



# Spot Check Evaluation

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## REVISION HISTORY

| VERSION | DESCRIPTION             | ISSUED DATE   |
|---------|-------------------------|---------------|
| Rev. 01 | Initial issue of report | Nov. 07, 2017 |
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## 1. Introduction Section

The original model (FCC ID: PY7-48140L) and the variant model (FCC ID: PY7-78553D) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/NFC/GPS. Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS, DXX) and Part 15E (equipment class: NII) test data issued test data of PY7-78553D references the test data of PY7-48140L

The original model (FCC ID: PY7-48140L) and the variant model (FCC ID: PY7-78553D) has identical PCB layout, antenna, SW implementation for GSM/WCDMA/LTE. Based on their similarity, the FCC Part 22, 24, 27 (equipment class: PCE) test data issued test data of PY7-78553D references the test data of PY7-48140L

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: PY7-78553D).



## 2. Difference Section

The original model (FCC ID: PY7-48140L) and the variant model (FCC ID: PY7-78553D) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/NFC/GPS. The details of similarity and difference can be found in the Operating Description.

The original model (FCC ID: PY7-48140L) and the variant model (FCC ID: PY7-78553D) has identical PCB layout, antenna, SW implementation for GSM/WCDMA/LTE. The details of similarity and difference can be found in the Operating Description.

Cellular transmitter RF components are different in PY7-78553D, to support capability for different cellular bands.

The product specification is outlined in the following table:

| FCC ID        |                                         |                                 | PY7-48140L             | PY7-78553D |
|---------------|-----------------------------------------|---------------------------------|------------------------|------------|
| Wireless Tech | Mode                                    |                                 | Frequency (MHz)        |            |
| GSM           | GSM Voice<br>GPRS (GMSK)<br>EDGE (8PSK) | Multi-Slot Class 33<br>DTM: Yes | 850/1900               | 850/1900   |
| UMTS          | AMR/RCM12.2Kbps<br>HSDPA/HSUPA/DC-HSDPA |                                 | B5/B2                  | B5/B2      |
| LTE (FDD)     | QPSK/16QAM/64QAM                        |                                 | B5/B2/B7/B41           | B5/B2/B7   |
| Wi-Fi         | 11b/11g/11n(HT20)/11ac(VHT20)           |                                 | 2412-2462              |            |
|               | 11a/11n(HT20)/11n(HT40)/                |                                 | 5180-5240              |            |
|               | 11ac(VHT20)/ 11ac(VHT40)/               |                                 | 5260-5320              |            |
|               | 11ac(VHT80)                             |                                 | 5500-5720<br>5745-5825 |            |
| Bluetooth     | V5.0 LE                                 |                                 | 2402-2480 MHz          |            |
| NFC           | ASK                                     |                                 | 13.56 MHz              |            |



### 3. Spot Check Verification Data Section

Summary of the spot check:

| Test Item                              | Mode                   | PY7-48140L<br>Worst Result | PY7-78553D<br>Worst Result | Difference (dB) |
|----------------------------------------|------------------------|----------------------------|----------------------------|-----------------|
| Average<br>Conducted<br>Power<br>(dBm) | 802.11b                | 16.48                      | 16.43                      | 0.05            |
|                                        | 802.11g                | 13.42                      | 13.31                      | 0.11            |
|                                        | 11n HT20               | 12.91                      | 12.75                      | 0.16            |
|                                        | 11ac VHT20             | 12.93                      | 12.74                      | 0.19            |
|                                        | BT (1Mbps)             | 9.72                       | 9.64                       | 0.08            |
|                                        | BT (2Mbps)             | 6.31                       | 6.35                       | -0.04           |
|                                        | BT (3Mbps)             | 6.27                       | 6.30                       | -0.03           |
|                                        | BT-LE(1Mbps)           | -0.01                      | -0.25                      | 0.24            |
|                                        | BT-LE(2Mbps)           | -0.03                      | -0.18                      | 0.15            |
|                                        | 11a, 5.2GHz            | 14.94                      | 14.84                      | 0.1             |
|                                        | 11n HT20, 5.2GHz       | 13.85                      | 13.87                      | -0.02           |
|                                        | 11n HT40, 5.2GHz       | 12.65                      | 12.84                      | 0.05            |
|                                        | 11n VHT20, 5.2GHz      | 13.92                      | 13.84                      | 0.08            |
|                                        | 11n VHT40, 5.2GHz      | 12.73                      | 12.81                      | 0.17            |
|                                        | 11n VHT80, 5.2GHz      | 11.56                      | 11.95                      | 0.03            |
|                                        | 11a, 5.3GHz            | 14.75                      | 14.52                      | 0.23            |
|                                        | 11n HT20, 5.3GHz       | 13.89                      | 13.93                      | -0.04           |
|                                        | 11n HT40, 5.3GHz       | 12.50                      | 12.59                      | -0.09           |
|                                        | 11n VHT20, 5.3GHz      | 13.98                      | 13.89                      | 0.09            |
|                                        | 11n VHT40, 5.3GHz      | 12.59                      | 12.58                      | 0.01            |
|                                        | 11n VHT80, 5.3GHz      | 11.53                      | 11.71                      | 0.18            |
|                                        | 11a, 5.5GHz            | 14.94                      | 14.93                      | 0.01            |
|                                        | 11n HT20, 5.5GHz       | 13.85                      | 13.92                      | -0.07           |
|                                        | 11n HT40, 5.5GHz       | 12.82                      | 12.89                      | -0.07           |
|                                        | 11n VHT20, 5.5GHz      | 13.94                      | 13.90                      | 0.04            |
|                                        | 11n VHT40, 5.5GHz      | 12.87                      | 12.75                      | 0.12            |
|                                        | 11n VHT80, 5.5GHz      | 11.71                      | 11.70                      | -0.02           |
|                                        | 11a, 5.8GHz            | 13.85                      | 13.83                      | 0.02            |
|                                        | 11n HT20, 5.8GHz       | 13.90                      | 13.89                      | 0.01            |
|                                        | 11n HT40, 5.8GHz       | 12.96                      | 12.90                      | 0.06            |
|                                        | 11n VHT20, 5.8GHz      | 13.99                      | 13.75                      | 0.24            |
|                                        | 11n VHT40, 5.8GHz      | 12.97                      | 12.82                      | 0.15            |
|                                        | 11n VHT80, 5.8GHz      | 11.67                      | 11.66                      | 0.01            |
|                                        | S/N of test sample     | RQ3005X7GH                 | CQ30000180<br>RQ3005ZXJ1   |                 |
|                                        | Test date              | 2017/09/25~2017/10/26      | 2017/09/27~2017/10/31      |                 |
|                                        | GSM 850 (GPRS)         | 33.24                      | 33.45                      | -0.21           |
|                                        | GSM 850 (EDGE)         | 27.00                      | 26.73                      | 0.27            |
|                                        | GSM1900(GPRS)          | 30.48                      | 30.29                      | 0.19            |
|                                        | GSM1900(EDGE)          | 26.49                      | 25.79                      | 0.70            |
|                                        | UMTS B2 (RMC 12.2Kbps) | 24.00                      | 24.00                      | 0.00            |
|                                        | UMTS B5 (RMC 12.2Kbps) | 24.50                      | 24.50                      | 0.00            |
|                                        | LTE B2 (FDD - QPSK)    | 23.93                      | 23.95                      | -0.02           |
|                                        | LTE B5 (FDD - QPSK)    | 24.24                      | 24.26                      | -0.02           |
|                                        | LTE B7 (FDD - QPSK)    | 24.34                      | 23.93                      | 0.41            |
|                                        | S/N of test sample     | RQ3005X591                 | CQ3000017K                 |                 |
|                                        | Test date              | 2017/06/27~2017/08/20      | 2017/10/31                 |                 |



| Test Item                                                              | Mode               | PY7-48140L<br>Worst Result | PY7-78553D<br>Worst Result | Difference (dB) |
|------------------------------------------------------------------------|--------------------|----------------------------|----------------------------|-----------------|
| Peak Radiated<br>Spurious<br>Emission<br>(Band Edge)<br>(dBuV/m)       | 802.11b            | 54.93                      | 53.69                      | 1.24            |
|                                                                        | 802.11ac-VHT20     | 58.80                      | 57.42                      | 1.38            |
|                                                                        | BT (1Mbps)         | 47.92                      | 50.04                      | -2.12           |
|                                                                        | BT-LE(1Mbps)       | 52.06                      | 52.36                      | -0.3            |
|                                                                        | 802.11ac, 5.2GHz   | 57.73                      | 58.30                      | -0.57           |
|                                                                        | 802.11ac, 5.3GHz   | 56.48                      | 57.11                      | -0.63           |
|                                                                        | 802.11ac, 5.5GHz   | 56.91                      | 54.70                      | 2.21            |
|                                                                        | 802.11ac, 5.8GHz   | 51.95                      | 50.69                      | 1.26            |
|                                                                        | S/N of test sample | CQ300000QK<br>CQ300000QJ   | CQ3000016P<br>CQ300005AJ   |                 |
|                                                                        | Test date          | 2017/09/27~2017/10/15      |                            |                 |
| Average<br>Radiated<br>Spurious<br>Emission (Band<br>Edge)<br>(dBuV/m) | 802.11b            | 47.65                      | 45.01                      | 2.64            |
|                                                                        | 802.11ac-VHT20     | 49.07                      | 47.59                      | 1.48            |
|                                                                        | BT (1Mbps)         | 23.13                      | 25.25                      | -2.12           |
|                                                                        | BT-LE(1Mbps)       | 44.14                      | 43.93                      | 0.21            |
|                                                                        | 802.11ac, 5.2GHz   | 50.64                      | 51.00                      | -0.36           |
|                                                                        | 802.11ac, 5.3GHz   | 50.71                      | 50.55                      | 0.16            |
|                                                                        | 802.11ac, 5.5GHz   | 49.81                      | 46.95                      | 2.86            |
|                                                                        | S/N of test sample | CQ300000QK<br>CQ300000QJ   | CQ3000016P<br>CQ300005AJ   |                 |
|                                                                        | Test date          |                            |                            |                 |
| Peak Radiated<br>Spurious<br>Emission<br>(Harmonic)<br>(dBuV/m)        | 802.11b            | 45.09                      | 44.28                      | 0.81            |
|                                                                        | 802.11ac-VHT20     | 44.59                      | 44.15                      | 0.44            |
|                                                                        | BT (1Mbps)         | 42.92                      | 43.73                      | -0.81           |
|                                                                        | BT-LE(1Mbps)       | 43.56                      | 43.82                      | -0.26           |
|                                                                        | 802.11ac, 5.2GHz   | 46.72                      | 46.05                      | 0.67            |
|                                                                        | 802.11ac, 5.3GHz   | 45.48                      | 44.80                      | 0.68            |
|                                                                        | 802.11ac, 5.5GHz   | 44.28                      | 42.58                      | 1.70            |
|                                                                        | 802.11ac, 5.8GHz   | 50.60                      | 48.74                      | 1.86            |
|                                                                        | S/N of test sample | CQ300000QK<br>CQ300000QJ   | CQ3000016P<br>CQ300005AJ   |                 |
|                                                                        | Test date          |                            |                            |                 |
| NFC<br>(dBuV/m)                                                        | RSE (30MHz to1GHz) | 33.73                      | 32.66                      | 1.07            |
|                                                                        | S/N of test sample | CQ300000QJ                 | CQ300005AJ                 |                 |
|                                                                        | Test date          | 2017/10/12                 | 2017/10/20                 |                 |



**Conclusion:**

Radiated spurious emission test against the variant model for non-cellular part based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result (power levels measured are within 1dB, and the worst case of RSE spot check verification based on the worst condition from the original model is within 3dB, and are compliance with the limits), the test data from the original model is representative for the variant model.

The unwanted, harmonics, radiated spurious emission is reported peak measurement only due to spurious lower than 20dB than the limit, 74dBuv/m

The detail test results can be found in this document, Appendix A, hereafter.



