

FCC Test Report

| | |
|--------------|--------------------------------|
| Product Name | Notebook Computers |
| Model No | 16T90P,16TD90P,16TG90P,16TB90P |
| FCC ID | BEJNT-16T90P |

| | |
|-----------|--|
| Applicant | LG Electronics USA |
| Address | 111 Sylvan Avenue North Bulding Englewood Cliffs New Jersey United States |

| | |
|-----------------|----------------------|
| Date of Receipt | Nov. 05, 2020 |
| Issued Date | Dec. 09, 2020 |
| Report No. | 20B0154R-E3032110126 |
| Report Version | V1.0 |



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

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Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test Report

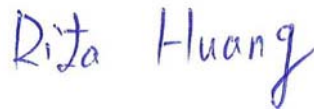
Issued Date: Dec. 09, 2020

Report No.: 20B0154R-E3032110126



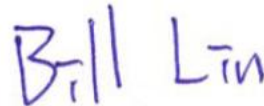
| | |
|---------------------|---|
| Product Name | Notebook Computers |
| Applicant | LG Electronics USA |
| Address | 111 Sylvan Avenue North Bulding Englewood Cliffs New Jerssy United States |
| Manufacturer | LG Electronics Inc. |
| Model No. | 16T90P,16TD90P,16TG90P,16TB90P |
| FCC ID. | BEJNT-16T90P |
| EUT Rated Voltage | AC 100-240V, 50-60Hz |
| EUT Test Voltage | AC 120V/60Hz |
| Trade Name | LG |
| Applicable Standard | FCC CFR Title 47 Part 15 Subpart E ANSI C63.4: 2014, ANSI C63.10: 2013 KDB Publication 789033 |
| Test Result | Complied |

Documented By :



(Senior Adm. Specialist / Rita Huang)

Tested By :



(Senior Engineer / Bill Lin)

Approved By :



(Director / Vincent Lin)

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Revision History

| Report No. | Version | Description | Issued Date |
|----------------------|----------------|--------------------------|--------------------|
| 20B0154R-E3032110126 | V1.0 | Initial issue of report. | Dec. 09, 2020 |

1. GENERAL INFORMATION

1.1. EUT Description

| | |
|--------------------|--|
| Product Name | Notebook Computers |
| Trade Name | LG |
| FCC ID. | BEJNT-16T90P |
| Model No. | 16T90P,16TD90P,16TG90P,16TB90P |
| Frequency Range | 802.11a/n/ax-20MHz: 5180-5320MHz, 5500-5700MHz, 5720MHz, 5745-5825MHz 802.11n/ax-40MHz: 5190-5310MHz, 5510-5670MHz, 5710MHz, 5755-5795MHz 802.11ac/ax-80MHz: 5210-5290MHz, 5530-5690MHz, 5775MHz 802.11ac/ax-160MHz: 5250MHz, 5570MHz |
| Number of Channels | 802.11a/n/ax-20MHz: 25 802.11n/ax-40MHz: 12 802.11ac/ax-80MHz: 6 802.11ac/ax-160MHz: 2 |
| Data Speed | 802.11a: 6 - 54Mbps 802.11n: up to 300Mbps 802.11ac: up to 1733.3Mbps 802.11ax: up to 2402Mbps |
| Channel Control | Auto |
| Type of Modulation | 802.11a/n/ac/ax: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) |
| Antenna type | PIFA Antenna |
| Antenna Gain | Refer to the table "Antenna List" |
| Power Adapter | MFR: HONOR, M/N: ADT-65DSU-D03-2 Input: AC 100-240V~50-60Hz 1.6A Output: 20V $\overline{=}$ 3.25A, MAX 65W Cable Out: Non-Shielded, 1.5m Power Cord: Non-Shielded, 1.5m |
| Contain Module | Intel / AX201D2W |

Antenna List

| No. | Manufacturer | Part No. | Antenna Type | Peak Gain |
|-----|--------------|---|--------------|---|
| 1 | Yageo | DQ601419201 (Main) DQ601419201 (Aux) | PIFA Antenna | 2.80dBi For 5.15~5.25GHz 2.76dBi For 5.25~5.35GHz 2.95dBi For 5.47~5.725GHz 2.70dBi For 5.725~5.825GHz |
| 2 | Hong-Bo | 260-23807 (Main) 260-23807 (Aux) | PIFA Antenna | -0.19dBi For 5.15~5.25GHz -1.56dBi For 5.25~5.35GHz -0.54dBi For 5.47~5.725GHz -1.40dBi For 5.725~5.825GHz |

Note: The antenna of EUT is conform to FCC 15.203

802.11a/n/ax -20MHz Center Working Frequency of Each Channel:

| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| Channel 36: | 5180 MHz | Channel 40: | 5200 MHz | Channel 44: | 5220 MHz | Channel 48: | 5240 MHz |
| Channel 52: | 5260 MHz | Channel 56: | 5280 MHz | Channel 60: | 5300 MHz | Channel 64: | 5320 MHz |
| Channel 100: | 5500 MHz | Channel 104: | 5520 MHz | Channel 108: | 5540 MHz | Channel 112: | 5560 MHz |
| Channel 116: | 5580 MHz | Channel 120: | 5600 MHz | Channel 124: | 5620 MHz | Channel 128: | 5640 MHz |
| Channel 132: | 5660 MHz | Channel 136: | 5680 MHz | Channel 140: | 5700 MHz | Channel 144: | 5720 MHz |
| Channel 149: | 5745 MHz | Channel 153: | 5765 MHz | Channel 157: | 5785 MHz | Channel 161: | 5805 MHz |
| Channel 165: | 5825 MHz | | | | | | |

802.11n/ax -40MHz Center Working Frequency of Each Channel:

| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| Channel 38: | 5190 MHz | Channel 46: | 5230 MHz | Channel 54: | 5270 MHz | Channel 62: | 5310 MHz |
| Channel 102: | 5510 MHz | Channel 110: | 5550 MHz | Channel 118: | 5590 MHz | Channel 126: | 5630 MHz |
| Channel 134: | 5670 MHz | Channel 142: | 5710 MHz | Channel 151: | 5755 MHz | Channel 159: | 5795 MHz |

802.11ac/ax -80MHz Center Working Frequency of Each Channel:

| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| Channel 42: | 5210 MHz | Channel 58: | 5290 MHz | Channel 106: | 5530 MHz | Channel 122: | 5610 MHz |
| Channel 138: | 5690 MHz | Channel 155: | 5775 MHz | | | | |

802.11ac/ax-160MHz Center Working Frequency of Each Channel:

| Channel | Frequency | Channel | Frequency |
|-------------|-----------|--------------|-----------|
| Channel 50: | 5250 MHz | Channel 114: | 5570 MHz |

Note:

1. This device is a Notebook Computers with built-in WLAN and Bluetooth transceiver, this report for WLAN 5GHz.
2. The EUT is including four models for different marketing requirement.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report.
5. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.
6. At result of pretests, module supports dual-channel transmission, only the worst case is shown in the report.
7. The SISOA(Chain A) is Aux and SISOB(Chain B) is Main for EUT in this report.

Test item:

| | Maximun conducted output power | Peak Power Spectral Density | Occupied Bandwidth | Radiated Emission | Band Edge |
|----------------------|--------------------------------|-----------------------------|--------------------|-------------------|-----------|
| SISOA-802.11a | ✓ | Band4 | Band4 | Band4 | Band4 |
| SISOA-802.11n20 | ✓ | | | | |
| SISOA-802.11n40 | ✓ | | | | |
| SISOA-802.11ac80 | ✓ | | | | |
| SISOA-802.11ac160 | ✓ | | | | |
| SISOA-802.11ax20 | ✓ | Band4 | Band4 | Band4 | Band4 |
| SISOA-802.11ax40 | ✓ | Band4 | Band4 | Band4 | Band4 |
| SISOA-802.11ax80 | ✓ | Band4 | Band4 | Band4 | Band4 |
| SISOA-802.11ax160 | ✓ | | | | |
| SISOA-802.11ax20-RU | ✓ | Band4 | | | |
| SISOA-802.11ax40-RU | ✓ | Band4 | | | |
| SISOA-802.11ax80-RU | ✓ | Band4 | | | |
| SISOA-802.11ax160-RU | ✓ | | | | |
| SISOB-802.11a | ✓ | Band1~3 | | Band1~3 | Band1~3 |
| SISOB-802.11n20 | ✓ | | | | |
| SISOB-802.11n40 | ✓ | | | | |
| SISOB-802.11ac80 | ✓ | | | | |
| SISOB-802.11ac160 | ✓ | | | | |
| SISOB-802.11ax20 | ✓ | Band1~3 | | Band1~3 | Band1~3 |
| SISOB-802.11ax40 | ✓ | Band1~3 | | Band1~3 | Band1~3 |
| SISOB-802.11ax80 | ✓ | Band1~3 | | Band1~3 | Band1~3 |
| SISOB-802.11ax160 | ✓ | Band1~3 | | Band1~3 | Band1~3 |
| SISOB-802.11ax20-RU | ✓ | Band1~3 | | | |
| SISOB-802.11ax40-RU | ✓ | Band1~3 | | | |
| SISOB-802.11ax80-RU | ✓ | Band1~3 | | | |
| SISOB-802.11ax160-RU | ✓ | Band1~3 | | | |
| MIMO-802.11n20 | ✓ | ✓ | | | |
| MIMO-802.11n40 | ✓ | ✓ | | | |
| MIMO-802.11ac80 | ✓ | ✓ | | | |
| MIMO-802.11ac160 | ✓ | ✓ | | | |
| MIMO-802.11ax20 | ✓ | ✓ | ✓ | ✓ | ✓ |
| MIMO-802.11ax40 | ✓ | ✓ | ✓ | ✓ | ✓ |
| MIMO-802.11ax80 | ✓ | ✓ | ✓ | ✓ | ✓ |
| MIMO-802.11ax160 | ✓ | ✓ | | ✓ | ✓ |
| MIMO-802.11ax20-RU | ✓ | ✓ | | | |
| MIMO-802.11ax40-RU | ✓ | ✓ | | | |
| MIMO-802.11ax80-RU | ✓ | ✓ | | | |
| MIMO-802.11ax160-RU | ✓ | ✓ | | | |

Note:

1. The EUT applies to SISOA 、SISOB and MIMO mode. Each mode through the pretest, only the worst case (Please see Test item table) are shown in the test report.
2. RU config settings, please refer to each test item data.

| | |
|---------------------|---|
| Test Mode (5GHz) | Mode 1 SISO A: Transmit (802.11a_6Mbps) Mode 2 SISO A: Transmit (802.11n-20BW_7.2Mbps) Mode 3 SISO A: Transmit (802.11n-40BW_15Mbps) Mode 4 SISO A: Transmit (802.11ac-80BW_32.5Mbps) Mode 5 SISO A: Transmit (802.11ac-160BW_65Mbps) Mode 6: SISO A: Transmit (802.11ax-20BW_8.6Mbps) Mode 7: SISO A: Transmit (802.11ax-40BW_17.2Mbps) Mode 8: SISO A: Transmit (802.11ax-80BW_36Mbps) Mode 9: SISO A: Transmit (802.11ax-160BW_72.1Mbps) Mode 10 SISO B: Transmit (802.11a_6Mbps) Mode 11 SISO B: Transmit (802.11n-20BW_7.2Mbps) Mode 12 SISO B: Transmit (802.11n-40BW_15Mbps) Mode 13 SISO B: Transmit (802.11ac-80BW_32.5Mbps) Mode 14 SISO B: Transmit (802.11ac-160BW_65Mbps) Mode 15: SISO B: Transmit (802.11ax-20BW_8.6Mbps) Mode 16: SISO B: Transmit (802.11ax-40BW_17.2Mbps) Mode 17: SISO B: Transmit (802.11ax-80BW_36Mbps) Mode 18: SISO B: Transmit (802.11ax-160BW_72.1Mbps) Mode 19 MIMO: Transmit (802.11n-20BW_14.4Mbps) Mode 20 MIMO: Transmit (802.11n-40BW_30Mbps) Mode 21 MIMO: Transmit (802.11ac-80BW_65Mbps) Mode 22 MIMO: Transmit (802.11ac-160BW_130Mbps) Mode 23: MIMO: Transmit (802.11ax-20BW_17.2Mbps) Mode 24: MIMO: Transmit (802.11ax-40BW_34.4Mbps) Mode 25: MIMO: Transmit (802.11ax-80BW_72.1Mbps) Mode 26: MIMO: Transmit (802.11ax-160BW_144.1Mbps) |
|---------------------|---|

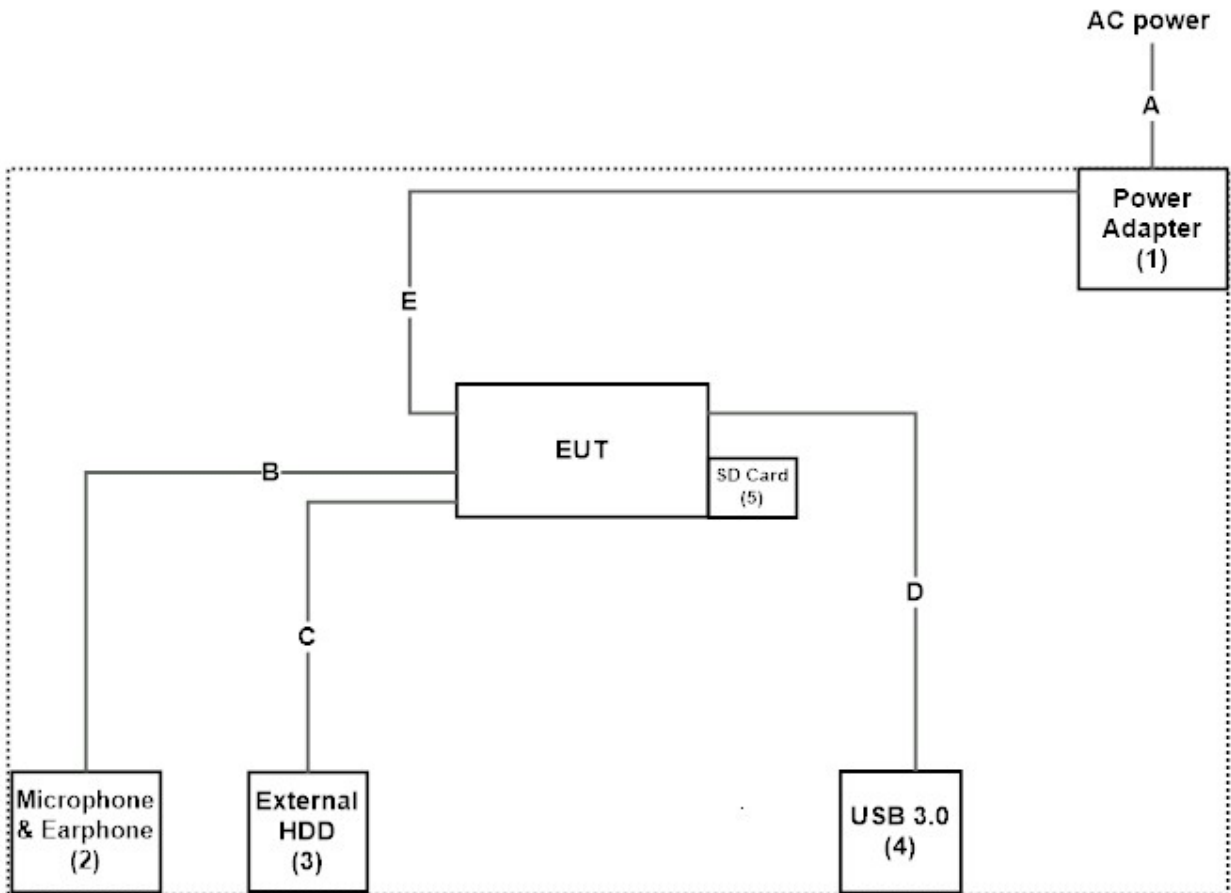
1.2. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

| | Product | Manufacturer | Model No. | Serial No. | Power Cord |
|---|-----------------------|--------------|---------------------|-------------|--------------------|
| 1 | Power Adapter | HONOR | ADT-65DSU-D03-2 | EAY65895911 | Non-Shielded, 1.5m |
| 2 | Microphone & Earphone | PCHOME | N/A | N/A | N/A |
| 3 | External HDD | SanDisk | SanDisk Extreme 900 | N/A | N/A |
| 4 | USB 3.0 | Transcend | TS1TSJ25M3 | D468623809 | N/A |
| 5 | SD Card | Apacer | 64GB R85 | N/A | N/A |

| Signal Cable Type | Signal cable Description |
|-------------------|---|
| A | Power Cable Non-Shielded, 1.5m |
| B | Microphone & Earphone Cable Non-Shielded, 1.2m |
| C | USB Cable Shielded, 0.5m |
| D | USB Cable Shielded, 0.4m |
| E | Power Cable Non-Shielded, 1.5m |

1.3. Configuration of tested System



1.4. EUT Exercise Software

1. Setup the EUT as shown in Section 1.3.
2. Execute software “DRTU Ver.11.1941.0-10270” on the EUT.
3. Configure the test mode, the test channel, and the data rate.
4. Press “OK” to start the continuous Transmit.
5. Verify that the EUT works properly.

1.5. Test Facility

Ambient conditions in the laboratory:

| Performed Item | Items | Required | Actual |
|--------------------|------------------|----------|---------|
| Conducted Emission | Temperature (°C) | 10~40 °C | 21.8 °C |
| | Humidity (%RH) | 10~90 % | 62.9 % |
| Radiated Emission | Temperature (°C) | 10~40 °C | 22.2 °C |
| | Humidity (%RH) | 10~90 % | 58.5 % |
| Conductive | Temperature (°C) | 10~40 °C | 23.1 °C |
| | Humidity (%RH) | 10~90 % | 55.7% |

USA : FCC Registration Number: TW0023

Canada : IC Registration Number: 25880

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd
Address : No.159, Sec. 2, Wenhua 1st Rd., Linkou Dist.,
New Taipei City 24457, Taiwan, R.O.C.

Phone number : 886-2-2602-7968
Fax number : 866-2-2602-3286
Email address : info.tw@dekra.com
Website : <http://www.dekra.com.tw>

1.6. List of Test Equipment

For Conduction measurements /ASR1

| | Equipment | Manufacturer | Model No. | Serial No. | Cali. Data | Due. Data |
|---|--------------------|--------------|-----------|------------|------------|------------|
| X | EMI Test Receiver | R&S | ESR7 | 101601 | 2020.05.28 | 2021.05.27 |
| X | Two-Line V-Network | R&S | ENV216 | 101306 | 2020.03.25 | 2021.03.24 |
| X | Two-Line V-Network | R&S | ENV216 | 101307 | 2020.04.17 | 2021.04.16 |
| X | Coaxial Cable | DEKRA | RG400 BNC | RF001 | 2020.05.24 | 2021.05.23 |

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : DEKRA Testing System V2.0.

For Conducted measurements /ASR2

| | Equipment | Manufacturer | Model No. | Serial No. | Cali. Data | Due. Data |
|---|-------------------|--------------|-----------|------------|------------|------------|
| X | Spectrum Analyzer | R&S | FSV30 | 103464 | 2020.02.11 | 2021.02.10 |
| X | Power Meter | Anritsu | ML2496A | 1548003 | 2019.12.17 | 2020.12.16 |
| X | Power Sensor | Anritsu | MA2411B | 1531024 | 2019.12.17 | 2020.12.16 |
| X | Power Sensor | Anritsu | MA2411B | 1531025 | 2019.12.17 | 2020.12.16 |

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : DEKRA Conduction Test System V9.0.5.

For Radiated measurements /ACB1

| | Equipment | Manufacturer | Model No. | Serial No. | Cali. Data | Due. Data |
|---|-------------------|---------------|--------------|------------|------------|------------|
| X | Loop Antenna | AMETEK | HLA6121 | 49611 | 2020.03.16 | 2021.03.15 |
| X | Bi-Log Antenna | SCHWARZBECK | VULB9168 | 9168-953 | 2020.01.03 | 2021.01.02 |
| X | Horn Antenna | ETS-Lindgren | 3117 | 00203800 | 2019.12.12 | 2020.12.11 |
| X | Horn Antenna | Com-Power | AH-840 | 101087 | 2020.06.08 | 2021.06.07 |
| X | Pre-Amplifier | EMCI | EMC001330 | 980316 | 2020.06.23 | 2021.06.22 |
| X | Pre-Amplifier | EMCI | EMC051845SE | SN980632 | 2020.08.21 | 2021.08.20 |
| X | Pre-Amplifier | EMCI | EMC184045SE | 980314 | 2020.06.10 | 2021.06.09 |
| X | Filter | MICRO-TRONICS | BRM50702 | G270 | 2020.08.17 | 2021.08.16 |
| X | Filter | MICRO-TRONICS | BRM50716 | G196 | 2020.08.17 | 2021.08.16 |
| X | EMI Test Receiver | R&S | ESR7 | 101602 | 2019.12.16 | 2020.12.15 |
| X | Spectrum Analyzer | R&S | FSV40 | 101148 | 2020.03.16 | 2021.03.15 |
| X | Coaxial Cable | SUHNER | SUCOFLEX 106 | RF002 | 2020.07.03 | 2021.07.02 |
| X | Mircoflex Cable | HUBER SUHNER | SUCOFLEX 102 | MY3381/2 | 2020.06.10 | 2021.06.09 |

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : DEKRA Testing System V2.0.

1.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document, and is described in each test chapter of this report.

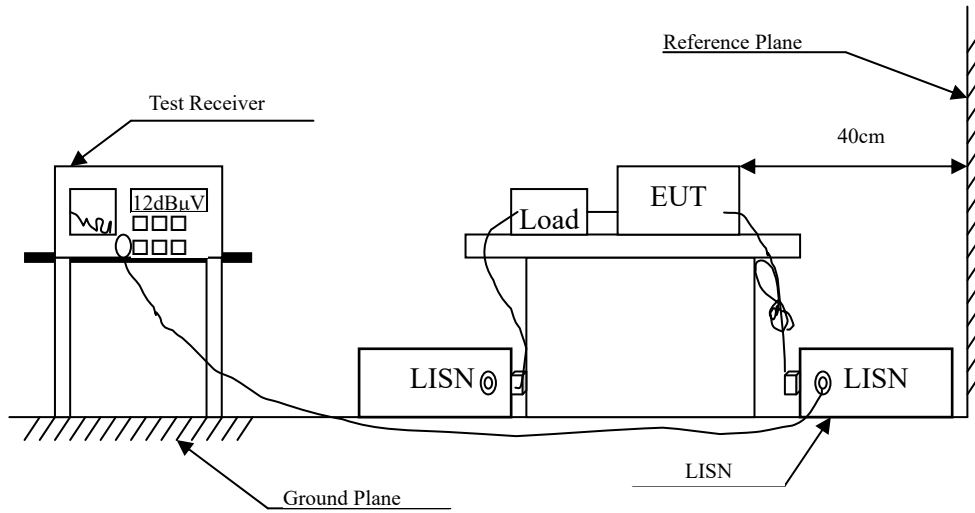
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

| Test item | Uncertainty | |
|--------------------------------|-------------------------|------------------------|
| Conducted Emission | ±3.42 dB | |
| Maximun conducted output power | Power Meter ±0.91 dB | |
| Peak Power Spectral Density | ±2.53 dB | |
| Radiated Emission | Under 1GHz ±4.06 dB | Above 1GHz ±3.73 dB |
| Band Edge | ±2.53 dB | |
| Occupied Bandwidth | ±682.83 Hz | |
| Duty Cycle | ±2.31 ms | |

2. Conducted Emission

2.1. Test Setup



2.2. Limits

| FCC Part 15 Subpart C Paragraph 15.207 (dBμV) Limit | | |
|---|--------|-------|
| Frequency MHz | Limits | |
| | QP | AV |
| 0.15 - 0.50 | 66-56 | 56-46 |
| 0.50-5.0 | 56 | 46 |
| 5.0 - 30 | 60 | 50 |

Remarks : In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4:2014 on conducted measurement.

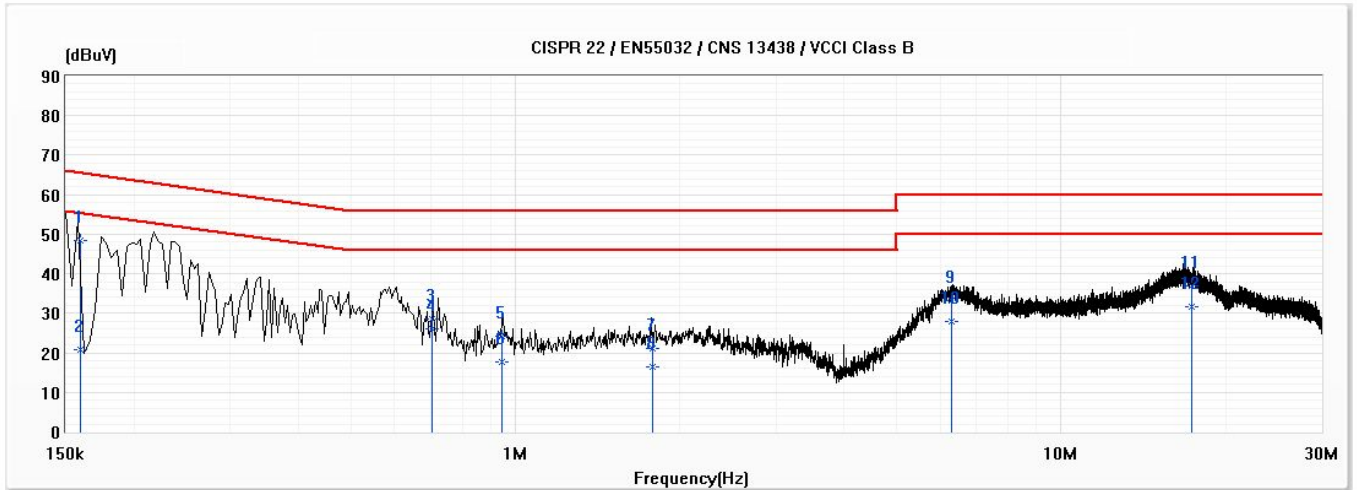
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

The EUT was setup to ANSI C63.4, 2014; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

2.4. Test Result of Conducted Emission

Product : Notebook Computers
 Test Item : Conducted Emission Test
 Test date : 2020/12/09
 Test Mode : Mode 26: MIMO: Transmit (802.11ax-160BW_144.1Mbps) (5250MHz)

Line1



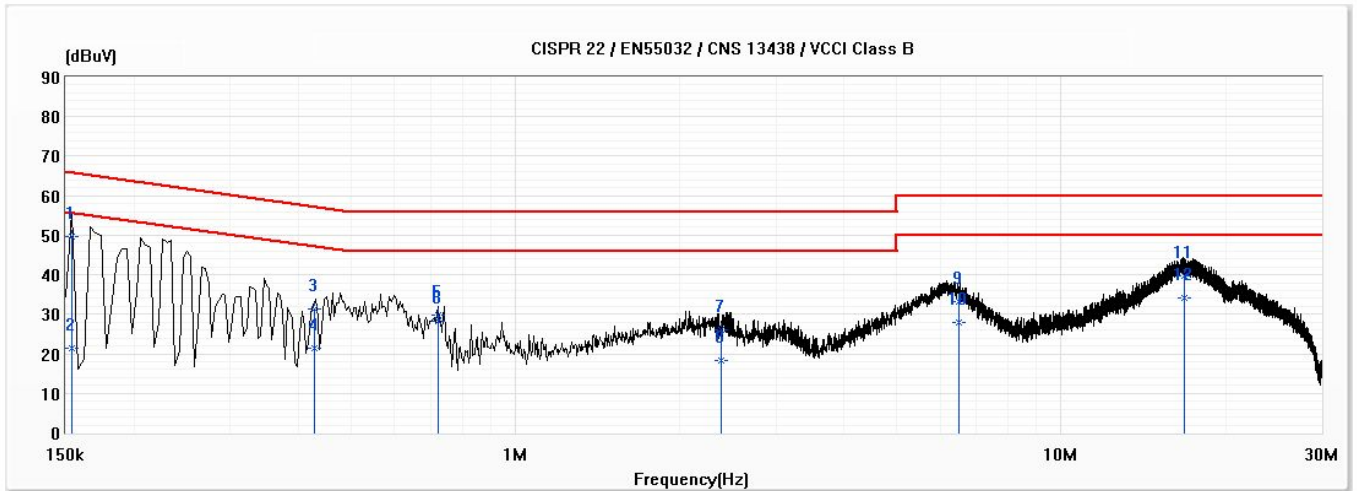
| No | Frequency (MHz) | Emission Level (dBuV) | Limit (dBuV) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB) | Detector Type |
|----|-----------------|-----------------------|--------------|-------------|----------------------|---------------------|---------------|
| *1 | 0.160 | 48.47 | 65.48 | -17.00 | 38.82 | 9.66 | QP |
| 2 | 0.160 | 20.87 | 55.48 | -34.61 | 11.21 | 9.66 | AV |
| 3 | 0.705 | 28.44 | 56.00 | -27.56 | 18.77 | 9.68 | QP |
| 4 | 0.705 | 25.95 | 46.00 | -20.05 | 16.27 | 9.68 | AV |
| 5 | 0.943 | 24.34 | 56.00 | -31.66 | 14.65 | 9.69 | QP |
| 6 | 0.943 | 17.76 | 46.00 | -28.24 | 8.07 | 9.69 | AV |
| 7 | 1.780 | 21.10 | 56.00 | -34.90 | 11.39 | 9.71 | QP |
| 8 | 1.780 | 16.42 | 46.00 | -29.58 | 6.70 | 9.71 | AV |
| 9 | 6.290 | 33.10 | 60.00 | -26.90 | 23.27 | 9.82 | QP |
| 10 | 6.290 | 27.99 | 50.00 | -22.01 | 18.17 | 9.82 | AV |
| 11 | 17.338 | 36.93 | 60.00 | -23.07 | 26.97 | 9.95 | QP |
| 12 | 17.338 | 31.62 | 50.00 | -18.38 | 21.66 | 9.95 | AV |

Remark:

1. "*" means this data is the worst emission level; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=LISN Factor+Cable Loss).
3. Margin=Emission Level-Limit

Product : Notebook Computers
 Test Item : Conducted Emission Test
 Test date : 2020/12/09
 Test Mode : Mode 26: MIMO: Transmit (802.11ax-160BW_144.1Mbps) (5250MHz)

N



| No | Frequency (MHz) | Emission Level (dBuV) | Limit (dBuV) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB) | Detector Type |
|-----|-----------------|-----------------------|--------------|-------------|----------------------|---------------------|---------------|
| 1 | 0.154 | 49.59 | 65.78 | -16.19 | 39.92 | 9.67 | QP |
| 2 | 0.154 | 21.41 | 55.78 | -34.38 | 11.74 | 9.67 | AV |
| 3 | 0.428 | 31.22 | 57.29 | -26.08 | 21.55 | 9.67 | QP |
| 4 | 0.428 | 21.49 | 47.29 | -25.81 | 11.82 | 9.67 | AV |
| 5 | 0.723 | 29.83 | 56.00 | -26.17 | 20.15 | 9.68 | QP |
| 6 | 0.723 | 28.33 | 46.00 | -17.67 | 18.65 | 9.68 | AV |
| 7 | 2.381 | 25.96 | 56.00 | -30.04 | 16.22 | 9.74 | QP |
| 8 | 2.381 | 18.32 | 46.00 | -27.68 | 8.58 | 9.74 | AV |
| 9 | 6.488 | 33.34 | 60.00 | -26.66 | 23.50 | 9.83 | QP |
| 10 | 6.488 | 27.89 | 50.00 | -22.11 | 18.05 | 9.83 | AV |
| 11 | 16.785 | 39.81 | 60.00 | -20.19 | 29.79 | 10.01 | QP |
| *12 | 16.785 | 34.28 | 50.00 | -15.72 | 24.27 | 10.01 | AV |

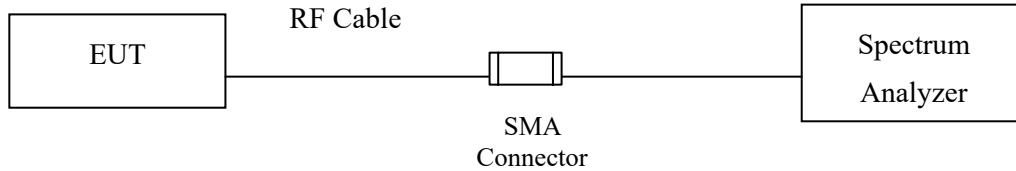
Remark:

1. "*" means this data is the worst emission level; "!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=LISN Factor+Cable Loss).
3. Margin=Emission Level-Limit

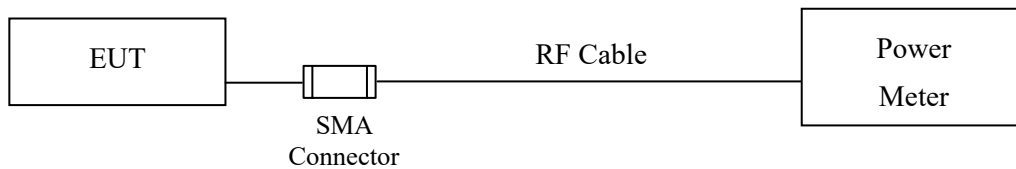
3. Maximun conducted output power

3.1. Test Setup

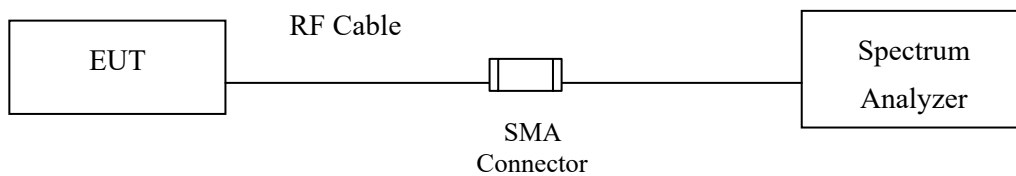
26dB Occupied Bandwidth



Conduction Power Measurement (for 802.11a)



Conduction Power Measurement (for 802.11ac)



3.2. Limits

3.2.1. For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna

gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. 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.

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

3.2.2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.3. 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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII 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.

3.3. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater the 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT

was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

802.11an (BW \leq 40MHz) Maximum conducted output power using KDB 789033 section E)3)b)
Method PM-G (Measurement using a gated RF average power meter)

Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)

802.11ac (BW=80MHz) Maximum conducted output power using KDB 789033 section E)2)b)
Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D03 section D) procedure is used for measurements.

3.4. Test Result of Maximum conducted output power

Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 1 SISO A: Transmit (802.11a_6Mbps)

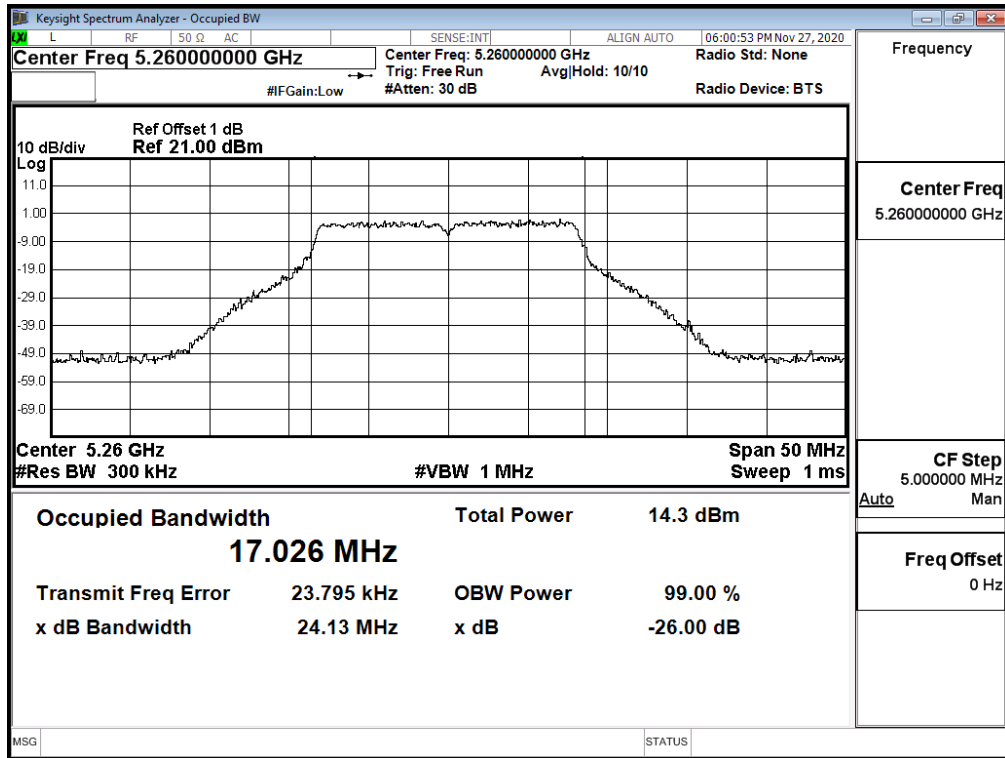
| Cable loss=1dB | | Maximum conducted output power | | | | | | | |
|----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | | | | | | | |
| | | 6 | 9 | 12 | 18 | 24 | 36 | 48 | 54 |
| | | Measurement Level (dBm) | | | | | | | |
| 36 | 5180 | 7.51 | -- | -- | -- | -- | -- | -- | -- |
| 44 | 5220 | 7.55 | 7.52 | 7.45 | 7.40 | 7.33 | 7.30 | 7.20 | 7.11 |
| 48 | 5240 | 7.52 | -- | -- | -- | -- | -- | -- | -- |
| 52 | 5260 | 7.53 | -- | -- | -- | -- | -- | -- | -- |
| 60 | 5300 | 7.56 | 7.53 | 7.43 | 7.40 | 7.37 | 7.31 | 7.21 | 7.15 |
| 64 | 5320 | 7.57 | -- | -- | -- | -- | -- | -- | -- |
| 100 | 5500 | 7.40 | -- | -- | -- | -- | -- | -- | -- |
| 116 | 5580 | 7.46 | 7.42 | 7.32 | 7.24 | 7.21 | 7.13 | 7.06 | 6.99 |
| 140 | 5700 | 7.48 | -- | -- | -- | -- | -- | -- | -- |
| 149 | 5745 | 10.87 | -- | -- | -- | -- | -- | -- | -- |
| 157 | 5785 | 10.94 | 10.84 | 10.77 | 10.68 | 10.58 | 10.51 | 10.42 | 10.35 |
| 165 | 5825 | 10.81 | -- | -- | -- | -- | -- | -- | -- |

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

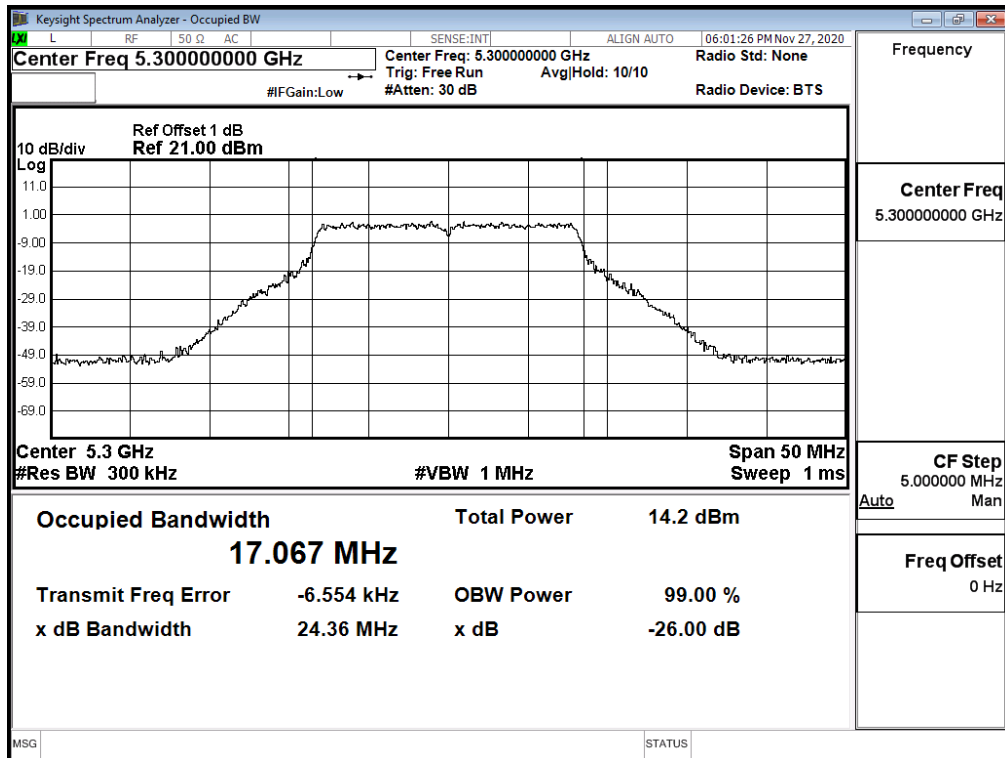
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 36 | 5180 | -- | 7.51 | 24 | -- | Pass |
| 44 | 5220 | -- | 7.55 | 24 | -- | Pass |
| 48 | 5240 | -- | 7.52 | 24 | -- | Pass |
| 52 | 5260 | 24.130 | 7.53 | 24 | 24.83 | Pass |
| 60 | 5300 | 24.360 | 7.56 | 24 | 24.87 | Pass |
| 64 | 5320 | 23.390 | 7.57 | 24 | 24.69 | Pass |
| 100 | 5500 | 24.310 | 7.40 | 24 | 24.86 | Pass |
| 116 | 5580 | 24.200 | 7.46 | 24 | 24.84 | Pass |
| 140 | 5700 | 24.210 | 7.48 | 24 | 24.84 | Pass |
| 149 | 5745 | -- | 10.87 | 30 | -- | Pass |
| 157 | 5785 | -- | 10.94 | 30 | -- | Pass |
| 165 | 5825 | -- | 10.81 | 30 | -- | Pass |

