

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

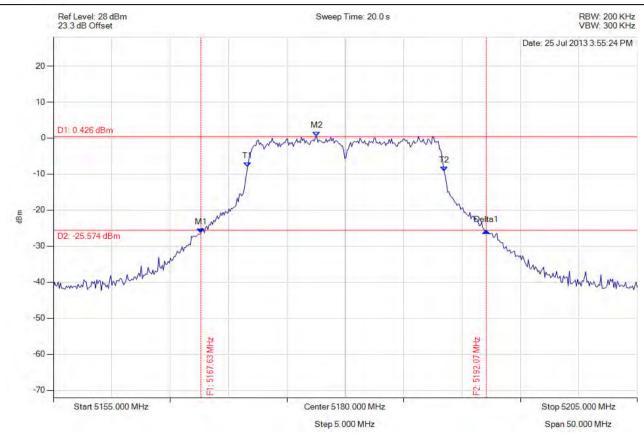
Page: 199 of 585

# A.1.1. 26 dB & 99% Bandwidth



### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5180.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5167.625 MHz: -26.427 dBm M2: 5177.545 MHz: 0.426 dBm Delta1: 24.449 MHz: 0.759 dB T1: 5171.633 MHz: -8.083 dBm T2: 5188.467 MHz: -9.222 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 24.449 MHz Measured 99% Bandwidth: 16.834 MHz



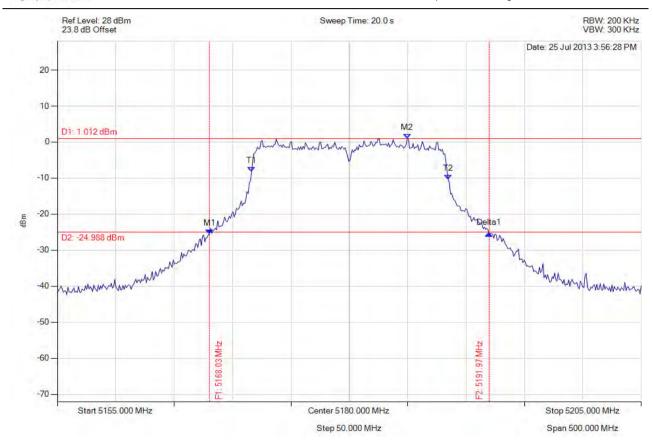
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 200 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5180.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5168.026 MHz: -25.603 dBm M2: 5184.960 MHz: 1.012 dBm Delta1: 23.948 MHz: 0.169 dB T1: 5171.633 MHz: -8.203 dBm T2: 5188.467 MHz: -10.363 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 23.948 MHz Measured 99% Bandwidth: 16.834 MHz



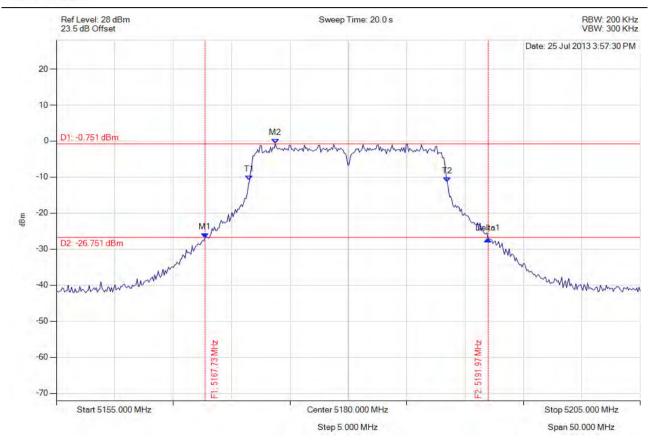
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 201 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5180.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5167.725 MHz: -26.836 dBm M2: 5173.737 MHz: -0.751 dBm Delta1: 24.248 MHz: -0.329 dB T1: 5171.533 MHz: -10.928 dBm T2: 5188.467 MHz: -11.396 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.248 MHz Measured 99% Bandwidth: 16.934 MHz



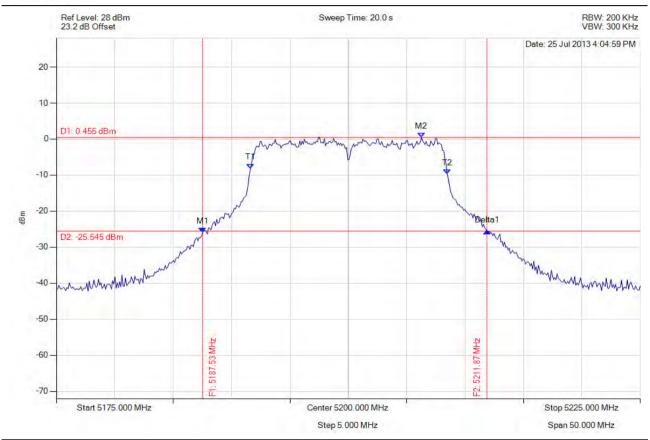
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 202 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5200.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5187.525 MHz: -25.919 dBm M2: 5206.263 MHz: 0.455 dBm Delta1: 24.349 MHz: 0.323 dB T1: 5191.633 MHz: -8.125 dBm T2: 5208.467 MHz: -9.641 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 24.349 MHz Measured 99% Bandwidth: 16.834 MHz



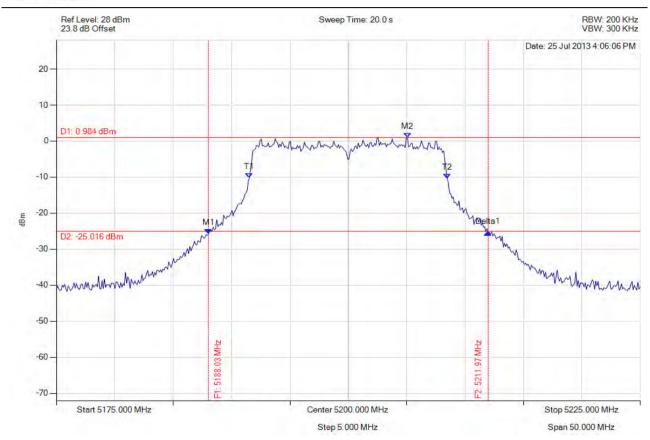
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 203 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5200.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5188.026 MHz: -25.768 dBm M2: 5205.060 MHz: 0.984 dBm Delta1: 23.948 MHz: 0.368 dB T1: 5191.533 MHz: -10.175 dBm T2: 5208.467 MHz: -10.332 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 23.948 MHz Measured 99% Bandwidth: 16.934 MHz



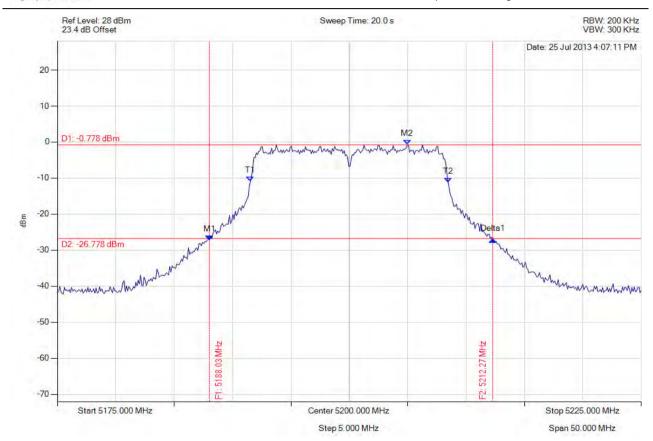
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 204 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5200.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5188.026 MHz: -27.200 dBm M2: 5204.960 MHz: -0.778 dBm Delta1: 24.248 MHz: 0.216 dB T1: 5191.533 MHz: -10.912 dBm T2: 5208.467 MHz: -11.274 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.248 MHz Measured 99% Bandwidth: 16.934 MHz



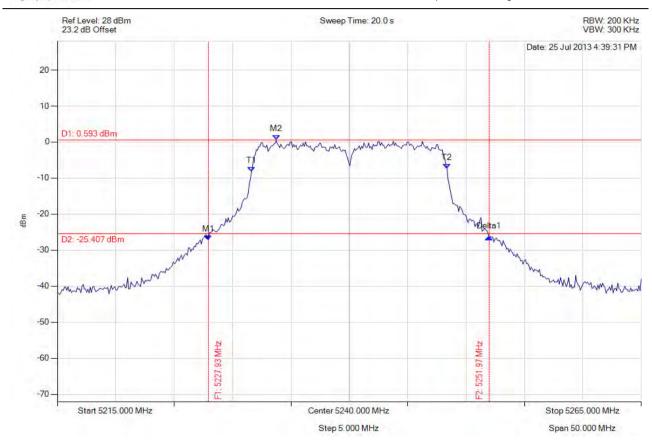
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 205 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5240.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5227.926 MHz: -27.192 dBm M2: 5233.737 MHz: 0.593 dBm Delta1: 24.048 MHz: 0.856 dB T1: 5231.633 MHz: -8.156 dBm T2: 5248.367 MHz: -7.365 dBm OBW: 16.733 MHz	Measured 26 dB Bandwidth: 24.048 MHz Measured 99% Bandwidth: 16.733 MHz



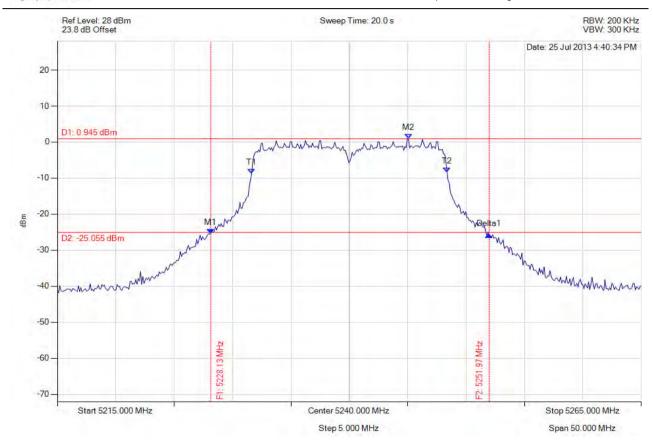
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 206 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5240.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5228.126 MHz: -25.390 dBm M2: 5245.060 MHz: 0.945 dBm Delta1: 23.848 MHz: -0.350 dB T1: 5231.633 MHz: -8.736 dBm T2: 5248.367 MHz: -8.339 dBm OBW: 16.733 MHz	Measured 26 dB Bandwidth: 23.848 MHz Measured 99% Bandwidth: 16.733 MHz



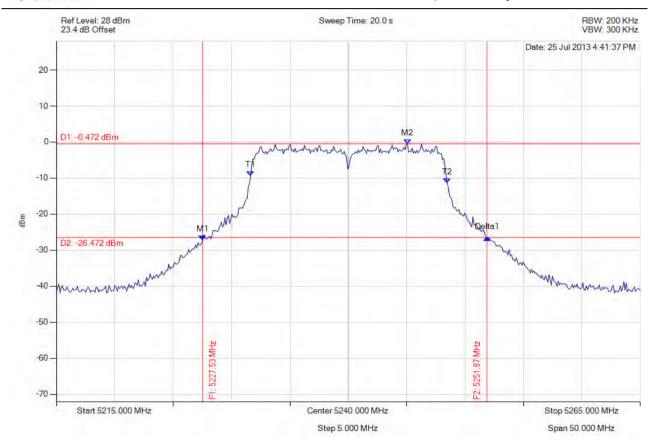
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

**Page:** 207 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5240.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5227.525 MHz: -27.287 dBm M2: 5245.060 MHz: -0.472 dBm Delta1: 24.349 MHz: 0.708 dB T1: 5231.633 MHz: -9.411 dBm T2: 5248.467 MHz: -11.386 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 24.349 MHz Measured 99% Bandwidth: 16.834 MHz



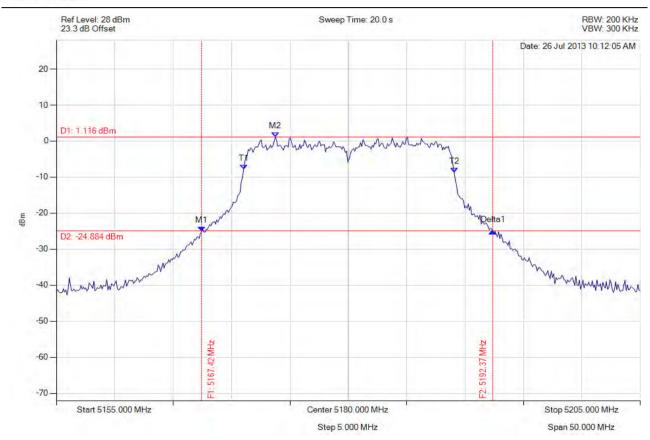
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 208 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5167.425 MHz: -25.128 dBm M2: 5173.737 MHz: 1.116 dBm Delta1: 24.950 MHz: 0.155 dB T1: 5171.032 MHz: -7.951 dBm T2: 5189.068 MHz: -8.673 dBm OBW: 18.036 MHz	Measured 26 dB Bandwidth: 24.950 MHz Measured 99% Bandwidth: 18.036 MHz



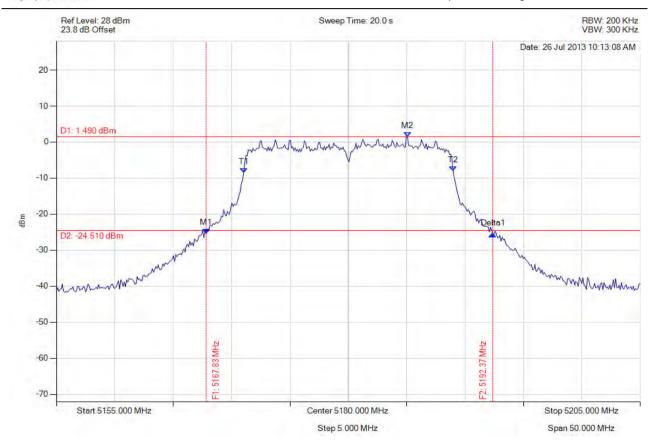
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 209 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5167.826 MHz: -25.418 dBm M2: 5185.060 MHz: 1.490 dBm Delta1: 24.549 MHz: -0.140 dB T1: 5171.032 MHz: -8.569 dBm T2: 5188.968 MHz: -8.001 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 24.549 MHz Measured 99% Bandwidth: 17.936 MHz



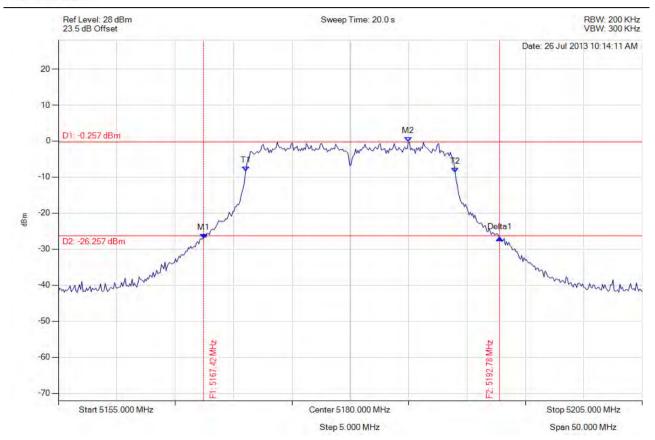
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 210 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5167.425 MHz: -27.031 dBm M2: 5184.960 MHz: -0.257 dBm Delta1: 25.351 MHz: 0.159 dB T1: 5171.032 MHz: -8.308 dBm T2: 5188.968 MHz: -8.648 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 25.351 MHz Measured 99% Bandwidth: 17.936 MHz



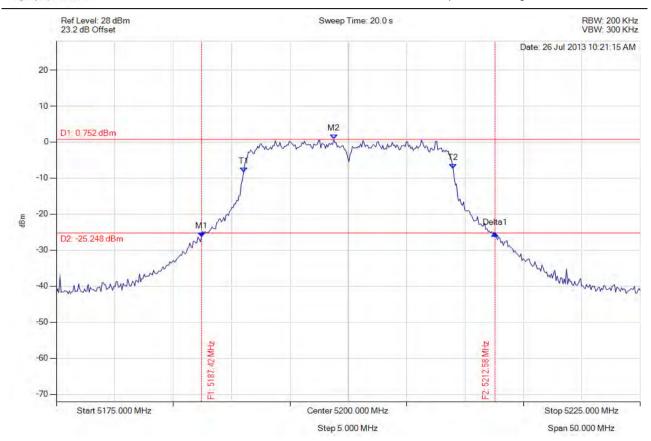
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 211 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5187.425 MHz: -26.315 dBm M2: 5198.747 MHz: 0.752 dBm Delta1: 25.150 MHz: 0.942 dB T1: 5191.032 MHz: -8.376 dBm T2: 5208.968 MHz: -7.367 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 25.150 MHz Measured 99% Bandwidth: 17.936 MHz



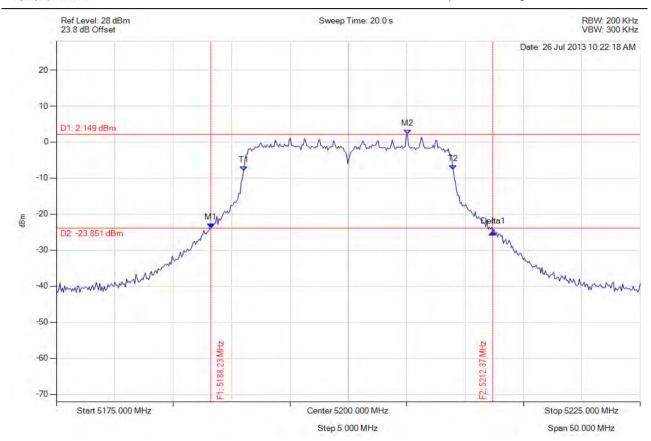
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 212 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5188.226 MHz: -23.917 dBm M2: 5205.060 MHz: 2.149 dBm Delta1: 24.148 MHz: -1.204 dB T1: 5191.032 MHz: -8.058 dBm T2: 5208.968 MHz: -7.662 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 24.148 MHz Measured 99% Bandwidth: 17.936 MHz



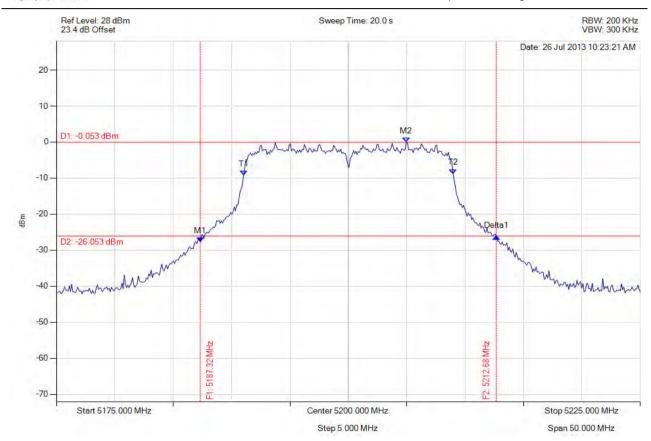
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 213 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5187.325 MHz: -27.719 dBm M2: 5204.960 MHz: -0.053 dBm Delta1: 25.351 MHz: 1.570 dB T1: 5191.032 MHz: -9.171 dBm T2: 5208.968 MHz: -8.795 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 25.351 MHz Measured 99% Bandwidth: 17.936 MHz



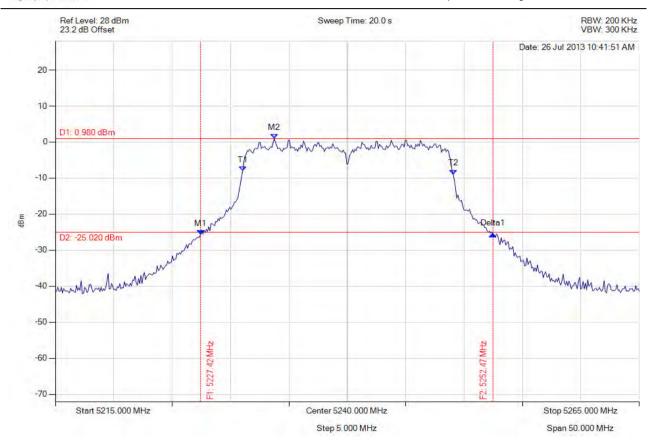
To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 214 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5227.425 MHz: -25.660 dBm M2: 5233.737 MHz: 0.980 dBm Delta1: 25.050 MHz: 0.065 dB T1: 5231.032 MHz: -8.115 dBm T2: 5249.068 MHz: -8.963 dBm OBW: 18.036 MHz	Measured 26 dB Bandwidth: 25.050 MHz Measured 99% Bandwidth: 18.036 MHz



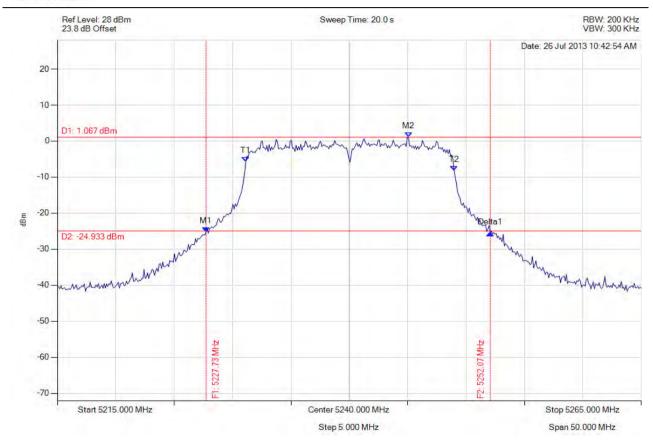
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

**Page:** 215 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5227.725 MHz: -25.201 dBm M2: 5245.060 MHz: 1.067 dBm Delta1: 24.349 MHz: -0.421 dB T1: 5231.132 MHz: -5.667 dBm T2: 5248.968 MHz: -8.180 dBm OBW: 17.836 MHz	Measured 26 dB Bandwidth: 24.349 MHz Measured 99% Bandwidth: 17.836 MHz



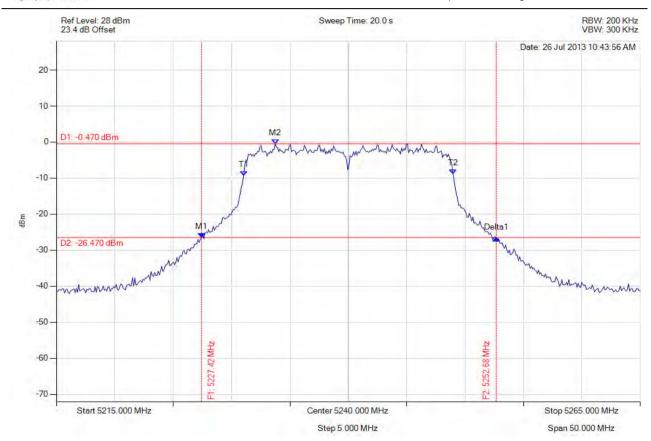
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 216 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5227.425 MHz: -26.486 dBm M2: 5233.737 MHz: -0.470 dBm Delta1: 25.251 MHz: -0.218 dB T1: 5231.032 MHz: -9.417 dBm T2: 5248.968 MHz: -8.945 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 25.251 MHz Measured 99% Bandwidth: 17.936 MHz



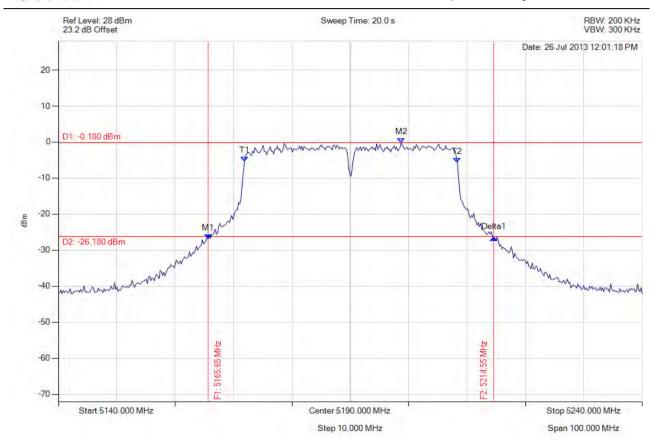
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 217 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5165.651 MHz: -26.860 dBm M2: 5198.717 MHz: -0.180 dBm Delta1: 48.898 MHz: 0.291 dB T1: 5171.864 MHz: -5.303 dBm T2: 5208.337 MHz: -5.724 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 48.898 MHz Measured 99% Bandwidth: 36.473 MHz



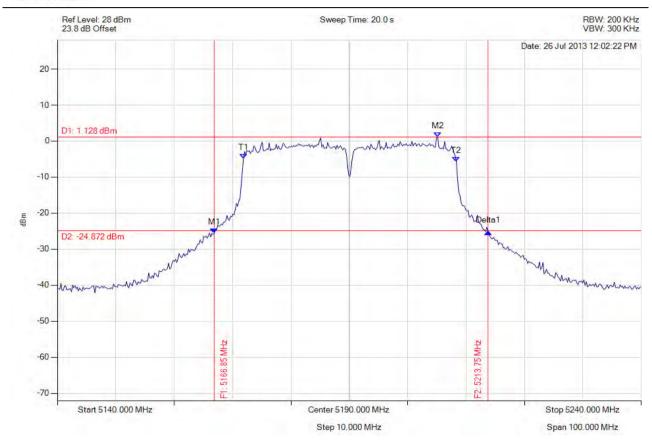
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 218 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5166.854 MHz: -25.557 dBm M2: 5205.130 MHz: 1.128 dBm Delta1: 46.894 MHz: 0.423 dB T1: 5171.864 MHz: -4.859 dBm T2: 5208.337 MHz: -5.722 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 46.894 MHz Measured 99% Bandwidth: 36.473 MHz



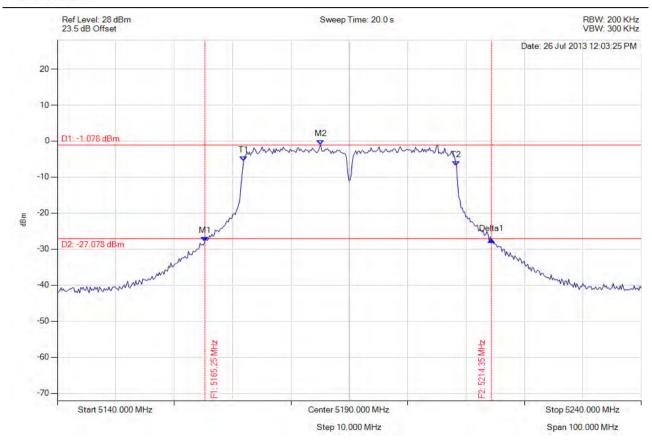
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

**Page:** 219 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5165.251 MHz: -27.871 dBm M2: 5185.090 MHz: -1.078 dBm Delta1: 49.098 MHz: 0.517 dB T1: 5171.864 MHz: -5.583 dBm T2: 5208.337 MHz: -6.940 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 49.098 MHz Measured 99% Bandwidth: 36.473 MHz



