

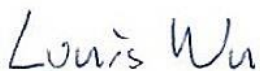


FCC CO-LOCATION RADIO TEST REPORT

FCC ID : 2AG0Z-P97
Equipment : VR Headset
Brand Name : 
Model Name : P97
Applicant : Meta Platforms Technologies, LLC.
1 Hacker Way, Menlo Park, CA 94025, USA
Manufacturer : Meta Platforms Technologies, LLC.
1 Hacker Way, Menlo Park, CA 94025, USA
Standard : FCC Part 15 Subpart E §15.407

The product was received on Apr. 08, 2024 and testing was performed from Apr. 11, 2024 to May 09, 2024. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.



Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



Table of Contents

History of this test report..... 3

Summary of Test Result..... 4

1 General Description 5

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

 1.2 Modification of EUT 5

 1.3 Testing Location 6

 1.4 Applicable Standards..... 6

2 Test Configuration of Equipment Under Test 7

 2.1 Carrier Frequency and Channel 7

 2.2 Connection Diagram of Test System..... 9

 2.3 Support Unit used in test configuration and system 9

 2.4 EUT Operation Test Setup 9

3 Test Result 10

 3.1 Unwanted Emissions Measurement..... 10

 3.2 Antenna Requirements..... 15

4 List of Measuring Equipment..... 16

5 Measurement Uncertainty 18

Appendix A. Radiated Spurious Emission

Appendix B. Radiated Spurious Emission Plots

Appendix C. Setup Photographs



History of this test report

| Report No. | Version | Description | Issue Date |
|--------------|---------|-------------------------|--------------|
| FR413013-01G | 01 | Initial issue of report | May 29, 2024 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|---------------|------------------------|---------------------|--------------------|--------------------------------------|
| 3.1 | 15.247(d) 15.407(b) | Unwanted Emissions | Pass | 2.23 dB under the limit at 43.58 MHz |
| 3.2 | 15.203 | Antenna Requirement | Pass | - |

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Yun Huang

Report Producer: Clio Lo



1 General Description

1.1 Product Feature of Equipment Under Test

| Product Feature | |
|-----------------|---|
| General Specs | Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, Wi-Fi 6GHz 802.11ax and nRF. |
| Sample 1 | E2-C1 |
| Sample 2 | E2-C2 |
| Sample 3 | E2-C3 |
| Sample 4 | E2-C4 |
| Antenna Type | Bluetooth: <Ant. 0>: Hybrid Slot Monopole Antenna <Ant. 1>: Hybrid Slot Monopole Antenna WLAN: <Ant. 0>: Hybrid Slot Monopole Antenna <Ant. 1>: Hybrid Slot Monopole Antenna nRF: Folded Dipole Antenna |

| Antenna information | | |
|-----------------------|-----------------|---|
| 2400 MHz ~ 2483.5 MHz | Peak Gain (dBi) | <Ant. 0>: 4.0 <Ant. 1>: 4.1 <Ant. 2>: 4.5 |
| 5725 MHz ~ 5850 MHz | Peak Gain (dBi) | <Ant. 0>: 4.1 <Ant. 1>: 4.2 |

Remark: The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Modification of EUT

No modifications made to the EUT during the testing.



1.3 Testing Location

| | |
|---------------------------|--|
| Test Site | Sporton International Inc. Wensan Laboratory |
| Test Site Location | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855 |
| Test Site No. | Sporton Site No. 03CH13-HY |

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

FCC designation No.: TW3786

1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

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



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and only the worst case emissions were reported in this report.

2.1 Carrier Frequency and Channel

| 2400-2483.5 MHz | | | |
|----------------------|-------------|---------|-------------|
| Bluetooth – LE 1Mbps | | nRF | |
| Channel | Freq. (MHz) | Channel | Freq. (MHz) |
| 05 | 2412 | 12 | 2426 |
| 15 | 2432 | 25 | 2452 |
| 30 | 2462 | 37 | 2476 |

| 2400-2483.5 MHz | | | |
|-----------------|-------------|---------------|-------------|
| 802.11b | | 802.11ax HE20 | |
| Channel | Freq. (MHz) | Channel | Freq. (MHz) |
| 05 | 2432 | 01 | 2412 |
| - | - | 05 | 2432 |
| - | - | 12 | 2467 |

| 5725-5850 MHz | |
|---------------|-------------|
| 802.11ax HE20 | |
| Channel | Freq. (MHz) |
| 157 | 5785 |

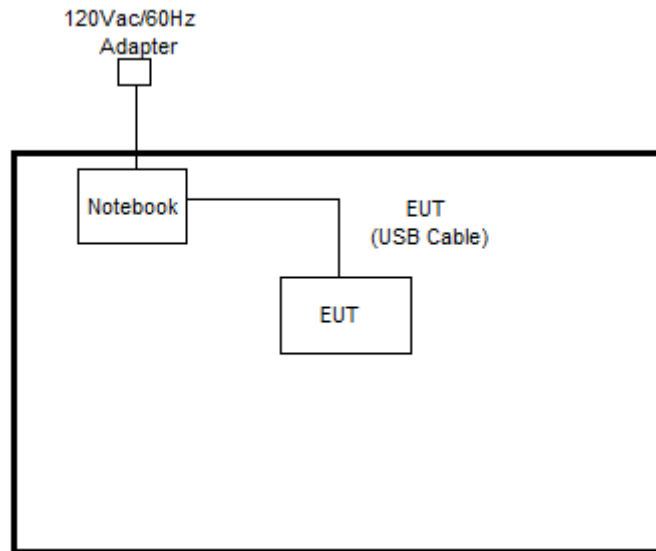


<Co-Location>

| Modulation | Data Rate |
|--|----------------------|
| 2.4GHz 802.11ax HE20 for Ant. 0 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | MCS0 + MCS0 +GFSK |
| 2.4GHz 802.11b for Ant. 0 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | 1 Mbps + MCS0 + GFSK |
| 2.4GHz 802.11ax HE20 for Ant. 0 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | MCS0 + MCS0 +GFSK |
| 2.4GHz 802.11ax HE20 for Ant. 0 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | MCS0 + MCS0 +GFSK |
| 2.4GHz 802.11ax HE20 for Ant. 1 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | MCS0 + MCS0 +GFSK |
| 2.4GHz 802.11b for Ant. 1 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | 1 Mbps + MCS0 + GFSK |
| 2.4GHz 802.11ax HE20 for Ant. 1 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | MCS0 + MCS0 +GFSK |
| 2.4GHz 802.11ax HE20 for Ant. 1 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | MCS0 + MCS0 +GFSK |
| Bluetooth-LE for Ant. 0 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | GFSK + MCS0 +GFSK |
| Bluetooth-LE for Ant. 0 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | GFSK + MCS0 +GFSK |
| Bluetooth-LE for Ant. 0 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | GFSK + MCS0 +GFSK |
| Bluetooth-LE for Ant. 1 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | GFSK + MCS0 +GFSK |
| Bluetooth-LE for Ant. 1 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | GFSK + MCS0 +GFSK |
| Bluetooth-LE for Ant. 1 + 5GHz 802.11ax HE20 for MIMO <Ant. 0+1> + nRF for Ant. 2 | GFSK + MCS0 +GFSK |

Remark: For Radiated Test Cases, the tests were performed with Sample 1.

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

| Item | Equipment | Brand Name | Model Name | FCC ID | Data Cable | Power Cord |
|------|-----------|------------|------------|------------|------------|--|
| 1. | Notebook | Acer | N18Q13 | PD9AX201NG | N/A | AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m |

2.4 EUT Operation Test Setup

The RF test items, utility “QRCT V4.0 Version 4.0.211.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



3 Test Result

3.1 Unwanted Emissions Measurement

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

3.1.1 Limit of Unwanted Emissions

<For 2402 MHz ~ 2480 MHz>

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device is measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB.

<For 5725 MHz ~ 5850 MHz>

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



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

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

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

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

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

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

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

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

3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.



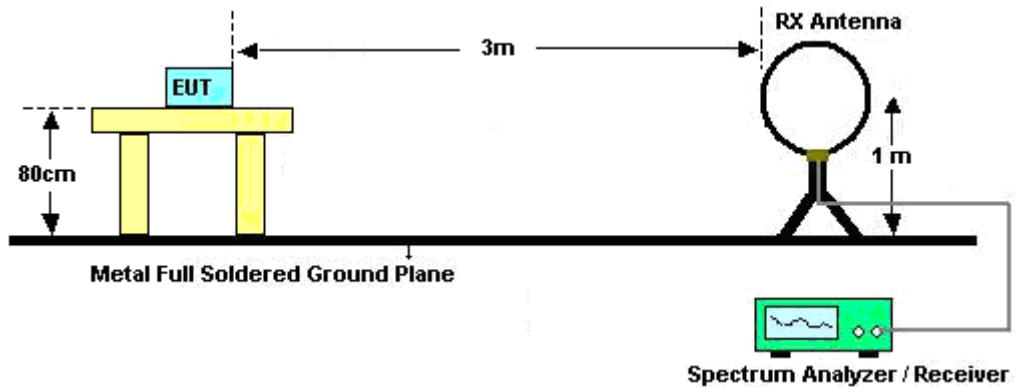
3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as "-".

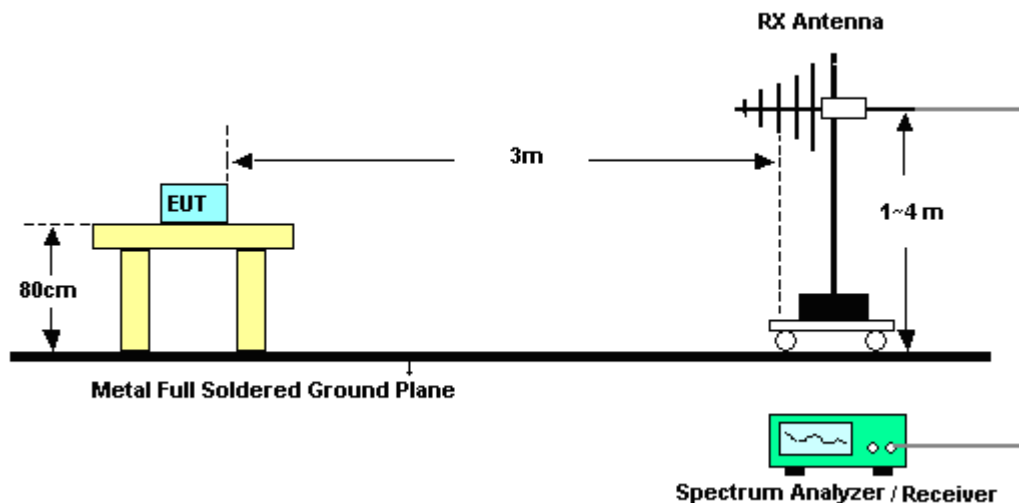
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-”.

