

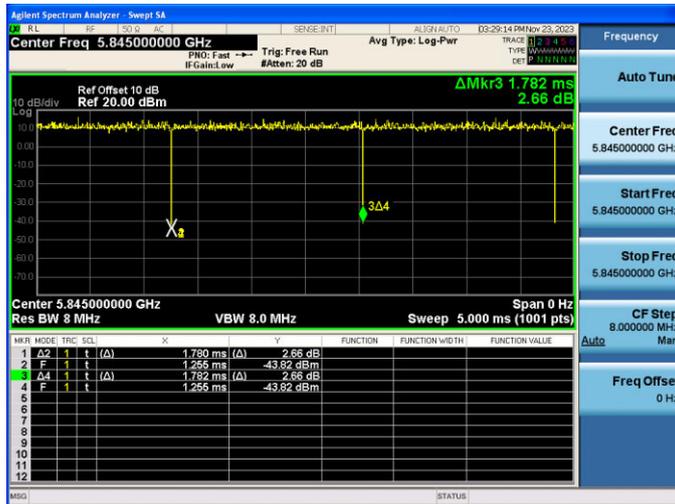
Appendix B. Test Plots

Full RU

Duty Cycle

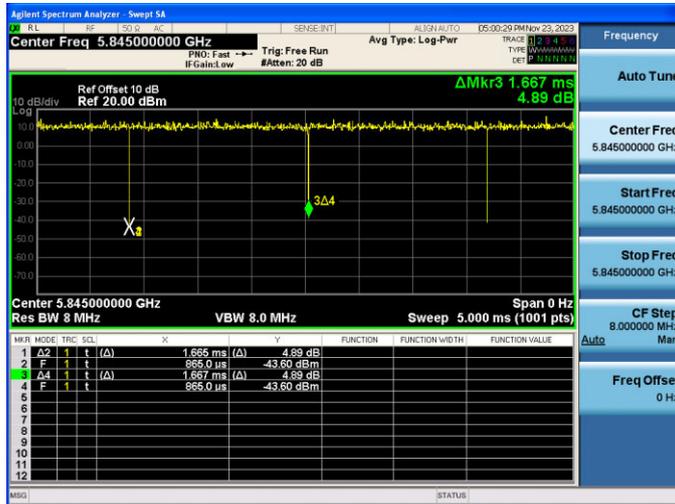
802.11a

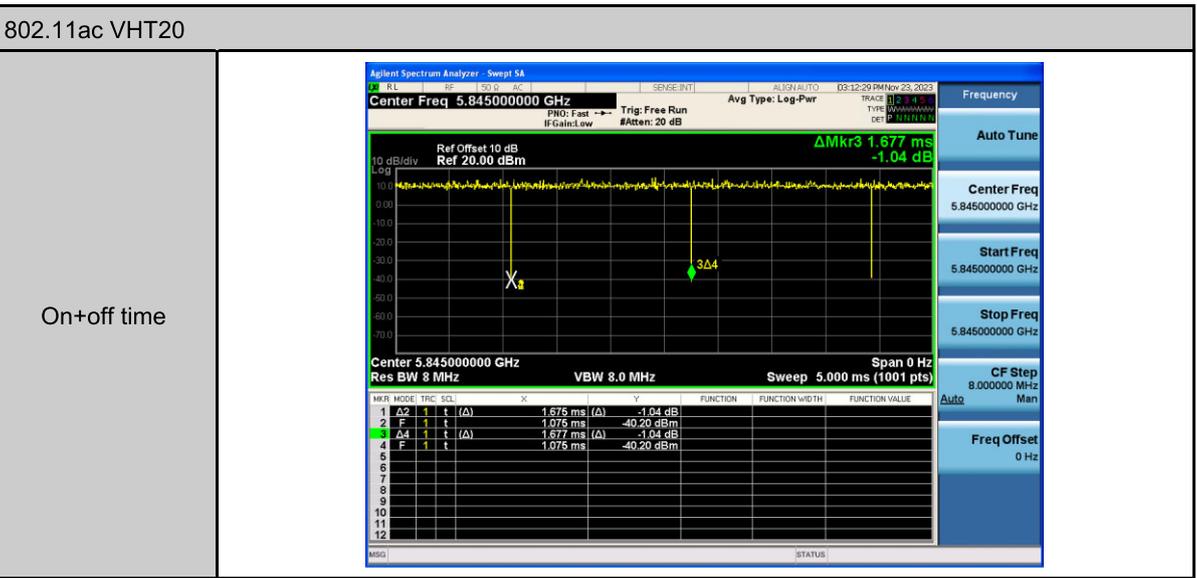
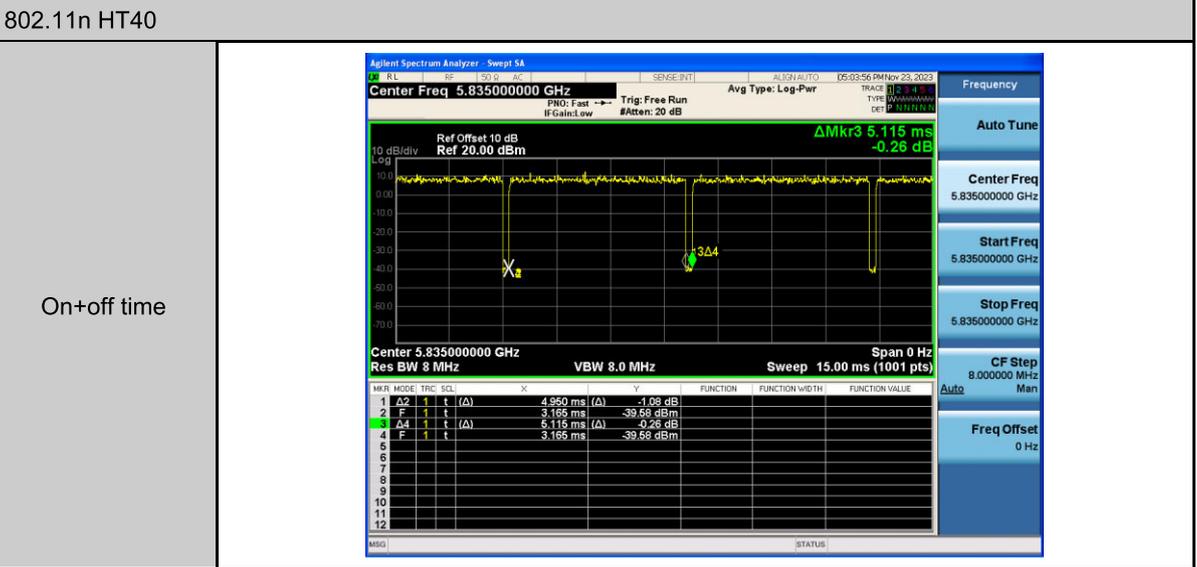
On+off time



