

9.2.5.8 Chain B 802.11n HT40 99% Occupied Bandwidth

Chain B 802.11n HT40 99% Occupied Bandwidth		
Channel No.	Frequency (MHz)	99% Occupied Bandwidth (MHz)
38	5190	36.132
46	5230	36.117
54	5270	36.110
62	5310	36.156
102	5510	36.043
110	5550	36.141
134	5670	36.074
142	5710	36.126
151	5755	36.049
159	5795	36.096

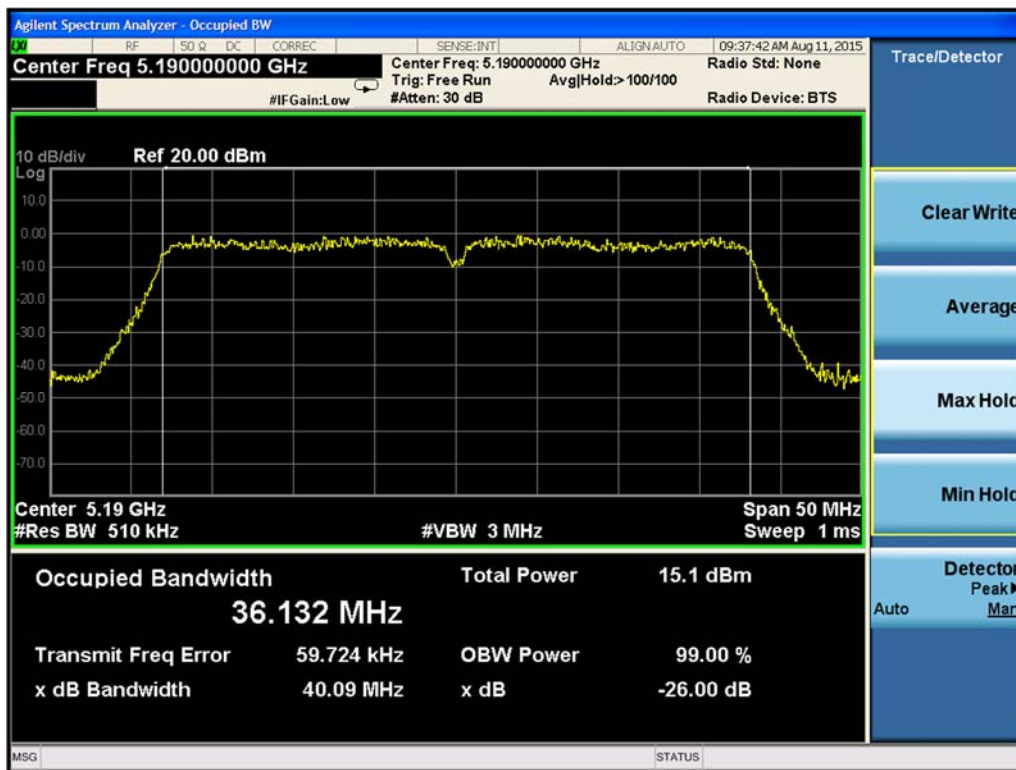


Figure 9-220. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 38)

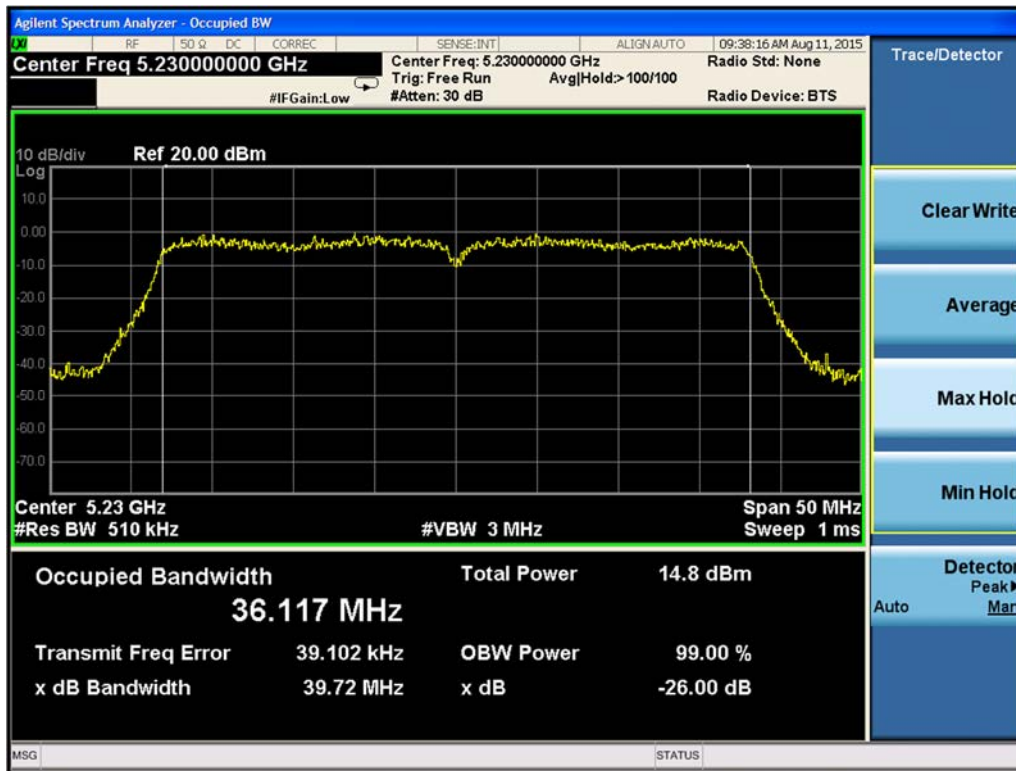


Figure 9-221. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 46)

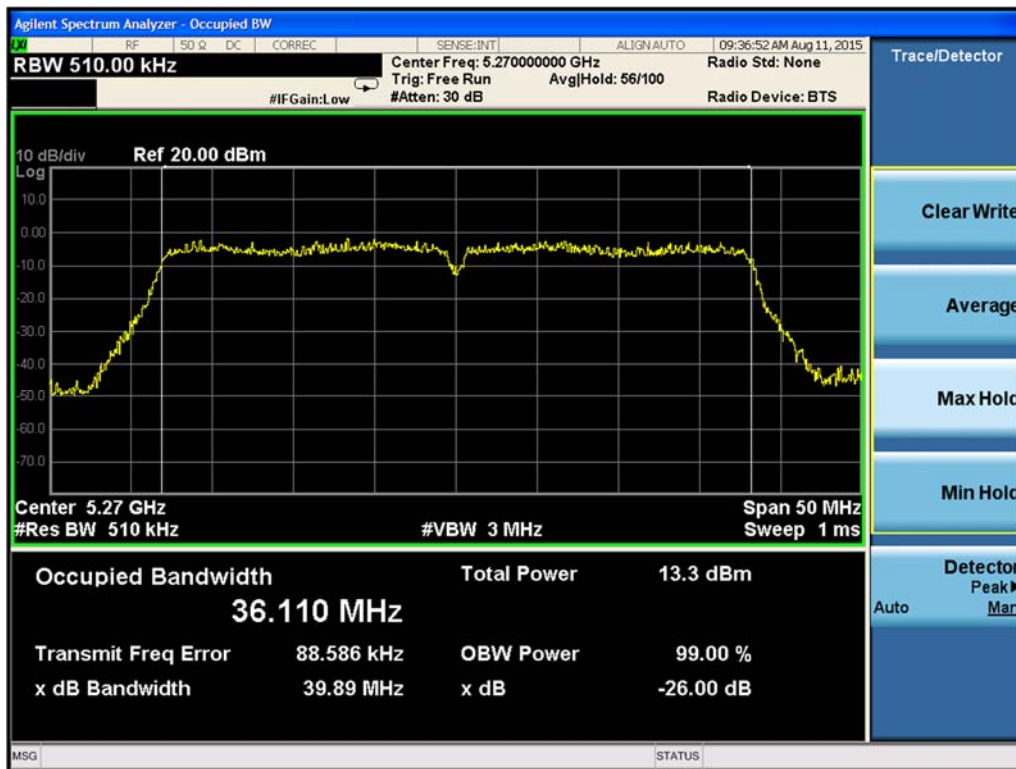


Figure 9-222. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 54)



Figure 9-223. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 62)



Figure 9-224. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 102)

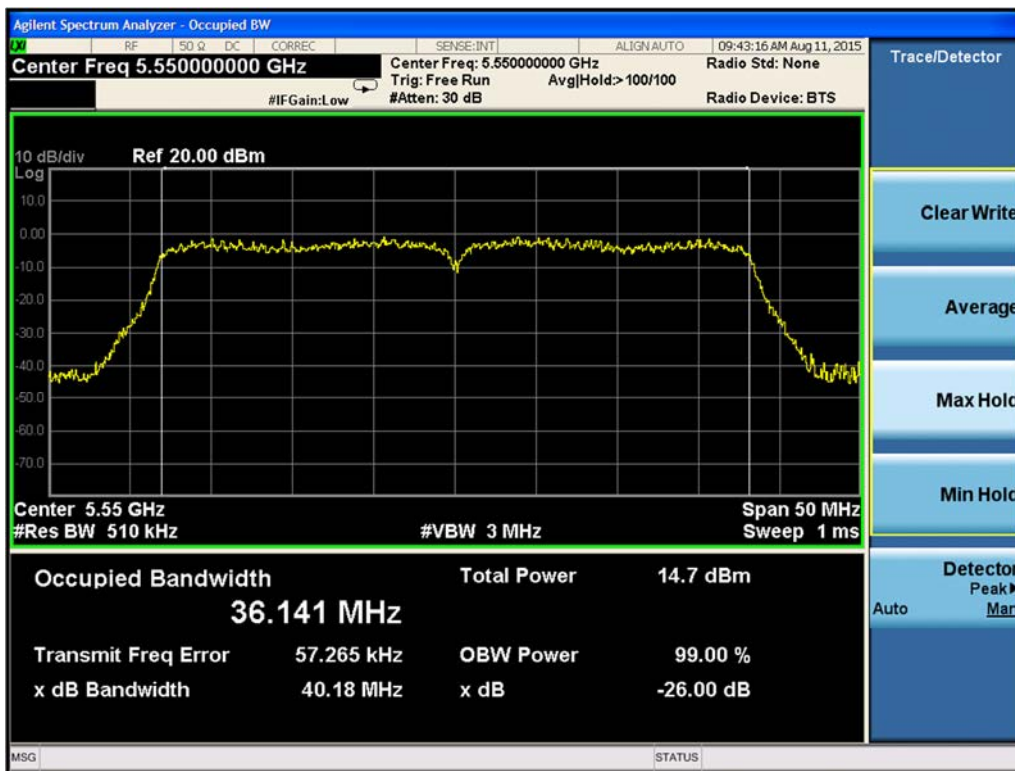


Figure 9-225. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 110)



Figure 9-226. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 134)

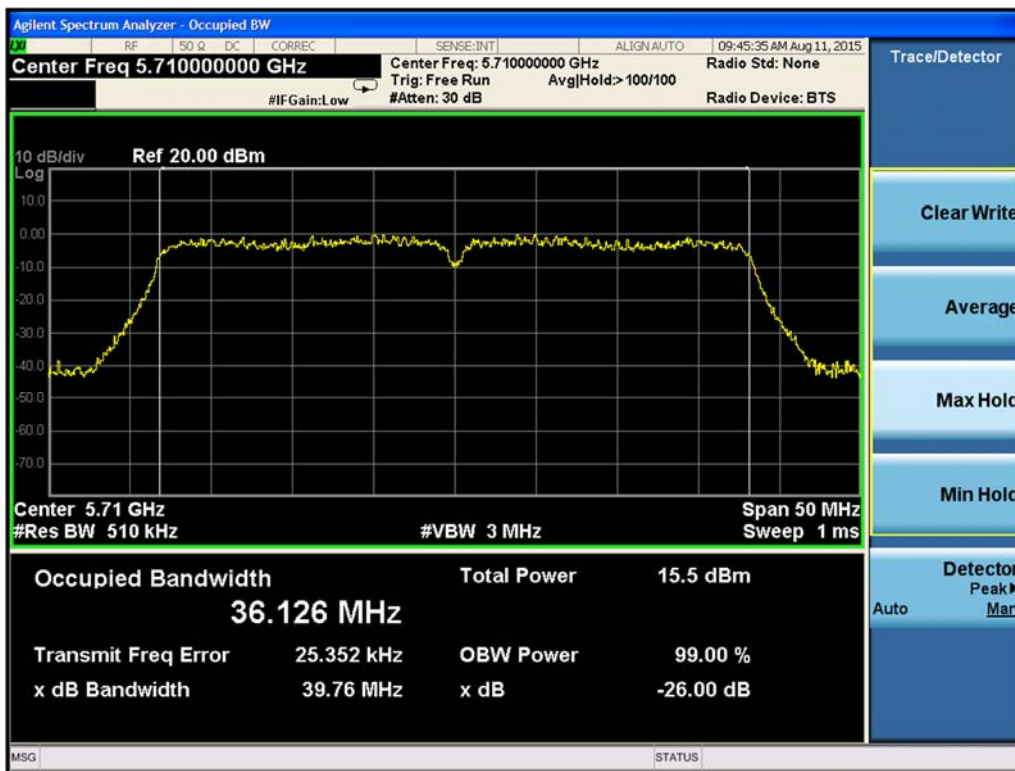


Figure 9-227. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 142)

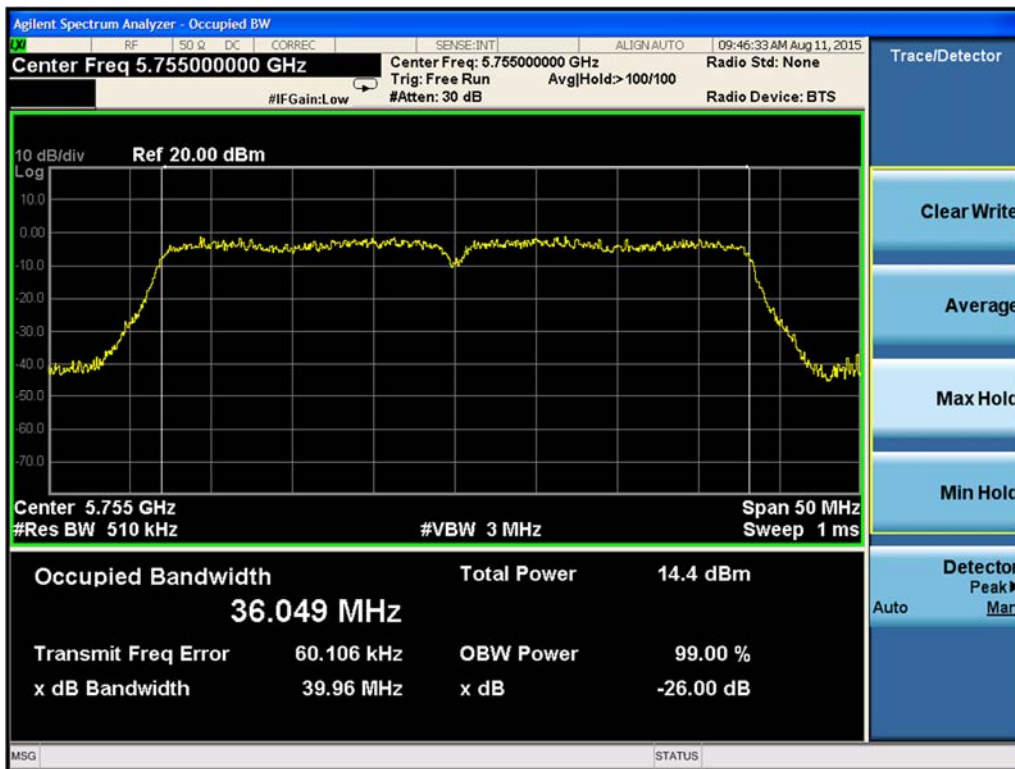


Figure 9-228. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 151)

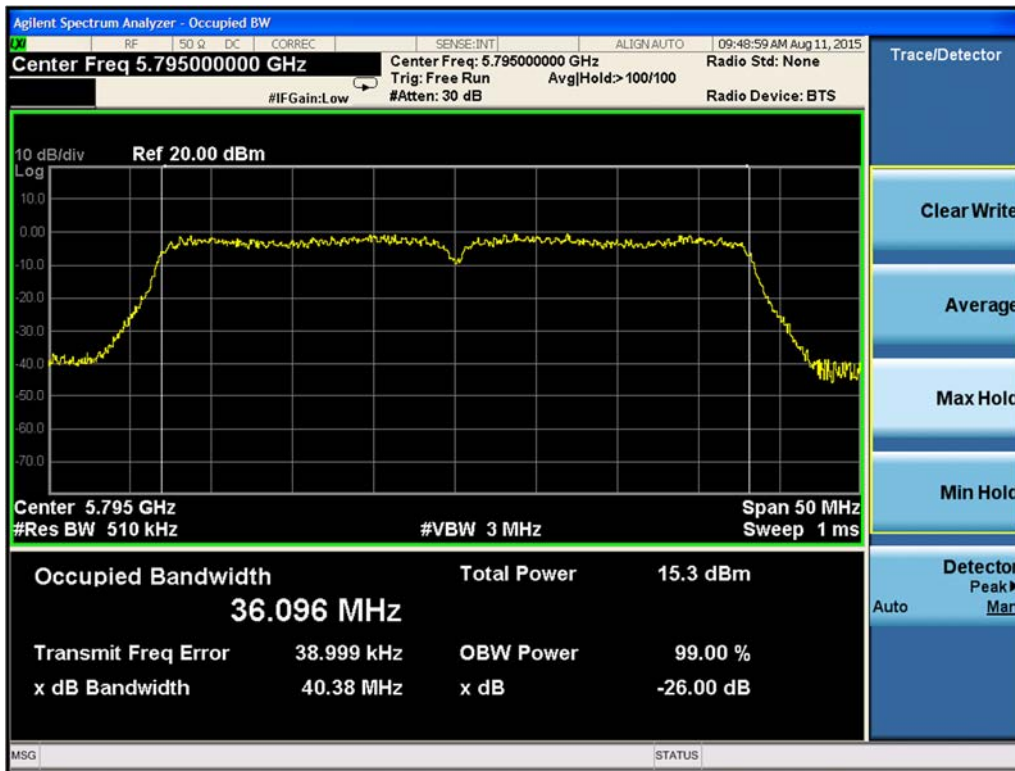


Figure 9-229. 99% Occupied Bandwidth Chain B 802.11n HT40 (Ch. 159)

