



FCC RADIO TEST REPORT

FCC ID : 2ADEFAT-CD1
Equipment : Airtame Radio Module
Brand Name : Airtame
Model Name : AT-CD1
Applicant : Airtame ApS
Danneskiold Samsoes Alle 24, 1sal
TV, Copenhagen K 1434, Denmark
Manufacturer : Airtame ApS
Danneskiold Samsoes Alle 24, 1sal
TV, Copenhagen K 1434, Denmark
Standard : FCC Part 15 Subpart E §15.407

The product was received on Mar. 28, 2022 and testing was performed from May 20, 2022 to Jul. 25, 2022. We, Sporton International (USA) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval from Sporton International (USA) Inc., the test report shall not be reproduced except in full.

Approved by: Neil Kao

Sporton International (USA) Inc.
1175 Montague Expressway, Milpitas, CA 95035



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History of this test report

Report No.	Version	Description	Issue Date
FR210727003E	01	Initial issue of report	Jul. 20, 2022
FR210727003E	02	1. Revise section 3.2.8, 3.3.3 2. Revise Appendix C and Appendix D	Jul. 29, 2022

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(a)	Maximum Conducted Output Power	Pass	-
3.2	15.407(b)	Unwanted Emissions	Pass	4.87 dB under the limit at 11279.000 MHz
3.3	15.207	AC Conducted Emission	Pass	3.47 dB under the limit at 0.505 MHz
3.4	15.203 15.407(a)	Antenna Requirement	Pass	-

Conformity Assessment Condition:

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

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.

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.

Product Feature	
Antenna Type	WLAN: <Ant. 1>: PCB Dipole Antenna <Ant. 2>: PCB Dipole Antenna Bluetooth: PCB Dipole Antenna

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	Ant. 1: 3.7 Ant. 2: 4.0

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 (USA) Inc.
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL : 408 9043300
Test Site No.	Sporton Site No. 03CH02-CA, TH01-CA, CO01-CA

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

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.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: 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 find Z plane for Single Mode and X plane for MIMO Mode as worst plane.
- 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 final test modes consider the modulation and the worst data rates as shown in the table below.

Single Mode

Modulation	Data Rate
802.11a	6 Mbps

MIMO Mode

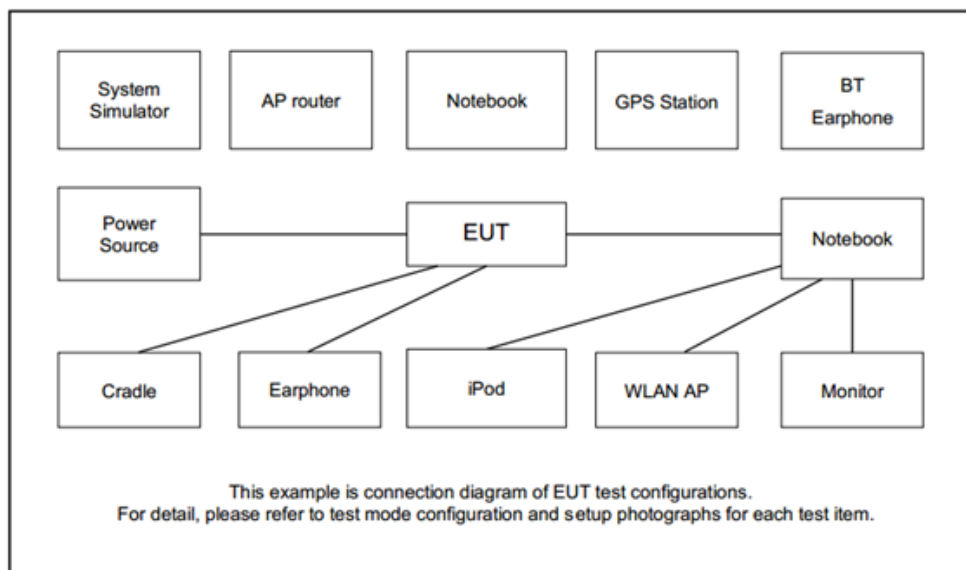
Modulation	Data Rate
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + RJ-45 Link (Charging from Adapter) + Play video with USB-C HDD + HDMI*2 connect to TV (TV Resolution: 1080p) + USB-A 3.0 Link to mouse + USB-A 3.0 connect to keyboard + USB-C 3.0 Link to HDD Mode 2 : WLAN (5GHz) Link + Bluetooth Link + RJ-45 Link (Charging from PoE Adapter) + USB Link mode (SECO to USB-A 3.0) + HDMI*2 connect to TV (TV Resolution: 4K 30Hz) + USB-A 3.0 Link to mouse + USB-A 3.0 Link connect to HDD + USB-C 3.0 connect to phone for charging
Remark: - The worst case of Conducted Emission is mode 2; only the test data of it was reported. - HDMI Cable means media application transferred between EUT and external display.	

Ch. #		Band IV : 5725-5850 MHz			
		802.11a	802.11n HT20	802.11n HT40	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 Speaker	JBL	GO2J	CCAH18LP0030 E4	N/A	N/A
2.	WLAN AP	NETGEAR	R7800	PY315100319	N/A	Unshielded, 1.8 m
3.	Notebook	Acer	Altos PS548-G1	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	PoE Adapter	TYCON	TP-POE-HP-48G-RC	FCC DoC	N/A	Unshielded, 1.0m
5.	HDD	WD	WDBYNN0010BBL-0B	FCC DoC	Unshielded, 0.5 m	N/A
6.	Monitor	Samsung	U28R552UQR	FCC DoC	Shielded, 1.2 m	Unshielded, 1.8 m
7.	Keyboard	Lenovo	SK-8827	FCC DoC	Shielded, 1.3 m	N/A
8.	Mouse	HP	N910U	FCC DoC	Unshielded, 1.8 m	N/A
9.	Phone	Moto	XT2045-3	FCC DoC	N/A	N/A

2.5 EUT Operation Test Setup

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

3 Test Result

3.1 Maximum Conducted Output Power Measurement

3.1.1 Limit of Maximum Conducted Output Power

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

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

3.1.2 Measuring Instruments

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

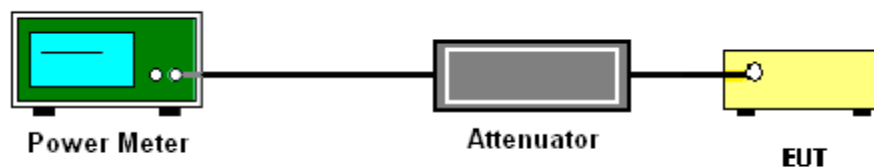
3.1.3 Test Procedures

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

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

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01

3.1.4 Test Setup



3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.2 Unwanted Emissions Measurement

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

3.2.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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.

3.2.2 Measuring Instruments

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

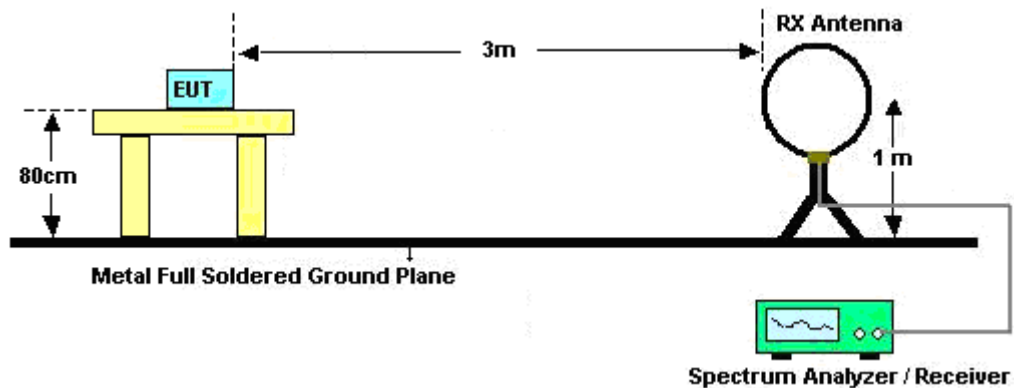
3.2.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 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.

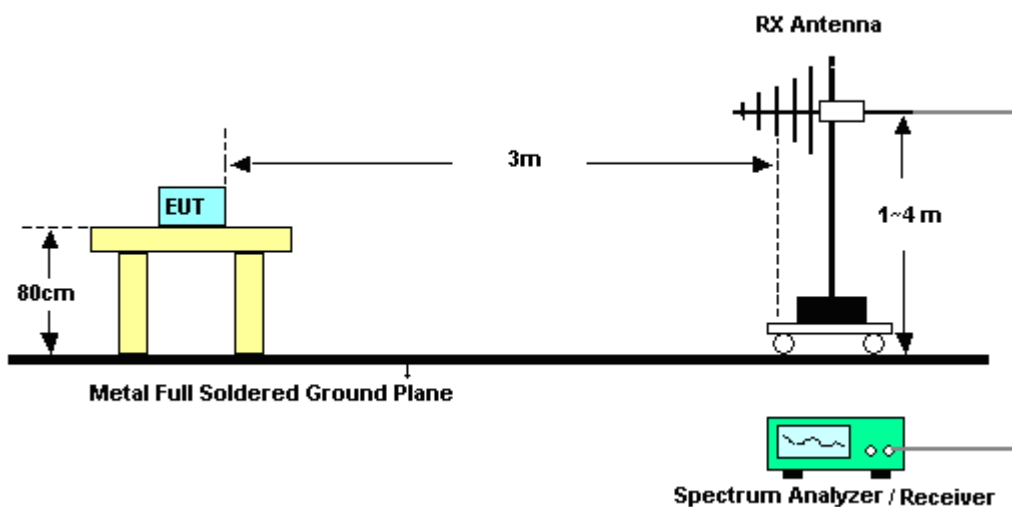
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit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

3.2.4 Test Setup

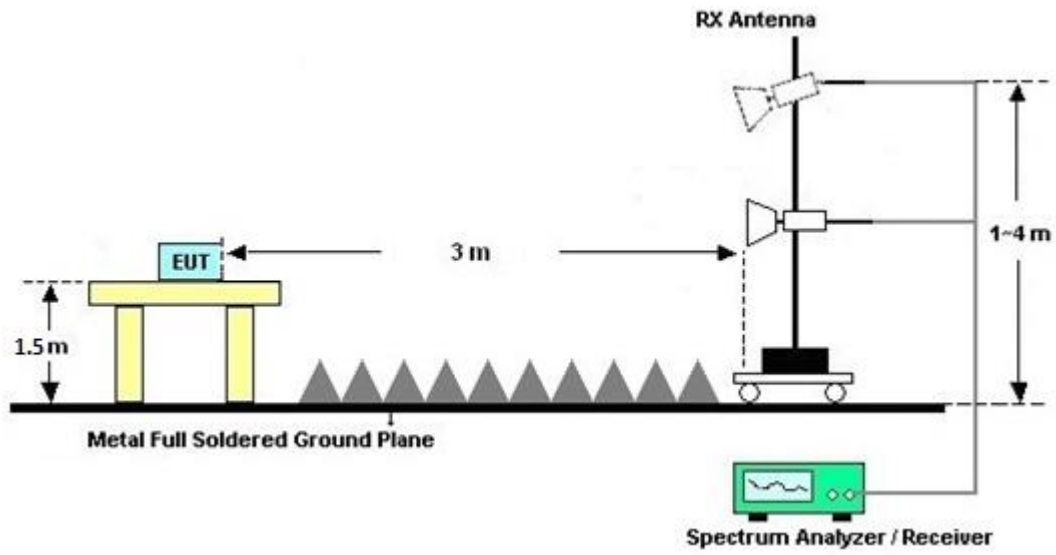
For radiated emissions below 30MHz



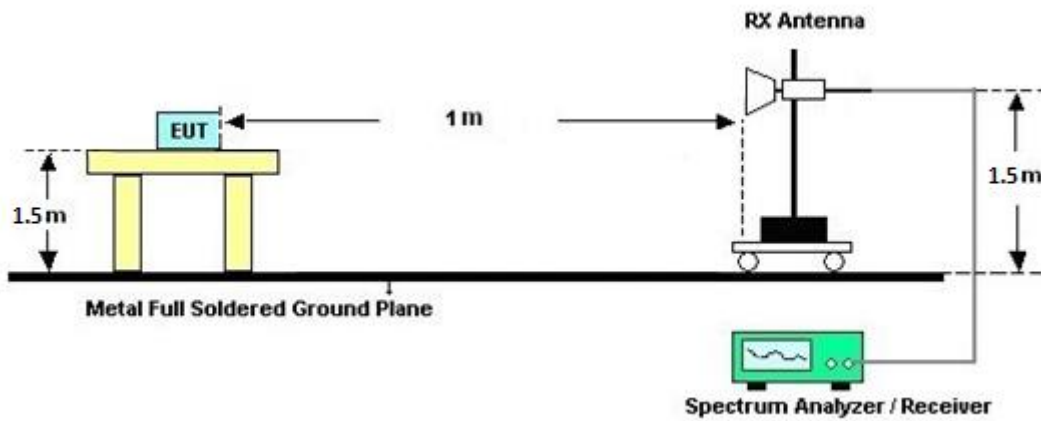
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz





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

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

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

3.2.6 Test Result of Radiated Band Edges

Please refer to Appendix C and D.

3.2.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

Note: When the scan with peak detector exceeds the limit associated with the average detector, additional scan with average detection was performed to show compliance with the average limit. The additional scan plot of the low channel is provided for justification.

