## 9.2.22. 802.11ax HE20 MODE IN THE 5.8 GHz BAND

**1TX Antenna 6 MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5745 | 18.418 |
| Mid | 5785 | 18.322 |
| High | 5825 | 18.421 |

**MID CHANNEL**

**1TX Antenna 6 MODE: 26 Tones, RU Index 4**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5745 | 17.105 |
| Mid | 5785 | 17.162 |
| High | 5825 | 17.219 |

**MID CHANNEL**



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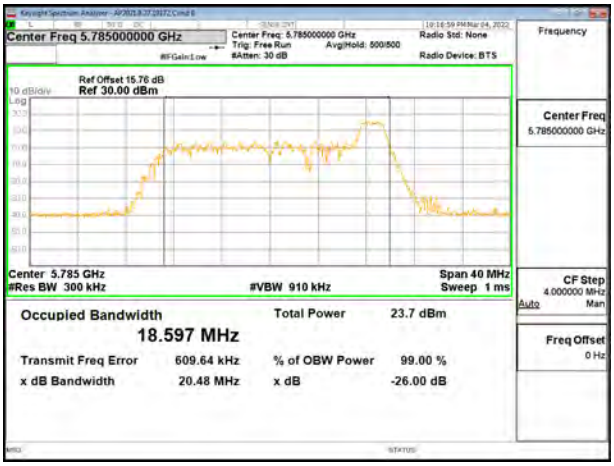
**1TX Antenna 6 MODE: 26 Tones, RU Index 8**

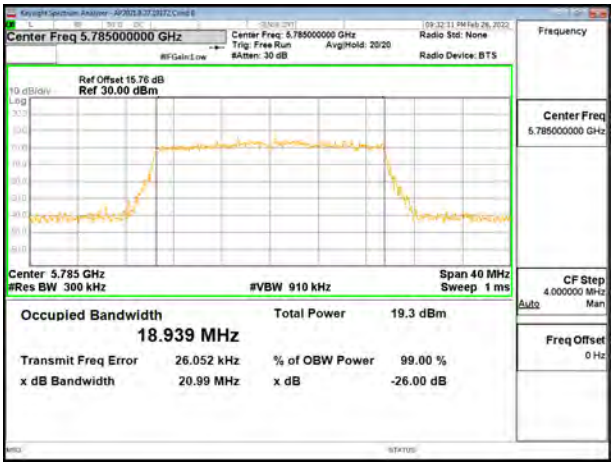
| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5745 | 18.557 |
| Mid | 5785 | 18.597 |
| High | 5825 | 18.562 |




**MID CHANNEL**

**1TX Antenna 6 MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5745 | 18.907 |
| Mid | 5785 | 18.939 |
| High | 5825 | 18.873 |




**MID CHANNEL**



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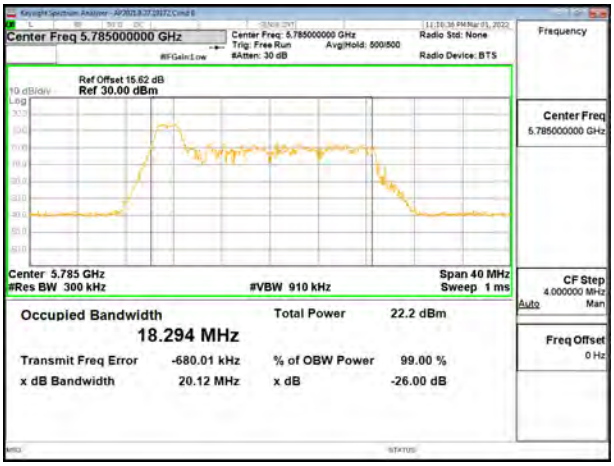
**1TX Antenna 5 MODE: 26 Tones, RU Index 0**

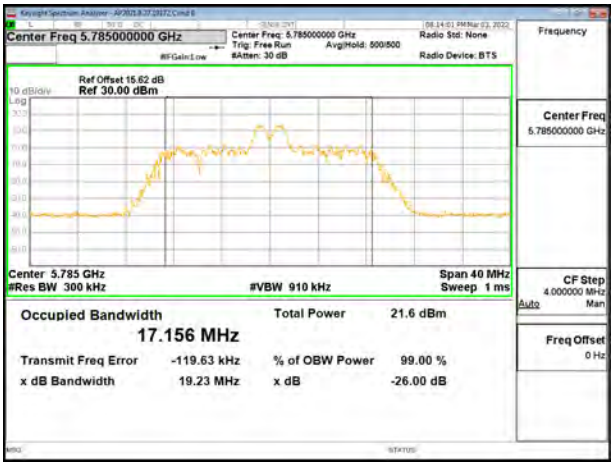
| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5745 | 18.351 |
| Mid | 5785 | 18.294 |
| High | 5825 | 18.373 |




**MID CHANNEL**

**1TX Antenna 5 MODE: 26 Tones, RU Index 4**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5745 | 17.056 |
| Mid | 5785 | 17.156 |
| High | 5825 | 17.160 |




**MID CHANNEL**



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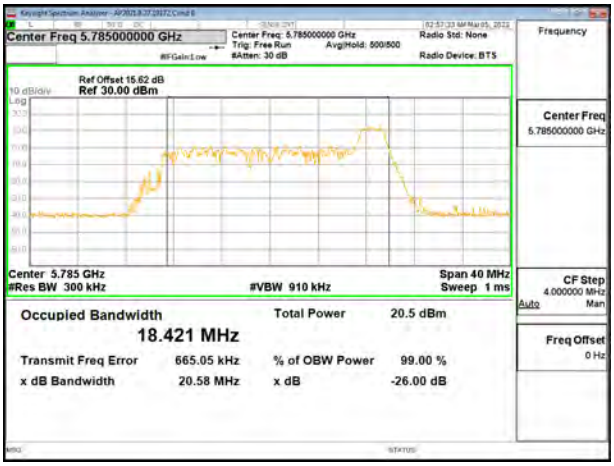
**1TX Antenna 5 MODE: 26 Tones, RU Index 8**

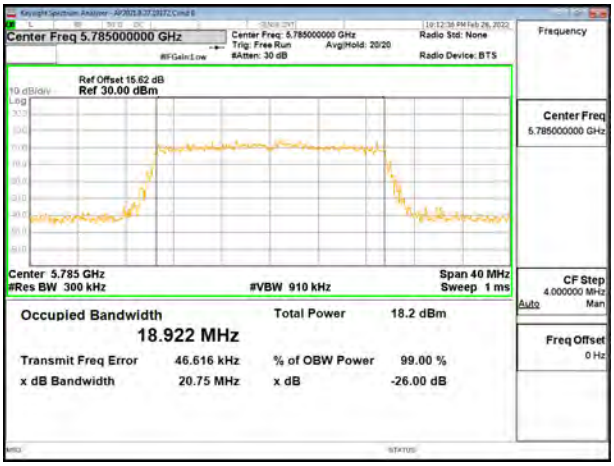
| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5745 | 18.629 |
| Mid | 5785 | 18.421 |
| High | 5825 | 18.447 |




**MID CHANNEL**

**1TX Antenna 5 MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5745 | 18.942 |
| Mid | 5785 | 18.922 |
| High | 5825 | 18.915 |




**MID CHANNEL**



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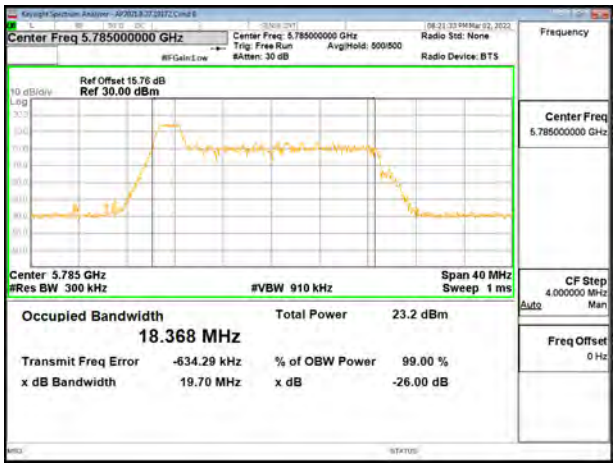
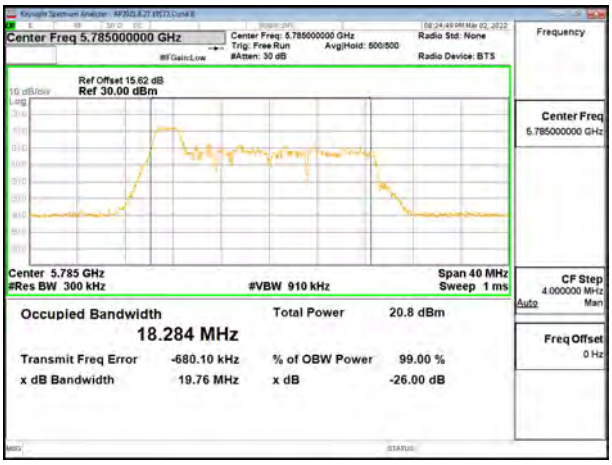
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Low | 5745 | 18.376 | 18.295 |
| Mid | 5785 | 18.368 | 18.284 |
| High | 5825 | 18.358 | 18.336 |




**MID CHANNEL [ANT 6]**

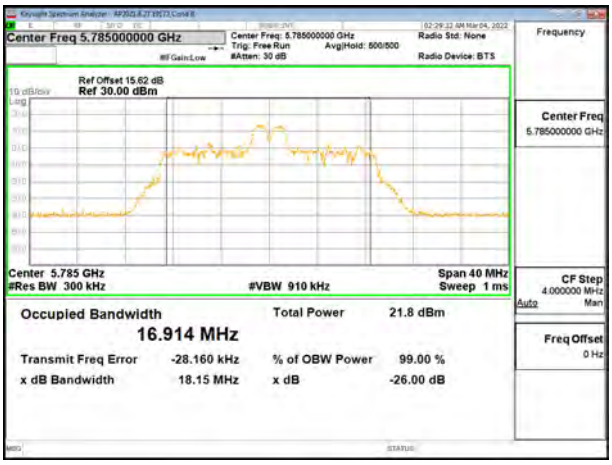



**MID CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 4**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Low | 5745 | 17.004 | 16.933 |
| Mid | 5785 | 17.071 | 16.914 |
| High | 5825 | 16.918 | 16.925 |

**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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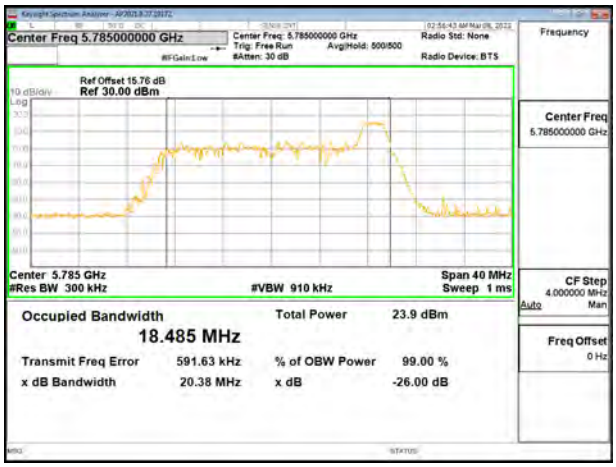
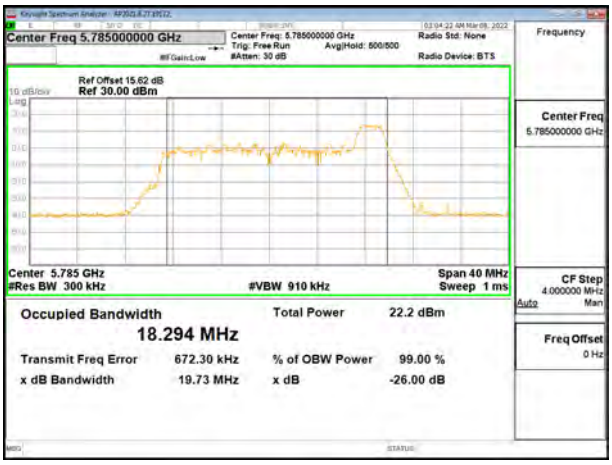
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Low | 5745 | 18.551 | 18.282 |
| Mid | 5785 | 18.485 | 18.294 |
| High | 5825 | 18.569 | 18.385 |



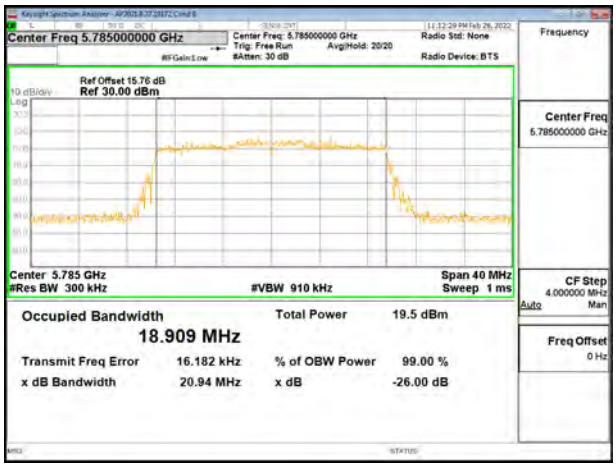

**MID CHANNEL [ANT 6]**



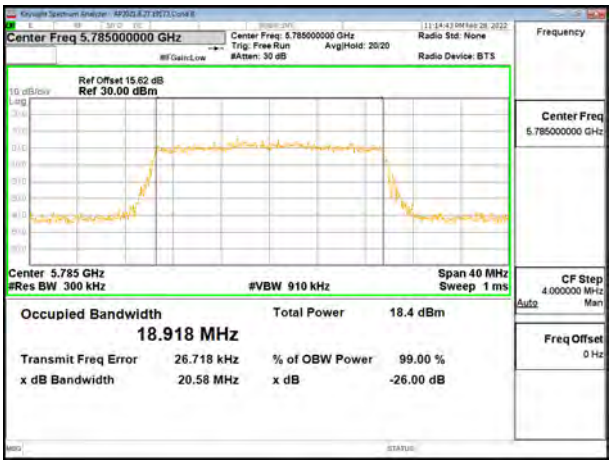

**MID CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Low | 5745 | 18.947 | 18.920 |
| Mid | 5785 | 18.909 | 18.918 |
| High | 5825 | 18.947 | 18.917 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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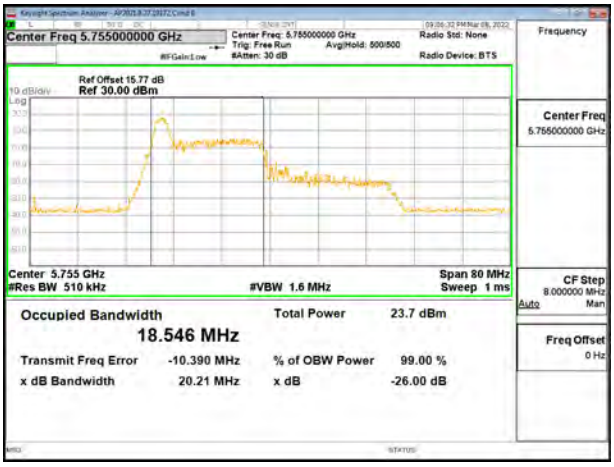
## 9.2.23. 802.11ax HE40 MODE IN THE 5.8 GHz BAND

**1TX Antenna 6 MODE: 26 Tones, RU Index 0**

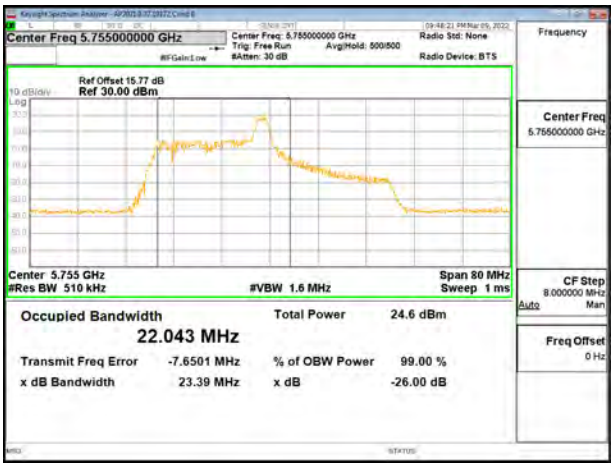
| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5755 | 18.546 |
| High | 5795 | 18.739 |




**LOW CHANNEL**

**1TX Antenna 6 MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5755 | 22.043 |
| High | 5795 | 22.059 |




**LOW CHANNEL**



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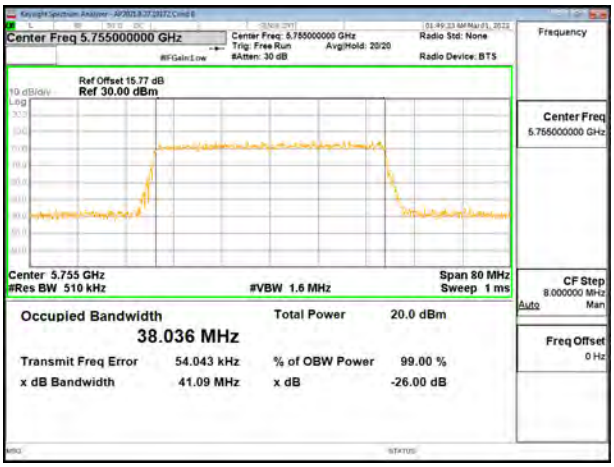
**1TX Antenna 6 MODE: 26 Tones, RU Index 17**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5755 | 18.753 |
| High | 5795 | 18.900 |

**LOW CHANNEL**

**1TX Antenna 6 MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5755 | 38.036 |
| High | 5795 | 37.919 |




**LOW CHANNEL**



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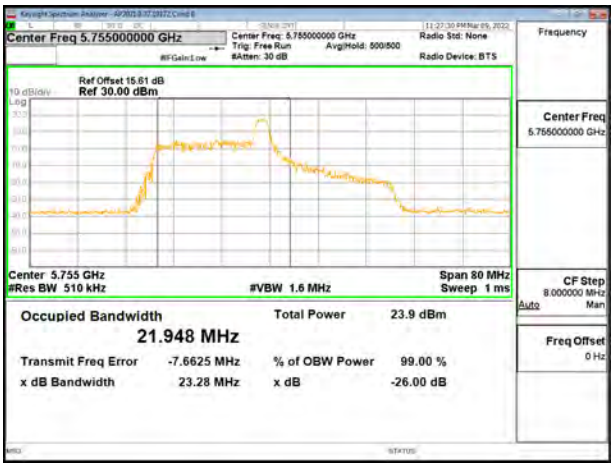
**1TX Antenna 5 MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5755 | 18.633 |
| High | 5795 | 18.719 |

**LOW CHANNEL**

**1TX Antenna 5 MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5755 | 21.948 |
| High | 5795 | 22.011 |




**LOW CHANNEL**



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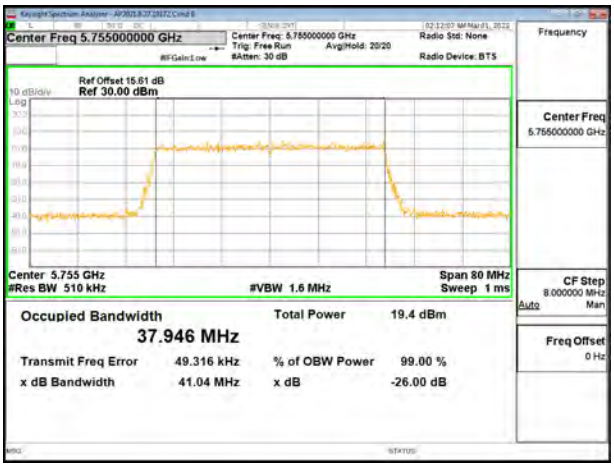
**1TX Antenna 5 MODE: 26 Tones, RU Index 17**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5755 | 18.731 |
| High | 5795 | 18.889 |

**LOW CHANNEL**

**1TX Antenna 5 MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Low | 5755 | 37.946 |
| High | 5795 | 37.933 |




**LOW CHANNEL**



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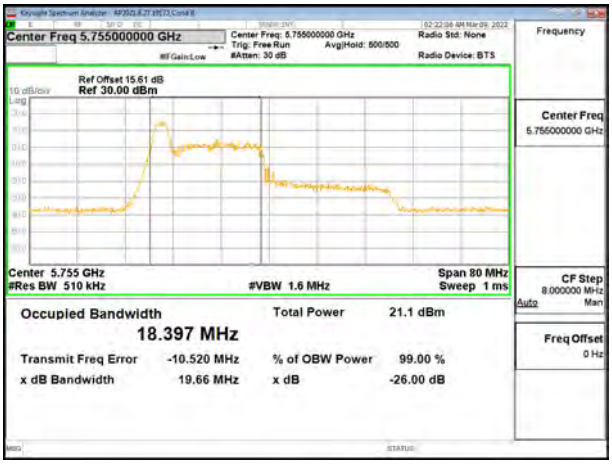
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Low | 5755 | 18.412 | 18.397 |
| High | 5795 | 18.472 | 18.315 |

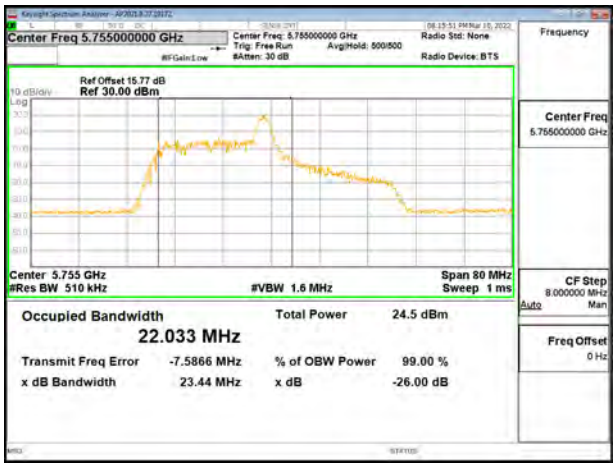
**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Low | 5755 | 22.033 | 21.649 |
| High | 5795 | 21.911 | 21.691 |




**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**



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**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 17**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Low | 5755 | 18.561 | 18.477 |
| High | 5795 | 18.785 | 18.442 |

**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Low | 5755 | 37.973 | 37.985 |
| High | 5795 | 37.953 | 37.958 |

**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**



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### 9.2.24. 802.11ax HE80 MODE IN THE 5.8 GHz BAND

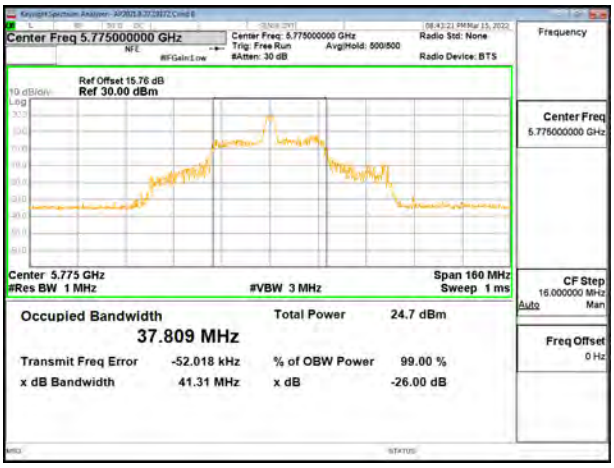
**1TX Antenna 6 MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Mid | 5775 | 18.342 |

**MID CHANNEL**

**1TX Antenna 6 MODE: 26 Tones, RU Index 18**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Mid | 5775 | 37.809 |




**MID CHANNEL**



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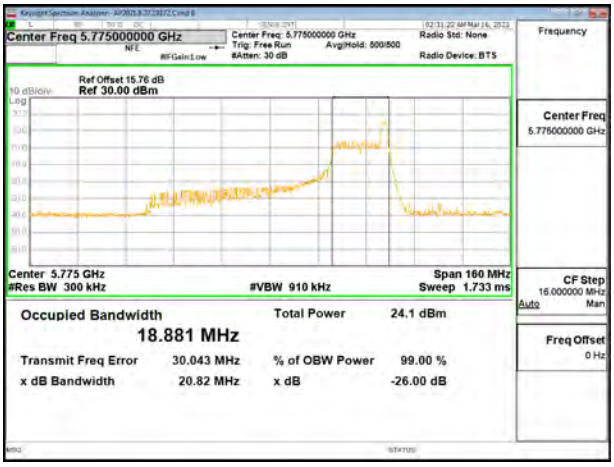
**1TX Antenna 6 MODE: 26 Tones, RU Index 36**

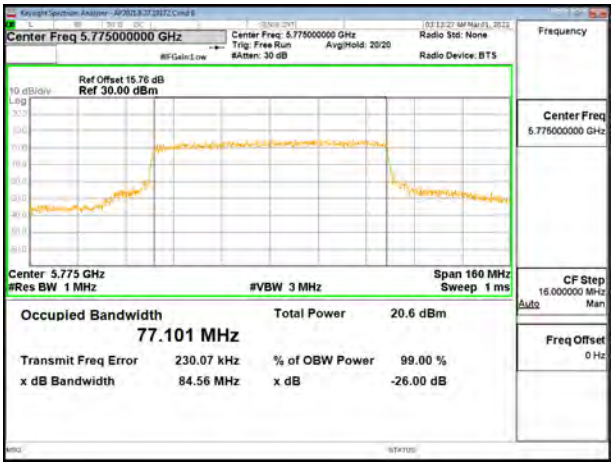
| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Mid | 5775 | 18.881 |




**MID CHANNEL**

**1TX Antenna 6 MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Mid | 5775 | 77.101 |




**MID CHANNEL**



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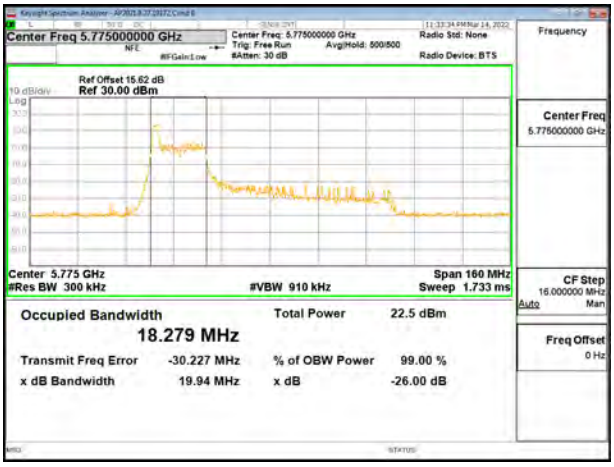
**1TX Antenna 5 MODE: 26 Tones, RU Index 0**

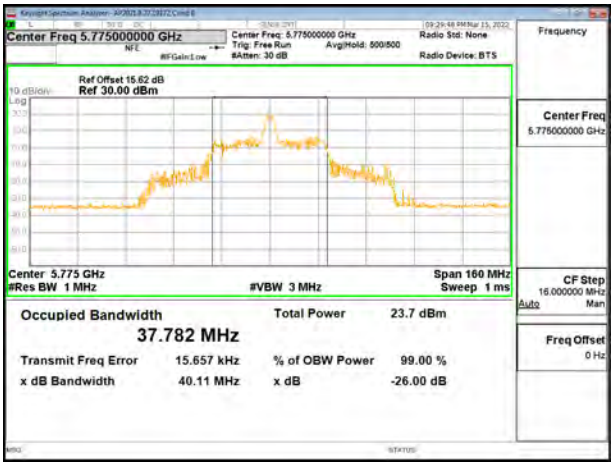
| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Mid | 5775 | 18.279 |




**MID CHANNEL**

**1TX Antenna 5 MODE: 26 Tones, RU Index 18**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Mid | 5775 | 37.782 |




**MID CHANNEL**



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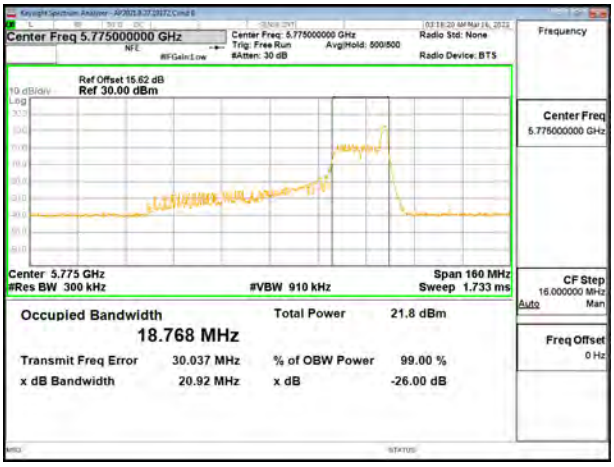
**1TX Antenna 5 MODE: 26 Tones, RU Index 36**

