



FCC RADIO TEST REPORT

FCC ID : P4Q-N564A
Equipment : Tablet
Brand Name : MiTAC, Mio, NAVMAN, MAGELLAN
Model Name : N564A
Applicant : MiTAC Digital Technology Corporation
No.200, Wen Hua 2nd Rd., Guishan Dist., Taoyuan City 333,
Taiwan (R.O.C.)
Manufacturer : MITAC Computer (Kunshan) Co., Ltd.
No. 269, 2nd Avenue, District A, Comprehensive Free Trade
Zone, 300 Kunshan, China
Standard : FCC PART 15 Subpart E §15.407

The product was received on Apr. 11, 2018 and testing was started from Apr. 18, 2018 and completed on May 06, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant 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.

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|--|---------------------|--|--------------------|---|
| - | 15.403(i) | 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 2.01 dB at 5470.000 MHz |
| 3.3 | 15.207 | AC Conducted Emission | Pass | Under limit 9.27 dB at 0.562 MHz |
| - | 15.407(c) | Automatically Discontinue Transmission | Not Required | - |
| 3.4 | 15.203 15.407(a) | Antenna Requirement | Pass | - |
| Remark: | | | | |
| 1. Not required means after assessing, test items are not necessary to carry out. | | | | |
| 2. This is a variant report. All the test cases were performed on original report which can be referred to Sporton Report Number FR722135-07E (FCC ID: P4Q-N564B). | | | | |

Reviewed by: Joseph Lin

Report Producer: Polly Tsai



1 General Description

1.1 Product Feature of Equipment Under Test

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

| Product Specification subjective to this standard | |
|---|--|
| Sample 1 | EUT with SKU 1 |
| Sample 2 | EUT with SKU 2 |
| Sample 3 | EUT with SKU 3 |
| Integrated WLAN Module | Brand Name: Qualcomm Model Name: WCN3660B |
| Antenna Type | WLAN: PIFA Antenna Bluetooth: PIFA Antenna GPS/GLONASS: PATCH Antenna NFC: Loop Antenna |

Remark: All test items were performed with Sample 3.

<Sample Information>

| SKU | SKU 1 | SKU 2 | SKU3 |
|----------------|--------------------|--------------------|--------------------|
| Model name | N564B | N564B | N564A |
| WLAN | Support(2.4G + 5G) | Support(2.4G + 5G) | Support(2.4G + 5G) |
| WWAN | Support | Support | Not Support |
| RFID(13.56MHz) | Support | Not Support | Support |
| RAM | 2G | 2G | 2G |
| Storage | 16G | 16G | 16G |
| Camera | Support | Support | Support |

1.2 Modification of EUT

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



1.3 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

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

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

| | | |
|---------------------------|---|--|
| Test Site | SPORTON INTERNATIONAL INC. | |
| 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. | |
| | 03CH12-HY | |

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

1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ ANSI C63.10-2013

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



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

| Frequency Band | Channel | Freq. (MHz) | Channel | Freq. (MHz) |
|--------------------------------------|---------|-------------|---------|-------------|
| 5150-5250 MHz Band 1 (U-NII-1) | 36 | 5180 | 44 | 5220 |
| | 38* | 5190 | 46* | 5230 |
| | 40 | 5200 | 48 | 5240 |
| | - | - | | |

| 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 |
| | - | - | | |

| 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 |
| | - | - | 134* | 5670 |
| | 108 | 5540 | 136 | 5680 |
| | 110* | 5550 | 140 | 5700 |

Note: The above Frequency and Channel in "*" were 802.11n HT40.



2.2 Test Mode

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

| Modulation | Data Rate |
|--------------|-----------|
| 802.11a | 6 Mbps |
| 802.11n HT20 | MCS0 |
| 802.11n HT40 | MCS0 |

| Test Cases | |
|------------------------------|--|
| AC Conducted Emission | Mode 1: Bluetooth Link + WLAN (2.4GHz) Link + GLONASS Rx + Cradle 1 + Earphone + USB Cable (Charging from AC Adapter) + USB Flash Drive (Link) |

| Ch. # | | Band I : 5150-5250 MHz | Band II : 5250-5350 MHz | Band III : 5470-5725MHz |
|-------|--------|------------------------|-------------------------|-------------------------|
| | | 802.11a | 802.11a | 802.11a |
| L | Low | 36 | - | - |
| M | Middle | - | 60 | - |
| H | High | - | - | 140 |

| 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 | 36 | - | - |
| M | Middle | - | - | 116 |
| H | High | - | 64 | - |

| Ch. # | | Band I : 5150-5250 MHz | Band II : 5250-5350 MHz | Band III : 5470-5725MHz |
|-------|--------|------------------------|-------------------------|-------------------------|
| | | 802.11n HT40 | 802.11n HT40 | 802.11n HT40 |
| L | Low | 38 | - | 102 |
| M | Middle | - | - | - |
| H | High | - | 62 | - |

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

| Item | Equipment | Trade Name | Model Name | FCC ID | Data Cable | Power Cord |
|------|--------------------|---------------|----------------|--|------------------|--|
| 1. | GPS Station | Pendulum | GSG-54 | N/A | N/A | Unshielded, 1.8 m |
| 2. | WLAN AP | ASUS | RT-AC66U | MSQ-RTAC66U | N/A | Unshielded, 1.8 m |
| 3. | Bluetooth Earphone | Sony Ericsson | MW600 | PY7DDA-2029 | N/A | N/A |
| 4. | iPod Earphone | Apple | N/A | Verification | Unshielded, 1.0m | N/A |
| 5. | Notebook | DELL | Latitude E6320 | FCC DoC/ Contains FCC ID: QDS-BRCM1054 | N/A | AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m |
| 6. | SD Card | SanDisk | MicroSD HC | FCC DoC | N/A | N/A |
| 7. | USB Flash Drive | Kingston | DataTraveler | N/A | N/A | N/A |

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT” 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 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

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

The measuring equipment is listed in the section 4 of this test report.

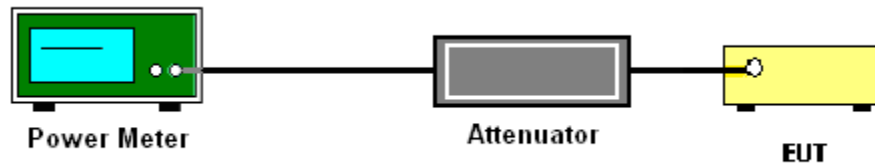
3.1.3 Test Procedures

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

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

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

3.1.4 Test Setup



3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



3.2 Unwanted Emissions Measurement

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

3.2.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 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.

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



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

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

- (i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.³
- (ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.⁴

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

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

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 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

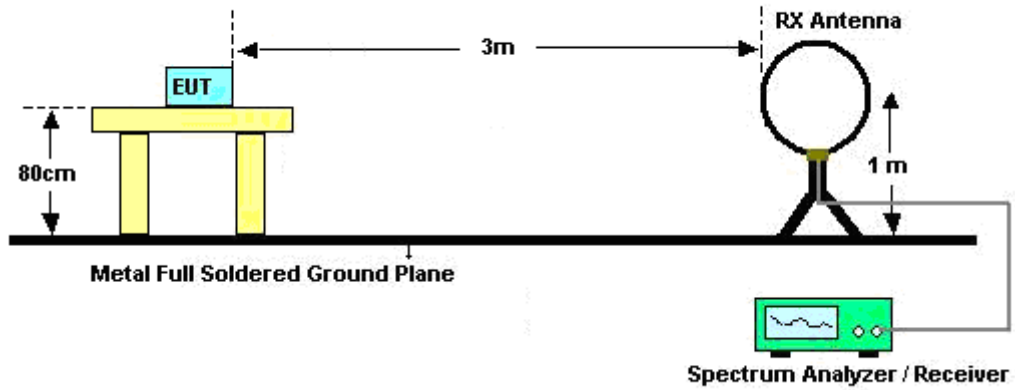


(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

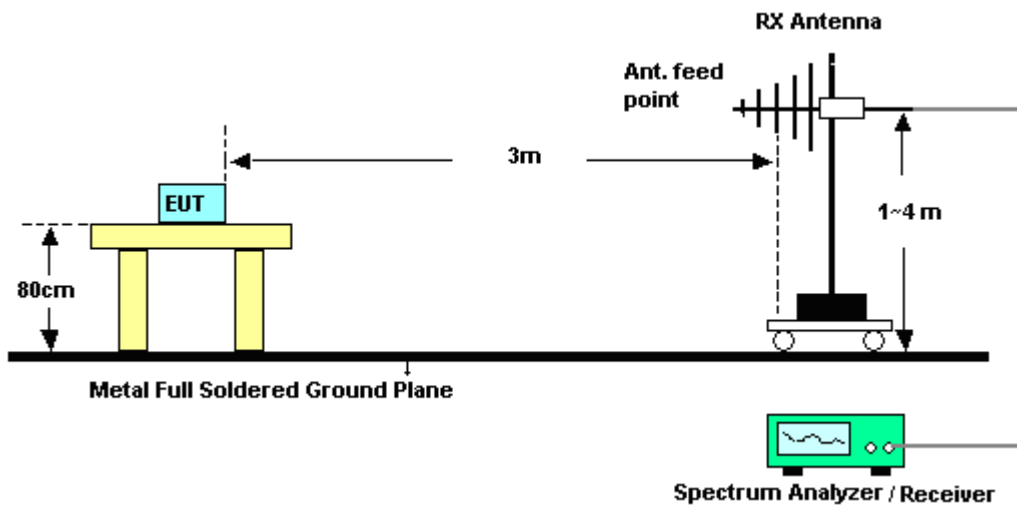
- RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. 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.

3.2.4 Test Setup

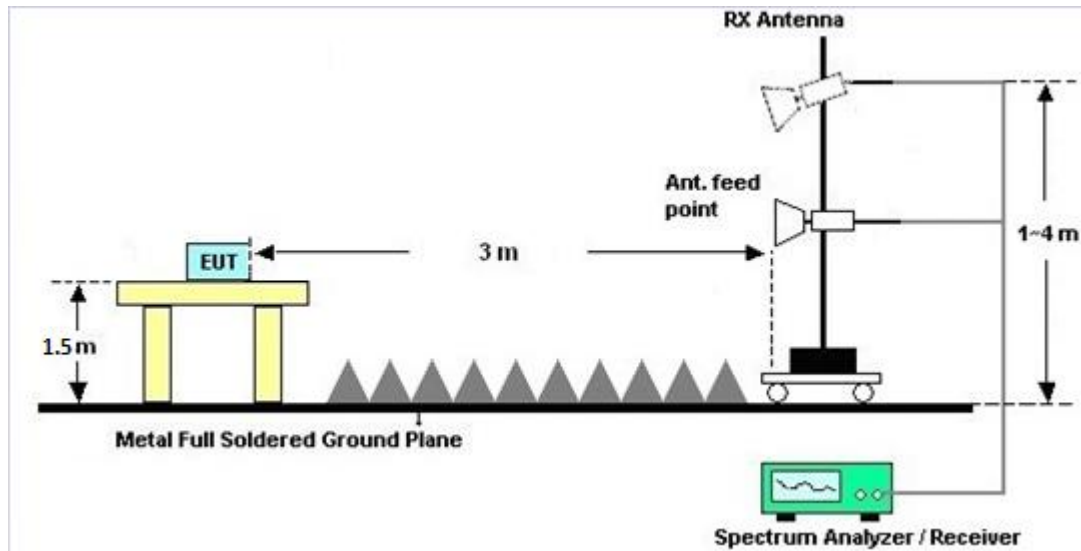
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.2.5 Test Results of Radiated 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 semi-Anechoic chamber, and the result came out very similar.