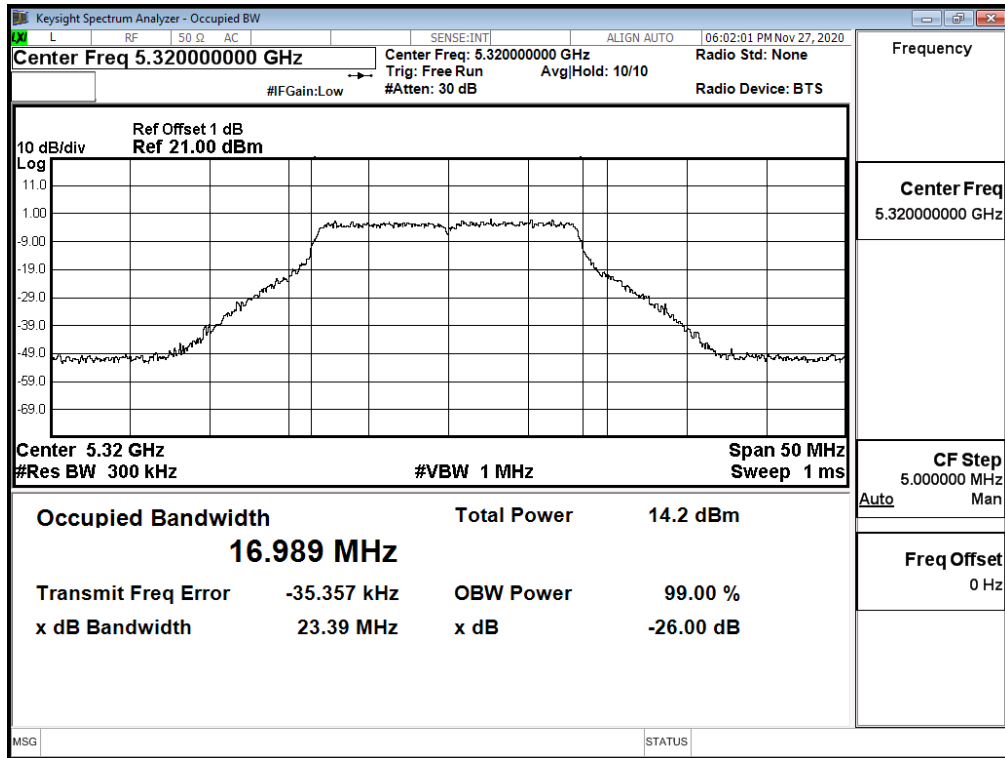
26dB Occupied Bandwidth: Channel 52



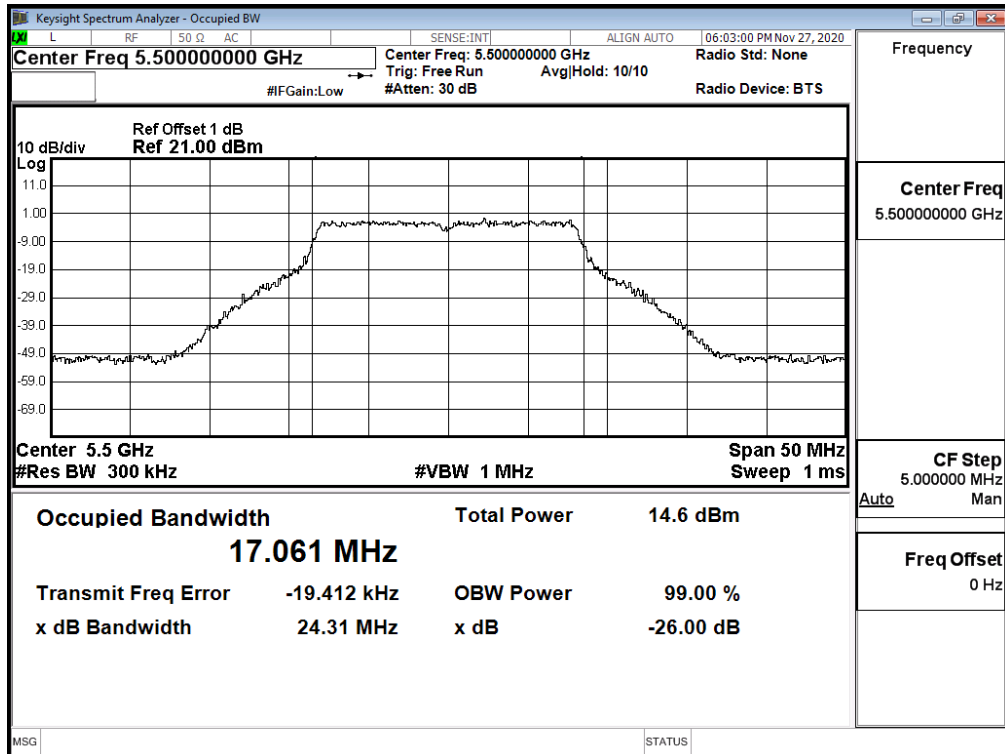
Channel 60



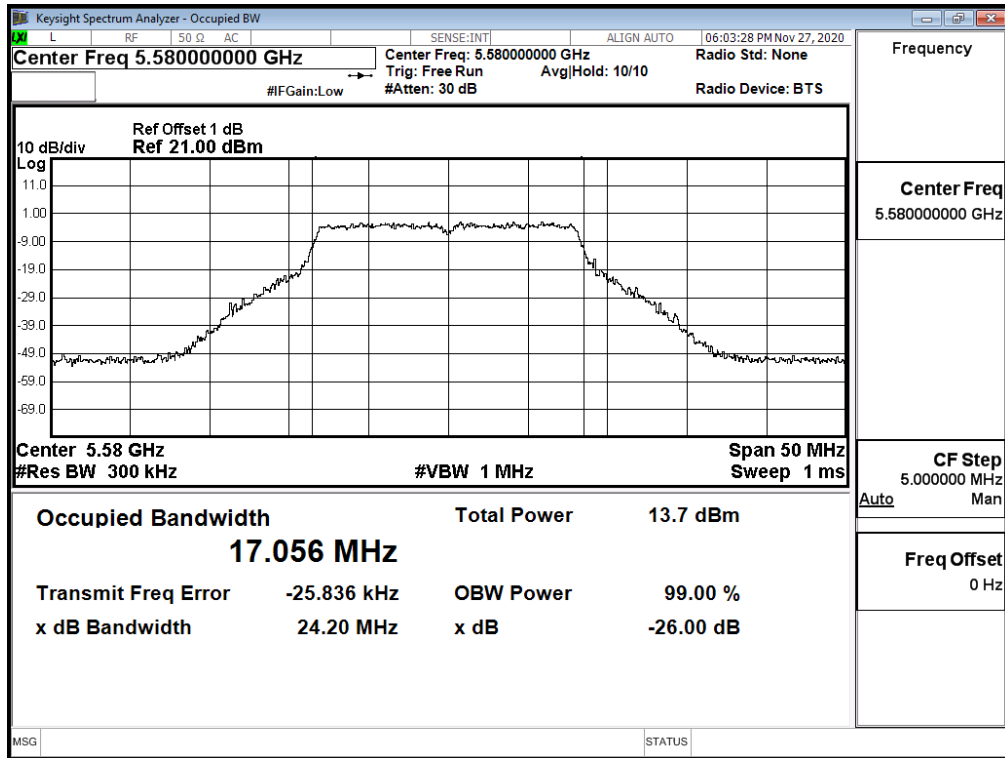
Channel 64



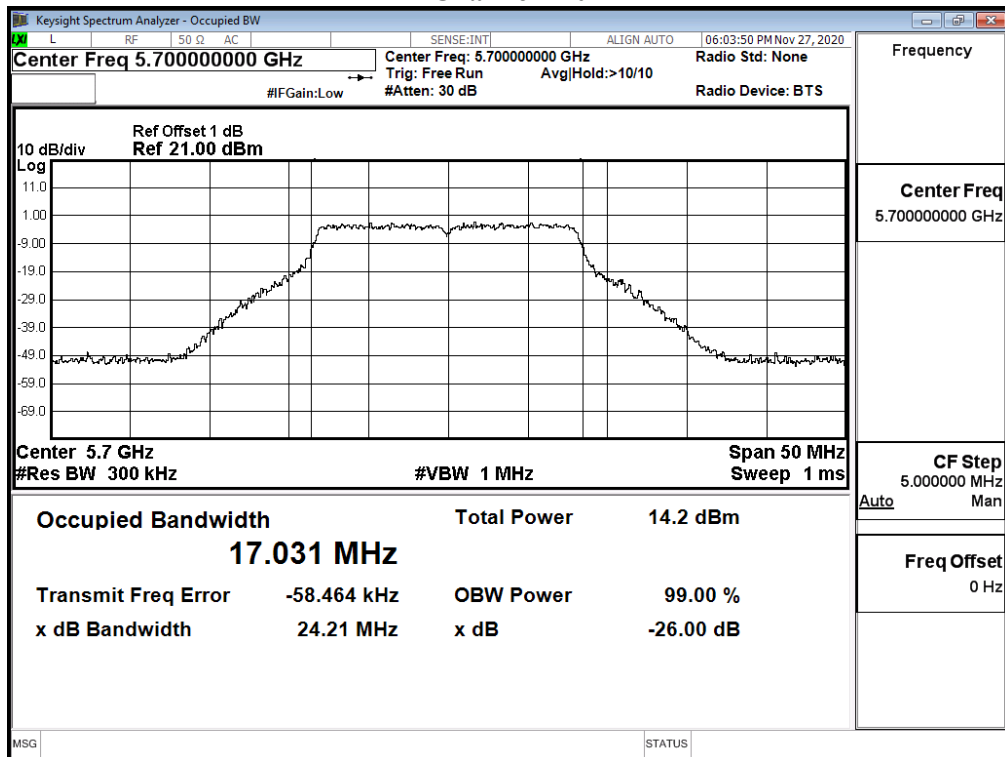
Channel 100



Channel 116



Channel 140



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 2 SISO A: Transmit (802.11n-20BW_7.2Mbps)

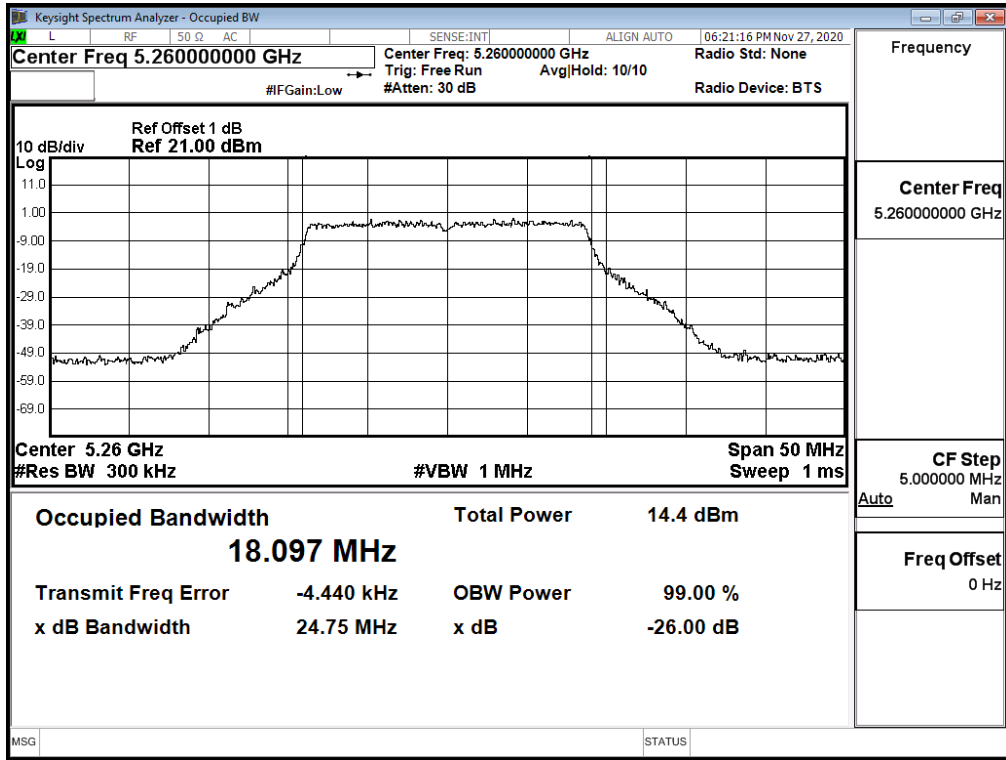
| Cable loss=1dB | | Maximum conducted output power | | | | | | | | | |
|----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|----|-----|
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | |
| | | HT0 | HT1 | HT2 | HT3 | HT4 | HT5 | HT6 | | | HT7 |
| | | Measurement Level (dBm) | | | | | | | | | |
| 36 | 5180 | 7.85 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 44 | 5220 | 7.53 | 7.48 | 7.42 | 7.32 | 7.24 | 7.20 | 7.17 | 7.12 | | |
| 48 | 5240 | 7.64 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 52 | 5260 | 7.86 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 60 | 5300 | 7.53 | 7.46 | 7.38 | 7.28 | 7.24 | 7.17 | 7.09 | 7.03 | | |
| 64 | 5320 | 7.52 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 100 | 5500 | 7.42 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 116 | 5580 | 7.48 | 7.38 | 7.33 | 7.23 | 7.14 | 7.11 | 7.04 | 7.01 | | |
| 140 | 5700 | 7.47 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 144(Band3) | 5720 | 6.40 | 6.34 | 6.29 | 6.19 | 6.09 | 6.02 | 5.99 | 5.94 | | |
| 144(Band4) | 5720 | 0.68 | 0.65 | 0.59 | 0.52 | 0.44 | 0.37 | 0.30 | 0.26 | | |
| 149 | 5745 | 10.90 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 157 | 5785 | 10.84 | 10.77 | 10.73 | 10.66 | 10.62 | 10.55 | 10.52 | 10.45 | | |
| 165 | 5825 | 10.97 | -- | -- | -- | -- | -- | -- | -- | -- | |

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

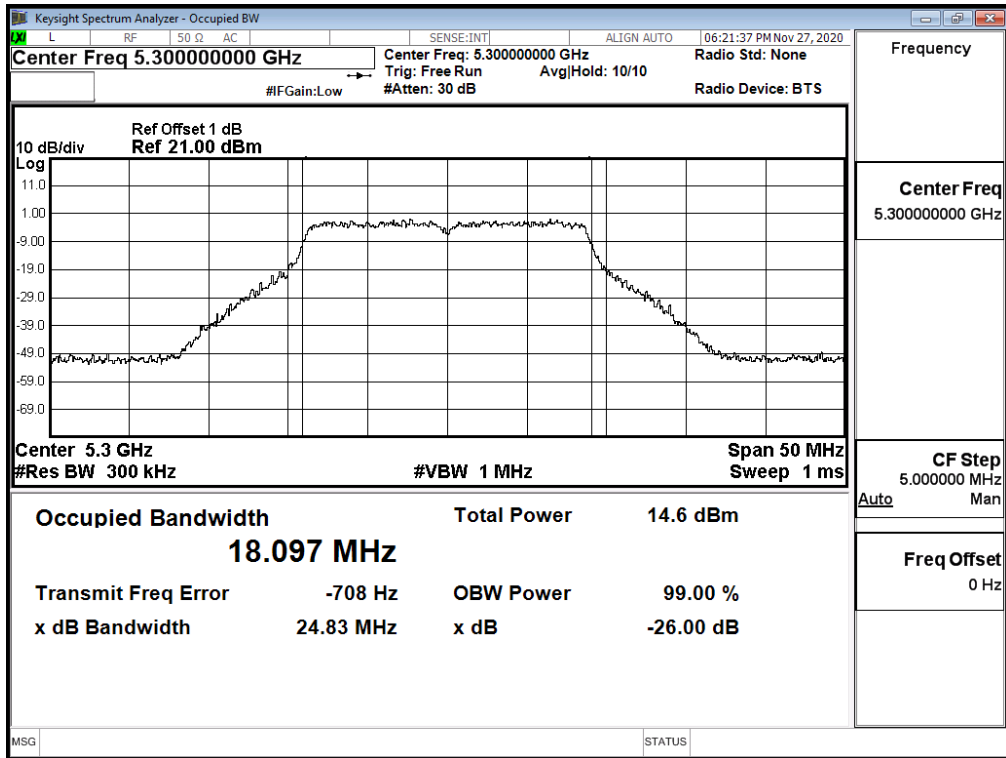
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 36 | 5180 | -- | 7.85 | 24 | -- | Pass |
| 44 | 5220 | -- | 7.53 | 24 | -- | Pass |
| 48 | 5240 | -- | 7.64 | 24 | -- | Pass |
| 52 | 5260 | 24.750 | 7.86 | 24 | 24.94 | Pass |
| 60 | 5300 | 24.830 | 7.53 | 24 | 24.95 | Pass |
| 64 | 5320 | 24.710 | 7.52 | 24 | 24.93 | Pass |
| 100 | 5500 | 24.320 | 7.42 | 24 | 24.86 | Pass |
| 116 | 5580 | 24.160 | 7.48 | 24 | 24.83 | Pass |
| 140 | 5700 | 24.310 | 7.47 | 24 | 24.86 | Pass |
| 144(Band3) | 5720 | 16.850 | 6.40 | 24 | 23.27 | Pass |
| 144(Band4) | 5720 | -- | 0.68 | 30 | -- | Pass |
| 149 | 5745 | -- | 10.90 | 30 | -- | Pass |
| 157 | 5785 | -- | 10.84 | 30 | -- | Pass |
| 165 | 5825 | -- | 10.97 | 30 | -- | Pass |

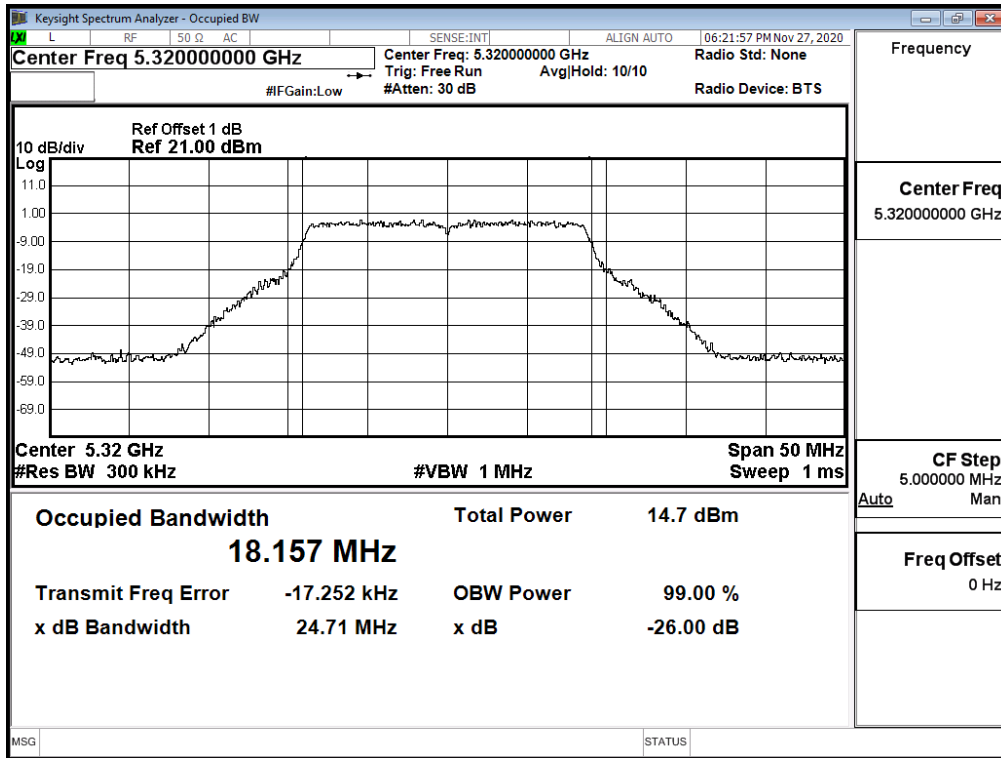
26dB Occupied Bandwidth: Channel 52



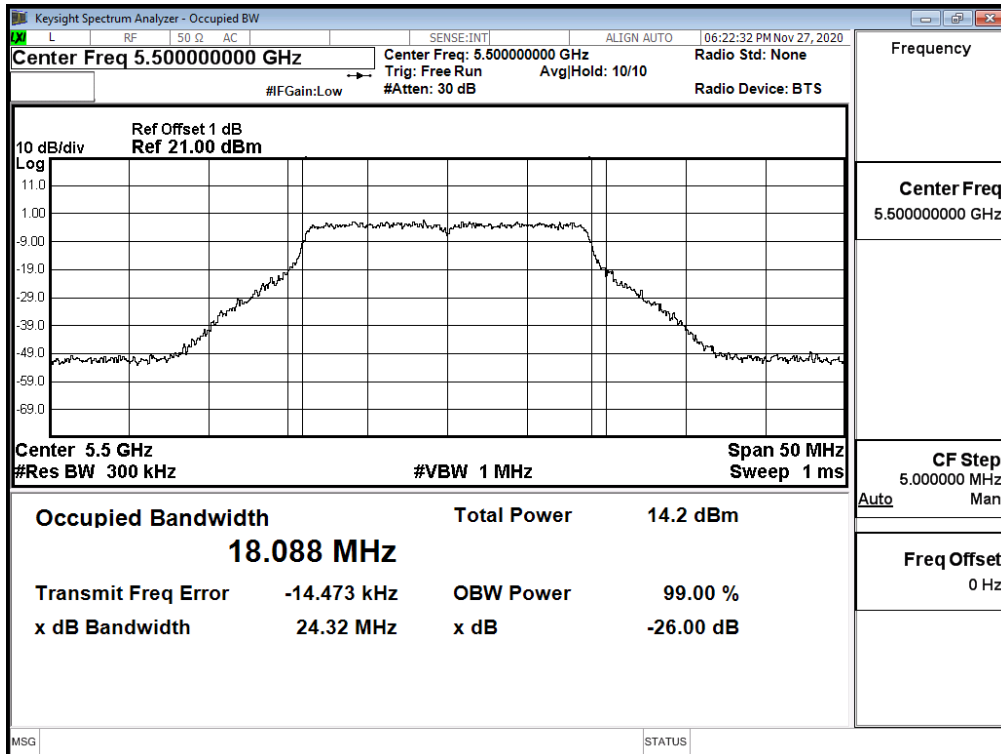
Channel 60



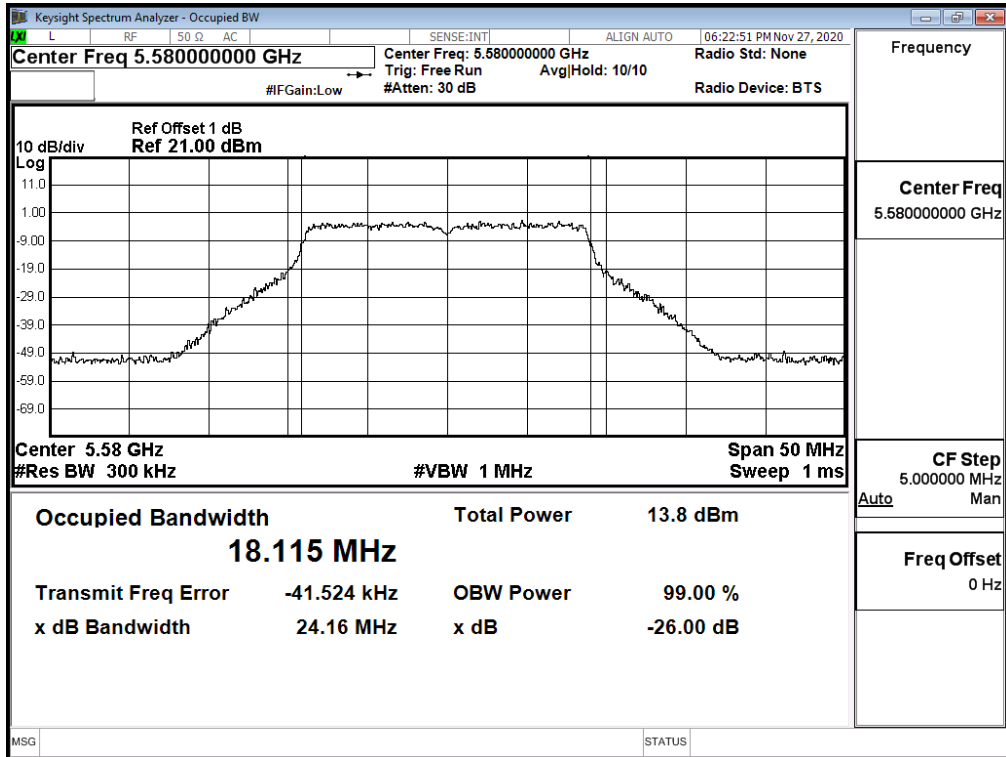
Channel 64



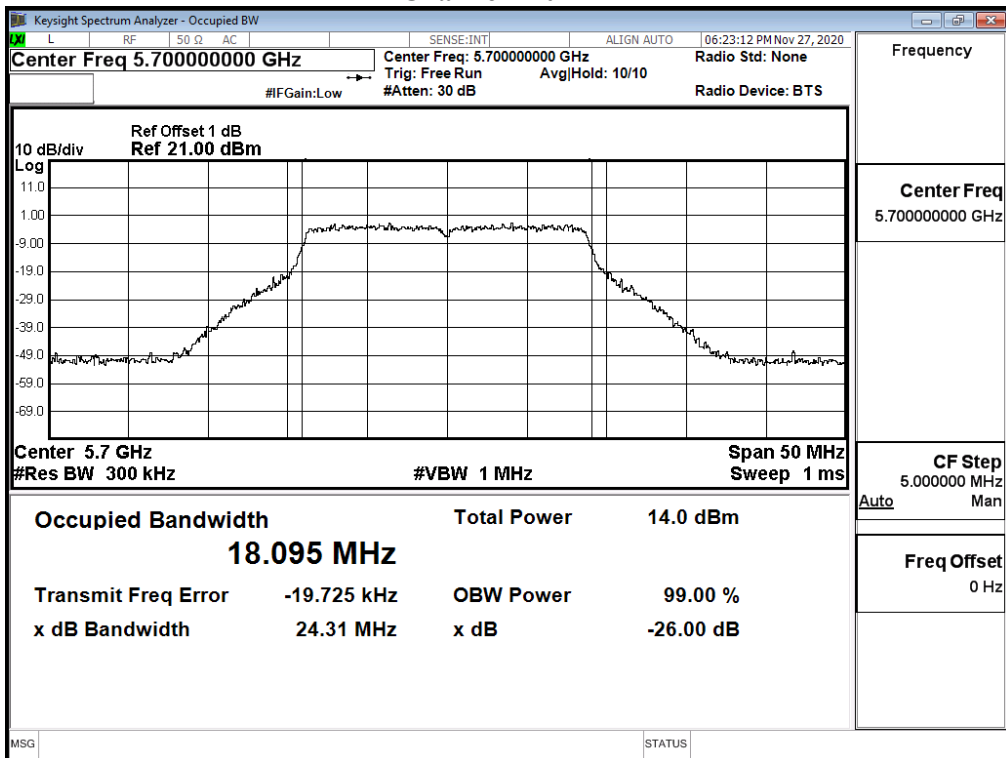
Channel 100



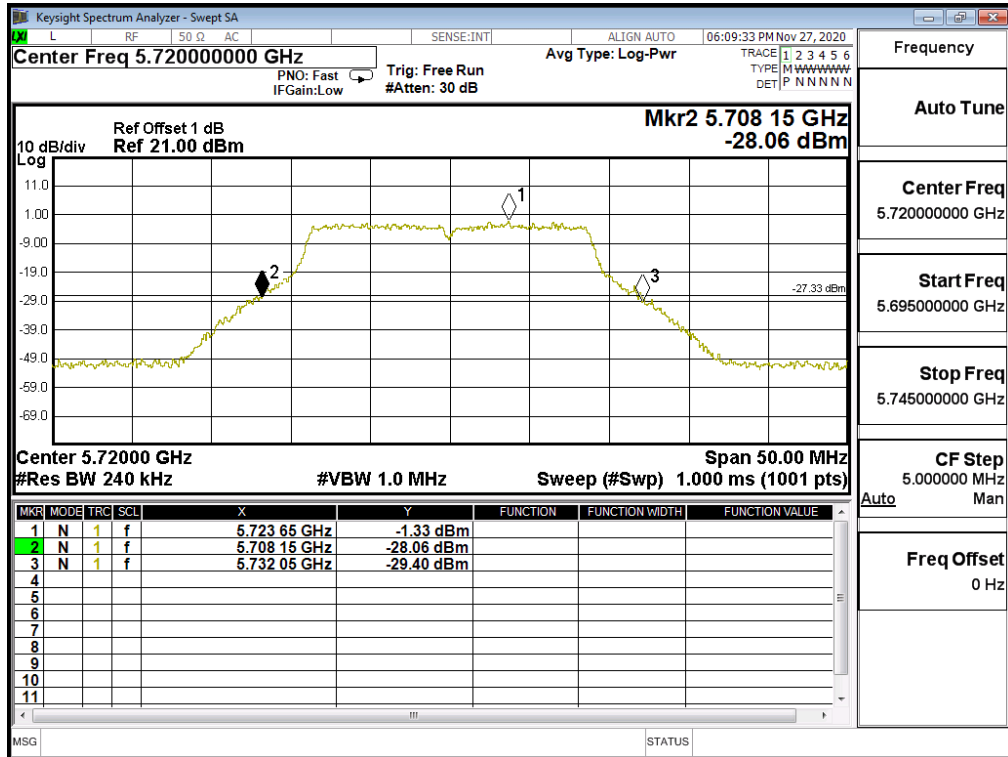
Channel 116



Channel 140



Channel 144



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 3 SISO A: Transmit (802.11n-40BW_15Mbps)

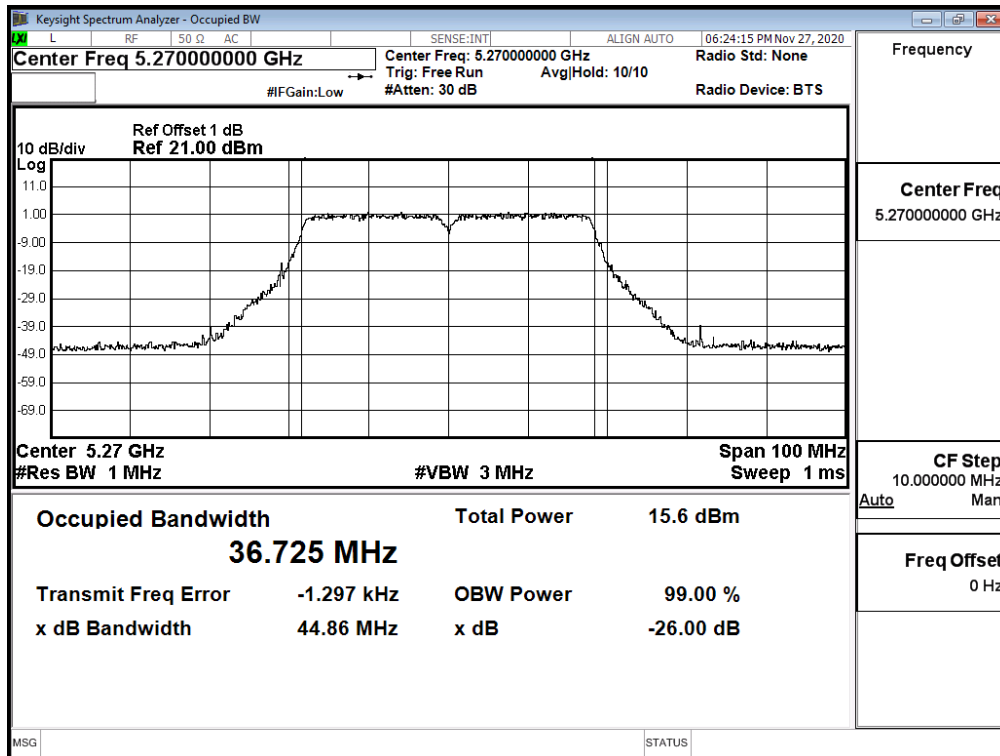
| Cable loss=1dB | | Maximum conducted output power | | | | | | | |
|----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | | | | | | | |
| | | HT0 | HT1 | HT2 | HT3 | HT4 | HT5 | HT6 | HT7 |
| | | Measurement Level (dBm) | | | | | | | |
| 38 | 5190 | 7.89 | -- | -- | -- | -- | -- | -- | -- |
| 46 | 5230 | 7.51 | 7.46 | 7.42 | 7.32 | 7.28 | 7.22 | 7.14 | 7.07 |
| 54 | 5270 | 7.55 | -- | -- | -- | -- | -- | -- | -- |
| 62 | 5310 | 7.51 | 7.46 | 7.39 | 7.34 | 7.26 | 7.21 | 7.15 | 7.07 |
| 102 | 5510 | 7.39 | -- | -- | -- | -- | -- | -- | -- |
| 110 | 5550 | 7.42 | 7.37 | 7.32 | 7.26 | 7.22 | 7.13 | 7.08 | 6.99 |
| 134 | 5670 | 7.48 | -- | -- | -- | -- | -- | -- | -- |
| 142F(Band3) | 5710 | 7.00 | 6.96 | 6.90 | 6.86 | 6.79 | 6.71 | 6.63 | 6.58 |
| 142F(Band4) | 5710 | -3.03 | -3.09 | -3.15 | -3.25 | -3.33 | -3.40 | -3.50 | -3.55 |
| 151 | 5755 | 10.76 | -- | -- | -- | -- | -- | -- | -- |
| 159 | 5795 | 10.98 | 10.93 | 10.84 | 10.74 | 10.67 | 10.60 | 10.54 | 10.48 |

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

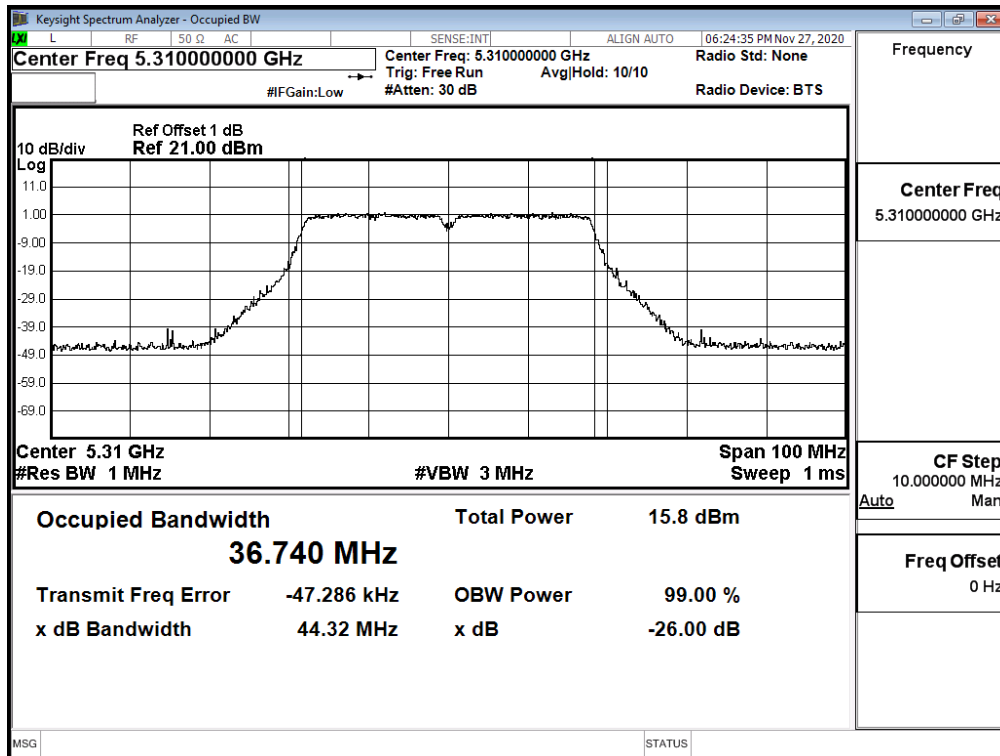
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|-------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 38 | 5190 | -- | 7.89 | 24 | -- | Pass |
| 46 | 5230 | -- | 7.51 | 24 | -- | Pass |
| 54 | 5270 | 44.860 | 7.55 | 24 | 27.52 | Pass |
| 62 | 5310 | 44.320 | 7.51 | 24 | 27.47 | Pass |
| 102 | 5510 | 45.050 | 7.39 | 24 | 27.54 | Pass |
| 110 | 5550 | 43.930 | 7.42 | 24 | 27.43 | Pass |
| 134 | 5670 | 44.170 | 7.48 | 24 | 27.45 | Pass |
| 142F(Band3) | 5710 | 36.900 | 7.00 | 24 | 26.67 | Pass |
| 142F(Band4) | 5710 | -- | -3.03 | 30 | -- | Pass |
| 151 | 5755 | -- | 10.76 | 30 | -- | Pass |
| 159 | 5795 | -- | 10.98 | 30 | -- | Pass |

