



FCC RADIO TEST REPORT

FCC ID : HLZA22001
Equipment : Tablet PC
Brand Name : acer
Model Name : A22001
Marketing Name : Iconia Tab P10, P10-11, Iconia Tab M10, M10-11
Applicant : Acer Incorporated
8F., No. 88, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei
City 22181, Taiwan (R.O.C)
Manufacturer : Hunan Greatwall Computer System Co.,Ltd
Hunan GreatWall Industrial Park, Xiangyun Middle Road,
Tianyuan District, Zhuzhou, Hunan Province, China.
Standard : FCC Part 15 Subpart E §15.407

The product was received on Mar. 27, 2023 and testing was performed from Apr. 10, 2023 to May 04, 2023. 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 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
FR332001E	01	Initial issue of report	May 09, 2023



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	6dB & 26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
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	7.72 dB under the limit at 11650.000 MHz
3.5	15.207	AC Conducted Emission	Pass	11.41 dB under the limit at 0.494 MHz
3.6	15.203	Antenna Requirement	Pass	-

Conformity Assessment Condition:

- 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.
- 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: Lewis Ho
Report Producer: Michelle Chen



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac, and GNSS.
Antenna Type WLAN: FPC Antenna Bluetooth: FPC Antenna GPS / Glonass / Galileo: PIFA Antenna

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	0.68

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. 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, CO07-HY, 03CH23-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.



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: conduction emission (150 kHz to 30 MHz), 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.
- b. AC power line Conducted Emission was tested under maximum output power.

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.
2. The above Frequency and Channel with "#" are 802.11ac VHT80.



2.2 Test Mode

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.

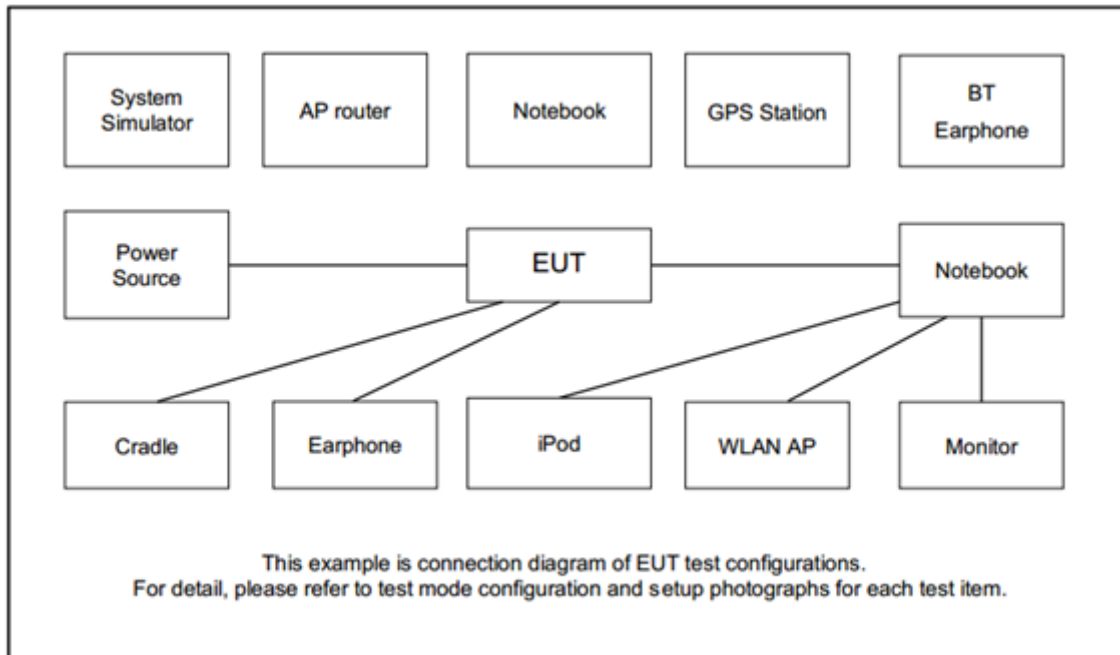
Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by VHT20)	MCS0
802.11n HT40 (Covered by VHT40)	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Earphone +USB Cable 1 (Charging from AC Adapter)
	Mode 2 : Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Earphone +USB Cable 2 (Charging from AC Adapter)
Remark:	
1. The worst case of Conducted Emission is mode 2; only the test data of it was reported.	
2. For Radiated Test Cases, the tests were performed with USB Cable 1.	

Ch. #	Band IV : 5725-5850 MHz			
	802.11a	802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
L Low	149	149	151	-
M Middle	157	157	-	155
H High	165	165	159	-

Remark: 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 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Kinyo	BTE-3622	N/A	N/A	N/A
2.	WLAN AP	ASUS	RT-AC52	N/A	N/A	Unshielded, 1.8 m
3.	Notebook	Dell	P79G	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
5.	Earphone + Mic	Samsung	Ecouteur	N/A	nonshielded 1.8m	N/A



2.5 EUT Operation Test Setup

The RF test items, make the EUT (SW: Acer_AV0S0_M10-11_0_001.00_EEA_GEN1) get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 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.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 4.2 + 10 = 14.2 \text{ (dB)} \end{aligned}$$

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.

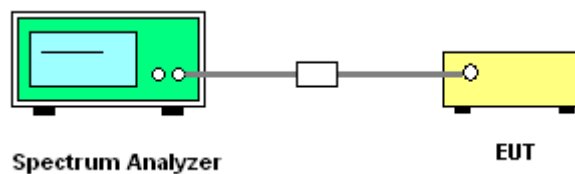
3.1.2 Measuring Instruments

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 $\geq 3 \times$ 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

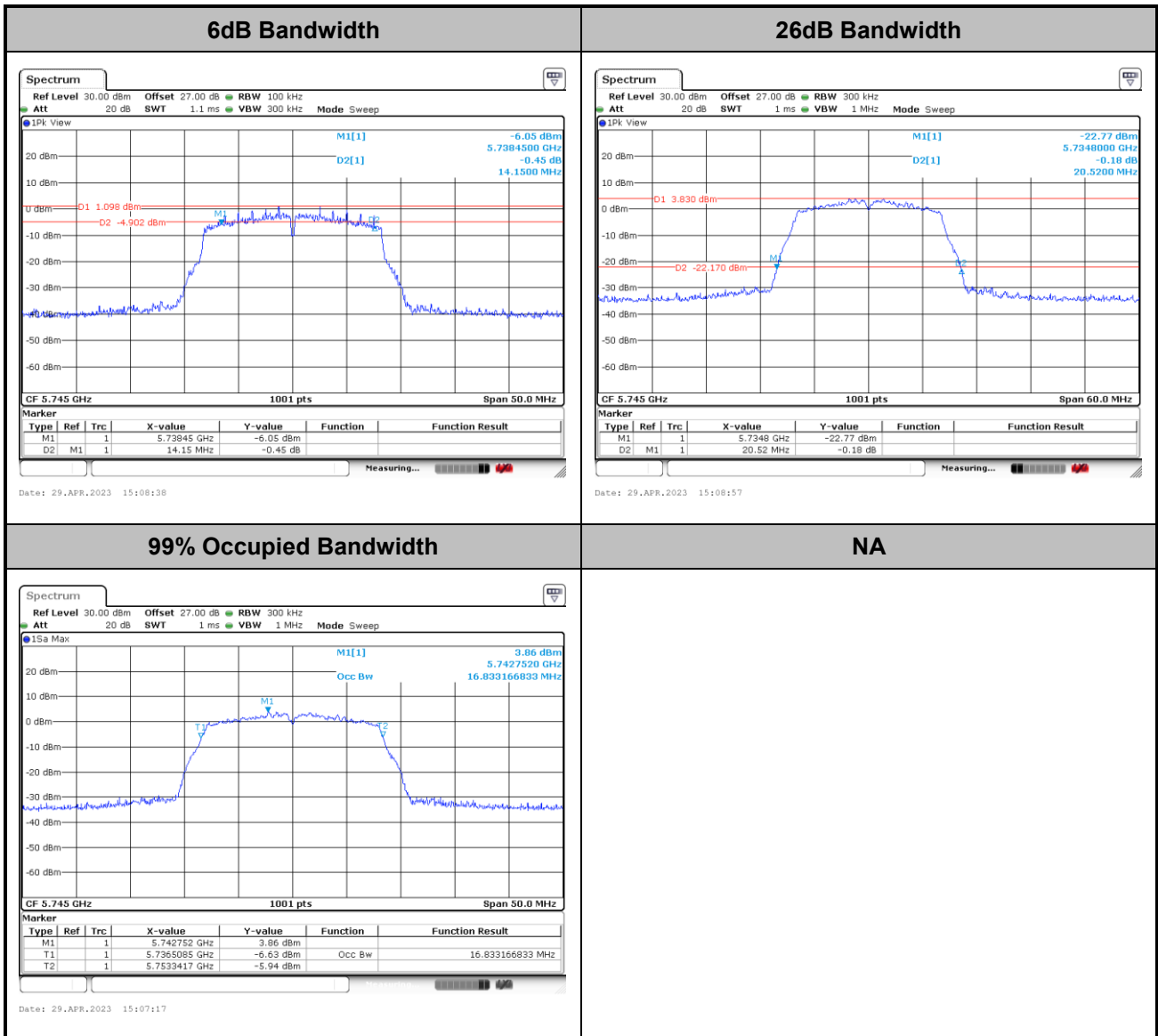


3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.



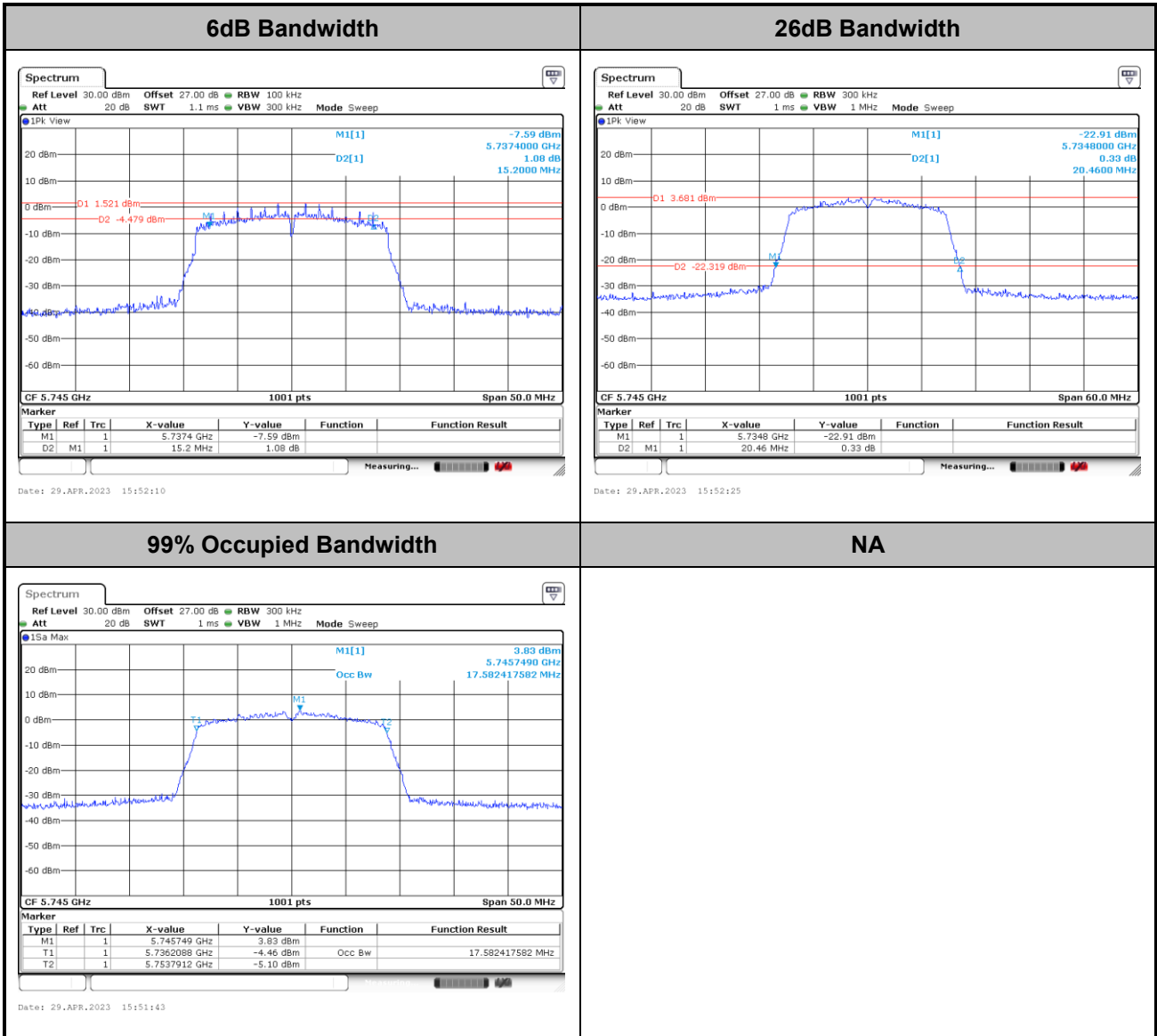
<802.11a>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



