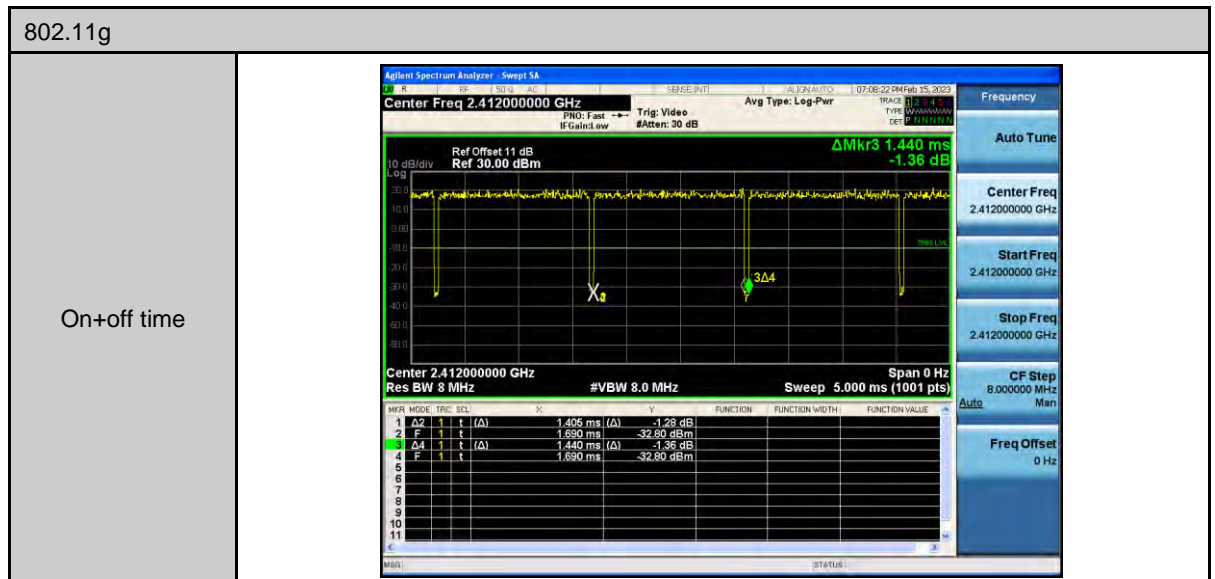
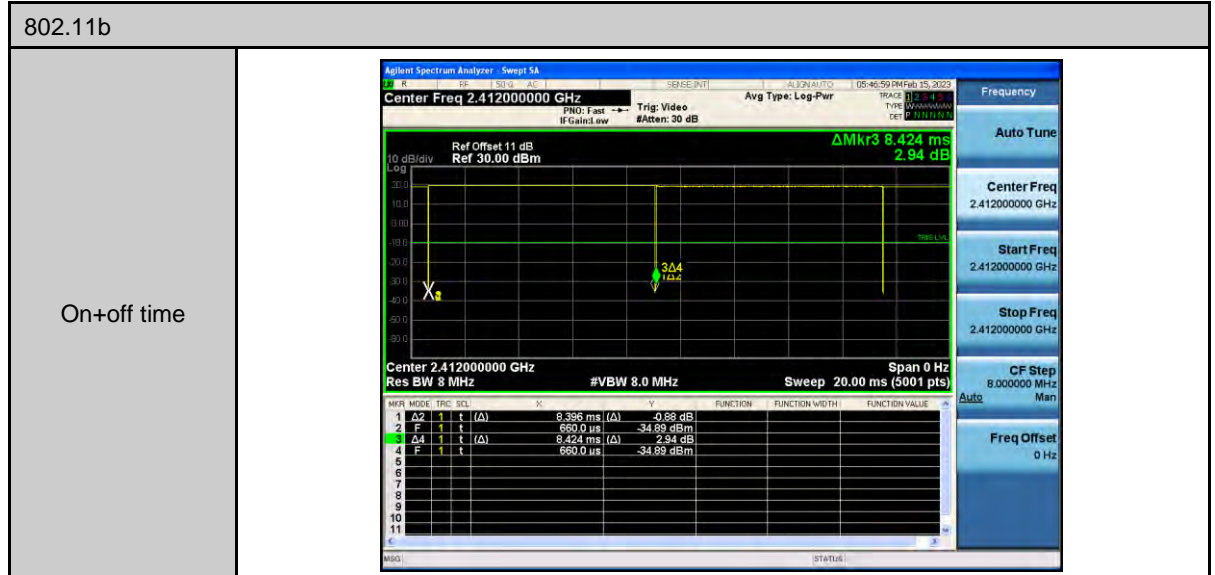
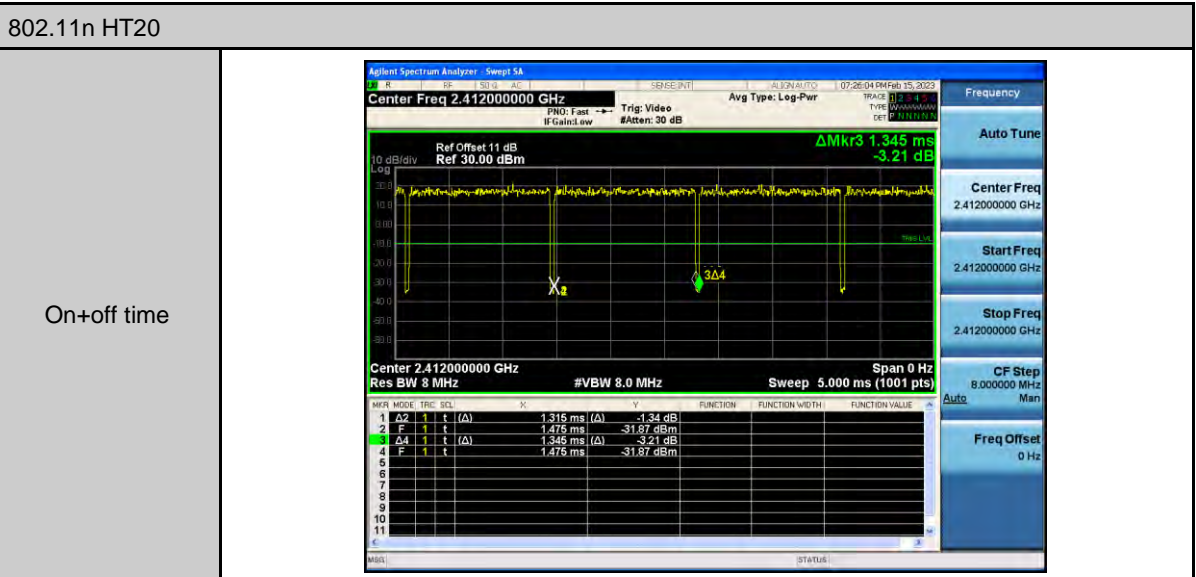


