6. On Time, Duty Cycle and Measurement methods

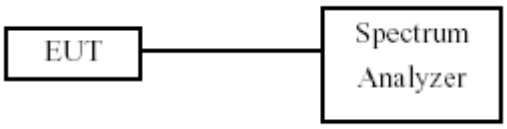
6.1. Test Limit

None; for reporting purposes only.

6.2. Test Procedure

KDB 789033 Zero-Span Spectrum Analyzer Method.

6.3. Test Setup Layout



6.4. Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100047	2014/03/27	2015/03/26

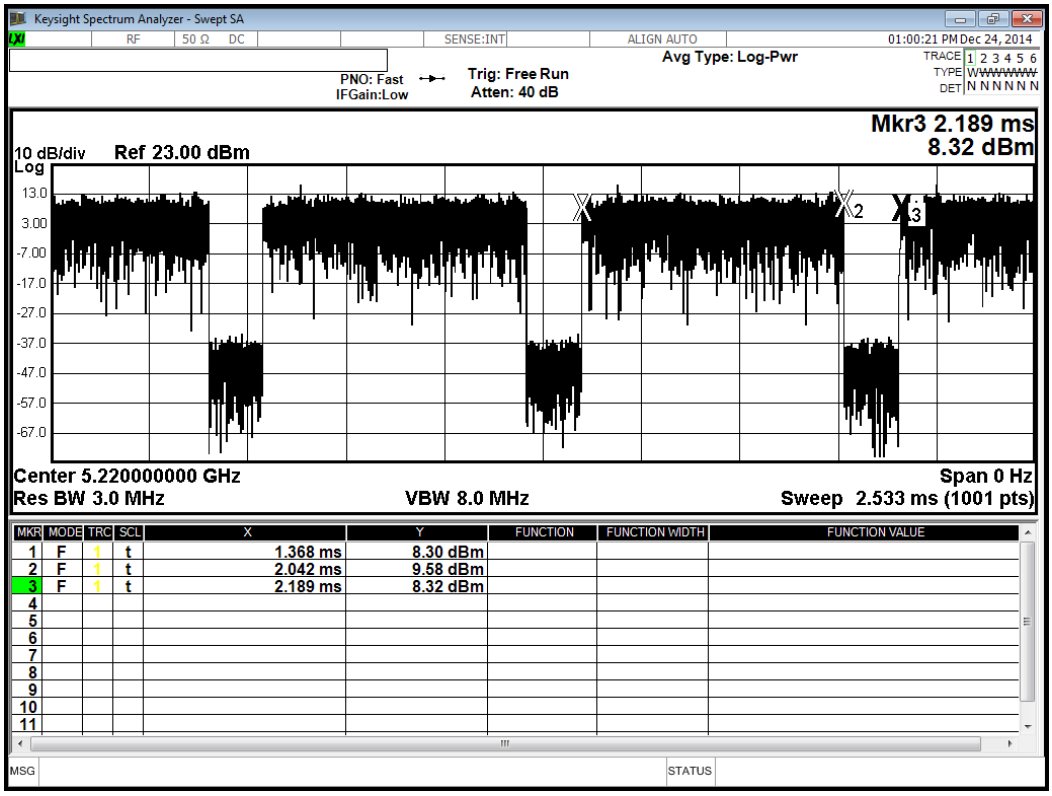
6.5. Test Result and Data

Test Date: Aug. 22, 2014 Temperature: 25℃

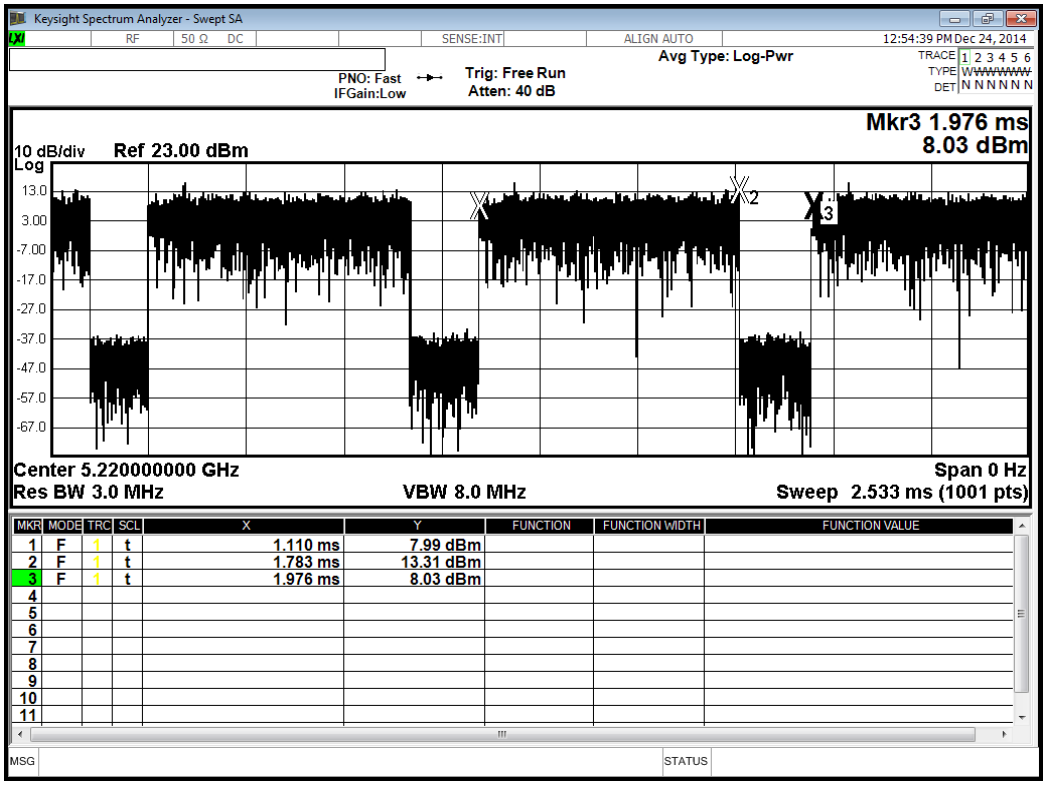
Atmospheric pressure: 1056 hPa Humidity: 52%

Mode	On Time B (msec)	Period Time (msec)	Duty Cycle x (linear)	Duty Cycle(%)	1/T Minimum VBW (kHz)	Duty Cycle correction Factor (dB)
802.11a	674	821	0.8210	82.10%	1.22	0.86
802.11a HT20	673	866	0.7771	77.71%	1.29	1.10
802.11a HT40	349	485	0.7196	71.96%	1.39	1.43
802.11ac VHT20	674.1	765.1	0.8811	88.11%	1.13	0.55
802.11ac VHT40	348.5	520.5	0.6695	66.95%	1.49	1.74
802.11ac VHT80	676.5	808.5	0.8367	83.67%	1.20	0.77

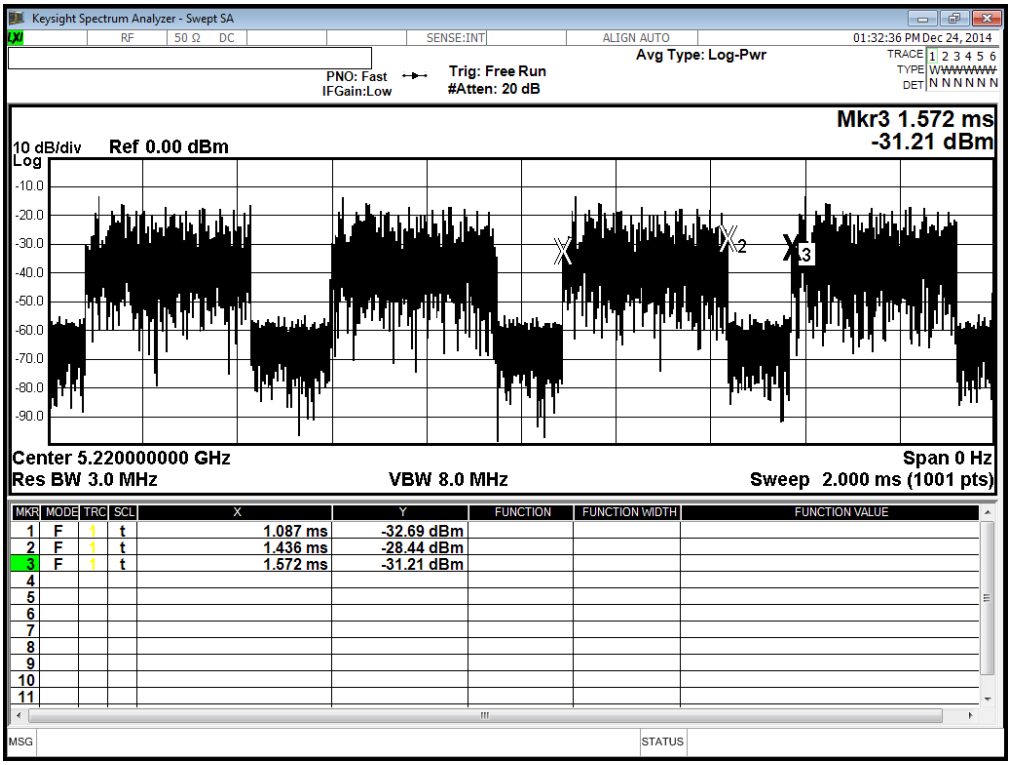
Modulation Standard: 802.11a (6Mbps)



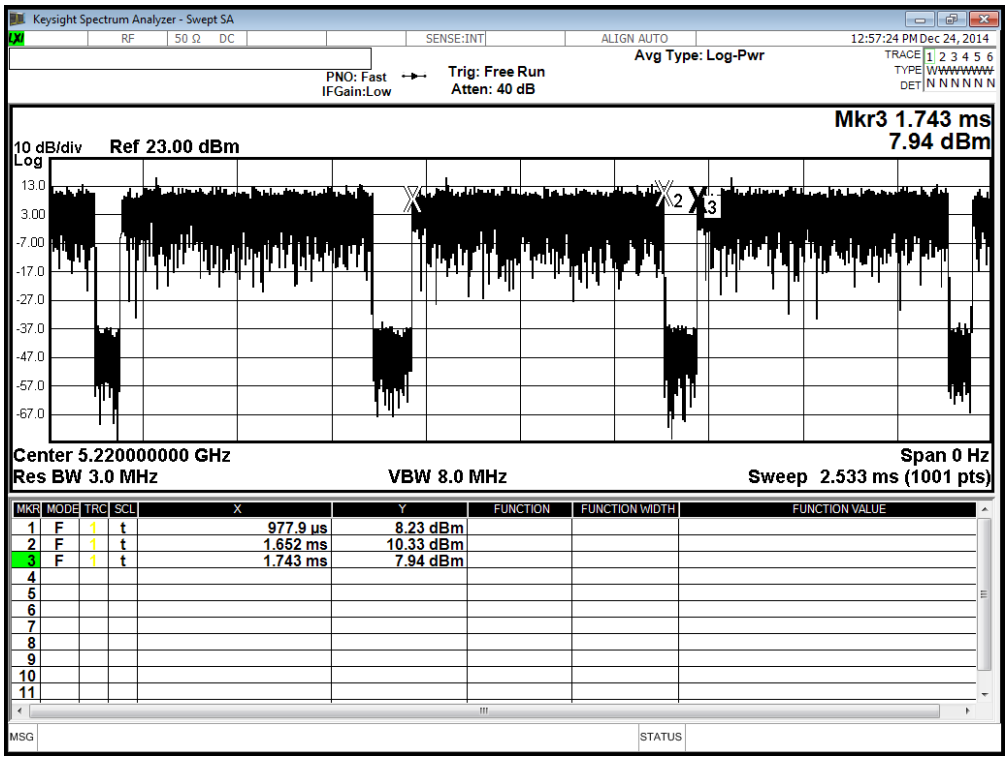
Modulation Standard: 802.11an HT20 (6Mbps)



