FCC RADIO TEST REPORT

FCC ID	:	**UZ7MC220K**
Equipment	:	**Mobile computer**
Brand Name	:	**Zebra**
Model Name	:	**MC220K**
Applicant	:	**Zebra Technologies Corporation** **1 Zebra Plaza, Holtsville, NY 11742**
Manufacturer	:	**Zebra Technologies Corporation** **1 Zebra Plaza, Holtsville, NY 11742**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Apr. 07, 2020 and testing was started from Apr. 11, 2020 and completed on Aug. 15, 2020. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR040803-02E	01	Initial issue of report	Aug. 31, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 1.36 dB at 5725.000 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 14.88 dB at 13.560 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	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: Tina Chuang

1 General Description

1.1 Product Feature of Equipment Under Test

Product Specification subjective to this standard	
Equipment	Mobile computer
Brand Name	Zebra
Model Name	MC220K
FCC ID	UZ7MC220K
EUT supports Radios application	NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	EV1
SW Version	10-11-31.00-QG-U00-PRD-HEL-04
OS Version	Android 10
MFD	02JUN20
EUT Stage	Engineering Sample

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

Specification of Accessories				
AC Adapter	**Brand Name**	Zebra	**Part Number**	PWR-WUA5V12W0US
Battery	**Brand Name**	Zebra	**Part Number**	BT-000418-10
USB Cable (TypeA plug to TypeC plug)	**Brand Name**	Zebra	**Part Number**	CBL-TC2X-USBC-01
Trigger Handle	**Brand Name**	Zebra	**Part Number**	TRG-MC2X-SNP1-01
Holster 1	**Brand Name**	Zebra	**Part Number**	SG-MC2X-HLSTR-01
Holster 2	**Brand Name**	Zebra	**Part Number**	SG-MC3021212-01R

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
Maximum Output Power to Antenna	**<5180 MHz ~ 5240 MHz>** 802.11a : 22.00 dBm / 0.1585 W 802.11n HT20 : 22.00 dBm / 0.1585 W 802.11n HT40 : 21.00 dBm / 0.1259 W 802.11ac VHT20: 22.10 dBm / 0.1622 W 802.11ac VHT40: 21.10 dBm / 0.1288 W 802.11ac VHT80: 18.80 dBm / 0.0759 W **<5260 MHz ~ 5320 MHz>** 802.11a : 21.40 dBm / 0.1380 W 802.11n HT20 : 21.50 dBm / 0.1413 W 802.11n HT40 : 22.10 dBm / 0.1622 W 802.11ac VHT20: 21.60 dBm / 0.1445 W 802.11ac VHT40: 22.20 dBm / 0.1660 W 802.11ac VHT80: 16.00 dBm / 0.0398 W **<5500 MHz ~ 5720 MHz>** 802.11a : 22.30 dBm / 0.1698 W 802.11n HT20 : 21.80 dBm / 0.1514 W 802.11n HT40 : 21.40 dBm / 0.1380 W 802.11ac VHT20: 21.90 dBm / 0.1549 W 802.11ac VHT40: 21.50 dBm / 0.1413 W 802.11ac VHT80: 20.60 dBm / 0.1148 W
99% Occupied Bandwidth	802.11a : 29.42 MHz 802.11ac VHT20 : 27.57 MHz 802.11ac VHT40 : 45.15 MHz 802.11ac VHT80 : 77.44 MHz
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)
Antenna Type / Gain	**<5180 MHz ~ 5240 MHz>** Monopole Antenna with gain 2.34 dBi **<5260 MHz ~ 5320 MHz>** Monopole Antenna with gain 2.34 dBi **<5500 MHz ~ 5720 MHz >** Monopole Antenna with gain 4.26 dBi

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	03CH07-HY

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

FCC designation No.: TW1190

1.5 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Z plane) 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)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42#	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58#	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106#	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118*	5590	124	5620
	120	5600	126*	5630
	122#	5610	128	5640

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	138#	5690	144	5720
	142*	5710		

Note:

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

2.2 Test Mode

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

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

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

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	122
H	High	-	-	-
Straddle		-	-	138

Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

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 036	5180	**22.00**	CH 036	21.70	21.70	21.90	21.90	21.80	21.80	21.80
CH 044	5220	21.30								
CH 048	5240	21.40								
CH 052	5260	**21.40**	CH 052	21.00	21.00	21.00	20.90	20.90	20.90	20.90
CH 060	5300	21.30								
CH 064	5320	19.90								
CH 100	5500	**22.30**	CH 100	21.90	21.90	22.00	21.90	22.20	22.20	22.20
CH 116	5580	21.50								
CH 140	5700	20.10								
CH 144*	5720	21.50								

Note: The above Frequency and Channel in "*" were straddle Channel.

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 036	5180	**22.00**	CH 036	21.60	21.50	21.50	21.50	21.50	21.50	21.50
CH 044	5220	21.30								
CH 048	5240	21.40								
CH 052	5260	**21.50**	CH 052	21.00	21.20	21.20	21.20	21.20	21.20	21.20
CH 060	5300	**21.50**								
CH 064	5320	19.90								
CH 100	5500	**21.80**	CH 100	21.30	21.30	21.30	21.50	21.50	21.50	21.50
CH 116	5580	21.40								
CH 140	5700	19.40								
CH 144*	5720	21.50								

Note: The above Frequency and Channel in "*" were straddle Channel.

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 038	5190	18.40	CH 046	20.70	20.70	20.70	20.50	20.50	20.50	20.50
CH 046	5230	**21.00**								
CH 054	5270	**22.10**	CH 054	21.60	21.60	21.60	21.70	21.70	21.80	21.80
CH 062	5310	15.80								
CH 102	5510	18.40	CH 110	20.9	20.9	20.9	21.0	21.0	21.0	21.1
CH 110	5550	**21.40**								
CH 134	5670	20.70								
CH 142*	5710	21.30								

Note: The above Frequency and Channel in "*" were straddle Channel.

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 036	5180	**22.10**	CH 036	21.70	21.60	21.60	21.60	21.60	21.60	21.60	21.60
CH 044	5220	21.40									
CH 048	5240	21.50									
CH 052	5260	**21.60**	CH 052	21.10	21.30	21.30	21.30	21.30	21.30	21.30	21.30
CH 060	5300	**21.60**									
CH 064	5320	20.00									
CH 100	5500	**21.90**	CH 100	21.50	21.50	21.50	21.60	21.60	21.60	21.60	21.60
CH 116	5580	21.50									
CH 140	5700	19.50									
CH 144*	5720	21.60									

Note: The above Frequency and Channel in "*" were straddle Channel.

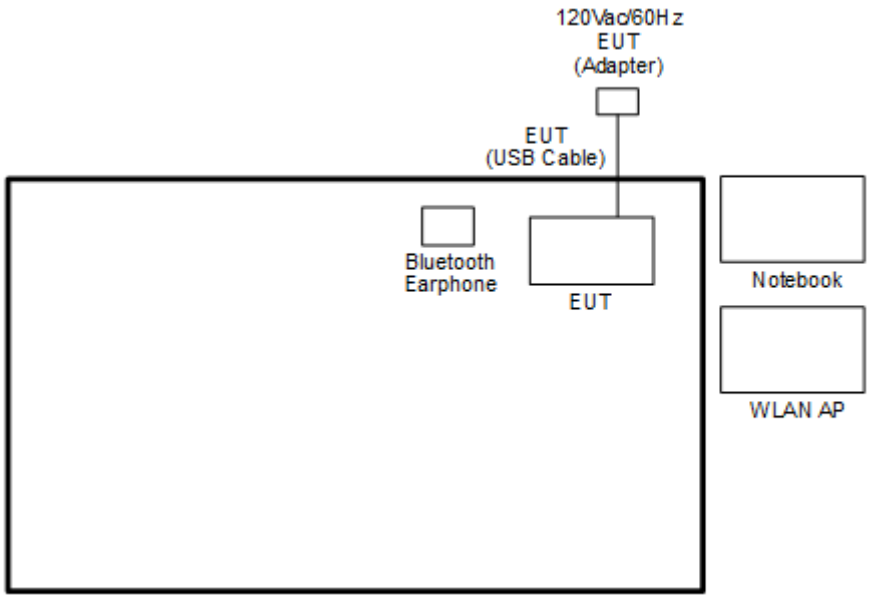
802.11ac VHT40 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index							
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 038	5190	18.50	CH 046	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8
CH 046	5230	**21.10**										
CH 054	5270	**22.20**	CH 054	21.8	21.8	21.8	21.9	21.9	22.0	22.0	22.0	22.0
CH 062	5310	15.90										
CH 102	5510	18.50	CH 110	21.1	21.1	21.1	21.2	21.2	21.2	21.2	21.2	21.2
CH 110	5550	**21.50**										
CH 134	5670	20.80										
CH 142*	5710	21.40										

Note: The above Frequency and Channel in "*" were straddle Channel.

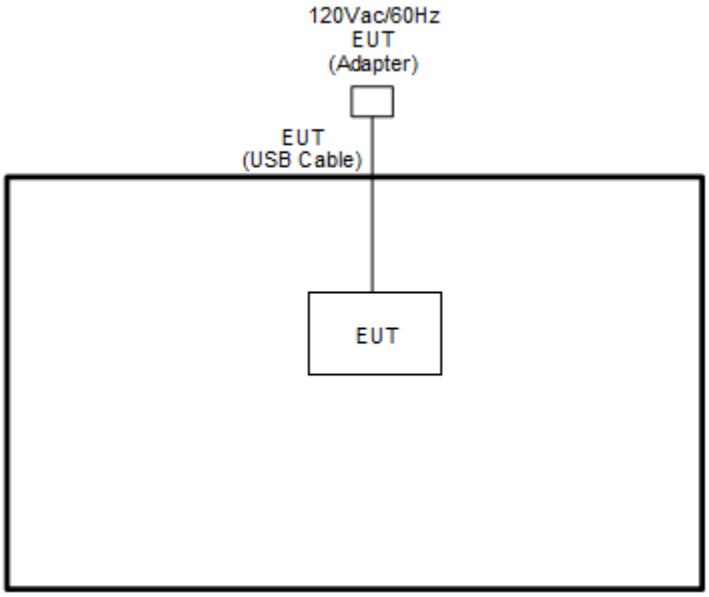
802.11ac VHT80 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 042	5210	**18.80**	CH 042	18.40	18.40	18.40	18.50	18.50	18.50	18.50	18.50	18.50
CH 058	5290	**16.00**	CH 058	15.60	15.60	15.60	15.70	15.70	15.70	15.70	15.70	15.70
CH 106	5530	15.40	CH 138	21.50	21.50	21.50	21.40	21.40	21.40	21.40	21.40	21.40
CH 122	5610	20.60										
CH 138*	5690	**21.80**										

Note: The above Frequency and Channel in "*" were straddle Channel.

2.3 Connection Diagram of Test System



<For WLAN Tx Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT V4.0.00156.0” 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.

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 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

3.1.4 Test Setup

3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Test Engineer :	Hank Hsu, Kai Liao, Owen Yang, Tommy Lee, Ryan Lin	Temperature :	21.1~24.9°C
		Relative Humidity :	50.1~56.6%

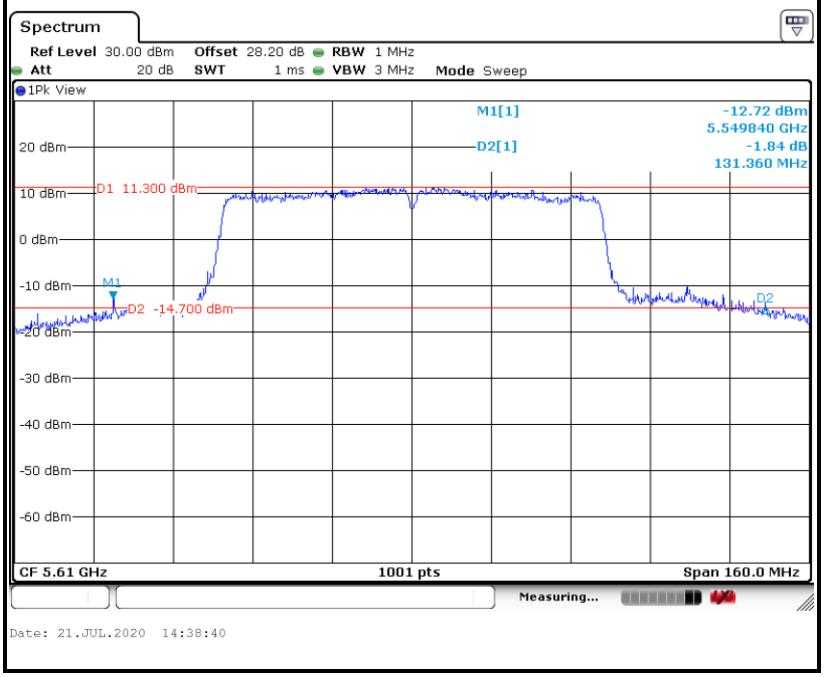
Band I single antenna														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		-	Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	17.88	-	31.30	-	-		22.52	-		
11a	6Mbps	1	44	5220	26.27	-	40.10	-	-		23.01	-		
11a	6Mbps	1	48	5240	26.72	-	44.00	-	-		23.01	-		
VHT20	MCS0	1	36	5180	18.73	-	31.15	-	-		22.73	-		
VHT20	MCS0	1	44	5220	26.87	-	46.40	-	-		23.01	-	-	-
VHT20	MCS0	1	48	5240	27.27	-	47.45	-	-		23.01	-		
VHT40	MCS0	1	38	5190	36.66	-	42.48	-	-		23.01	-		
VHT40	MCS0	1	46	5230	39.76	-	61.20	-	-		23.01	-		
VHT80	MCS0	1	42	5210	**76.84**	-	**84.80**	-	-		23.01	-		

Band II single antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	52	5260	29.42	-	45.20	-	23.98	-	30.00	-	23.98	-	
11a	6Mbps	1	60	5300	25.82	-	38.00	-	23.98	-	30.00	-	23.98	-	
11a	6Mbps	1	64	5320	17.13	-	29.50	-	23.34	-	29.34	-	23.98	-	
VHT20	MCS0	1	52	5260	27.57	-	45.95	-	23.98	-	30.00	-	23.98	-	
VHT20	MCS0	1	60	5300	25.97	-	45.70	-	23.98	-	30.00	-	23.98	-	-
VHT20	MCS0	1	64	5320	18.58	-	30.90	-	23.69	-	29.69	-	23.98	-	
VHT40	MCS0	1	54	5270	45.15	-	66.51	-	23.98	-	30.00	-	23.98	-	
VHT40	MCS0	1	62	5310	36.56	-	42.12	-	23.98	-	30.00	-	23.98	-	
VHT80	MCS0	1	58	5290	**76.84**	-	**84.80**	-	23.98	-	30.00	-	23.98	-	

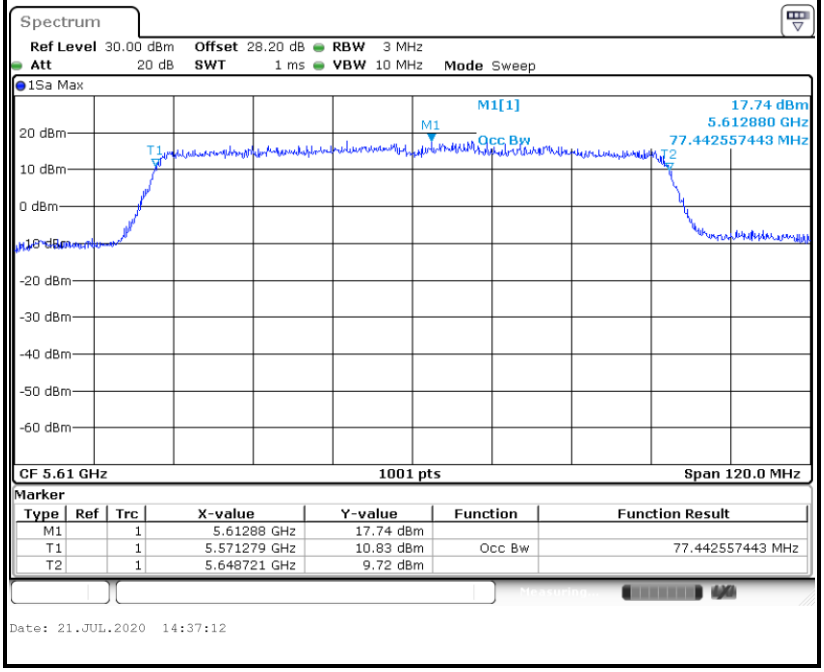
Band III single antenna																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	100	5500	24.68	-	41.05	-	23.98	-	30.00	-	23.98	-	----	----
11a	6Mbps	1	116	5580	23.43	-	39.80	-	23.98	-	30.00	-	23.98	-	----	----
11a	6Mbps	1	140	5700	18.13	-	31.40	-	23.58	-	29.58	-	23.98	-	----	----
VHT20	MCS0	1	100	5500	25.52	-	44.30	-	23.98	-	30.00	-	23.98	-	----	----
VHT20	MCS0	1	116	5580	23.73	-	40.40	-	23.98	-	30.00	-	23.98	-	----	----
VHT20	MCS0	1	140	5700	18.38	-	29.35	-	23.64	-	29.64	-	23.98	-	----	----
VHT40	MCS0	1	102	5510	36.56	-	42.12	-	23.98	-	30.00	-	23.98	-	----	----
VHT40	MCS0	1	110	5550	37.16	-	64.62	-	23.98	-	30.00	-	23.98	-	----	----
VHT40	MCS0	1	134	5670	37.56	-	61.29	-	23.98	-	30.00	-	23.98	-	----	----
VHT80	MCS0	1	106	5530	76.96	-	84.64	-	23.98	-	30.00	-	23.98	-	----	----
VHT80	MCS0	1	122	5610	**77.44**	-	**131.36**	-	23.98	-	30.00	-	23.98	-	----	----

Band III straddle channel single antenna																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	144	5720	15.34	-	23.75	-	22.86	-	28.86	-	23.98	-	2.95	-
VHT20	MCS0	1	144	5720	15.39	-	24.20	-	22.87	-	28.87	-	23.98	-	3.80	-
VHT40	MCS0	1	142	5710	33.58	-	43.08	-	23.98	-	30.00	-	23.98	-	3.18	-
VHT80	MCS0	1	138	5690	73.60	-	94.68	-	23.98	-	30.00	-	23.98	-	2.60	-

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

■ For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For the 5.25–5.725 GHz bands:

■ The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

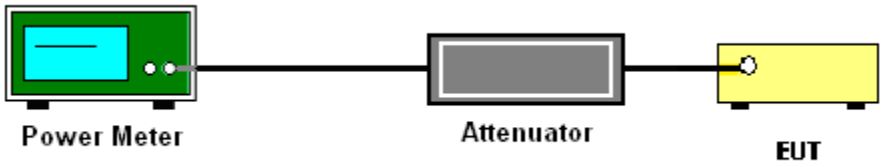
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using an 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.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Test Engineer :	Hank Hsu, Kai Liao, Owen Yang, Tommy Lee, Ryan Lin	Temperature :	21.1~24.9°C
		Relative Humidity :	50.1~56.6%

FCC Band I single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	36	5180	22.00	-	-	24.00	24.00	2.34	0.00	Pass
11a	6Mbps	1	44	5220	21.30	-		24.00	24.00	2.34	0.00	Pass
11a	6Mbps	1	48	5240	21.40	-		24.00	24.00	2.34	0.00	Pass
HT20	MCS0	1	36	5180	22.00	-		24.00	24.00	2.34	0.00	Pass
HT20	MCS0	1	44	5220	21.30	-		24.00	24.00	2.34	0.00	Pass
HT20	MCS0	1	48	5240	21.40	-		24.00	24.00	2.34	0.00	Pass
HT40	MCS0	1	38	5190	18.40	-		24.00	24.00	2.34	0.00	Pass
HT40	MCS0	1	46	5230	21.00	-		24.00	24.00	2.34	0.00	Pass
VHT20	MCS0	1	36	5180	**22.10**	-		24.00	24.00	2.34	0.00	Pass
VHT20	MCS0	1	44	5220	21.40	-		24.00	24.00	2.34	0.00	Pass
VHT20	MCS0	1	48	5240	21.50	-		24.00	24.00	2.34	0.00	Pass
VHT40	MCS0	1	38	5190	18.50	-		24.00	24.00	2.34	0.00	Pass
VHT40	MCS0	1	46	5230	21.10	-		24.00	24.00	2.34	0.00	Pass
VHT80	MCS0	1	42	5210	18.80	-		24.00	24.00	2.34	0.00	Pass

FCC Band II single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	21.40	-		23.98	23.98	2.34	0.00	26.99	Pass
11a	6Mbps	1	60	5300	21.30	-		23.98	23.98	2.34	0.00	26.99	Pass
11a	6Mbps	1	64	5320	19.90	-		23.98	23.98	2.34	0.00	26.99	Pass
HT20	MCS0	1	52	5260	21.50	-		23.98	23.98	2.34	0.00	26.99	Pass
HT20	MCS0	1	60	5300	21.50	-		23.98	23.98	2.34	0.00	26.99	Pass
HT20	MCS0	1	64	5320	19.90	-		23.98	23.98	2.34	0.00	26.99	Pass
HT40	MCS0	1	54	5270	22.10	-		23.98	23.98	2.34	0.00	26.99	Pass
HT40	MCS0	1	62	5310	15.80	-	-	23.98	23.98	2.34	0.00	26.99	Pass
VHT20	MCS0	1	52	5260	21.60	-		23.98	23.98	2.34	0.00	26.99	Pass
VHT20	MCS0	1	60	5300	21.60	-		23.98	23.98	2.34	0.00	26.99	Pass
VHT20	MCS0	1	64	5320	20.00	-		23.98	23.98	2.34	0.00	26.99	Pass
VHT40	MCS0	1	54	5270	**22.20**	-		23.98	23.98	2.34	0.00	26.99	Pass
VHT40	MCS0	1	62	5310	15.90	-		23.98	23.98	2.34	0.00	26.99	Pass
VHT80	MCS0	1	58	5290	16.00	-		23.98	23.98	2.34	0.00	26.99	Pass

FCC Band III single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	**22.30**	-		23.98	23.98	4.26	0.00	26.99	Pass
11a	6Mbps	1	116	5580	21.50	-		23.98	23.98	4.26	0.00	26.99	Pass
11a	6Mbps	1	140	5700	20.10	-		23.98	23.98	4.26	0.00	26.99	Pass
HT20	MCS0	1	100	5500	21.80	-		23.98	23.98	4.26	0.00	26.99	Pass
HT20	MCS0	1	116	5580	21.40	-		23.98	23.98	4.26	0.00	26.99	Pass
HT20	MCS0	1	140	5700	19.40	-		23.98	23.98	4.26	0.00	26.99	Pass
HT40	MCS0	1	102	5510	18.40	-		23.98	23.98	4.26	0.00	26.99	Pass
HT40	MCS0	1	110	5550	21.40	-		23.98	23.98	4.26	0.00	26.99	Pass
HT40	MCS0	1	134	5670	20.70	-	-	23.98	23.98	4.26	0.00	26.99	Pass
VHT20	MCS0	1	100	5500	21.90	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT20	MCS0	1	116	5580	21.50	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT20	MCS0	1	140	5700	19.50	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT40	MCS0	1	102	5510	18.50	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT40	MCS0	1	110	5550	21.50	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT40	MCS0	1	134	5670	20.80	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT80	MCS0	1	106	5530	15.40	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT80	MCS0	1	122	5610	20.60	-		23.98	23.98	4.26	0.00	26.99	Pass

FCC Band III straddle channel single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	144	5720	21.50	-		23.98	23.98	4.26	0.00	26.99	Pass
HT20	MCS0	1	144	5720	21.50	-		23.98	23.98	4.26	0.00	26.99	Pass
HT40	MCS0	1	142	5710	21.30	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT20	MCS0	1	144	5720	21.60	-	-	23.98	23.98	4.26	0.00	26.99	Pass
VHT40	MCS0	1	142	5710	21.40	-		23.98	23.98	4.26	0.00	26.99	Pass
VHT80	MCS0	1	138	5690	21.80	-		23.98	23.98	4.26	0.00	26.99	Pass

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

For the 5.25–5.725 GHz bands:

The maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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.

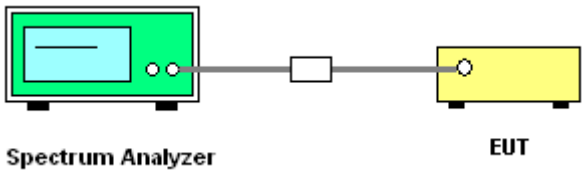
 # Method SA-3 #

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

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 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.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Test Engineer :	Hank Hsu, Kai Liao, Owen Yang, Tommy Lee, Ryan Lin	Temperature :	21.1~24.9°C
		Relative Humidity :	50.1~56.6%

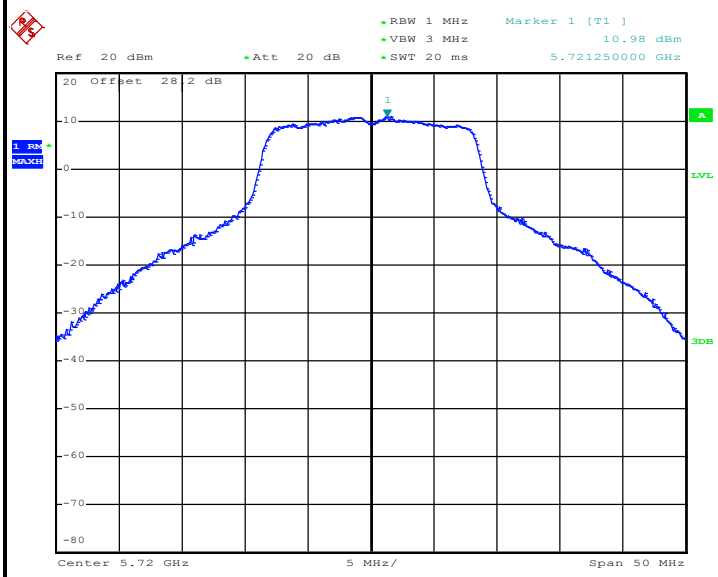
FCC Band I single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	36	5180	10.62	-		11.00	-	2.34	0.00	Pass
11a	6Mbps	1	44	5220	10.76	-		11.00	-	2.34	0.00	Pass
11a	6Mbps	1	48	5240	**10.92**	-		11.00	-	2.34	0.00	Pass
VHT20	MCS0	1	36	5180	10.73	-		11.00	-	2.34	0.00	Pass
VHT20	MCS0	1	44	5220	10.80	-	-	11.00	-	2.34	0.00	Pass
VHT20	MCS0	1	48	5240	10.60	-		11.00	-	2.34	0.00	Pass
VHT40	MCS0	1	38	5190	6.71	-		11.00	-	2.34	0.00	Pass
VHT40	MCS0	1	46	5230	8.90	-		11.00	-	2.34	0.00	Pass
VHT80	MCS0	1	42	5210	3.44	-		11.00	-	2.34	0.00	Pass

Band II single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	52	5260	10.75	-		11.00	-	2.34	0.00	Pass
11a	6Mbps	1	60	5300	10.79	-		11.00	-	2.34	0.00	Pass
11a	6Mbps	1	64	5320	10.58	-		11.00	-	2.34	0.00	Pass
VHT20	MCS0	1	52	5260	**10.98**	-		11.00	-	2.34	0.00	Pass
VHT20	MCS0	1	60	5300	10.81	-	-	11.00	-	2.34	0.00	Pass
VHT20	MCS0	1	64	5320	10.65	-		11.00	-	2.34	0.00	Pass
VHT40	MCS0	1	54	5270	9.73	-		11.00	-	2.34	0.00	Pass
VHT40	MCS0	1	62	5310	9.70	-		11.00	-	2.34	0.00	Pass
VHT80	MCS0	1	58	5290	8.28	-		11.00	-	2.34	0.00	Pass

Band III single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	100	5500	10.86	-		11.00	-	4.26	0.00	Pass
11a	6Mbps	1	116	5580	10.88	-		11.00	-	4.26	0.00	Pass
11a	6Mbps	1	140	5700	**10.92**	-		11.00	-	4.26	0.00	Pass
VHT20	MCS0	1	100	5500	10.76	-		11.00	-	4.26	0.00	Pass
VHT20	MCS0	1	116	5580	10.79	-		11.00	-	4.26	0.00	Pass
VHT20	MCS0	1	140	5700	10.19	-	-	11.00	-	4.26	0.00	Pass
VHT40	MCS0	1	102	5510	5.74	-		11.00	-	4.26	0.00	Pass
VHT40	MCS0	1	110	5550	9.58	-		11.00	-	4.26	0.00	Pass
VHT40	MCS0	1	134	5670	8.34	-		11.00	-	4.26	0.00	Pass
VHT80	MCS0	1	106	5530	1.70	-		11.00	-	4.26	0.00	Pass
VHT80	MCS0	1	122	5610	7.95	-		11.00	-	4.26	0.00	Pass

Band III straddle channel single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	144	5720	**10.98**	-		11.00	-	4.26	0.00	Pass
VHT20	MCS0	1	144	5720	10.76	-	-	11.00	-	4.26	0.00	Pass
VHT40	MCS0	1	142	5710	9.11	-		11.00	-	4.26	0.00	Pass
VHT80	MCS0	1	138	5690	7.58	-		11.00	-	4.26	0.00	Pass

Worst Case Power Density (dBm/MHz)



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3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of –27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

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

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

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

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

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

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

(i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of −27 dBm/MHz.

