# FCC PART 15
# TEST REPORT
## No. I17Z60076-SRD15

**for**

**HMD Global Oy**

**Smart Phone**

**TA-1021**

**With**

**FCC ID: 2AJOTTA-1021**

**Hardware Version: 3**

**Software Version: 000C_3_110**

**Issued Date: 2017-04-15**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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# REPORT HISTORY

| Report Number | Revision | Description | Issue Date |
|---|---|---|---|
| I17Z60076-SRD15 | Rev.0 | 1st edition | 2017-04-15 |

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# 1. TEST LATORATORY

## 1.1. Testing Location

Conducted testing Location: CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China100191

Radiated testing Location: CTTL(BDA)

Address: No. 18 Jia Kangding Street, BDA District, Beijing, P. R. China 100191

## 1.2. Testing Environment

Normal Temperature: 15-35℃

Extreme Temperature: -10/+55℃

Relative Humidity: 20-75%

## 1.3. Project data

Testing Start Date: 2017-02-20

Testing End Date: 2017-04-14

## 1.4. Signature

**Jiang Xue**

**( Prepared this test report )**

**Zheng Wei**

**(Reviewed this test report)**

**Lv Songdong**

**(Approved this test report)**

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# 2. CLIENT INFORMATION

## 2.1. Applicant Information

| | |
|---|---|
| Company Name: | HMD Global Oy |
| Address: | Karaportti 2, 02610 Espoo, Finland |
| City: | Espoo |
| Postal Code: | 201203 |
| Country: | Finland |
| Contact | Mikko Kahlos |
| Telephone: | +358-408036126 |
| Fax: | / |

## 2.2. Manufacturer Information

| | |
|---|---|
| Company Name: | HMD Global Oy |
| Address: | Karaportti 2, 02610 Espoo, Finland |
| City: | Espoo |
| Postal Code: | 201203 |
| Country: | Finland |
| Contact | Mikko Kahlos |
| Telephone: | +358-408036126 |
| Fax: | / |

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# 3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT(AE)

## 3.1. About EUT

| | |
|---|---|
| Description | Smart Phone |
| Model name | TA-1021 |
| FCC ID | 2AJOTTA-1021 |
| IC ID | / |
| WLAN Frequency Range | ISM Bands:<br>-5150MHz~5350MHz<br>-5470MHz~5725MHz<br>-5725MHz~5850MHz |
| Type of modulation | OFDM |
| Antenna | Integral Antenna |
| Voltage | 3.84 V DC by Battery |

Note: Photographs of EUT are shown in ANNEX C of this test report. Components list, please refer to documents of the manufacturer.

## 3.2. Internal Identification of EUT used during the test

| EUT ID* | SN or IMEI | HW Version | SW Version |
|---|---|---|---|
| EUT1 | / | 3 | 000C_3_110 |
| EUT2 | / | 3 | 000C_3_050 |

*EUT ID: is used to identify the test sample in the lab internally.

## 3.3. Internal Identification of AE used during the test

| AE ID* | Description | SN |
|---|---|---|
| AE1 | Battery | INBUILT |
| AE2 | Battery | INBUILT |
| AE3 | Travel charger | / |
| AE4 | Travel charger | / |
| AE5 | USB cable | / |
| AE6 | Headset | / |

AE1

| | |
|---|---|
| Model | HE316 |
| Manufacturer | SCUD(FUJIAN) ELECTRONICS CO LTD |
| Capacitance | 3000mAh |
| Nominal voltage | 3.82V |

AE2

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| | |
|---|---|
| Model | HE317 |
| Manufacturer | SCUD(FUJIAN) ELECTRONICS CO LTD |
| Capacitance | 3000mAh |
| Nominal voltage | 3.84V |

AE3/AE4

| | |
|---|---|
| Model | FC0102 |
| Manufacturer | Salcomp |
| Length of cable | / |

AE5

| | |
|---|---|
| Model | CUBB01M-FA010-DH |
| Manufacturer | FOXCONN |
| Length of cable | 99cm |

AE6

| | |
|---|---|
| Model | 5CAB5422B-N01-DG |
| Manufacturer | FOXCONN |
| Length of cable | / |

*AE ID: is used to identify the test sample in the lab internally.

## 3.4. General Description

The Equipment under Test (EUT) is a model of Smart Phone with integrated antenna and inbuilt battery.
It has Bluetooth (EDR) function.
It consists of normal options: travel charger, USB cable and Phone.
Manual and specifications of the EUT were provided to fulfil the test.
Samples undergoing test were selected by the client.

## 3.5. Interpretation of the Test Environment

For the test methods, the test environment uncertainty figures correspond to an expansion factor k=2.

Measurement Uncertainty

| Parameter | Uncertainty |
|---|---|
| temperature | 0.48°C |
| humidity | 2 % |
| DC voltages | 0.003V |

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# 4. REFERENCE DOCUMENTS

## 4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

## 4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

| | | |
|---|---|---|
| FCC Part15 | Title 47 of the Code of Federal Regulations; Chapter I Part 15 - Radio frequency devices | 2015 |
| ANSI C63.10 | Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz | 2014 |
| UNII: KDB 789033 | Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E | 2014-06 |

# 5. LABORATORY ENVIRONMENT

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

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# 6. SUMMARY OF TEST RESULTS

## 6.1. Summary of Test Results

| SUMMARY OF MEASUREMENT RESULTS | Sub-clause of Part15E | Sub-clause of IC | Verdict |
|---|---|---|---|
| Maximum Output Power | 15.407 | / | **P** |
| Power Spectral Density | 15.407 | / | **P** |
| Occupied 26dB Bandwidth | 15.403 | / | **P** |
| Band edge compliance | 15.407 | / | **P** |
| Transmitter spurious emissions radiated | 15.407 | / | **P** |
| Spurious emissions radiated < 30 MHz | 15.407 | / | **P** |
| Spurious emissions conducted < 30 MHz | 15.407 | / | **P** |
| Frequency Stability | 15.407 | / | **P** |
| Transmit Power Control | 15.407 | / | **NA** |

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

| | |
|---|---|
| P | Pass, The EUT complies with the essential requirements in the standard. |
| NM | Not measured, The test was not measured by CTTL |
| NA | Not Applicable, The test was not applicable |
| F | Fail, The EUT does not comply with the essential requirements in the standard |

## 6.2. Statements

CTTL has evaluated the test cases requested by the client/manufacturer as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.1.

This report only deals with the WLAN function among the features described in section 3.

This model is a variant product which model name is TA-1025; all the test result has been derived from test report of TA-1025.

## 6.3. Test Conditions

For this report, all the test cases are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

| | |
|---|---|
| Temperature | 26℃ |
| Voltage | 3.84V |
| Humidity | 44% |

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# 7. TEST EQUIPMENTS UTILIZED

**Conducted test system**

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration date | Calibration Due date |
|---|---|---|---|---|---|---|
| 1 | Vector Signal Analyzer | FSQ40 | 200089 | Rohde & Schwarz | 2016-06-07 | 2017-06-06 |
| 2 | Shielding Room | S81 | / | ETS-Lindgren | / | / |

**Radiated emission test system**

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Period | Calibration Due date |
|---|---|---|---|---|---|---|
| 1 | Test Receiver | ESU26 | 100376 | Rohde & Schwarz | 1 year | 2017-11-30 |
| 2 | BiLog Antenna | VULB9163 | 514 | Schwarzbeck | 3 years | 2017-11-24 |
| 3 | Dual-Ridge Waveguide Horn Antenna | 3116 | 2661 | ETS-Lindgren | 3 years | 2017-06-17 |
| 4 | Dual-Ridge Waveguide Horn Antenna | 3115 | 6914 | ETS-Lindgren | 3 years | 2017-09-21 |
| 5 | Vector Signal Analyzer | FSV | 101047 | Rohde & Schwarz | 1 year | 2017-06-28 |
| 6 | Test Receiver | ESCI7 | 100948 | Rohde & Schwarz | 1 year | 2017-07-05 |
| 7 | AMN | ESH3-Z5 | 825562/028 | Rohde & Schwarz | 1 year | 2017-07-06 |

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# 8. Measurement Uncertainty

## 8.1. Transmitter Output Power

Measurement Uncertainty: 0.339dB,k=1.96

## 8.2. Peak Power Spectral Density

Measurement Uncertainty: 0.705dBm/MHz,k=1.96

## 8.3. Occupied Channel Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

## 8.4. Band Edges Compliance

Measurement Uncertainty : 0.62dBm,k=1.96

## 8.5. Spurious Emissions

**Conducted (k=1.96)**

| Frequency Range | Uncertainty(dBm) |
|---|---|
| 30MHz ≤ f ≤ 2GHz | 1.22 |
| 2GHz ≤ f ≤3.6GHz | 1.22 |
| 3.6GHz ≤ f ≤8GHz | 1.22 |
| 8GHz ≤ f ≤12.75GHz | 1.51 |
| 12.75GHz ≤ f ≤26GHz | 1.51 |
| 26GHz ≤ f ≤40GHz | 1.59 |

**Radiated (k=2)**

| Frequency Range | Uncertainty(dBm) |
|---|---|
| 9kHz-30MHz | |
| 30MHz ≤ f ≤ 1GHz | 4.86 |
| 1GHz ≤ f ≤18GHz | 5.26 |
| 18GHz ≤ f ≤40GHz | 5.28 |

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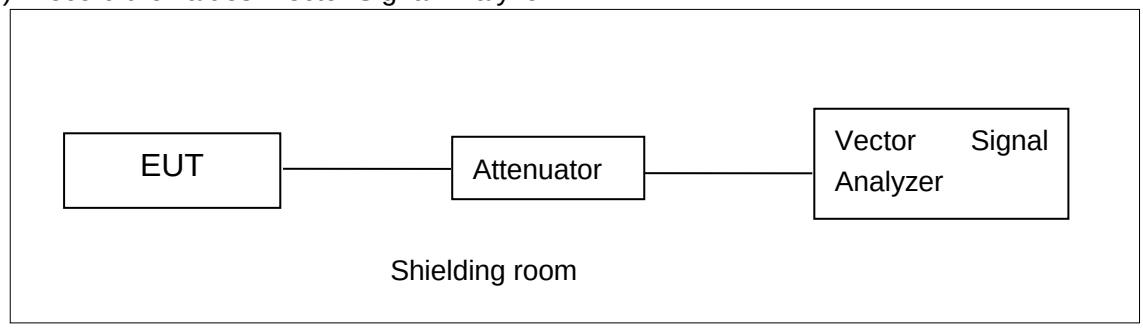
# ANNEX A: MEASUREMENT RESULTS

## A.1. Measurement Method

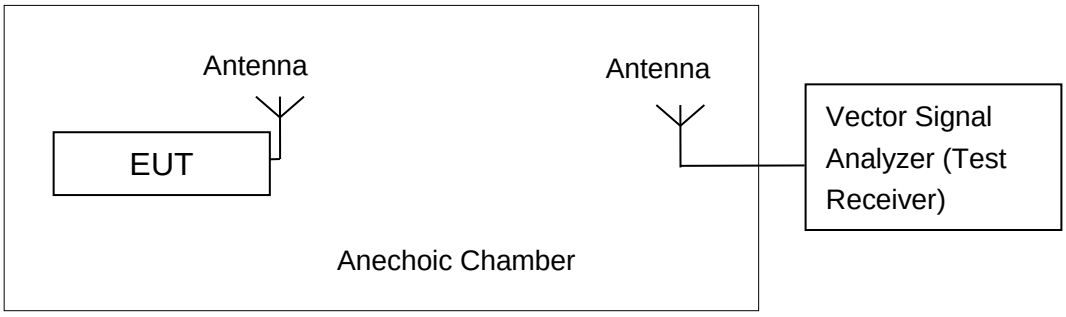
### A.1.1. Conducted Measurements

1). Connect the EUT to the test system correctly.
2). Set the EUT to the required work mode.
3). Set the EUT to the required channel.
4). Set the spectrum analyzer to start measurement.
5). Record the values. Vector Signal Analyzer




### A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows,
Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;
Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 10Hz;




The measurement is made according to KDB 789033
The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.

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## A.2. Maximum output Power

**Measurement Limit and Method:**

| Standard | Frequency (MHz) | Limit (dBm) |
|---|---|---|
| FCC CRF Part 15.407(a) | 5150MHz~5250MHz | 24dBm |
| | 5250MHz~5350MHz | 24dBm or 11+10logB |
| | 5470MHz~5725MHz | 24dBm or 11+10logB |

Limit use the less value, and B is the 26dB bandwidth.

The measurement method SA-1 is made according to KDB 789033

**Measurement Results:**

**802.11a mode**

| Mode | Channel | Test Result (dBm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Data Rate (Mbps) | | | | | | | |
| | | 6 | 9 | 12 | 18 | 24 | 36 | 48 | 54 |
| 802.11a | 5180MHz (Ch36) | 12.63 | 12.36 | 12.14 | 11.61 | 11.13 | 10.6 | 10.06 | 9.85 |
| | 5200MHz (Ch40) | 12.39 | / | / | / | / | / | / | / |
| | 5240MHz(Ch48) | 12.59 | / | / | / | / | / | / | / |
| | 5260MHz(Ch52) | 12.62 | / | / | / | / | / | / | / |
| | 5280MHz(Ch56) | 12.63 | / | / | / | / | / | / | / |
| | 5320MHz(Ch64) | 12.87 | / | / | / | / | / | / | / |
| | 5500MHz(Ch100) | 12.81 | / | / | / | / | / | / | / |
| | 5580MHz(Ch116) | 12.80 | / | / | / | / | / | / | / |
| | 5700MHz(Ch140) | 12.04 | / | / | / | / | / | / | / |

The data rate 6Mbps is selected as worse condition, and the following cases are performed with this condition.

**802.11n-HT20 mode**

| Mode | Channel | Test Result (dBm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Data Rate | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 |
| 802.11n (HT20) | 5180MHz (Ch36) | 11.47 | 11.07 | 10.73 | 10.15 | 9.6 | 9.15 | 9 | 8.73 |
| | 5200MHz (Ch40) | 11.40 | / | / | / | / | / | / | / |
| | 5240MHz(Ch48) | 11.53 | / | / | / | / | / | / | / |
| | 5260MHz(Ch52) | 11.75 | / | / | / | / | / | / | / |
| | 5280MHz(Ch56) | 11.49 | / | / | / | / | / | / | / |
| | 5320MHz(Ch64) | 11.98 | / | / | / | / | / | / | / |
| | 5500MHz(Ch100) | 11.56 | / | / | / | / | / | / | / |
| | 5580MHz(Ch116) | 11.62 | / | / | / | / | / | / | / |
| | 5700MHz(Ch140) | 11.14 | / | / | / | / | / | / | / |

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

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**802.11n-HT40 mode**

| Mode | Channel | Test Result (dBm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Data Rate | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 |
| 802.11n (HT40) | 5190MHz (Ch38) | 11.07 | 10.27 | 9.7 | 9.02 | 8.32 | 7.84 | 7.62 | 7.39 |
| | 5230MHz(Ch46) | 11.05 | / | / | / | / | / | / | / |
| | 5270MHz(Ch54) | 11.35 | / | / | / | / | / | / | / |
| | 5310MHz(Ch62) | 11.34 | / | / | / | / | / | / | / |
| | 5510MHz(Ch102) | 11.44 | / | / | / | / | / | / | / |
| | 5550MHz(Ch110) | 11.58 | / | / | / | / | / | / | / |
| | 5670MHz(Ch134) | 11.12 | / | / | / | / | / | / | / |

The data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

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## A.3. Peak Power Spectral Density (conducted)

**Measurement Limit:**

| Standard | Frequency (MHz) | Limit (dBm/MHz) |
|---|---|---|
| FCC CRF Part 15.407(a) | 5150MHz~5250MHz | 11 |
| | 5250MHz~5350MHz | 11 |
| | 5470MHz~5725MHz | 11 |

The output power measurement method SA-1 is made according to KDB 789033

**Measurement Results:**

| Mode | Channel | Power Spectral Density (dBm/MHz) | Conclusion |
|---|---|---|---|
| 802.11a | 5180 MHz | 9.08 | P |
| | 5200 MHz | 9.10 | P |
| | 5240 MHz | 9.44 | P |
| | 5260 MHz | 8.96 | P |
| | 5280 MHz | 9.96 | P |
| | 5320 MHz | 9.41 | P |
| | 5500 MHz | 9.76 | P |
| | 5580 MHz | 8.88 | P |
| | 5700 MHz | 8.43 | P |
| 802.11n HT20 | 5180 MHz | 8.36 | P |
| | 5200 MHz | 9.09 | P |
| | 5240 MHz | 8.39 | P |
| | 5260 MHz | 8.41 | P |
| | 5280 MHz | 9.65 | P |
| | 5320 MHz | 9.60 | P |
| | 5500 MHz | 9.18 | P |
| | 5580 MHz | 8.52 | P |
| | 5700 MHz | 8.55 | P |
| 802.11n HT40 | 5190 MHz | 5.01 | P |
| | 5230 MHz | 5.31 | P |
| | 5270 MHz | 6.01 | P |
| | 5310 MHz | 5.48 | P |
| | 5510 MHz | 6.03 | P |
| | 5550 MHz | 4.80 | P |
| | 5670 MHz | 4.96 | P |

**Conclusion: PASS**

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## A.4. Occupied 26dB Bandwidth(conducted)

**Measurement Limit:**

| Standard | Limit (kHz) |
|---|---|
| FCC 47 CFR Part 15.403 (i) | / |

The measurement is made according to KDB 789033

**Measurement Uncertainty:**

| | |
|---|---|
| Measurement Uncertainty | 60.80Hz |

**Measurement Result:**

| Mode | Channel | Occupied 26dB Bandwidth ( kHz) | | conclusion |
|---|---|---|---|---|
| 802.11a | 5180 MHz | Fig.1 | 23.00 | P |
| | 5200 MHz | Fig.2 | 23.00 | P |
| | 5240 MHz | Fig.3 | 23.45 | P |
| | 5260 MHz | Fig.4 | 22.80 | P |
| | 5280 MHz | Fig.5 | 23.00 | P |
| | 5320 MHz | Fig.6 | 22.80 | P |
| | 5500 MHz | Fig.7 | 22.70 | P |
| | 5580 MHz | Fig.8 | 22.70 | P |
| | 5700 MHz | Fig.9 | 22.85 | P |
| 802.11n HT20 | 5180 MHz | Fig.10 | 23.15 | P |
| | 5200 MHz | Fig.11 | 22.90 | P |
| | 5240 MHz | Fig.12 | 23.30 | P |
| | 5260 MHz | Fig.13 | 22.60 | P |
| | 5280 MHz | Fig.14 | 22.90 | P |
| | 5320 MHz | Fig.15 | 22.80 | P |
| | 5500 MHz | Fig.16 | 22.75 | P |
| | 5580 MHz | Fig.17 | 22.75 | P |
| | 5700 MHz | Fig.18 | 22.95 | P |
| 802.11n HT40 | 5190 MHz | Fig.19 | 44.32 | P |
| | 5230 MHz | Fig.20 | 43.76 | P |
| | 5270 MHz | Fig.21 | 43.84 | P |
| | 5310 MHz | Fig.22 | 43.76 | P |
| | 5510 MHz | Fig.23 | 42.48 | P |
| | 5550 MHz | Fig.24 | 43.36 | P |
| | 5670 MHz | Fig.25 | 42.88 | P |

