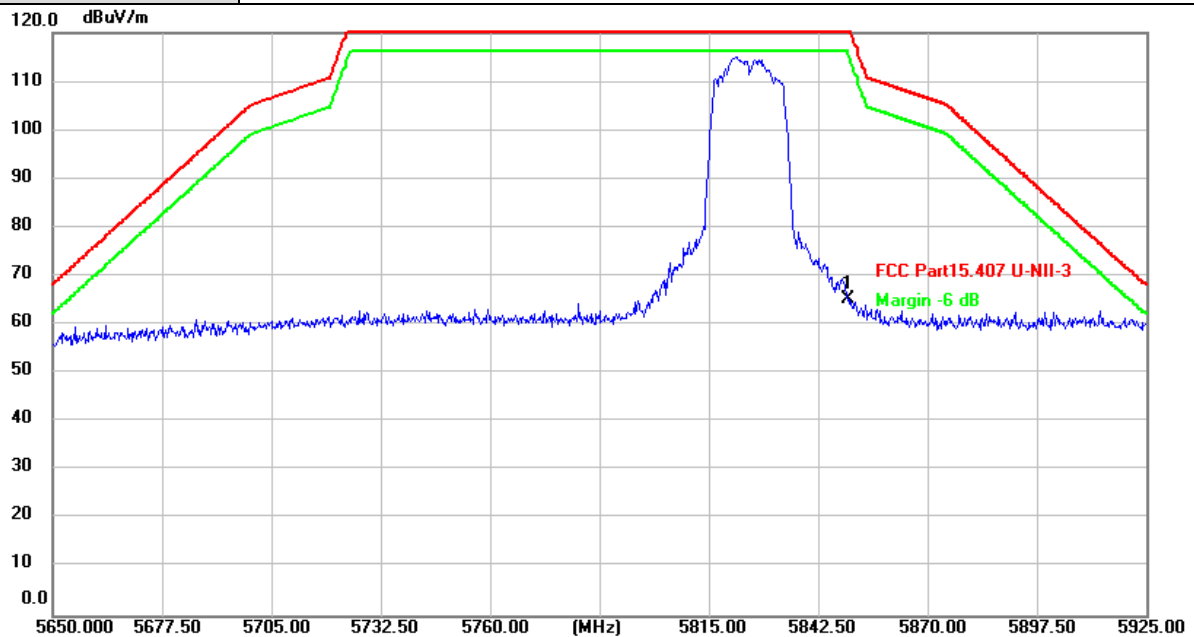




|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Ant No.    | MIMO                                                                         |
| Ant. Pol.  | Vertical                                                                     |
| Test Mode: | TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3)                                    |
| Remark:    | No report for the emission which more than 10 dB below the prescribed limit. |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 5850.000        | 60.38          | 4.95          | 65.33          | 122.20         | -56.87      | peak     |

## Remarks:

- 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- 2.Margin value = Level -Limit value



|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Ant No.    | MIMO                                                                         |
| Ant. Pol.  | Horizontal                                                                   |
| Test Mode: | TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3)                                    |
| Remark:    | No report for the emission which more than 10 dB below the prescribed limit. |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 5725.000        | 68.32          | 4.54          | 72.86          | 122.20         | -49.34      | peak     |

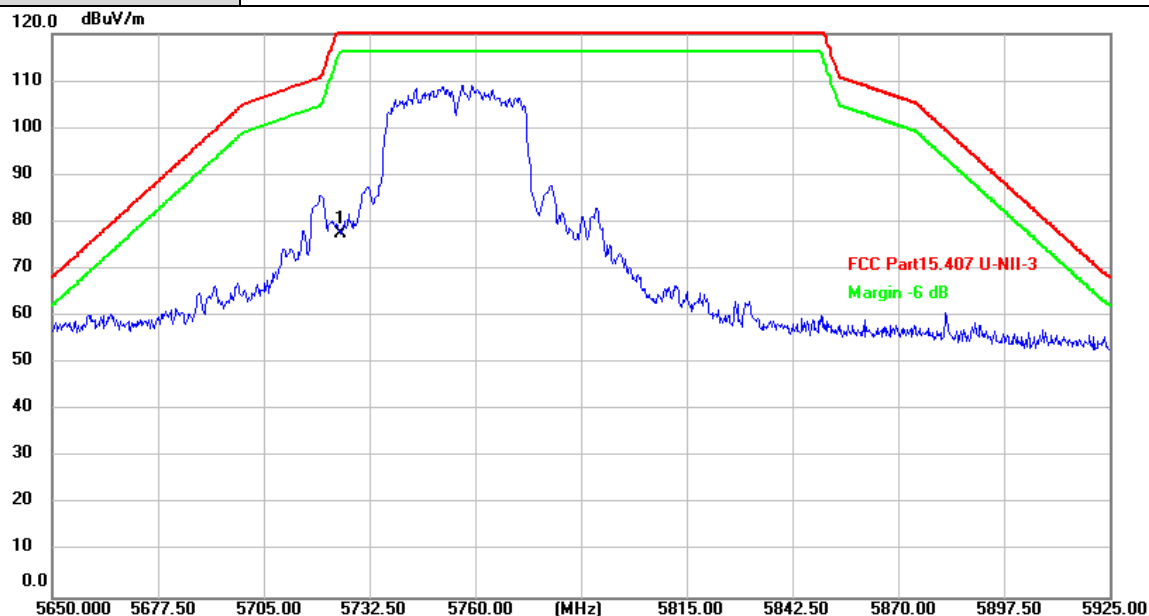
## Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value



|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Ant No.    | MIMO                                                                         |
| Ant. Pol.  | Vertical                                                                     |
| Test Mode: | TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3)                                    |
| Remark:    | No report for the emission which more than 10 dB below the prescribed limit. |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 5725.000        | 73.11          | 4.54          | 77.65          | 122.20         | -44.55      | peak     |

## Remarks:

- Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- Margin value = Level -Limit value



|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Ant No.    | MIMO                                                                         |
| Ant. Pol.  | Horizontal                                                                   |
| Test Mode: | TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)                                    |
| Remark:    | No report for the emission which more than 10 dB below the prescribed limit. |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 5850.000        | 49.69          | 4.95          | 54.64          | 122.20         | -67.56      | peak     |

## Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value



|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Ant No.    | MIMO                                                                         |
| Ant. Pol.  | Vertical                                                                     |
| Test Mode: | TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)                                    |
| Remark:    | No report for the emission which more than 10 dB below the prescribed limit. |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 5850.000        | 59.91          | 4.95          | 64.86          | 122.20         | -57.34      | peak     |

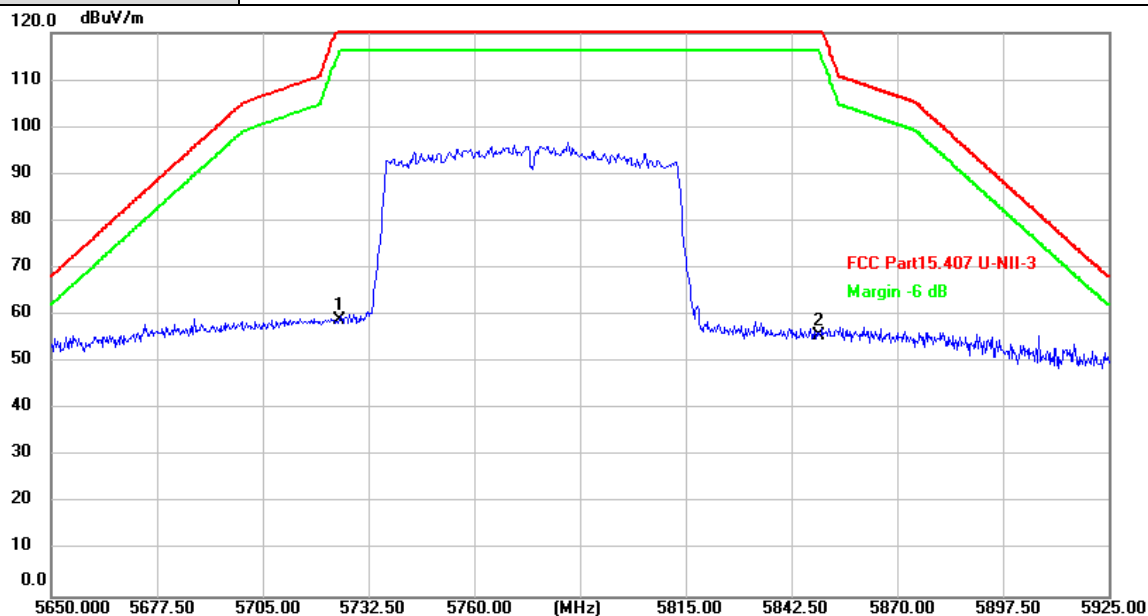
## Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value



|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Ant No.    | MIMO                                                                         |
| Ant. Pol.  | Horizontal                                                                   |
| Test Mode: | TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)                                    |
| Remark:    | No report for the emission which more than 10 dB below the prescribed limit. |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 5725.000        | 54.48          | 4.54          | 59.02          | 122.20         | -63.18      | peak     |
| 2   | 5850.000        | 50.69          | 4.95          | 55.64          | 122.20         | -66.56      | peak     |

