NCC RADIO TEST REPORT

Equipment	:	**EC30 Enterprise Companion**
Brand Name	:	**Zebra**
Model name	:	**EC300K**
Applicant	:	台灣斑馬科技股份有限公司 台北市信義區松高路 **9** 號 **13** 樓
Manufacturer	:	**Zebra Technologies Corporation** **1 Zebra Plaza, Holtsville, NY 11742**
Standard	:	**NCC LP0002 (2018-01-10)**

The product was received on Mar. 04, 2019 and testing was started from May 05, 2019 and completed on Jun. 21, 2019. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures NCC LP0002 (2018-01-10) 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 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.)

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History of this test report

Report No.	Version	Description	Issued Date
TR930401E	01	Initial issue of report	Jul. 09, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	LP0002 4.7.3 4.7.5	6dB & 26dB Bandwidth	Pass	-
3.1	LP0002 4.7.3	99% Occupied Bandwidth	Reporting only	-
3.2	LP0002 4.7.3	Maximum Conducted Output Power	Pass	-
3.3	LP0002 4.7.3	Power Spectral Density	Pass	-
3.4	LP0002 4.7.4	Unwanted Emissions	Pass	Under limit 1.45 dB at 39.700 MHz
3.5	LP0002 2.3	AC Conducted Emission	Pass	Under limit 12.69 dB at 0.384 MHz
3.6	LP0002 4.7.6	Automatically Discontinue Transmission	Pass	-
3.7	LP0002 2.2 4.7.8	Antenna Requirement	Pass	-
Annex A	LP0002 2.11	Receiver Radiated Emission	Pass	Please refer to Annex A
Annex B	LP0002 2.2 5.20.2	Maximum Power Density	Pass	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Elise Chang

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	EC30 Enterprise Companion
Brand Name	Zebra
Model Name	EC300K
EUT supports Radios application	WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	EC30 MB EV2 V12
SW Version	Zebra/EC30PR/EC30RT:8.1.0/01-17-19.00-ON-U00-PRD/365: eng/relaese-keys
SW Version for TXBF	Zebra/EC30PR/EC30RT:8.1.0/01-14-06.00-OG-U00-PRD/261: eng/release-keys
FW Version	01-17-19.00-ON-U00-PRD
FW Version for TXBF	01-14-06.00-OG-U00-PRD
MFD	28APR19
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

Specification of Accessories				
AC Adapter - EU	**Brand Name**	ZEBRA	**Part Number**	PWR-WUA5V12W0EU
AC Adapter - US	**Brand Name**	ZEBRA	**Part Number**	PWR-WUA5V12W0US
TC2X USB-C Cable	**Brand Name**	ZEBRA	**Part Number**	CBL-TC2X-USBC01
TC5X USB-C Cable	**Brand Name**	ZEBRA	**Part Number**	CBL-TC5X-USBC2A-01
3.5MM headset adapter cable	**Brand Name**	ZEBRA	**Model Name**	CBL-TC51-HDST35-01
3.5MM PTT/VOIP headset	**Brand Name**	ZEBRA	**Model Name**	HDST-35MM-PTVP-01
3.5MM PTT headset	**Brand Name**	ZEBRA	**Model Name**	HDST-35MM-PTT1-01
Body Holster (EC30 Soft Holster)	**Brand Name**	ZEBRA	**Part Number**	SG-EC30-HLSTR1-01
Wrist Holster (EC30 Arm Mount (standard strap))	**Brand Name**	ZEBRA	**Part Number**	SG-EC30-ARM1-01
Body Holster (EC30 Rigid holster with snap-in design. Rotating Belt Clip with ability to insert in either direction.)	**Brand Name**	ZEBRA	**Part Number**	SG-EC30-RHLSTR1-01
Lanyard Adapter with a Vest/Garment clip with coiled tether	**Brand Name**	ZEBRA	**Part Number**	SG-EC30-CLIP1-01
Lanyard Adapter (EC30 RETRACTABLE LANYARD WITH MAGNETIC RECOIL, ADJUSTABLE NECK STRAP AND ADAPTER (1 PACK))	**Brand Name**	ZEBRA	**Part Number**	SG-EC30-RLYD1-01
Lanyard Adapter (EC30 BASIC LANYARD WITH ADJUSTABLE NECK STRAP AND ADAPTER)	**Brand Name**	ZEBRA	**Part Number**	SG-EC30-BLYD1-01
Lanyard Adapter (EC30 RETRACTOR WITH MAGNETIC RECOIL, CARABINER AND ADAPTER)	**Brand Name**	ZEBRA	**Part Number**	SG-EC30-RCB1-01

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	5745 MHz ~ 5825 MHz
Maximum Output Power <CDD Modes>	**<Ant. 1>** 802.11a : 17.30 dBm / 0.0537 W 802.11n HT20 : 17.30 dBm / 0.0537 W 802.11n HT40 : 17.20 dBm / 0.0525 W 802.11ac VHT20: 17.40 dBm / 0.0550 W 802.11ac VHT40: 17.30 dBm / 0.0537 W 802.11ac VHT80: 17.30 dBm / 0.0537 W **<Ant. 2>** 802.11a : 17.20 dBm / 0.0525 W 802.11n HT20 : 17.30 dBm / 0.0537 W 802.11n HT40 : 17.10 dBm / 0.0513 W 802.11ac VHT20: 17.40 dBm / 0.0550 W 802.11ac VHT40: 17.20 dBm / 0.0525 W 802.11ac VHT80: 17.10 dBm / 0.0513 W **MIMO <Ant. 1 + 2>** 802.11a : 19.11 dBm / 0.0815 W 802.11n HT20 : 19.31 dBm / 0.0853 W 802.11n HT40 : 19.11 dBm / 0.0815 W 802.11ac VHT20: 19.41 dBm / 0.0873 W 802.11ac VHT40: 19.16 dBm / 0.0824 W 802.11ac VHT80: 19.31 dBm / 0.0853 W
Maximum Output Power <TXBF Modes>	**MIMO <Ant. 1 + 2>** 802.11ac VHT20: 18.40 dBm / 0.0692 W 802.11ac VHT40: 18.71 dBm / 0.0743 W 802.11ac VHT80: 18.94 dBm / 0.0783 W
99% Occupied Bandwidth <CDD Modes>	**<Ant. 1>** 802.11a : 16.80 MHz 802.11ac VHT20 : 17.95 MHz 802.11ac VHT40 : 36.60 MHz 802.11ac VHT80 : 77.04 MHz **<Ant. 2>** 802.11a : 16.75 MHz 802.11ac VHT20 : 17.95 MHz 802.11ac VHT40 : 36.60 MHz 802.11ac VHT80 : 76.92 MHz **MIMO <Ant. 1>** 802.11a : 16.80 MHz 802.11ac VHT20 : 18.00 MHz 802.11ac VHT40 : 36.60 MHz 802.11ac VHT80 : 76.80 MHz **MIMO <Ant. 2>** 802.11a : 16.70 MHz 802.11ac VHT20 : 17.90 MHz 802.11ac VHT40 : 36.60 MHz 802.11ac VHT80 : 76.80 MHz

<table>
<tr><th colspan="2">Standards-related Product Specification</th></tr>
<tr><td>99% Occupied Bandwidth
<TXBF Modes></td><td>MIMO <Ant. 1>
802.11ac VHT20 : 17.90 MHz
802.11ac VHT40 : 36.60 MHz
802.11ac VHT80 : 77.04 MHz
MIMO <Ant. 2>
802.11ac VHT20 : 18.60 MHz
802.11ac VHT40 : 36.60 MHz
802.11ac VHT80 : 77.04 MHz</td></tr>
<tr><td>Type of Modulation</td><td>802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)</td></tr>
<tr><td>Antenna Type / Gain</td><td><Ant. 1> : PCB Antenna with gain 2.49 dBi
<Ant. 2> : PCB Antenna with gain 2.53 dBi</td></tr>
<tr><td>Antenna Function Description</td><td><table><tr><th></th><th>Ant. 1</th><th>Ant. 2</th></tr><tr><td>802.11 a/n/ac</td><td>V</td><td>V</td></tr><tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td></tr><tr><td>802.11ac TXBF</td><td>V</td><td>V</td></tr></table></td></tr>
</table>

Note: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.

1.3 Modification of EUT

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

1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory	
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	CO05-HY

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

Test Site	SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory	
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
Test Site No.	**Sporton Site No.**	
	03CH11-HY	03CH13-HY

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

FCC designation No.: TW1190 and TW0007

1.5 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- NCC LP0002 (2018-01-10)
- 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: 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

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, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane for Ant. 2, MIMO Ant. 1+2, and TXBF Mode; Y plane for Ant. 1) were recorded in this report.

b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4 (U-NII-3)	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155#	5775	165	5825

Note:

1. The above Frequency and Channel 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.

Single Mode

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

MIMO Mode

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

TXBF Mode

Modulation	Data Rate
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + Scanner Scan Bar Code + Play MP3 + 3.5MM headset adapter cable + 3.5MM PTT/VOIP headset + TC5X USB-C Cable (Charging with AC Adapter)
Remark: For Radiated Test Cases, the tests were performed with 3.5MM headset adapter cable, 3.5MM PTT/VOIP headset and TC5X USB-C Cable.	

<CDD Mode>

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

<TXBF Mode>

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	-

<CDD Mode>

<Ant. 1>

802.11a RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	Data Rate (bps)	channel	Data Rate (bps)							
		6M		9M	12M	18M	24M	36M	48M	54M	
CH 149	5745	**17.30**	CH 149	17.20	17.20	17.10	17.10	17.00	17.00	17.00	
CH 157	5785	17.20									
CH 165	5825	17.20									

802.11n HT20 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	channel	MCS Index							
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	
CH 149	5745	17.20	CH 165	17.20	17.10	17.10	17.20	17.20	17.20	17.20	
CH 157	5785	17.10									
CH 165	5825	**17.30**									

802.11n HT40 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	channel	MCS Index							
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	
CH 151	5755	17.10	CH 159	17.10	17.10	17.10	17.00	17.00	17.00	17.00	
CH 159	5795	**17.20**									

802.11ac VHT20 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	
CH 149	5745	17.30	CH 165	17.30	17.20	17.20	17.30	17.30	17.30	17.30	17.30	
CH 157	5785	17.20										
CH 165	5825	**17.40**										

802.11ac VHT40 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 151	5755	17.20	CH 159	17.20	17.20	17.20	17.10	17.10	17.10	17.10	17.10	17.10
CH 159	5795	**17.30**										

802.11ac VHT80 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH155	5775	**17.30**	CH155	17.10	17.20	17.20	17.20	17.20	17.20	17.20	17.20	17.20

<Ant. 2>

802.11a RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	Data Rate (bps)	channel	Data Rate (bps)							
		6M		9M	12M	18M	24M	36M	48M	54M	
CH 149	5745	**17.20**	CH 149	17.10	17.10	16.80	16.80	17.10	17.10	17.10	
CH 157	5785	17.10									
CH 165	5825	17.10									

802.11n HT20 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	channel	MCS Index							
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	
CH 149	5745	17.20	CH 165	17.20	17.10	17.20	17.10	17.20	17.20	17.20	
CH 157	5785	17.10									
CH 165	5825	**17.30**									

802.11n HT40 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	channel	MCS Index							
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	
CH 151	5755	**17.10**	CH 151	17.00	17.00	17.00	16.80	16.80	16.80	16.80	
CH 159	5795	17.00									

802.11ac VHT20 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
CH 149	5745	17.30	CH 165	17.30	17.20	17.30	17.20	17.30	17.30	17.30	17.30
CH 157	5785	17.20									
CH 165	5825	**17.40**									

802.11ac VHT40 RF Output Power (dBm)													
Power vs. Channel			Power vs Data Rate										
Channel	Frequency (MHz)	MCS Index	channel	MCS Index									
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 151	5755	**17.20**	CH 151	17.10	17.10	17.10	16.90	16.90	16.90	16.90	16.90	16.90
CH 159	5795	17.10										

802.11ac VHT80 RF Output Power (dBm)													
Power vs. Channel			Power vs Data Rate										
Channel	Frequency (MHz)	MCS Index	channel	MCS Index									
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH155	5775	**17.10**	CH155	16.90	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00

<Ant. 1+2>

802.11a RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	Data Rate (bps)	channel	Data Rate (bps)								
		6M		9M	12M	18M	24M	36M	48M	54M
CH 149	5745	**19.11**	CH 149	19.01	19.01	18.86	18.91	18.86	18.86	18.86
CH 157	5785	**19.11**										
CH 165	5825	**19.11**										

802.11n HT20 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
CH 149	5745	19.16	CH 165	19.23	19.03	19.21	19.21	19.26	19.26	19.26
CH 157	5785	19.11										
CH 165	5825	**19.31**										

802.11n HT40 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
CH 151	5755	**19.11**	CH 151	19.06	19.06	19.06	18.86	18.86	18.86	18.86
CH 159	5795	19.06										

802.11ac VHT20 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	
CH 149	5745	19.21	CH 165	19.33	19.13	19.31	19.31	19.36	19.36	19.36	19.36	
CH 157	5785	19.16										
CH 165	5825	**19.41**										

802.11ac VHT40 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 151	5755	**19.16**	CH 151	19.16	19.16	19.16	18.96	18.96	18.96	18.96	18.96	18.96
CH 159	5795	19.11										

802.11ac VHT80 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH155	5775	**19.31**	CH155	19.26	19.31	19.31	18.87	18.87	18.91	18.91	18.91	18.91

<TXBF>

<Ant. 1+2>

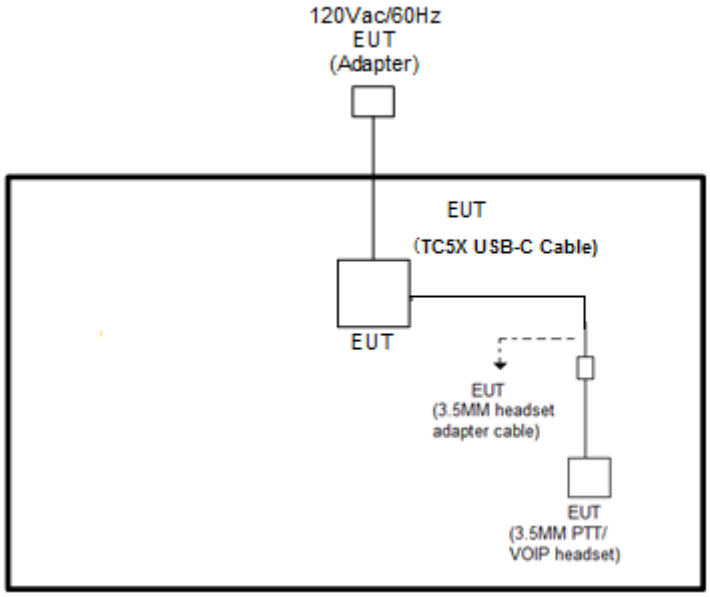
802.11ac VHT20 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	
CH 149	5745	**18.40**	CH 149	18.34	18.03	18.03	18.20	18.20	18.38	18.36	18.32	
CH 157	5785	18.26										
CH 165	5825	18.30										

802.11ac VHT40 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 151	5755	**18.71**	CH 151	18.65	18.70	18.70	18.49	18.56	18.52	18.50	18.56	18.42
CH 159	5795	18.57										

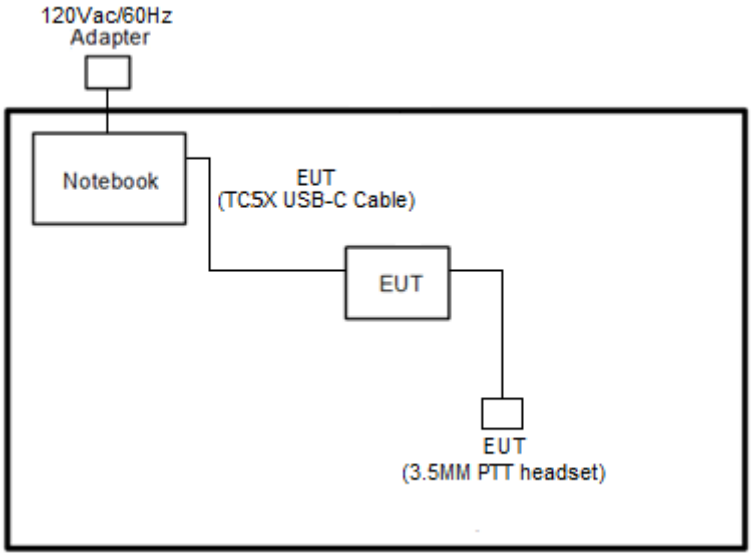
802.11ac VHT80 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH155	5775	**18.94**	CH155	18.83	18.88	18.88	18.68	18.75	18.64	18.64	18.68	18.68

2.3 Connection Diagram of Test System

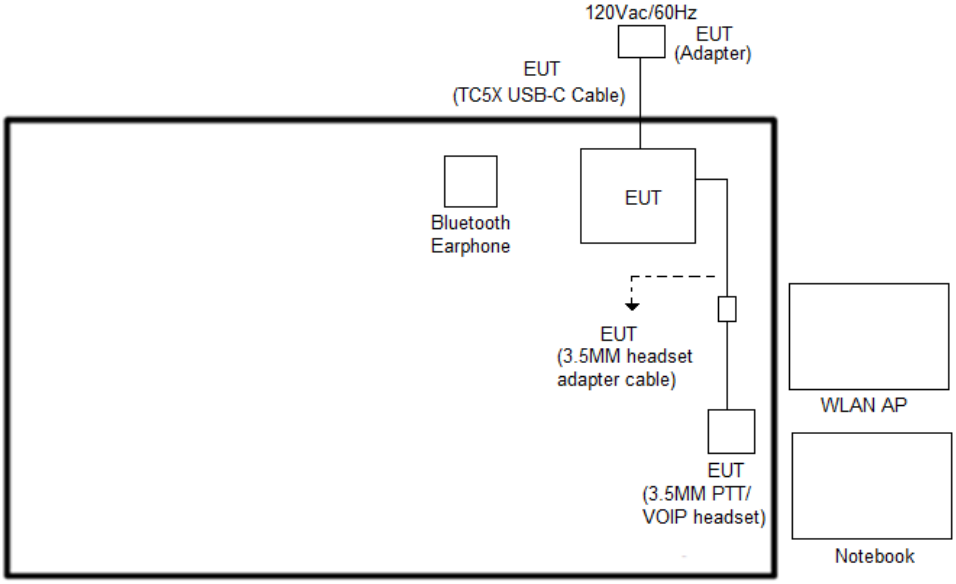
<WLAN CDD Tx Mode>



<WLAN TXBF Mode>



<AC Conducted Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
3.	Notebook	DELL	Latitude E3340	FCC DoC/ Contains FCC ID: PD97260NGU	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Notebook	Lenovo	G480	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Bar Code	N/A	N/A	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility "Qualcomm Radio Control Toolkit V3.0.303.0" 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.

For TXBF mode, the modulation modes and data rates manipulated by the command lines in the engineering program made the EUT link to another EUT by power under the normal operation. The "adb" software tool was used to enable the EUT to transmit signals continuously.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

3.1.1 Description of 6dB and 26dB and 99% Occupied Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

26dB and 99% Occupied bandwidth are reporting only.

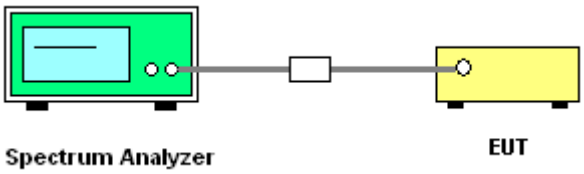
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth for the band 5.725-5.85GHz
2. Set RBW = 100kHz.
3. Set the VBW ≥ 3 x RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

3.1.4 Test Setup



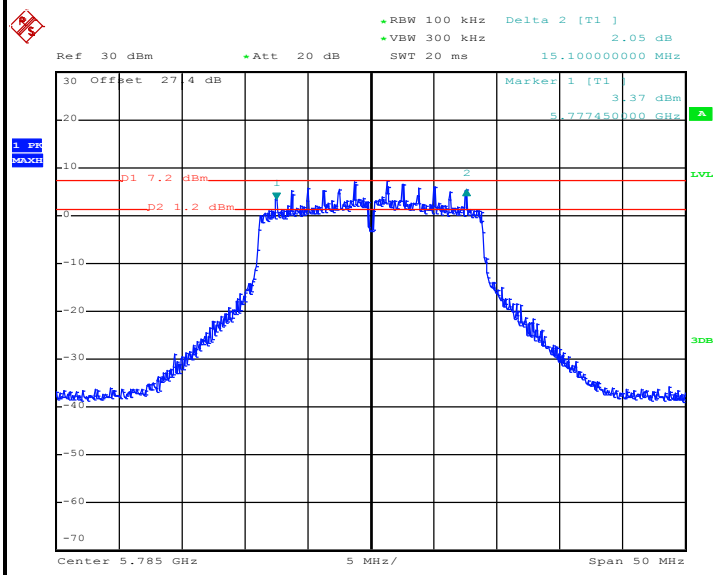
3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

<CDD Mode>

Test Engineer :	Luffy Lin and Richard Qiu	Temperature :	21~25℃
		Relative Humidity :	51~54%

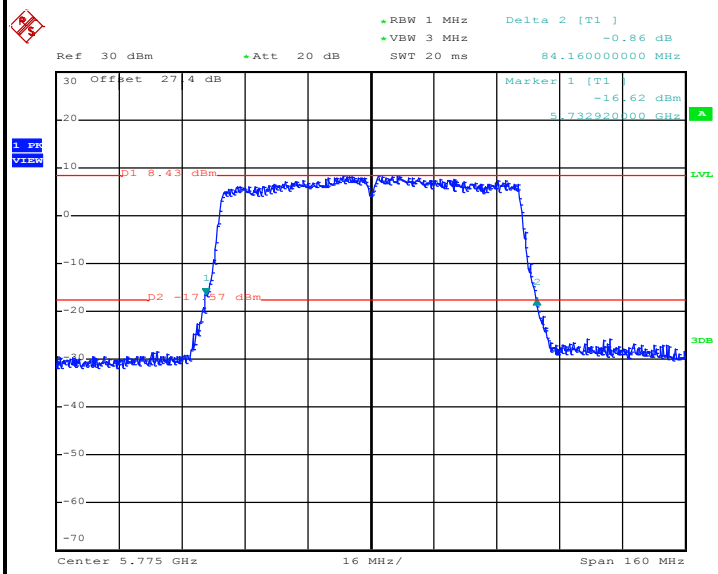
Band IV												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	149	5745	16.80	16.75	24.75	24.85	15.75	15.75	0.5	Pass
11a	6Mbps	1	157	5785	16.75	16.75	24.65	25.40	15.31	16.05	0.5	Pass
11a	6Mbps	1	165	5825	16.75	16.75	24.60	24.80	16.25	15.50	0.5	Pass
VHT20	MCS0	1	149	5745	17.85	17.95	26.00	25.40	16.05	16.25	0.5	Pass
VHT20	MCS0	1	157	5785	17.85	17.90	25.55	26.15	**15.10**	15.65	0.5	Pass
VHT20	MCS0	1	165	5825	17.95	17.90	25.55	25.85	16.25	15.45	0.5	Pass
VHT40	MCS0	1	151	5755	36.60	36.60	42.35	42.36	35.64	36.00	0.5	Pass
VHT40	MCS0	1	159	5795	36.60	36.60	41.62	42.12	35.64	36.00	0.5	Pass
VHT80	MCS0	1	155	5775	**77.04**	76.92	83.84	83.20	75.20	75.20	0.5	Pass
11a	6Mbps	2	149	5745	16.65	16.70	24.05	24.75	15.40	16.00	0.5	Pass
11a	6Mbps	2	157	5785	16.80	16.70	24.75	24.30	15.80	16.25	0.5	Pass
11a	6Mbps	2	165	5825	16.70	16.65	24.65	25.20	15.15	16.05	0.5	Pass
VHT20	MCS0	2	149	5745	17.80	17.90	25.00	25.45	**15.10**	16.80	0.5	Pass
VHT20	MCS0	2	157	5785	17.95	17.85	25.75	25.35	15.95	15.70	0.5	Pass
VHT20	MCS0	2	165	5825	18.00	17.85	26.25	25.60	17.25	16.25	0.5	Pass
VHT40	MCS0	2	151	5755	36.60	36.60	41.94	41.94	35.20	35.64	0.5	Pass
VHT40	MCS0	2	159	5795	36.40	36.60	41.76	41.94	35.10	36.09	0.5	Pass
VHT80	MCS0	2	155	5775	76.80	76.80	83.52	**84.16**	75.11	75.20	0.5	Pass

Minimum 6dB Bandwidth



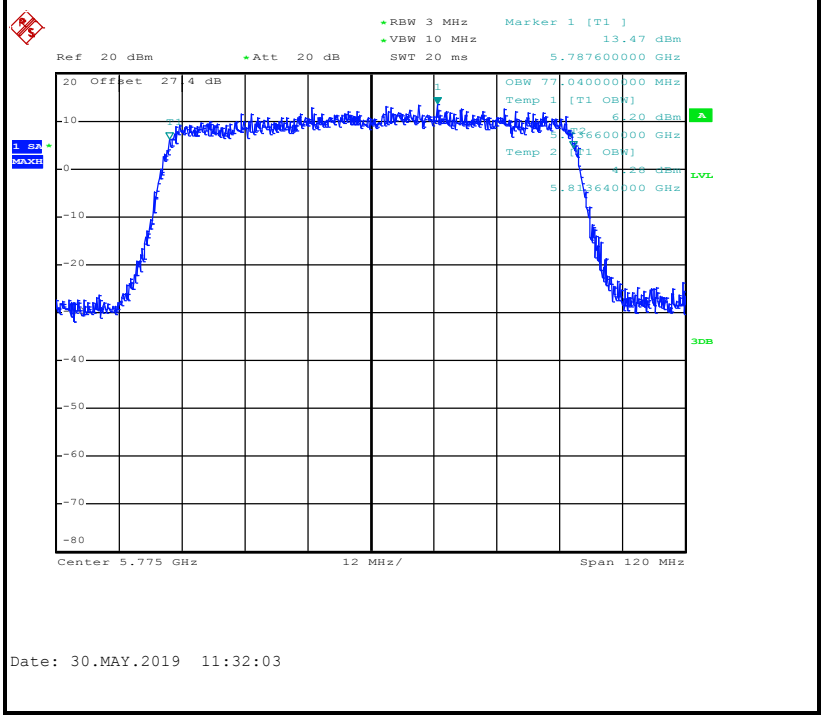
Date: 30.MAY.2019 10:35:52

Maximum 26dB Bandwidth



Date: 30.MAY.2019 11:20:40

Maximum 99% Occupied Bandwidth



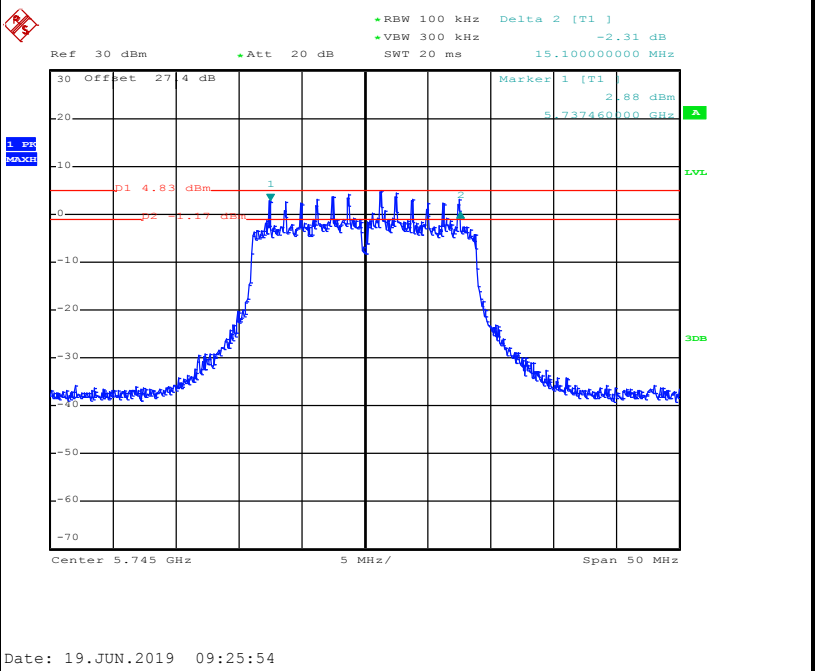
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<TXBF Modes>

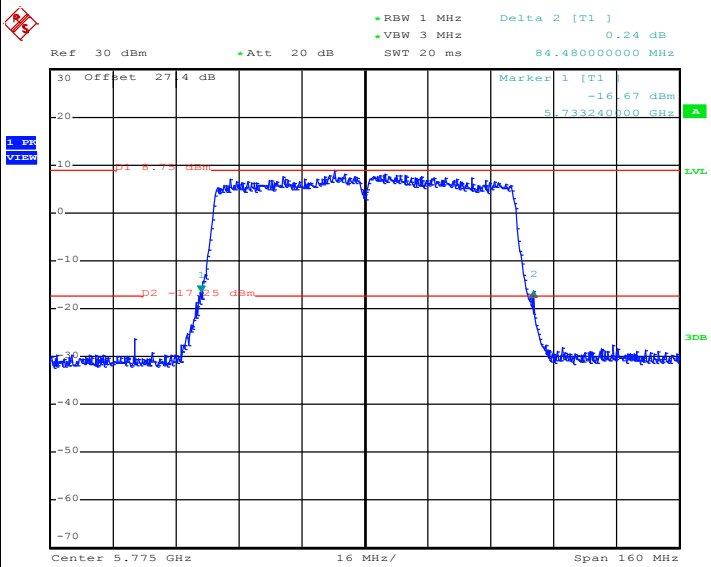
Test Engineer :	Luffy Lin	Temperature :	21~25℃
		Relative Humidity :	51~54%

Band IV												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
VHT20	MCS0	2	149	5745	17.75	18.60	24.70	27.35	**15.10**	17.58	0.5	Pass
VHT20	MCS0	2	157	5785	17.85	18.25	24.30	26.80	15.13	17.56	0.5	Pass
VHT20	MCS0	2	165	5825	17.90	18.00	24.40	26.85	15.13	17.54	0.5	Pass
VHT40	MCS0	2	151	5755	36.60	36.50	41.79	42.12	35.04	36.10	0.5	Pass
VHT40	MCS0	2	159	5795	36.60	36.60	41.40	42.60	35.02	35.85	0.5	Pass
VHT80	MCS0	2	155	5775	**77.04**	**77.04**	82.88	**84.48**	74.24	74.41	0.5	Pass

Minimum 6dB Bandwidth

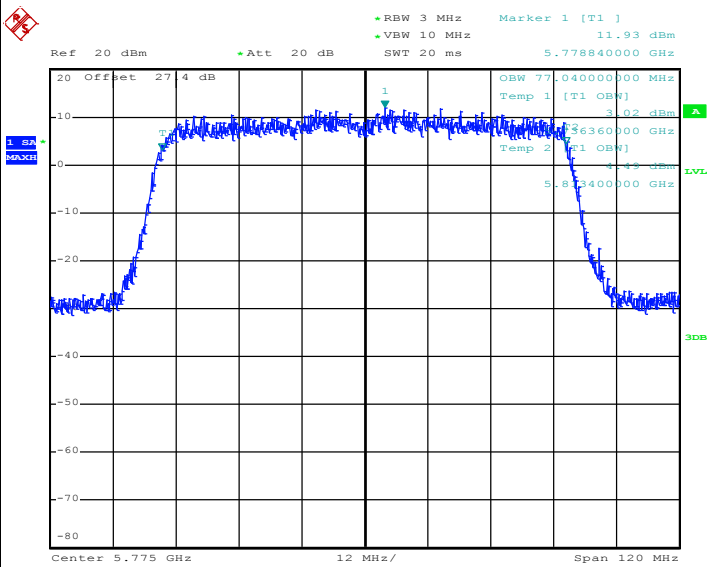


Maximum 26dB Bandwidth



Date: 18.JUN.2019 19:46:47

Maximum 99% Occupied Bandwidth



Date: 18.JUN.2019 19:48:49

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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

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

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

<CDD Modes>

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.