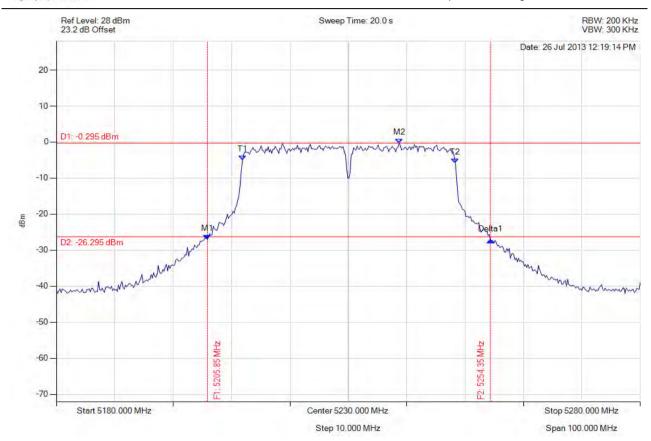
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 220 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5205.852 MHz: -27.021 dBm M2: 5238.717 MHz: -0.295 dBm Delta1: 48.497 MHz: -0.161 dB T1: 5211.864 MHz: -5.032 dBm T2: 5248.337 MHz: -5.907 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 48.497 MHz Measured 99% Bandwidth: 36.473 MHz



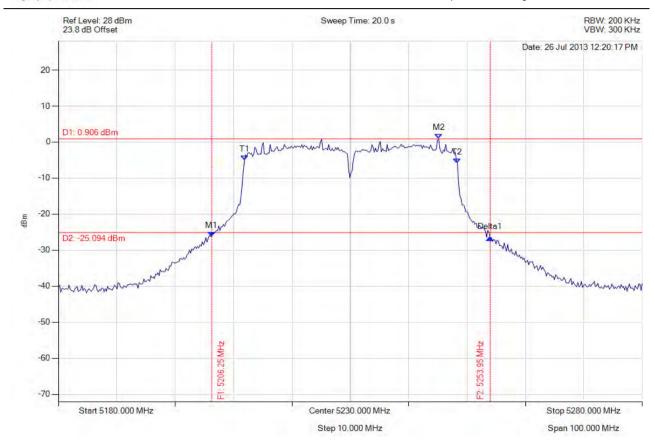
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 221 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5206.253 MHz: -26.175 dBm M2: 5245.130 MHz: 0.906 dBm Delta1: 47.695 MHz: -0.334 dB T1: 5211.864 MHz: -4.998 dBm T2: 5248.337 MHz: -5.909 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.473 MHz



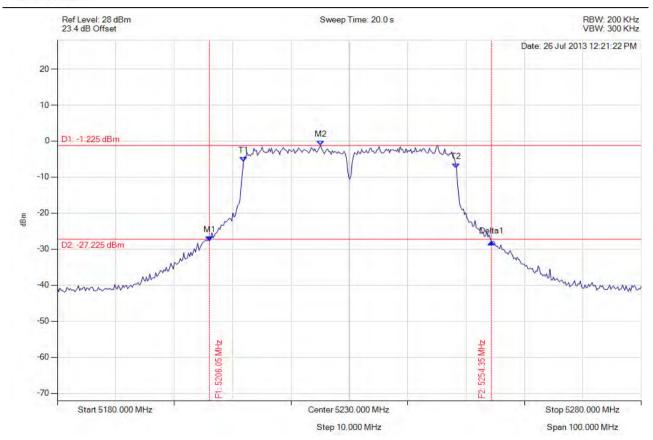
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 222 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5206.052 MHz: -27.755 dBm M2: 5225.090 MHz: -1.225 dBm Delta1: 48.297 MHz: -0.309 dB T1: 5211.864 MHz: -5.724 dBm T2: 5248.337 MHz: -7.466 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 48.297 MHz Measured 99% Bandwidth: 36.473 MHz



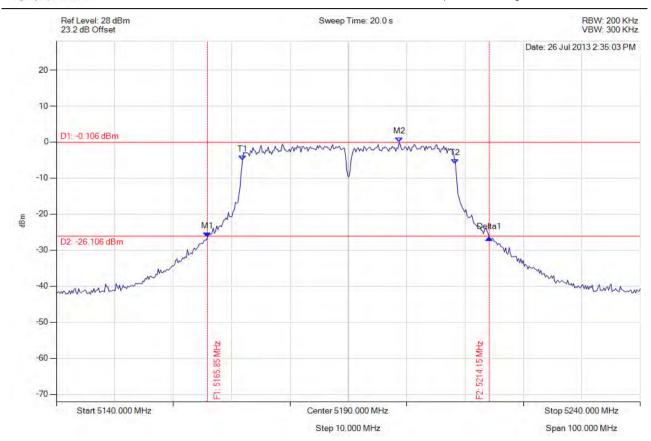
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 223 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5190.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5165.852 MHz: -26.376 dBm M2: 5198.717 MHz: -0.106 dBm Delta1: 48.297 MHz: -0.163 dB T1: 5171.864 MHz: -4.991 dBm T2: 5208.337 MHz: -5.988 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 48.297 MHz Measured 99% Bandwidth: 36.473 MHz



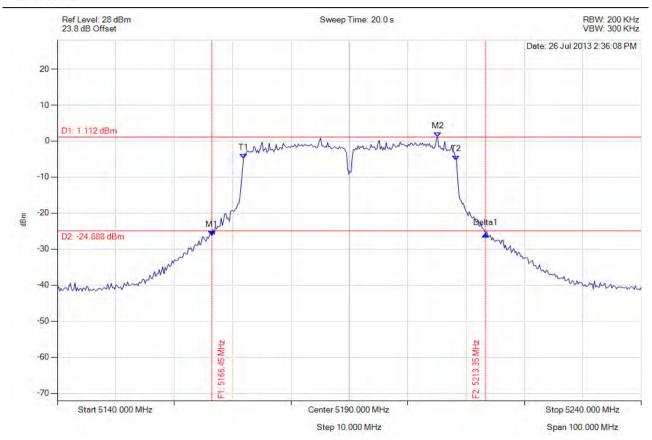
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 224 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5190.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5166.453 MHz: -26.171 dBm M2: 5205.130 MHz: 1.112 dBm Delta1: 46.894 MHz: 0.370 dB T1: 5171.864 MHz: -4.849 dBm T2: 5208.337 MHz: -5.286 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 46.894 MHz Measured 99% Bandwidth: 36.473 MHz



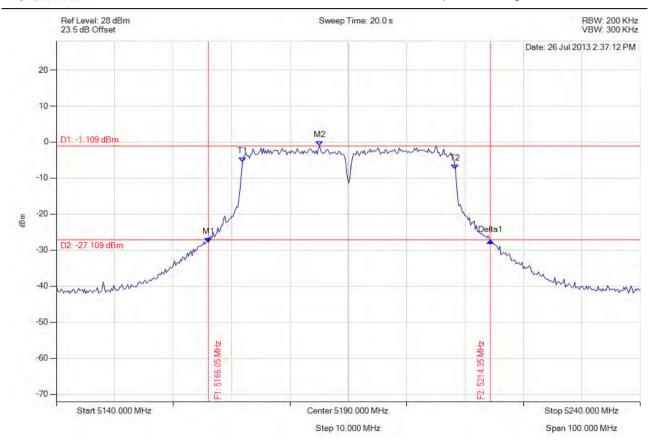
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 225 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5190.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5166.052 MHz: -27.830 dBm M2: 5185.090 MHz: -1.109 dBm Delta1: 48.297 MHz: 0.431 dB T1: 5171.864 MHz: -5.522 dBm T2: 5208.337 MHz: -7.536 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 48.297 MHz Measured 99% Bandwidth: 36.473 MHz



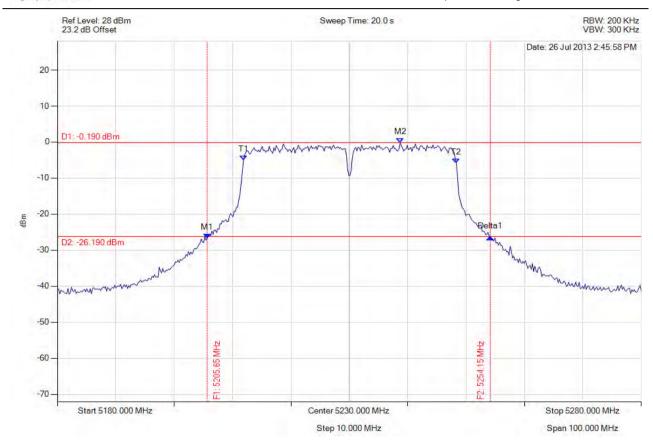
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 226 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5230.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5205.651 MHz: -26.712 dBm M2: 5238.717 MHz: -0.190 dBm Delta1: 48.497 MHz: 0.390 dB T1: 5211.864 MHz: -5.089 dBm T2: 5248.337 MHz: -5.892 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 48.497 MHz Measured 99% Bandwidth: 36.473 MHz



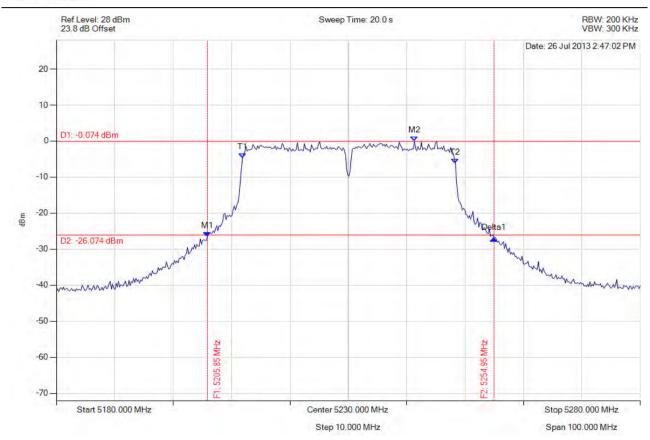
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 227 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5230.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5205.852 MHz: -26.590 dBm M2: 5241.323 MHz: -0.074 dBm Delta1: 49.098 MHz: -0.508 dB T1: 5211.864 MHz: -4.688 dBm T2: 5248.337 MHz: -6.212 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 49.098 MHz Measured 99% Bandwidth: 36.473 MHz



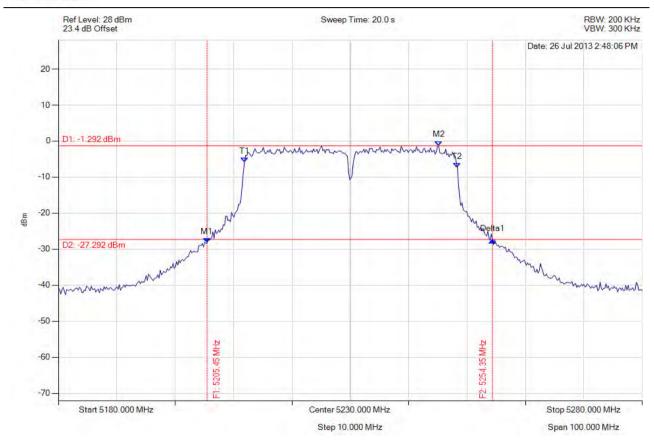
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 228 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5230.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5205.451 MHz: -28.286 dBm M2: 5245.130 MHz: -1.292 dBm Delta1: 48.898 MHz: 0.813 dB T1: 5211.864 MHz: -5.819 dBm T2: 5248.337 MHz: -7.444 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 48.898 MHz Measured 99% Bandwidth: 36.473 MHz



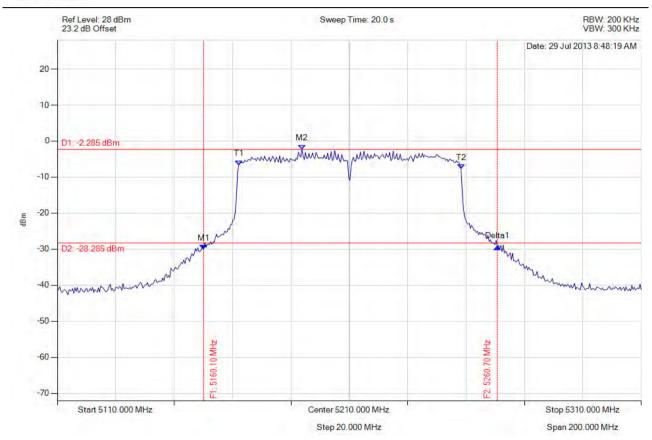
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 229 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5160.100 MHz: -30.033 dBm M2: 5193.768 MHz: -2.285 dBm Delta1: 100.601 MHz: 0.596 dB T1: 5172.124 MHz: -6.633 dBm T2: 5248.277 MHz: -7.698 dBm OBW: 76.152 MHz	Measured 26 dB Bandwidth: 100.601 MHz Measured 99% Bandwidth: 76.152 MHz



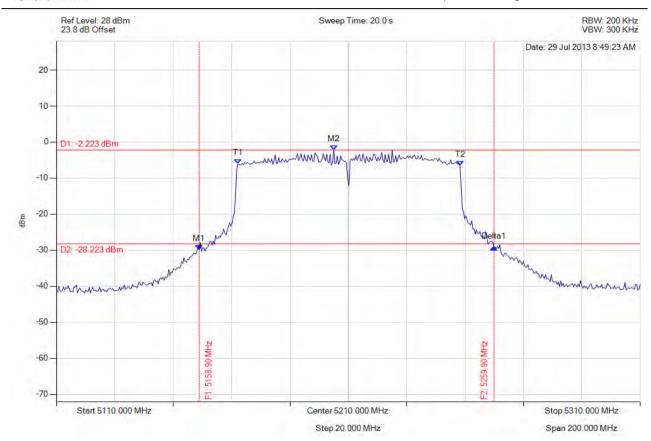
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 230 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5158.898 MHz: -29.870 dBm M2: 5204.990 MHz: -2.223 dBm Delta1: 101.002 MHz: 0.606 dB T1: 5172.124 MHz: -6.106 dBm T2: 5248.277 MHz: -6.478 dBm OBW: 76.152 MHz	Measured 26 dB Bandwidth: 101.002 MHz Measured 99% Bandwidth: 76.152 MHz



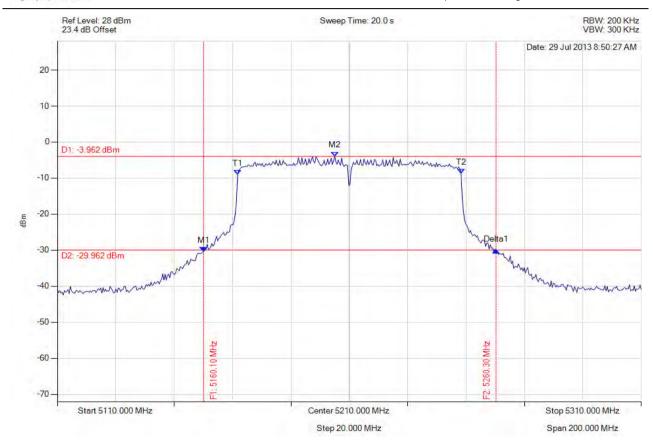
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 231 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5160.100 MHz: -30.377 dBm M2: 5204.990 MHz: -3.962 dBm Delta1: 100.200 MHz: 0.299 dB T1: 5171.723 MHz: -9.083 dBm T2: 5248.277 MHz: -8.727 dBm OBW: 76.553 MHz	Measured 26 dB Bandwidth: 100.200 MHz Measured 99% Bandwidth: 76.553 MHz



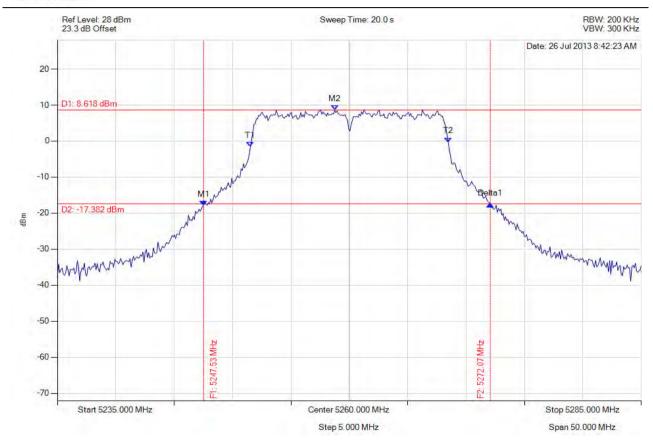
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 232 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5260.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5247.525 MHz: -17.847 dBm M2: 5258.747 MHz: 8.618 dBm Delta1: 24.549 MHz: 0.234 dB T1: 5251.533 MHz: -1.532 dBm T2: 5268.467 MHz: -0.283 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.549 MHz Measured 99% Bandwidth: 16.934 MHz



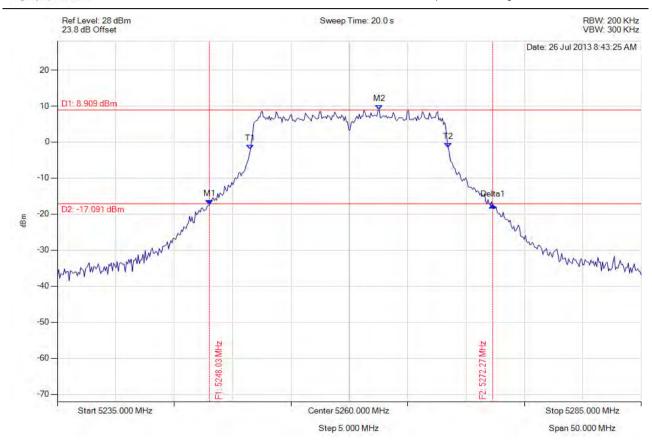
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 233 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5260.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5248.026 MHz: -17.409 dBm M2: 5262.555 MHz: 8.909 dBm Delta1: 24.248 MHz: -0.118 dB T1: 5251.533 MHz: -2.034 dBm T2: 5268.467 MHz: -1.603 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.248 MHz Measured 99% Bandwidth: 16.934 MHz



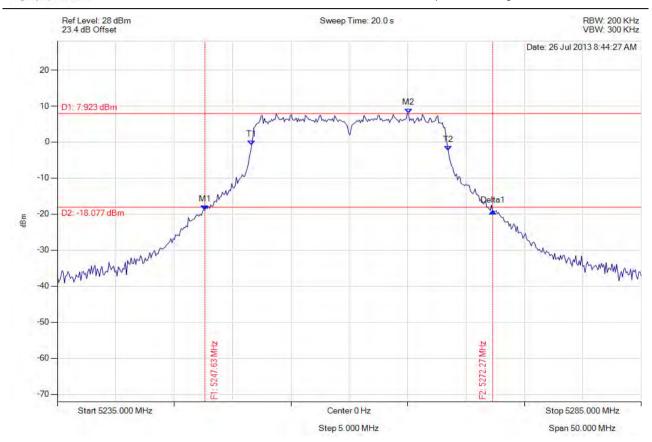
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 234 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5260.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5247.625 MHz: -18.933 dBm M2: 5265.060 MHz: 7.923 dBm Delta1: 24.649 MHz: -0.252 dB T1: 5251.633 MHz: -0.889 dBm T2: 5268.467 MHz: -2.354 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 24.649 MHz Measured 99% Bandwidth: 16.834 MHz



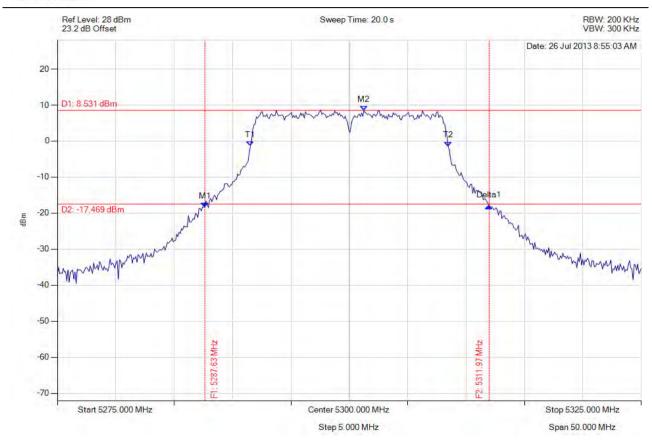
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 235 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5300.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5287.625 MHz: -18.312 dBm M2: 5301.253 MHz: 8.531 dBm Delta1: 24.349 MHz: 0.336 dB T1: 5291.533 MHz: -1.388 dBm T2: 5308.467 MHz: -1.453 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.349 MHz Measured 99% Bandwidth: 16.934 MHz



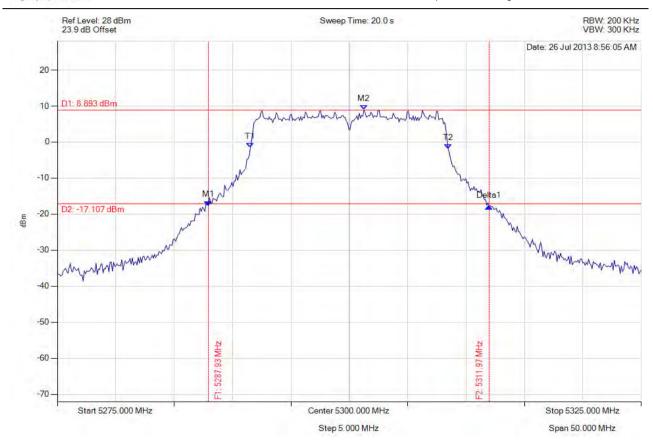
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 236 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5300.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5287.926 MHz: -17.629 dBm M2: 5301.253 MHz: 8.893 dBm Delta1: 24.048 MHz: -0.275 dB T1: 5291.533 MHz: -1.473 dBm T2: 5308.467 MHz: -1.845 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.048 MHz Measured 99% Bandwidth: 16.934 MHz



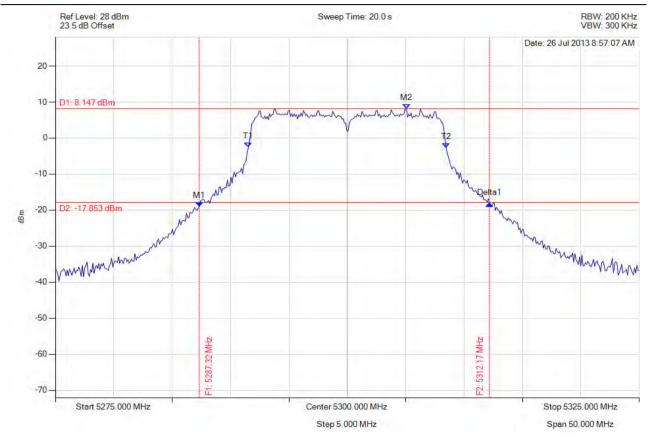
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 237 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5300.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5287.325 MHz: -19.010 dBm M2: 5305.060 MHz: 8.147 dBm Delta1: 24.850 MHz: 0.866 dB T1: 5291.533 MHz: -2.561 dBm T2: 5308.467 MHz: -2.720 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.850 MHz Measured 99% Bandwidth: 16.934 MHz



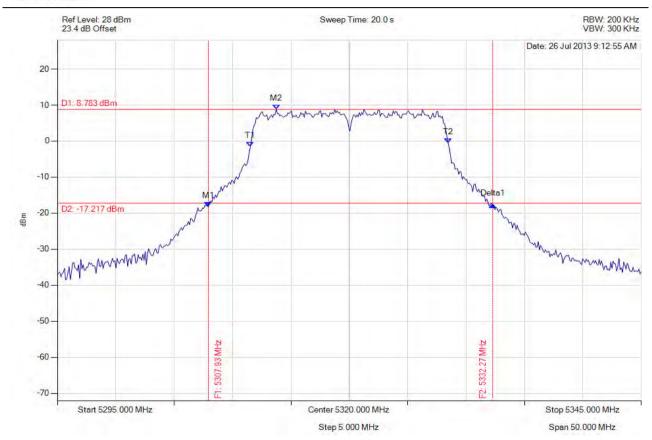
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 238 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5320.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5307.926 MHz: -18.150 dBm M2: 5313.737 MHz: 8.783 dBm Delta1: 24.349 MHz: 0.523 dB T1: 5311.533 MHz: -1.567 dBm T2: 5328.467 MHz: -0.609 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.349 MHz Measured 99% Bandwidth: 16.934 MHz



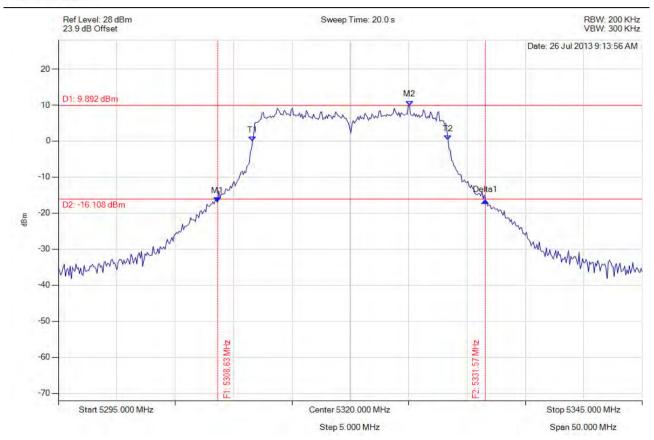
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 239 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5320.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5308.627 MHz: -16.950 dBm M2: 5325.060 MHz: 9.892 dBm Delta1: 22.946 MHz: 0.388 dB T1: 5311.633 MHz: -0.062 dBm T2: 5328.367 MHz: 0.341 dBm OBW: 16.733 MHz	Measured 26 dB Bandwidth: 22.946 MHz Measured 99% Bandwidth: 16.733 MHz



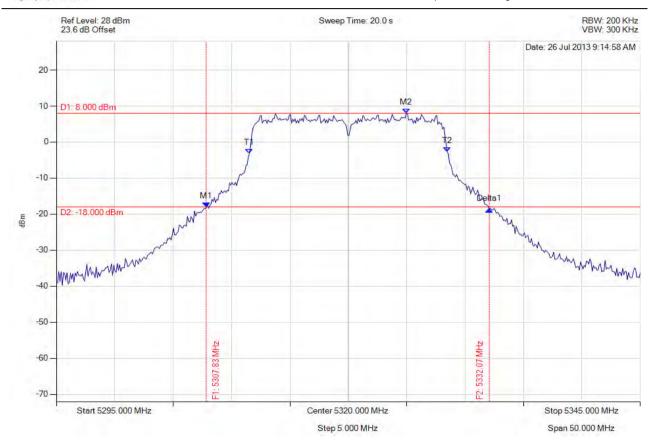
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 240 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5320.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5307.826 MHz: -18.101 dBm M2: 5324.960 MHz: 8.000 dBm Delta1: 24.248 MHz: -0.610 dB T1: 5311.533 MHz: -3.177 dBm T2: 5328.467 MHz: -2.685 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.248 MHz Measured 99% Bandwidth: 16.934 MHz