**Conclusion: PASS**

**Test graphs as below:**

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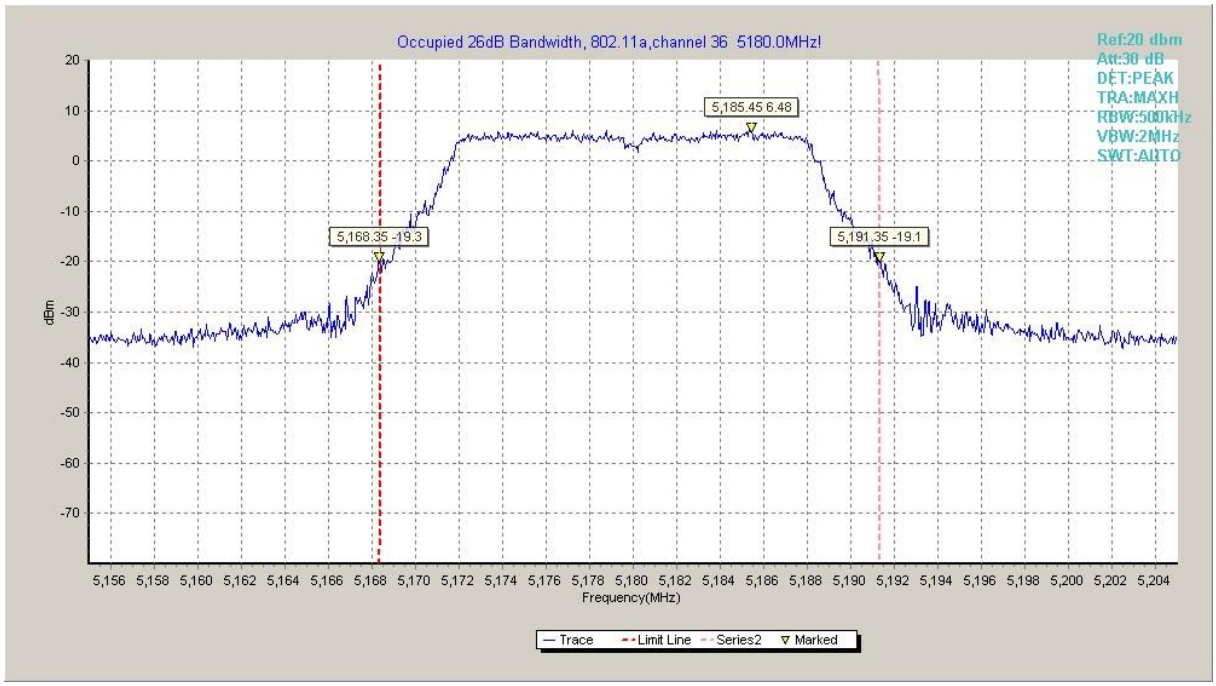


**Fig. 1 Occupied 26dB Bandwidth (802.11a, 5180MHz)**

**Fig. 2 Occupied 26dB Bandwidth (802.11a, 5200MHz)**

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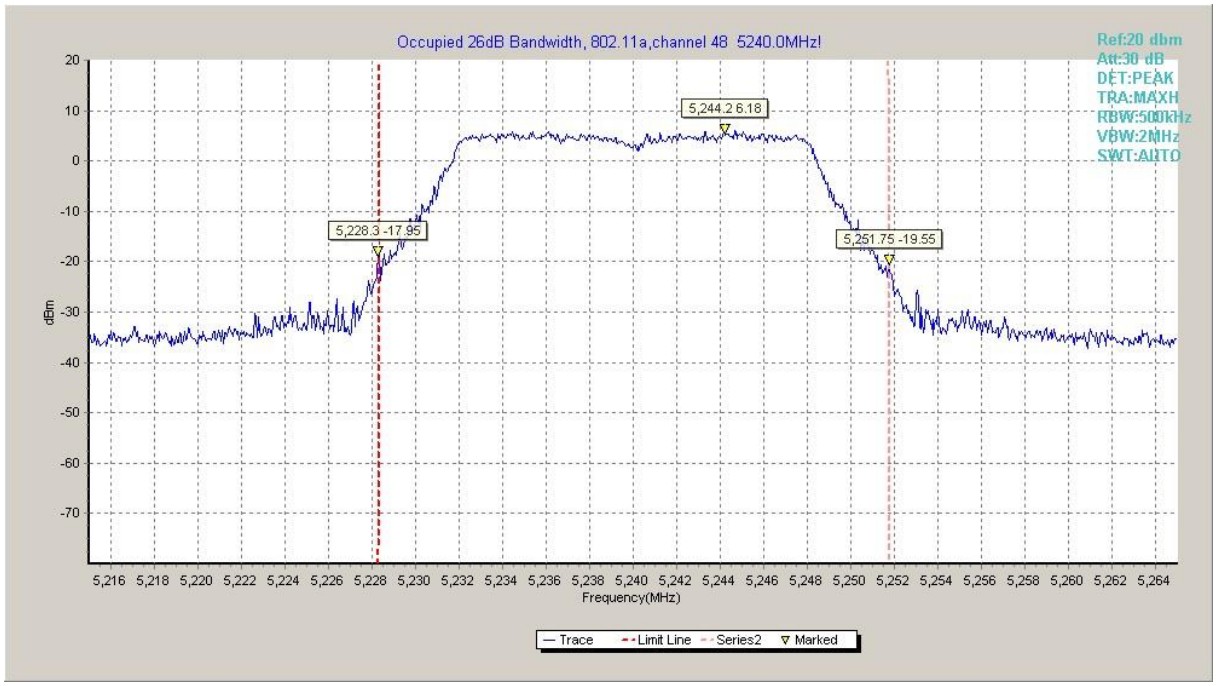


**Fig. 3 Occupied 26dB Bandwidth (802.11a, 5240MHz)**

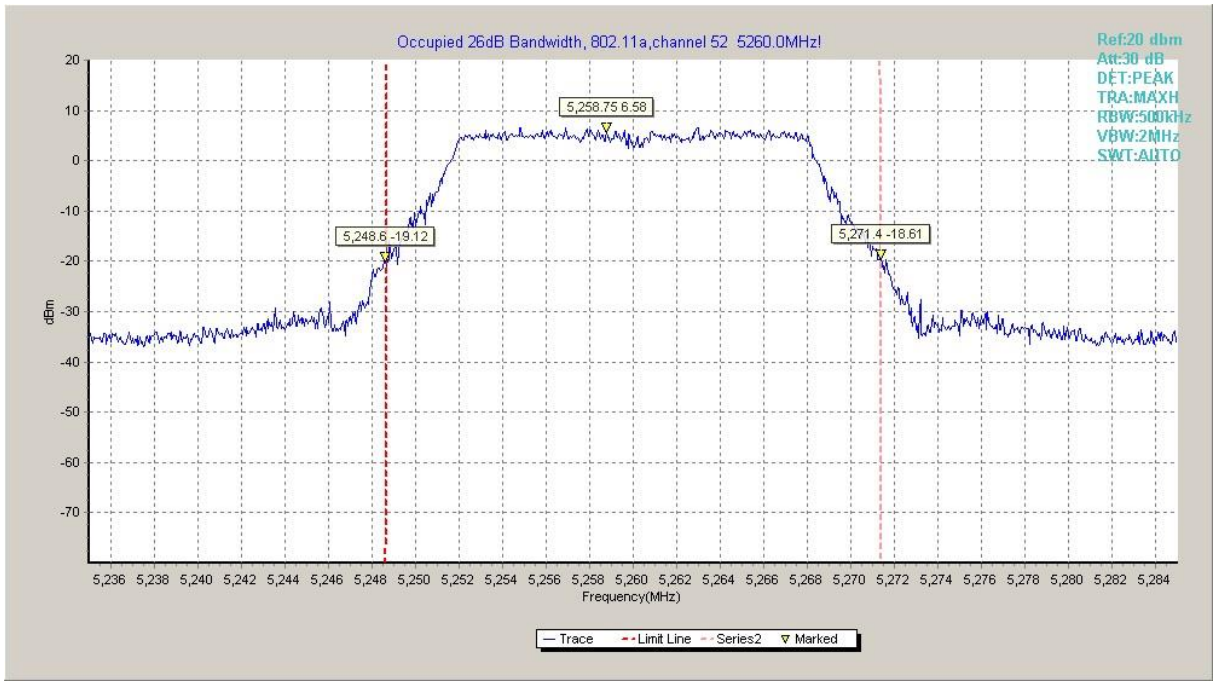


**Fig. 4 Occupied 26dB Bandwidth (802.11a, 5260MHz)**

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**Fig. 5 Occupied 26dB Bandwidth (802.11a, 5280MHz)**

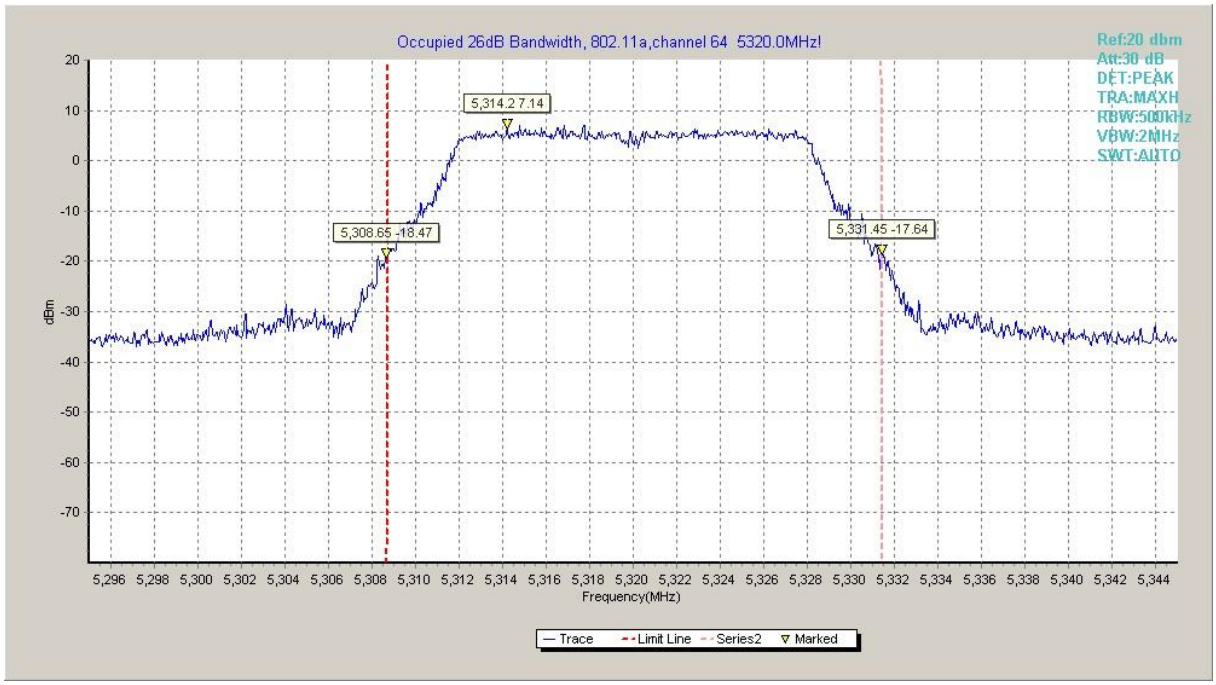


**Fig. 6 Occupied 26dB Bandwidth (802.11a, 5320MHz)**

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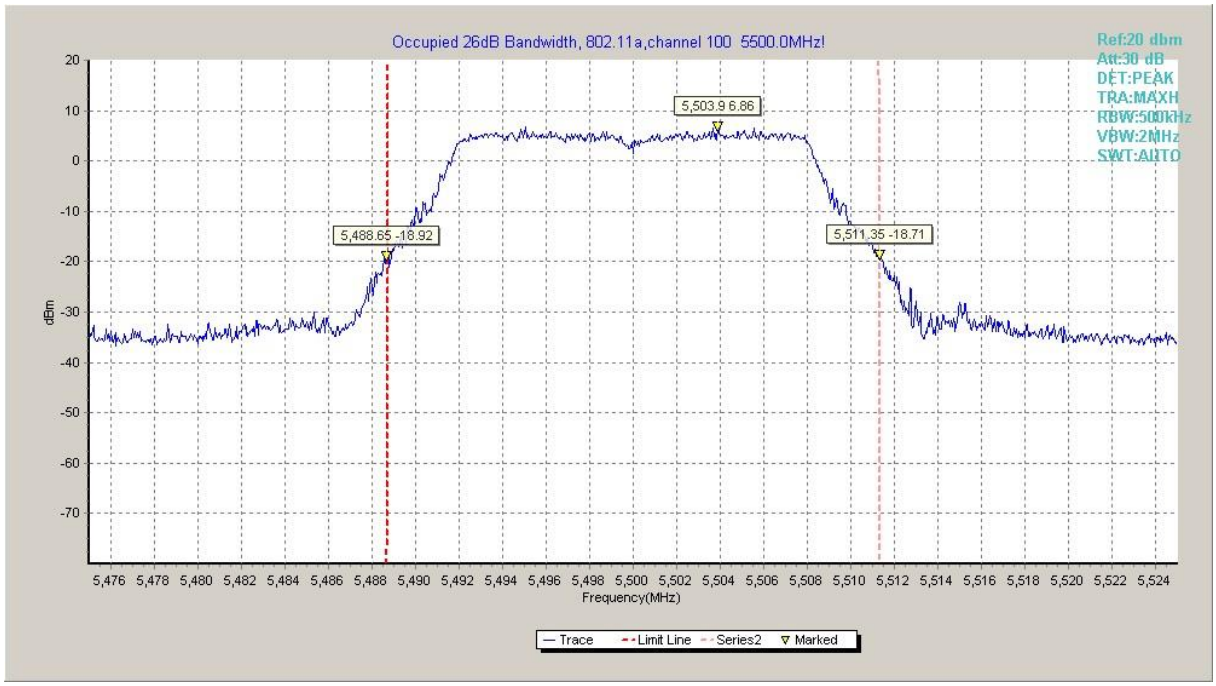


**Fig. 7 Occupied 26dB Bandwidth (802.11a, 5500MHz)**

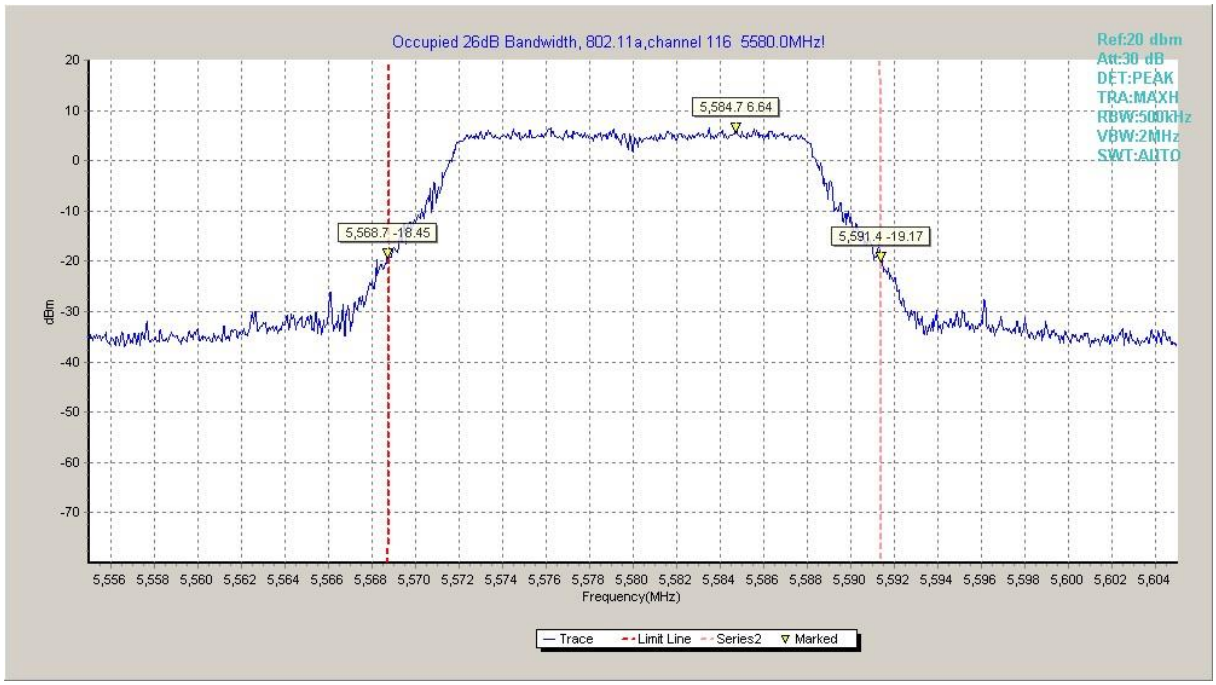


**Fig. 8 Occupied 26dB Bandwidth (802.11a, 5580MHz)**

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**Fig. 9 Occupied 26dB Bandwidth (802.11a, 5700MHz)**