## 4. Reference detail Section

| Rule Part     | Equipment Class | Wireless Technology      | Frequency Band (MHz)                                                      | Reference FCC ID | Type Grant/Permissive Change | Reference Report Title | Reference Application | Reference Report Sections                    |
|---------------|-----------------|--------------------------|---------------------------------------------------------------------------|------------------|------------------------------|------------------------|-----------------------|----------------------------------------------|
| 15C           | DTS             | Bluetooth – LE<br>Wii-Fi | 2400~2483.5                                                               | PY7-48140L       | Original Grant               | FCC RF Test Report     | PY7-78553D            | Part 15C<br>(FR762713-01B,<br>FR762713-01C)  |
|               | DSS             | Bluetooth                | 2400~2483.5                                                               | PY7-48140L       | Original Grant               | FCC RF Test Report     | PY7-78553D            | Part 15C<br>(FR762713-01A)                   |
|               | DXX             | NFC                      | 13.56                                                                     | PY7-48140L       | Original Grant               | FCC RF Test Report     | PY7-78553D            | Part 15C<br>(FR762713-01D)                   |
| 15E           | NII             | Wi-Fi                    | 5150~5250<br>5250~5350<br>5470~5725<br>5725~5850                          | PY7-48140L       | Original Grant               | FCC RF Test Report     | PY7-78553D            | Part 15E<br>(FR762713-01E,<br>FR762713-01F ) |
|               |                 | DFS                      | 5470~5725                                                                 | PY7-48140L       | Original Grant               | FCC RF Test Report     | PY7-78553D            | Part 15E<br>(FZ762713-01 )                   |
| Part 22.24.27 | PCE             | GSM<br>WCDMA             | GSM/GPRS(EDGE) 850<br>GSM/GPRS(EDGE) 1900<br>WCDMA Band 2<br>WCDMA Band 5 | PY7-48140L       | Original Grant               | FCC RF Test Report     | PY7-78553D            | Part 22.24.27<br>(FG762713-01A )             |
| Part 22.24.27 | PCE             | LTE                      | LTE B2/B5/B7                                                              | PY7-48140L       | Original Grant               | FCC RF Test Report     | PY7-78553D            | Part 22.24.27<br>(FG762713-01B )             |

## Appendix A. Spot Check Test Result

### 1.1 Conducted power

<2.4GHz WLAN>

|             | Mode           | Channel | Frequency (MHz) | Data Rate | Tune-Up Limit | FCC ID PY7-48140L<br>Average power (dBm) | FCC ID PY7-78553D<br>Average power (dBm) |
|-------------|----------------|---------|-----------------|-----------|---------------|------------------------------------------|------------------------------------------|
| 2.4GHz WLAN | 802.11b        | CH 1    | 2412            | 1Mbps     | 17            | 16.48                                    | 16.43                                    |
|             |                | CH 6    | 2437            |           |               | 16.21                                    | 16.09                                    |
|             |                | CH 11   | 2462            |           |               | 16.19                                    | 16.01                                    |
|             | 802.11g        | CH 1    | 2412            | 6Mbps     | 13.5          | 13.42                                    | 13.31                                    |
|             |                | CH 6    | 2437            |           |               | 13.28                                    | 13.27                                    |
|             |                | CH 11   | 2462            |           |               | 13.40                                    | 13.26                                    |
|             | 802.11n-HT20   | CH 1    | 2412            | MCS0      | 13            | 12.79                                    | 12.75                                    |
|             |                | CH 6    | 2437            |           |               | 12.69                                    | 12.65                                    |
|             |                | CH 11   | 2462            |           |               | 12.91                                    | 12.75                                    |
|             | 802.11ac-VHT20 | CH 1    | 2412            | MCS0      | 13            | 12.83                                    | 12.73                                    |
|             |                | CH 6    | 2437            |           |               | 12.74                                    | 12.58                                    |
|             |                | CH 11   | 2462            |           |               | 12.93                                    | 12.74                                    |



| <Bluetooth>              |         |                 |               |                                             |                                             |
|--------------------------|---------|-----------------|---------------|---------------------------------------------|---------------------------------------------|
| Mode                     | Channel | Frequency (MHz) | Tune-Up Limit | FCC ID<br>PY7-48140L<br>Average power (dBm) | FCC ID<br>PY7-78553D<br>Average power (dBm) |
| Bluetooth<br>(1Mbps)     | CH 00   | 2402            | 10.5          | 9.72                                        | 9.35                                        |
|                          | CH 39   | 2441            |               | 8.70                                        | 8.97                                        |
|                          | CH 78   | 2480            |               | 8.67                                        | 9.64                                        |
| Bluetooth<br>(2Mbps)     | CH 00   | 2402            | 7             | 6.31                                        | 5.92                                        |
|                          | CH 39   | 2441            |               | 5.34                                        | 5.69                                        |
|                          | CH 78   | 2480            |               | 5.40                                        | 6.35                                        |
| Bluetooth<br>(3Mbps)     | CH 00   | 2402            | 7             | 6.27                                        | 5.93                                        |
|                          | CH 39   | 2441            |               | 5.36                                        | 5.70                                        |
|                          | CH 78   | 2480            |               | 5.42                                        | 6.30                                        |
| BLE<br>(GFSK)<br>(1Mbps) | CH 00   | 2402            | 0             | -1.66                                       | -2.44                                       |
|                          | CH 19   | 2440            |               | -1.69                                       | -2.25                                       |
|                          | CH 39   | 2480            |               | -0.01                                       | -0.25                                       |
| BLE<br>(GFSK)<br>(2Mbps) | CH 00   | 2402            | 0             | -1.70                                       | -2.40                                       |
|                          | CH 19   | 2440            |               | -1.72                                       | -2.24                                       |
|                          | CH 39   | 2480            |               | -0.03                                       | -0.18                                       |


**<5GHz WLAN>**

| 5.2GHz<br>WLAN | Mode           | Channel | Frequency<br>(MHz) | Data Rate | Tune-Up<br>Limit | FCC ID<br>PY7-48140L<br>Average<br>power (dBm) | FCC ID<br>PY7-78553D<br>Average<br>power (dBm) |
|----------------|----------------|---------|--------------------|-----------|------------------|------------------------------------------------|------------------------------------------------|
|                |                |         |                    |           |                  |                                                |                                                |
|                | 802.11a        | CH 36   | 5180               | 6Mbps     | 15               | 14.94                                          | 14.84                                          |
|                |                | CH 44   | 5220               |           |                  | 14.88                                          | 14.81                                          |
|                |                | CH 48   | 5240               |           |                  | 14.84                                          | 14.75                                          |
|                | 802.11n-HT20   | CH 36   | 5180               | MCS0      | 14               | 13.85                                          | 13.87                                          |
|                |                | CH 44   | 5220               |           |                  | 13.65                                          | 13.77                                          |
|                |                | CH 48   | 5240               |           |                  | 13.67                                          | 13.77                                          |
|                | 802.11n-HT40   | CH 38   | 5190               | MCS0      | 13               | 12.89                                          | 12.84                                          |
|                |                | CH 46   | 5230               |           |                  | 12.63                                          | 12.72                                          |
|                | 802.11ac-VHT20 | CH 36   | 5180               | MCS0      | 14               | 13.92                                          | 13.84                                          |
|                |                | CH 44   | 5220               |           |                  | 13.74                                          | 13.67                                          |
|                |                | CH 48   | 5240               |           |                  | 13.71                                          | 13.68                                          |
|                | 802.11ac-VHT40 | CH 38   | 5190               | MCS0      | 13               | 12.98                                          | 12.81                                          |
|                |                | CH 46   | 5230               |           |                  | 12.71                                          | 12.70                                          |
|                | 802.11ac-VHT80 | CH 42   | 5210               | MCS0      | 12               | 11.98                                          | 11.95                                          |
|                | Mode           | Channel | Frequency<br>(MHz) | Data Rate | Tune-Up<br>Limit | FCC ID<br>PY7-48140L<br>Average<br>power (dBm) | FCC ID<br>PY7-78553D<br>Average<br>power (dBm) |
|                | 802.11a        | CH 52   | 5260               | 6Mbps     | 15               | 14.70                                          | 14.51                                          |
|                |                | CH 60   | 5300               |           |                  | 14.67                                          | 14.52                                          |
|                |                | CH 64   | 5320               |           |                  | 14.75                                          | 14.51                                          |
|                | 802.11n-HT20   | CH 52   | 5260               | MCS0      | 14               | 13.86                                          | 13.93                                          |
|                |                | CH 60   | 5300               |           |                  | 13.81                                          | 13.90                                          |
|                |                | CH 64   | 5320               |           |                  | 13.89                                          | 13.82                                          |
|                | 802.11n-HT40   | CH 54   | 5270               | MCS0      | 13               | 12.50                                          | 12.56                                          |
|                |                | CH 62   | 5310               |           |                  | 12.50                                          | 12.59                                          |
|                | 802.11ac-VHT20 | CH 52   | 5260               | MCS0      | 14               | 13.93                                          | 13.83                                          |
|                |                | CH 60   | 5300               |           |                  | 13.90                                          | 13.89                                          |
|                |                | CH 64   | 5320               |           |                  | 13.98                                          | 13.81                                          |



| 5.3GHz<br>WLAN | Mode           | Channel | Frequency<br>(MHz) | Data Rate | Tune-Up<br>Limit | FCC ID<br>PY7-48140L<br>Average<br>power (dBm) | FCC ID<br>PY7-78553D<br>Average<br>power (dBm) |
|----------------|----------------|---------|--------------------|-----------|------------------|------------------------------------------------|------------------------------------------------|
|                | 802.11ac-VHT40 | CH 54   | 5270               | MCS0      | 13               | 12.56                                          | 12.55                                          |
|                |                | CH 62   | 5310               |           |                  | 12.59                                          | 12.58                                          |
|                | 802.11ac-VHT80 | CH 58   | 5290               | MCS0      | 12               | 11.89                                          | 11.71                                          |
| 5.5GHz<br>WLAN | Mode           | Channel | Frequency<br>(MHz) | Data Rate | Tune-Up<br>Limit | FCC ID<br>PY7-48140L<br>Average<br>power (dBm) | FCC ID<br>PY7-78553D<br>Average<br>power (dBm) |
|                | 802.11a        | CH 100  | 5500               | 6Mbps     | 15               | 14.94                                          | 14.93                                          |
|                |                | CH 116  | 5580               |           |                  | 14.81                                          | 14.75                                          |
|                |                | CH 140  | 5700               |           | 14               | 13.86                                          | 13.53                                          |
|                |                | CH144   | 5720               |           |                  | 13.78                                          | 13.53                                          |
|                | 802.11n-HT20   | CH 100  | 5500               | MCS0      | 14               | 13.85                                          | 13.92                                          |
|                |                | CH 116  | 5580               |           |                  | 13.70                                          | 13.76                                          |
|                |                | CH 140  | 5700               |           |                  | 13.77                                          | 13.88                                          |
|                |                | CH144   | 5720               |           |                  | 13.76                                          | 13.75                                          |
|                | 802.11n-HT40   | CH 102  | 5510               | MCS0      | 13               | 12.82                                          | 12.89                                          |
|                |                | CH 126  | 5630               |           |                  | 12.79                                          | 12.82                                          |
|                |                | CH 134  | 5670               |           |                  | 12.71                                          | 12.74                                          |
|                |                | CH142   | 5710               |           |                  | 12.66                                          | 12.65                                          |
|                | 802.11ac-VHT20 | CH 100  | 5500               | MCS0      | 14               | 13.94                                          | 13.90                                          |
|                |                | CH 116  | 5580               |           |                  | 13.76                                          | 13.74                                          |
|                |                | CH 140  | 5700               |           |                  | 13.87                                          | 13.86                                          |
|                |                | CH144   | 5720               |           |                  | 13.83                                          | 13.64                                          |
|                | 802.11ac-VHT40 | CH 102  | 5510               | MCS0      | 13               | 12.87                                          | 12.75                                          |
|                |                | CH 126  | 5630               |           |                  | 12.80                                          | 12.75                                          |
|                |                | CH 134  | 5670               |           |                  | 12.74                                          | 12.73                                          |
|                |                | CH142   | 5710               |           |                  | 12.75                                          | 12.61                                          |
|                | 802.11ac-VHT80 | CH106   | 5530               | MCS0      | 12               | 11.68                                          | 11.66                                          |
|                |                | CH122   | 5610               |           |                  | 11.70                                          | 11.68                                          |
|                |                | CH138   | 5690               |           |                  | 11.71                                          | 11.70                                          |



| 5.8GHz<br>WLAN | Mode           | Channel | Frequency<br>(MHz) | Data Rate | Tune-Up<br>Limit | FCC ID<br>PY7-48140L<br>Average<br>power (dBm) | FCC ID<br>PY7-78553D<br>Average<br>power (dBm) |
|----------------|----------------|---------|--------------------|-----------|------------------|------------------------------------------------|------------------------------------------------|
|                | 802.11a        | CH 149  | 5745               | MCS0      | 14               | 13.85                                          | 13.83                                          |
|                |                | CH 157  | 5785               |           |                  | 13.83                                          | 13.81                                          |
|                |                | CH 165  | 5825               |           |                  | 13.58                                          | 13.68                                          |
|                | 802.11n-HT20   | CH 149  | 5745               | MCS0      | 14               | 13.90                                          | 13.89                                          |
|                |                | CH 157  | 5785               |           |                  | 13.82                                          | 13.80                                          |
|                |                | CH 165  | 5825               |           |                  | 13.80                                          | 13.79                                          |
|                | 802.11n-HT40   | CH 151  | 5755               | MCS0      | 13               | 12.87                                          | 12.86                                          |
|                |                | CH 159  | 5795               |           |                  | 12.96                                          | 12.90                                          |
|                | 802.11ac-VHT20 | CH 149  | 5745               | MCS0      | 14               | 13.99                                          | 13.74                                          |
|                |                | CH 157  | 5785               |           |                  | 13.87                                          | 13.75                                          |
|                |                | CH 165  | 5825               |           |                  | 13.87                                          | 13.68                                          |
|                | 802.11ac-VHT40 | CH 151  | 5755               | MCS0      | 13               | 12.94                                          | 12.82                                          |
|                |                | CH 159  | 5795               |           |                  | 12.97                                          | 12.79                                          |
|                | 802.11ac-VHT80 | CH155   | 5775               | MCS0      | 12               | 11.67                                          | 11.66                                          |