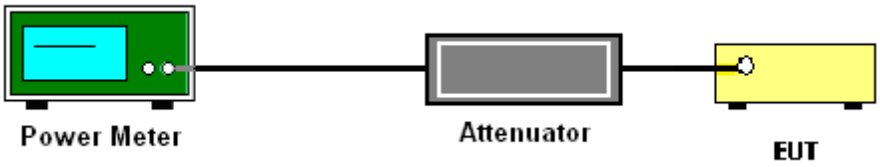
<TXBF Modes>

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

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

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

<CDD Mode>

Test Engineer :	Luffy Lin and Richard Qiu	Temperature :	21~25℃
		Relative Humidity :	51~54%

Band IV												
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	17.30	17.20		30.00	30.00	2.49	2.53	Pass
11a	6Mbps	1	157	5785	17.20	17.10		30.00	30.00	2.49	2.53	Pass
11a	6Mbps	1	165	5825	17.20	17.10		30.00	30.00	2.49	2.53	Pass
HT20	MCS0	1	149	5745	17.20	17.20		30.00	30.00	2.49	2.53	Pass
HT20	MCS0	1	157	5785	17.10	17.10		30.00	30.00	2.49	2.53	Pass
HT20	MCS0	1	165	5825	17.30	17.30		30.00	30.00	2.49	2.53	Pass
HT40	MCS0	1	151	5755	17.10	17.10		30.00	30.00	2.49	2.53	Pass
HT40	MCS0	1	159	5795	17.20	17.00		30.00	30.00	2.49	2.53	Pass
VHT20	MCS0	1	149	5745	17.30	17.30		30.00	30.00	2.49	2.53	Pass
VHT20	MCS0	1	157	5785	17.20	17.20		30.00	30.00	2.49	2.53	Pass
VHT20	MCS0	1	165	5825	17.40	17.40		30.00	30.00	2.49	2.53	Pass
VHT40	MCS0	1	151	5755	17.20	17.20		30.00	30.00	2.49	2.53	Pass
VHT40	MCS0	1	159	5795	17.30	17.10		30.00	30.00	2.49	2.53	Pass
VHT80	MCS0	1	155	5775	17.30	17.10		30.00	30.00	2.49	2.53	Pass
11a	6Mbps	2	149	5745	16.00	16.20	19.11	30.00		2.53		Pass
11a	6Mbps	2	157	5785	16.00	16.20	19.11	30.00		2.53		Pass
11a	6Mbps	2	165	5825	16.00	16.20	19.11	30.00		2.53		Pass
HT20	MCS0	2	149	5745	16.10	16.20	19.16	30.00		2.53		Pass
HT20	MCS0	2	157	5785	16.10	16.10	19.11	30.00		2.53		Pass
HT20	MCS0	2	165	5825	16.30	16.30	19.31	30.00		2.53		Pass
HT40	MCS0	2	151	5755	16.00	16.20	19.11	30.00		2.53		Pass
HT40	MCS0	2	159	5795	16.00	16.10	19.06	30.00		2.53		Pass
VHT20	MCS0	2	149	5745	16.10	16.30	19.21	30.00		2.53		Pass
VHT20	MCS0	2	157	5785	16.10	16.20	19.16	30.00		2.53		Pass
VHT20	MCS0	2	165	5825	16.40	16.40	19.41	30.00		2.53		Pass
VHT40	MCS0	2	151	5755	16.00	16.30	19.16	30.00		2.53		Pass
VHT40	MCS0	2	159	5795	16.00	16.20	19.11	30.00		2.53		Pass
VHT80	MCS0	2	155	5775	16.10	16.50	19.31	30.00		2.53		Pass

<TXBF Mode>

Test Engineer :	Luffy Lin	**Temperature :**	21~25℃
		Relative Humidity :	51~54%

Band IV												
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**	
VHT20	MCS0	2	149	5745	14.40	16.20	18.40	30.00		5.52		Pass
VHT20	MCS0	2	157	5785	14.20	16.10	18.26	30.00		5.52		Pass
VHT20	MCS0	2	165	5825	14.30	16.10	18.30	30.00		5.52		Pass
VHT40	MCS0	2	151	5755	15.00	16.30	18.71	30.00		5.52		Pass
VHT40	MCS0	2	159	5795	14.80	16.20	18.57	30.00		5.52		Pass
VHT80	MCS0	2	155	5775	15.40	16.40	18.94	30.00		5.52		Pass

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

For the band 5.725–5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

<CDD Modes>

 # Method SA-2 #

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW ≥ 1 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(500kHz/RBW) to the test result.
- Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.

<TXBF Modes>

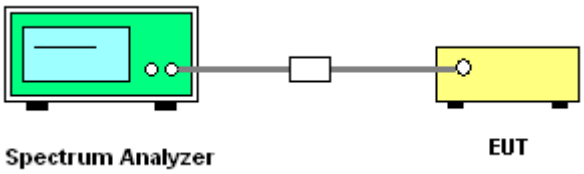
 # Method SA-3 #

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

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW ≥ 1 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time ≤ (number of points in sweep) × T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
- Detector = power averaging (rms).
- Trace mode = max hold.
- Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
   Method (c): Measure and add 10 log(N_{ANT}) dB.
   With this technique, spectrum measurements are performed at each output of the device, but rather than summing the spectra or the spectral peaks across the outputs, the quantity 10 log(N_{ANT}) dB is added to each spectrum value before comparing to the emission limit. The addition of 10 log(N_{ANT}) dB serves to apportion the emission limit among the N_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{ANT}$ th of the PSD limit.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

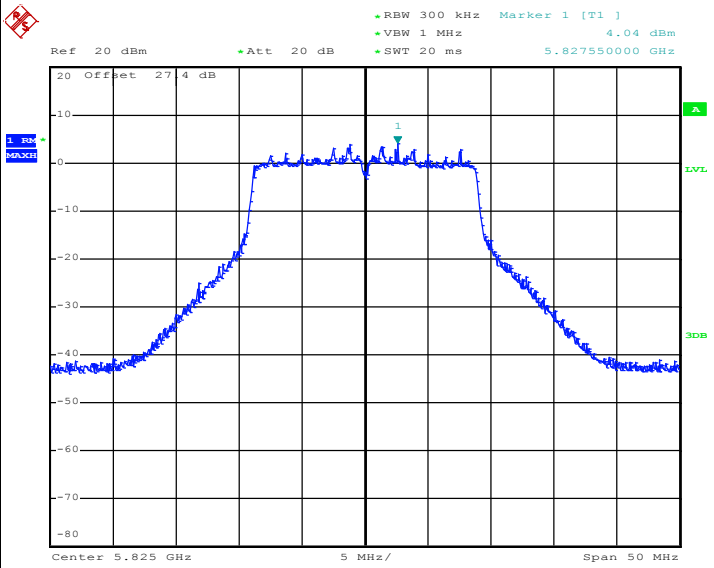
<CDD Modes>

Test Engineer :	Luffy Lin and Richard Qiu	Temperature :	21~25℃
		Relative Humidity :	51~54%

Band IV																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	149	5745	0.00	0.00	2.22	2.22	7.54	6.99		30.00	30.00	2.49	2.53	Pass
11a	6Mbps	1	157	5785	0.00	0.00	2.22	2.22	7.01	7.51		30.00	30.00	2.49	2.53	Pass
11a	6Mbps	1	165	5825	0.00	0.00	2.22	2.22	7.17	7.03		30.00	30.00	2.49	2.53	Pass
VHT20	MCS0	1	149	5745	0.00	0.00	2.22	2.22	7.36	7.38		30.00	30.00	2.49	2.53	Pass
VHT20	MCS0	1	157	5785	0.00	0.00	2.22	2.22	7.47	7.44		30.00	30.00	2.49	2.53	Pass
VHT20	MCS0	1	165	5825	0.00	0.00	2.22	2.22	7.40	7.42		30.00	30.00	2.49	2.53	Pass
VHT40	MCS0	1	151	5755	0.00	0.00	2.22	2.22	3.26	2.90		30.00	30.00	2.49	2.53	Pass
VHT40	MCS0	1	159	5795	0.00	0.00	2.22	2.22	3.79	3.08		30.00	30.00	2.49	2.53	Pass
VHT80	MCS0	1	155	5775	0.00	0.00	2.22	2.22	1.64	1.41		30.00	30.00	2.49	2.53	Pass
11a	6Mbps	2	149	5745	0.00	0.00	2.22		5.99	5.76	9.00	30.00		5.52		Pass
11a	6Mbps	2	157	5785	0.00	0.00	2.22		6.02	6.20	9.21	30.00		5.52		Pass
11a	6Mbps	2	165	5825	0.00	0.00	2.22		5.67	5.93	8.94	30.00		5.52		Pass
VHT20	MCS0	2	149	5745	0.00	0.00	2.22		6.68	6.51	9.69	30.00		5.52		Pass
VHT20	MCS0	2	157	5785	0.00	0.00	2.22		5.52	6.65	9.66	30.00		5.52		Pass
VHT20	MCS0	2	165	5825	0.00	0.00	2.22		6.26	6.96	**9.97**	30.00		5.52		Pass
VHT40	MCS0	2	151	5755	0.00	0.00	2.22		2.46	2.56	5.57	30.00		5.52		Pass
VHT40	MCS0	2	159	5795	0.00	0.00	2.22		3.04	2.68	6.05	30.00		5.52		Pass
VHT80	MCS0	2	155	5775	0.00	0.00	2.22		0.35	1.88	4.89	30.00		5.52		Pass

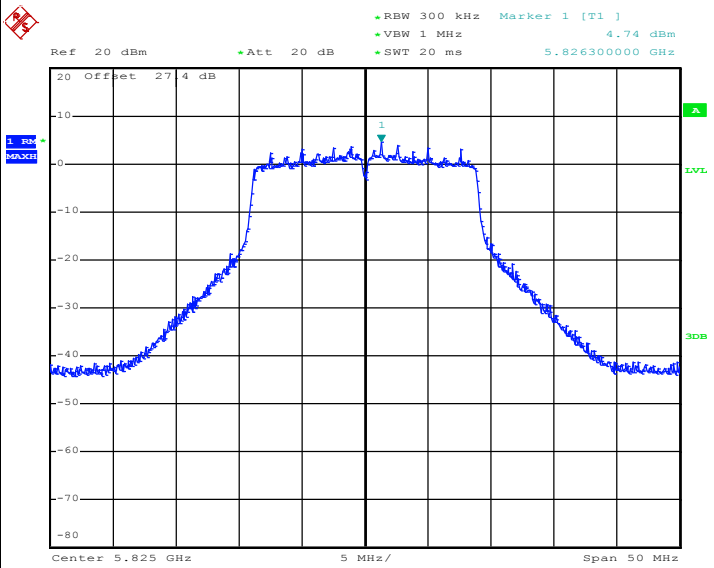
Note: PSD Sum = Max PSD(Ant. 1, Ant. 2) + 10 log (n)

Worst Case Power Density (dBm/MHz) for MIMO Ant. 1



Date: 30.MAY.2019 10:07:45

Worst Case Power Density (dBm/MHz) for MIMO Ant. 2



Date: 30.MAY.2019 10:03:47

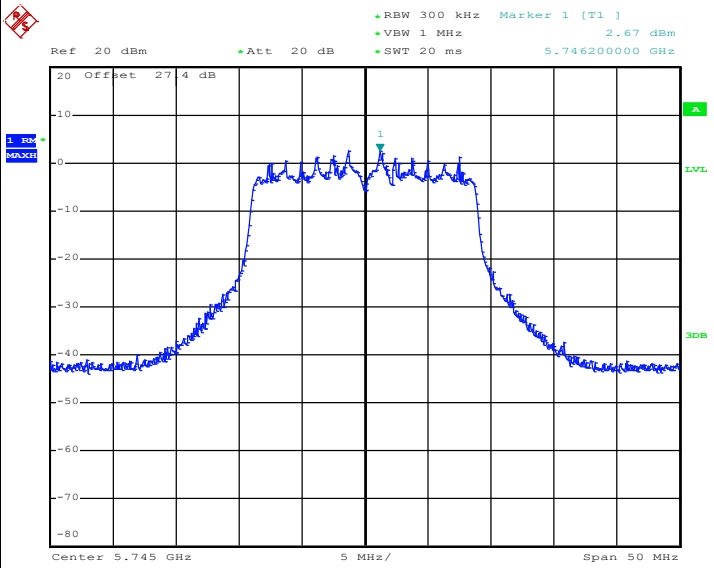
<TXBF Modes>

Test Engineer :	Luffy Lin	Temperature :	21~25℃
		Relative Humidity :	51~54%

Band IV																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
VHT20	MCS0	2	149	5745	0.00	0.00	2.22		4.89	6.44	**9.45**	30.00		5.52		Pass
VHT20	MCS0	2	157	5785	0.00	0.00	2.22		4.91	6.14	9.15	30.00		5.52		Pass
VHT20	MCS0	2	165	5825	0.00	0.00	2.22		5.47	4.98	8.48	30.00		5.52		Pass
VHT40	MCS0	2	151	5755	0.00	0.00	2.22		3.23	2.73	6.24	30.00		5.52		Pass
VHT40	MCS0	2	159	5795	0.00	0.00	2.22		3.61	2.07	6.62	30.00		5.52		Pass
VHT80	MCS0	2	155	5775	0.00	0.00	2.22		3.93	1.75	6.94	30.00		5.52		Pass

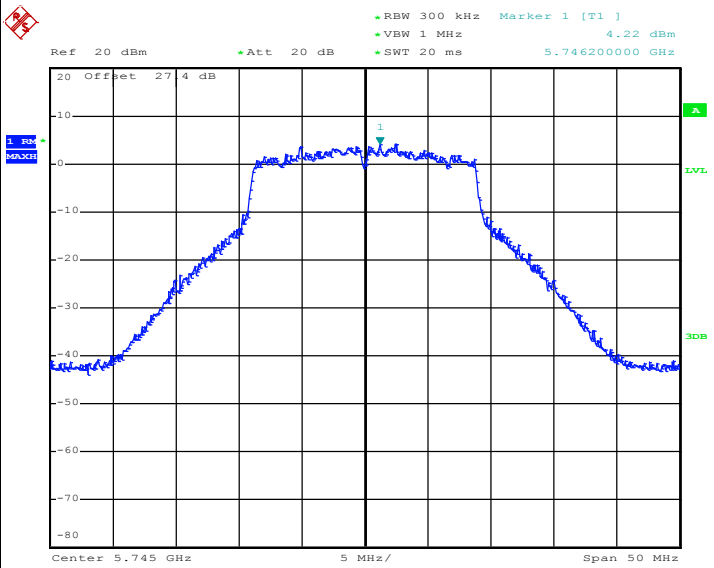
Note: PSD Sum = Max PSD(Ant. 1, Ant. 2) + 10 log (n)

Worst Case Power Density (dBm/MHz) for MIMO Ant. 1



Date: 18.JUN.2019 19:05:22

Worst Case Power Density (dBm/MHz) for MIMO Ant. 2



Date: 18.JUN.2019 19:06:56

3.4 Unwanted Emissions Measurement

3.4.1 Limit of Unwanted Emissions

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

All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBμV/m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBμV/m).

(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) ANSI C63.10-2013 clause 12.7.3 note 97

As specified by regulatory requirements, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit. However, an out-of-band emission that complies with both the average and peak general regulatory limits is not required to satisfy the peak emission limit.

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 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

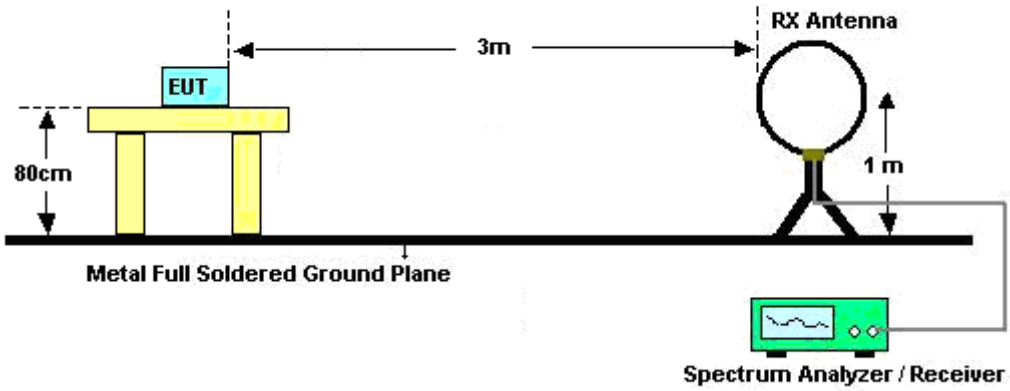
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- 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.

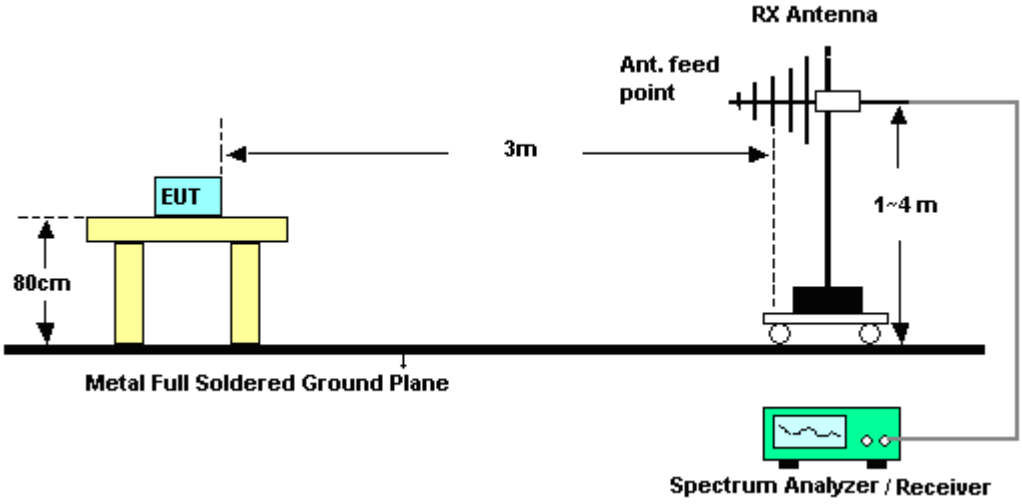
3.4.4 Test Setup

For radiated emissions below 30MHz

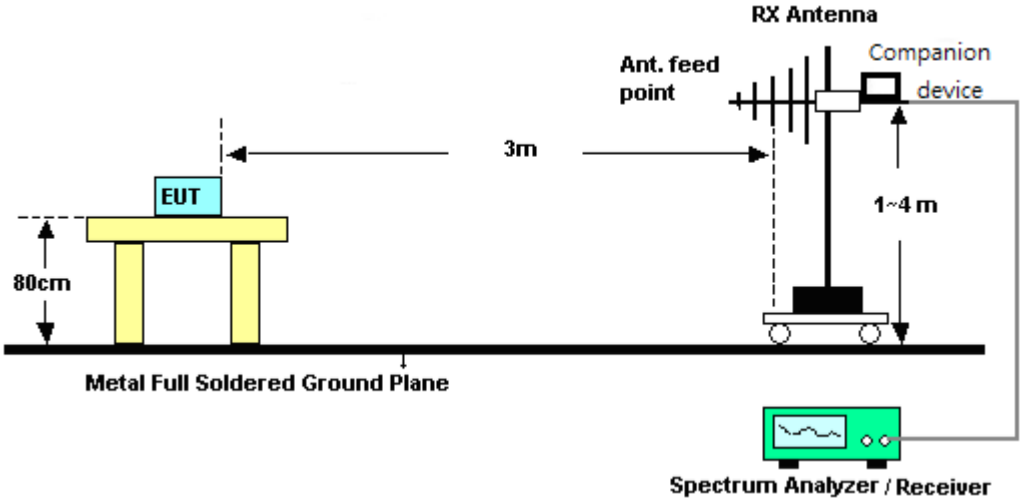


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

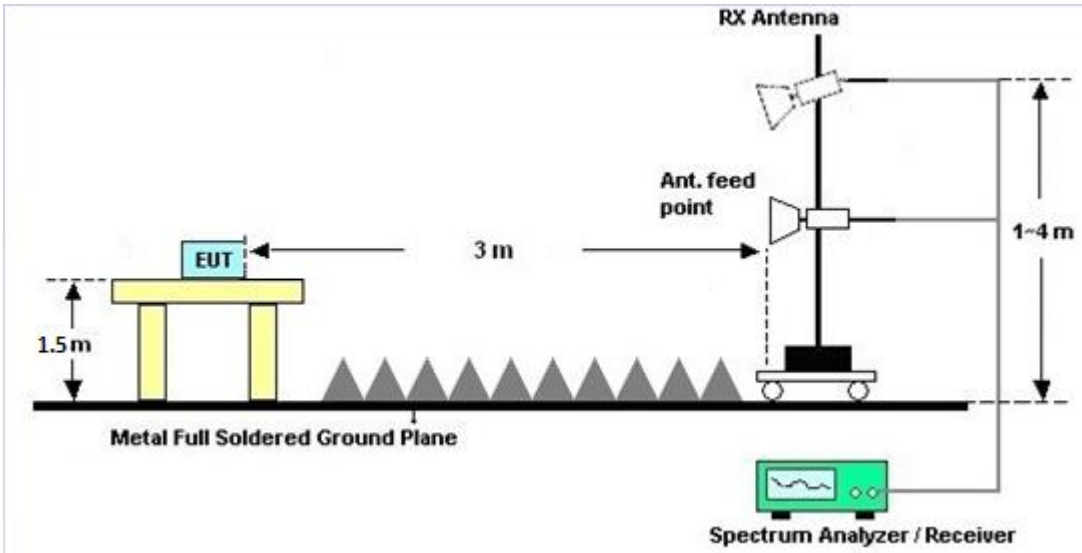


<TXBF Modes>

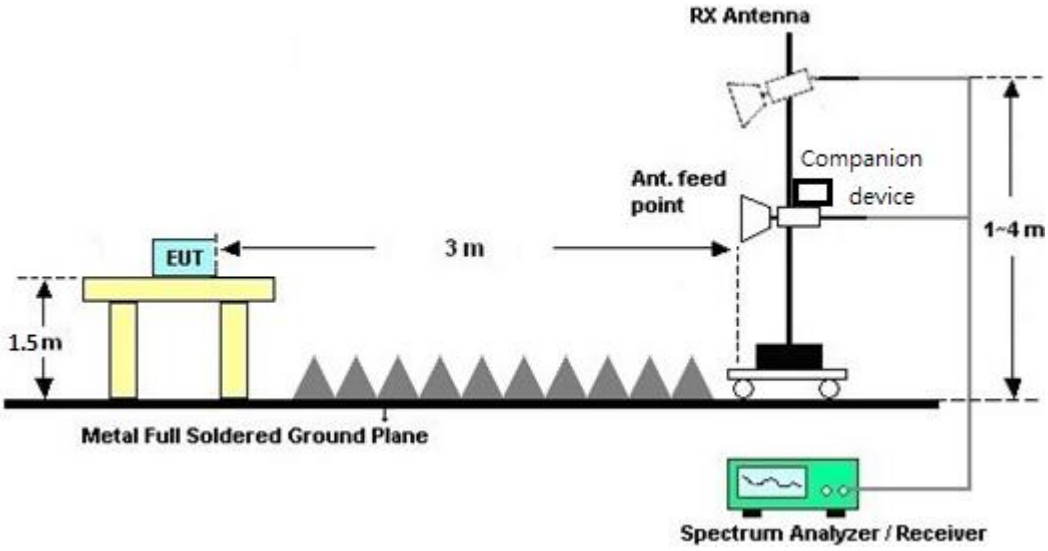


For radiated emissions above 1GHz

<CDD Mode>



<TXBF Modes>



3.4.5 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 per NCC LP0002 section 5.13 was not reported.

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix B and C.