### 9.2.5.9 Chain A 802.11ac VHT40 99% Occupied Bandwidth

Chain A 802.11ac VHT40 99% Occupied Bandwidth		
Channel No.	Frequency (MHz)	99% Occupied Bandwidth (MHz)
38	5190	36.125
46	5230	36.133
54	5270	36.108
62	5310	36.112
102	5510	36.129
110	5550	36.156
134	5670	36.170
142	5710	36.138
151	5755	36.094
159	5795	36.194

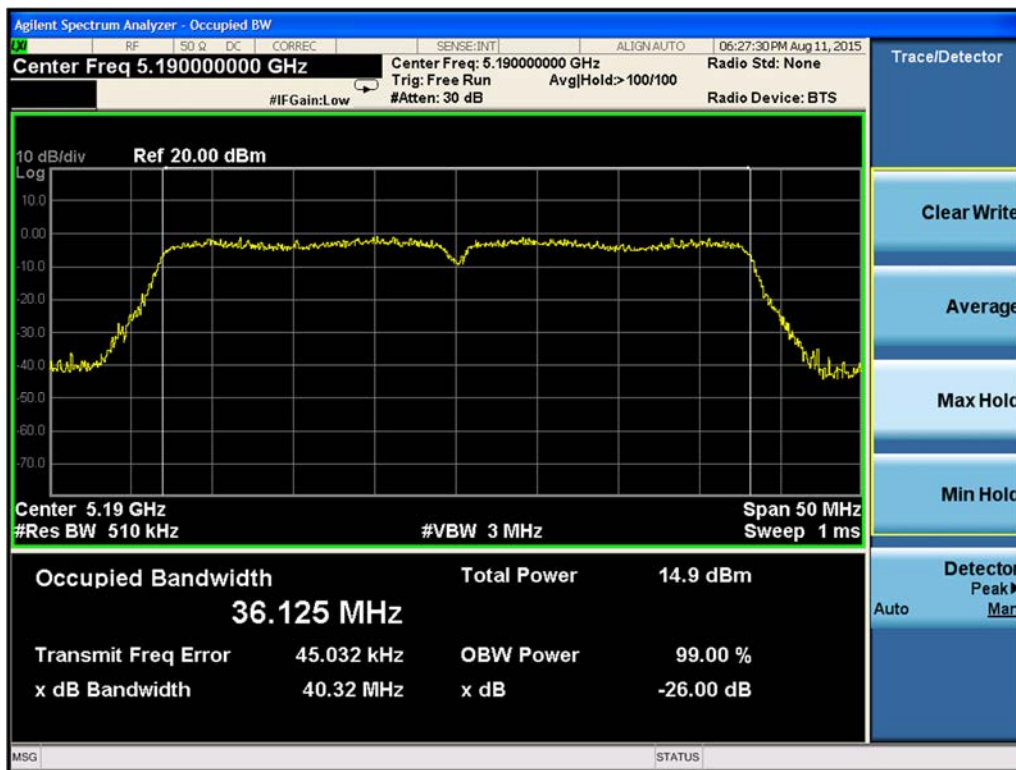


Figure 9-230. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 38)

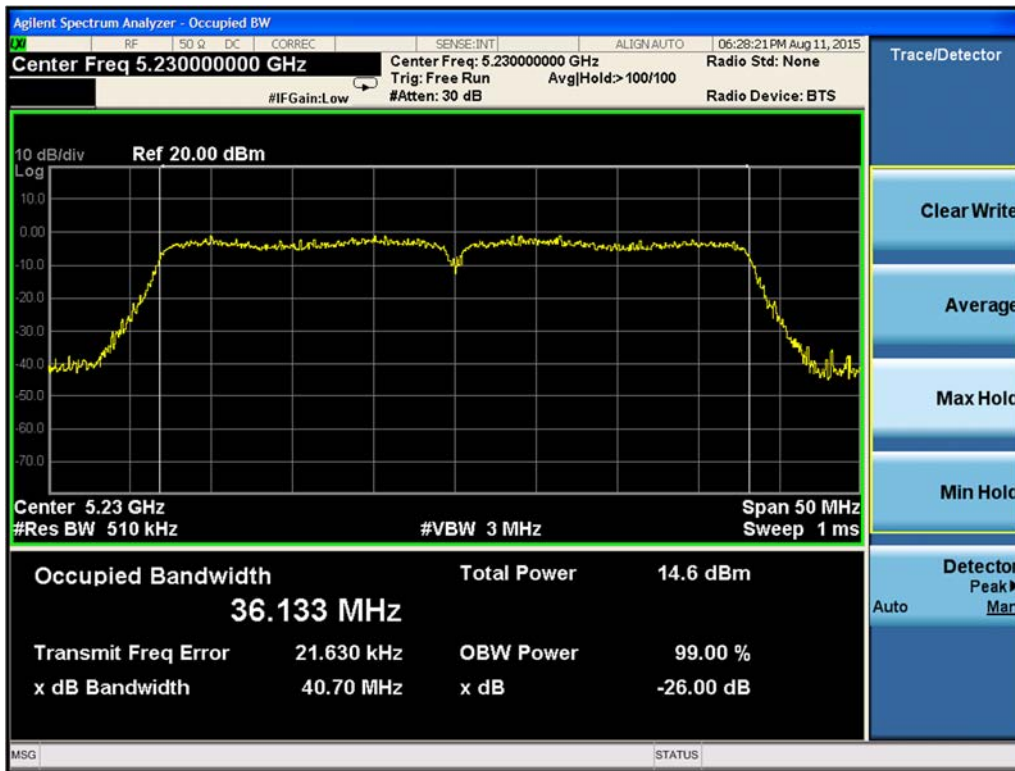


Figure 9-231. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 46)

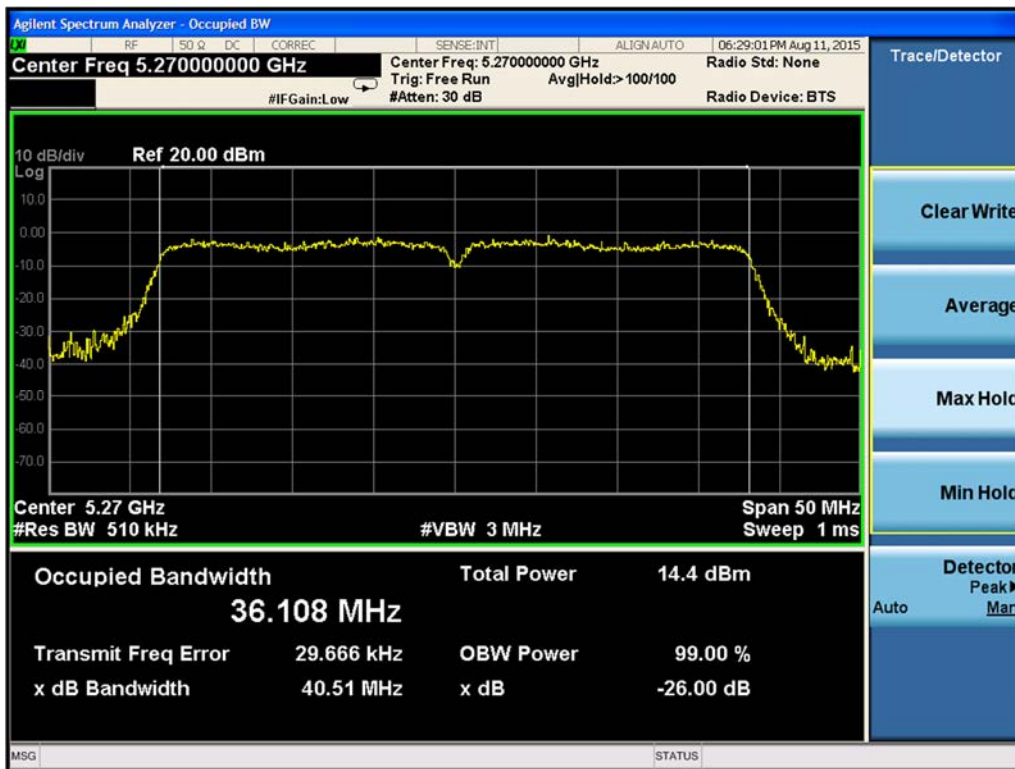


Figure 9-232. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 54)



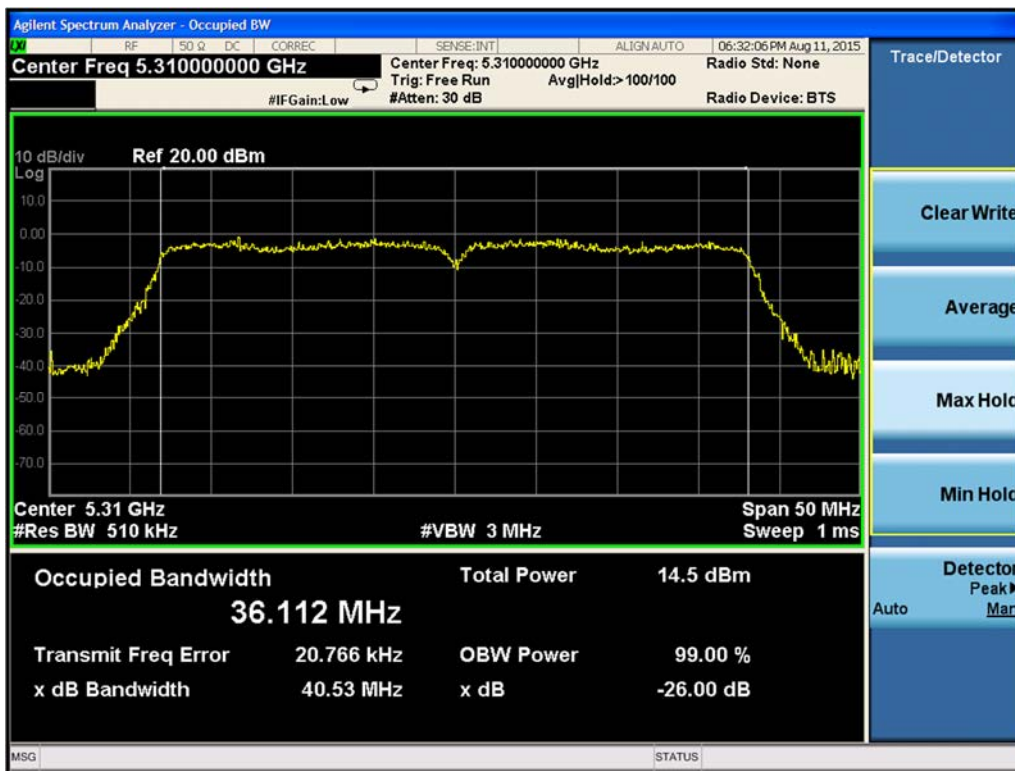


Figure 9-233. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 62)

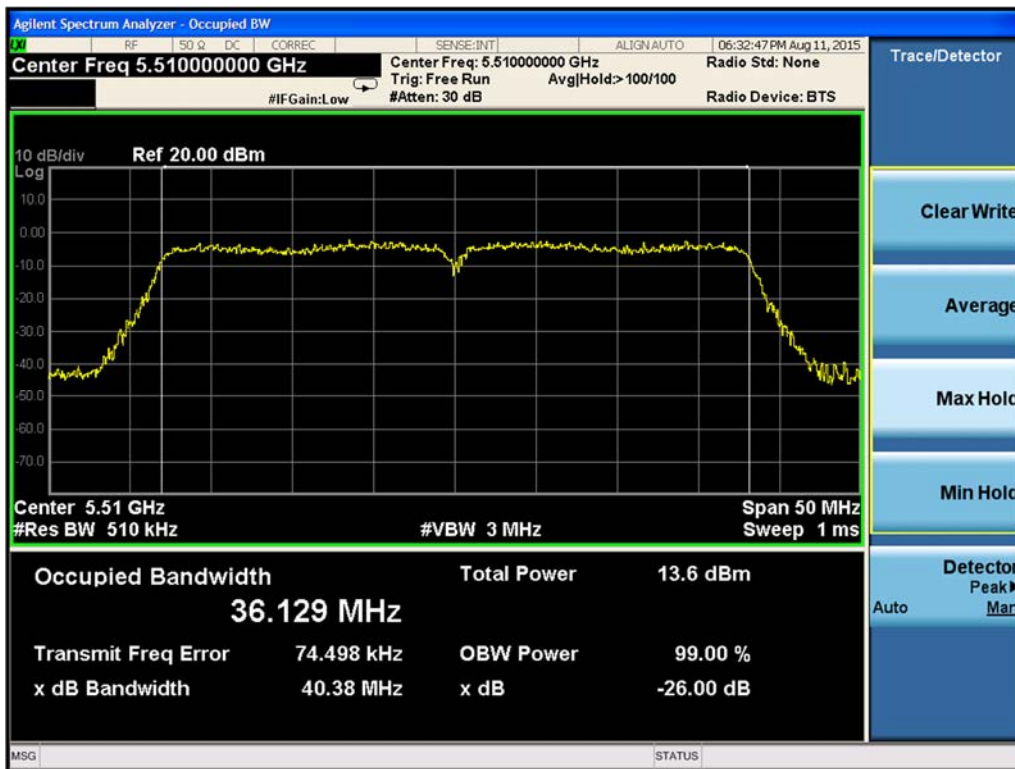


Figure 9-234. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 102)

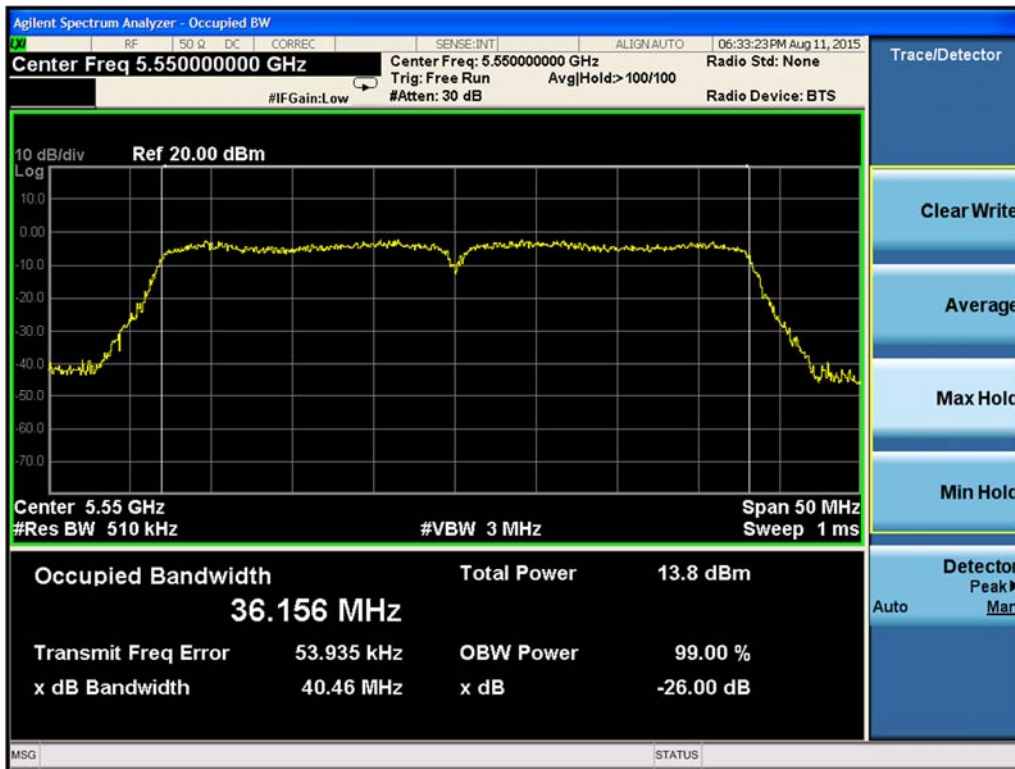


Figure 9-235. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 110)

