



FCC RADIO TEST REPORT

FCC ID : HLZA22001
Equipment : Tablet PC
Brand Name : acer
Model Name : A22001
Marketing Name : Iconia Tab P10, P10-11
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 Oct. 25, 2022 and testing was performed from Nov. 01, 2022 to Dec. 16, 2022. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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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	4.94 dB under the limit at 11650.000 MHz
3.5	15.207	AC Conducted Emission	Pass	3.02 dB under the limit at 26.000 MHz
3.6	15.203	Antenna Requirement	Pass	-

Declaration of Conformity:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Uncertainty of Evaluation".

Comments and Explanations:

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

Reviewed by: Lewis Ho**Report Producer: Dewi Huang**



1 General Description

1.1 Product Feature of Equipment Under Test

Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac, and GPS/Galileo/Glonass.

Product Feature	
Antenna Type	WLAN: FPC Antenna Bluetooth: FPC Antenna GPS/Galileo/Glonass: PIFA Antenna

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	-0.18

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

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. TH02-HY, CO05-HY, 03CH07-HY

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

FCC designation No.: TW1190

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 and 802.11ax HE40.
2. The above Frequency and Channel with "#" are 802.11ac VHT80 and 802.11ax HE80.



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.

Single Mode

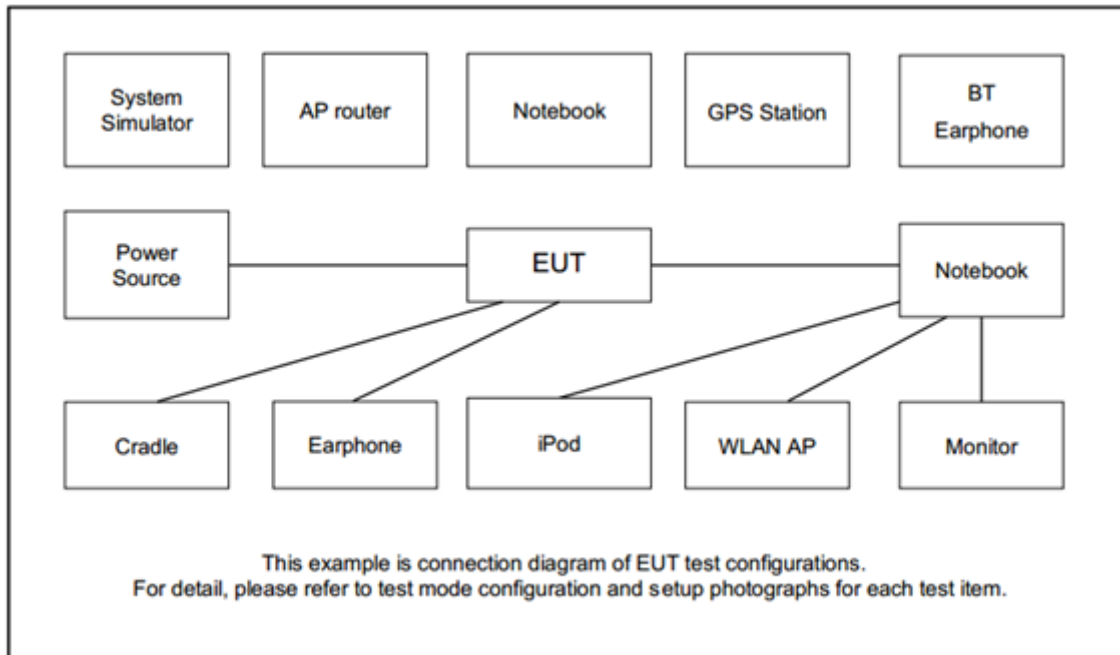
Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by VHT20)	MCS0
802.11n HT40 (Covered by VHT40)	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN (5GHz) Link + MPEG4 + Earphone +USB Cable (Charging from AC Adapter)

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	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
4.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P : Unshielded, 1.2 m DC O/P : Shielded, 1.8 m



2.5 EUT Operation Test Setup

The RF test items, make the EUT (SW: Acer_AV0S0_P10-11_0_006.00_PAPAP_GEN1.1) 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.

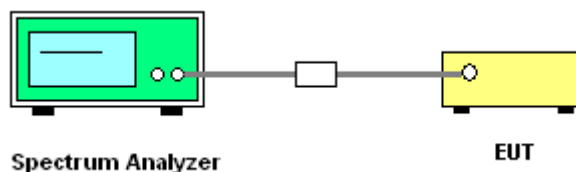
3.1.2 Measuring Instruments

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

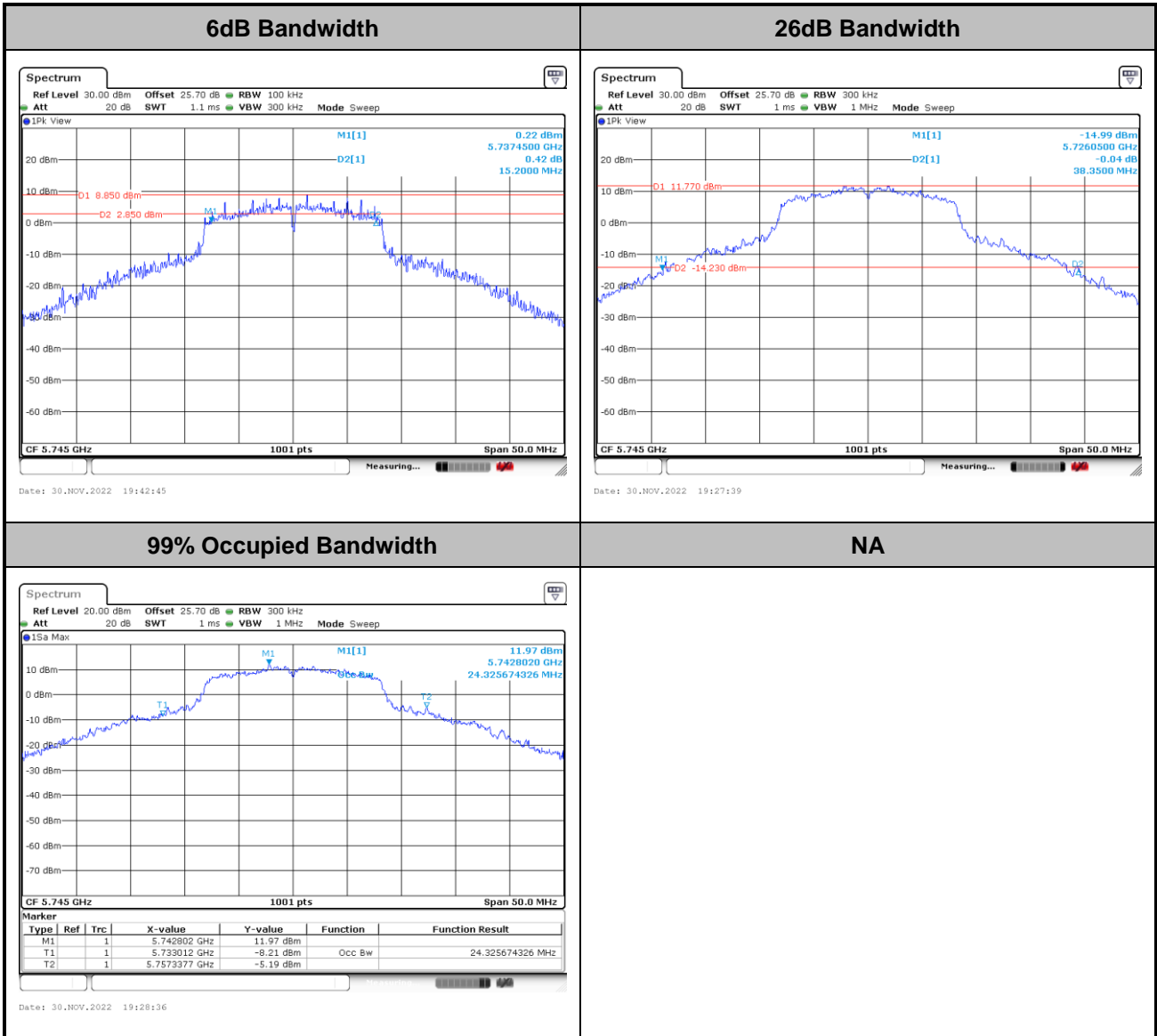


3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.