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.4.2 Measuring Instruments

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

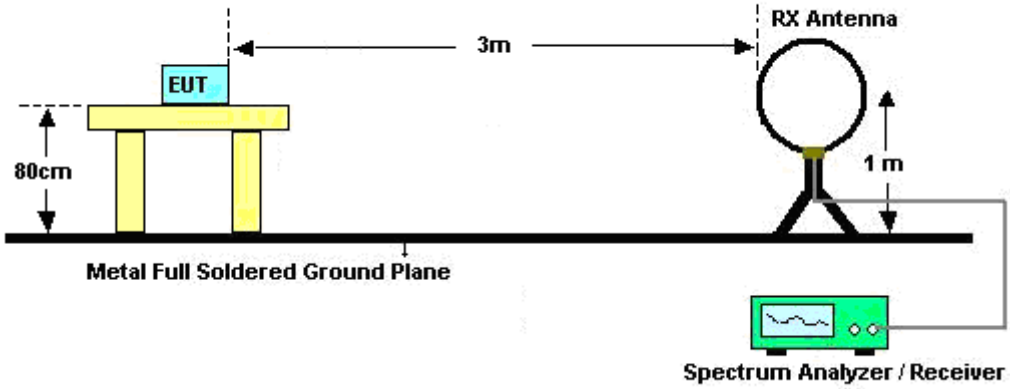
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- 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.

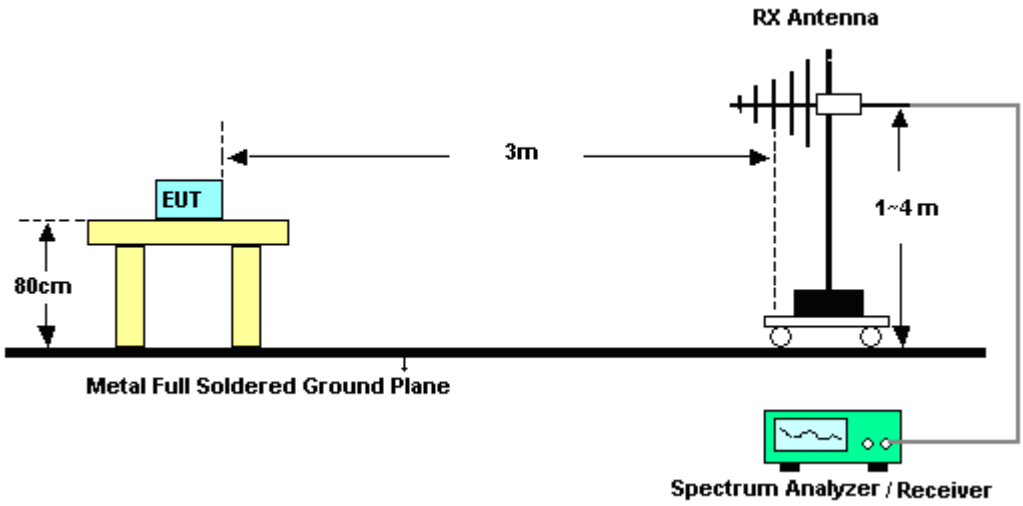
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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

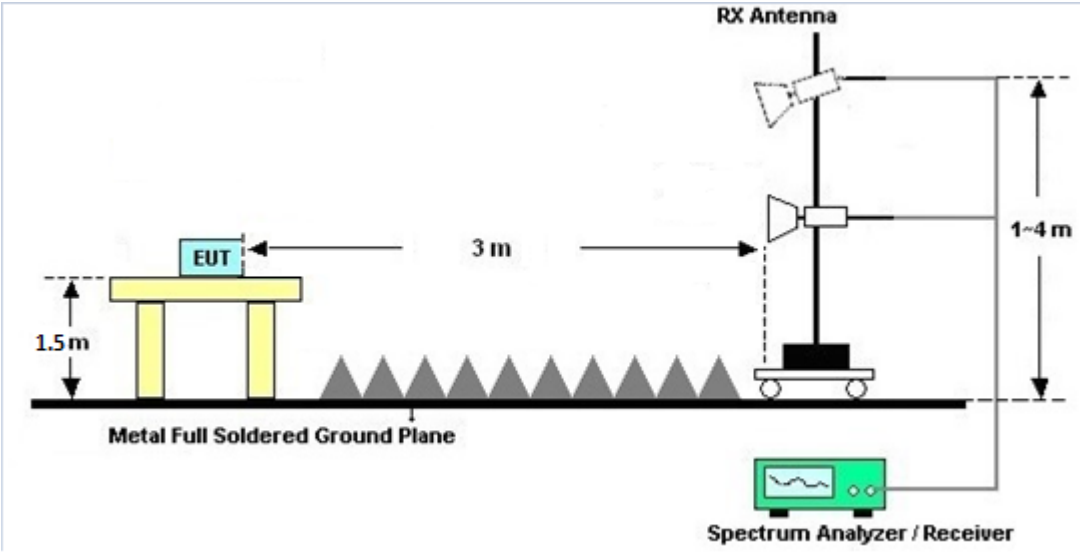
For radiated emissions below 30MHz



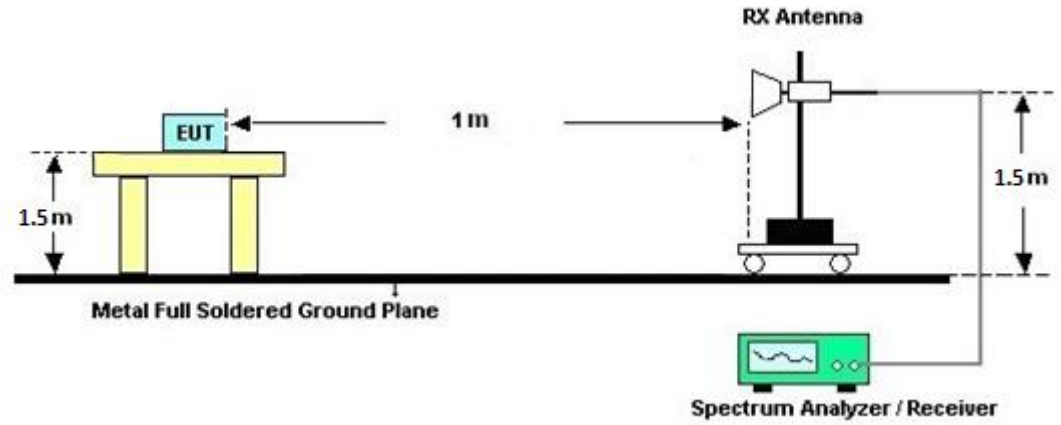
For radiated emissions from 30MHz to 1GHz



For radiated emissions from 1GHz to 18GHz



For radiated emissions above 18GHz



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

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

There is a comparison data of both open-field test site and 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 Spurious at 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 Radiated Spurious Emissions (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.

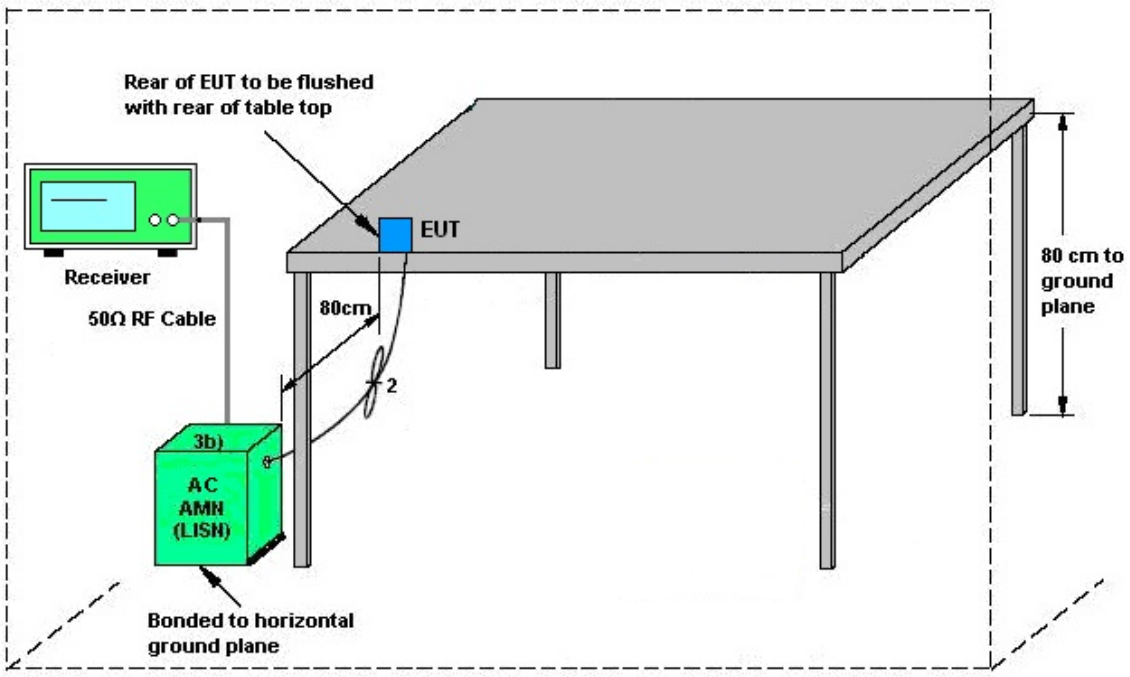
3.5.2 Measuring Instruments

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

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

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	35419 & 03	30MHz~1GHz	Apr. 30, 2019	Apr. 22, 2020 ~ Apr. 28, 2020	Apr. 29, 2020	Radiation (03CH07-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	35419 & 03	30MHz~1GHz	Apr. 29, 2020	Apr. 29, 2020 ~ Aug. 15, 2020	Apr. 28, 2021	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 06, 2019	Apr. 29, 2020 ~ Aug. 15, 2020	Dec. 05, 2020	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MX E)	MY5329005 3	20Hz~26.5GHz	Jan. 18, 2020	Apr. 29, 2020 ~ Aug. 15, 2020	Jan. 17, 2021	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Dec. 26, 2019	Apr. 29, 2020 ~ Aug. 15, 2020	Dec. 25, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-001 01800-30-10 P	1590075	1GHz~18GHz	Apr. 24, 2019	Apr. 22, 2020	Apr. 23, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-001 01800-30-10 P	1590075	1GHz~18GHz	Apr. 23, 2020	Apr. 23, 2020 ~ Aug. 15, 2020	Apr. 22, 2021	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 20, 2019	Apr. 22, 2020 ~ May 18, 2020	May 19, 2020	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 19, 2020	May 19, 2020~ Aug. 15, 2020	May 18, 2021	Radiation (03CH07-HY)
3m Semi Anechoic Chamber (NSA)	TDK	SAC-3M	03CH07-HY	30MHz~1GHz	Jan. 01, 2020	Apr. 29, 2020~ Aug. 15, 2020	Dec. 31, 2020	Radiation (03CH07-HY)
3m Semi Anechoic Chamber (Site VSWR)	TDK	SAC-3M	03CH07-HY	1GHz~18GHz	Dec. 24, 2019	Apr. 29, 2020~ Aug. 15, 2020	Dec. 23, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2,8 01606/2	18GHz~40GHz	Feb. 25, 2020	Apr. 29, 2020~ Aug. 15, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126 E	30MHz~18GHz	N/A	Apr. 29, 2020~ Aug. 15, 2020	N/A	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4, MY28655/4	9kHz~30MHz	Feb. 25, 2020	Apr. 29, 2020~ Aug. 15, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 25, 2020	Apr. 29, 2020~ Aug. 15, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 25, 2020	Apr. 29, 2020~ Aug. 15, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
Controller	ChainTek	Chaintek 3000	N/A	Control Turn table	N/A	Apr. 29, 2020~ Aug. 15, 2020	N/A	Radiation (03CH07-HY)
Controller	Max-Full	MF7802	MF7802083 68	Control Ant Mast	N/A	Apr. 29, 2020~ Aug. 15, 2020	N/A	Radiation (03CH07-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Apr. 29, 2020~ Aug. 15, 2020	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 29, 2020~ Aug. 15, 2020	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	N/A	Apr. 29, 2020~ Aug. 15, 2020	N/A	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 26, 2019	Apr. 29, 2020~ Aug. 15, 2020	Nov. 25, 2020	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	N9010A	MY542004845	10Hz~44GHz	Feb. 10, 2020	Apr. 29, 2020~ Aug. 15, 2020	Feb. 09, 2021	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	N/A	Apr. 29, 2020~ Aug. 15, 2020	N/A	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	80504004656H	N/A	N/A	Apr. 29, 2020~ Aug. 15, 2020	N/A	Radiation (03CH07-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 25, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 15, 2019	Jun. 25, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 07, 2019	Jun. 25, 2020	Nov. 06, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 15, 2019	Jun. 25, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 25, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	Jun. 25, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	Jun. 25, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 2. 2020	Apr. 11, 2020~ Aug. 04. 2020	Mar. 1. 2021	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO10	10MHz~6GHz	Dec. 23, 2019	Apr. 11, 2020~ Aug. 04. 2020	Dec. 22, 2020	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 15, 2019	Apr. 11, 2020~ Aug. 04. 2020	Nov. 14, 2020	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC1300484	N/A	Aug. 22,2019	Apr. 11, 2020~ Aug. 04. 2020	Aug. 21,2020	Conducted (TH05-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.3**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.7**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.3**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0**

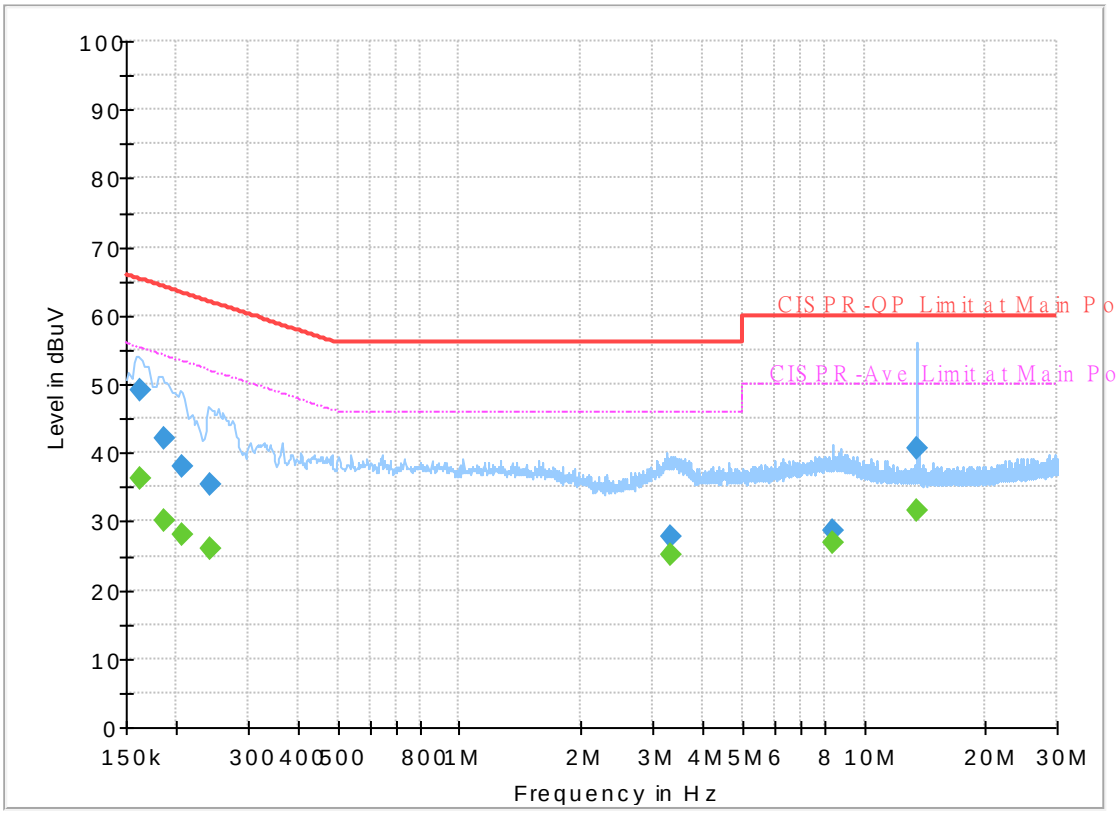
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	**Temperature :**	23~25℃
		Relative Humidity :	42~50%

EUT Information

Report NO :	040803-02
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



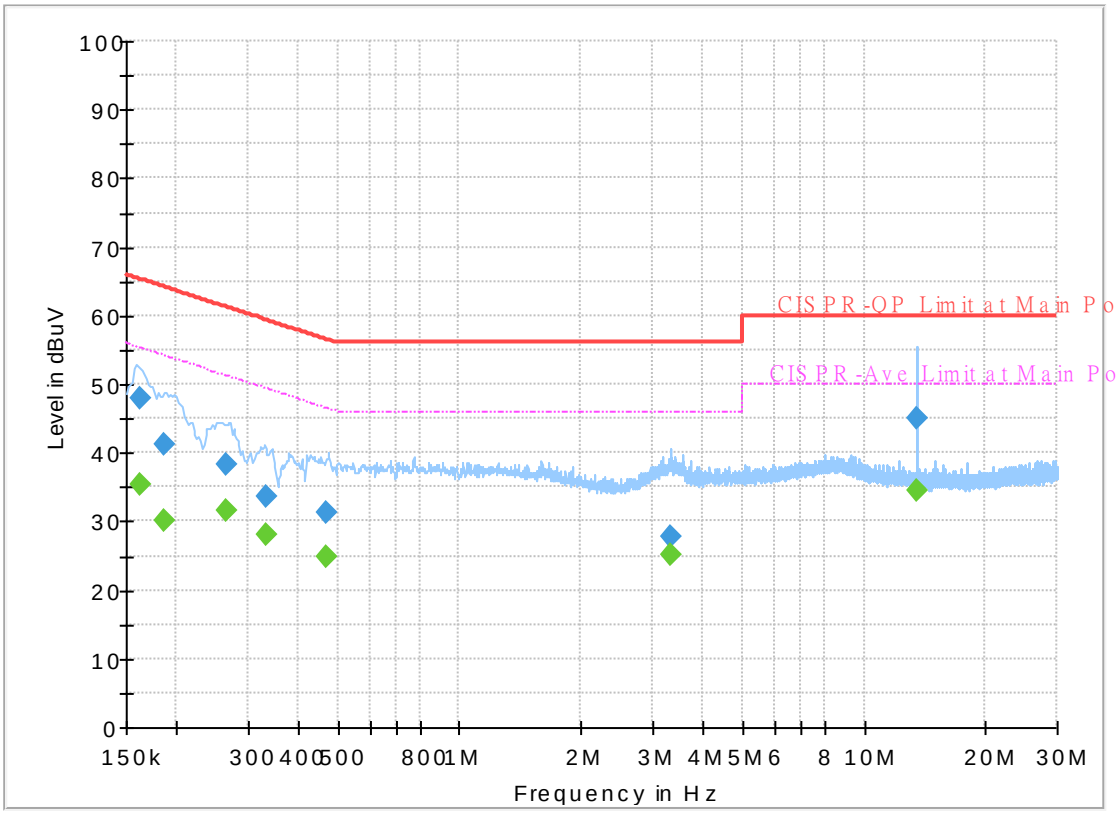
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161790	---	36.28	55.37	19.09	L1	OFF	19.6
0.161790	49.25	---	65.37	16.12	L1	OFF	19.6
0.186000	---	30.12	54.21	24.09	L1	OFF	19.6
0.186000	42.17	---	64.21	22.04	L1	OFF	19.6
0.206970	---	28.13	53.33	25.20	L1	OFF	19.6
0.206970	37.91	---	63.33	25.42	L1	OFF	19.6
0.242880	---	25.93	52.00	26.07	L1	OFF	19.6
0.242880	35.42	---	62.00	26.58	L1	OFF	19.6
3.315750	---	25.04	46.00	20.96	L1	OFF	19.7
3.315750	27.65	---	56.00	28.35	L1	OFF	19.7
8.379780	---	26.76	50.00	23.24	L1	OFF	20.0
8.379780	28.74	---	60.00	31.26	L1	OFF	20.0
13.560000	---	31.69	50.00	18.31	L1	OFF	20.2
13.560000	40.69	---	60.00	19.31	L1	OFF	20.2

EUT Information

Report NO :	040803-02
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.162510	---	35.24	55.34	20.10	N	OFF	19.5
0.162510	47.94	---	65.34	17.40	N	OFF	19.5
0.186000	---	30.02	54.21	24.19	N	OFF	19.5
0.186000	41.20	---	64.21	23.01	N	OFF	19.5
0.264750	---	31.59	51.28	19.69	N	OFF	19.5
0.264750	38.30	---	61.28	22.98	N	OFF	19.5
0.331800	---	28.04	49.41	21.37	N	OFF	19.5
0.331800	33.76	---	59.41	25.65	N	OFF	19.5
0.471300	---	24.86	46.49	21.63	N	OFF	19.5
0.471300	31.15	---	56.49	25.34	N	OFF	19.5
3.343020	---	25.00	46.00	21.00	N	OFF	19.6
3.343020	27.84	---	56.00	28.16	N	OFF	19.6
13.560000	---	34.55	50.00	15.45	N	OFF	19.9
13.560000	45.12	---	60.00	14.88	N	OFF	19.9

Appendix B. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh, and Ken Wu	Temperature :	21~25°C
		Relative Humidity :	48~53%

Band 1 - 5150~5250MHz

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 36 5180MHz		5148.98	57.86	-16.14	74	47.32	34.4	11.56	35.42	397	334	P	H
		5150	50.62	-3.38	54	40.08	34.4	11.56	35.42	397	334	A	H
	*	5182	112.44	-	-	101.8	34.47	11.58	35.41	397	334	P	H
	*	5182	104.44	-	-	93.8	34.47	11.58	35.41	397	334	A	H
													H
		5149.5	55.37	-18.63	74	44.83	34.4	11.56	35.42	324	1	P	V
		5149.76	48.6	-5.4	54	38.06	34.4	11.56	35.42	324	1	A	V
	*	5180	109.94	-	-	99.3	34.47	11.58	35.41	324	1	P	V
	*	5180	101.94	-	-	91.3	34.47	11.58	35.41	324	1	A	V
													V
802.11a CH 44 5220MHz		5104	49.6	-24.4	74	39.21	34.3	11.52	35.43	387	332	P	H
		5145.86	40.01	-13.99	54	29.48	34.4	11.55	35.42	387	332	A	H
	*	5220	110.66	-	-	99.94	34.5	11.62	35.4	387	332	P	H
	*	5220	102.92	-	-	92.2	34.5	11.62	35.4	387	332	A	H
		5458.88	48.43	-25.57	74	37.16	34.7	11.88	35.31	387	332	P	H
		5459.72	39.52	-14.48	54	28.25	34.7	11.88	35.31	387	332	A	H
		5057.46	49.15	-24.85	74	38.95	34.17	11.48	35.45	356	0	P	V
		5106.86	39.71	-14.29	54	29.29	34.33	11.52	35.43	356	0	A	V
	*	5220	108.48	-	-	97.76	34.5	11.62	35.4	356	0	P	V
	*	5220	100.79	-	-	90.07	34.5	11.62	35.4	356	0	A	V
		5378.24	49.06	-24.94	74	37.98	34.63	11.79	35.34	356	0	P	V
		5457.76	39.26	-14.74	54	27.99	34.7	11.88	35.31	356	0	A	V

802.11a CH 48 5240MHz		5050.44	47.56	-26.44	74	37.44	34.1	11.47	35.45	364	345	P	H
		5147.94	39.17	-14.83	54	28.63	34.4	11.56	35.42	364	345	A	H
	*	5240	112.22	-	-	101.47	34.5	11.64	35.39	364	345	P	H
	*	5240	104.15	-	-	93.4	34.5	11.64	35.39	364	345	A	H
		5413.52	47.99	-26.01	74	36.79	34.7	11.83	35.33	364	345	P	H
		5360.32	38.65	-15.35	54	27.73	34.5	11.77	35.35	364	345	A	H
		5123.76	48.28	-25.72	74	37.8	34.37	11.54	35.43	334	360	P	V
		5139.1	38.93	-15.07	54	28.43	34.37	11.55	35.42	334	360	A	V
	*	5240	108.25	-	-	97.5	34.5	11.64	35.39	334	360	P	V
	*	5240	99.95	-	-	89.2	34.5	11.64	35.39	334	360	A	V
		5351.92	47.34	-26.66	74	36.43	34.5	11.76	35.35	334	360	P	V
		5355.28	38.37	-15.63	54	27.46	34.5	11.76	35.35	334	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

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 36 5180MHz		10360	42.37	-25.83	68.2	46.9	37.47	17.58	59.58	100	0	P	H
		15540	44.96	-29.04	74	39.73	40.1	21.65	56.52	100	0	P	H
													H
													H
		10360	42.21	-25.99	68.2	46.74	37.47	17.58	59.58	100	0	P	V
		15540	44.8	-29.2	74	39.57	40.1	21.65	56.52	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	45.11	-23.09	68.2	48.9	37.53	17.65	58.97	100	0	P	H
		15660	46.16	-27.84	74	40.73	40.45	21.73	56.75	100	0	P	H
													H
													H
		10440	46.11	-22.09	68.2	49.9	37.53	17.65	58.97	100	0	P	V
		15660	46.36	-27.64	74	40.93	40.45	21.73	56.75	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	44.91	-23.29	68.2	48.59	37.58	17.68	58.94	100	0	P	H
		15720	48.28	-25.72	74	42.68	40.58	21.76	56.74	100	0	P	H
													H
													H
		10480	45.65	-22.55	68.2	49.33	37.58	17.68	58.94	100	0	P	V
		15720	47.81	-26.19	74	42.21	40.58	21.76	56.74	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

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)
		5150	57.46	-16.54	74	46.92	34.4	11.56	35.42	394	336	P	H
		5150	49.69	-4.31	54	39.15	34.4	11.56	35.42	394	336	A	H
	*	5180	110.54	-	-	99.9	34.47	11.58	35.41	394	336	P	H
	*	5180	103.04	-	-	92.4	34.47	11.58	35.41	394	336	A	H
802.11ac													H
VHT20													H
CH 36		5149.5	56.54	-17.46	74	46	34.4	11.56	35.42	324	0	P	V
5180MHz		5150	49.61	-4.39	54	39.07	34.4	11.56	35.42	324	0	A	V
	*	5180	109.74	-	-	99.1	34.47	11.58	35.41	324	0	P	V
	*	5180	101.24	-	-	90.6	34.47	11.58	35.41	324	0	A	V
													V
													V
		5094.64	48.59	-25.41	74	38.22	34.3	11.51	35.44	362	325	P	H
		5150	39.77	-14.23	54	29.23	34.4	11.56	35.42	362	325	A	H
	*	5220	111.52	-	-	100.8	34.5	11.62	35.4	362	325	P	H
	*	5220	102.52	-	-	91.8	34.5	11.62	35.4	362	325	A	H
802.11ac		5379.64	47.89	-26.11	74	36.81	34.63	11.79	35.34	362	325	P	H
VHT20		5459.44	38.36	-15.64	54	27.09	34.7	11.88	35.31	362	325	A	H
CH 44		5101.66	49.1	-24.9	74	38.72	34.3	11.52	35.44	318	0	P	V
5220MHz		5148.98	39.27	-14.73	54	28.73	34.4	11.56	35.42	318	0	A	V
	*	5220	110.33	-	-	99.61	34.5	11.62	35.4	318	0	P	V
	*	5220	101.23	-	-	90.51	34.5	11.62	35.4	318	0	A	V
		5405.68	47.62	-26.38	74	36.43	34.7	11.82	35.33	318	0	P	V
		5460	38.28	-15.72	54	27.01	34.7	11.88	35.31	318	0	A	V

