FCC RADIO TEST REPORT

FCC ID	:	**PPD-QCNFA435**
Equipment	:	**Single Stream 802.11a/b/g/n/ac + BT 4.1 M.2 Type Card**
Brand Name	:	**Qualcomm Atheros**
Model name	:	**QCNFA435**
Applicant	:	**Qualcomm Atheros, Inc 1700 Technology Drive, San Jose, CA 95110**
Manufacturer	:	**Qualcomm Atheros, Inc 1700 Technology Drive, San Jose, CA 95110**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Jun. 27, 2018 and testing was started from Jul. 24, 2018 and completed on Aug. 04, 2018. We, SPORTON INTERNATIONAL 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Jones Tsai

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR862732E	01	Initial issue of report	Aug. 30, 2018

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	Under limit 4.72 dB at 69.960 MHz
3.3	15.203 & 15.407 (a)	Antenna Requirement	Pass	-

Reviewed by: Joseph Lin

Report Producer: Nancy Yang

1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Sample 1	EUT with Host 1
Sample 2	EUT with Host 2

The product was installed into Portable Computer (Brand Name: DELL, Model Name: P77F) during test, and the host information was recorded in the following table.

Host Information	
Host 1	Host with WNC Antenna
Host 2	Host with HB Antenna

Antenna Information								
Mode	**Manufacturer**	**Antenna type**	**Antenna**	**2.4G**	**5G B1**	**5G B2**	**5G B3**	**5G B4**
Notebook	HB	PIFA	1(main)	0.72	-2.24	-3.79	-0.4	0.84
			2(aux)	-2.07	-4.02	-2.29	0.98	0.98
	WNC	PIFA	1(main)	-3.86	-1.92	-0.86	-3.04	-2.23
			2(aux)	-3.88	-3.41	-3.03	-0.97	-0.97

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

1.3 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	TH05-HY	03CH07-HY

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

1.4 Applicable Standards

According to the specifications of 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.
- ANSI C63.10-2013

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

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 in "*" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "#" were 802.11ac VHT80.

2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Remark:

1. For Radiated Test Cases, the tests were performed with Adapter 1.
2. The test configuration was designated by manufacturer.

< Sample 1>

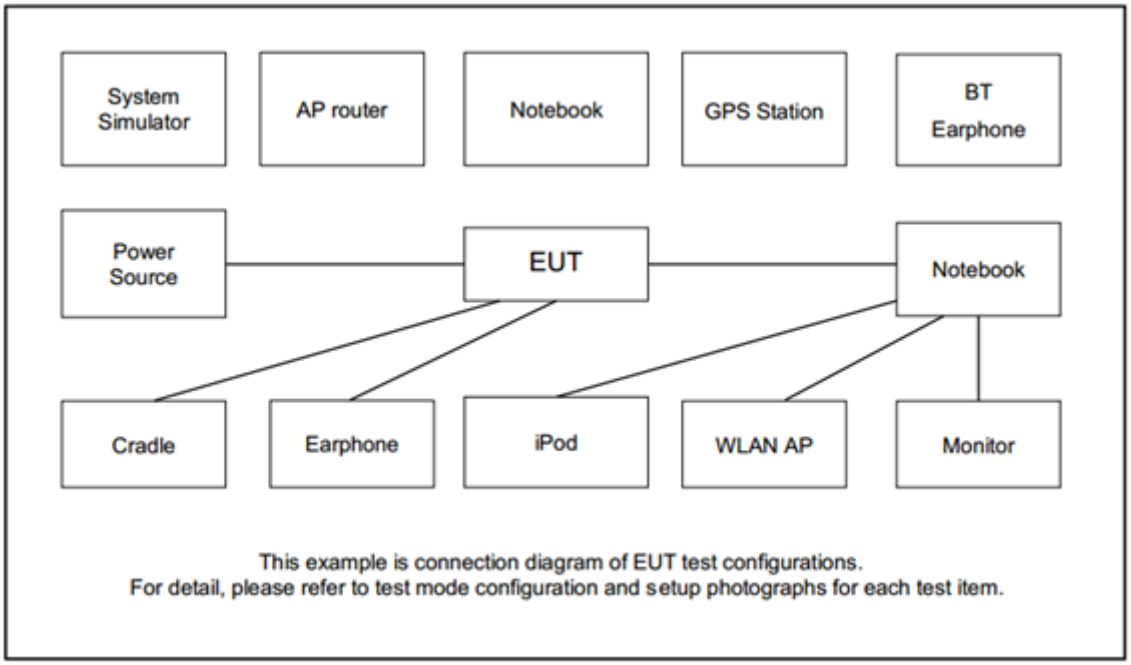
Ch. #		Band IV：5725-5850 MHz		
		802.11a	802.11n HT20	802.11n HT40
L	Low	149	149	151
M	Middle	157	157	-
H	High	165	165	159

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

< Sample 2>

Ch. #		Band IV：5725-5850 MHz
		802.11a
L	Low	-
M	Middle	157
H	High	-

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	iPod Earphone	Apple	N/A	Verification	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT” was installed in Portable Computer 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

See list of measuring equipment of this test report.

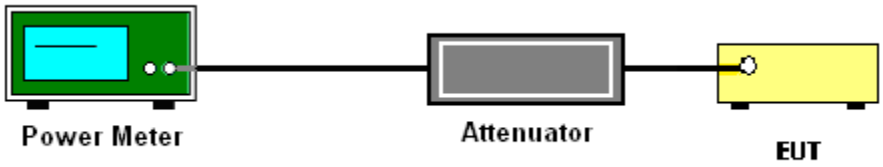
3.1.3 Test Procedures

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

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, 10 log(1/x), where x is the duty cycle.

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 fallen in restricted bands shall comply with the general field strength limits as below table,

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

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

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

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

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

(i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits 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.[3]

(ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.[4]

Note 3: An out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz peak emission limit.

Note 4: Only devices with antenna gains of 10 dBi or less may be approved using the emission limits specified in Section 15.247(d) till March 2, 2018; all other devices operating in this band must use the mask specified in Section 15.407(b)(4)(i).

3.2.2 Measuring Instruments

See list of measuring equipment of 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 1000MHz

   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

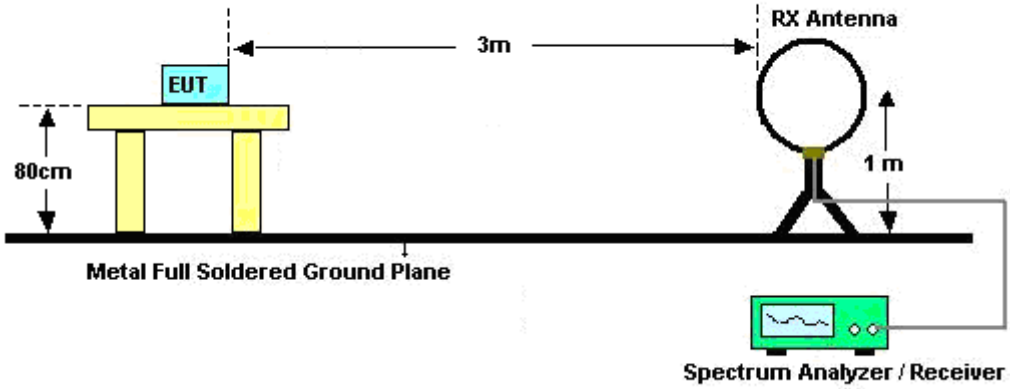
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

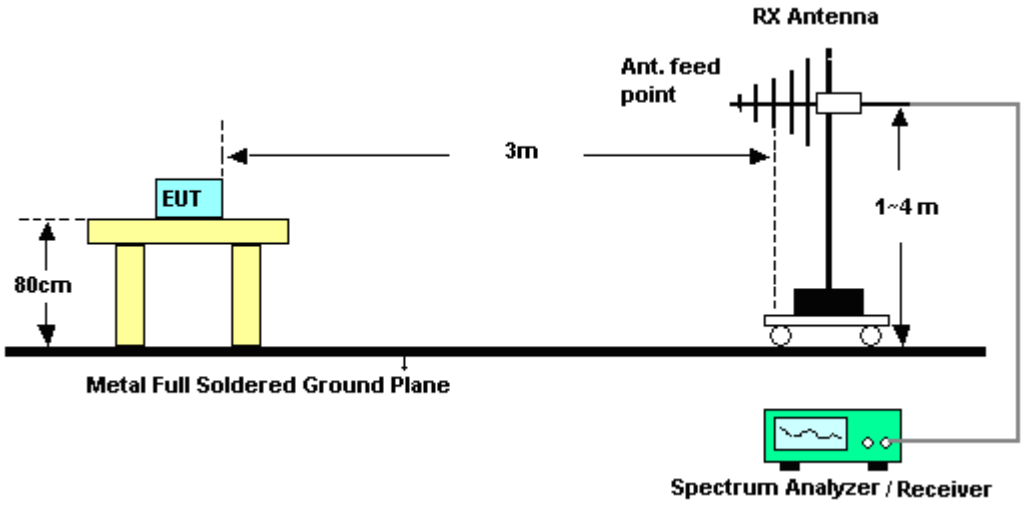
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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 was 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. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.2.4 Test Setup

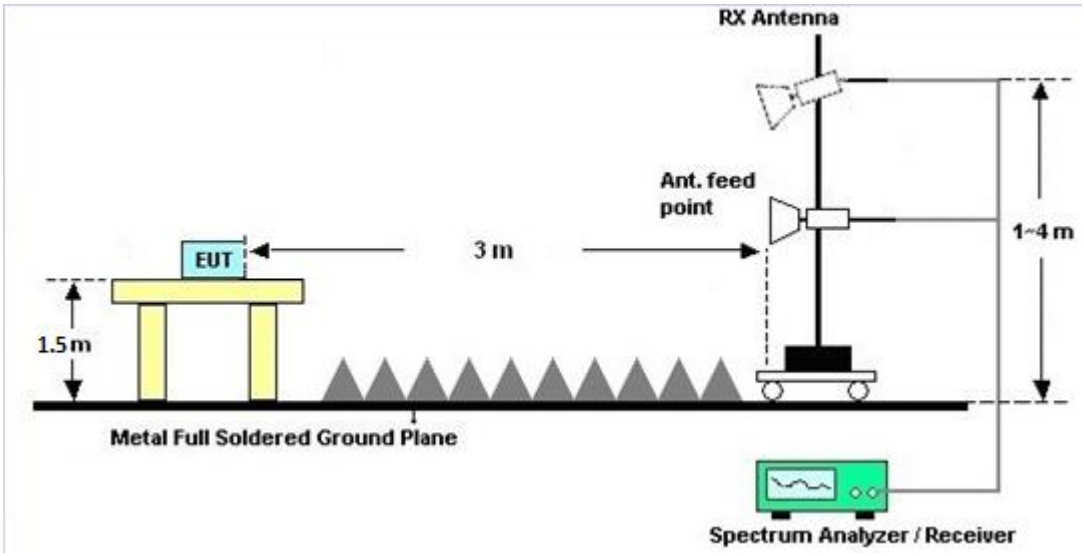
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.2.6 Test Result of Radiated Band Edges

Please refer to Appendix B and C.