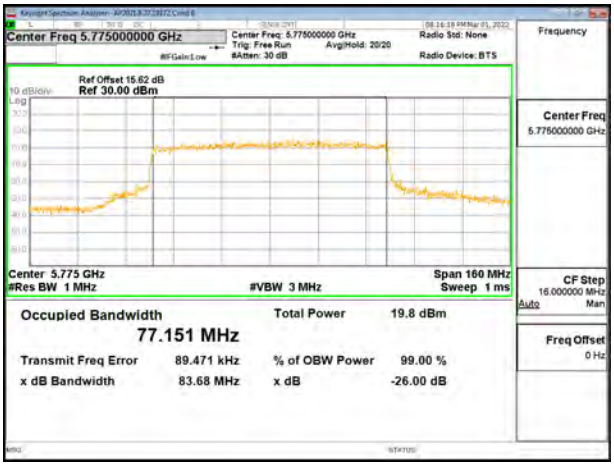
| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Mid | 5775 | 18.768 |




**MID CHANNEL**

**1TX Antenna 5 MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---|---|---|
| Mid | 5775 | 77.151 |

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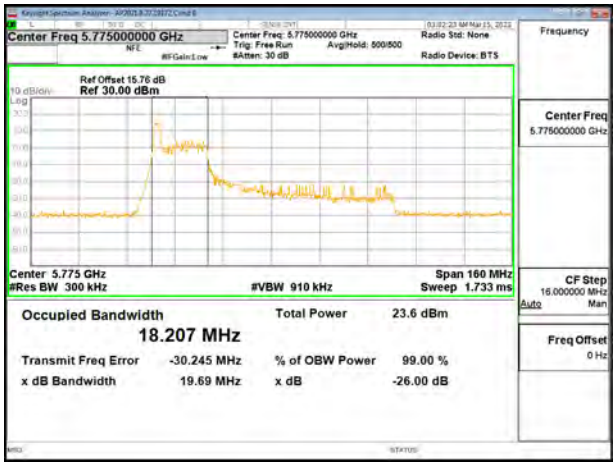
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Mid | 5775 | 18.207 | 18.113 |

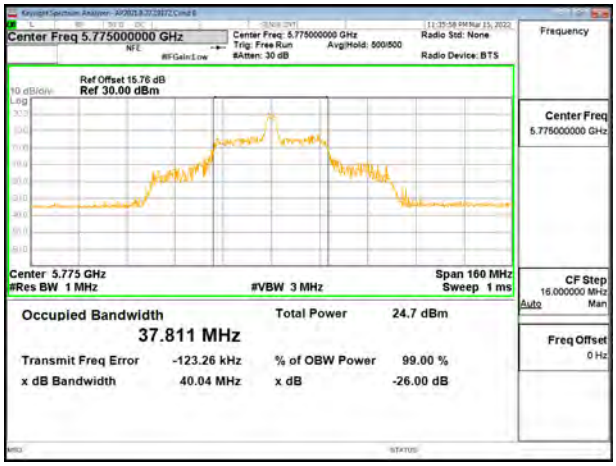



**MID CHANNEL [ANT 6]**

**MID CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 18**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Mid | 5775 | 37.811 | 36.516 |




**MID CHANNEL [ANT 6]**

**MID CHANNEL [ANT 5]**



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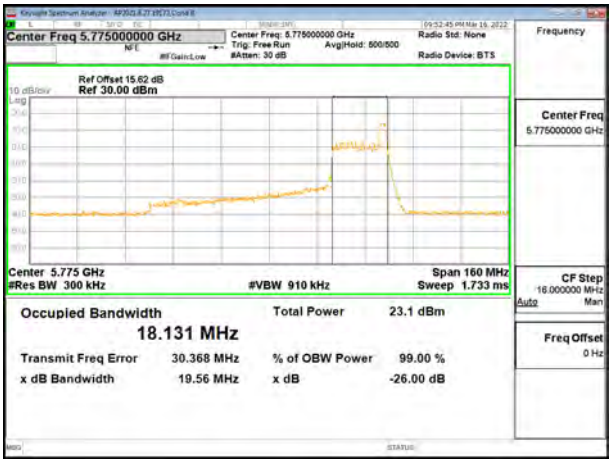
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 36**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Mid | 5775 | 18.821 | 18.131 |

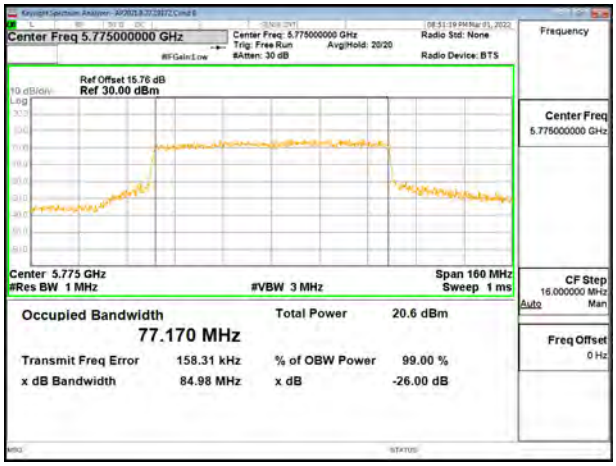
**MID CHANNEL [ANT 6]**



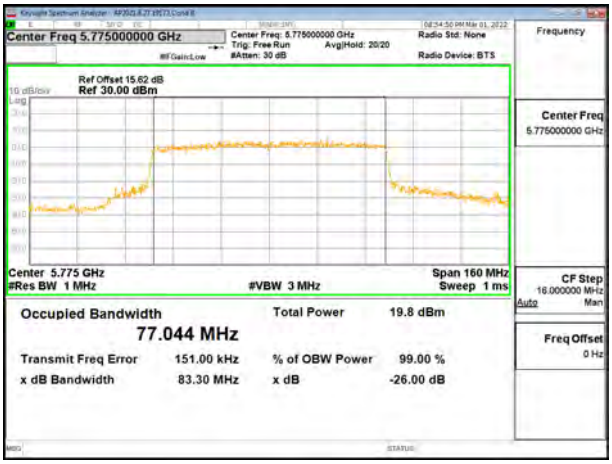

**MID CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: SU Mode**

| Channel | Frequency (MHz) | 99% Bandwidth Antenna 6 (MHz) | 99% Bandwidth Antenna 5 (MHz) |
|---|---|---|---|
| Mid | 5775 | 77.170 | 77.044 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.3. 6 dB BANDWIDTH

**LIMITS**

FCC §15.407 (e)

The minimum 6 dB bandwidth shall be at least 500 kHz.

**RESULTS**



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### 9.3.1. **802.11n HT20 MODE IN THE 5.8 GHz BAND**

**1TX Antenna 6 MODE**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 17.580 | 0.5 |
| Mid | 5785 | 17.592 | 0.5 |
| High | 5825 | 17.600 | 0.5 |
| 144 | 5720 | 3.812 | 0.5 |

**MID CHANNEL**



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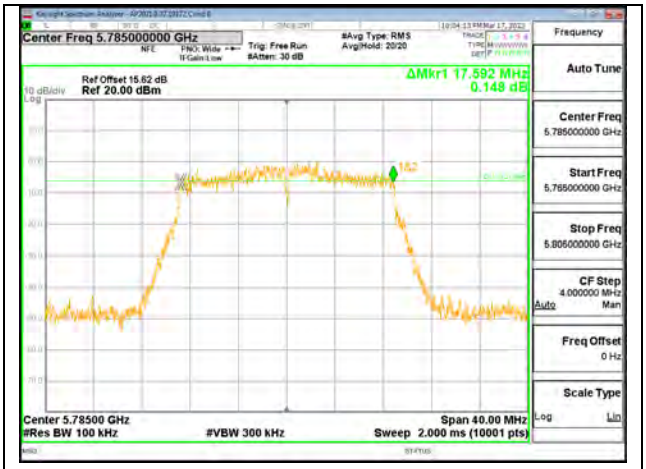
**1TX Antenna 5 MODE**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 17.596 | 0.5 |
| Mid | 5785 | 17.592 | 0.5 |
| High | 5825 | 17.596 | 0.5 |
| 144 | 5720 | 3.784 | 0.5 |




**MID CHANNEL**



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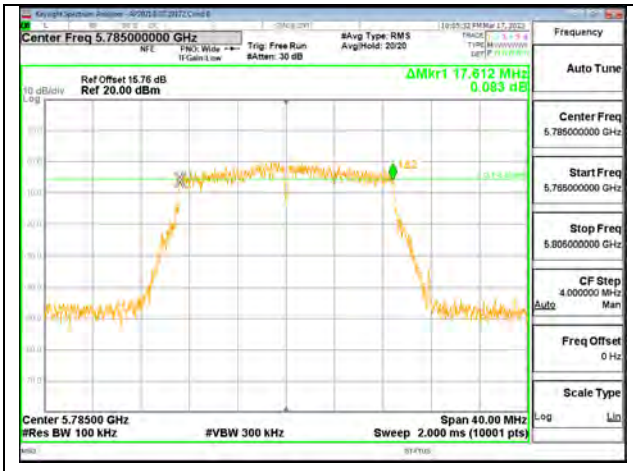
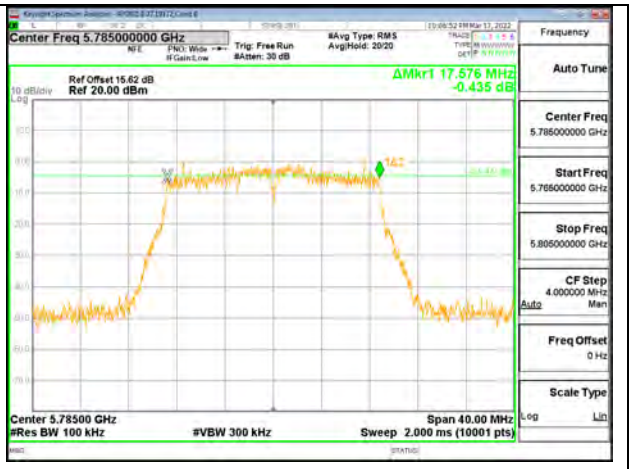
**2TX Antenna 6 + Antenna 5 CDD MODE**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5745 | 17.580 | 17.560 | 0.5 |
| Mid | 5785 | 17.612 | 17.576 | 0.5 |
| High | 5825 | 17.588 | 17.576 | 0.5 |
| 144 | 5720 | 3.804 | 3.812 | 0.5 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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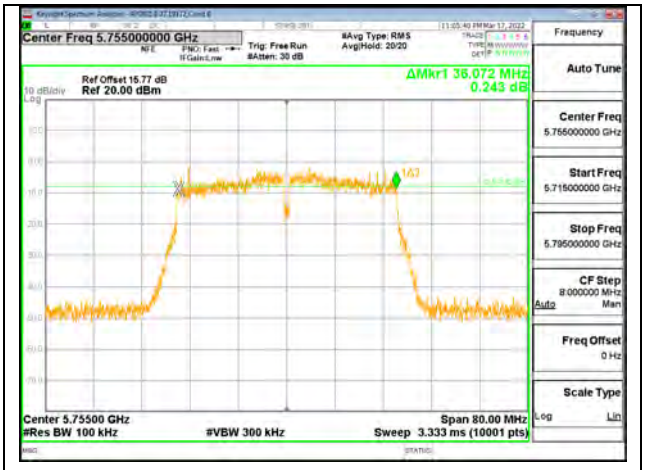
## 9.3.2. **802.11n HT40 MODE IN THE 5.8 GHz BAND**

**1TX Antenna 6 MODE**

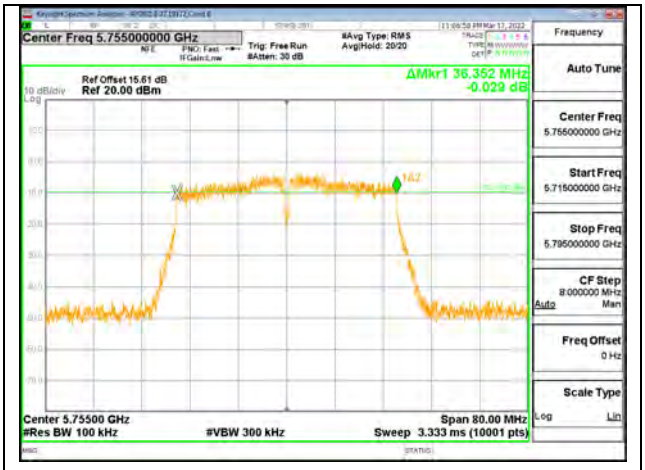
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 36.072 | 0.5 |
| High | 5795 | 35.944 | 0.5 |
| 142 | 5710 | 3.240 | 0.5 |




**LOW CHANNEL**

**1TX Antenna 5 MODE**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 36.352 | 0.5 |
| High | 5795 | 36.064 | 0.5 |
| 142 | 5710 | 3.224 | 0.5 |




**LOW CHANNEL**



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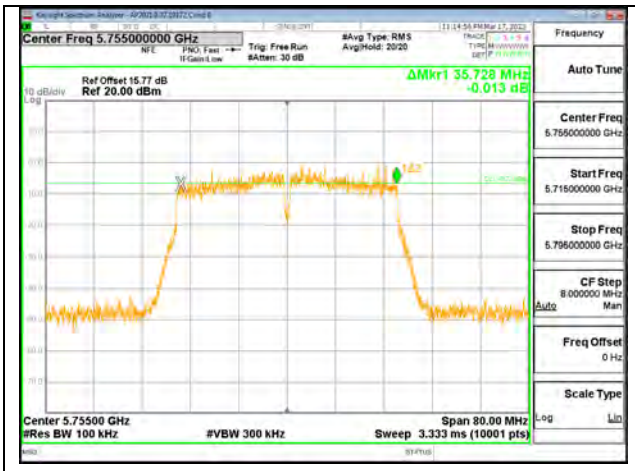
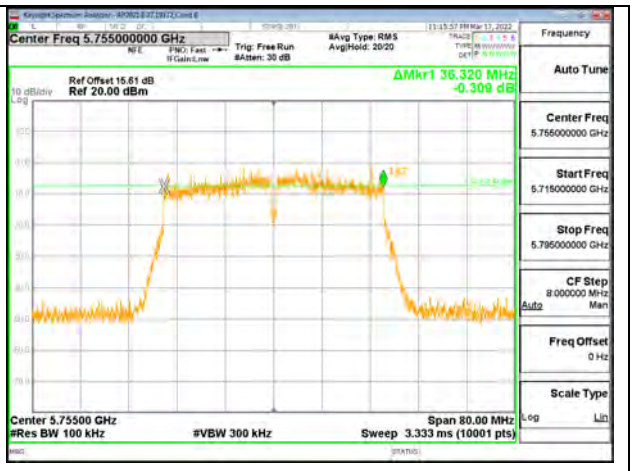
**2TX Antenna 6 + Antenna 5 CDD MODE**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5755 | 35.728 | 36.320 | 0.5 |
| High | 5795 | 35.744 | 35.720 | 0.5 |
| 142 | 5710 | 3.184 | 3.192 | 0.5 |




**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**



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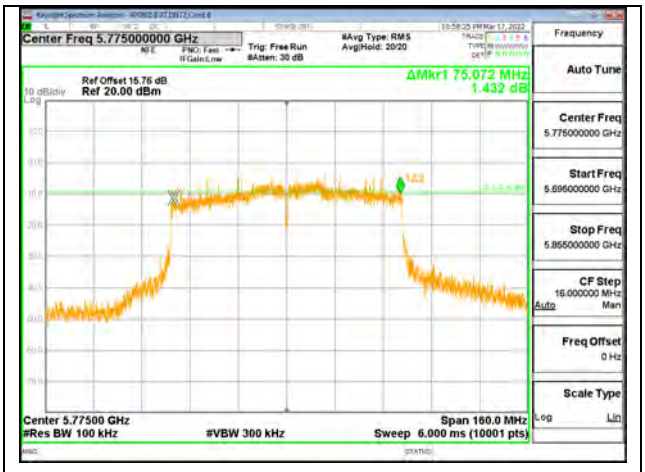
### 9.3.3. **802.11ac VHT80 MODE IN THE 5.8 GHz BAND**

**1TX Antenna 6 MODE**

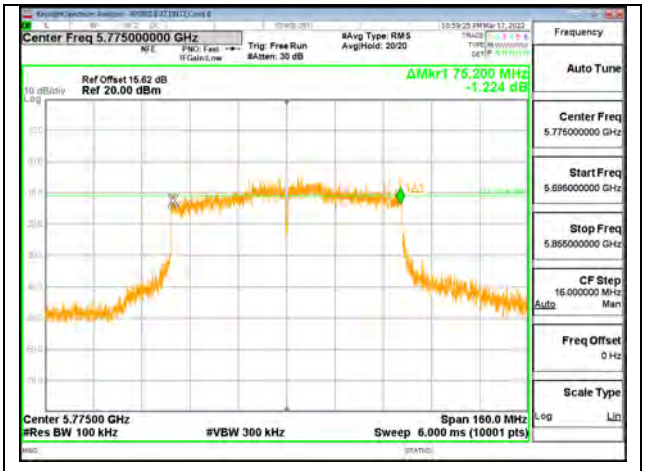
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 75.072 | 0.5 |
| 138 | 5690 | 3.176 | 0.5 |




**MID CHANNEL**

**1TX Antenna 5 MODE**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 75.200 | 0.5 |
| 138 | 5690 | 2.616 | 0.5 |




**MID CHANNEL**



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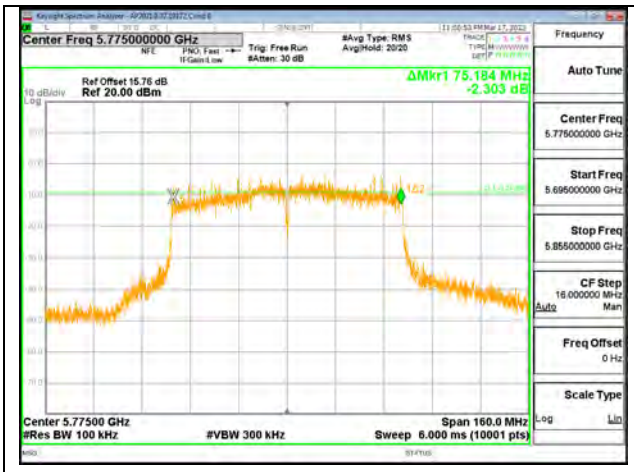
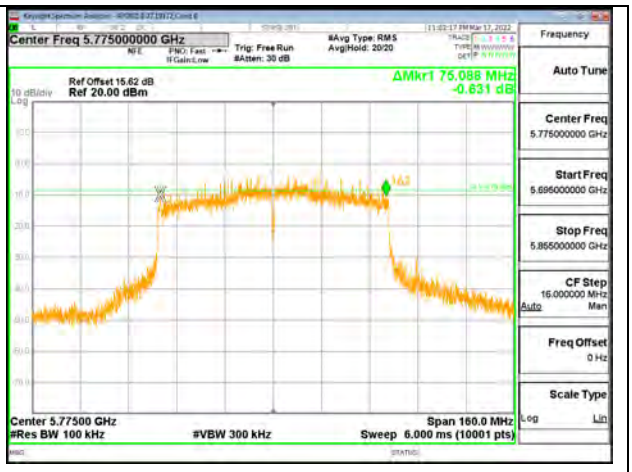
**2TX Antenna 6 + Antenna 5 CDD MODE**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Mid | 5775 | 75.184 | 75.088 | 0.5 |
| 138 | 5690 | 3.224 | 3.160 | 0.5 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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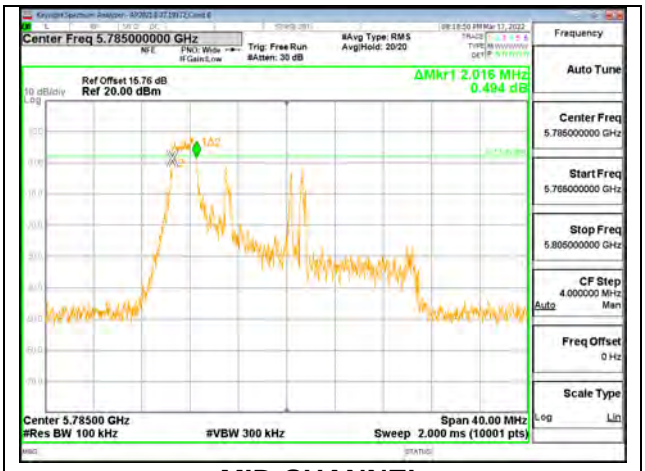
## 9.3.4. 802.11ax HE20 MODE IN THE 5.8 GHz BAND

**1TX Antenna 6 MODE: 26 Tones, RU Index 0**

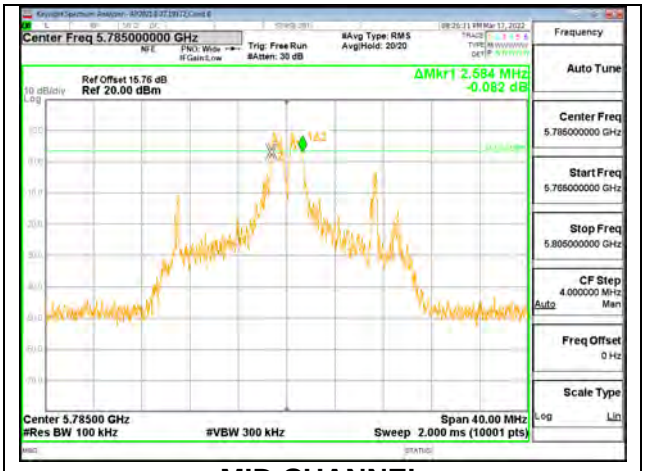
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 2.040 | 0.5 |
| Mid | 5785 | 2.016 | 0.5 |
| High | 5825 | 2.028 | 0.5 |




**MID CHANNEL**

**1TX Antenna 6 MODE: 26 Tones, RU Index 4**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 2.565 | 0.5 |
| Mid | 5785 | 2.584 | 0.5 |
| High | 5825 | 2.564 | 0.5 |




**MID CHANNEL**



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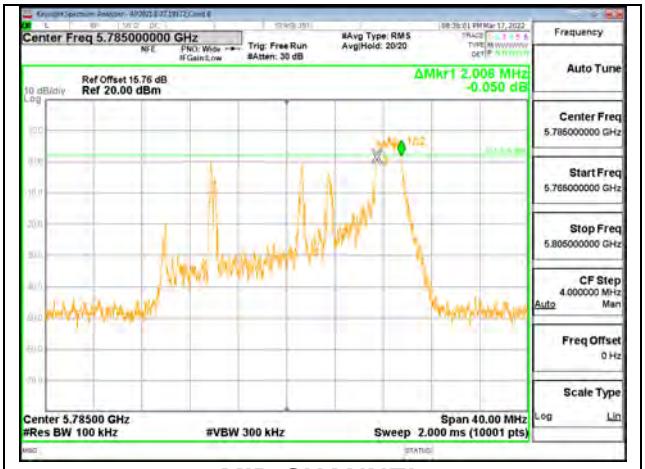
**1TX Antenna 6 MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 2.064 | 0.5 |
| Mid | 5785 | 2.008 | 0.5 |
| High | 5825 | 2.052 | 0.5 |
| 144 | 5720 | 2.012 | 0.5 |




**MID CHANNEL**

**1TX Antenna 6 MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 19.076 | 0.5 |
| Mid | 5785 | 17.592 | 0.5 |
| High | 5825 | 18.812 | 0.5 |
| 144 | 5720 | 4.564 | 0.5 |

**MID CHANNEL**



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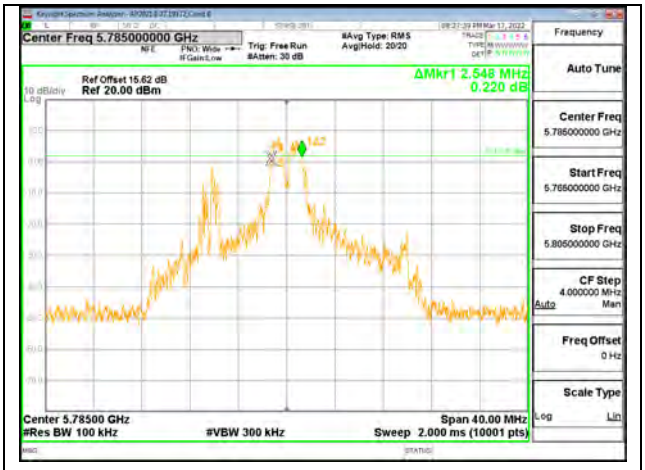
**1TX Antenna 5 MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 2.060 | 0.5 |
| Mid | 5785 | 2.008 | 0.5 |
| High | 5825 | 2.076 | 0.5 |

**MID CHANNEL**

**1TX Antenna 5 MODE: 26 Tones, RU Index 4**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 2.540 | 0.5 |
| Mid | 5785 | 2.548 | 0.5 |
| High | 5825 | 2.572 | 0.5 |




**MID CHANNEL**



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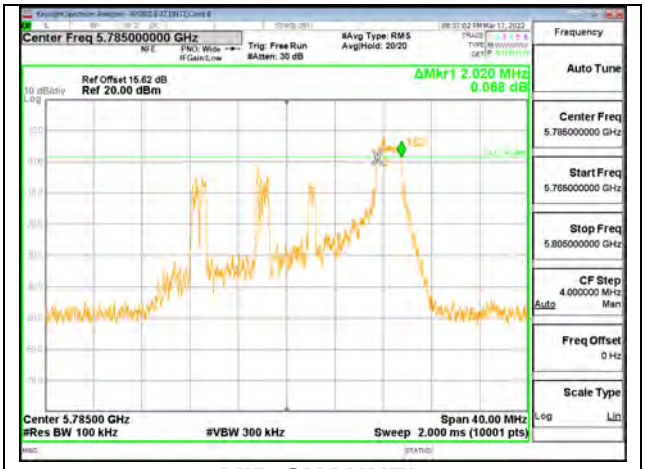
**1TX Antenna 5 MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 2.092 | 0.5 |
| Mid | 5785 | 2.020 | 0.5 |
| High | 5825 | 2.060 | 0.5 |
| 144 | 5720 | 2.016 | 0.5 |




**MID CHANNEL**

**1TX Antenna 5 MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5745 | 18.844 | 0.5 |
| Mid | 5785 | 18.688 | 0.5 |
| High | 5825 | 18.732 | 0.5 |
| 144 | 5720 | 4.540 | 0.5 |

**MID CHANNEL**



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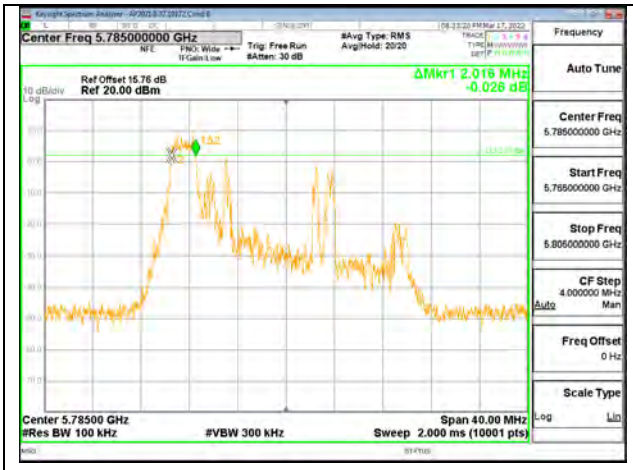
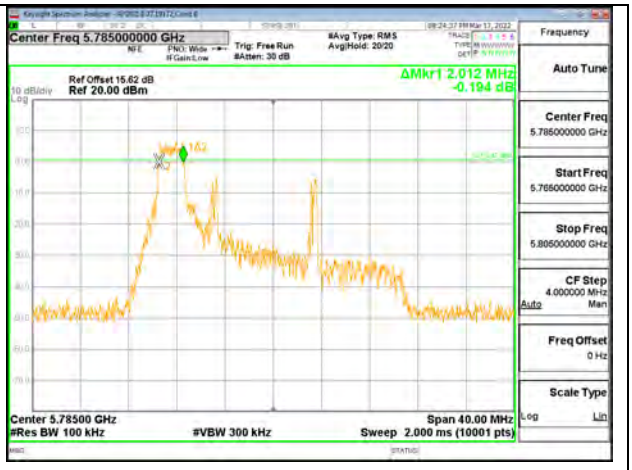
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5745 | 2.008 | 2.060 | 0.5 |
| Mid | 5785 | 2.016 | 2.012 | 0.5 |
| High | 5825 | 2.024 | 2.056 | 0.5 |