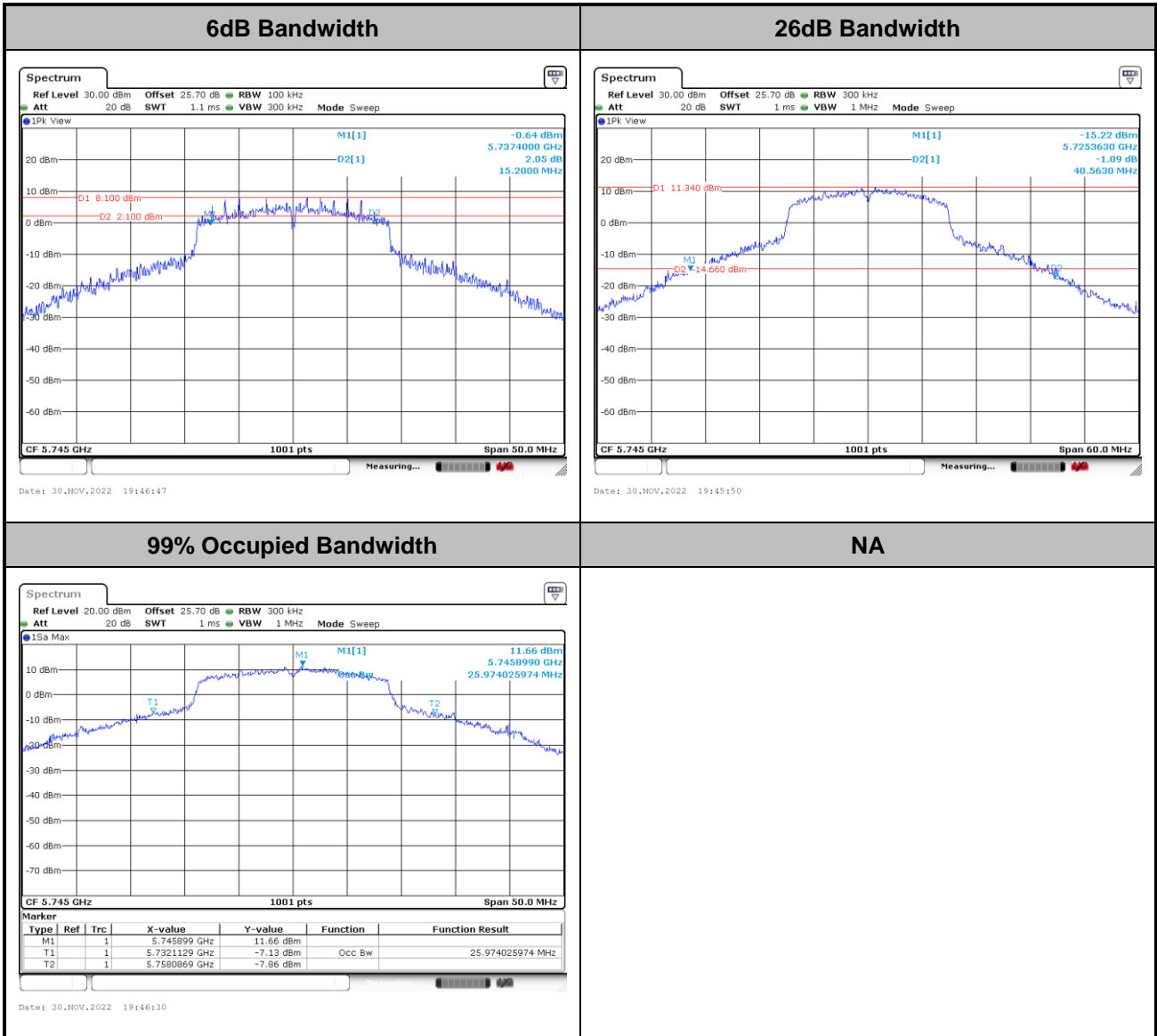
<802.11a>



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



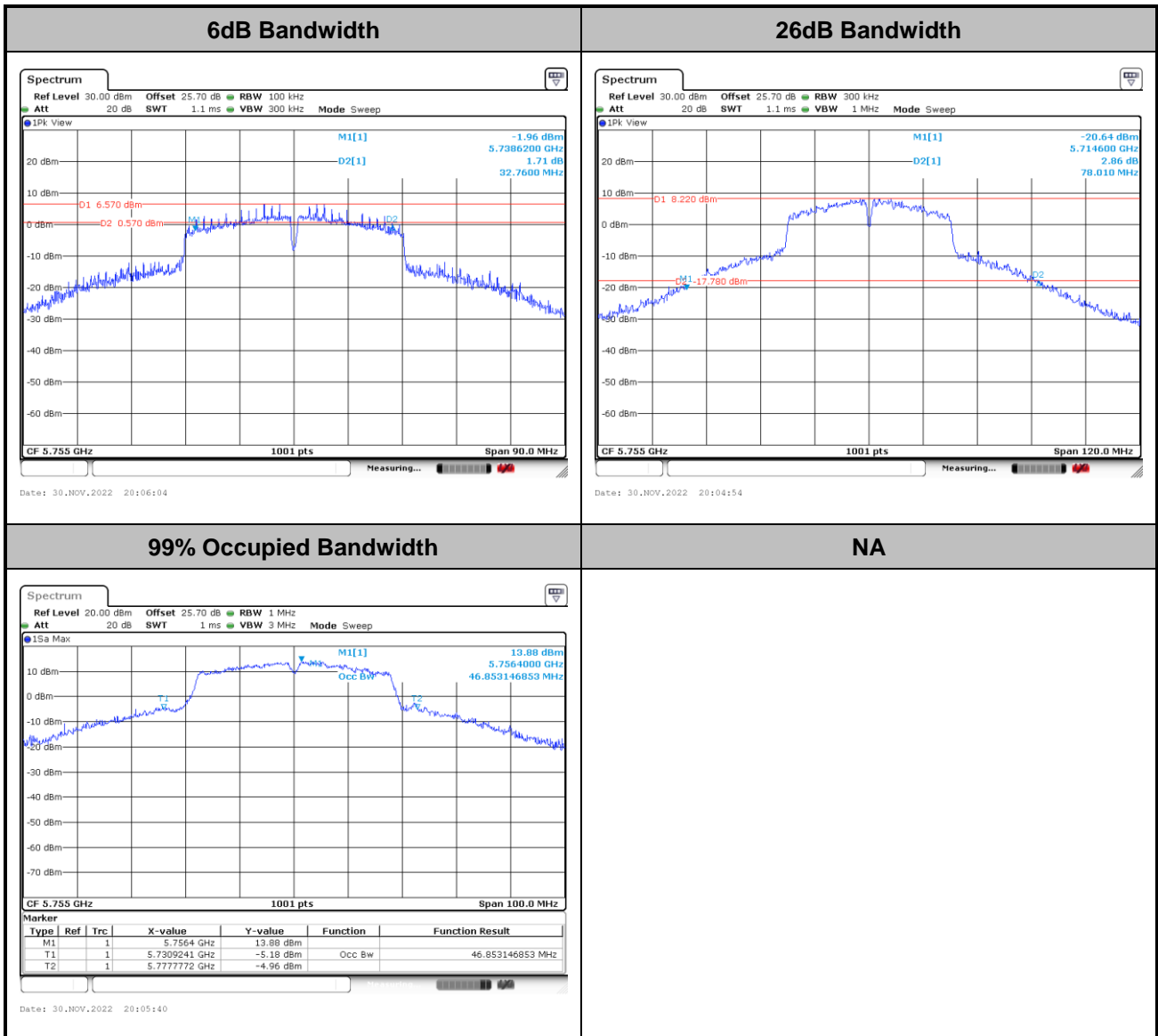
<802.11ac VHT20>



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



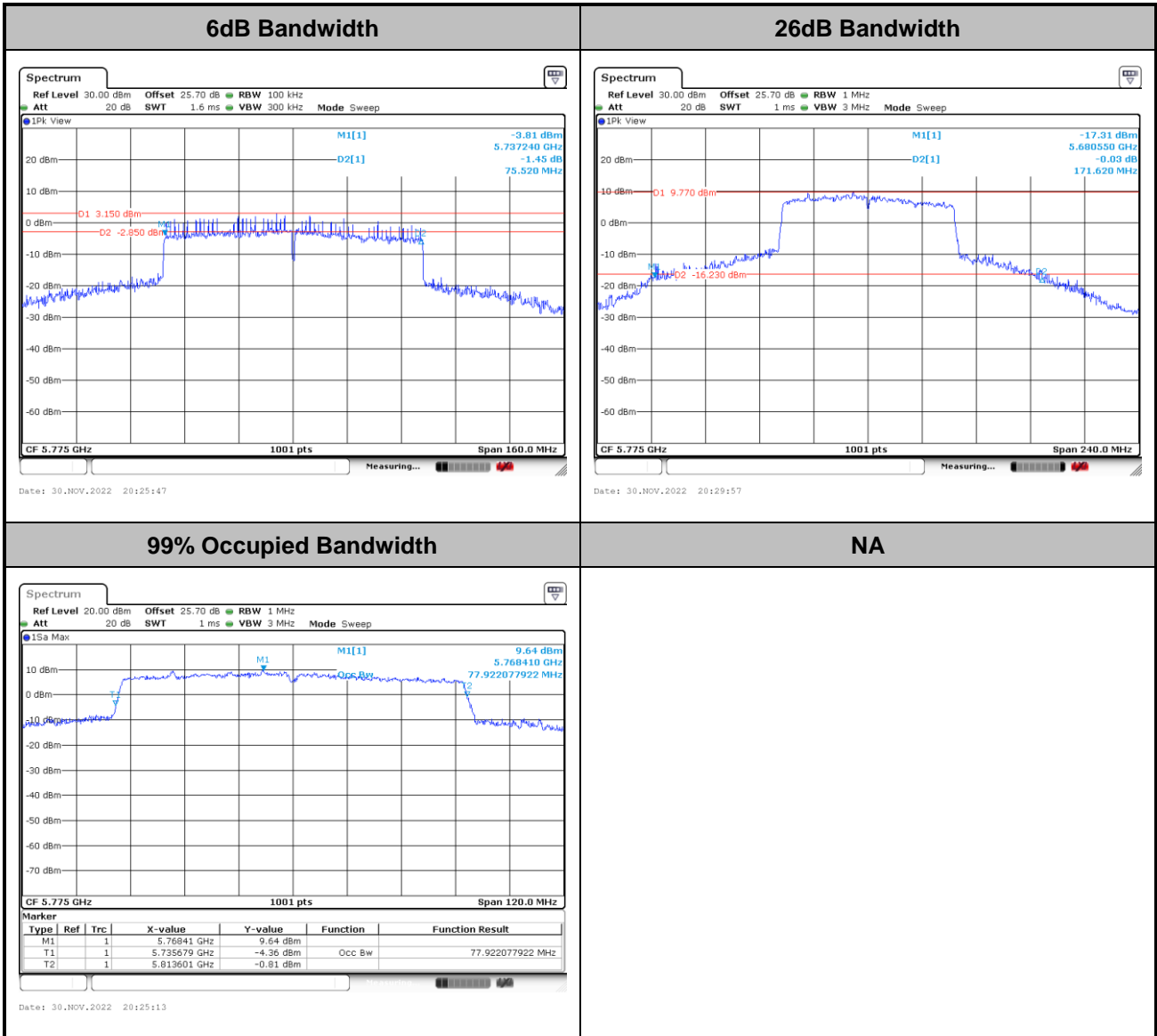
<802.11ac VHT40>



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.

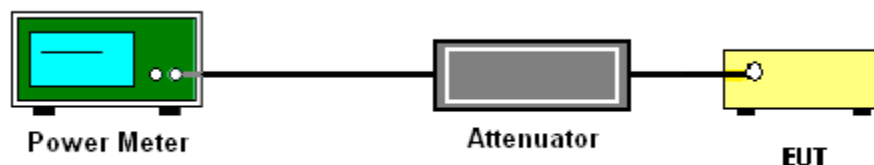
3.2.3 Test Procedures

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

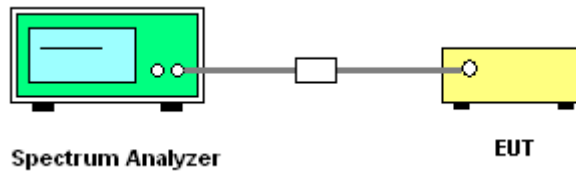
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

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.

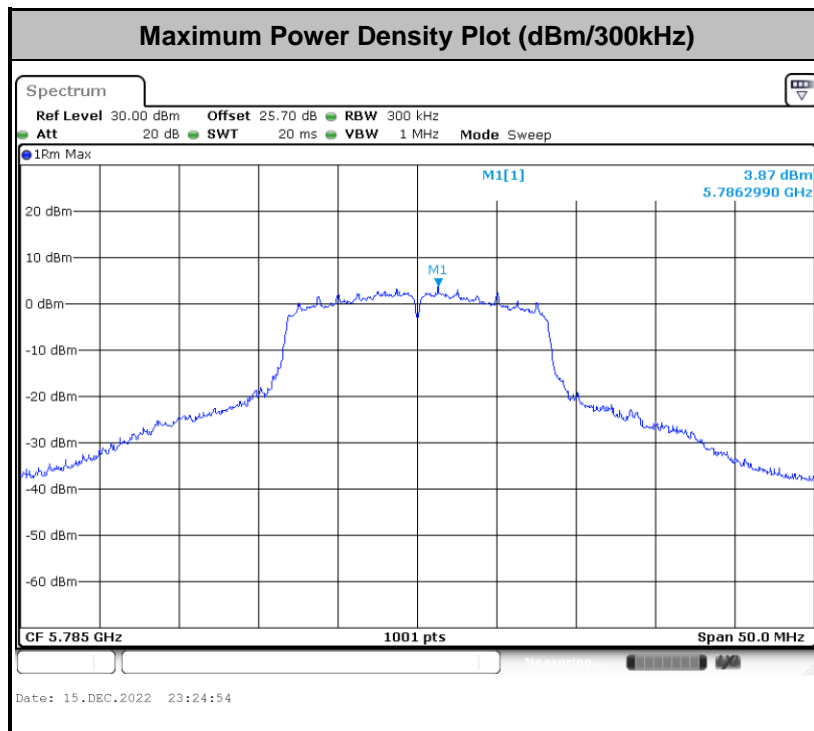
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

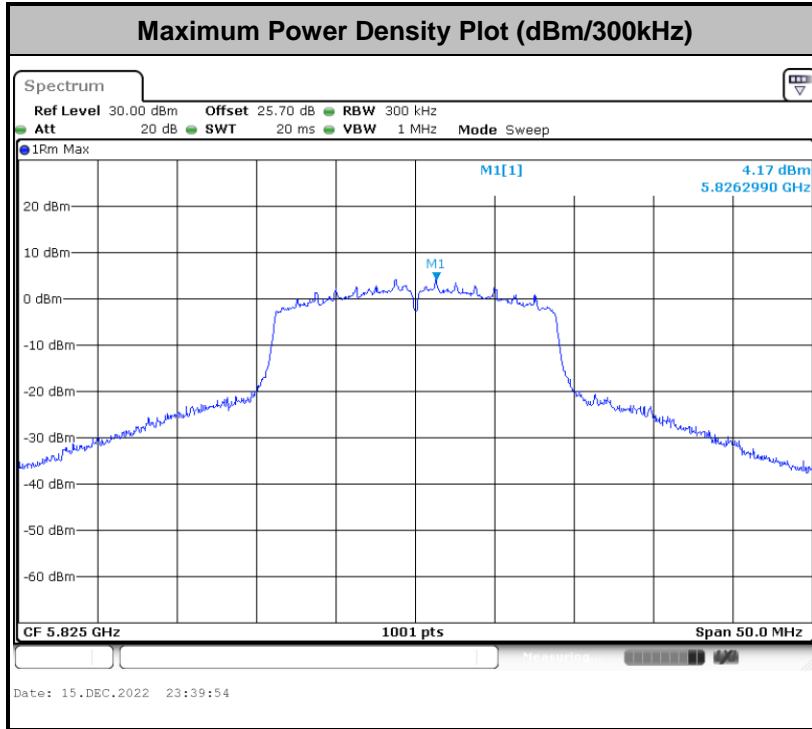
Please refer to Appendix A.

