TESTING LABORATORY
CERTIFICATE#4323.01

# FCC PART 15.407

# TEST REPORT

For

## Shanghai Sunmi Technology Co.,Ltd.

Room 605, Block 7, KIC Plaza, No.388 Song Hu Road, Yang Pu District, Shanghai 200433 China

## FCC ID: 2AH25T2SW

| | |
|---|---|
| **Report Type:** Original Report | **Product Type:** POS System |

| | |
|---|---|
| **Test Engineer:** | CK Huang |
| **Report Number:** | RKSA200804002-00D |
| **Report Date:** | 2020-10-19 |
| **Reviewed By:** | Oscar Ye<br>EMC Manager |
| **Test Laboratory:** | Bay Area Compliance Laboratories Corp. (Kunshan)<br>No.248 Chenghu Road, Kunshan, Jiangsu province, China<br>Tel: +86-0512-86175000<br>Fax: +86-0512-88934268<br>www.baclcorp.com.cn |

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# GENERAL INFORMATION

## Product Description for Equipment under Test (EUT)

| | |
|---|---|
| Applicant: | Shanghai Sunmi Technology Co.,Ltd. |
| Product Type: | POS System |
| Test Model | L1563, L1573 |
| Series Model: | L1562, L1561, L1572, L1571 |
| Model Difference | See Declaration of Similarity |
| Power Supply: | DC 24.0V from Adapter |
| RF Function: | 5G Wi-Fi |
| Operating Band/Frequency: | 5G Wi-Fi B1: 5150-5250 MHz, B4: 5725-5850 MHz |
| Channel Number: | 5G Wi-Fi B1: 7, B4: 8 |
| Channel Separation: | 802.11a/802.11ac20/n20: 20MHz; 802.11n40/802.11ac40:40 MHz, 802.11ac80: 80 MHz |
| Modulation Type: | OFDM |
| Antenna Type: | L1563: PCB Antenna; L1573: PCB Antenna |
| *Maximum Antenna Gain: | L1563: Chain0: 0.05 dBi; Chain1: 0.05 dBi<br>L1573: Chain0: 1.57 dBi; Chain1: 1.57 dBi |

*Adapter1 information（L1563/L1562/L1561）:*
*Model: CYSE65-240250*
*Input: AC 100V-240V, 50/60Hz, 1.7A*
*Output: DC 24.0V, 2.5A, 60.0W*

*Adapter2 information（L1573/L1572/L1571）:*
*Model: CYZS36-240150*
*Input: AC 100V-240V, 50/60Hz, 1.5A*
*Output: DC 24.0V, 1.5A*

*Note1: The Maximum Antenna Gain was declared by the manufacturer.*

*Note2: According to product differences, choose model L1563 and L1573 for full test.*

**All measurement and test data in this report was gathered from production sample serial number: 20200804002. (Assigned by the BACL. The EUT supplied by the applicant was received on 2020-08-04)*

## Objective

This type approval report is prepared on behalf of *Shanghai Sunmi Technology Co.,Ltd.* in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions' rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

## Related Submittal(s)/Grant(s)

FCC Part 15.247 DSS submissions with FCC ID: 2AH25T2SW
FCC Part 15.247 DTS submissions with FCC ID: 2AH25T2SW
FCC Part 15B JAB submissions with FCC ID: 2AH25T2SW

## Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Kunshan).

## Measurement Uncertainty

| Item | | Uncertainty |
|---|---|---|
| AC Power Lines Conducted Emissions | | 3.19 dB |
| RF conducted test with spectrum | | 0.9dB |
| RF Output Power with Power meter | | 0.5dB |
| Radiated emission | 30MHz~1GHz | 6.11dB |
| | 1GHz~6GHz | 4.45dB |
| | 6GHz~18GHz | 5.23dB |
| | 18GHz~40GHz | 5.65dB |
| Occupied Bandwidth | | 0.5kHz |
| Temperature | | 1.0℃ |
| Humidity | | 6% |

## Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) Lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4323.01), the FCC designation No. CN1185 under the FCC KDB 974614 D01 and CAB identifier CN0004 under the ISED requirement. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

# SYSTEM TEST CONFIGURATION

## Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

In **5150~5250 MHz** band, test channel list is as below:

802.11a/ac20/n20 mode Channel 36, 40, 48 were tested.
802.11n40/ac40 mode Channel 38, 46 were tested.
802.11ac80 mode Channel 42 was tested.

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---|---|---|---|
| 36 | 5180 | 44 | 5220 |
| 38 | 5190 | 46 | 5230 |
| 40 | 5200 | 48 | 5240 |
| 42 | 5210 | / | / |

For **5725~5850** MHz band,

802.11a/ac20/n20 mode Channel 149, 157, 165 were tested.
802.11n40/ac40 mode Channel 151, 159 were tested.
802.11ac80 mode Channel 155 was tested.

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---|---|---|---|
| 149 | 5745 | 159 | 5795 |
| 151 | 5755 | 161 | 5805 |
| 153 | 5765 | 165 | 5825 |
| 155 | 5775 | / | / |
| 157 | 5785 | / | / |

**For Conducted Test:**

802.11a: each transmit chains were tested
802.11ac: each transmit chains were tested
802.11n: each transmit chains were tested

Based on the same RF electrical parameters of all models, the model of L1563 was selected for testing.

**For Radiated Test:**

For 802.11a: SISO for each transmit chain
For 802.11ac: MIMO for two transmit chains
For 802.11n: MIMO for two transmit chains

Based on the same RF electrical parameters except for antennas gains, the models of L1563 and L1573 were selected for testing.

## EUT Exercise Software

RF test tool: QRCT3

The worst case was performed under:

5150MHz-5250MHz Band:

| Mode | Data rate | Channel | Power Setting | |
|---|---|---|---|---|
| | | | Chain0 | Chain1 |
| 802.11a | 6 Mbps | 5180 | 21 | 21 |
| | | 5200 | 21 | 21 |
| | | 5240 | 21 | 21 |
| 802.11ac20 | MCS0 | 5180 | 21 | 20 |
| | | 5200 | 21 | 20 |
| | | 5240 | 20 | 20 |
| 802.11n-HT20 | MCS0 | 5180 | 21 | 20 |
| | | 5200 | 21 | 20 |
| | | 5240 | 20 | 20 |
| 802.11ac40 | MCS0 | 5190 | 15 | 15 |
| | | 5230 | 15 | 15 |
| 802.11n-HT40 | MCS0 | 5190 | 15 | 15 |
| | | 5230 | 15 | 15 |
| 802.11ac80 | MCS0 | 5210 | 10 | 10 |

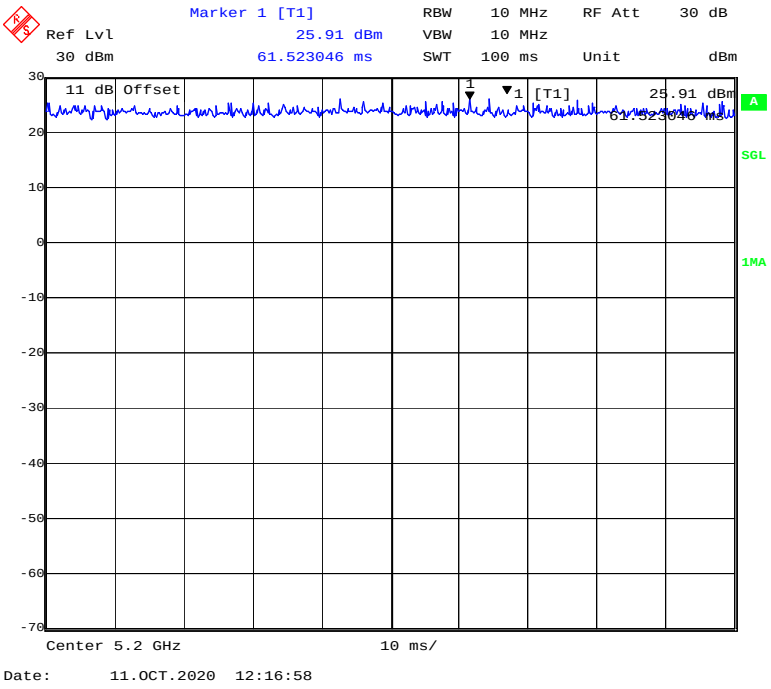
5725MHz-5850MHz Band:

| Mode | Data rate | Channel | Power Setting | |
|---|---|---|---|---|
| | | | Chain0 | Chain1 |
| 802.11a | 6 Mbps | 5745 | 25 | 25 |
| | | 5785 | 25 | 25 |
| | | 5825 | 25 | 25 |
| 802.11ac20 | MCS0 | 5745 | 25 | 25 |
| | | 5785 | 25 | 25 |
| | | 5825 | 25 | 25 |
| 802.11n-HT20 | MCS0 | 5745 | 25 | 25 |
| | | 5785 | 25 | 25 |
| | | 5825 | 25 | 25 |
| 802.11ac40 | MCS0 | 5755 | 25 | 25 |
| | | 5795 | 25 | 25 |
| 802.11n-HT40 | MCS0 | 5755 | 25 | 25 |
| | | 5795 | 25 | 25 |
| 802.11ac80 | MCS0 | 5775 | 25 | 25 |

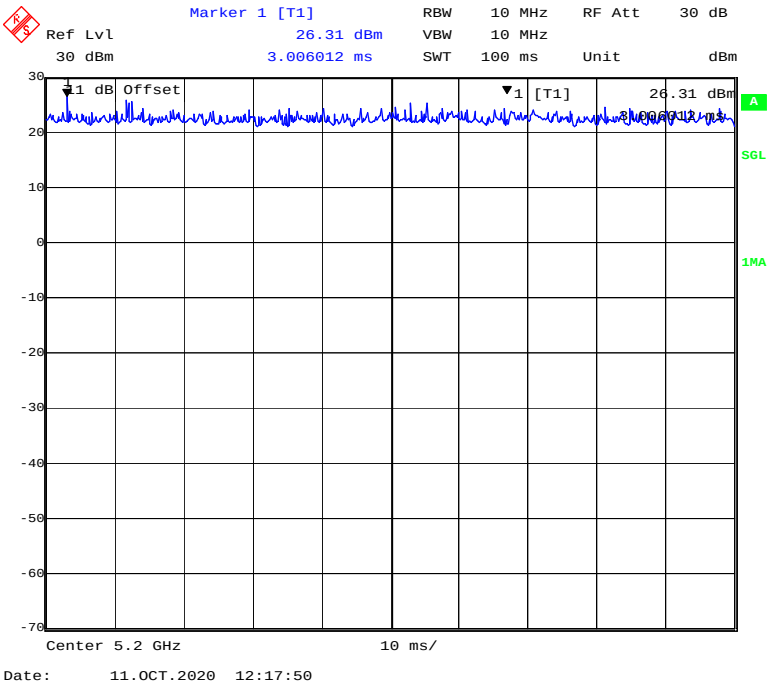
***Duty Cycle***

***5150MHz-5250MHz Band-Chain0:***

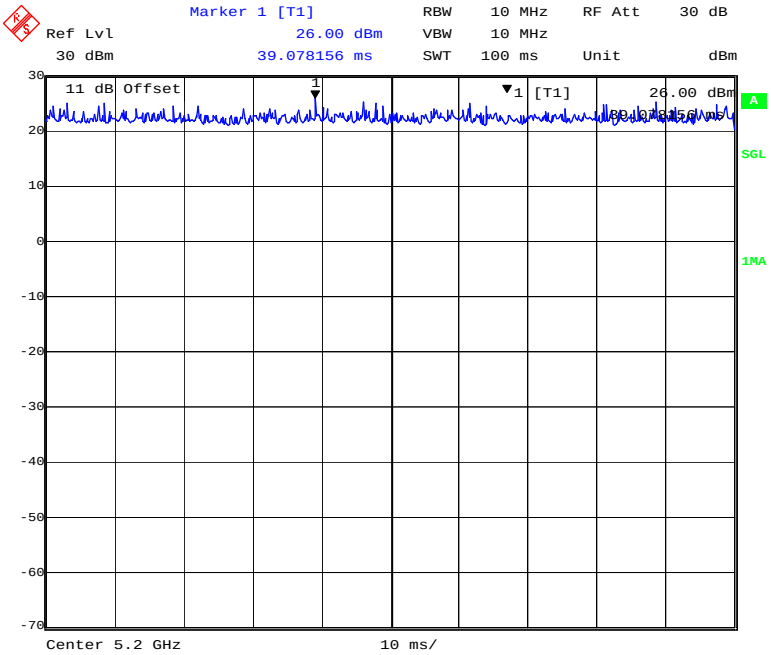
**802.11a mode**



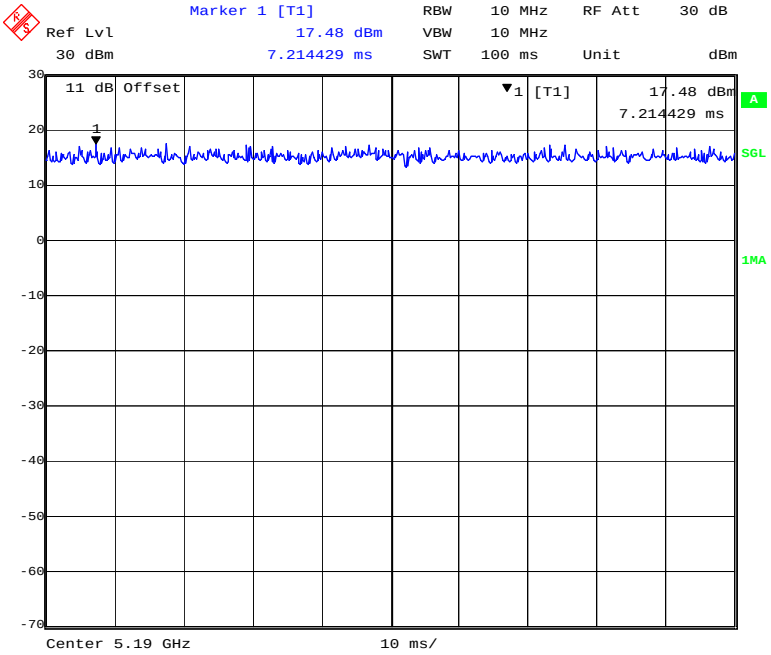

**802.11ac20 mode**



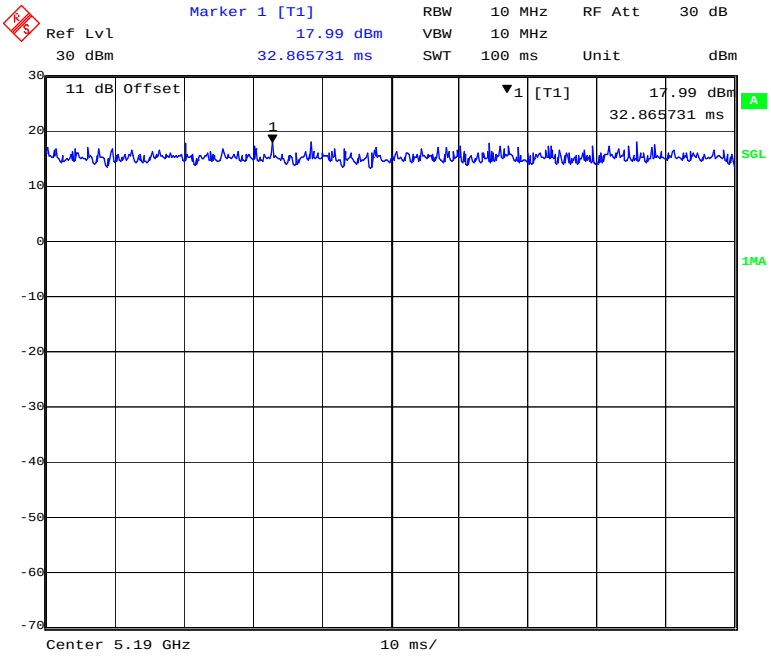
## 802.11n-HT20 mode



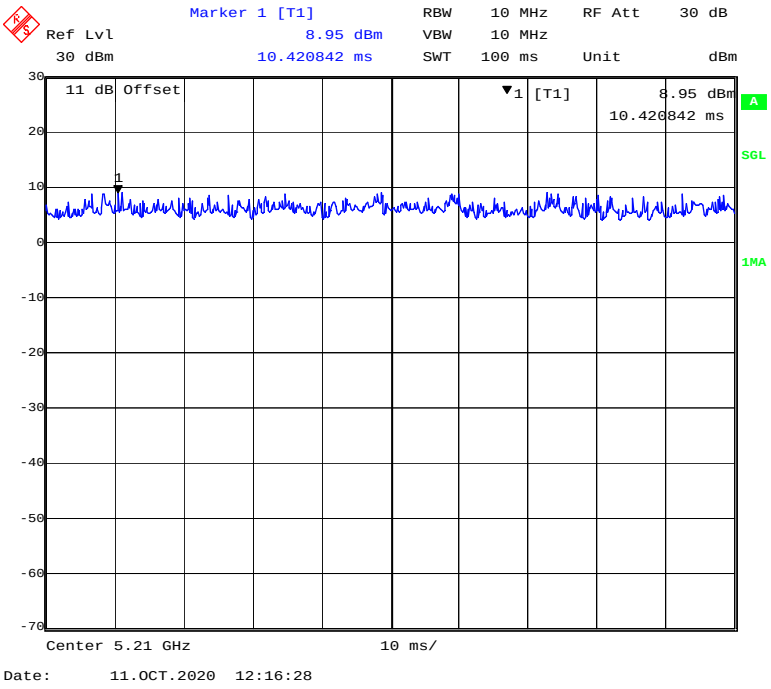

## 802.11ac40 mode



## 802.11n-HT40 mode

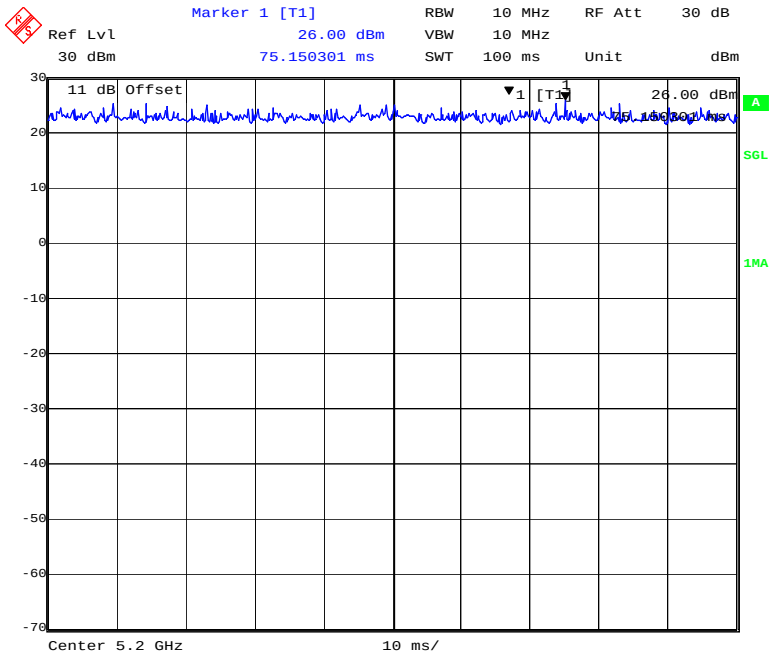



## 802.11ac80 mode



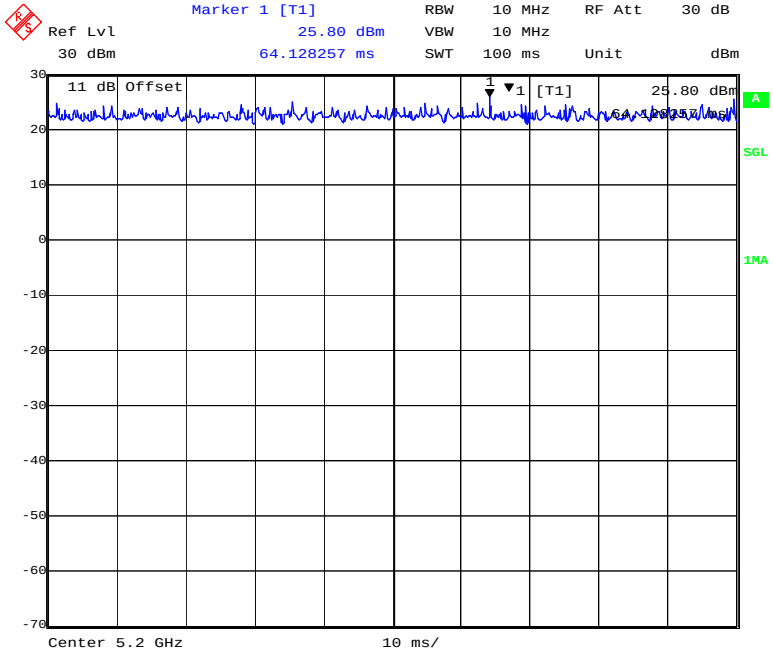
***5150MHz-5250MHz Band-Chain1:***

**802.11a mode**




Date: 11.OCT.2020 10:03:23

**802.11ac20 mode**

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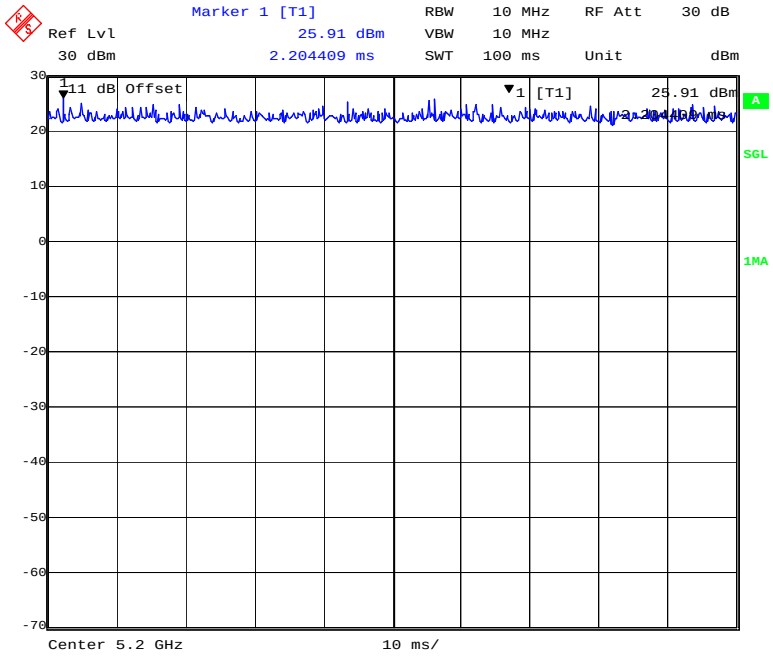
## 802.11n-HT20 mode

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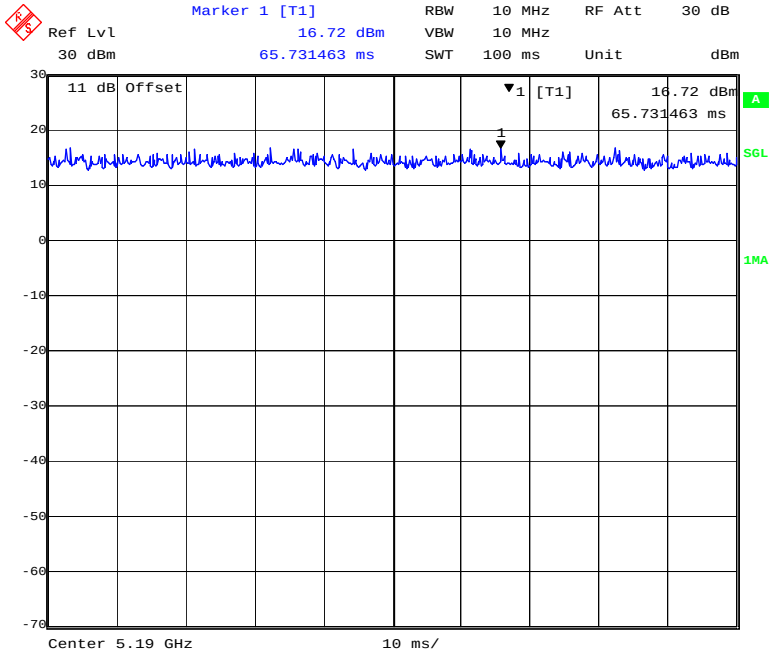
## 802.11ac40 mode

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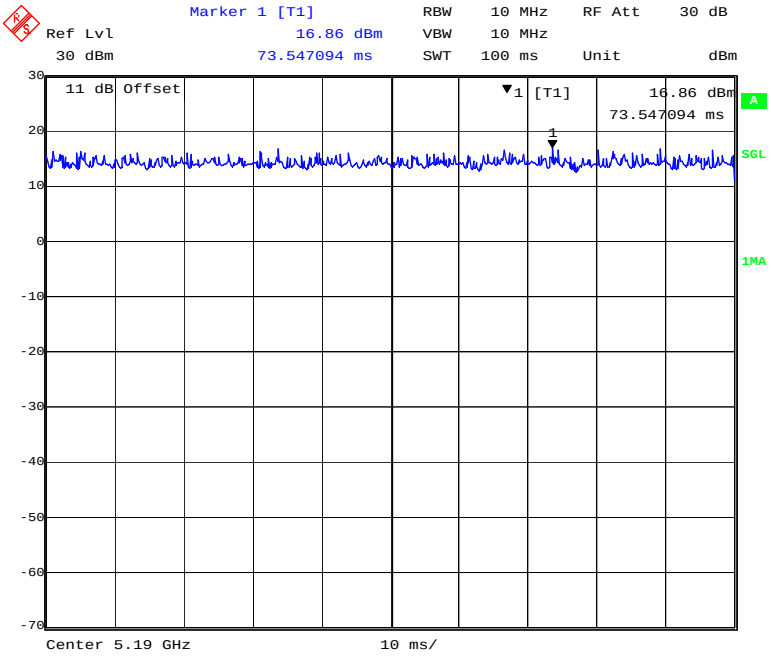
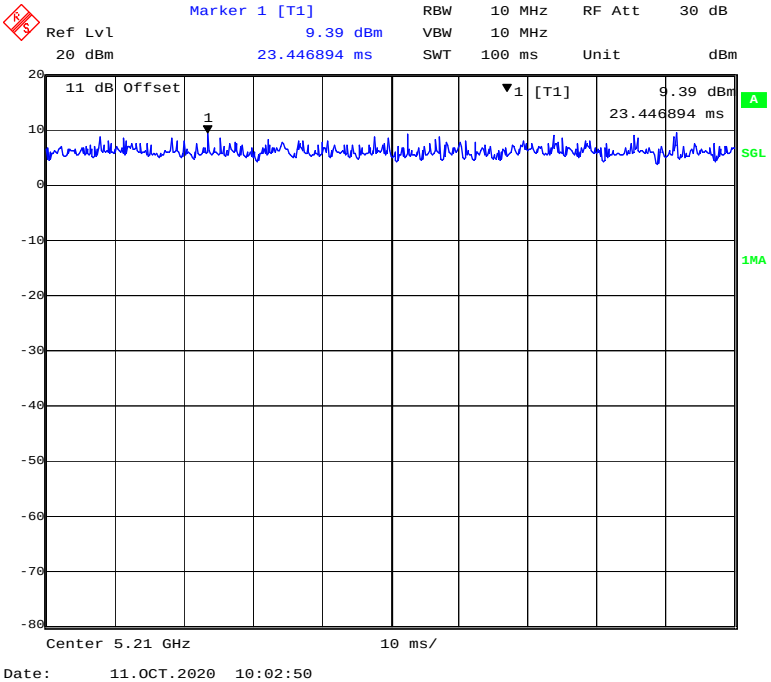
## 802.11n-HT40 mode

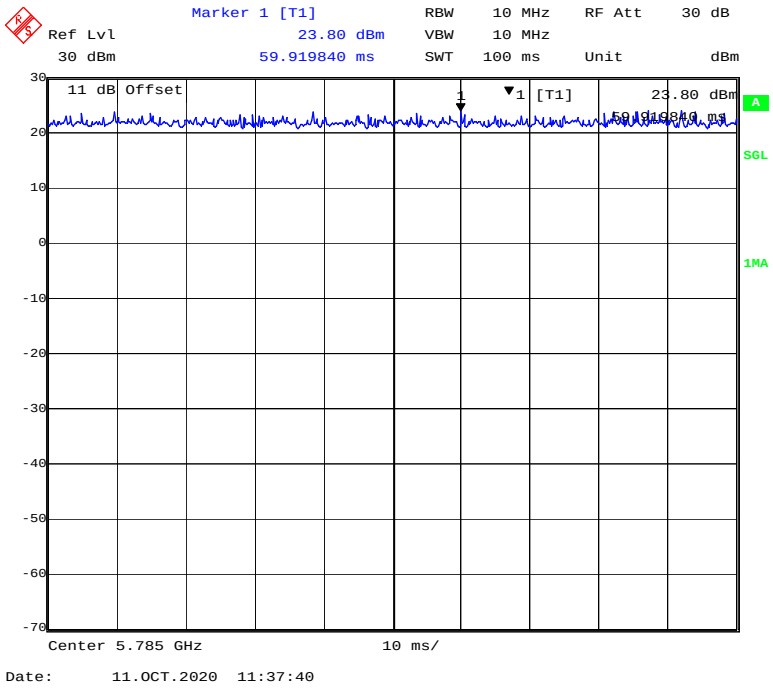



## 802.11ac80 mode

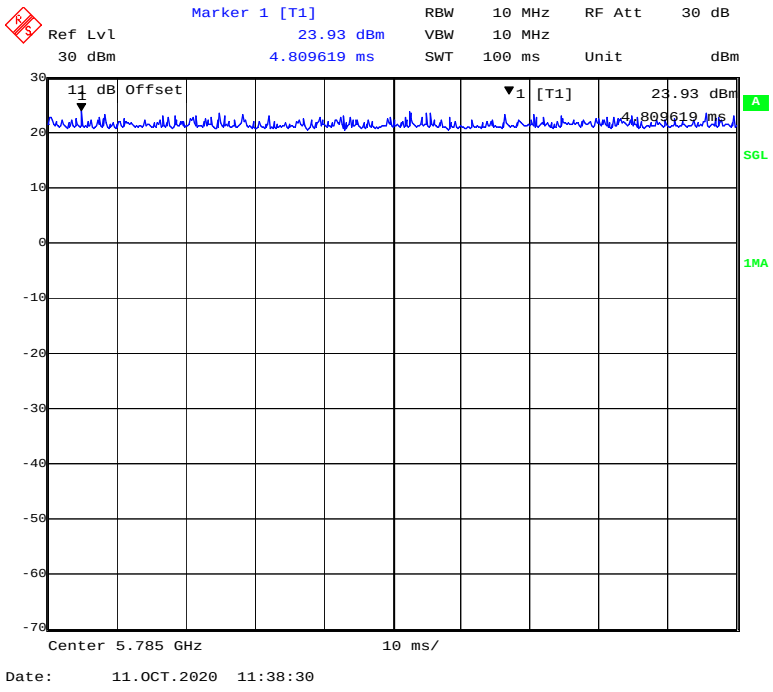


***5725MHz-5850MHz Band-Chain0:***

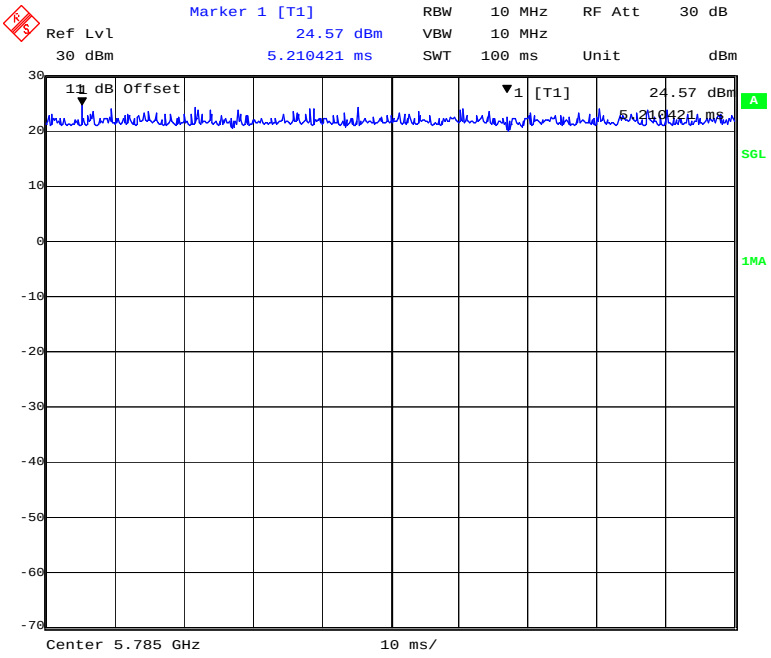
**802.11a mode**



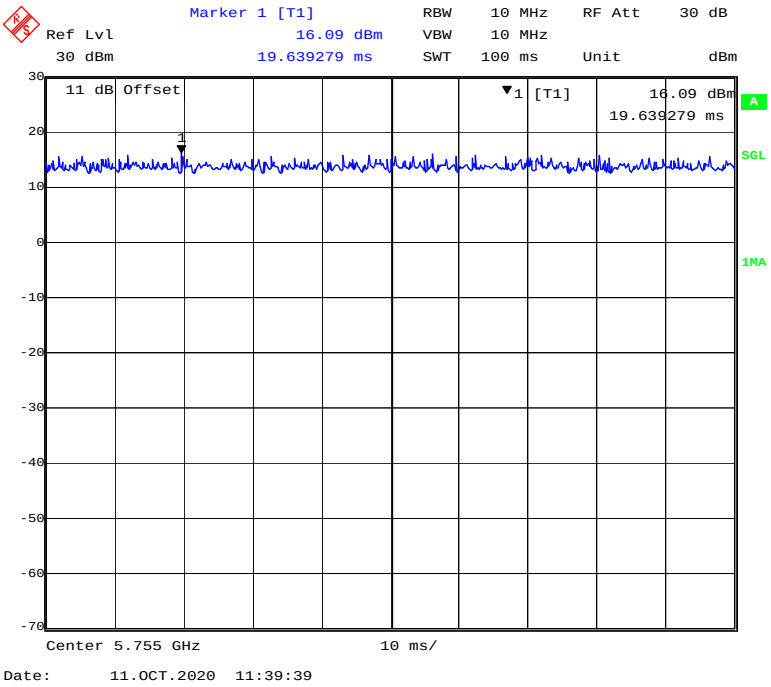

**802.11ac20 mode**



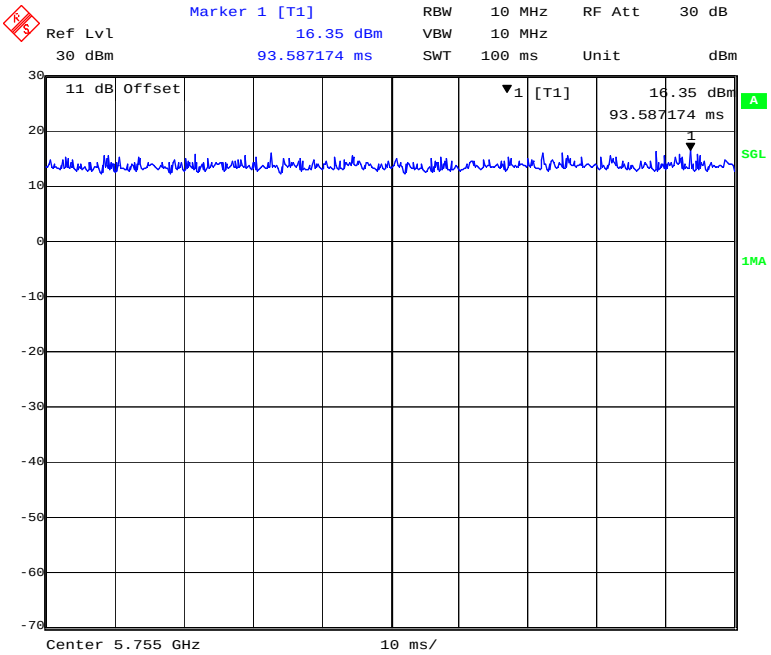
## 802.11n-HT20 mode



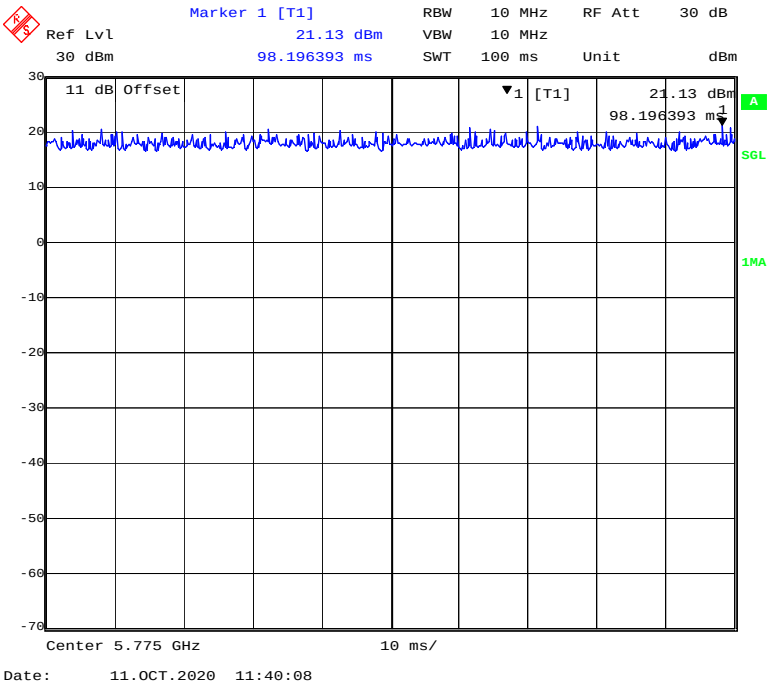

## 802.11ac40 mode



## 802.11n-HT40 mode

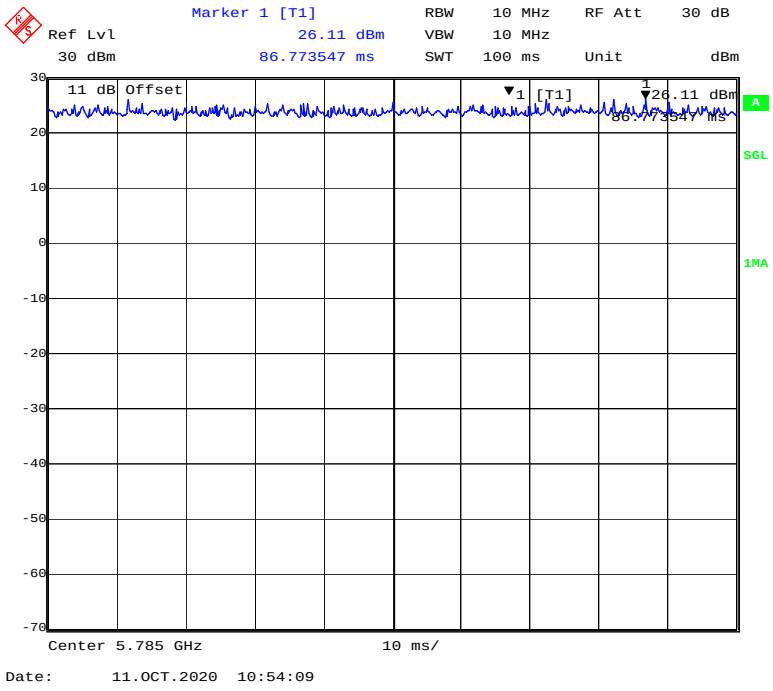



## 802.11ac80 mode



***5725MHz-5850MHz Band-Chain1:***

**802.11a mode**

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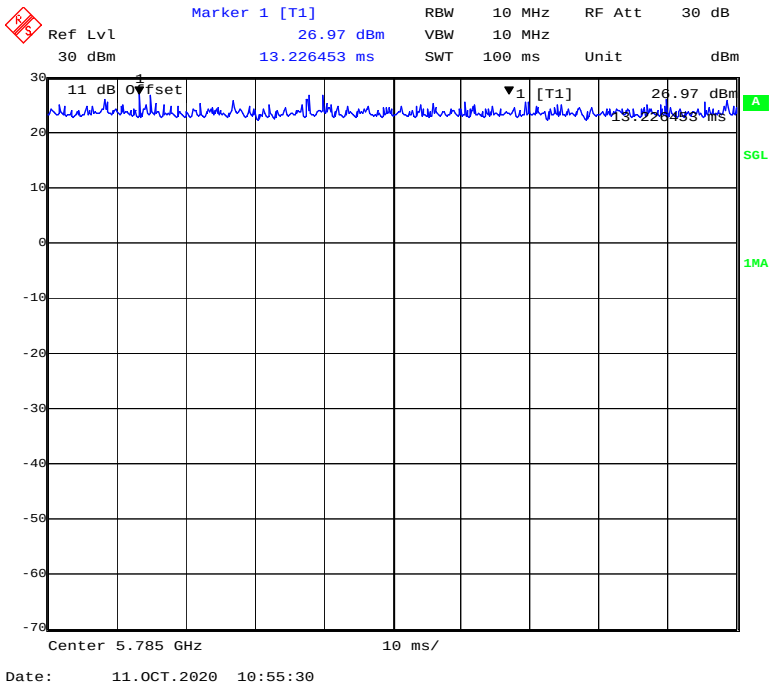
**802.11ac20 mode**

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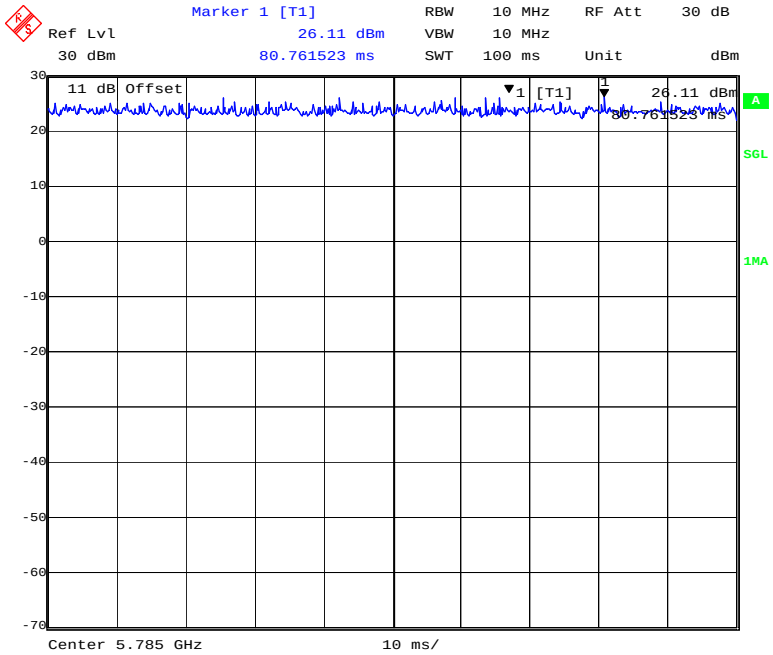
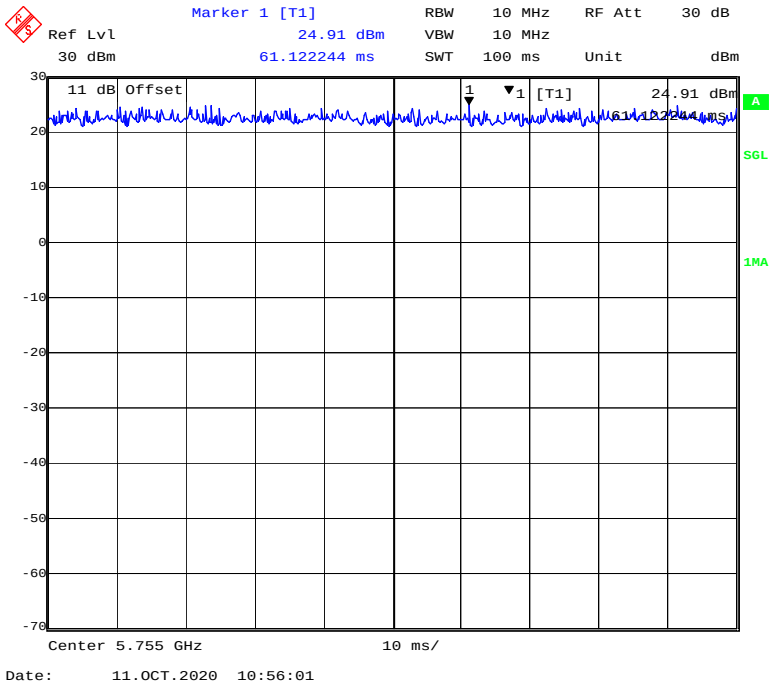
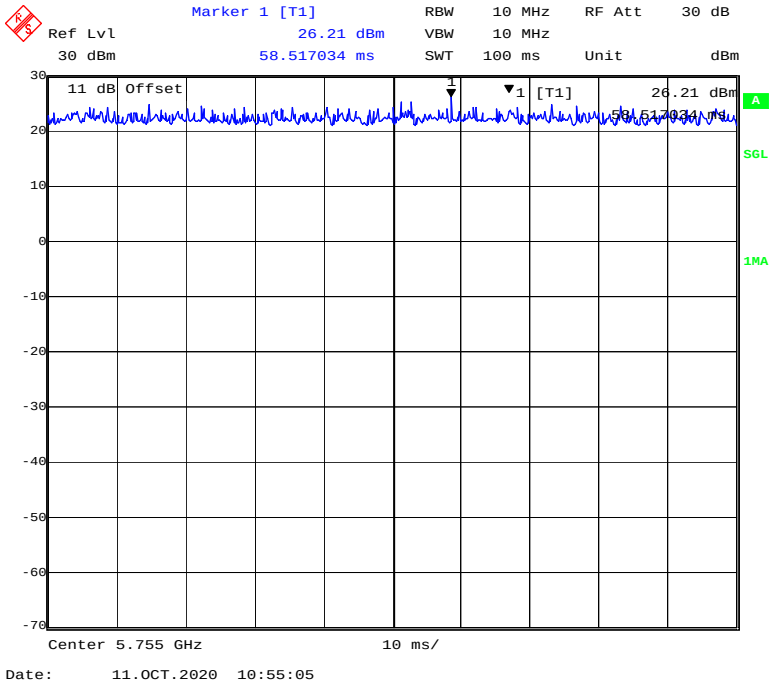
## 802.11n-HT20 mode



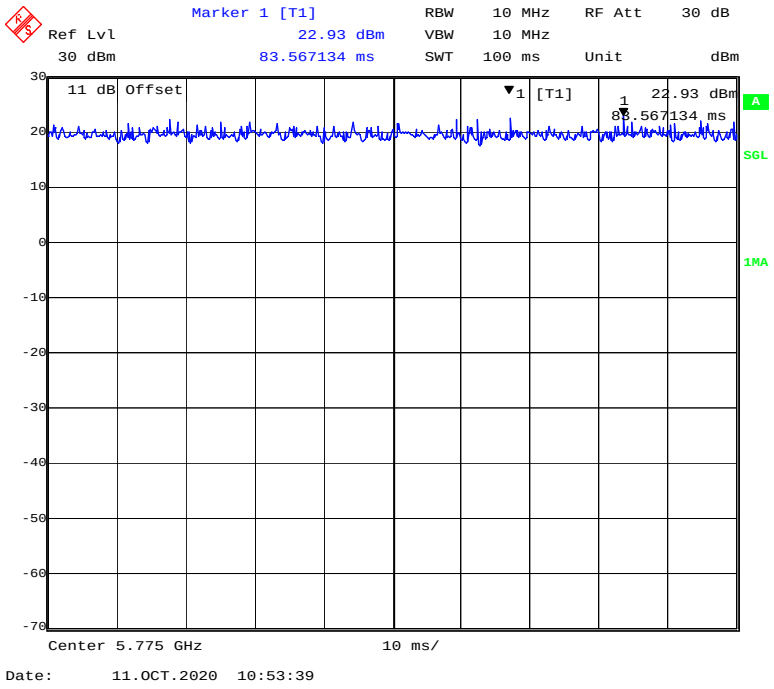

## 802.11ac40 mode



## 802.11n-HT40 mode




## 802.11ac80 mode



| Mode | Frequency Range (MHz) | Duty Cycle (%) | T (ms) | 1/T (kHz) | 10log(1/x) |
|---|---|---|---|---|---|
| 802.11a | 5150-5250 | 100 | / | / | 0 |
| 802.11ac20 | | 100 | / | / | 0 |
| 802.11n-HT20 | | 100 | / | / | 0 |
| 802.11ac40 | | 100 | / | / | 0 |
| 802.11n-HT40 | | 100 | / | / | 0 |
| 802.11ac80 | | 100 | / | / | 0 |
| 802.11a | 5725-5850 | 100 | / | / | 0 |
| 802.11ac20 | | 100 | / | / | 0 |
| 802.11n-HT20 | | 100 | / | / | 0 |
| 802.11ac40 | | 100 | / | / | 0 |
| 802.11n-HT40 | | 100 | / | / | 0 |
| 802.11ac80 | | 100 | / | / | 0 |

**Note**: "x" means duty cycle.

## Equipment Modifications

No modification was made to the EUT.

## Support Equipment List and Details

| Manufacturer | Description | Model | Serial Number |
|---|---|---|---|
| Shanghai Sunmi Technology Co.,Ltd. | Cash Box | / | / |
| TP-LINK | Router | EC26CA652860 | 1153150000000 |
| / | Printer | / | / |
| / | Earphone | / | / |
| Sandisk | USB flash disk | / | / |
| Sandisk | SD card | SDSQUNC-032G-ZN6MA | / |

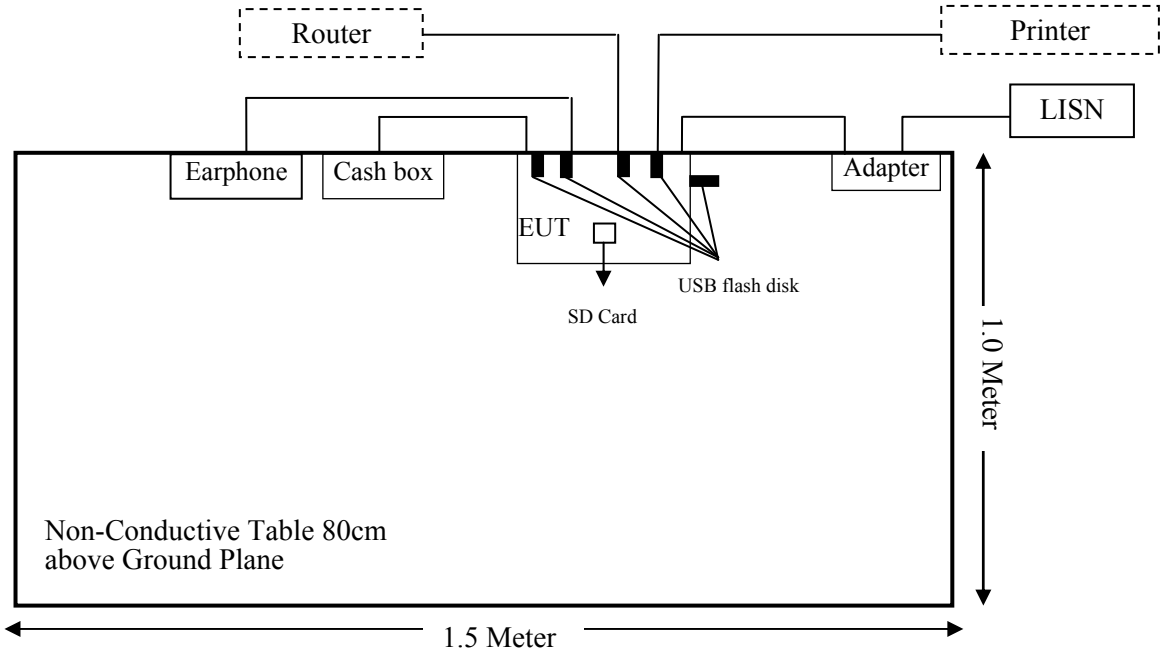
## External I/O Cable

| Cable Description | Shielding Type | Length (m) | From Port | To |
|---|---|---|---|---|
| RJ11 Cable | Un-shielding | 0.5 | EUT | Cash Box |
| USB Cable | Un-shielding | 1.0 | EUT | Adapter |
| Power Cable | Un-shielding | 1.0 | Adapter | LISN/AC Source |
| Audio Cable | Un-shielding | 1.0 | EUT | Earphone |
| Data Cable | Un-shielding | 10 | EUT | Printer |
| RJ45 Cable | Un-shielding | 1.0 | EUT | Router |

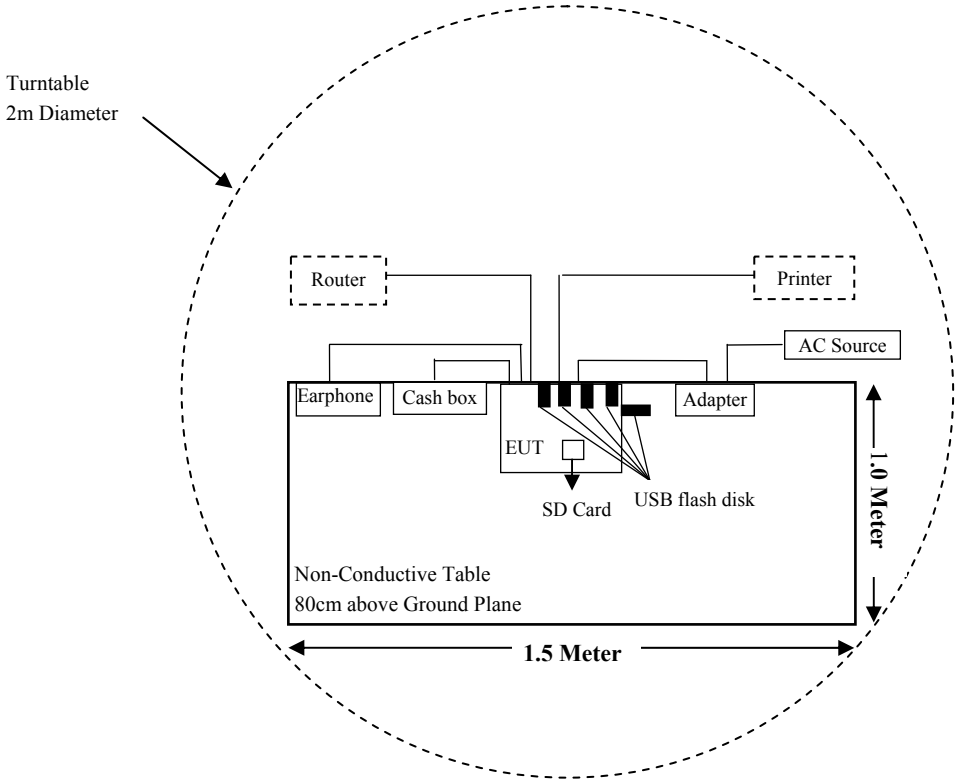
## Block Diagram of Test Setup

### For model: L1563

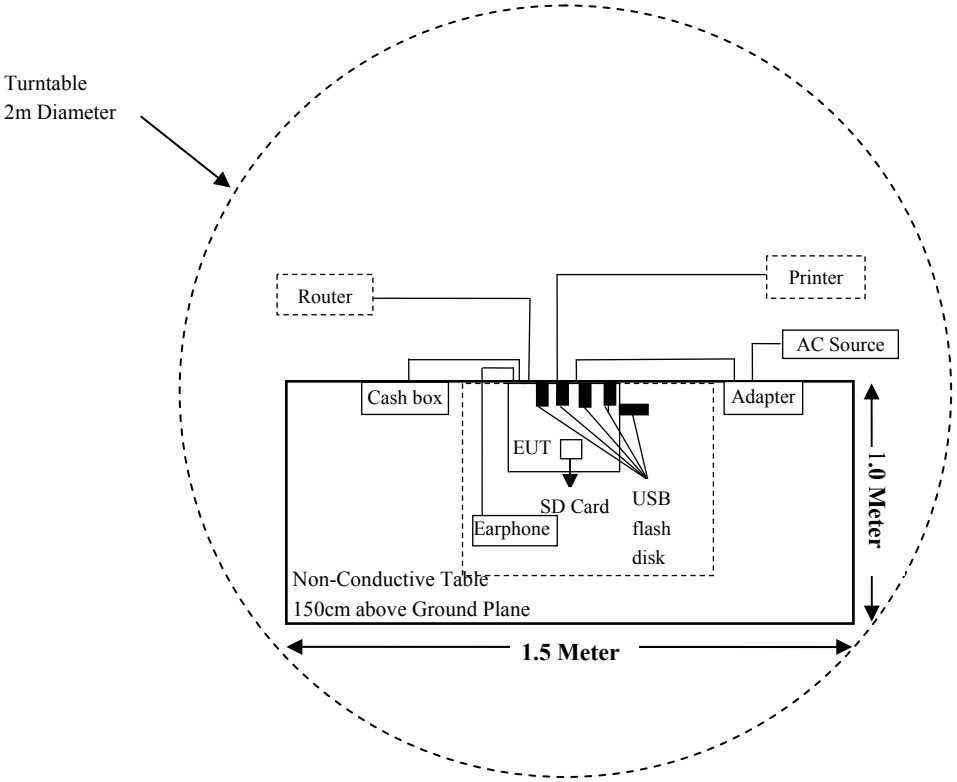
For Conducted Emissions:




For Radiated Emissions (Below 1GHz):

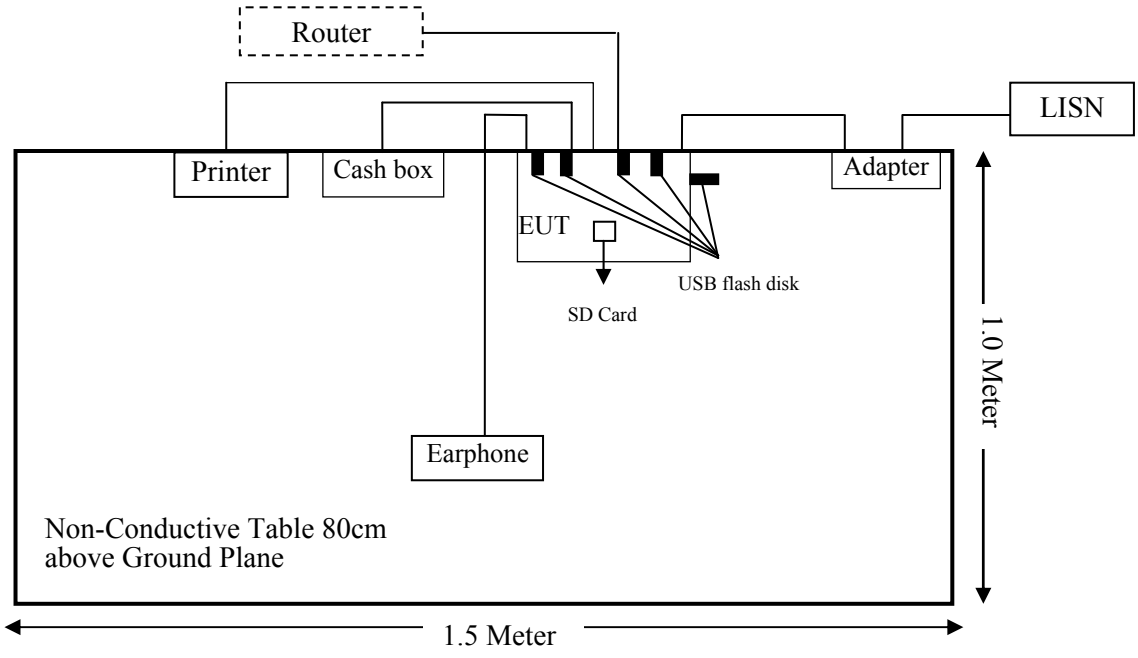


For Radiated Emissions (Above 1GHz):

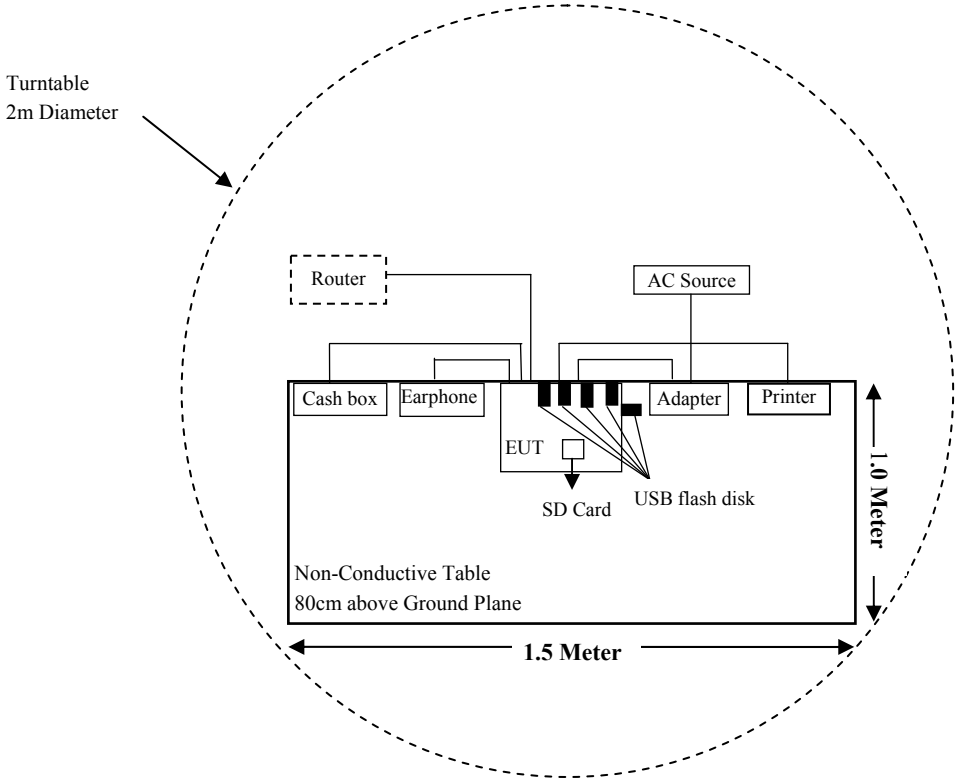



**For model: L1573**

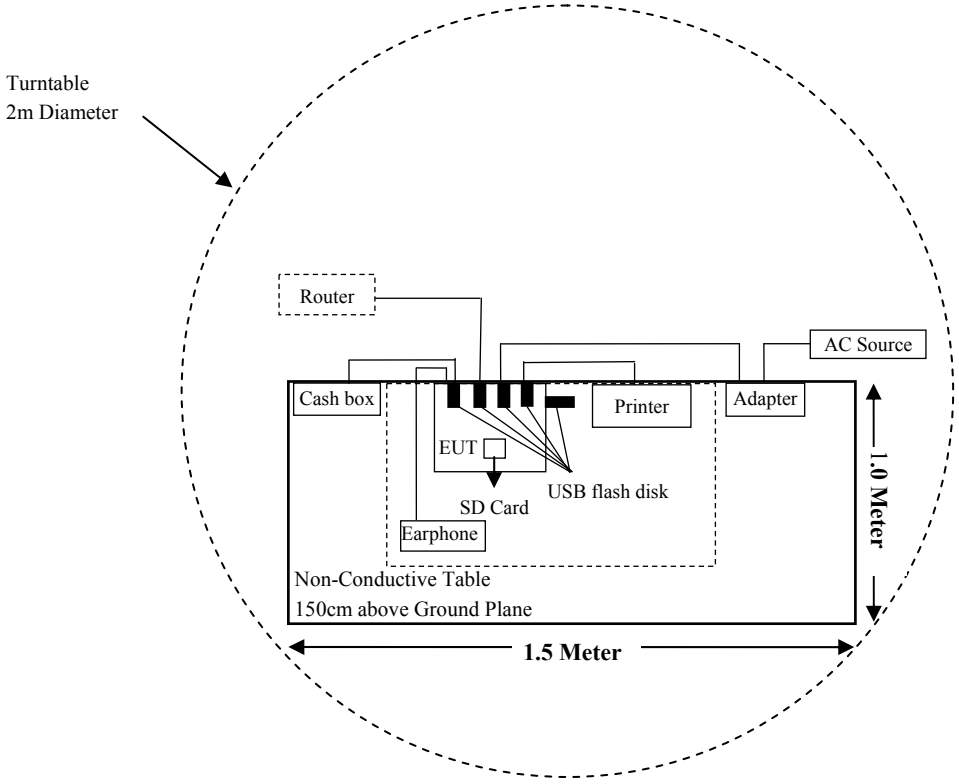
For Conducted Emissions:



For Radiated Emissions (Below 1GHz):




For Radiated Emissions (Above 1GHz):



# SUMMARY OF TEST RESULTS

| FCC Rules | Description of Test | Result |
|---|---|---|
| §1.1310 & §2.1091 | Maximum Permissible Exposure (MPE) | Compliant |
| §15.203 | Antenna Requirement | Compliant |
| §15.207 & §15.407(b)(8) | AC Power Line Conducted Emissions | Compliant |
| §15.205 & §15.209 & §15.407(B)(1)(4)(8)(9) | Undesirable Emission & Restricted Bands | Compliant |
| §15.407(a)(12) & §15.407(e) | Emission Bandwidth | Compliant |
| §15.407(a)(1)(3) | Conducted Transmitter Output Power | Compliant |
| §15.407(a)(1)(3) | Power Spectral Density | Compliant |

# TEST EQUIPMENT LIST

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| **Radiated Emission Test（Chamber 1#）** | | | | | |
| Rohde & Schwarz | EMI Test Receiver | ESCI | 100195 | 2019-12-14 | 2020-12-13 |
| Sunol Sciences | Broadband Antenna | JB3 | A090413-1 | 2017-12-26 | 2020-12-25 |
| Sonoma Instrunent | Pre-amplifier | 310N | 171205 | 2020-08-14 | 2021-08-13 |
| Rohde & Schwarz | Auto Test Software | EMC32 | 100361 | / | / |
| MICRO-COAX | Coaxial Cable | Cable-8 | 008 | 2020-08-15 | 2021-08-14 |
| MICRO-COAX | Coaxial Cable | Cable-9 | 009 | 2020-08-15 | 2021-08-14 |
| MICRO-COAX | Coaxial Cable | Cable-10 | 010 | 2020-08-15 | 2021-08-14 |
| **Radiated Emission Test（Chamber 2#）** | | | | | |
| Rohde & Schwarz | EMI Test Receiver | ESU40 | 100207 | 2020-04-01 | 2021-03-31 |
| ETS-LINDGREN | Horn Antenna | 3115 | 6229 | 2020-01-10 | 2023-01-09 |
| ETS-LINDGREN | Horn Antenna | 3116 | 00084159 | 2019-10-18 | 2022-10-17 |
| A.H.Systems, inc | Amplifier | PAM-0118P | 512 | 2020-02-20 | 2021-02-19 |
| EM Electronics Corporation | Amplifier | EM18G40G | 060726 | 2020-03-22 | 2021-03-21 |
| MICRO-TRONICS | Band Reject Filter | BRC50703 | G094 | 2020-08-05 | 2021-08-04 |
| MICRO-TRONICS | Band Reject Filter | BRC50705 | G085 | 2020-08-05 | 2021-08-04 |
| Narda | Attenuator | 10dB | 010 | 2020-08-15 | 2021-08-14 |
| Rohde & Schwarz | Auto test Software | EMC32 | 100361 | / | / |
| MICRO-COAX | Coaxial Cable | Cable-6 | 006 | 2019-12-12 | 2020-12-11 |
| MICRO-COAX | Coaxial Cable | Cable-11 | 011 | 2020-08-15 | 2021-08-14 |
| MICRO-COAX | Coaxial Cable | Cable-12 | 012 | 2020-08-15 | 2021-08-14 |
| MICRO-COAX | Coaxial Cable | Cable-13 | 013 | 2020-08-15 | 2021-08-14 |
| **RF Conducted Test** | | | | | |
| Rohde & Schwarz | EMI Test Receiver | FSIQ26 | 836131/009 | 2019-12-14 | 2020-12-13 |
| Agilent | Power Meter | N1912A | MY5000492 | 2019-11-18 | 2020-11-17 |
| Agilent | Power Sensor | N1921A | MY54210024 | 2019-11-18 | 2020-11-17 |
| Narda | Attenuator | 10dB | 010 | 2020-08-15 | 2021-08-14 |
| Sunmi | RF Cable | Sunmi 01 | C01 | Each Time | / |
| **Conducted Emission Test** | | | | | |
| Rohde & Schwarz | EMI Test Receiver | ESR | 1316.3003K03-101746-zn | 2020-08-05 | 2021-08-04 |
| Rohde & Schwarz | LISN | ENV216 | 3560655016 | 2019-11-30 | 2020-11-29 |
| Audix | Test Software | e3 | V9 | -- | -- |
| Rohde & Schwarz | Pulse limiter | ESH3-Z2 | 0357.8810.54 | 2020-08-10 | 2021-08-09 |
| MICRO-COAX | Coaxial Cable | Cable-15 | 015 | 2020-08-15 | 2021-08-14 |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

# §1.1310& §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

## Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

| (B) Limits for General Population/Uncontrolled Exposure | | | | |
|---|---|---|---|---|
| **Frequency Range (MHz)** | **Electric Field Strength (V/m)** | **Magnetic Field Strength (A/m)** | **Power Density ($mW/cm^2$)** | **Averaging Time (minutes)** |
| 0.3-1.34 | 614 | 1.63 | *(100) | 30 |
| 1.34-30 | 824/f | 2.19/f | *($180/f^2$) | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | / | | f/1500 | 30 |
| 1500-100,000 | / | | 1.0 | 30 |

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

## Calculated Formulary:

Predication of MPE limit at a given distance
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. $mW/cm^2$);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

## Calculated Data (worst case):

### Model: L1563

**2.4G Wi-Fi/BLE/BT:**

| Mode | Frequency Range (MHz) | Maximum Antenna Gain | | Tune-up Conducted Power | | Evaluation Distance (cm) | Power Density ($mW/cm^2$) | MPE Limit ($mW/cm^2$) |
|---|---|---|---|---|---|---|---|---|
| | | (dBi) | (numeric) | (dBm) | (mW) | | | |
| 802.11b | 2412-2462 | 2.19 | 1.66 | 23.00 | 199.53 | 20 | 0.0659 | 1.0 |
| 802.11g | | 2.19 | 1.66 | 24.00 | 251.19 | 20 | 0.0829 | 1.0 |
| 802.11n-HT20 | | 2.19 | 1.66 | 24.00 | 251.19 | 20 | 0.0829 | 1.0 |
| 802.11n-HT40 | 2422-2452 | 2.19 | 1.66 | 23.50 | 223.87 | 20 | 0.0739 | 1.0 |
| BLE (1Mbps) | 2402-2480 | 2.19 | 1.66 | 0.50 | 1.12 | 20 | 0.0004 | 1.0 |
| BLE (2Mbps) | 2402-2480 | 2.19 | 1.66 | 1.00 | 1.26 | 20 | 0.0004 | 1.0 |
| BT | 2402-2480 | 2.19 | 1.66 | 9.50 | 8.91 | 20 | 0.0029 | 1.0 |

**5G Wi-Fi:**

| Mode | Frequency Range (MHz) | Antenna Gain | | Tune-up Conducted Power | | Evaluation Distance (cm) | Power Density ($mW/cm^2$) | MPE Limit ($mW/cm^2$) |
|---|---|---|---|---|---|---|---|---|
| 802.11a | 5150~5250 | 0.05 | 1.01 | 18.50 | 70.79 | 20 | 0.0142 | 1.0 |
| | 5725~5850 | 0.05 | 1.01 | 21.00 | 125.89 | 20 | 0.0253 | 1.0 |
| 802.11ac20 | 5150~5250 | 0.05 | 1.01 | 20.50 | 112.20 | 20 | 0.0225 | 1.0 |
| | 5725~5850 | 0.05 | 1.01 | 23.00 | 199.53 | 20 | 0.0401 | 1.0 |
| 802.11n20 | 5150~5250 | 0.05 | 1.01 | 20.50 | 112.20 | 20 | 0.0225 | 1.0 |
| | 5725~5850 | 0.05 | 1.01 | 23.00 | 199.53 | 20 | 0.0401 | 1.0 |
| 802.11ac40 | 5150~5250 | 0.05 | 1.01 | 16.00 | 39.81 | 20 | 0.0080 | 1.0 |
| | 5725~5850 | 0.05 | 1.01 | 22.50 | 177.83 | 20 | 0.0357 | 1.0 |
| 802.11n40 | 5150~5250 | 0.05 | 1.01 | 16.00 | 39.81 | 20 | 0.0080 | 1.0 |
| | 5725~5850 | 0.05 | 1.01 | 22.50 | 177.83 | 20 | 0.0357 | 1.0 |
| 802.11ac80 | 5150~5250 | 0.05 | 1.01 | 10.50 | 11.22 | 20 | 0.0023 | 1.0 |
| | 5725~5850 | 0.05 | 1.01 | 23.00 | 199.53 | 20 | 0.0401 | 1.0 |

**Note:** 1. The tune up power were declared by the manufacturer.
2. Wi-Fi and BT/BLE can't transmit simultaneously.
3. For 802.11b, 802.11g, 802.11a, the tune-up power is base on SISO mode
For 802.11ac20/n20/n40/ac40/ac80, the tune-up power is base on MIMO mode

**Result:** The device meet FCC MPE at 20 cm distance.

**Model: L1573**

**2.4G Wi-Fi/BLE/BT:**

| Mode | Frequency Range (MHz) | Maximum Antenna Gain | | Tune-up Conducted Power | | Evaluation Distance (cm) | Power Density ($mW/cm^2$) | MPE Limit ($mW/cm^2$) |
|---|---|---|---|---|---|---|---|---|
| | | (dBi) | (numeric) | (dBm) | (mW) | | | |
| 802.11b | 2412-2462 | 1.14 | 1.30 | 23.00 | 199.53 | 20 | 0.0516 | 1.0 |
| 802.11g | | 1.14 | 1.30 | 24.00 | 251.19 | 20 | 0.0650 | 1.0 |
| 802.11n-HT20 | | 1.14 | 1.30 | 24.00 | 251.19 | 20 | 0.0650 | 1.0 |
| 802.11n-HT40 | 2422-2452 | 1.14 | 1.30 | 23.50 | 223.87 | 20 | 0.0579 | 1.0 |
| BLE (1Mbps) | 2402-2480 | 1.14 | 1.30 | 0.50 | 1.12 | 20 | 0.0003 | 1.0 |
| BLE (2Mbps) | 2402-2480 | 1.14 | 1.30 | 1.00 | 1.26 | 20 | 0.0003 | 1.0 |
| BT | 2402-2480 | 1.14 | 1.30 | 9.50 | 8.91 | 20 | 0.0023 | 1.0 |

**5G Wi-Fi:**

| Mode | Frequency Range (MHz) | Antenna Gain | | Tune-up Conducted Power | | Evaluation Distance (cm) | Power Density ($mW/cm^2$) | MPE Limit ($mW/cm^2$) |
|---|---|---|---|---|---|---|---|---|
| 802.11a | 5150~5250 | 1.57 | 1.44 | 18.50 | 70.79 | 20 | 0.0203 | 1.0 |
| | 5725~5850 | 1.57 | 1.44 | 21.00 | 125.89 | 20 | 0.0361 | 1.0 |
| 802.11ac20 | 5150~5250 | 1.57 | 1.44 | 20.50 | 112.20 | 20 | 0.0321 | 1.0 |
| | 5725~5850 | 1.57 | 1.44 | 23.00 | 199.53 | 20 | 0.0570 | 1.0 |
| 802.11n20 | 5150~5250 | 1.57 | 1.44 | 20.50 | 112.20 | 20 | 0.0321 | 1.0 |
| | 5725~5850 | 1.57 | 1.44 | 23.00 | 199.53 | 20 | 0.0570 | 1.0 |
| 802.11ac40 | 5150~5250 | 1.57 | 1.44 | 16.00 | 39.81 | 20 | 0.0114 | 1.0 |
| | 5725~5850 | 1.57 | 1.44 | 22.50 | 177.83 | 20 | 0.0509 | 1.0 |
| 802.11n40 | 5150~5250 | 1.57 | 1.44 | 16.00 | 39.81 | 20 | 0.0114 | 1.0 |
| | 5725~5850 | 1.57 | 1.44 | 22.50 | 177.83 | 20 | 0.0509 | 1.0 |
| 802.11ac80 | 5150~5250 | 1.57 | 1.44 | 10.50 | 11.22 | 20 | 0.0032 | 1.0 |
| | 5725~5850 | 1.57 | 1.44 | 23.00 | 199.53 | 20 | 0.0570 | 1.0 |

**Note:** 1. The tune up power were declared by the manufacturer.
2. Wi-Fi and BT/BLE can't transmit simultaneously.
3. For 802.11b, 802.11g, 802.11a, the tune-up power is base on SISO mode
For 802.11ac20/n20/n40/ac40/ac80, the tune-up power is base on MIMO mode

**Result:** The device meet FCC MPE at 20 cm distance.

# FCC §15.203 – ANTENNA REQUIREMENT

## Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. 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 provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407, if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

## Antenna Connector Construction

The EUT (model: L1563) has an internal PCB antenna for 5G Wi-Fi and antenna gain is 0.05 dBi which was permanently attached, fulfill the requirement of this section; The EUT (model: L1573) has an internal PCB antenna for 5G Wi-Fi and antenna gain is 1.57 dBi which was permanently attached, fulfill the requirement of this section Please refer to the EUT photos.