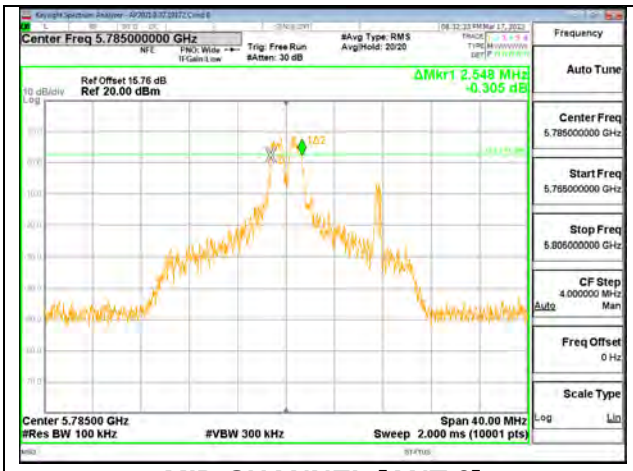

**MID CHANNEL [ANT 6]**



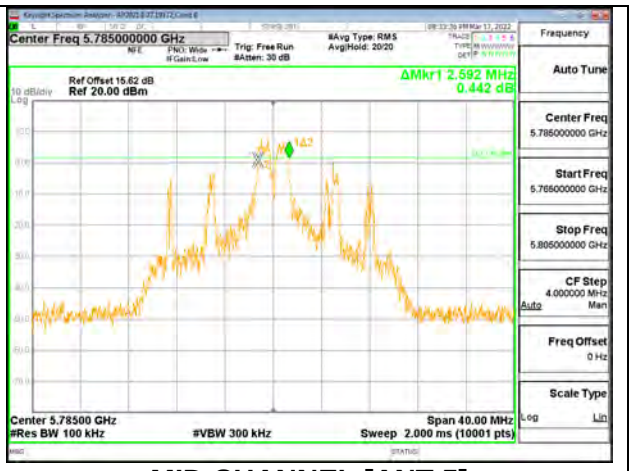

**MID CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 4**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5745 | 2.552 | 2.564 | 0.5 |
| Mid | 5785 | 2.548 | 2.592 | 0.5 |
| High | 5825 | 2.576 | 2.560 | 0.5 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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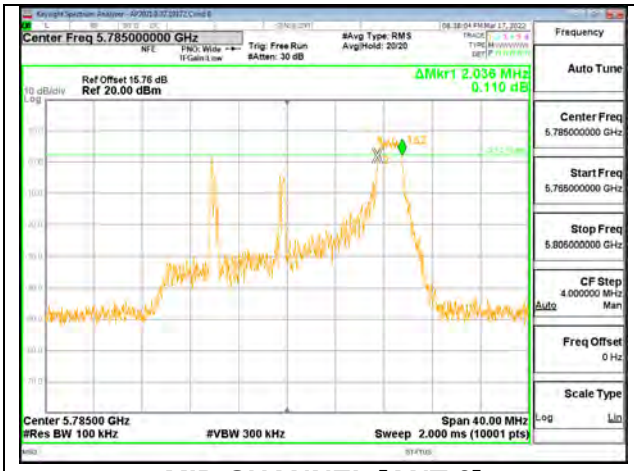
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5745 | 2.040 | 2.020 | 0.5 |
| Mid | 5785 | 2.036 | 2.060 | 0.5 |
| High | 5825 | 2.032 | 2.032 | 0.5 |
| 144 | 5720 | 2.040 | 2.072 | 0.5 |

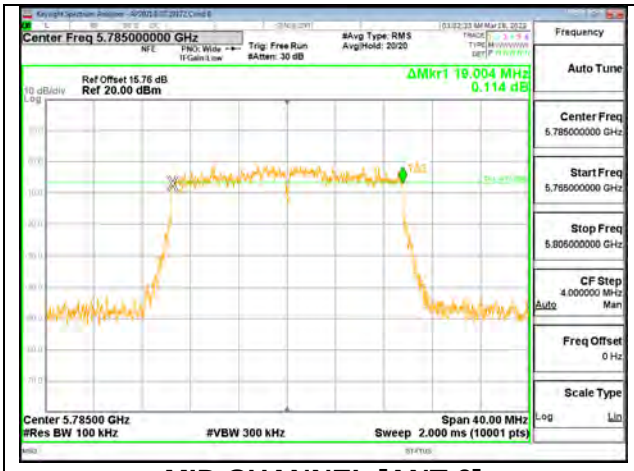



MID CHANNEL [ANT 6]

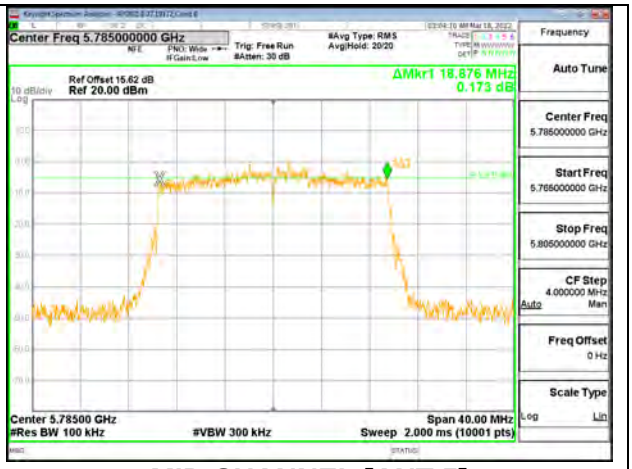
MID CHANNEL [ANT 5]

**2TX Antenna 6 + Antenna 5 OFDMA MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5745 | 18.792 | 18.856 | 0.5 |
| Mid | 5785 | 19.004 | 18.876 | 0.5 |
| High | 5825 | 18.776 | 18.820 | 0.5 |
| 144 | 5720 | 4.584 | 4.580 | 0.5 |




MID CHANNEL [ANT 6]




MID CHANNEL [ANT 5]



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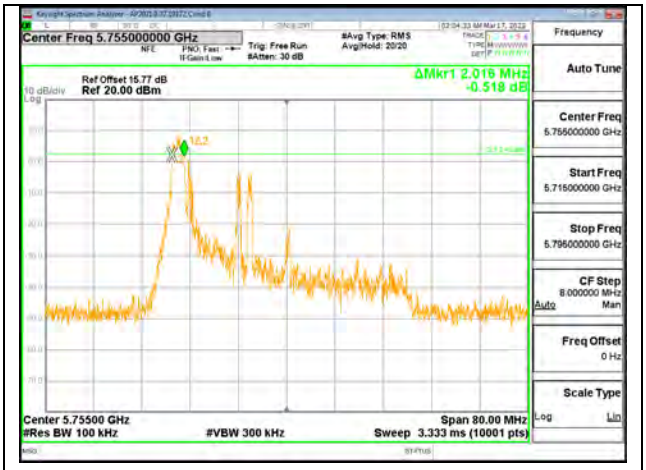
## 9.3.5. **802.11ax HE40 MODE IN THE 5.8 GHz BAND**

**1TX Antenna 6 MODE: 26 Tones, RU Index 0**

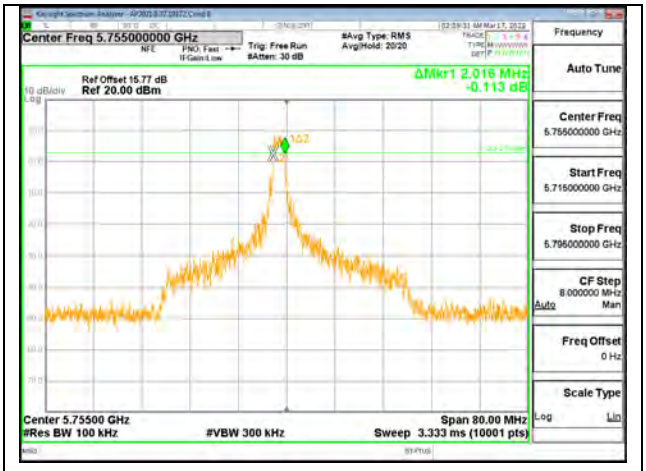
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 2.016 | 0.5 |
| High | 5795 | 2.056 | 0.5 |




**LOW CHANNEL**

**1TX Antenna 6 MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 2.016 | 0.5 |
| High | 5795 | 2.032 | 0.5 |




**LOW CHANNEL**



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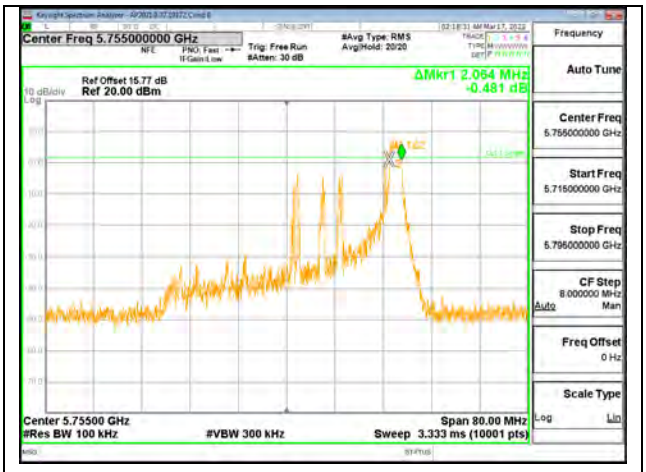
**1TX Antenna 6 MODE: 26 Tones, RU Index 17**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 2.064 | 0.5 |
| High | 5795 | 2.048 | 0.5 |
| 142 | 5710 | 2.048 | 0.5 |




**LOW CHANNEL**

**1TX Antenna 6 MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 37.632 | 0.5 |
| High | 5795 | 37.896 | 0.5 |
| 142 | 5710 | 4.096 | 0.5 |

**LOW CHANNEL**



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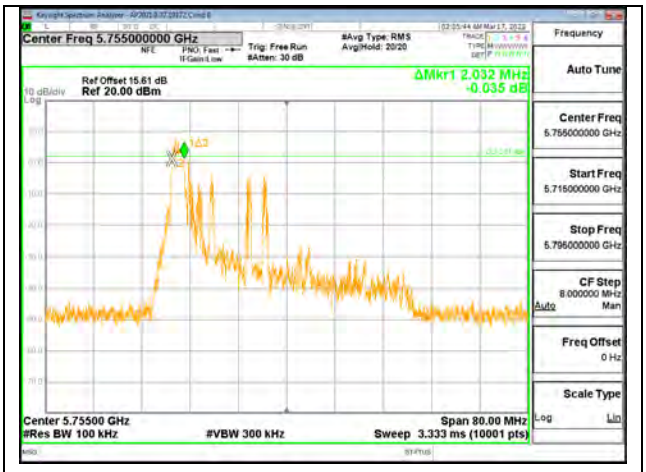
**1TX Antenna 5 MODE: 26 Tones, RU Index 0**

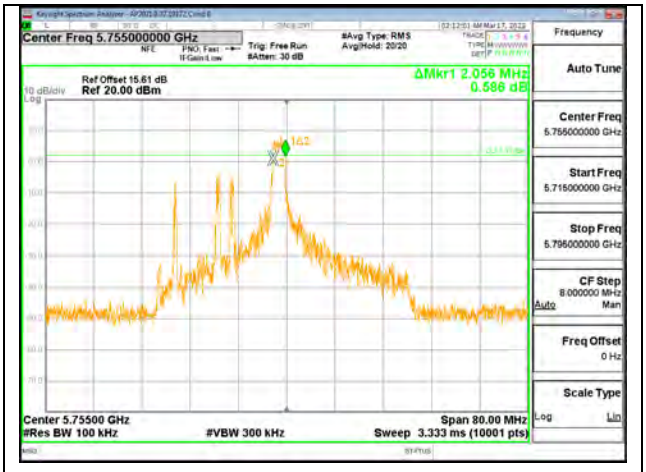
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 2.032 | 0.5 |
| High | 5795 | 2.088 | 0.5 |




**LOW CHANNEL**

**1TX Antenna 5 MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 2.056 | 0.5 |
| High | 5795 | 2.040 | 0.5 |




**LOW CHANNEL**



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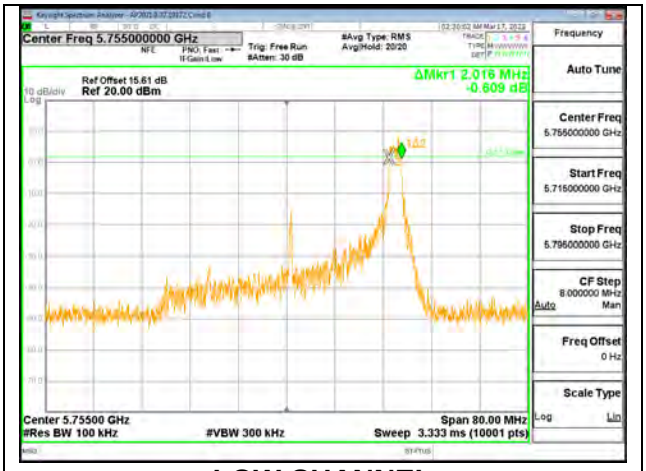
**1TX Antenna 5 MODE: 26 Tones, RU Index 17**

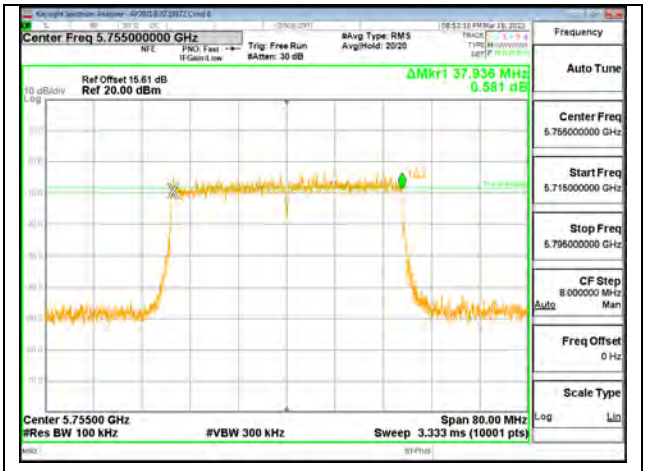
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 2.016 | 0.5 |
| High | 5795 | 2.088 | 0.5 |
| 142 | 5710 | 2.064 | 0.5 |




**LOW CHANNEL**

**1TX Antenna 5 MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Low | 5755 | 37.936 | 0.5 |
| High | 5795 | 38.056 | 0.5 |
| 142 | 5710 | 4.112 | 0.5 |




**LOW CHANNEL**



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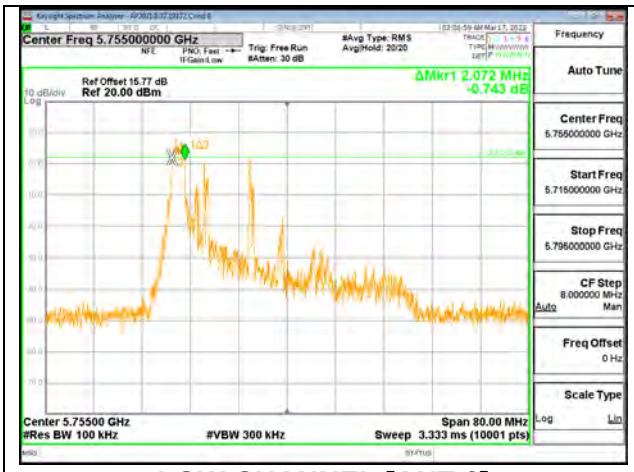
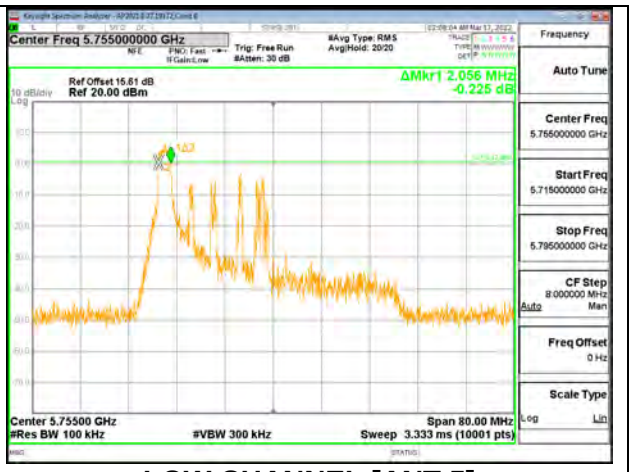
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5755 | 2.072 | 2.056 | 0.5 |
| High | 5795 | 2.064 | 2.056 | 0.5 |



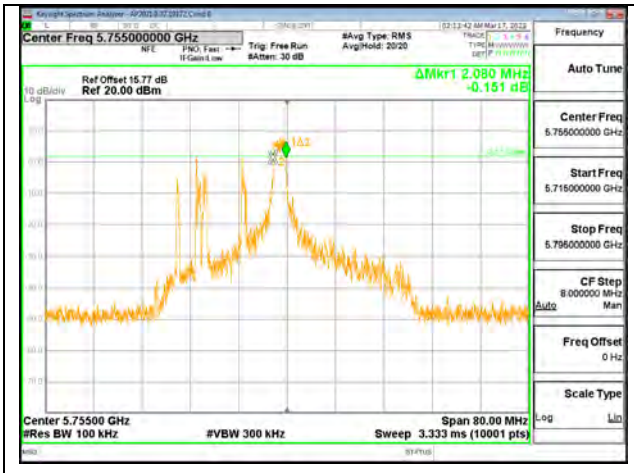

**LOW CHANNEL [ANT 6]**



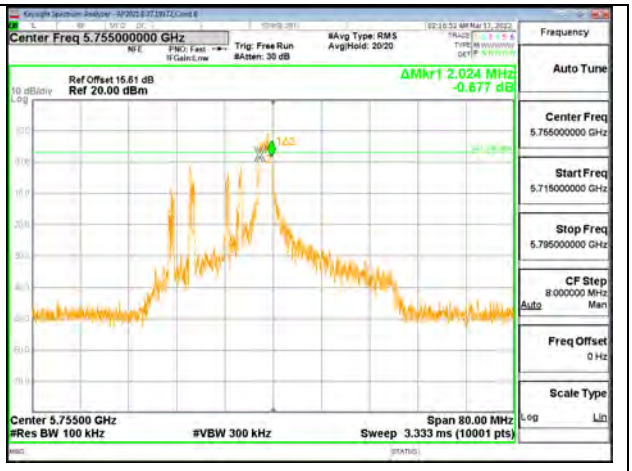

**LOW CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 8**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5755 | 2.080 | 2.024 | 0.5 |
| High | 5795 | 2.072 | 2.040 | 0.5 |




**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**



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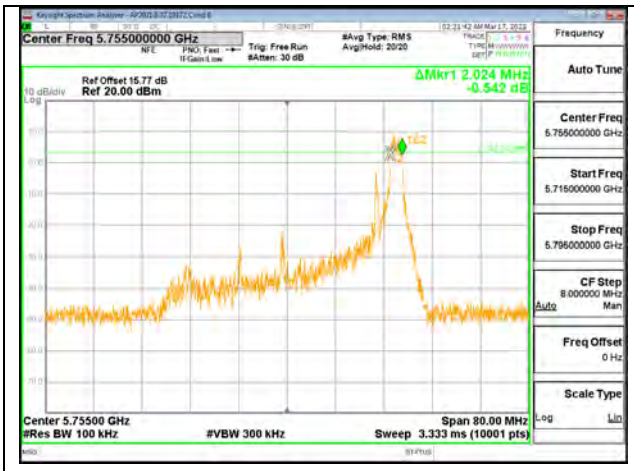
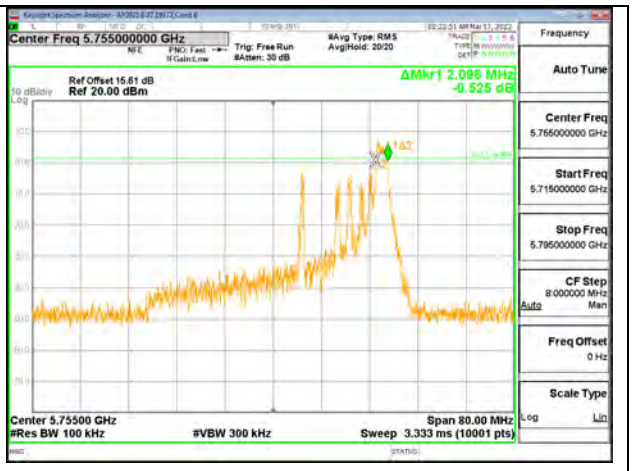
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 17**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5755 | 2.024 | 2.096 | 0.5 |
| High | 5795 | 2.072 | 2.058 | 0.5 |
| 142 | 5710 | 2.048 | 2.048 | 0.5 |



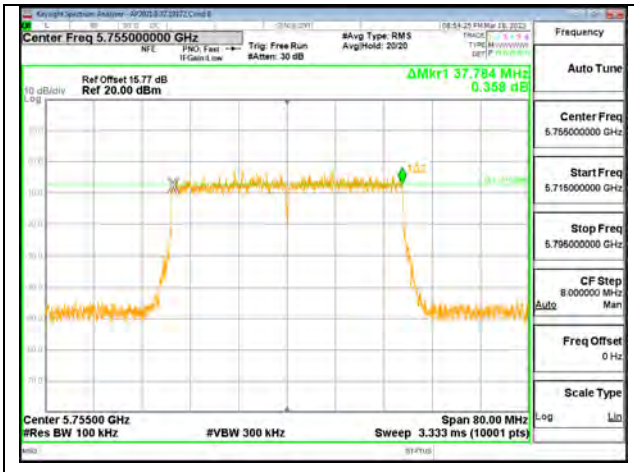

**LOW CHANNEL [ANT 6]**



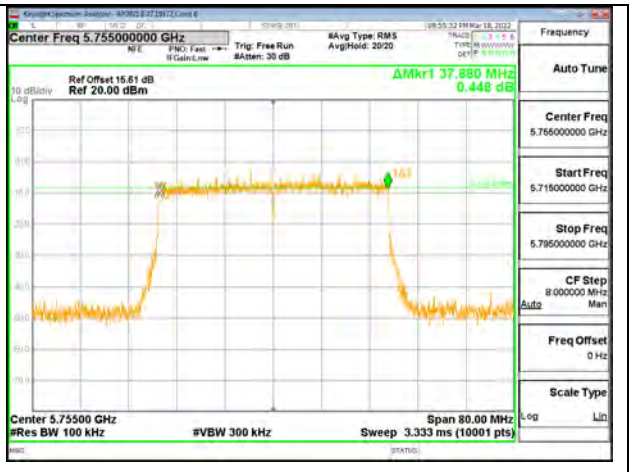

**LOW CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Low | 5755 | 37.784 | 37.880 | 0.5 |
| High | 5795 | 37.720 | 37.688 | 0.5 |
| 142 | 5710 | 3.944 | 4.128 | 0.5 |




**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**



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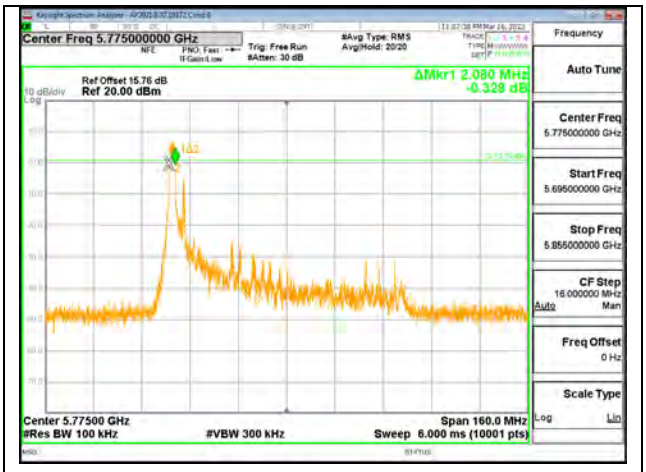
## 9.3.6. 802.11ax HE80 MODE IN THE 5.8 GHz BAND

**1TX Antenna 6 MODE: 26 Tones, RU Index 0**

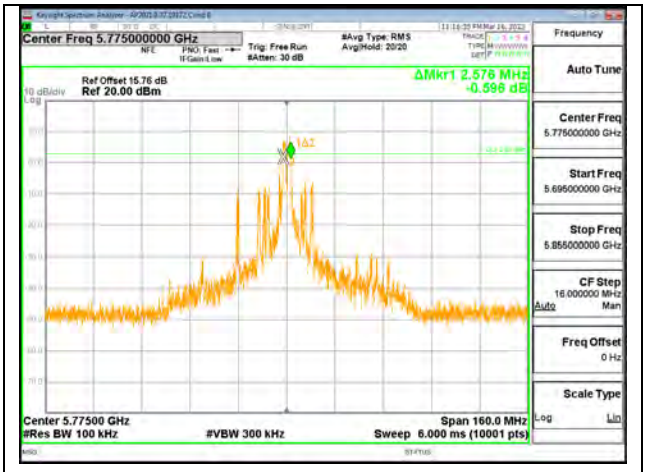
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 2.080 | 0.5 |




**MID CHANNEL**

**1TX Antenna 6 MODE: 26 Tones, RU Index 18**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 2.576 | 0.5 |




**MID CHANNEL**



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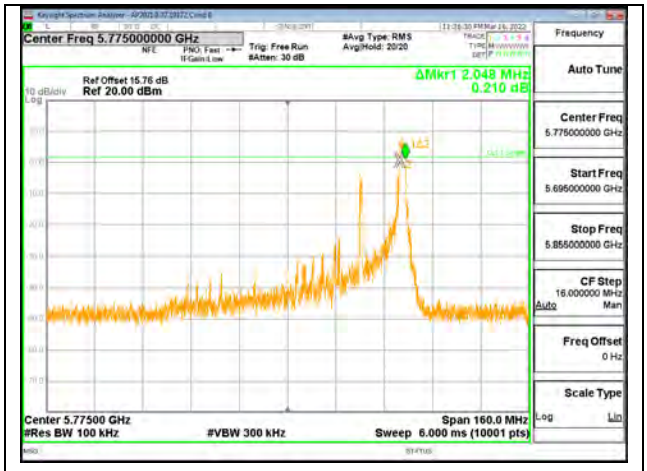
**1TX Antenna 6 MODE: 26 Tones, RU Index 36**

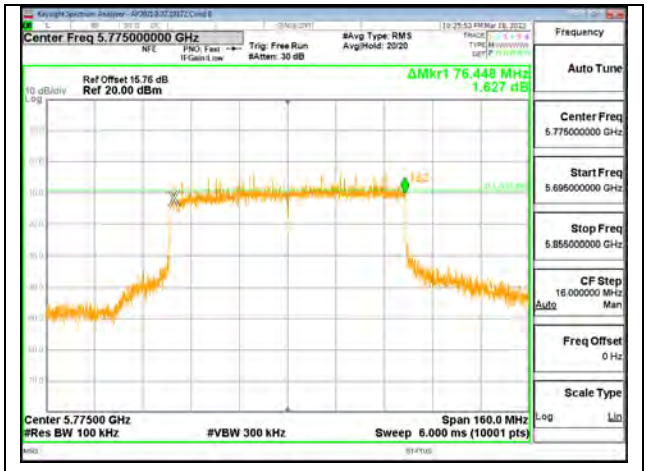
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 2.048 | 0.5 |
| 138 | 5690 | 2.032 | 0.5 |