<802.11a>

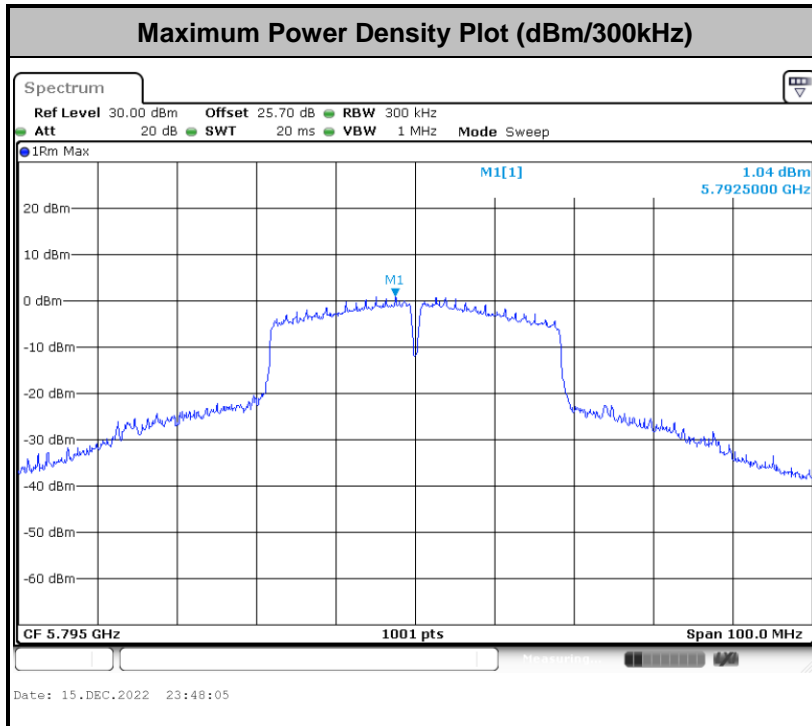




<802.11ac VHT20>

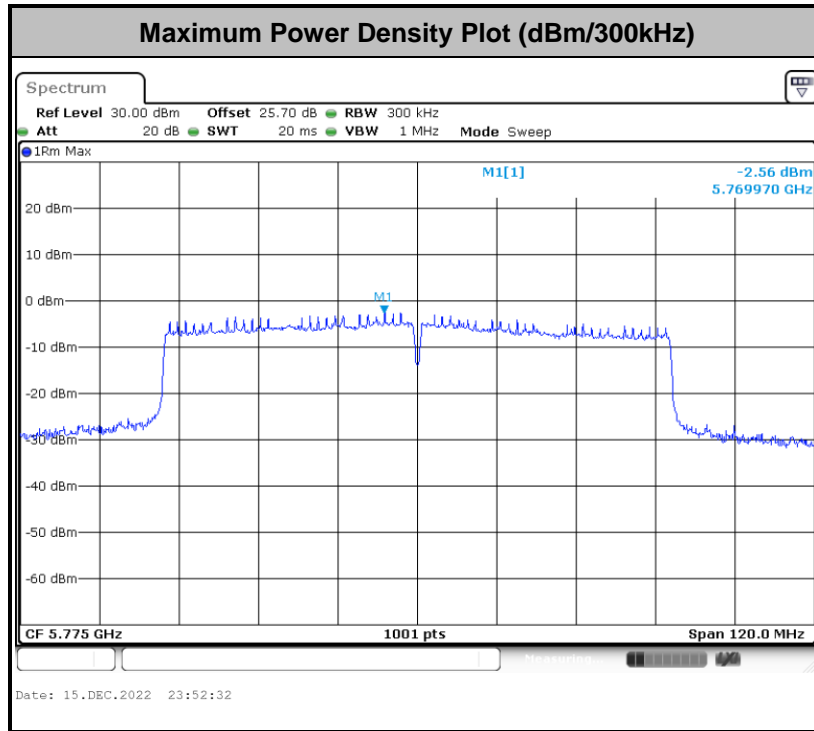


<802.11ac VHT40>





<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.

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

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.

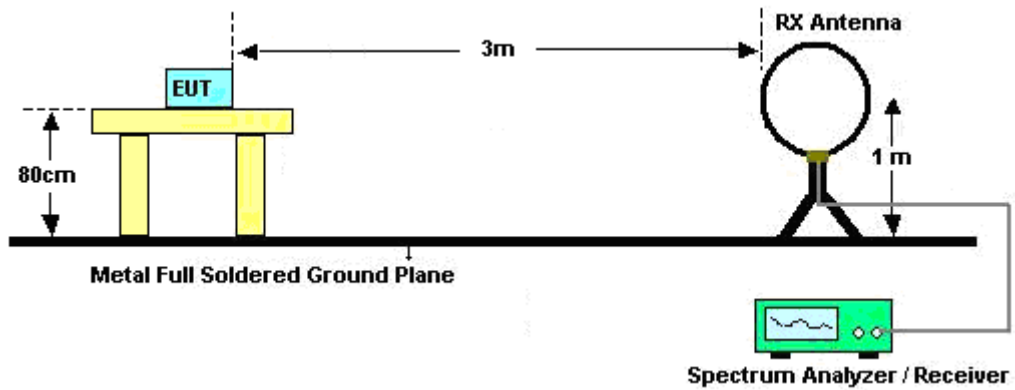
3.4.3 Test Procedures

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.

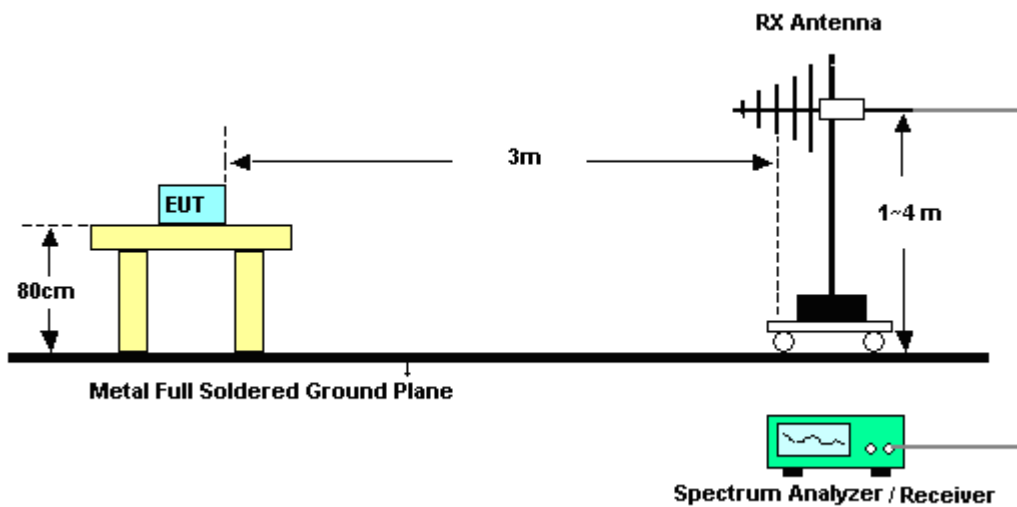
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit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

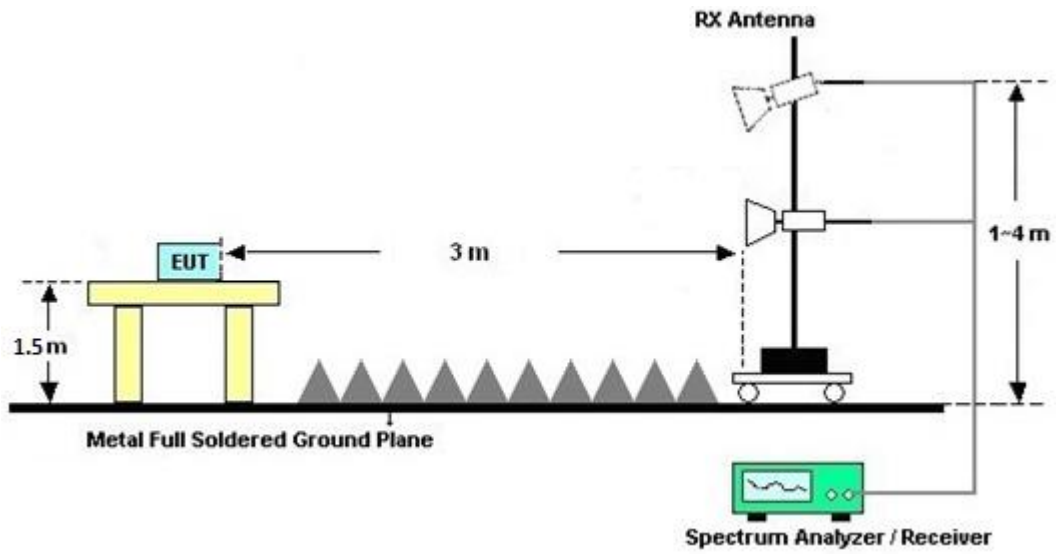
For radiated emissions below 30MHz



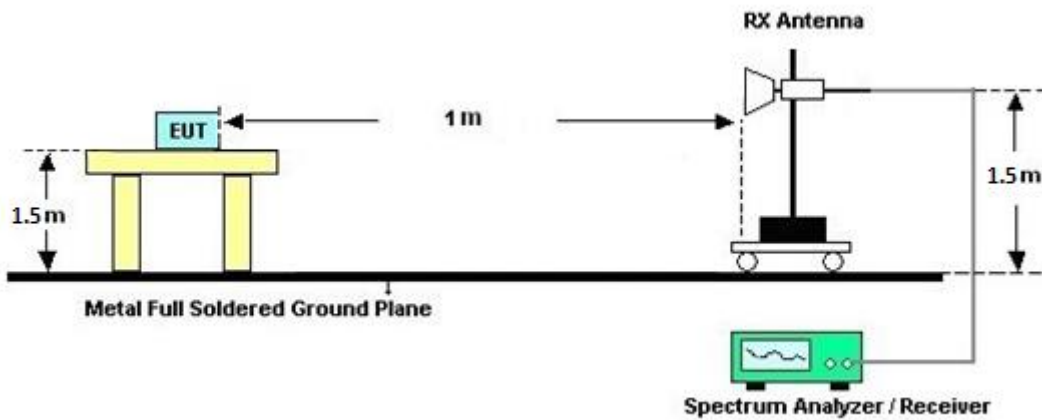
For radiated emissions from 30MHz to 1GHz