## 1.2 Radiated Spurious Emission

### 2.4GHz BT/WLAN

| Mode              | Ch    | Freq.<br>(MHz) | Peak<br>/Avg. | FCC ID<br>PY7-48140L |          |          |           |          |          | FCC ID<br>PY7-78553D |          |          |           |          |          |
|-------------------|-------|----------------|---------------|----------------------|----------|----------|-----------|----------|----------|----------------------|----------|----------|-----------|----------|----------|
|                   |       |                |               | Band edge            |          |          | Harmonic  |          |          | Band edge            |          |          | Harmonic  |          |          |
|                   |       |                |               | Frequency            | Level    | Limit    | Frequency | Level    | Limit    | Frequency            | Level    | Limit    | Frequency | Level    | Limit    |
|                   |       |                |               | (MHz)                | (dBuV/m) | (dBuV/m) | y (MHz)   | (dBuV/m) | (dBuV/m) | (MHz)                | (dBuV/m) | (dBuV/m) | y (MHz)   | (dBuV/m) | (dBuV/m) |
| BT(1Mbps)         | CH 78 | 2480           | P             | 2483.56              | 47.92    | 74       | 7440      | 42.92    | 74       | 2483.52              | 50.04    | 74       | 7440      | 43.73    | 74       |
|                   |       |                | A             | 2483.56              | 23.13    | 54       | -         | -        | -        | 2483.52              | 25.25    | 54       | -         | -        | -        |
| BLE(1Mbps)        | CH 39 | 2480           | P             | 2499.32              | 52.06    | 74       | 7440      | 43.56    | 74       | 2487.44              | 52.36    | 74       | 7440      | 43.82    | 74       |
|                   |       |                | A             | 2489.4               | 44.14    | 54       | -         | -        | -        | 2492.4               | 43.93    | 54       | -         | -        | -        |
| 802.11b           | CH 11 | 2462           | P             | 2483.56              | 54.93    | 74       | 7386      | 45.09    | 74       | 2487.68              | 53.69    | 74       | 7386      | 44.28    | 74       |
|                   |       |                | A             | 2485.92              | 47.65    | 54       | -         | -        | -        | 2487.76              | 45.01    | 54       | -         | -        | -        |
| 802.11ac<br>VHT20 | CH 11 | 2462           | P             | 2483.56              | 58.8     | 74       | 7386      | 44.59    | 74       | 2484.04              | 57.42    | 74       | 7386      | 44.15    | 74       |
|                   |       |                | A             | 2483.56              | 49.07    | 54       | -         | -        | -        | 2483.72              | 47.59    | 54       | -         | -        | -        |

### 5.2GHz WLAN

| Mode              | Ch    | Freq.<br>(MHz) | Peak<br>/Avg. | FCC ID<br>PY7-48140L |          |          |           |          |          | FCC ID<br>PY7-78553D |          |          |           |          |          |
|-------------------|-------|----------------|---------------|----------------------|----------|----------|-----------|----------|----------|----------------------|----------|----------|-----------|----------|----------|
|                   |       |                |               | Band edge            |          |          | Harmonic  |          |          | Band edge            |          |          | Harmonic  |          |          |
|                   |       |                |               | Frequency            | Level    | Limit    | Frequency | Level    | Limit    | Frequency            | Level    | Limit    | Frequency | Level    | Limit    |
|                   |       |                |               | y (MHz)              | (dBuV/m) | (dBuV/m) | y (MHz)   | (dBuV/m) | (dBuV/m) | y (MHz)              | (dBuV/m) | (dBuV/m) | y (MHz)   | (dBuV/m) | (dBuV/m) |
| 802.11ac<br>VHT80 | CH 42 | 5210           | P             | 5145.34              | 57.73    | 74       | 10420     | 46.72    | 74       | 5149.24              | 58.3     | 74       | 10420     | 46.05    | 74       |
|                   |       |                | A             | 5147.94              | 50.64    | 54       | -         | -        | -        | 5148.72              | 51       | 54       | -         | -        | -        |


**5.3GHz WLAN**

| Mode              | Ch    | Freq.<br>(MHz) | Peak<br>/Avg. | FCC ID<br>PY7-48140L |                   |                   |                     |                   |                   | FCC ID<br>PY7-78553D |                   |                   |                     |                   |                   |
|-------------------|-------|----------------|---------------|----------------------|-------------------|-------------------|---------------------|-------------------|-------------------|----------------------|-------------------|-------------------|---------------------|-------------------|-------------------|
|                   |       |                |               | Band edge            |                   |                   | Harmonic            |                   |                   | Band edge            |                   |                   | Harmonic            |                   |                   |
|                   |       |                |               | Frequenc<br>y (MHz)  | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz)  | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) |
| 802.11ac<br>VHT40 | CH 62 | 5310           | P             | 5352                 | 56.48             | 74                | 10620               | 45.48             | 74                | 5350.8               | 57.11             | 74                | 10620               | 44.8              | 74                |
|                   |       |                | A             | 5350.8               | 50.71             | 54                | -                   | -                 | -                 | 5350.8               | 50.55             | 54                | -                   | -                 | -                 |

**5.5GHz WLAN**

| Mode              | Ch     | Freq.<br>(MHz) | Peak<br>/Avg. | FCC ID<br>PY7-48140L |                   |                   |                     |                   |                   | FCC ID<br>PY7-78553D |                   |                   |                     |                   |                   |
|-------------------|--------|----------------|---------------|----------------------|-------------------|-------------------|---------------------|-------------------|-------------------|----------------------|-------------------|-------------------|---------------------|-------------------|-------------------|
|                   |        |                |               | Band edge            |                   |                   | Harmonic            |                   |                   | Band edge            |                   |                   | Harmonic            |                   |                   |
|                   |        |                |               | Frequenc<br>y (MHz)  | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz)  | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) |
| 802.11ac<br>VHT80 | CH 106 | 5530           | P             | 5456.08              | 56.91             | 74                | 16590               | 44.28             | 68.2              | 5458.24              | 54.7              | 74                | 16590               | 42.58             | 68.2              |
|                   |        |                | A             | 5458.72              | 49.81             | 54                | -                   | -                 | -                 | 5458.24              | 46.95             | 54                | -                   | -                 | -                 |

**5.8GHz WLAN**

| Mode              | Ch     | Freq.<br>(MHz) | Peak<br>/Avg. | FCC ID<br>PY7-48140L |                   |                   |                     |                   |                   | FCC ID<br>PY7-78553D |                   |                   |                     |                   |                   |
|-------------------|--------|----------------|---------------|----------------------|-------------------|-------------------|---------------------|-------------------|-------------------|----------------------|-------------------|-------------------|---------------------|-------------------|-------------------|
|                   |        |                |               | Band edge            |                   |                   | Harmonic            |                   |                   | Band edge            |                   |                   | Harmonic            |                   |                   |
|                   |        |                |               | Frequenc<br>y (MHz)  | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz)  | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Frequenc<br>y (MHz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) |
| 802.11ac<br>VHT40 | CH 151 | 5755           | P             | 5949                 | 51.95             | 68.2              | 17265               | 50.6              | 68.2              | 5947.6               | 50.69             | 68.2              | 17265               | 48.74             | 68.2              |



**2.4GHz 2400~2483.5MHz  
BT (1M) (Band Edge @ 3m)**

| BT                              | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| <b>BT<br/>CH 78<br/>2480MHz</b> | *                                                                                           | 2480                 | 103.18              | -                       | -                           | 102.08                    | 27.15                         | 4.92                    | 30.97                      | 235                  | 234                     | P                       | H               |
|                                 | *                                                                                           | 2480                 | 78.39               | -                       | -                           | -                         | -                             | -                       | -                          | -                    | -                       | A                       | H               |
|                                 |                                                                                             | 2483.52              | 50.04               | -23.96                  | 74                          | 48.93                     | 27.15                         | 4.93                    | 30.97                      | 235                  | 234                     | P                       | H               |
|                                 |                                                                                             | 2483.52              | 25.25               | -28.75                  | 54                          | -                         | -                             | -                       | -                          | -                    | -                       | A                       | H               |
|                                 |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                 |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                 | *                                                                                           | 2480                 | 100.97              | -                       | -                           | 99.87                     | 27.15                         | 4.92                    | 30.97                      | 303                  | 82                      | P                       | V               |
|                                 | *                                                                                           | 2480                 | 76.18               | -                       | -                           | -                         | -                             | -                       | -                          | -                    | -                       | A                       | V               |
|                                 |                                                                                             | 2483.52              | 48.95               | -25.05                  | 74                          | 47.84                     | 27.15                         | 4.93                    | 30.97                      | 303                  | 82                      | P                       | V               |
|                                 |                                                                                             | 2483.52              | 24.16               | -29.84                  | 54                          | -                         | -                             | -                       | -                          | -                    | -                       | A                       | V               |
|                                 |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
|                                 |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
| <b>Remark</b>                   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz**

**BT (1M) (Harmonic @ 3m)**

| BT                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| BT<br>CH 78<br>2480MHz |                                                                                             | 4960                 | 40.89               | -33.11                  | 74                          | 58.11                     | 31.75                         | 7.59                    | 57.05                      | 100                  | 0                       | P                       | H               |
|                        |                                                                                             | 4960                 | 16.1                | -37.9                   | 54                          | -                         | -                             | -                       | -                          | -                    | -                       | A                       | H               |
|                        |                                                                                             | 7440                 | 43.06               | -30.94                  | 74                          | 54.42                     | 36.41                         | 9.21                    | 57.44                      | 100                  | 0                       | P                       | H               |
|                        |                                                                                             | 7440                 | 18.27               | -35.73                  | 54                          | -                         | -                             | -                       | -                          | -                    | -                       | A                       | H               |
|                        |                                                                                             | 4960                 | 39.1                | -34.9                   | 74                          | 56.32                     | 31.75                         | 7.59                    | 57.05                      | 100                  | 0                       | P                       | V               |
|                        |                                                                                             | 4960                 | 14.31               | -39.69                  | 54                          | -                         | -                             | -                       | -                          | -                    | -                       | A                       | V               |
|                        |                                                                                             | 7440                 | 43.73               | -30.27                  | 74                          | 55.09                     | 36.41                         | 9.21                    | 57.44                      | 100                  | 0                       | P                       | V               |
|                        |                                                                                             | 7440                 | 18.94               | -35.06                  | 54                          | -                         | -                             | -                       | -                          | -                    | -                       | A                       | V               |
| Remark                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz**  
**BLE 1Mbps (Band Edge @ 3m)**

| BLE                              | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|----------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| <b>BLE<br/>CH 39<br/>2480MHz</b> | *                                                                                           | 2480                 | 91.75               | -                       | -                           | 80.72                     | 27.15                         | 4.92                    | 30.97                      | 147                  | 150                     | P                       | H               |
|                                  | *                                                                                           | 2480                 | 91.47               | -                       | -                           | 80.44                     | 27.15                         | 4.92                    | 30.97                      | 147                  | 150                     | A                       | H               |
|                                  |                                                                                             | 2487.44              | 52.36               | -21.64                  | 74                          | 41.32                     | 27.15                         | 4.93                    | 30.97                      | 147                  | 150                     | P                       | H               |
|                                  |                                                                                             | 2492.4               | 43.93               | -10.07                  | 54                          | 32.83                     | 27.2                          | 4.93                    | 30.96                      | 147                  | 150                     | A                       | H               |
|                                  |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                  |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                  | *                                                                                           | 2480                 | 91.11               | -                       | -                           | 80.08                     | 27.15                         | 4.92                    | 30.97                      | 186                  | 253                     | P                       | V               |
|                                  | *                                                                                           | 2480                 | 90.86               | -                       | -                           | 79.83                     | 27.15                         | 4.92                    | 30.97                      | 186                  | 253                     | A                       | V               |
|                                  |                                                                                             | 2488.24              | 51.13               | -22.87                  | 74                          | 40.03                     | 27.2                          | 4.93                    | 30.96                      | 186                  | 253                     | P                       | V               |
|                                  |                                                                                             | 2494.88              | 43.88               | -10.12                  | 54                          | 32.78                     | 27.2                          | 4.93                    | 30.96                      | 186                  | 253                     | A                       | V               |
|                                  |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
|                                  |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
| <b>Remark</b>                    | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz  
BLE 1Mbps (Harmonic @ 3m)**

| BLE                              | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|----------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| <b>BLE<br/>CH 39<br/>2480MHz</b> |                                                                                             | 4960                 | 39.13               | -34.87                  | 74                          | 56.35                     | 31.75                         | 7.59                    | 57.05                      | 100                  | 0                       | P                       | H               |
|                                  |                                                                                             | 7440                 | 43.51               | -30.49                  | 74                          | 54.87                     | 36.41                         | 9.21                    | 57.44                      | 100                  | 0                       | P                       | H               |
|                                  |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                  |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                  |                                                                                             | 4960                 | 40.17               | -33.83                  | 74                          | 57.39                     | 31.75                         | 7.59                    | 57.05                      | 100                  | 0                       | P                       | V               |
|                                  |                                                                                             | 7440                 | 43.82               | -30.18                  | 74                          | 55.18                     | 36.41                         | 9.21                    | 57.44                      | 100                  | 0                       | P                       | V               |
|                                  |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
|                                  |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
| <b>Remark</b>                    | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz**