Appendix B. Test Plots

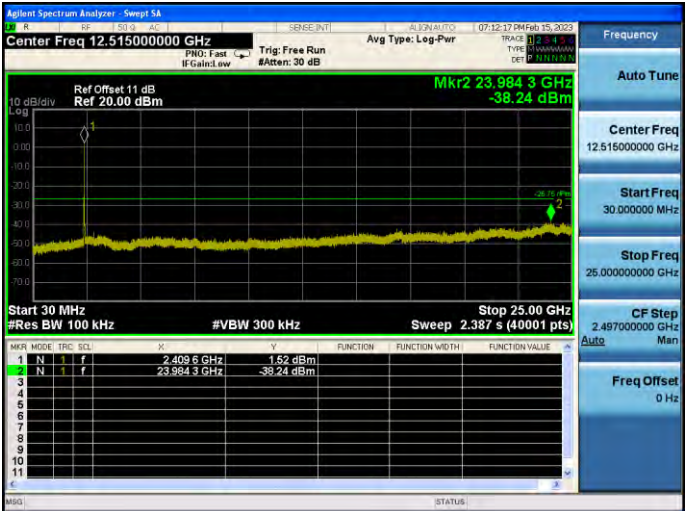
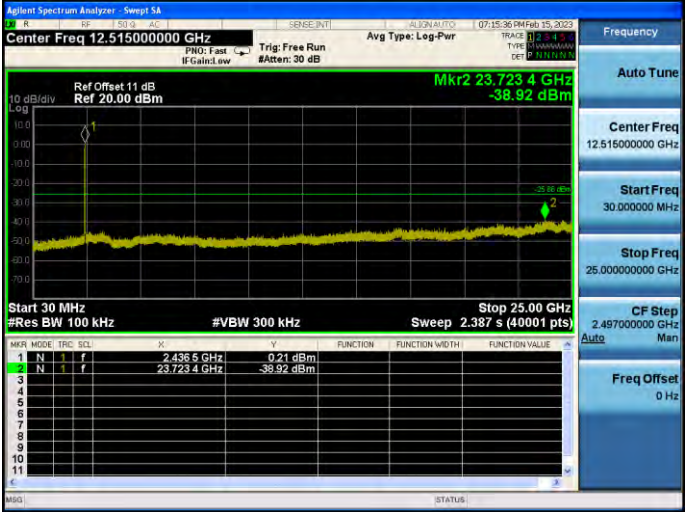
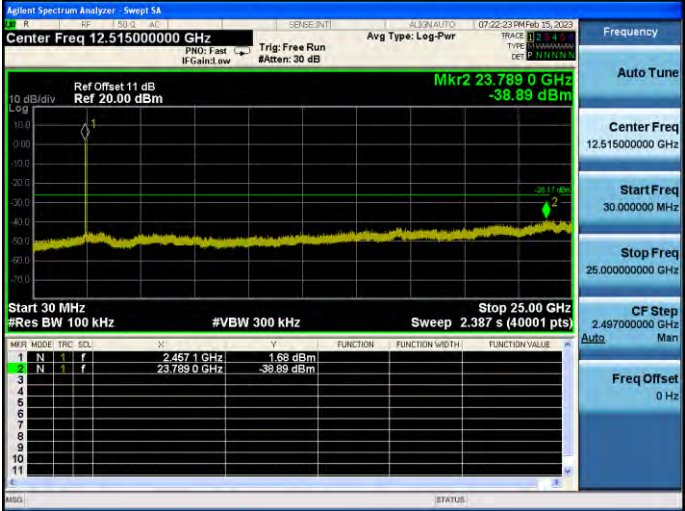
Duty cycle





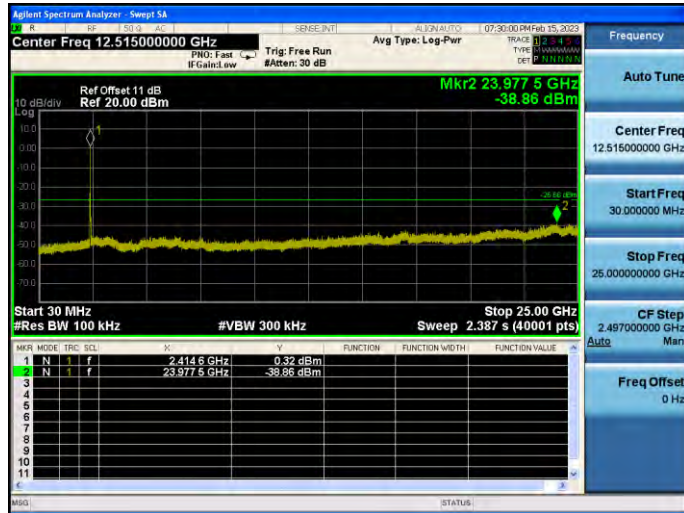
Out of Band Conducted Spurious Emission

802.11b_ANT-0																												
2412 MHz	<table border="1"> <thead> <tr> <th>MNR</th> <th>MODE</th> <th>TRC</th> <th>SQL</th> <th>F</th> <th>P</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>f</td> <td>f</td> <td>2.4128 GHz</td> <td>6.83 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>f</td> <td>f</td> <td>23.8351 GHz</td> <td>-37.66 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MNR	MODE	TRC	SQL	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	f	f	2.4128 GHz	6.83 dBm				2	N	f	f	23.8351 GHz	-37.66 dBm			
MNR	MODE	TRC	SQL	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
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2	N	f	f	23.8351 GHz	-37.66 dBm																							
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MNR	MODE	TRC	SQL	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
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2	N	f	f	23.7771 GHz	-38.52 dBm																							
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MNR	MODE	TRC	SQL	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																				
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2	N	f	f	23.9263 GHz	-38.68 dBm																							