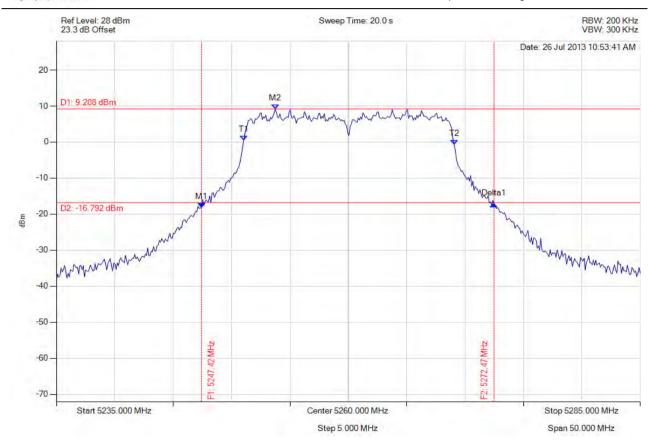
To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 241 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5247.425 MHz: -18.186 dBm M2: 5253.737 MHz: 9.208 dBm Delta1: 25.050 MHz: 1.021 dB T1: 5251.032 MHz: 0.426 dBm T2: 5269.068 MHz: -0.647 dBm OBW: 18.036 MHz	Measured 26 dB Bandwidth: 25.050 MHz Measured 99% Bandwidth: 18.036 MHz



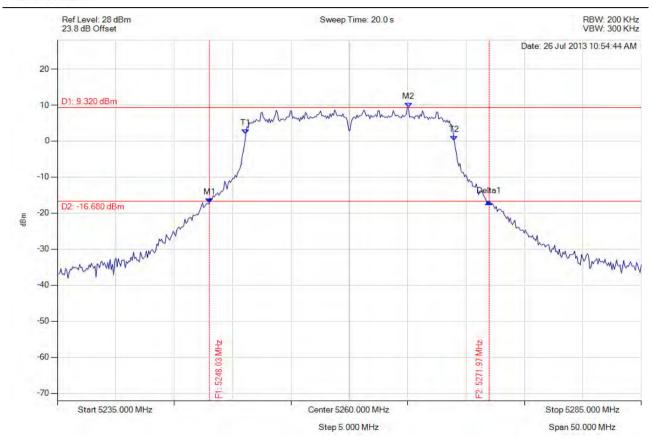
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 242 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5248.026 MHz: -17.224 dBm M2: 5265.060 MHz: 9.320 dBm Delta1: 23.948 MHz: 0.415 dB T1: 5251.132 MHz: 2.009 dBm T2: 5268.968 MHz: 0.201 dBm OBW: 17.836 MHz	Measured 26 dB Bandwidth: 23.948 MHz Measured 99% Bandwidth: 17.836 MHz



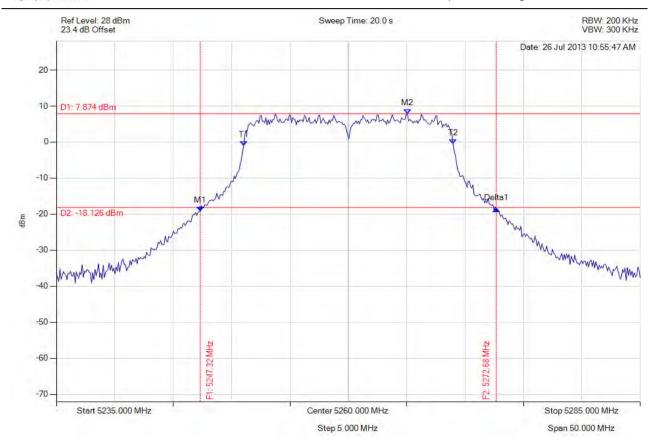
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 243 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5247.325 MHz: -19.252 dBm M2: 5265.060 MHz: 7.874 dBm Delta1: 25.351 MHz: 0.757 dB T1: 5251.032 MHz: -1.056 dBm T2: 5268.968 MHz: -0.501 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 25.351 MHz Measured 99% Bandwidth: 17.936 MHz



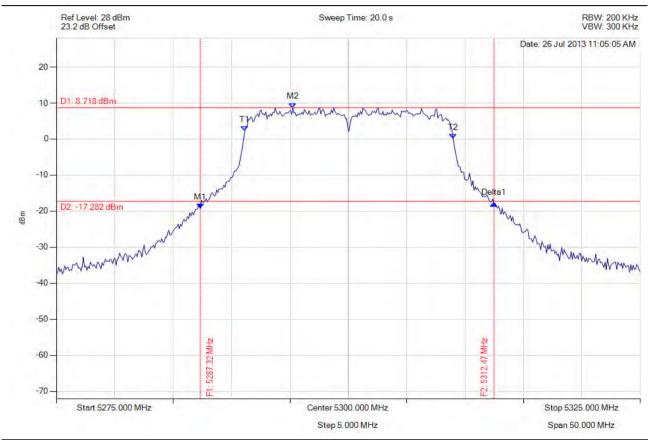
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 244 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5287.325 MHz: -19.254 dBm M2: 5295.240 MHz: 8.718 dBm Delta1: 25.150 MHz: 1.332 dB T1: 5291.132 MHz: 2.237 dBm T2: 5308.968 MHz: 0.156 dBm OBW: 17.836 MHz	Measured 26 dB Bandwidth: 25.150 MHz Measured 99% Bandwidth: 17.836 MHz



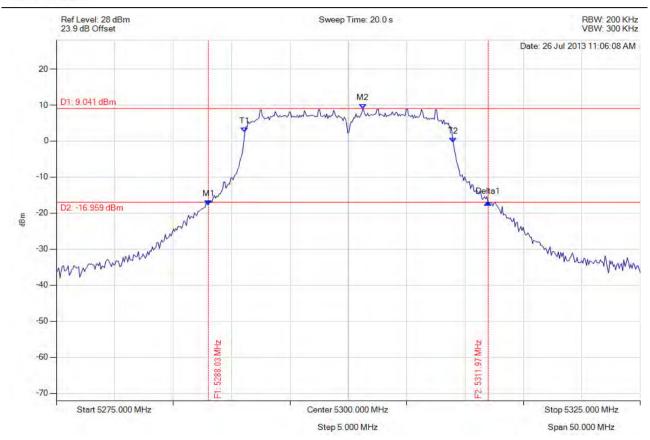
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 245 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5288.026 MHz: -17.696 dBm M2: 5301.253 MHz: 9.041 dBm Delta1: 23.948 MHz: 0.596 dB T1: 5291.132 MHz: 2.476 dBm T2: 5308.968 MHz: -0.322 dBm OBW: 17.836 MHz	Measured 26 dB Bandwidth: 23.948 MHz Measured 99% Bandwidth: 17.836 MHz



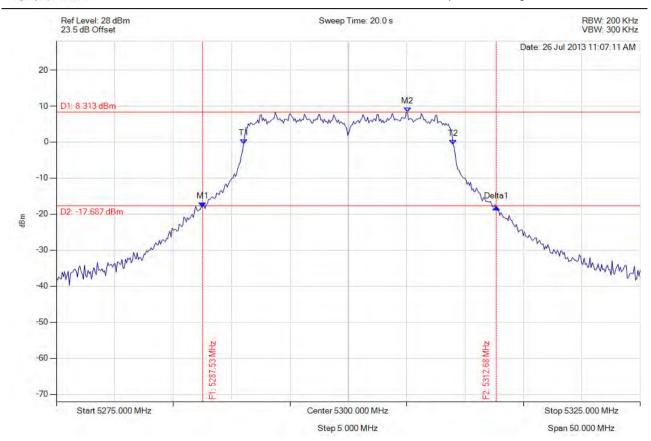
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 246 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5287.525 MHz: -18.036 dBm M2: 5305.060 MHz: 8.313 dBm Delta1: 25.150 MHz: -0.067 dB T1: 5291.032 MHz: -0.511 dBm T2: 5308.968 MHz: -0.690 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 25.150 MHz Measured 99% Bandwidth: 17.936 MHz



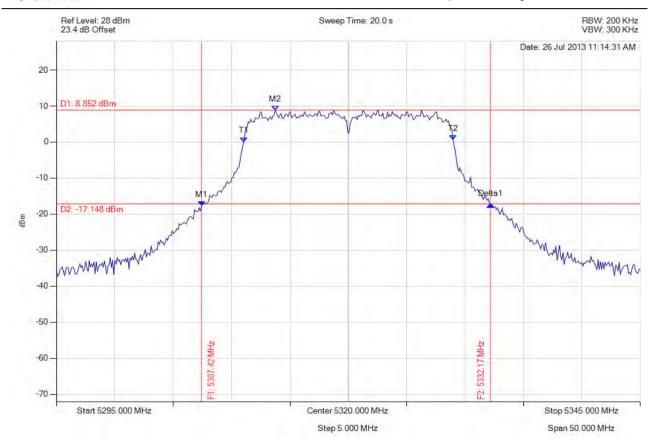
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 247 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5307.425 MHz: -17.786 dBm M2: 5313.737 MHz: 8.852 dBm Delta1: 24.749 MHz: 0.474 dB T1: 5311.032 MHz: 0.048 dBm T2: 5328.968 MHz: 0.622 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 24.749 MHz Measured 99% Bandwidth: 17.936 MHz



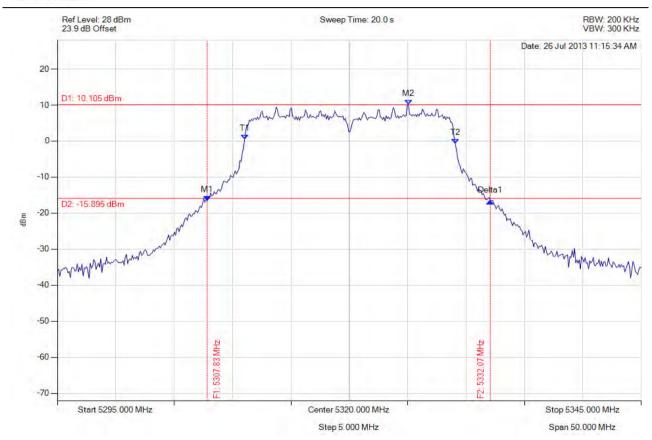
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 248 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5307.826 MHz: -16.622 dBm M2: 5325.060 MHz: 10.105 dBm Delta1: 24.248 MHz: -0.157 dB T1: 5311.032 MHz: 0.406 dBm T2: 5329.068 MHz: -0.643 dBm OBW: 18.036 MHz	Measured 26 dB Bandwidth: 24.248 MHz Measured 99% Bandwidth: 18.036 MHz



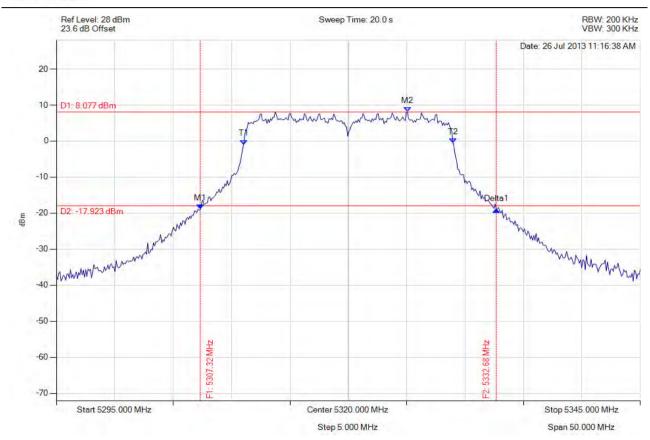
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 249 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5307.325 MHz: -18.949 dBm M2: 5325.060 MHz: 8.077 dBm Delta1: 25.351 MHz: -0.120 dB T1: 5311.032 MHz: -0.956 dBm T2: 5328.968 MHz: -0.550 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 25.351 MHz Measured 99% Bandwidth: 17.936 MHz



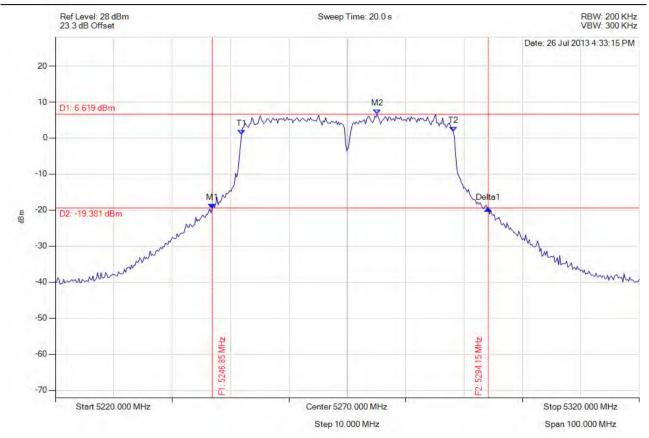
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 250 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5246.854 MHz: -19.539 dBm M2: 5275.110 MHz: 6.619 dBm Delta1: 47.295 MHz: -0.012 dB T1: 5251.864 MHz: 1.008 dBm T2: 5288.136 MHz: 1.840 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.295 MHz Measured 99% Bandwidth: 36.273 MHz



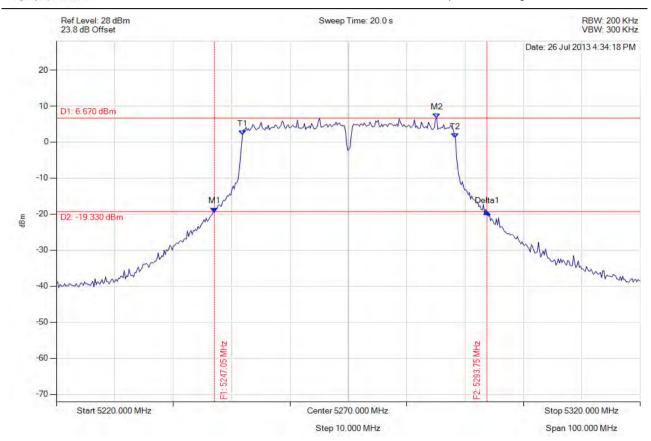
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 251 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5247.054 MHz: -19.474 dBm M2: 5285.130 MHz: 6.670 dBm Delta1: 46.693 MHz: 0.045 dB T1: 5251.864 MHz: 1.974 dBm T2: 5288.337 MHz: 1.155 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 46.693 MHz Measured 99% Bandwidth: 36.473 MHz



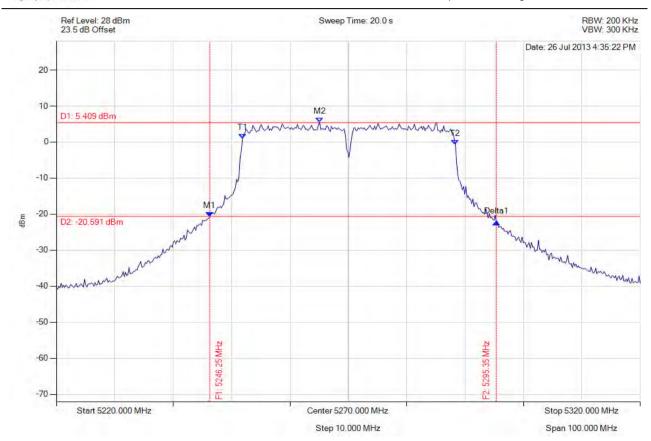
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 252 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5246.253 MHz: -20.761 dBm M2: 5265.090 MHz: 5.409 dBm Delta1: 49.098 MHz: -1.477 dB T1: 5251.864 MHz: 1.008 dBm T2: 5288.337 MHz: -0.666 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 49.098 MHz Measured 99% Bandwidth: 36.473 MHz



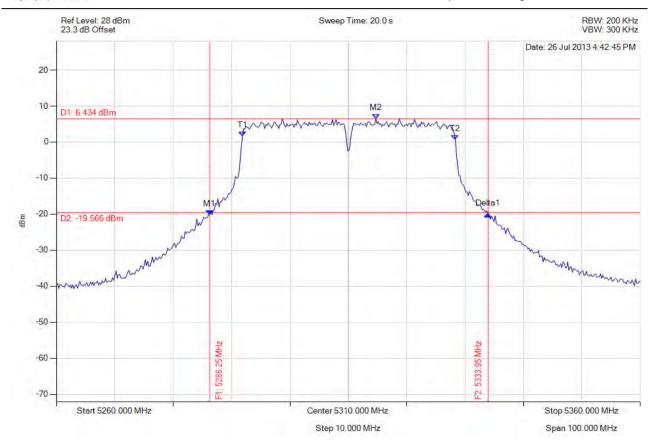
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 253 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5286.253 MHz: -20.157 dBm M2: 5314.709 MHz: 6.434 dBm Delta1: 47.695 MHz: 0.171 dB T1: 5291.864 MHz: 1.606 dBm T2: 5328.337 MHz: 0.644 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.473 MHz



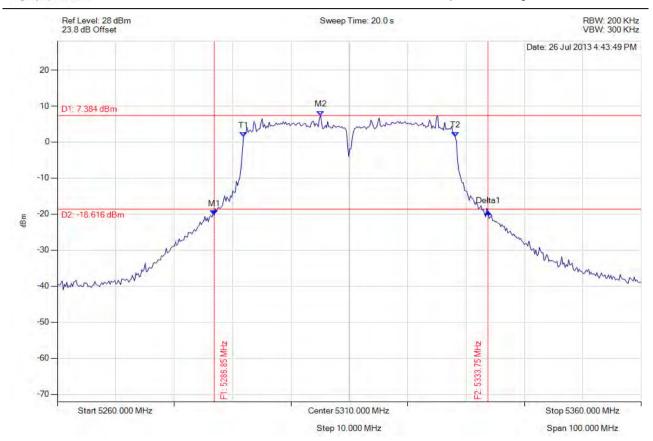
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 254 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5286.854 MHz: -20.147 dBm M2: 5305.090 MHz: 7.384 dBm Delta1: 46.894 MHz: 0.757 dB T1: 5291.864 MHz: 1.512 dBm T2: 5328.136 MHz: 1.543 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 46.894 MHz Measured 99% Bandwidth: 36.273 MHz



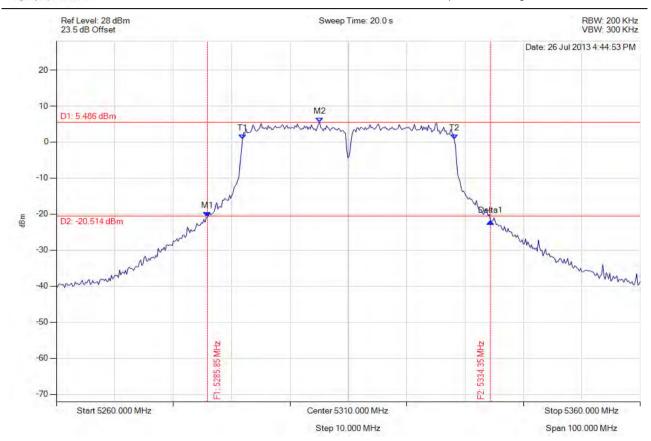
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 255 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5285.852 MHz: -20.779 dBm M2: 5305.090 MHz: 5.486 dBm Delta1: 48.497 MHz: -1.222 dB T1: 5291.864 MHz: 0.831 dBm T2: 5328.136 MHz: 0.738 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 48.497 MHz Measured 99% Bandwidth: 36.273 MHz



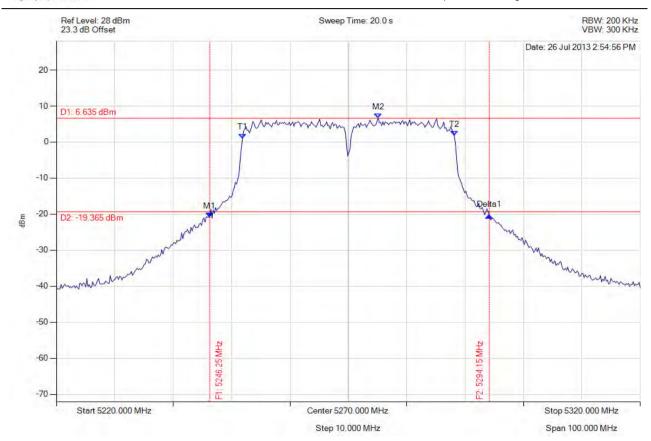
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 256 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5270.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5246.253 MHz: -20.816 dBm M2: 5275.110 MHz: 6.635 dBm Delta1: 47.896 MHz: 0.364 dB T1: 5251.864 MHz: 1.041 dBm T2: 5288.136 MHz: 1.828 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.896 MHz Measured 99% Bandwidth: 36.273 MHz



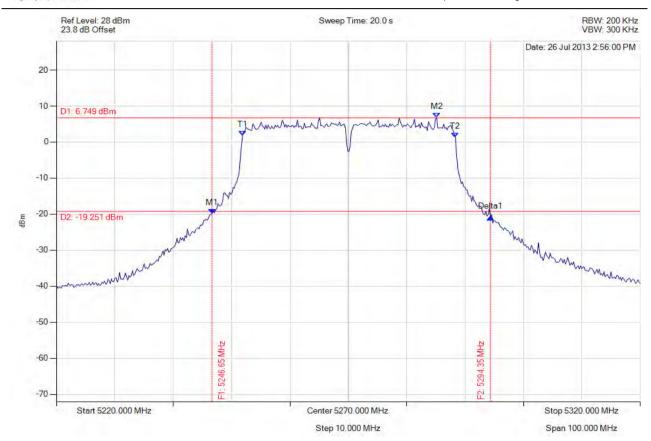
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 257 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5270.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5246.653 MHz: -19.828 dBm M2: 5285.130 MHz: 6.749 dBm Delta1: 47.695 MHz: -1.123 dB T1: 5251.864 MHz: 1.750 dBm T2: 5288.337 MHz: 1.258 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.473 MHz



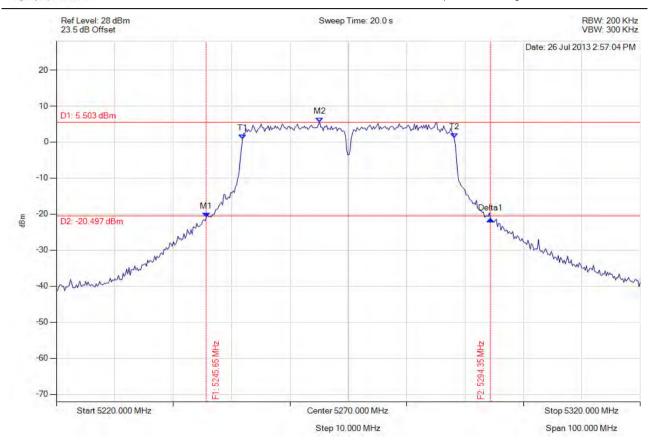
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 258 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5270.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5245.651 MHz: -20.926 dBm M2: 5265.090 MHz: 5.503 dBm Delta1: 48.697 MHz: -0.474 dB T1: 5251.864 MHz: 0.774 dBm T2: 5288.136 MHz: 1.075 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 48.697 MHz Measured 99% Bandwidth: 36.273 MHz



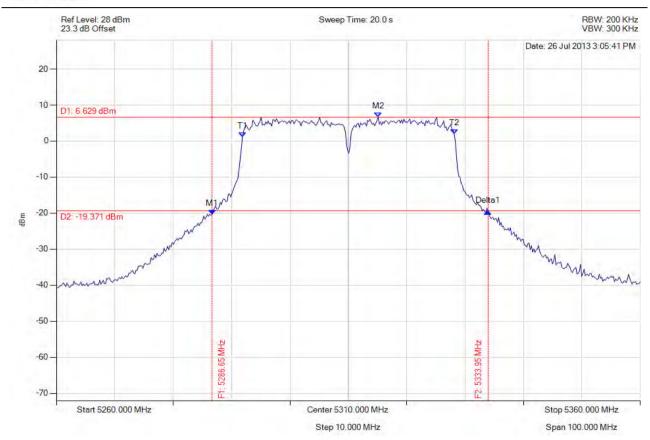
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

**Page:** 259 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5310.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5286.653 MHz: -20.403 dBm M2: 5315.110 MHz: 6.629 dBm Delta1: 47.295 MHz: 0.925 dB T1: 5291.864 MHz: 1.203 dBm T2: 5328.136 MHz: 1.994 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.295 MHz Measured 99% Bandwidth: 36.273 MHz



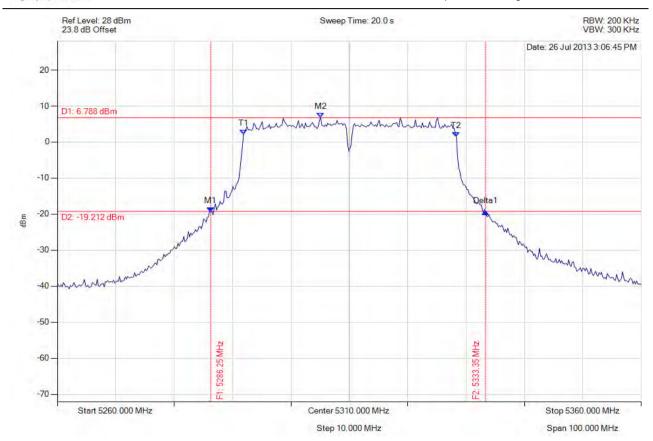
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 260 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5310.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5286.253 MHz: -19.431 dBm M2: 5305.090 MHz: 6.788 dBm Delta1: 47.094 MHz: -0.024 dB T1: 5291.864 MHz: 2.056 dBm T2: 5328.337 MHz: 1.447 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 47.094 MHz Measured 99% Bandwidth: 36.473 MHz



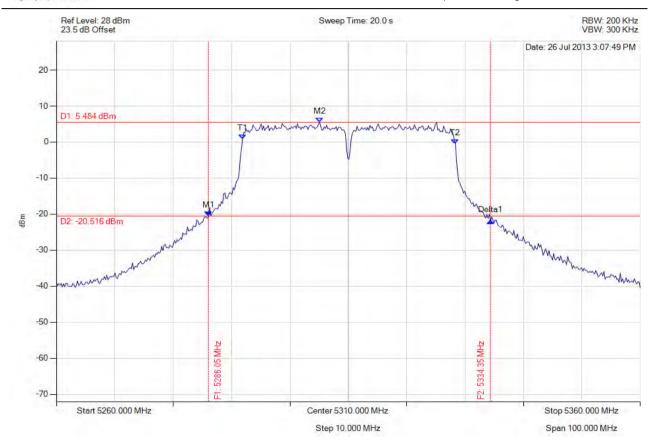
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 261 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5310.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5286.052 MHz: -20.627 dBm M2: 5305.090 MHz: 5.484 dBm Delta1: 48.297 MHz: -1.271 dB T1: 5291.864 MHz: 0.752 dBm T2: 5328.337 MHz: -0.489 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 48.297 MHz Measured 99% Bandwidth: 36.473 MHz



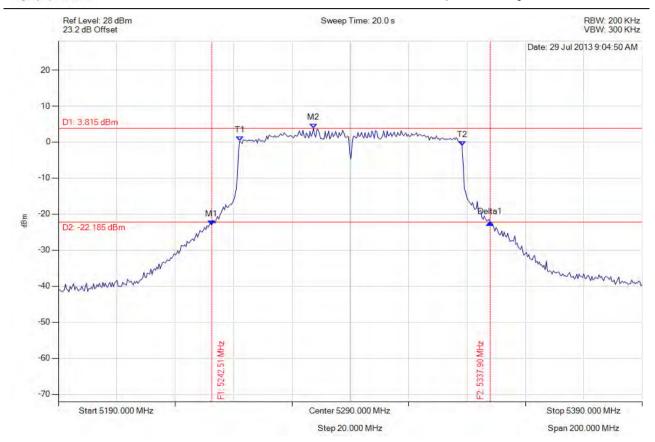
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 262 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5290.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5242.505 MHz: -22.984 dBm M2: 5277.375 MHz: 3.815 dBm Delta1: 95.391 MHz: 0.600 dB T1: 5252.124 MHz: 0.325 dBm T2: 5328.277 MHz: -0.993 dBm OBW: 76.152 MHz	Measured 26 dB Bandwidth: 95.391 MHz Measured 99% Bandwidth: 76.152 MHz