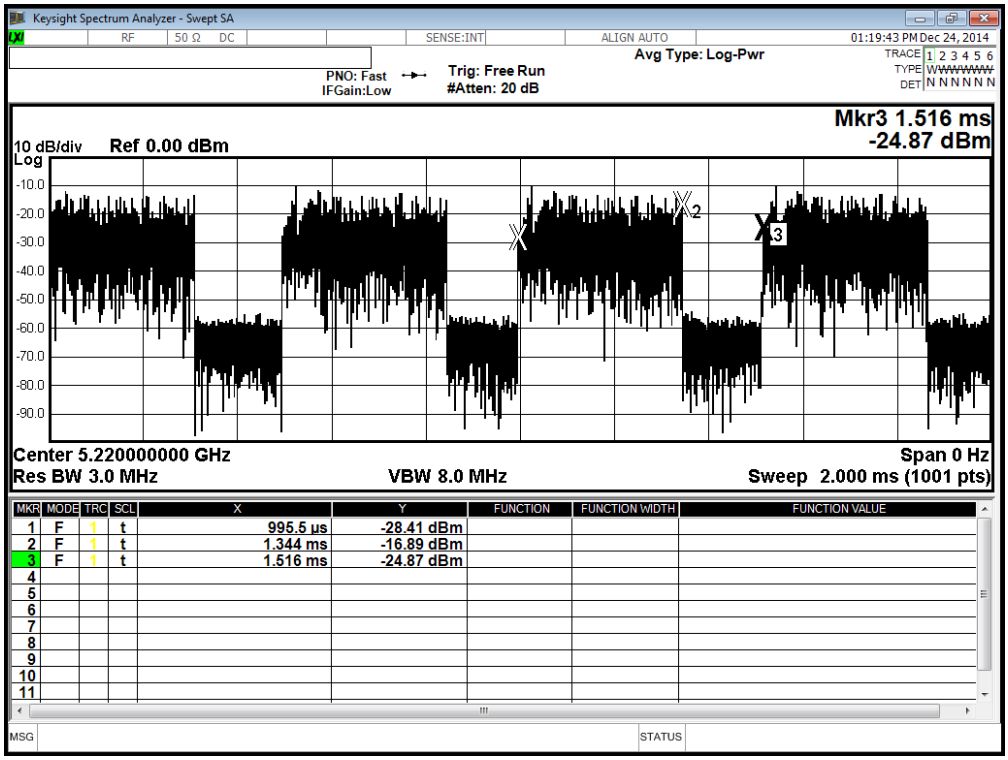
Modulation Standard: 802.11an, HT40 (13.5Mbps)



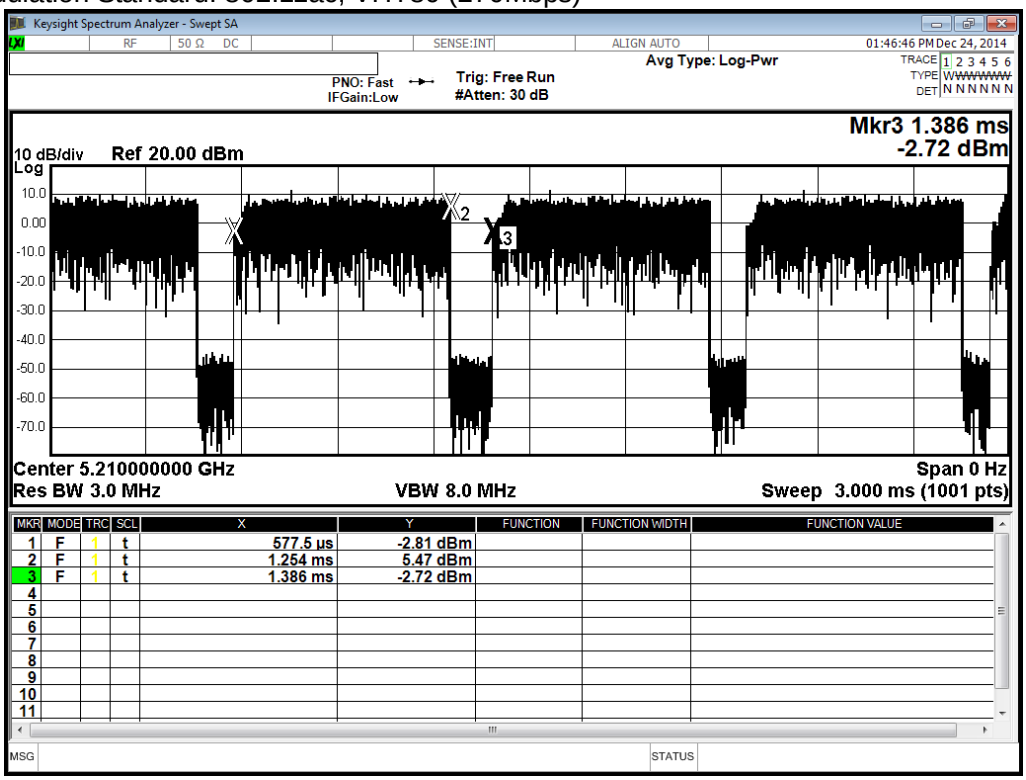
Modulation Standard: 802.11ac, VHT20 (54Mbps)



Modulation Standard: 802.11ac, VHT40 (130Mbps)



Modulation Standard: 802.11ac, VHT80 (270Mbps)



7. Measurement Method

26 dB and 6dB Emission BW	KDB 789033 D02 v01, Section C
99% Occupied BW	KDB 789033 D02 v01, Section D
Conducted Output Power	KDB 789033 D02 v01, Section E.2.d and E.3.b (Method PM-G)
Power Spectral Density	KDB 789033 D02 v01, Section F
Unwanted emissions in restricted bands	KDB 789033 D02 v01, Sections G and H
Unwanted emissions in non-restricted bands	KDB 789033 D02 v01, Sections G and H

8. 6dB Bandwidth

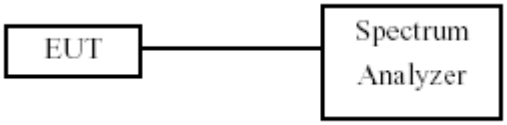
8.1. Test Limit

FCC §15.407
The minimum 6 dB bandwidth shall be at least 500 kHz.

8.2. Test Procedure

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to100KHz, the VBW >= 3 x RBW, peak detector and max hold.

8.3. Test Setup Layout



8.4. Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100047	2014/03/27	2015/03/26

8.5. Test Result and Data

Test Date: Aug. 22, 2014 Temperature: 25℃
Atmospheric pressure: 1020 hPa Humidity: 65%

802.11a mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 6dB Bandwidth (MHz)	Ant. B 6dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	16.3	16.4	0.5
Middle	5785	16.4	16.4	0.5
High	5825	16.2	16.4	0.5
Worst		16.4	16.4	

802.11n HT20 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 6dB Bandwidth (MHz)	Ant. B 6dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.5	17.5	0.5
Middle	5785	17.2	17.5	0.5
High	5825	17.6	17.5	0.5
Worst		17.6	17.5	

802.11n HT40 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 6dB Bandwidth (MHz)	Ant. B 6dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.2	35.96	0.5
High	5795	36.0	36.0	0.5
Worst		36.2	36.0	

802.11ac VHT20 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 6dB Bandwidth (MHz)	Ant. B 6dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.5	17.4	0.5
Middle	5785	17.6	17.6	0.5
High	5825	17.4	17.6	0.5
Worst		17.6	17.6	

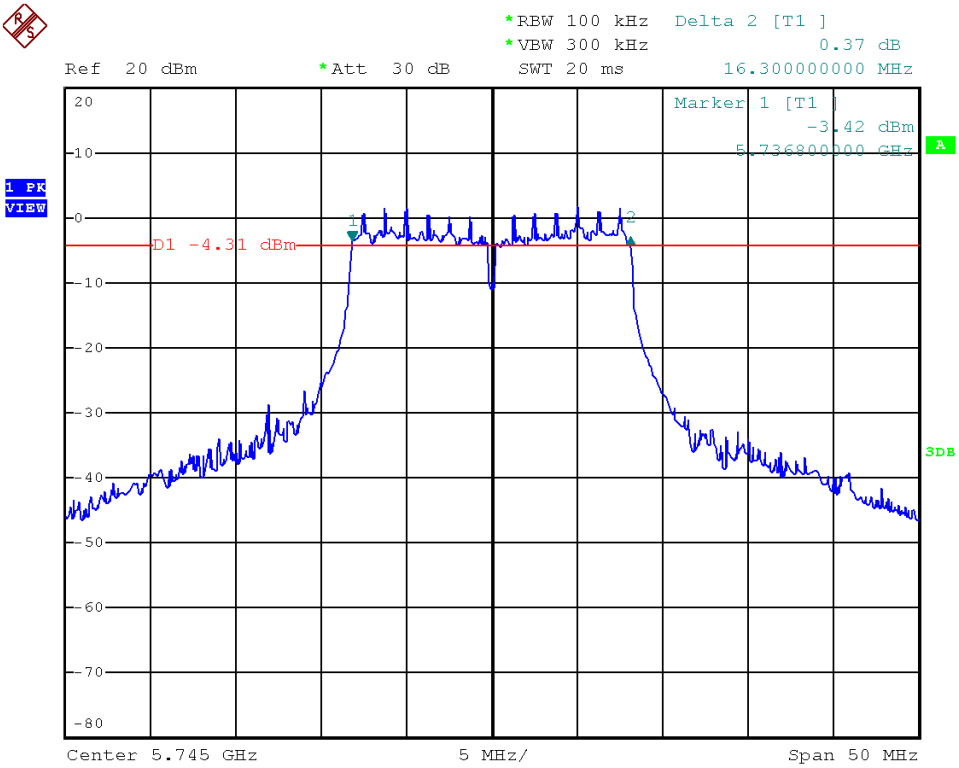
802.11ac VHT40 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 6dB Bandwidth (MHz)	Ant. B 6dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.0	35.96	0.5
High	5795	36.0	36.0	0.5
Worst		36.0	36.0	