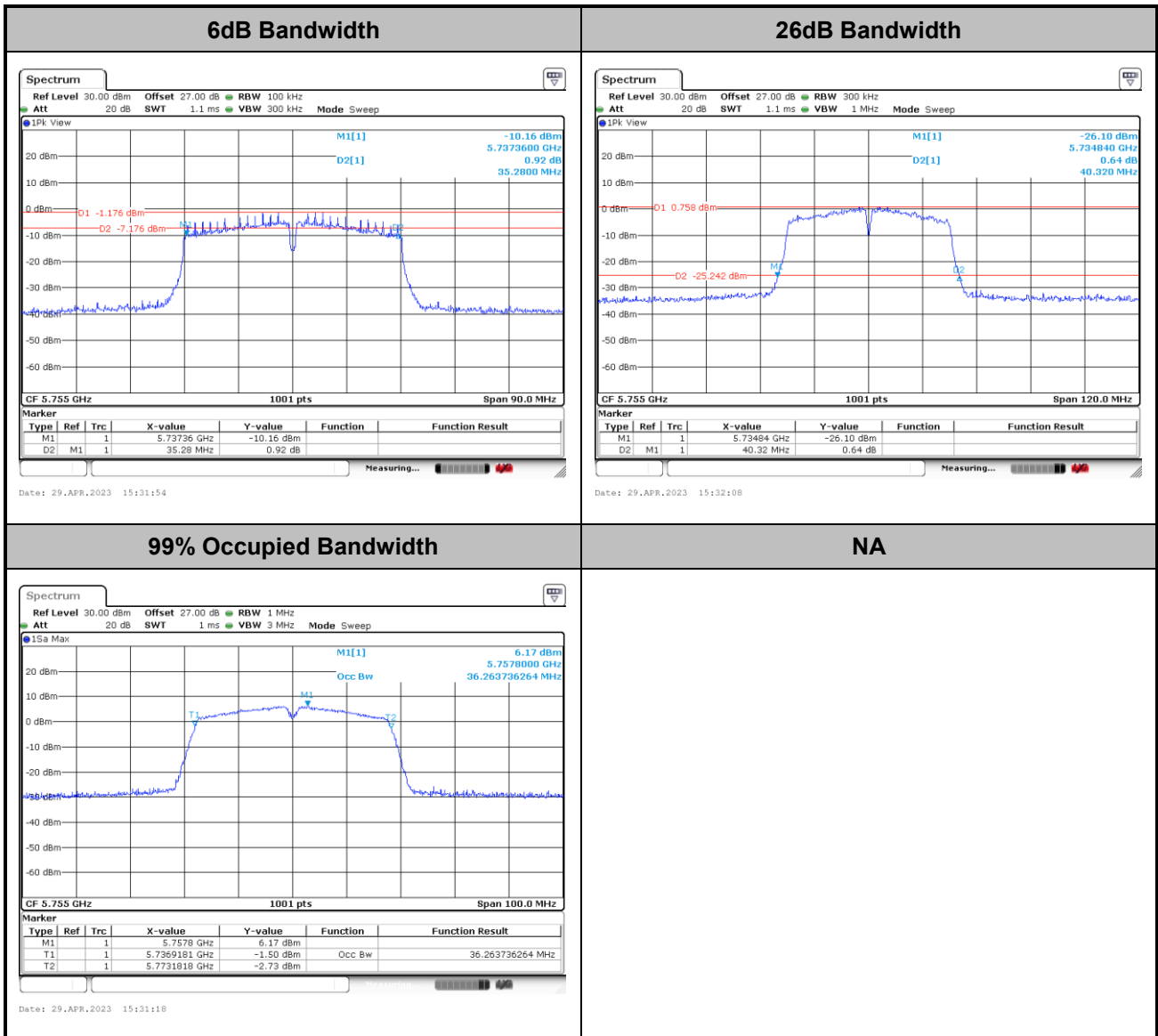
<802.11ac VHT20>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



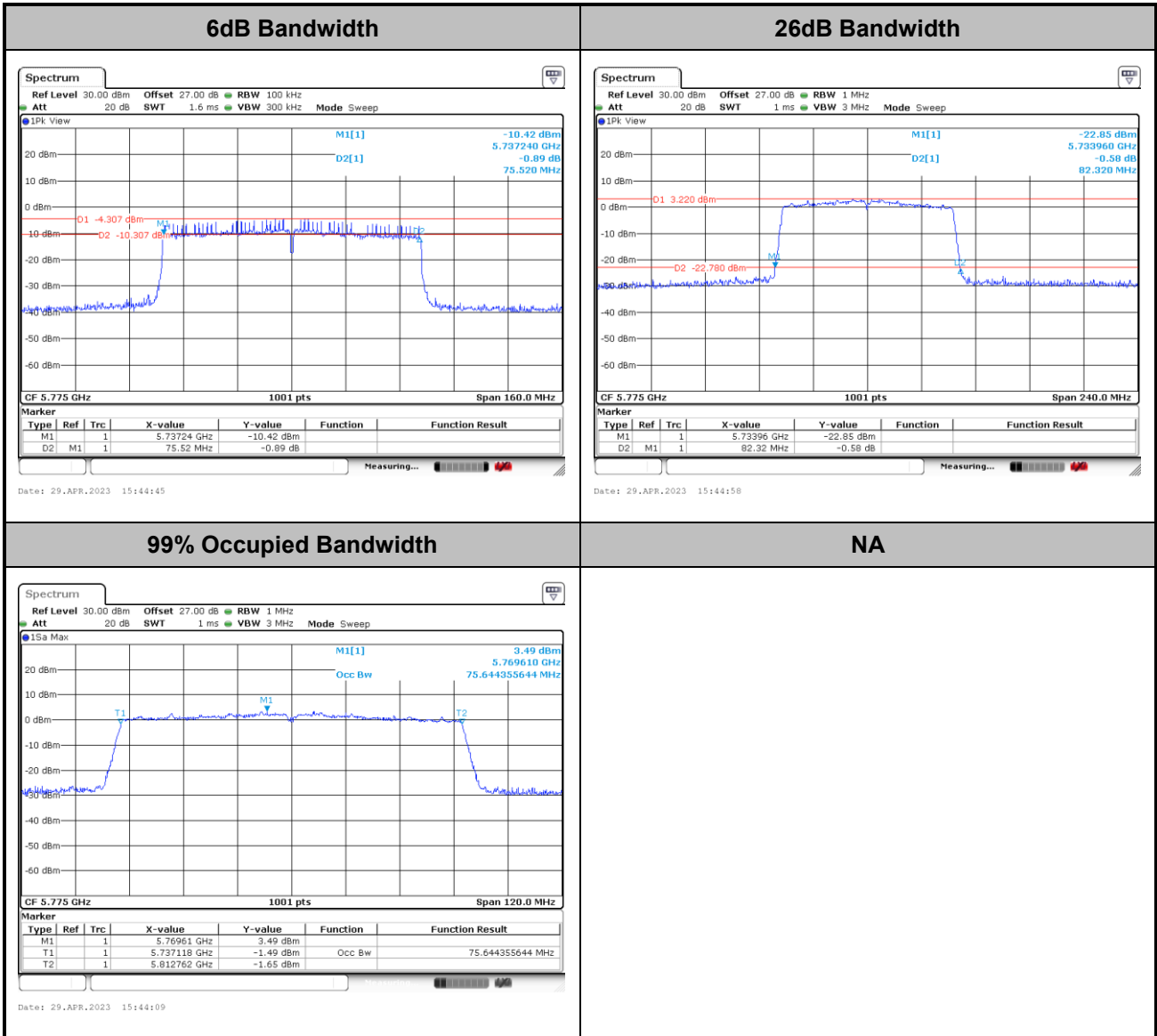
<802.11ac VHT40>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<802.11ac VHT80>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

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.

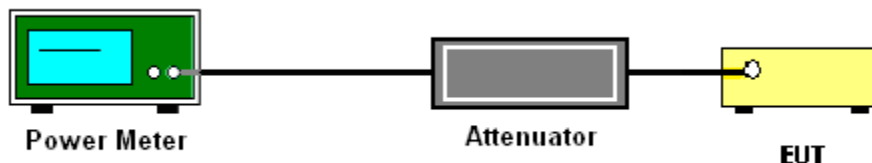
3.2.3 Test Procedures

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

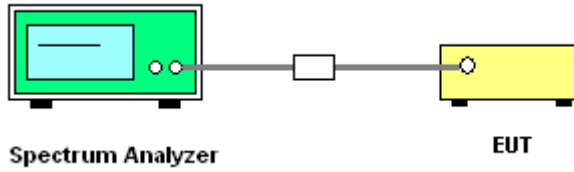
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

Method SA-3

(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 300 kHz.
 - Set VBW \geq 1 MHz.
 - Number of points in sweep \geq 2 Span / RBW.
 - Add $10 \log(500 \text{ kHz/RBW})$ to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement
 - Sweep time \leq (number of points in sweep) \times 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.
Detector = power averaging (rms).
 - Trace mode = max hold.
 - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
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.

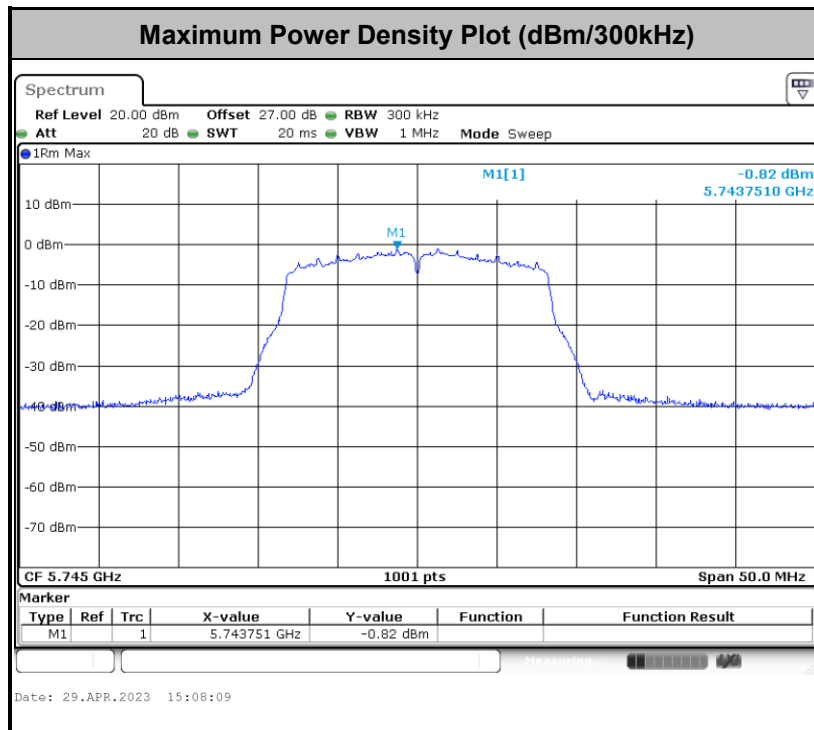
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

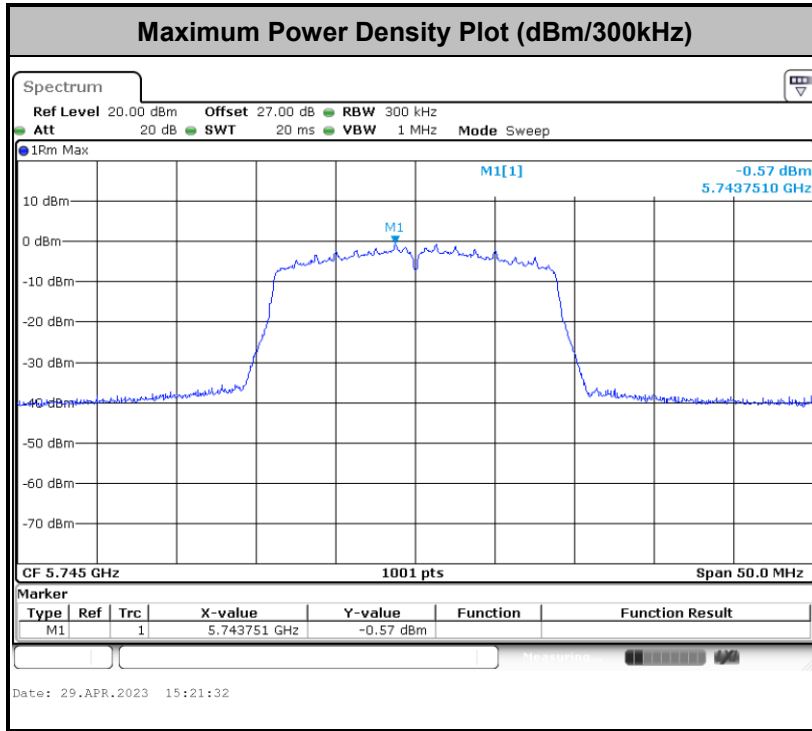
Please refer to Appendix A.