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
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 24, 2022	Nov. 19, 2022~Nov. 28, 2022	Apr. 23, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Nov. 19, 2022~Nov. 28, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Nov. 19, 2022~Nov. 28, 2022	Sep. 19, 2023	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Nov. 19, 2022~Nov. 28, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 03, 2022	Nov. 19, 2022~Nov. 28, 2022	Oct. 02, 2023	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 03, 2022	Nov. 19, 2022~Nov. 28, 2022	Oct. 02, 2023	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 21, 2022	Nov. 19, 2022~Nov. 28, 2022	Jul. 20, 2023	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2022	Nov. 19, 2022~Nov. 28, 2022	Jul. 21, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Nov. 19, 2022~Nov. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Nov. 19, 2022~Nov. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Nov. 19, 2022~Nov. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 16, 2022	Nov. 19, 2022~Nov. 28, 2022	Sep. 15, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	Nov. 19, 2022~Nov. 28, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Nov. 19, 2022~Nov. 28, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Nov. 19, 2022~Nov. 28, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Nov. 19, 2022~Nov. 28, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Nov. 19, 2022~Nov. 28, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Nov. 19, 2022~Nov. 28, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	Nov. 19, 2022~Nov. 28, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz~26.5GHz	May 27, 2022	Nov. 19, 2022~Nov. 28, 2022	May 26, 2023	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	01224	18GHz~40GHz	Jul. 05, 2022	Nov. 19, 2022~Nov. 28, 2022	Jul. 04, 2023	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Dec. 06, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Oct. 06, 2022	Dec. 06, 2022	Oct. 05, 2023	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2022	Dec. 06, 2022	Nov. 16, 2023	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 17, 2022	Dec. 06, 2022	Nov. 16, 2023	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Dec. 06, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Aug. 01, 2022	Dec. 06, 2022	Jul. 31, 2023	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Dec. 06, 2022	Dec. 29, 2022	Conduction (CO05-HY)
Hygrometer	TECPEL	TR-32	HE17XB2468	N/A	Mar. 18, 2022	Nov. 01, 2022~ Dec. 16, 2022	Mar. 17, 2023	Conducted (TH02-HY)
USB Power Sensor	DARE	RPR3006W	16I00054SNO 13 (NO:255)	10MHz~6GHz	Dec. 29, 2021	Nov. 01, 2022~ Dec. 16, 2022	Dec. 28, 2022	Conducted (TH02-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101564	10Hz~40GHz	Sep. 13, 2022	Nov. 01, 2022~ Dec. 16, 2022	Sep. 12, 2023	Conducted (TH02-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.5 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.50 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.50 dB
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Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.20 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.30 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Junyu Jhou	Temperature:	21~25	°C
Test Date:	2022/11/01~2022/12/16	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	24.33	-	38.35	-	15.20	-	0.5	Pass
11a	6Mbps	1	157	5785	24.23	-	37.10	-	15.20	-	0.5	Pass
11a	6Mbps	1	165	5825	22.63	-	35.15	-	15.15	-	0.5	Pass
VHT20	MCS0	1	149	5745	25.97	-	40.56	-	15.20	-	0.5	Pass
VHT20	MCS0	1	157	5785	25.87	-	41.96	-	15.25	-	0.5	Pass
VHT20	MCS0	1	165	5825	24.53	-	40.31	-	15.25	-	0.5	Pass
VHT40	MCS0	1	151	5755	46.85	-	78.01	-	32.76	-	0.5	Pass
VHT40	MCS0	1	159	5795	48.65	-	79.63	-	32.76	-	0.5	Pass
VHT80	MCS0	1	155	5775	77.92	-	171.62	-	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	16.20	-		30.00	-	-0.18	-	Pass
11a	6Mbps	1	157	5785	16.40	-		30.00	-	-0.18	-	Pass
11a	6Mbps	1	165	5825	16.10	-		30.00	-	-0.18	-	Pass
HT20	MCS0	1	149	5745	16.10	-		30.00	-	-0.18	-	Pass
HT20	MCS0	1	157	5785	16.30	-		30.00	-	-0.18	-	Pass
HT20	MCS0	1	165	5825	16.30	-		30.00	-	-0.18	-	Pass
HT40	MCS0	1	151	5755	16.20	-		30.00	-	-0.18	-	Pass
HT40	MCS0	1	159	5795	16.40	-		30.00	-	-0.18	-	Pass
VHT20	MCS0	1	149	5745	16.20	-		30.00	-	-0.18	-	Pass
VHT20	MCS0	1	157	5785	16.40	-		30.00	-	-0.18	-	Pass
VHT20	MCS0	1	165	5825	16.40	-		30.00	-	-0.18	-	Pass
VHT40	MCS0	1	151	5755	16.30	-		30.00	-	-0.18	-	Pass
VHT40	MCS0	1	159	5795	16.50	-		30.00	-	-0.18	-	Pass
VHT80	MCS0	1	155	5775	16.10	-		30.00	-	-0.18	-	Pass

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	-	5.90	-		30.00	-	-0.18	-	Pass
11a	6Mbps	1	157	5785	2.22	-	6.09	-		30.00	-	-0.18	-	Pass
11a	6Mbps	1	165	5825	2.22	-	5.79	-		30.00	-	-0.18	-	Pass
VHT20	MCS0	1	149	5745	2.22	-	5.92	-		30.00	-	-0.18	-	Pass
VHT20	MCS0	1	157	5785	2.22	-	6.00	-		30.00	-	-0.18	-	Pass
VHT20	MCS0	1	165	5825	2.22	-	6.39	-		30.00	-	-0.18	-	Pass
VHT40	MCS0	1	151	5755	2.22	-	3.04	-		30.00	-	-0.18	-	Pass
VHT40	MCS0	1	159	5795	2.22	-	3.26	-		30.00	-	-0.18	-	Pass
VHT80	MCS0	1	155	5775	2.22	-	-0.34	-		30.00	-	-0.18	-	Pass

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



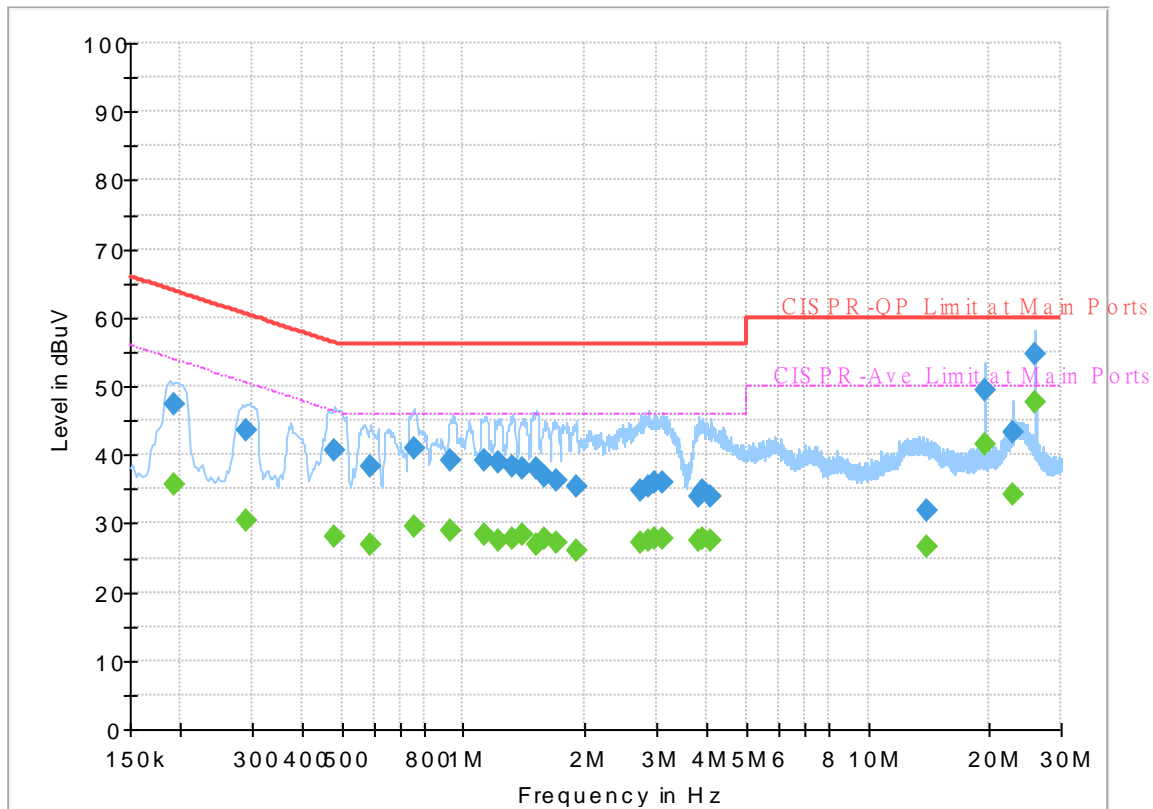
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	Temperature :	23~26°C
		Relative Humidity :	45~55%

EUT Information

Report NO : 202509
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



Final_Result

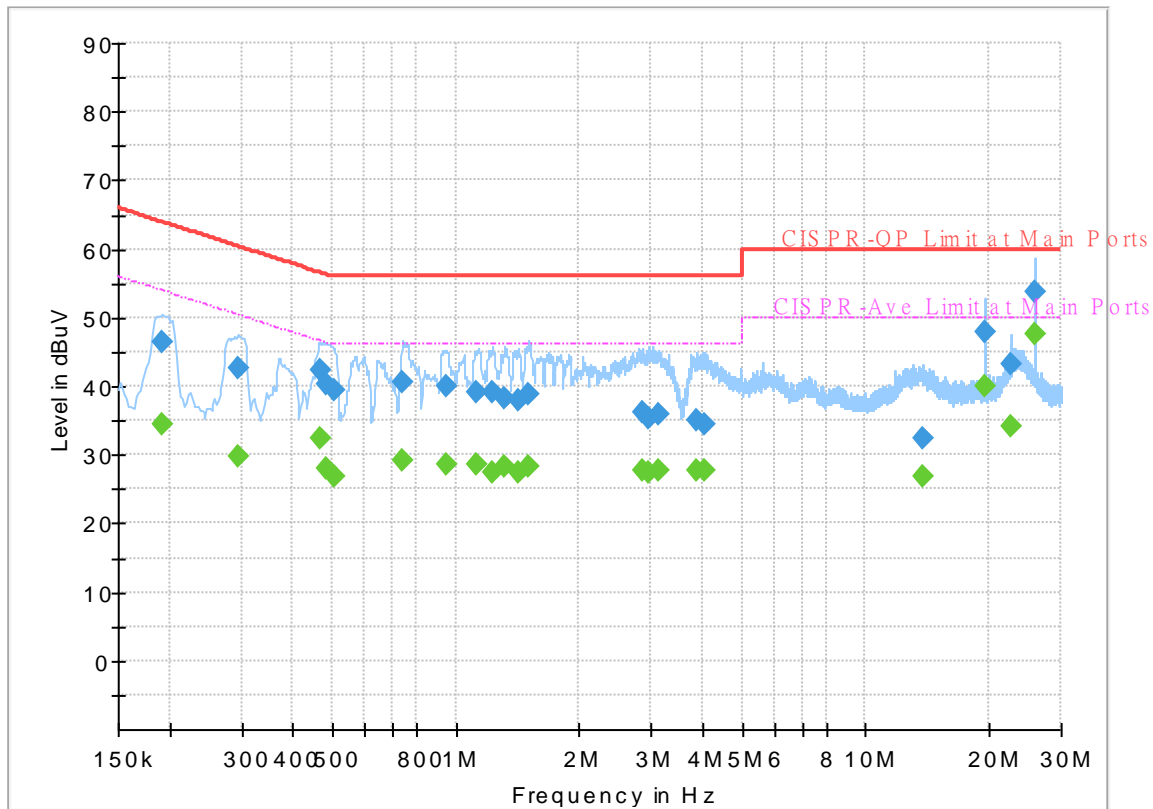
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.192750	---	35.70	53.92	18.22	L1	OFF	19.8
0.192750	47.28	---	63.92	16.64	L1	OFF	19.8
0.291750	---	30.42	50.47	20.05	L1	OFF	19.8
0.291750	43.63	---	60.47	16.84	L1	OFF	19.8
0.480750	---	28.21	46.33	18.12	L1	OFF	19.8
0.480750	40.60	---	56.33	15.73	L1	OFF	19.8
0.591000	---	26.99	46.00	19.01	L1	OFF	19.8
0.591000	38.34	---	56.00	17.66	L1	OFF	19.8
0.753000	---	29.61	46.00	16.39	L1	OFF	19.8
0.753000	40.98	---	56.00	15.02	L1	OFF	19.8
0.928500	---	28.86	46.00	17.14	L1	OFF	19.8
0.928500	39.27	---	56.00	16.73	L1	OFF	19.8
1.128750	---	28.38	46.00	17.62	L1	OFF	19.8
1.128750	39.24	---	56.00	16.76	L1	OFF	19.8
1.223250	---	27.53	46.00	18.47	L1	OFF	19.8
1.223250	38.82	---	56.00	17.18	L1	OFF	19.8
1.317750	---	27.67	46.00	18.33	L1	OFF	19.8
1.317750	38.41	---	56.00	17.59	L1	OFF	19.8
1.405500	---	28.27	46.00	17.73	L1	OFF	19.9
1.405500	37.95	---	56.00	18.05	L1	OFF	19.9
1.515750	---	26.99	46.00	19.01	L1	OFF	19.9