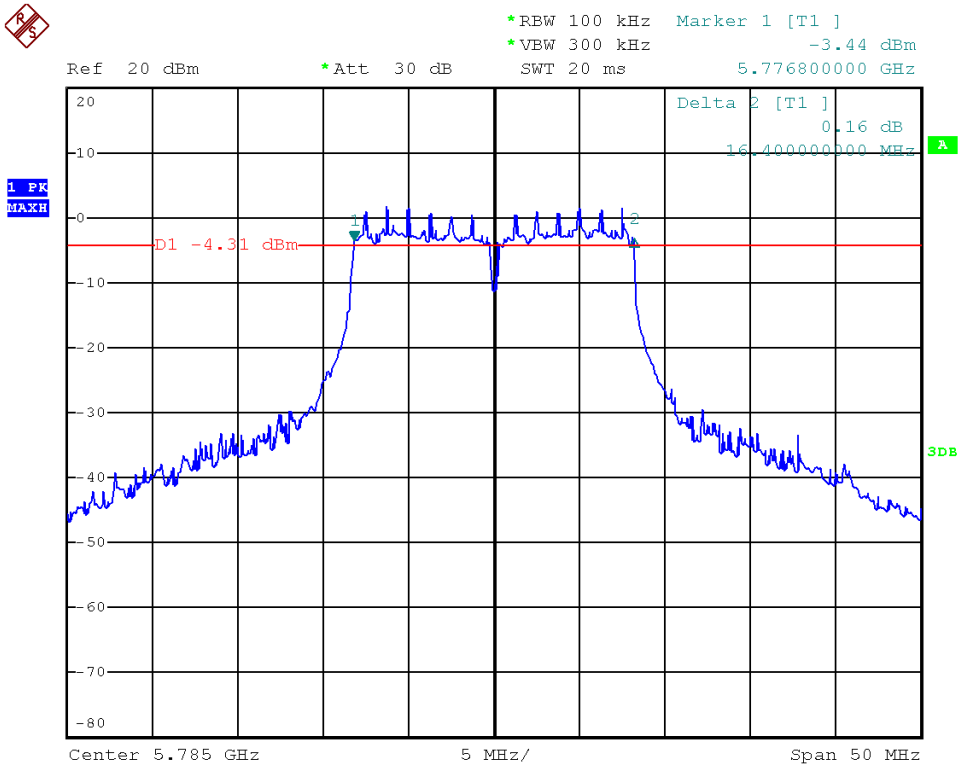
802.11ac VHT80 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 6dB Bandwidth (MHz)	Ant. B 6dB Bandwidth (MHz)	Minimum Limit (MHz)
Middle	5775	75.28	75.28	0.5
Worst		75.28	75.28	

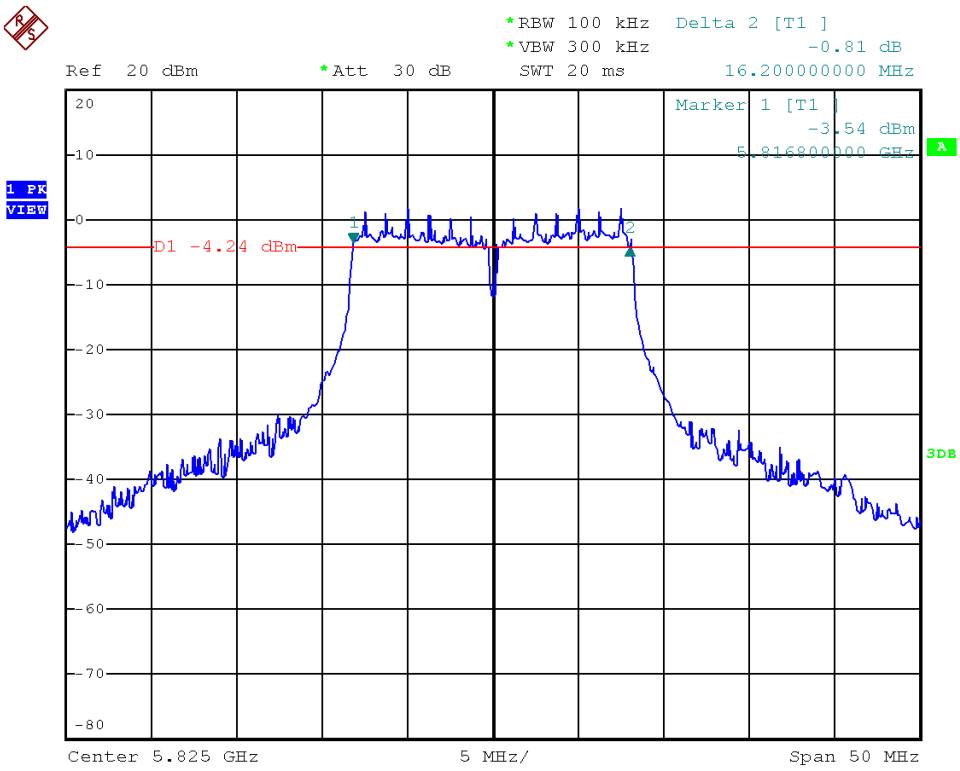
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 149



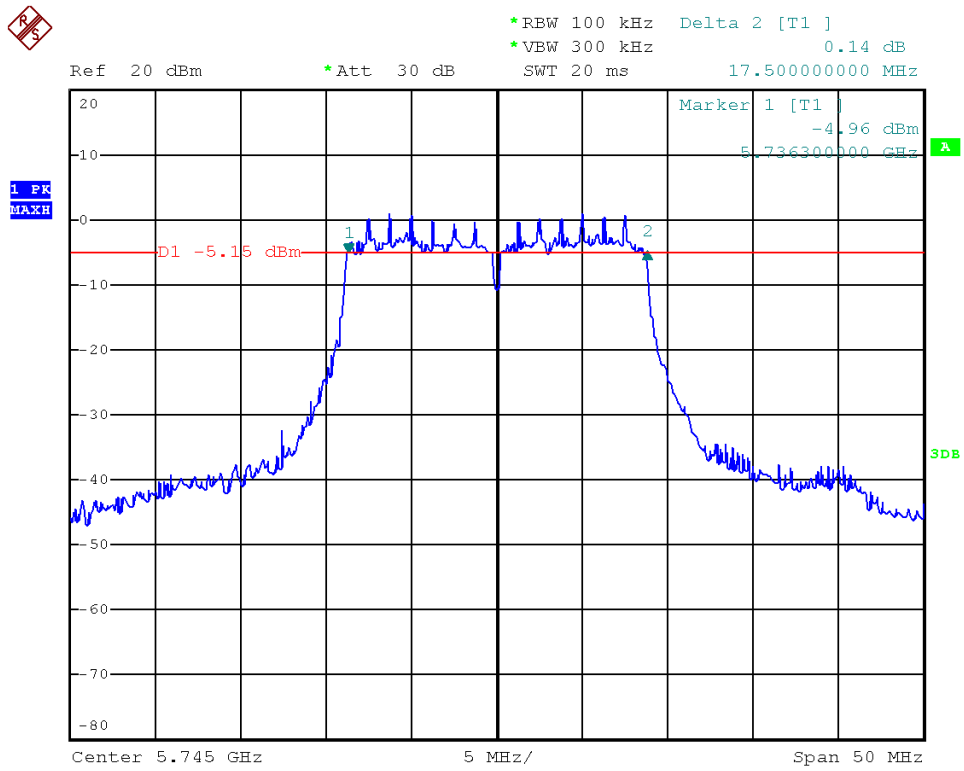
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 157



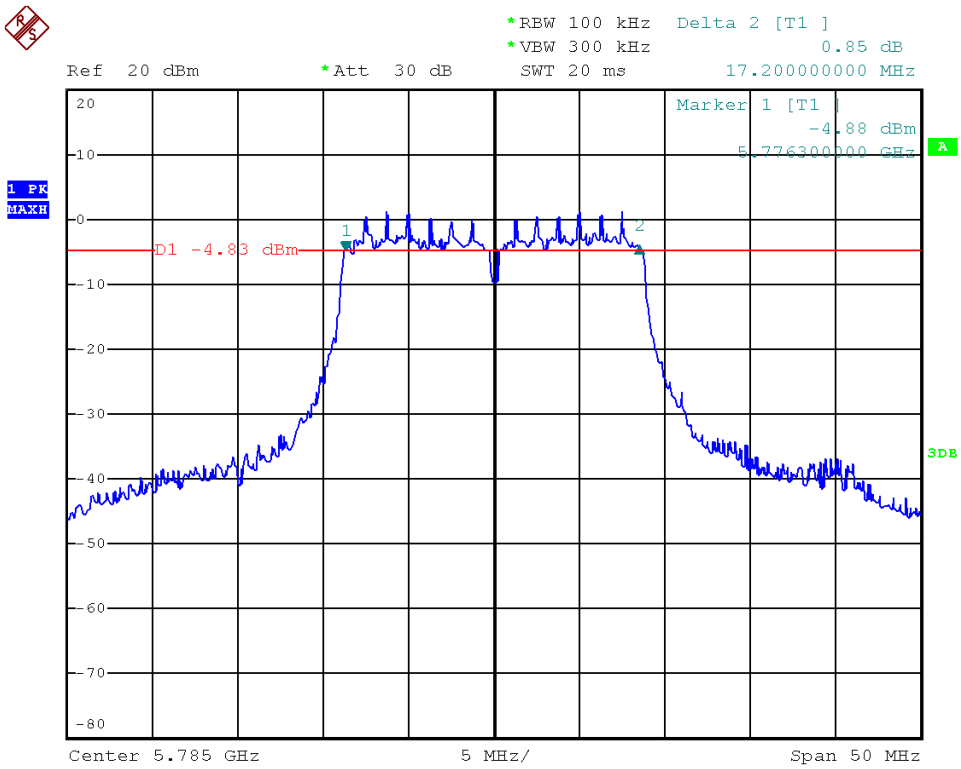
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 165



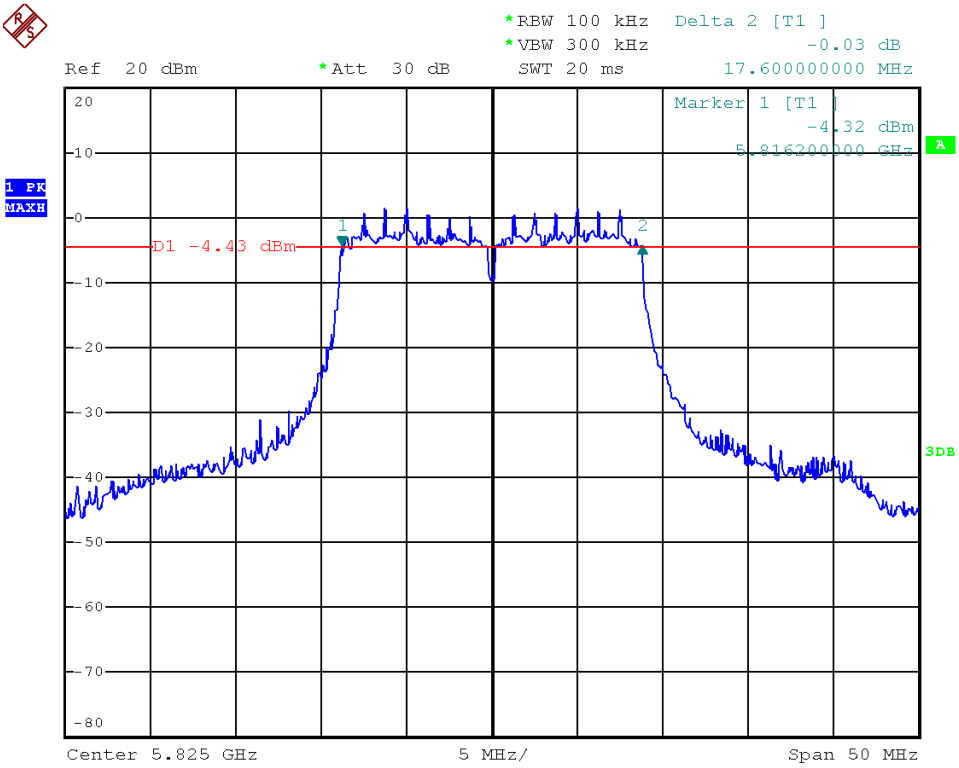
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 149