3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.2.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.



3.3 AC Conducted Emission Measurement

3.3.1 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.

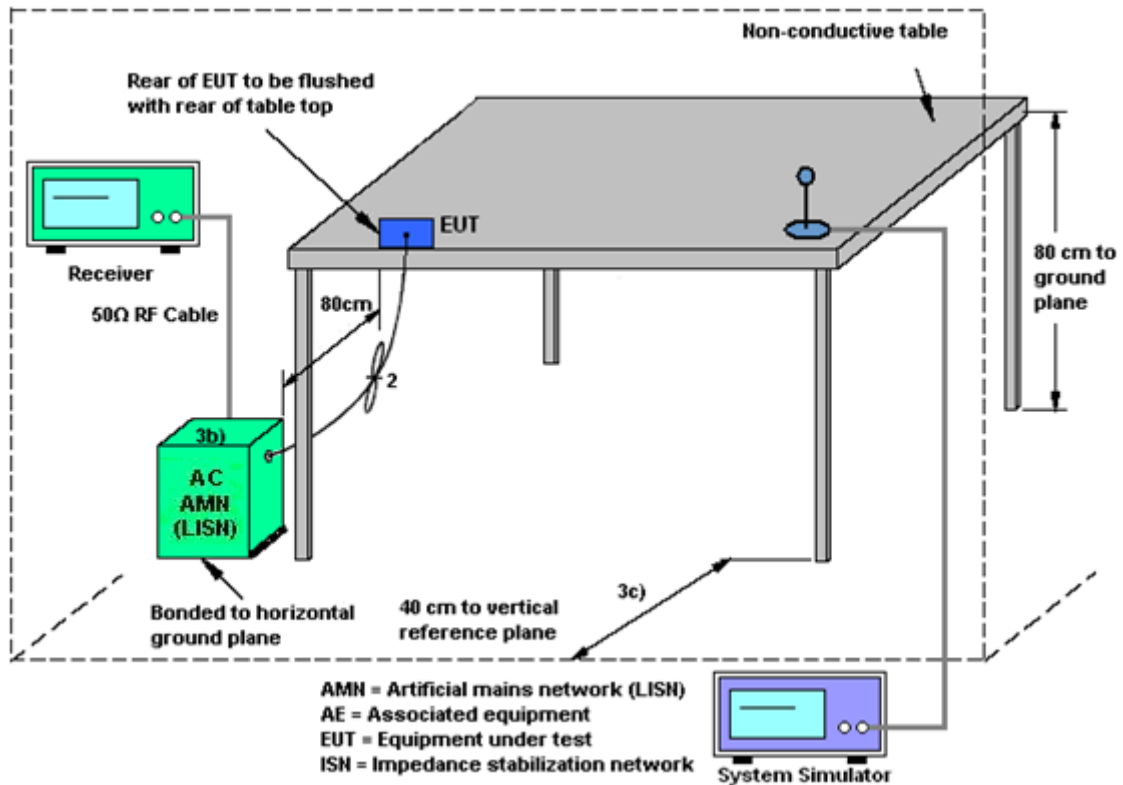
3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 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.

3.3.4 Test Setup



3.3.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.4 Antenna Requirements

3.4.1 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.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.4.3 Antenna Gain

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



4 List of Measuring Equipment

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|-----------------------|-----------------------|-------------------------|----------------------|-------------------------------------|------------------|---------------------------------|---------------|--------------------------|
| Power Meter | Anritsu | ML2495A | 0932001 | N/A | Sep. 26, 2017 | Apr. 18, 2018~ Apr. 19, 2018 | Sep. 25, 2018 | Conducted (TH05-HY) |
| Power Sensor | Anritsu | MA2411B | 0846202 | 300MHz~40GHz | Sep. 26, 2017 | Apr. 18, 2018~ Apr. 19, 2018 | Sep. 25, 2018 | Conducted (TH05-HY) |
| Spectrum Analyzer | Rohde & Schwarz | FSP30 | 101067 | 9kHz ~ 30GHz | Nov. 13, 2017 | Apr. 18, 2018~ Apr. 19, 2018 | Nov. 12, 2018 | Conducted (TH05-HY) |
| Switch Box & RF Cable | Burgeon | ETF-058 | EC130048 4 | N/A | Mar. 01, 2018 | Apr. 18, 2018~ Apr. 19, 2018 | Feb. 28, 2019 | Conducted (TH05-HY) |
| AC Power Source | ChainTek | APC-1000W | N/A | N/A | N/A | Apr. 19, 2018 | N/A | Conduction (CO05-HY) |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | 102388 | 3.6GHz | Dec. 08, 2017 | Apr. 19, 2018 | Dec. 07, 2018 | Conduction (CO05-HY) |
| LISN | Rohde & Schwarz | ENV216 | 100080 | 9kHz~30MHz | Nov. 30, 2017 | Apr. 19, 2018 | Nov. 29, 2018 | Conduction (CO05-HY) |
| LISN | Rohde & Schwarz | ENV216 | 100081 | 9kHz~30MHz | Dec. 08, 2017 | Apr. 19, 2018 | Dec. 07, 2018 | Conduction (CO05-HY) |
| Test Software | Rohde & Schwarz | EMC32 V10.30 | N/A | N/A | N/A | Apr. 19, 2018 | N/A | Conduction (CO05-HY) |
| LF Cable | HUBER + SUHNER | RG-214/U | LF01 | N/A | Jan. 03, 2018 | Apr. 19, 2018 | Jan. 02, 2019 | Conduction (CO05-HY) |
| Pulse Limiter | Rohde & Schwarz | ESH3-Z2 | 100851 | N/A | Jan. 03, 2018 | Apr. 19, 2018 | Jan. 02, 2019 | Conduction (CO05-HY) |
| Loop Antenna | Rohde & Schwarz | HFH2-Z2 | 100488 | 9 kHz~30 MHz | Nov. 23, 2017 | May 02, 2018~ May 06, 2018 | Nov. 22, 2018 | Radiation (03CH12-HY) |
| Bilog Antenna | TESEQ | CBL 6111D&N-6-0 6 | 35414&AT- N0602 | 30MHz~1GHz | Oct. 14, 2017 | May 02, 2018~ May 06, 2018 | Oct. 13, 2018 | Radiation (03CH12-HY) |
| Horn Antenna | SCHWARZBE CK | BBHA 9120D | 9120D-132 8 | 1GHz ~ 18GHz | Oct. 20, 2017 | May 02, 2018~ May 06, 2018 | Oct. 19, 2018 | Radiation (03CH12-HY) |
| SHF-EHF Horn Antenna | SCHWARZBE CK | BBHA 9170 | BBHA9170 584 | 18GHz ~ 40GHz | Nov. 27, 2017 | May 02, 2018~ May 06, 2018 | Nov. 26, 2018 | Radiation (03CH12-HY) |
| Amplifier | Sonoma-Instru ment | 310 N | 187282 | 9KHz~1GHz | Jan. 19, 2018 | May 02, 2018~ May 06, 2018 | Jan. 18, 2020 | Radiation (03CH12-HY) |
| Preamplifier | Keysight | 83017A | MY532701 48 | 1GHz~26.5GHz | Jan. 15, 2018 | May 02, 2018~ May 06, 2018 | Jan. 14, 2019 | Radiation (03CH12-HY) |
| Preamplifier | Jet-Power | JPA0118-55-3 03K | 171000180 0054002 | 1GHz~18GHz | Apr. 17, 2018 | May 02, 2018~ May 06, 2018 | Apr. 16, 2019 | Radiation (03CH12-HY) |
| Amplifier | MITEQ | TTA1840-35- HG | 1871923 | 18GHz~40GHz, VSWR : 2.5:1 max | Jul. 18, 2017 | May 02, 2018~ May 06, 2018 | Jul. 17, 2018 | Radiation (03CH12-HY) |
| EMI Test Receiver | Rohde & Schwarz | ESU26 | 100390 | 20Hz~26.5GHz | Dec. 25, 2017 | May 02, 2018~ May 06, 2018 | Dec. 24, 2018 | Radiation (03CH12-HY) |
| Spectrum Analyzer | Keysight | N9010A | MY542004 85 | 10Hz ~ 44GHz | Oct. 31, 2017 | May 02, 2018~ May 06, 2018 | Oct. 30, 2018 | Radiation (03CH12-HY) |
| Test Software | Audix | E3 6.2009-8-24 | RK-00098 9 | N/A | N/A | May 02, 2018~ May 06, 2018 | N/A | Radiation (03CH12-HY) |
| Antenna Mast | EMEC | AM-BS-4500- B | N/A | 1m~4m | N/A | May 02, 2018~ May 06, 2018 | N/A | Radiation (03CH12-HY) |



| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|------------|-------------------|--------------------------------------|---------------|-----------------|------------------|-------------------------------|---------------|--------------------------|
| Turn Table | EMEC | TT2000 | N/A | 0~360 Degree | N/A | May 02, 2018~ May 06, 2018 | N/A | Radiation (03CH12-HY) |
| Filter | Wainwright | WLKS1200-1 2SS | SN2 | 1.2G Low Pass | Mar. 23, 2018 | May 02, 2018~ May 06, 2018 | Mar. 22, 2019 | Radiation (03CH12-HY) |
| Filter | Woken | WHKX8-5272. 5-6750-18000 -40ST | SN2 | 6.75G High pass | Mar. 21, 2018 | May 02, 2018~ May 06, 2018 | Mar. 20, 2019 | Radiation (03CH12-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 126E | 0058/126E | 30M-18G | Mar. 14, 2018 | May 02, 2018~ May 06, 2018 | Mar. 13, 2019 | Radiation (03CH12-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY15539/ 4 | 30M-18G | Mar. 14, 2018 | May 02, 2018~ May 06, 2018 | Mar. 13, 2019 | Radiation (03CH12-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY36979/ 4 | 30M-18G | Mar. 14, 2018 | May 02, 2018~ May 06, 2018 | Mar. 13, 2019 | Radiation (03CH12-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 505134/2 | 30M~40GHz | Oct. 17, 2017 | May 02, 2018~ May 06, 2018 | Oct. 16, 2018 | Radiation (03CH12-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 800740/2 | 30M~40GHz | Oct. 17, 2017 | May 02, 2018~ May 06, 2018 | Oct. 16, 2018 | Radiation (03CH12-HY) |