		5074.1	48.76	-25.24	74	38.48	34.23	11.49	35.44	364	345	P	H
		5148.98	39.2	-14.8	54	28.66	34.4	11.56	35.42	364	345	A	H
	*	5240	111.85	-	-	101.1	34.5	11.64	35.39	364	345	P	H
	*	5240	103.65	-	-	92.9	34.5	11.64	35.39	364	345	A	H
802.11ac		5367.88	47.71	-26.29	74	36.7	34.57	11.78	35.34	364	345	P	H
VHT20		5355.28	39.08	-14.92	54	28.17	34.5	11.76	35.35	364	345	A	H
CH 48		5133.38	49.91	-24.09	74	39.42	34.37	11.54	35.42	334	360	P	V
5240MHz		5133.9	38.9	-15.1	54	28.41	34.37	11.54	35.42	334	360	A	V
	*	5240	108.45	-	-	97.7	34.5	11.64	35.39	334	360	P	V
	*	5240	99.65	-	-	88.9	34.5	11.64	35.39	334	360	A	V
		5360.04	47.66	-26.34	74	36.74	34.5	11.77	35.35	334	360	P	V
		5363.4	38.35	-15.65	54	27.36	34.57	11.77	35.35	334	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

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)
		10360	44.23	-23.97	68.2	48.21	37.47	17.58	59.03	100	0	P	H
		15540	47.4	-26.6	74	42.42	40.1	21.65	56.77	100	0	P	H
802.11ac													H
VHT20													H
CH 36		10360	45.93	-22.27	68.2	49.91	37.47	17.58	59.03	100	0	P	V
5180MHz		15540	45.93	-28.07	74	40.95	40.1	21.65	56.77	100	0	P	V
													V
													V
		10440	45.7	-22.5	68.2	49.49	37.53	17.65	58.97	100	0	P	H
		15660	48.24	-25.76	74	42.81	40.45	21.73	56.75	100	0	P	H
802.11ac													H
VHT20													H
CH 44		10440	45.33	-22.87	68.2	49.12	37.53	17.65	58.97	100	0	P	V
5220MHz		15660	46.51	-27.49	74	41.08	40.45	21.73	56.75	100	0	P	V
													V
													V
		10480	45.25	-22.95	68.2	48.93	37.58	17.68	58.94	100	0	P	H
		15720	48.36	-25.64	74	42.76	40.58	21.76	56.74	100	0	P	H
802.11ac													H
VHT20													H
CH 48		10480	44.78	-23.42	68.2	48.46	37.58	17.68	58.94	100	0	P	V
5240MHz		15720	47.3	-26.7	74	41.7	40.58	21.76	56.74	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

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)
		5146.9	58.15	-15.85	74	47.62	34.4	11.55	35.42	393	340	P	H
		5150	52.52	-1.48	54	41.98	34.4	11.56	35.42	393	340	A	H
	*	5190	106.35	-	-	95.7	34.47	11.59	35.41	393	340	P	H
	*	5190	97.85	-	-	87.2	34.47	11.59	35.41	393	340	A	H
802.11ac		5387.2	47.93	-26.07	74	36.84	34.63	11.8	35.34	393	340	P	H
VHT40		5441.8	39.98	-14.02	54	28.74	34.7	11.86	35.32	393	340	A	H
CH 38		5148.98	59.12	-14.88	74	48.58	34.4	11.56	35.42	342	0	P	V
5190MHz		5149.24	52.26	-1.74	54	41.72	34.4	11.56	35.42	342	0	A	V
	*	5190	103.95	-	-	93.3	34.47	11.59	35.41	342	0	P	V
	*	5190	95.66	-	-	85.01	34.47	11.59	35.41	342	0	A	V
		5431.72	47.7	-26.3	74	36.47	34.7	11.85	35.32	342	0	P	V
		5420.8	40.16	-13.84	54	28.96	34.7	11.83	35.33	342	0	A	V
		5148.98	54.72	-19.28	74	44.18	34.4	11.56	35.42	365	333	P	H
		5132.6	48.5	-5.5	54	38.01	34.37	11.54	35.42	365	333	A	H
	*	5230	109.76	-	-	99.02	34.5	11.63	35.39	365	333	P	H
	*	5230	101.04	-	-	90.3	34.5	11.63	35.39	365	333	A	H
802.11ac		5351.64	52.71	-21.29	74	41.8	34.5	11.76	35.35	365	333	P	H
VHT40		5350.8	45.05	-8.95	54	34.14	34.5	11.76	35.35	365	333	A	H
CH 46		5146.12	57.04	-16.96	74	46.51	34.4	11.55	35.42	298	359	P	V
5230MHz		5137.54	48.11	-5.89	54	37.61	34.37	11.55	35.42	298	359	A	V
	*	5230	106.44	-	-	95.7	34.5	11.63	35.39	298	359	P	V
	*	5230	97.94	-	-	87.2	34.5	11.63	35.39	298	359	A	V
		5369.56	49.06	-24.94	74	38.05	34.57	11.78	35.34	298	359	P	V
		5350.24	42.57	-11.43	54	31.66	34.5	11.76	35.35	298	359	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

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)
		10380	44.42	-23.78	68.2	48.36	37.48	17.6	59.02	100	0	P	H
		15570	46.46	-27.54	74	41.35	40.2	21.68	56.77	100	0	P	H
802.11ac													H
VHT40													H
CH 38		10380	44.92	-23.28	68.2	48.86	37.48	17.6	59.02	100	0	P	V
5190MHz		15570	47.1	-26.9	74	41.99	40.2	21.68	56.77	100	0	P	V
													V
													V
		10460	45.56	-22.64	68.2	49.31	37.55	17.66	58.96	100	0	P	H
		15690	47.29	-26.71	74	41.74	40.55	21.75	56.75	100	0	P	H
802.11ac													H
VHT40													H
CH 46		10460	45.06	-23.14	68.2	48.81	37.55	17.66	58.96	100	0	P	V
5230MHz		15690	47.18	-26.82	74	41.63	40.55	21.75	56.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

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)
802.11ac VHT80 CH 42 5210MHz		5147.94	57.81	-16.19	74	47.27	34.4	11.56	35.42	388	341	P	H
		5146.64	50.69	-3.31	54	40.16	34.4	11.55	35.42	388	341	A	H
	*	5210	102.79	-	-	92.08	34.5	11.61	35.4	388	341	P	H
	*	5210	94.41	-	-	83.7	34.5	11.61	35.4	388	341	A	H
		5415.48	48.82	-25.18	74	37.62	34.7	11.83	35.33	388	341	P	H
		5354.16	42.92	-11.08	54	32.01	34.5	11.76	35.35	388	341	A	H
		5149.24	56.13	-17.87	74	45.59	34.4	11.56	35.42	337	0	P	V
		5148.2	49.57	-4.43	54	39.03	34.4	11.56	35.42	337	0	A	V
	*	5210	100.51	-	-	89.8	34.5	11.61	35.4	337	0	P	V
	*	5210	92.67	-	-	81.96	34.5	11.61	35.4	337	0	A	V
		5442.64	47.77	-26.23	74	36.53	34.7	11.86	35.32	337	0	P	V
		5351.92	41.31	-12.69	54	30.4	34.5	11.76	35.35	337	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

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)
		10420	44.79	-23.41	68.2	48.63	37.52	17.63	58.99	100	0	P	H
		15630	46.55	-27.45	74	41.2	40.4	21.71	56.76	100	0	P	H
802.11ac													H
VHT80													H
CH 42		10420	45.31	-22.89	68.2	49.15	37.52	17.63	58.99	100	0	P	V
5210MHz		15630	47.25	-26.75	74	41.9	40.4	21.71	56.76	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (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)
802.11a CH 52 5260MHz		5144.9	47.95	-26.05	74	37.42	34.4	11.55	35.42	340	327	P	H
		5149.1	38.88	-15.12	54	28.34	34.4	11.56	35.42	340	327	A	H
	*	5260	111.25	-	-	100.4	34.57	11.66	35.38	340	327	P	H
	*	5260	102.95	-	-	92.1	34.57	11.66	35.38	340	327	A	H
		5406.48	47.04	-26.96	74	35.85	34.7	11.82	35.33	340	327	P	H
		5350.08	38.55	-15.45	54	27.64	34.5	11.76	35.35	340	327	A	H
		5139.3	47.88	-26.12	74	37.38	34.37	11.55	35.42	349	360	P	V
		5139.3	38.84	-15.16	54	28.34	34.37	11.55	35.42	349	360	A	V
	*	5260	109.53	-	-	98.68	34.57	11.66	35.38	349	360	P	V
	*	5260	101.05	-	-	90.2	34.57	11.66	35.38	349	360	A	V
		5377.2	47.34	-26.66	74	36.32	34.57	11.79	35.34	349	360	P	V
		5351.28	38.2	-15.8	54	27.29	34.5	11.76	35.35	349	360	A	V
802.11a CH 60 5300MHz		5066.5	47.74	-26.26	74	37.53	34.17	11.49	35.45	374	342	P	H
		5149.8	38.8	-15.2	54	28.26	34.4	11.56	35.42	374	342	A	H
	*	5300	110.56	-	-	99.53	34.7	11.7	35.37	374	342	P	H
	*	5300	102.74	-	-	91.71	34.7	11.7	35.37	374	342	A	H
		5354.64	51.38	-22.62	74	40.47	34.5	11.76	35.35	374	342	P	H
		5350.08	40.12	-13.88	54	29.21	34.5	11.76	35.35	374	342	A	H
		5141.4	48.79	-25.21	74	38.26	34.4	11.55	35.42	360	0	P	V
		5150	38.73	-15.27	54	28.19	34.4	11.56	35.42	360	0	A	V
	*	5300	107.84	-	-	96.81	34.7	11.7	35.37	360	0	P	V
	*	5300	99.54	-	-	88.51	34.7	11.7	35.37	360	0	A	V
		5418.24	47.51	-26.49	74	36.31	34.7	11.83	35.33	360	0	P	V
		5350.08	39.05	-14.95	54	28.14	34.5	11.76	35.35	360	0	A	V

802.11a CH 64 5320MHz	*	5320	111.1	-	-	100.1	34.63	11.73	35.36	333	343	P	H
	*	5320	103.3	-	-	92.3	34.63	11.73	35.36	333	343	A	H
		5351.52	60.54	-13.46	74	49.63	34.5	11.76	35.35	333	343	P	H
		5350.08	52.33	-1.67	54	41.42	34.5	11.76	35.35	333	343	A	H
													H
													H
	*	5320	108.7	-	-	97.7	34.63	11.73	35.36	360	0	P	V
	*	5320	100.6	-	-	89.6	34.63	11.73	35.36	360	0	A	V
		5350.4	54.47	-19.53	74	43.56	34.5	11.76	35.35	360	0	P	V
		5350.08	46.94	-7.06	54	36.03	34.5	11.76	35.35	360	0	A	V
													V
													V

Remark

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

Band 2 5250~5350MHz

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 52 5260MHz		10520	44.83	-23.37	68.2	48.45	37.6	17.7	58.92	100	0	P	H
		15780	48.24	-25.76	74	42.65	40.53	21.8	56.74	100	0	P	H
													H
													H
		10520	43.74	-24.46	68.2	47.36	37.6	17.7	58.92	100	0	P	V
		15780	46.95	-27.05	74	41.36	40.53	21.8	56.74	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	44.76	-29.24	74	48.28	37.6	17.76	58.88	100	0	P	H
		15900	47.84	-26.16	74	41.87	40.8	21.89	56.72	100	0	P	H
													H
													H
		10600	45.48	-28.52	74	49	37.6	17.76	58.88	100	0	P	V
		15900	48.18	-25.82	74	42.21	40.8	21.89	56.72	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	45.87	-28.13	74	49.31	37.63	17.79	58.86	100	0	P	H
		15960	46.23	-27.77	74	40.21	40.8	21.93	56.71	100	0	P	H
													H
													H
		10640	45.32	-28.68	74	48.76	37.63	17.79	58.86	100	0	P	V
		15960	46.08	-27.92	74	40.06	40.8	21.93	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

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)
		5076.3	48.14	-25.86	74	37.86	34.23	11.49	35.44	340	327	P	H
		5149.8	38.97	-15.03	54	28.43	34.4	11.56	35.42	340	327	A	H
	*	5260	111.55	-	-	100.7	34.57	11.66	35.38	340	327	P	H
	*	5260	103.45	-	-	92.6	34.57	11.66	35.38	340	327	A	H
802.11ac		5375.76	48.83	-25.17	74	37.82	34.57	11.78	35.34	340	327	P	H
VHT20		5375.04	38.54	-15.46	54	27.53	34.57	11.78	35.34	340	327	A	H
CH 52		5098	49.13	-24.87	74	38.76	34.3	11.51	35.44	349	360	P	V
5260MHz		5149.45	38.86	-15.14	54	28.32	34.4	11.56	35.42	349	360	A	V
	*	5260	107.75	-	-	96.9	34.57	11.66	35.38	349	360	P	V
	*	5260	99.15	-	-	88.3	34.57	11.66	35.38	349	360	A	V
		5352.96	47.89	-26.11	74	36.98	34.5	11.76	35.35	349	360	P	V
		5366.88	38.38	-15.62	54	27.38	34.57	11.78	35.35	349	360	A	V
		5117.95	48.88	-25.12	74	38.45	34.33	11.53	35.43	205	350	P	H
		5137.2	38.76	-15.24	54	28.26	34.37	11.55	35.42	205	350	A	H
	*	5300	112.78	-	-	101.75	34.7	11.7	35.37	205	350	P	H
	*	5300	104.05	-	-	93.02	34.7	11.7	35.37	205	350	A	H
802.11ac		5350.8	59.49	-14.51	74	48.58	34.5	11.76	35.35	205	350	P	H
VHT20		5350.56	50.54	-3.46	54	39.63	34.5	11.76	35.35	205	350	A	H
CH 60		5103.95	46.93	-27.07	74	36.54	34.3	11.52	35.43	326	3	P	V
5300MHz		5149.8	38.75	-15.25	54	28.21	34.4	11.56	35.42	326	3	A	V
	*	5300	109.53	-	-	98.5	34.7	11.7	35.37	326	3	P	V
	*	5300	101.79	-	-	90.76	34.7	11.7	35.37	326	3	A	V
		5350.08	50.84	-23.16	74	39.93	34.5	11.76	35.35	326	3	P	V
		5350.32	42.6	-11.4	54	31.69	34.5	11.76	35.35	326	3	A	V

	*	5320	111.31	-	-	100.31	34.63	11.73	35.36	200	347	P	H
	*	5320	103.44	-	-	92.44	34.63	11.73	35.36	200	347	A	H
		5351.84	59.68	-14.32	74	48.77	34.5	11.76	35.35	200	347	P	H
		5350.08	51.41	-2.59	54	40.5	34.5	11.76	35.35	200	347	A	H
802.11ac													H
VHT20													H
CH 64	*	5320	109.64	-	-	98.64	34.63	11.73	35.36	378	0	P	V
5320MHz	*	5320	101.45	-	-	90.45	34.63	11.73	35.36	378	0	A	V
		5350.24	56.15	-17.85	74	45.24	34.5	11.76	35.35	378	0	P	V
		5350.08	48.06	-5.94	54	37.15	34.5	11.76	35.35	378	0	A	V
													V
													V

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

Band 2 5250~5350MHz

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)
		10520	44.52	-23.68	68.2	48.14	37.6	17.7	58.92	100	0	P	H
		15780	48.39	-25.61	74	42.8	40.53	21.8	56.74	100	0	P	H
802.11ac													H
VHT20													H
CH 52		10520	45.25	-22.95	68.2	48.87	37.6	17.7	58.92	100	0	P	V
5260MHz		15780	48.41	-25.59	74	42.82	40.53	21.8	56.74	100	0	P	V
													V
													V
		10600	44.97	-29.03	74	48.49	37.6	17.76	58.88	100	0	P	H
		15900	47.4	-26.6	74	41.43	40.8	21.89	56.72	100	0	P	H
802.11ac													H
VHT20													H
CH 60		10600	44.57	-29.43	74	48.09	37.6	17.76	58.88	100	0	P	V
5300MHz		15900	48.27	-25.73	74	42.3	40.8	21.89	56.72	100	0	P	V
													V
													V
		10640	44.82	-29.18	74	48.26	37.63	17.79	58.86	100	0	P	H
		15960	47.11	-26.89	74	41.09	40.8	21.93	56.71	100	0	P	H
802.11ac													H
VHT20													H
CH 64		10640	45.11	-28.89	74	48.55	37.63	17.79	58.86	100	0	P	V
5320MHz		15960	46.35	-27.65	74	40.33	40.8	21.93	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

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)
		5129.5	49.86	-24.14	74	39.38	34.37	11.54	35.43	339	335	P	H
		5139.65	42.7	-11.3	54	32.17	34.4	11.55	35.42	339	335	A	H
	*	5270	109.46	-	-	98.6	34.57	11.67	35.38	339	335	P	H
	*	5270	102.29	-	-	91.43	34.57	11.67	35.38	339	335	A	H
802.11ac		5355.6	57.6	-16.4	74	46.69	34.5	11.76	35.35	339	335	P	H
VHT40		5350.32	51.34	-2.66	54	40.43	34.5	11.76	35.35	339	335	A	H
CH 54		5149.45	49.78	-24.22	74	39.24	34.4	11.56	35.42	327	358	P	V
5270MHz		5149.1	42.52	-11.48	54	31.98	34.4	11.56	35.42	327	358	A	V
	*	5270	106.31	-	-	95.45	34.57	11.67	35.38	327	358	P	V
	*	5270	99.31	-	-	88.45	34.57	11.67	35.38	327	358	A	V
		5375.28	53.89	-20.11	74	42.88	34.57	11.78	35.34	327	358	P	V
		5362.56	46.35	-7.65	54	35.36	34.57	11.77	35.35	327	358	A	V
		5036.05	49.1	-24.9	74	39	34.1	11.46	35.46	352	338	P	H
		5105.7	41.11	-12.89	54	30.69	34.33	11.52	35.43	352	338	A	H
	*	5310	104.79	-	-	93.8	34.63	11.72	35.36	352	338	P	H
	*	5310	97.93	-	-	86.94	34.63	11.72	35.36	352	338	A	H
802.11ac		5352.48	58.04	-15.96	74	47.13	34.5	11.76	35.35	352	338	P	H
VHT40		5350.08	51.45	-2.55	54	40.54	34.5	11.76	35.35	352	338	A	H
CH 62		5052.15	48.98	-25.02	74	38.86	34.1	11.47	35.45	381	354	P	V
5310MHz		5082.6	41.02	-12.98	54	30.73	34.23	11.5	35.44	381	354	A	V
	*	5310	101.84	-	-	90.85	34.63	11.72	35.36	381	354	P	V
	*	5310	95.14	-	-	84.15	34.63	11.72	35.36	381	354	A	V
		5351.52	54.03	-19.97	74	43.12	34.5	11.76	35.35	381	354	P	V
		5350.08	47.63	-6.37	54	36.72	34.5	11.76	35.35	381	354	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

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)
		10540	44.65	-23.55	68.2	48.25	37.6	17.71	58.91	100	0	P	H
		15810	47.88	-26.12	74	42.29	40.5	21.82	56.73	100	0	P	H
802.11ac													H
VHT40													H
CH 54		10540	44.3	-23.9	68.2	47.9	37.6	17.71	58.91	100	0	P	V
5270MHz		15810	47.52	-26.48	74	41.93	40.5	21.82	56.73	100	0	P	V
													V
													V
		10620	44.88	-29.12	74	48.35	37.62	17.78	58.87	100	0	P	H
		15930	47.33	-26.67	74	41.33	40.8	21.91	56.71	100	0	P	H
802.11ac													H
VHT40													H
CH 62		10620	46.06	-27.94	74	49.53	37.62	17.78	58.87	100	0	P	V
5310MHz		15930	47.1	-26.9	74	41.1	40.8	21.91	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

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)
802.11ac VHT80 CH 58 5290MHz		5106.4	50.93	-23.07	74	40.51	34.33	11.52	35.43	373	342	P	H
		5143.5	41.13	-12.87	54	30.6	34.4	11.55	35.42	373	342	A	H
	*	5290	101.29	-	-	90.34	34.63	11.69	35.37	373	342	P	H
	*	5290	94.37	-	-	83.42	34.63	11.69	35.37	373	342	A	H
		5354.4	57.71	-16.29	74	46.8	34.5	11.76	35.35	373	342	P	H
		5351.52	51.82	-2.18	54	40.91	34.5	11.76	35.35	373	342	A	H
		5105	49.28	-24.72	74	38.89	34.3	11.52	35.43	343	358	P	V
		5139.65	41.3	-12.7	54	30.77	34.4	11.55	35.42	343	358	A	V
	*	5290	98.8	-	-	87.85	34.63	11.69	35.37	343	358	P	V
	*	5290	91.02	-	-	80.07	34.63	11.69	35.37	343	358	A	V
		5350.56	52.18	-21.82	74	41.27	34.5	11.76	35.35	343	358	P	V
		5350.32	45.76	-8.24	54	34.85	34.5	11.76	35.35	343	358	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

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)
		10580	44.6	-23.6	68.2	48.14	37.6	17.75	58.89	100	0	P	H
		15870	47.72	-26.28	74	41.83	40.74	21.87	56.72	100	0	P	H
802.11ac													H
VHT80													H
CH 58		10580	44.3	-23.9	68.2	47.84	37.6	17.75	58.89	100	0	P	V
5290MHz		15870	47.38	-26.62	74	41.49	40.74	21.87	56.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (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)
802.11a CH 100 5500MHz		5457.68	57.7	-16.3	74	46.43	34.7	11.88	35.31	193	360	P	H
		5469.68	64.3	-3.9	68.2	52.92	34.8	11.89	35.31	193	360	P	H
		5460	51.25	-2.75	54	39.98	34.7	11.88	35.31	193	360	A	H
	*	5500	114.94	-	-	103.31	35	11.93	35.3	193	360	P	H
	*	5500	107.29	-	-	95.66	35	11.93	35.3	193	360	A	H
													H
		5458.64	51.22	-22.78	74	39.95	34.7	11.88	35.31	370	358	P	V
		5469.52	56.37	-11.83	68.2	44.99	34.8	11.89	35.31	370	358	P	V
		5460.08	44	-106	150	32.73	34.7	11.88	35.31	370	358	A	V
	*	5500	109.74	-	-	98.11	35	11.93	35.3	370	358	P	V
	*	5500	102.04	-	-	90.41	35	11.93	35.3	370	358	A	V
													V
802.11a CH 116 5580MHz		5453.44	48.46	-25.54	74	37.21	34.7	11.87	35.32	197	4	P	H
		5466.16	49.29	-18.91	68.2	37.91	34.8	11.89	35.31	197	4	P	H
		5459.92	39.66	-14.34	54	28.39	34.7	11.88	35.31	197	4	A	H
	*	5580	116.08	-	-	104.5	34.87	12.02	35.31	197	4	P	H
	*	5580	108.18	-	-	96.6	34.87	12.02	35.31	197	4	A	H
		5735.705	48.71	-19.49	68.2	36.77	35	12.26	35.32	197	4	P	H
		5456.8	49.17	-24.83	74	37.9	34.7	11.88	35.31	322	3	P	V
		5462.08	46.67	-21.53	68.2	35.4	34.7	11.88	35.31	322	3	P	V
		5459.44	39.32	-14.68	54	28.05	34.7	11.88	35.31	322	3	A	V
	*	5580	109.23	-	-	97.65	34.87	12.02	35.31	322	3	P	V
	*	5580	101.17	-	-	89.59	34.87	12.02	35.31	322	3	A	V
		5731.925	48.73	-19.47	68.2	36.79	35	12.26	35.32	322	3	P	V

802.11a CH 140 5700MHz	*	5700	114.61	-	-	102.73	35	12.2	35.32	191	5	P	H
	*	5700	107.42	-	-	95.54	35	12.2	35.32	191	5	A	H
		5725.4	66.69	-1.51	68.2	54.76	35	12.25	35.32	191	5	P	H
													H
													H
													H
	*	5700	106.21	-	-	94.33	35	12.2	35.32	381	333	P	V
	*	5700	98.72	-	-	86.84	35	12.2	35.32	381	333	A	V
		5727.64	52.81	-15.39	68.2	40.88	35	12.25	35.32	381	333	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

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 100 5500MHz		11000	44.66	-29.34	74	47.4	37.9	18.05	58.69	100	0	P	H
		16500	49.51	-18.69	68.2	41.95	41.6	22.38	56.42	100	0	P	H
													H
													H
		11000	45.13	-28.87	74	47.87	37.9	18.05	58.69	100	0	P	V
		16500	50.97	-17.23	68.2	43.41	41.6	22.38	56.42	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	44.67	-29.33	74	46.89	37.9	18.19	58.31	100	0	P	H
		16740	48.34	-19.86	68.2	39.73	42.36	22.58	56.33	100	0	P	H
													H
													H
		11160	45.37	-28.63	74	47.59	37.9	18.19	58.31	100	0	P	V
		16740	48.54	-19.66	68.2	39.93	42.36	22.58	56.33	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	46.22	-27.78	74	47.45	38.1	18.41	57.74	100	0	P	H
		17100	49.62	-18.58	68.2	41.02	42	22.87	56.27	100	0	P	H
													H
													H
		11400	45.9	-28.1	74	47.13	38.1	18.41	57.74	100	0	P	V
		17100	50.46	-17.74	68.2	41.86	42	22.87	56.27	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

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)
		5459.76	60.1	-13.9	74	48.83	34.7	11.88	35.31	202	2	P	H
		5465.2	63.04	-5.16	68.2	51.67	34.8	11.88	35.31	202	2	P	H
		5460	52.47	-1.53	54	41.2	34.7	11.88	35.31	202	2	A	H
	*	5500	114.92	-	-	103.29	35	11.93	35.3	202	2	P	H
802.11ac	*	5500	106.9	-	-	95.27	35	11.93	35.3	202	2	A	H
VHT20													H
CH 100		5459.28	55.46	-18.54	74	44.19	34.7	11.88	35.31	371	1	P	V
5500MHz		5469.04	57.52	-10.68	68.2	46.14	34.8	11.89	35.31	371	1	P	V
		5459.92	45.74	-8.26	54	34.47	34.7	11.88	35.31	371	1	A	V
	*	5500	109.18	-	-	97.55	35	11.93	35.3	371	1	P	V
	*	5500	101.22	-	-	89.59	35	11.93	35.3	371	1	A	V
													V
		5448.64	48.72	-25.28	74	37.47	34.7	11.87	35.32	197	4	P	H
		5463.04	48.47	-19.73	68.2	37.1	34.8	11.88	35.31	197	4	P	H
		5459.44	39.81	-14.19	54	28.54	34.7	11.88	35.31	197	4	A	H
	*	5580	116.18	-	-	104.6	34.87	12.02	35.31	197	4	P	H
802.11ac	*	5580	107.9	-	-	96.32	34.87	12.02	35.31	197	4	A	H
VHT20		5739.485	49.6	-18.6	68.2	37.65	35	12.27	35.32	197	4	P	H
CH 116		5395.36	48	-26	74	36.83	34.7	11.81	35.34	322	3	P	V
5580MHz		5463.52	50.9	-17.3	68.2	39.53	34.8	11.88	35.31	322	3	P	V
		5459.44	39.34	-14.66	54	28.07	34.7	11.88	35.31	322	3	A	V
	*	5580	109.11	-	-	97.53	34.87	12.02	35.31	322	3	P	V
	*	5580	100.9	-	-	89.32	34.87	12.02	35.31	322	3	A	V
		5729.09	48.69	-19.51	68.2	36.76	35	12.25	35.32	322	3	P	V

	*	5700	114.54	-	-	102.66	35	12.2	35.32	189	5	P	H
	*	5700	106.69	-	-	94.81	35	12.2	35.32	189	5	A	H
		5725	66.84	-1.36	68.2	54.91	35	12.25	35.32	189	5	P	H
													H
802.11ac													H
VHT20													H
CH 140	*	5700	105.21	-	-	93.33	35	12.2	35.32	381	334	P	V
5700MHz	*	5700	97.69	-	-	85.81	35	12.2	35.32	381	334	A	V
		5725.08	54.23	-13.97	68.2	42.3	35	12.25	35.32	381	334	P	V
													V
													V
													V

Remark

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

Band 3 - 5470~5725MHz

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)
		11000	44.96	-29.04	74	47.7	37.9	18.05	58.69	100	0	P	H
		16500	49.97	-18.23	68.2	42.41	41.6	22.38	56.42	100	0	P	H
802.11ac													H
VHT20													H
CH 100		11000	45.78	-28.22	74	48.52	37.9	18.05	58.69	100	0	P	V
5500MHz		16500	49.79	-18.41	68.2	42.23	41.6	22.38	56.42	100	0	P	V
													V
													V
		11160	45.48	-28.52	74	47.7	37.9	18.19	58.31	100	0	P	H
		16740	48.73	-19.47	68.2	40.12	42.36	22.58	56.33	100	0	P	H
802.11ac													H
VHT20													H
CH 116		11160	45.44	-28.56	74	47.66	37.9	18.19	58.31	100	0	P	V
5580MHz		16740	48.04	-20.16	68.2	39.43	42.36	22.58	56.33	100	0	P	V
													V
													V
		11400	46.07	-27.93	74	47.3	38.1	18.41	57.74	100	0	P	H
		17100	49.87	-18.33	68.2	41.27	42	22.87	56.27	100	0	P	H
802.11ac													H
VHT20													H
CH 140		11400	46.17	-27.83	74	47.4	38.1	18.41	57.74	100	0	P	V
5700MHz		17100	49.54	-18.66	68.2	40.94	42	22.87	56.27	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