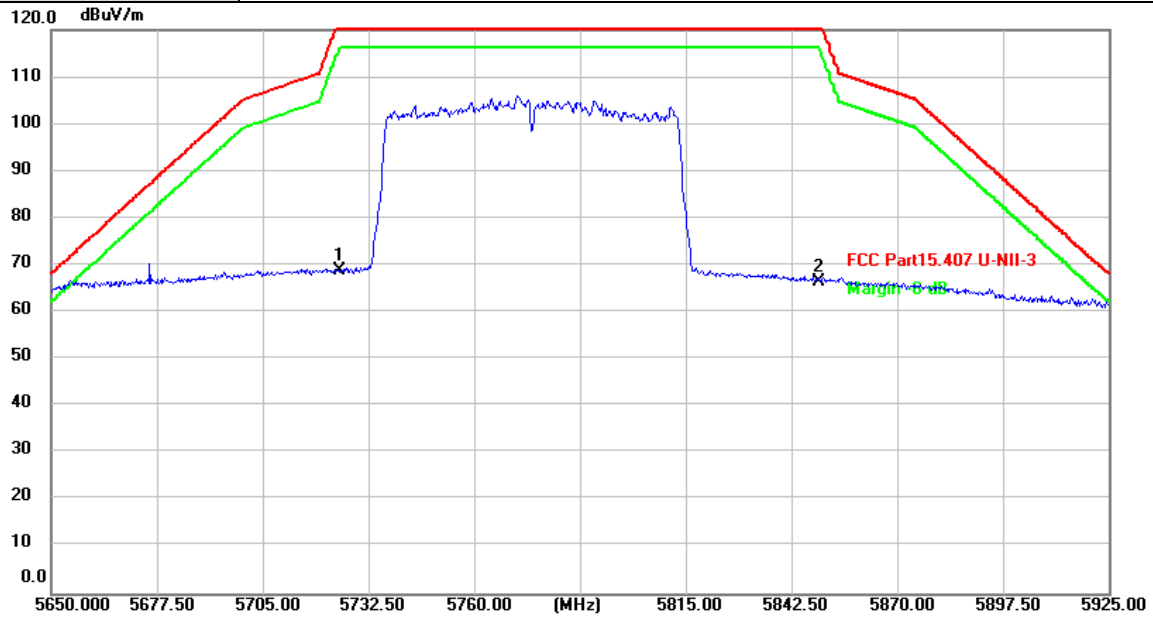
## Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value



|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Ant No.    | MIMO                                                                         |
| Ant. Pol.  | Vertical                                                                     |
| Test Mode: | TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)                                    |
| Remark:    | No report for the emission which more than 10 dB below the prescribed limit. |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 5725.000        | 64.32          | 4.54          | 68.86          | 122.20         | -53.34      | peak     |
| 2   | 5850.000        | 61.65          | 4.95          | 66.60          | 122.20         | -55.60      | peak     |

## Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value

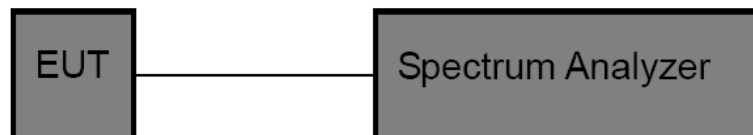


### 3.4. Bandwidth Test

#### Limit

| FCC Part 15 Subpart C(15.407)/ RSS-247 |         |                       |
|----------------------------------------|---------|-----------------------|
| Test Item                              | Limit   | Frequency Range (MHz) |
| 26 Bandwidth                           | N/A     | 5150~5250             |
|                                        |         | 5250~5350             |
|                                        |         | 5500~5700             |
| 6 dB Bandwidth                         | >500kHz | 5725~5850             |

#### Test Configuration



#### Test Procedure

Please refer to According to KDB789033 D02, for the measurement methods.

#### The setting of the spectrum analyser as below:

| 26dB Bandwidth Test |                                            |
|---------------------|--------------------------------------------|
| Spectrum Parameters | Setting                                    |
| Attenuation         | Auto                                       |
| Span                | >26 dB Bandwidth                           |
| RBW                 | Approximately 1% of the emission bandwidth |
| VBW                 | VBW>RBW                                    |
| Detector            | Peak                                       |
| Trace               | Max Hold                                   |
| Sweep Time          | Auto                                       |





| 6dB Bandwidth Test          |                     |
|-----------------------------|---------------------|
| Spectrum Parameters         | Setting             |
| Attenuation                 | Auto                |
| Span                        | >6 dB Bandwidth     |
| RBW                         | 100 kHz             |
| VBW                         | VBW>=3*RBW          |
| Detector                    | Peak                |
| Trace                       | Max Hold            |
| Sweep Time                  | Auto                |
| 99% Occupied Bandwidth Test |                     |
| Spectrum Parameters         | Setting             |
| Attenuation                 | Auto                |
| RBW                         | 1% to 5% of the OBW |
| VBW                         | ≥ 3RBW              |
| Detector                    | Peak                |
| Trace                       | Max Hold            |

Note: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

#### **Test Mode**

Please refer to the clause 2.4.

#### **Test Results**

Please see the Appendix A1, A2, A3



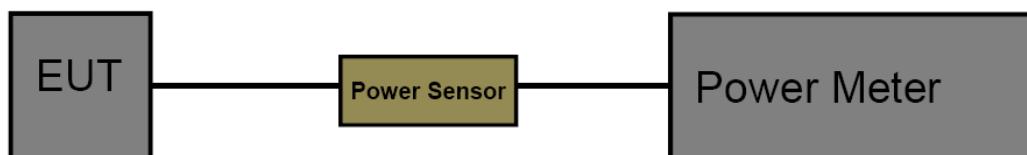
### 3.5. Output Power Test

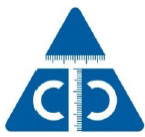
#### Limit

| FCC Part 15 Subpart E (15.407) |                                                                |                      |
|--------------------------------|----------------------------------------------------------------|----------------------|
| Test Item                      | Limit                                                          | Frequency Range(MHz) |
| Conducted Output Power         | Fixed: 1 Watt (30dBm)<br>Mobile and Portable:<br>250mW (24dBm) | 5150~5250            |
|                                | 250mW (24dBm)                                                  | 5250~5350            |
|                                | 250mW (24dBm)                                                  | 5500~5700            |
|                                | 1 Watt (30dBm)                                                 | 5725~5850            |

| IC Power@PSD Limit                 |                 |                                                                                 |                                                                                  |                                  |                             |
|------------------------------------|-----------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------|-----------------------------|
| Frequency                          | Type of devices | Maximum Conducted Output Power                                                  | EIRP Output Power                                                                | Conducted Power Spectral Density | EIRP Power Spectral Density |
| 5150MHz-5250MHz                    | in vehicles     |                                                                                 | 30mW or $1.76 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz) |                                  |                             |
|                                    | Other Devices   |                                                                                 | 200mW or $10 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)  |                                  | 10dBm/MHz                   |
| 5250MHz-5350MHz                    | in vehicles     |                                                                                 | 30mW or $1.76 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz) |                                  |                             |
|                                    | Other Devices   | 250mW or $11 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz) | 1W or $17 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)     | 11dBm/MHz                        |                             |
| 5470MHz-5600MHz<br>5650MHz-5725MHz | ALL Devices     | 250mW or $11 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz) | 1W or $17 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)     | 11dBm/MHz                        |                             |
| 5725MHz-5850MHz                    | ALL Devices     | 1W                                                                              |                                                                                  | 30dBm/500KHz                     |                             |

#### Test Configuration





### **Test Procedure**

The measurement is according to section 3 of KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

### **Test Mode**

Please refer to the clause 2.4.

### **Test Result**

Please see the Appendix B



### 3.6. Power Spectral Density Test

#### Limit

#### FCC Part 15 Subpart E(15.407)/ RSS-247

For the 5.15~5.25GHz band:

- Outdoor AP  
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 17 - (G_{TX} - 6)$ .
- Indoor AP  
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 17 - (G_{TX} - 6)$ .
- Point-to-point AP  
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.  
If  $G_{TX} > 23\text{dBi}$ , then  $\text{PSD} = 17 - (G_{TX} - 23)$ .
- Client devices  
The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 11 - (G_{TX} - 6)$ .

For the 5.25~5.35GHz band:

The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 11 - (G_{TX} - 6)$ .

For the 5.47~5.725GHz band:

The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 11 - (G_{TX} - 6)$ .

For the 5.725~5.85GHz band:

- Point-to-multipoint systems (P2M)  
The peak power spectral density (PSD) shall not exceed the lesser of 30dBm/500kHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 30 - (G_{TX} - 6)$ .
- Point-to-point systems (P2P)  
The peak power spectral density (PSD) shall not exceed the lesser of 30dBm/500kHz.

Note:  $G_{TX}$ : EUT Antenna gain.

| IC Power&PSD Limit                 |                 |                                                                                 |                                                                                  |                                  |                             |
|------------------------------------|-----------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------|-----------------------------|
| Frequency                          | Type of devices | Maximum Conducted Output Power                                                  | EIRP Output Power                                                                | Conducted Power Spectral Density | EIRP Power Spectral Density |
| 5150MHz-5250MHz                    | in vehicles     |                                                                                 | 30mW or $1.76 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz) |                                  |                             |
|                                    | Other Devices   |                                                                                 | 200mW or $10 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)  |                                  | 10dBm/MHz                   |
| 5250MHz-5350MHz                    | in vehicles     |                                                                                 | 30mW or $1.76 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz) |                                  |                             |
|                                    | Other Devices   | 250mW or $11 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz) | 1W or $17 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)     | 11dBm/MHz                        |                             |
| 5470MHz-5600MHz<br>5650MHz-5725MHz | ALL Devices     | 250mW or $11 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz) | 1W or $17 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)     | 11dBm/MHz                        |                             |
| 5725MHz-5850MHz                    | ALL Devices     | 1W                                                                              |                                                                                  | 30dBm/500KHz                     |                             |

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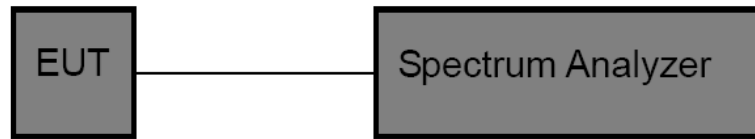
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### Test Configuration



### Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement is according to KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyzer center frequency to transmitting frequency.
- (3) Set the span to encompass the entire emissions bandwidth (EBW)(alternatively, the entire 99% OBW) of the signal.
- (4) RBW=1MHz for devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz  
RBW=500kHz for devices operating in the band 5.725-5.85 GHz
- (5) Set the VBW to:  $\geq 3$  RBW
- (6) Detector: AVG
- (7) Trace: Max Hold and View
- (7) Sweep time: auto
- (8) Trace average at least 100 traces in power averaging.
- (9) User the peak marker function to determine the maximum amplitude level within the RBW. Apply correction to the result if different RBW is used.

NOTE: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

### Test Mode

Please refer to the clause 2.4.