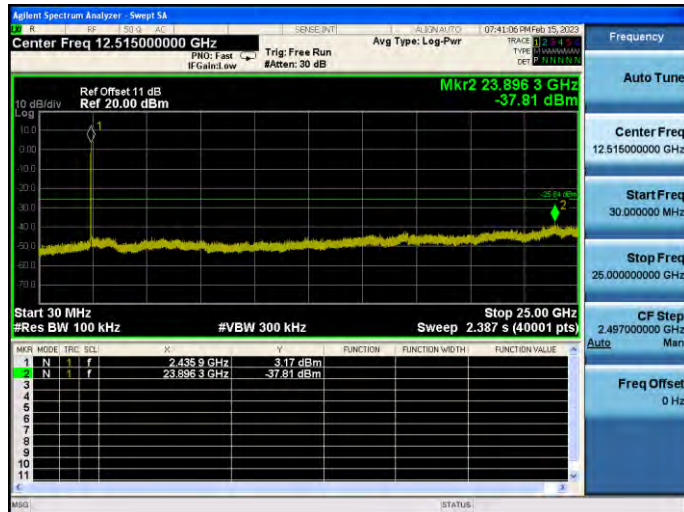
802.11g_ANT-0	
2412 MHz	
2462 MHz	

802.11n HT20_ANT-0

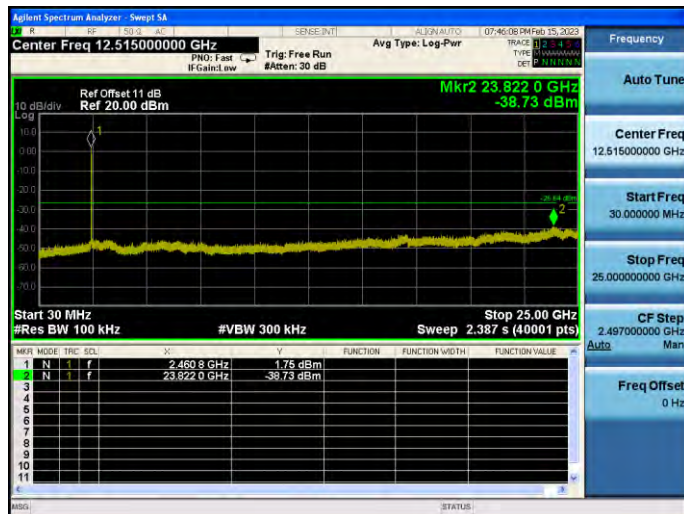
2412 MHz



2437 MHz



2462 MHz



Reference level

802.11b_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 11 dB Ref 20.00 dBm Mkr1 2.412 497 GHz 7.52 dBm Center 2.412000 GHz #Res BW 100 kHz #VBW 300 kHz Span 12.13 MHz Sweep 1.200 ms (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 11 dB Ref 20.00 dBm Mkr1 2.437 511 GHz 7.87 dBm Center 2.437000 GHz #Res BW 100 kHz #VBW 300 kHz Span 12.16 MHz Sweep 1.200 ms (1001 pts)</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 11 dB Ref 20.00 dBm Mkr1 2.462 503 GHz 9.55 dBm Center 2.462000 GHz #Res BW 100 kHz #VBW 300 kHz Span 12.89 MHz Sweep 1.267 ms (1001 pts)</p>

