



FCC RADIO TEST REPORT

FCC ID : 2AUQI-7436
Equipment : HDMI Digital Media Receiver
Model Name : S3L46N
Applicant : PROJECT 710 L.L.C.
101 Merritt 7 Corporate Park, 3rd floor
Norwalk, CT 06851
United States
Standard : FCC Part 15 Subpart E §15.407

The product was received on Mar. 23, 2020 and testing was started from Apr. 06, 2020 and completed on Jun. 02, 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 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.)



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History of this test report

Report No.	Version	Description	Issued Date
FR020402-01E	01	Initial issue of report	Jun. 23, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)
3.1	15.403 (i)	6dB & 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
3.5	15.207	AC Conducted Emission	Pass
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: Yimin Ho

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	HDMI Digital Media Receiver
Model Name	S3L46N
FCC ID	2AUQI-7436
EUT supports Radios application	WLAN b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	5745 MHz ~ 5825 MHz
Maximum Output Power to Antenna	MIMO <Ant. 0 + 1> 802.11a : 20.40 dBm / 0.1096 W 802.11n HT20 : 20.20 dBm / 0.1047 W 802.11n HT40 : 20.22 dBm / 0.1052 W 802.11ac VHT20: 20.10 dBm / 0.1023 W 802.11ac VHT40: 20.12 dBm / 0.1028 W 802.11ac VHT80: 19.67 dBm / 0.0927 W
99% Occupied Bandwidth	MIMO <Ant. 0> 802.11a : 16.75 MHz 802.11n HT20 : 17.80 MHz 802.11n HT40 : 36.40 MHz 802.11ac VHT80 : 76.56 MHz MIMO <Ant. 1> 802.11a : 16.70 MHz 802.11n HT20 : 17.80 MHz 802.11n HT40 : 36.50 MHz 802.11ac VHT80 : 76.56 MHz
Antenna Gain / Gain	<Ant. 0> : PCB Inv F type Antenna with gain 5.01 dBi <Ant. 1> : PCB Inv F type Antenna with gain 5.46 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

Note: MIMO Ant. 0+1 is a calculated result from sum of the power MIMO Ant. 0 and MIMO Ant. 1.

1.3 Modification of EUT

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



1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sporton Site No.	
	TH05-HY	CO05-HY

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

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

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

FCC designation No.: TW1190 and TW0007

1.5 Applicable Standards

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

- ♦ 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. The TAF code is not including all the FCC KDB listed without accreditation.

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 and HDMI Extender Cable. The worst cases (EUT without HDMI Extender Cable and X 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)
5725-5850 MHz Band 4 (U-NII-3)	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155 [#]	5775	165	5825

Note:

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

2.2 Test Mode

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

MIMO Mode

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

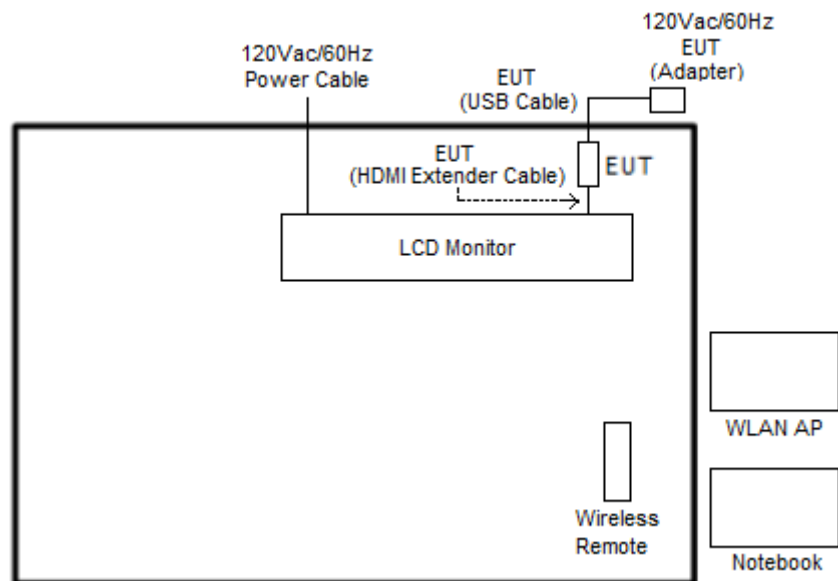
Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + MPEG4 + USB Cable (Charging from Adapter) + HDMI Extender cable + TV: Sharp LC-50UA6800T (TV Resolution: 720p_60Hz_10b_HDR10)
Remark: For Radiated Test Cases, the tests were performed with USB Cable 1.	

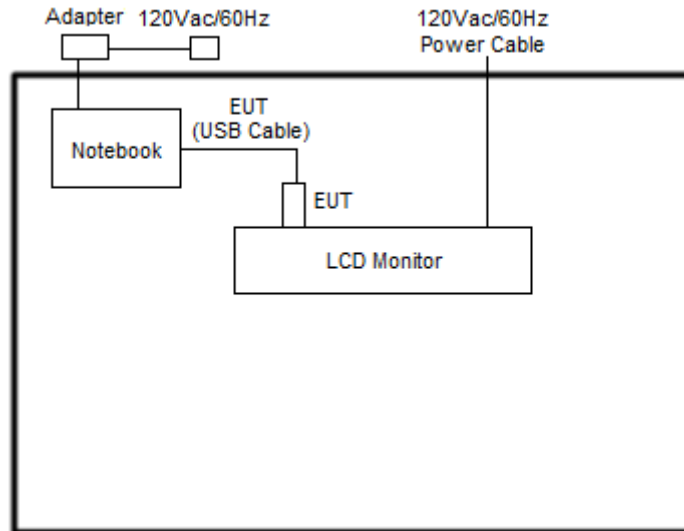
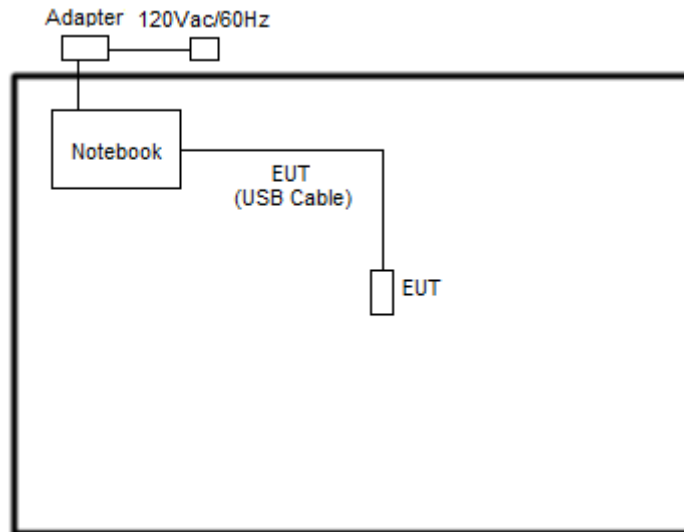
Ch. #		Band IV : 5725-5850 MHz			
		802.11a	802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

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

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN Tx for EUT without HDMI Extender>

<WLAN Tx for X Plane>


2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	Notebook	Lenovo	L570	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	LCD Monitor	Sharp	LC-50UA6800T	FCC DoC	Shielded, 1.6m	Unshielded, 1.8m
5.	LCD Monitor	DELL	P2715Qt	N/A	N/A	N/A
6.	Wireless Remote	N/A	L5B83H	2AN7U-5463	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility "Compliance v1.0.0.71" 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).

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$

3 Test Result

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

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

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

26dB and 99% Occupied bandwidth are reporting only.

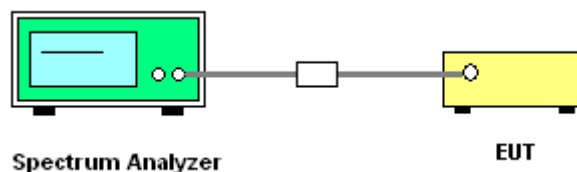
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

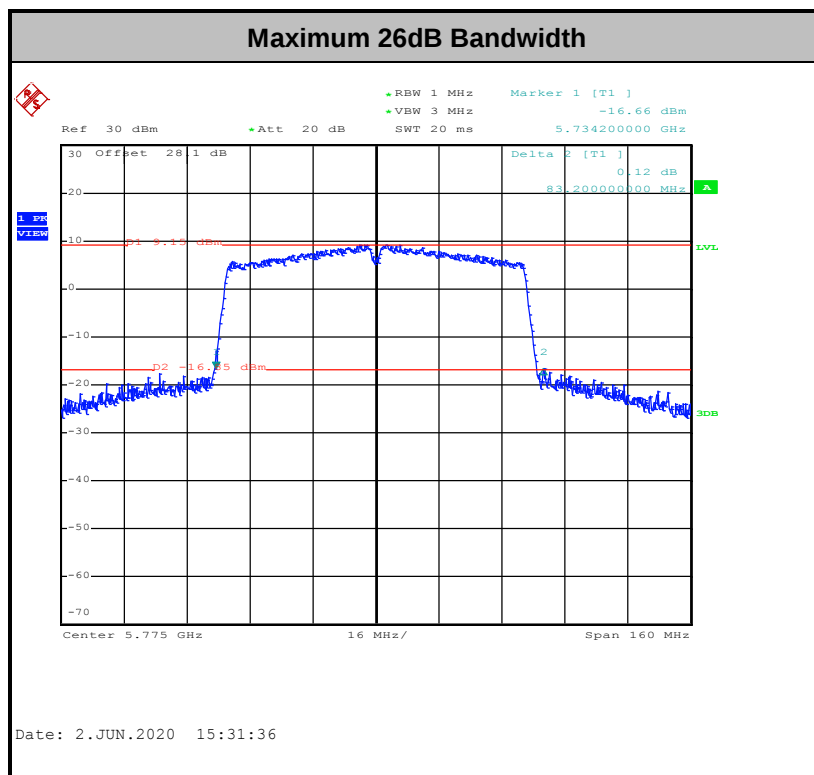
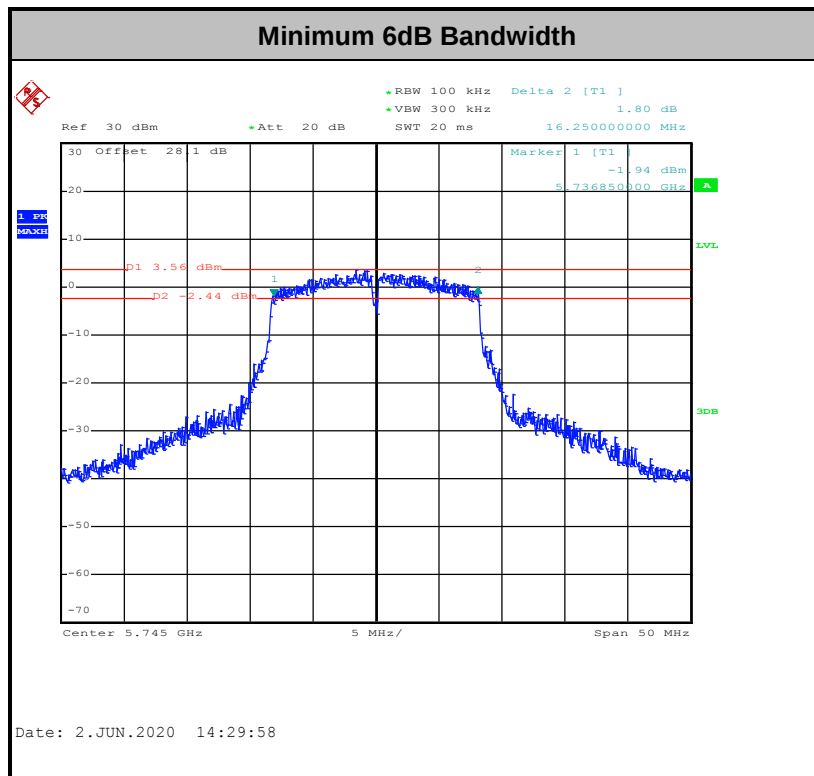
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section C) Emission bandwidth for the band 5.725-5.85GHz
2. Set RBW = 100kHz.
3. Set the VBW $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is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

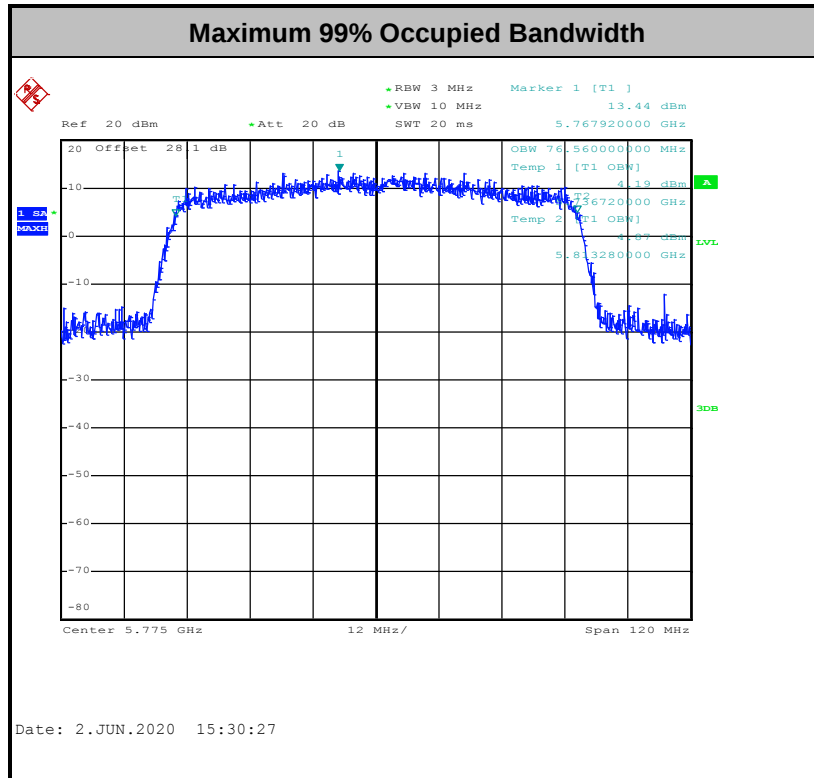
3.1.4 Test Setup



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

Please refer to Appendix A.