### Test Result

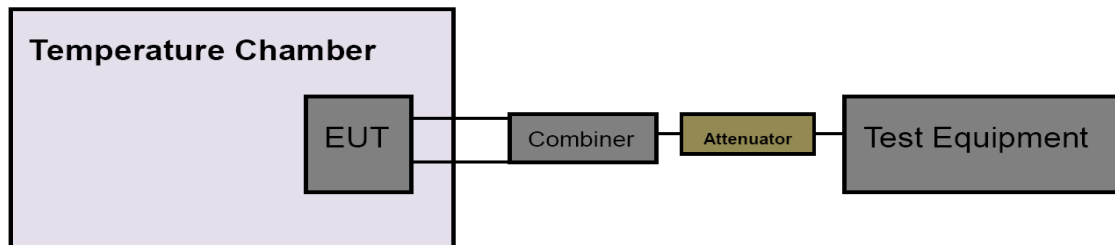
Please see the Appendix C

### 3.7. Frequency Stability Measurement

#### Limit

| FCC Part 15 Subpart C(15.407) |                                                                                                                                                          |                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Test Item                     | Limit                                                                                                                                                    | Frequency Range(MHz) |
| Peak Excursion Measurement    | Specified in the user's manual, the transmitter center frequency tolerance shall be $\pm 20$ ppm maximum for the 5 GHz band (IEEE 802.11n specification) | 5150~5250            |
|                               |                                                                                                                                                          | 5250~5350            |
|                               |                                                                                                                                                          | 5500~5700            |
|                               |                                                                                                                                                          | 5725~5850            |

#### Test Configuration



#### Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyzer center frequency to transmitting frequency.
- (3) Set the span to encompass the entire emissions bandwidth (EBW) of the signal.
- (4) Set the RBW to: 10 kHz, VBW=10 kHz with peak detector and maxhold settings.
- (5) The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- (6) Extreme temperature is 0°C~45°C

NOTE: The EUT was set to continuously transmitting in continuously un-modulation transmitting mode.

#### Test Mode

Please refer to the clause 2.4.

#### Test Result

Please see the Appendix D



### 3.8 Antenna Requirement

#### Standard Requirement

##### **FCC CFR Title 47 Part 15 Subpart C Section 15.203:**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### Test Result

Complies



## Appendix A1: Emission Bandwidth

### Test Result

| Mode            | Channel | Ant. | Center Frequency (MHz) | 26 dB Bandwidth (MHz) |
|-----------------|---------|------|------------------------|-----------------------|
| IEEE 802.11a    | 36      | 0    | 5180                   | 22.99                 |
|                 |         | 1    | 5180                   | 22.09                 |
|                 |         | 2    | 5180                   | 20.00                 |
|                 |         | 3    | 5180                   | 19.71                 |
|                 | 40      | 0    | 5200                   | 22.34                 |
|                 |         | 1    | 5200                   | 19.98                 |
|                 |         | 2    | 5200                   | 19.94                 |
|                 |         | 3    | 5200                   | 19.60                 |
|                 | 48      | 0    | 5240                   | 19.68                 |
|                 |         | 1    | 5240                   | 19.46                 |
|                 |         | 2    | 5240                   | 19.69                 |
|                 |         | 3    | 5240                   | 19.60                 |
|                 | 52      | 0    | 5260                   | 19.62                 |
|                 |         | 1    | 5260                   | 19.64                 |
|                 |         | 2    | 5260                   | 20.00                 |
|                 |         | 3    | 5260                   | 19.77                 |
|                 | 56      | 0    | 5280                   | 19.57                 |
|                 |         | 1    | 5280                   | 19.77                 |
|                 |         | 2    | 5280                   | 22.12                 |
|                 |         | 3    | 5280                   | 19.90                 |
|                 | 64      | 0    | 5320                   | 19.65                 |
|                 |         | 1    | 5320                   | 19.74                 |
|                 |         | 2    | 5320                   | 21.18                 |
|                 |         | 3    | 5320                   | 20.07                 |
|                 | 100     | 0    | 5500                   | 20.23                 |
|                 |         | 1    | 5500                   | 19.75                 |
|                 |         | 2    | 5500                   | 22.40                 |
|                 |         | 3    | 5500                   | 22.32                 |
|                 | 116     | 0    | 5580                   | 19.64                 |
|                 |         | 1    | 5580                   | 19.89                 |
|                 |         | 2    | 5580                   | 19.97                 |
|                 |         | 3    | 5580                   | 19.59                 |
|                 | 140     | 0    | 5700                   | 19.68                 |
|                 |         | 1    | 5700                   | 19.70                 |
|                 |         | 2    | 5700                   | 19.92                 |
|                 |         | 3    | 5700                   | 19.61                 |
| IEEE 802.11n_20 | 36      | 0    | 5180                   | 19.95                 |
|                 |         | 1    | 5180                   | 20.22                 |
|                 |         | 2    | 5180                   | 20.05                 |
|                 |         | 3    | 5180                   | 19.77                 |
|                 | 40      | 0    | 5200                   | 19.96                 |
|                 |         | 1    | 5200                   | 20.17                 |
|                 |         | 2    | 5200                   | 19.97                 |
|                 |         | 3    | 5200                   | 19.87                 |
|                 | 48      | 0    | 5240                   | 20.21                 |
|                 |         | 1    | 5240                   | 20.13                 |
|                 |         | 2    | 5240                   | 19.98                 |
|                 |         | 3    | 5240                   | 19.88                 |
|                 | 52      | 0    | 5260                   | 20.04                 |
|                 |         | 1    | 5260                   | 20.16                 |
|                 |         | 2    | 5260                   | 20.07                 |
|                 |         | 3    | 5260                   | 19.80                 |
|                 | 56      | 0    | 5280                   | 19.81                 |
|                 |         | 1    | 5280                   | 20.22                 |
|                 |         | 2    | 5280                   | 20.04                 |
|                 |         | 3    | 5280                   | 19.68                 |
|                 | 64      | 0    | 5320                   | 19.90                 |
|                 |         | 1    | 5320                   | 20.21                 |

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|                  |     |   |      |       |
|------------------|-----|---|------|-------|
|                  | 100 | 2 | 5320 | 19.92 |
|                  |     | 3 | 5320 | 19.77 |
|                  |     | 0 | 5500 | 20.26 |
|                  |     | 1 | 5500 | 20.15 |
|                  |     | 2 | 5500 | 20.04 |
|                  |     | 3 | 5500 | 19.78 |
|                  | 116 | 0 | 5580 | 20.03 |
|                  |     | 1 | 5580 | 20.17 |
|                  |     | 2 | 5580 | 20.21 |
|                  |     | 3 | 5580 | 19.76 |
|                  | 140 | 0 | 5700 | 20.13 |
|                  |     | 1 | 5700 | 20.12 |
|                  |     | 2 | 5700 | 19.91 |
|                  |     | 3 | 5700 | 19.92 |
| IEEE 802.11n_40  | 38  | 0 | 5190 | 40.35 |
|                  |     | 1 | 5190 | 40.08 |
|                  |     | 2 | 5190 | 39.67 |
|                  |     | 3 | 5190 | 40.07 |
|                  | 46  | 0 | 5230 | 40.16 |
|                  |     | 1 | 5230 | 40.02 |
|                  |     | 2 | 5230 | 39.68 |
|                  |     | 3 | 5230 | 39.90 |
|                  | 54  | 0 | 5270 | 39.92 |
|                  |     | 1 | 5270 | 40.42 |
|                  |     | 2 | 5270 | 40.08 |
|                  |     | 3 | 5270 | 39.94 |
|                  | 62  | 0 | 5310 | 39.74 |
|                  |     | 1 | 5310 | 39.70 |
|                  |     | 2 | 5310 | 39.96 |
|                  |     | 3 | 5310 | 40.10 |
|                  | 102 | 0 | 5510 | 40.09 |
|                  |     | 1 | 5510 | 40.18 |
|                  |     | 2 | 5510 | 39.92 |
|                  |     | 3 | 5510 | 39.87 |
|                  | 110 | 0 | 5550 | 39.90 |
|                  |     | 1 | 5550 | 40.09 |
|                  |     | 2 | 5550 | 39.95 |
|                  |     | 3 | 5550 | 39.86 |
|                  | 134 | 0 | 5670 | 39.93 |
|                  |     | 1 | 5670 | 40.11 |
|                  |     | 2 | 5670 | 39.72 |
|                  |     | 3 | 5670 | 39.66 |
| IEEE 802.11ac_20 | 36  | 0 | 5180 | 20.04 |
|                  |     | 1 | 5180 | 19.98 |
|                  |     | 2 | 5180 | 20.18 |
|                  |     | 3 | 5180 | 20.36 |
|                  | 40  | 0 | 5200 | 20.28 |
|                  |     | 1 | 5200 | 20.09 |
|                  |     | 2 | 5200 | 20.23 |
|                  |     | 3 | 5200 | 20.27 |
|                  | 48  | 0 | 5240 | 20.08 |
|                  |     | 1 | 5240 | 20.06 |
|                  |     | 2 | 5240 | 20.08 |
|                  |     | 3 | 5240 | 20.16 |
|                  | 52  | 0 | 5260 | 20.01 |
|                  |     | 1 | 5260 | 20.15 |
|                  |     | 2 | 5260 | 20.02 |
|                  |     | 3 | 5260 | 20.07 |
|                  | 56  | 0 | 5280 | 20.05 |
|                  |     | 1 | 5280 | 20.15 |
|                  |     | 2 | 5280 | 20.13 |
|                  |     | 3 | 5280 | 20.05 |
|                  | 64  | 0 | 5320 | 20.19 |
|                  |     | 1 | 5320 | 20.17 |
|                  |     | 2 | 5320 | 20.18 |
|                  |     | 3 | 5320 | 20.14 |