**MID CHANNEL**

**1TX Antenna 6 MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 76.448 | 0.5 |
| 138 | 5690 | 3.896 | 0.5 |




**MID CHANNEL**



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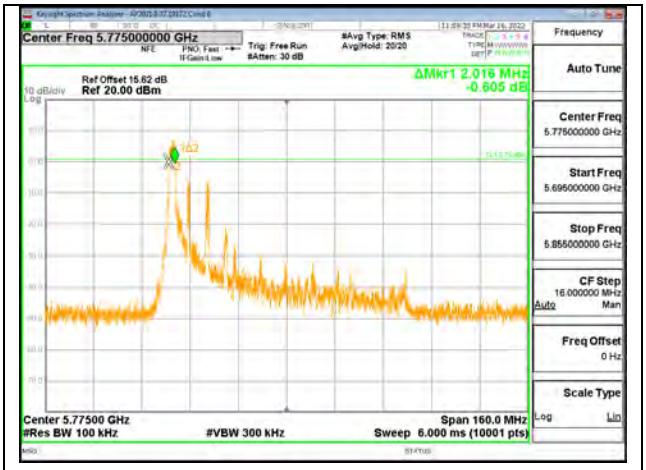
**1TX Antenna 5 MODE: 26 Tones, RU Index 0**

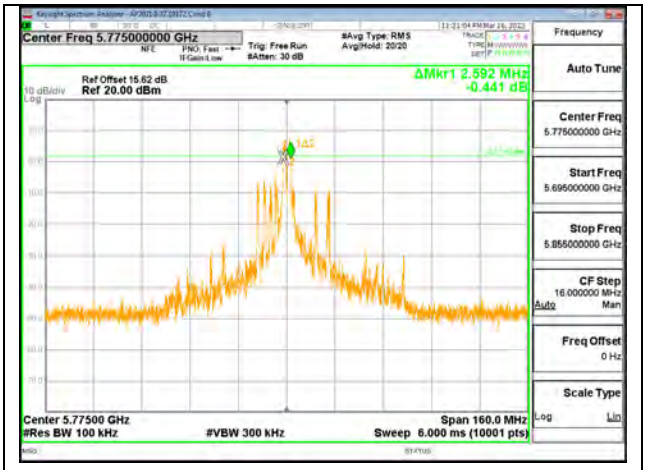
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 2.016 | 0.5 |




**MID CHANNEL**

**1TX Antenna 5 MODE: 26 Tones, RU Index 18**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 2.592 | 0.5 |




**MID CHANNEL**



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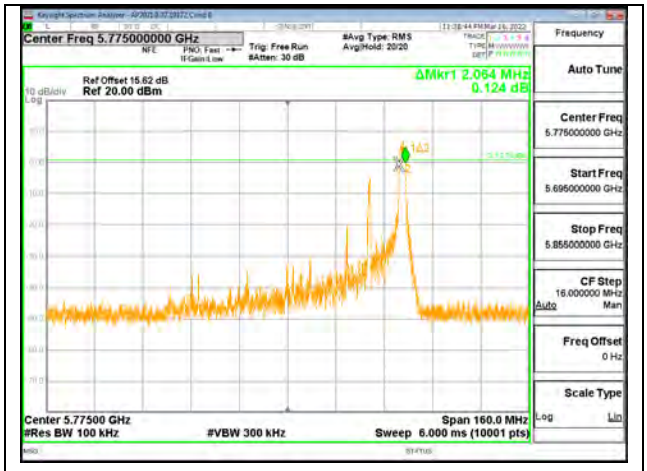
**1TX Antenna 5 MODE: 26 Tones, RU Index 36**

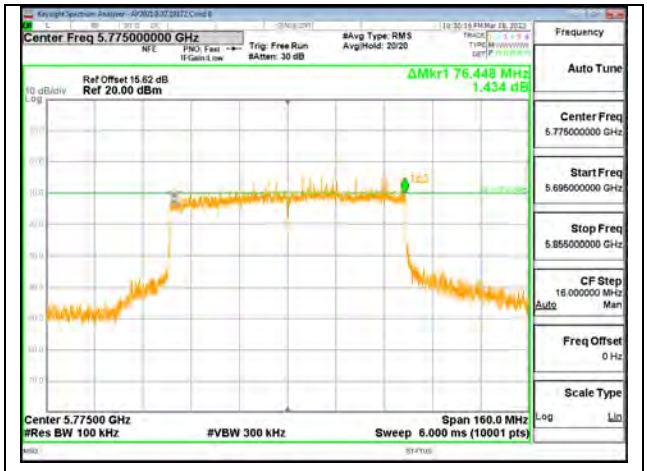
| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 2.064 | 0.5 |
| 138 | 5690 | 2.048 | 0.5 |




**MID CHANNEL**

**1TX Antenna 5 MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---|---|---|---|
| Mid | 5775 | 76.448 | 0.5 |
| 138 | 5690 | 4.008 | 0.5 |




**MID CHANNEL**



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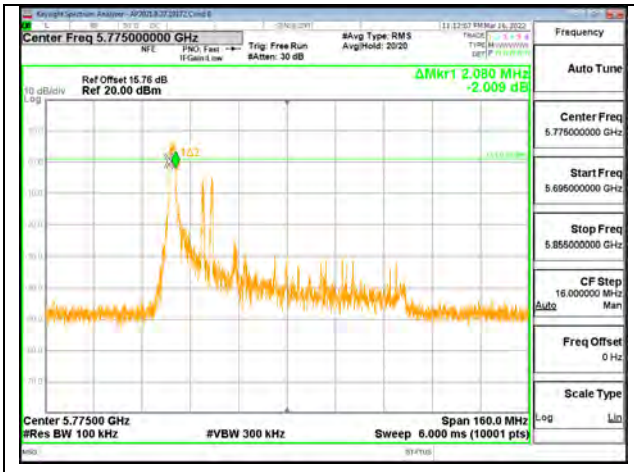
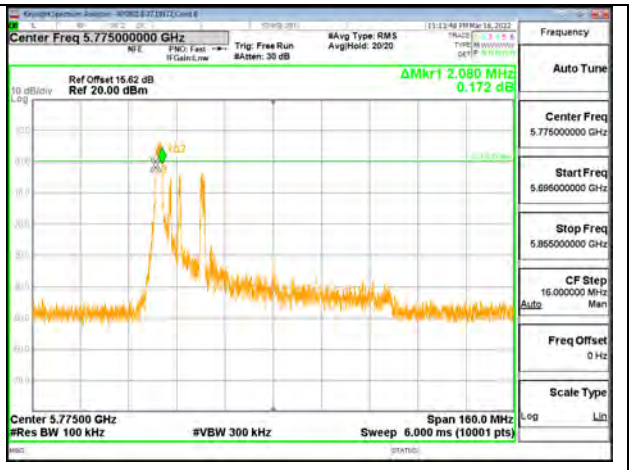
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 0**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Mid | 5775 | 2.080 | 2.080 | 0.5 |



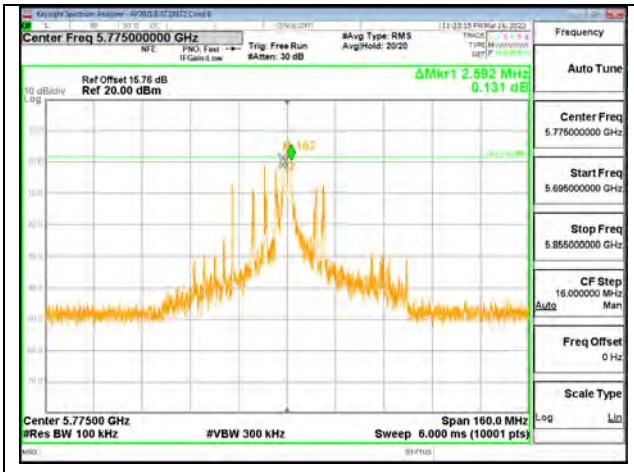

**MID CHANNEL [ANT 6]**



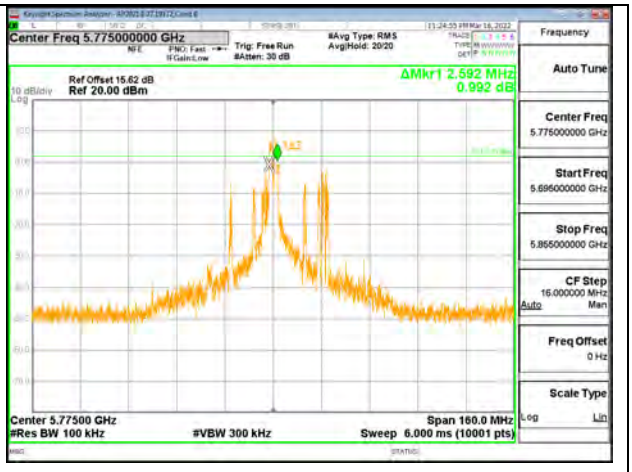

**MID CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 18**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Mid | 5775 | 2.592 | 2.592 | 0.5 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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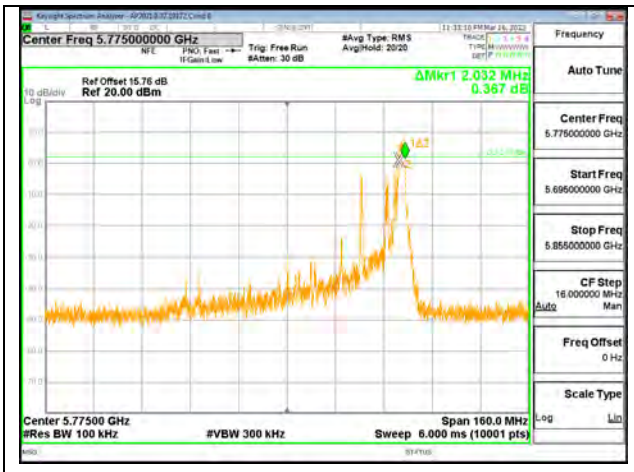
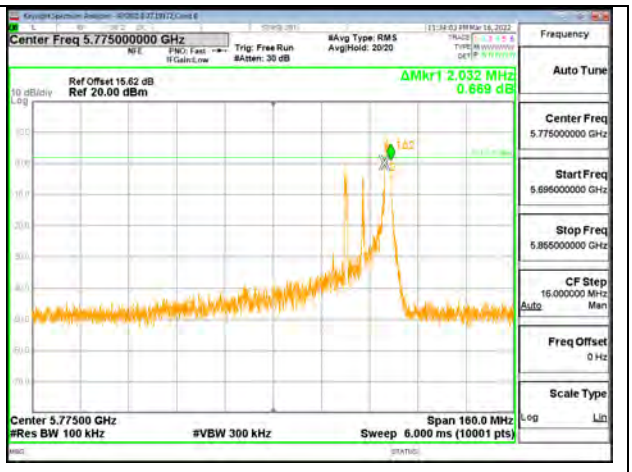
**2TX Antenna 6 + Antenna 5 OFDMA MODE: 26 Tones, RU Index 36**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Mid | 5775 | 2.032 | 2.032 | 0.5 |
| 138 | 5690 | 2.016 | 2.064 | 0.5 |



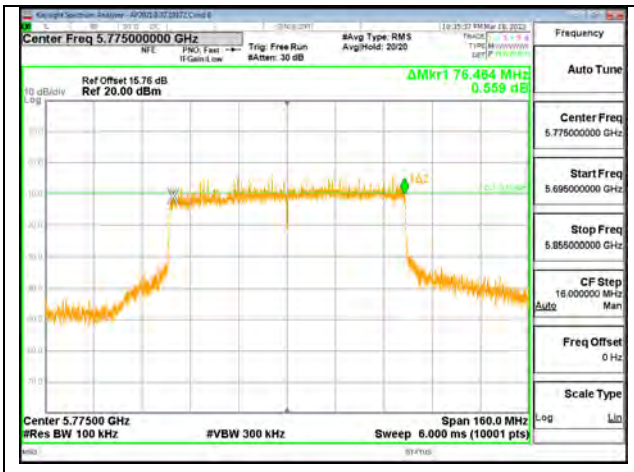

**MID CHANNEL [ANT 6]**



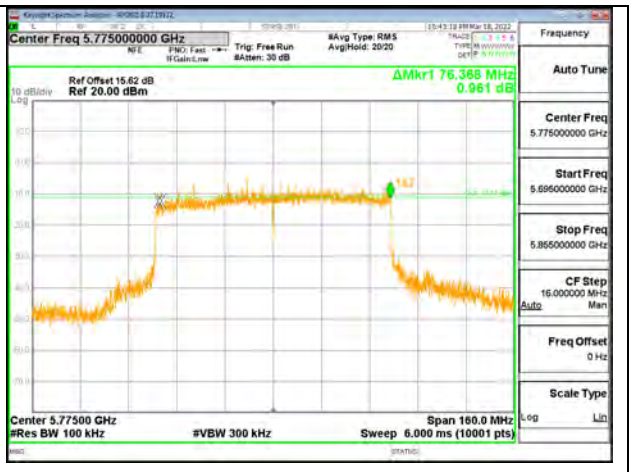

**MID CHANNEL [ANT 5]**

**2TX Antenna 6 + Antenna 5 OFDMA MODE: SU Mode**

| Channel | Frequency (MHz) | 6 dB Bandwidth Antenna 6 (MHz) | 6 dB Bandwidth Antenna 5 (MHz) | Minimum Limit (MHz) |
|---|---|---|---|---|
| Mid | 5775 | 76.464 | 76.368 | 0.5 |
| 138 | 5690 | 3.592 | 3.800 | 0.5 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.4. OUTPUT POWER AND PSD

**LIMITS**

### FCC §15.407

**Band 5.15–5.25 GHz**

(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, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**Bands 5.25-5.35 GHz and 5.47-5.725 GHz**
The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**Band 5.725-5.85 GHz**

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

**TEST PROCEDURE**

The measurement method used for output power is KDB 789033 D02 v02r01, Section E.3.b (Method PM-G).

The measurement method used for power spectral density is KDB 789033 D02 v02r01, Section F.
For all straddle channels, full bandwidth power is reported in the 5.6GHz section. The combined 5.6GHz and 5.8GHz power already passed the worst case 5.6GHz 24dBm limit, therefore there is no need to provide the 5.8GHz power.

11n HT20 and 11ax HE20 straddle channel 26dB bandwidth= (26dB BW/2)+5


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**DIRECTIONAL ANTENNA GAIN**

For 1 TX:

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

For 2 TX:

Tx chains are uncorrelated for power and correlated for PSD due to the device supporting CDD in all MIMO modes. The directional gains are as follows:

| Band (GHz) | ANT 6 Gain (dBi) | ANT 5 Gain (dBi) | Uncorrelated Chains Directional Gain (dBi) | Correlated Chains Directional Gain (dBi) |
|---|---|---|---|---|
| 5.2 | -2.90 | -2.00 | -2.43 | 0.57 |
| 5.3 | -2.20 | -1.00 | -1.56 | 1.43 |
| 5.6 | -0.90 | -1.30 | -1.10 | 1.91 |
| 5.8 | -0.50 | -1.20 | -0.84 | 2.17 |

Note: Uncorrelated gain is used for SDM chains for both power and PSD.

**DIRECTIONAL GAIN CALCULATION:**

ANSI C63.10-2013 section 14.4.3

Uncorrelated directional gain=10*LOG((10^(Ant1/10)+10^(Ant2/10))/2)
Correlated directional Gain=10*LOG(((10^(Ant1/20)+10^(Ant2/20))^2)/2)

Sample Calculation at 5.2GHz Band:

Ant1=-2.90, Ant2=-2.00

Uncorrelated Antenna gain=10log[(10^(-2.9/10)+10^(-2.0/10))/2]=-2.43dBi

Correlated Antenna gain=10log[(10^(-2.9/20)+10^(-2.0/20))^2)/2]=0.57dBi

**RESULTS**



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## 9.4.1. **802.11n HT20 MODE IN THE 5.2 GHz BAND**

**1TX Antenna 6 MODE (FCC) MOBILE)**

| | |
|---|---|
| **Test Engineer:** | 44366 |
| **Test Date:** | 3/21/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.90 | 24.00 | 11.00 |
| Mid | 5200 | -2.90 | 24.00 | 11.00 |
| High | 5240 | -2.90 | 24.00 | 11.00 |

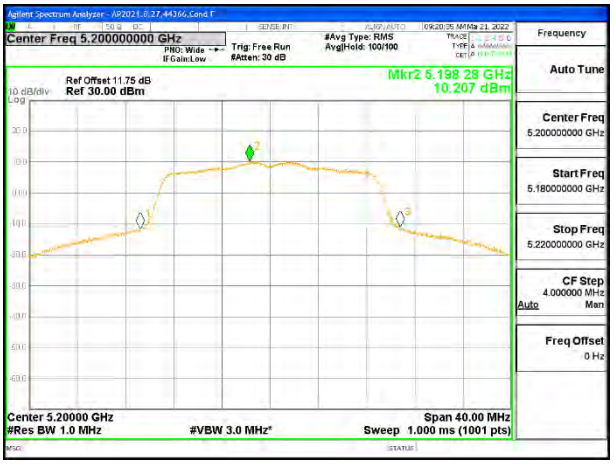
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 18.94 | 18.94 | 24.00 | -5.06 |
| Mid | 5200 | 19.93 | 19.93 | 24.00 | -4.07 |
| High | 5240 | 19.96 | 19.96 | 24.00 | -4.04 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 8.936 | 9.036 | 11.00 | -1.964 |
| Mid | 5200 | 10.207 | 10.307 | 11.00 | -0.693 |
| High | 5240 | 10.232 | 10.332 | 11.00 | -0.668 |




**MID CHANNEL**



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**1TX Antenna 5 MODE (FCC) MOBILE**

| | |
|---|---|
| **Test Engineer:** | 44366 |
| **Test Date:** | 3/21/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.00 | 24.00 | 11.00 |
| Mid | 5200 | -2.00 | 24.00 | 11.00 |
| High | 5240 | -2.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 18.86 | 18.86 | 24.00 | -5.14 |
| Mid | 5200 | 19.91 | 19.91 | 24.00 | -4.09 |
| High | 5240 | 19.89 | 19.89 | 24.00 | -4.11 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 8.961 | 9.061 | 11.00 | -1.939 |
| Mid | 5200 | 10.096 | 10.196 | 11.00 | -0.804 |
| High | 5240 | 10.036 | 10.136 | 11.00 | -0.864 |

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## 2TX Antenna 6 + Antenna 5 CDD MODE (FCC) MOBILE

| | |
|---|---|
| **Test Engineer:** | 50820, 44366 |
| **Test Date:** | 3/22/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|---|
| Low | 5180 | -2.43 | 0.57 | 24.00 | 11.00 |
| Mid | 5200 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5240 | -2.43 | 0.57 | 24.00 | 11.00 |

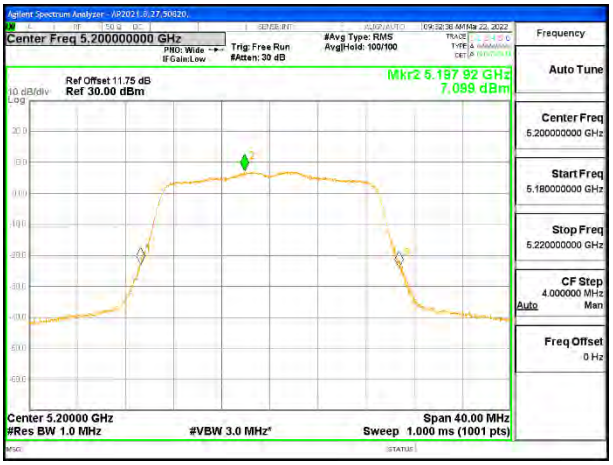
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

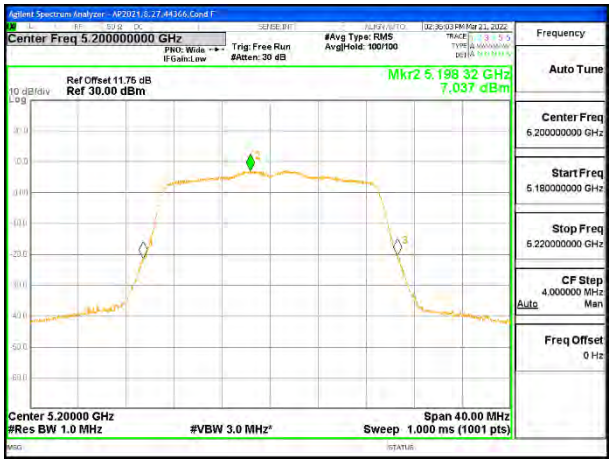
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 16.93 | 16.91 | 19.93 | 24.00 | -4.07 |
| Mid | 5200 | 16.93 | 16.85 | 19.90 | 24.00 | -4.10 |
| High | 5240 | 16.86 | 16.87 | 19.88 | 24.00 | -4.12 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 7.049 | 6.967 | 10.12 | 11.00 | -0.882 |
| Mid | 5200 | 7.099 | 7.037 | 10.18 | 11.00 | -0.822 |
| High | 5240 | 7.204 | 7.113 | 10.27 | 11.00 | -0.731 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.4.2. **802.11n HT40 MODE IN THE 5.2 GHz BAND**

**1TX Antenna 6 MODE (FCC) MOBILE**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.90 | 24.00 | 11.00 |
| High | 5230 | -2.90 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 17.46 | 17.46 | 24.00 | -6.54 |
| High | 5230 | 20.45 | 20.45 | 24.00 | -3.55 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 4.302 | 4.502 | 11.00 | -6.498 |
| High | 5230 | 7.770 | 7.970 | 11.00 | -3.030 |

**LOW CHANNEL**



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**1TX Antenna 5 MODE (FCC) MOBILE**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.00 | 24.00 | 11.00 |
| High | 5230 | -2.00 | 24.00 | 11.00 |

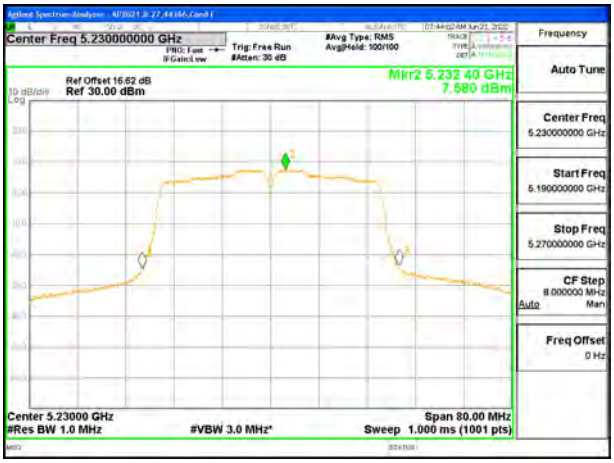
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 17.43 | 17.43 | 24.00 | -6.57 |
| High | 5230 | 20.43 | 20.43 | 24.00 | -3.57 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 4.389 | 4.589 | 11.00 | -6.411 |
| High | 5230 | 7.580 | 7.780 | 11.00 | -3.220 |

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## 2TX Antenna 6 + Antenna 5 CDD MODE (FCC) MOBILE

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|---|
| Low | 5190 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5230 | -2.43 | 0.57 | 24.00 | 11.00 |

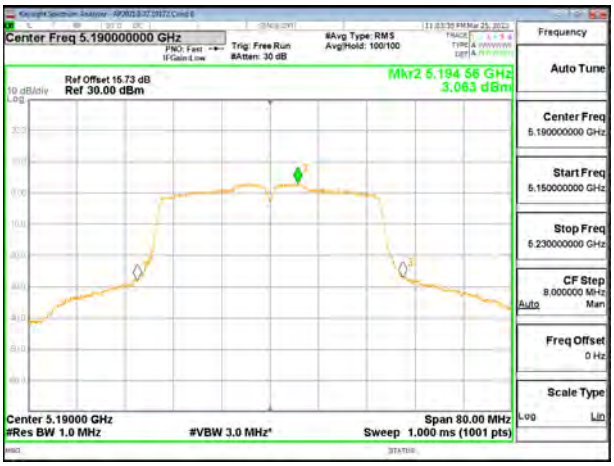
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 15.82 | 15.86 | 18.85 | 24.00 | -5.15 |
| High | 5230 | 19.43 | 19.37 | 22.41 | 24.00 | -1.59 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 3.063 | 3.182 | 6.33 | 11.00 | -4.667 |
| High | 5230 | 6.423 | 6.205 | 9.53 | 11.00 | -1.474 |




**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**



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## 9.4.3. **802.11ac VHT80 MODE IN THE 5.2 GHz BAND**

**1TX Antenna 6 MODE (FCC) MOBILE**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.90 | 24.00 | 11.00 |

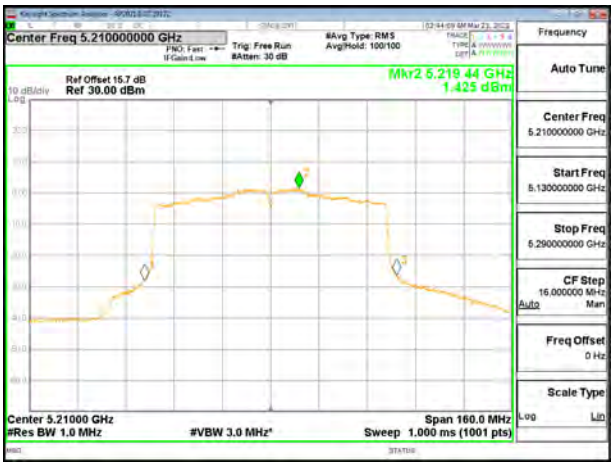
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 17.40 | 17.40 | 24.00 | -6.60 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 1.425 | 1.63 | 11.00 | -9.375 |

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**1TX Antenna 5 MODE (FCC) MOBILE**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 17.48 | 17.48 | 24.00 | -6.52 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 1.392 | 1.59 | 11.00 | -9.408 |

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## 2TX Antenna 6 + Antenna 5 CDD MODE (FCC) MOBILE

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5210 | -2.43 | 0.57 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

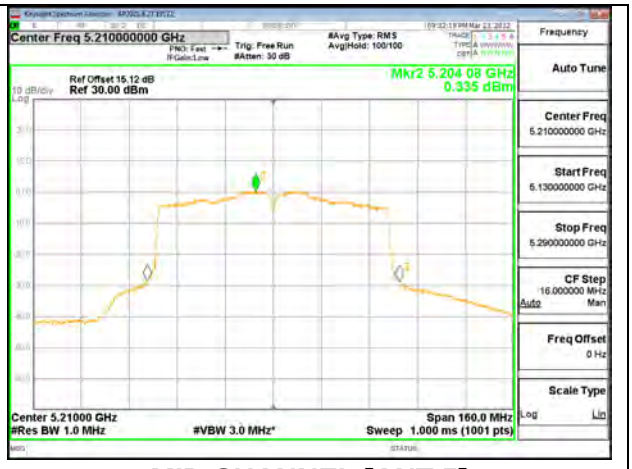
**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 16.35 | 16.34 | 19.36 | 24.00 | -4.64 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 0.325 | 0.335 | 3.54 | 11.00 | -7.460 |

**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.4.4. **802.11ax HE20 MODE IN THE 5.2 GHz BAND**

**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.90 | 24.00 | 11.00 |
| Mid | 5200 | -2.90 | 24.00 | 11.00 |
| High | 5240 | -2.90 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 11.91 | 11.91 | 24.00 | -12.09 |
| Mid | 5200 | 11.96 | 11.96 | 24.00 | -12.04 |
| High | 5240 | 11.95 | 11.95 | 24.00 | -12.05 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 9.411 | 9.411 | 11.00 | -1.589 |
| Mid | 5200 | 9.432 | 9.432 | 11.00 | -1.568 |
| High | 5240 | 9.462 | 9.462 | 11.00 | -1.538 |

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**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 4**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.90 | 24.00 | 11.00 |
| Mid | 5200 | -2.90 | 24.00 | 11.00 |
| High | 5240 | -2.90 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 11.90 | 11.90 | 24.00 | -12.10 |
| Mid | 5200 | 11.92 | 11.92 | 24.00 | -12.08 |
| High | 5240 | 11.94 | 11.94 | 24.00 | -12.06 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 8.582 | 8.582 | 11.00 | -2.418 |
| Mid | 5200 | 8.560 | 8.560 | 11.00 | -2.440 |
| High | 5240 | 8.439 | 8.439 | 11.00 | -2.561 |

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**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.90 | 24.00 | 11.00 |
| Mid | 5200 | -2.90 | 24.00 | 11.00 |
| High | 5240 | -2.90 | 24.00 | 11.00 |