**WIFI 802.11b (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1                    | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| <b>802.11b<br/>CH 11<br/>2462MHz</b> | *                                                                                           | 2462                 | 106.77              | -                       | -                           | 95.81                     | 27.1                          | 4.9                     | 30.97                      | 160                  | 181                     | P                       | H               |
|                                      | *                                                                                           | 2462                 | 103.54              | -                       | -                           | 92.58                     | 27.1                          | 4.9                     | 30.97                      | 160                  | 181                     | A                       | H               |
|                                      |                                                                                             | 2487.68              | 53.69               | -20.31                  | 74                          | 42.59                     | 27.2                          | 4.93                    | 30.96                      | 160                  | 181                     | P                       | H               |
|                                      |                                                                                             | 2487.76              | 45.01               | -8.99                   | 54                          | 33.91                     | 27.2                          | 4.93                    | 30.96                      | 160                  | 181                     | A                       | H               |
|                                      |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                      |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                      | *                                                                                           | 2462                 | 104.33              | -                       | -                           | 93.37                     | 27.1                          | 4.9                     | 30.97                      | 100                  | 118                     | P                       | V               |
|                                      | *                                                                                           | 2462                 | 101.09              | -                       | -                           | 90.13                     | 27.1                          | 4.9                     | 30.97                      | 100                  | 118                     | A                       | V               |
|                                      |                                                                                             | 2488.92              | 53.56               | -20.44                  | 74                          | 42.46                     | 27.2                          | 4.93                    | 30.96                      | 100                  | 118                     | P                       | V               |
|                                      |                                                                                             | 2487.8               | 43.68               | -10.32                  | 54                          | 32.58                     | 27.2                          | 4.93                    | 30.96                      | 100                  | 118                     | A                       | V               |
|                                      |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
|                                      |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
| <b>Remark</b>                        | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz  
WIFI 802.11b (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                    | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| <b>802.11b<br/>CH 11<br/>2462MHz</b> |                                                                                             | 4924                 | 41.08               | -32.92                  | 74                          | 58.46                     | 31.7                          | 7.52                    | 57.1                       | 100                  | 0                       | P                       | H               |
|                                      |                                                                                             | 7386                 | 44.28               | -29.72                  | 74                          | 55.73                     | 36.31                         | 9.18                    | 57.38                      | 100                  | 0                       | P                       | H               |
|                                      |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                      |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                      |                                                                                             | 4924                 | 41.75               | -32.25                  | 74                          | 59.13                     | 31.7                          | 7.52                    | 57.1                       | 100                  | 0                       | P                       | V               |
|                                      |                                                                                             | 7386                 | 44.1                | -29.9                   | 74                          | 55.55                     | 36.31                         | 9.18                    | 57.38                      | 100                  | 0                       | P                       | V               |
|                                      |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
|                                      |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
| <b>Remark</b>                        | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz**

**WIFI 802.11ac VHT20 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT20<br>CH 11<br>2462MHz | *                                                                                           | 2462                 | 103.3               | -                       | -                           | 92.34                     | 27.1                          | 4.9                     | 30.97                      | 113                  | 179                     | P                       | H               |
|                                       | *                                                                                           | 2462                 | 95.68               | -                       | -                           | 84.72                     | 27.1                          | 4.9                     | 30.97                      | 113                  | 179                     | A                       | H               |
|                                       |                                                                                             | 2484.04              | 57.42               | -16.58                  | 74                          | 46.38                     | 27.15                         | 4.93                    | 30.97                      | 113                  | 179                     | P                       | H               |
|                                       |                                                                                             | 2483.72              | 47.59               | -6.41                   | 54                          | 36.55                     | 27.15                         | 4.93                    | 30.97                      | 113                  | 179                     | A                       | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                       | *                                                                                           | 2462                 | 100.74              | -                       | -                           | 89.78                     | 27.1                          | 4.9                     | 30.97                      | 100                  | 120                     | P                       | V               |
|                                       | *                                                                                           | 2462                 | 93.46               | -                       | -                           | 82.5                      | 27.1                          | 4.9                     | 30.97                      | 100                  | 120                     | A                       | V               |
|                                       |                                                                                             | 2484.84              | 55.07               | -18.93                  | 74                          | 44.03                     | 27.15                         | 4.93                    | 30.97                      | 100                  | 120                     | P                       | V               |
|                                       |                                                                                             | 2483.52              | 46.1                | -7.9                    | 54                          | 35.06                     | 27.15                         | 4.93                    | 30.97                      | 100                  | 120                     | A                       | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz**

**WIFI 802.11ac VHT20 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT20<br>CH 11<br>2462MHz |                                                                                             | 4924                 | 39.08               | -34.92                  | 74                          | 56.46                     | 31.7                          | 7.52                    | 57.1                       | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             | 7386                 | 44.15               | -29.85                  | 74                          | 55.6                      | 36.31                         | 9.18                    | 57.38                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                       |                                                                                             | 4924                 | 38.6                | -35.4                   | 74                          | 55.98                     | 31.7                          | 7.52                    | 57.1                       | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             | 7386                 | 44.08               | -29.92                  | 74                          | 55.53                     | 36.31                         | 9.18                    | 57.38                      | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



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

| WIFI<br>Ant.<br>1                               | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| <b>802.11ac<br/>VHT80<br/>CH 42<br/>5210MHz</b> |                                                                                             | 5147.42              | 57.29               | -16.71                  | 74                          | 49.22                     | 32.05                         | 9.05                    | 33.03                      | 100                  | 122                     | P                       | H               |
|                                                 |                                                                                             | 5149.5               | 50.9                | -3.1                    | 54                          | 42.83                     | 32.05                         | 9.05                    | 33.03                      | 100                  | 122                     | A                       | H               |
|                                                 | *                                                                                           | 5210                 | 95.79               | -                       | -                           | 87.61                     | 32.12                         | 9.09                    | 33.03                      | 100                  | 122                     | P                       | H               |
|                                                 | *                                                                                           | 5210                 | 87.7                | -                       | -                           | 79.52                     | 32.12                         | 9.09                    | 33.03                      | 100                  | 122                     | A                       | H               |
|                                                 |                                                                                             | 5384.4               | 49.08               | -24.92                  | 74                          | 40.62                     | 32.28                         | 9.2                     | 33.02                      | 100                  | 122                     | P                       | H               |
|                                                 |                                                                                             | 5449.64              | 40.69               | -13.31                  | 54                          | 32.07                     | 32.35                         | 9.29                    | 33.02                      | 100                  | 122                     | A                       | H               |
|                                                 |                                                                                             | 5149.24              | 58.3                | -15.7                   | 74                          | 50.23                     | 32.05                         | 9.05                    | 33.03                      | 337                  | 85                      | P                       | V               |
|                                                 |                                                                                             | 5148.72              | 51                  | -3                      | 54                          | 42.93                     | 32.05                         | 9.05                    | 33.03                      | 337                  | 85                      | P                       | V               |
|                                                 | *                                                                                           | 5210                 | 97.67               | -                       | -                           | 89.49                     | 32.12                         | 9.09                    | 33.03                      | 337                  | 85                      | P                       | V               |
|                                                 | *                                                                                           | 5210                 | 89.46               | -                       | -                           | 81.28                     | 32.12                         | 9.09                    | 33.03                      | 337                  | 85                      | A                       | V               |
|                                                 |                                                                                             | 5351.36              | 49.31               | -24.69                  | 74                          | 40.9                      | 32.25                         | 9.19                    | 33.03                      | 337                  | 85                      | P                       | V               |
|                                                 |                                                                                             | 5459.16              | 40.8                | -13.2                   | 54                          | 32.18                     | 32.35                         | 9.29                    | 33.02                      | 337                  | 85                      | A                       | V               |
| <b>Remark</b>                                   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



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

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT80<br>CH 42<br>5210MHz |                                                                                             | 10420                | 46.05               | -27.95                  | 74                          | 56.67                   | 38.48                         | 14.67                   | 64.08                      | 100                  | 0                       | P                     | H             |
|                                       |                                                                                             | 15630                | 44.45               | -29.55                  | 74                          | 50.84                   | 37.2                          | 18.03                   | 61.98                      | 100                  | 0                       | P                     | H             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | H             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | H             |
|                                       |                                                                                             | 10420                | 45.34               | -28.66                  | 74                          | 55.96                   | 38.48                         | 14.67                   | 64.08                      | 100                  | 0                       | P                     | V             |
|                                       |                                                                                             | 15630                | 45.35               | -28.65                  | 74                          | 51.74                   | 37.2                          | 18.03                   | 61.98                      | 100                  | 0                       | P                     | V             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | V             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | V             |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 2 - 5250~5350MHz**

**WIFI 802.11ac VHT40 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1                               | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| <b>802.11ac<br/>VHT40<br/>CH 62<br/>5310MHz</b> |                                                                                             | 5037.74              | 49.4                | -24.6                   | 74                          | 41.52                   | 31.95                         | 8.97                    | 33.04                      | 100                  | 122                     | P                     | H             |
|                                                 |                                                                                             | 5106.76              | 41.51               | -12.49                  | 54                          | 33.52                   | 32.02                         | 9.01                    | 33.04                      | 100                  | 122                     | A                     | H             |
|                                                 | *                                                                                           | 5310                 | 100.6               | -                       | -                           | 92.25                   | 32.22                         | 9.16                    | 33.03                      | 100                  | 122                     | P                     | H             |
|                                                 | *                                                                                           | 5310                 | 91.65               | -                       | -                           | 83.3                    | 32.22                         | 9.16                    | 33.03                      | 100                  | 122                     | A                     | H             |
|                                                 |                                                                                             | 5350.08              | 54.3                | -19.7                   | 74                          | 45.89                   | 32.25                         | 9.19                    | 33.03                      | 100                  | 122                     | P                     | H             |
|                                                 |                                                                                             | 5352                 | 47.88               | -6.12                   | 54                          | 39.47                   | 32.25                         | 9.19                    | 33.03                      | 100                  | 122                     | A                     | H             |
|                                                 |                                                                                             | 5116.96              | 48.93               | -25.07                  | 74                          | 40.92                   | 32.02                         | 9.03                    | 33.04                      | 326                  | 80                      | P                     | V             |
|                                                 |                                                                                             | 5091.12              | 41.44               | -12.56                  | 54                          | 33.47                   | 32                            | 9.01                    | 33.04                      | 326                  | 80                      | A                     | V             |
|                                                 | *                                                                                           | 5310                 | 101.7               | -                       | -                           | 93.35                   | 32.22                         | 9.16                    | 33.03                      | 326                  | 80                      | P                     | V             |
|                                                 | *                                                                                           | 5310                 | 93.58               | -                       | -                           | 85.23                   | 32.22                         | 9.16                    | 33.03                      | 326                  | 80                      | A                     | V             |
|                                                 |                                                                                             | 5350.8               | 57.11               | -16.89                  | 74                          | 48.7                    | 32.25                         | 9.19                    | 33.03                      | 326                  | 80                      | P                     | V             |
|                                                 |                                                                                             | 5350.08              | 50.55               | -3.45                   | 54                          | 42.14                   | 32.25                         | 9.19                    | 33.03                      | 326                  | 80                      | A                     | V             |
| <b>Remark</b>                                   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



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

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT40<br>CH 62<br>5310MHz |                                                                                             | 10620                | 44.18               | -29.82                  | 74                          | 54.41                   | 38.74                         | 14.81                   | 64.08                      | 100                  | 0                       | P                     | H             |
|                                       |                                                                                             | 15930                | 44.15               | -29.85                  | 74                          | 50.31                   | 36.15                         | 18.28                   | 60.86                      | 100                  | 0                       | P                     | H             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | H             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | H             |
|                                       |                                                                                             | 10620                | 44.8                | -29.2                   | 74                          | 55.03                   | 38.74                         | 14.81                   | 64.08                      | 100                  | 0                       | P                     | V             |
|                                       |                                                                                             | 15930                | 44.27               | -29.73                  | 74                          | 50.43                   | 36.15                         | 18.28                   | 60.86                      | 100                  | 0                       | P                     | V             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | V             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | V             |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 3 - 5470~5725MHz**

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

| WIFI<br>Ant.<br>1                                | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|--------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| <b>802.11ac<br/>VHT80<br/>CH 106<br/>5530MHz</b> |                                                                                             | 5455.12              | 53.2                | -20.8                   | 74                          | 44.58                   | 32.35                         | 9.29                    | 33.02                      | 103                  | 121                     | P                     | H             |
|                                                  |                                                                                             | 5461.6               | 53.47               | -14.73                  | 68.2                        | 44.85                   | 32.35                         | 9.29                    | 33.02                      | 103                  | 121                     | P                     | H             |
|                                                  |                                                                                             | 5457.52              | 45.37               | -8.63                   | 54                          | 36.75                   | 32.35                         | 9.29                    | 33.02                      | 103                  | 121                     | A                     | H             |
|                                                  | *                                                                                           | 5530                 | 94.73               | -                       | -                           | 85.93                   | 32.44                         | 9.41                    | 33.05                      | 103                  | 121                     | P                     | H             |
|                                                  | *                                                                                           | 5530                 | 86.1                | -                       | -                           | 77.3                    | 32.44                         | 9.41                    | 33.05                      | 103                  | 121                     | A                     | H             |
|                                                  |                                                                                             | 5728.46              | 50.32               | -17.88                  | 68.2                        | 40.7                    | 32.94                         | 9.81                    | 33.13                      | 103                  | 121                     | P                     | H             |
|                                                  |                                                                                             | 5458.24              | 54.7                | -19.3                   | 74                          | 46.08                   | 32.35                         | 9.29                    | 33.02                      | 303                  | 81                      | P                     | V             |
|                                                  |                                                                                             | 5466.64              | 57.17               | -11.03                  | 68.2                        | 48.53                   | 32.37                         | 9.29                    | 33.02                      | 303                  | 81                      | P                     | V             |
|                                                  |                                                                                             | 5458.24              | 46.95               | -7.05                   | 54                          | 38.33                   | 32.35                         | 9.29                    | 33.02                      | 303                  | 81                      | A                     | V             |
|                                                  | *                                                                                           | 5530                 | 97.15               | -                       | -                           | 88.35                   | 32.44                         | 9.41                    | 33.05                      | 303                  | 81                      | P                     | V             |
|                                                  | *                                                                                           | 5530                 | 88.93               | -                       | -                           | 80.13                   | 32.44                         | 9.41                    | 33.05                      | 303                  | 81                      | A                     | V             |
|                                                  |                                                                                             | 5733.5               | 49.71               | -18.49                  | 68.2                        | 40.04                   | 32.94                         | 9.88                    | 33.15                      | 303                  | 81                      | P                     | V             |
| <b>Remark</b>                                    | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 3 5470~5725MHz**  
**WIFI 802.11ac VHT80 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT80<br>CH 106<br>5530MHz |                                                                                             | 11060                | 46.27               | -27.73                  | 74                          | 55.61                   | 39.11                         | 15.13                   | 63.87                      | 100                  | 0                       | P                     | H             |
|                                        |                                                                                             | 16590                | 42.13               | -26.07                  | 68.2                        | 47.96                   | 37.76                         | 18.81                   | 62.7                       | 100                  | 0                       | P                     | H             |
|                                        |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | H             |
|                                        |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | H             |
|                                        |                                                                                             | 11060                | 47.02               | -26.98                  | 74                          | 56.36                   | 39.11                         | 15.13                   | 63.87                      | 100                  | 0                       | P                     | V             |
|                                        |                                                                                             | 16590                | 42.58               | -25.62                  | 68.2                        | 48.41                   | 37.76                         | 18.81                   | 62.7                       | 100                  | 0                       | P                     | V             |
|                                        |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | V             |
|                                        |                                                                                             |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       | V             |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |


**Band 4 - 5725~5850MHz**
**WIFI 802.11ac VHT40 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1                                | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| <b>802.11ac<br/>VHT40<br/>CH 151<br/>5755MHz</b> |      | 5616.2               | 50.01               | -18.19                  | 68.2                        | 40.85                     | 32.69                         | 9.55                    | 33.08                      | 100                  | 121                     | P                       | H               |
|                                                  |      | 5699.2               | 55.01               | -49.6                   | 104.61                      | 45.52                     | 32.86                         | 9.75                    | 33.12                      | 100                  | 121                     | P                       | H               |
|                                                  |      | 5719.2               | 64.64               | -45.94                  | 110.58                      | 55.02                     | 32.94                         | 9.81                    | 33.13                      | 100                  | 121                     | P                       | H               |
|                                                  |      | 5721                 | 63.45               | -49.63                  | 113.08                      | 53.83                     | 32.94                         | 9.81                    | 33.13                      | 100                  | 121                     | P                       | H               |
|                                                  | *    | 5755                 | 103.46              | -                       | -                           | 93.71                     | 33.02                         | 9.88                    | 33.15                      | 100                  | 121                     | P                       | H               |
|                                                  | *    | 5755                 | 95.06               | -                       | -                           | 85.31                     | 33.02                         | 9.88                    | 33.15                      | 100                  | 121                     | A                       | H               |
|                                                  |      | 5854.2               | 50.25               | -62.37                  | 112.62                      | 40.15                     | 33.27                         | 10.02                   | 33.19                      | 100                  | 121                     | P                       | H               |
|                                                  |      | 5870.2               | 50.55               | -55.99                  | 106.54                      | 40.47                     | 33.27                         | 10.02                   | 33.21                      | 100                  | 121                     | P                       | H               |
|                                                  |      | 5906.8               | 50.28               | -31.35                  | 81.63                       | 40.09                     | 33.39                         | 10.02                   | 33.22                      | 100                  | 121                     | P                       | H               |
|                                                  |      | 5947.6               | 50.69               | -17.51                  | 68.2                        | 40.43                     | 33.48                         | 10.02                   | 33.24                      | 100                  | 121                     | P                       | H               |
|                                                  |      |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                                  |      | 5623.8               | 50.04               | -18.16                  | 68.2                        | 40.88                     | 32.69                         | 9.55                    | 33.08                      | 252                  | 82                      | P                       | V               |
|                                                  |      | 5697.4               | 51.44               | -51.84                  | 103.28                      | 41.95                     | 32.86                         | 9.75                    | 33.12                      | 252                  | 82                      | P                       | V               |
|                                                  |      | 5719.6               | 61.35               | -49.34                  | 110.69                      | 51.73                     | 32.94                         | 9.81                    | 33.13                      | 252                  | 82                      | P                       | V               |
|                                                  |      | 5724.8               | 64.32               | -57.42                  | 121.74                      | 54.7                      | 32.94                         | 9.81                    | 33.13                      | 252                  | 82                      | P                       | V               |
|                                                  | *    | 5755                 | 102.25              | -                       | -                           | 92.5                      | 33.02                         | 9.88                    | 33.15                      | 252                  | 82                      | P                       | V               |
|                                                  | *    | 5755                 | 94.27               | -                       | -                           | 84.52                     | 33.02                         | 9.88                    | 33.15                      | 252                  | 82                      | A                       | V               |
|                                                  |      | 5852                 | 50.22               | -67.42                  | 117.64                      | 40.16                     | 33.23                         | 10.02                   | 33.19                      | 252                  | 82                      | P                       | V               |
|                                                  |      | 5856.8               | 49.17               | -61.13                  | 110.3                       | 39.07                     | 33.27                         | 10.02                   | 33.19                      | 252                  | 82                      | P                       | V               |
|                                                  |      | 5898                 | 51.42               | -36.72                  | 88.14                       | 41.27                     | 33.35                         | 10.02                   | 33.22                      | 252                  | 82                      | P                       | V               |
|                                                  |      | 5936.2               | 50.65               | -17.55                  | 68.2                        | 40.44                     | 33.43                         | 10.02                   | 33.24                      | 252                  | 82                      | P                       | V               |
|                                                  |      |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |

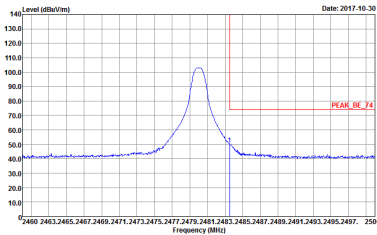
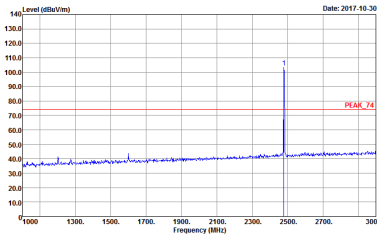


**Band 4 5725~5850MHz**  
**WIFI 802.11ac VHT40 (Harmonic @ 3m)**

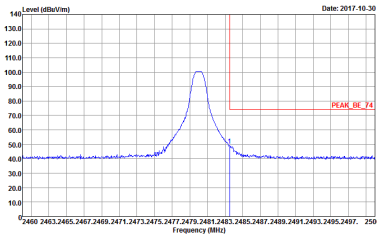
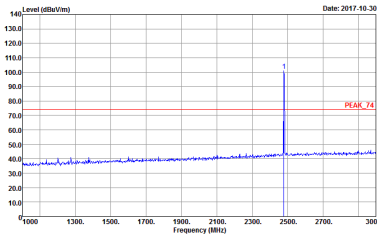
| WIFI<br>Ant.<br>1                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT40<br>CH 151<br>5755MHz |                                                                                             | 11510                | 46.25               | -27.75                  | 74                          | 55.02                     | 38.5                          | 15.45                   | 63                         | 100                  | 0                       | P                       | H               |
|                                        |                                                                                             | 17265                | 48.71               | -19.49                  | 68.2                        | 49.18                     | 40.74                         | 19.26                   | 60.83                      | 100                  | 0                       | P                       | H               |
|                                        |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                        |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | H               |
|                                        |                                                                                             | 11510                | 46.55               | -27.45                  | 74                          | 55.32                     | 38.5                          | 15.45                   | 63                         | 100                  | 0                       | P                       | V               |
|                                        |                                                                                             | 17265                | 48.74               | -19.46                  | 68.2                        | 49.21                     | 40.74                         | 19.26                   | 60.83                      | 100                  | 0                       | P                       | V               |
|                                        |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
|                                        |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         | V               |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



2.4GHz 2400~2483.5MHz  
BT (1M) (Band Edge @ 3m)

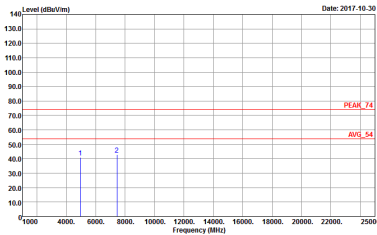
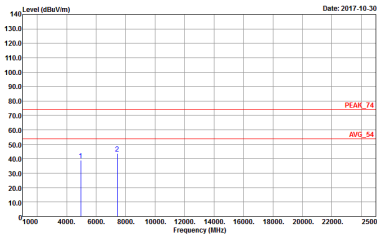
| BT   | 2.4GHz 2400~2483.5MHz Band Edge @ 3m                                                                                                                               |                                                                                                                                                                  |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | BT CH78 2480MHz                                                                                                                                                    |                                                                                                                                                                  |
|      | Horizontal                                                                                                                                                         | Fundamental                                                                                                                                                      |
| Peak |  <p>Site : 03CH13-HY<br/>Condition : PEAK BE 74 3m HORN 9120D 1241 HORIZONTAL</p> |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m HORN 9120D 1241 HORIZONTAL</p> |



| BT   | 2.4GHz 2400~2483.5MHz Band Edge @ 3m                                                                                                                             |                                                                                                                                                                |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | BT CH78 2480MHz                                                                                                                                                  |                                                                                                                                                                |
|      | Vertical                                                                                                                                                         | Fundamental                                                                                                                                                    |
| Peak |  <p>Site : 03CH13-HY<br/>Condition : PEAK BE 74 3m HORN 9120D 1241 VERTICAL</p> |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m HORN 9120D 1241 VERTICAL</p> |

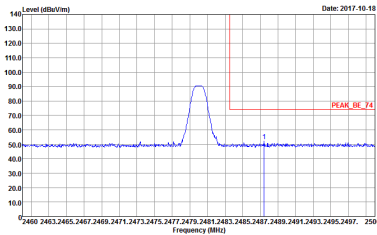
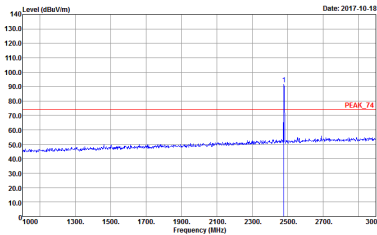
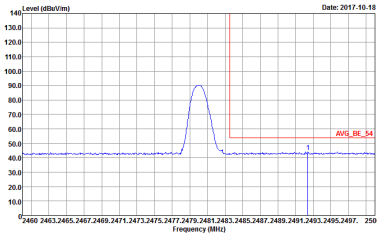
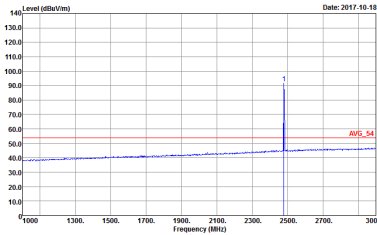


**2.4GHz 2400~2483.5MHz  
BT (1M) (Harmonic @ 3m)**

| BT                             | 2.4GHz 2400~2483.5MHz Harmonic @ 3m                                                                                                                          |                                                                                                                                                             |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                | BT CH78 2480MHz                                                                                                                                              |                                                                                                                                                             |
|                                | Horizontal                                                                                                                                                   | Vertical                                                                                                                                                    |
| <b>Peak</b><br><br><b>Avg.</b> |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m SHF HORN 584 HORIZONTAL</p> |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m SHF HORN 584 VERTICAL</p> |
|                                |                                                                                                                                                              |                                                                                                                                                             |



2.4GHz 2400~2483.5MHz  
BLE 1Mbps (Band Edge @ 3m)

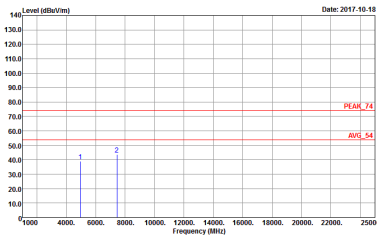
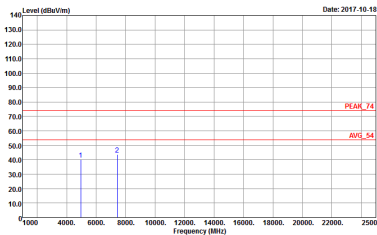
| BLE  | 2.4GHz 2400~2483.5MHz Band Edge @ 3m                                                                                                                                |                                                                                                                                                                   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | BLE CH39 2480MHz                                                                                                                                                    |                                                                                                                                                                   |
|      | Horizontal                                                                                                                                                          | Fundamental                                                                                                                                                       |
| Peak |  <p>Site : 03CH13-HY<br/>Condition : PEAK BE 74 3m HORN 9120D 1241 HORIZONTAL</p>  |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m HORN 9120D 1241 HORIZONTAL</p>  |
| Avg. |  <p>Site : 03CH13-HY<br/>Condition : AVG BE 54 3m HORN 9120D 1241 HORIZONTAL</p> |  <p>Site : 03CH13-HY<br/>Condition : AVG 54 3m HORN 9120D 1241 HORIZONTAL</p> |



| BLE  | 2.4GHz 2400~2483.5MHz Band Edge @ 3m                                           |                                                                             |
|------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
|      | BLE CH39 2480MHz                                                               |                                                                             |
|      | Vertical                                                                       | Fundamental                                                                 |
| Peak | <p>Site : 03CH13-HY<br/>Condition : PEAK_BE_74 3m HORN 9120D 1241 VERTICAL</p> | <p>Site : 03CH13-HY<br/>Condition : PEAK_74 3m HORN 9120D 1241 VERTICAL</p> |
| Avg. | <p>Site : 03CH13-HY<br/>Condition : AVG_BE_54 3m HORN 9120D 1241 VERTICAL</p>  | <p>Site : 03CH13-HY<br/>Condition : AVG_54 3m HORN 9120D 1241 VERTICAL</p>  |