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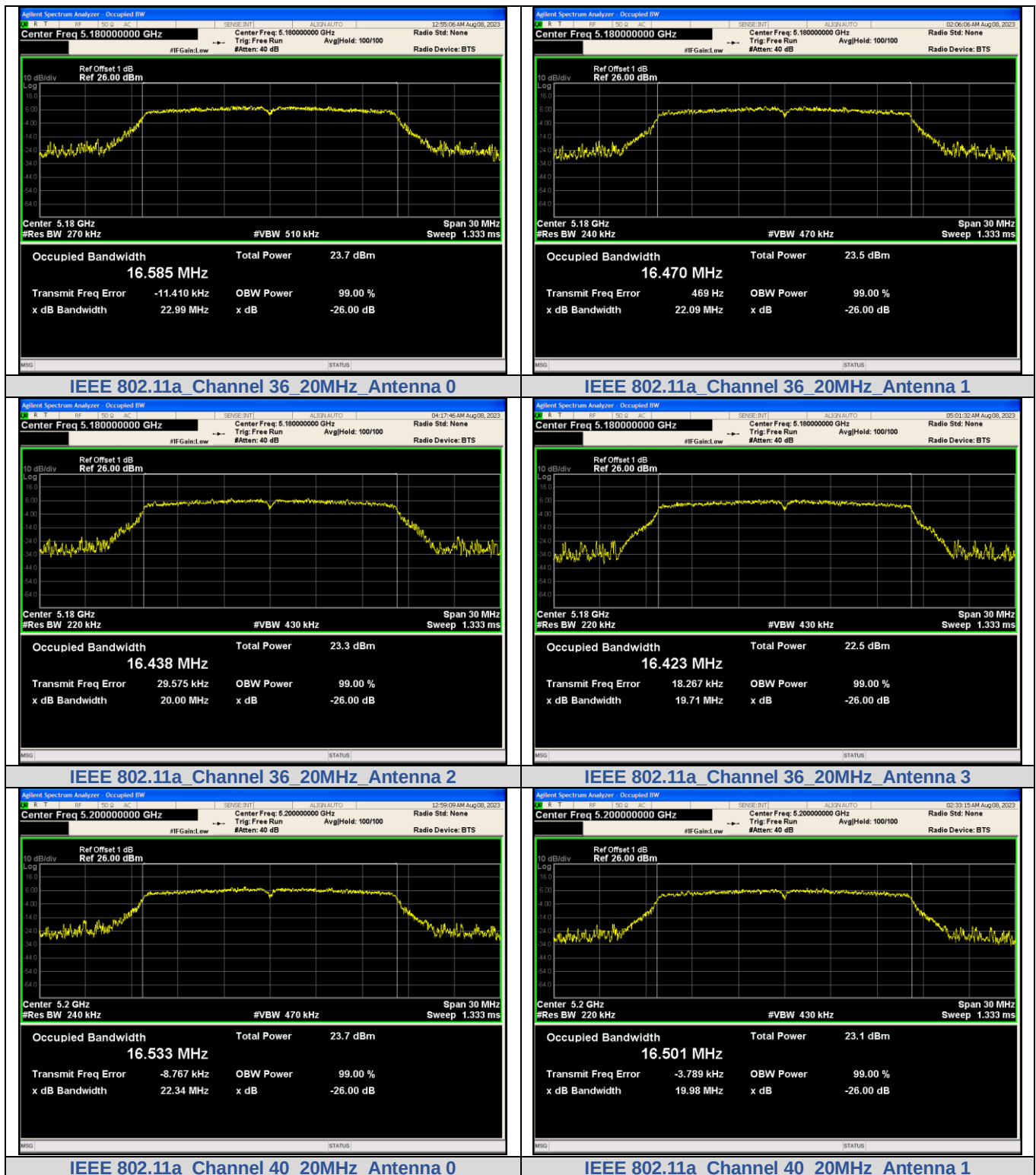
|                  |     |   |      |       |
|------------------|-----|---|------|-------|
|                  | 100 | 0 | 5500 | 20.19 |
|                  |     | 1 | 5500 | 20.02 |
|                  |     | 2 | 5500 | 19.91 |
|                  |     | 3 | 5500 | 20.04 |
|                  | 116 | 0 | 5580 | 20.02 |
|                  |     | 1 | 5580 | 20.06 |
|                  |     | 2 | 5580 | 20.27 |
|                  |     | 3 | 5580 | 20.03 |
|                  | 140 | 0 | 5700 | 20.09 |
|                  |     | 1 | 5700 | 20.05 |
|                  |     | 2 | 5700 | 20.20 |
|                  |     | 3 | 5700 | 20.03 |
| IEEE 802.11ac_40 | 38  | 0 | 5190 | 39.86 |
|                  |     | 1 | 5190 | 39.48 |
|                  |     | 2 | 5190 | 39.49 |
|                  |     | 3 | 5190 | 39.43 |
|                  | 46  | 0 | 5230 | 40.77 |
|                  |     | 1 | 5230 | 39.62 |
|                  |     | 2 | 5230 | 39.43 |
|                  |     | 3 | 5230 | 39.53 |
|                  | 54  | 0 | 5270 | 40.25 |
|                  |     | 1 | 5270 | 39.61 |
|                  |     | 2 | 5270 | 39.62 |
|                  |     | 3 | 5270 | 39.58 |
|                  | 62  | 0 | 5310 | 40.07 |
|                  |     | 1 | 5310 | 39.73 |
|                  |     | 2 | 5310 | 39.21 |
|                  |     | 3 | 5310 | 39.87 |
|                  | 102 | 0 | 5510 | 39.98 |
|                  |     | 1 | 5510 | 40.37 |
|                  |     | 2 | 5510 | 39.79 |
|                  |     | 3 | 5510 | 39.57 |
|                  | 110 | 0 | 5550 | 40.37 |
|                  |     | 1 | 5550 | 39.80 |
|                  |     | 2 | 5550 | 39.35 |
|                  |     | 3 | 5550 | 39.60 |
|                  | 134 | 0 | 5670 | 39.90 |
|                  |     | 1 | 5670 | 39.96 |
|                  |     | 2 | 5670 | 39.71 |
|                  |     | 3 | 5670 | 39.52 |
| IEEE 802.11ac_80 | 42  | 0 | 5210 | 80.63 |
|                  |     | 1 | 5210 | 80.08 |
|                  |     | 2 | 5210 | 80.48 |
|                  |     | 3 | 5210 | 80.90 |
|                  | 58  | 0 | 5290 | 80.79 |
|                  |     | 1 | 5290 | 80.37 |
|                  |     | 2 | 5290 | 80.06 |
|                  |     | 3 | 5290 | 80.57 |
|                  | 106 | 0 | 5530 | 80.65 |
|                  |     | 1 | 5530 | 80.41 |
|                  |     | 2 | 5530 | 80.30 |
|                  |     | 3 | 5530 | 80.59 |
|                  | 122 | 0 | 5610 | 80.91 |
|                  |     | 1 | 5610 | 80.22 |
|                  |     | 2 | 5610 | 79.98 |
|                  |     | 3 | 5610 | 80.44 |



| Mode             | Channel | Ant. | Center Frequency (MHz) | 26 dB Bandwidth (MHz) |
|------------------|---------|------|------------------------|-----------------------|
| IEEE 802.11a     | 149     | 0    | 5745                   | 19.72                 |
|                  |         | 1    | 5745                   | 20.02                 |
|                  |         | 2    | 5745                   | 19.44                 |
|                  |         | 3    | 5745                   | 19.61                 |
|                  | 157     | 0    | 5785                   | 19.61                 |
|                  |         | 1    | 5785                   | 19.59                 |
|                  |         | 2    | 5785                   | 20.02                 |
|                  |         | 3    | 5785                   | 19.81                 |
|                  | 165     | 0    | 5825                   | 19.69                 |
|                  |         | 1    | 5825                   | 19.82                 |
|                  |         | 2    | 5825                   | 20.05                 |
|                  |         | 3    | 5825                   | 19.46                 |
| IEEE 802.11n_20  | 149     | 0    | 5745                   | 19.91                 |
|                  |         | 1    | 5745                   | 20.13                 |
|                  |         | 2    | 5745                   | 19.95                 |
|                  |         | 3    | 5745                   | 19.76                 |
|                  | 157     | 0    | 5785                   | 20.05                 |
|                  |         | 1    | 5785                   | 20.17                 |
|                  |         | 2    | 5785                   | 19.99                 |
|                  |         | 3    | 5785                   | 19.90                 |
|                  | 165     | 0    | 5825                   | 19.99                 |
|                  |         | 1    | 5825                   | 20.16                 |
|                  |         | 2    | 5825                   | 20.02                 |
|                  |         | 3    | 5825                   | 19.82                 |
| IEEE 802.11n_40  | 151     | 0    | 5755                   | 39.91                 |
|                  |         | 1    | 5755                   | 40.51                 |
|                  |         | 2    | 5755                   | 39.96                 |
|                  |         | 3    | 5755                   | 39.87                 |
|                  | 159     | 0    | 5795                   | 39.86                 |
|                  |         | 1    | 5795                   | 39.95                 |
|                  |         | 2    | 5795                   | 39.70                 |
|                  |         | 3    | 5795                   | 40.14                 |
| IEEE 802.11ac_20 | 149     | 0    | 5745                   | 20.24                 |
|                  |         | 1    | 5745                   | 19.98                 |
|                  |         | 2    | 5745                   | 20.13                 |
|                  |         | 3    | 5745                   | 20.15                 |
|                  | 157     | 0    | 5785                   | 20.30                 |
|                  |         | 1    | 5785                   | 20.08                 |
|                  |         | 2    | 5785                   | 20.10                 |
|                  |         | 3    | 5785                   | 20.22                 |
|                  | 165     | 0    | 5825                   | 20.22                 |
|                  |         | 1    | 5825                   | 20.03                 |
|                  |         | 2    | 5825                   | 20.04                 |
|                  |         | 3    | 5825                   | 20.14                 |
| IEEE 802.11ac_40 | 151     | 0    | 5755                   | 48.12                 |
|                  |         | 1    | 5755                   | 39.69                 |
|                  |         | 2    | 5755                   | 39.55                 |
|                  |         | 3    | 5755                   | 39.46                 |
|                  | 159     | 0    | 5795                   | 53.02                 |
|                  |         | 1    | 5795                   | 39.98                 |
|                  |         | 2    | 5795                   | 39.49                 |
|                  |         | 3    | 5795                   | 39.78                 |
| IEEE 802.11ac_80 | 155     | 0    | 5775                   | 80.72                 |
|                  |         | 1    | 5775                   | 80.15                 |
|                  |         | 2    | 5775                   | 79.75                 |
|                  |         | 3    | 5775                   | 80.53                 |