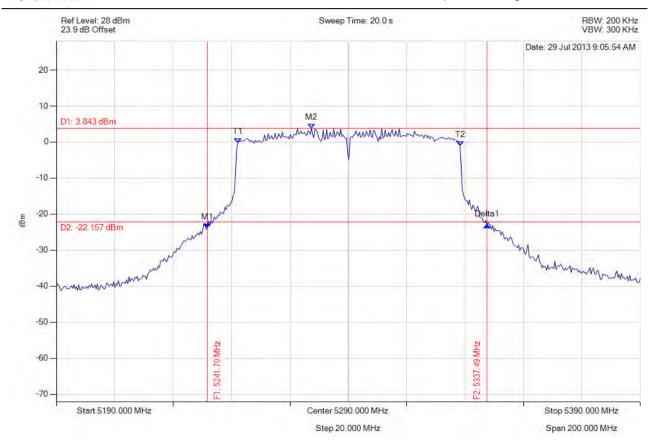
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 263 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5290.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5241.703 MHz: -23.854 dBm M2: 5277.375 MHz: 3.843 dBm Delta1: 95.792 MHz: 0.795 dB T1: 5252.124 MHz: -0.232 dBm T2: 5328.277 MHz: -1.103 dBm OBW: 76.152 MHz	Measured 26 dB Bandwidth: 95.792 MHz Measured 99% Bandwidth: 76.152 MHz



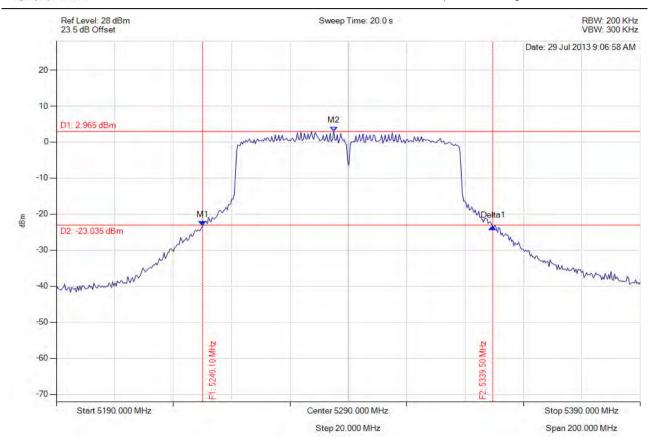
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 264 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5290.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5240.100 MHz: -23.263 dBm M2: 5284.990 MHz: 2.965 dBm Delta1: 99.399 MHz: -0.207 dB T1: 0 Hz: 500.000 dBm T2: 0 Hz: 500.000 dBm OBW: 75.752 MHz	Measured 26 dB Bandwidth: 99.399 MHz Measured 99% Bandwidth: 75.752 MHz



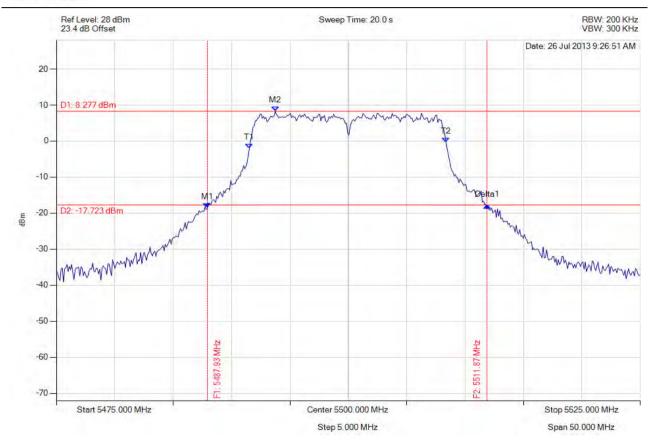
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 265 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5500.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5487.926 MHz: -18.624 dBm M2: 5493.737 MHz: 8.277 dBm Delta1: 23.948 MHz: 0.738 dB T1: 5491.533 MHz: -2.040 dBm T2: 5508.367 MHz: -0.383 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 23.948 MHz Measured 99% Bandwidth: 16.834 MHz



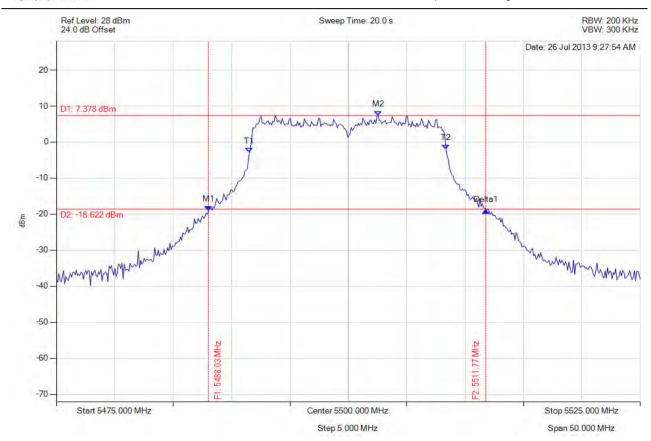
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 266 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5500.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5488.026 MHz: -18.971 dBm M2: 5502.555 MHz: 7.378 dBm Delta1: 23.747 MHz: -0.077 dB T1: 5491.533 MHz: -2.901 dBm T2: 5508.367 MHz: -1.951 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 23.747 MHz Measured 99% Bandwidth: 16.834 MHz



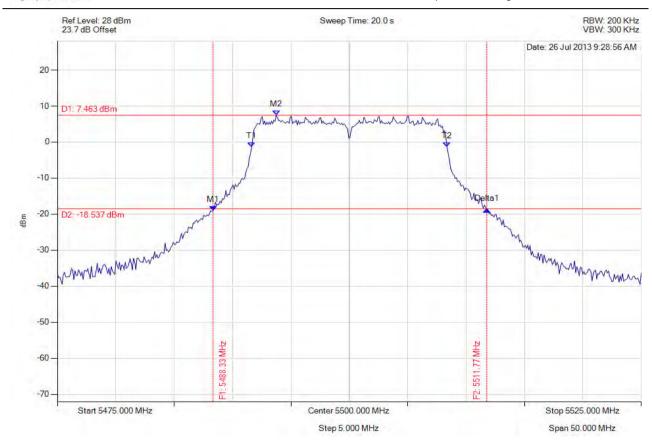
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 267 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5500.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5488.327 MHz: -19.022 dBm M2: 5493.737 MHz: 7.463 dBm Delta1: 23.447 MHz: 0.366 dB T1: 5491.633 MHz: -1.353 dBm T2: 5508.367 MHz: -1.432 dBm OBW: 16.733 MHz	Measured 26 dB Bandwidth: 23.447 MHz Measured 99% Bandwidth: 16.733 MHz



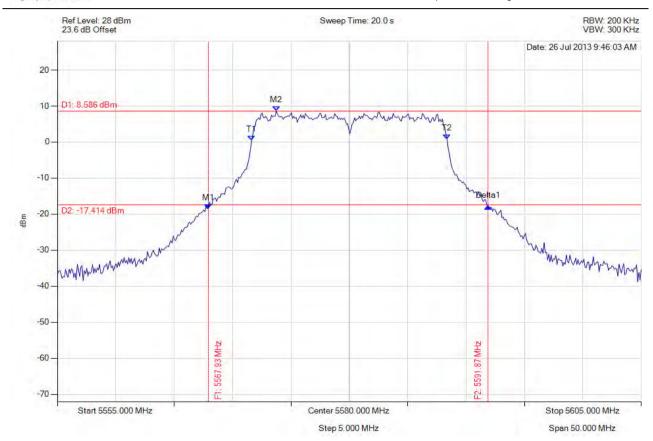
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 268 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5580.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5567.926 MHz: -18.479 dBm M2: 5573.737 MHz: 8.586 dBm Delta1: 23.948 MHz: 0.574 dB T1: 5571.633 MHz: 0.494 dBm T2: 5588.367 MHz: 0.858 dBm OBW: 16.733 MHz	Measured 26 dB Bandwidth: 23.948 MHz Measured 99% Bandwidth: 16.733 MHz



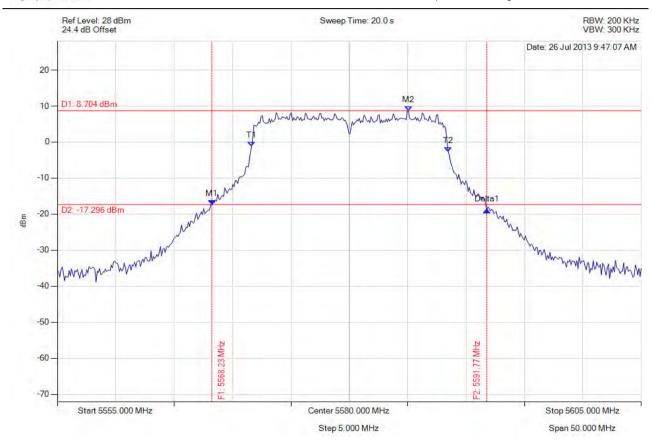
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 269 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5580.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5568.226 MHz: -17.416 dBm M2: 5585.060 MHz: 8.704 dBm Delta1: 23.547 MHz: -1.415 dB T1: 5571.633 MHz: -1.135 dBm T2: 5588.467 MHz: -2.655 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 23.547 MHz Measured 99% Bandwidth: 16.834 MHz



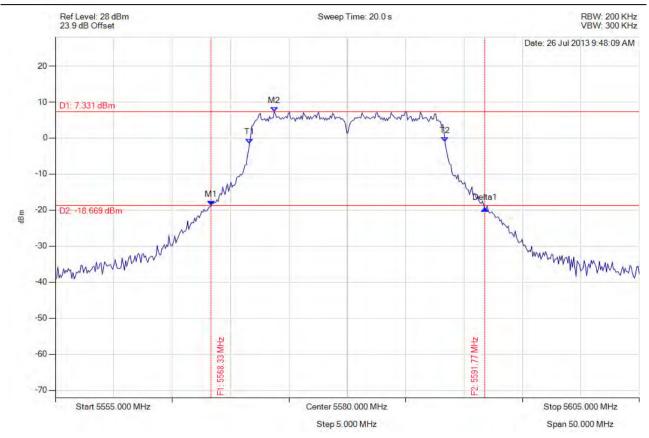
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

**Page:** 270 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5580.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5568.327 MHz: -18.752 dBm M2: 5573.737 MHz: 7.331 dBm Delta1: 23.447 MHz: -0.826 dB T1: 5571.633 MHz: -1.459 dBm T2: 5588.367 MHz: -1.052 dBm OBW: 16.733 MHz	Measured 26 dB Bandwidth: 23.447 MHz Measured 99% Bandwidth: 16.733 MHz



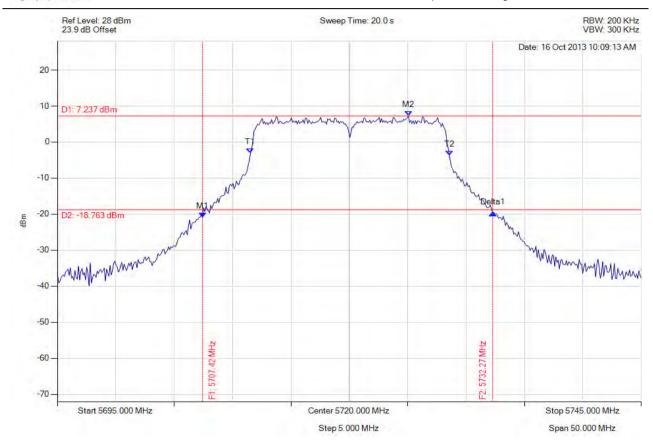
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 271 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5700.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5707.425 MHz: -20.869 dBm M2: 5725.060 MHz: 7.237 dBm Delta1: 24.850 MHz: 1.220 dB T1: 5711.533 MHz: -3.070 dBm T2: 5728.567 MHz: -3.718 dBm OBW: 17.034 MHz	Measured 26 dB Bandwidth: 24.850 MHz Measured 99% Bandwidth: 17.034 MHz



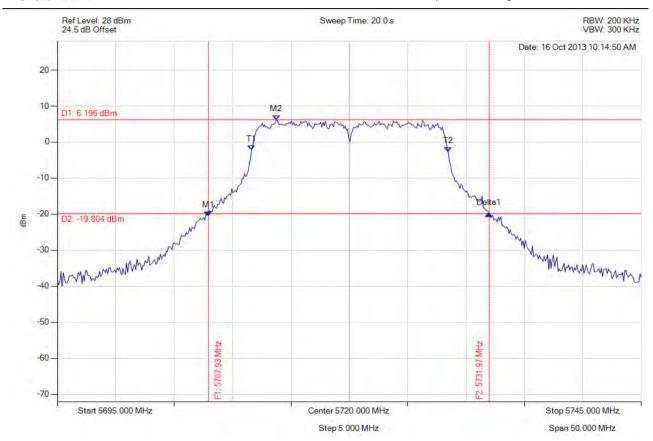
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 272 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5700.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5707.926 MHz: -20.478 dBm M2: 5713.737 MHz: 6.196 dBm Delta1: 24.048 MHz: 0.651 dB T1: 5711.633 MHz: -2.134 dBm T2: 5728.467 MHz: -2.777 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 24.048 MHz Measured 99% Bandwidth: 16.834 MHz



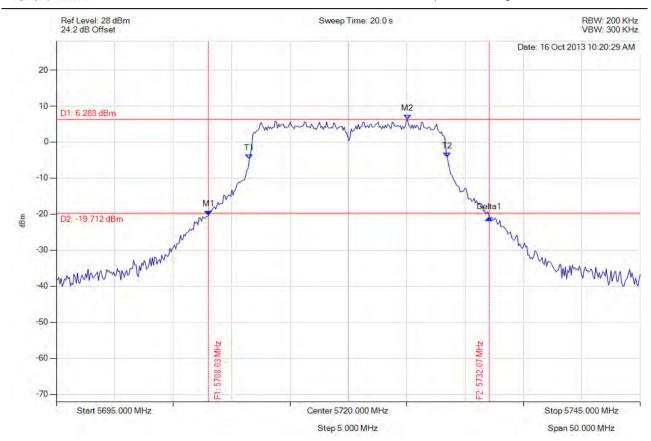
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 273 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5700.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5708.026 MHz: -20.303 dBm M2: 5725.060 MHz: 6.288 dBm Delta1: 24.048 MHz: -0.716 dB T1: 5711.533 MHz: -4.652 dBm T2: 5728.467 MHz: -4.225 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.048 MHz Measured 99% Bandwidth: 16.934 MHz



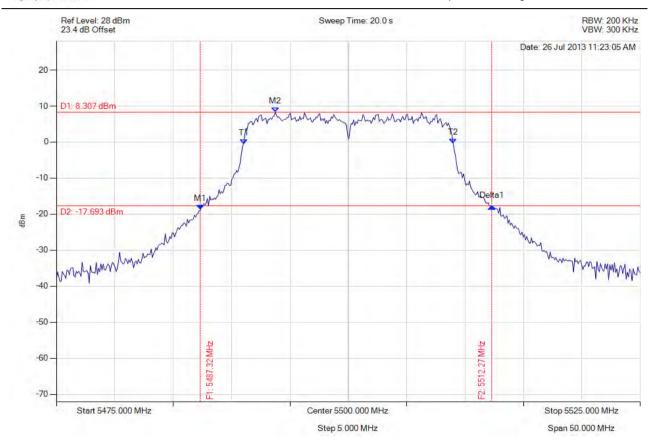
To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 274 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5487.325 MHz: -18.792 dBm M2: 5493.737 MHz: 8.307 dBm Delta1: 24.950 MHz: 0.976 dB T1: 5491.032 MHz: -0.468 dBm T2: 5508.968 MHz: -0.312 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 24.950 MHz Measured 99% Bandwidth: 17.936 MHz



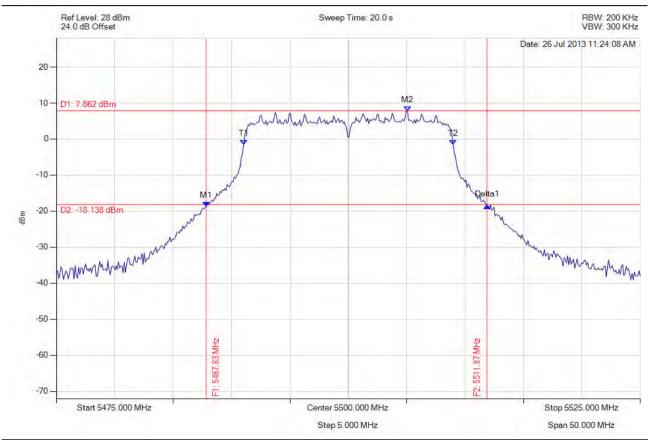
To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 275 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5487.826 MHz: -18.790 dBm M2: 5505.060 MHz: 7.862 dBm Delta1: 24.048 MHz: 0.327 dB T1: 5491.032 MHz: -1.546 dBm T2: 5508.968 MHz: -1.565 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 24.048 MHz Measured 99% Bandwidth: 17.936 MHz



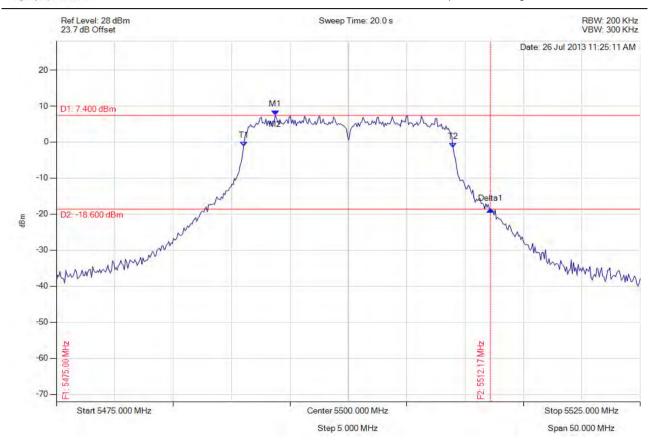
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 276 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5487.721 MHz: 7.400 dBm M2: 5493.737 MHz: 7.400 dBm Delta1: 5512.17 MHz: -26.099 dB T1: 5491.032 MHz: -1.235 dBm T2: 5508.968 MHz: -1.514 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 24.449 MHz Measured 99% Bandwidth: 17.936 MHz



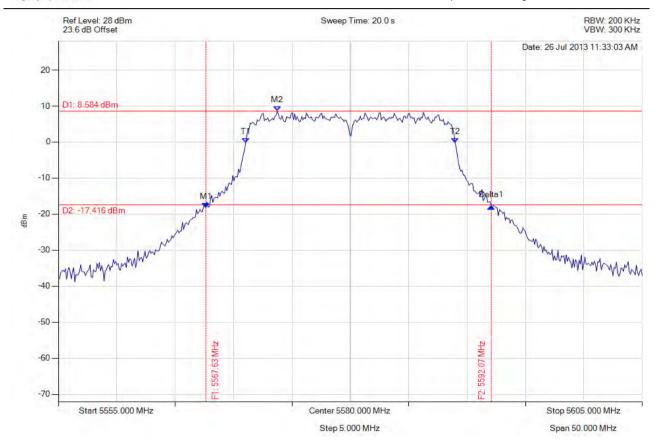
To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 277 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5567.625 MHz: -18.180 dBm M2: 5573.737 MHz: 8.584 dBm Delta1: 24.449 MHz: 0.380 dB T1: 5571.032 MHz: -0.257 dBm T2: 5588.968 MHz: -0.133 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 24.449 MHz Measured 99% Bandwidth: 17.936 MHz



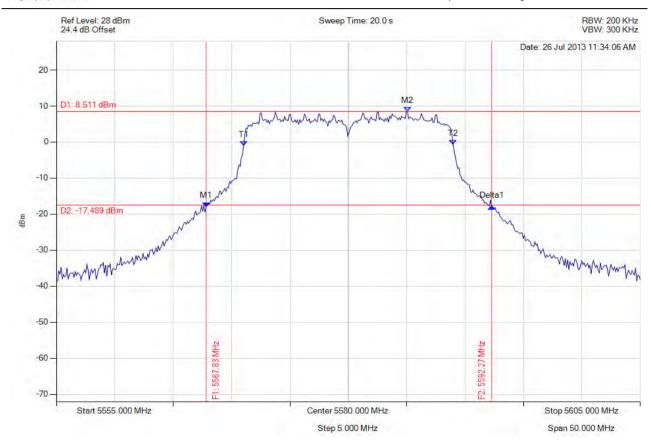
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 278 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5567.826 MHz: -17.969 dBm M2: 5585.060 MHz: 8.511 dBm Delta1: 24.449 MHz: 0.055 dB T1: 5571.032 MHz: -0.981 dBm T2: 5588.968 MHz: -0.751 dBm OBW: 17.936 MHz	Measured 26 dB Bandwidth: 24.449 MHz Measured 99% Bandwidth: 17.936 MHz



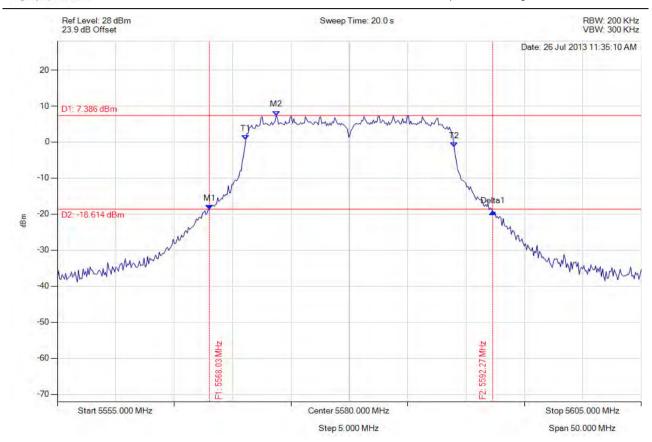
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 279 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5568.026 MHz: -18.744 dBm M2: 5573.737 MHz: 7.386 dBm Delta1: 24.248 MHz: -0.578 dB T1: 5571.132 MHz: 0.683 dBm T2: 5588.968 MHz: -1.365 dBm OBW: 17.836 MHz	Measured 26 dB Bandwidth: 24.248 MHz Measured 99% Bandwidth: 17.836 MHz



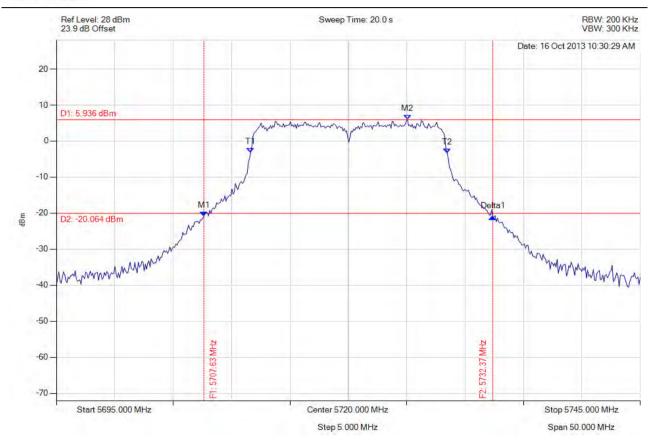
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 280 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5707.625 MHz: -20.922 dBm M2: 5725.060 MHz: 5.936 dBm Delta1: 24.749 MHz: -0.077 dB T1: 5711.633 MHz: -3.196 dBm T2: 5728.467 MHz: -3.344 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 24.749 MHz Measured 99% Bandwidth: 16.834 MHz



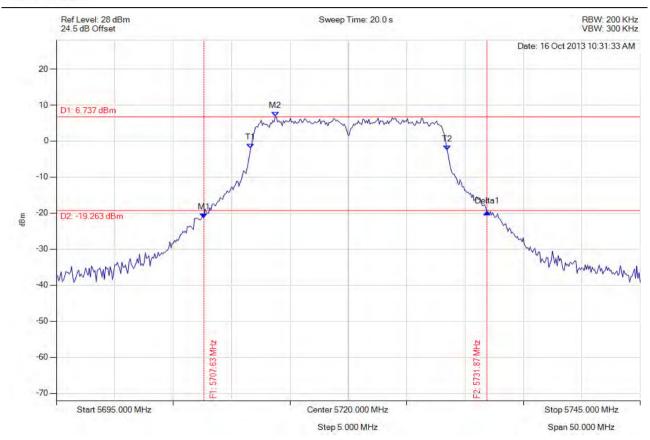
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A

**Issue Date:** 22nd February 2016 **Page:** 281 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5707.625 MHz: -21.329 dBm M2: 5713.737 MHz: 6.737 dBm Delta1: 24.248 MHz: 1.676 dB T1: 5711.633 MHz: -2.020 dBm T2: 5728.467 MHz: -2.600 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 24.248 MHz Measured 99% Bandwidth: 16.834 MHz



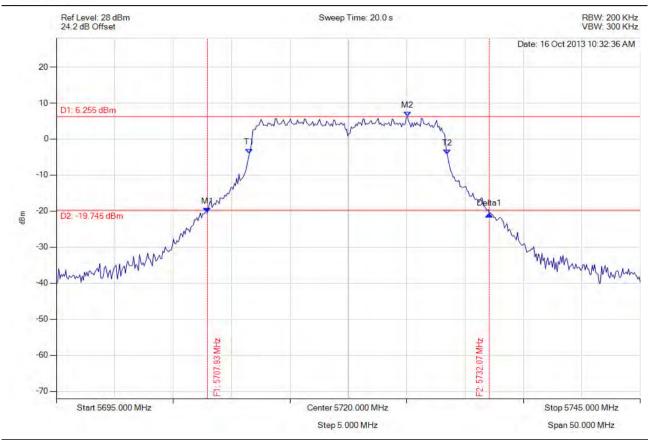
To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 282 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5707.926 MHz: -20.428 dBm M2: 5725.060 MHz: 6.255 dBm Delta1: 24.148 MHz: -0.447 dB T1: 5711.533 MHz: -3.962 dBm T2: 5728.467 MHz: -4.257 dBm OBW: 16.934 MHz	Measured 26 dB Bandwidth: 24.148 MHz Measured 99% Bandwidth: 16.934 MHz