3.1.4 Test Setup

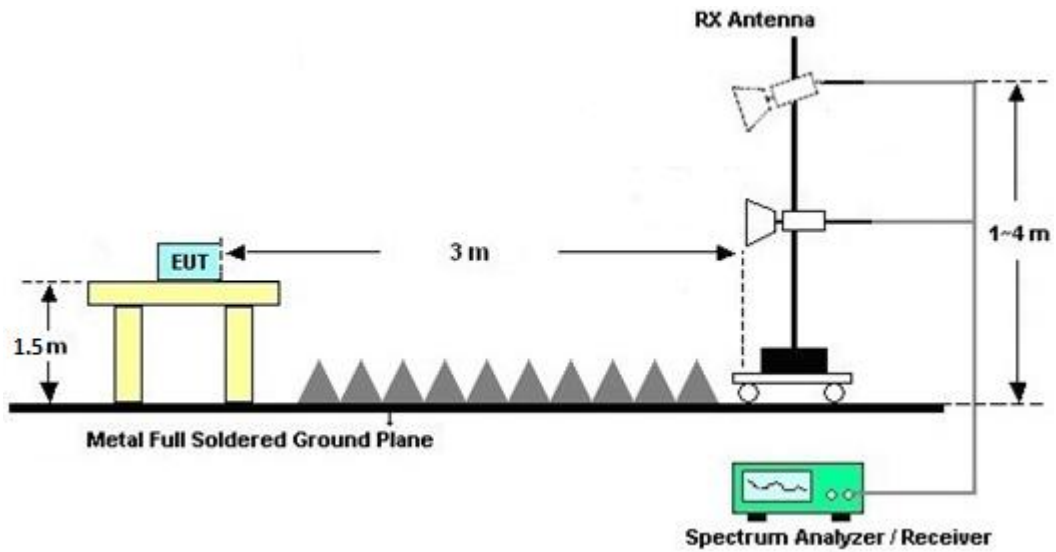
For radiated emissions below 30MHz



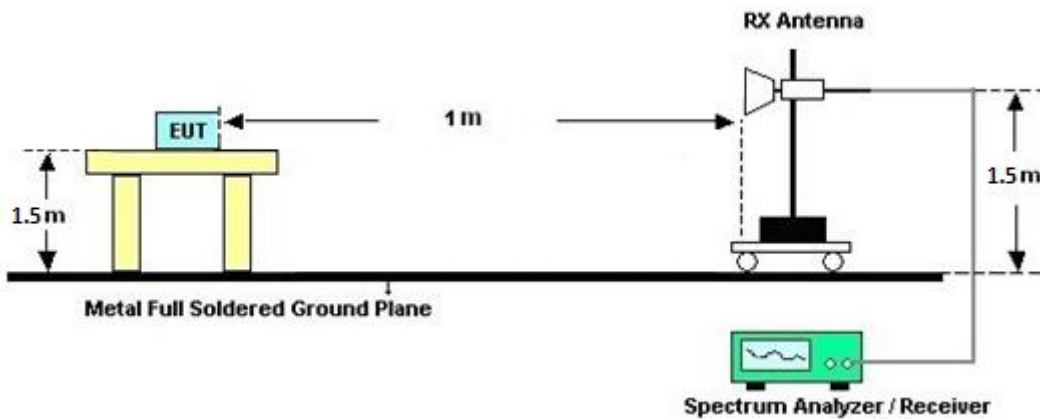
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

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

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

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

Please refer to Appendix A and B.



3.2 Antenna Requirements

3.2.1 Standard Applicable

The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.2.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.



4 List of Measuring Equipment

| Instrument | Brand Name | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|----------------------|-------------------|--|------------|-----------------------------|------------------|----------------------------------|---------------|--------------------------|
| Loop Antenna | Rohde & Schwarz | HFH2-Z2 | 100315 | 9 kHz~30 MHz | Feb. 23, 2024 | Apr. 11, 2024~ May 09, 2024 | Feb. 22, 2025 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 803951/2 | 9k~30M | Mar. 06, 2024 | Apr. 11, 2024~ May 09, 2024 | Mar. 05, 2025 | Radiation (03CH13-HY) |
| Amplifier | SONOMA | 310N | 187282 | 9kHz~1GHz | Dec. 13, 2023 | Apr. 11, 2024~ May 09, 2024 | Dec. 12, 2024 | Radiation (03CH13-HY) |
| Bilog Antenna | TESEQ | CBL 6111D & 00800N1D01N -06 | 40103 & 07 | 30MHz~1GHz | Apr. 23, 2023 | Apr. 11, 2024 | Apr. 22, 2024 | Radiation (03CH13-HY) |
| Bilog Antenna | TESEQ | CBL 6111D & 00800N1D01N -06 | 40103 & 07 | 30MHz~1GHz | Apr. 12, 2024 | Apr. 12, 2024 ~ May 09, 2024 | Apr. 11, 2025 | Radiation (03CH13-HY) |
| EMI Test Receiver | Agilent | N9038A(MXE) | MY53290045 | 20MHz~8.4GHz | Apr. 25, 2023 | Apr. 11, 2024 ~ Apr. 16, 2024 | Apr. 24, 2024 | Radiation (03CH13-HY) |
| EMI Test Receiver | Agilent | N9038A(MXE) | MY53290045 | 20MHz~8.4GHz | Apr. 17, 2024 | Apr. 17, 2024 ~ May 09, 2024 | Apr. 16, 2025 | Radiation (03CH13-HY) |
| Horn Antenna | SCHWARZBE CK | BBHA 9120 D | 9120D-1326 | 1GHz~18GHz | Aug. 17, 2023 | Apr. 11, 2024 ~ May 09, 2024 | Aug. 16, 2024 | Radiation (03CH13-HY) |
| Preamplifier | MITEQ | AMF-7D-0010 1800-30-10P | 1590074 | 1GHz~18GHz | May 16, 2023 | Apr. 11, 2024 ~ May 09, 2024 | May 15, 2024 | Radiation (03CH13-HY) |
| Preamplifier | EM Electronics | EM01G18G | 060803 | 1GHz~18GHz | Jan. 09, 2024 | Apr. 11, 2024 ~ May 09, 2024 | Jan. 08, 2025 | Radiation (03CH13-HY) |
| Preamplifier | EMEC | EM18G40G | 060801 | 18GHz~40GHz | Jun. 27, 2023 | Apr. 11, 2024 ~ May 09, 2024 | Jun. 26, 2024 | Radiation (03CH13-HY) |
| SHF-EHF Horn Antenna | SCHWARZBE CK | BBHA9170 | 00993 | 18GHz-40GHz | Nov. 24, 2023 | Apr. 11, 2024 ~ May 09, 2024 | Nov. 23, 2024 | Radiation (03CH13-HY) |
| Spectrum Analyzer | Keysight | N9010B | MY62170337 | 10Hz~44GHz | Aug. 17, 2023 | Apr. 11, 2024 ~ May 09, 2024 | Aug. 16, 2024 | Radiation (03CH13-HY) |
| Filter | Wainwright | WLK10-4630-5 093-11000-40 SS | SN1 | 4.5GHz Low Pass Filter | Sep. 11, 2023 | Apr. 11, 2024 ~ May 09, 2024 | Sep. 10, 2024 | Radiation (03CH13-HY) |
| Filter | Wainwright | WHKX8-5872. 5-6750-18000- 40ST | SN5 | 6.75GHz High Pass Filter | Mar. 08, 2024 | Apr. 11, 2024 ~ May 09, 2024 | Mar. 07, 2025 | Radiation (03CH13-HY) |
| Filter | Wainwright | WHKX6-7268- 9200-26500-40 CD | SN4 | 9GHz High Pass Filter | May 23, 2023 | Apr. 11, 2024 ~ May 09, 2024 | May 22, 2024 | Radiation (03CH13-HY) |
| Filter | Wainwright | WLK4-1000-15 30-8000-40SS | SN4 | 1.53GHz Low Pass Filter | Jun. 14, 2023 | Apr. 11, 2024 ~ May 09, 2024 | Jun. 13, 2024 | Radiation (03CH13-HY) |
| Filter | Wainwright | WHKX12-2700 -3000-18000-6 OSS | SN2 | 3GHz High Pass Filter | Jul. 10, 2023 | Apr. 11, 2024 ~ May 09, 2024 | Jul. 09, 2024 | Radiation (03CH13-HY) |
| Notch Filter | Wainwright | WRCQV14-60 25-6425-7125- 7525-60SS | SN2 | N/A | Jan. 05, 2024 | Apr. 11, 2024 ~ May 09, 2024 | Jan. 04, 2025 | Radiation (03CH13-HY) |
| Notch Filter | Wainwright | WRCQV14-54 25-5825-6525- 6925-60SS | SN1 | N/A | Jan. 05, 2024 | Apr. 11, 2024 ~ May 09, 2024 | Jan. 04, 2025 | Radiation (03CH13-HY) |



| Instrument | Brand Name | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|--------------|----------------|---------------|--------------------|-------------------------------|------------------|------------------------------|---------------|-----------------------|
| RF Cable | HUBER + SUHNER | SUCOFLEX 126E | 0030/126E | 30MHz~18GHz | Feb. 07, 2024 | Apr. 11, 2024 ~ May 09, 2024 | Feb. 06, 2025 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 804011/2, 804012/2 | 18GHz ~40GHz | Jan. 02, 2024 | Apr. 11, 2024 ~ May 09, 2024 | Jan. 01, 2025 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | 804793/4 | 30MHz~18GHz | Feb. 07, 2024 | Apr. 11, 2024 ~ May 09, 2024 | Feb. 06, 2025 | Radiation (03CH13-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY24961/4 | 30MHz~18GHz | Feb. 07, 2024 | Apr. 11, 2024 ~ May 09, 2024 | Feb. 06, 2025 | Radiation (03CH13-HY) |
| Hygrometer | TECPEL | DTM-303A | TP215159 | N/A | Sep. 13, 2023 | Apr. 11, 2024 ~ May 09, 2024 | Sep. 12, 2024 | Radiation (03CH13-HY) |
| Controller | EMEC | EM1000 | N/A | Control Turn table & Ant Mast | N/A | Apr. 11, 2024 ~ May 09, 2024 | N/A | Radiation (03CH13-HY) |
| Antenna Mast | EMEC | AM-BS-4500-B | N/A | 1m~4m | N/A | Apr. 11, 2024 ~ May 09, 2024 | N/A | Radiation (03CH13-HY) |
| Turn Table | EMEC | TT2000 | N/A | 0~360 Degree | N/A | Apr. 11, 2024 ~ May 09, 2024 | N/A | Radiation (03CH13-HY) |
| Software | Audix | N/A | RK-001124 | N/A | N/A | Apr. 11, 2024 ~ May 09, 2024 | N/A | Radiation (03CH13-HY) |