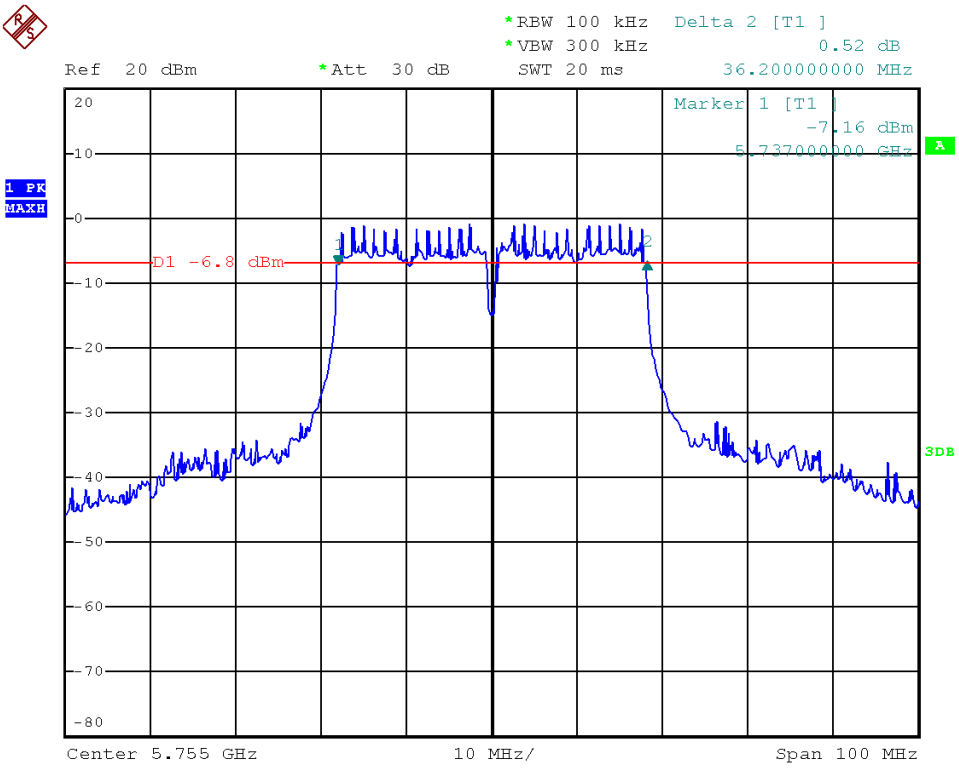
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 157



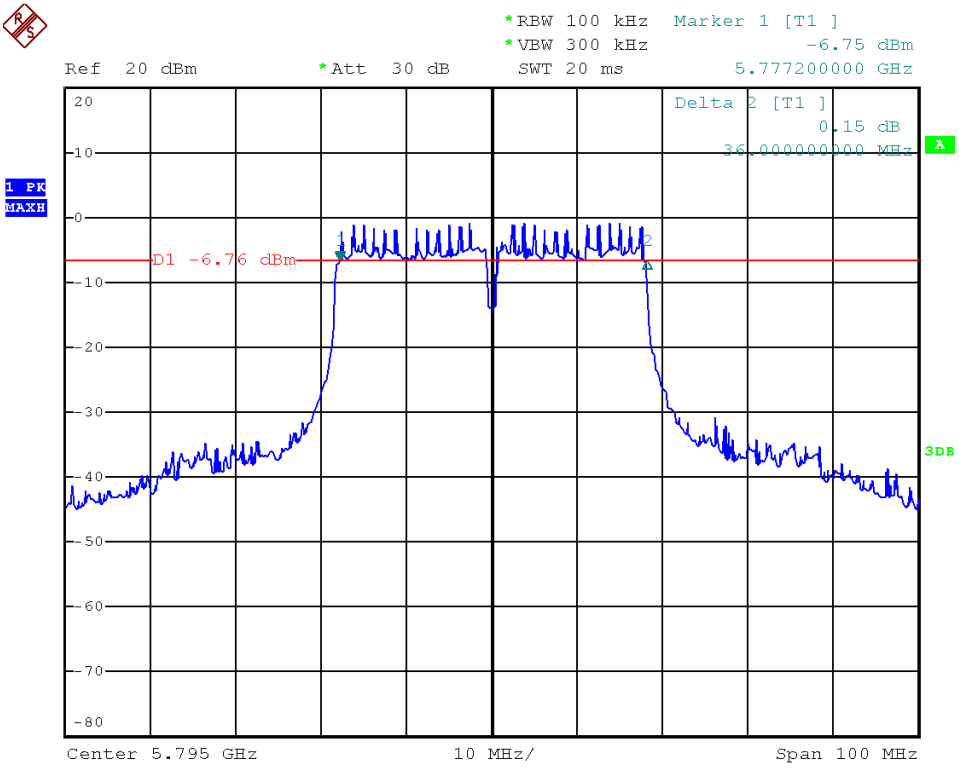
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 165



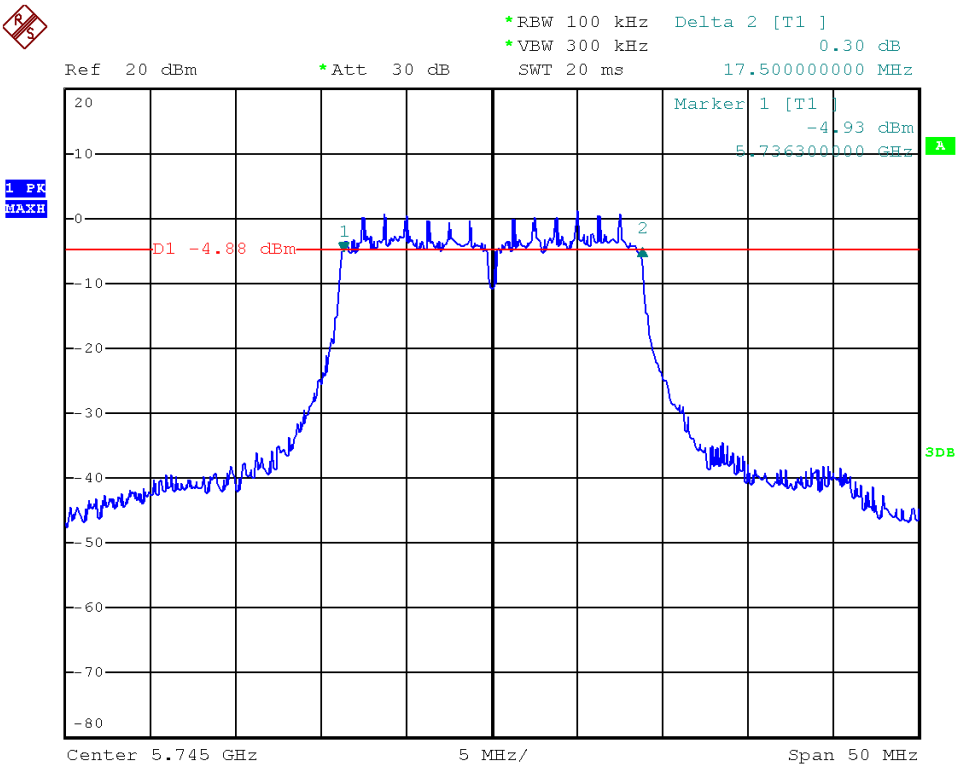
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 151



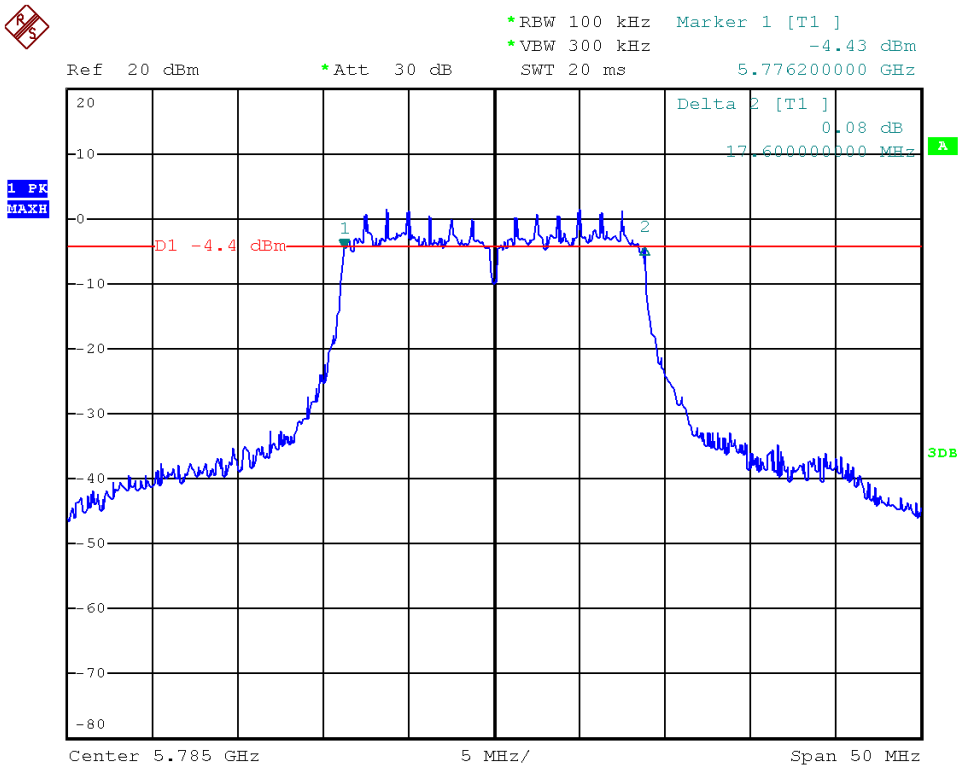
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 159



