



# FCC RADIO TEST REPORT

**FCC ID** : PY7-87607S  
**Equipment** : GSM/WCDMA/LTE Phone with BT, DTS/UNII  
a/b/g/n/ac/ax, GPS, WPC and NFC  
**Brand Name** : Sony  
**Applicant** : Sony Mobile Communications Inc.  
4-12-3 Higashi-Shinagawa, Shinagawa-ku,  
Tokyo, 140-0002, Japan  
**Manufacturer** : Sony Mobile Communications Inc.  
4-12-3 Higashi-Shinagawa, Shinagawa-ku,  
Tokyo, 140-0002, Japan  
**Standard** : FCC Part 15 Subpart E §15.407

The product was received on Dec. 04, 2019 and testing was started from Jan. 13, 2020 and completed on Feb. 10, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this spot check data 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

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



# Table of Contents

**History of this test report ..... 3**

**Summary of Test Result ..... 4**

**1 General Description..... 5**

    1.1 Product Feature of Equipment Under Test ..... 5

    1.2 Modification of EUT ..... 6

    1.3 Testing Location ..... 6

    1.4 Applicable Standards ..... 6

**2 Test Configuration of Equipment Under Test..... 7**

    2.1 Carrier Frequency and Channel..... 7

    2.2 Test Mode ..... 8

    2.3 Connection Diagram of Test System ..... 10

    2.4 EUT Operation Test Setup ..... 10

**3 Test Result..... 11**

    3.1 Maximum Conducted Output Power Measurement..... 11

    3.2 Unwanted Emissions Measurement ..... 13

    3.3 Antenna Requirements ..... 18

**4 List of Measuring Equipment ..... 19**

**5 Uncertainty of Evaluation ..... 21**

**Appendix A. Conducted Test Results**

**Appendix B. Radiated Spurious Emission**

**Appendix C. Radiated Spurious Emission Plots**

**Appendix D. Duty Cycle Plots**





### Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.403(i)	6dB & 26dB Bandwidth	Not Required	-
-	2.1049	99% Occupied Bandwidth	Not Required	-
3.1	15.407(a)	Maximum Conducted Output Power	Pass	-
-	15.407(a)	Power Spectral Density	Not Required	-
3.2	15.407(b)	Unwanted Emissions	Pass	Under limit 4.67 dB at 5470.000 MHz
-	15.207	AC Conducted Emission	Not Required	-
-	15.407(c)	Automatically Discontinue Transmission	Not Required	-
3.3	15.203 15.407(a)	Antenna Requirement	Pass	-

**Remark:** This is a spot check data report and data performed in appendix of this report are chosen from the worst case of the original FCC ID report. All the test cases were performed on original report which can be referred to Sporton Report Number FR901542-02E.

<b>Declaration of Conformity:</b>
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
<b>Comments and Explanations:</b>
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: Yvonne Cheng**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, DTS/UNII a/b/g/n/ac/ax, NFC, GNSS and WPC.

Product Specification subjective to this standard	
Antenna Type	<Ant. 1>: Loop Antenna <Ant. 2>: Monopole Antenna
Antenna Gain	<Ant 1>: <5150 MHz ~ 5250 MHz> : -1.90 dBi <5250 MHz ~ 5350 MHz> : -2.00 dBi <5470 MHz ~ 5725 MHz> : -4.10 dBi <Ant 2>: <5150 MHz ~ 5250 MHz> : -6.10 dBi <5250 MHz ~ 5350 MHz> : -6.70 dBi <5470 MHz ~ 5725 MHz> : -4.40 dBi

EUT Information List			
HW Version	SW Version	S/N	Performed Test Item
A	0.320	QV71000Y2C	RF Conducted Measurement
		QV7100AM2C	Radiated Spurious Emission

Accessory List	
AC Adapter	Model Name : UCH32
	S/N: 6218W30200197
Earphone	Model Name.: STH40D
	S/N : N/A
Bluetooth Earphone	Model Name : SBH82D
	S/N : N/A
USB Cable	Model Name : UCB24
	S/N : N/A
Audio Cable	Model Name : EC234
	S/N : N/A

**Note:**

1. Above EUT list used are electrically identical per declared by manufacturer.
2. Above the accessories list are used to exercise the EUT during test, and the serial number of each type of accessories is listed in each section of this report.
3. For other wireless features of this EUT, test report will be issued separately.



### 1.2 Modification of EUT

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

### 1.3 Testing Location

<b>Test Site</b>	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
<b>Test Site Location</b>	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
<b>Test Site No.</b>	<b>Sporton Site No.</b>
	TH05-HY

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

<b>Test Site</b>	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sporton Site No.</b>
	03CH16-HY

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

FCC designation No.: TW1190 and TW0007

### 1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

**Remark:**

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



## 2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated:, radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

### 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 <sup>#</sup>	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 <sup>#</sup>	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 <sup>#</sup>	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 <sup>#</sup>	5610	128	5640

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

**Note:**

- 1. The above Frequency and Channel in "\*" were 802.11n HT40, 802.11ac VHT40, and 802.11ax HE40.
- 2. The above Frequency and Channel in "<sup>#</sup>" were 802.11ac VHT80 and 802.11ax HE80.

## 2.2 Test Mode

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

Modulation	Data Rate
802.11n HT20	MCS0
802.11ac VHT80	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0





Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	-	52	-
M	Middle	-	-	-
H	High	-	-	-
Straddle		-	-	144

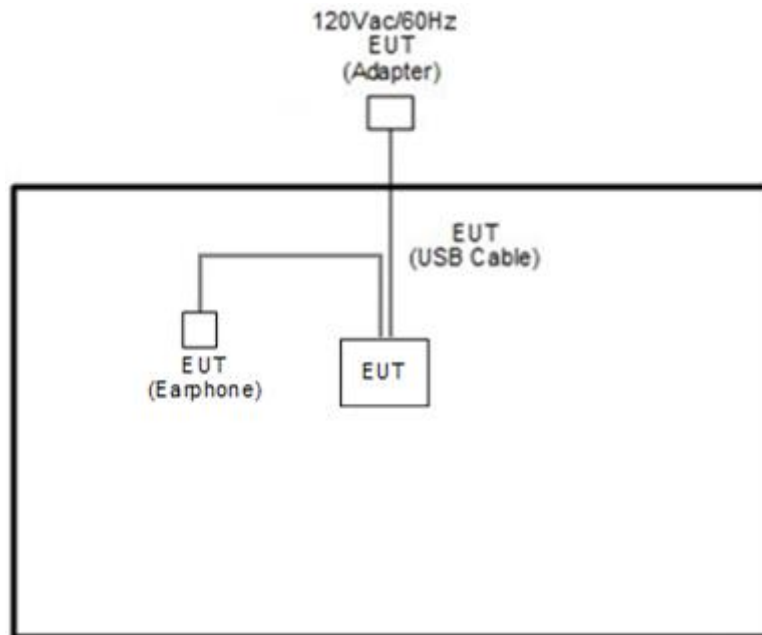
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	-
M	Middle	42	-	-
H	High	-	-	-
Straddle		-	-	-

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	38	-	102
M	Middle	-	-	-
H	High	-	-	-
Straddle		-	-	-

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE80	802.11ax HE80	802.11ax HE80
L	Low	-	-	-
M	Middle	-	58	-
H	High	-	-	-
Straddle		-	-	-

## 2.3 Connection Diagram of Test System

< For Radiated Emissions Measurement >



## 2.4 EUT Operation Test Setup

The RF test items, utility “FTMC\_bridge\_forURC\_v0.39” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



### 3 Test Result

#### 3.1 Maximum Conducted Output Power Measurement

##### 3.1.1 Limit of Maximum Conducted Output Power

<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  $11 \text{ dBm} + 10 \log B$ , 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.

##### 3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

### 3.1.3 Test Procedures

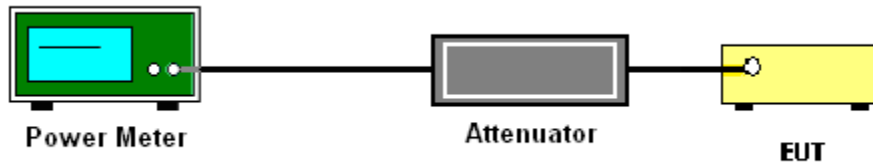
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using 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.

### 3.1.4 Test Setup



### 3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



### 3.2 Unwanted Emissions Measurement

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

#### 3.2.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 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.

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



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

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

- (i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.
- (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

### 3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

### 3.2.3 Test Procedures

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

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

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

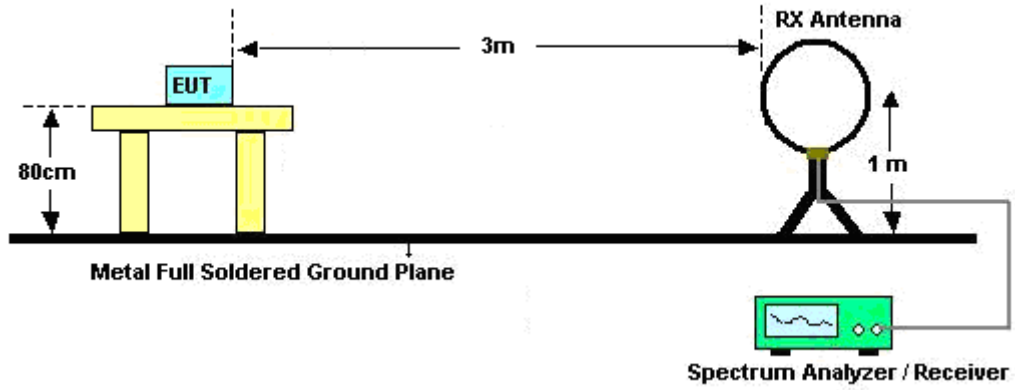
- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.