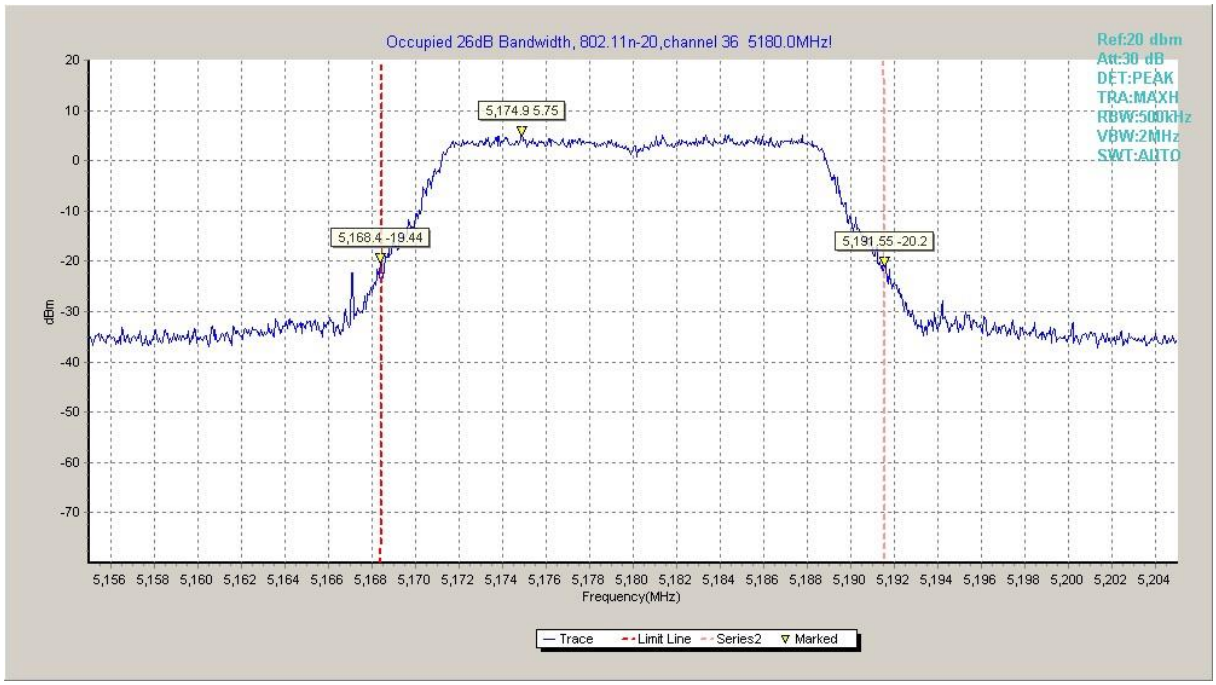


**Fig. 10 Occupied 26dB Bandwidth (802.11n-HT20, 5180MHz)**

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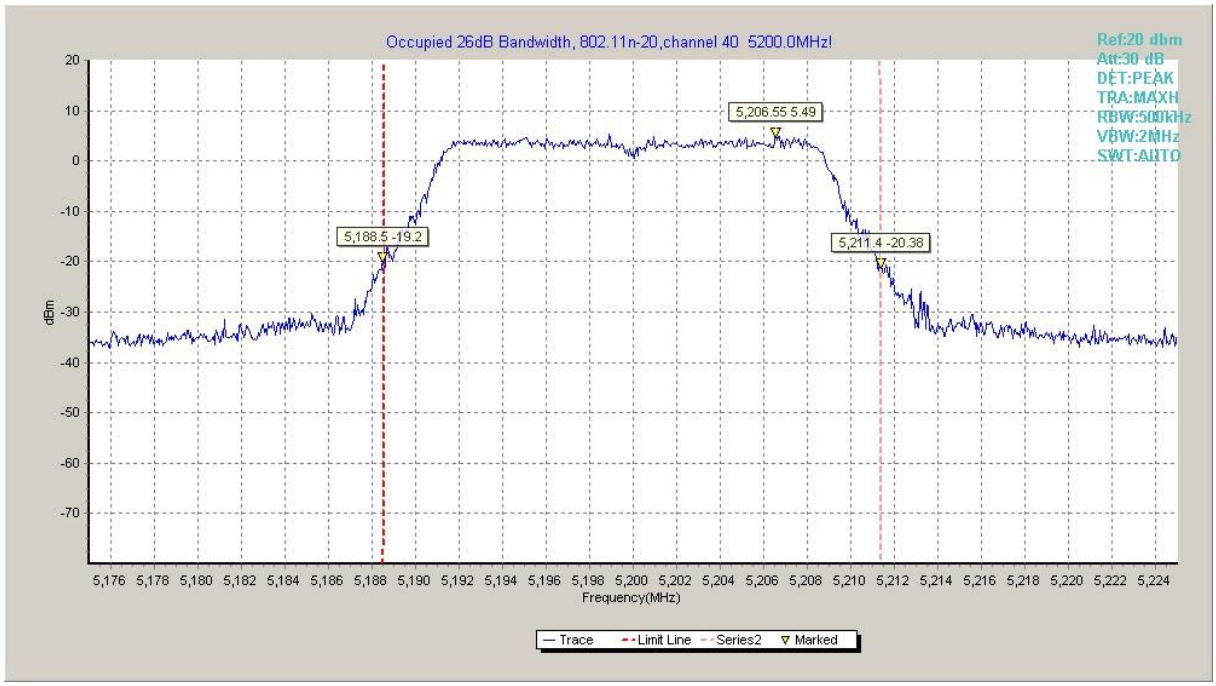


**Fig. 11 Occupied 26dB Bandwidth (802.11n-HT20, 5200MHz)**

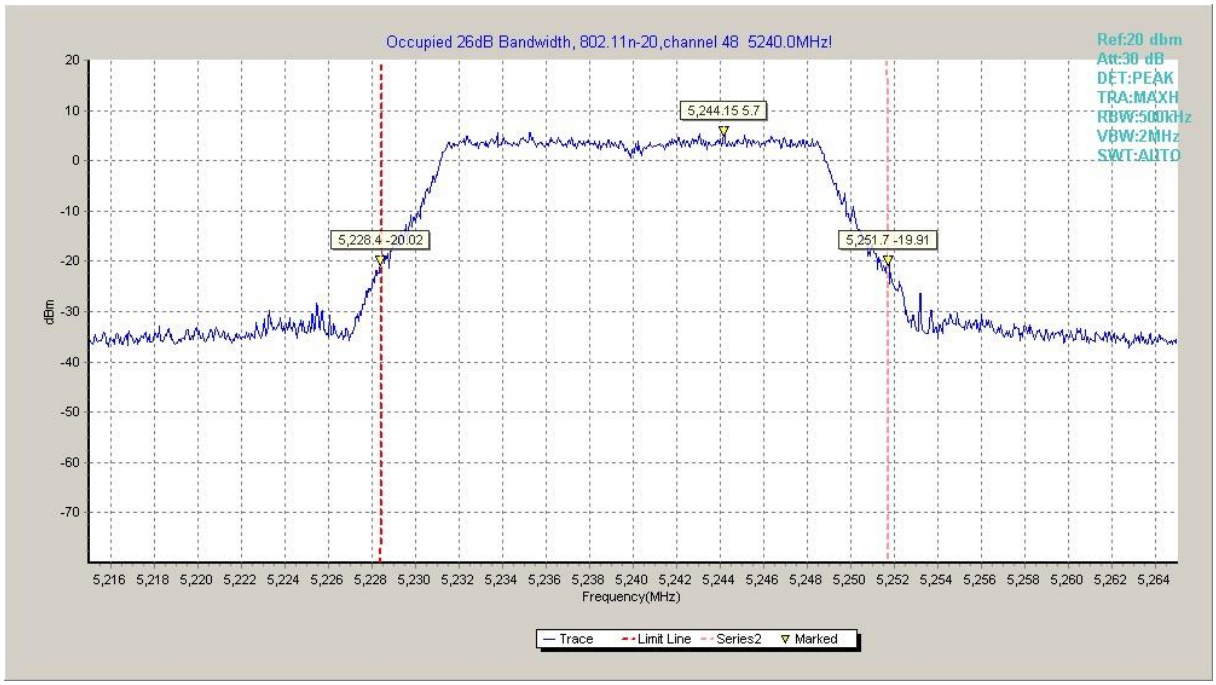


**Fig. 12 Occupied 26dB Bandwidth (802.11n-HT20, 5240MHz)**

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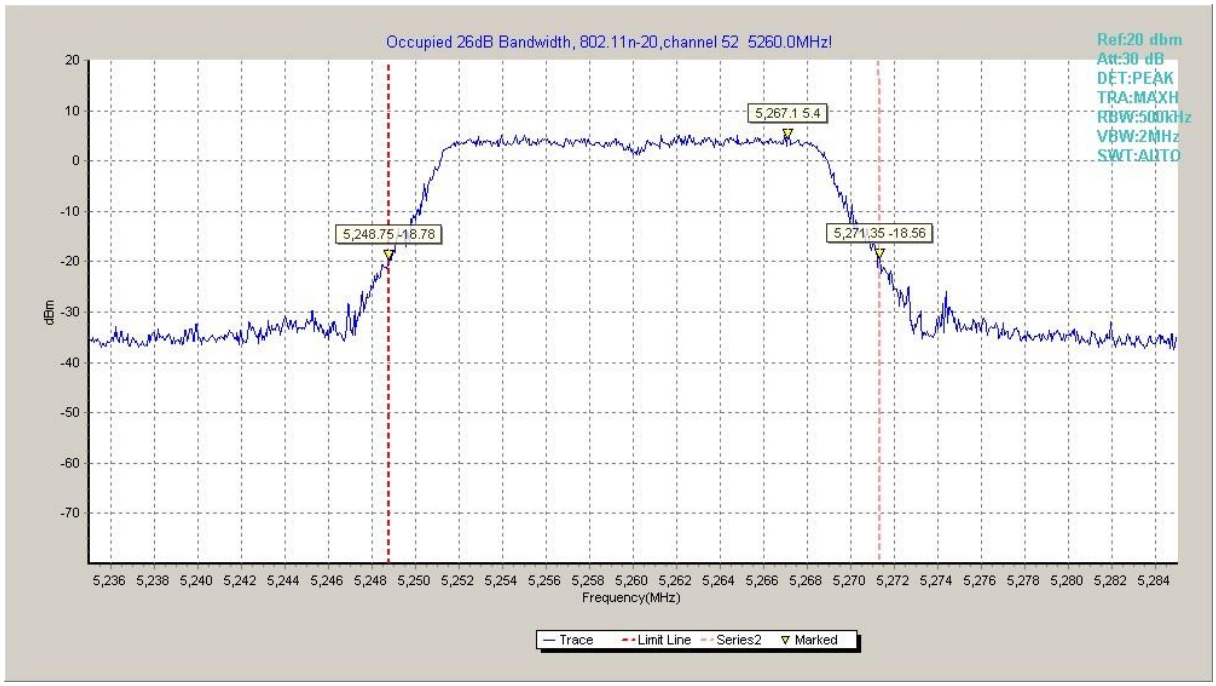


**Fig. 13 Occupied 26dB Bandwidth (802.11n-HT20, 5260MHz)**

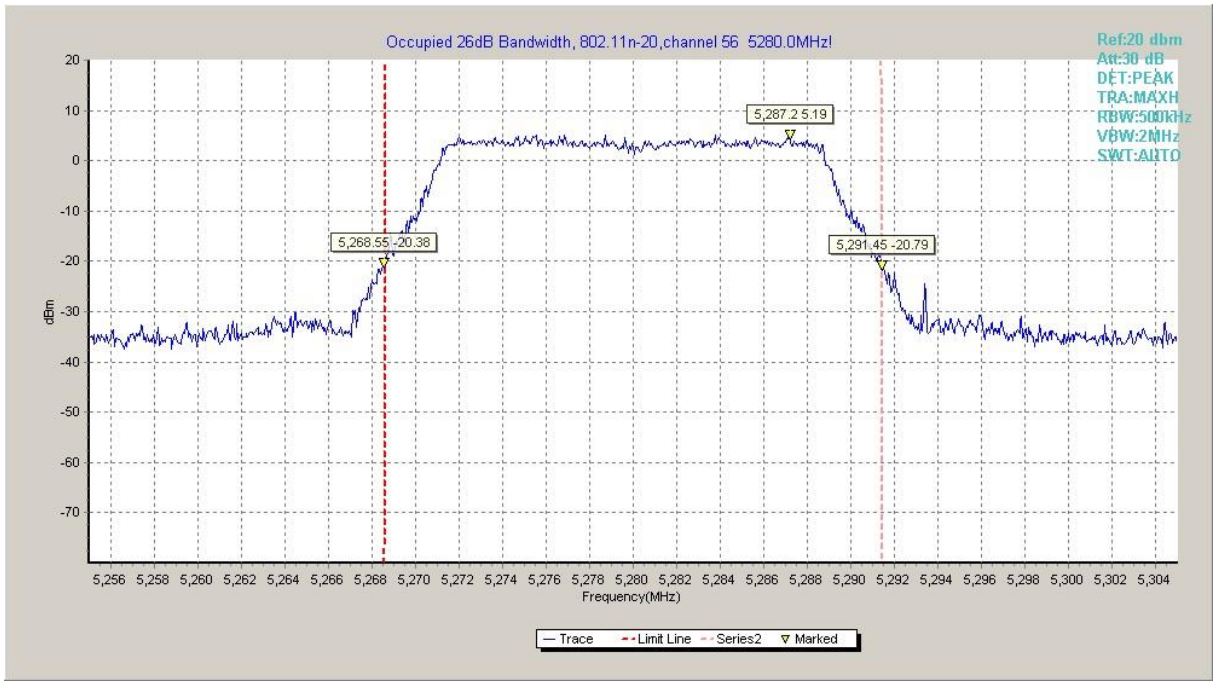


**Fig. 14 Occupied 26dB Bandwidth (802.11n-HT20, 5280MHz)**

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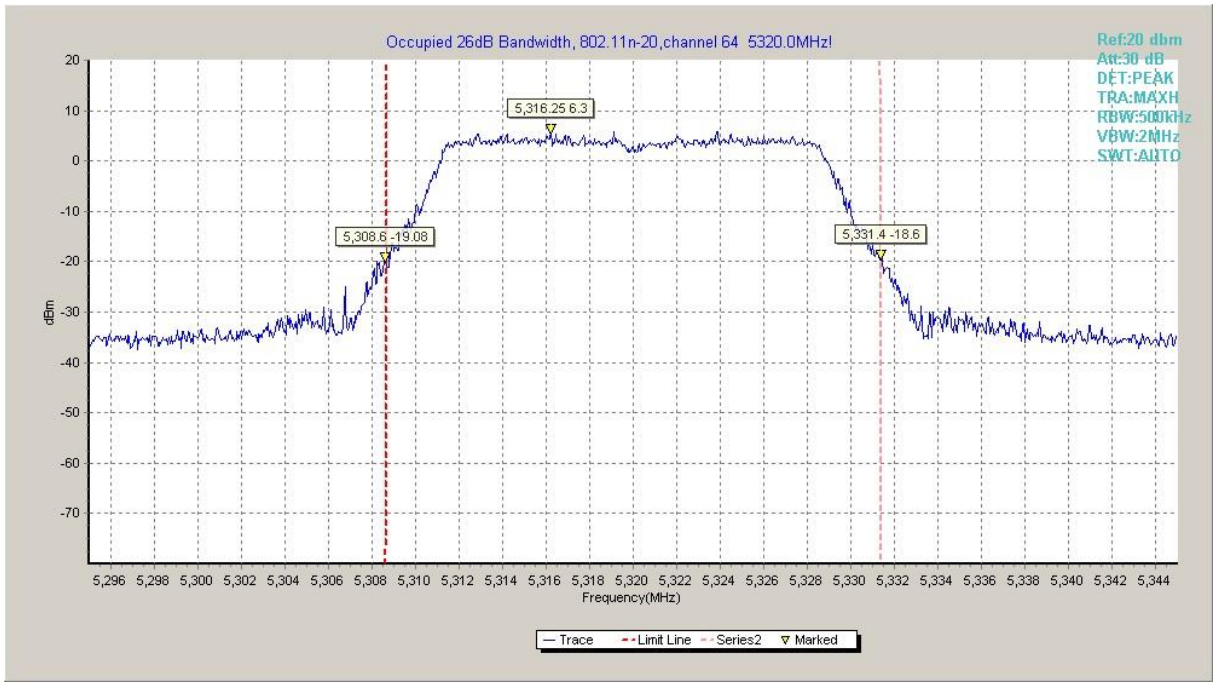


**Fig. 15 Occupied 26dB Bandwidth (802.11n-HT20, 5320MHz)**

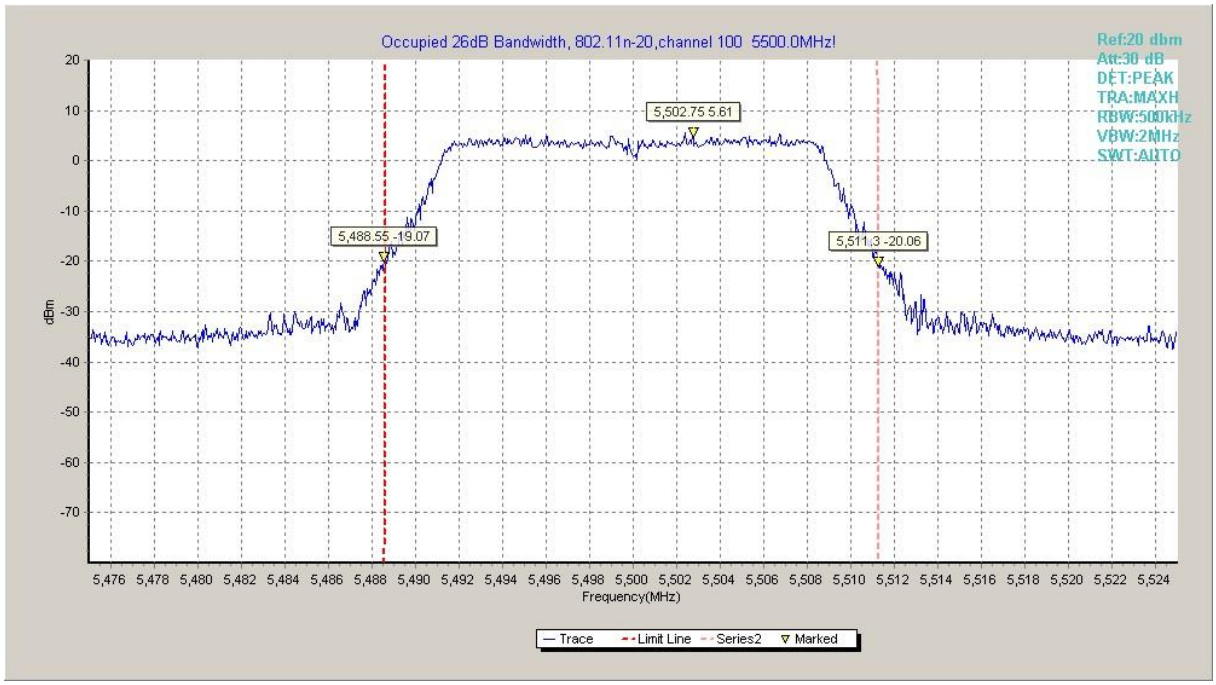


**Fig. 16 Occupied 26dB Bandwidth (802. 11n-HT20, 5500MHz)**

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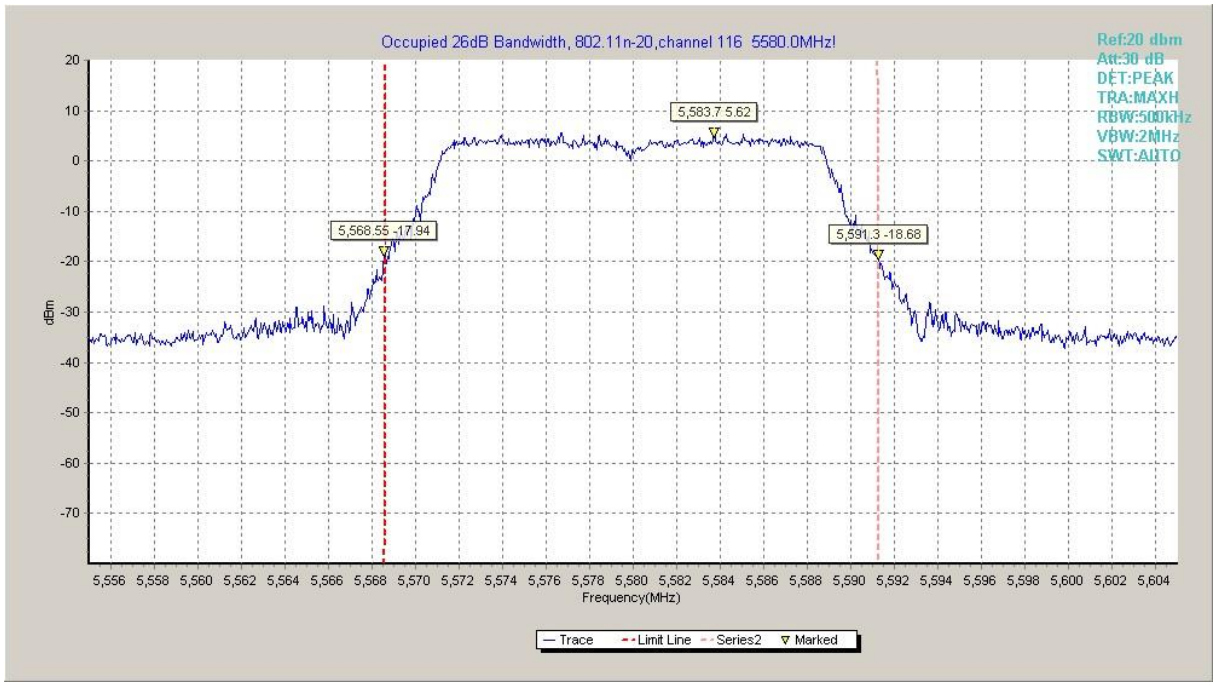