3.3 AC Conducted Emission Measurement

3.3.1 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.

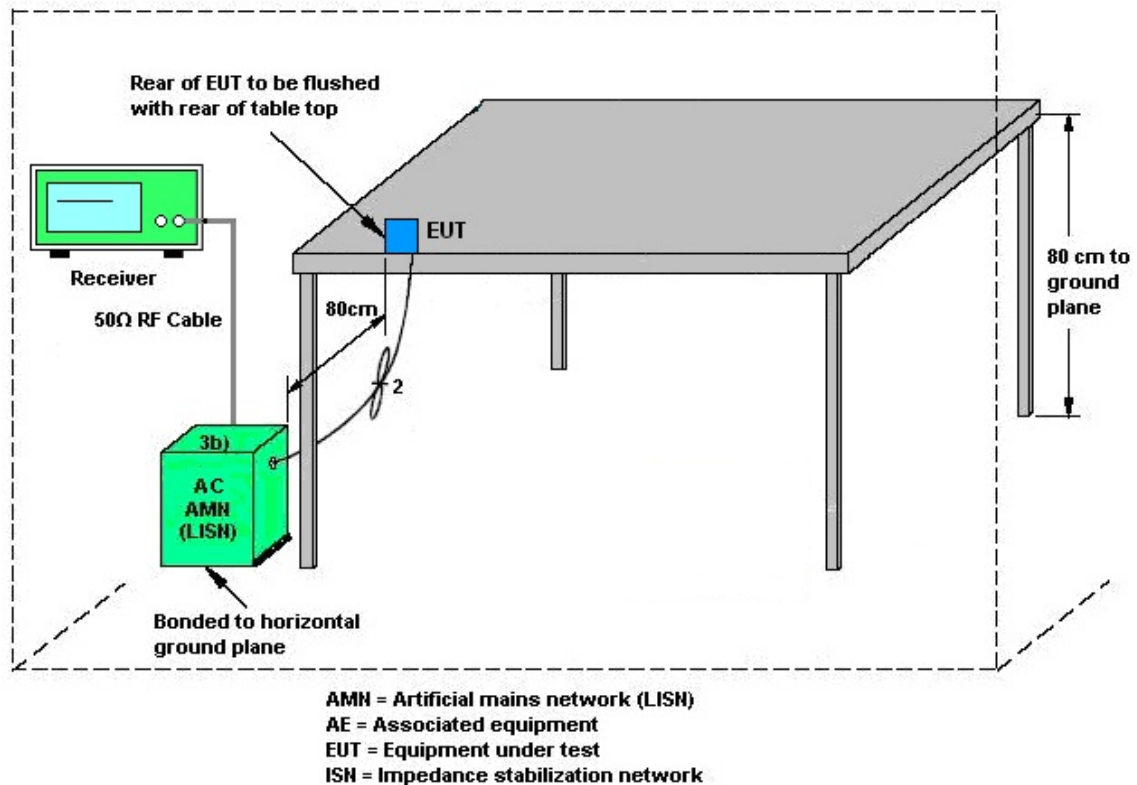
3.3.2 Measuring Instruments

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

3.3.3 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 (IF Bandwidth = 9 kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.3.4 Test Setup



3.3.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.4 Antenna Requirements

3.4.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.4.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9kHz~30MHz	Jan. 07, 2022	Jun. 24, 2022~ Jul. 25, 2022	Jan. 06, 2023	Radiation (03CH02-CA)
Bilog Antenna	TESEQ	6111D	54683	30MHz~1GHz	Oct. 15, 2021	Jun. 24, 2022~ Jul. 25, 2022	Oct. 14, 2022	Radiation (03CH02-CA)
Horn Antenna	SCHWARZBECK	BBHA 9120D	01895	1GHz~18GHz	Aug. 25, 2021	Jun. 24, 2022~ Jul. 25, 2022	Aug. 24, 2022	Radiation (03CH02-CA)
Horn Antenna	SCHWARZBECK	BBHA 9170D	00842	18GHz~40GHz	Jul. 20, 2021	Jun. 24, 2022~ Jul. 18, 2022	Jul. 19, 2022	Radiation (03CH02-CA)
Horn Antenna	SCHWARZBECK	BBHA 9170D	00841	18GHz~40GHz	Aug. 26, 2021	Jul. 19, 2022~ Jul. 25, 2022	Aug. 25, 2022	Radiation (03CH02-CA)
Amplifier	SONOMA	310N	372240	N/A	May 10, 2022	Jun. 24, 2022~ Jul. 25, 2022	May 09, 2023	Radiation (03CH02-CA)
Preamplifier	Keysight	83017A	MY53270323	1GHz~26.5GHz	May 11, 2022	Jun. 24, 2022~ Jul. 25, 2022	May 10, 2023	Radiation (03CH02-CA)
Preamplifier	E-instrument	ERA-100M-18 G-56-01-A70	EC1900251	1GHz~18GHz	May 10, 2022	Jun. 24, 2022~ Jul. 25, 2022	May 09, 2023	Radiation (03CH02-CA)
Preamplifier	EMEC	EMC18G40G	060725	18GHz~40GHz	May 10, 2022	Jun. 24, 2022~ Jul. 25, 2022	May 09, 2023	Radiation (03CH02-CA)
RF Cable	HUBER+SUHNER	SUCOFLEX 102	8024032/2, 802406/2, 802875/2	N/A	Jun. 22, 2022	Jun. 24, 2022~ Jul. 25, 2022	Jun. 21, 2023	Radiation (03CH02-CA)
Spectrum Analyzer	Keysight	N9010A	MY57420221	10Hz~44GHz	Sep. 22, 2021	Jun. 24, 2022~ Jul. 25, 2022	Sep. 21, 2022	Radiation (03CH02-CA)
Filter	Wainwright	WHKX8-5872. 5-6750-18000- 40ST	SN8	6.75GHz High Pass Filter	Jul. 22, 2021	May 24, 2022~ Jul. 20, 2022	Jul. 21, 2022	Radiation (03CH02-CA)
Filter	Wainwright	WHKX8-5872. 5-6750-18000- 40ST	SN8	6.75GHz High Pass Filter	Jul. 21, 2022	Jul. 21, 2022~ Jul. 25, 2022	Jul. 20, 2023	Radiation (03CH02-CA)
Filter	Wainwright	WLK12-1200-1 272-11000-40 SS	SN1	1.2G Low Pass	Jul. 22, 2021	May 24, 2022~ Jul. 20, 2022	Jul. 21, 2022	Radiation (03CH02-CA)
Filter	Wainwright	WLK12-1200-1 272-11000-40 SS	SN1	1.2G Low Pass	Jul. 21, 2022	Jul. 21, 2022~ Jul. 25, 2022	Jul. 20, 2023	Radiation (03CH02-CA)
Hygrometer	TESEO	608-H1	45142602	N/A	Aug. 04, 2021	Jun. 24, 2022~ Jul. 25, 2022	Aug. 03, 2022	Radiation (03CH02-CA)
Controller	ChainTek	EM-1000	060876	NA	N/A	Jun. 24, 2022~ Jul. 25, 2022	N/A	Radiation (03CH02-CA)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jun. 24, 2022~ Jul. 25, 2022	N/A	Radiation (03CH02-CA)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jun. 24, 2022~ Jul. 25, 2022	N/A	Radiation (03CH02-CA)
Software	Audix	E3	N/A	N/A	N/A	Jun. 24, 2022~ Jul. 25, 2022	N/A	Radiation (03CH02-CA)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LISN	TESEQ	NNB51	47415	N/A	May 10, 2022	May 20, 2022~ Jun. 20, 2022	May 09, 2023	Conduction (CO01-CA)
LISN	TESEQ	NNB51	47407	N/A	May 10, 2022	May 20, 2022~ Jun. 20, 2022	May 09, 2023	Conduction (CO01-CA)
Pulse limiter with 10dB attenuation	SCHWARZBE CK	VTSD 9561-F N	9561-F- N00412	N/A	Jul. 06, 2021	May 20, 2022~ Jun. 20, 2022	Jul. 05, 2022	Conduction (CO01-CA)
EMI Test Receiver	R&S	ESR7	102177	7GHz	Jun. 02, 2021	May 20, 2022~ May 31, 2022	Jun. 01, 2022	Conduction (CO01-CA)
EMI Test Receiver	R&S	ESR7	102177	7GHz	May 31, 2022	Jun. 01, 2022~ Jun. 20, 2022	May 30, 2023	Conduction (CO01-CA)
Software	R&S	EMC32	N/A	Version 10.30.00	N/A	May 20, 2022~ Jun. 20, 2022	N/A	Conduction (CO01-CA)
Hygrometer	Testo	608-H1	45142595	N/A	Aug. 30, 2021	Jun. 20, 2022~ Jul. 11, 2022	Aug. 29, 2022	Conducted (TH01-CA)
Power Sensor	EM Electronics Corporation	RPR3006W	RPR6W-1901 026	10MHz-6GHz	May 10, 2022	Jun. 20, 2022~ Jul. 11, 2022	May 09, 2023	Conducted (TH01-CA)
Switch Box & RF Cable	EM Electronics	EMSW26	1090304	N/A	Mar. 30, 2022	Jun. 20, 2022~ Jul. 11, 2022	Mar. 29, 2023	Conducted (TH01-CA)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101089	10Hz-40GHz	Jun. 01, 2022	Jun. 20, 2022~ Jul. 11, 2022	May 31, 2023	Conducted (TH01-CA)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.0 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.7 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.2 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.4 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Venkata Kondepudi and Liliana Gonzalez	Temperature:	21~25	°C
Test Date:	2022/6/20~2022/7/11	Relative Humidity:	48~53	%

TEST RESULTS DATA
Average Power Table

Band IV 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	17.24	-		30.00	-	3.70	4.00	Pass
11a	6Mbps	1	157	5785	17.27	-		30.00	-	3.70	4.00	Pass
11a	6Mbps	1	165	5825	17.28	-		30.00	-	3.70	4.00	Pass

Band IV MIMO												
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	
HT20	MCS0	2	149	5745	18.15	16.44	20.39	30.00		4.00		Pass
HT20	MCS0	2	157	5785	18.19	16.08	20.27	30.00		4.00		Pass
HT20	MCS0	2	165	5825	17.65	16.54	20.14	30.00		4.00		Pass
HT40	MCS0	2	151	5755	14.16	15.14	17.69	30.00		4.00		Pass
HT40	MCS0	2	159	5795	14.21	14.99	17.63	30.00		4.00		Pass
VHT80	MCS0	2	155	5775	10.23	11.10	13.70	30.00		4.00		Pass



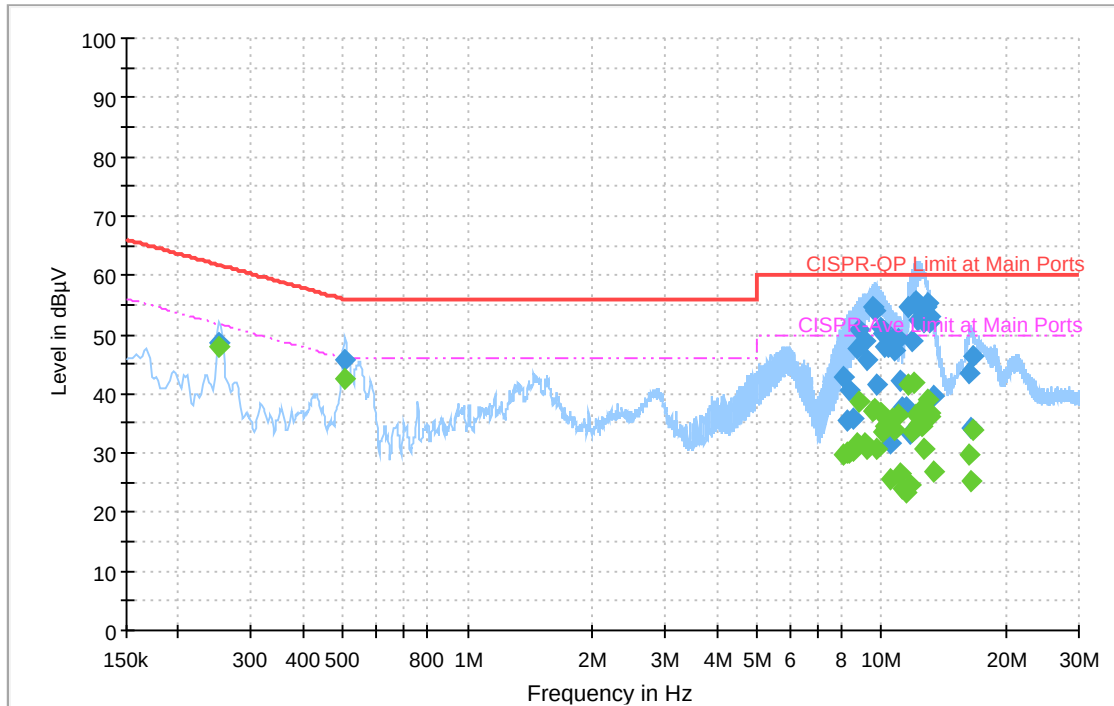
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Yuan Lee	Temperature :	19~25℃
		Relative Humidity :	37~44%