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)
		5459.2	57.02	-16.98	74	45.75	34.7	11.88	35.31	204	3	P	H
		5468.8	60.36	-7.84	68.2	48.98	34.8	11.89	35.31	204	3	P	H
		5459.92	50.64	-3.36	54	39.37	34.7	11.88	35.31	204	3	A	H
	*	5510	107.42	-	-	95.78	35	11.94	35.3	204	3	P	H
802.11ac	*	5510	100.86	-	-	89.22	35	11.94	35.3	204	3	A	H
VHT40		5731.925	49.59	-18.61	68.2	37.65	35	12.26	35.32	204	3	P	H
CH 102		5459.92	50.04	-23.96	74	38.77	34.7	11.88	35.31	315	1	P	V
5510MHz		5467.36	55.77	-12.43	68.2	44.39	34.8	11.89	35.31	315	1	P	V
		5458	44.76	-9.24	54	33.49	34.7	11.88	35.31	315	1	A	V
	*	5510	101.23	-	-	89.59	35	11.94	35.3	315	1	P	V
	*	5510	95.59	-	-	83.95	35	11.94	35.3	315	1	A	V
		5738.54	48.09	-20.11	68.2	36.14	35	12.27	35.32	315	1	P	V
		5453.92	58.27	-15.73	74	47.02	34.7	11.87	35.32	200	4	P	H
		5469.04	59.1	-9.1	68.2	47.72	34.8	11.89	35.31	200	4	P	H
		5459.92	50.76	-3.24	54	39.49	34.7	11.88	35.31	200	4	A	H
	*	5550	111.33	-	-	99.86	34.8	11.98	35.31	200	4	P	H
802.11ac	*	5550	105.05	-	-	93.58	34.8	11.98	35.31	200	4	A	H
VHT40		5726.255	50.01	-18.19	68.2	38.08	35	12.25	35.32	200	4	P	H
CH 110		5446.48	51.52	-22.48	74	40.28	34.7	11.86	35.32	382	36	P	V
5550MHz		5464.48	49.34	-18.86	68.2	37.97	34.8	11.88	35.31	382	36	P	V
		5452.24	44.79	-9.21	54	33.54	34.7	11.87	35.32	382	36	A	V
	*	5550	105.83	-	-	94.36	34.8	11.98	35.31	382	36	P	V
	*	5550	98.79	-	-	87.32	34.8	11.98	35.31	382	36	A	V
		5756.81	48.89	-19.31	68.2	36.92	35	12.3	35.33	382	36	P	V

		5435.4	48.17	-25.83	74	36.94	34.7	11.85	35.32	173	2	P	H
		5466.9	47.4	-20.8	68.2	36.02	34.8	11.89	35.31	173	2	P	H
		5452.2	41.02	-12.98	54	29.77	34.7	11.87	35.32	173	2	A	H
	*	5670	111.48	-	-	99.79	34.85	12.16	35.32	173	2	P	H
802.11ac	*	5670	104.47	-	-	92.78	34.85	12.16	35.32	173	2	A	H
VHT40		5725.275	66.47	-1.73	68.2	54.54	35	12.25	35.32	173	2	P	H
CH 134		5431.9	49.09	-24.91	74	37.86	34.7	11.85	35.32	222	77	P	V
5670MHz		5466.2	47.24	-20.96	68.2	35.86	34.8	11.89	35.31	222	77	P	V
		5459.55	40.68	-13.32	54	29.41	34.7	11.88	35.31	222	77	A	V
	*	5670	105.12	-	-	93.43	34.85	12.16	35.32	222	77	P	V
	*	5670	98.02	-	-	86.33	34.85	12.16	35.32	222	77	A	V
		5730.35	58.4	-9.8	68.2	46.46	35	12.26	35.32	222	77	P	V

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

Band 3 - 5470~5725MHz

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)
		11020	45.54	-28.46	74	48.22	37.9	18.06	58.64	100	0	P	H
		16530	48.29	-19.91	68.2	40.63	41.67	22.4	56.41	100	0	P	H
802.11ac													H
VHT40													H
CH 102		11020	45.38	-28.62	74	48.06	37.9	18.06	58.64	100	0	P	V
5510MHz		16530	49.07	-19.13	68.2	41.41	41.67	22.4	56.41	100	0	P	V
													V
													V
		11100	45.08	-28.92	74	47.5	37.9	18.13	58.45	100	0	P	H
		16650	48.75	-19.45	68.2	40.52	42.1	22.5	56.37	100	0	P	H
802.11ac													H
VHT40													H
CH 110		11100	44.93	-29.07	74	47.35	37.9	18.13	58.45	100	0	P	V
5550MHz		16650	50.02	-18.18	68.2	41.79	42.1	22.5	56.37	100	0	P	V
													V
													V
		11340	45.45	-28.55	74	46.95	38.03	18.35	57.88	100	0	P	H
		17010	49.56	-18.64	68.2	40.82	42.17	22.81	56.24	100	0	P	H
802.11ac													H
VHT40													H
CH 134		11340	45.3	-28.7	74	46.8	38.03	18.35	57.88	100	0	P	V
5670MHz		17010	49.85	-18.35	68.2	41.11	42.17	22.81	56.24	100	0	P	V
													V
													V

Remark

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

Band 3 5470~5725MHz

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)
		5457.04	59.12	-14.88	74	47.85	34.7	11.88	35.31	192	360	P	H
		5467.36	60.59	-7.61	68.2	49.21	34.8	11.89	35.31	192	360	P	H
		5458.24	52.6	-1.4	54	41.33	34.7	11.88	35.31	192	360	A	H
	*	5530	103.4	-	-	91.81	34.93	11.96	35.3	192	360	P	H
802.11ac	*	5530	98.14	-	-	86.55	34.93	11.96	35.3	192	360	A	H
VHT80		5728.775	48.99	-19.21	68.2	37.06	35	12.25	35.32	192	360	P	H
CH 106		5426.56	48.38	-25.62	74	37.16	34.7	11.84	35.32	367	2	P	V
5530MHz		5469.52	48.91	-19.29	68.2	37.53	34.8	11.89	35.31	367	2	P	V
		5422.48	42.01	-11.99	54	30.8	34.7	11.84	35.33	367	2	A	V
	*	5530	96.18	-	-	84.59	34.93	11.96	35.3	367	2	P	V
	*	5530	90.86	-	-	79.27	34.93	11.96	35.3	367	2	A	V
		5757.44	48.54	-19.66	68.2	36.57	35	12.3	35.33	367	2	P	V
		5458.15	56.19	-17.81	74	44.92	34.7	11.88	35.31	192	360	P	H
		5467.25	58.25	-9.95	68.2	46.87	34.8	11.89	35.31	192	360	P	H
		5459.2	49.74	-4.26	54	38.47	34.7	11.88	35.31	192	360	A	H
	*	5610	109.09	-	-	97.34	35	12.06	35.31	192	360	P	H
802.11ac	*	5610	102.05	-	-	90.3	35	12.06	35.31	192	360	A	H
VHT80		5736.825	64.35	-3.85	68.2	52.4	35	12.27	35.32	192	360	P	H
CH 122		5451.5	52.23	-21.77	74	40.98	34.7	11.87	35.32	204	65	P	V
5610MHz		5460.6	52.77	-15.43	68.2	41.5	34.7	11.88	35.31	204	65	P	V
		5457.8	45.4	-8.6	54	34.13	34.7	11.88	35.31	204	65	A	V
	*	5610	103.45	-	-	91.7	35	12.06	35.31	204	65	P	V
	*	5610	96.15	-	-	84.4	35	12.06	35.31	204	65	A	V
		5725.975	60.02	-8.18	68.2	48.09	35	12.25	35.32	204	65	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

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)
		11060	44.74	-29.26	74	47.29	37.9	18.1	58.55	100	0	P	H
		16590	48.01	-20.19	68.2	40.18	41.77	22.45	56.39	100	0	P	H
802.11ac													H
VHT80													H
CH 106		11060	45.1	-28.9	74	47.65	37.9	18.1	58.55	100	0	P	V
5530MHz		16590	47.19	-21.01	68.2	39.36	41.77	22.45	56.39	100	0	P	V
													V
													V
		11220	45.4	-28.6	74	47.4	37.92	18.25	58.17	100	0	P	H
		16830	49.36	-18.84	68.2	40.7	42.3	22.66	56.3	100	0	P	H
802.11ac													H
VHT80													H
CH 122		11220	48.79	-25.21	74	50.79	37.92	18.25	58.17	100	0	P	V
5610MHz		16830	50.77	-17.43	68.2	42.11	42.3	22.66	56.3	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5410.06	48.18	-25.82	74	36.99	34.7	11.82	35.33	190	7	P	H
		5464.27	47.57	-20.63	68.2	36.2	34.8	11.88	35.31	190	7	P	H
		5458.81	39.37	-14.63	54	28.1	34.7	11.88	35.31	190	7	A	H
	*	5720	116.58	-	-	104.66	35	12.24	35.32	190	7	P	H
	*	5720	108.81	-	-	96.89	35	12.24	35.32	190	7	A	H
		5900.25	50.82	-17.38	68.2	38.54	35.2	12.42	35.34	190	7	P	H
		5384.32	47.96	-26.04	74	36.88	34.63	11.79	35.34	200	307	P	V
		5469.34	47.43	-20.77	68.2	36.05	34.8	11.89	35.31	200	307	P	V
		5459.2	39.17	-14.83	54	27.9	34.7	11.88	35.31	200	307	A	V
	*	5720	110.57	-	-	98.65	35	12.24	35.32	200	307	P	V
	*	5720	102.49	-	-	90.57	35	12.24	35.32	200	307	A	V
		5920	50.68	-17.52	68.2	38.39	35.2	12.43	35.34	200	307	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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 144 5720MHz		11440	45.92	-28.08	74	46.99	38.13	18.44	57.64	100	0	P	H
		17160	50.68	-17.52	68.2	42.33	41.73	22.91	56.29	100	0	P	H
													H
													H
		11440	46.56	-27.44	74	47.63	38.13	18.44	57.64	100	0	P	V
		17160	52.41	-15.79	68.2	44.06	41.73	22.91	56.29	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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)
802.11ac VHT20 CH 144 5720MHz		5438.92	48.09	-25.91	74	36.86	34.7	11.85	35.32	198	5	P	H
		5465.05	46.62	-21.58	68.2	35.25	34.8	11.88	35.31	198	5	P	H
		5459.59	39.27	-14.73	54	28	34.7	11.88	35.31	198	5	A	H
	*	5720	116.34	-	-	104.42	35	12.24	35.32	198	5	P	H
	*	5720	108.48	-	-	96.56	35	12.24	35.32	198	5	A	H
		5901.25	50.71	-17.49	68.2	38.43	35.2	12.42	35.34	198	5	P	H
		5420.98	49.03	-24.97	74	37.83	34.7	11.83	35.33	202	307	P	V
		5464.27	48.24	-19.96	68.2	36.87	34.8	11.88	35.31	202	307	P	V
		5459.98	39.19	-14.81	54	27.92	34.7	11.88	35.31	202	307	A	V
	*	5720	109.76	-	-	97.84	35	12.24	35.32	202	307	P	V
	*	5720	102	-	-	90.08	35	12.24	35.32	202	307	A	V
		5938.25	50.03	-18.17	68.2	37.73	35.2	12.44	35.34	202	307	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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)
		11440	46.12	-27.88	74	47.19	38.13	18.44	57.64	100	0	P	H
		17160	50.86	-17.34	68.2	42.51	41.73	22.91	56.29	100	0	P	H
802.11ac													H
VHT20													H
CH 144		11440	45.57	-28.43	74	46.64	38.13	18.44	57.64	100	0	P	V
5720MHz		17160	51.07	-17.13	68.2	42.72	41.73	22.91	56.29	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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)
802.11ac VHT40 CH 142 5710MHz		5421.37	47.92	-26.08	74	36.72	34.7	11.83	35.33	199	5	P	H
		5460.37	48.3	-19.9	68.2	37.03	34.7	11.88	35.31	199	5	P	H
		5453.35	40.93	-13.07	54	29.68	34.7	11.87	35.32	199	5	A	H
	*	5710	111.6	-	-	99.7	35	12.22	35.32	199	5	P	H
	*	5710	104.17	-	-	92.27	35	12.22	35.32	199	5	A	H
		5900.75	51.23	-16.97	68.2	38.95	35.2	12.42	35.34	199	5	P	H
		5427.61	48.1	-25.9	74	36.88	34.7	11.84	35.32	210	302	P	V
		5463.88	47.44	-20.76	68.2	36.07	34.8	11.88	35.31	210	302	P	V
		5447.5	40.86	-13.14	54	29.62	34.7	11.86	35.32	210	302	A	V
	*	5710	104.57	-	-	92.67	35	12.22	35.32	210	302	P	V
	*	5710	97.35	-	-	85.45	35	12.22	35.32	210	302	A	V
		5899.75	50.43	-17.77	68.2	38.15	35.2	12.42	35.34	210	302	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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)
		11420	45.39	-28.61	74	46.54	38.12	18.42	57.69	100	0	P	H
		17130	49.73	-18.47	68.2	41.25	41.87	22.89	56.28	100	0	P	H
802.11ac													H
VHT40													H
CH 142		11420	46.78	-27.22	74	47.93	38.12	18.42	57.69	100	0	P	V
5710MHz		17130	49.09	-19.11	68.2	40.61	41.87	22.89	56.28	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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)
802.11ac VHT80 CH 138 5690MHz		5456.86	51.96	-22.04	74	40.69	34.7	11.88	35.31	193	0	P	H
		5470	52.9	-15.3	68.2	41.52	34.8	11.89	35.31	193	0	P	H
		5459.98	44.57	-9.43	54	33.3	34.7	11.88	35.31	193	0	A	H
	*	5690	110.36	-	-	98.49	35	12.19	35.32	193	0	P	H
	*	5690	102.37	-	-	90.5	35	12.19	35.32	193	0	A	H
		5857.3	59.46	-8.74	68.2	47.33	35.07	12.4	35.34	193	0	P	H
		5417.08	48.56	-25.44	74	37.36	34.7	11.83	35.33	212	69	P	V
		5470	49.46	-18.74	68.2	38.08	34.8	11.89	35.31	212	69	P	V
		5459.2	41.96	-12.04	54	30.69	34.7	11.88	35.31	212	69	A	V
	*	5690	103.9	-	-	92.03	35	12.19	35.32	212	69	P	V
	*	5690	97.32	-	-	85.45	35	12.19	35.32	212	69	A	V
		5851.9	54.83	-13.37	68.2	42.77	35	12.4	35.34	212	69	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

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)
		11380	45.88	-28.12	74	47.21	38.08	18.38	57.79	100	0	P	H
		17070	49.55	-18.65	68.2	40.9	42.07	22.84	56.26	100	0	P	H
802.11ac													H
VHT80													H
CH 138		11380	45.13	-28.87	74	46.46	38.08	18.38	57.79	100	0	P	V
5690MHz		17070	49.83	-18.37	68.2	41.18	42.07	22.84	56.26	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 VHT20 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		30	22.3	-17.7	40	27.06	24.32	0.93	30.01	-	-	P	H
		47.01	19.37	-20.63	40	32.57	15.63	1.16	29.99	-	-	P	H
		96.96	19.63	-23.87	43.5	32.28	15.67	1.65	29.97	-	-	P	H
		908.3	32.76	-13.24	46	27.72	28.84	5.14	28.94	-	-	P	H
		937	33.24	-12.76	46	27.29	29.51	5.22	28.78	-	-	P	H
		947.5	33.86	-12.14	46	27.27	30.05	5.25	28.71	100	0	P	H
													H
													H
													H
													H
5GHz													H
802.11ac													H
VHT20		30.27	29	-11	40	33.76	24.32	0.93	30.01	100	0	P	V
LF		40.26	26.4	-13.6	40	36.33	19	1.07	30	-	-	P	V
		160.68	23.39	-20.11	43.5	34.75	16.46	2.13	29.95	-	-	P	V
		882.4	32.5	-13.5	46	27.65	28.86	5.06	29.07	-	-	P	V
		941.2	32.46	-13.54	46	26.22	29.75	5.24	28.75	-	-	P	V
		955.2	34.23	-11.77	46	27.1	30.53	5.27	28.67	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix C. Radiated Spurious Emission

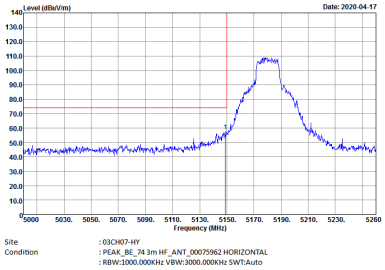
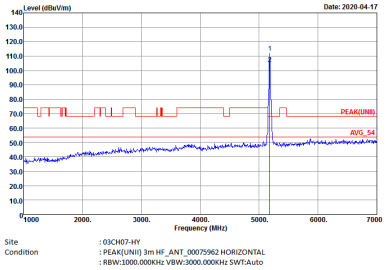
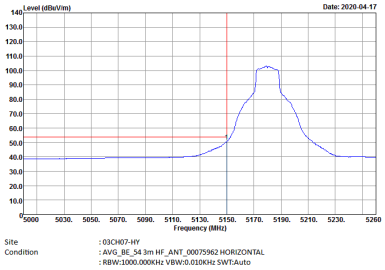
Test Engineer :	Jesse Wang, Stan Hsieh, and Ken Wu	**Temperature :**	21~25°C
		Relative Humidity :	48~53%

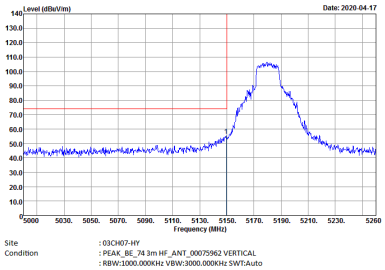
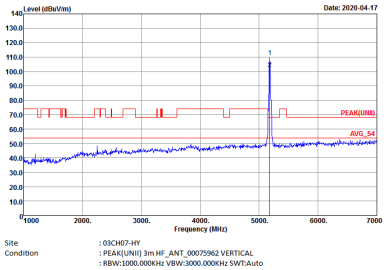
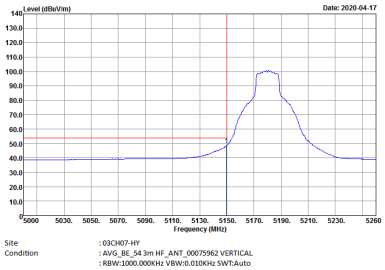
Note symbol

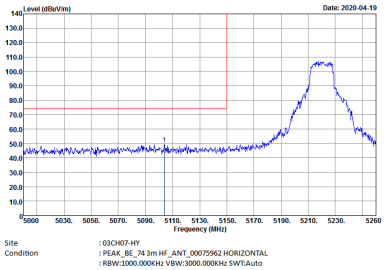
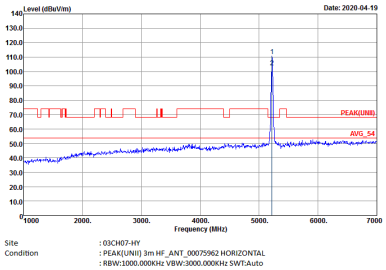
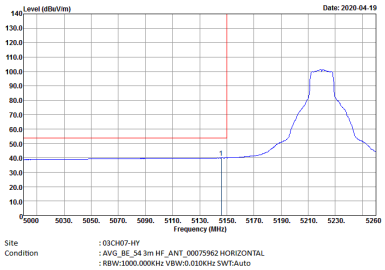
-L	**Low channel location**
-R	**High channel location**

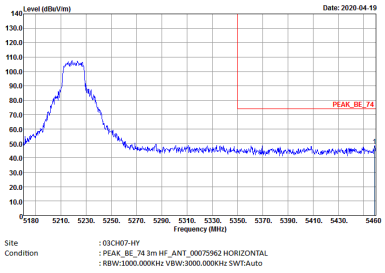
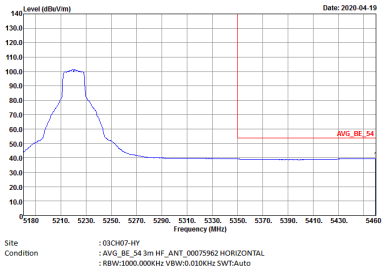
Band 1 - 5150~5250MHz

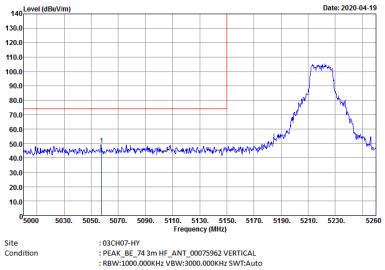
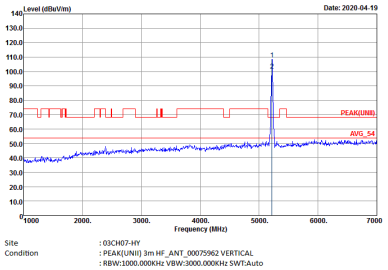
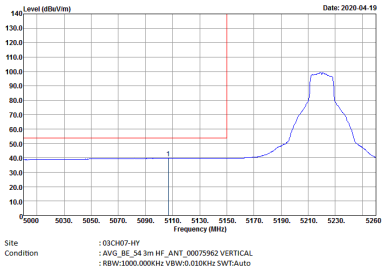
WIFI 802.11a (Band Edge @ 3m)

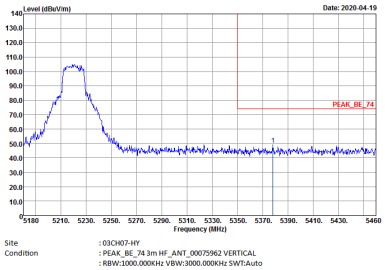
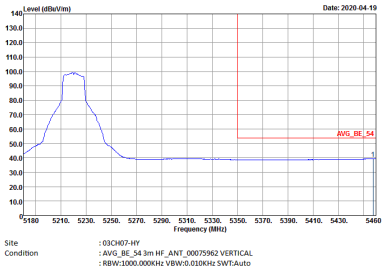
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

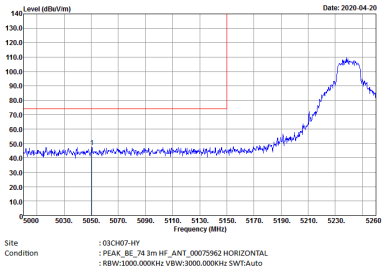
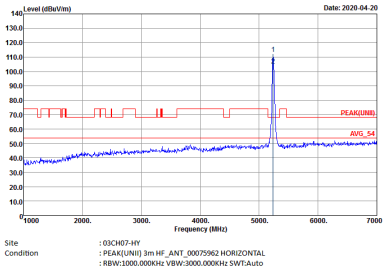
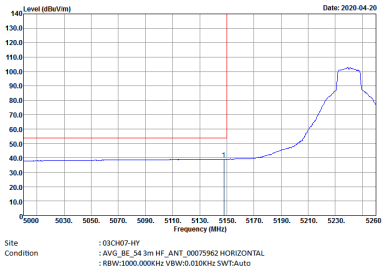
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

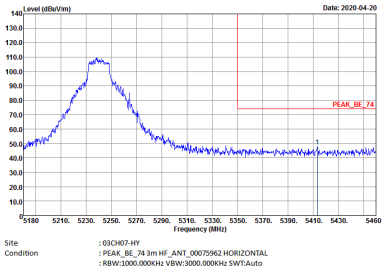
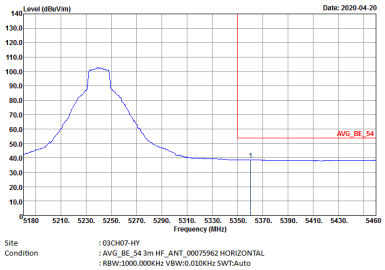
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

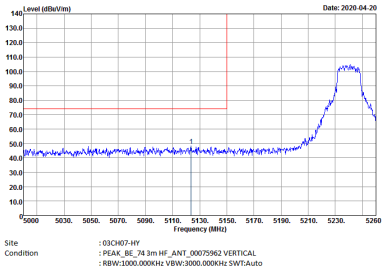
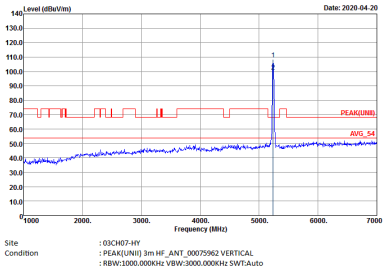
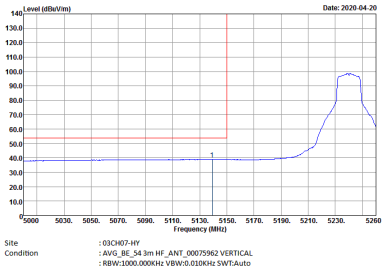
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

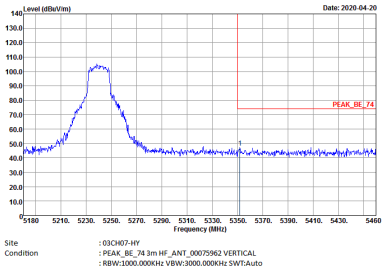
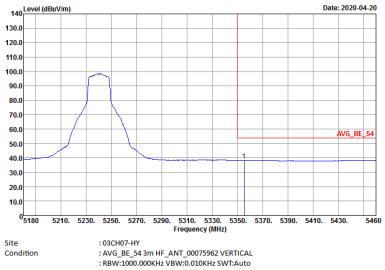
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

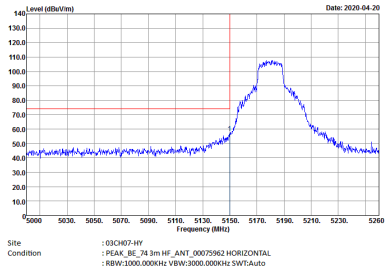
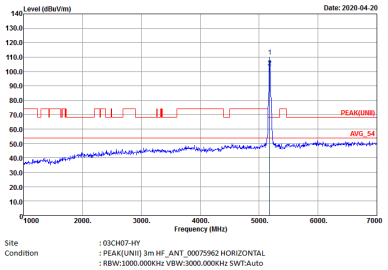
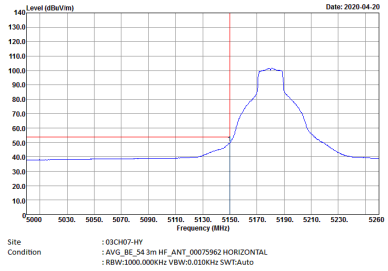
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

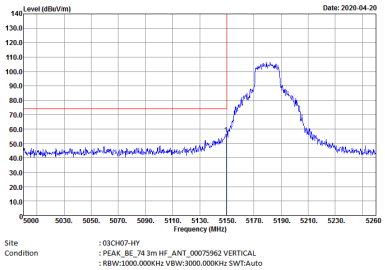
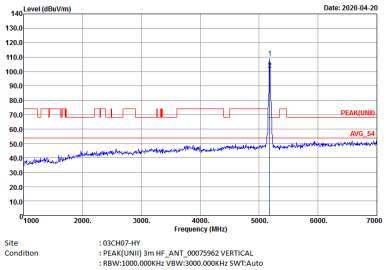
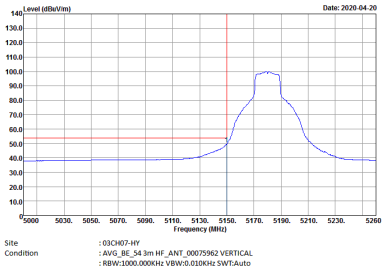
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

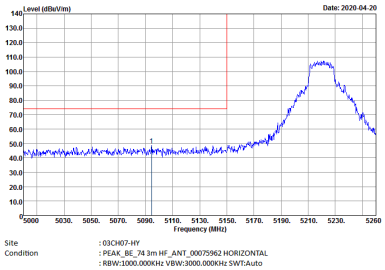
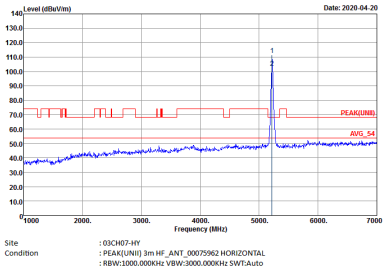
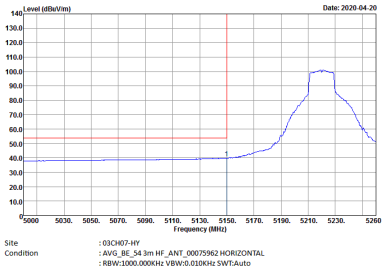
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