**Fig. 17 Occupied 26dB Bandwidth (802. 11n-HT20, 5580MHz)**

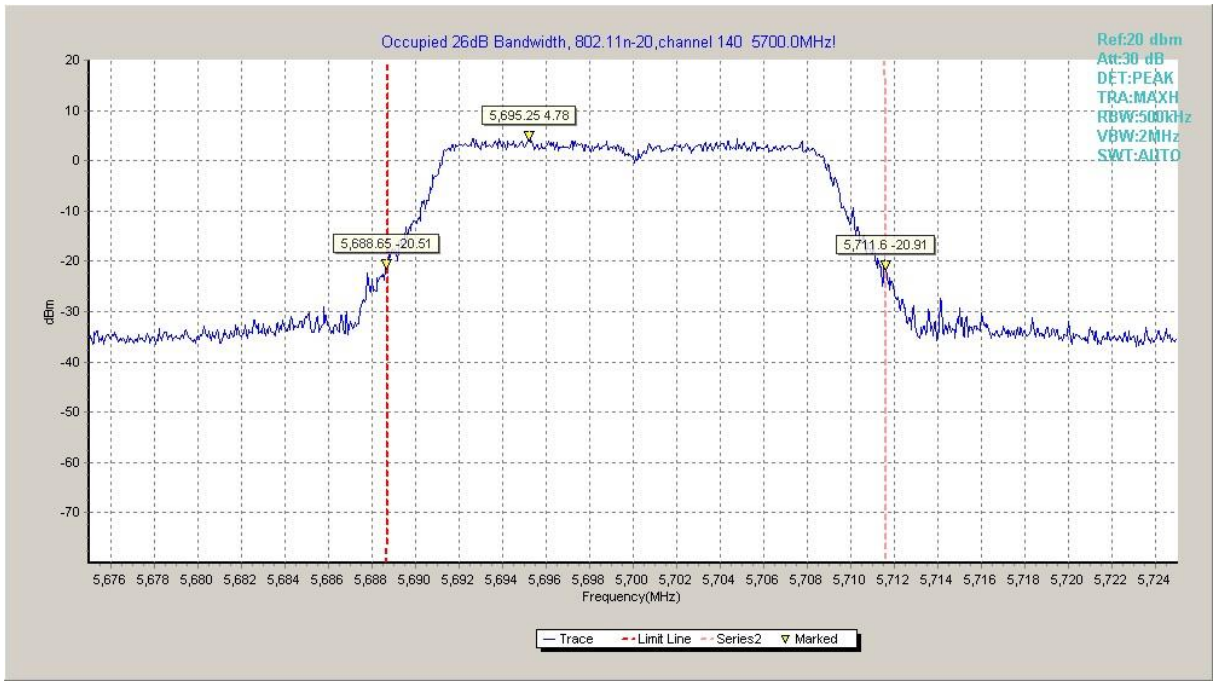


**Fig. 18 Occupied 26dB Bandwidth (802. 11n-HT20, 5700MHz)**

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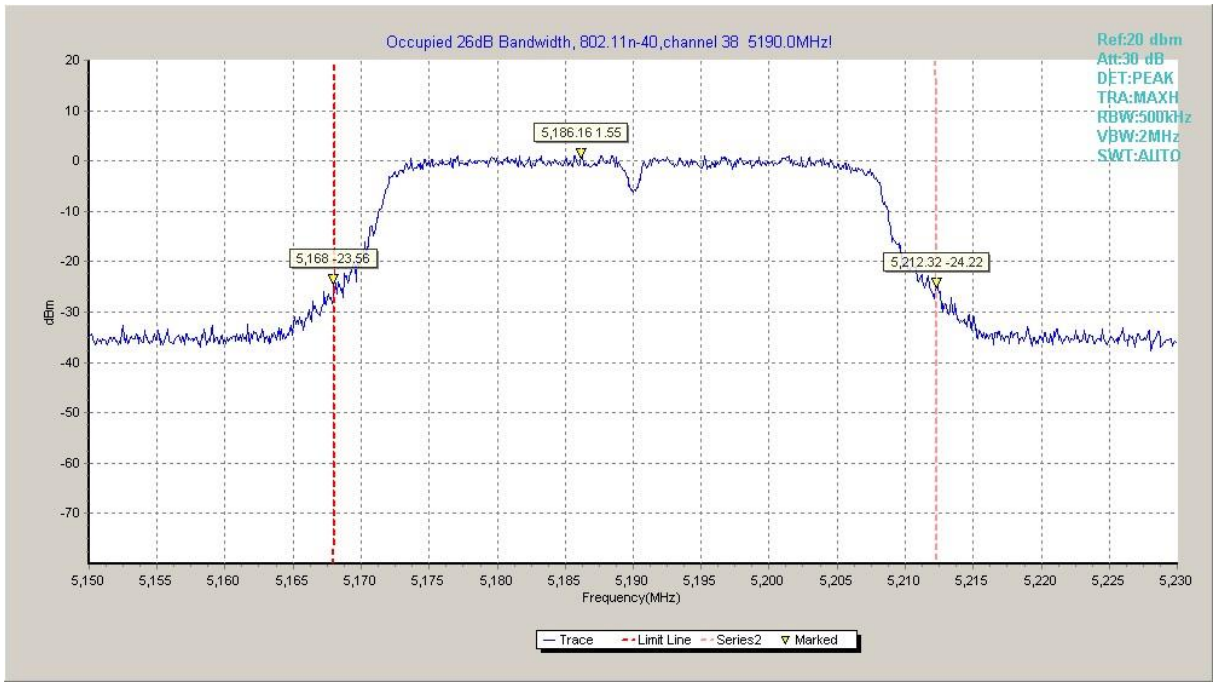


**Fig. 19 Occupied 26dB Bandwidth (802.11n-HT40, 5190MHz)**

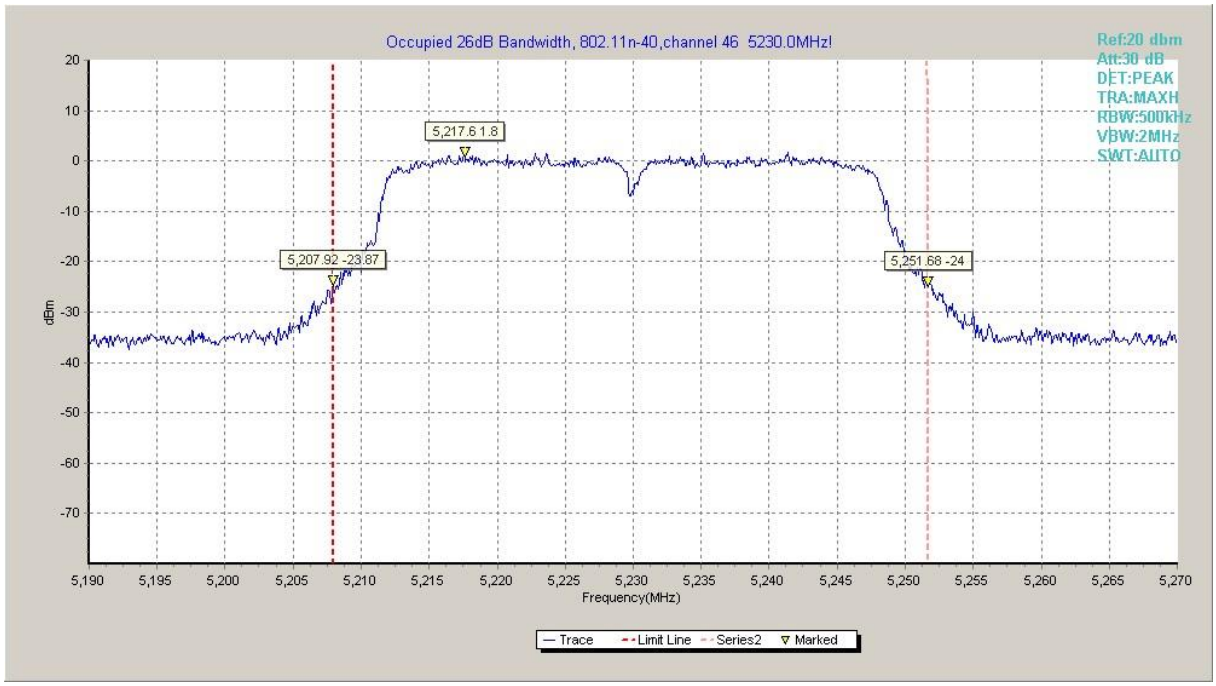


**Fig. 20 Occupied 26dB Bandwidth (802.11n-HT40, 5230MHz)**

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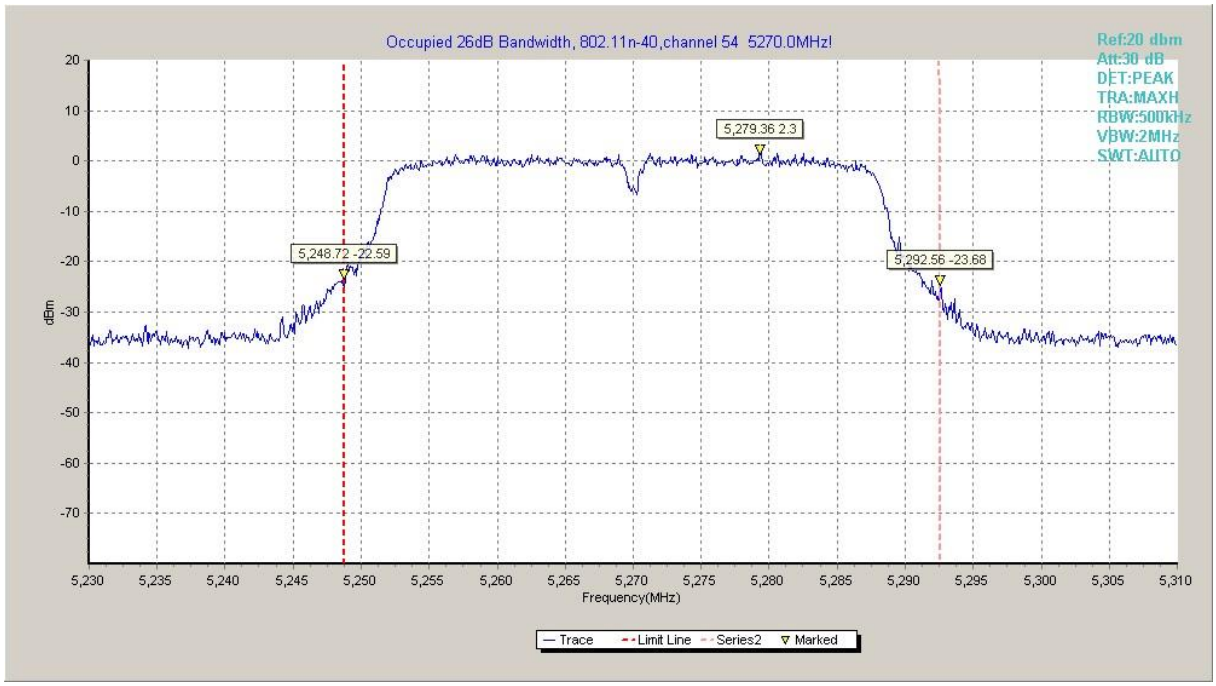


**Fig. 21 Occupied 26dB Bandwidth (802.11n-HT40, 5270MHz)**

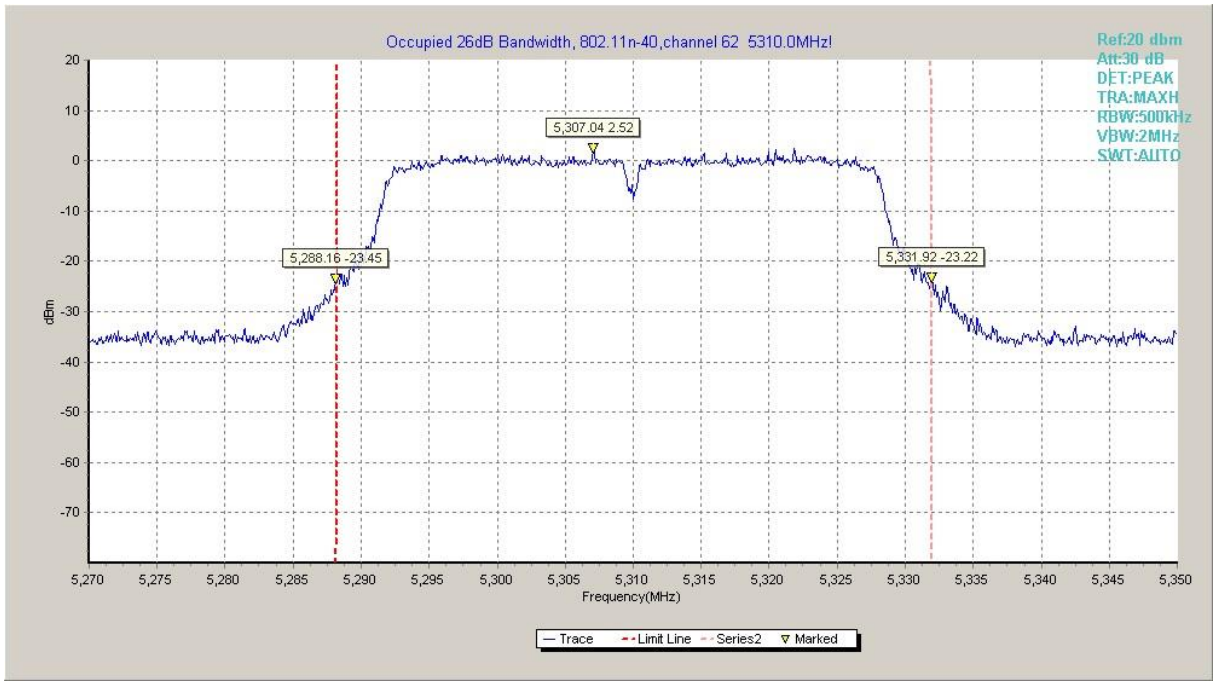


**Fig. 22 Occupied 26dB Bandwidth (802.11n-HT40, 5310MHz)**

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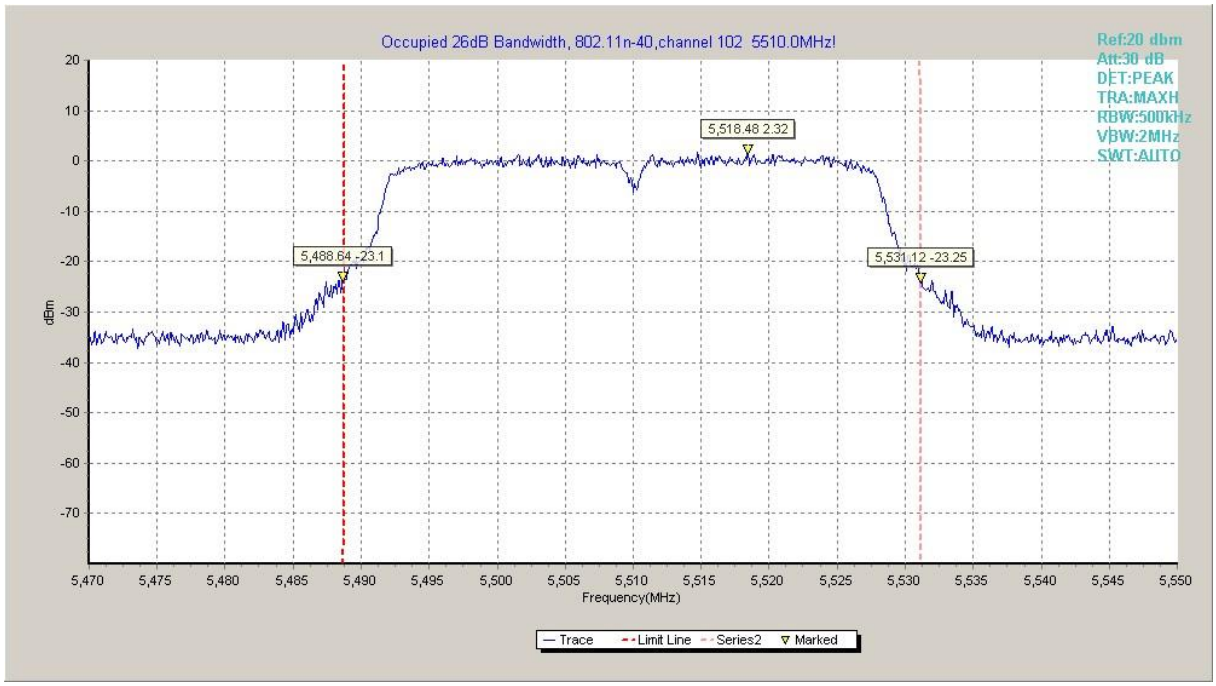