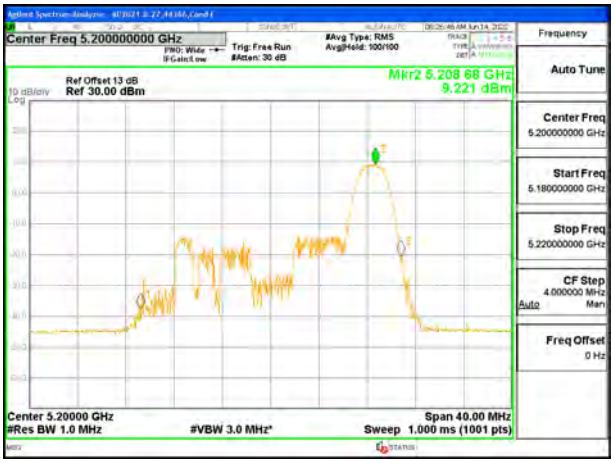
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 11.90 | 11.90 | 24.00 | -12.10 |
| Mid | 5200 | 11.92 | 11.92 | 24.00 | -12.08 |
| High | 5240 | 11.93 | 11.93 | 24.00 | -12.07 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 9.330 | 9.330 | 11.00 | -1.670 |
| Mid | 5200 | 9.221 | 9.221 | 11.00 | -1.779 |
| High | 5240 | 9.576 | 9.576 | 11.00 | -1.424 |




**MID CHANNEL**



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**1TX Antenna 6 MODE (FCC) MOBILE – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/22/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.90 | 24.00 | 11.00 |
| Mid | 5200 | -2.90 | 24.00 | 11.00 |
| High | 5240 | -2.90 | 24.00 | 11.00 |

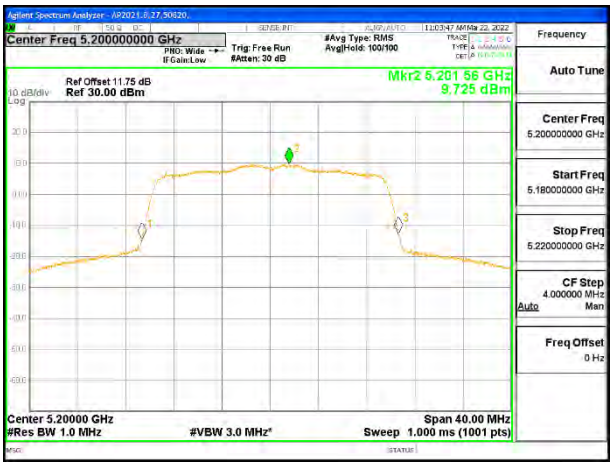
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 18.44 | 18.44 | 24.00 | -5.56 |
| Mid | 5200 | 19.90 | 19.90 | 24.00 | -4.10 |
| High | 5240 | 19.85 | 19.85 | 24.00 | -4.15 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 8.154 | 8.154 | 11.00 | -2.846 |
| Mid | 5200 | 9.725 | 9.725 | 11.00 | -1.275 |
| High | 5240 | 9.891 | 9.891 | 11.00 | -1.109 |

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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/22/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.00 | 24.00 | 11.00 |
| Mid | 5200 | -2.00 | 24.00 | 11.00 |
| High | 5240 | -2.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 11.91 | 11.91 | 24.00 | -12.09 |
| Mid | 5200 | 11.96 | 11.96 | 24.00 | -12.04 |
| High | 5240 | 11.91 | 11.91 | 24.00 | -12.09 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 9.290 | 9.290 | 11.00 | -1.710 |
| Mid | 5200 | 9.347 | 9.347 | 11.00 | -1.653 |
| High | 5240 | 9.684 | 9.684 | 11.00 | -1.316 |

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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 4**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/22/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.00 | 24.00 | 11.00 |
| Mid | 5200 | -2.00 | 24.00 | 11.00 |
| High | 5240 | -2.00 | 24.00 | 11.00 |

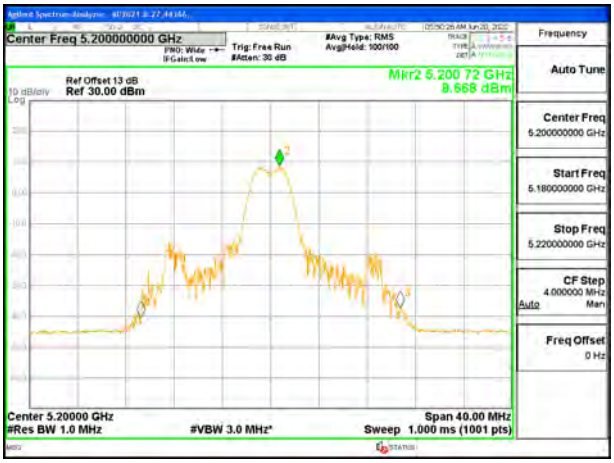
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 11.94 | 11.94 | 24.00 | -12.06 |
| Mid | 5200 | 11.96 | 11.96 | 24.00 | -12.04 |
| High | 5240 | 11.92 | 11.92 | 24.00 | -12.08 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 8.700 | 8.700 | 11.00 | -2.300 |
| Mid | 5200 | 8.668 | 8.668 | 11.00 | -2.332 |
| High | 5240 | 8.749 | 8.749 | 11.00 | -2.251 |

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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.00 | 24.00 | 11.00 |
| Mid | 5200 | -2.00 | 24.00 | 11.00 |
| High | 5240 | -2.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 11.93 | 11.93 | 24.00 | -12.07 |
| Mid | 5200 | 11.98 | 11.98 | 24.00 | -12.02 |
| High | 5240 | 11.97 | 11.97 | 24.00 | -12.03 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 9.440 | 9.440 | 11.00 | -1.560 |
| Mid | 5200 | 9.237 | 9.237 | 11.00 | -1.763 |
| High | 5240 | 9.580 | 9.580 | 11.00 | -1.420 |

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**1TX Antenna 5 MODE (FCC) MOBILE – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/22/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|
| Low | 5180 | -2.00 | 24.00 | 11.00 |
| Mid | 5200 | -2.00 | 24.00 | 11.00 |
| High | 5240 | -2.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 18.40 | 18.40 | 24.00 | -5.60 |
| Mid | 5200 | 19.88 | 19.88 | 24.00 | -4.12 |
| High | 5240 | 19.96 | 19.96 | 24.00 | -4.04 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5180 | 8.187 | 8.19 | 11.00 | -2.813 |
| Mid | 5200 | 9.703 | 9.70 | 11.00 | -1.297 |
| High | 5240 | 9.865 | 9.87 | 11.00 | -1.135 |

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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/28/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5180 | -2.43 | 0.57 | 24.00 | 11.00 |
| Mid | 5200 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5240 | -2.43 | 0.57 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 8.90 | 8.98 | 11.95 | 24.00 | -12.05 |
| Mid | 5200 | 8.78 | 8.76 | 11.78 | 24.00 | -12.22 |
| High | 5240 | 8.91 | 8.88 | 11.91 | 24.00 | -12.09 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 6.373 | 6.478 | 9.436 | 11.00 | -1.564 |
| Mid | 5200 | 6.401 | 6.532 | 9.477 | 11.00 | -1.523 |
| High | 5240 | 6.387 | 6.528 | 9.468 | 11.00 | -1.532 |

**MID CHANNEL ANT 6**

**MID CHANNEL ANT 5**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 4

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5180 | -2.43 | 0.57 | 24.00 | 11.00 |
| Mid | 5200 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5240 | -2.43 | 0.57 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 8.70 | 8.93 | 11.83 | 24.00 | -12.17 |
| Mid | 5200 | 8.91 | 8.87 | 11.90 | 24.00 | -12.10 |
| High | 5240 | 8.92 | 8.91 | 11.93 | 24.00 | -12.07 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 5.551 | 5.511 | 8.541 | 11.00 | -2.459 |
| Mid | 5200 | 5.650 | 5.515 | 8.593 | 11.00 | -2.407 |
| High | 5240 | 5.847 | 5.788 | 8.828 | 11.00 | -2.172 |

**MID CHANNEL ANT 6**

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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 8

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/28/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5180 | -2.43 | 0.57 | 24.00 | 11.00 |
| Mid | 5200 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5240 | -2.43 | 0.57 | 24.00 | 11.00 |

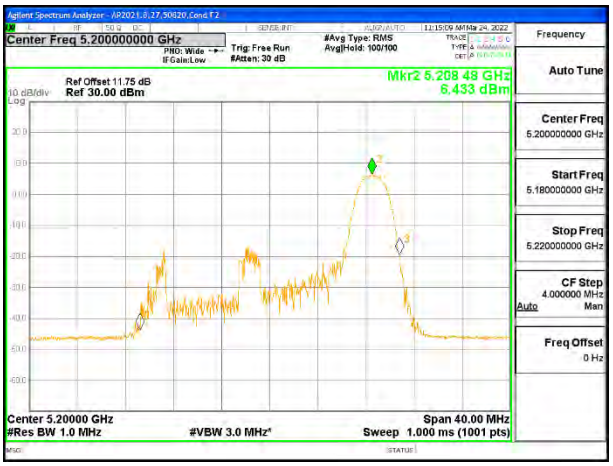
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 8.96 | 8.68 | 11.83 | 24.00 | -12.17 |
| Mid | 5200 | 8.94 | 8.87 | 11.92 | 24.00 | -12.08 |
| High | 5240 | 8.93 | 8.75 | 11.85 | 24.00 | -12.15 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 6.628 | 6.497 | 9.573 | 11.00 | -1.427 |
| Mid | 5200 | 6.433 | 6.503 | 9.478 | 11.00 | -1.522 |
| High | 5240 | 6.540 | 6.779 | 9.671 | 11.00 | -1.329 |

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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – SU Mode

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/24/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5180 | -2.43 | 0.57 | 24.00 | 11.00 |
| Mid | 5200 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5240 | -2.43 | 0.57 | 24.00 | 11.00 |

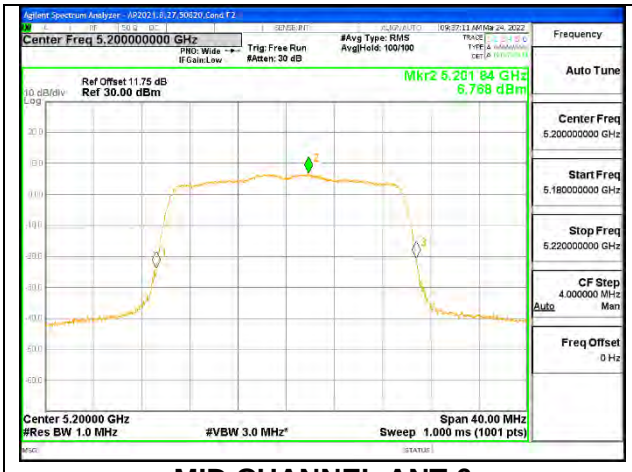
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

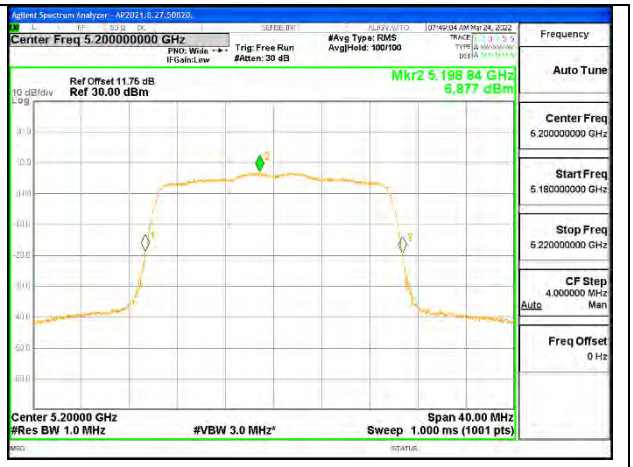
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 16.89 | 16.90 | 19.91 | 24.00 | -4.09 |
| Mid | 5200 | 16.92 | 16.96 | 19.95 | 24.00 | -4.05 |
| High | 5240 | 16.95 | 16.95 | 19.96 | 24.00 | -4.04 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5180 | 6.738 | 6.819 | 9.789 | 11.00 | -1.211 |
| Mid | 5200 | 6.768 | 6.877 | 9.833 | 11.00 | -1.167 |
| High | 5240 | 6.673 | 6.853 | 9.774 | 11.00 | -1.226 |




**MID CHANNEL ANT 6**




**MID CHANNEL ANT 5**



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## 9.4.5. **802.11ax HE40 MODE IN THE 5.2 GHz BAND**

**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/31/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.90 | 24.00 | 11.00 |
| High | 5230 | -2.90 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 10.91 | 10.91 | 24.00 | -13.09 |
| High | 5230 | 10.90 | 10.90 | 24.00 | -13.10 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 7.751 | 7.751 | 11.00 | -3.249 |
| High | 5230 | 7.983 | 7.983 | 11.00 | -3.017 |

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**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/31/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.90 | 24.00 | 11.00 |
| High | 5230 | -2.90 | 24.00 | 11.00 |

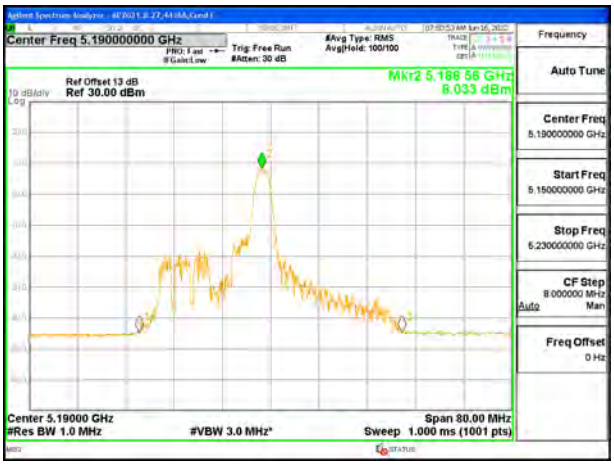
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 10.93 | 10.93 | 24.00 | -13.07 |
| High | 5230 | 10.91 | 10.91 | 24.00 | -13.09 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 8.033 | 8.033 | 11.00 | -2.967 |
| High | 5230 | 7.938 | 7.938 | 11.00 | -3.062 |

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**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 17**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/31/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.90 | 24.00 | 11.00 |
| High | 5230 | -2.90 | 24.00 | 11.00 |

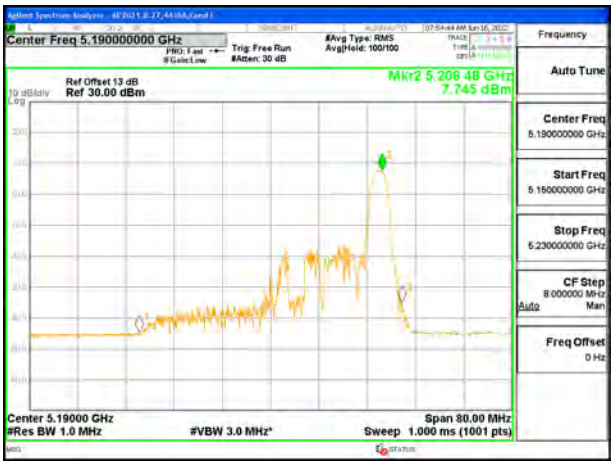
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 10.90 | 10.90 | 24.00 | -13.10 |
| High | 5230 | 10.95 | 10.95 | 24.00 | -13.05 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 7.745 | 7.745 | 11.00 | -3.255 |
| High | 5230 | 7.982 | 7.982 | 11.00 | -3.018 |

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**1TX Antenna 6 MODE (FCC) MOBILE – SU**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.90 | 24.00 | 11.00 |
| High | 5230 | -2.90 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.15 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 16.49 | 16.49 | 24.00 | -7.51 |
| High | 5230 | 20.45 | 20.45 | 24.00 | -3.55 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 2.219 | 2.369 | 11.00 | -8.631 |
| High | 5230 | 6.865 | 7.015 | 11.00 | -3.985 |

**LOW CHANNEL**



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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/30/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.00 | 24.00 | 11.00 |
| High | 5230 | -2.00 | 24.00 | 11.00 |

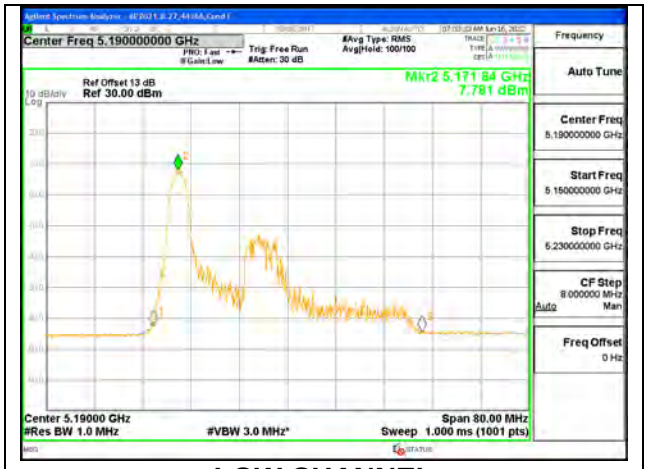
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 10.97 | 10.97 | 24.00 | -13.03 |
| High | 5230 | 10.92 | 10.92 | 24.00 | -13.08 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 7.781 | 7.781 | 11.00 | -3.219 |
| High | 5230 | 7.981 | 7.981 | 11.00 | -3.019 |

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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/30/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.00 | 24.00 | 11.00 |
| High | 5230 | -2.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 10.92 | 10.92 | 24.00 | -13.08 |
| High | 5230 | 10.94 | 10.94 | 24.00 | -13.06 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 7.846 | 7.846 | 11.00 | -3.154 |
| High | 5230 | 8.055 | 8.055 | 11.00 | -2.945 |

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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 17**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/30/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.00 | 24.00 | 11.00 |
| High | 5230 | -2.00 | 24.00 | 11.00 |

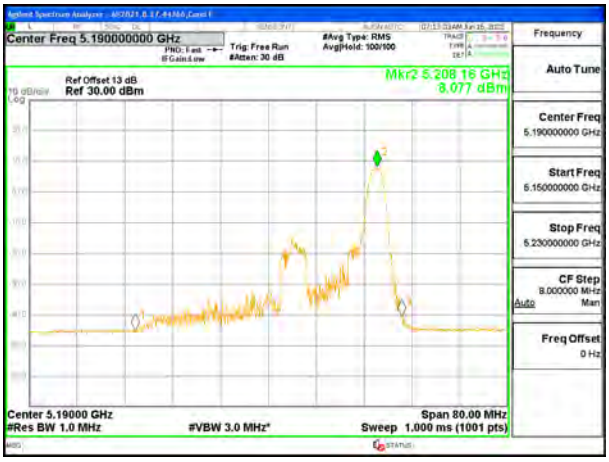
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 10.90 | 10.90 | 24.00 | -13.10 |
| High | 5230 | 10.95 | 10.95 | 24.00 | -13.05 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 8.077 | 8.077 | 11.00 | -2.923 |
| High | 5230 | 7.918 | 7.918 | 11.00 | -3.082 |




**LOW CHANNEL**



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**1TX Antenna 5 MODE (FCC) MOBILE – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/24/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Low | 5190 | -2.00 | 24.00 | 11.00 |
| High | 5230 | -2.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.15 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 16.45 | 16.45 | 24.00 | -7.55 |
| High | 5230 | 20.43 | 20.43 | 24.00 | -3.57 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5190 | 2.232 | 2.382 | 11.00 | -8.618 |
| High | 5230 | 6.844 | 6.994 | 11.00 | -4.006 |

**LOW CHANNEL**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/30/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|---|
| Low | 5190 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5230 | -2.43 | 0.57 | 24.00 | 11.00 |

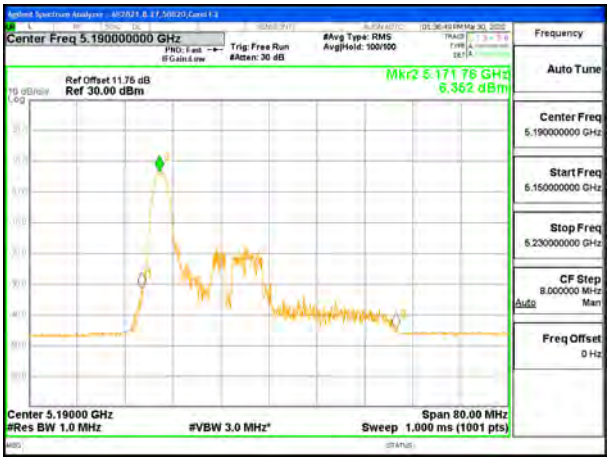
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

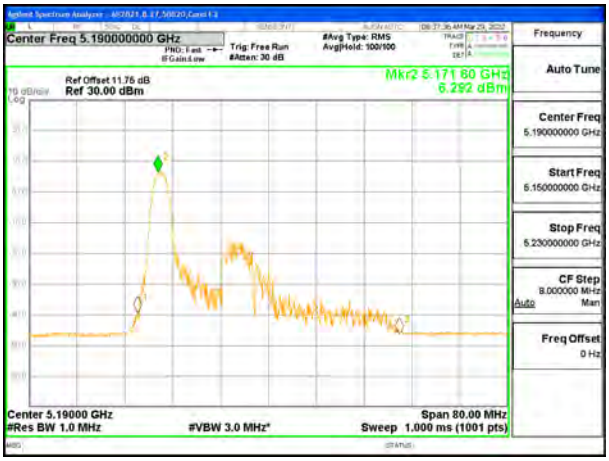
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 8.80 | 8.94 | 11.88 | 24.00 | -12.12 |
| High | 5230 | 8.86 | 8.99 | 11.94 | 24.00 | -12.06 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 6.352 | 6.292 | 9.332 | 11.00 | -1.668 |
| High | 5230 | 6.267 | 6.423 | 9.356 | 11.00 | -1.644 |




**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 8

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/29/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|---|
| Low | 5190 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5230 | -2.43 | 0.57 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 8.95 | 8.94 | 11.96 | 24.00 | -12.04 |
| High | 5230 | 8.95 | 8.98 | 11.98 | 24.00 | -12.02 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 6.308 | 6.661 | 9.498 | 11.00 | -1.502 |
| High | 5230 | 6.586 | 6.663 | 9.635 | 11.00 | -1.365 |

**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 17

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/29/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|---|
| Low | 5190 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5230 | -2.43 | 0.57 | 24.00 | 11.00 |

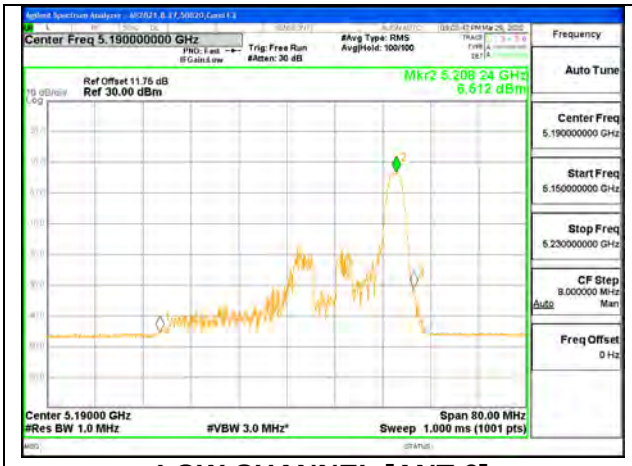
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

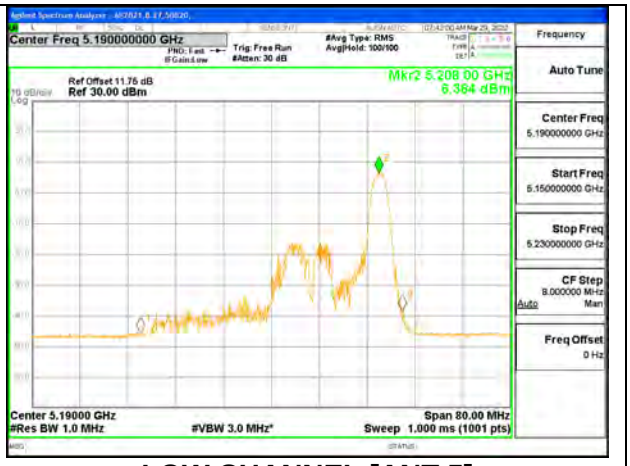
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 8.99 | 8.97 | 11.99 | 24.00 | -12.01 |
| High | 5230 | 8.99 | 8.79 | 11.90 | 24.00 | -12.10 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 6.512 | 6.384 | 9.459 | 11.00 | -1.541 |
| High | 5230 | 6.513 | 6.656 | 9.595 | 11.00 | -1.405 |




**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – SU Mode

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|---|
| Low | 5190 | -2.43 | 0.57 | 24.00 | 11.00 |
| High | 5230 | -2.43 | 0.57 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.15 | **Included in Calculations of Corr'd PSD** |

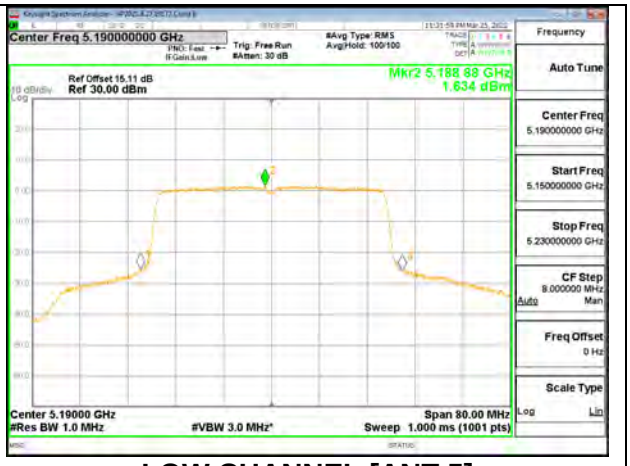
**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 15.95 | 15.96 | 18.97 | 24.00 | -5.03 |
| High | 5230 | 19.40 | 19.48 | 22.45 | 24.00 | -1.55 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5190 | 1.525 | 1.634 | 4.740 | 11.00 | -6.260 |
| High | 5230 | 4.890 | 5.040 | 8.126 | 11.00 | -2.874 |

**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**



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## 9.4.6. **802.11ax HE80 MODE IN THE 5.2 GHz BAND**

**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.90 | 24.00 | 11.00 |

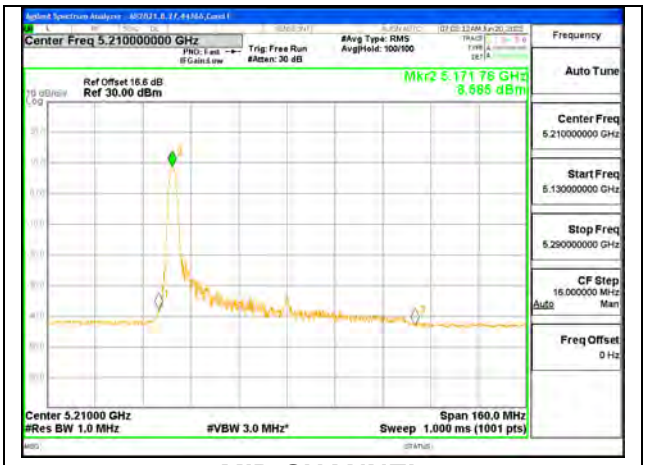
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 10.93 | 10.93 | 24.00 | -13.07 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 8.585 | 8.585 | 11.00 | -2.415 |




**MID CHANNEL**



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**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 18**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.90 | 24.00 | 11.00 |

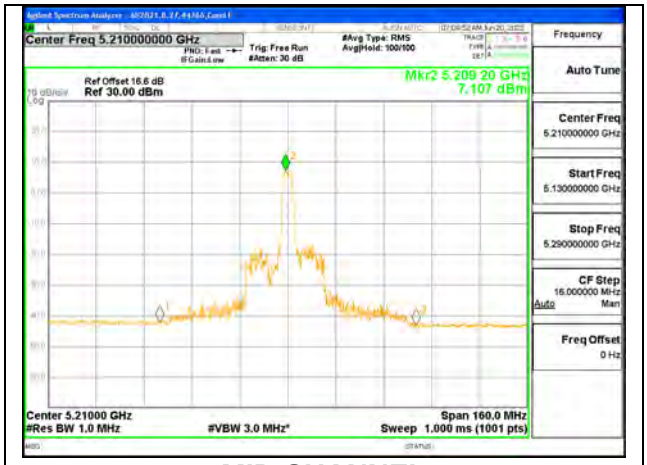
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 10.85 | 10.85 | 24.00 | -13.15 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 7.107 | 7.107 | 11.00 | -3.893 |