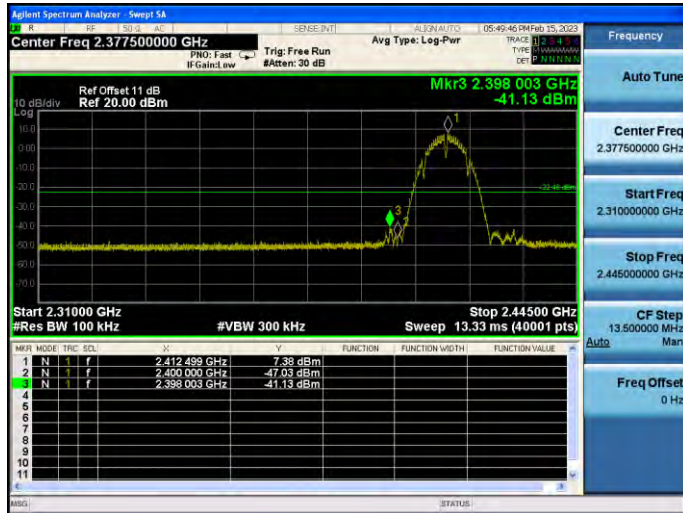
802.11g_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.412000000 GHz Mkr1 2.413 275 GHz 3.25 dBm Ref Offset 11 dB Ref 20.00 dBm Center 2.41200 GHz #Res BW 100 kHz #VBW 300 kHz Span 23.19 MHz Sweep 2.267 ms (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.437000000 GHz Mkr1 2.438 266 GHz 4.12 dBm Ref Offset 11 dB Ref 20.00 dBm Center 2.43700 GHz #Res BW 100 kHz #VBW 300 kHz Span 23.02 MHz Sweep 2.267 ms (1001 pts)</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.462000000 GHz Mkr1 2.463 274 GHz 3.83 dBm Ref Offset 11 dB Ref 20.00 dBm Center 2.46200 GHz #Res BW 100 kHz #VBW 300 kHz Span 22.75 MHz Sweep 2.200 ms (1001 pts)</p>