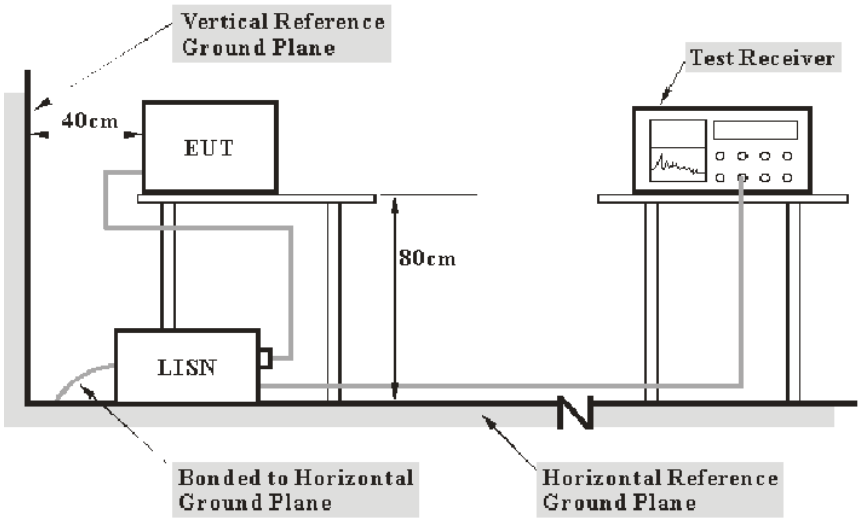
**Result:** Compliant.

# FCC §15.407 (b) (6) §15.207 (a) – AC POWER LINE CONDUCTED EMISSIONS

## Applicable Standard

FCC §15.207(a), §15.407(b) (6)

## EUT Setup




Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

## EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range | IF B/W |
|---|---|
| 150 kHz – 30 MHz | 9 kHz |

## Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

## Factor & Over Limit Calculation

The Corrected factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

The "**Over Limit**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit of 7dB means the emission is 7 dB above the limit. The equation for over limit calculation is as follows:

Over Limit (dB) = Read level (dBμV) + Factor (dB) - Limit (dBμV)

## Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

## Test Data

### Environmental Conditions

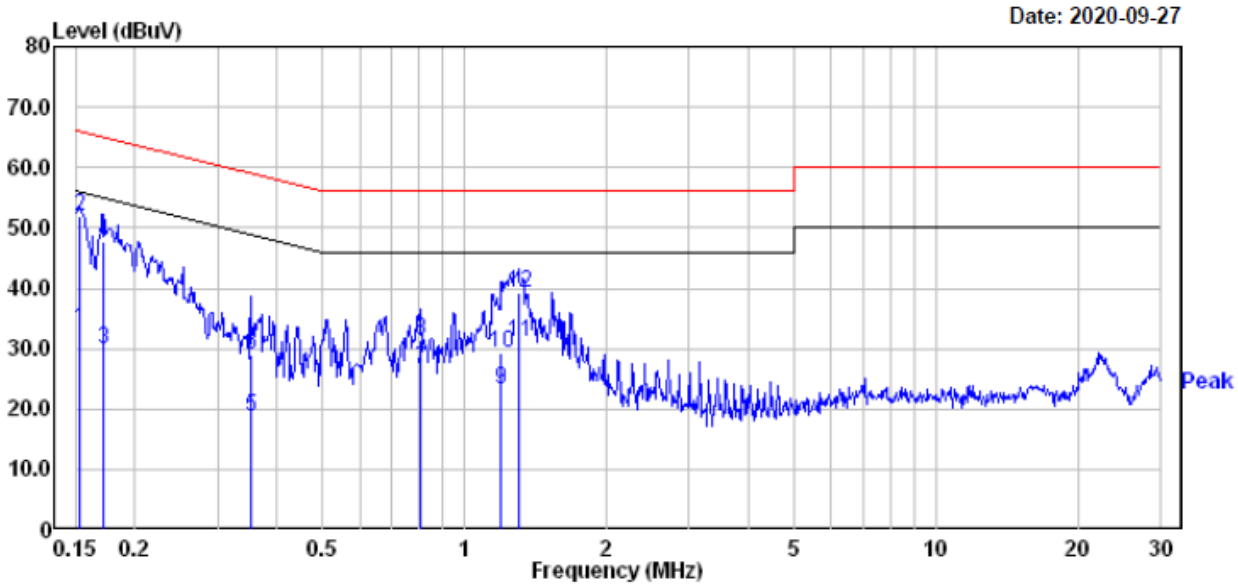
| | |
|---|---|
| **Temperature:** | 24.6-25.2 ℃ |
| **Relative Humidity:** | 46-50 % |
| **ATM Pressure:** | 101.3-101.6 kPa |

*The testing was performed by CK Huang from 2020-09-03 to 2020-09-27.*

*EUT operation mode: Transmitting in 802.11ac20 mode low channel of 5725-5850MHz (worst case)*

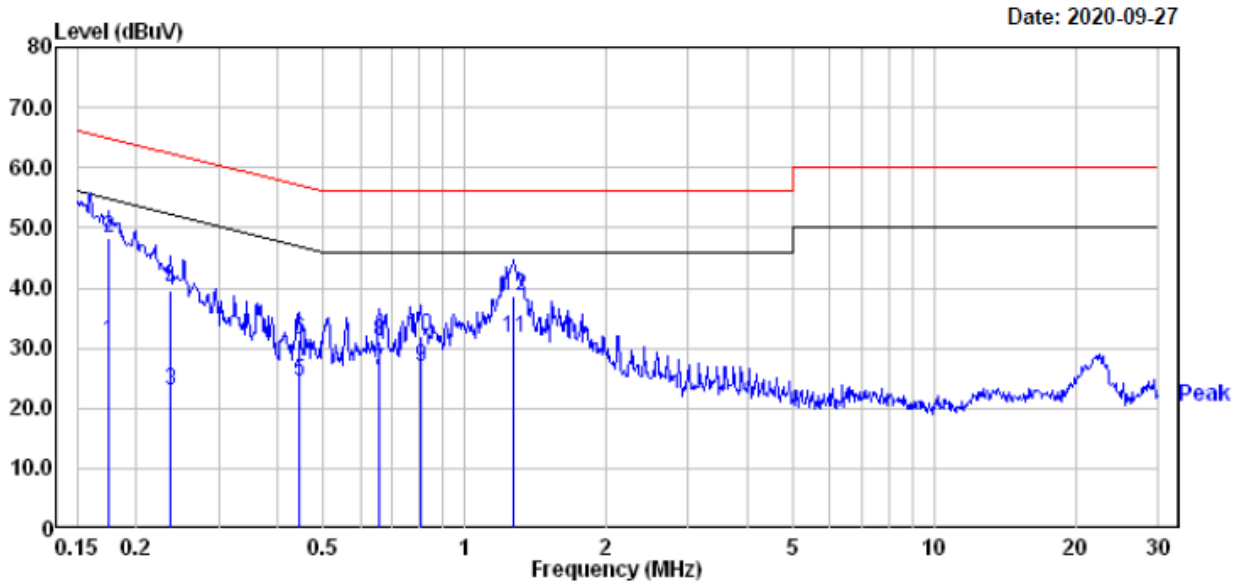
**Model: L1563**

**AC 120V/60 Hz, Line**




| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | |
| 1 | 0.152 | 13.50 | 19.82 | 33.32 | 55.87 | -22.55 | Average |
| 2 | 0.152 | 32.20 | 19.82 | 52.02 | 65.87 | -13.85 | QP |
| 3 | 0.171 | 10.20 | 19.83 | 30.03 | 54.90 | -24.87 | Average |
| 4 | 0.171 | 27.80 | 19.83 | 47.63 | 64.90 | -17.27 | QP |
| 5 | 0.352 | -1.01 | 19.81 | 18.80 | 48.91 | -30.11 | Average |
| 6 | 0.352 | 9.19 | 19.81 | 29.00 | 58.91 | -29.91 | QP |
| 7 | 0.804 | 6.80 | 19.70 | 26.50 | 46.00 | -19.50 | Average |
| 8 | 0.804 | 11.70 | 19.70 | 31.40 | 56.00 | -24.60 | QP |
| 9 | 1.197 | 3.40 | 19.81 | 23.21 | 46.00 | -22.79 | Average |
| 10 | 1.197 | 9.50 | 19.81 | 29.31 | 56.00 | -26.69 | QP |
| 11 | 1.303 | 11.30 | 19.82 | 31.12 | 46.00 | -14.88 | Average |
| 12 | 1.303 | 19.30 | 19.82 | 39.12 | 56.00 | -16.88 | QP |

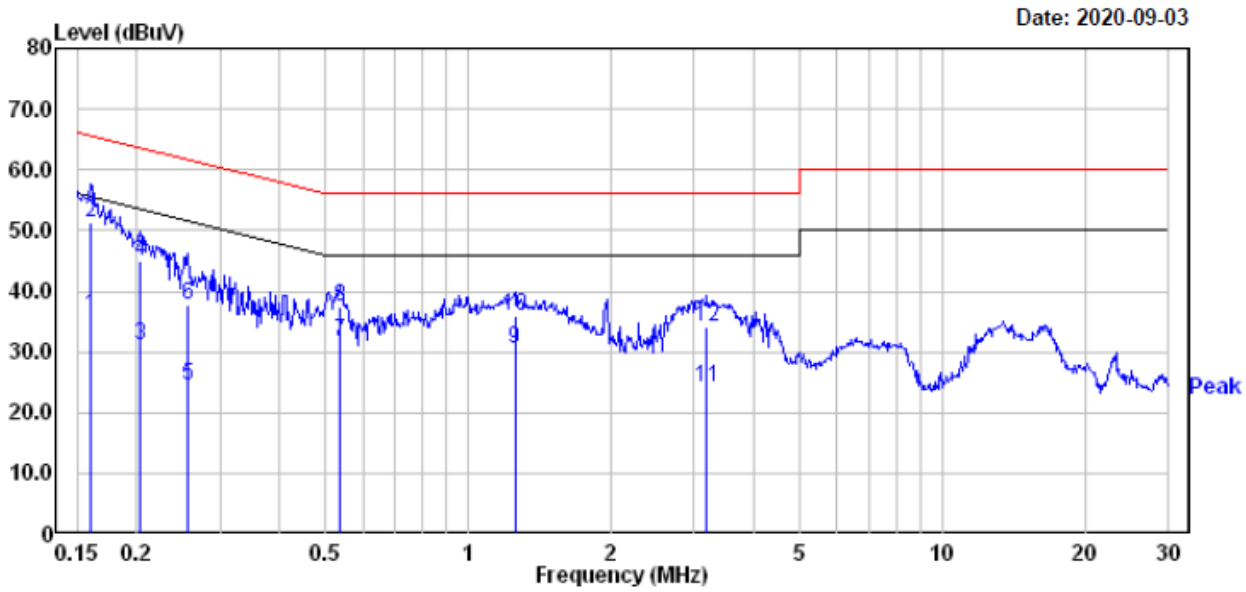
**AC 120V/60 Hz, Neutral**




| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | |
| 1 | 0.175 | 11.20 | 19.83 | 31.03 | 54.72 | -23.69 | Average |
| 2 | 0.175 | 28.40 | 19.83 | 48.23 | 64.72 | -16.49 | QP |
| 3 | 0.237 | 3.00 | 19.82 | 22.82 | 52.22 | -29.40 | Average |
| 4 | 0.237 | 19.60 | 19.82 | 39.42 | 62.22 | -22.80 | QP |
| 5 | 0.444 | 4.60 | 19.75 | 24.35 | 46.98 | -22.63 | Average |
| 6 | 0.444 | 11.70 | 19.75 | 31.45 | 56.98 | -25.53 | QP |
| 7 | 0.658 | 6.50 | 19.75 | 26.25 | 46.00 | -19.75 | Average |
| 8 | 0.658 | 11.20 | 19.75 | 30.95 | 56.00 | -25.05 | QP |
| 9 | 0.804 | 7.30 | 19.70 | 27.00 | 46.00 | -19.00 | Average |
| 10 | 0.804 | 12.30 | 19.70 | 32.00 | 56.00 | -24.00 | QP |
| 11 | 1.276 | 12.00 | 19.82 | 31.82 | 46.00 | -14.18 | Average |
| 12 | 1.276 | 18.90 | 19.82 | 38.72 | 56.00 | -17.28 | QP |

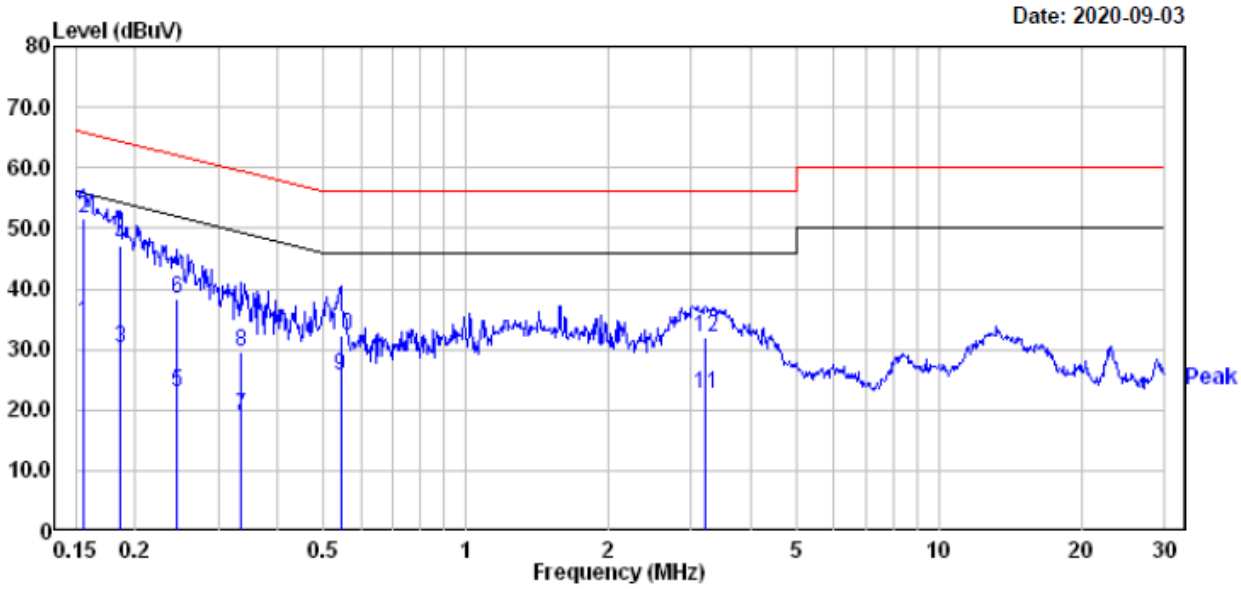
**Model: L1573**

**AC 120V/60 Hz, Line**




| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | |
| 1 | 0.160 | 16.00 | 19.83 | 35.83 | 55.47 | -19.64 | Average |
| 2 | 0.160 | 31.50 | 19.83 | 51.33 | 65.47 | -14.14 | QP |
| 3 | 0.204 | 11.30 | 19.82 | 31.12 | 53.45 | -22.33 | Average |
| 4 | 0.204 | 25.20 | 19.82 | 45.02 | 63.45 | -18.43 | QP |
| 5 | 0.256 | 4.50 | 19.82 | 24.32 | 51.56 | -27.24 | Average |
| 6 | 0.256 | 17.90 | 19.82 | 37.72 | 61.56 | -23.84 | QP |
| 7 | 0.535 | 12.01 | 19.75 | 31.76 | 46.00 | -14.24 | Average |
| 8 | 0.535 | 17.71 | 19.75 | 37.46 | 56.00 | -18.54 | QP |
| 9 | 1.255 | 10.60 | 19.82 | 30.42 | 46.00 | -15.58 | Average |
| 10 | 1.255 | 16.20 | 19.82 | 36.02 | 56.00 | -19.98 | QP |
| 11 | 3.190 | 4.80 | 19.46 | 24.26 | 46.00 | -21.74 | Average |
| 12 | 3.190 | 14.80 | 19.46 | 34.26 | 56.00 | -21.74 | QP |

**AC 120V/60 Hz, Neutral**




| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | |
| 1 | 0.156 | 14.60 | 19.82 | 34.42 | 55.69 | -21.27 | Average |
| 2 | 0.156 | 31.70 | 19.82 | 51.52 | 65.69 | -14.17 | QP |
| 3 | 0.185 | 10.41 | 19.82 | 30.23 | 54.24 | -24.01 | Average |
| 4 | 0.185 | 27.21 | 19.82 | 47.03 | 64.24 | -17.21 | QP |
| 5 | 0.244 | 3.20 | 19.82 | 23.02 | 51.95 | -28.93 | Average |
| 6 | 0.244 | 18.40 | 19.82 | 38.22 | 61.95 | -23.73 | QP |
| 7 | 0.336 | -0.71 | 19.82 | 19.11 | 49.31 | -30.20 | Average |
| 8 | 0.336 | 9.79 | 19.82 | 29.61 | 59.31 | -29.70 | QP |
| 9 | 0.544 | 6.00 | 19.75 | 25.75 | 46.00 | -20.25 | Average |
| 10 | 0.544 | 12.50 | 19.75 | 32.25 | 56.00 | -23.75 | QP |
| 11 | 3.207 | 3.30 | 19.46 | 22.76 | 46.00 | -23.24 | Average |
| 12 | 3.207 | 12.50 | 19.46 | 31.96 | 56.00 | -24.04 | QP |

# §15.205 & §15.209 & §15.407(B)(1)(4) (8)(9) – UNDESIRABLE EMISSION & RESTRICTED BANDS

## Applicable Standard

FCC §15.407 (b)(1)(4) (8) (9); §15.209; §15.205;

For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27dBm/MHz

For transmitters operating in the 5.725-5.85 GHz band: 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.

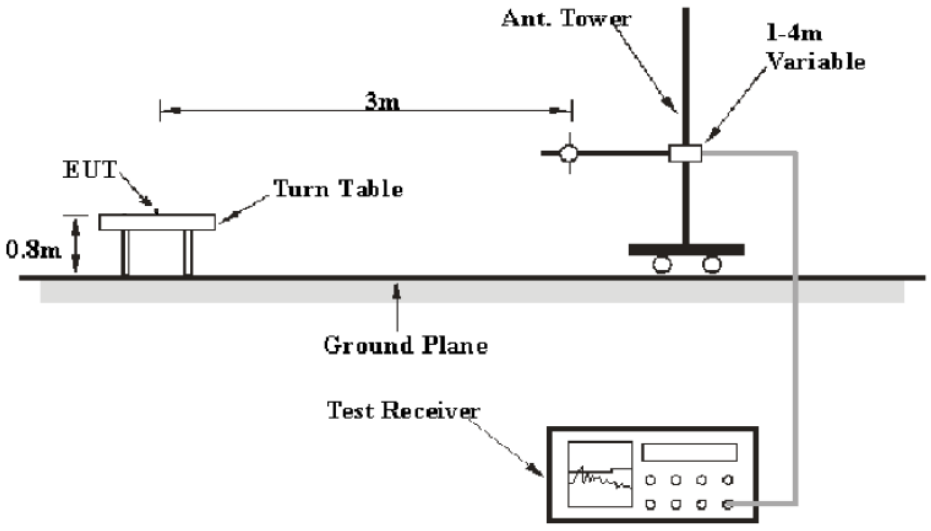
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

As per FCC §15.35(d):Unless otherwise specified, on any frequency or frequencies above 1000MHz,the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000MHz shall be performed using a minimum resolution bandwidth of 1MHz.

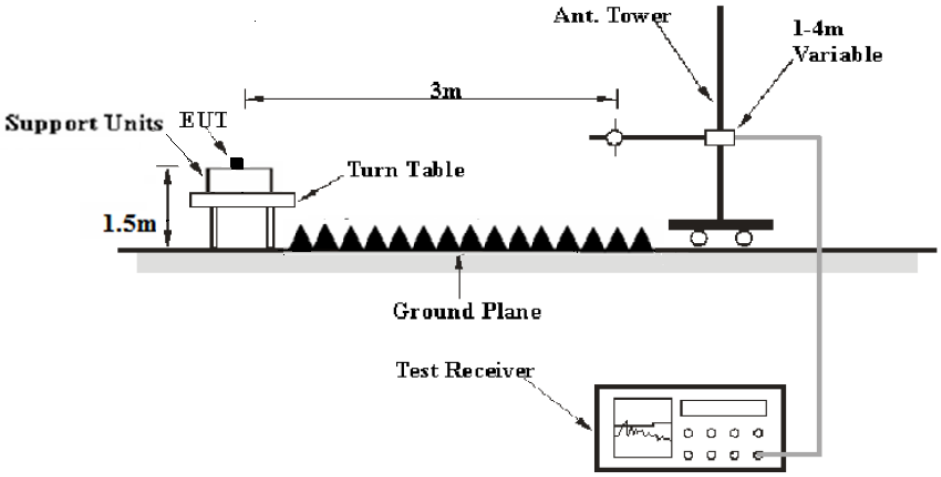
According to 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: E [dBµV/m] = EIRP [dBm] + 95.2, for d = 3 meters.

## EUT Setup

Below 1 GHz:



Above 1 GHz:




The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

## EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver Setup was set with the following configurations:

| Frequency Range | RBW | Video B/W | IF B/W | Detector |
|---|---|---|---|---|
| 30 MHz – 1000 MHz | 120 kHz | 300 kHz | 120 kHz | QP |
| Above 1GHz | 1MHz | 3 MHz | / | PK |
| | 1MHz | 3 MHz | / | Ave. |

## Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet and the other support equipments were connected to the second AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

## Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna factor + Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit –Corrected Amplitude

## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 24.6~25.0 ℃ |
| **Relative Humidity:** | 48~53 % |
| **ATM Pressure:** | 100.7~101.3 kPa |

*The testing was performed by CK Huang from 2020-09-04 to 2020-10-05.*

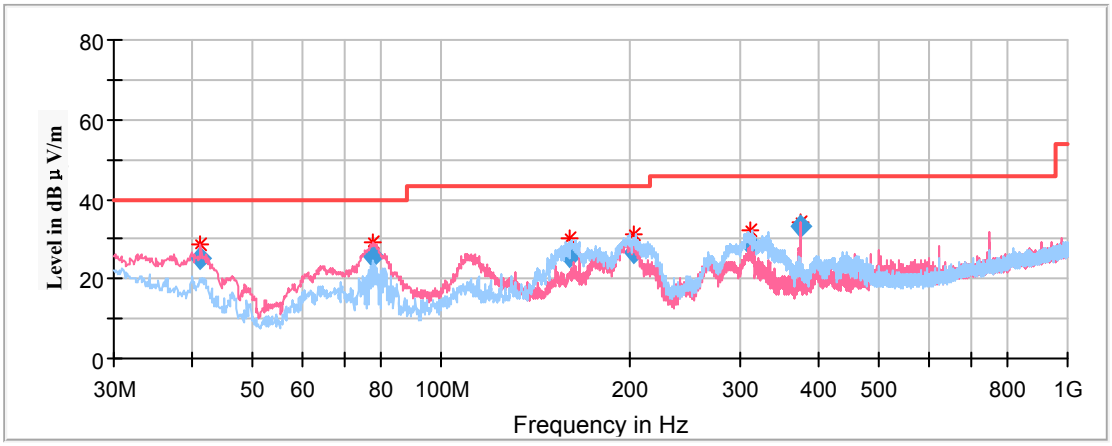
*Test Mode: Transmitting*

## Spurious Emission Test

### Model: L1563

### 30MHz-1GHz(5150-5250MHz Band):

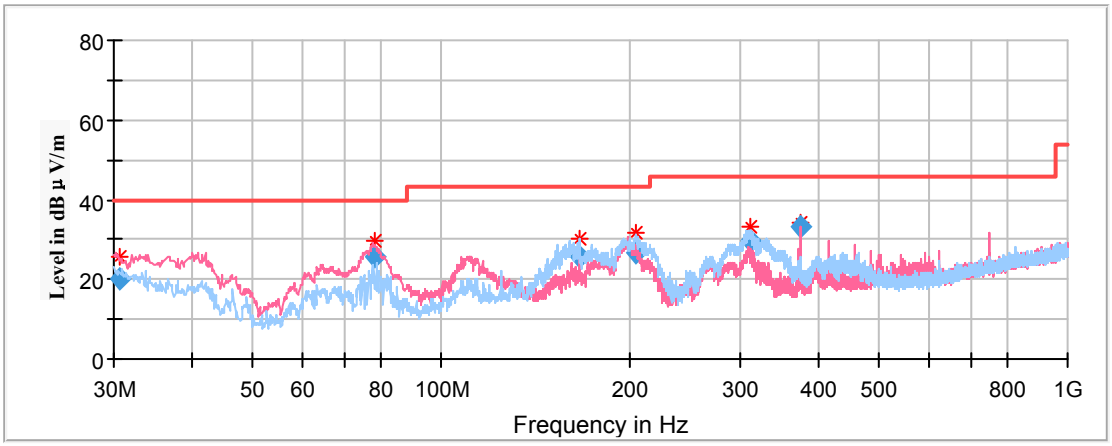
*Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X, Y and Z axes of orientation,* ***the worst case 802.11ac20 mode high channel*** *in Z-axis of orientation was recorded.*




| Frequency (MHz) | Corrected Amplitude | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|
| | QuasiPeak (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 41.232250 | 25.18 | 100.0 | V | 312.0 | -18.4 | 40.00 | 14.82 |
| 77.994900 | 25.76 | 100.0 | V | 236.0 | -23.9 | 40.00 | 14.24 |
| 160.251200 | 25.65 | 200.0 | H | 146.0 | -18.8 | 43.50 | 17.85 |
| 203.540400 | 26.47 | 200.0 | H | 162.0 | -17.8 | 43.50 | 17.03 |
| 310.394100 | 28.81 | 100.0 | H | 163.0 | -16.8 | 46.00 | 17.19 |
| 374.267750 | 33.21 | 100.0 | V | 177.0 | -15.2 | 46.00 | 12.79 |

**30MHz-1GHz(5725-5850MHz Band):**

*Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation,* ***the worst case 802.11ac20 mode low channel*** *in Z-axis of orientation was recorded*




| Frequency (MHz) | Corrected Amplitude | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|
| | QuasiPeak (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 30.702858 | 20.18 | 100.0 | V | 213.0 | -11.1 | 40.00 | 19.82 |
| 78.259400 | 25.83 | 100.0 | V | 233.0 | -23.9 | 40.00 | 14.17 |
| 166.245100 | 25.75 | 200.0 | H | 132.0 | -19.0 | 43.50 | 17.75 |
| 204.476300 | 26.84 | 100.0 | H | 146.0 | -17.9 | 43.50 | 16.66 |
| 310.697100 | 29.48 | 100.0 | H | 173.0 | -16.8 | 46.00 | 16.52 |
| 374.281250 | 33.17 | 100.0 | V | 181.0 | -15.2 | 46.00 | 12.83 |

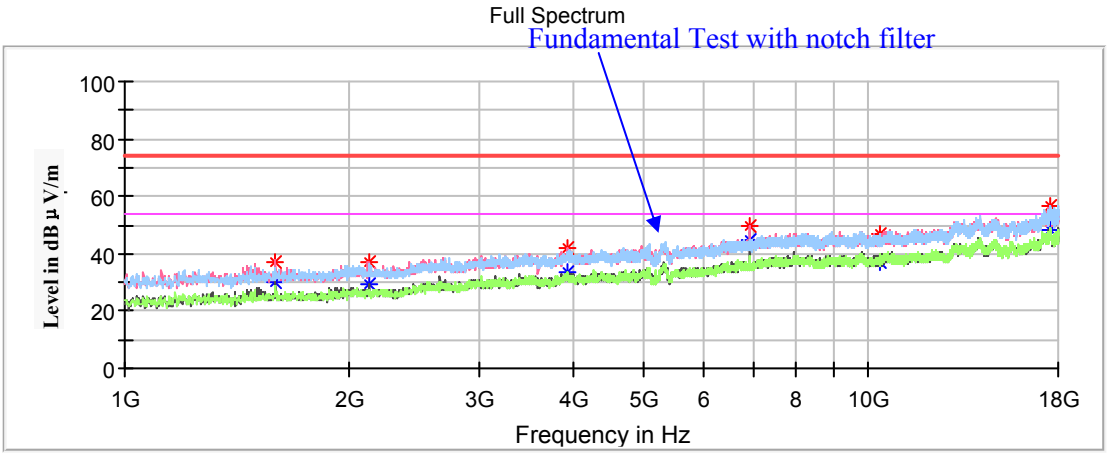
**1GHz-18GHz(5150-5250MHz Band):**

**802.11a Mode-Chain0:**

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

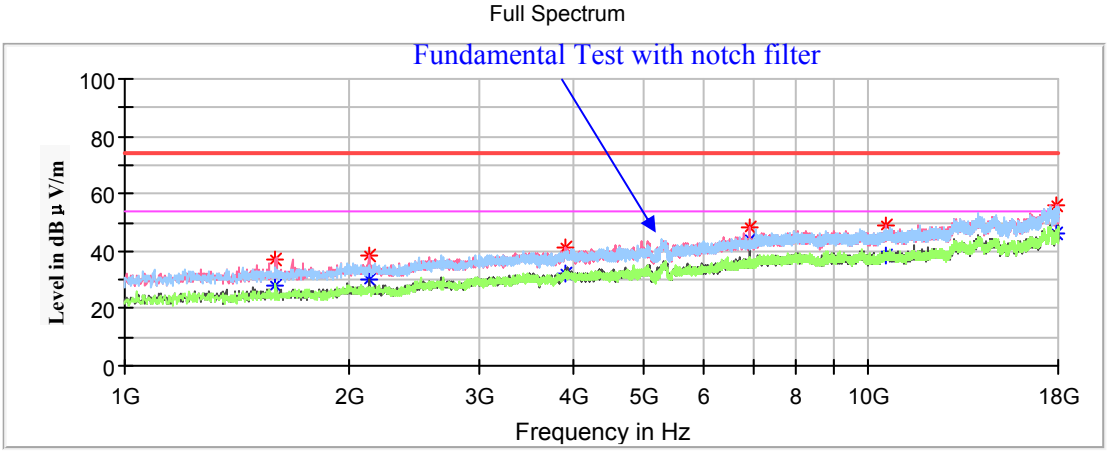
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5180MHz**



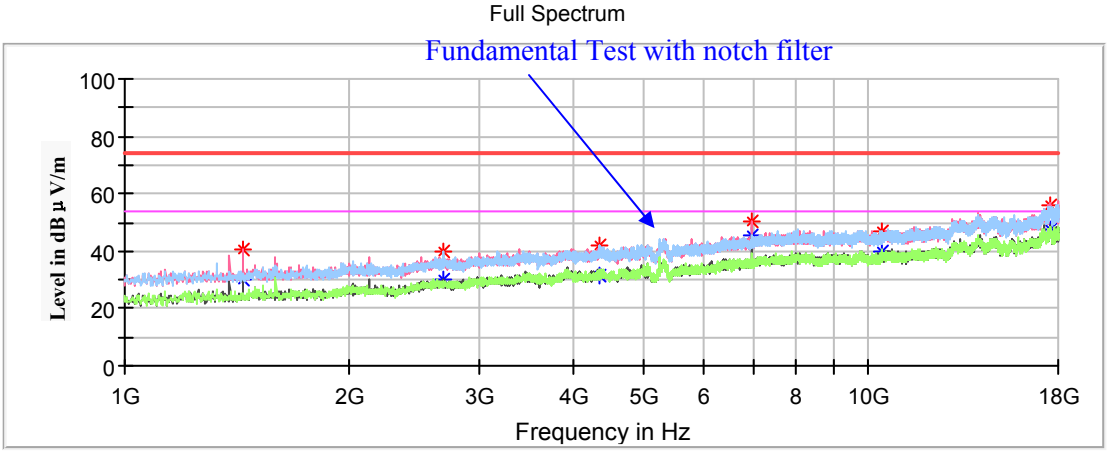

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1596.700000 | --- | 30.17 | 150.0 | V | 234.0 | -16.0 | 54.00 | 23.83 |
| 1596.700000 | 37.37 | --- | 150.0 | V | 234.0 | -16.0 | 74.00 | 36.63 |
| 2127.100000 | 37.05 | --- | 200.0 | V | 272.0 | -13.9 | 68.20 | 31.15 |
| 3939.300000 | --- | 33.40 | 150.0 | V | 355.0 | -7.2 | 54.00 | 20.60 |
| 3939.300000 | 42.02 | --- | 150.0 | V | 355.0 | -7.2 | 74.00 | 31.98 |
| 6905.800000 | 49.51 | --- | 150.0 | V | 130.0 | -0.3 | 68.20 | 18.69 |
| 10360.000000 | 46.72 | --- | 150.0 | H | 19.0 | 2.2 | 68.20 | 21.48 |
| 17569.900000 | 56.36 | --- | 150.0 | V | 359.0 | 8.9 | 68.20 | 11.84 |

**Middle Channel: 5200MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1593.300000 | 37.30 | --- | 150.0 | V | 239.0 | -16.0 | 74.00 | 36.70 |
| 1593.300000 | --- | 27.67 | 150.0 | V | 239.0 | -16.0 | 54.00 | 26.33 |
| 2130.500000 | 38.41 | --- | 150.0 | V | 252.0 | -13.9 | 68.20 | 29.79 |
| 3910.400000 | --- | 31.90 | 200.0 | V | 130.0 | -7.3 | 54.00 | 22.10 |
| 3910.400000 | 41.34 | --- | 200.0 | V | 130.0 | -7.3 | 74.00 | 32.66 |
| 6933.000000 | 48.35 | --- | 150.0 | V | 148.0 | -0.2 | 68.20 | 19.85 |
| 10400.000000 | 48.72 | --- | 150.0 | V | 316.0 | 2.2 | 68.20 | 19.48 |
| 17923.500000 | --- | 46.47 | 150.0 | V | 50.0 | 8.8 | 54.00 | 7.53 |
| 17923.500000 | 55.89 | --- | 150.0 | V | 50.0 | 8.8 | 74.00 | 18.11 |

**High Channel: 5240MHz**



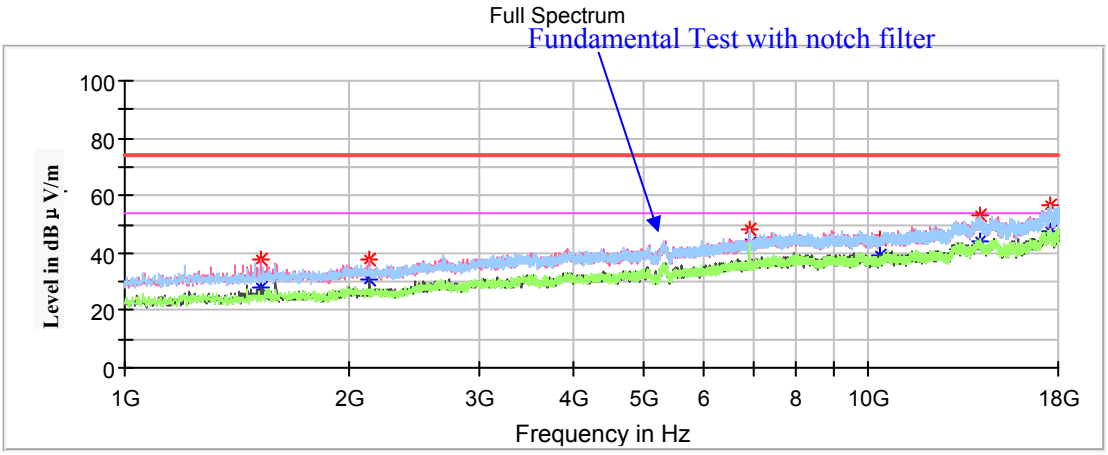

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1442.000000 | --- | 29.81 | 150.0 | V | 301.0 | -16.7 | 54.00 | 24.19 |
| 1442.000000 | 40.68 | --- | 150.0 | V | 301.0 | -16.7 | 74.00 | 33.32 |
| 2681.300000 | 39.97 | --- | 150.0 | V | 0.0 | -11.6 | 68.20 | 28.23 |
| 4355.800000 | --- | 31.71 | 150.0 | V | 301.0 | -6.4 | 54.00 | 22.29 |
| 4355.800000 | 41.68 | --- | 150.0 | V | 301.0 | -6.4 | 74.00 | 32.32 |
| 6985.700000 | 50.53 | --- | 150.0 | V | 147.0 | -0.1 | 68.20 | 17.67 |
| 10480.000000 | 47.17 | --- | 200.0 | H | 324.0 | 2.3 | 68.20 | 21.03 |
| 17534.200000 | 55.87 | --- | 150.0 | V | 288.0 | 8.9 | 68.20 | 12.33 |

**802.11a Mode-Chain1:**

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

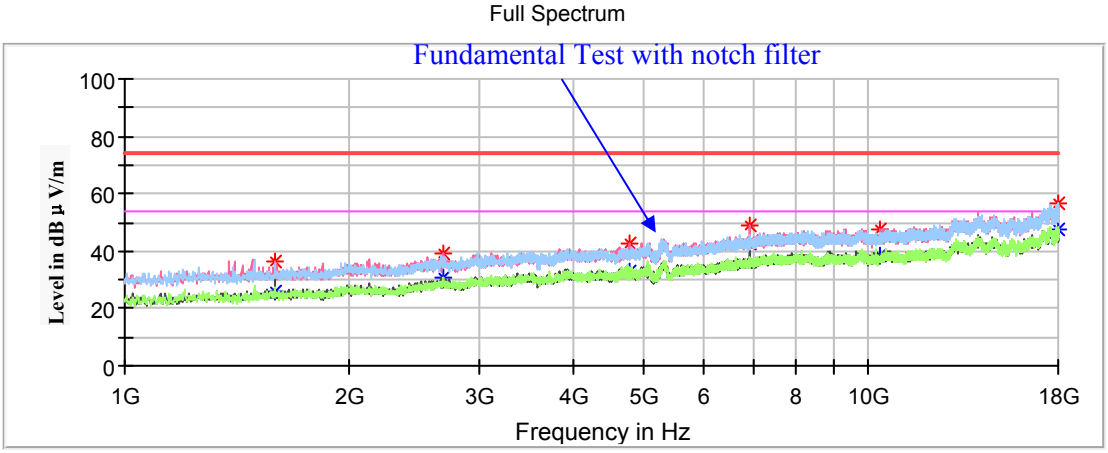
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5180MHz**



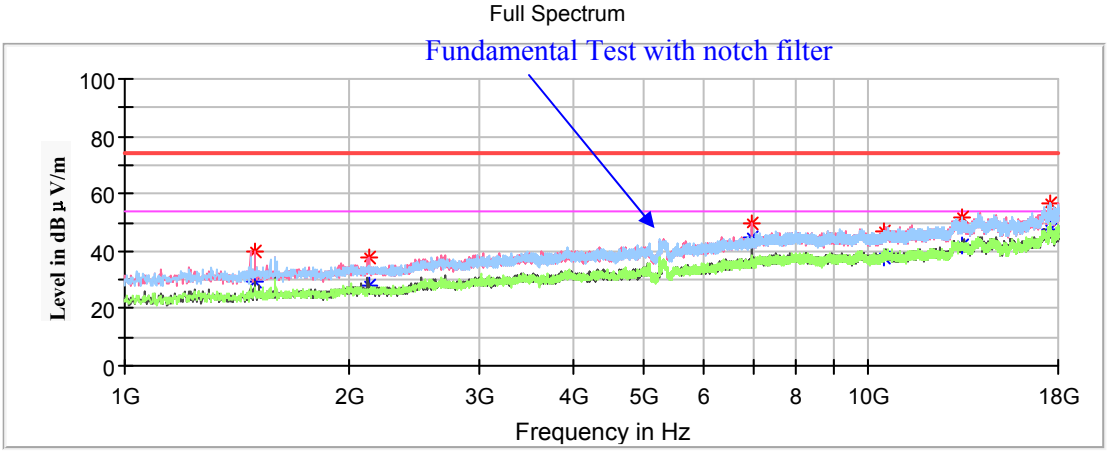

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1527.000000 | --- | 27.87 | 150.0 | V | 209.0 | -16.3 | 54.00 | 26.13 |
| 1527.000000 | 38.03 | --- | 150.0 | V | 209.0 | -16.3 | 74.00 | 35.97 |
| 2130.500000 | 37.48 | --- | 150.0 | V | 247.0 | -13.9 | 68.20 | 30.72 |
| 6905.800000 | 48.54 | --- | 200.0 | V | 157.0 | -0.3 | 68.20 | 19.66 |
| 10360.000000 | 45.10 | --- | 200.0 | H | 5.0 | 2.2 | 68.20 | 23.10 |
| 14112.100000 | 52.82 | --- | 200.0 | H | 76.0 | 6.2 | 68.20 | 15.38 |
| 17585.200000 | 56.43 | --- | 200.0 | H | 0.0 | 8.9 | 68.20 | 11.77 |

**Middle Channel: 5200MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1595.000000 | 36.69 | --- | 150.0 | V | 298.0 | -16.0 | 74.00 | 37.31 |
| 1595.000000 | --- | 26.16 | 150.0 | V | 298.0 | -16.0 | 54.00 | 27.84 |
| 2681.300000 | 38.94 | --- | 150.0 | V | 348.0 | -11.6 | 68.20 | 29.26 |
| 4768.900000 | --- | 32.60 | 150.0 | V | 260.0 | -5.7 | 54.00 | 21.40 |
| 4768.900000 | 42.40 | --- | 150.0 | V | 260.0 | -5.7 | 74.00 | 31.60 |
| 6933.000000 | 48.74 | --- | 200.0 | V | 144.0 | -0.2 | 68.20 | 19.46 |
| 10400.000000 | 47.45 | --- | 150.0 | V | 209.0 | 2.2 | 68.20 | 20.75 |
| 17954.100000 | --- | 47.78 | 150.0 | H | 183.0 | 8.8 | 54.00 | 6.22 |
| 17954.100000 | 56.53 | --- | 150.0 | H | 183.0 | 8.8 | 74.00 | 17.47 |

**High Channel: 5240MHz**



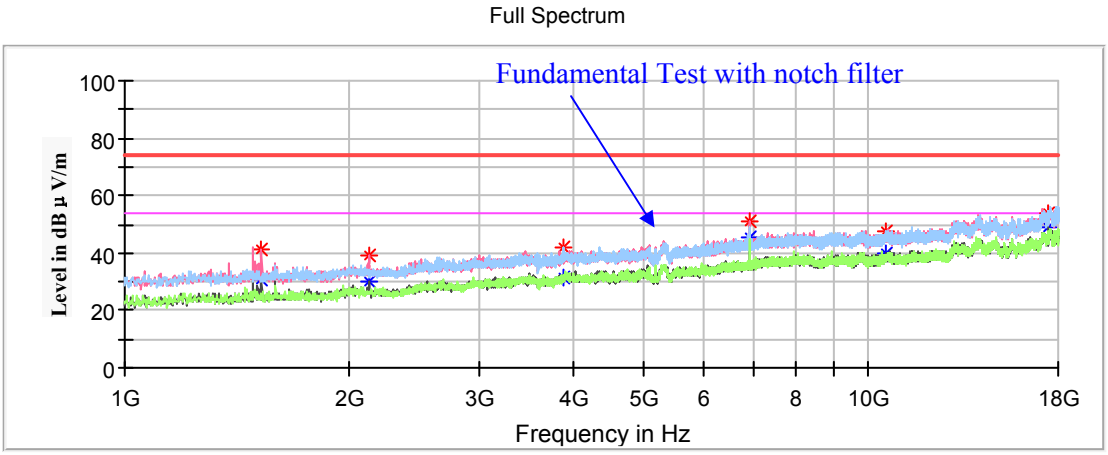

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1494.700000 | 39.54 | --- | 150.0 | V | 239.0 | -16.4 | 74.00 | 34.46 |
| 1494.700000 | --- | 29.23 | 150.0 | V | 239.0 | -16.4 | 54.00 | 24.77 |
| 2125.400000 | 37.61 | --- | 200.0 | V | 239.0 | -14.0 | 68.20 | 30.59 |
| 6985.700000 | 49.54 | --- | 150.0 | V | 122.0 | -0.1 | 68.20 | 18.66 |
| 10480.000000 | 46.83 | --- | 200.0 | H | 100.0 | 2.3 | 68.20 | 21.37 |
| 13357.300000 | --- | 41.63 | 150.0 | V | 188.0 | 5.5 | 54.00 | 12.37 |
| 13357.300000 | 51.97 | --- | 150.0 | V | 188.0 | 5.5 | 74.00 | 22.03 |
| 17524.000000 | 56.48 | --- | 150.0 | H | 243.0 | 8.9 | 68.20 | 11.72 |

***802.11ac20 Mode(Chain0+Chain1):***

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

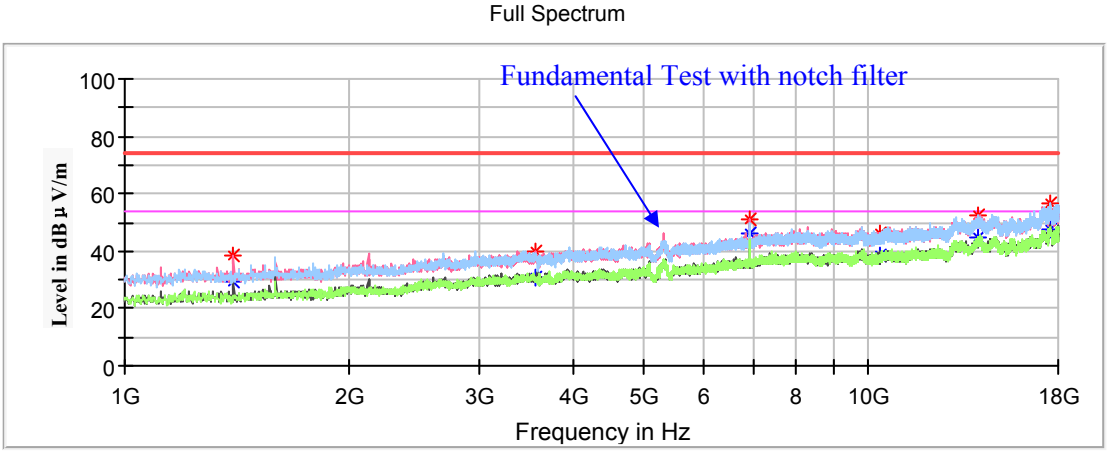
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5180MHz**



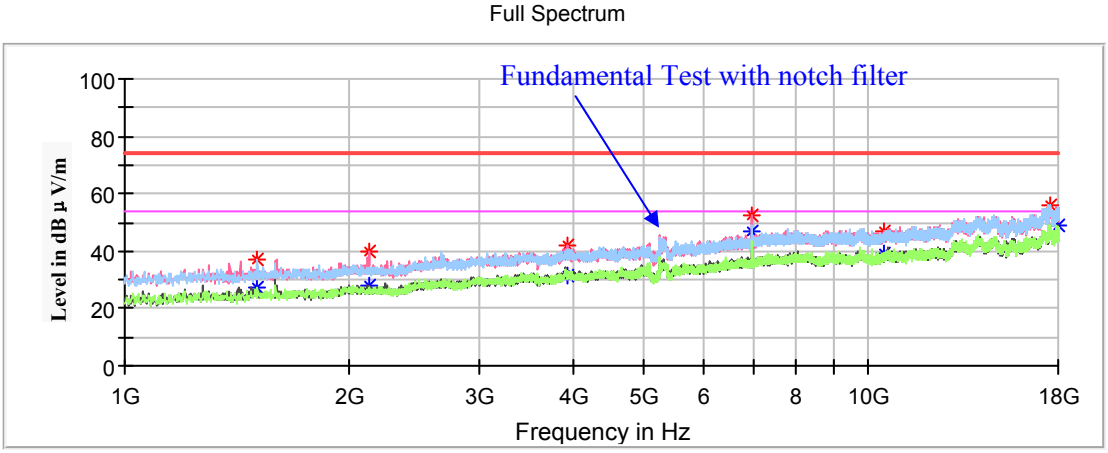

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1528.700000 | --- | 31.02 | 150.0 | V | 212.0 | -16.3 | 54.00 | 22.98 |
| 1528.700000 | 41.59 | --- | 150.0 | V | 212.0 | -16.3 | 74.00 | 32.41 |
| 2127.100000 | 39.01 | --- | 150.0 | V | 250.0 | -13.9 | 68.20 | 29.19 |
| 3896.800000 | 41.63 | --- | 200.0 | H | 212.0 | -7.4 | 74.00 | 32.37 |
| 3896.800000 | --- | 31.17 | 200.0 | H | 212.0 | -7.4 | 54.00 | 22.83 |
| 6905.800000 | 51.38 | --- | 150.0 | V | 156.0 | -0.3 | 68.20 | 16.82 |
| 10360.000000 | 47.89 | --- | 150.0 | V | 174.0 | 2.2 | 68.20 | 20.31 |
| 17484.900000 | 53.92 | --- | 150.0 | V | 225.0 | 8.8 | 68.20 | 14.28 |

**Middle Channel: 5200MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1401.200000 | 38.63 | --- | 150.0 | V | 289.0 | -16.9 | 74.00 | 35.37 |
| 1401.200000 | --- | 29.66 | 150.0 | V | 289.0 | -16.9 | 54.00 | 24.34 |
| 3575.500000 | 40.02 | --- | 150.0 | V | 327.0 | -8.5 | 68.20 | 28.18 |
| 6933.000000 | 50.99 | --- | 200.0 | V | 143.0 | -0.2 | 68.20 | 17.21 |
| 10400.000000 | 46.46 | --- | 150.0 | V | 327.0 | 2.2 | 68.20 | 21.74 |
| 14057.700000 | 52.35 | --- | 200.0 | H | 237.0 | 6.2 | 68.20 | 15.85 |
| 17522.300000 | 56.33 | --- | 150.0 | H | 331.0 | 8.9 | 68.20 | 11.87 |

**High Channel: 5240MHz**



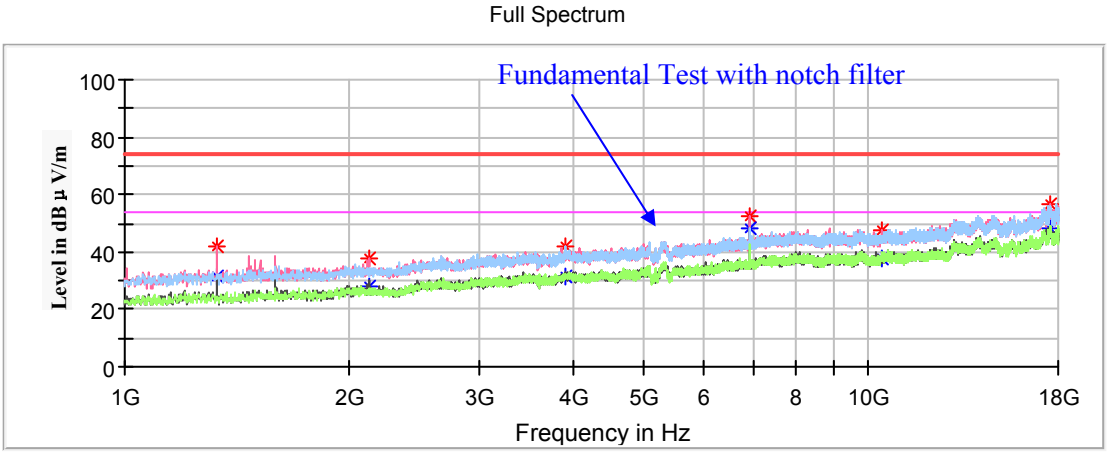

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1510.000000 | --- | 27.49 | 200.0 | H | 217.0 | -16.3 | 54.00 | 26.51 |
| 1510.000000 | 37.15 | --- | 200.0 | H | 217.0 | -16.3 | 74.00 | 36.85 |
| 2128.800000 | 39.73 | --- | 150.0 | V | 259.0 | -13.9 | 68.20 | 28.47 |
| 3939.300000 | --- | 31.59 | 200.0 | H | 204.0 | -7.2 | 54.00 | 22.41 |
| 3939.300000 | 41.64 | --- | 200.0 | H | 204.0 | -7.2 | 74.00 | 32.36 |
| 6985.700000 | 52.70 | --- | 150.0 | V | 156.0 | -0.1 | 68.20 | 15.50 |
| 10480.000000 | 46.57 | --- | 150.0 | V | 50.0 | 2.3 | 68.20 | 21.63 |
| 17559.700000 | 55.71 | --- | 200.0 | H | 9.0 | 8.9 | 68.20 | 12.49 |

***802.11n-HT20 Mode(Chain0+Chain1):***

*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

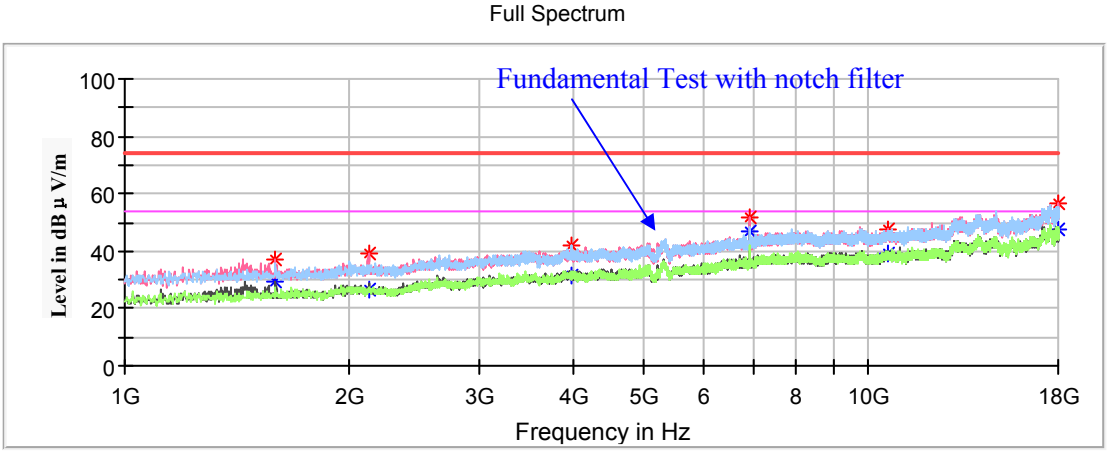
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5180MHz**



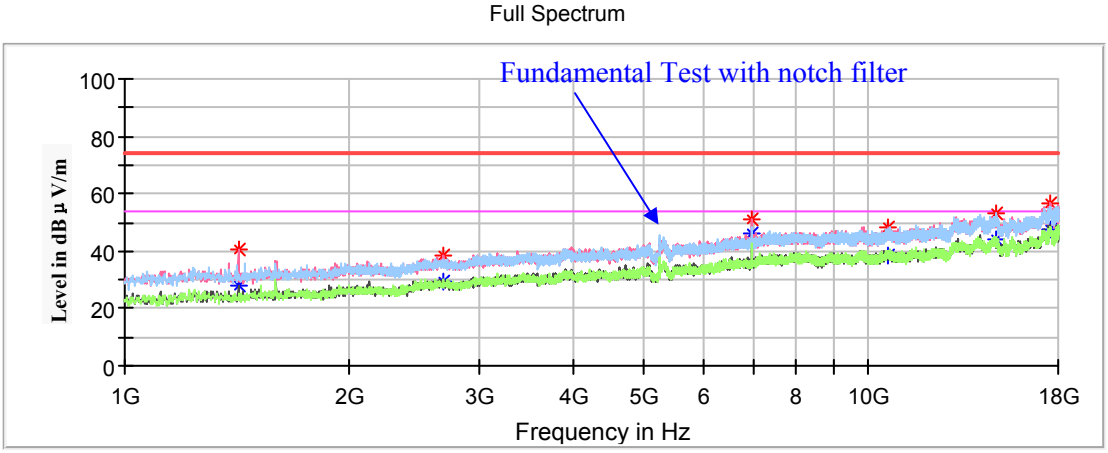

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1328.100000 | 42.03 | --- | 150.0 | V | 239.0 | -17.3 | 74.00 | 31.97 |
| 1328.100000 | --- | 31.23 | 150.0 | V | 239.0 | -17.3 | 54.00 | 22.77 |
| 2127.100000 | 37.77 | --- | 150.0 | V | 251.0 | -13.9 | 68.20 | 30.43 |
| 3924.000000 | --- | 31.78 | 150.0 | H | 277.0 | -7.3 | 54.00 | 22.22 |
| 3924.000000 | 42.18 | --- | 150.0 | H | 277.0 | -7.3 | 74.00 | 31.82 |
| 6905.800000 | 52.49 | --- | 150.0 | V | 149.0 | -0.3 | 68.20 | 15.71 |
| 10360.000000 | 47.29 | --- | 200.0 | V | 188.0 | 2.2 | 68.20 | 20.91 |
| 17525.700000 | 56.39 | --- | 200.0 | H | 5.0 | 8.9 | 68.20 | 11.81 |

**Middle Channel: 5200MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1595.000000 | 37.20 | --- | 150.0 | V | 227.0 | -16.0 | 74.00 | 36.80 |
| 1595.000000 | --- | 29.54 | 150.0 | V | 227.0 | -16.0 | 54.00 | 24.46 |
| 2125.400000 | 39.10 | --- | 150.0 | V | 252.0 | -14.0 | 68.20 | 29.10 |
| 3988.600000 | 41.79 | --- | 200.0 | H | 101.0 | -7.0 | 74.00 | 32.21 |
| 3988.600000 | --- | 31.40 | 200.0 | H | 101.0 | -7.0 | 54.00 | 22.60 |
| 6933.000000 | 51.73 | --- | 150.0 | V | 148.0 | -0.2 | 68.20 | 16.47 |
| 10400.000000 | 47.70 | --- | 150.0 | V | 122.0 | 2.2 | 68.20 | 20.50 |
| 17952.400000 | 56.34 | --- | 150.0 | V | 256.0 | 8.8 | 74.00 | 17.66 |
| 17952.400000 | --- | 47.34 | 150.0 | V | 256.0 | 8.8 | 54.00 | 6.66 |

**High Channel: 5240MHz**



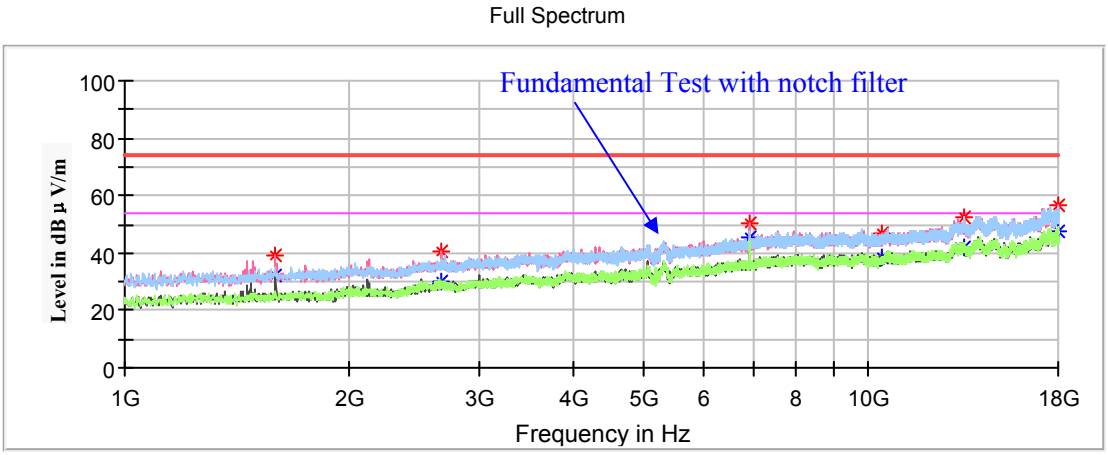

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1419.900000 | 40.53 | --- | 150.0 | V | 250.0 | -16.8 | 74.00 | 33.47 |
| 1419.900000 | --- | 27.75 | 150.0 | V | 250.0 | -16.8 | 54.00 | 26.25 |
| 2677.900000 | 38.40 | --- | 150.0 | V | 350.0 | -11.6 | 68.20 | 29.80 |
| 6985.700000 | 51.05 | --- | 150.0 | V | 115.0 | -0.1 | 68.20 | 17.15 |
| 10480.000000 | 48.41 | --- | 200.0 | V | 238.0 | 2.3 | 68.20 | 19.79 |
| 14815.900000 | 52.80 | --- | 200.0 | H | 121.0 | 5.6 | 68.20 | 15.40 |
| 17525.700000 | 56.62 | --- | 200.0 | H | 185.0 | 8.9 | 68.20 | 11.58 |

***802.11ac40 Mode(Chain0+Chain1):***

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

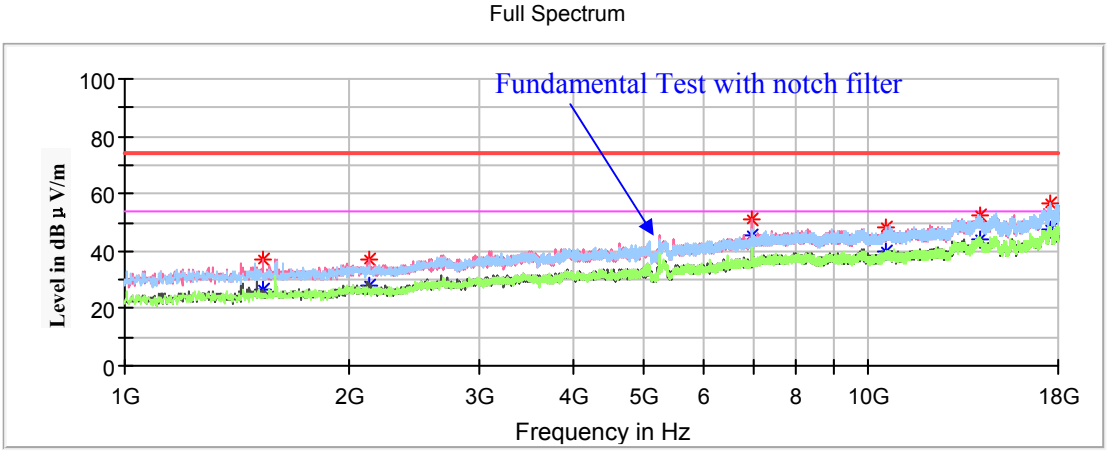
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5190MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1593.300000 | --- | 32.45 | 150.0 | V | 264.0 | -16.0 | 54.00 | 21.55 |
| 1593.300000 | 39.31 | --- | 150.0 | V | 264.0 | -16.0 | 74.00 | 34.69 |
| 2659.200000 | 40.72 | --- | 200.0 | V | 264.0 | -11.7 | 68.20 | 27.48 |
| 6919.400000 | 50.24 | --- | 150.0 | V | 148.0 | -0.2 | 68.20 | 17.96 |
| 10380.000000 | 47.01 | --- | 200.0 | H | 278.0 | 2.2 | 68.20 | 21.19 |
| 13410.000000 | 52.32 | --- | 150.0 | V | 357.0 | 5.6 | 68.20 | 15.88 |
| 17967.700000 | 56.98 | --- | 150.0 | V | 64.0 | 8.8 | 74.00 | 17.02 |
| 17967.700000 | --- | 47.80 | 150.0 | V | 64.0 | 8.8 | 54.00 | 6.20 |

**High Channel: 5230MHz**



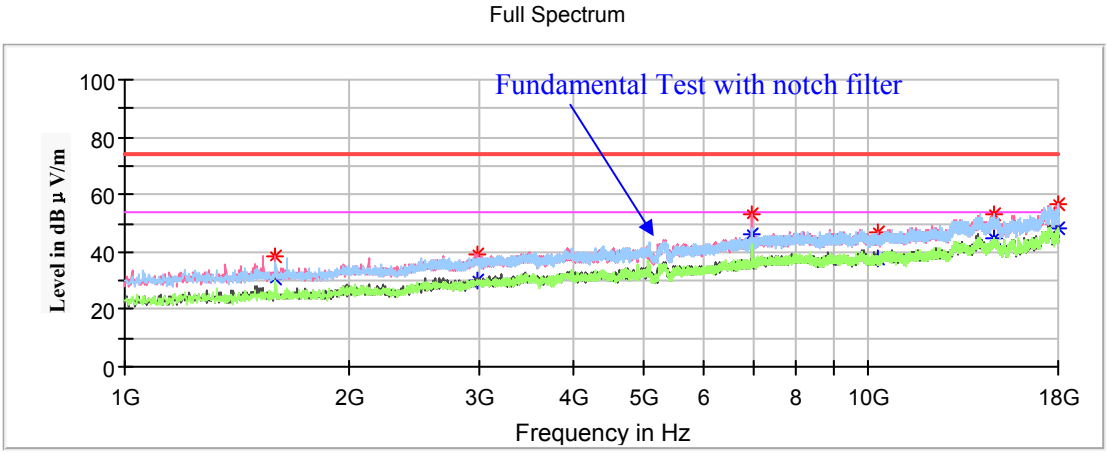

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1535.500000 | 37.04 | --- | 150.0 | V | 170.0 | -16.2 | 74.00 | 36.96 |
| 1535.500000 | --- | 26.26 | 150.0 | V | 170.0 | -16.2 | 54.00 | 27.74 |
| 2127.100000 | 36.99 | --- | 150.0 | V | 271.0 | -13.9 | 68.20 | 31.21 |
| 6972.100000 | 51.34 | --- | 150.0 | V | 195.0 | -0.1 | 68.20 | 16.86 |
| 10460.000000 | 48.10 | --- | 200.0 | H | 323.0 | 2.3 | 68.20 | 20.10 |
| 14091.700000 | 52.66 | --- | 200.0 | H | 75.0 | 6.2 | 68.20 | 15.54 |
| 17508.700000 | 56.42 | --- | 150.0 | V | 208.0 | 8.9 | 68.20 | 11.78 |

***802.11n-HT40 Mode(Chain0+Chain1):***

*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

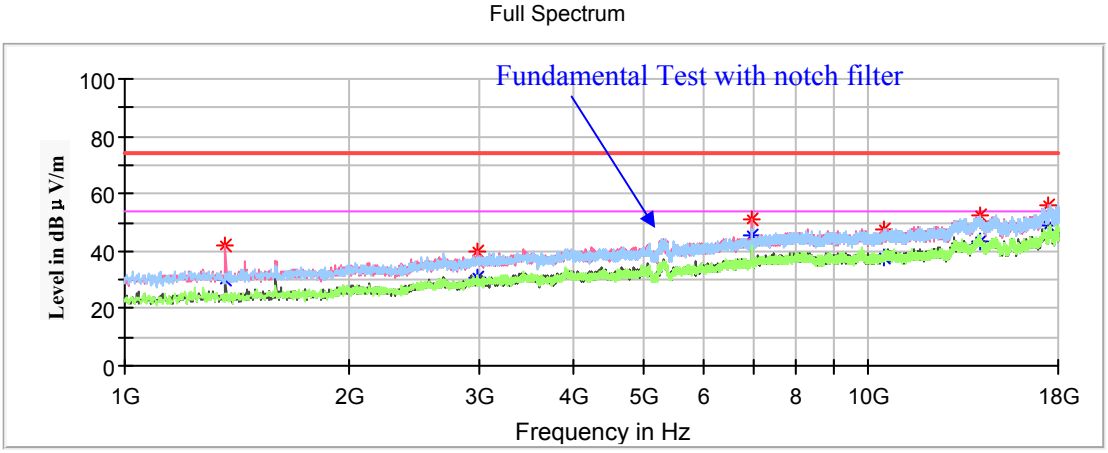
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5190MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1591.600000 | 38.54 | --- | 150.0 | V | 245.0 | -16.0 | 74.00 | 35.46 |
| 1591.600000 | --- | 30.45 | 150.0 | V | 245.0 | -16.0 | 54.00 | 23.55 |
| 2973.700000 | 39.05 | --- | 200.0 | H | 63.0 | -10.2 | 68.20 | 29.15 |
| 6972.100000 | 53.06 | --- | 200.0 | V | 116.0 | -0.1 | 68.20 | 15.14 |
| 10380.000000 | 46.75 | --- | 150.0 | V | 143.0 | 2.2 | 68.20 | 21.45 |
| 14768.300000 | 53.23 | --- | 200.0 | H | 324.0 | 5.8 | 68.20 | 14.97 |
| 17954.100000 | --- | 48.05 | 200.0 | V | 50.0 | 8.8 | 54.00 | 5.95 |
| 17954.100000 | 56.73 | --- | 200.0 | V | 50.0 | 8.8 | 74.00 | 17.27 |

**High Channel: 5230MHz**



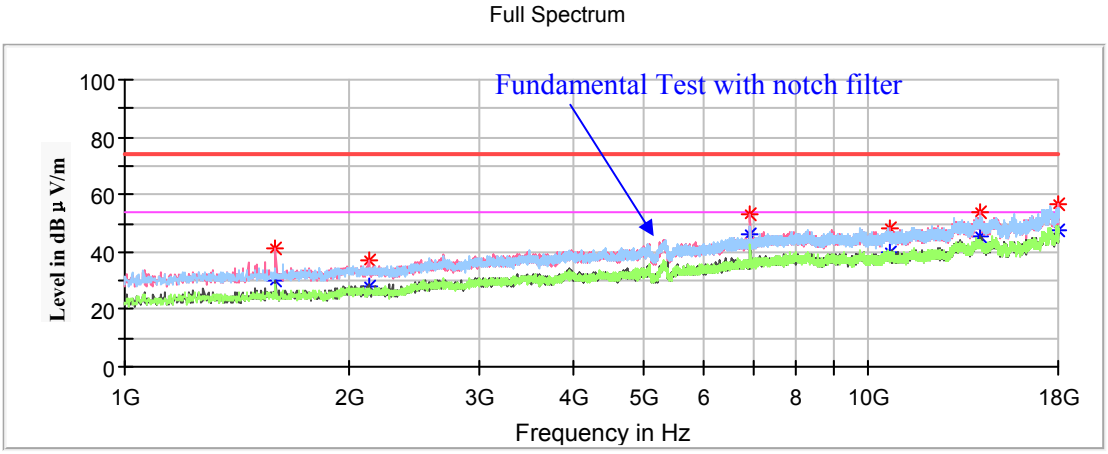

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1367.200000 | 42.19 | --- | 150.0 | V | 233.0 | -17.1 | 74.00 | 31.81 |
| 1367.200000 | --- | 29.84 | 150.0 | V | 233.0 | -17.1 | 54.00 | 24.16 |
| 2975.400000 | 39.60 | --- | 150.0 | V | 309.0 | -10.2 | 68.20 | 28.60 |
| 6972.100000 | 51.18 | --- | 150.0 | V | 156.0 | -0.1 | 68.20 | 17.02 |
| 10460.000000 | 47.76 | --- | 200.0 | H | 178.0 | 2.3 | 68.20 | 20.44 |
| 14110.400000 | 52.24 | --- | 200.0 | H | 75.0 | 6.2 | 68.20 | 15.96 |
| 17498.500000 | 55.83 | --- | 150.0 | V | 355.0 | 8.9 | 68.20 | 12.37 |