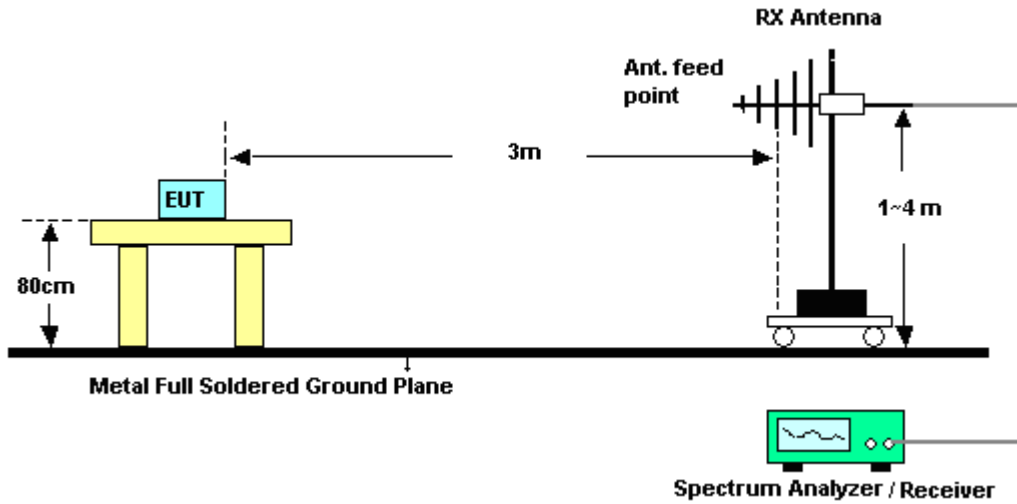
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

### 3.2.4 Test Setup

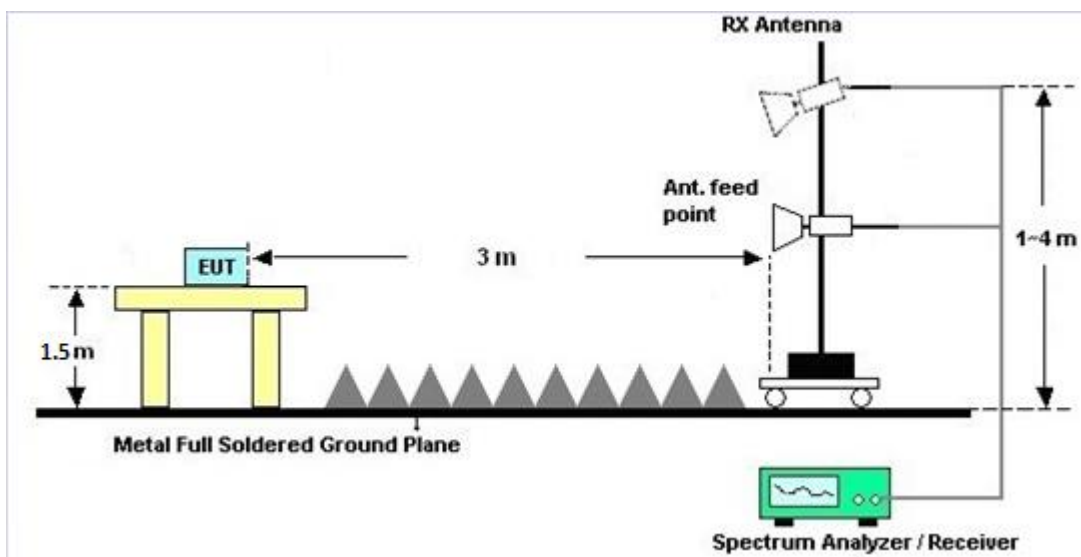
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz

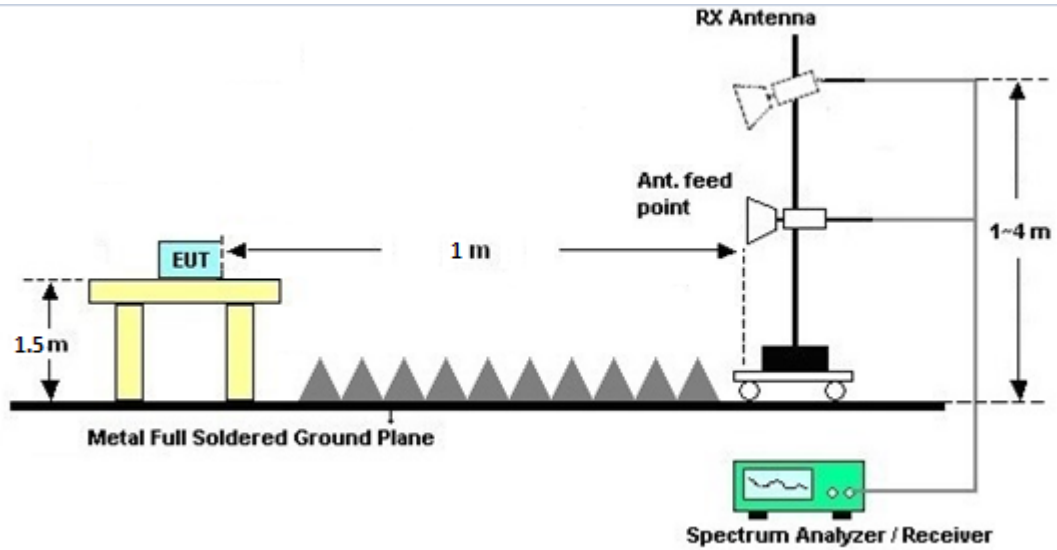


For radiated emissions from 1GHz to 18GHz





For radiated emissions from 18GHz~40GHz



### 3.2.5 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.

### 3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

### 3.2.7 Duty Cycle

Please refer to Appendix D.

### 3.2.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix B and C.



### **3.3 Antenna Requirements**

#### **3.3.1 Standard Applicable**

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

#### **3.3.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.

#### **3.3.3 Antenna Gain**

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



## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Dec. 26, 2019	Feb. 06, 2020~ Feb. 10, 2020	Dec. 25, 2020	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL6111D&0 0802N1D01N- 06	47020&06	30MHz to 1GHz	Oct. 13, 2019	Feb. 06, 2020~ Feb. 10, 2020	Oct. 12, 2020	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-152 2	1G~18GHz	Sep. 19, 2019	Feb. 06, 2020~ Feb. 10, 2020	Sep. 18, 2020	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1000MHz	Oct. 01, 2019	Feb. 06, 2020~ Feb. 10, 2020	Sep. 30, 2020	Radiation (03CH16-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180 0054001	1GHz~18GHz	May 19, 2019	Feb. 06, 2020~ Feb. 10, 2020	May 18, 2020	Radiation (03CH16-HY)
Preamplifier	EMEC	EMC184045B	980192	18GHz ~40GHz	Jul. 10, 2019	Feb. 06, 2020~ Feb. 10, 2020	Jul. 09, 2020	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY532702 64	1GHz~26.5GHz	Dec. 11, 2019	Feb. 06, 2020~ Feb. 10, 2020	Dec. 10, 2020	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY554201 70	20MHz~8.4GHz	Mar. 08, 2019	Feb. 06, 2020~ Feb. 10, 2020	Mar. 07, 2020	Radiation (03CH16-HY)
Spectrum Analyzer	Agilent	E4446A	MY501801 36	3Hz~44GHz	Apr. 29, 2019	Feb. 06, 2020~ Feb. 10, 2020	Apr. 28, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/ 4PE	NA	Aug. 30, 2019	Feb. 06, 2020~ Feb. 10, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/ 4PE	NA	Aug. 30, 2019	Feb. 06, 2020~ Feb. 10, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300 -5757	NA	Aug. 30, 2019	Feb. 06, 2020~ Feb. 10, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 26, 2019	Feb. 06, 2020~ Feb. 10, 2020	Feb. 25, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 26, 2019	Feb. 06, 2020~ Feb. 10, 2020	Feb. 25, 2020	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 576	18GHz~40GHz	May 14, 2019	Feb. 06, 2020~ Feb. 10, 2020	May 13, 2020	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 13, 2019	Feb. 06, 2020~ Feb. 10, 2020	Dec. 12, 2020	Radiation (03CH16-HY)
Hygrometer	TECPEL	DTM-303B	TP161243	N/A	Jun. 17, 2019	Feb. 06, 2020~ Feb. 10, 2020	Jun. 16, 2020	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Feb. 06, 2020~ Feb. 10, 2020	N/A	Radiation (03CH16-HY)
Filter	Wainwright	WLK4-1000-1 530-8000-40S S	SN11	1.53G Low Pass	Sep. 15, 2019	Feb. 06, 2020~ Feb. 10, 2020	Sep. 14, 2020	Radiation (03CH16-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000 -40SS	SN3	6.75GHz High Pass	Sep. 16, 2019	Feb. 06, 2020~ Feb. 10, 2020	Sep. 15, 2020	Radiation (03CH16-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H2	41410069	N/A	Jun. 17, 2019	Jan. 13, 2020~ Jan. 21, 2020	Jun. 16, 2020	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	13I00030S NO32	9kHz~6GHz	Dec. 17, 2019	Jan. 13, 2020~ Jan. 21, 2020	Dec. 16, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Aug. 14, 2019	Jan. 13, 2020~ Jan. 21, 2020	Aug. 13, 2020	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC120838 2	N/A	Mar. 27, 2019	Jan. 13, 2020~ Jan. 21, 2020	Mar. 26, 2020	Conducted (TH05-HY)



## 5 Uncertainty of Evaluation

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	6.7
---	-----

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	3.9
---	-----

**Appendix A. Test Result of Conducted Test Items**

Test Engineer:	Hank Hsu	Temperature:	21~25	°C
Test Date:	2020/1/13~2020/2/4	Relative Humidity:	51~54	%

**TEST RESULTS DATA**  
**Average Power Table**

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 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	36	5180	11.00	11.30		24.00	24.00	-1.90	-6.10	Pass
11a	6Mbps	1	44	5220	11.00	11.10		24.00	24.00	-1.90	-6.10	Pass
11a	6Mbps	1	48	5240	11.20	10.90		24.00	24.00	-1.90	-6.10	Pass
HT20	MCS0	1	36	5180	11.30	11.40		24.00	24.00	-1.90	-6.10	Pass
HT20	MCS0	1	44	5220	11.00	11.20		24.00	24.00	-1.90	-6.10	Pass
HT20	MCS0	1	48	5240	11.50	11.20		24.00	24.00	-1.90	-6.10	Pass
HT40	MCS0	1	38	5190	11.10	11.30		24.00	24.00	-1.90	-6.10	Pass
HT40	MCS0	1	46	5230	11.30	11.30		24.00	24.00	-1.90	-6.10	Pass
VHT20	MCS0	1	36	5180	11.20	11.30		24.00	24.00	-1.90	-6.10	Pass
VHT20	MCS0	1	44	5220	10.90	11.10		24.00	24.00	-1.90	-6.10	Pass
VHT20	MCS0	1	48	5240	11.40	11.10		24.00	24.00	-1.90	-6.10	Pass
VHT40	MCS0	1	38	5190	11.00	11.20		24.00	24.00	-1.90	-6.10	Pass
VHT40	MCS0	1	46	5230	11.20	11.20		24.00	24.00	-1.90	-6.10	Pass
VHT80	MCS0	1	42	5210	10.90	11.30		24.00	24.00	-1.90	-6.10	Pass

FCC Band I MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	36	5180	11.00	11.30	14.16	24.00		-1.90		Pass
11a	6Mbps	2	44	5220	11.00	11.10	14.06	24.00		-1.90		Pass
11a	6Mbps	2	48	5240	11.20	11.00	14.11	24.00		-1.90		Pass
HT20	MCS0	2	36	5180	11.30	11.50	14.41	24.00		-1.90		Pass
HT20	MCS0	2	44	5220	11.00	11.30	14.16	24.00		-1.90		Pass
HT20	MCS0	2	48	5240	11.50	11.20	14.36	24.00		-1.90		Pass
HT40	MCS0	2	38	5190	11.10	11.30	14.21	24.00		-1.90		Pass
HT40	MCS0	2	46	5230	11.30	11.40	14.36	24.00		-1.90		Pass
VHT20	MCS0	2	36	5180	11.20	11.40	14.31	24.00		-1.90		Pass
VHT20	MCS0	2	44	5220	10.90	11.20	14.06	24.00		-1.90		Pass
VHT20	MCS0	2	48	5240	11.40	11.10	14.26	24.00		-1.90		Pass
VHT40	MCS0	2	38	5190	11.00	11.20	14.11	24.00		-1.90		Pass
VHT40	MCS0	2	46	5230	11.20	11.30	14.26	24.00		-1.90		Pass
VHT80	MCS0	2	42	5210	10.90	11.50	14.22	24.00		-1.90		Pass