5 Measurement Uncertainty

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

| | |
|---|---------|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 6.50 dB |
|---|---------|

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

| | |
|---|---------|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 4.20 dB |
|---|---------|

Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

| | |
|---|---------|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 4.60 dB |
|---|---------|

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

| | |
|---|---------|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 5.30 dB |
|---|---------|



Appendix A. Radiated Spurious Emission

| | | | |
|-----------------|--------------------------------------|---------------------|---------|
| Test Engineer : | Jacky Hung , Mancy Chou and Rain Lee | Temperature : | 20~26°C |
| | | Relative Humidity : | 40~65% |

2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_Ch05 + 802.11ax HE20_Tx_CH157 +nRF_Tx_CH37 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11ax20 CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | | 4864 | 47.56 | -26.44 | 74 | 45.14 | 32.63 | 7.04 | 37.25 | - | - | P | H | |
| | | 4952 | 47.13 | -26.87 | 74 | 44.18 | 33.01 | 7.13 | 37.19 | - | - | P | H | |
| | | 7296 | 46.74 | -27.26 | 74 | 56.62 | 37 | 9.92 | 56.8 | - | - | P | H | |
| | | 7428 | 45.4 | -28.6 | 74 | 56.08 | 36.44 | 9.91 | 57.03 | - | - | P | H | |
| | | 11570 | 46.55 | -27.45 | 74 | 52 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.6 | -20.6 | 68.2 | 50.95 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4864 | 46.48 | -27.52 | 74 | 44.06 | 32.63 | 7.04 | 37.25 | - | - | P | V |
| | | | 4952 | 47.47 | -26.53 | 74 | 44.52 | 33.01 | 7.13 | 37.19 | - | - | P | V |
| | | | 7296 | 47.78 | -26.22 | 74 | 57.66 | 37 | 9.92 | 56.8 | - | - | P | V |
| | | | 7428 | 45.76 | -28.24 | 74 | 56.44 | 36.44 | 9.91 | 57.03 | - | - | P | V |
| | | | 11570 | 46.57 | -27.43 | 74 | 52.02 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.73 | -20.47 | 68.2 | 51.08 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

802.11ax HE20_Tx_Ch05 + 802.11ax HE20_Tx_CH157 +nRF_Tx_CH37 (SHF @ 3m)

| Ant. | Note | Frequency | Level | Margin | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|--|---|-----------------------------|------------|--------|------------|--------|----------|--------|--------|--------|---------|-------|-------|
| Simultaneously | | (MHz) | (dBμV/m) | (dB) | (dBμV/m) | (dBμV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) |
| 802.11ax20 CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz SHF | | 24720 | 41.39 | -26.81 | 68.2 | 57.99 | 39.22 | -2.41 | 53.41 | - | - | P | H |
| | | 38838 | 45.95 | -28.05 | 74 | 59.77 | 43.58 | -0.5 | 56.9 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | Remark | 1. No other spurious found. | | | | | | | | | | | |
| 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | |
| | 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |



Emission below 1GHz

802.11ax HE20_Tx_Ch05 + 802.11ax HE20_Tx_CH157 +nRF_Tx_CH37 (LF @ 3m)

| Ant. | Note | Frequency | Level | Margin | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. | |
|---|--|-----------|------------|--------|------------|--------|----------|--------|--------|--------|---------|-------|-------|---|
| Simultaneously | | (MHz) | (dBμV/m) | (dB) | (dBμV/m) | (dBμV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) | |
| 802.11ax20 CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz LF | | 30 | 25.16 | -14.84 | 40 | 31.09 | 25.3 | 1.08 | 32.31 | - | - | P | H | |
| | | 71.71 | 23.96 | -16.04 | 40 | 42.12 | 12.67 | 1.4 | 32.23 | - | - | P | H | |
| | | 159.01 | 25.07 | -18.43 | 43.5 | 38.91 | 16.6 | 1.75 | 32.19 | - | - | P | H | |
| | | 222.06 | 29.64 | -16.36 | 46 | 44.37 | 15.56 | 1.88 | 32.17 | - | - | P | H | |
| | | 558.65 | 28.35 | -17.65 | 46 | 31.8 | 26.12 | 2.64 | 32.21 | - | - | P | H | |
| | | 718.7 | 37.4 | -8.6 | 46 | 39.44 | 27.15 | 2.92 | 32.11 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 43.58 | 31.78 | -8.22 | 40 | 45.23 | 17.58 | 1.26 | 32.29 | 100 | 152 | QP | H |
| | | | 129.91 | 30.05 | -13.45 | 43.5 | 43.11 | 17.6 | 1.59 | 32.25 | - | - | P | V |
| | | | 209.45 | 25.07 | -18.43 | 43.5 | 40.33 | 15.1 | 1.83 | 32.19 | - | - | P | V |
| | | | 287.05 | 25.96 | -20.04 | 46 | 36.99 | 18.98 | 2.09 | 32.1 | - | - | P | V |
| | | | 565.44 | 28.32 | -17.68 | 46 | 31.8 | 26.08 | 2.65 | 32.21 | - | - | P | V |
| | | | 717.73 | 34.24 | -11.76 | 46 | 36.32 | 27.11 | 2.92 | 32.11 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | <ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--------|--|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|--|
| 802.11b CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz SHF | | 23560 | 41.73 | -26.47 | 68.2 | 59.82 | 38.7 | -2.63 | 54.16 | - | - | P | H | |
| | | 31264 | 42.34 | -31.66 | 74 | 59.16 | 41.19 | -1.59 | 56.42 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | Remark | 1. No other spurious found. | | | | | | | | | | | | |
| | | 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |
| 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--|-----------------|----------------|-------------|---------------------|-------------------|-----------------------|----------------|--------------------|--------------|-----------------|-----------------|------------|---|
| 802.11ax20 CH01 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz | | 4824 | 47.74 | -26.26 | 74 | 45.58 | 32.44 | 6.99 | 37.27 | - | - | P | H | |
| | | 4904 | 47.36 | -26.64 | 74 | 44.78 | 32.72 | 7.08 | 37.22 | - | - | P | H | |
| | | 7356 | 45.57 | -28.43 | 74 | 55.81 | 36.76 | 9.91 | 56.91 | - | - | P | H | |
| | | 11570 | 45.77 | -28.23 | 74 | 51.22 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.78 | -20.42 | 68.2 | 51.13 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4824 | 47.45 | -26.55 | 74 | 45.29 | 32.44 | 6.99 | 37.27 | - | - | P | V |
| | | | 4904 | 46.13 | -27.87 | 74 | 43.55 | 32.72 | 7.08 | 37.22 | - | - | P | V |
| | | | 7356 | 45.73 | -28.27 | 74 | 55.97 | 36.76 | 9.91 | 56.91 | - | - | P | V |
| | | | 11570 | 45.98 | -28.02 | 74 | 51.43 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.61 | -20.59 | 68.2 | 50.96 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|---|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11ax20 CH01 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz SHF | | 24344 | 40.79 | -27.41 | 68.2 | 57.91 | 38.98 | -2.48 | 53.62 | | | P | H |
| | | 31376 | 42.02 | -31.98 | 74 | 59.55 | 40.6 | -1.58 | 56.55 | | | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | 23992 | 42.1 | -31.9 | 74 | 59.95 | 38.7 | -2.65 | 53.9 | - | - | P |
| | | 31320 | 42.14 | -31.86 | 74 | 59.43 | 40.78 | -1.59 | 56.48 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|---|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11ax20 CH11 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz | | 2390 | 54.84 | -19.16 | 74 | 49.49 | 27.5 | 14.93 | 37.08 | 200 | 2 | P | H | |
| | | 2390 | 47.09 | -6.91 | 54 | 41.74 | 27.5 | 14.93 | 37.08 | 200 | 2 | A | H | |
| | | 4852 | 47.43 | -26.57 | 74 | 45.06 | 32.6 | 7.02 | 37.25 | - | - | P | H | |
| | | 4924 | 46.93 | -27.07 | 74 | 44.2 | 32.84 | 7.1 | 37.21 | - | - | P | H | |
| | | 7278 | 45.15 | -28.85 | 74 | 55 | 37 | 9.92 | 56.77 | - | - | P | H | |
| | | 7386 | 45.27 | -28.73 | 74 | 55.75 | 36.58 | 9.9 | 56.96 | - | - | P | H | |
| | | 11570 | 46.6 | -27.4 | 74 | 52.05 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 48.21 | -19.99 | 68.2 | 51.56 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4852 | 47.94 | -26.06 | 74 | 45.57 | 32.6 | 7.02 | 37.25 | - | - | P | V |
| | | | 4924 | 47.85 | -26.15 | 74 | 45.12 | 32.84 | 7.1 | 37.21 | - | - | P | V |
| | | | 7278 | 46.16 | -27.84 | 74 | 56.01 | 37 | 9.92 | 56.77 | - | - | P | V |
| | | | 7386 | 45.8 | -28.2 | 74 | 56.28 | 36.58 | 9.9 | 56.96 | - | - | P | V |
| | | | 11570 | 46 | -28 | 74 | 51.45 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.68 | -20.52 | 68.2 | 51.03 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | <ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--------|-----------------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11ax20 CH11 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz SHF | | 23976 | 41.32 | -32.68 | 74 | 59.18 | 38.7 | -2.65 | 53.91 | - | - | P | H | |
| | | 31278 | 42.02 | -31.98 | 74 | 58.96 | 41.08 | -1.59 | 56.43 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | Remark | 1. No other spurious found. | | | | | | | | | | | | |
| 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | | |
| 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |



Emission below 1GHz

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBµV/m) | Margin (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|---|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11ax20 CH11 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz LF | | 30 | 25.02 | -14.98 | 40 | 30.95 | 25.3 | 1.08 | 32.31 | - | - | P | H | |
| | | 70.74 | 23.75 | -16.25 | 40 | 42.07 | 12.52 | 1.4 | 32.24 | - | - | P | H | |
| | | 161.92 | 25.6 | -17.9 | 43.5 | 39.83 | 16.21 | 1.75 | 32.19 | - | - | P | H | |
| | | 217.21 | 30.01 | -15.99 | 46 | 45.26 | 15.07 | 1.86 | 32.18 | - | - | P | H | |
| | | 574.17 | 28.24 | -17.76 | 46 | 31.97 | 25.82 | 2.66 | 32.21 | - | - | P | H | |
| | | 954.41 | 34.25 | -11.75 | 46 | 30.88 | 31 | 3.32 | 30.95 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 43.58 | 30.78 | -9.22 | 40 | 44.23 | 17.58 | 1.26 | 32.29 | 100 | 135 | QP | H |
| | | | 127.97 | 27.25 | -16.25 | 43.5 | 40.41 | 17.5 | 1.59 | 32.25 | - | - | P | V |
| | | | 136.7 | 22.74 | -20.76 | 43.5 | 35.86 | 17.5 | 1.61 | 32.23 | - | - | P | V |
| | | | 287.05 | 25.15 | -20.85 | 46 | 36.18 | 18.98 | 2.09 | 32.1 | - | - | P | V |
| | | | 729.37 | 33.43 | -12.57 | 46 | 35.08 | 27.49 | 2.95 | 32.09 | - | - | P | V |
| | | | 824.43 | 34.18 | -11.82 | 46 | 34.8 | 28.1 | 3.11 | 31.83 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|---------------------|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| | | 4864 | 47.64 | -26.36 | 74 | 45.22 | 32.63 | 7.04 | 37.25 | - | - | P | H |
| | | 4952 | 47.83 | -26.17 | 74 | 44.88 | 33.01 | 7.13 | 37.19 | - | - | P | H |
| | | 7296 | 47.21 | -26.79 | 74 | 57.09 | 37 | 9.92 | 56.8 | - | - | P | H |
| | | 7428 | 45.18 | -28.82 | 74 | 55.86 | 36.44 | 9.91 | 57.03 | - | - | P | H |
| | | 11570 | 47.53 | -26.47 | 74 | 52.98 | 38.68 | 11.83 | 55.96 | - | - | P | H |
| | | 17355 | 48.22 | -19.98 | 68.2 | 51.57 | 38.8 | 14.31 | 56.46 | - | - | P | H |
| | | | | | | | | | | | | | H |
| 802.11ax20 | | | | | | | | | | | | | H |
| CH05 | | | | | | | | | | | | | H |
| 2432MHz | | | | | | | | | | | | | H |
| + | | | | | | | | | | | | | H |
| 802.11ax20 | | | | | | | | | | | | | H |
| CH157 | | | | | | | | | | | | | H |
| 5785MHz | | 4864 | 52.27 | -21.73 | 74 | 49.85 | 32.63 | 7.04 | 37.25 | 100 | 224 | P | V |
| + | | 4864 | 48.61 | -5.39 | 54 | 46.19 | 32.63 | 7.04 | 37.25 | 100 | 224 | A | V |
| nRF | | 4952 | 47.6 | -26.4 | 74 | 44.65 | 33.01 | 7.13 | 37.19 | - | - | P | V |
| CH37 | | 7296 | 47 | -27 | 74 | 56.88 | 37 | 9.92 | 56.8 | - | - | P | V |
| 2476MHz | | 7428 | 46.65 | -27.35 | 74 | 57.33 | 36.44 | 9.91 | 57.03 | - | - | P | V |
| | | 11570 | 47.04 | -26.96 | 74 | 52.49 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | 17355 | 47.99 | -20.21 | 68.2 | 51.34 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |



Emission above 18GHz

802.11ax HE20_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--------|-----------------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11ax20 CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz SHF | | 24664 | 40.64 | -27.56 | 68.2 | 57.25 | 39.23 | -2.41 | 53.43 | - | - | P | H | |
| | | 31264 | 42.66 | -31.34 | 74 | 59.48 | 41.19 | -1.59 | 56.42 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | Remark | 1. No other spurious found. | | | | | | | | | | | | |
| 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | | |
| 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |



Emission below 1GHz

802.11ax HE20_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|---------------------|---|-------------------|------------------|---------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-------------------|--------------|
| | | 30 | 25.31 | -14.69 | 40 | 31.24 | 25.3 | 1.08 | 32.31 | - | - | P | H |
| | | 162.89 | 25.42 | -18.08 | 43.5 | 39.56 | 16.29 | 1.76 | 32.19 | - | - | P | H |
| | | 224.97 | 29.17 | -16.83 | 46 | 43.65 | 15.8 | 1.89 | 32.17 | - | - | P | H |
| | | 576.11 | 28.7 | -17.3 | 46 | 32.46 | 25.78 | 2.68 | 32.22 | - | - | P | H |
| | | 703.18 | 32.79 | -13.21 | 46 | 35.39 | 26.63 | 2.9 | 32.13 | - | - | P | H |
| | | 948.59 | 35.17 | -10.83 | 46 | 31.92 | 30.94 | 3.31 | 31 | - | - | P | H |
| 802.11ax20 | | | | | | | | | | | | | H |
| CH05 | | | | | | | | | | | | | H |
| 2432MHz | | | | | | | | | | | | | H |
| + | | | | | | | | | | | | | H |
| 802.11ax20 | | | | | | | | | | | | | H |
| CH157 | | 43.58 | 32.8 | -7.2 | 40 | 46.25 | 17.58 | 1.26 | 32.29 | 100 | 134 | QP | H |
| 5785MHz | | 58.13 | 33.13 | -6.87 | 40 | 52.26 | 11.8 | 1.32 | 32.25 | - | - | P | V |
| + | | 128.94 | 30.05 | -13.45 | 43.5 | 43.12 | 17.59 | 1.59 | 32.25 | - | - | P | V |
| nRF | | 288.02 | 25.61 | -20.39 | 46 | 36.58 | 19.02 | 2.1 | 32.09 | - | - | P | V |
| CH37 | | 558.65 | 27.8 | -18.2 | 46 | 31.25 | 26.12 | 2.64 | 32.21 | - | - | P | V |
| 2476MHz | | 944.71 | 34.11 | -11.89 | 46 | 31.06 | 30.79 | 3.3 | 31.04 | - | - | P | V |
| LF | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|---|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11b CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | | 2388 | 51.95 | -22.05 | 74 | 46.62 | 27.48 | 14.93 | 37.08 | 100 | 329 | P | H | |
| | | 2388 | 44.1 | -9.9 | 54 | 38.77 | 27.48 | 14.93 | 37.08 | 100 | 329 | A | H | |
| | | 4864 | 47.43 | -26.57 | 74 | 45.01 | 32.63 | 7.04 | 37.25 | - | - | P | H | |
| | | 4952 | 47.55 | -26.45 | 74 | 44.6 | 33.01 | 7.13 | 37.19 | - | - | P | H | |
| | | 7296 | 48 | -26 | 74 | 57.88 | 37 | 9.92 | 56.8 | - | - | P | H | |
| | | 7428 | 45.85 | -28.15 | 74 | 56.53 | 36.44 | 9.91 | 57.03 | - | - | P | H | |
| | | 11570 | 46.69 | -27.31 | 74 | 52.14 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.93 | -20.27 | 68.2 | 51.28 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 2388 | 55.84 | -18.16 | 74 | 50.51 | 27.48 | 14.93 | 37.08 | 185 | 148 | P | V |
| | | | 2388 | 47.8 | -6.2 | 54 | 42.47 | 27.48 | 14.93 | 37.08 | 185 | 148 | A | V |
| | | | 4864 | 52.57 | -21.43 | 74 | 50.15 | 32.63 | 7.04 | 37.25 | 100 | 229 | P | V |
| | | | 4864 | 48.66 | -5.34 | 54 | 46.24 | 32.63 | 7.04 | 37.25 | 100 | 229 | A | V |
| | | | 4952 | 47.59 | -26.41 | 74 | 44.64 | 33.01 | 7.13 | 37.19 | - | - | P | V |
| | | | 7296 | 46.59 | -27.41 | 74 | 56.47 | 37 | 9.92 | 56.8 | - | - | P | V |
| | | | 7428 | 45.92 | -28.08 | 74 | 56.6 | 36.44 | 9.91 | 57.03 | - | - | P | V |
| | | | 11570 | 46.8 | -27.2 | 74 | 52.25 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | 17355 | 48.19 | -20.01 | 68.2 | 51.54 | 38.8 | 14.31 | 56.46 | - | - | P | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | <ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--------|--|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|--|
| 802.11b CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz SHF | | 24760 | 40.86 | -27.34 | 68.2 | 57.56 | 39.12 | -2.42 | 53.4 | - | - | P | H | |
| | | 31306 | 42.69 | -31.31 | 74 | 59.89 | 40.86 | -1.59 | 56.47 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | Remark | 1. No other spurious found. | | | | | | | | | | | | |
| | | 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |
| 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | | |



Emission below 1GHz

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

Table with columns: Ant. Simultaneously, Note, Frequency (MHz), Level (dBµV/m), Margin (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include frequency data for channels 802.11b CH05, 802.11ax20 CH157, and nRF CH37 LF.