<802.11a>

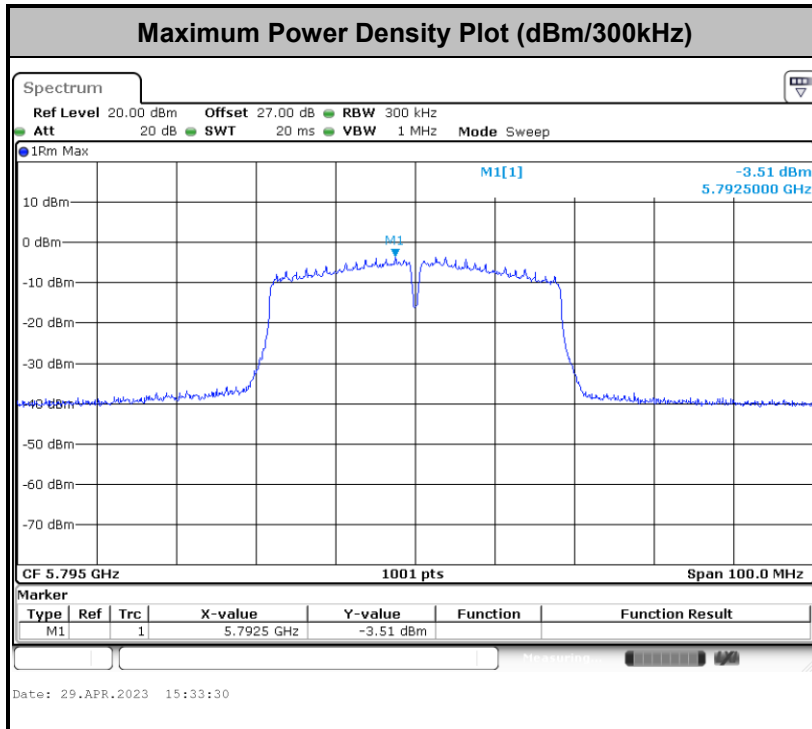




<802.11ac VHT20>

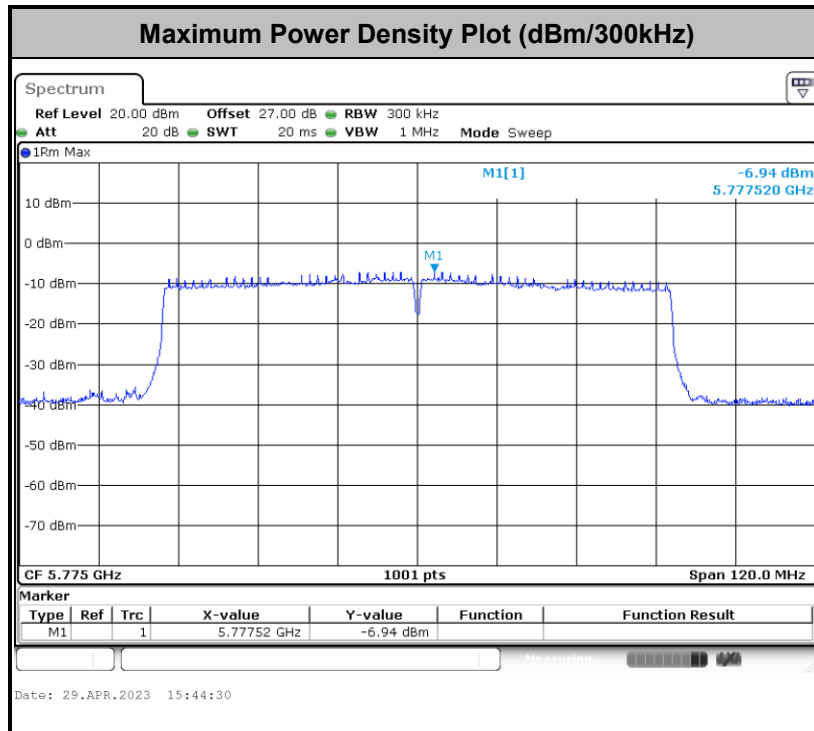


<802.11ac VHT40>





<802.11ac VHT80>





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.

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

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.

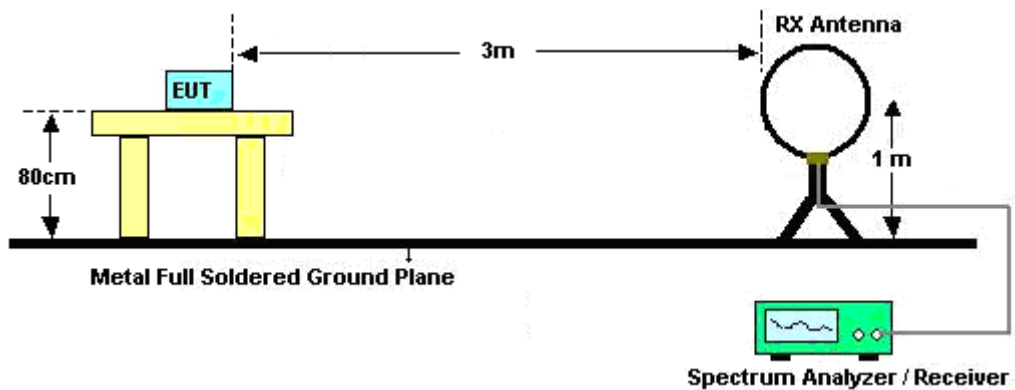
3.4.3 Test Procedures

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 \geq 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 \geq 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.

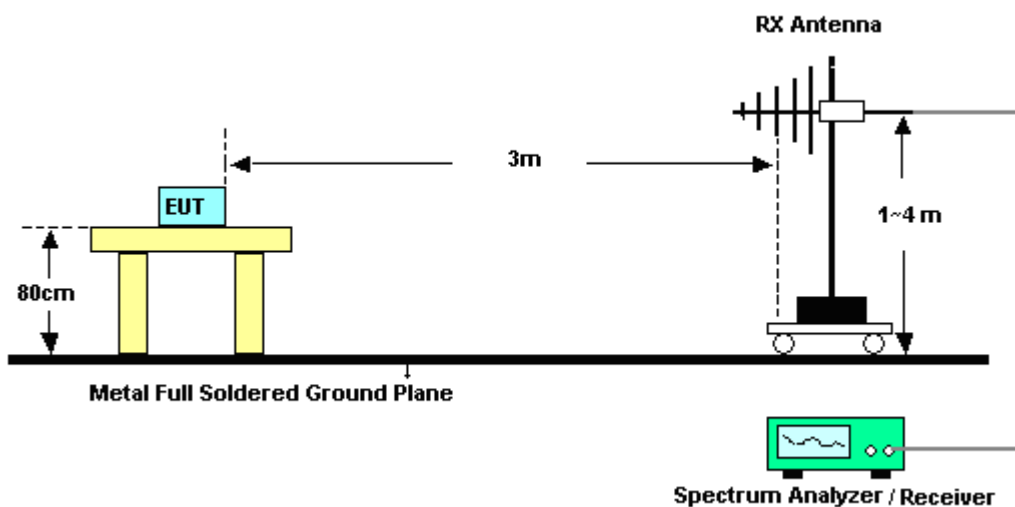
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit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

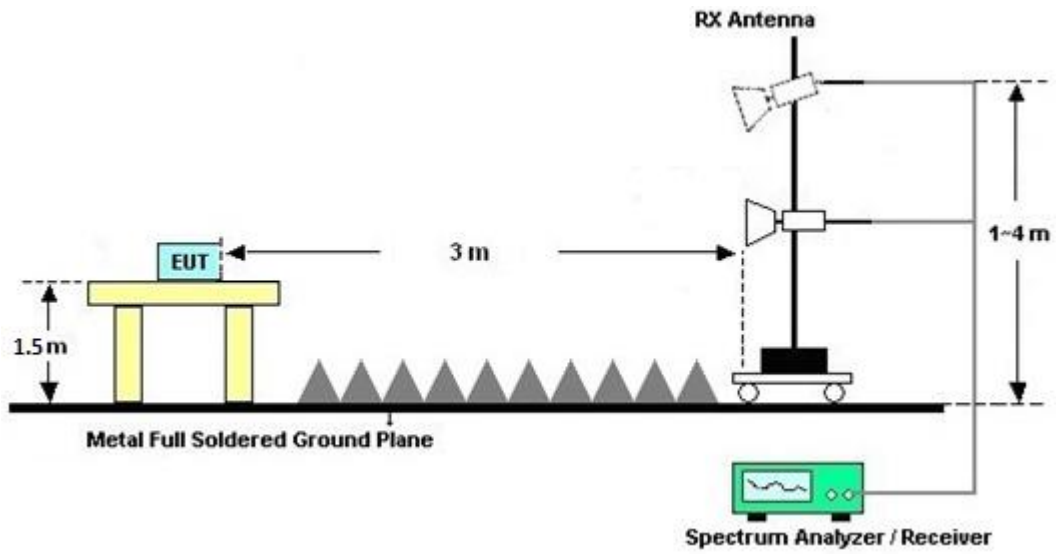
For radiated emissions below 30MHz



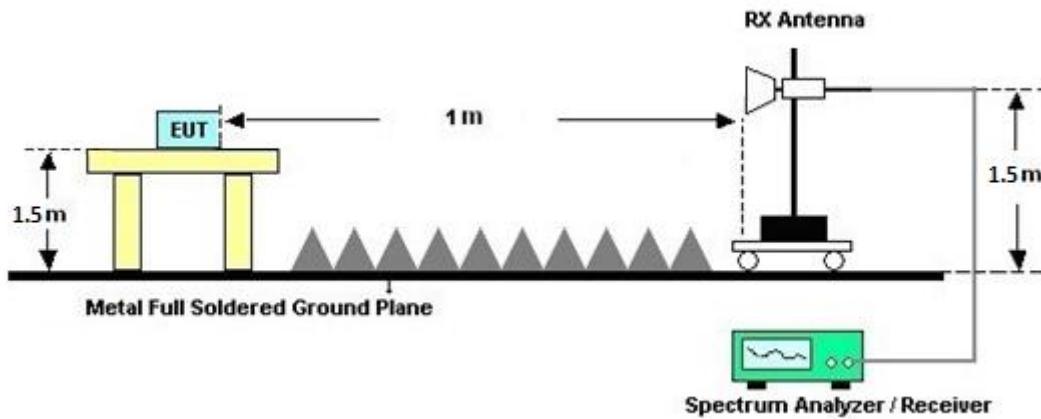
For radiated emissions from 30MHz to 1GHz



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 C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.



3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.6 Antenna Requirements

3.6.1 Standard Applicable

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 rule.