EUT Information

Site: CO01-CA
Power: 120Vac/60Hz
Project: 210727003
Mode: 2

Full Spectrum



Final Result

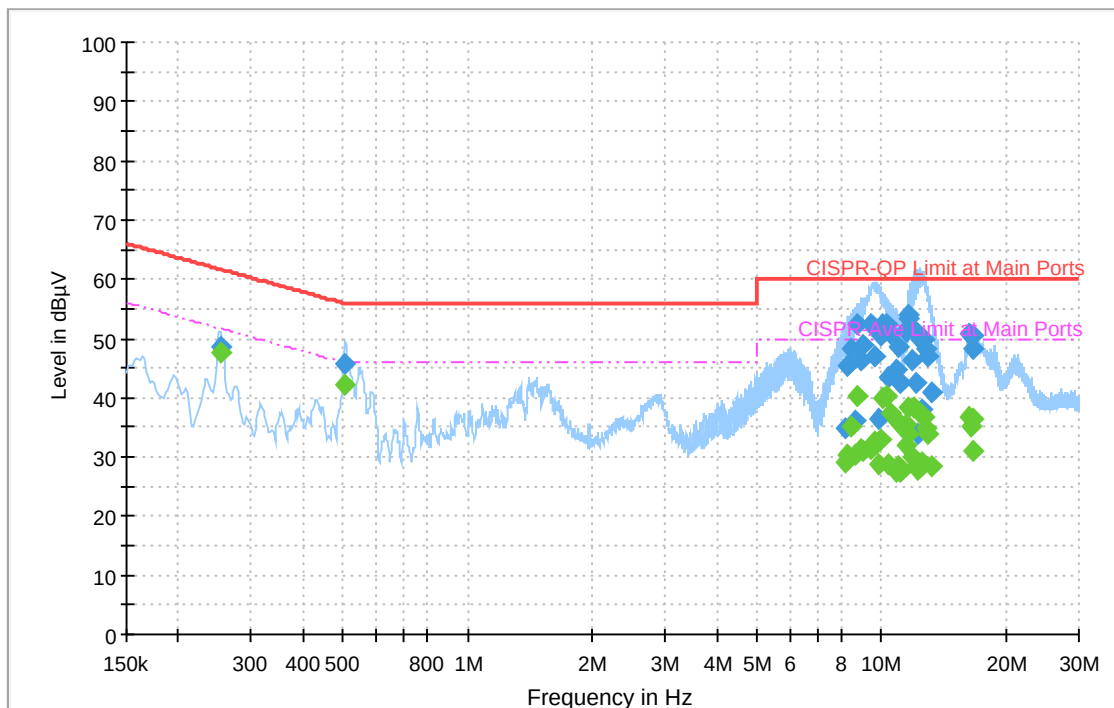
Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.250665	48.72	---	61.74	13.02	L1	OFF	20.3
0.250665	---	48.04	51.74	3.70	L1	OFF	20.3
0.504861	45.66	---	56.00	10.34	L1	OFF	20.3
0.504861	---	42.53	46.00	3.47	L1	OFF	20.3
8.124000	42.88	---	60.00	17.12	L1	OFF	20.4
8.124000	---	29.68	50.00	20.32	L1	OFF	20.4
8.252970	35.54	---	60.00	24.46	L1	OFF	20.4
8.252970	---	29.94	50.00	20.06	L1	OFF	20.4
8.376981	40.68	---	60.00	19.32	L1	OFF	20.4
8.376981	---	30.19	50.00	19.81	L1	OFF	20.4
8.569212	35.92	---	60.00	24.08	L1	OFF	20.4
8.569212	---	30.39	50.00	19.61	L1	OFF	20.4
8.694636	47.75	---	60.00	12.25	L1	OFF	20.4
8.694636	---	31.62	50.00	18.38	L1	OFF	20.4
8.827170	50.82	---	60.00	9.18	L1	OFF	20.4
8.827170	---	38.61	50.00	11.39	L1	OFF	20.4
9.077613	48.89	---	60.00	11.11	L1	OFF	20.4
9.077613	---	31.69	50.00	18.31	L1	OFF	20.4
9.267810	45.70	---	60.00	14.30	L1	OFF	20.4
9.267810	---	30.68	50.00	19.32	L1	OFF	20.4
9.490326	54.78	---	60.00	5.22	L1	OFF	20.4

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
9.490326	---	37.14	50.00	12.86	L1	OFF	20.4
9.643929	53.95	---	60.00	6.05	L1	OFF	20.5
9.643929	---	37.36	50.00	12.64	L1	OFF	20.5
9.761595	41.66	---	60.00	18.34	L1	OFF	20.5
9.761595	---	30.73	50.00	19.27	L1	OFF	20.5
9.906927	51.19	---	60.00	8.81	L1	OFF	20.5
9.906927	---	36.77	50.00	13.23	L1	OFF	20.5
10.017294	50.13	---	60.00	9.87	L1	OFF	20.5
10.017294	---	33.51	50.00	16.49	L1	OFF	20.5
10.162644	47.83	---	60.00	12.17	L1	OFF	20.5
10.162644	---	34.37	50.00	15.63	L1	OFF	20.5
10.354641	47.91	---	60.00	12.09	L1	OFF	20.5
10.354641	---	34.98	50.00	15.02	L1	OFF	20.5
10.487454	31.62	---	60.00	28.38	L1	OFF	20.5
10.487454	---	25.52	50.00	24.48	L1	OFF	20.5
10.617378	49.14	---	60.00	10.86	L1	OFF	20.5
10.617378	---	35.84	50.00	14.16	L1	OFF	20.5
10.737474	47.13	---	60.00	12.87	L1	OFF	20.5
10.737474	---	33.88	50.00	16.12	L1	OFF	20.5
10.934304	49.31	---	60.00	10.69	L1	OFF	20.5
10.934304	---	36.42	50.00	13.58	L1	OFF	20.5
11.061573	42.22	---	60.00	17.78	L1	OFF	20.5
11.061573	---	26.64	50.00	23.36	L1	OFF	20.5
11.197374	37.66	---	60.00	22.34	L1	OFF	20.5
11.197374	---	23.98	50.00	26.02	L1	OFF	20.5
11.511762	37.60	---	60.00	22.40	L1	OFF	20.5
11.511762	---	23.35	50.00	26.65	L1	OFF	20.5
11.640264	54.58	---	60.00	5.42	L1	OFF	20.5
11.640264	---	41.68	50.00	8.32	L1	OFF	20.5
11.769162	33.08	---	60.00	26.92	L1	OFF	20.5
11.769162	---	24.75	50.00	25.25	L1	OFF	20.5
11.899437	48.81	---	60.00	11.19	L1	OFF	20.5
11.899437	---	33.48	50.00	16.52	L1	OFF	20.5
12.018255	55.36	---	60.00	4.64	L1	OFF	20.5
12.018255	---	41.78	50.00	8.22	L1	OFF	20.5
12.150150	55.57	---	60.00	4.43	L1	OFF	20.5
12.150150	---	36.55	50.00	13.45	L1	OFF	20.5
12.281433	52.49	---	60.00	7.51	L1	OFF	20.5
12.281433	---	34.95	50.00	15.05	L1	OFF	20.5
12.345360	54.31	---	60.00	5.69	L1	OFF	20.5
12.345360	---	37.05	50.00	12.95	L1	OFF	20.5
12.468822	54.26	---	60.00	5.74	L1	OFF	20.5
12.468822	---	34.56	50.00	15.44	L1	OFF	20.5
12.604308	52.01	---	60.00	7.99	L1	OFF	20.5
12.604308	---	30.76	50.00	19.24	L1	OFF	20.5
12.791796	54.66	---	60.00	5.34	L1	OFF	20.5
12.791796	---	36.17	50.00	13.83	L1	OFF	20.5
12.915582	55.22	---	60.00	4.78	L1	OFF	20.5
12.915582	---	38.93	50.00	11.07	L1	OFF	20.5
13.046667	53.13	---	60.00	6.87	L1	OFF	20.5
13.046667	---	36.82	50.00	13.18	L1	OFF	20.5
13.107687	52.19	---	60.00	7.81	L1	OFF	20.5
13.107687	---	36.26	50.00	13.74	L1	OFF	20.5
13.433055	39.50	---	60.00	20.50	L1	OFF	20.5
13.433055	---	26.72	50.00	23.28	L1	OFF	20.5
16.309176	43.35	---	60.00	16.65	L1	OFF	20.5
16.309176	---	29.63	50.00	20.37	L1	OFF	20.5
16.372221	34.12	---	60.00	25.88	L1	OFF	20.5
16.372221	---	25.21	50.00	24.79	L1	OFF	20.5
16.560375	46.33	---	60.00	13.67	L1	OFF	20.5
16.560375	---	33.83	50.00	16.17	L1	OFF	20.5

EUT Information

Site: CO01-CA
Power: 120Vac/60Hz
Project: 210727003
Mode: 2

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.252186	48.55	---	61.69	13.13	N	OFF	20.3
0.252186	---	47.65	51.69	4.03	N	OFF	20.3
0.505590	45.58	---	56.00	10.42	N	OFF	20.3
0.505590	---	42.32	46.00	3.68	N	OFF	20.3
8.185506	34.92	---	60.00	25.08	N	OFF	20.4
8.185506	---	29.18	50.00	20.82	N	OFF	20.4
8.307744	45.30	---	60.00	14.70	N	OFF	20.4
8.307744	---	30.34	50.00	19.66	N	OFF	20.4
8.442339	48.12	---	60.00	11.88	N	OFF	20.4
8.442339	---	35.19	50.00	14.81	N	OFF	20.4
8.632581	36.03	---	60.00	23.97	N	OFF	20.4
8.632581	---	30.45	50.00	19.55	N	OFF	20.4
8.759265	52.40	---	60.00	7.60	N	OFF	20.4
8.759265	---	40.40	50.00	9.60	N	OFF	20.4
8.893149	46.22	---	60.00	13.78	N	OFF	20.4
8.893149	---	31.28	50.00	18.72	N	OFF	20.4
9.015414	49.03	---	60.00	10.97	N	OFF	20.4
9.015414	---	30.97	50.00	19.03	N	OFF	20.4
9.374523	52.36	---	60.00	7.64	N	OFF	20.4
9.374523	---	31.26	50.00	18.74	N	OFF	20.4
9.618756	47.11	---	60.00	12.89	N	OFF	20.4

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
9.618756	---	32.63	50.00	17.37	N	OFF	20.4
9.821031	36.53	---	60.00	23.47	N	OFF	20.4
9.821031	---	28.84	50.00	21.16	N	OFF	20.4
9.950703	50.39	---	60.00	9.61	N	OFF	20.4
9.950703	---	32.91	50.00	17.09	N	OFF	20.4
10.101003	52.44	---	60.00	7.56	N	OFF	20.5
10.101003	---	40.01	50.00	9.99	N	OFF	20.5
10.292586	52.33	---	60.00	7.67	N	OFF	20.5
10.292586	---	40.12	50.00	9.88	N	OFF	20.5
10.422753	43.61	---	60.00	16.39	N	OFF	20.5
10.422753	---	28.68	50.00	21.32	N	OFF	20.5
10.545054	50.81	---	60.00	9.19	N	OFF	20.5
10.545054	---	37.39	50.00	12.61	N	OFF	20.5
10.871772	44.86	---	60.00	15.14	N	OFF	20.5
10.871772	---	27.57	50.00	22.43	N	OFF	20.5
10.929957	48.48	---	60.00	11.52	N	OFF	20.5
10.929957	---	35.71	50.00	14.29	N	OFF	20.5
11.001714	42.88	---	60.00	17.12	N	OFF	20.5
11.001714	---	28.49	50.00	21.51	N	OFF	20.5
11.067828	42.60	---	60.00	17.40	N	OFF	20.5
11.067828	---	27.41	50.00	22.59	N	OFF	20.5
11.447844	51.25	---	60.00	8.75	N	OFF	20.5
11.447844	---	35.32	50.00	14.68	N	OFF	20.5
11.509287	51.56	---	60.00	8.44	N	OFF	20.5
11.509287	---	32.07	50.00	17.93	N	OFF	20.5
11.571873	53.84	---	60.00	6.16	N	OFF	20.5
11.571873	---	33.94	50.00	16.06	N	OFF	20.5
11.640633	53.45	---	60.00	6.55	N	OFF	20.5
11.640633	---	38.32	50.00	11.68	N	OFF	20.5
11.829084	46.20	---	60.00	13.80	N	OFF	20.5
11.829084	---	29.89	50.00	20.11	N	OFF	20.5
11.952969	51.37	---	60.00	8.63	N	OFF	20.5
11.952969	---	38.40	50.00	11.60	N	OFF	20.5
12.082839	42.44	---	60.00	17.56	N	OFF	20.5
12.082839	---	28.44	50.00	21.56	N	OFF	20.5
12.214905	33.83	---	60.00	26.17	N	OFF	20.5
12.214905	---	27.75	50.00	22.25	N	OFF	20.5
12.340518	49.89	---	60.00	10.11	N	OFF	20.5
12.340518	---	37.28	50.00	12.72	N	OFF	20.5
12.466959	37.96	---	60.00	22.04	N	OFF	20.5
12.466959	---	29.01	50.00	20.99	N	OFF	20.5
12.593382	49.71	---	60.00	10.29	N	OFF	20.5
12.593382	---	36.67	50.00	13.33	N	OFF	20.5
12.791049	48.19	---	60.00	11.81	N	OFF	20.5
12.791049	---	34.77	50.00	15.23	N	OFF	20.5
12.976710	46.90	---	60.00	13.10	N	OFF	20.5
12.976710	---	33.79	50.00	16.21	N	OFF	20.5
13.239870	40.84	---	60.00	19.16	N	OFF	20.5
13.239870	---	28.54	50.00	21.46	N	OFF	20.5
16.303686	50.76	---	60.00	9.24	N	OFF	20.5
16.303686	---	36.80	50.00	13.20	N	OFF	20.5
16.434789	50.57	---	60.00	9.43	N	OFF	20.5
16.434789	---	35.27	50.00	14.73	N	OFF	20.5
16.555065	50.63	---	60.00	9.37	N	OFF	20.5
16.555065	---	36.36	50.00	13.64	N	OFF	20.5
16.693404	48.16	---	60.00	11.84	N	OFF	20.5
16.693404	---	31.14	50.00	18.86	N	OFF	20.5