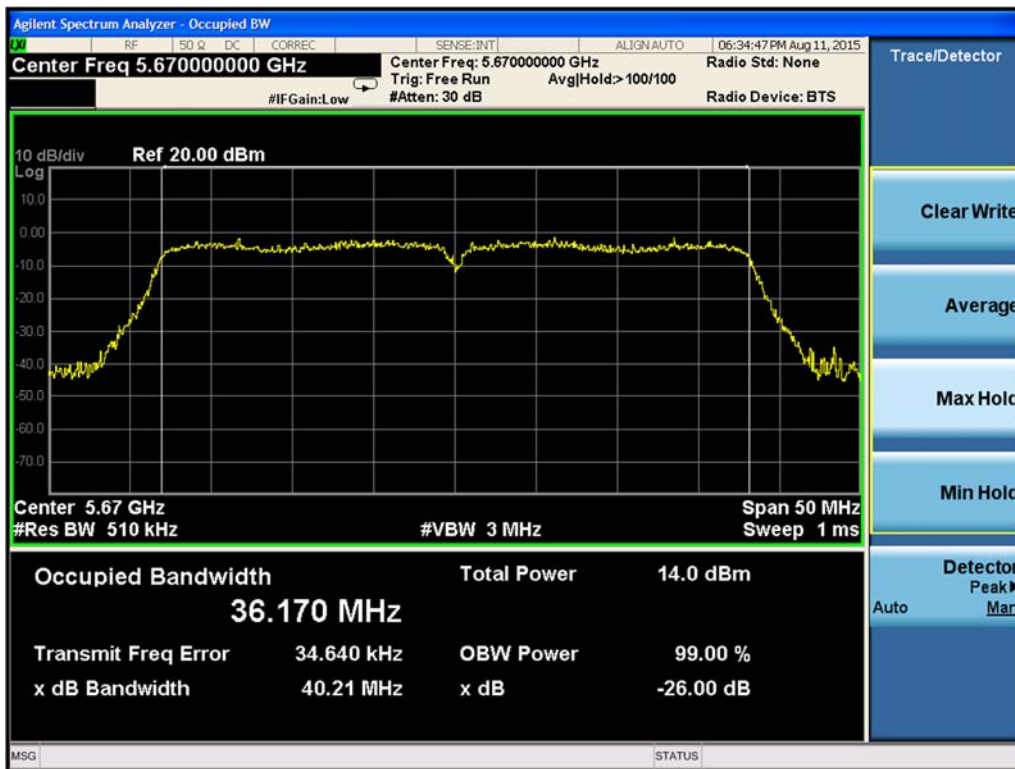


Figure 9-236. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 134)

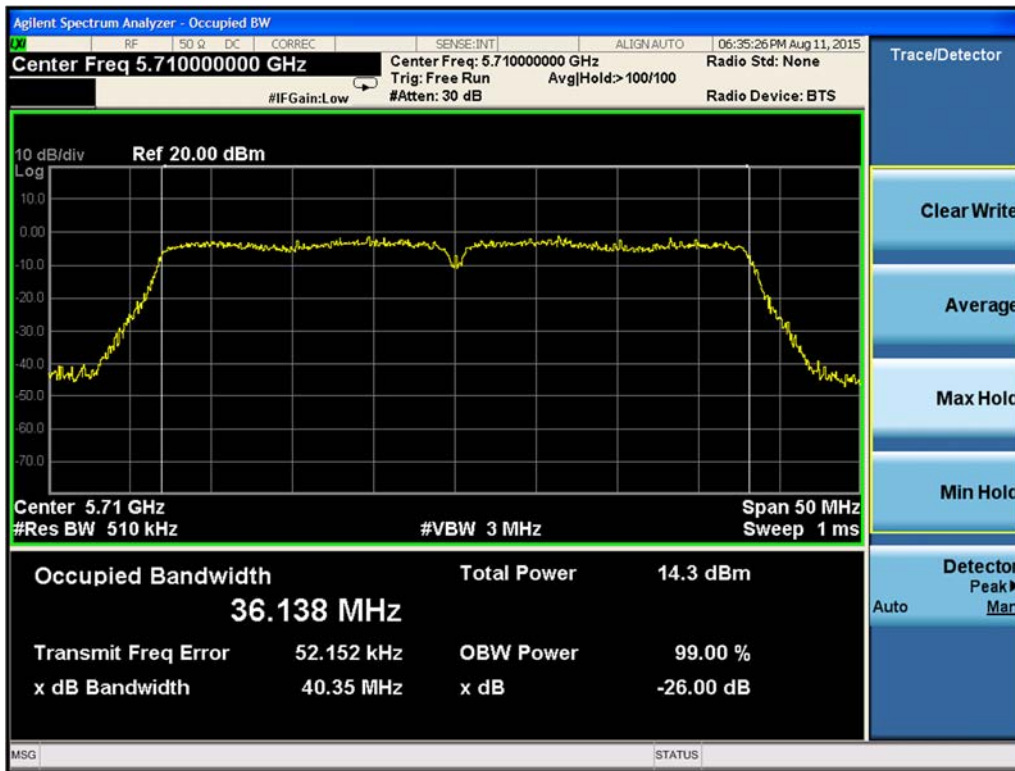


Figure 9-237. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 142)



Figure 9-238. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 151)

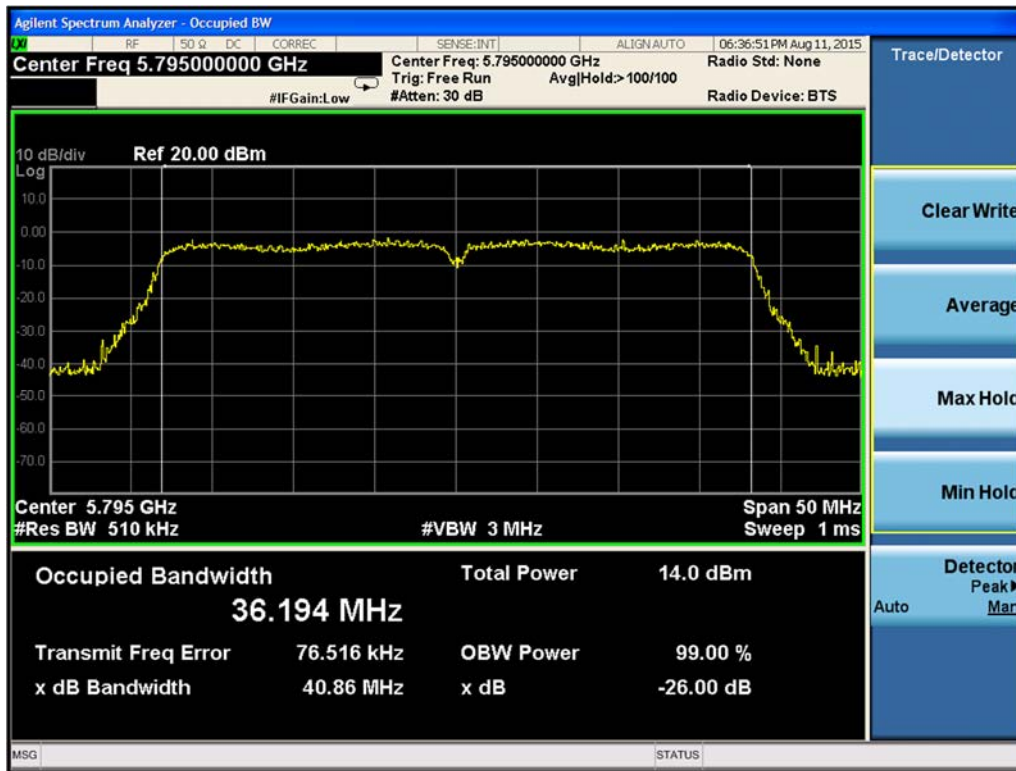


Figure 9-239. 99% Occupied Bandwidth Chain A 802.11ac VHT40 (Ch. 159)

9.2.5.10 Chain B 802.11ac VHT40 99% Occupied Bandwidth

Chain B 802.11ac VHT40 99% Occupied Bandwidth		
Channel No.	Frequency (MHz)	99% Occupied Bandwidth (MHz)
38	5190	36.139
46	5230	36.075
54	5270	36.074
62	5310	36.122
102	5510	36.070
110	5550	36.099
134	5670	36.094
142	5710	36.091
151	5755	36.112
159	5795	36.121

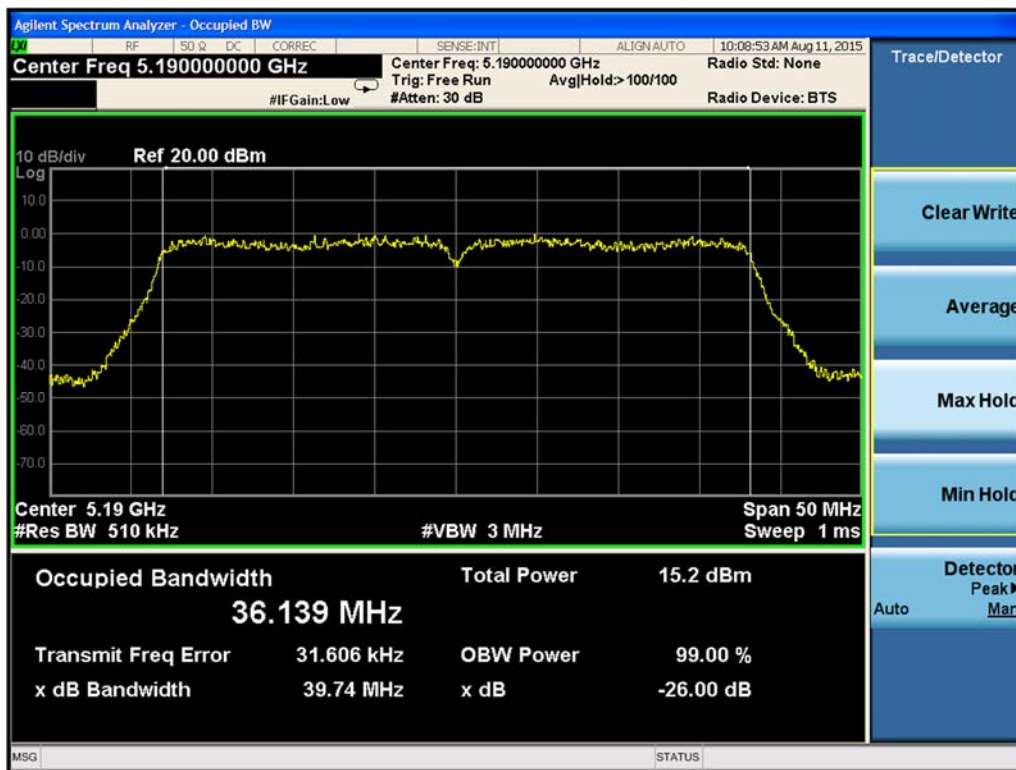


Figure 9-240. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 38)

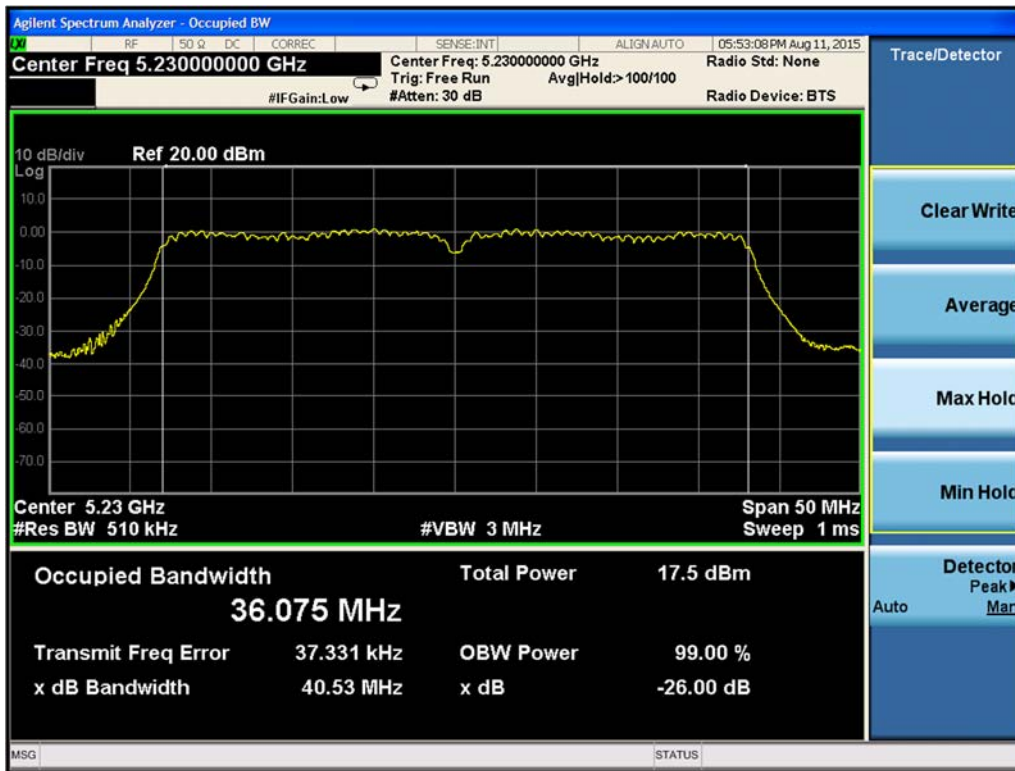


Figure 9-241. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 46)



Figure 9-242. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 54)



Figure 9-243. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 62)



Figure 9-244. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 102)



Figure 9-245. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 110)



Figure 9-246. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 134)



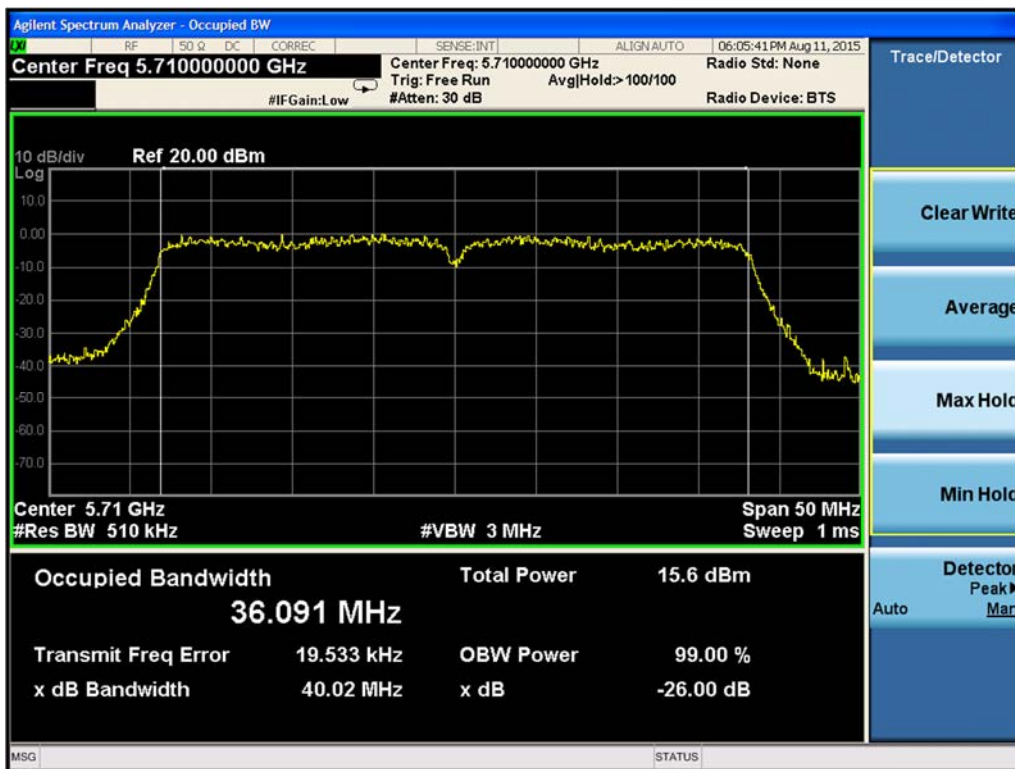


Figure 9-247. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 142)

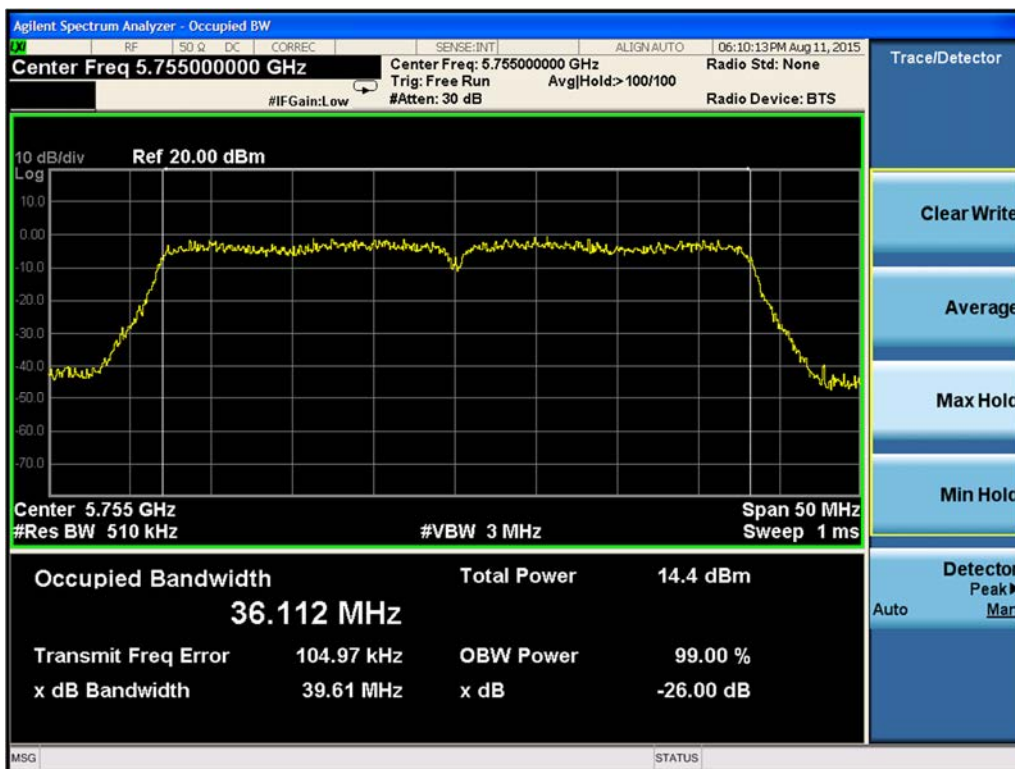


Figure 9-248. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 151)