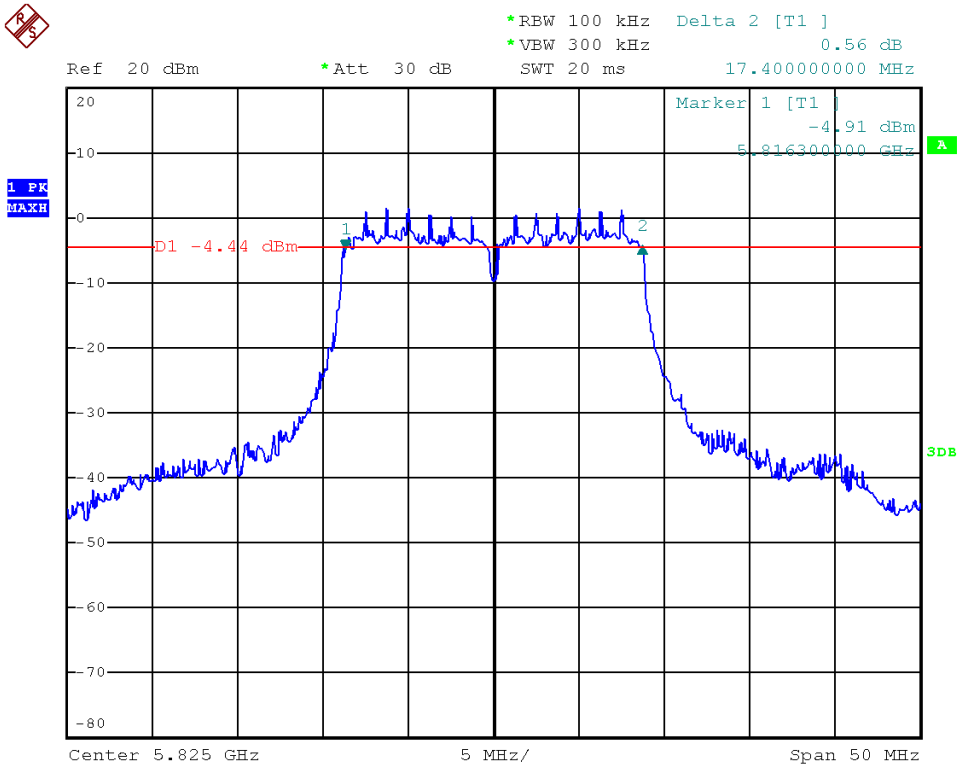
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 149



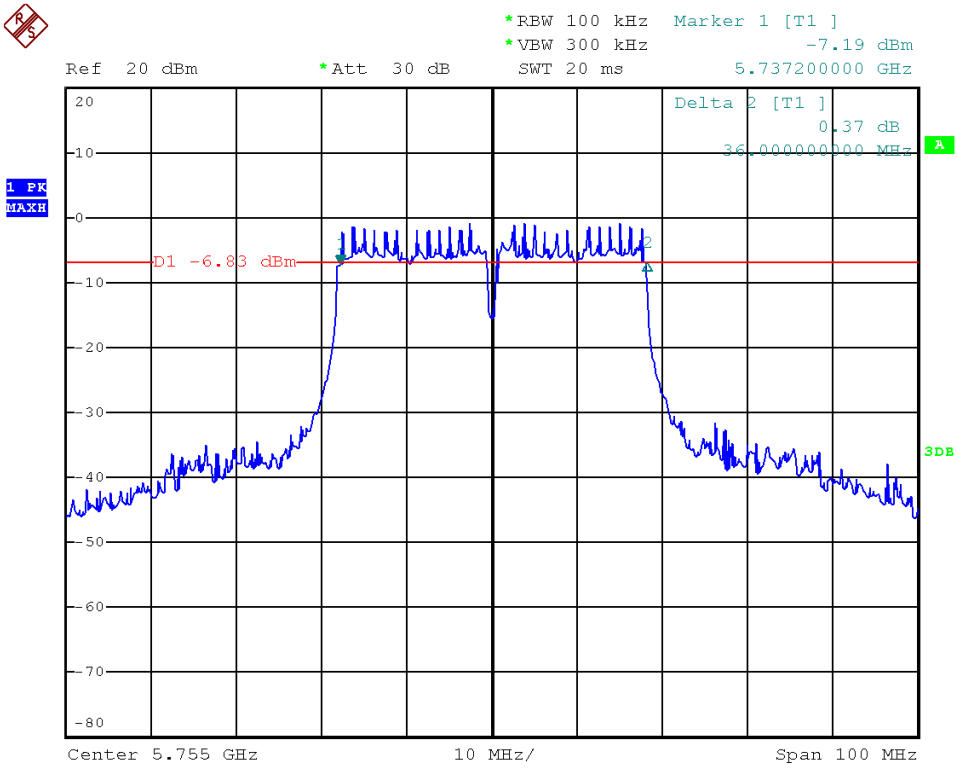
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 157



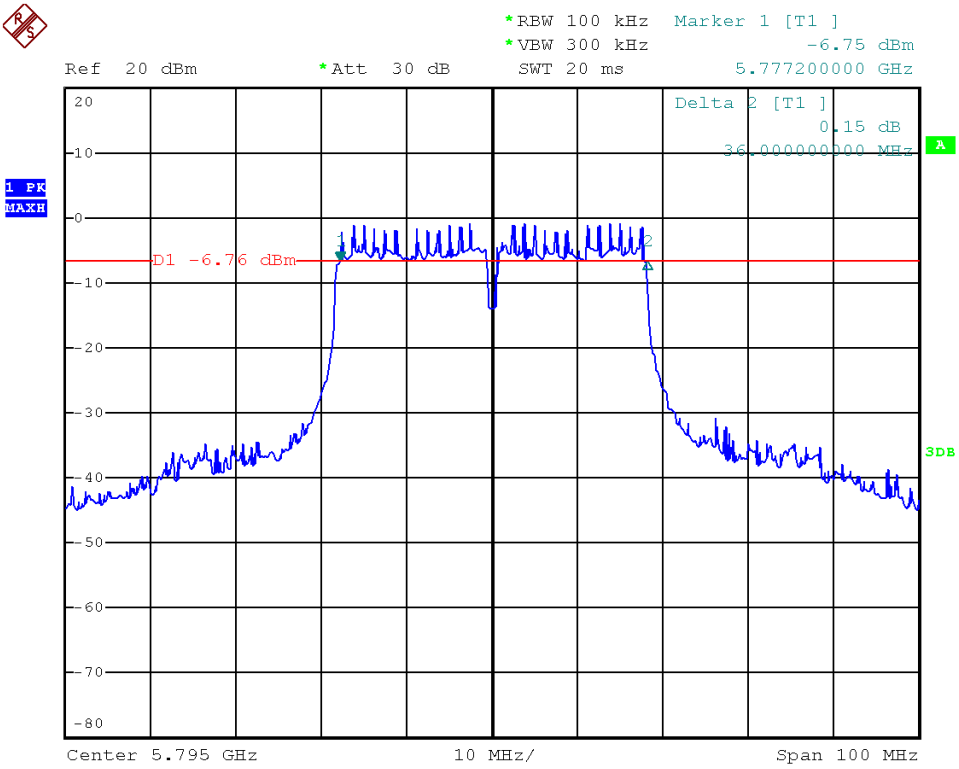
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 165



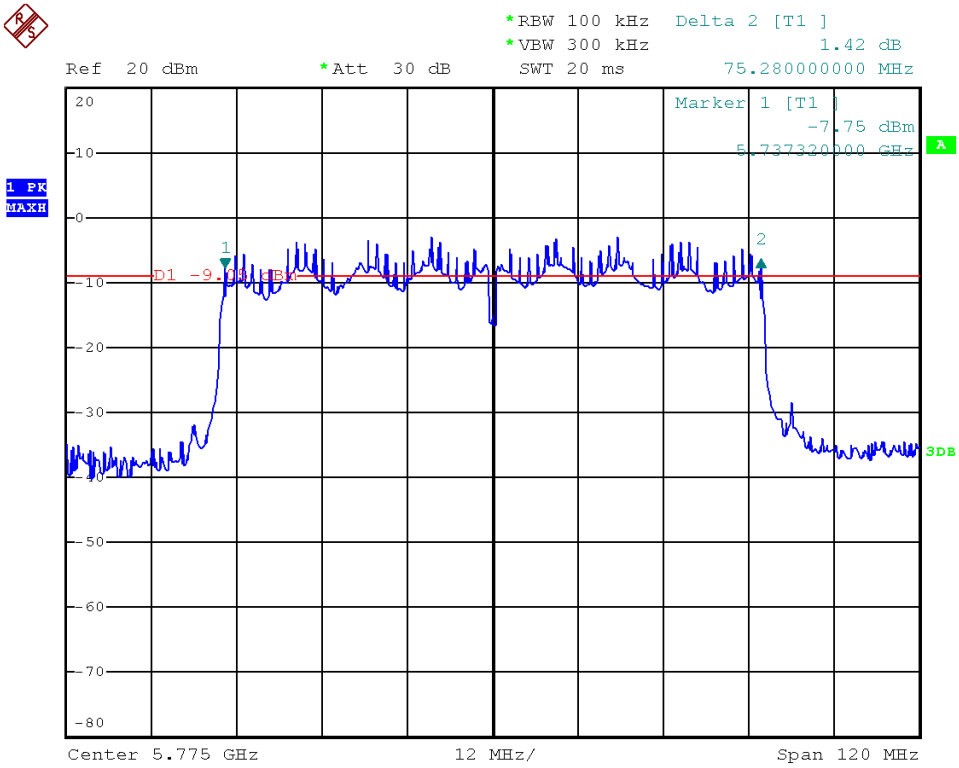
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 151



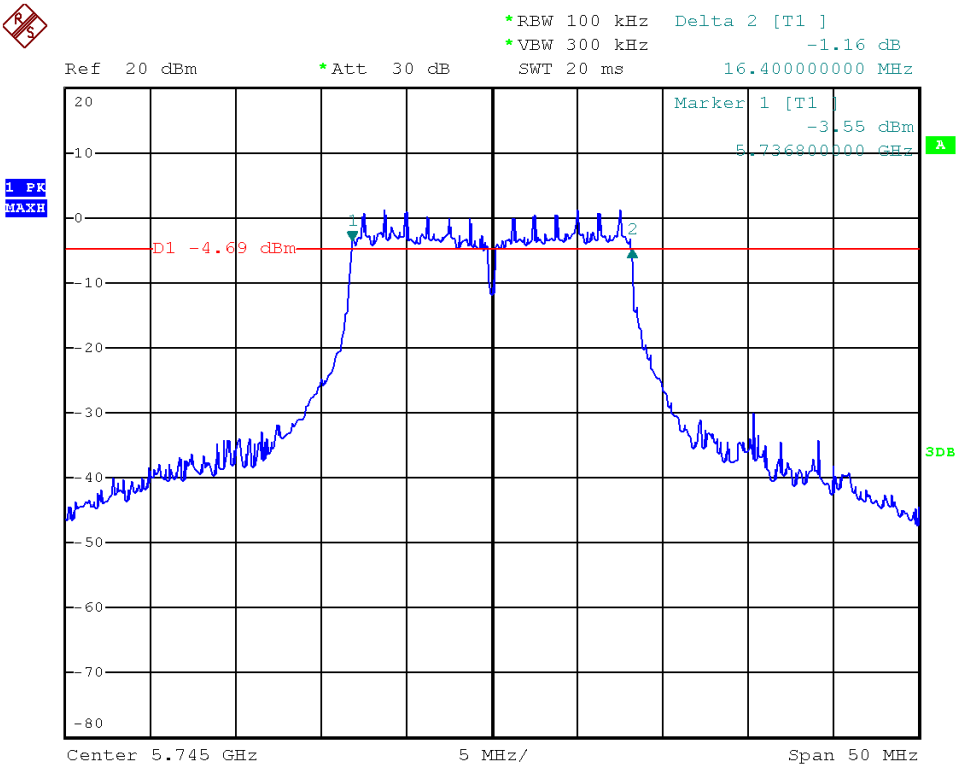
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 159