## Test Graphs



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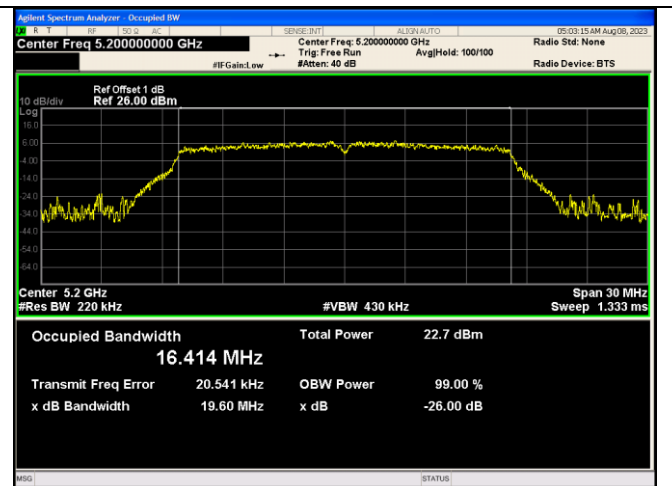
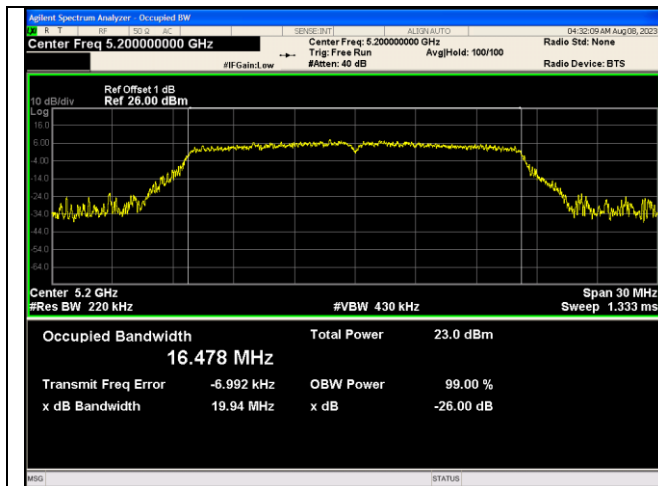
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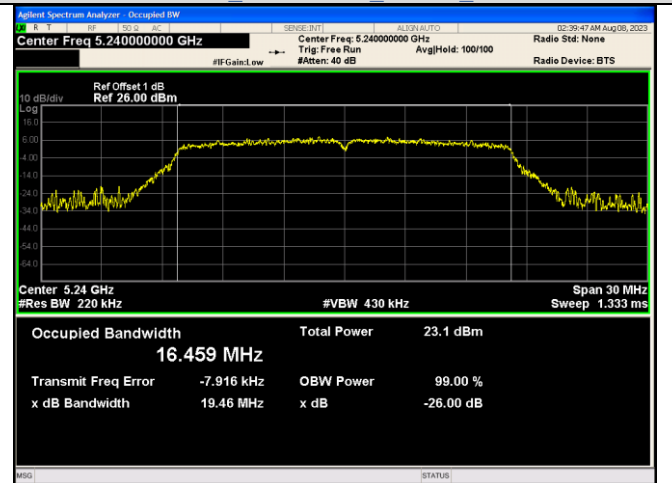
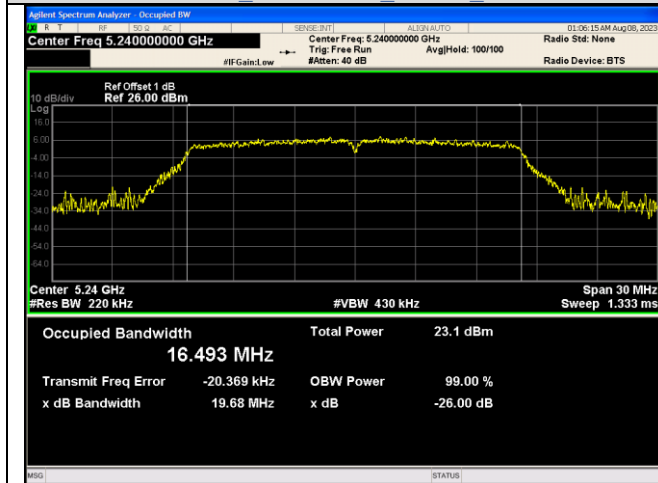
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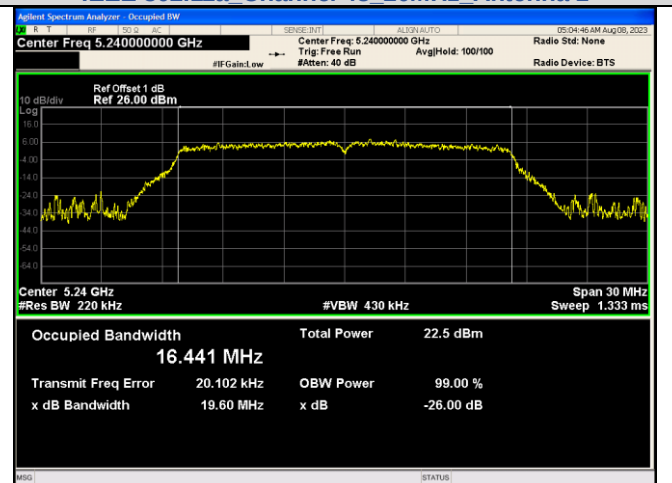
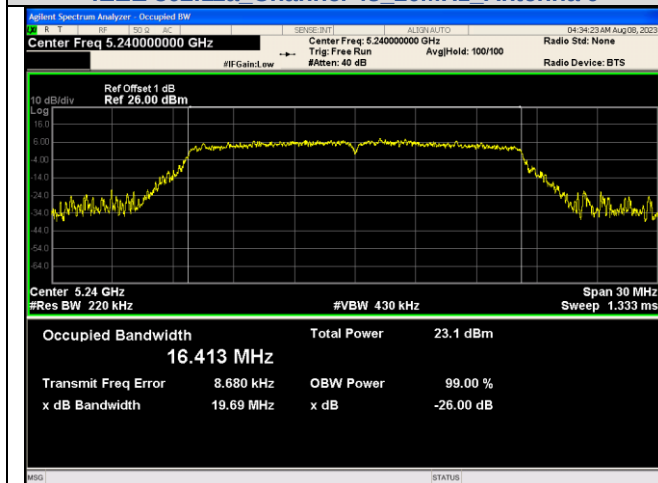
IEEE 802.11a Channel 40 20MHz Antenna 2