5 Uncertainty of Evaluation

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

| | |
|---|-----|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 2.7 |
|---|-----|

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

| | |
|---|-----|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 5.1 |
|---|-----|

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

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

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

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

Appendix A. Test Result of Conducted Test Items

| | | | | |
|----------------|----------------------|--------------------|-------|----|
| Test Engineer: | Eason Huang | Temperature: | 21~25 | °C |
| Test Date: | 2018/4/18~2018/04/19 | Relative Humidity: | 51~54 | % |

TEST RESULTS DATA
Average Power Table

| FCC Band I | | | | | | | | | | |
|------------|-----------|-----|-----|-------------|------------------|-------------------------------|---------------------------------|----------|---|-----------|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | Average Conducted Power (dBm) | FCC Conducted Power Limit (dBm) | DG (dBi) | - | Pass/Fail |
| | | | | | Ant 1 | Ant 1 | Ant 1 | Ant 1 | | |
| 11a | 6Mbps | 1 | 36 | 5180 | 0.62 | 13.77 | 24.00 | 2.95 | | Pass |
| 11a | 6Mbps | 1 | 44 | 5220 | 0.62 | 13.72 | 24.00 | 2.95 | | Pass |
| 11a | 6Mbps | 1 | 48 | 5240 | 0.62 | 13.82 | 24.00 | 2.95 | | Pass |
| HT20 | MCS0 | 1 | 36 | 5180 | 0.66 | 13.67 | 24.00 | 2.95 | | Pass |
| HT20 | MCS0 | 1 | 44 | 5220 | 0.66 | 13.56 | 24.00 | 2.95 | | Pass |
| HT20 | MCS0 | 1 | 48 | 5240 | 0.66 | 13.70 | 24.00 | 2.95 | | Pass |
| HT40 | MCS0 | 1 | 38 | 5190 | 0.70 | 13.50 | 24.00 | 2.95 | | Pass |
| HT40 | MCS0 | 1 | 46 | 5230 | 0.70 | 13.83 | 24.00 | 2.95 | | Pass |

TEST RESULTS DATA
Average Power Table

| FCC Band II | | | | | | | | | | |
|-------------|-----------|-----|-----|-------------|------------------|-------------------------------|---------------------------------|----------|------------------------|-----------|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | Average Conducted Power (dBm) | FCC Conducted Power Limit (dBm) | DG (dBi) | EIRP Power Limit (dBm) | Pass/Fail |
| | | | | | Ant 1 | Ant 1 | Ant 1 | Ant 1 | | |
| 11a | 6Mbps | 1 | 52 | 5260 | 0.62 | 14.51 | 23.98 | 2.41 | 26.99 | Pass |
| 11a | 6Mbps | 1 | 60 | 5300 | 0.62 | 14.63 | 23.98 | 2.41 | 26.99 | Pass |
| 11a | 6Mbps | 1 | 64 | 5320 | 0.62 | 14.82 | 23.98 | 2.41 | 26.99 | Pass |
| HT20 | MCS0 | 1 | 52 | 5260 | 0.66 | 14.66 | 23.98 | 2.41 | 26.99 | Pass |
| HT20 | MCS0 | 1 | 60 | 5300 | 0.66 | 14.52 | 23.98 | 2.41 | 26.99 | Pass |
| HT20 | MCS0 | 1 | 64 | 5320 | 0.66 | 15.04 | 23.98 | 2.41 | 26.99 | Pass |
| HT40 | MCS0 | 1 | 54 | 5270 | 0.70 | 14.80 | 23.98 | 2.41 | 26.99 | Pass |
| HT40 | MCS0 | 1 | 62 | 5310 | 0.70 | 14.42 | 23.98 | 2.41 | 26.99 | Pass |

TEST RESULTS DATA
Average Power Table

| FCC Band III | | | | | | | | | | |
|--------------|-----------|-----|-----|-------------|------------------|-------------------------------|---------------------------------|----------|------------------------|-----------|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | Average Conducted Power (dBm) | FCC Conducted Power Limit (dBm) | DG (dBi) | EIRP Power Limit (dBm) | Pass/Fail |
| | | | | | Ant 1 | Ant 1 | Ant 1 | Ant 1 | | |
| 11a | 6Mbps | 1 | 100 | 5500 | 0.62 | 13.84 | 23.98 | 3.04 | 26.99 | Pass |
| 11a | 6Mbps | 1 | 116 | 5580 | 0.62 | 13.98 | 23.98 | 3.04 | 26.99 | Pass |
| 11a | 6Mbps | 1 | 140 | 5700 | 0.62 | 13.75 | 23.98 | 3.04 | 26.99 | Pass |
| HT20 | MCS0 | 1 | 100 | 5500 | 0.66 | 13.98 | 23.98 | 3.04 | 26.99 | Pass |
| HT20 | MCS0 | 1 | 116 | 5580 | 0.66 | 13.81 | 23.98 | 3.04 | 26.99 | Pass |
| HT20 | MCS0 | 1 | 140 | 5700 | 0.66 | 12.94 | 23.98 | 3.04 | 26.99 | Pass |
| HT40 | MCS0 | 1 | 102 | 5510 | 0.70 | 14.06 | 23.98 | 3.04 | 26.99 | Pass |
| HT40 | MCS0 | 1 | 110 | 5550 | 0.70 | 14.02 | 23.98 | 3.04 | 26.99 | Pass |
| HT40 | MCS0 | 1 | 134 | 5670 | 0.70 | 14.08 | 23.98 | 3.04 | 26.99 | Pass |



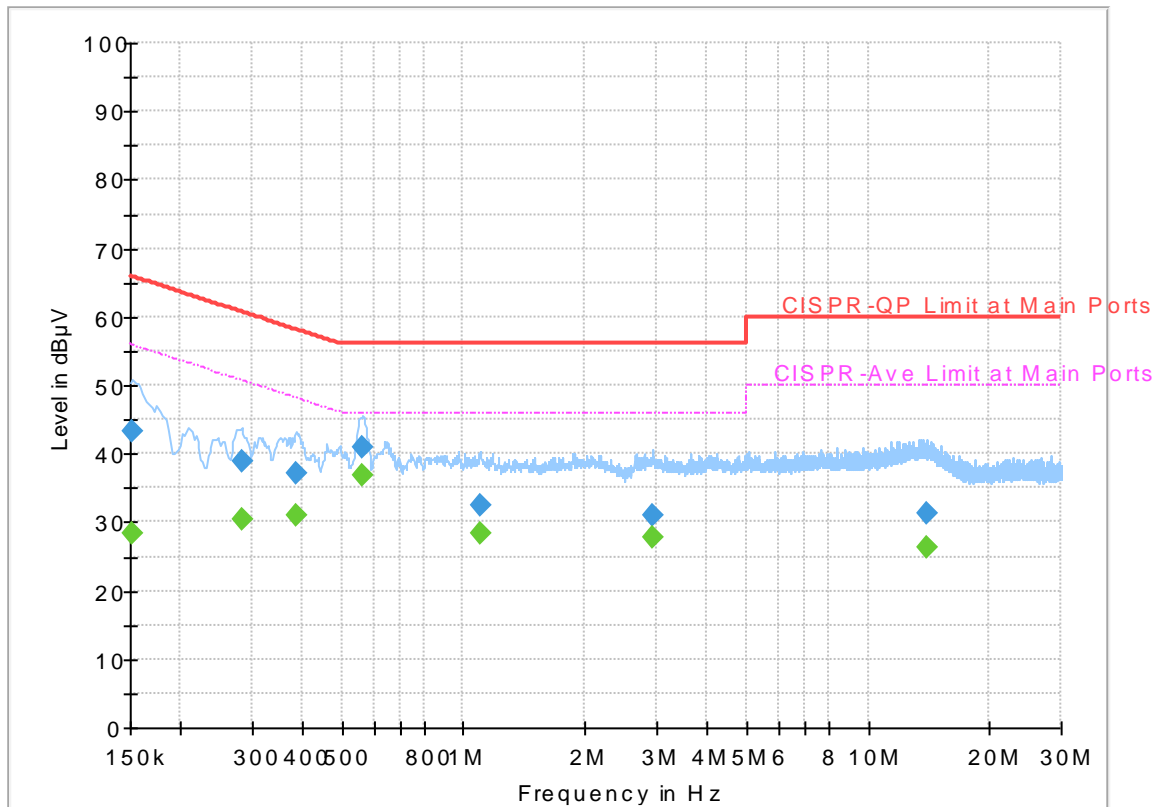
Appendix B. AC Conducted Emission Test Results

| | | | |
|-----------------|------------|---------------------|---------|
| Test Engineer : | Shareef Yu | Temperature : | 23~24°C |
| | | Relative Humidity : | 58~62% |