Appendix C. Radiated Spurious Emission

Test Engineer :	Fu Chen	Temperature :	20~25°C
		Relative Humidity :	42~50%

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Margin Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5627.6	53.27	-14.93	68.2	40.06	31.98	11.62	30.39	250	141	P	H
		5698	62.63	-41.1	103.73	49.35	31.98	11.72	30.42	250	141	P	H
		5719.6	71.06	-39.63	110.69	57.68	32.05	11.75	30.42	250	141	P	H
		5725	76.32	-45.88	122.2	62.91	32.07	11.76	30.42	250	141	P	H
		4840	54.69	-19.31	74	42.79	31.48	10.84	30.42	-	-	P	H
		4840	44.19	-9.81	54	32.29	31.48	10.84	30.42	-	-	A	H
		5428	54.39	-19.61	74	41.53	31.79	11.43	30.36	-	-	P	H
		5428	44.77	-9.23	54	31.91	31.79	11.43	30.36	-	-	A	H
	*	5745	104.65	-	-	91.15	32.14	11.78	30.42	250	141	P	H
	*	5745	98.14	-	-	84.64	32.14	11.78	30.42	250	141	A	H
		5606.2	53.31	-14.89	68.2	40.19	31.91	11.59	30.38	102	263	P	V
		5697.2	70.12	-33.02	103.14	56.85	31.97	11.72	30.42	102	263	P	V
		5719.2	79.42	-31.16	110.58	66.05	32.04	11.75	30.42	102	263	P	V
		5724.8	84.05	-37.69	121.74	70.66	32.06	11.75	30.42	102	263	P	V
		4786	55.39	-18.61	74	43.53	31.49	10.79	30.42	-	-	P	V
		4786	44.11	-9.89	54	32.25	31.49	10.79	30.42	-	-	A	V
		5446	54.32	-19.68	74	41.42	31.81	11.45	30.36	-	-	P	V
		5446	45.06	-8.94	54	32.16	31.81	11.45	30.36	-	-	A	V
	*	5745	113.04	-	-	99.56	32.12	11.78	30.42	102	263	P	V
	*	5745	105.37	-	-	91.89	32.12	11.78	30.42	102	263	A	V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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		5614	52.64	-15.56	68.2	39.44	31.99	11.6	30.39	269	143	P	H
		5679.8	52.55	-37.74	90.29	39.3	31.97	11.69	30.41	269	143	P	H
		5719	54.42	-56.1	110.52	41.05	32.04	11.75	30.42	269	143	P	H
		5724.2	56.26	-64.12	120.38	42.87	32.06	11.75	30.42	269	143	P	H
		4816	54.17	-19.83	74	42.26	31.5	10.83	30.42	-	-	P	H
		4816	43.84	-10.16	54	31.93	31.5	10.83	30.42	-	-	A	H
		5392	53.17	-20.83	74	40.42	31.7	11.4	30.35	-	-	P	H
		5392	44.43	-9.57	54	31.68	31.7	11.4	30.35	-	-	A	H
	*	5785	106.58	-	-	92.9	32.27	11.84	30.43	269	143	P	H
	*	5785	98.39	-	-	84.71	32.27	11.84	30.43	269	143	A	H
		5854.8	54.63	-56.63	111.26	40.71	32.47	11.92	30.47	269	143	P	H
		5867.4	53.92	-53.41	107.33	39.99	32.47	11.94	30.48	269	143	P	H
		5880	54.69	-46.8	101.49	40.76	32.47	11.95	30.49	269	143	P	H
		5935.2	54.66	-13.54	68.2	40.58	32.57	12.02	30.51	269	143	P	H
		5632.8	53.37	-14.83	68.2	40.22	31.91	11.63	30.39	100	263	P	V
		5698.8	54.57	-49.75	104.32	41.29	31.98	11.72	30.42	100	263	P	V
		5719	60.37	-50.15	110.52	47	32.04	11.75	30.42	100	263	P	V
		5724.2	63.46	-56.92	120.38	50.08	32.05	11.75	30.42	100	263	P	V
		4888	54.34	-19.66	74	42.54	31.34	10.86	30.4	-	-	P	V
		4888	43.62	-10.38	54	31.82	31.34	10.86	30.4	-	-	A	V
		5404	53.69	-20.31	74	40.95	31.68	11.41	30.35	-	-	P	V
		5404	44.62	-9.38	54	31.88	31.68	11.41	30.35	-	-	A	V
	*	5785	113.87	-	-	100.19	32.27	11.84	30.43	100	263	P	V
	*	5785	105.62	-	-	91.94	32.27	11.84	30.43	100	263	A	V
		5852.4	59.34	-57.39	116.73	45.41	32.48	11.92	30.47	100	263	P	V
		5860.4	58.3	-50.99	109.29	44.37	32.48	11.93	30.48	100	263	P	V
		5883.4	55.04	-43.92	98.96	41.06	32.51	11.96	30.49	100	263	P	V
		5936.4	54.44	-13.76	68.2	40.35	32.58	12.02	30.51	100	263	P	V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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		4828	54.64	-19.36	74	42.74	31.49	10.83	30.42	-	-	P	H
		4828	43.78	-10.22	54	31.88	31.49	10.83	30.42	-	-	A	H
		5416	53.61	-20.39	74	40.78	31.76	11.42	30.35	-	-	P	H
		5416	45.06	-8.94	54	32.23	31.76	11.42	30.35	-	-	A	H
	*	5825	106.67	-	-	92.83	32.4	11.89	30.45	271	139	P	H
	*	5825	88.58	-	-	74.74	32.4	11.89	30.45	271	139	A	H
		5850	71.18	-51.02	122.2	57.26	32.47	11.92	30.47	271	139	P	H
		5856	64.26	-46.26	110.52	50.34	32.47	11.92	30.47	271	139	P	H
		5875	56.42	-48.78	105.2	42.49	32.47	11.95	30.49	271	139	P	H
		5948.4	54.44	-13.76	68.2	40.32	32.6	12.03	30.51	271	139	P	H
		4768	53.93	-20.07	74	42.2	31.41	10.75	30.43	-	-	P	V
		4768	43.73	-10.27	54	32	31.41	10.75	30.43	-	-	A	V
		5446	53.99	-20.01	74	41.09	31.81	11.45	30.36	-	-	P	V
		5446	44.86	-9.14	54	31.96	31.81	11.45	30.36	-	-	A	V
	*	5825	114.47	-	-	100.63	32.4	11.89	30.45	101	272	P	V
	*	5825	106.34	-	-	92.5	32.4	11.89	30.45	101	272	A	V
		5851	79.67	-40.25	119.92	65.75	32.47	11.92	30.47	101	272	P	V
		5855	73.58	-37.22	110.8	59.65	32.48	11.92	30.47	101	272	P	V
		5875.2	64.13	-40.92	105.05	50.17	32.5	11.95	30.49	101	272	P	V
		5926	55.41	-12.79	68.2	41.36	32.56	12	30.51	101	272	P	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.												



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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		11213	48.14	-25.86	74	59.06	39.72	17.65	68.29	-	-	P	H
		11213	37.67	-16.33	54	48.59	39.72	17.65	68.29	-	-	A	H
		11490	47.18	-26.82	74	56.83	40.16	17.93	67.74	-	-	P	H
		14490	50.75	-23.25	74	56.45	41.94	20.34	67.98	-	-	P	H
		14490	41.8	-12.2	54	47.5	41.94	20.34	67.98	-	-	A	H
		17235	49.61	-18.59	68.2	56.01	40.73	21.58	68.71	-	-	P	H
		18000	57.23	-16.77	74	56.18	48.82	21.95	69.72	-	-	P	H
		18000	49.16	-4.84	54	48.11	48.82	21.95	69.72	-	-	A	H
													H
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													H
													H
		11490	47.49	-26.51	74	57.22	40.08	17.93	67.74	-	-	P	V
		11576	48.58	-25.42	74	58.17	40	18.02	67.61	-	-	P	V
		11576	38.87	-15.13	54	48.46	40	18.02	67.61	-	-	A	V
		14490	50.7	-23.3	74	56.4	41.94	20.34	67.98	-	-	P	V
		14490	41.95	-12.05	54	47.65	41.94	20.34	67.98	-	-	A	V
		17235	49.44	-18.76	68.2	55.64	40.93	21.58	68.71	-	-	P	V
		18000	57.92	-16.08	74	56.65	49.04	21.95	69.72	-	-	P	V
		18000	49.35	-4.65	54	48.08	49.04	21.95	69.72	-	-	A	V
													V
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													V
													V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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		11323	48.52	-25.48	74	59.21	39.82	17.76	68.27	-	-	P	H
		11323	38.47	-15.53	54	49.16	39.82	17.76	68.27	-	-	A	H
		11570	47.4	-26.6	74	56.97	40.04	18.01	67.62	-	-	P	H
		14490	51	-23	74	56.7	41.94	20.34	67.98	-	-	P	H
		14490	41.88	-12.12	54	47.58	41.94	20.34	67.98	-	-	A	H
		17355	50.97	-17.23	68.2	56.89	41.6	21.64	69.16	-	-	P	H
		18000	58.94	-15.06	74	57.89	48.82	21.95	69.72	-	-	P	H
		18000	49.06	-4.94	54	48.01	48.82	21.95	69.72	-	-	A	H
													H
													H
													H
													H
		11433	49.44	-24.56	74	59.49	40.01	17.87	67.93	-	-	P	V
		11433	39.08	-14.92	54	49.13	40.01	17.87	67.93	-	-	A	V
		11570	47.72	-26.28	74	57.32	40.01	18.01	67.62	-	-	P	V
		14490	51.23	-22.77	74	56.93	41.94	20.34	67.98	-	-	P	V
		14490	41.91	-12.09	54	47.61	41.94	20.34	67.98	-	-	A	V
		17355	52.15	-16.05	68.2	57.89	41.78	21.64	69.16	-	-	P	V
		18000	58.18	-15.82	74	56.91	49.04	21.95	69.72	-	-	P	V
		18000	49.3	-4.7	54	48.03	49.04	21.95	69.72	-	-	A	V
													V
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													V
													V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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		11378	48.8	-25.2	74	59.16	39.96	17.81	68.13	-	-	P	H
		11378	38.76	-15.24	54	49.12	39.96	17.81	68.13	-	-	A	H
		11650	47.81	-26.19	74	57.57	39.74	18.09	67.59	-	-	P	H
		14490	50.38	-23.62	74	56.08	41.94	20.34	67.98	-	-	P	H
		14490	41.99	-12.01	54	47.69	41.94	20.34	67.98	-	-	A	H
		17475	50.7	-17.5	68.2	55.95	42.53	21.69	69.47	-	-	P	H
		17989	57.51	-16.49	74	56.9	48.53	21.93	69.85	-	-	P	H
		17989	48.64	-5.36	54	48.03	48.53	21.93	69.85	-	-	A	H
													H
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													H
													H
		11279	48.68	-25.32	74	59.62	39.67	17.71	68.32	-	-	P	V
		11279	38.08	-15.92	54	49.02	39.67	17.71	68.32	-	-	A	V
		11650	46.78	-27.22	74	56.53	39.75	18.09	67.59	-	-	P	V
		14491	50.71	-23.29	74	56.4	41.95	20.34	67.98	-	-	P	V
		14491	41.91	-12.09	54	47.6	41.95	20.34	67.98	-	-	A	V
		17475	50.94	-17.26	68.2	56	42.72	21.69	69.47	-	-	P	V
		17978	57.91	-16.09	74	57.42	48.54	21.93	69.98	-	-	P	V
		17978	48.63	-5.37	54	48.14	48.54	21.93	69.98	-	-	A	V
													V
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													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.												
	4. The emission level close to 18GHz is checked that the average emission level is noise floor only.												