**TEST RESULTS DATA**  
**Average Power Table**

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 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	52	5260	11.00	10.80		23.98	23.98	-2.00	-6.70	30	Pass
11a	6Mbps	1	60	5300	11.00	11.10		23.98	23.98	-2.00	-6.70	30	Pass
11a	6Mbps	1	64	5320	11.10	11.40		23.98	23.98	-2.00	-6.70	30	Pass
HT20	MCS0	1	52	5260	11.50	11.00		23.98	23.98	-2.00	-6.70	30	Pass
HT20	MCS0	1	60	5300	11.40	11.20		23.98	23.98	-2.00	-6.70	30	Pass
HT20	MCS0	1	64	5320	11.10	11.50		23.98	23.98	-2.00	-6.70	30	Pass
HT40	MCS0	1	54	5270	10.90	11.30		23.98	23.98	-2.00	-6.70	30	Pass
HT40	MCS0	1	62	5310	11.50	11.10		23.98	23.98	-2.00	-6.70	30	Pass
VHT20	MCS0	1	52	5260	11.40	10.90		23.98	23.98	-2.00	-6.70	30	Pass
VHT20	MCS0	1	60	5300	11.30	11.10		23.98	23.98	-2.00	-6.70	30	Pass
VHT20	MCS0	1	64	5320	11.00	11.40		23.98	23.98	-2.00	-6.70	30	Pass
VHT40	MCS0	1	54	5270	10.80	11.20		23.98	23.98	-2.00	-6.70	30	Pass
VHT40	MCS0	1	62	5310	11.40	11.00		23.98	23.98	-2.00	-6.70	30	Pass
VHT80	MCS0	1	58	5290	11.20	11.40		23.98	23.98	-2.00	-6.70	30	Pass

FCC Band II MIMO													
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 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	2	52	5260	11.00	10.90	13.96	23.98		-2.00		30	Pass
11a	6Mbps	2	60	5300	11.10	11.20	14.16	23.98		-2.00		30	Pass
11a	6Mbps	2	64	5320	11.10	11.40	14.26	23.98		-2.00		30	Pass
HT20	MCS0	2	52	5260	11.50	11.00	14.27	23.98		-2.00		30	Pass
HT20	MCS0	2	60	5300	11.40	11.20	14.31	23.98		-2.00		30	Pass
HT20	MCS0	2	64	5320	11.10	11.50	14.31	23.98		-2.00		30	Pass
HT40	MCS0	2	54	5270	10.90	11.40	14.17	23.98		-2.00		30	Pass
HT40	MCS0	2	62	5310	11.50	11.10	14.31	23.98		-2.00		30	Pass
VHT20	MCS0	2	52	5260	11.40	10.90	14.17	23.98		-2.00		30	Pass
VHT20	MCS0	2	60	5300	11.30	11.10	14.21	23.98		-2.00		30	Pass
VHT20	MCS0	2	64	5320	11.00	11.40	14.21	23.98		-2.00		30	Pass
VHT40	MCS0	2	54	5270	10.80	11.30	14.07	23.98		-2.00		30	Pass
VHT40	MCS0	2	62	5310	11.40	11.00	14.21	23.98		-2.00		30	Pass
VHT80	MCS0	2	58	5290	11.20	11.40	14.31	23.98		-2.00		30	Pass



**TEST RESULTS DATA**  
**Average Power Table**

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 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	100	5500	10.80	10.90		23.98	23.98	-4.10	-4.40	30	Pass
11a	6Mbps	1	116	5580	11.00	11.00		23.98	23.98	-4.10	-4.40	30	Pass
11a	6Mbps	1	140	5700	11.00	11.30		23.98	23.98	-4.10	-4.40	30	Pass
HT20	MCS0	1	100	5500	11.40	11.40		23.98	23.98	-4.10	-4.40	30	Pass
HT20	MCS0	1	116	5580	11.30	11.20		23.98	23.98	-4.10	-4.40	30	Pass
HT20	MCS0	1	140	5700	11.10	11.10		23.98	23.98	-4.10	-4.40	30	Pass
HT40	MCS0	1	102	5510	11.30	11.30		23.98	23.98	-4.10	-4.40	30	Pass
HT40	MCS0	1	110	5550	11.40	11.00		23.98	23.98	-4.10	-4.40	30	Pass
HT40	MCS0	1	134	5670	11.40	11.40		23.98	23.98	-4.10	-4.40	30	Pass
VHT20	MCS0	1	100	5500	11.30	11.30		23.98	23.98	-4.10	-4.40	30	Pass
VHT20	MCS0	1	116	5580	11.20	11.10		23.98	23.98	-4.10	-4.40	30	Pass
VHT20	MCS0	1	140	5700	11.00	11.00		23.98	23.98	-4.10	-4.40	30	Pass
VHT40	MCS0	1	102	5510	11.20	11.20		23.98	23.98	-4.10	-4.40	30	Pass
VHT40	MCS0	1	110	5550	11.30	10.90		23.98	23.98	-4.10	-4.40	30	Pass
VHT40	MCS0	1	134	5670	11.30	11.30		23.98	23.98	-4.10	-4.40	30	Pass
VHT80	MCS0	1	106	5530	11.30	11.40		23.98	23.98	-4.10	-4.40	30	Pass
VHT80	MCS0	1	122	5610	11.10	11.30		23.98	23.98	-4.10	-4.40	30	Pass

FCC Band III MIMO													
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 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	2	100	5500	10.80	10.90	13.86	23.98		-4.10		30	Pass
11a	6Mbps	2	116	5580	11.00	11.10	14.06	23.98		-4.10		30	Pass
11a	6Mbps	2	140	5700	11.00	11.30	14.16	23.98		-4.10		30	Pass
HT20	MCS0	2	100	5500	11.40	11.40	14.41	23.98		-4.10		30	Pass
HT20	MCS0	2	116	5580	11.30	11.20	14.26	23.98		-4.10		30	Pass
HT20	MCS0	2	140	5700	11.10	11.10	14.11	23.98		-4.10		30	Pass
HT40	MCS0	2	102	5510	11.30	11.30	14.31	23.98		-4.10		30	Pass
HT40	MCS0	2	110	5550	11.40	11.00	14.21	23.98		-4.10		30	Pass
HT40	MCS0	2	134	5670	11.40	11.40	14.41	23.98		-4.10		30	Pass
VHT20	MCS0	2	100	5500	11.30	11.30	14.31	23.98		-4.10		30	Pass
VHT20	MCS0	2	116	5580	11.20	11.10	14.16	23.98		-4.10		30	Pass
VHT20	MCS0	2	140	5700	11.00	11.00	14.01	23.98		-4.10		30	Pass
VHT40	MCS0	2	102	5510	11.20	11.20	14.21	23.98		-4.10		30	Pass
VHT40	MCS0	2	110	5550	11.30	10.90	14.11	23.98		-4.10		30	Pass
VHT40	MCS0	2	134	5670	11.30	11.30	14.31	23.98		-4.10		30	Pass
VHT80	MCS0	2	106	5530	11.30	11.40	14.36	23.98		-4.10		30	Pass
VHT80	MCS0	2	122	5610	11.10	11.30	14.21	23.98		-4.10		30	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 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	144	5720	10.80	10.90		23.98	23.98	-4.10	-4.40	30	Pass
HT20	MCS0	1	144	5720	11.30	11.30		23.98	23.98	-4.10	-4.40	30	Pass
HT40	MCS0	1	142	5710	11.00	11.20		23.98	23.98	-4.10	-4.40	30	Pass
VHT20	MCS0	1	144	5720	11.20	11.20		23.98	23.98	-4.10	-4.40	30	Pass
VHT40	MCS0	1	142	5710	10.90	11.10		23.98	23.98	-4.10	-4.40	30	Pass
VHT80	MCS0	1	138	5690	11.00	11.20		23.98	23.98	-4.10	-4.40	30	Pass

FCC Band III straddle channel MIMO													
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 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	2	144	5720	11.10	10.90	14.01	23.98		-4.10		30	Pass
HT20	MCS0	2	144	5720	11.30	11.30	14.31	23.98		-4.10		30	Pass
HT40	MCS0	2	142	5710	11.00	11.30	14.16	23.98		-4.10		30	Pass
VHT20	MCS0	2	144	5720	11.20	11.20	14.21	23.98		-4.10		30	Pass
VHT40	MCS0	2	142	5710	10.90	11.20	14.06	23.98		-4.10		30	Pass
VHT80	MCS0	2	138	5690	11.00	11.20	14.11	23.98		-4.10		30	Pass

**TEST RESULTS DATA**  
**Average Power Table**

FCC Band I single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	1	36	5180	Full	10.90	11.30		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	36	5180	26/0	8.70	8.70		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	36	5180	52/37	11.40	11.30		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	36	5180	106/53	10.80	11.10		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	44	5220	Full	11.00	11.10		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	44	5220	26/4	8.50	8.70		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	44	5220	52/39	10.90	11.20		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	44	5220	106/53	11.10	11.40		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	48	5240	Full	10.90	11.30		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	48	5240	26/8	8.70	8.50		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	48	5240	52/40	11.20	11.10		24.00	24.00	-1.90	-6.10	Pass
HE20	MCS0	1	48	5240	106/54	11.00	11.30		24.00	24.00	-1.90	-6.10	Pass
HE40	MCS0	1	38	5190	Full	10.90	11.10		24.00	24.00	-1.90	-6.10	Pass
HE40	MCS0	1	38	5190	242/61	11.20	11.20		24.00	24.00	-1.90	-6.10	Pass
HE40	MCS0	1	46	5230	Full	10.90	11.30		24.00	24.00	-1.90	-6.10	Pass
HE40	MCS0	1	46	5230	242/62	11.00	11.10		24.00	24.00	-1.90	-6.10	Pass
HE80	MCS0	1	42	5210	Full	11.50	11.40		24.00	24.00	-1.90	-6.10	Pass
HE80	MCS0	1	42	5210	484/65	11.20	11.20		24.00	24.00	-1.90	-6.10	Pass

FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	2	36	5180	Full	10.90	11.30	14.11	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	36	5180	26/0	8.70	8.70	11.71	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	36	5180	52/37	11.40	11.30	14.36	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	36	5180	106/53	10.80	11.10	13.96	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	44	5220	Full	11.00	11.10	14.06	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	44	5220	26/4	8.50	8.70	11.61	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	44	5220	52/39	10.90	11.20	14.06	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	44	5220	106/53	11.10	11.40	14.26	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	48	5240	Full	10.90	11.30	14.11	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	48	5240	26/8	8.70	8.50	11.61	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	48	5240	52/40	11.20	11.10	14.16	24.00	24.00	-1.90	-1.90	Pass
HE20	MCS0	2	48	5240	106/54	11.00	11.30	14.16	24.00	24.00	-1.90	-1.90	Pass
HE40	MCS0	2	38	5190	Full	10.90	11.10	14.01	24.00	24.00	-1.90	-1.90	Pass
HE40	MCS0	2	38	5190	242/61	11.20	11.20	14.21	24.00	24.00	-1.90	-1.90	Pass
HE40	MCS0	2	46	5230	Full	10.90	11.30	14.11	24.00	24.00	-1.90	-1.90	Pass
HE40	MCS0	2	46	5230	242/62	11.00	11.10	14.06	24.00	24.00	-1.90	-1.90	Pass
HE80	MCS0	2	42	5210	Full	11.40	11.40	14.41	24.00	24.00	-1.90	-1.90	Pass
HE80	MCS0	2	42	5210	484/65	11.20	11.20	14.21	24.00	24.00	-1.90	-1.90	Pass

**TEST RESULTS DATA**  
**Average Power Table**

FCC Band II single antenna														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
HE20	MCS0	1	52	5260	Full	11.00	11.30		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	52	5260	26/0	8.50	8.80		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	52	5260	52/37	11.40	11.40		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	52	5260	106/53	10.90	11.00		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	60	5300	Full	11.20	11.20		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	60	5300	26/4	8.50	8.70		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	60	5300	52/39	11.40	11.20		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	60	5300	106/54	11.30	11.40		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	64	5320	Full	11.00	11.10		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	64	5320	26/8	8.40	8.70		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	64	5320	52/40	10.90	11.20		23.98	23.98	-2.00	-6.70	30	Pass
HE20	MCS0	1	64	5320	106/54	11.20	11.10		23.98	23.98	-2.00	-6.70	30	Pass
HE40	MCS0	1	54	5270	Full	11.40	11.00		23.98	23.98	-2.00	-6.70	30	Pass
HE40	MCS0	1	54	5270	242/61	11.00	10.90		23.98	23.98	-2.00	-6.70	30	Pass
HE40	MCS0	1	62	5310	Full	11.30	11.20		23.98	23.98	-2.00	-6.70	30	Pass
HE40	MCS0	1	62	5310	242/62	11.10	10.80		23.98	23.98	-2.00	-6.70	30	Pass
HE80	MCS0	1	58	5290	Full	11.10	11.20		23.98	23.98	-2.00	-6.70	30	Pass
HE80	MCS0	1	58	5290	484/66	11.30	11.00		23.98	23.98	-2.00	-6.70	30	Pass

FCC Band II MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
HE20	MCS0	2	52	5260	Full	11.00	11.30	14.16	23.98		-2.00		30	Pass
HE20	MCS0	2	52	5260	26/0	8.50	8.80	11.66	23.98		-2.00		30	Pass
HE20	MCS0	2	52	5260	52/37	11.40	11.40	14.41	23.98		-2.00		30	Pass
HE20	MCS0	2	52	5260	106/53	10.90	11.00	13.96	23.98		-2.00		30	Pass
HE20	MCS0	2	60	5300	Full	11.20	11.20	14.21	23.98		-2.00		30	Pass
HE20	MCS0	2	60	5300	26/4	8.50	8.70	11.61	23.98		-2.00		30	Pass
HE20	MCS0	2	60	5300	52/39	11.40	11.20	14.31	23.98		-2.00		30	Pass
HE20	MCS0	2	60	5300	106/54	11.30	11.40	14.36	23.98		-2.00		30	Pass
HE20	MCS0	2	64	5320	Full	11.00	11.10	14.06	23.98		-2.00		30	Pass
HE20	MCS0	2	64	5320	26/8	8.40	8.70	11.56	23.98		-2.00		30	Pass
HE20	MCS0	2	64	5320	52/40	10.90	11.20	14.06	23.98		-2.00		30	Pass
HE20	MCS0	2	64	5320	106/54	11.20	11.10	14.16	23.98		-2.00		30	Pass
HE40	MCS0	2	54	5270	Full	11.40	11.00	14.21	23.98		-2.00		30	Pass
HE40	MCS0	2	54	5270	242/61	11.00	10.90	13.96	23.98		-2.00		30	Pass
HE40	MCS0	2	62	5310	Full	11.30	11.20	14.26	23.98		-2.00		30	Pass
HE40	MCS0	2	62	5310	242/62	11.10	10.80	13.96	23.98		-2.00		30	Pass
HE80	MCS0	2	58	5290	Full	11.10	11.20	14.16	23.98		-2.00		30	Pass
HE80	MCS0	2	58	5290	484/66	11.30	11.00	14.16	23.98		-2.00		30	Pass

**TEST RESULTS DATA**  
**Average Power Table**

FCC Band III single antenna														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
HE20	MCS0	1	100	5500	Full	11.30	11.30		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	100	5500	26/0	8.60	8.50		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	100	5500	52/37	11.10	10.90		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	100	5500	106/53	10.90	11.20		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	116	5580	Full	11.10	11.20		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	116	5580	26/4	8.60	8.70		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	116	5580	52/38	11.00	10.80		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	116	5580	106/53	11.10	11.00		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	140	5700	Full	11.10	11.30		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	140	5700	26/8	8.60	8.50		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	140	5700	52/40	10.70	10.90		23.98	23.98	-4.10	-4.40	30	Pass
HE20	MCS0	1	140	5700	106/54	11.00	11.20		23.98	23.98	-4.10	-4.40	30	Pass
HE40	MCS0	1	102	5510	Full	11.30	11.50		23.98	23.98	-4.10	-4.40	30	Pass
HE40	MCS0	1	102	5510	242/61	9.50	9.80		23.98	23.98	-4.10	-4.40	30	Pass
HE40	MCS0	1	110	5550	Full	11.00	11.30		23.98	23.98	-4.10	-4.40	30	Pass
HE40	MCS0	1	110	5550	242/61	11.10	11.10		23.98	23.98	-4.10	-4.40	30	Pass
HE40	MCS0	1	134	5670	Full	11.00	11.00		23.98	23.98	-4.10	-4.40	30	Pass
HE40	MCS0	1	134	5670	242/62	11.30	11.30		23.98	23.98	-4.10	-4.40	30	Pass
HE80	MCS0	1	106	5530	Full	11.30	11.20		23.98	23.98	-4.10	-4.40	30	Pass
HE80	MCS0	1	106	5530	484/65	11.00	10.80		23.98	23.98	-4.10	-4.40	30	Pass
HE80	MCS0	1	122	5610	Full	11.00	11.10		23.98	23.98	-4.10	-4.40	30	Pass
HE80	MCS0	1	122	5610	484/66	10.80	11.10		23.98	23.98	-4.10	-4.40	30	Pass

FCC Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
HE20	MCS0	2	100	5500	Full	11.30	11.30	14.31	23.98		-4.10		30	Pass
HE20	MCS0	2	100	5500	26/0	8.60	8.50	11.56	23.98		-4.10		30	Pass
HE20	MCS0	2	100	5500	52/37	11.10	10.90	14.01	23.98		-4.10		30	Pass
HE20	MCS0	2	100	5500	106/53	10.90	11.20	14.06	23.98		-4.10		30	Pass
HE20	MCS0	2	116	5580	Full	11.10	11.20	14.16	23.98		-4.10		30	Pass
HE20	MCS0	2	116	5580	26/4	8.60	8.70	11.66	23.98		-4.10		30	Pass
HE20	MCS0	2	116	5580	52/38	11.00	10.80	13.91	23.98		-4.10		30	Pass
HE20	MCS0	2	116	5580	106/53	11.10	11.00	14.06	23.98		-4.10		30	Pass
HE20	MCS0	2	140	5700	Full	11.10	11.30	14.21	23.98		-4.10		30	Pass
HE20	MCS0	2	140	5700	26/8	8.60	8.50	11.56	23.98		-4.10		30	Pass
HE20	MCS0	2	140	5700	52/40	10.70	10.90	13.81	23.98		-4.10		30	Pass
HE20	MCS0	2	140	5700	106/54	11.00	11.20	14.11	23.98		-4.10		30	Pass
HE40	MCS0	2	102	5510	Full	11.30	11.50	14.41	23.98		-4.10		30	Pass
HE40	MCS0	2	102	5510	242/61	9.60	9.90	12.76	23.98		-4.10		30	Pass
HE40	MCS0	2	110	5550	Full	11.00	11.30	14.16	23.98		-4.10		30	Pass
HE40	MCS0	2	110	5550	242/61	11.10	11.10	14.11	23.98		-4.10		30	Pass
HE40	MCS0	2	134	5670	Full	11.00	11.00	14.01	23.98		-4.10		30	Pass
HE40	MCS0	2	134	5670	242/62	11.30	11.30	14.31	23.98		-4.10		30	Pass
HE80	MCS0	2	106	5530	Full	11.30	11.20	14.26	23.98		-4.10		30	Pass
HE80	MCS0	2	106	5530	484/65	11.00	10.80	13.91	23.98		-4.10		30	Pass
HE80	MCS0	2	122	5610	Full	11.00	11.10	14.06	23.98		-4.10		30	Pass
HE80	MCS0	2	122	5610	484/66	10.80	11.10	13.96	23.98		-4.10		30	Pass



### Appendix B. Radiated Spurious Emission

Test Engineer :	Andy Yang and CR Liro	Temperature :	20~25°C
		Relative Humidity :	50~60%