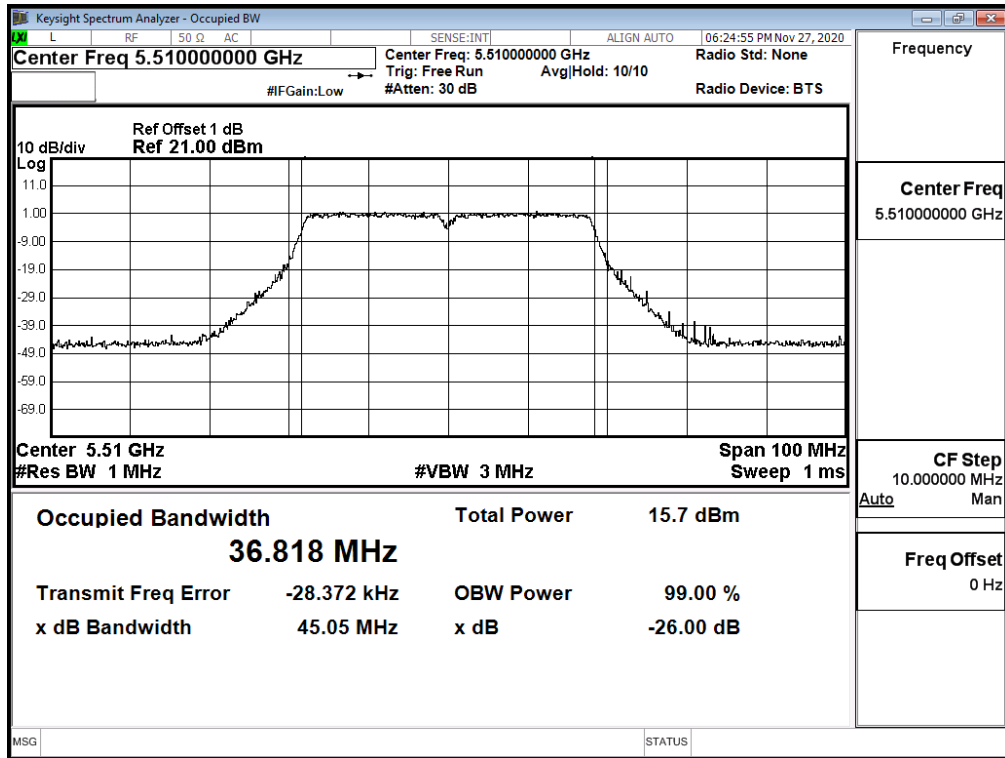
26dB Occupied Bandwidth: Channel 54



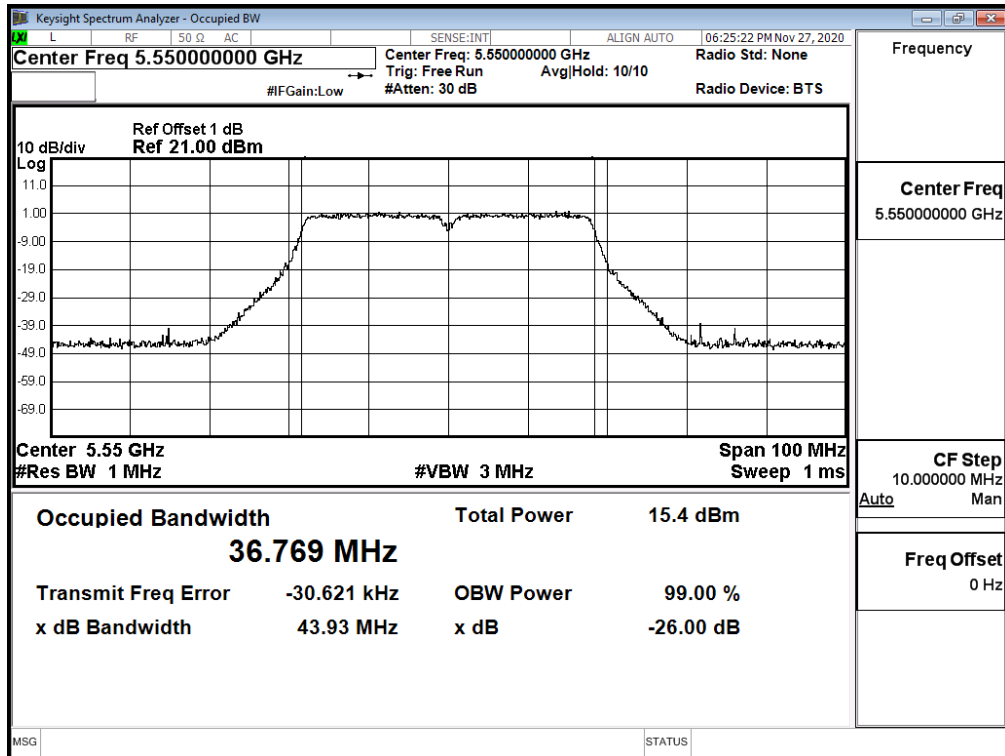
Channel 62



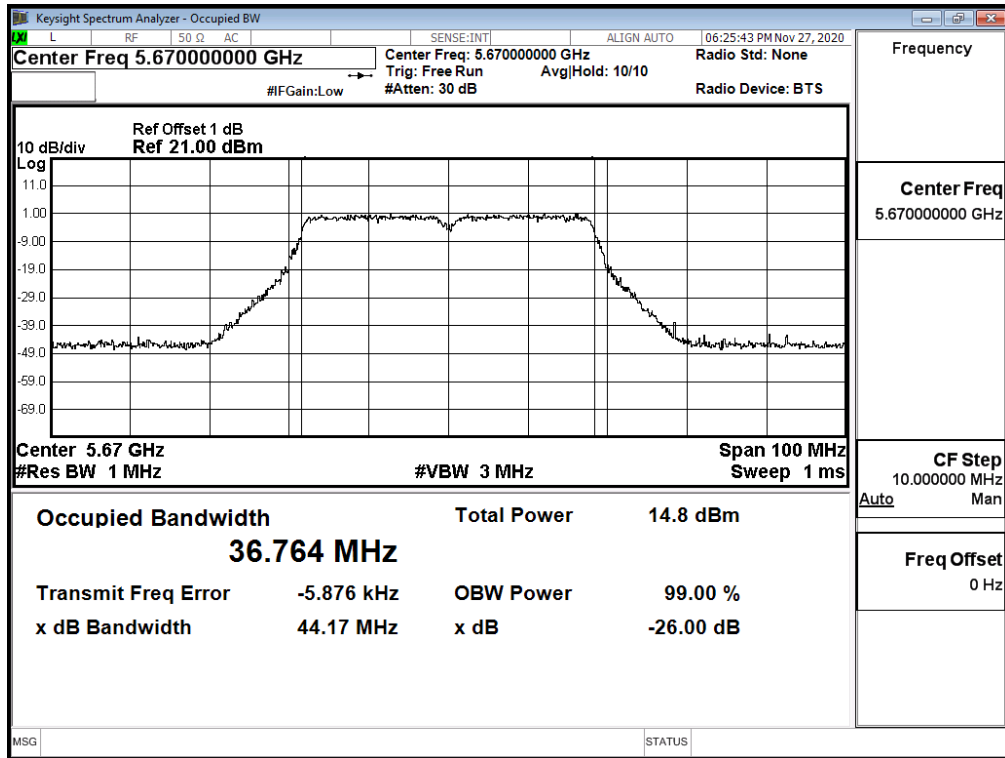
Channel 102



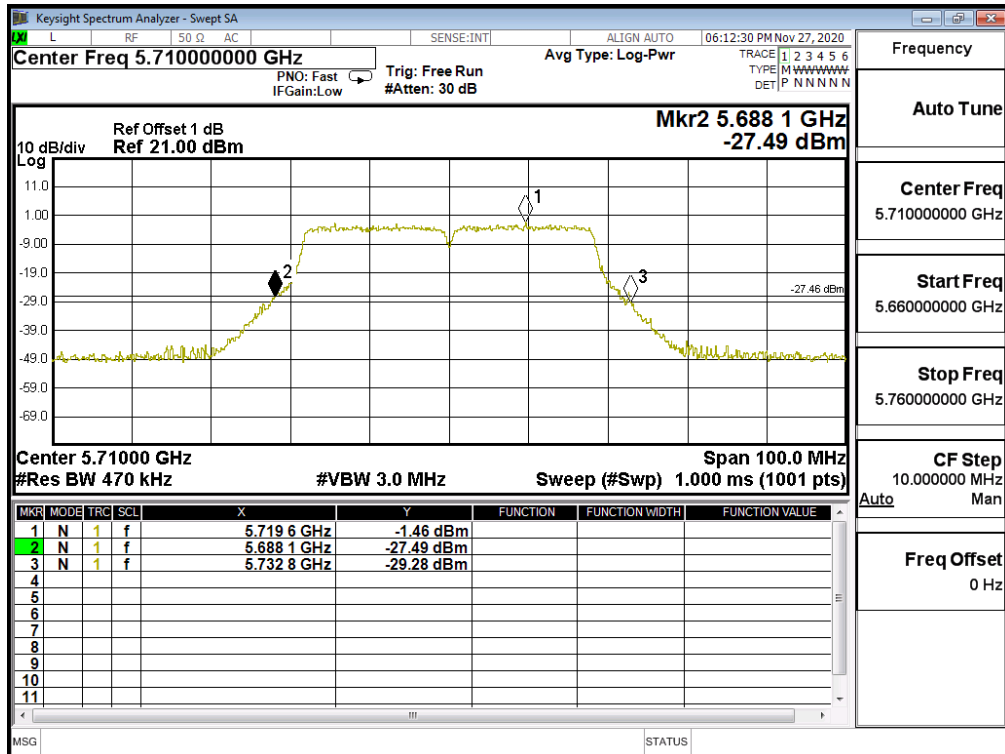
Channel 110



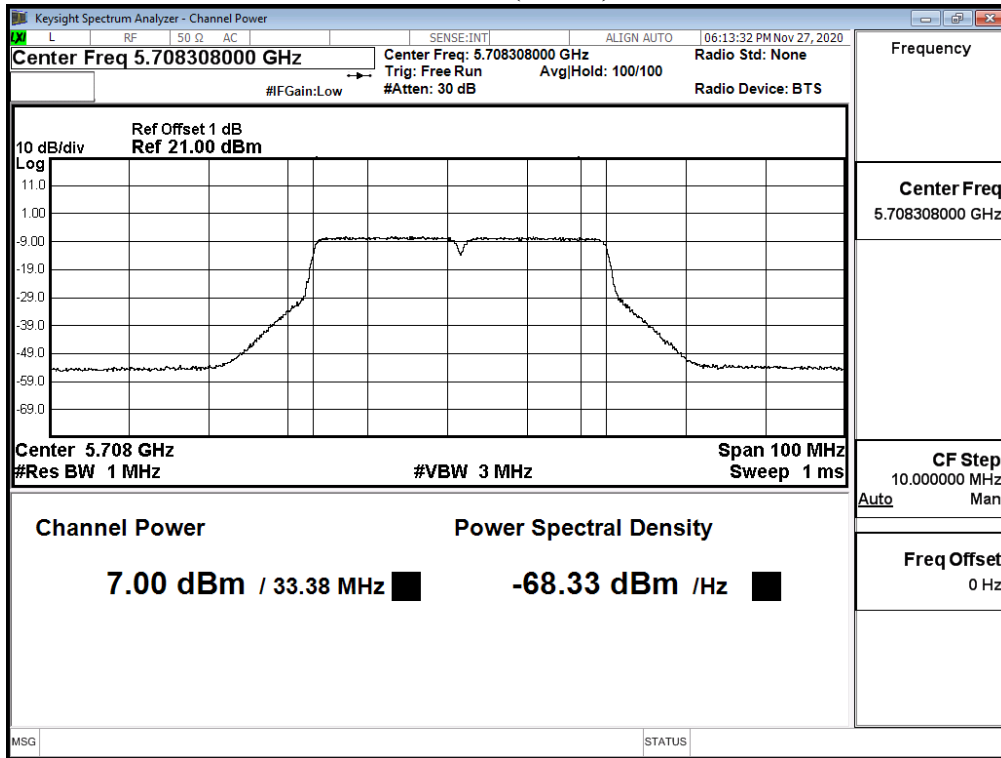
Channel 134



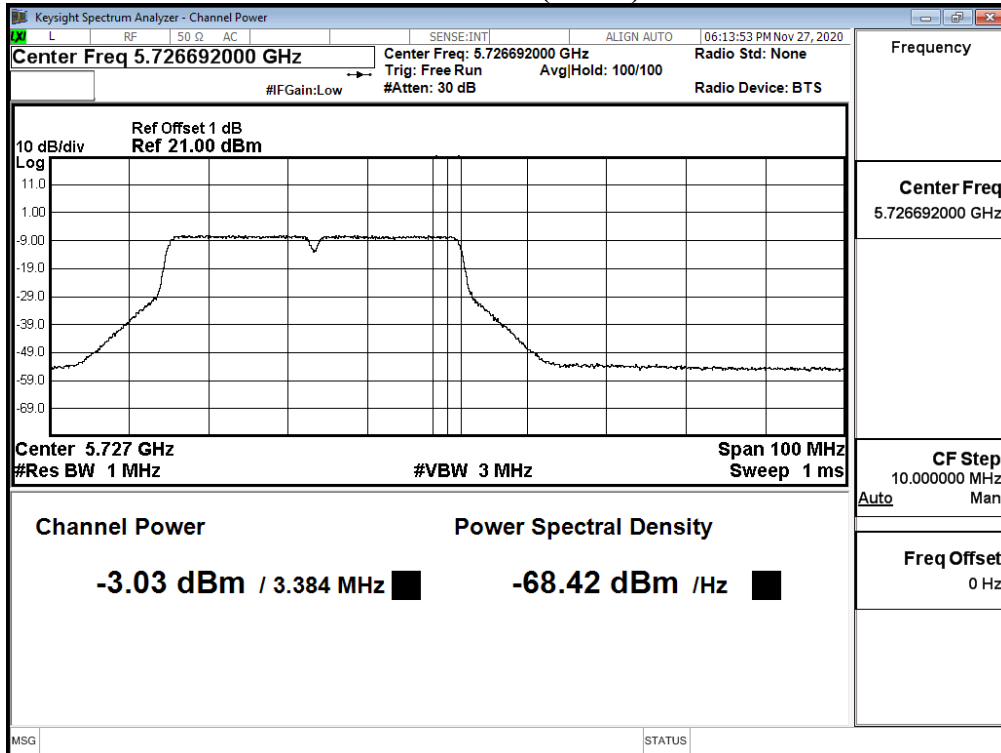
Channel 142



**Maximum conducted output power:
Channel 142 (Band3)**



**Maximum conducted output power:
Channel 142 (Band4)**



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 4 SISO A: Transmit (802.11ac-80BW_32.5Mbps)

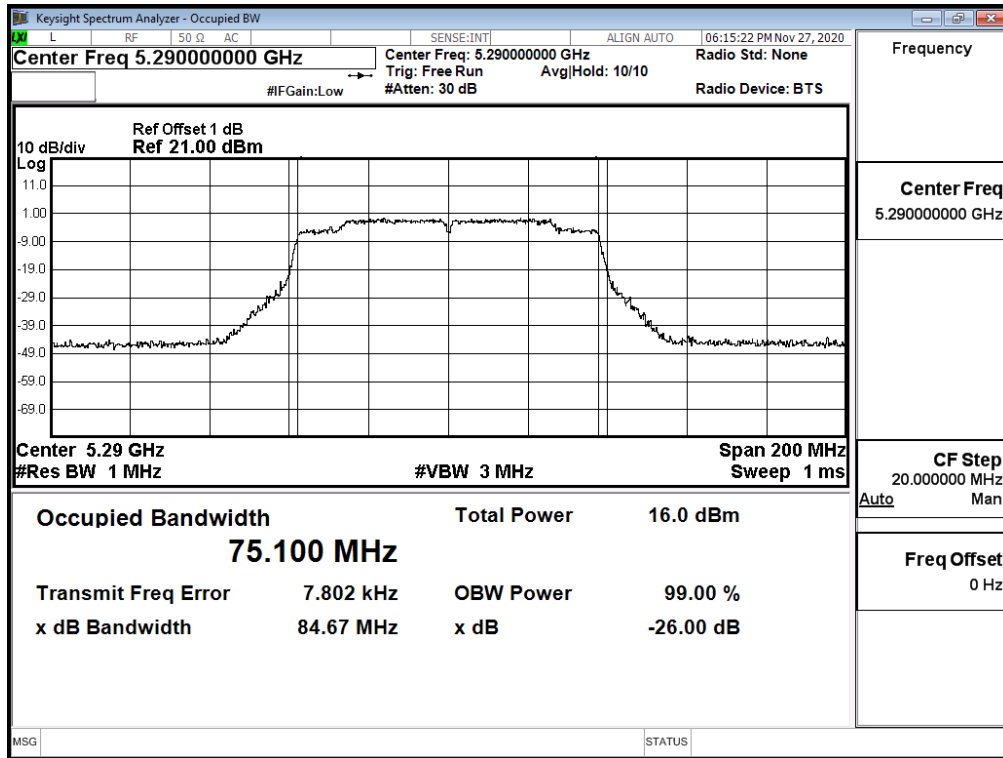
| Cable loss=1dB | | Maximum conducted output power | | | | | | | | | |
|----------------|-----------------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Channel No | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | |
| | | VHT0 | VHT1 | VHT2 | VHT3 | VHT4 | VHT5 | VHT6 | VHT7 | VHT8 | VHT9 |
| 42 | 5210 | 7.59 | 7.49 | 7.40 | 7.31 | 7.22 | 7.15 | 7.09 | 7.01 | 6.95 | 6.88 |
| 58 | 5290 | 7.67 | 7.61 | 7.51 | 7.45 | 7.36 | 7.31 | 7.26 | 7.18 | 7.15 | 7.08 |
| 106ac80 | 5530 | 7.46 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 122ac80 | 5610 | 7.35 | 7.31 | 7.24 | 7.20 | 7.13 | 7.09 | 7.06 | 7.00 | 6.90 | 6.86 |
| 138ac80(Band3) | 5690 | 7.39 | 7.30 | 7.25 | 7.16 | 7.07 | 7.03 | 6.95 | 6.85 | 6.77 | 6.71 |
| 138ac80(Band4) | 5690 | -10.02 | -10.06 | -10.11 | -10.14 | -10.23 | -10.26 | -10.35 | -10.42 | -10.46 | -10.50 |
| 155ac80 | 5775 | 10.96 | 10.88 | 10.78 | 10.75 | 10.71 | 10.68 | 10.65 | 10.58 | 10.54 | 10.50 |

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

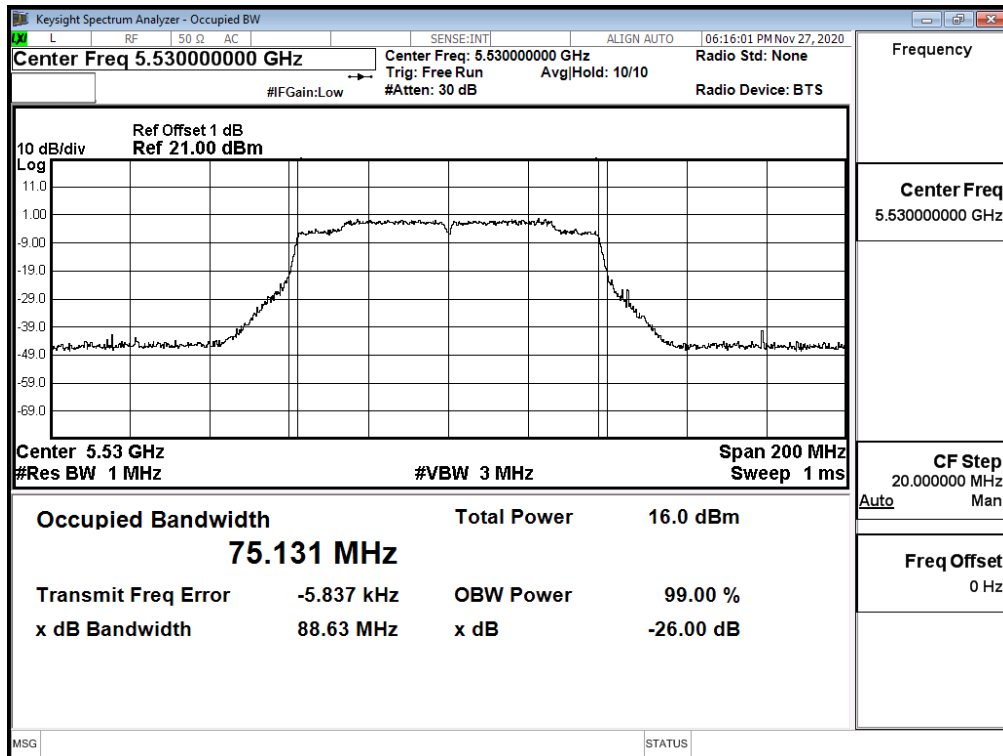
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|----------------|-----------------------|----------------------|--------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 42 | 5210 | -- | 7.59 | 24 | -- | Pass |
| 58 | 5290 | 84.670 | 7.67 | 24 | 30.28 | Pass |
| 106ac80 | 5530 | 88.630 | 7.46 | 24 | 30.48 | Pass |
| 122ac80 | 5610 | 85.480 | 7.35 | 24 | 30.32 | Pass |
| 138ac80(Band3) | 5690 | 77.800 | 7.39 | 24 | 29.91 | Pass |
| 138ac80(Band4) | 5690 | -- | -10.02 | 30 | -- | Pass |
| 155ac80 | 5775 | -- | 10.96 | 30 | -- | Pass |

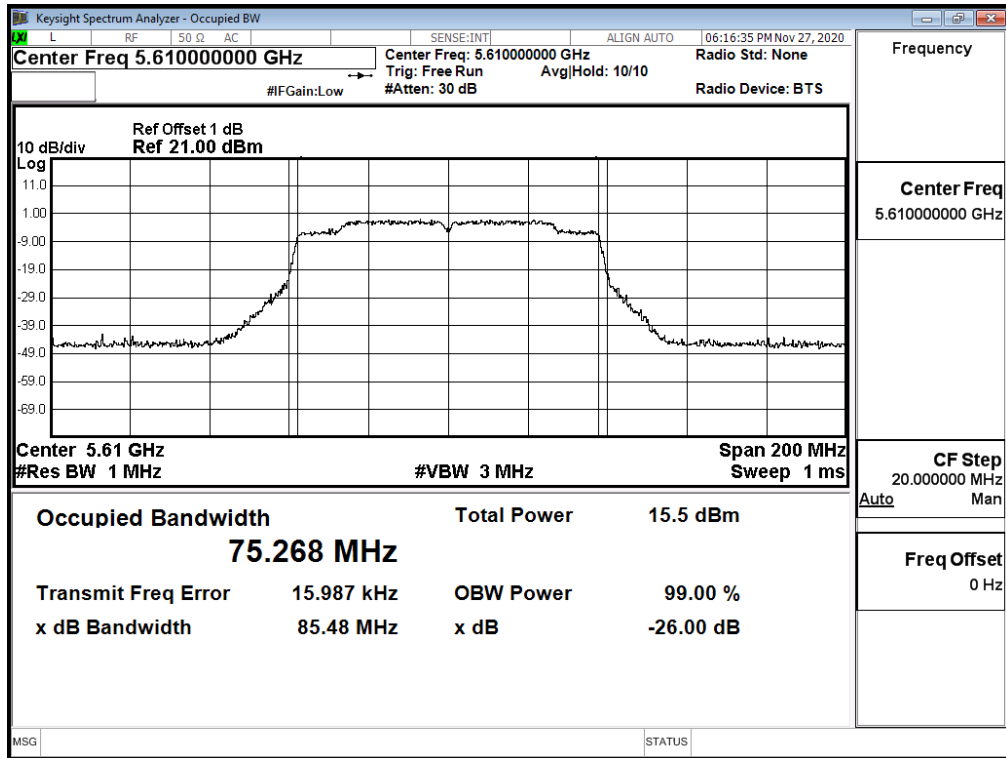
26dB Occupied Bandwidth: Channel 58



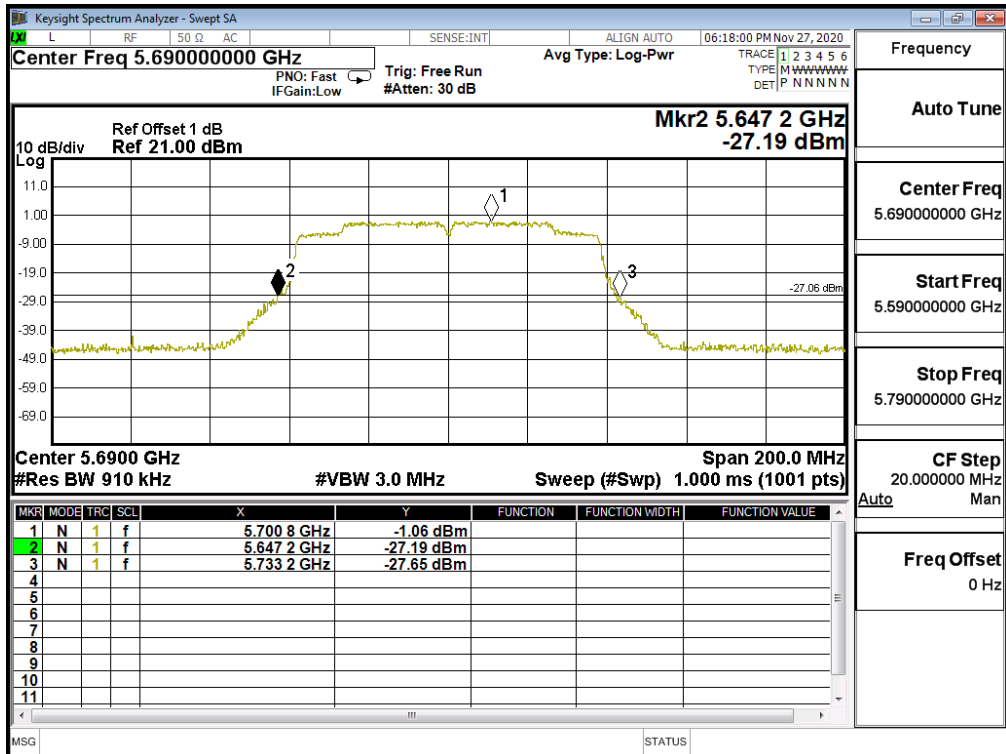
Channel 106



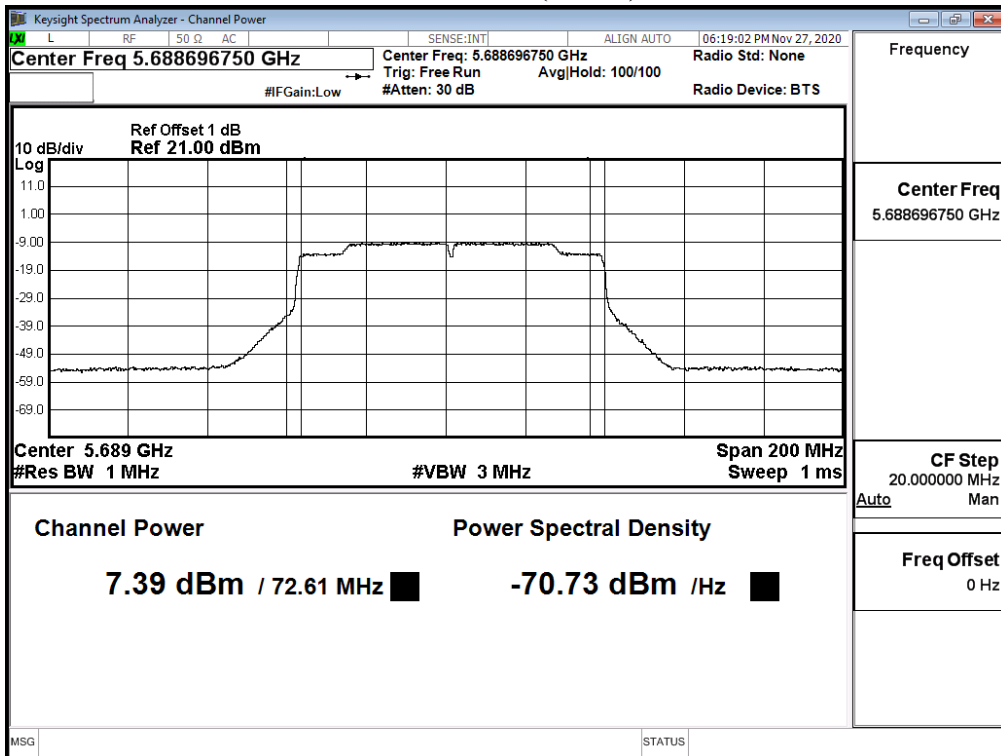
Channel 122



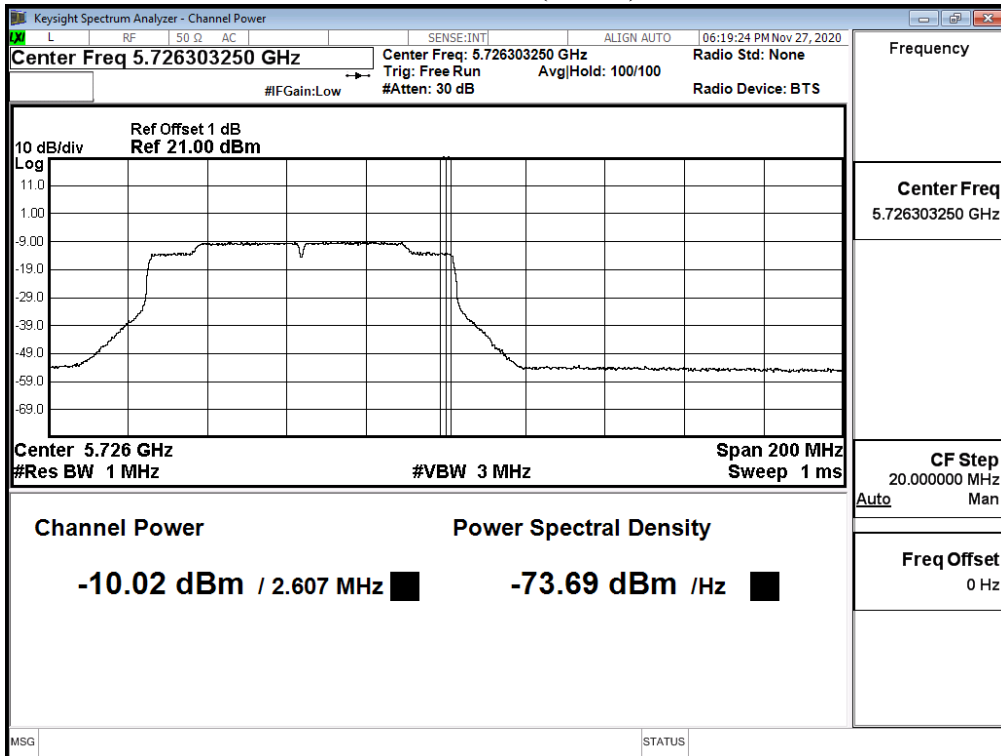
Channel 138



**Maximum conducted output power:
Channel 138 (Band3)**



**Maximum conducted output power:
Channel 138 (Band4)**



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 5 SISO A: Transmit (802.11ac-160BW_65Mbps)

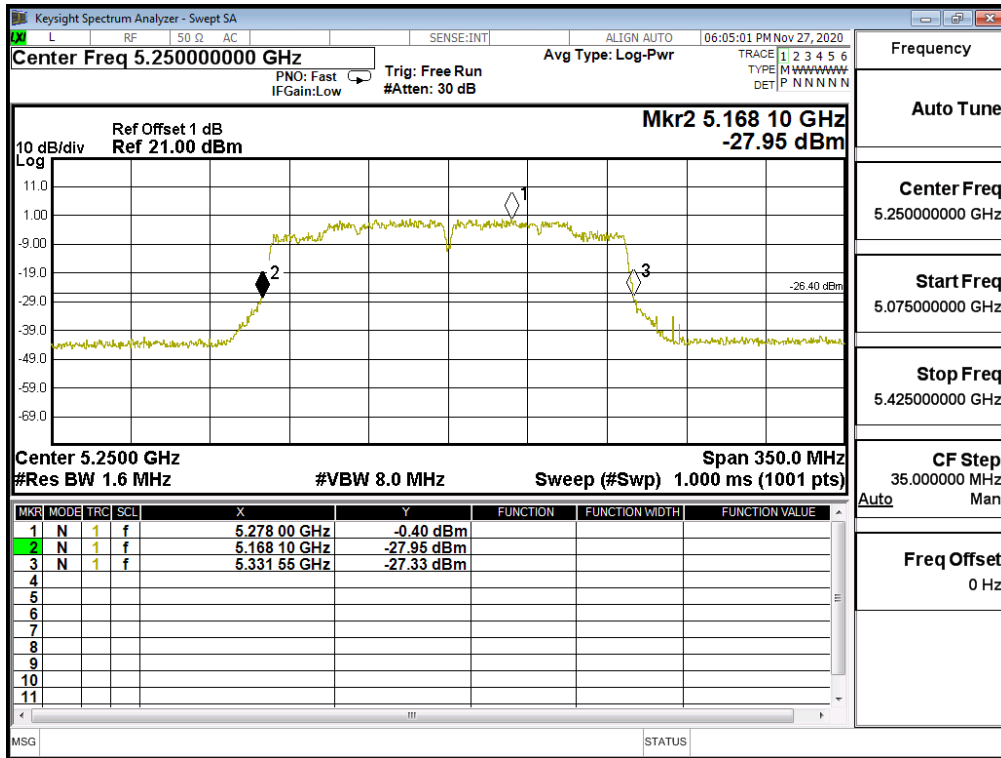
| Cable loss=1dB | | Maximum conducted output power | | | | | | | | | |
|----------------|-----------------|--------------------------------|------|------|------|------|------|------|------|------|------|
| Channel No | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | |
| | | VHT0 | VHT1 | VHT2 | VHT3 | VHT4 | VHT5 | VHT6 | VHT7 | VHT8 | VHT9 |
| 50ac160(Band1) | 5250 | 4.14 | 4.07 | 4.04 | 4.00 | 3.90 | 3.87 | 3.82 | 3.74 | 3.70 | 3.61 |
| 50ac160(Band2) | 5250 | 4.85 | 4.79 | 4.73 | 4.67 | 4.64 | 4.55 | 4.50 | 4.46 | 4.42 | 4.36 |
| 114ac160 | 5570 | 7.46 | 7.39 | 7.30 | 7.21 | 7.17 | 7.08 | 7.01 | 6.92 | 6.82 | 6.76 |

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

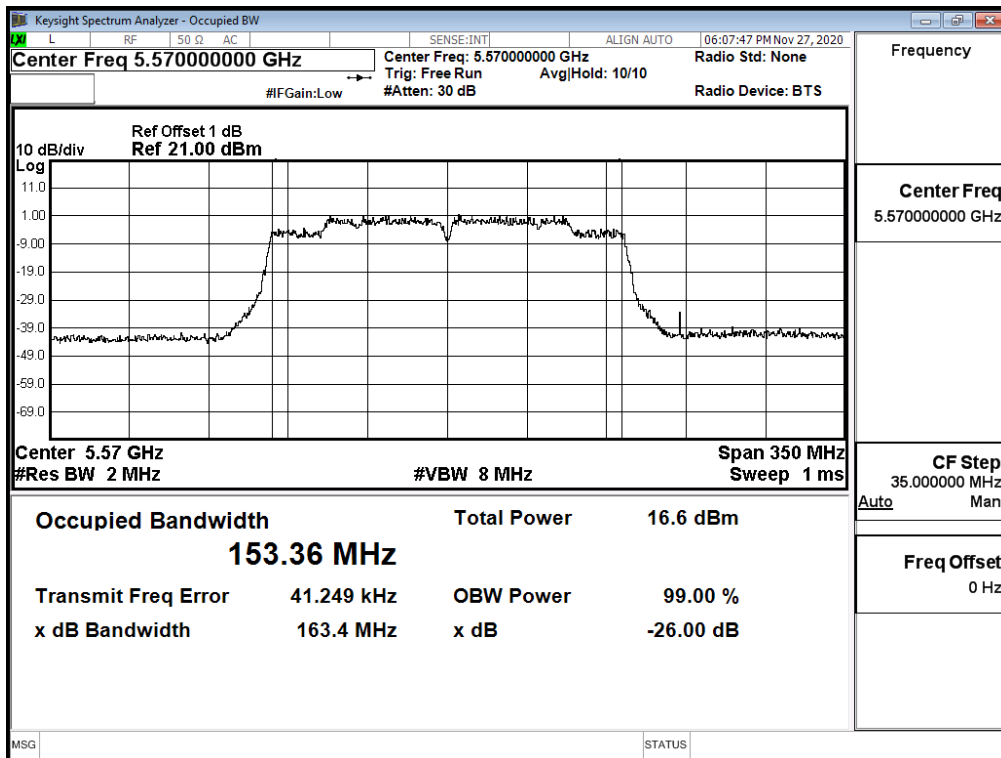
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|----------------|-----------------------|----------------------|--------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 50ac160(Band1) | 5250 | -- | 4.14 | 24 | -- | Pass |
| 80ac160(Band2) | 5250 | 81.550 | 4.85 | 24 | 30.11 | Pass |
| 114ac160 | 5570 | 163.400 | 7.46 | 24 | 33.13 | Pass |

26dB Occupied Bandwidth: Channel 50

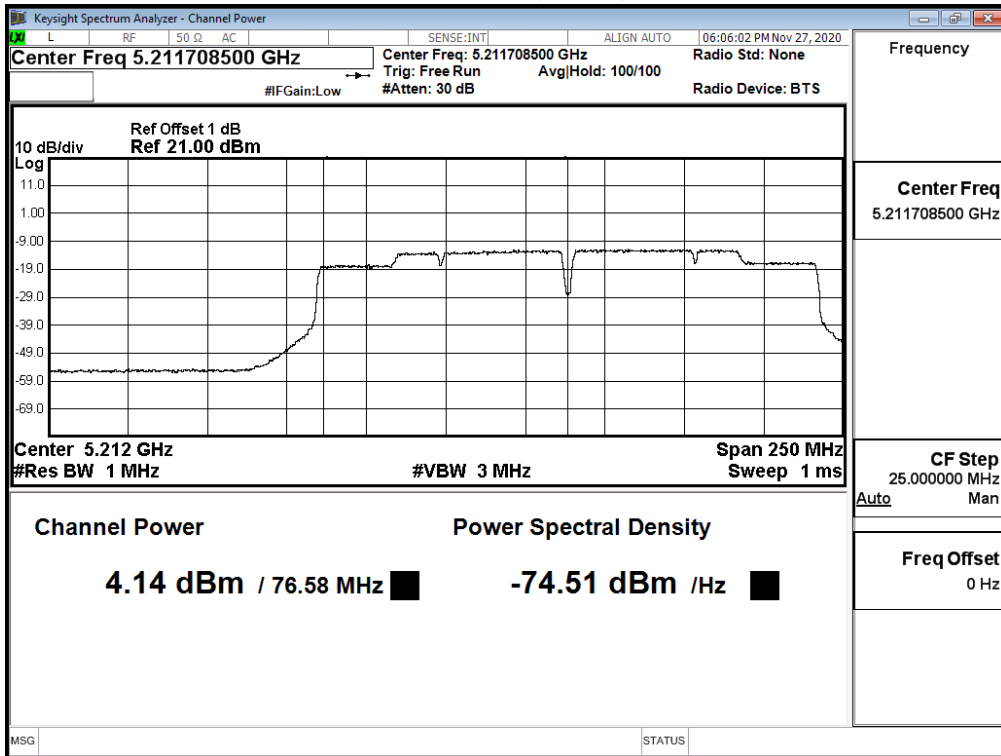


Channel 114



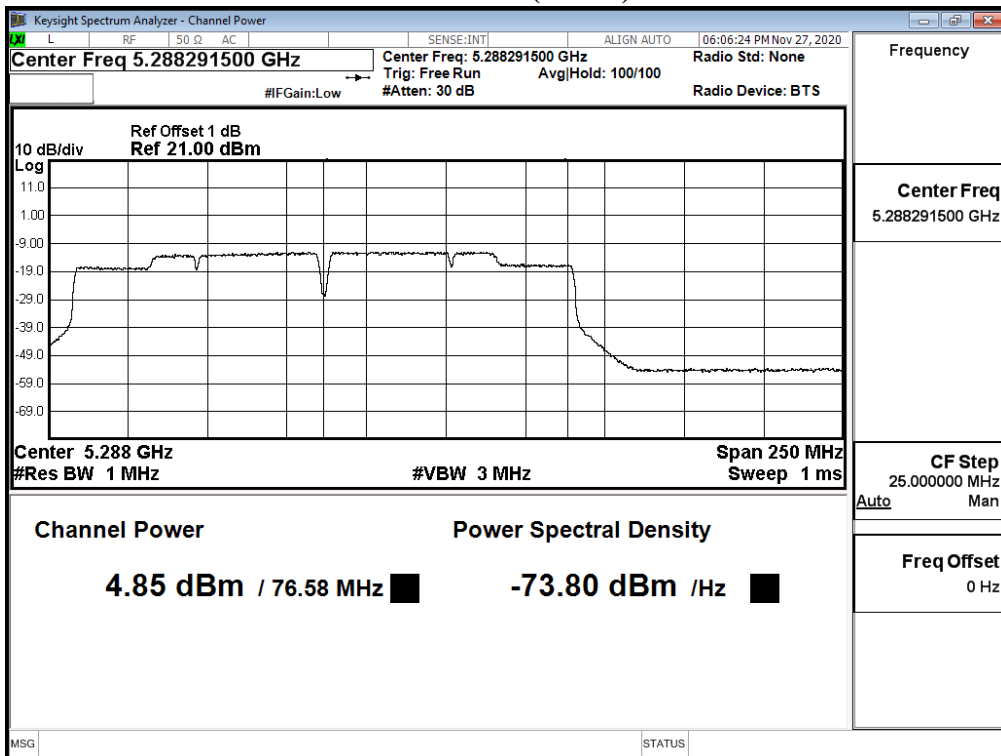
Maximum conducted output power:

Channel 50 (Band1)



Maximum conducted output power:

Channel 50 (Band2)



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 6: SISO A: Transmit (802.11ax-20BW_8.6Mbps)

RU config: Full

| Cable loss=1 dB | | Maximum conducted output power | | | | | | | | | | | |
|-----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 | MCS8 | MCS9 | MCS10 | MCS11 |
| | | Measurement Level (dBm) | | | | | | | | | | | |
| 36 | 5180 | 7.57 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 44 | 5220 | 7.56 | 7.53 | 7.46 | 7.41 | 7.34 | 7.24 | 7.14 | 7.10 | 7.01 | 6.93 | 6.84 | 6.80 |
| 48 | 5240 | 7.52 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 52 | 5260 | 7.62 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 60 | 5300 | 7.61 | 7.54 | 7.48 | 7.39 | 7.36 | 7.30 | 7.25 | 7.15 | 7.09 | 6.99 | 6.93 | 6.85 |
| 64 | 5320 | 7.54 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 100 | 5500 | 7.22 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 116 | 5580 | 7.28 | 7.21 | 7.14 | 7.04 | 6.98 | 6.94 | 6.91 | 6.86 | 6.76 | 6.67 | 6.64 | 6.57 |
| 140 | 5700 | 7.44 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 144(Band3) | 5720 | 6.38 | 6.29 | 6.20 | 6.17 | 6.10 | 6.03 | 5.97 | 5.87 | 5.83 | 5.79 | 5.76 | 5.67 |
| 144(Band4) | 5720 | 0.99 | 0.91 | 0.85 | 0.82 | 0.73 | 0.66 | 0.58 | 0.51 | 0.48 | 0.44 | 0.38 | 0.31 |
| 149 | 5745 | 10.86 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 157 | 5785 | 10.87 | 10.77 | 10.70 | 10.65 | 10.59 | 10.56 | 10.52 | 10.42 | 10.39 | 10.34 | 10.25 | 10.17 |
| 165 | 5825 | 10.89 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 36 | 5180 | -- | 7.57 | 24 | -- | Pass |
| 44 | 5220 | -- | 7.56 | 24 | -- | Pass |
| 48 | 5240 | -- | 7.52 | 24 | -- | Pass |
| 52 | 5260 | 23.330 | 7.62 | 24 | 24.68 | Pass |
| 60 | 5300 | 23.550 | 7.61 | 24 | 24.72 | Pass |
| 64 | 5320 | 23.690 | 7.54 | 24 | 24.75 | Pass |
| 100 | 5500 | 23.560 | 7.22 | 24 | 24.72 | Pass |
| 116 | 5580 | 24.080 | 7.28 | 24 | 24.82 | Pass |
| 140 | 5700 | 23.830 | 7.44 | 24 | 24.77 | Pass |
| 144(Band3) | 5720 | 17.300 | 6.38 | 24 | 23.38 | Pass |
| 144(Band4) | 5720 | -- | 0.99 | 30 | -- | Pass |
| 149 | 5745 | -- | 10.86 | 30 | -- | Pass |
| 157 | 5785 | -- | 10.87 | 30 | -- | Pass |
| 165 | 5825 | -- | 10.89 | 30 | -- | Pass |