802.11n HT20

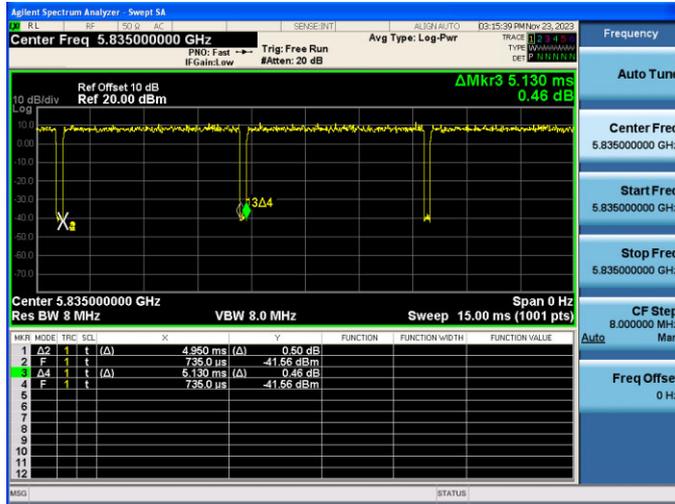
On+off time





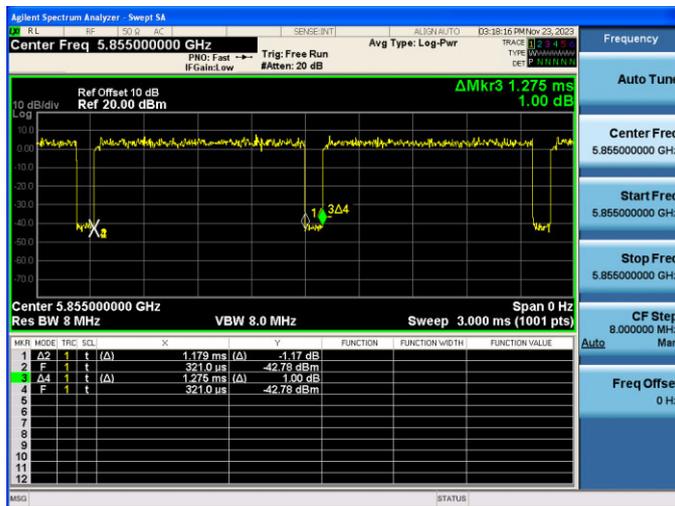
802.11ac VHT40

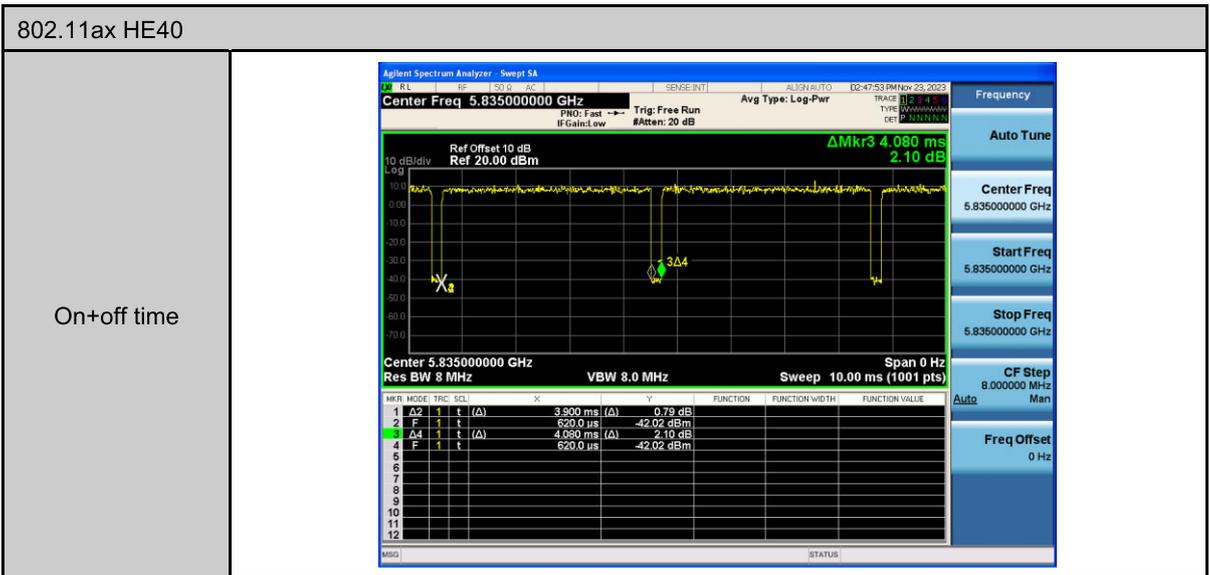
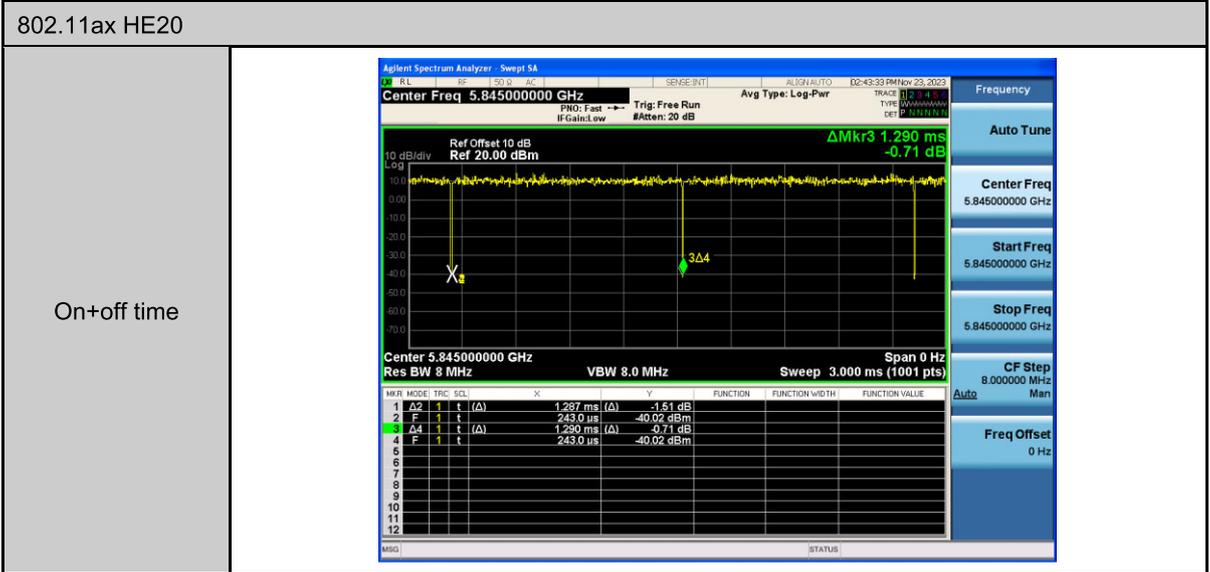
On+off time