3.2.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix B and C.

3.3 Antenna Requirements

3.3.1 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.

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.3.3 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	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	0932001	N/A	Sep. 26, 2017	Jul. 25, 2018 ~ Jul. 26, 2018	Sep. 25, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 26, 2017	Jul. 25, 2018 ~ Jul. 26, 2018	Sep. 25, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz ~ 30GHz	Nov. 13, 2017	Jul. 25, 2018 ~ Jul. 26, 2018	Nov. 12, 2018	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Mar. 01, 2018	Jul. 25, 2018 ~ Jul. 26, 2018	Feb. 28, 2019	Conducted (TH05-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35419&03	30MHz to 1GHz	Dec. 18, 2017	Jul. 24, 2018 ~ Aug. 04, 2018	Dec. 17, 2018	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 23, 2017	Jul. 24, 2018 ~ Aug. 04, 2018	Aug. 22, 2018	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 10, 2017	Jul. 24, 2018 ~ Aug. 04, 2018	Nov. 09, 2018	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590075	1GHz ~ 18GHz	Apr. 25, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	Apr. 24, 2019	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz-1GHz	May 21, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	May 20, 2019	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~ 26.5GHz	Oct. 30, 2017	Jul. 24, 2018 ~ Aug. 04, 2018	Oct. 29, 2018	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Apr. 17, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	Apr. 16, 2019	Radiation (03CH07-HY)
Filter	Wainwright	WLKS1200-8SS	SN3	1.2G Low Pass	Nov. 21, 2017	Jul. 24, 2018 ~ Aug. 04, 2018	Nov. 20, 2018	Radiation (03CH07-HY)
Filter	Microwave	H3G018G1	SN477220	3.0G High Pass	Nov. 21, 2017	Jul. 24, 2018 ~ Aug. 04, 2018	Nov. 20, 2018	Radiation (03CH07-HY)
Filter	Microwave	WHKX7.0/26.5G-6SS	SN4	7G High Pass	Nov. 21, 2017	Jul. 24, 2018 ~ Aug. 04, 2018	Nov. 20, 2018	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4,MY28655/4	9KHz~30MHz	Jan. 02, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	Jan. 01, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 27, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	Feb. 26, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 27, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	Feb. 26, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 27, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	Feb. 26, 2019	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Jul. 24, 2018 ~ Aug. 04, 2018	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Jul. 24, 2018 ~ Aug. 04, 2018	N/A	Radiation (03CH07-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 16, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	Jul. 15, 2019	Radiation (03CH07-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz- 40GHz	Nov. 10, 2017	Jul. 24, 2018 ~ Aug. 04, 2018	Nov. 09, 2018	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A (MXE)	MY53290053	20Hz to 26.5GHz	Jan. 16, 2018	Jul. 24, 2018 ~ Aug. 04, 2018	Jan. 15, 2019	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	80504004656H	N/A	N/A	Jul. 24, 2018 ~ Aug. 04, 2018	N/A	Radiation (03CH07-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.7**

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.2**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Luffy Lin	Temperature:	21~25	°C
Test Date:	2018/07/25 ~2018/07/26	Relative Humidity:	51~54	%

TEST RESULTS DATA
Average Power Table

Band IV													
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)		FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	149	5745	0.29	-	14.74	-	30.00	-	0.98	-	Pass
11a	6Mbps	1	157	5785	0.29	-	14.86	-	30.00	-	0.98	-	Pass
11a	6Mbps	1	165	5825	0.29	-	14.95	-	30.00	-	0.98	-	Pass
HT20	MCS0	1	149	5745	0.29	-	14.84	-	30.00	-	0.98	-	Pass
HT20	MCS0	1	157	5785	0.29	-	14.67	-	30.00	-	0.98	-	Pass
HT20	MCS0	1	165	5825	0.29	-	14.72	-	30.00	-	0.98	-	Pass
HT40	MCS0	1	151	5755	0.48	-	12.83	-	30.00	-	0.98	-	Pass
HT40	MCS0	1	159	5795	0.48	-	13.98	-	30.00	-	0.98	-	Pass
VHT20	MCS0	1	149	5745	0.26	-	14.87	-	30.00	-	0.98	-	Pass
VHT20	MCS0	1	157	5785	0.26	-	14.81	-	30.00	-	0.98	-	Pass
VHT20	MCS0	1	165	5825	0.26	-	14.98	-	30.00	-	0.98	-	Pass
VHT40	MCS0	1	151	5755	0.47	-	12.85	-	30.00	-	0.98	-	Pass
VHT40	MCS0	1	159	5795	0.47	-	13.97	-	30.00	-	0.98	-	Pass
VHT80	MCS0	1	155	5775	0.61	-	12.38	-	30.00	-	0.98	-	Pass

Appendix B. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh, and Ken Wu	**Temperature :**	22~24°C
		Relative Humidity :	52~54%