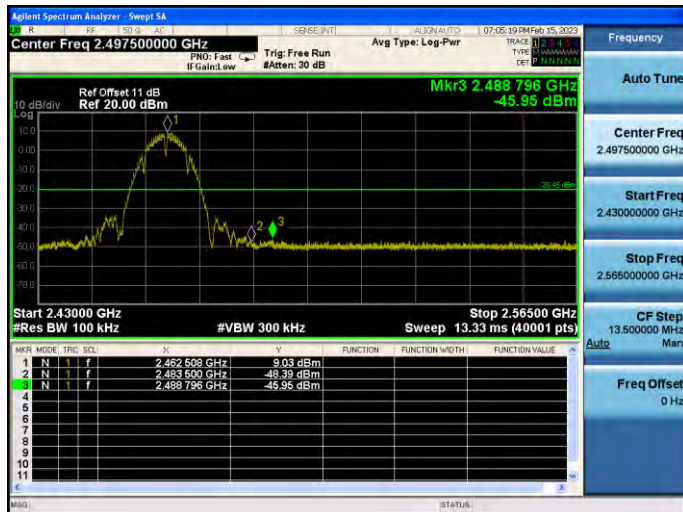
Conducted Band Edge

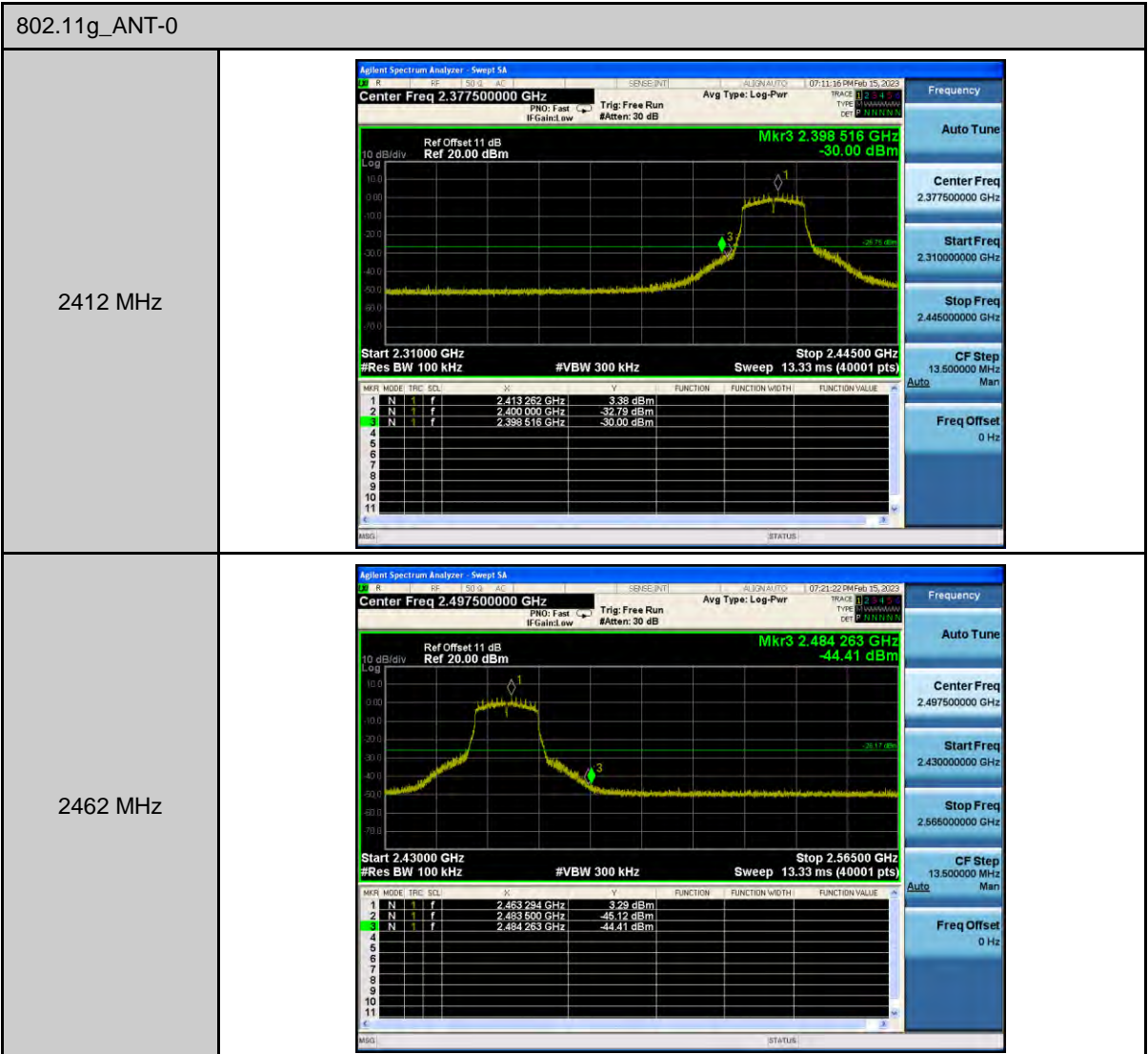
802.11b_ANT-0

2412 MHz



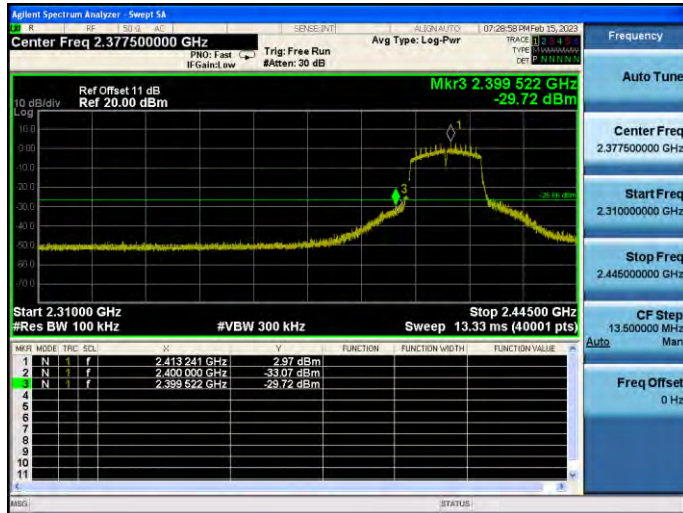
2462 MHz



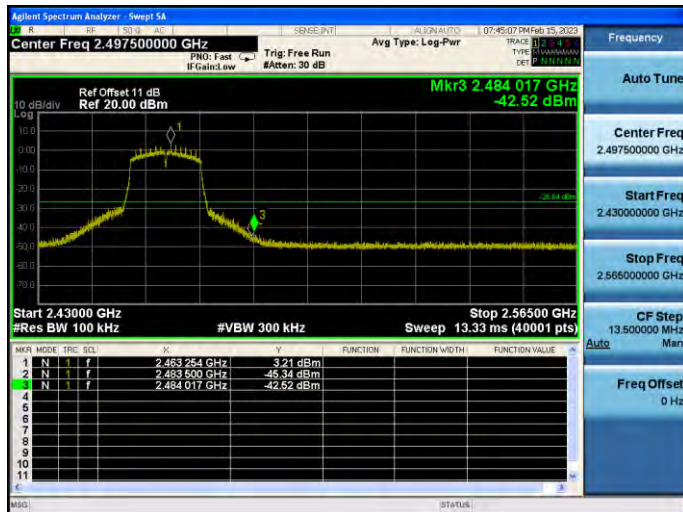


802.11n HT20_ANT-0

2412 MHz



2462 MHz






6 dB Bandwidth

802.11b_ANT-0

<p>2412 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.412 GHz #Res BW 100 kHz</p> <p>Span 40 MHz Sweep 3.867 ms</p> <p>Occupied Bandwidth 12.752 MHz</p> <p>Total Power 23.0 dBm</p> <p>Transmit Freq Error 127.39 kHz x dB Bandwidth 8.088 MHz</p> <p>OBW Power 99.00 % x dB -6.00 dB</p>
<p>2437 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.437 GHz #Res BW 100 kHz</p> <p>Span 40 MHz Sweep 3.867 ms</p> <p>Occupied Bandwidth 12.940 MHz</p> <p>Total Power 23.6 dBm</p> <p>Transmit Freq Error 31.493 kHz x dB Bandwidth 8.107 MHz</p> <p>OBW Power 99.00 % x dB -6.00 dB</p>
<p>2462 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.462 GHz #Res BW 100 kHz</p> <p>Span 40 MHz Sweep 3.867 ms</p> <p>Occupied Bandwidth 13.230 MHz</p> <p>Total Power 25.2 dBm</p> <p>Transmit Freq Error -33.513 kHz x dB Bandwidth 8.591 MHz</p> <p>OBW Power 99.00 % x dB -6.00 dB</p>