**Fig. 23 Occupied 26dB Bandwidth (802. 11n-HT40, 5510MHz)**

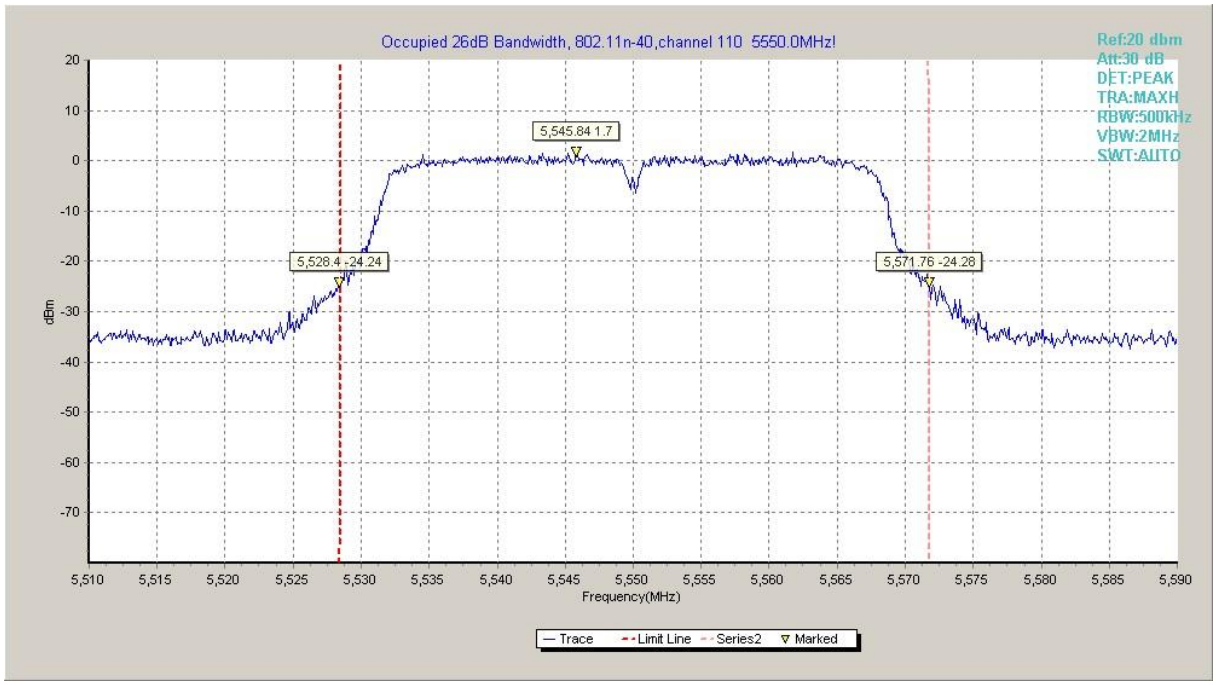


**Fig. 24 Occupied 26dB Bandwidth (802. 11n-HT40, 5550MHz)**

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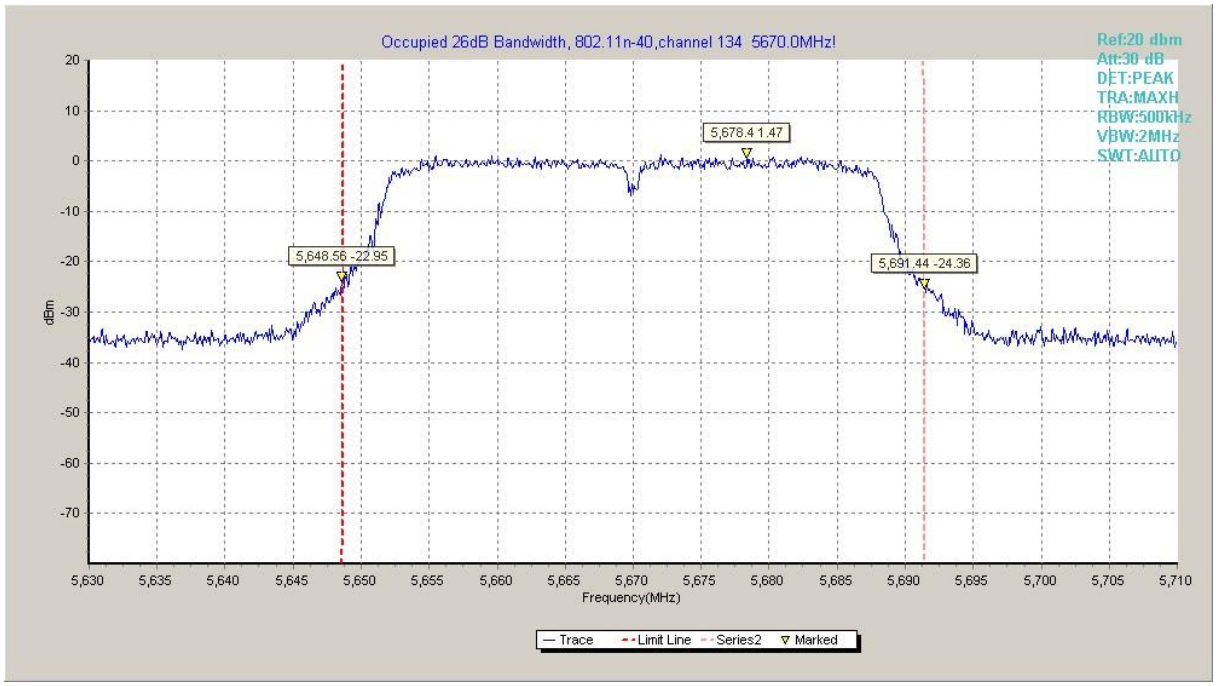


**Fig. 25 Occupied 26dB Bandwidth (802. 11n-HT40, 5670MHz)**

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## A.5. Band Edges Compliance

### A5.1 Band Edges - Radiated

**Measurement Limit:**

| Standard | Limit (dB μ V/m) | |
|---|---|---|
| FCC 47 CFR Part 15.209 | Peak | 74 |
| | Average | 54 |

The measurement is made according to KDB 789033
In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

**Measurement Uncertainty:**

| | |
|---|---|
| Measurement Uncertainty | 0.75dB |

**Measurement Result:**

| Mode | Channel | Test Results | Conclusion |
|---|---|---|---|
| 802.11a | 5180 MHz | Fig.26 | P |
| | 5320 MHz | Fig.27 | P |
| | 5500 MHz | Fig.28 | P |
| 802.11n HT20 | 5180 MHz | Fig.29 | P |
| | 5320 MHz | Fig.30 | P |
| | 5500 MHz | Fig.31 | P |
| 802.11n HT40 | 5190 MHz | Fig.32 | P |
| | 5310 MHz | Fig.33 | P |
| | 5510 MHz | Fig.34 | P |

**Conclusion: PASS**
**Test graphs as below:**

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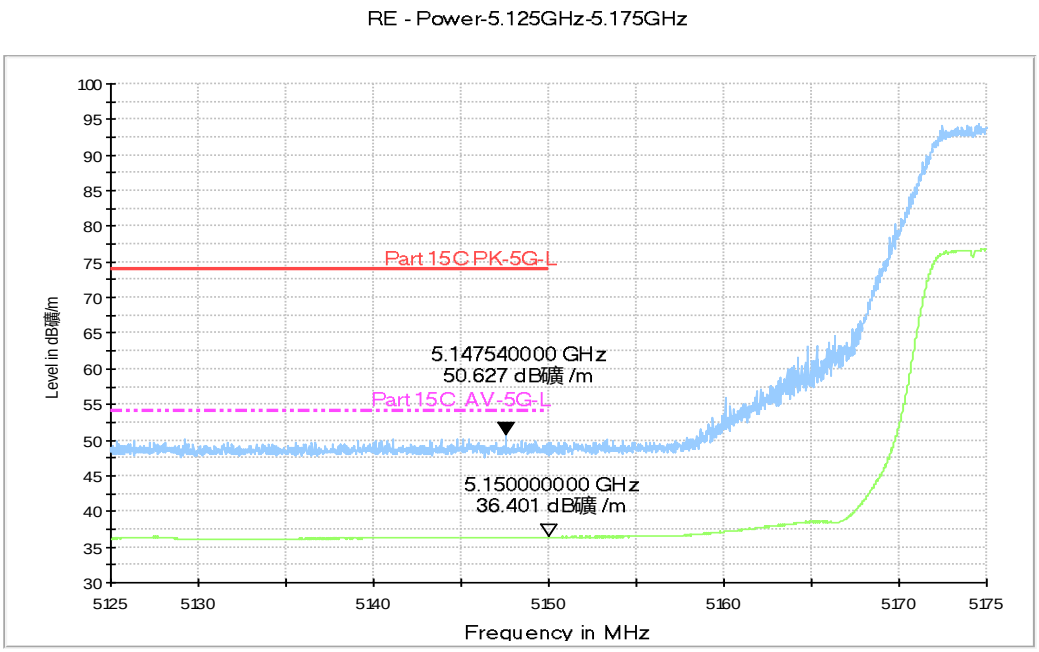


**Fig. 26 Band Edges (802.11a, 5180MHz)**

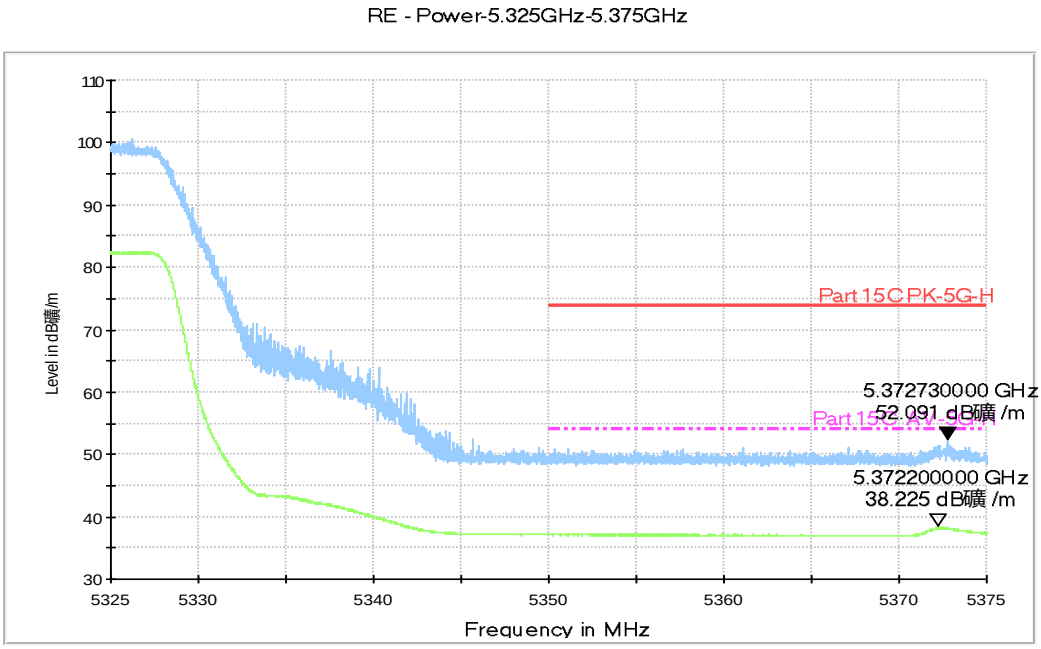


**Fig. 27 Band Edges (802.11a, 5320MHz)**

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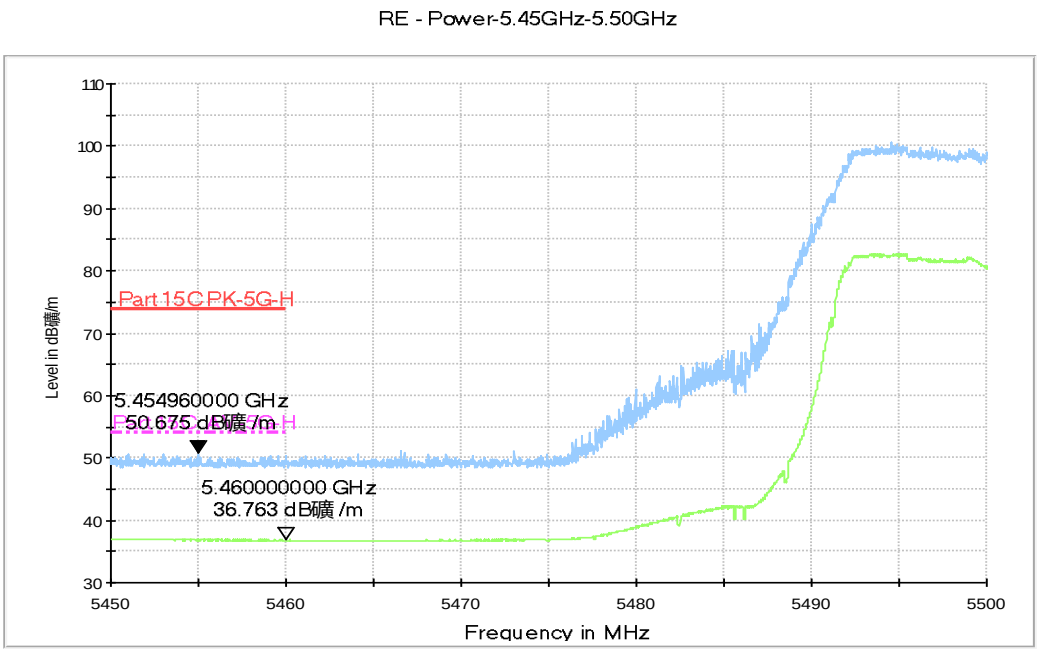


**Fig. 28 Band Edges (802.11a, 5500MHz)**

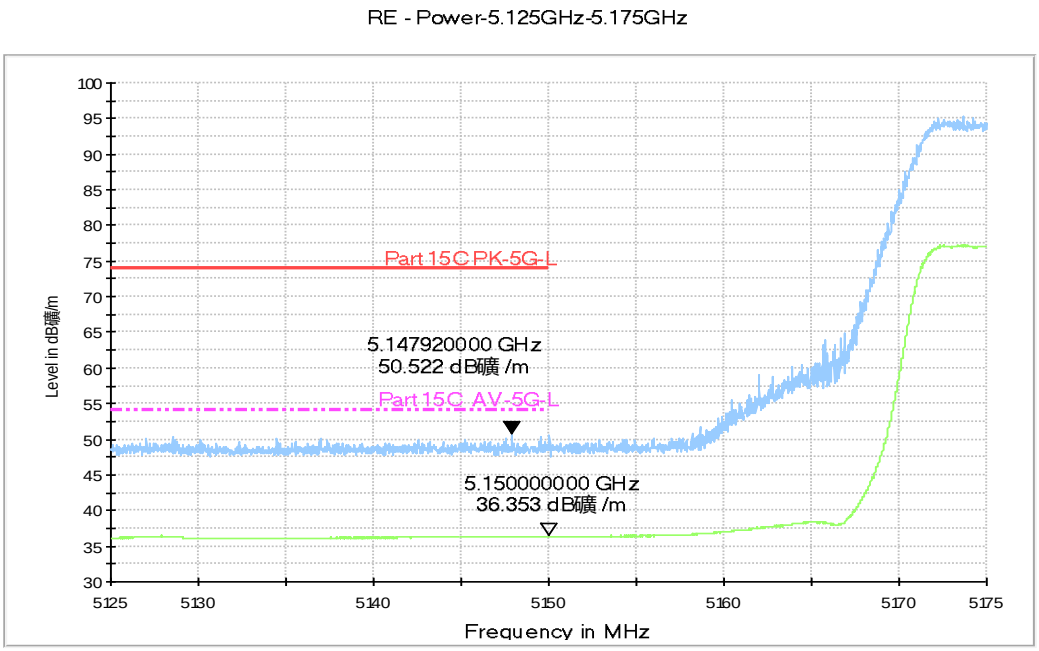


**Fig. 29 Band Edges (802.11n-HT20, 5180MHz)**

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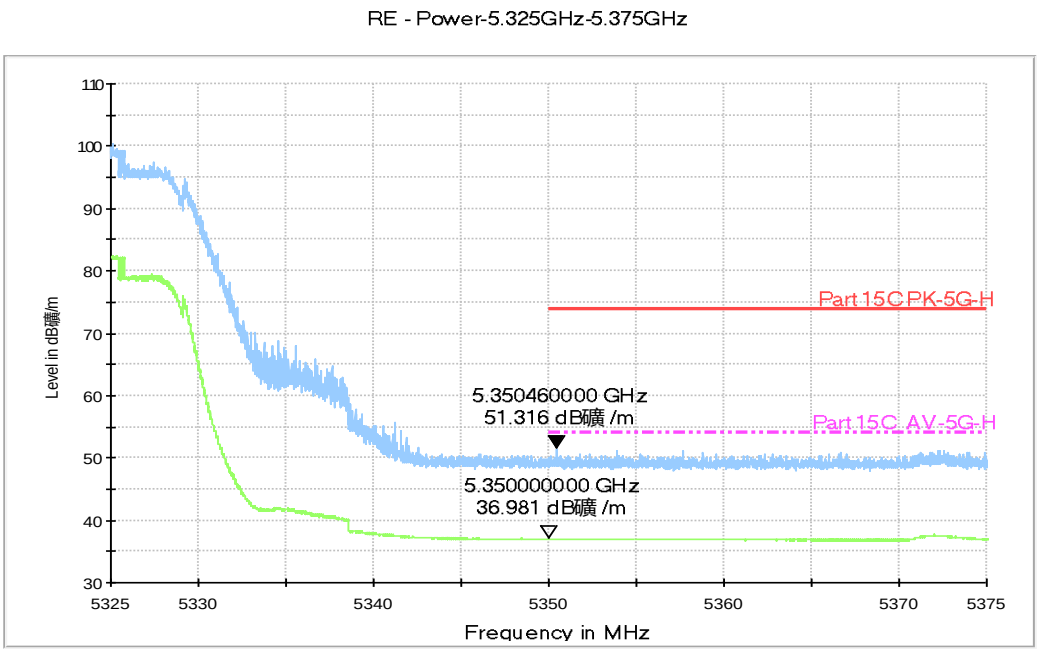