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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

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

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

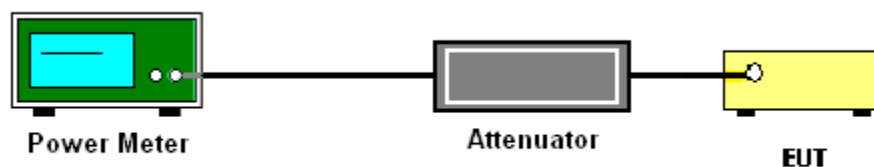
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

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

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

Method SA-3

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

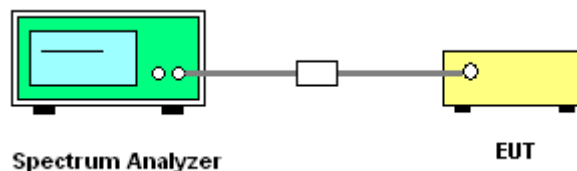
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW $\geq$ 1 MHz.
- Number of points in sweep $\geq$ 2 Span / RBW.
- Sweep time $\leq$ (number of points in sweep) $\times$ T, when duty cycle is less than 98 percent where T is the minimum transmission 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 PSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (c): Measure and add $10 \log(N_{\text{ANT}})$ dB.

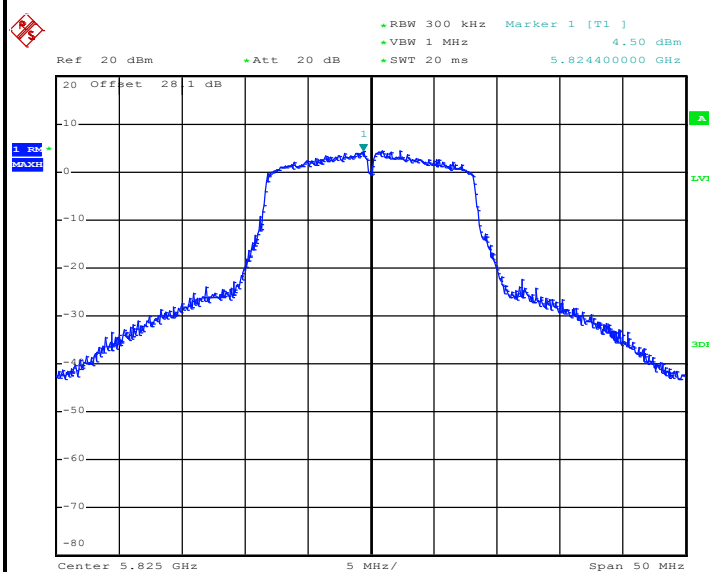
With this technique, spectrum measurements are performed at each output of the device, but rather than summing the spectra or the spectral peaks across the outputs, the quantity $10 \log(N_{\text{ANT}})$ dB is added to each spectrum value before comparing to the emission limit. The addition of $10 \log(N_{\text{ANT}})$ dB serves to apportion the emission limit among the N_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{\text{ANT}}^{\text{th}}$ of the PSD limit.

3.3.4 Test Setup

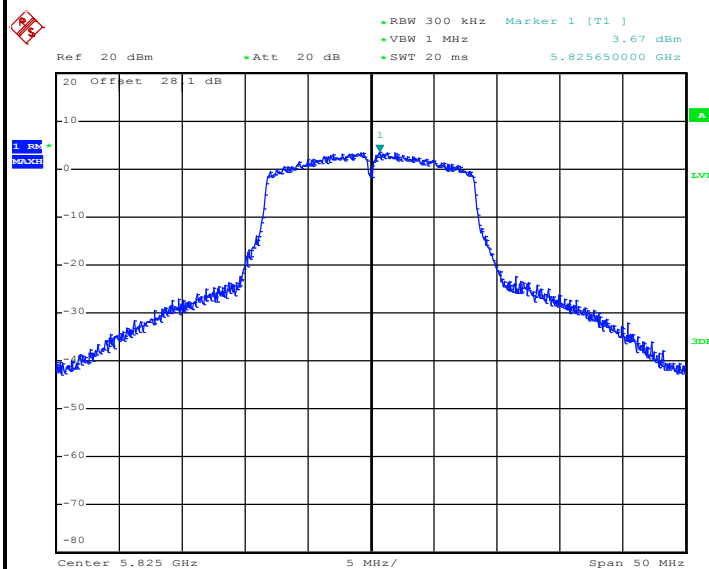


3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

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


Date: 2.JUN.2020 14:42:00

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


Date: 2.JUN.2020 14:44:02

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 5.725-5.85 GHz band:

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

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

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

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

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

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.

3.4.2 Measuring Instruments

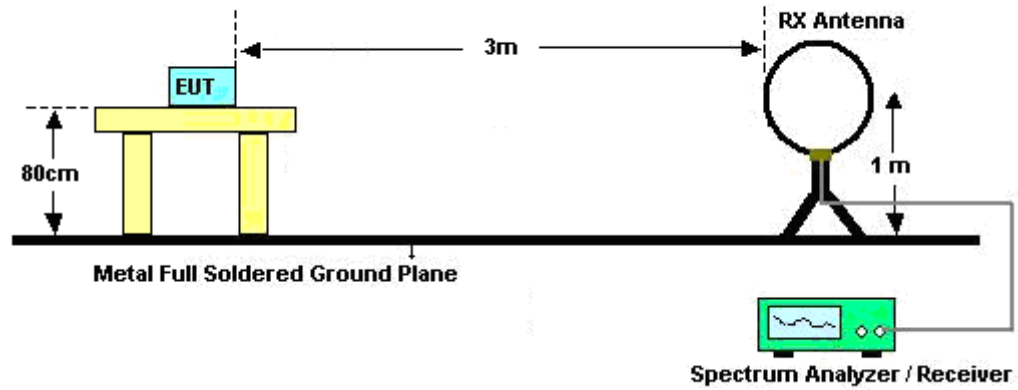
See list of measuring equipment of this test report.

3.4.3 Test Procedures

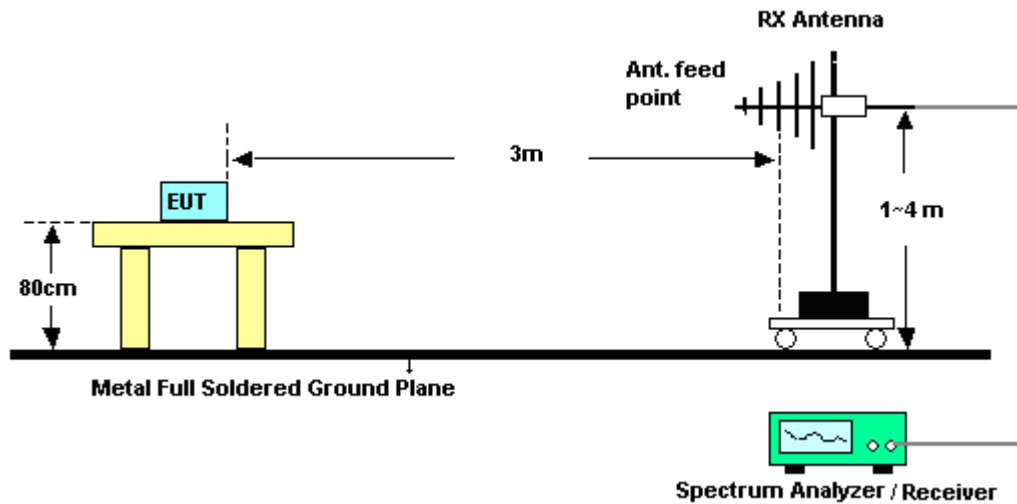
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section G) Unwanted emissions measurement.
(1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 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 $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT 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

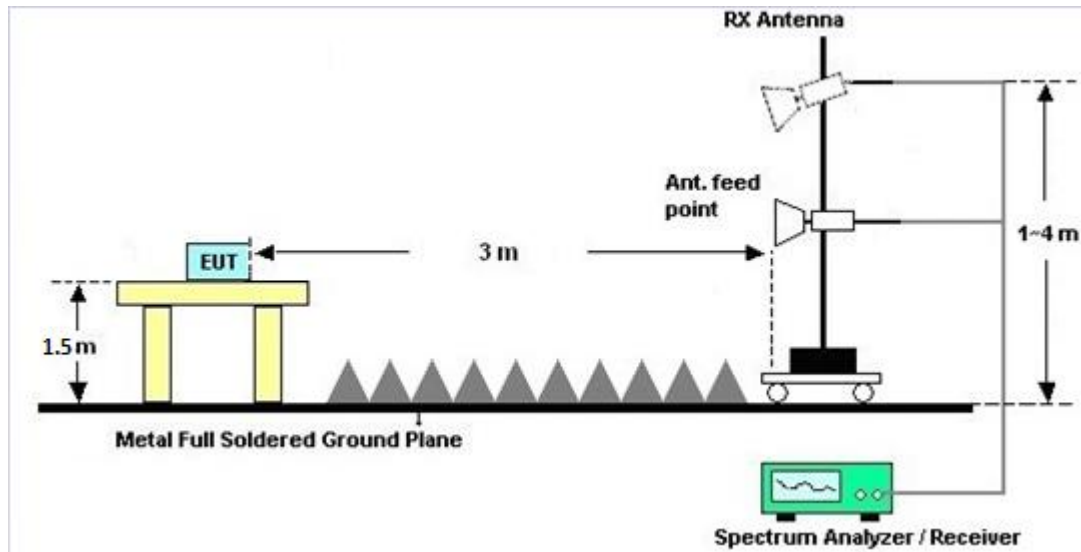
For radiated emissions below 30MHz



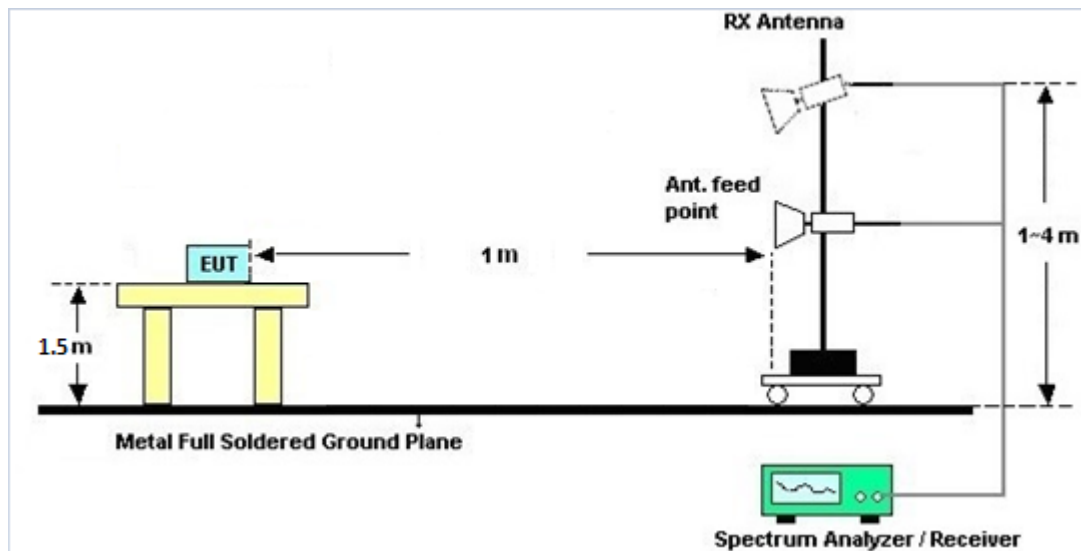
For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



For radiated emissions above 18GHz





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

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

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

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 (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

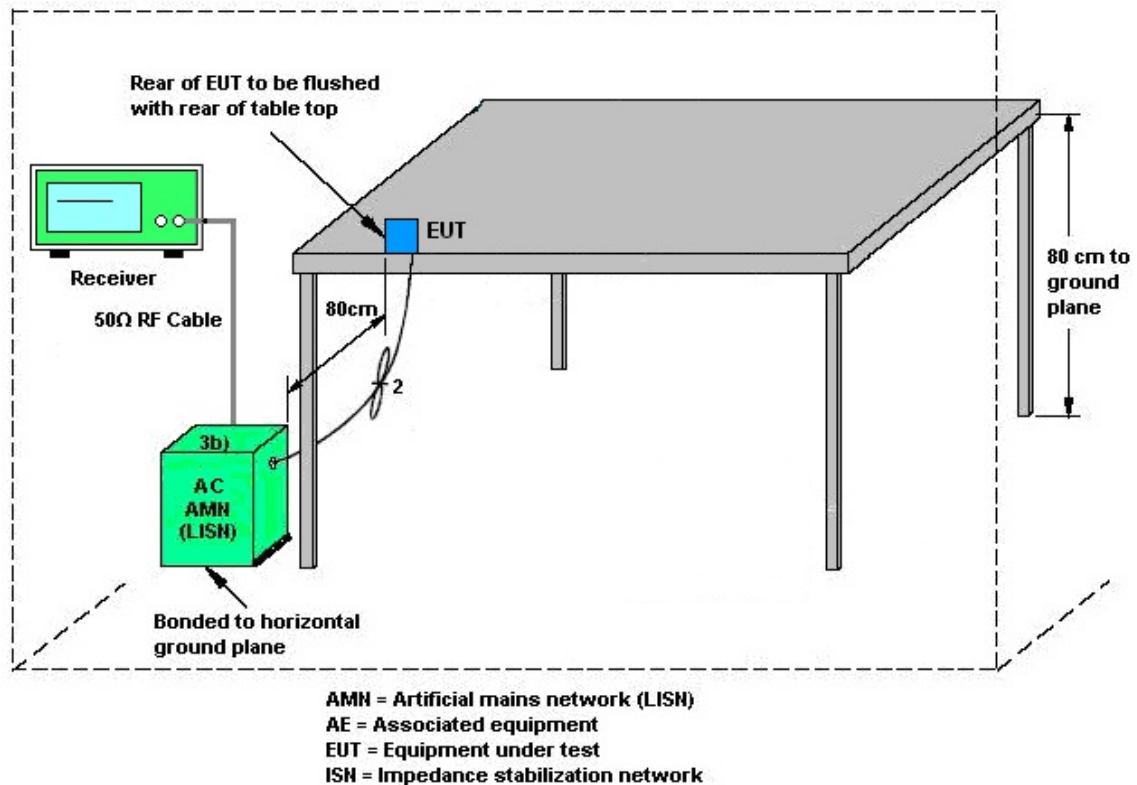
3.5.2 Measuring Instruments

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



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

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

EUT is verified this characteristic during the function check of normal sample associated with an access point:

- A. Information start: make EUT supply information to the access point.
- B. Information stop: stop supplying information to the access point.