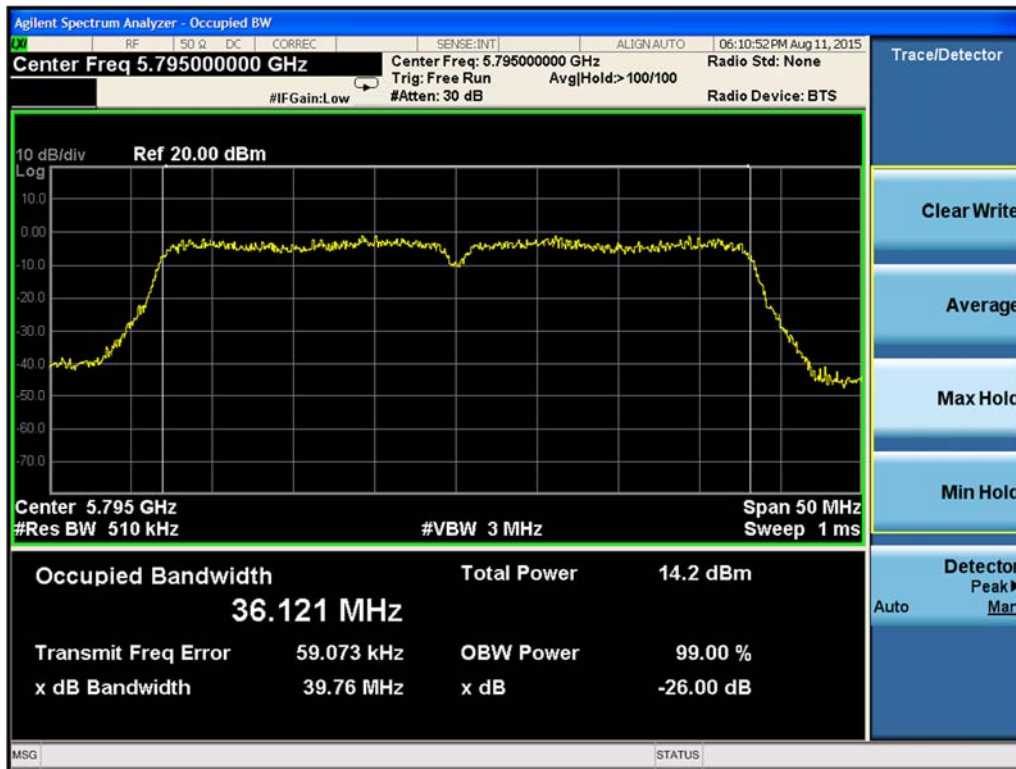


Figure 9-249. 99% Occupied Bandwidth Chain B 802.11ac VHT40 (Ch. 159)

9.2.5.11 Chain A 802.11ac VHT80 99% Occupied Bandwidth

Chain A 802.11ac VHT80 99% Occupied Bandwidth		
Channel No.	Frequency (MHz)	99% Occupied Bandwidth (MHz)
42	5210	75.965
58	5290	76.072
106	5530	76.433
122	5610	76.115
138	5690	76.369
155	5775	76.355



Figure 250. 99% Occupied Bandwidth Chain A 802.11ac VHT80 (Ch. 42)

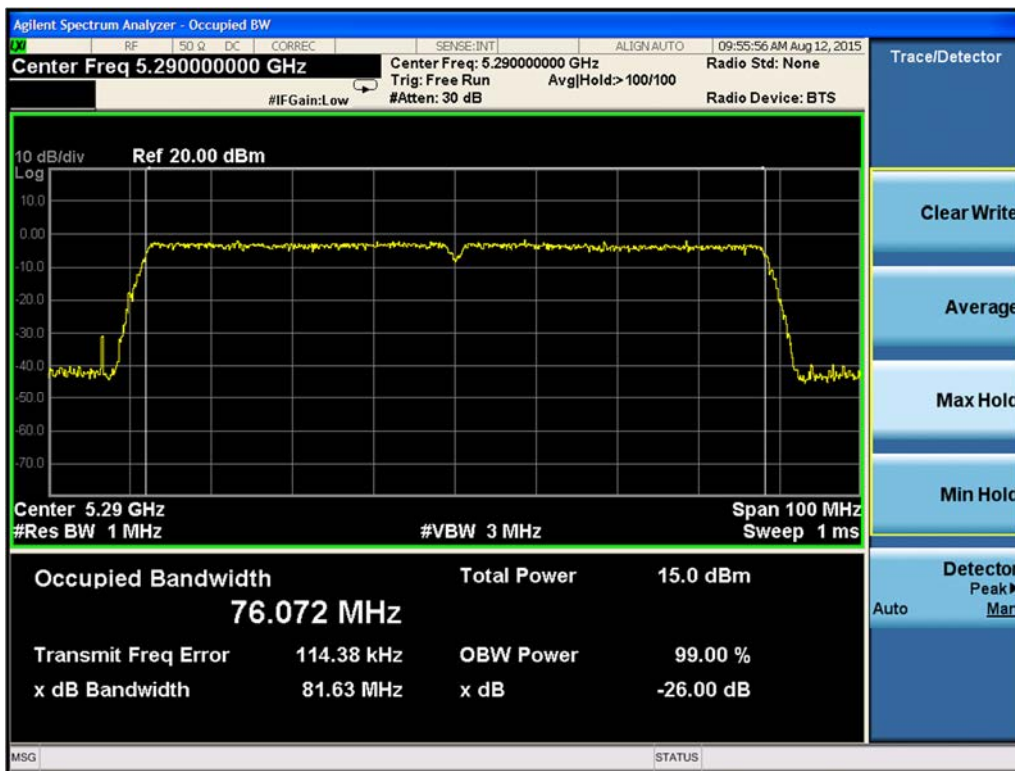


Figure 251. 99% Occupied Bandwidth Chain A 802.11ac VHT80 (Ch. 58)

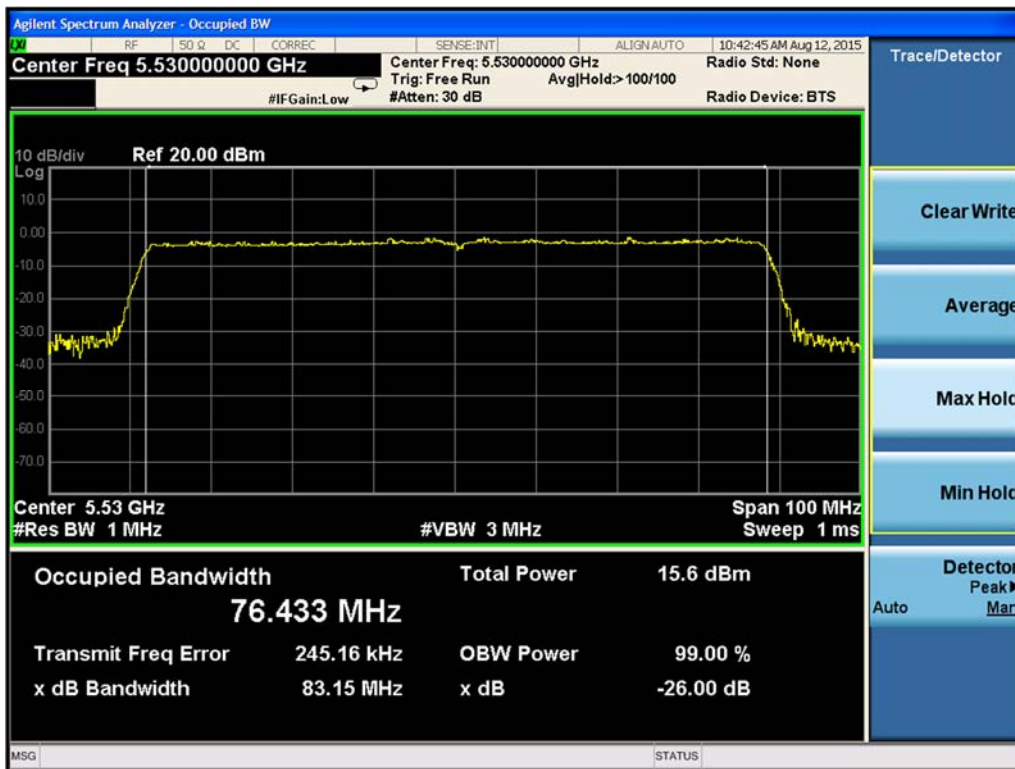


Figure 252. 99% Occupied Bandwidth Chain A 802.11ac VHT80 (Ch. 106)



Figure 253. 99% Occupied Bandwidth Chain A 802.11ac VHT80 (Ch. 122)

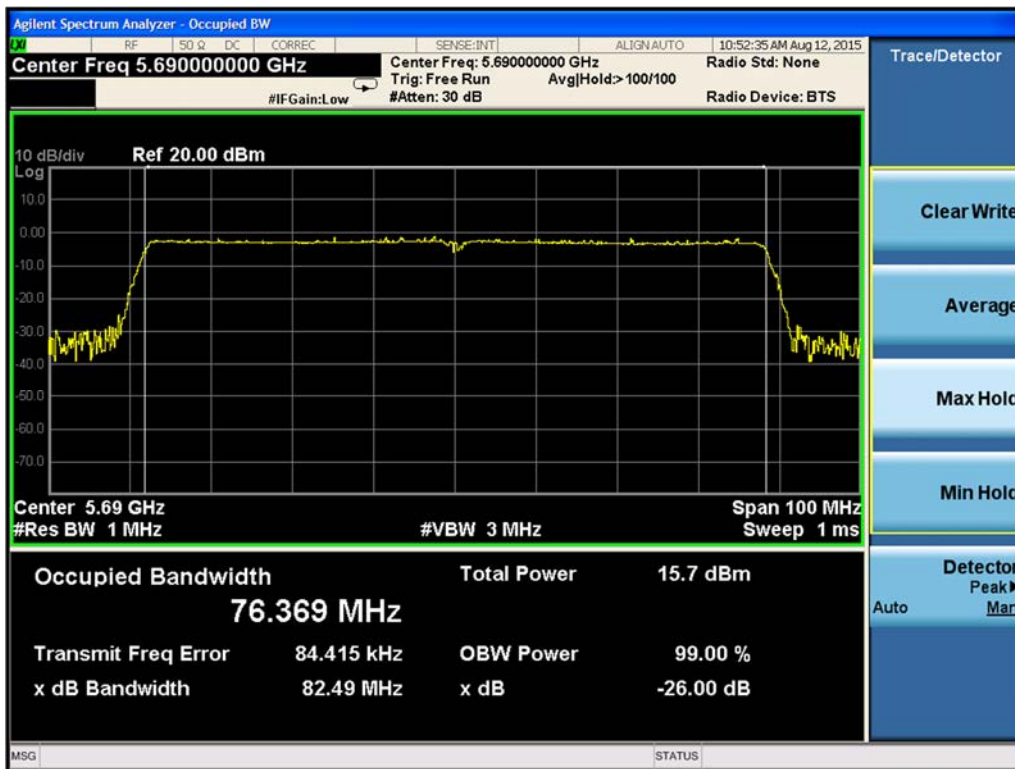


Figure 254. 99% Occupied Bandwidth Chain A 802.11ac VHT80 (Ch. 138)



Figure 255. 99% Occupied Bandwidth Chain A 802.11ac VHT80 (Ch. 155)

9.2.5.12 Chain B 802.11ac VHT80 99% Occupied Bandwidth

Chain B 802.11ac VHT80 99% Occupied Bandwidth		
Channel No.	Frequency (MHz)	99% Occupied Bandwidth (MHz)
42	5210	76.067
58	5290	76.057
106	5530	75.948
122	5610	75.978
138	5690	75.999
155	5775	76.024



Figure 256. 99% Occupied Bandwidth Chain B 802.11ac VHT80 (Ch. 42)



Figure 257. 99% Occupied Bandwidth Chain B 802.11ac VHT80 (Ch. 58)

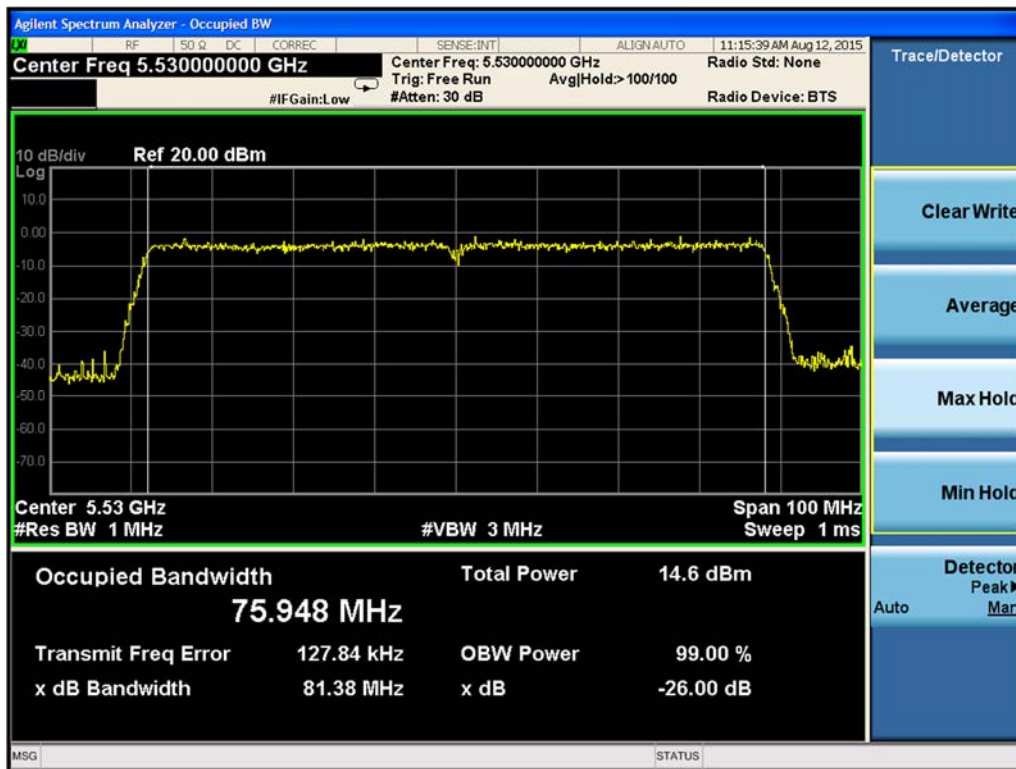


Figure 258. 99% Occupied Bandwidth Chain B 802.11ac VHT80 (Ch. 106)



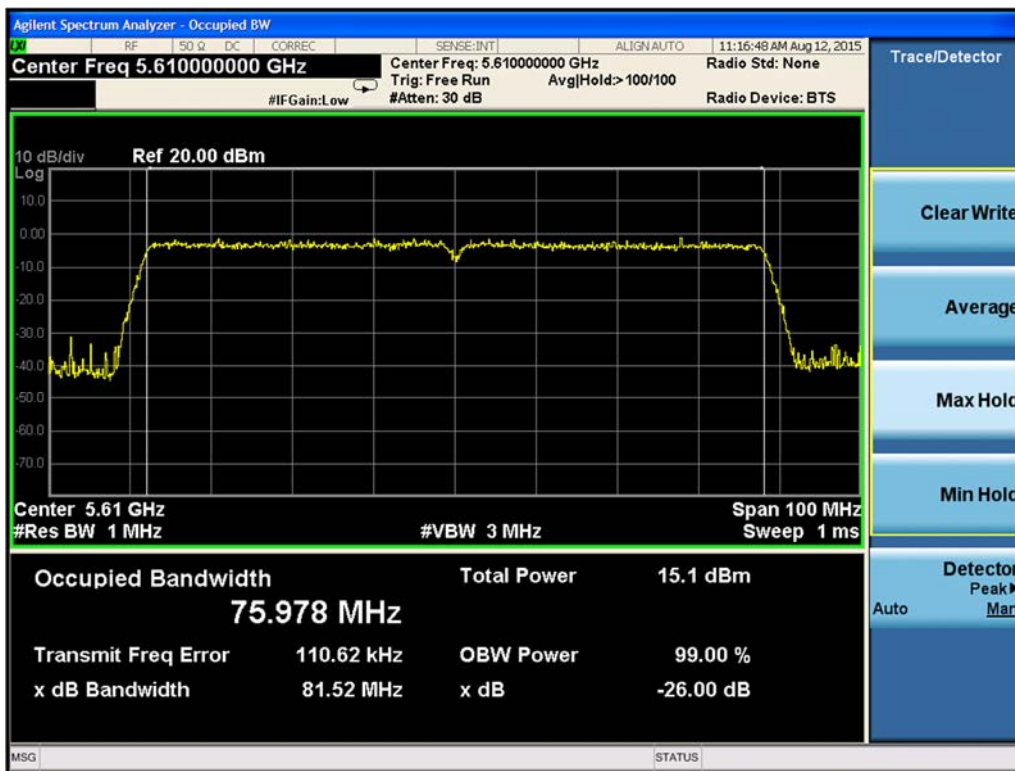


Figure 259. 99% Occupied Bandwidth Chain B 802.11ac VHT80 (Ch. 122)