Remark
1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBµV/m) | Margin (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11ax20 CH01 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz | | 4824 | 46.62 | -27.38 | 74 | 44.46 | 32.44 | 6.99 | 37.27 | - | - | P | H | |
| | | 4904 | 47.58 | -26.42 | 74 | 45 | 32.72 | 7.08 | 37.22 | - | - | P | H | |
| | | 7356 | 47.08 | -26.92 | 74 | 57.32 | 36.76 | 9.91 | 56.91 | - | - | P | H | |
| | | 11570 | 46.27 | -27.73 | 74 | 51.72 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.11 | -21.09 | 68.2 | 50.46 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4824 | 47.33 | -26.67 | 74 | 45.17 | 32.44 | 6.99 | 37.27 | - | - | P | V |
| | | | 4904 | 47.39 | -26.61 | 74 | 44.81 | 32.72 | 7.08 | 37.22 | - | - | P | V |
| | | | 7356 | 45.93 | -28.07 | 74 | 56.17 | 36.76 | 9.91 | 56.91 | - | - | P | V |
| | | | 11570 | 46.49 | -27.51 | 74 | 51.94 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.95 | -20.25 | 68.2 | 51.3 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|---|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11ax20 CH01 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz SHF | | 23336 | 40.5 | -27.7 | 68.2 | 58.83 | 38.7 | -2.73 | 54.3 | - | - | P | H |
| | | 31320 | 41.6 | -32.4 | 74 | 58.89 | 40.78 | -1.59 | 56.48 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | 24264 | 40.85 | -27.35 | 68.2 | 58.4 | 38.66 | -2.52 | 53.69 | - | - | P |
| | | 31544 | 42.19 | -31.81 | 74 | 59.92 | 40.59 | -1.58 | 56.74 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |



Emission below 1GHz

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-------------------|------------------|---------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11ax20 CH01 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz LF | | 30 | 25.51 | -14.49 | 40 | 31.44 | 25.3 | 1.08 | 32.31 | - | - | P | H | |
| | | 90.14 | 22.19 | -21.31 | 43.5 | 38.41 | 14.61 | 1.44 | 32.27 | - | - | P | H | |
| | | 159.01 | 24.98 | -18.52 | 43.5 | 38.82 | 16.6 | 1.75 | 32.19 | - | - | P | H | |
| | | 215.27 | 28.85 | -14.65 | 43.5 | 44.35 | 14.83 | 1.85 | 32.18 | - | - | P | H | |
| | | 476.2 | 26.14 | -19.86 | 46 | 32.34 | 23.52 | 2.46 | 32.18 | - | - | P | H | |
| | | 856.44 | 32.5 | -13.5 | 46 | 31.68 | 29.34 | 3.19 | 31.71 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 43.58 | 31.82 | -8.18 | 40 | 45.27 | 17.58 | 1.26 | 32.29 | 100 | 145 | QP | H |
| | | | 125.06 | 28.86 | -14.64 | 43.5 | 41.94 | 17.6 | 1.57 | 32.25 | - | - | P | V |
| | | | 191.02 | 24.36 | -19.14 | 43.5 | 40.06 | 14.7 | 1.8 | 32.2 | - | - | P | V |
| | | | 288.02 | 25.59 | -20.41 | 46 | 36.56 | 19.02 | 2.1 | 32.09 | - | - | P | V |
| | | | 741.98 | 31.66 | -14.34 | 46 | 32.64 | 28.12 | 2.96 | 32.06 | - | - | P | V |
| | | | 901.06 | 34.29 | -11.71 | 46 | 33.46 | 29.02 | 3.23 | 31.42 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | <ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|---|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| 802.11ax20 CH11 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz | | 2390 | 59.6 | -14.4 | 74 | 54.25 | 27.5 | 14.93 | 37.08 | 200 | 350 | P | H | |
| | | 2390 | 50.7 | -3.3 | 54 | 45.35 | 27.5 | 14.93 | 37.08 | 200 | 350 | A | H | |
| | | 4852 | 45.96 | -28.04 | 74 | 43.59 | 32.6 | 7.02 | 37.25 | - | - | P | H | |
| | | 4924 | 48.52 | -25.48 | 74 | 45.79 | 32.84 | 7.1 | 37.21 | - | - | P | H | |
| | | 7278 | 47.23 | -26.77 | 74 | 57.08 | 37 | 9.92 | 56.77 | - | - | P | H | |
| | | 7386 | 46.92 | -27.08 | 74 | 57.4 | 36.58 | 9.9 | 56.96 | - | - | P | H | |
| | | 11570 | 45.98 | -28.02 | 74 | 51.43 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 46.93 | -21.27 | 68.2 | 50.28 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4852 | 47.2 | -26.8 | 74 | 44.83 | 32.6 | 7.02 | 37.25 | - | - | P | V |
| | | | 4924 | 49.3 | -24.7 | 74 | 46.57 | 32.84 | 7.1 | 37.21 | 100 | 52 | P | V |
| | | | 4924 | 42.95 | -11.05 | 54 | 40.22 | 32.84 | 7.1 | 37.21 | 100 | 52 | A | V |
| | | | 7278 | 46.66 | -27.34 | 74 | 56.51 | 37 | 9.92 | 56.77 | - | - | P | V |
| | | | 7386 | 45.51 | -28.49 | 74 | 55.99 | 36.58 | 9.9 | 56.96 | - | - | P | V |
| | | | 11570 | 46.35 | -27.65 | 74 | 51.8 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.86 | -20.34 | 68.2 | 51.21 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | <ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|---|--------|-----------------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11ax20 CH11 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz SHF | | 24736 | 40.98 | -27.22 | 68.2 | 57.64 | 39.16 | -2.41 | 53.41 | - | - | P | H |
| | | 31320 | 42.09 | -31.91 | 74 | 59.38 | 40.78 | -1.59 | 56.48 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | Remark | 1. No other spurious found. | | | | | | | | | | | |
| 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | |
| 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission below 1GHz

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBµV/m) | Margin (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|---|----------------------|---------------------|------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|---|
| 802.11ax20 CH11 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz LF | | 30 | 25.22 | -14.78 | 40 | 31.15 | 25.3 | 1.08 | 32.31 | - | - | P | H | |
| | | 160.95 | 24.08 | -19.42 | 43.5 | 38.21 | 16.31 | 1.75 | 32.19 | - | - | P | H | |
| | | 221.09 | 29.32 | -16.68 | 46 | 44.12 | 15.49 | 1.88 | 32.17 | - | - | P | H | |
| | | 557.68 | 27.89 | -18.11 | 46 | 31.39 | 26.06 | 2.64 | 32.2 | - | - | P | H | |
| | | 864.2 | 32.66 | -13.34 | 46 | 32.01 | 29.12 | 3.19 | 31.66 | - | - | P | H | |
| | | 963.14 | 34.2 | -19.8 | 54 | 30.73 | 31 | 3.34 | 30.87 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBµV/m) | Margin (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH15 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | | 4864 | 46.81 | -27.19 | 74 | 44.39 | 32.63 | 7.04 | 37.25 | - | - | P | H | |
| | | 4952 | 47.65 | -26.35 | 74 | 44.7 | 33.01 | 7.13 | 37.19 | - | - | P | H | |
| | | 7297 | 46.39 | -27.61 | 74 | 56.27 | 37 | 9.92 | 56.8 | - | - | P | H | |
| | | 7428 | 45.87 | -28.13 | 74 | 56.55 | 36.44 | 9.91 | 57.03 | - | - | P | H | |
| | | 11570 | 46.01 | -27.99 | 74 | 51.46 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.8 | -20.4 | 68.2 | 51.15 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4864 | 47.48 | -26.52 | 74 | 45.06 | 32.63 | 7.04 | 37.25 | - | - | P | V |
| | | | 4952 | 47.57 | -26.43 | 74 | 44.62 | 33.01 | 7.13 | 37.19 | - | - | P | V |
| | | | 7297 | 47.6 | -26.4 | 74 | 57.48 | 37 | 9.92 | 56.8 | - | - | P | V |
| | | | 7428 | 45.44 | -28.56 | 74 | 56.12 | 36.44 | 9.91 | 57.03 | - | - | P | V |
| | | | 11570 | 46.2 | -27.8 | 74 | 51.65 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.53 | -20.67 | 68.2 | 50.88 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--------|-----------------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH15 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz SHF | | 24792 | 41.19 | -27.01 | 68.2 | 57.81 | 39.18 | -2.42 | 53.38 | - | - | P | H | |
| | | 31376 | 42.01 | -31.99 | 74 | 59.54 | 40.6 | -1.58 | 56.55 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | Remark | 1. No other spurious found. | | | | | | | | | | | | |
| 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | | | |
| 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |



Emission below 1GHz

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|---|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH15 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz LF | | 87.23 | 27.09 | -12.91 | 40 | 43.66 | 14.25 | 1.43 | 32.25 | - | - | P | H | |
| | | 160.95 | 28.37 | -15.13 | 43.5 | 42.5 | 16.31 | 1.75 | 32.19 | - | - | P | H | |
| | | 213.33 | 32.98 | -10.52 | 43.5 | 48.41 | 14.9 | 1.85 | 32.18 | - | - | P | H | |
| | | 562.53 | 29.13 | -16.87 | 46 | 32.54 | 26.15 | 2.65 | 32.21 | - | - | P | H | |
| | | 833.16 | 32.45 | -13.55 | 46 | 32.42 | 28.69 | 3.14 | 31.8 | - | - | P | H | |
| | | 955.38 | 34.51 | -11.49 | 46 | 31.13 | 31 | 3.32 | 30.94 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 30 | 33.31 | -6.69 | 40 | 39.24 | 25.3 | 1.08 | 32.31 | - | - | P | H |
| | | | 43.58 | 30.3 | -9.7 | 40 | 43.75 | 17.58 | 1.26 | 32.29 | 100 | 185 | QP | V |
| | | | 192.96 | 30.11 | -13.39 | 43.5 | 45.71 | 14.8 | 1.8 | 32.2 | - | - | P | V |
| | | | 287.05 | 25.69 | -20.31 | 46 | 36.72 | 18.98 | 2.09 | 32.1 | - | - | P | V |
| | | | 614.91 | 28.67 | -17.33 | 46 | 32.35 | 25.8 | 2.74 | 32.22 | - | - | P | V |
| | | | 848.68 | 32.72 | -13.28 | 46 | 31.94 | 29.35 | 3.18 | 31.75 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH10 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz | | 4824 | 47.05 | -26.95 | 74 | 44.89 | 32.44 | 6.99 | 37.27 | - | - | P | H | |
| | | 4904 | 47.26 | -26.74 | 74 | 44.68 | 32.72 | 7.08 | 37.22 | - | - | P | H | |
| | | 7356 | 46.25 | -27.75 | 74 | 56.49 | 36.76 | 9.91 | 56.91 | - | - | P | H | |
| | | 11570 | 47.12 | -26.88 | 74 | 52.57 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.44 | -20.76 | 68.2 | 50.79 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4824 | 46.62 | -27.38 | 74 | 44.46 | 32.44 | 6.99 | 37.27 | - | - | P | V |
| | | 4904 | 47.37 | -26.63 | 74 | 44.79 | 32.72 | 7.08 | 37.22 | - | - | P | V | |
| | | 7356 | 46.05 | -27.95 | 74 | 56.29 | 36.76 | 9.91 | 56.91 | - | - | P | V | |
| | | 11570 | 46.1 | -27.9 | 74 | 51.55 | 38.68 | 11.83 | 55.96 | - | - | P | V | |
| | | 17355 | 47.47 | -20.73 | 68.2 | 50.82 | 38.8 | 14.31 | 56.46 | - | - | P | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH10 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz SHF | | 23952 | 40.87 | -33.13 | 74 | 58.75 | 38.7 | -2.65 | 53.93 | - | - | P | H | |
| | | 31278 | 42.77 | -31.23 | 74 | 59.71 | 41.08 | -1.59 | 56.43 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | 23992 | 41.91 | -32.09 | 74 | 59.76 | 38.7 | -2.65 | 53.9 | - | - | P | V |
| | | | 31236 | 43.73 | -30.27 | 74 | 60.3 | 41.41 | -1.6 | 56.38 | - | - | P | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission below 1GHz