<For Sample 1>

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over 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		5645.2	52.66	-15.54	68.2	41.33	35.09	11.43	35.19	367	176	P	H
		5694.6	57.06	-44.16	101.22	45.63	35.17	11.46	35.2	367	176	P	H
		5708.6	69.9	-37.71	107.61	58.41	35.19	11.5	35.2	367	176	P	H
		5724.2	72.64	-47.74	120.38	61.13	35.21	11.5	35.2	367	176	P	H
	*	5745	112.96	-	-	101.4	35.24	11.53	35.21	367	176	P	H
	*	5745	104.76	-	-	93.2	35.24	11.53	35.21	367	176	A	H
													H
													H
		5650	52.09	-16.11	68.2	40.73	35.12	11.43	35.19	281	156	P	V
		5657.8	52.98	-21.01	73.99	41.62	35.12	11.43	35.19	281	156	P	V
		5715	62.98	-46.42	109.4	51.49	35.19	11.5	35.2	281	156	P	V
		5725	66.93	-55.27	122.2	55.42	35.21	11.5	35.2	281	156	P	V
	*	5745	106.94	-	-	95.38	35.24	11.53	35.21	281	156	P	V
	*	5745	98.6	-	-	87.04	35.24	11.53	35.21	281	156	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over 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)
	*	5825	110.94	-	-	99.2	35.36	11.6	35.22	375	178	P	H
	*	5825	102.54	-	-	90.8	35.36	11.6	35.22	375	178	A	H
		5851.6	70.03	-48.52	118.55	58.28	35.38	11.6	35.23	375	178	P	H
		5855	63.52	-47.28	110.8	51.74	35.41	11.6	35.23	375	178	P	H
		5875.2	52.66	-52.39	105.05	40.82	35.43	11.65	35.24	375	178	P	H
		5928	50.16	-18.04	68.2	38.21	35.5	11.69	35.24	375	178	P	H
													H
802.11a													H
CH 165	*	5825	104.6	-	-	92.86	35.36	11.6	35.22	272	171	P	V
5825MHz	*	5825	96.54	-	-	84.8	35.36	11.6	35.22	272	171	A	V
		5850.8	66.67	-53.71	120.38	54.92	35.38	11.6	35.23	272	171	P	V
		5855.6	57.57	-53.06	110.63	45.79	35.41	11.6	35.23	272	171	P	V
		5886.4	50.13	-46.61	96.74	38.29	35.43	11.65	35.24	272	171	P	V
		5925.6	49.92	-18.28	68.2	37.97	35.5	11.69	35.24	272	171	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)	Over 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		11570	52.11	-21.89	74	52.31	38.46	18.54	57.2	102	61	P	H
		11570	42.39	-11.61	54	42.59	38.46	18.54	57.2	102	61	A	H
		17355	51.87	-16.33	68.2	44.08	41.61	21.91	55.73	380	0	P	H
													H
		11570	58.04	-15.96	74	58.24	38.46	18.54	57.2	113	227	P	V
		11570	49.15	-4.85	54	49.35	38.46	18.54	57.2	113	227	A	V
		17355	51.95	-16.25	68.2	44.16	41.61	21.91	55.73	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over 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)
		5647.8	52.65	-15.55	68.2	41.32	35.09	11.43	35.19	367	176	P	H
		5689.2	57.7	-39.54	97.24	46.27	35.17	11.46	35.2	367	176	P	H
		5707.2	68.48	-38.74	107.22	56.99	35.19	11.5	35.2	367	176	P	H
		5720.6	74.48	-37.69	112.17	62.97	35.21	11.5	35.2	367	176	P	H
	*	5745	112.66	-	-	101.1	35.24	11.53	35.21	367	176	P	H
	*	5745	104.43	-	-	92.87	35.24	11.53	35.21	367	176	A	H
802.11n													H
HT20													H
CH 149		5648.2	52.66	-15.54	68.2	41.33	35.09	11.43	35.19	281	156	P	V
5745MHz		5688.8	54.38	-42.56	96.94	42.95	35.17	11.46	35.2	281	156	P	V
		5715.8	66.95	-42.68	109.63	55.46	35.19	11.5	35.2	281	156	P	V
		5720.6	70.01	-42.16	112.17	58.5	35.21	11.5	35.2	281	156	P	V
	*	5745	106.65	-	-	95.09	35.24	11.53	35.21	281	156	P	V
	*	5745	98.61	-	-	87.05	35.24	11.53	35.21	281	156	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over 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)
	*	5825	111.1	-	-	99.36	35.36	11.6	35.22	376	176	P	H
	*	5825	102.84	-	-	91.1	35.36	11.6	35.22	376	176	A	H
		5850.8	69.69	-50.69	120.38	57.94	35.38	11.6	35.23	376	176	P	H
		5861	64.72	-44.4	109.12	52.9	35.41	11.65	35.24	376	176	P	H
		5876	56.25	-48.21	104.46	44.41	35.43	11.65	35.24	376	176	P	H
		5925.2	50.61	-17.59	68.2	38.66	35.5	11.69	35.24	376	176	P	H
802.11n													H
HT20													H
CH 165	*	5825	104.44	-	-	92.7	35.36	11.6	35.22	272	171	P	V
5825MHz	*	5825	96.53	-	-	84.79	35.36	11.6	35.22	272	171	A	V
		5852.2	62.7	-54.48	117.18	50.95	35.38	11.6	35.23	272	171	P	V
		5855.4	57.71	-52.98	110.69	45.93	35.41	11.6	35.23	272	171	P	V
		5911.6	49.64	-28.45	78.09	37.71	35.48	11.69	35.24	272	171	P	V
		5948.6	50.19	-18.01	68.2	38.17	35.53	11.74	35.25	272	171	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 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over 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		11570	55.75	-18.25	74	55.95	38.46	18.54	57.2	338	253	P	H
		11570	44.62	-9.38	54	44.82	38.46	18.54	57.2	338	253	A	H
		17355	51.93	-16.27	68.2	44.14	41.61	21.91	55.73	100	0	P	H
													H
		11570	57.96	-16.04	74	58.16	38.46	18.54	57.2	109	227	P	V
		11570	48.45	-5.55	54	48.65	38.46	18.54	57.2	109	227	A	V
		17355	52.45	-15.75	68.2	44.66	41.61	21.91	55.73	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over 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)
		5619.8	59.48	-8.72	68.2	48.19	35.07	11.4	35.18	366	178	P	H
		5698	62.43	-41.3	103.73	51	35.17	11.46	35.2	366	178	P	H
		5719.2	72.72	-37.86	110.58	61.21	35.21	11.5	35.2	366	178	P	H
		5725	74.02	-48.18	122.2	62.51	35.21	11.5	35.2	366	178	P	H
	*	5755	110.13	-	-	98.55	35.26	11.53	35.21	366	178	P	H
	*	5755	102.57	-	-	90.99	35.26	11.53	35.21	366	178	A	H
		5853.8	52.26	-61.28	113.54	40.48	35.41	11.6	35.23	366	178	P	H
		5864.4	55.37	-52.8	108.17	43.55	35.41	11.65	35.24	366	178	P	H
		5878.2	53.06	-49.76	102.82	41.22	35.43	11.65	35.24	366	178	P	H
		5948.6	49.55	-18.65	68.2	37.53	35.53	11.74	35.25	366	178	P	H
802.11n													H
HT40													H
CH 151		5630.2	53.18	-15.02	68.2	41.87	35.07	11.43	35.19	159	136	P	V
5755MHz		5698.2	59.46	-44.41	103.87	48.03	35.17	11.46	35.2	159	136	P	V
		5719.4	68.08	-42.55	110.63	56.57	35.21	11.5	35.2	159	136	P	V
		5722.6	68.13	-48.6	116.73	56.62	35.21	11.5	35.2	159	136	P	V
	*	5755	104.16	-	-	92.58	35.26	11.53	35.21	159	136	P	V
	*	5755	96.63	-	-	85.05	35.26	11.53	35.21	159	136	A	V
		5850.8	49.38	-71	120.38	37.63	35.38	11.6	35.23	159	136	P	V
		5864	49.36	-58.92	108.28	37.54	35.41	11.65	35.24	159	136	P	V
		5887.2	49.3	-46.84	96.14	37.46	35.43	11.65	35.24	159	136	P	V
		5927	48.63	-19.57	68.2	36.68	35.5	11.69	35.24	159	136	P	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over 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)
		5642.2	58.11	-10.09	68.2	46.78	35.09	11.43	35.19	380	176	P	H
		5670.4	57.66	-25.68	83.34	46.25	35.14	11.46	35.19	380	176	P	H
		5716.6	58.79	-51.06	109.85	47.3	35.19	11.5	35.2	380	176	P	H
		5721.8	54.2	-60.7	114.9	42.69	35.21	11.5	35.2	380	176	P	H
	*	5795	109.75	-	-	98.1	35.31	11.56	35.22	380	176	P	H
	*	5795	102.35	-	-	90.7	35.31	11.56	35.22	380	176	A	H
		5851.2	57.61	-61.85	119.46	45.86	35.38	11.6	35.23	380	176	P	H
		5856.2	56	-54.46	110.46	44.22	35.41	11.6	35.23	380	176	P	H
		5903.2	54.33	-29.96	84.29	42.42	35.46	11.69	35.24	380	176	P	H
		5925	52.16	-16.04	68.2	40.21	35.5	11.69	35.24	380	176	P	H
802.11n													H
HT40													H
CH 159		5640	51.06	-17.14	68.2	39.73	35.09	11.43	35.19	177	134	P	V
5795MHz		5687.6	53.96	-42.09	96.05	42.53	35.17	11.46	35.2	177	134	P	V
		5702	55.07	-50.69	105.76	43.58	35.19	11.5	35.2	177	134	P	V
		5722.6	52.55	-64.18	116.73	41.04	35.21	11.5	35.2	177	134	P	V
	*	5795	103.7	-	-	92.05	35.31	11.56	35.22	177	134	P	V
	*	5795	95.71	-	-	84.06	35.31	11.56	35.22	177	134	A	V
		5852.2	57.81	-59.37	117.18	46.06	35.38	11.6	35.23	177	134	P	V
		5856.8	56.34	-53.96	110.3	44.56	35.41	11.6	35.23	177	134	P	V
		5893.6	52.09	-39.31	91.4	40.22	35.46	11.65	35.24	177	134	P	V
		5939.4	49.56	-18.64	68.2	37.59	35.53	11.69	35.25	177	134	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over 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)
		5642.4	52.58	-15.62	68.2	41.25	35.09	11.43	35.19	367	177	P	H
		5698.4	62	-42.02	104.02	50.57	35.17	11.46	35.2	367	177	P	H
		5717.8	70.97	-39.21	110.18	59.46	35.21	11.5	35.2	367	177	P	H
		5722.2	74.93	-40.89	115.82	63.42	35.21	11.5	35.2	367	177	P	H
	*	5745	113.27	-	-	101.71	35.24	11.53	35.21	367	177	P	H
	*	5745	105.4	-	-	93.84	35.24	11.53	35.21	367	177	A	H
802.11ac													H
VHT20													H
CH 149		5622	51.32	-16.88	68.2	40	35.07	11.43	35.18	197	134	P	V
5745MHz		5695.6	55.68	-46.28	101.96	44.25	35.17	11.46	35.2	197	134	P	V
		5715.6	63.1	-46.47	109.57	51.61	35.19	11.5	35.2	197	134	P	V
		5725	64.76	-57.44	122.2	53.25	35.21	11.5	35.2	197	134	P	V
	*	5745	106.95	-	-	95.39	35.24	11.53	35.21	197	134	P	V
	*	5745	99.43	-	-	87.87	35.24	11.53	35.21	197	134	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over 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)
	*	5825	111.2	-	-	99.46	35.36	11.6	35.22	376	177	P	H
	*	5825	103.36	-	-	91.62	35.36	11.6	35.22	376	177	A	H
		5851.6	70.22	-48.33	118.55	58.47	35.38	11.6	35.23	376	177	P	H
		5856.6	62.75	-47.6	110.35	50.97	35.41	11.6	35.23	376	177	P	H
		5924.6	52.5	-15.99	68.49	40.55	35.5	11.69	35.24	376	177	P	H
		5927.2	51.2	-17	68.2	39.25	35.5	11.69	35.24	376	177	P	H
802.11ac													H
VHT20													H
CH 165	*	5825	104.52	-	-	92.78	35.36	11.6	35.22	166	135	P	V
5825MHz	*	5825	96.61	-	-	84.87	35.36	11.6	35.22	166	135	A	V
		5852.6	64.14	-52.13	116.27	52.39	35.38	11.6	35.23	166	135	P	V
		5855	58.62	-52.18	110.8	46.84	35.41	11.6	35.23	166	135	P	V
		5884.4	49.6	-48.62	98.22	37.76	35.43	11.65	35.24	166	135	P	V
		5932.2	49.5	-18.7	68.2	37.55	35.5	11.69	35.24	166	135	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)	Over 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 VHT20 CH 157 5785MHz		11570	55.25	-18.75	74	55.45	38.46	18.54	57.2	337	252	P	H
		11570	44.42	-9.58	54	44.62	38.46	18.54	57.2	337	252	A	H
		17355	51.21	-16.99	68.2	43.42	41.61	21.91	55.73	100	0	P	H
													H
		11570	57.58	-16.42	74	57.78	38.46	18.54	57.2	109	227	P	V
		11570	48.47	-5.53	54	48.67	38.46	18.54	57.2	109	227	A	V
		17355	52.01	-16.19	68.2	44.22	41.61	21.91	55.73	100	0	P	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over 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)
		5641	58.75	-9.45	68.2	47.42	35.09	11.43	35.19	366	178	P	H
		5689.4	60.45	-36.93	97.38	49.02	35.17	11.46	35.2	366	178	P	H
		5719.6	72.74	-37.95	110.69	61.23	35.21	11.5	35.2	366	178	P	H
		5721.2	74.78	-38.76	113.54	63.27	35.21	11.5	35.2	366	178	P	H
	*	5755	109.99	-	-	98.41	35.26	11.53	35.21	366	178	P	H
	*	5755	102.58	-	-	91	35.26	11.53	35.21	366	178	A	H
		5852	57.39	-60.25	117.64	45.64	35.38	11.6	35.23	366	178	P	H
		5858.6	51.56	-58.23	109.79	39.79	35.41	11.6	35.24	366	178	P	H
		5913	50.2	-26.85	77.05	38.27	35.48	11.69	35.24	366	178	P	H
		5944	49.59	-18.61	68.2	37.57	35.53	11.74	35.25	366	178	P	H
802.11ac													H
VHT40													H
CH 151		5631.6	52.75	-15.45	68.2	41.44	35.07	11.43	35.19	159	136	P	V
5755MHz		5697.8	59.34	-44.24	103.58	47.91	35.17	11.46	35.2	159	136	P	V
		5719	67.01	-43.51	110.52	55.5	35.21	11.5	35.2	159	136	P	V
		5720.8	69.43	-43.19	112.62	57.92	35.21	11.5	35.2	159	136	P	V
	*	5755	104.35	-	-	92.77	35.26	11.53	35.21	159	136	P	V
	*	5755	96.79	-	-	85.21	35.26	11.53	35.21	159	136	A	V
		5851.8	49.74	-68.36	118.1	37.99	35.38	11.6	35.23	159	136	P	V
		5862.8	50.6	-58.01	108.61	38.78	35.41	11.65	35.24	159	136	P	V
		5898	49.82	-38.32	88.14	37.95	35.46	11.65	35.24	159	136	P	V
		5944.4	49.02	-19.18	68.2	37	35.53	11.74	35.25	159	136	P	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over 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)
		5610.8	57.27	-10.93	68.2	46.01	35.04	11.4	35.18	380	176	P	H
		5691.2	57.38	-41.33	98.71	45.95	35.17	11.46	35.2	380	176	P	H
		5712.8	58.35	-50.44	108.79	46.86	35.19	11.5	35.2	380	176	P	H
		5721.4	57.77	-56.22	113.99	46.26	35.21	11.5	35.2	380	176	P	H
	*	5795	109.78	-	-	98.13	35.31	11.56	35.22	380	176	P	H
	*	5795	102.35	-	-	90.7	35.31	11.56	35.22	380	176	A	H
		5852.8	58.55	-57.27	115.82	46.8	35.38	11.6	35.23	380	176	P	H
		5856	56.38	-54.14	110.52	44.6	35.41	11.6	35.23	380	176	P	H
		5906.2	53.82	-28.26	82.08	41.89	35.48	11.69	35.24	380	176	P	H
		5927	51.93	-16.27	68.2	39.98	35.5	11.69	35.24	380	176	P	H
802.11ac													H
VHT40													H
CH 159		5639	51.5	-16.7	68.2	40.17	35.09	11.43	35.19	177	134	P	V
5795MHz		5692.6	54.96	-44.78	99.74	43.53	35.17	11.46	35.2	177	134	P	V
		5710.2	52.95	-55.11	108.06	41.46	35.19	11.5	35.2	177	134	P	V
		5721.8	52.83	-62.07	114.9	41.32	35.21	11.5	35.2	177	134	P	V
	*	5795	103.41	-	-	91.76	35.31	11.56	35.22	177	134	P	V
	*	5795	96.11	-	-	84.46	35.31	11.56	35.22	177	134	A	V
		5852.6	60	-56.27	116.27	48.25	35.38	11.6	35.23	177	134	P	V
		5856	56.46	-54.06	110.52	44.68	35.41	11.6	35.23	177	134	P	V
		5887.8	50.53	-45.17	95.7	38.66	35.46	11.65	35.24	177	134	P	V
		5940.4	49.94	-18.26	68.2	37.92	35.53	11.74	35.25	177	134	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over 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)
		5645.2	62.74	-5.46	68.2	51.41	35.09	11.43	35.19	380	176	P	H
		5692.6	69.02	-30.72	99.74	57.59	35.17	11.46	35.2	380	176	P	H
		5710.2	69.5	-38.56	108.06	58.01	35.19	11.5	35.2	380	176	P	H
		5723.4	70.22	-48.33	118.55	58.71	35.21	11.5	35.2	380	176	P	H
	*	5775	106.43	-	-	94.83	35.29	11.53	35.22	380	176	P	H
	*	5775	98.68	-	-	87.08	35.29	11.53	35.22	380	176	A	H
		5854	66.9	-46.18	113.08	55.12	35.41	11.6	35.23	380	176	P	H
		5855	64.89	-45.91	110.8	53.11	35.41	11.6	35.23	380	176	P	H
		5896.8	59.27	-29.76	89.03	47.4	35.46	11.65	35.24	380	176	P	H
		5926.8	53.32	-14.88	68.2	41.37	35.5	11.69	35.24	380	176	P	H
802.11ac													H
VHT80													H
CH 155		5609.6	52.56	-15.64	68.2	41.3	35.04	11.4	35.18	227	112	P	V
5775MHz		5692.6	64.23	-35.51	99.74	52.8	35.17	11.46	35.2	227	112	P	V
		5716.2	67.2	-42.54	109.74	55.71	35.19	11.5	35.2	227	112	P	V
		5724.2	67.21	-53.17	120.38	55.7	35.21	11.5	35.2	227	112	P	V
	*	5775	100.8	-	-	89.2	35.29	11.53	35.22	227	112	P	V
	*	5775	92.72	-	-	81.12	35.29	11.53	35.22	227	112	A	V
		5851.4	66.16	-52.85	119.01	54.41	35.38	11.6	35.23	227	112	P	V
		5856.4	64.2	-46.21	110.41	52.42	35.41	11.6	35.23	227	112	P	V
		5875	58.03	-47.17	105.2	46.19	35.43	11.65	35.24	227	112	P	V
		5942	50.01	-18.19	68.2	37.99	35.53	11.74	35.25	227	112	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)	Over 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)
		11550	52.23	-21.77	74	52.48	38.44	18.54	57.23	375	251	P	H
		11550	44.46	-9.54	54	44.71	38.44	18.54	57.23	375	251	A	H
802.11ac		17325	51.69	-16.51	68.2	43.89	41.66	21.88	55.74	100	0	P	H
VHT80													H
CH 155		11550	53.96	-20.04	74	54.21	38.44	18.54	57.23	121	226	P	V
5775MHz		11550	47.56	-6.44	54	47.81	38.44	18.54	57.23	121	226	A	V
		17325	52.48	-15.72	68.2	44.68	41.66	21.88	55.74	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