802.11g_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Occupied Bandwidth: 16.409 MHz</p> <p>Total Power: 20.8 dBm</p> <p>Transmit Freq Error: 57.576 kHz</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Occupied Bandwidth: 16.444 MHz</p> <p>Total Power: 21.6 dBm</p> <p>Transmit Freq Error: 16.924 kHz</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Occupied Bandwidth: 16.388 MHz</p> <p>Total Power: 21.2 dBm</p> <p>Transmit Freq Error: -10.671 kHz</p>

802.11n HT20_ANT-0

<p>2412 MHz</p>	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Center Freq 2.412000000 GHz</p> <p>Trig: Free Run AvgHold: 1/1</p> <p>Radio Device: BTS</p> <p>Ref Offset 11 dB</p> <p>Ref 20.00 dBm</p> <p>Center 2.412 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.867 ms</p> <p>Occupied Bandwidth 17.585 MHz</p> <p>Total Power 20.6 dBm</p> <p>Transmit Freq Error 58.332 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 15.94 MHz</p> <p>x dB -6.00 dB</p>
<p>2437 MHz</p>	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Center Freq 2.437000000 GHz</p> <p>Trig: Free Run AvgHold: 1/1</p> <p>Radio Device: BTS</p> <p>Ref Offset 11 dB</p> <p>Ref 20.00 dBm</p> <p>Center 2.437 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.867 ms</p> <p>Occupied Bandwidth 17.608 MHz</p> <p>Total Power 21.8 dBm</p> <p>Transmit Freq Error 12.176 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 15.16 MHz</p> <p>x dB -6.00 dB</p>