***802.11ac80 Mode(Chain0+Chain1):***

*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5210MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1596.700000 | 41.26 | --- | 150.0 | V | 274.0 | -16.0 | 74.00 | 32.74 |
| 1596.700000 | --- | 29.77 | 150.0 | V | 274.0 | -16.0 | 54.00 | 24.23 |
| 2125.400000 | 37.10 | --- | 150.0 | V | 261.0 | -14.0 | 68.20 | 31.10 |
| 6946.600000 | 52.82 | --- | 200.0 | V | 156.0 | -0.2 | 68.20 | 15.38 |
| 10420.000000 | 48.45 | --- | 200.0 | H | 139.0 | 2.3 | 68.20 | 19.75 |
| 14118.900000 | 53.57 | --- | 150.0 | V | 183.0 | 6.2 | 68.20 | 14.63 |
| 17955.800000 | --- | 47.26 | 200.0 | H | 113.0 | 8.8 | 54.00 | 6.74 |
| 17955.800000 | 56.86 | --- | 200.0 | H | 113.0 | 8.8 | 74.00 | 17.14 |

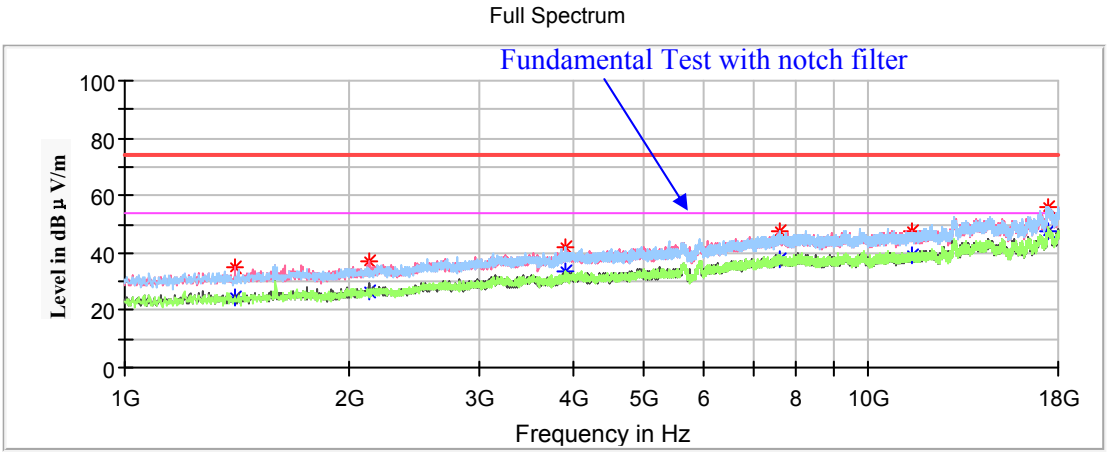
**1GHz-18GHz(5725-5850MHz Band):**

***802.11a Mode-Chain0:***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

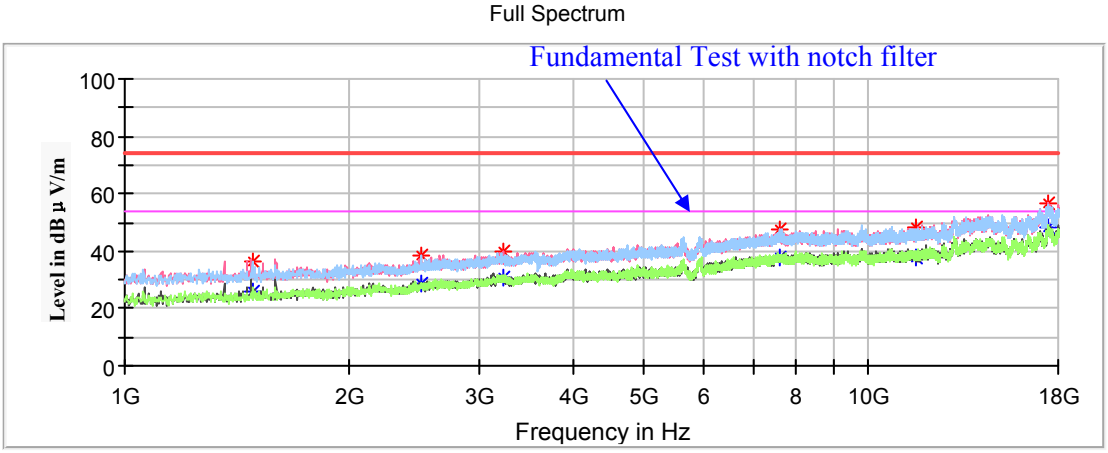
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5745MHz**



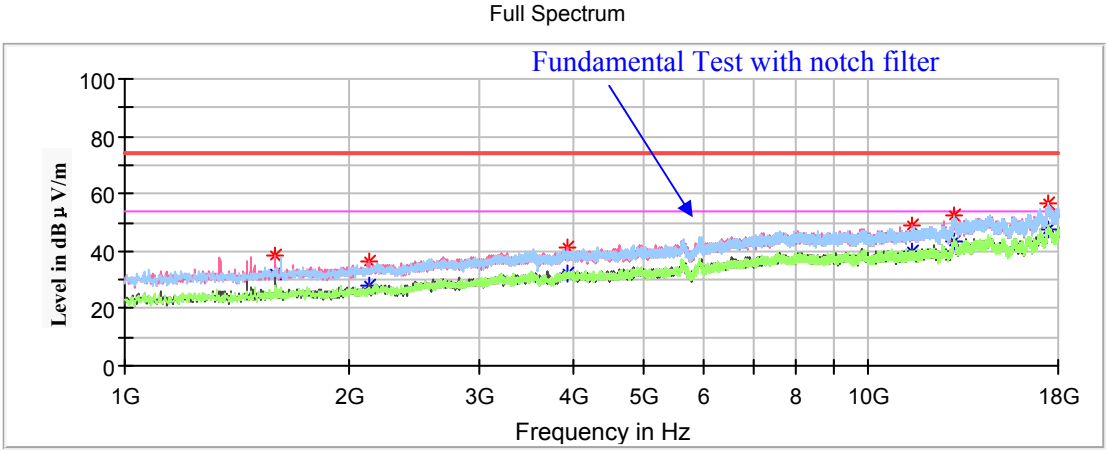

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1404.600000 | 35.09 | --- | 150.0 | V | 288.0 | -16.9 | 74.00 | 38.91 |
| 1404.600000 | --- | 24.62 | 150.0 | V | 288.0 | -16.9 | 54.00 | 29.38 |
| 2128.800000 | 36.83 | --- | 150.0 | V | 263.0 | -13.9 | 68.20 | 31.37 |
| 3908.700000 | --- | 33.24 | 200.0 | H | 39.0 | -7.3 | 54.00 | 20.76 |
| 3908.700000 | 41.78 | --- | 200.0 | H | 39.0 | -7.3 | 74.00 | 32.22 |
| 7602.800000 | --- | 37.61 | 150.0 | V | 314.0 | 1.2 | 54.00 | 16.39 |
| 7602.800000 | 47.88 | --- | 150.0 | V | 314.0 | 1.2 | 74.00 | 26.12 |
| 11490.000000 | --- | 39.40 | 150.0 | V | 174.0 | 2.8 | 54.00 | 14.60 |
| 11490.000000 | 47.33 | --- | 150.0 | V | 174.0 | 2.8 | 74.00 | 26.67 |
| 17479.800000 | 56.20 | --- | 200.0 | V | 237.0 | 8.8 | 68.20 | 12.00 |

**Middle Channel: 5785MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1482.800000 | 36.06 | --- | 200.0 | H | 231.0 | -16.5 | 74.00 | 37.94 |
| 1482.800000 | --- | 25.58 | 200.0 | H | 231.0 | -16.5 | 54.00 | 28.42 |
| 2506.200000 | 38.42 | --- | 150.0 | H | 116.0 | -12.4 | 68.20 | 29.78 |
| 3225.300000 | 39.98 | --- | 150.0 | H | 218.0 | -9.5 | 68.20 | 28.22 |
| 7584.100000 | --- | 38.03 | 150.0 | V | 167.0 | 1.2 | 54.00 | 15.97 |
| 7584.100000 | 47.46 | --- | 150.0 | V | 167.0 | 1.2 | 74.00 | 26.54 |
| 11570.000000 | --- | 37.74 | 150.0 | V | 36.0 | 2.8 | 54.00 | 16.26 |
| 11570.000000 | 47.91 | --- | 150.0 | V | 36.0 | 2.8 | 74.00 | 26.09 |
| 17461.100000 | 56.37 | --- | 200.0 | V | 332.0 | 8.8 | 68.20 | 11.83 |

**High Channel: 5825MHz**



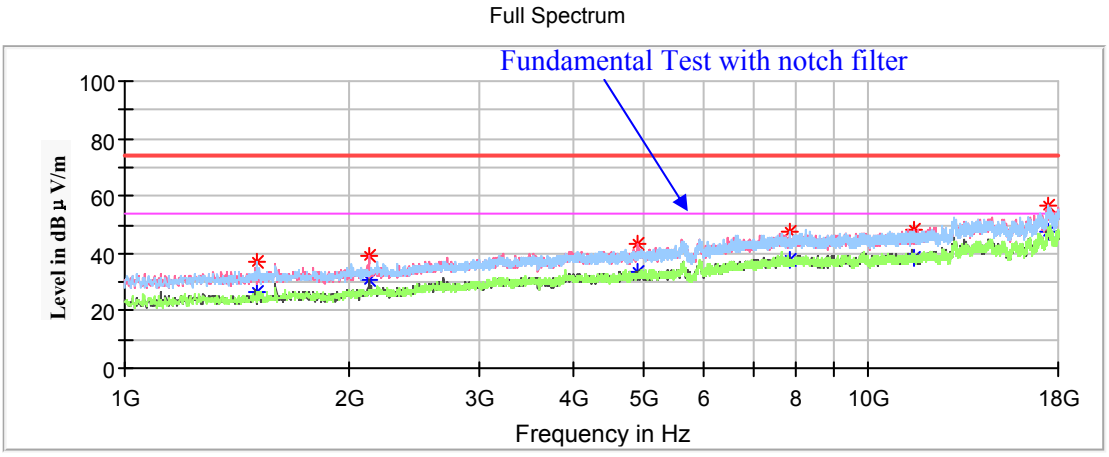

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1593.300000 | 38.62 | --- | 200.0 | V | 236.0 | -16.0 | 74.00 | 35.38 |
| 1593.300000 | --- | 32.33 | 200.0 | V | 236.0 | -16.0 | 54.00 | 21.67 |
| 2130.500000 | 36.20 | --- | 150.0 | V | 287.0 | -13.9 | 68.20 | 32.00 |
| 3929.100000 | --- | 31.91 | 200.0 | H | 162.0 | -7.3 | 54.00 | 22.09 |
| 3929.100000 | 41.31 | --- | 200.0 | H | 162.0 | -7.3 | 74.00 | 32.69 |
| 11650.000000 | --- | 39.74 | 150.0 | V | 300.0 | 2.8 | 54.00 | 14.26 |
| 11650.000000 | 49.26 | --- | 150.0 | V | 300.0 | 2.8 | 74.00 | 24.74 |
| 13017.300000 | 52.24 | --- | 200.0 | V | 0.0 | 5.2 | 68.20 | 15.96 |
| 17475.000000 | 56.35 | --- | 150.0 | V | 185.0 | 8.8 | 68.20 | 11.85 |

***802.11a Mode-Chain1:***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

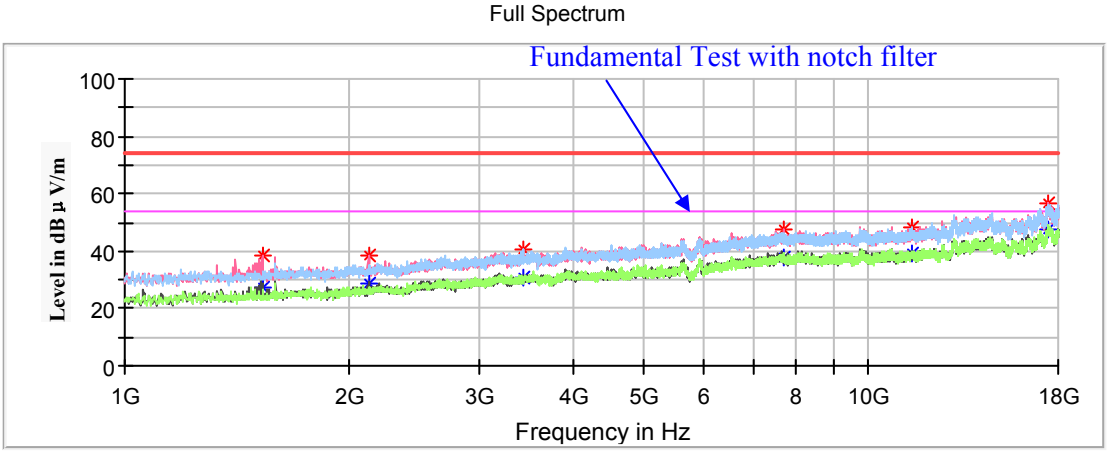
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5745MHz**



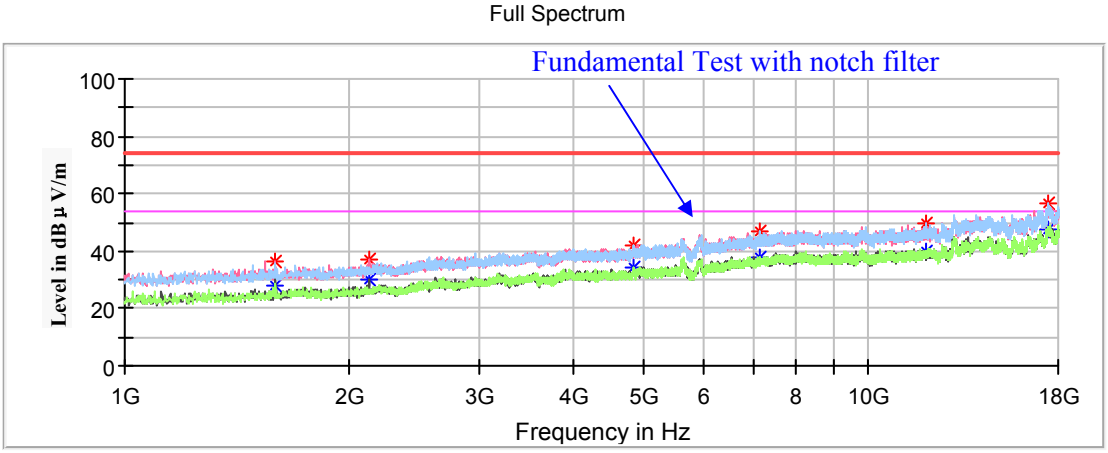

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1503.200000 | 37.19 | --- | 150.0 | H | 217.0 | -16.3 | 74.00 | 36.81 |
| 1503.200000 | --- | 26.54 | 150.0 | H | 217.0 | -16.3 | 54.00 | 27.46 |
| 2128.800000 | 39.22 | --- | 150.0 | V | 249.0 | -13.9 | 68.20 | 28.98 |
| 4908.300000 | --- | 33.33 | 200.0 | V | 300.0 | -5.4 | 54.00 | 20.67 |
| 4908.300000 | 43.22 | --- | 200.0 | V | 300.0 | -5.4 | 74.00 | 30.78 |
| 7822.100000 | 47.86 | --- | 200.0 | H | 205.0 | 1.5 | 68.20 | 20.34 |
| 11490.000000 | --- | 38.72 | 150.0 | V | 325.0 | 2.8 | 54.00 | 15.28 |
| 11490.000000 | 48.05 | --- | 150.0 | V | 325.0 | 2.8 | 74.00 | 25.95 |
| 17450.900000 | 56.57 | --- | 200.0 | H | 358.0 | 8.7 | 68.20 | 11.63 |

**Middle Channel: 5785MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1530.400000 | 38.11 | --- | 150.0 | V | 298.0 | -16.2 | 74.00 | 35.89 |
| 1530.400000 | --- | 27.52 | 150.0 | V | 298.0 | -16.2 | 54.00 | 26.48 |
| 2125.400000 | 38.62 | --- | 200.0 | V | 260.0 | -14.0 | 68.20 | 29.58 |
| 3442.900000 | 40.65 | --- | 150.0 | V | 235.0 | -9.0 | 68.20 | 27.55 |
| 7681.000000 | --- | 37.49 | 150.0 | H | 40.0 | 1.3 | 54.00 | 16.51 |
| 7681.000000 | 47.81 | --- | 150.0 | H | 40.0 | 1.3 | 74.00 | 26.19 |
| 11570.000000 | --- | 38.96 | 200.0 | H | 142.0 | 2.8 | 54.00 | 15.04 |
| 11570.000000 | 48.14 | --- | 200.0 | H | 142.0 | 2.8 | 74.00 | 25.86 |
| 17355.000000 | 56.70 | --- | 200.0 | V | 336.0 | 8.7 | 68.20 | 11.50 |

**High Channel: 5825MHz**



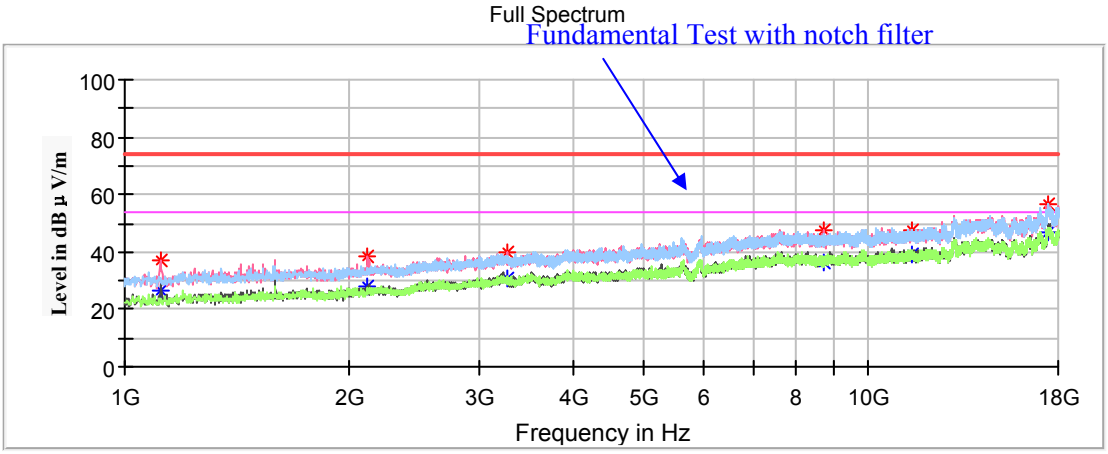

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1595.000000 | 36.44 | --- | 150.0 | V | 244.0 | -16.0 | 74.00 | 37.56 |
| 1595.000000 | --- | 28.01 | 150.0 | V | 244.0 | -16.0 | 54.00 | 25.99 |
| 2127.100000 | 37.19 | --- | 150.0 | V | 283.0 | -13.9 | 68.20 | 31.01 |
| 4825.000000 | --- | 33.95 | 200.0 | H | 0.0 | -5.5 | 54.00 | 20.05 |
| 4825.000000 | 42.28 | --- | 200.0 | H | 0.0 | -5.5 | 74.00 | 31.72 |
| 7155.700000 | 47.04 | --- | 150.0 | V | 206.0 | 0.3 | 68.20 | 21.16 |
| 11650.000000 | --- | 40.07 | 150.0 | H | 128.0 | 2.8 | 54.00 | 13.93 |
| 11650.000000 | 49.68 | --- | 150.0 | H | 128.0 | 2.8 | 74.00 | 24.32 |
| 17475.000000 | 56.80 | --- | 200.0 | H | 22.0 | 8.8 | 68.20 | 11.40 |

***802.11ac20 Mode(Chain0+Chain1):***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

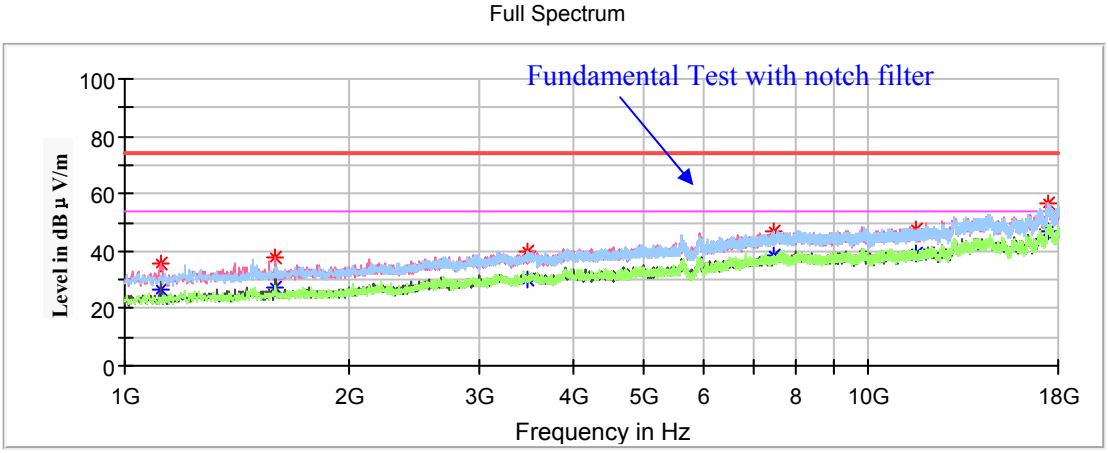
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5745MHz**



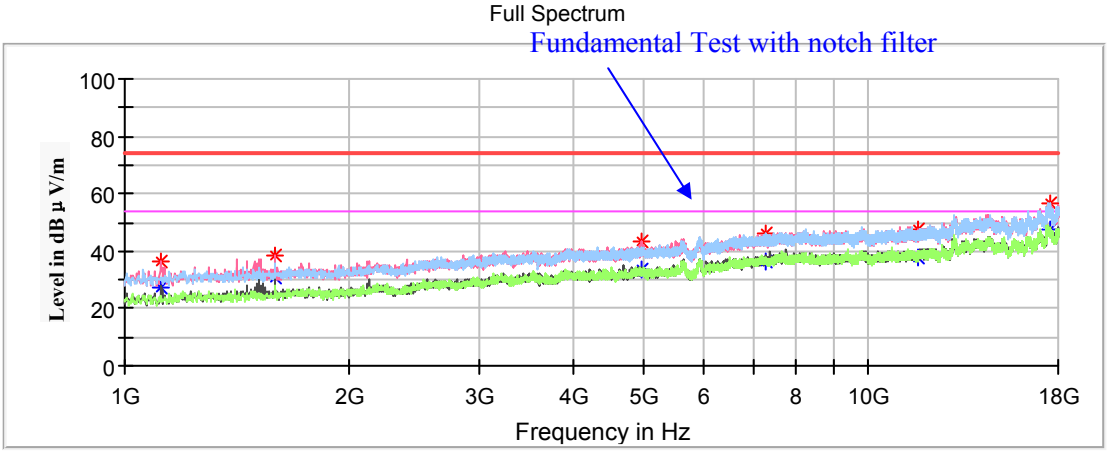

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1115.600000 | --- | 26.77 | 150.0 | V | 13.0 | -18.4 | 54.00 | 27.23 |
| 1115.600000 | 37.13 | --- | 150.0 | V | 13.0 | -18.4 | 74.00 | 36.87 |
| 2123.700000 | 38.14 | --- | 150.0 | V | 255.0 | -14.0 | 68.20 | 30.06 |
| 3267.800000 | 39.92 | --- | 200.0 | H | 358.0 | -9.4 | 68.20 | 28.28 |
| 8721.400000 | 47.31 | --- | 200.0 | H | 144.0 | 1.6 | 68.20 | 20.89 |
| 11490.000000 | --- | 39.31 | 150.0 | V | 229.0 | 2.8 | 54.00 | 14.69 |
| 11490.000000 | 47.73 | --- | 150.0 | V | 229.0 | 2.8 | 74.00 | 26.27 |
| 17420.300000 | 56.41 | --- | 200.0 | H | 228.0 | 8.6 | 68.20 | 11.79 |

**Middle Channel: 5785MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | --- | 26.59 | 150.0 | V | 13.0 | -18.4 | 54.00 | 27.41 |
| 1117.300000 | 35.65 | --- | 150.0 | V | 13.0 | -18.4 | 74.00 | 38.35 |
| 1593.300000 | --- | 27.13 | 150.0 | V | 236.0 | -16.0 | 54.00 | 26.87 |
| 1593.300000 | 37.89 | --- | 150.0 | V | 236.0 | -16.0 | 74.00 | 36.11 |
| 3478.600000 | 40.07 | --- | 150.0 | H | 351.0 | -8.9 | 68.20 | 28.13 |
| 7458.300000 | --- | 38.21 | 150.0 | H | 264.0 | 0.9 | 54.00 | 15.79 |
| 7458.300000 | 46.70 | --- | 150.0 | H | 264.0 | 0.9 | 74.00 | 27.30 |
| 11570.000000 | --- | 39.33 | 150.0 | V | 37.0 | 2.8 | 54.00 | 14.67 |
| 11570.000000 | 47.72 | --- | 150.0 | V | 37.0 | 2.8 | 74.00 | 26.28 |
| 17462.800000 | 56.90 | --- | 150.0 | H | 200.0 | 8.8 | 68.20 | 11.30 |

**High Channel: 5825MHz**



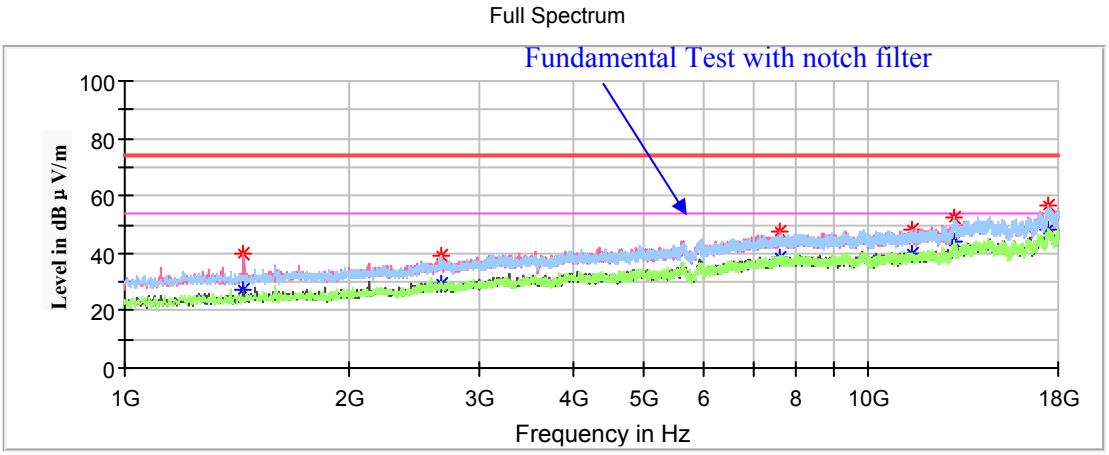

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | --- | 27.07 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.93 |
| 1117.300000 | 36.36 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 37.64 |
| 1595.000000 | --- | 30.82 | 200.0 | V | 243.0 | -16.0 | 54.00 | 23.18 |
| 1595.000000 | 38.20 | --- | 200.0 | V | 243.0 | -16.0 | 74.00 | 35.80 |
| 4952.500000 | --- | 33.71 | 150.0 | V | 352.0 | -5.3 | 54.00 | 20.29 |
| 4952.500000 | 43.07 | --- | 150.0 | V | 352.0 | -5.3 | 74.00 | 30.93 |
| 7296.800000 | --- | 36.66 | 150.0 | V | 90.0 | 0.6 | 54.00 | 17.34 |
| 7296.800000 | 46.26 | --- | 150.0 | V | 90.0 | 0.6 | 74.00 | 27.74 |
| 11650.000000 | 47.59 | --- | 150.0 | V | 26.0 | 2.8 | 74.00 | 26.41 |
| 11650.000000 | --- | 37.75 | 150.0 | V | 26.0 | 2.8 | 54.00 | 16.25 |
| 17475.000000 | 56.44 | --- | 200.0 | H | 0.0 | 8.8 | 68.20 | 11.76 |

***802.11n-HT20 Mode(Chain0+Chain1):***

*(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)*

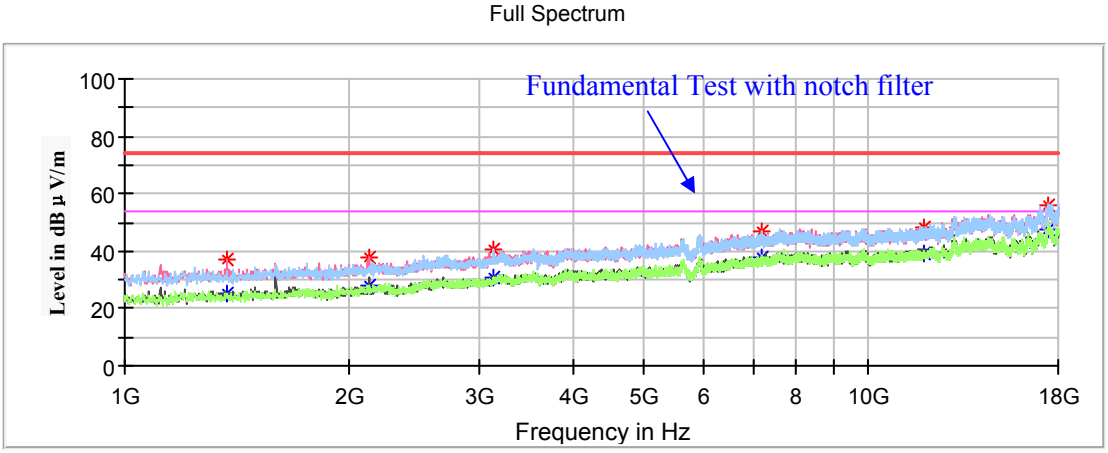
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5745MHz**



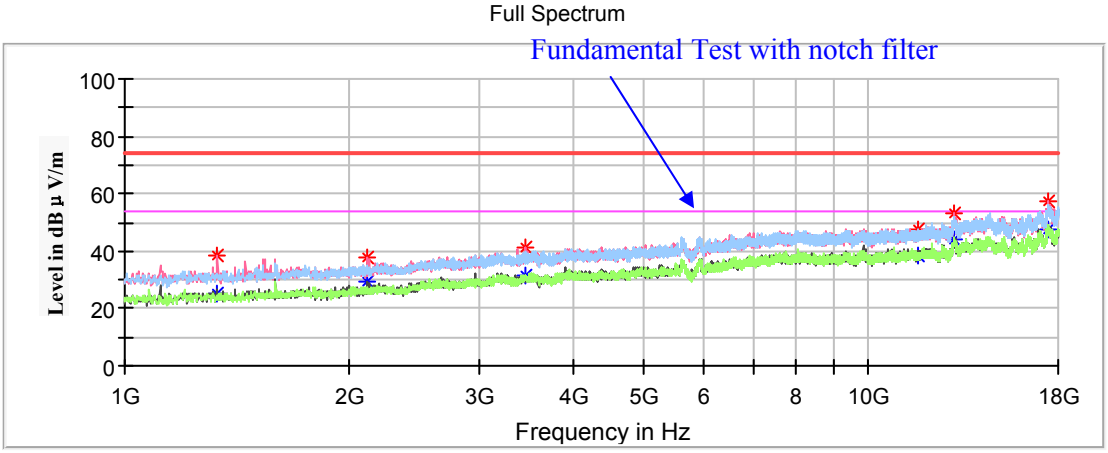

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1445.400000 | 40.07 | --- | 150.0 | V | 299.0 | -16.7 | 74.00 | 33.93 |
| 1445.400000 | --- | 27.24 | 150.0 | V | 299.0 | -16.7 | 54.00 | 26.76 |
| 2662.600000 | 39.09 | --- | 200.0 | H | 336.0 | -11.7 | 68.20 | 29.11 |
| 7607.900000 | --- | 38.59 | 200.0 | H | 187.0 | 1.2 | 54.00 | 15.41 |
| 7607.900000 | 47.75 | --- | 200.0 | H | 187.0 | 1.2 | 74.00 | 26.25 |
| 11490.000000 | --- | 39.65 | 150.0 | V | 15.0 | 2.8 | 54.00 | 14.35 |
| 11490.000000 | 47.92 | --- | 150.0 | V | 15.0 | 2.8 | 74.00 | 26.08 |
| 13051.300000 | 52.47 | --- | 150.0 | V | 218.0 | 5.3 | 68.20 | 15.73 |
| 17428.800000 | 56.40 | --- | 150.0 | H | 175.0 | 8.6 | 68.20 | 11.80 |

**Middle Channel: 5785MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1372.300000 | 36.82 | --- | 150.0 | V | 241.0 | -17.1 | 74.00 | 37.18 |
| 1372.300000 | --- | 25.14 | 150.0 | V | 241.0 | -17.1 | 54.00 | 28.86 |
| 2125.400000 | 37.62 | --- | 150.0 | V | 254.0 | -14.0 | 68.20 | 30.58 |
| 3138.600000 | 40.68 | --- | 200.0 | H | 359.0 | -9.7 | 68.20 | 27.52 |
| 7176.100000 | 46.60 | --- | 150.0 | H | 229.0 | 0.3 | 68.20 | 21.60 |
| 11570.000000 | --- | 38.98 | 150.0 | V | 146.0 | 2.8 | 54.00 | 15.02 |
| 11570.000000 | 48.29 | --- | 150.0 | V | 146.0 | 2.8 | 74.00 | 25.71 |
| 17495.100000 | 56.02 | --- | 200.0 | H | 178.0 | 8.9 | 68.20 | 12.18 |

**High Channel: 5825MHz**



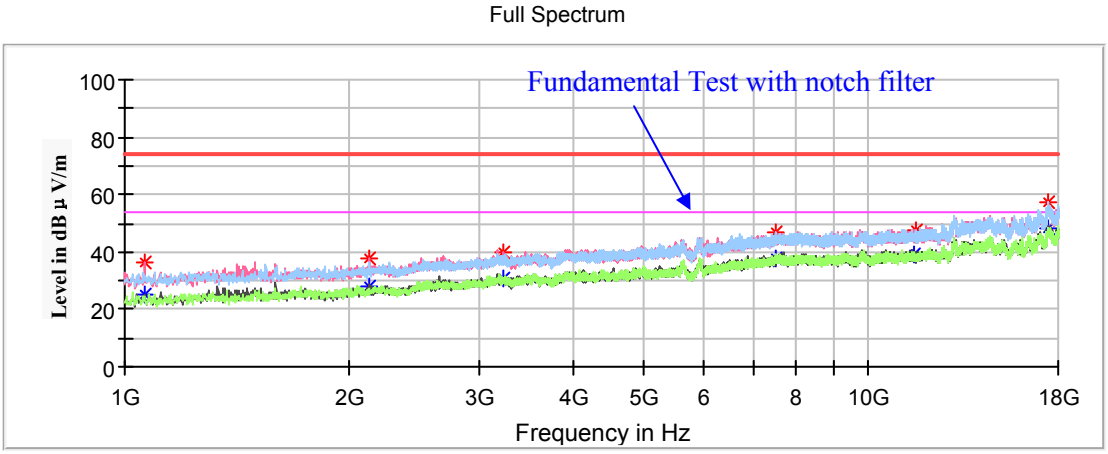

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1333.200000 | 38.29 | --- | 150.0 | V | 269.0 | -17.3 | 74.00 | 35.71 |
| 1333.200000 | --- | 25.30 | 150.0 | V | 269.0 | -17.3 | 54.00 | 28.70 |
| 2123.700000 | 37.77 | --- | 150.0 | V | 256.0 | -14.0 | 68.20 | 30.43 |
| 3463.300000 | 41.07 | --- | 150.0 | V | 30.0 | -8.9 | 68.20 | 27.13 |
| 11650.000000 | --- | 38.28 | 150.0 | V | 73.0 | 2.8 | 54.00 | 15.72 |
| 11650.000000 | 47.40 | --- | 150.0 | V | 73.0 | 2.8 | 74.00 | 26.60 |
| 13008.800000 | 53.17 | --- | 200.0 | H | 354.0 | 5.2 | 68.20 | 15.03 |
| 17475.000000 | 57.37 | --- | 150.0 | V | 243.0 | 8.8 | 68.20 | 10.83 |

***802.11ac40 Mode(Chain0+Chain1):***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

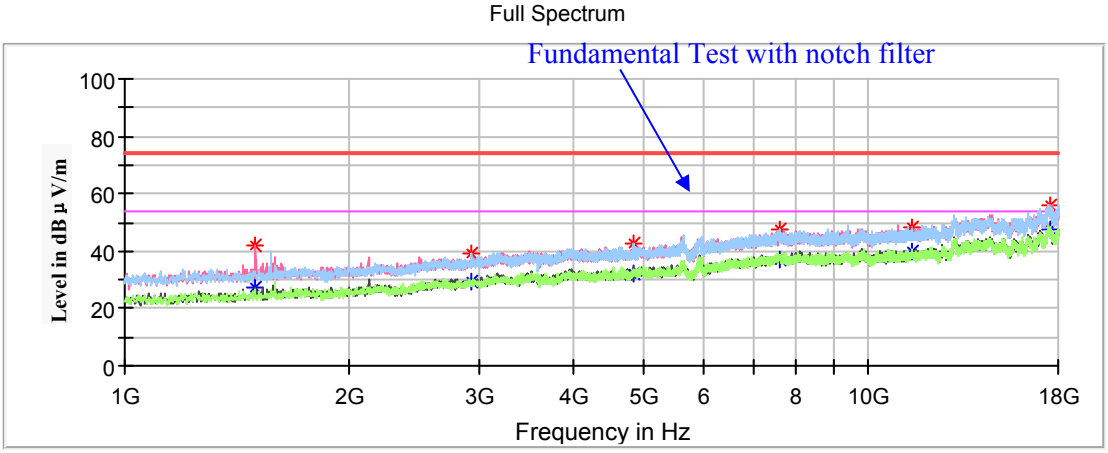
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5755MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1062.900000 | 36.26 | --- | 150.0 | V | 284.0 | -18.7 | 74.00 | 37.74 |
| 1062.900000 | --- | 24.91 | 150.0 | V | 284.0 | -18.7 | 54.00 | 29.09 |
| 2128.800000 | 37.78 | --- | 150.0 | V | 271.0 | -13.9 | 68.20 | 30.42 |
| 3228.700000 | 39.92 | --- | 150.0 | V | 334.0 | -9.5 | 68.20 | 28.28 |
| 7505.900000 | --- | 37.82 | 200.0 | V | 156.0 | 1.0 | 54.00 | 16.18 |
| 7505.900000 | 46.65 | --- | 200.0 | V | 156.0 | 1.0 | 74.00 | 27.35 |
| 11510.000000 | --- | 39.38 | 150.0 | H | 354.0 | 2.8 | 54.00 | 14.62 |
| 11510.000000 | 47.74 | --- | 150.0 | H | 354.0 | 2.8 | 74.00 | 26.26 |
| 17447.500000 | 57.39 | --- | 150.0 | V | 182.0 | 8.7 | 68.20 | 10.81 |

**High Channel: 5795MHz**



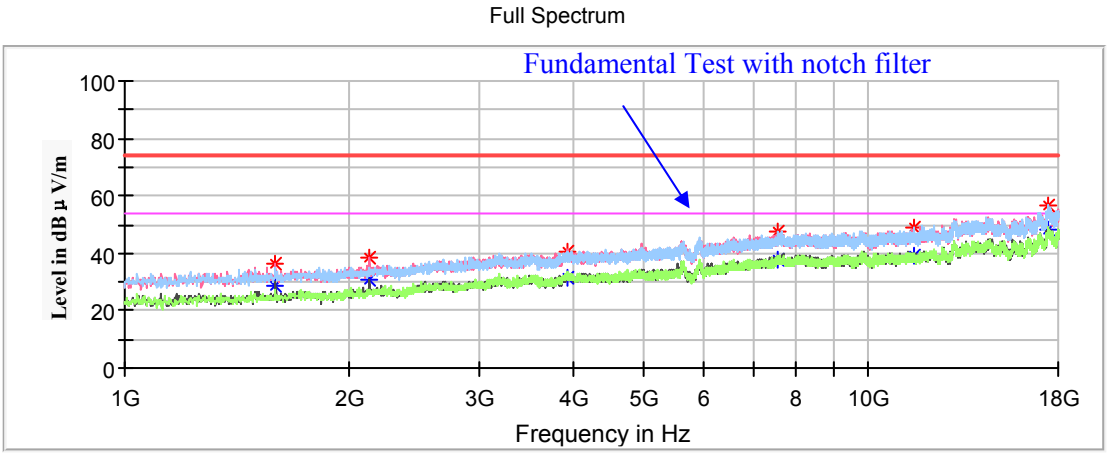

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1499.800000 | 41.79 | --- | 150.0 | V | 225.0 | -16.4 | 74.00 | 32.21 |
| 1499.800000 | --- | 27.54 | 150.0 | V | 225.0 | -16.4 | 54.00 | 26.46 |
| 2919.300000 | 39.48 | --- | 150.0 | H | 136.0 | -10.5 | 68.20 | 28.72 |
| 4830.100000 | --- | 32.39 | 150.0 | H | 187.0 | -5.5 | 54.00 | 21.61 |
| 4830.100000 | 42.38 | --- | 150.0 | H | 187.0 | -5.5 | 74.00 | 31.62 |
| 7602.800000 | 47.80 | --- | 150.0 | H | 4.0 | 1.2 | 74.00 | 26.20 |
| 7602.800000 | --- | 37.27 | 150.0 | H | 4.0 | 1.2 | 54.00 | 16.73 |
| 11590.000000 | --- | 39.95 | 150.0 | V | 276.0 | 2.8 | 54.00 | 14.05 |
| 11590.000000 | 48.55 | --- | 150.0 | V | 276.0 | 2.8 | 74.00 | 25.45 |
| 17564.800000 | 56.19 | --- | 200.0 | V | 169.0 | 8.9 | 68.20 | 12.01 |

***802.11n-HT40 Mode(Chain0+Chain1):***

*(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)*

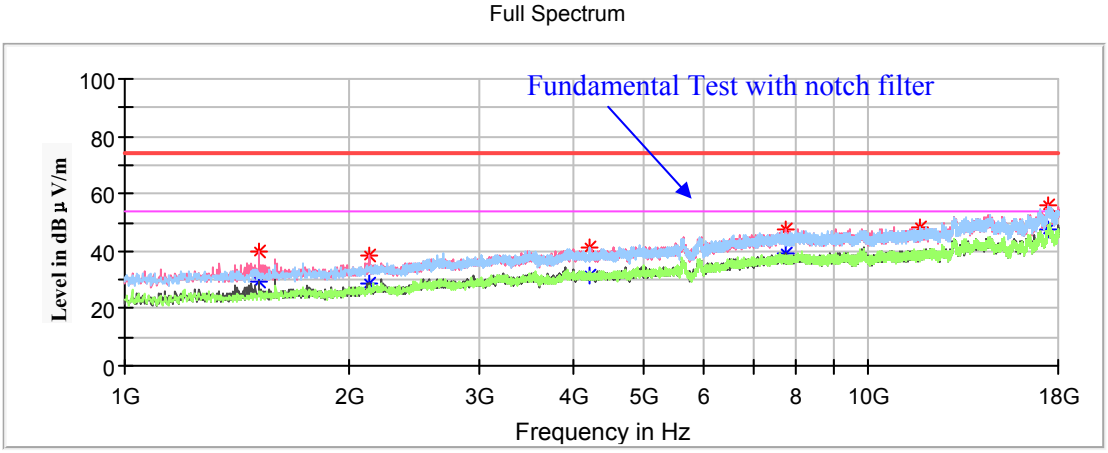
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5755MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1593.300000 | --- | 28.43 | 150.0 | V | 245.0 | -16.0 | 54.00 | 25.57 |
| 1593.300000 | 36.49 | --- | 150.0 | V | 245.0 | -16.0 | 74.00 | 37.51 |
| 2130.500000 | 38.48 | --- | 150.0 | V | 258.0 | -13.9 | 68.20 | 29.72 |
| 3947.800000 | --- | 31.44 | 150.0 | V | 258.0 | -7.2 | 54.00 | 22.56 |
| 3947.800000 | 40.86 | --- | 150.0 | V | 258.0 | -7.2 | 74.00 | 33.14 |
| 7575.600000 | --- | 37.64 | 150.0 | V | 354.0 | 1.1 | 54.00 | 16.36 |
| 7575.600000 | 47.52 | --- | 150.0 | V | 354.0 | 1.1 | 74.00 | 26.48 |
| 11510.000000 | 48.79 | --- | 150.0 | H | 128.0 | 2.8 | 74.00 | 25.21 |
| 11510.000000 | --- | 38.82 | 150.0 | H | 128.0 | 2.8 | 54.00 | 15.18 |
| 17432.200000 | 56.73 | --- | 200.0 | H | 231.0 | 8.7 | 68.20 | 11.47 |

**High Channel: 5795MHz**



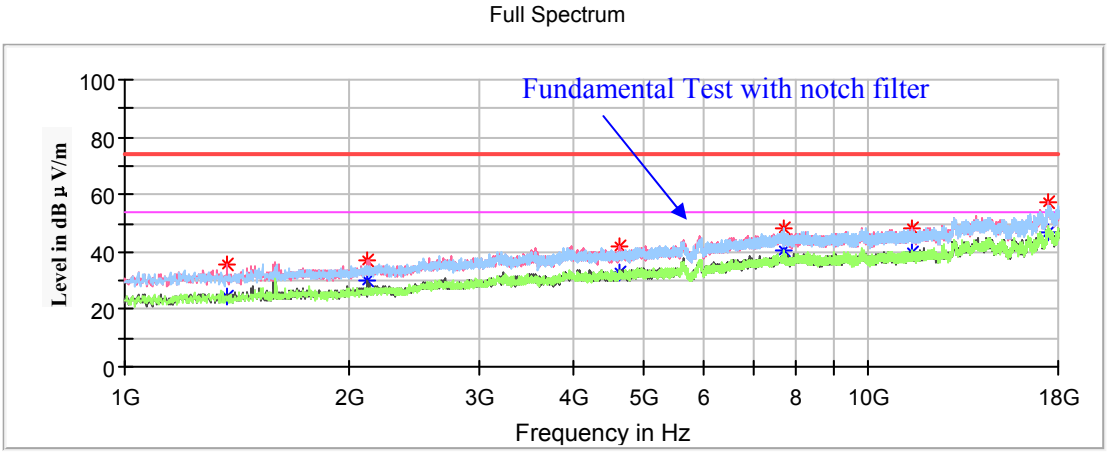

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1515.100000 | 40.16 | --- | 150.0 | V | 231.0 | -16.3 | 74.00 | 33.84 |
| 1515.100000 | --- | 29.28 | 150.0 | V | 231.0 | -16.3 | 54.00 | 24.72 |
| 2130.500000 | 38.33 | --- | 150.0 | V | 257.0 | -13.9 | 68.20 | 29.87 |
| 4226.600000 | 41.20 | --- | 200.0 | H | 40.0 | -6.6 | 74.00 | 32.80 |
| 4226.600000 | --- | 31.73 | 200.0 | H | 40.0 | -6.6 | 54.00 | 22.27 |
| 7726.900000 | 47.37 | --- | 150.0 | V | 269.0 | 1.4 | 74.00 | 26.63 |
| 7726.900000 | --- | 39.21 | 150.0 | V | 269.0 | 1.4 | 54.00 | 14.79 |
| 11590.000000 | --- | 38.83 | 200.0 | H | 104.0 | 2.8 | 54.00 | 15.17 |
| 11590.000000 | 48.27 | --- | 200.0 | H | 104.0 | 2.8 | 74.00 | 25.73 |
| 17479.800000 | 55.69 | --- | 150.0 | V | 295.0 | 8.8 | 68.20 | 12.51 |

***802.11ac80 Mode(Chain0+Chain1):***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5775MHz**

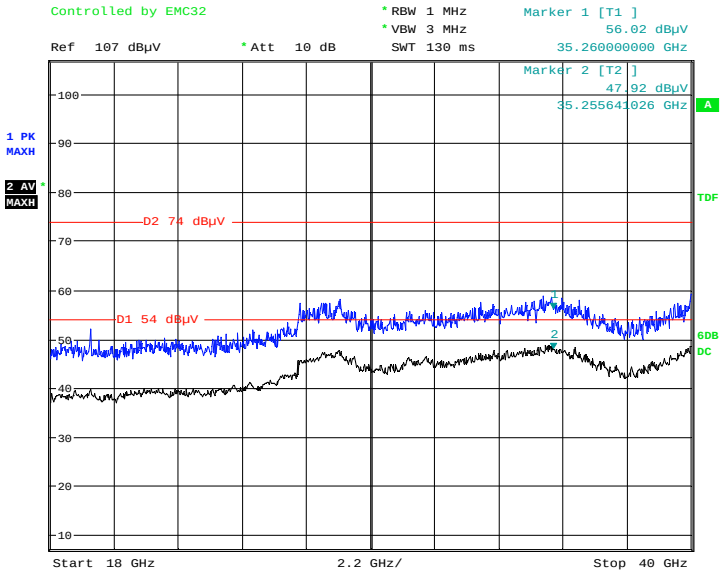



| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1372.300000 | --- | 24.56 | 150.0 | V | 287.0 | -17.1 | 54.00 | 29.44 |
| 1372.300000 | 35.42 | --- | 150.0 | V | 287.0 | -17.1 | 74.00 | 38.58 |
| 2123.700000 | 37.08 | --- | 200.0 | V | 249.0 | -14.0 | 68.20 | 31.12 |
| 4622.700000 | --- | 32.62 | 200.0 | V | 108.0 | -6.0 | 54.00 | 21.38 |
| 4622.700000 | 41.95 | --- | 200.0 | V | 108.0 | -6.0 | 74.00 | 32.05 |
| 7699.700000 | --- | 40.24 | 200.0 | H | 230.0 | 1.3 | 54.00 | 13.76 |
| 7699.700000 | 48.30 | --- | 200.0 | H | 230.0 | 1.3 | 74.00 | 25.70 |
| 11550.000000 | 47.95 | --- | 150.0 | V | 68.0 | 2.8 | 74.00 | 26.05 |
| 11550.000000 | --- | 39.94 | 150.0 | V | 68.0 | 2.8 | 54.00 | 14.06 |
| 17462.800000 | 57.12 | --- | 150.0 | V | 94.0 | 8.8 | 68.20 | 11.08 |

**18GHz-40GHz(5150-5250MHz Band):**

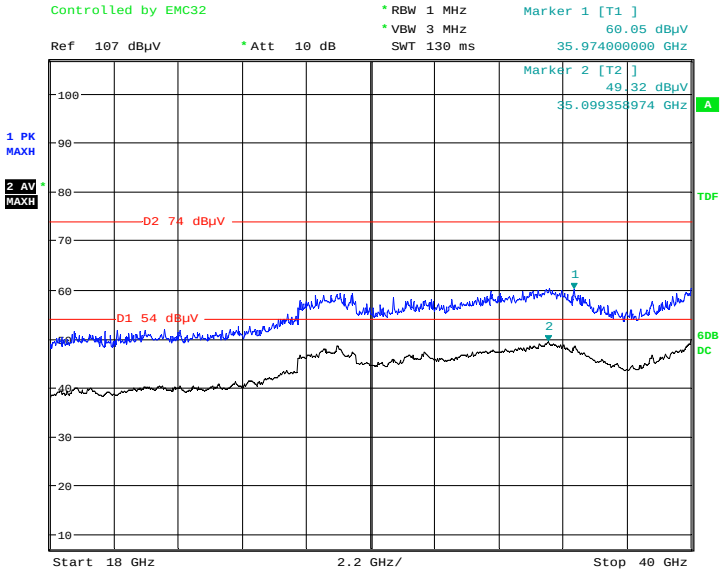
*Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X, Y and Z axes of orientation,* ***the worst case 802.11ac20 mode high channel*** *in Z-axis of orientation was recorded.*

**Horizontal**




Date: 27.SEP.2020 21:36:27

**Vertical**

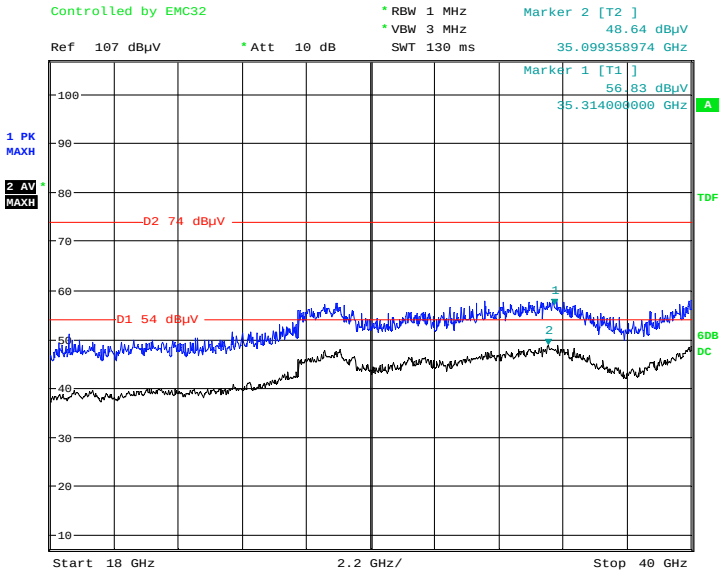



Date: 27.SEP.2020 21:44:55

**18GHz-40GHz(5725-5850MHz Band):**

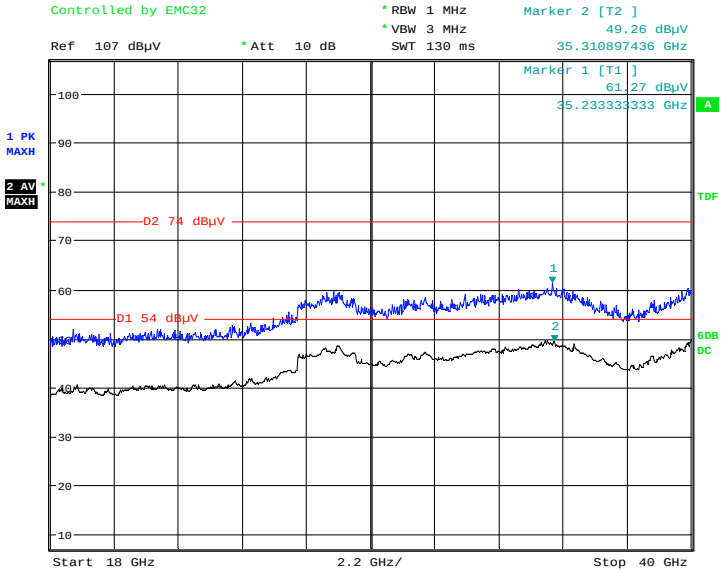
*Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation,* ***the worst case 802.11ac20 mode low channel*** *in Z-axis of orientation was recorded.*

**Horizontal**




Date: 27.SEP.2020 21:29:36

**Vertical**

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## Restricted Bands Emissions Test (5150-5250MHz Band):

Note:
1. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
2. Corrected Amplitude = Corrected Factor + Reading
3. Margin = Limit - Corrected. Amplitude

***802.11a Mode-Chain0:*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5180MHz | | | | | | | | |
| 5150.00 | --- | 49.65 | 200.0 | V | 192.0 | 5.2 | 54.00 | 4.35 |
| 5150.00 | 54.75 | --- | 200.0 | V | 192.0 | 5.2 | 74.00 | 19.25 |
| High Channel: 5240MHz | | | | | | | | |
| 5350.00 | 55.51 | --- | 150.0 | V | 247.0 | 5.7 | 74.00 | 18.49 |
| 5350.00 | --- | 51.23 | 150.0 | V | 247.0 | 5.7 | 54.00 | 2.77 |

***802.11a Mode-Chain1:*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5180MHz | | | | | | | | |
| 5150.00 | 56.03 | --- | 200.0 | H | 146.0 | 5.2 | 74.00 | 17.97 |
| 5150.00 | --- | 50.44 | 200.0 | H | 146.0 | 5.2 | 54.00 | 3.56 |
| High Channel: 5240MHz | | | | | | | | |
| 5350.00 | 54.76 | --- | 200.0 | H | 11.0 | 5.7 | 74.00 | 19.24 |
| 5350.00 | --- | 51.13 | 200.0 | H | 11.0 | 5.7 | 54.00 | 2.87 |

***802.11ac20 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Corrected Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5180MHz | | | | | | | | |
| 5150.00 | 54.04 | --- | 150.0 | V | 166.0 | 5.2 | 74.00 | 19.96 |
| 5150.00 | --- | 50.71 | 150.0 | V | 166.0 | 5.2 | 54.00 | 3.29 |
| High Channel: 5240MHz | | | | | | | | |
| 5350.00 | 54.12 | --- | 150.0 | V | 8.0 | 5.7 | 74.00 | 19.88 |
| 5350.00 | --- | 50.15 | 150.0 | V | 8.0 | 5.7 | 54.00 | 3.85 |

***802.11n-HT20 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5180MHz | | | | | | | | |
| 5150.00 | 55.16 | --- | 200.0 | V | 174.0 | 5.2 | 74.00 | 18.84 |
| 5150.00 | --- | 50.77 | 200.0 | V | 174.0 | 5.2 | 54.00 | 3.23 |
| High Channel: 5240MHz | | | | | | | | |
| 5350.00 | 55.14 | --- | 150.0 | V | 9.0 | 5.7 | 74.00 | 18.86 |
| 5350.00 | --- | 50.26 | 150.0 | V | 9.0 | 5.7 | 54.00 | 3.74 |

***802.11ac40 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Corrected Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5190MHz | | | | | | | | |
| 5150.00 | 54.06 | --- | 200.0 | V | 153.0 | 5.2 | 74.00 | 19.94 |
| 5150.00 | --- | 51.02 | 200.0 | V | 153.0 | 5.2 | 54.00 | 2.98 |
| High Channel: 5230MHz | | | | | | | | |
| 5350.00 | 56.52 | --- | 150.0 | V | 349.0 | 5.7 | 74.00 | 17.48 |
| 5350.00 | --- | 51.82 | 150.0 | V | 349.0 | 5.7 | 54.00 | 2.18 |

***802.11n-HT40 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Corrected Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5190MHz | | | | | | | | |
| 5150.00 | 55.26 | --- | 150.0 | V | 146.0 | 5.2 | 74.00 | 18.74 |
| 5150.00 | --- | 51.47 | 150.0 | V | 146.0 | 5.2 | 54.00 | 2.53 |
| High Channel: 5230MHz | | | | | | | | |
| 5350.00 | 54.38 | --- | 150.0 | V | 65.0 | 5.7 | 74.00 | 19.62 |
| 5350.00 | --- | 51.45 | 150.0 | V | 65.0 | 5.7 | 54.00 | 2.55 |

***802.11ac80 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Corrected Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5210MHz | | | | | | | | |
| 5150.00 | 56.03 | --- | 150.0 | H | 340.0 | 5.2 | 74.00 | 17.97 |
| 5150.00 | --- | 51.83 | 150.0 | H | 340.0 | 5.2 | 54.00 | 2.17 |
| 5350.00 | 55.50 | --- | 200.0 | H | 338.0 | 5.7 | 74.00 | 18.50 |
| 5350.00 | --- | 50.76 | 200.0 | H | 338.0 | 5.7 | 54.00 | 3.24 |

## Restricted Bands Emissions Test (5725-5850MHz Band):

Note:
1. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
2. Corrected Amplitude = Corrected Factor + Reading
3. Margin = Limit - Corrected. Amplitude

***802.11a Mode-Chain0:*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5745MHz | | | | | | | | |
| 5650.00 | 53.75 | --- | 150.0 | H | 98.0 | 6.4 | 68.2 | 14.45 |
| 5700.00 | 55.67 | --- | 200.0 | H | 182.0 | 6.5 | 105.2 | 49.53 |
| 5720.00 | 54.49 | --- | 200.0 | H | 198.0 | 6.5 | 110.8 | 56.31 |
| 5725.00 | 58.18 | --- | 150.0 | V | 104.0 | 6.5 | 122.2 | 64.02 |
| High Channel: 5825MHz | | | | | | | | |
| 5850.00 | 55.00 | --- | 150.0 | V | 221.0 | 6.7 | 122.2 | 67.20 |
| 5855.00 | 55.28 | --- | 200.0 | H | 279.0 | 6.7 | 110.8 | 55.52 |
| 5875.00 | 56.13 | --- | 150.0 | V | 72.0 | 6.8 | 105.2 | 49.07 |
| 5925.00 | 55.80 | --- | 150.0 | V | 187.0 | 6.9 | 68.2 | 12.40 |

***802.11a Mode-Chain1:*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5745MHz | | | | | | | | |
| 5650.00 | 54.29 | --- | 150.0 | V | 0.0 | 6.4 | 68.2 | 13.91 |
| 5700.00 | 54.32 | --- | 200.0 | H | 279.0 | 6.5 | 105.2 | 50.88 |
| 5720.00 | 53.66 | --- | 150.0 | V | 15.0 | 6.5 | 110.8 | 57.14 |
| 5725.00 | 55.46 | --- | 200.0 | H | 355.0 | 6.5 | 122.2 | 66.74 |
| High Channel: 5825MHz | | | | | | | | |
| 5850.00 | 54.43 | --- | 150.0 | H | 184.0 | 6.7 | 122.2 | 67.77 |
| 5855.00 | 55.65 | --- | 200.0 | H | 12.0 | 6.7 | 110.8 | 55.15 |
| 5875.00 | 54.71 | --- | 200.0 | H | 268.0 | 6.8 | 105.2 | 50.49 |
| 5925.00 | 54.36 | --- | 150.0 | V | 175.0 | 6.9 | 68.2 | 13.84 |

***802.11ac20 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5745MHz | | | | | | | | |
| 5650.00 | 54.55 | --- | 150.0 | V | 166.0 | 6.4 | 68.2 | 13.65 |
| 5700.00 | 53.97 | --- | 200.0 | H | 0.0 | 6.5 | 105.2 | 51.23 |
| 5720.00 | 55.42 | --- | 150.0 | V | 117.0 | 6.5 | 110.8 | 55.38 |
| 5725.00 | 57.92 | --- | 150.0 | V | 63.0 | 6.5 | 122.2 | 64.28 |
| High Channel: 5825MHz | | | | | | | | |
| 5850.00 | 56.04 | --- | 150.0 | V | 350.0 | 6.7 | 122.2 | 66.16 |
| 5855.00 | 54.58 | --- | 200.0 | H | 169.0 | 6.7 | 110.8 | 56.22 |
| 5875.00 | 55.80 | --- | 150.0 | V | 320.0 | 6.8 | 105.2 | 49.40 |
| 5925.00 | 55.51 | --- | 200.0 | H | 13.0 | 6.9 | 68.2 | 12.69 |

***802.11n-HT20 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5745MHz | | | | | | | | |
| 5650.00 | 53.94 | --- | 150.0 | V | 199.0 | 6.4 | 68.2 | 14.26 |
| 5700.00 | 53.53 | --- | 200.0 | H | 1.0 | 6.5 | 105.2 | 51.67 |
| 5720.00 | 53.70 | --- | 150.0 | H | 114.0 | 6.5 | 110.8 | 57.10 |
| 5725.00 | 56.71 | --- | 200.0 | V | 99.0 | 6.5 | 122.2 | 65.49 |
| High Channel: 5825MHz | | | | | | | | |
| 5850.00 | 54.22 | --- | 200.0 | V | 292.0 | 6.7 | 122.2 | 67.98 |
| 5855.00 | 53.83 | --- | 150.0 | V | 277.0 | 6.7 | 110.8 | 56.97 |
| 5875.00 | 53.51 | --- | 150.0 | H | 182.0 | 6.8 | 105.2 | 51.69 |
| 5925.00 | 54.33 | --- | 200.0 | H | 118.0 | 6.9 | 68.2 | 13.87 |

***802.11ac40 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5755MHz | | | | | | | | |
| 5650.00 | 54.73 | --- | 200.0 | H | 7.0 | 6.4 | 68.2 | 13.47 |
| 5700.00 | 56.16 | --- | 150.0 | V | 350.0 | 6.5 | 105.2 | 49.04 |
| 5720.00 | 63.20 | --- | 150.0 | V | 97.0 | 6.5 | 110.8 | 47.60 |
| 5725.00 | 63.88 | --- | 200.0 | V | 59.0 | 6.5 | 122.2 | 58.32 |
| High Channel: 5795MHz | | | | | | | | |
| 5850.00 | 54.65 | --- | 150.0 | V | 0.0 | 6.7 | 122.2 | 67.55 |
| 5855.00 | 54.64 | --- | 200.0 | H | 106.0 | 6.7 | 110.8 | 56.16 |
| 5875.00 | 54.62 | --- | 150.0 | H | 0.0 | 6.8 | 105.2 | 50.58 |
| 5925.00 | 55.25 | --- | 150.0 | V | 297.0 | 6.9 | 68.2 | 12.95 |

***802.11n-HT40 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5755MHz | | | | | | | | |
| 5650.00 | 53.96 | --- | 200.0 | H | 144.0 | 6.4 | 68.2 | 14.24 |
| 5700.00 | 53.19 | --- | 150.0 | H | 336.0 | 6.5 | 105.2 | 52.01 |
| 5720.00 | 56.40 | --- | 150.0 | V | 88.0 | 6.5 | 110.8 | 54.40 |
| 5725.00 | 58.53 | --- | 200.0 | V | 106.0 | 6.5 | 122.2 | 63.67 |
| High Channel: 5795MHz | | | | | | | | |
| 5850.00 | 55.96 | --- | 200.0 | H | 3.0 | 6.7 | 122.2 | 66.24 |
| 5855.00 | 54.78 | --- | 150.0 | V | 258.0 | 6.7 | 110.8 | 56.02 |
| 5875.00 | 54.71 | --- | 200.0 | V | 0.0 | 6.8 | 105.2 | 50.49 |
| 5925.00 | 55.18 | --- | 150.0 | V | 185.0 | 6.9 | 68.2 | 13.02 |

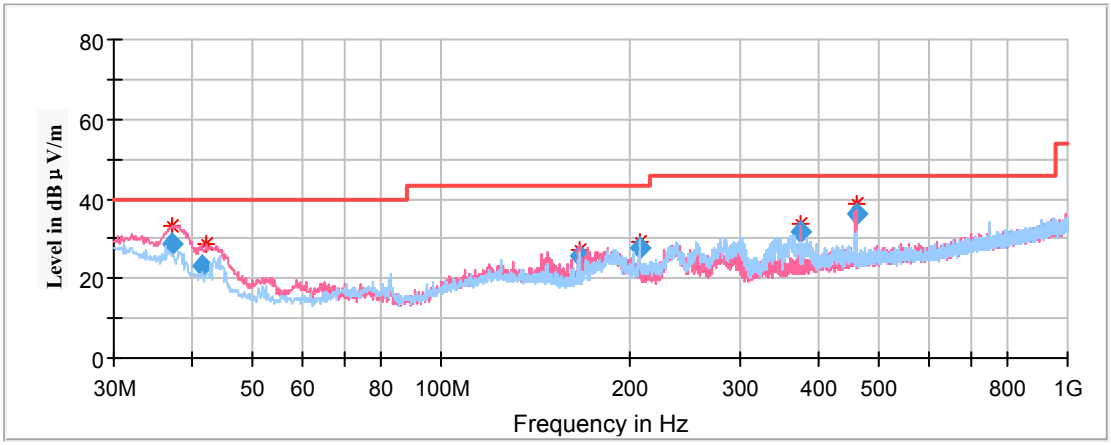
***802.11ac80 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5775MHz | | | | | | | | |
| 5650.00 | 53.14 | --- | 200.0 | H | 158.0 | 6.4 | 68.2 | 15.06 |
| 5700.00 | 57.18 | --- | 150.0 | V | 355.0 | 6.5 | 105.2 | 48.02 |
| 5720.00 | 60.08 | --- | 150.0 | H | 140.0 | 6.5 | 110.8 | 50.72 |
| 5725.00 | 62.90 | --- | 150.0 | H | 210.0 | 6.5 | 122.2 | 59.30 |
| 5850.00 | 56.73 | --- | 150.0 | V | 111.0 | 6.7 | 122.2 | 65.47 |
| 5855.00 | 56.97 | --- | 200.0 | V | 111.0 | 6.7 | 110.8 | 53.83 |
| 5875.00 | 55.68 | --- | 150.0 | V | 92.0 | 6.8 | 105.2 | 49.52 |
| 5925.00 | 54.93 | --- | 200.0 | H | 245.0 | 6.9 | 68.2 | 13.27 |

**Model: L1573**

**30MHz-1GHz(5150-5250MHz Band):**

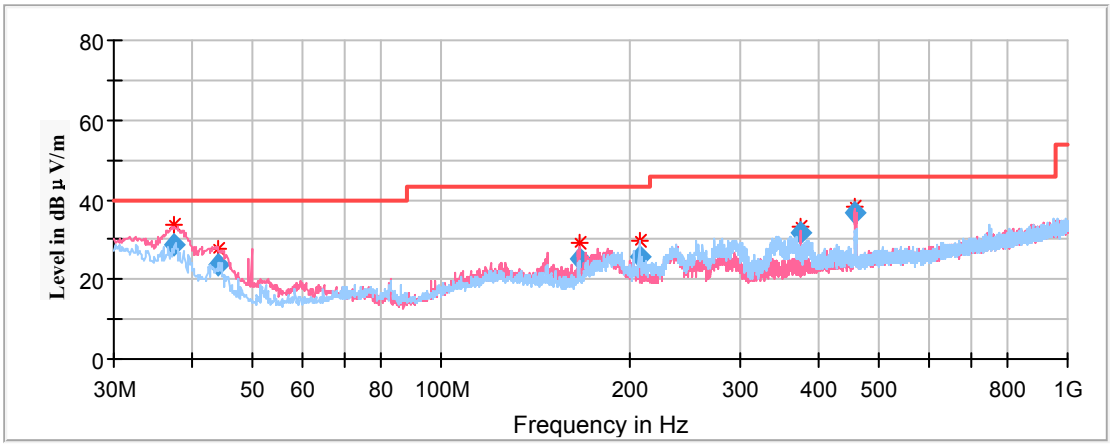
*Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X, Y and Z axes of orientation,* ***the worst case 802.11ac20 mode high channel*** *in Z-axis of orientation was recorded.*




| Frequency (MHz) | Corrected Amplitude | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|
| | QuasiPeak (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 37.242800 | 28.58 | 100.0 | V | 161.0 | -9.3 | 40.00 | 11.42 |
| 41.613550 | 23.00 | 100.0 | V | 140.0 | -12.3 | 40.00 | 17.00 |
| 166.337800 | 25.80 | 100.0 | V | 0.0 | -13.5 | 43.50 | 17.70 |
| 207.905350 | 27.56 | 100.0 | H | 261.0 | -12.7 | 43.50 | 15.94 |
| 374.263850 | 31.71 | 200.0 | V | 2.0 | -9.2 | 46.00 | 14.29 |
| 459.537750 | 36.42 | 100.0 | V | 0.0 | -7.1 | 46.00 | 9.58 |

**30MHz-1GHz(5725-5850MHz Band):**

*Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation,* ***the worst case 802.11ac20 mode low channel*** *in Z-axis of orientation was recorded*




| Frequency (MHz) | Corrected Amplitude | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|
| | QuasiPeak (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 37.354200 | 28.76 | 100.0 | V | 322.0 | -9.4 | 40.00 | 11.24 |
| 43.908350 | 23.54 | 100.0 | V | 2.0 | -13.8 | 40.00 | 16.46 |
| 166.287100 | 25.26 | 100.0 | V | 258.0 | -13.5 | 43.50 | 18.24 |
| 206.857950 | 25.54 | 100.0 | H | 270.0 | -12.7 | 43.50 | 17.96 |
| 374.271050 | 31.46 | 200.0 | V | 0.0 | -9.2 | 46.00 | 14.54 |
| 457.473200 | 36.54 | 100.0 | V | 353.0 | -7.2 | 46.00 | 9.46 |