5GHz WIFI 802.11a (LF @ 3m)

WIFI	Note	Frequency	Level	Over	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)
5GHz 802.11a LF		69.96	35.28	-4.72	40	52.83	12.34	1.7	31.59	100	0	P	H
		98.31	35.61	-7.89	43.5	49.84	15.58	1.75	31.56	-	-	P	H
		183.09	28.56	-14.94	43.5	42.79	14.87	2.37	31.47	-	-	P	H
		757.1	31.08	-14.92	46	29.43	27.82	4.46	30.63	-	-	P	H
		864.2	31.13	-14.87	46	27.79	29	4.88	30.54	-	-	P	H
		948.9	32.88	-13.12	46	28.07	30.28	5.05	30.52	-	-	P	H
													H
													H
													H
													H
													H
													H
		30	33.29	-6.71	40	38.71	24.6	1.33	31.35	100	0	P	V
		68.88	32.32	-7.68	40	49.97	12.24	1.7	31.59	-	-	P	V
		151.23	30.45	-13.05	43.5	42.72	16.98	2.25	31.5	-	-	P	V
		666.1	30.29	-15.71	46	30.57	26.2	4.25	30.73	-	-	P	V
		889.4	31.48	-14.52	46	28.31	28.81	4.89	30.53	-	-	P	V
		952.4	31.91	-14.09	46	26.88	30.49	5.05	30.51	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<For Sample 2>

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over 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 157 5785MHz		5631.6	51.32	-16.88	68.2	40.01	35.07	11.43	35.19	380	160	P	H
		5692.4	52.66	-46.94	99.6	41.23	35.17	11.46	35.2	380	160	P	H
		5710.6	50.43	-57.74	108.17	38.94	35.19	11.5	35.2	380	160	P	H
		5723	49.78	-67.86	117.64	38.27	35.21	11.5	35.2	380	160	P	H
	*	5785	109.33	-	-	97.7	35.29	11.56	35.22	380	160	P	H
	*	5785	100.68	-	-	89.05	35.29	11.56	35.22	380	160	A	H
		5851.6	48.81	-69.74	118.55	37.06	35.38	11.6	35.23	380	160	P	H
		5859.2	49.01	-60.61	109.62	37.24	35.41	11.6	35.24	380	160	P	H
		5883.6	49.61	-49.2	98.81	37.77	35.43	11.65	35.24	380	160	P	H
		5932.8	49.94	-18.26	68.2	37.99	35.5	11.69	35.24	380	160	P	H
													H
													H
		5632.4	51.71	-16.49	68.2	40.4	35.07	11.43	35.19	303	229	P	V
		5665.4	51.91	-27.72	79.63	40.52	35.12	11.46	35.19	303	229	P	V
		5707.8	52.21	-55.18	107.39	40.72	35.19	11.5	35.2	303	229	P	V
		5723	49.95	-67.69	117.64	38.44	35.21	11.5	35.2	303	229	P	V
	*	5785	107.5	-	-	95.87	35.29	11.56	35.22	303	229	P	V
	*	5785	98.89	-	-	87.26	35.29	11.56	35.22	303	229	A	V
		5852.6	49.25	-67.02	116.27	37.5	35.38	11.6	35.23	303	229	P	V
		5865.8	49.4	-58.37	107.77	37.58	35.41	11.65	35.24	303	229	P	V
		5880.8	50.45	-50.44	100.89	38.61	35.43	11.65	35.24	303	229	P	V
		5938.8	49.19	-19.01	68.2	37.22	35.53	11.69	35.25	303	229	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 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over 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		11570	47.21	-26.79	74	47.41	38.46	18.54	57.2	100	0	P	H
		17355	50.88	-17.32	68.2	43.09	41.61	21.91	55.73	100	0	P	H
													H
													H
		11570	57.23	-16.77	74	57.43	38.46	18.54	57.2	118	226	P	V
		11570	46.96	-7.04	54	47.16	38.46	18.54	57.2	118	226	A	V
		17355	51.74	-16.46	68.2	43.95	41.61	21.91	55.73	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