IEEE 802.11a Channel 40 20MHz Antenna 3



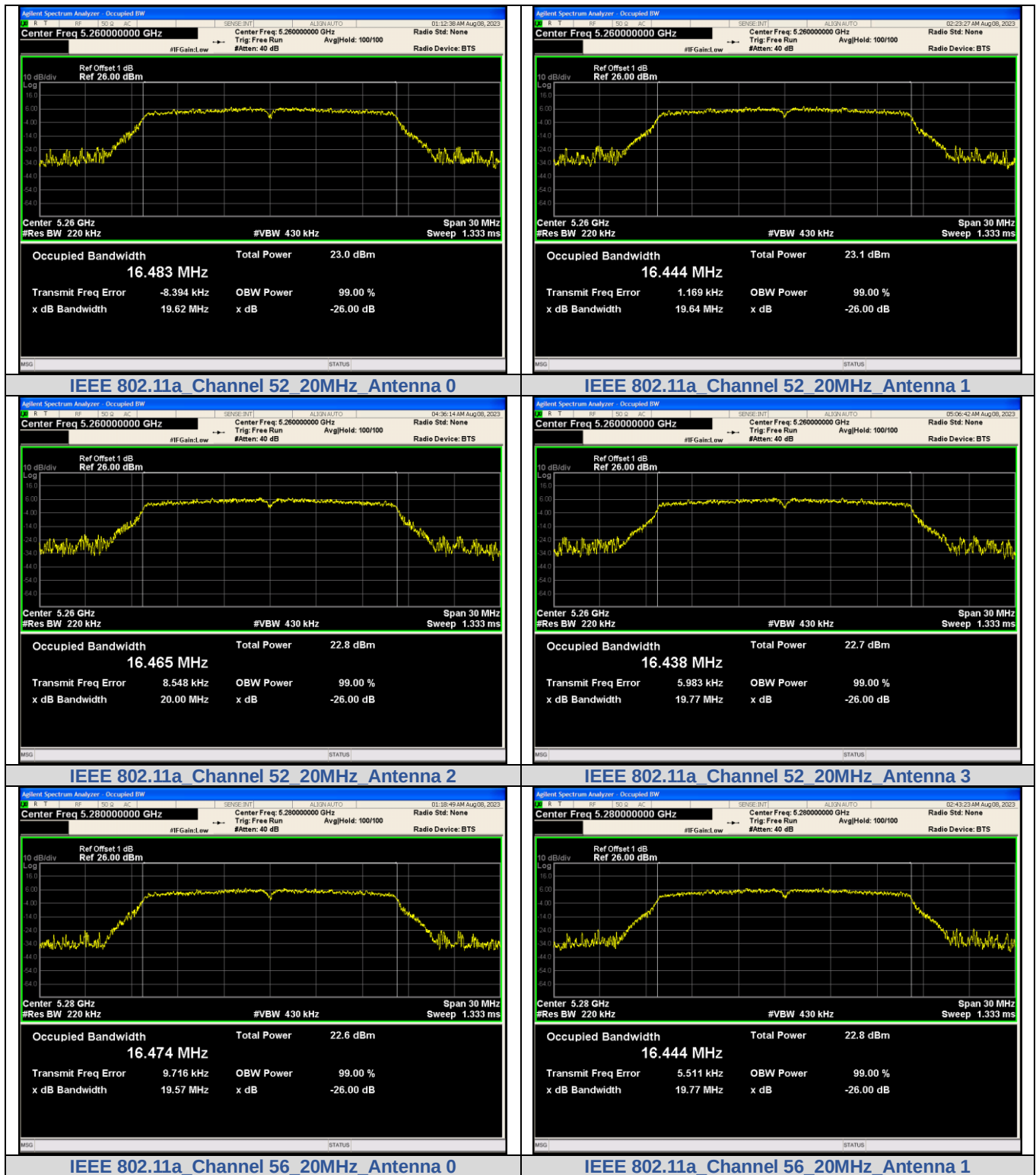
IEEE 802.11a Channel 48 20MHz Antenna 0

IEEE 802.11a Channel 48 20MHz Antenna 1



IEEE 802.11a Channel 48 20MHz Antenna 2

IEEE 802.11a Channel 48 20MHz Antenna 3



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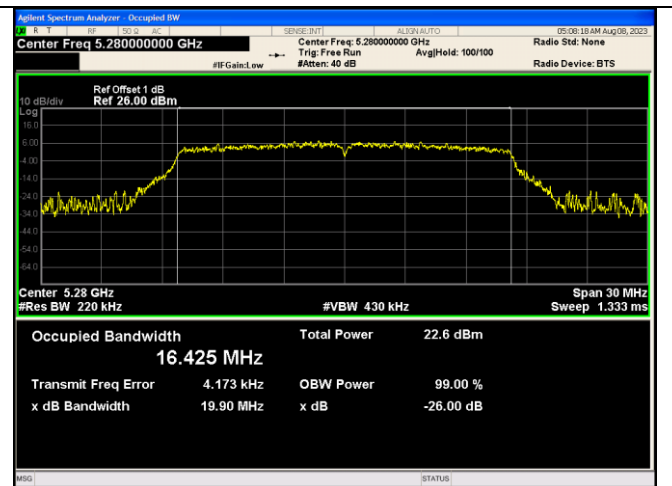
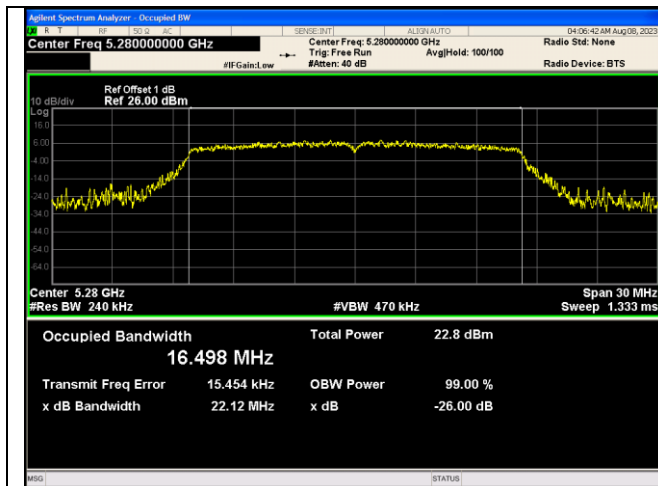
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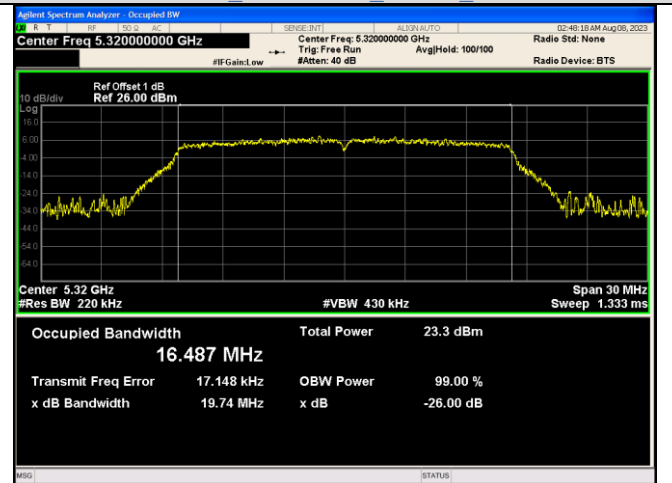
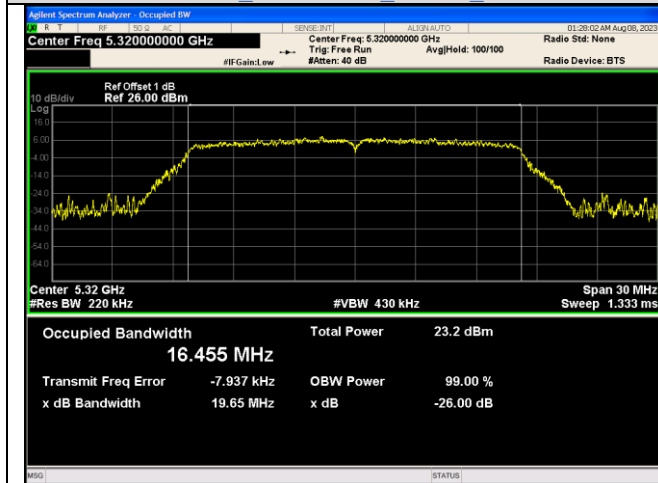
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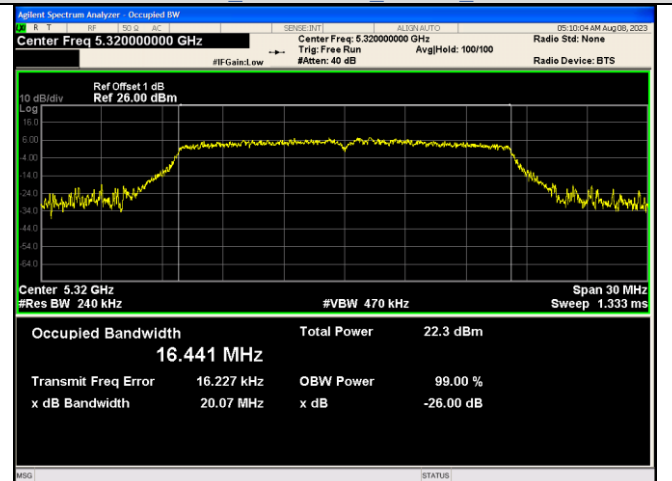
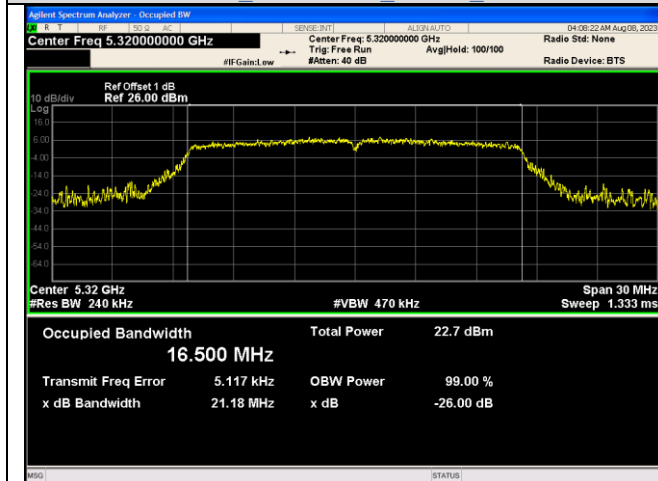
IEEE 802.11a Channel 56 20MHz Antenna 2