Band 4 - 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 149 5745MHz		5649.4	60.38	-7.82	68.2	47.17	31.96	11.65	30.4	100	179	P	H
		5700	77.09	-28.11	105.2	63.81	31.98	11.72	30.42	100	179	P	H
		5719.4	84.58	-26.05	110.63	71.2	32.05	11.75	30.42	100	179	P	H
		5724.4	92.28	-28.55	120.83	78.89	32.06	11.75	30.42	100	179	P	H
		5104	54.08	-19.92	74	41.22	32.16	11.07	30.37	-	-	P	H
		5104	44.52	-9.48	54	31.66	32.16	11.07	30.37	-	-	A	H
		5440	53.88	-20.12	74	40.98	31.82	11.44	30.36	-	-	P	H
		5440	44.71	-9.29	54	31.81	31.82	11.44	30.36	-	-	A	H
	*	5745	118.43	-	-	104.93	32.14	11.78	30.42	100	179	P	H
	*	5745	110.88	-	-	97.38	32.14	11.78	30.42	100	179	A	H
		5606.2	52.66	-15.54	68.2	39.54	31.91	11.59	30.38	385	239	P	V
		5699.6	65.6	-39.31	104.91	52.32	31.98	11.72	30.42	385	239	P	V
		5718.6	75.29	-35.12	110.41	61.92	32.04	11.75	30.42	385	239	P	V
		5723.2	83.28	-34.82	118.1	69.9	32.05	11.75	30.42	385	239	P	V
		4816	54.28	-19.72	74	42.33	31.54	10.83	30.42	-	-	P	V
		4816	43.66	-10.34	54	31.71	31.54	10.83	30.42	-	-	A	V
		5410	54.2	-19.8	74	41.43	31.7	11.42	30.35	-	-	P	V
		5410	44.65	-9.35	54	31.88	31.7	11.42	30.35	-	-	A	V
	*	5745	110.08	-	-	96.6	32.12	11.78	30.42	385	239	P	V
	*	5745	102.24	-	-	88.76	32.12	11.78	30.42	385	239	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)
802.11n HT20 CH 157 5785MHz		5633.6	53.47	-14.73	68.2	40.25	31.98	11.63	30.39	100	183	P	H
		5698.4	59.96	-44.06	104.02	46.68	31.98	11.72	30.42	100	183	P	H
		5718.8	70.14	-40.32	110.46	56.77	32.04	11.75	30.42	100	183	P	H
		5724.2	71.02	-49.36	120.38	57.63	32.06	11.75	30.42	100	183	P	H
		4822	55.01	-18.99	74	43.11	31.49	10.83	30.42	-	-	P	H
		4822	43.69	-10.31	54	31.79	31.49	10.83	30.42	-	-	A	H
		5434	53.17	-20.83	74	40.29	31.8	11.44	30.36	-	-	P	H
		5434	44.88	-9.12	54	32	31.8	11.44	30.36	-	-	A	H
	*	5785	118.54	-	-	104.86	32.27	11.84	30.43	100	183	P	H
	*	5785	110.85	-	-	97.17	32.27	11.84	30.43	100	183	A	H
		5850.4	68.19	-53.1	121.29	54.27	32.47	11.92	30.47	100	183	P	H
		5859.6	65.05	-44.46	109.51	51.13	32.47	11.93	30.48	100	183	P	H
		5878.4	58.85	-43.82	102.67	44.92	32.47	11.95	30.49	100	183	P	H
		5935.4	53.96	-14.24	68.2	39.88	32.57	12.02	30.51	100	183	P	H
		5606.2	51.6	-16.6	68.2	38.48	31.91	11.59	30.38	399	245	P	V
		5676.4	53.52	-34.26	87.78	40.29	31.95	11.69	30.41	399	245	P	V
		5717.8	57.2	-52.98	110.18	43.85	32.03	11.74	30.42	399	245	P	V
		5723	60.47	-57.17	117.64	47.09	32.05	11.75	30.42	399	245	P	V
		4996	53.57	-20.43	74	41.27	31.76	10.92	30.38	-	-	P	V
		4996	44.02	-9.98	54	31.72	31.76	10.92	30.38	-	-	A	V
		5452	54.25	-19.75	74	41.33	31.83	11.45	30.36	-	-	P	V
		5452	45.13	-8.87	54	32.21	31.83	11.45	30.36	-	-	A	V
	*	5785	110.36	-	-	96.68	32.27	11.84	30.43	399	245	P	V
	*	5785	102.14	-	-	88.46	32.27	11.84	30.43	399	245	A	V
		5851.8	57.14	-60.96	118.1	43.22	32.47	11.92	30.47	399	245	P	V
		5856	55.74	-54.78	110.52	41.81	32.48	11.92	30.47	399	245	P	V
		5909.8	54.59	-24.83	79.42	40.56	32.54	11.99	30.5	399	245	P	V
		5929.6	53.17	-15.03	68.2	39.1	32.57	12.01	30.51	399	245	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)
802.11n HT20 CH 165 5825MHz		4924	53.34	-20.66	74	41.41	31.45	10.88	30.4	-	-	P	H
		4924	43.74	-10.26	54	31.81	31.45	10.88	30.4	-	-	A	H
		5446	53.75	-20.25	74	40.83	31.83	11.45	30.36	-	-	P	H
		5446	45.03	-8.97	54	32.11	31.83	11.45	30.36	-	-	A	H
	*	5825	118.54	-	-	104.7	32.4	11.89	30.45	101	180	P	H
	*	5825	110.67	-	-	96.83	32.4	11.89	30.45	101	180	A	H
		5851.4	85.12	-33.89	119.01	71.2	32.47	11.92	30.47	101	180	P	H
		5855.8	82.29	-28.29	110.58	68.37	32.47	11.92	30.47	101	180	P	H
		5876.6	71.95	-32.06	104.01	58.02	32.47	11.95	30.49	101	180	P	H
		5931	55.64	-12.56	68.2	41.58	32.56	12.01	30.51	101	180	P	H
		5068	53.66	-20.34	74	41.04	31.98	11.02	30.38	-	-	P	V
		5068	44.45	-9.55	54	31.83	31.98	11.02	30.38	-	-	A	V
		5404	52.72	-21.28	74	39.98	31.68	11.41	30.35	-	-	P	V
		5404	44.78	-9.22	54	32.04	31.68	11.41	30.35	-	-	A	V
	*	5825	110.33	-	-	96.49	32.4	11.89	30.45	393	240	P	V
	*	5825	102.01	-	-	88.17	32.4	11.89	30.45	393	240	A	V
		5852.2	75.02	-42.16	117.18	61.09	32.48	11.92	30.47	393	240	P	V
		5855	72.67	-38.13	110.8	58.74	32.48	11.92	30.47	393	240	P	V
		5875.6	61.77	-42.98	104.75	47.81	32.5	11.95	30.49	393	240	P	V
		5933.6	53.79	-14.41	68.2	39.72	32.57	12.01	30.51	393	240	P	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.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)
802.11n HT20 CH 149 5745MHz		11490	48.72	-25.28	74	58.37	40.16	17.93	67.74	-	-	P	H
		11774	49.38	-24.62	74	59.8	39.27	18.23	67.92	-	-	P	H
		11774	38.18	-15.82	54	48.6	39.27	18.23	67.92	-	-	A	H
		14490	51.4	-22.6	74	57.1	41.94	20.34	67.98	-	-	P	H
		14490	41.94	-12.06	54	47.64	41.94	20.34	67.98	-	-	A	H
		17235	50.9	-17.3	68.2	57.3	40.73	21.58	68.71	-	-	P	H
		17989	58.15	-15.85	74	57.54	48.53	21.93	69.85	-	-	P	H
		17989	48.73	-5.27	54	48.12	48.53	21.93	69.85	-	-	A	H
													H
													H
													H
													H
		11367	49.46	-24.54	74	59.97	39.86	17.8	68.17	-	-	P	V
		11367	38.51	-15.49	54	49.02	39.86	17.8	68.17	-	-	A	V
		11490	47.92	-26.08	74	57.65	40.08	17.93	67.74	-	-	P	V
		14491	51.69	-22.31	74	57.38	41.95	20.34	67.98	-	-	P	V
		14491	41.97	-12.03	54	47.66	41.95	20.34	67.98	-	-	A	V
		17235	50.36	-17.84	68.2	56.56	40.93	21.58	68.71	-	-	P	V
		18000	58.4	-15.6	74	57.13	49.04	21.95	69.72	-	-	P	V
		18000	49.48	-4.52	54	48.21	49.04	21.95	69.72	-	-	A	V
													V
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													V
													V



WiFi Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)
802.11n HT20 CH 157 5785MHz		11268	48.02	-25.98	74	58.91	39.73	17.7	68.32	-	-	P	H
		11268	37.7	-16.3	54	48.59	39.73	17.7	68.32	-	-	A	H
		11570	47.54	-26.46	74	57.11	40.04	18.01	67.62	-	-	P	H
		14491	50.65	-23.35	74	56.35	41.94	20.34	67.98	-	-	P	H
		14491	41.85	-12.15	54	47.55	41.94	20.34	67.98	-	-	A	H
		17355	51.9	-16.3	68.2	57.82	41.6	21.64	69.16	-	-	P	H
		18000	58.94	-15.06	74	57.89	48.82	21.95	69.72	-	-	P	H
		18000	49.05	-4.95	54	48	48.82	21.95	69.72	-	-	A	H
													H
													H
													H
													H
		11400	49.25	-24.75	74	59.56	39.92	17.83	68.06	-	-	P	V
		11400	38.9	-15.1	54	49.21	39.92	17.83	68.06	-	-	A	V
		11570	47.79	-26.21	74	57.39	40.01	18.01	67.62	-	-	P	V
		14491	51.03	-22.97	74	56.72	41.95	20.34	67.98	-	-	P	V
		14491	41.89	-12.11	54	47.58	41.95	20.34	67.98	-	-	A	V
		17355	51.38	-16.82	68.2	57.12	41.78	21.64	69.16	-	-	P	V
		17989	58.38	-15.62	74	57.51	48.79	21.93	69.85	-	-	P	V
		17989	48.98	-5.02	54	48.11	48.79	21.93	69.85	-	-	A	V
													V
													V
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													V

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)	
802.11n HT20 CH 165 5825MHz		11191	49.1	-24.9	74	60.01	39.73	17.62	68.26	-	-	P	H	
		11191	38.36	-15.64	54	49.27	39.73	17.62	68.26	-	-	A	H	
		11650	47.28	-26.72	74	57.04	39.74	18.09	67.59	-	-	P	H	
		14491	50.41	-23.59	74	56.11	41.94	20.34	67.98	-	-	P	H	
		14491	41.8	-12.2	54	47.5	41.94	20.34	67.98	-	-	A	H	
		17475	52.1	-16.1	68.2	57.35	42.53	21.69	69.47	-	-	P	H	
		18000	57.76	-16.24	74	56.71	48.82	21.95	69.72	-	-	P	H	
		18000	49.15	-4.85	54	48.1	48.82	21.95	69.72	-	-	A	H	
													H	
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													H	
			11650	46.99	-27.01	74	56.74	39.75	18.09	67.59	-	-	P	V
			12027	49.43	-24.57	74	59.4	39.18	18.47	67.62	-	-	P	V
			12027	38.59	-15.41	54	48.56	39.18	18.47	67.62	-	-	A	V
			14491	51.35	-22.65	74	57.04	41.95	20.34	67.98	-	-	P	V
			14491	41.86	-12.14	54	47.55	41.95	20.34	67.98	-	-	A	V
			17475	51.3	-16.9	68.2	56.36	42.72	21.69	69.47	-	-	P	V
			17989	57.61	-16.39	74	56.74	48.79	21.93	69.85	-	-	P	V
			17989	48.87	-5.13	54	48	48.79	21.93	69.85	-	-	A	V
													V	
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													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.													
	4. The emission level close to 18GHz is checked that the average emission level is noise floor only.													