1.515750	38.06	---	56.00	17.94	L1	OFF	19.9
1.585500	---	27.67	46.00	18.33	L1	OFF	19.9
1.585500	36.75	---	56.00	19.25	L1	OFF	19.9
1.704750	---	27.12	46.00	18.88	L1	OFF	19.9
1.704750	36.22	---	56.00	19.78	L1	OFF	19.9
1.893750	---	25.92	46.00	20.08	L1	OFF	19.9
1.893750	35.34	---	56.00	20.66	L1	OFF	19.9
2.728500	---	27.19	46.00	18.81	L1	OFF	19.9
2.728500	34.93	---	56.00	21.07	L1	OFF	19.9
2.863500	---	27.58	46.00	18.42	L1	OFF	19.9
2.863500	35.25	---	56.00	20.75	L1	OFF	19.9
2.969250	---	27.72	46.00	18.28	L1	OFF	19.9
2.969250	35.92	---	56.00	20.08	L1	OFF	19.9
3.111000	---	27.79	46.00	18.21	L1	OFF	19.9
3.111000	35.86	---	56.00	20.14	L1	OFF	19.9
3.817500	---	27.56	46.00	18.44	L1	OFF	20.0
3.817500	34.03	---	56.00	21.97	L1	OFF	20.0
3.912000	---	27.74	46.00	18.26	L1	OFF	20.0
3.912000	34.87	---	56.00	21.13	L1	OFF	20.0
4.103250	---	27.52	46.00	18.48	L1	OFF	20.0
4.103250	33.83	---	56.00	22.17	L1	OFF	20.0
13.996500	---	26.65	50.00	23.35	L1	OFF	20.3
13.996500	31.98	---	60.00	28.02	L1	OFF	20.3
19.500000	---	41.51	50.00	8.49	L1	OFF	20.5
19.500000	49.45	---	60.00	10.55	L1	OFF	20.5
22.749000	---	34.28	50.00	15.72	L1	OFF	20.6
22.749000	43.33	---	60.00	16.67	L1	OFF	20.6
26.000250	---	46.96	50.00	3.04	L1	OFF	20.7
26.000250	54.72	---	60.00	5.28	L1	OFF	20.7

EUT Information

Report NO : 202509
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.192750	---	34.51	53.92	19.41	N	OFF	19.8
0.192750	46.49	---	63.92	17.43	N	OFF	19.8
0.294000	---	29.83	50.41	20.58	N	OFF	19.8
0.294000	42.64	---	60.41	17.77	N	OFF	19.8
0.467250	---	32.47	46.56	14.09	N	OFF	19.8
0.467250	42.26	---	56.56	14.30	N	OFF	19.8
0.483000	---	27.87	46.29	18.42	N	OFF	19.8
0.483000	40.35	---	56.29	15.94	N	OFF	19.8
0.503250	---	26.88	46.00	19.12	N	OFF	19.8
0.503250	39.29	---	56.00	16.71	N	OFF	19.8
0.744000	---	29.30	46.00	16.70	N	OFF	19.8
0.744000	40.72	---	56.00	15.28	N	OFF	19.8
0.944250	---	28.56	46.00	17.44	N	OFF	19.8
0.944250	39.92	---	56.00	16.08	N	OFF	19.8
1.122000	---	28.64	46.00	17.36	N	OFF	19.8
1.122000	39.17	---	56.00	16.83	N	OFF	19.8
1.232250	---	27.37	46.00	18.63	N	OFF	19.8
1.232250	39.02	---	56.00	16.98	N	OFF	19.8
1.317750	---	28.22	46.00	17.78	N	OFF	19.8
1.317750	38.38	---	56.00	17.62	N	OFF	19.8
1.425750	---	27.28	46.00	18.72	N	OFF	19.8

1.425750	38.06	---	56.00	17.94	N	OFF	19.8
1.509000	---	28.28	46.00	17.72	N	OFF	19.8
1.509000	38.92	---	56.00	17.08	N	OFF	19.8
2.856750	---	27.62	46.00	18.38	N	OFF	19.9
2.856750	36.13	---	56.00	19.87	N	OFF	19.9
2.971500	---	27.46	46.00	18.54	N	OFF	19.9
2.971500	35.33	---	56.00	20.67	N	OFF	19.9
3.140250	---	27.67	46.00	18.33	N	OFF	19.9
3.140250	35.81	---	56.00	20.19	N	OFF	19.9
3.889500	---	27.81	46.00	18.19	N	OFF	20.0
3.889500	35.04	---	56.00	20.96	N	OFF	20.0
4.067250	---	27.61	46.00	18.39	N	OFF	20.0
4.067250	34.45	---	56.00	21.55	N	OFF	20.0
13.731000	---	26.78	50.00	23.22	N	OFF	20.4
13.731000	32.31	---	60.00	27.69	N	OFF	20.4
19.500000	---	40.08	50.00	9.92	N	OFF	20.6
19.500000	47.84	---	60.00	12.16	N	OFF	20.6
22.749000	---	34.23	50.00	15.77	N	OFF	20.7
22.749000	43.26	---	60.00	16.74	N	OFF	20.7
26.000070	---	46.98	50.00	3.02	N	OFF	20.8
26.000070	53.86	---	60.00	6.14	N	OFF	20.8



Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh, Ken Wu and James Chiu	Temperature :	21.9~24.9°C
		Relative Humidity :	57.7~61.8%