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dB μ V/m) | Margin (dB) | Limit Line (dB μ V/m) | Read Level (dB μ V) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|----------------------|---------------------------|------------------|-----------------------------------|-------------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|---|
| BLE CH10 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz LF | | 30 | 31.61 | -8.39 | 40 | 37.54 | 25.3 | 1.08 | 32.31 | - | - | P | H | |
| | | 161.92 | 27.06 | -16.44 | 43.5 | 41.29 | 16.21 | 1.75 | 32.19 | - | - | P | H | |
| | | 204.6 | 29.23 | -14.27 | 43.5 | 44.52 | 15.09 | 1.81 | 32.19 | - | - | P | H | |
| | | 288.99 | 36.53 | -9.47 | 46 | 47.46 | 19.06 | 2.1 | 32.09 | - | - | P | H | |
| | | 441.28 | 31.98 | -14.02 | 46 | 38.85 | 22.9 | 2.39 | 32.16 | - | - | P | H | |
| | | 911.73 | 33.38 | -12.62 | 46 | 32.2 | 29.27 | 3.24 | 31.33 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 44.55 | 32.24 | -7.76 | 40 | 46.21 | 17.03 | 1.27 | 32.27 | 100 | 135 | QP | H |
| | | | 199.75 | 34.34 | -9.16 | 43.5 | 49.75 | 15 | 1.79 | 32.2 | - | - | P | V |
| | | | 389.87 | 28.74 | -17.26 | 46 | 36.99 | 21.59 | 2.28 | 32.12 | - | - | P | V |
| | | | 557.68 | 32.26 | -13.74 | 46 | 35.76 | 26.06 | 2.64 | 32.2 | - | - | P | V |
| | | | 762.35 | 31.24 | -14.76 | 46 | 31.97 | 28.3 | 2.99 | 32.02 | - | - | P | V |
| | | | 930.16 | 33.13 | -12.87 | 46 | 31 | 30.01 | 3.28 | 31.16 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | <ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH30 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz | | 2390 | 53.47 | -20.53 | 74 | 48.12 | 27.5 | 14.93 | 37.08 | 141 | 356 | P | H | |
| | | 2390 | 44.84 | -9.16 | 54 | 39.49 | 27.5 | 14.93 | 37.08 | 141 | 356 | A | H | |
| | | 4852 | 47.26 | -26.74 | 74 | 44.89 | 32.6 | 7.02 | 37.25 | - | - | P | H | |
| | | 4924 | 47.02 | -26.98 | 74 | 44.29 | 32.84 | 7.1 | 37.21 | - | - | P | H | |
| | | 7278 | 46.5 | -27.5 | 74 | 56.35 | 37 | 9.92 | 56.77 | - | - | P | H | |
| | | 7386 | 45.65 | -28.35 | 74 | 56.13 | 36.58 | 9.9 | 56.96 | - | - | P | H | |
| | | 11570 | 46.21 | -27.79 | 74 | 51.66 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.63 | -20.57 | 68.2 | 50.98 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 2390 | 51.18 | -22.82 | 74 | 45.83 | 27.5 | 14.93 | 37.08 | 300 | 220 | P | V |
| | | | 2390 | 42.3 | -11.7 | 54 | 36.95 | 27.5 | 14.93 | 37.08 | 300 | 220 | A | V |
| | | | 4852 | 47.45 | -26.55 | 74 | 45.08 | 32.6 | 7.02 | 37.25 | - | - | P | V |
| | | | 4924 | 47.04 | -26.96 | 74 | 44.31 | 32.84 | 7.1 | 37.21 | - | - | P | V |
| | | | 7278 | 46.62 | -27.38 | 74 | 56.47 | 37 | 9.92 | 56.77 | - | - | P | V |
| | | | 7386 | 45.67 | -28.33 | 74 | 56.15 | 36.58 | 9.9 | 56.96 | - | - | P | V |
| | | | 11570 | 45.75 | -28.25 | 74 | 51.2 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.27 | -20.93 | 68.2 | 50.62 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH30 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz SHF | | 24360 | 41.21 | -26.99 | 68.2 | 58.29 | 39 | -2.47 | 53.61 | - | - | P | H | |
| | | 31250 | 41.92 | -32.08 | 74 | 58.62 | 41.3 | -1.6 | 56.4 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | 24680 | 40.76 | -27.44 | 68.2 | 57.34 | 39.26 | -2.41 | 53.43 | - | - | P | V |
| | | | 31264 | 43.06 | -30.94 | 74 | 59.88 | 41.19 | -1.59 | 56.42 | - | - | P | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission below 1GHz

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBµV/m) | Margin (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|---|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH30 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz LF | | 31.94 | 25.19 | -14.81 | 40 | 32.27 | 24.14 | 1.05 | 32.34 | - | - | P | H | |
| | | 159.98 | 25.42 | -18.08 | 43.5 | 39.36 | 16.5 | 1.63 | 32.19 | - | - | P | H | |
| | | 222.06 | 29.61 | -16.39 | 46 | 44.34 | 15.56 | 1.8 | 32.17 | - | - | P | H | |
| | | 497.54 | 25.27 | -20.73 | 46 | 31.1 | 23.85 | 2.41 | 32.19 | - | - | P | H | |
| | | 729.37 | 35.06 | -10.94 | 46 | 36.71 | 27.49 | 2.8 | 32.09 | - | - | P | H | |
| | | 913.67 | 32.82 | -13.18 | 46 | 31.52 | 29.35 | 3.06 | 31.31 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 43.58 | 37.77 | -2.23 | 40 | 51.22 | 17.58 | 1.13 | 32.29 | - | - | P | H |
| | | | 58.13 | 32.99 | -7.01 | 40 | 52.12 | 11.8 | 1.24 | 32.25 | - | - | P | V |
| | | | 122.15 | 30.68 | -12.82 | 43.5 | 43.87 | 17.5 | 1.5 | 32.26 | - | - | P | V |
| | | | 193.93 | 26.79 | -16.71 | 43.5 | 42.4 | 14.8 | 1.72 | 32.2 | - | - | P | V |
| | | | 325.85 | 34.3 | -11.7 | 46 | 44.54 | 19.63 | 2.07 | 32.06 | - | - | P | V |
| | | | 424.79 | 38.34 | -7.66 | 46 | 45.34 | 22.8 | 2.26 | 32.15 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBµV/m) | Margin (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH15 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | | 4864 | 47.23 | -26.77 | 74 | 44.81 | 32.63 | 7.04 | 37.25 | - | - | P | H | |
| | | 4952 | 47.71 | -26.29 | 74 | 44.76 | 33.01 | 7.13 | 37.19 | - | - | P | H | |
| | | 7296 | 46.76 | -27.24 | 74 | 56.64 | 37 | 9.92 | 56.8 | - | - | P | H | |
| | | 7428 | 45.72 | -28.28 | 74 | 56.4 | 36.44 | 9.91 | 57.03 | - | - | P | H | |
| | | 11565 | 46.94 | -27.06 | 74 | 52.36 | 38.71 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.06 | -21.14 | 68.2 | 50.41 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4864 | 47.1 | -26.9 | 74 | 44.68 | 32.63 | 7.04 | 37.25 | - | - | P | V |
| | | | 4952 | 47.87 | -26.13 | 74 | 44.92 | 33.01 | 7.13 | 37.19 | - | - | P | V |
| | | | 7296 | 47.74 | -26.26 | 74 | 57.62 | 37 | 9.92 | 56.8 | - | - | P | V |
| | | | 7428 | 45.22 | -28.78 | 74 | 55.9 | 36.44 | 9.91 | 57.03 | - | - | P | V |
| | | | 11565 | 45.77 | -28.23 | 74 | 51.19 | 38.71 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.81 | -20.39 | 68.2 | 51.16 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--------|--|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH15 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz SHF | | 24336 | 40.62 | -27.58 | 68.2 | 57.79 | 38.94 | -2.48 | 53.63 | - | - | P | H | |
| | | 31292 | 43.49 | -30.51 | 74 | 60.57 | 40.96 | -1.59 | 56.45 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | Remark | 1. No other spurious found. | | | | | | | | | | | | |
| | | 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |
| 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |