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)
802.11n HT40 CH 151 5755MHz		5650	62	-6.2	68.2	48.79	31.96	11.65	30.4	101	176	P	H
		5697.4	75.71	-27.57	103.28	62.43	31.98	11.72	30.42	101	176	P	H
		5720	82.42	-28.38	110.8	69.04	32.05	11.75	30.42	101	176	P	H
		5721.2	83.4	-30.14	113.54	70.02	32.05	11.75	30.42	101	176	P	H
		4834	53.82	-20.18	74	41.91	31.49	10.84	30.42	-	-	P	H
		4834	44.14	-9.86	54	32.23	31.49	10.84	30.42	-	-	A	H
		5428	53.71	-20.29	74	40.85	31.79	11.43	30.36	-	-	P	H
		5428	45.69	-8.31	54	32.83	31.79	11.43	30.36	-	-	A	H
	*	5755	113.1	-	-	99.55	32.17	11.8	30.42	101	176	P	H
	*	5755	106.24	-	-	92.69	32.17	11.8	30.42	101	176	A	H
		5850.4	61.31	-59.98	121.29	47.39	32.47	11.92	30.47	101	176	P	H
		5855	60.11	-50.69	110.8	46.19	32.47	11.92	30.47	101	176	P	H
		5875.2	56.78	-48.27	105.05	42.85	32.47	11.95	30.49	101	176	P	H
		5944.4	54.4	-13.8	68.2	40.29	32.59	12.03	30.51	101	176	P	H
		5610.2	53.68	-14.52	68.2	40.56	31.91	11.59	30.38	366	243	P	V
		5697	66.45	-36.54	102.99	53.18	31.97	11.72	30.42	366	243	P	V
		5718	73.17	-37.07	110.24	59.81	32.03	11.75	30.42	366	243	P	V
		5721.4	75.82	-38.17	113.99	62.44	32.05	11.75	30.42	366	243	P	V
		4840	53.71	-20.29	74	41.75	31.54	10.84	30.42	-	-	P	V
		4840	44.49	-9.51	54	32.53	31.54	10.84	30.42	-	-	A	V
		5434	53.69	-20.31	74	40.84	31.77	11.44	30.36	-	-	P	V
		5434	45.18	-8.82	54	32.33	31.77	11.44	30.36	-	-	A	V
	*	5755	104.09	-	-	90.55	32.16	11.8	30.42	366	243	P	V
	*	5755	97.42	-	-	83.88	32.16	11.8	30.42	366	243	A	V
		5854.4	54.23	-57.94	112.17	40.3	32.48	11.92	30.47	366	243	P	V
		5856.6	54.83	-55.52	110.35	40.89	32.48	11.93	30.47	366	243	P	V
		5880.6	53.95	-47.09	101.04	39.99	32.5	11.95	30.49	366	243	P	V
		5936.6	53.23	-14.97	68.2	39.14	32.58	12.02	30.51	366	243	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)
802.11n HT40 CH 159 5795MHz		5646.6	53.85	-14.35	68.2	40.64	31.96	11.65	30.4	100	181	P	H
		5698.6	63.49	-40.68	104.17	50.21	31.98	11.72	30.42	100	181	P	H
		5718.6	70.77	-39.64	110.41	57.4	32.04	11.75	30.42	100	181	P	H
		5721	71.15	-41.93	113.08	57.77	32.05	11.75	30.42	100	181	P	H
		5056	52.88	-21.12	74	40.33	31.93	11	30.38	-	-	P	H
		5056	45.02	-8.98	54	32.47	31.93	11	30.38	-	-	A	H
		5452	54.83	-19.17	74	41.89	31.85	11.45	30.36	-	-	P	H
		5452	45.76	-8.24	54	32.82	31.85	11.45	30.36	-	-	A	H
	*	5795	113.47	-	-	99.75	32.31	11.85	30.44	100	181	P	H
	*	5795	106.25	-	-	92.53	32.31	11.85	30.44	100	181	A	H
		5852.6	76.51	-39.76	116.27	62.59	32.47	11.92	30.47	100	181	P	H
		5859	71.17	-38.51	109.68	57.25	32.47	11.93	30.48	100	181	P	H
		5878.2	65.67	-37.15	102.82	51.74	32.47	11.95	30.49	100	181	P	H
		5935	54.96	-13.24	68.2	40.88	32.57	12.02	30.51	100	181	P	H
		5641.6	51.31	-16.89	68.2	38.16	31.91	11.64	30.4	398	244	P	V
		5694.4	55.13	-45.94	101.07	41.87	31.97	11.71	30.42	398	244	P	V
		5719.2	59.21	-51.37	110.58	45.84	32.04	11.75	30.42	398	244	P	V
		5723.2	59.48	-58.62	118.1	46.1	32.05	11.75	30.42	398	244	P	V
		4780	54.06	-19.94	74	42.24	31.46	10.78	30.42	-	-	P	V
		4780	44.6	-9.4	54	32.78	31.46	10.78	30.42	-	-	A	V
		5434	53.1	-20.9	74	40.25	31.77	11.44	30.36	-	-	P	V
		5434	45.64	-8.36	54	32.79	31.77	11.44	30.36	-	-	A	V
	*	5795	104.66	-	-	90.94	32.31	11.85	30.44	398	244	P	V
	*	5795	97.65	-	-	83.93	32.31	11.85	30.44	398	244	A	V
		5852.4	64.75	-51.98	116.73	50.82	32.48	11.92	30.47	398	244	P	V
		5857.2	60.26	-49.92	110.18	46.32	32.48	11.93	30.47	398	244	P	V
		5875.8	55.86	-48.75	104.61	41.9	32.5	11.95	30.49	398	244	P	V
		5929	53.68	-14.52	68.2	39.61	32.57	12.01	30.51	398	244	P	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.												

**Band 4 5725~5850MHz****WIFI 802.11n HT40 (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)
802.11n HT40 CH 151 5755MHz		11389	48.9	-25.1	74	59.2	39.98	17.82	68.1	-	-	P	H
		11389	39.94	-14.06	54	50.24	39.98	17.82	68.1	-	-	A	H
		11510	47.31	-26.69	74	56.91	40.15	17.95	67.7	-	-	P	H
		14490	50.39	-23.61	74	56.09	41.94	20.34	67.98	-	-	P	H
		14490	42.5	-11.5	54	48.2	41.94	20.34	67.98	-	-	A	H
		17265	48.14	-20.06	68.2	54.4	40.91	21.59	68.76	-	-	P	H
		17989	57.54	-16.46	74	56.93	48.53	21.93	69.85	-	-	P	H
		17989	49.73	-4.27	54	49.12	48.53	21.93	69.85	-	-	A	H
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													H
		11202	48.17	-25.83	74	59.13	39.67	17.64	68.27	-	-	P	V
		11202	39.54	-14.46	54	50.5	39.67	17.64	68.27	-	-	A	V
		11510	47.58	-26.42	74	57.25	40.08	17.95	67.7	-	-	P	V
		14490	49.51	-24.49	74	55.21	41.94	20.34	67.98	-	-	P	V
		14490	42.61	-11.39	54	48.31	41.94	20.34	67.98	-	-	A	V
		17265	50.61	-17.59	68.2	56.66	41.12	21.59	68.76	-	-	P	V
		17978	57.83	-16.17	74	57.34	48.54	21.93	69.98	-	-	P	V
		17978	49.11	-4.89	54	48.62	48.54	21.93	69.98	-	-	A	V
													V
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													V

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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)
802.11n HT40 CH 159 5795MHz		11345	49.12	-24.88	74	59.69	39.88	17.78	68.23	-	-	P	H
		11345	39.64	-14.36	54	50.21	39.88	17.78	68.23	-	-	A	H
		11590	47.13	-26.87	74	56.68	40.01	18.03	67.59	-	-	P	H
		14490	49.73	-24.27	74	55.43	41.94	20.34	67.98	-	-	P	H
		14490	42.62	-11.38	54	48.32	41.94	20.34	67.98	-	-	A	H
		17385	50.35	-17.85	68.2	56.19	41.82	21.65	69.31	-	-	P	H
		17989	57.55	-16.45	74	56.94	48.53	21.93	69.85	-	-	P	H
		17989	49.41	-4.59	54	48.8	48.53	21.93	69.85	-	-	A	H
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													H
													H
													H
		11279	49.13	-24.87	74	60.07	39.67	17.71	68.32	-	-	P	V
		11279	49.13	-4.87	54	60.07	39.67	17.71	68.32	-	-	A	V
		11590	47.24	-26.76	74	56.82	39.98	18.03	67.59	-	-	P	V
		14490	49.54	-24.46	74	55.24	41.94	20.34	67.98	-	-	P	V
		14490	42.53	-11.47	54	48.23	41.94	20.34	67.98	-	-	A	V
		17385	52.7	-15.5	68.2	58.34	42.02	21.65	69.31	-	-	P	V
		17989	57.81	-16.19	74	56.94	48.79	21.93	69.85	-	-	P	V
		17989	49.81	-4.19	54	48.94	48.79	21.93	69.85	-	-	A	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.												
	4. The emission level close to 18GHz is checked that the average emission level is noise floor only.												

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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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 VHT80 CH 155 5775MHz		5649.8	62.33	-5.87	68.2	49.12	31.96	11.65	30.4	106	181	P	H
		5700	70.45	-34.75	105.2	57.17	31.98	11.72	30.42	106	181	P	H
		5719.4	74.04	-36.59	110.63	60.66	32.05	11.75	30.42	106	181	P	H
		5720.6	74.14	-38.03	112.17	60.76	32.05	11.75	30.42	106	181	P	H
		4918	53	-21	74	41.08	31.44	10.88	30.4	-	-	P	H
		4918	45.03	-8.97	54	33.11	31.44	10.88	30.4	-	-	A	H
		5440	55.68	-18.32	74	42.78	31.82	11.44	30.36	-	-	P	H
		5440	46.43	-7.57	54	33.53	31.82	11.44	30.36	-	-	A	H
	*	5775	107.92	-	-	94.29	32.24	11.82	30.43	106	181	P	H
	*	5775	100.18	-	-	86.55	32.24	11.82	30.43	106	181	A	H
		5851.6	69.19	-49.36	118.55	55.27	32.47	11.92	30.47	106	181	P	H
		5860.8	68.03	-41.14	109.17	54.11	32.47	11.93	30.48	106	181	P	H
		5875	63.32	-41.88	105.2	49.39	32.47	11.95	30.49	106	181	P	H
		5925.6	57.32	-10.88	68.2	43.29	32.54	12	30.51	106	181	P	H
		5648.2	55.13	-13.07	68.2	41.96	31.92	11.65	30.4	381	242	P	V
		5699.6	64.23	-40.68	104.91	50.95	31.98	11.72	30.42	381	242	P	V
		5718.8	62.88	-47.58	110.46	49.51	32.04	11.75	30.42	381	242	P	V
		5724	63.75	-56.17	119.92	50.37	32.05	11.75	30.42	381	242	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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 VHT80 CH 155 5775MHz		4978	53.93	-20.07	74	41.8	31.61	10.91	30.39	-	-	P	V
		4978	45.65	-8.35	54	33.52	31.61	10.91	30.39	-	-	A	V
		5416	53.41	-20.59	74	40.63	31.71	11.42	30.35	-	-	P	V
		5416	46.27	-7.73	54	33.49	31.71	11.42	30.35	-	-	A	V
	*	5775	97.88	-	-	84.26	32.23	11.82	30.43	381	242	P	V
	*	5775	90.9	-	-	77.28	32.23	11.82	30.43	381	242	A	V
		5853.4	60.78	-53.67	114.45	46.85	32.48	11.92	30.47	381	242	P	V
		5857.4	57.95	-52.18	110.13	44.01	32.48	11.93	30.47	381	242	P	V
		5880.6	57.03	-44.01	101.04	43.07	32.5	11.95	30.49	381	242	P	V
		5929.8	53.86	-14.34	68.2	39.79	32.57	12.01	30.51	381	242	P	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.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Margin Limit (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 VHT80 CH 155 5775MHz		11147	48.55	-25.45	74	59.39	39.79	17.57	68.2	-	-	P	H
		11147	39.87	-14.13	54	50.71	39.79	17.57	68.2	-	-	A	H
		11550	47.51	-26.49	74	57.11	40.06	17.99	67.65	-	-	P	H
		14491	51.39	-22.61	74	57.09	41.94	20.34	67.98	-	-	P	H
		14491	43.4	-10.6	54	49.1	41.94	20.34	67.98	-	-	A	H
		17325	51.41	-16.79	68.2	57.43	41.36	21.62	69	-	-	P	H
		17989	59.25	-14.75	74	58.64	48.53	21.93	69.85	-	-	P	H
		17989	51.18	-2.82	54	50.57	48.53	21.93	69.85	-	-	A	H
													H
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													H
													H
		11411	48.61	-25.39	74	58.84	39.95	17.84	68.02	-	-	P	V
		11411	40.27	-13.73	54	50.5	39.95	17.84	68.02	-	-	A	V
		11550	47.71	-26.29	74	57.33	40.04	17.99	67.65	-	-	P	V
		14490	51.12	-22.88	74	56.82	41.94	20.34	67.98	-	-	P	V
		14490	43.29	-10.71	54	48.99	41.94	20.34	67.98	-	-	A	V
		17325	51.59	-16.61	68.2	57.43	41.54	21.62	69	-	-	P	V
		17989	58.87	-15.13	74	58	48.79	21.93	69.85	-	-	P	V
		17989	51.41	-2.59	54	50.54	48.79	21.93	69.85	-	-	A	V
													V
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													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. 4. The emission level close to 18GHz is checked that the average emission level is noise floor only.												