**Fig. 30 Band Edges (802.11n-HT20, 5320MHz)**

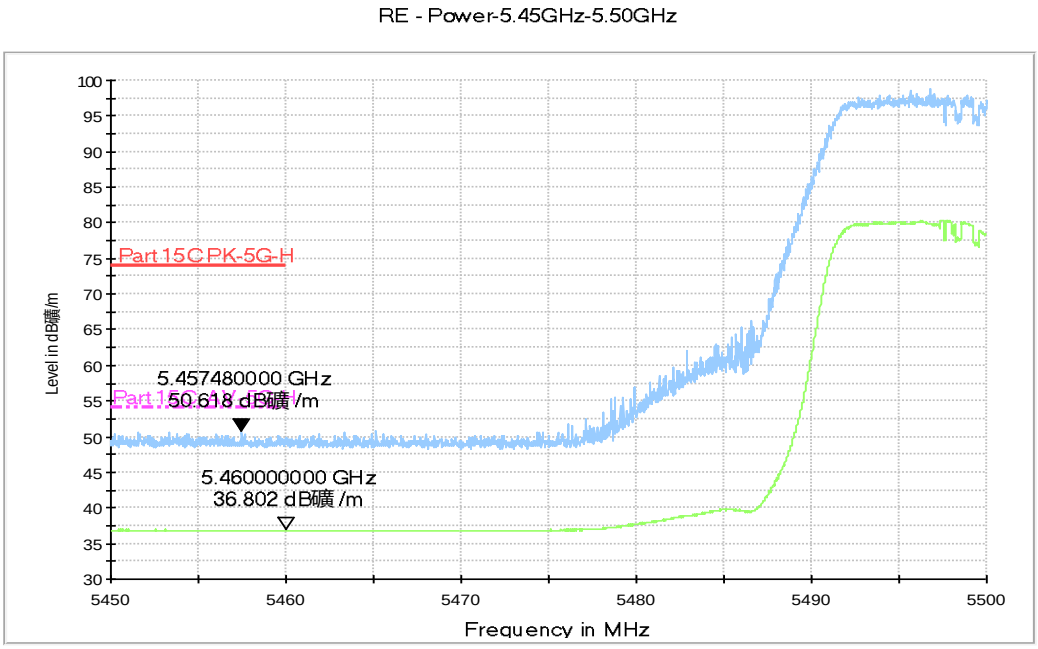


**Fig. 31 Band Edges (802.11n-HT20, 5500MHz)**

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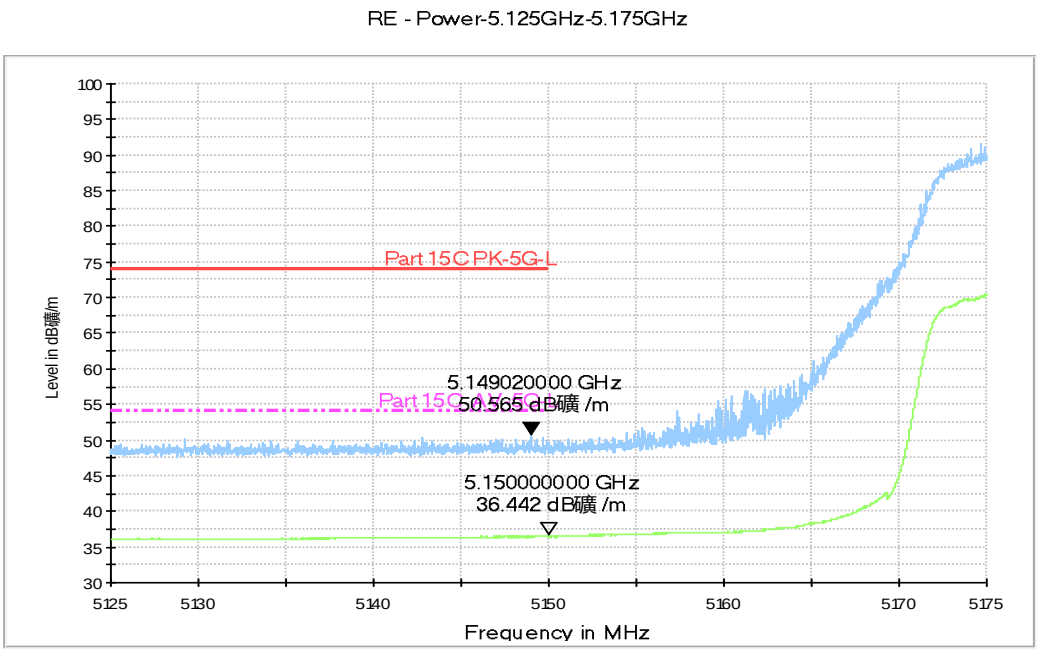


**Fig. 32 Band Edges (802.11n-HT40, 5190MHz)**

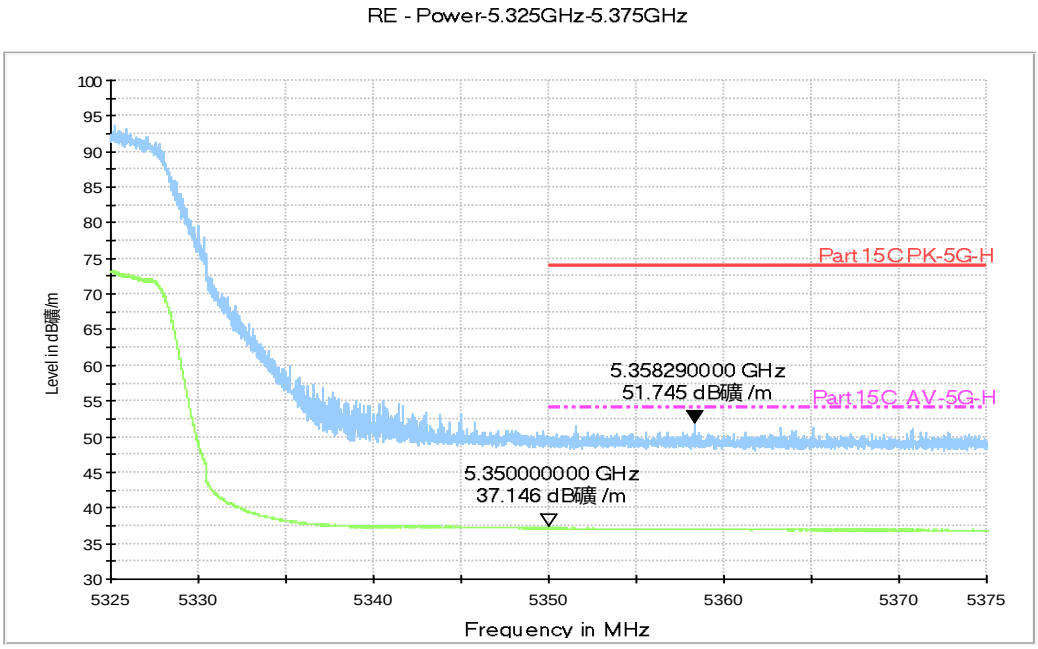


**Fig. 33 Band Edges (802.11n-HT40, 5310MHz)**

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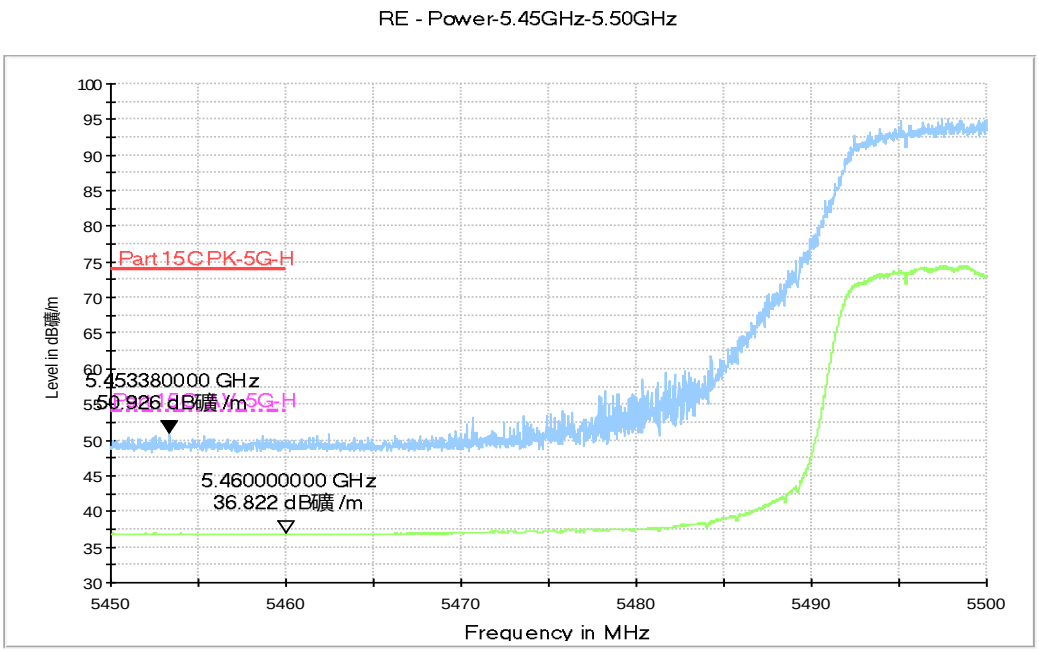


**Fig. 34 Band Edges (802.11n-HT40, 5510MHz)**

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## A.6. Transmitter Spurious Emission

**Measurement Limit:**

| Standard | Limit |
|---|---|
| FCC 47 CFR Part 15.407 | -27 dBm/MHz |

The measurement is made according to KDB 789033
In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

**Limit in restricted band:**

| Frequency of emission (MHz) | Field strength(dBμV/m) | Measurement distance(m) |
|---|---|---|
| 30-88 | 40.0 | 3 |
| 88-216 | 43.5 | 3 |
| 216-960 | 46.0 | 3 |
| Above 960 | 54.0 | 3 |

Note: for frequency range below 960MHz, the limit in 15.209 is defined in 10m test distance. The limit used above is calculated from 10m to 3m

**Measurement uncertainty:**
Expanded measurement uncertainty for this test item is U =3.9 dB, k=2.

**Measurement Results:**

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**802.11a mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11a | 36(5180MHz) | 1 GHz ~ 3 GHz | Fig.35 | P |
| | | 3 GHz ~ 6 GHz | Fig.36 | P |
| | | 6 GHz ~ 18 GHz | Fig.37 | P |
| | 40(5200MHz) | 30 MHz ~1 GHz | Fig.38 | P |
| | | 1 GHz ~ 3 GHz | Fig.39 | P |
| | | 3 GHz ~ 6 GHz | Fig.40 | P |
| | | 6 GHz ~ 18 GHz | Fig.41 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.42 | P |
| | | 26.5 GHz ~ 40 GHz | Fig.43 | P |
| | 48(5240MHz) | 1 GHz ~ 3 GHz | Fig.44 | P |
| | | 3 GHz ~ 6 GHz | Fig.45 | P |
| | | 6 GHz ~ 18 GHz | Fig.46 | P |
| | 52(5260MHz) | 1 GHz ~ 3 GHz | Fig.47 | P |
| | | 3 GHz ~ 6 GHz | Fig.48 | P |
| | | 6 GHz ~ 18 GHz | Fig.49 | P |
| | 56(5280MHz) | 30 MHz ~1 GHz | Fig.50 | P |
| | | 1 GHz ~ 3 GHz | Fig.51 | P |
| | | 3 GHz ~ 6 GHz | Fig.52 | P |
| | | 6 GHz ~ 18 GHz | Fig.53 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.54 | P |
| | | 26.5 GHz ~ 40 GHz | Fig.55 | P |
| | 64(5320MHz) | 1 GHz ~ 3 GHz | Fig.56 | P |
| | | 3 GHz ~ 6 GHz | Fig.57 | P |
| | | 6 GHz ~ 18 GHz | Fig.58 | P |
| | 100(5500MHz) | 1 GHz ~ 3 GHz | Fig.59 | P |
| | | 3 GHz ~ 6 GHz | Fig.60 | P |
| | | 6 GHz ~ 18 GHz | Fig.61 | P |
| | 120(5600MHz) | 30 MHz ~1 GHz | Fig.62 | P |
| | | 1 GHz ~ 3 GHz | Fig.63 | P |
| | | 3 GHz ~ 6 GHz | Fig.64 | P |
| | | 6 GHz ~ 18 GHz | Fig.65 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.66 | P |
| | | 26.5 GHz ~ 40 GHz | Fig.67 | P |
| | 140(5700MHz) | 1 GHz ~ 3 GHz | Fig.68 | P |
| | | 3 GHz ~ 6 GHz | Fig.69 | P |
| | | 6 GHz ~ 18 GHz | Fig.70 | P |

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**802.11n-HT20 mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11n -HT20 | 36(5180MHz) | 1 GHz ~ 3 GHz | Fig.71 | P |
| | | 3 GHz ~ 6 GHz | Fig.72 | P |
| | | 6 GHz ~ 18 GHz | Fig.73 | P |
| | 40(5200MHz) | 30 MHz ~1 GHz | Fig.74 | P |
| | | 1 GHz ~ 3 GHz | Fig.75 | P |
| | | 3 GHz ~ 6 GHz | Fig.76 | P |
| | | 6 GHz ~ 18 GHz | Fig.77 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.78 | P |
| | | 26.5 GHz ~ 40 GHz | Fig.79 | P |
| | 48(5240MHz) | 1 GHz ~ 3 GHz | Fig.80 | P |
| | | 3 GHz ~ 6 GHz | Fig.81 | P |
| | | 6 GHz ~ 18 GHz | Fig.82 | P |
| | 52(5260MHz) | 1 GHz ~ 3 GHz | Fig.83 | P |
| | | 3 GHz ~ 6 GHz | Fig.84 | P |
| | | 6 GHz ~ 18 GHz | Fig.85 | P |
| | 56(5280MHz) | 30 MHz ~1 GHz | Fig.86 | P |
| | | 1 GHz ~ 3 GHz | Fig.87 | P |
| | | 3 GHz ~ 6 GHz | Fig.88 | P |
| | | 6 GHz ~ 18 GHz | Fig.89 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.90 | P |
| | | 26.5 GHz ~ 40 GHz | Fig.91 | P |
| | 64(5320MHz) | 1 GHz ~ 3 GHz | Fig.92 | P |
| | | 3 GHz ~ 6 GHz | Fig.93 | P |
| | | 6 GHz ~ 18 GHz | Fig.94 | P |
| | 100(5500MHz) | 1 GHz ~ 3 GHz | Fig.95 | P |
| | | 3 GHz ~ 6 GHz | Fig.96 | P |
| | | 6 GHz ~ 18 GHz | Fig.97 | P |
| | 116(5580MHz) | 30 MHz ~1 GHz | Fig.98 | P |
| | | 1 GHz ~ 3 GHz | Fig.99 | P |
| | | 3 GHz ~ 6 GHz | Fig.100 | P |
| | | 6 GHz ~ 18 GHz | Fig.101 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.102 | P |
| | | 26.5 GHz ~ 40 GHz | Fig.103 | P |
| | 140(5700MHz) | 1 GHz ~ 3 GHz | Fig.104 | P |
| | | 3 GHz ~ 6 GHz | Fig.105 | P |
| | | 6 GHz ~ 18 GHz | Fig.106 | P |

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**802.11n-HT40 mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11n HT40 | 38(5190MHz) | 30 MHz ~1 GHz | Fig.107 | P |
| | | 1 GHz ~ 3 GHz | Fig.108 | P |
| | | 3 GHz ~ 6 GHz | Fig.109 | P |
| | | 6 GHz ~ 18 GHz | Fig.110 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.111 | P |
| | | 26.5 GHz ~ 40 GHz | Fig.112 | P |
| | 46(5230MHz) | 1 GHz ~ 3 GHz | Fig.113 | P |
| | | 3 GHz ~ 6 GHz | Fig.114 | P |
| | | 6 GHz ~ 18 GHz | Fig.115 | P |
| | 54(5270MHz) | 30 MHz ~1 GHz | Fig.116 | P |
| | | 1 GHz ~ 3 GHz | Fig.117 | P |
| | | 3 GHz ~ 6 GHz | Fig.118 | P |
| | | 6 GHz ~ 18 GHz | Fig.119 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.120 | P |
| | | 26.5 GHz ~ 40 GHz | Fig.121 | P |
| | 62(5310MHz) | 1 GHz ~ 3 GHz | Fig.122 | P |
| | | 3 GHz ~ 6 GHz | Fig.123 | P |
| | | 6 GHz ~ 18 GHz | Fig.124 | P |
| | 102(5510MHz) | 1 GHz ~ 3 GHz | Fig.125 | P |
| | | 3 GHz ~ 6 GHz | Fig.126 | P |
| | | 6 GHz ~ 18 GHz | Fig.127 | P |
| | 134(5670MHz) | 1 GHz ~ 3 GHz | Fig.128 | P |
| | | 3 GHz ~ 6 GHz | Fig.129 | P |
| | | 6 GHz ~ 18 GHz | Fig.130 | P |

**Conclusion: PASS**

**Note:**

A "reference path loss" is established and the $A_{Rpl}$ is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

$P_{Mea}$ is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result=$P_{Mea}$+$A_{Rpl=}$ $P_{Mea}$+Cable Loss+Antenna Factor

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**AVERAGE Results:**

**802.11a**

Channel 36

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5139.600 | 35.5 | -33.1 | 34.4 | 34.12 | 54.0 | 18.5 | H |
| 5148.300 | 35.6 | -33.0 | 34.4 | 34.09 | 54.0 | 18.4 | H |
| 10360.000 | 34.0 | -29.8 | 37.9 | 25.85 | 54.0 | 20.0 | H |
| 15540.000 | 36.1 | -26.3 | 40.1 | 22.29 | 54.0 | 17.9 | H |
| 17807.500 | 40.3 | -23.0 | 41.0 | 22.33 | 54.0 | 13.7 | H |
| 17805.300 | 40.2 | -23.1 | 41.0 | 22.33 | 54.0 | 13.8 | H |

Channel 40

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5148.000 | 35.8 | -33.0 | 34.4 | 34.34 | 54.0 | 18.2 | H |
| 5252.700 | 36.4 | -32.4 | 34.4 | 34.39 | 54.0 | 17.6 | H |
| 10400.000 | 34.2 | -29.6 | 38.0 | 25.83 | 54.0 | 19.8 | H |
| 15600.000 | 36.8 | -26.4 | 40.1 | 23.02 | 54.0 | 17.2 | H |
| 17806.400 | 40.3 | -23.0 | 41.0 | 22.35 | 54.0 | 13.7 | H |
| 17808.600 | 40.3 | -23.0 | 41.0 | 22.31 | 54.0 | 13.7 | H |