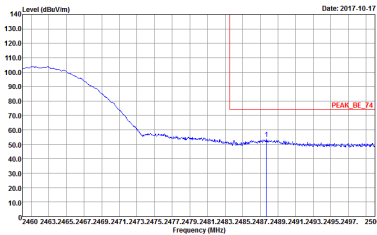
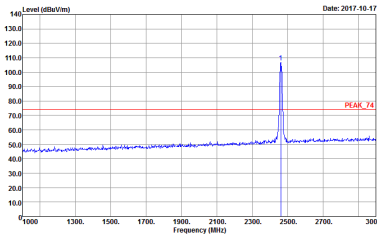
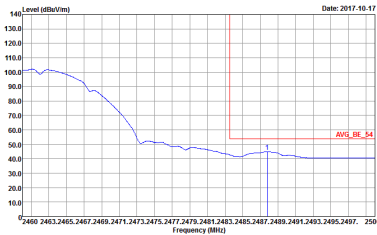
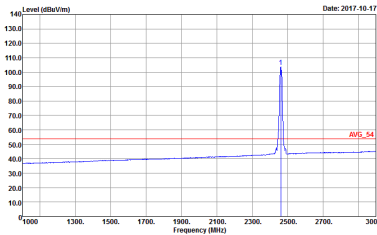


2.4GHz 2400~2483.5MHz  
BLE 1Mbps (Harmonic @ 3m)

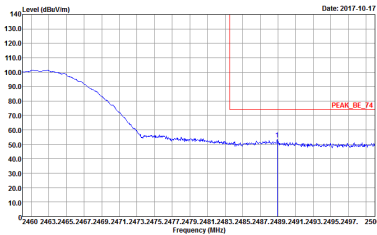
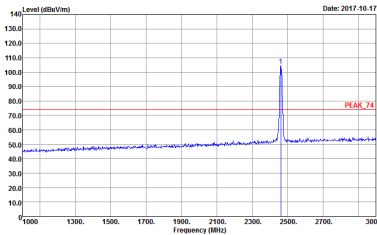
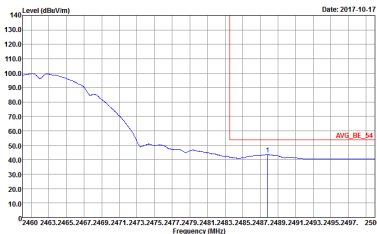
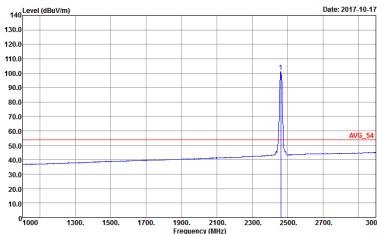
| BLE  | 2.4GHz 2400~2483.5MHz Harmonic @ 3m                                                                                                                          |                                                                                                                                                             |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | BLE CH39 2480MHz                                                                                                                                             |                                                                                                                                                             |
|      | Horizontal                                                                                                                                                   | Vertical                                                                                                                                                    |
| Peak |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m SHF HORN 584 HORIZONTAL</p> |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m SHF HORN 584 VERTICAL</p> |



2.4GHz 2400~2483.5MHz  
WIFI 802.11b (Band Edge @ 3m)

| WIFI | 2.4GHz 2400~2483.5MHz Band Edge @ 3m                                                                                                                                |                                                                                                                                                                   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11b CH11 2462MHz                                                                                                                                                |                                                                                                                                                                   |
| 1    | Horizontal                                                                                                                                                          | Fundamental                                                                                                                                                       |
| Peak |  <p>Site : 03CH13-HY<br/>Condition : PEAK BE 74 3m HORN 9120D 1241 HORIZONTAL</p>  |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m HORN 9120D 1241 HORIZONTAL</p>  |
| Avg. |  <p>Site : 03CH13-HY<br/>Condition : AVG BE 54 3m HORN 9120D 1241 HORIZONTAL</p> |  <p>Site : 03CH13-HY<br/>Condition : AVG 54 3m HORN 9120D 1241 HORIZONTAL</p> |



| WIFI | 2.4GHz 2400~2483.5MHz Band Edge @ 3m                                                                                                                              |                                                                                                                                                                 |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11b CH11 2462MHz                                                                                                                                              |                                                                                                                                                                 |
| 1    | Vertical                                                                                                                                                          | Fundamental                                                                                                                                                     |
| Peak |  <p>Site : 03CH13-HY<br/>Condition : PEAK BE 74 3m HORN 9120D 1241 VERTICAL</p>  |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m HORN 9120D 1241 VERTICAL</p>  |
| Avg. |  <p>Site : 03CH13-HY<br/>Condition : AVG BE 54 3m HORN 9120D 1241 VERTICAL</p> |  <p>Site : 03CH13-HY<br/>Condition : AVG 54 3m HORN 9120D 1241 VERTICAL</p> |

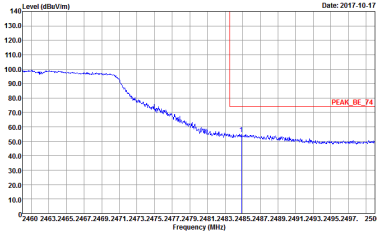
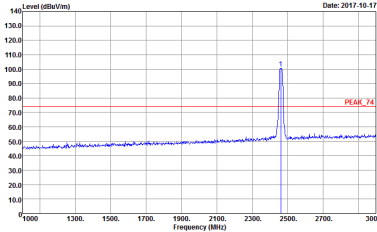
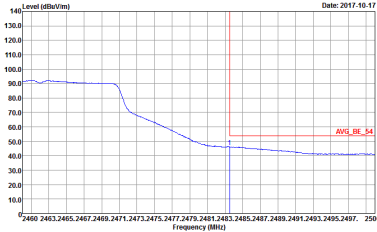
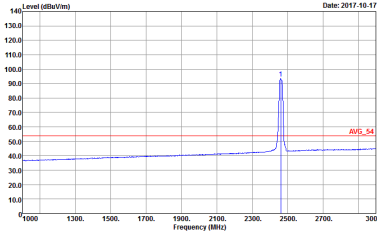


2.4GHz 2400~2483.5MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

| WIFI | 2.4GHz 2400~2483.5MHz Band Edge @ 3m                                             |                                                                               |
|------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| ANT  | 802.11ac VH20 CH11 2462MHz                                                       |                                                                               |
| 1    | Horizontal                                                                       | Fundamental                                                                   |
| Peak | <p>Site : 03CH13-HY<br/>Condition : PEAK BE 74 3m HORN 9120D 1241 HORIZONTAL</p> | <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m HORN 9120D 1241 HORIZONTAL</p> |
| Avg. | <p>Site : 03CH13-HY<br/>Condition : AVG BE 54 3m HORN 9120D 1241 HORIZONTAL</p>  | <p>Site : 03CH13-HY<br/>Condition : AVG 54 3m HORN 9120D 1241 HORIZONTAL</p>  |



| WIFI | 2.4GHz 2400~2483.5MHz Band Edge @ 3m                                                                                                                              |                                                                                                                                                                 |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VH20 CH11 2462MHz                                                                                                                                        |                                                                                                                                                                 |
| 1    | Vertical                                                                                                                                                          | Fundamental                                                                                                                                                     |
| Peak |  <p>Site : 03CH13-HY<br/>Condition : PEAK BE 74 3m HORN 9120D 1241 VERTICAL</p>  |  <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m HORN 9120D 1241 VERTICAL</p>  |
| Avg. |  <p>Site : 03CH13-HY<br/>Condition : AVG BE 54 3m HORN 9120D 1241 VERTICAL</p> |  <p>Site : 03CH13-HY<br/>Condition : AVG 54 3m HORN 9120D 1241 VERTICAL</p> |



2.4GHz 2400~2483.5MHz  
WIFI 802.11b (Harmonic @ 3m)

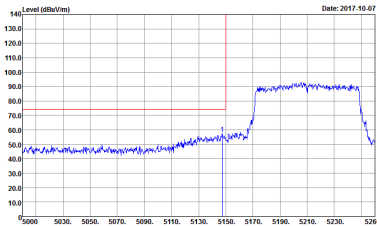
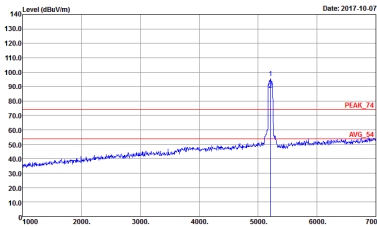
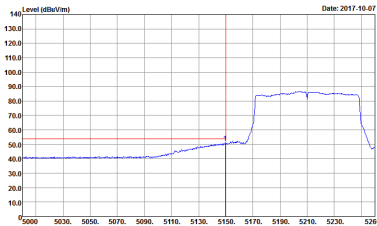
| WIFI         | 2.4GHz 2400~2483.5MHz Harmonic @ 3m                                        |                                                                          |
|--------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------|
| ANT          | 802.11b CH11 2462MHz                                                       |                                                                          |
| 1            | Horizontal                                                                 | Vertical                                                                 |
| Peak<br>Avg. | <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m SHF HORN 584 HORIZONTAL</p> | <p>Site : 03CH13-HY<br/>Condition : PEAK 74 3m SHF HORN 584 VERTICAL</p> |



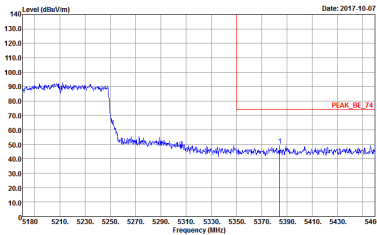
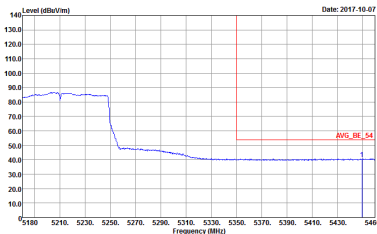
**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11ac VHT20 (Harmonic @ 3m)**

| WIFI                       | 2.4GHz 2400~2483.5MHz Harmonic @ 3m                                         |                                                                           |
|----------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------|
| ANT                        | 802.11ac VHT20 CH11 2462MHz                                                 |                                                                           |
| 1                          | Horizontal                                                                  | Vertical                                                                  |
| <b>Peak</b><br><b>Avg.</b> | <p>Site : 03CH13-HY<br/> Condition : PEAK 74 3m SHF HORN 584 HORIZONTAL</p> | <p>Site : 03CH13-HY<br/> Condition : PEAK 74 3m SHF HORN 584 VERTICAL</p> |

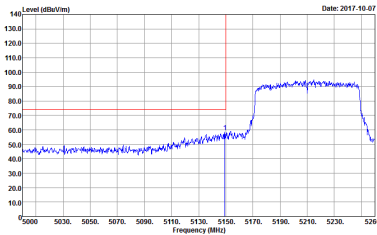
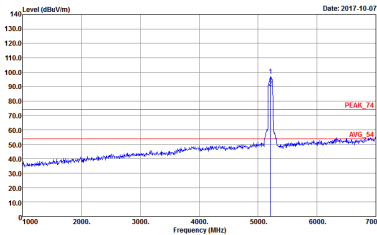
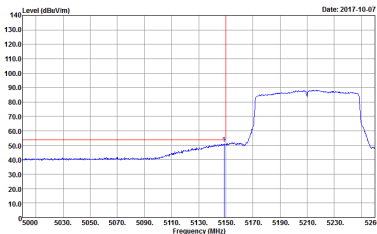
**Band 1 - 5150~5250MHz**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

| WIFI        | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                 |                                                                                                                                                                 |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT         | 802.11ac VHT80 CH42 5210MHz - L                                                                                                                                    |                                                                                                                                                                 |
| 1           | Horizontal                                                                                                                                                         | Fundamental                                                                                                                                                     |
| <b>Peak</b> |  <p>Site : 03CH11-HY<br/> Condition : PEAK BE 74 3m HORN 9120D-HF HORIZONTAL</p>  |  <p>Site : 03CH11-HY<br/> Condition : PEAK 74 3m HORN 9120D-HF HORIZONTAL</p> |
| <b>Avg.</b> |  <p>Site : 03CH11-HY<br/> Condition : AVG BE 54 3m HORN 9120D-HF HORIZONTAL</p> | <b>Left blank</b>                                                                                                                                               |

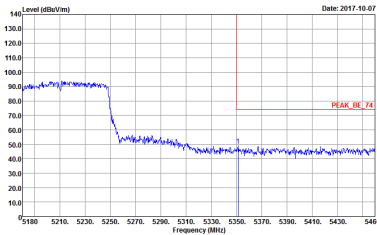
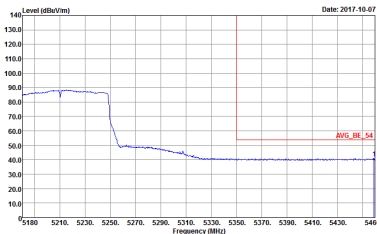


| WIFI | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                |             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT  | 802.11ac VHT80 CH42 5210MHz - R                                                                                                                                   |             |
| 1    | Horizontal                                                                                                                                                        | Fundamental |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK BE 74 3m HORN 91200-HF HORIZONTAL</p>  | Left blank  |
| Avg. |  <p>Site : 03CH11-HY<br/>Condition : AVG BE 54 3m HORN 91200-HF HORIZONTAL</p> | Left blank  |