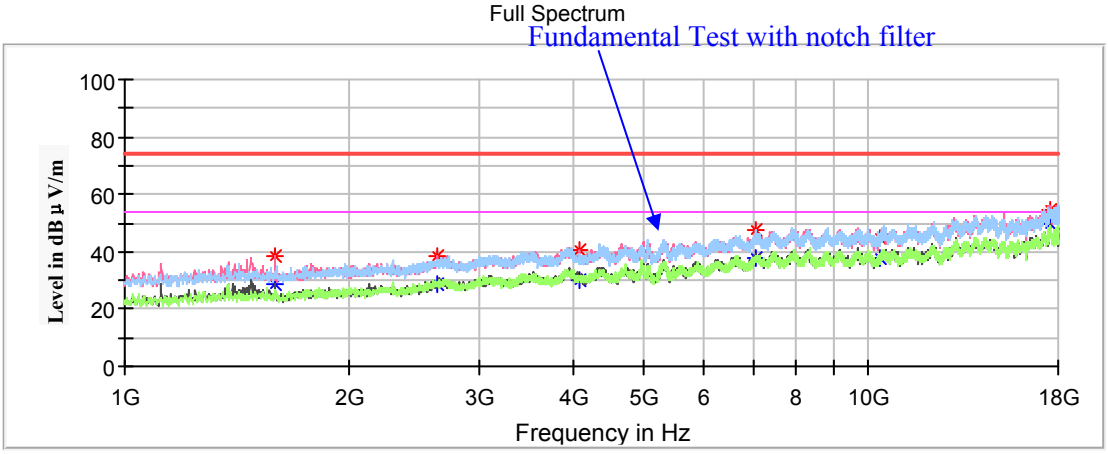
**1GHz-18GHz(5150-5250MHz Band):**

**802.11a Mode-Chain0:**

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

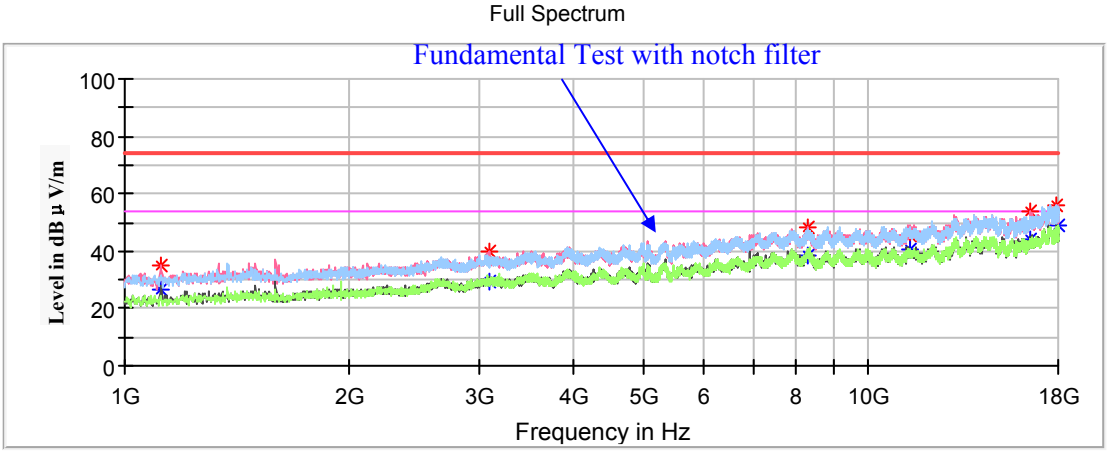
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5180MHz**



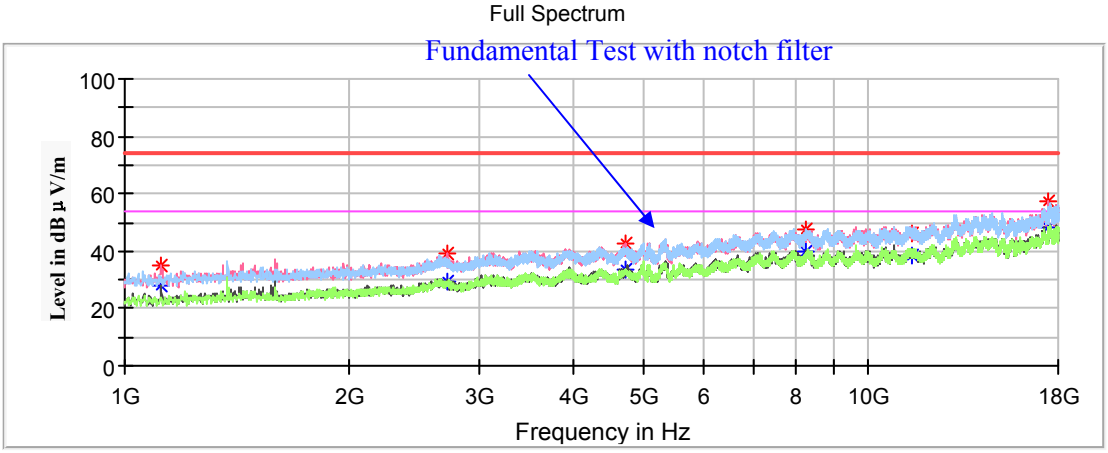

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1591.600000 | 38.20 | --- | 150.0 | V | 271.0 | -16.0 | 74.00 | 35.80 |
| 1591.600000 | --- | 28.44 | 150.0 | V | 271.0 | -16.0 | 54.00 | 25.56 |
| 2628.600000 | 38.50 | --- | 150.0 | V | 0.0 | -11.8 | 68.20 | 29.70 |
| 4075.300000 | 40.55 | --- | 150.0 | V | 4.0 | -6.9 | 74.00 | 33.45 |
| 4075.300000 | --- | 30.09 | 150.0 | V | 4.0 | -6.9 | 54.00 | 23.91 |
| 7072.400000 | 47.46 | --- | 150.0 | H | 287.0 | 0.1 | 68.20 | 20.74 |
| 10360.000000 | 44.85 | --- | 150.0 | H | 236.0 | 2.2 | 68.20 | 23.35 |
| 17512.100000 | 54.62 | --- | 150.0 | V | 345.0 | 8.9 | 68.20 | 13.58 |

**Middle Channel: 5200MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1119.000000 | --- | 26.31 | 150.0 | V | 0.0 | -18.4 | 54.00 | 27.69 |
| 1119.000000 | 35.04 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 38.96 |
| 3092.700000 | 40.13 | --- | 150.0 | V | 206.0 | -9.9 | 68.20 | 28.07 |
| 8287.900000 | --- | 38.76 | 150.0 | V | 244.0 | 1.5 | 54.00 | 15.24 |
| 8287.900000 | 48.02 | --- | 150.0 | V | 244.0 | 1.5 | 74.00 | 25.98 |
| 11400.600000 | --- | 40.41 | 150.0 | V | 12.0 | 2.8 | 54.00 | 13.59 |
| 11400.600000 | 45.45 | --- | 150.0 | V | 12.0 | 2.8 | 74.00 | 28.55 |
| 16514.200000 | 53.52 | --- | 150.0 | V | 35.0 | 5.5 | 68.20 | 14.68 |
| 17935.400000 | 56.26 | --- | 150.0 | V | 129.0 | 8.8 | 74.00 | 17.74 |
| 17935.400000 | --- | 48.97 | 150.0 | V | 129.0 | 8.8 | 54.00 | 5.03 |

**High Channel: 5240MHz**



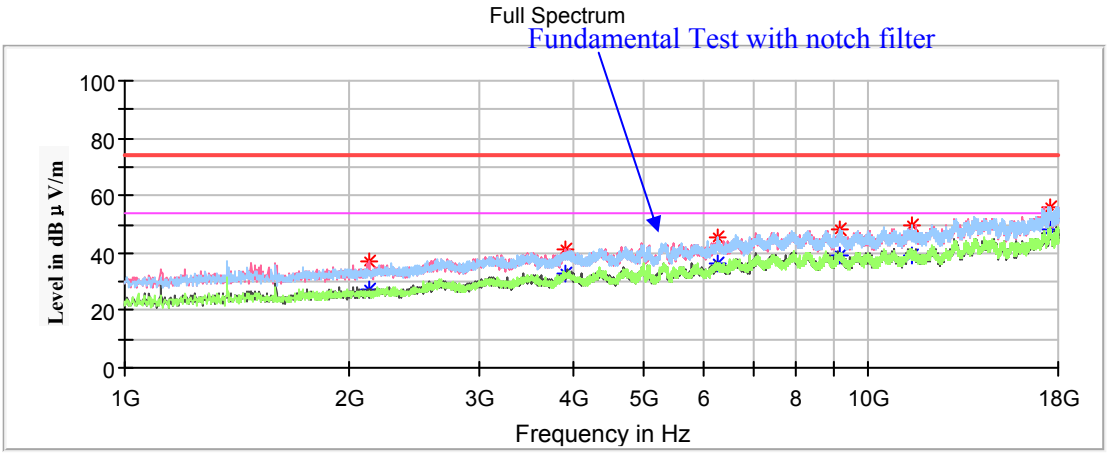

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | 35.16 | --- | 150.0 | V | 358.0 | -18.4 | 74.00 | 38.84 |
| 1117.300000 | --- | 27.97 | 150.0 | V | 358.0 | -18.4 | 54.00 | 26.03 |
| 2708.500000 | 38.84 | --- | 150.0 | V | 243.0 | -11.5 | 74.00 | 35.16 |
| 2708.500000 | --- | 29.64 | 150.0 | V | 243.0 | -11.5 | 54.00 | 24.36 |
| 4704.300000 | 42.70 | --- | 150.0 | V | 1.0 | -5.8 | 74.00 | 31.30 |
| 4704.300000 | --- | 33.40 | 150.0 | V | 1.0 | -5.8 | 54.00 | 20.60 |
| 8259.000000 | 47.74 | --- | 150.0 | V | 352.0 | 1.6 | 74.00 | 26.26 |
| 8259.000000 | --- | 39.57 | 150.0 | V | 352.0 | 1.6 | 54.00 | 14.43 |
| 11480.500000 | --- | 38.50 | 150.0 | H | 295.0 | 2.8 | 54.00 | 15.50 |
| 11480.500000 | 46.06 | --- | 150.0 | H | 295.0 | 2.8 | 74.00 | 27.94 |
| 17495.100000 | 57.07 | --- | 150.0 | V | 283.0 | 8.9 | 68.20 | 11.13 |

**802.11a Mode-Chain1:**

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

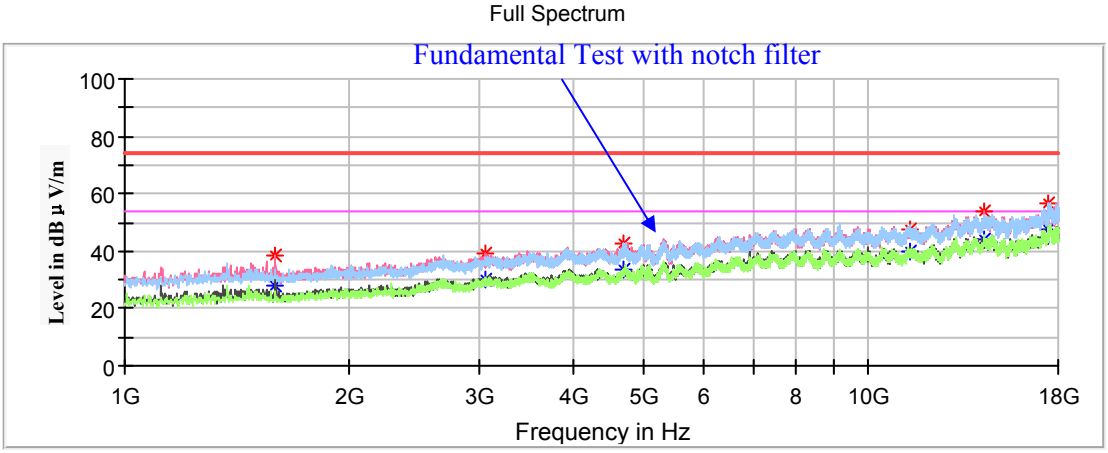
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5180MHz**



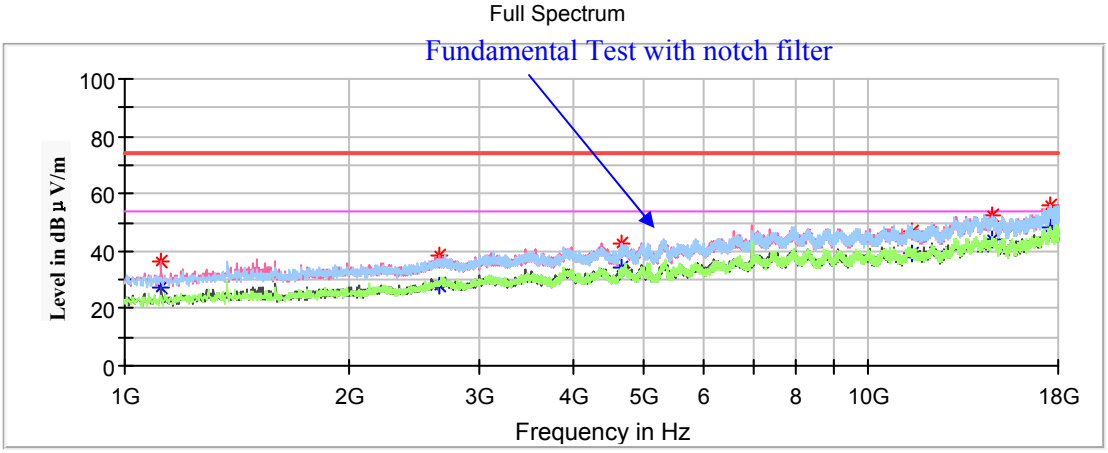

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 2130.500000 | 36.87 | --- | 150.0 | V | 83.0 | -13.9 | 68.20 | 31.33 |
| 3918.900000 | --- | 33.21 | 150.0 | H | 326.0 | -7.3 | 54.00 | 20.79 |
| 3918.900000 | 41.25 | --- | 150.0 | H | 326.0 | -7.3 | 74.00 | 32.75 |
| 6254.700000 | 45.34 | --- | 150.0 | H | 7.0 | -2.1 | 68.20 | 22.86 |
| 9166.800000 | --- | 39.42 | 150.0 | V | 210.0 | 2.0 | 54.00 | 14.58 |
| 9166.800000 | 48.08 | --- | 150.0 | V | 210.0 | 2.0 | 74.00 | 25.92 |
| 11443.100000 | --- | 39.36 | 150.0 | V | 83.0 | 2.8 | 54.00 | 14.64 |
| 11443.100000 | 49.85 | --- | 150.0 | V | 83.0 | 2.8 | 74.00 | 24.15 |
| 17583.500000 | 56.24 | --- | 150.0 | V | 45.0 | 8.9 | 68.20 | 11.96 |

**Middle Channel: 5200MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1593.300000 | 38.56 | --- | 150.0 | V | 266.0 | -16.0 | 74.00 | 35.44 |
| 1593.300000 | --- | 27.70 | 150.0 | V | 266.0 | -16.0 | 54.00 | 26.30 |
| 3058.700000 | 39.19 | --- | 150.0 | V | 200.0 | -9.9 | 68.20 | 29.01 |
| 4680.500000 | 42.45 | --- | 150.0 | V | 239.0 | -5.8 | 74.00 | 31.55 |
| 4680.500000 | --- | 33.82 | 150.0 | V | 239.0 | -5.8 | 54.00 | 20.18 |
| 11400.600000 | --- | 39.95 | 150.0 | V | 111.0 | 2.8 | 54.00 | 14.05 |
| 11400.600000 | 47.58 | --- | 150.0 | V | 111.0 | 2.8 | 74.00 | 26.42 |
| 14334.800000 | 53.97 | --- | 150.0 | V | 11.0 | 6.4 | 68.20 | 14.23 |
| 17490.000000 | 56.80 | --- | 150.0 | H | 64.0 | 8.9 | 68.20 | 11.40 |

**High Channel: 5240MHz**



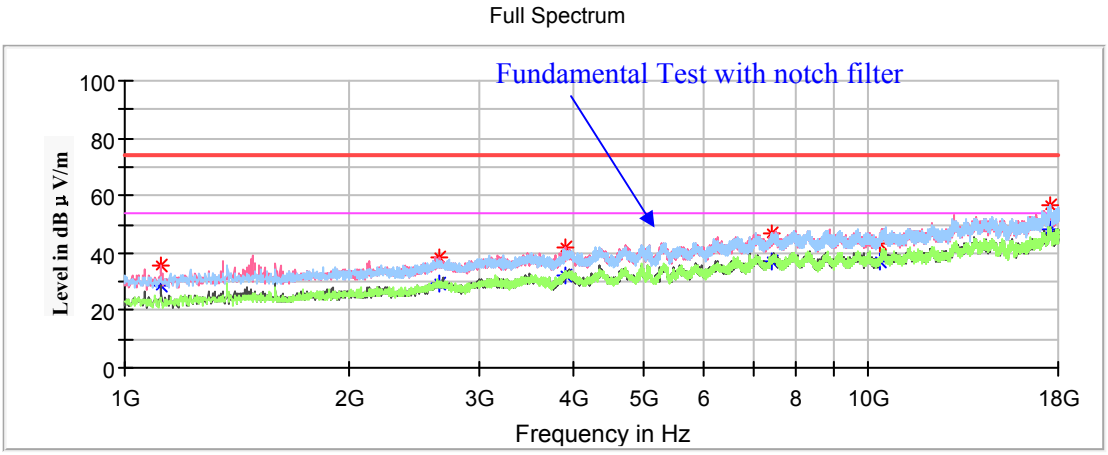

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | 36.68 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 37.32 |
| 1117.300000 | --- | 27.41 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.59 |
| 2654.100000 | 38.18 | --- | 150.0 | V | 292.0 | -11.7 | 68.20 | 30.02 |
| 4651.600000 | 42.67 | --- | 150.0 | H | 15.0 | -5.9 | 74.00 | 31.33 |
| 4651.600000 | --- | 34.07 | 150.0 | H | 15.0 | -5.9 | 54.00 | 19.93 |
| 11480.500000 | --- | 39.23 | 150.0 | V | 306.0 | 2.8 | 54.00 | 14.77 |
| 11480.500000 | 47.19 | --- | 150.0 | V | 306.0 | 2.8 | 74.00 | 26.81 |
| 14702.000000 | 52.65 | --- | 150.0 | V | 252.0 | 6.0 | 68.20 | 15.55 |
| 17513.800000 | 55.94 | --- | 150.0 | H | 346.0 | 8.9 | 68.20 | 12.26 |

***802.11ac20 Mode(Chain0+Chain1):***

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

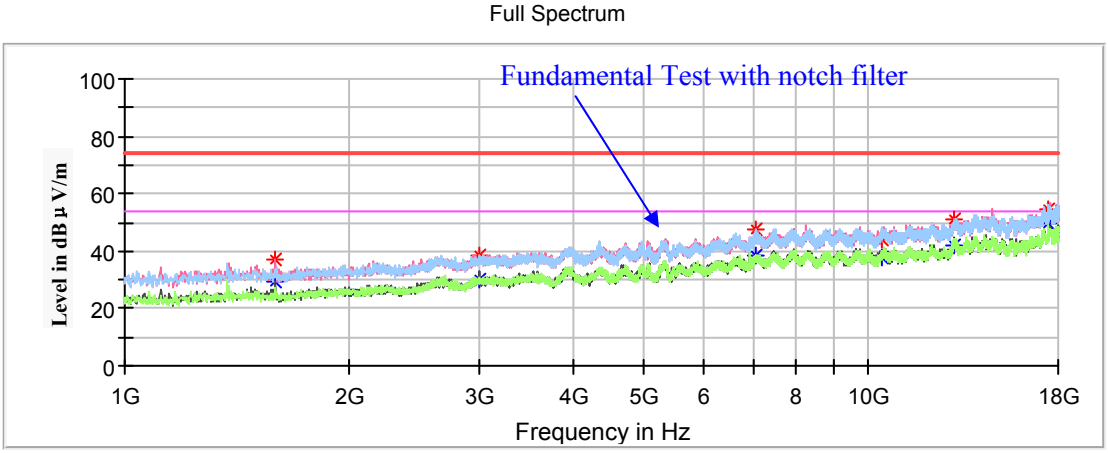
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5180MHz**



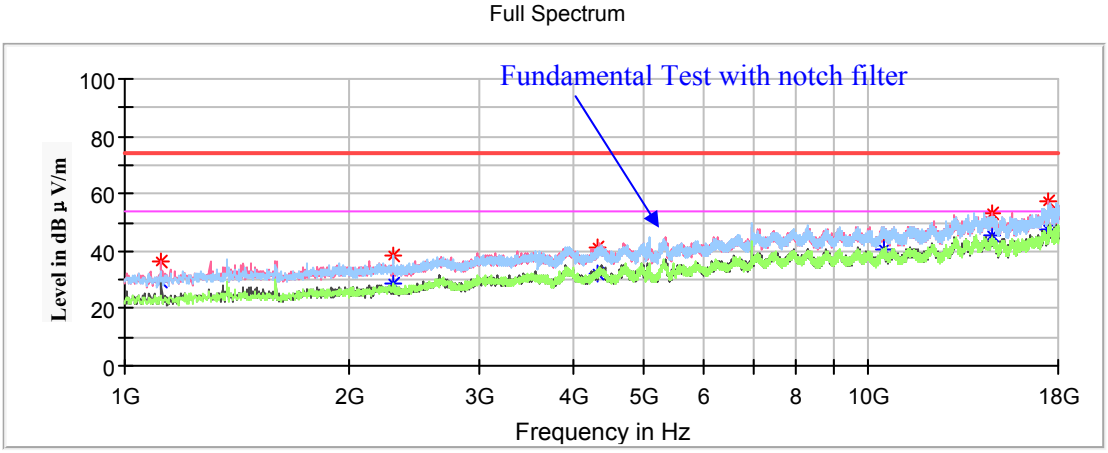

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1119.000000 | --- | 28.53 | 150.0 | V | 5.0 | -18.4 | 54.00 | 25.47 |
| 1119.000000 | 35.49 | --- | 150.0 | V | 5.0 | -18.4 | 74.00 | 38.51 |
| 2655.800000 | 38.39 | --- | 150.0 | V | 282.0 | -11.7 | 68.20 | 29.81 |
| 3920.600000 | --- | 32.15 | 150.0 | V | 178.0 | -7.3 | 54.00 | 21.85 |
| 3920.600000 | 42.27 | --- | 150.0 | V | 178.0 | -7.3 | 74.00 | 31.73 |
| 7395.400000 | --- | 37.08 | 150.0 | V | 1.0 | 0.8 | 54.00 | 16.92 |
| 7395.400000 | 46.98 | --- | 150.0 | V | 1.0 | 0.8 | 74.00 | 27.02 |
| 10360.000000 | 43.40 | --- | 150.0 | V | 1.0 | 2.2 | 68.20 | 24.80 |
| 17563.100000 | 56.58 | --- | 150.0 | V | 38.0 | 8.9 | 68.20 | 11.62 |

**Middle Channel: 5200MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1595.000000 | --- | 29.23 | 150.0 | V | 265.0 | -16.0 | 54.00 | 24.77 |
| 1595.000000 | 36.88 | --- | 150.0 | V | 265.0 | -16.0 | 74.00 | 37.12 |
| 2999.200000 | 38.71 | --- | 150.0 | H | 354.0 | -10.1 | 68.20 | 29.49 |
| 7058.800000 | 47.30 | --- | 150.0 | H | 334.0 | 0.1 | 68.20 | 20.90 |
| 10400.000000 | 43.95 | --- | 150.0 | V | 10.0 | 2.2 | 68.20 | 24.25 |
| 13025.800000 | 51.29 | --- | 150.0 | V | 252.0 | 5.2 | 68.20 | 16.91 |
| 17498.500000 | 54.36 | --- | 150.0 | V | 212.0 | 8.9 | 68.20 | 13.84 |

**High Channel: 5240MHz**



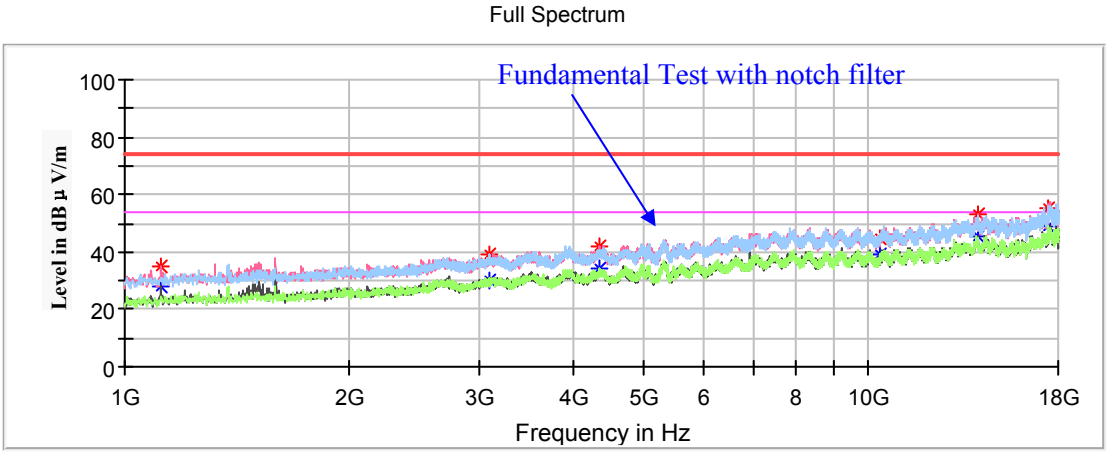

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | --- | 29.67 | 150.0 | V | 11.0 | -18.4 | 54.00 | 24.33 |
| 1117.300000 | 36.69 | --- | 150.0 | V | 11.0 | -18.4 | 74.00 | 37.31 |
| 2293.700000 | --- | 28.47 | 150.0 | H | 54.0 | -13.3 | 54.00 | 25.53 |
| 2293.700000 | 38.50 | --- | 150.0 | H | 54.0 | -13.3 | 74.00 | 35.50 |
| 4332.000000 | --- | 32.18 | 150.0 | V | 34.0 | -6.5 | 54.00 | 21.82 |
| 4332.000000 | 41.19 | --- | 150.0 | V | 34.0 | -6.5 | 74.00 | 32.81 |
| 10480.000000 | 44.89 | --- | 150.0 | H | 249.0 | 2.3 | 68.20 | 23.31 |
| 14669.700000 | 53.26 | --- | 150.0 | V | 174.0 | 6.0 | 68.20 | 14.94 |
| 17500.200000 | 57.24 | --- | 150.0 | V | 85.0 | 8.9 | 68.20 | 10.96 |

***802.11n-HT20 Mode(Chain0+Chain1):***

*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

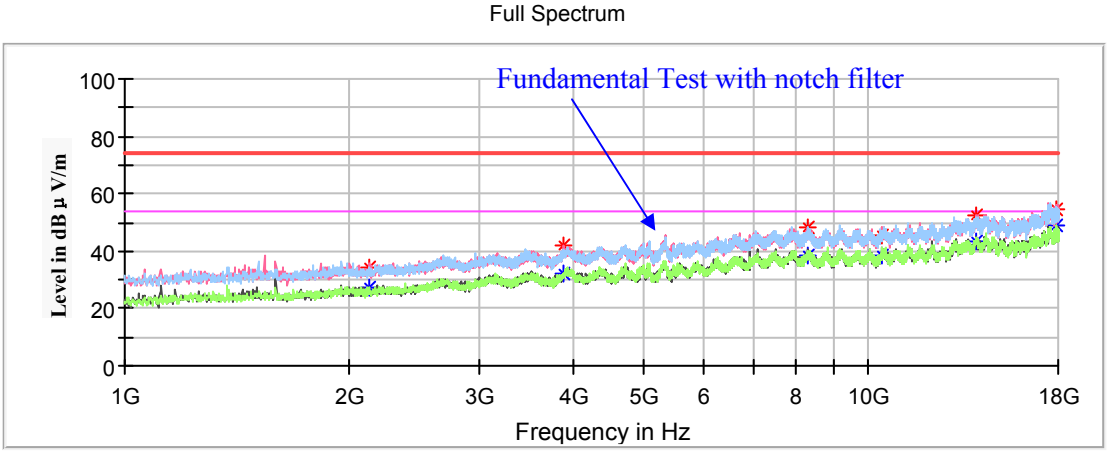
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5180MHz**



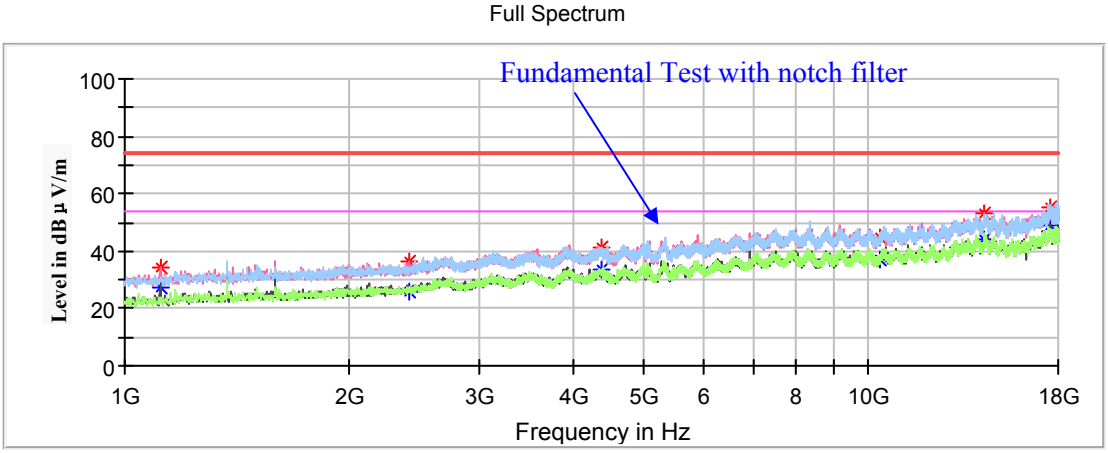

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1119.000000 | --- | 28.13 | 150.0 | V | 0.0 | -18.4 | 54.00 | 25.87 |
| 1119.000000 | 35.17 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 38.83 |
| 3096.100000 | 39.08 | --- | 150.0 | V | 61.0 | -9.9 | 68.20 | 29.12 |
| 4355.800000 | --- | 34.13 | 150.0 | V | 99.0 | -6.4 | 54.00 | 19.87 |
| 4355.800000 | 42.01 | --- | 150.0 | V | 99.0 | -6.4 | 74.00 | 31.99 |
| 10360.000000 | 44.75 | --- | 150.0 | H | 283.0 | 2.2 | 68.20 | 23.45 |
| 14013.500000 | 52.80 | --- | 150.0 | V | 280.0 | 6.2 | 68.20 | 15.40 |
| 17490.000000 | 55.10 | --- | 150.0 | H | 219.0 | 8.9 | 68.20 | 13.10 |

**Middle Channel: 5200MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 2127.100000 | 34.50 | --- | 150.0 | V | 265.0 | -13.9 | 68.20 | 33.70 |
| 3900.200000 | --- | 32.37 | 150.0 | H | 334.0 | -7.4 | 54.00 | 21.63 |
| 3900.200000 | 41.68 | --- | 150.0 | H | 334.0 | -7.4 | 74.00 | 32.32 |
| 8301.500000 | --- | 38.52 | 150.0 | V | 331.0 | 1.5 | 54.00 | 15.48 |
| 8301.500000 | 47.97 | --- | 150.0 | V | 331.0 | 1.5 | 74.00 | 26.03 |
| 10400.000000 | 45.25 | --- | 150.0 | H | 117.0 | 2.2 | 68.20 | 22.95 |
| 13942.100000 | 52.43 | --- | 150.0 | V | 9.0 | 6.1 | 68.20 | 15.77 |
| 17935.400000 | 54.28 | --- | 150.0 | V | 18.0 | 8.8 | 74.00 | 19.72 |
| 17935.400000 | --- | 48.78 | 150.0 | V | 18.0 | 8.8 | 54.00 | 5.22 |

**High Channel: 5240MHz**



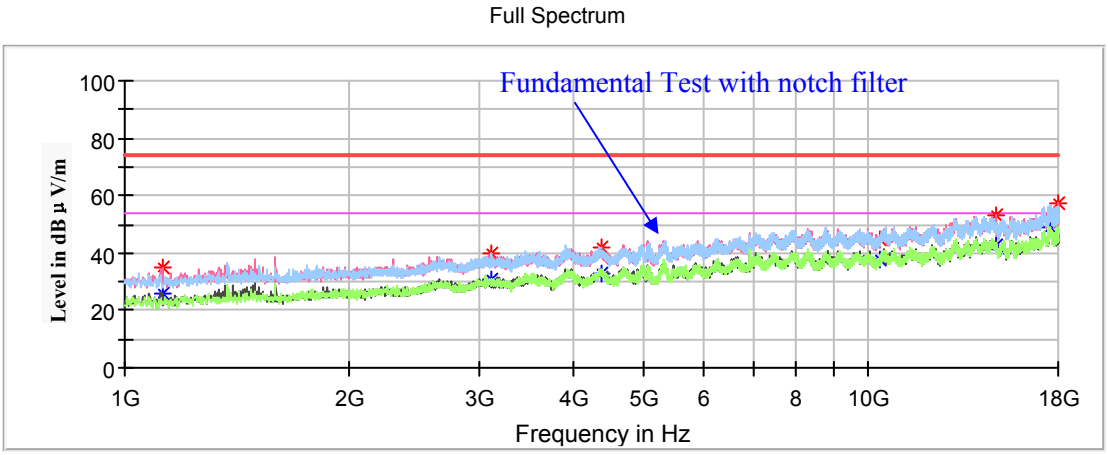

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1115.600000 | 34.60 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 39.40 |
| 1115.600000 | --- | 27.28 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.72 |
| 2411.000000 | 36.32 | --- | 150.0 | V | 26.0 | -12.8 | 68.20 | 31.88 |
| 4377.900000 | --- | 33.33 | 150.0 | V | 90.0 | -6.4 | 54.00 | 20.67 |
| 4377.900000 | 41.41 | --- | 150.0 | V | 90.0 | -6.4 | 74.00 | 32.59 |
| 10480.000000 | 44.71 | --- | 150.0 | V | 64.0 | 2.3 | 68.20 | 23.49 |
| 14348.400000 | 53.23 | --- | 150.0 | V | 14.0 | 6.4 | 68.20 | 14.97 |
| 17541.000000 | 55.55 | --- | 150.0 | H | 36.0 | 8.9 | 68.20 | 12.65 |

***802.11ac40 Mode(Chain0+Chain1):***

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

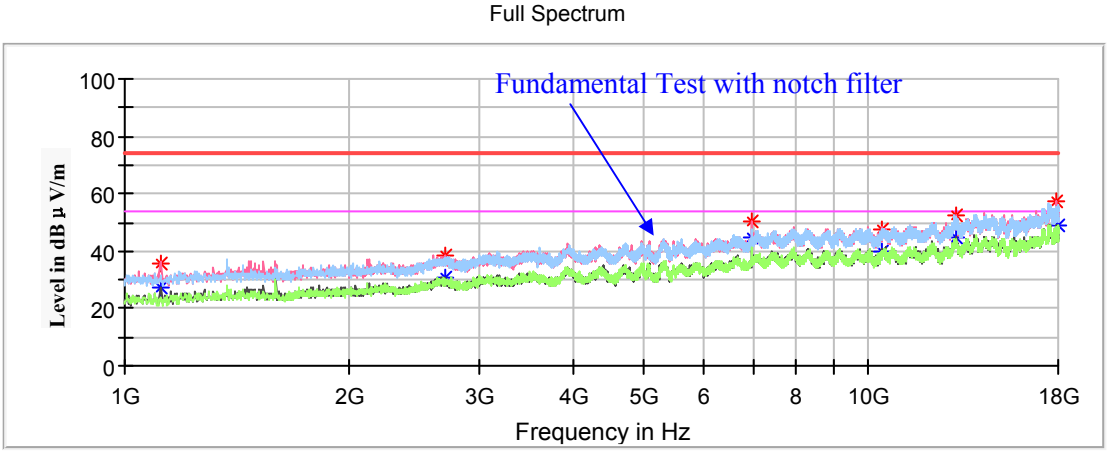
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5190MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1122.400000 | --- | 25.70 | 150.0 | V | 0.0 | -18.4 | 54.00 | 28.30 |
| 1122.400000 | 35.00 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 39.00 |
| 3113.100000 | 39.69 | --- | 150.0 | H | 301.0 | -9.8 | 68.20 | 28.51 |
| 4379.600000 | --- | 33.13 | 150.0 | V | 12.0 | -6.4 | 54.00 | 20.87 |
| 4379.600000 | 42.15 | --- | 150.0 | V | 12.0 | -6.4 | 74.00 | 31.85 |
| 10380.000000 | 44.59 | --- | 150.0 | V | 311.0 | 2.2 | 68.20 | 23.61 |
| 14814.200000 | 52.85 | --- | 150.0 | V | 4.0 | 5.6 | 68.20 | 15.35 |
| 17967.700000 | --- | 49.19 | 150.0 | H | 29.0 | 8.9 | 54.00 | 4.81 |
| 17967.700000 | 57.43 | --- | 150.0 | H | 29.0 | 8.9 | 74.00 | 16.57 |

**High Channel: 5230MHz**



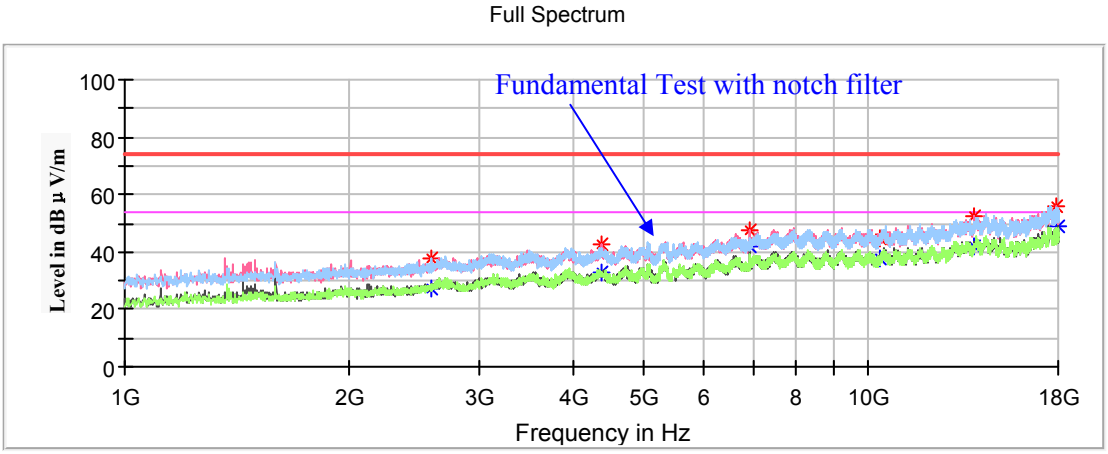

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1120.700000 | --- | 27.36 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.64 |
| 1120.700000 | 35.88 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 38.12 |
| 2701.700000 | --- | 30.57 | 150.0 | V | 352.0 | -11.5 | 54.00 | 23.43 |
| 2701.700000 | 38.60 | --- | 150.0 | V | 352.0 | -11.5 | 74.00 | 35.40 |
| 6972.100000 | 50.63 | --- | 150.0 | V | 121.0 | -0.1 | 68.20 | 17.57 |
| 10460.000000 | 47.23 | --- | 150.0 | H | 349.0 | 2.3 | 68.20 | 20.97 |
| 13122.700000 | 52.31 | --- | 150.0 | V | 96.0 | 5.3 | 68.20 | 15.89 |
| 17940.500000 | 57.19 | --- | 150.0 | V | 172.0 | 8.8 | 74.00 | 16.81 |
| 17940.500000 | --- | 49.17 | 150.0 | V | 256.0 | 8.8 | 54.00 | 4.83 |

***802.11n-HT40 Mode(Chain0+Chain1):***

*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

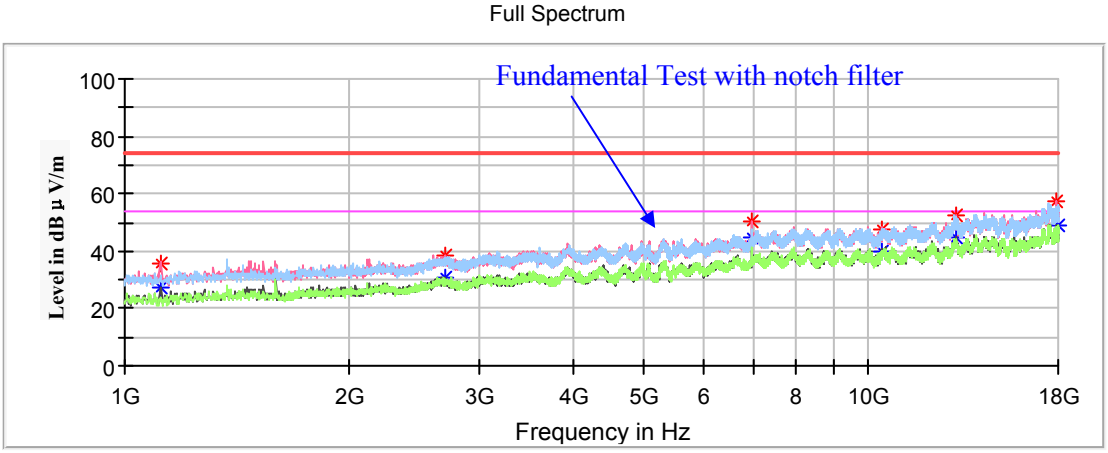
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5190MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 2579.300000 | 37.89 | --- | 150.0 | H | 169.0 | -12.1 | 68.20 | 30.31 |
| 4376.200000 | --- | 33.01 | 150.0 | H | 356.0 | -6.4 | 54.00 | 20.99 |
| 4376.200000 | 42.34 | --- | 150.0 | H | 356.0 | -6.4 | 74.00 | 31.66 |
| 6919.400000 | 47.38 | --- | 150.0 | V | 141.0 | -0.2 | 68.20 | 20.82 |
| 10380.000000 | 45.01 | --- | 150.0 | V | 345.0 | 2.2 | 68.20 | 23.19 |
| 13904.700000 | 52.11 | --- | 150.0 | V | 358.0 | 6.1 | 68.20 | 16.09 |
| 17938.800000 | 56.23 | --- | 150.0 | V | 0.0 | 8.8 | 74.00 | 17.77 |
| 17938.800000 | --- | 48.89 | 150.0 | V | 0.0 | 8.8 | 54.00 | 5.11 |

**High Channel: 5230MHz**



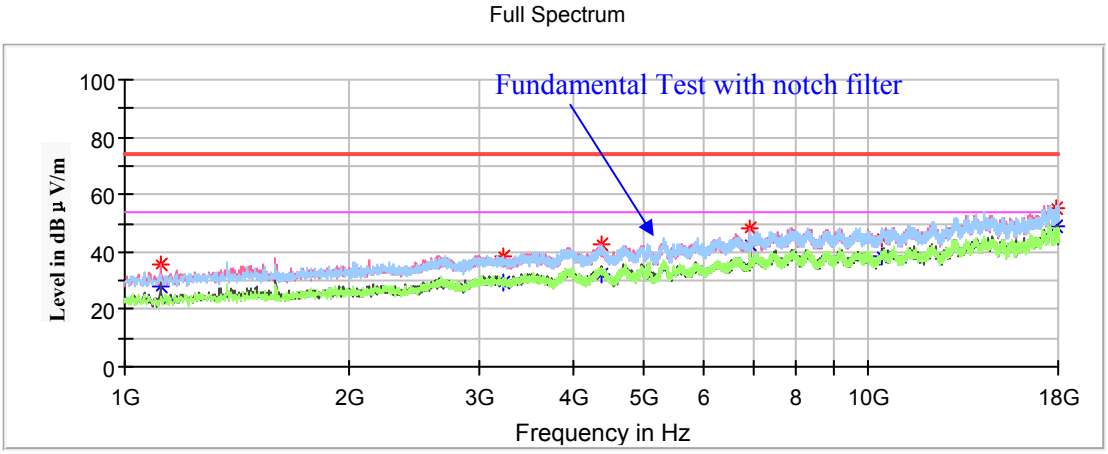

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1120.700000 | --- | 27.36 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.64 |
| 1120.700000 | 35.88 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 38.12 |
| 2701.700000 | --- | 30.57 | 150.0 | V | 352.0 | -11.5 | 54.00 | 23.43 |
| 2701.700000 | 38.60 | --- | 150.0 | V | 352.0 | -11.5 | 74.00 | 35.40 |
| 6972.100000 | 50.63 | --- | 150.0 | V | 121.0 | -0.1 | 68.20 | 17.57 |
| 10460.000000 | 47.23 | --- | 150.0 | H | 349.0 | 2.3 | 68.20 | 20.97 |
| 13122.700000 | 52.31 | --- | 150.0 | V | 96.0 | 5.3 | 68.20 | 15.89 |
| 17940.500000 | 57.19 | --- | 150.0 | V | 172.0 | 8.8 | 74.00 | 16.81 |
| 17940.500000 | --- | 49.17 | 150.0 | V | 172.0 | 8.8 | 54.00 | 4.83 |

***802.11ac80 Mode(Chain0+Chain1):***

*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5210MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | --- | 27.92 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.08 |
| 1117.300000 | 35.61 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 38.39 |
| 3220.200000 | 38.74 | --- | 150.0 | H | 0.0 | -9.5 | 68.20 | 29.46 |
| 4388.100000 | --- | 32.19 | 150.0 | H | 300.0 | -6.4 | 54.00 | 21.81 |
| 4388.100000 | 42.40 | --- | 150.0 | H | 300.0 | -6.4 | 74.00 | 31.60 |
| 6946.600000 | 48.47 | --- | 150.0 | V | 149.0 | -0.2 | 68.20 | 19.73 |
| 10420.000000 | 44.78 | --- | 150.0 | H | 313.0 | 2.3 | 68.20 | 23.42 |
| 17938.800000 | 54.91 | --- | 150.0 | H | 185.0 | 8.8 | 74.00 | 19.09 |
| 17938.800000 | --- | 48.92 | 150.0 | H | 185.0 | 8.8 | 54.00 | 5.08 |

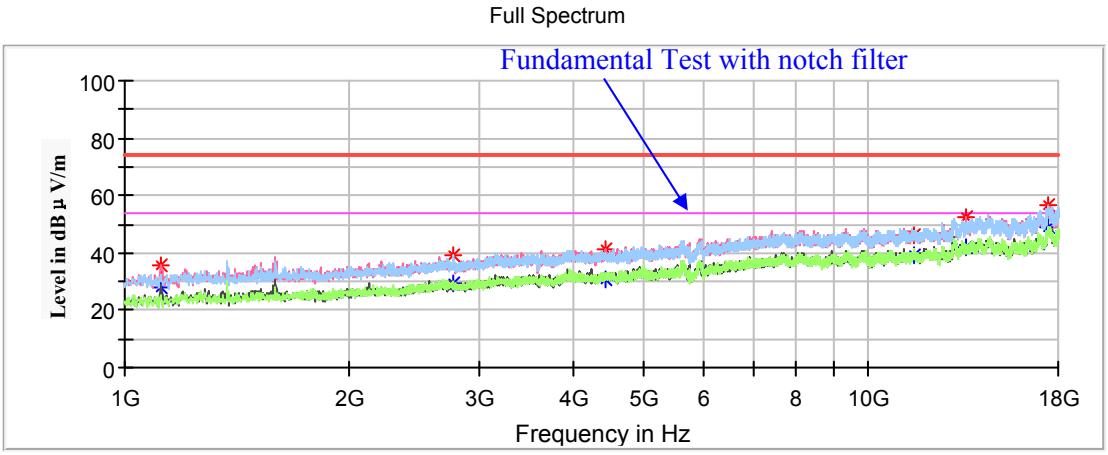
**1GHz-18GHz(5725-5850MHz Band):**

***802.11a Mode-Chain0:***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

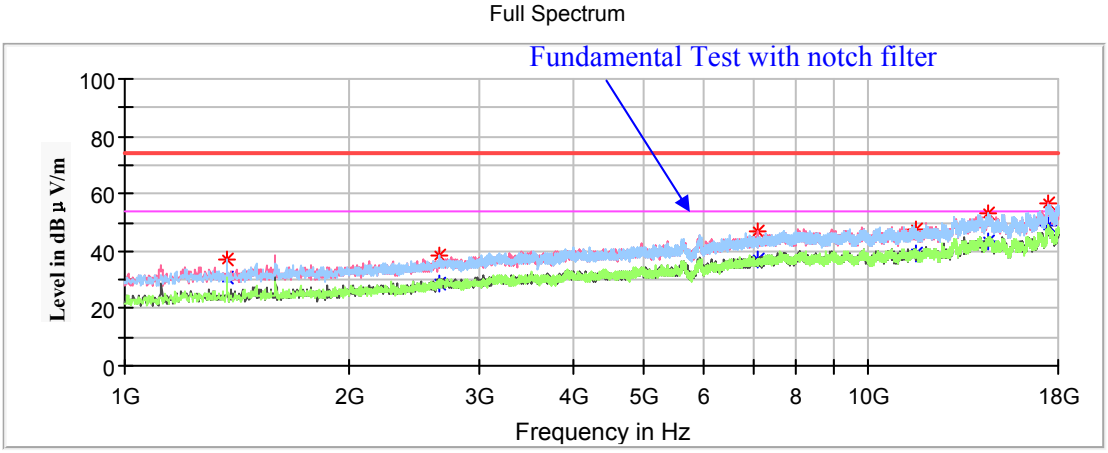
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5745MHz**



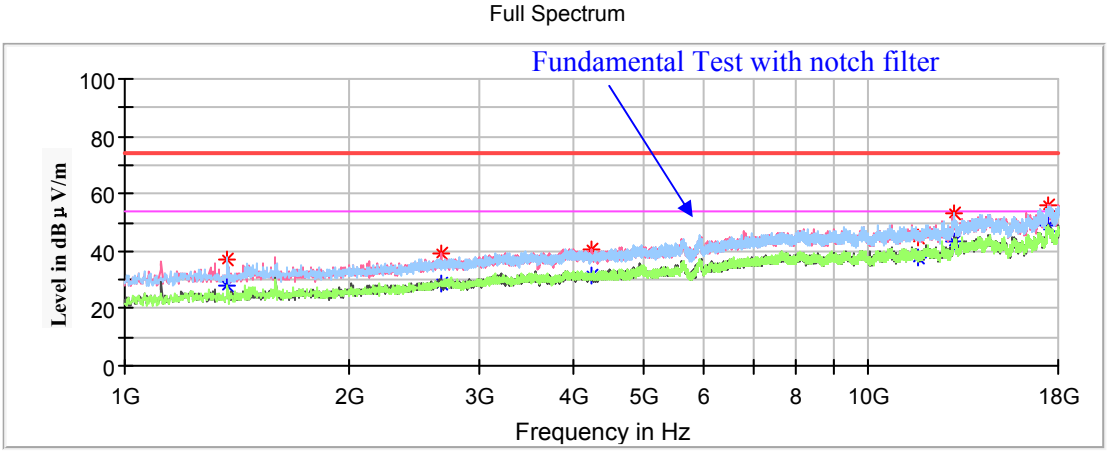

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1115.600000 | --- | 27.72 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.28 |
| 1115.600000 | 35.63 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 38.37 |
| 2766.300000 | --- | 29.32 | 150.0 | H | 0.0 | -11.2 | 54.00 | 24.68 |
| 2766.300000 | 39.28 | --- | 150.0 | H | 0.0 | -11.2 | 74.00 | 34.72 |
| 4440.800000 | 41.39 | --- | 150.0 | V | 191.0 | -6.3 | 68.20 | 26.81 |
| 11490.000000 | 45.89 | --- | 150.0 | V | 72.0 | 2.8 | 74.00 | 28.11 |
| 11490.000000 | --- | 39.01 | 150.0 | V | 72.0 | 2.8 | 54.00 | 14.99 |
| 13508.600000 | 52.47 | --- | 150.0 | V | 230.0 | 5.7 | 68.20 | 15.73 |
| 17459.400000 | 56.84 | --- | 150.0 | V | 323.0 | 8.8 | 68.20 | 11.36 |

**Middle Channel: 5785MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1372.300000 | --- | 30.47 | 150.0 | H | 282.0 | -17.1 | 54.00 | 23.53 |
| 1372.300000 | 36.79 | --- | 150.0 | H | 282.0 | -17.1 | 74.00 | 37.21 |
| 2650.700000 | 38.39 | --- | 150.0 | H | 63.0 | -11.7 | 68.20 | 29.81 |
| 7097.900000 | 46.75 | --- | 150.0 | V | 11.0 | 0.2 | 68.20 | 21.45 |
| 11570.000000 | --- | 39.25 | 150.0 | V | 22.0 | 2.8 | 54.00 | 14.75 |
| 11570.000000 | 47.82 | --- | 150.0 | V | 22.0 | 2.8 | 74.00 | 26.18 |
| 14504.800000 | 53.02 | --- | 150.0 | H | 116.0 | 6.5 | 68.20 | 15.18 |
| 17500.200000 | 56.38 | --- | 150.0 | V | 331.0 | 8.9 | 68.20 | 11.82 |

**High Channel: 5825MHz**



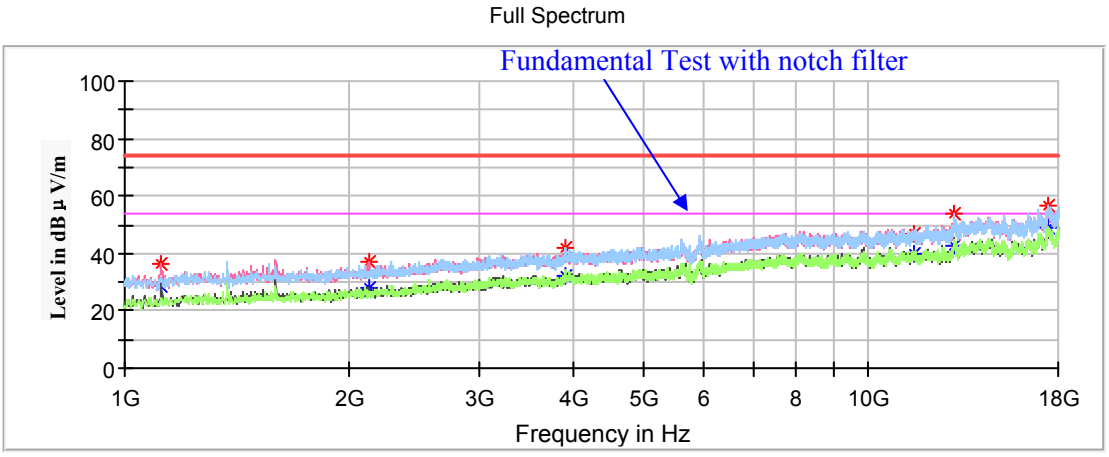

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1372.300000 | --- | 27.80 | 150.0 | H | 296.0 | -17.1 | 54.00 | 26.20 |
| 1372.300000 | 37.01 | --- | 150.0 | H | 296.0 | -17.1 | 74.00 | 36.99 |
| 2660.900000 | 38.90 | --- | 150.0 | V | 125.0 | -11.7 | 68.20 | 29.30 |
| 4238.500000 | --- | 31.78 | 150.0 | V | 1.0 | -6.6 | 54.00 | 22.22 |
| 4238.500000 | 40.71 | --- | 150.0 | V | 1.0 | -6.6 | 74.00 | 33.29 |
| 11650.000000 | --- | 37.95 | 150.0 | V | 87.0 | 2.8 | 54.00 | 16.05 |
| 11650.000000 | 44.54 | --- | 150.0 | V | 87.0 | 2.8 | 74.00 | 29.46 |
| 13054.700000 | 53.09 | --- | 150.0 | H | 245.0 | 5.3 | 68.20 | 15.11 |
| 17445.800000 | 56.29 | --- | 150.0 | V | 112.0 | 8.7 | 68.20 | 11.91 |

***802.11a Mode-Chain1:***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

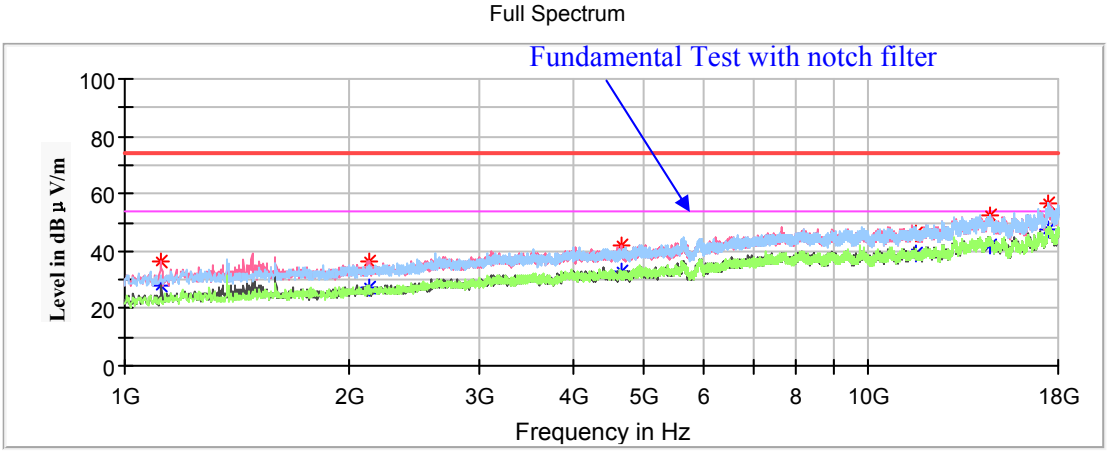
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5745MHz**



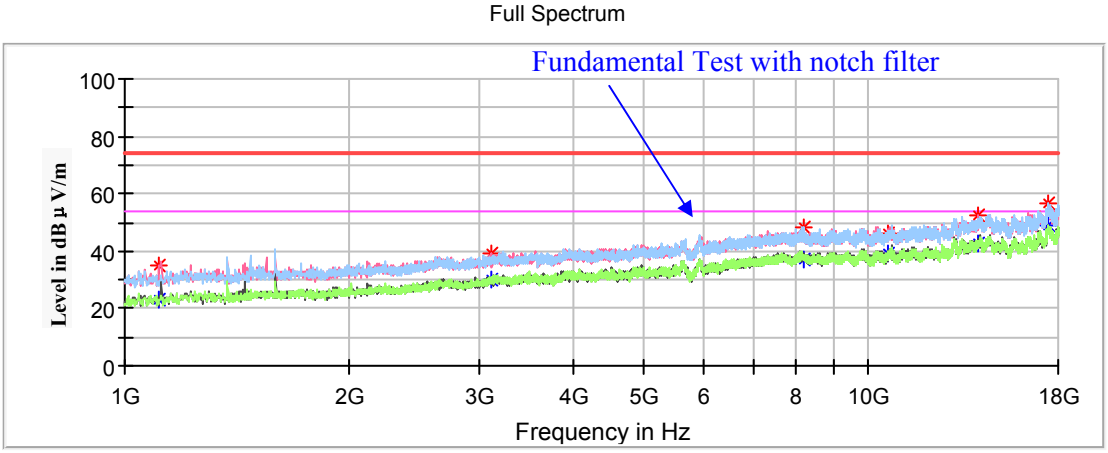

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | --- | 28.98 | 150.0 | V | 4.0 | -18.4 | 54.00 | 25.02 |
| 1117.300000 | 36.09 | --- | 150.0 | V | 4.0 | -18.4 | 74.00 | 37.91 |
| 2125.400000 | 37.28 | --- | 150.0 | V | 271.0 | -14.0 | 68.20 | 30.92 |
| 3917.200000 | --- | 32.50 | 150.0 | H | 63.0 | -7.3 | 54.00 | 21.50 |
| 3917.200000 | 41.70 | --- | 150.0 | H | 63.0 | -7.3 | 74.00 | 32.30 |
| 11490.000000 | --- | 40.08 | 150.0 | H | 36.0 | 2.8 | 54.00 | 13.92 |
| 11490.000000 | 47.10 | --- | 150.0 | H | 36.0 | 2.8 | 74.00 | 26.90 |
| 13054.700000 | 53.52 | --- | 150.0 | H | 2.0 | 5.3 | 68.20 | 14.68 |
| 17444.100000 | 56.92 | --- | 150.0 | H | 356.0 | 8.7 | 68.20 | 11.28 |

**Middle Channel: 5785MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | --- | 28.01 | 150.0 | V | 1.0 | -18.4 | 54.00 | 25.99 |
| 1117.300000 | 36.28 | --- | 150.0 | V | 1.0 | -18.4 | 74.00 | 37.72 |
| 2128.800000 | 36.65 | --- | 150.0 | V | 270.0 | -13.9 | 68.20 | 31.55 |
| 4643.100000 | --- | 33.14 | 150.0 | V | 345.0 | -5.9 | 54.00 | 20.86 |
| 4643.100000 | 42.16 | --- | 150.0 | V | 345.0 | -5.9 | 74.00 | 31.84 |
| 11570.000000 | 46.13 | --- | 150.0 | V | 116.0 | 2.8 | 74.00 | 27.87 |
| 11570.000000 | --- | 38.95 | 150.0 | V | 116.0 | 2.8 | 54.00 | 15.05 |
| 14572.800000 | 52.74 | --- | 150.0 | H | 334.0 | 6.3 | 68.20 | 15.46 |
| 17486.600000 | 56.57 | --- | 150.0 | V | 65.0 | 8.8 | 68.20 | 11.63 |

**High Channel: 5825MHz**



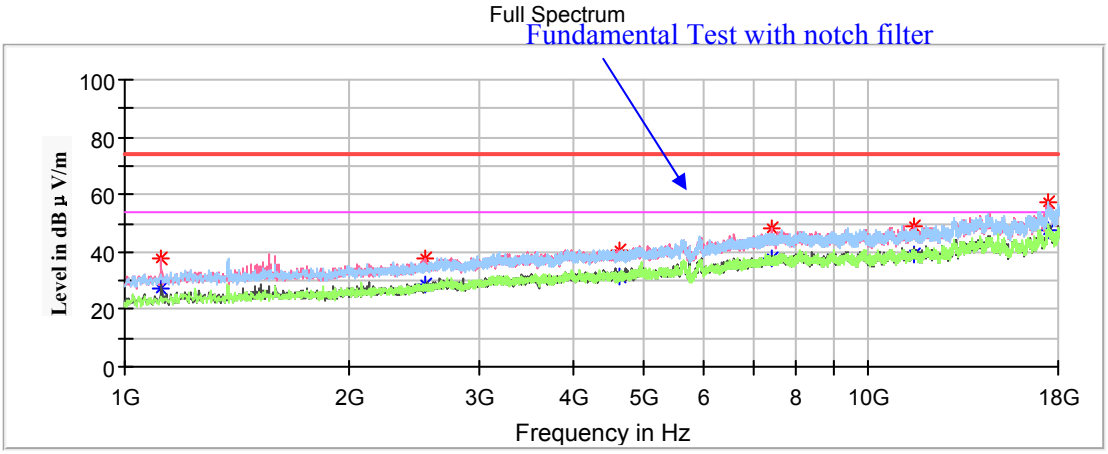

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1113.900000 | --- | 23.15 | 150.0 | V | 0.0 | -18.5 | 54.00 | 30.85 |
| 1113.900000 | 35.21 | --- | 150.0 | V | 0.0 | -18.5 | 74.00 | 38.79 |
| 3118.200000 | 39.19 | --- | 150.0 | V | 150.0 | -9.8 | 68.20 | 29.01 |
| 8168.900000 | --- | 37.00 | 150.0 | V | 73.0 | 1.6 | 54.00 | 17.00 |
| 8168.900000 | 48.18 | --- | 150.0 | V | 73.0 | 1.6 | 74.00 | 25.82 |
| 11650.000000 | --- | 38.91 | 150.0 | H | 345.0 | 2.8 | 54.00 | 15.09 |
| 11650.000000 | 46.06 | --- | 150.0 | H | 345.0 | 2.8 | 74.00 | 27.94 |
| 14027.100000 | 52.49 | --- | 150.0 | V | 266.0 | 6.2 | 68.20 | 15.71 |
| 17456.000000 | 56.71 | --- | 150.0 | H | 206.0 | 8.7 | 68.20 | 11.49 |

***802.11ac20 Mode(Chain0+Chain1):***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

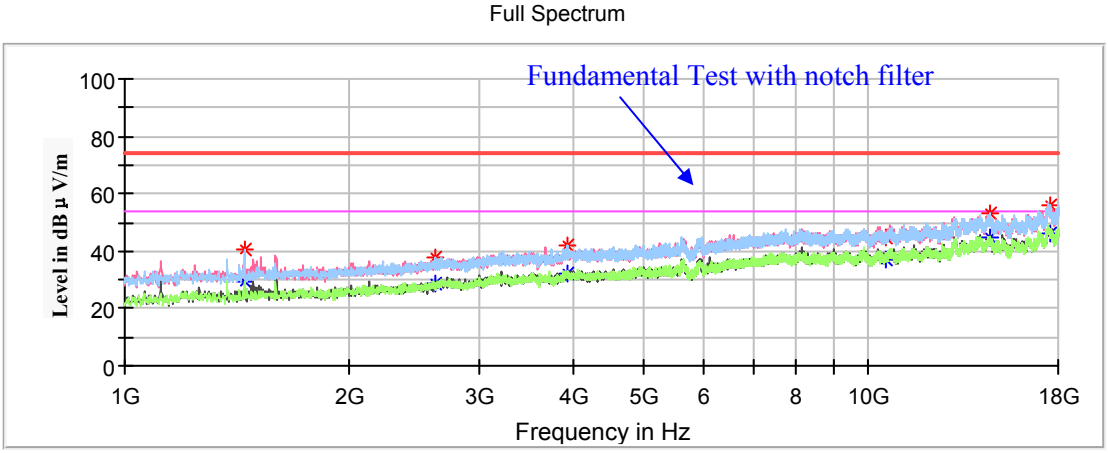
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5745MHz**



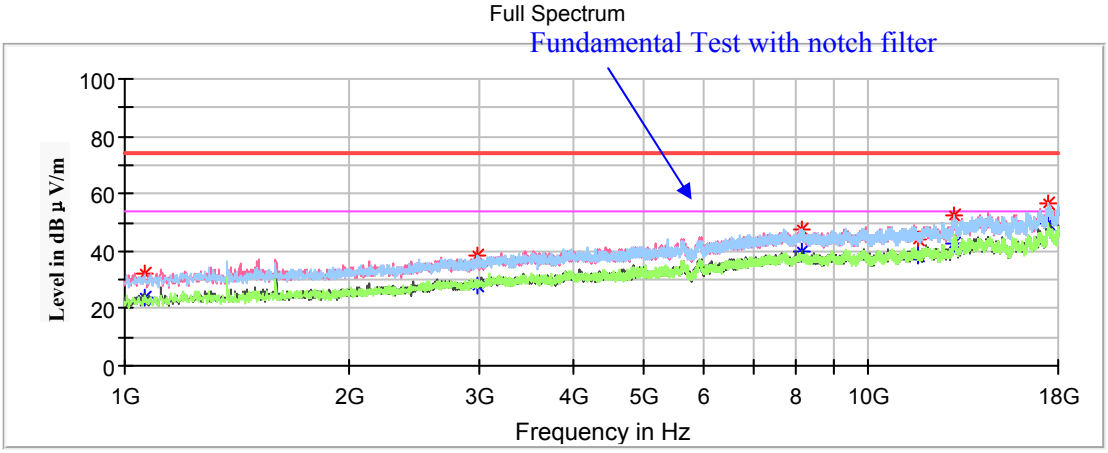

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | --- | 27.06 | 150.0 | V | 358.0 | -18.4 | 54.00 | 26.94 |
| 1117.300000 | 37.55 | --- | 150.0 | V | 358.0 | -18.4 | 74.00 | 36.45 |
| 2541.900000 | 37.97 | --- | 150.0 | V | 48.0 | -12.2 | 68.20 | 30.23 |
| 4617.600000 | --- | 31.39 | 150.0 | H | 348.0 | -6.0 | 54.00 | 22.61 |
| 4617.600000 | 40.79 | --- | 150.0 | H | 348.0 | -6.0 | 74.00 | 33.21 |
| 7412.400000 | --- | 37.52 | 150.0 | V | 61.0 | 0.8 | 54.00 | 16.48 |
| 7412.400000 | 48.09 | --- | 150.0 | V | 61.0 | 0.8 | 74.00 | 25.91 |
| 11490.000000 | 48.86 | --- | 150.0 | V | 124.0 | 2.8 | 74.00 | 25.14 |
| 11490.000000 | --- | 39.25 | 150.0 | V | 124.0 | 2.8 | 54.00 | 14.75 |
| 17418.600000 | 57.11 | --- | 150.0 | H | 299.0 | 8.6 | 68.20 | 11.09 |

**Middle Channel: 5785MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1447.100000 | --- | 29.65 | 150.0 | H | 207.0 | -16.6 | 54.00 | 24.35 |
| 1447.100000 | 40.80 | --- | 150.0 | H | 207.0 | -16.6 | 74.00 | 33.20 |
| 2611.600000 | 37.88 | --- | 150.0 | H | 271.0 | -11.9 | 68.20 | 30.32 |
| 3947.800000 | --- | 31.98 | 150.0 | H | 258.0 | -7.2 | 54.00 | 22.02 |
| 3947.800000 | 41.87 | --- | 150.0 | H | 258.0 | -7.2 | 74.00 | 32.13 |
| 11570.000000 | 44.99 | --- | 150.0 | H | 195.0 | 2.8 | 74.00 | 29.01 |
| 11570.000000 | --- | 37.28 | 150.0 | H | 195.0 | 2.8 | 54.00 | 16.72 |
| 14593.200000 | 53.02 | --- | 150.0 | H | 130.0 | 6.3 | 68.20 | 15.18 |
| 17595.400000 | 56.09 | --- | 150.0 | V | 200.0 | 8.9 | 68.20 | 12.11 |

**High Channel: 5825MHz**



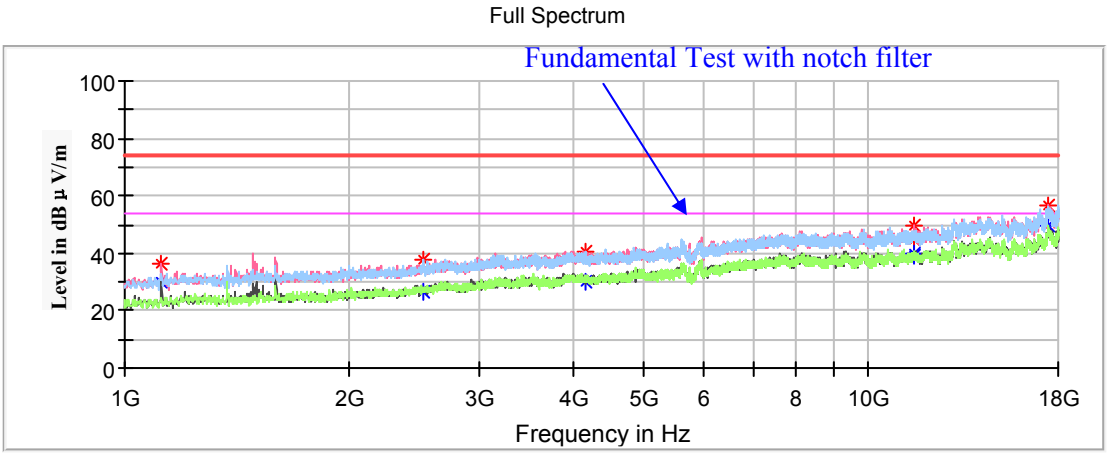

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1064.600000 | --- | 23.69 | 150.0 | V | 117.0 | -18.7 | 54.00 | 30.31 |
| 1064.600000 | 32.26 | --- | 150.0 | V | 117.0 | -18.7 | 74.00 | 41.74 |
| 2977.100000 | 38.20 | --- | 150.0 | H | 194.0 | -10.2 | 68.20 | 30.00 |
| 8133.200000 | --- | 39.96 | 150.0 | V | 142.0 | 1.7 | 54.00 | 14.04 |
| 8133.200000 | 47.58 | --- | 150.0 | V | 142.0 | 1.7 | 74.00 | 26.42 |
| 11650.000000 | --- | 38.21 | 150.0 | H | 308.0 | 2.8 | 54.00 | 15.79 |
| 11650.000000 | 44.38 | --- | 150.0 | H | 308.0 | 2.8 | 74.00 | 29.62 |
| 13059.800000 | 52.73 | --- | 150.0 | H | 244.0 | 5.3 | 68.20 | 15.47 |
| 17488.300000 | 56.78 | --- | 150.0 | V | 16.0 | 8.8 | 68.20 | 11.42 |

***802.11n-HT20 Mode(Chain0+Chain1):***

*(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)*

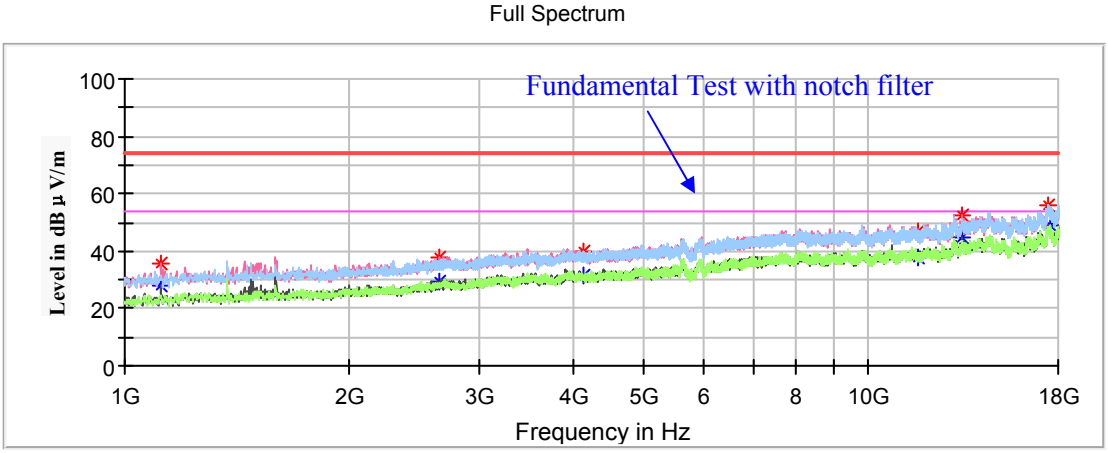
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5745MHz**