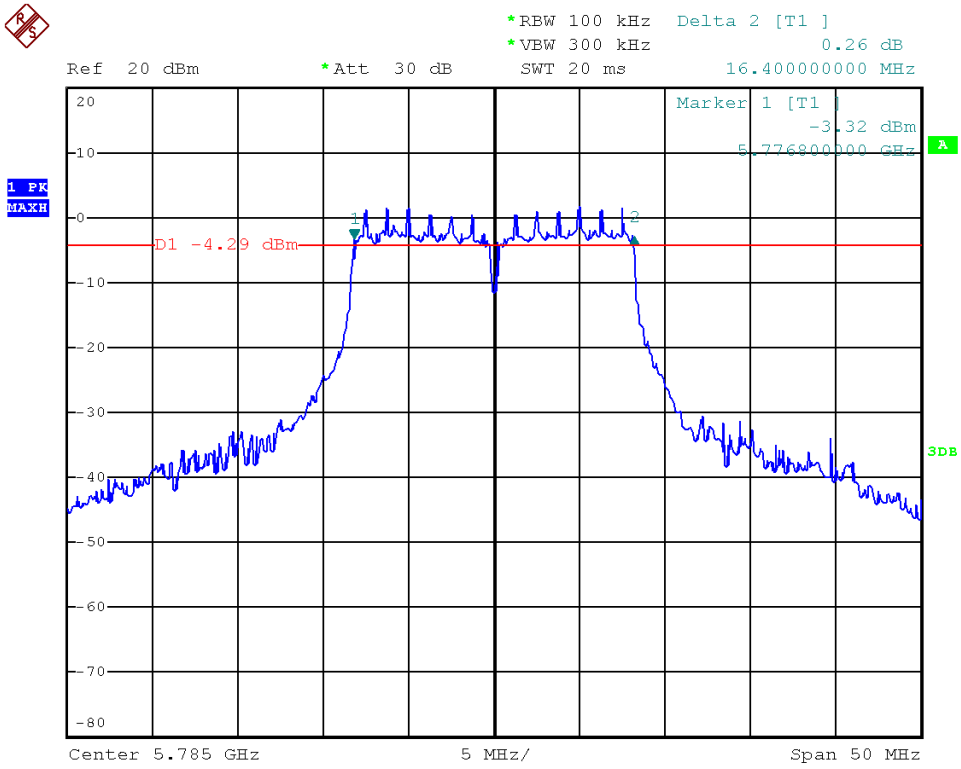
Modulation Standard: 802.11ac VHT80 (270Mbps), ANT A
Channel: 155



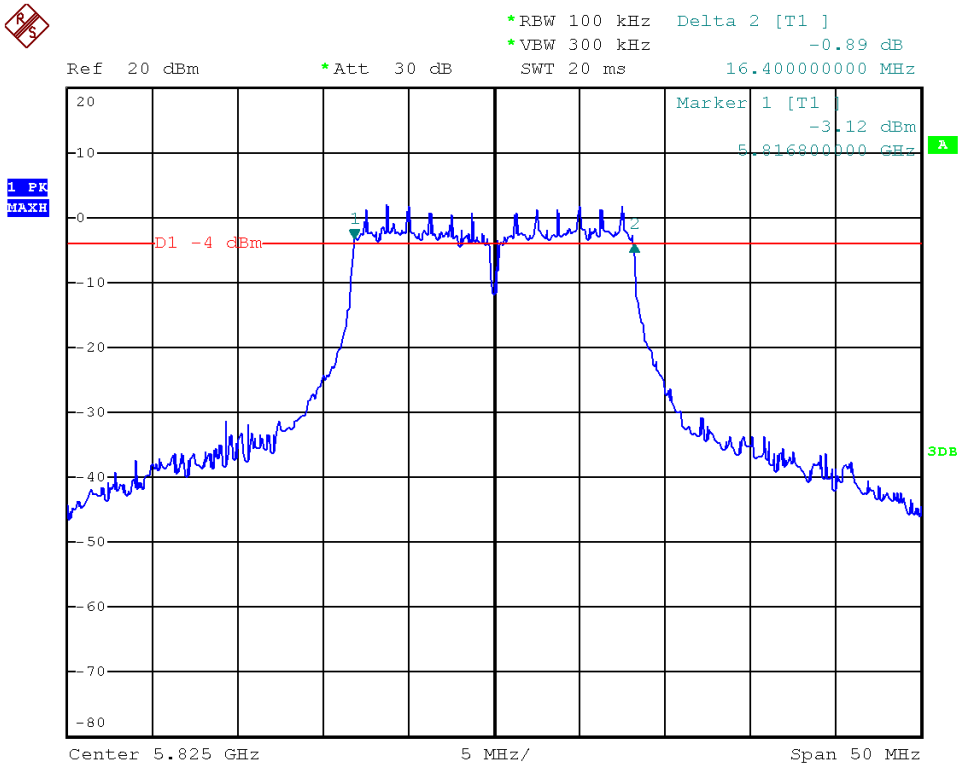
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 149



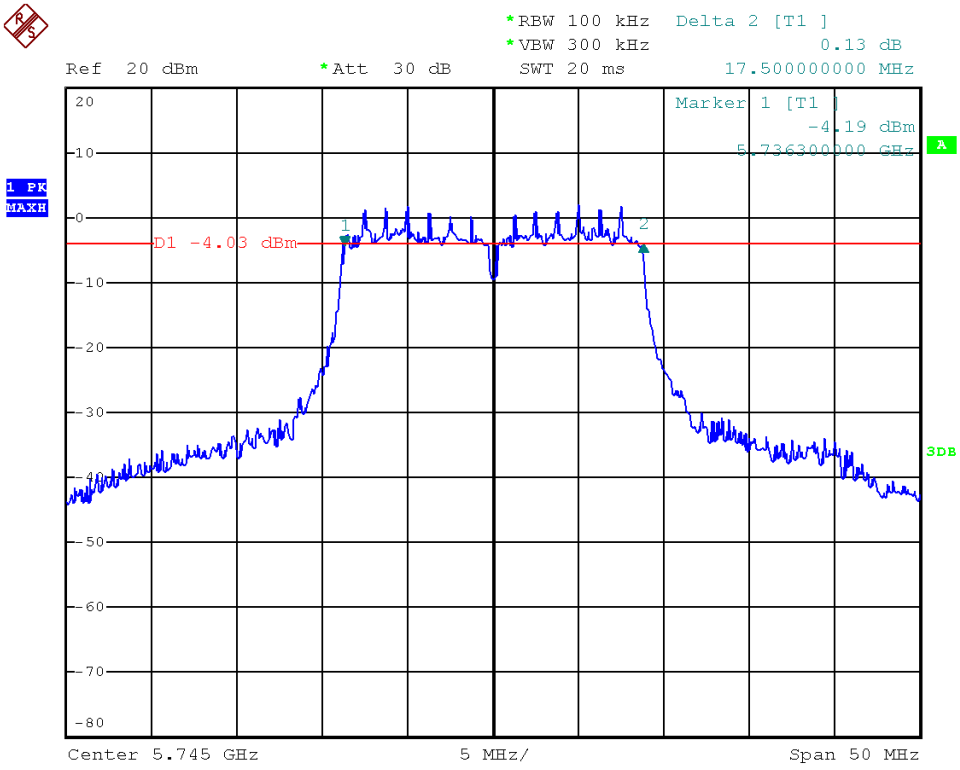
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 157



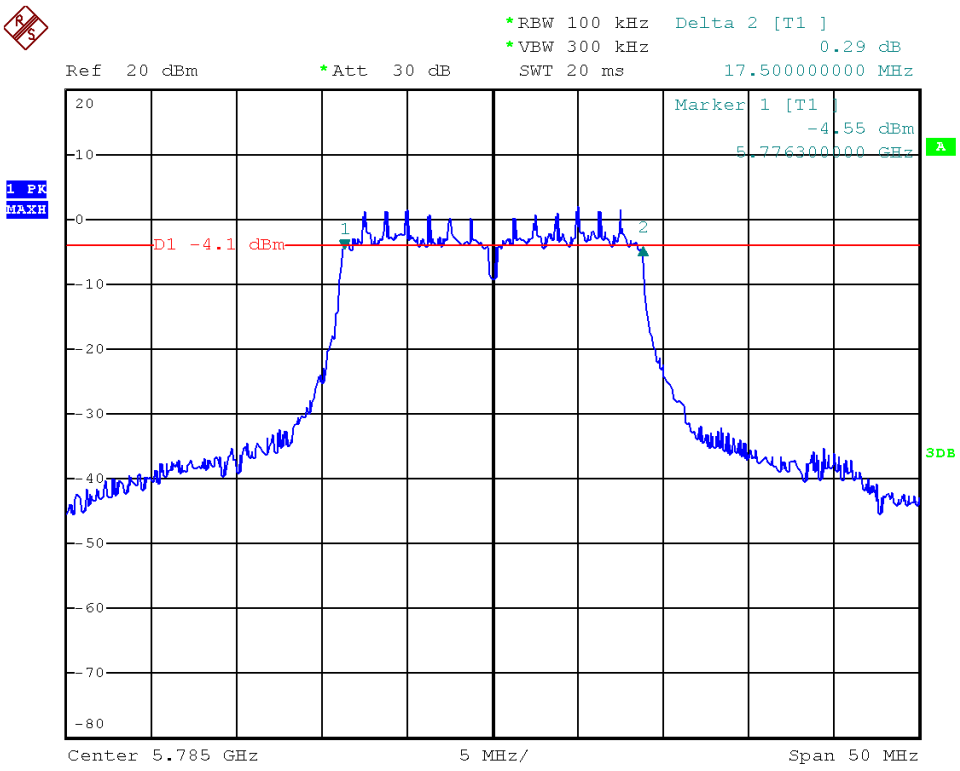
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 165