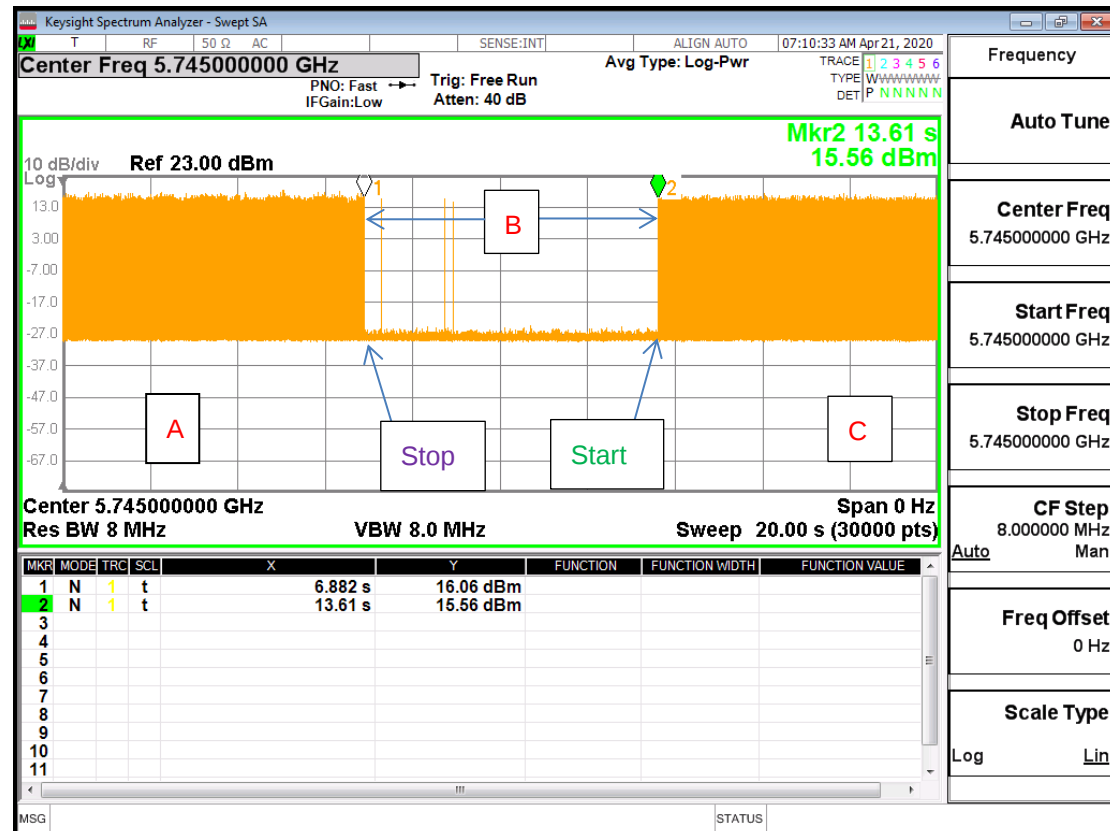
While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

- C. Information start: make EUT supply information to the access point again.

The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



5745MHz



Note: The control / signalling information during the period B is precluded.

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

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

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

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

The EUT supports CDD mode.

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

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

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

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

<CDD Modes>						
			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant. 1 (dBi)	Ant. 2 (dBi)				
Band IV	5.01	5.46	5.46	8.25	0.00	2.25

$Power\ Limit\ Reduction = DG(Power) - 6dBi, (min = 0)$

$PSD\ Limit\ Reduction = DG(PSD) - 6dBi, (min = 0)$



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jan. 09, 2020	May 09, 2020~ May 27, 2020	Jan. 08, 2021	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL6111D&0 0802N1D01N- 06	47020&06	30MHz to 1GHz	Oct. 12, 2019	May 09, 2020~ May 27, 2020	Oct. 11, 2020	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-152 2	1G~18GHz	Sep. 19, 2019	May 09, 2020~ May 27, 2020	Sep. 18, 2020	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 980	18GHz~40GHz	Jan. 10, 2020	May 09, 2020~ May 27, 2020	Jan. 09, 2021	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Oct. 01, 2019	May 09, 2020~ May 27, 2020	Sep. 30, 2020	Radiation (03CH16-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180 0055006	1GHz~18GHz	May 07, 2020	May 09, 2020~ May 27, 2020	May 06, 2021	Radiation (03CH16-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180 0055007	1GHz~18GHz	Mar. 31, 2020	May 09, 2020~ May 27, 2020	Mar. 30, 2021	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~40GHz	Dec. 13, 2019	May 09, 2020~ May 27, 2020	Dec. 12, 2020	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY532702 64	1GHz~26.5GHz	Dec. 11, 2019	May 09, 2020~ May 27, 2020	Dec.10, 2020	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY572901 11	3Hz~26.5GHz	Dec. 05, 2019	May 09, 2020~ May 27, 2020	Dec. 04, 2020	Radiation (03CH16-HY)
Spectrum Analyzer	Agilent	E4446A	MY501801 36	3Hz~44GHz	May 04, 2020	May 09, 2020~ May 27, 2020	May 03, 2021	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/ 4PE	NA	Aug. 30, 2019	May 09, 2020~ May 27, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/ 4PE	NA	Aug. 30, 2019	May 09, 2020~ May 27, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300 -5757	NA	Aug. 30, 2019	May 09, 2020~ May 27, 2020	Aug. 29, 2020	Radiation (03CH16-HY)
Hygrometer	TECPEL	DTM-303B	TP161243	N/A	Jun. 17, 2019	May 09, 2020~ May 27, 2020	Jun. 16, 2020	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	May 09, 2020~ May 27, 2020	N/A	Radiation (03CH16-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 06, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 15, 2019	Apr. 06, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 07, 2019	Apr. 06, 2020	Nov. 06, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 20, 2019	Apr. 06, 2020	Nov. 19, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 15, 2019	Apr. 06, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Apr. 06, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	Apr. 06, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	Apr. 06, 2020	Jan. 01, 2021	Conduction (CO05-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	Apr. 13, 2020~ Jun. 02, 2020	Jun. 16, 2020	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054S NO10	10MHz~6GHz	Dec. 23, 2019	Apr. 13, 2020~ Jun. 02, 2020	Dec. 22, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Aug. 14, 2019	Apr. 13, 2020~ Jun. 02, 2020	Aug. 13, 2020	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC130048 4	N/A	Aug. 22, 2019	Apr. 13, 2020~ Jun. 02, 2020	Aug. 21, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Keysight	N9010A	MY560704 12	10Hz~7GHz	Aug. 27, 2019	Apr. 13, 2020~ Jun. 02, 2020	Aug. 26, 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
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.7
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.9
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Eason Huang / Rebecca Li/Howard Lin	Temperature:	20.1~24.9	°C
Test Date:	2020/4/13~2020/6/2	Relative Humidity:	45.7~58.8	%

TEST RESULTS DATA
6dB and 26dB EBW and 99% OBW

Band IV MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	2	149	5745	16.65	16.60	23.50	21.40	16.25	16.30	0.5	Pass
11a	6Mbps	2	157	5785	16.75	16.70	25.50	22.60	16.30	16.30	0.5	Pass
11a	6Mbps	2	165	5825	16.75	16.70	26.25	24.80	16.30	16.30	0.5	Pass
HT20	MCS0	2	149	5745	17.80	17.80	27.50	23.55	17.50	17.55	0.5	Pass
HT20	MCS0	2	157	5785	17.80	17.70	21.80	21.50	17.55	17.55	0.5	Pass
HT20	MCS0	2	165	5825	17.80	17.80	26.05	27.25	17.50	17.50	0.5	Pass
HT40	MCS0	2	151	5755	36.40	36.40	43.20	42.12	36.18	36.36	0.5	Pass
HT40	MCS0	2	159	5795	36.30	36.50	42.66	44.91	36.36	36.36	0.5	Pass
VHT80	MCS0	2	155	5775	76.56	76.56	83.20	80.96	76.48	76.16	0.5	Pass

TEST RESULTS DATA
Average Power Table

Band IV 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	149	5745	17.60	17.00	20.32	30.00		5.46		Pass
11a	6Mbps	2	157	5785	17.80	16.80	20.34	30.00		5.46		Pass
11a	6Mbps	2	165	5825	17.90	16.80	20.40	30.00		5.46		Pass
HT20	MCS0	2	149	5745	17.30	16.80	20.07	30.00		5.46		Pass
HT20	MCS0	2	157	5785	17.70	16.60	20.20	30.00		5.46		Pass
HT20	MCS0	2	165	5825	17.70	16.60	20.20	30.00		5.46		Pass
HT40	MCS0	2	151	5755	17.50	16.90	20.22	30.00		5.46		Pass
HT40	MCS0	2	159	5795	17.70	16.60	20.20	30.00		5.46		Pass
VHT20	MCS0	2	149	5745	17.20	16.70	19.97	30.00		5.46		Pass
VHT20	MCS0	2	157	5785	17.60	16.50	20.10	30.00		5.46		Pass
VHT20	MCS0	2	165	5825	17.60	16.50	20.10	30.00		5.46		Pass
VHT40	MCS0	2	151	5755	17.40	16.80	20.12	30.00		5.46		Pass
VHT40	MCS0	2	159	5795	17.60	16.50	20.10	30.00		5.46		Pass
VHT80	MCS0	2	155	5775	16.90	16.40	19.67	30.00		5.46		Pass

TEST RESULTS DATA
Power Spectral Density

Band IV MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	149	5745	2.22		6.47	5.42	9.48	27.75		8.25		Pass
11a	6Mbps	2	157	5785	2.22		6.37	5.85	9.38	27.75		8.25		Pass
11a	6Mbps	2	165	5825	2.22		6.72	5.89	9.73	27.75		8.25		Pass
HT20	MCS0	2	149	5745	2.22		6.02	6.00	9.03	27.75		8.25		Pass
HT20	MCS0	2	157	5785	2.22		5.49	4.71	8.50	27.75		8.25		Pass
HT20	MCS0	2	165	5825	2.22		6.49	6.22	9.50	27.75		8.25		Pass
HT40	MCS0	2	151	5755	2.22		2.74	2.77	5.78	27.75		8.25		Pass
HT40	MCS0	2	159	5795	2.22		3.67	2.57	6.68	27.75		8.25		Pass
VHT80	MCS0	2	155	5775	2.22		0.03	0.28	3.29	27.75		8.25		Pass

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



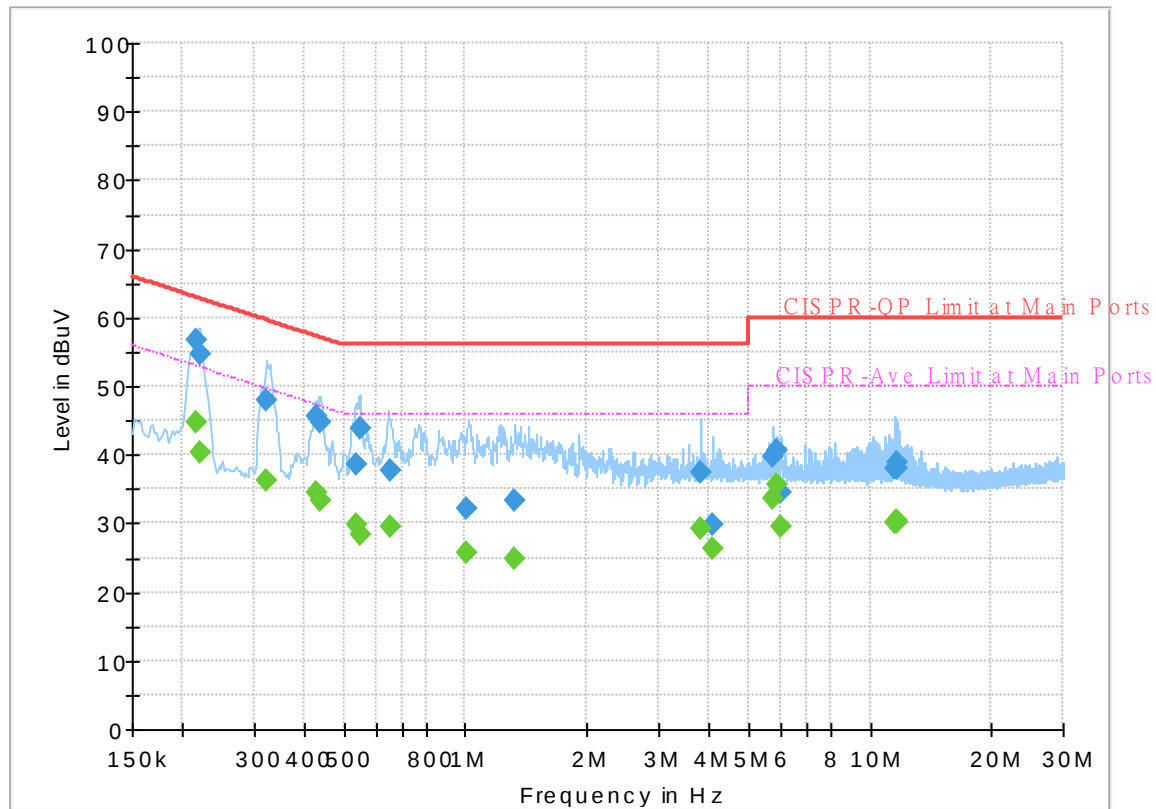
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	22~25℃
		Relative Humidity :	42~50%