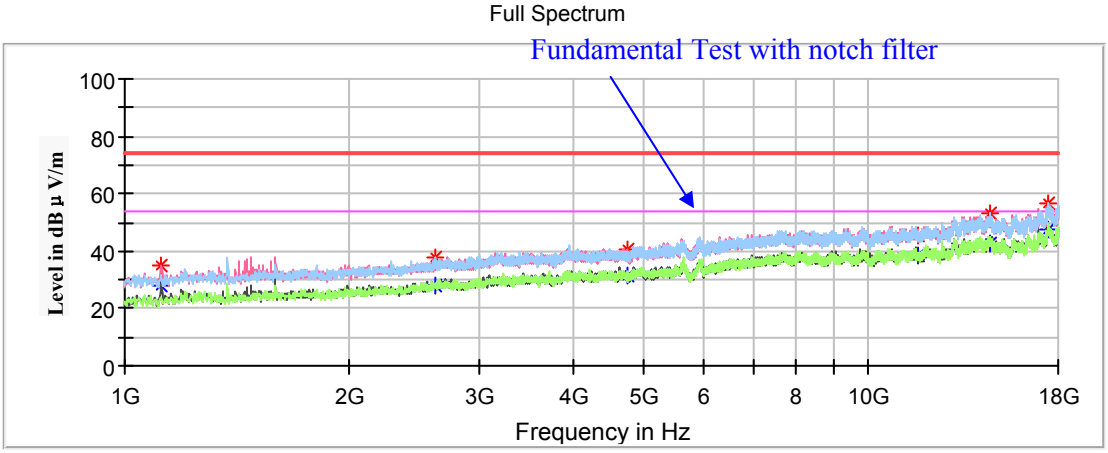

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1120.700000 | 36.08 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 37.92 |
| 1120.700000 | --- | 30.36 | 150.0 | V | 0.0 | -18.4 | 54.00 | 23.64 |
| 2524.900000 | 37.84 | --- | 150.0 | H | 104.0 | -12.3 | 68.20 | 30.36 |
| 4163.700000 | 40.79 | --- | 150.0 | H | 207.0 | -6.7 | 74.00 | 33.21 |
| 4163.700000 | --- | 30.36 | 150.0 | H | 207.0 | -6.7 | 54.00 | 23.64 |
| 11490.000000 | 44.71 | --- | 150.0 | V | 6.0 | 2.8 | 74.00 | 29.29 |
| 11490.000000 | --- | 39.08 | 150.0 | V | 6.0 | 2.8 | 54.00 | 14.92 |
| 11550.200000 | 49.75 | --- | 150.0 | V | 116.0 | 2.9 | 74.00 | 24.25 |
| 11550.200000 | --- | 39.83 | 150.0 | V | 116.0 | 2.9 | 54.00 | 14.17 |
| 17459.400000 | 56.88 | --- | 150.0 | V | 180.0 | 8.8 | 68.20 | 11.32 |

**Middle Channel: 5785MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1117.300000 | --- | 27.63 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.37 |
| 1117.300000 | 35.69 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 38.31 |
| 2654.100000 | 37.69 | --- | 150.0 | V | 1.0 | -11.7 | 68.20 | 30.51 |
| 4146.700000 | --- | 31.39 | 150.0 | V | 40.0 | -6.8 | 54.00 | 22.61 |
| 4146.700000 | 40.08 | --- | 150.0 | V | 40.0 | -6.8 | 74.00 | 33.92 |
| 11570.000000 | --- | 37.52 | 150.0 | V | 271.0 | 2.8 | 54.00 | 16.48 |
| 11570.000000 | 46.88 | --- | 150.0 | V | 271.0 | 2.8 | 74.00 | 27.12 |
| 13382.800000 | --- | 44.66 | 150.0 | V | 258.0 | 5.6 | 54.00 | 9.34 |
| 13382.800000 | 52.72 | --- | 150.0 | V | 258.0 | 5.6 | 74.00 | 21.28 |
| 17496.800000 | 56.23 | --- | 150.0 | H | 168.0 | 8.9 | 68.20 | 11.97 |

**High Channel: 5825MHz**



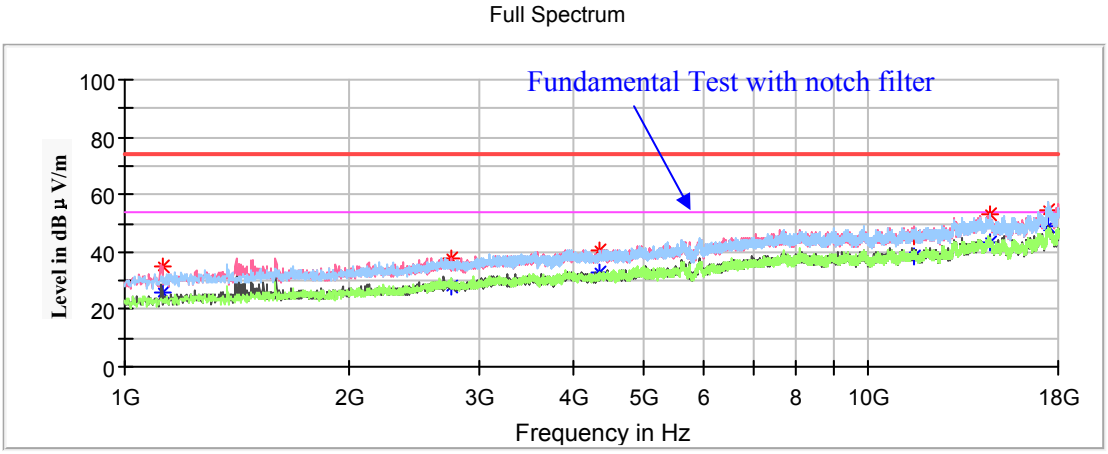

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1120.700000 | --- | 27.79 | 150.0 | V | 0.0 | -18.4 | 54.00 | 26.21 |
| 1120.700000 | 35.19 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 38.81 |
| 2616.700000 | 37.91 | --- | 150.0 | H | 224.0 | -11.9 | 68.20 | 30.29 |
| 4729.800000 | --- | 31.75 | 150.0 | V | 23.0 | -5.7 | 54.00 | 22.25 |
| 4729.800000 | 40.71 | --- | 150.0 | V | 23.0 | -5.7 | 74.00 | 33.29 |
| 11650.000000 | --- | 38.60 | 150.0 | V | 142.0 | 2.8 | 54.00 | 15.40 |
| 11650.000000 | 45.41 | --- | 150.0 | V | 142.0 | 2.8 | 74.00 | 28.59 |
| 14586.400000 | 53.29 | --- | 150.0 | H | 275.0 | 6.3 | 68.20 | 14.91 |
| 17450.900000 | 56.65 | --- | 150.0 | V | 53.0 | 8.7 | 68.20 | 11.55 |

***802.11ac40 Mode(Chain0+Chain1):***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

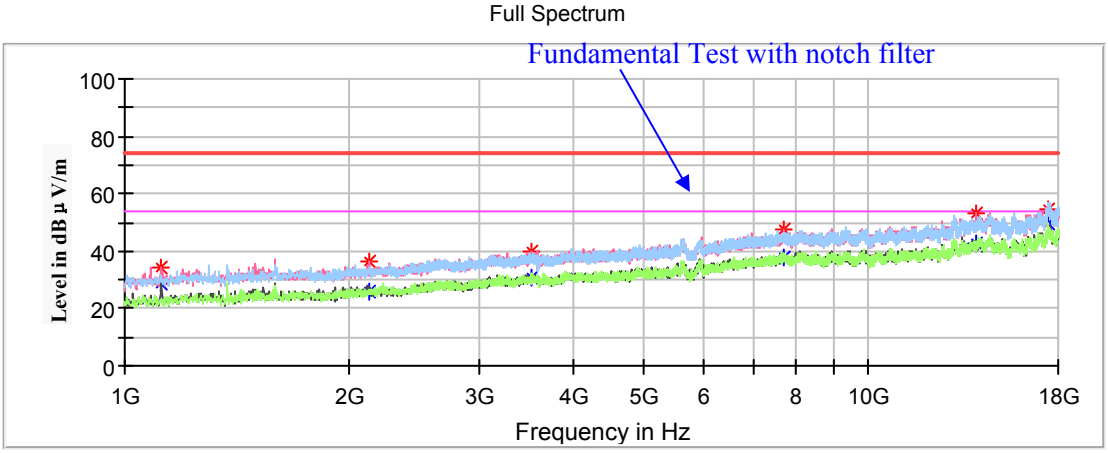
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5755MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1122.400000 | --- | 25.67 | 150.0 | V | 7.0 | -18.4 | 54.00 | 28.33 |
| 1122.400000 | 34.84 | --- | 150.0 | V | 7.0 | -18.4 | 74.00 | 39.16 |
| 2742.500000 | --- | 28.22 | 150.0 | H | 218.0 | -11.3 | 54.00 | 25.78 |
| 2742.500000 | 37.88 | --- | 150.0 | H | 218.0 | -11.3 | 74.00 | 36.12 |
| 4362.600000 | --- | 32.66 | 150.0 | V | 211.0 | -6.4 | 54.00 | 21.34 |
| 4362.600000 | 40.81 | --- | 150.0 | V | 211.0 | -6.4 | 74.00 | 33.19 |
| 11510.000000 | 45.79 | --- | 150.0 | V | 356.0 | 2.8 | 74.00 | 28.21 |
| 11510.000000 | --- | 38.71 | 150.0 | V | 356.0 | 2.8 | 54.00 | 15.29 |
| 14567.700000 | 52.85 | --- | 150.0 | H | 27.0 | 6.3 | 68.20 | 15.35 |
| 17464.500000 | 54.45 | --- | 150.0 | V | 108.0 | 8.8 | 68.20 | 13.75 |

**High Channel: 5795MHz**



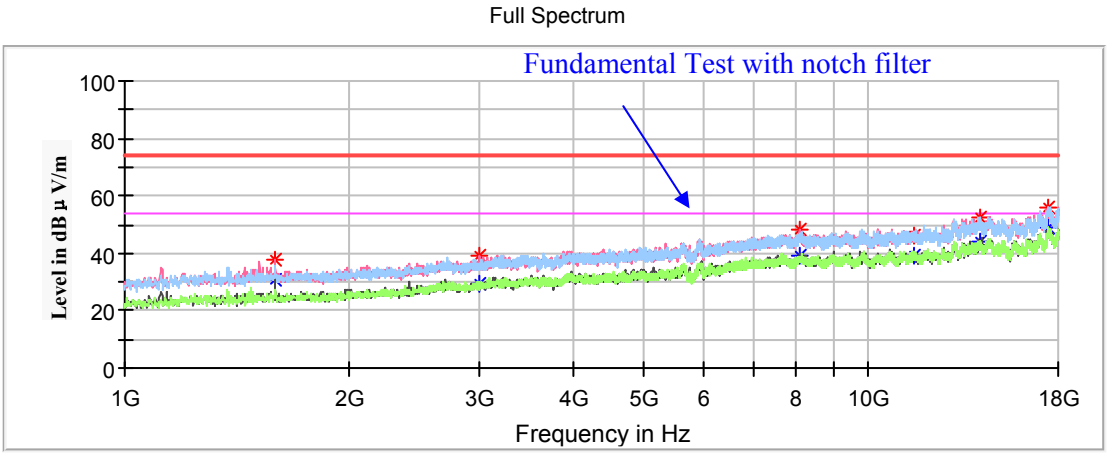

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1120.700000 | --- | 28.54 | 150.0 | V | 0.0 | -18.4 | 54.00 | 25.46 |
| 1120.700000 | 34.49 | --- | 150.0 | V | 0.0 | -18.4 | 74.00 | 39.51 |
| 2128.800000 | 36.19 | --- | 150.0 | V | 85.0 | -13.9 | 68.20 | 32.01 |
| 3529.600000 | 39.85 | --- | 150.0 | V | 85.0 | -8.7 | 68.20 | 28.35 |
| 7677.600000 | --- | 38.02 | 150.0 | V | 60.0 | 1.3 | 54.00 | 15.98 |
| 7677.600000 | 47.50 | --- | 150.0 | V | 60.0 | 1.3 | 74.00 | 26.50 |
| 13996.500000 | 52.90 | --- | 150.0 | V | 266.0 | 6.1 | 68.20 | 15.30 |
| 17478.100000 | 54.67 | --- | 150.0 | V | 252.0 | 8.8 | 68.20 | 13.53 |

***802.11n-HT40 Mode(Chain0+Chain1):***

*(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)*

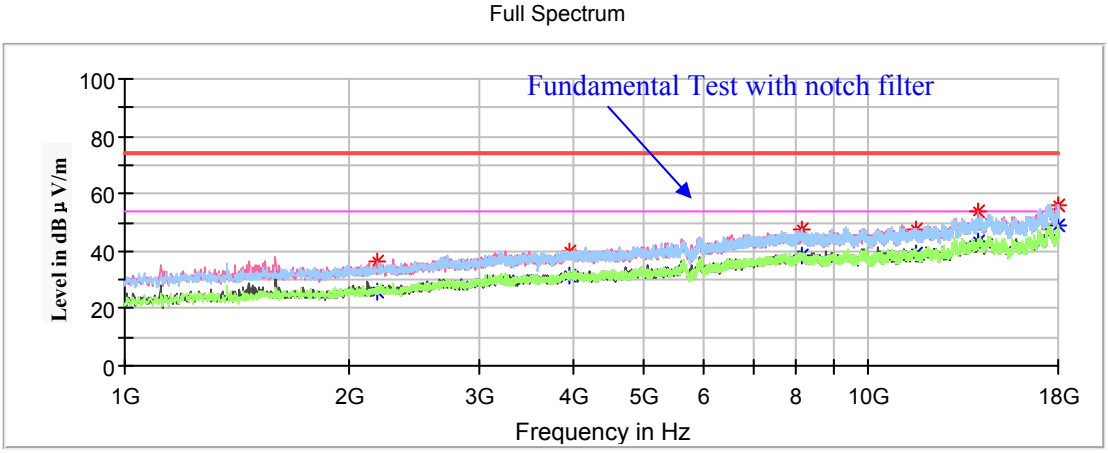
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5755MHz**




| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1593.300000 | --- | 30.81 | 150.0 | V | 257.0 | -16.0 | 54.00 | 23.19 |
| 1593.300000 | 37.72 | --- | 150.0 | V | 257.0 | -16.0 | 74.00 | 36.28 |
| 3006.000000 | 38.99 | --- | 150.0 | V | 128.0 | -10.1 | 68.20 | 29.21 |
| 8080.500000 | --- | 39.21 | 150.0 | V | 0.0 | 1.7 | 54.00 | 14.79 |
| 8080.500000 | 47.93 | --- | 150.0 | V | 0.0 | 1.7 | 74.00 | 26.07 |
| 11510.000000 | --- | 39.23 | 150.0 | V | 64.0 | 2.8 | 54.00 | 14.77 |
| 11510.000000 | 46.03 | --- | 150.0 | V | 64.0 | 2.8 | 74.00 | 27.97 |
| 14118.900000 | 52.70 | --- | 150.0 | H | 0.0 | 6.2 | 68.20 | 15.50 |
| 17462.800000 | 55.63 | --- | 150.0 | V | 90.0 | 8.8 | 68.20 | 12.57 |

**High Channel: 5795MHz**



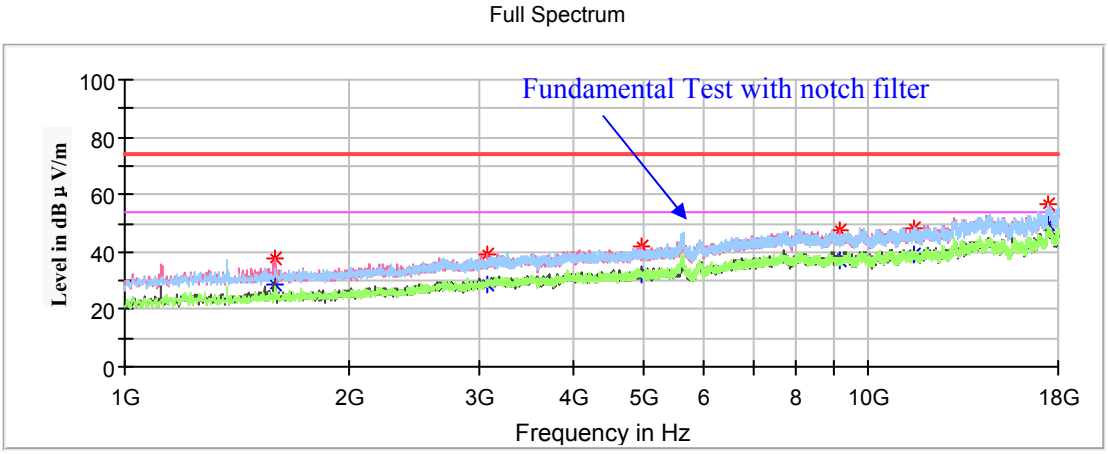

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 2190.000000 | 36.32 | --- | 150.0 | V | 157.0 | -13.7 | 68.20 | 31.88 |
| 3954.600000 | --- | 31.66 | 150.0 | V | 8.0 | -7.2 | 54.00 | 22.34 |
| 3954.600000 | 40.20 | --- | 150.0 | V | 8.0 | -7.2 | 74.00 | 33.80 |
| 8160.400000 | --- | 38.61 | 150.0 | V | 221.0 | 1.7 | 54.00 | 15.39 |
| 8160.400000 | 47.40 | --- | 150.0 | V | 221.0 | 1.7 | 74.00 | 26.60 |
| 11590.000000 | --- | 39.00 | 150.0 | V | 335.0 | 2.8 | 54.00 | 15.00 |
| 11590.000000 | 47.87 | --- | 150.0 | V | 335.0 | 2.8 | 74.00 | 26.13 |
| 14023.700000 | 53.54 | --- | 150.0 | V | 335.0 | 6.2 | 68.20 | 14.66 |
| 17966.000000 | --- | 49.06 | 150.0 | H | 358.0 | 8.8 | 54.00 | 4.94 |
| 17966.000000 | 56.25 | --- | 150.0 | H | 358.0 | 8.8 | 74.00 | 17.75 |

***802.11ac80 Mode(Chain0+Chain1):***

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

**Low Channel: 5775MHz**

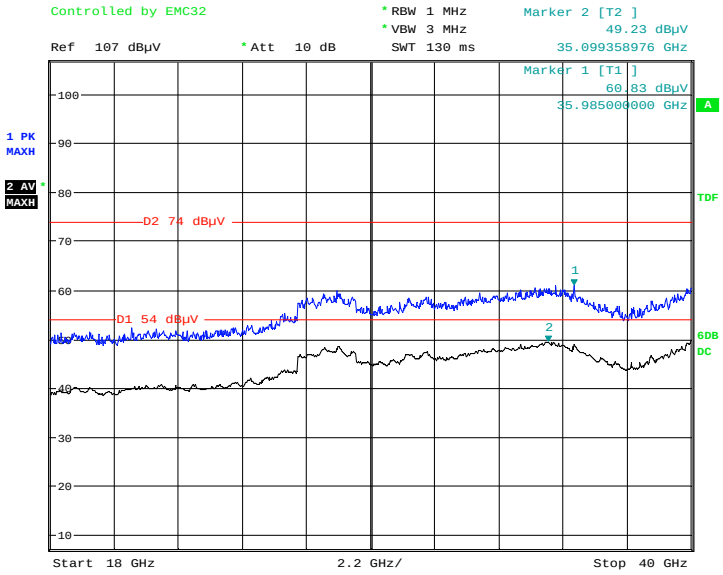



| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| 1596.700000 | --- | 28.68 | 150.0 | V | 244.0 | -16.0 | 54.00 | 25.32 |
| 1596.700000 | 38.00 | --- | 150.0 | V | 244.0 | -16.0 | 74.00 | 36.00 |
| 3080.800000 | 39.20 | --- | 150.0 | V | 179.0 | -9.9 | 68.20 | 29.00 |
| 4949.100000 | --- | 31.95 | 150.0 | V | 0.0 | -5.3 | 54.00 | 22.05 |
| 4949.100000 | 42.25 | --- | 150.0 | V | 0.0 | -5.3 | 74.00 | 31.75 |
| 9129.400000 | --- | 37.33 | 150.0 | V | 204.0 | 1.9 | 54.00 | 16.67 |
| 9129.400000 | 47.31 | --- | 150.0 | V | 204.0 | 1.9 | 74.00 | 26.69 |
| 11550.000000 | --- | 39.16 | 150.0 | H | 90.0 | 2.8 | 54.00 | 14.84 |
| 11550.000000 | 47.94 | --- | 150.0 | H | 90.0 | 2.8 | 74.00 | 26.06 |
| 17452.600000 | 56.75 | --- | 150.0 | H | 52.0 | 8.7 | 68.20 | 11.45 |

**18GHz-40GHz(5150-5250MHz Band):**

*Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X, Y and Z axes of orientation,* ***the worst case 802.11ac20 mode high channel*** *in Z-axis of orientation was recorded.*

**Horizontal**

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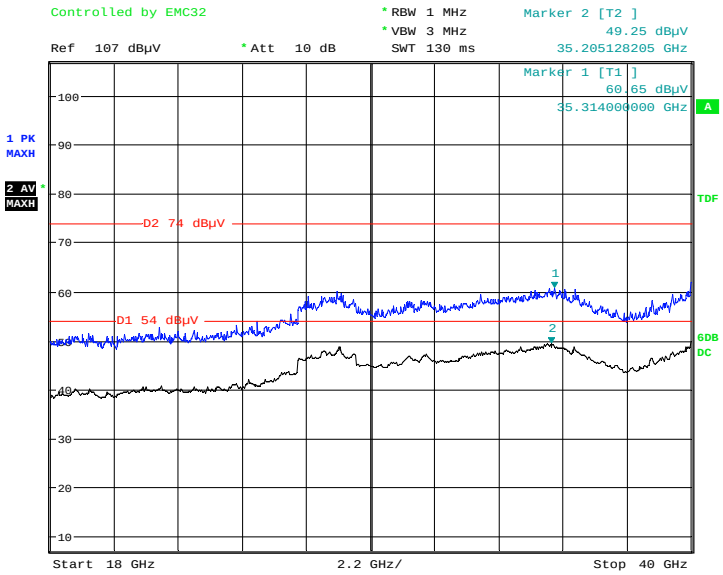
**Vertical**

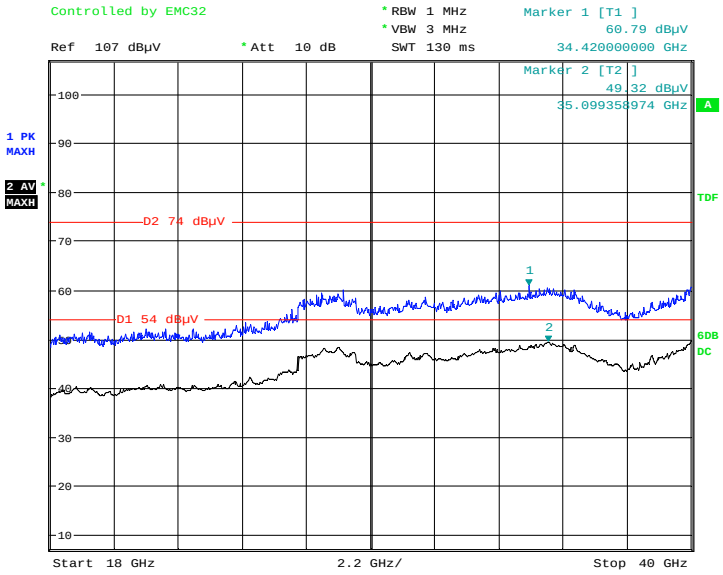



Date: 5.OCT.2020 14:14:27

**18GHz-40GHz(5725-5850MHz Band):**

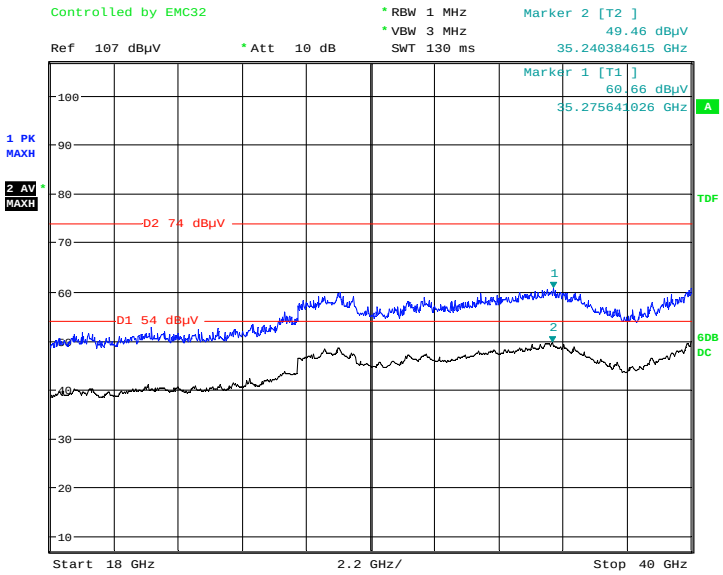
*Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation,* ***the worst case 802.11ac20 mode low channel*** *in Z-axis of orientation was recorded.*

**Horizontal**




Date: 5.OCT.2020 14:37:11

**Vertical**




Date: 5.OCT.2020 14:28:08

## Restricted Bands Emissions Test (5150-5250MHz Band):

Note:
1. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
2. Corrected Amplitude = Corrected Factor + Reading
3. Margin = Limit - Corrected. Amplitude

***802.11a Mode-Chain0:*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5180MHz | | | | | | | | |
| 5150.00 | --- | 48.82 | 200.0 | V | 107.0 | 5.2 | 54.00 | 5.18 |
| 5150.00 | 56.38 | --- | 200.0 | V | 107.0 | 5.2 | 74.00 | 17.62 |
| High Channel: 5240MHz | | | | | | | | |
| 5350.00 | --- | 48.09 | 150.0 | V | 242.0 | 5.7 | 54.00 | 5.91 |
| 5350.00 | 54.86 | --- | 150.0 | V | 242.0 | 5.7 | 74.00 | 19.14 |

***802.11a Mode-Chain1:*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5180MHz | | | | | | | | |
| 5150.00 | --- | 49.09 | 200.0 | V | 89.0 | 5.2 | 54.00 | 4.91 |
| 5150.00 | 56.25 | --- | 200.0 | V | 89.0 | 5.2 | 74.00 | 17.75 |
| High Channel: 5240MHz | | | | | | | | |
| 5350.00 | --- | 48.65 | 150.0 | V | 337.0 | 5.7 | 54.00 | 5.35 |
| 5350.00 | 55.44 | --- | 150.0 | V | 337.0 | 5.7 | 74.00 | 18.56 |

***802.11ac20 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Corrected Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5180MHz | | | | | | | | |
| 5150.00 | --- | 49.94 | 200.0 | H | 318.0 | 5.2 | 54.00 | 4.06 |
| 5150.00 | 55.17 | --- | 200.0 | H | 318.0 | 5.2 | 74.00 | 18.83 |
| High Channel: 5240MHz | | | | | | | | |
| 5350.00 | --- | 48.06 | 200.0 | H | 24.0 | 5.7 | 54.00 | 5.94 |
| 5350.00 | 56.10 | --- | 200.0 | H | 24.0 | 5.7 | 74.00 | 17.90 |

***802.11n-HT20 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5180MHz | | | | | | | | |
| 5150.00 | --- | 47.28 | 150.0 | V | 1.0 | 5.2 | 54.00 | 6.72 |
| 5150.00 | 55.18 | --- | 150.0 | V | 1.0 | 5.2 | 74.00 | 18.82 |
| High Channel: 5240MHz | | | | | | | | |
| 5350.00 | --- | 46.72 | 150.0 | V | 10.0 | 5.7 | 54.00 | 7.28 |
| 5350.00 | 55.79 | --- | 150.0 | V | 10.0 | 5.7 | 74.00 | 18.21 |

***802.11ac40 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Corrected Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5190MHz | | | | | | | | |
| 5150.00 | --- | 48.64 | 150.0 | V | 222.0 | 5.2 | 54.00 | 5.36 |
| 5150.00 | 55.65 | --- | 150.0 | V | 222.0 | 5.2 | 74.00 | 18.35 |
| High Channel: 5230MHz | | | | | | | | |
| 5350.00 | --- | 47.79 | 200.0 | V | 56.0 | 5.7 | 54.00 | 6.21 |
| 5350.00 | 57.19 | --- | 200.0 | V | 56.0 | 5.7 | 74.00 | 16.81 |

***802.11n-HT40 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Corrected Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5190MHz | | | | | | | | |
| 5150.00 | --- | 46.96 | 150.0 | V | 238.0 | 5.2 | 54.00 | 7.04 |
| 5150.00 | 54.77 | --- | 150.0 | V | 238.0 | 5.2 | 74.00 | 19.23 |
| High Channel: 5230MHz | | | | | | | | |
| 5350.00 | 53.84 | --- | 150.0 | V | 347.0 | 5.7 | 74.00 | 20.16 |
| 5350.00 | --- | 50.69 | 150.0 | V | 347.0 | 5.7 | 54.00 | 3.31 |

***802.11ac80 Mode (Chain0+ Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Corrected Factor (dB/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBµV/m) | Average (dBµV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5210MHz | | | | | | | | |
| 5150.00 | --- | 48.31 | 150.0 | V | 340.0 | 5.2 | 54.00 | 5.69 |
| 5150.00 | 56.60 | --- | 200.0 | V | 340.0 | 5.2 | 74.00 | 17.40 |
| 5350.00 | --- | 49.85 | 150.0 | V | 180.0 | 5.7 | 54.00 | 4.15 |
| 5350.00 | 56.31 | --- | 150.0 | V | 180.0 | 5.7 | 74.00 | 17.69 |

## Restricted Bands Emissions Test (5725-5850MHz Band):

Note:
1. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
2. Corrected Amplitude = Corrected Factor + Reading
3. Margin = Limit - Corrected. Amplitude

***802.11a Mode-Chain0:*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5745MHz | | | | | | | | |
| 5650.00 | 53.99 | --- | 200.0 | V | 0.0 | 6.4 | 68.2 | 14.21 |
| 5700.00 | 53.24 | --- | 200.0 | H | 107.0 | 6.5 | 105.2 | 51.96 |
| 5720.00 | 54.70 | --- | 150.0 | H | 9.0 | 6.5 | 110.8 | 56.10 |
| 5725.00 | 55.81 | --- | 150.0 | V | 359.0 | 6.5 | 122.2 | 66.39 |
| High Channel: 5825MHz | | | | | | | | |
| 5850.00 | 54.46 | --- | 150.0 | V | 268.0 | 6.7 | 122.2 | 67.74 |
| 5855.00 | 54.80 | --- | 150.0 | H | 80.0 | 6.7 | 110.8 | 56.00 |
| 5875.00 | 55.10 | --- | 150.0 | H | 126.0 | 6.8 | 105.2 | 50.10 |
| 5925.00 | 55.79 | --- | 150.0 | V | 356.0 | 6.9 | 68.2 | 12.41 |

***802.11a Mode-Chain1:*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5745MHz | | | | | | | | |
| 5650.00 | 54.01 | --- | 150.0 | H | 267.0 | 6.4 | 68.2 | 14.19 |
| 5700.00 | 55.35 | --- | 150.0 | V | 340.0 | 6.5 | 105.2 | 49.85 |
| 5720.00 | 54.24 | --- | 150.0 | H | 183.0 | 6.5 | 110.8 | 56.56 |
| 5725.00 | 55.75 | --- | 150.0 | V | 308.0 | 6.5 | 122.2 | 66.45 |
| High Channel: 5825MHz | | | | | | | | |
| 5850.00 | 53.94 | --- | 150.0 | H | 169.0 | 6.7 | 122.2 | 68.26 |
| 5855.00 | 53.69 | --- | 150.0 | H | 84.0 | 6.7 | 110.8 | 57.11 |
| 5875.00 | 55.68 | --- | 150.0 | H | 0.0 | 6.8 | 105.2 | 49.52 |
| 5925.00 | 55.14 | --- | 150.0 | H | 115.0 | 6.9 | 68.2 | 13.06 |

***802.11ac20 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5745MHz | | | | | | | | |
| 5650.00 | 53.99 | --- | 150.0 | H | 87.0 | 6.4 | 68.2 | 14.21 |
| 5700.00 | 54.45 | --- | 150.0 | H | 25.0 | 6.5 | 105.2 | 50.75 |
| 5720.00 | 55.74 | --- | 150.0 | H | 25.0 | 6.5 | 110.8 | 55.06 |
| 5725.00 | 59.81 | --- | 150.0 | V | 116.0 | 6.5 | 122.2 | 62.39 |
| High Channel: 5825MHz | | | | | | | | |
| 5850.00 | 66.34 | --- | 150.0 | H | 218.0 | 6.7 | 122.2 | 55.86 |
| 5855.00 | 58.11 | --- | 150.0 | H | 218.0 | 6.7 | 110.8 | 52.69 |
| 5875.00 | 56.39 | --- | 150.0 | V | 320.0 | 6.8 | 105.2 | 48.81 |
| 5925.00 | 56.29 | --- | 150.0 | V | 257.0 | 6.9 | 68.2 | 11.91 |

***802.11n-HT20 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5745MHz | | | | | | | | |
| 5650.00 | 54.67 | --- | 150.0 | H | 118.0 | 6.4 | 68.2 | 13.53 |
| 5700.00 | 53.98 | --- | 150.0 | V | 273.0 | 6.5 | 105.2 | 51.22 |
| 5720.00 | 56.87 | --- | 150.0 | H | 201.0 | 6.5 | 110.8 | 53.93 |
| 5725.00 | 62.97 | --- | 150.0 | H | 167.0 | 6.5 | 122.2 | 59.23 |
| High Channel: 5825MHz | | | | | | | | |
| 5850.00 | 55.96 | --- | 150.0 | V | 145.0 | 6.7 | 122.2 | 66.24 |
| 5855.00 | 55.00 | --- | 150.0 | H | 88.0 | 6.7 | 110.8 | 55.80 |
| 5875.00 | 54.72 | --- | 150.0 | H | 218.0 | 6.8 | 105.2 | 50.48 |
| 5925.00 | 53.73 | --- | 150.0 | H | 201.0 | 6.9 | 68.2 | 14.47 |

***802.11ac40 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5755MHz | | | | | | | | |
| 5650.00 | 53.40 | --- | 150.0 | H | 349.0 | 6.4 | 68.2 | 14.80 |
| 5700.00 | 53.39 | --- | 150.0 | V | 195.0 | 6.5 | 105.2 | 51.81 |
| 5720.00 | 57.77 | --- | 150.0 | H | 161.0 | 6.5 | 110.8 | 53.03 |
| 5725.00 | 57.99 | --- | 150.0 | H | 161.0 | 6.5 | 122.2 | 64.21 |
| High Channel: 5795MHz | | | | | | | | |
| 5850.00 | 57.16 | --- | 150.0 | V | 124.0 | 6.7 | 122.2 | 65.04 |
| 5855.00 | 55.90 | --- | 150.0 | H | 98.0 | 6.7 | 110.8 | 54.90 |
| 5875.00 | 54.44 | --- | 150.0 | V | 78.0 | 6.8 | 105.2 | 50.76 |
| 5925.00 | 54.88 | --- | 150.0 | H | 145.0 | 6.9 | 68.2 | 13.32 |

***802.11n-HT40 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5755MHz | | | | | | | | |
| 5650.00 | 51.92 | --- | 150.0 | H | 180.0 | 6.4 | 68.2 | 16.28 |
| 5700.00 | 53.40 | --- | 150.0 | H | 51.0 | 6.5 | 105.2 | 51.80 |
| 5720.00 | 54.69 | --- | 150.0 | V | 138.0 | 6.5 | 110.8 | 56.11 |
| 5725.00 | 56.89 | --- | 150.0 | H | 163.0 | 6.5 | 122.2 | 65.31 |
| High Channel: 5795MHz | | | | | | | | |
| 5850.00 | 55.49 | --- | 150.0 | H | 82.0 | 6.7 | 122.2 | 66.71 |
| 5855.00 | 54.24 | --- | 150.0 | V | 215.0 | 6.7 | 110.8 | 56.56 |
| 5875.00 | 54.42 | --- | 150.0 | V | 168.0 | 6.8 | 105.2 | 50.78 |
| 5925.00 | 56.56 | --- | 150.0 | H | 320.0 | 6.9 | 68.2 | 11.64 |

***802.11ac80 Mode (Chain0+Chain1):*** *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

| Frequency (MHz) | Corrected Amplitude | | Rx Antenna | | Turntable Degree | Correct Factor (dB/m) | Limit (dBμV/m) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| | MaxPeak (dBμV/m) | Average (dBμV/m) | Height (cm) | Polar (H/V) | | | | |
| Low Channel: 5775MHz | | | | | | | | |
| 5650.00 | 54.97 | --- | 150.0 | H | 141.0 | 6.4 | 68.2 | 13.23 |
| 5700.00 | 60.59 | --- | 150.0 | H | 175.0 | 6.5 | 105.2 | 44.61 |
| 5720.00 | 63.56 | --- | 150.0 | H | 175.0 | 6.5 | 110.8 | 47.24 |
| 5725.00 | 64.02 | --- | 150.0 | V | 118.0 | 6.5 | 122.2 | 58.18 |
| 5850.00 | 63.05 | --- | 150.0 | H | 229.0 | 6.7 | 122.2 | 59.15 |
| 5855.00 | 62.20 | --- | 150.0 | V | 118.0 | 6.7 | 110.8 | 48.60 |
| 5875.00 | 58.45 | --- | 150.0 | V | 214.0 | 6.8 | 105.2 | 46.75 |
| 5925.00 | 54.28 | --- | 150.0 | V | 62.0 | 6.9 | 68.2 | 13.92 |

# FCC §15.407(a) &§15.407(e)–EMISSION BANDWIDTH

## Applicable Standard

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

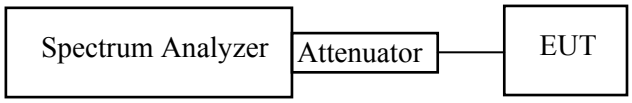
Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

## Test Procedure

**1. Emission Bandwidth (EBW)**
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. **Minimum Emission Bandwidth for the band 5.725-5.85 GHz**
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 24.8 ℃ |
| **Relative Humidity:** | 54 % |
| **ATM Pressure:** | 101.5 kPa |

*The testing was performed by CK Huang on 2020-10-11.*

**Test Result:** Compliant

*5150-5250 MHz:*

| Test mode | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) | | 99% Bandwidth (MHz) | |
|---|---|---|---|---|---|---|
| | | | Chain0 | Chain1 | Chain0 | Chain1 |
| 802.11a | Low | 5180 | 26.052 | 25.892 | 17.074 | 16.994 |
| | Middle | 5200 | 25.812 | 25.411 | 17.074 | 16.994 |
| | High | 5240 | 25.651 | 25.090 | 16.994 | 16.994 |
| 802.11ac20 | Low | 5180 | 25.331 | 24.770 | 18.116 | 18.116 |
| | Middle | 5200 | 24.930 | 25.170 | 18.116 | 18.116 |
| | High’ | 5240 | 25.170 | 24.048 | 18.036 | 18.036 |
| 802.11n-HT20 | Low | 5180 | 24.930 | 25.411 | 18.116 | 18.116 |
| | Middle | 5200 | 25.651 | 25.491 | 18.116 | 18.116 |
| | High | 5240 | 24.369 | 24.289 | 18.116 | 17.956 |
| 802.11ac40 | Low | 5190 | 42.204 | 41.964 | 36.553 | 36.553 |
| | High’ | 5230 | 41.964 | 42.204 | 36.553 | 36.433 |
| 802.11n-HT40 | Low | 5190 | 42.204 | 42.204 | 36.433 | 36.553 |
| | High | 5230 | 42.204 | 42.084 | 36.433 | 36.433 |
| 802.11ac80 | Low | 5210 | 84.890 | 84.409 | 75.992 | 75.992 |

*5725-5850MHz:*

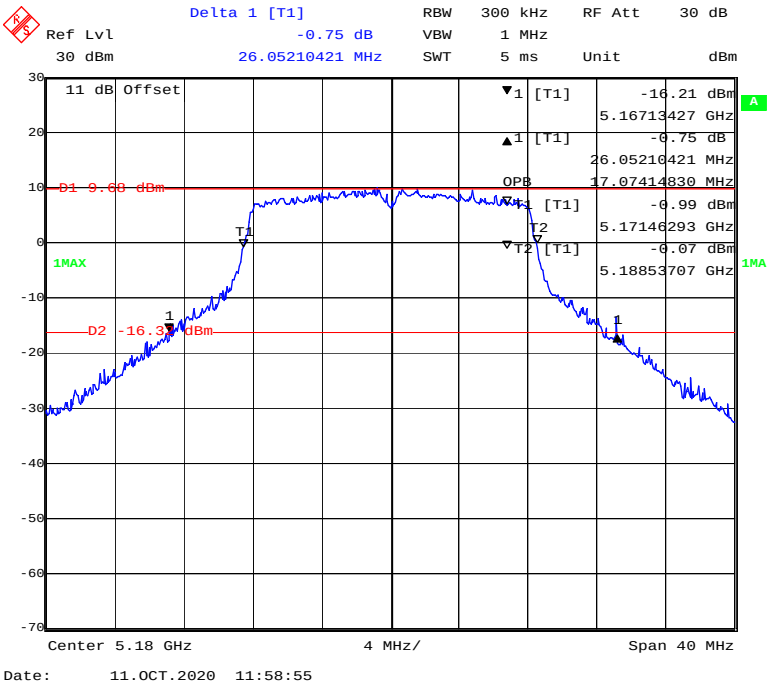
| Test mode | Channel | Frequency (MHz) | 6dB Bandwidth (MHz) | | 99% Bandwidth (MHz) | | Limit (MHz) |
|---|---|---|---|---|---|---|---|
| | | | Chain0 | Chain1 | Chain0 | Chain1 | |
| 802.11a | Low | 5745 | 16.192 | 16.273 | 21.523 | 21.824 | ≥0.5 |
| | Middle | 5785 | 16.353 | 16.273 | 21.583 | 20.621 | ≥0.5 |
| | High | 5825 | 16.353 | 16.273 | 21.042 | 22.124 | ≥0.5 |
| 802.11ac20 | Low | 5745 | 17.555 | 17.234 | 21.583 | 21.703 | ≥0.5 |
| | Middle | 5785 | 17.555 | 17.635 | 21.463 | 21.042 | ≥0.5 |
| | High | 5825 | 17.234 | 17.635 | 20.922 | 22.425 | ≥0.5 |
| 802.11n-HT20 | Low | 5745 | 17.315 | 17.555 | 21.764 | 21.703 | ≥0.5 |
| | Middle | 5785 | 17.555 | 16.914 | 21.283 | 20.982 | ≥0.5 |
| | High | 5825 | 16.994 | 17.555 | 20.982 | 22.244 | ≥0.5 |
| 802.11ac40 | Low | 5755 | 35.832 | 35.832 | 39.198 | 39.439 | ≥0.5 |
| | High | 5795 | 35.711 | 35.471 | 39.198 | 38.116 | ≥0.5 |
| 802.11n-HT40 | Low | 5755 | 35.711 | 35.832 | 39.078 | 38.597 | ≥0.5 |
| | High | 5795 | 35.952 | 35.832 | 39.198 | 38.236 | ≥0.5 |
| 802.11ac80 | Low | 5775 | 75.511 | 75.511 | 84.409 | 82.485 | ≥0.5 |