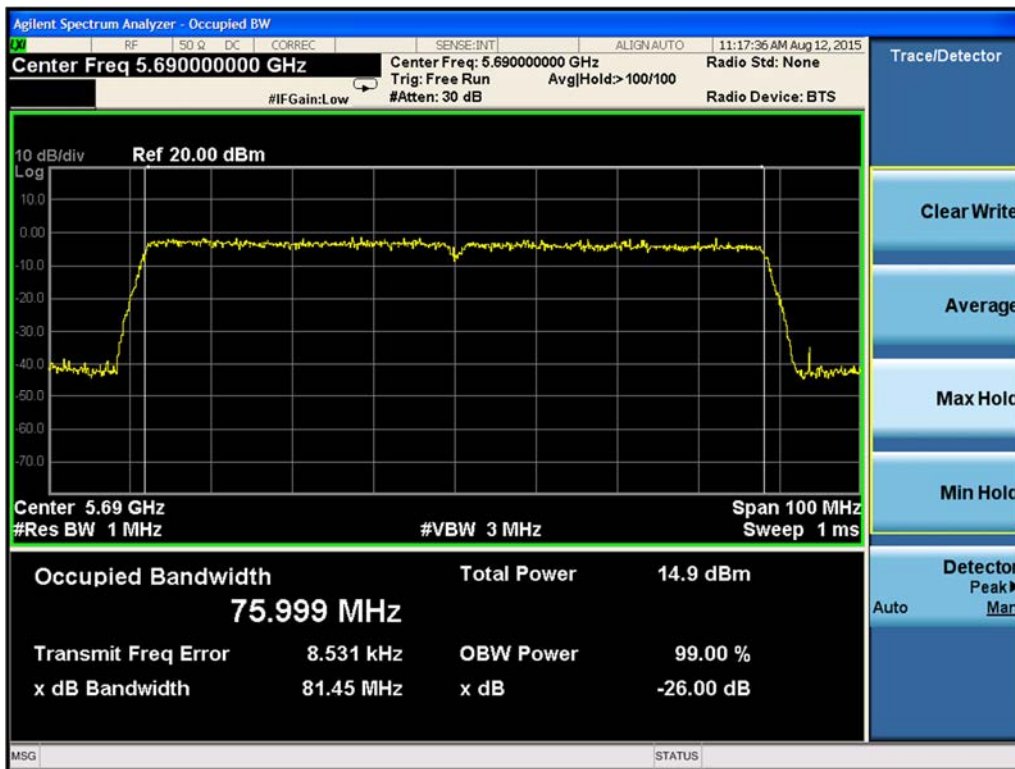


Figure 260. 99% Occupied Bandwidth Chain B 802.11ac VHT80 (Ch. 138)

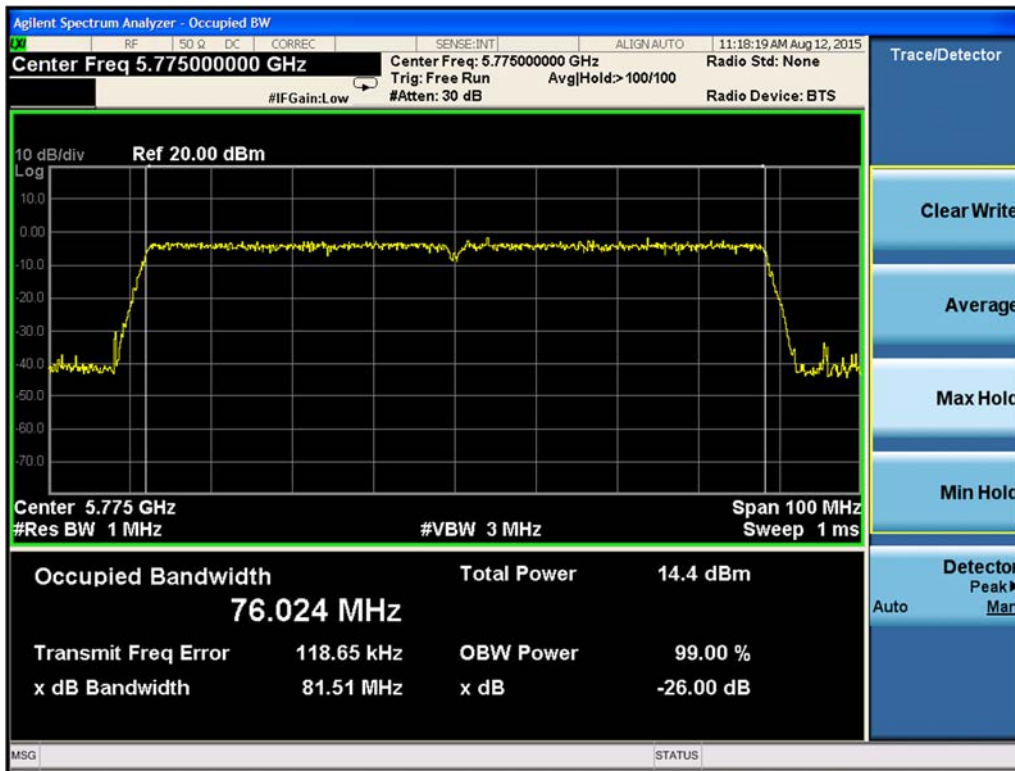


Figure 261. 99% Occupied Bandwidth Chain B 802.11ac VHT80 (Ch. 155)

## 9.3 6-dB Bandwidth

### 9.3.1 Test Requirement:

FCC CFR 47 Rule Part 15.407 (e)

Industry Canada RSS-247 [6.2.4]

### 9.3.2 Test Method:

Measurements were performed according to the procedures defined in KDB 789033- General UNII Test Procedures New Rules v01 and ANSI C63.10 2013.

#### **Spectrum Analyzer settings:**

RBW = 100 kHz

VBW  $\geq$  3xRBW

Trace Mode= Peak Detector (Max Hold)

Sweep time= Auto

The in-built functionality of the Spectrum Analyzer is used to measure the 6-dB bandwidth.

### 9.3.3 Limits:

The 6-dB Bandwidth shall be  $\geq$  500 kHz.

### 9.3.4 Test Results:

Pass

### 9.3.5 Test Data:

#### 9.3.5.1 Chain A 802.11a 6-dB Bandwidth

Chain A 802.11a 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
149	5745	16.33
157	5785	16.34
165	5825	16.25

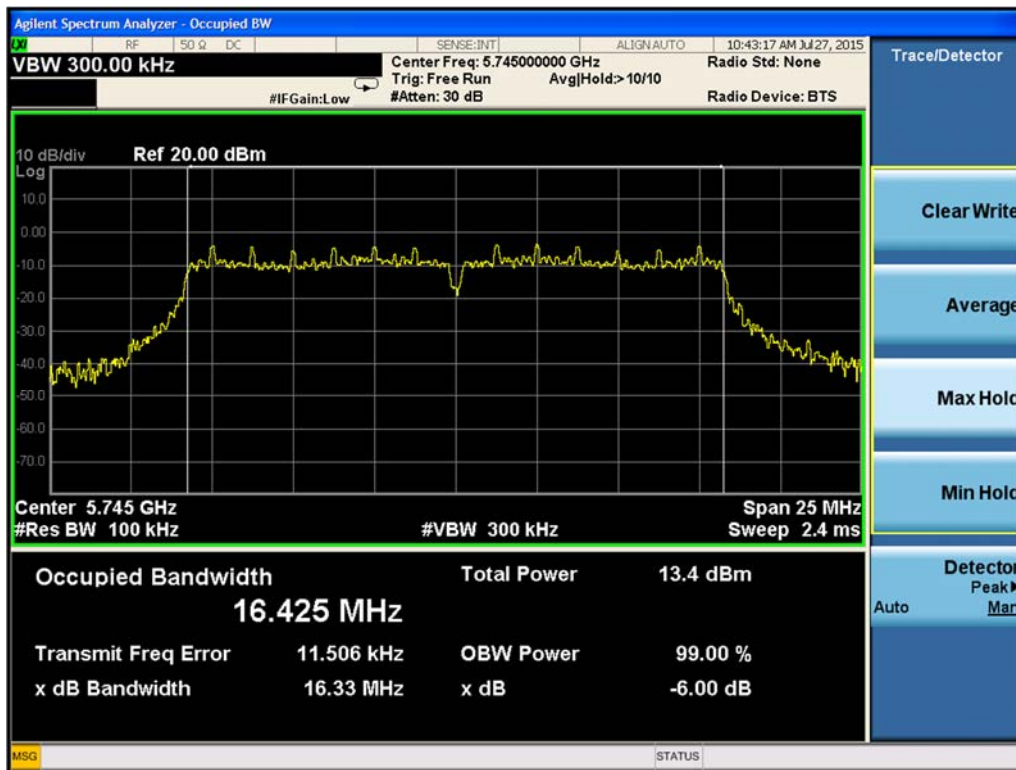


Figure 262. 6-dB Bandwidth Chain A 802.11a (Ch. 149)

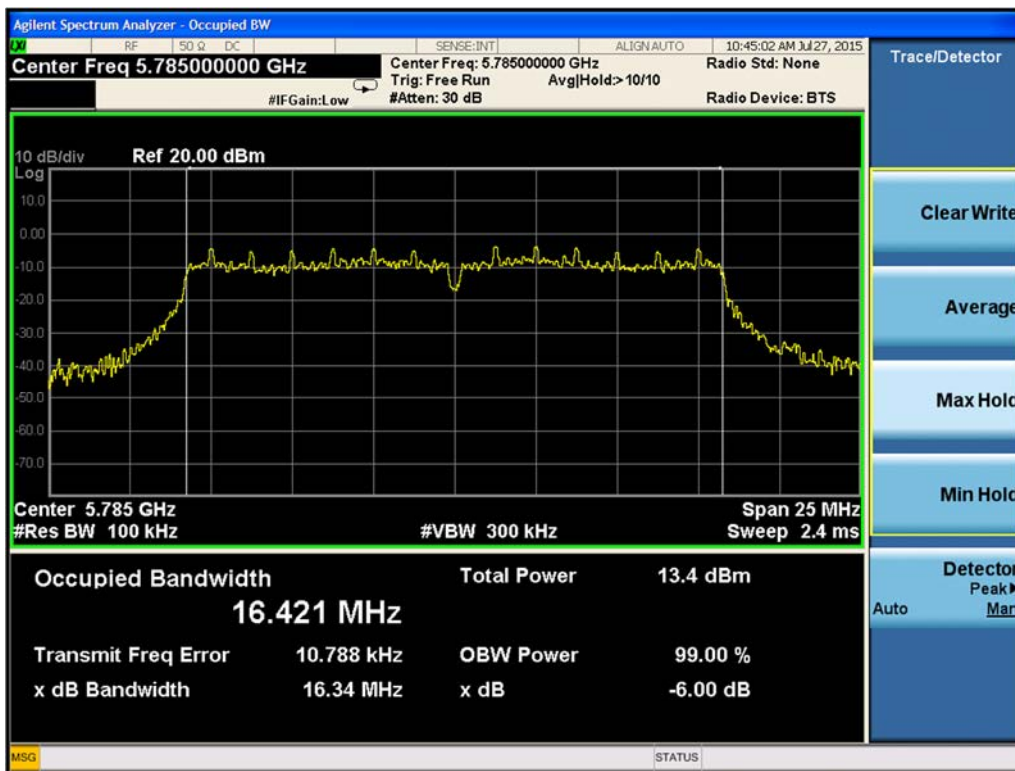


Figure 263. 6-dB Bandwidth Chain A 802.11a (Ch. 157)

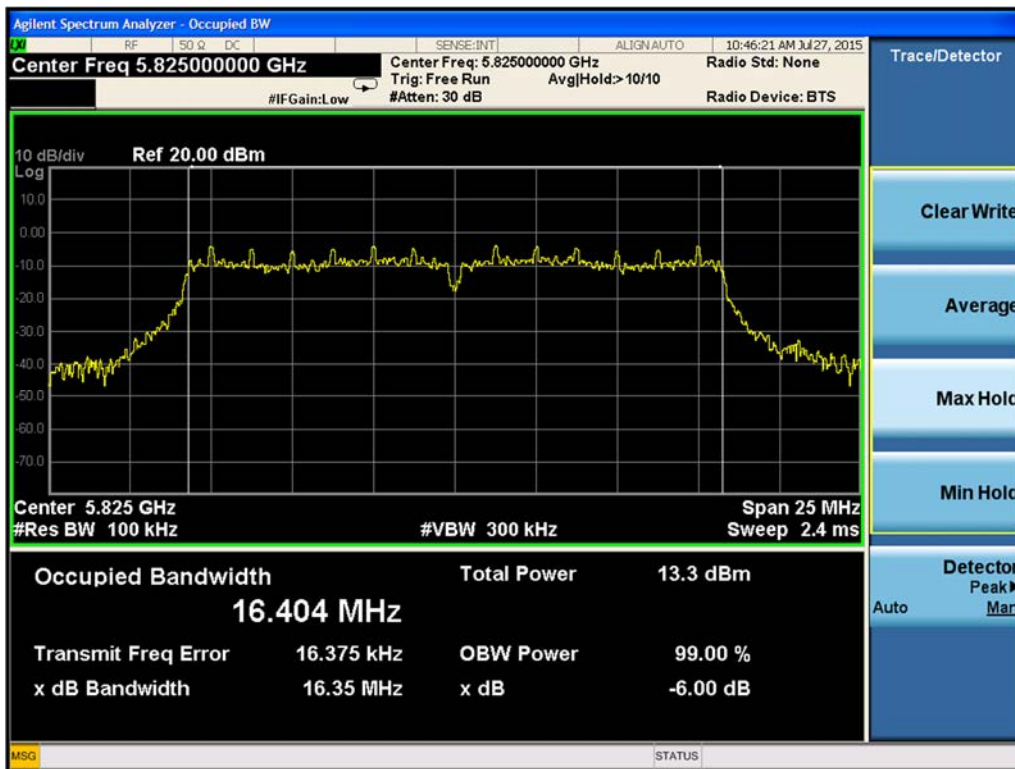


Figure 264. 6-dB Bandwidth Chain A 802.11a (Ch. 165)

### 9.3.5.2 Chain B 802.11a 6-dB Bandwidth

Chain B 802.11a 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
149	5745	16.35
157	5785	16.35
165	5825	16.36

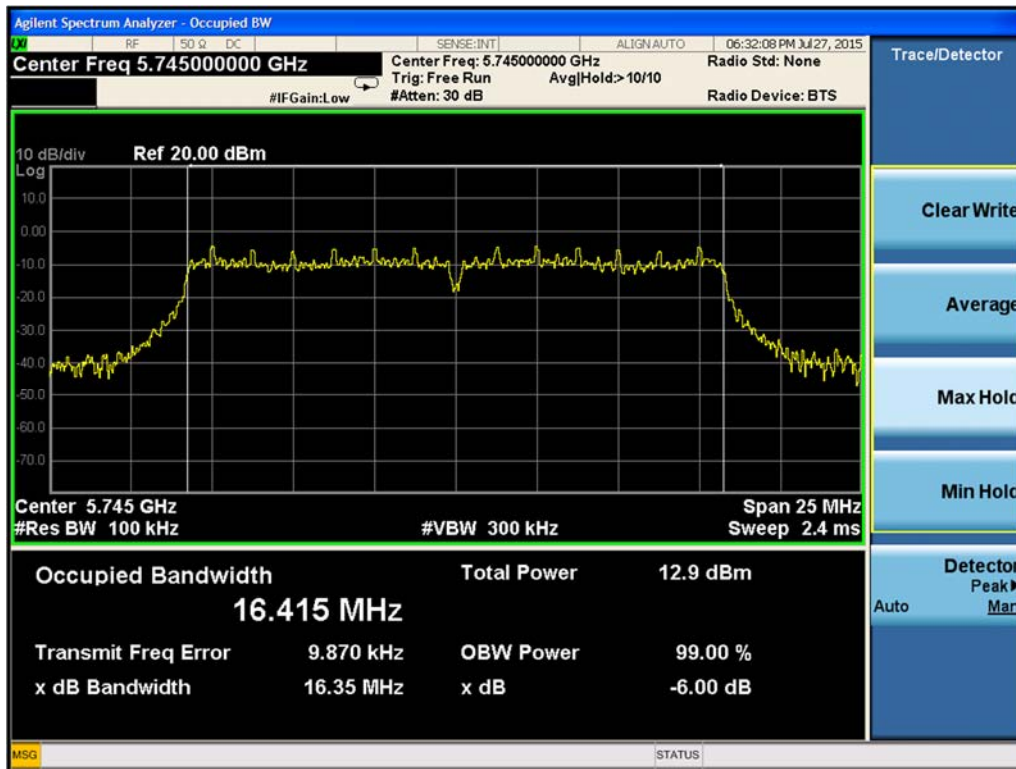


Figure 265. 6-dB Bandwidth Chain B 802.11a (Ch. 149)

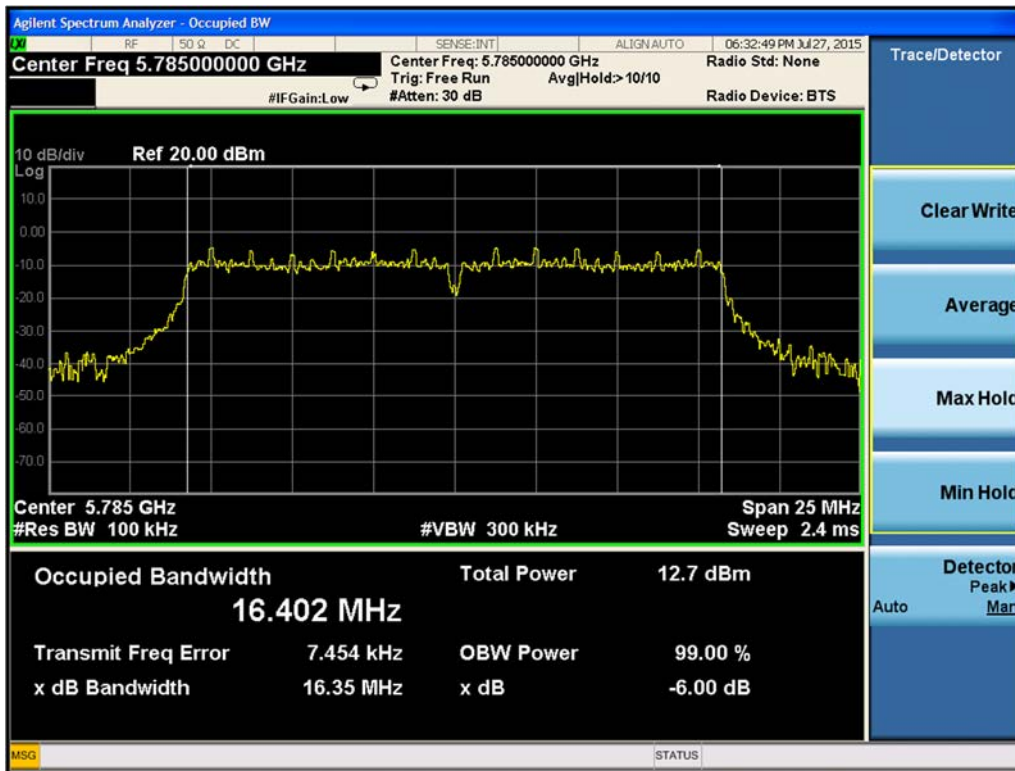


Figure 266. 6-dB Bandwidth Chain B 802.11a (Ch. 157)