802.11ac VHT80

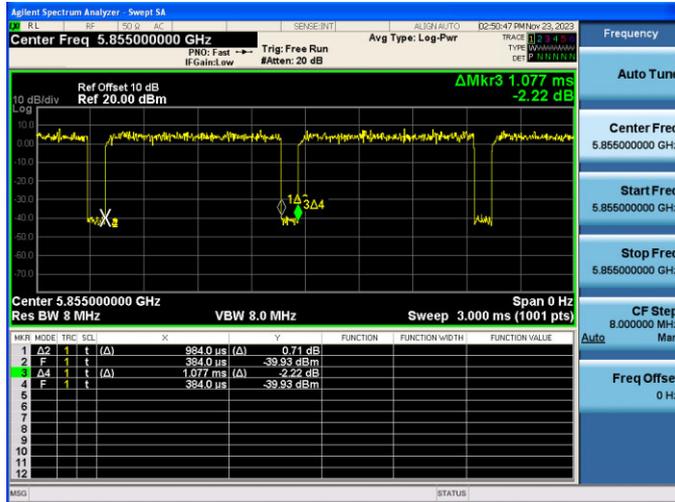
On+off time





802.11ax HE80

On+off time



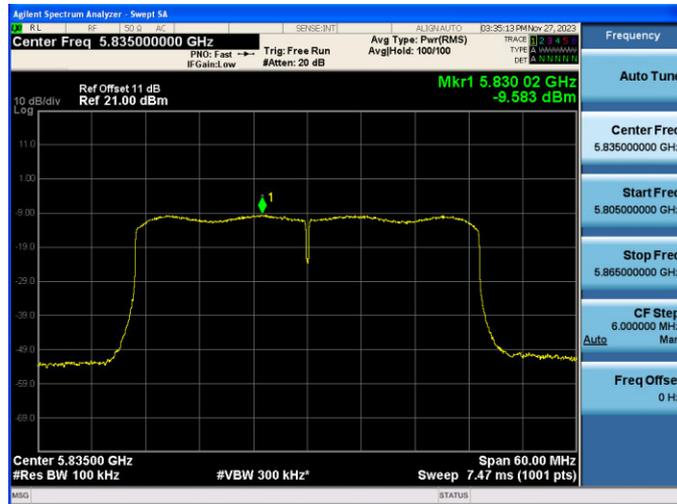
Maximum Power Spectral Density

| 802.11a_ANT-0 | |
|---------------|---|
| 5845 MHz | <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 5.845000000 GHz</p> <p>Mkr1 5.84252 GHz -5.281 dBm</p> <p>Center 5.84500 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.00 ms (1001 pts)</p> |
| 5865 MHz | <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 5.865000000 GHz</p> <p>Mkr1 5.86716 GHz -5.485 dBm</p> <p>Center 5.86500 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.00 ms (1001 pts)</p> |
| 5885 MHz | <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 5.885000000 GHz</p> <p>Mkr1 5.88688 GHz -5.684 dBm</p> <p>Center 5.88500 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.00 ms (1001 pts)</p> |

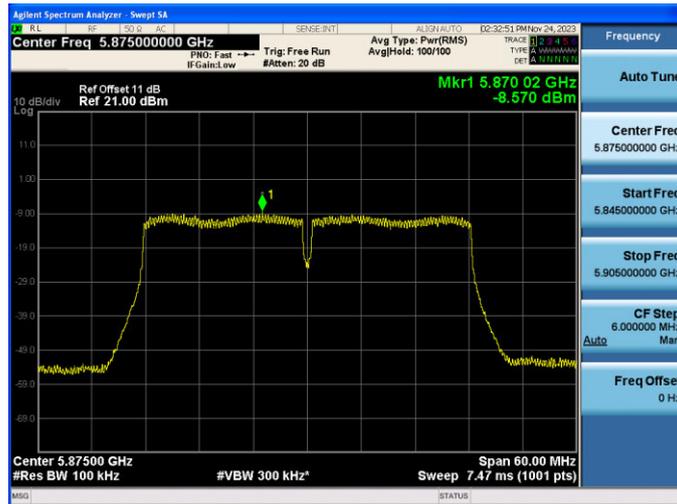
| 802.11ac VHT20_ANT-0 | |
|----------------------|--|
| 5845 MHz | |
| 5865 MHz | |
| 5885 MHz | |