**5150-5250 MHz Band:**

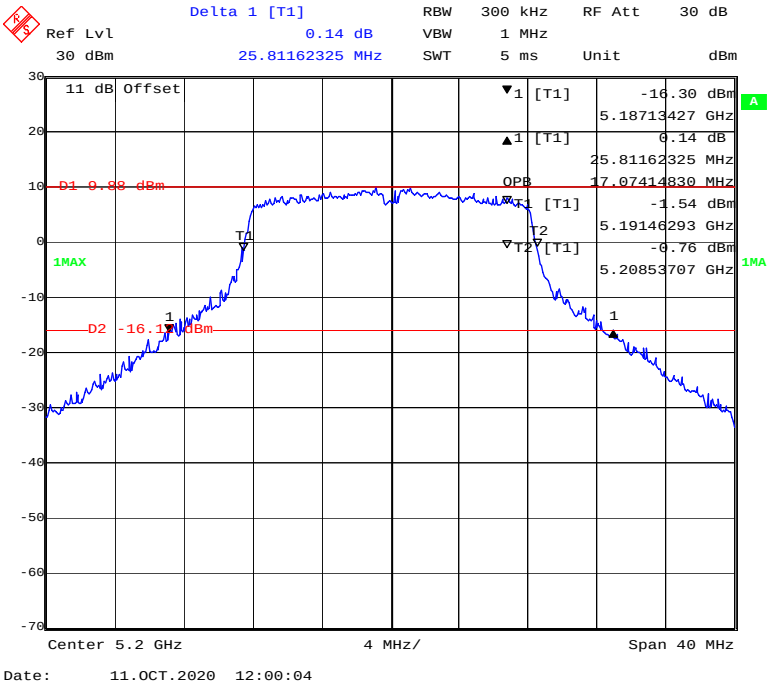
**Chain0**

**26 Bandwidth&99% Occupied Bandwidth**

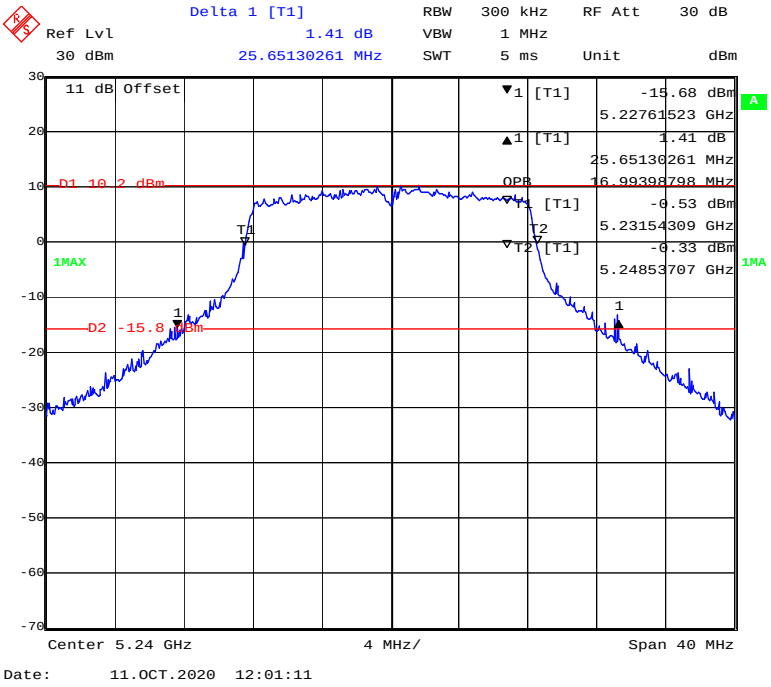
**802.11a mode, 5180MHz**



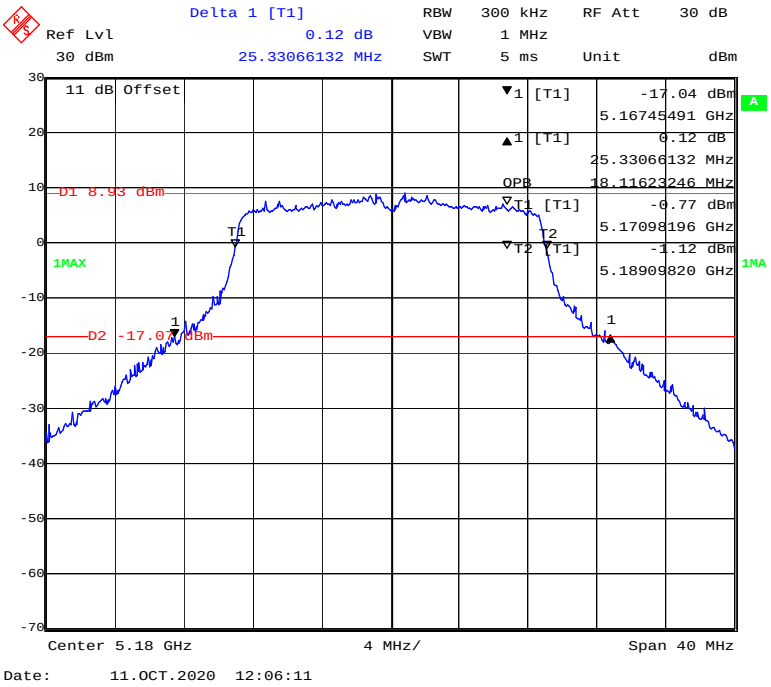

**802.11a mode, 5200MHz**



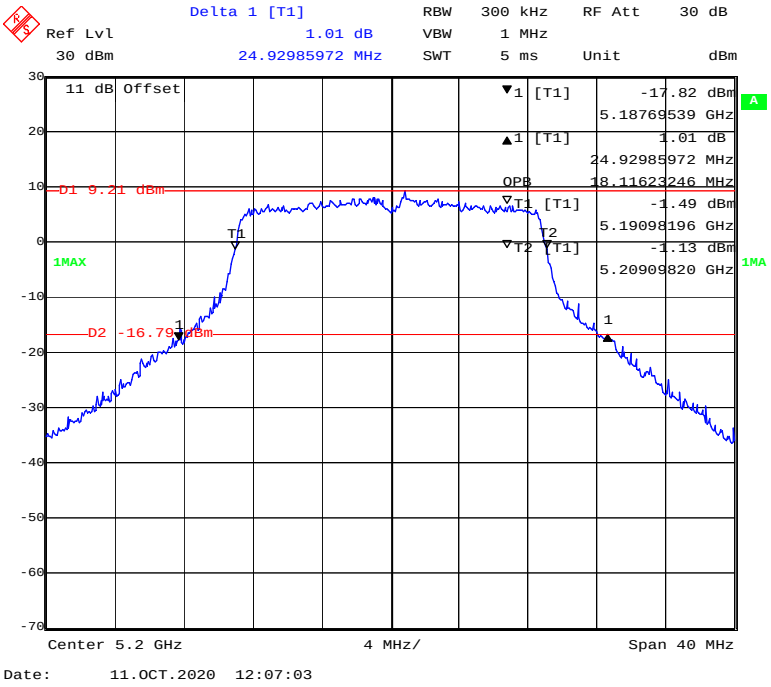
**802.11a mode, 5240MHz**



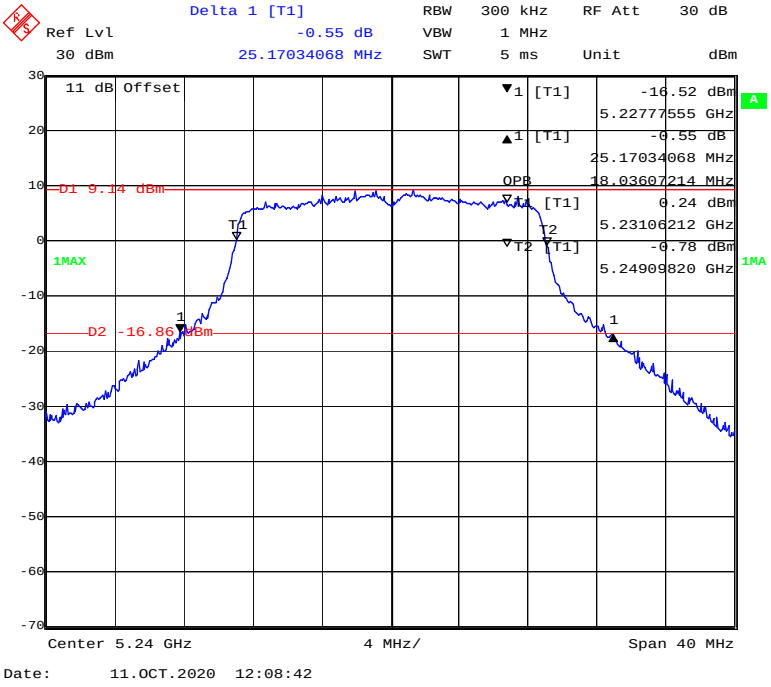

**802.11ac20 mode, 5180MHz**



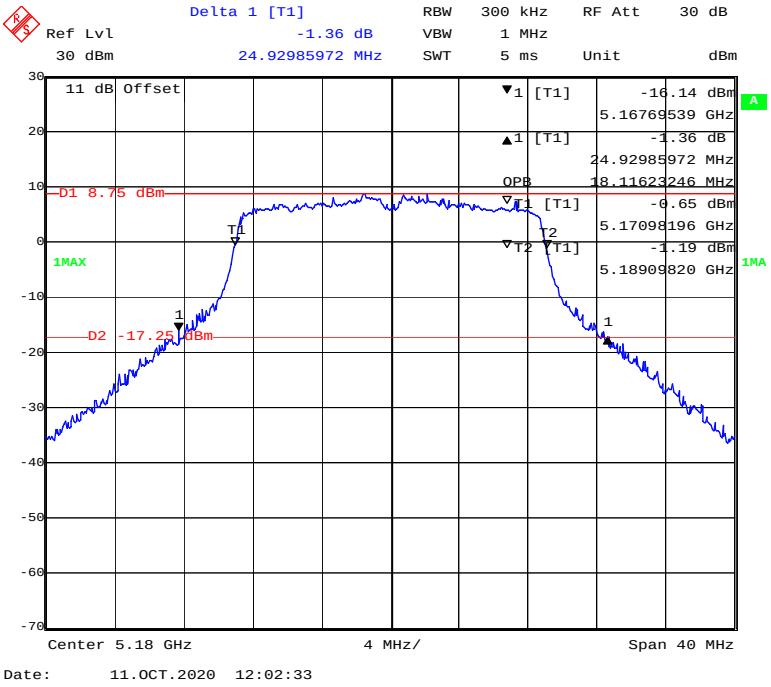
**802.11ac20 mode, 5200MHz**



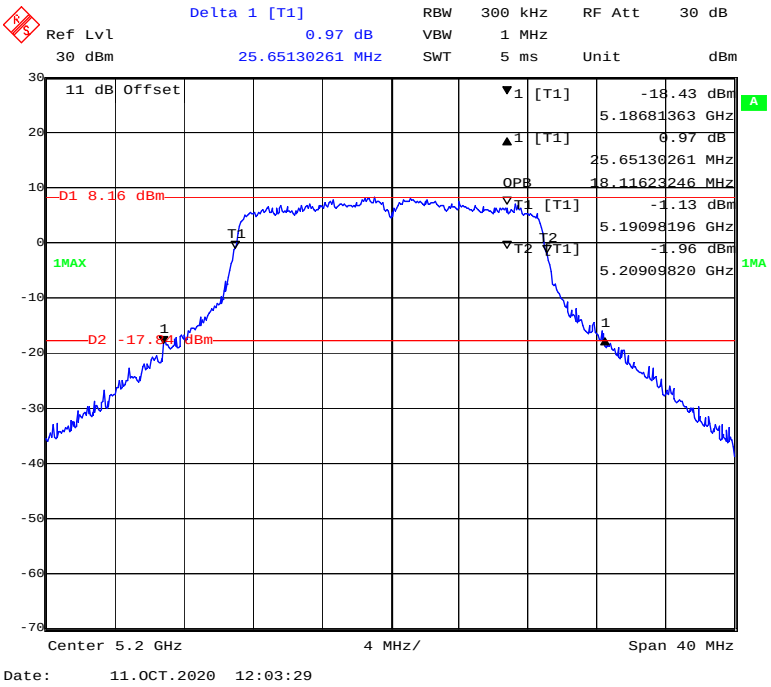

**802.11ac20 mode, 5240MHz**



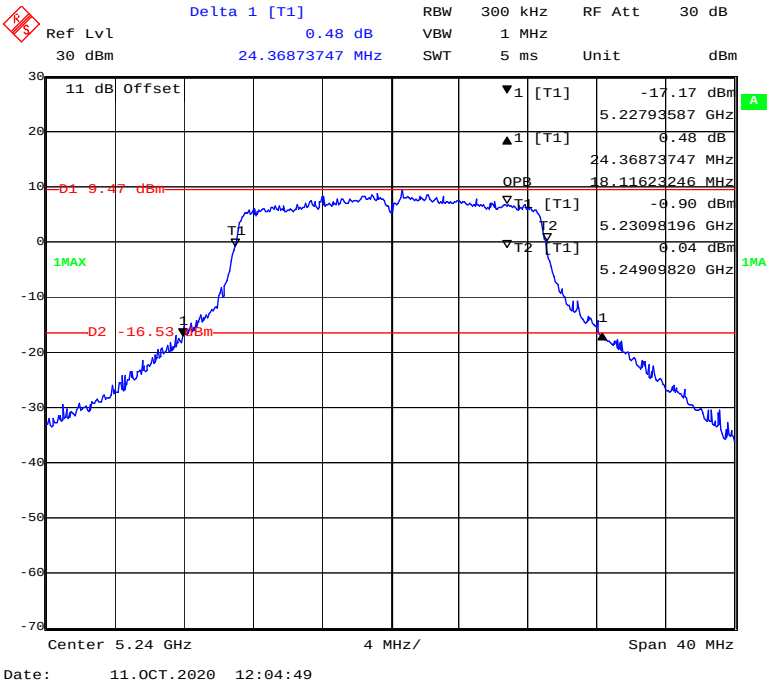
**802.11n-HT20 mode, 5180MHz**



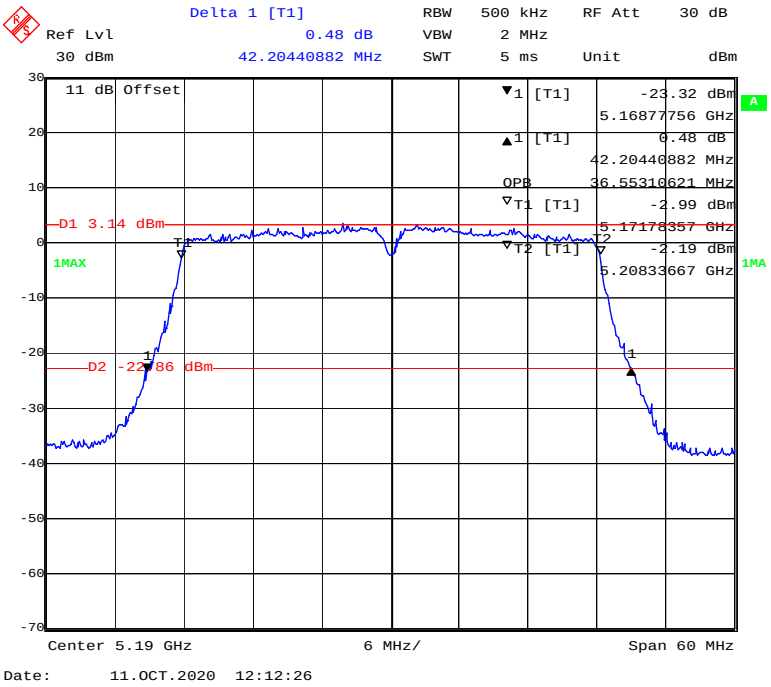

**802.11n-HT20 mode, 5200MHz**



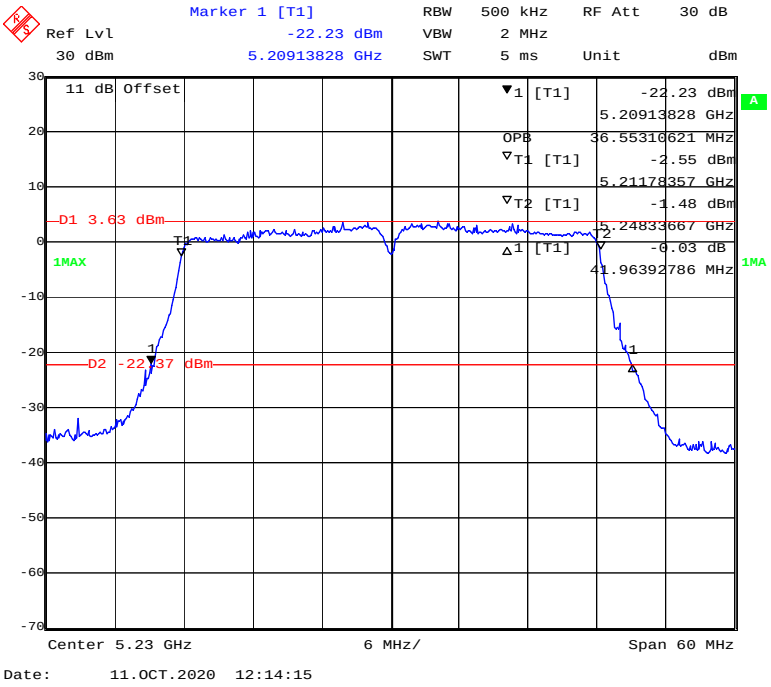
**802.11n-HT20 mode, 5240MHz**



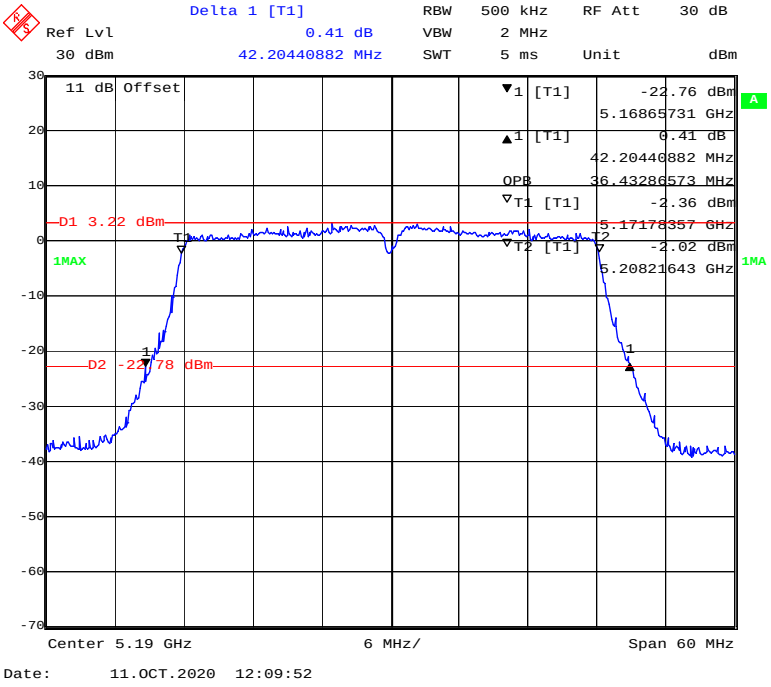

**802.11ac40 mode, 5190MHz**



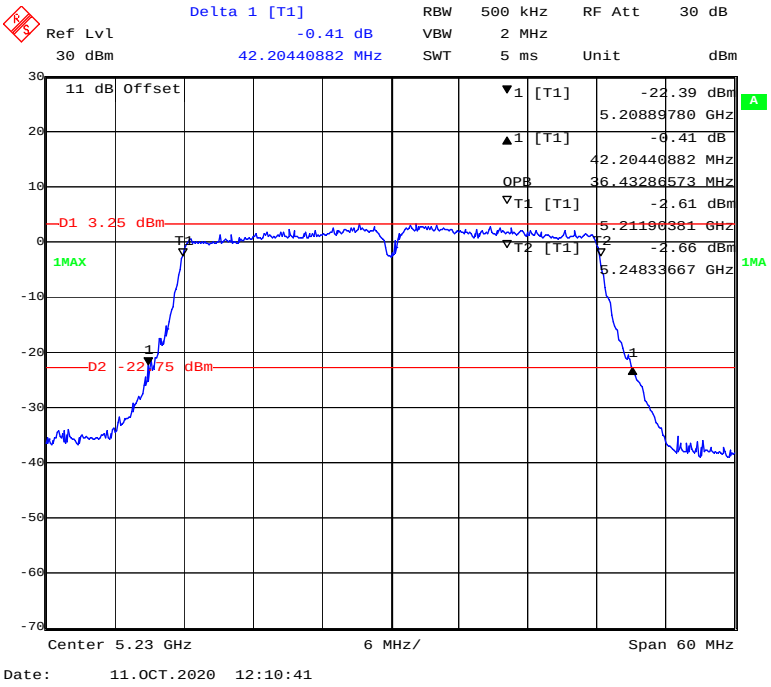
**802.11ac40 mode, 5230MHz**



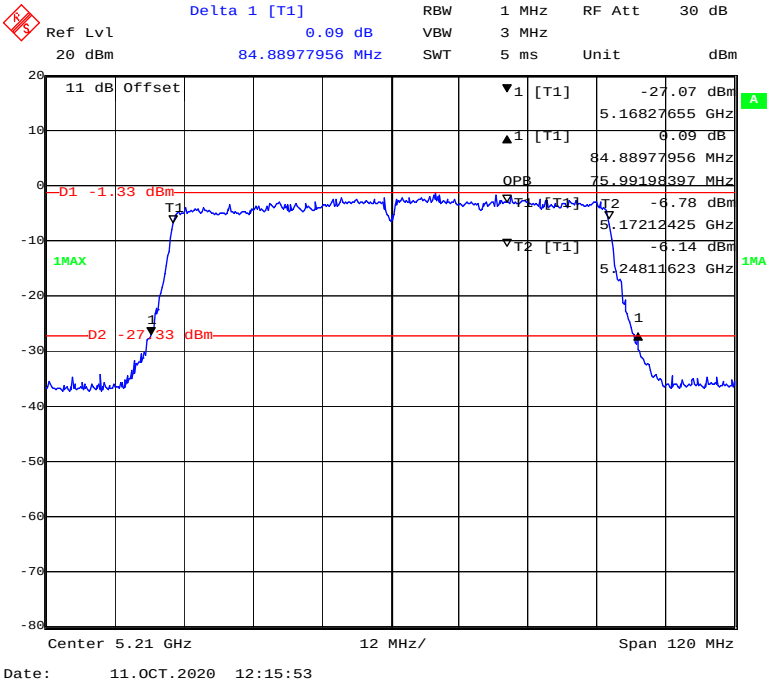

**802.11n-HT40 mode, 5190MHz**



**802.11n-HT40 mode, 5230MHz**



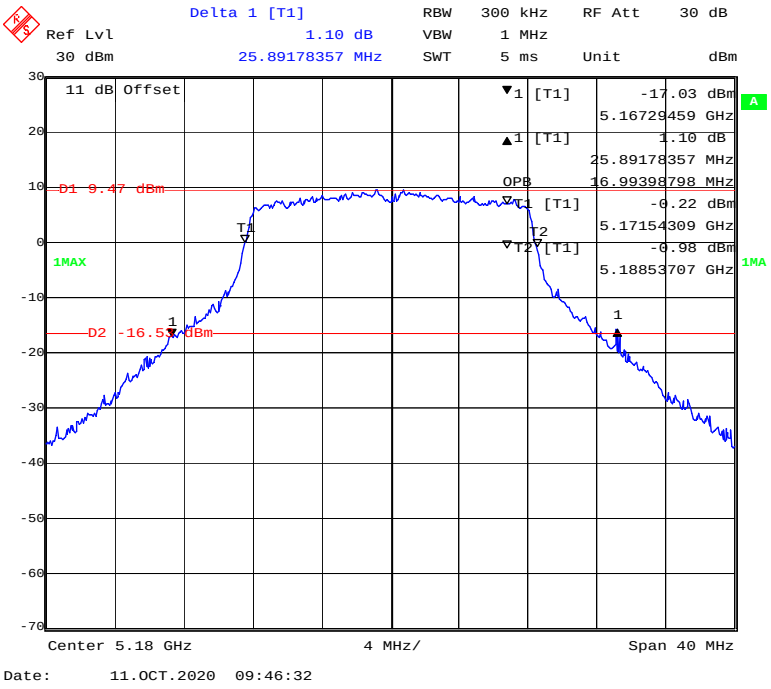

**802.11ac80 mode, 5210MHz**



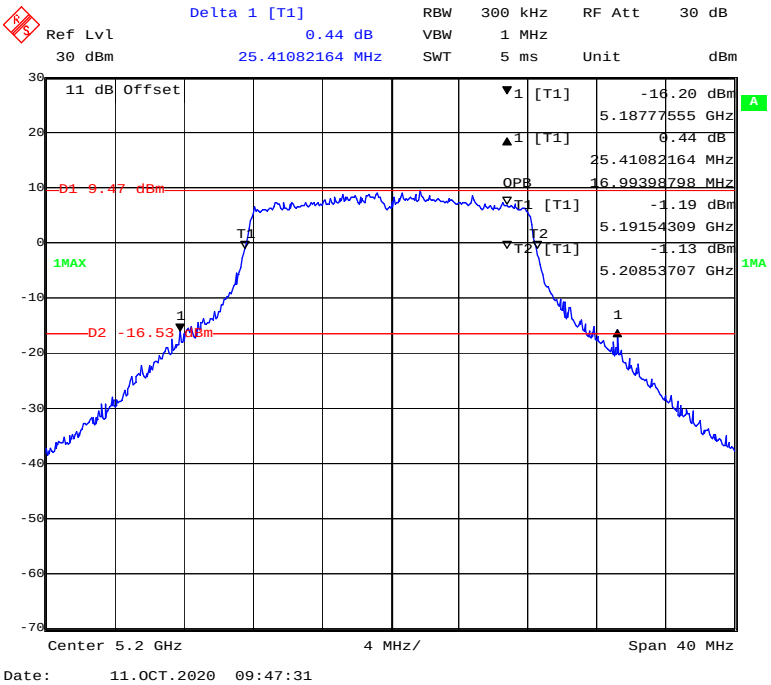
**Chain1**

**26 Bandwidth&99% Occupied Bandwidth**

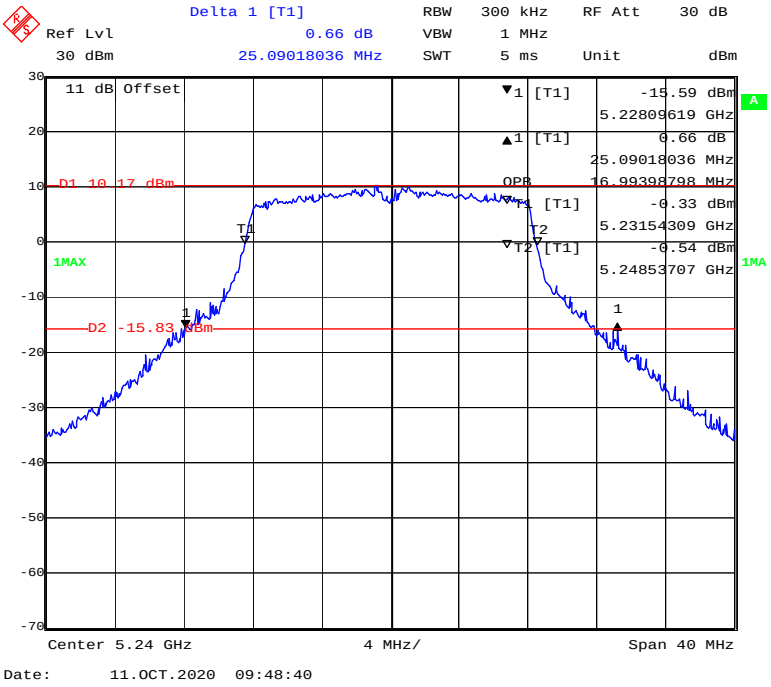
**802.11a mode, 5180MHz**



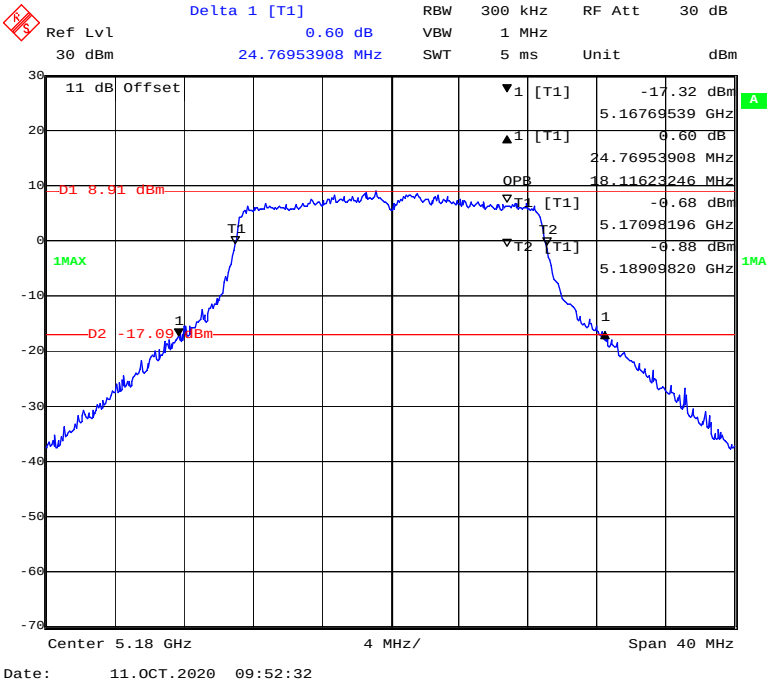

**802.11a mode, 5200MHz**



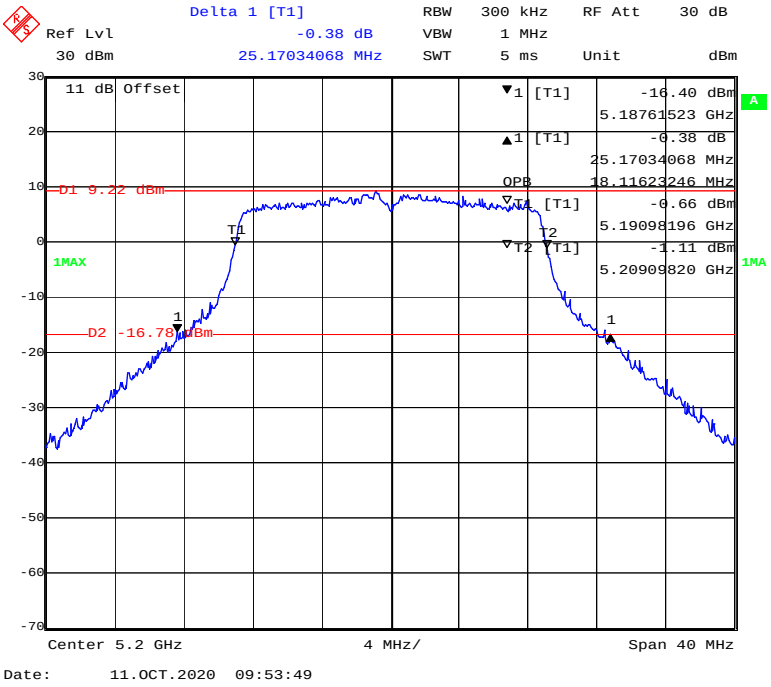
**802.11a mode, 5240MHz**



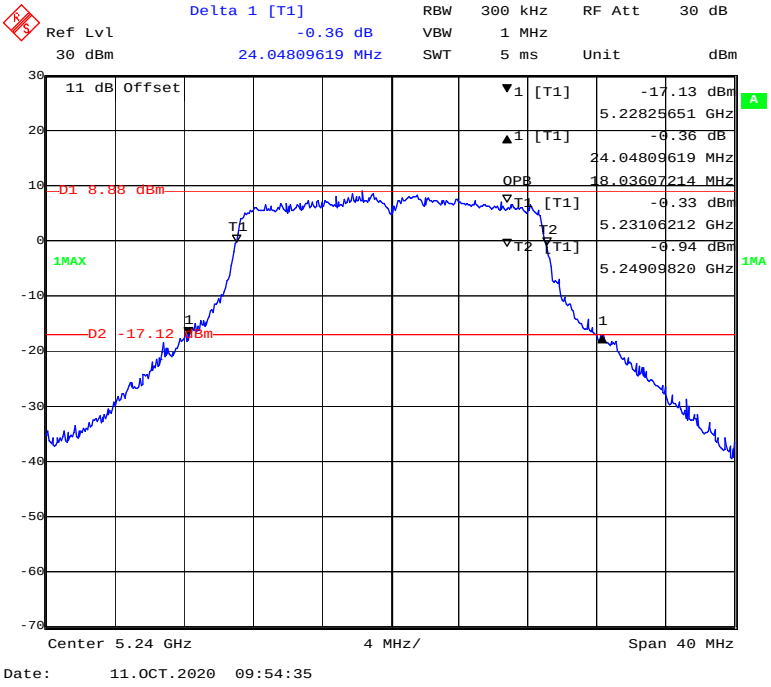

**802.11ac20 mode, 5180MHz**



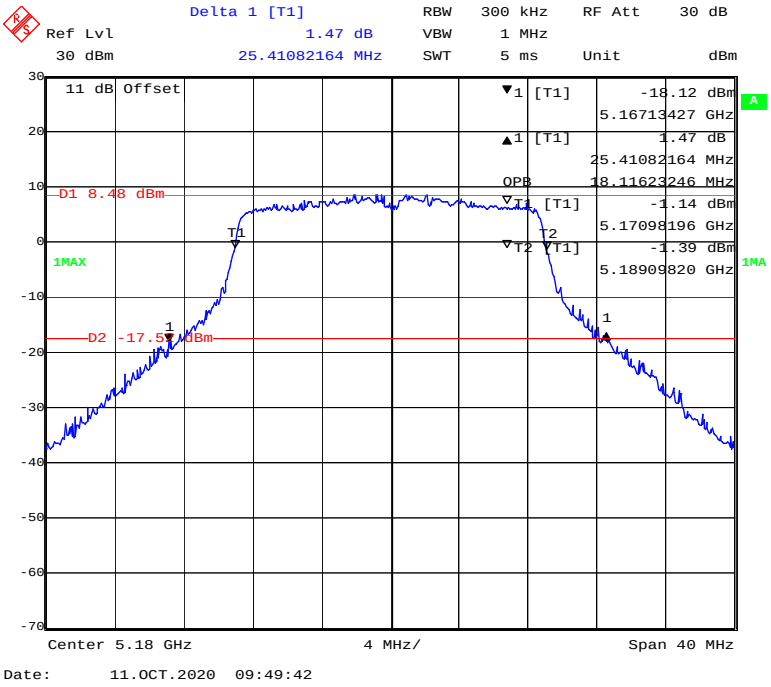
**802.11ac20 mode, 5200MHz**



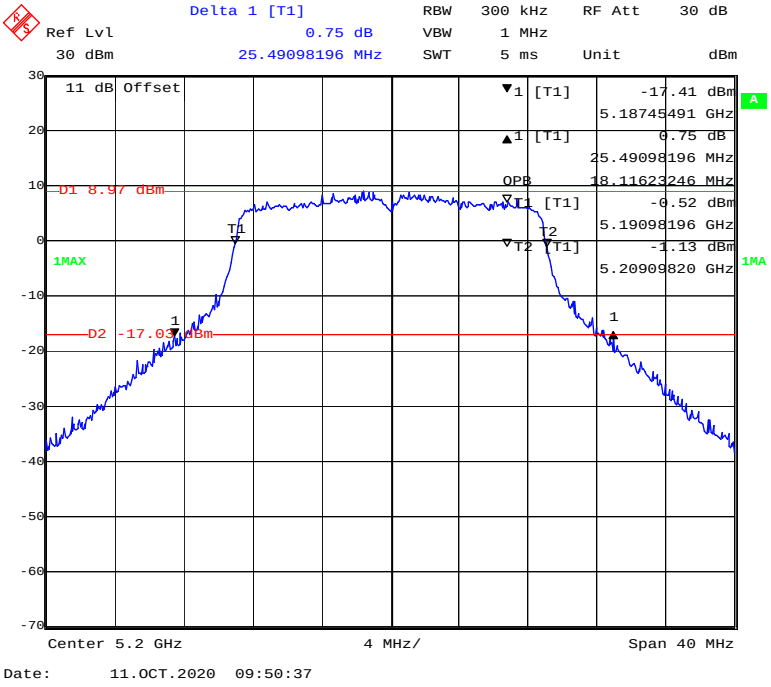

**802.11ac20 mode, 5240MHz**



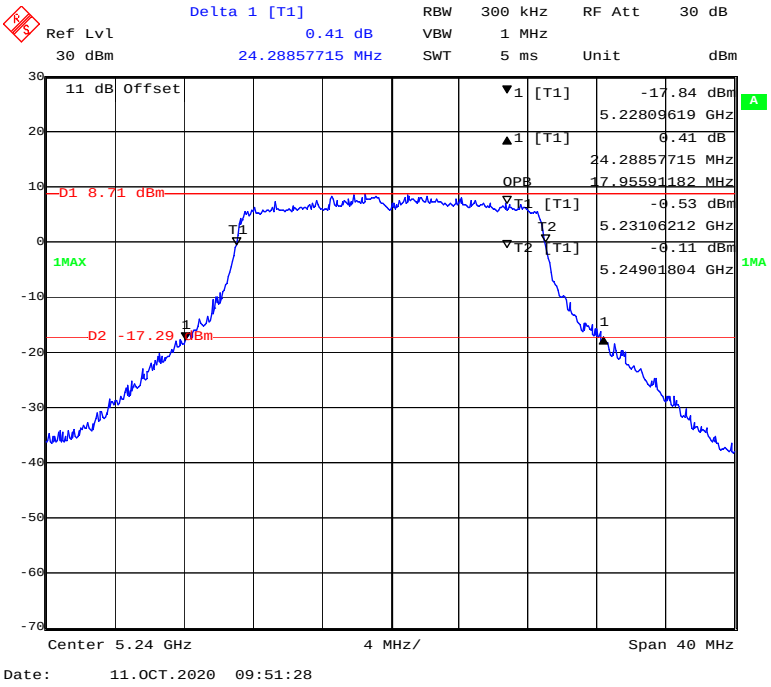
**802.11n-HT20 mode, 5180MHz**



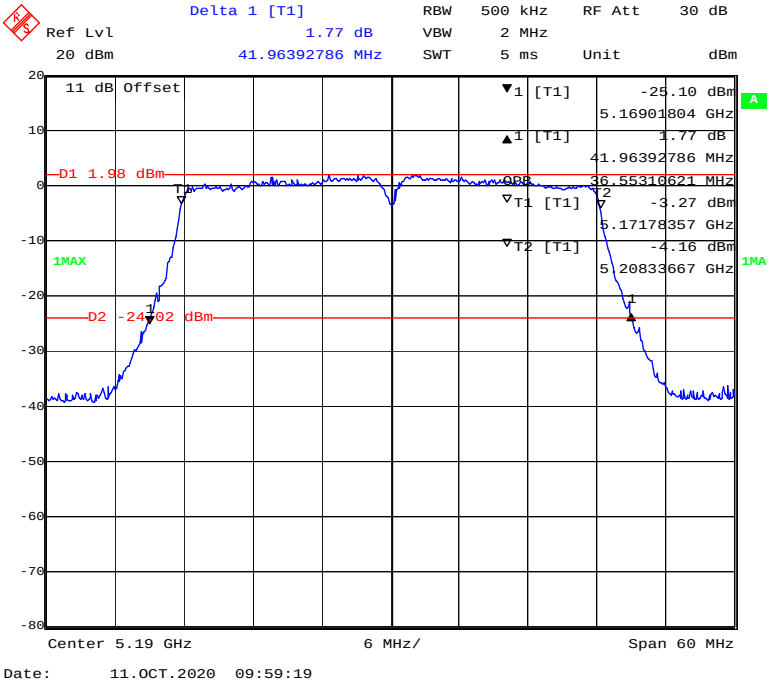

**802.11n-HT20 mode, 5200MHz**



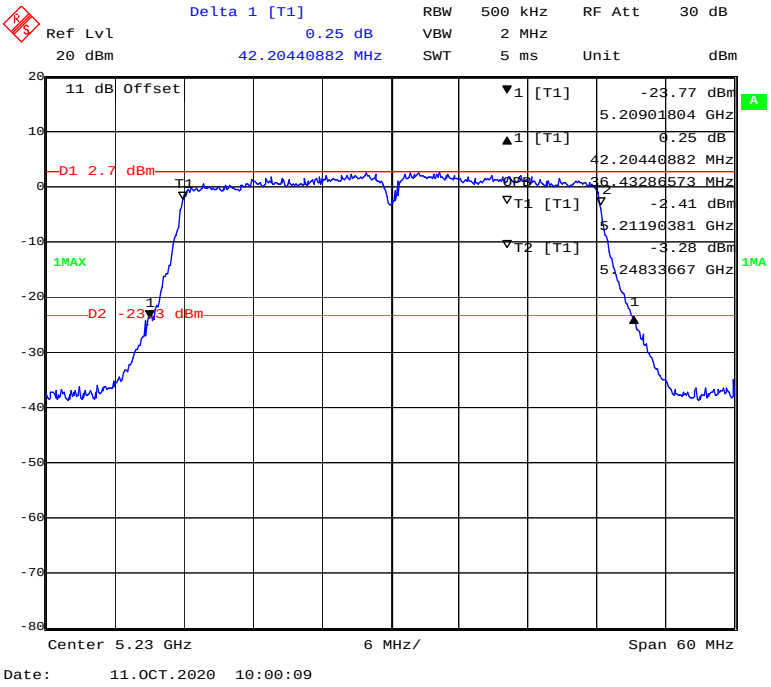
**802.11n-HT20 mode, 5240MHz**



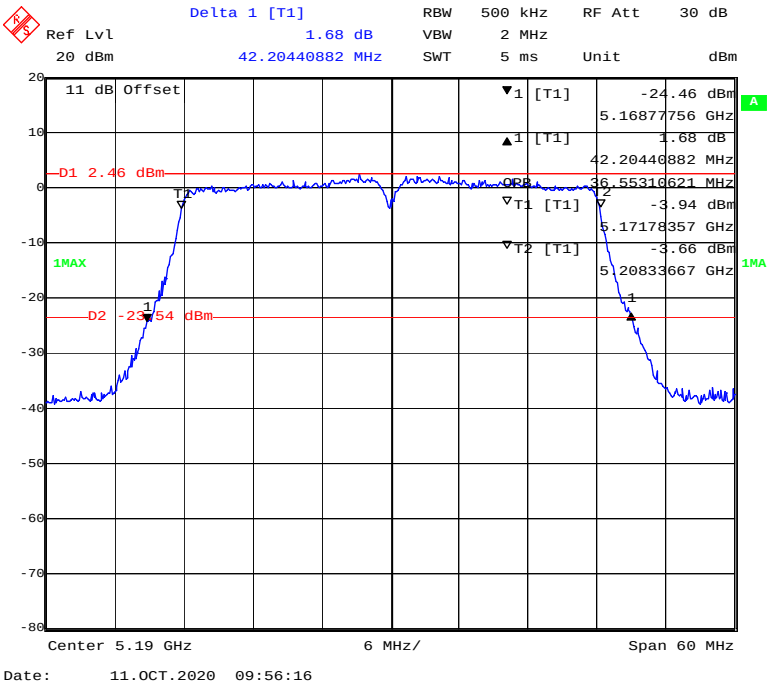

**802.11ac40 mode, 5190MHz**



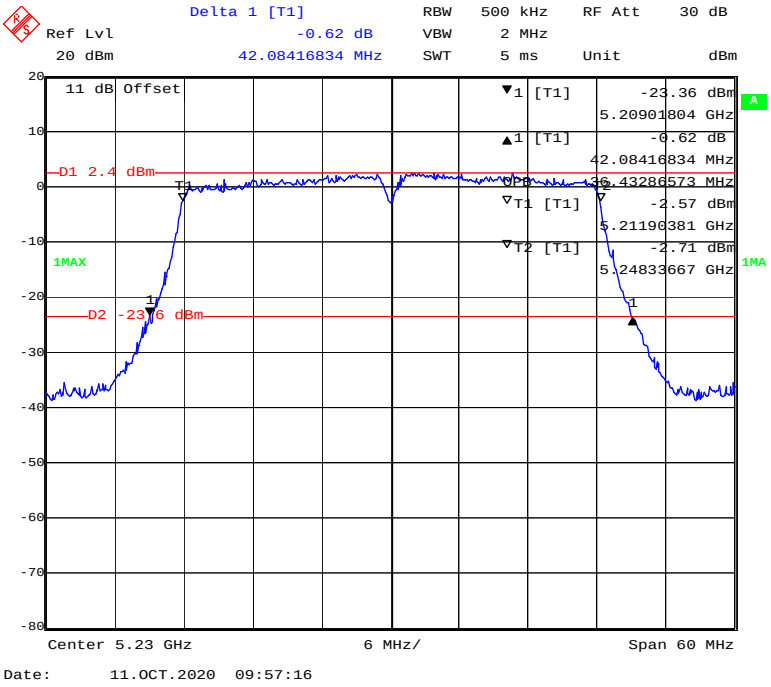
**802.11ac40 mode, 5230MHz**



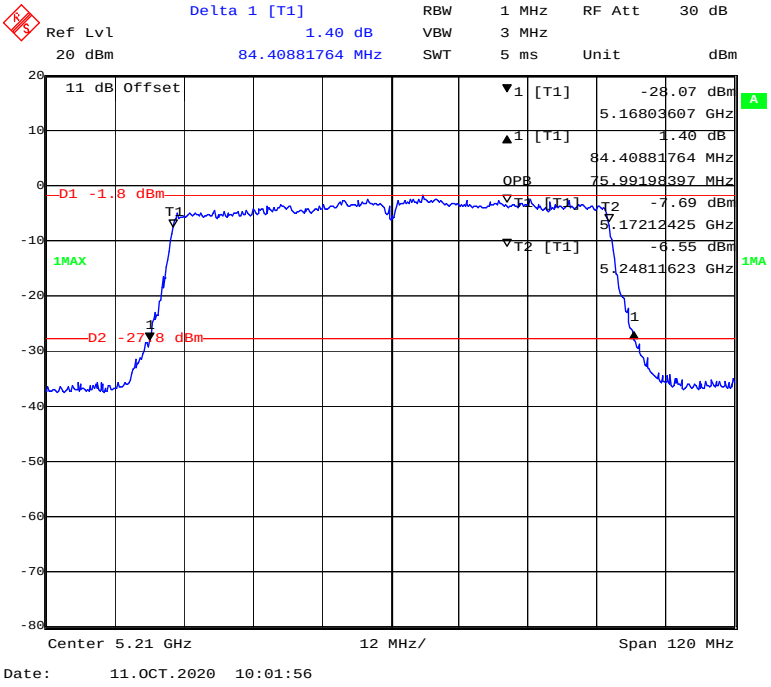

**802.11n-HT40 mode, 5190MHz**



**802.11n-HT40 mode, 5230MHz**




**802.11ac80 mode, 5210MHz**

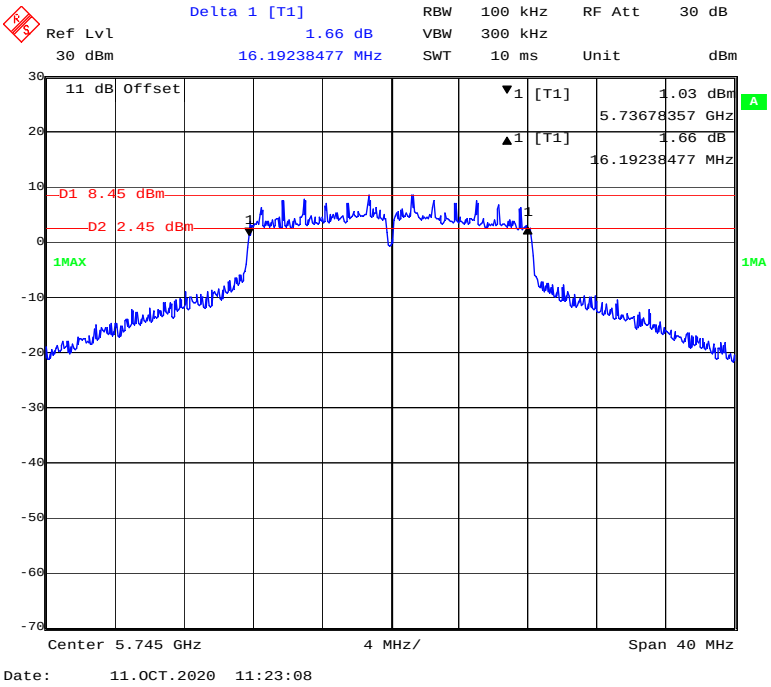


**5725-5850 MHz Band**

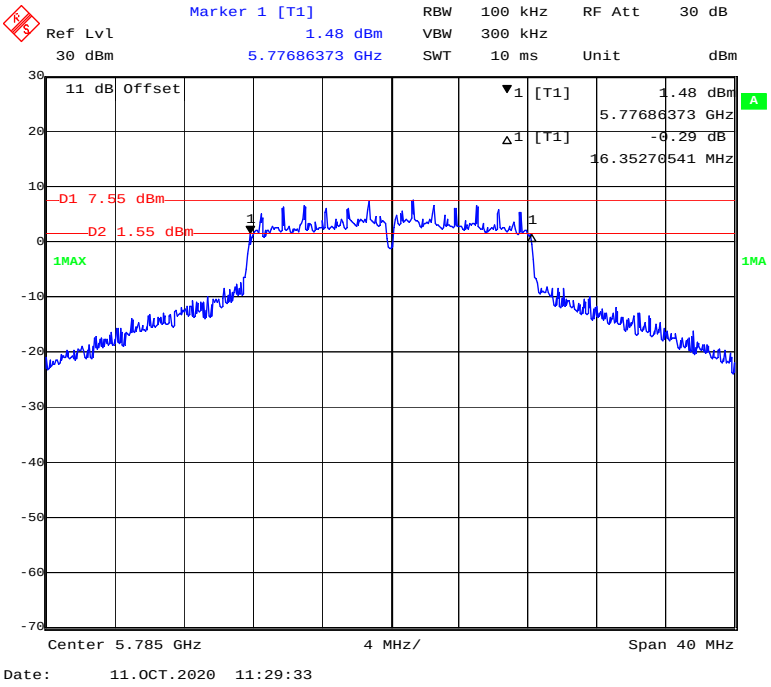
**Chain0**

**6dB Bandwidth**

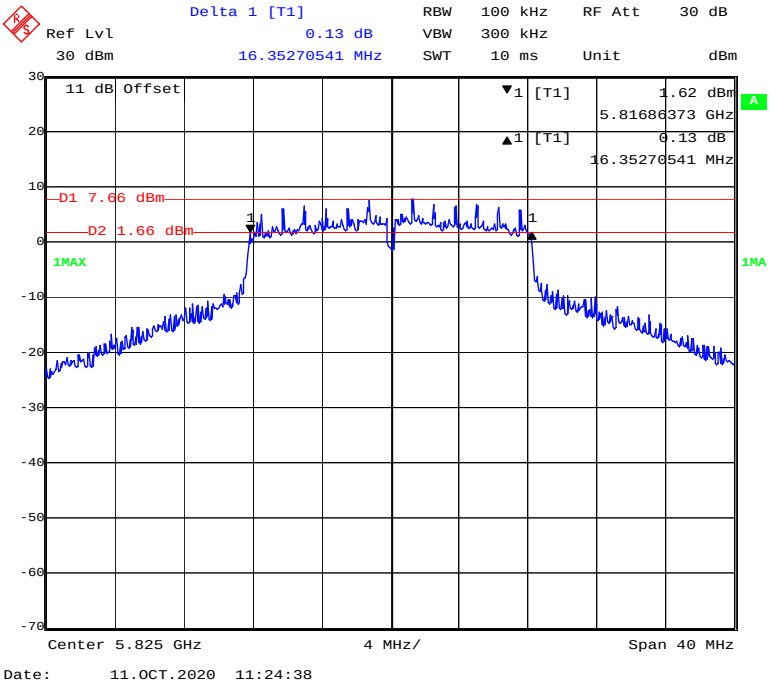
**802.11a mode, 5745MHz**



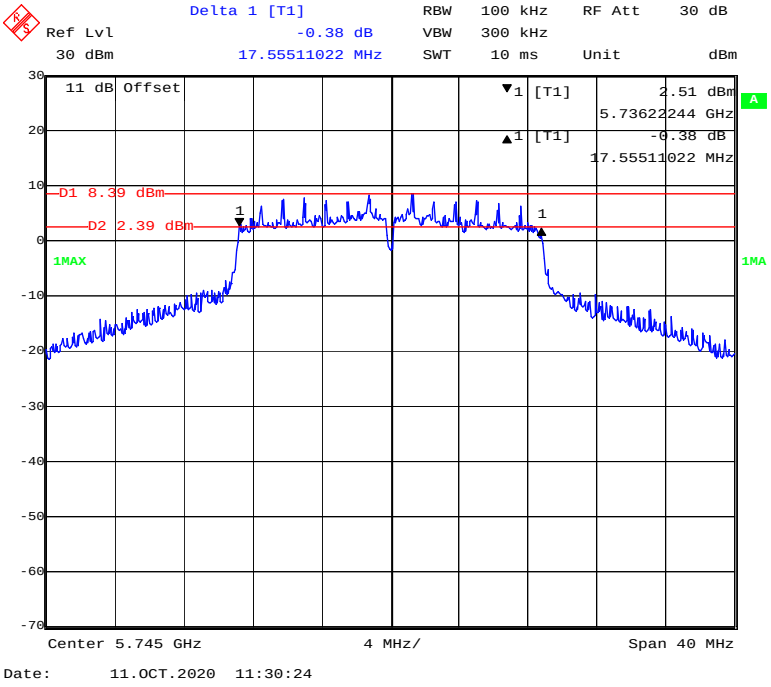

**802.11a mode, 5785MHz**



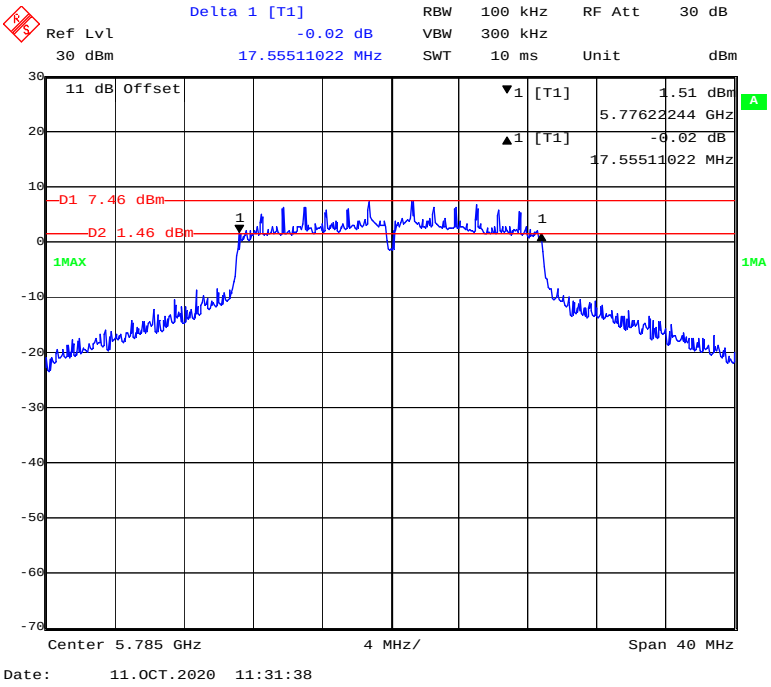
**802.11a mode, 5825MHz**



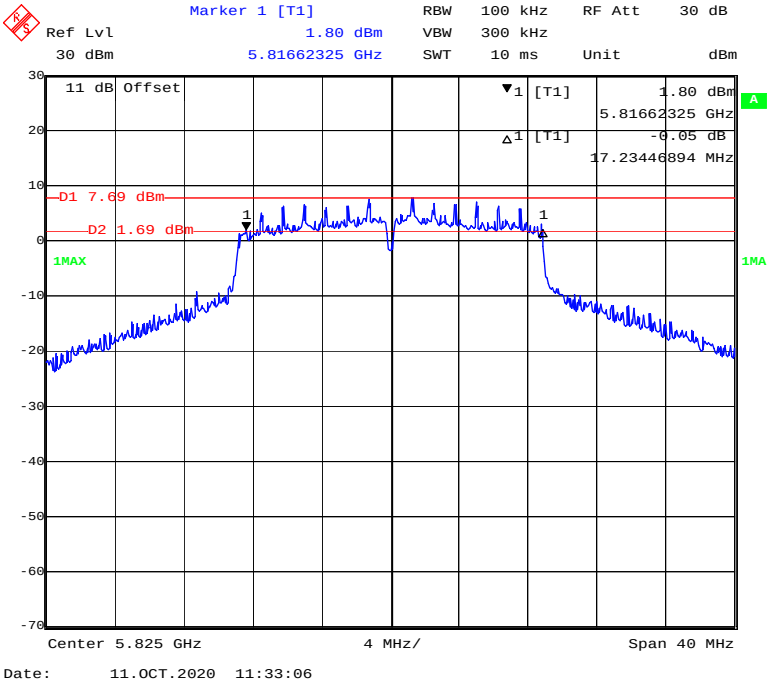

**802.11ac20 mode, 5745MHz**



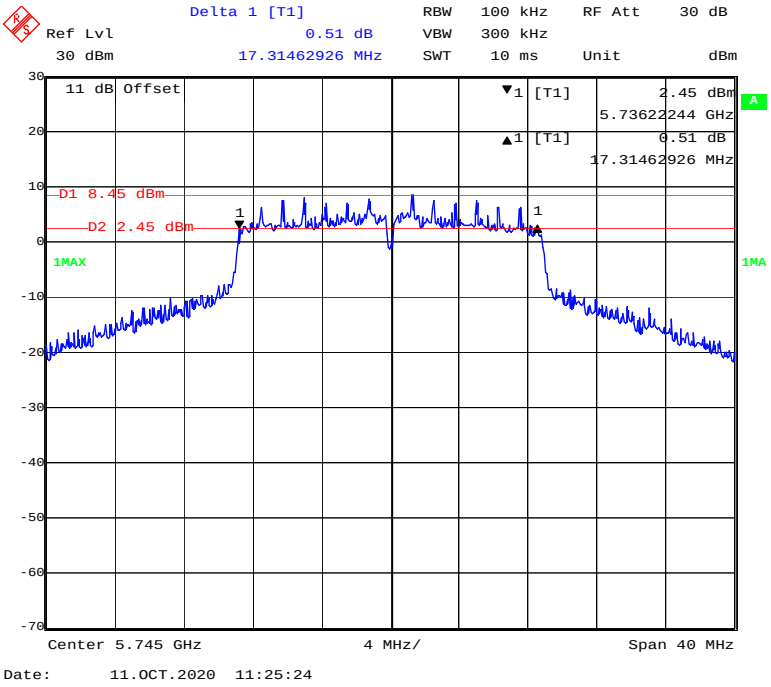
**802.11ac20 mode, 5785MHz**



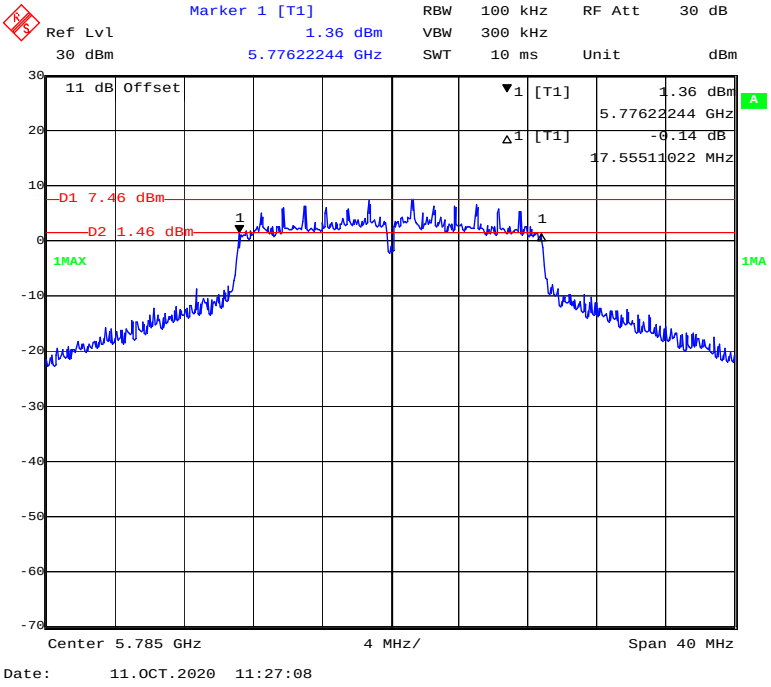

**802.11ac20 mode, 5825MHz**



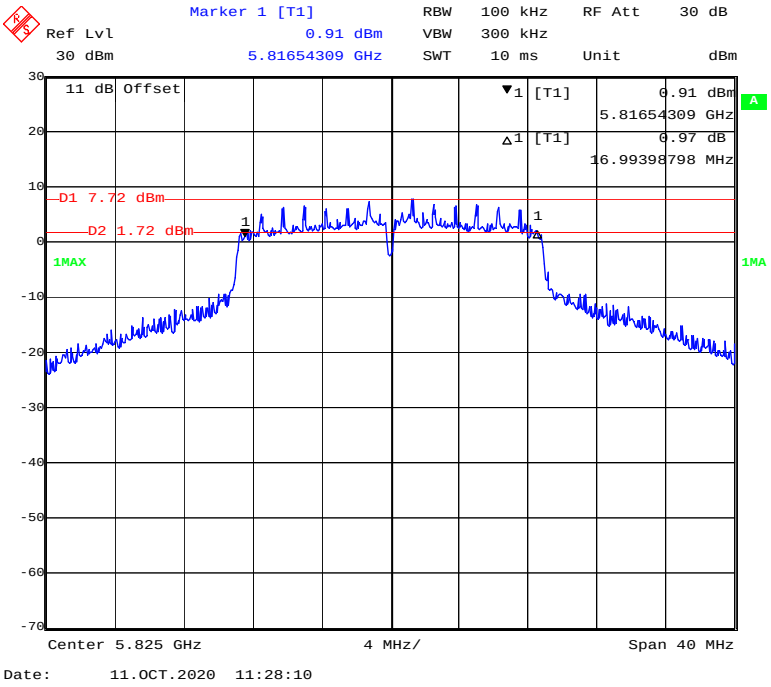
**802.11n-HT20 mode, 5745MHz**



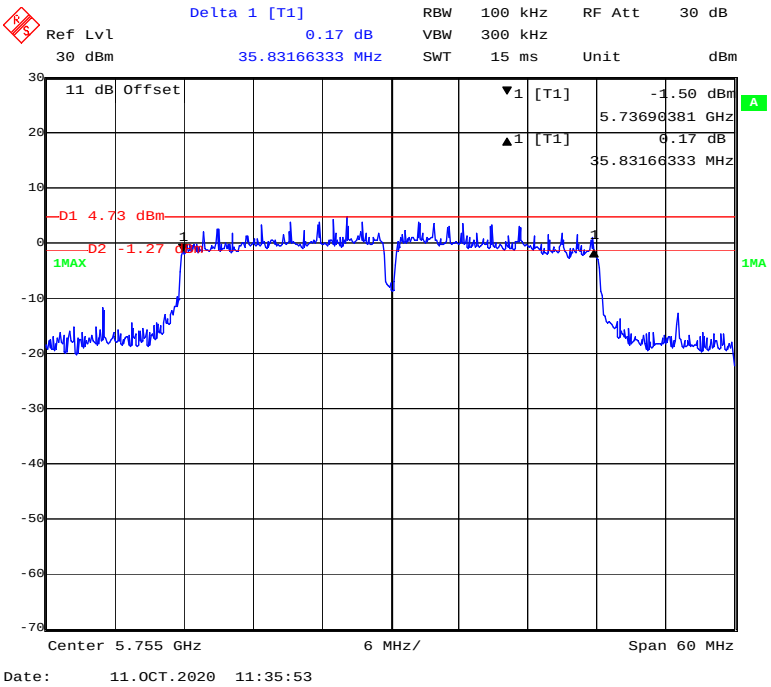

**802.11n-HT20 mode, 5785MHz**



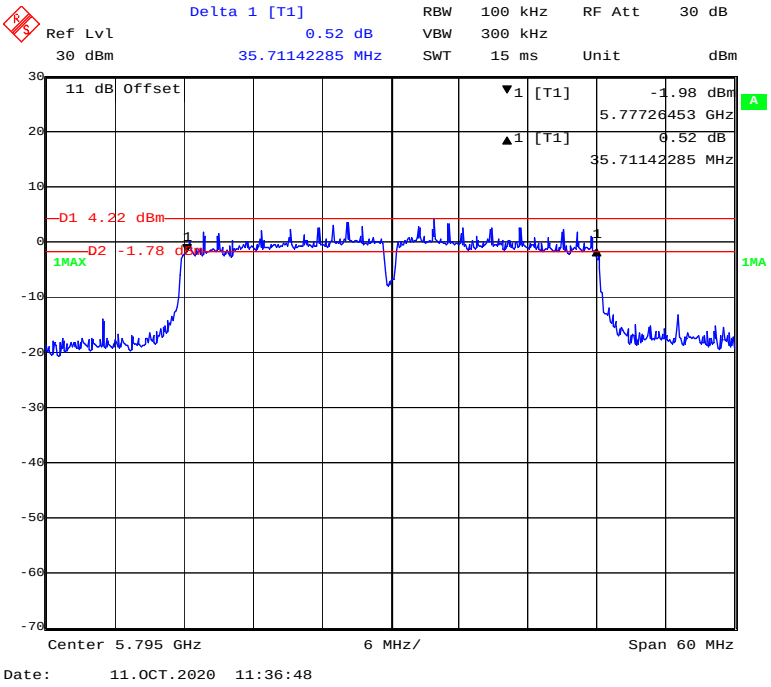
**802.11n-HT20 mode, 5825MHz**



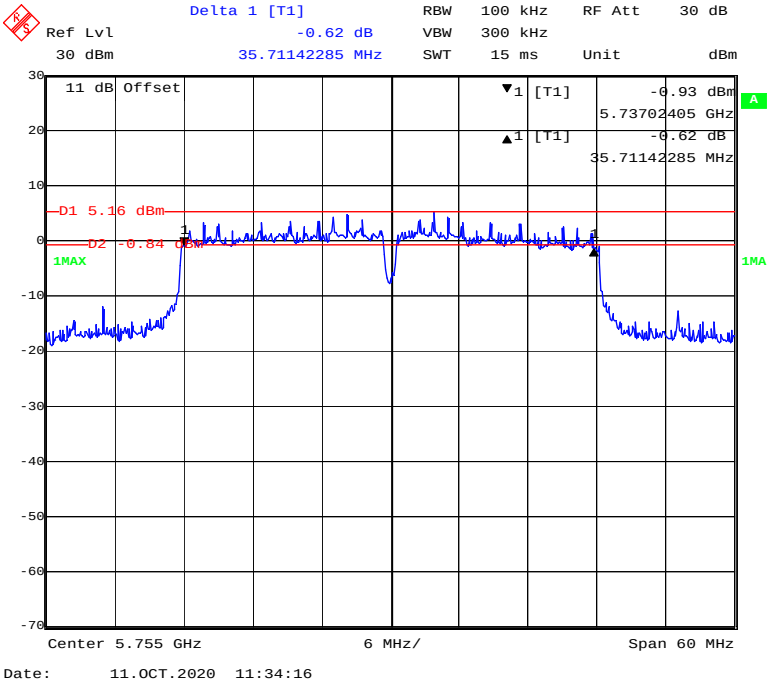

**802.11ac40 mode, 5755MHz**



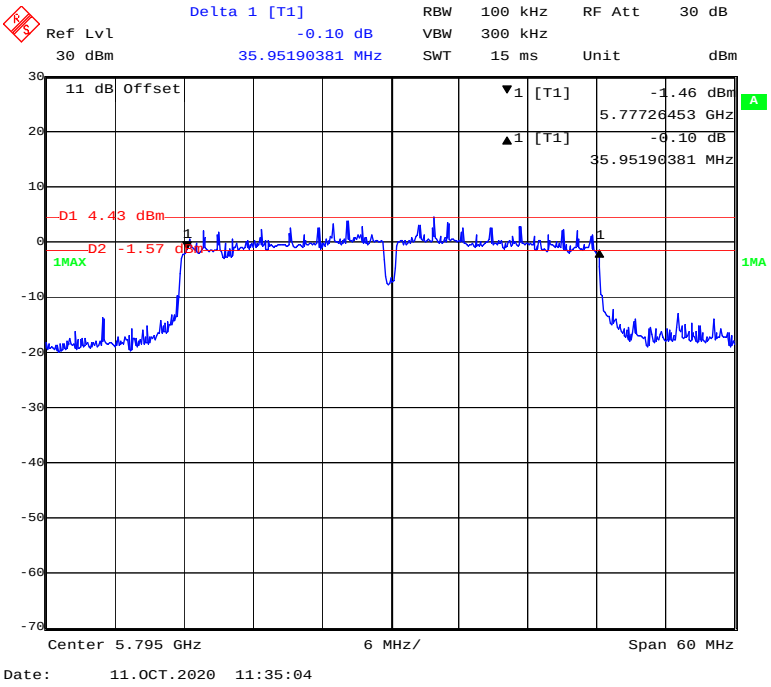
**802.11ac40 mode, 5795MHz**



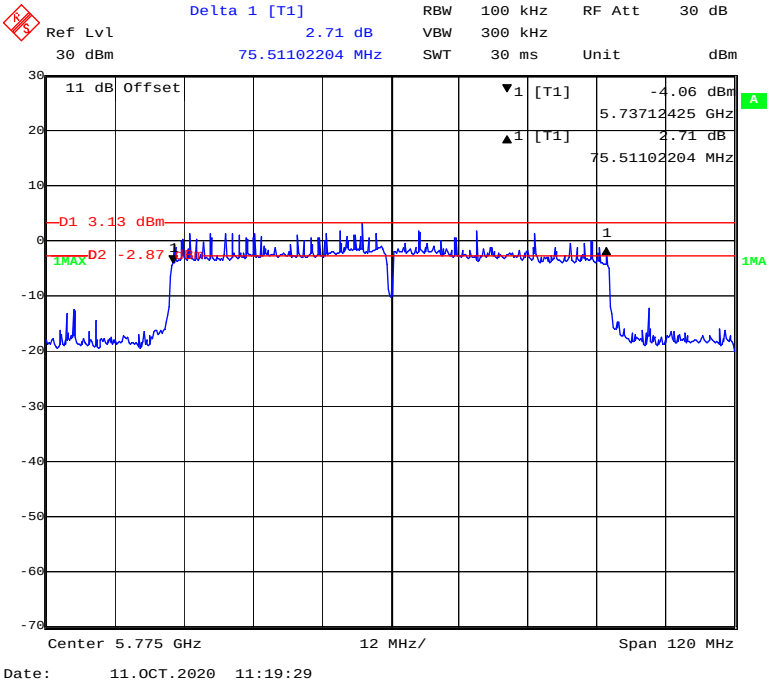

**802.11n-HT40 mode, 5755MHz**



**802.11n-HT40 mode, 5795MHz**

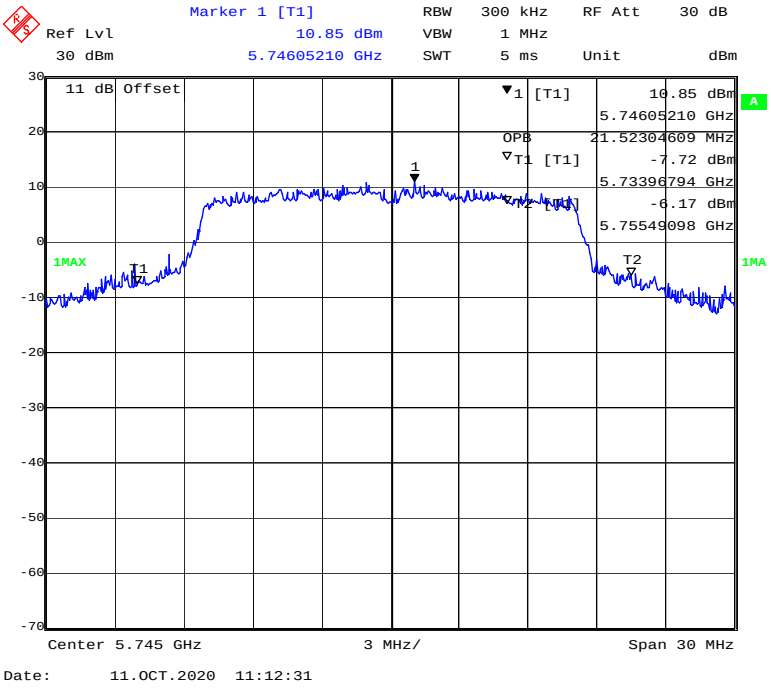



**802.11ac80 mode, 5775MHz**

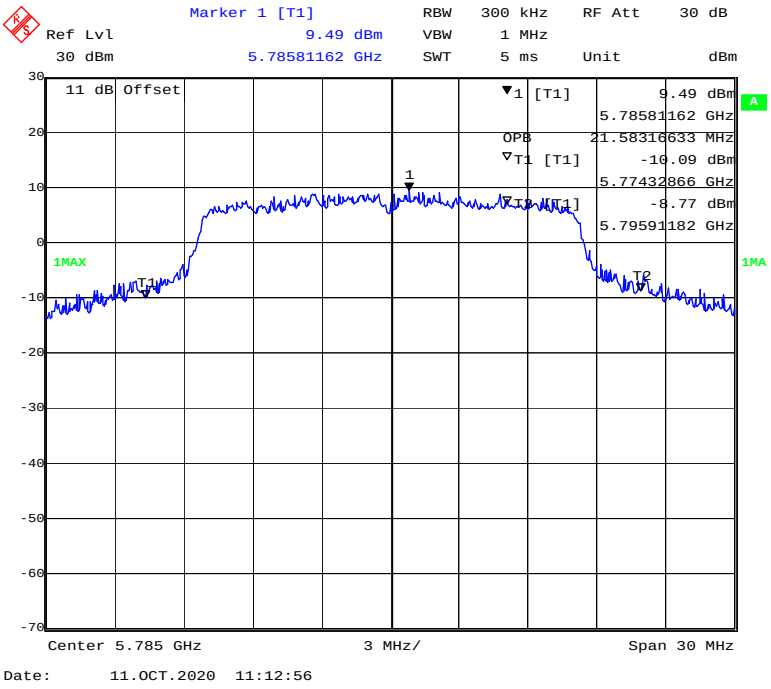


**99% Occupied Bandwidth:**

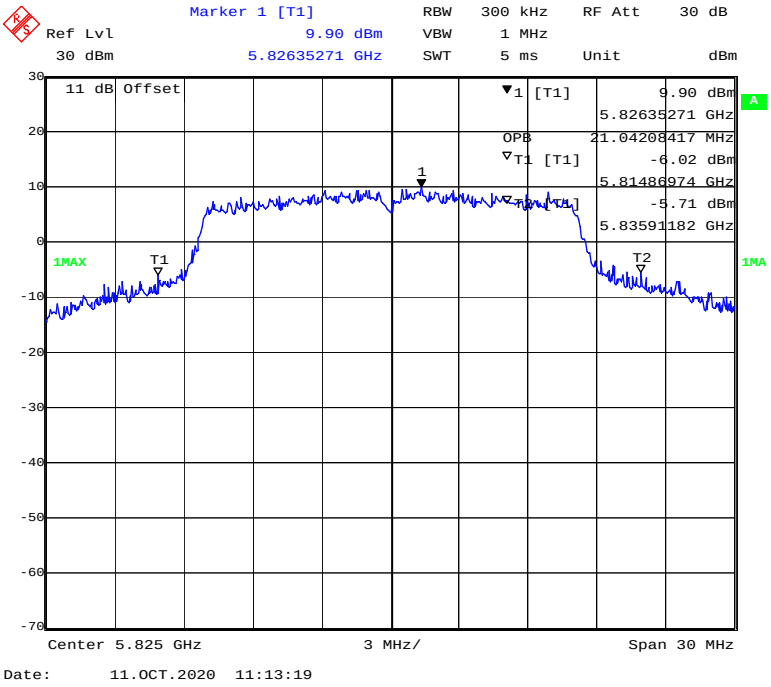
**802.11a mode, 5745MHz**



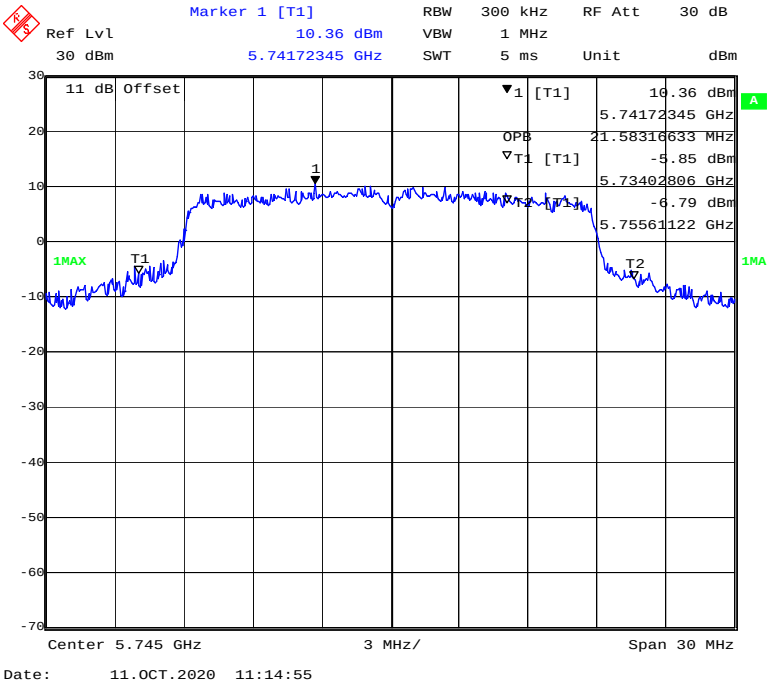

**802.11a mode, 5785MHz**



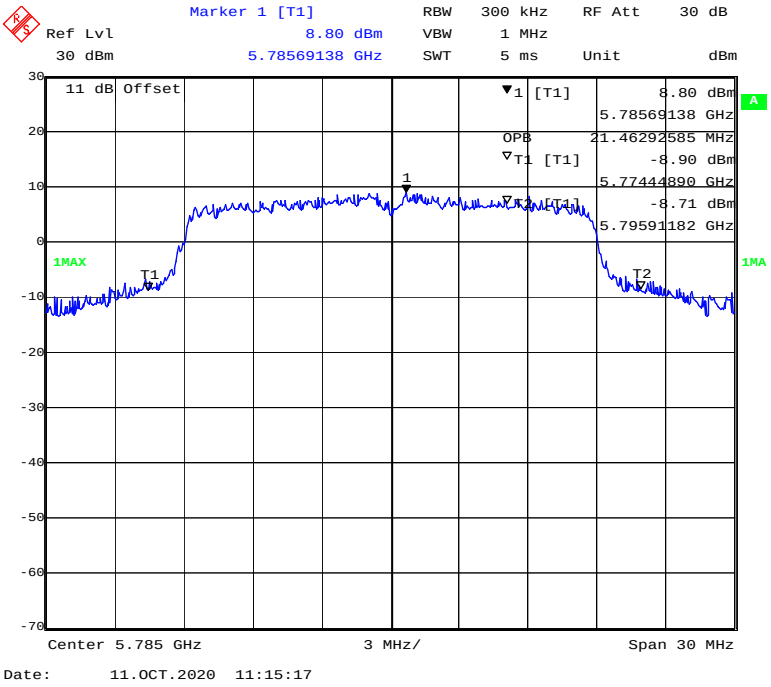
**802.11a mode, 5825MHz**



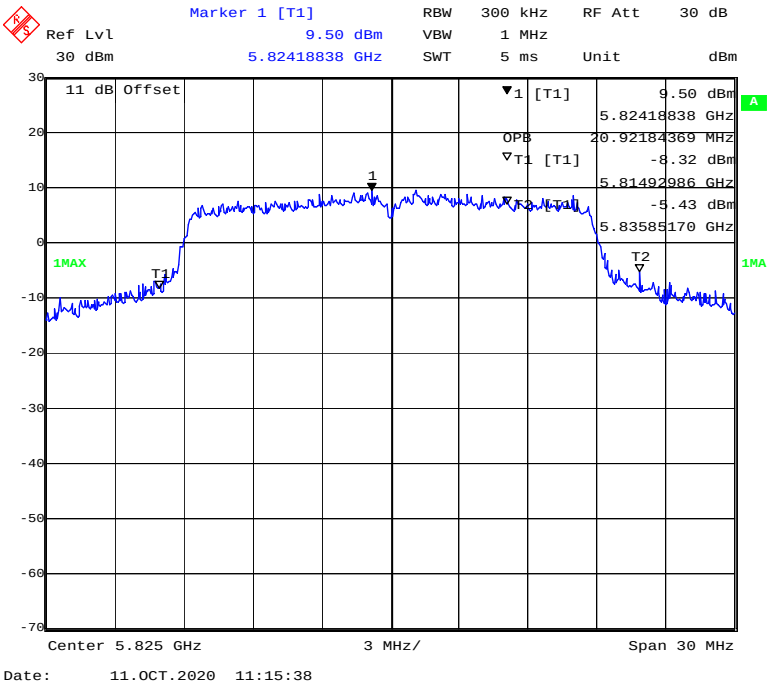

**802.11ac20 mode, 5745MHz**



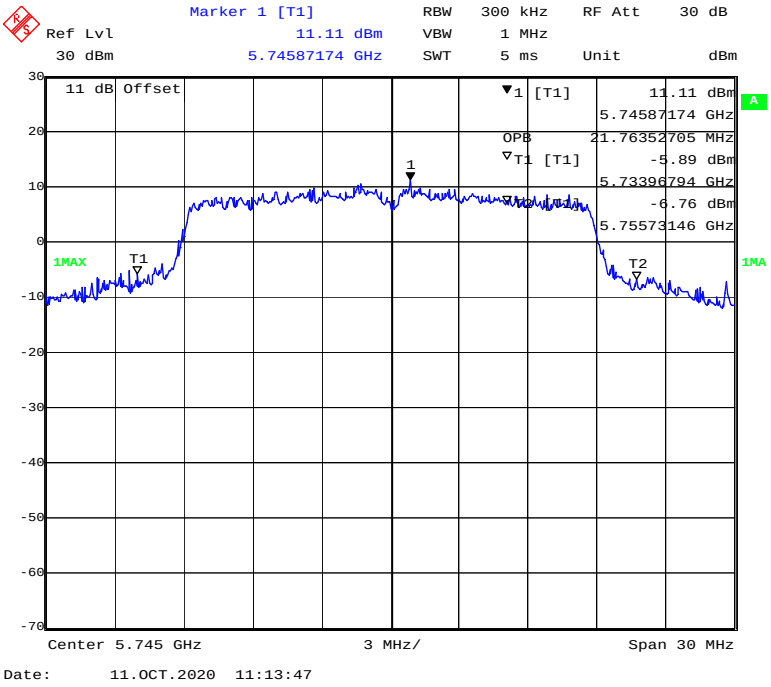
**802.11ac20 mode, 5785MHz**



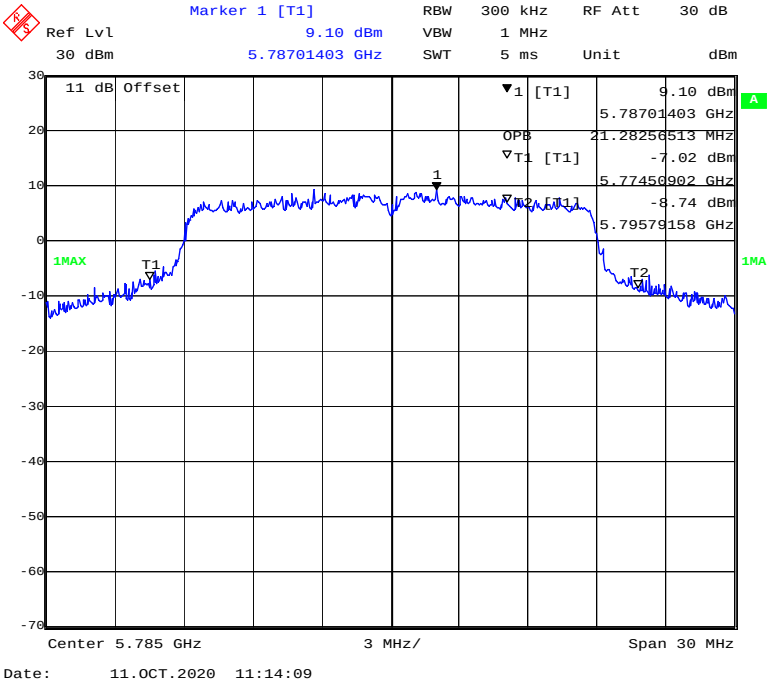

**802.11ac20 mode, 5825MHz**



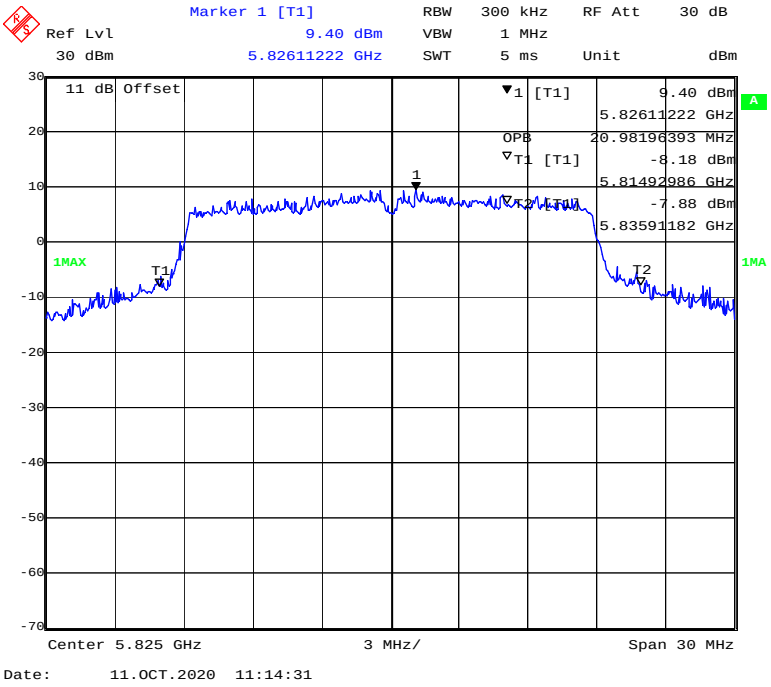
**802.11n-HT20 mode, 5745MHz**



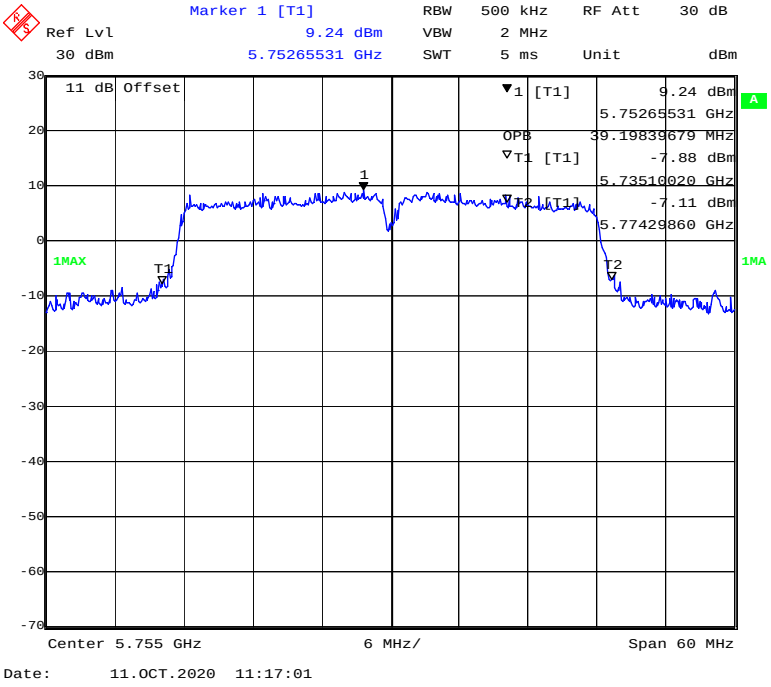

**802.11n-HT20 mode, 5785MHz**



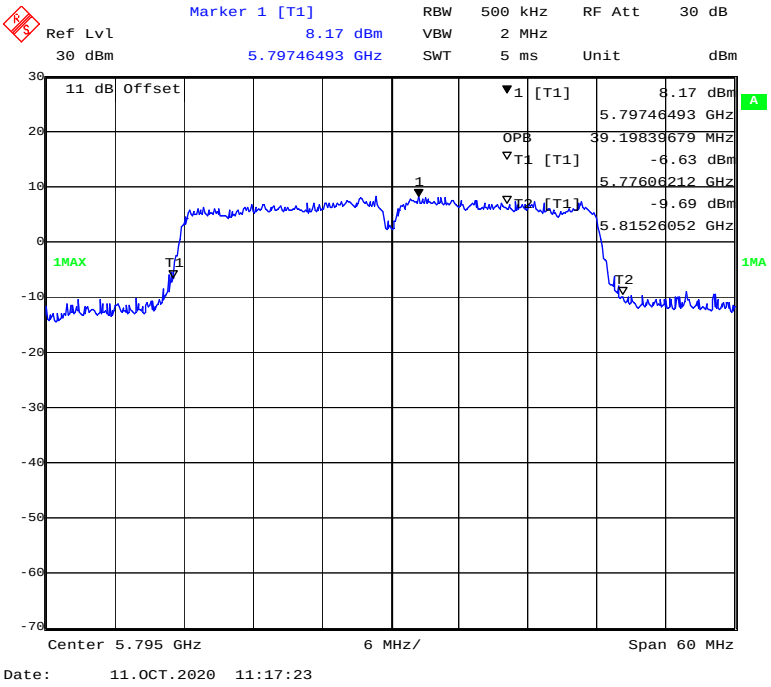
**802.11n-HT20 mode, 5825MHz**



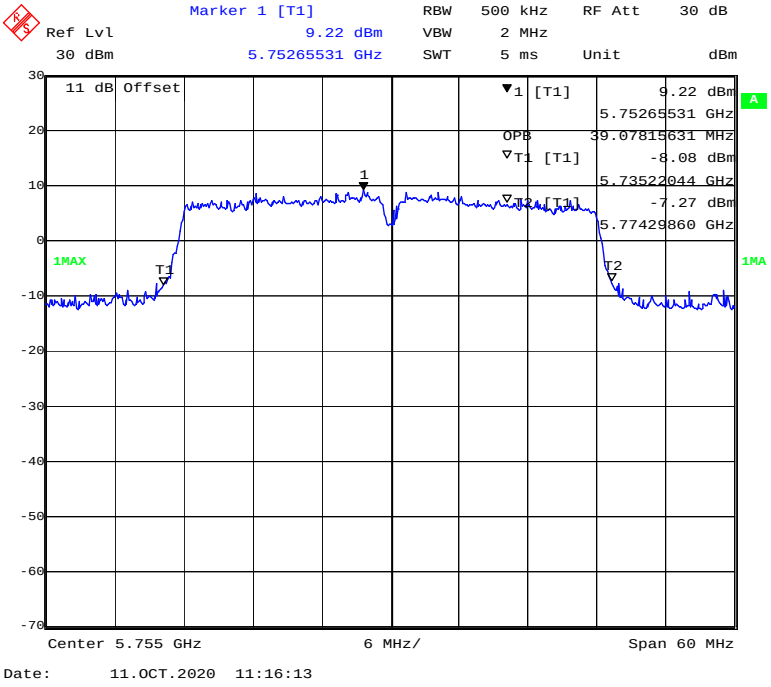

**802.11ac40 mode, 5755MHz**



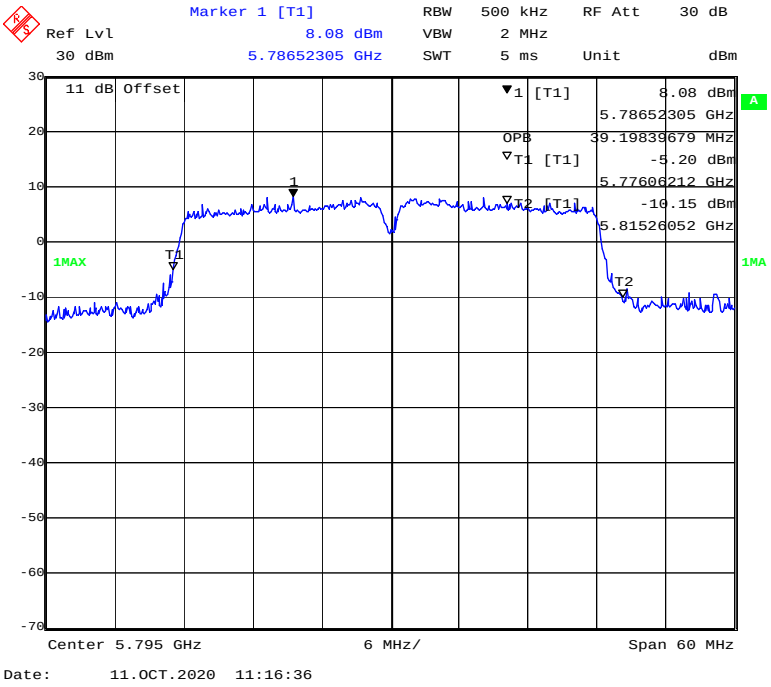
**802.11ac40 mode, 5795MHz**



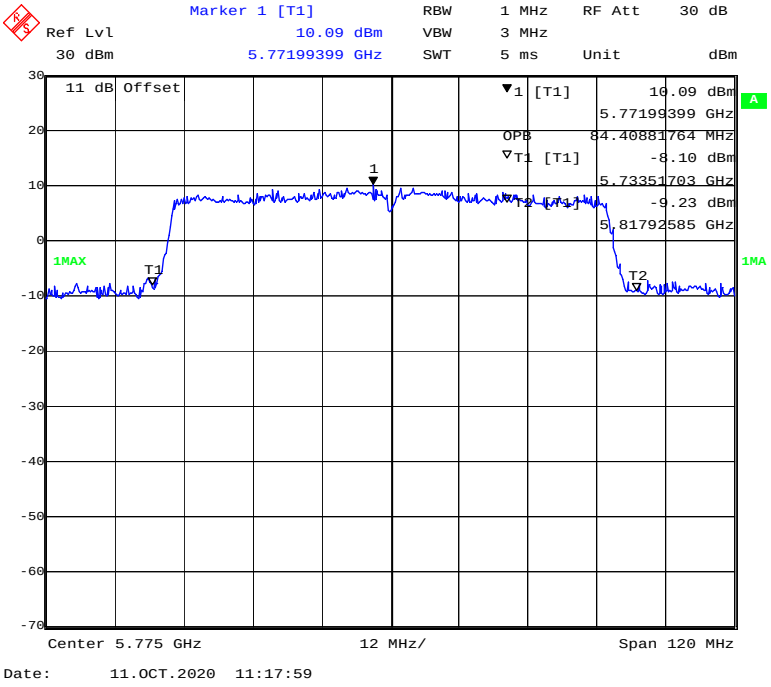

**802.11n-HT40 mode, 5755MHz**



**802.11n-HT40 mode, 5795MHz**



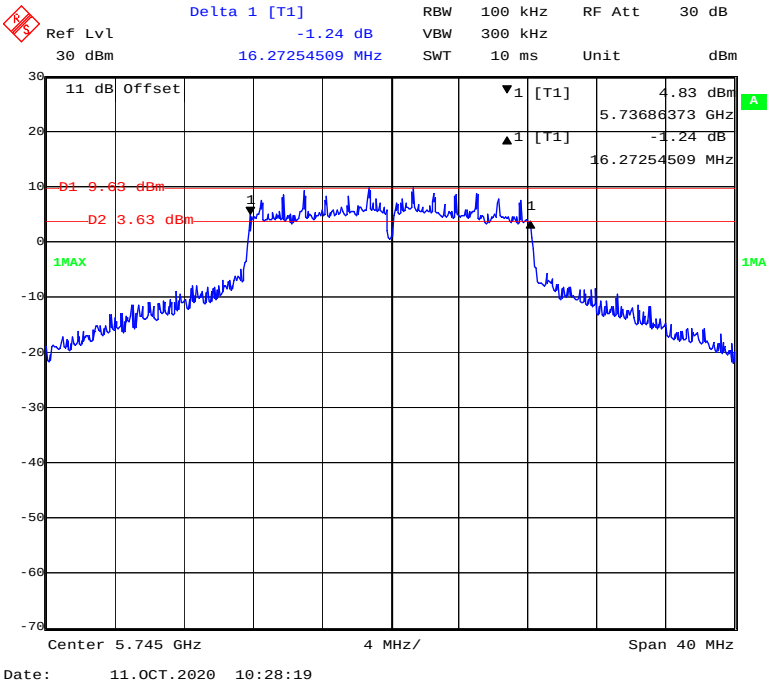

**802.11n-ac80 mode, 5775MHz**



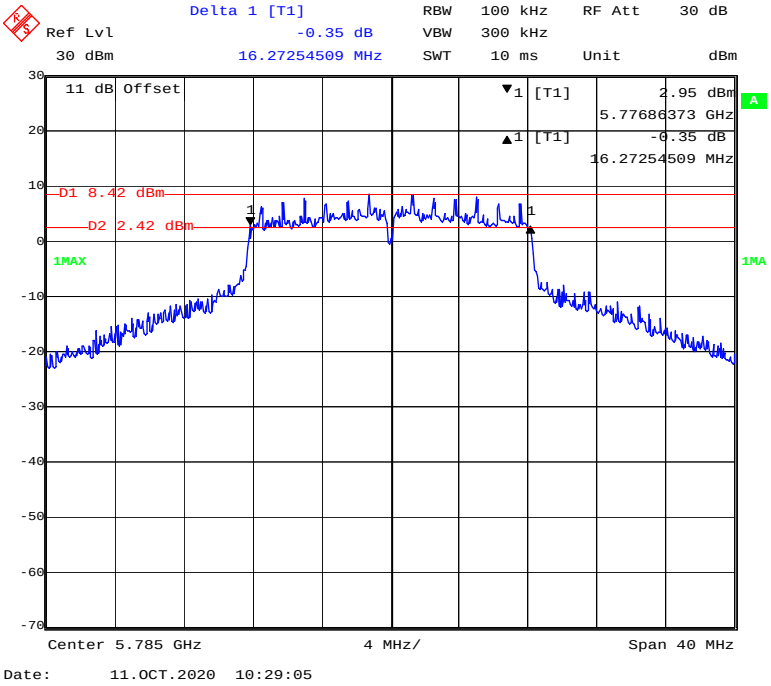
**Chain1**

**6dB Bandwidth**

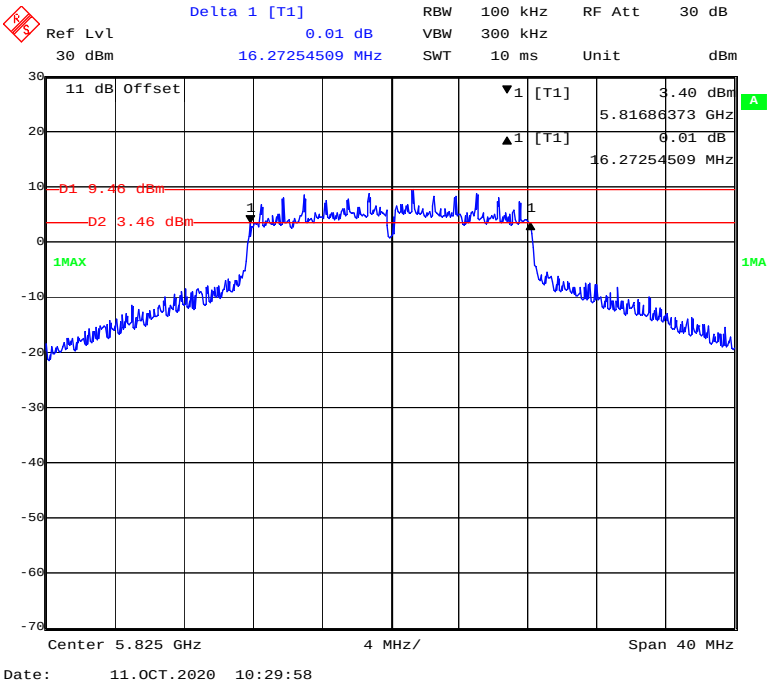
**802.11a mode, 5745MHz**



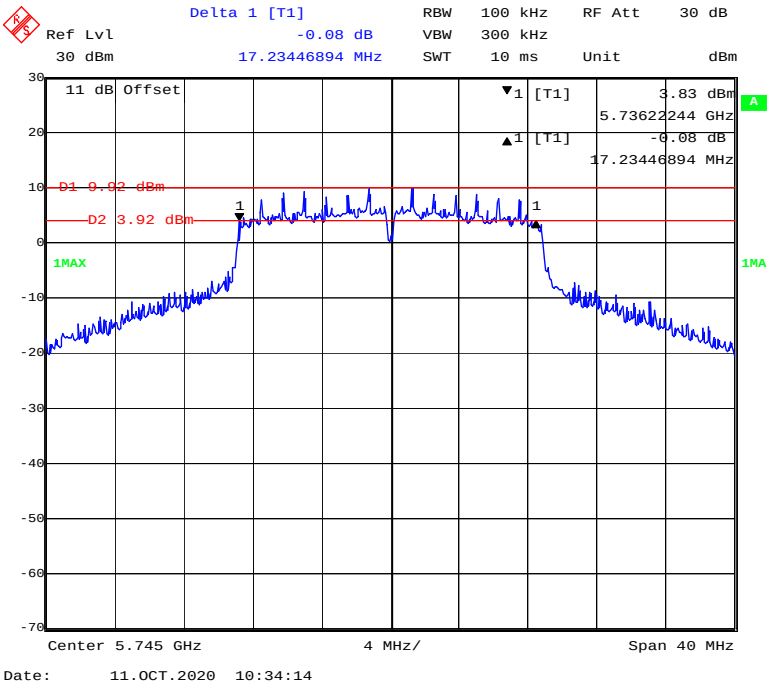

**802.11a mode, 5785MHz**



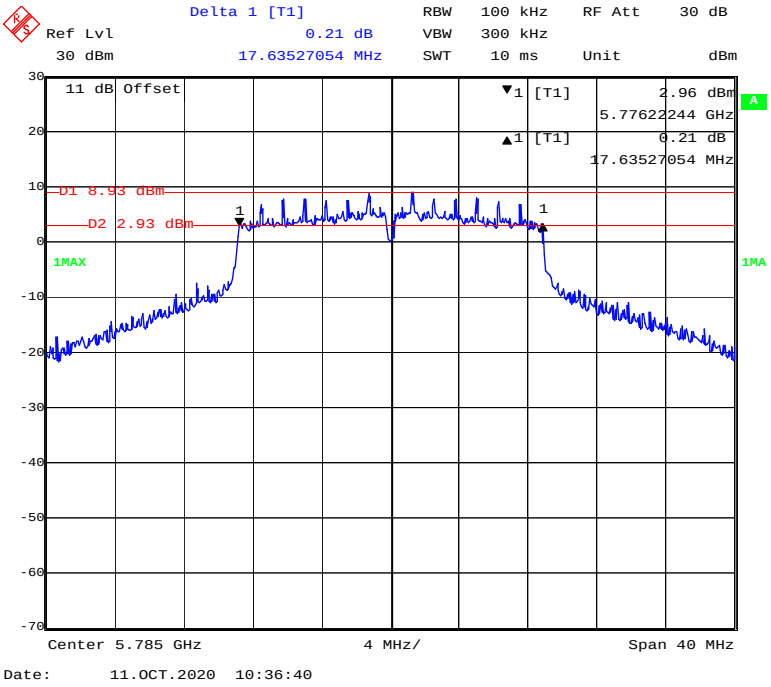
**802.11a mode, 5825MHz**



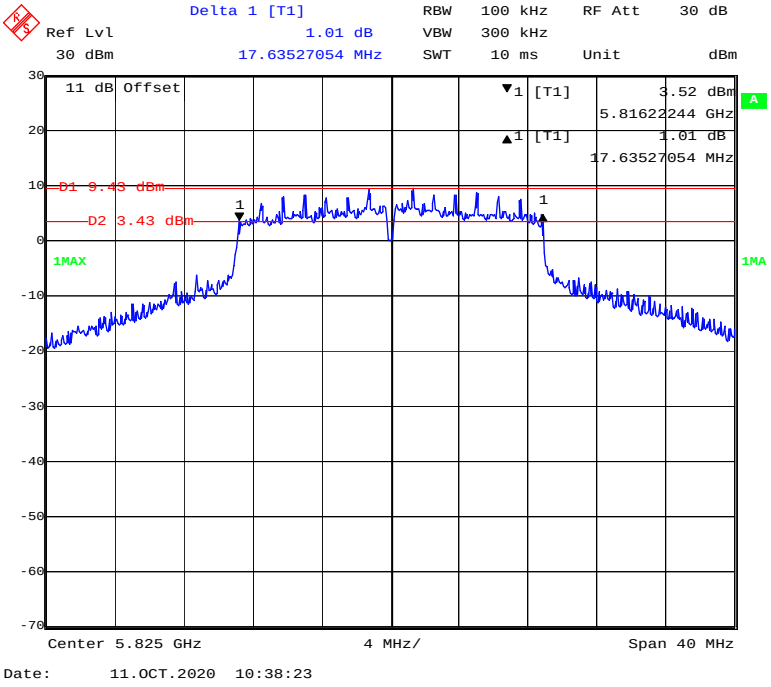

**802.11ac20 mode, 5745MHz**



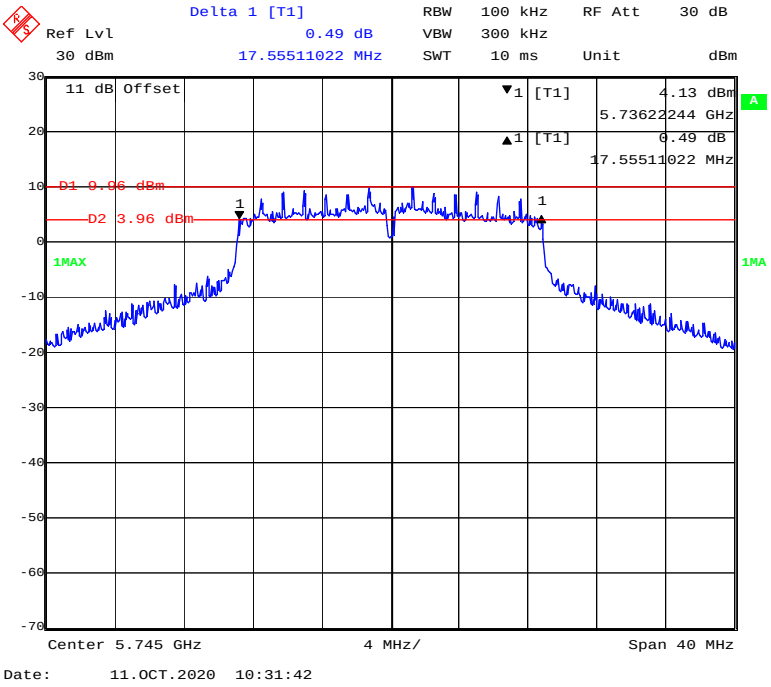
**802.11ac20 mode, 5785MHz**



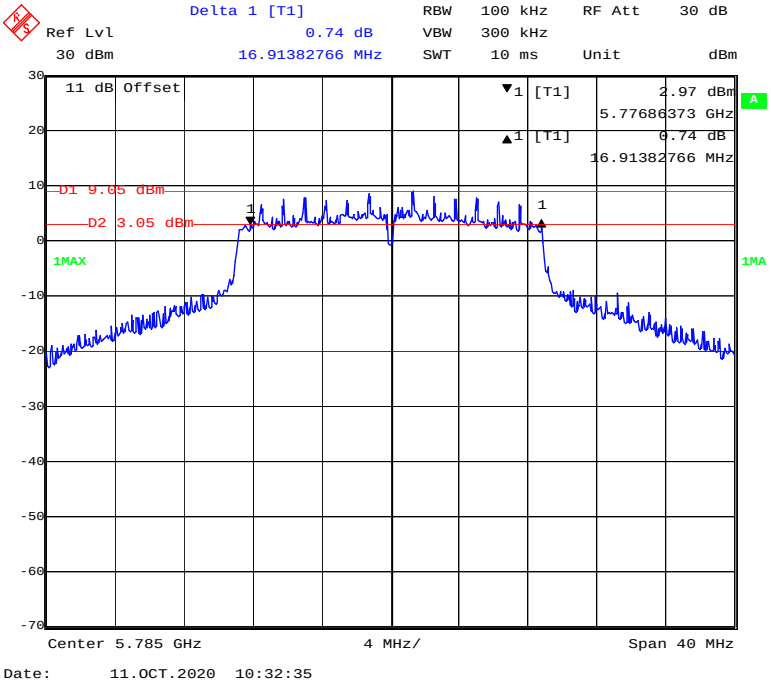

**802.11ac20 mode, 5825MHz**



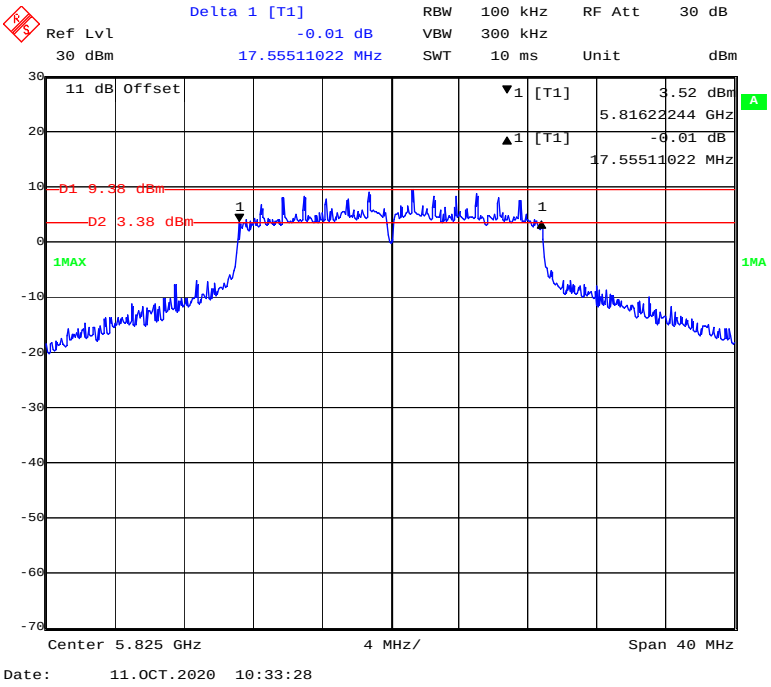
**802.11n-HT20 mode, 5745MHz**



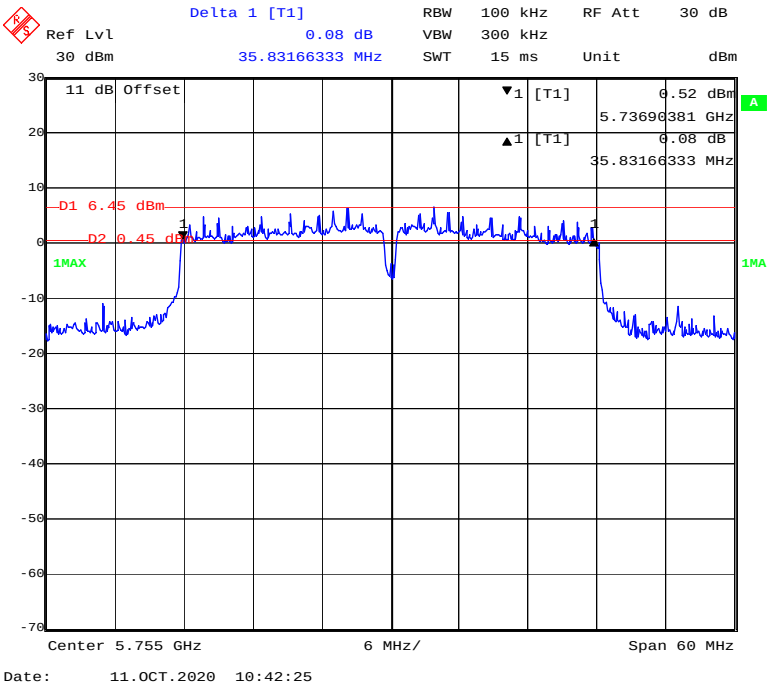

**802.11n-HT20 mode, 5785MHz**



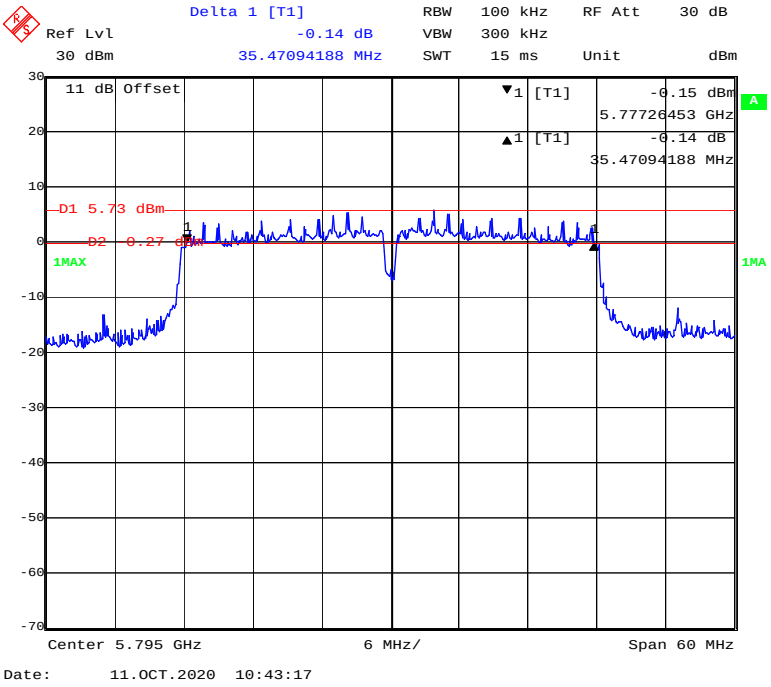
**802.11n-HT20 mode, 5825MHz**



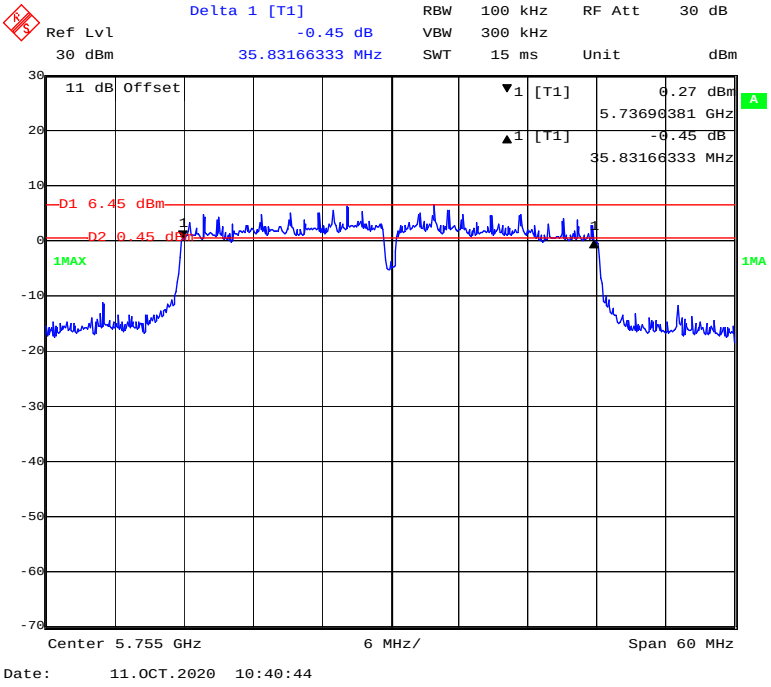

**802.11ac40 mode, 5755MHz**



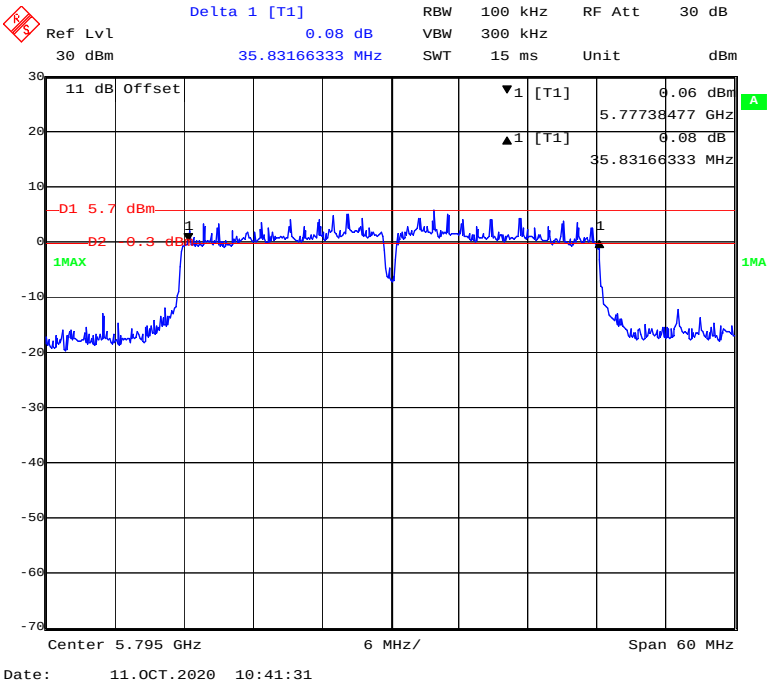
**802.11ac40 mode, 5795MHz**



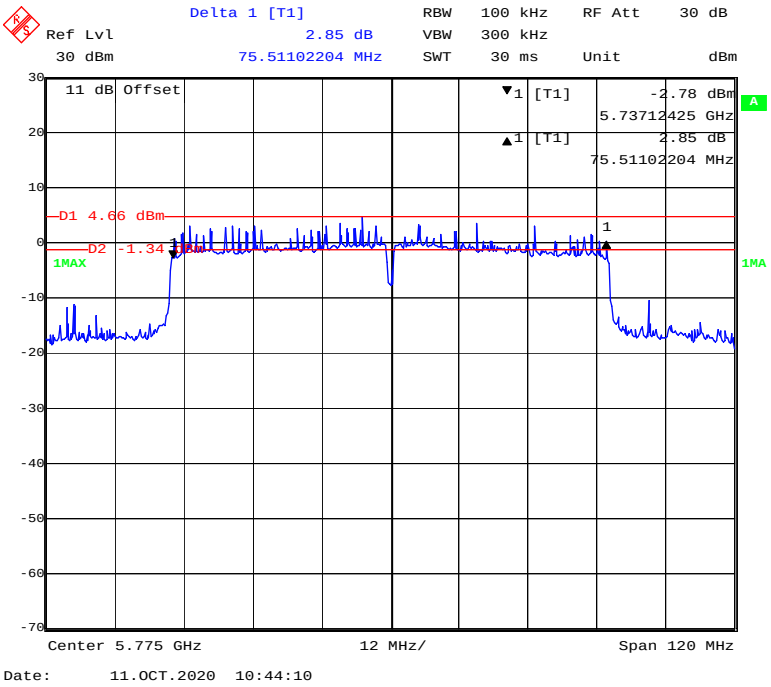

**802.11n-HT40 mode, 5755MHz**



**802.11n-HT40 mode, 5795MHz**

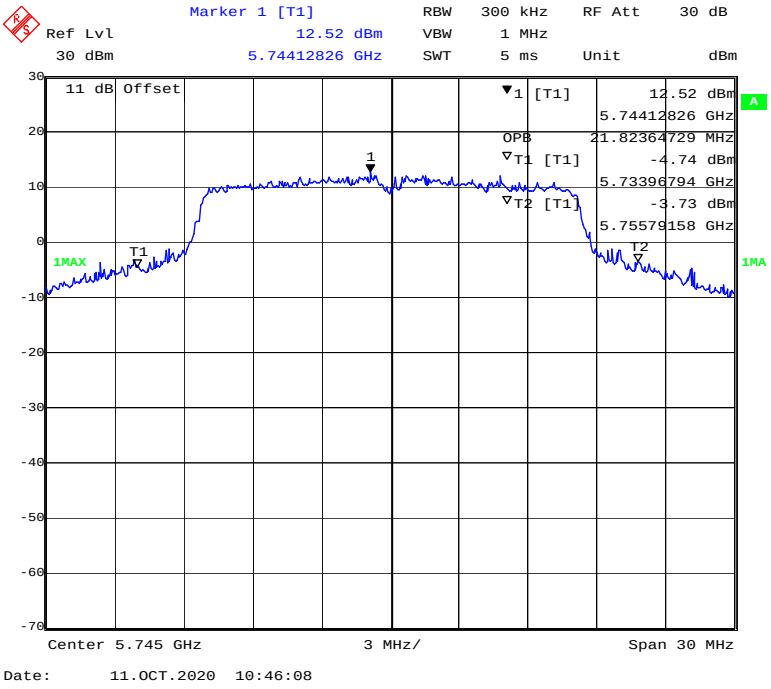



**802.11ac80 mode, 5775MHz**

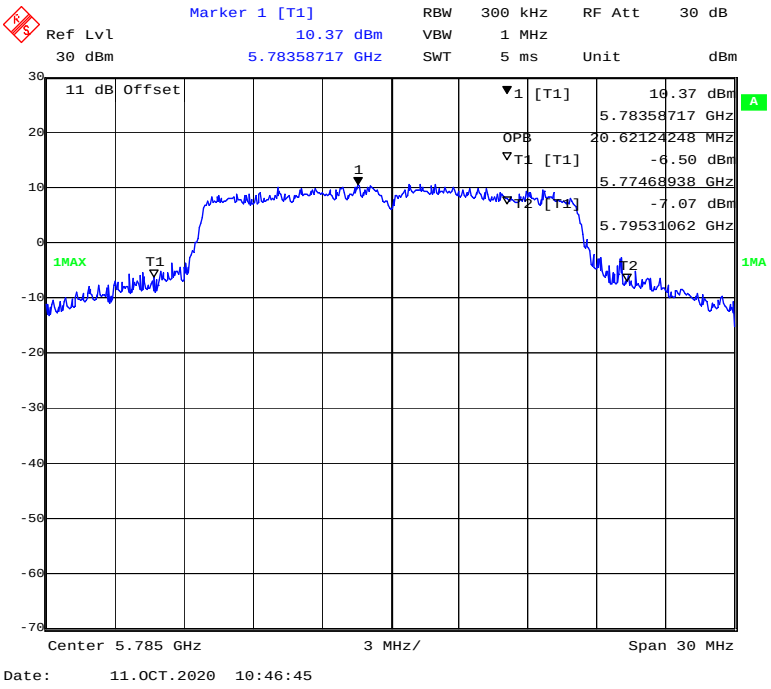


**99% Occupied Bandwidth:**

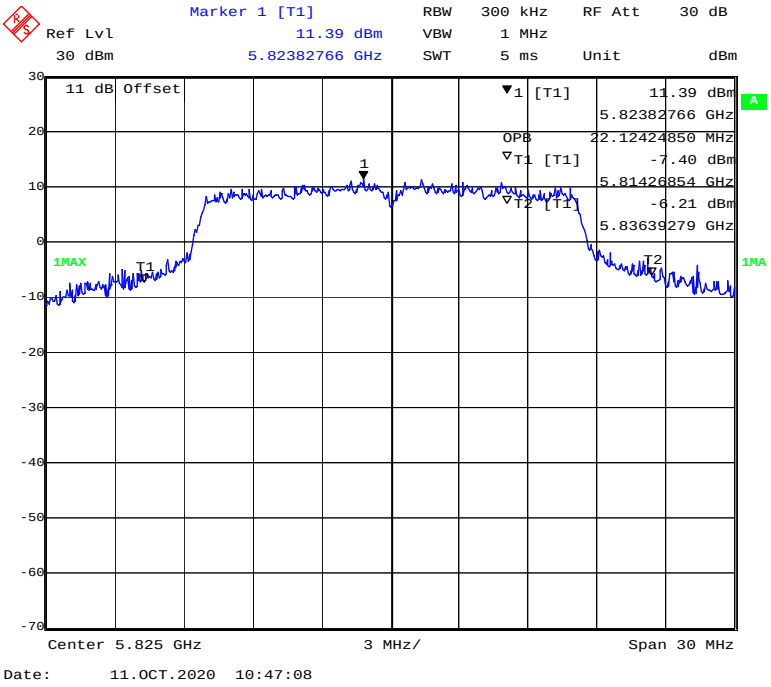
**802.11a mode, 5745MHz**



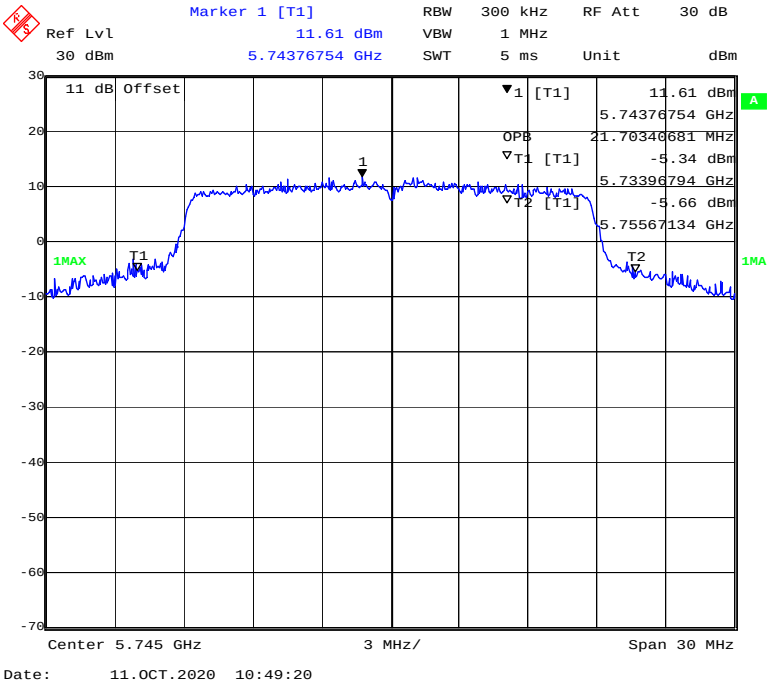

**802.11a mode, 5785MHz**



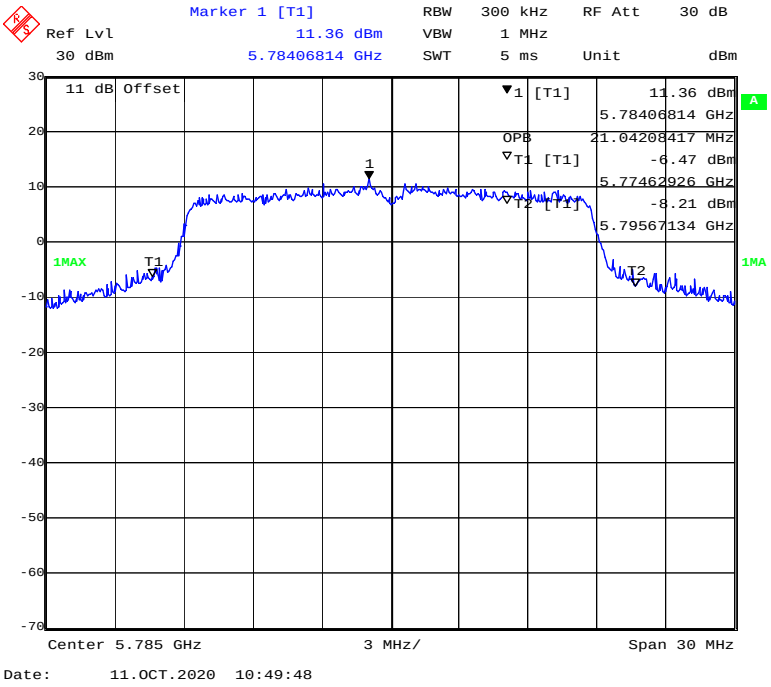
**802.11a mode, 5825MHz**



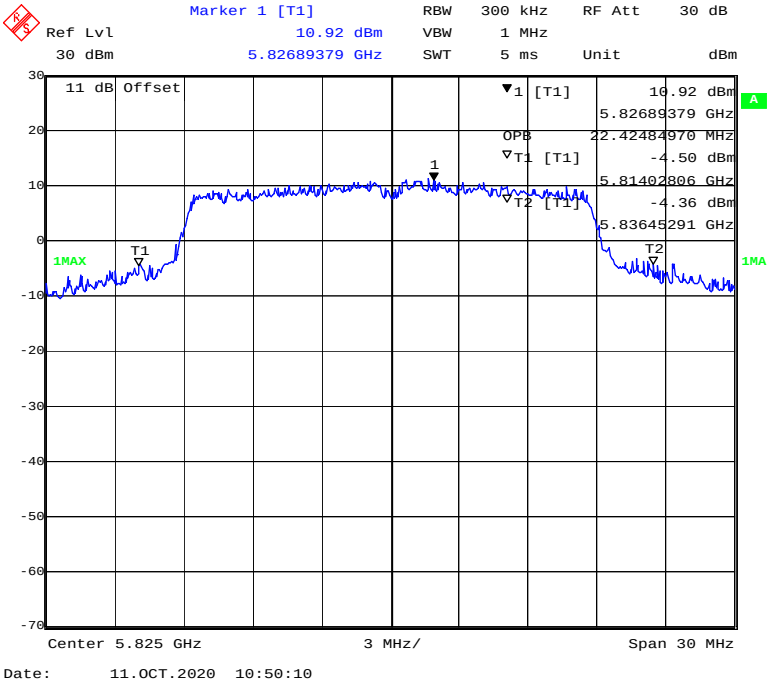

**802.11ac20 mode, 5745MHz**



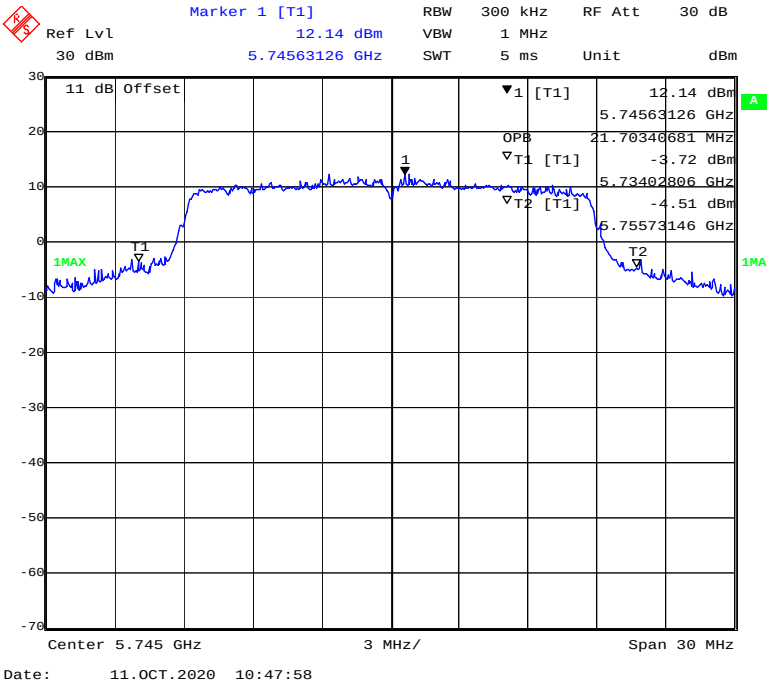
**802.11ac20 mode, 5785MHz**



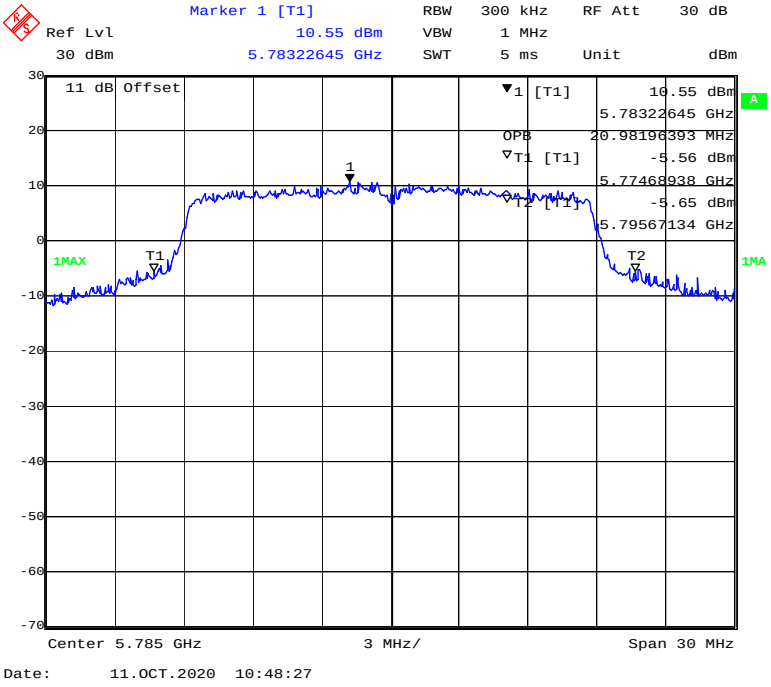

**802.11ac20 mode, 5825MHz**



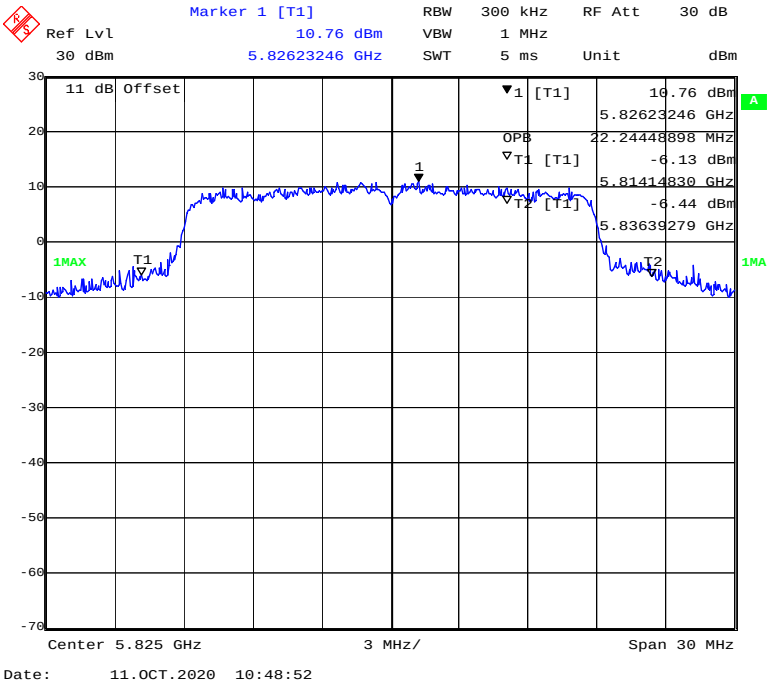
**802.11n-HT20 mode, 5745MHz**



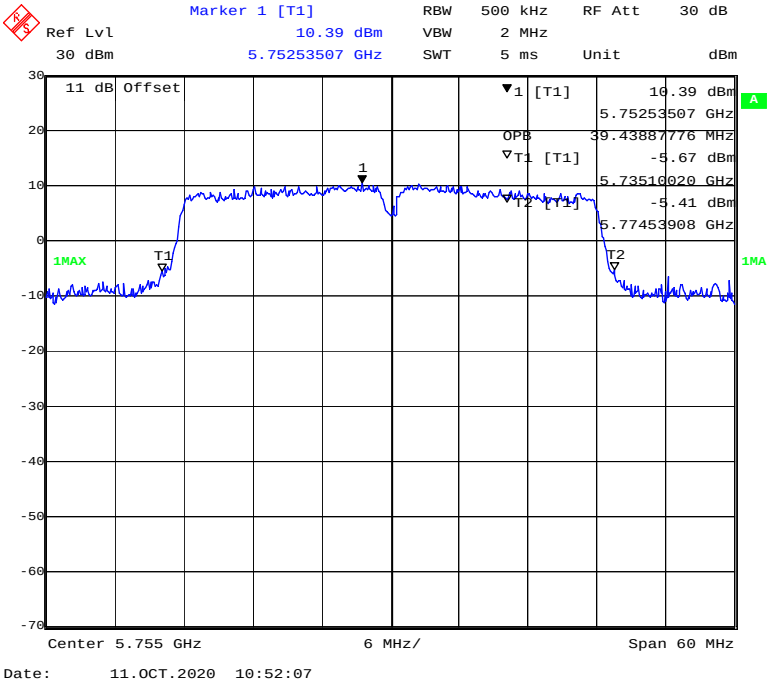

**802.11n-HT20 mode, 5785MHz**



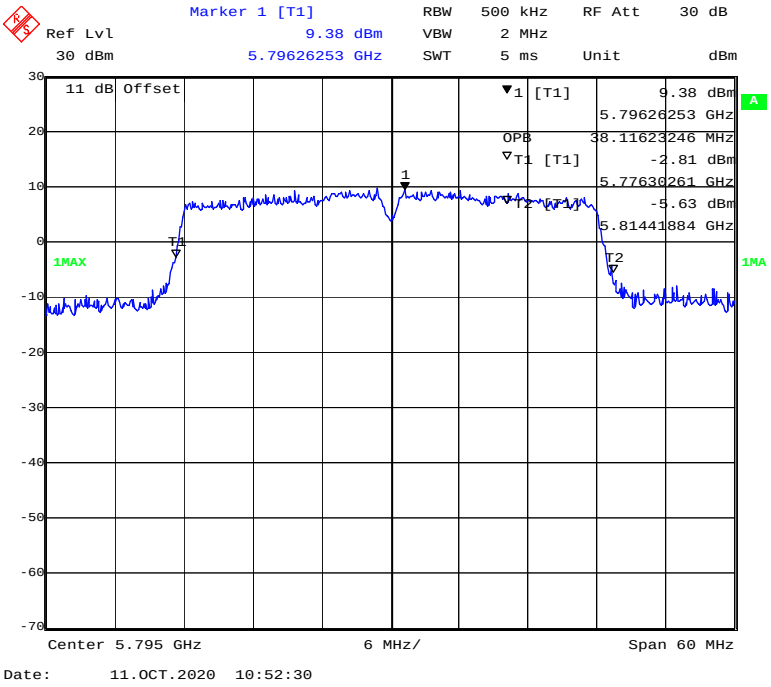
**802.11n-HT20 mode, 5825MHz**



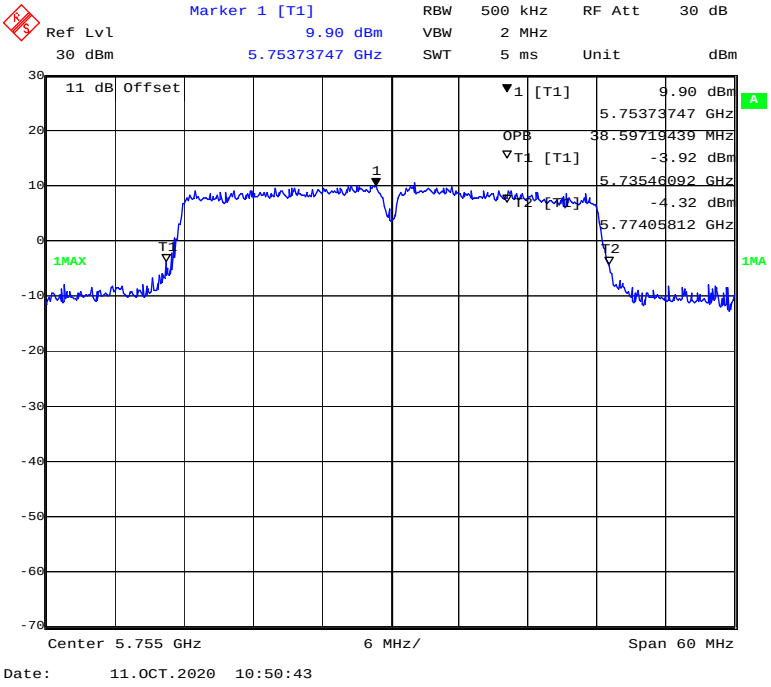

**802.11ac40 mode, 5755MHz**



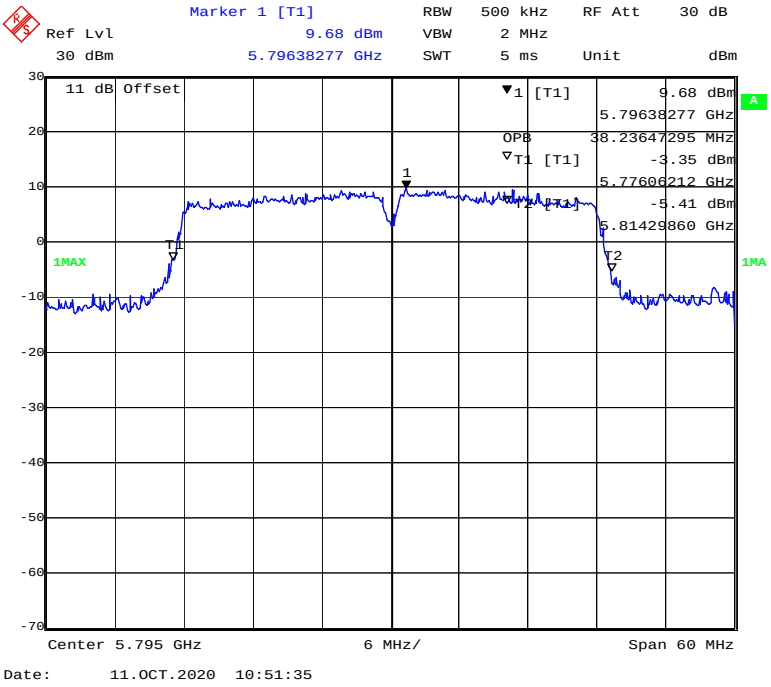
**802.11ac40 mode, 5795MHz**



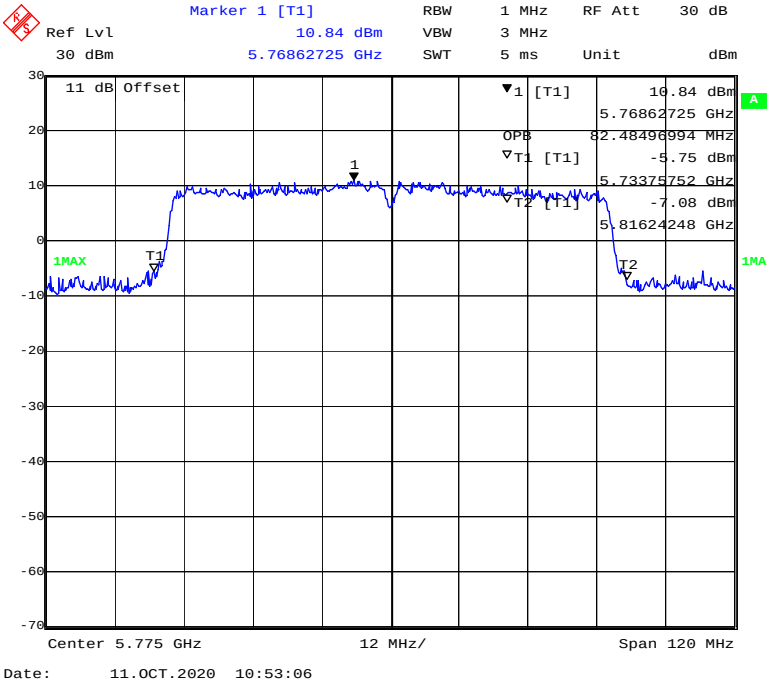

**802.11n-HT40 mode, 5755MHz**



**802.11n-HT40 mode, 5795MHz**




**802.11n-ac80 mode, 5775MHz**



# FCC §15.407(a) (1) (3) – CONDUCTED TRANSMITTER OUTPUT POWER

## Applicable Standard

According to §15.407(a)(1)

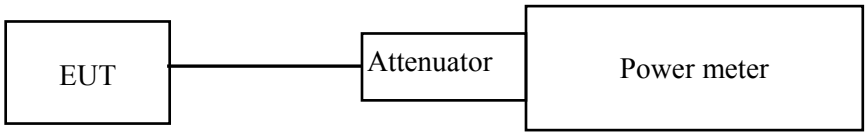
(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6
dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain
of the antenna exceeds 6 dBi.

According to §15.407(a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

## Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.




## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 24.8 ℃ |
| **Relative Humidity:** | 50 % |
| **ATM Pressure:** | 101.5 kPa |

*The testing was performed by CK Huang on 2020-10-11.*

*Test Mode: Transmitting*

| Test mode | Band | Channel | Frequency (MHz) | Average Conducted Output Power (dBm) | | | Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|---|
| | | | | Chain0 | Chain1 | Total | | |
| 802.11a | 5150-5250 MHz | Low | 5180 | 18.21 | 17.94 | / | 24 | PASS |
| | | Middle | 5200 | 18.12 | 17.35 | / | 24 | PASS |
| | | High | 5240 | 18.42 | 18.32 | / | 24 | PASS |
| | 5725-5850 MHz | Low | 5745 | 18.76 | 20.51 | / | 30 | PASS |
| | | Middle | 5785 | 17.88 | 19.66 | / | 30 | PASS |
| | | High | 5825 | 18.03 | 20.10 | / | 30 | PASS |
| 802.11n-HT20 | 5150-5250 MHz | Low | 5180 | 17.27 | 17.38 | 20.34 | 24 | PASS |
| | | Middle | 5200 | 17.31 | 17.42 | 20.38 | 24 | PASS |
| | | High | 5240 | 17.30 | 17.30 | 20.31 | 24 | PASS |
| | 5725-5850 MHz | Low | 5745 | 18.93 | 20.48 | 22.78 | 30 | PASS |
| | | Middle | 5785 | 17.89 | 19.34 | 21.69 | 30 | PASS |
| | | High | 5825 | 18.15 | 19.99 | 22.18 | 30 | PASS |
| 802.11n-HT40 | 5150-5250 MHz | Low | 5190 | 12.75 | 11.86 | 15.34 | 24 | PASS |
| | | High | 5230 | 12.97 | 12.52 | 15.76 | 24 | PASS |
| | 5725-5850 MHz | Low | 5755 | 18.49 | 20.14 | 22.40 | 30 | PASS |
| | | High | 5795 | 17.70 | 19.39 | 21.64 | 30 | PASS |
| 802.11ac20 | 5150-5250 MHz | Low | 5180 | 17.35 | 17.36 | 20.37 | 24 | PASS |
| | | Middle | 5200 | 17.13 | 17.36 | 20.26 | 24 | PASS |
| | | High | 5240 | 17.48 | 17.29 | 20.40 | 24 | PASS |
| | 5725-5850 MHz | Low | 5745 | 18.98 | 20.49 | 22.81 | 30 | PASS |
| | | Middle | 5785 | 17.84 | 19.45 | 21.73 | 30 | PASS |
| | | High | 5825 | 18.14 | 20.01 | 22.19 | 30 | PASS |
| 802.11ac40 | 5150-5250 MHz | Low | 5190 | 12.63 | 12.02 | 15.35 | 24 | PASS |
| | | High | 5230 | 12.78 | 12.57 | 15.69 | 24 | PASS |
| | 5725-5850 MHz | Low | 5755 | 18.58 | 20.15 | 22.45 | 30 | PASS |
| | | High | 5795 | 17.91 | 19.35 | 21.70 | 30 | PASS |
| 802.11ac80 | 5150-5250 MHz | / | 5210 | 7.47 | 7.00 | 10.25 | 24 | PASS |
| | 5725-5850 MHz | / | 5775 | 18.93 | 20.25 | 22.65 | 30 | PASS |

Note 1: The total output power=10Log10(10^(Chain0/10)+10^(Chain1/10))
Note 2: The maximum antenna gain is 1.57 dBi, the device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO
transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11
devices:
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
So:
Directional gain = $G_{ANT}$ + Array Gain = 1.57dBi < 6dBi

# FCC §15.407(a) (1) (3) - POWER SPECTRAL DENSITY

## Applicable Standard

According to §15.407(a)(1)

(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6
dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain
of the antenna exceeds 6 dBi.

According to §15.407(a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

## Test Procedure

The measurements are base on FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices section F: Maximum power spectral density (PPSD)

## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 24.8 ℃ |
| **Relative Humidity:** | 54 % |
| **ATM Pressure:** | 101.5 kPa |

*The testing was performed by CK Huang on 2020-10-11.*

*Test Mode: Transmitting*

**5150MHz-5250MHz:**

| Mode | Channel | Frequency (MHz) | PSD (dBm/MHz) | | | Limit (dBm/MHz) | Result |
|---|---|---|---|---|---|---|---|
| | | | Chain0 | Chain1 | Total | | |
| 802.11a | Low | 5180 | 8.47 | 7.70 | / | 11 | PASS |
| | Middle | 5200 | 8.25 | 7.50 | / | 11 | PASS |
| | High | 5240 | 8.94 | 8.37 | / | 11 | PASS |
| 802.11ac20 | Low | 5180 | 7.36 | 7.43 | 10.41 | 11 | PASS |
| | Middle | 5200 | 7.32 | 7.42 | 10.38 | 11 | PASS |
| | High | 5240 | 7.59 | 7.56 | 10.59 | 11 | PASS |
| 802.11n20 | Low | 5180 | 6.92 | 7.47 | 10.21 | 11 | PASS |
| | Middle | 5200 | 6.91 | 7.18 | 10.06 | 11 | PASS |
| | High | 5240 | 7.77 | 7.45 | 10.62 | 11 | PASS |
| 802.11ac40 | Low | 5190 | -0.68 | -1.54 | 1.92 | 11 | PASS |
| | High | 5230 | -0.74 | -1.25 | 2.02 | 11 | PASS |
| 802.11n40 | Low | 5190 | -0.80 | -1.53 | 1.86 | 11 | PASS |
| | High | 5230 | -0.68 | -0.69 | 2.33 | 11 | PASS |
| 802.11ac80 | / | 5210 | -8.90 | -9.51 | -6.18 | 11 | PASS |

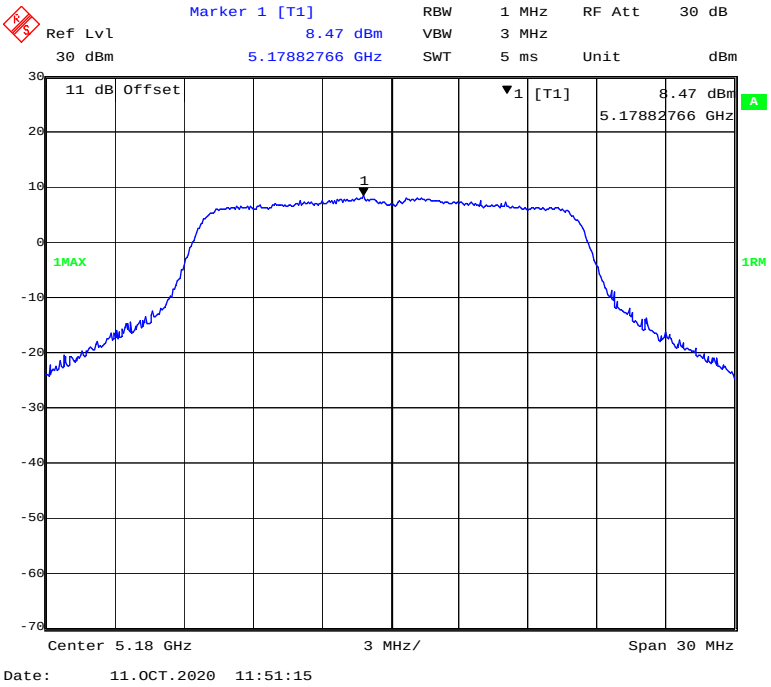
**5725MHz-5850MHz:**

| Mode | Channel | Frequency MHz | PSD (dBm/500kHz) | | | Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|---|
| | | | Chain0 | Chain1 | Total | | |
| 802.11a | Low | 5745 | 8.46 | 9.40 | / | 30 | PASS |
| | Middle | 5785 | 6.57 | 8.55 | / | 30 | PASS |
| | High | 5825 | 7.54 | 8.25 | / | 30 | PASS |
| 802.11ac20 | Low | 5745 | 7.92 | 9.40 | 11.73 | 30 | PASS |
| | Middle | 5785 | 6.72 | 8.52 | 10.72 | 30 | PASS |
| | High | 5825 | 6.36 | 8.64 | 10.66 | 30 | PASS |
| 802.11n20 | Low | 5745 | 7.59 | 8.93 | 11.32 | 30 | PASS |
| | Middle | 5785 | 6.31 | 8.14 | 10.33 | 30 | PASS |
| | High | 5825 | 7.31 | 8.72 | 11.08 | 30 | PASS |
| 802.11ac40 | Low | 5755 | 5.08 | 5.74 | 8.43 | 30 | PASS |
| | High | 5795 | 3.28 | 5.14 | 7.32 | 30 | PASS |
| 802.11n40 | Low | 5755 | 4.05 | 5.94 | 8.11 | 30 | PASS |
| | High | 5795 | 3.41 | 5.63 | 7.67 | 30 | PASS |
| 802.11ac80 | / | 5775 | 2.63 | 3.97 | 6.36 | 30 | PASS |

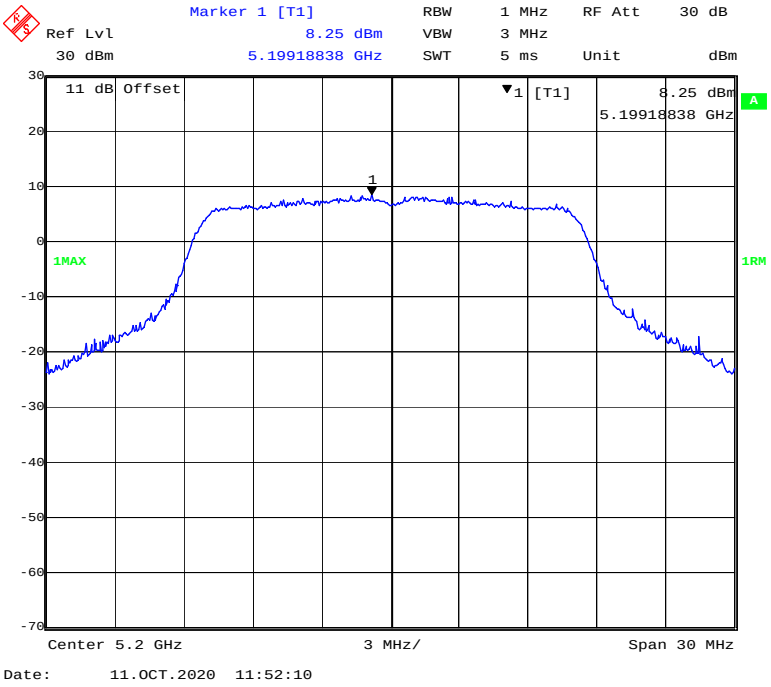
Note1: The total PSD=10Log10(10^(Chain0/10)+10^(Chain1/10))
Note2: The maximum antenna gain is 1.57 dBi. The device employed Cyclic Delay Diversity (CDD) for 802.11MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01,
for power spectral density (PSD)measurements on the devices:
Array Gain = 10 log($N_{ANT}/N_{SS}$) dB.
So:
Directional gain = $G_{ANT}$ + Array Gain = 1.57+10*log(2/1) =4.57 dBi

**5150MHz-5250MHz Band-Chain0:**

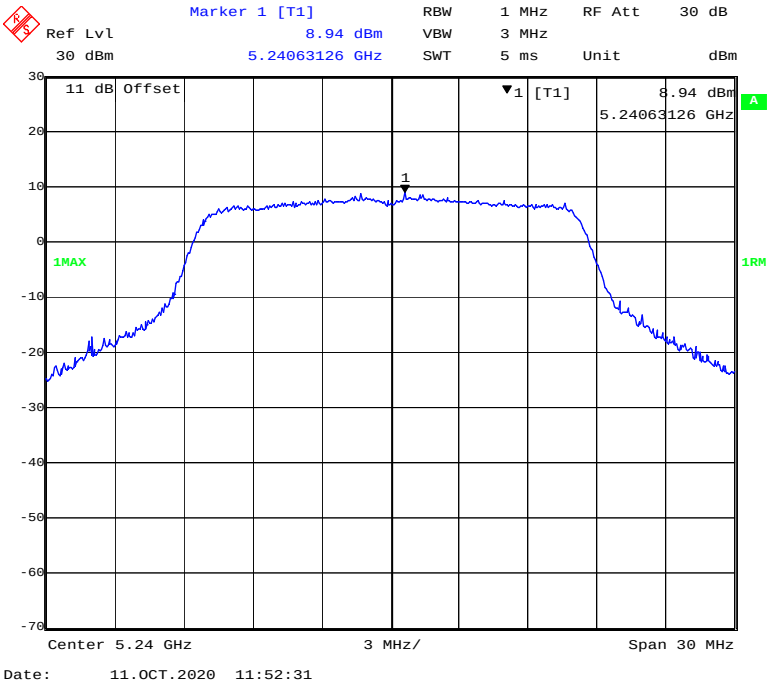
**802.11a mode, Power spectral density-5180MHz**



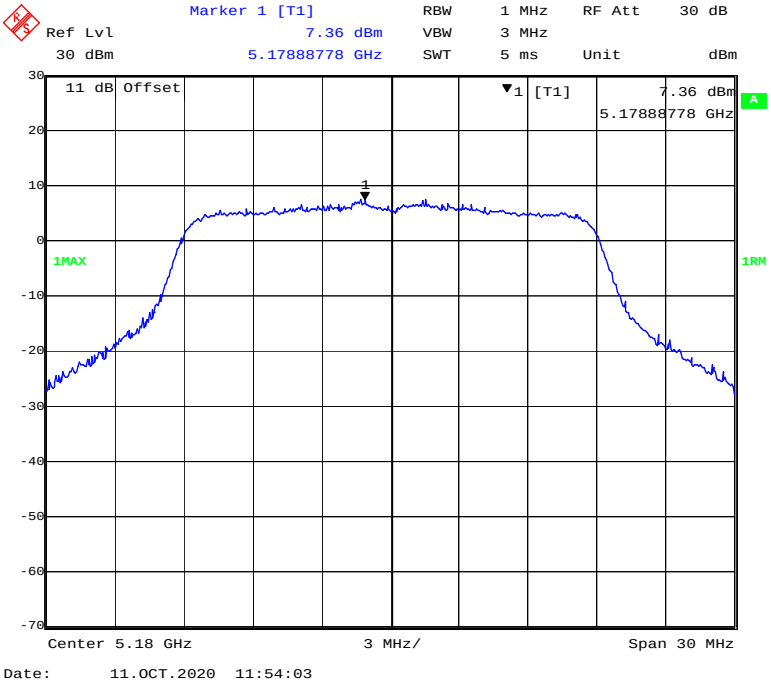

**802.11a mode, Power spectral density-5200MHz**



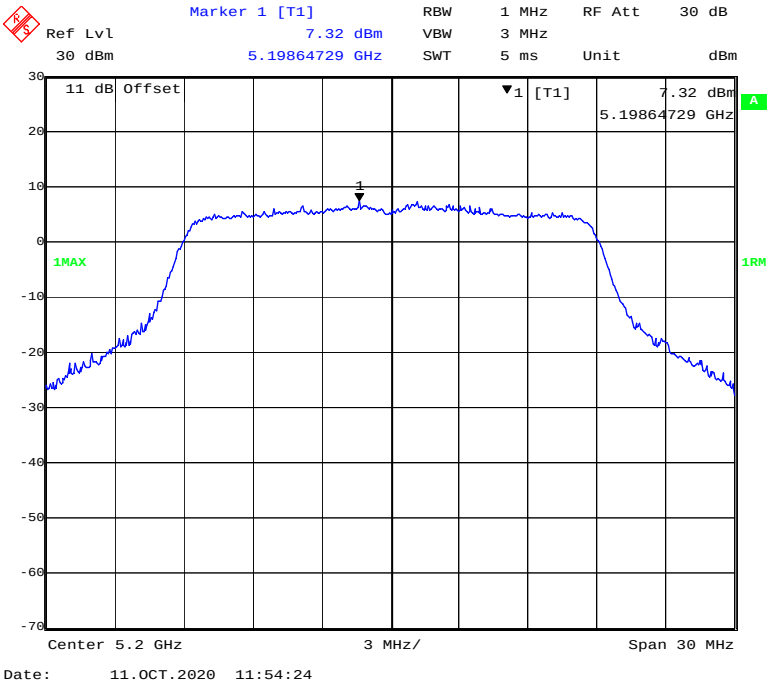
**802.11a mode, Power spectral density-5240MHz**



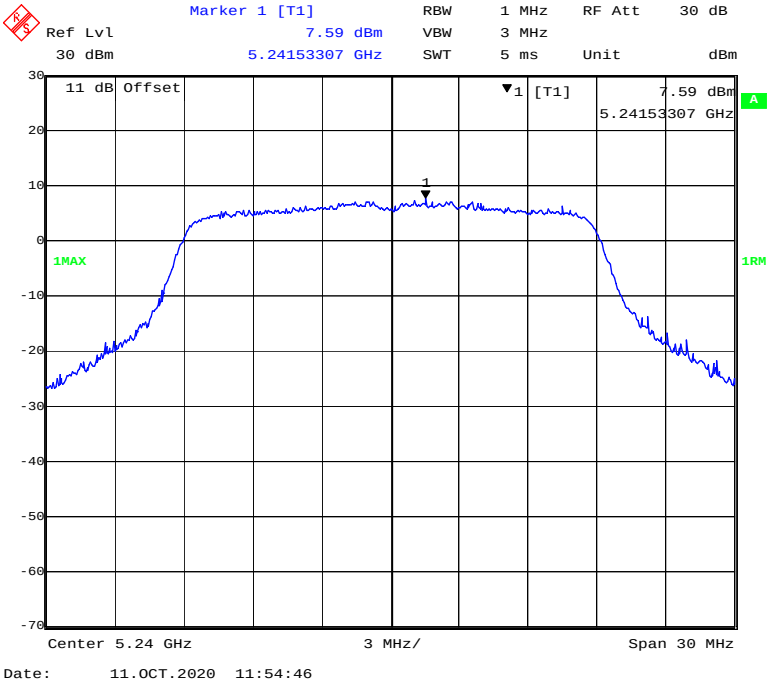

**802.11ac20 mode, Power spectral density-5180MHz**



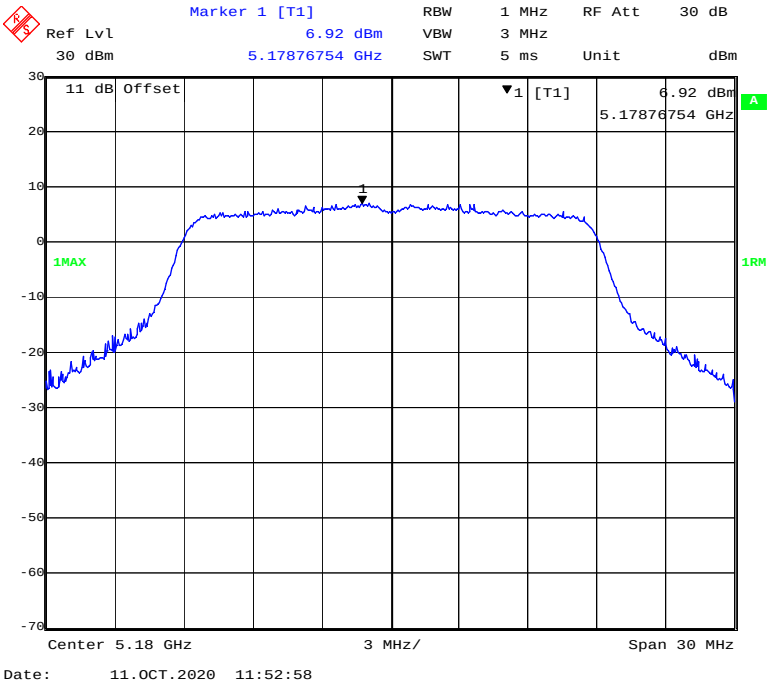
**802.11ac20 mode, Power spectral density-5200MHz**



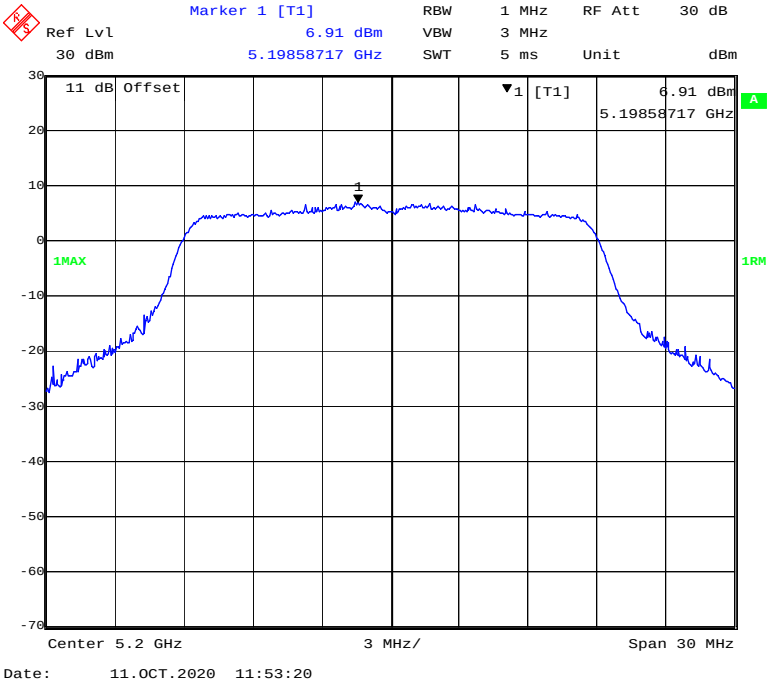

**802.11ac20 mode, Power spectral density-5240MHz**



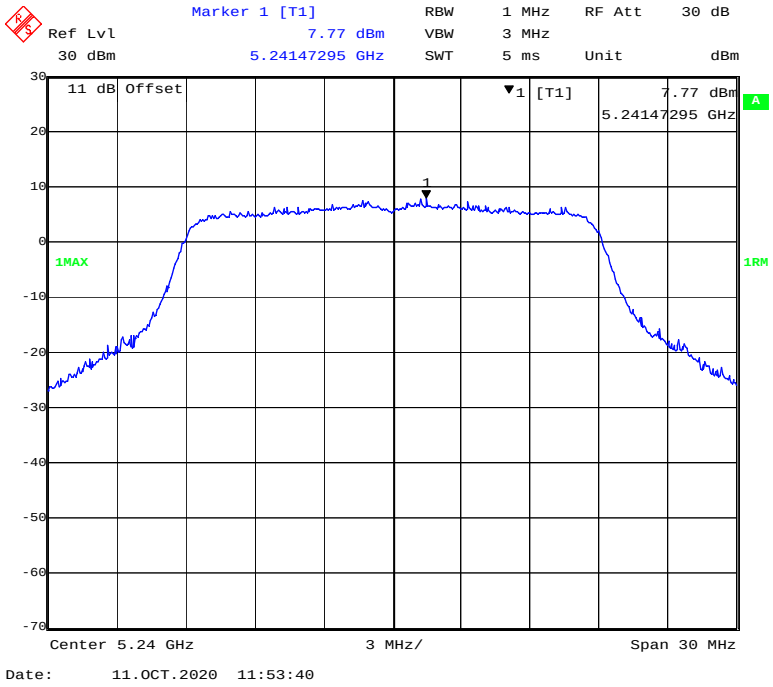
**802.11n-HT20 mode, Power spectral density-5180MHz**



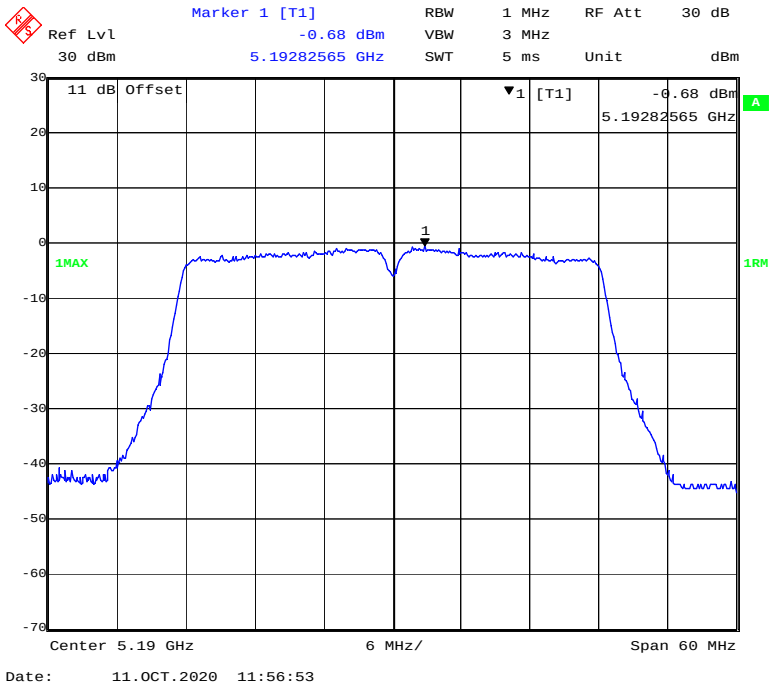

**802.11n-HT20 mode, Power spectral density-5200MHz**



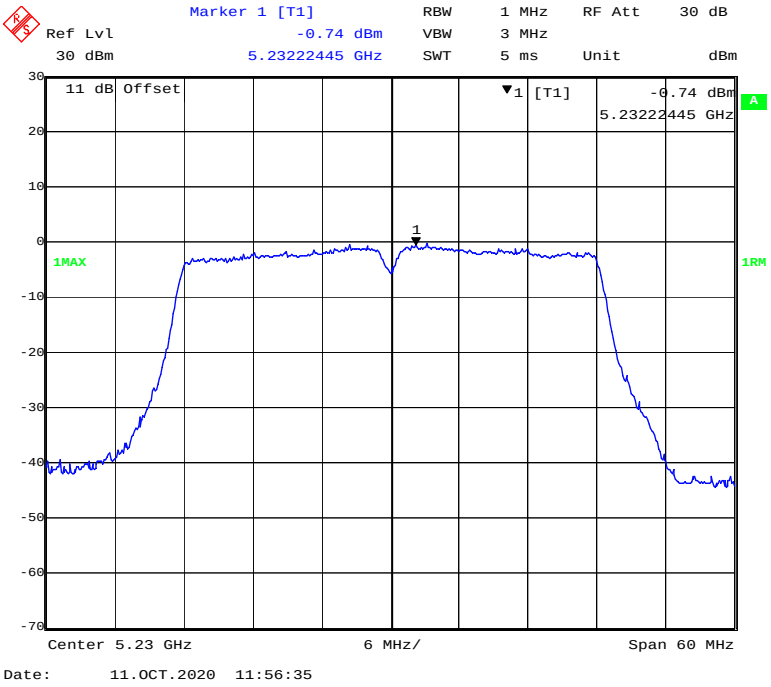
**802.11n-HT20 mode, Power spectral density-5240MHz**



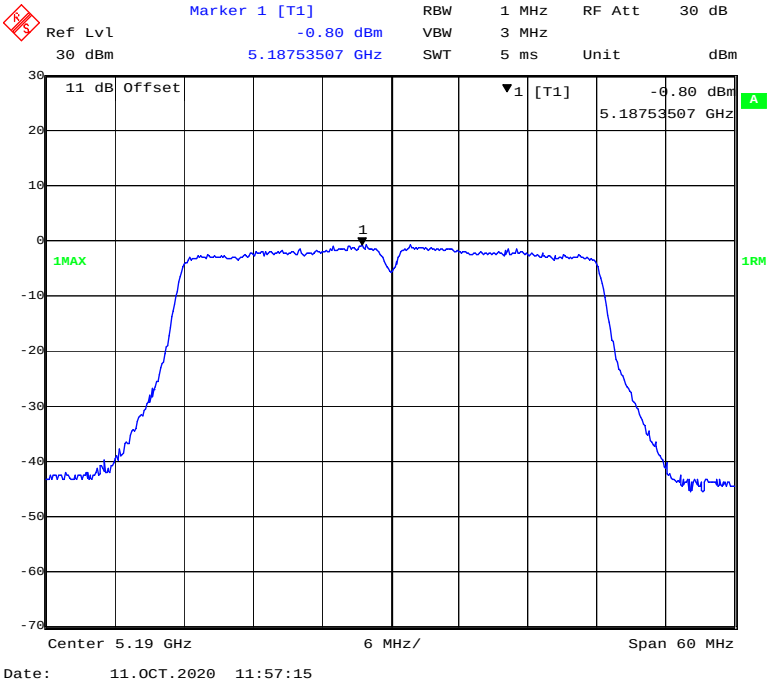

**802.11ac40 mode, Power spectral density-5190MHz**



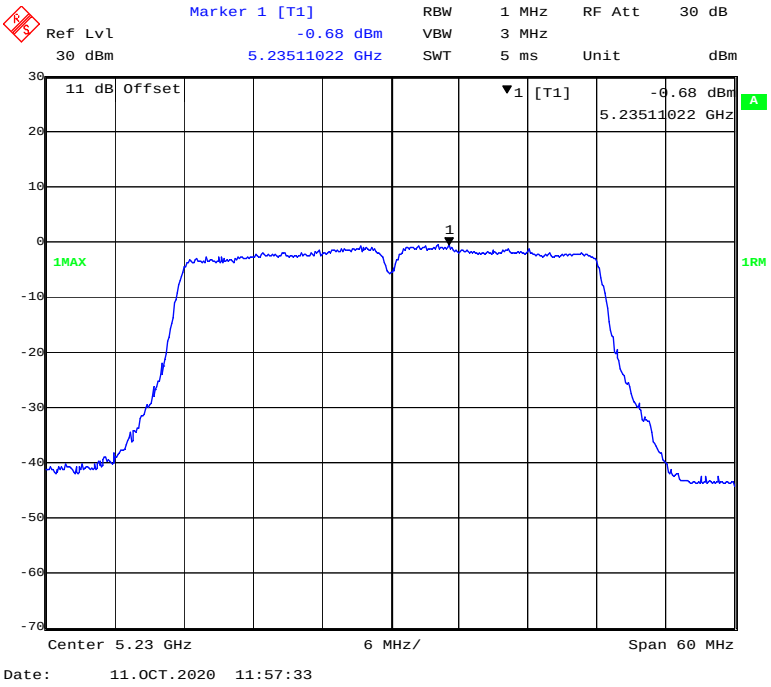
**802.11ac40 mode, Power spectral density-5230MHz**