<p>2462 MHz</p>	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Center Freq 2.462000000 GHz</p> <p>Trig: Free Run AvgHold: 1/1</p> <p>Radio Device: BTS</p> <p>Ref Offset 11 dB</p> <p>Ref 20.00 dBm</p> <p>Center 2.462 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 40 MHz</p> <p>Sweep 3.867 ms</p> <p>Occupied Bandwidth 17.567 MHz</p> <p>Total Power 20.8 dBm</p> <p>Transmit Freq Error -17.269 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 15.17 MHz</p> <p>x dB -6.00 dB</p>

99% Occupied Bandwidth

802.11b_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.412 GHz #Res BW 300 kHz</p> <p>Span 40 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 12.763 MHz</p> <p>Total Power 19.3 dBm</p> <p>Transmit Freq Error 146.43 kHz x dB Bandwidth 16.32 MHz</p> <p>OBW Power 99.00 % x dB -26.00 dB</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.437 GHz #Res BW 300 kHz</p> <p>Span 40 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 12.984 MHz</p> <p>Total Power 19.8 dBm</p> <p>Transmit Freq Error 37.323 kHz x dB Bandwidth 16.41 MHz</p> <p>OBW Power 99.00 % x dB -26.00 dB</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.462 GHz #Res BW 300 kHz</p> <p>Span 40 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 13.262 MHz</p> <p>Total Power 21.5 dBm</p> <p>Transmit Freq Error -17.012 kHz x dB Bandwidth 17.25 MHz</p> <p>OBW Power 99.00 % x dB -26.00 dB</p>