**Band 1 - 5150~5250MHz**

**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1+2		( MHz )	( dBμV/m )	( dB )	Line ( dBμV/m )	Level ( dBμV )	Factor ( dB/m )	Loss ( dB )	Factor ( dB )	Pos ( cm )	Pos ( deg )	Avg. ( P/A )	( H/V )
802.11ac VHT80 CH 42 5210MHz		5132.86	54.66	-19.34	74	39.47	31.73	12.3	28.84	100	62	P	H
		5150	42.53	-11.47	54	27.36	31.7	12.32	28.85	100	62	A	H
	*	5210	97.27	-	-	82.3	31.46	12.4	28.89	100	62	P	H
	*	5210	87.51	-	-	72.54	31.46	12.4	28.89	100	62	A	H
		5370.96	52.93	-21.07	74	38.09	31.28	12.55	28.99	100	62	P	H
		5444.04	41.52	-12.48	54	26.32	31.58	12.66	29.04	100	62	A	H
		5096.46	54.64	-19.36	74	39.41	31.79	12.25	28.81	100	305	P	V
		5148.2	42.45	-11.55	54	27.28	31.7	12.32	28.85	100	305	A	V
	*	5210	94.51	-	-	79.54	31.46	12.4	28.89	100	305	P	V
	*	5210	86.08	-	-	71.11	31.46	12.4	28.89	100	305	A	V
	5408.2	53.21	-20.79	74	38.2	31.43	12.6	29.02	100	305	P	V	
	5449.92	41.51	-12.49	54	26.29	31.6	12.67	29.05	100	305	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11ac VHT80 CH 42 5210MHz		10420	44.65	-23.55	68.2	44.87	39.84	19.26	59.32	100	0	P	H
		15630	43.31	-30.69	74	41.26	37.58	24.37	59.9	100	0	P	H
													H
													H
		10420	45.73	-22.47	68.2	45.95	39.84	19.26	59.32	100	0	P	V
		15630	43.46	-30.54	74	41.41	37.58	24.37	59.9	100	0	P	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11n HT20 CH 52 5260MHz		5026.18	52.71	-21.29	74	37.72	31.6	12.16	28.77	100	60	P	H
		5090.44	42.03	-11.97	54	26.82	31.78	12.24	28.81	100	60	A	H
	*	5260	103.79	-	-	88.96	31.3	12.45	28.92	100	60	P	H
	*	5260	93.5	-	-	78.67	31.3	12.45	28.92	100	60	A	H
		5437.44	53.53	-20.47	74	38.37	31.55	12.65	29.04	100	60	P	H
		5443.68	41.58	-12.42	54	26.39	31.57	12.66	29.04	100	60	A	H
		5110.5	53.71	-20.29	74	38.48	31.78	12.27	28.82	100	318	P	V
		5100.98	42.03	-11.97	54	26.79	31.8	12.26	28.82	100	318	A	V
	*	5260	101.68	-	-	86.85	31.3	12.45	28.92	100	318	P	V
	*	5260	92.06	-	-	77.23	31.3	12.45	28.92	100	318	A	V
		5424.24	53.71	-20.29	74	38.61	31.5	12.63	29.03	100	318	P	V
		5448.96	41.48	-12.52	54	26.26	31.6	12.67	29.05	100	318	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





**Band 2 5250~5350MHz  
WIFI 802.11n HT20 (Harmonic @ 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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11n HT20 CH 52 5260MHz		10520	46.45	-21.75	68.2	46.43	40	19.42	59.4	100	0	P	H
		15780	43.06	-30.94	74	41.19	37.3	24.37	59.8	100	0	P	H
													H
													H
5260MHz		10520	46.21	-21.99	68.2	46.19	40	19.42	59.4	100	0	P	V
		15780	43.61	-30.39	74	41.74	37.3	24.37	59.8	100	0	P	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel

WIFI 802.11n HT20 (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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11n HT20 CH 144 5720MHz		5370.67	54.15	-19.85	74	39.31	31.28	12.55	28.99	100	61	P	H
		5466.22	52.79	-15.41	68.2	37.51	31.63	12.71	29.06	100	61	P	H
		5448.28	41.57	-12.43	54	26.36	31.59	12.67	29.05	100	61	A	H
	*	5720	105.26	-	-	89.26	31.88	13.15	29.03	100	61	P	H
	*	5720	95.16	-	-	79.16	31.88	13.15	29.03	100	61	A	H
		5886.25	55.63	-12.57	68.2	39.12	32.17	13.33	28.99	100	61	P	H
		5428.39	53	-21	74	37.89	31.51	12.63	29.03	102	177	P	V
		5463.1	53.54	-14.66	68.2	38.27	31.63	12.7	29.06	102	177	P	V
		5457.64	41.54	-12.46	54	26.28	31.62	12.69	29.05	102	177	A	V
	*	5720	102.73	-	-	86.73	31.88	13.15	29.03	102	177	P	V
	*	5720	93.27	-	-	77.27	31.88	13.15	29.03	102	177	A	V
			5909.5	55.46	-12.74	68.2	38.85	32.24	13.35	28.98	102	177	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 - Straddle Channel  
WIFI 802.11n HT20 (Harmonic @ 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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11n HT20 CH 144 5720MHz		11440	45.45	-28.55	74	45.47	40.1	20.61	60.73	100	0	P	H
		17160	48.3	-19.9	68.2	38.6	40.54	26.35	57.19	100	0	P	H
													H
													H
		11440	45.53	-28.47	74	45.55	40.1	20.61	60.73	100	0	P	V
		17160	48.46	-19.74	68.2	38.76	40.54	26.35	57.19	100	0	P	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 1 - 5150~5250MHz**

**WIFI 802.11ax HE40 Partial RU (242 Tone) (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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11ax HE40 Partial RU (242 Tone) 242/61 CH 38 5190MHz		5148.98	62.02	-11.98	74	46.85	31.7	12.32	28.85	100	73	P	H
		5093.86	41.83	-12.17	54	26.6	31.79	12.25	28.81	100	73	A	H
	*	5190	98.14	-	-	83.1	31.54	12.38	28.88	100	73	P	H
	*	5190	86.05	-	-	71.01	31.54	12.38	28.88	100	73	A	H
		5455.8	53.42	-20.58	74	38.17	31.61	12.69	29.05	100	73	P	H
		5453	41.44	-12.56	54	26.2	31.61	12.68	29.05	100	73	A	H
		5150	64	-10	74	48.83	31.7	12.32	28.85	101	157	P	V
		5149.76	42.15	-11.85	54	26.98	31.7	12.32	28.85	101	157	A	V
	*	5190	103.69	-	-	88.65	31.54	12.38	28.88	101	157	P	V
	*	5190	90.83	-	-	75.79	31.54	12.38	28.88	101	157	A	V
		5413.24	53.25	-20.75	74	38.21	31.45	12.61	29.02	101	157	P	V
		5446.84	41.42	-12.58	54	26.2	31.59	12.67	29.04	101	157	A	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE40 Partial RU (242 Tone) (Harmonic @ 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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11ax HE40 Partial RU (484 Tone) 242/61CH CH 38 5190MHz		10380	45.46	-22.74	68.2	45.84	39.72	19.2	59.3	100	0	P	H
		15570	44.61	-29.39	74	42.35	37.82	24.38	59.94	100	0	P	H
													H
													H
		10380	45.14	-23.06	68.2	45.52	39.72	19.2	59.3	100	0	P	V
		15570	44.76	-29.24	74	42.5	37.82	24.38	59.94	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 802.11ax HE80 Partial RU (484 Tone) (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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11ax HE80 Partial RU (242 Tone) 484/66 RU CH 58 5290MHz		5109.14	55.99	-18.01	74	40.76	31.78	12.27	28.82	100	75	P	H
		5093.84	42	-12	54	26.77	31.79	12.25	28.81	100	75	A	H
	*	5290	99.11	-	-	84.27	31.3	12.48	28.94	100	75	P	H
	*	5290	86.2	-	-	71.36	31.3	12.48	28.94	100	75	A	H
		5367.36	64.21	-9.79	74	49.38	31.27	12.55	28.99	100	75	P	H
		5456.88	41.61	-12.39	54	26.36	31.61	12.69	29.05	100	75	A	H
		5122.06	55.15	-18.85	74	39.94	31.76	12.28	28.83	100	159	P	V
		5094.52	42	-12	54	26.77	31.79	12.25	28.81	100	159	A	V
	*	5290	101.45	-	-	86.61	31.3	12.48	28.94	100	159	P	V
	*	5290	85.99	-	-	71.15	31.3	12.48	28.94	100	159	A	V
		5362.8	63.45	-10.55	74	48.65	31.25	12.54	28.99	100	159	P	V
		5455.44	41.52	-12.48	54	26.27	31.61	12.69	29.05	100	159	A	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 2 5250~5350MHz**

**WIFI 802.11ax HE80 Partial RU (484 Tone) (Harmonic @ 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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11ax HE80 Partial RU (242 Tone) 484/66 RU CH 58 5290MHz		10580	46.65	-21.55	68.2	46.68	40	19.51	59.54	100	0	P	H
		15870	44.41	-29.59	74	42.62	37.16	24.37	59.74	100	0	P	H
													H
													H
		10580	46.46	-21.74	68.2	46.49	40	19.51	59.54	100	0	P	V
		15870	43.51	-30.49	74	41.72	37.16	24.37	59.74	100	0	P	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 - 5470~5725MHz**

**WIFI 802.11ax HE40 Partial RU (242 Tone) (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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	(P/A)	(H/V)
802.11ax HE40 Partial RU (242 Tone) 242/61 CH 102 5510MHz		5447.2	54.38	-19.62	74	39.17	31.59	12.67	29.05	100	275	P	H
		5469.28	58.15	-10.05	68.2	42.86	31.64	12.71	29.06	100	275	P	H
		5450.56	41.88	-12.12	54	26.65	31.6	12.68	29.05	100	275	A	H
	*	5510	98.77	-	-	83.34	31.72	12.79	29.08	100	275	P	H
	*	5510	86.41	-	-	70.98	31.72	12.79	29.08	100	275	A	H
		5725.31	54.8	-13.4	68.2	38.77	31.9	13.16	29.03	100	275	P	H
		5459.44	55.31	-18.69	74	40.05	31.62	12.69	29.05	100	184	P	V
		5470	63.53	-4.67	68.2	48.24	31.64	12.71	29.06	100	184	P	V
		5450.56	41.85	-12.15	54	26.62	31.6	12.68	29.05	100	184	A	V
	*	5510	103.41	-	-	87.98	31.72	12.79	29.08	100	184	P	V
	*	5510	90.52	-	-	75.09	31.72	12.79	29.08	100	184	A	V
			5752.085	54.82	-13.38	68.2	38.64	32	13.2	29.02	100	184	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





**Band 3 - 5470~5725MHz**

**WIFI 802.11ax HE40 Partial RU (242 Tone) (Harmonic @ 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+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11ax HE40 Partial RU (242 Tone) 242/61 CH 102 5510MHz		11020	48.99	-25.01	74	48.99	40.34	20.15	60.49	100	0	P	H
		16530	46.38	-21.82	68.2	41.03	38.95	25.27	58.87	100	0	A	H
													H
													H
		11020	47.96	-26.04	74	47.96	40.34	20.15	60.49	100	0	P	V
		16530	47.24	-20.96	68.2	41.89	38.95	25.27	58.87	100	0	P	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Emission above 18GHz**

**5GHz WIFI 802.11ax HE40 Partial RU (SHF)**

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 )	
802.11n HE40 SHF		19760	37.52	-36.48	74	42.42	37.75	11.29	53.94	150	0	P	H	
		33312	44.02	-24.18	68.2	39.62	40.84	17.78	54.22	150	0	P	H	
													H	
													H	
													H	
													H	
			23522	41.65	-26.55	68.2	42.19	39.73	13.03	53.3	150	0	P	V
			38724	47.23	-26.77	74	39.95	44	18.87	55.59	150	0	P	V
														V
														V
														V
														V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against limit line.													