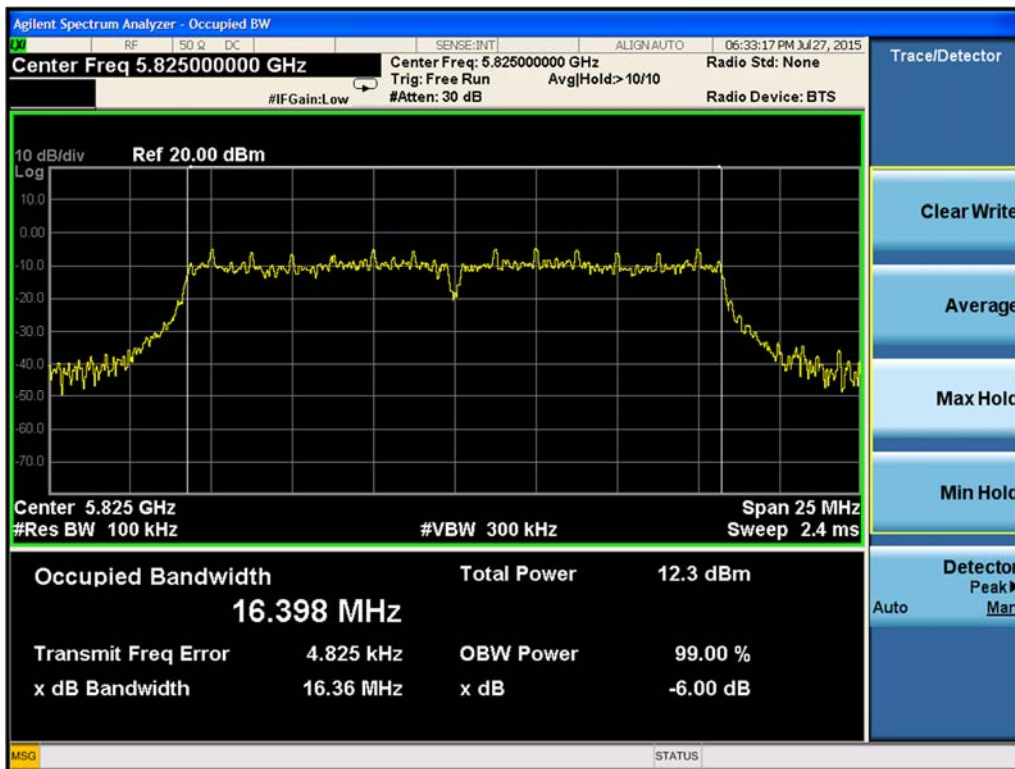


Figure 267. 6-dB Bandwidth Chain B 802.11a (Ch. 165)

### 9.3.5.3 Chain A 802.11n HT20 6-dB Bandwidth

Chain A 802.11n HT20 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
149	5745	17.64
157	5785	17.63
165	5825	17.58

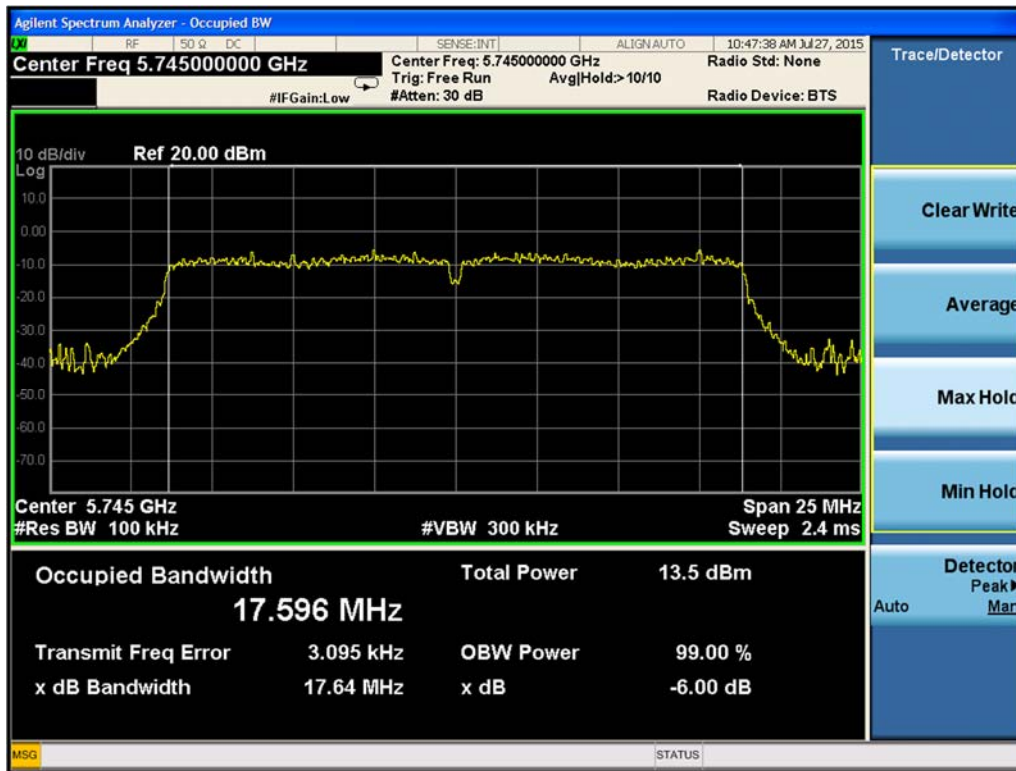


Figure 268. 6-dB Bandwidth Chain A 802.11n HT20 (Ch. 149)



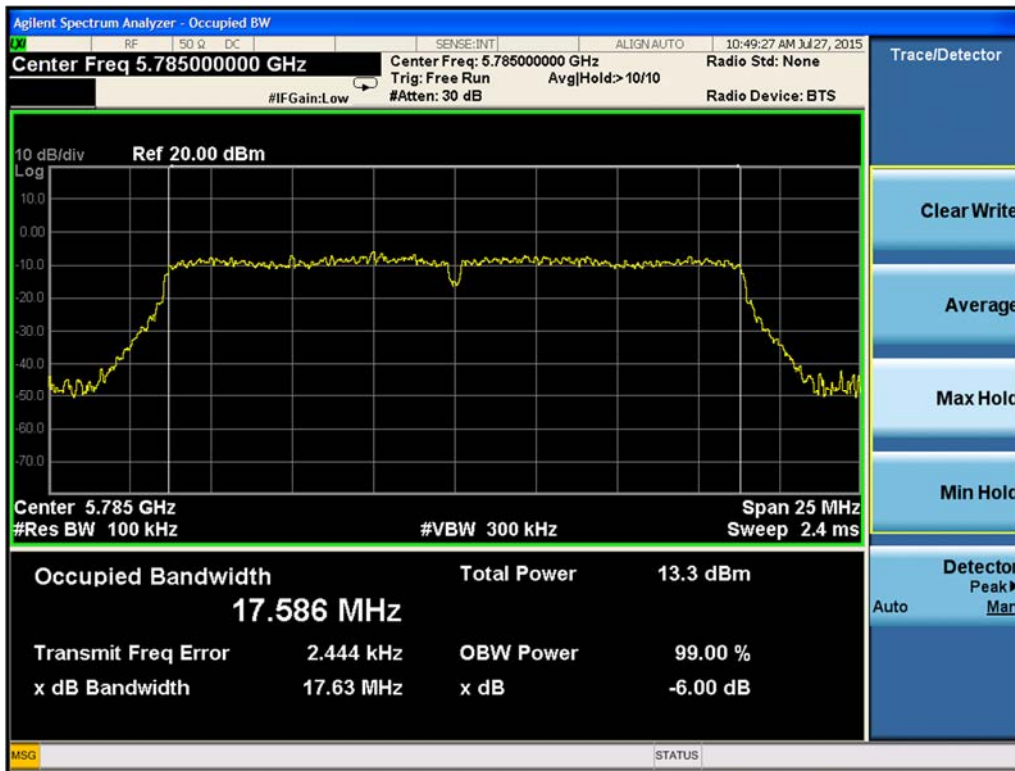


Figure 269. 6-dB Bandwidth Chain A 802.11n HT20 (Ch. 157)

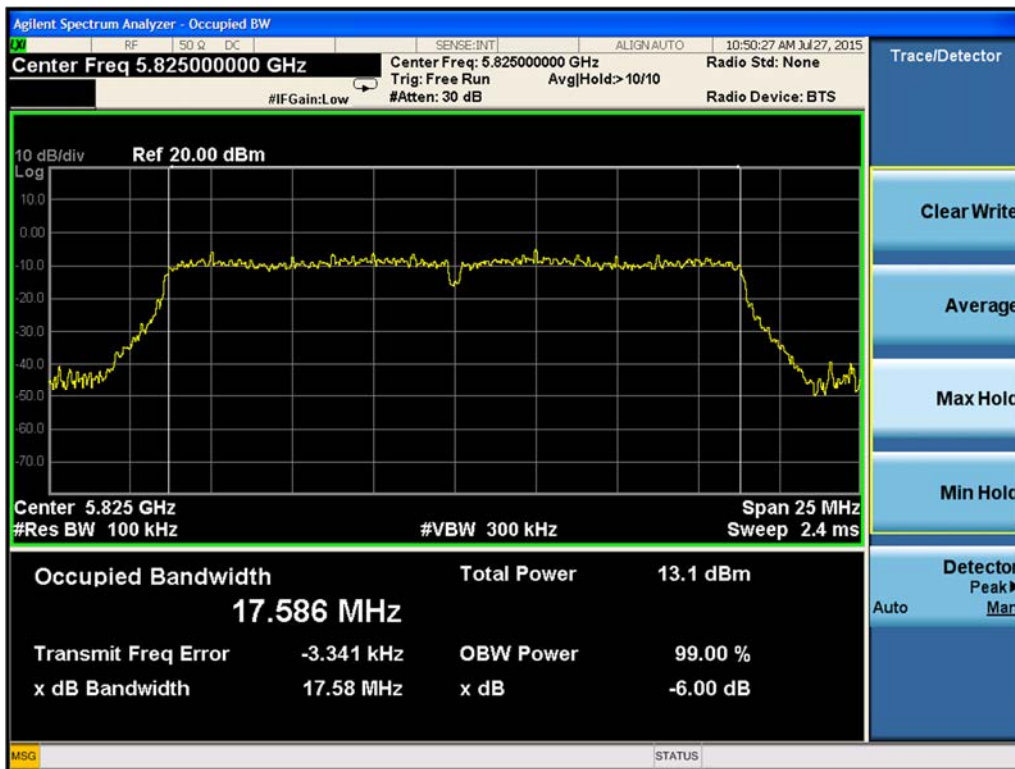


Figure 270. 6-dB Bandwidth Chain A 802.11n HT20 (Ch. 165)

### 9.3.5.4 Chain B 802.11n HT20 6-dB Bandwidth

Chain B 802.11n HT20 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
149	5745	17.64
157	5785	17.64
165	5825	17.65

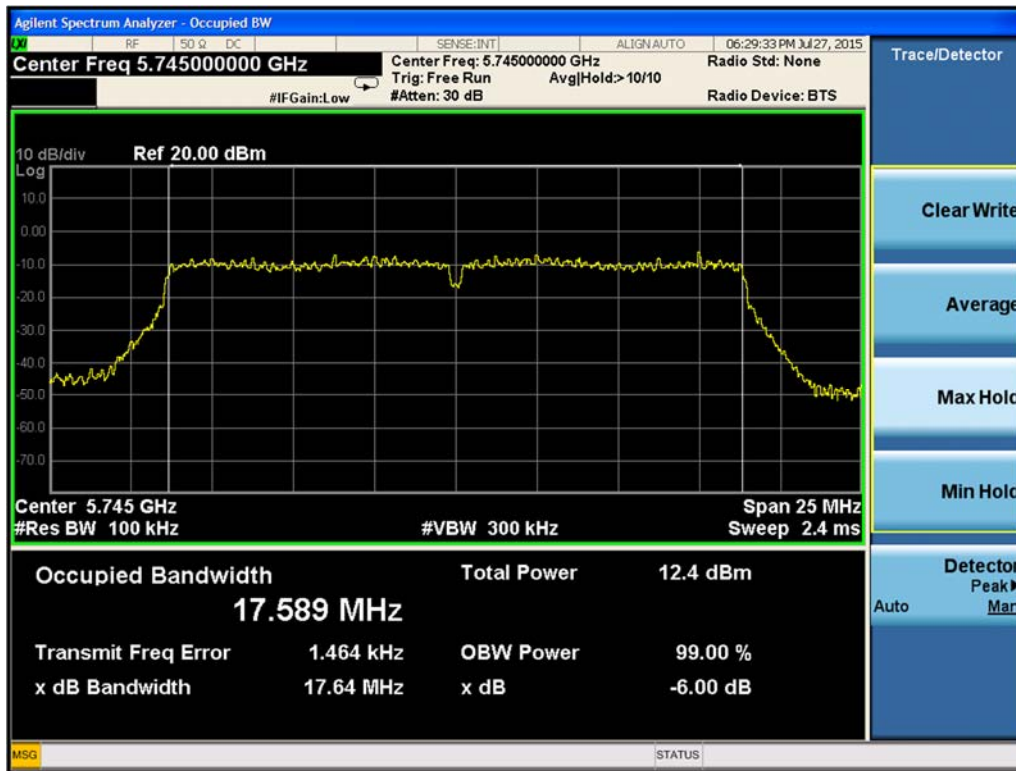


Figure 271. 6-dB Bandwidth Chain B 802.11n HT20 (Ch. 149)

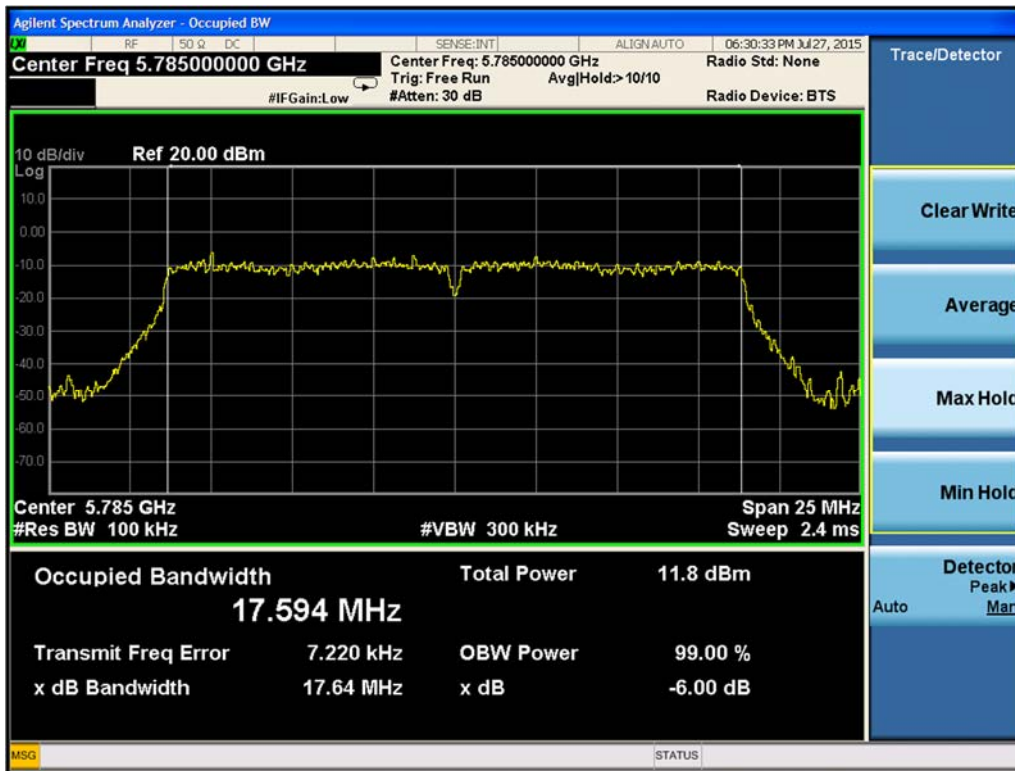


Figure 272. 6-dB Bandwidth Chain B 802.11n HT20 (Ch. 157)



Figure 273. 6-dB Bandwidth Chain B 802.11n HT20 (Ch. 165)

### 9.3.5.5 Chain A 802.11ac VHT20 6-dB Bandwidth

Chain A 802.11ac VHT20 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
149	5745	17.63
157	5785	17.66
165	5825	17.60



Figure 274. 6-dB Bandwidth Chain A 802.11ac VHT20 (Ch. 149)



Figure 275. 6-dB Bandwidth Chain A 802.11ac VHT20 (Ch. 157)