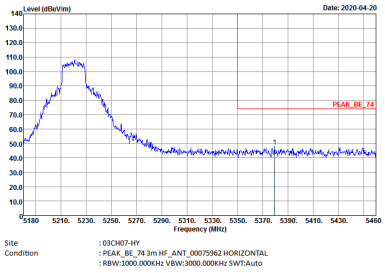
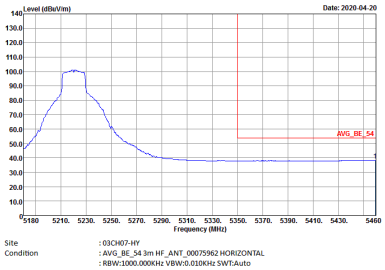
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

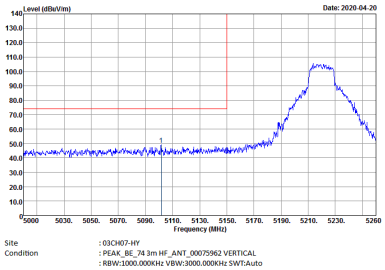
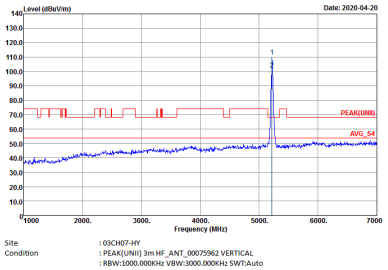
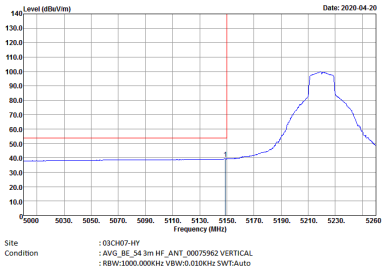
Band 1 5150~5250MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

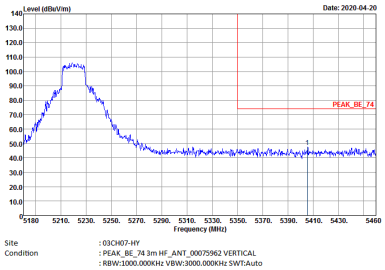
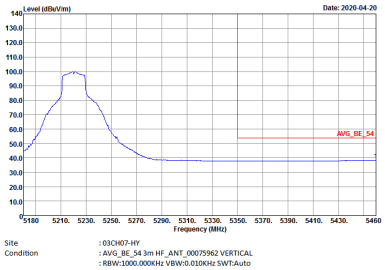
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

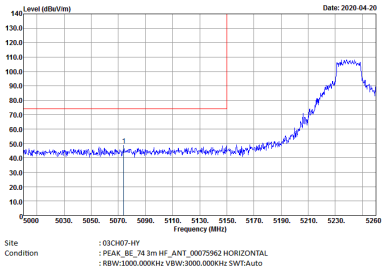
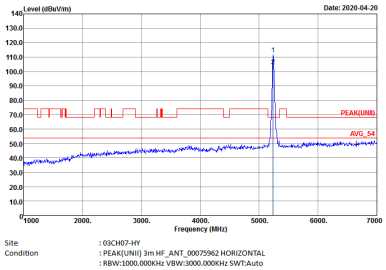
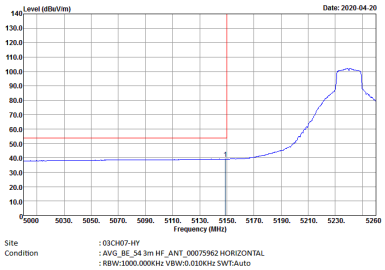
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

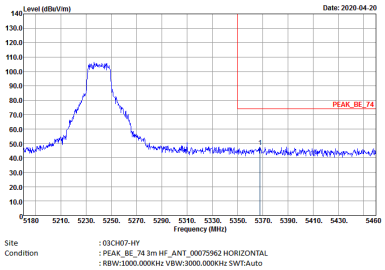
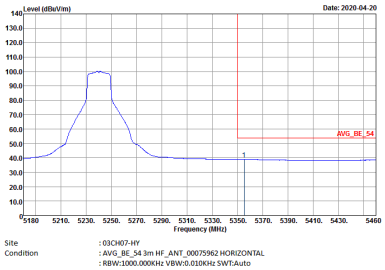
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

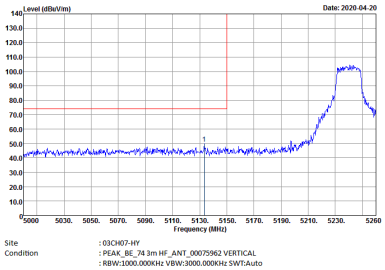
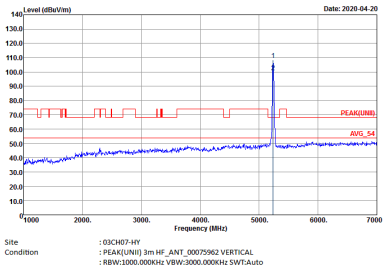
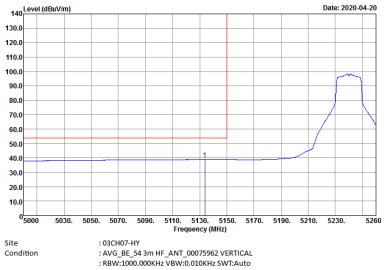
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

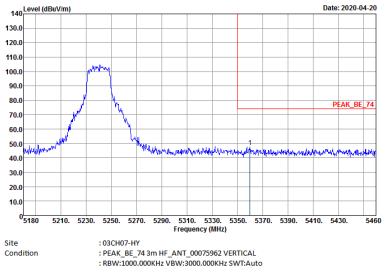
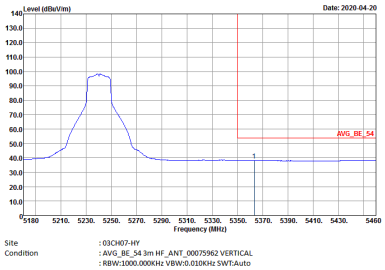
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH44 5220MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

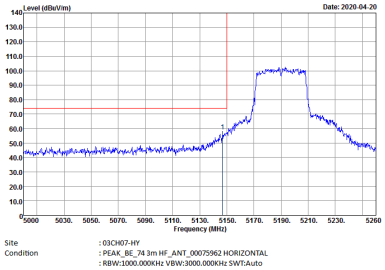
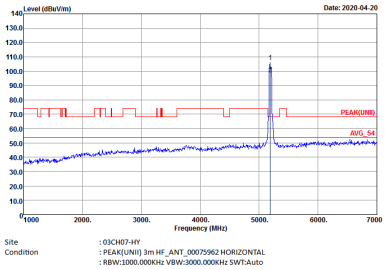
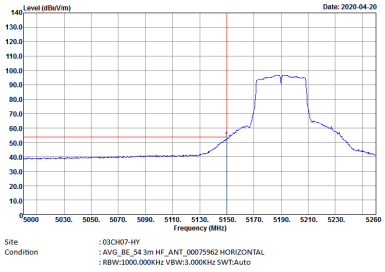
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH48 5240MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

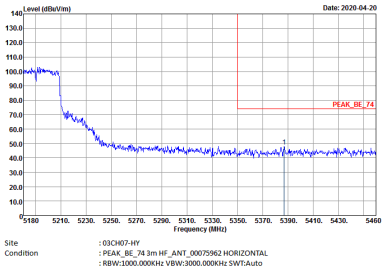
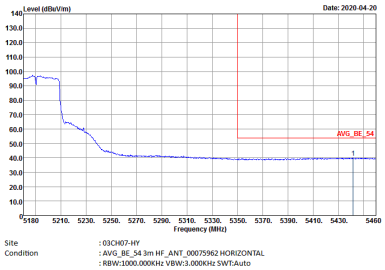
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

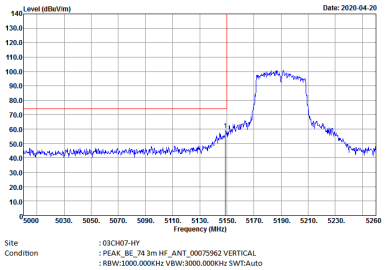
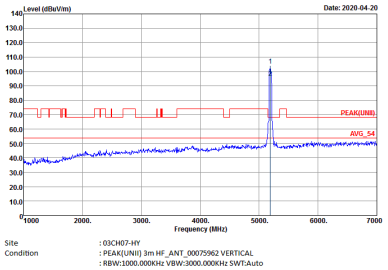
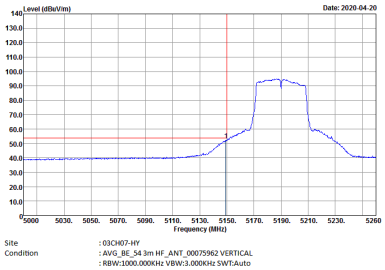
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

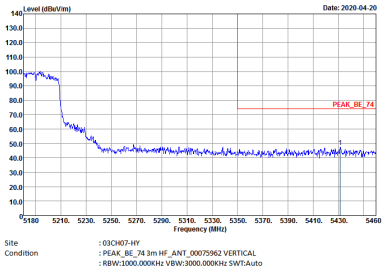
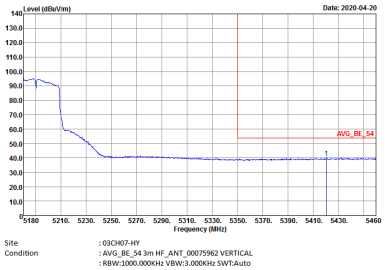
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

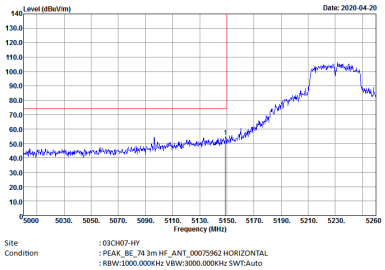
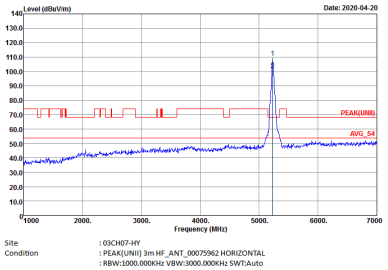
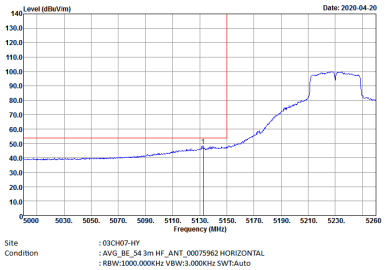
Band 1 5150~5250MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

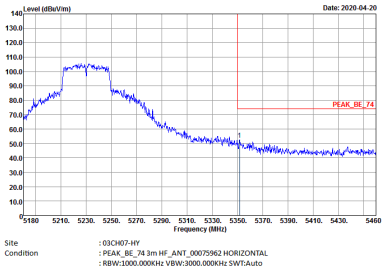
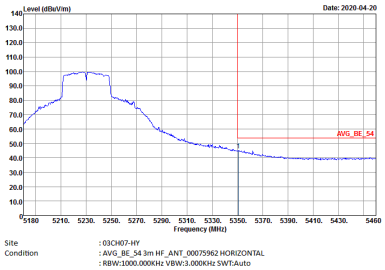
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

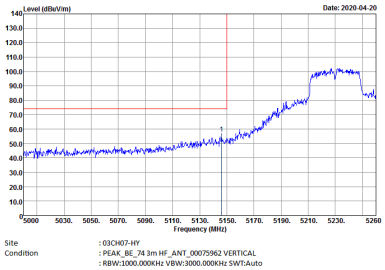
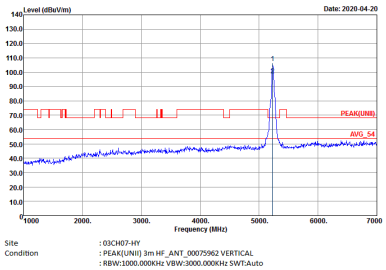
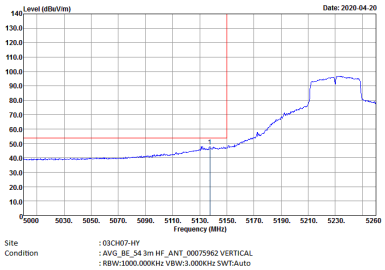
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

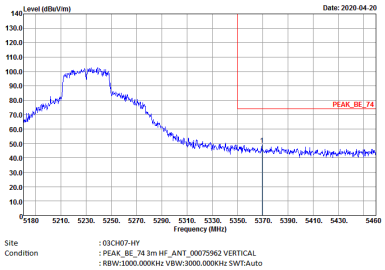
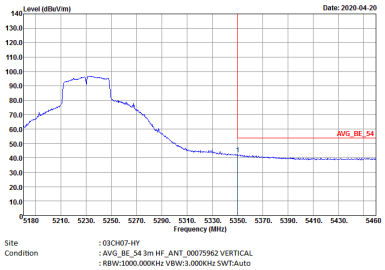
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH38 5190MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH38 5190MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

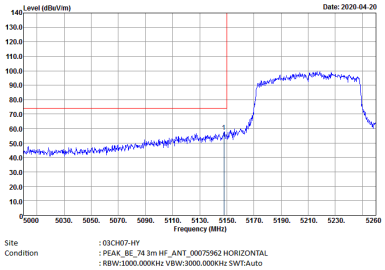
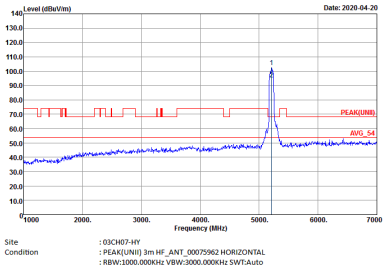
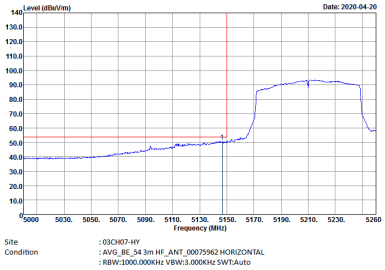
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH46 5230MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

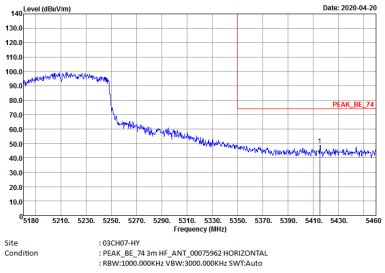
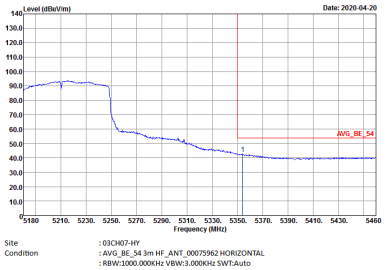
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

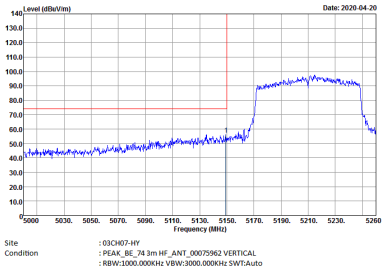
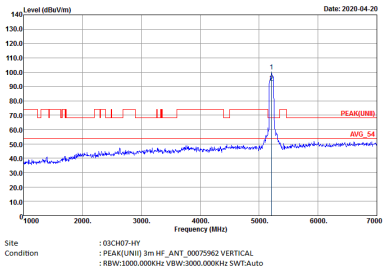
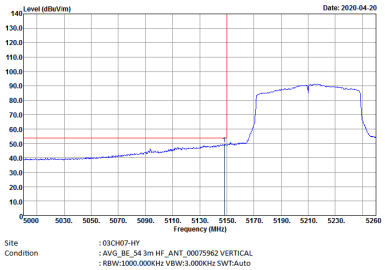
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

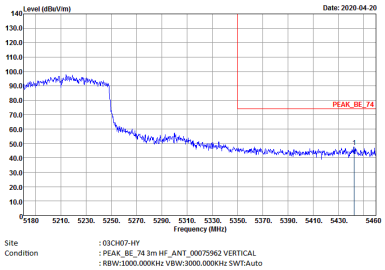
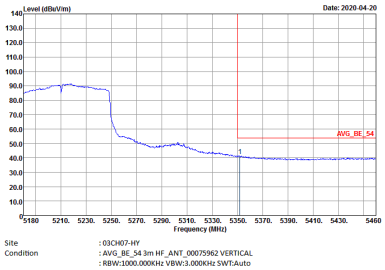
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

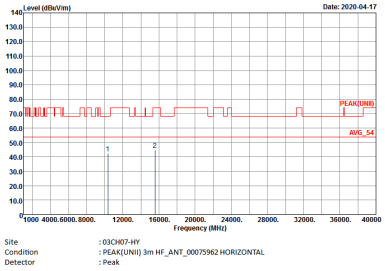
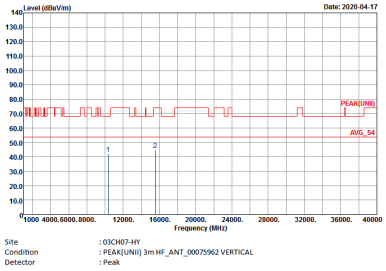
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

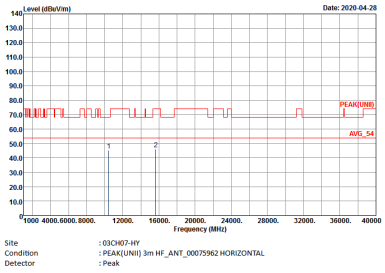
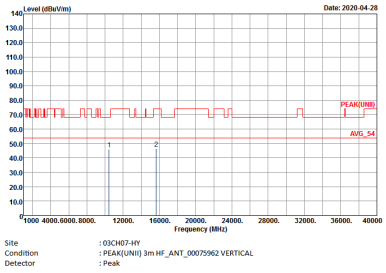
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

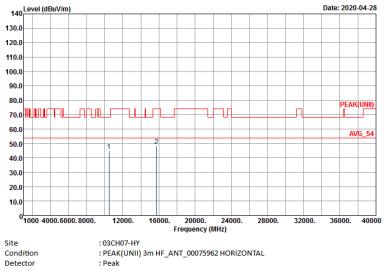
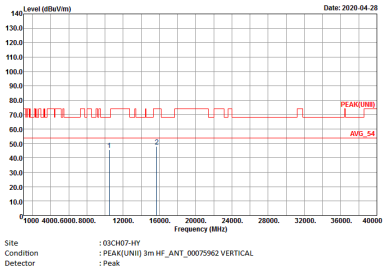
Band 1 5150~5250MHz

Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

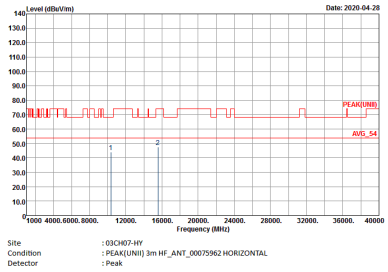
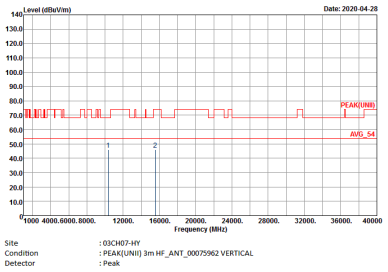
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

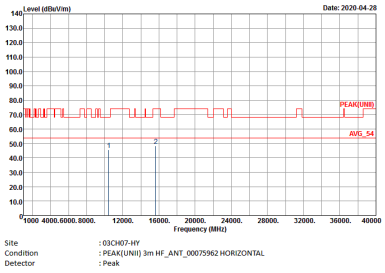
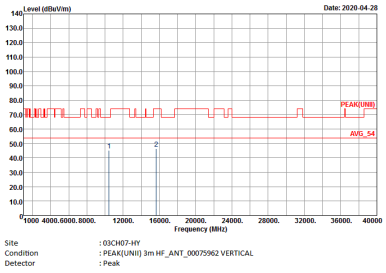
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.		

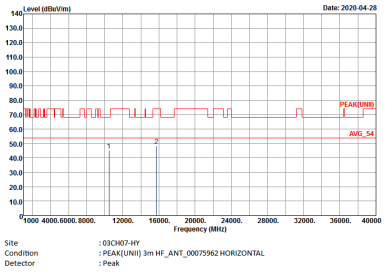
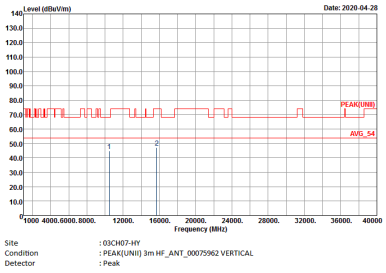
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 1 5150~5250MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

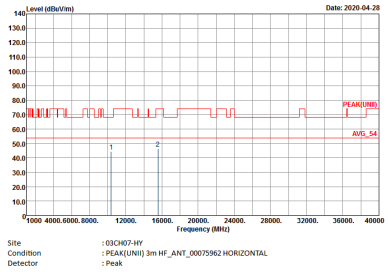
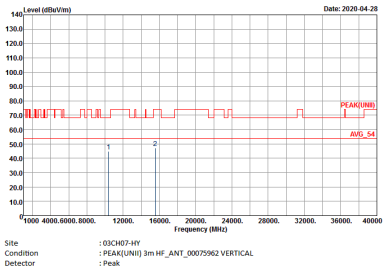
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.		

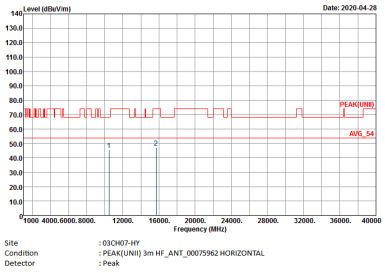
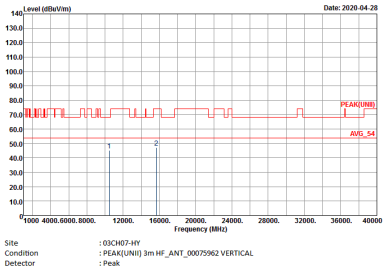
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 1 5150~5250MHz

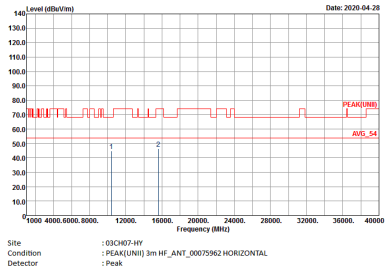
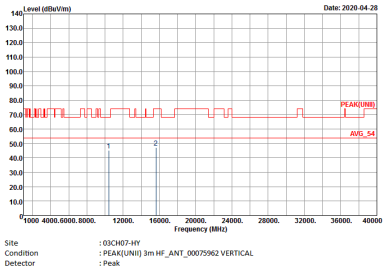
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH38 5190MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH46 5230MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 1 5150~5250MHz

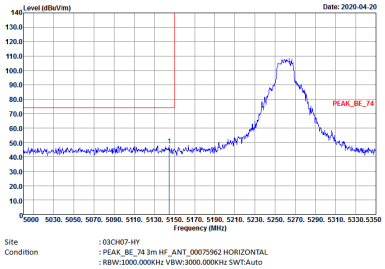
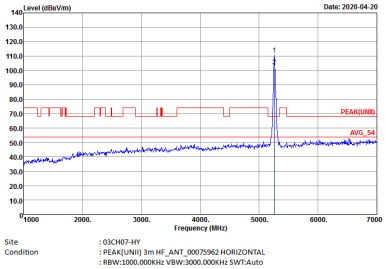
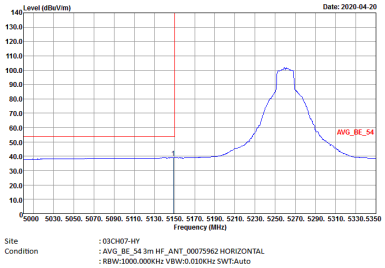
WIFI 802.11ac VHT80 (Harmonic @ 3m)

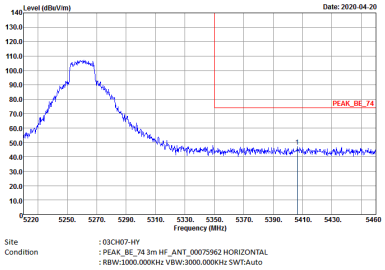
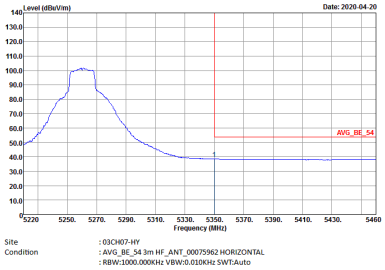
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz	
1	Horizontal	Vertical
Peak Avg.		