Emission below 1GHz

WIFI 802.11ax HE40 Partial RU (242 Tone) (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )	
802.11ax HE40 Partial RU (242 Tone) 242/61 LF		30	21.88	-18.12	40	28.75	24.39	0.93	32.19	-	-	P	H	
		150.28	27.87	-15.63	43.5	40.97	17.03	2.16	32.29	-	-	P	H	
		209.45	29.61	-13.89	43.5	44.21	15.22	2.5	32.32	-	-	P	H	
		649.83	29.46	-16.54	46	30.76	26.37	4.36	32.03	-	-	P	H	
		870.02	32.42	-13.58	46	30.36	29.04	5.07	32.05	-	-	P	H	
		951.5	34.57	-11.43	46	29.8	30.77	5.31	31.31	100	0	P	H	
			42.61	30.84	-9.16	40	44.15	17.95	1.08	32.34	100	0	P	V
			182.29	29.66	-13.84	43.5	44.82	14.8	2.35	32.31	-	-	P	V
			561.56	28.33	-17.67	46	30.09	26.17	4.06	31.99	-	-	P	V
			729.37	30.34	-15.66	46	30.37	27.54	4.64	32.21	-	-	P	V
			852.56	31.94	-14.06	46	29.96	29.08	5.03	32.13	-	-	P	V
			951.5	33.88	-12.12	46	29.11	30.77	5.31	31.31	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



**Note symbol**

*	<b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is <b>over limit</b> line.
P/A	<b>Peak</b> or <b>Average</b>
H/V	<b>Horizontal</b> or <b>Vertical</b>



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

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11b 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 :	Andy Yang and CR Liro	Temperature :	20~25°C
		Relative Humidity :	50~60%

#### Note symbol

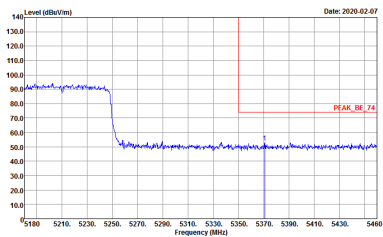
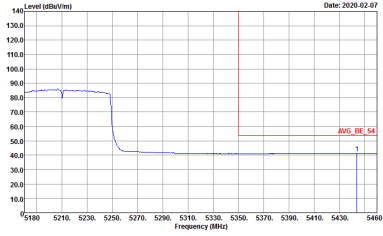
-L	Low channel location
-R	High channel location



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

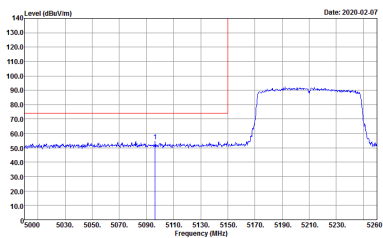
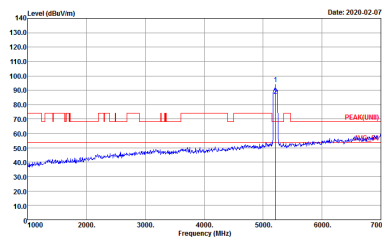
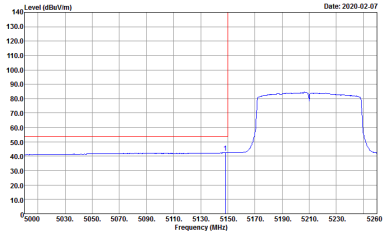
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Horizontal	Fundamental
<b>Peak</b>	<p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>	<p>Site : 03CH16-HY            Condition : PEAK(FUNDT) 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>
<b>Avg.</b>	<p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>	<b>Left blank</b>



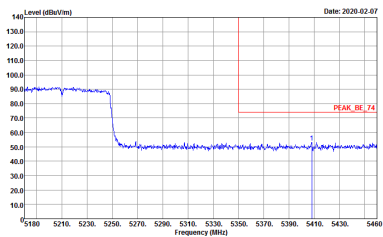
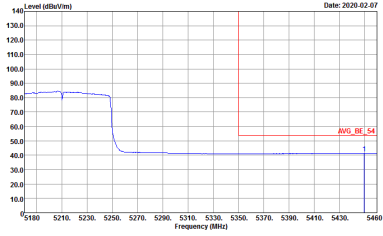
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>





WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Date: 2020-02-07</p> <p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 901543-01</p>	 <p>Date: 2020-02-07</p> <p>Site : 03CH16-HY            Condition : PEAK(LINE) 3m 91200_1522 VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 901543-01</p>
<p><b>Avg.</b></p>	 <p>Date: 2020-02-07</p> <p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>

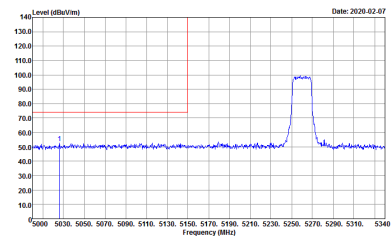


Band 1 - 5150~5250MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

Table with 2 columns: Horizontal and Vertical. Each column contains a graph of Level (dBuV/m) vs Frequency (MHz) and associated test parameters like Site, Condition, Detector, and Project.



**Band 2 - 5250~5350MHz**  
**WIFI 802.11n HT20 (Band Edge @ 3m)**

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Horizontal	Fundamental
<b>Peak</b>	 <p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 11.5</p>	 <p>Site : 03CH16-HY            Condition : PEAK(FUNDT) 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 11.5</p>
<b>Avg.</b>	 <p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 11.5</p>	Left blank

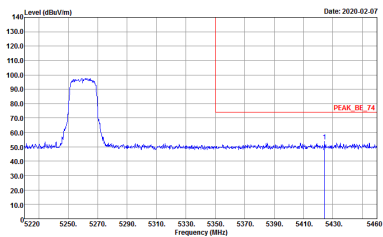
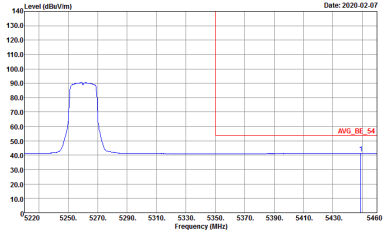


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Horizontal	Fundamental
<p><b>Peak</b></p>		<p>Left blank</p>
<p><b>Avg.</b></p>		<p>Left blank</p>



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	<p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 11.5</p>	<p>Site : 03CH16-HY            Condition : PEAK(LINE) 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 11.5</p>
<p><b>Avg.</b></p>	<p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 11.5</p>	<p><b>Left blank</b></p>



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - R	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 11.5</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 11.5</p>	<p>Left blank</p>



**Band 2 - 5250~5350MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

<b>WIFI</b>	<b>Band 2 5250~5350MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11n HT20 CH52 5260MHz</b>	
<b>1+2</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 901543-01 Setting : 115</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 9120D_1522 VERTICAL Detector : Peak Project : 901543-01 Setting : 115</p>





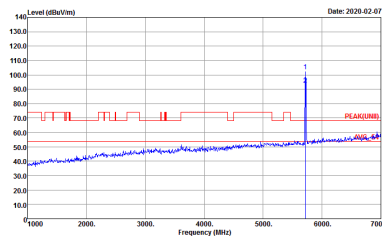
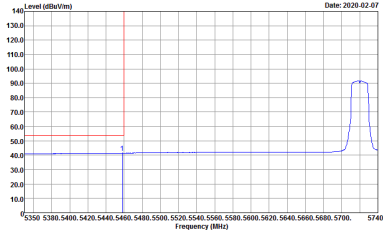
**Band 3 - Straddle Channel**  
**WIFI 802.11n HT20 (Fundamental @ 3m)**

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Horizontal	Fundamental
<b>Peak</b>	 <p>Site : 03CH16-HY            Condition : STRADDLES U-NIT-1A2A 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 11</p>	 <p>Site : 03CH16-HY            Condition : PEAK(LINE) 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 11</p>
<b>Avg.</b>	 <p>Site : 03CH16-HY            Condition : U-NIT-1A2A AVERAGE 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 11</p>	<b>Left blank</b>



WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : G8CJH6-144 Condition : STRADDLES U-NIT-1A2A 3m 91200_1522 HORIZONTAL Detector : Peak Project : 901543-01 Setting : 11</p>	Left blank



WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH16-HY            Condition : STRADDLES U-NIT-1A2A 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 11</p>	 <p>Site : 03CH16-HY            Condition : PEAK(LINII) 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 11</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH16-HY            Condition : U-NIT-1A2A AVERAGE 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 11</p>	<p><b>Left blank</b></p>



WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 08CH16-144 Condition : STRADDLES U-NIT-1A2A 3m 91200_1522 VERTICAL Detector : Peak Project : 901543-01 Setting : 11</p>	Left blank



**Band 3 - Straddle Channel**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1+2	Horizontal	Vertical
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 901543-01 Setting : 11</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 901543-01 Setting : 11</p>



**Band 1 - 5150~5250MHz**

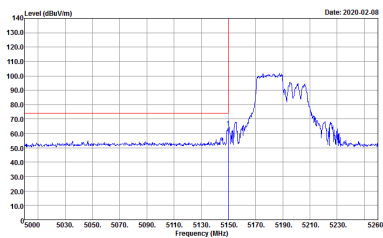
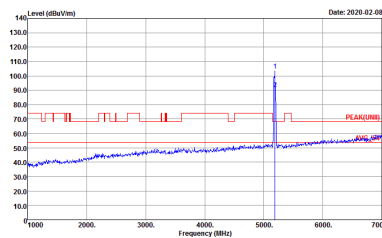
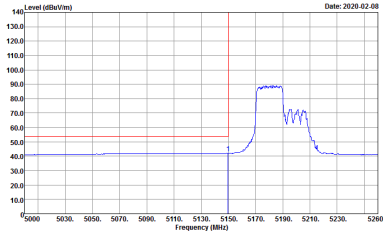
**WIFI 802.11ax HE40 Partial RU (242 Tone) (Band Edge @ 3m)**

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH38 5190MHz - L	
1+2	Horizontal	Fundamental
<b>Peak</b>	<p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>	<p>Site : 03CH16-HY            Condition : PEAK(FUNDE) 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>
<b>Avg.</b>	<p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>	<b>Left blank</b>



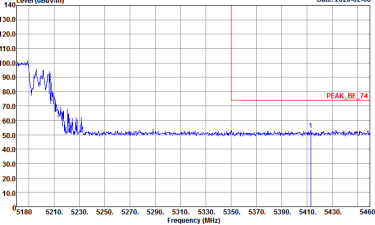
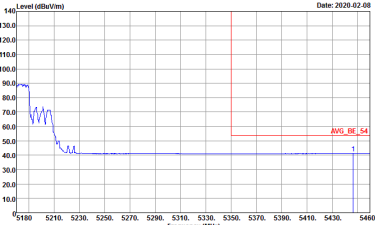
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH38 5190MHz - R	
1+2	Horizontal	Fundamental
<p><b>Peak</b></p>		<p>Left blank</p>
<p><b>Avg.</b></p>		<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH38 5190MHz - L	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 VERTICAL            RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 901543-01</p>	 <p>Site : 03CH16-HY            Condition : PEAK(LINE) 3m 91200_1522 VERTICAL            RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 901543-01</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 VERTICAL            RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>





WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH38 5190MHz - R	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 VERTICAL            RBW:1000.000kHz VBW:3000.000kHz SWT:Auto            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 VERTICAL            RBW:1000.000kHz VBW:3.010kHz SWT:Auto            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>



**Band 1 - 5150~5250MHz**

**WIFI 802.11ax HE40 Partial RU (242 Tone) (Harmonic @ 3m)**

<b>WIFI</b>	<b>Band 1 5150~5250MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE40 Partial RU (242 Tone) 242/61RU CH38 5190MHz</b>	
<b>1+2</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 901543-01</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 901543-01</p>



Band 2 - 5250~5350MHz

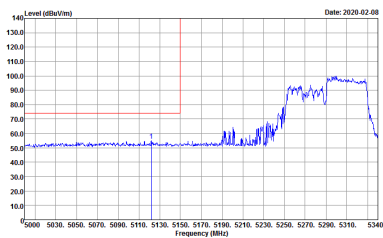
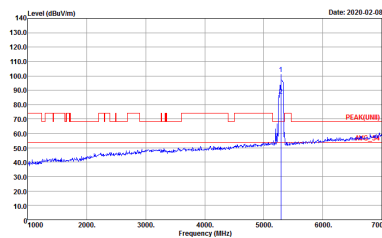
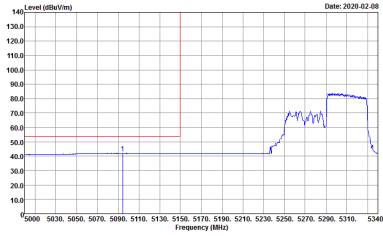
WIFI 802.11ax HE80 Partial RU (484 Tone) (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial RU (484 Tone) 484/66 RU CH58 5290MHz - L	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 12</p>	<p>Site : 03CH16-HY            Condition : PEAK(FUNDET) 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 12</p>
Avg.	<p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 12</p>	Left blank

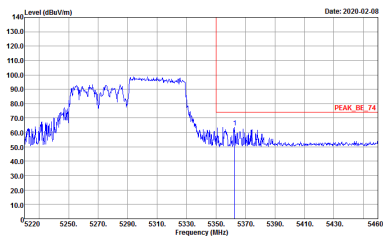
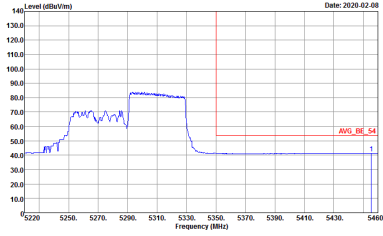


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial RU (484 Tone) 484/66 RU CH58 5290MHz - R	
1+2	Horizontal	Fundamental
<p><b>Peak</b></p>	<p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 12</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	<p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01            Setting : 12</p>	<p>Left blank</p>



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial RU (484 Tone) 484/66 RU CH58 5290MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY          Condition : PEAK_BE_74 3m 91200_1522 VERTICAL          RBW:1000.000kHz VBW:3000.000kHz SWT:Auto          Detector : Peak          Project : 901543-01          Setting : 12</p>	 <p>Site : 03CH16-HY          Condition : PEAK(FUN1) 3m 91200_1522 VERTICAL          RBW:1000.000kHz VBW:3000.000kHz SWT:Auto          Detector : Peak          Project : 901543-01          Setting : 12</p>
Avg.	 <p>Site : 03CH16-HY          Condition : AVG_BE_54 3m 91200_1522 VERTICAL          RBW:1000.000kHz VBW:3.000kHz SWT:Auto          Detector : Peak          Project : 901543-01          Setting : 12</p>	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial RU (484 Tone) 484/66 RU CH58 5290MHz - R	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH16-HY            Condition : PEAK_BE_74 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 12</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH16-HY            Condition : AVG_BE_54 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01            Setting : 12</p>	<p>Left blank</p>



**Band 2 - 5250~5350MHz**

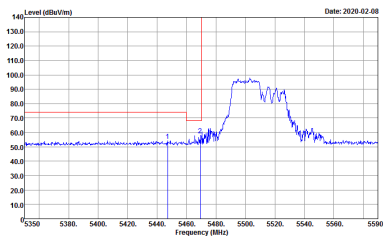
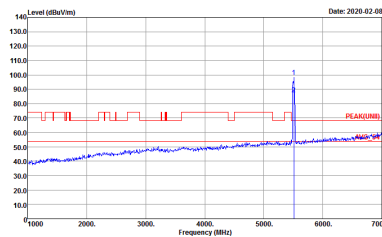
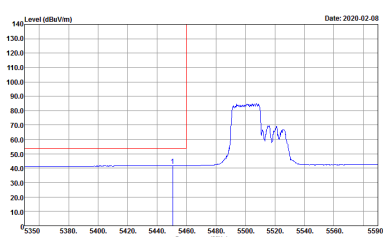
**WIFI 802.11ax HE80 Partial RU (484 Tone) (Harmonic @ 3m)**

<b>WIFI</b>	<b>Band 2 5250~5350MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE80 Partial RU (484 Tone) 484/66 RU CH58 5290MHz</b>	
<b>1+2</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH16-HY          Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL          Detector : Peak          Project : 901543-01          Setting : 12</p>	<p>Site : 03CH16-HY          Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL          Detector : Peak          Project : 901543-01          Setting : 12</p>



**Band 3 - 5470~5725MHz**

**WIFI 802.11ax HE40 Partial RU (242 Tone) (Band Edge @ 3m)**

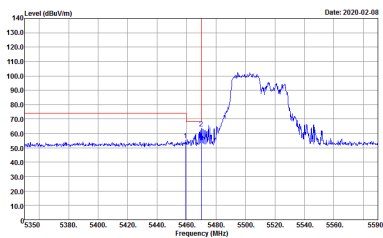
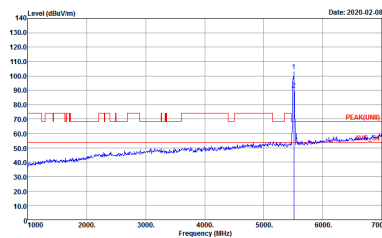
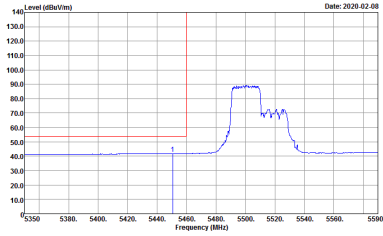
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH102 5510MHz - L	
1+2	Horizontal	Fundamental
<b>Peak</b>	 <p>Site : 03CH16-HY            Condition : PEAK_BE(UNIT)_B3 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>	 <p>Site : 03CH16-HY            Condition : PEAK(UNIT)_3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>
<b>Avg.</b>	 <p>Site : 03CH16-HY            Condition : AVG_BE(UNIT)_B3 3m 91200_1522 HORIZONTAL            Detector : Peak            Project : 901543-01</p>	<b>Left blank</b>





WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak	<p>Site : D2CH102-144 Condition : PEAK_BE[UNIT], B3 3m 91200_1522 HORIZONTAL Detector : Peak Project : 901543-01</p>	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH102 5510MHz - L	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH16-HY            Condition : PEAK_BE(UNIT)_B3 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01</p>	 <p>Site : 03CH16-HY            Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH16-HY            Condition : AVG_BE(UNIT)_B3 3m 91200_1522 VERTICAL            Detector : Peak            Project : 901543-01</p>	<p>Left blank</p>

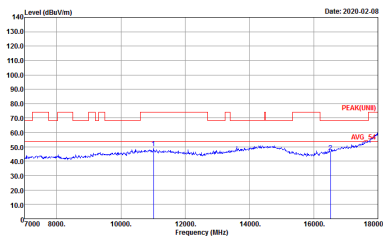
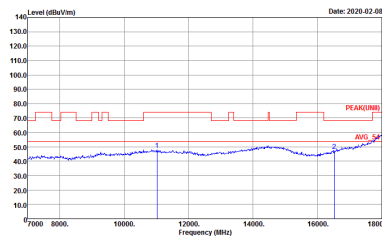


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak	<p>Site : D2CH16-14V Condition : PEAK_BE[UNII]_B3 3m 9120D_1522 VERTICAL Detector : Peak Project : 901543-01</p>	Left blank



**Band 3 - 5470~5725MHz**

**WIFI 802.11ax HE40 Partial RU (242 Tone) (Harmonic @ 3m)**

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ax HE40 Partial RU (242 Tone) 242/61 RU CH102 5510MHz	
1+2	Horizontal	Vertical
<p><b>Peak</b></p> <p><b>Avg.</b></p>	 <p>Site : 03CH16-HY          Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL          Detector : Peak          Project : 901543-01</p>	 <p>Site : 03CH16-HY          Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL          Detector : Peak          Project : 901543-01</p>



Emission above 18GHz  
5GHz WIFI 802.11ax HE40 (SHF)

WIFI	5GHz WIFI	
ANT	802.11ax HE40 SHF	
1	Horizontal	Vertical
<p><b>Peak</b></p> <p><b>Avg.</b></p>	<p>Site : 03CH16-#Y Condition : PEAK(LINE) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 901543-01</p>	<p>Site : 03CH16-#Y Condition : PEAK(LINE) 3m 91200_1522 VERTICAL Detector : Peak Project : 901543-01</p>



Emission below 1GHz
WIFI 802.11ax HE40 (LF)

Table with 2 columns: Horizontal and Vertical. Each column contains a graph of Level (dBuV/m) vs Frequency (MHz) and associated test parameters like Site, Condition, Detector, and Project.