EUT Information

Report NO : 020402-01
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



Final_Result

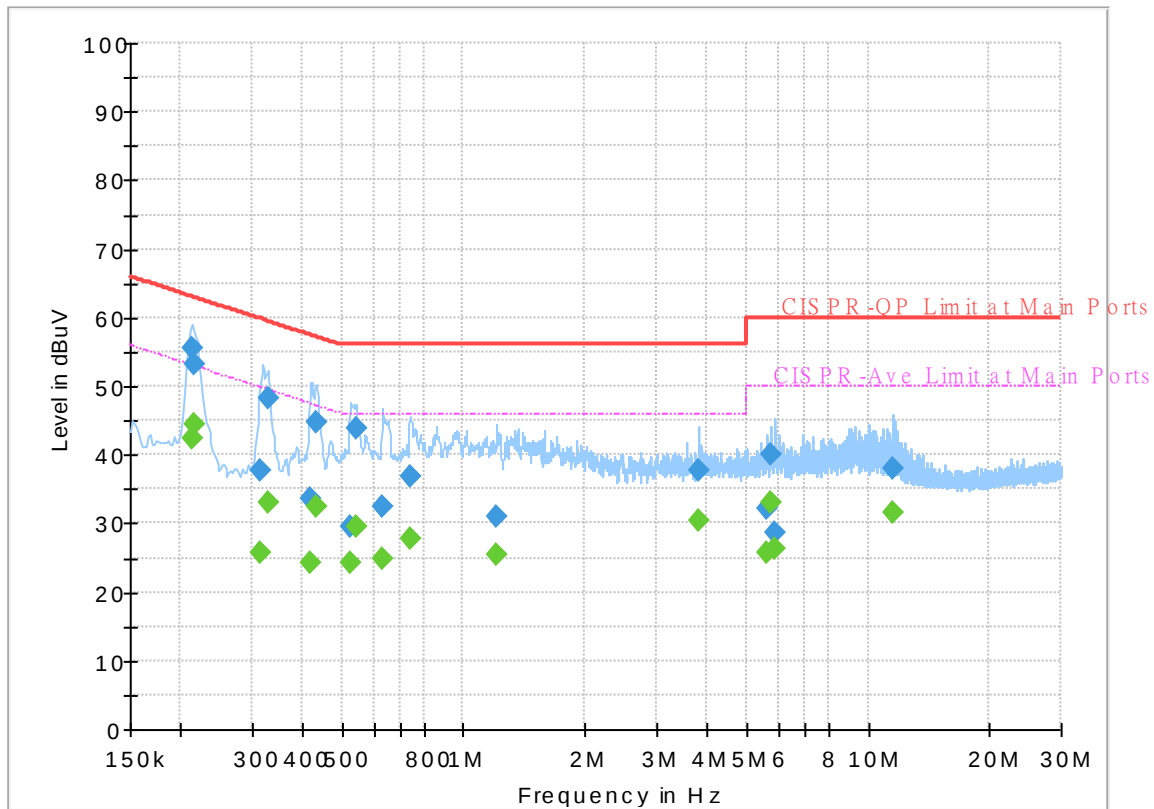
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.216420	---	44.73	52.96	8.23	L1	OFF	19.6
0.216420	56.74	---	62.96	6.22	L1	OFF	19.6
0.220110	---	40.41	52.82	12.41	L1	OFF	19.6
0.220110	54.68	---	62.82	8.14	L1	OFF	19.6
0.322890	---	36.15	49.63	13.48	L1	OFF	19.6
0.322890	47.96	---	59.63	11.67	L1	OFF	19.6
0.428370	---	34.46	47.28	12.82	L1	OFF	19.6
0.428370	45.58	---	57.28	11.70	L1	OFF	19.6
0.437280	---	33.31	47.11	13.80	L1	OFF	19.6
0.437280	44.63	---	57.11	12.48	L1	OFF	19.6
0.539250	---	29.90	46.00	16.10	L1	OFF	19.6
0.539250	38.60	---	56.00	17.40	L1	OFF	19.6
0.548700	---	28.27	46.00	17.73	L1	OFF	19.6
0.548700	43.98	---	56.00	12.02	L1	OFF	19.6
0.649500	---	29.47	46.00	16.53	L1	OFF	19.6
0.649500	37.62	---	56.00	18.38	L1	OFF	19.6
1.009500	---	25.68	46.00	20.32	L1	OFF	19.6
1.009500	32.26	---	56.00	23.74	L1	OFF	19.6
1.325760	---	24.84	46.00	21.16	L1	OFF	19.6
1.325760	33.21	---	56.00	22.79	L1	OFF	19.6
3.819210	---	29.10	46.00	16.90	L1	OFF	19.7

3.819210	37.30	---	56.00	18.70	L1	OFF	19.7
4.096680	---	26.35	46.00	19.65	L1	OFF	19.7
4.096680	29.83	---	56.00	26.17	L1	OFF	19.7
5.743140	---	33.63	50.00	16.37	L1	OFF	19.9
5.743140	39.90	---	60.00	20.10	L1	OFF	19.9
5.884530	---	35.57	50.00	14.43	L1	OFF	19.9
5.884530	40.61	---	60.00	19.39	L1	OFF	19.9
6.027000	---	29.56	50.00	20.44	L1	OFF	19.9
6.027000	34.63	---	60.00	25.37	L1	OFF	19.9
11.460930	---	30.06	50.00	19.94	L1	OFF	20.1
11.460930	38.04	---	60.00	21.96	L1	OFF	20.1
11.602410	---	30.21	50.00	19.79	L1	OFF	20.1
11.602410	38.86	---	60.00	21.14	L1	OFF	20.1
11.649480	---	30.31	50.00	19.69	L1	OFF	20.1
11.649480	37.88	---	60.00	22.12	L1	OFF	20.1

EUT Information

Report NO : 020402-01
 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)
0.213000	---	42.28	53.09	10.81	N	OFF	19.6
0.213000	55.48	---	63.09	7.61	N	OFF	19.6
0.215250	---	44.55	53.00	8.45	N	OFF	19.6
0.215250	53.25	---	63.00	9.75	N	OFF	19.6
0.314250	---	25.72	49.86	24.14	N	OFF	19.6
0.314250	37.73	---	59.86	22.13	N	OFF	19.6
0.327840	---	33.15	49.51	16.36	N	OFF	19.6
0.327840	48.13	---	59.51	11.38	N	OFF	19.6
0.420540	---	24.30	47.44	23.14	N	OFF	19.6
0.420540	33.49	---	57.44	23.95	N	OFF	19.6
0.433590	---	32.47	47.18	14.71	N	OFF	19.6
0.433590	44.73	---	57.18	12.45	N	OFF	19.6
0.522420	---	24.24	46.00	21.76	N	OFF	19.6
0.522420	29.68	---	56.00	26.32	N	OFF	19.6
0.543120	---	29.60	46.00	16.40	N	OFF	19.6
0.543120	43.92	---	56.00	12.08	N	OFF	19.6
0.627540	---	24.83	46.00	21.17	N	OFF	19.6
0.627540	32.38	---	56.00	23.62	N	OFF	19.6
0.743460	---	27.74	46.00	18.26	N	OFF	19.6
0.743460	36.95	---	56.00	19.05	N	OFF	19.6
1.205250	---	25.42	46.00	20.58	N	OFF	19.6

1.205250	30.93	---	56.00	25.07	N	OFF	19.6
3.820110	---	30.50	46.00	15.50	N	OFF	19.7
3.820110	37.59	---	56.00	18.41	N	OFF	19.7
5.606700	---	25.70	50.00	24.30	N	OFF	19.8
5.606700	32.08	---	60.00	27.92	N	OFF	19.8
5.741790	---	32.90	50.00	17.10	N	OFF	19.9
5.741790	40.15	---	60.00	19.85	N	OFF	19.9
5.874990	---	26.23	50.00	23.77	N	OFF	19.9
5.874990	28.60	---	60.00	31.40	N	OFF	19.9
11.458950	---	31.49	50.00	18.51	N	OFF	20.1
11.458950	38.05	---	60.00	21.95	N	OFF	20.1



Appendix C. Radiated Spurious Emission

Test Engineer :	Karl Hou, Andy Yang and CR Liao	Temperature :	20~25°C
		Relative Humidity :	50~60%

<EUT without HDMI Extender Cable>

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5630.6	54.97	-13.23	68.2	39.31	31.7	13.01	29.05	260	55	P	H
		5695.2	57.12	-44.54	101.66	41.25	31.79	13.11	29.03	260	55	P	H
		5720	66.18	-44.62	110.8	50.18	31.88	13.15	29.03	260	55	P	H
		5725	73.42	-48.78	122.2	57.39	31.9	13.16	29.03	260	55	P	H
	*	5745	116.6	-	-	100.45	31.98	13.19	29.02	260	55	P	H
	*	5745	109.01	-	-	92.86	31.98	13.19	29.02	260	55	A	H
		5613.6	55.94	-12.26	68.2	40.31	31.7	12.98	29.05	159	326	P	V
		5700	59.5	-45.7	105.2	43.61	31.8	13.12	29.03	159	326	P	V
		5718.8	68.76	-41.7	110.46	52.76	31.88	13.15	29.03	159	326	P	V
		5724.8	77.82	-43.92	121.74	61.79	31.9	13.16	29.03	159	326	P	V
	*	5745	120.34	-	-	104.19	31.98	13.19	29.02	159	326	P	V
	*	5745	112.71	-	-	96.56	31.98	13.19	29.02	159	326	A	V



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 157 5785MHz		5645	54.11	-14.09	68.2	38.43	31.7	13.03	29.05	264	55	P	H
		5678.4	54.99	-34.27	89.26	39.18	31.76	13.09	29.04	264	55	P	H
		5713.8	56.24	-52.83	109.07	40.27	31.86	13.14	29.03	264	55	P	H
		5721.8	57.77	-57.13	114.9	41.76	31.89	13.15	29.03	264	55	P	H
	*	5785	116.24	-	-	99.92	32.07	13.26	29.01	264	55	P	H
	*	5785	108.67	-	-	92.35	32.07	13.26	29.01	264	55	A	H
		5850.8	54.64	-65.74	120.38	38.23	32.1	13.31	29	264	55	P	H
		5867.2	55.37	-52.01	107.38	38.91	32.13	13.32	28.99	264	55	P	H
		5878.2	55.39	-47.43	102.82	38.89	32.16	13.33	28.99	264	55	P	H
		5925.8	54.45	-13.75	68.2	37.77	32.3	13.36	28.98	264	55	P	H
		5609.6	55.4	-12.8	68.2	39.77	31.7	12.98	29.05	150	330	P	V
		5698.4	56.72	-47.3	104.02	40.83	31.8	13.12	29.03	150	330	P	V
		5712.8	58.29	-50.5	108.79	42.33	31.85	13.14	29.03	150	330	P	V
		5721.8	58.78	-56.12	114.9	42.77	31.89	13.15	29.03	150	330	P	V
	*	5785	120.54	-	-	104.22	32.07	13.26	29.01	150	330	P	V
	*	5785	113.08	-	-	96.76	32.07	13.26	29.01	150	330	A	V
		5854	58.22	-54.86	113.08	41.8	32.11	13.31	29	150	330	P	V
		5869.2	57.75	-49.07	106.82	41.28	32.14	13.32	28.99	150	330	P	V
		5884.8	57.35	-40.57	97.92	40.84	32.17	13.33	28.99	150	330	P	V
		5938	55.94	-12.26	68.2	39.2	32.35	13.36	28.97	150	330	P	V



WIFI Ant. 0+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 165 5825MHz	*	5825	116.35	-	-	99.95	32.1	13.3	29	270	15	P	H
	*	5825	108.44	-	-	92.04	32.1	13.3	29	270	15	A	H
		5850.2	64.03	-57.71	121.74	47.62	32.1	13.31	29	270	15	P	H
		5857.8	61	-49.01	110.01	44.56	32.12	13.31	28.99	270	15	P	H
		5881.4	56.17	-44.28	100.45	39.67	32.16	13.33	28.99	270	15	P	H
		5942	55.43	-12.77	68.2	38.66	32.37	13.37	28.97	270	15	P	H
	*	5825	120.17	-	-	103.77	32.1	13.3	29	150	322	P	V
	*	5825	112.68	-	-	96.28	32.1	13.3	29	150	322	A	V
		5850	68.88	-53.32	122.2	52.47	32.1	13.31	29	150	322	P	V
		5856.2	65.4	-45.06	110.46	48.97	32.11	13.31	28.99	150	322	P	V
		5882	58.48	-41.52	100	41.98	32.16	13.33	28.99	150	322	P	V
		5947.8	55.83	-12.37	68.2	39.04	32.39	13.37	28.97	150	322	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	59.88	-14.12	74	60.71	40.1	20.19	61.59	244	290	P	H
		11490	48.29	-5.71	54	49.12	40.1	20.19	61.59	244	290	A	H
		17235	52.13	-16.07	68.2	43.63	40.84	25.98	58.82	100	0	P	H
		11490	49.86	-24.14	74	50.69	40.1	20.19	61.59	100	0	P	V
		17235	52.11	-16.09	68.2	43.61	40.84	25.98	58.82	100	0	P	V
802.11a CH 157 5785MHz		11570	59.32	-14.68	74	60.29	39.89	20.28	61.62	257	291	P	H
		11570	49.35	-4.65	54	50.32	39.89	20.28	61.62	257	291	A	H
		17355	51.15	-17.05	68.2	41.61	41.38	26.18	58.53	100	0	P	H
		11570	48.98	-25.02	74	49.95	39.89	20.28	61.62	100	0	P	V
		17355	51.48	-16.72	68.2	41.94	41.38	26.18	58.53	100	0	P	V
802.11a CH 165 5825MHz		11650	57.89	-16.11	74	59.07	39.6	20.37	61.63	246	292	P	H
		11650	46.41	-7.59	54	47.59	39.6	20.37	61.63	246	292	A	H
		17475	51.9	-16.3	68.2	41.27	41.97	26.38	58.23	100	0	P	H
		11650	48.63	-25.37	74	49.81	39.6	20.37	61.63	100	0	P	V
		17475	52.08	-16.12	68.2	41.45	41.97	26.38	58.23	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		5647.6	55.91	-12.29	68.2	40.21	31.7	13.04	29.04	275	17	P	H
		5700	55.97	-49.23	105.2	40.08	31.8	13.12	29.03	275	17	P	H
		5719.8	64.05	-46.69	110.74	48.05	31.88	13.15	29.03	275	17	P	H
		5722.2	73.58	-42.24	115.82	57.56	31.89	13.16	29.03	275	17	P	H
	*	5745	114.52	-	-	98.37	31.98	13.19	29.02	275	17	P	H
	*	5745	106.72	-	-	90.57	31.98	13.19	29.02	275	17	A	H
		5650	56.19	-12.01	68.2	40.49	31.7	13.04	29.04	139	329	P	V
		5698	58.56	-45.17	103.73	42.67	31.8	13.12	29.03	139	329	P	V
		5720	72.56	-38.24	110.8	56.56	31.88	13.15	29.03	139	329	P	V
		5721.2	77.19	-36.35	113.54	61.19	31.88	13.15	29.03	139	329	P	V
	*	5745	118.48	-	-	102.33	31.98	13.19	29.02	139	329	P	V
	*	5745	111.21	-	-	95.06	31.98	13.19	29.02	139	329	A	V