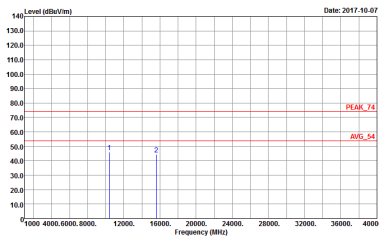
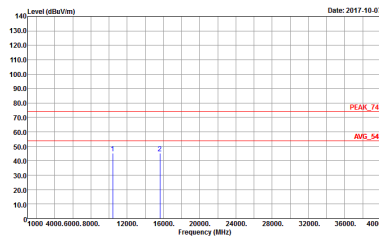


| WIFI | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                              |                                                                                                                                                              |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VHT80 CH42 5210MHz - L                                                                                                                                 |                                                                                                                                                              |
| 1    | Vertical                                                                                                                                                        | Fundamental                                                                                                                                                  |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK BE 74 3m HORN 9120D-HF VERTICAL</p>  |  <p>Site : 03CH11-HY<br/>Condition : PEAK 74 3m HORN 9120D-HF VERTICAL</p> |
| Avg. |  <p>Site : 03CH11-HY<br/>Condition : AVG BE 54 3m HORN 9120D-HF VERTICAL</p> | Left blank                                                                                                                                                   |

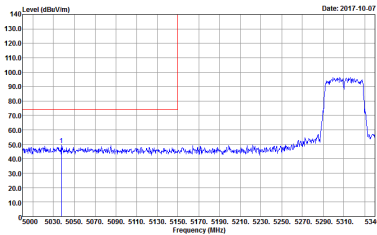
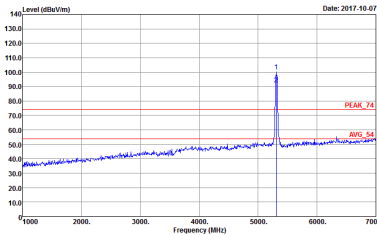
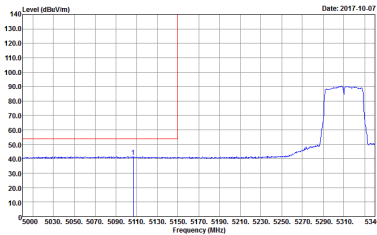


| WIFI | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                              |             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT  | 802.11ac VHT80 CH42 5210MHz - R                                                                                                                                 |             |
| 1    | Vertical                                                                                                                                                        | Fundamental |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK BE 74 3m HORN 91200-HF VERTICAL</p>  | Left blank  |
| Avg. |  <p>Site : 03CH11-HY<br/>Condition : AVG BE 54 3m HORN 91200-HF VERTICAL</p> | Left blank  |

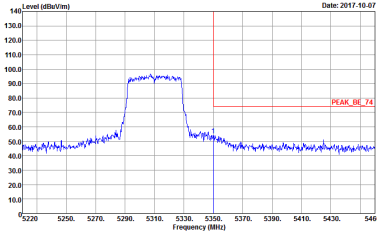
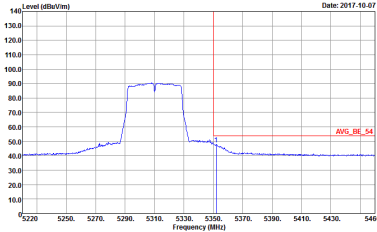
**Band 1 - 5150~5250MHz**  
**WIFI 802.11ac VHT80 (Harmonic @ 3m)**

| WIFI                 | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                              |                                                                                                                                                               |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT                  | 802.11ac VHT80 CH42 5210MHz                                                                                                                                    |                                                                                                                                                               |
| 1                    | Horizontal                                                                                                                                                     | Vertical                                                                                                                                                      |
| <b>Peak<br/>Avg.</b> |  <p>Site : 03CHI1-HY<br/> Condition : PEAK 74 3m HORN 9120D-HF HORIZONTAL</p> |  <p>Site : 03CHI1-HY<br/> Condition : PEAK 74 3m HORN 9120D-HF VERTICAL</p> |

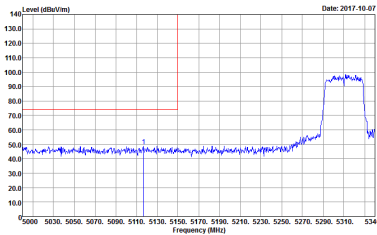
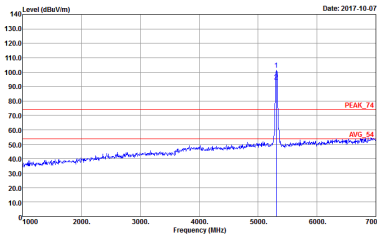
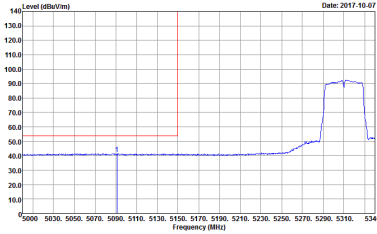
**Band 2 - 5250~5350MHz**  
**WIFI 802.11ac VHT40 (Band Edge @ 3m)**

| WIFI        | Band 2 5250~5350MHz Band Edge @ 3m                                                                                                                                 |                                                                                                                                                                 |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT         | 802.11ac VHT40 CH62 5310 MHz - L                                                                                                                                   |                                                                                                                                                                 |
| 1           | Horizontal                                                                                                                                                         | Fundamental                                                                                                                                                     |
| <b>Peak</b> |  <p>Site : 03CH11-HY<br/> Condition : PEAK BE 74 3m HORN 9120D-HF HORIZONTAL</p>  |  <p>Site : 03CH11-HY<br/> Condition : PEAK 74 3m HORN 9120D-HF HORIZONTAL</p> |
| <b>Avg.</b> |  <p>Site : 03CH11-HY<br/> Condition : AVG BE 54 3m HORN 9120D-HF HORIZONTAL</p> | <b>Left blank</b>                                                                                                                                               |

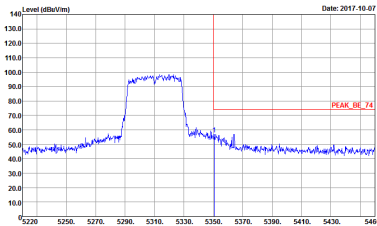
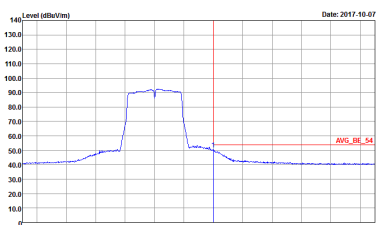


| WIFI | Band 2 5250~5350MHz Band Edge @ 3m                                                                                                                                |             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT  | 802.11ac VHT40 CH62 5310 MHz - R                                                                                                                                  |             |
| 1    | Horizontal                                                                                                                                                        | Fundamental |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL</p>  | Left blank  |
| Avg. |  <p>Site : 03CH11-HY<br/>Condition : AVG_BE_54 3m HORN 91200-HF HORIZONTAL</p> | Left blank  |



| WIFI | Band 2 5250~5350MHz Band Edge @ 3m                                                                                                                              |                                                                                                                                                              |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VHT40 CH62 5310 MHz - L                                                                                                                                |                                                                                                                                                              |
| 1    | Vertical                                                                                                                                                        | Fundamental                                                                                                                                                  |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK BE 74 3m HORN 9120D-HF VERTICAL</p>  |  <p>Site : 03CH11-HY<br/>Condition : PEAK 74 3m HORN 9120D-HF VERTICAL</p> |
| Avg. |  <p>Site : 03CH11-HY<br/>Condition : AVG BE 54 3m HORN 9120D-HF VERTICAL</p> | Left blank                                                                                                                                                   |



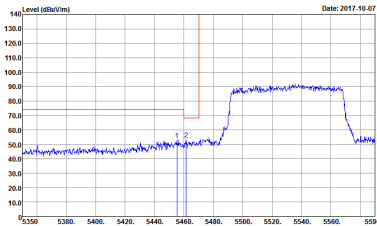
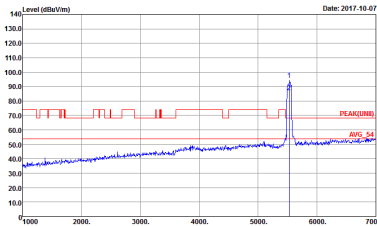
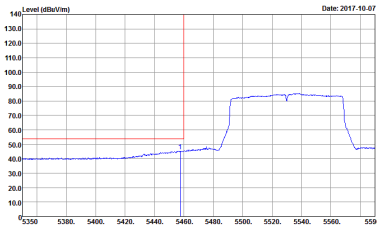
| WIFI | Band 2 5250~5350MHz Band Edge @ 3m                                                                                                                              |             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT  | 802.11ac VHT40 CH62 5310 MHz - R                                                                                                                                |             |
| 1    | Vertical                                                                                                                                                        | Fundamental |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK_BE_74 3m HORN 91200-HF VERTICAL</p>  | Left blank  |
| Avg. |  <p>Site : 03CH11-HY<br/>Condition : AVG_BE_54 3m HORN 91200-HF VERTICAL</p> | Left blank  |



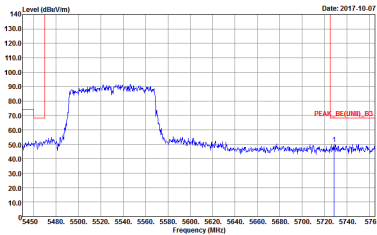
**Band 2 - 5250~5350MHz**  
**WIFI 802.11ac VHT40 (Harmonic @ 3m)**

| WIFI         | Band 2 5250~5350MHz Harmonic @ 3m                                            |                                                                            |
|--------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| ANT          | 802.11ac VHT40 CH62 5310 MHz                                                 |                                                                            |
| 1            | Horizontal                                                                   | Vertical                                                                   |
| Peak<br>Avg. | <p>Site : 03CH11-HY<br/> Condition : PEAK 74 3m HORN 9120D-HF HORIZONTAL</p> | <p>Site : 03CH11-HY<br/> Condition : PEAK 74 3m HORN 9120D-HF VERTICAL</p> |

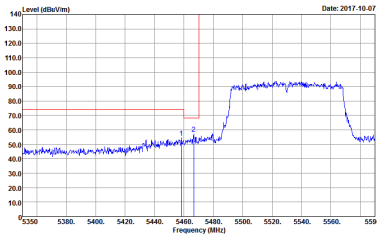
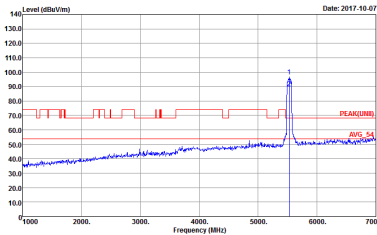
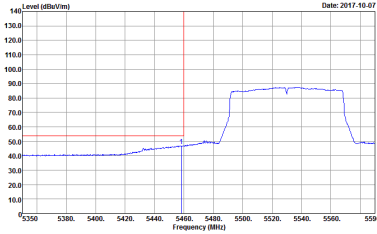
**Band 3 - 5470~5725MHz**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m                                                                                                                                       |                                                                                                                                                                    |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VHT80 CH106 5530MHz - L                                                                                                                                         |                                                                                                                                                                    |
| 1    | Horizontal                                                                                                                                                               | Fundamental                                                                                                                                                        |
| Peak |  <p>Site : 03CHI1-HY<br/> Condition : PEAK BE(UNII) B3 3m HORN 9120D-HF HORIZONTAL</p>  |  <p>Site : 03CHI1-HY<br/> Condition : PEAK(UNII) 3m HORN 9120D-HF HORIZONTAL</p> |
| Avg. |  <p>Site : 03CHI1-HY<br/> Condition : AVG BE(UNII) B3 3m HORN 9120D-HF HORIZONTAL</p> | Left blank                                                                                                                                                         |



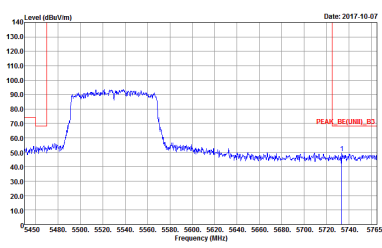
| WIFI | Band 3 5470~5725MHz Band Edge @ 3m                                                                                                                                     |             |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT  | 802.11ac VHT80 CH106 5530MHz - R                                                                                                                                       |             |
| 1    | Horizontal                                                                                                                                                             | Fundamental |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK_BE(UNIT) B3 3m HORN 91200-HF HORIZONTAL</p> | Left blank  |



| WIFI | Band 3 5470~5725MHz Band Edge @ 3m                                                                                                                                              |                                                                                                                                                                           |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VHT80 CH106 5530MHz - L                                                                                                                                                |                                                                                                                                                                           |
| 1    | Vertical                                                                                                                                                                        | Fundamental                                                                                                                                                               |
| Peak | <div><p>Site : 03CH11-HY<br/>Condition : PEAK BE(UNII) B3 3m HORN 9120D-HF VERTICAL</p></div>  | <div><p>Site : 03CH11-HY<br/>Condition : PEAK(UNII) 3m HORN 9120D-HF VERTICAL</p></div> |
| Avg. | <div><p>Site : 03CH11-HY<br/>Condition : AVG BE(UNII) B3 3m HORN 9120D-HF VERTICAL</p></div> | Left blank                                                                                                                                                                |