IEEE 802.11a Channel 56 20MHz Antenna 3



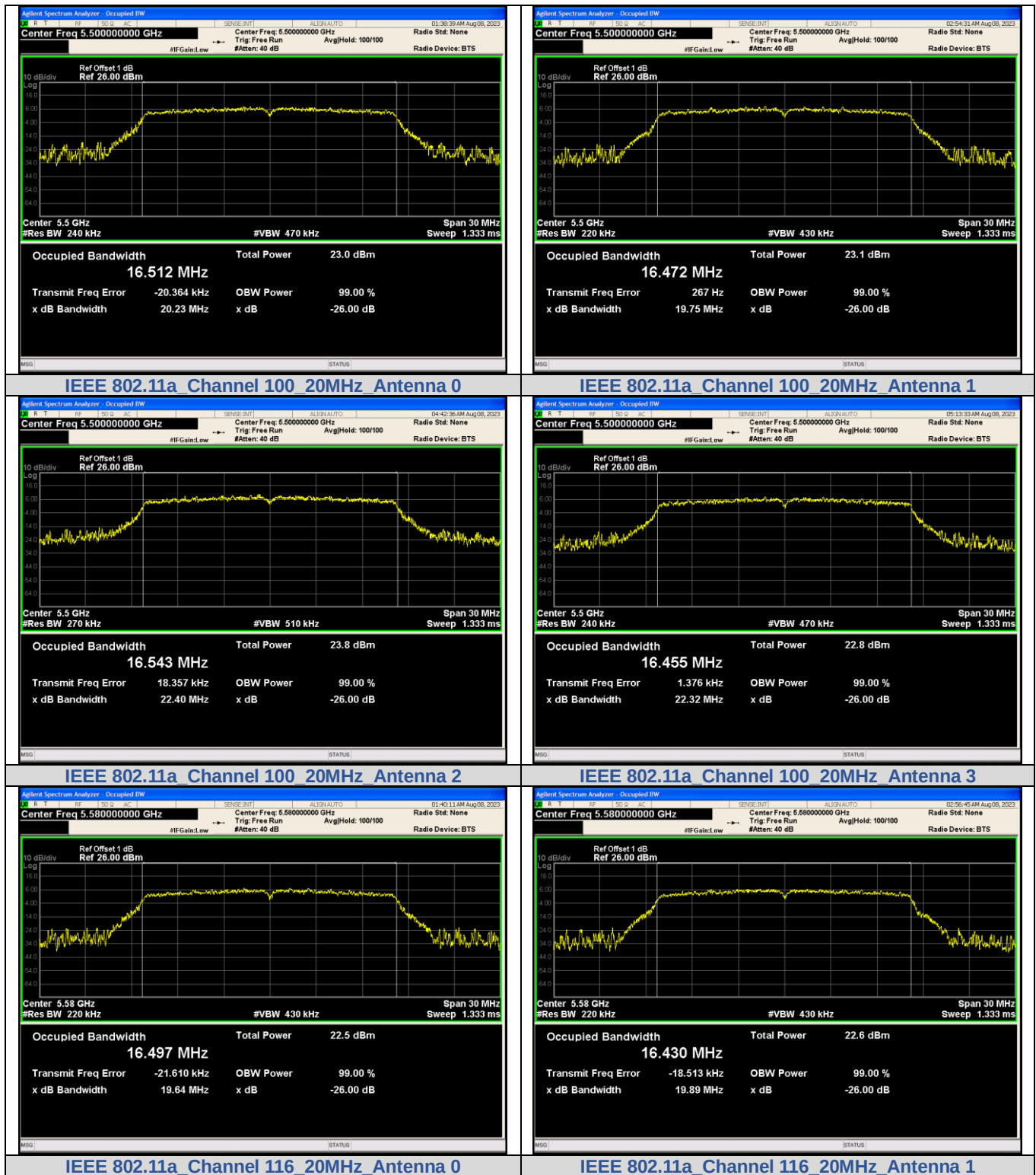
IEEE 802.11a Channel 64 20MHz Antenna 0

IEEE 802.11a Channel 64 20MHz Antenna 1

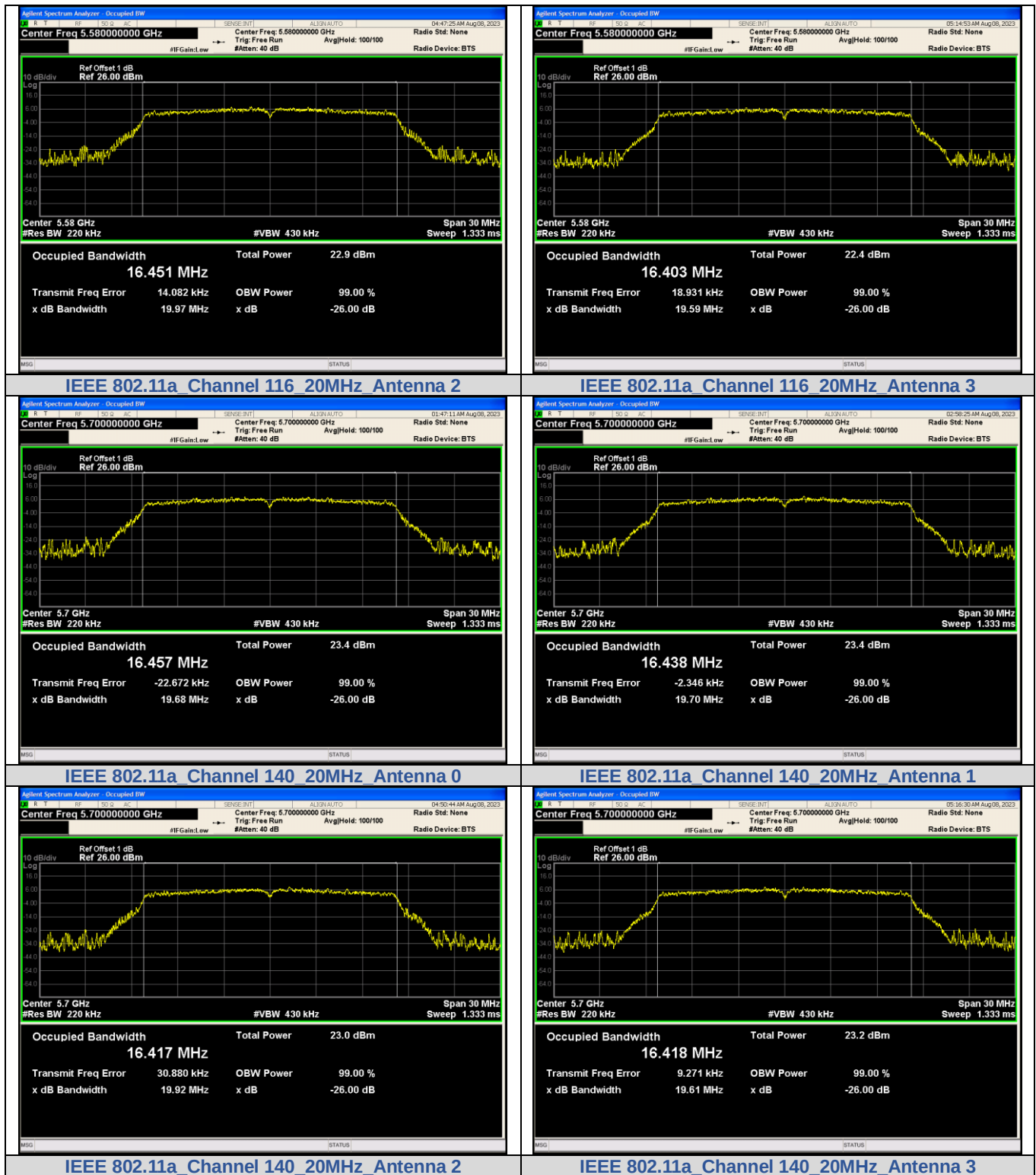


IEEE 802.11a Channel 64 20MHz Antenna 2

IEEE 802.11a Channel 64 20MHz Antenna 3







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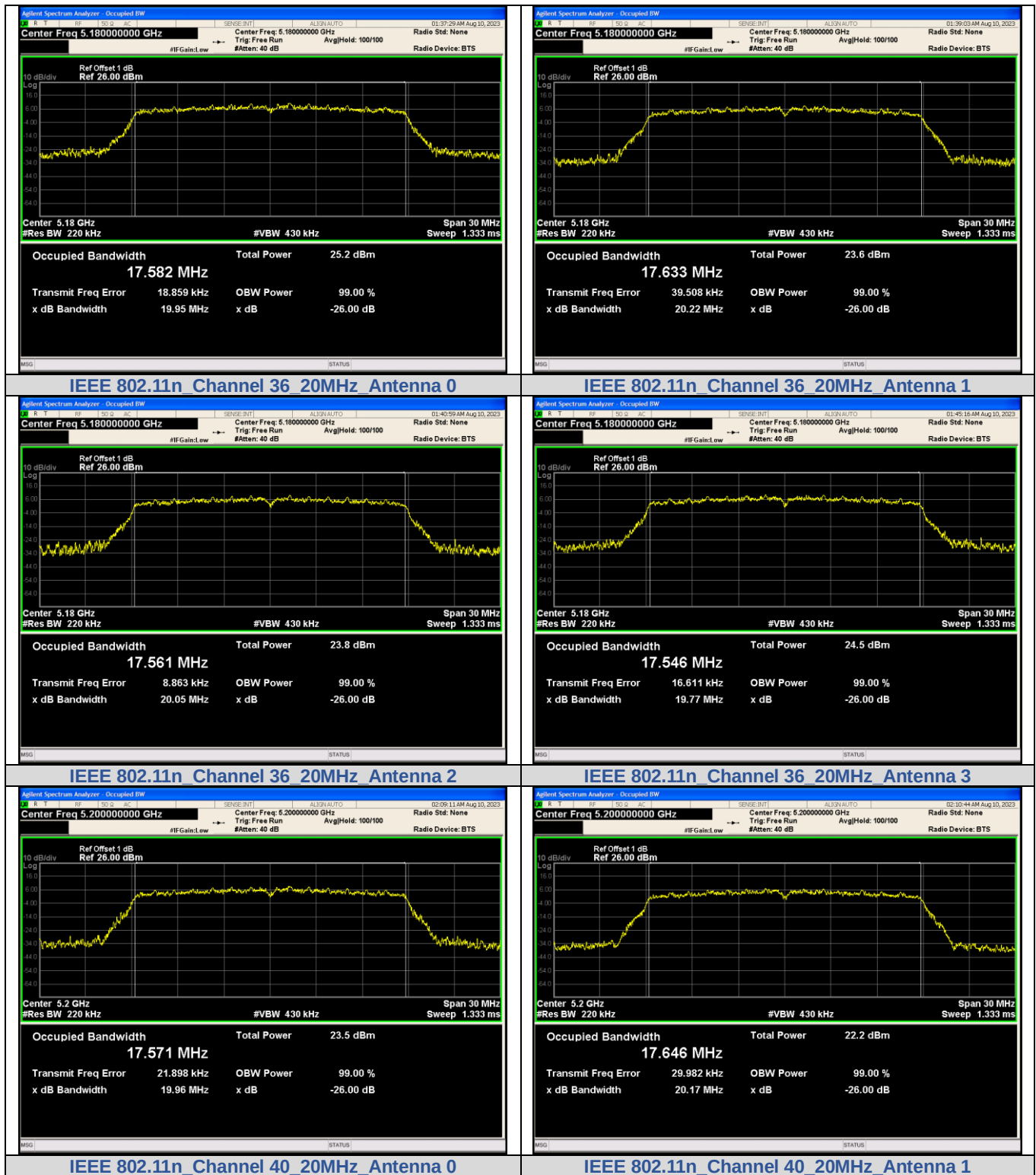
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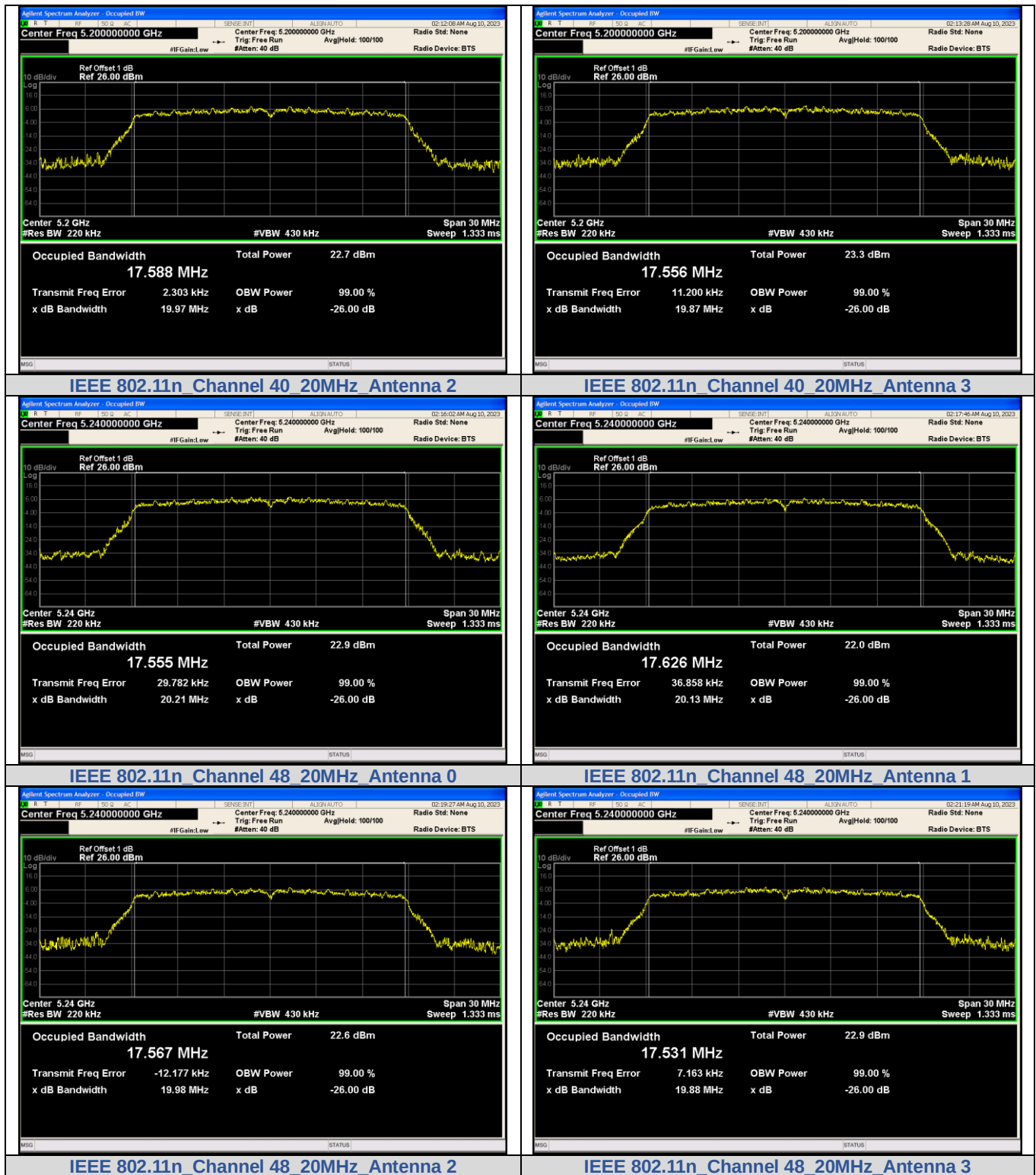
Tel.: (86)755-27521059