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECEPEL	DTM-303A	TP201996	N/A	Nov. 17, 2022	Apr. 10, 2023~ Apr. 29, 2023	Nov. 16, 2023	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 13, 2022	Apr. 10, 2023~ Apr. 29, 2023	Dec. 12, 2023	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101905	10Hz - 40GHz	Aug. 03, 2022	Apr. 10, 2023~ Apr. 29, 2023	Aug. 02, 2023	Conducted (TH05-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Apr. 23, 2023~ May 02, 2023	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Apr. 23, 2023~ May 02, 2023	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Nov. 01, 2022	Apr. 23, 2023~ May 02, 2023	Oct. 31, 2023	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 15, 2023	Apr. 23, 2023~ May 02, 2023	Mar. 14, 2024	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 05, 2023	Apr. 23, 2023~ May 02, 2023	Mar. 04, 2024	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Oct. 06, 2022	Apr. 23, 2023~ May 02, 2023	Oct. 05, 2023	Conduction (CO07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Apr. 26, 2023~ May 04, 2023	Sep. 19, 2023	Radiation (03CH23-HY)
Bilog Antenna with 6dB pad	TESEQ & WOKEN	CBL 6111D & 00802N1D-06	62028 & 003	N/A	Oct. 11, 2022	Apr. 26, 2023~ May 04, 2023	Oct. 10, 2023	Radiation (03CH23-HY)
Amplifier	SONOMA	310N	421582	N/A	Jul. 16, 2022	Apr. 26, 2023~ May 04, 2023	Jul. 15, 2023	Radiation (03CH23-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C05A18E N	1GHz~18GHz	Jul. 06, 2022	Apr. 26, 2023~ May 04, 2023	Jul. 05, 2023	Radiation (03CH23-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	1223	18GHz-40GHz	Jul. 05, 2022	Apr. 26, 2023~ May 04, 2023	Jul. 04, 2023	Radiation (03CH23-HY)
Amplifier	EMEC	EM01G18GA	060878	N/A	Sep. 29, 2022	Apr. 26, 2023~ May 04, 2023	Sep. 28, 2023	Radiation (03CH23-HY)
Preamplifier	EMEC	EM18G40G	060872	18-40GHz	Sep. 28, 2022	Apr. 26, 2023~ May 04, 2023	Sep. 27, 2023	Radiation (03CH23-HY)
Signal Analyzer	Keysight	N9010B	MY62170337	N/A	Sep. 11, 2022	Apr. 26, 2023~ May 04, 2023	Sep. 10, 2023	Radiation (03CH23-HY)
Hygrometer	TECEPEL	DTM-303B	TP211542	N/A	Nov. 17, 2022	Apr. 26, 2023~ May 04, 2023	Nov. 16, 2023	Radiation (03CH23-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Apr. 26, 2023~ May 04, 2023	N/A	Radiation (03CH23-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Apr. 26, 2023~ May 04, 2023	N/A	Radiation (03CH23-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Apr. 26, 2023~ May 04, 2023	N/A	Radiation (03CH23-HY)
Software	Audix	E3 6.09824_2019 122	RK-002347	N/A	N/A	Apr. 26, 2023~ May 04, 2023	N/A	Radiation (03CH23-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 07, 2023	Apr. 26, 2023~ May 04, 2023	Mar. 06, 2024	Radiation (03CH23-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804392/2,804 610/2,804613 /2	N/A	Oct. 25, 2022	Apr. 26, 2023~ May 04, 2023	Oct. 24, 2023	Radiation (03CH23-HY)



5 Measurement Uncertainty

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.46 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.80 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.40 dB
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Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.30 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.20 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	James Li and Mina Liu	Temperature:	21~25	°C
Test Date:	2023/4/10~2023/4/29	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 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	149	5745	16.83	-	20.52	-	14.15	-	0.5	Pass
11a	6Mbps	1	157	5785	16.83	-	20.52	-	15.20	-	0.5	Pass
11a	6Mbps	1	165	5825	16.78	-	20.34	-	15.20	-	0.5	Pass
VHT20	MCS0	1	149	5745	17.58	-	20.46	-	15.20	-	0.5	Pass
VHT20	MCS0	1	157	5785	17.58	-	20.52	-	14.00	-	0.5	Pass
VHT20	MCS0	1	165	5825	17.58	-	20.46	-	15.20	-	0.5	Pass
VHT40	MCS0	1	151	5755	36.26	-	40.32	-	35.28	-	0.5	Pass
VHT40	MCS0	1	159	5795	36.26	-	40.20	-	35.19	-	0.5	Pass
VHT80	MCS0	1	155	5775	75.64	-	82.32	-	75.52	-	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 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	149	5745	11.90	-		30.00	-	0.68	-	Pass
11a	6Mbps	1	157	5785	11.90	-		30.00	-	0.68	-	Pass
11a	6Mbps	1	165	5825	11.80	-		30.00	-	0.68	-	Pass
HT20	MCS0	1	149	5745	11.60	-		30.00	-	0.68	-	Pass
HT20	MCS0	1	157	5785	11.50	-		30.00	-	0.68	-	Pass
HT20	MCS0	1	165	5825	11.50	-		30.00	-	0.68	-	Pass
HT40	MCS0	1	151	5755	10.90	-		30.00	-	0.68	-	Pass
HT40	MCS0	1	159	5795	11.20	-		30.00	-	0.68	-	Pass
VHT20	MCS0	1	149	5745	11.70	-		30.00	-	0.68	-	Pass
VHT20	MCS0	1	157	5785	11.60	-		30.00	-	0.68	-	Pass
VHT20	MCS0	1	165	5825	11.60	-		30.00	-	0.68	-	Pass
VHT40	MCS0	1	151	5755	11.00	-		30.00	-	0.68	-	Pass
VHT40	MCS0	1	159	5795	11.30	-		30.00	-	0.68	-	Pass
VHT80	MCS0	1	155	5775	11.30	-		30.00	-	0.68	-	Pass

U-NII-3 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			DG (dBi)		E.I.R.P Power (dBm)		E.I.R.P Limit (dBm)	
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	149	5745	11.90	-		0.68	-	12.58	0.00	36	36
11a	6Mbps	1	157	5785	11.90	-		0.68	-	12.58	0.00	36	36
11a	6Mbps	1	165	5825	11.80	-		0.68	-	12.48	0.00	36	36
HT20	MCS0	1	149	5745	11.60	-		0.68	-	12.28	0.00	36	36
HT20	MCS0	1	157	5785	11.50	-		0.68	-	12.18	0.00	36	36
HT20	MCS0	1	165	5825	11.50	-		0.68	-	12.18	0.00	36	36
HT40	MCS0	1	151	5755	10.90	-		0.68	-	11.58	0.00	36	36
HT40	MCS0	1	159	5795	11.20	-		0.68	-	11.88	0.00	36	36
VHT20	MCS0	1	149	5745	11.70	-		0.68	-	12.38	0.00	36	36
VHT20	MCS0	1	157	5785	11.60	-		0.68	-	12.28	0.00	36	36
VHT20	MCS0	1	165	5825	11.60	-		0.68	-	12.28	0.00	36	36
VHT40	MCS0	1	151	5755	11.00	-		0.68	-	11.68	0.00	36	36
VHT40	MCS0	1	159	5795	11.30	-		0.68	-	11.98	0.00	36	36
VHT80	MCS0	1	155	5775	11.30	-		0.68	-	11.98	0.00	36	36

TEST RESULTS DATA
Power Spectral Density

U-NII-3 single antenna														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	149	5745	2.22	-	1.40	-		30.00	-	0.68	-	Pass
11a	6Mbps	1	157	5785	2.22	-	1.22	-		30.00	-	0.68	-	Pass
11a	6Mbps	1	165	5825	2.22	-	1.20	-		30.00	-	0.68	-	Pass
VHT20	MCS0	1	149	5745	2.22	-	1.65	-		30.00	-	0.68	-	Pass
VHT20	MCS0	1	157	5785	2.22	-	1.44	-		30.00	-	0.68	-	Pass
VHT20	MCS0	1	165	5825	2.22	-	1.48	-		30.00	-	0.68	-	Pass
VHT40	MCS0	1	151	5755	2.22	-	-1.44	-		30.00	-	0.68	-	Pass
VHT40	MCS0	1	159	5795	2.22	-	-1.29	-		30.00	-	0.68	-	Pass
VHT80	MCS0	1	155	5775	2.22	-	-4.72	-		30.00	-	0.68	-	Pass

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



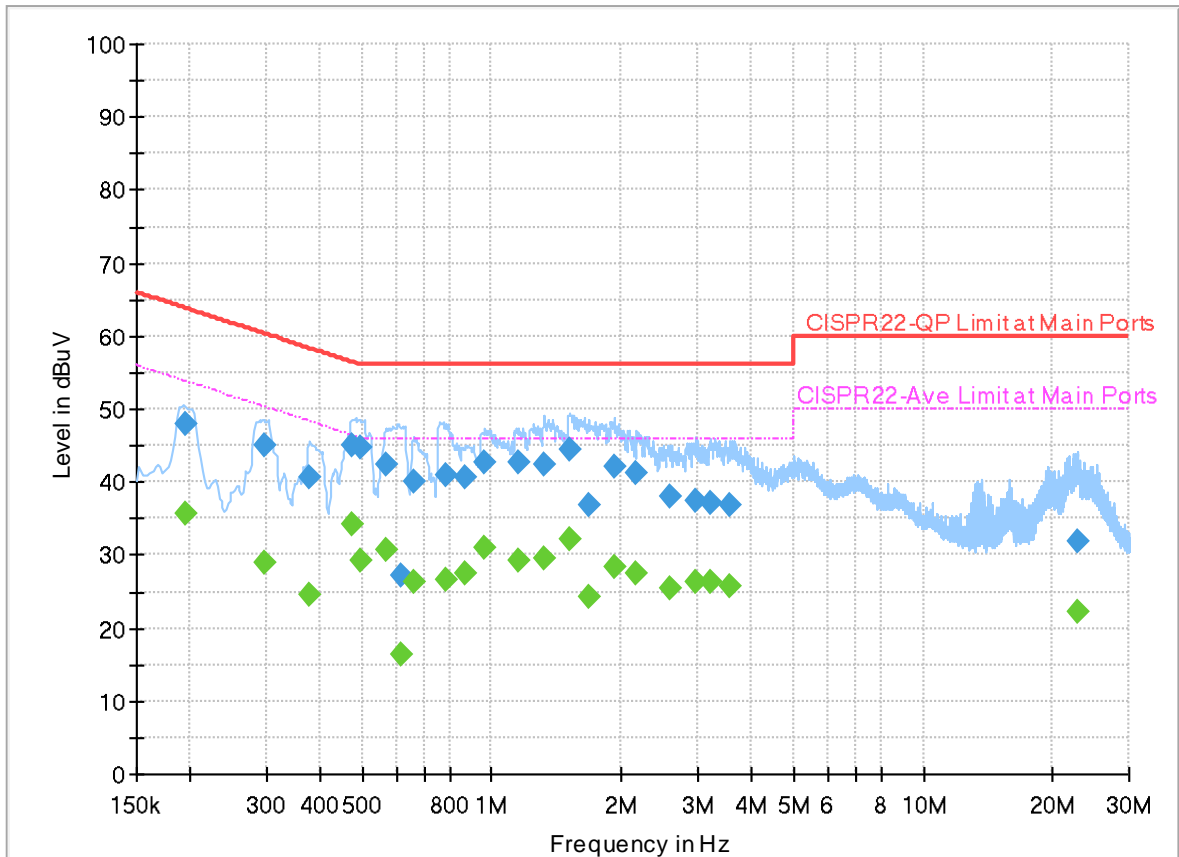
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	Temperature :	21.2~23.6°C
		Relative Humidity :	58.3~63.4%

EUT Information

Report NO : 332001
 Test Mode : Mode 2
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