# FCC Test Report

| WIFI | Band 3 5470~5725MHz Band Edge @ 3m                                                                                                                                    |             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT  | 802.11ac VHT80 CH106 5530MHz - R                                                                                                                                      |             |
| 1    | Vertical                                                                                                                                                              | Fundamental |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK_BE(UNIT1) B3 3m HORN 9120D-HF VERTICAL</p> | Left blank  |

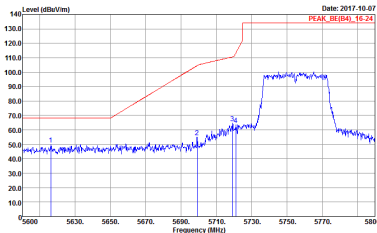
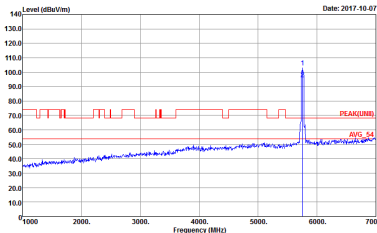
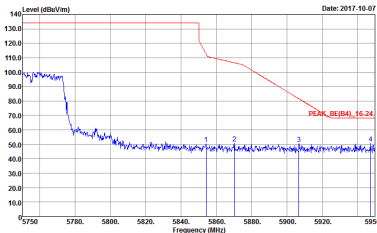


**Band 3 - 5470~5725MHz**  
**WIFI 802.11ac VHT80 (Harmonic @ 3m)**

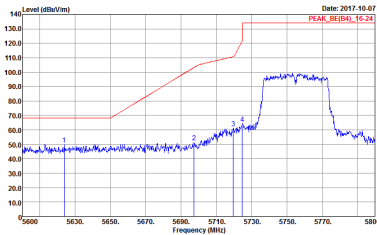
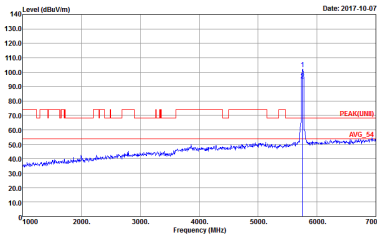
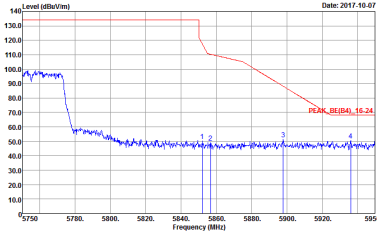
| WIFI                 | Band 3 5470~5725MHz Harmonic @ 3m                                               |                                                                               |
|----------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| ANT                  | 802.11ac VHT80 CH106 5530MHz                                                    |                                                                               |
| 1                    | Horizontal                                                                      | Vertical                                                                      |
| <b>Peak<br/>Avg.</b> | <p>Site : 03CHI1-HY<br/> Condition : PEAK(UNIT) 3m HORN 9120D-HF HORIZONTAL</p> | <p>Site : 03CHI1-HY<br/> Condition : PEAK(UNIT) 3m HORN 9120D-HF VERTICAL</p> |



Band 4 - 5725~5850MHz  
WIFI 802.11ac VHT40 (Band Edge @ 3m)

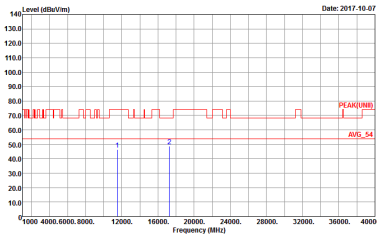
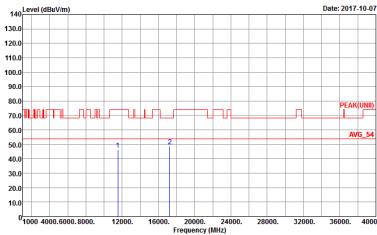
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                        |                                                                                                                                                                  |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VHT40 CH151 5755MHz                                                                                                                                              |                                                                                                                                                                  |
| 1    | Horizontal                                                                                                                                                                | Fundamental                                                                                                                                                      |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK BE(B4) 16-24 3m HORN 9120D-HF HORIZONTAL</p>   |  <p>Site : 03CH11-HY<br/>Condition : PEAK(UWB) 3m HORN 9120D-HF HORIZONTAL</p> |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK BE(B4) 16-24 3m HORN 9120D-HF HORIZONTAL</p> | Left blank                                                                                                                                                       |

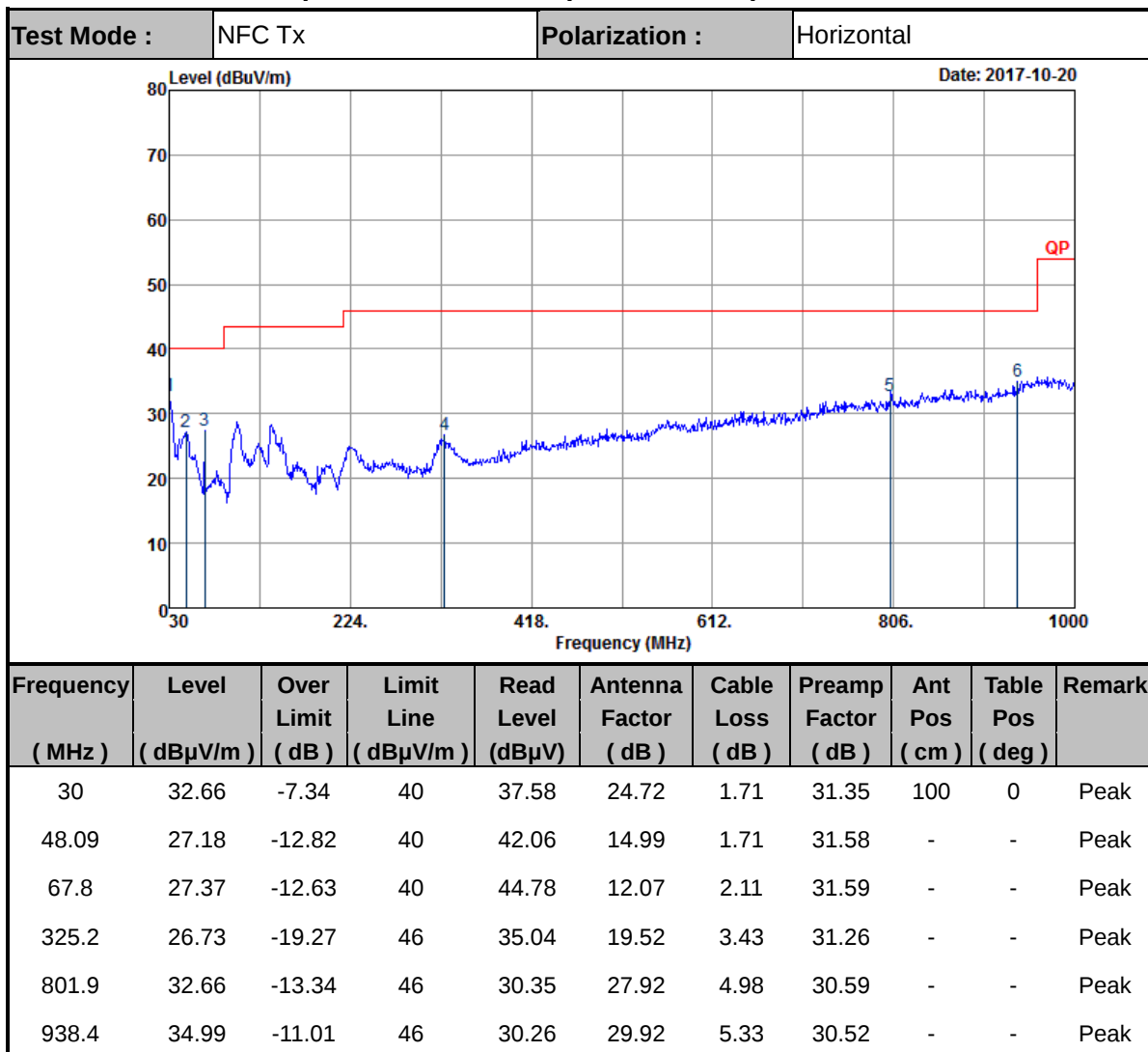


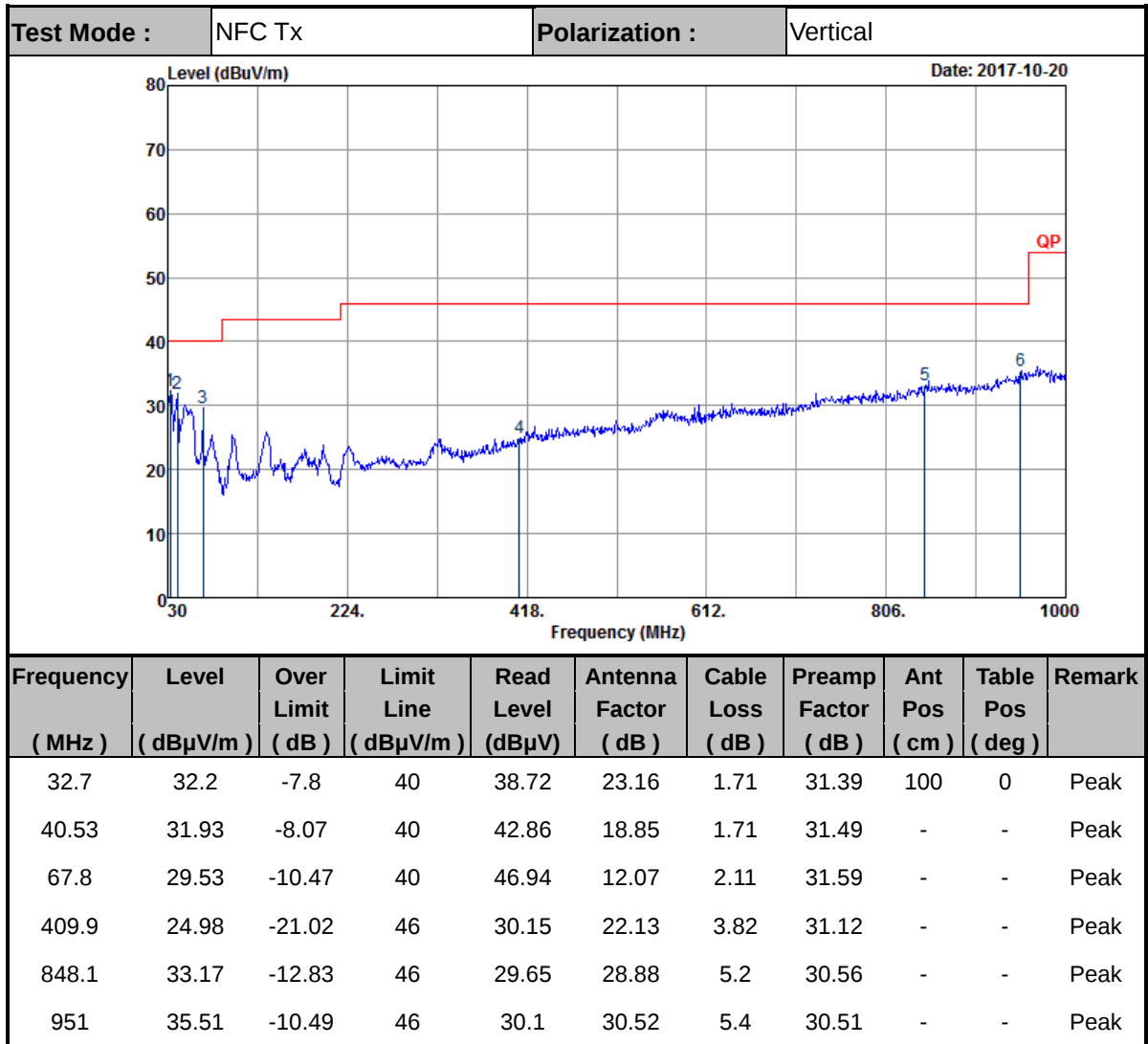
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                      |                                                                                                                                                                |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VHT40 CH151 5755MHz                                                                                                                                            |                                                                                                                                                                |
| 1    | Vertical                                                                                                                                                                | Fundamental                                                                                                                                                    |
| Peak |  <p>Site : 03CH11-HY<br/>Condition : PEAK BE(B4) 16-24 3m HORN 9120D-HF VERTICAL</p>   |  <p>Site : 03CH11-HY<br/>Condition : PEAK(U11) 3m HORN 9120D-HF VERTICAL</p> |
|      |  <p>Site : 03CH11-HY<br/>Condition : PEAK BE(B4) 16-24 3m HORN 9120D-HF VERTICAL</p> | Left blank                                                                                                                                                     |



**Band 4 - 5725~5850MHz**  
**WIFI 802.11ac VHT40 (Harmonic @ 3m)**

| WIFI                 | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                 |                                                                                                                                                                  |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT                  | 802.11ac VHT40 CH151 5755MHz                                                                                                                                      |                                                                                                                                                                  |
| 1                    | Horizontal                                                                                                                                                        | Vertical                                                                                                                                                         |
| <b>Peak<br/>Avg.</b> |  <p>Site : 03CH11-HY<br/> Condition : PEAK(UNIT) 3m HORN 9120D-HF HORIZONTAL</p> |  <p>Site : 03CH11-HY<br/> Condition : PEAK(UNIT) 3m HORN 9120D-HF VERTICAL</p> |

**NFC**
**Results of Radiated Spurious Emissions (30MHz~1GHz)**



**Note:**

1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
2. Emission level (dBμV/m) = 20 log Emission level (μV/m).
3. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor= Level.

End of this report