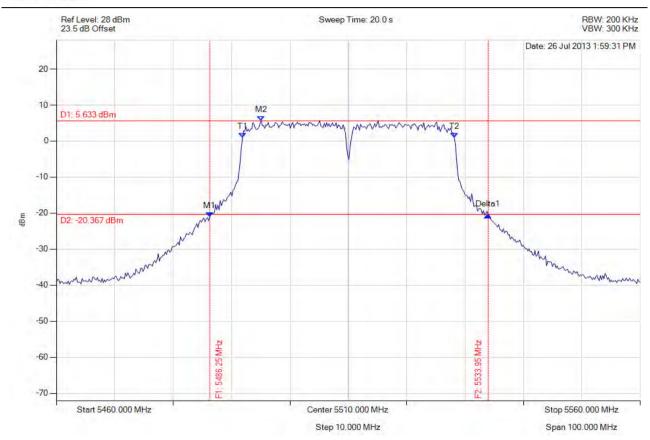
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 283 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5486.253 MHz: -21.123 dBm M2: 5495.070 MHz: 5.633 dBm Delta1: 47.695 MHz: 0.616 dB T1: 5491.864 MHz: 0.927 dBm T2: 5528.136 MHz: 1.033 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.273 MHz



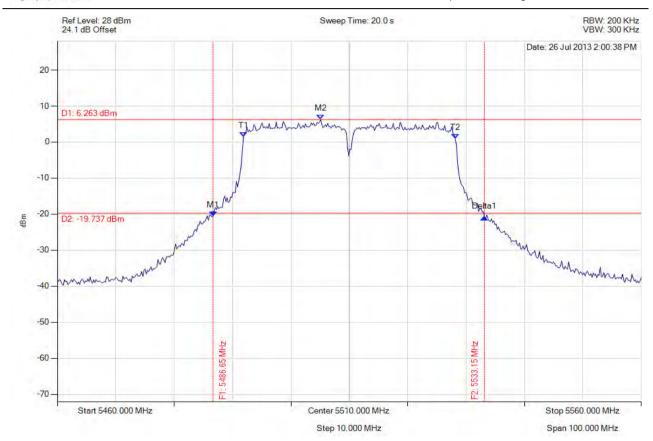
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 284 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5486.653 MHz: -20.596 dBm M2: 5505.090 MHz: 6.263 dBm Delta1: 46.493 MHz: -0.334 dB T1: 5491.864 MHz: 1.409 dBm T2: 5528.136 MHz: 1.020 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 46.493 MHz Measured 99% Bandwidth: 36.273 MHz



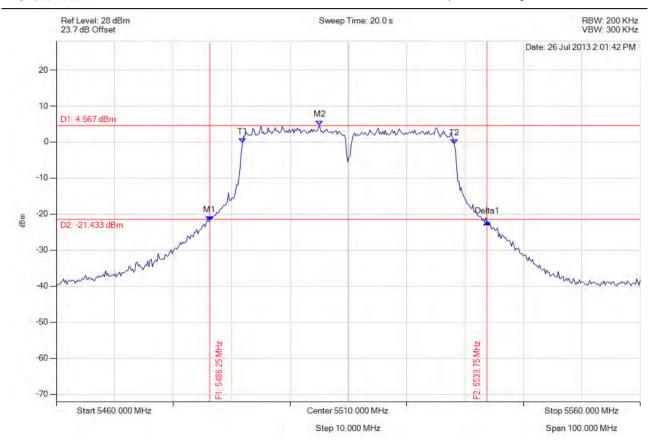
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 285 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5486.253 MHz: -21.957 dBm M2: 5505.090 MHz: 4.567 dBm Delta1: 47.495 MHz: -0.218 dB T1: 5491.864 MHz: -0.257 dBm T2: 5528.136 MHz: -0.509 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.495 MHz Measured 99% Bandwidth: 36.273 MHz



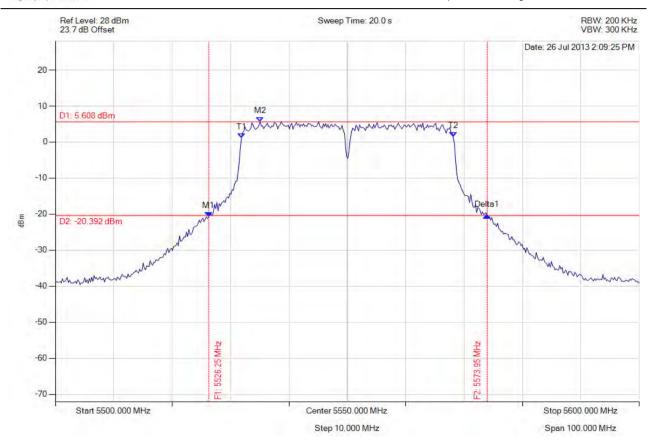
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 286 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5526.253 MHz: -20.724 dBm M2: 5535.070 MHz: 5.608 dBm Delta1: 47.695 MHz: 0.325 dB T1: 5531.864 MHz: 1.106 dBm T2: 5568.136 MHz: 1.427 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.273 MHz



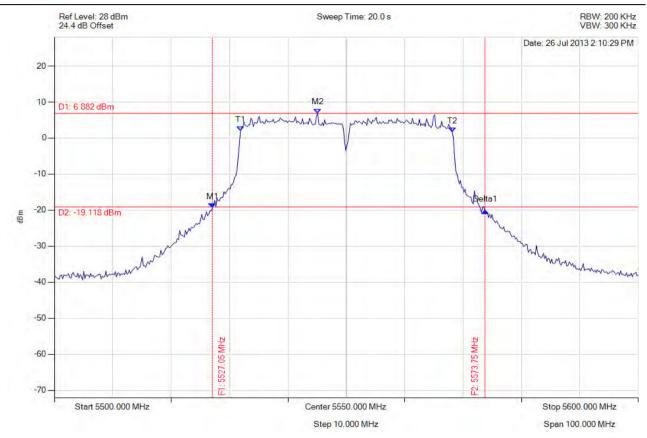
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 287 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5527.054 MHz: -19.340 dBm M2: 5545.090 MHz: 6.882 dBm Delta1: 46.693 MHz: -0.801 dB T1: 5531.864 MHz: 1.899 dBm T2: 5568.136 MHz: 1.681 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 46.693 MHz Measured 99% Bandwidth: 36.273 MHz



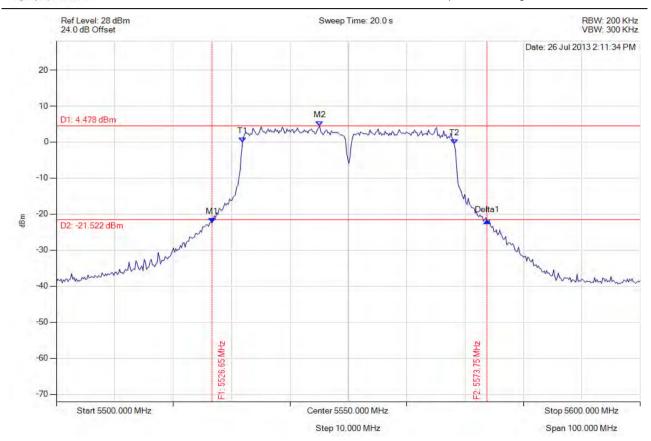
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 288 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5526.653 MHz: -22.453 dBm M2: 5545.090 MHz: 4.478 dBm Delta1: 47.094 MHz: 0.492 dB T1: 5531.864 MHz: -0.080 dBm T2: 5568.136 MHz: -0.466 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.094 MHz Measured 99% Bandwidth: 36.273 MHz



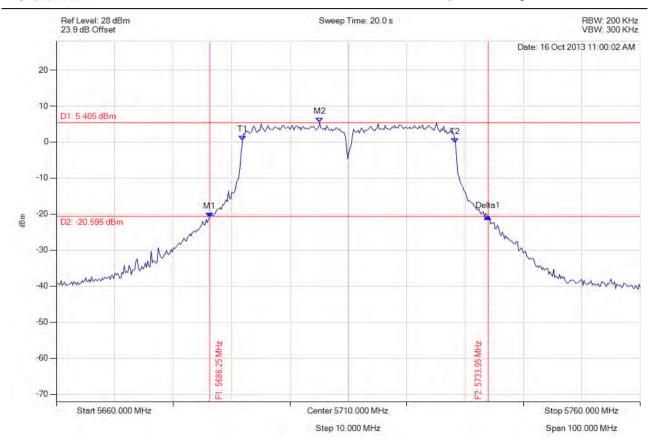
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 289 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5686.253 MHz: -20.926 dBm M2: 5705.090 MHz: 5.405 dBm Delta1: 47.695 MHz: 0.273 dB T1: 5691.864 MHz: 0.404 dBm T2: 5728.337 MHz: -0.234 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.473 MHz



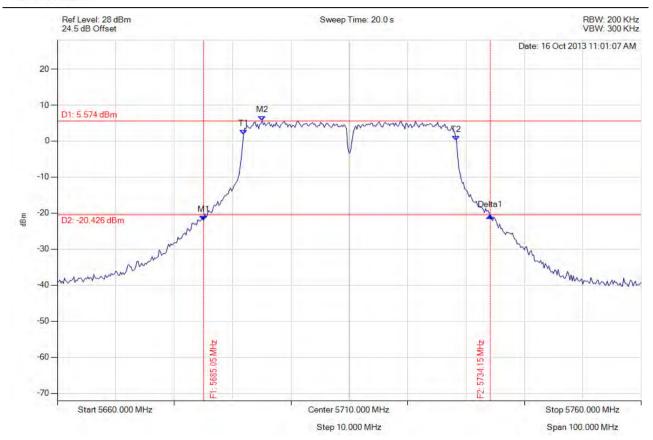
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 290 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5685.050 MHz: -21.987 dBm M2: 5695.070 MHz: 5.574 dBm Delta1: 49.098 MHz: 1.265 dB T1: 5691.864 MHz: 1.746 dBm T2: 5728.337 MHz: 0.142 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 49.098 MHz Measured 99% Bandwidth: 36.473 MHz



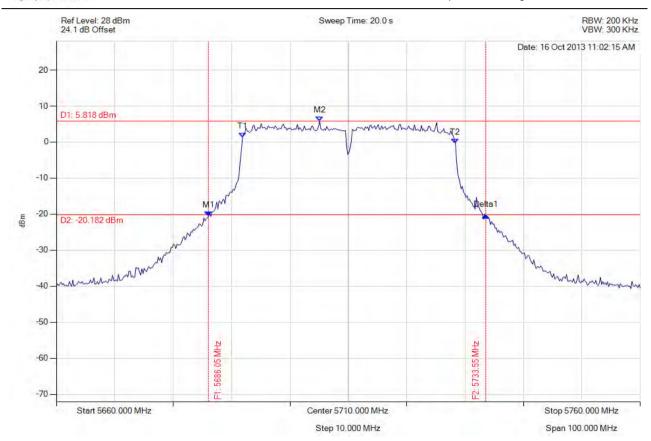
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 291 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5686.052 MHz: -20.574 dBm M2: 5705.090 MHz: 5.818 dBm Delta1: 47.495 MHz: 0.222 dB T1: 5691.864 MHz: 1.246 dBm T2: 5728.337 MHz: -0.361 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 47.495 MHz Measured 99% Bandwidth: 36.473 MHz



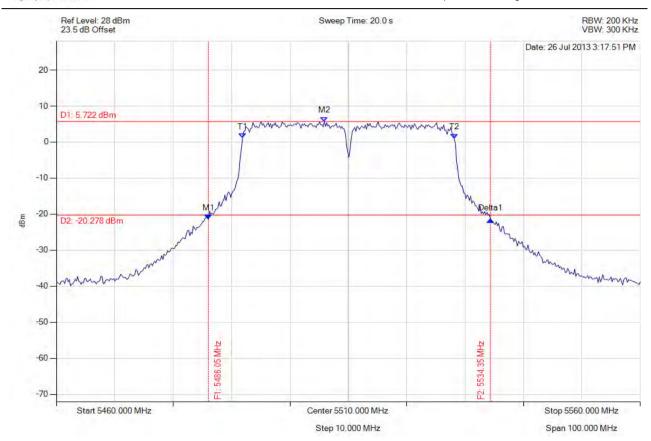
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 292 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5510.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5486.052 MHz: -21.410 dBm M2: 5505.892 MHz: 5.722 dBm Delta1: 48.297 MHz: -0.055 dB T1: 5491.864 MHz: 1.108 dBm T2: 5528.136 MHz: 1.047 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 48.297 MHz Measured 99% Bandwidth: 36.273 MHz



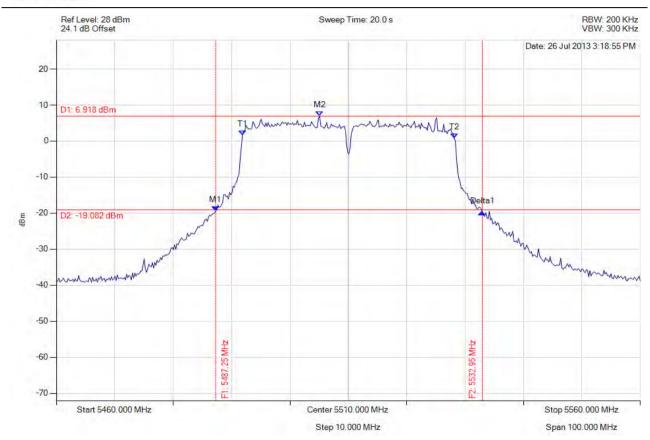
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 293 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5510.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5487.255 MHz: -19.398 dBm M2: 5505.090 MHz: 6.918 dBm Delta1: 45.691 MHz: -0.279 dB T1: 5491.864 MHz: 1.679 dBm T2: 5528.136 MHz: 0.854 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 45.691 MHz Measured 99% Bandwidth: 36.273 MHz



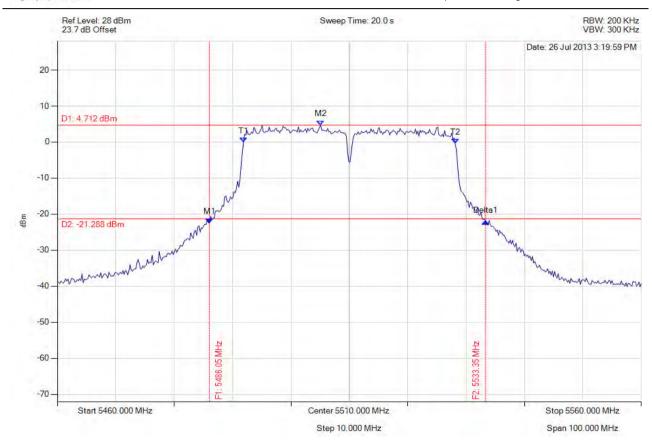
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 294 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5510.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5486.052 MHz: -22.467 dBm M2: 5505.090 MHz: 4.712 dBm Delta1: 47.295 MHz: 0.340 dB T1: 5491.864 MHz: -0.027 dBm T2: 5528.136 MHz: -0.434 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.295 MHz Measured 99% Bandwidth: 36.273 MHz



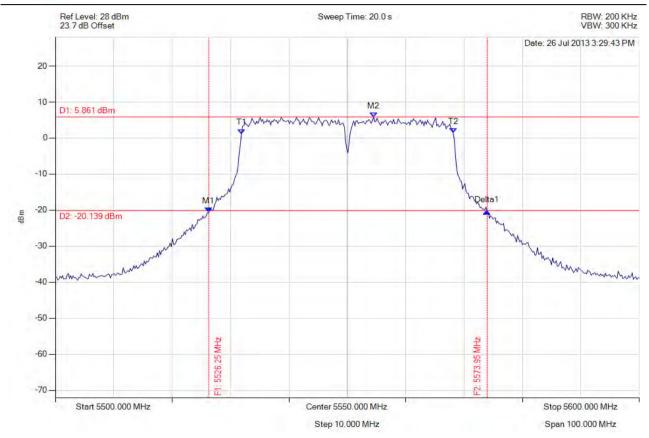
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 295 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5550.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5526.253 MHz: -20.617 dBm M2: 5554.509 MHz: 5.861 dBm Delta1: 47.695 MHz: 0.315 dB T1: 5531.864 MHz: 1.212 dBm T2: 5568.136 MHz: 1.474 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.273 MHz



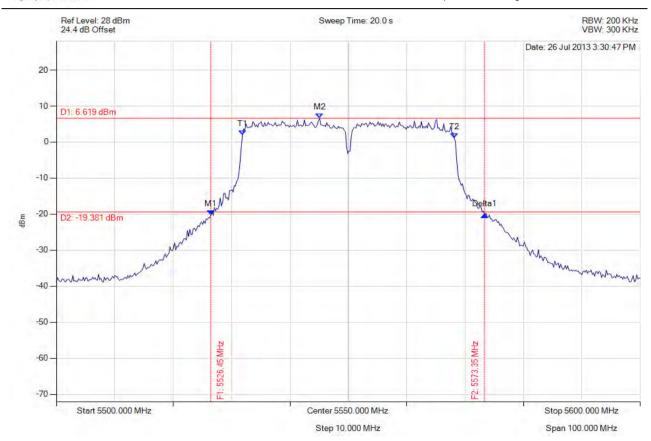
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 296 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5550.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5526.453 MHz: -20.271 dBm M2: 5545.090 MHz: 6.619 dBm Delta1: 46.894 MHz: 0.063 dB T1: 5531.864 MHz: 1.992 dBm T2: 5568.136 MHz: 1.203 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 46.894 MHz Measured 99% Bandwidth: 36.273 MHz



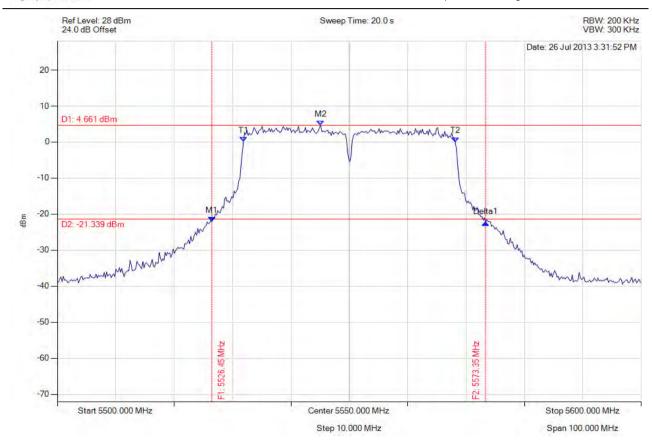
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 297 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5550.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5526.453 MHz: -22.026 dBm M2: 5545.090 MHz: 4.661 dBm Delta1: 46.894 MHz: -0.305 dB T1: 5531.864 MHz: 0.134 dBm T2: 5568.136 MHz: 0.048 dBm OBW: 36.273 MHz	Measured 26 dB Bandwidth: 46.894 MHz Measured 99% Bandwidth: 36.273 MHz



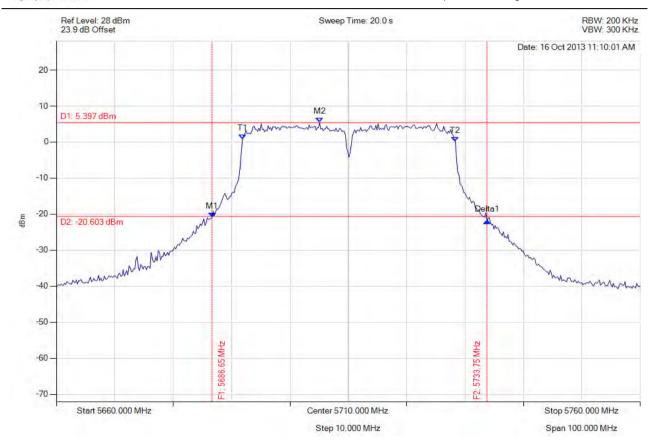
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 298 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5670.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5686.653 MHz: -20.916 dBm M2: 5705.090 MHz: 5.397 dBm Delta1: 47.094 MHz: -0.885 dB T1: 5691.864 MHz: 0.766 dBm T2: 5728.337 MHz: 0.069 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 47.094 MHz Measured 99% Bandwidth: 36.473 MHz



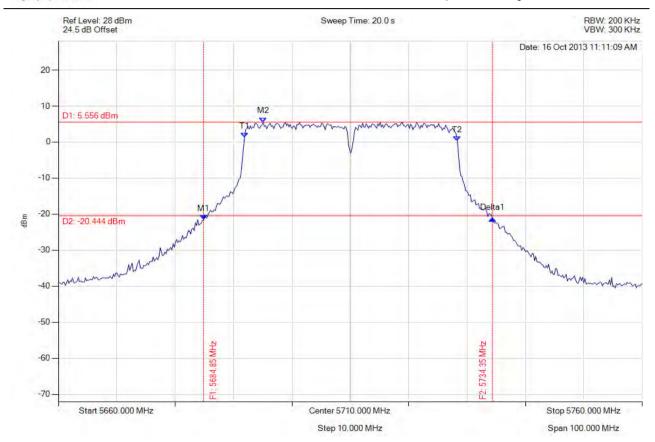
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 299 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5670.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5684.850 MHz: -21.627 dBm M2: 5695.070 MHz: 5.556 dBm Delta1: 49.499 MHz: 0.384 dB T1: 5691.864 MHz: 1.254 dBm T2: 5728.337 MHz: 0.329 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 49.499 MHz Measured 99% Bandwidth: 36.473 MHz



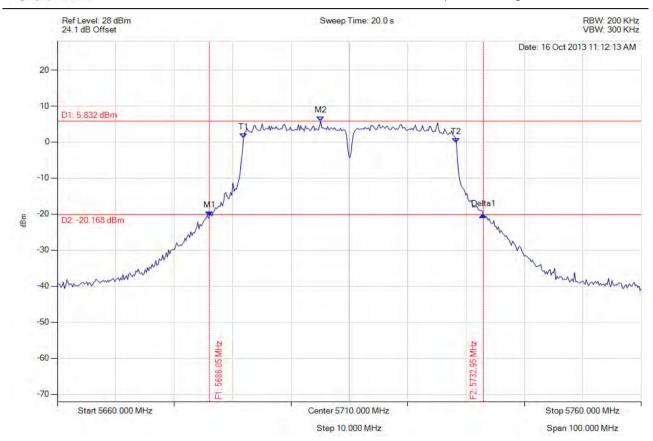
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 300 of 585



### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5670.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5686.052 MHz: -20.497 dBm M2: 5705.090 MHz: 5.832 dBm Delta1: 46.894 MHz: 0.270 dB T1: 5691.864 MHz: 1.183 dBm T2: 5728.337 MHz: -0.265 dBm OBW: 36.473 MHz	Measured 26 dB Bandwidth: 46.894 MHz Measured 99% Bandwidth: 36.473 MHz



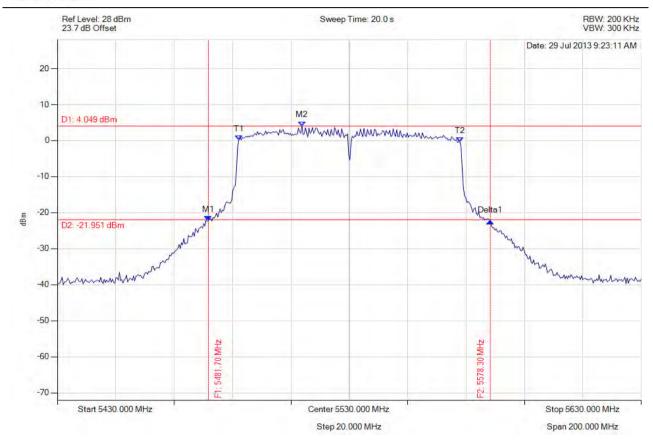
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 301 of 585



# 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5530.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5481.703 MHz: -22.187 dBm M2: 5513.768 MHz: 4.049 dBm Delta1: 96.593 MHz: -0.238 dB T1: 5492.124 MHz: 0.123 dBm T2: 5567.876 MHz: -0.367 dBm OBW: 75.752 MHz	Measured 26 dB Bandwidth: 96.593 MHz Measured 99% Bandwidth: 75.752 MHz



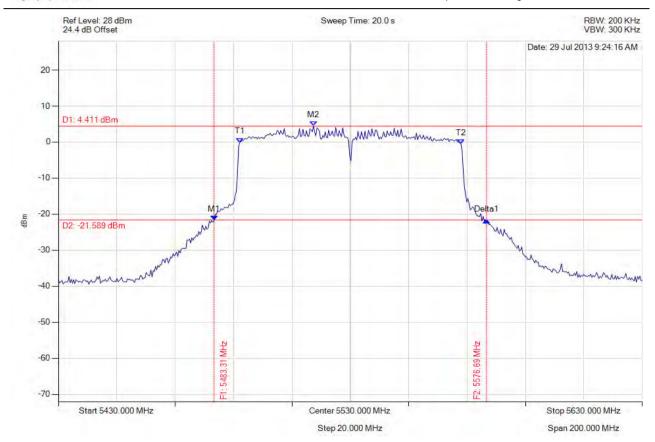
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 302 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5530.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5483.307 MHz: -21.794 dBm M2: 5517.375 MHz: 4.411 dBm Delta1: 93.387 MHz: 0.037 dB T1: 5492.124 MHz: -0.119 dBm T2: 5567.876 MHz: -0.499 dBm OBW: 75.752 MHz	Measured 26 dB Bandwidth: 93.387 MHz Measured 99% Bandwidth: 75.752 MHz



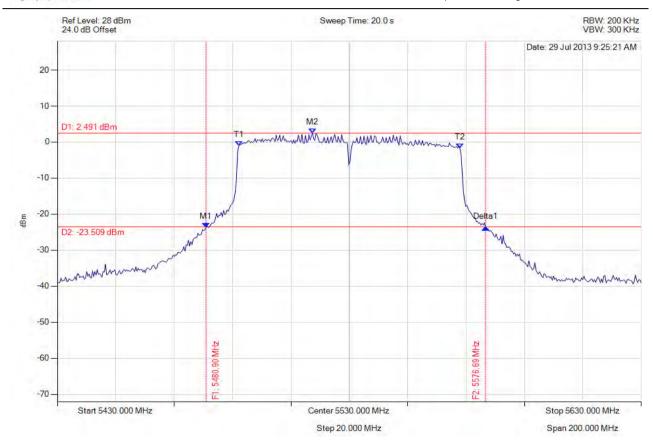
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

**Page:** 303 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5530.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5480.902 MHz: -23.761 dBm M2: 5517.375 MHz: 2.491 dBm Delta1: 95.792 MHz: 0.012 dB T1: 5492.124 MHz: -1.050 dBm T2: 5567.876 MHz: -1.742 dBm OBW: 75.752 MHz	Measured 26 dB Bandwidth: 95.792 MHz Measured 99% Bandwidth: 75.752 MHz



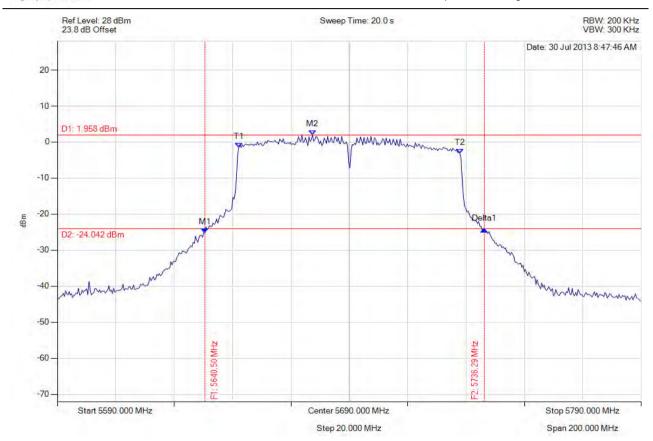
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 304 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5690.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5640.501 MHz: -25.258 dBm M2: 5677.375 MHz: 1.958 dBm Delta1: 95.792 MHz: 0.994 dB T1: 5652.124 MHz: -1.504 dBm T2: 5727.876 MHz: -3.234 dBm OBW: 75.752 MHz	Measured 26 dB Bandwidth: 95.792 MHz Measured 99% Bandwidth: 75.752 MHz