Final_Result

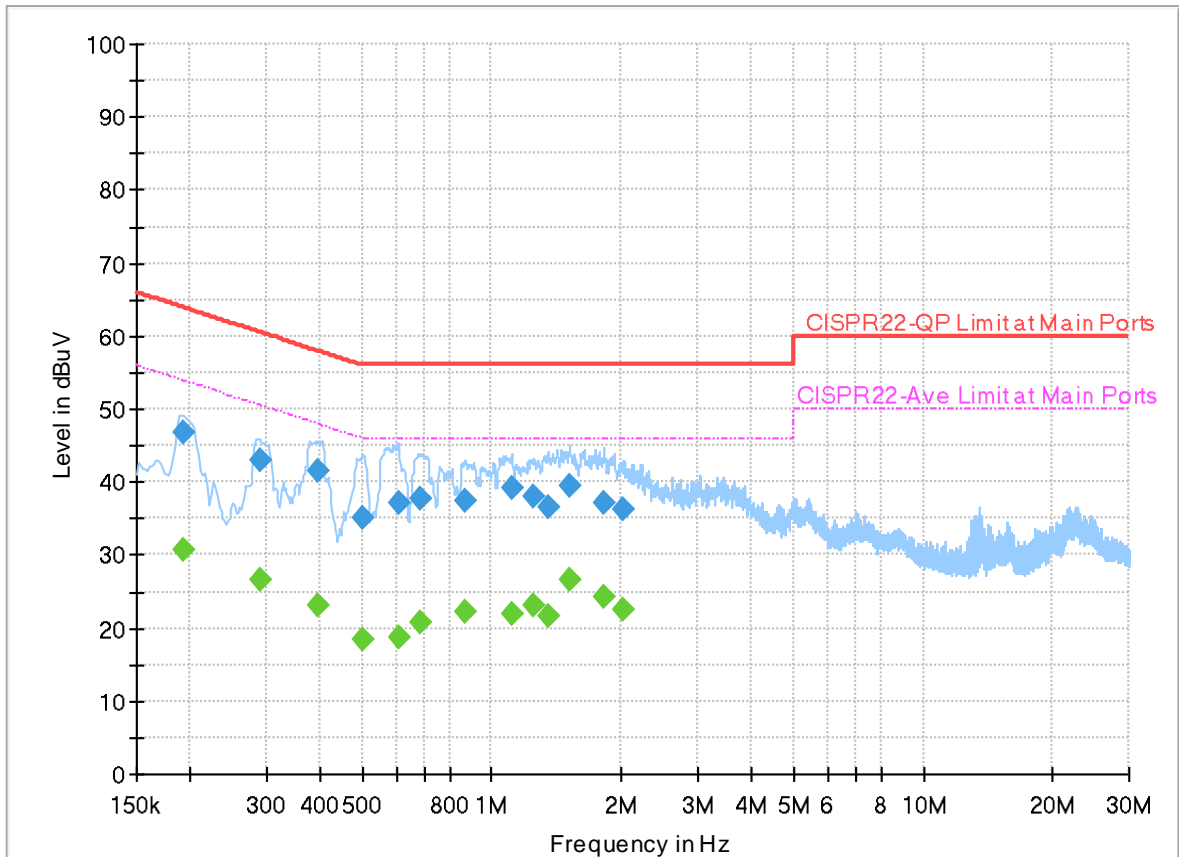
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.195000	---	35.58	53.82	18.24	L1	OFF	19.9
0.195000	47.99	---	63.82	15.83	L1	OFF	19.9
0.298500	---	29.07	50.28	21.21	L1	OFF	20.0
0.298500	45.05	---	60.28	15.23	L1	OFF	20.0
0.379410	---	24.64	48.29	23.65	L1	OFF	20.0
0.379410	40.57	---	58.29	17.72	L1	OFF	20.0
0.476250	---	34.30	46.40	12.10	L1	OFF	20.0
0.476250	44.96	---	56.40	11.44	L1	OFF	20.0
0.494250	---	29.19	46.10	16.91	L1	OFF	20.0
0.494250	44.69	---	56.10	11.41	L1	OFF	20.0
0.566250	---	30.71	46.00	15.29	L1	OFF	20.0
0.566250	42.53	---	56.00	13.47	L1	OFF	20.0
0.618270	---	16.50	46.00	29.50	L1	OFF	20.0
0.618270	27.26	---	56.00	28.74	L1	OFF	20.0
0.657240	---	26.40	46.00	19.60	L1	OFF	20.0
0.657240	40.05	---	56.00	15.95	L1	OFF	20.0
0.780180	---	26.73	46.00	19.27	L1	OFF	20.0
0.780180	40.85	---	56.00	15.15	L1	OFF	20.0
0.868470	---	27.53	46.00	18.47	L1	OFF	20.0

0.868470	40.75	---	56.00	15.25	L1	OFF	20.0
0.960450	---	30.92	46.00	15.08	L1	OFF	20.0
0.960450	42.68	---	56.00	13.32	L1	OFF	20.0
1.157370	---	29.28	46.00	16.72	L1	OFF	20.0
1.157370	42.56	---	56.00	13.44	L1	OFF	20.0
1.327380	---	29.41	46.00	16.59	L1	OFF	20.0
1.327380	42.46	---	56.00	13.54	L1	OFF	20.0
1.513500	---	32.15	46.00	13.85	L1	OFF	20.0
1.513500	44.52	---	56.00	11.48	L1	OFF	20.0
1.671000	---	24.37	46.00	21.63	L1	OFF	20.0
1.671000	36.86	---	56.00	19.14	L1	OFF	20.0
1.920750	---	28.50	46.00	17.50	L1	OFF	20.0
1.920750	42.09	---	56.00	13.91	L1	OFF	20.0
2.169870	---	27.63	46.00	18.37	L1	OFF	20.0
2.169870	41.21	---	56.00	14.79	L1	OFF	20.0
2.598000	---	25.40	46.00	20.60	L1	OFF	20.0
2.598000	37.99	---	56.00	18.01	L1	OFF	20.0
2.984730	---	26.21	46.00	19.79	L1	OFF	20.0
2.984730	37.31	---	56.00	18.69	L1	OFF	20.0
3.225750	---	26.32	46.00	19.68	L1	OFF	20.0
3.225750	37.20	---	56.00	18.80	L1	OFF	20.0
3.574500	---	25.72	46.00	20.28	L1	OFF	20.0
3.574500	36.79	---	56.00	19.21	L1	OFF	20.0
22.940790	---	22.19	50.00	27.81	L1	OFF	20.2
22.940790	31.84	---	60.00	28.16	L1	OFF	20.2

EUT Information

Report NO : 332001
 Test Mode : Mode 2
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.192390	---	30.69	53.93	23.24	N	OFF	20.0
0.192390	46.91	---	63.93	17.02	N	OFF	20.0
0.289500	---	26.54	50.54	24.00	N	OFF	20.0
0.289500	42.93	---	60.54	17.61	N	OFF	20.0
0.396690	---	23.17	47.92	24.75	N	OFF	20.0
0.396690	41.38	---	57.92	16.54	N	OFF	20.0
0.500730	---	18.47	46.00	27.53	N	OFF	20.0
0.500730	35.13	---	56.00	20.87	N	OFF	20.0
0.607920	---	18.60	46.00	27.40	N	OFF	20.0
0.607920	37.15	---	56.00	18.85	N	OFF	20.0
0.683340	---	20.85	46.00	25.15	N	OFF	20.0
0.683340	37.57	---	56.00	18.43	N	OFF	20.0
0.869820	---	22.35	46.00	23.65	N	OFF	20.0
0.869820	37.57	---	56.00	18.43	N	OFF	20.0
1.111290	---	21.83	46.00	24.17	N	OFF	20.0
1.111290	39.07	---	56.00	16.93	N	OFF	20.0
1.254390	---	22.99	46.00	23.01	N	OFF	20.0
1.254390	38.12	---	56.00	17.88	N	OFF	20.0
1.356000	---	21.71	46.00	24.29	N	OFF	20.0

1.356000	36.57	---	56.00	19.43	N	OFF	20.0
1.513500	---	26.56	46.00	19.44	N	OFF	20.0
1.513500	39.47	---	56.00	16.53	N	OFF	20.0
1.815000	---	24.16	46.00	21.84	N	OFF	20.0
1.815000	37.22	---	56.00	18.78	N	OFF	20.0
2.022630	---	22.61	46.00	23.39	N	OFF	20.0
2.022630	36.30	---	56.00	19.70	N	OFF	20.0



Appendix C. Radiated Spurious Emission

Test Engineer :	Leo Li and Shiming Liu	Temperature :	18.3~24.5°C
		Relative Humidity :	42.3~68.5%

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11a CH 149 5745MHz		5642.075	49.1	-19.1	68.2	36.18	33.47	13.46	34.01	119	43	P	H	
		5663.9	50.01	-28.51	78.52	36.97	33.58	13.49	34.03	119	43	P	H	
		5700.125	50.17	-55.07	105.24	36.88	33.8	13.55	34.06	119	43	P	H	
		5723.3	53.05	-65.27	118.32	39.61	33.94	13.58	34.08	119	43	P	H	
	*	5745	92.04	-	-	78.46	34.07	13.61	34.1	119	43	P	H	
	*	5745	85.4	-	-	71.82	34.07	13.61	34.1	119	43	A	H	
														H
														H
			5612.6	50.83	-17.37	68.2	38.05	33.35	13.42	33.99	299	42	P	V
			5697.875	51.26	-52.37	103.63	37.99	33.79	13.54	34.06	299	42	P	V
			5717.9	52.75	-57.46	110.21	39.35	33.91	13.57	34.08	299	42	P	V
			5723.525	61.17	-57.67	118.84	47.73	33.94	13.58	34.08	299	42	P	V
	*		5745	102.35	-	-	88.77	34.07	13.61	34.1	299	42	P	V
	*		5745	95.97	-	-	82.39	34.07	13.61	34.1	299	42	A	V
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5617.75	49.71	-18.49	68.2	36.9	33.37	13.43	33.99	119	43	P	H
		5680	50.13	-40.31	90.44	36.97	33.68	13.52	34.04	119	43	P	H
		5704	50.51	-55.81	106.32	37.21	33.82	13.55	34.07	119	43	P	H
		5724.75	48.72	-72.91	121.63	35.27	33.95	13.58	34.08	119	43	P	H
	*	5785	88.83	-	-	75.2	34.1	13.67	34.14	119	43	P	H
	*	5785	82.46	-	-	68.83	34.1	13.67	34.14	119	43	A	H
		5853.5	46.98	-67.24	114.22	33.41	34	13.76	34.19	119	43	P	H
		5858.25	49	-60.89	109.89	35.43	34	13.77	34.2	119	43	P	H
		5889	51.19	-43.62	94.81	37.6	34	13.81	34.22	119	43	P	H
		5927.5	49.13	-19.07	68.2	35.52	34	13.87	34.26	119	43	P	H
													H
													H
802.11a													
CH 157													
5785MHz		5601.25	49.72	-18.48	68.2	36.99	33.31	13.4	33.98	302	194	P	V
		5692.75	51.24	-48.62	99.86	38.01	33.76	13.53	34.06	302	194	P	V
		5717	50.27	-59.69	109.96	36.88	33.9	13.57	34.08	302	194	P	V
		5725	50.8	-71.4	122.2	37.35	33.95	13.58	34.08	302	194	P	V
	*	5785	103.2	-	-	89.57	34.1	13.67	34.14	302	194	P	V
	*	5785	96.12	-	-	82.49	34.1	13.67	34.14	302	194	A	V
		5852.5	49.1	-67.4	116.5	35.53	34	13.76	34.19	302	194	P	V
		5856.75	50.76	-59.55	110.31	37.19	34	13.77	34.2	302	194	P	V
		5892.75	50.47	-41.56	92.03	36.88	34	13.82	34.23	302	194	P	V
		5928.75	50.69	-17.51	68.2	37.08	34	13.87	34.26	302	194	P	V
													V
													V



WiFi Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 165 5825MHz	*	5825	101.69	-	-	88.09	34.05	13.72	34.17	120	105	P	H	
	*	5825	95.81	-	-	82.21	34.05	13.72	34.17	120	105	A	H	
		5852	53.92	-63.72	117.64	40.35	34	13.76	34.19	120	105	P	H	
		5857	51.57	-58.67	110.24	38	34	13.77	34.2	120	105	P	H	
		5904.2	50.37	-33.18	83.55	36.77	34	13.84	34.24	120	105	P	H	
		5942.6	49.55	-18.65	68.2	35.93	34	13.89	34.27	120	105	P	H	
														H
														H
	*	5825	103.42	-	-	89.82	34.05	13.72	34.17	302	194	P	V	
	*	5825	96.57	-	-	82.97	34.05	13.72	34.17	302	194	A	V	
		5850.8	53.43	-66.95	120.38	39.86	34	13.76	34.19	302	194	P	V	
		5862.8	51.85	-56.76	108.61	38.27	34	13.78	34.2	302	194	P	V	
		5919	51.42	-21.2	72.62	37.81	34	13.86	34.25	302	194	P	V	
		5935.4	49.34	-18.86	68.2	35.72	34	13.88	34.26	302	194	P	V	
														V
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 149 5745MHz		11490	52.36	-21.64	74	33.31	38.79	20.11	39.85	100	159	P	H	
		11490	43.49	-10.51	54	24.44	38.79	20.11	39.85	100	159	A	H	
		17235	53.06	-15.14	68.2	34.48	40	24.84	46.26	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11490	51.83	-22.17	74	32.78	38.79	20.11	39.85	101	163	P	V
			11490	44.68	-9.32	54	25.63	38.79	20.11	39.85	101	163	A	V
			17235	52.42	-15.78	68.2	33.84	40	24.84	46.26	-	-	P	V
														V
														V
														V
													V	
													V	
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 157 5785MHz		11570	50.68	-23.32	74	31.78	38.66	20.16	39.92	100	137	P	H	
		11570	44.4	-9.6	54	25.5	38.66	20.16	39.92	100	137	A	H	
		17355	52.6	-15.6	68.2	34.12	39.94	24.93	46.39	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11570	55.35	-18.65	74	36.45	38.66	20.16	39.92	101	157	P	V
			11570	45.83	-8.17	54	26.93	38.66	20.16	39.92	101	157	A	V
			17355	52.68	-15.52	68.2	34.2	39.94	24.93	46.39	-	-	P	V
														V
														V
														V
														V
														V
														V
													V	



WiFi Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 165 5825MHz		11650	55.94	-18.06	74	37.06	38.65	20.22	39.99	116	139	P	H	
		11650	45.91	-8.09	54	27.03	38.65	20.22	39.99	116	139	A	H	
		17475	53.34	-14.86	68.2	34.87	39.97	25.03	46.53	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11650	56.93	-17.07	74	38.05	38.65	20.22	39.99	100	175	P	V
			11650	46.28	-7.72	54	27.4	38.65	20.22	39.99	100	175	A	V
			17475	52.48	-15.72	68.2	34.01	39.97	25.03	46.53	-	-	P	V
														V
														V
														V
														V
														V
														V
													V	
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. 													