3.4.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix B and C.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

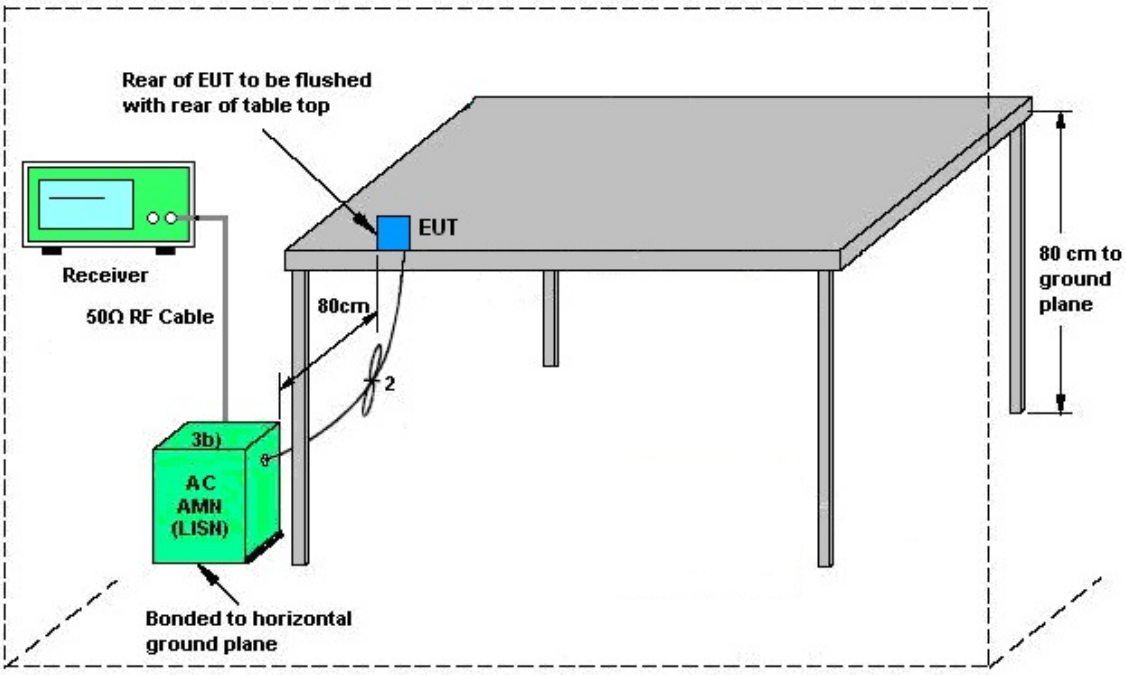
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was 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 should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.5.4 Test Setup



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3.7 Antenna Requirements

3.7.1 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.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = GANT + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(NANT/NSS=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.

<CDD Modes>

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	2.49	2.53	2.53	5.52	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

TXBF modes

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

The EUT supports beamforming for 802.11ac modes.

The directional gain calculation is following F)2)e)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	2.49	2.53	5.52	5.52	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 14, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	May 14, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	May 14, 2019	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	May 14, 2019	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	May 14, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Dec. 31, 2018	May 14, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Dec. 31, 2018	May 14, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	Jun. 29, 2018	May 14, 2019 ~ Jun.14, 2019	Jun. 28, 2019	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 05, 2018	May 14, 2019 ~ Jun.14, 2019	Dec. 04, 2019	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 14, 2018	May 14, 2019 ~ Jun.14, 2019	Nov. 13, 2020	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590074	1GHz~18GHz	May 21, 2018	May 14, 2019~ May 19, 2019	May 20, 2019	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590074	1GHz~18GHz	May 20, 2019	May 21, 2019~ Jun.14, 2019	May 19, 2020	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 06, 2018	May 14, 2019 ~ Jun.14, 2019	Dec. 05, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Feb. 13, 2019	May 14, 2019 ~ Jun.14, 2019	Feb. 12, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30M-18G	Feb. 13, 2019	May 14, 2019 ~ Jun.14, 2019	Feb. 12, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M-18G	Feb. 13, 2019	May 14, 2019 ~ Jun.14, 2019	Feb. 12, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30M~40GHz	Mar. 13, 2019	May 14, 2019 ~ Jun.14, 2019	Mar. 12, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30M~40GHz	Mar. 13, 2019	May 14, 2019 ~ Jun.14, 2019	Mar. 12, 2020	Radiation (03CH13-HY)
Spectrum Analyzer	Agilent	N9010A	MY55370526	10Hz~44GHz	Mar. 19, 2019	May 14, 2019 ~ Jun.14, 2019	Mar. 18, 2020	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	May 14, 2019 ~ Jun.14, 2019	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	May 14, 2019 ~ Jun.14, 2019	N/A	Radiation (03CH13-HY)
Software	AUDIX	E3 6.2009-8-24c	RK-001124	N/A	N/A	May 14, 2019 ~ Jun.14, 2019	N/A	Radiation (03CH13-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY54130085	20Hz ~ 8.4GHz	Nov. 01, 2018	May 14, 2019 ~ Jun.14, 2019	Oct. 31, 2019	Radiation (03CH13-HY)
Filter	Woken	WHKX8-5272.5-6750-18000-40ST	SN5	6.75G Highpass	Mar.13, 2019	May 14, 2019 ~ Jun.14, 2019	Mar. 12, 2020	Radiation (03CH13-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
<CDD Mode>								
Power Sensor	DARE	RPR3006W	16I00054SNO10	10MHz~6GHz	Dec. 19, 2018	May 05, 2019~ Jun. 21, 2019	Dec. 18, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	May 05, 2019~ Jun. 21, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	GEO821763	N/A	Oct. 08, 2018	May 05, 2019~ Jun. 21, 2019	Oct. 07, 2020	Conducted (TH05-HY)
Switch Box & RF Cable	EM	EMSW18	SW1070903	N/A	Dec 19,2018	May 05, 2019~ Jun. 21, 2019	Dec 18 2019	Conducted (TH05-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 16, 2018	May 11, 2019~ May 24, 2019	Jul. 15, 2019	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 04, 2018	May 11, 2019~ May 24, 2019	Dec. 03, 2019	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D&N-6-06	35414&AT-N0602	30MHz~1GHz	Oct. 13, 2018	May 11, 2019~ May 24, 2019	Oct. 12, 2019	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 30, 2018	May 11, 2019~ May 24, 2019	Oct. 29, 2019	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Nov. 22, 2018	May 11, 2019~ May 24, 2019	Nov. 21, 2019	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 14, 2018	May 11, 2019~ May 24, 2019	Nov. 13, 2020	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz ~ 44GHz	Oct. 19, 2018	May 11, 2019~ May 24, 2019	Oct. 18, 2019	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	May 11, 2019~ May 24, 2019	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	May 11, 2019~ May 24, 2019	N/A	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800055007	1GHz~18GHz	Apr. 01, 2019	May 11, 2019~ May 24, 2019	Mar. 31, 2020	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 05, 2018	May 11, 2019~ May 24, 2019	Dec. 04, 2019	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY54130085	N/A	Nov. 01, 2018	May 11, 2019~ May 24, 2019	Oct. 31, 2019	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	May 11, 2019~ May 24, 2019	N/A	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz-30MHz	Mar. 13, 2019	May 11, 2019~ May 24, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz-40GHz	Mar. 13, 2019	May 11, 2019~ May 24, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	30M-18G	Mar. 13, 2019	May 11, 2019~ May 24, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30MHz-40GHz	Mar. 13, 2019	May 11, 2019~ May 24, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN3	6.75GHz High Pass	Sep. 17, 2018	May 11, 2019~ May 24, 2019	Sep. 16, 2019	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1G Low Pass	Sep. 16, 2018	May 11, 2019~ May 24, 2019	Sep. 17, 2019	Radiation (03CH11-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
<TXBF>								
Power Sensor	DARE	RPR3006W	13I00030SNO32	9kHz~6GHz	Dec. 03, 2018	Jun. 10, 2019~ Jun. 20, 2019	Dec. 02, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	Jun. 10, 2019~ Jun. 20, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1208382	N/A	Mar. 27, 2019	Jun. 10, 2019~ Jun. 20, 2019	Mar. 26, 2020	Conducted (TH05-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 16, 2018	Jun. 06, 2019~ Jun. 07, 2019	Jul. 15, 2019	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 04, 2018	Jun. 06, 2019~ Jun. 07, 2019	Dec. 03, 2019	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D&N-6-06	35414&AT-N0602	30MHz~1GHz	Oct. 13, 2018	Jun. 06, 2019~ Jun. 07, 2019	Oct. 12, 2019	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 30, 2018	Jun. 06, 2019~ Jun. 07, 2019	Oct. 29, 2019	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Nov. 22, 2018	Jun. 06, 2019~ Jun. 07, 2019	Nov. 21, 2019	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 14, 2018	Jun. 06, 2019~ Jun. 07, 2019	Nov. 13, 2020	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz ~ 44GHz	Oct. 19, 2018	Jun. 06, 2019~ Jun. 07, 2019	Oct. 18, 2019	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Jun. 06, 2019~ Jun. 07, 2019	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Jun. 06, 2019~ Jun. 07, 2019	N/A	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800055007	1GHz~18GHz	Apr. 01, 2019	Jun. 06, 2019~ Jun. 07, 2019	Mar. 31, 2020	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 05, 2018	Jun. 06, 2019~ Jun. 07, 2019	Dec. 04, 2019	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY54130085	N/A	Nov. 01, 2018	Jun. 06, 2019~ Jun. 07, 2019	Oct. 31, 2019	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001042	N/A	N/A	Jun. 06, 2019~ Jun. 07, 2019	N/A	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz-30MHz	Mar. 13, 2019	Jun. 06, 2019~ Jun. 07, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz-40GHz	Mar. 13, 2019	Jun. 06, 2019~ Jun. 07, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	30M-18G	Mar. 13, 2019	Jun. 06, 2019~ Jun. 07, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30MHz-40GHz	Mar. 13, 2019	Jun. 06, 2019~ Jun. 07, 2019	Mar. 12, 2020	Radiation (03CH11-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN3	6.75GHz High Pass	Sep. 17, 2018	Jun. 06, 2019~ Jun. 07, 2019	Sep. 16, 2019	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1G Low Pass	Sep. 16, 2018	Jun. 06, 2019~ Jun. 07, 2019	Sep. 17, 2019	Radiation (03CH11-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.20

<03CH11-HY>

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.20

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.50

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.20

<03CH13-HY>

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.9

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

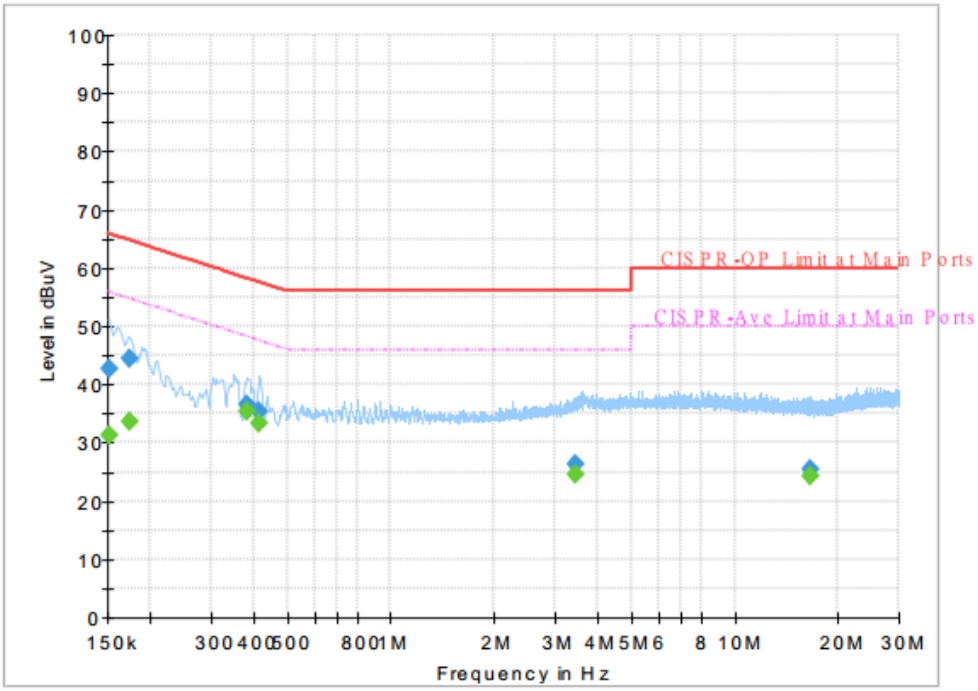
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.4

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.3

Appendix A. AC Conducted Emission Test Results

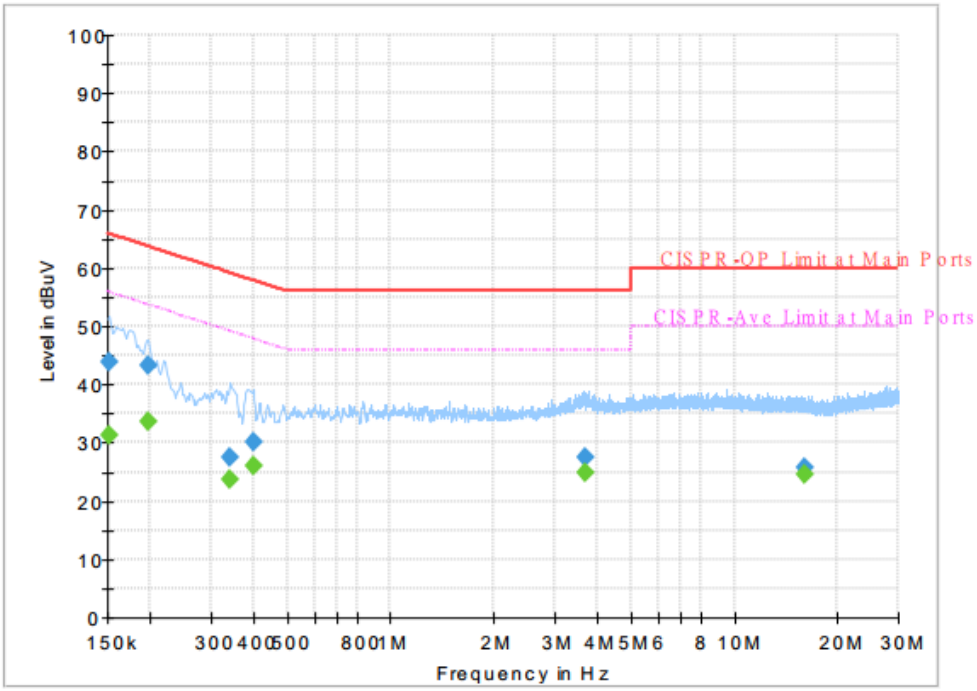
Test Engineer :	Jimmy Chang	**Temperature :**	24~26℃
		Relative Humidity :	52~54%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	31.33	55.88	24.55	L1	OFF	19.5
0.152250	42.55	---	65.88	23.33	L1	OFF	19.5
0.174750	---	33.73	54.73	21.00	L1	OFF	19.5
0.174750	44.51	---	64.73	20.22	L1	OFF	19.5
0.384000	---	35.50	48.19	12.69	L1	OFF	19.5
0.384000	36.69	---	58.19	21.50	L1	OFF	19.5
0.413250	---	33.31	47.58	14.27	L1	OFF	19.5
0.413250	35.50	---	57.58	22.08	L1	OFF	19.5
3.462000	---	24.63	46.00	21.37	L1	OFF	19.7
3.462000	26.45	---	56.00	29.55	L1	OFF	19.7
16.642500	---	24.37	50.00	25.63	L1	OFF	20.1
16.642500	25.48	---	60.00	34.52	L1	OFF	20.1

Test Engineer :	Jimmy Chang	**Temperature :**	24~26℃
		Relative Humidity :	52~54%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	31.27	55.88	24.61	N	OFF	19.5
0.152250	43.77	---	65.88	22.11	N	OFF	19.5
0.197250	---	33.75	53.73	19.98	N	OFF	19.5
0.197250	43.27	---	63.73	20.46	N	OFF	19.5
0.339000	---	23.58	49.23	25.65	N	OFF	19.5
0.339000	27.53	---	59.23	31.70	N	OFF	19.5
0.397500	---	26.08	47.91	21.83	N	OFF	19.5
0.397500	30.08	---	57.91	27.83	N	OFF	19.5
3.682500	---	24.81	46.00	21.19	N	OFF	19.7
3.682500	27.59	---	56.00	28.41	N	OFF	19.7
16.010250	---	24.66	50.00	25.34	N	OFF	20.2
16.010250	25.84	---	60.00	34.16	N	OFF	20.2

Appendix B. Radiated Spurious Emission

Test Engineer :	Hao Shu, Fu Chen, Ken Wu	Temperature :	21~26°C
		Relative Humidity :	52~58%

<CDD Mode>

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		5603.6	52.04	-16.16	68.2	42.93	31.79	10.46	33.14	195	288	P	H
		5696	52.6	-49.65	102.25	43.28	31.98	10.51	33.17	195	288	P	H
		5719.6	62.26	-48.43	110.69	52.87	32.04	10.53	33.18	195	288	P	H
		5724.2	72.23	-48.15	120.38	62.83	32.05	10.53	33.18	195	288	P	H
	*	5745	111.04	-	-	101.6	32.09	10.54	33.19	195	288	P	H
	*	5745	103.14	-	-	93.7	32.09	10.54	33.19	195	288	A	H
													H
													H
		5637.2	51.92	-16.28	68.2	42.86	31.73	10.48	33.15	301	9	P	V
		5692.2	54.99	-44.46	99.45	45.7	31.95	10.51	33.17	301	9	P	V
		5717.2	67.05	-42.97	110.02	57.68	32.03	10.52	33.18	301	9	P	V
		5724.4	73.5	-47.33	120.83	64.1	32.05	10.53	33.18	301	9	P	V
	*	5745	114.71	-	-	105.27	32.09	10.54	33.19	301	9	P	V
	*	5745	106.64	-	-	97.2	32.09	10.54	33.19	301	9	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)
802.11a CH 157 5785MHz		5627.25	48.5	-19.7	68.2	39.43	31.75	10.47	33.15	188	288	P	H
		5693.5	51.56	-48.85	100.41	42.26	31.96	10.51	33.17	188	288	P	H
		5717	50.82	-59.14	109.96	41.45	32.03	10.52	33.18	188	288	P	H
		5723	52.11	-65.53	117.64	42.71	32.05	10.53	33.18	188	288	P	H
	*	5785	111.59	-	-	102.06	32.17	10.56	33.2	188	288	P	H
	*	5785	103.33	-	-	93.8	32.17	10.56	33.2	188	288	A	H
		5853.25	51.41	-63.38	114.79	41.73	32.31	10.59	33.22	188	288	P	H
		5862	52.49	-56.35	108.84	42.78	32.35	10.59	33.23	188	288	P	H
		5875.25	52.34	-52.67	105.01	42.57	32.4	10.6	33.23	188	288	P	H
		5930.5	50.28	-17.92	68.2	40.35	32.56	10.62	33.25	188	288	P	H
													H
													H
		5606.5	49.74	-18.46	68.2	40.63	31.79	10.46	33.14	296	5	P	V
		5695.25	51.2	-50.5	101.7	41.89	31.97	10.51	33.17	296	5	P	V
		5716	52.25	-57.43	109.68	42.88	32.03	10.52	33.18	296	5	P	V
		5724	52.54	-67.38	119.92	43.14	32.05	10.53	33.18	296	5	P	V
	*	5785	113.74	-	-	104.21	32.17	10.56	33.2	296	5	P	V
	*	5785	105.93	-	-	96.4	32.17	10.56	33.2	296	5	A	V
		5852.5	53.97	-62.53	116.5	44.29	32.31	10.59	33.22	296	5	P	V
		5867.25	53.39	-53.98	107.37	43.65	32.37	10.6	33.23	296	5	P	V
		5875.5	51.05	-53.78	104.83	41.28	32.4	10.6	33.23	296	5	P	V
		5931	49.93	-18.27	68.2	40	32.56	10.62	33.25	296	5	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)
	*	5825	110.9	-	-	101.28	32.25	10.58	33.21	186	291	P	H
	*	5825	103.12	-	-	93.5	32.25	10.58	33.21	186	291	A	H
		5853	63.64	-51.72	115.36	53.96	32.31	10.59	33.22	186	291	P	H
		5855	62.64	-48.16	110.8	52.95	32.32	10.59	33.22	186	291	P	H
		5882	55.12	-44.88	100	45.32	32.43	10.6	33.23	186	291	P	H
		5929.4	51.31	-16.89	68.2	41.38	32.56	10.62	33.25	186	291	P	H
													H
802.11a													H
CH 165	*	5825	114.28	-	-	104.66	32.25	10.58	33.21	292	9	P	V
5825MHz	*	5825	106.12	-	-	96.5	32.25	10.58	33.21	292	9	A	V
		5851.6	65.91	-52.64	118.55	56.23	32.31	10.59	33.22	292	9	P	V
		5855.4	63.44	-47.25	110.69	53.75	32.32	10.59	33.22	292	9	P	V
		5884.6	55.32	-42.75	98.07	45.51	32.44	10.6	33.23	292	9	P	V
		5925.6	52.84	-15.36	68.2	42.92	32.55	10.62	33.25	292	9	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 149 5745MHz		11490	54.14	-19.86	74	59.4	39.7	17.23	62.19	263	43	P	H
		11490	43.76	-10.24	54	49.02	39.7	17.23	62.19	263	43	A	H
		17235	47.8	-20.4	68.2	44.31	40.51	22.06	59.08	100	0	P	H
													H
		11490	46.5	-27.5	74	51.76	39.7	17.23	62.19	100	0	P	V
		17235	48.65	-19.55	68.2	45.16	40.51	22.06	59.08	100	0	P	V
													V
													V
802.11a CH 157 5785MHz		11570	55.9	-18.1	74	61.33	39.49	17.34	62.26	298	81	P	H
		11570	45.16	-8.84	54	50.59	39.49	17.34	62.26	298	81	A	H
		17355	46.65	-21.55	68.2	42.31	40.98	22.18	58.82	100	0	P	H
													H
		11570	45.98	-28.02	74	51.41	39.49	17.34	62.26	100	0	P	V
		17355	47.78	-20.42	68.2	43.44	40.98	22.18	58.82	100	0	P	V
													V
													V
802.11a CH 165 5825MHz		11650	55.78	-18.22	74	61.44	39.2	17.46	62.32	281	78	P	H
		11650	44.84	-9.16	54	50.5	39.2	17.46	62.32	281	78	A	H
		17475	48.93	-19.27	68.2	43.62	41.58	22.29	58.56	100	0	P	H
													H
		11650	46.66	-27.34	74	52.32	39.2	17.46	62.32	100	0	P	V
		17475	47.69	-20.51	68.2	42.38	41.58	22.29	58.56	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (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)
		5629.025	50.69	-17.51	68.2	41.62	31.74	10.48	33.15	196	290	P	H
		5687.75	53.04	-43.13	96.17	43.77	31.93	10.51	33.17	196	290	P	H
		5719.925	65.78	-45	110.78	56.39	32.04	10.53	33.18	196	290	P	H
		5724.425	75.37	-45.52	120.89	65.97	32.05	10.53	33.18	196	290	P	H
	*	5745	111.31	-	-	101.87	32.09	10.54	33.19	196	290	P	H
	*	5745	103.71	-	-	94.27	32.09	10.54	33.19	196	290	A	H
802.11ac													H
VHT20													H
CH 149		5646.575	53.31	-14.89	68.2	44.27	31.71	10.49	33.16	302	334	P	V
5745MHz		5696.975	55.54	-47.43	102.97	46.22	31.98	10.51	33.17	302	334	P	V
		5719.925	68.36	-42.42	110.78	58.97	32.04	10.53	33.18	302	334	P	V
		5725.1	77.35	-56.85	134.2	67.95	32.05	10.53	33.18	302	334	P	V
	*	5745	113.95	-	-	104.51	32.09	10.54	33.19	302	334	P	V
	*	5745	106.36	-	-	96.92	32.09	10.54	33.19	302	334	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)
		5611.75	51.04	-17.16	68.2	41.94	31.78	10.47	33.15	189	290	P	H
		5686	50.79	-44.08	94.87	41.53	31.92	10.51	33.17	189	290	P	H
		5703	51.71	-54.33	106.04	42.35	32.01	10.52	33.17	189	290	P	H
		5721	52.04	-61.04	113.08	42.65	32.04	10.53	33.18	189	290	P	H
	*	5785	111.32	-	-	101.79	32.17	10.56	33.2	189	290	P	H
	*	5785	103.74	-	-	94.21	32.17	10.56	33.2	189	290	A	H
		5853	51.92	-63.44	115.36	42.24	32.31	10.59	33.22	189	290	P	H
		5860	52.55	-56.85	109.4	42.85	32.34	10.59	33.23	189	290	P	H
		5889	52.11	-42.7	94.81	42.27	32.46	10.61	33.23	189	290	P	H
		5925.25	51.35	-16.85	68.2	41.43	32.55	10.62	33.25	189	290	P	H
802.11ac													H
VHT20													H
CH 157		5632.5	50.07	-18.13	68.2	41	31.74	10.48	33.15	298	334	P	V
5785MHz		5698.25	52.33	-51.58	103.91	43	31.99	10.51	33.17	298	334	P	V
		5718.75	52.08	-58.37	110.45	42.69	32.04	10.53	33.18	298	334	P	V
		5722.75	52.65	-64.42	117.07	43.25	32.05	10.53	33.18	298	334	P	V
	*	5785	113.55	-	-	104.02	32.17	10.56	33.2	298	334	P	V
	*	5785	105.77	-	-	96.24	32.17	10.56	33.2	298	334	A	V
		5854	51.84	-61.24	113.08	42.15	32.32	10.59	33.22	298	334	P	V
		5871.5	53.04	-53.14	106.18	43.28	32.39	10.6	33.23	298	334	P	V
		5910	51.59	-27.68	79.27	41.7	32.52	10.61	33.24	298	334	P	V
		5938	51	-17.2	68.2	41.04	32.58	10.63	33.25	298	334	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)
	*	5825	111.03	-	-	101.41	32.25	10.58	33.21	191	289	P	H
	*	5825	103.31	-	-	93.69	32.25	10.58	33.21	191	289	A	H
		5849.96	63.8	-70.4	134.2	54.13	32.3	10.59	33.22	191	289	P	H
		5859.185	56.61	-53.02	109.63	46.9	32.34	10.59	33.22	191	289	P	H
		5878.25	53.25	-49.54	102.79	43.47	32.41	10.6	33.23	191	289	P	H
		5936.265	51	-17.2	68.2	41.06	32.57	10.62	33.25	191	289	P	H
802.11ac													H
VHT20													H
CH 165	*	5825	113.04	-	-	103.42	32.25	10.58	33.21	296	339	P	V
5825MHz	*	5825	105.14	-	-	95.52	32.25	10.58	33.21	296	339	A	V
		5849.96	64.14	-70.06	134.2	54.47	32.3	10.59	33.22	296	339	P	V
		5858.57	57.17	-52.63	109.8	47.47	32.33	10.59	33.22	296	339	P	V
		5882.76	54.14	-45.3	99.44	44.34	32.43	10.6	33.23	296	339	P	V
		5936.265	51.41	-16.79	68.2	41.47	32.57	10.62	33.25	296	339	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 149 5745MHz		11490	55.79	-18.21	74	61.05	39.7	17.23	62.19	296	84	P	H
		11490	44.21	-9.79	54	49.47	39.7	17.23	62.19	296	84	A	H
		17235	47.86	-20.34	68.2	44.37	40.51	22.06	59.08	100	0	P	H
													H
		11490	46.33	-27.67	74	51.59	39.7	17.23	62.19	100	0	P	V
		17235	47.82	-20.38	68.2	44.33	40.51	22.06	59.08	100	0	P	V
													V
													V
802.11ac VHT20 CH 157 5785MHz		11570	53.09	-20.91	74	58.52	39.49	17.34	62.26	311	102	P	H
		11570	42.87	-11.13	54	48.3	39.49	17.34	62.26	311	102	A	H
		17355	48.97	-19.23	68.2	44.63	40.98	22.18	58.82	100	0	P	H
													H
		11570	47.14	-26.86	74	52.57	39.49	17.34	62.26	100	0	P	V
		17355	48.49	-19.71	68.2	44.15	40.98	22.18	58.82	100	0	P	V
													V
													V
802.11ac VHT20 CH 165 5825MHz		11650	53.49	-20.51	74	59.15	39.2	17.46	62.32	298	80	P	H
		11650	44	-10	54	49.66	39.2	17.46	62.32	298	80	A	H
		17475	48.91	-19.29	68.2	43.6	41.58	22.29	58.56	100	0	P	H
													H
		11650	45.76	-28.24	74	51.42	39.2	17.46	62.32	100	0	P	V
		17475	49.78	-18.42	68.2	44.47	41.58	22.29	58.56	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac 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)
		5611	50.4	-17.8	68.2	41.3	31.78	10.47	33.15	196	289	P	H
		5685.75	54.63	-40.06	94.69	45.38	31.91	10.51	33.17	196	289	P	H
		5720	76.89	-33.91	110.8	67.5	32.04	10.53	33.18	196	289	P	H
		5724	79.81	-40.11	119.92	70.41	32.05	10.53	33.18	196	289	P	H
	*	5755	109.48	-	-	100.01	32.11	10.55	33.19	196	289	P	H
	*	5755	101.29	-	-	91.82	32.11	10.55	33.19	196	289	A	H
		5854.75	50.92	-60.45	111.37	41.23	32.32	10.59	33.22	196	289	P	H
		5861.75	51.77	-57.14	108.91	42.06	32.35	10.59	33.23	196	289	P	H
		5914.25	51.9	-24.23	76.13	41.99	32.53	10.62	33.24	196	289	P	H
		5927.75	50.04	-18.16	68.2	40.11	32.56	10.62	33.25	196	289	P	H
802.11ac													H
VHT40													H
CH 151		5643.25	52.44	-15.76	68.2	43.41	31.71	10.48	33.16	287	335	P	V
5755MHz		5698.25	59.79	-44.12	103.91	50.46	31.99	10.51	33.17	287	335	P	V
		5719.25	81.01	-29.58	110.59	71.62	32.04	10.53	33.18	287	335	P	V
		5724.75	83.38	-38.25	121.63	73.98	32.05	10.53	33.18	287	335	P	V
	*	5755	112.42	-	-	102.95	32.11	10.55	33.19	287	335	P	V
	*	5755	104.27	-	-	94.8	32.11	10.55	33.19	287	335	A	V
		5853.5	52.28	-61.94	114.22	42.6	32.31	10.59	33.22	287	335	P	V
		5863.5	52.14	-56.28	108.42	42.42	32.35	10.6	33.23	287	335	P	V
		5916	52.42	-22.42	74.84	42.51	32.53	10.62	33.24	287	335	P	V
		5938.75	50.52	-17.68	68.2	40.56	32.58	10.63	33.25	287	335	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)
		5618.5	50.08	-18.12	68.2	41	31.76	10.47	33.15	195	287	P	H
		5677.5	51.04	-37.55	88.59	41.85	31.86	10.5	33.17	195	287	P	H
		5717.5	55.46	-54.64	110.1	46.09	32.03	10.52	33.18	195	287	P	H
		5720.25	54.52	-56.85	111.37	45.13	32.04	10.53	33.18	195	287	P	H
	*	5795	109.47	-	-	99.91	32.19	10.57	33.2	195	287	P	H
	*	5795	101.61	-	-	92.05	32.19	10.57	33.2	195	287	A	H
		5850.75	60.04	-60.45	120.49	50.37	32.3	10.59	33.22	195	287	P	H
		5861.25	58.24	-50.81	109.05	48.53	32.35	10.59	33.23	195	287	P	H
		5882.25	53.97	-45.85	99.82	44.17	32.43	10.6	33.23	195	287	P	H
		5944	52.96	-15.24	68.2	42.99	32.59	10.63	33.25	195	287	P	H
802.11ac													H
VHT40													H
CH 159		5601.75	50.4	-17.8	68.2	41.28	31.8	10.46	33.14	319	311	P	V
5795MHz		5698.75	53.94	-50.34	104.28	44.61	31.99	10.51	33.17	319	311	P	V
		5714	56.75	-52.37	109.12	47.38	32.03	10.52	33.18	319	311	P	V
		5723.5	57.27	-61.51	118.78	47.87	32.05	10.53	33.18	319	311	P	V
	*	5795	112.15	-	-	102.59	32.19	10.57	33.2	319	311	P	V
	*	5795	103.95	-	-	94.39	32.19	10.57	33.2	319	311	A	V
		5852	62.13	-55.51	117.64	52.45	32.31	10.59	33.22	319	311	P	V
		5857.25	59.06	-51.11	110.17	49.36	32.33	10.59	33.22	319	311	P	V
		5877.25	55.02	-48.51	103.53	45.24	32.41	10.6	33.23	319	311	P	V
		5930.75	51.47	-16.73	68.2	41.54	32.56	10.62	33.25	319	311	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	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 VHT40 CH 151 5755MHz		11510	49.41	-24.59	74	54.7	39.67	17.25	62.21	100	0	P	H
		17265	48.86	-19.34	68.2	45.19	40.6	22.09	59.02	100	0	P	H
													H
													H
		11510	47.01	-26.99	74	52.3	39.67	17.25	62.21	100	0	P	V
		17265	47.7	-20.5	68.2	44.03	40.6	22.09	59.02	100	0	P	V
													V
													V
802.11ac VHT40 CH 159 5795MHz		11590	49.08	-24.92	74	54.55	39.43	17.37	62.27	100	0	P	H
		17385	49.37	-18.83	68.2	44.8	41.12	22.2	58.75	100	0	P	H
													H
													H
		11590	45.44	-28.56	74	50.91	39.43	17.37	62.27	100	0	P	V
		17385	48.87	-19.33	68.2	44.3	41.12	22.2	58.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac 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)
		5650	55.11	-13.09	68.2	46.08	31.7	10.49	33.16	197	294	P	H
		5695.25	74.58	-27.12	101.7	65.27	31.97	10.51	33.17	197	294	P	H
		5717	76.61	-33.35	109.96	67.24	32.03	10.52	33.18	197	294	P	H
		5724.75	77.35	-44.28	121.63	67.95	32.05	10.53	33.18	197	294	P	H
	*	5775	106.11	-	-	96.6	32.15	10.56	33.2	197	294	P	H
	*	5775	98.14	-	-	88.63	32.15	10.56	33.2	197	294	A	H
		5851.75	74.87	-43.34	118.21	65.19	32.31	10.59	33.22	197	294	P	H
		5858.25	72.92	-36.97	109.89	63.22	32.33	10.59	33.22	197	294	P	H
		5875	68.05	-37.15	105.2	58.28	32.4	10.6	33.23	197	294	P	H
		5934.25	52.99	-15.21	68.2	43.05	32.57	10.62	33.25	197	294	P	H
802.11ac													H
VHT80													H
CH 155		5650	57.43	-10.77	68.2	48.4	31.7	10.49	33.16	310	309	P	V
5775MHz		5697.5	76.84	-26.52	103.36	67.51	31.99	10.51	33.17	310	309	P	V
		5719.25	81.5	-29.09	110.59	72.11	32.04	10.53	33.18	310	309	P	V
		5723.5	82.41	-36.37	118.78	73.01	32.05	10.53	33.18	310	309	P	V
	*	5775	108.52	-	-	99.01	32.15	10.56	33.2	310	309	P	V
	*	5775	100.66	-	-	91.15	32.15	10.56	33.2	310	309	A	V
		5850	75.7	-46.5	122.2	66.03	32.3	10.59	33.22	310	309	P	V
		5855	75.14	-35.66	110.8	65.45	32.32	10.59	33.22	310	309	P	V
		5875.5	69.72	-35.11	104.83	59.95	32.4	10.6	33.23	310	309	P	V
		5927.25	53.24	-14.96	68.2	43.32	32.55	10.62	33.25	310	309	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)
802.11ac VHT80 CH 155 5775MHz		11550	46.87	-27.13	74	52.25	39.55	17.31	62.24	-	-	P	H
		17325	47.99	-20.21	68.2	43.89	40.83	22.15	58.88	100	0	P	H
													H
													H
		11550	45.27	-28.73	74	50.65	39.55	17.31	62.24	-	-	P	V
		17325	47.14	-21.06	68.2	43.04	40.83	22.15	58.88	100	0	P	V
													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 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)
5GHz 802.11a LF		39.7	26.17	-13.83	40	38.51	19.2	0.83	32.37	-	-	P	H
		60.07	33.53	-6.47	40	53.2	11.64	1.05	32.36	100	0	P	H
		97.9	28.21	-15.29	43.5	43.75	15.45	1.33	32.32	-	-	P	H
		844.8	31.98	-14.02	46	30.61	28.95	4.06	31.64	-	-	P	H
		903.97	32.25	-13.75	46	30.36	29	4.2	31.31	-	-	P	H
		950.53	33.98	-12.02	46	29.96	30.6	4.31	30.89	-	-	P	H
													H
													H
													H
													H
													H
													H
		42.61	35.55	-4.45	40	49.3	17.75	0.87	32.37	100	9	Q	V
		42.61	38.41	-1.59	40	52.16	17.75	0.87	32.37	100	9	P	V
		86.26	32.32	-7.68	40	49.38	14	1.27	32.33	-	-	P	V
		140.58	21.59	-21.91	43.5	35.18	17.13	1.57	32.29	-	-	P	V
		859.35	31.88	-14.12	46	30.06	29.3	4.09	31.57	-	-	P	V
		901.06	32.03	-13.97	46	30.19	28.99	4.19	31.34	-	-	P	V
		957.32	33.82	-12.18	46	29.41	30.89	4.34	30.82	-	-	P	V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 2	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 149 5745MHz		5625.425	50.59	-17.61	68.2	41.52	31.75	10.47	33.15	100	60	P	H
		5694.275	55.51	-45.47	100.98	46.2	31.97	10.51	33.17	100	60	P	H
		5716.55	66.94	-42.9	109.84	57.57	32.03	10.52	33.18	100	60	P	H
		5723.75	77.96	-41.39	119.35	68.56	32.05	10.53	33.18	100	60	P	H
	*	5745	115.76	-	-	106.32	32.09	10.54	33.19	100	60	P	H
	*	5745	108.11	-	-	98.67	32.09	10.54	33.19	100	60	A	H
													H
													H
		5628.575	50.34	-17.86	68.2	41.27	31.74	10.48	33.15	368	14	P	V
		5699.9	53.01	-52.12	105.13	43.67	32	10.51	33.17	368	14	P	V
		5717.675	64.02	-46.13	110.15	54.64	32.04	10.52	33.18	368	14	P	V
		5724.875	73.31	-48.61	121.92	63.91	32.05	10.53	33.18	368	14	P	V
	*	5745	111.06	-	-	101.62	32.09	10.54	33.19	368	14	P	V
	*	5745	103.76	-	-	94.32	32.09	10.54	33.19	368	14	A	V
													V
													V