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		5641.8	48.89	-19.31	68.2	37.14	34.7	12.26	35.21	400	48	P	H	
		5688.8	48.5	-48.44	96.94	36.55	34.86	12.28	35.19	400	48	P	H	
		5719.8	54.16	-56.58	110.74	42.03	35.02	12.29	35.18	400	48	P	H	
		5725	63.91	-58.29	122.2	51.73	35.05	12.3	35.17	400	48	P	H	
	*	5745	100.2	-	-	87.88	35.17	12.31	35.16	400	48	P	H	
	*	5745	92.91	-	-	80.59	35.17	12.31	35.16	400	48	A	H	
														H
														H
			5614.8	49.41	-18.79	68.2	37.68	34.7	12.25	35.22	139	0	P	V
			5696.6	52.72	-49.97	102.69	40.74	34.89	12.28	35.19	139	0	P	V
			5716.4	64.49	-45.3	109.79	52.38	35	12.29	35.18	139	0	P	V
			5722.6	73.26	-43.47	116.73	61.09	35.04	12.3	35.17	139	0	P	V
	*		5745	106.5	-	-	94.18	35.17	12.31	35.16	139	0	P	V
	*		5745	99.07	-	-	86.75	35.17	12.31	35.16	139	0	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)
		5614	47.72	-20.48	68.2	35.99	34.7	12.25	35.22	387	50	P	H
		5699.6	48.25	-56.66	104.91	36.26	34.9	12.28	35.19	387	50	P	H
		5715	48.07	-61.33	109.4	35.97	34.99	12.29	35.18	387	50	P	H
		5723.6	48.02	-70.99	119.01	35.85	35.04	12.3	35.17	387	50	P	H
	*	5785	98.21	-	-	85.84	35.2	12.32	35.15	387	50	P	H
	*	5785	91.79	-	-	79.42	35.2	12.32	35.15	387	50	A	H
		5851.2	48.04	-71.42	119.46	35.63	35.2	12.4	35.19	387	50	P	H
		5855.6	50.73	-59.9	110.63	38.32	35.2	12.41	35.2	387	50	P	H
		5877.8	50.21	-52.91	103.12	37.79	35.2	12.44	35.22	387	50	P	H
		5941.8	49.75	-18.45	68.2	37.37	35.12	12.54	35.28	387	50	P	H
													H
													H
802.11a													
CH 157													
5785MHz		5621.2	50.17	-18.03	68.2	38.44	34.7	12.25	35.22	141	5	P	V
		5653.2	49.05	-21.53	70.58	37.29	34.71	12.26	35.21	141	5	P	V
		5718.6	51.38	-59.03	110.41	39.26	35.01	12.29	35.18	141	5	P	V
		5722.2	53.42	-62.4	115.82	41.28	35.03	12.29	35.18	141	5	P	V
	*	5785	105.26	-	-	92.89	35.2	12.32	35.15	141	5	P	V
	*	5785	99.33	-	-	86.96	35.2	12.32	35.15	141	5	A	V
		5851.8	52.45	-65.65	118.1	40.03	35.2	12.41	35.19	141	5	P	V
		5871.2	50.82	-55.44	106.26	38.4	35.2	12.43	35.21	141	5	P	V
		5895	50.16	-40.2	90.36	37.73	35.2	12.47	35.24	141	5	P	V
		5944.2	50.4	-17.8	68.2	38.03	35.11	12.54	35.28	141	5	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	100.04	-	-	87.64	35.2	12.37	35.17	400	46	P	H	
	*	5825	93.83	-	-	81.43	35.2	12.37	35.17	400	46	A	H	
		5851.2	60.53	-58.93	119.46	48.12	35.2	12.4	35.19	400	46	P	H	
		5856.8	54.19	-56.11	110.3	41.78	35.2	12.41	35.2	400	46	P	H	
		5893	51.2	-40.64	91.84	38.77	35.2	12.46	35.23	400	46	P	H	
		5948	50.12	-18.08	68.2	37.77	35.1	12.54	35.29	400	46	P	H	
														H
														H
	*	5825	105.01	-	-	92.61	35.2	12.37	35.17	152	7	P	V	
	*	5825	98.1	-	-	85.7	35.2	12.37	35.17	152	7	A	V	
		5850.4	62.92	-58.37	121.29	50.51	35.2	12.4	35.19	152	7	P	V	
		5855.2	57.37	-53.37	110.74	44.96	35.2	12.41	35.2	152	7	P	V	
		5876.8	50.82	-53.04	103.86	38.4	35.2	12.44	35.22	152	7	P	V	
		5946.4	49.59	-18.61	68.2	37.23	35.11	12.54	35.29	152	7	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	52.47	-21.53	74	51.93	38.11	19.31	56.88	323	186	P	H	
		11490	43.14	-10.86	54	42.6	38.11	19.31	56.88	323	186	A	H	
		17235	58.17	-10.03	68.2	48.46	41.5	23.9	55.69	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11490	54.74	-19.26	74	54.2	38.11	19.31	56.88	254	203	P	V
			11490	45.96	-8.04	54	45.42	38.11	19.31	56.88	254	203	A	V
			17235	58.97	-9.23	68.2	49.26	41.5	23.9	55.69	-	-	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)	
802.11a CH 157 5785MHz		11570	55.12	-18.88	74	54.26	38.24	19.37	56.75	202	125	P	H	
		11570	46	-8	54	45.14	38.24	19.37	56.75	202	125	A	H	
		17355	57.99	-10.21	68.2	48.05	41.44	24	55.5	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11570	57.56	-16.44	74	56.7	38.24	19.37	56.75	296	206	P	V
			11570	48.09	-5.91	54	47.23	38.24	19.37	56.75	296	206	A	V
			17355	55.47	-12.73	68.2	45.53	41.44	24	55.5	-	-	P	V
														V
														V
														V
														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	55.75	-18.25	74	54.57	38.4	19.43	56.65	234	125	P	H	
		11650	47.24	-6.76	54	46.06	38.4	19.43	56.65	234	125	A	H	
		17475	53.31	-14.89	68.2	43.21	41.33	24.09	55.32	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11650	58.69	-15.31	74	57.51	38.4	19.43	56.65	259	207	P	V
			11650	49.06	-4.94	54	47.88	38.4	19.43	56.65	259	207	A	V
			17475	52.14	-16.06	68.2	42.04	41.33	24.09	55.32	-	-	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		5615.2	48.06	-20.14	68.2	36.33	34.7	12.25	35.22	397	302	P	H	
		5699	49.75	-54.71	104.46	37.76	34.9	12.28	35.19	397	302	P	H	
		5716.2	65.03	-44.71	109.74	52.92	35	12.29	35.18	397	302	P	H	
		5724.2	73.56	-46.82	120.38	61.38	35.05	12.3	35.17	397	302	P	H	
	*	5745	99.97	-	-	87.65	35.17	12.31	35.16	397	302	P	H	
	*	5745	93.56	-	-	81.24	35.17	12.31	35.16	397	302	A	H	
														H
														H
			5611.8	49.72	-18.48	68.2	37.99	34.7	12.25	35.22	125	6	P	V
			5696.4	55.54	-47.01	102.55	43.56	34.89	12.28	35.19	125	6	P	V
			5719.8	71.52	-39.22	110.74	59.39	35.02	12.29	35.18	125	6	P	V
			5724	81.23	-38.69	119.92	69.06	35.04	12.3	35.17	125	6	P	V
	*		5745	106.15	-	-	93.83	35.17	12.31	35.16	125	6	P	V
	*		5745	99.78	-	-	87.46	35.17	12.31	35.16	125	6	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)
		5637.6	49.84	-18.36	68.2	38.09	34.7	12.26	35.21	390	58	P	H
		5692	48.89	-50.41	99.3	36.93	34.87	12.28	35.19	390	58	P	H
		5701.6	48.24	-57.41	105.65	36.22	34.91	12.29	35.18	390	58	P	H
		5722.4	47.15	-69.12	116.27	34.99	35.03	12.3	35.17	390	58	P	H
	*	5785	99.19	-	-	86.82	35.2	12.32	35.15	390	58	P	H
	*	5785	93.19	-	-	80.82	35.2	12.32	35.15	390	58	A	H
		5854.4	48.32	-63.85	112.17	35.9	35.2	12.41	35.19	390	58	P	H
		5869.8	49.52	-57.13	106.65	37.1	35.2	12.43	35.21	390	58	P	H
		5893.8	50.74	-40.51	91.25	38.3	35.2	12.47	35.23	390	58	P	H
		5936.4	49.48	-18.72	68.2	37.1	35.13	12.53	35.28	390	58	P	H
802.11ac													H
VHT20													H
CH 157		5620.2	50.69	-17.51	68.2	38.96	34.7	12.25	35.22	133	7	P	V
5785MHz		5690.2	49.9	-48.07	97.97	37.95	34.86	12.28	35.19	133	7	P	V
		5718.8	55.45	-55.01	110.46	43.33	35.01	12.29	35.18	133	7	P	V
		5721.4	53.84	-60.15	113.99	41.7	35.03	12.29	35.18	133	7	P	V
	*	5785	105.78	-	-	93.41	35.2	12.32	35.15	133	7	P	V
	*	5785	99.13	-	-	86.76	35.2	12.32	35.15	133	7	A	V
		5852	49.31	-68.33	117.64	36.89	35.2	12.41	35.19	133	7	P	V
		5869.8	48.86	-57.79	106.65	36.44	35.2	12.43	35.21	133	7	P	V
		5900.6	49.71	-36.51	86.22	37.27	35.2	12.48	35.24	133	7	P	V
		5945.2	49.56	-18.64	68.2	37.2	35.11	12.54	35.29	133	7	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	99.44	-	-	87.04	35.2	12.37	35.17	400	47	P	H	
	*	5825	93.5	-	-	81.1	35.2	12.37	35.17	400	47	A	H	
		5850.6	56.85	-63.98	120.83	44.44	35.2	12.4	35.19	400	47	P	H	
		5858.4	53.24	-56.61	109.85	40.83	35.2	12.41	35.2	400	47	P	H	
		5883.8	49.77	-48.9	98.67	37.34	35.2	12.45	35.22	400	47	P	H	
		5936.8	49.38	-18.82	68.2	37	35.13	12.53	35.28	400	47	P	H	
														H
														H
	*	5825	104.76	-	-	92.36	35.2	12.37	35.17	150	0	0	P	V
	*	5825	97.41	-	-	85.01	35.2	12.37	35.17	150	0	0	A	V
		5851.4	64.23	-54.78	119.01	51.82	35.2	12.4	35.19	150	0	0	P	V
		5855	59.57	-51.23	110.8	47.15	35.2	12.41	35.19	150	0	0	P	V
		5877.2	51.85	-51.72	103.57	39.43	35.2	12.44	35.22	150	0	0	P	V
		5942.8	50.08	-18.12	68.2	37.71	35.11	12.54	35.28	150	0	0	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 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	52.34	-21.66	74	51.8	38.11	19.31	56.88	234	126	P	H	
		11490	43.14	-10.86	54	42.6	38.11	19.31	56.88	234	126	A	H	
		17235	59.5	-8.7	68.2	49.79	41.5	23.9	55.69	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11490	53.94	-20.06	74	53.4	38.11	19.31	56.88	259	206	P	V
			11490	45.5	-8.5	54	44.96	38.11	19.31	56.88	259	206	A	V
			17235	57.75	-10.45	68.2	48.04	41.5	23.9	55.69	-	-	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	53.44	-20.56	74	52.58	38.24	19.37	56.75	232	124	P	H	
		11570	45.53	-8.47	54	44.67	38.24	19.37	56.75	232	124	A	H	
		17355	56.81	-11.39	68.2	46.87	41.44	24	55.5	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11570	55.18	-18.82	74	54.32	38.24	19.37	56.75	258	208	P	V
			11570	47.2	-6.8	54	46.34	38.24	19.37	56.75	258	208	A	V
			17355	55.52	-12.68	68.2	45.58	41.44	24	55.5	-	-	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	55.48	-18.52	74	54.3	38.4	19.43	56.65	230	127	P	H	
		11650	46.84	-7.16	54	45.66	38.4	19.43	56.65	230	127	A	H	
		17475	52.84	-15.36	68.2	42.74	41.33	24.09	55.32	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11650	56.45	-17.55	74	55.27	38.4	19.43	56.65	200	206	P	V
			11650	47.66	-6.34	54	46.48	38.4	19.43	56.65	200	206	A	V
			17475	53.38	-14.82	68.2	43.28	41.33	24.09	55.32	-	-	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)
		5637	49.26	-18.94	68.2	37.51	34.7	12.26	35.21	395	301	P	H
		5693.8	52.62	-48.01	100.63	40.65	34.88	12.28	35.19	395	301	P	H
		5719.6	71.35	-39.34	110.69	59.22	35.02	12.29	35.18	395	301	P	H
		5723.6	72.98	-46.03	119.01	60.81	35.04	12.3	35.17	395	301	P	H
	*	5755	97.04	-	-	84.69	35.2	12.31	35.16	395	301	P	H
	*	5755	90.22	-	-	77.87	35.2	12.31	35.16	395	301	A	H
		5852.2	50.15	-67.03	117.18	37.73	35.2	12.41	35.19	395	301	P	H
		5865	49.35	-58.65	108	36.93	35.2	12.42	35.2	395	301	P	H
		5904.2	49.75	-33.8	83.55	37.32	35.19	12.48	35.24	395	301	P	H
		5938	50.34	-17.86	68.2	37.97	35.12	12.53	35.28	395	301	P	H
													H
													H
802.11ac													
VHT40													
CH 151		5641.8	53.83	-14.37	68.2	42.08	34.7	12.26	35.21	164	5	P	V
5755MHz		5699.8	64.95	-40.1	105.05	52.96	34.9	12.28	35.19	164	5	P	V
		5719.2	79.48	-31.1	110.58	67.35	35.02	12.29	35.18	164	5	P	V
		5722	80.63	-34.73	115.36	68.49	35.03	12.29	35.18	164	5	P	V
	*	5755	103.26	-	-	90.91	35.2	12.31	35.16	164	5	P	V
	*	5755	97.08	-	-	84.73	35.2	12.31	35.16	164	5	A	V
		5850	51.27	-70.93	122.2	38.86	35.2	12.4	35.19	164	5	P	V
		5856.2	51.12	-59.34	110.46	38.71	35.2	12.41	35.2	164	5	P	V
		5884.4	50.41	-47.81	98.22	37.98	35.2	12.45	35.22	164	5	P	V
		5938	49.84	-18.36	68.2	37.47	35.12	12.53	35.28	164	5	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)
		5635	49.06	-19.14	68.2	37.31	34.7	12.26	35.21	385	48	P	H
		5677	50.13	-38.09	88.22	38.25	34.81	12.27	35.2	385	48	P	H
		5701.4	49.8	-55.79	105.59	37.78	34.91	12.29	35.18	385	48	P	H
		5724.8	49.62	-72.12	121.74	37.44	35.05	12.3	35.17	385	48	P	H
	*	5795	97.26	-	-	84.87	35.2	12.33	35.14	385	48	P	H
	*	5795	90.18	-	-	77.79	35.2	12.33	35.14	385	48	A	H
		5852.8	50.36	-65.46	115.82	37.94	35.2	12.41	35.19	385	48	P	H
		5873.6	50.26	-55.33	105.59	37.83	35.2	12.44	35.21	385	48	P	H
		5913.2	50.55	-26.35	76.9	38.14	35.17	12.49	35.25	385	48	P	H
		5932.2	50.8	-17.4	68.2	38.41	35.14	12.52	35.27	385	48	P	H
802.11ac													H
VHT40													H
CH 159		5627.4	50.12	-18.08	68.2	38.39	34.7	12.25	35.22	170	5	P	V
5795MHz		5697	54.12	-48.87	102.99	42.14	34.89	12.28	35.19	170	5	P	V
		5716.6	57.21	-52.64	109.85	45.1	35	12.29	35.18	170	5	P	V
		5722.8	58.33	-58.85	117.18	46.16	35.04	12.3	35.17	170	5	P	V
	*	5795	102.78	-	-	90.39	35.2	12.33	35.14	170	5	P	V
	*	5795	95.95	-	-	83.56	35.2	12.33	35.14	170	5	A	V
		5851	57.44	-62.48	119.92	45.03	35.2	12.4	35.19	170	5	P	V
		5857.4	56.79	-53.34	110.13	44.38	35.2	12.41	35.2	170	5	P	V
		5876	51.76	-52.7	104.46	39.34	35.2	12.44	35.22	170	5	P	V
		5925.4	50.37	-17.83	68.2	37.98	35.15	12.51	35.27	170	5	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	49.77	-24.23	74	49.16	38.12	19.33	56.84	234	126	P	H	
		11510	42.13	-11.87	54	41.52	38.12	19.33	56.84	234	126	A	H	
		17265	54.83	-13.37	68.2	45.05	41.5	23.92	55.64	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11510	51.36	-22.64	74	50.75	38.12	19.33	56.84	204	206	P	V
			11510	44.01	-9.99	54	43.4	38.12	19.33	56.84	204	206	A	V
			17265	53.31	-14.89	68.2	43.53	41.5	23.92	55.64	-	-	P	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	51.77	-22.23	74	50.83	38.28	19.39	56.73	257	123	P	H	
		11590	44.1	-9.9	54	43.16	38.28	19.39	56.73	257	123	A	H	
		17385	54.3	-13.9	68.2	44.32	41.42	24.02	55.46	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11590	52.77	-21.23	74	51.83	38.28	19.39	56.73	276	207	P	V
			11590	45.44	-8.56	54	44.5	38.28	19.39	56.73	276	207	A	V
			17385	53.63	-14.57	68.2	43.65	41.42	24.02	55.46	-	-	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)
		5648	55.67	-12.53	68.2	43.92	34.7	12.26	35.21	389	47	P	H
		5681.4	64.13	-27.34	91.47	52.21	34.83	12.28	35.19	389	47	P	H
		5718.2	64.83	-45.47	110.3	52.71	35.01	12.29	35.18	389	47	P	H
		5725	66.92	-55.28	122.2	54.74	35.05	12.3	35.17	389	47	P	H
	*	5775	93.12	-	-	80.75	35.2	12.32	35.15	389	47	P	H
	*	5775	86.96	-	-	74.59	35.2	12.32	35.15	389	47	A	H
		5853.4	57.16	-57.29	114.45	44.74	35.2	12.41	35.19	389	47	P	H
		5856	58.94	-51.58	110.52	46.53	35.2	12.41	35.2	389	47	P	H
		5876.8	54.39	-49.47	103.86	41.97	35.2	12.44	35.22	389	47	P	H
		5935.4	50.57	-17.63	68.2	38.19	35.13	12.53	35.28	389	47	P	H
802.11ac													H
VHT80													H
CH 155		5635.4	62.33	-5.87	68.2	50.58	34.7	12.26	35.21	147	6	P	V
5775MHz		5684	74.03	-19.37	93.4	62.1	34.84	12.28	35.19	147	6	P	V
		5713.2	77.68	-31.22	108.9	65.59	34.98	12.29	35.18	147	6	P	V
		5720.8	79	-33.62	112.62	66.87	35.02	12.29	35.18	147	6	P	V
	*	5775	98.8	-	-	86.43	35.2	12.32	35.15	147	6	P	V
	*	5775	92.67	-	-	80.3	35.2	12.32	35.15	147	6	A	V
		5852.8	68.31	-47.51	115.82	55.89	35.2	12.41	35.19	147	6	P	V
		5857	68.97	-41.27	110.24	56.56	35.2	12.41	35.2	147	6	P	V
		5876.2	60.24	-44.07	104.31	47.82	35.2	12.44	35.22	147	6	P	V
		5928	51.8	-16.4	68.2	39.41	35.14	12.52	35.27	147	6	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	47.24	-26.76	74	46.46	38.2	19.36	56.78	-	-	P	H	
		17325	51.14	-17.06	68.2	41.24	41.47	23.98	55.55	-	-	P	H	
													H	
													H	
													H	
													H	
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													H	
													H	
													H	
													H	
													H	
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													H	
													H	
			11550	49.13	-24.87	74	48.35	38.2	19.36	56.78	-	-	P	V
			17325	51.46	-16.74	68.2	41.56	41.47	23.98	55.55	-	-	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 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
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)
802.11a SHF	1	39494	45.28	-28.72	74	44.56	45.3	14.63	59.21	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			39340	45.24	-28.76	74	44.95	45.24	14.57	59.52	-	-	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)	
802.11a LF		46.74	31.2	-8.8	40	44.23	15.88	1.12	30.03	-	-	P	H	
		93.45	35.42	-8.08	43.5	48.79	14.92	1.72	30.01	-	-	P	H	
		186.6	33.5	-10	43.5	46.4	14.66	2.46	30.02	-	-	P	H	
		616.4	35.62	-10.38	46	35.99	25.35	4.27	29.99	-	-	P	H	
		857.9	33.11	-12.89	46	28.27	28.9	5.19	29.25	-	-	P	H	
		951.7	33.92	-12.08	46	26.78	30.4	5.56	28.82	-	-	P	H	
														H
														H
														H
														H
														H
														H
			30.27	33.56	-6.44	40	38.24	24.39	1.01	30.08	-	-	P	V
			70.04	32.72	-7.28	40	48.96	12.19	1.43	29.86	133	0	Q	V
			93.45	34	-9.5	43.5	47.37	14.92	1.72	30.01	-	-	P	V
			577.9	33.41	-12.59	46	33.65	25.64	4.14	30.02	-	-	P	V
			895	32.66	-13.34	46	27.7	28.59	5.42	29.05	-	-	P	V
			958	33.39	-12.61	46	25.95	30.65	5.58	28.79	-	-	P	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 CH 149 5745MHz		5650	55.45	-12.75	68.2	54.51	32.22	4.58	35.86	103	308	P	H