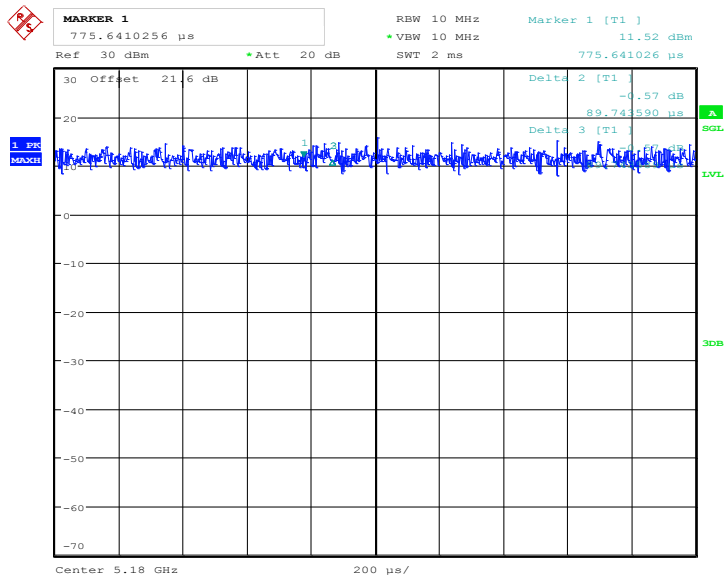
### Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1+2	5GHz 802.11n HT20 for Ant. 1	100.00	-	-	10Hz	0.00
1+2	5GHz 802.11n HT20 for Ant. 2	100.00	-	-	10Hz	0.00
1+2	5GHz 802.11ac VHT80 for Ant. 1	100.00	-	-	10Hz	0.00
1+2	5GHz 802.11ac VHT80 for Ant. 2	100.00	-	-	10Hz	0.00
1+2	5GHz 802.11ax HE40 for Ant. 1	100.00	-	-	10Hz	0.00
1+2	5GHz 802.11ax HE40 for Ant. 2	100.00	-	-	10Hz	0.00
1+2	5GHz 802.11ax HE80 for Ant. 1	100.00	-	-	10Hz	0.00
1+2	5GHz 802.11ax HE80 for Ant. 2	100.00	-	-	10Hz	0.00



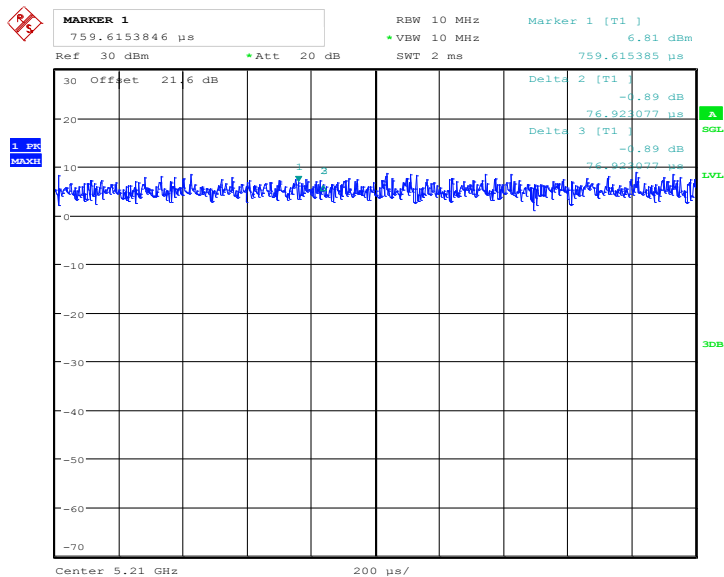
MIMO <Ant. 1>

802.11n HT20



Date: 1.JAN.2003 02:20:19

802.11ac VHT80

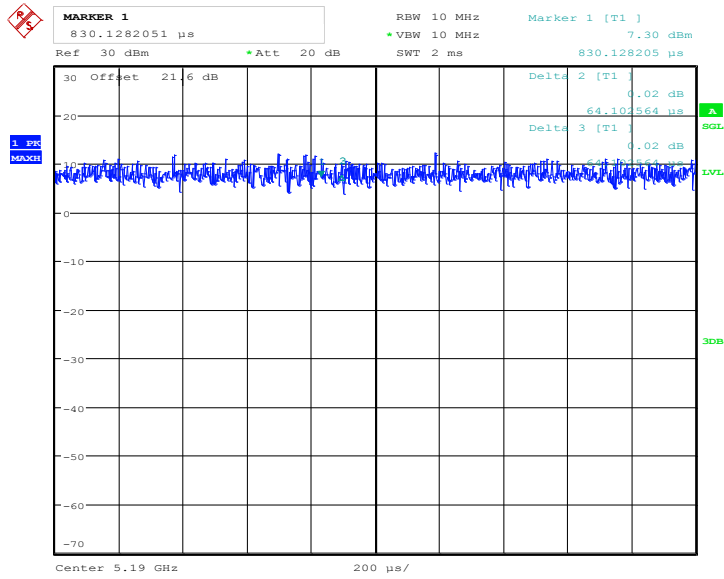


Date: 1.JAN.2003 02:47:26



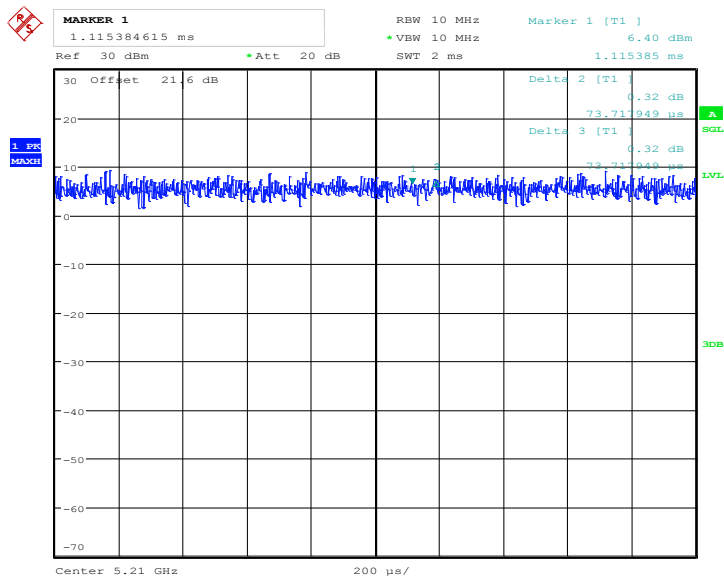


802.11ax HE40



Date: 1.JAN.2003 03:02:04

802.11ax HE80

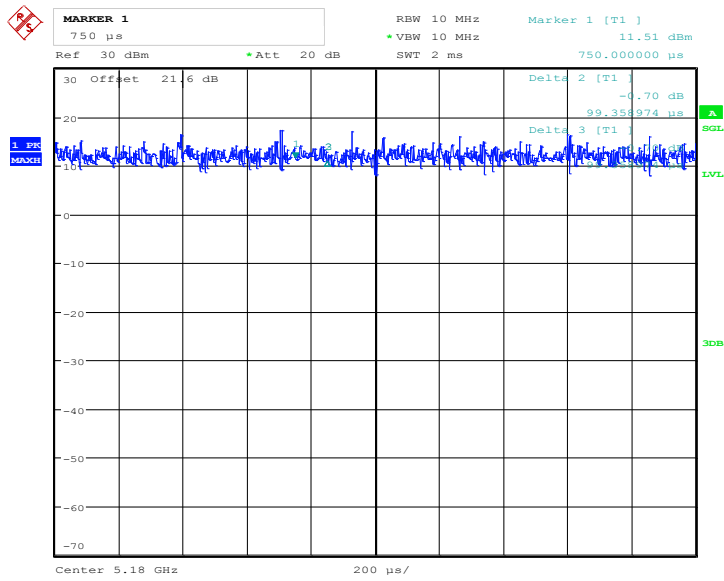


Date: 1.JAN.2003 03:07:09



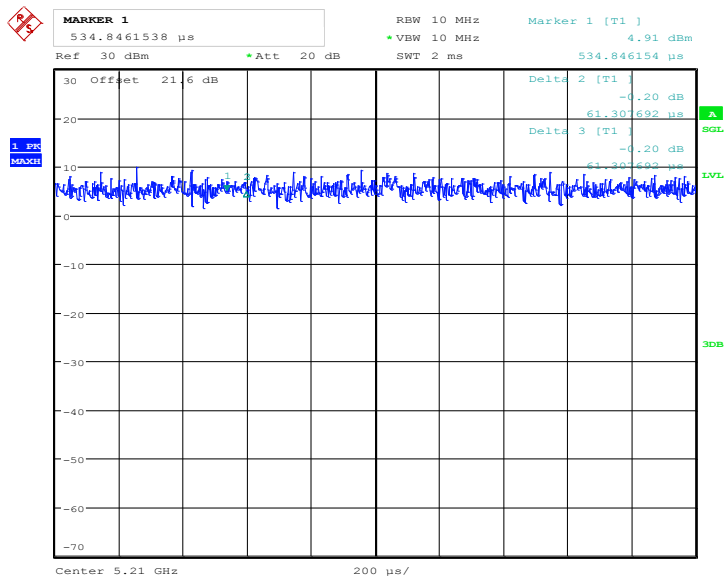
MIMO <Ant. 2>

802.11n HT20



Date: 1.JAN.2003 02:22:50

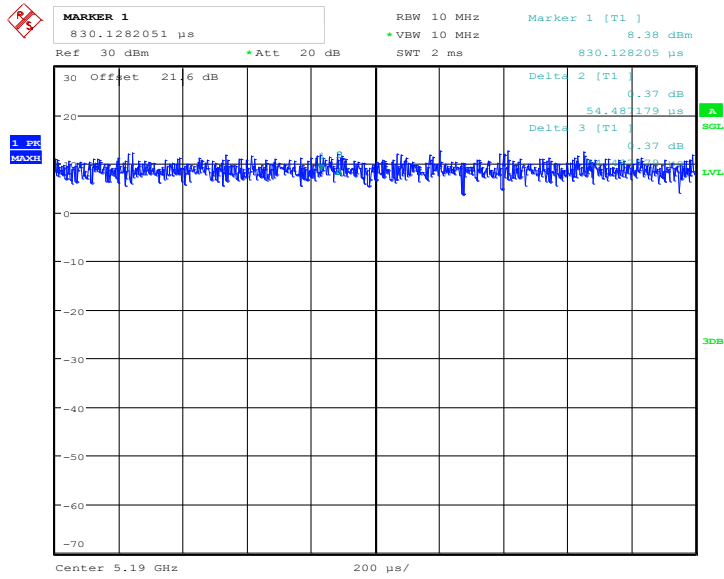
802.11ac VHT80



Date: 1.JAN.2003 02:48:12

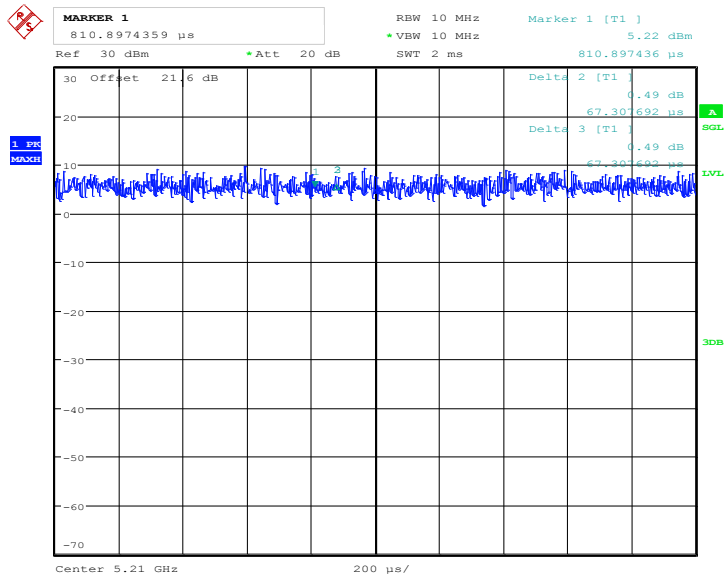


802.11ax HE40



Date: 1.JAN.2003 03:03:09

802.11ax HE80



Date: 1.JAN.2003 03:07:52

—————THE END—————