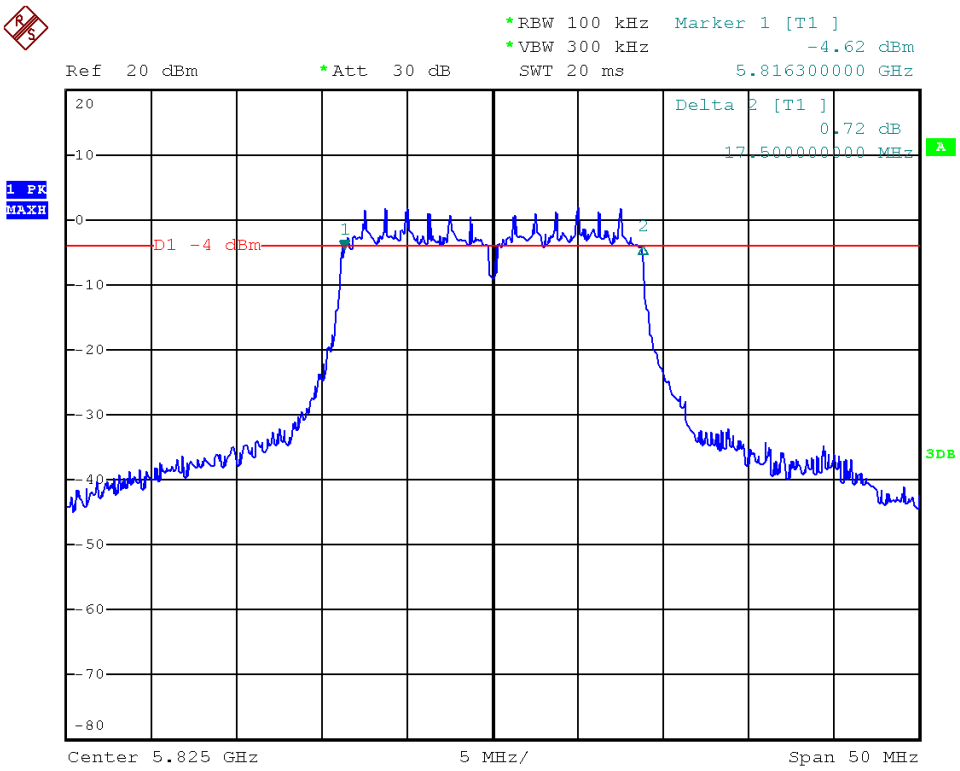
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 149



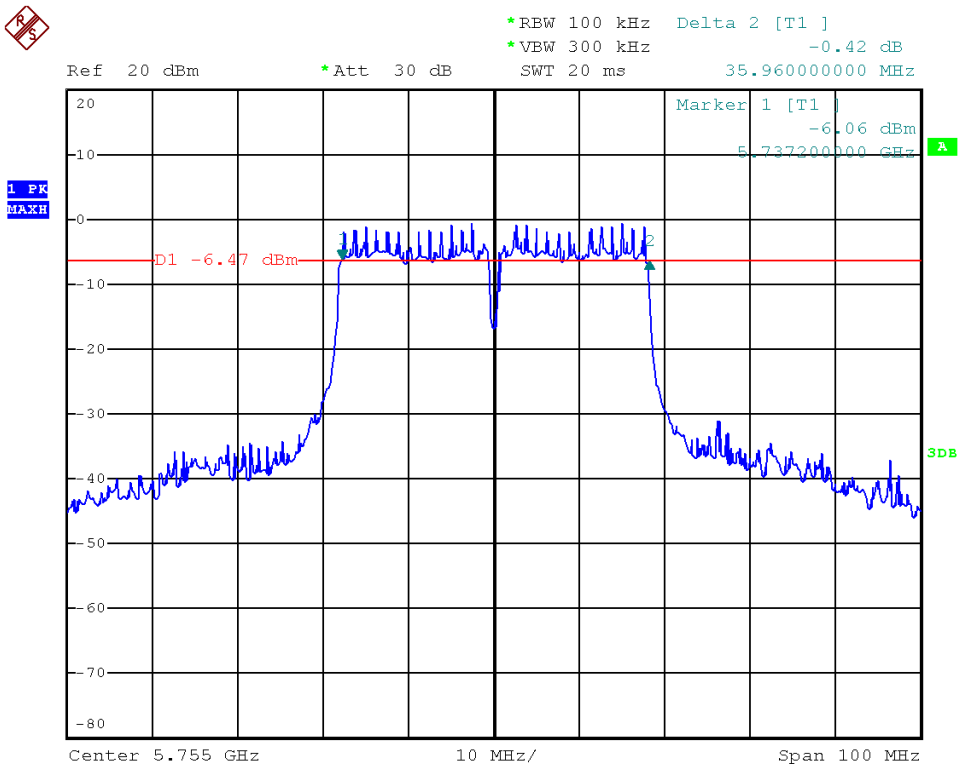
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 157



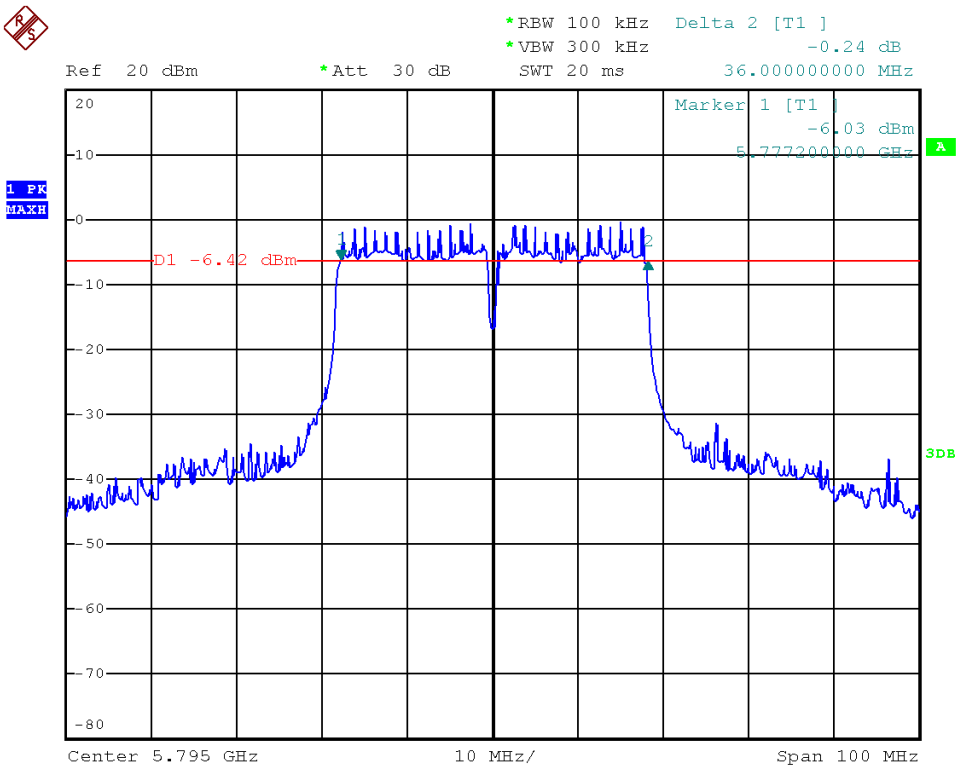
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 165



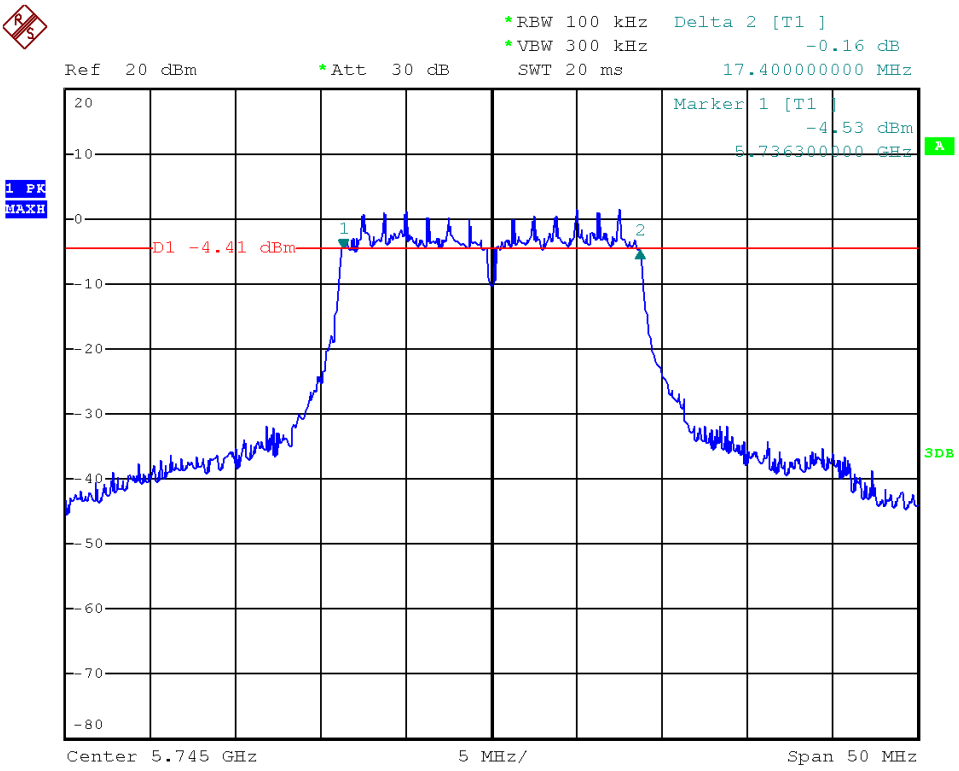
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 151



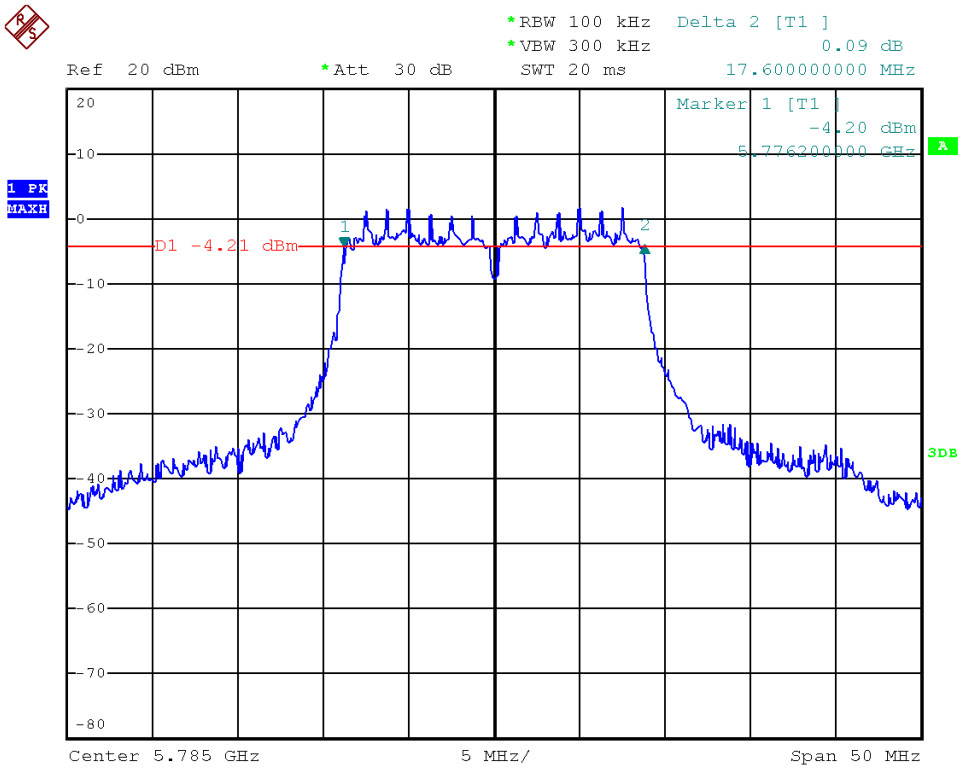
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 159