Emission above 18GHz

5GHz WIFI 802.11ac VHT80 (SHF @ 1m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT80 SHF		36486	46.73	-27.27	74	37.94	42.35	21.68	55.24	-	-	P	H
													H
													H
													H
													H
													H
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Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF @ 3m)

[illegible]

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.				Limit	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 Limit(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 Limit(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 Limit(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

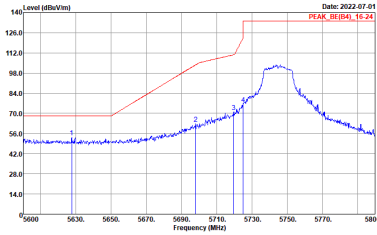
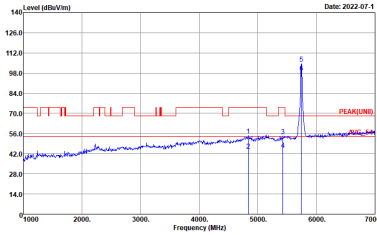
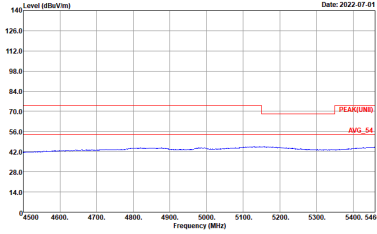
Test Engineer :	Fu Chen	Temperature :	20~25°C
		Relative Humidity :	42~50%

Note symbol

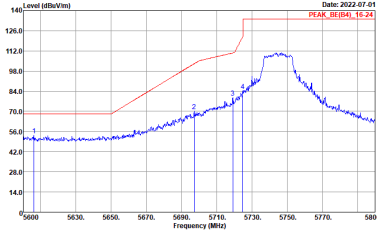
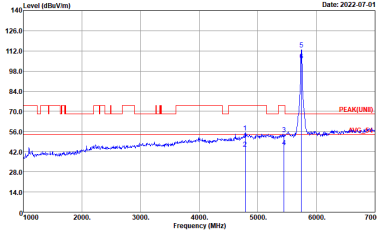
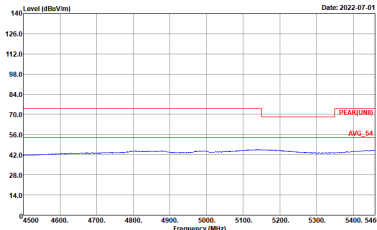
-L	Low channel location
-R	High channel location



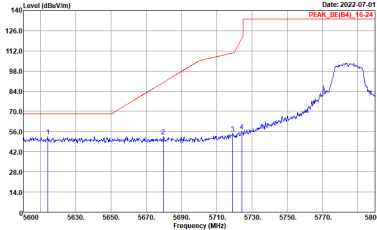
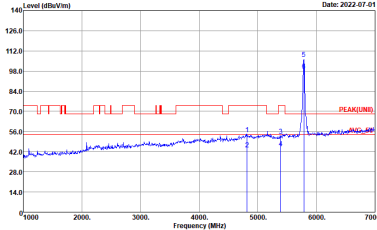
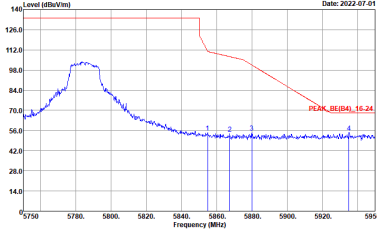
Band 4 - 5725~5850MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_REF [64]_16-24 3m HORN-HF_01895_2021 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK [UN] 34 3m HORN-HF_01895_2021 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg	Left blank	 Site : 03CH02-CA Condition : PEAK [UN] 34 3m HORN-HF_01895_2021 HORIZONTAL

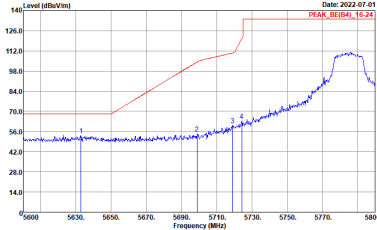
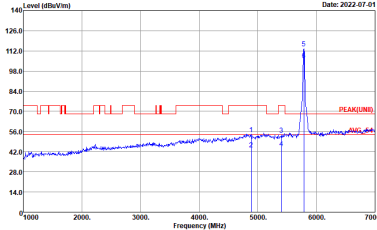
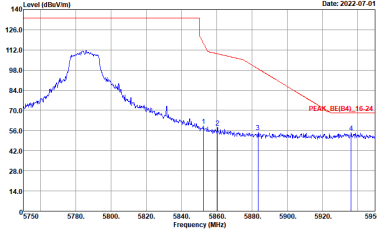


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg	Left blank	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL

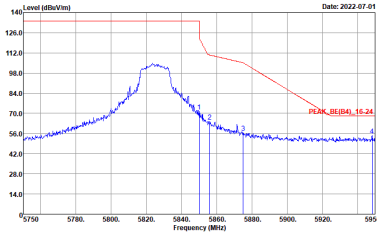
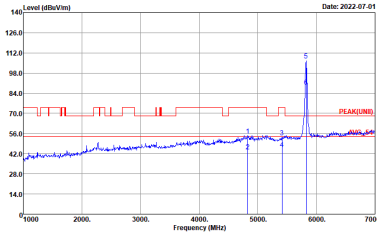


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



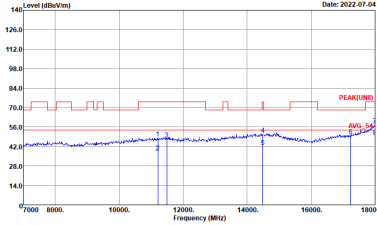
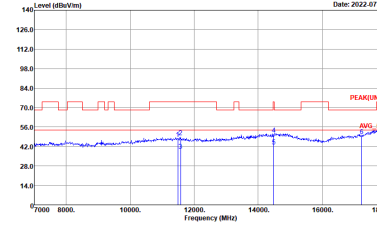
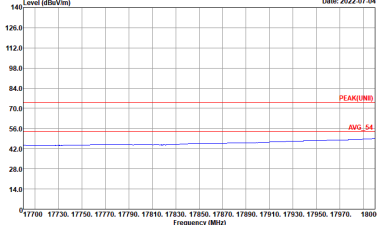
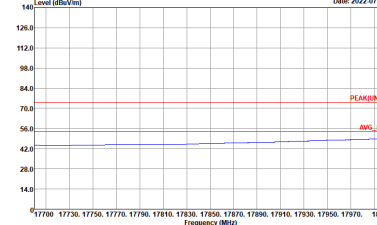
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_B4_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(FUN) 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto



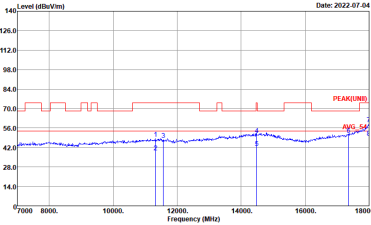
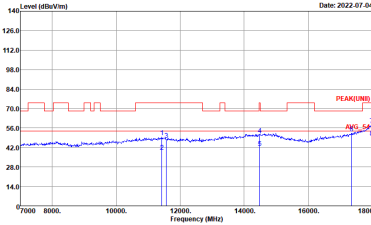
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Vertical	Fundamental
Peak	Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH02-CA Condition : PEAK(FUND) 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto



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	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL
	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL
Avg		



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL



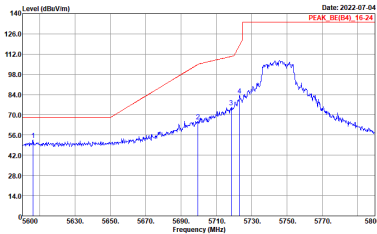
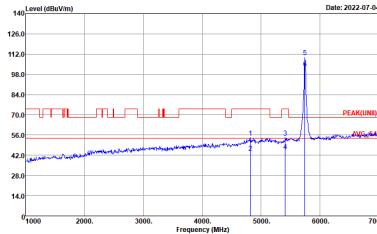
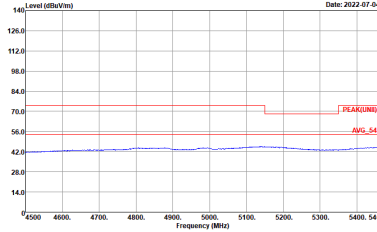
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2022.07.04 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 HORIZONTAL	Level (dBuV/m) Date: 2022.07.04 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL



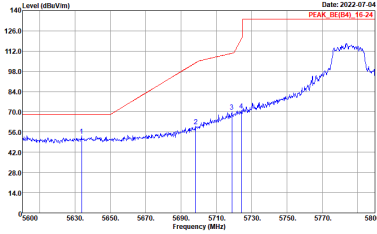
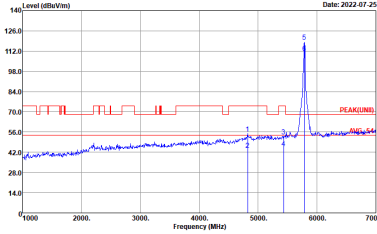
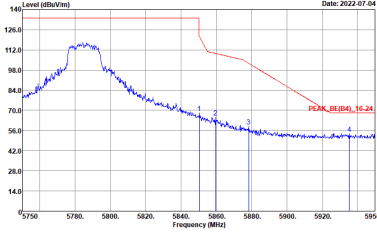
Band 4 - 5725~5850MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak	Site : 03CH02-CA Condition : PEAK_REF [64], 16-24 3m HORN-HF_01895_2021 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH02-CA Condition : PEAK [64], 16-24 3m HORN-HF_01895_2021 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg	Left blank	Site : 03CH02-CA Condition : PEAK [64], 16-24 3m HORN-HF_01895_2021 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

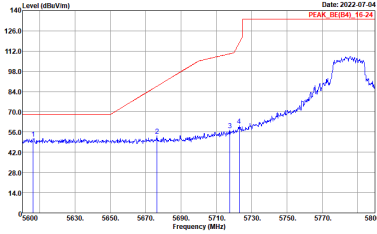
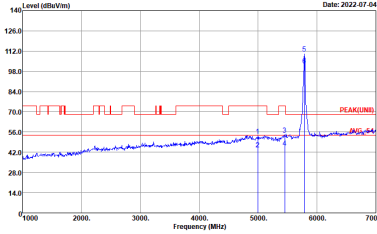
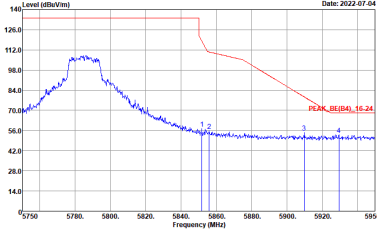


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_85(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg	Left blank	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL

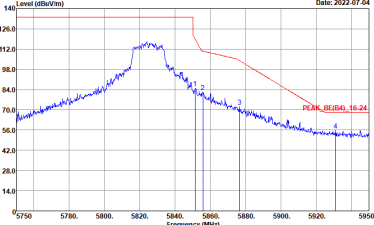
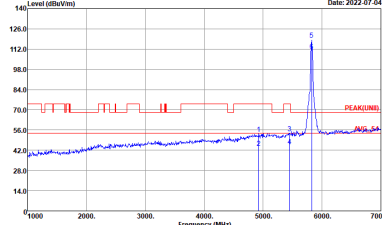


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH402-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH402-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Peak	 Site : 03CH402-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH402-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH402-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Peak	 Site : 03CH402-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



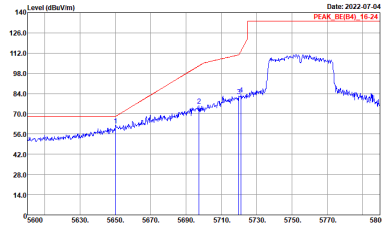
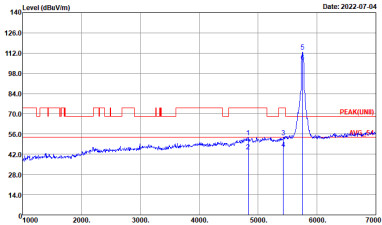
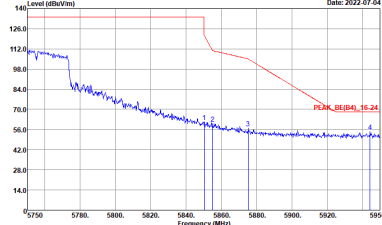
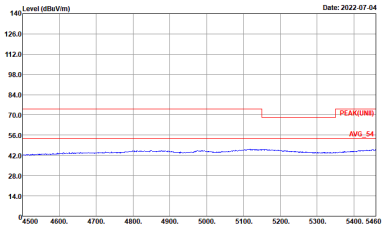
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_85(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK_85(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto



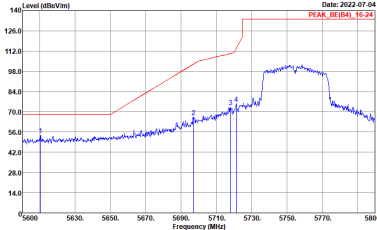
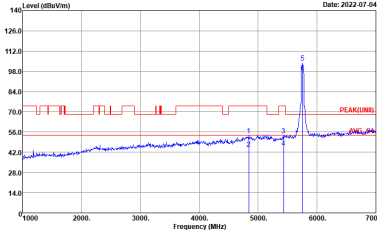
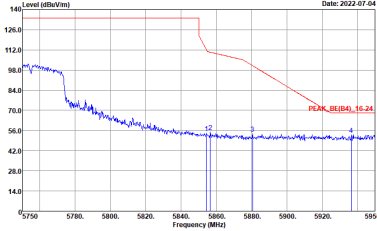
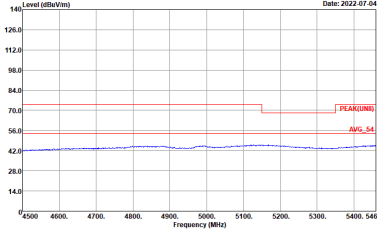
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Vertical	Fundamental
Peak	Site : 03CH02-CA Condition : PEAK_85(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto



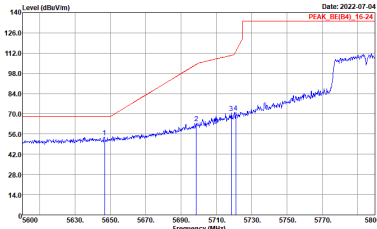
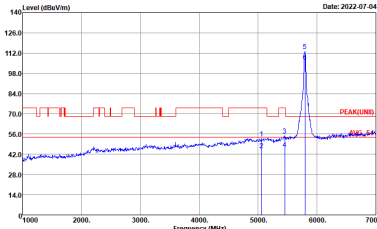
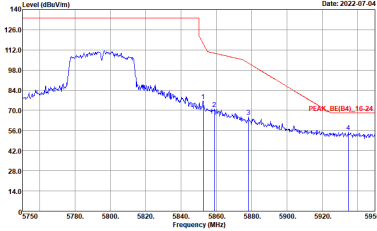
Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNB) 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNB) 3m HORN-HF_01895_2021 HORIZONTAL