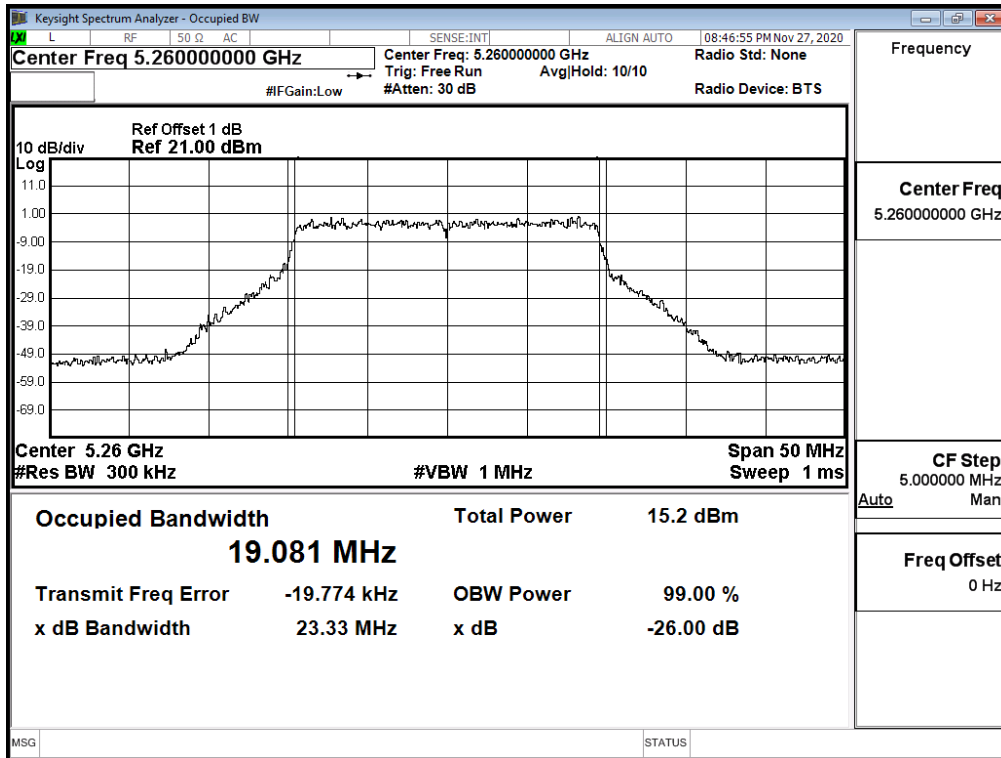
RU config: Other

| Channel No / Frequency (MHz) | RU setting | Average Power Output (dBm) | | | | | | | | | | | | | Required Lim |
|------------------------------------|------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------------|
| | | Data Rate (Mbps) | | | | | | | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 | MCS8 | MCS9 | MCS10 | MCS11 | | |
| 36/5180 | 26/0 | 7.57 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm |
| | 52/37 | 7.52 | 7.47 | 7.38 | 7.32 | 7.25 | 7.20 | 7.14 | 7.06 | 7.01 | 6.91 | 6.81 | 6.75 | <24dBm | |
| | 106/53 | 7.53 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |
| 64/5320 | 26/8 | 7.77 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |
| | 52/40 | 7.57 | 7.54 | 7.49 | 7.41 | 7.37 | 7.29 | 7.20 | 7.10 | 7.03 | 6.95 | 6.92 | 6.87 | <24dBm | |
| | 106/54 | 7.54 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |
| 100/5500 | 26/0 | 7.34 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |
| | 52/37 | 7.45 | 7.35 | 7.30 | 7.20 | 7.15 | 7.07 | 6.98 | 6.92 | 6.82 | 6.78 | 6.73 | 6.65 | <24dBm | |
| | 106/53 | 7.34 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |
| 140/5700 | 26/8 | 7.49 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |
| | 52/40 | 7.41 | 7.36 | 7.29 | 7.25 | 7.16 | 7.08 | 6.98 | 6.89 | 6.83 | 6.79 | 6.72 | 6.65 | <24dBm | |
| | 106/54 | 7.49 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |
| 149/5745 | 26/0 | 10.92 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <30dBm | |
| | 52/37 | 10.99 | 10.92 | 10.84 | 10.80 | 10.70 | 10.60 | 10.55 | 10.48 | 10.45 | 10.37 | 10.30 | 10.26 | <30dBm | |
| | 106/53 | 10.99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <30dBm | |

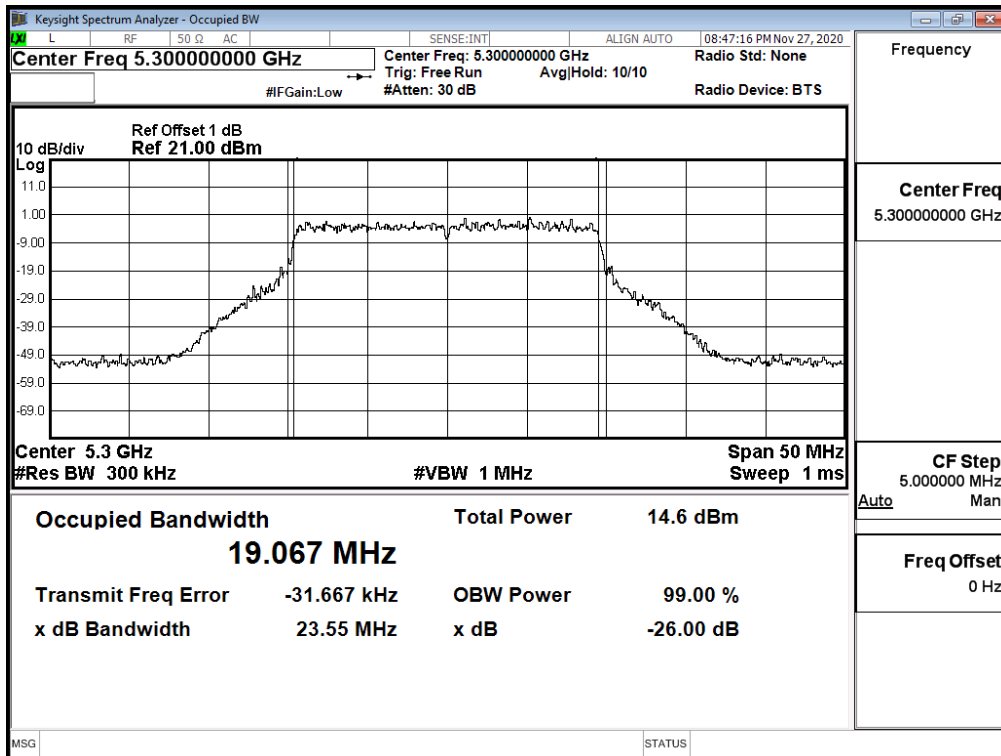
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 36/5180 | 26/0 | -- | 7.57 | 24 | -- | Pass |
| | 52/37 | -- | 7.52 | 24 | -- | Pass |
| | 106/53 | -- | 7.53 | 24 | -- | Pass |
| 64/5320 | 26/8 | 20.630 | 7.77 | 24 | 24.14 | Pass |
| | 52/40 | 21.490 | 7.57 | 24 | 24.32 | Pass |
| | 106/54 | 21.800 | 7.54 | 24 | 24.38 | Pass |
| 100/5500 | 26/0 | 20.420 | 7.34 | 24 | 24.10 | Pass |
| | 52/37 | 20.720 | 7.45 | 24 | 24.16 | Pass |
| | 106/53 | 20.760 | 7.34 | 24 | 24.17 | Pass |
| 140/5700 | 26/8 | 20.840 | 7.49 | 24 | 24.19 | Pass |
| | 52/40 | 21.230 | 7.41 | 24 | 24.27 | Pass |
| | 106/54 | 22.180 | 7.49 | 24 | 24.46 | Pass |
| 149/5745 | 26/0 | -- | 10.92 | 30 | -- | Pass |
| | 52/37 | -- | 10.99 | 30 | -- | Pass |
| | 106/53 | -- | 10.99 | 30 | -- | Pass |

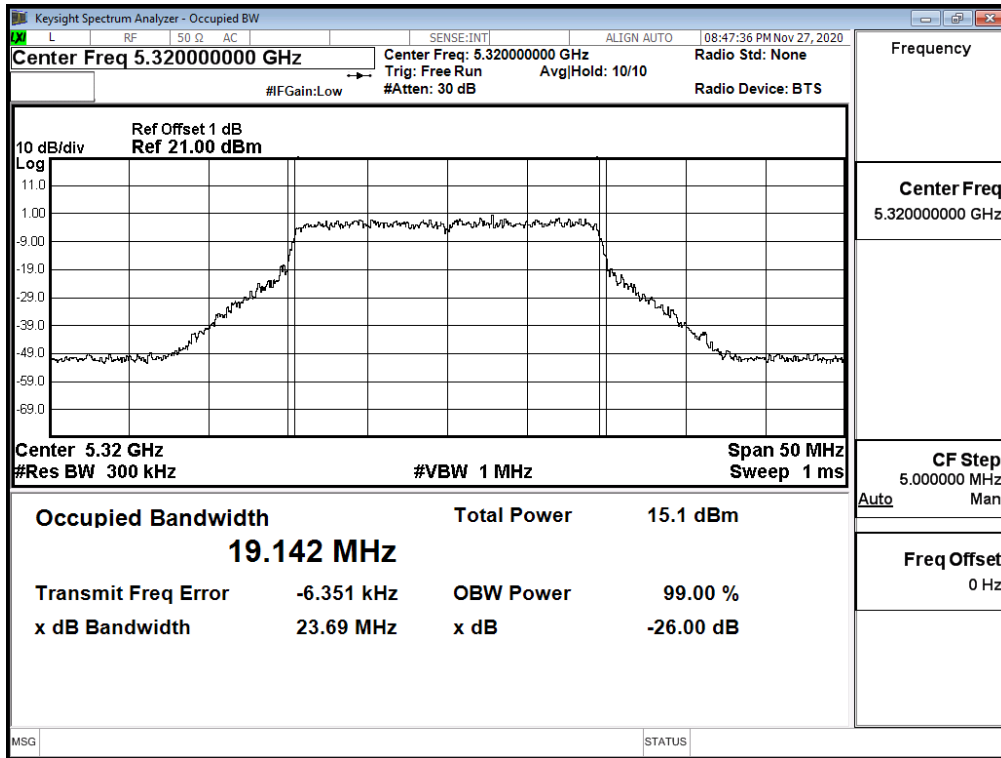
RU config: Full
26dB Occupied Bandwidth:
Channel 52



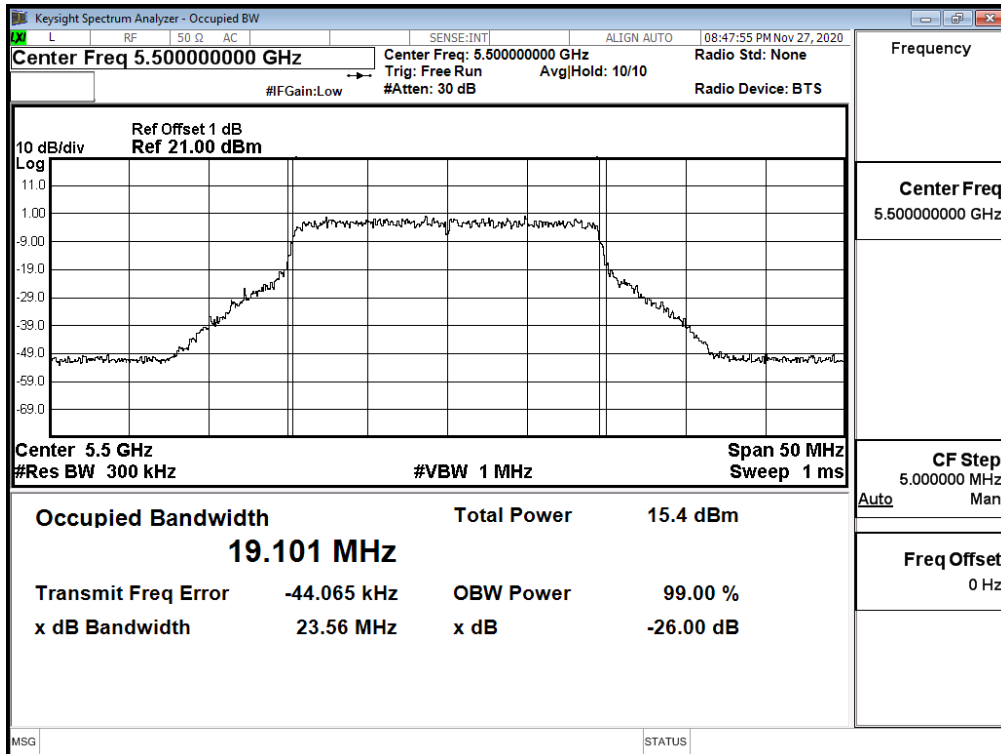
Channel 60



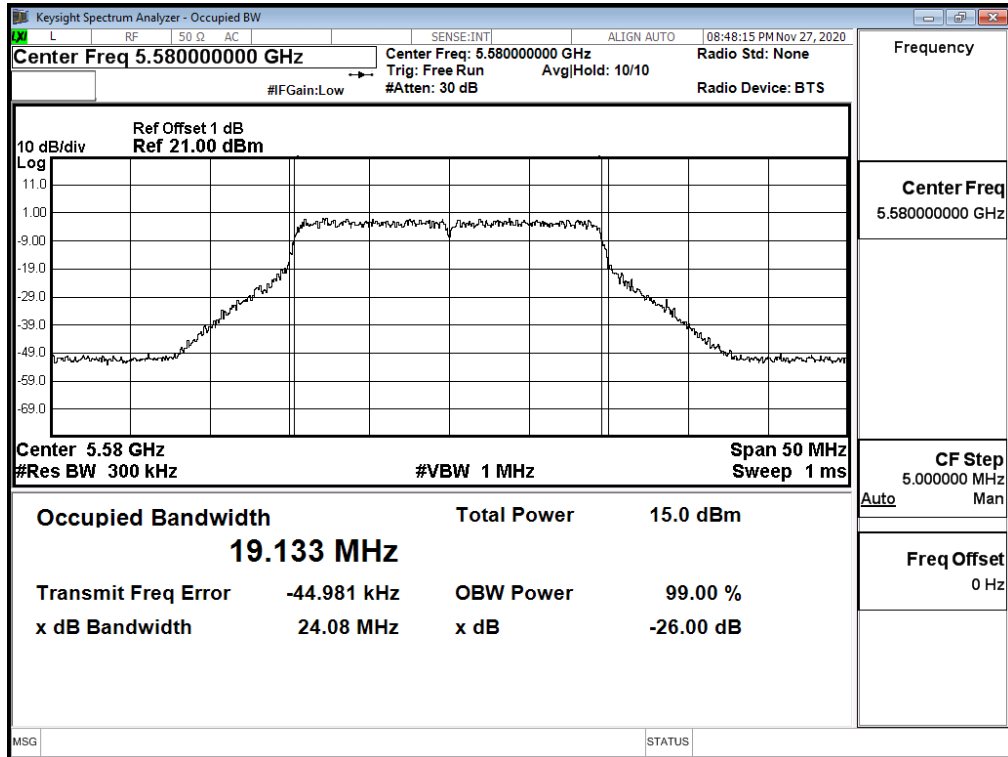
Channel 64



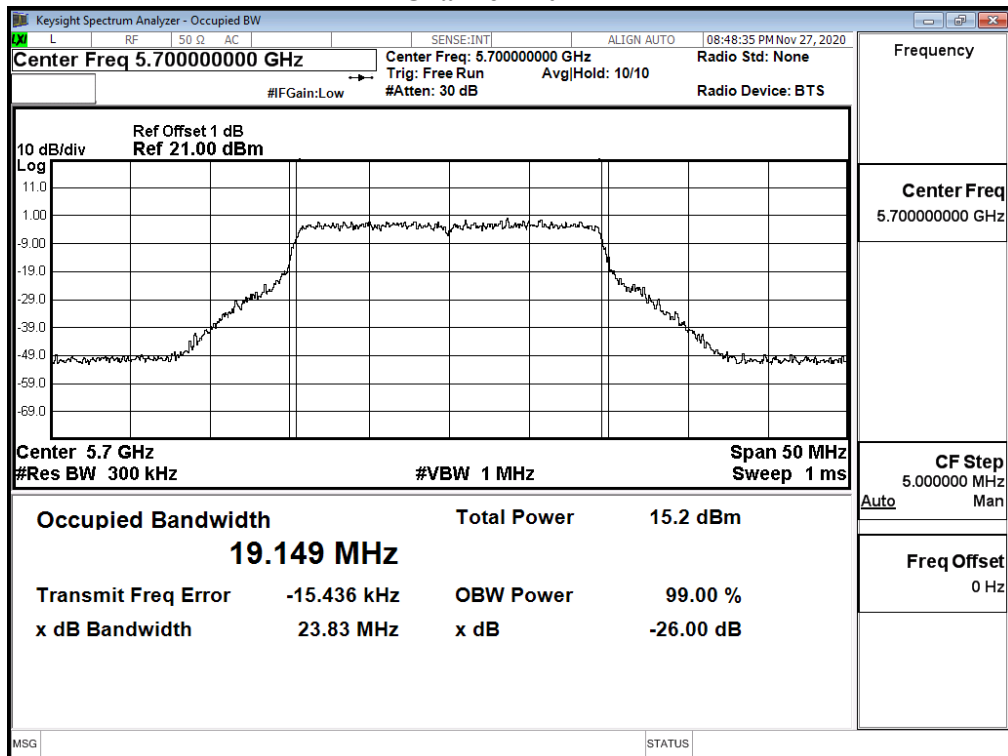
Channel 100



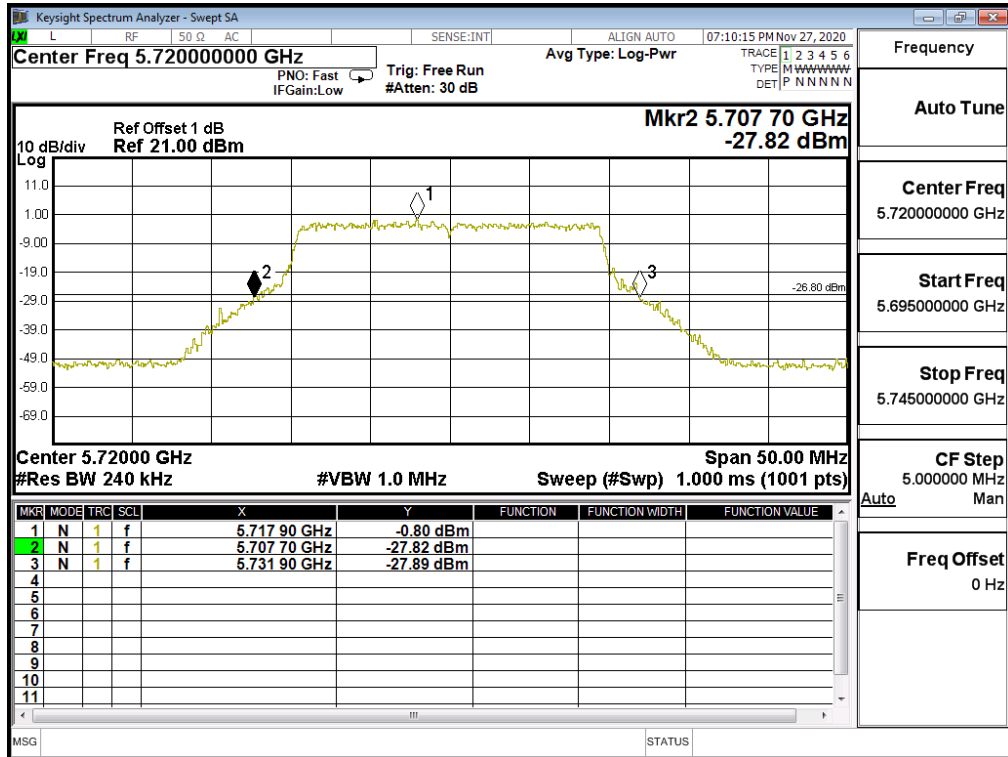
Channel 116



Channel 140



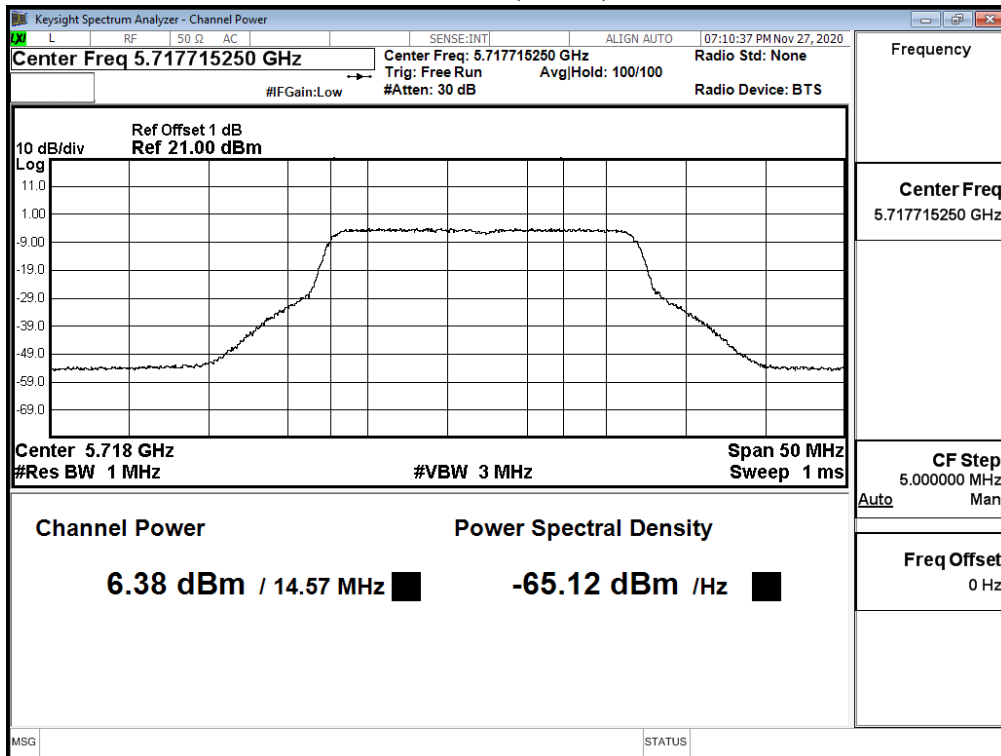
Channel 144



RU config: Full

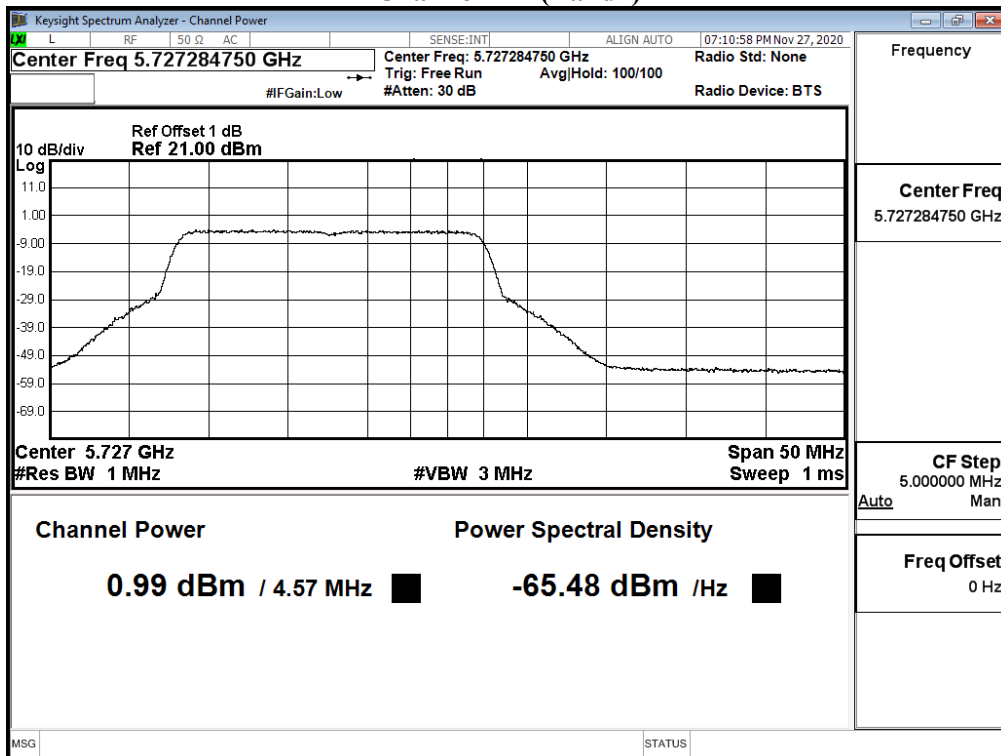
Maximum conducted output power:

Channel 144 (Band3)

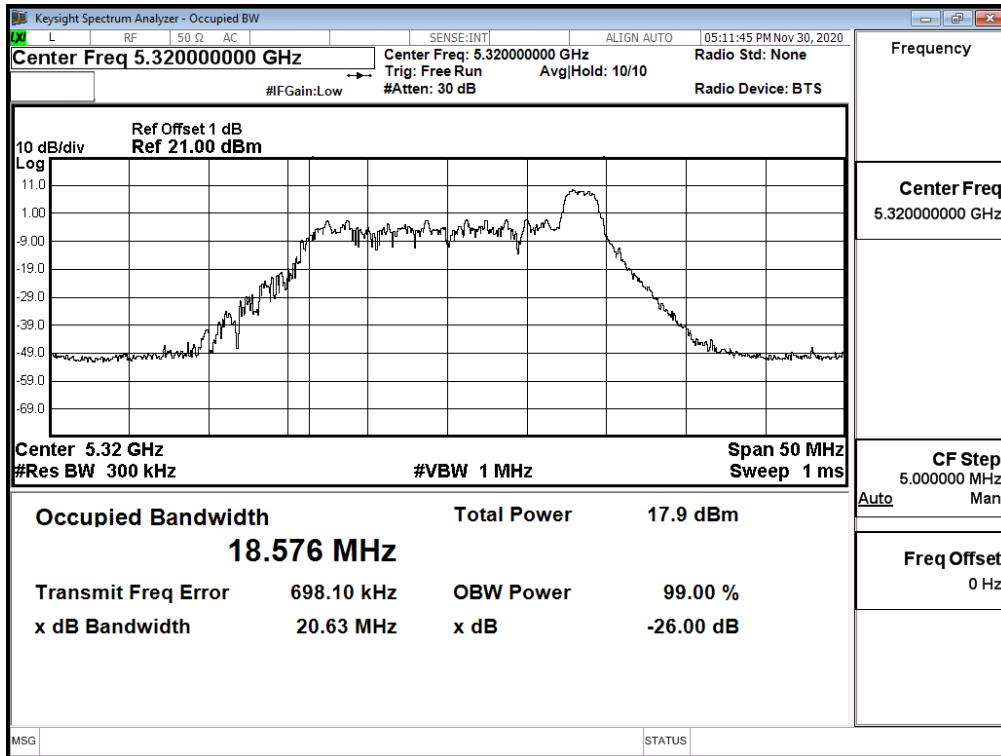


Maximum conducted output power:

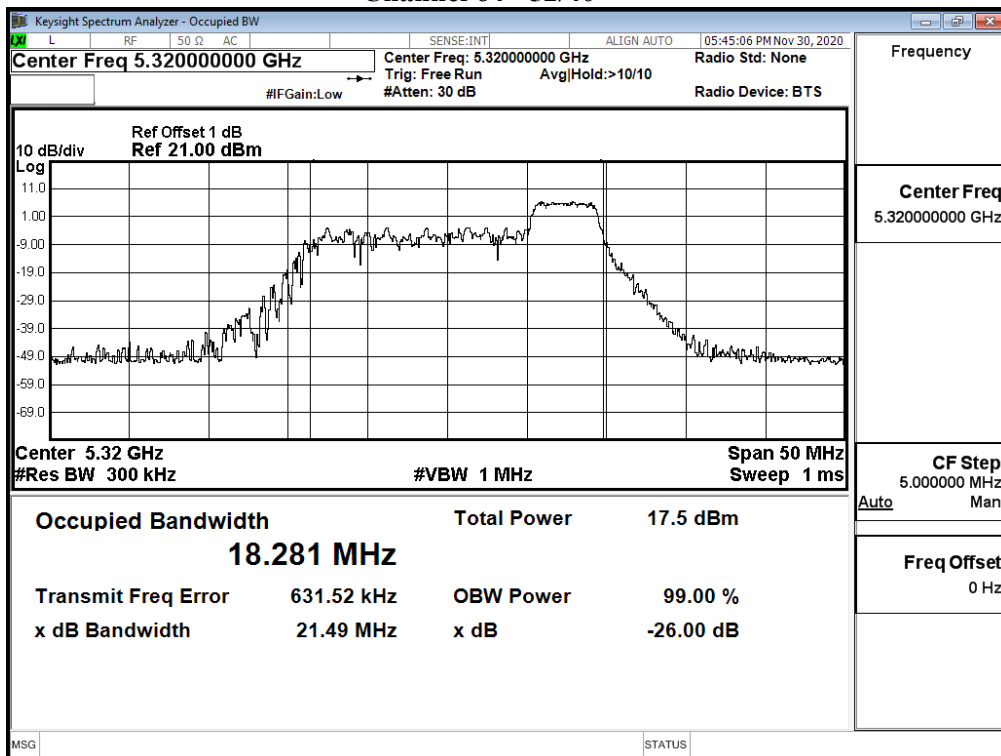
Channel 144 (Band4)



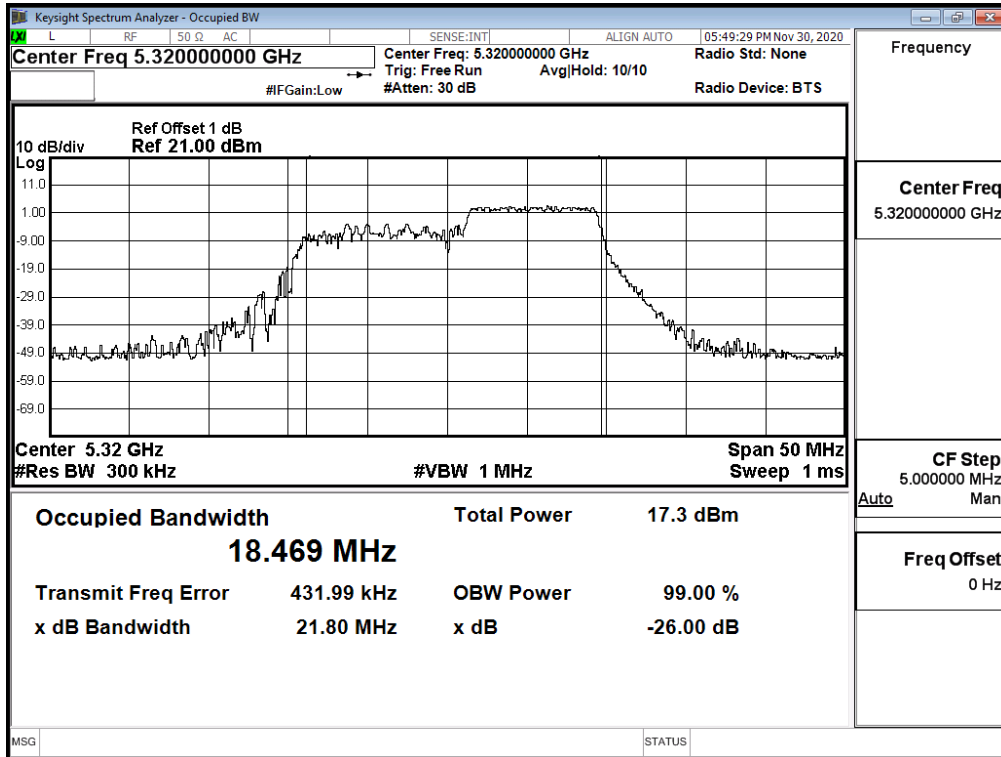
RU config: Other
26dB Occupied Bandwidth:
Channel 64 - 26/8



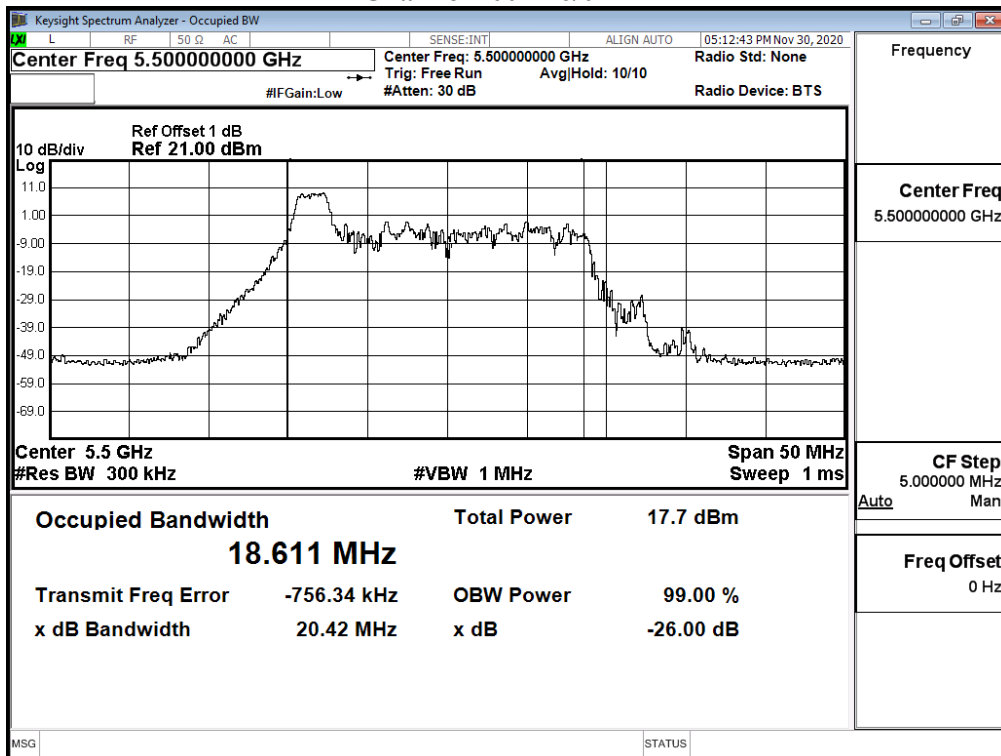
Channel 64 - 52/40



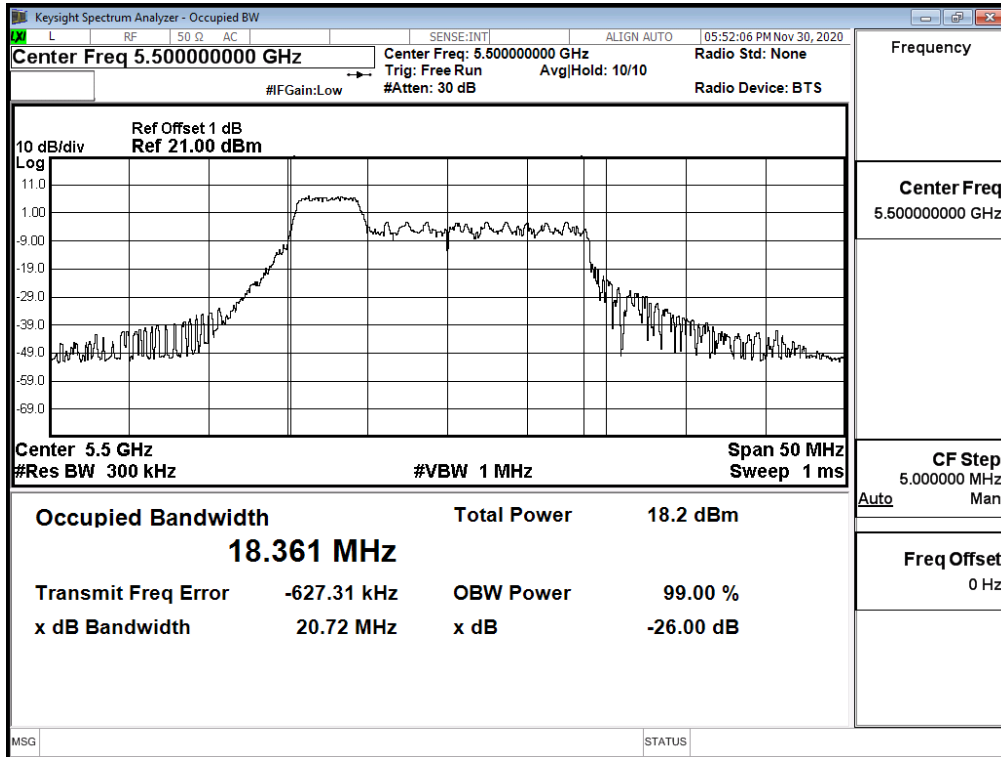
Channel 64 - 106/54



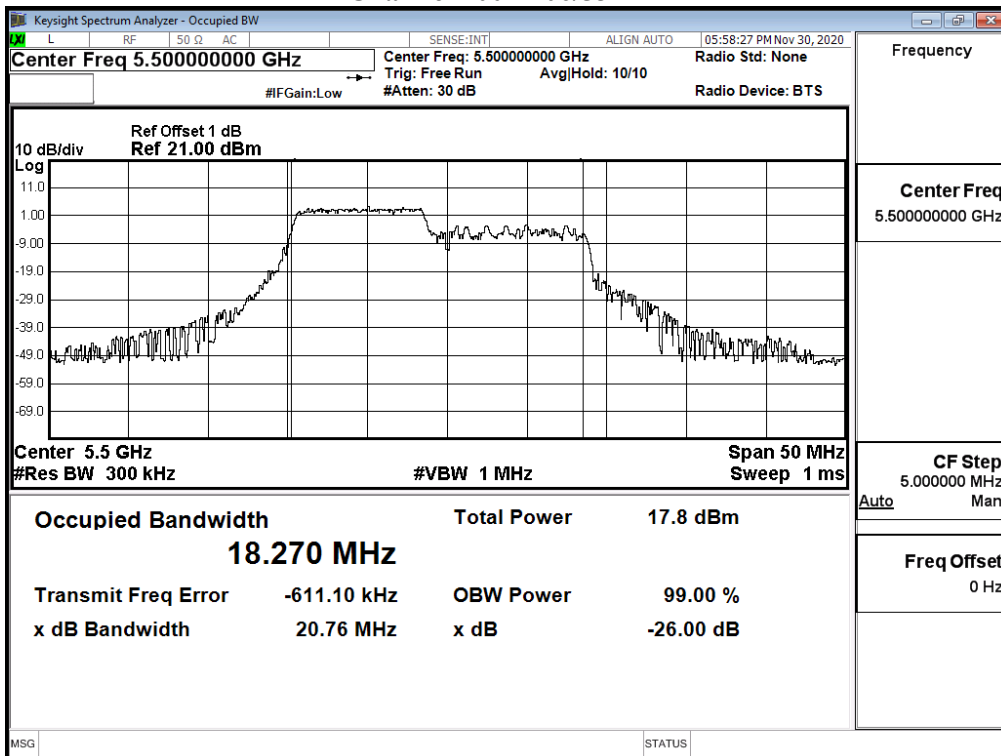
Channel 100 - 26/0



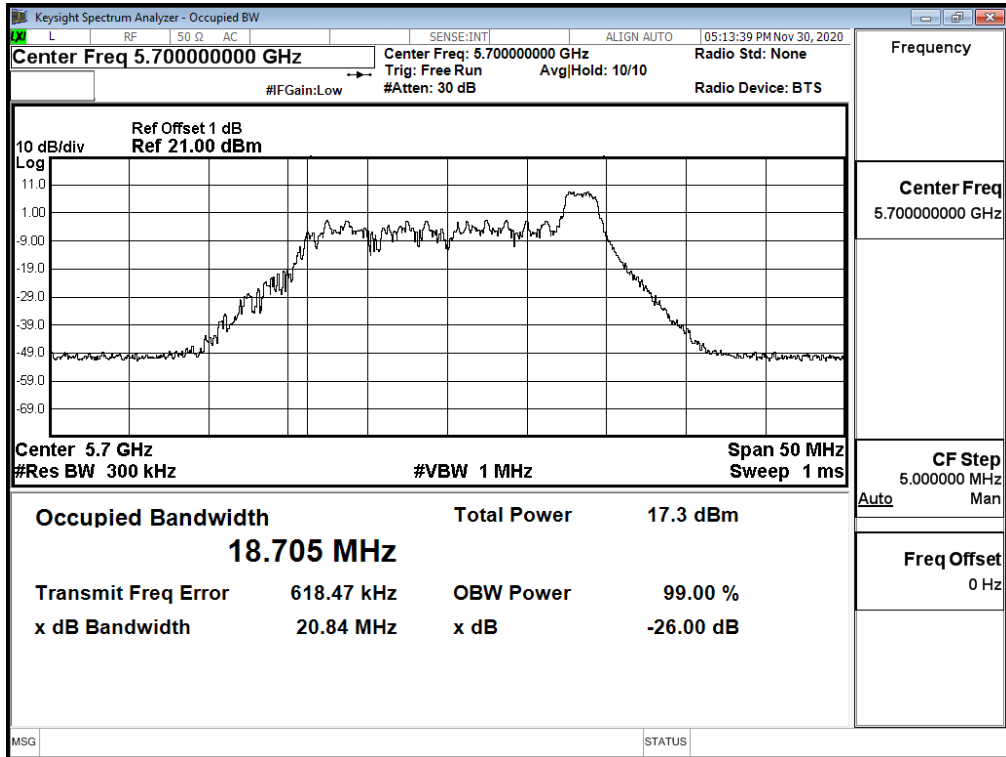
Channel 100 - 52/37



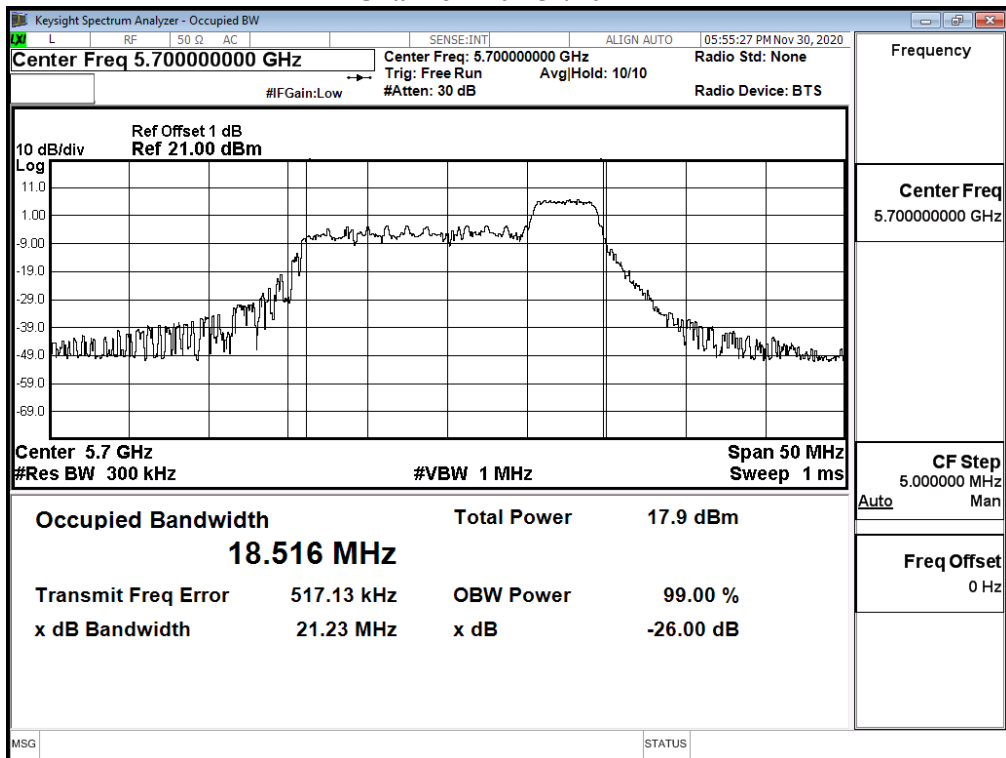
Channel 100 - 106/53



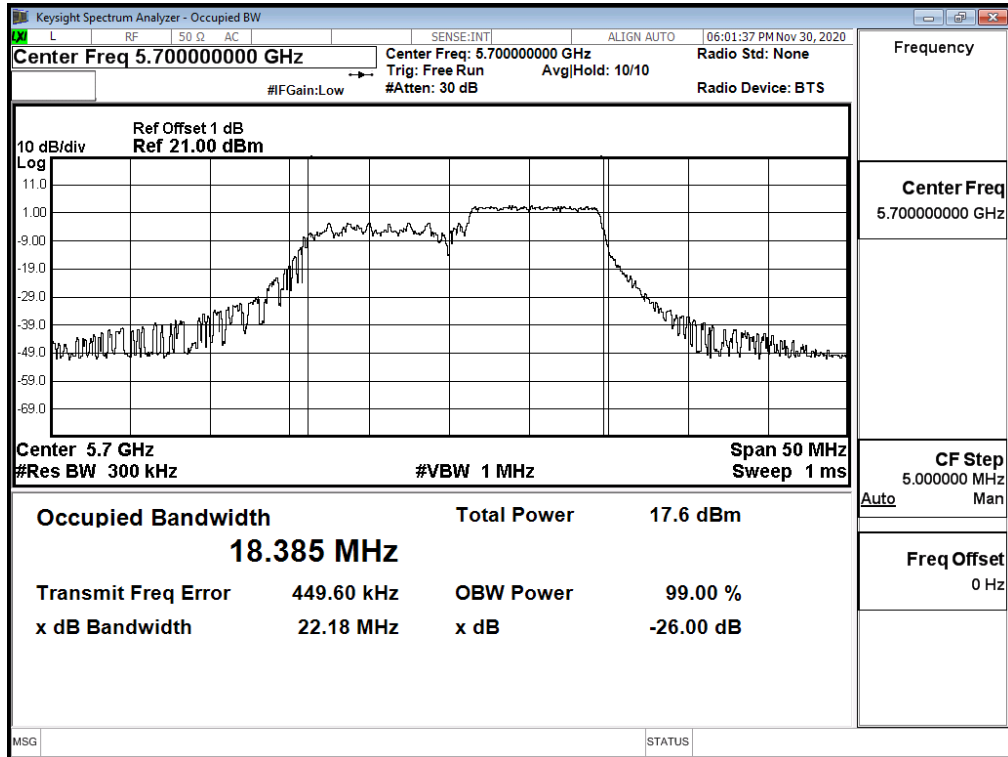
Channel 140 - 26/8



Channel 140 - 52/40



Channel 140 - 106/54



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 7: SISO A: Transmit (802.11ax-40BW_17.2Mbps)