WIFI Ant. 2	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		5603.5	50.24	-17.96	68.2	41.13	31.79	10.46	33.14	100	59	P	H
		5684.75	51.06	-42.89	93.95	41.81	31.91	10.51	33.17	100	59	P	H
		5719.75	52.25	-58.48	110.73	42.86	32.04	10.53	33.18	100	59	P	H
		5723.25	52.45	-65.76	118.21	43.05	32.05	10.53	33.18	100	59	P	H
	*	5785	115.31	-	-	105.78	32.17	10.56	33.2	100	59	P	H
	*	5785	107.77	-	-	98.24	32.17	10.56	33.2	100	59	A	H
		5851.5	55.19	-63.59	118.78	45.51	32.31	10.59	33.22	100	59	P	H
		5864	54.78	-53.5	108.28	45.05	32.36	10.6	33.23	100	59	P	H
		5884	52.3	-46.22	98.52	42.49	32.44	10.6	33.23	100	59	P	H
		5935.25	51.99	-16.21	68.2	42.05	32.57	10.62	33.25	100	59	P	H
													H
													H
		5631	49.72	-18.48	68.2	40.65	31.74	10.48	33.15	400	12	P	V
		5688.5	51.27	-45.45	96.72	42	31.93	10.51	33.17	400	12	P	V
		5711.25	50.07	-58.28	108.35	40.71	32.02	10.52	33.18	400	12	P	V
		5722.25	50.08	-65.85	115.93	40.69	32.04	10.53	33.18	400	12	P	V
	*	5785	110.96	-	-	101.43	32.17	10.56	33.2	400	12	P	V
	*	5785	103.9	-	-	94.37	32.17	10.56	33.2	400	12	A	V
		5850.75	50.83	-69.66	120.49	41.16	32.3	10.59	33.22	400	12	P	V
		5865.75	50.53	-57.26	107.79	40.8	32.36	10.6	33.23	400	12	P	V
		5888.5	51.18	-44	95.18	41.35	32.45	10.61	33.23	400	12	P	V
		5942.25	50.55	-17.65	68.2	40.59	32.58	10.63	33.25	400	12	P	V
													V
													V

WIFI Ant. 2	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	115.62	-	-	106	32.25	10.58	33.21	100	67	P	H
	*	5825	107.96	-	-	98.34	32.25	10.58	33.21	100	67	A	H
		5853.65	68.11	-45.77	113.88	58.43	32.31	10.59	33.22	100	67	P	H
		5857.545	66.15	-43.94	110.09	56.45	32.33	10.59	33.22	100	67	P	H
		5877.43	55.61	-47.78	103.39	45.83	32.41	10.6	33.23	100	67	P	H
		5945.9	52.91	-15.29	68.2	42.94	32.59	10.63	33.25	100	67	P	H
													H
802.11a													H
CH 165	*	5825	111.36	-	-	101.74	32.25	10.58	33.21	375	13	P	V
5825MHz	*	5825	103.94	-	-	94.32	32.25	10.58	33.21	375	13	A	V
		5851.19	62.96	-56.53	119.49	53.29	32.3	10.59	33.22	375	13	P	V
		5855.7	60.94	-49.66	110.6	51.25	32.32	10.59	33.22	375	13	P	V
		5895.88	52.15	-37.56	89.71	42.3	32.48	10.61	33.24	375	13	P	V
		5948.155	52.04	-16.16	68.2	42.06	32.6	10.63	33.25	375	13	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. 2	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 149 5745MHz		11490	45.7	-28.3	74	50.96	39.7	17.23	62.19	100	0	P	H
		17235	48.48	-19.72	68.2	44.99	40.51	22.06	59.08	100	0	P	H
													H
													H
		11490	47.2	-26.8	74	52.46	39.7	17.23	62.19	100	0	P	V
		17235	48.02	-20.18	68.2	44.53	40.51	22.06	59.08	100	0	P	V
													V
													V
802.11a CH 157 5785MHz		11570	45.49	-28.51	74	50.92	39.49	17.34	62.26	100	0	P	H
		17355	47.29	-20.91	68.2	42.95	40.98	22.18	58.82	100	0	P	H
													H
													H
		11570	45.82	-28.18	74	51.25	39.49	17.34	62.26	100	0	P	V
		17355	47.27	-20.93	68.2	42.93	40.98	22.18	58.82	100	0	P	V
													V
													V
802.11a CH 165 5825MHz		11650	45.9	-28.1	74	51.56	39.2	17.46	62.32	100	0	P	H
		17475	48.3	-19.9	68.2	42.99	41.58	22.29	58.56	100	0	P	H
													H
													H
		11650	46.77	-27.23	74	52.43	39.2	17.46	62.32	100	0	P	V
		17475	48.56	-19.64	68.2	43.25	41.58	22.29	58.56	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 2	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)
		5642.975	51.56	-16.64	68.2	42.53	31.71	10.48	33.16	100	72	P	H
		5698.1	55.55	-48.25	103.8	46.22	31.99	10.51	33.17	100	72	P	H
		5719.7	69.19	-41.53	110.72	59.8	32.04	10.53	33.18	100	72	P	H
		5724.2	79.49	-40.89	120.38	70.09	32.05	10.53	33.18	100	72	P	H
	*	5745	115.13	-	-	105.69	32.09	10.54	33.19	100	72	P	H
	*	5745	107.47	-	-	98.03	32.09	10.54	33.19	100	72	A	H
802.11ac													H
VHT20													H
CH 149		5615.3	49.92	-18.28	68.2	40.83	31.77	10.47	33.15	387	14	P	V
5745MHz		5692.925	52.25	-47.73	99.98	42.95	31.96	10.51	33.17	387	14	P	V
		5719.025	64.16	-46.37	110.53	54.77	32.04	10.53	33.18	387	14	P	V
		5724.875	74.21	-47.71	121.92	64.81	32.05	10.53	33.18	387	14	P	V
	*	5745	110.98	-	-	101.54	32.09	10.54	33.19	387	14	P	V
	*	5745	103.23	-	-	93.79	32.09	10.54	33.19	387	14	A	V
													V
													V

WIFI Ant. 2	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)
		5610.25	50.65	-17.55	68.2	41.55	31.78	10.47	33.15	100	66	P	H
		5697	50.93	-52.06	102.99	41.61	31.98	10.51	33.17	100	66	P	H
		5716.25	52.66	-57.09	109.75	43.29	32.03	10.52	33.18	100	66	P	H
		5722.5	51.89	-64.61	116.5	42.5	32.04	10.53	33.18	100	66	P	H
	*	5785	114.92	-	-	105.39	32.17	10.56	33.2	100	66	P	H
	*	5785	107.32	-	-	97.79	32.17	10.56	33.2	100	66	A	H
		5853.5	53.94	-60.28	114.22	44.26	32.31	10.59	33.22	100	66	P	H
		5868.25	54.53	-52.56	107.09	44.79	32.37	10.6	33.23	100	66	P	H
		5883.75	53.55	-45.15	98.7	43.74	32.44	10.6	33.23	100	66	P	H
		5944.75	51.99	-16.21	68.2	42.02	32.59	10.63	33.25	100	66	P	H
802.11ac													H
VHT20													H
CH 157		5604	49.93	-18.27	68.2	40.82	31.79	10.46	33.14	400	12	P	V
5785MHz		5681.25	50.17	-41.19	91.36	40.95	31.89	10.5	33.17	400	12	P	V
		5709.75	49.38	-58.55	107.93	40.02	32.02	10.52	33.18	400	12	P	V
		5722.25	49.08	-66.85	115.93	39.69	32.04	10.53	33.18	400	12	P	V
	*	5785	111.03	-	-	101.5	32.17	10.56	33.2	400	12	P	V
	*	5785	103.44	-	-	93.91	32.17	10.56	33.2	400	12	A	V
		5851.5	52.07	-66.71	118.78	42.39	32.31	10.59	33.22	400	12	P	V
		5855	51.02	-59.78	110.8	41.33	32.32	10.59	33.22	400	12	P	V
		5900	51.29	-35.37	86.66	41.42	32.5	10.61	33.24	400	12	P	V
		5926	52.87	-15.33	68.2	42.95	32.55	10.62	33.25	400	12	P	V
													V
													V

WIFI Ant. 2	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	115.04	-	-	105.42	32.25	10.58	33.21	100	70	P	H
	*	5825	107.33	-	-	97.71	32.25	10.58	33.21	100	70	A	H
		5849.96	74.08	-60.12	134.2	64.41	32.3	10.59	33.22	100	70	P	H
		5855.085	64.71	-46.07	110.78	55.02	32.32	10.59	33.22	100	70	P	H
		5882.965	57.97	-41.31	99.28	48.17	32.43	10.6	33.23	100	70	P	H
		5927.655	52.51	-15.69	68.2	42.58	32.56	10.62	33.25	100	70	P	H
802.11ac													H
VHT20													H
CH 165	*	5825	111.01	-	-	101.39	32.25	10.58	33.21	375	14	P	V
5825MHz	*	5825	103.34	-	-	93.72	32.25	10.58	33.21	375	14	A	V
		5849.96	69	-65.2	134.2	59.33	32.3	10.59	33.22	375	14	P	V
		5856.11	60.24	-50.25	110.49	50.55	32.32	10.59	33.22	375	14	P	V
		5881.325	50.89	-49.61	100.5	41.09	32.43	10.6	33.23	375	14	P	V
		5927.245	51.43	-16.77	68.2	41.51	32.55	10.62	33.25	375	14	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. 2	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 149 5745MHz		11490	44.92	-29.08	74	50.18	39.7	17.23	62.19	100	0	P	H
		17235	47.31	-20.89	68.2	43.82	40.51	22.06	59.08	100	0	P	H
													H
													H
		11490	46.01	-27.99	74	51.27	39.7	17.23	62.19	100	0	P	V
		17235	47.03	-21.17	68.2	43.54	40.51	22.06	59.08	100	0	P	V
													V
													V
802.11ac VHT20 CH 157 5785MHz		11570	45.03	-28.97	74	50.46	39.49	17.34	62.26	100	0	P	H
		17355	47.41	-20.79	68.2	43.07	40.98	22.18	58.82	100	0	P	H
													H
													H
		11570	46.25	-27.75	74	51.68	39.49	17.34	62.26	100	0	P	V
		17355	49.11	-19.09	68.2	44.77	40.98	22.18	58.82	100	0	P	V
													V
													V
802.11ac VHT20 CH 165 5825MHz		11650	45.65	-28.35	74	51.31	39.2	17.46	62.32	100	0	P	H
		17475	48.41	-19.79	68.2	43.1	41.58	22.29	58.56	100	0	P	H
													H
													H
		11650	46.67	-27.33	74	52.33	39.2	17.46	62.32	100	0	P	V
		17475	48.79	-19.41	68.2	43.48	41.58	22.29	58.56	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 2	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)
		5640.5	52.78	-15.42	68.2	43.73	31.72	10.48	33.15	100	60	P	H
		5697.5	65.9	-37.46	103.36	56.57	31.99	10.51	33.17	100	60	P	H
		5719	83.3	-27.22	110.52	73.91	32.04	10.53	33.18	100	60	P	H
		5724	85.52	-34.4	119.92	76.12	32.05	10.53	33.18	100	60	P	H
	*	5755	114.23	-	-	104.76	32.11	10.55	33.19	100	60	P	H
	*	5755	105.8	-	-	96.33	32.11	10.55	33.19	100	60	A	H
		5852	56.66	-60.98	117.64	46.98	32.31	10.59	33.22	100	60	P	H
		5862.5	55.56	-53.14	108.7	45.85	32.35	10.59	33.23	100	60	P	H
		5890.25	53.49	-40.39	93.88	43.65	32.46	10.61	33.23	100	60	P	H
		5943.5	52.21	-15.99	68.2	42.24	32.59	10.63	33.25	100	60	P	H
802.11ac													H
VHT40													H
CH 151		5649.75	50.75	-17.45	68.2	41.72	31.7	10.49	33.16	384	14	P	V
5755MHz		5696.5	57.76	-44.86	102.62	48.44	31.98	10.51	33.17	384	14	P	V
		5717.75	75.69	-34.48	110.17	66.31	32.04	10.52	33.18	384	14	P	V
		5725	80.02	-42.18	122.2	70.62	32.05	10.53	33.18	384	14	P	V
	*	5755	109.62	-	-	100.15	32.11	10.55	33.19	384	14	P	V
	*	5755	101.47	-	-	92	32.11	10.55	33.19	384	14	A	V
		5853.5	51.94	-62.28	114.22	42.26	32.31	10.59	33.22	384	14	P	V
		5857.25	52.26	-57.91	110.17	42.56	32.33	10.59	33.22	384	14	P	V
		5891.25	51.56	-41.58	93.14	41.72	32.47	10.61	33.24	384	14	P	V
		5927.75	50.69	-17.51	68.2	40.76	32.56	10.62	33.25	384	14	P	V
													V
													V

WIFI Ant. 2	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)
		5620	51.26	-16.94	68.2	42.18	31.76	10.47	33.15	100	67	P	H
		5698.5	54.62	-49.47	104.09	45.29	31.99	10.51	33.17	100	67	P	H
		5715.25	61.1	-48.37	109.47	51.73	32.03	10.52	33.18	100	67	P	H
		5724.75	63.21	-58.42	121.63	53.81	32.05	10.53	33.18	100	67	P	H
	*	5795	114.11	-	-	104.55	32.19	10.57	33.2	100	67	P	H
	*	5795	105.7	-	-	96.14	32.19	10.57	33.2	100	67	A	H
		5853	69.66	-45.7	115.36	59.98	32.31	10.59	33.22	100	67	P	H
		5863	68.22	-40.34	108.56	58.5	32.35	10.6	33.23	100	67	P	H
		5875.75	61.92	-42.72	104.64	52.15	32.4	10.6	33.23	100	67	P	H
		5929.75	52.62	-15.58	68.2	42.69	32.56	10.62	33.25	100	67	P	H
802.11ac													H
VHT40													H
CH 159		5642.5	49.63	-18.57	68.2	40.59	31.72	10.48	33.16	400	13	P	V
5795MHz		5698	51.61	-52.12	103.73	42.28	31.99	10.51	33.17	400	13	P	V
		5709.5	52.84	-55.02	107.86	43.48	32.02	10.52	33.18	400	13	P	V
		5724.75	56.05	-65.58	121.63	46.65	32.05	10.53	33.18	400	13	P	V
	*	5795	109.65	-	-	100.09	32.19	10.57	33.2	400	13	P	V
	*	5795	101.44	-	-	91.88	32.19	10.57	33.2	400	13	A	V
		5850	60.31	-61.89	122.2	50.64	32.3	10.59	33.22	400	13	P	V
		5855.25	59.28	-51.45	110.73	49.59	32.32	10.59	33.22	400	13	P	V
		5875.25	54.45	-50.56	105.01	44.68	32.4	10.6	33.23	400	13	P	V
		5927.25	52.02	-16.18	68.2	42.1	32.55	10.62	33.25	400	13	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 2	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 VHT40 CH 151 5755MHz		11510	45.02	-28.98	74	50.31	39.67	17.25	62.21	100	0	P	H
		17265	47.99	-20.21	68.2	44.32	40.6	22.09	59.02	100	0	P	H
													H
													H
		11510	46.15	-27.85	74	51.44	39.67	17.25	62.21	100	0	P	V
		17265	48.2	-20	68.2	44.53	40.6	22.09	59.02	100	0	P	V
													V
													V
802.11ac VHT40 CH 159 5795MHz		11590	45.33	-28.67	74	50.8	39.43	17.37	62.27	100	0	P	H
		17385	49.03	-19.17	68.2	44.46	41.12	22.2	58.75	100	0	P	H
													H
													H
		11590	47.13	-26.87	74	52.6	39.43	17.37	62.27	100	0	P	V
		17385	49.42	-18.78	68.2	44.85	41.12	22.2	58.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2	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)
		5648.75	62.24	-5.96	68.2	53.21	31.7	10.49	33.16	100	71	P	H
		5699	80.13	-24.33	104.46	70.8	31.99	10.51	33.17	100	71	P	H
		5720	85.75	-25.05	110.8	76.36	32.04	10.53	33.18	100	71	P	H
		5720	85.75	-25.05	110.8	76.36	32.04	10.53	33.18	100	71	P	H
	*	5775	110.64	-	-	101.13	32.15	10.56	33.2	100	71	P	H
	*	5775	102.82	-	-	93.31	32.15	10.56	33.2	100	71	A	H
		5851.5	85.52	-33.26	118.78	75.84	32.31	10.59	33.22	100	71	P	H
		5860.75	83.37	-25.82	109.19	73.67	32.34	10.59	33.23	100	71	P	H
		5879.5	75.8	-26.06	101.86	66.01	32.42	10.6	33.23	100	71	P	H
		5929.5	62.15	-6.05	68.2	52.22	32.56	10.62	33.25	100	71	P	H
802.11ac													H
VHT80													H
CH 155		5644.5	58.49	-9.71	68.2	49.46	31.71	10.48	33.16	380	13	P	V
5775MHz		5696.75	73.8	-29	102.8	64.48	31.98	10.51	33.17	380	13	P	V
		5719.25	75.42	-35.17	110.59	66.03	32.04	10.53	33.18	380	13	P	V
		5720.25	77.62	-33.75	111.37	68.23	32.04	10.53	33.18	380	13	P	V
	*	5775	105.95	-	-	96.44	32.15	10.56	33.2	380	13	P	V
	*	5775	98.33	-	-	88.82	32.15	10.56	33.2	380	13	A	V
		5851.25	75.13	-44.22	119.35	65.45	32.31	10.59	33.22	380	13	P	V
		5855.25	74.11	-36.62	110.73	64.42	32.32	10.59	33.22	380	13	P	V
		5875.75	70.24	-34.4	104.64	60.47	32.4	10.6	33.23	380	13	P	V
		5931	60.07	-8.13	68.2	50.14	32.56	10.62	33.25	380	13	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. 2	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 VHT80 CH 155 5775MHz		11550	45.57	-28.43	74	50.95	39.55	17.31	62.24	100	0	P	H
		17325	47.48	-20.72	68.2	43.38	40.83	22.15	58.88	100	0	P	H
													H
													H
		11550	45.99	-28.01	74	51.37	39.55	17.31	62.24	100	0	P	V
		17325	48.24	-19.96	68.2	44.14	40.83	22.15	58.88	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