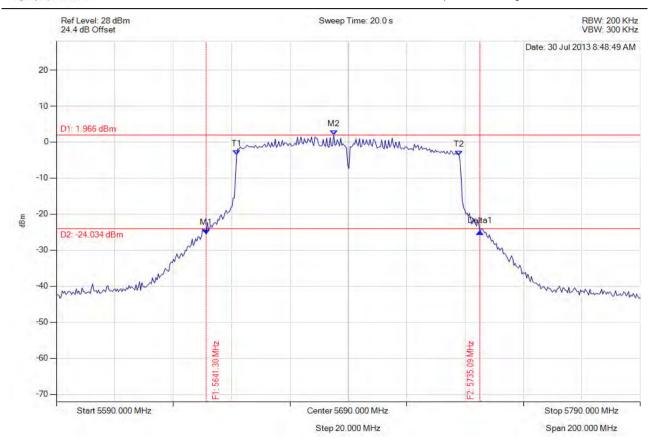
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 305 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5690.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5641.303 MHz: -25.467 dBm M2: 5684.990 MHz: 1.966 dBm Delta1: 93.788 MHz: 0.643 dB T1: 5651.723 MHz: -3.606 dBm T2: 5727.876 MHz: -3.635 dBm OBW: 76.152 MHz	Measured 26 dB Bandwidth: 93.788 MHz Measured 99% Bandwidth: 76.152 MHz



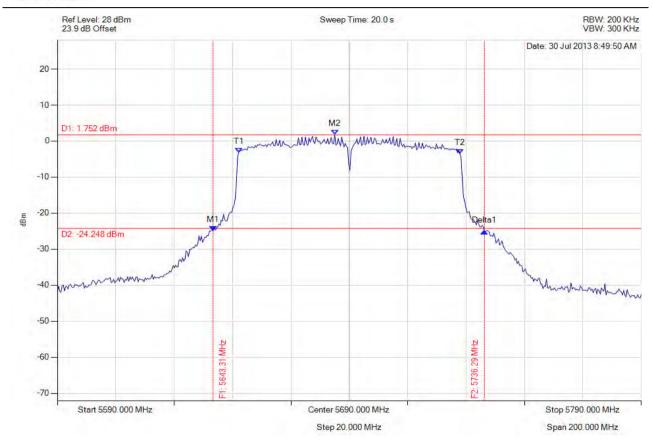
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 306 of 585



## 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5690.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1: 5643.307 MHz: -24.877 dBm M2: 5684.990 MHz: 1.752 dBm Delta1: 92.986 MHz: -0.159 dB T1: 5652.124 MHz: -3.167 dBm T2: 5727.876 MHz: -3.468 dBm OBW: 75.752 MHz	Measured 26 dB Bandwidth: 92.986 MHz Measured 99% Bandwidth: 75.752 MHz

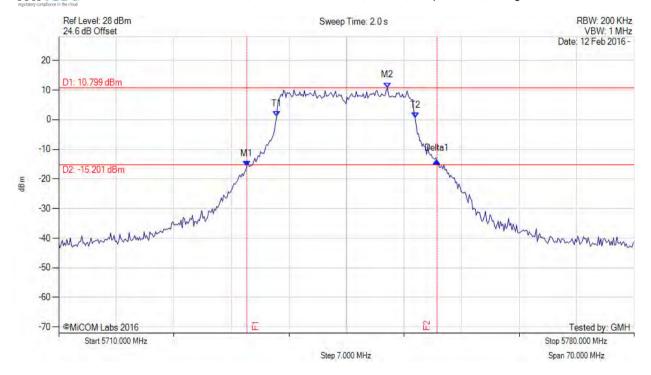


To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 307 of 585

#### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5745.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



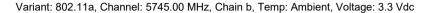
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5732.866 MHz: -15.795 dBm M2: 5749.980 MHz: 10.799 dBm Delta1: 23.146 MHz: 1.993 dB T1: 5736.513 MHz: 1.094 dBm T2: 5753.347 MHz: 0.557 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 23.146 MHz Measured 99% Bandwidth: 16.834 MHz

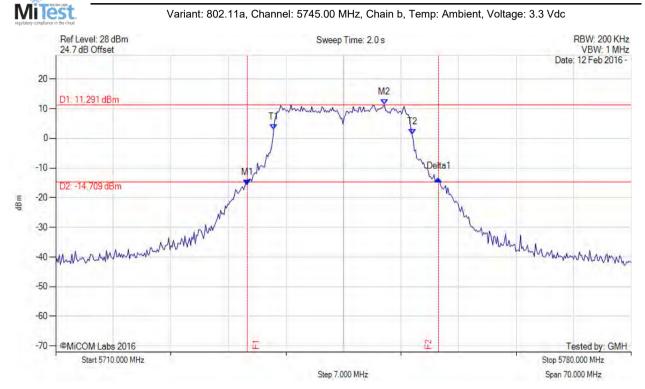


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 308 of 585

### 26 dB & 99% BANDWIDTH





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5733.287 MHz: -15.689 dBm M2: 5749.980 MHz: 11.291 dBm Delta1: 23.287 MHz: 1.963 dB T1: 5736.513 MHz: 2.891 dBm T2: 5753.347 MHz: 1.329 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 23.287 MHz Measured 99% Bandwidth: 16.834 MHz

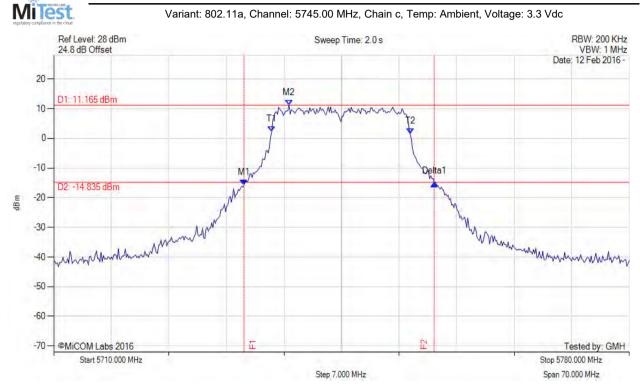


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 309 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5745.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5733.146 MHz : -15.677 dBm M2 : 5738.617 MHz : 11.165 dBm Delta1 : 23.146 MHz : 0.456 dB T1 : 5736.513 MHz : 2.312 dBm T2 : 5753.347 MHz : 1.523 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 23.146 MHz Measured 99% Bandwidth: 16.834 MHz

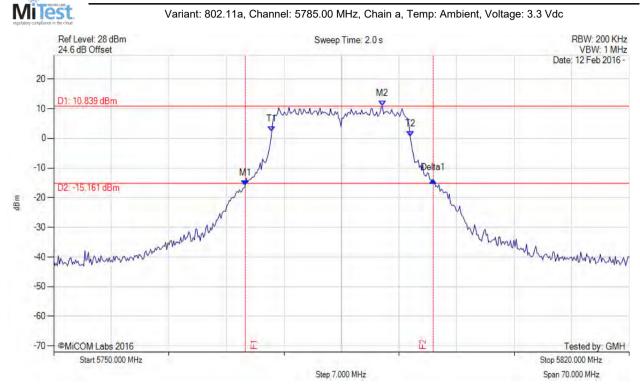


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 310 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5785.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
	M1 : 5773.287 MHz : -15.872 dBm M2 : 5789.980 MHz : 10.839 dBm Delta1 : 22.866 MHz : 1.855 dB T1 : 5776.513 MHz : 2.169 dBm T2 : 5793.347 MHz : 0.719 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 22.866 MHz Measured 99% Bandwidth: 16.834 MHz

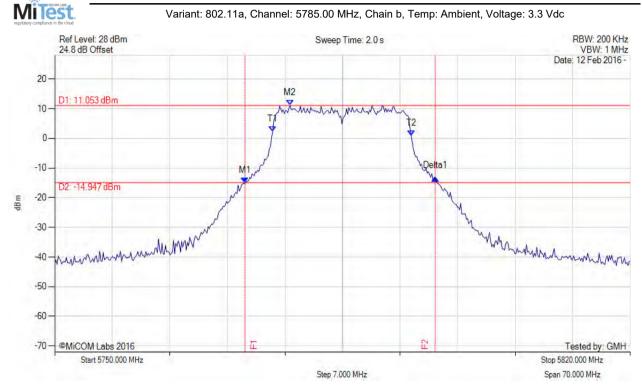


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 311 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5785.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



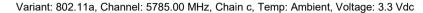
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
· · · · · · · · · · · · · · · · · · ·	M1 : 5773.146 MHz : -15.117 dBm M2 : 5778.617 MHz : 11.053 dBm Delta1 : 23.146 MHz : 1.755 dB T1 : 5776.513 MHz : 2.334 dBm T2 : 5793.347 MHz : 0.923 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 23.146 MHz Measured 99% Bandwidth: 16.834 MHz

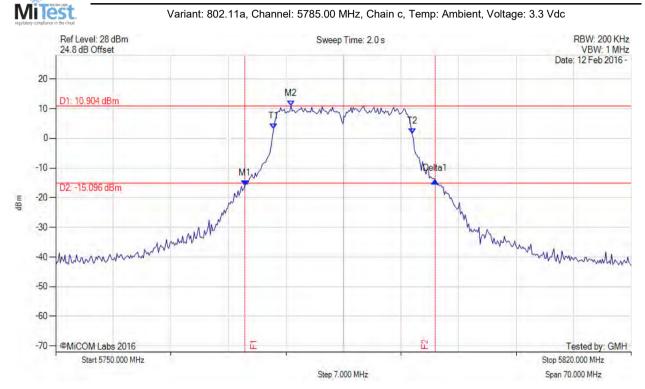


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 312 of 585

### 26 dB & 99% BANDWIDTH





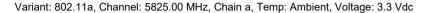
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5773.006 MHz : -15.976 dBm M2 : 5778.617 MHz : 10.904 dBm Delta1 : 23.146 MHz : 1.643 dB T1 : 5776.513 MHz : 3.288 dBm T2 : 5793.347 MHz : 1.472 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 23.146 MHz Measured 99% Bandwidth: 16.834 MHz

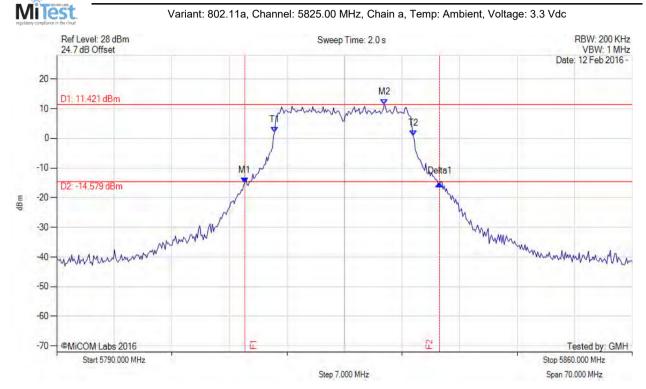


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 313 of 585

### 26 dB & 99% BANDWIDTH





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5812.866 MHz : -14.947 dBm M2 : 5829.840 MHz : 11.421 dBm Delta1 : 23.707 MHz : -0.417 dB T1 : 5816.513 MHz : 2.102 dBm T2 : 5833.347 MHz : 0.841 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 23.707 MHz Measured 99% Bandwidth: 16.834 MHz

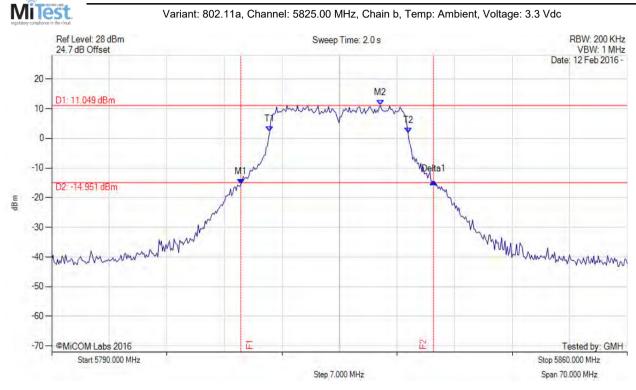


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 314 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5825.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5813.006 MHz: -15.457 dBm M2: 5829.980 MHz: 11.049 dBm Delta1: 23.427 MHz: 0.864 dB T1: 5816.513 MHz: 2.251 dBm T2: 5833.347 MHz: 1.718 dBm OBW: 16.834 MHz	Measured 26 dB Bandwidth: 23.427 MHz Measured 99% Bandwidth: 16.834 MHz

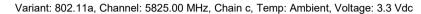


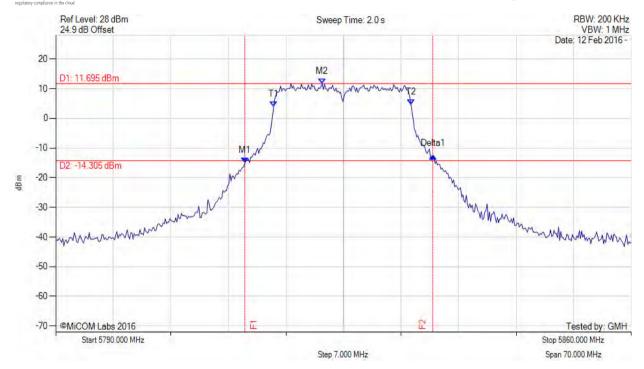
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 315 of 585

### 26 dB & 99% BANDWIDTH





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5813.006 MHz : -15.061 dBm M2 : 5822.405 MHz : 11.695 dBm Delta1 : 22.866 MHz : 2.443 dB T1 : 5816.513 MHz : 3.981 dBm T2 : 5833.206 MHz : 4.653 dBm OBW : 16.693 MHz	Measured 26 dB Bandwidth: 22.866 MHz Measured 99% Bandwidth: 16.693 MHz



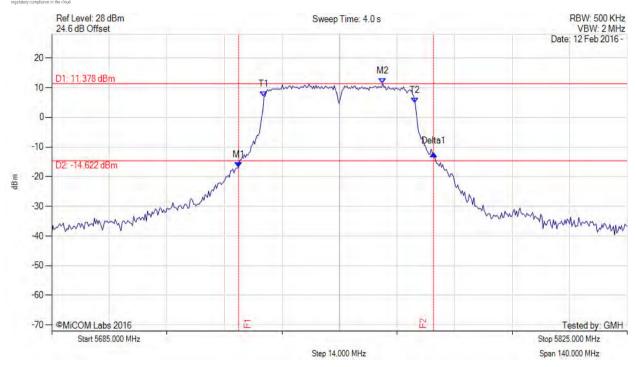
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 316 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5755.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5730.451 MHz: -16.879 dBm M2: 5765.521 MHz: 11.378 dBm Delta1: 47.415 MHz: 4.737 dB T1: 5736.623 MHz: 6.920 dBm T2: 5773.377 MHz: 4.836 dBm OBW: 36.754 MHz	Measured 26 dB Bandwidth: 47.415 MHz Measured 99% Bandwidth: 36.754 MHz

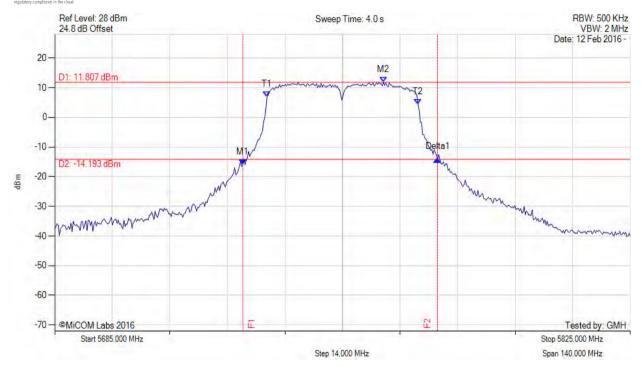


To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 317 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5755.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5730.731 MHz: -15.970 dBm M2: 5764.960 MHz: 11.807 dBm Delta1: 47.415 MHz: 1.832 dB T1: 5736.623 MHz: 6.920 dBm T2: 5773.377 MHz: 4.396 dBm OBW: 36.754 MHz	Measured 26 dB Bandwidth: 47.415 MHz Measured 99% Bandwidth: 36.754 MHz

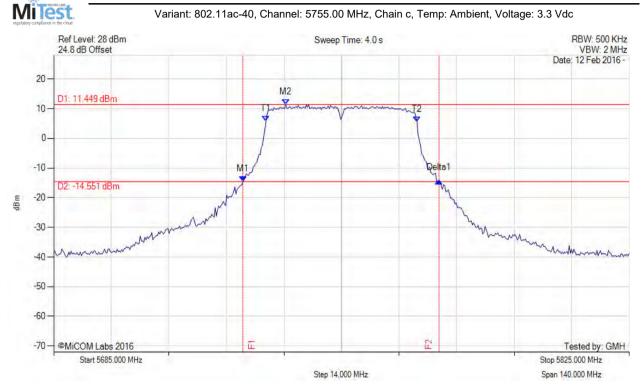


To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 318 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5755.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5731.012 MHz : -14.652 dBm M2 : 5741.393 MHz : 11.449 dBm Delta1 : 47.695 MHz : 0.451 dB T1 : 5736.623 MHz : 5.702 dBm T2 : 5773.377 MHz : 5.523 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.754 MHz

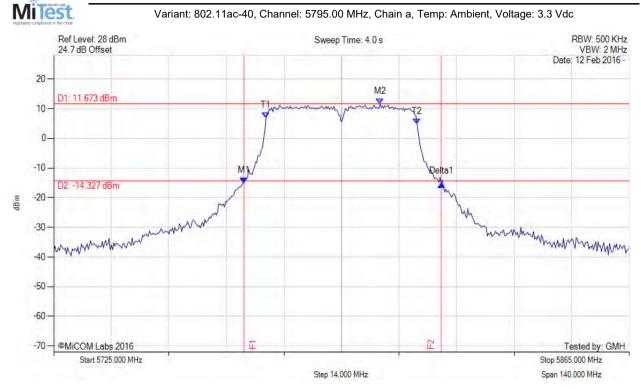


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 319 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5795.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5771.293 MHz : -15.089 dBm M2 : 5804.399 MHz : 11.673 dBm Delta1 : 47.976 MHz : -0.297 dB T1 : 5776.623 MHz : 6.916 dBm T2 : 5813.377 MHz : 4.856 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 47.976 MHz Measured 99% Bandwidth: 36.754 MHz

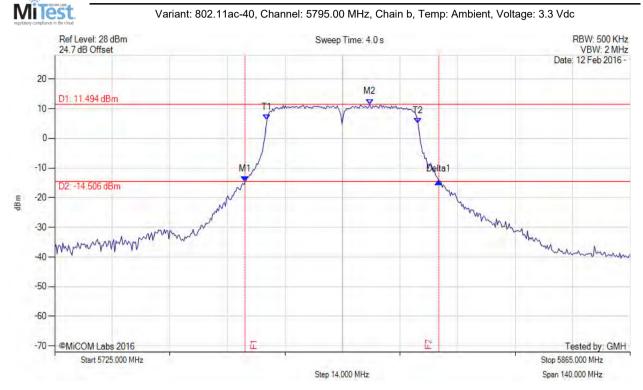


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 320 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5795.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5771.293 MHz : -14.619 dBm M2 : 5801.593 MHz : 11.494 dBm Delta1 : 47.134 MHz : 0.004 dB T1 : 5776.623 MHz : 6.286 dBm T2 : 5813.377 MHz : 5.015 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 47.134 MHz Measured 99% Bandwidth: 36.754 MHz

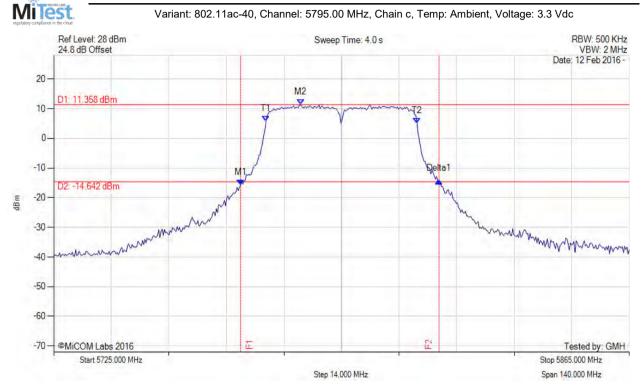


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 321 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-40, Channel: 5795.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5770.451 MHz : -15.787 dBm M2 : 5785.040 MHz : 11.358 dBm Delta1 : 48.257 MHz : 1.558 dB T1 : 5776.623 MHz : 5.733 dBm T2 : 5813.377 MHz : 5.124 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 48.257 MHz Measured 99% Bandwidth: 36.754 MHz

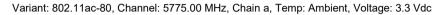


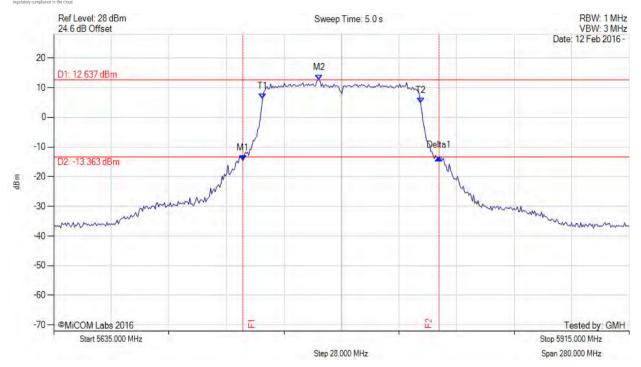
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 322 of 585

### 26 dB & 99% BANDWIDTH





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5727.024 MHz : -14.642 dBm M2 : 5764.058 MHz : 12.637 dBm Delta1 : 95.391 MHz : 1.104 dB T1 : 5736.563 MHz : 6.210 dBm T2 : 5813.437 MHz : 4.858 dBm OBW : 76.874 MHz	Measured 26 dB Bandwidth: 95.391 MHz Measured 99% Bandwidth: 76.874 MHz

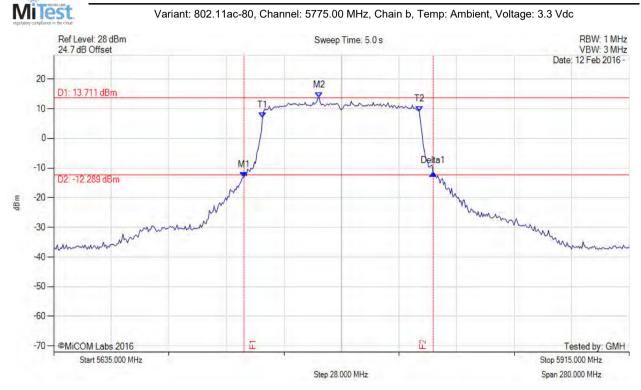


To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 323 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5727.585 MHz : -13.157 dBm M2 : 5764.058 MHz : 13.711 dBm Delta1 : 92.024 MHz : 1.497 dB T1 : 5736.563 MHz : 6.975 dBm T2 : 5812.876 MHz : 9.094 dBm OBW : 76.313 MHz	Measured 26 dB Bandwidth: 92.024 MHz Measured 99% Bandwidth: 76.313 MHz



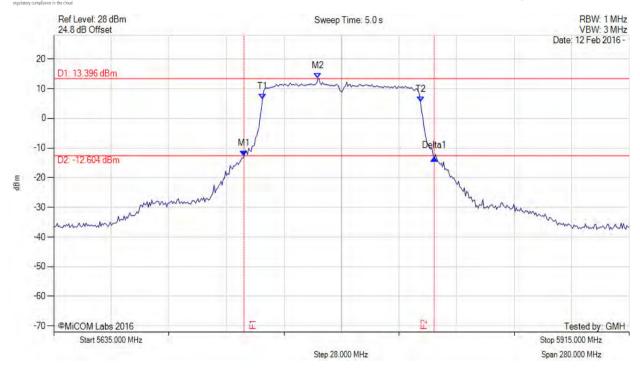
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 324 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5727.585 MHz: -12.775 dBm M2: 5763.497 MHz: 13.396 dBm Delta1: 92.585 MHz: -0.632 dB T1: 5736.563 MHz: 6.536 dBm T2: 5813.437 MHz: 5.493 dBm OBW: 76.874 MHz	Measured 26 dB Bandwidth: 92.585 MHz Measured 99% Bandwidth: 76.874 MHz



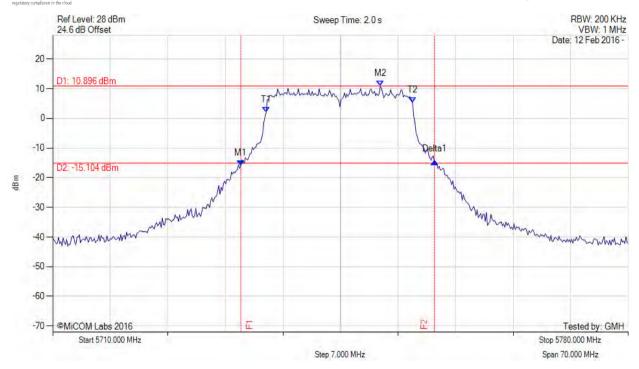
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 325 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5732.866 MHz : -15.974 dBm M2 : 5749.840 MHz : 10.896 dBm Delta1 : 23.567 MHz : 1.318 dB T1 : 5735.952 MHz : 1.950 dBm T2 : 5753.768 MHz : 5.328 dBm OBW : 17.816 MHz	Measured 26 dB Bandwidth: 23.567 MHz Measured 99% Bandwidth: 17.816 MHz

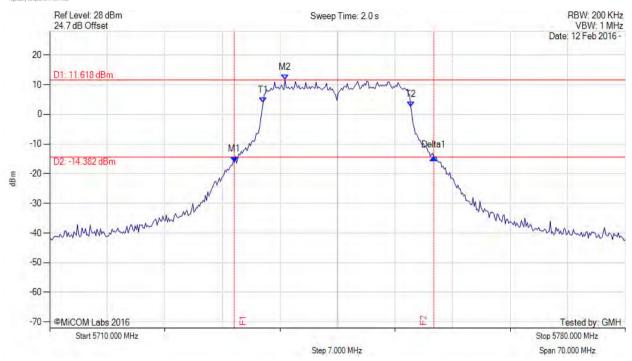


To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A

**Issue Date:** 22nd February 2016 **Page:** 326 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5732.445 MHz : -16.073 dBm M2 : 5738.617 MHz : 11.618 dBm Delta1 : 24.269 MHz : 1.584 dB T1 : 5735.952 MHz : 3.855 dBm T2 : 5753.908 MHz : 2.424 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 24.269 MHz Measured 99% Bandwidth: 17.956 MHz