802.11ac VHT40_ANT-0

5835 MHz



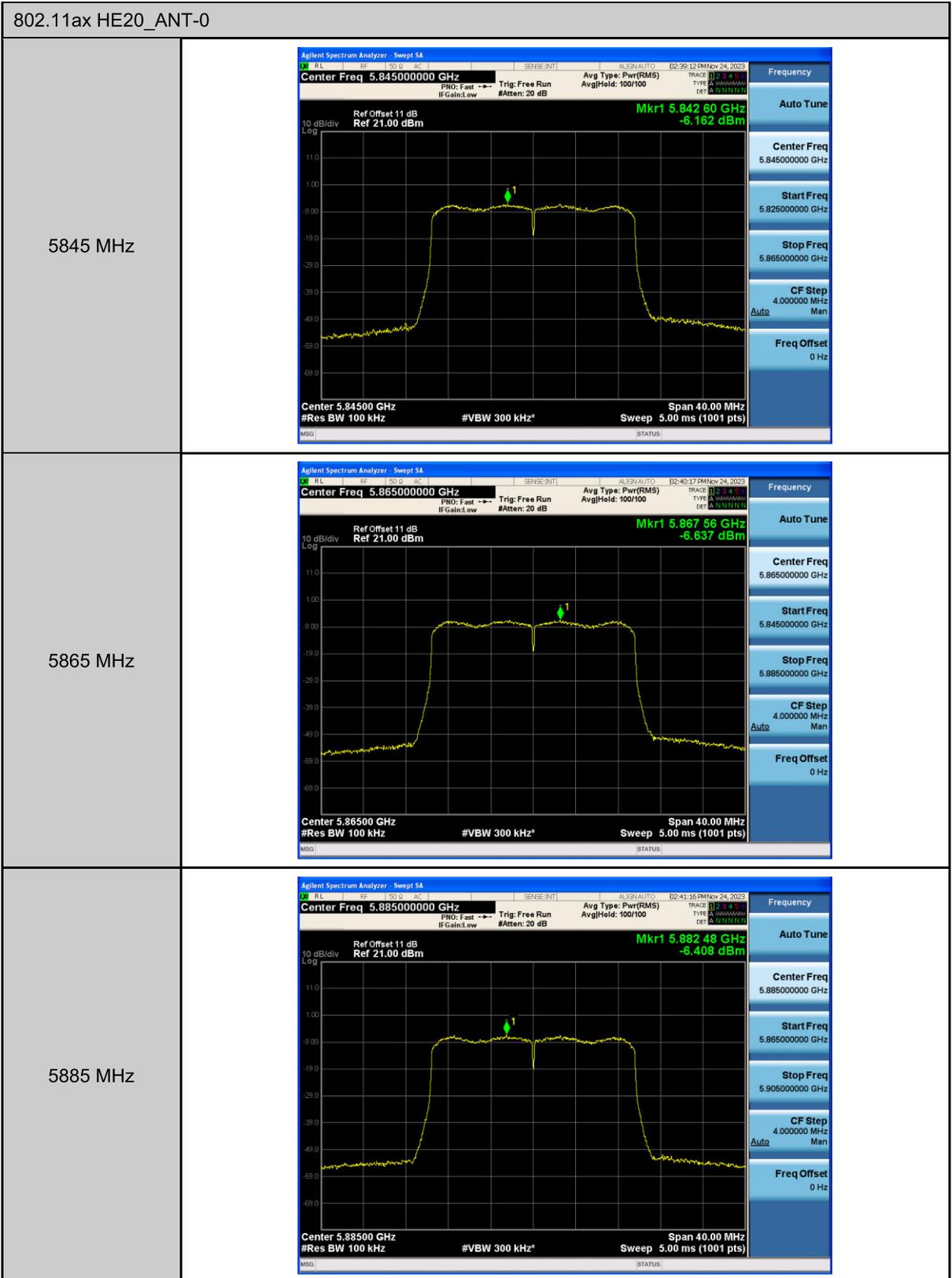
5875 MHz

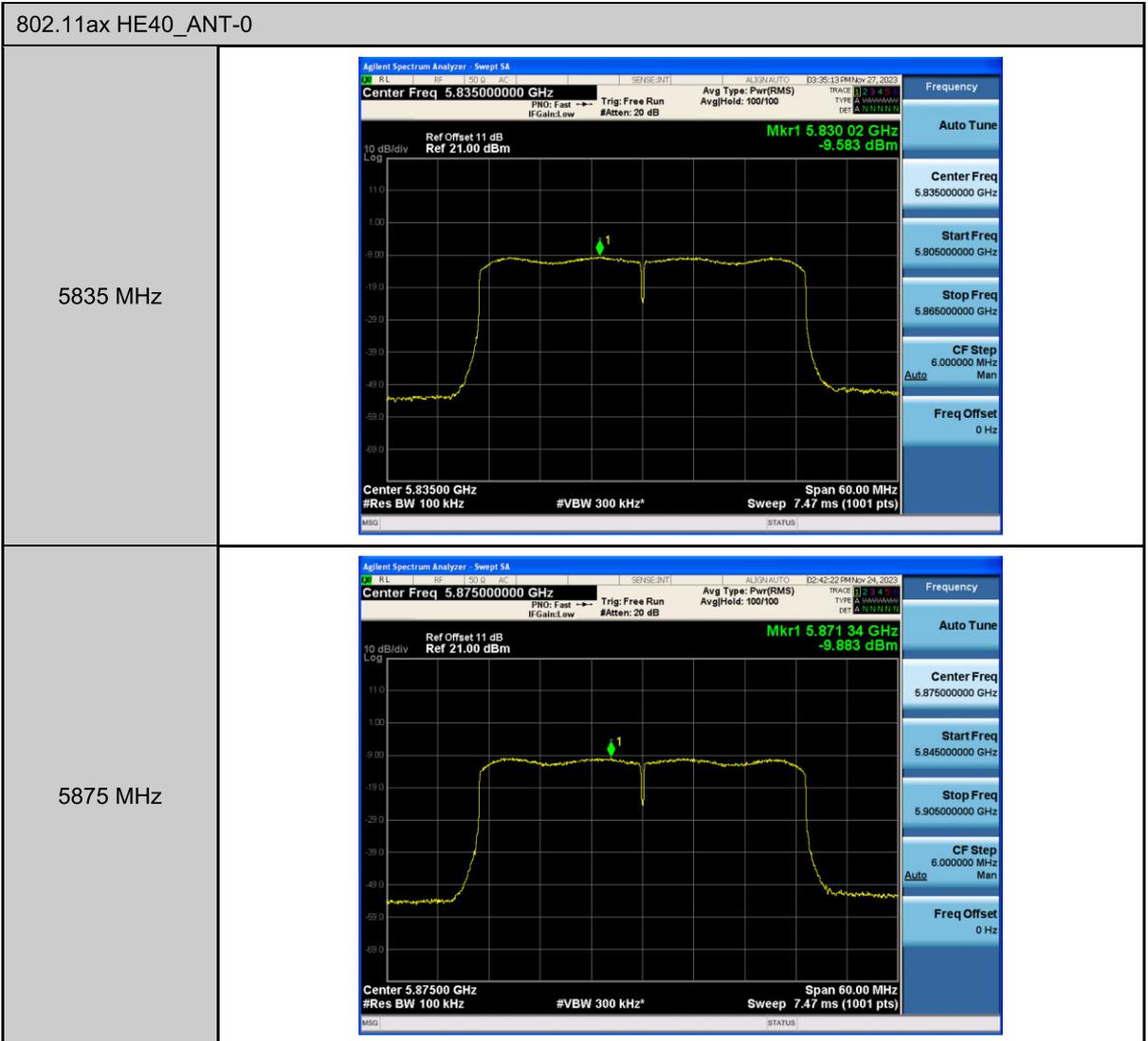


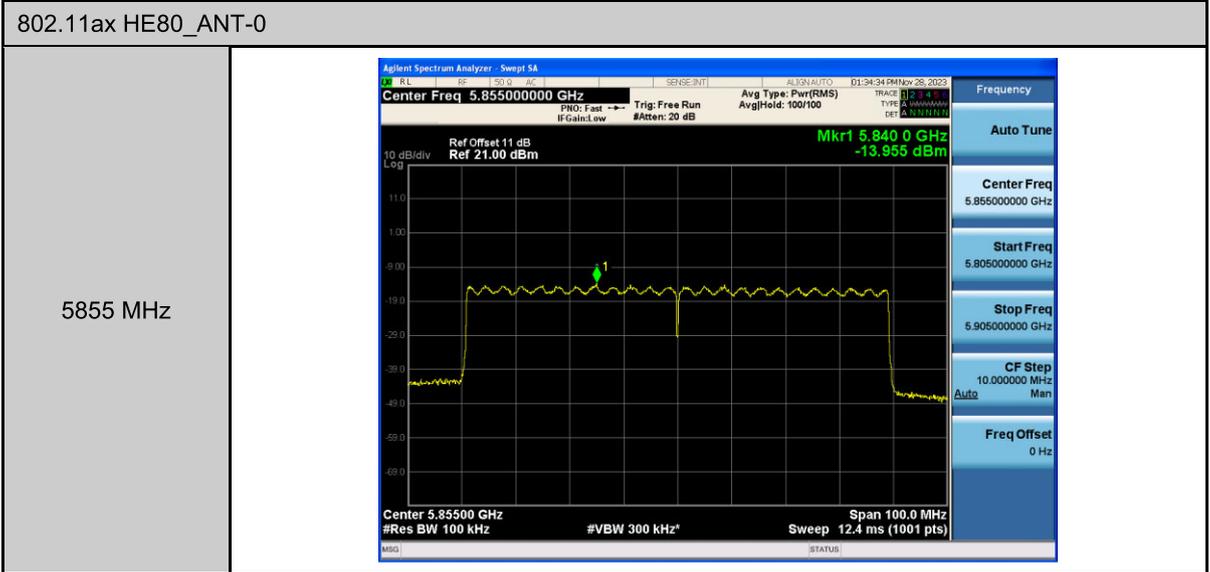
802.11ac VHT80_ANT-0

5855 MHz







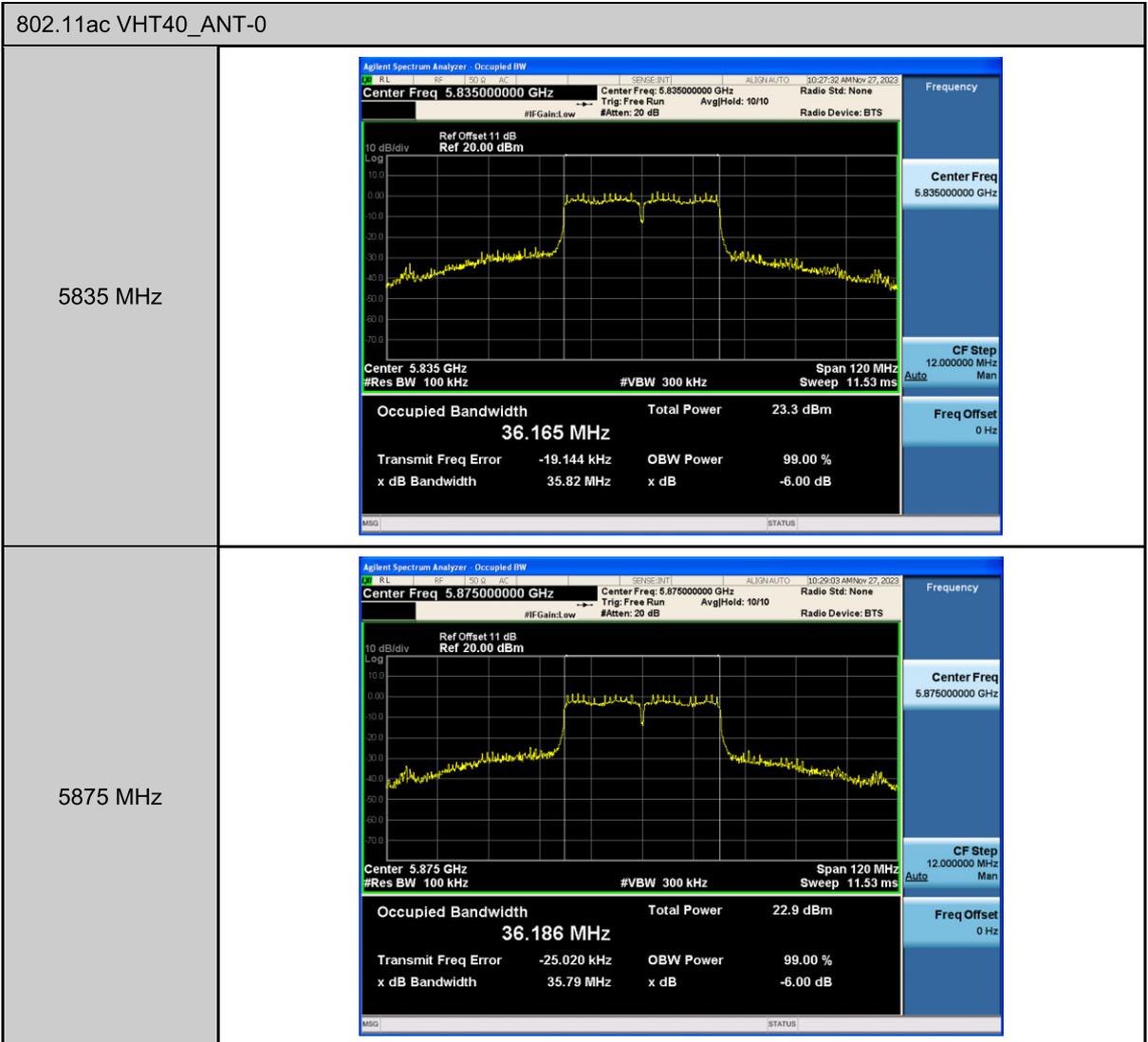


6 dB Bandwidth

802.11a_ANT-0

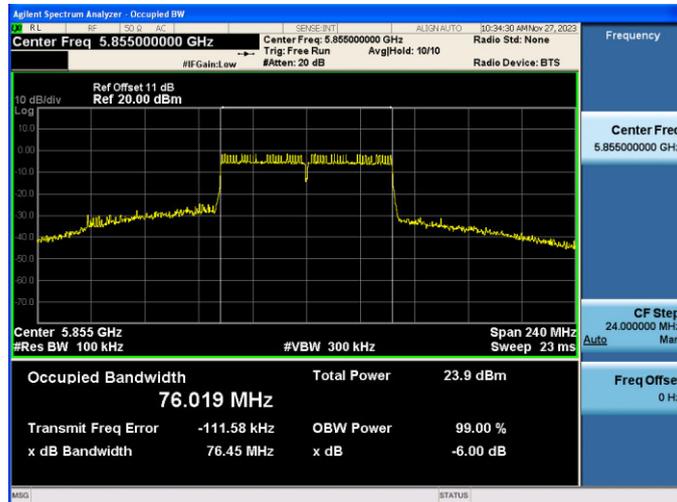
| | |
|-----------------|--|
| <p>5845 MHz</p> | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.845000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 16.545 MHz</p> <p>Total Power: 22.8 dBm</p> <p>Transmit Freq Error: 11.739 kHz</p> <p>x dB Bandwidth: 16.45 MHz</p> <p>OBW Power: 99.00 %</p> <p>x dB: -6.00 dB</p> |
| <p>5865 MHz</p> | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.865000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 16.554 MHz</p> <p>Total Power: 22.7 dBm</p> <p>Transmit Freq Error: 11.348 kHz</p> <p>x dB Bandwidth: 16.46 MHz</p> <p>OBW Power: 99.00 %</p> <p>x dB: -6.00 dB</p> |
| <p>5885 MHz</p> | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.884960000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 16.552 MHz</p> <p>Total Power: 22.3 dBm</p> <p>Transmit Freq Error: 46.026 kHz</p> <p>x dB Bandwidth: 16.46 MHz</p> <p>OBW Power: 99.00 %</p> <p>x dB: -6.00 dB</p> |