Band 4 5725~5850MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT20 CH 149 5745MHz		5634.2	52.33	-15.87	68.2	39.45	33.44	13.45	34.01	120	194	P	H	
		5682.575	52.17	-40.17	92.34	39	33.7	13.52	34.05	120	194	P	H	
		5719.925	57.52	-53.26	110.78	44.11	33.92	13.57	34.08	120	194	P	H	
		5723.975	64.78	-55.08	119.86	51.34	33.94	13.58	34.08	120	194	P	H	
	*	5745	104.96	-	-	91.38	34.07	13.61	34.1	120	194	P	H	
	*	5745	98.7	-	-	85.12	34.07	13.61	34.1	120	194	A	H	
														H
														H
			5618	50.36	-17.84	68.2	37.55	33.37	13.43	33.99	299	42	P	V
			5673.575	51.53	-34.16	85.69	38.42	33.64	13.51	34.04	299	42	P	V
			5718.8	52.84	-57.62	110.46	39.44	33.91	13.57	34.08	299	42	P	V
			5724.65	62.58	-58.82	121.4	49.13	33.95	13.58	34.08	299	42	P	V
	*		5745	102.38	-	-	88.8	34.07	13.61	34.1	299	42	P	V
	*		5745	95.65	-	-	82.07	34.07	13.61	34.1	299	42	A	V
														V
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5644.25	50.56	-17.64	68.2	37.63	33.48	13.46	34.01	120	194	P	H
		5690.5	52.95	-45.25	98.2	39.73	33.74	13.53	34.05	120	194	P	H
		5710.5	52.6	-55.54	108.14	39.25	33.86	13.56	34.07	120	194	P	H
		5720.5	51.74	-60.2	111.94	38.33	33.92	13.57	34.08	120	194	P	H
	*	5785	105.38	-	-	91.75	34.1	13.67	34.14	120	194	P	H
	*	5785	98.57	-	-	84.94	34.1	13.67	34.14	120	194	A	H
		5853.75	50.97	-62.68	113.65	37.39	34	13.77	34.19	120	194	P	H
		5860.25	50.81	-58.52	109.33	37.24	34	13.77	34.2	120	194	P	H
		5882	50.84	-49.16	100	37.26	34	13.8	34.22	120	194	P	H
		5935	52.95	-15.25	68.2	39.33	34	13.88	34.26	120	194	P	H
802.11ac													H
VHT20													H
CH 157		5643.5	50.53	-17.67	68.2	37.61	33.47	13.46	34.01	300	42	P	V
5785MHz		5672.5	50.56	-34.33	84.89	37.46	33.63	13.51	34.04	300	42	P	V
		5716.75	49.83	-60.06	109.89	36.44	33.9	13.57	34.08	300	42	P	V
		5722.75	50.36	-66.71	117.07	36.92	33.94	13.58	34.08	300	42	P	V
	*	5785	102.27	-	-	88.64	34.1	13.67	34.14	300	42	P	V
	*	5785	95.53	-	-	81.9	34.1	13.67	34.14	300	42	A	V
		5852.75	49.06	-66.87	115.93	35.49	34	13.76	34.19	300	42	P	V
		5861.75	49.47	-59.44	108.91	35.89	34	13.78	34.2	300	42	P	V
		5882.75	50.61	-48.83	99.44	37.02	34	13.81	34.22	300	42	P	V
		5937	50.31	-17.89	68.2	36.7	34	13.88	34.27	300	42	P	V
													V
													V



WiFi Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT20 CH 165 5825MHz	*	5825	105.14	-	-	91.54	34.05	13.72	34.17	119	193	P	H	
	*	5825	98.7	-	-	85.1	34.05	13.72	34.17	119	193	P	H	
		5852	53.76	-63.88	117.64	40.19	34	13.76	34.19	119	193	P	H	
		5857	51.41	-58.83	110.24	37.84	34	13.77	34.2	119	193	P	H	
		5904.2	50.16	-33.39	83.55	36.56	34	13.84	34.24	119	193	P	H	
		5942.6	49.34	-18.86	68.2	35.72	34	13.89	34.27	119	193	A	H	
														H
														H
	*	5825	103.91	-	-	90.31	34.05	13.72	34.17	300	42	P	V	
	*	5825	96.44	-	-	82.84	34.05	13.72	34.17	300	42	P	V	
		5850.8	53.28	-67.1	120.38	39.71	34	13.76	34.19	300	42	P	V	
		5862.8	51.7	-56.91	108.61	38.12	34	13.78	34.2	300	42	P	V	
		5919	51.25	-21.37	72.62	37.64	34	13.86	34.25	300	42	P	V	
		5935.4	49.17	-19.03	68.2	35.55	34	13.88	34.26	300	42	A	V	
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz
WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT20 CH 149 5745MHz		11490	53.08	-20.92	74	34.03	38.79	20.11	39.85	100	133	P	H	
		11490	43.77	-10.23	54	24.72	38.79	20.11	39.85	100	133	A	H	
		17235	53.66	-14.54	68.2	35.08	40	24.84	46.26	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11490	55.48	-18.52	74	36.43	38.79	20.11	39.85	100	161	P	V
			11490	45.07	-8.93	54	26.02	38.79	20.11	39.85	100	161	A	V
			17235	52.9	-15.3	68.2	34.32	40	24.84	46.26	-	-	P	V
														V
														V
														V
														V
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT20 CH 157 5785MHz		11570	51.47	-22.53	74	32.57	38.66	20.16	39.92	100	139	P	H	
		11570	44.1	-9.9	54	25.2	38.66	20.16	39.92	100	139	A	H	
		17355	52.54	-15.66	68.2	34.06	39.94	24.93	46.39	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11570	56.4	-17.6	74	37.5	38.66	20.16	39.92	101	177	P	V
			11570	45.31	-8.69	54	26.41	38.66	20.16	39.92	101	177	A	V
			17355	52.11	-16.09	68.2	33.63	39.94	24.93	46.39	-	-	P	V
														V
														V
														V
														V
														V
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT20 CH 165 5825MHz		11650	55.61	-18.39	74	36.73	38.65	20.22	39.99	100	140	P	H	
		11650	44.97	-9.03	54	26.09	38.65	20.22	39.99	100	140	A	H	
		17475	52.37	-15.83	68.2	33.9	39.97	25.03	46.53	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11650	56.57	-17.43	74	37.69	38.65	20.22	39.99	100	176	P	V
			11650	46	-8	54	27.12	38.65	20.22	39.99	100	176	A	V
			17475	52.94	-15.26	68.2	34.47	39.97	25.03	46.53	-	-	P	V
														V
														V
														V
														V
														V
													V	
													V	
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. 													



Band 4 5725~5850MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5614.25	50.92	-17.28	68.2	38.13	33.36	13.42	33.99	100	192	P	H
		5698.75	52.26	-52.02	104.28	38.99	33.79	13.54	34.06	100	192	P	H
		5720	57.39	-53.41	110.8	43.98	33.92	13.57	34.08	100	192	P	H
		5724	60.36	-59.56	119.92	46.92	33.94	13.58	34.08	100	192	P	H
	*	5755	100.35	-	-	86.74	34.1	13.62	34.11	100	192	P	H
	*	5755	94.39	-	-	80.78	34.1	13.62	34.11	100	192	A	H
		5854.25	50.49	-62.02	112.51	36.91	34	13.77	34.19	100	192	P	H
		5871.75	49.81	-56.3	106.11	36.23	34	13.79	34.21	100	192	P	H
		5893.25	51.07	-40.59	91.66	37.48	34	13.82	34.23	100	192	P	H
		5946	50.39	-17.81	68.2	36.77	34	13.89	34.27	100	192	P	H
802.11ac													H
VHT40													H
CH 151		5629.25	50.18	-18.02	68.2	37.32	33.42	13.44	34	300	43	P	V
5755MHz		5699.75	51.85	-53.17	105.02	38.57	33.8	13.54	34.06	300	43	P	V
		5717	58.97	-50.99	109.96	45.58	33.9	13.57	34.08	300	43	P	V
		5721.5	64.08	-50.14	114.22	50.65	33.93	13.58	34.08	300	43	P	V
	*	5755	96.93	-	-	83.32	34.1	13.62	34.11	300	43	P	V
	*	5755	90.81	-	-	77.2	34.1	13.62	34.11	300	43	A	V
		5853.75	48.39	-65.26	113.65	34.81	34	13.77	34.19	300	43	P	V
		5868.25	50.54	-56.55	107.09	36.96	34	13.79	34.21	300	43	P	V
		5895.25	50.16	-40.02	90.18	36.57	34	13.82	34.23	300	43	P	V
		5936.75	50.1	-18.1	68.2	36.49	34	13.88	34.27	300	43	P	V
													V
													V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5629	50.96	-17.24	68.2	38.1	33.42	13.44	34	300	192	P	H
		5677.75	51.11	-37.67	88.78	37.97	33.67	13.51	34.04	300	192	P	H
		5717.75	51.92	-58.25	110.17	38.52	33.91	13.57	34.08	300	192	P	H
		5723.5	53.95	-64.83	118.78	40.51	33.94	13.58	34.08	300	192	P	H
	*	5795	99.86	-	-	86.22	34.1	13.68	34.14	300	192	P	H
	*	5795	93.74	-	-	80.1	34.1	13.68	34.14	300	192	A	H
		5850	49.31	-72.89	122.2	35.74	34	13.76	34.19	300	192	P	H
		5867.5	50.77	-56.53	107.3	37.2	34	13.78	34.21	300	192	P	H
		5883.5	51.48	-47.41	98.89	37.89	34	13.81	34.22	300	192	P	H
		5943.5	50.59	-17.61	68.2	36.97	34	13.89	34.27	300	192	P	H
802.11ac													H
VHT40													H
CH 159		5616.5	49.7	-18.5	68.2	36.9	33.37	13.42	33.99	300	43	P	V
5795MHz		5692.75	51.08	-48.78	99.86	37.85	33.76	13.53	34.06	300	43	P	V
		5716.5	51.2	-58.62	109.82	37.81	33.9	13.57	34.08	300	43	P	V
		5724.25	49.12	-71.37	120.49	35.67	33.95	13.58	34.08	300	43	P	V
	*	5795	97.27	-	-	83.63	34.1	13.68	34.14	300	43	P	V
	*	5795	91.17	-	-	77.53	34.1	13.68	34.14	300	43	A	V
		5851.25	50.24	-69.11	119.35	36.67	34	13.76	34.19	300	43	P	V
		5866.75	50.53	-56.98	107.51	36.96	34	13.78	34.21	300	43	P	V
		5896.75	52.16	-36.91	89.07	38.56	34	13.83	34.23	300	43	P	V
		5932.25	49.79	-18.41	68.2	36.17	34	13.88	34.26	300	43	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT40 CH 151 5755MHz		11510	52.23	-21.77	74	33.19	38.78	20.13	39.87	-	-	P	H	
		11510	43.02	-10.98	54	23.98	38.78	20.13	39.87	-	-	A	H	
		17265	52.78	-15.42	68.2	34.21	40	24.86	46.29	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11510	52.09	-21.91	74	33.05	38.78	20.13	39.87	-	-	P	V
			11510	42.88	-11.12	54	23.84	38.78	20.13	39.87	-	-	A	V
			17265	51.99	-16.21	68.2	33.42	40	24.86	46.29	-	-	P	V
														V
														V
														V
														V
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT40 CH 159 5795MHz		11590	52.97	-21.03	74	34.11	38.62	20.18	39.94	-	-	P	H	
		11590	43.76	-10.24	54	24.9	38.62	20.18	39.94	-	-	A	H	
		17385	53.42	-14.78	68.2	34.97	39.92	24.96	46.43	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11590	51.77	-22.23	74	32.91	38.62	20.18	39.94	-	-	P	V
			11590	42.56	-11.44	54	23.7	38.62	20.18	39.94	-	-	A	V
			17385	52.79	-15.41	68.2	34.34	39.92	24.96	46.43	-	-	P	V
														V
														V
														V
														V
														V
													V	
													V	
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. 													



Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5631.25	52.01	-16.19	68.2	39.14	33.42	13.45	34	100	192	P	H
		5690.25	60.3	-37.71	98.01	47.08	33.74	13.53	34.05	100	192	P	H
		5716.75	66.55	-43.34	109.89	53.16	33.9	13.57	34.08	100	192	P	H
		5723.25	68.05	-50.16	118.21	54.61	33.94	13.58	34.08	100	192	P	H
	*	5775	96.78	-	-	83.16	34.1	13.65	34.13	100	192	P	H
	*	5775	90.89	-	-	77.27	34.1	13.65	34.13	100	192	A	H
		5850.75	54.87	-65.62	120.49	41.3	34	13.76	34.19	100	192	P	H
		5866.5	56.49	-51.09	107.58	42.92	34	13.78	34.21	100	192	P	H
		5880.5	51.81	-49.3	101.11	38.23	34	13.8	34.22	100	192	P	H
		5934.5	49.92	-18.28	68.2	36.3	34	13.88	34.26	100	192	P	H
													H
													H
802.11ac													
VHT80													
CH 155		5616.75	50.72	-17.48	68.2	37.92	33.37	13.42	33.99	300	45	P	V
5775MHz		5683	56.05	-36.61	92.66	42.88	33.7	13.52	34.05	300	45	P	V
		5718.5	63.71	-46.67	110.38	50.31	33.91	13.57	34.08	300	45	P	V
		5722.75	61.96	-55.11	117.07	48.52	33.94	13.58	34.08	300	45	P	V
	*	5775	93.74	-	-	80.12	34.1	13.65	34.13	300	45	P	V
	*	5775	87.71	-	-	74.09	34.1	13.65	34.13	300	45	A	V
		5853	54.17	-61.19	115.36	40.6	34	13.76	34.19	300	45	P	V
		5856.75	53.48	-56.83	110.31	39.91	34	13.77	34.2	300	45	P	V
		5903.5	51.8	-32.27	84.07	38.21	34	13.83	34.24	300	45	P	V
		5950	50.98	-17.22	68.2	37.36	34	13.9	34.28	300	45	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
i802.11ac VHT80 CH 155 5775MHz		11550	51.79	-22.21	74	32.84	38.7	20.15	39.9	-	-	P	H	
		11550	42.58	-11.42	54	23.63	38.7	20.15	39.9	-	-	A	H	
		17325	52.04	-16.16	68.2	33.53	39.97	24.9	46.36	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11550	51.96	-22.04	74	33.01	38.7	20.15	39.9	-	-	P	V
			11550	42.75	-11.25	54	23.8	38.7	20.15	39.9	-	-	A	V
			17325	52.2	-16	68.2	33.69	39.97	24.9	46.36	-	-	P	V
														V
														V
														V
														V
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.													



Emission above 18GHz

5GHz WIFI 802.11a (SHF @ 1m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11a SHF	1	25004	42.51	-25.69	68.2	42.07	39.79	20.15	59.5	-	-	P	H
		39918.4	51.07	-22.93	74	40.74	44.97	29.13	63.77	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			21893	41.95	-26.25	68.2	46.21	38.79	18.11	61.16	-	-	P
		39224.8	51.07	-22.93	74	41.04	44.64	28.66	63.27	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Emission below 1GHz
5GHz WIFI 802.11a (LF @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
5GHz 802.11a LF		72.68	24.15	-15.85	40	42.81	12.43	1.61	32.7	-	-	P	H	
		95.96	30.73	-12.77	43.5	45.96	15.59	1.85	32.67	-	-	P	H	
		207.51	25.31	-18.19	43.5	40.24	15	2.78	32.71	-	-	P	H	
		385.02	27.8	-18.2	46	35.81	21.2	3.63	32.84	-	-	P	H	
		564.47	28.49	-17.51	46	30.81	26.3	4.38	33	-	-	P	H	
		935.01	34.66	-11.34	46	30.39	30.3	5.64	31.67	-	-	P	H	
														H
														H
														H
														H
														H
														H
			31.94	31.13	-8.87	40	38.84	24.02	1.02	32.75	-	-	P	V
			74.62	26.15	-13.85	40	44.63	12.59	1.63	32.7	-	-	P	V
			93.05	28.24	-15.26	43.5	43.8	15.3	1.82	32.68	-	-	P	V
			128.94	27.51	-15.99	43.5	40.59	17.5	2.1	32.68	-	-	P	V
			256.98	23.36	-22.64	46	33.62	19.46	3.03	32.75	-	-	P	V
			880.69	33.65	-12.35	46	31.33	29.01	5.46	32.15	-	-	P	V
														V
														V
													V	
													V	
													V	
													V	

Remark

- No other spurious found.
- All results are PASS against limit line.
- The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a		11213	48.14	-25.86	74	59.06	39.72	17.65	68.29	-	-	P	H
CH 149		11213	37.67	-16.33	54	48.59	39.72	17.65	68.29	-	-	A	H
5745MHz													

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Margin(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 11213MHz:

1. Level(dBμV/m)
 - = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 - = 39.72(dB/m) + 17.65(dB) + 59.06(dBμV) – 68.29 (dB)
 - = 48.14 (dBμV/m)
2. Margin(dB)
 - = Level(dBμV/m) – Limit Line(dBμV/m)
 - = 48.14(dBμV/m) – 74(dBμV/m)
 - = -25.86(dB)

For Average Limit @ 11213MHz:

1. Level(dBμV/m)
 - = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 - = 39.72(dB/m) + 17.65(dB) + 48.59(dBμV) – 68.29 (dB)
 - = 37.67 (dBμV/m)
2. Margin(dB) = Level(dBμV/m) – Limit Line(dBμV/m)
 - = 37.67(dBμV/m) – 54(dBμV/m)
 - = -16.33(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Leo Li and Shiming Liu	Temperature :	18.3~24.5°C
		Relative Humidity :	42.3~68.5%

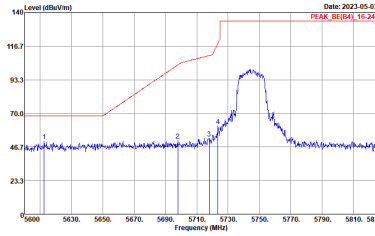
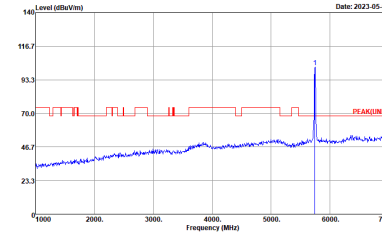
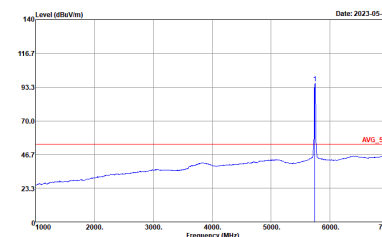
Band 4 - 5725~5850MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH23-HY Condition : PEAK_8E(B4)_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>

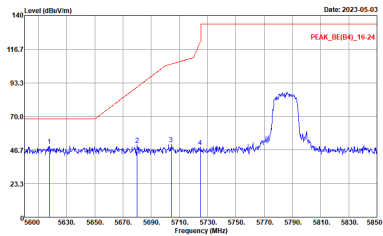
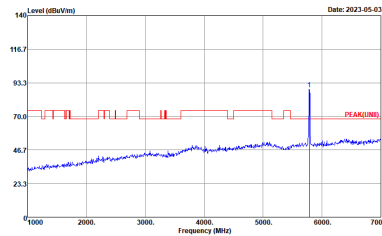
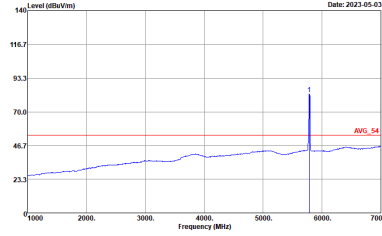


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Avg	Left blank	<p>The spectrum plot displays the signal level in dBµV/m across a frequency range from 1000 MHz to 7000 MHz. A prominent peak is observed at 5745 MHz, reaching a level of approximately 93.3 dBµV/m. The baseline noise floor is around 23.3 dBµV/m. A red horizontal line labeled 'AVG_54' is positioned at approximately 46.7 dBµV/m. The plot includes a date stamp of 2023-05-03 and technical details: Site: 03CH23-HY, Condition: AVG_54 3m LE2:05A18EN_230705 HORIZONTAL, RBW:1000.000KHz VBW:1.000KHz SWT-Auto.</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH23-HY Condition : PEAK_BE[94]_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH23-HY Condition : PEAK[LINE] 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	
		 <p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH23-HY Condition : PEAK_BE(B4)_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH23-HV Condition : PEAK_9C(94)_16-24 3m LE2C05A18EN_230705 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	Left blank

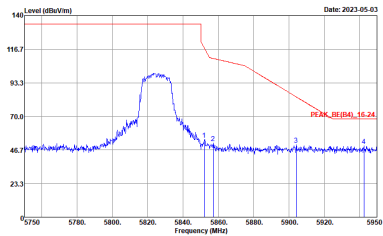
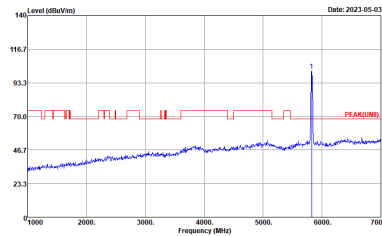
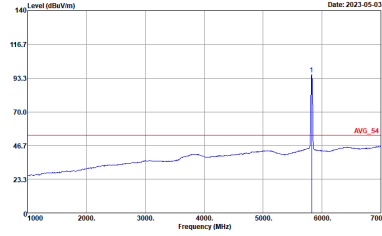


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH23-HY Condition : PEAK_BE(B4)_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>

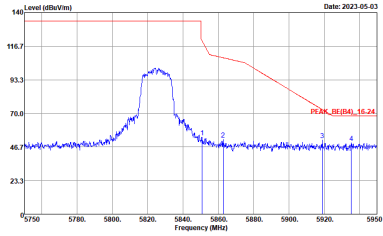
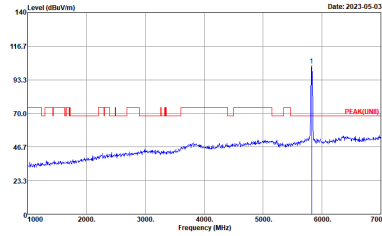
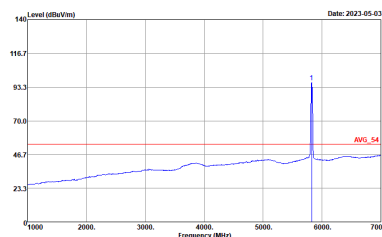


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak	<p>Site : 09CH23-HV Condition : PEAK_9C(94)_16-24 3m LE2005A18EN_230705 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



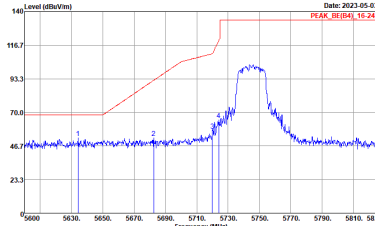
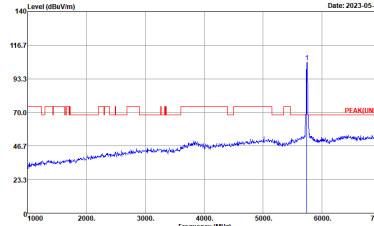
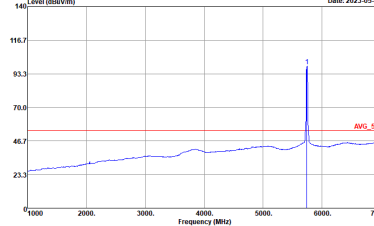
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH23-HY Condition : PEAK_06[94]_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH23-HY Condition : PEAK[LINE3] 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	
		 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