5GHz WIFI 802.11a (LF @ 3m)

WIFI	Note	Frequency	Level	Over	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)
5GHz 802.11a LF		30	28.76	-11.24	40	34.18	24.6	1.33	31.35	100	0	P	H
		214.68	29.03	-14.47	43.5	42.88	15.2	2.38	31.43	-	-	P	H
		248.7	31.4	-14.6	46	42	18.15	2.63	31.38	-	-	P	H
		938.4	31.64	-14.36	46	27.43	29.75	4.98	30.52	-	-	P	H
		950.3	31.94	-14.06	46	27.01	30.39	5.05	30.51	-	-	P	H
		957.3	32.39	-13.61	46	27.1	30.75	5.05	30.51	-	-	P	H
													H
													H
													H
													H
													H
													H
		30.54	31.44	-8.56	40	37.38	24.09	1.33	31.36	100	0	P	V
		200.64	31.37	-12.13	43.5	45.51	14.93	2.38	31.45	-	-	P	V
		253.29	29.99	-16.01	46	40	18.73	2.63	31.37	-	-	P	V
		926.5	31.1	-14.9	46	27.29	29.36	4.97	30.52	-	-	P	V
		943.3	31.62	-14.38	46	27.06	30.03	5.05	30.52	-	-	P	V
		953.1	31.94	-14.06	46	26.86	30.54	5.05	30.51	-	-	P	V
													V
													V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against limit line.

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	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

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

WIFI	Note	Frequency	Level	Over	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)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	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. Over Limit(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. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average 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) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix C. Radiated Spurious Emission Plots

Test Engineer :	Jesse Wang, Stan Hsieh, and Ken Wu	**Temperature :**	22~24°C
		Relative Humidity :	52~54%

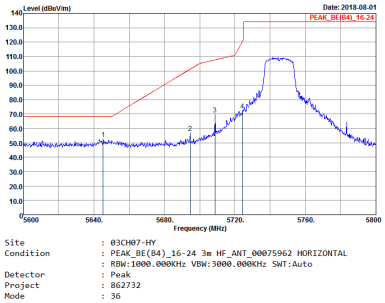
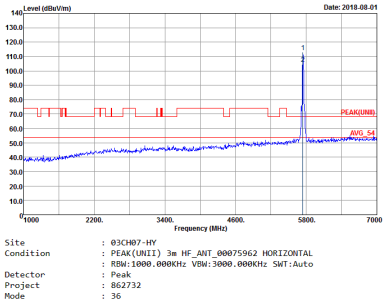
Note symbol

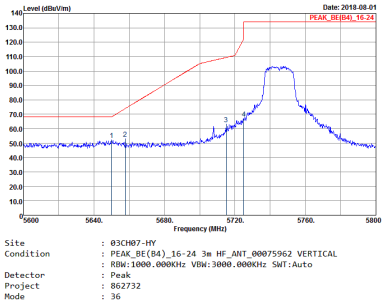
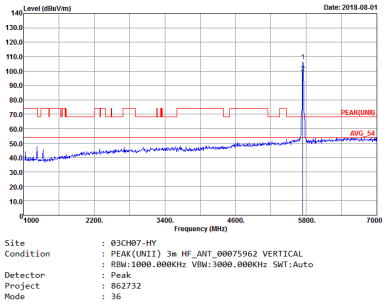
-L	**Low channel location**
-R	**High channel location**

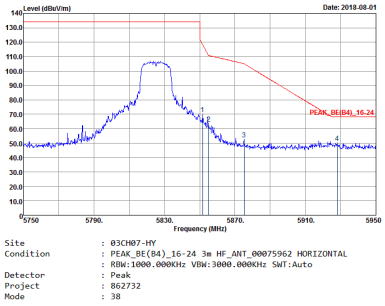
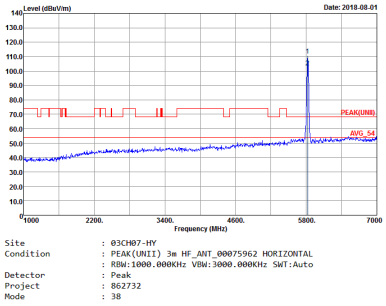
<For Sample 1>

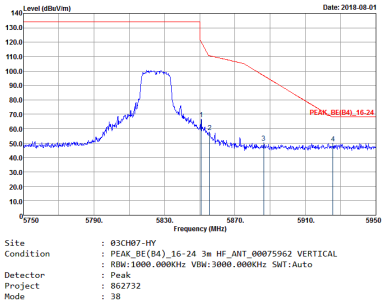
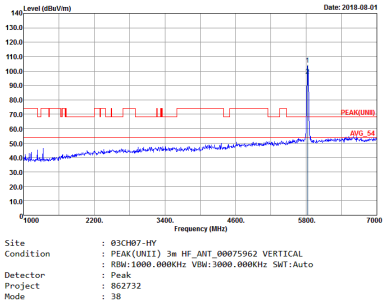
Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

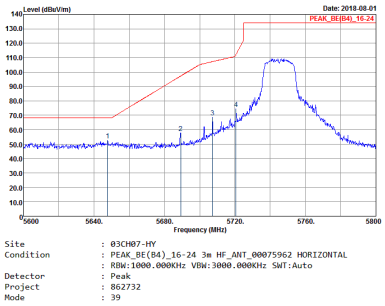
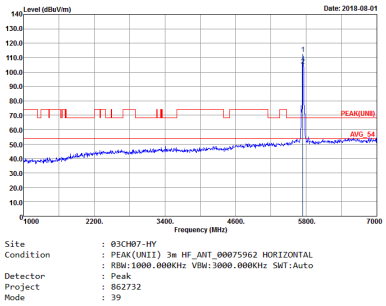
WIFI	**Band 4 5725~5850MHz Band Edge @ 3m**	
ANT	**802.11a CH149 5745MHz**	
1	**Horizontal**	**Fundamental**
Peak		

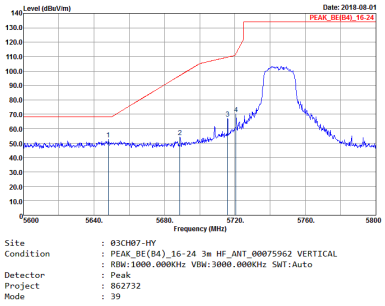
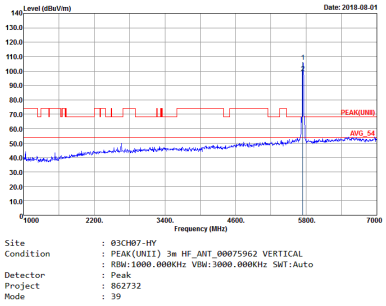
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Vertical	Fundamental
Peak		

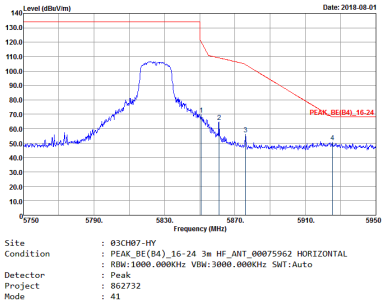
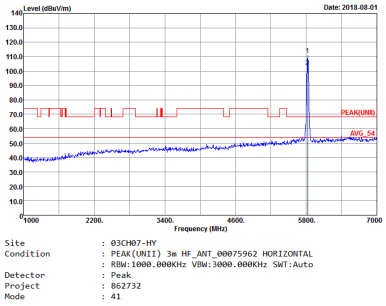
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak		

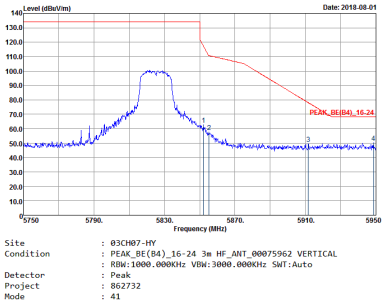
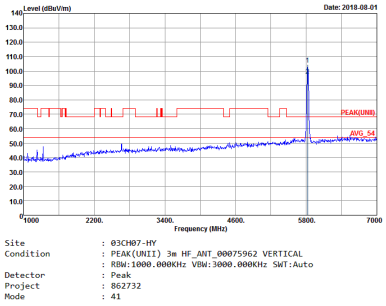
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Vertical	Fundamental
Peak		

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

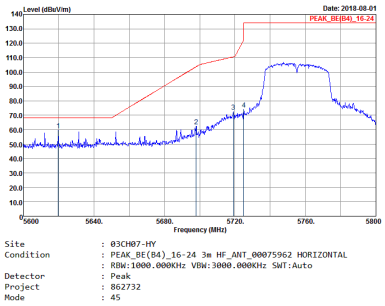
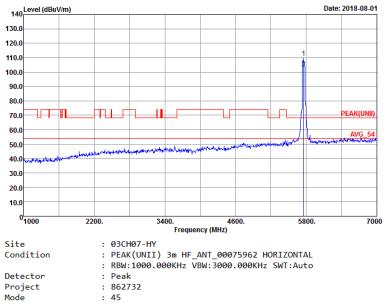
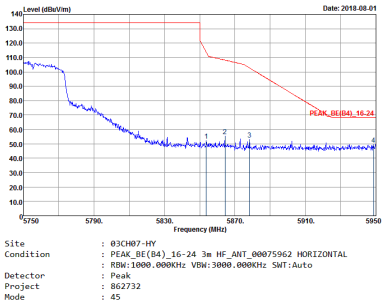
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