RU config: Full

| Cable loss=1dB | | Maximum conducted output power | | | | | | | | | | | |
|----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 | MCS8 | MCS9 | MCS10 | MCS11 |
| | | Measurement Level (dBm) | | | | | | | | | | | |
| 38 | 5190 | 7.55 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 46 | 5230 | 7.55 | 7.52 | 7.42 | 7.36 | 7.31 | 7.26 | 7.16 | 7.08 | 7.04 | 7.01 | 6.95 | 6.92 |
| 54 | 5270 | 7.52 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 62 | 5310 | 7.51 | 7.43 | 7.34 | 7.26 | 7.19 | 7.14 | 7.10 | 7.07 | 6.99 | 6.94 | 6.91 | 6.83 |
| 102 | 5510 | 7.43 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 110 | 5550 | 7.30 | 7.21 | 7.14 | 7.11 | 7.08 | 7.04 | 7.01 | 6.95 | 6.87 | 6.79 | 6.69 | 6.64 |
| 134 | 5670 | 7.37 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 142F(Band3) | 5710 | 6.93 | 6.89 | 6.84 | 6.80 | 6.74 | 6.68 | 6.58 | 6.55 | 6.45 | 6.40 | 6.30 | 6.20 |
| 142F(Band4) | 5710 | -2.51 | -2.54 | -2.61 | -2.64 | -2.74 | -2.83 | -2.93 | -3.01 | -3.06 | -3.12 | -3.19 | -3.22 |
| 151 | 5755 | 10.93 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 159 | 5795 | 10.99 | 10.91 | 10.82 | 10.77 | 10.70 | 10.60 | 10.55 | 10.49 | 10.39 | 10.35 | 10.26 | 10.23 |

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|-------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 38 | 5190 | -- | 7.55 | 24 | -- | Pass |
| 46 | 5230 | -- | 7.55 | 24 | -- | Pass |
| 54 | 5270 | 43.550 | 7.52 | 24 | 27.39 | Pass |
| 62 | 5310 | 45.110 | 7.51 | 24 | 27.54 | Pass |
| 102 | 5510 | 44.380 | 7.43 | 24 | 27.47 | Pass |
| 110 | 5550 | 44.660 | 7.30 | 24 | 27.50 | Pass |
| 134 | 5670 | 44.000 | 7.37 | 24 | 27.43 | Pass |
| 142F(Band3) | 5710 | 36.100 | 6.93 | 24 | 26.58 | Pass |
| 142F(Band4) | 5710 | -- | -2.51 | 30 | -- | Pass |
| 151 | 5755 | -- | 10.93 | 30 | -- | Pass |
| 159 | 5795 | -- | 10.99 | 30 | -- | Pass |

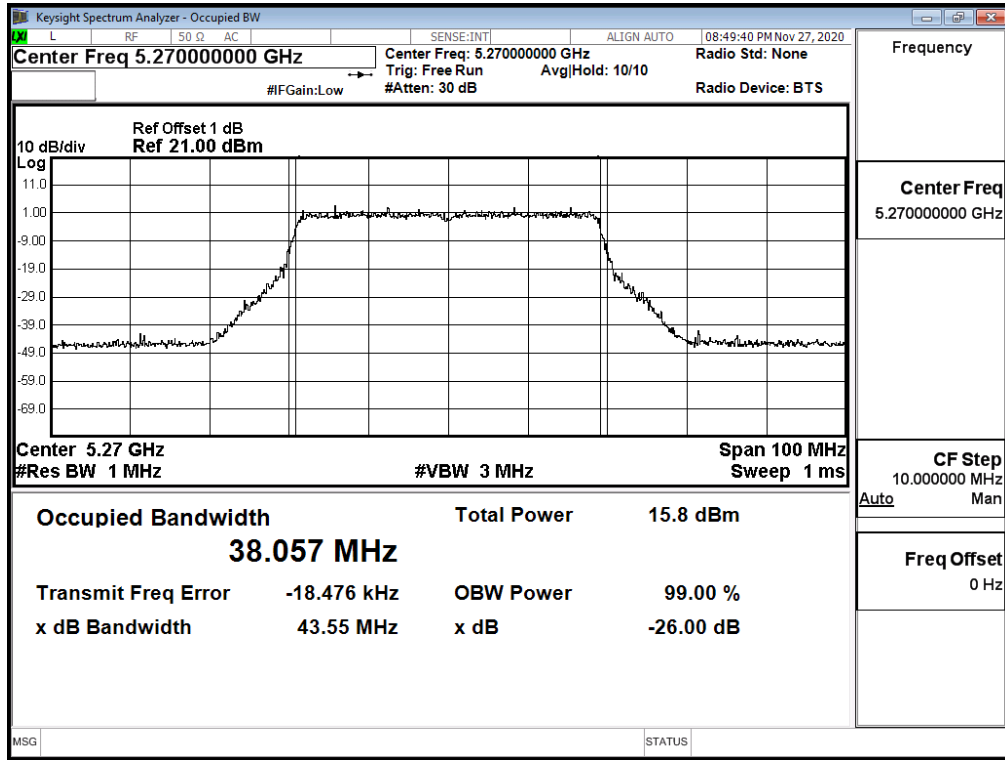
RU config: Other

| Channel No / Frequency (MHz) | RU setting | Average Power Output (dBm) | | | | | | | | | | | | | Required Limi |
|------------------------------------|------------|----------------------------|------|------|------|------|------|------|------|------|------|-------|-------|--------|---------------|
| | | Data Rate (Mbps) | | | | | | | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 | MCS8 | MCS9 | MCS10 | MCS11 | | |
| 38 / 5190 | 242/61 | 7.52 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm |
| 62 / 5310 | 242/62 | 7.68 | 7.61 | 7.52 | 7.42 | 7.39 | 7.30 | 7.20 | 7.17 | 7.11 | 7.03 | 6.96 | 6.88 | <24dBm | |
| 102 / 5510 | 242/61 | 7.37 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |
| 134 / 5670 | 242/62 | 7.35 | 7.27 | 7.21 | 7.17 | 7.11 | 7.08 | 7.02 | 6.99 | 6.92 | 6.84 | 6.77 | 6.67 | <24dBm | |
| 151 / 5755 | 242/61 | 10.98 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <24dBm | |

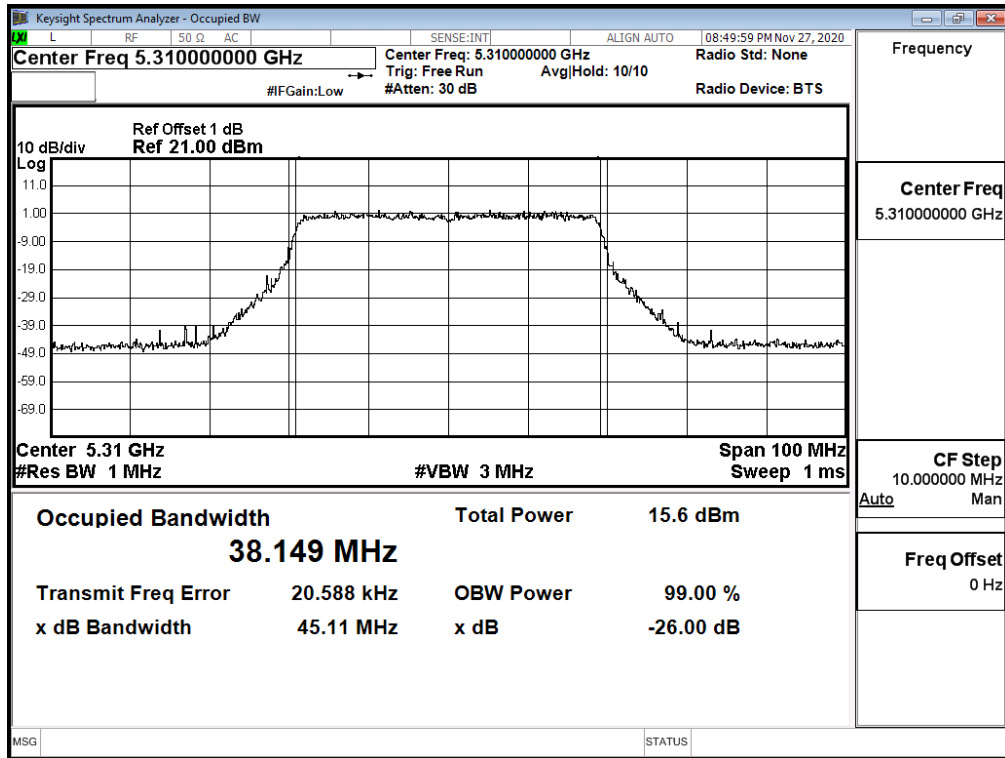
Maximum conducted output power Measurement:

| Channel No /Frequency Range (MHz) | RU setting | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|---|------------|--------------------------------|------------------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 38 / 5190 | 242/61 | | 7.52 | 24 | | Pass |
| 62 / 5310 | 242/62 | 23.480 | 7.68 | 24 | 24.71 | Pass |
| 102 / 5510 | 242/61 | 22.500 | 7.37 | 24 | 24.52 | Pass |
| 134 / 5670 | 242/62 | 22.330 | 7.35 | 24 | 24.49 | Pass |
| 151 / 5755 | 242/61 | | 10.98 | 30 | | Pass |

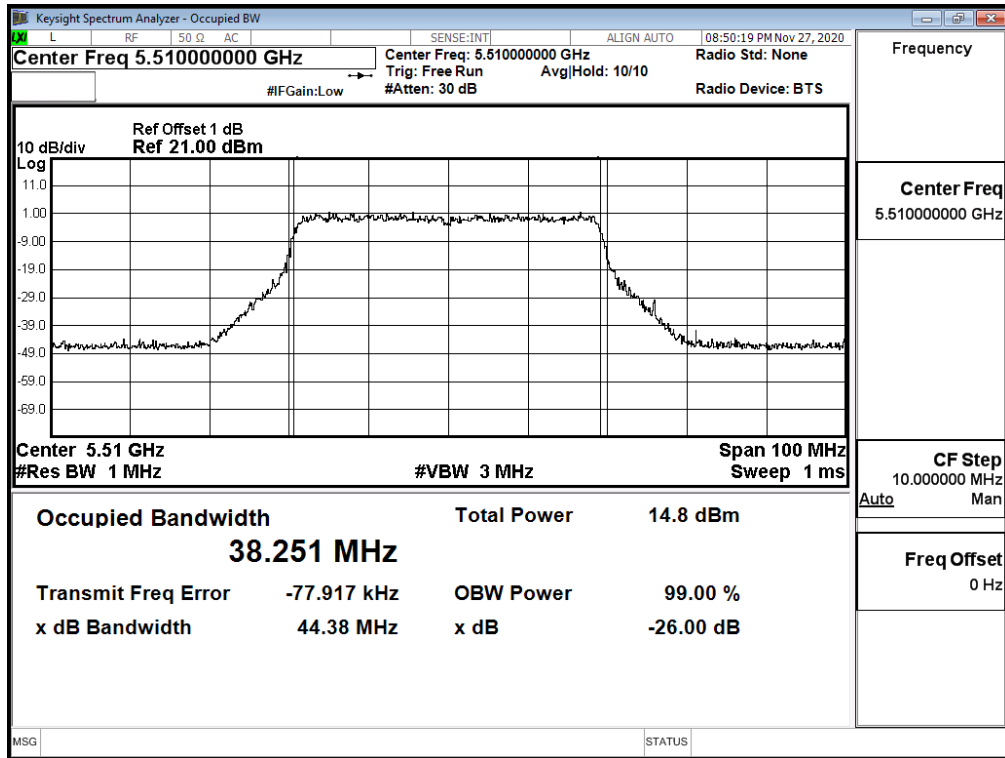
RU config: Full
26dB Occupied Bandwidth:
Channel 54



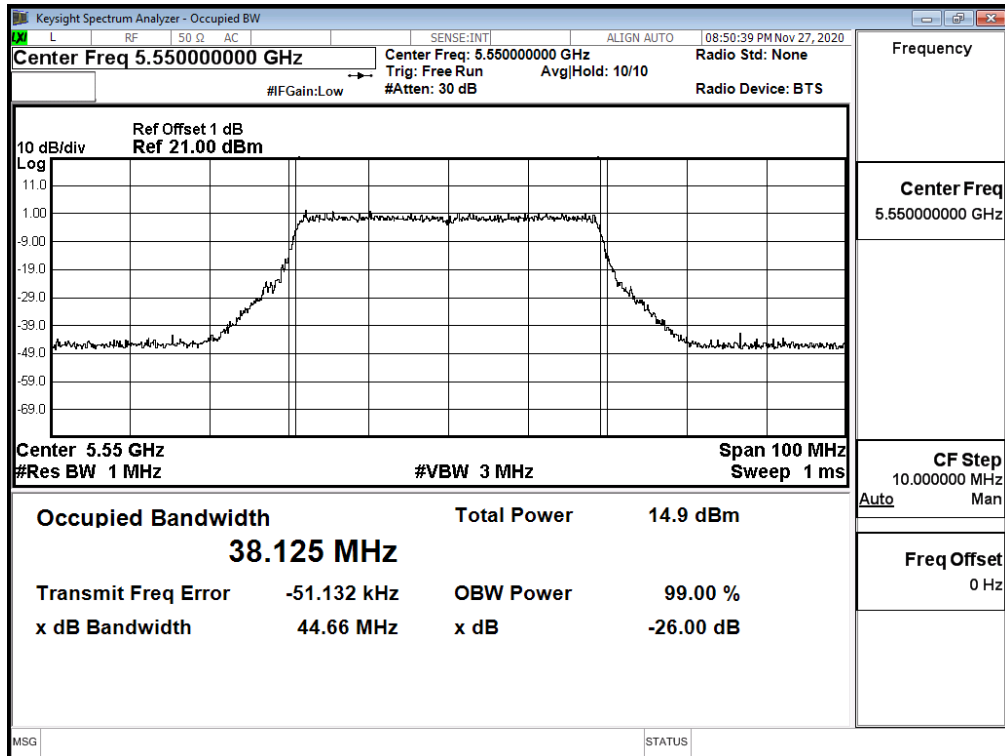
Channel 62



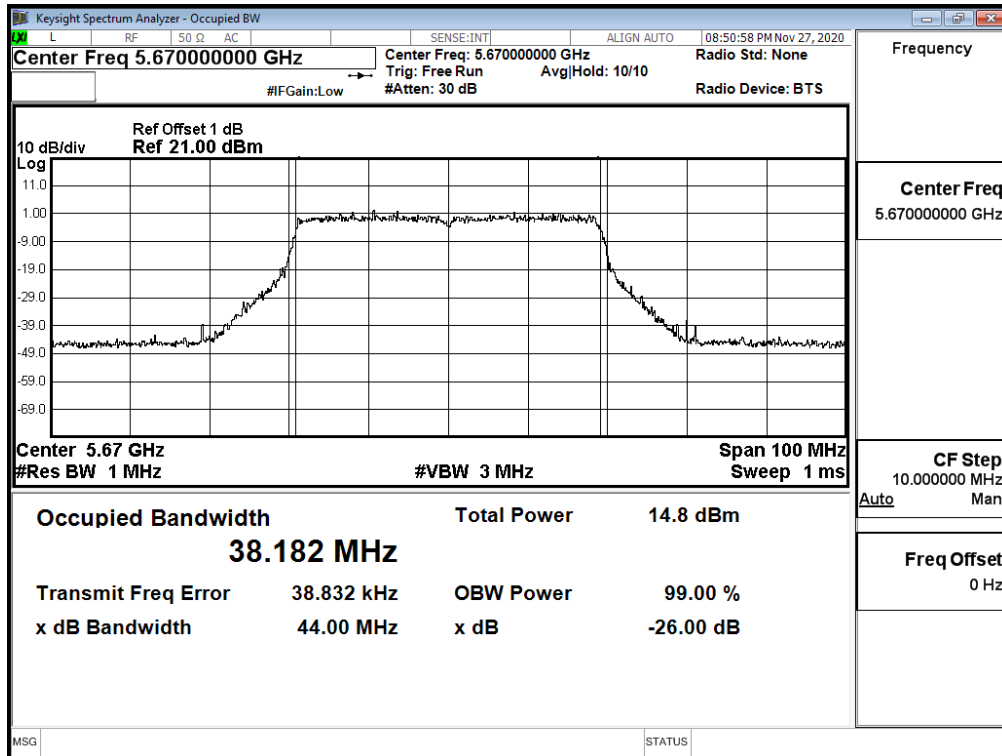
Channel 102



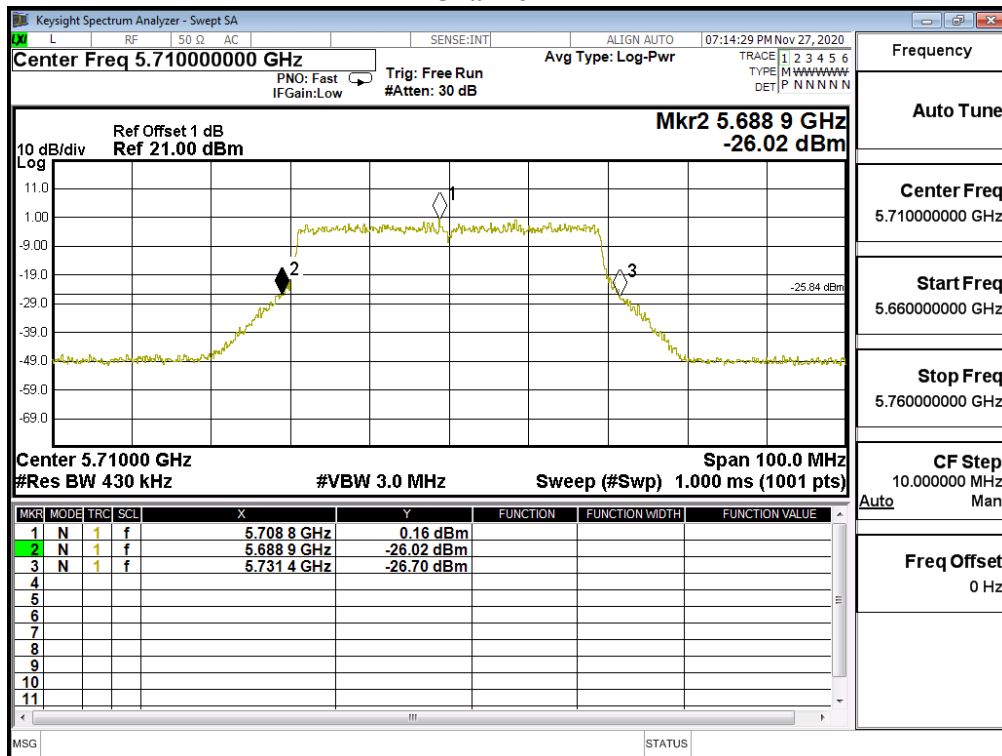
Channel 110



Channel 134



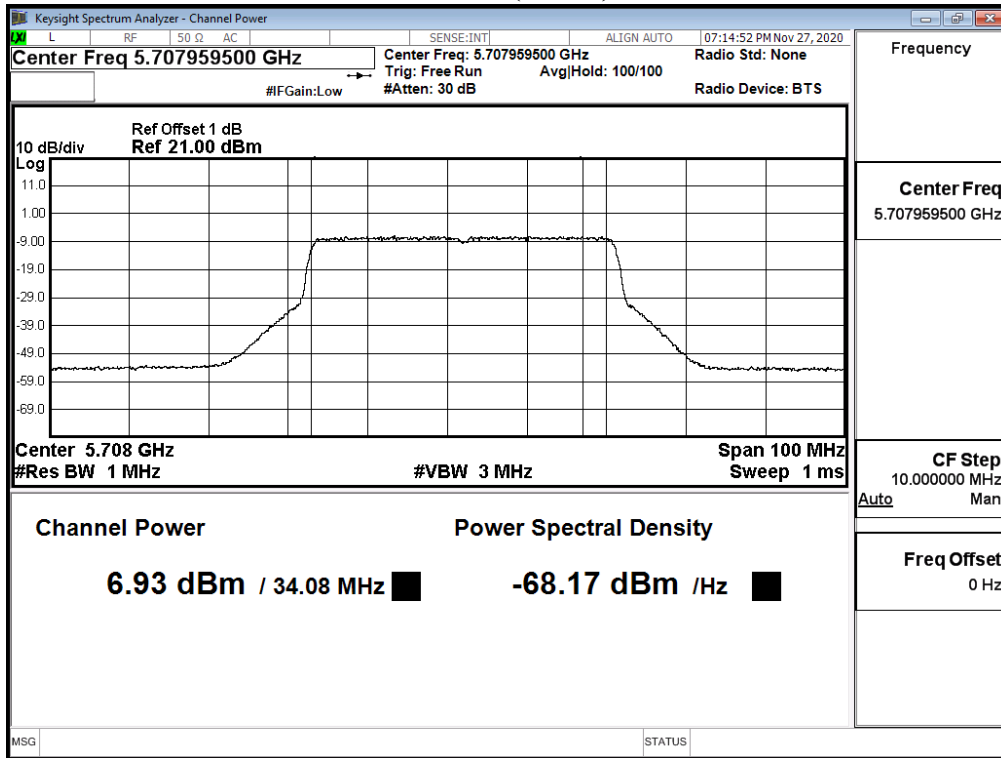
Channel 142



RU config: Full

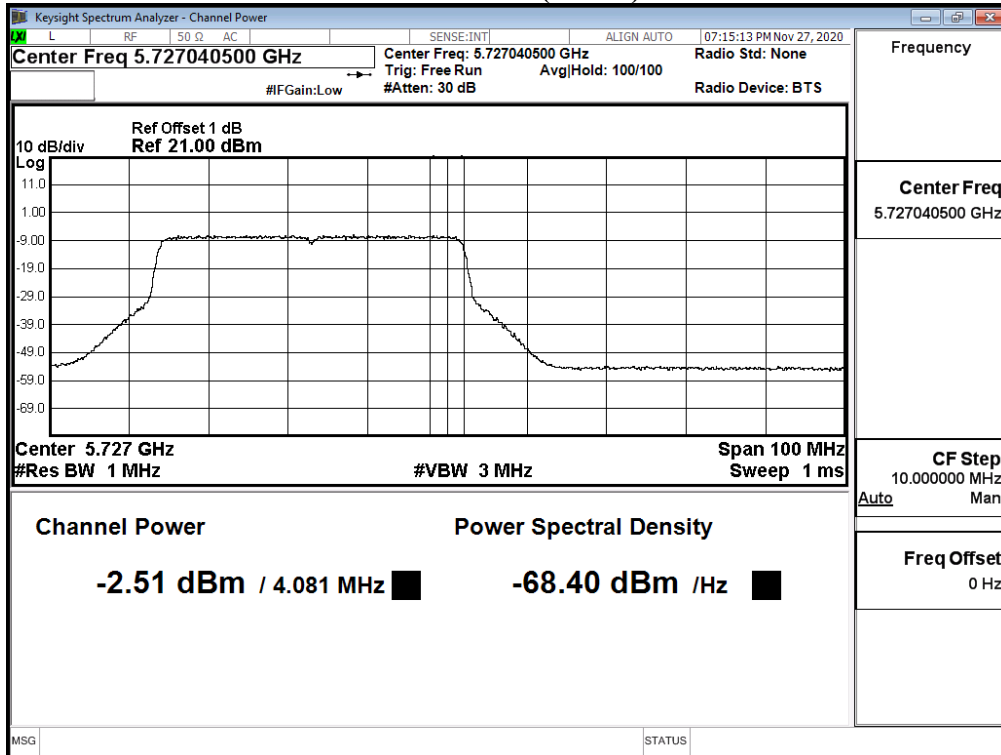
Maximum conducted output power:

Channel 142 (Band3)

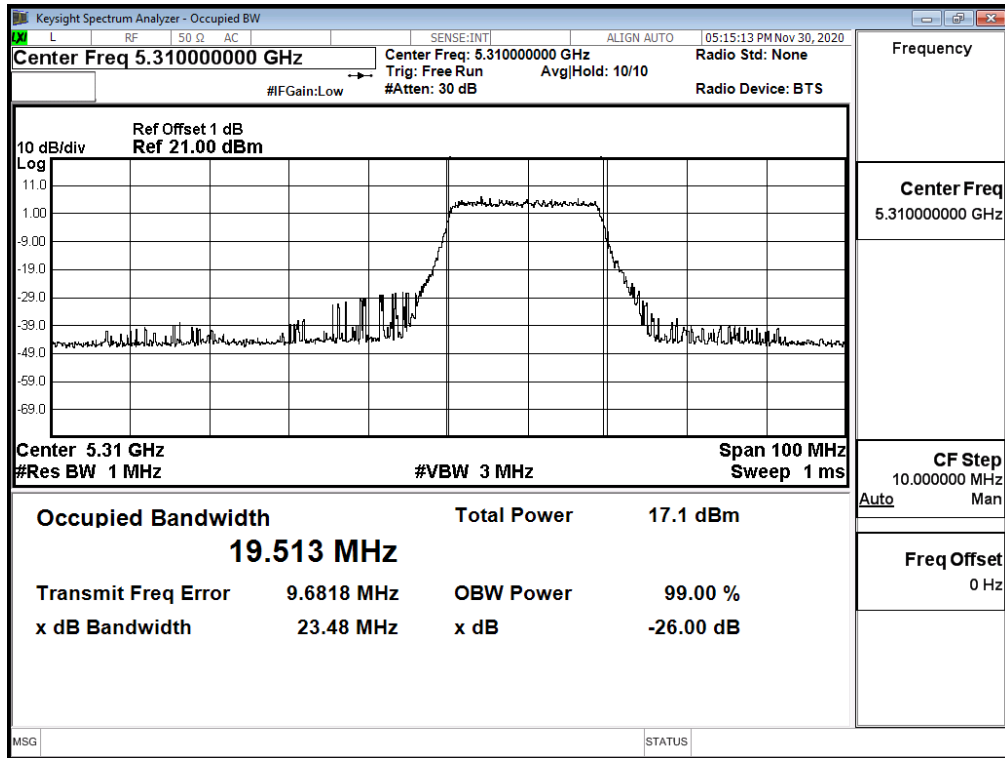


Maximum conducted output power:

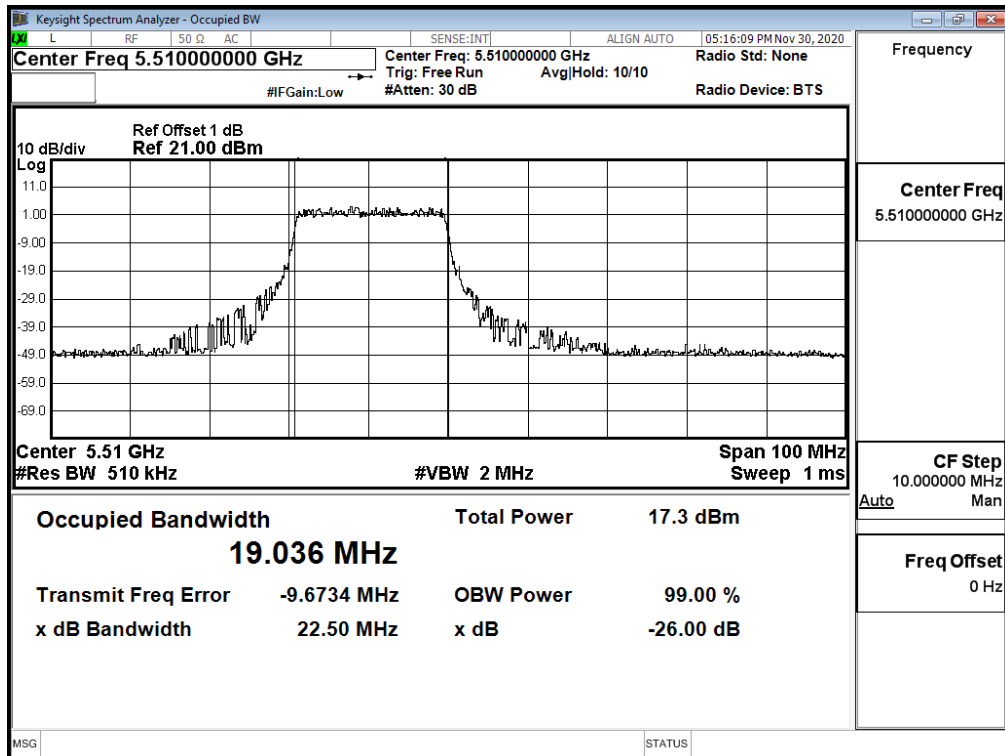
Channel 142 (Band4)



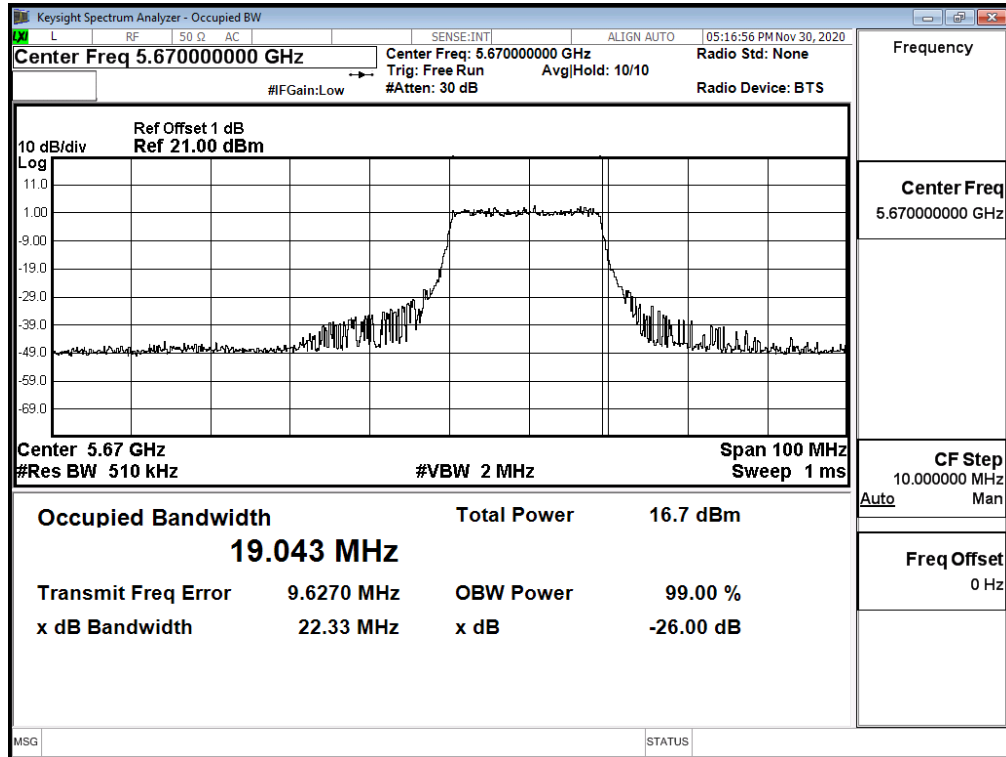
RU config: Other
26dB Occupied Bandwidth:
Channel 62 - 242/62



Channel 102 - 242/61



Channel 134 - 242/62



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 8: SISO A: Transmit (802.11ax-80BW_36Mbps)

RU config: Full

| Cable loss=1dB | | Maximum conducted output power | | | | | | | | | | | |
|----------------|--------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Channel No | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 | MCS8 | MCS9 | MCS10 | MCS11 |
| 42 | 5210 | 7.51 | 7.44 | 7.34 | 7.25 | 7.18 | 7.10 | 7.04 | 7.00 | 6.91 | 6.87 | 6.77 | 6.67 |
| 58 | 5290 | 7.51 | 7.41 | 7.36 | 7.30 | 7.24 | 7.15 | 7.09 | 7.04 | 6.94 | 6.91 | 6.82 | 6.77 |
| 106ac80 | 5530 | 7.09 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 122ac80 | 5610 | 7.39 | 7.35 | 7.31 | 7.28 | 7.18 | 7.13 | 7.06 | 6.97 | 6.91 | 6.85 | 6.78 | 6.73 |
| 138ac80(Band3) | 5690 | 7.30 | 7.22 | 7.15 | 7.09 | 7.06 | 6.97 | 6.92 | 6.83 | 6.79 | 6.71 | 6.68 | 6.63 |
| 138ac80(Band4) | 5690 | -9.06 | -9.13 | -9.22 | -9.29 | -9.33 | -9.40 | -9.43 | -9.52 | -9.59 | -9.65 | -9.75 | -9.85 |
| 155ac80 | 5775 | 10.64 | 10.54 | 10.51 | 10.41 | 10.36 | 10.31 | 10.26 | 10.19 | 10.14 | 10.07 | 10.04 | 9.95 |

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|----------------|-----------------------------|----------------------------|--------------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 42 | 5210 | -- | 7.51 | 24 | -- | Pass |
| 58 | 5290 | 82.120 | 7.51 | 24 | 30.14 | Pass |
| 106ac80 | 5530 | 83.870 | 7.09 | 24 | 30.24 | Pass |
| 122ac80 | 5610 | 83.060 | 7.39 | 24 | 30.19 | Pass |
| 138ac80(Band3) | 5690 | 76.200 | 7.30 | 24 | 29.82 | Pass |
| 138ac80(Band4) | 5690 | -- | -9.06 | 30 | -- | Pass |
| 155ac80 | 5775 | -- | 10.64 | 30 | -- | Pass |

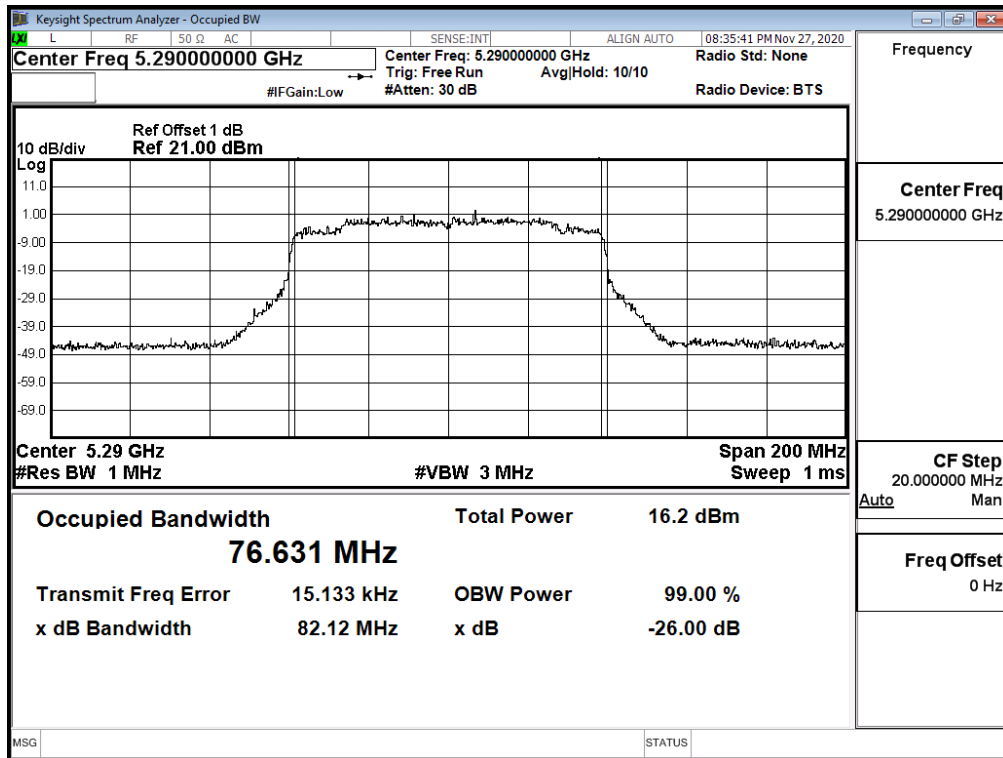
RU config: Other

| Channel No / Frequency Range (MHz) | RU setting | Maximum Conducted Power Output (dBm) | | | | | | | | | | | | | Required Limit |
|---|------------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------------------|
| | | Data Rate (Mbps) | | | | | | | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 | MCS8 | MCS9 | MCS10 | MCS11 | | |
| 42/5210 | 484/65 | 7.55 | 7.47 | 7.39 | 7.30 | 7.25 | 7.19 | 7.09 | 7.05 | 6.97 | 6.90 | 6.80 | 6.74 | <24dBm | |
| 58/5290 | 484/66 | 7.54 | 7.51 | 7.47 | 7.41 | 7.34 | 7.24 | 7.17 | 7.13 | 7.07 | 7.04 | 6.96 | 6.88 | <24dBm | |
| 106/5530 | 484/65 | 7.45 | 7.37 | 7.32 | 7.28 | 7.22 | 7.17 | 7.10 | 7.04 | 6.97 | 6.90 | 6.80 | 6.75 | <24dBm | |
| 155/5775 | 484/65 | 10.91 | 10.81 | 10.77 | 10.67 | 10.58 | 10.50 | 10.47 | 10.43 | 10.36 | 10.33 | 10.24 | 10.15 | <30dBm | |