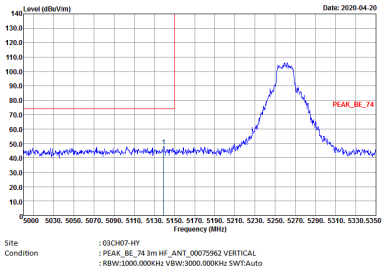
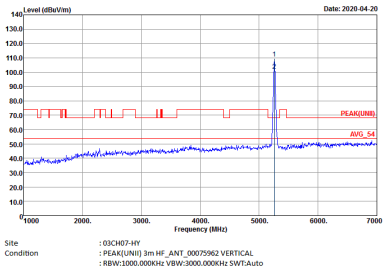
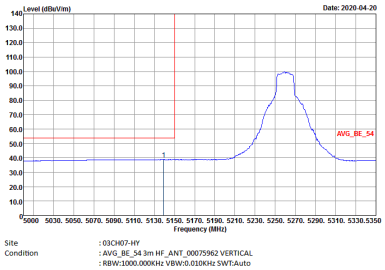
Band 1 - 5150~5250MHz

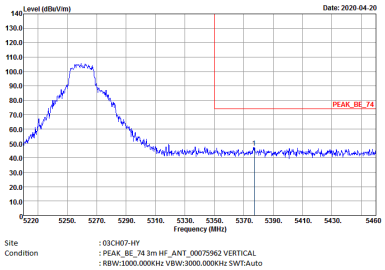
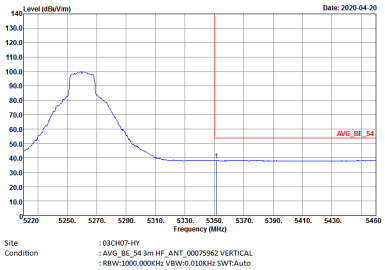
Band 2 - 5250~5350MHz

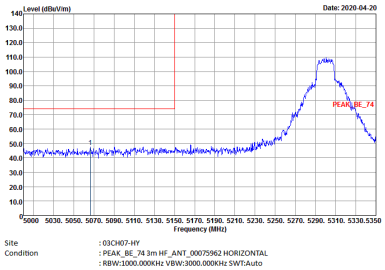
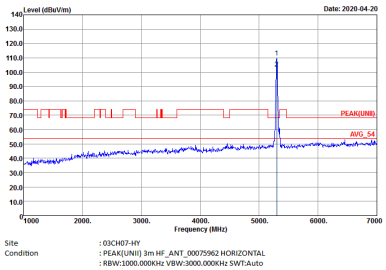
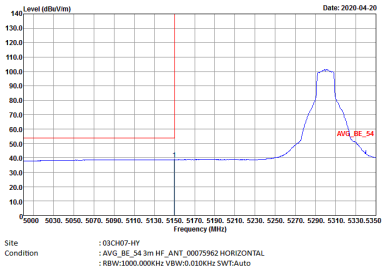
WIFI 802.11a (Band Edge @ 3m)

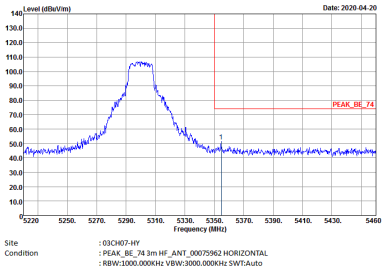
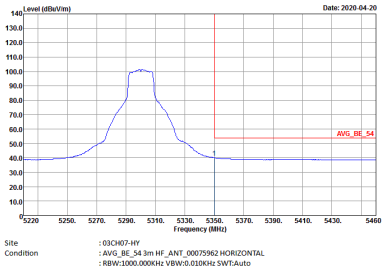
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

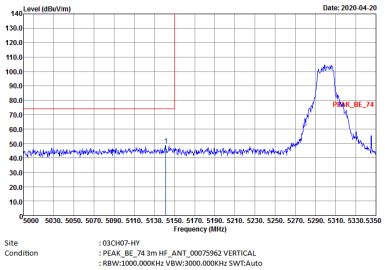
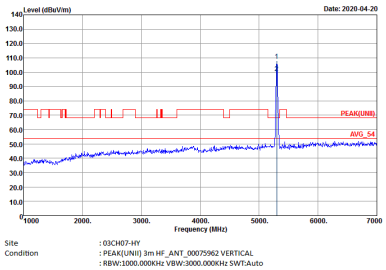
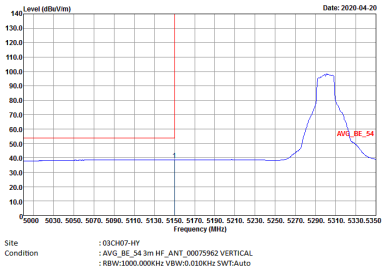
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

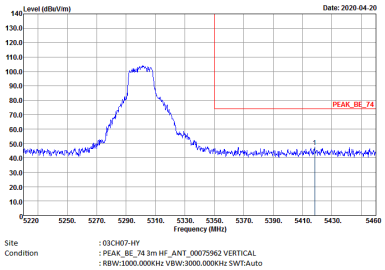
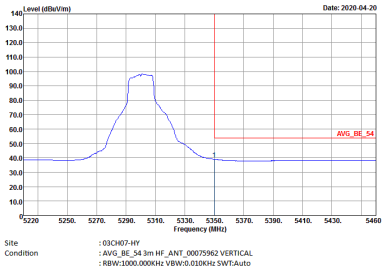
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

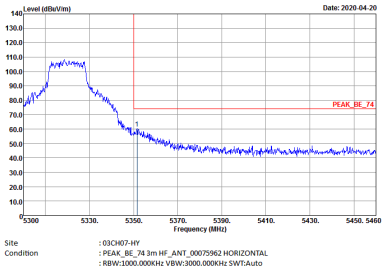
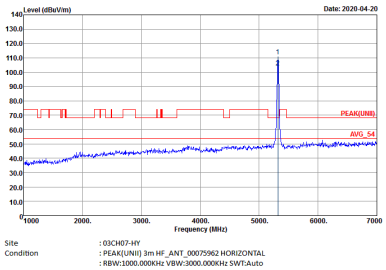
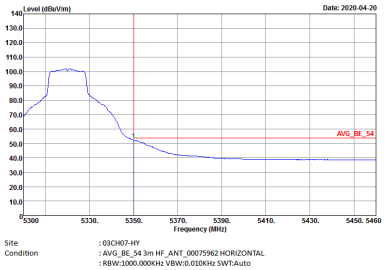
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

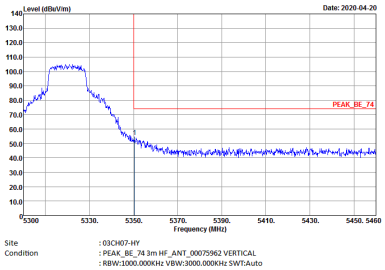
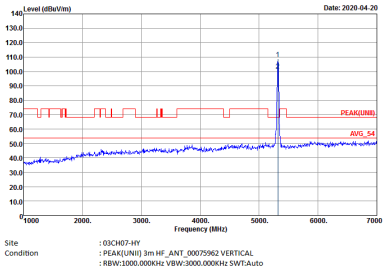
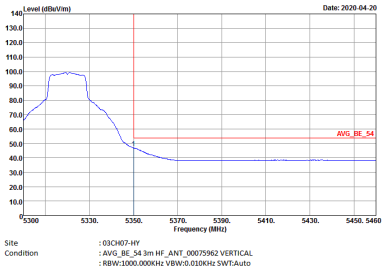
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

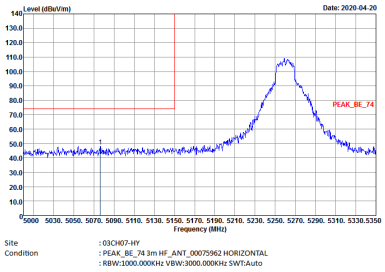
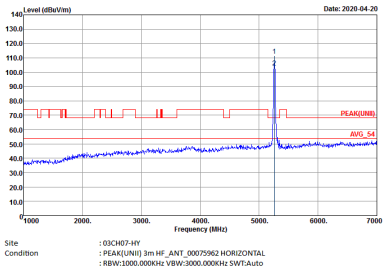
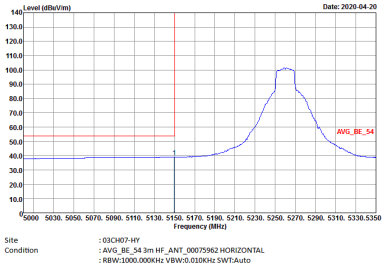
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

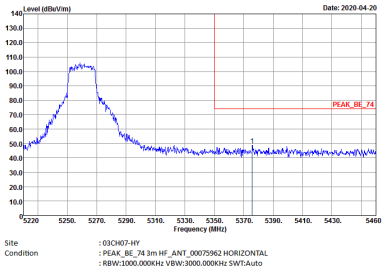
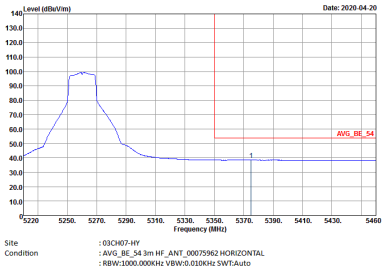
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

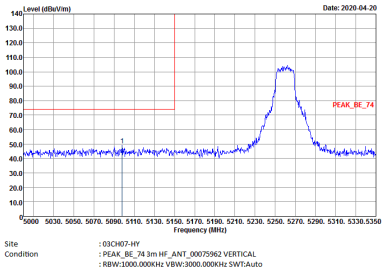
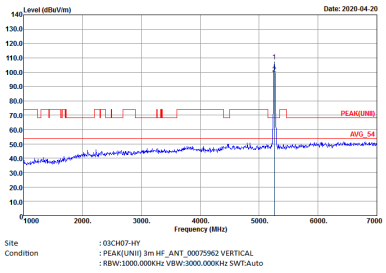
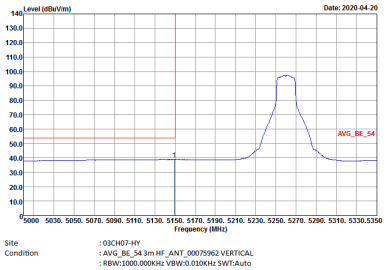
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

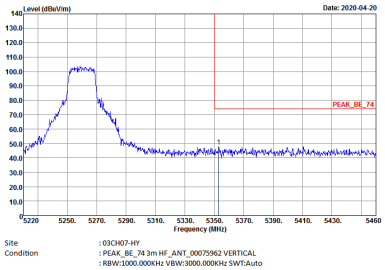
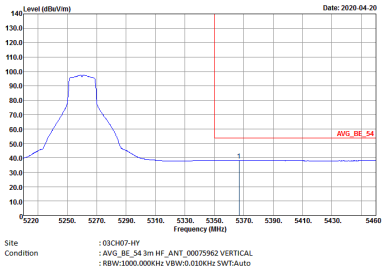
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

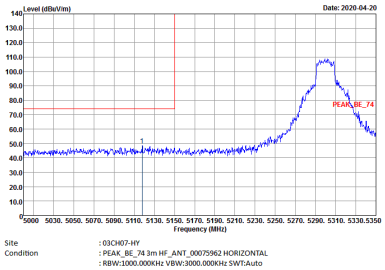
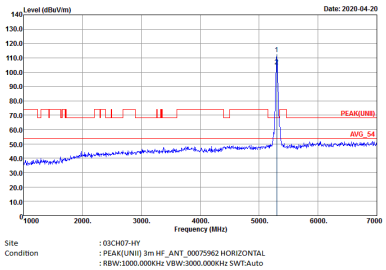
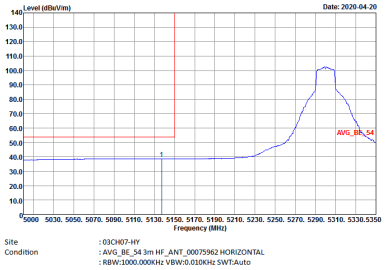
Band 2 5250~5350MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

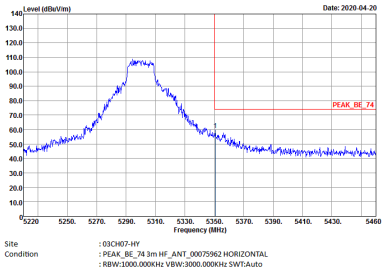
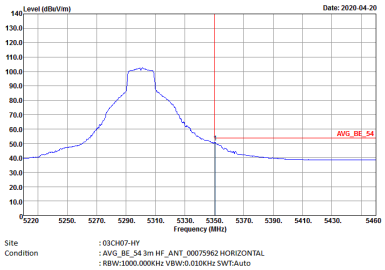
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

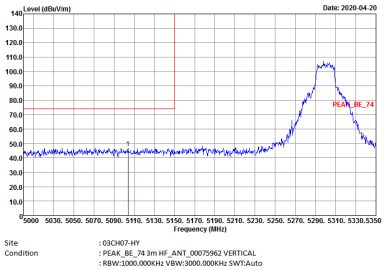
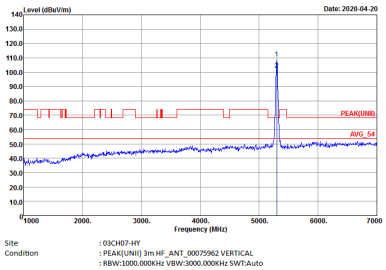
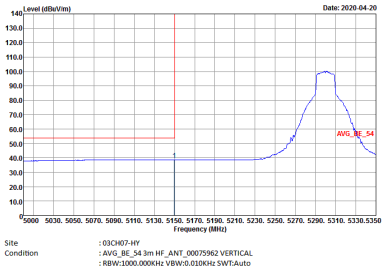
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

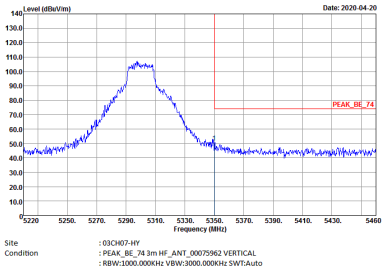
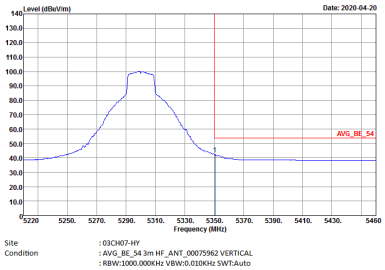
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

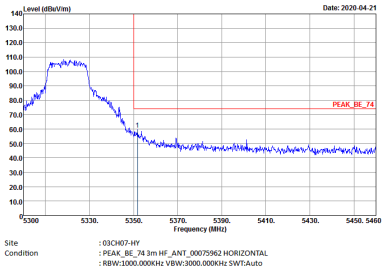
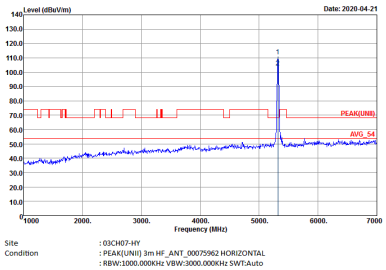
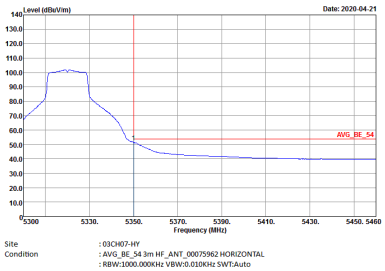
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

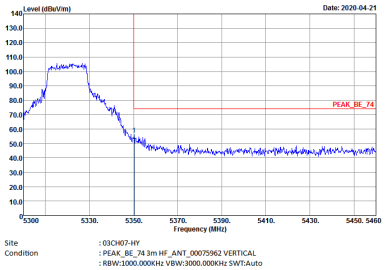
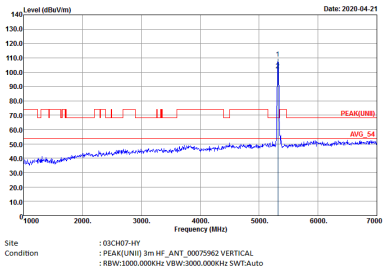
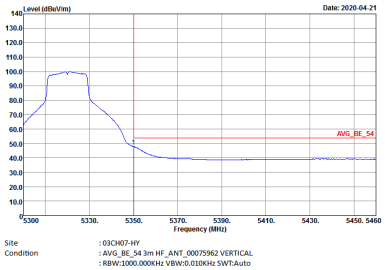
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

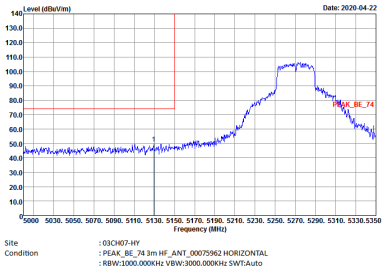
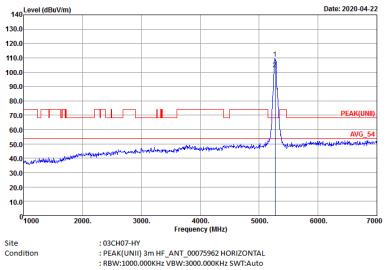
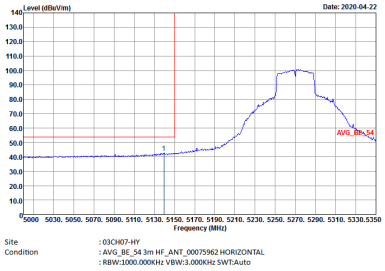
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

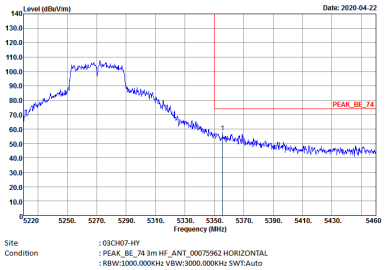
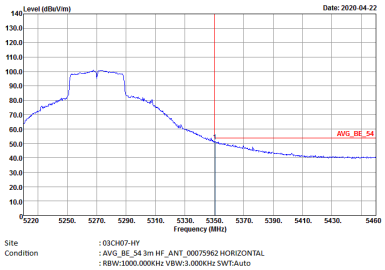
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

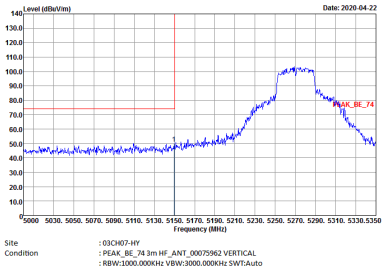
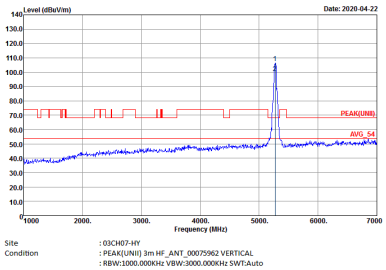
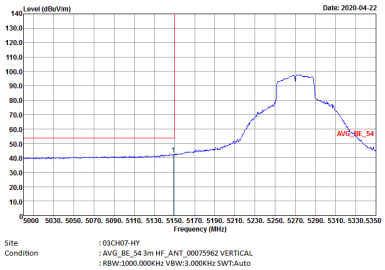
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

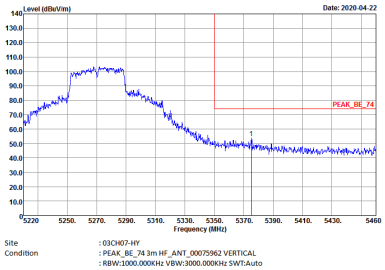
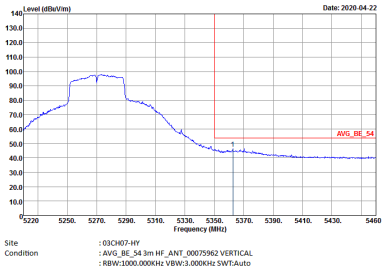
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

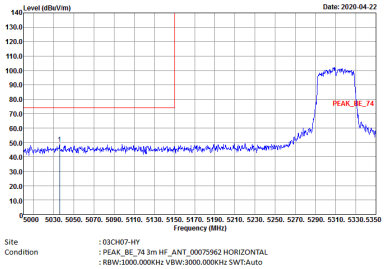
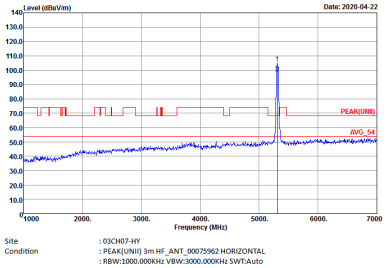
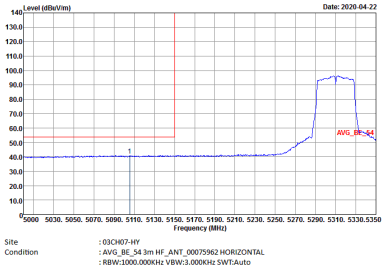
Band 2 5250~5350MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

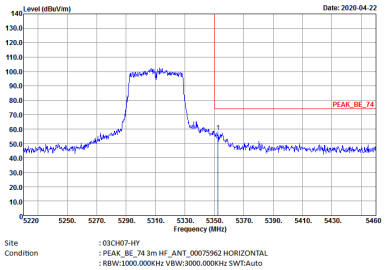
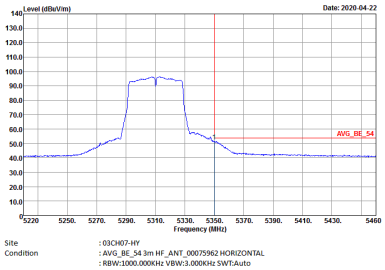
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH54 5270 - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

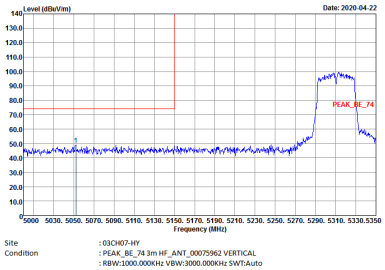
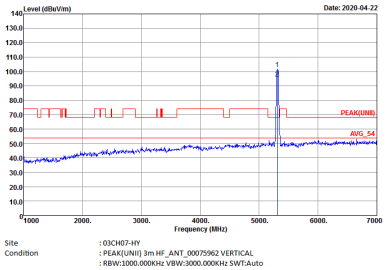
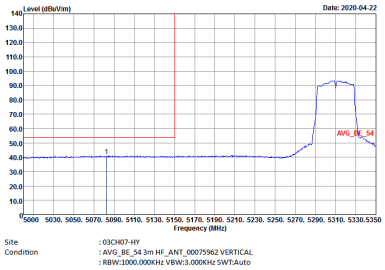
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH54 5270 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

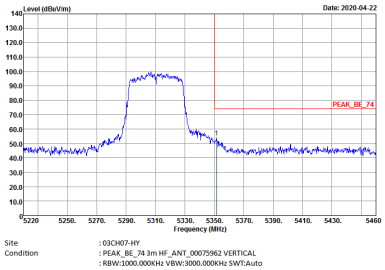
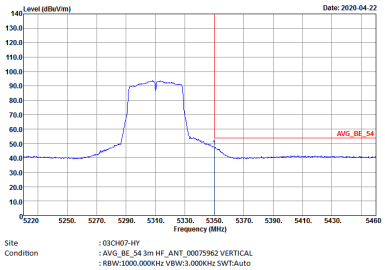
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH54 5270 - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH54 5270 - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

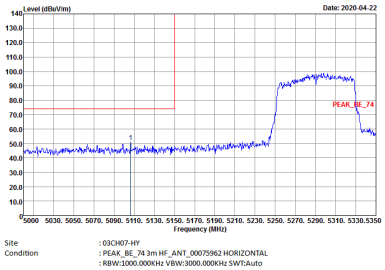
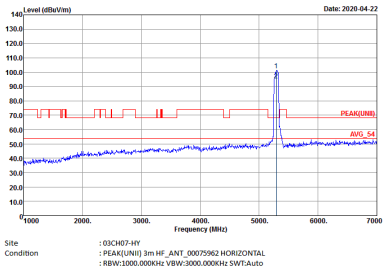
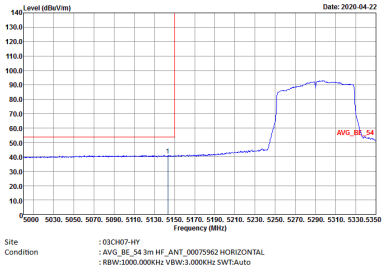
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

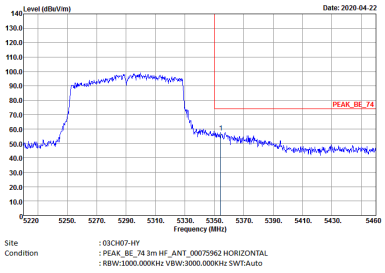
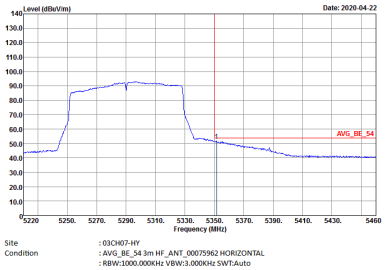
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

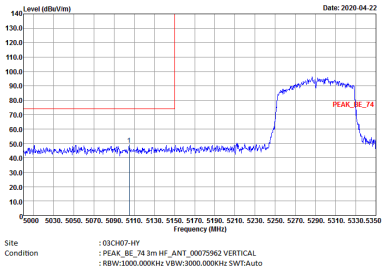
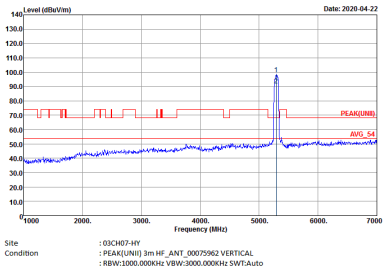
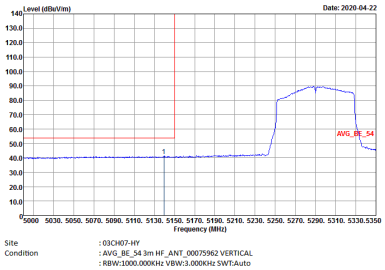
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH62 5310 - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

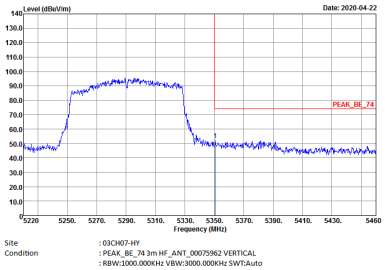
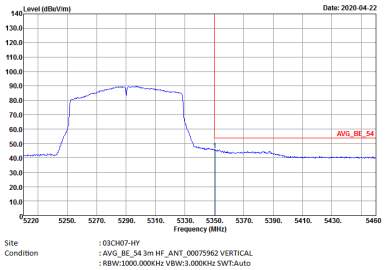
Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

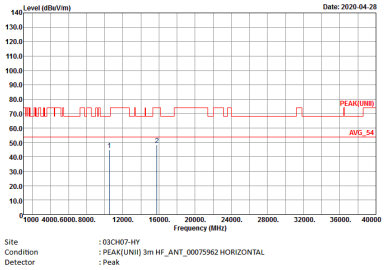
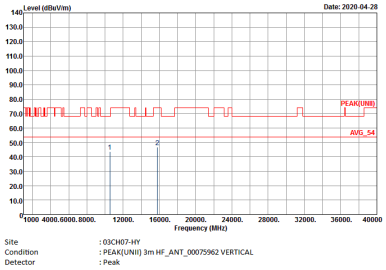
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

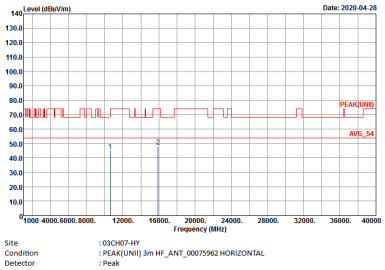
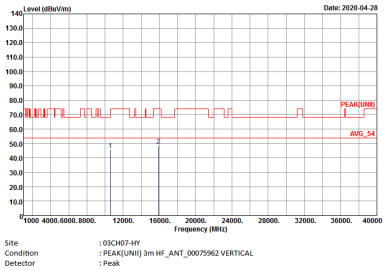
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

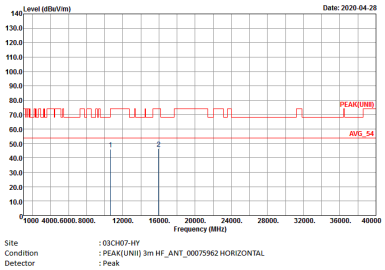
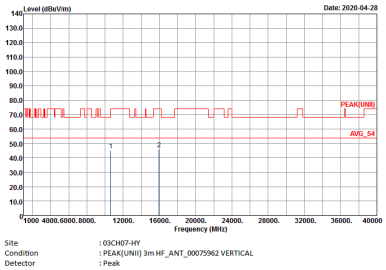
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

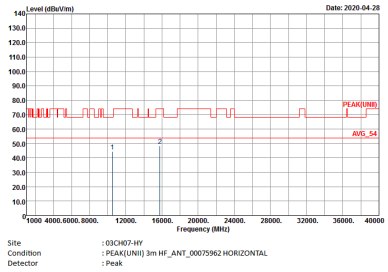
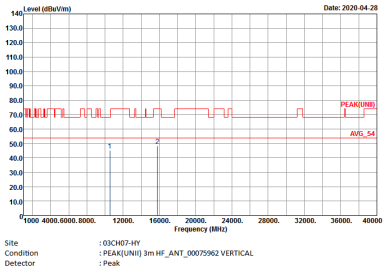
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.		

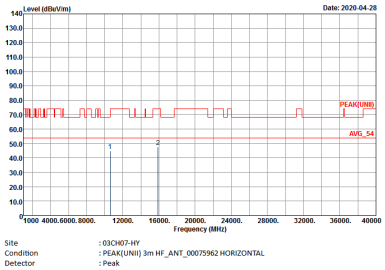
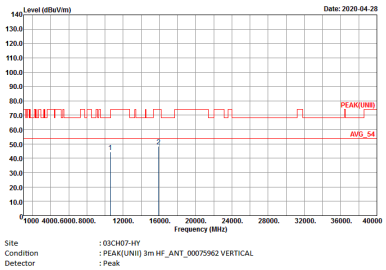
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.		

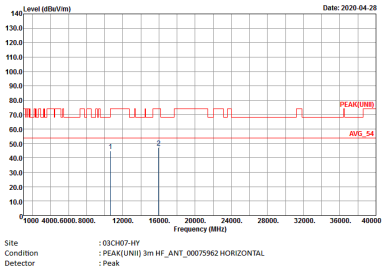
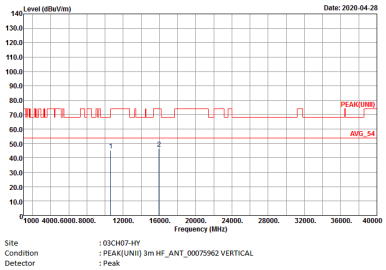
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 2 5250~5350MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

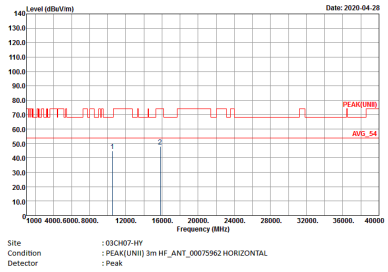
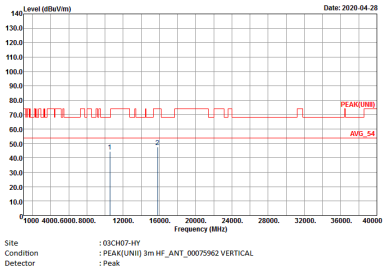
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.		

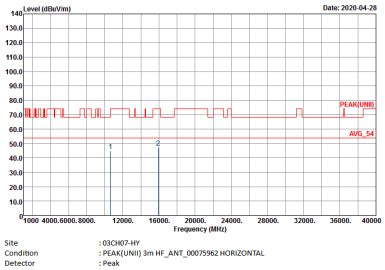
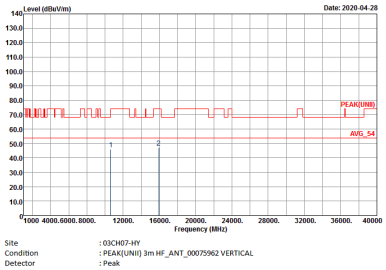
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 2 5250~5350MHz

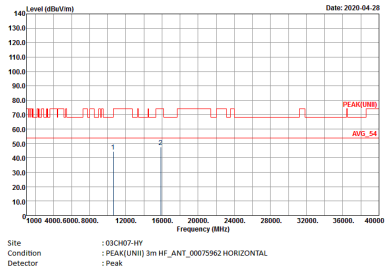
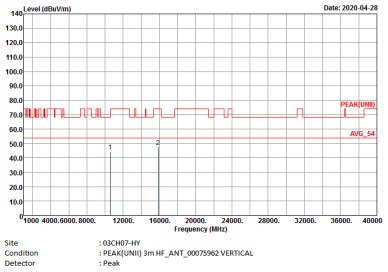
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH54 5270	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH62 5310	
1	Horizontal	Vertical
Peak Avg.		