**MID CHANNEL**



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**1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 36**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.90 | 24.00 | 11.00 |

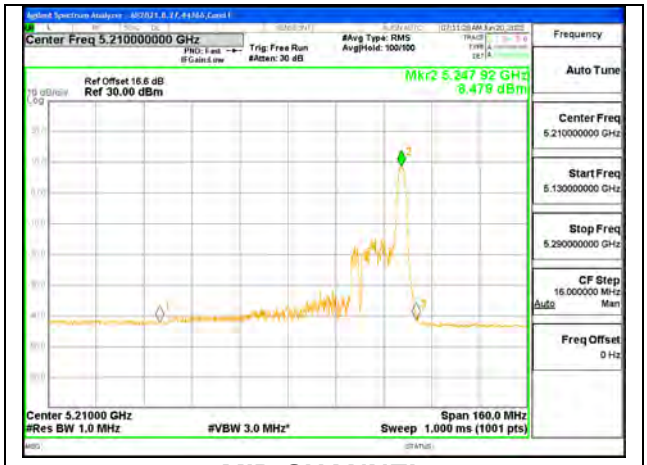
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 10.84 | 10.84 | 24.00 | -13.16 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 8.497 | 8.497 | 11.00 | -2.503 |

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**1TX Antenna 6 MODE (FCC) MOBILE – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.90 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.26 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 16.85 | 16.85 | 24.00 | -7.15 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | -0.530 | -0.270 | 11.00 | -11.270 |

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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/25/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.00 | 24.00 | 11.00 |

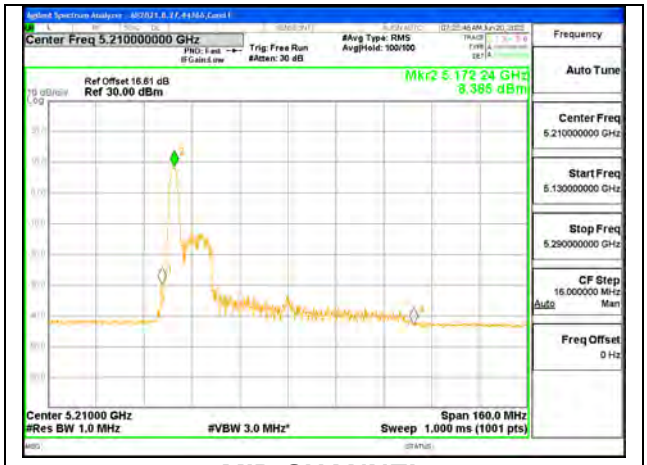
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 10.98 | 10.98 | 24.00 | -13.02 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 8.385 | 8.385 | 11.00 | -2.615 |

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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 18**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 10.95 | 10.95 | 24.00 | -13.05 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 7.167 | 7.167 | 11.00 | -3.833 |

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**1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 36**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.00 | 24.00 | 11.00 |

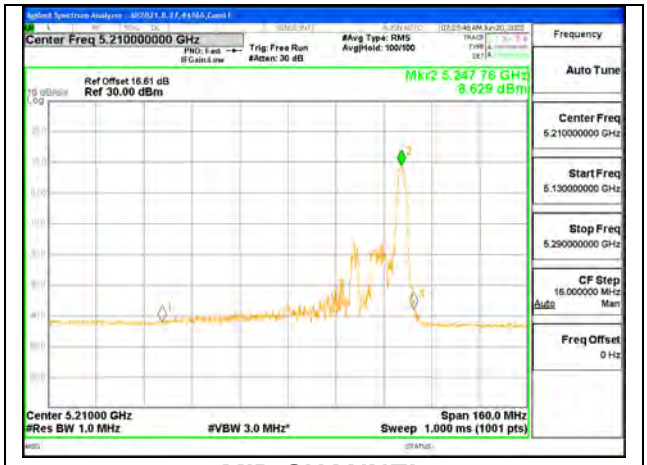
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 10.92 | 10.92 | 24.00 | -13.08 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 8.629 | 8.629 | 11.00 | -2.371 |

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**1TX Antenna 5 MODE (FCC) MOBILE – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) | PSD Limit (dBm/ 1MHz) |
|---|---|---|---|---|
| Mid | 5210 | -2.00 | 24.00 | 11.00 |

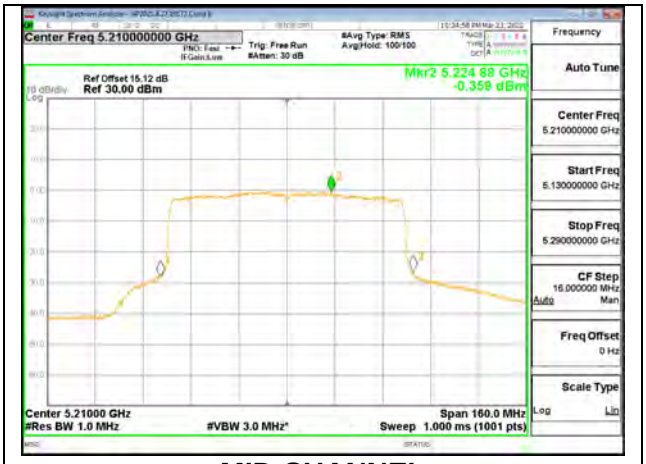
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.26 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | 16.88 | 16.88 | 24.00 | -7.12 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5210 | -0.359 | -0.099 | 11.00 | -11.099 |

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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5210 | -2.43 | 0.57 | 24.00 | 11.00 |

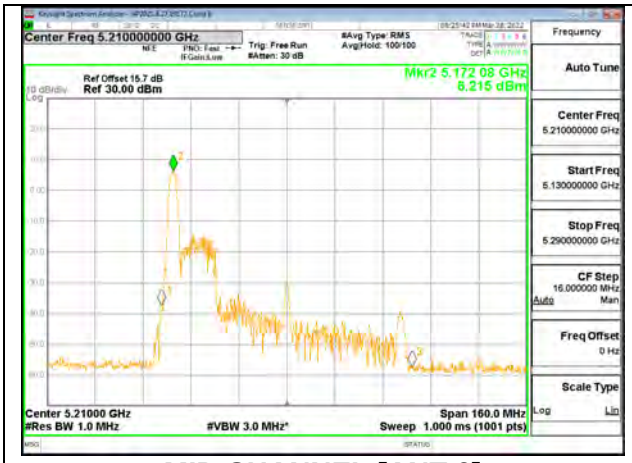
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

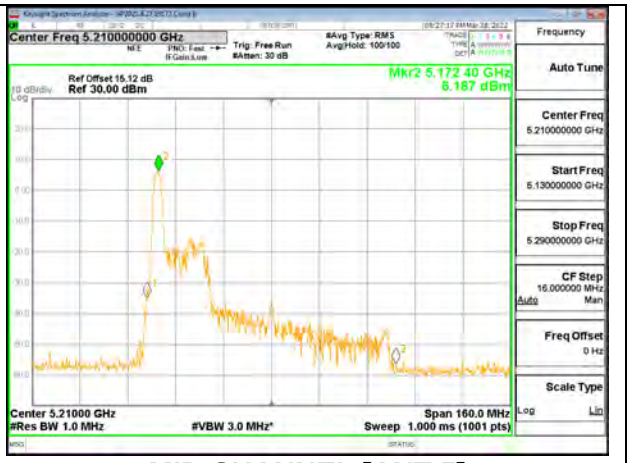
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 8.98 | 8.95 | 11.98 | 24.00 | -12.02 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/ 1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 6.215 | 6.187 | 9.211 | 11.00 | -1.789 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 18**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5210 | -2.43 | 0.57 | 24.00 | 11.00 |

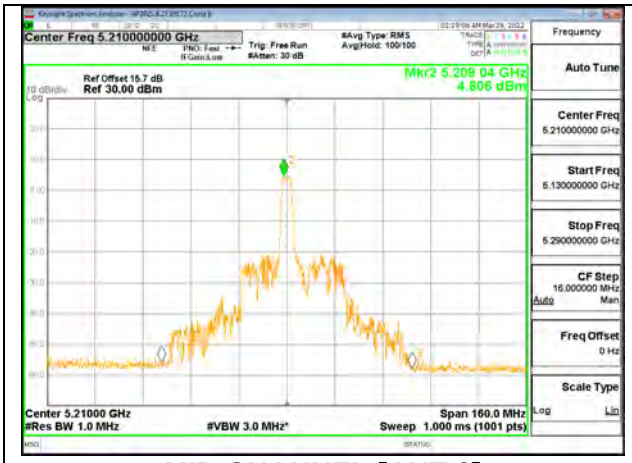
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

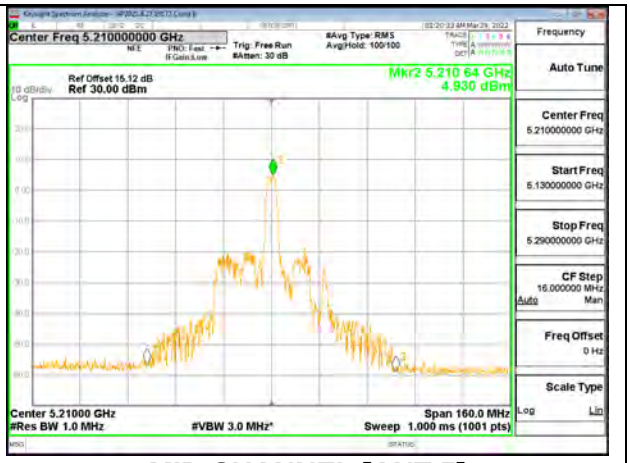
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 8.92 | 8.89 | 11.92 | 24.00 | -12.08 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD | Antenna 5 Meas PSD | Total Corr'd PSD (dBm/ 1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 4.806 | 4.930 | 7.879 | 11.00 | -3.121 |




**MID CHANNEL [ANT 6]**

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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 36

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/29/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5210 | -2.43 | 0.57 | 24.00 | 11.00 |

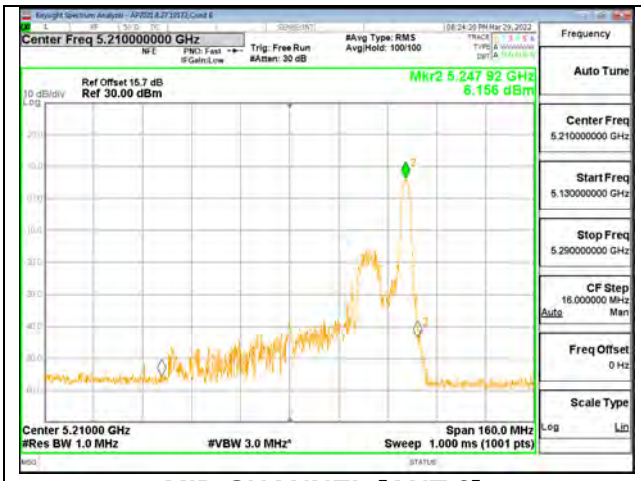
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

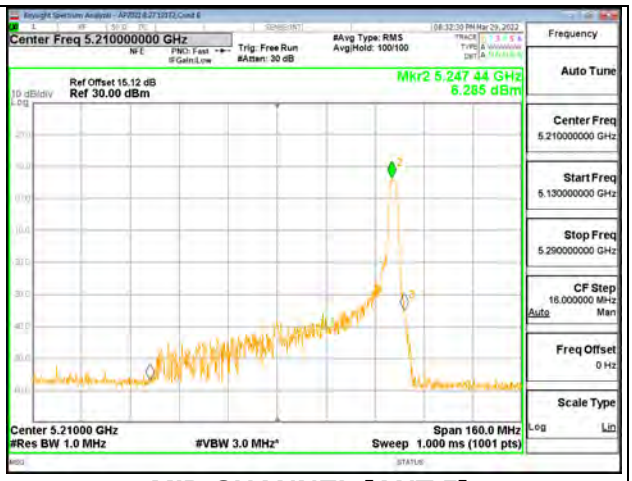
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 8.88 | 8.90 | 11.90 | 24.00 | -12.10 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/ 1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 6.156 | 6.285 | 9.231 | 11.00 | -1.769 |




**MID CHANNEL [ANT 6]**

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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – SU Mode

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Antenna Gain and Limits**

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5210 | -2.43 | 0.57 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.26 | **Included in Calculations of Corr'd PSD** |

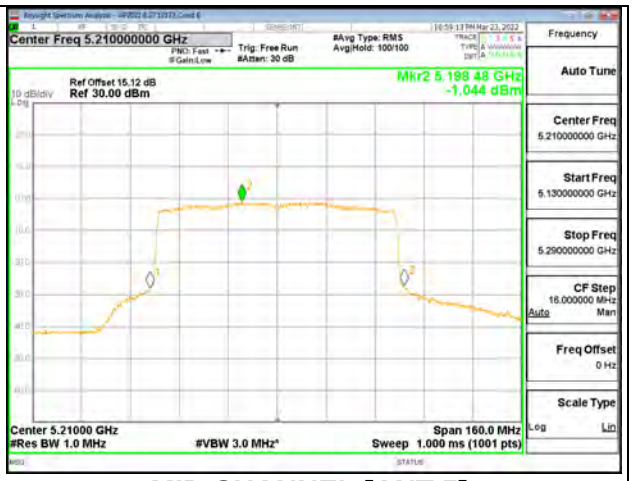
**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | 15.85 | 16.00 | 18.94 | 24.00 | -5.06 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/ 1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5210 | -0.933 | -1.044 | 2.282 | 11.00 | -8.718 |

**MID CHANNEL [ANT 6]**

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## 9.4.7. **802.11n HT20 MODE IN THE 5.3 GHz BAND**

**1TX Antenna 6 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 44366 |
| **Test Date:** | 3/21/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 21.02 | -2.20 | 24.00 | 11.00 |
| Mid | 5300 | 20.72 | -2.20 | 24.00 | 11.00 |
| High | 5320 | 21.37 | -2.20 | 24.00 | 11.00 |

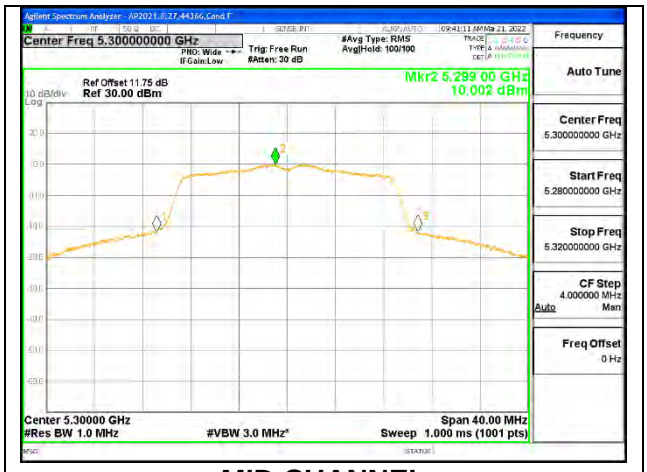
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 19.98 | 19.98 | 24.00 | -4.02 |
| Mid | 5300 | 19.94 | 19.94 | 24.00 | -4.06 |
| High | 5320 | 18.95 | 18.95 | 24.00 | -5.05 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 10.158 | 10.258 | 11.00 | -0.742 |
| Mid | 5300 | 10.002 | 10.102 | 11.00 | -0.898 |
| High | 5320 | 8.994 | 9.094 | 11.00 | -1.906 |




**MID CHANNEL**



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**1TX Antenna 5 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 44366 |
| **Test Date:** | 3/21/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 20.86 | -1.00 | 24.00 | 11.00 |
| Mid | 5300 | 21.24 | -1.00 | 24.00 | 11.00 |
| High | 5320 | 21.64 | -1.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 19.97 | 19.97 | 24.00 | -4.03 |
| Mid | 5300 | 19.92 | 19.92 | 24.00 | -4.08 |
| High | 5320 | 18.93 | 18.93 | 24.00 | -5.07 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 10.322 | 10.422 | 11.00 | -0.578 |
| Mid | 5300 | 10.039 | 10.139 | 11.00 | -0.861 |
| High | 5320 | 8.804 | 8.904 | 11.00 | -2.096 |

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## 2TX Antenna 6 + Antenna 5 CDD MODE (FCC)

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/22/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5260 | 20.70 | -1.56 | 1.43 | 24.00 | 11.00 |
| Mid | 5300 | 20.48 | -1.56 | 1.43 | 24.00 | 11.00 |
| High | 5320 | 21.31 | -1.56 | 1.43 | 24.00 | 11.00 |

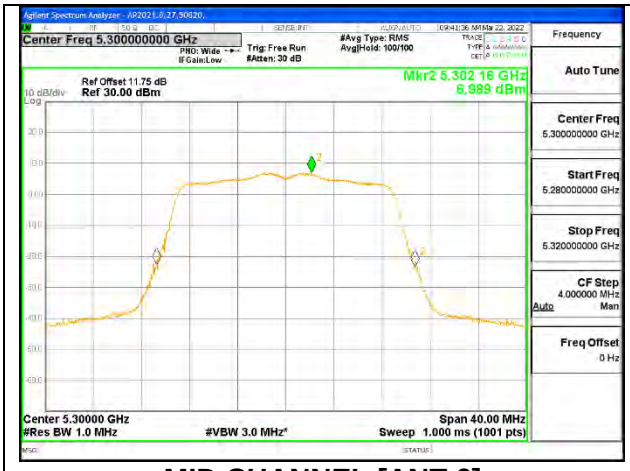
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

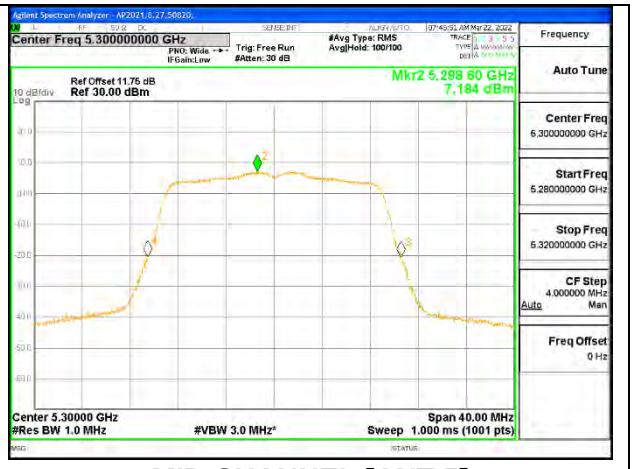
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 16.92 | 16.86 | 19.90 | 24.00 | -4.10 |
| Mid | 5300 | 16.86 | 16.91 | 19.90 | 24.00 | -4.10 |
| High | 5320 | 16.97 | 16.94 | 19.97 | 24.00 | -4.03 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 7.065 | 7.167 | 10.227 | 11.00 | -0.773 |
| Mid | 5300 | 6.989 | 7.184 | 10.198 | 11.00 | -0.802 |
| High | 5320 | 6.829 | 7.012 | 10.032 | 11.00 | -0.968 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.4.8. **802.11n HT40 MODE IN THE 5.3 GHz BAND**

**1TX Antenna 6 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 40.82 | -2.20 | 24.00 | 11.00 |
| High | 5310 | 42.11 | -2.20 | 24.00 | 11.00 |

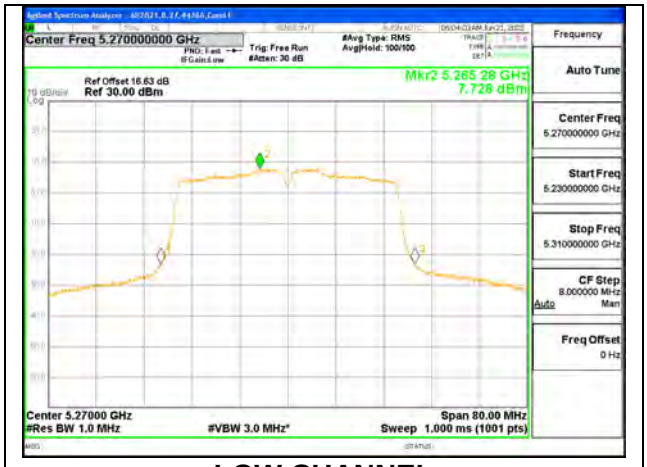
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 20.46 | 20.46 | 24.00 | -3.54 |
| High | 5310 | 16.91 | 16.91 | 24.00 | -7.09 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 7.728 | 7.928 | 11.00 | -3.072 |
| High | 5310 | 4.008 | 4.208 | 11.00 | -6.792 |




**LOW CHANNEL**



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**1TX Antenna 5 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 40.88 | -1.00 | 24.00 | 11.00 |
| High | 5310 | 42.61 | -1.00 | 24.00 | 11.00 |

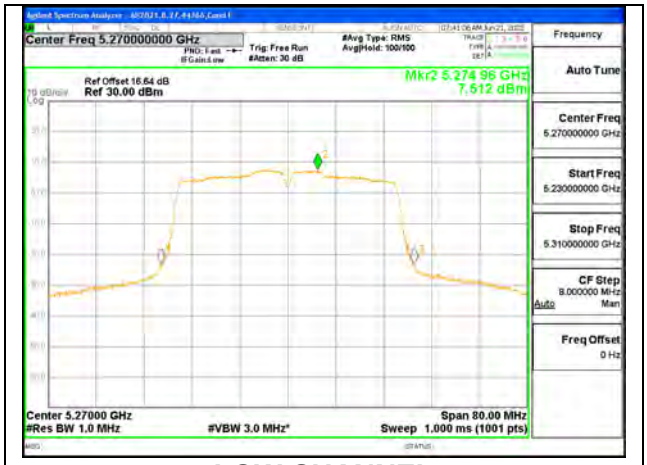
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 20.41 | 20.41 | 24.00 | -3.59 |
| High | 5310 | 16.92 | 16.92 | 24.00 | -7.08 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 7.512 | 7.712 | 11.00 | -3.288 |
| High | 5310 | 3.976 | 3.976 | 11.00 | -7.024 |




**LOW CHANNEL**



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**2TX Antenna 6 + Antenna 5 CDD MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5270 | 40.65 | -1.56 | 1.43 | 24.00 | 11.00 |
| High | 5310 | 41.90 | -1.56 | 1.43 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 19.42 | 19.44 | 22.44 | 24.00 | -1.56 |
| High | 5310 | 15.43 | 15.42 | 18.44 | 24.00 | -5.56 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 6.290 | 6.411 | 9.561 | 11.00 | -1.439 |
| High | 5310 | 2.146 | 2.291 | 5.429 | 11.00 | -5.571 |

**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**



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## 9.4.9. **802.11ac VHT80 MODE IN THE 5.3 GHz BAND**

**1TX Antenna 6 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 82.89 | -2.20 | 24.00 | 11.00 |

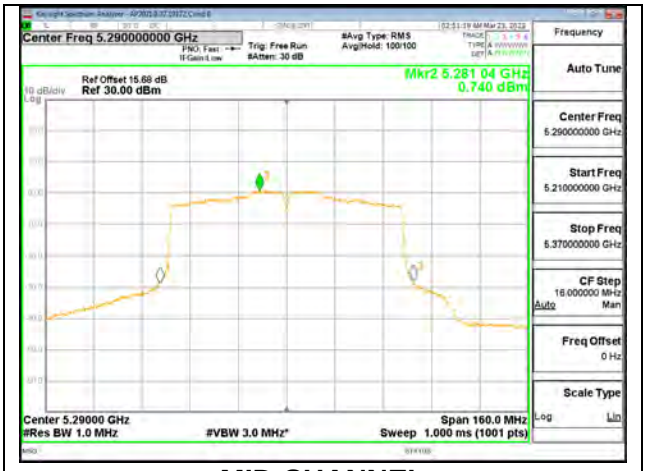
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 16.94 | 16.94 | 24.00 | -7.06 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 0.740 | 0.940 | 11.00 | -10.060 |

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**1TX Antenna 5 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 82.96 | -1.00 | 24.00 | 11.00 |

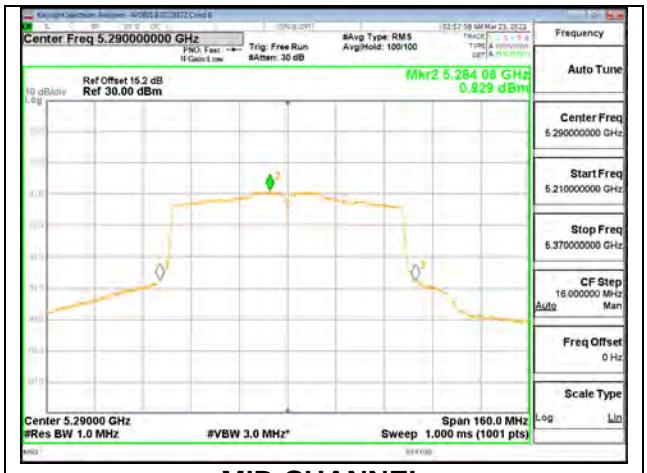
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 16.98 | 16.98 | 24.00 | -7.02 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 0.829 | 1.029 | 11.00 | -9.971 |

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**2TX Antenna 6 + Antenna 5 CDD MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 82.15 | -1.56 | 1.43 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

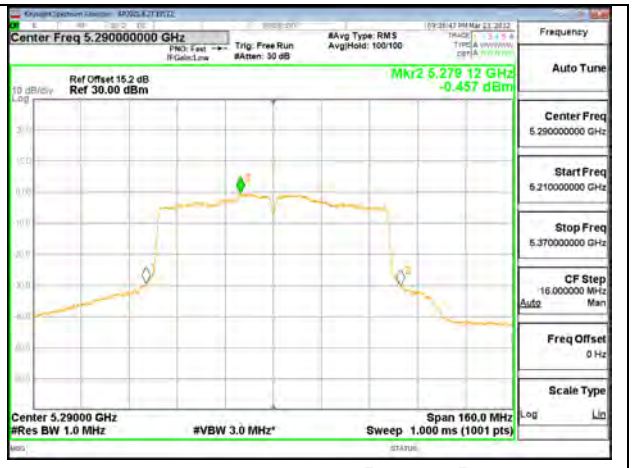
**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 15.40 | 15.39 | 18.41 | 24.00 | -5.59 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | -0.548 | -0.457 | 2.708 | 11.00 | -8.292 |

**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.4.10. 802.11ax HE20 MODE IN THE 5.3 GHz BAND

**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 19.87 | -2.20 | 23.98 | 11.00 |
| Mid | 5300 | 19.94 | -2.20 | 24.00 | 11.00 |
| High | 5320 | 19.83 | -2.20 | 23.97 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 11.94 | 11.94 | 23.98 | -12.04 |
| Mid | 5300 | 11.91 | 11.91 | 24.00 | -12.09 |
| High | 5320 | 11.98 | 11.98 | 23.97 | -11.99 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 9.449 | 9.449 | 11.00 | -1.551 |
| Mid | 5300 | 9.506 | 9.506 | 11.00 | -1.494 |
| High | 5320 | 9.400 | 9.400 | 11.00 | -1.600 |

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**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 4**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 19.09 | -2.20 | 23.81 | 11.00 |
| Mid | 5300 | 18.58 | -2.20 | 23.69 | 11.00 |
| High | 5320 | 19.23 | -2.20 | 23.84 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 11.92 | 11.92 | 23.81 | -11.89 |
| Mid | 5300 | 11.91 | 11.91 | 23.69 | -11.78 |
| High | 5320 | 11.95 | 11.95 | 23.84 | -11.89 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 8.540 | 8.540 | 11.00 | -2.460 |
| Mid | 5300 | 8.608 | 8.608 | 11.00 | -2.392 |
| High | 5320 | 8.533 | 8.533 | 11.00 | -2.467 |