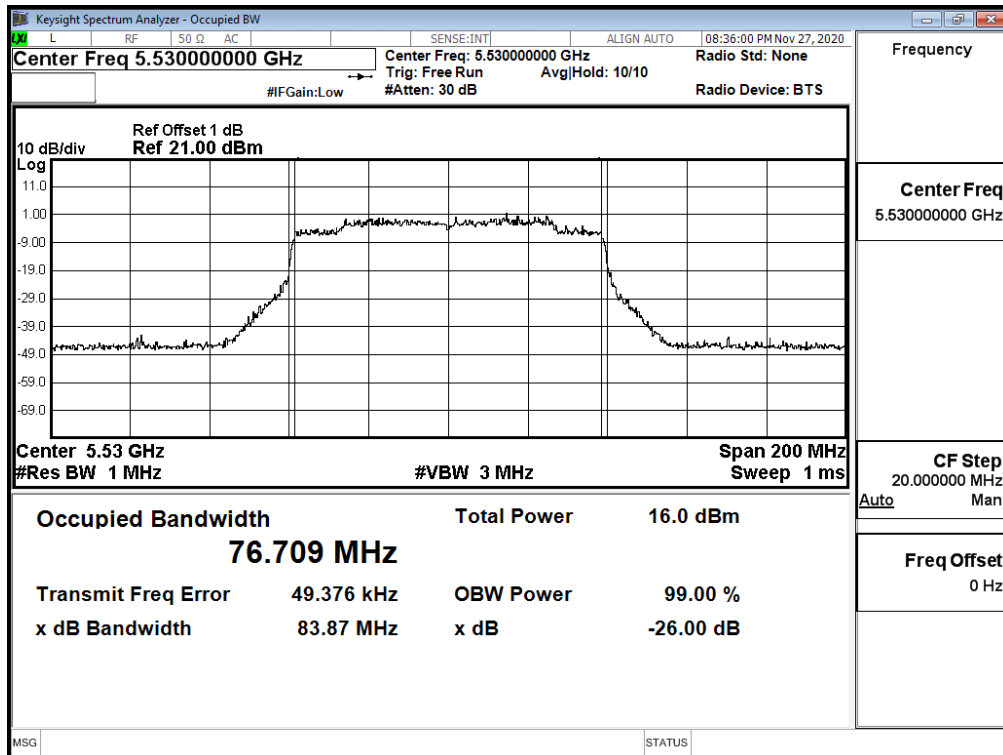
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|------------|-----------------------------|----------------------------|--------------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 42/5210 | 484/65 | -- | 7.55 | 24 | -- | Pass |
| 58/5290 | 484/66 | 42.870 | 7.54 | 24 | 27.32 | Pass |
| 106/5530 | 484/65 | 46.040 | 7.45 | 24 | 27.63 | Pass |
| 155/5775 | 484/65 | -- | 10.91 | 30 | -- | Pass |

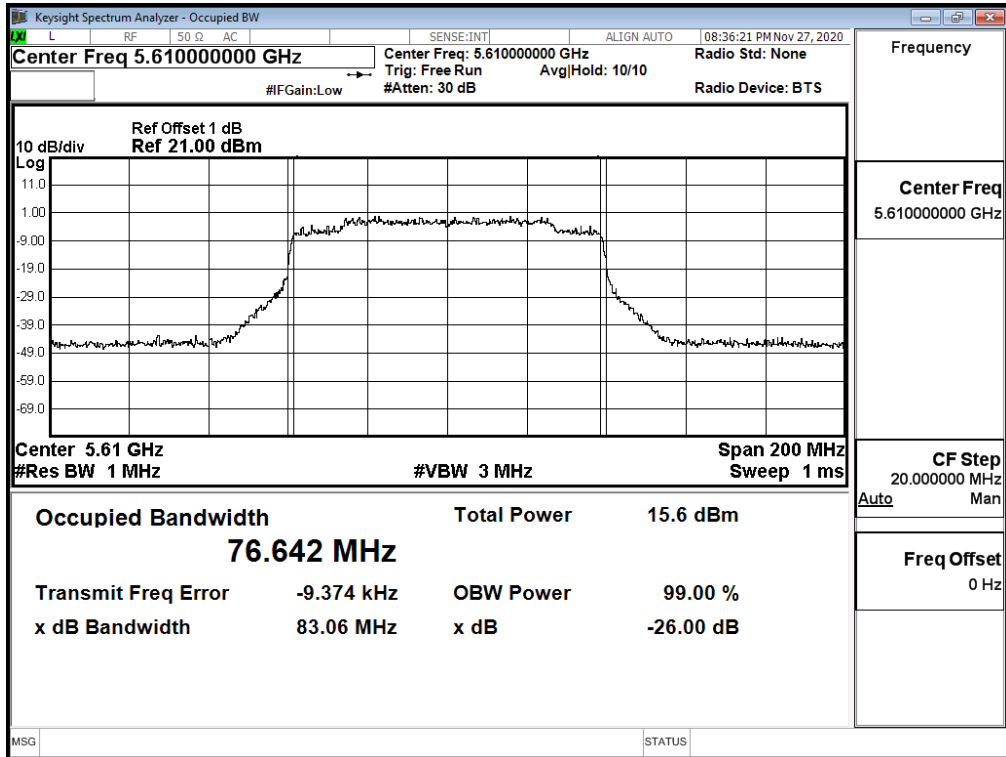
RU config: Full
26dB Occupied Bandwidth:
Channel 58



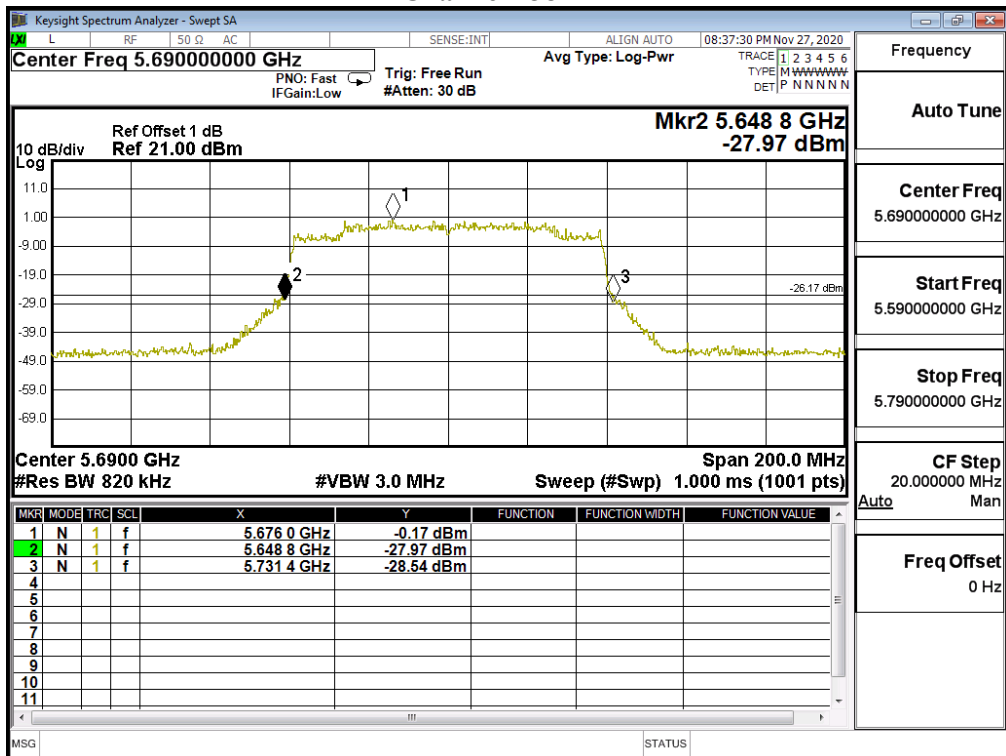
Channel 106



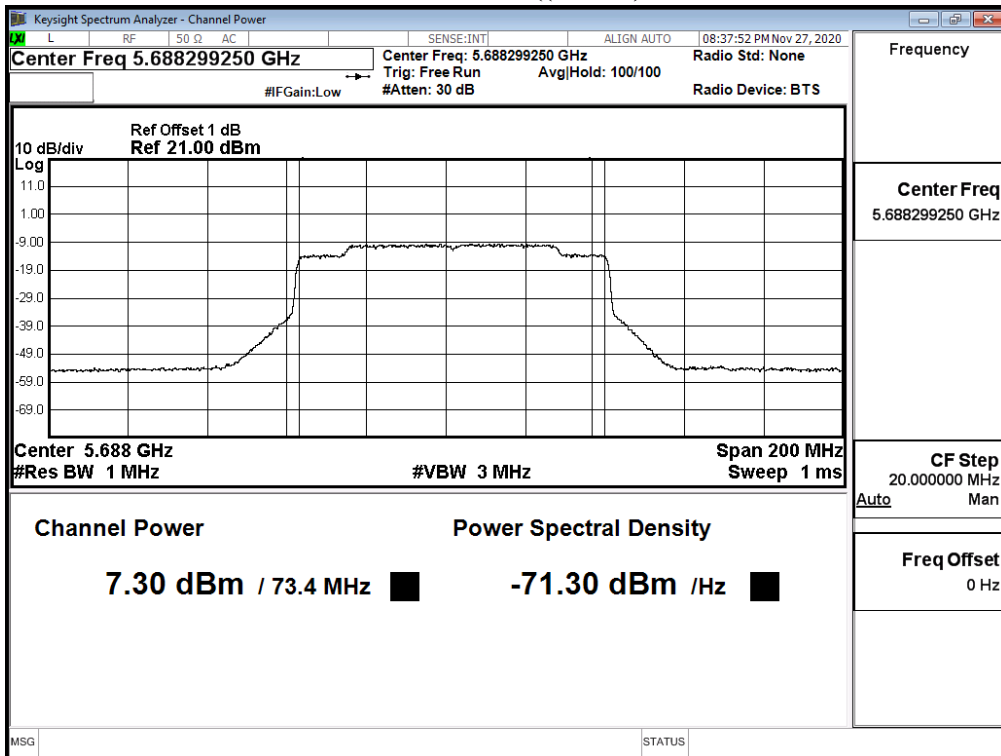
Channel 122



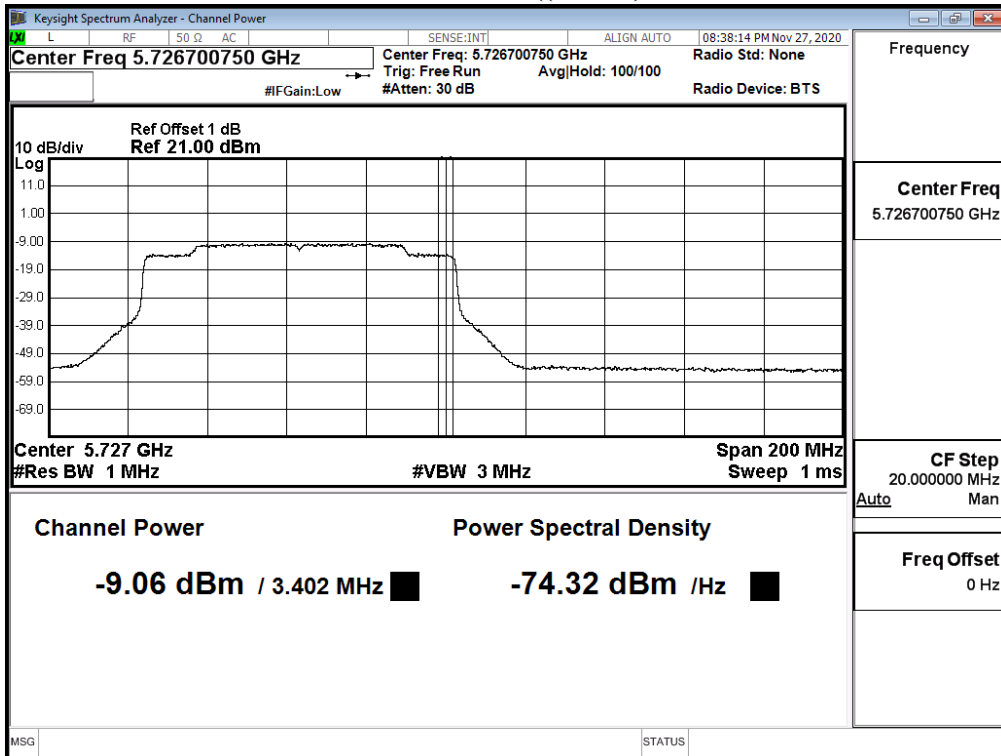
Channel 138



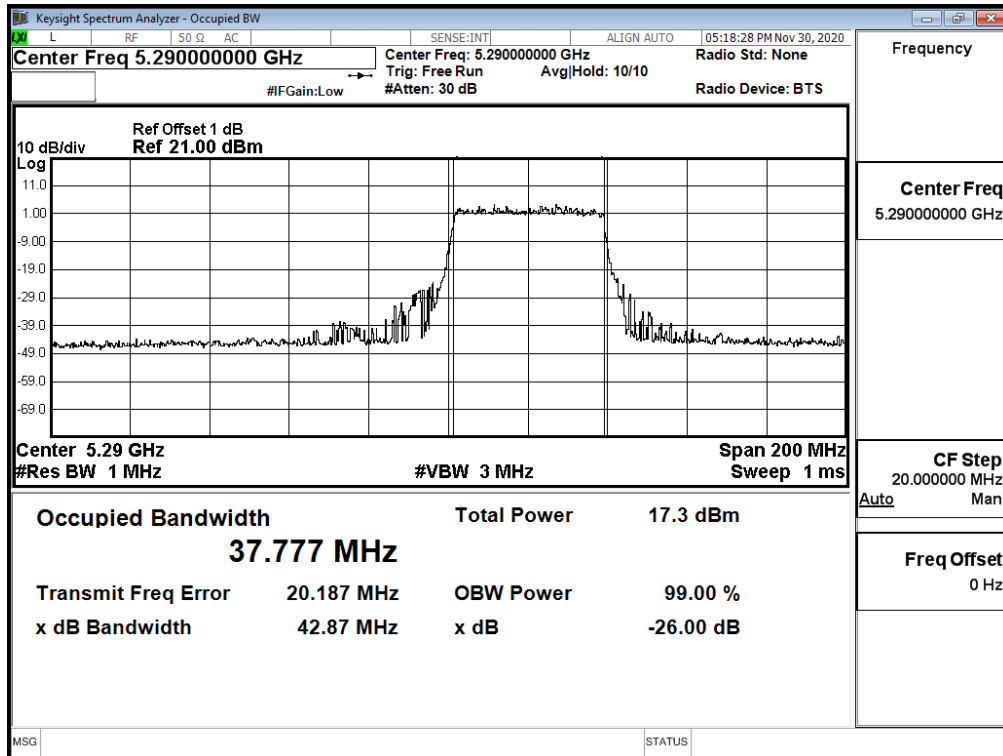
RU config: Full
Maximum conducted output power:
Channel 138 ((Band3))



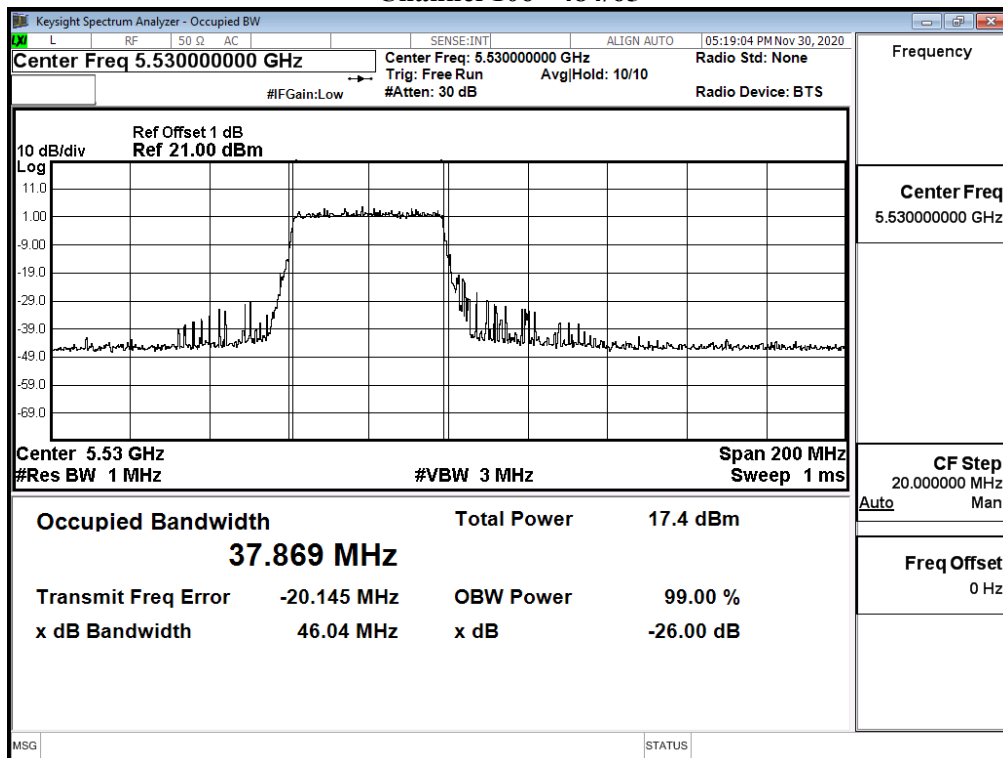
Maximum conducted output power:
Channel 138 ((Band4))



RU config: Other
26dB Occupied Bandwidth:
Channel 58 - 484/66



Channel 106 - 484/65



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 9: SISO A: Transmit (802.11ax-160BW_72.1Mbps)

RU config: Full

| Cable loss=1dB | | Maximum conducted output power | | | | | | | | | | | |
|----------------|--------------------|--------------------------------|------|------|------|------|------|------|------|------|------|-------|-------|
| Channel No | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 | MCS8 | MCS9 | MCS10 | MCS11 |
| 50ac160(Band1) | 5250 | 4.14 | 4.09 | 4.02 | 3.92 | 3.84 | 3.76 | 3.67 | 3.60 | 3.51 | 3.46 | 3.42 | 3.39 |
| 50ac160(Band2) | 5250 | 4.86 | 4.77 | 4.72 | 4.64 | 4.56 | 4.46 | 4.42 | 4.34 | 4.24 | 4.15 | 4.11 | 4.06 |
| 114ac160 | 5570 | 7.30 | 7.27 | 7.24 | 7.21 | 7.17 | 7.07 | 7.02 | 6.93 | 6.87 | 6.79 | 6.74 | 6.68 |

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|----------------|-----------------------------|----------------------------|--------------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 50ac160(Band1) | 5250 | -- | 4.14 | 24 | -- | Pass |
| 80ac160(Band2) | 5250 | 84.000 | 4.86 | 24 | 30.24 | Pass |
| 114ac160 | 5570 | 163.600 | 7.30 | 24 | 33.14 | Pass |

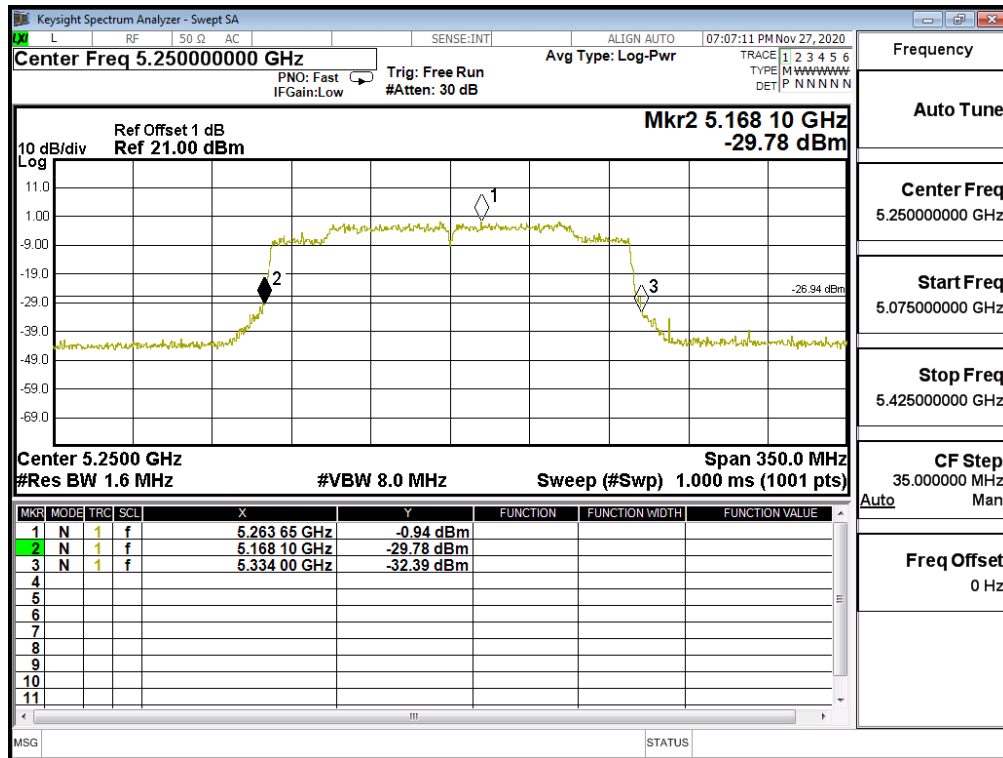
RU config: Other

| Channel No / Frequency (MHz) | RU setting | Average Power Output (dBm) | | | | | | | | | | | | | Required Limit |
|------------------------------------|------------|----------------------------|------|------|------|------|------|------|------|------|------|-------|-------|--------|-------------------|
| | | Data Rate (Mbps) | | | | | | | | | | | | | |
| | | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 | MCS8 | MCS9 | MCS10 | MCS11 | | |
| 50/5250 | 996/67 | 7.51 | 7.41 | 7.37 | 7.31 | 7.21 | 7.14 | 7.05 | 6.95 | 6.87 | 6.78 | 6.73 | 6.63 | <24dBm | |
| | 996/S67 | 7.61 | 7.51 | 7.47 | 7.38 | 7.31 | 7.24 | 7.18 | 7.10 | 7.00 | 6.94 | 6.86 | 6.81 | <24dBm | |
| 114/5570 | 996/67 | 7.43 | 7.39 | 7.36 | 7.31 | 7.22 | 7.17 | 7.10 | 7.05 | 7.02 | 6.95 | 6.90 | 6.84 | <24dBm | |
| | 996/S67 | 7.44 | 7.34 | 7.27 | 7.23 | 7.17 | 7.10 | 7.06 | 7.01 | 6.92 | 6.86 | 6.76 | 6.72 | <24dBm | |

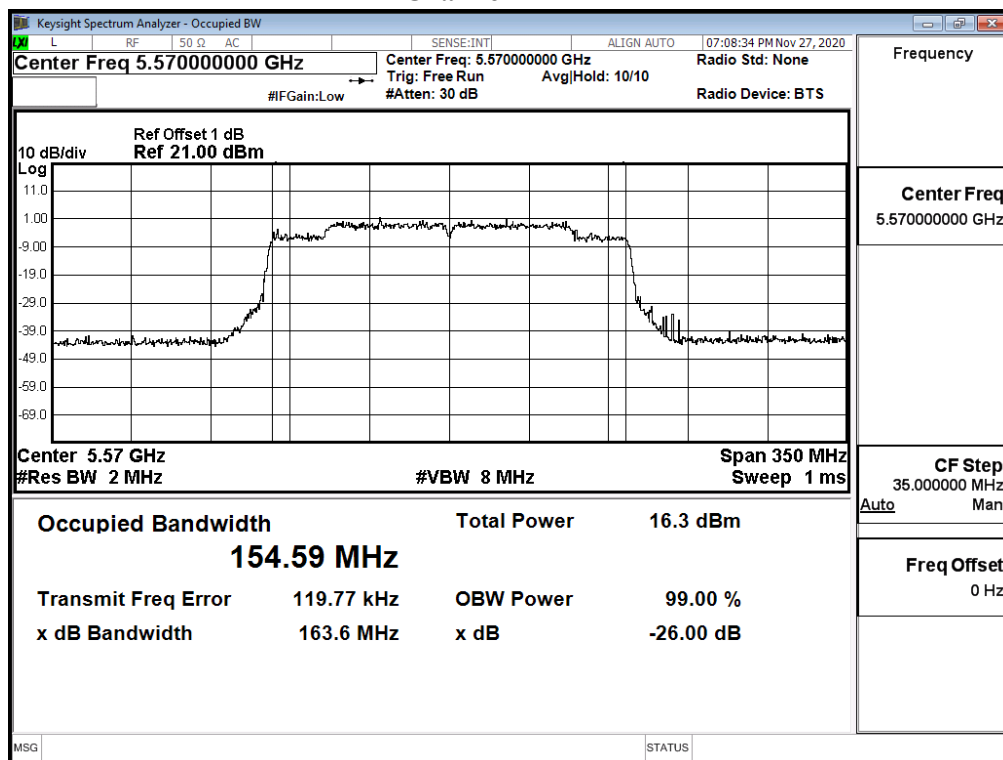
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|------------|-----------------------------|----------------------------|--------------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 50/5250 | 996/67 | -- | 7.51 | 24 | -- | Pass |
| | 996/S67 | 88.070 | 7.61 | 24 | 30.45 | Pass |
| 114/5570 | 996/67 | 86.160 | 7.43 | 24 | 30.35 | Pass |
| | 996/S67 | 87.130 | 7.44 | 24 | 30.40 | Pass |

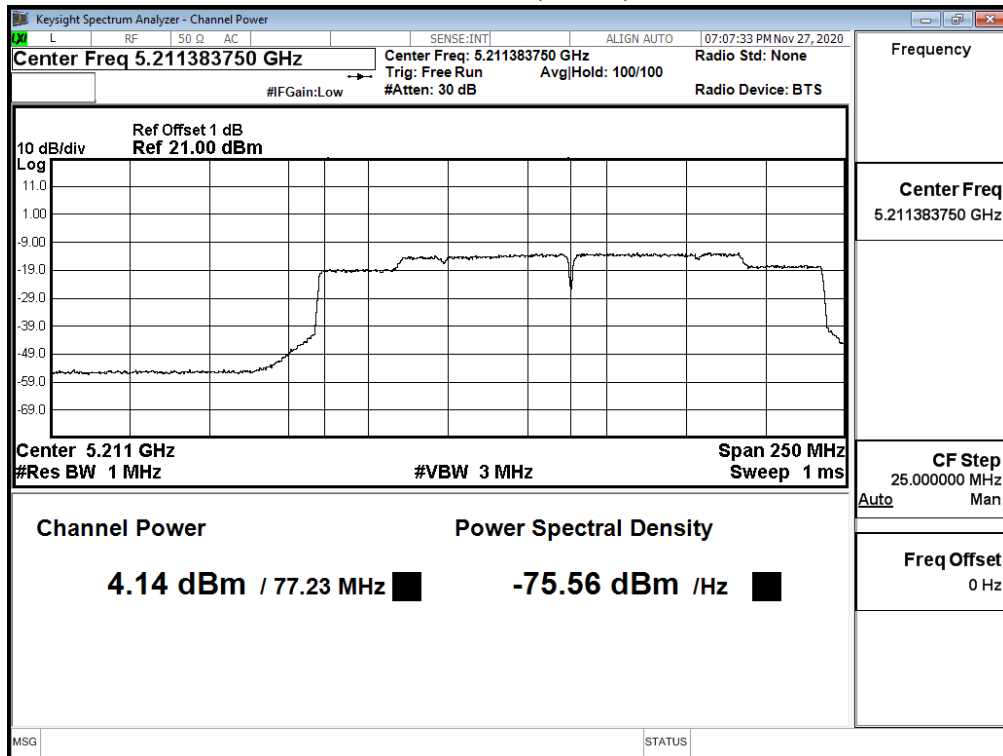
RU config: Full
26dB Occupied Bandwidth:
Channel 50



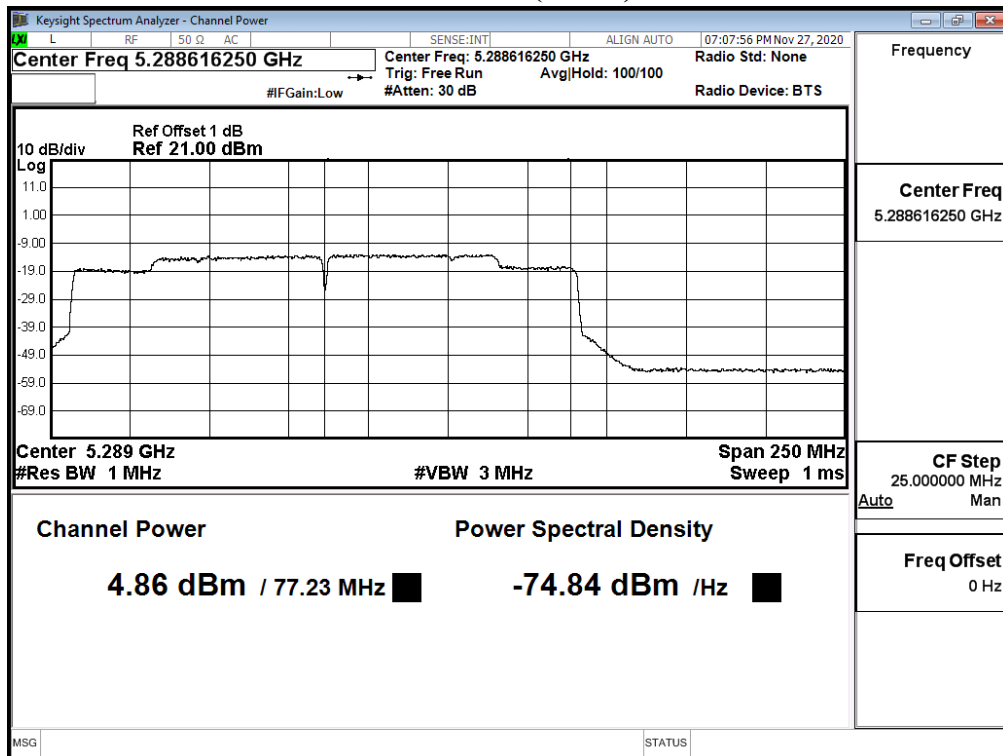
Channel 114



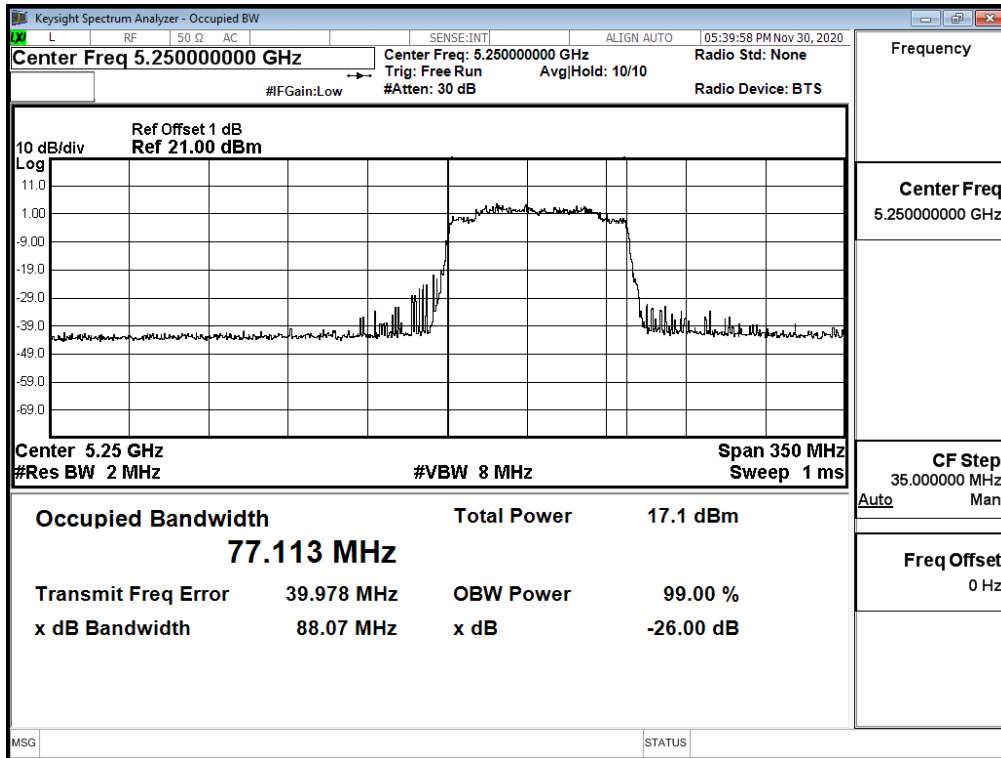
RU config: Full
Maximum conducted output power:
Channel 50 (Band1)



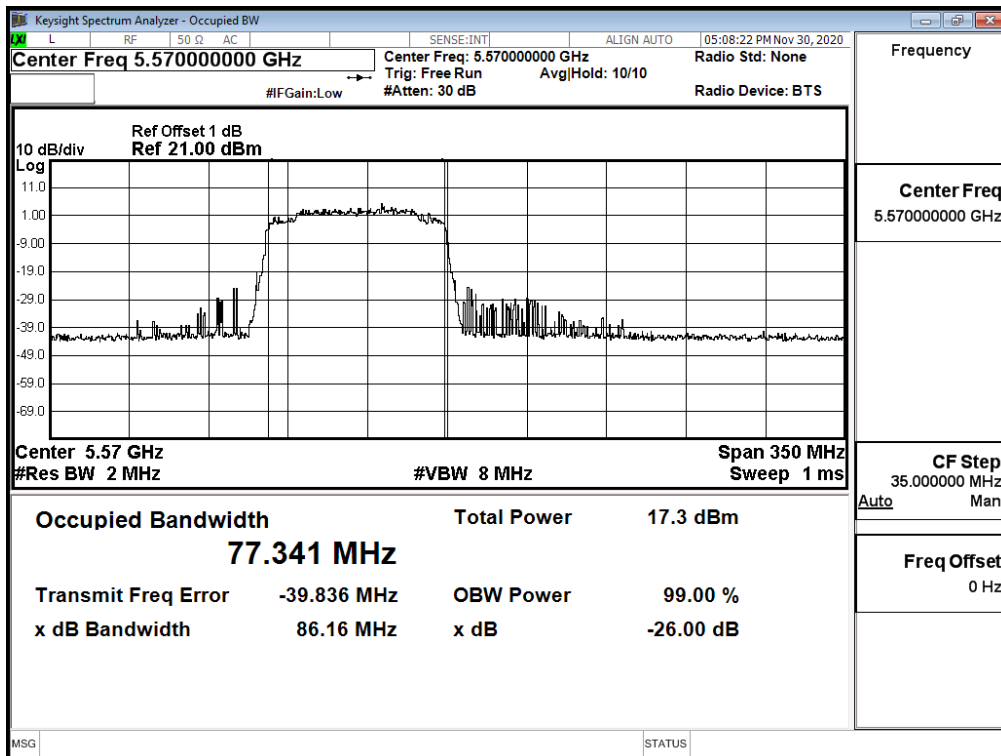
Maximum conducted output power:
Channel 50 (Band2)



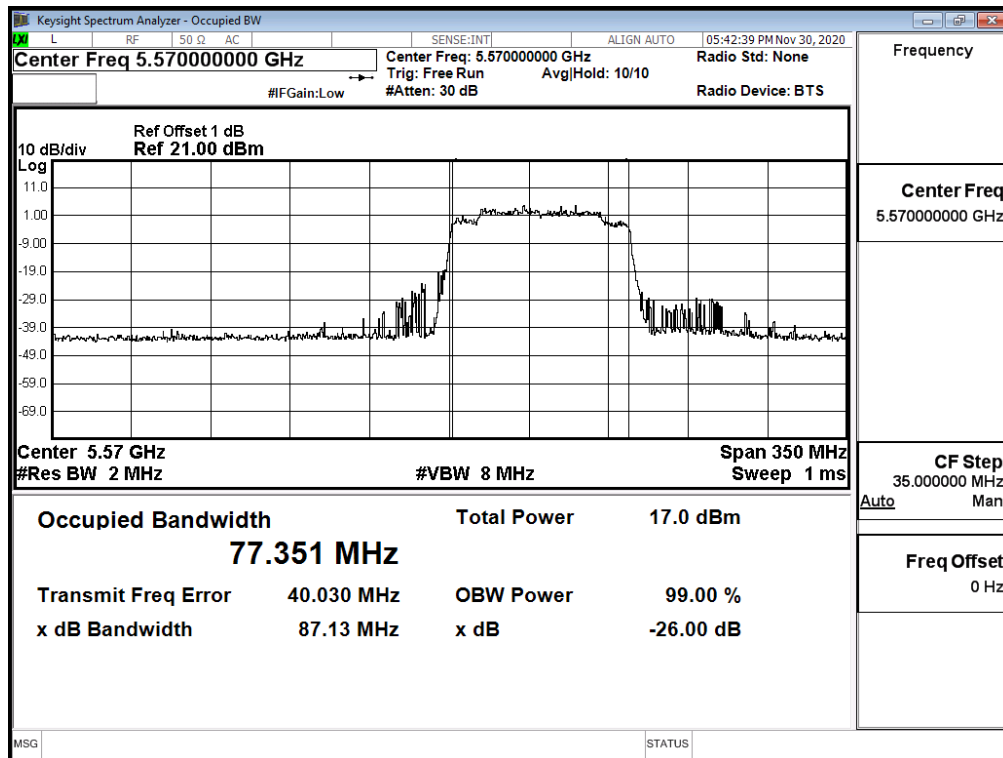
RU config: Other
26dB Occupied Bandwidth:
Channel 50 - 996/S67



26dB Occupied Bandwidth:
Channel 114 - 996/67



Channel 114 - 996/S67



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 10 SISO B: Transmit (802.11a_6Mbps)

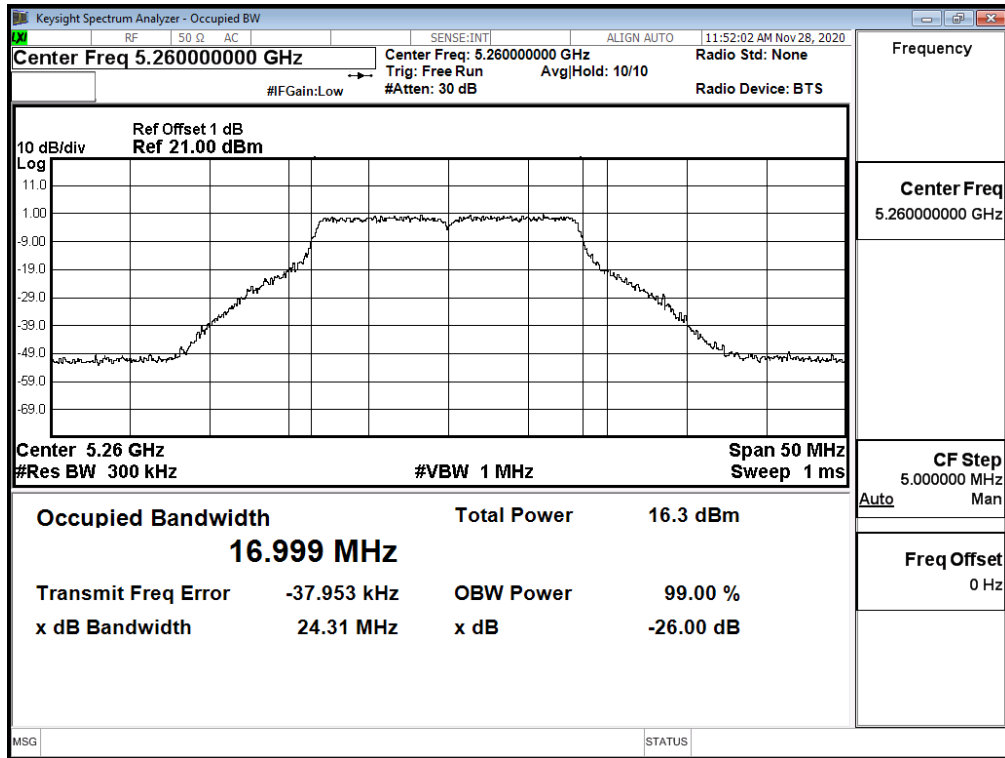
| Cable loss=1dB | | Maximum conducted output power | | | | | | | |
|----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | | | | | | | |
| | | 6 | 9 | 12 | 18 | 24 | 36 | 48 | 54 |
| | | Measurement Level (dBm) | | | | | | | |
| 36 | 5180 | 10.85 | -- | -- | -- | -- | -- | -- | -- |
| 44 | 5220 | 10.92 | 10.86 | 10.79 | 10.69 | 10.59 | 10.51 | 10.41 | 10.33 |
| 48 | 5240 | 10.85 | -- | -- | -- | -- | -- | -- | -- |
| 52 | 5260 | 10.96 | -- | -- | -- | -- | -- | -- | -- |
| 60 | 5300 | 10.99 | 10.91 | 10.82 | 10.75 | 10.68 | 10.59 | 10.50 | 10.46 |
| 64 | 5320 | 10.97 | -- | -- | -- | -- | -- | -- | -- |
| 100 | 5500 | 9.83 | -- | -- | -- | -- | -- | -- | -- |
| 116 | 5580 | 9.92 | 9.89 | 9.79 | 9.72 | 9.68 | 9.64 | 9.58 | 9.54 |
| 140 | 5700 | 9.98 | -- | -- | -- | -- | -- | -- | -- |
| 149 | 5745 | 10.71 | -- | -- | -- | -- | -- | -- | -- |
| 157 | 5785 | 10.75 | 10.66 | 10.56 | 10.46 | 10.42 | 10.34 | 10.27 | 10.20 |
| 165 | 5825 | 10.62 | -- | -- | -- | -- | -- | -- | -- |