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

WIFI Ant. 2	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)
5GHz 802.11ac VHT80 LF		39.7	27.18	-12.82	40	39.52	19.2	0.83	32.37	-	-	P	H
		94.02	28.28	-15.22	43.5	44.25	15.04	1.32	32.33	-	-	P	H
		137.67	29.72	-13.78	43.5	43.27	17.18	1.56	32.29	-	-	P	H
		853.53	31.81	-14.19	46	30.14	29.19	4.08	31.6	-	-	P	H
		891.36	31.93	-14.07	46	30.13	29.03	4.17	31.4	-	-	P	H
		928.22	33.51	-12.49	46	30.93	29.41	4.26	31.09	100	0	P	H
													H
													H
													H
													H
													H
													H
		39.7	35.84	-4.16	40	48.18	19.2	0.83	32.37	100	289	Q	V
		39.7	40.04	0.04	40	52.38	19.2	0.83	32.37	100	289	P	V
		61.04	28.42	-11.58	40	48.09	11.63	1.06	32.36	-	-	P	V
		71.71	25.52	-14.48	40	44.53	12.19	1.15	32.35	-	-	P	V
		826.37	31.62	-14.38	46	31.07	28.29	4	31.74	-	-	P	V
		872.93	32.37	-13.63	46	30.51	29.22	4.13	31.49	-	-	P	V
		951.5	33.73	-12.27	46	29.66	30.64	4.31	30.88	-	-	P	V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1+2	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 149 5745MHz		5643.2	53.69	-14.51	68.2	44.66	31.71	10.48	33.16	100	71	P	H
		5694.4	58.62	-42.45	101.07	49.31	31.97	10.51	33.17	100	71	P	H
		5719.2	71.7	-38.88	110.58	62.31	32.04	10.53	33.18	100	71	P	H
		5724.6	84.19	-37.1	121.29	74.79	32.05	10.53	33.18	100	71	P	H
	*	5745	119.24	-	-	109.8	32.09	10.54	33.19	100	71	P	H
	*	5745	111.88	-	-	102.44	32.09	10.54	33.19	100	71	A	H
													H
													H
		5641.2	50.49	-17.71	68.2	41.45	31.72	10.48	33.16	397	254	P	V
		5699.8	52.54	-52.51	105.05	43.2	32	10.51	33.17	397	254	P	V
		5719.4	66.69	-43.94	110.63	57.3	32.04	10.53	33.18	397	254	P	V
		5724.8	79.31	-42.43	121.74	69.91	32.05	10.53	33.18	397	254	P	V
	*	5745	114.83	-	-	105.39	32.09	10.54	33.19	397	254	P	V
	*	5745	107.33	-	-	97.89	32.09	10.54	33.19	397	254	A	V
													V
													V

WIFI Ant. 1+2	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		5644.25	50.32	-17.88	68.2	41.29	31.71	10.48	33.16	100	68	P	H
		5697.5	52.02	-51.34	103.36	42.69	31.99	10.51	33.17	100	68	P	H
		5715	53.75	-55.65	109.4	44.38	32.03	10.52	33.18	100	68	P	H
		5723.75	52.79	-66.56	119.35	43.39	32.05	10.53	33.18	100	68	P	H
	*	5785	118.7	-	-	109.17	32.17	10.56	33.2	100	68	P	H
	*	5785	111.08	-	-	101.55	32.17	10.56	33.2	100	68	A	H
		5850	54.07	-68.13	122.2	44.4	32.3	10.59	33.22	100	68	P	H
		5856.25	54.13	-56.32	110.45	44.43	32.33	10.59	33.22	100	68	P	H
		5888.25	52.47	-42.89	95.36	42.64	32.45	10.61	33.23	100	68	P	H
		5932	51.54	-16.66	68.2	41.61	32.56	10.62	33.25	100	68	P	H
													H
													H
		5624	49.69	-18.51	68.2	40.62	31.75	10.47	33.15	103	240	P	V
		5690	50.62	-47.21	97.83	41.34	31.94	10.51	33.17	103	240	P	V
		5719.75	51.97	-58.76	110.73	42.58	32.04	10.53	33.18	103	240	P	V
		5723.75	50.34	-69.01	119.35	40.94	32.05	10.53	33.18	103	240	P	V
	*	5785	114.79	-	-	105.26	32.17	10.56	33.2	103	240	P	V
	*	5785	106.43	-	-	96.9	32.17	10.56	33.2	103	240	A	V
		5851.75	51.68	-66.53	118.21	42	32.31	10.59	33.22	103	240	P	V
		5856.75	51.47	-58.84	110.31	41.77	32.33	10.59	33.22	103	240	P	V
		5902.75	51.9	-32.73	84.63	42.02	32.51	10.61	33.24	103	240	P	V
		5930.25	50.05	-18.15	68.2	40.12	32.56	10.62	33.25	103	240	P	V
													V
													V

WIFI Ant. 1+2	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	118.26	-	-	108.64	32.25	10.58	33.21	100	69	P	H
	*	5825	110.77	-	-	101.15	32.25	10.58	33.21	100	69	A	H
		5850.2	71.89	-49.85	121.74	62.22	32.3	10.59	33.22	100	69	P	H
		5856	71.19	-39.33	110.52	61.5	32.32	10.59	33.22	100	69	P	H
		5879.8	57.49	-44.14	101.63	47.7	32.42	10.6	33.23	100	69	P	H
		5939.6	53.48	-14.72	68.2	43.52	32.58	10.63	33.25	100	69	P	H
													H
802.11a													H
CH 165	*	5825	114.49	-	-	104.87	32.25	10.58	33.21	366	259	P	V
5825MHz	*	5825	107.06	-	-	97.44	32.25	10.58	33.21	366	259	A	V
		5850.6	66.5	-54.33	120.83	56.83	32.3	10.59	33.22	366	259	P	V
		5855.2	64.81	-45.93	110.74	55.12	32.32	10.59	33.22	366	259	P	V
		5876.6	53.61	-50.4	104.01	43.83	32.41	10.6	33.23	366	259	P	V
		5929.4	52.44	-15.76	68.2	42.51	32.56	10.62	33.25	366	259	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+2	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 149 5745MHz		11490	49.1	-24.9	74	54.36	39.7	17.23	62.19	100	0	P	H
		17235	47.87	-20.33	68.2	44.38	40.51	22.06	59.08	100	0	P	H
													H
													H
		11490	55.64	-18.36	74	60.9	39.7	17.23	62.19	100	156	P	V
		11490	46.3	-7.7	54	51.56	39.7	17.23	62.19	100	156	A	V
		17235	48.4	-19.8	68.2	44.91	40.51	22.06	59.08	100	0	P	V
													V
802.11a CH 157 5785MHz		11570	47.53	-26.47	74	52.96	39.49	17.34	62.26	100	0	P	H
		17355	49.19	-19.01	68.2	44.85	40.98	22.18	58.82	100	0	P	H
													H
													H
		11570	57.88	-16.12	74	63.31	39.49	17.34	62.26	105	156	P	V
		11570	47.75	-6.25	54	53.18	39.49	17.34	62.26	105	156	A	V
		17355	48.67	-19.53	68.2	44.33	40.98	22.18	58.82	100	0	P	V
													V
802.11a CH 165 5825MHz		11650	47.1	-26.9	74	52.76	39.2	17.46	62.32	100	0	P	H
		17475	48.63	-19.57	68.2	43.32	41.58	22.29	58.56	100	0	P	H
													H
													H
		11650	55.93	-18.07	74	61.59	39.2	17.46	62.32	100	160	P	V
		11650	46.32	-7.68	54	51.98	39.2	17.46	62.32	100	160	A	V
		17475	49.26	-18.94	68.2	43.95	41.58	22.29	58.56	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 VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5644.8	53.26	-14.94	68.2	44.23	31.71	10.48	33.16	100	70	P	H
		5690.4	58.7	-39.42	98.12	49.42	31.94	10.51	33.17	100	70	P	H
		5716.6	67.4	-42.45	109.85	58.03	32.03	10.52	33.18	100	70	P	H
		5725	77.28	-44.92	122.2	67.88	32.05	10.53	33.18	100	70	P	H
	*	5745	120.47	-	-	111.03	32.09	10.54	33.19	100	70	P	H
	*	5745	112.79	-	-	103.35	32.09	10.54	33.19	100	70	A	H
802.11ac													H
VHT20													H
CH 149		5624.6	50.35	-17.85	68.2	41.28	31.75	10.47	33.15	100	251	P	V
5745MHz		5688.4	54.9	-41.74	96.64	45.63	31.93	10.51	33.17	100	251	P	V
		5717.4	62.8	-47.27	110.07	53.43	32.03	10.52	33.18	100	251	P	V
		5725	74	-48.2	122.2	64.6	32.05	10.53	33.18	100	251	P	V
	*	5745	114.63	-	-	105.19	32.09	10.54	33.19	100	251	P	V
	*	5745	106.04	-	-	96.6	32.09	10.54	33.19	100	251	A	V
													V
													V

WIFI Ant. 1+2	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)
		5627.75	49.93	-18.27	68.2	40.86	31.74	10.48	33.15	100	88	P	H
		5695	50.52	-50.99	101.51	41.21	31.97	10.51	33.17	100	88	P	H
		5701.75	51.51	-54.18	105.69	42.16	32	10.52	33.17	100	88	P	H
		5724.5	53.9	-67.16	121.06	44.5	32.05	10.53	33.18	100	88	P	H
	*	5785	118.57	-	-	109.04	32.17	10.56	33.2	100	88	P	H
	*	5785	110.75	-	-	101.22	32.17	10.56	33.2	100	88	A	H
		5851.25	54.36	-64.99	119.35	44.68	32.31	10.59	33.22	100	88	P	H
		5861.75	53.82	-55.09	108.91	44.11	32.35	10.59	33.23	100	88	P	H
		5907.75	52.49	-28.44	80.93	42.6	32.52	10.61	33.24	100	88	P	H
		5938.75	51.31	-16.89	68.2	41.35	32.58	10.63	33.25	100	88	P	H
802.11ac													H
VHT20													H
CH 157		5630.75	50.25	-17.95	68.2	41.18	31.74	10.48	33.15	100	252	P	V
5785MHz		5693	50.47	-49.57	100.04	41.17	31.96	10.51	33.17	100	252	P	V
		5719.5	52	-58.66	110.66	42.61	32.04	10.53	33.18	100	252	P	V
		5723.25	50.43	-67.78	118.21	41.03	32.05	10.53	33.18	100	252	P	V
	*	5785	115.29	-	-	105.76	32.17	10.56	33.2	100	252	P	V
	*	5785	107.23	-	-	97.7	32.17	10.56	33.2	100	252	A	V
		5854.75	53.13	-58.24	111.37	43.44	32.32	10.59	33.22	100	252	P	V
		5863.25	52.11	-56.38	108.49	42.39	32.35	10.6	33.23	100	252	P	V
		5876.5	51.16	-52.93	104.09	41.38	32.41	10.6	33.23	100	252	P	V
		5931.5	50.2	-18	68.2	40.27	32.56	10.62	33.25	100	252	P	V
													V
													V

WIFI Ant. 1+2	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	118.79	-	-	109.17	32.25	10.58	33.21	100	83	P	H
	*	5825	110.58	-	-	100.96	32.25	10.58	33.21	100	83	A	H
		5850.4	74.69	-46.6	121.29	65.02	32.3	10.59	33.22	100	83	P	H
		5855.4	66.34	-44.35	110.69	56.65	32.32	10.59	33.22	100	83	P	H
		5878.8	54.89	-47.49	102.38	45.1	32.42	10.6	33.23	100	83	P	H
		5941.8	52.32	-15.88	68.2	42.36	32.58	10.63	33.25	100	83	P	H
802.11ac													H
VHT20													H
CH 165	*	5825	114.63	-	-	105.01	32.25	10.58	33.21	100	241	P	V
5825MHz	*	5825	106.72	-	-	97.1	32.25	10.58	33.21	100	241	A	V
		5851.2	66.3	-53.16	119.46	56.63	32.3	10.59	33.22	100	241	P	V
		5855	59.68	-51.12	110.8	49.99	32.32	10.59	33.22	100	241	P	V
		5884	53.91	-44.61	98.52	44.1	32.44	10.6	33.23	100	241	P	V
		5925.4	51.14	-17.06	68.2	41.22	32.55	10.62	33.25	100	241	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+2	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 149 5745MHz		11490	48.4	-25.6	74	53.66	39.7	17.23	62.19	100	0	P	H
		17235	47.65	-20.55	68.2	44.16	40.51	22.06	59.08	100	0	P	H
													H
													H
		11490	54.32	-19.68	74	59.58	39.7	17.23	62.19	100	154	P	V
		11490	44.43	-9.57	54	49.69	39.7	17.23	62.19	100	154	A	V
		17235	48.45	-19.75	68.2	44.96	40.51	22.06	59.08	100	0	P	V
													V
802.11ac VHT20 CH 157 5785MHz		11570	47.33	-26.67	74	52.76	39.49	17.34	62.26	100	0	P	H
		17355	47.2	-21	68.2	42.86	40.98	22.18	58.82	100	0	P	H
													H
													H
		11570	56.15	-17.85	74	61.58	39.49	17.34	62.26	100	156	P	V
		11570	45.4	-8.6	54	50.83	39.49	17.34	62.26	100	156	A	V
		17355	48.44	-19.76	68.2	44.1	40.98	22.18	58.82	100	0	P	V
													V
802.11ac VHT20 CH 165 5825MHz		11650	48.15	-25.85	74	53.81	39.2	17.46	62.32	100	0	P	H
		17475	49.03	-19.17	68.2	43.72	41.58	22.29	58.56	100	0	P	H
													H
													H
		11650	56.85	-17.15	74	62.51	39.2	17.46	62.32	100	155	P	V
		11650	46.47	-7.53	54	52.13	39.2	17.46	62.32	100	155	A	V
		17475	49.75	-18.45	68.2	44.44	41.58	22.29	58.56	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+2	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)
		5649.5	56.44	-11.76	68.2	47.41	31.7	10.49	33.16	100	68	P	H
		5697.75	68.46	-35.08	103.54	59.13	31.99	10.51	33.17	100	68	P	H
		5717	85.88	-24.08	109.96	76.51	32.03	10.52	33.18	100	68	P	H
		5723.75	87.74	-31.61	119.35	78.34	32.05	10.53	33.18	100	68	P	H
	*	5755	118.52	-	-	109.05	32.11	10.55	33.19	100	68	P	H
	*	5755	110.16	-	-	100.69	32.11	10.55	33.19	100	68	A	H
		5851.5	62.12	-56.66	118.78	52.44	32.31	10.59	33.22	100	68	P	H
		5856.5	57.82	-52.56	110.38	48.12	32.33	10.59	33.22	100	68	P	H
		5886.75	54.07	-42.41	96.48	44.25	32.45	10.6	33.23	100	68	P	H
		5939.75	53.22	-14.98	68.2	43.26	32.58	10.63	33.25	100	68	P	H
802.11ac													H
VHT40													H
CH 151		5630.75	51.36	-16.84	68.2	42.29	31.74	10.48	33.15	100	243	P	V
5755MHz		5698.75	63.89	-40.39	104.28	54.56	31.99	10.51	33.17	100	243	P	V
		5719	81.2	-29.32	110.52	71.81	32.04	10.53	33.18	100	243	P	V
		5720.25	78.36	-33.01	111.37	68.97	32.04	10.53	33.18	100	243	P	V
	*	5755	111.83	-	-	102.36	32.11	10.55	33.19	100	243	P	V
	*	5755	103.56	-	-	94.09	32.11	10.55	33.19	100	243	A	V
		5854.5	52.01	-59.93	111.94	42.32	32.32	10.59	33.22	100	243	P	V
		5855.25	53.45	-57.28	110.73	43.76	32.32	10.59	33.22	100	243	P	V
		5876.25	50.65	-53.62	104.27	40.88	32.4	10.6	33.23	100	243	P	V
		5930	51.12	-17.08	68.2	41.19	32.56	10.62	33.25	100	243	P	V
													V
													V

WIFI Ant. 1+2	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)
		5629	51.29	-16.91	68.2	42.22	31.74	10.48	33.15	100	67	P	H
		5694.25	59.62	-41.34	100.96	50.31	31.97	10.51	33.17	100	67	P	H
		5713.5	64.78	-44.2	108.98	55.41	32.03	10.52	33.18	100	67	P	H
		5723.25	62.79	-55.42	118.21	53.39	32.05	10.53	33.18	100	67	P	H
	*	5795	117.85	-	-	108.29	32.19	10.57	33.2	100	67	P	H
	*	5795	109.85	-	-	100.29	32.19	10.57	33.2	100	67	A	H
		5855	71.76	-39.04	110.8	62.07	32.32	10.59	33.22	100	67	P	H
		5856	71.44	-39.08	110.52	61.75	32.32	10.59	33.22	100	67	P	H
		5875	65.51	-39.69	105.2	55.74	32.4	10.6	33.23	100	67	P	H
		5950	52.95	-15.25	68.2	42.97	32.6	10.63	33.25	100	67	P	H
802.11ac													H
VHT40													H
CH 159		5623.25	49.87	-18.33	68.2	40.8	31.75	10.47	33.15	100	253	P	V
5795MHz		5700	55.94	-49.26	105.2	46.6	32	10.51	33.17	100	253	P	V
		5718.75	59.75	-50.7	110.45	50.36	32.04	10.53	33.18	100	253	P	V
		5723.5	60.63	-58.15	118.78	51.23	32.05	10.53	33.18	100	253	P	V
	*	5795	112.65	-	-	103.09	32.19	10.57	33.2	100	253	P	V
	*	5795	104.19	-	-	94.63	32.19	10.57	33.2	100	253	A	V
		5852	65.78	-51.86	117.64	56.1	32.31	10.59	33.22	100	253	P	V
		5864	61.33	-46.95	108.28	51.6	32.36	10.6	33.23	100	253	P	V
		5886.25	58.56	-38.29	96.85	48.75	32.44	10.6	33.23	100	253	P	V
		5935.5	51.07	-17.13	68.2	41.13	32.57	10.62	33.25	100	253	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	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 VHT40 CH 151 5755MHz		11510	46.82	-27.18	74	52.11	39.67	17.25	62.21	100	0	P	H
		17265	47.74	-20.46	68.2	44.07	40.6	22.09	59.02	100	0	P	H
													H
													H
		11510	54.04	-19.96	74	59.33	39.67	17.25	62.21	100	215	P	V
		11510	44.54	-9.46	54	49.83	39.67	17.25	62.21	100	215	A	V
		17265	48.43	-19.77	68.2	44.76	40.6	22.09	59.02	100	0	P	V
													V
802.11ac VHT40 CH 159 5795MHz		11590	49.41	-24.59	74	54.88	39.43	17.37	62.27	100	0	P	H
		17385	48.66	-19.54	68.2	44.09	41.12	22.2	58.75	100	0	P	H
													H
													H
		11590	55.85	-18.15	74	61.32	39.43	17.37	62.27	100	159	P	V
		11590	46.18	-7.82	54	51.65	39.43	17.37	62.27	100	159	A	V
		17385	48.24	-19.96	68.2	43.67	41.12	22.2	58.75	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 VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5644	62.61	-5.59	68.2	53.58	31.71	10.48	33.16	100	68	P	H
		5699.5	80.8	-24.03	104.83	71.46	32	10.51	33.17	100	68	P	H
		5720	86.9	-23.9	110.8	77.51	32.04	10.53	33.18	100	68	P	H
		5720	86.9	-23.9	110.8	77.51	32.04	10.53	33.18	100	68	P	H
	*	5775	114.88	-	-	105.37	32.15	10.56	33.2	100	68	P	H
	*	5775	107.09	-	-	97.58	32.15	10.56	33.2	100	68	A	H
		5850	80.94	-41.26	122.2	71.27	32.3	10.59	33.22	100	68	P	H
		5861.75	83.48	-25.43	108.91	73.77	32.35	10.59	33.23	100	68	P	H
		5878.75	76.14	-26.27	102.41	66.35	32.42	10.6	33.23	100	68	P	H
		5932.75	62.99	-5.21	68.2	53.05	32.57	10.62	33.25	100	68	P	H
802.11ac													H
VHT80													H
CH 155		5631	56.89	-11.31	68.2	47.82	31.74	10.48	33.15	100	248	P	V
5775MHz		5695	76.12	-25.39	101.51	66.81	31.97	10.51	33.17	100	248	P	V
		5713	80.84	-28	108.84	71.47	32.03	10.52	33.18	100	248	P	V
		5724.25	82.52	-37.97	120.49	73.12	32.05	10.53	33.18	100	248	P	V
	*	5775	110.69	-	-	101.18	32.15	10.56	33.2	100	248	P	V
	*	5775	102.41	-	-	92.9	32.15	10.56	33.2	100	248	A	V
		5853.75	79.53	-34.12	113.65	69.85	32.31	10.59	33.22	100	248	P	V
		5855.75	76.71	-33.88	110.59	67.02	32.32	10.59	33.22	100	248	P	V
		5877.5	69.53	-33.81	103.34	59.75	32.41	10.6	33.23	100	248	P	V
		5938	54.08	-14.12	68.2	44.12	32.58	10.63	33.25	100	248	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+2	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 VHT80 CH 155 5775MHz		11550	48.9	-25.1	74	54.28	39.55	17.31	62.24	100	0	P	H
		17325	49.51	-18.69	68.2	45.41	40.83	22.15	58.88	100	0	P	H
													H
													H
		11550	55.1	-18.9	74	60.48	39.55	17.31	62.24	100	157	P	V
		11550	44.44	-9.56	54	49.82	39.55	17.31	62.24	100	157	A	V
		17325	47.38	-20.82	68.2	43.28	40.83	22.15	58.88	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 802.11ac VHT80 (LF @ 3m)

WIFI Ant. 1+2	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)
5GHz 802.11ac VHT80 LF		39.7	25.71	-14.29	40	38.05	19.2	0.83	32.37	-	-	P	H
		95.96	27.37	-16.13	43.5	43.12	15.24	1.33	32.32	-	-	P	H
		135.73	29.66	-13.84	43.5	43.18	17.22	1.55	32.29	-	-	P	H
		750.71	30.08	-15.92	46	30.44	27.82	3.82	32	-	-	P	H
		874.87	32.23	-13.77	46	30.38	29.2	4.13	31.48	-	-	P	H
		948.59	33.31	-12.69	46	29.41	30.49	4.31	30.9	100	0	P	H
													H
													H
													H
													H
													H
													H
		35.82	32.6	-7.4	40	42.81	21.35	0.81	32.37	-	-	P	V
		39.7	34.45	-5.55	40	46.79	19.2	0.83	32.37	100	279	P	V
		39.7	38.55	-1.45	40	50.89	19.2	0.83	32.37	100	279	Q	V
		70.74	24.45	-15.55	40	43.56	12.09	1.15	32.35	-	-	P	V
		758.47	30.78	-15.22	46	31.04	27.88	3.84	31.98	-	-	P	V
		853.53	32.27	-13.73	46	30.6	29.19	4.08	31.6	-	-	P	V
		952.47	33.86	-12.14	46	29.73	30.68	4.32	30.87	-	-	P	V
		35.82	32.6	-7.4	40	42.81	21.35	0.81	32.37	-	-	P	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<TXBF Mode>

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT20 (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+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5648.375	56.02	-12.18	68.2	46.99	31.7	10.49	33.16	100	72	P	H
		5696.525	66.45	-36.19	102.64	57.13	31.98	10.51	33.17	100	72	P	H
		5719.25	70	-40.59	110.59	60.61	32.04	10.53	33.18	100	72	P	H
		5724.875	77.49	-44.43	121.92	68.09	32.05	10.53	33.18	100	72	P	H
	*	5745	117.45	-	-	108.01	32.09	10.54	33.19	100	72	P	H
	*	5745	103.89	-	-	94.45	32.09	10.54	33.19	100	72	A	H
802.11ac													H
VHT20													H
CH 149		5637.125	50.6	-17.6	68.2	41.54	31.73	10.48	33.15	370	14	P	V
5745MHz		5699.225	58.9	-45.73	104.63	49.56	32	10.51	33.17	370	14	P	V
		5712.5	61.83	-46.87	108.7	52.46	32.03	10.52	33.18	370	14	P	V
		5724.65	70.39	-51.01	121.4	60.99	32.05	10.53	33.18	370	14	P	V
	*	5745	112.05	-	-	102.61	32.09	10.54	33.19	370	14	P	V
	*	5745	98.55	-	-	89.11	32.09	10.54	33.19	370	14	A	V
													V
													V

WIFI Ant. 1+2	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)
		5645.25	51.76	-16.44	68.2	42.73	31.71	10.48	33.16	100	72	P	H
		5699	58.04	-46.42	104.46	48.71	31.99	10.51	33.17	100	72	P	H
		5719	62.81	-47.71	110.52	53.42	32.04	10.53	33.18	100	72	P	H
		5721.75	61.96	-52.83	114.79	52.57	32.04	10.53	33.18	100	72	P	H
	*	5785	117.77	-	-	108.24	32.17	10.56	33.2	100	72	P	H
	*	5785	103.79	-	-	94.26	32.17	10.56	33.2	100	72	A	H
		5853	63.43	-51.93	115.36	53.75	32.31	10.59	33.22	100	72	P	H
		5859.5	62.18	-47.36	109.54	52.48	32.34	10.59	33.23	100	72	P	H
		5879	58.24	-43.99	102.23	48.45	32.42	10.6	33.23	100	72	P	H
		5939	54.29	-13.91	68.2	44.33	32.58	10.63	33.25	100	72	P	H
802.11ac													H
VHT20													H
CH 157		5620.75	51.3	-16.9	68.2	42.22	31.76	10.47	33.15	383	17	P	V
5785MHz		5655.5	50.42	-21.87	72.29	41.36	31.73	10.49	33.16	383	17	P	V
		5715.25	52.56	-56.91	109.47	43.19	32.03	10.52	33.18	383	17	P	V
		5722	54.21	-61.15	115.36	44.82	32.04	10.53	33.18	383	17	P	V
	*	5785	112.36	-	-	102.83	32.17	10.56	33.2	383	17	P	V
	*	5785	98.38	-	-	88.85	32.17	10.56	33.2	383	17	A	V
		5854.25	50.72	-61.79	112.51	41.03	32.32	10.59	33.22	383	17	P	V
		5864	51.44	-56.84	108.28	41.71	32.36	10.6	33.23	383	17	P	V
		5908	52.85	-27.89	80.74	42.96	32.52	10.61	33.24	383	17	P	V
		5939.25	50.47	-17.73	68.2	40.51	32.58	10.63	33.25	383	17	P	V
													V
													V