EUT Information

Report NO : 722135-10
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



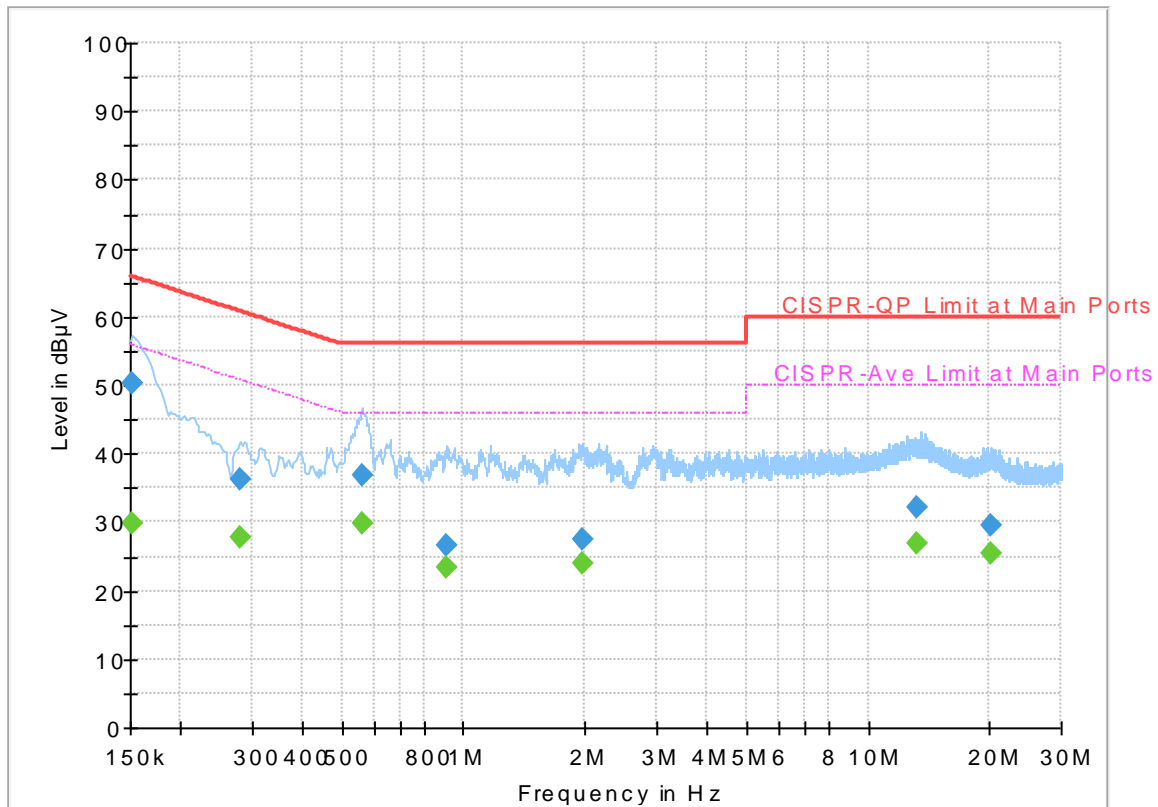
Final Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|------|--------|------------|
| 0.152250 | --- | 28.39 | 55.88 | 27.49 | L1 | OFF | 19.5 |
| 0.152250 | 43.23 | --- | 65.88 | 22.65 | L1 | OFF | 19.5 |
| 0.282750 | --- | 30.37 | 50.74 | 20.37 | L1 | OFF | 19.5 |
| 0.282750 | 38.77 | --- | 60.74 | 21.97 | L1 | OFF | 19.5 |
| 0.386250 | --- | 30.98 | 48.14 | 17.16 | L1 | OFF | 19.5 |
| 0.386250 | 37.24 | --- | 58.14 | 20.90 | L1 | OFF | 19.5 |
| 0.561750 | --- | 36.73 | 46.00 | 9.27 | L1 | OFF | 19.5 |
| 0.561750 | 40.85 | --- | 56.00 | 15.15 | L1 | OFF | 19.5 |
| 1.101750 | --- | 28.43 | 46.00 | 17.57 | L1 | OFF | 19.5 |
| 1.101750 | 32.52 | --- | 56.00 | 23.48 | L1 | OFF | 19.5 |
| 2.944500 | --- | 27.84 | 46.00 | 18.16 | L1 | OFF | 19.6 |
| 2.944500 | 31.06 | --- | 56.00 | 24.94 | L1 | OFF | 19.6 |
| 13.983000 | --- | 26.22 | 50.00 | 23.78 | L1 | OFF | 19.7 |
| 13.983000 | 31.15 | --- | 60.00 | 28.85 | L1 | OFF | 19.7 |

EUT Information

Report NO : 722135-10
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|------|--------|------------|
| 0.152250 | --- | 29.93 | 55.88 | 25.95 | N | OFF | 19.5 |
| 0.152250 | 50.34 | --- | 65.88 | 15.54 | N | OFF | 19.5 |
| 0.280500 | --- | 27.78 | 50.80 | 23.02 | N | OFF | 19.5 |
| 0.280500 | 36.24 | --- | 60.80 | 24.56 | N | OFF | 19.5 |
| 0.559500 | --- | 29.68 | 46.00 | 16.32 | N | OFF | 19.5 |
| 0.559500 | 36.85 | --- | 56.00 | 19.15 | N | OFF | 19.5 |
| 0.912750 | --- | 23.30 | 46.00 | 22.70 | N | OFF | 19.5 |
| 0.912750 | 26.73 | --- | 56.00 | 29.27 | N | OFF | 19.5 |
| 1.965750 | --- | 23.98 | 46.00 | 22.02 | N | OFF | 19.6 |
| 1.965750 | 27.43 | --- | 56.00 | 28.57 | N | OFF | 19.6 |
| 13.276500 | --- | 26.93 | 50.00 | 23.07 | N | OFF | 19.8 |
| 13.276500 | 32.07 | --- | 60.00 | 27.93 | N | OFF | 19.8 |
| 20.040000 | --- | 25.50 | 50.00 | 24.50 | N | OFF | 19.9 |
| 20.040000 | 29.46 | --- | 60.00 | 30.54 | N | OFF | 19.9 |



Appendix C. Radiated Spurious Emission

| | | | |
|-----------------|-----------------------------------|---------------------|---------|
| Test Engineer : | Karl Hou, Nick Yu, and Peter Liao | Temperature : | 23~25°C |
| | | Relative Humidity : | 56~61% |

Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. | |
|-----------------------------|---|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|---|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | | |
| 1 | | (MHz) | (dBµV/m) | (dB) | (dBµV/m) | (dBµV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) | |
| 802.11a CH 36 5180MHz | | 5143 | 58.98 | -15.02 | 74 | 52.34 | 31.79 | 5.99 | 31.14 | 100 | 249 | P | H | |
| | | 5127.92 | 45.23 | -8.77 | 54 | 38.61 | 31.78 | 5.98 | 31.14 | 100 | 249 | A | H | |
| | * | 5180 | 109.76 | - | - | 103.07 | 31.81 | 6.02 | 31.14 | 100 | 249 | P | H | |
| | * | 5180 | 98.13 | - | - | 91.44 | 31.81 | 6.02 | 31.14 | 100 | 249 | A | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | 5150 | 53.59 | -20.41 | 74 | 46.95 | 31.79 | 5.99 | 31.14 | 281 | 353 | P | V |
| | | | 5127.92 | 41.22 | -12.78 | 54 | 34.6 | 31.78 | 5.98 | 31.14 | 281 | 353 | A | V |
| | * | | 5180 | 104.53 | - | - | 97.84 | 31.81 | 6.02 | 31.14 | 281 | 353 | P | V |
| | * | | 5180 | 92.99 | - | - | 86.3 | 31.81 | 6.02 | 31.14 | 281 | 353 | A | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | |



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|-----------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11a CH 36 5180MHz | | 10360 | 48.48 | -19.72 | 68.2 | 58.82 | 39.86 | 9.79 | 59.99 | 100 | 0 | P | H | |
| | | 15540 | 44.62 | -29.38 | 74 | 51.9 | 38.53 | 12.23 | 58.04 | 100 | 0 | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | 10360 | 52.56 | -15.64 | 68.2 | 62.9 | 39.86 | 9.79 | 59.99 | 100 | 0 | P | V |
| | | | 15540 | 45.19 | -28.81 | 74 | 52.47 | 38.53 | 12.23 | 58.04 | 100 | 0 | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | |



Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|----------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11n HT20 CH 36 5180MHz | | 5149.76 | 59.8 | -14.2 | 74 | 53.16 | 31.79 | 5.99 | 31.14 | 100 | 245 | P | H | |
| | | 5128.44 | 46.24 | -7.76 | 54 | 39.62 | 31.78 | 5.98 | 31.14 | 100 | 245 | A | H | |
| | * | 5180 | 109.76 | - | - | 103.07 | 31.81 | 6.02 | 31.14 | 100 | 245 | P | H | |
| | * | 5180 | 98.22 | - | - | 91.53 | 31.81 | 6.02 | 31.14 | 100 | 245 | A | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | 5149.5 | 56.48 | -17.52 | 74 | 49.84 | 31.79 | 5.99 | 31.14 | 296 | 354 | P | V |
| | | | 5149.76 | 40.83 | -13.17 | 54 | 34.19 | 31.79 | 5.99 | 31.14 | 296 | 354 | A | V |
| | | * | 5180 | 104.79 | - | - | 98.1 | 31.81 | 6.02 | 31.14 | 296 | 354 | P | V |
| | | * | 5180 | 93.5 | - | - | 86.81 | 31.81 | 6.02 | 31.14 | 296 | 354 | A | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | |

Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|----------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11n HT20 CH 36 5180MHz | | 10360 | 50.23 | -17.97 | 68.2 | 60.57 | 39.86 | 9.79 | 59.99 | 100 | 0 | P | H | |
| | | 15540 | 44.94 | -29.06 | 74 | 52.22 | 38.53 | 12.23 | 58.04 | 100 | 0 | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | 10360 | 52.52 | -15.68 | 68.2 | 62.86 | 39.86 | 9.79 | 59.99 | 100 | 0 | P | V |
| | | | 15540 | 46.21 | -27.79 | 74 | 53.49 | 38.53 | 12.23 | 58.04 | 100 | 0 | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | |



Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|----------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11n HT40 CH 38 5190MHz | | 5150 | 69.71 | -4.29 | 74 | 63.07 | 31.79 | 5.99 | 31.14 | 100 | 248 | P | H |
| | | 5149.76 | 51.48 | -2.52 | 54 | 44.84 | 31.79 | 5.99 | 31.14 | 100 | 248 | A | H |
| | * | 5190 | 105.79 | - | - | 99.1 | 31.81 | 6.02 | 31.14 | 100 | 248 | P | H |
| | * | 5190 | 94.71 | - | - | 88.02 | 31.81 | 6.02 | 31.14 | 100 | 248 | A | H |
| | | 5416.6 | 49.66 | -24.34 | 74 | 42.68 | 31.95 | 6.18 | 31.15 | 100 | 248 | P | H |
| | | 5394.2 | 39.16 | -14.84 | 54 | 32.22 | 31.93 | 6.16 | 31.15 | 100 | 248 | A | H |
| | | 5149.76 | 60.44 | -13.56 | 74 | 53.8 | 31.79 | 5.99 | 31.14 | 298 | 353 | P | V |
| | | 5150 | 46.4 | -7.6 | 54 | 39.76 | 31.79 | 5.99 | 31.14 | 298 | 353 | A | V |
| | * | 5190 | 100.02 | - | - | 93.33 | 31.81 | 6.02 | 31.14 | 298 | 353 | P | V |
| | * | 5190 | 89 | - | - | 82.31 | 31.81 | 6.02 | 31.14 | 298 | 353 | A | V |
| | | 5393.36 | 49.17 | -24.83 | 74 | 42.24 | 31.93 | 6.15 | 31.15 | 298 | 353 | P | V |
| | | 5449.36 | 38.4 | -15.6 | 54 | 31.37 | 31.97 | 6.21 | 31.15 | 298 | 353 | A | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|----------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11n HT40 CH 38 5190MHz | | 10380 | 49.06 | -19.14 | 68.2 | 59.41 | 39.89 | 9.8 | 60.04 | 100 | 0 | P | H |
| | | 15570 | 44.29 | -29.71 | 74 | 51.59 | 38.46 | 12.24 | 58 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10380 | 51.16 | -17.04 | 68.2 | 61.51 | 39.89 | 9.8 | 60.04 | 100 | 0 | P | V |
| | | 15570 | 45.2 | -28.8 | 74 | 52.5 | 38.46 | 12.24 | 58 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |



Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|-----------------------------|---|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11a CH 60 5300MHz | | 5107.44 | 49.57 | -24.43 | 74 | 42.97 | 31.77 | 5.97 | 31.14 | 100 | 251 | P | H |
| | | 5064.26 | 39.02 | -14.98 | 54 | 32.49 | 31.74 | 5.93 | 31.14 | 100 | 251 | A | H |
| | * | 5300 | 110.07 | - | - | 103.25 | 31.88 | 6.09 | 31.15 | 100 | 251 | P | H |
| | * | 5300 | 98.45 | - | - | 91.63 | 31.88 | 6.09 | 31.15 | 100 | 251 | A | H |
| | | 5352.48 | 54.78 | -19.22 | 74 | 47.9 | 31.91 | 6.12 | 31.15 | 100 | 251 | P | H |
| | | 5352.24 | 45.29 | -8.71 | 54 | 38.41 | 31.91 | 6.12 | 31.15 | 100 | 251 | A | H |
| | | 5149.26 | 48.07 | -25.93 | 74 | 41.43 | 31.79 | 5.99 | 31.14 | 285 | 355 | P | V |
| | | 5148.58 | 37.56 | -16.44 | 54 | 30.92 | 31.79 | 5.99 | 31.14 | 285 | 355 | A | V |
| | * | 5300 | 105.74 | - | - | 98.92 | 31.88 | 6.09 | 31.15 | 285 | 355 | P | V |
| | * | 5300 | 93.75 | - | - | 86.93 | 31.88 | 6.09 | 31.15 | 285 | 355 | A | V |
| | | 5352.72 | 50.33 | -23.67 | 74 | 43.45 | 31.91 | 6.12 | 31.15 | 285 | 355 | P | V |
| | | 5352 | 40.82 | -13.18 | 54 | 33.94 | 31.91 | 6.12 | 31.15 | 285 | 355 | A | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

Band 2 5250~5350MHz
WIFI 802.11a (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|-----------------------------|---|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11a CH 60 5300MHz | | 10600 | 49.74 | -24.26 | 74 | 60.2 | 40.18 | 9.9 | 60.54 | 100 | 0 | P | H |
| | | 15900 | 44.53 | -29.47 | 74 | 51.89 | 37.81 | 12.37 | 57.54 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10600 | 55.66 | -18.34 | 74 | 66.12 | 40.18 | 9.9 | 60.54 | 312 | 157 | P | V |
| | | 10600 | 51.52 | -2.48 | 54 | 61.98 | 40.18 | 9.9 | 60.54 | 312 | 157 | A | V |
| | | 15900 | 45.74 | -28.26 | 74 | 53.1 | 37.81 | 12.37 | 57.54 | 100 | 0 | P | 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 (Band Edge @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|----------------------------|---|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11n HT20 CH 64 5320MHz | * | 5320 | 110.43 | - | - | 103.59 | 31.89 | 6.1 | 31.15 | 100 | 252 | P | H |
| | * | 5320 | 98.45 | - | - | 91.61 | 31.89 | 6.1 | 31.15 | 100 | 252 | A | H |
| | | 5350.56 | 60.16 | -13.84 | 74 | 53.28 | 31.91 | 6.12 | 31.15 | 100 | 252 | P | H |
| | | 5371.52 | 45.94 | -8.06 | 54 | 39.03 | 31.92 | 6.14 | 31.15 | 100 | 252 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 5320 | 105.37 | - | - | 98.53 | 31.89 | 6.1 | 31.15 | 280 | 357 | P | V |
| | * | 5320 | 93.69 | - | - | 86.85 | 31.89 | 6.1 | 31.15 | 280 | 357 | A | V |
| | | 5351.04 | 53.35 | -20.65 | 74 | 46.47 | 31.91 | 6.12 | 31.15 | 280 | 357 | P | V |
| | | 5371.36 | 41.7 | -12.3 | 54 | 34.79 | 31.92 | 6.14 | 31.15 | 280 | 357 | A | V |
| | | | | | | | | | | | | V | |
| | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

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

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|----------------------------|---|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11n HT20 CH 64 5320MHz | | 10640 | 52.78 | -21.22 | 74 | 63.3 | 40.21 | 9.91 | 60.64 | 365 | 156 | P | H |
| | | 10640 | 45.47 | -8.53 | 54 | 55.99 | 40.21 | 9.91 | 60.64 | 365 | 156 | A | H |
| | | 15960 | 43.67 | -30.33 | 74 | 51.08 | 37.67 | 12.38 | 57.46 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | 10640 | 56.64 | -17.36 | 74 | 67.16 | 40.21 | 9.91 | 60.64 | 317 | 158 | P | V |
| | | 10640 | 51.08 | -2.92 | 54 | 61.6 | 40.21 | 9.91 | 60.64 | 317 | 158 | A | V |
| | | 15960 | 43.64 | -30.36 | 74 | 51.05 | 37.67 | 12.38 | 57.46 | 100 | 0 | P | V |
| | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |



Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|----------------------------|---|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11n HT40 CH 62 5310MHz | | 5129.54 | 49.22 | -24.78 | 74 | 42.6 | 31.78 | 5.98 | 31.14 | 100 | 251 | P | H |
| | | 5077.18 | 39.62 | -14.38 | 54 | 33.07 | 31.75 | 5.94 | 31.14 | 100 | 251 | A | H |
| | * | 5310 | 107.6 | - | - | 100.76 | 31.89 | 6.1 | 31.15 | 100 | 251 | P | H |
| | * | 5310 | 95.74 | - | - | 88.9 | 31.89 | 6.1 | 31.15 | 100 | 251 | A | H |
| | | 5351.76 | 67.89 | -6.11 | 74 | 61.01 | 31.91 | 6.12 | 31.15 | 100 | 251 | P | H |
| | | 5350.32 | 51.08 | -2.92 | 54 | 44.2 | 31.91 | 6.12 | 31.15 | 100 | 251 | P | H |
| | | 5127.84 | 48.18 | -25.82 | 74 | 41.56 | 31.78 | 5.98 | 31.14 | 282 | 355 | P | V |
| | | 5132.94 | 38.29 | -15.71 | 54 | 31.67 | 31.78 | 5.98 | 31.14 | 282 | 355 | A | V |
| | * | 5310 | 102.11 | - | - | 95.27 | 31.89 | 6.1 | 31.15 | 282 | 355 | P | V |
| | * | 5310 | 91.29 | - | - | 84.45 | 31.89 | 6.1 | 31.15 | 282 | 355 | A | V |
| | | 5351.04 | 60.67 | -13.33 | 74 | 53.79 | 31.91 | 6.12 | 31.15 | 282 | 355 | P | V |
| | | 5350.32 | 45.14 | -8.86 | 54 | 38.26 | 31.91 | 6.12 | 31.15 | 282 | 355 | 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 HT40 (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|----------------------------|---|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11n HT40 CH 62 5310MHz | | 10620 | 49.21 | -24.79 | 74 | 59.7 | 40.2 | 9.9 | 60.59 | 100 | 0 | P | H |
| | | 15930 | 45.8 | -28.2 | 74 | 53.17 | 37.74 | 12.39 | 57.5 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 10620 | 56.24 | -17.76 | 74 | 66.73 | 40.2 | 9.9 | 60.59 | 319 | 158 | P | V |
| | | 10620 | 51.29 | -2.71 | 54 | 61.78 | 40.2 | 9.9 | 60.59 | 319 | 158 | A | V |
| | | 15930 | 45.98 | -28.02 | 74 | 53.35 | 37.74 | 12.39 | 57.5 | 100 | 0 | P | V |
| | | | | | | | | | | | | | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |



Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|------------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11a CH 140 5700MHz | * | 5700 | 111.03 | - | - | 103.65 | 32.27 | 6.36 | 31.25 | 130 | 291 | P | H |
| | * | 5700 | 99.06 | - | - | 91.68 | 32.27 | 6.36 | 31.25 | 130 | 291 | A | H |
| | | 5727.96 | 70.51 | -3.49 | 74 | 63.09 | 32.31 | 6.37 | 31.26 | 130 | 291 | P | H |
| | | 5725.24 | 49.63 | -4.37 | 54 | 42.21 | 32.31 | 6.37 | 31.26 | 130 | 291 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 5700 | 107.44 | - | - | 100.06 | 32.27 | 6.36 | 31.25 | 242 | 4 | P | V |
| | * | 5700 | 96.58 | - | - | 89.2 | 32.27 | 6.36 | 31.25 | 242 | 4 | A | V |
| | | 5725 | 65.05 | -8.95 | 74 | 57.63 | 32.31 | 6.37 | 31.26 | 242 | 4 | P | V |
| | | 5725.16 | 47.44 | -6.56 | 54 | 40.02 | 32.31 | 6.37 | 31.26 | 242 | 4 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|------------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11a CH 140 5700MHz | | 11400 | 58.97 | -15.03 | 74 | 70.08 | 40.18 | 10.29 | 61.58 | 395 | 0 | P | H |
| | | 11400 | 45.05 | -8.95 | 54 | 56.16 | 40.18 | 10.29 | 61.58 | 395 | 0 | A | H |
| | | 17100 | 47.07 | -26.93 | 74 | 49.45 | 41.06 | 12.64 | 56.08 | 100 | 0 | P | H |
| | | | | | | | | | | | | | H |
| | | 11400 | 64.57 | -9.43 | 74 | 75.68 | 40.18 | 10.29 | 61.58 | 303 | 159 | P | V |
| | | 11400 | 49.98 | -4.02 | 54 | 61.09 | 40.18 | 10.29 | 61.58 | 303 | 159 | A | V |
| | | 17100 | 49.53 | -24.47 | 74 | 51.91 | 41.06 | 12.64 | 56.08 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBµV/m) | Over Limit (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|-----------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11n HT20 CH 116 5580MHz | | 5393.92 | 52.7 | -21.3 | 74 | 45.77 | 31.93 | 6.15 | 31.15 | 102 | 252 | P | H |
| | | 5464.96 | 51.05 | -17.15 | 68.2 | 44.01 | 31.98 | 6.21 | 31.15 | 102 | 252 | P | H |
| | | 5439.28 | 39.4 | -14.6 | 54 | 32.4 | 31.96 | 6.19 | 31.15 | 102 | 252 | A | H |
| | * | 5580 | 111.26 | - | - | 104.04 | 32.1 | 6.32 | 31.2 | 102 | 252 | P | H |
| | * | 5580 | 99.68 | - | - | 92.46 | 32.1 | 6.32 | 31.2 | 102 | 252 | A | H |
| | | 5728.145 | 49.2 | -19 | 68.2 | 41.78 | 32.31 | 6.37 | 31.26 | 102 | 252 | P | H |
| | | 5405.2 | 49.13 | -24.87 | 74 | 42.18 | 31.94 | 6.16 | 31.15 | 260 | 2 | P | V |
| | | 5466.16 | 48.21 | -19.99 | 68.2 | 41.15 | 31.98 | 6.23 | 31.15 | 260 | 2 | P | V |
| | | 5430.88 | 38.12 | -15.88 | 54 | 31.12 | 31.96 | 6.19 | 31.15 | 260 | 2 | A | V |
| | * | 5580 | 106.54 | - | - | 99.32 | 32.1 | 6.32 | 31.2 | 260 | 2 | P | V |
| | * | 5580 | 95 | - | - | 87.78 | 32.1 | 6.32 | 31.2 | 260 | 2 | A | V |
| | | 5729.405 | 49.31 | -18.89 | 68.2 | 41.89 | 32.31 | 6.37 | 31.26 | 260 | 2 | P | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBµV/m) | Over Limit (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|-----------------------------|---|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11n HT20 CH 116 5580MHz | | 11160 | 59.46 | -14.54 | 74 | 70.46 | 40.37 | 10.16 | 61.53 | 391 | 330 | P | H | |
| | | 11160 | 47.23 | -6.77 | 54 | 58.23 | 40.37 | 10.16 | 61.53 | 391 | 330 | A | H | |
| | | 16740 | 47.17 | -21.03 | 68.2 | 51.34 | 40.13 | 12.52 | 56.82 | 100 | 0 | P | H | |
| | | | | | | | | | | | | | H | |
| | | | 11160 | 65.21 | -8.79 | 74 | 76.21 | 40.37 | 10.16 | 61.53 | 299 | 144 | P | V |
| | | | 11160 | 51.98 | -2.02 | 54 | 62.98 | 40.37 | 10.16 | 61.53 | 299 | 144 | A | V |
| | | | 16740 | 47.09 | -21.11 | 68.2 | 51.26 | 40.13 | 12.52 | 56.82 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | |



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|-----------------------------|---|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11n HT40 CH 102 5510MHz | | 5470 | 67.13 | -6.87 | 74 | 60.07 | 31.98 | 6.23 | 31.15 | 102 | 257 | P | H |
| | | 5470 | 51.99 | -2.01 | 54 | 44.93 | 31.98 | 6.23 | 31.15 | 102 | 257 | P | H |
| | * | 5510 | 108.57 | - | - | 101.47 | 32 | 6.26 | 31.16 | 102 | 257 | P | H |
| | * | 5510 | 96.7 | - | - | 89.6 | 32 | 6.26 | 31.16 | 102 | 257 | A | H |
| | | 5740.43 | 50.41 | -23.59 | 74 | 42.97 | 32.34 | 6.37 | 31.27 | 102 | 257 | P | H |
| | | 5734.445 | 39.55 | -14.45 | 54 | 32.14 | 32.31 | 6.37 | 31.27 | 102 | 257 | A | H |
| | | 5466.16 | 62.06 | -11.94 | 74 | 55 | 31.98 | 6.23 | 31.15 | 262 | 357 | P | V |
| | | 5468.32 | 47.9 | -6.1 | 54 | 40.84 | 31.98 | 6.23 | 31.15 | 262 | 357 | A | V |
| | * | 5510 | 103.25 | - | - | 96.15 | 32 | 6.26 | 31.16 | 262 | 357 | P | V |
| | * | 5510 | 92.04 | - | - | 84.94 | 32 | 6.26 | 31.16 | 262 | 357 | A | V |
| | | 5730.35 | 48.66 | -25.34 | 74 | 41.25 | 32.31 | 6.37 | 31.27 | 262 | 357 | P | V |
| | 5736.335 | 38.73 | -15.27 | 54 | 31.29 | 32.34 | 6.37 | 31.27 | 262 | 357 | A | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI Ant. 1 | Note | Frequency (MHz) | Level (dBμV/m) | Over Limit (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|-----------------------------|---|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|---|
| 802.11n HT40 CH 102 5510MHz | | 11020 | 54.96 | -19.04 | 74 | 65.87 | 40.49 | 10.1 | 61.5 | 397 | 325 | P | H | |
| | | 11020 | 44.8 | -9.2 | 54 | 55.71 | 40.49 | 10.1 | 61.5 | 397 | 325 | A | H | |
| | | 16530 | 45.22 | -28.78 | 74 | 50.29 | 39.68 | 12.49 | 57.24 | 100 | 0 | P | H | |
| | | | | | | | | | | | | | H | |
| | | | 11020 | 60.47 | -13.53 | 74 | 71.38 | 40.49 | 10.1 | 61.5 | 296 | 143 | P | V |
| | | | 11020 | 49.55 | -4.45 | 54 | 60.46 | 40.49 | 10.1 | 61.5 | 296 | 143 | A | V |
| | | | 16530 | 46.26 | -27.74 | 74 | 51.33 | 39.68 | 12.49 | 57.24 | 100 | 0 | P | V |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | |



Emission below 1GHz
WIFI 802.11n HT40 (LF @ 3m)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. | |
|-----------------------|--|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|---|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | | |
| 1 | | (MHz) | (dBμV/m) | (dB) | (dBμV/m) | (dBμV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) | |
| 802.11n HT40 LF | | 31.62 | 25.59 | -14.41 | 40 | 30.32 | 25.04 | 0.44 | 30.21 | 100 | 0 | P | H | |
| | | 101.28 | 25.19 | -18.31 | 43.5 | 38.46 | 16.31 | 0.85 | 30.43 | - | - | P | H | |
| | | 292.71 | 24.39 | -21.61 | 46 | 33.41 | 19.63 | 1.5 | 30.15 | - | - | P | H | |
| | | 508.6 | 29.56 | -16.44 | 46 | 32.97 | 24.46 | 1.9 | 29.77 | - | - | P | H | |
| | | 781.6 | 30.93 | -15.07 | 46 | 29.93 | 27.95 | 2.38 | 29.33 | - | - | P | H | |
| | | 977.6 | 33.41 | -20.59 | 54 | 29.58 | 29.99 | 2.76 | 28.92 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 30.81 | 29.5 | -10.5 | 40 | 33.64 | 25.62 | 0.44 | 30.2 | - | - | P | V |
| | | | 89.67 | 35.3 | -8.2 | 43.5 | 50.02 | 14.9 | 0.82 | 30.44 | 100 | 0 | P | V |
| | | | 227.1 | 22.87 | -23.13 | 46 | 34.97 | 16.79 | 1.38 | 30.27 | - | - | P | V |
| | | | 633.9 | 28.58 | -17.42 | 46 | 30.1 | 25.94 | 2.13 | 29.59 | - | - | P | V |
| | | | 856.5 | 31.19 | -14.81 | 46 | 29.17 | 28.74 | 2.49 | 29.21 | - | - | P | V |
| | | | 985.3 | 33.71 | -20.29 | 54 | 29.88 | 29.96 | 2.76 | 28.89 | - | - | P | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against limit line. | | | | | | | | | | | | | |



Note symbol

| | |
|-----|--|
| * | Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| ! | Test result is over limit line. |
| P/A | 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. | |
| 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, Nick Yu, and Peter Liao | Temperature : | 23~25°C |
| | | Relative Humidity : | 56~61% |

Note symbol

| | |
|----|-----------------------|
| -L | Low channel location |
| -R | High channel location |



Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

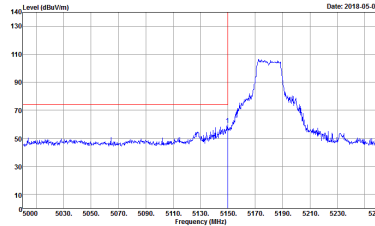
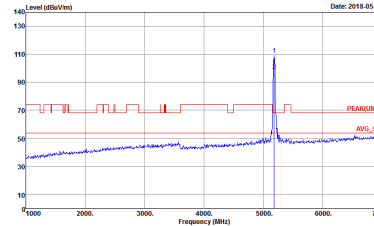
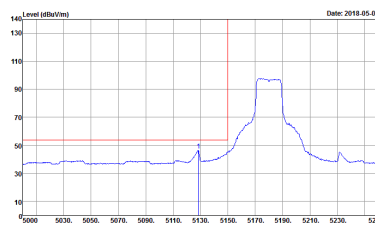
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|-------------|---|--|
| ANT | 802.11a CH36 5180MHz | |
| 1 | Horizontal | Fundamental |
| Peak | <p>Site : 03CH2-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 1</p> | <p>Site : 03CH2-HY Condition : PEAK(UM)E 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 1</p> |
| Avg. | <p>Site : 03CH2-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 1</p> | Left blank |



| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|------|---|--|
| ANT | 802.11a CH36 5180MHz | |
| 1 | Vertical | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 1</p> | <p>Site : 03CH12-HY Condition : PEAK(FUNDE) 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 1</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 1</p> | Left blank |



Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

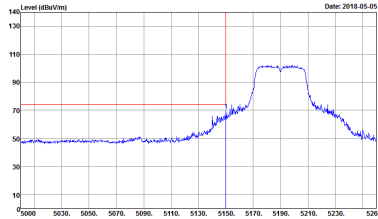
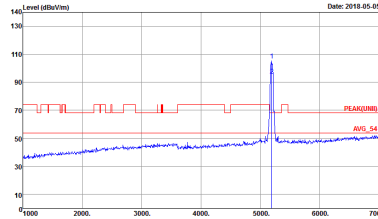
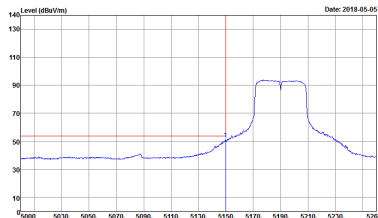
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|--------------------|--|---|
| ANT | 802.11n HT20 CH36 5180MHz | |
| 1 | Horizontal | Fundamental |
| <p>Peak</p> |  <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 4</p> |  <p>Site : 03CH12-HY Condition : PEAK(UN11) 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 4</p> |
| <p>Avg.</p> |  <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 4</p> | <p>Left blank</p> |