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

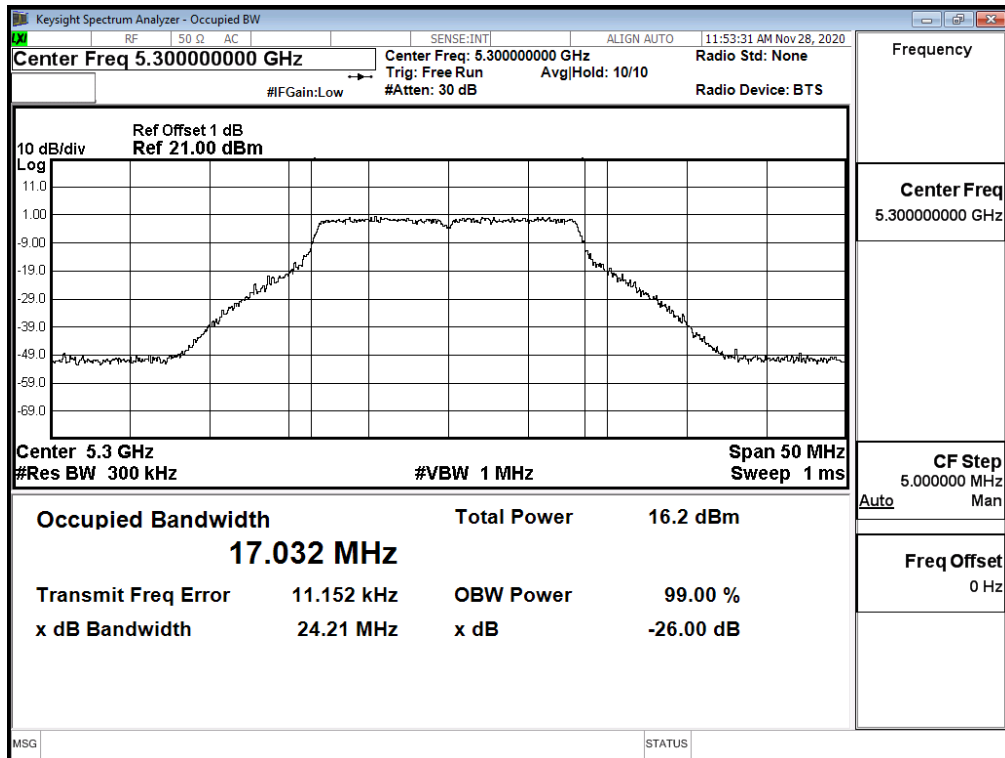
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 36 | 5180 | -- | 10.85 | 24 | -- | Pass |
| 44 | 5220 | -- | 10.92 | 24 | -- | Pass |
| 48 | 5240 | -- | 10.85 | 24 | -- | Pass |
| 52 | 5260 | 24.310 | 10.96 | 24 | 24.86 | Pass |
| 60 | 5300 | 24.210 | 10.99 | 24 | 24.84 | Pass |
| 64 | 5320 | 23.690 | 10.97 | 24 | 24.75 | Pass |
| 100 | 5500 | 23.220 | 9.83 | 24 | 24.66 | Pass |
| 116 | 5580 | 23.740 | 9.92 | 24 | 24.75 | Pass |
| 140 | 5700 | 24.070 | 9.98 | 24 | 24.81 | Pass |
| 149 | 5745 | -- | 10.71 | 30 | -- | Pass |
| 157 | 5785 | -- | 10.75 | 30 | -- | Pass |
| 165 | 5825 | -- | 10.62 | 30 | -- | Pass |

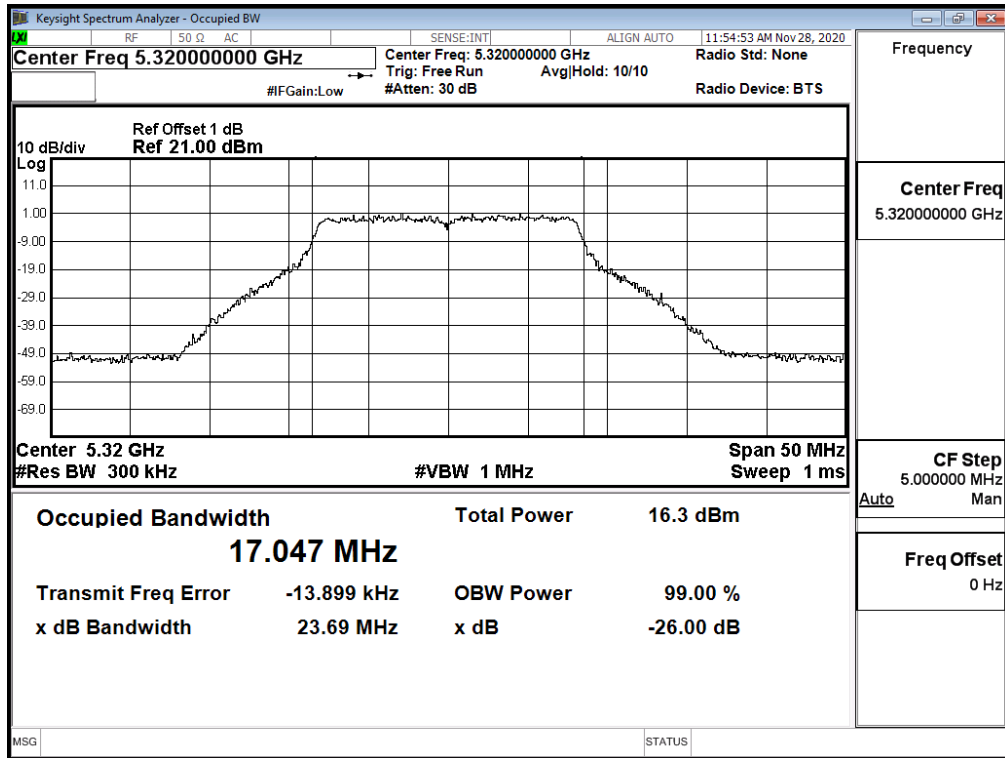
26dB Occupied Bandwidth: Channel 52



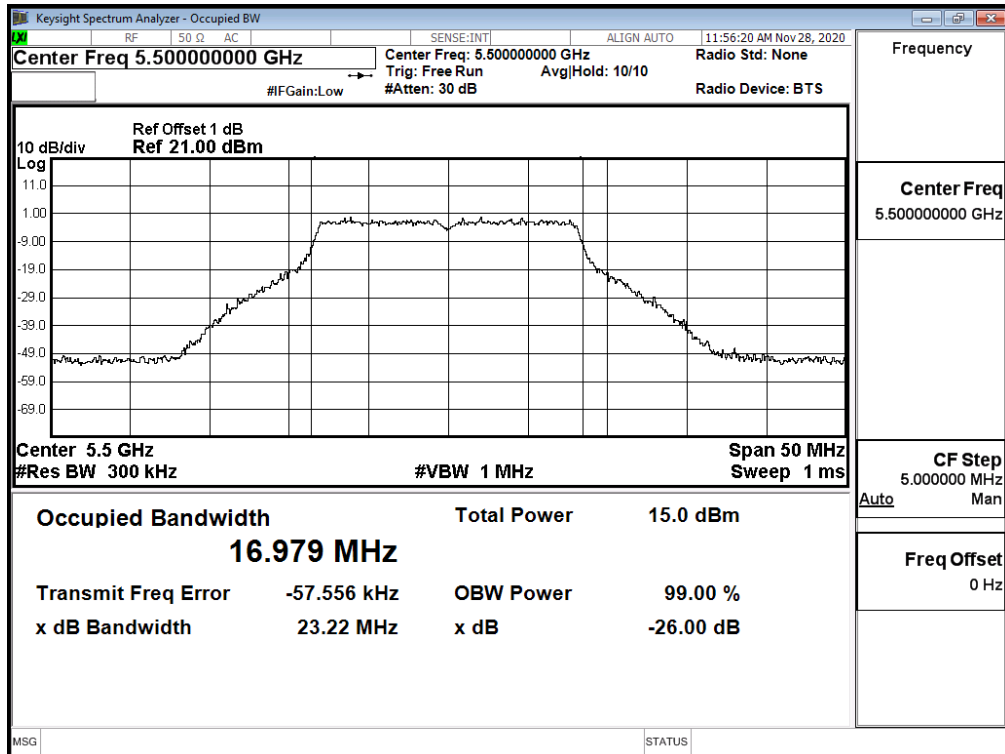
Channel 60



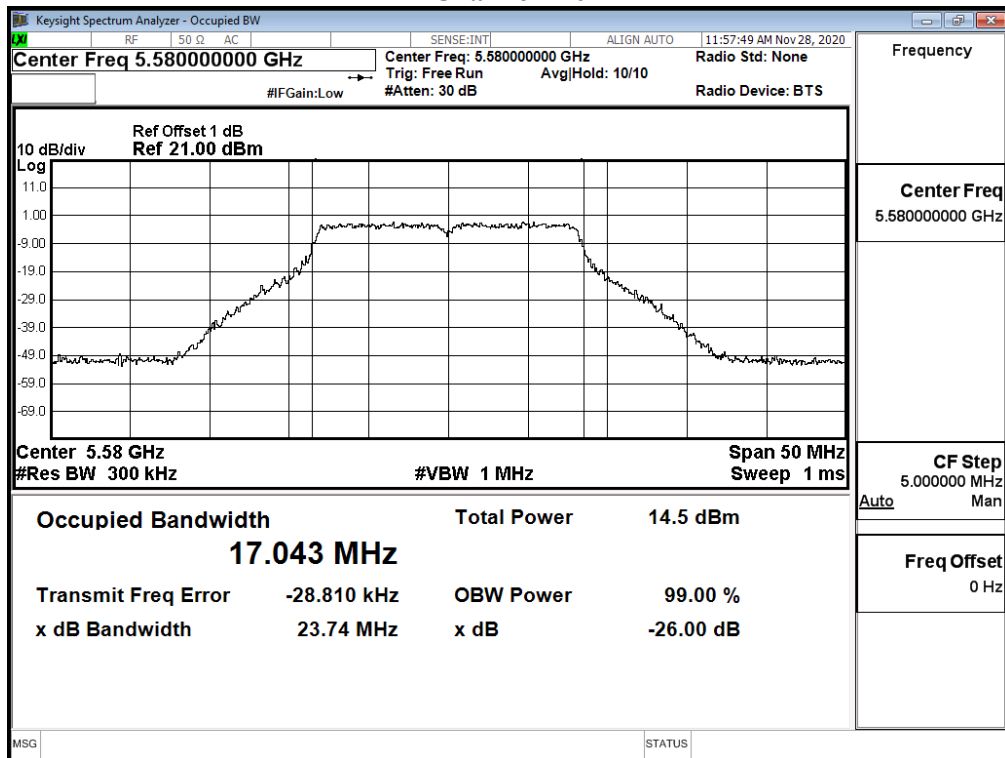
Channel 64



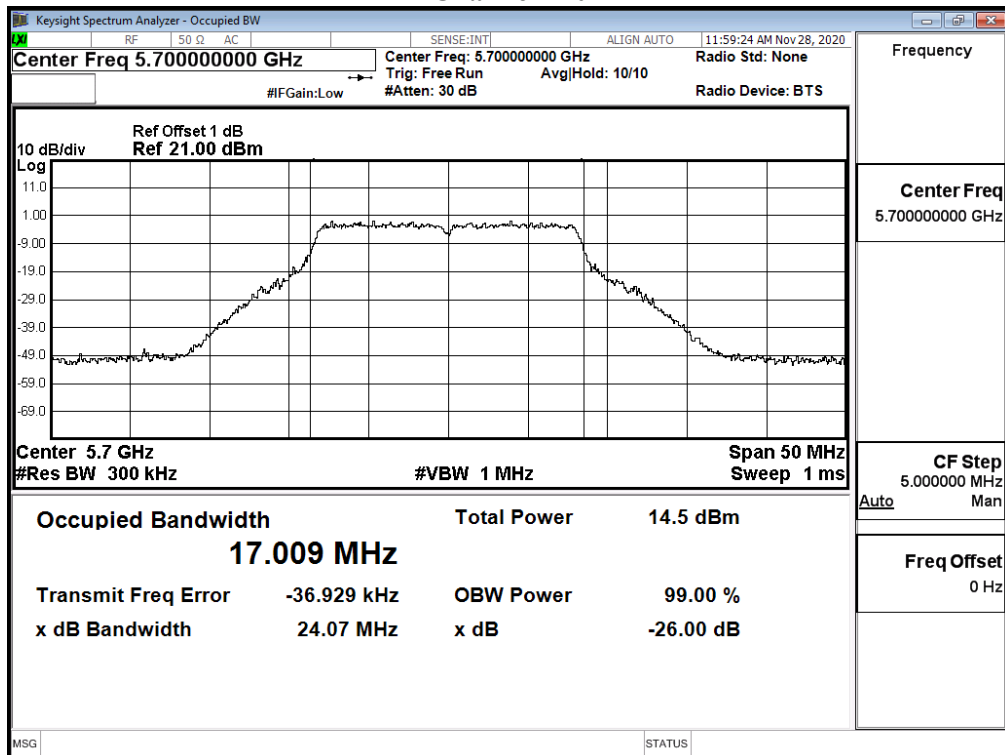
Channel 100



Channel 116



Channel 140



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 11 SISO B: Transmit (802.11n-20BW_7.2Mbps)

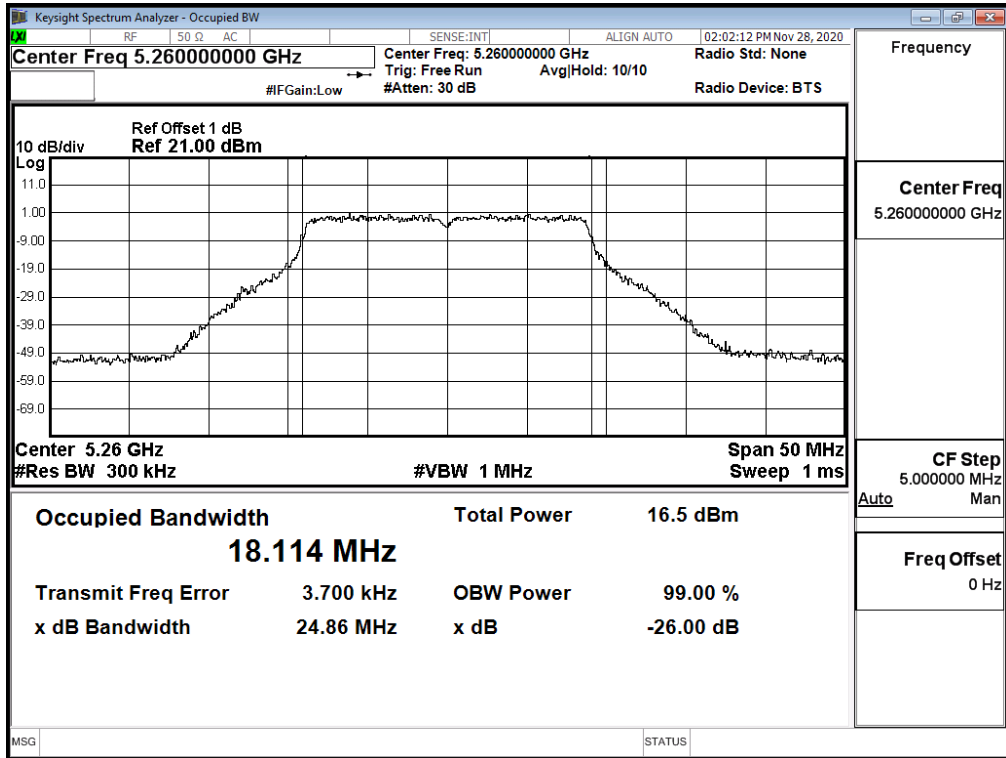
| Cable loss=1dB | | Maximum conducted output power | | | | | | | |
|----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | | | | | | | |
| | | HT0 | HT1 | HT2 | HT3 | HT4 | HT5 | HT6 | HT7 |
| | | Measurement Level (dBm) | | | | | | | |
| 36 | 5180 | 10.79 | -- | -- | -- | -- | -- | -- | -- |
| 44 | 5220 | 10.82 | 10.78 | 10.71 | 10.62 | 10.54 | 10.50 | 10.42 | 10.32 |
| 48 | 5240 | 10.94 | -- | -- | -- | -- | -- | -- | -- |
| 52 | 5260 | 10.98 | -- | -- | -- | -- | -- | -- | -- |
| 60 | 5300 | 10.94 | 10.89 | 10.79 | 10.72 | 10.66 | 10.58 | 10.48 | 10.41 |
| 64 | 5320 | 10.89 | -- | -- | -- | -- | -- | -- | -- |
| 100 | 5500 | 9.84 | -- | -- | -- | -- | -- | -- | -- |
| 116 | 5580 | 9.98 | 9.95 | 9.85 | 9.75 | 9.67 | 9.58 | 9.49 | 9.40 |
| 140 | 5700 | 9.93 | -- | -- | -- | -- | -- | -- | -- |
| 144(Band3) | 5720 | 8.80 | 8.77 | 8.70 | 8.63 | 8.60 | 8.53 | 8.48 | 8.38 |
| 144(Band4) | 5720 | 3.30 | 3.27 | 3.24 | 3.14 | 3.11 | 3.07 | 2.98 | 2.93 |
| 149 | 5745 | 10.80 | -- | -- | -- | -- | -- | -- | -- |
| 157 | 5785 | 10.75 | 10.72 | 10.66 | 10.61 | 10.56 | 10.46 | 10.39 | 10.33 |
| 165 | 5825 | 10.66 | -- | -- | -- | -- | -- | -- | -- |

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

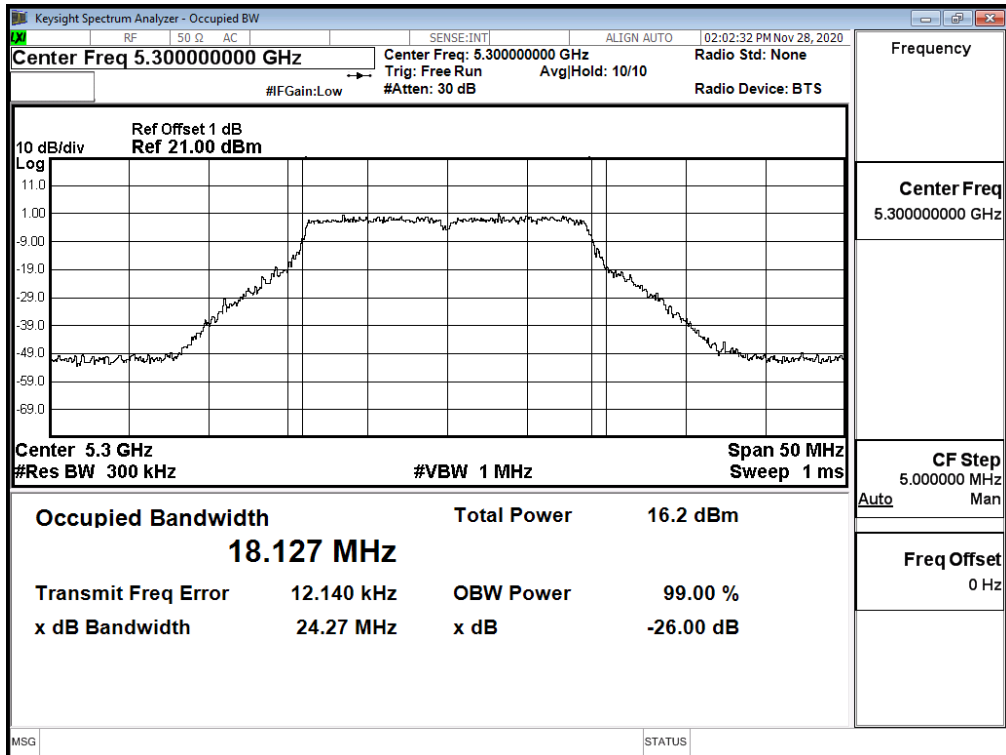
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 36 | 5180 | -- | 10.79 | 24 | -- | Pass |
| 44 | 5220 | -- | 10.82 | 24 | -- | Pass |
| 48 | 5240 | -- | 10.94 | 24 | -- | Pass |
| 52 | 5260 | 24.860 | 10.98 | 24 | 24.96 | Pass |
| 60 | 5300 | 24.270 | 10.94 | 24 | 24.85 | Pass |
| 64 | 5320 | 24.450 | 10.89 | 24 | 24.88 | Pass |
| 100 | 5500 | 24.270 | 9.84 | 24 | 24.85 | Pass |
| 116 | 5580 | 24.470 | 9.98 | 24 | 24.89 | Pass |
| 140 | 5700 | 24.160 | 9.93 | 24 | 24.83 | Pass |
| 144(Band3) | 5720 | 17.350 | 8.80 | 24 | 23.39 | Pass |
| 144(Band4) | 5720 | -- | 3.30 | 30 | -- | Pass |
| 149 | 5745 | -- | 10.80 | 30 | -- | Pass |
| 157 | 5785 | -- | 10.75 | 30 | -- | Pass |
| 165 | 5825 | -- | 10.66 | 30 | -- | Pass |

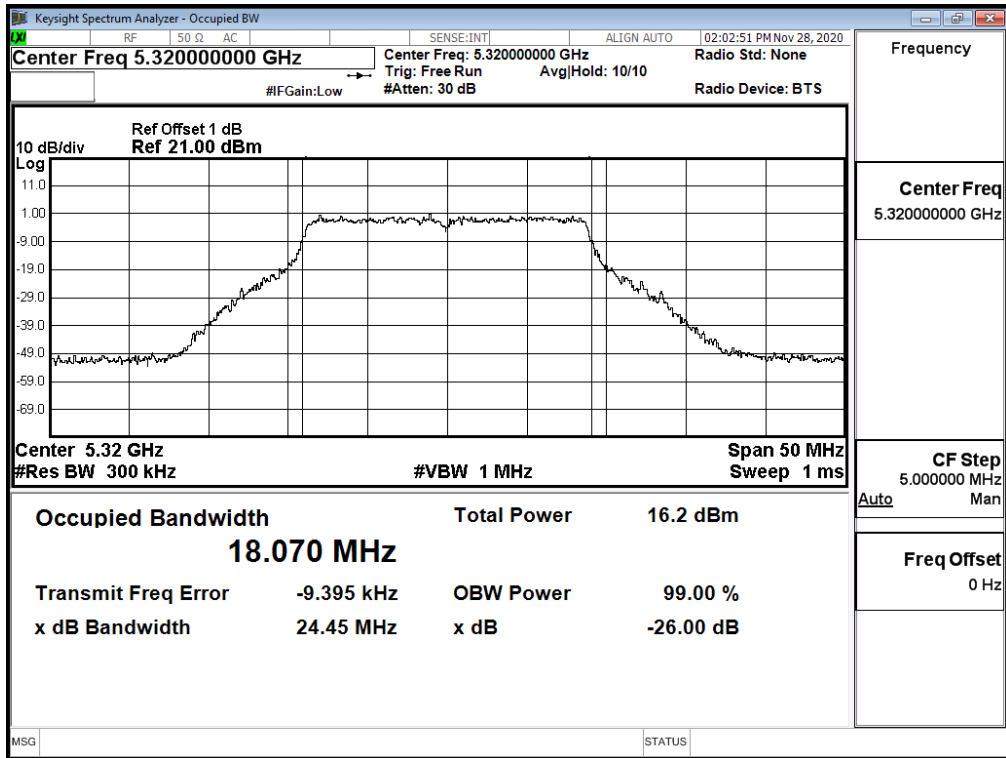
26dB Occupied Bandwidth: Channel 52



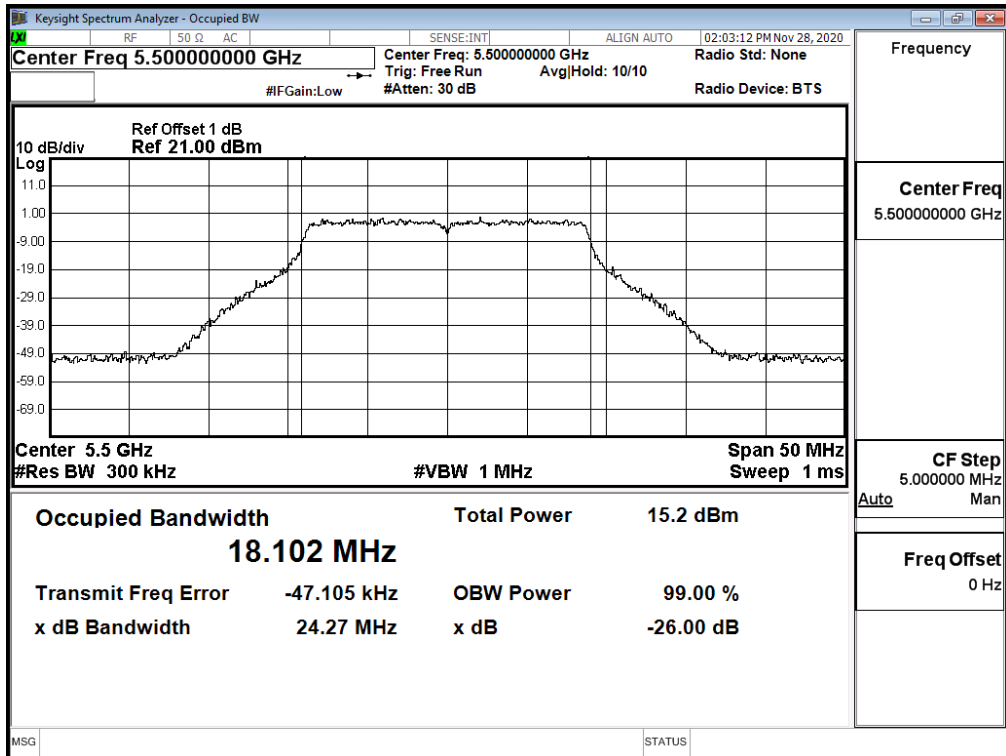
Channel 60



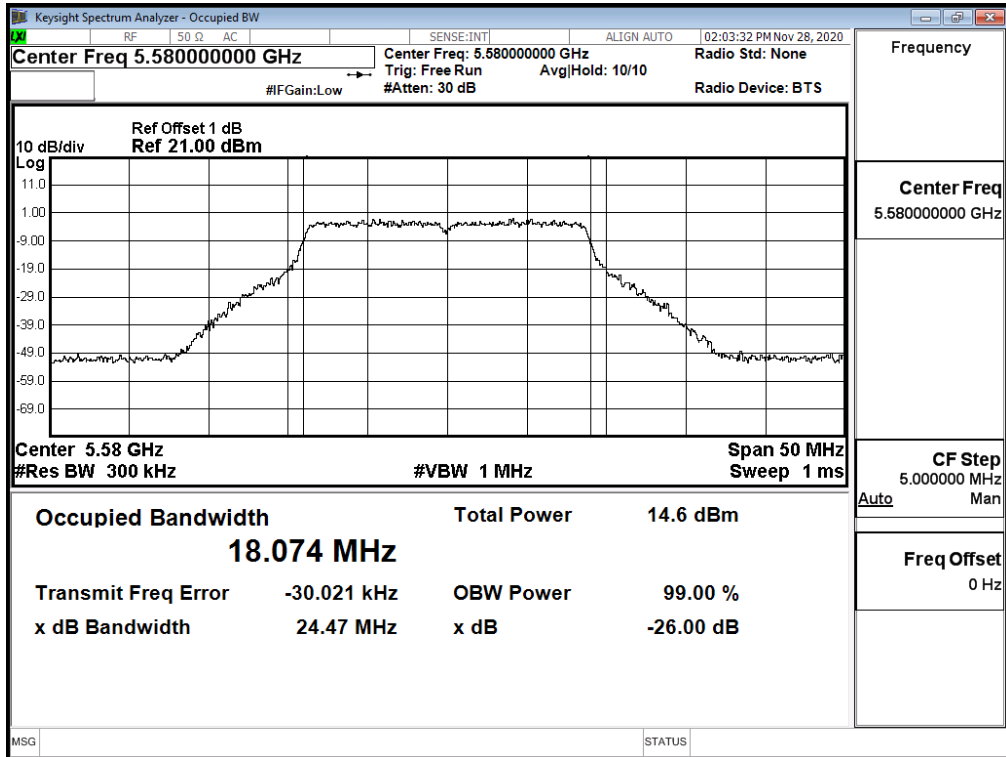
Channel 64



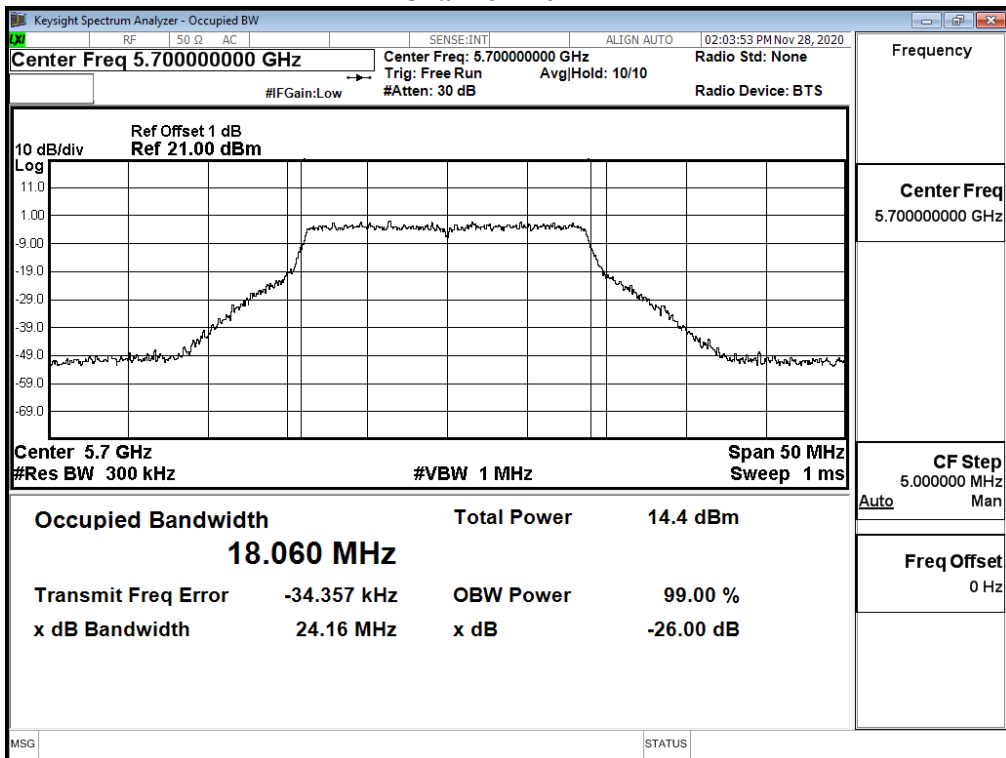
Channel 100



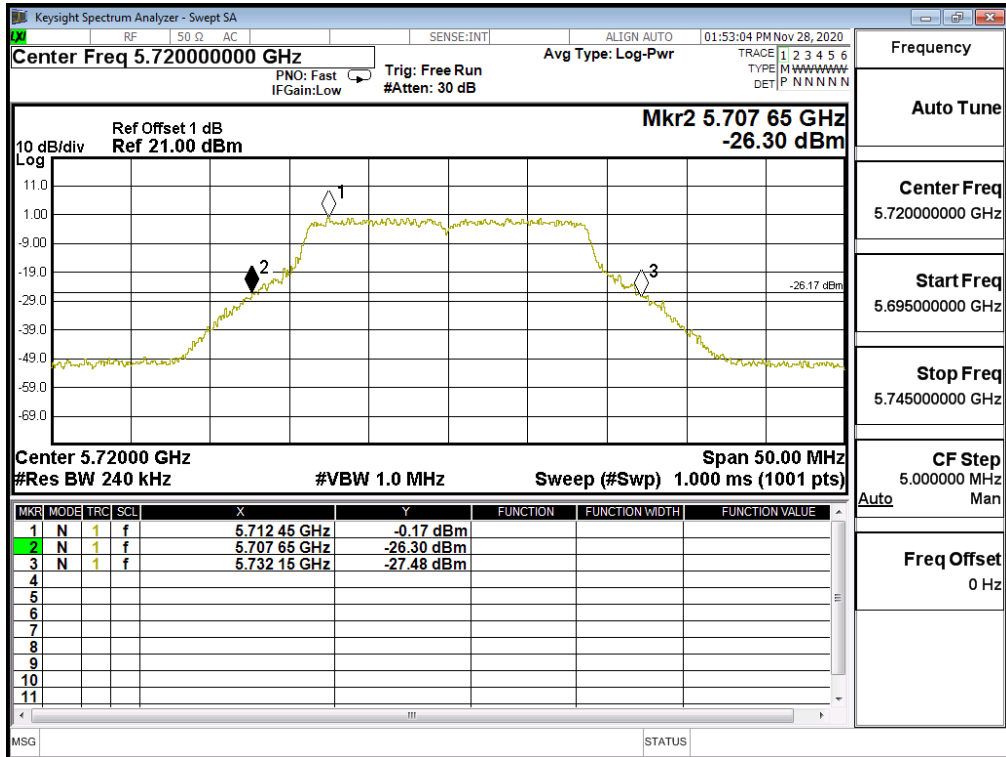
Channel 116



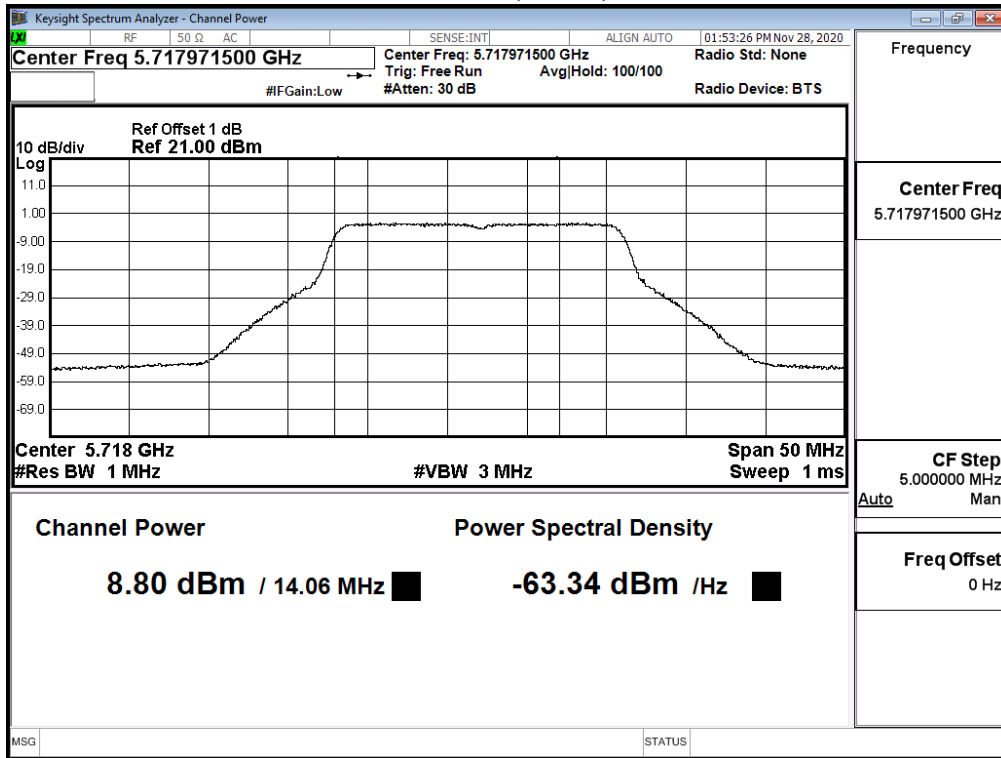
Channel 140



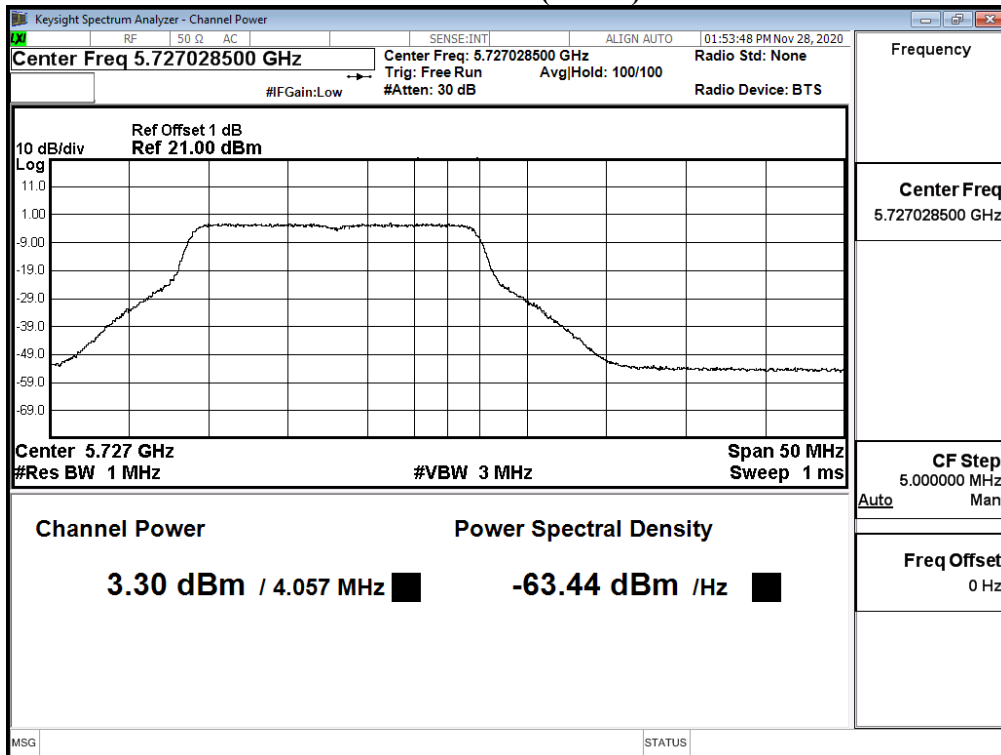
Channel 144



**Maximum conducted output power:
Channel 144 (Band3)**



**Maximum conducted output power:
Channel 144 (Band4)**



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 12 SISO B: Transmit (802.11n-40BW_15Mbps)