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**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 20.72 | -2.20 | 24.00 | 11.00 |
| Mid | 5300 | 20.64 | -2.20 | 24.00 | 11.00 |
| High | 5320 | 20.63 | -2.20 | 24.00 | 11.00 |
| **Duty Cycle CF (dB)** | | 0.00 | **Included in Calculations of Corr'd PSD** | | |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 11.95 | 11.95 | 24.00 | -12.05 |
| Mid | 5300 | 11.97 | 11.97 | 24.00 | -12.03 |
| High | 5320 | 11.94 | 11.94 | 24.00 | -12.06 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 9.667 | 9.667 | 11.00 | -1.333 |
| Mid | 5300 | 9.430 | 9.430 | 11.00 | -1.570 |
| High | 5320 | 9.466 | 9.466 | 11.00 | -1.534 |

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**1TX Antenna 6 MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/22/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 20.83 | -2.20 | 24.00 | 11.00 |
| Mid | 5300 | 20.89 | -2.20 | 24.00 | 11.00 |
| High | 5320 | 20.35 | -2.20 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 19.95 | 19.95 | 24.00 | -4.05 |
| Mid | 5300 | 19.80 | 19.80 | 24.00 | -4.20 |
| High | 5320 | 18.43 | 18.43 | 24.00 | -5.57 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 9.982 | 9.982 | 11.00 | -1.018 |
| Mid | 5300 | 9.613 | 9.613 | 11.00 | -1.387 |
| High | 5320 | 8.219 | 8.219 | 11.00 | -2.781 |

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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 20.00 | -1.00 | 24.00 | 11.00 |
| Mid | 5300 | 20.09 | -1.00 | 24.00 | 11.00 |
| High | 5320 | 20.10 | -1.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 11.90 | 11.90 | 24.00 | -12.10 |
| Mid | 5300 | 11.96 | 11.96 | 24.00 | -12.04 |
| High | 5320 | 11.90 | 11.90 | 24.00 | -12.10 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 9.550 | 9.550 | 11.00 | -1.450 |
| Mid | 5300 | 9.679 | 9.679 | 11.00 | -1.321 |
| High | 5320 | 9.543 | 9.543 | 11.00 | -1.457 |

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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 4**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 19.41 | -1.00 | 23.88 | 11.00 |
| Mid | 5300 | 18.85 | -1.00 | 23.75 | 11.00 |
| High | 5320 | 18.92 | -1.00 | 23.77 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 11.96 | 11.96 | 23.88 | -11.92 |
| Mid | 5300 | 11.93 | 11.93 | 23.75 | -11.82 |
| High | 5320 | 11.94 | 11.94 | 23.77 | -11.83 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 8.722 | 8.722 | 11.00 | -2.278 |
| Mid | 5300 | 8.799 | 8.799 | 11.00 | -2.201 |
| High | 5320 | 8.802 | 8.802 | 11.00 | -2.198 |

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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 20.59 | -1.00 | 24.00 | 11.00 |
| Mid | 5300 | 20.52 | -1.00 | 24.00 | 11.00 |
| High | 5320 | 20.05 | -1.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 11.92 | 11.92 | 24.00 | -12.08 |
| Mid | 5300 | 11.92 | 11.92 | 24.00 | -12.08 |
| High | 5320 | 11.90 | 11.90 | 24.00 | -12.10 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 9.640 | 9.640 | 11.00 | -1.360 |
| Mid | 5300 | 9.496 | 9.496 | 11.00 | -1.504 |
| High | 5320 | 9.586 | 9.586 | 11.00 | -1.414 |

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**1TX Antenna 5 MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/22/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5260 | 20.84 | -1.00 | 24.00 | 11.00 |
| Mid | 5300 | 20.32 | -1.00 | 24.00 | 11.00 |
| High | 5320 | 20.95 | -1.00 | 24.00 | 11.00 |

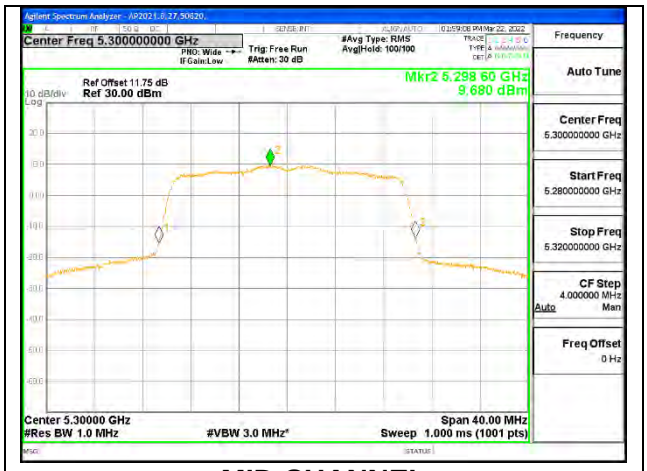
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 19.97 | 19.97 | 24.00 | -4.03 |
| Mid | 5300 | 19.98 | 19.98 | 24.00 | -4.02 |
| High | 5320 | 18.49 | 18.49 | 24.00 | -5.51 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5260 | 9.952 | 9.952 | 11.00 | -1.048 |
| Mid | 5300 | 9.680 | 9.680 | 11.00 | -1.320 |
| High | 5320 | 8.340 | 8.340 | 11.00 | -2.660 |

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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/28/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5260 | 19.60 | -1.56 | 1.43 | 23.92 | 11.00 |
| Mid | 5300 | 19.71 | -1.56 | 1.43 | 23.95 | 11.00 |
| High | 5320 | 19.76 | -1.56 | 1.43 | 23.96 | 11.00 |

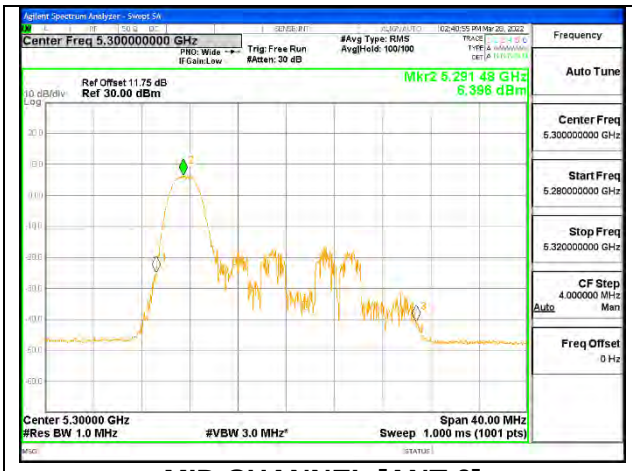
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 8.99 | 8.90 | 11.96 | 23.92 | -11.97 |
| Mid | 5300 | 8.99 | 8.99 | 12.00 | 23.95 | -11.95 |
| High | 5320 | 8.78 | 8.98 | 11.89 | 23.96 | -12.07 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 6.489 | 6.551 | 9.530 | 11.00 | -1.470 |
| Mid | 5300 | 6.396 | 6.712 | 9.567 | 11.00 | -1.433 |
| High | 5320 | 6.604 | 6.561 | 9.593 | 11.00 | -1.407 |




**MID CHANNEL [ANT 6]**

**MID CHANNEL [ANT 5]**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 4

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/28/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5260 | 18.43 | -1.56 | 1.43 | 23.66 | 11.00 |
| Mid | 5300 | 18.08 | -1.56 | 1.43 | 23.57 | 11.00 |
| High | 5320 | 18.26 | -1.56 | 1.43 | 23.62 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 8.99 | 8.94 | 11.98 | 23.66 | -11.68 |
| Mid | 5300 | 8.92 | 8.72 | 11.83 | 23.57 | -11.74 |
| High | 5320 | 8.99 | 8.78 | 11.90 | 23.62 | -11.72 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 5.810 | 5.619 | 8.726 | 11.00 | -2.274 |
| Mid | 5300 | 5.867 | 5.519 | 8.707 | 11.00 | -2.293 |
| High | 5320 | 5.540 | 5.375 | 8.469 | 11.00 | -2.531 |

**MID CHANNEL [ANT 6]**

**MID CHANNEL [ANT 5]**



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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/28/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5260 | 19.55 | -1.56 | 1.43 | 23.91 | 11.00 |
| Mid | 5300 | 19.65 | -1.56 | 1.43 | 23.93 | 11.00 |
| High | 5320 | 19.63 | -1.56 | 1.43 | 23.93 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 8.84 | 8.94 | 11.90 | 23.91 | -12.01 |
| Mid | 5300 | 8.83 | 8.83 | 11.84 | 23.93 | -12.09 |
| High | 5320 | 8.75 | 8.75 | 11.76 | 23.93 | -12.17 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 6.500 | 6.790 | 9.658 | 11.00 | -1.342 |
| Mid | 5300 | 6.581 | 6.403 | 9.503 | 11.00 | -1.497 |
| High | 5320 | 6.346 | 6.515 | 9.442 | 11.00 | -1.558 |

**MID CHANNEL [ANT 6]**

**MID CHANNEL [ANT 5]**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – SU Mode

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5260 | 20.45 | -1.56 | 1.43 | 24.00 | 11.00 |
| Mid | 5300 | 20.76 | -1.56 | 1.43 | 24.00 | 11.00 |
| High | 5320 | 20.97 | -1.56 | 1.43 | 24.00 | 11.00 |

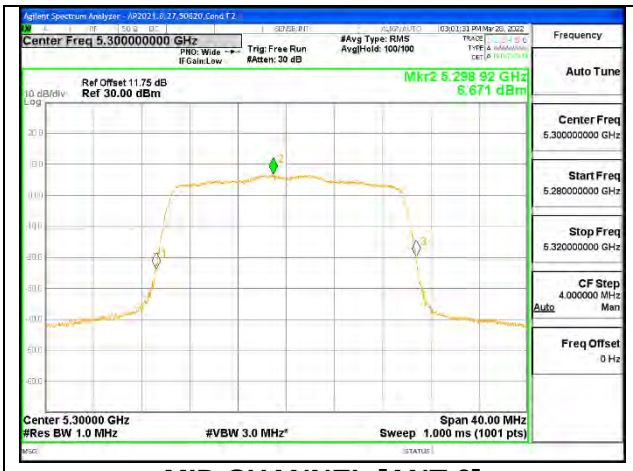
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

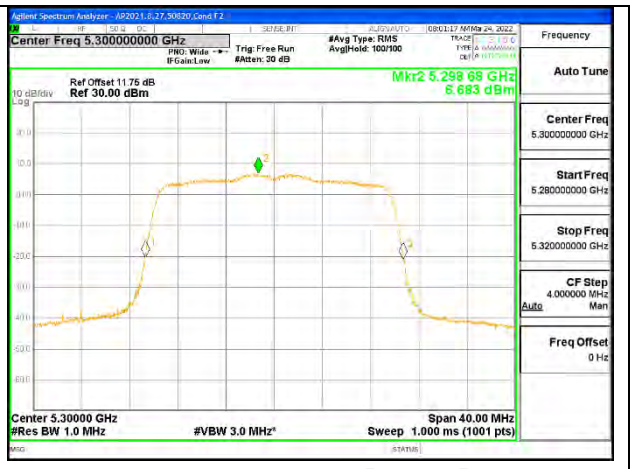
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 16.98 | 16.98 | 19.99 | 24.00 | -4.01 |
| Mid | 5300 | 16.94 | 16.99 | 19.98 | 24.00 | -4.02 |
| High | 5320 | 16.99 | 16.97 | 19.99 | 24.00 | -4.01 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5260 | 6.858 | 6.727 | 9.803 | 11.00 | -1.197 |
| Mid | 5300 | 6.671 | 6.683 | 9.687 | 11.00 | -1.313 |
| High | 5320 | 6.886 | 6.850 | 9.878 | 11.00 | -1.122 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.4.11. 802.11ax HE40 MODE IN THE 5.3 GHz BAND

**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/31/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 19.84 | -2.20 | 23.98 | 11.00 |
| High | 5310 | 21.49 | -2.20 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 10.95 | 10.95 | 23.98 | -13.03 |
| High | 5310 | 10.96 | 10.96 | 24.00 | -13.04 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 7.873 | 7.873 | 11.00 | -3.127 |
| High | 5310 | 8.099 | 8.099 | 11.00 | -2.901 |

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**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/31/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 24.05 | -2.20 | 24.00 | 11.00 |
| High | 5310 | 23.75 | -2.20 | 24.00 | 11.00 |

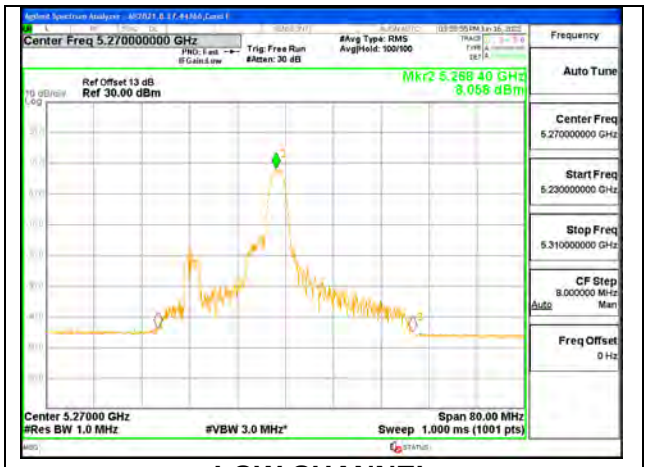
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 10.90 | 10.90 | 24.00 | -13.10 |
| High | 5310 | 10.90 | 10.90 | 24.00 | -13.10 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 8.058 | 8.058 | 11.00 | -2.942 |
| High | 5310 | 8.023 | 8.023 | 11.00 | -2.977 |

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**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 17**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/31/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 20.95 | -2.20 | 24.00 | 11.00 |
| High | 5310 | 21.22 | -2.20 | 24.00 | 11.00 |

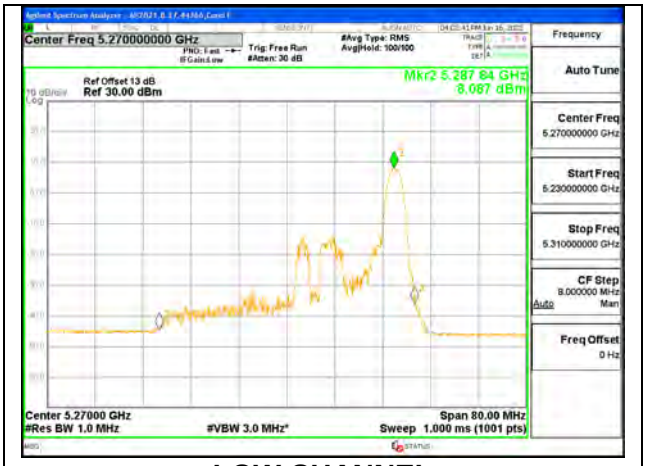
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 10.92 | 10.92 | 24.00 | -13.08 |
| High | 5310 | 10.94 | 10.94 | 24.00 | -13.06 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 8.087 | 8.087 | 11.00 | -2.913 |
| High | 5310 | 8.091 | 8.091 | 11.00 | -2.909 |




**LOW CHANNEL**



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**1TX Antenna 6 MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 40.81 | -2.20 | 24.00 | 11.00 |
| High | 5310 | 44.17 | -2.20 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.15 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 20.42 | 20.42 | 24.00 | -3.58 |
| High | 5310 | 15.93 | 15.93 | 24.00 | -8.07 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 6.636 | 6.786 | 11.00 | -4.214 |
| High | 5310 | 1.666 | 1.816 | 11.00 | -9.184 |

**LOW CHANNEL**



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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/30/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 20.11 | -1.00 | 24.00 | 11.00 |
| High | 5310 | 21.10 | -1.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 10.91 | 10.91 | 24.00 | -13.09 |
| High | 5310 | 10.93 | 10.93 | 24.00 | -13.07 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 8.052 | 8.052 | 11.00 | -2.948 |
| High | 5310 | 8.014 | 8.014 | 11.00 | -2.986 |

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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/30/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 24.13 | -1.00 | 24.00 | 11.00 |
| High | 5310 | 23.05 | -1.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 10.92 | 10.92 | 24.00 | -13.08 |
| High | 5310 | 10.97 | 10.97 | 24.00 | -13.03 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 7.908 | 7.908 | 11.00 | -3.092 |
| High | 5310 | 8.050 | 8.050 | 11.00 | -2.950 |

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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 17**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/30/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 21.50 | -1.00 | 24.00 | 11.00 |
| High | 5310 | 21.27 | -1.00 | 24.00 | 11.00 |

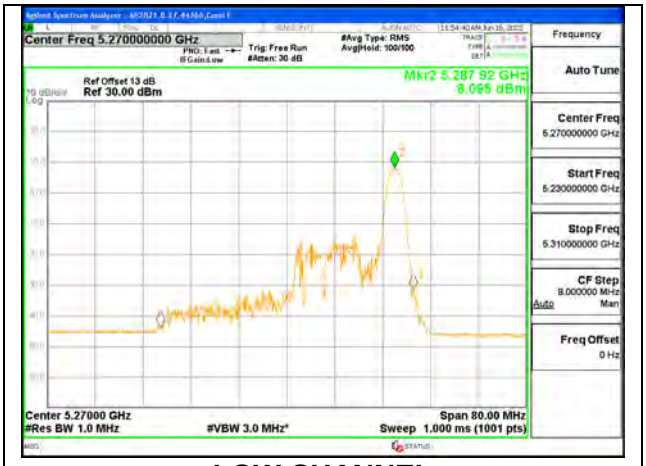
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 10.96 | 10.96 | 24.00 | -13.04 |
| High | 5310 | 10.97 | 10.97 | 24.00 | -13.03 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 8.095 | 8.095 | 11.00 | -2.905 |
| High | 5310 | 8.058 | 8.058 | 11.00 | -2.942 |

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**1TX Antenna 5 MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/29/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5270 | 40.42 | -1.00 | 24.00 | 11.00 |
| High | 5310 | 41.14 | -1.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.15 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 20.46 | 20.46 | 24.00 | -3.54 |
| High | 5310 | 15.94 | 15.94 | 24.00 | -8.06 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5270 | 6.684 | 6.834 | 11.00 | -4.166 |
| High | 5310 | 1.451 | 1.601 | 11.00 | -9.399 |

**LOW CHANNEL**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 0

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/29/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5270 | 20.18 | -1.56 | 1.43 | 24.00 | 11.00 |
| High | 5310 | 19.74 | -1.56 | 1.43 | 23.95 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 8.99 | 8.94 | 11.98 | 24.00 | -12.02 |
| High | 5310 | 8.96 | 8.98 | 11.98 | 23.95 | -11.97 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 6.377 | 6.246 | 9.322 | 11.00 | -1.678 |
| High | 5310 | 6.328 | 6.512 | 9.431 | 11.00 | -1.569 |

**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**



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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/29/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5270 | 23.07 | -1.56 | 1.43 | 24.00 | 11.00 |
| High | 5310 | 22.97 | -1.56 | 1.43 | 24.00 | 11.00 |

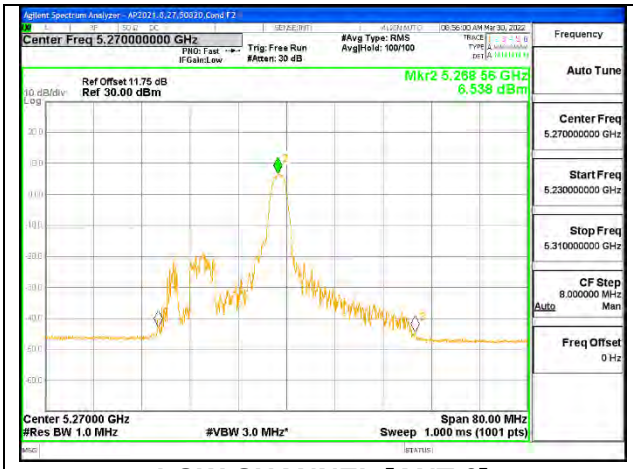
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 8.99 | 8.79 | 11.90 | 24.00 | -12.10 |
| High | 5310 | 8.98 | 8.98 | 11.99 | 24.00 | -12.01 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 6.538 | 6.687 | 9.623 | 11.00 | -1.377 |
| High | 5310 | 6.580 | 6.592 | 9.596 | 11.00 | -1.404 |




**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**



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## 2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 17

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/30/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5270 | 19.89 | -1.56 | 1.43 | 23.99 | 11.00 |
| High | 5310 | 19.93 | -1.56 | 1.43 | 24.00 | 11.00 |

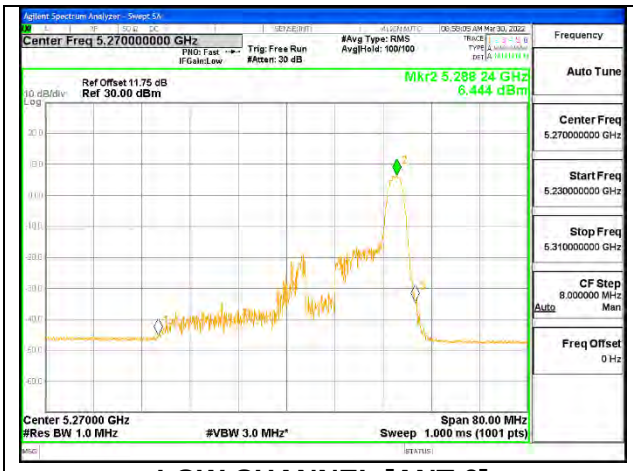
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

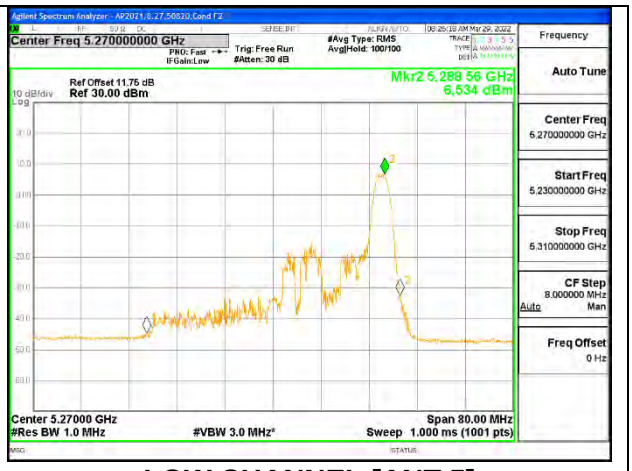
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 8.89 | 8.98 | 11.95 | 23.99 | -12.04 |
| High | 5310 | 8.76 | 8.99 | 11.89 | 24.00 | -12.11 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 6.444 | 6.534 | 9.500 | 11.00 | -1.500 |
| High | 5310 | 6.487 | 6.447 | 9.477 | 11.00 | -1.523 |




**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**



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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/25/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5270 | 40.18 | -1.56 | 1.43 | 24.00 | 11.00 |
| High | 5310 | 41.28 | -1.56 | 1.43 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.15 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 19.45 | 19.43 | 22.45 | 24.00 | -1.55 |
| High | 5310 | 15.35 | 15.36 | 18.37 | 24.00 | -5.63 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5270 | 4.881 | 4.940 | 8.071 | 11.00 | -2.929 |
| High | 5310 | 0.987 | 0.895 | 4.102 | 11.00 | -6.898 |

**LOW CHANNEL [ANT 6]**

**LOW CHANNEL [ANT 5]**



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## 9.4.12. 802.11ax HE80 MODE IN THE 5.3 GHz BAND

**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/26/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 19.67 | -2.20 | 23.94 | 11.00 |

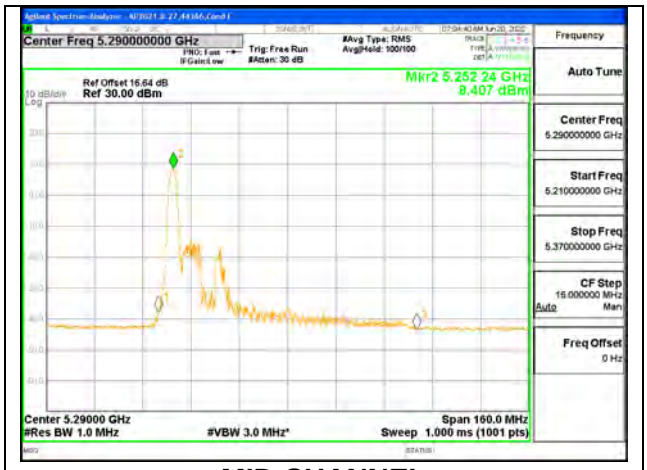
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 10.97 | 10.97 | 23.94 | -12.97 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 8.407 | 8.407 | 11.00 | -2.59 |

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**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 18**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 41.13 | -2.20 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 10.92 | 10.92 | 24.00 | -13.08 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 7.090 | 7.090 | 11.00 | -3.91 |

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**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 36**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 20.94 | -2.20 | 24.00 | 11.00 |

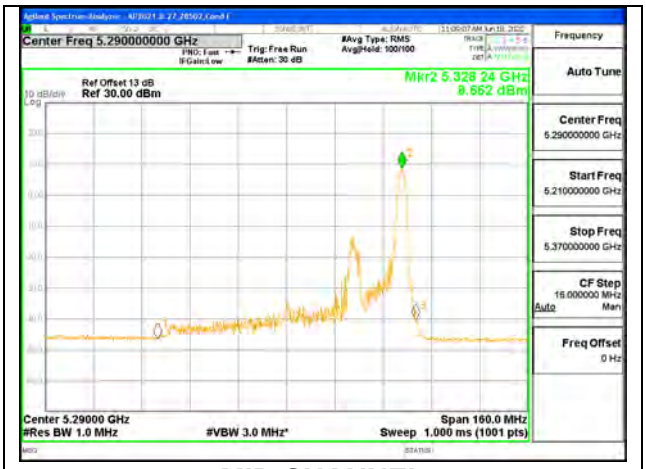
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 10.95 | 10.95 | 24.00 | -13.05 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 8.662 | 8.662 | 11.00 | -2.34 |

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**1TX Antenna 6 MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 81.33 | -2.20 | 24.00 | 11.00 |

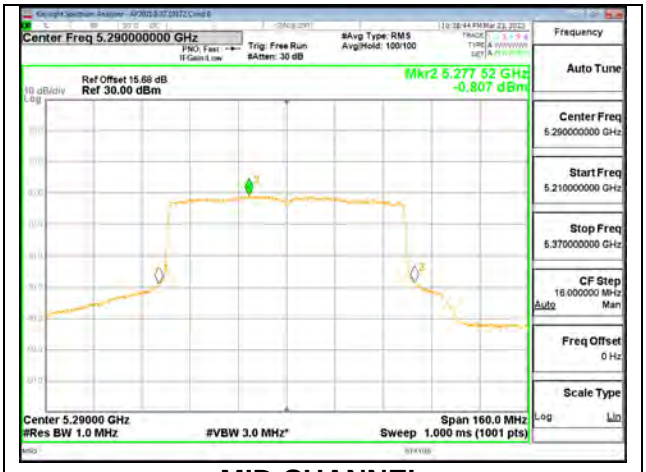
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.26 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 16.38 | 16.38 | 24.00 | -7.62 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | -0.807 | -0.547 | 11.00 | -11.55 |

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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/26/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 19.60 | -1.00 | 23.92 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 10.97 | 10.97 | 23.92 | -12.95 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 8.689 | 8.689 | 11.00 | -2.31 |

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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 18**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 41.39 | -1.00 | 24.00 | 11.00 |

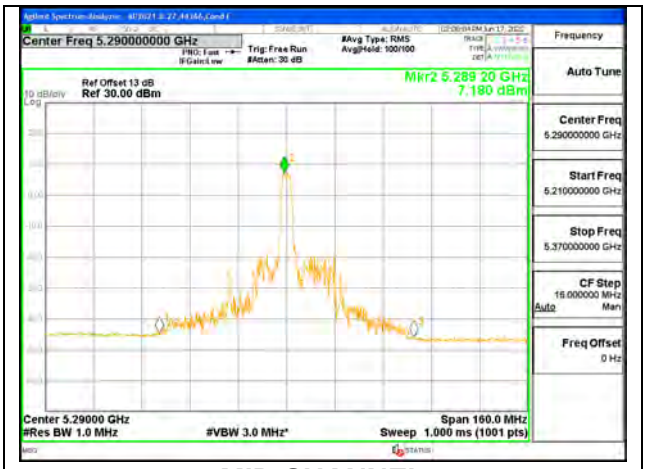
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 10.92 | 10.92 | 24.00 | -13.08 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 7.180 | 7.180 | 11.00 | -3.82 |

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**1TX Antenna 5 MODE (FCC) – 26 Tones, RU Index 36**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 20.91 | -1.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 10.96 | 10.96 | 24.00 | -13.04 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 8.604 | 8.604 | 11.00 | -2.40 |