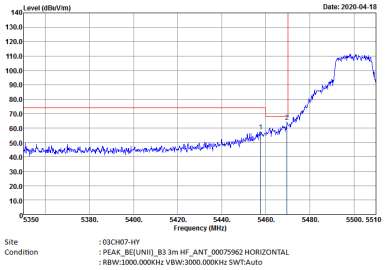
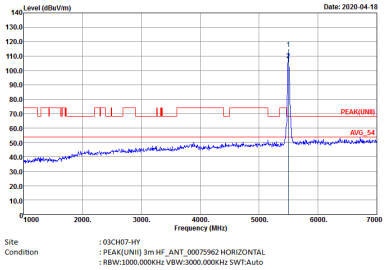
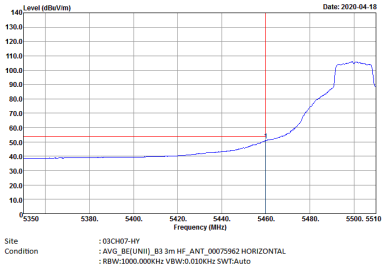
Band 2 5250~5350MHz

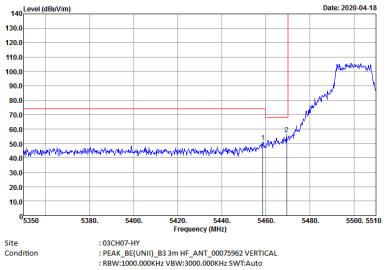
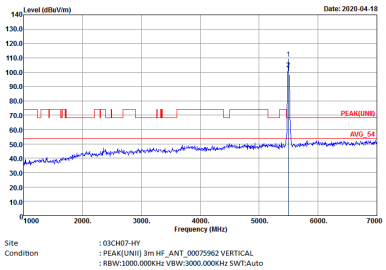
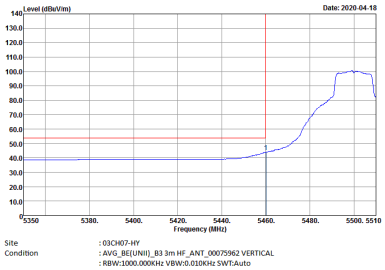
WIFI 802.11ac VHT80 (Harmonic @ 3m)

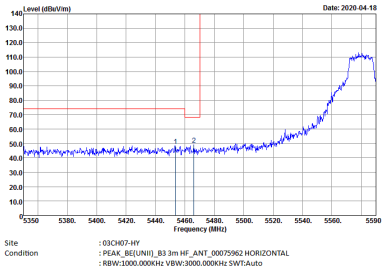
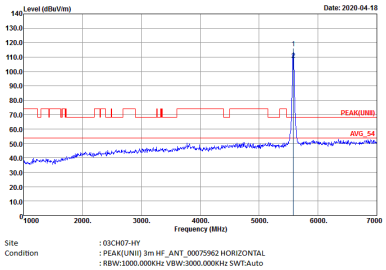
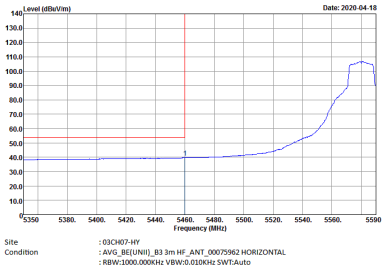
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
1	Horizontal	Vertical
Peak Avg.		

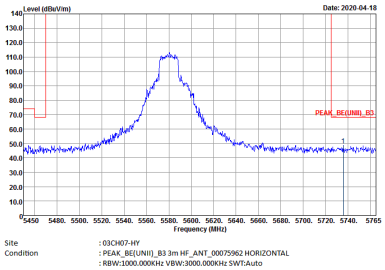
Band 3 - 5470~5725MHz

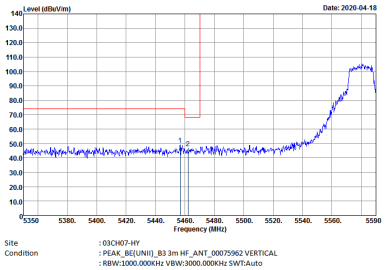
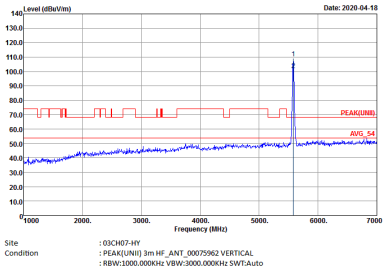
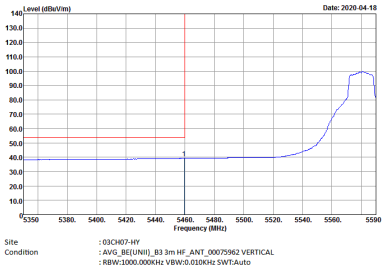
WIFI 802.11a (Band Edge @ 3m)

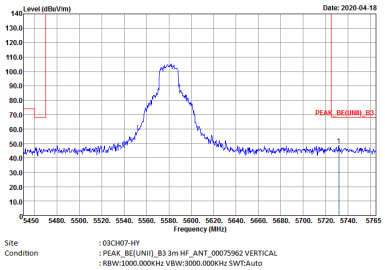
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

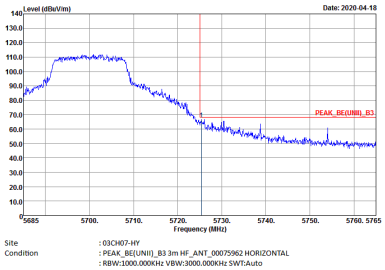
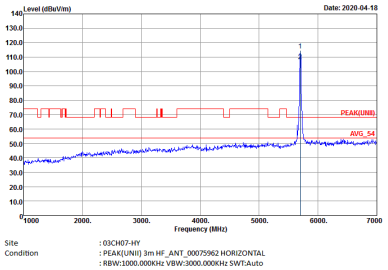
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

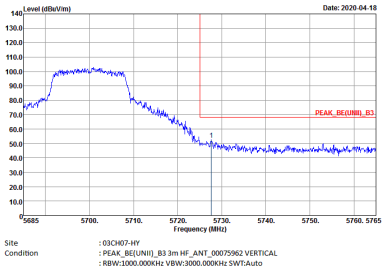
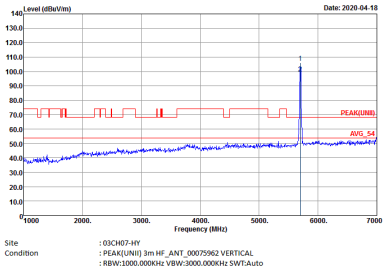
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

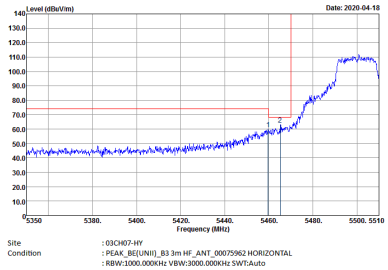
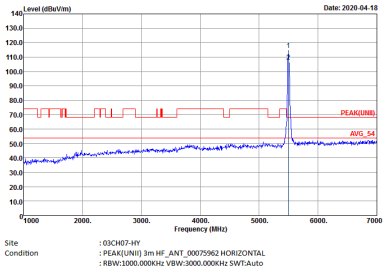
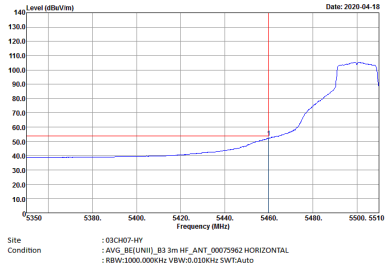
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

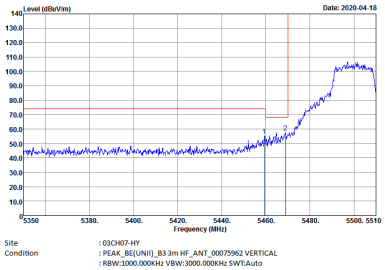
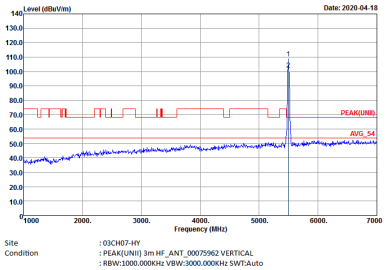
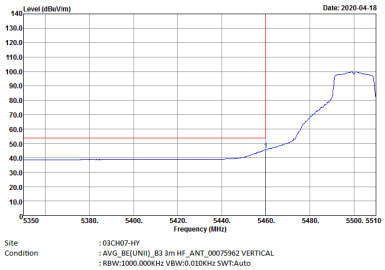
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
1	Vertical	Fundamental
Peak		Left blank

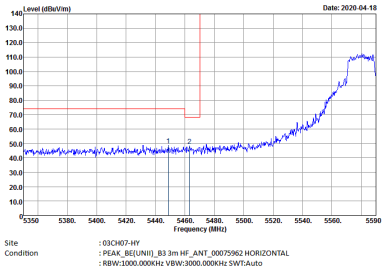
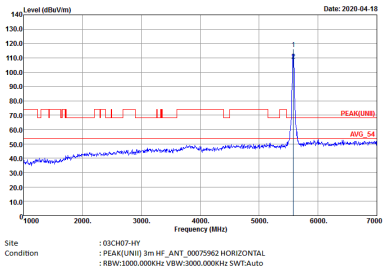
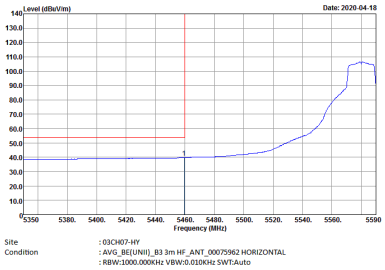
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Fundamental
Peak		

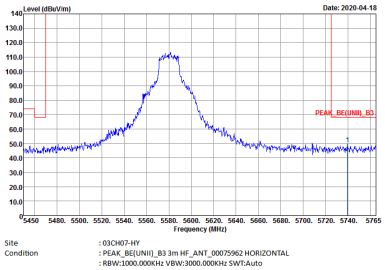
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Vertical	Fundamental
Peak		

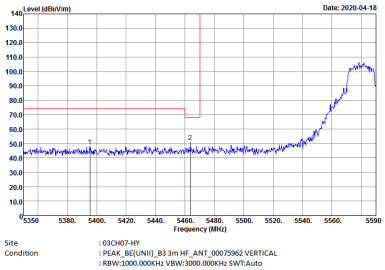
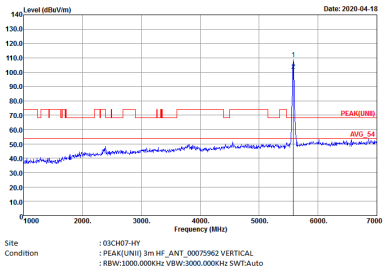
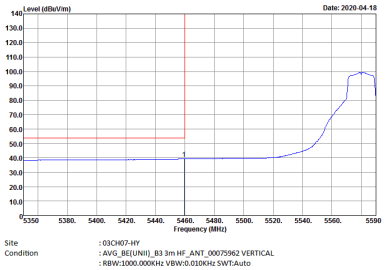
Band 3 5470~5725MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

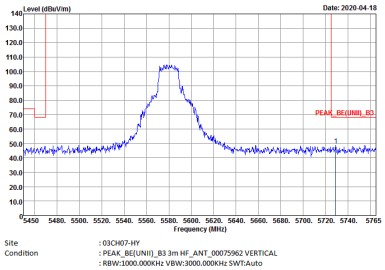
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH100 5500MHz	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

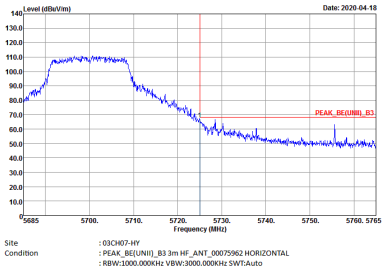
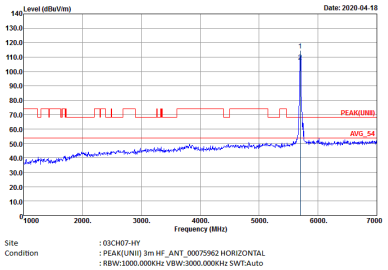
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH100 5500MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

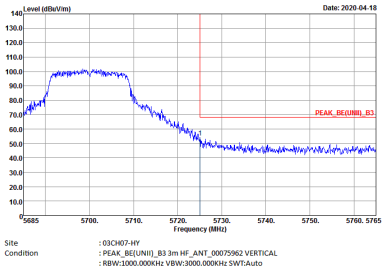
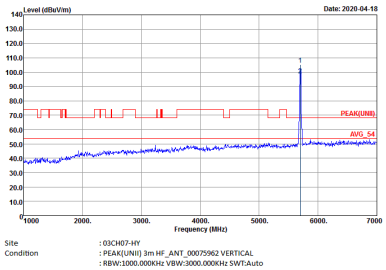
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

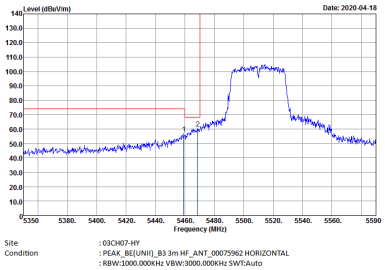
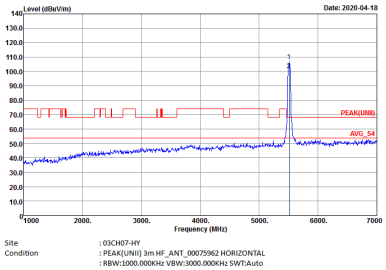
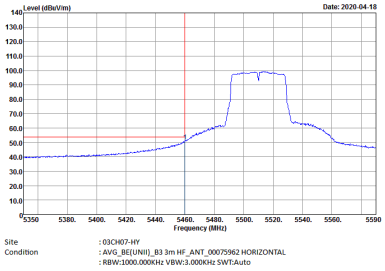
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

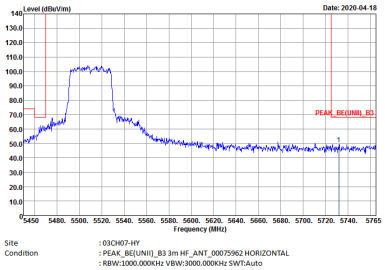
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz - R	
1	Vertical	Fundamental
Peak		Left blank

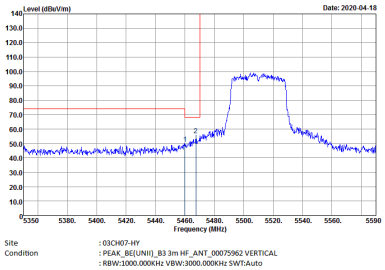
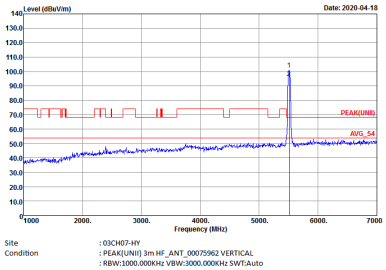
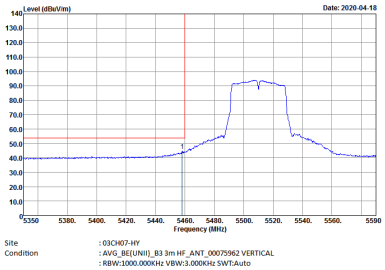
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH140 5700MHz	
1	Horizontal	Fundamental
Peak		

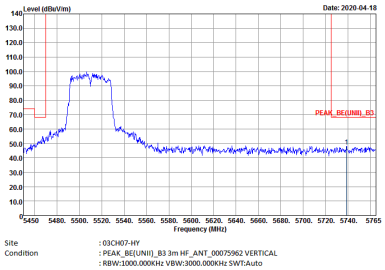
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH140 5700MHz	
1	Vertical	Fundamental
Peak		

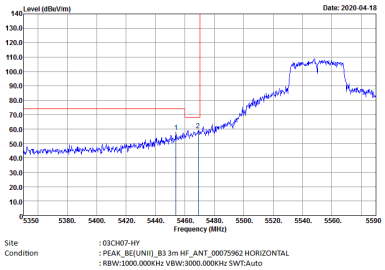
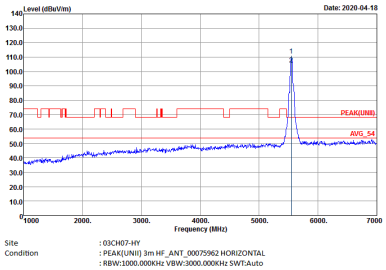
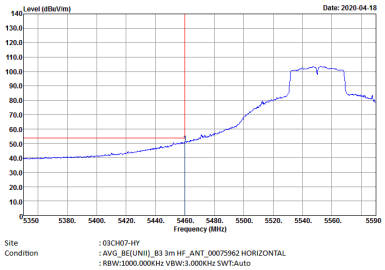
Band 3 5470~5725MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

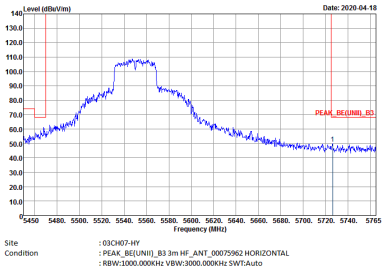
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

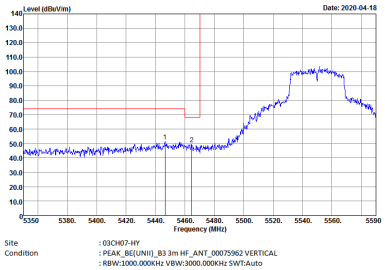
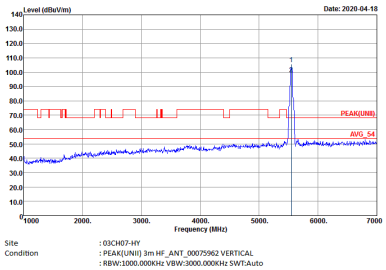
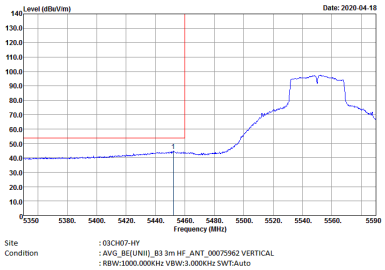
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

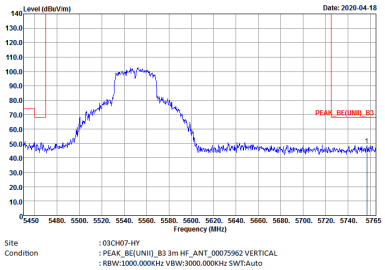
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

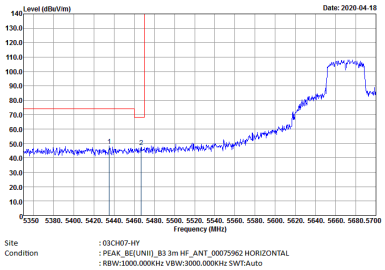
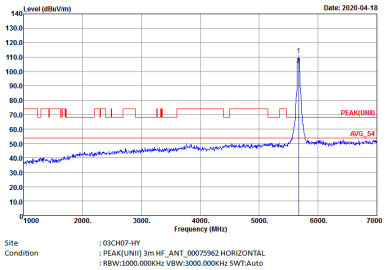
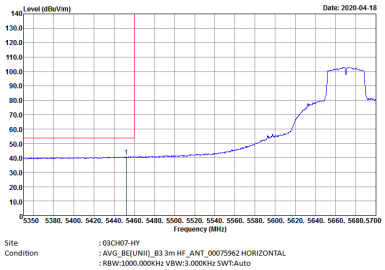
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz - R	
1	Vertical	Fundamental
Peak		Left blank

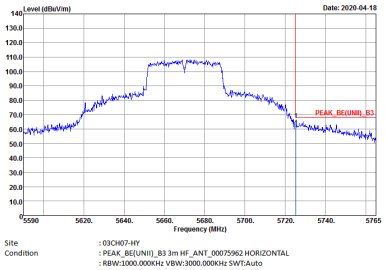
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

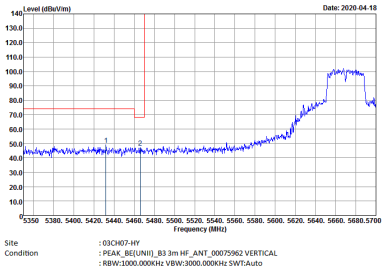
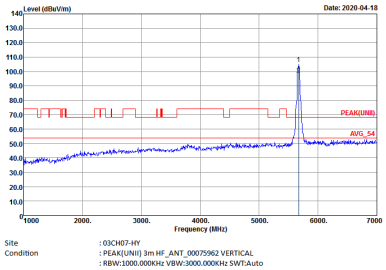
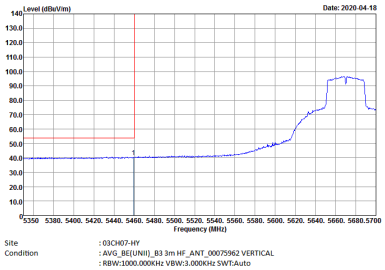
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

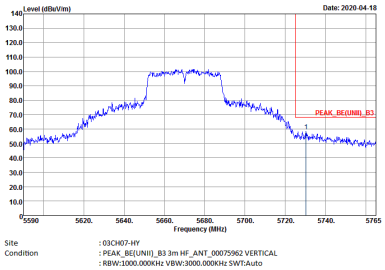
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz - R	
1	Vertical	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

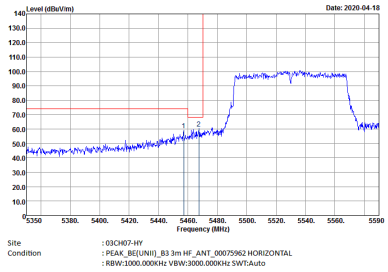
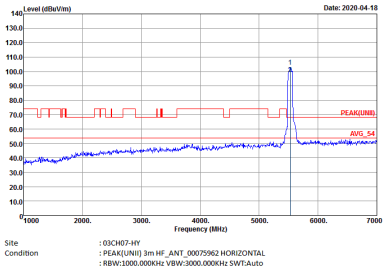
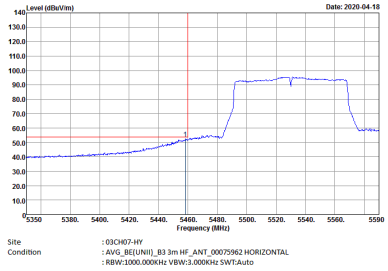
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

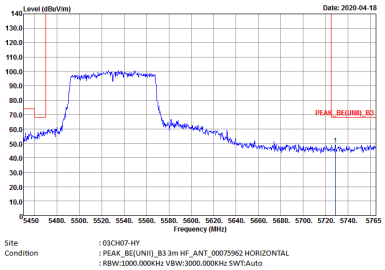
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

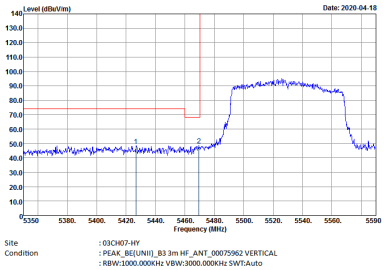
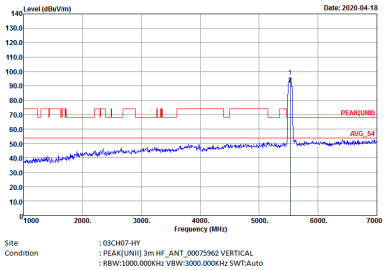
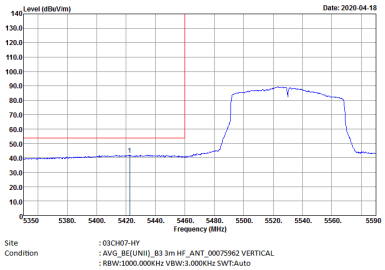
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz - R	
1	Vertical	Fundamental
Peak		Left blank

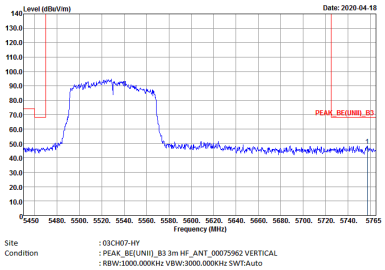
Band 3 5470~5725MHz

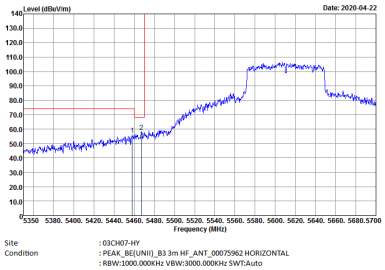
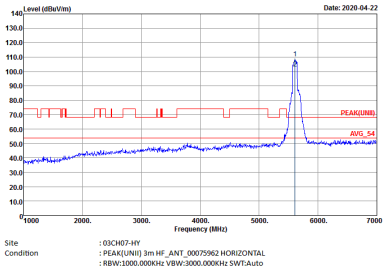
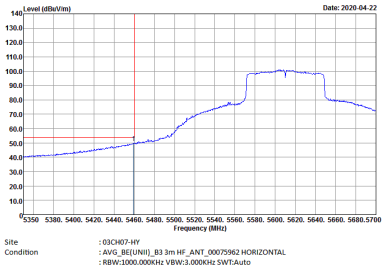
WIFI 802.11ac VHT80 (Band Edge @ 3m)

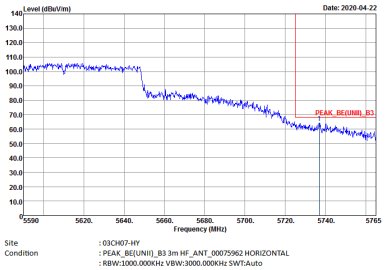
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

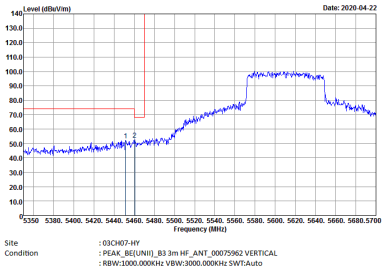
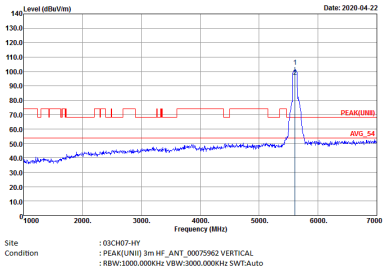
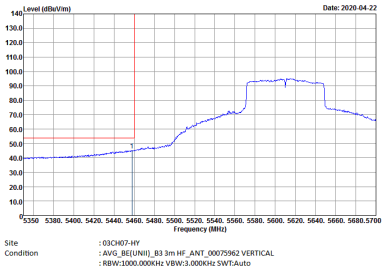
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

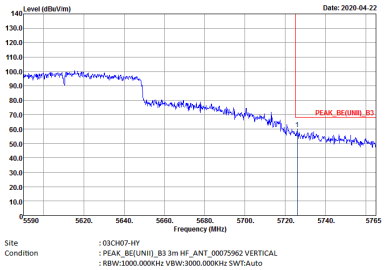
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1	Vertical	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

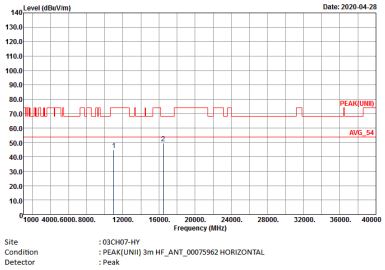
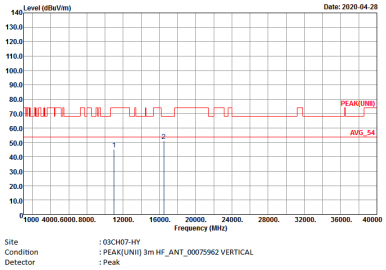
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1	Horizontal	Fundamental
Peak		Left blank

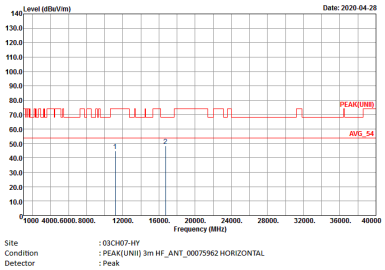
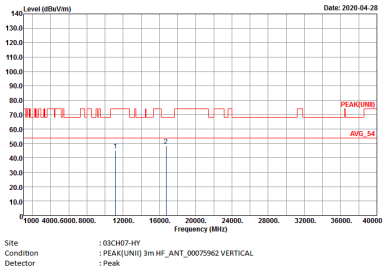
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

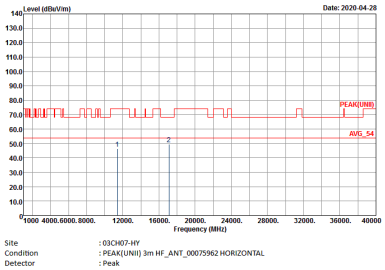
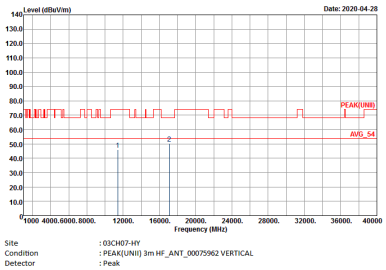
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz - R	
1	Vertical	Fundamental
Peak		Left blank

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

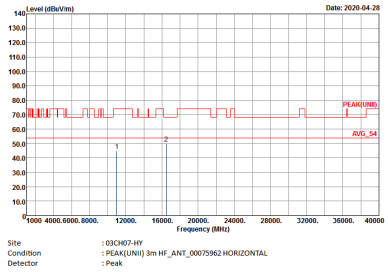
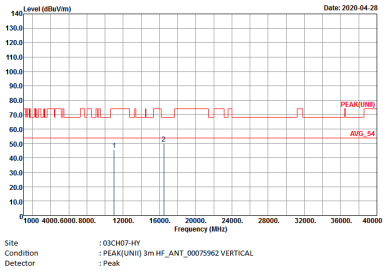
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.		