802.11g_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.412 GHz #Res BW 300 kHz</p> <p>Occupied Bandwidth 16.859 MHz</p> <p>Total Power 20.7 dBm</p> <p>Transmit Freq Error 117.20 kHz</p> <p>x dB Bandwidth 23.66 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -26.00 dB</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.437 GHz #Res BW 300 kHz</p> <p>Occupied Bandwidth 16.879 MHz</p> <p>Total Power 21.4 dBm</p> <p>Transmit Freq Error 31.236 kHz</p> <p>x dB Bandwidth 20.70 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -26.00 dB</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.462 GHz #Res BW 300 kHz</p> <p>Occupied Bandwidth 16.782 MHz</p> <p>Total Power 21.1 dBm</p> <p>Transmit Freq Error -20.889 kHz</p> <p>x dB Bandwidth 20.96 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -26.00 dB</p>

802.11n HT20_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.412 GHz #Res BW 300 kHz</p> <p>Occupied Bandwidth 17.855 MHz</p> <p>Total Power 20.5 dBm</p> <p>Transmit Freq Error 102.87 kHz</p> <p>x dB Bandwidth 23.90 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -26.00 dB</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.437 GHz #Res BW 300 kHz</p> <p>Occupied Bandwidth 17.908 MHz</p> <p>Total Power 21.4 dBm</p> <p>Transmit Freq Error 46.856 kHz</p> <p>x dB Bandwidth 23.30 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -26.00 dB</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center 2.462 GHz #Res BW 300 kHz</p> <p>Occupied Bandwidth 17.792 MHz</p> <p>Total Power 20.6 dBm</p> <p>Transmit Freq Error -7.256 kHz</p> <p>x dB Bandwidth 20.79 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB -26.00 dB</p>

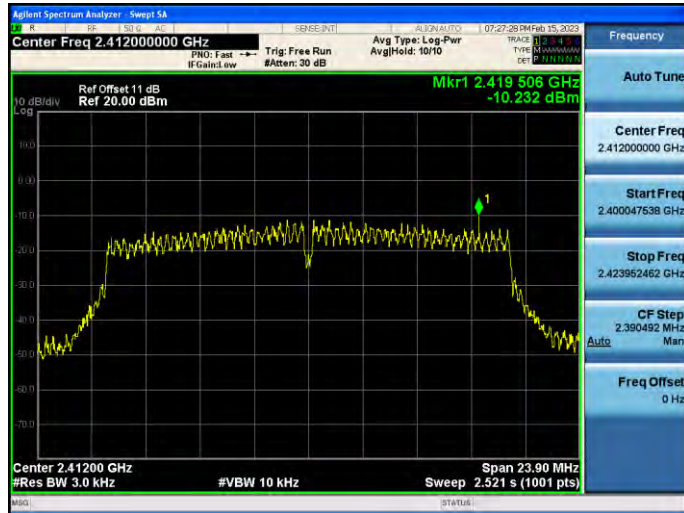
Maximum Power Spectral Density

802.11b_ANT-0	
2412 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 11 dB Ref 20.00 dBm Mkr1 2.412 886 GHz -6.123 dBm Center 2.412000 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 12.13 MHz Sweep 1.279 s (1001 pts)</p>
2437 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 11 dB Ref 20.00 dBm Mkr1 2.436 404 GHz -6.078 dBm Center 2.437000 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 12.16 MHz Sweep 1.282 s (1001 pts)</p>
2462 MHz	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 11 dB Ref 20.00 dBm Mkr1 2.461 085 GHz -4.262 dBm Center 2.462000 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 12.89 MHz Sweep 1.359 s (1001 pts)</p>

802.11g_ANT-0	
2412 MHz	
2437 MHz	
2462 MHz	

802.11n HT20_ANT-0

2412 MHz



2437 MHz



2462 MHz