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 157 5785MHz		5648	54.48	-13.72	68.2	38.78	31.7	13.04	29.04	277	18	P	H
		5670.4	55.56	-27.78	83.34	39.79	31.74	13.07	29.04	277	18	P	H
		5703.4	55.71	-50.44	106.15	39.8	31.81	13.13	29.03	277	18	P	H
		5724.4	55.89	-64.94	120.83	39.86	31.9	13.16	29.03	277	18	P	H
	*	5785	115.59	-	-	99.27	32.07	13.26	29.01	277	18	P	H
	*	5785	108.43	-	-	92.11	32.07	13.26	29.01	277	18	A	H
		5853.2	54.67	-60.23	114.9	38.25	32.11	13.31	29	277	18	P	H
		5861	55.99	-53.13	109.12	39.54	32.12	13.32	28.99	277	18	P	H
		5891	55.08	-38.25	93.33	38.56	32.18	13.33	28.99	277	18	P	H
		5930.6	54.2	-14	68.2	37.5	32.32	13.36	28.98	277	18	P	H
		5648.8	57.54	-10.66	68.2	41.84	31.7	13.04	29.04	140	329	P	V
		5694.6	58.79	-42.43	101.22	42.92	31.79	13.11	29.03	140	329	P	V
		5710.4	58.47	-49.64	108.11	42.52	31.84	13.14	29.03	140	329	P	V
		5723	57.73	-59.91	117.64	41.71	31.89	13.16	29.03	140	329	P	V
	*	5785	119.64	-	-	103.32	32.07	13.26	29.01	140	329	P	V
	*	5785	112.74	-	-	96.42	32.07	13.26	29.01	140	329	A	V
		5854.2	57.57	-55.05	112.62	41.14	32.11	13.31	28.99	140	329	P	V
		5870	59.65	-46.95	106.6	43.18	32.14	13.32	28.99	140	329	P	V
		5876.6	57.46	-46.55	104.01	40.97	32.15	13.33	28.99	140	329	P	V
		5930	55.14	-13.06	68.2	38.44	32.32	13.36	28.98	140	329	P	V



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 165 5825MHz	*	5825	115.99	-	-	99.59	32.1	13.3	29	283	19	P	H
	*	5825	108.2	-	-	91.8	32.1	13.3	29	283	19	A	H
		5850.4	66.3	-54.99	121.29	49.89	32.1	13.31	29	283	19	P	H
		5857.2	59.86	-50.32	110.18	43.43	32.11	13.31	28.99	283	19	P	H
		5884.6	56.94	-41.13	98.07	40.43	32.17	13.33	28.99	283	19	P	H
		5947.2	54.88	-13.32	68.2	38.09	32.39	13.37	28.97	283	19	P	H
	*	5825	119.9	-	-	103.5	32.1	13.3	29	134	330	P	V
	*	5825	112.75	-	-	96.35	32.1	13.3	29	134	330	A	V
		5850	72.7	-49.5	122.2	56.29	32.1	13.31	29	134	330	P	V
		5855	65.37	-45.43	110.8	48.94	32.11	13.31	28.99	134	330	P	V
		5877.4	59.47	-43.95	103.42	42.98	32.15	13.33	28.99	134	330	P	V
		5925.8	56.05	-12.15	68.2	39.37	32.3	13.36	28.98	134	330	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		11490	58.34	-15.66	74	59.17	40.1	20.19	61.59	242	292	P	H
		11490	46.77	-7.23	54	47.6	40.1	20.19	61.59	242	292	A	H
		17235	51.28	-16.92	68.2	42.78	40.84	25.98	58.82	100	0	P	H
		11490	49.64	-24.36	74	50.47	40.1	20.19	61.59	100	0	P	V
		17235	51.34	-16.86	68.2	42.84	40.84	25.98	58.82	100	0	P	V
802.11n HT20 CH 157 5785MHz		11570	59.59	-14.41	74	60.56	39.89	20.28	61.62	248	291	P	H
		11570	47.91	-6.09	54	48.88	39.89	20.28	61.62	248	291	A	H
		17355	51.36	-16.84	68.2	41.82	41.38	26.18	58.53	100	0	P	H
		11570	49.23	-24.77	74	50.2	39.89	20.28	61.62	100	0	P	V
		17355	51.48	-16.72	68.2	41.94	41.38	26.18	58.53	100	0	P	V
802.11n HT20 CH 165 5825MHz		11650	57.54	-16.46	74	58.72	39.6	20.37	61.63	267	294	P	H
		11650	46.19	-7.81	54	47.37	39.6	20.37	61.63	267	294	A	H
		17475	53.8	-14.4	68.2	43.17	41.97	26.38	58.23	100	0	P	H
		11650	48.51	-25.49	74	49.69	39.6	20.37	61.63	100	0	P	V
		17475	52.81	-15.39	68.2	42.18	41.97	26.38	58.23	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		5640.4	54.87	-13.33	68.2	39.2	31.7	13.02	29.05	284	17	P	H
		5693.8	61.19	-39.44	100.63	45.32	31.79	13.11	29.03	284	17	P	H
		5718	77.69	-32.55	110.24	61.7	31.87	13.15	29.03	284	17	P	H
		5721.8	78.35	-36.55	114.9	62.34	31.89	13.15	29.03	284	17	P	H
	*	5755	112.45	-	-	96.25	32.01	13.21	29.02	284	17	P	H
	*	5755	105.35	-	-	89.15	32.01	13.21	29.02	284	17	A	H
		5850.8	56.49	-63.89	120.38	40.08	32.1	13.31	29	284	17	P	H
		5869.6	55.05	-51.66	106.71	38.58	32.14	13.32	28.99	284	17	P	H
		5881.6	54.98	-45.32	100.3	38.48	32.16	13.33	28.99	284	17	P	H
		5944.8	56.26	-11.94	68.2	39.48	32.38	13.37	28.97	284	17	P	H
		5649.6	58.61	-9.59	68.2	42.91	31.7	13.04	29.04	138	330	P	V
		5696.4	66.48	-36.07	102.55	50.61	31.79	13.11	29.03	138	330	P	V
		5720	83.08	-27.72	110.8	67.08	31.88	13.15	29.03	138	330	P	V
		5725	83.79	-38.41	122.2	67.76	31.9	13.16	29.03	138	330	P	V
	*	5755	117.35	-	-	101.15	32.01	13.21	29.02	138	330	P	V
	*	5755	109.92	-	-	93.72	32.01	13.21	29.02	138	330	A	V
		5852.4	57.43	-59.3	116.73	41.02	32.1	13.31	29	138	330	P	V
		5869.6	58.14	-48.57	106.71	41.67	32.14	13.32	28.99	138	330	P	V
		5875.2	57.12	-47.93	105.05	40.63	32.15	13.33	28.99	138	330	P	V
		5933.2	55.04	-13.16	68.2	38.33	32.33	13.36	28.98	138	330	P	V



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 159 5795MHz		5618	54.38	-13.82	68.2	38.74	31.7	12.99	29.05	270	17	P	H
		5698.4	56.54	-47.48	104.02	40.65	31.8	13.12	29.03	270	17	P	H
		5718.8	58.82	-51.64	110.46	42.82	31.88	13.15	29.03	270	17	P	H
		5721.8	59.29	-55.61	114.9	43.28	31.89	13.15	29.03	270	17	P	H
	*	5795	113.33	-	-	96.98	32.09	13.27	29.01	270	17	P	H
	*	5795	106.06	-	-	89.71	32.09	13.27	29.01	270	17	A	H
		5852.8	61.46	-54.36	115.82	45.04	32.11	13.31	29	270	17	P	H
		5858.6	58.3	-51.49	109.79	41.85	32.12	13.32	28.99	270	17	P	H
		5886.2	56.29	-40.59	96.88	39.78	32.17	13.33	28.99	270	17	P	H
		5937.8	54.76	-13.44	68.2	38.02	32.35	13.36	28.97	270	17	P	H
		5646.4	56.09	-12.11	68.2	40.4	31.7	13.03	29.04	142	329	P	V
		5695.4	58.61	-43.2	101.81	42.74	31.79	13.11	29.03	142	329	P	V
		5714.2	61.21	-47.97	109.18	45.24	31.86	13.14	29.03	142	329	P	V
		5724.6	62.92	-58.37	121.29	46.89	31.9	13.16	29.03	142	329	P	V
	*	5795	117.34	-	-	100.99	32.09	13.27	29.01	142	329	P	V
	*	5795	110.05	-	-	93.7	32.09	13.27	29.01	142	329	A	V
		5850.6	64.17	-56.66	120.83	47.76	32.1	13.31	29	142	329	P	V
		5855.2	63.13	-47.61	110.74	46.7	32.11	13.31	28.99	142	329	P	V
		5878.8	59.35	-43.03	102.38	42.85	32.16	13.33	28.99	142	329	P	V
		5940.4	55.02	-13.18	68.2	38.27	32.36	13.36	28.97	142	329	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		11510	55.87	-18.13	74	56.7	40.07	20.22	61.6	234	292	P	H
		11510	45.48	-8.52	54	46.31	40.07	20.22	61.6	234	292	A	H
		17265	50.98	-17.22	68.2	42.24	40.96	26.03	58.75	100	0	P	H
		11510	49.2	-24.8	74	50.03	40.07	20.22	61.6	100	0	P	V
		17265	51.08	-17.12	68.2	42.34	40.96	26.03	58.75	100	0	P	V
802.11n HT40 CH 159 5795MHz		11590	56.85	-17.15	74	57.86	39.83	20.3	61.62	244	292	P	H
		11590	45.12	-8.88	54	46.13	39.83	20.3	61.62	244	292	A	H
		17385	51.99	-16.21	68.2	42.18	41.52	26.23	58.45	100	0	P	H
		11590	49.13	-24.87	74	50.14	39.83	20.3	61.62	100	0	P	V
		17385	51.54	-16.66	68.2	41.73	41.52	26.23	58.45	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		5642.6	59.78	-8.42	68.2	44.1	31.7	13.03	29.05	184	18	P	H
		5697.2	73.53	-29.61	103.14	57.65	31.79	13.12	29.03	184	18	P	H
		5717.4	76.06	-34.01	110.07	60.07	31.87	13.15	29.03	184	18	P	H
		5722.8	76.73	-40.45	117.18	60.71	31.89	13.16	29.03	184	18	P	H
	*	5775	109.46	-	-	93.18	32.05	13.24	29.01	184	18	P	H
	*	5775	101.68	-	-	85.4	32.05	13.24	29.01	184	18	A	H
		5852.2	69.02	-48.16	117.18	52.61	32.1	13.31	29	184	18	P	H
		5857.6	69.35	-40.72	110.07	52.91	32.12	13.31	28.99	184	18	P	H
		5878	60.66	-42.31	102.97	44.16	32.16	13.33	28.99	184	18	P	H
		5942.8	56.35	-11.85	68.2	39.58	32.37	13.37	28.97	184	18	P	H
		5645.8	63.9	-4.3	68.2	48.22	31.7	13.03	29.05	146	332	P	V
		5690.2	80.8	-17.17	97.97	64.95	31.78	13.1	29.03	146	332	P	V
		5719.8	83.53	-27.21	110.74	67.53	31.88	13.15	29.03	146	332	P	V
		5725	85.27	-36.93	122.2	69.24	31.9	13.16	29.03	146	332	P	V
	*	5775	114.56	-	-	98.28	32.05	13.24	29.01	146	332	P	V
	*	5775	106.79	-	-	90.51	32.05	13.24	29.01	146	332	A	V
		5850	78.69	-43.51	122.2	62.28	32.1	13.31	29	146	332	P	V
		5855.8	76.13	-34.45	110.58	59.7	32.11	13.31	28.99	146	332	P	V
		5875	68.86	-36.34	105.2	52.38	32.15	13.32	28.99	146	332	P	V
		5937	56.11	-12.09	68.2	39.38	32.35	13.36	28.98	146	332	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 0+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		11550	49.24	-24.76	74	50.16	39.95	20.26	61.61	100	0	P	H
VHT80		17325	52.05	-16.15	68.2	42.79	41.22	26.13	58.6	100	0	P	H
CH 155		11550	49.79	-24.21	74	50.71	39.95	20.26	61.61	100	0	P	V
5775MHz		17325	52.44	-15.76	68.2	43.18	41.22	26.13	58.6	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT80 LF		107.6	27.91	-15.59	43.5	41.85	16.54	1.78	32.26	-	-	P	H
		321.97	34.63	-11.37	46	44.37	19.48	3.1	32.32	-	-	P	H
		445.16	38.99	-7.01	46	44.51	23.04	3.59	32.15	-	-	P	H
		613.94	36.73	-9.27	46	38.84	25.58	4.26	31.95	100	36	QP	H
		741.98	36.93	-9.07	46	36.44	28.05	4.68	32.24	-	-	P	H
		897.18	34.98	-11.02	46	32.79	28.98	5.14	31.93	-	-	P	H
		107.6	27.91	-15.59	43.5	41.85	16.54	1.78	32.26	-	-	P	H
		189.08	28.08	-15.42	43.5	43.29	14.71	2.39	32.31	-	-	P	V
		329.73	28.6	-17.4	46	38.1	19.69	3.12	32.31	-	-	P	V
		445.16	39.61	-6.39	46	45.13	23.04	3.59	32.15	-	-	P	V
		615.88	32.99	-13.01	46	35.08	25.61	4.26	31.96	151	326	QP	V
		741.98	30.84	-15.16	46	30.35	28.05	4.68	32.24	-	-	P	V
		838.01	31.31	-14.69	46	29.68	28.85	4.98	32.2	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