| 802.11ac VHT20_ANT-0 | |
|----------------------|---|
| 5845 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.845000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 17.653 MHz</p> <p>Total Power: 22.9 dBm</p> <p>Transmit Freq Error: 4.122 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 17.58 MHz</p> <p>x dB: -6.00 dB</p> |
| 5865 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.865000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 17.667 MHz</p> <p>Total Power: 22.6 dBm</p> <p>Transmit Freq Error: 3.175 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 17.60 MHz</p> <p>x dB: -6.00 dB</p> |
| 5885 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.885000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 17.664 MHz</p> <p>Total Power: 22.5 dBm</p> <p>Transmit Freq Error: 4.347 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 17.62 MHz</p> <p>x dB: -6.00 dB</p> |

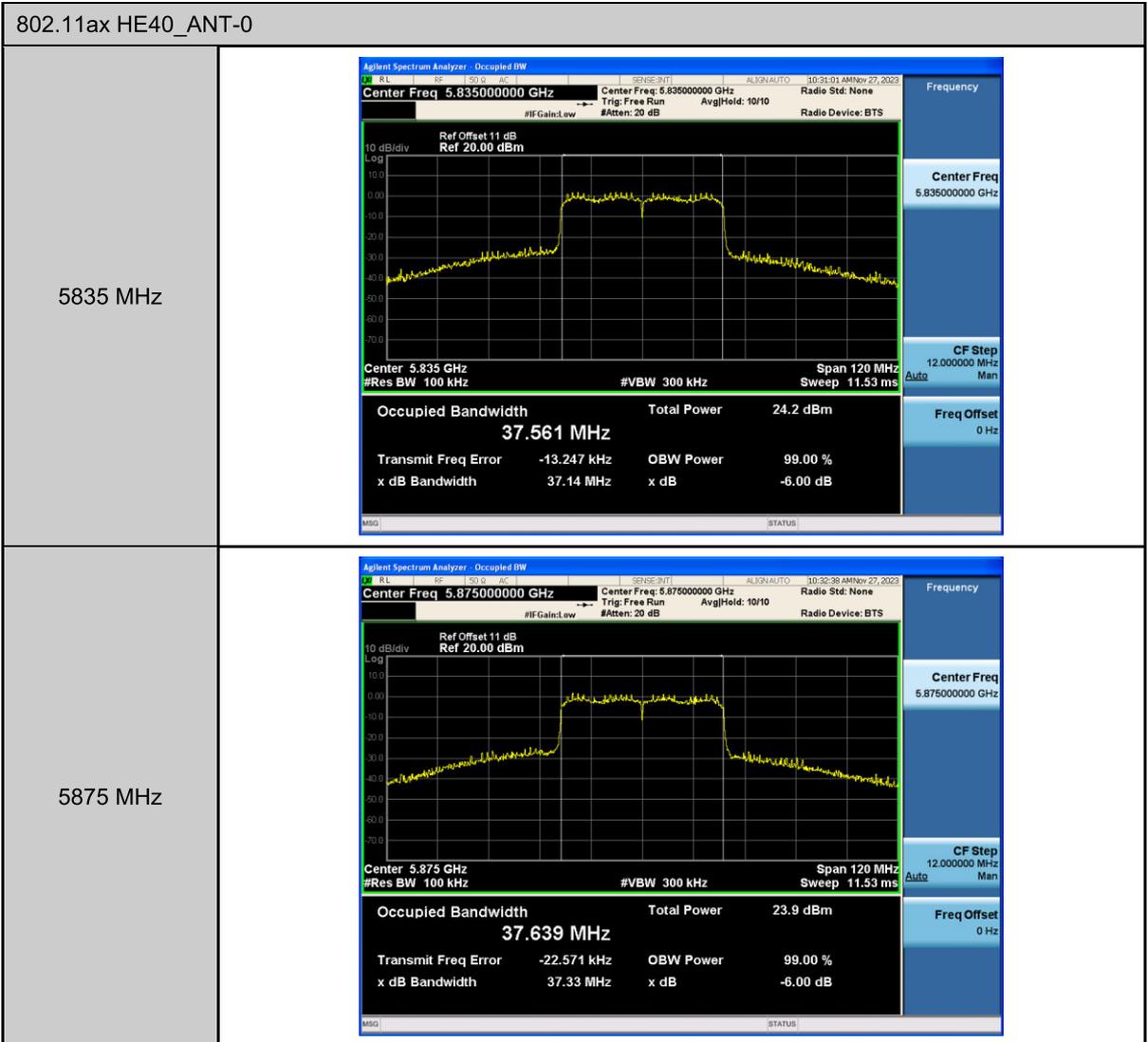


802.11ac VHT80_ANT-0

5855 MHz

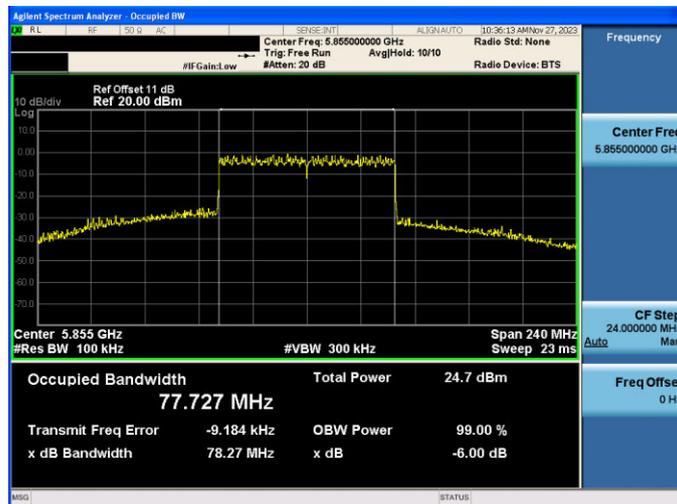


| 802.11ax HE20_ANT-0 | |
|---------------------|--|
| 5845 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.845000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 18.805 MHz</p> <p>Total Power: 23.7 dBm</p> <p>Transmit Freq Error: 2.298 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 18.44 MHz</p> |
| 5865 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.865000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 18.814 MHz</p> <p>Total Power: 23.8 dBm</p> <p>Transmit Freq Error: 11.263 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 18.59 MHz</p> |
| 5885 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.885000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Occupied Bandwidth: 18.833 MHz</p> <p>Total Power: 23.5 dBm</p> <p>Transmit Freq Error: 2.502 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 18.58 MHz</p> |