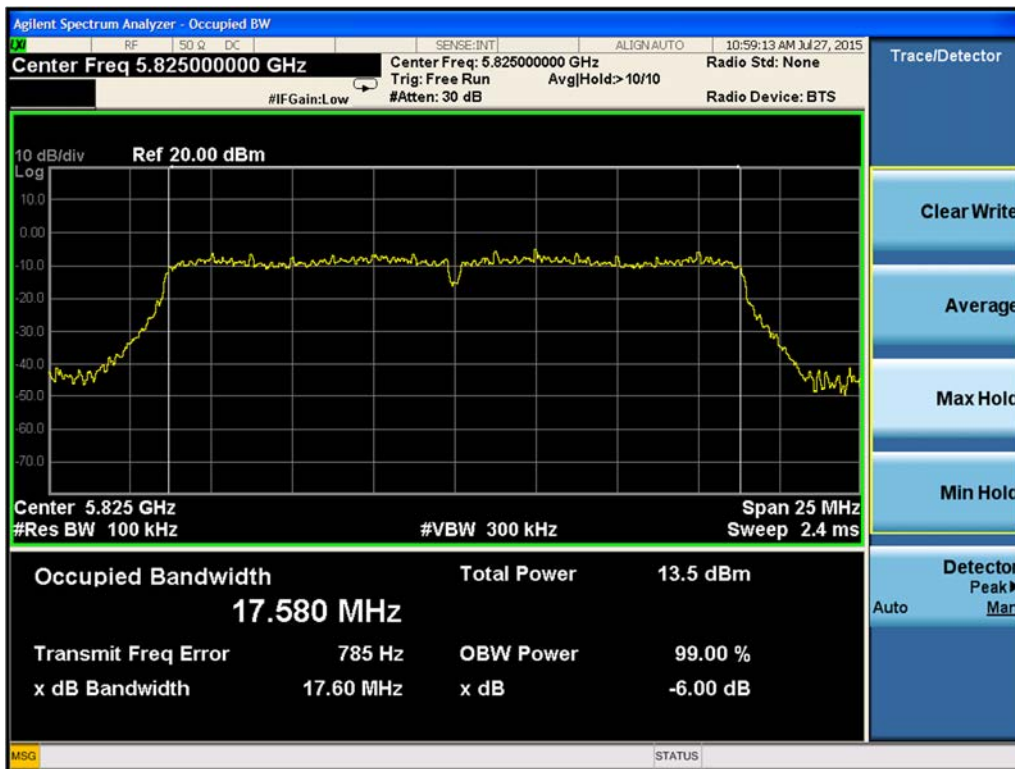


Figure 276. 6-dB Bandwidth Chain A 802.11ac VHT20 (Ch. 165)

### 9.3.5.6 Chain B 802.11ac VHT20 6-dB Bandwidth

Chain B 802.11ac VHT20 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
149	5745	17.62
157	5785	17.66
165	5825	17.65

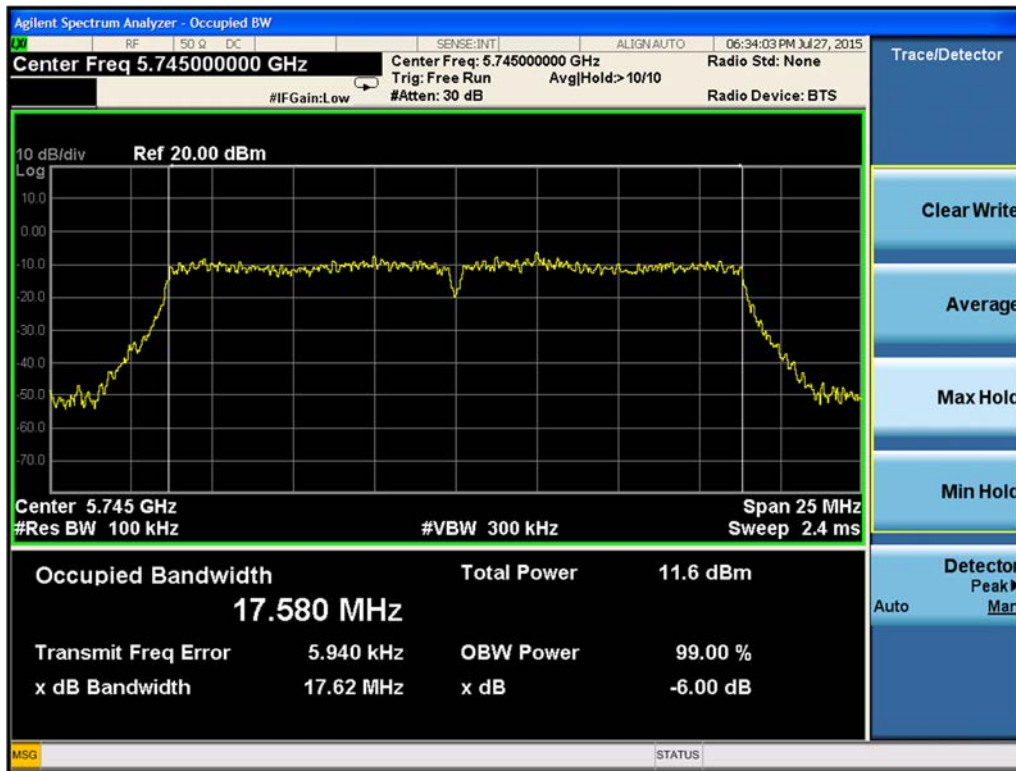


Figure 277. 6-dB Bandwidth Chain B 802.11ac VHT20 (Ch. 149)

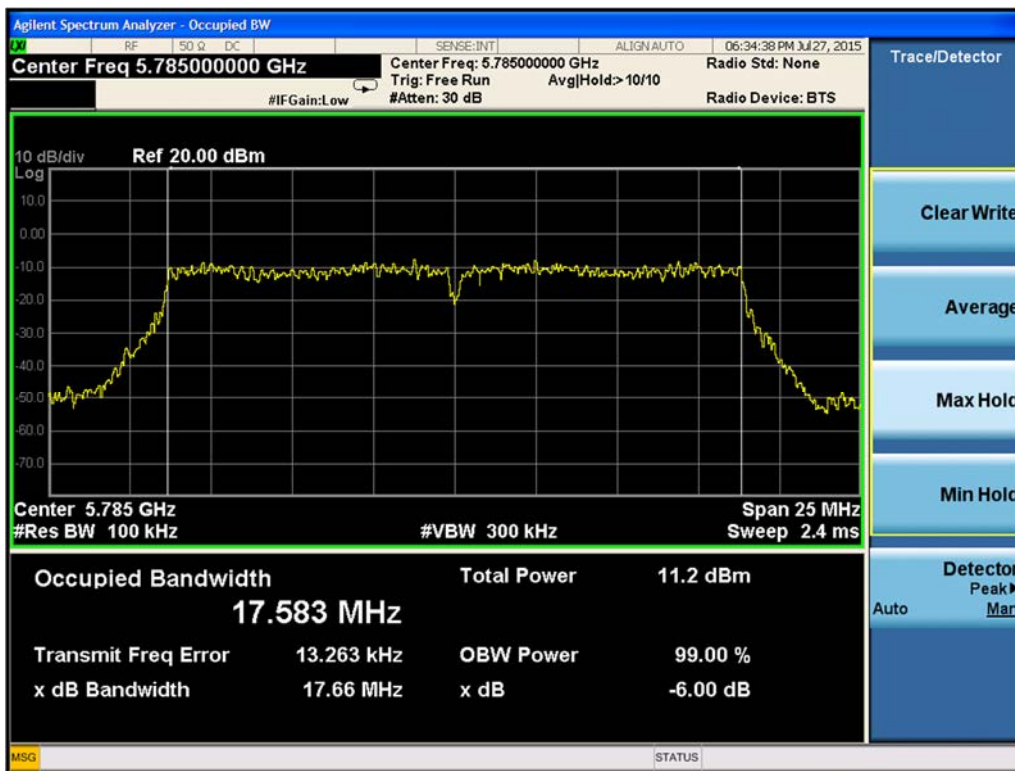


Figure 278. 6-dB Bandwidth Chain B 802.11ac VHT20 (Ch. 157)

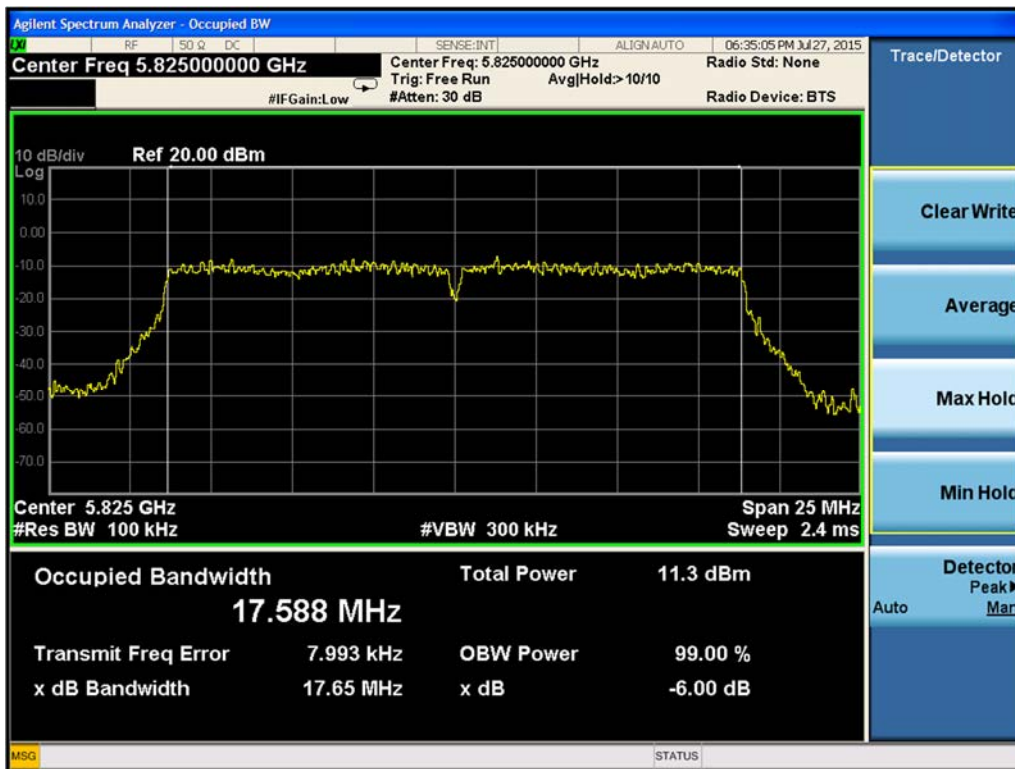


Figure 279. 6-dB Bandwidth Chain B 802.11ac VHT20 (Ch. 165)

### 9.3.5.7 Chain A 802.11n HT40 6-dB Bandwidth

Chain A 802.11n HT40 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
151	5755	36.09
159	5795	36.31

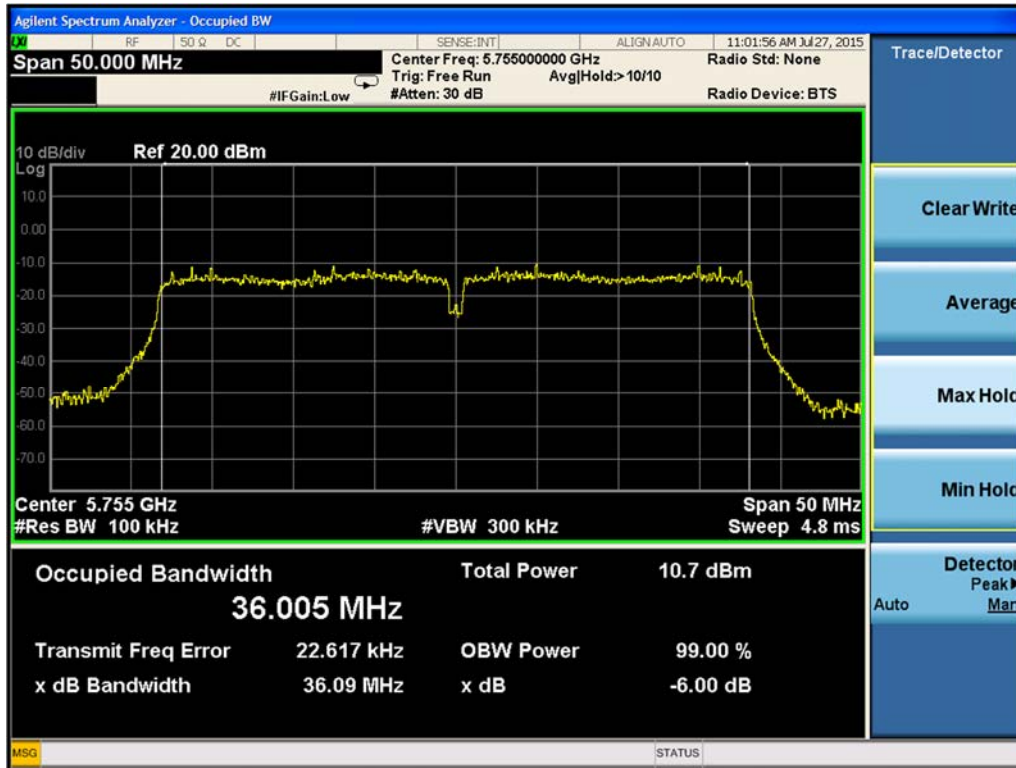


Figure 280. 6-dB Bandwidth Chain A 802.11n HT20 (Ch. 151)



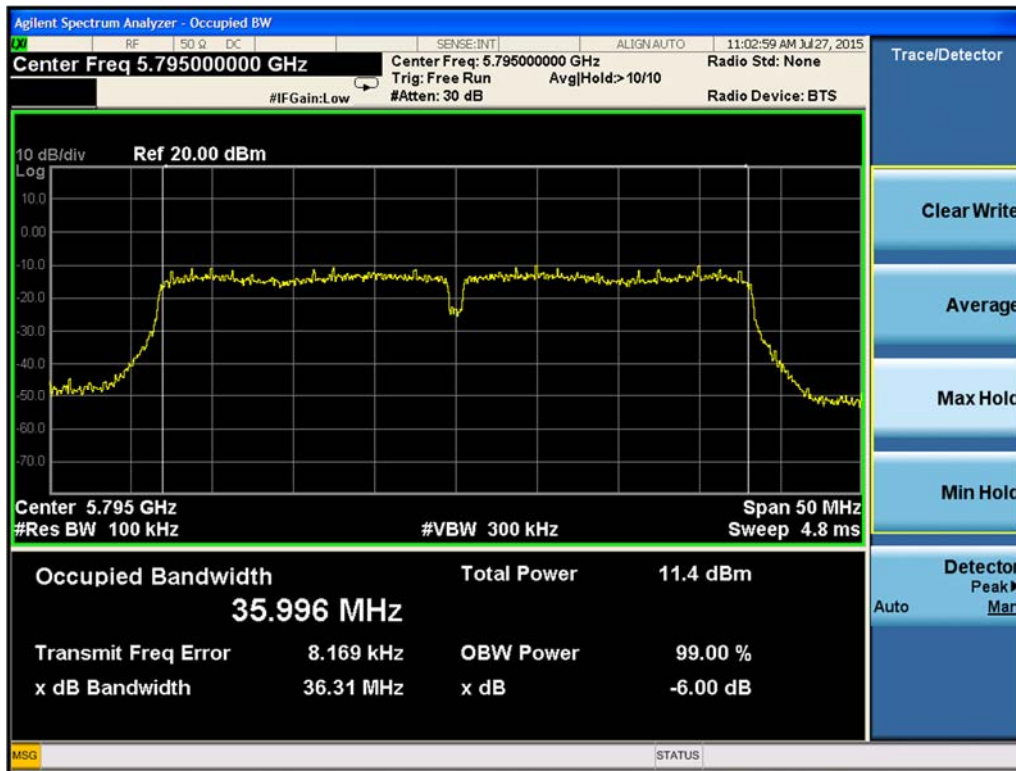


Figure 281. 6-dB Bandwidth Chain A 802.11n HT20 (Ch. 159)

### 9.3.5.8 Chain B 802.11n HT40 6-dB Bandwidth

Chain B 802.11n HT40 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
151	5755	36.15
159	5795	36.32

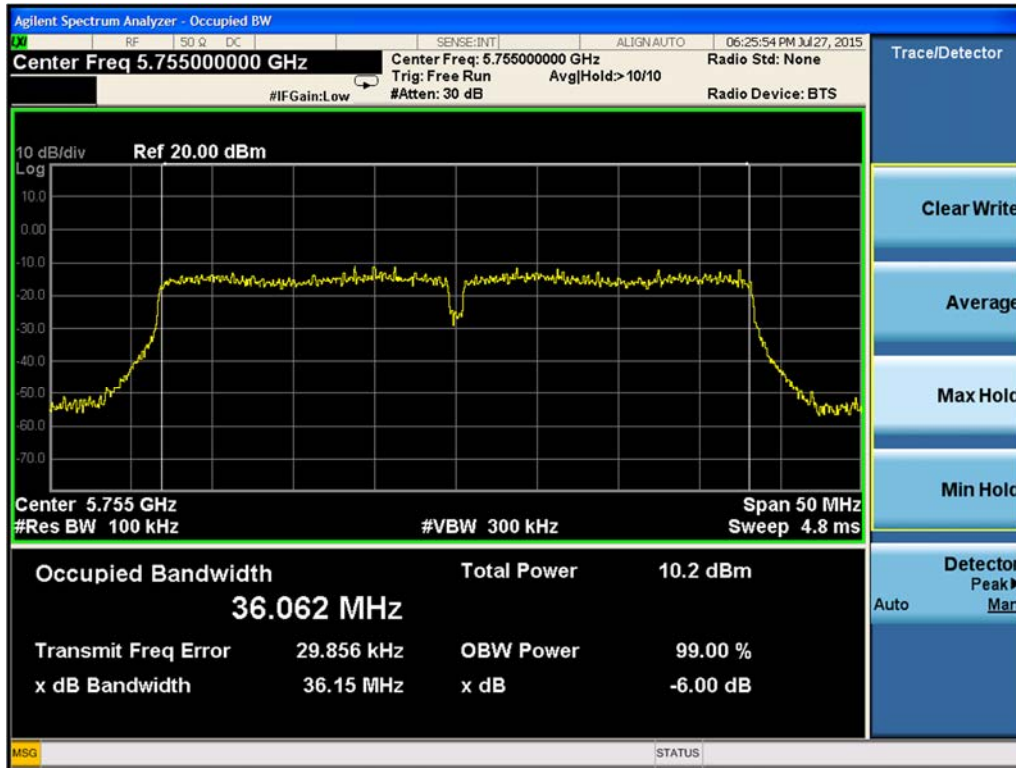


Figure 282. 6-dB Bandwidth Chain B 802.11n HT20 (Ch. 151)