Channel 48

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5187.300 | 36.2 | -32.4 | 34.4 | 34.18 | 54.0 | 17.8 | H |
| 5292.600 | 36.8 | -32.1 | 34.5 | 34.47 | 54.0 | 17.2 | H |
| 10480.000 | 33.0 | -30.6 | 38.1 | 25.59 | 54.0 | 21.0 | H |
| 15720.000 | 36.1 | -26.4 | 40.2 | 22.25 | 54.0 | 17.9 | H |
| 17808.600 | 40.3 | -23.0 | 41.0 | 22.36 | 54.0 | 13.7 | H |
| 17805.300 | 40.3 | -23.1 | 41.0 | 22.39 | 54.0 | 13.7 | H |

Channel 52

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5206.800 | 36.3 | -32.5 | 34.4 | 34.34 | 54.0 | 17.7 | H |
| 5312.700 | 37.1 | -32.0 | 34.5 | 34.63 | 54.0 | 16.9 | H |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 10520.000 | 33.0 | -30.9 | 38.1 | 25.84 | 54.0 | 21.0 | H |
| 15780.000 | 35.8 | -26.3 | 40.2 | 21.88 | 54.0 | 18.2 | H |
| 17805.300 | 40.3 | -23.1 | 41.0 | 22.41 | 54.0 | 13.7 | H |
| 17808.600 | 40.3 | -23.0 | 41.0 | 22.35 | 54.0 | 13.7 | H |

Channel 56

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5227.800 | 36.3 | -32.5 | 34.4 | 34.43 | 54.0 | 17.7 | H |
| 5332.800 | 37.1 | -31.9 | 34.5 | 34.41 | 54.0 | 16.9 | H |
| 10560.000 | 33.8 | -30.2 | 38.1 | 25.88 | 54.0 | 20.2 | H |
| 15840.000 | 36.9 | -26.2 | 40.3 | 22.85 | 54.0 | 17.1 | H |
| 17807.500 | 40.4 | -23.0 | 41.0 | 22.47 | 54.0 | 13.6 | H |
| 17809.700 | 40.4 | -23.0 | 41.0 | 22.44 | 54.0 | 13.6 | H |

Channel 64

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5350.800 | 36.5 | -31.9 | 34.6 | 33.80 | 54.0 | 17.5 | H |
| 5372.700 | 37.4 | -32.0 | 34.6 | 34.79 | 54.0 | 16.6 | H |
| 10640.000 | 34.0 | -29.3 | 38.2 | 25.12 | 54.0 | 20.0 | H |
| 15960.000 | 37.0 | -25.8 | 40.5 | 22.36 | 54.0 | 17.0 | H |
| 17809.700 | 40.4 | -23.0 | 41.0 | 22.40 | 54.0 | 13.6 | H |
| 17808.600 | 40.3 | -23.0 | 41.0 | 22.37 | 54.0 | 13.7 | H |

Channel 100

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5452.800 | 36.3 | -32.0 | 34.7 | 33.53 | 54.0 | 17.7 | H |
| 5454.300 | 36.3 | -32.0 | 34.7 | 33.59 | 54.0 | 17.7 | H |
| 11000.000 | 34.1 | -30.2 | 38.2 | 26.06 | 54.0 | 19.9 | H |
| 16500.000 | 37.4 | -26.0 | 41.1 | 22.30 | 54.0 | 16.6 | H |
| 17822.900 | 40.1 | -23.2 | 40.9 | 22.35 | 54.0 | 13.9 | H |
| 17806.400 | 40.5 | -23.0 | 41.0 | 22.56 | 54.0 | 13.5 | H |

Channel 120

| Frequency (MHz) | Meas. Result | Cable loss | Antenna Factor | Receiver Reading | Limit (dBµV/m) | Margin (dB) | Antenna Pol. |
|---|---|---|---|---|---|---|---|

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| | (dBμV/m) | (dB) | (dB/m) | (dBμV) | | | (H/V) |
|---|---|---|---|---|---|---|---|
| 5547.900 | 38.3 | -32.5 | 34.8 | 35.95 | 54.0 | 15.7 | H |
| 5652.000 | 38.1 | -32.5 | 34.9 | 35.77 | 54.0 | 15.9 | H |
| 11200.000 | 34.4 | -30.1 | 38.4 | 26.12 | 54.0 | 19.6 | H |
| 16800.000 | 37.6 | -26.2 | 41.5 | 22.26 | 54.0 | 16.4 | H |
| 17805.300 | 40.4 | -23.1 | 41.0 | 22.50 | 54.0 | 13.6 | H |
| 17809.700 | 40.4 | -23.0 | 41.0 | 22.45 | 54.0 | 13.6 | H |

Channel 140

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5727.000 | 36.1 | -33.0 | 34.9 | 34.18 | 54.0 | 17.9 | 5727.000 |
| 5737.800 | 36.0 | -32.9 | 34.9 | 34.05 | 54.0 | 18.0 | 5737.800 |
| 11400.000 | 34.5 | -30.2 | 38.6 | 26.09 | 54.0 | 19.6 | 11400.000 |
| 17100.000 | 38.1 | -25.5 | 41.3 | 22.30 | 54.0 | 15.9 | 17100.000 |
| 17810.800 | 40.4 | -23.0 | 41.0 | 22.46 | 54.0 | 13.6 | 17810.800 |
| 17798.700 | 40.3 | -23.2 | 41.0 | 22.46 | 54.0 | 13.7 | 17798.700 |

**802.11n-HT20**

Channel 36

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5128.500 | 35.5 | -33.2 | 34.4 | 34.27 | 54.0 | 18.5 | H |
| 5148.000 | 35.6 | -33.0 | 34.4 | 34.09 | 54.0 | 18.4 | H |
| 10360.000 | 34.0 | -29.8 | 37.9 | 25.89 | 54.0 | 20.0 | H |
| 15540.000 | 36.5 | -26.3 | 40.1 | 22.76 | 54.0 | 17.5 | H |
| 17809.700 | 40.3 | -23.0 | 41.0 | 22.36 | 54.0 | 13.7 | H |
| 17804.200 | 40.3 | -23.1 | 41.0 | 22.43 | 54.0 | 13.7 | H |

Channel 40

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5174.100 | 35.9 | -32.6 | 34.4 | 34.06 | 54.0 | 18.1 | H |
| 5252.100 | 36.4 | -32.4 | 34.4 | 34.36 | 54.0 | 17.6 | H |
| 10400.000 | 34.3 | -29.6 | 38.0 | 25.95 | 54.0 | 19.7 | H |
| 15600.000 | 36.1 | -26.4 | 40.1 | 22.30 | 54.0 | 17.9 | H |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17808.600 | 40.3 | -23.0 | 41.0 | 22.35 | 54.0 | 13.7 | H |
| 17807.500 | 40.3 | -23.0 | 41.0 | 22.34 | 54.0 | 13.7 | H |

Channel 48

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5188.500 | 36.3 | -32.4 | 34.4 | 34.36 | 54.0 | 17.7 | H |
| 5292.000 | 36.9 | -32.1 | 34.5 | 34.52 | 54.0 | 17.1 | H |
| 10480.000 | 33.1 | -30.6 | 38.1 | 25.67 | 54.0 | 20.9 | H |
| 15720.000 | 36.0 | -26.4 | 40.2 | 22.21 | 54.0 | 18.0 | H |
| 17809.700 | 40.3 | -23.0 | 41.0 | 22.31 | 54.0 | 13.7 | H |
| 17807.500 | 40.3 | -23.0 | 41.0 | 22.34 | 54.0 | 13.7 | H |

Channel 52

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5208.600 | 36.4 | -32.5 | 34.4 | 34.50 | 54.0 | 17.6 | H |
| 5312.100 | 37.0 | -32.0 | 34.5 | 34.49 | 54.0 | 17.0 | H |
| 10520.000 | 33.2 | -30.9 | 38.1 | 25.97 | 54.0 | 20.8 | H |
| 15780.000 | 35.8 | -26.3 | 40.2 | 21.94 | 54.0 | 18.2 | H |
| 17809.700 | 40.3 | -23.0 | 41.0 | 22.39 | 54.0 | 13.7 | H |
| 17807.500 | 40.3 | -23.0 | 41.0 | 22.36 | 54.0 | 13.7 | H |

Channel 56

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5228.400 | 36.3 | -32.5 | 34.4 | 34.35 | 54.0 | 17.7 | H |
| 5332.800 | 37.0 | -31.9 | 34.5 | 34.33 | 54.0 | 17.0 | H |
| 10560.000 | 33.8 | -30.2 | 38.1 | 25.83 | 54.0 | 20.2 | H |
| 15840.000 | 36.9 | -26.2 | 40.3 | 22.81 | 54.0 | 17.1 | H |
| 17808.600 | 40.4 | -23.0 | 41.0 | 22.50 | 54.0 | 13.6 | H |
| 17807.500 | 40.4 | -23.0 | 41.0 | 22.43 | 54.0 | 13.6 | H |

Channel 64

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5372.100 | 37.1 | -32.0 | 34.6 | 34.54 | 54.0 | 16.9 | H |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5386.800 | 36.2 | -32.1 | 34.6 | 33.61 | 54.0 | 17.8 | H |
| 10640.000 | 34.0 | -29.3 | 38.2 | 25.14 | 54.0 | 20.0 | H |
| 15960.000 | 37.9 | -25.8 | 40.5 | 23.27 | 54.0 | 16.1 | H |
| 17809.700 | 40.4 | -23.0 | 41.0 | 22.42 | 54.0 | 13.6 | H |
| 17802.000 | 40.4 | -23.1 | 41.0 | 22.53 | 54.0 | 13.6 | H |

Channel 100

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5451.900 | 36.3 | -32.0 | 34.7 | 33.54 | 54.0 | 17.7 | H |
| 5457.000 | 36.2 | -32.0 | 34.7 | 33.46 | 54.0 | 17.8 | H |
| 11000.000 | 34.1 | -30.2 | 38.2 | 26.06 | 54.0 | 19.9 | H |
| 16500.000 | 37.4 | -26.0 | 41.1 | 22.30 | 54.0 | 16.6 | H |
| 17811.900 | 40.4 | -23.0 | 41.0 | 22.46 | 54.0 | 13.6 | H |
| 17798.700 | 40.3 | -23.2 | 41.0 | 22.46 | 54.0 | 13.7 | H |

Channel 120

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5547.600 | 36.7 | -32.5 | 34.8 | 34.38 | 54.0 | 17.3 | H |
| 5652.000 | 36.7 | -32.5 | 34.9 | 34.34 | 54.0 | 17.3 | H |
| 11200.000 | 34.4 | -30.1 | 38.4 | 26.12 | 54.0 | 19.6 | H |
| 16800.000 | 37.6 | -26.2 | 41.5 | 22.26 | 54.0 | 16.4 | H |
| 17762.400 | 39.7 | -23.8 | 41.0 | 22.43 | 54.0 | 14.3 | H |
| 17811.900 | 40.4 | -23.0 | 41.0 | 22.46 | 54.0 | 13.6 | H |

Channel 140

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5728.800 | 36.0 | -33.0 | 34.9 | 34.14 | 54.0 | 18.0 | H |
| 5746.800 | 36.1 | -32.9 | 34.9 | 34.09 | 54.0 | 17.9 | H |
| 11400.000 | 34.5 | -30.2 | 38.6 | 26.09 | 54.0 | 19.6 | H |
| 17100.000 | 38.1 | -25.5 | 41.3 | 22.30 | 54.0 | 15.9 | H |
| 17807.500 | 40.4 | -23.0 | 41.0 | 22.47 | 54.0 | 13.6 | H |
| 17809.720 | 40.4 | -23.0 | 41.0 | 22.46 | 54.0 | 13.6 | H |

**802.11n-HT40**

Channel 38

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| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5138.400 | 35.5 | -33.1 | 34.4 | 34.17 | 54.0 | 18.5 | H |
| 5149.200 | 35.7 | -32.9 | 34.4 | 34.19 | 54.0 | 18.3 | H |
| 10380.000 | 34.4 | -29.7 | 38.0 | 26.13 | 54.0 | 19.6 | H |
| 15570.000 | 36.7 | -26.3 | 40.1 | 22.89 | 54.0 | 17.3 | H |
| 17809.700 | 40.3 | -23.0 | 41.0 | 22.37 | 54.0 | 13.7 | H |
| 17806.400 | 40.3 | -23.0 | 41.0 | 22.39 | 54.0 | 13.7 | H |

Channel 46

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5185.200 | 36.1 | -32.5 | 34.4 | 34.16 | 54.0 | 17.9 | H |
| 5262.900 | 36.6 | -32.3 | 34.4 | 34.50 | 54.0 | 17.4 | H |
| 10460.000 | 33.3 | -30.4 | 38.1 | 25.59 | 54.0 | 20.7 | H |
| 15690.000 | 36.3 | -26.4 | 40.2 | 22.50 | 54.0 | 17.7 | H |
| 17807.500 | 40.4 | -23.0 | 41.0 | 22.47 | 54.0 | 13.6 | H |
| 17810.800 | 40.3 | -23.0 | 41.0 | 22.39 | 54.0 | 13.7 | H |

Channel 54

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5188.200 | 36.0 | -32.4 | 34.4 | 34.00 | 54.0 | 18.0 | H |
| 5373.000 | 36.5 | -32.0 | 34.6 | 33.91 | 54.0 | 17.5 | H |
| 10540.000 | 33.6 | -30.5 | 38.1 | 25.99 | 54.0 | 20.4 | H |
| 15810.000 | 36.7 | -26.3 | 40.3 | 22.74 | 54.0 | 17.3 | H |
| 17805.300 | 40.5 | -23.1 | 41.0 | 22.58 | 54.0 | 13.5 | H |
| 17822.900 | 40.3 | -23.2 | 40.9 | 22.50 | 54.0 | 13.7 | H |

Channel 62

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5367.600 | 36.3 | -32.0 | 34.6 | 33.64 | 54.0 | 17.7 | H |
| 5450.700 | 36.3 | -32.0 | 34.7 | 33.53 | 54.0 | 17.7 | H |
| 10620.000 | 34.5 | -29.2 | 38.1 | 25.51 | 54.0 | 19.5 | H |
| 15930.000 | 37.0 | -25.9 | 40.4 | 22.49 | 54.0 | 17.0 | H |
| 17763.500 | 39.7 | -23.7 | 41.0 | 22.44 | 54.0 | 14.3 | H |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17809.700 | 40.4 | -23.0 | 41.0 | 22.48 | 54.0 | 13.6 | H |

Channel 102

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5451.900 | 36.3 | -32.0 | 34.7 | 33.53 | 54.0 | 17.7 | H |
| 5455.200 | 36.2 | -32.0 | 34.7 | 33.51 | 54.0 | 17.8 | H |
| 11020.000 | 34.2 | -30.4 | 38.2 | 26.40 | 54.0 | 19.8 | H |
| 16530.000 | 37.4 | -26.0 | 41.1 | 22.25 | 54.0 | 16.6 | H |
| 17793.200 | 40.1 | -23.3 | 41.0 | 22.40 | 54.0 | 13.9 | H |
| 17810.800 | 40.4 | -23.0 | 41.0 | 22.46 | 54.0 | 13.6 | H |

Channel 134

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5738.700 | 36.1 | -32.9 | 34.9 | 34.09 | 54.0 | 17.9 | H |
| 5743.200 | 36.1 | -32.9 | 34.9 | 34.09 | 54.0 | 17.9 | H |
| 11340.000 | 34.5 | -30.3 | 38.5 | 26.26 | 54.0 | 19.5 | H |
| 17010.000 | 38.3 | -25.6 | 41.4 | 22.54 | 54.0 | 15.7 | H |
| 17798.700 | 40.3 | -23.2 | 41.0 | 22.46 | 54.0 | 13.7 | H |
| 17818.500 | 40.2 | -23.1 | 40.9 | 22.34 | 54.0 | 13.8 | H |

**PEAK Results:**

**802.11a**

Channel 36

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5143.800 | 50.2 | -33.0 | 34.4 | 48.78 | 74.0 | 23.8 | H |
| 5147.540 | 50.6 | -33.0 | 34.4 | 49.16 | 74.0 | 23.4 | H |
| 17828.400 | 53.3 | -23.3 | 40.9 | 35.58 | 74.0 | 20.7 | H |
| 17816.400 | 53.0 | -23.1 | 40.9 | 35.13 | 74.0 | 21.0 | V |
| 17794.200 | 52.9 | -23.2 | 41.0 | 35.21 | 74.0 | 21.1 | H |
| 17745.000 | 52.9 | -24.0 | 41.0 | 35.93 | 74.0 | 21.1 | H |

Channel 40

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5148.900 | 48.5 | -33.0 | 34.4 | 47.01 | 74.0 | 25.5 | H |
| 5252.100 | 49.2 | -32.4 | 34.4 | 47.16 | 74.0 | 24.8 | H |
| 17831.400 | 54.4 | -23.3 | 40.9 | 36.79 | 74.0 | 19.6 | H |
| 17902.800 | 53.3 | -24.2 | 40.9 | 36.71 | 74.0 | 20.7 | V |
| 17810.400 | 53.0 | -23.0 | 41.0 | 35.01 | 74.0 | 21.0 | H |
| 17802.600 | 52.9 | -23.1 | 41.0 | 35.00 | 74.0 | 21.1 | H |

Channel 48

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5208.600 | 49.3 | -32.5 | 34.4 | 47.40 | 74.0 | 24.7 | H |
| 5287.500 | 49.6 | -32.1 | 34.5 | 47.25 | 74.0 | 24.4 | H |
| 17852.400 | 53.6 | -23.6 | 40.9 | 36.30 | 74.0 | 20.4 | H |
| 17821.800 | 53.2 | -23.2 | 40.9 | 35.38 | 74.0 | 20.8 | V |
| 17793.600 | 53.1 | -23.3 | 41.0 | 35.39 | 74.0 | 20.9 | V |
| 17798.400 | 53.1 | -23.2 | 41.0 | 35.29 | 74.0 | 20.9 | H |

Channel 52

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5202.300 | 49.8 | -32.5 | 34.4 | 47.83 | 74.0 | 24.2 | H |
| 5308.500 | 50.3 | -32.0 | 34.5 | 47.82 | 74.0 | 23.7 | H |
| 17805.000 | 53.1 | -23.1 | 41.0 | 35.17 | 74.0 | 20.9 | V |
| 17799.600 | 52.9 | -23.2 | 41.0 | 35.05 | 74.0 | 21.1 | V |
| 17806.200 | 52.8 | -23.0 | 41.0 | 34.90 | 74.0 | 21.2 | V |
| 17813.400 | 52.7 | -23.0 | 40.9 | 34.83 | 74.0 | 21.3 | V |