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL



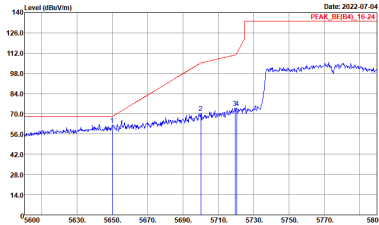
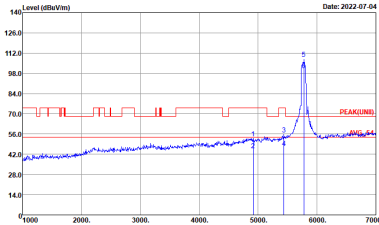
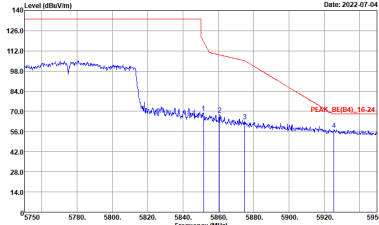
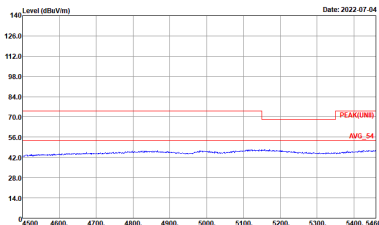
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH402-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH402-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Peak	 Site : 03CH402-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

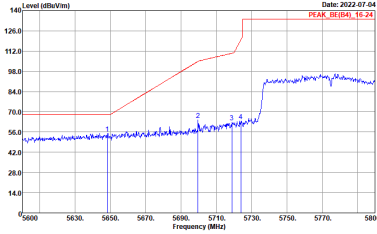
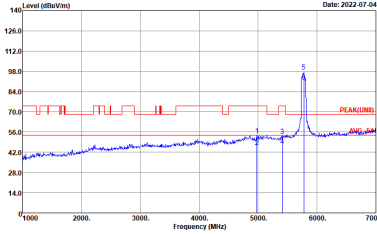
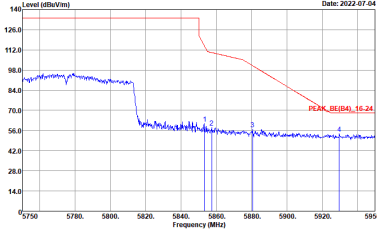
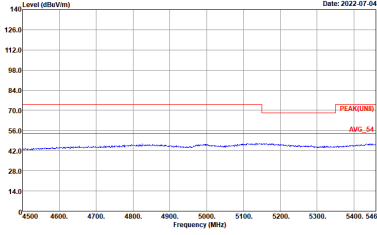


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1+2	Vertical	Fundamental
Peak	Site : 03CH402-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH402-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	Site : 03CH402-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



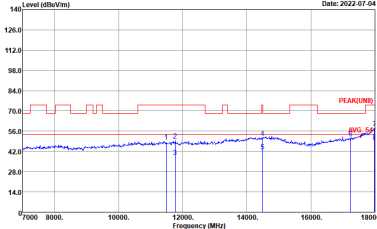
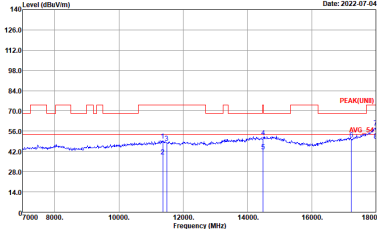
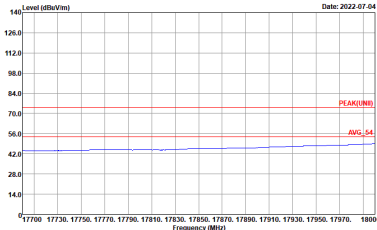
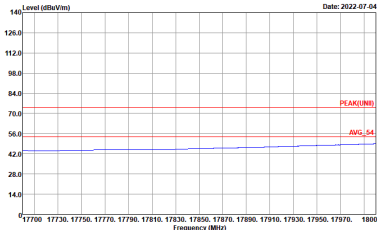
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNB) 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNB) 3m HORN-HF_01895_2021 HORIZONTAL

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
	 Site : 03CH02-CA Condition : PEAK_BE(B4)_16-24 3m HORN-HF_01895_2021 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL



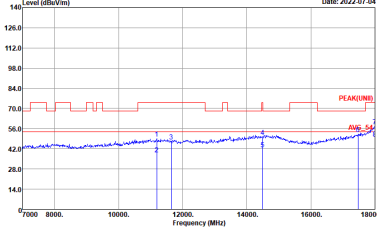
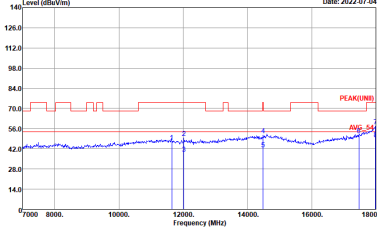
Band 4 - 5725~5850MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 VERTICAL
Avg	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 VERTICAL



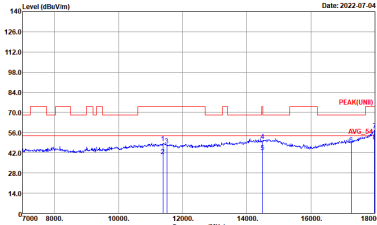
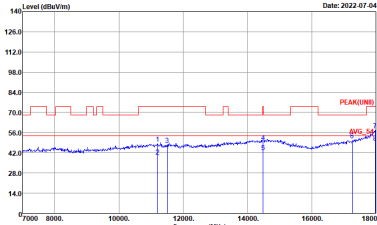
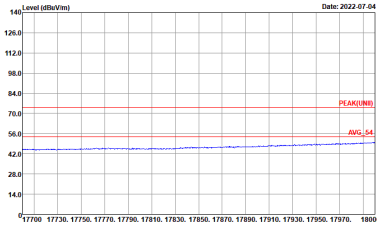
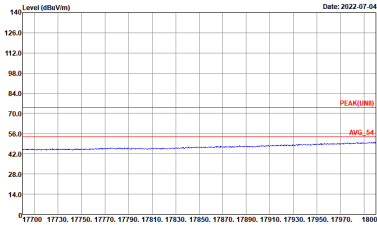
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2022-07-04 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 HORIZONTAL	Level (dBuV/m) Date: 2022-07-04 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBm/Vm) Date: 2022-07-04  Site : 03CH02-CA Condition : PEAK(UNB) 3m HORN-HF_01895_2021 HORIZONTAL	Level (dBm/Vm) Date: 2022-07-04  Site : 03CH02-CA Condition : PEAK(UNB) 3m HORN-HF_01895_2021 VERTICAL



Band 4 5725~5850MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

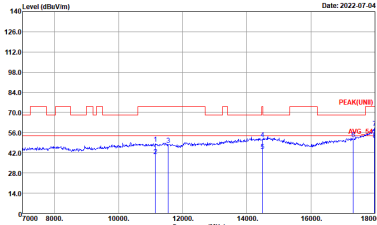
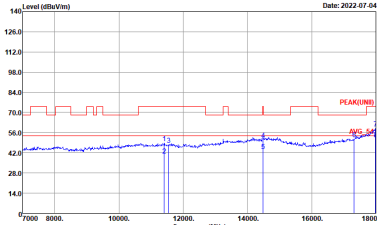
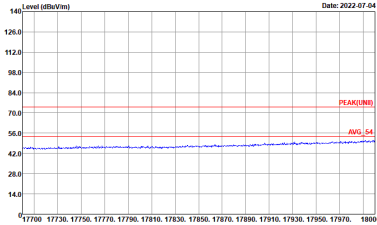
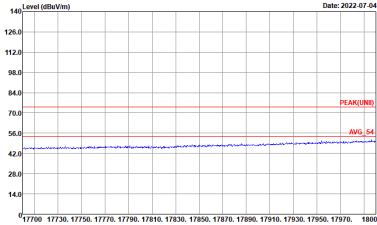
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Horizontal	Vertical
Peak	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 VERTICAL
Avg.	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 VERTICAL



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2022-07-04 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 HORIZONTAL	Level (dBuV/m) Date: 2022-07-04 Site : 03CH02-CA Condition : PEAK(UNIT) 3m HORN-HF_01895_2021 VERTICAL



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 VERTICAL
Avg	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 HORIZONTAL	 Site : 03CH02-CA Condition : PEAK(UNII) 3m HORN-HF_01895_2021 VERTICAL

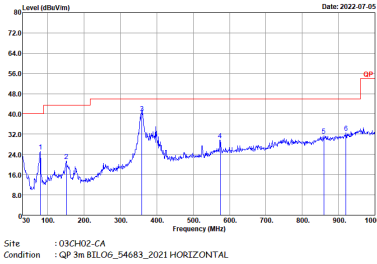
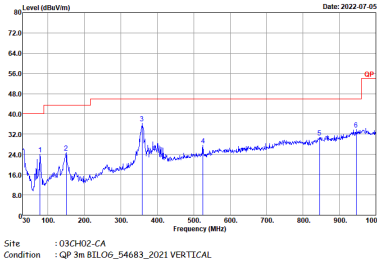


Emission above 18GHz
5GHz WIFI 802.11ac VHT80 (SHF @ 1m)

WIFI	5GHz WIFI	
ANT	802.11ac VHT80 SHF	
1+2	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2022-07-05 Site : 03CH02-CA Condition : PEAK(UM) 1m SHF_HORN_842_210720 HORIZONTAL	Level (dBuV/m) Date: 2022-07-05 Site : 03CH02-CA Condition : PEAK(UM) 1m SHF_HORN_842_210720 VERTICAL



Emission below 1GHz
5GHz WIFI 802.11ac VHT80 (LF @ 3m)

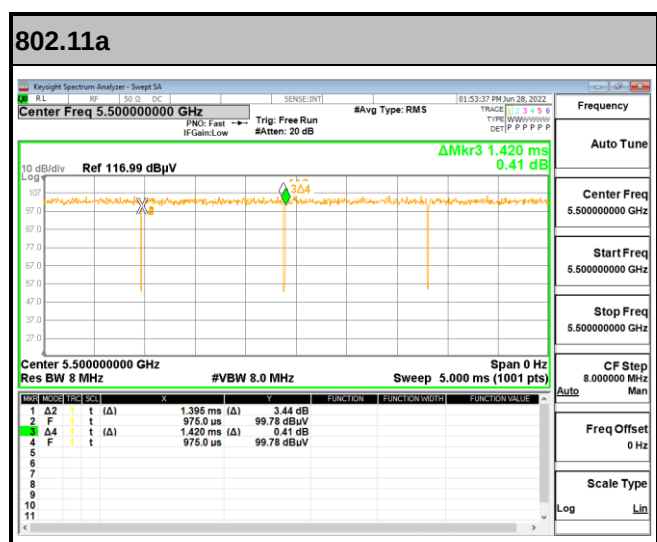
WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1+2	Horizontal	Vertical
QP / Peak	 Site : 03CH02-CA Condition : QP 3m 81LO6_54683_2021 HORIZONTAL	 Site : 03CH02-CA Condition : QP 3m 81LO6_54683_2021 VERTICAL



Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1	802.11a	98.24	-	-	10Hz
1+2	5GHz 802.11n HT20	98.50	-	-	10Hz
1+2	5GHz 802.11n HT40	96.72	648	1.54	3kHz
1+2	5GHz 802.11ac VHT80	93.62	323	3.10	10kHz

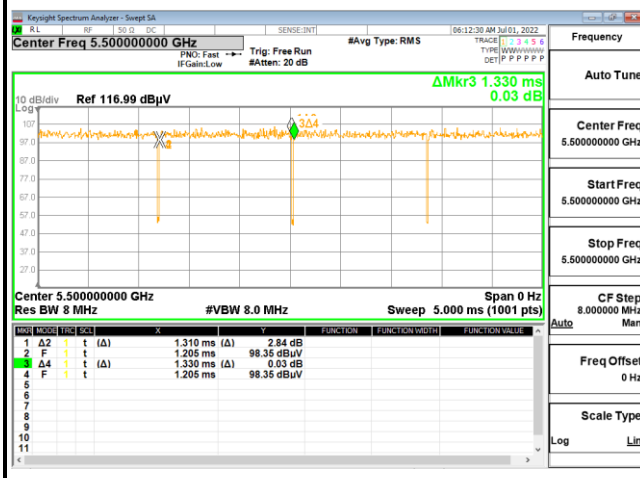
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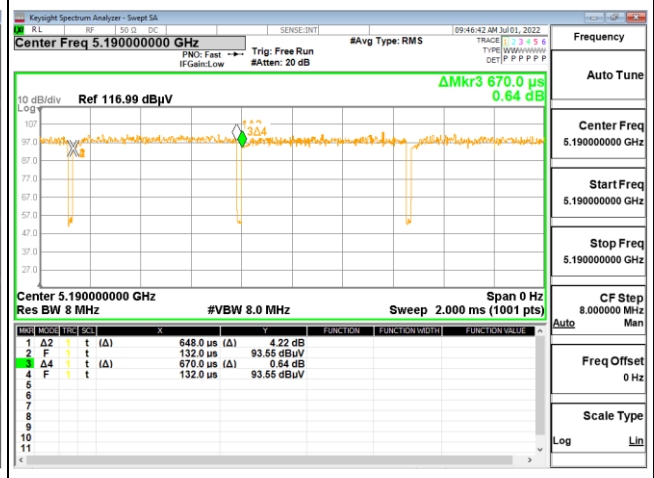


MIMO <Ant. 1+2>

5GHz 802.11n HT20



5GHz 802.11n HT40



5GHz 802.11ac VHT80