WIFI Ant. 1+2	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	118.56	-	-	108.94	32.25	10.58	33.21	100	70	P	H
	*	5825	104.02	-	-	94.4	32.25	10.58	33.21	100	70	A	H
		5850.165	72.28	-49.54	121.82	62.61	32.3	10.59	33.22	100	70	P	H
		5856.93	69.02	-41.24	110.26	59.32	32.33	10.59	33.22	100	70	P	H
		5878.865	65.85	-36.48	102.33	56.06	32.42	10.6	33.23	100	70	P	H
		5931.96	58.1	-10.1	68.2	48.17	32.56	10.62	33.25	100	70	P	H
802.11ac													H
VHT20													H
CH 165	*	5825	112.97	-	-	103.35	32.25	10.58	33.21	378	17	P	V
5825MHz	*	5825	99.61	-	-	89.99	32.25	10.58	33.21	378	17	A	V
		5849.96	65.28	-68.92	134.2	55.61	32.3	10.59	33.22	378	17	P	V
		5857.545	58.84	-51.25	110.09	49.14	32.33	10.59	33.22	378	17	P	V
		5886.655	52.76	-43.79	96.55	42.94	32.45	10.6	33.23	378	17	P	V
		5938.725	52.5	-15.7	68.2	42.54	32.58	10.63	33.25	378	17	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+2	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 149 5745MHz		11490	44.95	-29.05	74	50.21	39.7	17.23	62.19	100	0	P	H
		17235	47.18	-21.02	68.2	43.69	40.51	22.06	59.08	100	0	P	H
													H
													H
		11490	45.5	-28.5	74	50.76	39.7	17.23	62.19	100	0	P	V
		17235	46.73	-21.47	68.2	43.24	40.51	22.06	59.08	100	0	P	V
													V
													V
802.11ac VHT20 CH 157 5785MHz		11570	44.59	-29.41	74	50.02	39.49	17.34	62.26	100	0	P	H
		17355	46.34	-21.86	68.2	42	40.98	22.18	58.82	100	0	P	H
													H
													H
		11570	45.37	-28.63	74	50.8	39.49	17.34	62.26	100	0	P	V
		17355	47.14	-21.06	68.2	42.8	40.98	22.18	58.82	100	0	P	V
													V
													V
802.11ac VHT20 CH 165 5825MHz		11650	45.44	-28.56	74	51.1	39.2	17.46	62.32	100	0	P	H
		17475	46.73	-21.47	68.2	41.42	41.58	22.29	58.56	100	0	P	H
													H
													H
		11650	46.34	-27.66	74	52	39.2	17.46	62.32	100	0	P	V
		17475	47.57	-20.63	68.2	42.26	41.58	22.29	58.56	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5650	57.38	-10.82	68.2	48.35	31.7	10.49	33.16	100	72	P	H
		5698.75	69.4	-34.88	104.28	60.07	31.99	10.51	33.17	100	72	P	H
		5719	84.26	-26.26	110.52	74.87	32.04	10.53	33.18	100	72	P	H
		5723.5	84.15	-34.63	118.78	74.75	32.05	10.53	33.18	100	72	P	H
	*	5755	116	-	-	106.53	32.11	10.55	33.19	100	72	P	H
	*	5755	105.55	-	-	96.08	32.11	10.55	33.19	100	72	A	H
		5851	60.15	-59.77	119.92	50.48	32.3	10.59	33.22	100	72	P	H
		5862.75	59.14	-49.49	108.63	49.42	32.35	10.6	33.23	100	72	P	H
		5878.75	58.71	-43.7	102.41	48.92	32.42	10.6	33.23	100	72	P	H
		5927.25	52.91	-15.29	68.2	42.99	32.55	10.62	33.25	100	72	P	H
802.11ac													H
VHT40													H
CH 151		5637.5	50.84	-17.36	68.2	41.78	31.73	10.48	33.15	369	12	P	V
5755MHz		5700	58.96	-46.24	105.2	49.62	32	10.51	33.17	369	12	P	V
		5719.75	75.95	-34.78	110.73	66.56	32.04	10.53	33.18	369	12	P	V
		5723.75	76.7	-42.65	119.35	67.3	32.05	10.53	33.18	369	12	P	V
	*	5755	110.09	-	-	100.62	32.11	10.55	33.19	369	12	P	V
	*	5755	99.08	-	-	89.61	32.11	10.55	33.19	369	12	A	V
		5852.25	53.14	-63.93	117.07	43.46	32.31	10.59	33.22	369	12	P	V
		5873.75	51.6	-53.95	105.55	41.83	32.4	10.6	33.23	369	12	P	V
		5888	52.2	-43.35	95.55	42.37	32.45	10.61	33.23	369	12	P	V
		5936.25	51.78	-16.42	68.2	41.84	32.57	10.62	33.25	369	12	P	V
													V
													V

WIFI Ant. 1+2	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)
		5637.5	51.08	-17.12	68.2	42.02	31.73	10.48	33.15	100	73	P	H
		5696.25	57.28	-45.16	102.44	47.96	31.98	10.51	33.17	100	73	P	H
		5717.25	62.63	-47.4	110.03	53.26	32.03	10.52	33.18	100	73	P	H
		5724	64.17	-55.75	119.92	54.77	32.05	10.53	33.18	100	73	P	H
	*	5795	115.44	-	-	105.88	32.19	10.57	33.2	100	73	P	H
	*	5795	105.41	-	-	95.85	32.19	10.57	33.2	100	73	A	H
		5850.25	69.23	-52.4	121.63	59.56	32.3	10.59	33.22	100	73	P	H
		5855.25	67.95	-42.78	110.73	58.26	32.32	10.59	33.22	100	73	P	H
		5877.25	63.67	-39.86	103.53	53.89	32.41	10.6	33.23	100	73	P	H
		5928	54.04	-14.16	68.2	44.11	32.56	10.62	33.25	100	73	P	H
802.11ac													H
VHT40													H
CH 159		5650	51.19	-17.01	68.2	42.16	31.7	10.49	33.16	382	17	P	V
5795MHz		5690.75	51.74	-46.64	98.38	42.46	31.94	10.51	33.17	382	17	P	V
		5712.75	54.5	-54.27	108.77	45.13	32.03	10.52	33.18	382	17	P	V
		5723.75	54.2	-65.15	119.35	44.8	32.05	10.53	33.18	382	17	P	V
	*	5795	109.98	-	-	100.42	32.19	10.57	33.2	382	17	P	V
	*	5795	99.4	-	-	89.84	32.19	10.57	33.2	382	17	A	V
		5851	60.05	-59.87	119.92	50.38	32.3	10.59	33.22	382	17	P	V
		5856.25	57.84	-52.61	110.45	48.14	32.33	10.59	33.22	382	17	P	V
		5878	56.06	-46.91	102.97	46.28	32.41	10.6	33.23	382	17	P	V
		5936.25	52.21	-15.99	68.2	42.27	32.57	10.62	33.25	382	17	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	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 VHT40 CH 151 5755MHz		11510	45.48	-28.52	74	50.77	39.67	17.25	62.21	100	0	P	H
		17265	46.66	-21.54	68.2	42.99	40.6	22.09	59.02	100	0	P	H
													H
													H
		11510	46.14	-27.86	74	51.43	39.67	17.25	62.21	100	0	P	V
		17265	47.59	-20.61	68.2	43.92	40.6	22.09	59.02	100	0	P	V
													V
													V
802.11ac VHT40 CH 159 5795MHz		11590	46.1	-27.9	74	51.57	39.43	17.37	62.27	100	0	P	H
		17385	47.31	-20.89	68.2	42.74	41.12	22.2	58.75	100	0	P	H
													H
													H
		11590	45.81	-28.19	74	51.28	39.43	17.37	62.27	100	0	P	V
		17385	47.37	-20.83	68.2	42.8	41.12	22.2	58.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	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)
		5647.25	61.84	-6.36	68.2	52.8	31.71	10.49	33.16	100	75	P	H
		5700	77.03	-28.17	105.2	67.69	32	10.51	33.17	100	75	P	H
		5718.75	82.95	-27.5	110.45	73.56	32.04	10.53	33.18	100	75	P	H
		5723.25	82.29	-35.92	118.21	72.89	32.05	10.53	33.18	100	75	P	H
	*	5775	111.7	-	-	102.19	32.15	10.56	33.2	100	75	P	H
	*	5775	102.43	-	-	92.92	32.15	10.56	33.2	100	75	A	H
		5850.25	81.96	-39.67	121.63	72.29	32.3	10.59	33.22	100	75	P	H
		5860.5	81.23	-28.03	109.26	71.53	32.34	10.59	33.23	100	75	P	H
		5877.75	75.85	-27.31	103.16	66.07	32.41	10.6	33.23	100	75	P	H
		5926.5	62.46	-5.74	68.2	52.54	32.55	10.62	33.25	100	75	P	H
802.11ac													H
VHT80													H
CH 155		5638.75	54.37	-13.83	68.2	45.32	31.72	10.48	33.15	383	18	P	V
5775MHz		5699.75	66.41	-38.61	105.02	57.07	32	10.51	33.17	383	18	P	V
		5719	71.16	-39.36	110.52	61.77	32.04	10.53	33.18	383	18	P	V
		5725	73.53	-48.67	122.2	64.13	32.05	10.53	33.18	383	18	P	V
	*	5775	106.65	-	-	97.14	32.15	10.56	33.2	383	18	P	V
	*	5775	97.22	-	-	87.71	32.15	10.56	33.2	383	18	A	V
		5851.75	72.68	-45.53	118.21	63	32.31	10.59	33.22	383	18	P	V
		5856.5	71.37	-39.01	110.38	61.67	32.33	10.59	33.22	383	18	P	V
		5877.25	65.32	-38.21	103.53	55.54	32.41	10.6	33.23	383	18	P	V
		5925.25	52.83	-15.37	68.2	42.91	32.55	10.62	33.25	383	18	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+2	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 VHT80 CH 155 5775MHz		11550	46.18	-27.82	74	51.56	39.55	17.31	62.24	100	0	P	H
		17325	47.06	-21.14	68.2	42.96	40.83	22.15	58.88	100	0	P	H
													H
													H
		11550	47.83	-26.17	74	53.21	39.55	17.31	62.24	100	0	P	V
		17325	46.67	-21.53	68.2	42.57	40.83	22.15	58.88	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

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

WIFI Ant. 1+2	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)
5GHz 802.11ac VHT80 LF		56.19	25.64	-14.36	40	45.1	11.91	0.99	32.36	-	-	P	H
		88.2	28.95	-14.55	43.5	45.66	14.34	1.28	32.33	-	-	P	H
		108.57	26.47	-17.03	43.5	40.69	16.69	1.4	32.31	-	-	P	H
		308.39	26.78	-19.22	46	37.42	19.14	2.4	32.18	-	-	P	H
		624.61	29.81	-16.19	46	32.67	25.91	3.42	32.19	-	-	P	H
		951.5	34.17	-11.83	46	30.1	30.64	4.31	30.88	100	0	P	H
													H
													H
													H
													H
													H
													H
		30	33.96	-6.04	40	41.56	24.01	0.77	32.38	100	0	P	V
		56.19	33.1	-6.9	40	52.56	11.91	0.99	32.36	-	-	P	V
		107.6	30.93	-12.57	43.5	45.22	16.63	1.39	32.31	-	-	P	V
		385.02	24.93	-21.07	46	33.34	21.08	2.67	32.16	-	-	P	V
		665.35	30.46	-15.54	46	32.69	26.38	3.55	32.16	-	-	P	V
		954.41	34.37	-11.63	46	30.13	30.77	4.32	30.85	-	-	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+2		(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 :	Hao Shu, Fu Chen, Ken Wu	Temperature :	21~26°C
		Relative Humidity :	52~58%

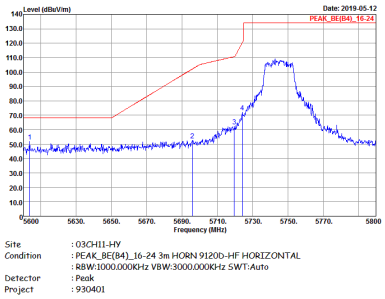
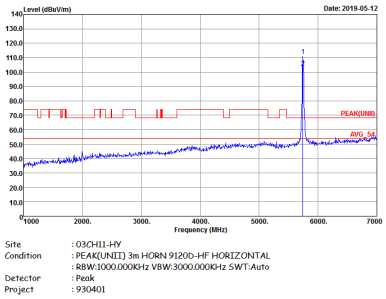
Note symbol

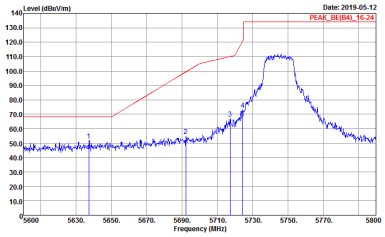
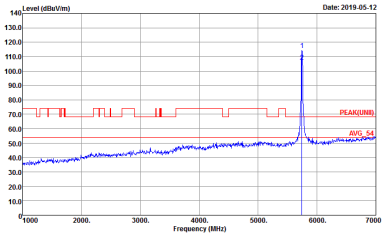
-L	**Low channel location**
-R	**High channel location**

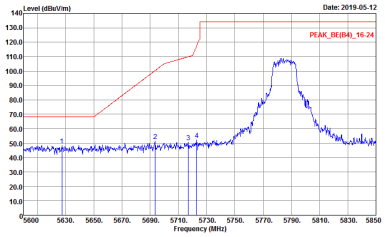
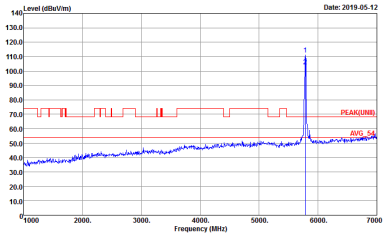
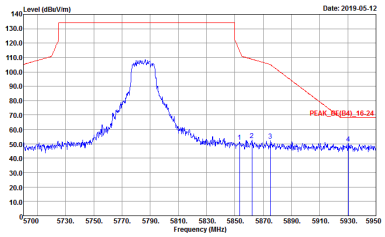
<CDD Mode>

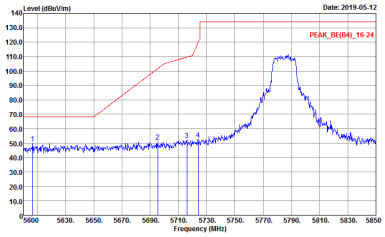
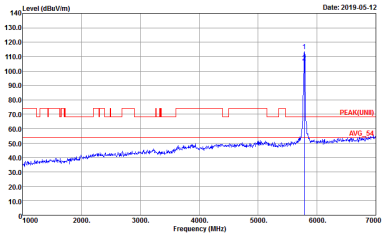
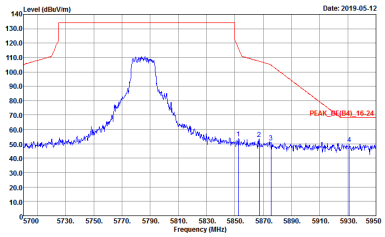
Band 4 - 5725~5850MHz

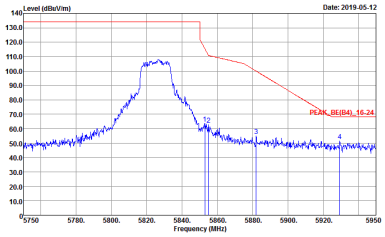
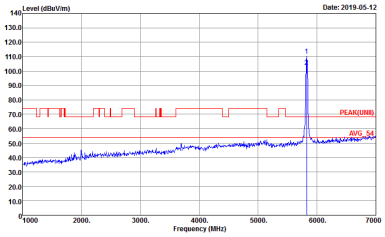
WIFI 802.11a (Band Edge @ 3m)

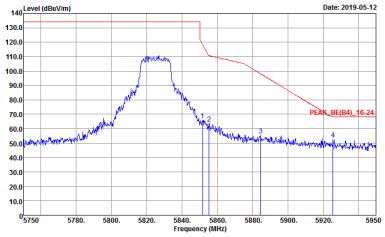
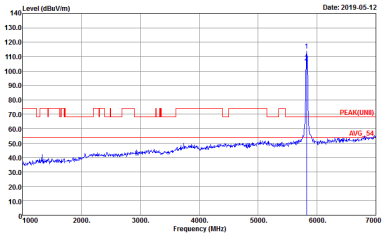
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

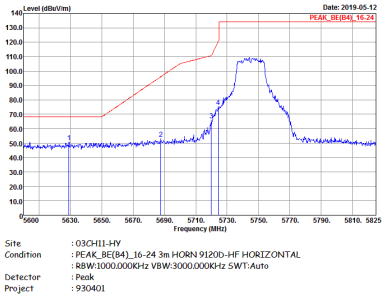
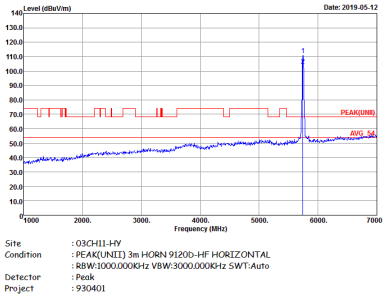
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

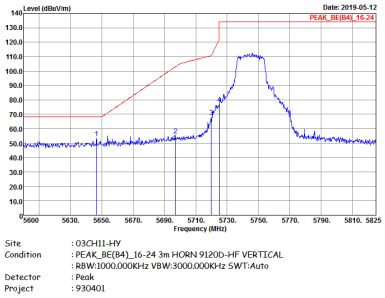
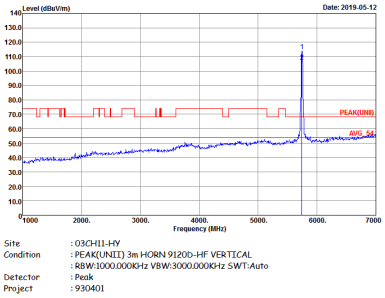
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401

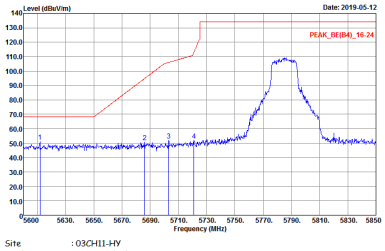
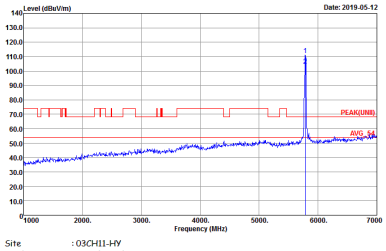
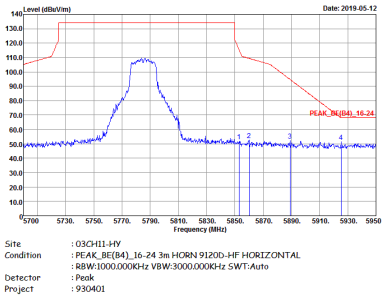
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401

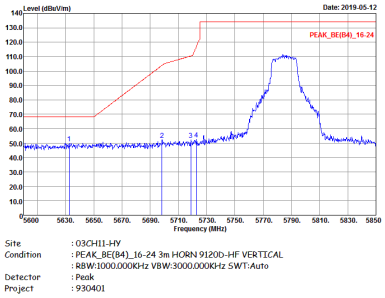
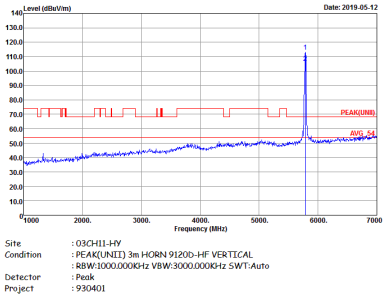
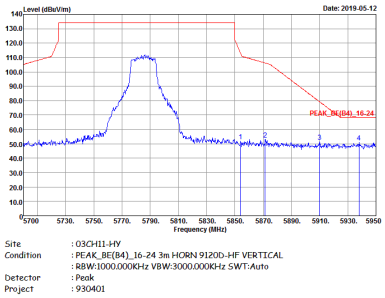
Band 4 5725~5850MHz

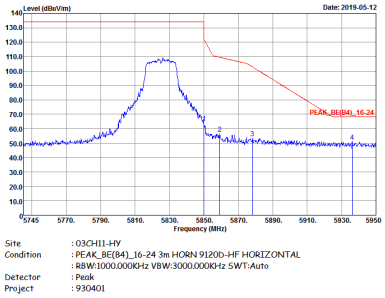
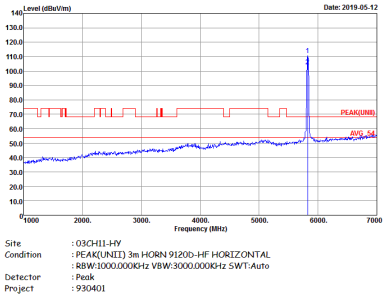
WIFI 802.11ac VHT20 (Band Edge @ 3m)

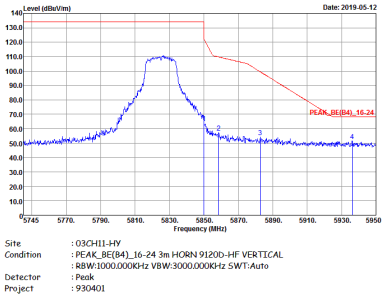
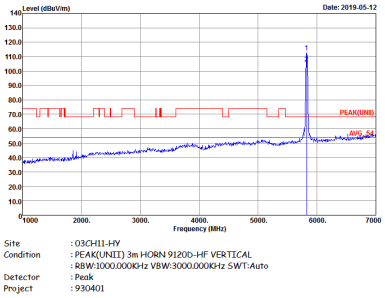
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

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 CH157 5785MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

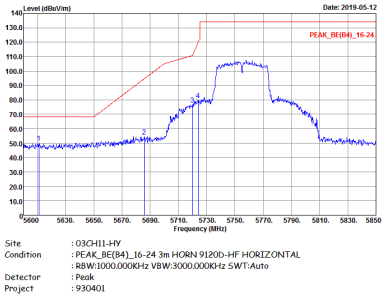
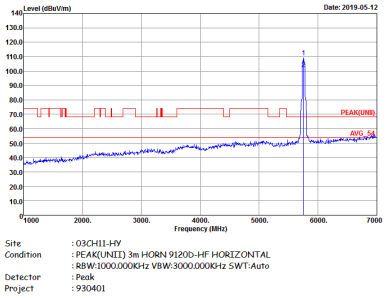
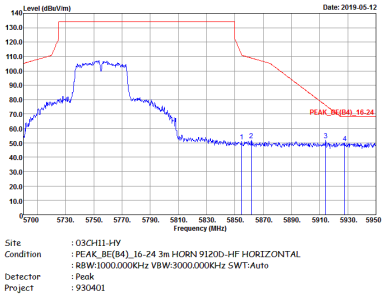
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

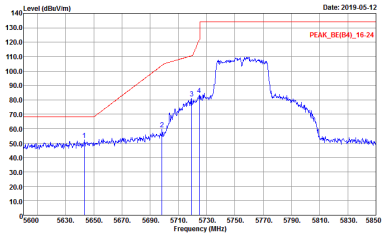
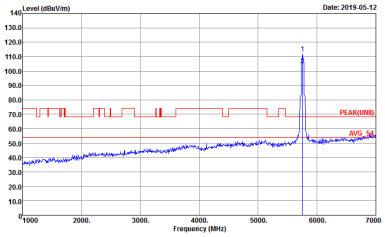
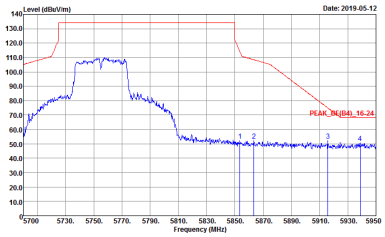
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Fundamental
Peak		

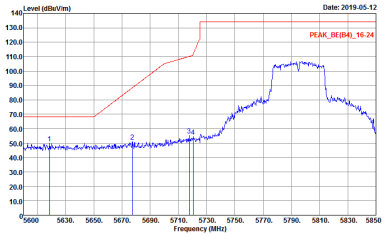
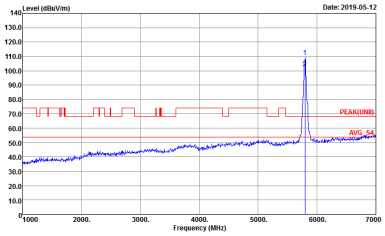
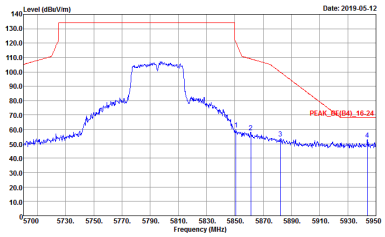
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Vertical	Fundamental
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401

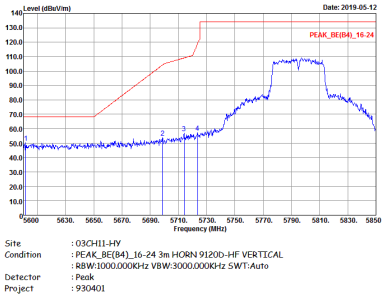
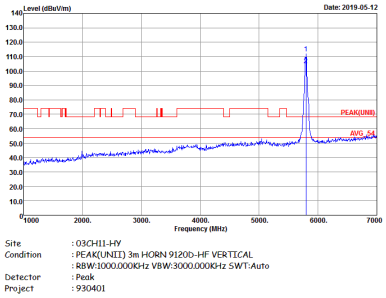
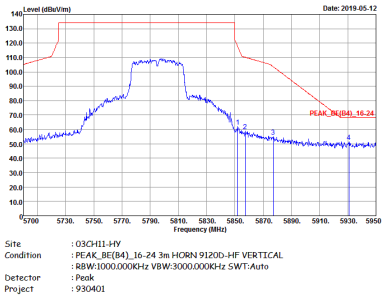
Band 4 5725~5850MHz

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

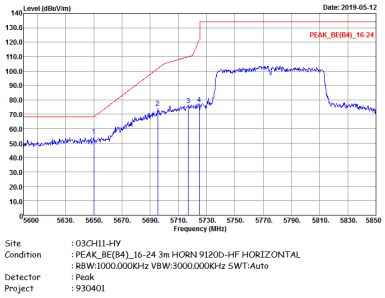
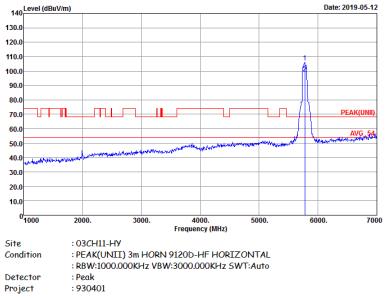
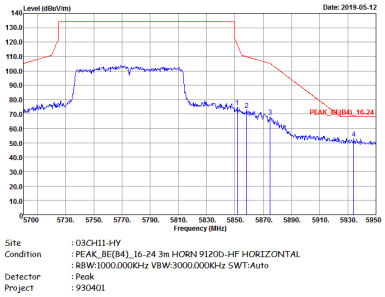
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

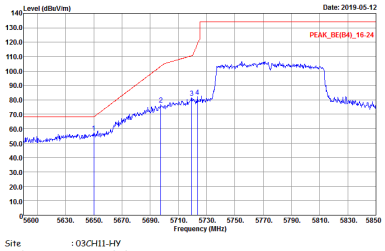
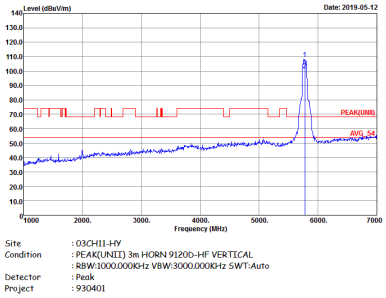
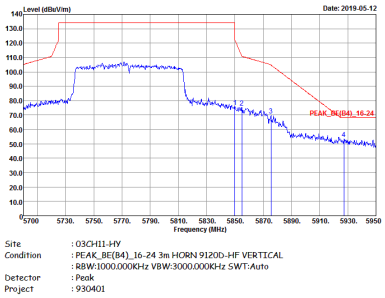
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	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

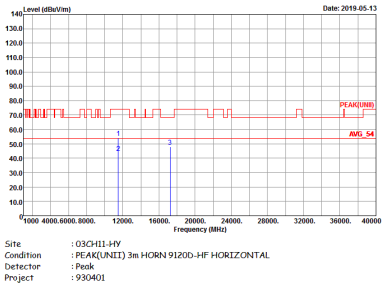
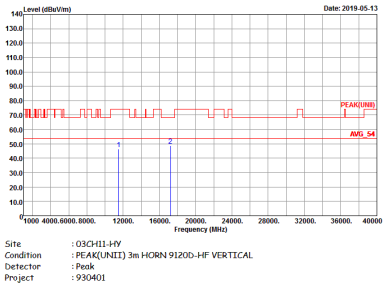
WIFI 802.11ac VHT80 (Band Edge @ 3m)

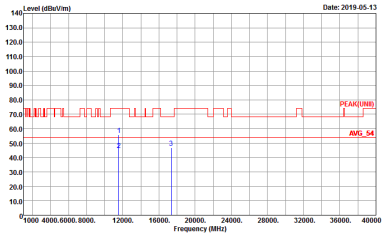
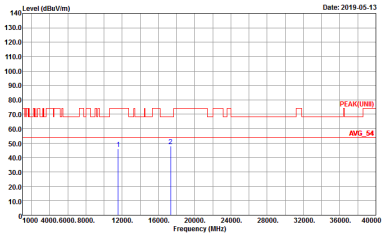
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

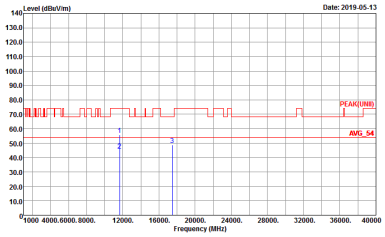
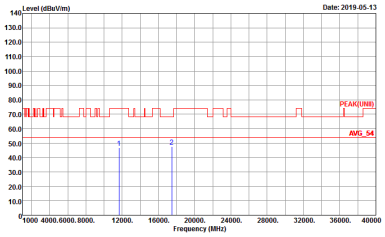
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

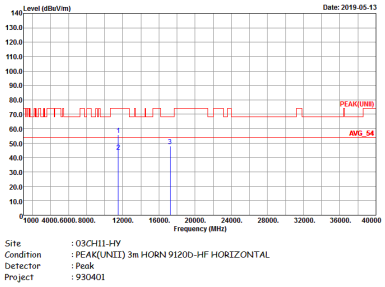
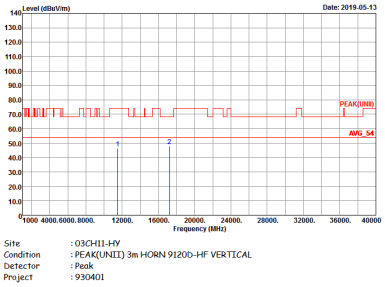
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.	 	