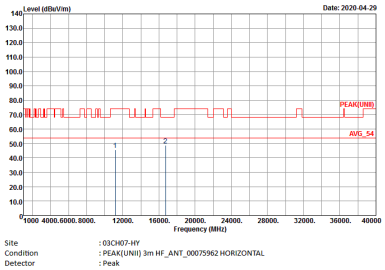
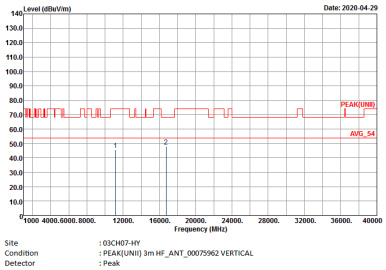
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.		

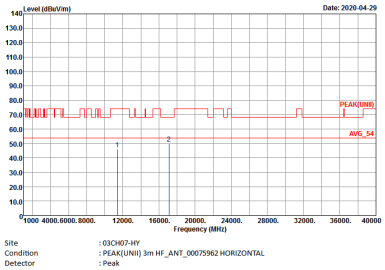
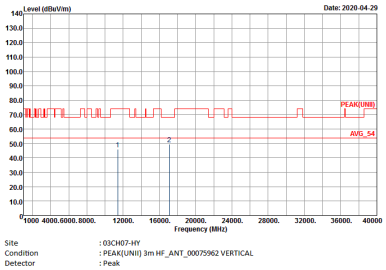
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 3 5470~5725MHz

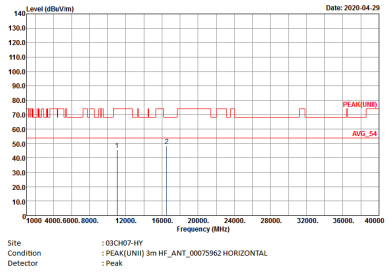
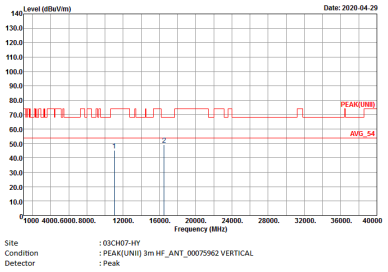
WIFI 802.11ac VHT20 (Harmonic @ 3m)

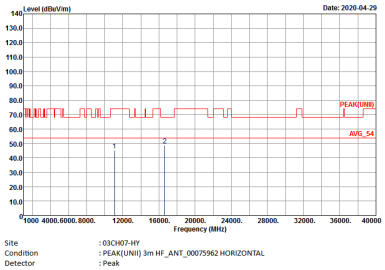
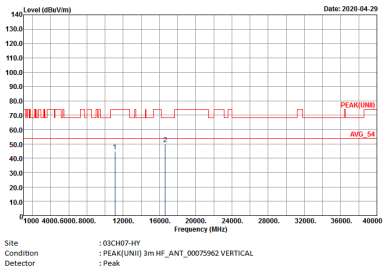
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.		

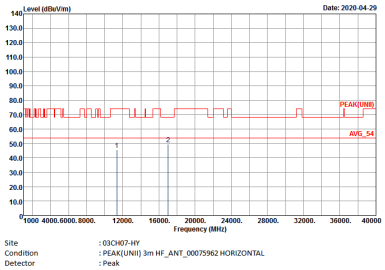
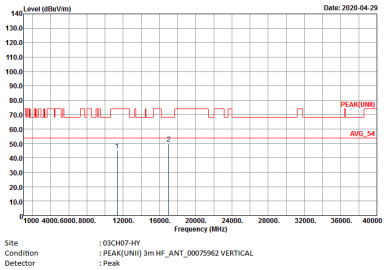
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 3 5470~5725MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)

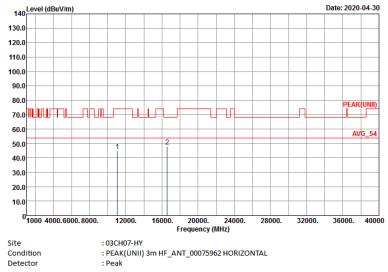
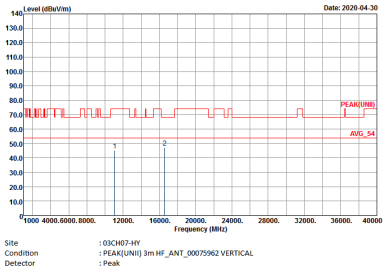
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH102 5510MHz	
1	Horizontal	Vertical
Peak Avg.		

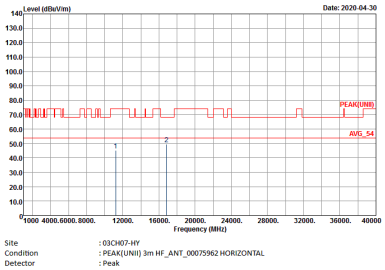
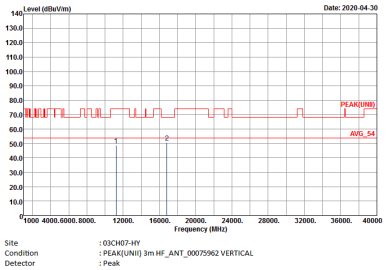
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH110 5550MHz	
1	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH134 5670MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 3 5470~5725MHz

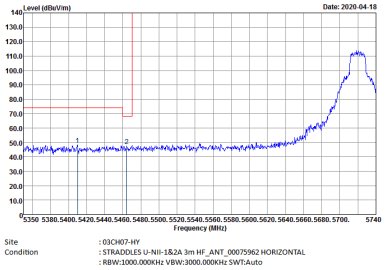
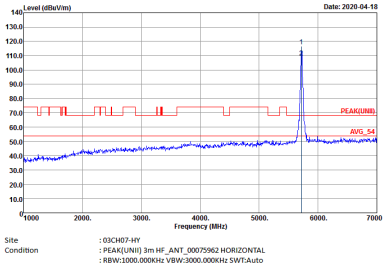
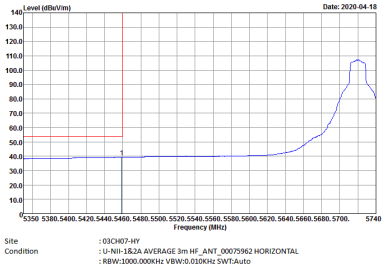
WIFI 802.11ac VHT80 (Harmonic @ 3m)

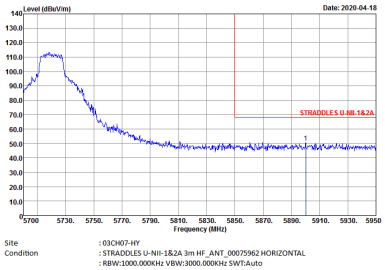
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz	
1	Horizontal	Vertical
Peak Avg.		

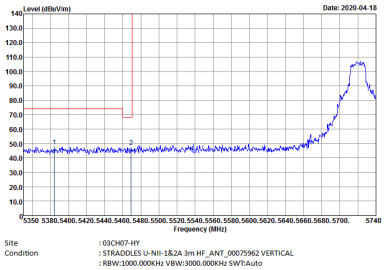
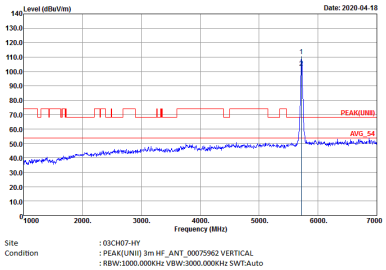
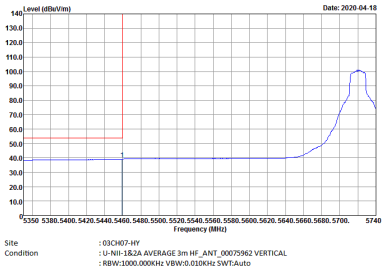
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH122 5610MHz	
1	Horizontal	Vertical
Peak Avg.		

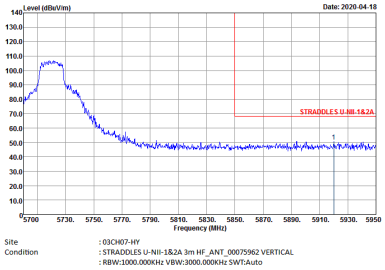
Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

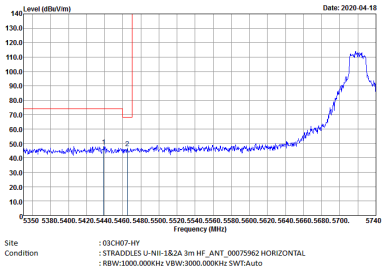
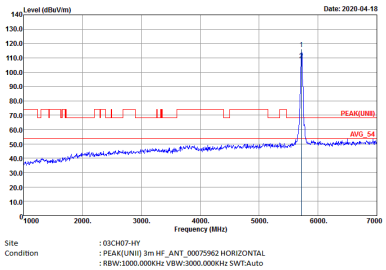
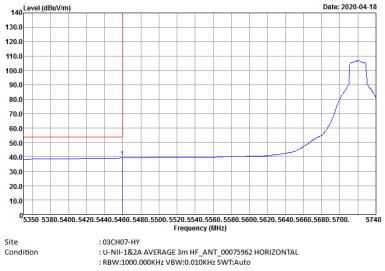
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

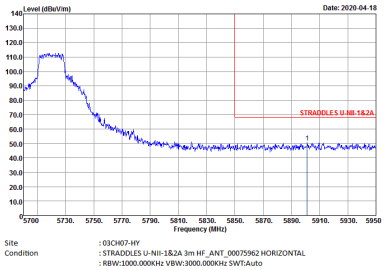
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz – R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

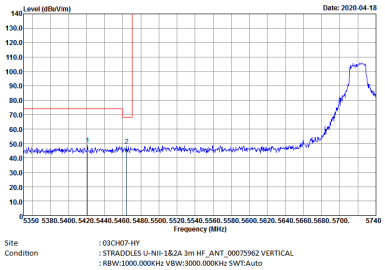
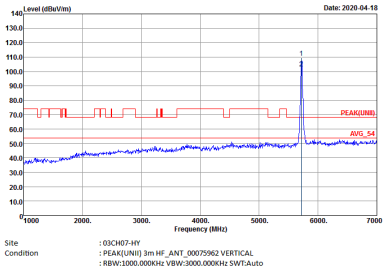
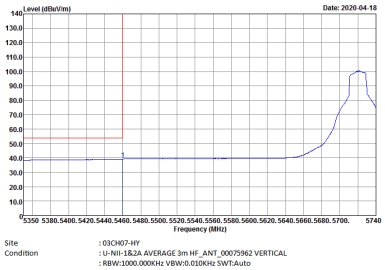
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

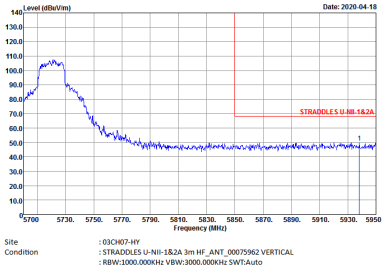
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

Band 3 – Straddle Channel
WIFI 802.11ac VHT20 (Band Edge @ 3m)

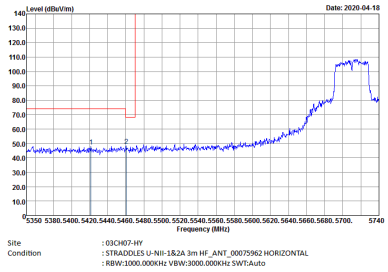
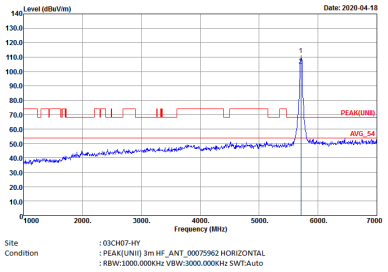
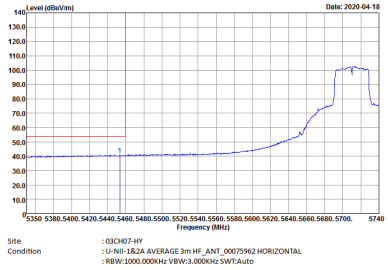
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

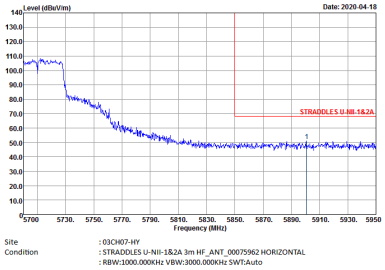
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

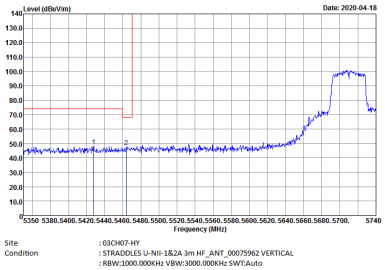
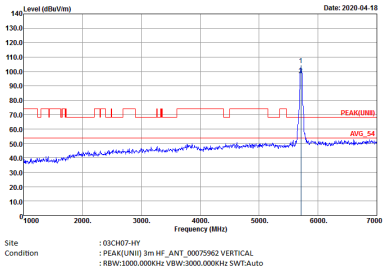
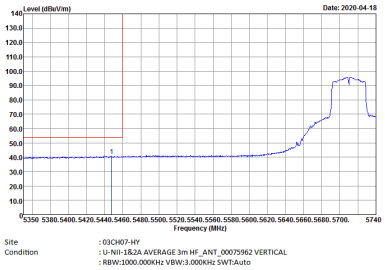
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

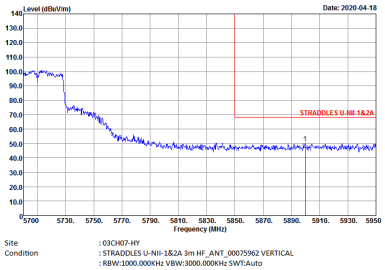
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

Band 3 – Straddle Channel
WIFI 802.11ac VHT40 (Band Edge @ 3m)

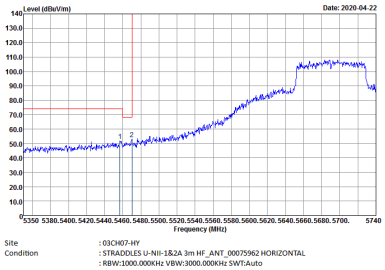
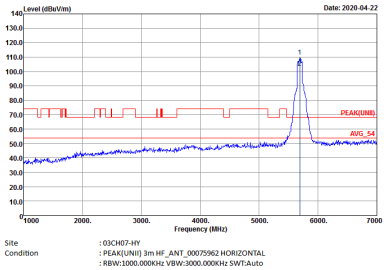
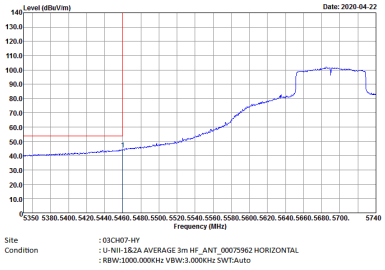
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

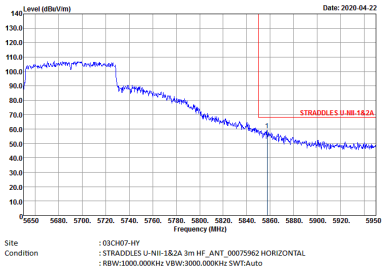
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

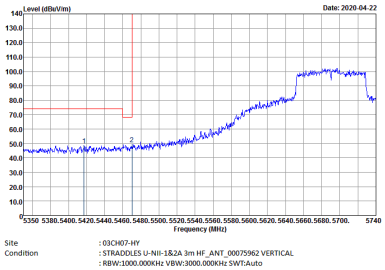
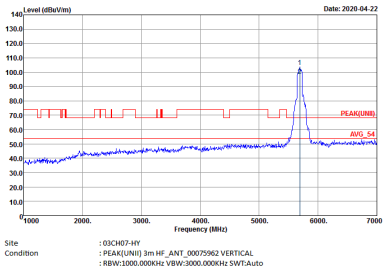
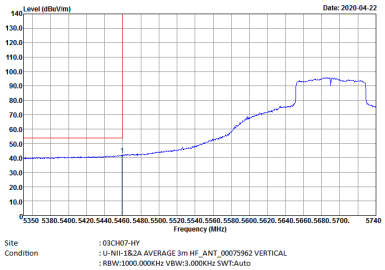
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

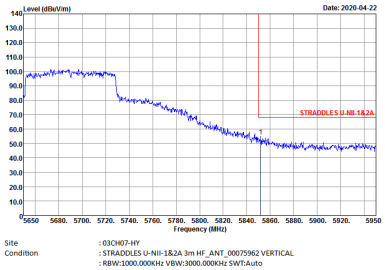
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

Band 3 – Straddle Channel
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac CH138 5690MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

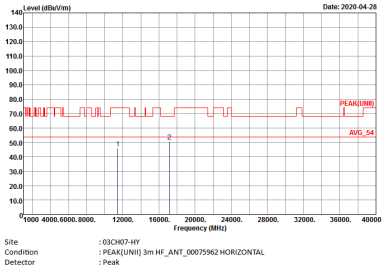
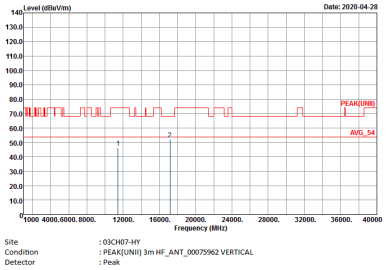
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac CH138 5690MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac CH138 5690MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ac CH138 5690MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.	Left blank	Left blank

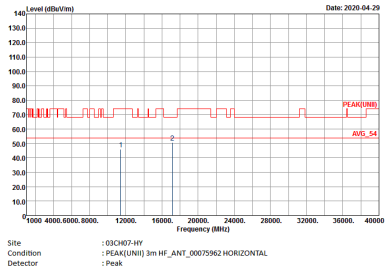
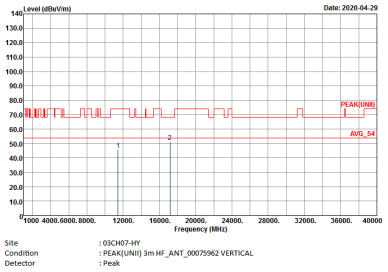
Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11a CH144 5720MHz	
1	Horizontal	Vertical
Peak Avg.		

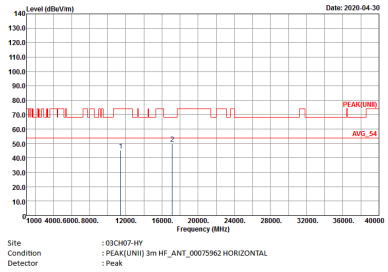
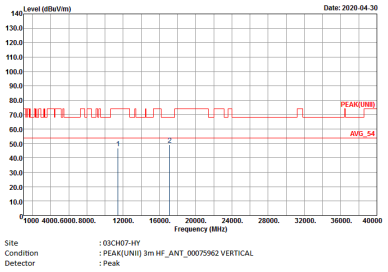
Band 3 – Straddle Channel

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT20 CH144 5720MHz	
1	Horizontal	Vertical
Peak Avg.		

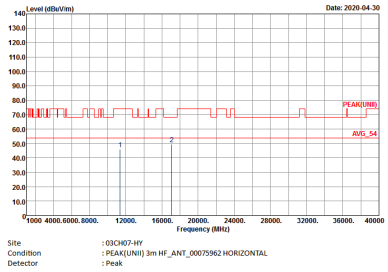
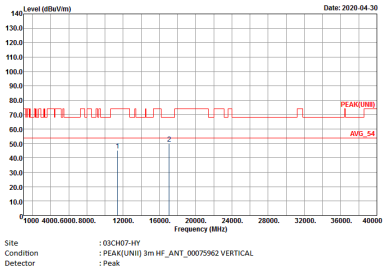
Band 3 – Straddle Channel

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT40 CH142 5710MHz	
1	Horizontal	Vertical
Peak Avg.		

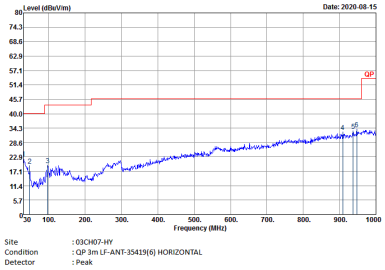
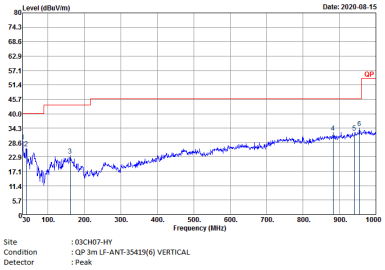
Band 3 – Straddle Channel

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

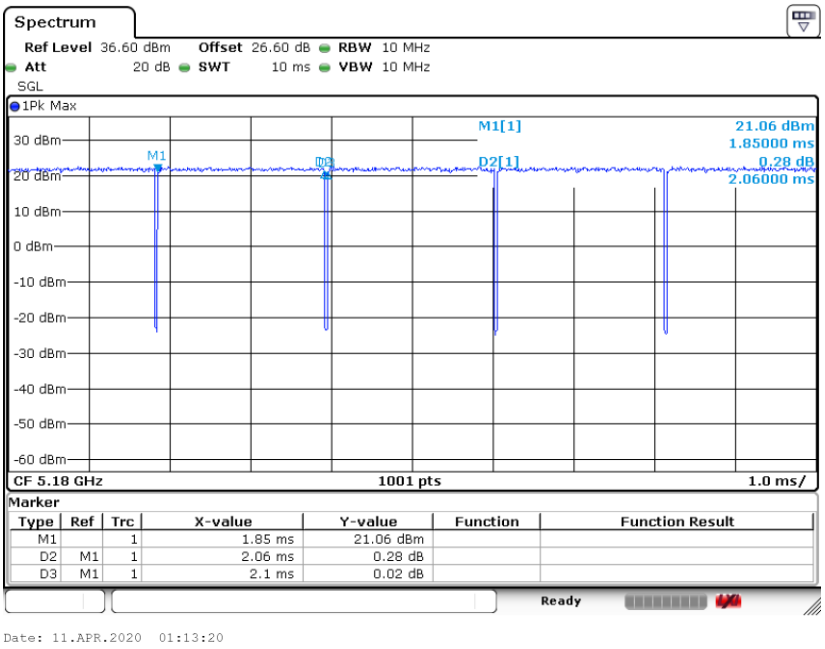
5GHz WIFI 802.11ac VHT20 (LF)

WIFI	5GHz WIFI	
ANT	802.11ac VHT20 LF	
1	Horizontal	Vertical
QP / Peak		

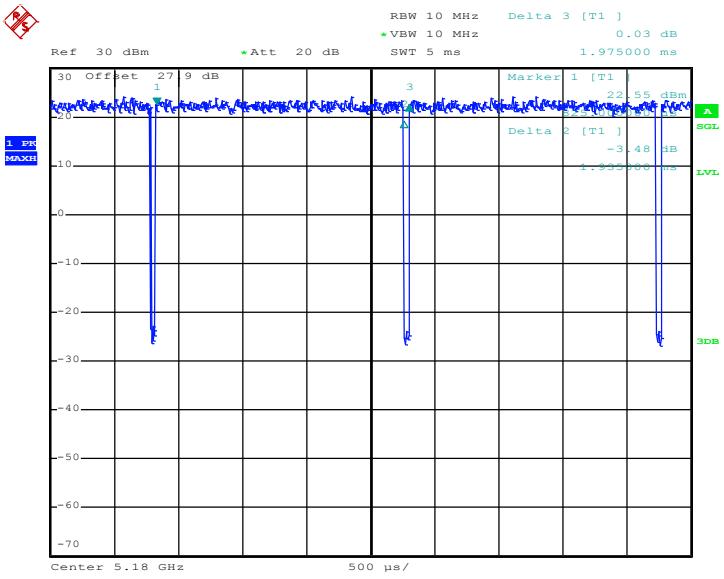
Appendix D. Duty Cycle Plots

Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor (dB)
802.11a	98.10	-	-	10Hz	0.08
5GHz 802.11ac VHT20	97.97	1935	0.52	1kHz	0.09
5GHz 802.11ac VHT40	95.43	940	1.06	3kHz	0.20
5GHz 802.11ac VHT80	92.00	460	2.17	3kHz	0.36

802.11a

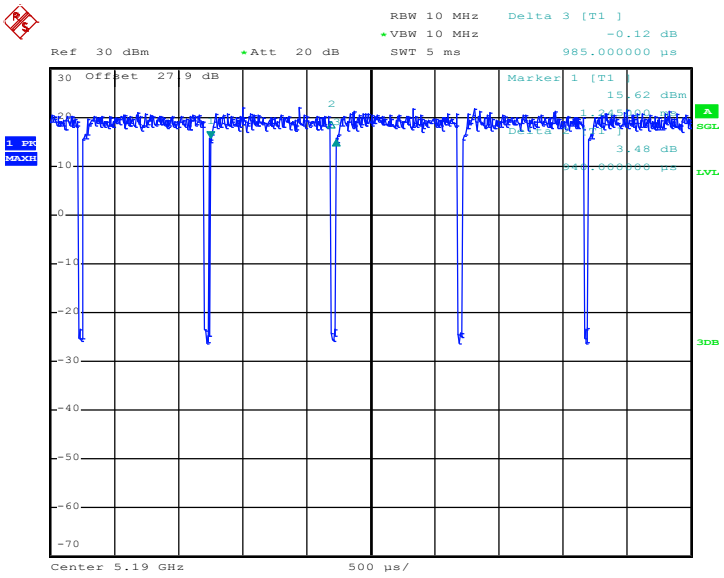


802.11ac VHT20



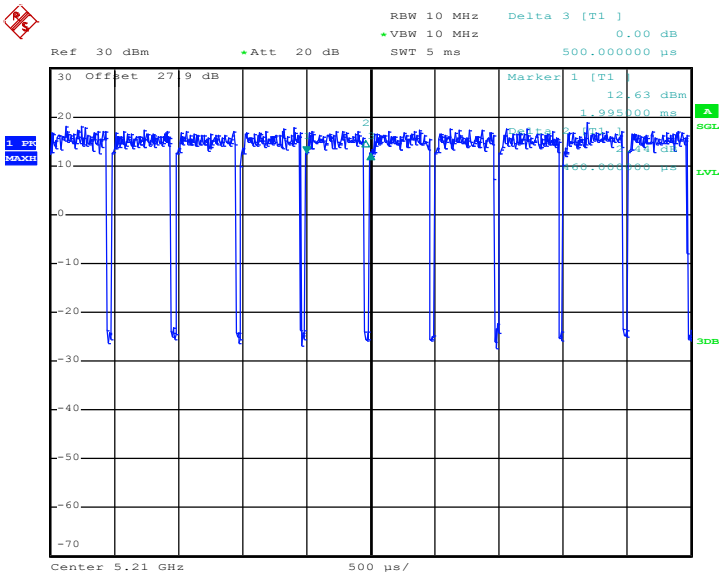
Date: 25.APR.2020 18:57:36

802.11ac VHT40



Date: 25.APR.2020 19:05:32

802.11ac VHT80



Date: 25.APR.2020 19:57:35