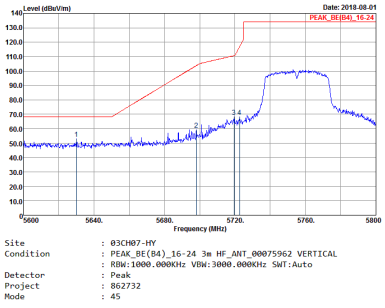
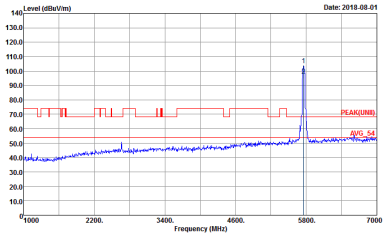
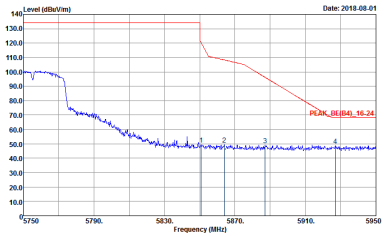
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
1	Vertical	Fundamental
Peak		

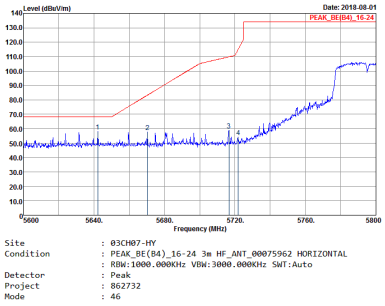
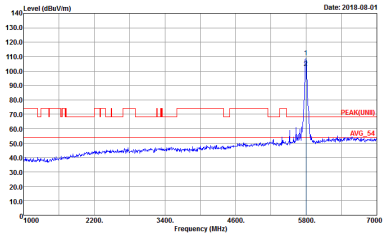
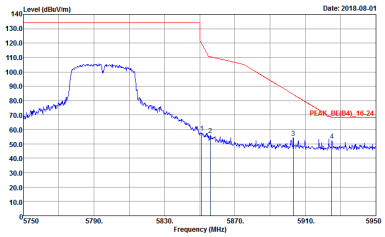
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1	Horizontal	Fundamental
Peak		

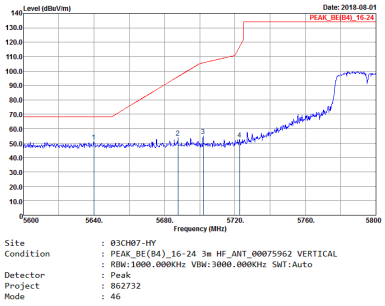
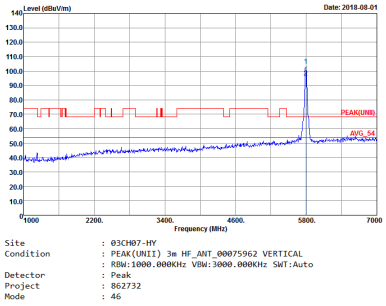
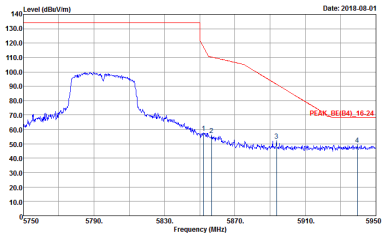
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1	Vertical	Fundamental
Peak		

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	Horizontal	Fundamental
Peak		
Peak		Left blank

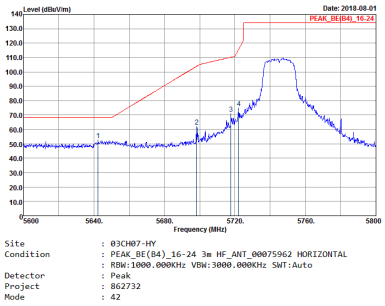
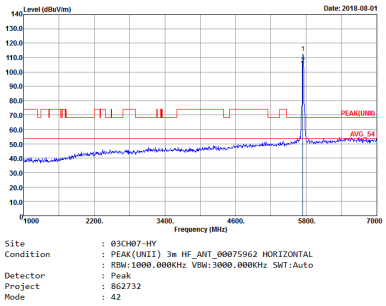
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 45	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 45
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 45	Left blank

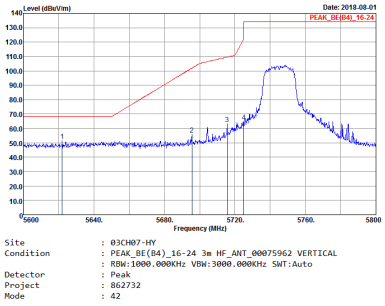
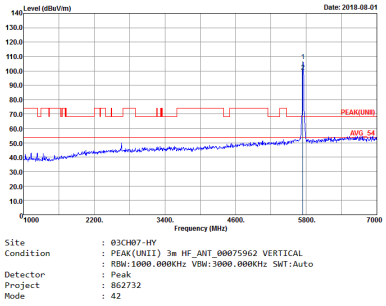
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 46	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 46
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 46	Left blank

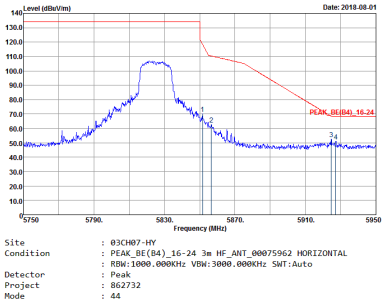
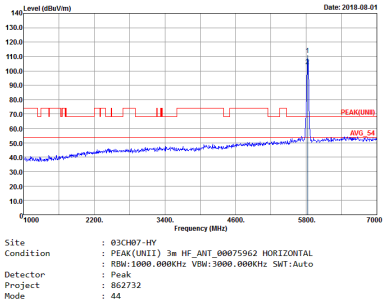
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 46	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 46
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 46	Left blank

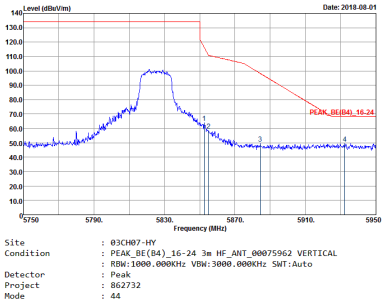
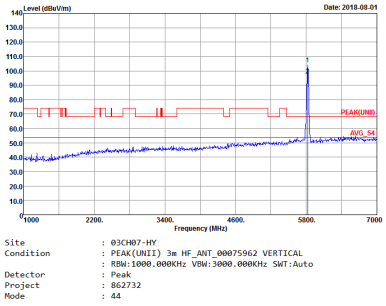
Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

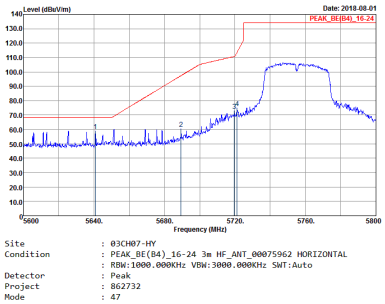
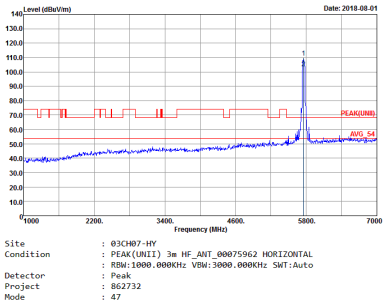
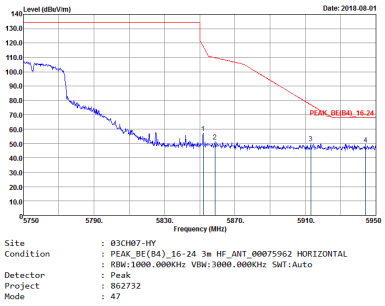
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

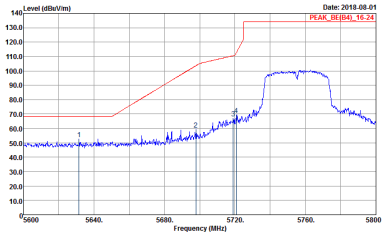
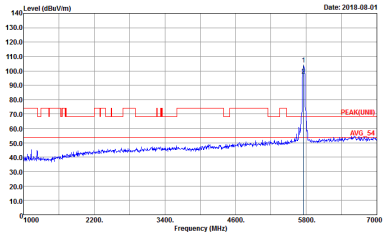
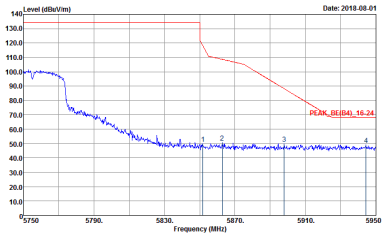
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Vertical	Fundamental
Peak Avg.		

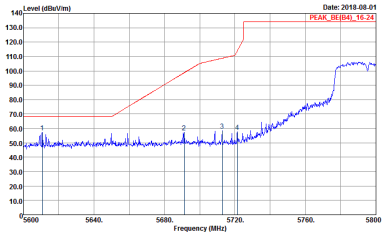
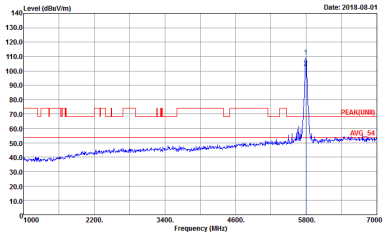
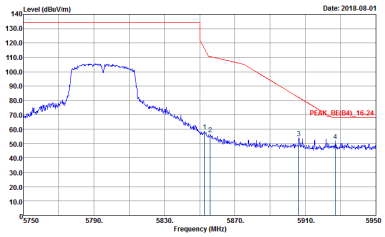
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Fundamental
Peak		

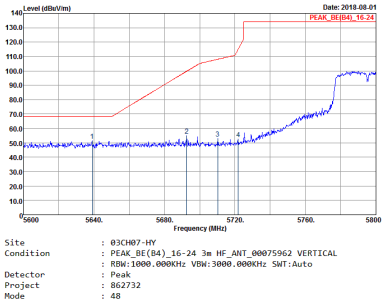
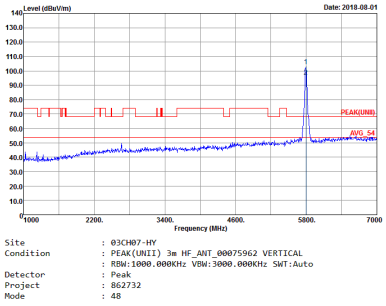
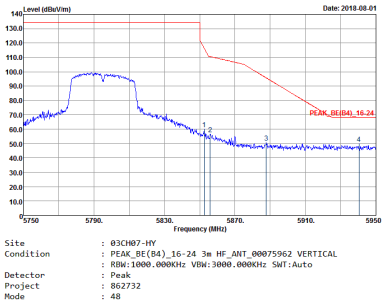
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Vertical	Fundamental
Peak Avg.		