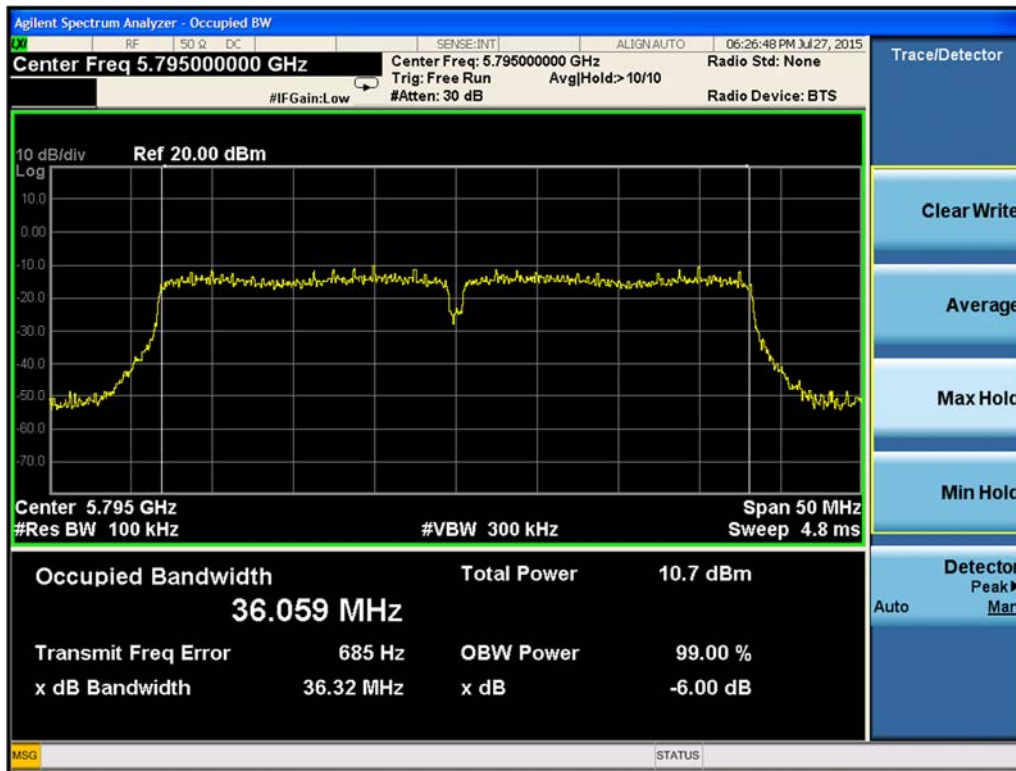


Figure 283. 6-dB Bandwidth Chain B 802.11n HT20 (Ch. 159)

### 9.3.5.9 Chain A 802.11ac VHT40 6-dB Bandwidth

Chain A 802.11ac VHT40 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
151	5755	36.31
159	5795	36.33

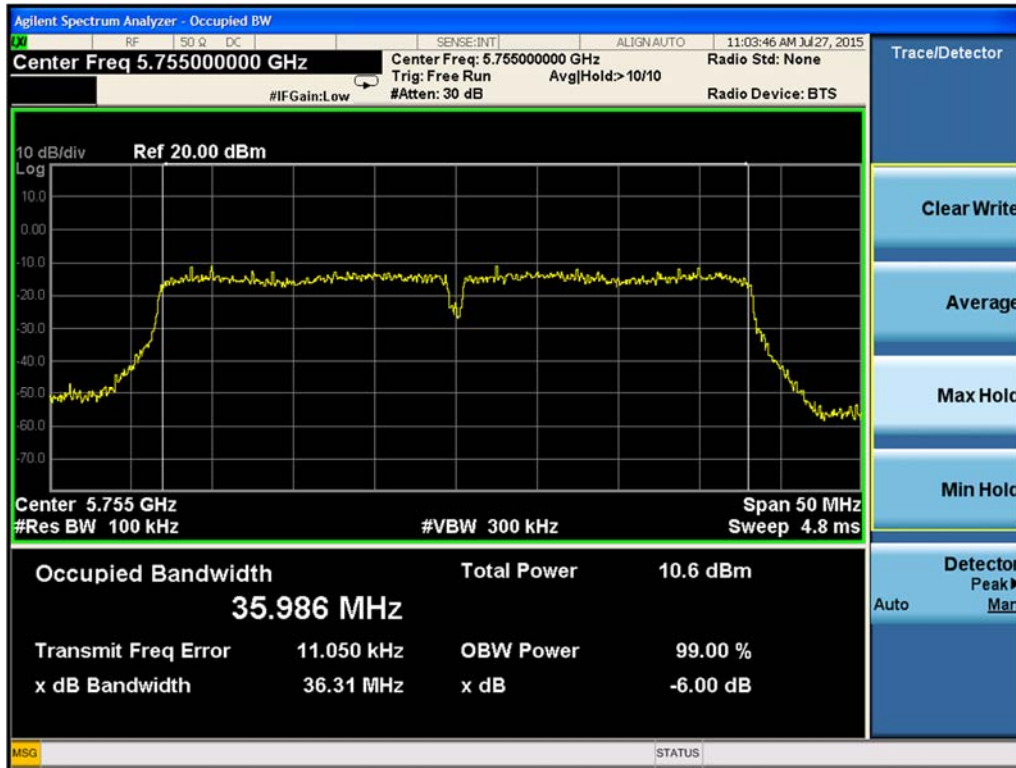


Figure 284. 6-dB Bandwidth Chain A 802.11ac VHT40 (Ch. 151)

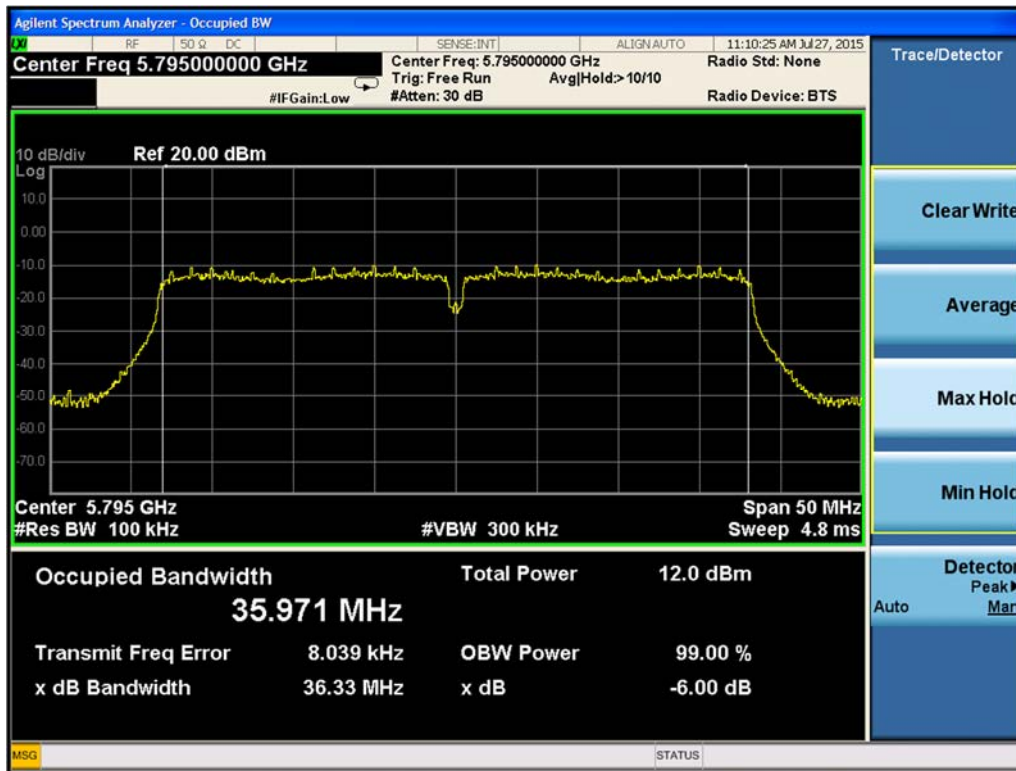


Figure 285. 6-dB Bandwidth Chain A 802.11ac VHT40 (Ch. 159)

### 9.3.5.10 Chain B 802.11ac VHT40 6-dB Bandwidth

Chain B 802.11ac VHT40 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
151	5755	36.33
159	5795	36.30

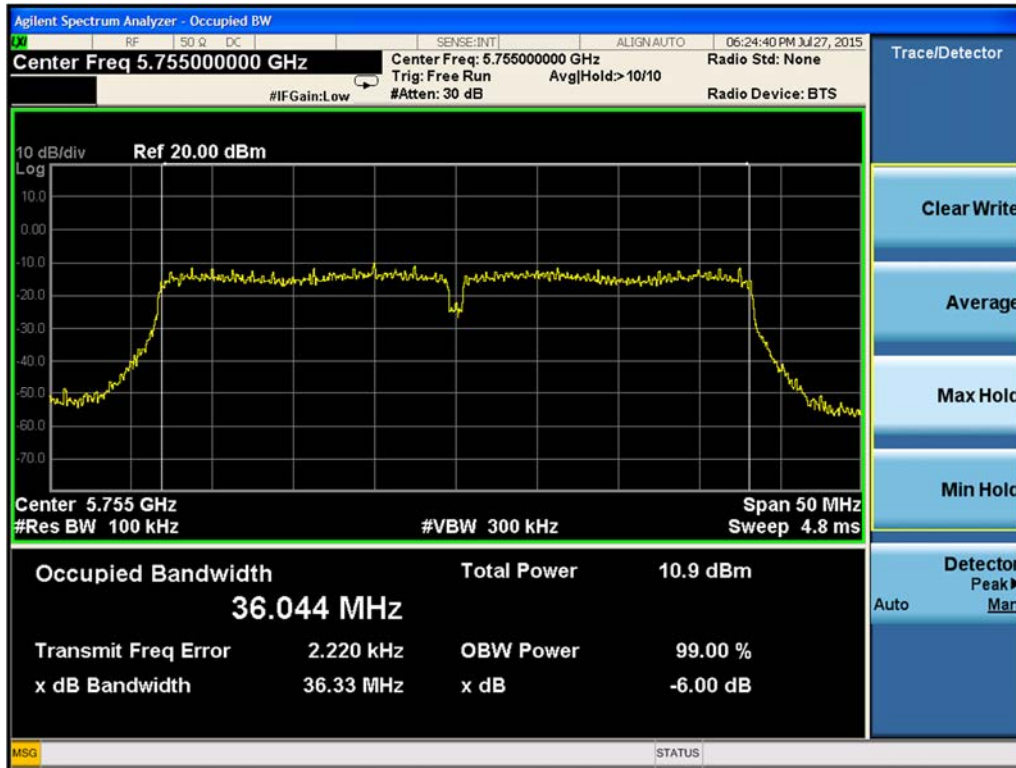


Figure 286. 6-dB Bandwidth Chain B 802.11ac VHT40 (Ch. 151)



Figure 287. 6-dB Bandwidth Chain B 802.11ac VHT40 (Ch. 159)

9.3.5.11 Chain A 802.11ac VHT80 6-dB Bandwidth

Chain A 802.11ac VHT80 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
155	5775	76.51

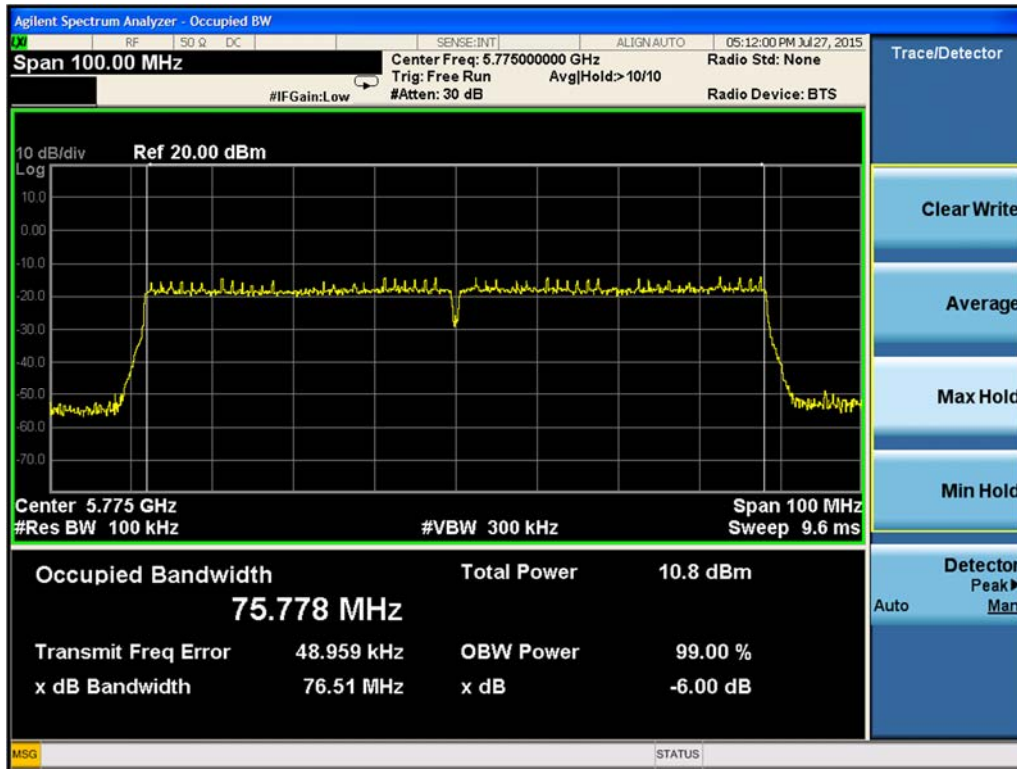


Figure 288. 6-dB Bandwidth Chain A 802.11ac VHT80 (Ch. 155)



9.3.5.12 Chain B 802.11ac VHT80 6-dB Bandwidth

Chain B 802.11ac VHT80 6-dB Bandwidth		
Channel No.	Frequency (MHz)	6-dB Bandwidth (MHz)
155	5775	76.56

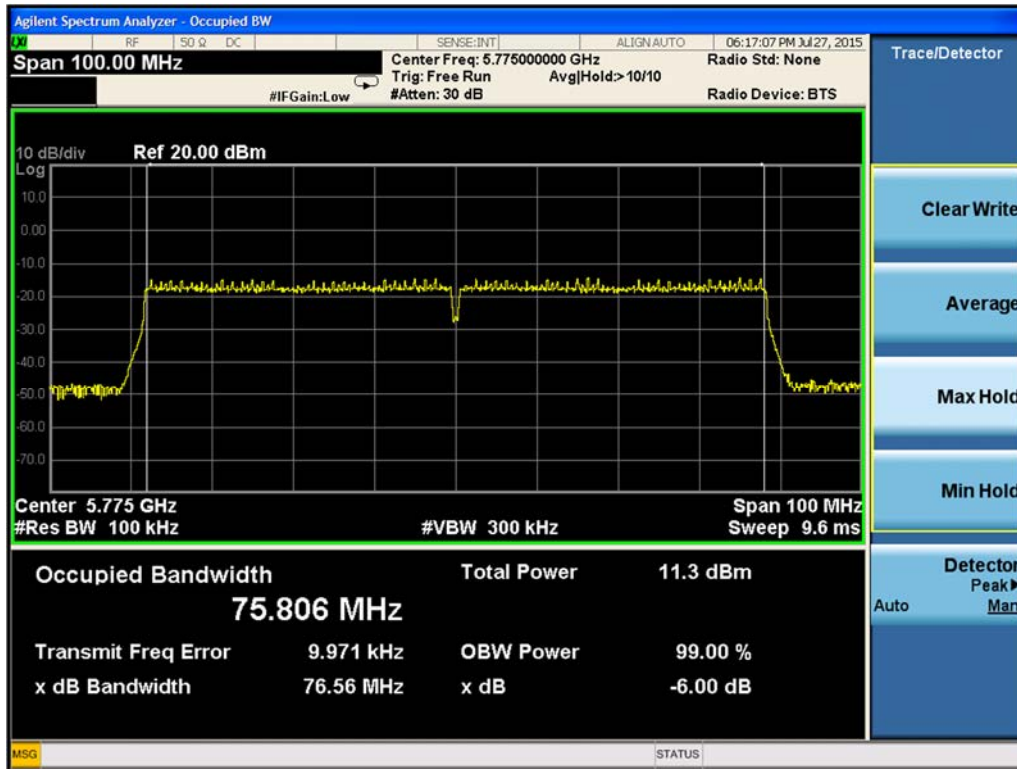


Figure 289. 6-dB Bandwidth Chain B 802.11ac VHT80 (Ch. 155)