Emission below 1GHz

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH15 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz LF | | 31.94 | 25.84 | -14.16 | 40 | 32.92 | 24.14 | 1.12 | 32.34 | - | - | P | H | |
| | | 69.77 | 27.97 | -12.03 | 40 | 46.53 | 12.28 | 1.4 | 32.24 | - | - | P | H | |
| | | 213.33 | 29.27 | -14.23 | 43.5 | 44.7 | 14.9 | 1.85 | 32.18 | - | - | P | H | |
| | | 581.93 | 27.88 | -18.12 | 46 | 31.76 | 25.66 | 2.68 | 32.22 | - | - | P | H | |
| | | 703.18 | 31.61 | -14.39 | 46 | 34.21 | 26.63 | 2.9 | 32.13 | - | - | P | H | |
| | | 957.32 | 34.6 | -11.4 | 46 | 31.21 | 31 | 3.32 | 30.93 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 30.97 | 32.59 | -7.41 | 40 | 39 | 24.81 | 1.1 | 32.32 | - | - | P | H |
| | | | 43.58 | 32.8 | -7.2 | 40 | 46.25 | 17.58 | 1.26 | 32.29 | 100 | 144 | QP | V |
| | | | 125.06 | 26.47 | -17.03 | 43.5 | 39.55 | 17.6 | 1.57 | 32.25 | - | - | P | V |
| | | | 191.02 | 25.66 | -17.84 | 43.5 | 41.36 | 14.7 | 1.8 | 32.2 | - | - | P | V |
| | | | 289.96 | 24.76 | -21.24 | 46 | 35.64 | 19.1 | 2.11 | 32.09 | - | - | P | V |
| | | | 703.18 | 31.2 | -14.8 | 46 | 33.8 | 26.63 | 2.9 | 32.13 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | <ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dB μ V/m) | Margin (dB) | Limit Line (dB μ V/m) | Read Level (dB μ V) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-----------------|----------------------|-------------|---------------------------|-------------------------|-----------------------|----------------|--------------------|--------------|-----------------|-----------------|------------|---|
| BLE CH10 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz | | 4824 | 47 | -27 | 74 | 44.84 | 32.44 | 6.99 | 37.27 | - | - | P | H | |
| | | 4904 | 46.74 | -27.26 | 74 | 44.16 | 32.72 | 7.08 | 37.22 | - | - | P | H | |
| | | 7356 | 46 | -28 | 74 | 56.24 | 36.76 | 9.91 | 56.91 | - | - | P | H | |
| | | 11570 | 46.01 | -27.99 | 74 | 51.46 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.99 | -20.21 | 68.2 | 51.34 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 4824 | 47.9 | -26.1 | 74 | 45.74 | 32.44 | 6.99 | 37.27 | - | - | P | V |
| | | | 4904 | 47.63 | -26.37 | 74 | 45.05 | 32.72 | 7.08 | 37.22 | - | - | P | V |
| | | | 7356 | 46.29 | -27.71 | 74 | 56.53 | 36.76 | 9.91 | 56.91 | - | - | P | V |
| | | | 11570 | 46.8 | -27.2 | 74 | 52.25 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.83 | -20.37 | 68.2 | 51.18 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|--|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|
| BLE CH10 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz SHF | | 24672 | 40.45 | -27.75 | 68.2 | 57.05 | 39.24 | -2.41 | 53.43 | - | - | P | H |
| | | 31236 | 43.08 | -30.92 | 74 | 59.65 | 41.41 | -1.6 | 56.38 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | 23992 | 41.96 | -32.04 | 74 | 59.81 | 38.7 | -2.65 | 53.9 | - | - | P |
| | | 31236 | 43.01 | -30.99 | 74 | 59.58 | 41.41 | -1.6 | 56.38 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |



Emission below 1GHz

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (LF @ 3m)

Table with columns: Note, Frequency (MHz), Level (dBµV/m), Margin (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for BLE CH10, 802.11ax20 CH157, nRF CH25, and LF.

Remark
1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (Harmonic @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|--|-------------------|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH30 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz | | 2390 | 53.35 | -20.65 | 74 | 48 | 27.5 | 14.93 | 37.08 | 300 | 355 | P | H | |
| | | 2390 | 45.22 | -8.78 | 54 | 39.87 | 27.5 | 14.93 | 37.08 | 300 | 355 | A | H | |
| | | 4852 | 47.1 | -26.9 | 74 | 44.73 | 32.6 | 7.02 | 37.25 | - | - | P | H | |
| | | 4924 | 46.48 | -27.52 | 74 | 43.75 | 32.84 | 7.1 | 37.21 | - | - | P | H | |
| | | 7278 | 46.33 | -27.67 | 74 | 56.18 | 37 | 9.92 | 56.77 | - | - | P | H | |
| | | 7386 | 45.32 | -28.68 | 74 | 55.8 | 36.58 | 9.9 | 56.96 | - | - | P | H | |
| | | 11570 | 46.27 | -27.73 | 74 | 51.72 | 38.68 | 11.83 | 55.96 | - | - | P | H | |
| | | 17355 | 47.44 | -20.76 | 68.2 | 50.79 | 38.8 | 14.31 | 56.46 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 2390 | 51.53 | -22.47 | 74 | 46.18 | 27.5 | 14.93 | 37.08 | 100 | 180 | P | V |
| | | | 2390 | 42.7 | -11.3 | 54 | 37.35 | 27.5 | 14.93 | 37.08 | 100 | 180 | A | V |
| | | | 4852 | 47.09 | -26.91 | 74 | 44.72 | 32.6 | 7.02 | 37.25 | - | - | P | V |
| | | | 4924 | 46.91 | -27.09 | 74 | 44.18 | 32.84 | 7.1 | 37.21 | - | - | P | V |
| | | | 7278 | 46.31 | -27.69 | 74 | 56.16 | 37 | 9.92 | 56.77 | - | - | P | V |
| | | | 7386 | 46.24 | -27.76 | 74 | 56.72 | 36.58 | 9.9 | 56.96 | - | - | P | V |
| | | | 11570 | 46.09 | -27.91 | 74 | 51.54 | 38.68 | 11.83 | 55.96 | - | - | P | V |
| | | | 17355 | 47.81 | -20.39 | 68.2 | 51.16 | 38.8 | 14.31 | 56.46 | - | - | P | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | |



Emission above 18GHz

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (SHF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBμV/m) | Margin (dB) | Limit Line (dBμV/m) | Read Level (dBμV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|---|--------|--|------------------|---------------|-----------------------|-------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH30 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz SHF | | 24768 | 40.97 | -27.23 | 68.2 | 57.64 | 39.14 | -2.42 | 53.39 | - | - | P | H | |
| | | 31236 | 44.12 | -29.88 | 74 | 60.69 | 41.41 | -1.6 | 56.38 | - | - | P | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | | | | | | | | | | | | | H | |
| | Remark | 1. No other spurious found. | | | | | | | | | | | | |
| | | 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |
| 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |



Emission below 1GHz

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (LF @ 3m)

| Ant. Simultaneously | Note | Frequency (MHz) | Level (dBµV/m) | Margin (dB) | Limit Line (dBµV/m) | Read Level (dBµV) | Antenna Factor (dB/m) | Path Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) | |
|--|---|-------------------|------------------|---------------|-----------------------|---------------------|-------------------------|------------------|----------------------|----------------|-------------------|-----------------|------------|---|
| BLE CH30 2462MHz + 802.11ax20 CH157 5785MHz + nRF CH12 2426MHz LF | | 30.97 | 25.08 | -14.92 | 40 | 31.49 | 24.81 | 1.1 | 32.32 | - | - | P | H | |
| | | 72.68 | 26.1 | -13.9 | 40 | 44.3 | 12.63 | 1.4 | 32.23 | - | - | P | H | |
| | | 160.95 | 25.46 | -18.04 | 43.5 | 39.59 | 16.31 | 1.75 | 32.19 | - | - | P | H | |
| | | 216.24 | 28.55 | -17.45 | 46 | 43.92 | 14.95 | 1.86 | 32.18 | - | - | P | H | |
| | | 635.28 | 28.78 | -17.22 | 46 | 31.73 | 26.5 | 2.77 | 32.22 | - | - | P | H | |
| | | 952.47 | 34.81 | -11.19 | 46 | 31.47 | 31 | 3.31 | 30.97 | - | - | P | H | |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | | H |
| | | | 30.97 | 33.88 | -6.12 | 40 | 40.29 | 24.81 | 1.1 | 32.32 | - | - | P | H |
| | | | 42.61 | 32.56 | -7.44 | 40 | 45.31 | 18.3 | 1.25 | 32.3 | 100 | 150 | QP | V |
| | | | 124.09 | 29.34 | -14.16 | 43.5 | 42.6 | 17.42 | 1.57 | 32.25 | - | - | P | V |
| | | | 290.93 | 25.83 | -20.17 | 46 | 36.69 | 19.12 | 2.11 | 32.09 | - | - | P | V |
| | | | 622.67 | 28.84 | -17.16 | 46 | 32.15 | 26.16 | 2.75 | 32.22 | - | - | P | V |
| | | | 935.98 | 34.35 | -11.65 | 46 | 31.82 | 30.36 | 3.28 | 31.11 | - | - | P | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| | | | | | | | | | | | | | V | |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. | | | | | | | | | | | | | |



Note symbol

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



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

| WIFI | Note | Frequency | Level | Margin | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---------|------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant. | | (MHz) | (dBμV/m) | (dB) | (dBμV/m) | (dBμV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) |
| 802.11a | | 5150 | 55.45 | -18.55 | 74 | 54.51 | 32.22 | 4.58 | 35.86 | 103 | 308 | P | H |
| CH 36 | | 5150 | 43.54 | -10.46 | 54 | 42.6 | 32.22 | 4.58 | 35.86 | 103 | 308 | A | H |
| 5180MHz | | | | | | | | | | | | | |

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

For Peak Limit @ 5150MHz:

1. Level(dBμV/m)
 - = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 - = 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
 - = 55.45 (dBμV/m)
2. Margin (dB)
 - = Leve(dBμV/m) – Limit Line(dBμV/m)
 - = 55.45(dBμV/m) – 74(dBμV/m)
 - = -18.55(dB)

For Average Limit @ 5150MHz:

1. Level(dBμV/m)
 - = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 - = 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
 - = 43.54 (dBμV/m)
2. Margin (dB)
 - = Level(dBμV/m) – Limit Line(dBμV/m)
 - = 43.54 (dBμV/m) – 54(dBμV/m)
 - = -10.46(dB)

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



Appendix B. Radiated Spurious Emission Plots

| | | | |
|-----------------|--------------------------------------|---------------------|---------|
| Test Engineer : | Jacky Hung , Mancy Chou and Rain Lee | Temperature : | 20~26°C |
| | | Relative Humidity : | 40~65% |

Note symbol

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



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_Ch05 + 802.11ax HE20_Tx_CH157 +nRF_Tx_CH37 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|------------------------------------|--|--|
| Ant. | 802.11ax20 CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL</p> |



Emission above 18GHz

802.11ax HE20_Tx_Ch05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| | | SHF @ 1m | |
|---------------------------------------|--|--|--|
| Ant. | 802.11ax20 CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 VERTICAL</p> | |



Emission below 1GHz

802.11ax HE20_Tx_Ch05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| | | LF @ 3m | |
|----------------|--|--|--|
| Ant. | 802.11ax20 CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak /QP | <p>Site : 03CH13-HY Condition : QP 3m B1L06_40103 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : QP 3m B1L06_40103 VERTICAL :</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|--|--|
| Ant. | 802.11b CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK[UNIT] 3m HORN_9120D_1326 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK[UNIT] 3m HORN_9120D_1326 VERTICAL</p> |



Emission above 18GHz

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| | | SHF @ 1m | |
|---------------------------------------|--|--|--|
| Ant. | 802.11b CH05 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 VERTICAL</p> | |



Emission below 1GHz

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| | | LF @ 3m | |
|----------------|--|--|--|
| Ant. | 802.11b CH05 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak /QP | <p>Site : 03CH13-HY Condition : QP 3m B1LO6_40103 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : QP 3m B1LO6_40103 VERTICAL :</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|--|--|
| Ant. | 802.11ax20 CH01 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL</p> |