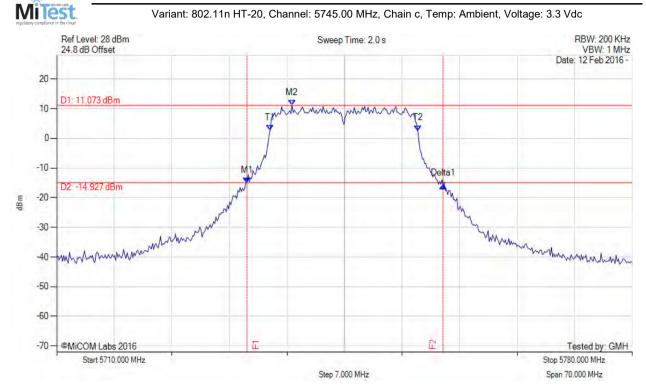


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 327 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5733.146 MHz: -14.963 dBm M2: 5738.617 MHz: 11.073 dBm Delta1: 23.848 MHz: -1.029 dB T1: 5735.952 MHz: 2.723 dBm T2: 5753.908 MHz: 2.627 dBm OBW: 17.956 MHz	Measured 26 dB Bandwidth: 23.848 MHz Measured 99% Bandwidth: 17.956 MHz



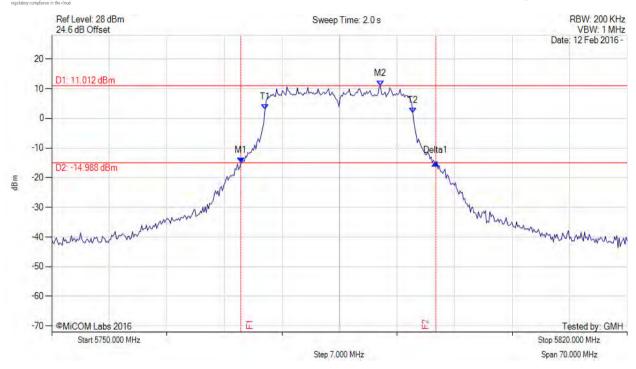
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

**Page:** 328 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
· · · · · · · · · · · · · · · · · · ·	M1: 5773.006 MHz: -15.032 dBm M2: 5789.980 MHz: 11.012 dBm Delta1: 23.707 MHz: 0.041 dB T1: 5775.952 MHz: 3.020 dBm T2: 5793.908 MHz: 1.891 dBm OBW: 17.956 MHz	Measured 26 dB Bandwidth: 23.707 MHz Measured 99% Bandwidth: 17.956 MHz



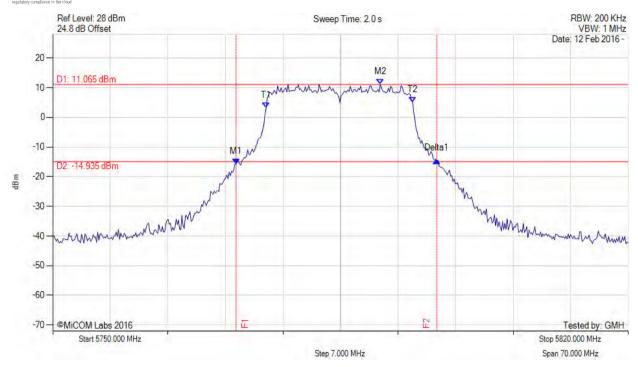
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 329 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5772.305 MHz : -15.756 dBm M2 : 5789.840 MHz : 11.065 dBm Delta1 : 24.409 MHz : 1.094 dB T1 : 5775.952 MHz : 3.129 dBm T2 : 5793.768 MHz : 5.149 dBm OBW : 17.816 MHz	Measured 26 dB Bandwidth: 24.409 MHz Measured 99% Bandwidth: 17.816 MHz



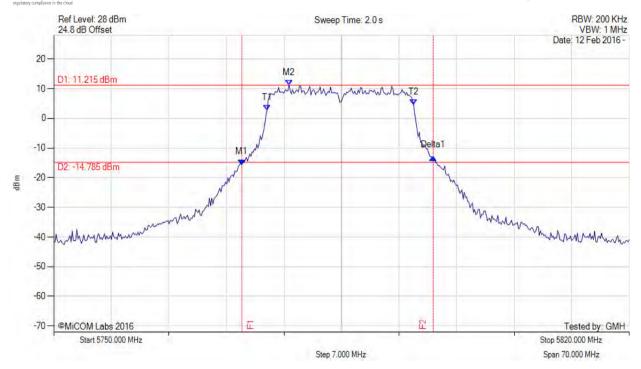
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407
Serial #: HPWD78-U3 Rev A
Issue Date: 22nd February 2016

Page: 330 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5772.866 MHz : -15.614 dBm M2 : 5778.617 MHz : 11.215 dBm Delta1 : 23.287 MHz : 2.400 dB T1 : 5775.952 MHz : 2.786 dBm T2 : 5793.768 MHz : 4.701 dBm OBW : 17.816 MHz	Measured 26 dB Bandwidth: 23.287 MHz Measured 99% Bandwidth: 17.816 MHz

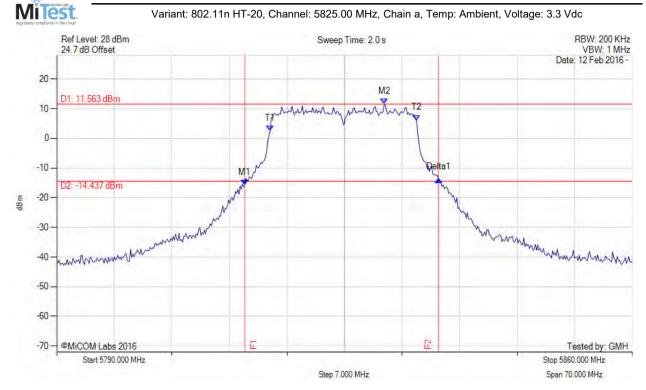


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 331 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5812.866 MHz : -15.656 dBm M2 : 5829.840 MHz : 11.563 dBm Delta1 : 23.567 MHz : 1.887 dB T1 : 5815.952 MHz : 2.446 dBm T2 : 5833.768 MHz : 6.107 dBm OBW : 17.816 MHz	Measured 26 dB Bandwidth: 23.567 MHz Measured 99% Bandwidth: 17.816 MHz

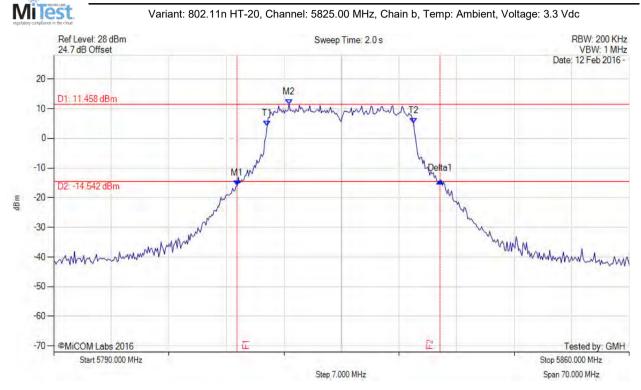


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 332 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5812.305 MHz : -15.943 dBm M2 : 5818.617 MHz : 11.458 dBm Delta1 : 24.689 MHz : 1.660 dB T1 : 5815.952 MHz : 4.146 dBm T2 : 5833.768 MHz : 5.015 dBm OBW : 17.816 MHz	Measured 26 dB Bandwidth: 24.689 MHz Measured 99% Bandwidth: 17.816 MHz



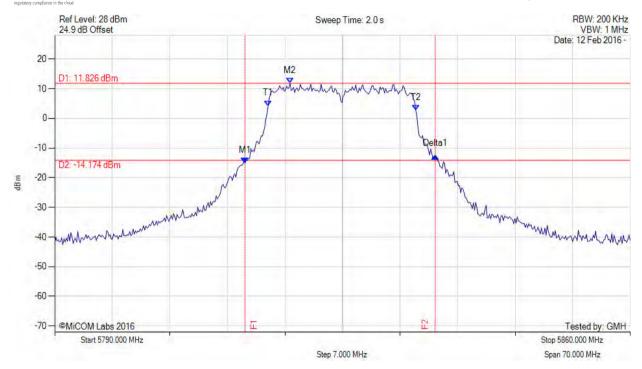
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 333 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5813.146 MHz : -15.097 dBm M2 : 5818.617 MHz : 11.826 dBm Delta1 : 23.146 MHz : 2.310 dB T1 : 5815.952 MHz : 4.246 dBm T2 : 5833.908 MHz : 2.755 dBm OBW : 17.956 MHz	Measured 26 dB Bandwidth: 23.146 MHz Measured 99% Bandwidth: 17.956 MHz

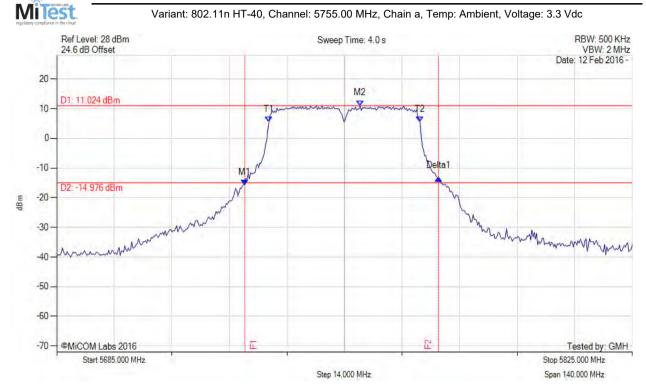


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 334 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5730.731 MHz : -15.679 dBm M2 : 5758.788 MHz : 11.024 dBm Delta1 : 47.134 MHz : 2.184 dB T1 : 5736.623 MHz : 5.625 dBm T2 : 5773.377 MHz : 5.474 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 47.134 MHz Measured 99% Bandwidth: 36.754 MHz



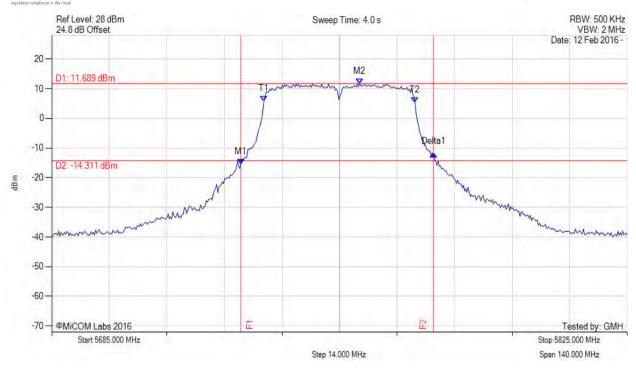
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 335 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain b, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5731.012 MHz: -15.540 dBm M2: 5759.910 MHz: 11.689 dBm Delta1: 46.854 MHz: 3.529 dB T1: 5736.623 MHz: 5.767 dBm T2: 5773.377 MHz: 5.236 dBm OBW: 36.754 MHz	Measured 26 dB Bandwidth: 46.854 MHz Measured 99% Bandwidth: 36.754 MHz

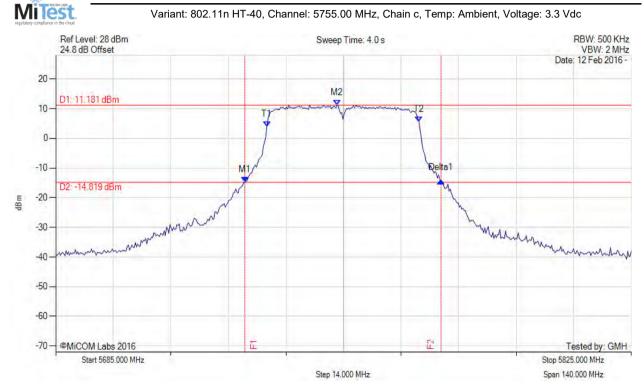


**To:** FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 336 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1: 5731.012 MHz: -14.865 dBm M2: 5753.457 MHz: 11.181 dBm Delta1: 47.695 MHz: 0.641 dB T1: 5736.343 MHz: 3.866 dBm T2: 5773.377 MHz: 5.456 dBm OBW: 37.034 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 37.034 MHz

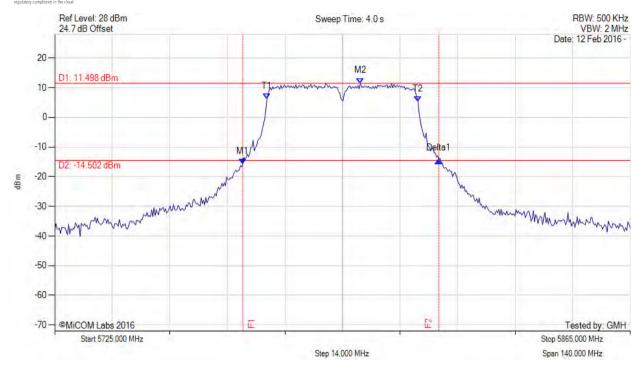


To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 337 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5795.00 MHz, Chain a, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5770.731 MHz : -15.632 dBm M2 : 5799.349 MHz : 11.498 dBm Delta1 : 47.695 MHz : 1.167 dB T1 : 5776.623 MHz : 6.253 dBm T2 : 5813.377 MHz : 5.340 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 47.695 MHz Measured 99% Bandwidth: 36.754 MHz



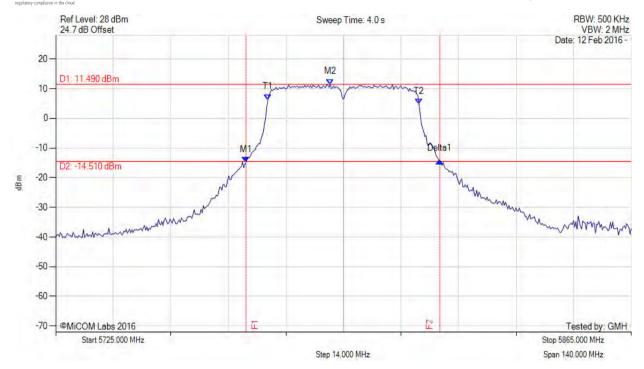
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A

Issue Date: 22nd February 2016 Page: 338 of 585

### 26 dB & 99% BANDWIDTH





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5771.293 MHz : -14.898 dBm M2 : 5791.774 MHz : 11.490 dBm Delta1 : 47.134 MHz : 0.549 dB T1 : 5776.623 MHz : 6.357 dBm T2 : 5813.377 MHz : 4.756 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 47.134 MHz Measured 99% Bandwidth: 36.754 MHz



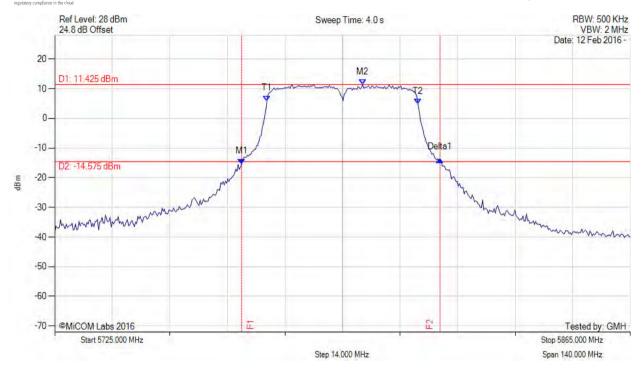
Title: Hewlett Packard MRLBB-1303 Wireless Module

To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 339 of 585

### 26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5795.00 MHz, Chain c, Temp: Ambient, Voltage: 3.3 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5770.451 MHz : -15.380 dBm M2 : 5799.910 MHz : 11.425 dBm Delta1 : 48.257 MHz : 1.515 dB T1 : 5776.623 MHz : 5.883 dBm T2 : 5813.377 MHz : 4.870 dBm OBW : 36.754 MHz	Measured 26 dB Bandwidth: 48.257 MHz Measured 99% Bandwidth: 36.754 MHz



To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

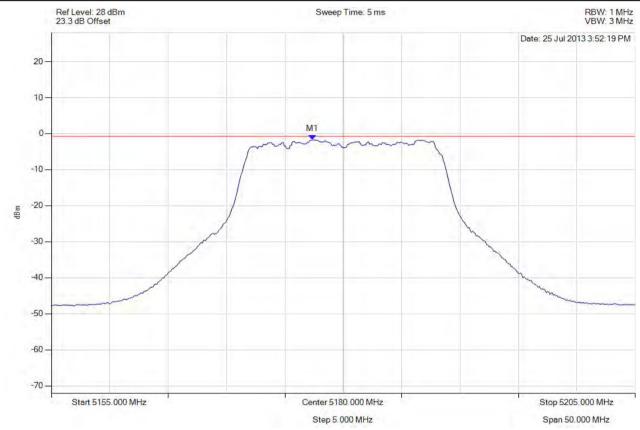
Page: 340 of 585

# A.1.2. Peak Power Spectral Density



## PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5180.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5177.345 MHz : -1.745 dBm	Limit: ≤ -2.171 dBm Margin: -0.43 dB

Back to the Matrix



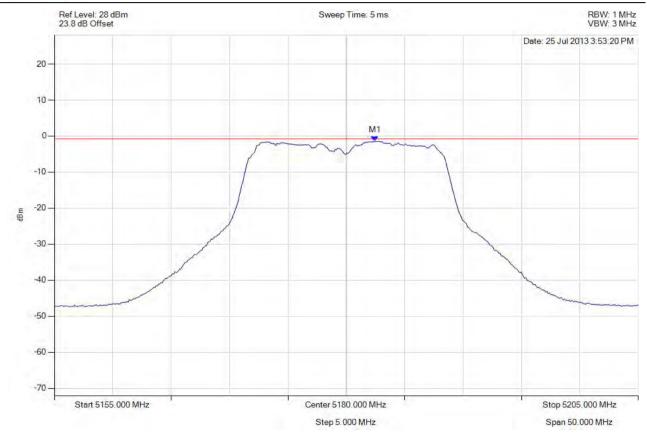
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 341 of 585



### **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5180.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5182.455 MHz : -1.442 dBm	Limit: ≤ -2.171 dBm Margin: -0.73 dB

Back to the Matrix



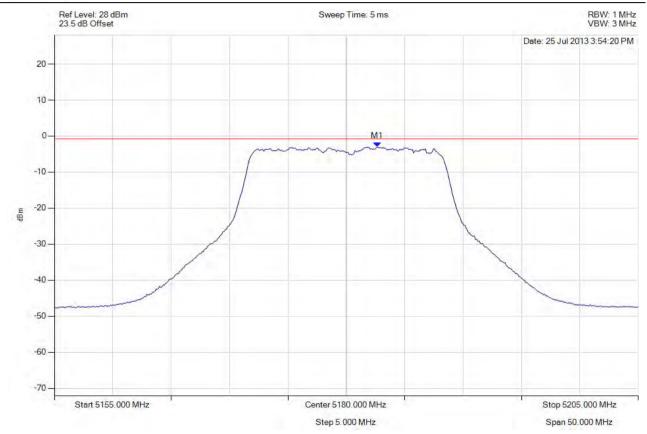
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 342 of 585



### **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5180.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5182.655 MHz : -3.100 dBm	Limit: ≤ -2.171 dBm Margin: 0.93 dB

Back to the Matrix



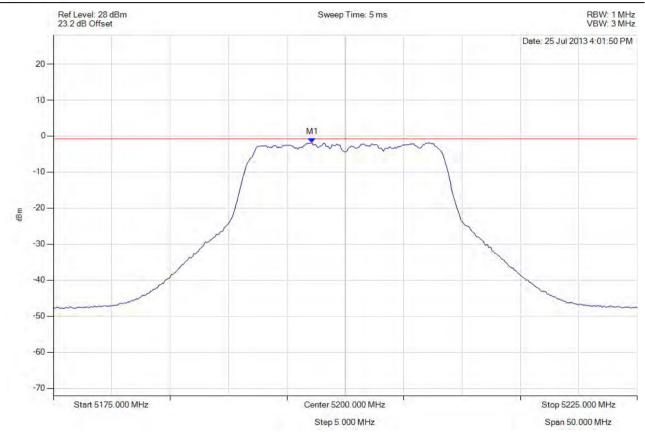
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 343 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5200.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5197.144 MHz : -1.855 dBm	Limit: ≤ -2.171 dBm Margin: -0.32 dB



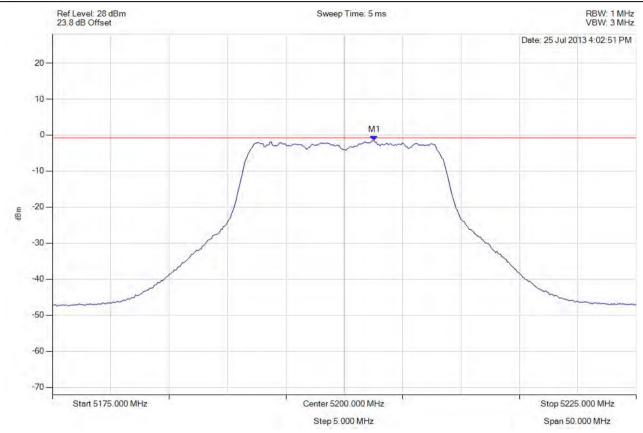
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 344 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5200.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5202.555 MHz : -1.551 dBm	Limit: ≤ -2.171 dBm Margin: -0.62 dB



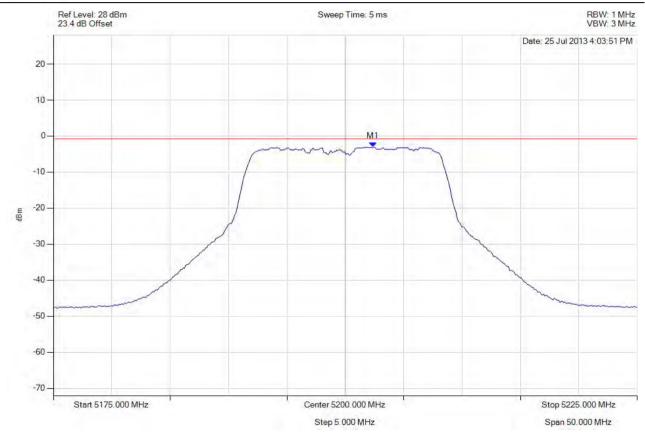
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 345 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5200.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5202.355 MHz : -3.043 dBm	Limit: ≤ -2.171 dBm Margin: 0.87 dB



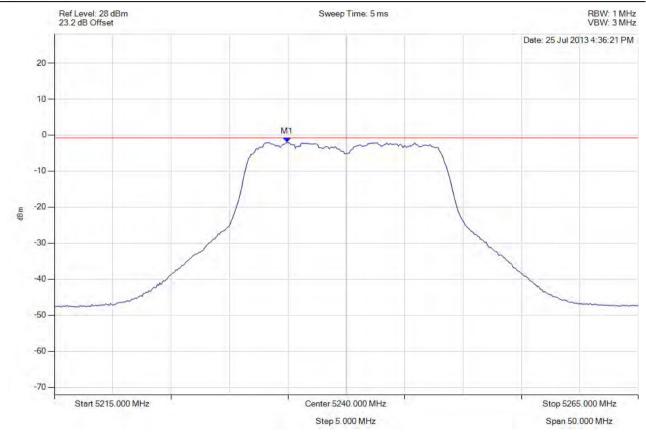
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 346 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5240.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5234.940 MHz : -2.030 dBm	Limit: ≤ -2.171 dBm Margin: -0.14 dB



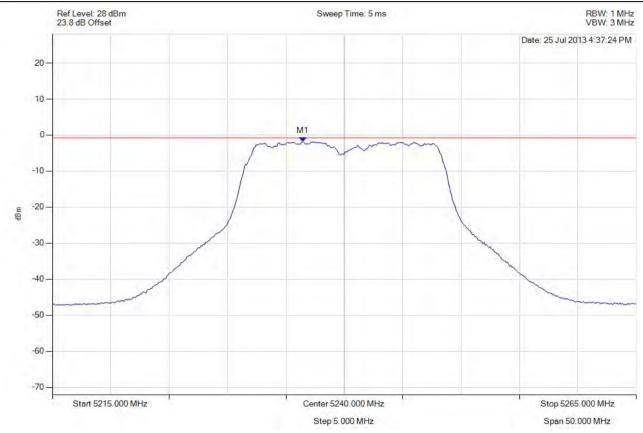
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 347 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5240.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5236.443 MHz : -1.850 dBm	Limit: ≤ -2.171 dBm Margin: -0.32 dB



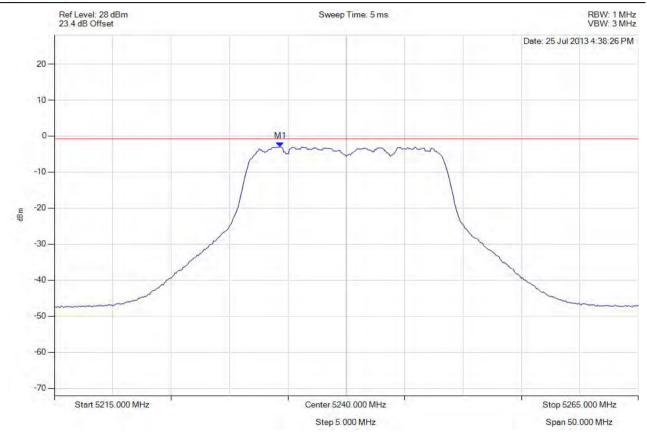
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 348 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5240.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5234.339 MHz : -2.980 dBm	Limit: ≤ -2.171 dBm Margin: 0.81 dB



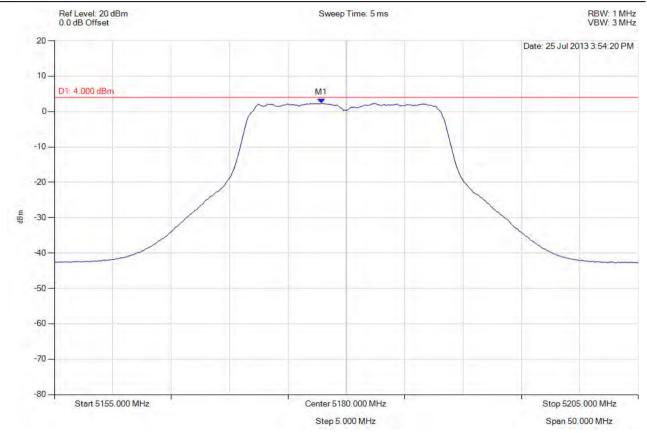
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 349 of 585



# **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5180.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5177.846 MHz : 2.353 dBm	Limit: ≤ 4.0 dBm Margin: -1.64 dB



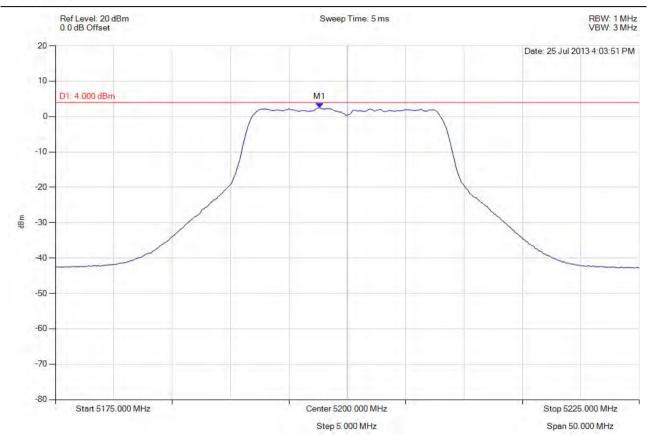
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 350 of 585