Channel 56

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5248.200 | 50.7 | -32.4 | 34.4 | 48.69 | 74.0 | 23.4 | H |
| 5352.600 | 50.1 | -31.9 | 34.6 | 47.45 | 74.0 | 23.9 | H |
| 17837.400 | 52.7 | -23.4 | 40.9 | 35.10 | 74.0 | 21.3 | V |
| 17806.200 | 52.6 | -23.0 | 41.0 | 34.66 | 74.0 | 21.4 | V |
| 17898.600 | 52.3 | -24.2 | 40.9 | 35.63 | 74.0 | 21.7 | V |
| 17925.000 | 52.2 | -24.5 | 40.9 | 35.87 | 74.0 | 21.8 | H |

Channel 64

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| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5367.080 | 51.1 | -32.0 | 34.6 | 48.48 | 74.0 | 22.9 | H |
| 5372.730 | 52.1 | -32.0 | 34.6 | 49.49 | 74.0 | 21.9 | H |
| 17802.000 | 53.1 | -23.1 | 41.0 | 35.21 | 74.0 | 20.9 | H |
| 17797.200 | 52.9 | -23.2 | 41.0 | 35.15 | 74.0 | 21.1 | V |
| 17809.200 | 52.5 | -23.0 | 41.0 | 34.51 | 74.0 | 21.5 | V |
| 17887.200 | 52.4 | -24.0 | 40.9 | 35.52 | 74.0 | 21.6 | V |

Channel 100

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5454.960 | 50.7 | -32.0 | 34.7 | 47.95 | 74.0 | 23.3 | H |
| 5460.000 | 50.2 | -32.0 | 34.7 | 47.51 | 74.0 | 23.8 | H |
| 17778.000 | 52.8 | -23.5 | 41.0 | 35.37 | 74.0 | 21.2 | V |
| 17790.600 | 52.7 | -23.3 | 41.0 | 35.04 | 74.0 | 21.3 | V |
| 17820.000 | 52.6 | -23.1 | 40.9 | 34.78 | 74.0 | 21.4 | V |
| 17796.000 | 52.6 | -23.2 | 41.0 | 34.82 | 74.0 | 21.4 | H |

Channel 120

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5547.450 | 52.8 | -32.5 | 34.8 | 50.46 | 74.0 | 21.2 | H |
| 5652.600 | 52.0 | -32.5 | 34.9 | 49.71 | 74.0 | 22.0 | H |
| 17744.400 | 52.7 | -24.1 | 41.0 | 35.73 | 74.0 | 21.3 | H |
| 17807.400 | 52.7 | -23.0 | 41.0 | 34.72 | 74.0 | 21.3 | V |
| 17814.600 | 52.6 | -23.1 | 40.9 | 34.72 | 74.0 | 21.4 | H |
| 17817.000 | 52.5 | -23.1 | 40.9 | 34.65 | 74.0 | 21.5 | H |

Channel 140

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5726.320 | 52.3 | -33.0 | 34.9 | 50.38 | 74.0 | 21.7 | H |
| 5744.900 | 51.6 | -32.9 | 34.9 | 49.56 | 74.0 | 22.4 | H |
| 17791.800 | 53.6 | -23.3 | 41.0 | 35.90 | 74.0 | 20.4 | H |
| 17798.400 | 53.1 | -23.2 | 41.0 | 35.32 | 74.0 | 20.9 | H |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17802.600 | 52.9 | -23.1 | 41.0 | 35.02 | 74.0 | 21.1 | H |
| 17795.400 | 52.6 | -23.2 | 41.0 | 34.89 | 74.0 | 21.4 | V |

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Channel 36

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5147.920 | 50.5 | -33.0 | 34.4 | 49.05 | 74.0 | 23.5 | H |
| 5149.500 | 50.4 | -32.9 | 34.4 | 48.93 | 74.0 | 23.6 | H |
| 17818.200 | 52.8 | -23.1 | 40.9 | 35.01 | 74.0 | 21.2 | V |
| 17779.200 | 52.6 | -23.5 | 41.0 | 35.12 | 74.0 | 21.4 | H |
| 17820.000 | 52.5 | -23.1 | 40.9 | 34.71 | 74.0 | 21.5 | V |
| 17805.600 | 52.4 | -23.1 | 41.0 | 34.54 | 74.0 | 21.6 | H |

Channel 40

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5128.650 | 48.8 | -33.2 | 34.4 | 47.53 | 74.0 | 25.2 | H |
| 5260.800 | 49.1 | -32.3 | 34.4 | 46.99 | 74.0 | 24.9 | H |
| 17762.400 | 52.9 | -23.8 | 41.0 | 35.70 | 74.0 | 21.1 | H |
| 17824.200 | 52.7 | -23.2 | 40.9 | 34.96 | 74.0 | 21.3 | H |
| 17826.600 | 52.6 | -23.2 | 40.9 | 34.92 | 74.0 | 21.4 | H |
| 17935.800 | 52.6 | -24.7 | 40.9 | 36.43 | 74.0 | 21.4 | V |

Channel 48

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5185.100 | 50.1 | -32.5 | 34.4 | 48.17 | 74.0 | 23.9 | H |
| 5293.050 | 48.7 | -32.1 | 34.5 | 46.36 | 74.0 | 25.3 | H |
| 17808.000 | 53.9 | -23.0 | 41.0 | 35.99 | 74.0 | 20.1 | V |
| 17790.600 | 52.8 | -23.3 | 41.0 | 35.11 | 74.0 | 21.2 | H |
| 17796.000 | 52.7 | -23.2 | 41.0 | 35.00 | 74.0 | 21.3 | V |
| 17764.200 | 52.7 | -23.7 | 41.0 | 35.43 | 74.0 | 21.3 | V |

Channel 52

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5151.300 | 49.7 | -32.9 | 34.4 | 48.17 | 74.0 | 24.3 | H |
| 5313.300 | 50.3 | -32.0 | 34.5 | 47.82 | 74.0 | 23.7 | H |
| 17777.400 | 53.0 | -23.5 | 41.0 | 35.58 | 74.0 | 21.0 | H |
| 17819.400 | 52.6 | -23.1 | 40.9 | 34.78 | 74.0 | 21.4 | V |
| 17807.400 | 52.5 | -23.0 | 41.0 | 34.57 | 74.0 | 21.5 | V |
| 17879.400 | 52.5 | -23.9 | 40.9 | 35.50 | 74.0 | 21.5 | V |

Channel 56

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5203.200 | 50.5 | -32.5 | 34.4 | 48.54 | 74.0 | 23.5 | H |
| 5321.100 | 49.5 | -31.9 | 34.5 | 46.90 | 74.0 | 24.5 | H |
| 17777.400 | 53.0 | -23.5 | 41.0 | 35.58 | 74.0 | 21.0 | V |
| 17819.400 | 52.6 | -23.1 | 40.9 | 34.78 | 74.0 | 21.4 | H |
| 17807.400 | 52.5 | -23.0 | 41.0 | 34.57 | 74.0 | 21.5 | V |
| 17879.400 | 52.5 | -23.9 | 40.9 | 35.50 | 74.0 | 21.5 | H |

Channel 64

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5350.460 | 51.3 | -31.9 | 34.6 | 48.62 | 74.0 | 22.7 | H |
| 5372.590 | 51.3 | -32.0 | 34.6 | 48.66 | 74.0 | 22.7 | H |
| 17800.200 | 53.3 | -23.1 | 41.0 | 35.44 | 74.0 | 20.7 | V |
| 17811.600 | 53.2 | -23.0 | 41.0 | 35.28 | 74.0 | 20.8 | V |
| 17835.600 | 52.9 | -23.3 | 40.9 | 35.30 | 74.0 | 21.1 | H |
| 17798.400 | 52.8 | -23.2 | 41.0 | 34.99 | 74.0 | 21.2 | H |

Channel 100

| Frequency (MHz) | Meas. Result (dBµV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBµV) | Limit (dBµV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5451.560 | 50.6 | -32.0 | 34.7 | 47.81 | 74.0 | 23.4 | H |
| 5457.480 | 50.6 | -32.0 | 34.7 | 47.90 | 74.0 | 23.4 | H |
| 17790.600 | 53.1 | -23.3 | 41.0 | 35.43 | 74.0 | 20.9 | V |
| 17824.200 | 52.9 | -23.2 | 40.9 | 35.11 | 74.0 | 21.1 | V |
| 17796.600 | 52.8 | -23.2 | 41.0 | 35.06 | 74.0 | 21.2 | H |
| 17898.600 | 52.7 | -24.2 | 40.9 | 36.00 | 74.0 | 21.3 | H |

Channel 120

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| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5505.600 | 50.4 | -32.3 | 34.8 | 47.92 | 74.0 | 23.6 | H |
| 5661.600 | 49.6 | -32.5 | 34.9 | 47.21 | 74.0 | 24.4 | H |
| 17804.400 | 53.2 | -23.1 | 41.0 | 35.35 | 74.0 | 20.8 | V |
| 17781.000 | 52.6 | -23.5 | 41.0 | 35.08 | 74.0 | 21.4 | H |
| 17811.000 | 52.6 | -23.0 | 41.0 | 34.65 | 74.0 | 21.4 | V |
| 17821.800 | 52.5 | -23.2 | 40.9 | 34.74 | 74.0 | 21.5 | H |

Channel 140

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5732.700 | 51.1 | -33.0 | 34.9 | 49.15 | 74.0 | 22.9 | H |
| 5740.020 | 51.0 | -32.9 | 34.9 | 49.00 | 74.0 | 23.0 | H |
| 17783.400 | 52.6 | -23.4 | 41.0 | 35.07 | 74.0 | 21.4 | V |
| 17896.200 | 52.4 | -24.2 | 40.9 | 35.72 | 74.0 | 21.6 | H |
| 17806.200 | 52.4 | -23.0 | 41.0 | 34.51 | 74.0 | 21.6 | V |
| 17826.600 | 52.3 | -23.2 | 40.9 | 34.63 | 74.0 | 21.7 | H |

**802.11n-HT40**

Channel 38

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5142.800 | 50.5 | -33.0 | 34.4 | 49.05 | 74.0 | 23.5 | H |
| 5149.020 | 50.6 | -33.0 | 34.4 | 49.08 | 74.0 | 23.4 | H |
| 17799.000 | 53.8 | -23.2 | 41.0 | 36.04 | 74.0 | 20.2 | H |
| 17880.600 | 53.3 | -23.9 | 40.9 | 36.36 | 74.0 | 20.7 | V |
| 17889.600 | 53.2 | -24.1 | 40.9 | 36.43 | 74.0 | 20.8 | H |
| 17795.400 | 53.1 | -23.2 | 41.0 | 35.31 | 74.0 | 20.9 | H |

Channel 46

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5189.100 | 49.0 | -32.5 | 34.4 | 47.02 | 74.0 | 25.0 | H |
| 5263.500 | 50.5 | -32.3 | 34.4 | 48.38 | 74.0 | 23.5 | H |
| 17801.400 | 53.1 | -23.1 | 41.0 | 35.30 | 74.0 | 20.9 | V |
| 17813.400 | 52.8 | -23.0 | 40.9 | 34.86 | 74.0 | 21.2 | V |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17802.000 | 52.7 | -23.1 | 41.0 | 34.86 | 74.0 | 21.3 | V |
| 17816.400 | 52.4 | -23.1 | 40.9 | 34.58 | 74.0 | 21.6 | H |

Channel 54

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5212.800 | 49.8 | -32.5 | 34.4 | 47.85 | 74.0 | 24.2 | H |
| 5368.800 | 49.4 | -32.0 | 34.6 | 46.81 | 74.0 | 24.6 | H |
| 17817.000 | 54.2 | -23.1 | 40.9 | 36.34 | 74.0 | 19.8 | V |
| 17802.000 | 52.8 | -23.1 | 41.0 | 34.98 | 74.0 | 21.2 | H |
| 17823.600 | 52.5 | -23.2 | 40.9 | 34.70 | 74.0 | 21.5 | H |
| 17796.600 | 52.4 | -23.2 | 41.0 | 34.60 | 74.0 | 21.6 | H |

Channel 62

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5351.500 | 51.6 | -31.9 | 34.6 | 48.94 | 74.0 | 22.4 | H |
| 5358.290 | 51.7 | -31.9 | 34.6 | 49.08 | 74.0 | 22.3 | H |
| 17814.600 | 53.0 | -23.1 | 40.9 | 35.16 | 74.0 | 21.0 | V |
| 17796.000 | 52.7 | -23.2 | 41.0 | 34.91 | 74.0 | 21.3 | H |
| 17804.400 | 52.6 | -23.1 | 41.0 | 34.68 | 74.0 | 21.4 | V |
| 17794.200 | 52.5 | -23.2 | 41.0 | 34.79 | 74.0 | 21.5 | V |

Channel 102

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5453.380 | 50.9 | -32.0 | 34.7 | 48.19 | 74.0 | 23.1 | H |
| 5458.700 | 50.6 | -32.0 | 34.7 | 47.89 | 74.0 | 23.4 | H |
| 17808.600 | 53.2 | -23.0 | 41.0 | 35.23 | 74.0 | 20.8 | V |
| 17802.600 | 53.1 | -23.1 | 41.0 | 35.21 | 74.0 | 20.9 | V |
| 17937.000 | 52.7 | -24.7 | 40.9 | 36.58 | 74.0 | 21.3 | V |
| 17787.600 | 52.6 | -23.4 | 41.0 | 35.02 | 74.0 | 21.4 | V |

Channel 134

| Frequency (MHz) | Meas. Result (dBμV/m) | Cable loss (dB) | Antenna Factor (dB/m) | Receiver Reading (dBμV) | Limit (dBμV/m) | Margin (dB) | Antenna Pol. (H/V) |
|---|---|---|---|---|---|---|---|
| 5725.296 | 50.3 | -33.0 | 34.9 | 48.37 | 74.0 | 23.7 | H |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5736.848 | 50.3 | -32.9 | 34.9 | 48.33 | 74.0 | 23.7 | H |
| 17814.000 | 53.5 | -23.1 | 40.9 | 35.62 | 74.0 | 20.5 | H |
| 17817.000 | 53.3 | -23.1 | 40.9 | 35.48 | 74.0 | 20.7 | V |
| 17811.600 | 53.2 | -23.0 | 41.0 | 35.28 | 74.0 | 20.8 | V |
| 17787.600 | 53.1 | -23.4 | 41.0 | 35.47 | 74.0 | 20.9 | H |

**Test graphs as below:**

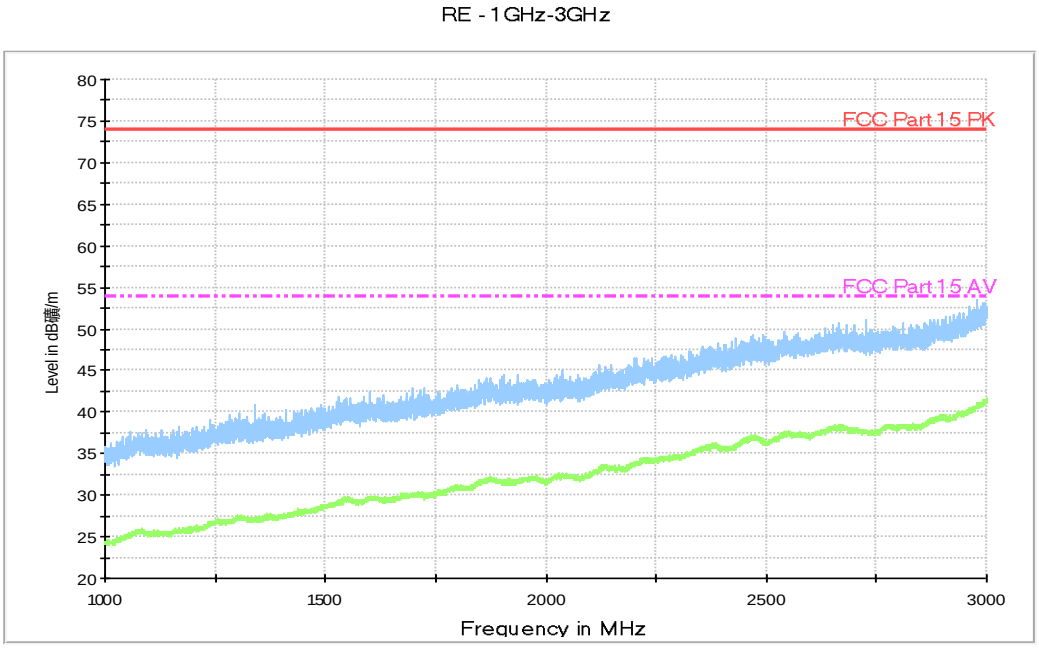
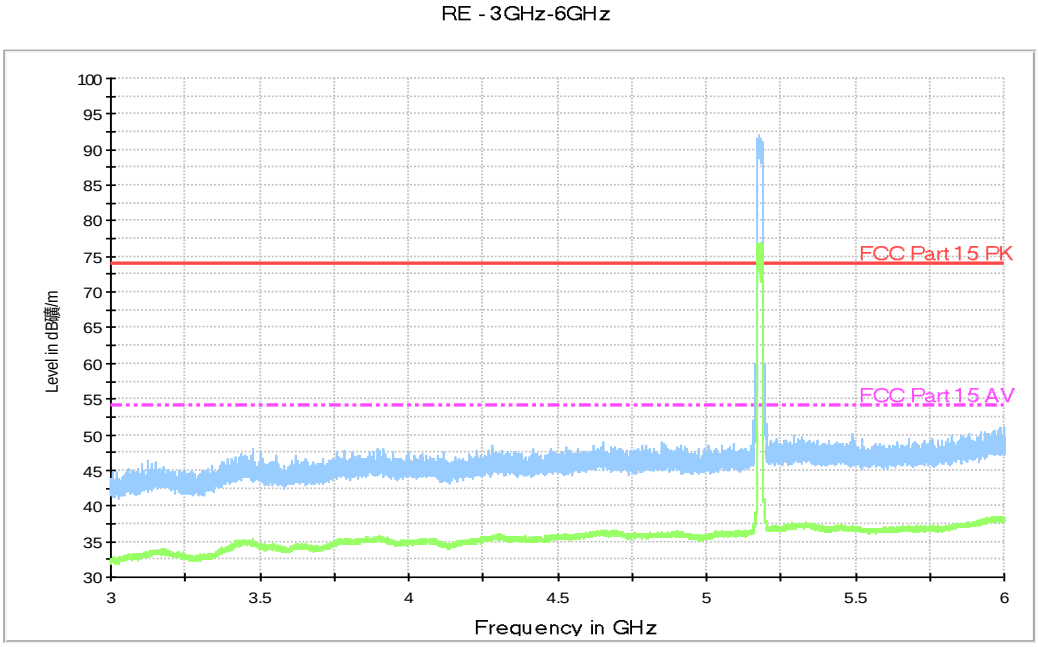



**Fig. 35 Radiated Spurious Emission (802.11a, ch36, 1 GHz-3 GHz)**

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