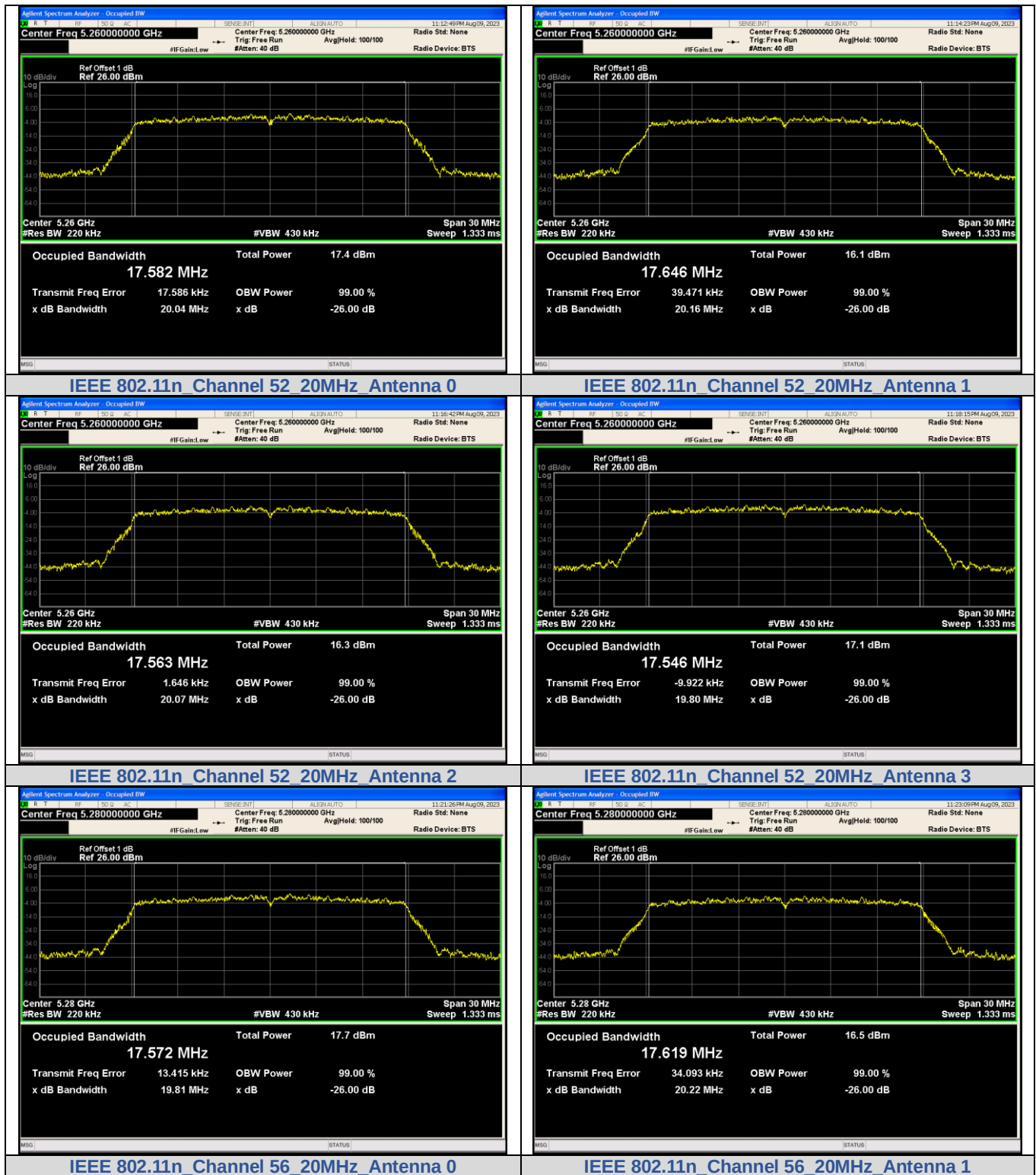
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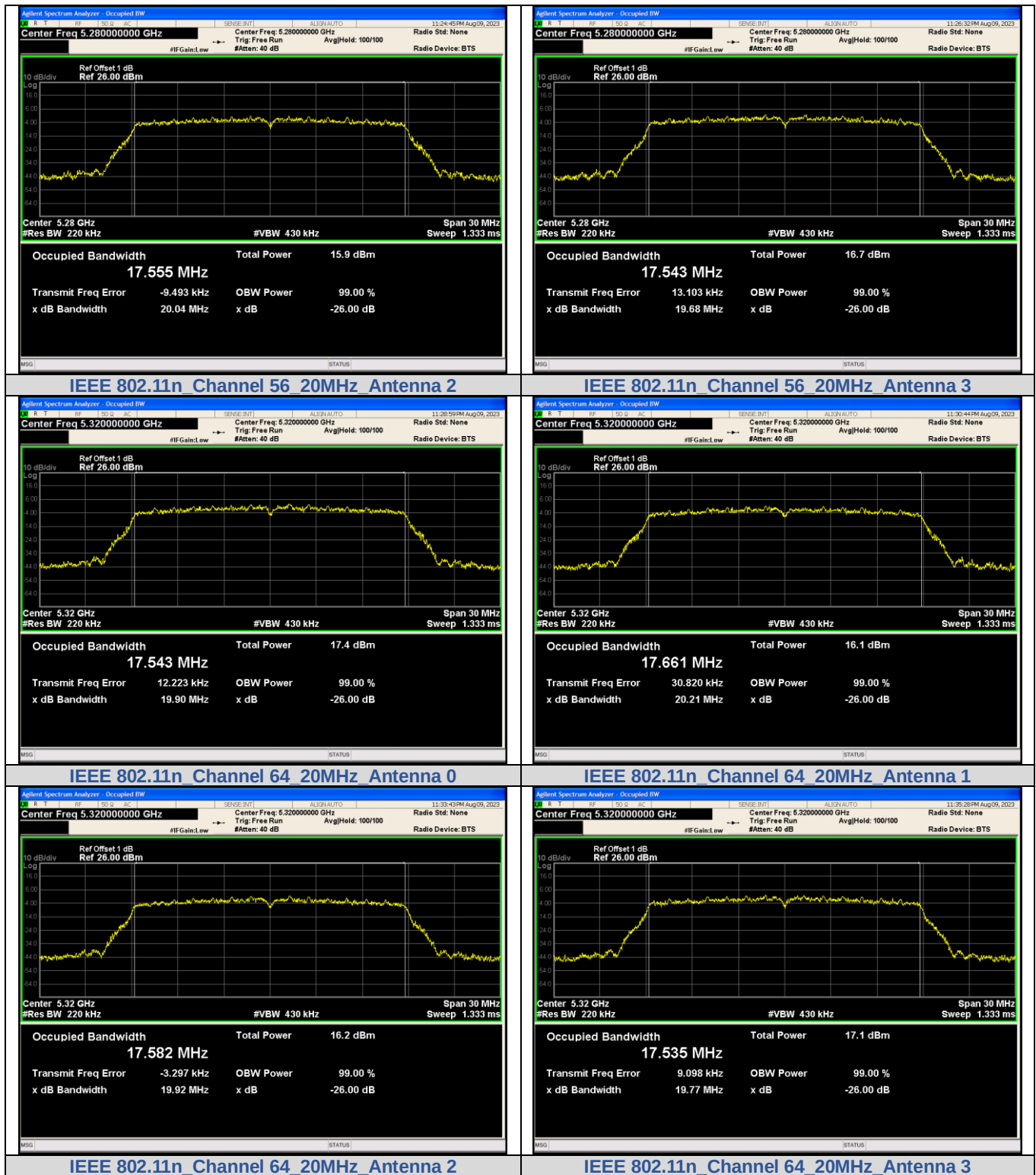
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