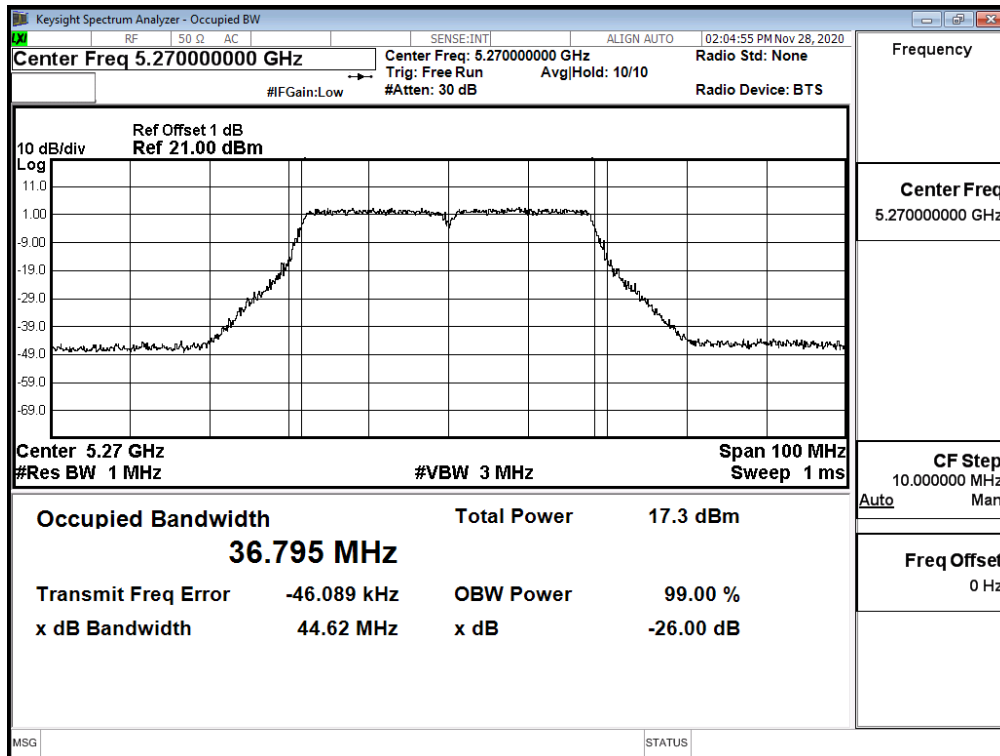
| Cable loss=1dB | | Maximum conducted output power | | | | | | | |
|----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Channel No. | Frequency (MHz) | Data Rate (Mbps) | | | | | | | |
| | | HT0 | HT1 | HT2 | HT3 | HT4 | HT5 | HT6 | HT7 |
| | | Measurement Level (dBm) | | | | | | | |
| 38 | 5190 | 10.84 | -- | -- | -- | -- | -- | -- | -- |
| 46 | 5230 | 10.99 | 10.91 | 10.83 | 10.80 | 10.70 | 10.62 | 10.56 | 10.49 |
| 54 | 5270 | 10.93 | -- | -- | -- | -- | -- | -- | -- |
| 62 | 5310 | 10.83 | 10.80 | 10.71 | 10.67 | 10.60 | 10.56 | 10.46 | 10.37 |
| 102 | 5510 | 9.88 | -- | -- | -- | -- | -- | -- | -- |
| 110 | 5550 | 9.98 | 9.89 | 9.83 | 9.77 | 9.69 | 9.62 | 9.59 | 9.51 |
| 134 | 5670 | 9.75 | -- | -- | -- | -- | -- | -- | -- |
| 142F(Band3) | 5710 | 9.48 | 9.42 | 9.37 | 9.28 | 9.24 | 9.19 | 9.12 | 9.08 |
| 142F(Band4) | 5710 | -0.61 | -0.66 | -0.75 | -0.79 | -0.85 | -0.90 | -0.97 | -1.07 |
| 151 | 5755 | 10.65 | -- | -- | -- | -- | -- | -- | -- |
| 159 | 5795 | 10.72 | 10.62 | 10.53 | 10.50 | 10.42 | 10.37 | 10.33 | 10.27 |

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

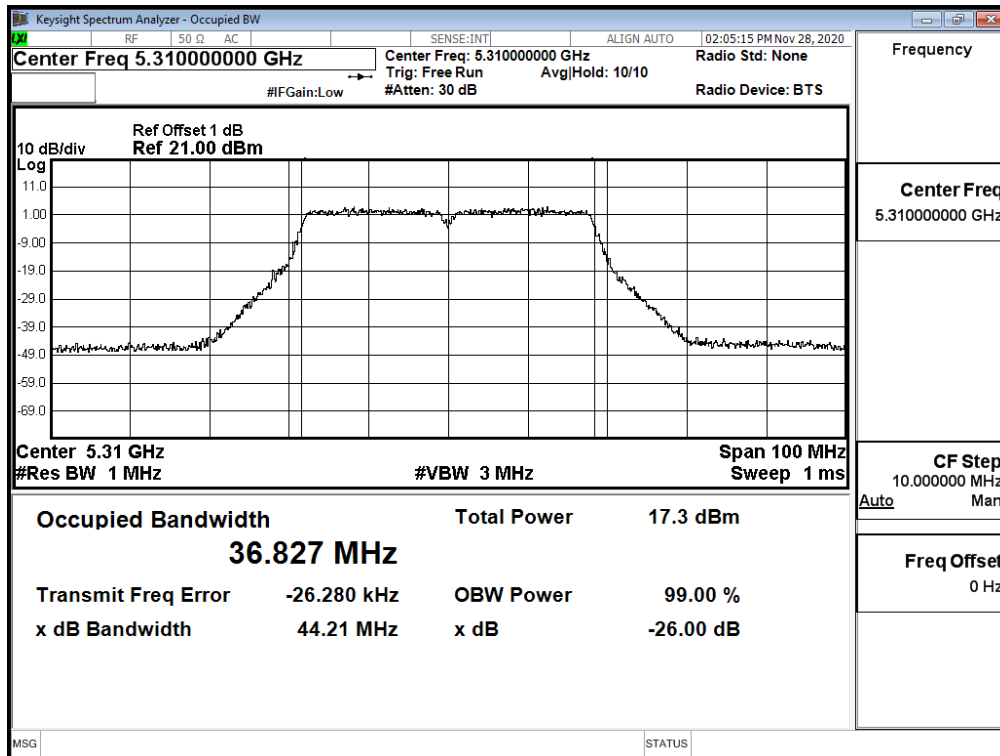
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|-------------|--------------------------|-------------------------|-----------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 38 | 5190 | -- | 10.84 | 24 | -- | Pass |
| 46 | 5230 | -- | 10.99 | 24 | -- | Pass |
| 54 | 5270 | 44.620 | 10.93 | 24 | 27.50 | Pass |
| 62 | 5310 | 44.210 | 10.83 | 24 | 27.46 | Pass |
| 102 | 5510 | 43.780 | 9.88 | 24 | 27.41 | Pass |
| 110 | 5550 | 44.310 | 9.98 | 24 | 27.47 | Pass |
| 134 | 5670 | 44.670 | 9.75 | 24 | 27.50 | Pass |
| 142F(Band3) | 5710 | 36.700 | 9.48 | 24 | 26.65 | Pass |
| 142F(Band4) | 5710 | -- | -0.61 | 30 | -- | Pass |
| 151 | 5755 | -- | 10.65 | 30 | -- | Pass |
| 159 | 5795 | -- | 10.72 | 30 | -- | Pass |

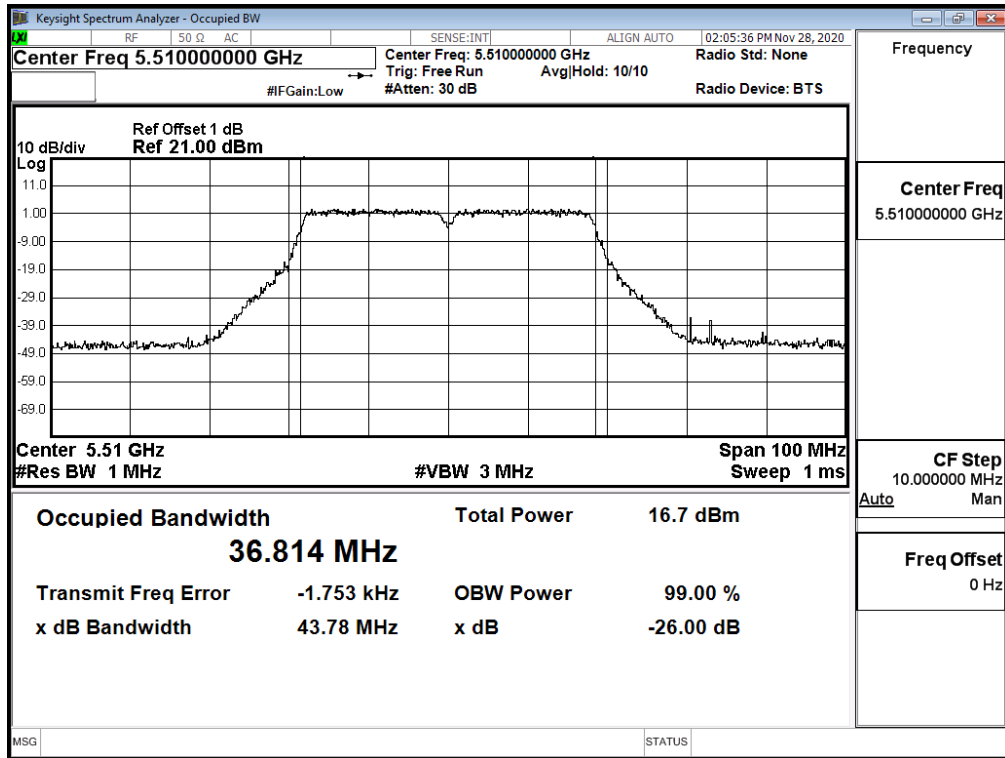
26dB Occupied Bandwidth: Channel 54



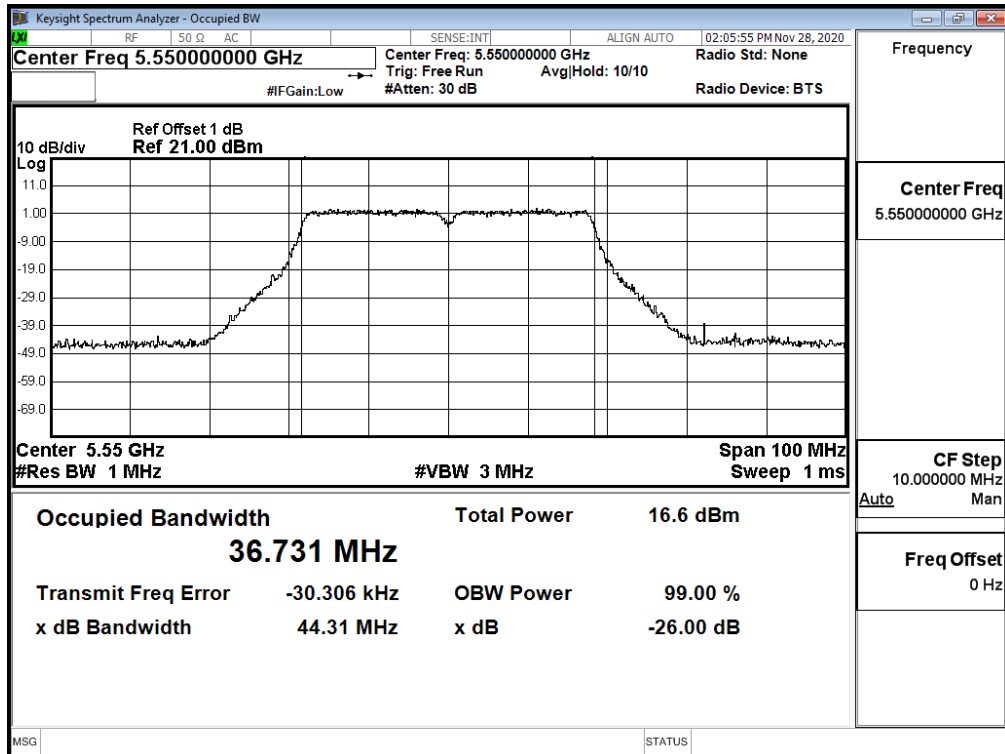
Channel 62



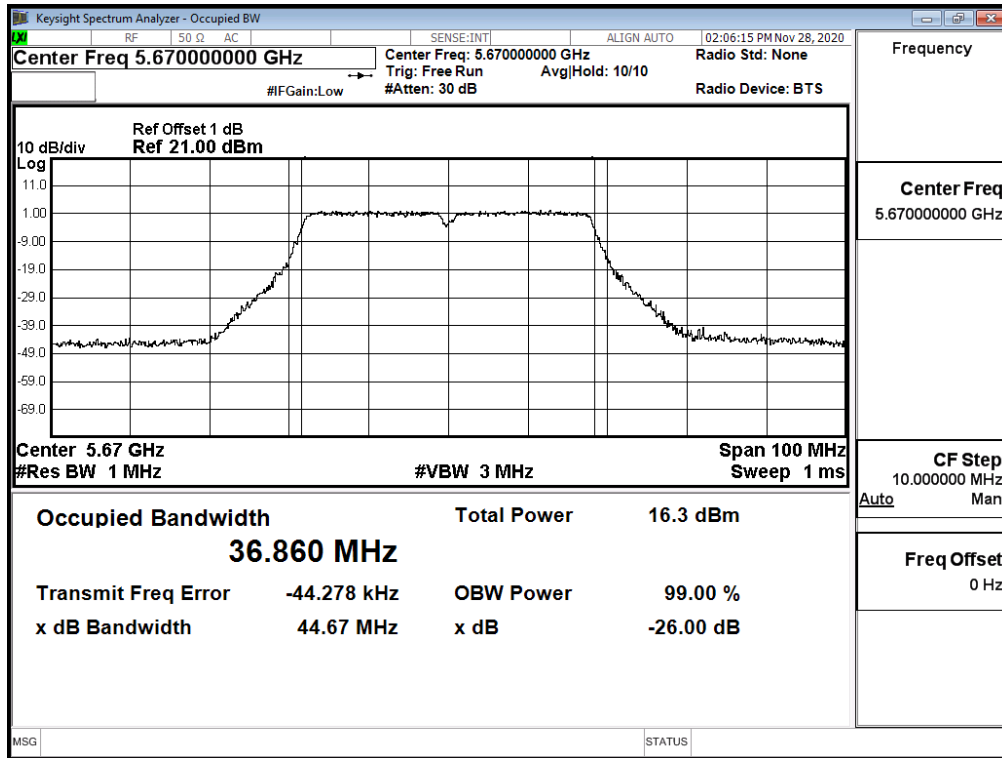
Channel 102



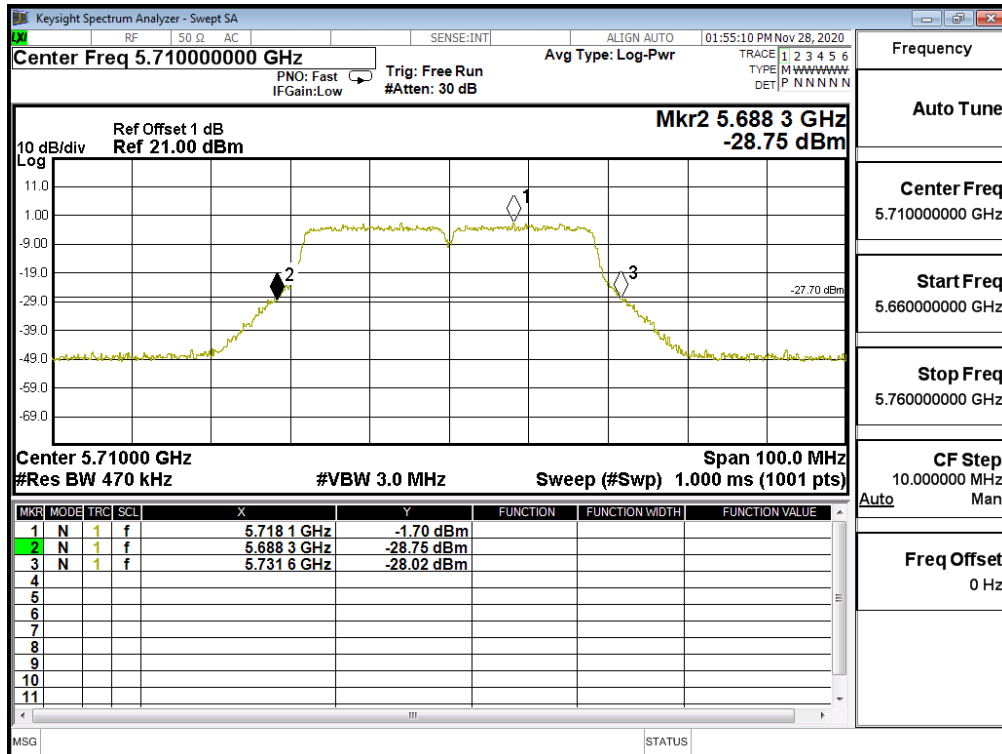
Channel 110



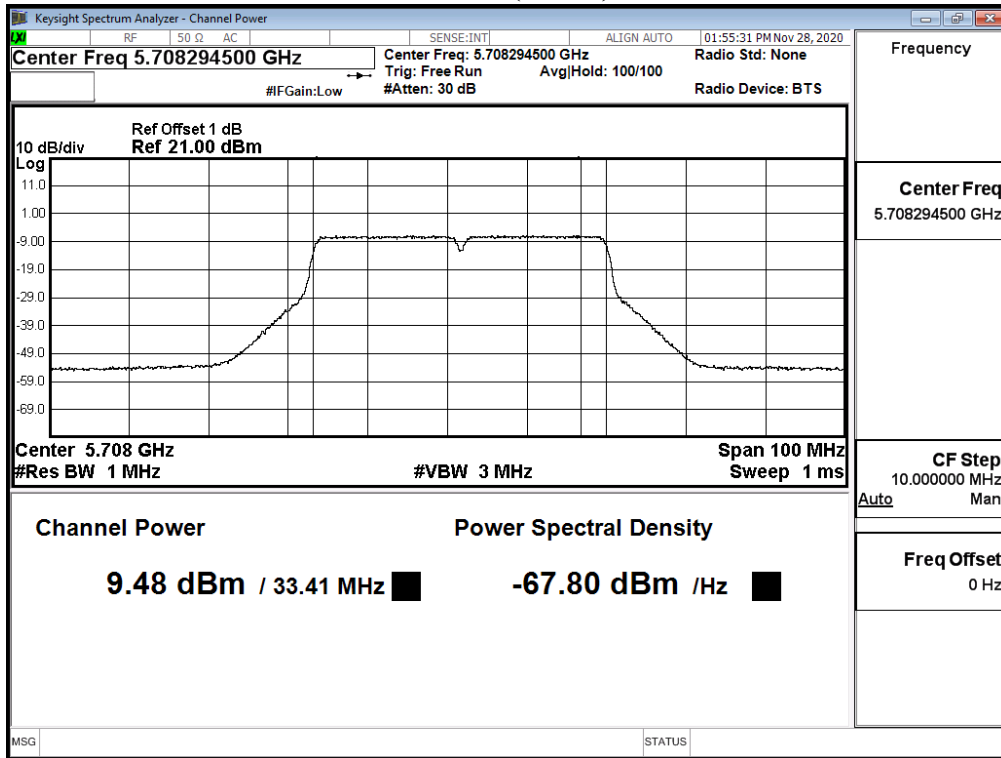
Channel 134



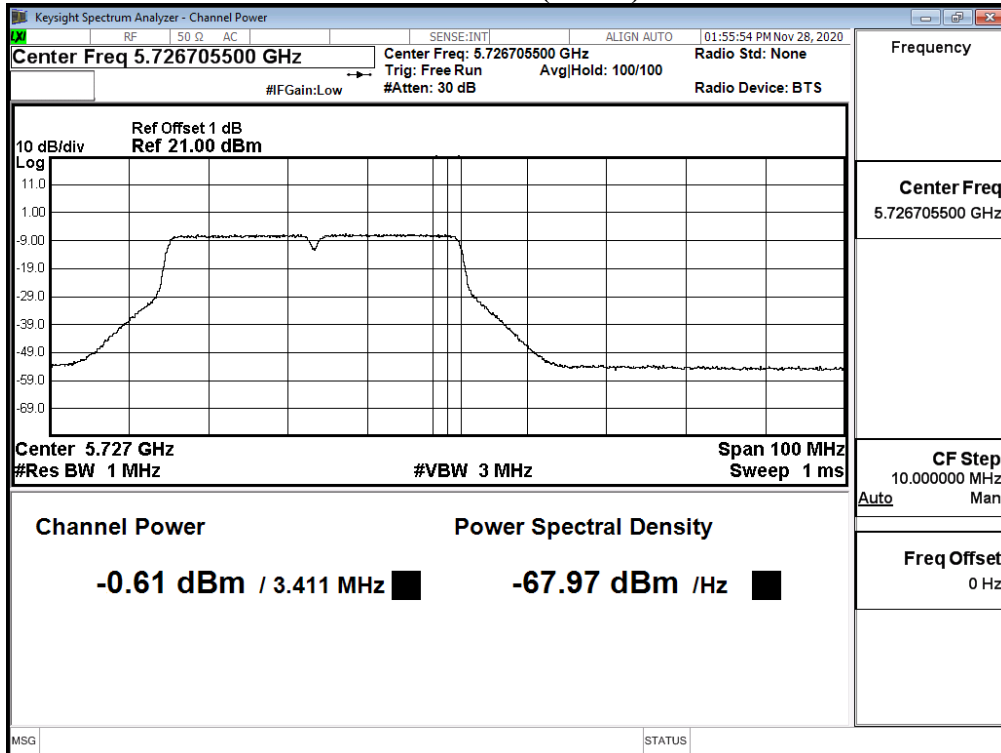
Channel 142



**Maximum conducted output power:
Channel 142 (Band3)**



**Maximum conducted output power:
Channel 142 (Band4)**



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 13 SISO B: Transmit (802.11ac-80BW_32.5Mbps)

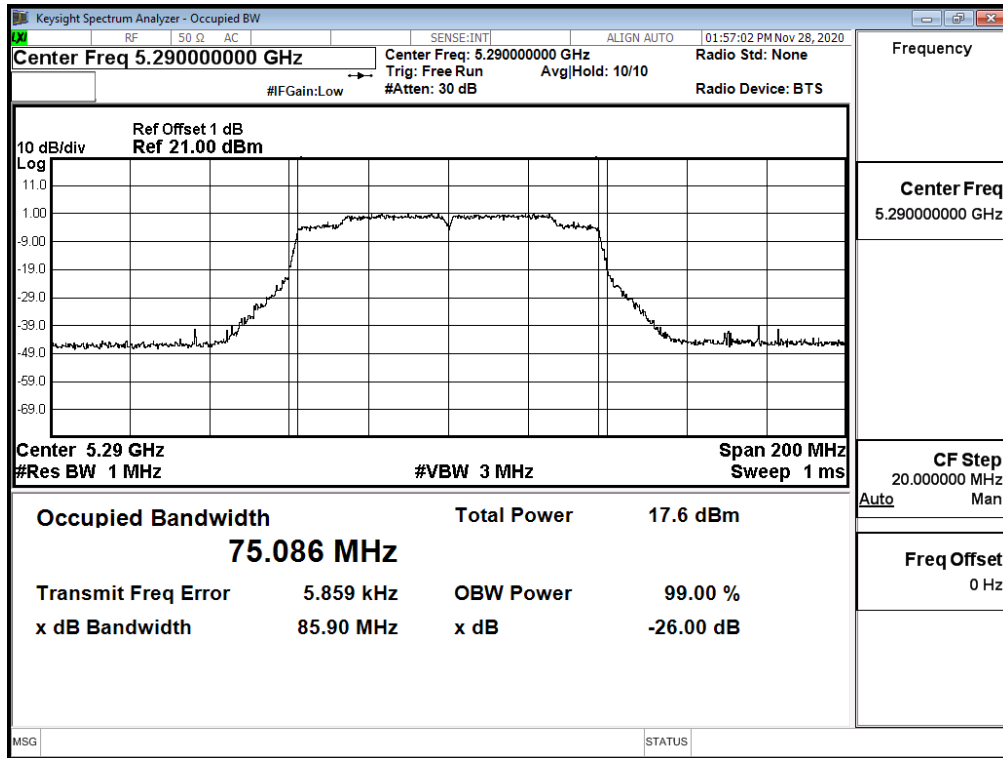
| Cable loss=1dB | | Maximum conducted output power | | | | | | | | | |
|----------------|-----------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Channel No | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | |
| | | VHT0 | VHT1 | VHT2 | VHT3 | VHT4 | VHT5 | VHT6 | VHT7 | VHT8 | VHT9 |
| 42 | 5210 | 10.79 | 10.71 | 10.61 | 10.52 | 10.48 | 10.38 | 10.33 | 10.25 | 10.21 | 10.11 |
| 58 | 5290 | 10.92 | 10.86 | 10.82 | 10.76 | 10.71 | 10.68 | 10.58 | 10.48 | 10.38 | 10.35 |
| 106ac80 | 5530 | 9.88 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 122ac80 | 5610 | 9.94 | 9.85 | 9.80 | 9.73 | 9.63 | 9.59 | 9.50 | 9.46 | 9.38 | 9.33 |
| 138ac80(Band3) | 5690 | 9.64 | 9.56 | 9.53 | 9.47 | 9.38 | 9.30 | 9.26 | 9.19 | 9.12 | 9.05 |
| 138ac80(Band4) | 5690 | -7.81 | -7.88 | -7.98 | -8.01 | -8.11 | -8.17 | -8.25 | -8.29 | -8.36 | -8.46 |
| 155ac80 | 5775 | 10.64 | 10.58 | 10.55 | 10.51 | 10.42 | 10.39 | 10.30 | 10.22 | 10.16 | 10.13 |

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

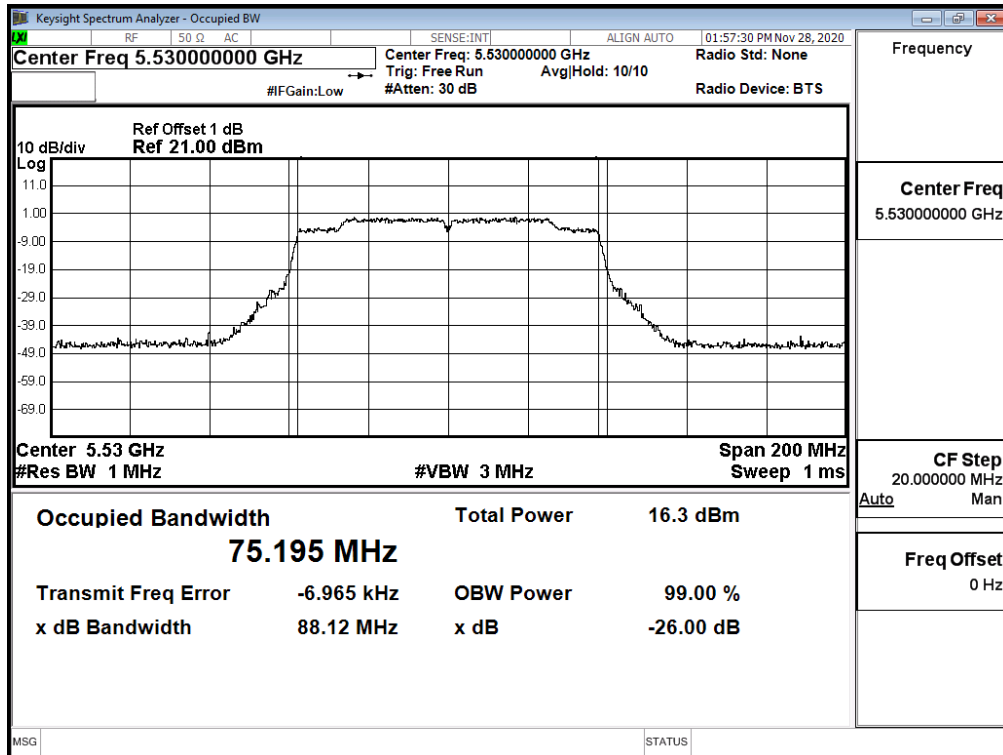
Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|----------------|-----------------------|----------------------|--------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 42 | 5210 | -- | 10.79 | 24 | -- | Pass |
| 58 | 5290 | 85.900 | 10.92 | 24 | 30.34 | Pass |
| 106ac80 | 5530 | 88.120 | 9.88 | 24 | 30.45 | Pass |
| 122ac80 | 5610 | 84.790 | 9.94 | 24 | 30.28 | Pass |
| 138ac80(Band3) | 5690 | 77.800 | 9.64 | 24 | 29.91 | Pass |
| 138ac80(Band4) | 5690 | -- | -7.81 | 30 | -- | Pass |
| 155ac80 | 5775 | -- | 10.64 | 30 | -- | Pass |

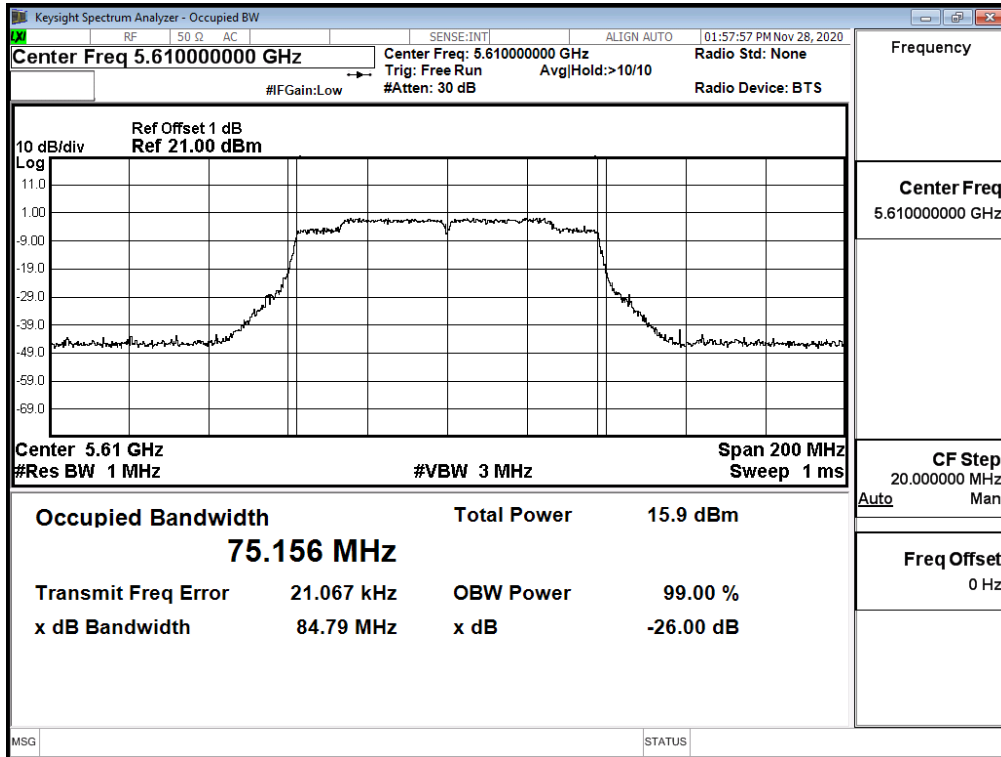
26dB Occupied Bandwidth: Channel 58



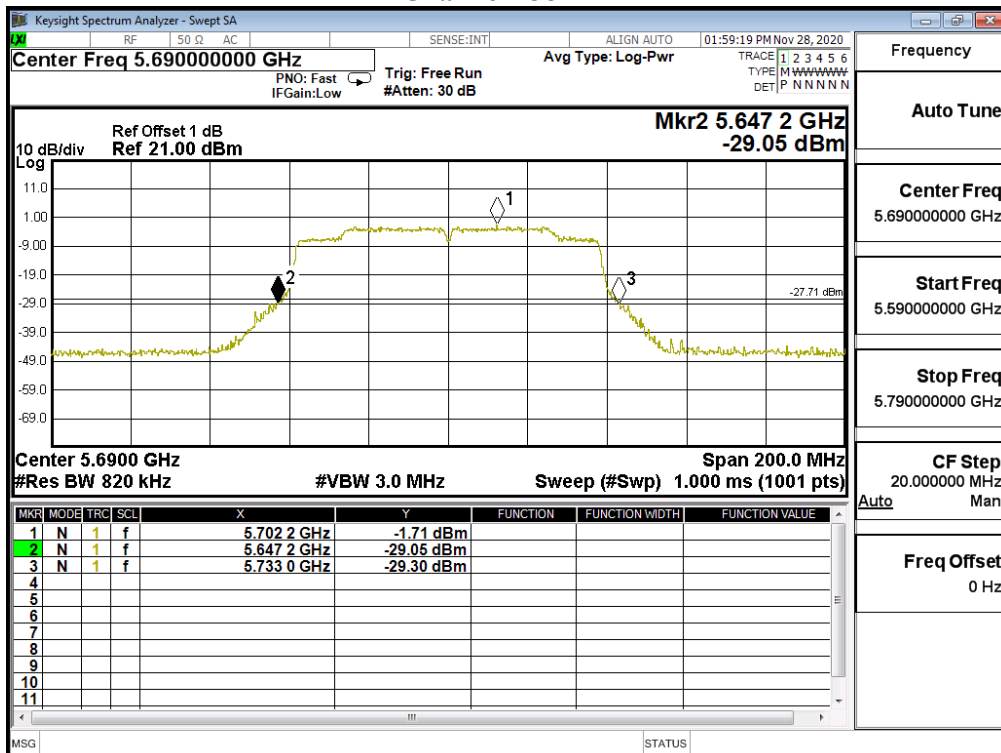
Channel 106



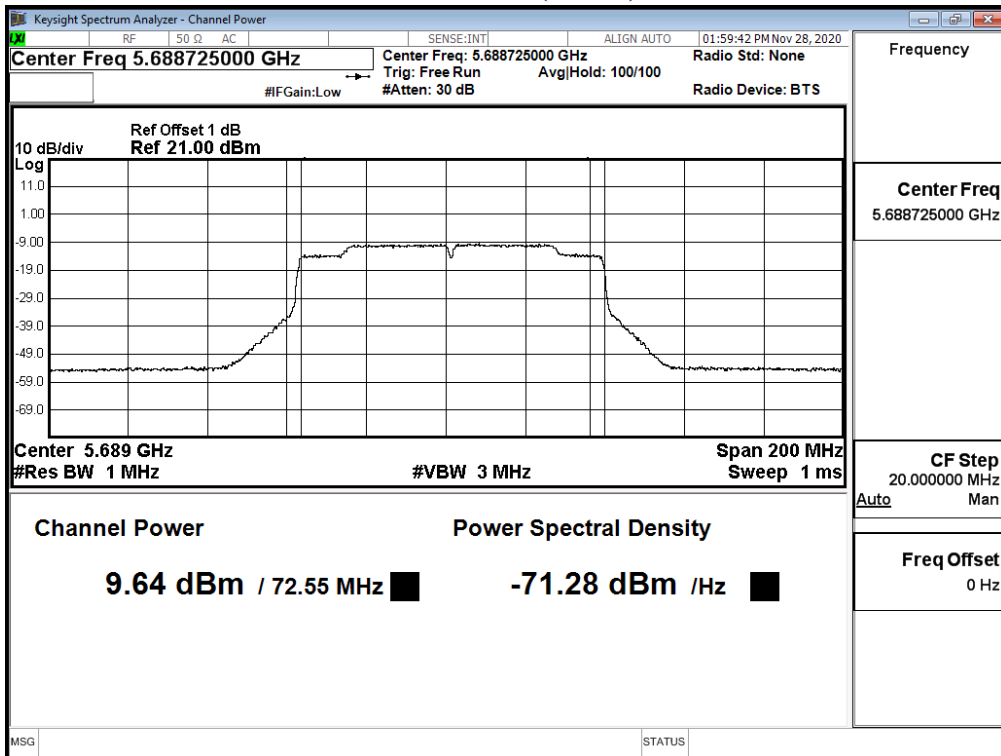
Channel 122



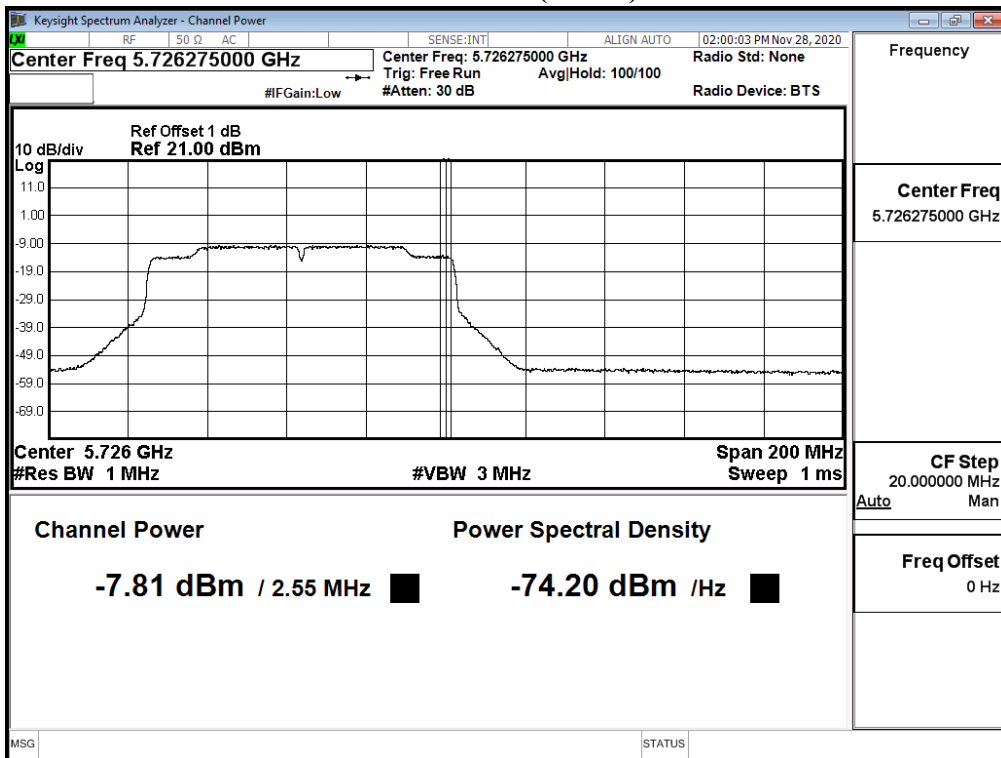
Channel 138



**Maximum conducted output power:
Channel 138 (Band3)**



**Maximum conducted output power:
Channel 138 (Band4)**



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 14 SISO B: Transmit (802.11ac-160BW_65Mbps)

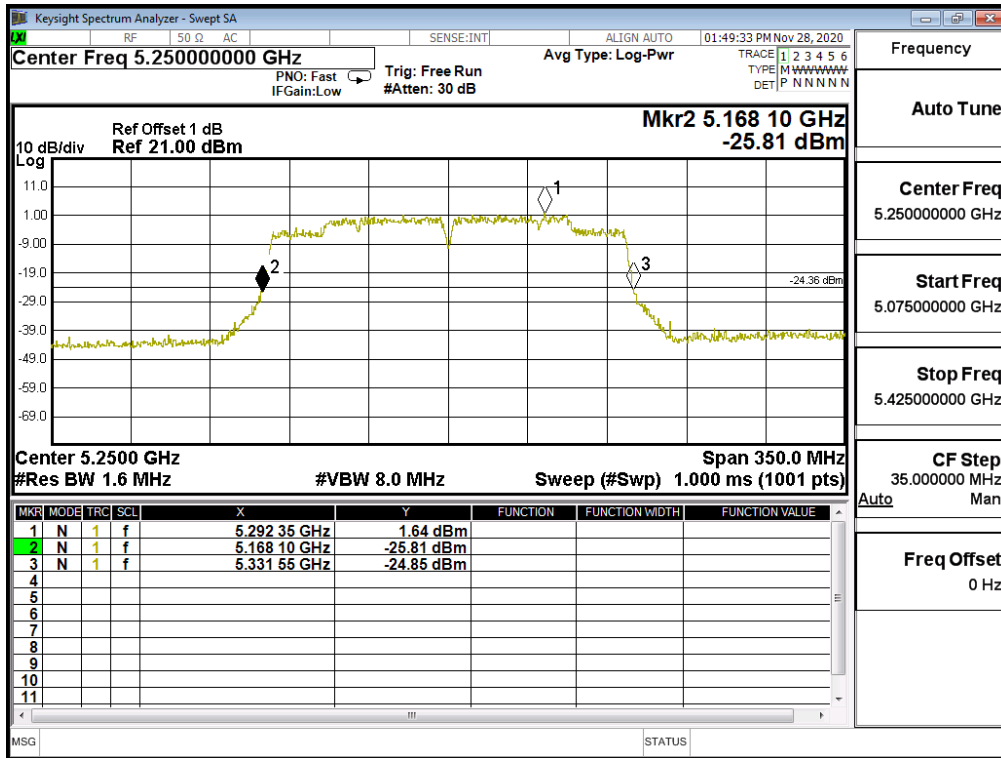
| Cable loss=1dB | | Maximum conducted output power | | | | | | | | | |
|----------------|-----------------|--------------------------------|------|------|------|------|------|------|------|------|------|
| Channel No | Frequency (MHz) | Data Rate (Mbps) | | | | | | | | | |
| | | VHT0 | VHT1 | VHT2 | VHT3 | VHT4 | VHT5 | VHT6 | VHT7 | VHT8 | VHT9 |
| 50ac160(Band1) | 5250 | 7.59 | 7.49 | 7.45 | 7.36 | 7.26 | 7.20 | 7.10 | 7.01 | 6.94 | 6.89 |
| 50ac160(Band2) | 5250 | 8.28 | 8.25 | 8.19 | 8.10 | 8.06 | 7.99 | 7.91 | 7.83 | 7.75 | 7.69 |
| 114ac160 | 5570 | 9.77 | 9.72 | 9.64 | 9.58 | 9.53 | 9.49 | 9.40 | 9.32 | 9.23 | 9.14 |

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

| Channel No | Frequency Range (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Output Power Limit | | Result |
|----------------|-----------------------|----------------------|--------------------|--------------------|---------------|--------|
| | | | | (dBm) | dBm+10log(BW) | |
| 50ac160(Band1) | 5250 | -- | 7.59 | 24 | -- | Pass |
| 80ac160(Band2) | 5250 | 81.550 | 8.28 | 24 | 30.11 | Pass |
| 114ac160 | 5570 | 162.900 | 9.77 | 24 | 33.12 | Pass |

26dB Occupied Bandwidth: Channel 50



Channel 114