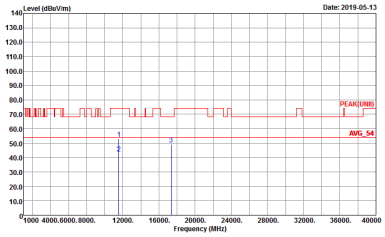
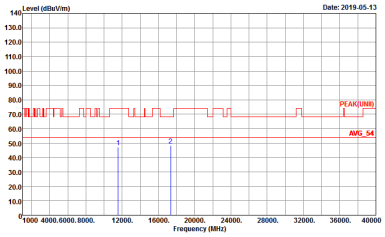
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

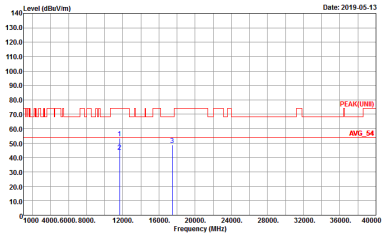
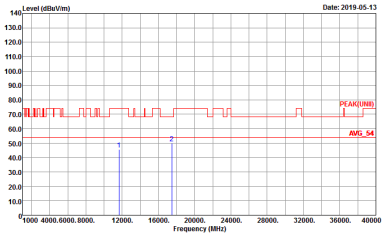
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

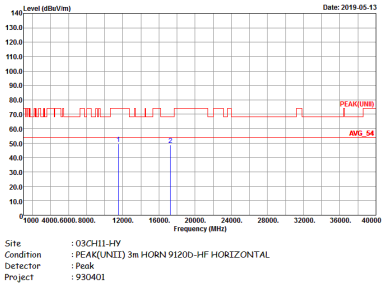
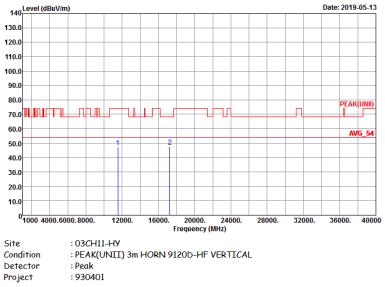
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.	 	

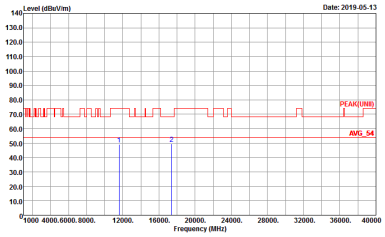
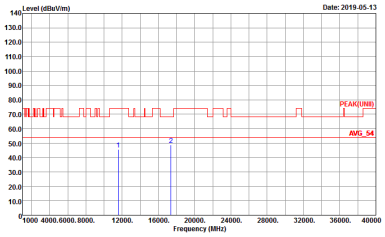
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

Band 4 5725~5850MHz

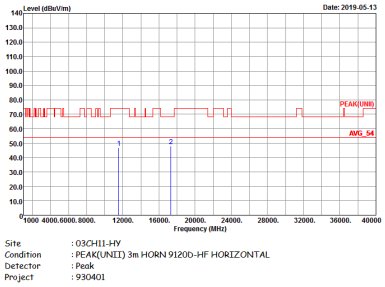
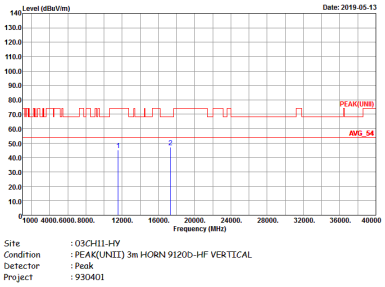
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

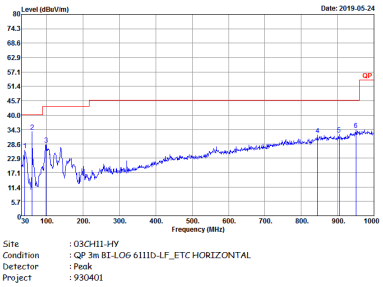
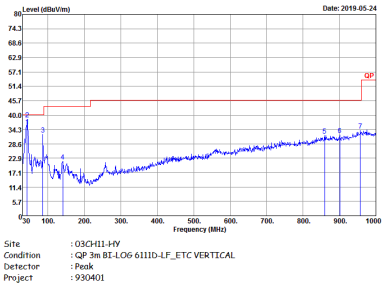
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

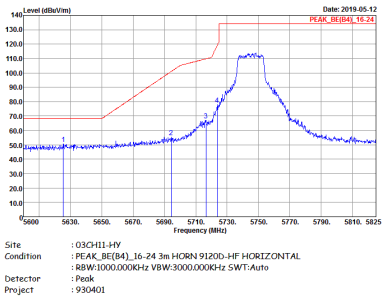
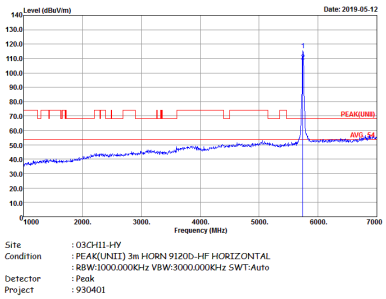
Emission below 1GHz

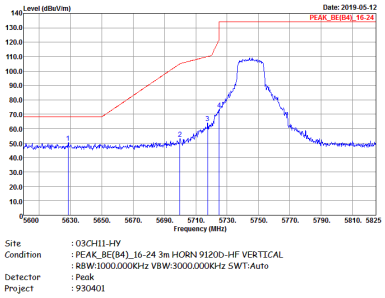
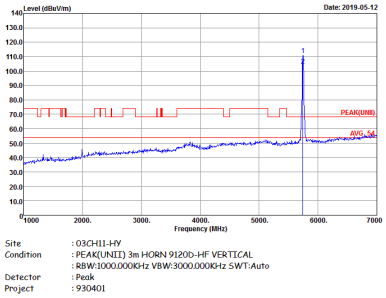
5GHz WIFI 802.11a (LF)

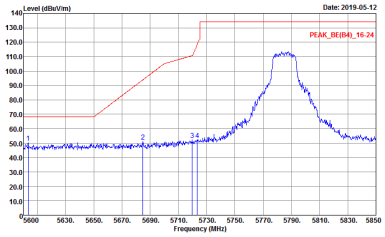
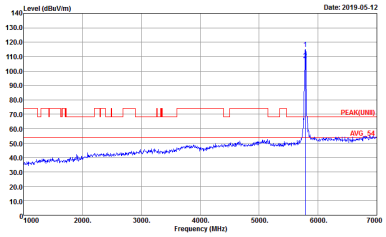
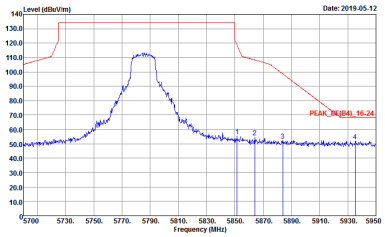
WIFI	5GHz 5725~5850MHz	
ANT	802.11a LF	
1	Horizontal	Vertical
QP / Peak		

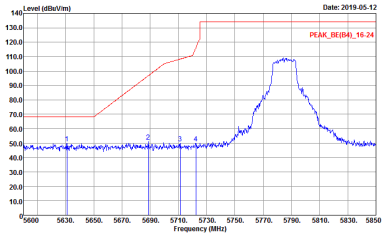
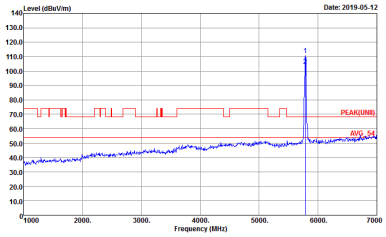
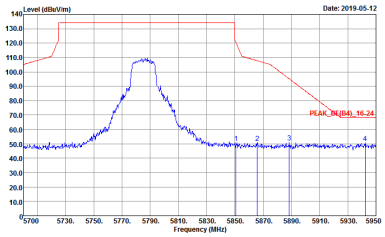
Band 4 - 5725~5850MHz

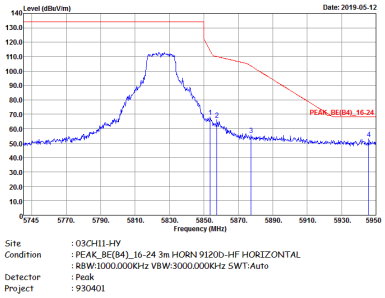
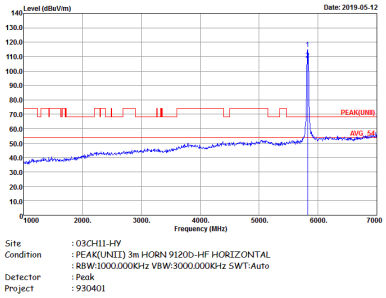
WIFI 802.11a (Band Edge @ 3m)

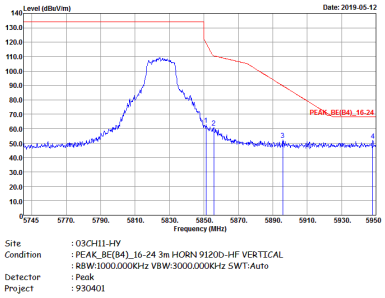
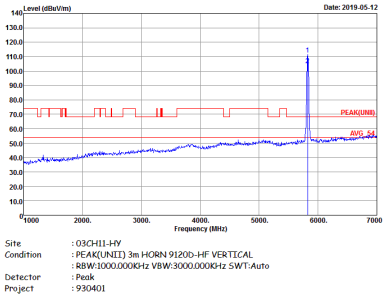
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
2	Horizontal	Fundamental
Peak		

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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

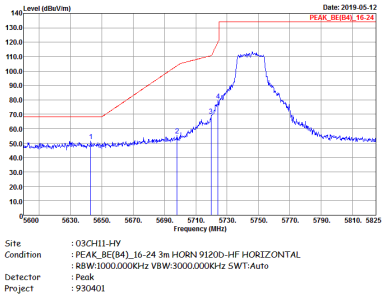
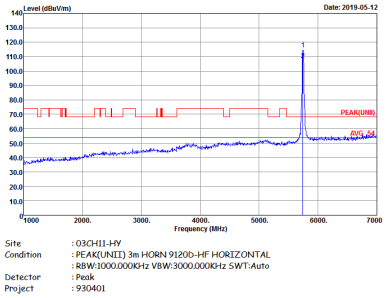
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

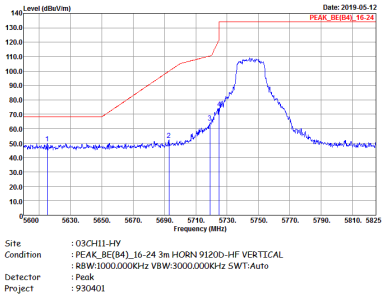
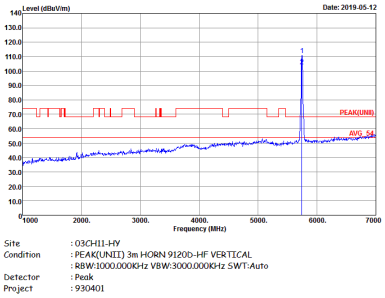
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
2	Horizontal	Fundamental
Peak		

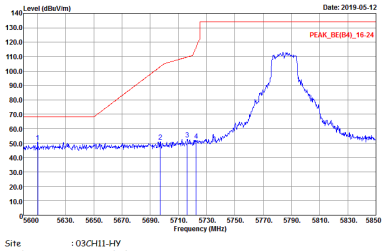
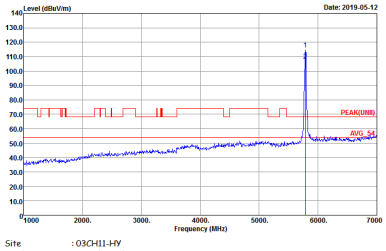
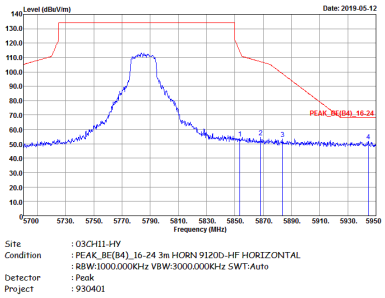
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
2	Vertical	Fundamental
Peak		

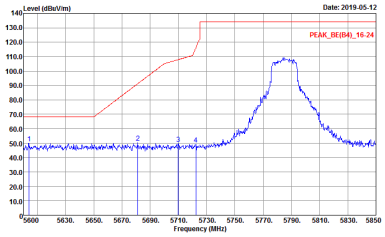
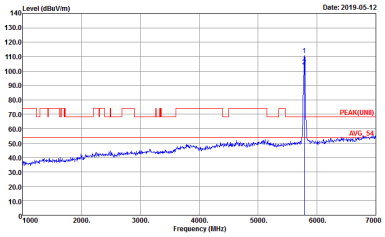
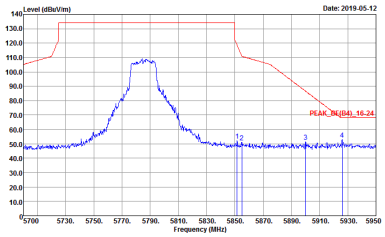
Band 4 5725~5850MHz

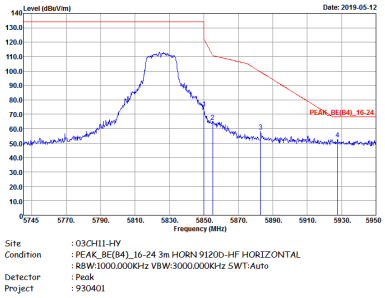
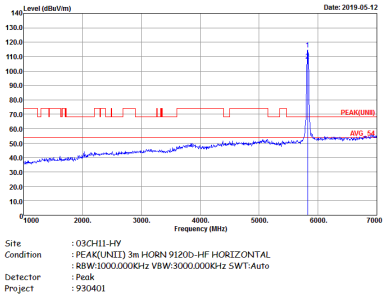
WIFI 802.11ac VHT20 (Band Edge @ 3m)

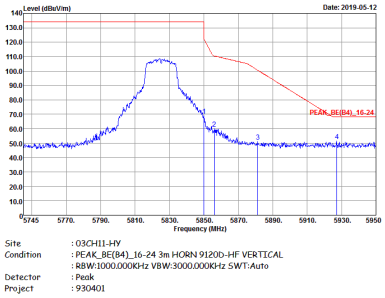
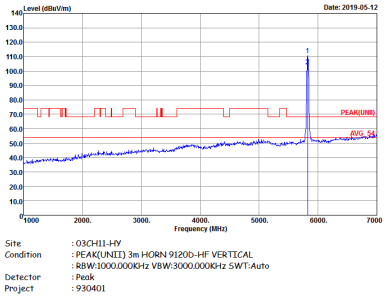
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
2	Horizontal	Fundamental
Peak		

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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
2	Horizontal	Fundamental
Peak		
Peak		Left blank

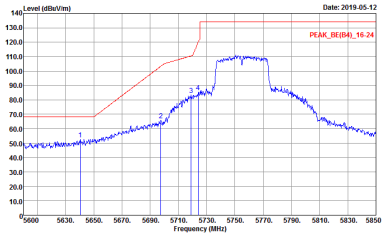
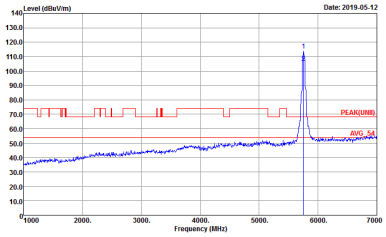
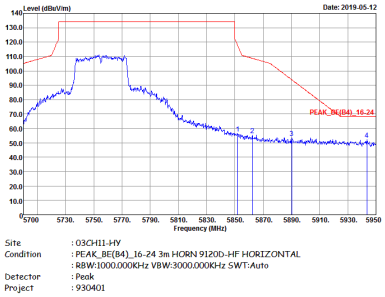
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

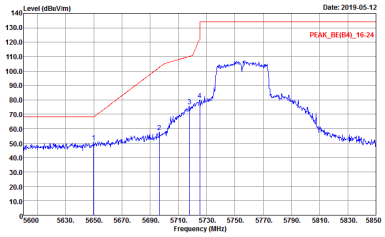
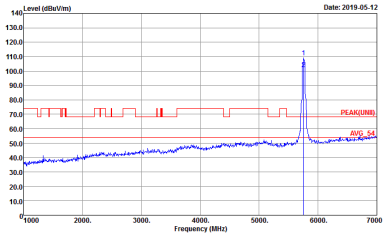
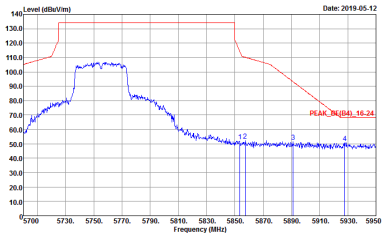
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
2	Horizontal	Fundamental
Peak		

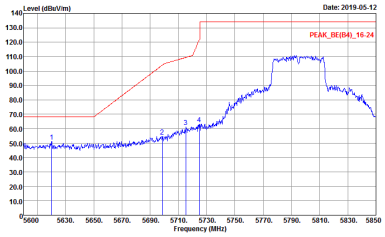
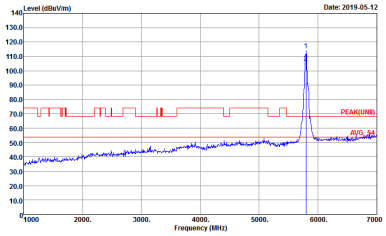
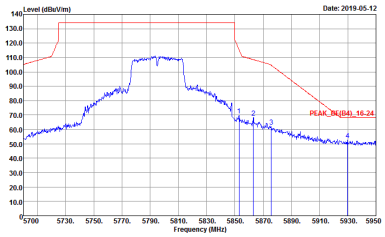
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
2	Vertical	Fundamental
Peak Avg.	 	

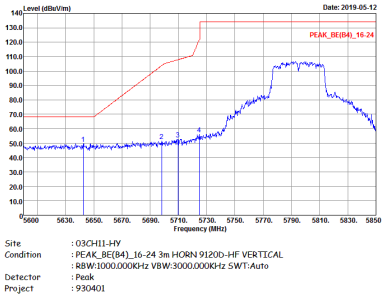
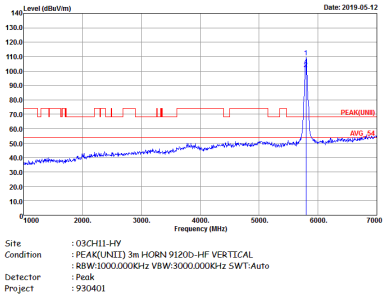
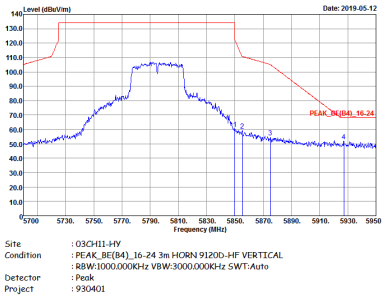
Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

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

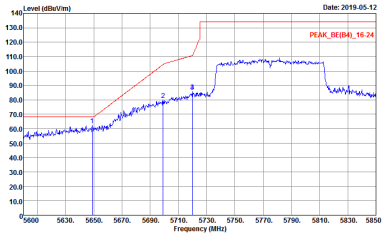
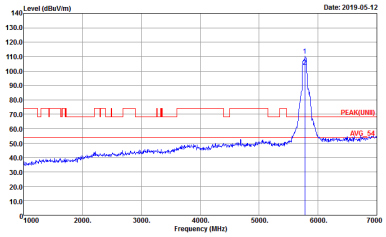
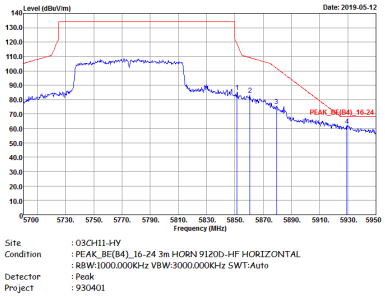
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

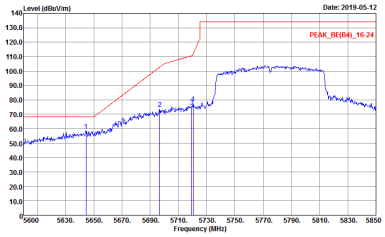
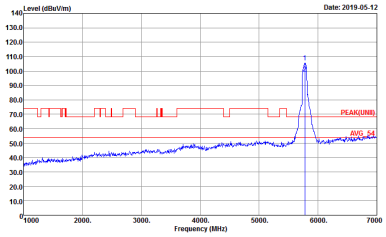
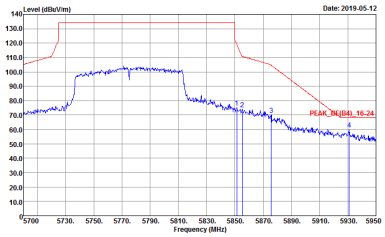
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

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

Band 4 5725~5850MHz

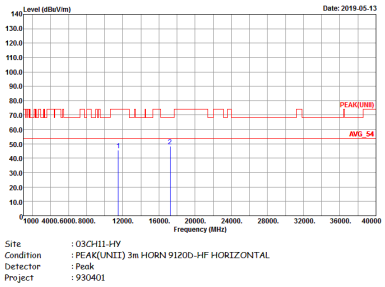
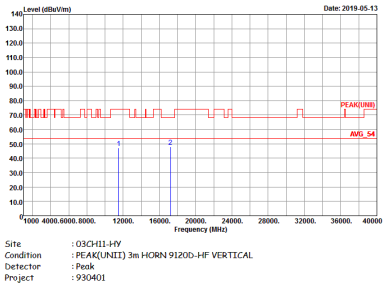
WIFI 802.11ac VHT80 (Band Edge @ 3m)

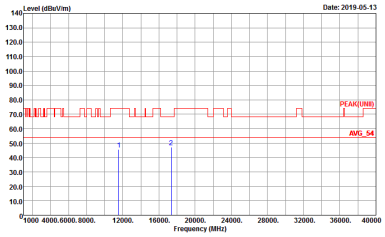
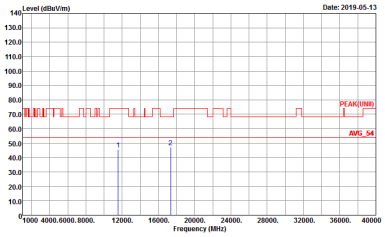
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
2	Horizontal	Fundamental
Peak		
Peak		Left blank

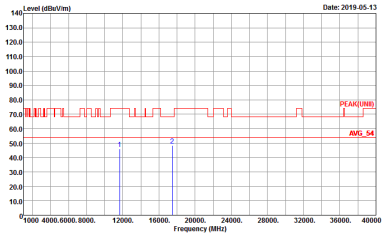
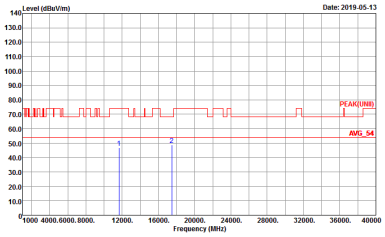
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

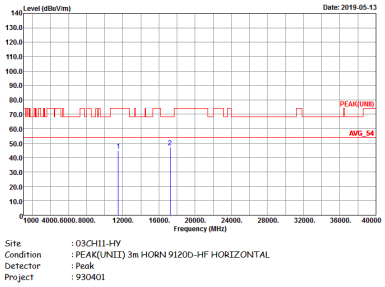
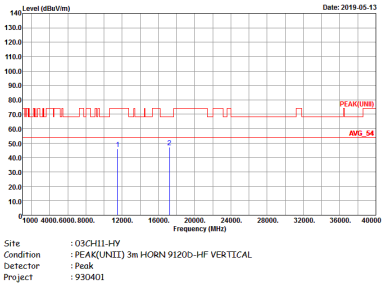
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
2	Horizontal	Vertical
Peak Avg.		

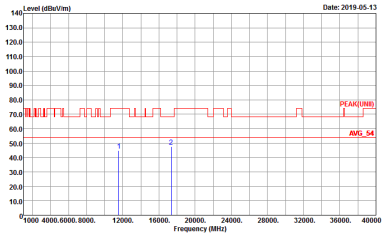
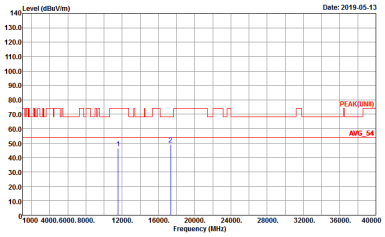
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

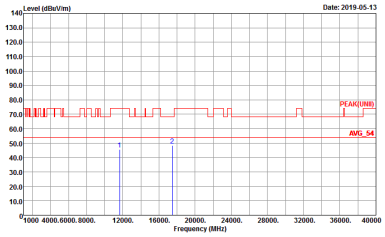
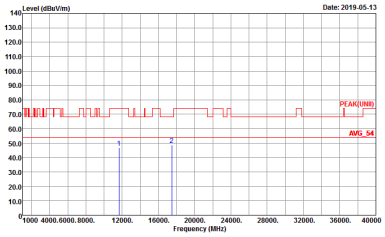
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

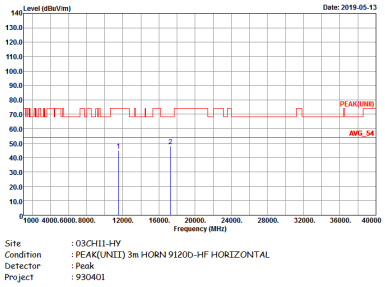
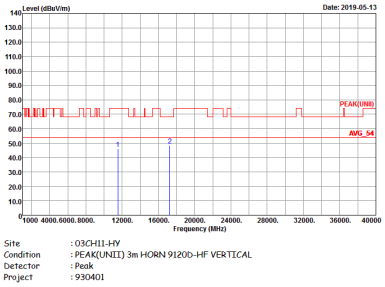
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
2	Horizontal	Vertical
Peak Avg.	 	