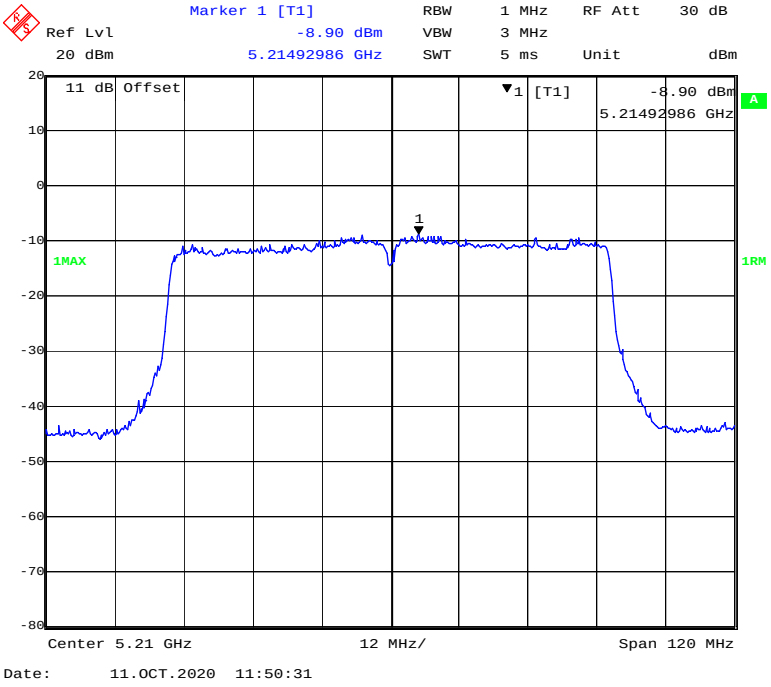

**802.11n-HT40 mode, Power spectral density-5190MHz**



**802.11n-HT40 mode, Power spectral density-5230MHz**

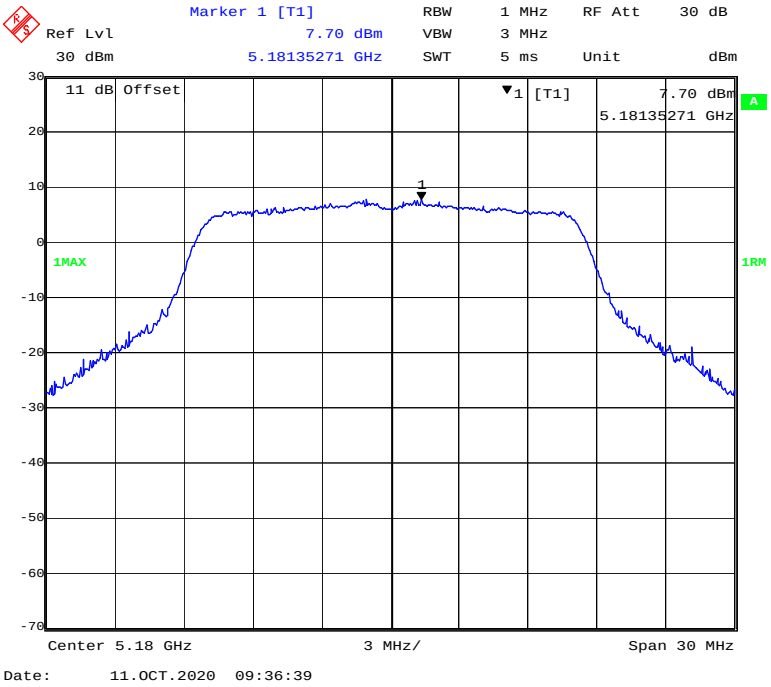



**802.11ac80 mode, Power spectral density-5210MHz**

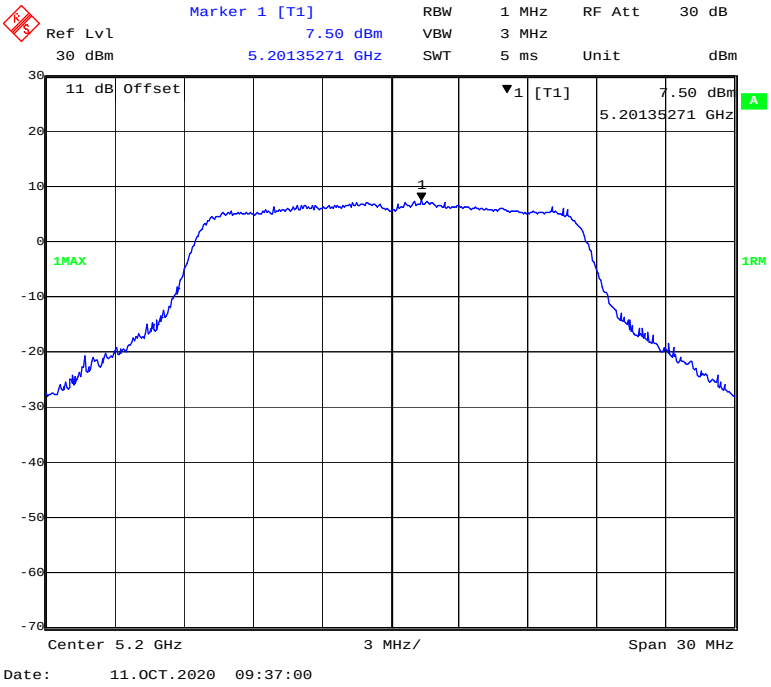


**5150MHz-5250MHz Band-Chain1:**

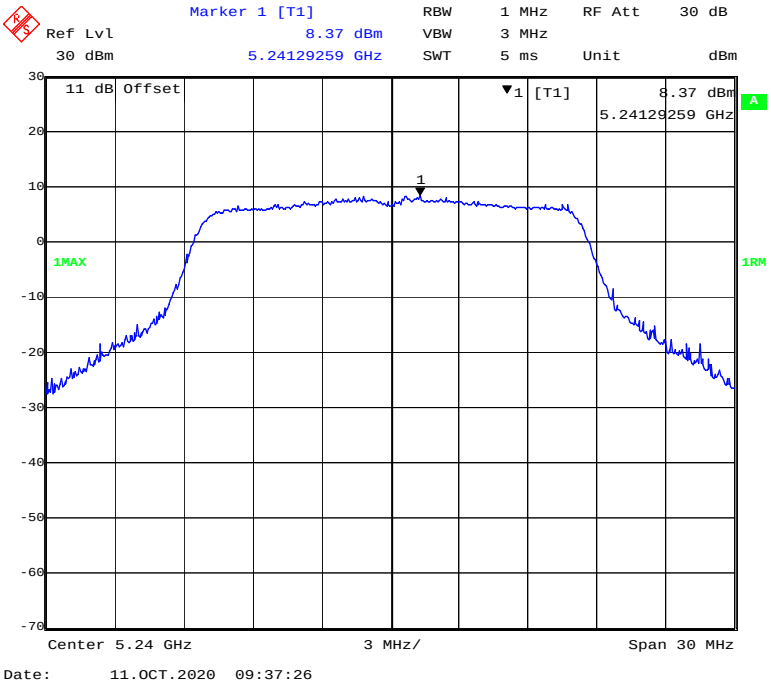
**802.11a mode, Power spectral density-5180MHz**



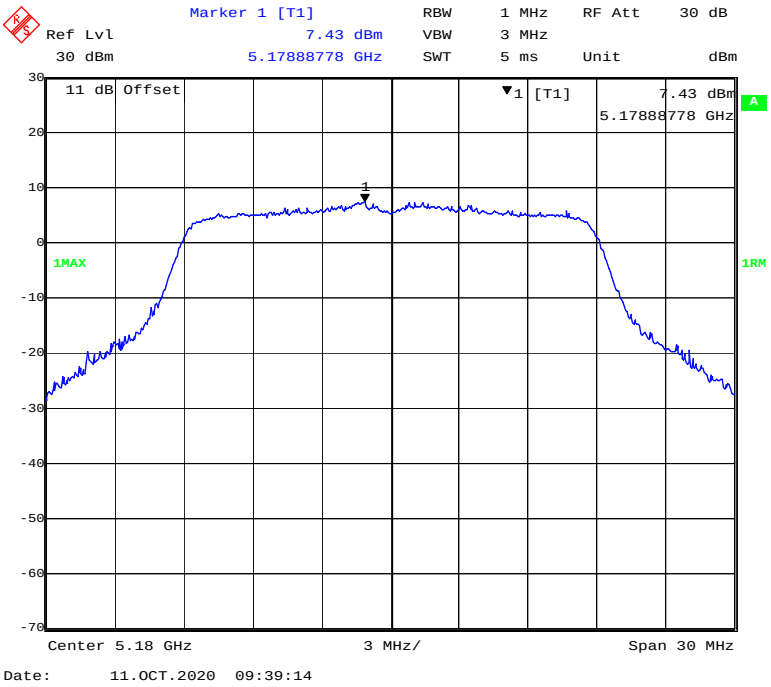

**802.11a mode, Power spectral density-5200MHz**



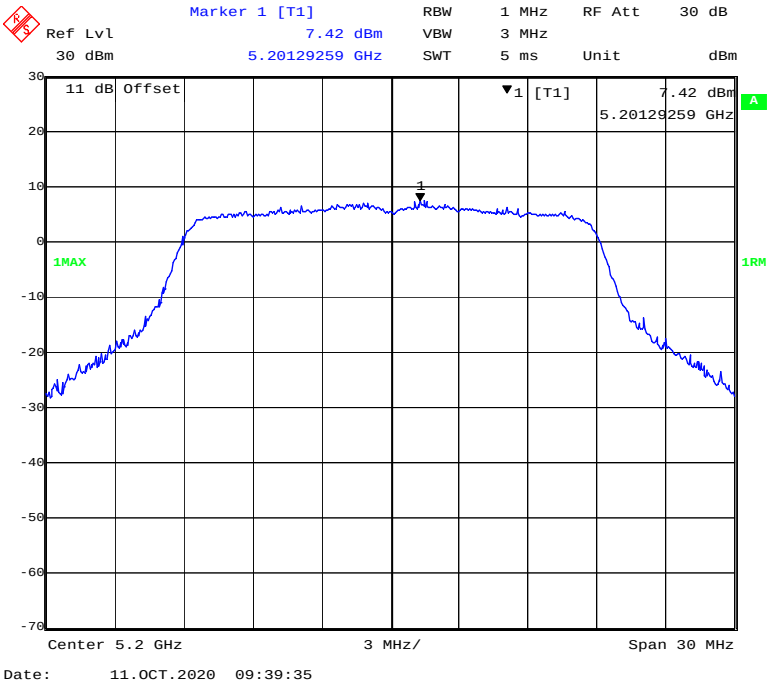
**802.11a mode, Power spectral density-5240MHz**



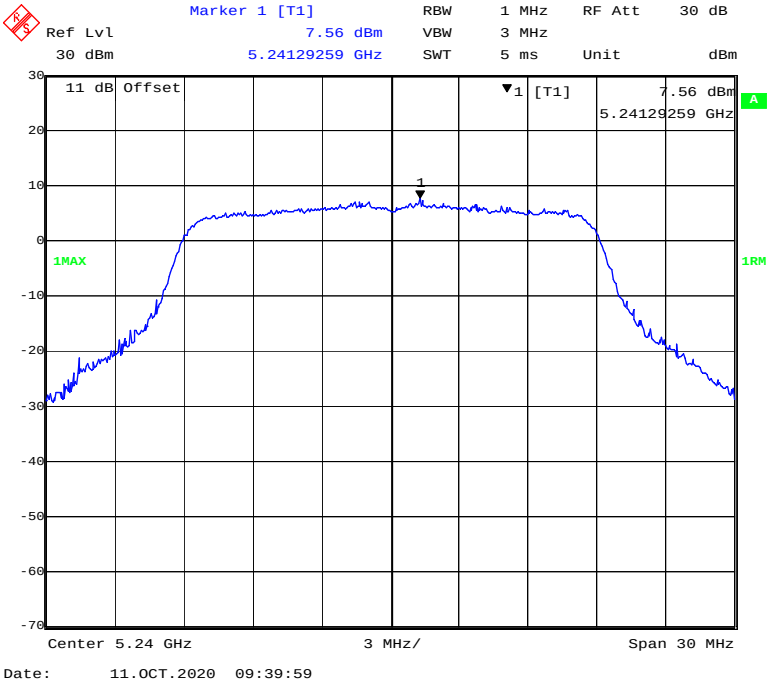

**802.11ac20 mode, Power spectral density-5180MHz**



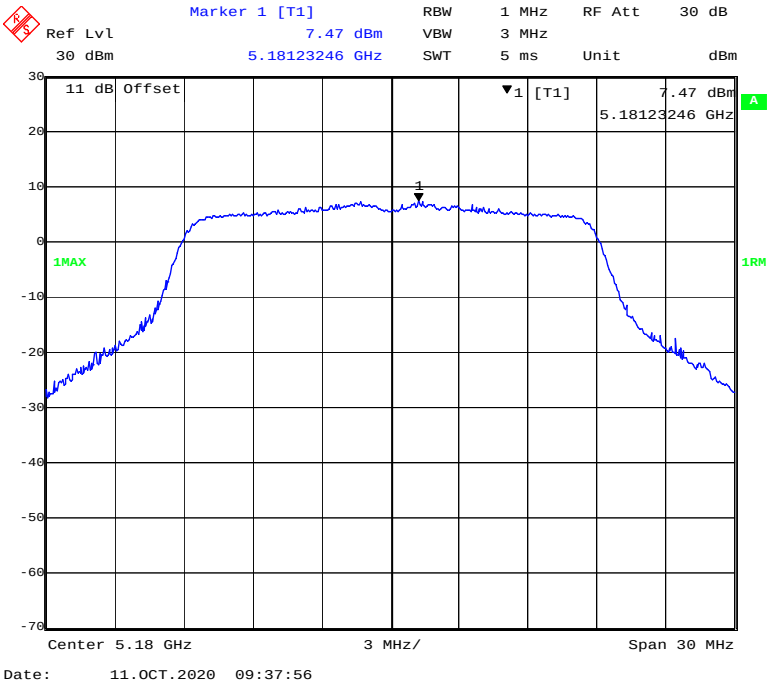
**802.11ac20 mode, Power spectral density-5200MHz**



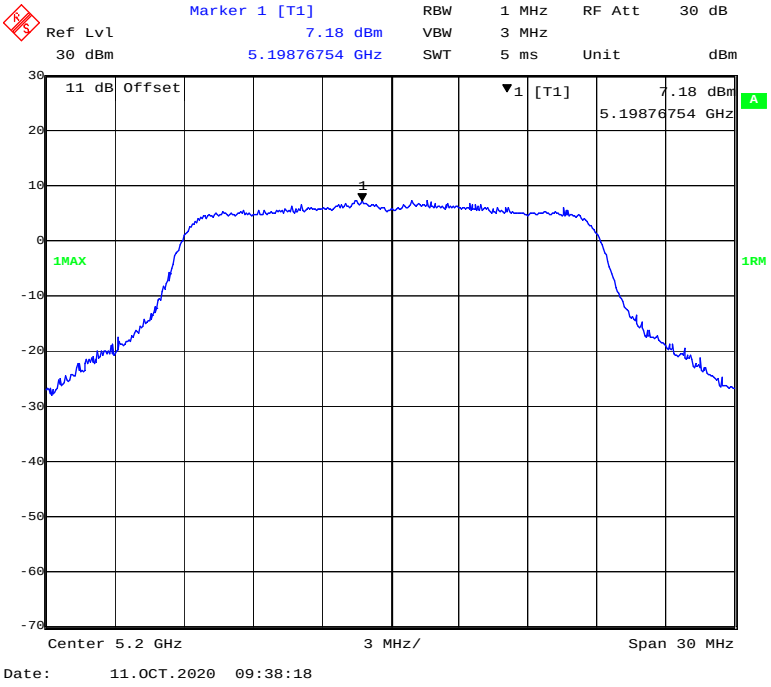

**802.11ac20 mode, Power spectral density-5240MHz**



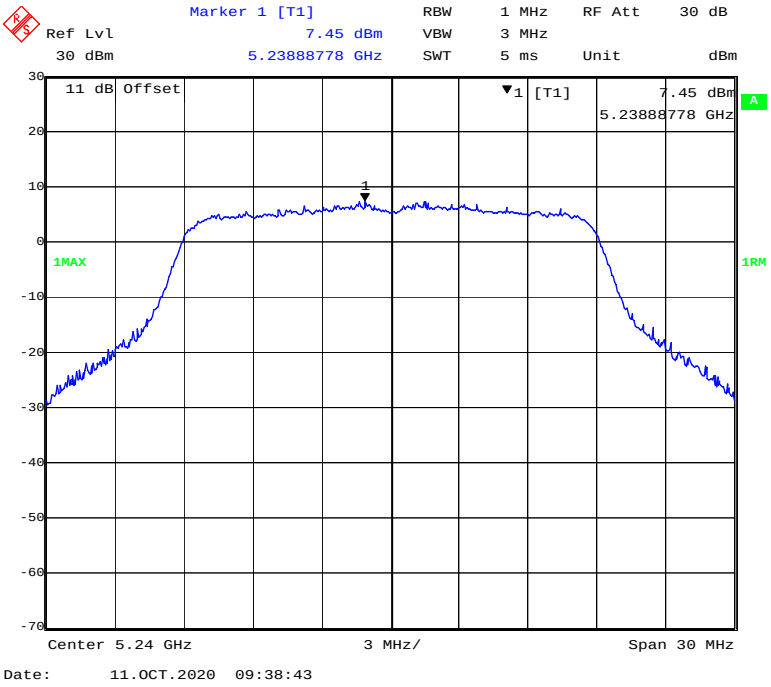
**802.11n-HT20 mode, Power spectral density-5180MHz**



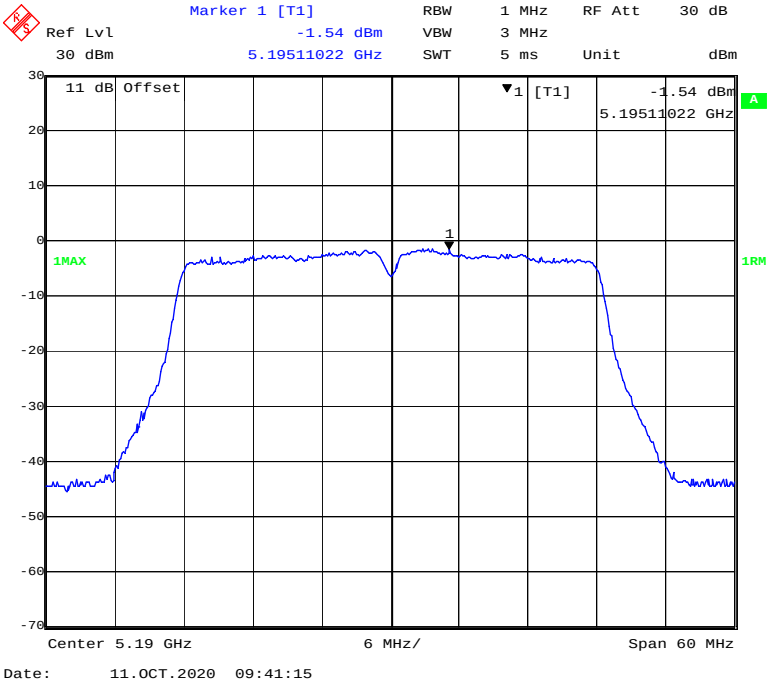

**802.11n-HT20 mode, Power spectral density-5200MHz**



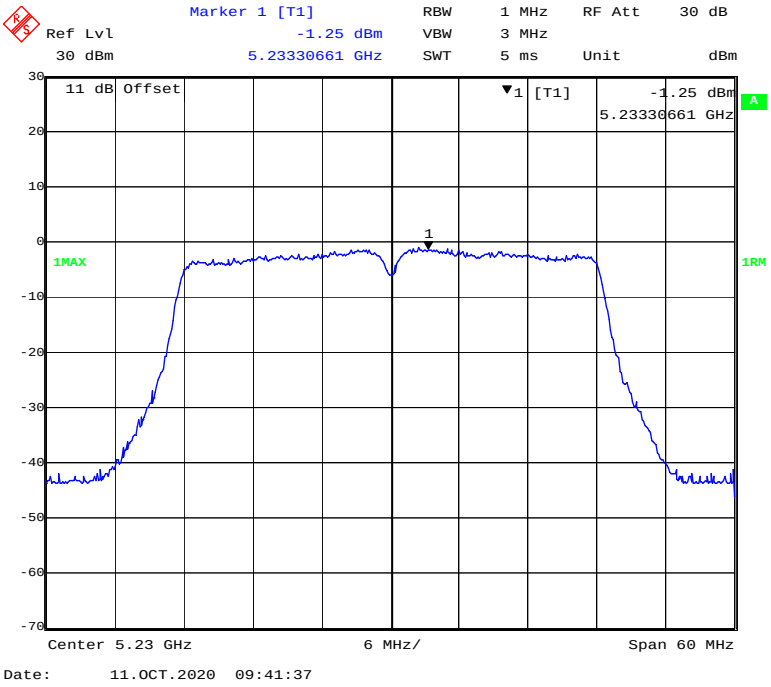
**802.11n-HT20 mode, Power spectral density-5240MHz**



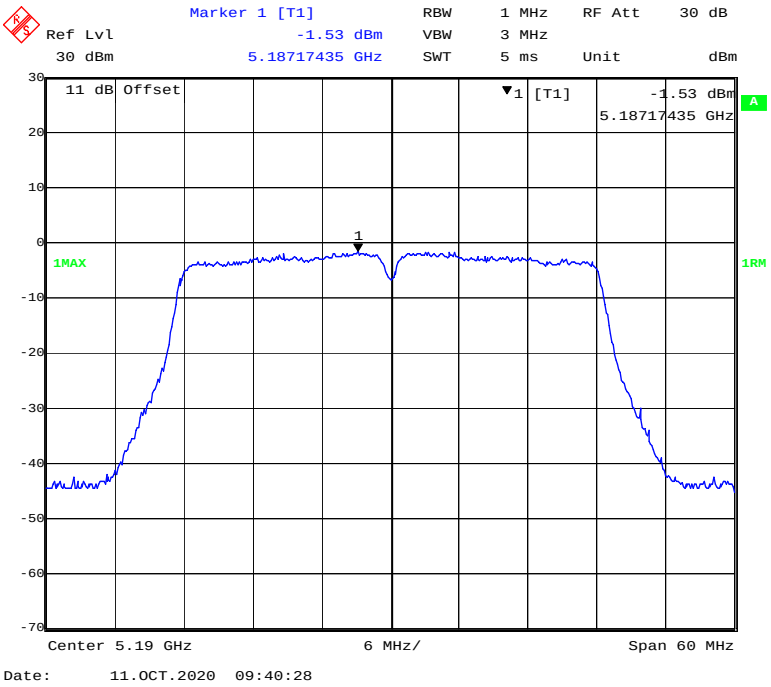

**802.11ac40 mode, Power spectral density-5190MHz**



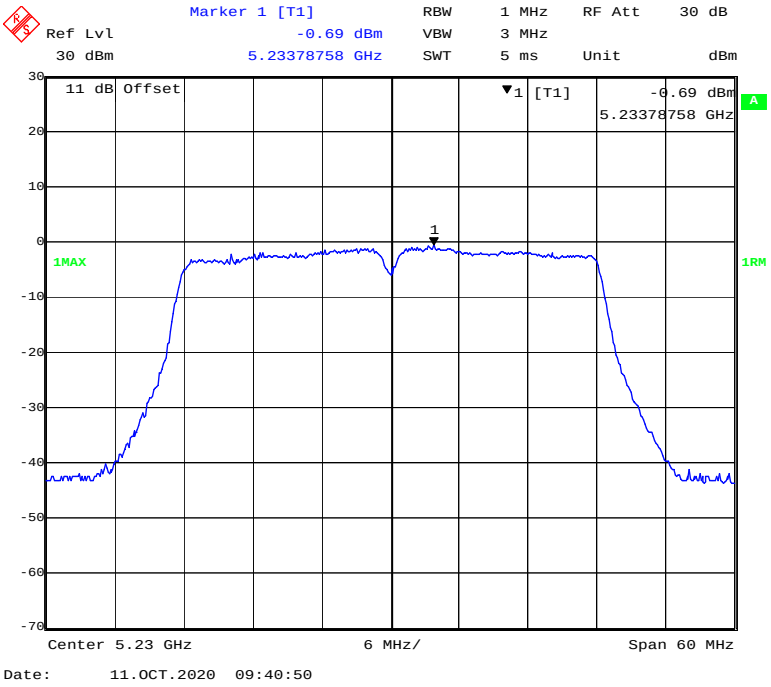
**802.11ac40 mode, Power spectral density-5230MHz**



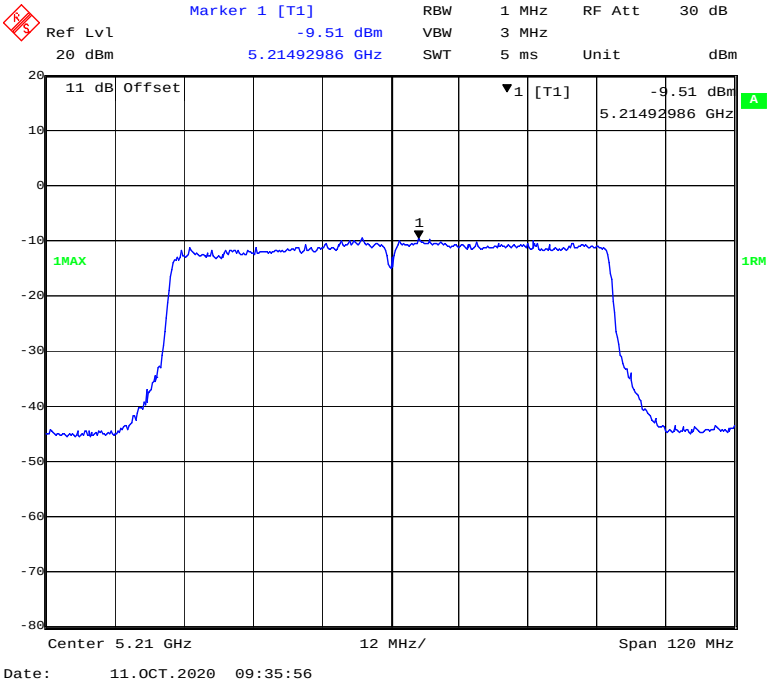

**802.11n-HT40 mode, Power spectral density-5190MHz**



**802.11n-HT40 mode, Power spectral density-5230MHz**

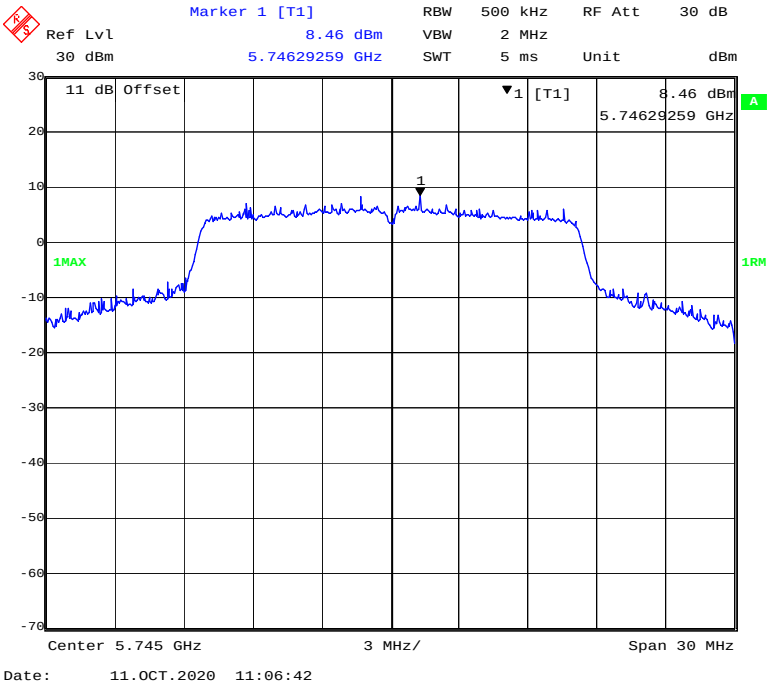



**802.11ac80 mode, Power spectral density-5210MHz**

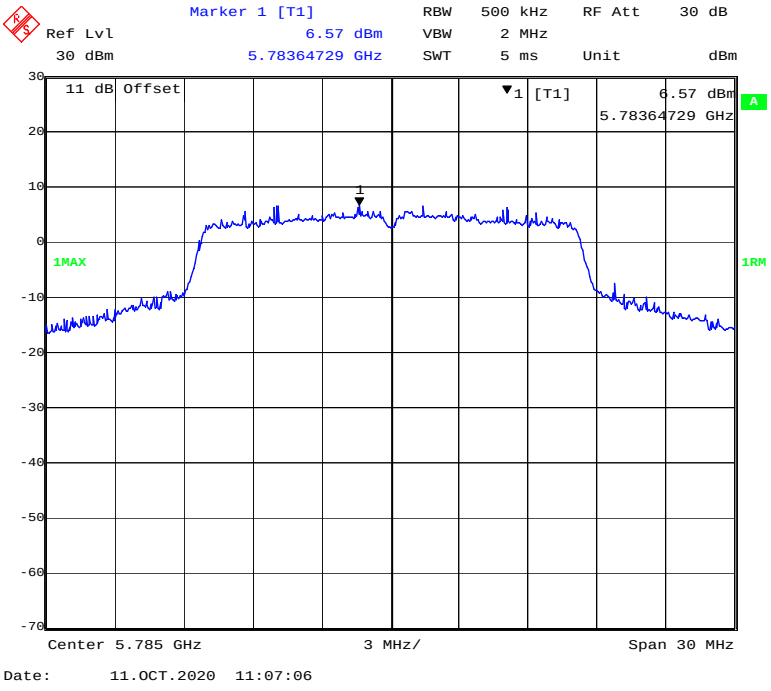


**5725MHz-5850 MHz Band-Chain0:**

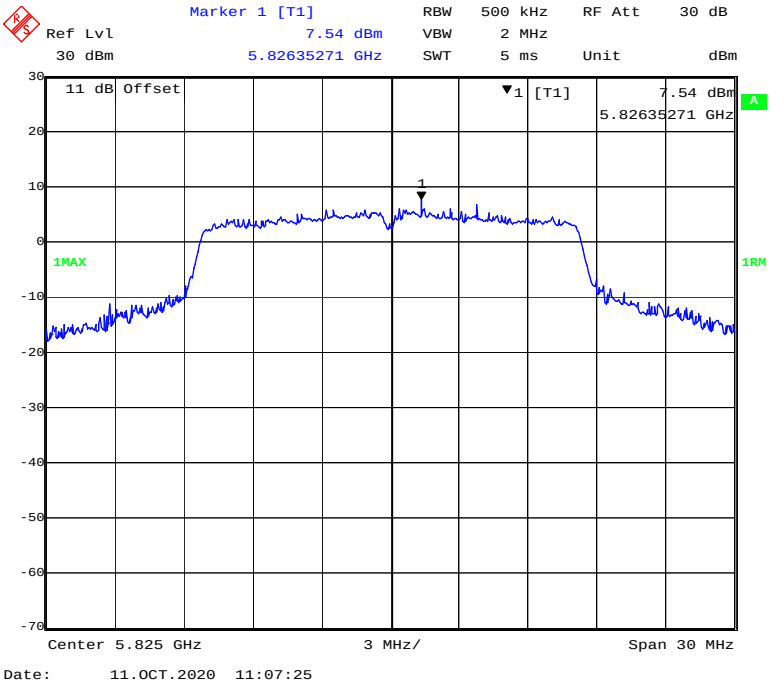
**802.11a mode, Power spectral density-5745MHz**



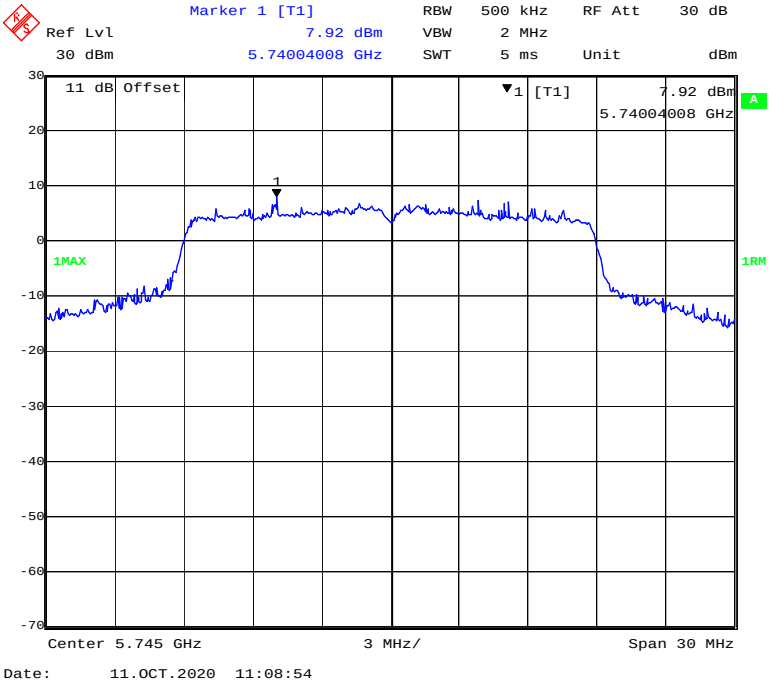

**802.11a mode, Power spectral density-5785MHz**



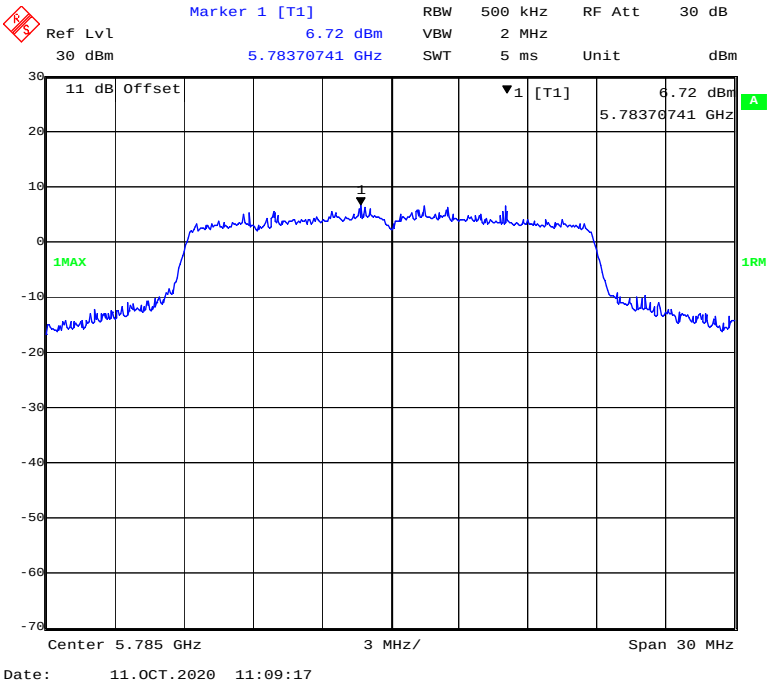
**802.11a mode, Power spectral density-5825MHz**



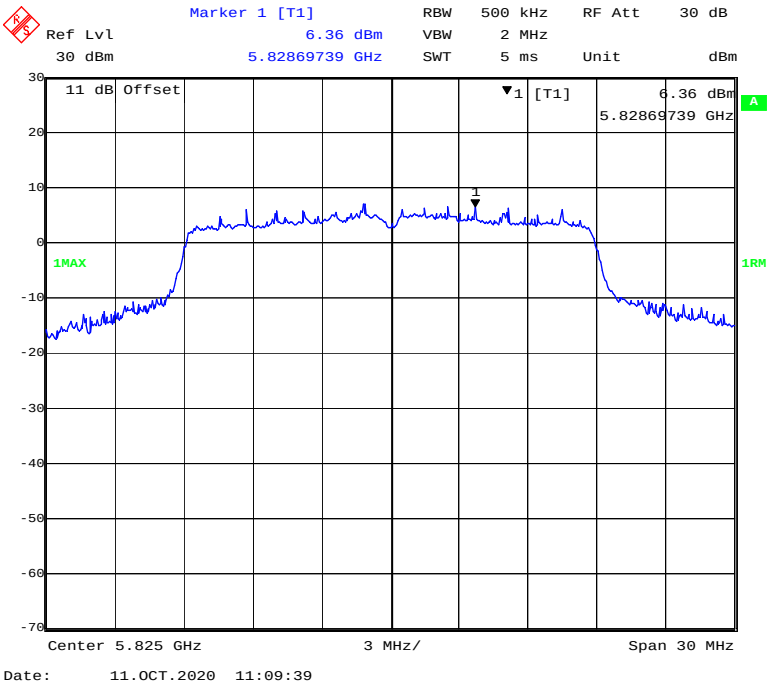

**802.11ac20 mode, Power spectral density-5745MHz**



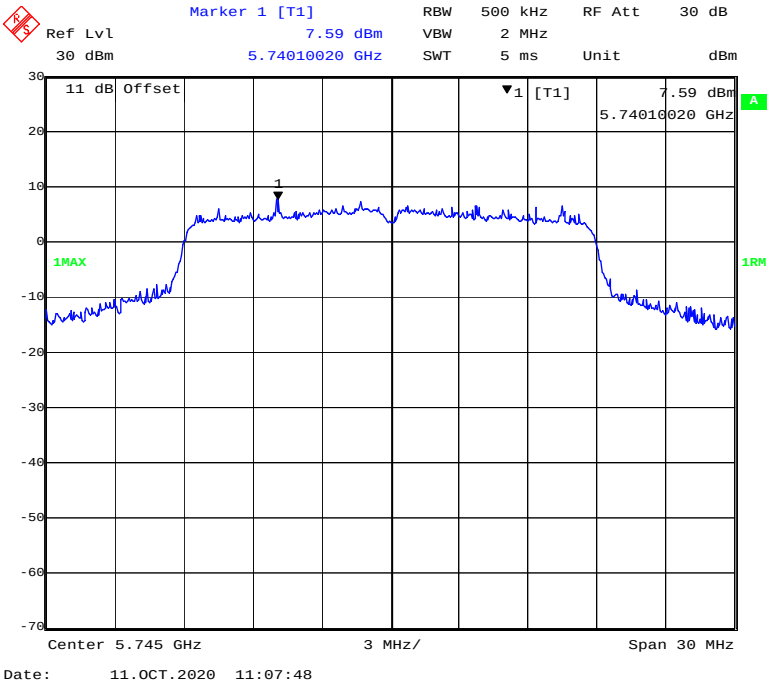
**802.11ac20 mode, Power spectral density-5785MHz**



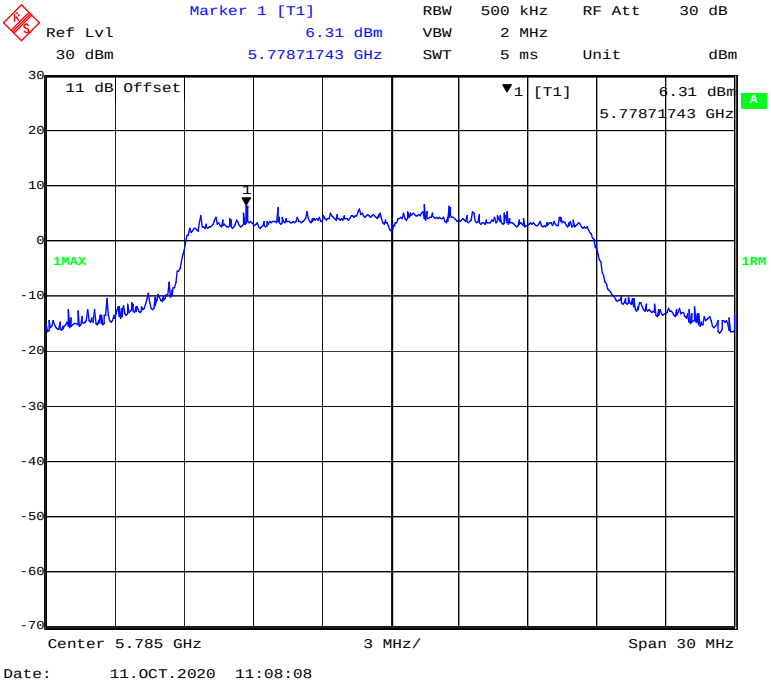

**802.11ac20 mode, Power spectral density-5825MHz**



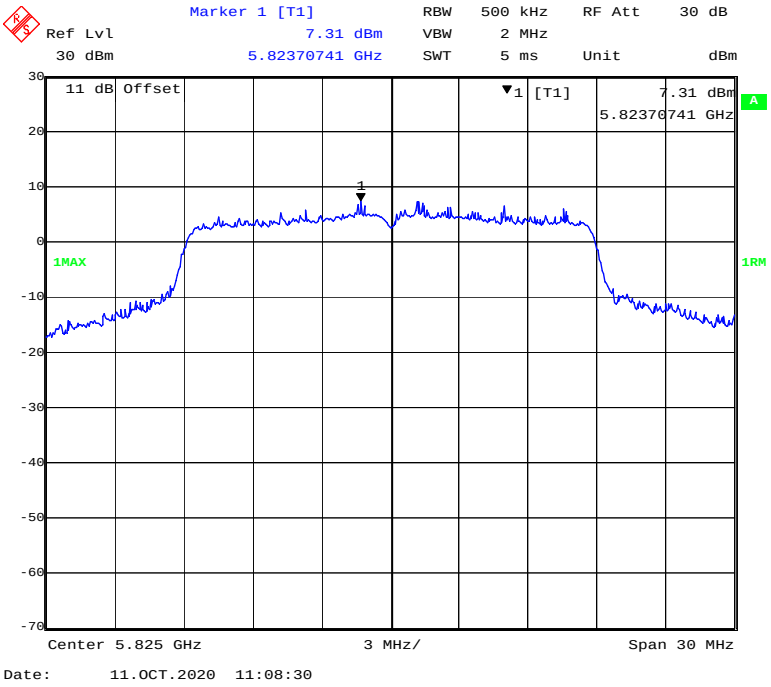
**802.11n-HT20 mode, Power spectral density-5745MHz**



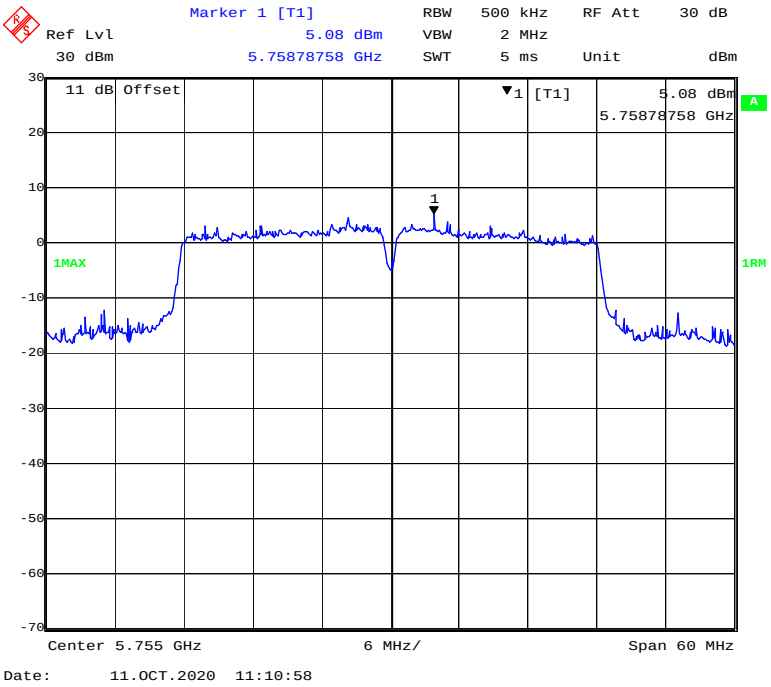

**802.11n-HT20 mode, Power spectral density-5785MHz**



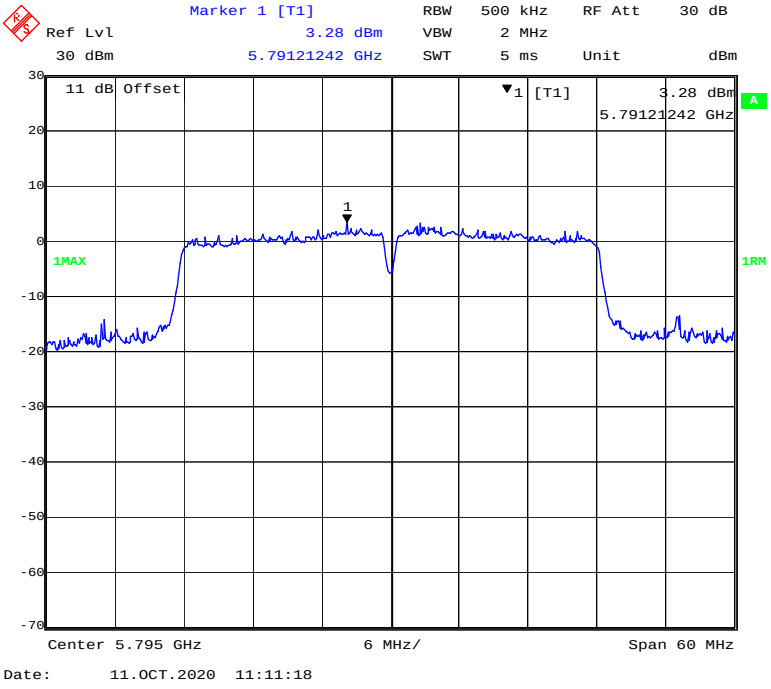
**802.11n-HT20 mode, Power spectral density-5825MHz**



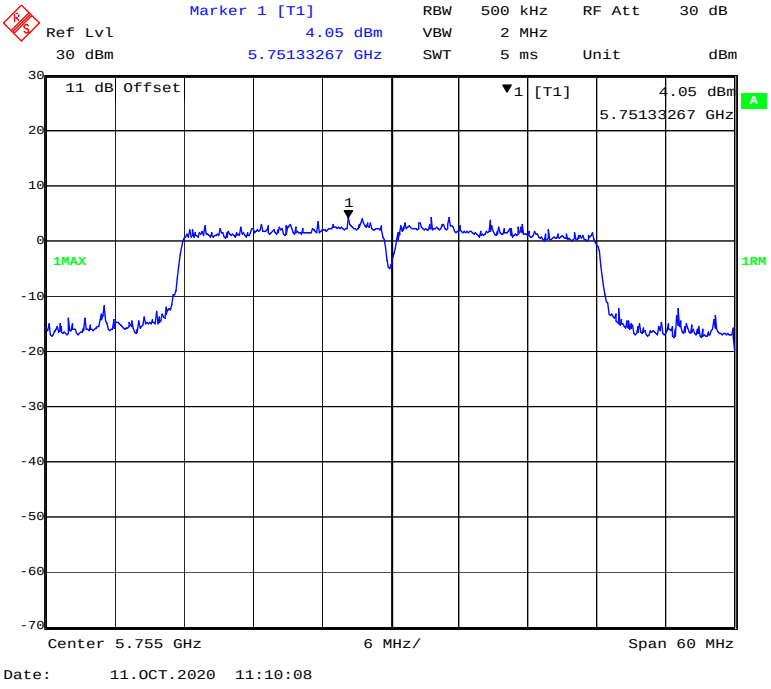

**802.11ac40 mode, Power spectral density-5755MHz**



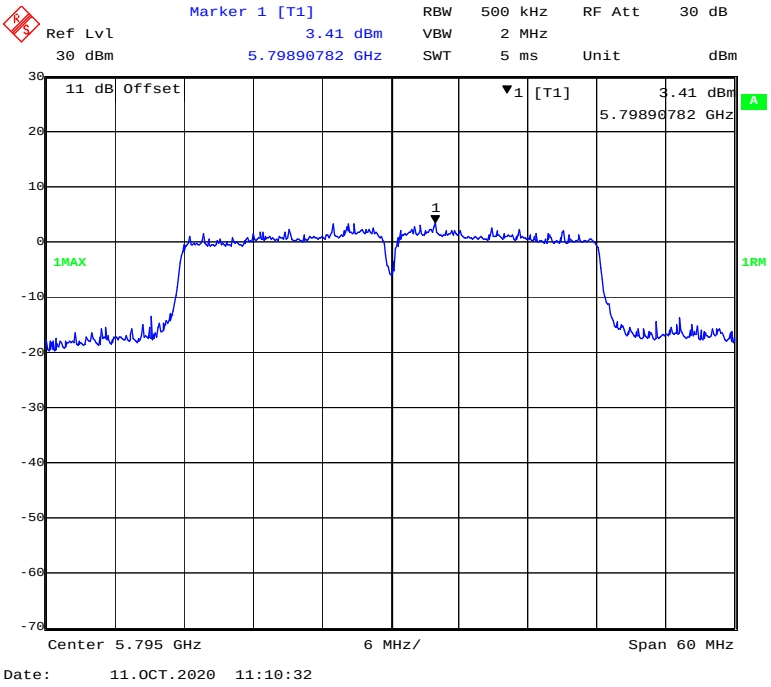
**802.11ac40 mode, Power spectral density-5795MHz**



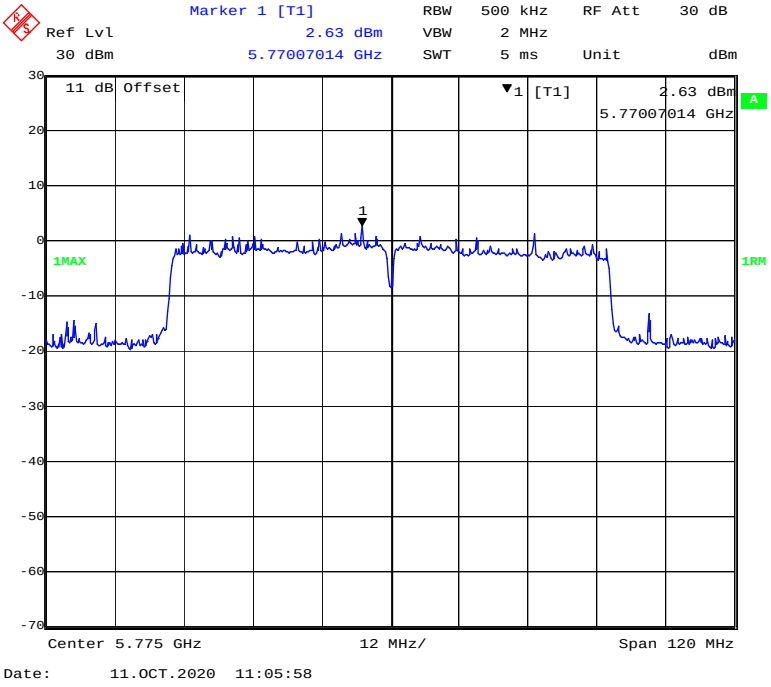

**802.11n-HT40 mode, Power spectral density-5755MHz**



**802.11n-HT40 mode, Power spectral density-5795MHz**

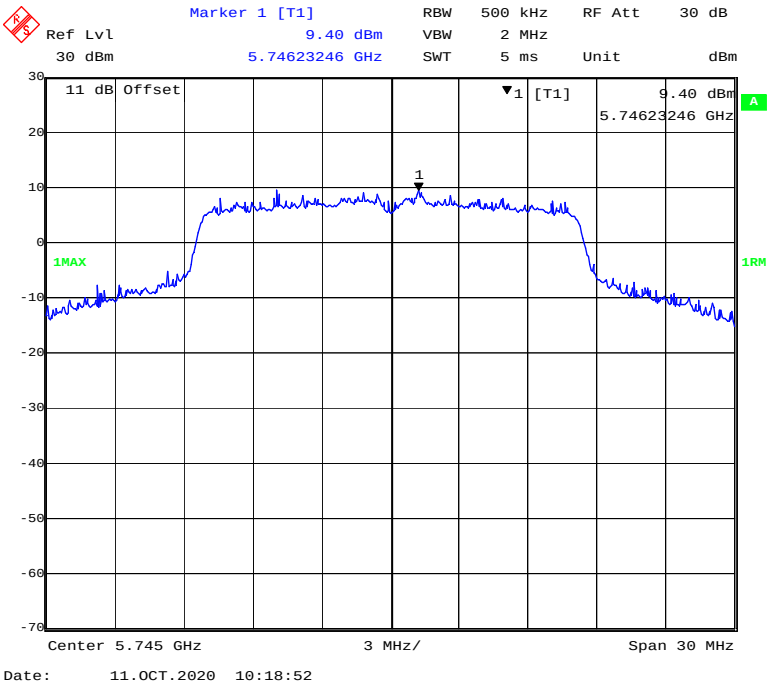



**802.11ac80 mode, Power spectral density-5775MHz**

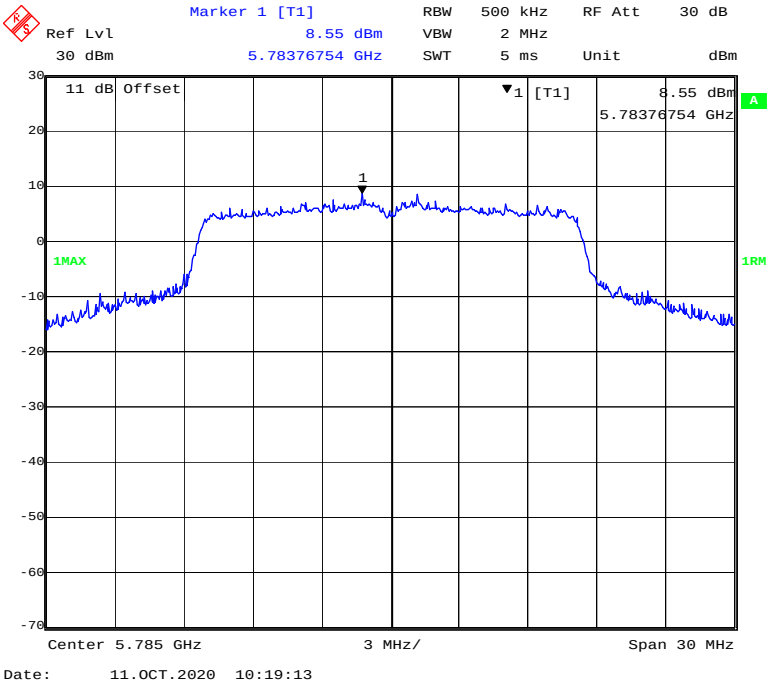


## 5725MHz-5850 MHz Band-Chain1:

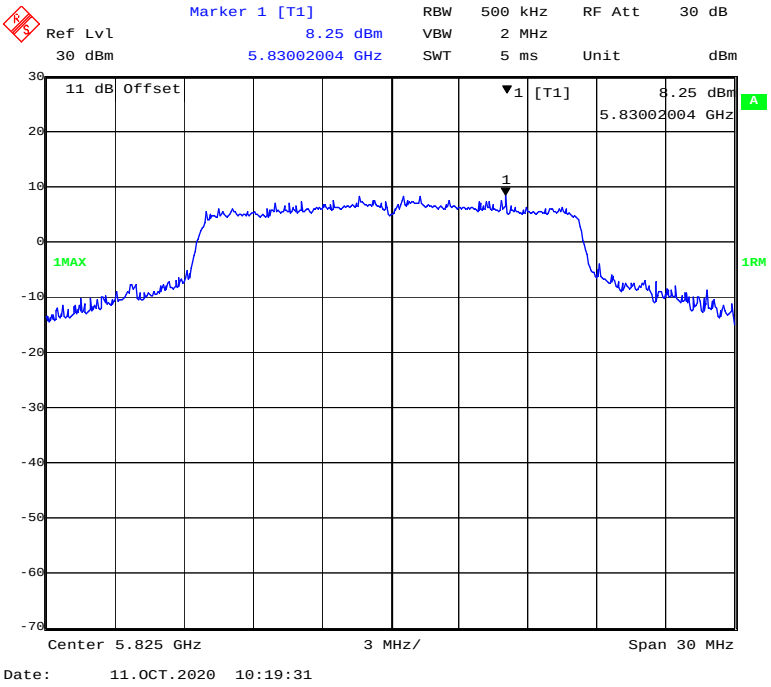
### 802.11a mode, Power spectral density-5745MHz



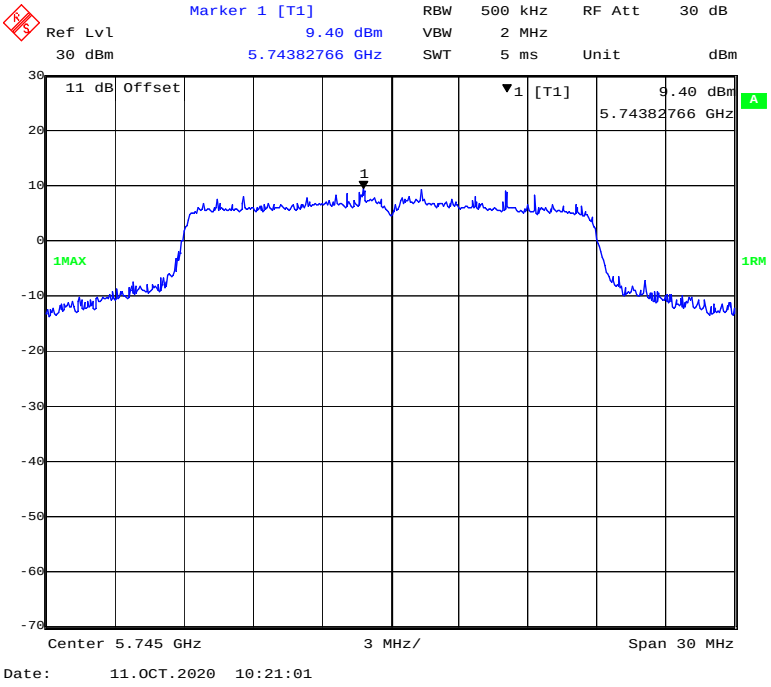

### 802.11a mode, Power spectral density-5785MHz



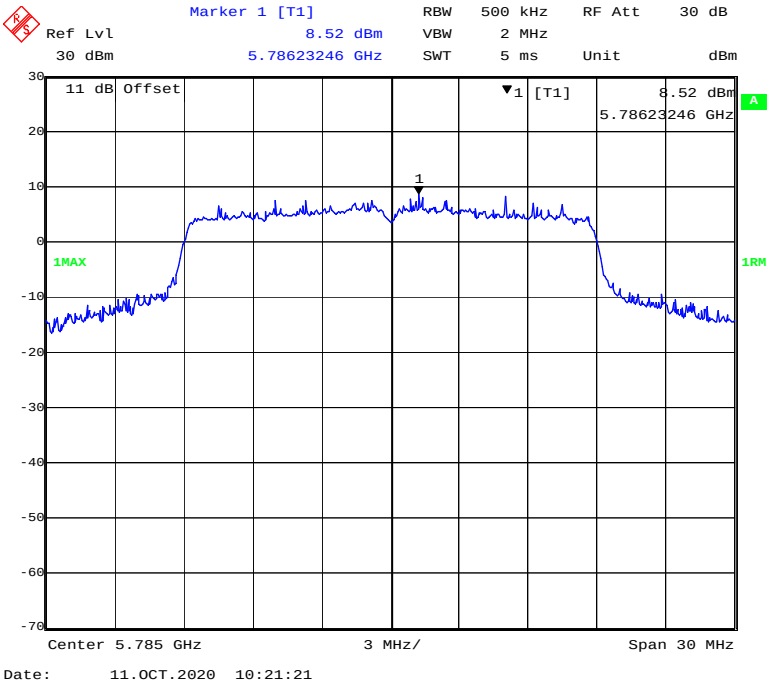
**802.11a mode, Power spectral density-5825MHz**



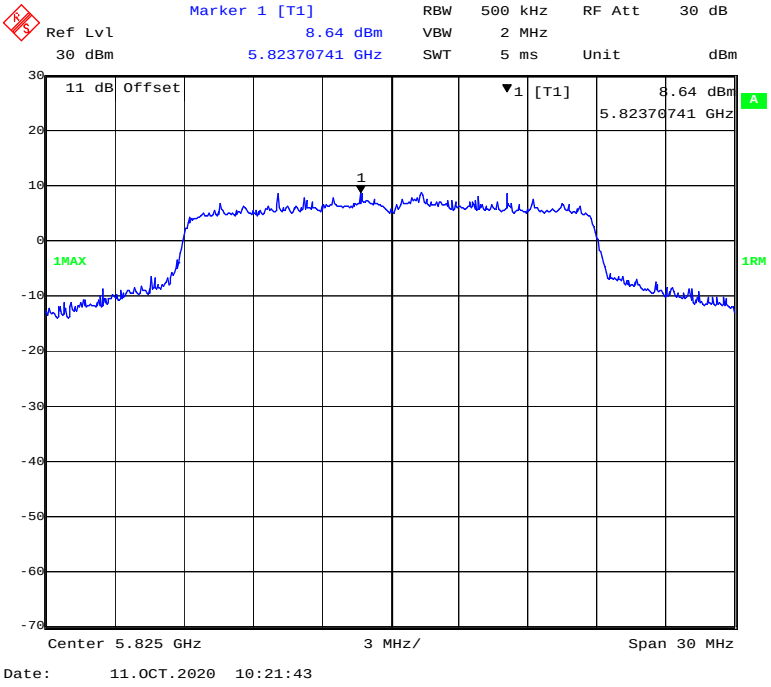

**802.11ac20 mode, Power spectral density-5745MHz**



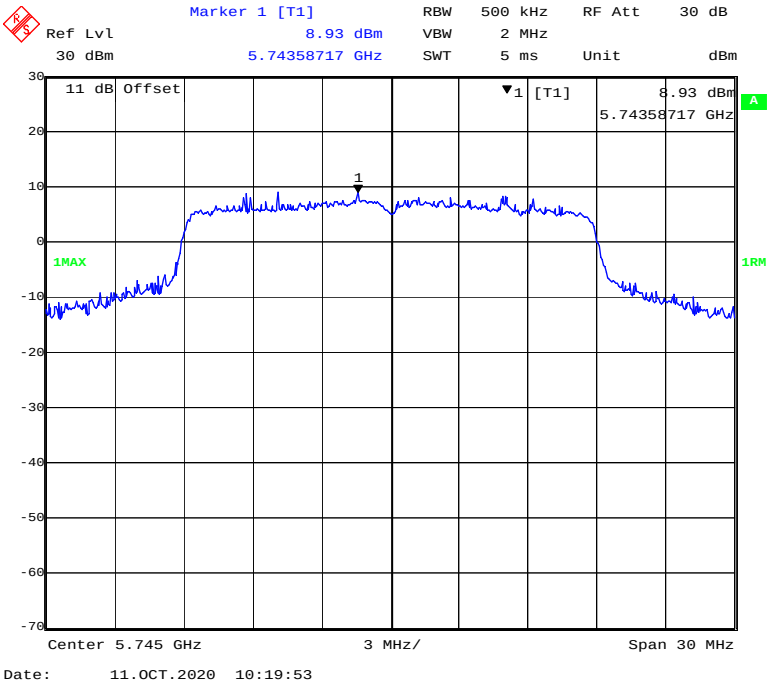
**802.11ac20 mode, Power spectral density-5785MHz**



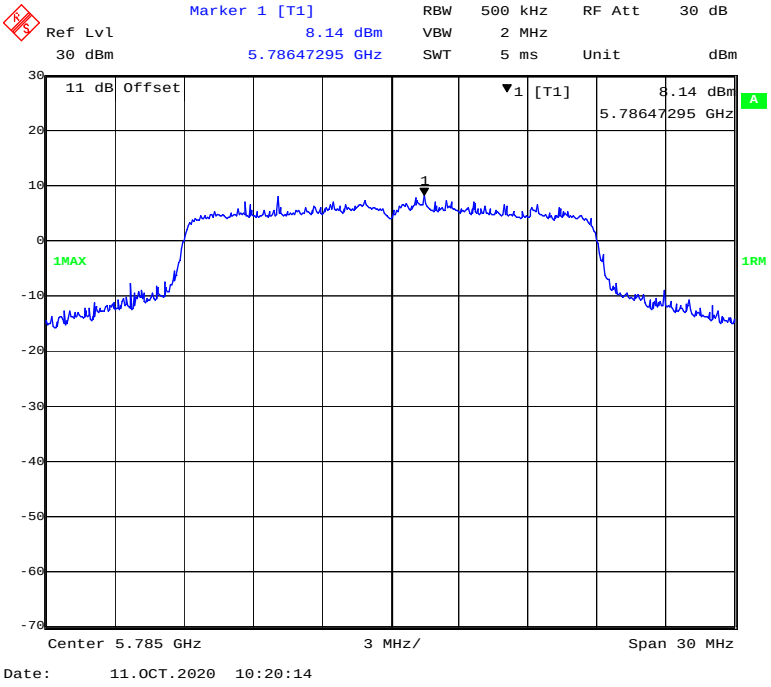

**802.11ac20 mode, Power spectral density-5825MHz**



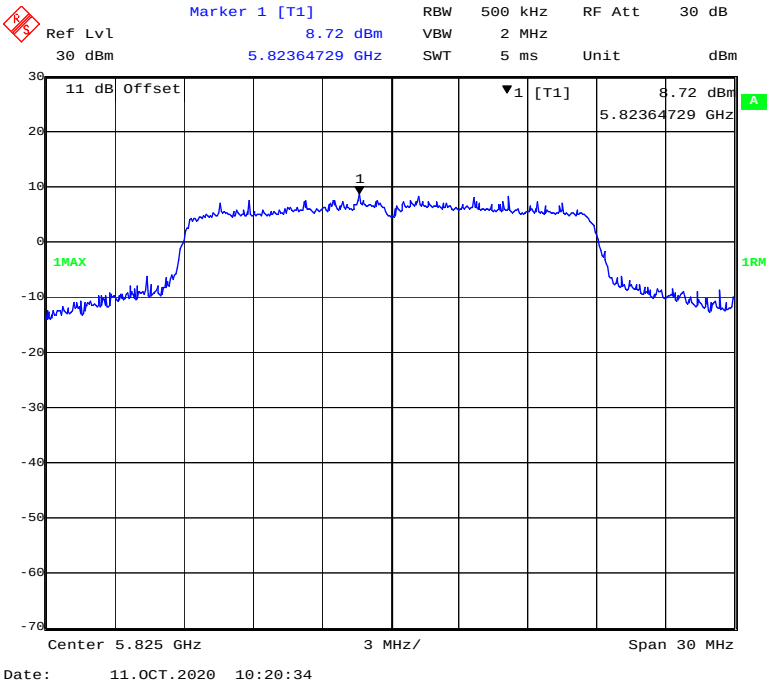
**802.11n-HT20 mode, Power spectral density-5745MHz**



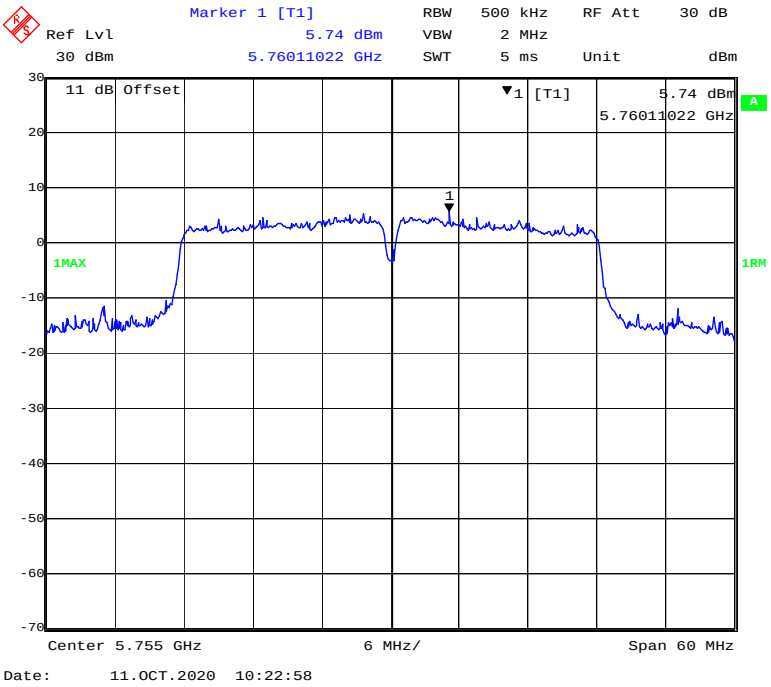

**802.11n-HT20 mode, Power spectral density-5785MHz**



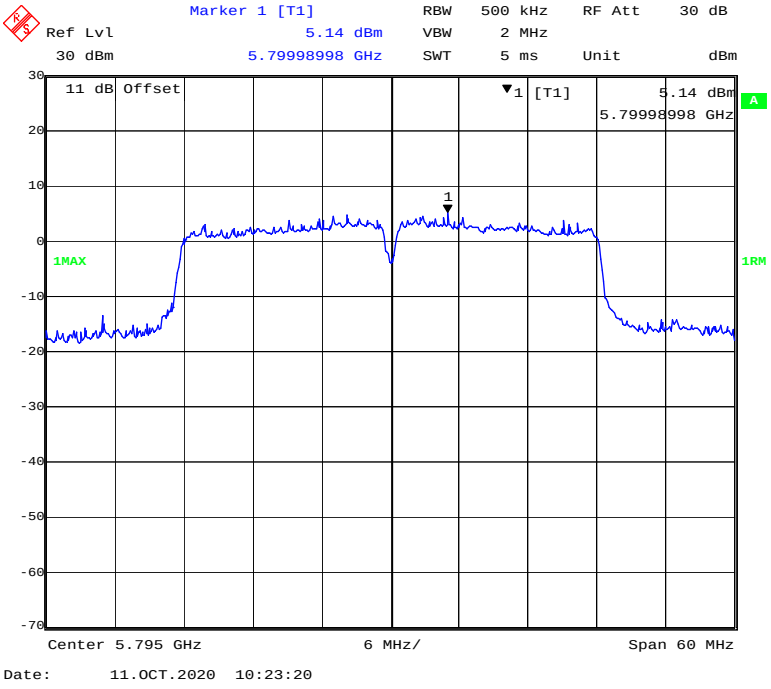
**802.11n-HT20 mode, Power spectral density-5825MHz**



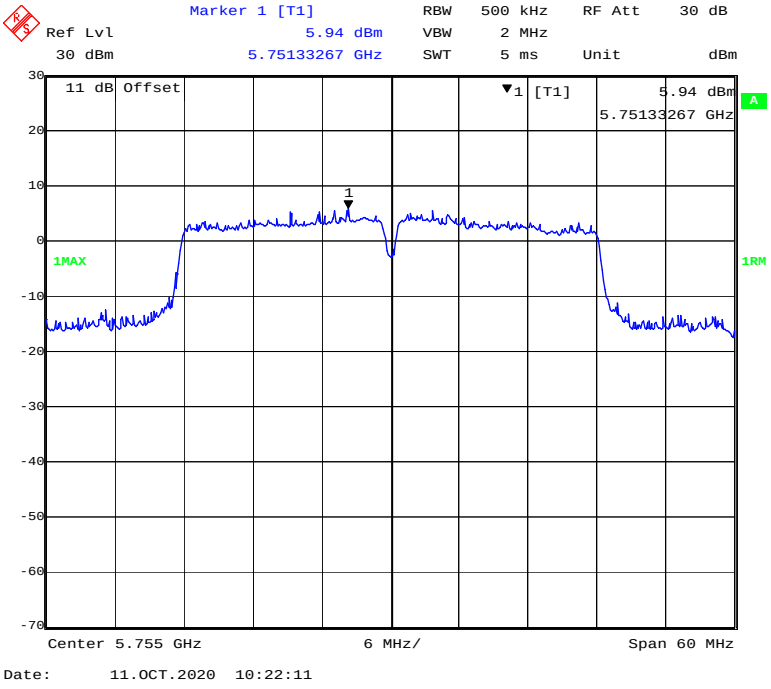

**802.11ac40 mode, Power spectral density-5755MHz**



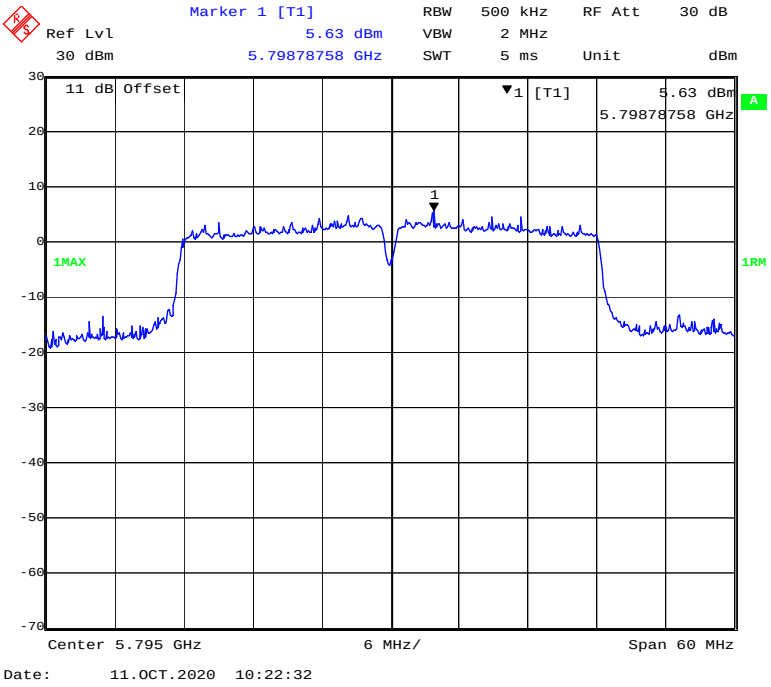
**802.11ac40 mode, Power spectral density-5795MHz**



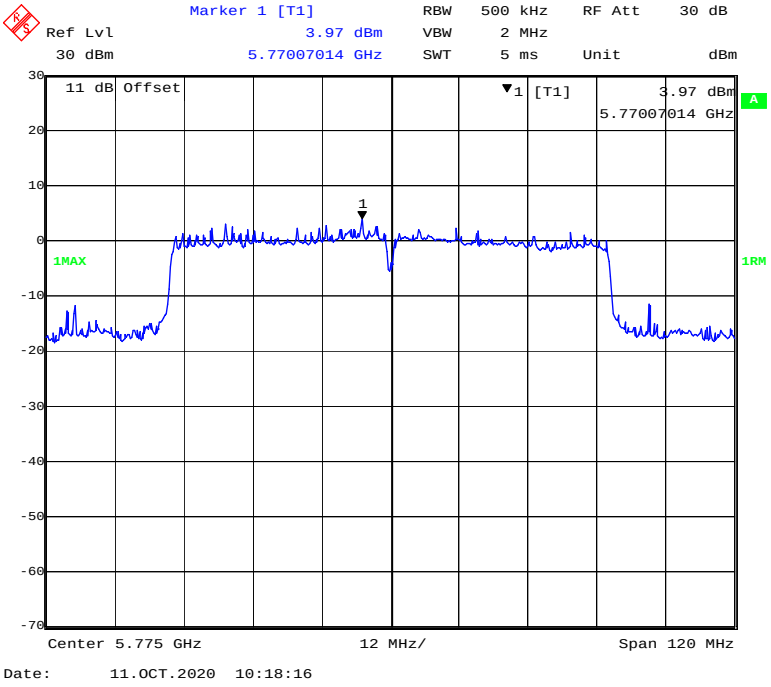

**802.11n-HT40 mode, Power spectral density-5755MHz**



**802.11n-HT40 mode, Power spectral density-5795MHz**




**802.11ac80 mode, Power spectral density-5775MHz**



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2: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

3: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

4: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

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