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

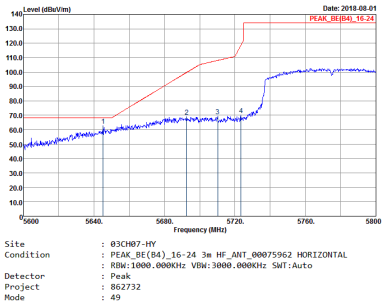
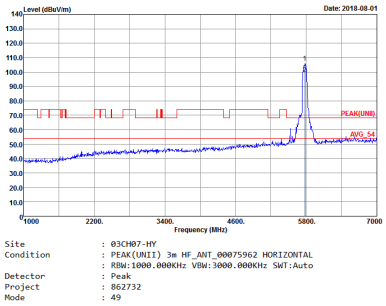
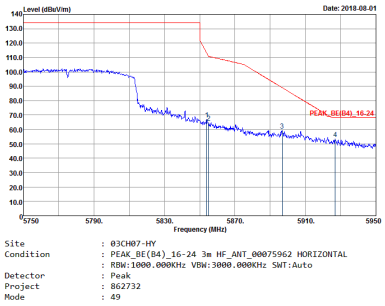
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

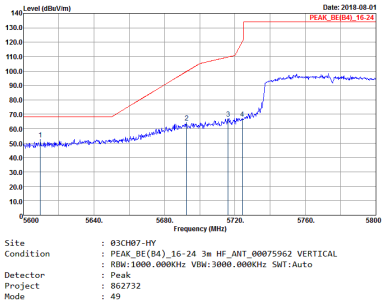
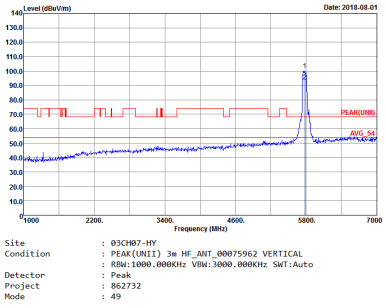
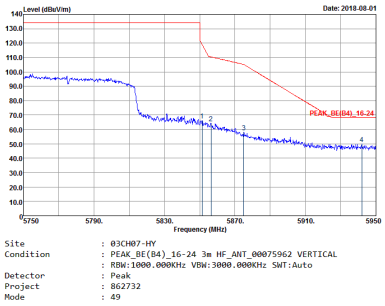
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 47	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 47
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 47	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 48	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 48
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 48	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

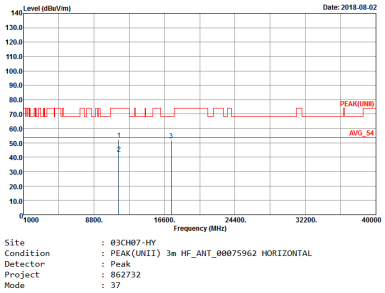
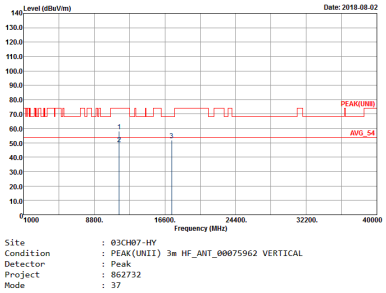
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

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

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

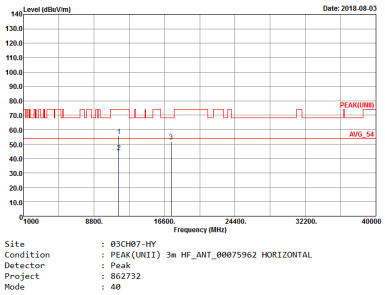
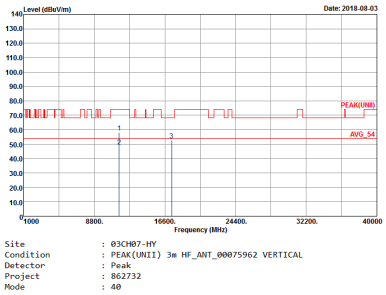
Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

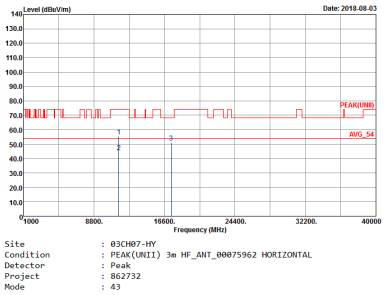
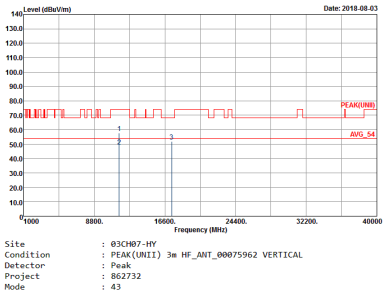
Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

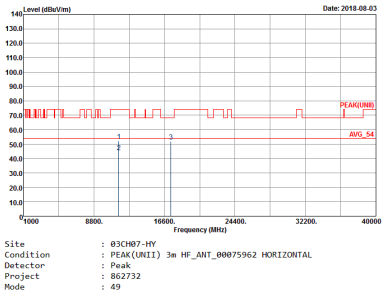
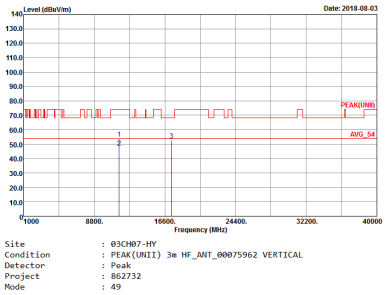
Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

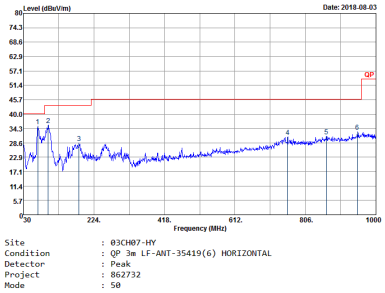
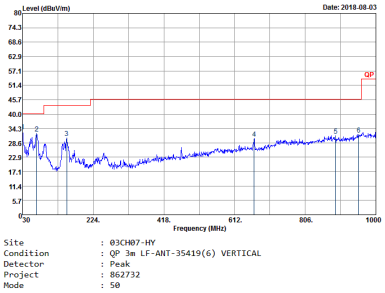
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

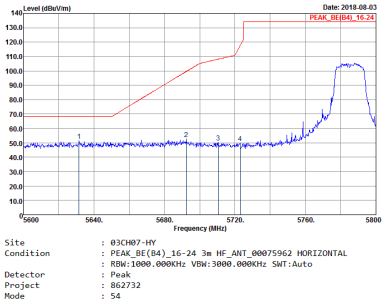
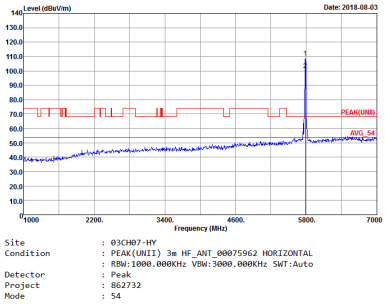
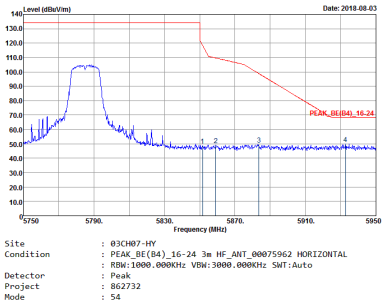
5GHz WIFI 802.11a (LF)

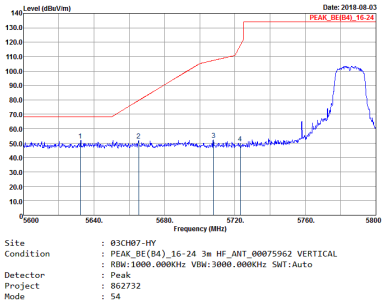
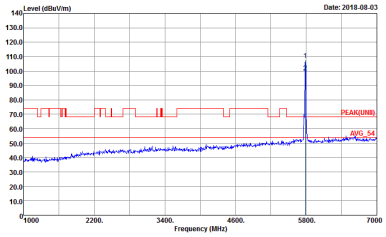
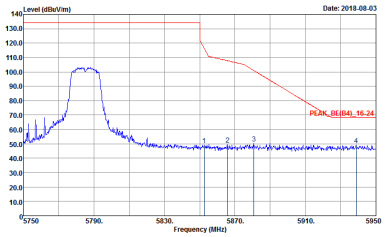
WIFI	5GHz 5725~5850MHz	
ANT	802.11a LF	
1	Horizontal	Vertical
QP / Peak		

<For Sample 2>

Band 4 - 5725~5850MHz

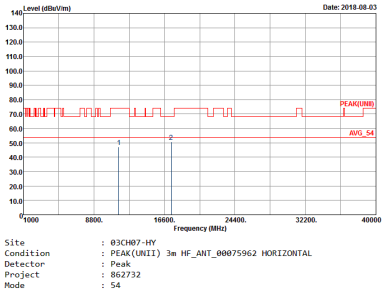
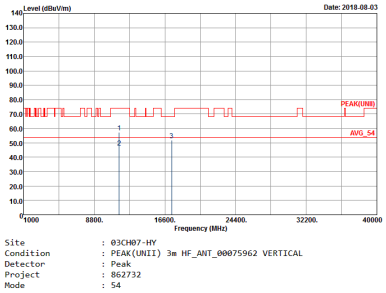
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 54	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 54
Peak	 Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 862732 Mode : 54	Left blank