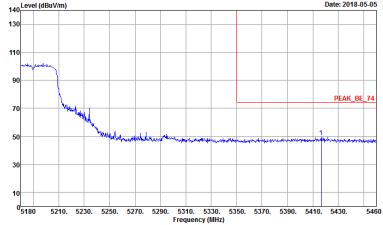
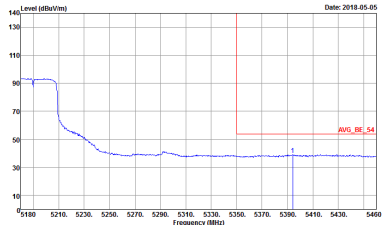
| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|------|---|---|
| ANT | 802.11n HT20 CH36 5180MHz | |
| 1 | Vertical | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 4</p> | <p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 4</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 4</p> | Left blank |



**Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)**

| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|------|--|--|
| ANT | 802.11n HT40 CH38 5190MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak |  <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 7</p> |  <p>Site : 03CH12-HY Condition : PEAK(UN11) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 7</p> |
| Avg. |  <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 7</p> | Left blank |

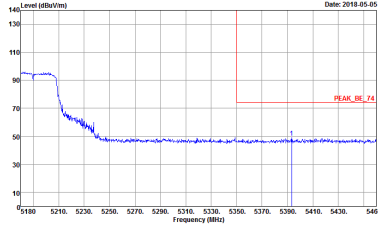
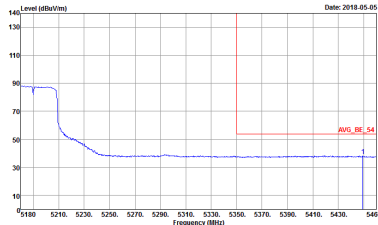


| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|--------------------|---|-------------------|
| ANT | 802.11n HT40 CH38 5190MHz - R | |
| 1 | Horizontal | Fundamental |
| <p>Peak</p> |  <p>Site : 03CHIZ-HY Condition : PEAK_BE_74 3m HORN_9120D_132R HORIZONTAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 7</p> | <p>Left blank</p> |
| <p>Avg.</p> |  <p>Site : 03CHIZ-HY Condition : AVG_BE_54 3m HORN_9120D_132R HORIZONTAL RBW:3000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 7</p> | <p>Left blank</p> |



| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|------|---|--|
| ANT | 802.11n HT40 CH38 5190MHz - L | |
| 1 | Vertical | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 7</p> | <p>Site : 03CH12-HY Condition : PEAK(FUNDE) 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 7</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL RBW:3000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 7</p> | Left blank |



| WIFI | Band 1 5150~5250MHz Band Edge @ 3m | |
|--------------------|---|-------------------|
| ANT | 802.11n HT40 CH38 5190MHz - R | |
| 1 | Vertical | Fundamental |
| <p>Peak</p> |  <p>Site : 03CH2-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL RBW:10000000Hz VBW:3000.0000Hz SWT:Auto Detector : Peak Project : 722135-10 Mode : 7</p> | <p>Left blank</p> |
| <p>Avg.</p> |  <p>Site : 03CH2-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL RBW:10000000Hz VBW:3.0000Hz SWT:Auto Detector : Peak Project : 722135-10 Mode : 7</p> | <p>Left blank</p> |



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

| | | |
|----------------------|--|--|
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
| ANT | 802.11a CH36 5180MHz | |
| 1 | Horizontal | Vertical |
| Peak Avg. | <p> Site : 03CH12-HY Condition : PEAK(NET) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 1 </p> | <p> Site : 03CH12-HY Condition : PEAK(NET) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 1 </p> |



**Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)**

| | | |
|----------------------|---|---|
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
| ANT | 802.11n HT20 CH36 5180MHz | |
| 1 | Horizontal | Vertical |
| Peak Avg. | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 4</p> | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 4</p> |



**Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)**

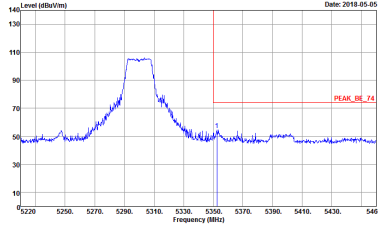
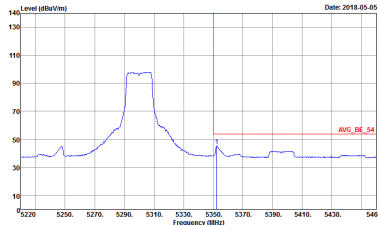
| | | |
|----------------------|---|---|
| WIFI | Band 1 5150~5250MHz Harmonic @ 3m | |
| ANT | 802.11n HT40 CH38 5190MHz | |
| 1 | Horizontal | Vertical |
| Peak Avg. | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 7</p> | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 7</p> |



Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|-------------|--|---|
| ANT | 802.11a CH60 5300MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 2</p> | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 2</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 2</p> | Left blank |



| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|--------------------|--|-------------------|
| ANT | 802.11a CH60 5300MHz - R | |
| 1 | Horizontal | Fundamental |
| <p>Peak</p> |  <p>Site : 03CHIZ-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 2</p> | <p>Left blank</p> |
| <p>Avg.</p> |  <p>Site : 03CHIZ-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 2</p> | <p>Left blank</p> |



| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|------|---|--|
| ANT | 802.11a CH60 5300MHz - L | |
| 1 | Vertical | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 2</p> | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 2</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 2</p> | Left blank |



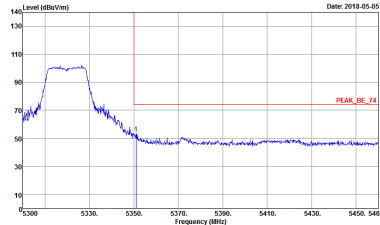
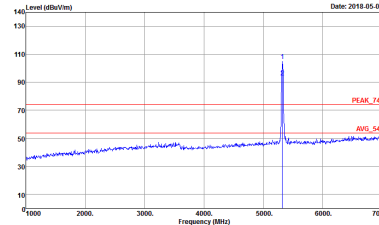
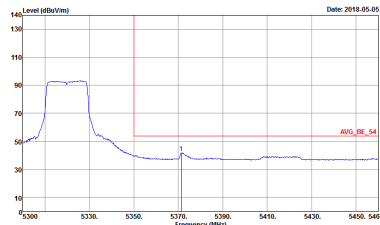
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|------|---|-------------|
| ANT | 802.11a CH60 5300MHz - R | |
| 1 | Vertical | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 2</p> | Left blank |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 2</p> | Left blank |



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

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|-------------|---|--|
| ANT | 802.11n HT20 CH64 5320MHz | |
| 1 | Horizontal | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 5</p> | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 5</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 5</p> | Left blank |



| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|--------------------|--|---|
| ANT | 802.11n HT20 CH64 5320MHz | |
| 1 | Vertical | Fundamental |
| <p>Peak</p> |  <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 5</p> |  <p>Site : 03CH12-HY Condition : PEAK_F4 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 5</p> |
| <p>Avg.</p> |  <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 5</p> | <p>Left blank</p> |



Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|-------------|--|--|
| ANT | 802.11n HT40 CH62 5310 - L | |
| 1 | Horizontal | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 8</p> | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 8</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 8</p> | Left blank |



| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|--------------------|---|-------------------|
| ANT | 802.11n HT40 CH62 5310 - R | |
| 1 | Horizontal | Fundamental |
| <p>Peak</p> | <p>Site : 03CHIZ-HY Condition : PEAK_BE_74 3m HORN_9120D_132R HORIZONTAL Detector : Peak Project : 722135-10 Mode : 8</p> | <p>Left blank</p> |
| <p>Avg.</p> | <p>Site : 03CHIZ-HY Condition : AVG_BE_54 3m HORN_9120D_132R HORIZONTAL Detector : Peak Project : 722135-10 Mode : 8</p> | <p>Left blank</p> |



| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|------|--|---|
| ANT | 802.11n HT40 CH62 5310 - L | |
| 1 | Vertical | Fundamental |
| Peak | <p>Site : 03CH2-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 8</p> | <p>Site : 03CH2-HY Condition : PEAK(FUNDE) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 8</p> |
| Avg. | <p>Site : 03CH2-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 8</p> | Left blank |



| WIFI | Band 2 5250~5350MHz Band Edge @ 3m | |
|------|--|-------------|
| ANT | 802.11n HT40 CH62 5310 - R | |
| 1 | Vertical | Fundamental |
| Peak | <p>Site : 03CH2-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 8</p> | Left blank |
| Avg. | <p>Site : 03CH2-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 8</p> | Left blank |



Band 2 - 5250~5350MHz
WIFI 802.11a (Harmonic @ 3m)

Table with 2 columns: Horizontal and Vertical. Each column contains a spectrum plot showing Level (dBu/m) vs Frequency (MHz) with peak markers and technical details like Site, Condition, Detector, Project, and Mode.



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

| | | |
|----------------------|--|--|
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
| ANT | 802.11n HT20 CH64 5320MHz | |
| 1 | Horizontal | Vertical |
| Peak Avg. | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 5</p> | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 5</p> |



**Band 2 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)**

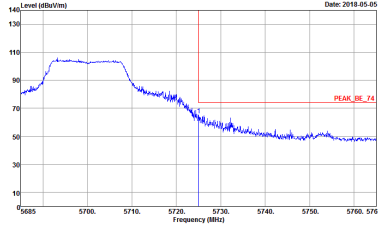
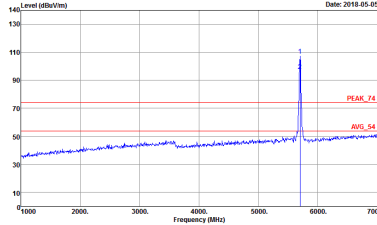
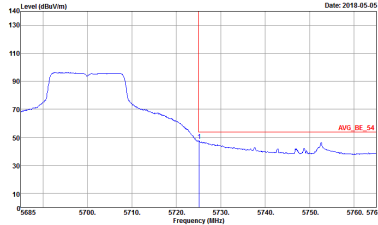
| | | |
|----------------------|---|---|
| WIFI | Band 2 5250~5350MHz Harmonic @ 3m | |
| ANT | 802.11n HT40 CH62 5310 | |
| 1 | Horizontal | Vertical |
| Peak Avg. | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 8</p> | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 8</p> |



Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|-------------|--|---|
| ANT | 802.11a CH140 5700MHz | |
| 1 | Horizontal | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 3</p> | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 3</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AV5_BE_54 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 3</p> | Left blank |



| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|--------------------|--|---|
| ANT | 802.11a CH140 5700MHz | |
| 1 | Vertical | Fundamental |
| <p>Peak</p> |  <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 3</p> |  <p>Site : 03CH12-HY Condition : PEAK_F4 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 3</p> |
| <p>Avg.</p> |  <p>Site : 03CH12-HY Condition : AVG_BE_S4 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 3</p> | <p>Left blank</p> |