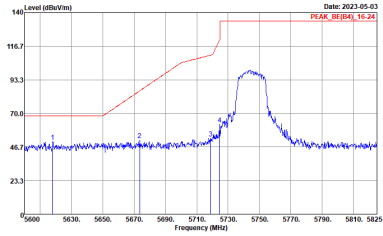
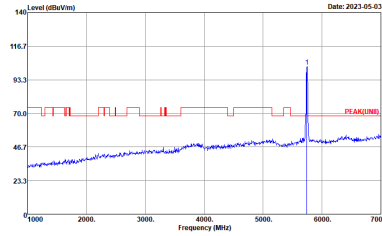
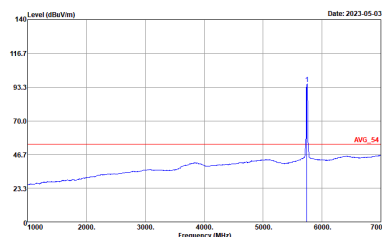
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH23-HY Condition : PEAK_8E[9A]_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



Band 4 5725~5850MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH23-HY Condition : PEAK_BE(B4)_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>

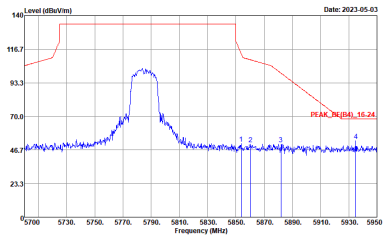


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH23-HY Condition : PEAK_BE[94]_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH23-HY Condition : PEAK[LINE] 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH23-HY Condition : PEAK_BE(B4)_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 09CH23-HV Condition : PEAK_BC(94)_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH23-HY Condition : PEAK_BE(B4)_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Vertical	Fundamental
Peak	<p>Site : 09CH23-HV Condition : PEAK_06(94)_16-24 3m LE2005A18ENL_230705 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH23-HY Condition : PEAK_BI(BI)_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHZ	
1	Vertical	Fundamental
Peak	<p>Site : 03CH23-HY Condition : PEAK_BE(B4)_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto</p>



Band 4 5725~5850MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Fundamental
Peak		
Avg	Left blank	



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 09CH23-HV Condition : PEAK_B4_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank

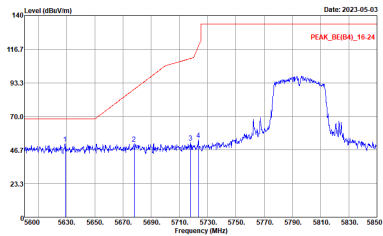
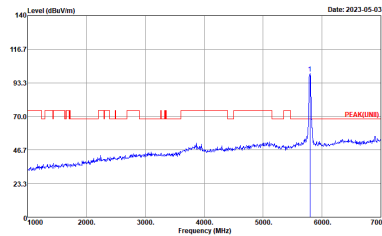
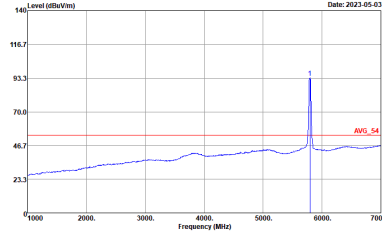


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH23-HY Condition : PEAK_BE(B4)_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak	<p>Site : 09CH23-HV Condition : PEAK_94_16-24 3m LE2005A18N1_230705 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank

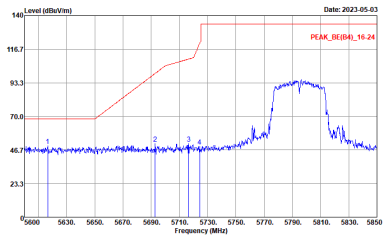
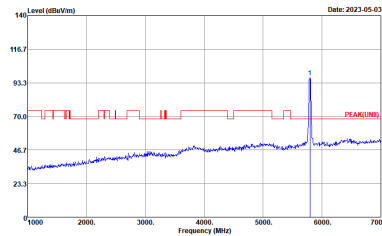
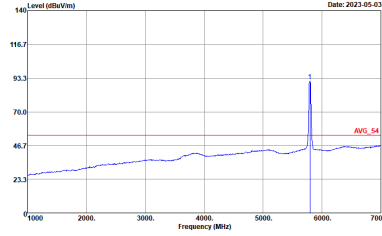


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH23-HY Condition : PEAK_BE[94]_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH23-HY Condition : PEAK[LINE3] 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 09CH23-HV Condition : PEAK_9C(94)_16-24 3m LE2005A18EN_230705 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH23-HY Condition : PEAK_BE(94)_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Vertical	Fundamental
Peak	<p>Site : 09CH23-HV Condition : PEAK_9C(94)_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak		
Avg	Left blank	



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH23-HV Condition : PEAK_BC(B4)_16-24 3m LE2C05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH23-HY Condition : PEAK_BE(B4)_16-24 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH23-HY Condition : PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH23-HY Condition : AVG_54 3m LE2005A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Vertical	Fundamental
Peak	<p>Site : 09CH23-HV Condition : PEAK_06(04)_16-24 3m LE2005A18EN_230705 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



Band 4 - 5725~5850MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Vertical
10.6G ~18G Avg.	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>

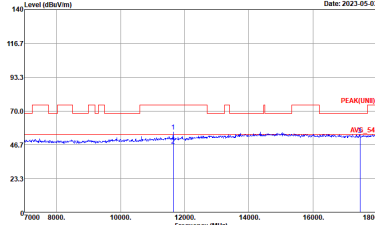
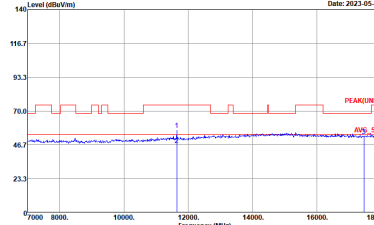


WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
10.6G ~18G Avg.	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 HORIZONTAL</p>	 <p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 VERTICAL</p>



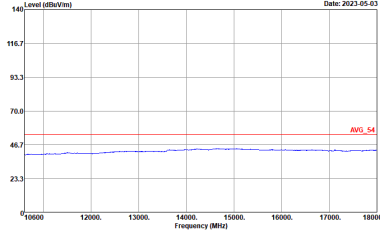
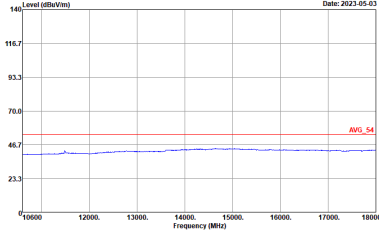
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
10.6G ~18G Avg.	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>



**Band 4 5725~5850MHz
WIFI 802.11ac VHT20 (Harmonic @ 3m)**

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH23-11Y Condition : -PEAK(LINE) 3m LE2005A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-11Y Condition : -PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Horizontal	Vertical
<p>10.6G ~18G Avg.</p>	 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 VERTICAL</p>

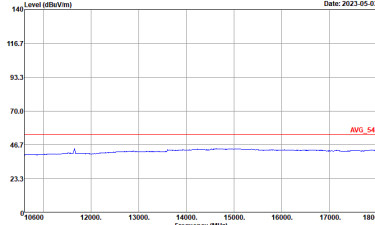
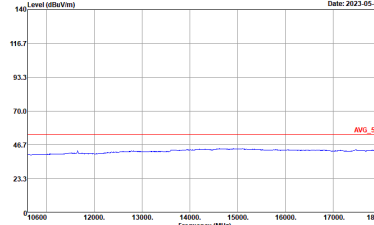


WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Vertical
10.6G ~18G Avg.	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : PEAK(UNII) 3m LE2C05A18EN_230705 VERTICAL</p>



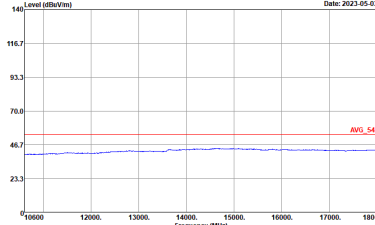
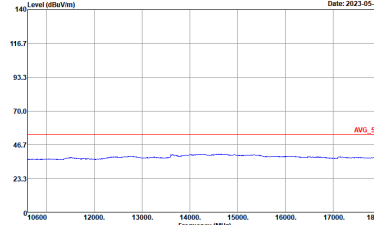
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Vertical
<p>10.6G ~18G Avg.</p>	 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>



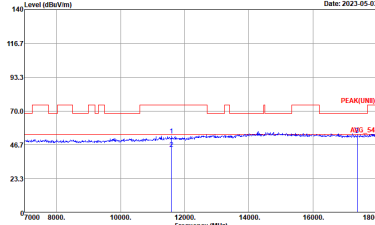
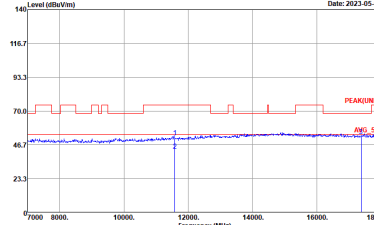
Band 4 5725~5850MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH23-14Y Condition : -PEAK(LINE) 3m LE2005A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-14Y Condition : -PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Vertical
<p>10.6G ~18G Avg.</p>	 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	 <p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH23-HY Condition : PEAK(UWB) 3m LE2C05A18EN_230705 HORIZONTAL</p>	 <p>Site : 03CH23-HY Condition : PEAK(UWB) 3m LE2C05A18EN_230705 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Vertical
10.6G ~18G Avg.	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>



Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH23-14Y Condition : -PEAK(LINE) 3m LE2005A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-14Y Condition : -PEAK(LINE) 3m LE2005A18EN_230705 VERTICAL</p>



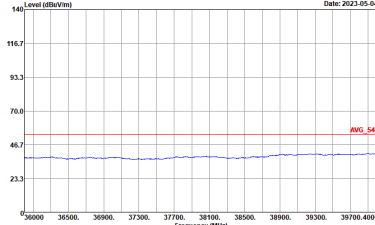
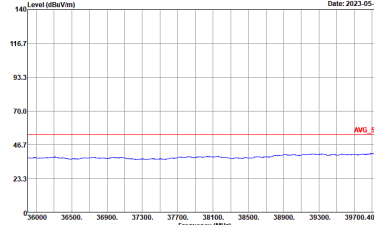
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Vertical
10.6G ~18G Avg.	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : AV6_54 3m LE2C05A18EN_230705 VERTICAL</p>



Emission above 18GHz
5GHz WIFI 802.11a (SHF @ 1m)

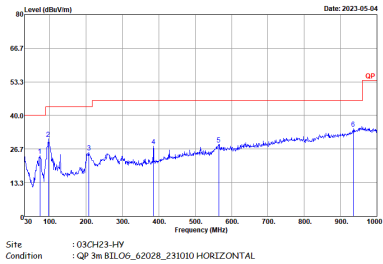
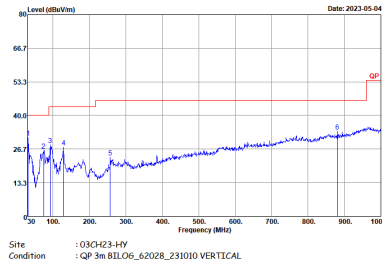
WIFI	5GHz WIFI	
ANT	802.11a SHF	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH23-HY Condition : PEAK(UNII) 1m SHF_1223_220705 HORIZONTAL</p>	<p>Site : 03CH23-HY Condition : PEAK(UNII) 1m SHF_1223_220705 VERTICAL</p>



WIFI	5GHz WIFI	
ANT	802.11a SHF	
1	Horizontal	Vertical
<p>36G</p> <p>~40G</p> <p>Avg.</p>	 <p>Site : 03CH23-HY Condition : AV6_54 1m SHF_1223_220705 HORIZONTAL</p>	 <p>Site : 03CH23-HY Condition : AV6_54 1m SHF_1223_220705 VERTICAL</p>



Emission below 1GHz
5GHz WIFI 802.11a (LF @ 3m)

WIFI	5GHz WIFI	
ANT	802.11a LF	
1	Horizontal	Vertical
QP / Peak	 <p>Site : 03CH23-HY Condition : QP 3m BIL06_62028_231010 HORIZONTAL</p>	 <p>Site : 03CH23-HY Condition : QP 3m BIL06_62028_231010 VERTICAL</p>



Appendix E. Duty Cycle Plots

Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
802.11a	97.54	1390	0.72	1kHz
5GHz 802.11ac VHT20	97.41	1315	0.76	1kHz
5GHz 802.11ac VHT40	94.77	652	1.53	3kHz
5GHz 802.11ac VHT80	90.00	3.09	10kHz	