**Emission above 18GHz****5GHz WIFI 802.11ac VHT80 (SHF @ 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.	
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz		32938	43.53	-24.67	68.2	39.65	40.42	17.58	54.12	150	0	P	H
802.11ac		37184	46.13	-22.07	68.2	40.5	42.76	19.79	56.92	150	0	P	H
VHT80		33840	43.66	-24.54	68.2	39.36	41.03	17.58	54.71	150	0	P	V
SHF		38108	47.07	-21.13	68.2	39.91	43.29	19.85	55.98	150	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



<X Plane>

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		5650	61.44	-6.76	68.2	45.74	31.7	13.04	29.04	100	119	P	H
		5694.2	75.77	-25.15	100.92	59.9	31.79	13.11	29.03	100	119	P	H
		5714.4	78.56	-30.67	109.23	62.59	31.86	13.14	29.03	100	119	P	H
		5724.4	78.24	-42.59	120.83	62.21	31.9	13.16	29.03	100	119	P	H
	*	5775	110.27	-	-	93.99	32.05	13.24	29.01	100	119	P	H
	*	5775	101.9	-	-	85.62	32.05	13.24	29.01	100	119	A	H
		5851	71.16	-48.76	119.92	54.75	32.1	13.31	29	100	119	P	H
		5859.8	70.13	-39.32	109.45	53.68	32.12	13.32	28.99	100	119	P	H
		5875.4	63.85	-41.05	104.9	47.36	32.15	13.33	28.99	100	119	P	H
		5932.8	54.29	-13.91	68.2	37.58	32.33	13.36	28.98	100	119	P	H
		5643.8	55.31	-12.89	68.2	39.63	31.7	13.03	29.05	399	241	P	V
		5699.2	64.75	-39.86	104.61	48.86	31.8	13.12	29.03	399	241	P	V
		5719	68.27	-42.25	110.52	52.27	31.88	13.15	29.03	399	241	P	V
		5723	68.89	-48.75	117.64	52.87	31.89	13.16	29.03	399	241	P	V
	*	5775	105.07	-	-	88.79	32.05	13.24	29.01	399	241	P	V
	*	5775	97.34	-	-	81.06	32.05	13.24	29.01	399	241	A	V
		5853.2	63.27	-51.63	114.9	46.85	32.11	13.31	29	399	241	P	V
		5857.8	62.1	-47.91	110.01	45.66	32.12	13.31	28.99	399	241	P	V
		5877	58.14	-45.57	103.71	41.65	32.15	13.33	28.99	399	241	P	V
		5930.6	54.42	-13.78	68.2	37.72	32.32	13.36	28.98	399	241	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 0+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		11550	49.78	-24.22	74	50.05	39.95	20.26	60.96	100	0	P	H
VHT80		17325	53.55	-14.65	68.2	44.4	41.22	26.13	58.71	100	0	P	H
CH 155		11550	49.48	-24.52	74	49.75	39.95	20.26	60.96	100	0	P	V
5775MHz		17325	53.16	-15.04	68.2	44.01	41.22	26.13	58.71	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average 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	Peak or Average
H/V	Horizontal or Vertical



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.	
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		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”.



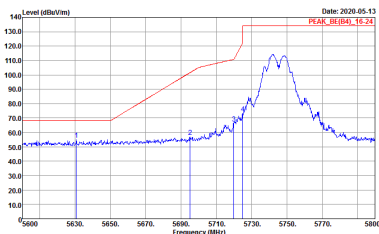
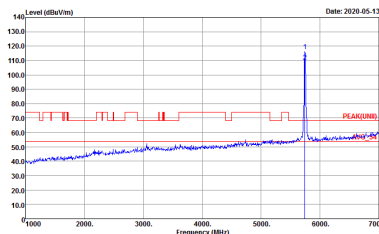
Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Karl Hou, Andy Yang and CR Liao	Temperature :	20~25°C
		Relative Humidity :	50~60%

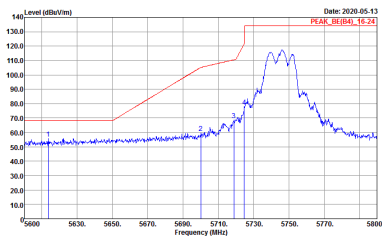
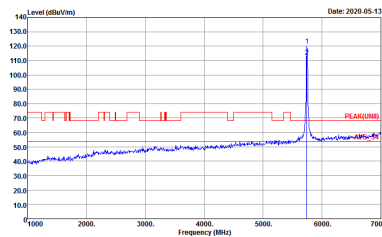
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Band 4 - 5725~5850MHz

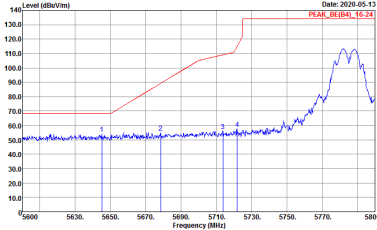
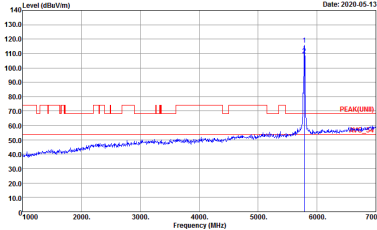
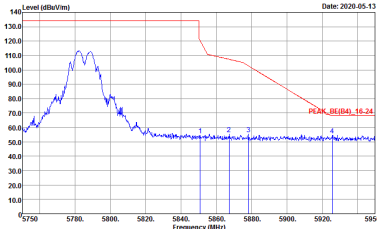
WIFI 802.11a (Band Edge @ 3m)

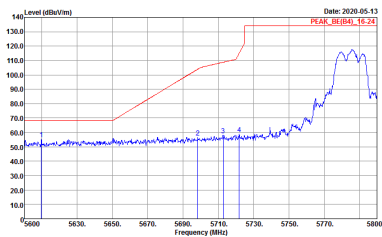
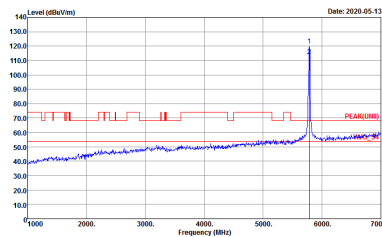
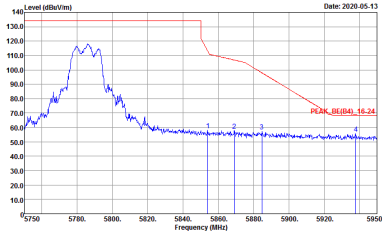
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(84)_16-24 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01



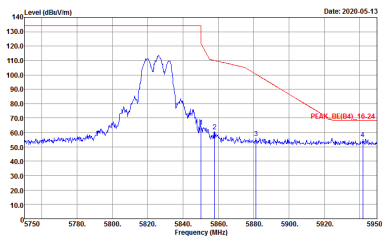
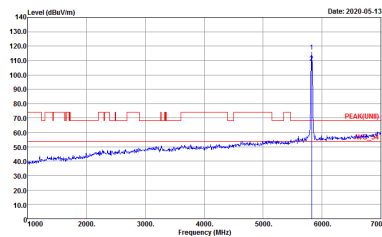
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH16-11Y Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01



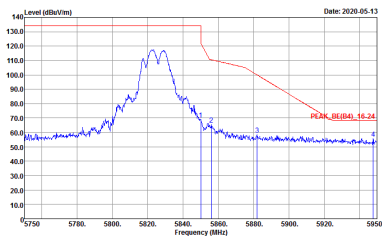
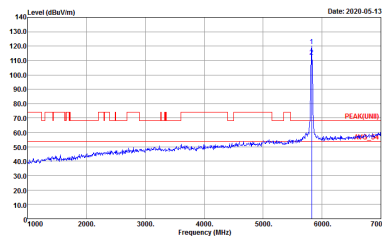
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	Left blank



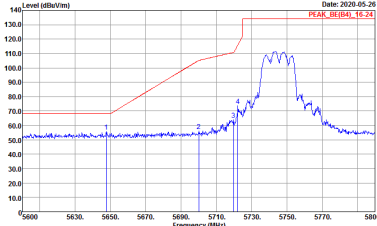
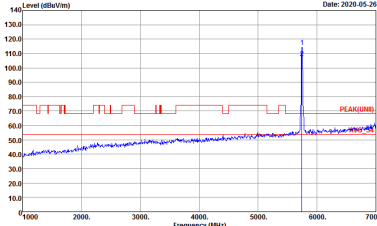
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH165-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH165-11Y Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01



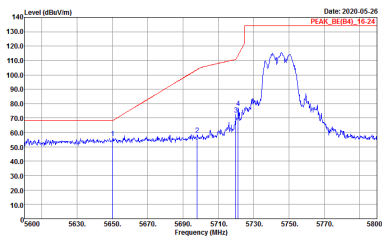
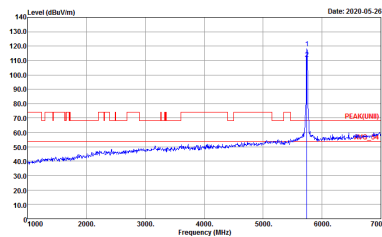
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH165-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH165-11Y Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01



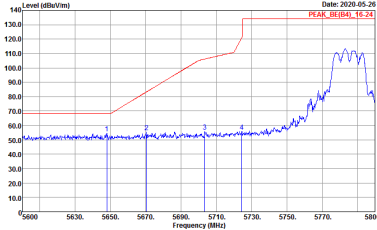
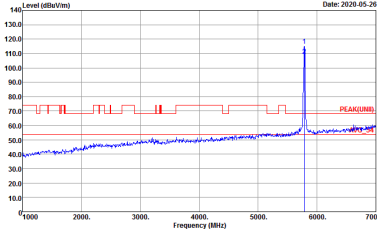
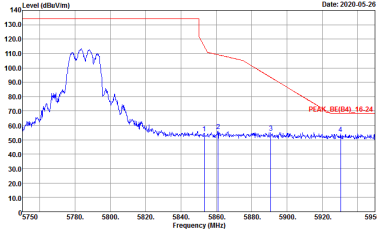
Band 4 5725~5850MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

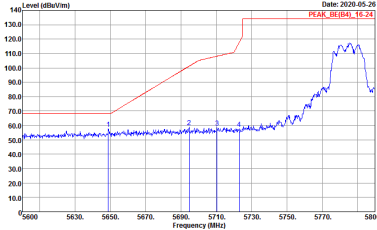
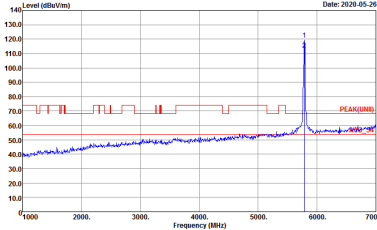
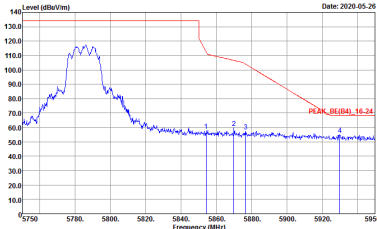
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(84)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01



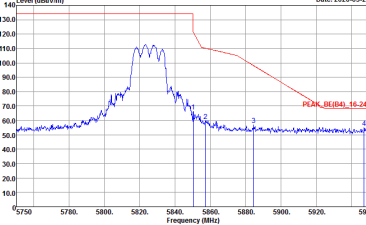
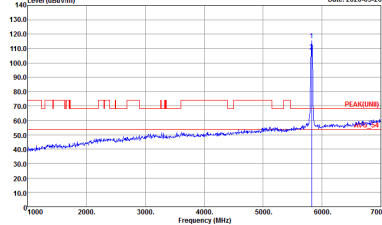
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH16-11Y Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01



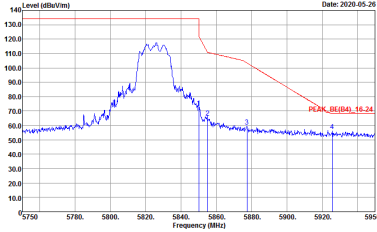
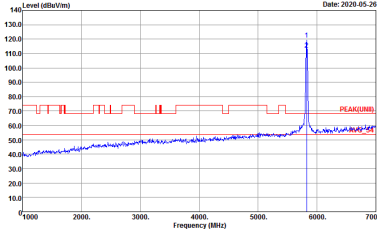
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Project : 020402-01	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	Left blank