Emission above 18GHz

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (SHF @ 3m)

| SHF @ 1m | | |
|---------------------------------------|---|---|
| Ant. | 802.11ax20 CH01 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : :PEAK(UNIT) 1m SHF_00993 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : :PEAK(UNIT) 1m SHF_00993 VERTICAL</p> |



Emission below 1GHz

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (LF @ 3m)

| | | LF @ 3m | |
|-----------------------------------|---|--|--|
| Ant. | 802.11ax20 CH01 2412MHz + 802.11ax20 CH157 5785MHz + nRF CH25 2452MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak /QP</p> | <p>Site : 03CH13-HY Condition : QP 3m B1LOG_40103 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : QP 3m B1LOG_40103 VERTICAL</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (Harmonic @ 3m)

| | | Harmonic @ 3m | |
|---------------------------------------|--|--|--|
| Ant. | 802.11ax20 CH11 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1326 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1326 VERTICAL :</p> | |



Emission above 18GHz

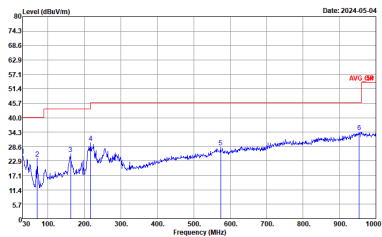
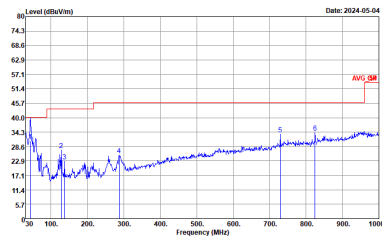
802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (SHF @ 3m)

| | | SHF @ 1m | |
|----------------|--|--|--|
| Ant. | 802.11ax20 CH11 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak Avg. | <p>Site : 03CH13-HY Condition : PEAK(UNIT) Im SHF_00993 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) Im SHF_00993 VERTICAL :</p> | |



Emission below 1GHz

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (LF @ 3m)

| | | LF @ 3m | |
|----------------|--|---|--|
| Ant. | 802.11ax20 CH11 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak /QP |  <p>Site : 03CH13-HY Condition : QP 3m BIL06_40103 HORIZONTAL</p> |  <p>Site : 03CH13-HY Condition : QP 3m BIL06_40103 VERTICAL</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|---|---|
| Ant. | 802.11ax20 CH05 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNITS) 3m HORN_9120D_1326 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK(UNITS) 3m HORN_9120D_1326 VERTICAL :</p> |



Emission above 18GHz

802.11ax HE20_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| | | SHF @ 1m | |
|---------------------------------------|--|--|--|
| Ant. | 802.11ax20 CH05 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 VERTICAL</p> | |



Emission below 1GHz

802.11ax HE20_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| | | LF @ 3m | |
|-----------------------------------|--|--|--|
| Ant. | 802.11ax20 CH05 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak /QP</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 VERTICAL</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| | | Harmonic @ 3m | |
|---------------------------------------|--|--|--|
| Ant. | 802.11b CH05 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1326 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1326 VERTICAL :</p> | |



Emission above 18GHz

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| SHF @ 1m | | |
|---------------------------------------|--|--|
| Ant. | 802.11b CH05 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) In SHF_00993 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) In SHF_00993 VERTICAL :</p> |



Emission below 1GHz

802.11b_Tx_CH05 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| | | LF @ 3m | |
|----------------|--|----------|--|
| Ant. | 802.11b CH05 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak /QP | | | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|--|--|
| Ant. | 802.11ax20 CH01 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK[UNIT] 3m HORN_9120D_1326 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK[UNIT] 3m HORN_9120D_1326 VERTICAL</p> |



Emission above 18GHz

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (SHF @ 3m)

| | | SHF @ 1m | |
|----------------|--|--|--|
| Ant. | 802.11ax20 CH01 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak Avg. | <p>Site : 03CH13-HY Condition : PEAK[UNIT] 1m SHF_00993 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK[UNIT] 1m SHF_00993 VERTICAL :</p> | |



Emission below 1GHz

802.11ax HE20_Tx_CH01 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (LF @ 3m)

| | | |
|-----------------------|--|--|
| | LF @ 3m | |
| Ant. | 802.11ax20 CH01 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | |
| Simultaneously | Horizontal | Vertical |
| Peak /QP | <p>Site : 03CH13-HY Condition : QP 3m B1LOG_40103 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : QP 3m B1LOG_40103 VERTICAL</p> |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|--|--|
| Ant. | 802.11ax20 CH11 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL</p> |



Emission above 18GHz

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (SHF @ 3m)

| | | SHF @ 1m | |
|----------------------|--|--|--|
| Ant. | 802.11ax20 CH11 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK[UNIT] 1m SHF_00993 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK[UNIT] 1m SHF_00993 VERTICAL</p> | |



Emission below 1GHz

802.11ax HE20_Tx_CH11 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (LF @ 3m)

| | | LF @ 3m | |
|----------------|---|---|--|
| Ant. | 802.11ax20 CH11 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak /QP | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 HORIZONTAL ..</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 VERTICAL ..</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|--|--|
| Ant. | BLE CH15 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL</p> |



Emission above 18GHz

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| | | SHF @ 1m | |
|---------------------------------------|--|--|--|
| Ant. | BLE CH15 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) Im SHF_00993 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) Im SHF_00993 VERTICAL</p> | |



Emission below 1GHz

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| | | LF @ 3m | |
|----------------|--|--|--|
| Ant. | BLE CH15 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak /QP | <p>Site : 03CH13-HY Condition : QP 3m BIL06_40103 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : QP 3m BIL06_40103 VERTICAL</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

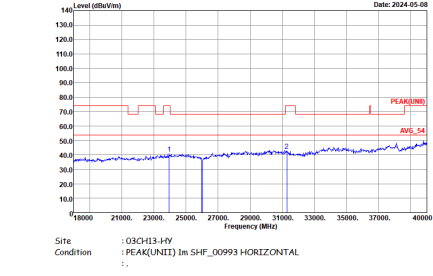
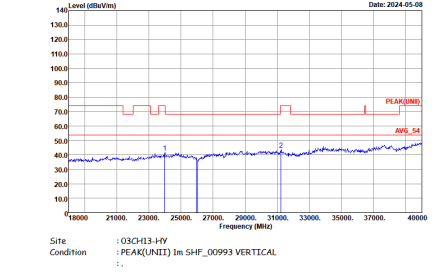
Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|------------------------------------|--|--|
| Ant. | BLE CH10 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL</p> |



Emission above 18GHz

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (SHF @ 3m)

| | | SHF @ 1m | |
|----------------|--|---|--|
| Ant. | BLE CH10 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak Avg. |  <p>Site : 03CH13-HY Condition : PEAK(UNIT) Im SHF_00993 HORIZONTAL :</p> |  <p>Site : 03CH13-HY Condition : PEAK(UNIT) Im SHF_00993 VERTICAL :</p> | |



Emission below 1GHz

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (LF @ 3m)

| | | LF @ 3m | |
|-----------------------------------|--|--|--|
| Ant. | BLE CH10 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak /QP</p> | <p>Site : 03CH13-HY Condition : QP 3m B1LOG_40103 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : QP 3m B1LOG_40103 VERTICAL :</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|--|--|
| Ant. | BLE CH30 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1326 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_91200_1326 VERTICAL</p> |



Emission above 18GHz

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (SHF @ 3m)

| | | SHF @ 1m | |
|---------------------------------------|--|--|--|
| Ant. | BLE CH30 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 VERTICAL</p> | |



Emission below 1GHz

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (LF @ 3m)

| | | LF @ 3m | |
|-----------------------------------|--|--|--|
| Ant. | BLE CH30 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | | |
| Simultaneously | Horizontal | Vertical | |
| <p>Peak /QP</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 VERTICAL :</p> | |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|--|--|
| Ant. | BLE CH15 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL :</p> |



Emission above 18GHz

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (SHF @ 3m)

| SHF @ 1m | | |
|----------------|--|--|
| Ant. | BLE CH15 2432MHz +802.11ax20 CH157 5785MHz +nRF CH37 2476MHz | |
| Simultaneously | Horizontal | Vertical |
| Peak Avg. | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 HORIZONTAL : .</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 VERTICAL : .</p> |



Emission below 1GHz

Bluetooth-LE_Tx_CH15 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH37 (LF @ 3m)

| LF @ 3m | | |
|-----------------------------------|--|--|
| Ant. | BLE CH15 2432MHz + 802.11ax20 CH157 5785MHz + nRF CH37 2476MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak /QP</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 HORIZONTAL : .</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 VERTICAL : .</p> |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|------------------------------------|--|--|
| Ant. | BLE CH10 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL :</p> |



Emission above 18GHz

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (SHF @ 3m)

| SHF @ 1m | | |
|---------------------------------------|--|--|
| Ant. | BLE CH10 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 HORIZONTAL : .</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 VERTICAL : .</p> |



Emission below 1GHz

Bluetooth-LE_Tx_CH10 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH25 (LF @ 3m)

| LF @ 3m | | |
|---------------------|--|--|
| Ant. | BLE CH10 2412MHz +802.11ax20 CH157 5785MHz +nRF CH25 2452MHz | |
| Simultaneously | Horizontal | Vertical |
| Peak /QP | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 VERTICAL :</p> |



2.4GHz 2400~2483.5MHz + Band 4 - 5745~5825MHz + nRF

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (Harmonic @ 3m)

| Harmonic @ 3m | | |
|---------------------------------------|--|--|
| Ant. | BLE CH30 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak</p> <p>Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 HORIZONTAL</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN_9120D_1326 VERTICAL</p> |



Emission above 18GHz

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (SHF @ 3m)

| SHF @ 1m | | |
|------------------------------------|--|--|
| Ant. | BLE CH30 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | |
| Simultaneously | Horizontal | Vertical |
| <p>Peak Avg.</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : PEAK(UNIT) 1m SHF_00993 VERTICAL :</p> |



Emission below 1GHz

Bluetooth-LE_Tx_CH30 + 802.11ax HE20_Tx_CH157 + nRF_Tx_CH12 (LF @ 3m)

| | | LF @ 3m | |
|----------------|--|--|--|
| Ant. | BLE CH30 2462MHz +802.11ax20 CH157 5785MHz +nRF CH12 2426MHz | | |
| Simultaneously | Horizontal | Vertical | |
| Peak /QP | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 HORIZONTAL :</p> | <p>Site : 03CH13-HY Condition : QP 3m BILOG_40103 VERTICAL :</p> | |