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 @ 2390MHz:

1. Level(dBμV/m)
 = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 = 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
 = 55.45 (dBμV/m)
2. Margin (dB)
 = Level(dBμV/m) – Limit Line(dBμV/m)
 = 55.45(dBμV/m) – 68.2(dBμV/m)
 = -12.75 (dB)

Peak measured complies with the limit line, so test result is “PASS”.



Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Jesse Wang, Stan Hsieh, Ken Wu and James Chiu	Temperature :	21.9~24.9°C
		Relative Humidity :	57.7~61.8%

Note symbol

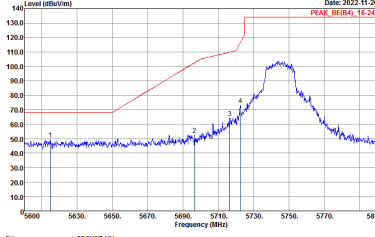
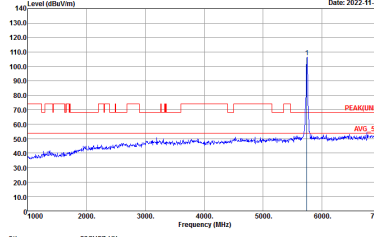
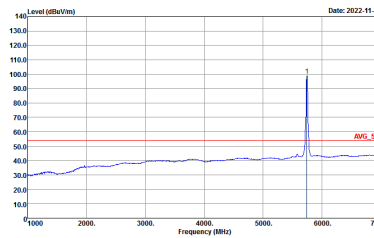
-L	Low channel location
-R	High channel location



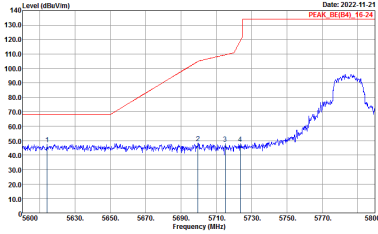
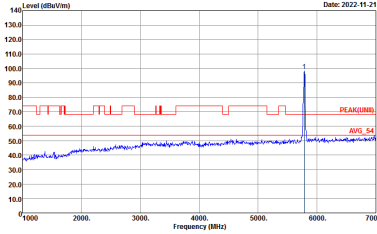
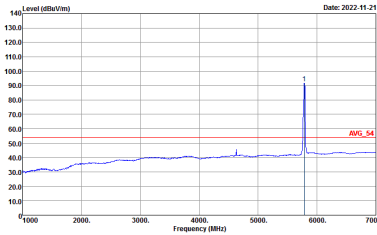
Band 4 - 5725~5850MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak	<p>Site Condition : 03CH07-HY : PEAK_RE(04)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>	<p>Site Condition : 03CH07-HY : PEAK(LIN)1 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>
Avg	Left blank	<p>Site Condition : 03CH07-HY : AVG_54 3m HF_ANT_00075962 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 : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH07-HY Condition : AVG_34 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak	<p>Site : D:\CH07\RF Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWTA:Auto</p>	Left blank

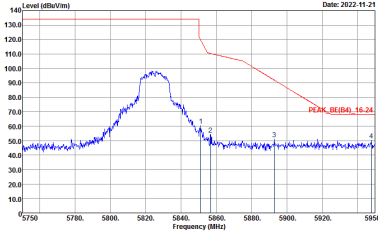
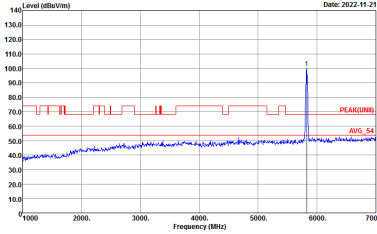
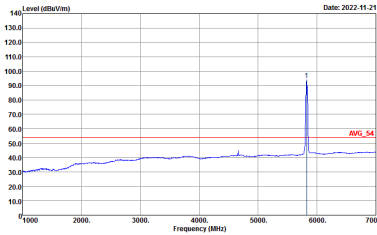


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN)I 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH07-HY Condition : AVG_34 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

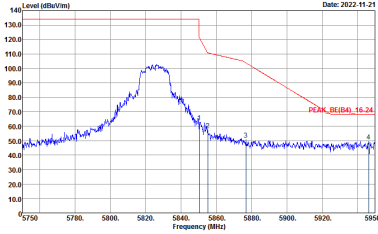
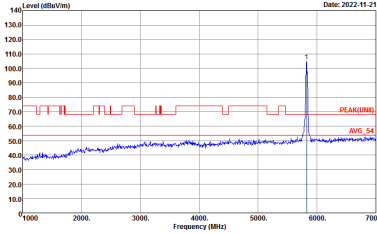
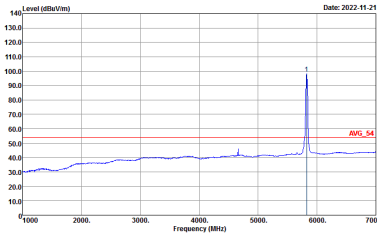


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak	<p>Site : D:\CH27\RY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWTA:Auto</p>	Left blank



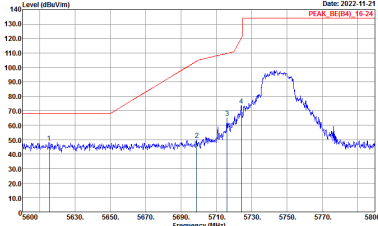
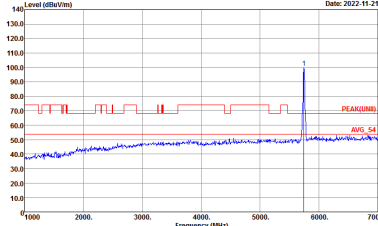
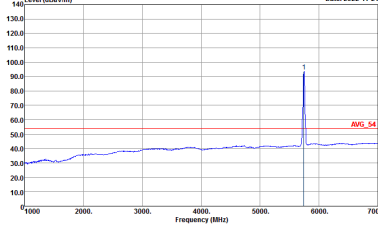
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH07-HY Condition : AVG_34 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>