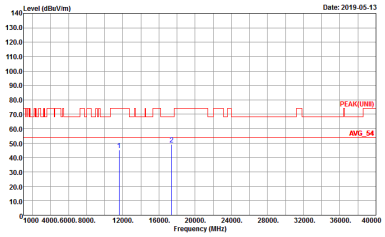
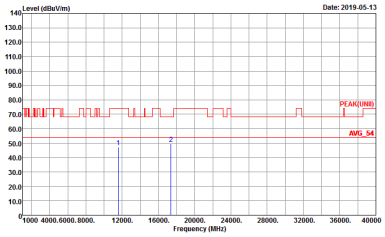
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

Band 4 5725~5850MHz

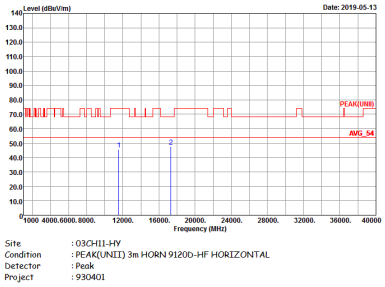
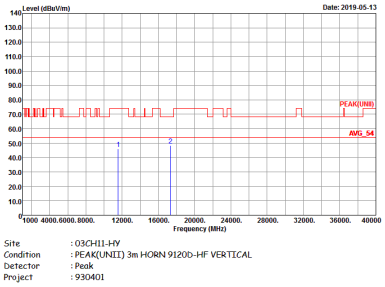
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

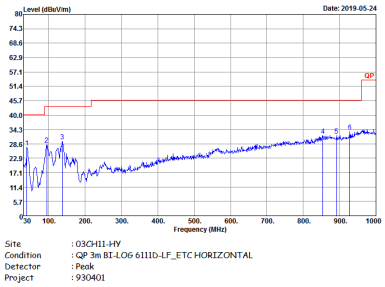
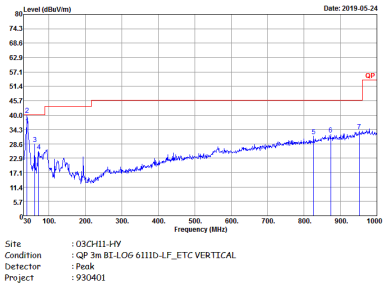
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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

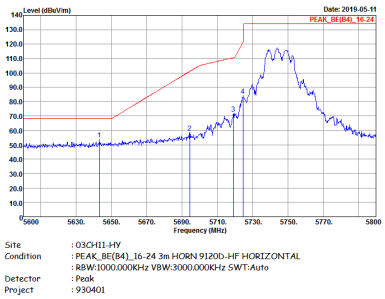
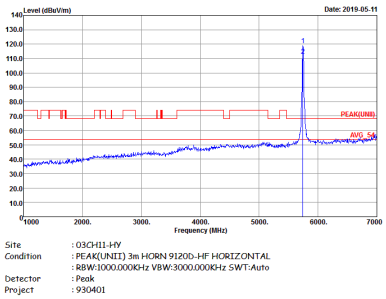
Emission below 1GHz

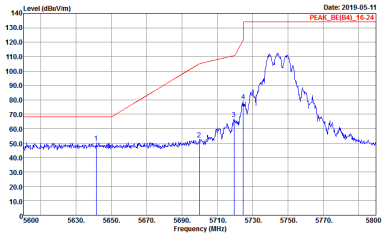
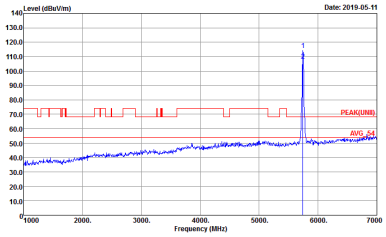
5GHz WIFI 802.11ac VHT80 (LF)

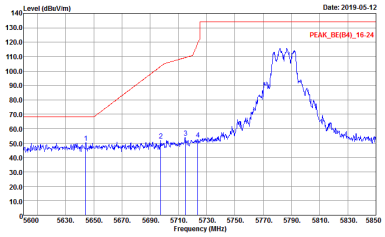
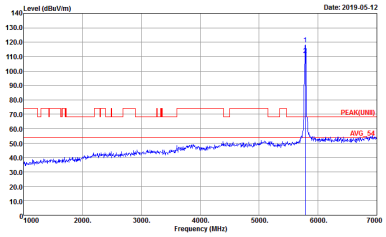
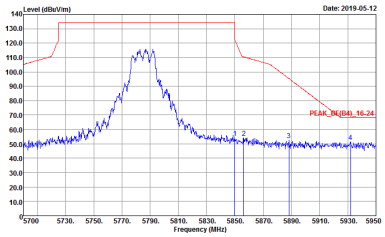
WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT80 LF	
2	Horizontal	Vertical
QP / Peak		

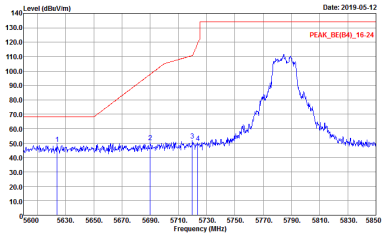
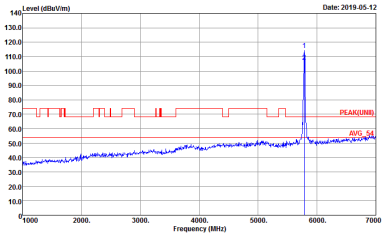
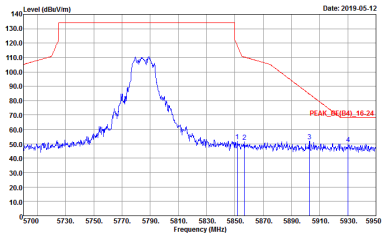
Band 4 - 5725~5850MHz

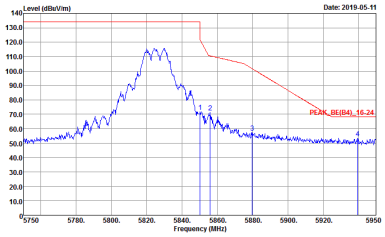
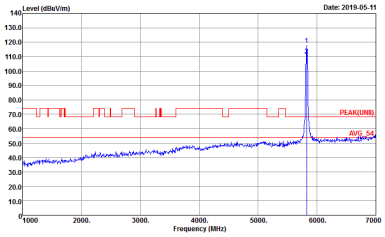
WIFI 802.11a (Band Edge @ 3m)

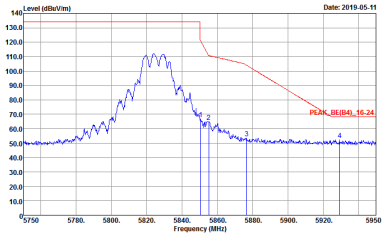
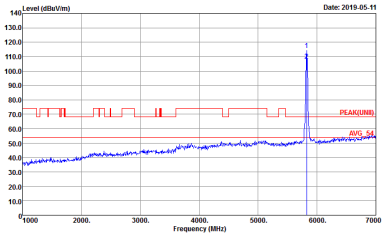
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1+2	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

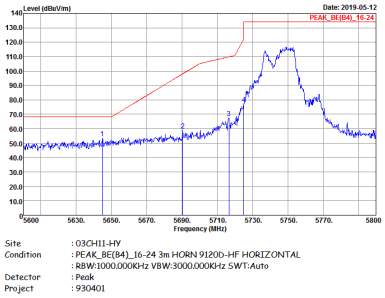
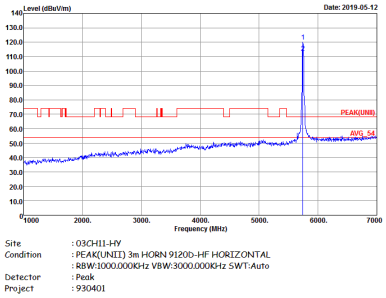
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

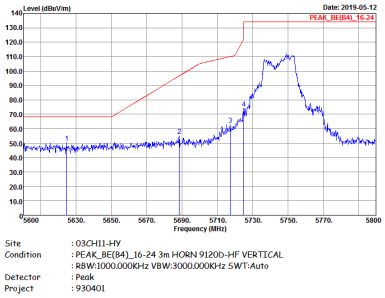
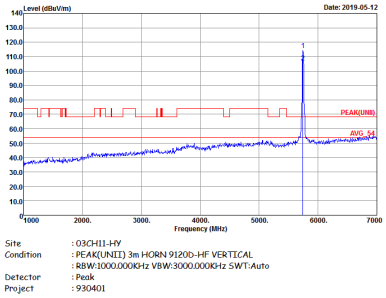
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401

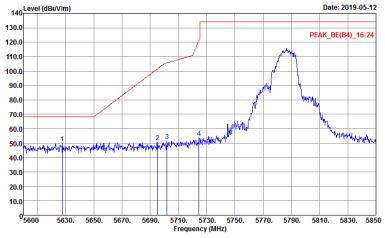
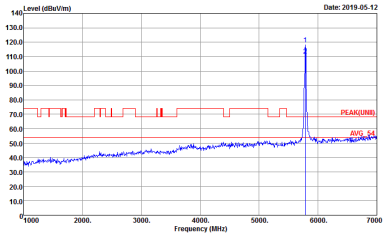
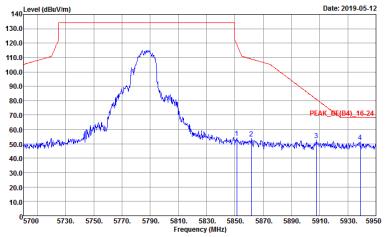
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401

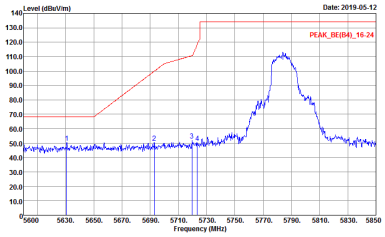
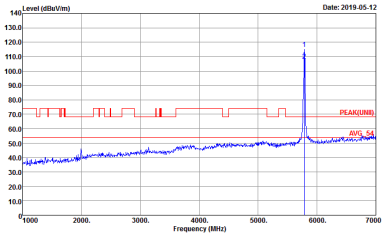
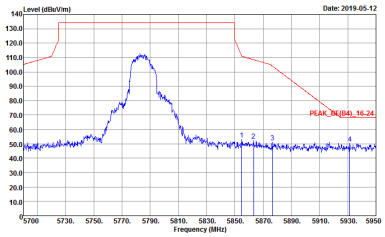
Band 4 5725~5850MHz

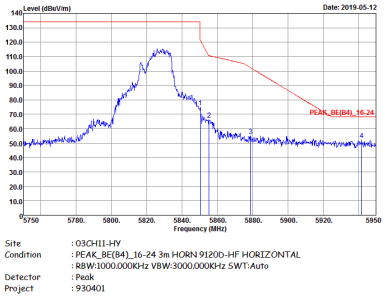
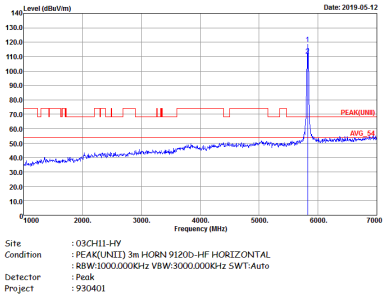
WIFI 802.11ac VHT20 (Band Edge @ 3m)

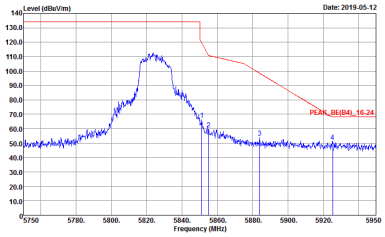
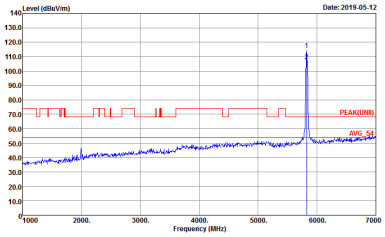
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1+2	Vertical	Fundamental
Peak Avg.	 	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

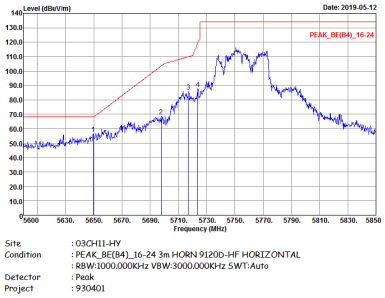
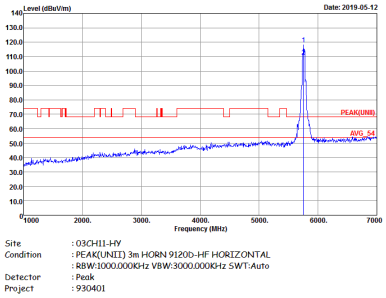
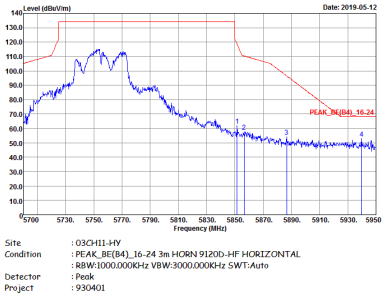
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

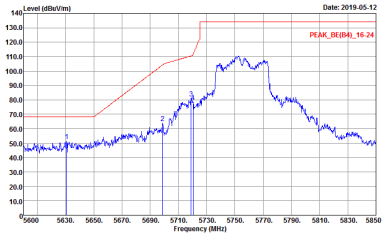
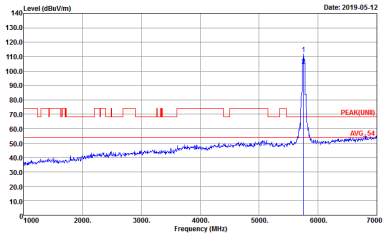
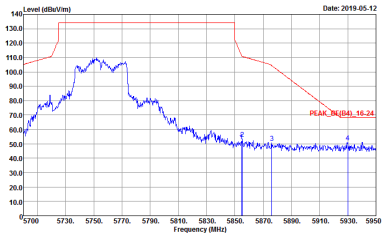
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak		

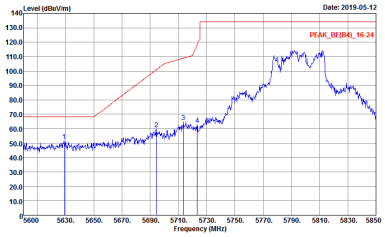
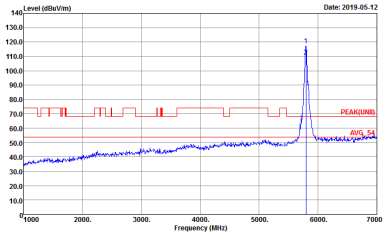
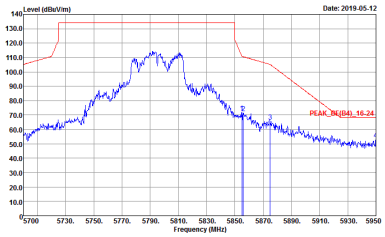
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1+2	Vertical	Fundamental
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401

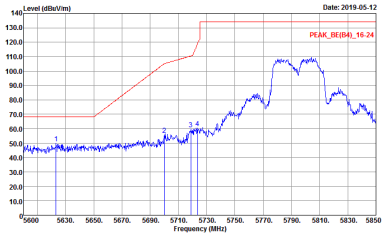
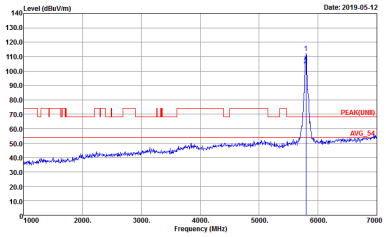
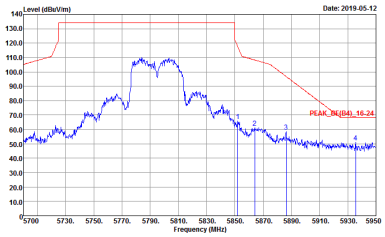
Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

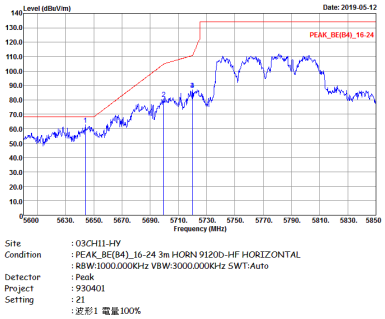
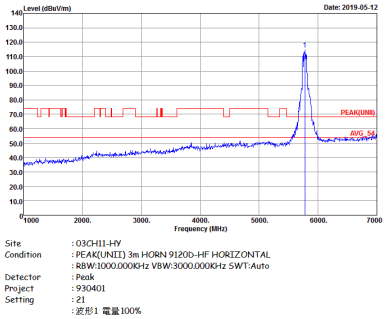
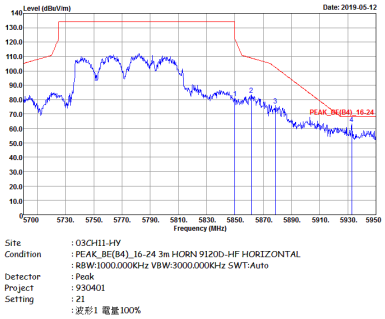
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

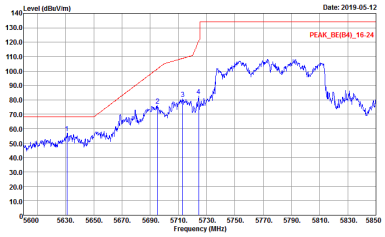
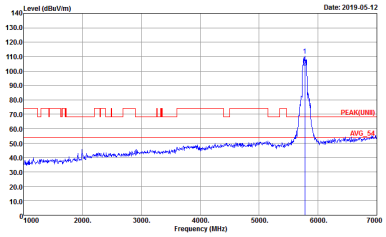
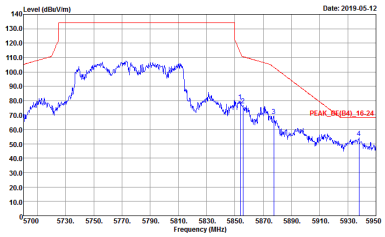
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401	Left blank

Band 4 5725~5850MHz

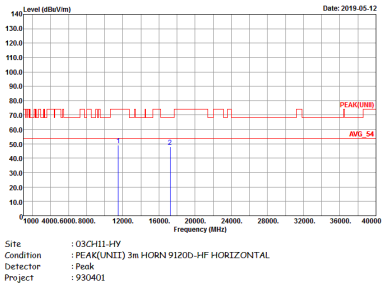
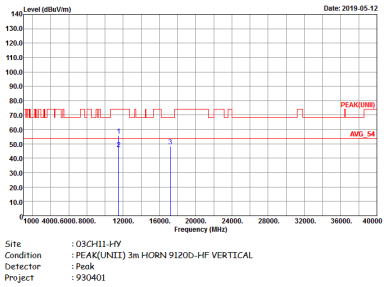
WIFI 802.11ac VHT80 (Band Edge @ 3m)

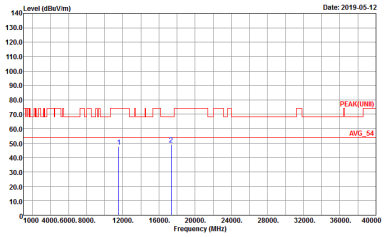
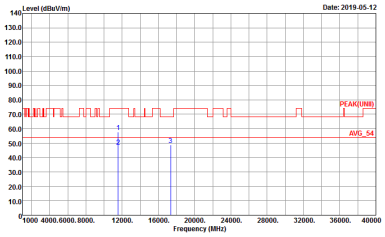
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

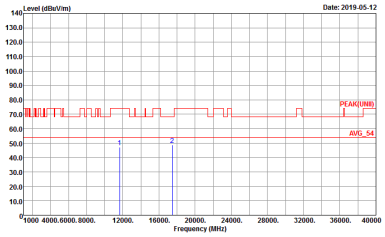
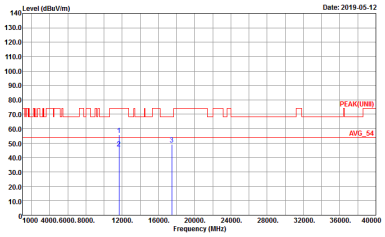
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 21	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 21
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 21	Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

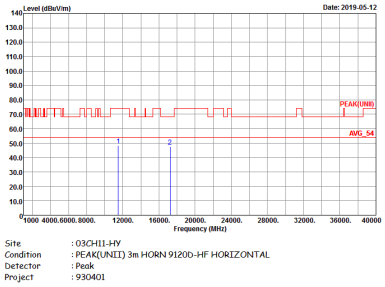
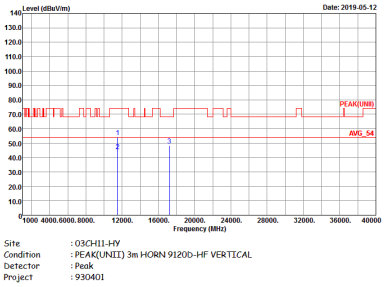
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1+2	Horizontal	Vertical
Peak Avg.		

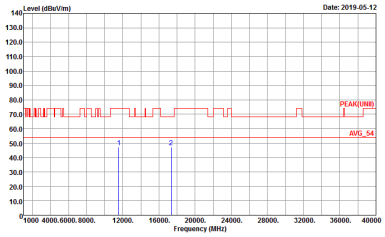
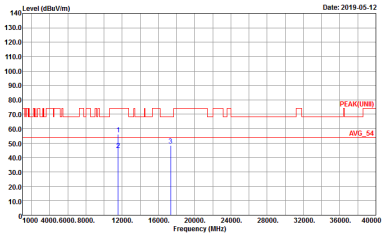
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

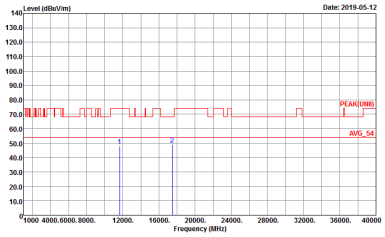
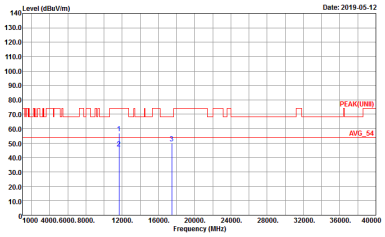
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

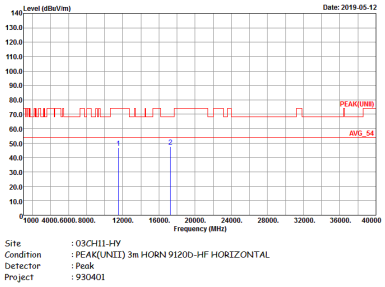
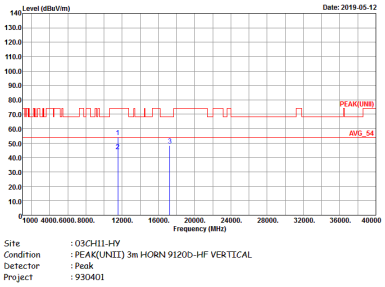
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1+2	Horizontal	Vertical
Peak Avg.		

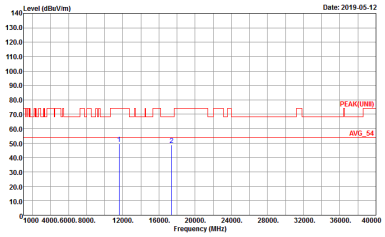
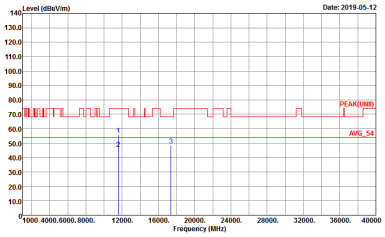
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

Band 4 5725~5850MHz

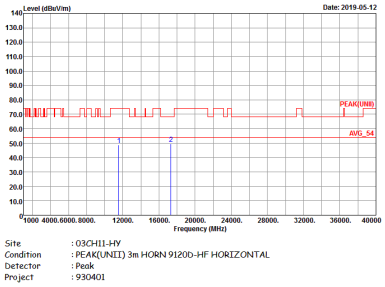
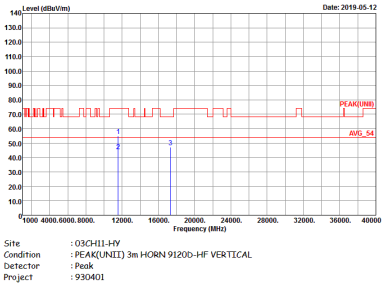
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 930401	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 930401

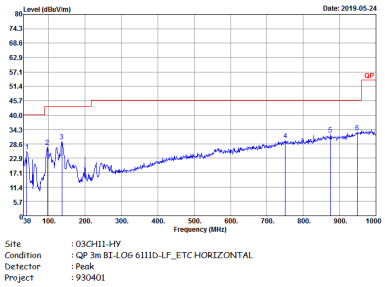
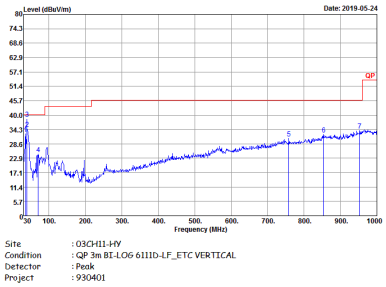
Band 4 5725~5850MHz

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.		

Emission below 1GHz

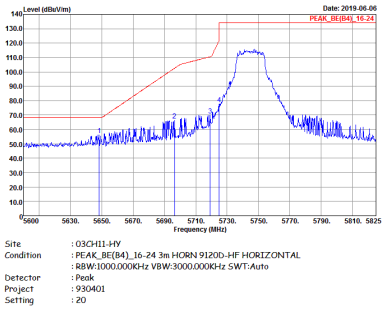
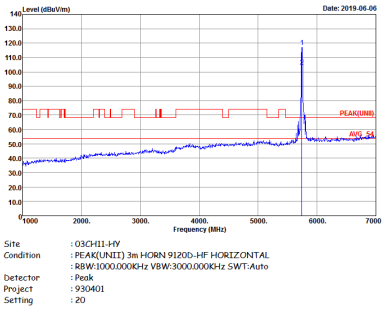
5GHz WIFI 802.11ac VHT80 (LF)

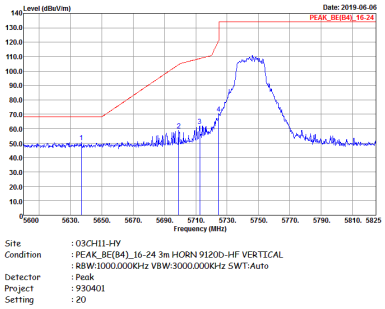
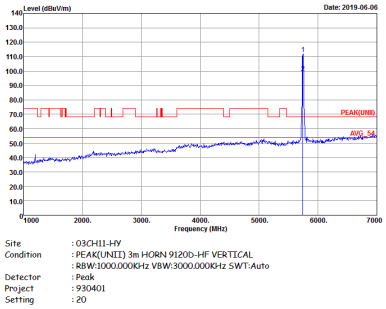
WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT80 LF	
1+2	Horizontal	Vertical
QP / Peak		

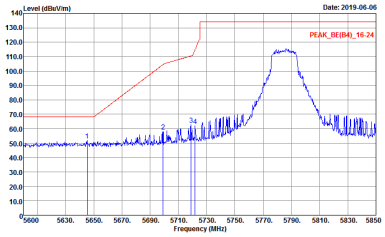
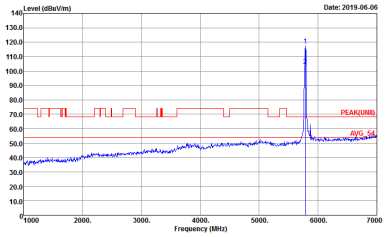
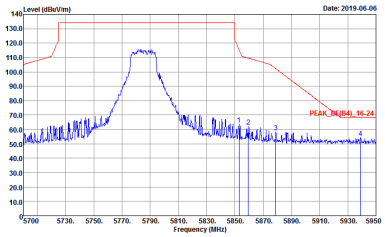
<TXBF Mode>

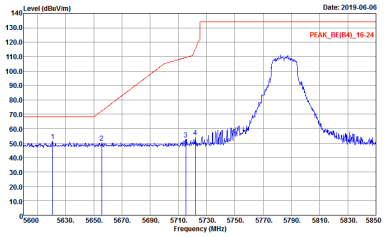
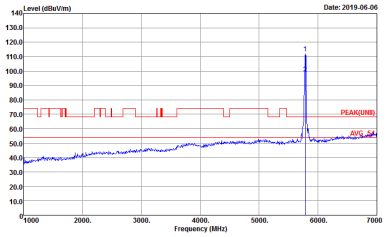
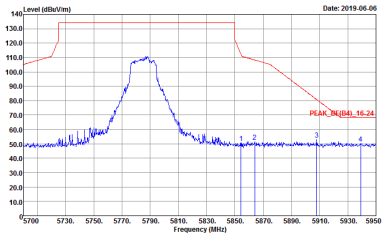
Band 4 - 5725~5850MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
1+2	Vertical	Fundamental
Peak Avg.	 	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 20	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 20
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 20	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 20	 Site : 03CH11-HY Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 20
Peak	 Site : 03CH11-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 930401 Setting : 20	Left blank