802.11ax HE80_ANT-0

5855 MHz

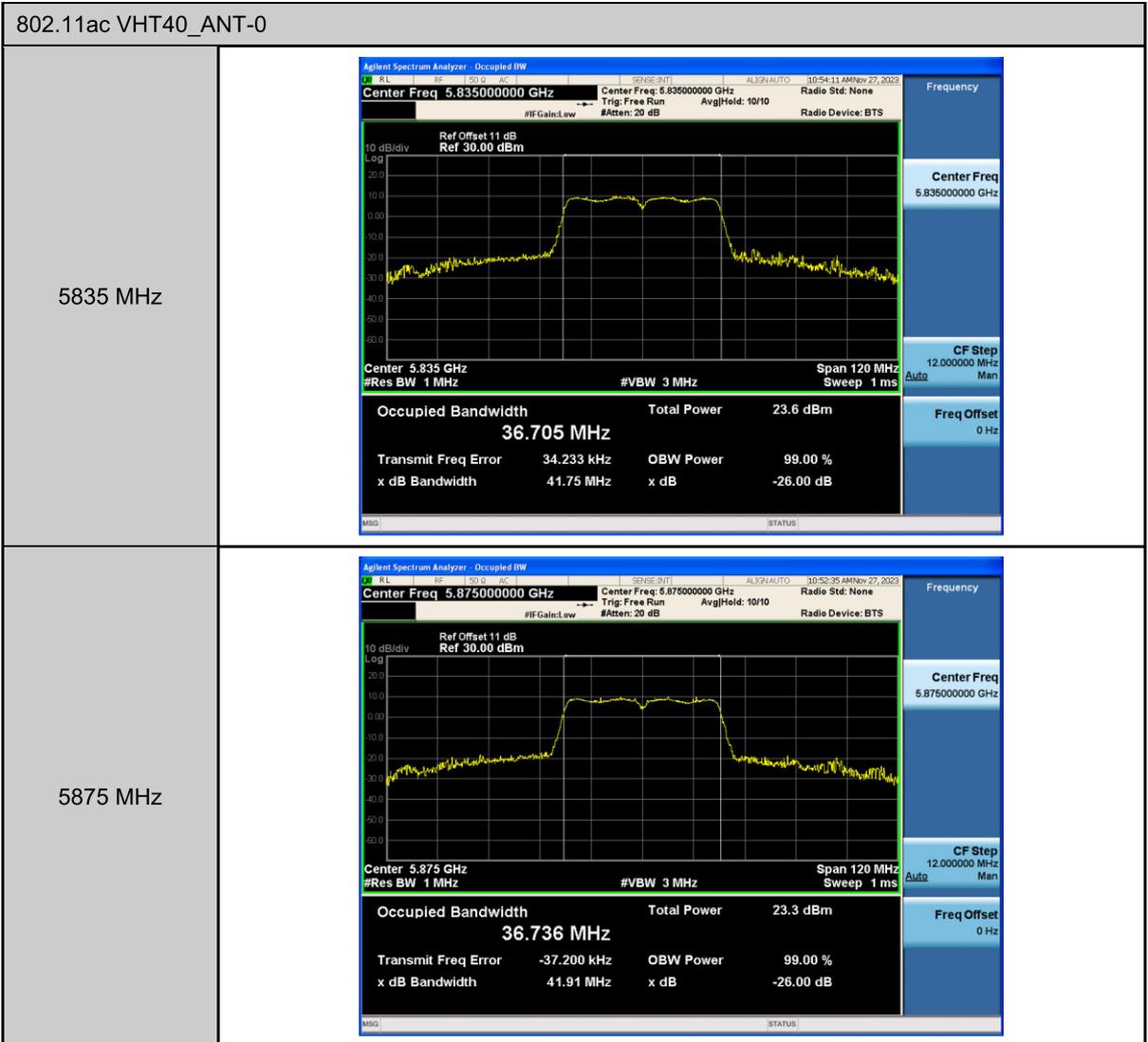


99% Occupied Bandwidth

802.11a_ANT-0

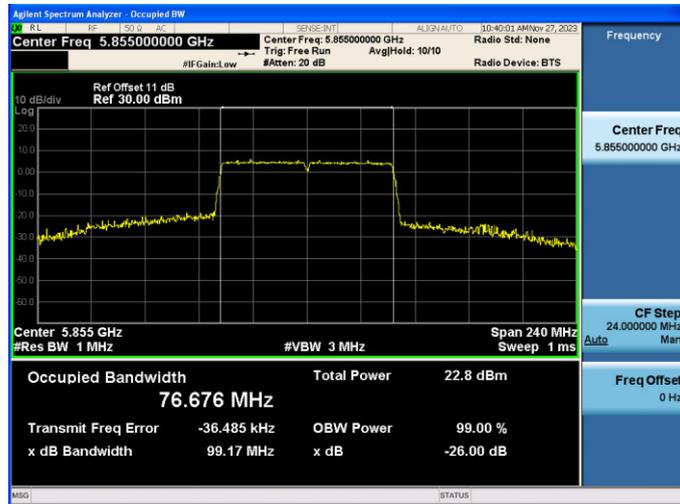
| | |
|-----------------|--|
| <p>5845 MHz</p> | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.845000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Occupied Bandwidth 17.302 MHz</p> <p>Total Power 22.3 dBm</p> <p>Transmit Freq Error -9.348 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 21.23 MHz</p> <p>x dB -26.00 dB</p> |
| <p>5865 MHz</p> | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.865000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Occupied Bandwidth 17.354 MHz</p> <p>Total Power 22.2 dBm</p> <p>Transmit Freq Error 41.026 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 20.76 MHz</p> <p>x dB -26.00 dB</p> |
| <p>5885 MHz</p> | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.885000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Occupied Bandwidth 17.368 MHz</p> <p>Total Power 22.1 dBm</p> <p>Transmit Freq Error 10.391 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 20.81 MHz</p> <p>x dB -26.00 dB</p> |

| 802.11ac VHT20_ANT-0 | |
|----------------------|--|
| 5845 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.845000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Center 5.845 GHz #Res BW 510 kHz #VBW 1.6 MHz Span 80 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 18.134 MHz Total Power 22.3 dBm</p> <p>Transmit Freq Error 9.364 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 26.23 MHz x dB -26.00 dB</p> |
| 5865 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.865000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Center 5.865 GHz #Res BW 510 kHz #VBW 1.6 MHz Span 80 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 18.104 MHz Total Power 22.2 dBm</p> <p>Transmit Freq Error 10.696 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 20.87 MHz x dB -26.00 dB</p> |
| 5885 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.885000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Center 5.885 GHz #Res BW 510 kHz #VBW 1.6 MHz Span 80 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 18.171 MHz Total Power 21.8 dBm</p> <p>Transmit Freq Error 36.503 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 22.86 MHz x dB -26.00 dB</p> |