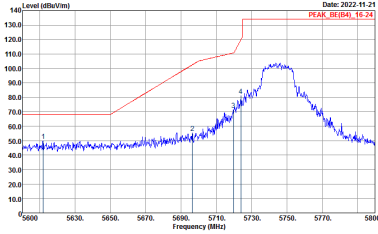
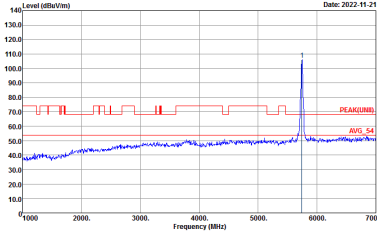
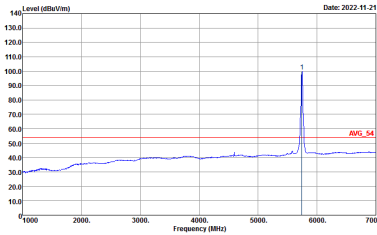
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Vertical	Fundamental
Peak	 <p>Site Condition : 03CH07-HY : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site Condition : 03CH07-HY : PEAK(LIN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
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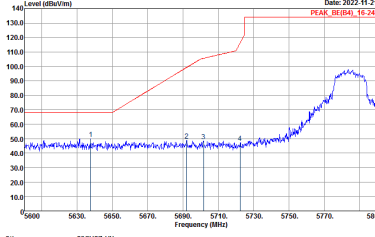
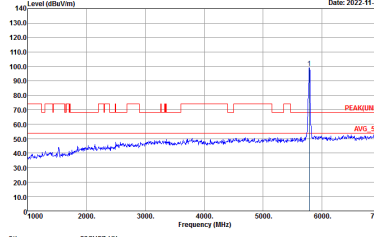
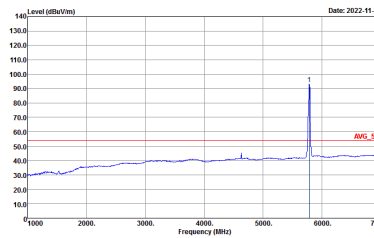
Band 4 5725~5850MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Horizontal	Fundamental
Peak	 <p>Site Condition : 03CH07-HY : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	 <p>Site Condition : 03CH07-HY : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>
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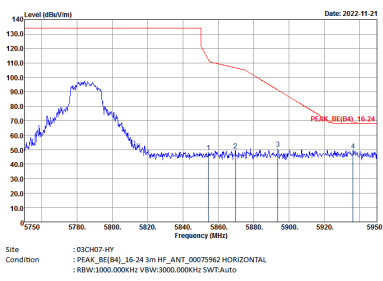


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH07-HY Condition : AVG_34 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN)I 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

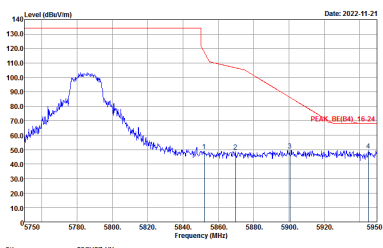


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : D:\CH27\RF Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWTA:Auto</p>	Left blank

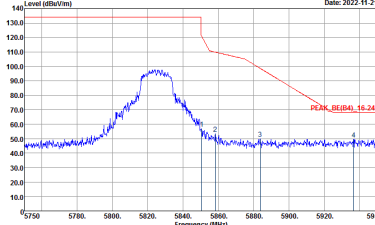
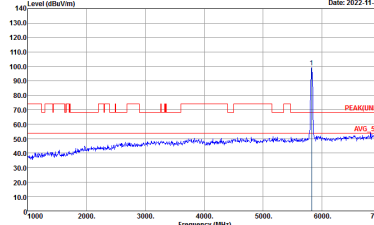
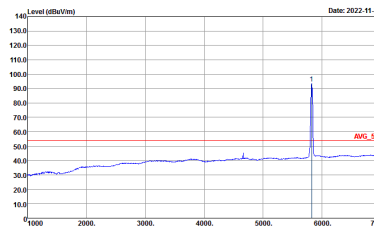


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN)1 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Vertical	Fundamental
Peak	 <p>Site : D:\CH27\RF Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWTA:Auto</p>	Left blank



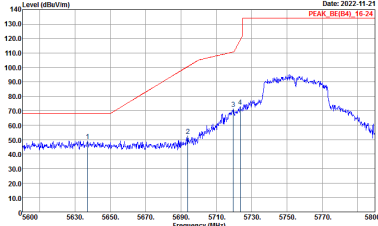
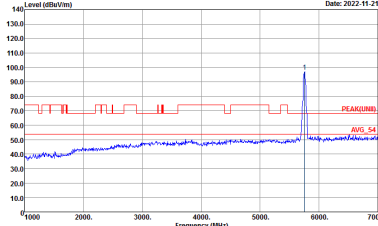
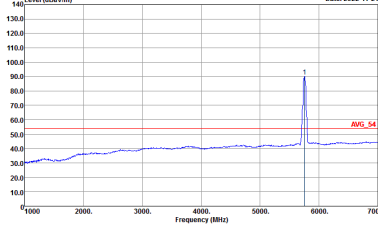
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN1) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Vertical	Fundamental
Peak	<p>Site Condition : 03CH07-HY : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site Condition : 03CH07-HY : PEAK(LIN1) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	<p>Site Condition : 03CH07-HY : AVG_34 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>



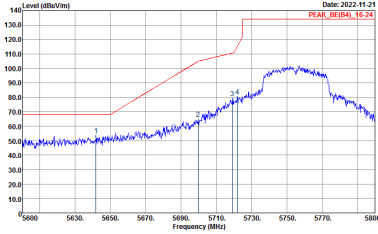
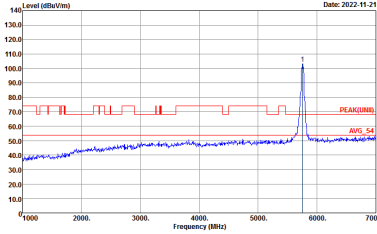
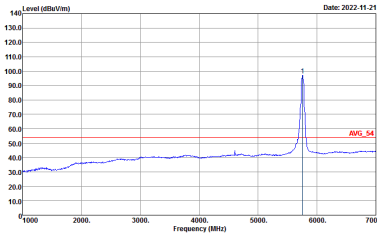
Band 4 5725~5850MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Fundamental
Peak	 <p>Site Condition : 03CH07-HY : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	 <p>Site Condition : 03CH07-HY : PEAK(LIN)I 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>
Avg	Left blank	 <p>Site Condition : 03CH07-HY : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWFAuto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Fundamental
Peak	<p>Site : D3CH27.07 Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	Left blank

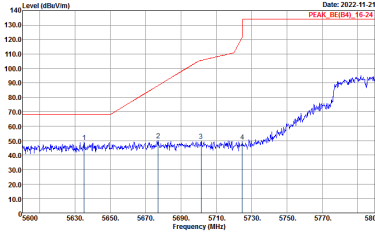
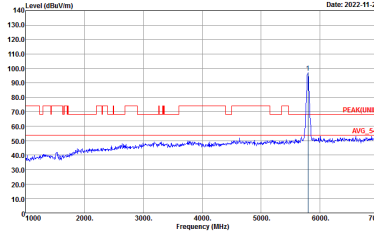
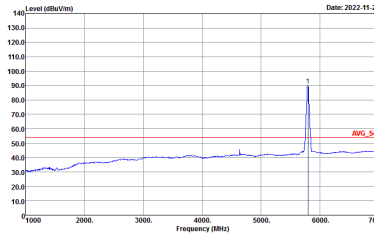


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH07-HY Condition : AVG_34 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto</p>

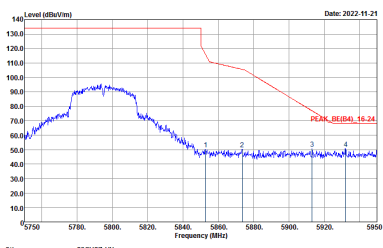


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak	<p>Site : D:\CH07\RF Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWTA:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site : 03CH07-HY Condition : AVG_34 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : D3CH27.011 Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWTA:Auto</p>	Left blank



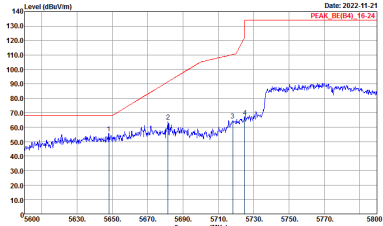
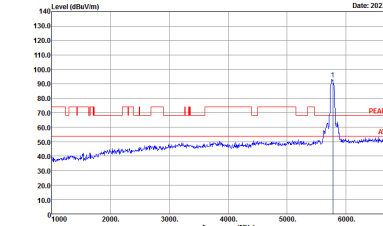
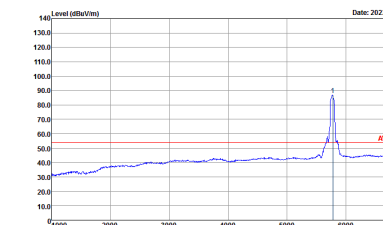
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN)1 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Vertical	Fundamental
Peak	<p>Site : D3CH27.07 Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWTA:Auto</p>	Left blank



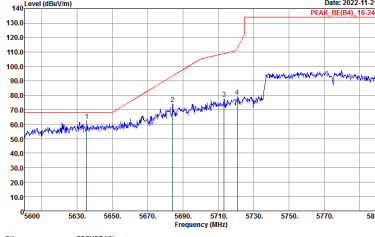
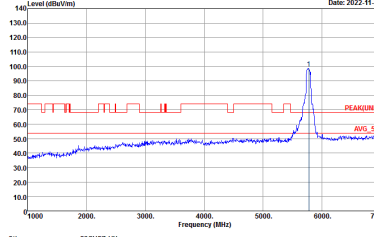
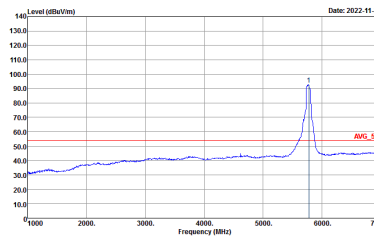
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak	 <p>Site Condition : 03CH07-HY : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VIEW:3000.000kHz SWTA:Auto</p>	 <p>Site Condition : 03CH07-HY : PEAK(LIN1) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>
Avg	Left blank	 <p>Site Condition : 03CH07-HY : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:10.000kHz SWTA:Auto</p>

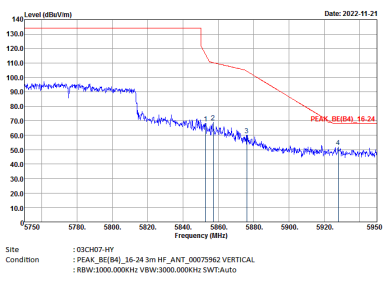


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak	<p>Site : D3CH27.07 Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWTA:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Vertical	Fundamental
Peak	 <p>Site Condition : 03CH07-HY : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site Condition : 03CH07-HY : PEAK(LIN)I 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg	Left blank	 <p>Site Condition : 03CH07-HY : AVG_S4 3m HF_ANT_00075962 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 : 03CH07.011 Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWTA: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 : 03CH07-HY Condition : PEAK(UNIT) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(UNIT) 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Vertical
14.47G ~14.5G Avg.	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
17.7G ~18G Avg		



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : :PEAK(UWB) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : :PEAK(UWB) 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
14.47G ~14.5G Avg.	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
17.7G ~18G Avg		



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : :PEAK(UWII) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : :PEAK(UWII) 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
14.47G ~14.5G Avg.	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
17.7G ~18G Avg		



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>Horizontal spectrum plot showing Level (dBuV/m) vs Frequency (MHz). The plot displays a series of peaks between 5725 MHz and 5850 MHz. A prominent peak is observed at 5745 MHz. The y-axis ranges from 10.0 to 140.0 dBuV/m, and the x-axis ranges from 0 to 18000 MHz. The plot is dated 2022-11-22. Site: 03CH02-HY, Condition: PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL.</p>	<p>Vertical spectrum plot showing Level (dBuV/m) vs Frequency (MHz). The plot displays a series of peaks between 5725 MHz and 5850 MHz. A prominent peak is observed at 5745 MHz. The y-axis ranges from 10.0 to 140.0 dBuV/m, and the x-axis ranges from 0 to 18000 MHz. The plot is dated 2022-11-22. Site: 03CH02-HY, Condition: PEAK(UNI) 3m HF_ANT_00075962 VERTICAL.</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : :PEAK(UWII) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : :PEAK(UWII) 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK(U/NH) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(U/NH) 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 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 : 03CH02-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH02-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK(UWII) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(UWII) 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 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.		



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 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 : 03CH07-HY Condition : PEAK(UNIT) 1m SHF-EHF_91701224 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(UNIT) 1m SHF-EHF_91701224 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 : 03CH07-HY Condition : QP 3m LF-ANT-35419(S) HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(S) VERTICAL</p>



Appendix E. Duty Cycle Plots

Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
802.11a	97.20	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	89.72	323	3.10	10kHz