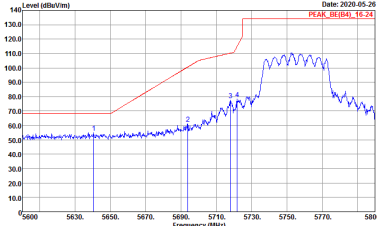
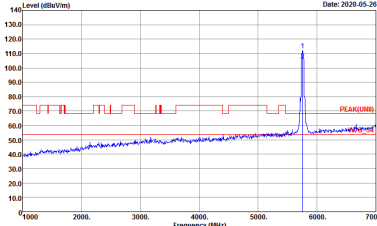
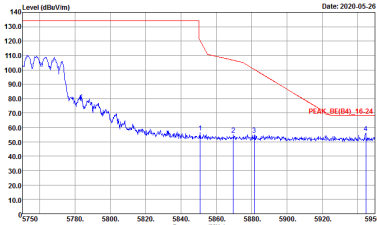
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH16-11Y Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01



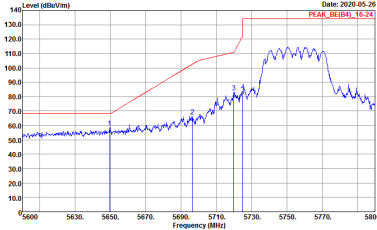
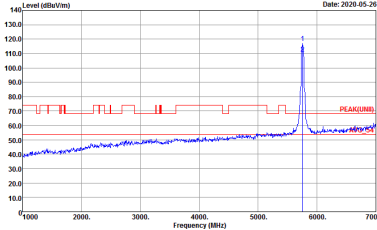
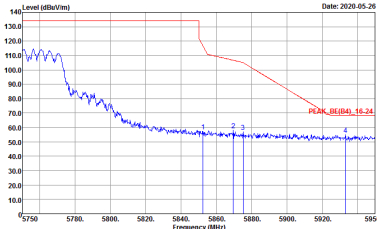
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01	 Site : 03CH16-11Y Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01



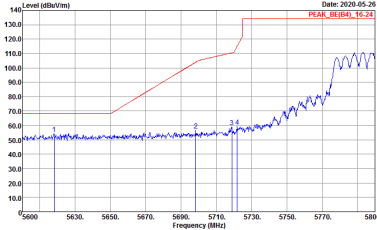
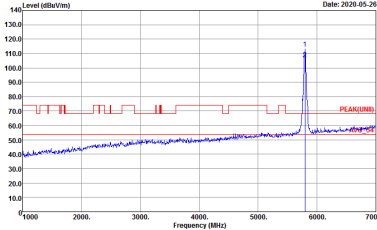
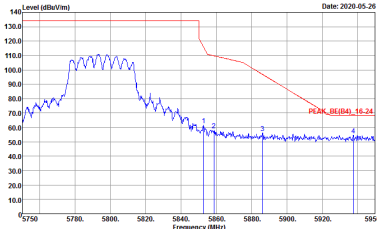
Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

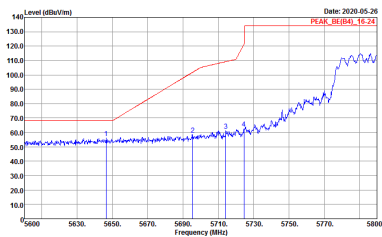
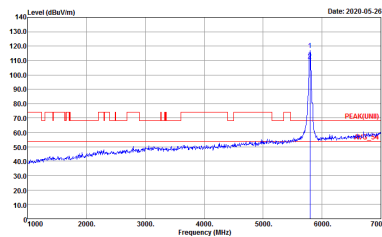
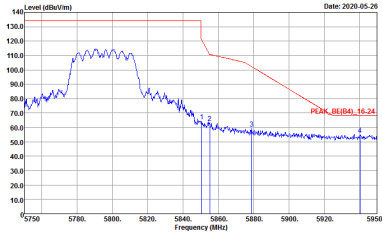
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	Left blank



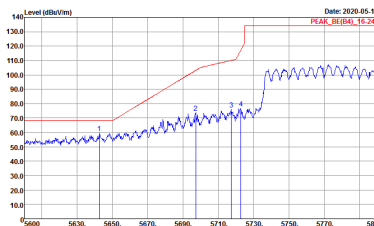
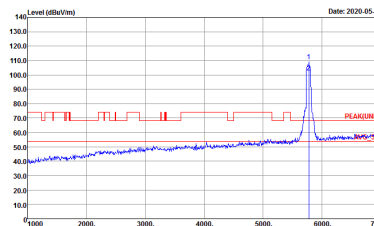
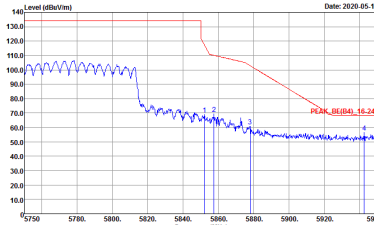
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	Left blank

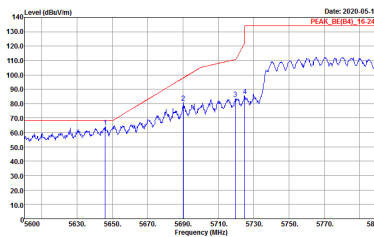
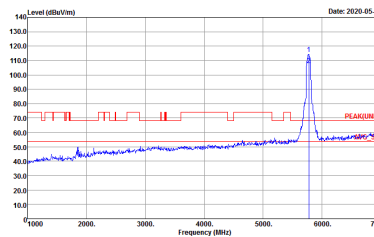
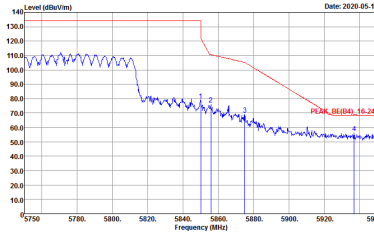


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(FUND) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	Left blank

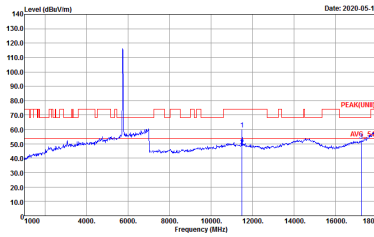
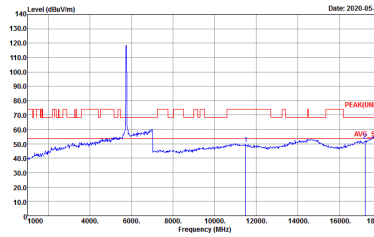
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	Left blank

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

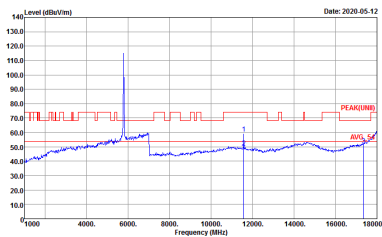
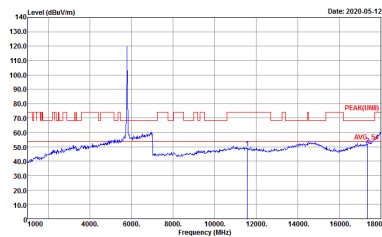
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	Left blank

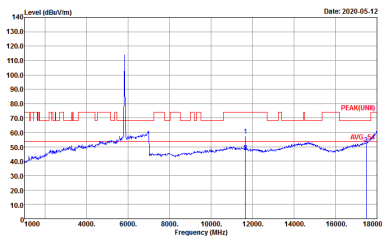
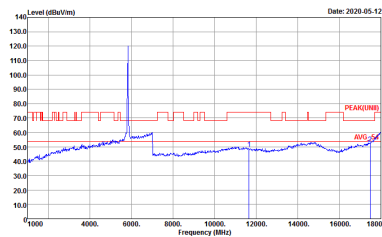
Band 4 - 5725~5850MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01



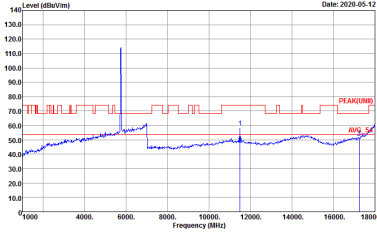
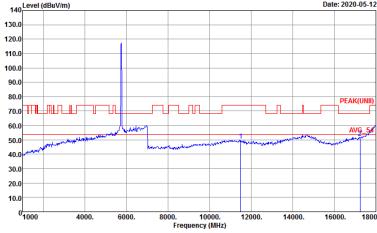
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-11Y Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-11Y Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01

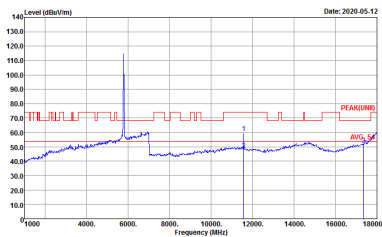
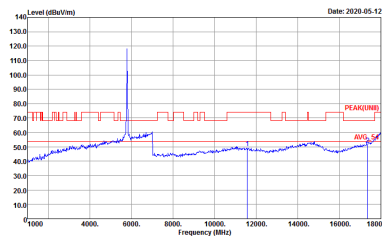


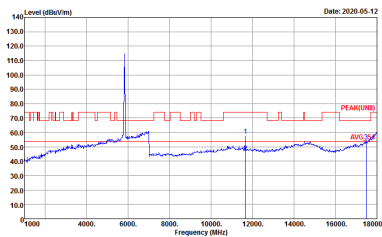
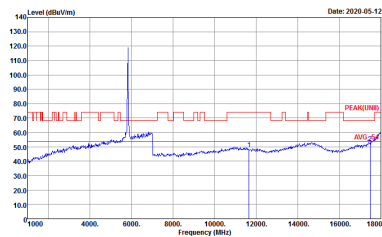
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-11Y Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-11Y Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01



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

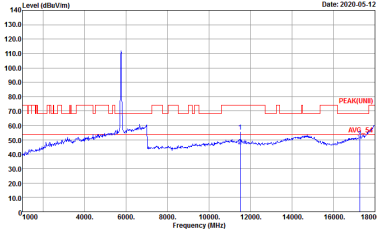
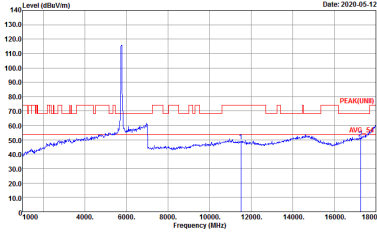
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-11Y Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-11Y Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01

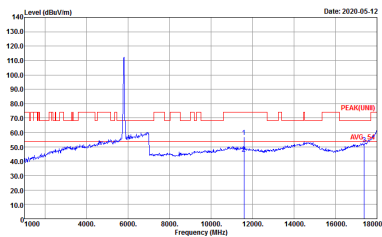
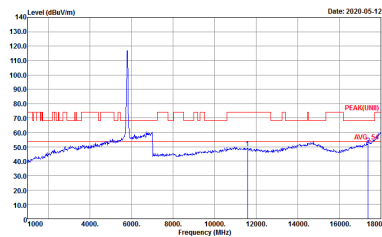
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Date: 2020-05-12 Site : 03CH16-11Y Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Date: 2020-05-12 Site : 03CH16-11Y Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01



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

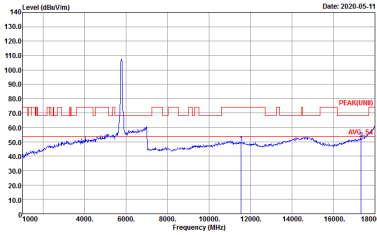
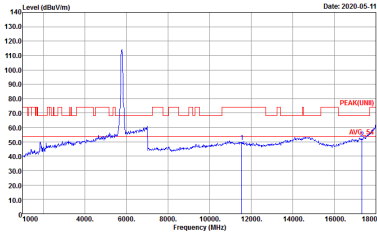
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-11Y Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-11Y Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01



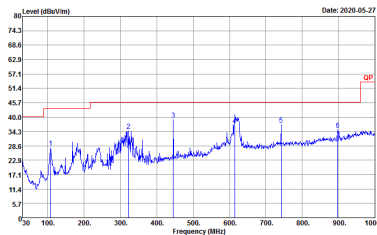
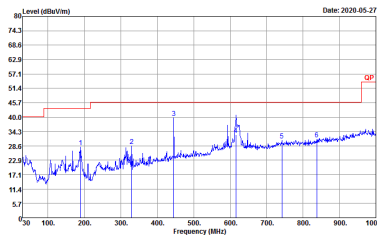
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01

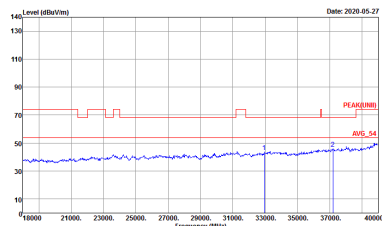
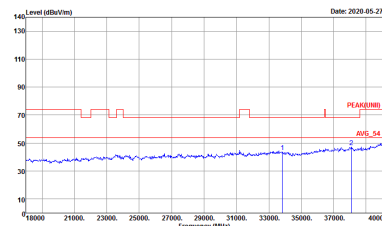


Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT80 LF	
0+1	Horizontal	Vertical
QP / Peak	 Site : 03CH16-HY Condition : QP 3m BIL06_47020406 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : QP 3m BIL06_47020406 VERTICAL Detector : Peak Project : 020402-01

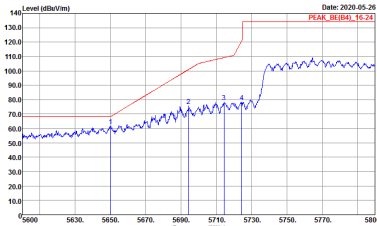
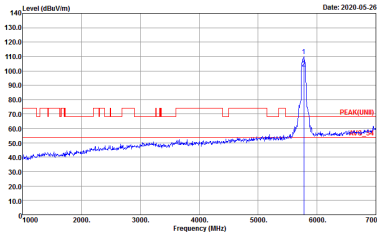
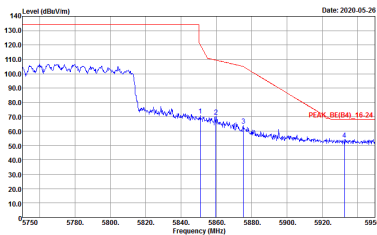
Emission above 18GHz
5GHz WIFI 802.11ac VHT80 (SHF)

WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT80 LF	
0+1	Horizontal	Vertical
QP / Peak	 Site : 03CH16-HY Condition : PEAK(UNIT) 1m SHF HORN BB-HA9170584 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 1m SHF HORN BB-HA9170584 VERTICAL Detector : Peak Project : 020402-01

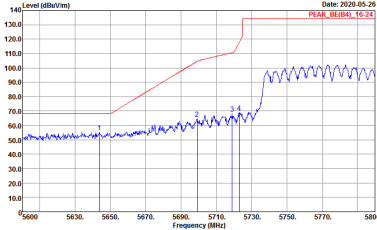
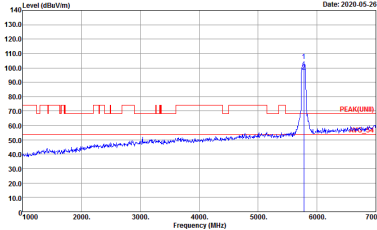
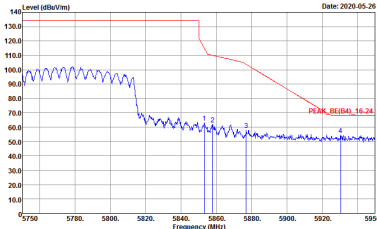


<X Plane>

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

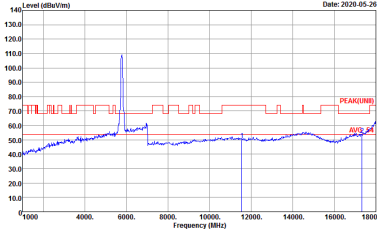
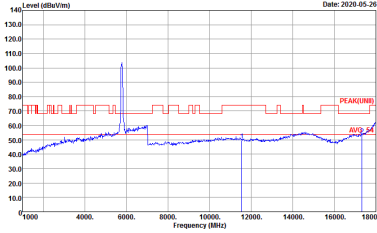
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(FUND) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01
	 Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01	Left blank



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 020402-01	 Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 020402-01



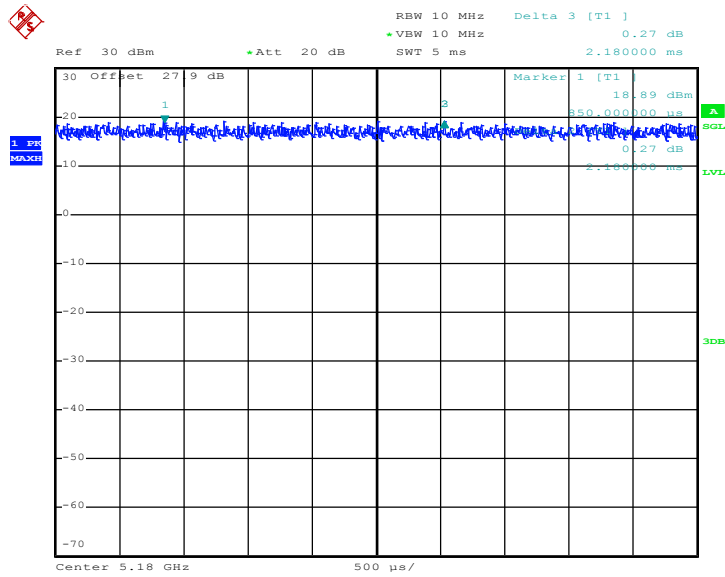
Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
0+1	802.11a for Ant. 0	100.00	-	-	10Hz	0.00
0+1	802.11a for Ant. 1	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11n HT20 for Ant. 0	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11n HT20 for Ant. 1	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11n HT40 for Ant. 0	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11n HT40 for Ant. 1	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11ac VHT80 for Ant. 0	100.00	-	-	10Hz	0.00
0+1	5GHz 802.11ac VHT80 for Ant. 1	100.00	-	-	10Hz	0.00



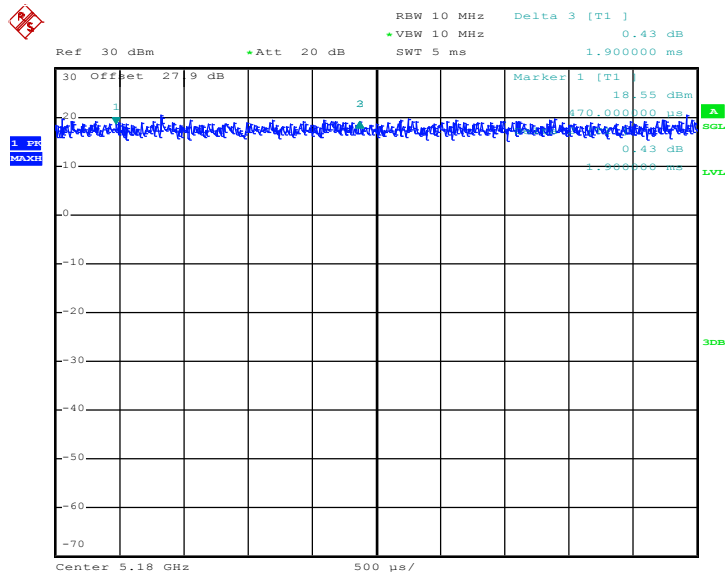
MIMO <Ant. 0>

802.11a



Date: 13.APR.2020 09:32:50

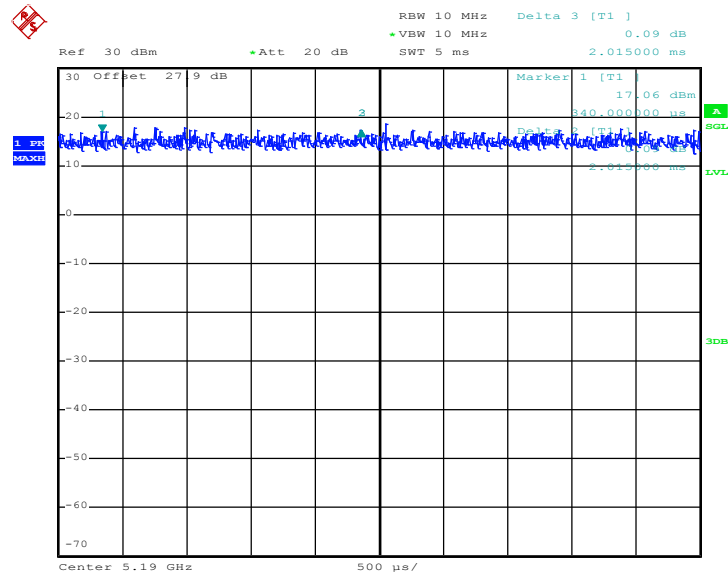
802.11n HT20



Date: 13.APR.2020 09:39:23

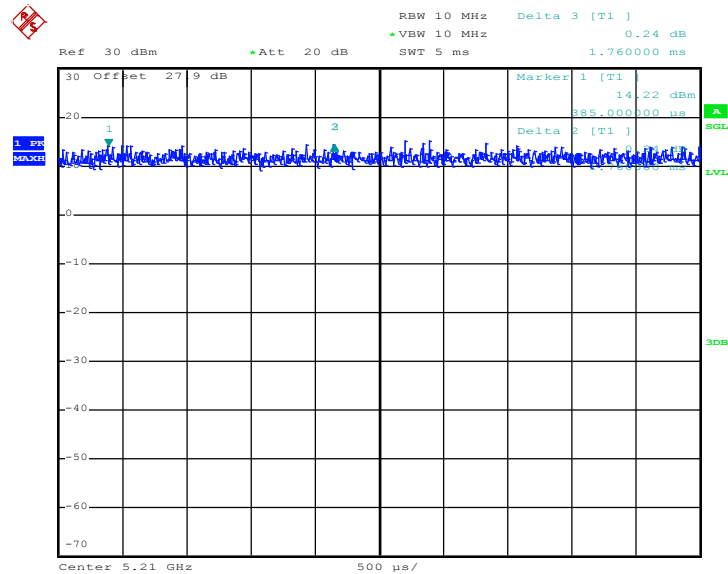


802.11n HT40



Date: 13.APR.2020 10:08:47

802.11ac VHT80

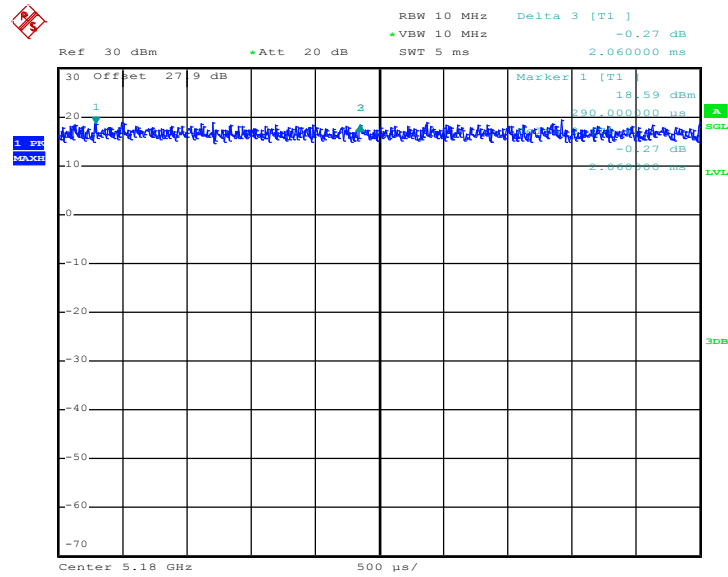


Date: 13.APR.2020 10:15:20



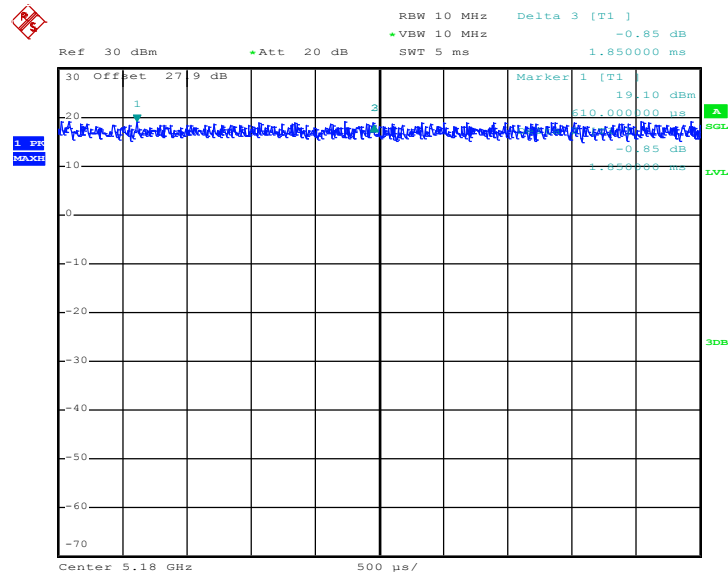
MIMO <Ant. 1>

802.11a



Date: 13.APR.2020 09:37:29

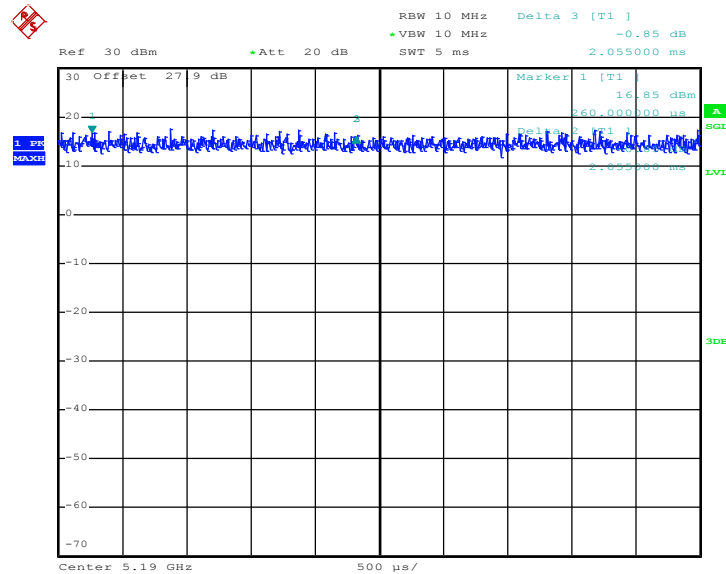
802.11n HT20



Date: 13.APR.2020 09:41:37

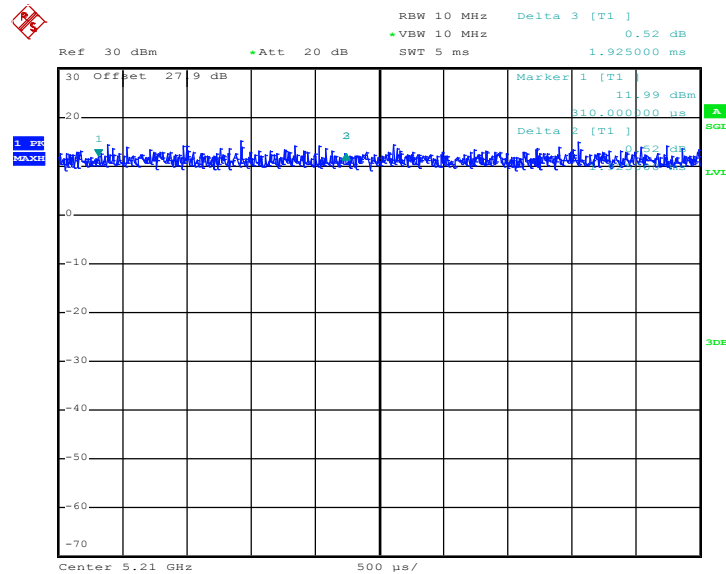


802.11n HT40



Date: 13.APR.2020 10:09:39

802.11ac VHT80



Date: 13.APR.2020 10:17:02

—THE END—