# **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5200.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5197.645 MHz : 2.489 dBm	Limit: ≤ 4.0 dBm Margin: -1.51 dB



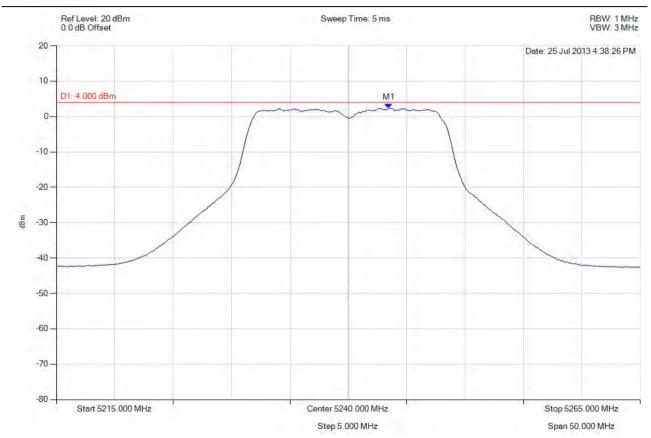
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 351 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11a, Channel: 5240.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5243.457 MHz : 2.351 dBm	Limit: ≤ 4.0 dBm Margin: -1.64 dB



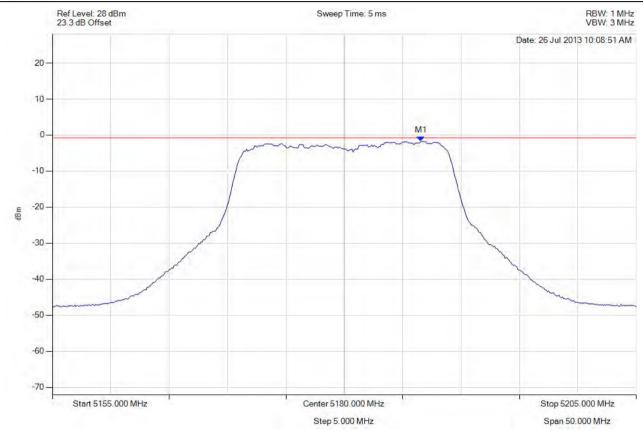
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 352 of 585



# **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5186.563 MHz : -1.684 dBm	Limit: ≤ -2.171 dBm Margin: -0.49 dB



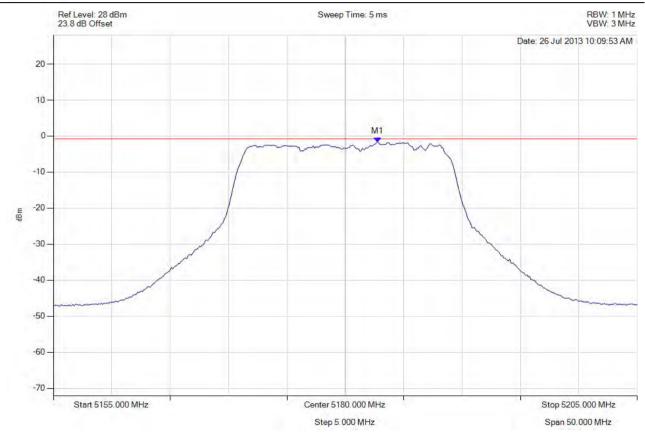
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 353 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5182.756 MHz : -1.686 dBm	Limit: ≤ -2.171 dBm Margin: -0.49 dB



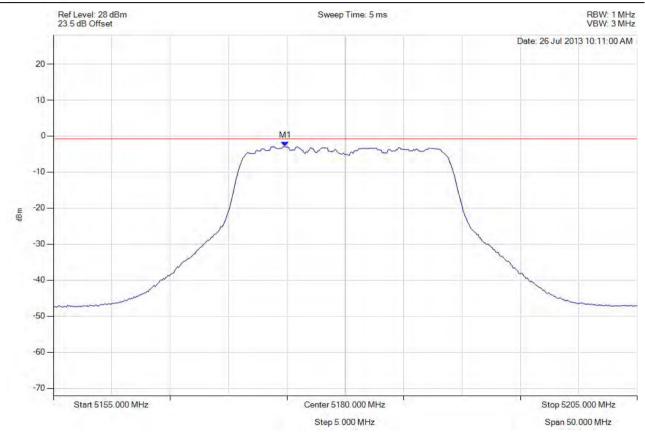
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 354 of 585



# **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5174.840 MHz : -2.926 dBm	Limit: ≤ -2.171 dBm Margin: 0.75 dB



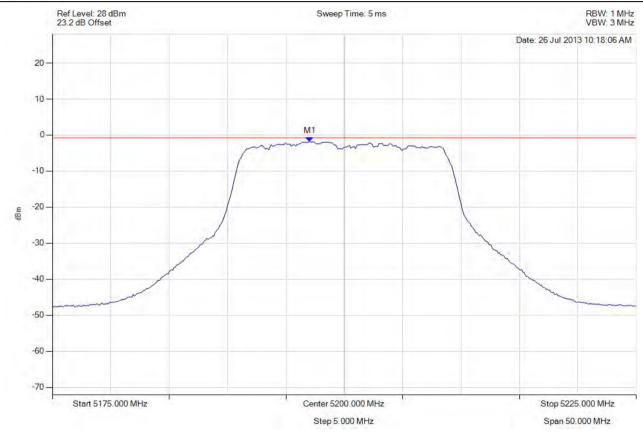
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 355 of 585



## PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5197.044 MHz : -1.859 dBm	Limit: ≤ -2.171 dBm Margin: -0.31 dB



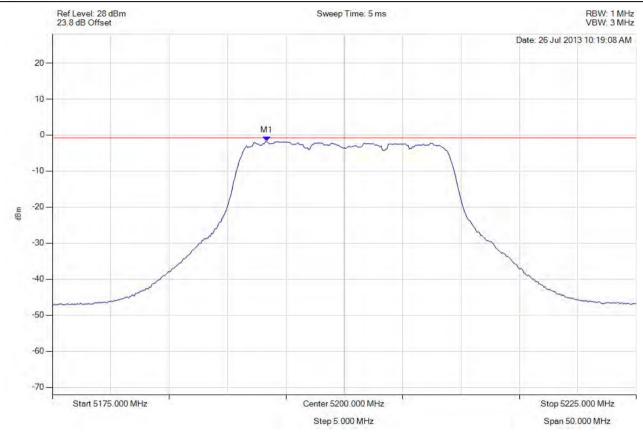
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 356 of 585



## PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5193.337 MHz : -1.779 dBm	Limit: ≤ -2.171 dBm Margin: -0.39 dB



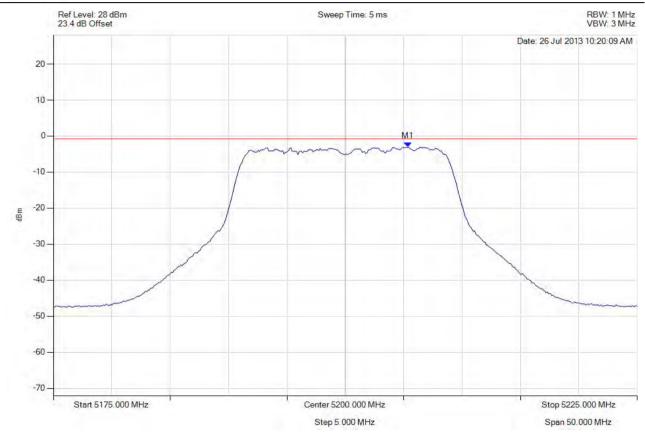
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 357 of 585



## PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5205.361 MHz : -3.067 dBm	Limit: ≤ -2.171 dBm Margin: 0.90 dB



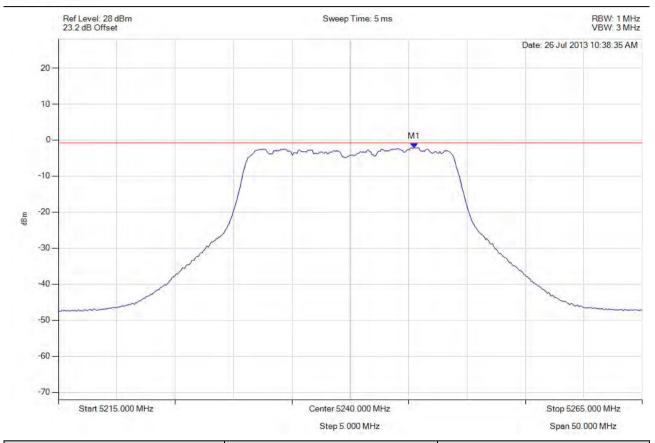
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 358 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5245.461 MHz : -2.115 dBm	Limit: ≤ -2.171 dBm Margin: -0.06 dB



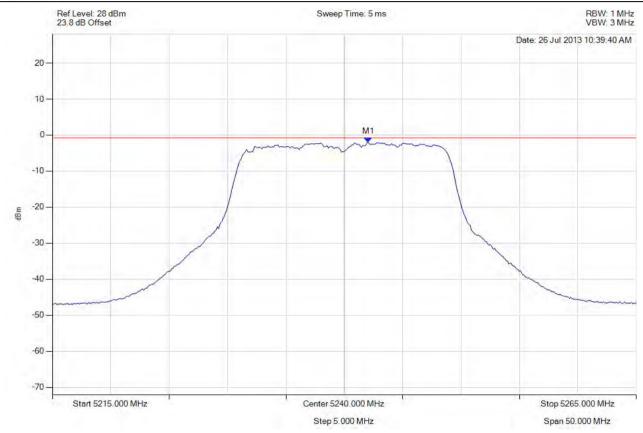
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 359 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5242.054 MHz : -2.041 dBm	Limit: ≤ -2.171 dBm Margin: -0.13 dB



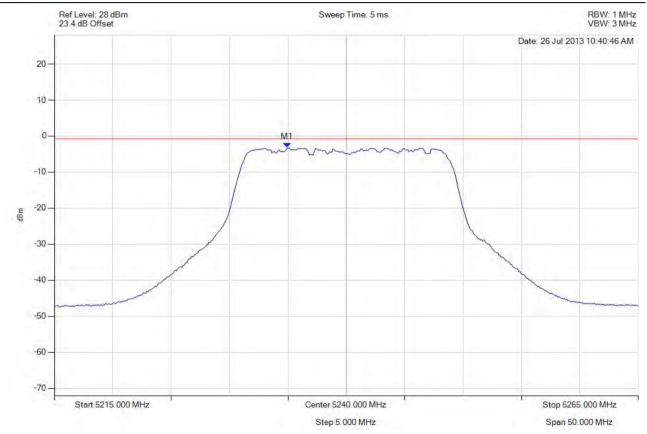
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 360 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5234.940 MHz : -3.250 dBm	Limit: ≤ -2.171 dBm Margin: 1.08 dB



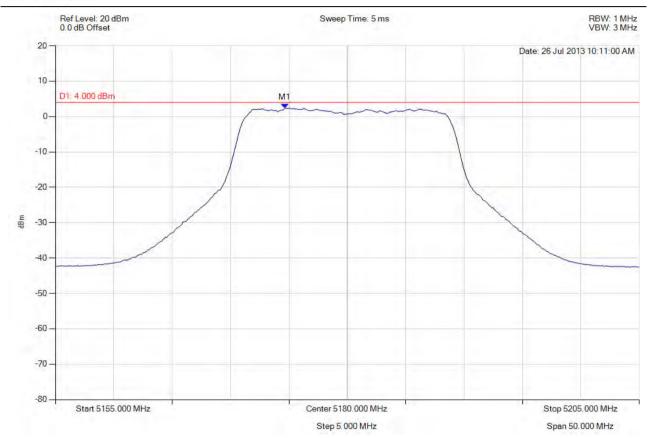
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 361 of 585



## PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5174.639 MHz : 2.352 dBm	Limit: ≤ 4.0 dBm Margin: -1.64 dB



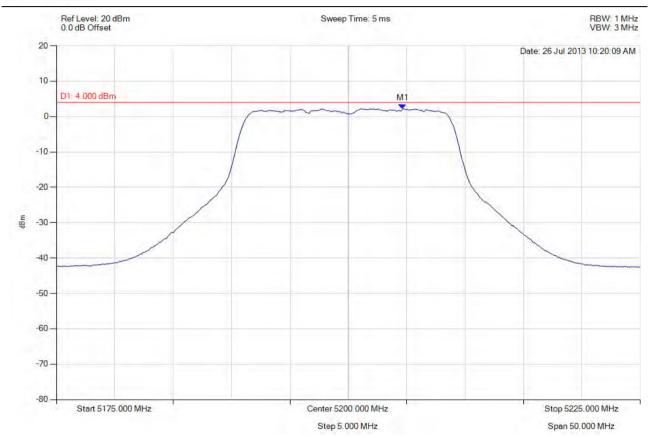
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 362 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-20, Channel: 5200.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5204.659 MHz : 2.203 dBm	Limit: ≤ 4.0 dBm Margin: -1.79 dB



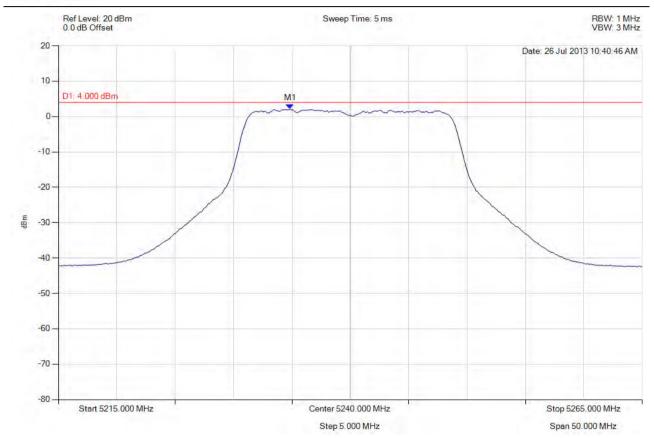
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 363 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5234.840 MHz : 2.092 dBm	Limit: ≤ 4.0 dBm Margin: -1.90 dB



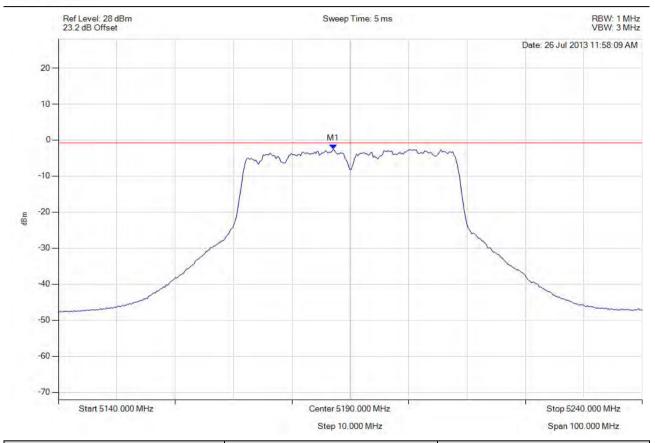
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 364 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5187.094 MHz : -2.499 dBm	Limit: ≤ -2.171 dBm Margin: 0.33 dB



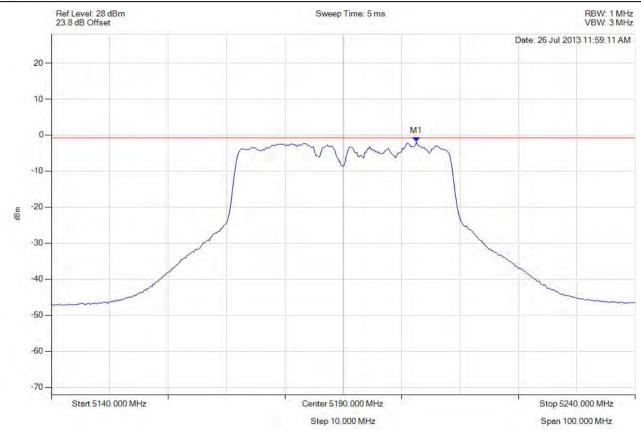
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 365 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5202.525 MHz : -1.924 dBm	Limit: ≤ -2.171 dBm Margin: -0.25 dB



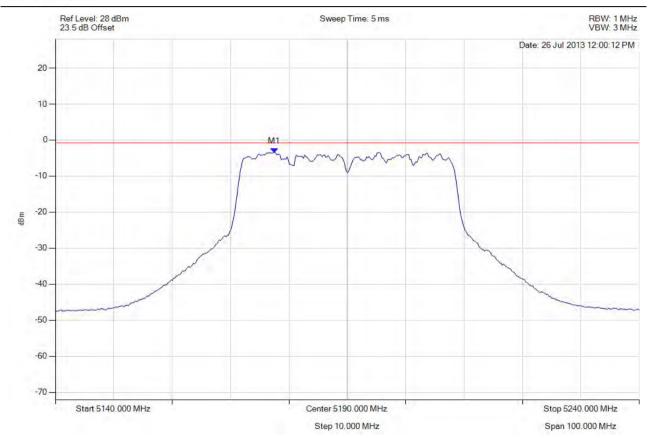
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 366 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5177.475 MHz : -3.450 dBm	Limit: ≤ -2.171 dBm Margin: 1.28 dB



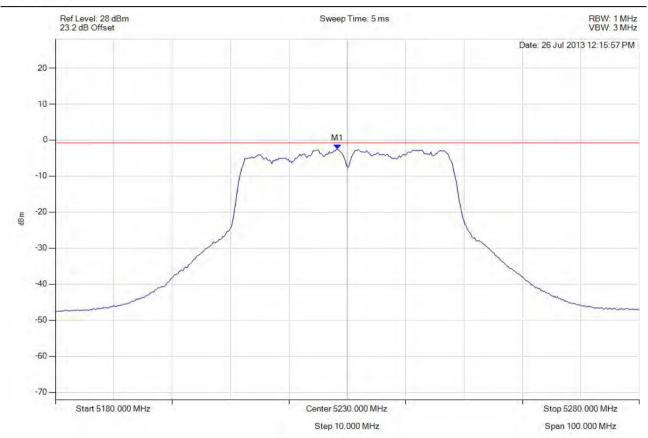
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 367 of 585



# PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5228.297 MHz : -2.546 dBm	Limit: ≤ -2.171 dBm Margin: 0.37 dB



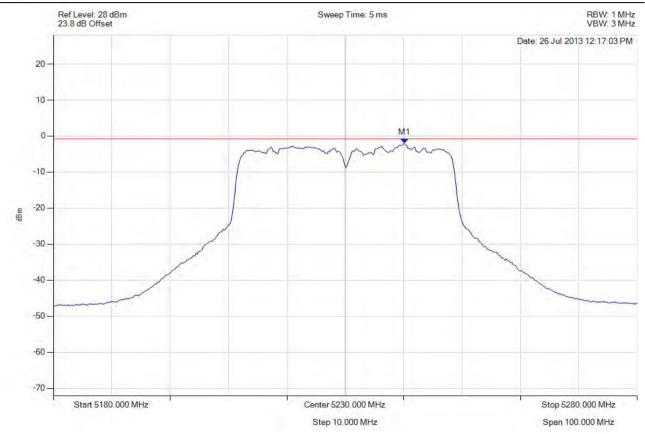
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 368 of 585



## PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5240.120 MHz : -2.055 dBm	Limit: ≤ -2.171 dBm Margin: -0.12 dB



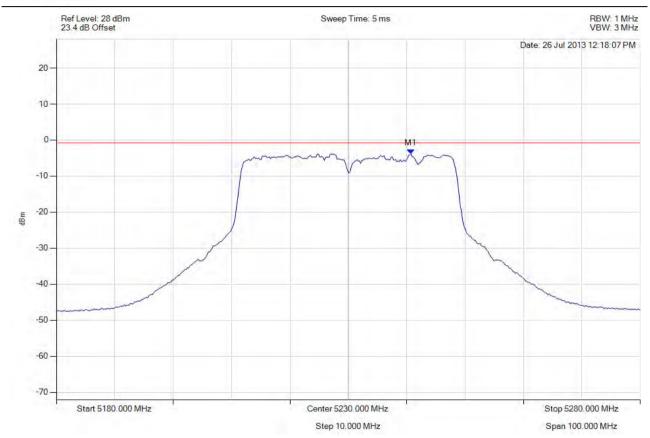
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 369 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5240.721 MHz : -3.851 dBm	Limit: ≤ -2.171 dBm Margin: -1.68 dB



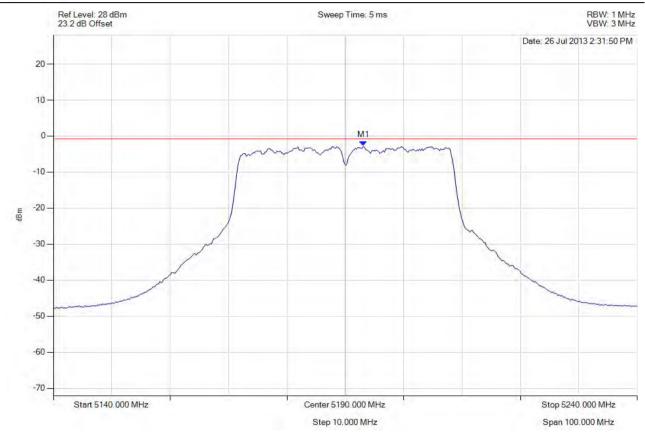
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 370 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11ac-40, Channel: 5190.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5193.106 MHz : -2.781 dBm	Limit: ≤ -2.171 dBm Margin: 0.61 dB



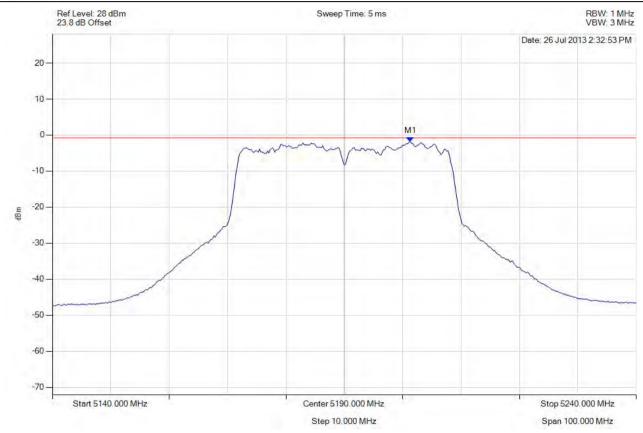
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 371 of 585



# **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11ac-40, Channel: 5190.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5201.323 MHz : -1.823 dBm	Limit: ≤ -2.171 dBm Margin: -0.35 dB



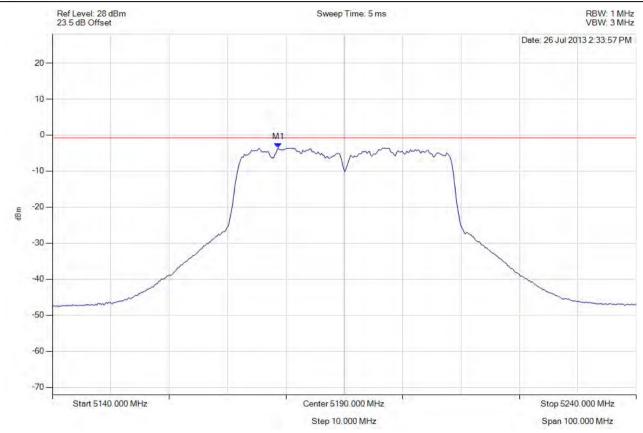
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 372 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11ac-40, Channel: 5190.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5178.677 MHz : -3.563 dBm	Limit: ≤ -2.171 dBm Margin: 1.39 dB



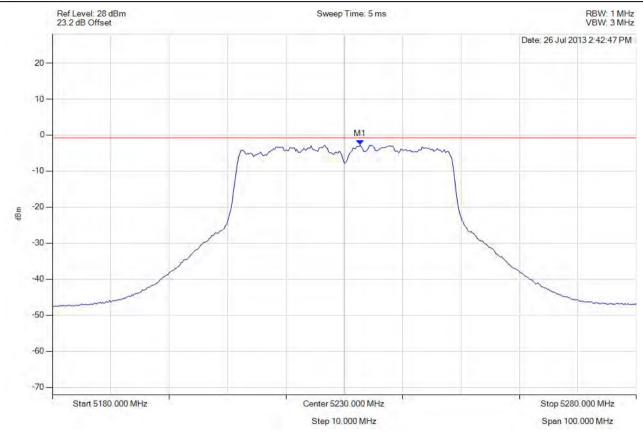
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 373 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11ac-40, Channel: 5230.00 MHz, Chain a, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5232.705 MHz : -2.701 dBm	Limit: ≤ -2.171 dBm Margin: 0.53 dB



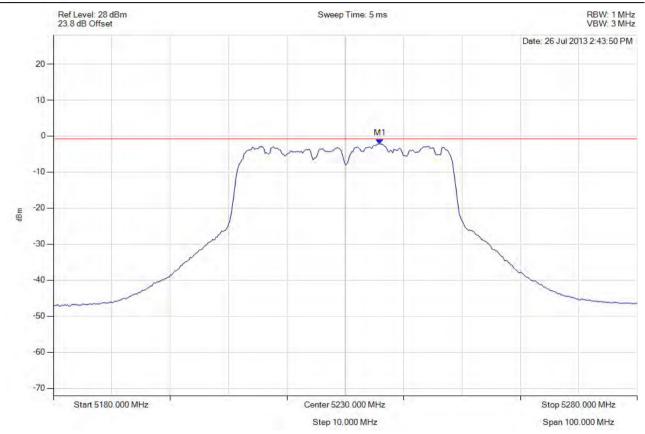
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

Page: 374 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11ac-40, Channel: 5230.00 MHz, Chain b, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5235.912 MHz : -2.153 dBm	Limit: ≤ -2.171 dBm Margin: -0.02 dB



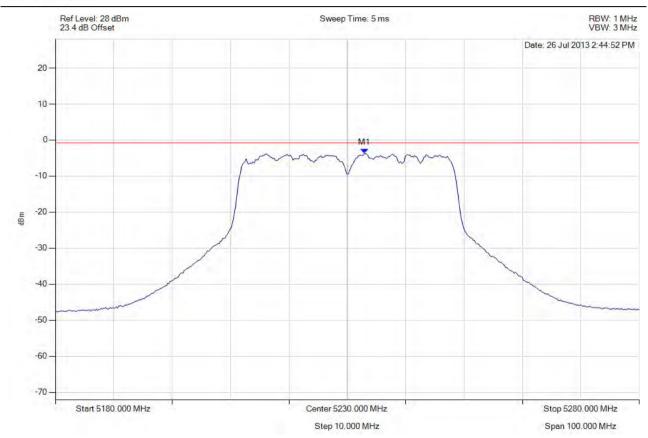
To: FCC 47 CFR Part 15.407 Serial #: HPWD78-U3 Rev A Issue Date: 22nd February 2016

**Page:** 375 of 585



## **PEAK POWER SPECTRAL DENSITY**

Variant: 802.11ac-40, Channel: 5230.00 MHz, Chain c, Temp: Ambient, Voltage: 5 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5232.906 MHz : -3.735 dBm	Limit: ≤ -2.171 dBm Margin: 1.56 dB