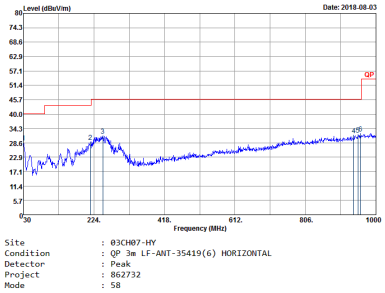
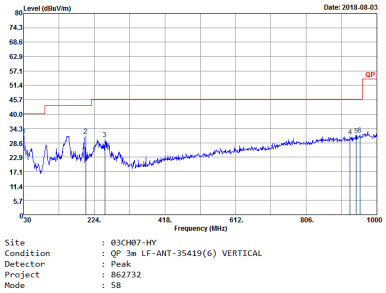
Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

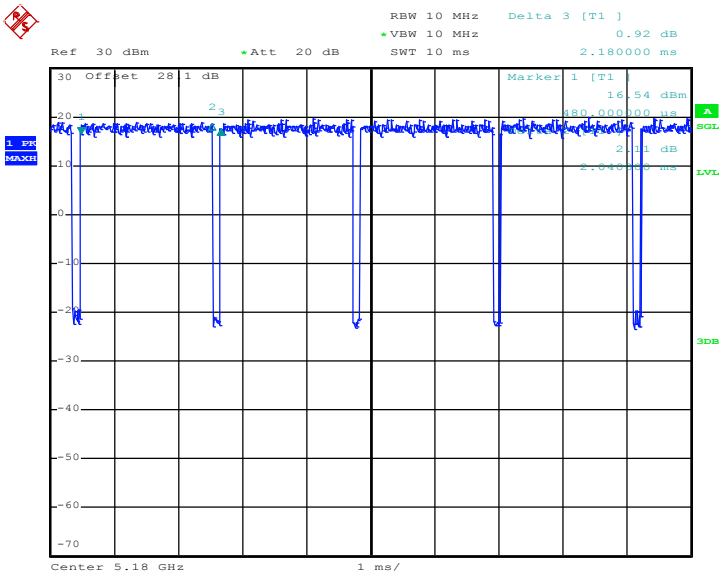
5GHz WIFI 802.11a (LF)

WIFI	5GHz 5725~5850MHz	
ANT	802.11a LF	
1	Horizontal	Vertical
QP / Peak		

Appendix D. Duty Cycle Plots

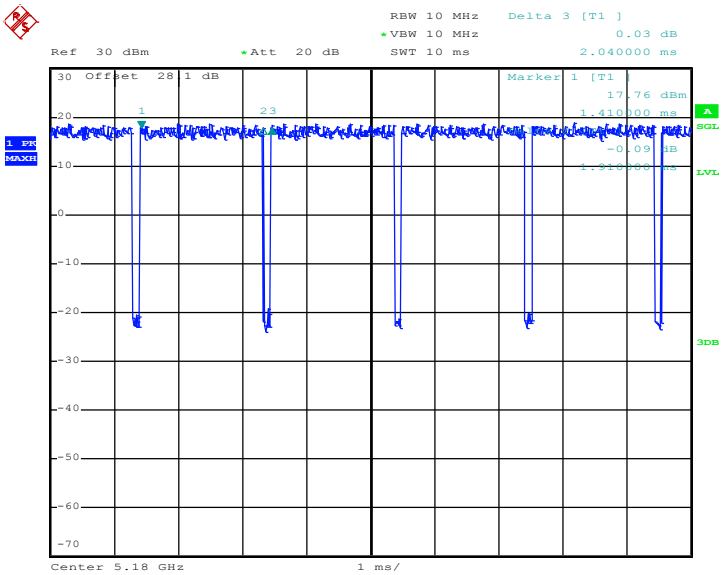
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11a	93.58	2040.00	0.49	1kHz	0.29
1	5GHz 802.11n HT20	93.63	1910.00	0.52	1kHz	0.29
1	5GHz 802.11n HT40	89.62	950.00	1.05	3kHz	0.48
1	5GHz 802.11ac VHT20	94.12	1920.00	0.52	1kHz	0.26
1	5GHz 802.11ac VHT40	89.72	960.00	1.04	3kHz	0.47
1	5GHz 802.11ac VHT80	86.90	730.00	1.37	3kHz	0.61

802.11a



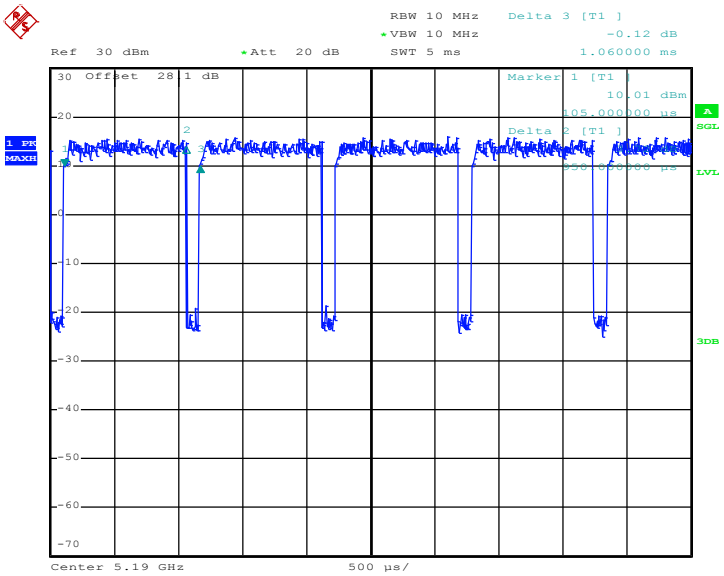
Date: 24.JUL.2018 07:23:36

802.11n HT20



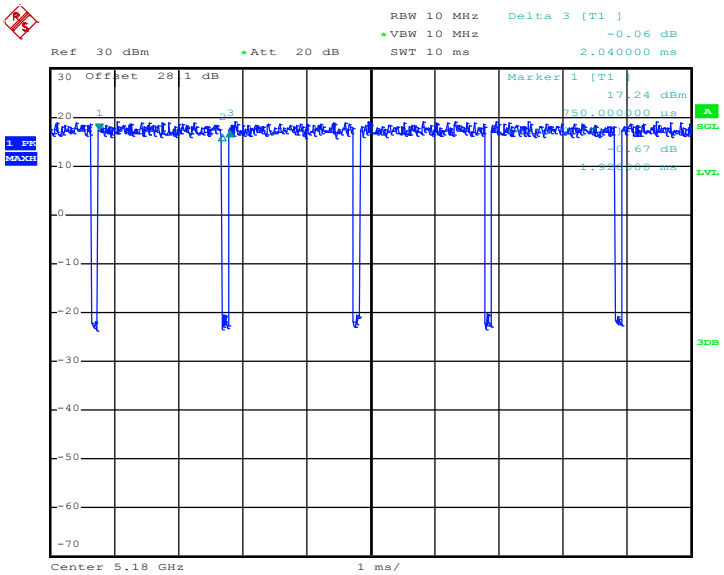
Date: 25.JUL.2018 00:02:02

802.11n HT40



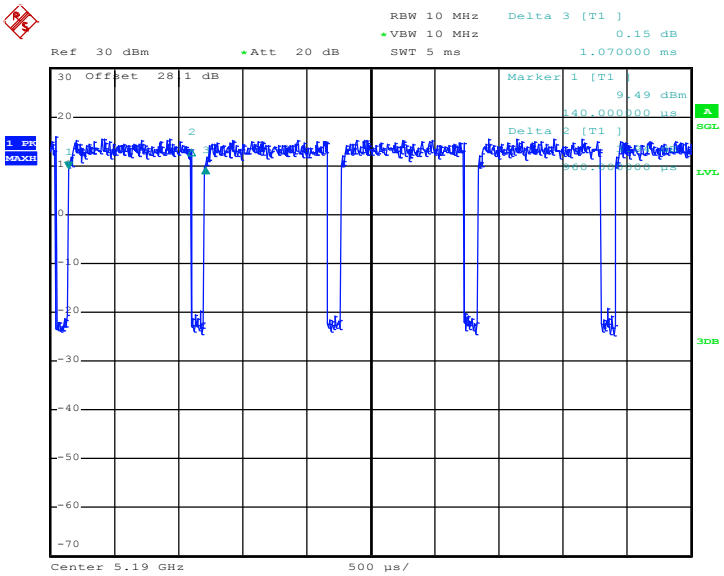
Date: 25.JUL.2018 01:22:10

802.11ac VHT20



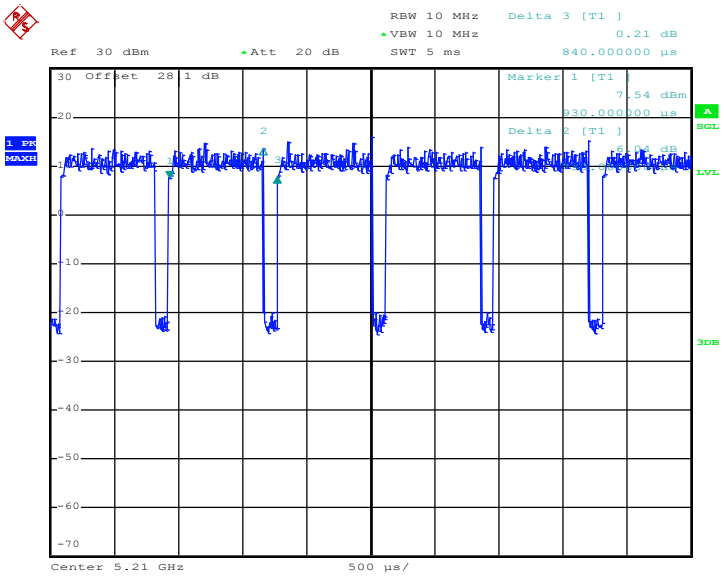
Date: 25.JUL.2018 01:57:35

802.11ac VHT40



Date: 25.JUL.2018 02:22:18

802.11ac VHT80



Date: 25.JUL.2018 02:50:01