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**1TX Antenna 5 MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/29/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Mid | 5290 | 81.95 | -1.00 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.26 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | 16.40 | 16.40 | 24.00 | -7.60 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Mid | 5290 | -0.797 | -0.537 | 11.00 | -11.54 |

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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/28/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 19.49 | -1.56 | 1.43 | 23.90 | 11.00 |

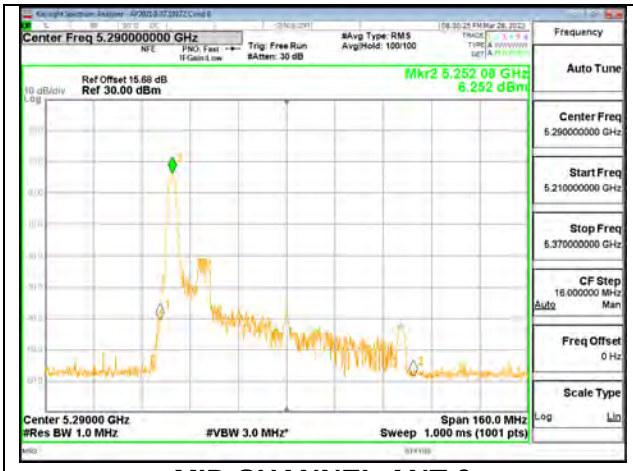
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

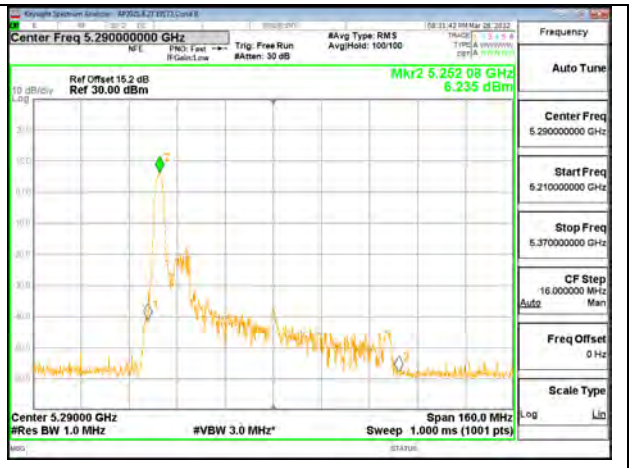
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 8.90 | 8.92 | 11.920 | 23.90 | -11.98 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 6.252 | 6.235 | 9.254 | 11.00 | -1.75 |




**MID CHANNEL ANT 6**




**MID CHANNEL ANT 5**



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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 18**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/29/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 38.67 | -1.56 | 1.43 | 24.00 | 11.00 |

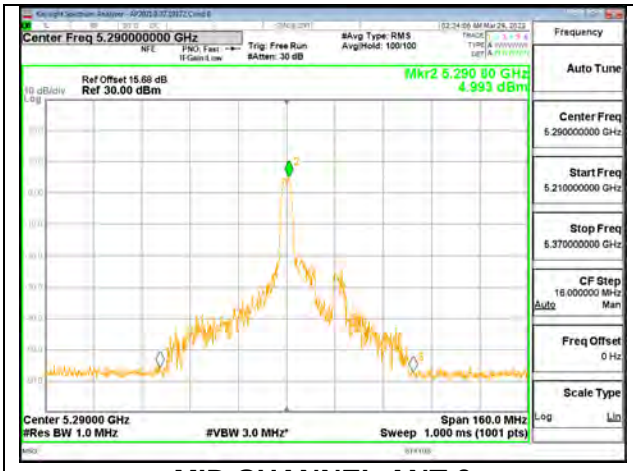
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

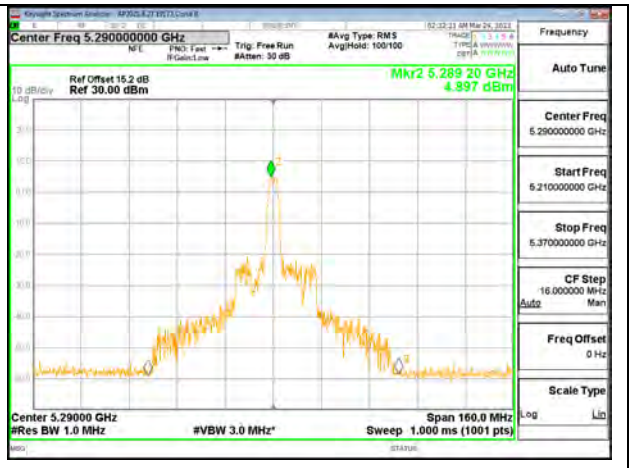
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 8.86 | 8.90 | 11.890 | 24.00 | -12.11 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 4.993 | 4.897 | 7.956 | 11.00 | -3.04 |




**MID CHANNEL ANT 6**




**MID CHANNEL ANT 5**



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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – 26 Tones, RU Index 36**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/29/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 19.47 | -1.56 | 1.43 | 23.89 | 11.00 |

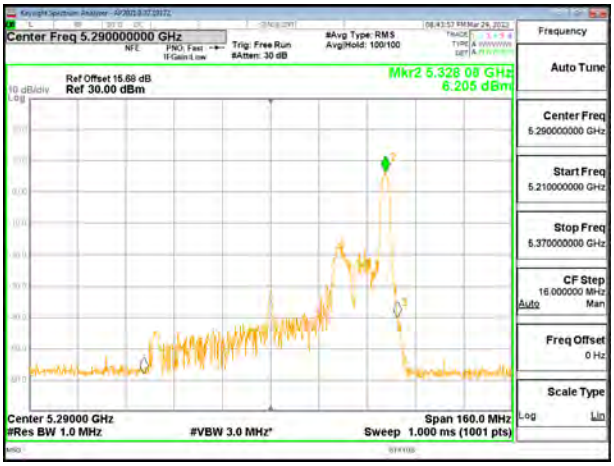
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

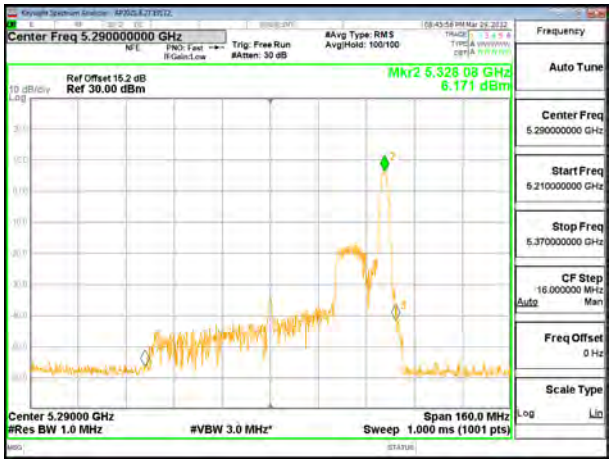
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 8.96 | 8.88 | 11.930 | 23.89 | -11.96 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 6.205 | 6.171 | 9.198 | 11.00 | -1.80 |




**MID CHANNEL ANT 6**

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**2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 81.33 | -1.56 | 1.43 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.26 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | 15.44 | 15.46 | 18.46 | 24.00 | -5.54 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Mid | 5290 | -1.405 | -1.529 | 1.804 | 11.00 | -9.20 |

**MID CHANNEL ANT 6**

**MID CHANNEL ANT 5**



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## 9.4.13. 802.11n HT20 MODE IN THE 5.6 GHz BAND

**1TX Antenna 6 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 44366 |
| **Test Date:** | 3/21/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5500 | 21.54 | -0.90 | 24.00 | 11.00 |
| Mid | 5580 | 21.03 | -0.90 | 24.00 | 11.00 |
| High | 5700 | 21.19 | -0.90 | 24.00 | 11.00 |
| 144 | 5720 | 15.46 | -0.90 | 22.89 | 11.00 |

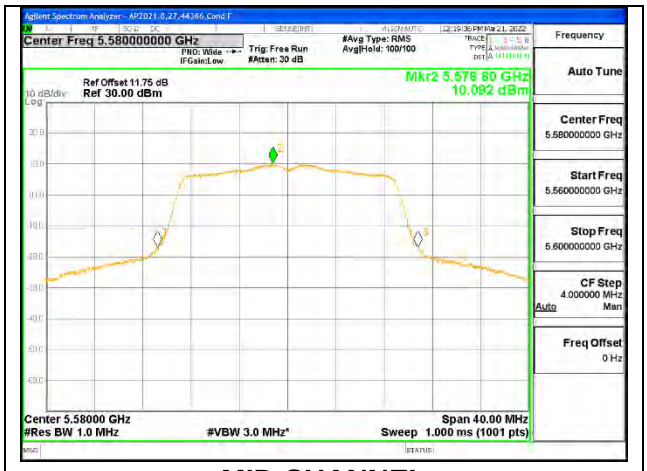
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 18.74 | 18.74 | 24.00 | -5.26 |
| Mid | 5580 | 19.88 | 19.88 | 24.00 | -4.12 |
| High | 5700 | 18.85 | 18.85 | 24.00 | -5.15 |
| 144 | 5720 | 19.97 | 19.97 | 22.89 | -2.92 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 8.753 | 8.853 | 11.00 | -2.147 |
| Mid | 5580 | 10.092 | 10.192 | 11.00 | -0.808 |
| High | 5700 | 9.061 | 9.161 | 11.00 | -1.839 |
| 144 | 5720 | 10.038 | 10.138 | 11.00 | -0.862 |

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**1TX Antenna 5 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 44366 |
| **Test Date:** | 3/21/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5500 | 21.30 | -1.30 | 24.00 | 11.00 |
| Mid | 5580 | 20.95 | -1.30 | 24.00 | 11.00 |
| High | 5700 | 21.94 | -1.30 | 24.00 | 11.00 |
| 144 | 5720 | 15.43 | -1.30 | 22.88 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 18.67 | 18.67 | 24.00 | -5.33 |
| Mid | 5580 | 19.92 | 19.92 | 24.00 | -4.08 |
| High | 5700 | 18.85 | 18.85 | 24.00 | -5.15 |
| 144 | 5720 | 19.94 | 19.94 | 22.88 | -2.94 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 8.592 | 8.692 | 11.00 | -2.308 |
| Mid | 5580 | 10.130 | 10.230 | 11.00 | -0.770 |
| High | 5700 | 9.162 | 9.262 | 11.00 | -1.738 |
| 144 | 5720 | 10.024 | 10.124 | 11.00 | -0.876 |

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**2TX Antenna 6 + Antenna 5 CDD MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5500 | 20.63 | -1.10 | 1.91 | 24.00 | 11.00 |
| Mid | 5580 | 20.74 | -1.10 | 1.91 | 24.00 | 11.00 |
| High | 5700 | 21.22 | -1.10 | 1.91 | 24.00 | 11.00 |
| 144 | 5720 | 15.31 | -1.10 | 1.91 | 22.85 | 11.00 |

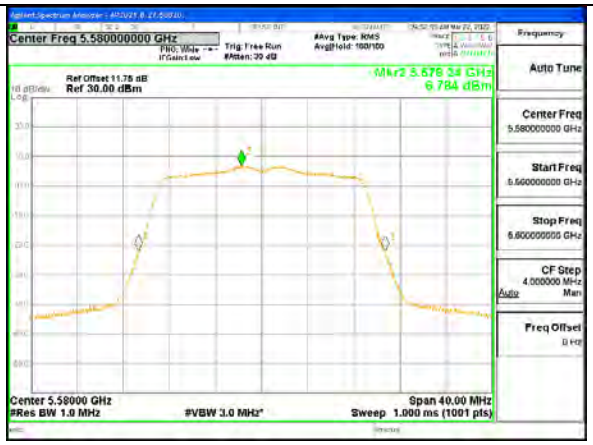
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.10 | **Included in Calculations of Corr'd PSD** |

**Output Power Results**

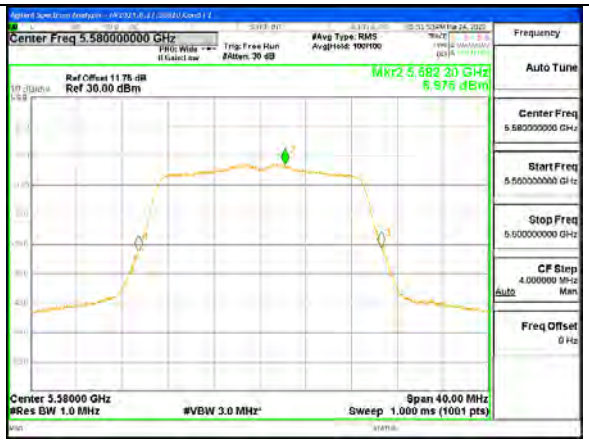
| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5500 | 16.98 | 16.85 | 19.93 | 24.00 | -4.07 |
| Mid | 5580 | 16.90 | 16.82 | 19.87 | 24.00 | -4.13 |
| High | 5700 | 16.85 | 16.81 | 19.84 | 24.00 | -4.16 |
| 144 | 5720 | 16.90 | 16.78 | 19.85 | 22.85 | -3.00 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5500 | 7.003 | 6.933 | 10.078 | 11.00 | -0.922 |
| Mid | 5580 | 6.784 | 6.975 | 9.991 | 11.00 | -1.009 |
| High | 5700 | 6.920 | 6.854 | 9.997 | 11.00 | -1.003 |
| 144 | 5720 | 6.807 | 6.934 | 9.981 | 11.00 | -1.019 |




**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.4.14. 802.11n HT40 MODE IN THE 5.6 GHz BAND

**1TX Antenna 6 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5510 | 41.91 | -0.90 | 24.00 | 11.00 |
| Mid | 5550 | 40.80 | -0.90 | 24.00 | 11.00 |
| High | 5670 | 43.19 | -0.90 | 24.00 | 11.00 |
| 142 | 5710 | 41.24 | -0.90 | 24.00 | 11.00 |

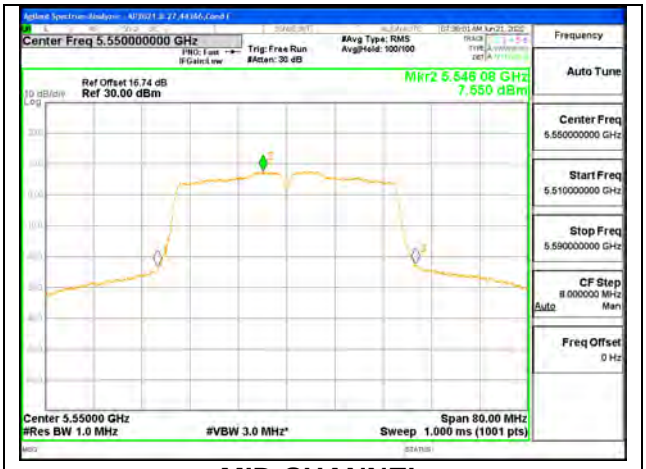
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5510 | 16.96 | 16.96 | 24.00 | -7.04 |
| Mid | 5550 | 20.43 | 20.43 | 24.00 | -3.57 |
| High | 5670 | 19.30 | 19.30 | 24.00 | -4.70 |
| 142 | 5710 | 20.43 | 20.43 | 24.00 | -3.57 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5510 | 3.942 | 4.142 | 11.00 | -6.858 |
| Mid | 5550 | 7.550 | 7.750 | 11.00 | -3.250 |
| High | 5670 | 6.143 | 6.343 | 11.00 | -4.657 |
| 142 | 5710 | 7.602 | 7.802 | 11.00 | -3.198 |




**MID CHANNEL**



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**1TX Antenna 5 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5510 | 41.83 | -1.30 | 24.00 | 11.00 |
| Mid | 5550 | 41.44 | -1.30 | 24.00 | 11.00 |
| High | 5670 | 42.50 | -1.30 | 24.00 | 11.00 |
| 142 | 5710 | 40.83 | -1.30 | 24.00 | 11.00 |

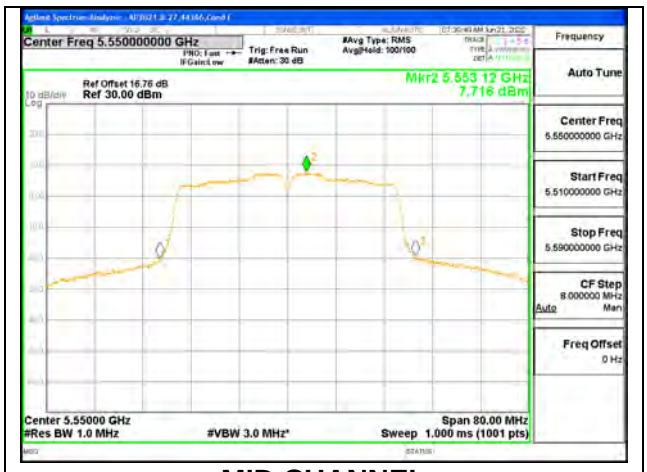
| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5510 | 16.94 | 16.94 | 24.00 | -7.06 |
| Mid | 5550 | 20.44 | 20.44 | 24.00 | -3.56 |
| High | 5670 | 19.30 | 19.30 | 24.00 | -4.70 |
| 142 | 5710 | 20.40 | 20.40 | 24.00 | -3.60 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5510 | 4.005 | 4.205 | 11.00 | -6.795 |
| Mid | 5550 | 7.716 | 7.916 | 11.00 | -3.084 |
| High | 5670 | 6.142 | 6.342 | 11.00 | -4.658 |
| 142 | 5710 | 7.742 | 7.942 | 11.00 | -3.058 |

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**2TX Antenna 6 + Antenna 5 CDD MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5510 | 41.00 | -1.10 | 1.91 | 24.00 | 11.00 |
| Mid | 5550 | 39.44 | -1.10 | 1.91 | 24.00 | 11.00 |
| High | 5670 | 40.61 | -1.10 | 1.91 | 24.00 | 11.00 |
| 142 | 5710 | 40.14 | -1.10 | 1.91 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd Power & PSD** |

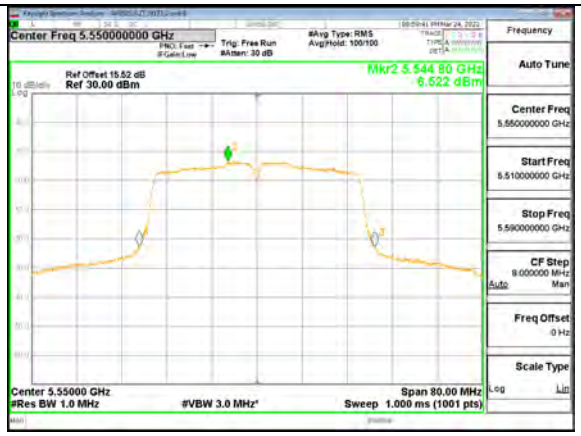
**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5510 | 15.82 | 15.97 | 18.91 | 24.00 | -5.09 |
| Mid | 5550 | 19.35 | 19.43 | 22.40 | 24.00 | -1.60 |
| High | 5670 | 18.95 | 18.92 | 21.95 | 24.00 | -2.05 |
| 142 | 5710 | 19.40 | 19.35 | 22.39 | 24.00 | -1.61 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/ 1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5510 | 3.375 | 3.210 | 6.504 | 11.00 | -4.50 |
| Mid | 5550 | 6.547 | 6.522 | 9.745 | 11.00 | -1.26 |
| High | 5670 | 5.966 | 5.803 | 9.096 | 11.00 | -1.90 |
| 142 | 5710 | 6.217 | 6.353 | 9.496 | 11.00 | -1.50 |

**MID CHANNEL [ANT 6]**




**MID CHANNEL [ANT 5]**



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## 9.4.15. 802.11ac VHT80 MODE IN THE 5.6 GHz BAND

**1TX Antenna 6 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5530 | 80.55 | -0.90 | 24.00 | 11.00 |
| High | 5610 | 80.48 | -0.90 | 24.00 | 11.00 |
| 138 | 5690 | 80.80 | -0.90 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5530 | 15.73 | 15.73 | 24.00 | -8.27 |
| High | 5610 | 20.42 | 20.42 | 24.00 | -3.58 |
| 138 | 5690 | 20.45 | 20.45 | 24.00 | -3.55 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5530 | 0.046 | 0.246 | 11.00 | -10.754 |
| High | 5610 | 4.136 | 4.136 | 11.00 | -6.864 |
| 138 | 5690 | 4.241 | 4.441 | 11.00 | -6.559 |

**LOW CHANNEL**



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**1TX Antenna 5 MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5530 | 81.20 | -1.30 | 24.00 | 11.00 |
| High | 5610 | 84.66 | -1.30 | 24.00 | 11.00 |
| 138 | 5690 | 81.08 | -1.30 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5530 | 15.90 | 15.90 | 24.00 | -8.10 |
| High | 5610 | 20.40 | 20.40 | 24.00 | -3.60 |
| 138 | 5690 | 20.45 | 20.45 | 24.00 | -3.55 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5530 | 0.074 | 0.274 | 11.00 | -10.726 |
| High | 5610 | 3.984 | 4.184 | 11.00 | -6.816 |
| 138 | 5690 | 4.288 | 4.488 | 11.00 | -6.512 |

**LOW CHANNEL**



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**2TX Antenna 6 + Antenna 5 CDD MODE (FCC)**

| | |
|---|---|
| **Test Engineer:** | 19172 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PSD (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|---|
| Low | 5530 | 81.24 | -1.10 | 1.91 | 24.00 | 11.00 |
| High | 5610 | 81.28 | -1.10 | 1.91 | 24.00 | 11.00 |
| 138 | 5690 | 80.77 | -1.10 | 1.91 | 24.00 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.20 | **Included in Calculations of Corr'd PSD** |

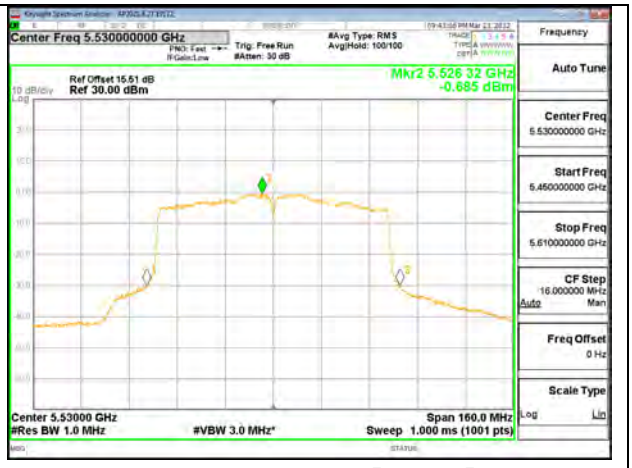
**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Antenna 5 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5530 | 15.22 | 15.24 | 18.24 | 24.00 | -5.76 |
| High | 5610 | 19.90 | 19.85 | 22.89 | 24.00 | -1.11 |
| 138 | 5690 | 19.96 | 19.98 | 22.98 | 24.00 | -1.02 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Antenna 5 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|---|
| Low | 5530 | -0.750 | -0.685 | 2.493 | 11.00 | -8.507 |
| High | 5610 | 4.013 | 4.068 | 7.251 | 11.00 | -3.749 |
| 138 | 5690 | 3.806 | 3.965 | 7.097 | 11.00 | -3.903 |

**LOW CHANNEL [ANT 6]**




**LOW CHANNEL [ANT 5]**



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## 9.4.16. 802.11ax HE20 MODE IN THE 5.6 GHz BAND

**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 0**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5500 | 19.53 | -0.90 | 23.91 | 11.00 |
| Mid | 5580 | 20.03 | -0.90 | 24.00 | 11.00 |
| High | 5700 | 20.02 | -0.90 | 24.00 | 11.00 |
| 144 | 5720 | 15.04 | -0.90 | 22.77 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 11.95 | 11.95 | 23.91 | -11.96 |
| Mid | 5580 | 11.95 | 11.95 | 24.00 | -12.05 |
| High | 5700 | 11.94 | 11.94 | 24.00 | -12.06 |
| 144 | 5720 | 11.91 | 11.91 | 22.77 | -10.86 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 9.641 | 9.641 | 11.00 | -1.359 |
| Mid | 5580 | 9.260 | 9.260 | 11.00 | -1.740 |
| High | 5700 | 9.397 | 9.397 | 11.00 | -1.603 |
| 144 | 5720 | 9.398 | 9.398 | 11.00 | -1.602 |

**MID CHANNEL**



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**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 4**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5500 | 19.04 | -0.90 | 23.80 | 11.00 |
| Mid | 5580 | 18.53 | -0.90 | 23.68 | 11.00 |
| High | 5700 | 18.38 | -0.90 | 23.64 | 11.00 |
| 144 | 5720 | 14.40 | -0.90 | 22.58 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 11.94 | 11.94 | 23.80 | -11.86 |
| Mid | 5580 | 11.97 | 11.97 | 23.68 | -11.71 |
| High | 5700 | 11.97 | 11.97 | 23.64 | -11.67 |
| 144 | 5720 | 11.96 | 11.96 | 22.58 | -10.62 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 8.561 | 8.561 | 11.00 | -2.439 |
| Mid | 5580 | 8.421 | 8.421 | 11.00 | -2.579 |
| High | 5700 | 8.434 | 8.434 | 11.00 | -2.566 |
| 144 | 5720 | 8.405 | 8.405 | 11.00 | -2.595 |

**MID CHANNEL**



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**1TX Antenna 6 MODE (FCC) – 26 Tones, RU Index 8**

| | |
|---|---|
| **Test Engineer:** | 50820 |
| **Test Date:** | 3/23/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5500 | 20.56 | -0.90 | 24.00 | 11.00 |
| Mid | 5580 | 20.34 | -0.90 | 24.00 | 11.00 |
| High | 5700 | 20.57 | -0.90 | 24.00 | 11.00 |
| 144 | 5720 | 15.24 | -0.90 | 22.83 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 11.91 | 11.91 | 24.00 | -12.09 |
| Mid | 5580 | 11.92 | 11.92 | 24.00 | -12.08 |
| High | 5700 | 11.91 | 11.91 | 24.00 | -12.09 |
| 144 | 5720 | 11.94 | 11.94 | 22.83 | -10.89 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 9.353 | 9.353 | 11.00 | -1.647 |
| Mid | 5580 | 9.253 | 9.253 | 11.00 | -1.747 |
| High | 5700 | 9.457 | 9.457 | 11.00 | -1.543 |
| 144 | 5720 | 9.531 | 9.531 | 11.00 | -1.469 |

**MID CHANNEL**



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**1TX Antenna 6 MODE (FCC) – SU Mode**

| | |
|---|---|
| **Test Engineer:** | 5820 |
| **Test Date:** | 3/24/2022 |

**Bandwidth, Antenna Gain, and Limits**

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Directional Gain (dBi) | Power Limit (dBm) | PSD Limit (dBm/1MHz) |
|---|---|---|---|---|---|
| Low | 5500 | 24.56 | -0.90 | 24.00 | 11.00 |
| Mid | 5580 | 20.77 | -0.90 | 24.00 | 11.00 |
| High | 5700 | 20.86 | -0.90 | 24.00 | 11.00 |
| 144 | 5720 | 15.34 | -0.90 | 22.86 | 11.00 |

| | | |
|---|---|---|
| **Duty Cycle CF (dB)** | 0.00 | **Included in Calculations Corr'd PSD** |

**Output Power Results**

| Channel | Frequency (MHz) | Antenna 6 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 18.49 | 18.49 | 24.00 | -5.51 |
| Mid | 5580 | 19.96 | 19.96 | 24.00 | -4.04 |
| High | 5700 | 16.90 | 16.90 | 24.00 | -7.10 |
| 144 | 5720 | 19.81 | 19.81 | 22.86 | -3.05 |

**PSD Results**

| Channel | Frequency (MHz) | Antenna 6 Meas PSD (dBm/1MHz) | Total Corr'd PSD (dBm/1MHz) | PSD Limit (dBm/1MHz) | PSD Margin (dB) |
|---|---|---|---|---|---|
| Low | 5500 | 8.395 | 8.395 | 11.00 | -2.605 |
| Mid | 5580 | 9.684 | 9.684 | 11.00 | -1.316 |
| High | 5700 | 7.200 | 7.200 | 11.00 | -3.800 |
| 144 | 5720 | 9.759 | 9.759 | 11.00 | -1.241 |

**MID CHANNEL**



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