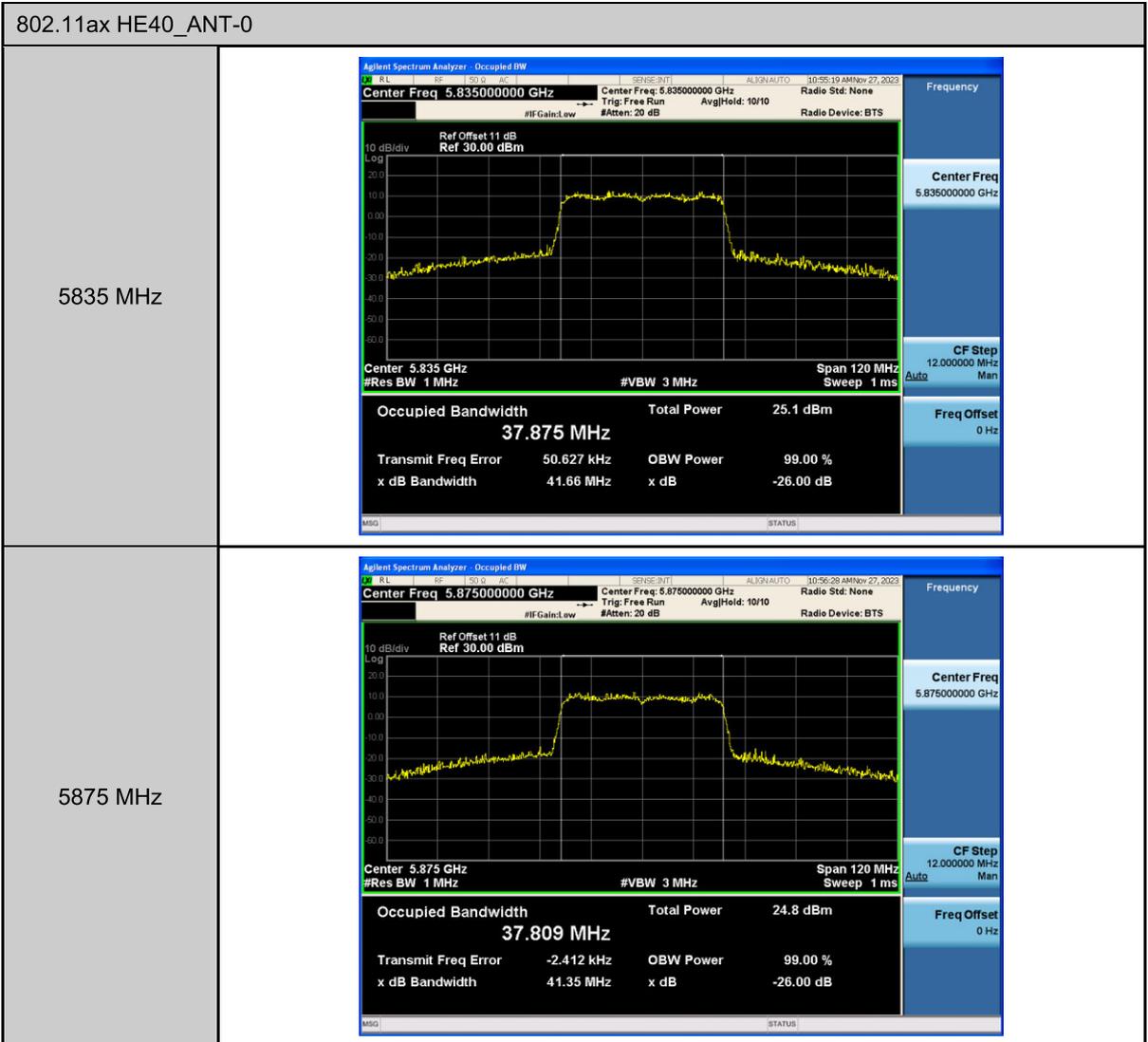


802.11ac VHT80_ANT-0

5855 MHz



| 802.11ax HE20_ANT-0 | |
|---------------------|---|
| 5845 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.845000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Occupied Bandwidth: 18.942 MHz</p> <p>Total Power: 24.3 dBm</p> <p>Transmit Freq Error: 38.733 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 20.85 MHz</p> <p>x dB: -26.00 dB</p> |
| 5865 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.865000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Occupied Bandwidth: 18.951 MHz</p> <p>Total Power: 24.5 dBm</p> <p>Transmit Freq Error: 48.944 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 21.13 MHz</p> <p>x dB: -26.00 dB</p> |
| 5885 MHz | <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.885000000 GHz</p> <p>Ref Offset 11 dB Ref 30.00 dBm</p> <p>Occupied Bandwidth: 18.944 MHz</p> <p>Total Power: 24.3 dBm</p> <p>Transmit Freq Error: 17.491 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 21.01 MHz</p> <p>x dB: -26.00 dB</p> |



802.11ax HE80_ANT-0

5855 MHz

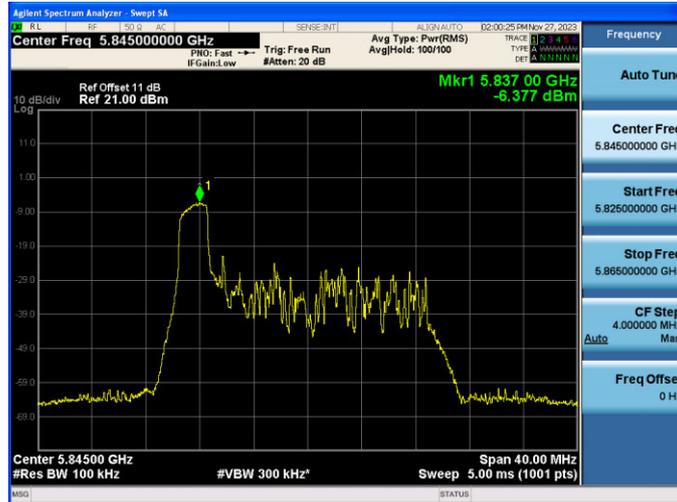


Partial RU

Maximum Power Spectral Density

802.11ax HE20_ANT-0

5845 MHz



5885 MHz