**Band 3 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)**

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|-------------|--|--|
| ANT | 802.11n HT20 CH116 5580MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE(UNII)_B3 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 6</p> | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 6</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE(UNII)_B3 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 6</p> | Left blank |



| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|------|--|-------------|
| ANT | 802.11n HT20 CH116 5580MHz - R | |
| 1 | Horizontal | Fundamental |
| Peak | <p>Site : 03CHZ-HY Condition : PEAK_BELUNTII_B3 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 6</p> | Left blank |



| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|--------------------|---|---|
| ANT | 802.11n HT20 CH116 5580MHz - L | |
| 1 | Vertical | Fundamental |
| <p>Peak</p> | <p>Site : 03CH12-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 6</p> | <p>Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 6</p> |
| <p>Avg.</p> | <p>Site : 03CH12-HY Condition : AVG_BE(UNIT)_B3 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 6</p> | <p>Left blank</p> |



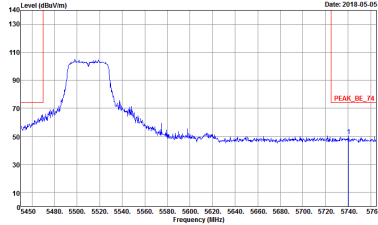
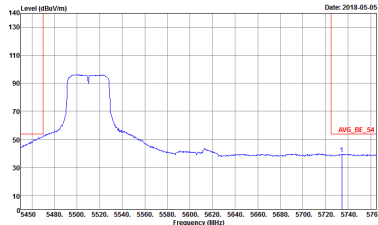
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|------|---|-------------|
| ANT | 802.11n HT20 CH116 5580MHz - R | |
| 1 | Vertical | Fundamental |
| Peak | <p>Site : 03CHZ-HY Condition : PEAK_BELUNTI_03 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 6</p> | Left blank |



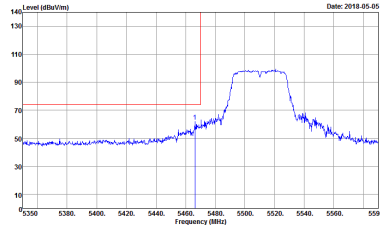
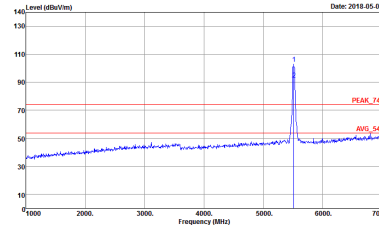
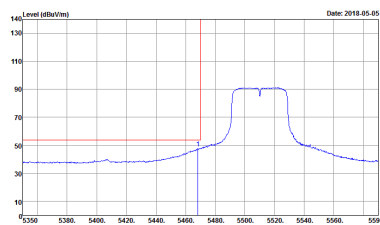
**Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)**

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|-------------|--|---|
| ANT | 802.11n HT40 CH102 5510MHz - L | |
| 1 | Horizontal | Fundamental |
| Peak | <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 9</p> | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 9</p> |
| Avg. | <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 722135-10 Mode : 9</p> | Left blank |

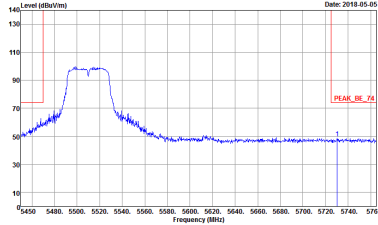
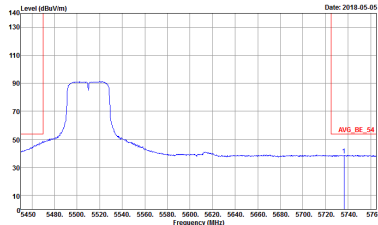


| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|--------------------|--|-------------------|
| ANT | 802.11n HT40 CH102 5510MHz - R | |
| 1 | Horizontal | Fundamental |
| <p>Peak</p> |  <p>Site : 03CHIZ-HY Condition : PEAK_BE_74 3m HORN_9120D_132R HORIZONTAL Detector : Peak Project : 722135-10 Mode : 9</p> | <p>Left blank</p> |
| <p>Avg.</p> |  <p>Site : 03CHIZ-HY Condition : AVG_BE_54 3m HORN_9120D_132R HORIZONTAL Detector : Peak Project : 722135-10 Mode : 9</p> | <p>Left blank</p> |



| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|--------------------|--|---|
| ANT | 802.11n HT40 CH102 5510MHz - L | |
| 1 | Vertical | Fundamental |
| <p>Peak</p> |  <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 9</p> |  <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 9</p> |
| <p>Avg.</p> |  <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 9</p> | <p>Left blank</p> |



| WIFI | Band 3 5470~5725MHz Band Edge @ 3m | |
|--------------------|--|-------------------|
| ANT | 802.11n HT40 CH102 5510MHz - R | |
| 1 | Vertical | Fundamental |
| <p>Peak</p> |  <p>Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 9</p> | <p>Left blank</p> |
| <p>Avg.</p> |  <p>Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 9</p> | <p>Left blank</p> |



Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

| | | |
|----------------------|--|--|
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
| ANT | 802.11a CH140 5700MHz | |
| 1 | Horizontal | Vertical |
| Peak Avg. | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 3</p> | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 3</p> |



**Band 3 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)**

| | | |
|----------------------|---|---|
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
| ANT | 802.11n HT20 CH116 5580MHz | |
| 1 | Horizontal | Vertical |
| Peak Avg. | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 6</p> | <p>Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 6</p> |



**Band 3 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)**

| | | |
|----------------------|--|--|
| WIFI | Band 3 5470~5725MHz Harmonic @ 3m | |
| ANT | 802.11n HT40 CH102 5510MHz | |
| 1 | Horizontal | Vertical |
| Peak Avg. | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 9</p> | <p>Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 722135-10 Mode : 9</p> |



Emission below 1GHz
5GHz WIFI 802.11n HT40 (LF)

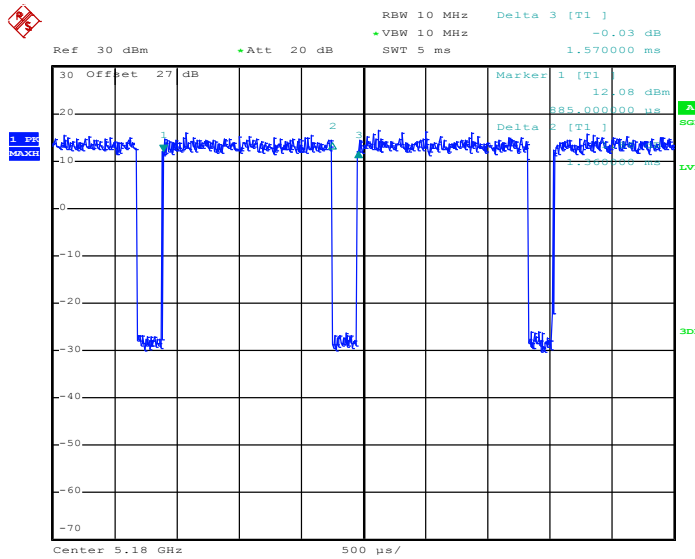
| WIFI | 5GHz WIFI | |
|--------------|--|--|
| ANT | 802.11n HT40 LF | |
| 1 | Horizontal | Vertical |
| QP / Peak | <p>Site : 03CH12-HY Condition : QP 3m BTL06_611D_47020406 HORIZONTAL Detector : Peak Project : 722135-10 Mode : 13</p> | <p>Site : 03CH12-HY Condition : QP 3m BTL06_611D_47020406 VERTICAL Detector : Peak Project : 722135-10 Mode : 13</p> |



Appendix E. Duty Cycle Plots

| Band | Duty Cycle (%) | T(us) | 1/T(kHz) | VBW Setting | Duty Factor (dB) |
|-------------------|----------------|---------|----------|-------------|------------------|
| 802.11a | 86.62 | 1360.00 | 0.74 | 1kHz | 0.62 |
| 5GHz 802.11n HT20 | 85.81 | 1270.00 | 0.79 | 1kHz | 0.66 |
| 5GHz 802.11n HT40 | 85.14 | 1260.00 | 0.79 | 1kHz | 0.70 |

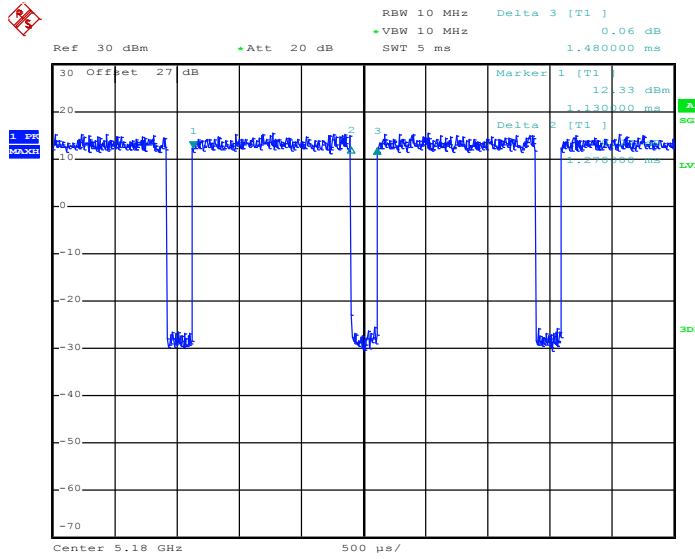
802.11a



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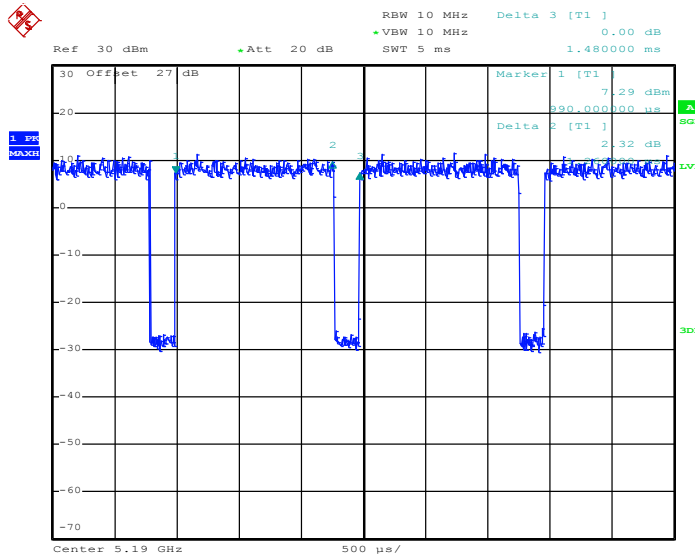


802.11n HT20



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802.11n HT40



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