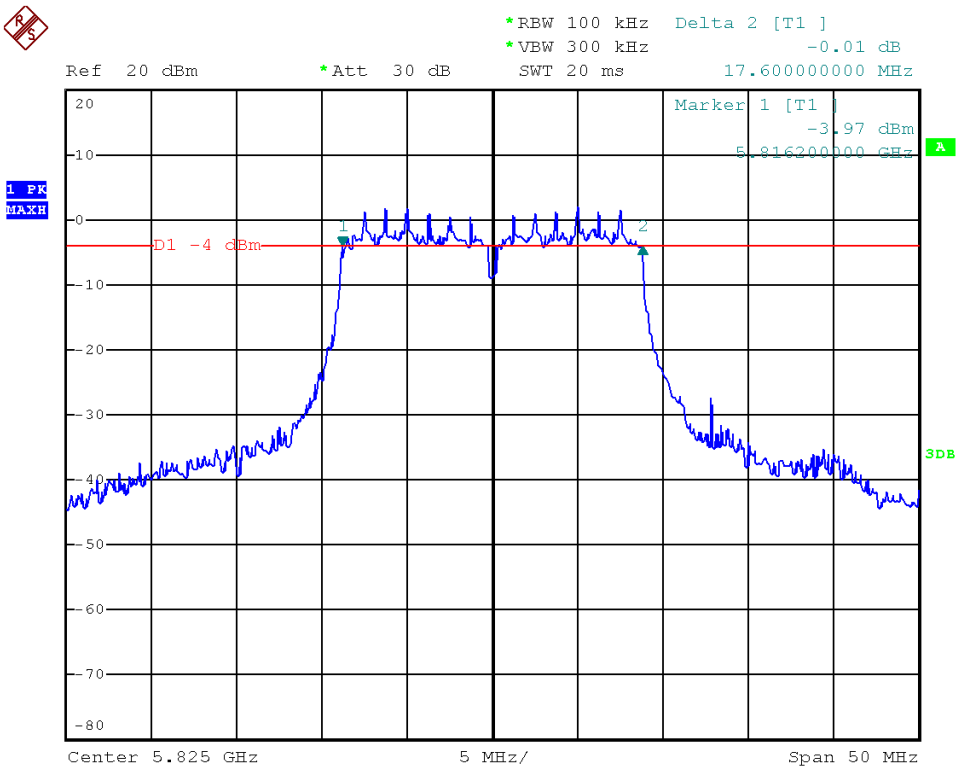
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 149



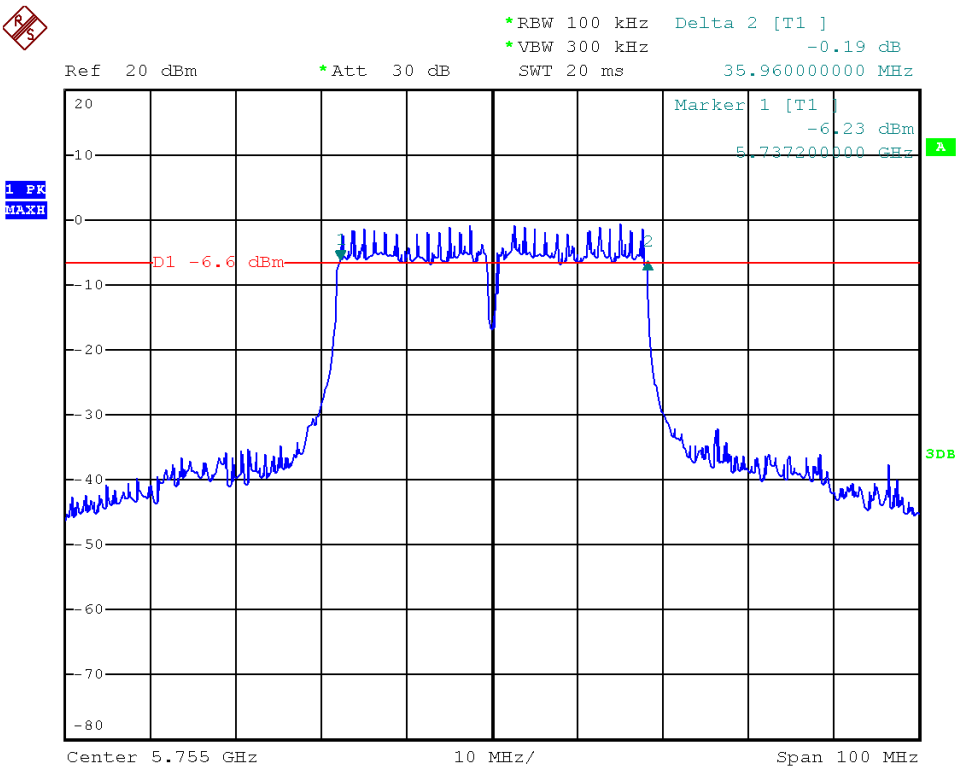
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 157



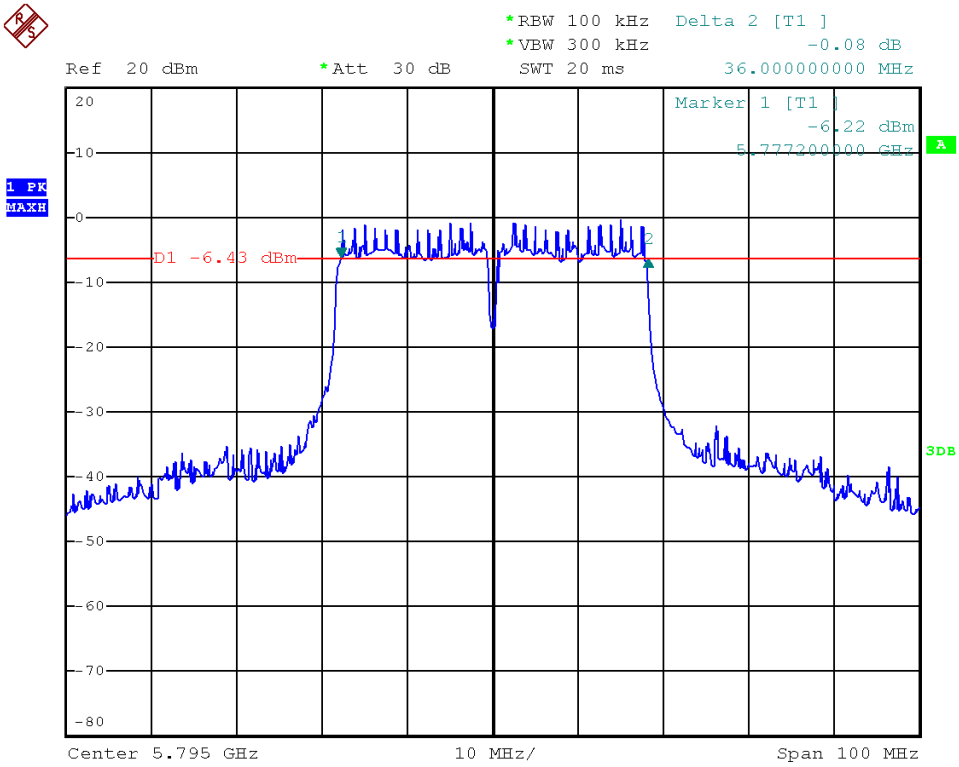
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 165



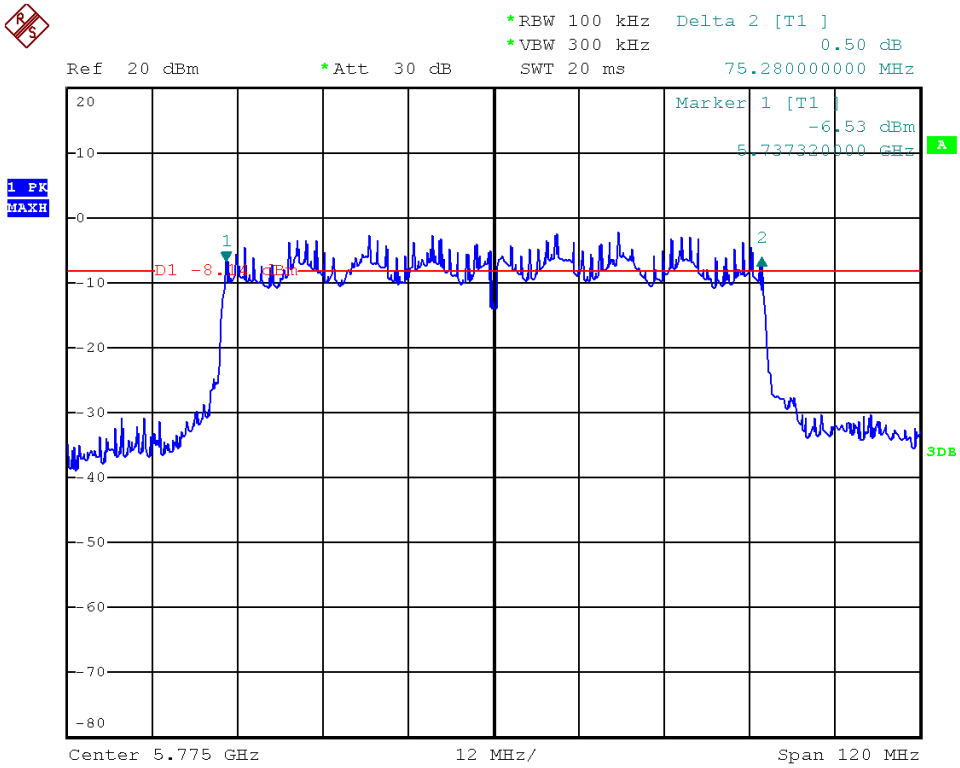
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 151



Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 159



Modulation Standard: 802.11ac VHT80 (270Mbps), ANT B
Channel: 155



9. 26dB Bandwidth

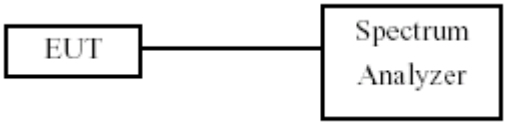
9.1. Test Limit

None; for reporting purposes only.

9.2. Test Procedure

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to100KHz, the VBW >= 3 x RBW, peak detector and max hold.

9.3. Test Setup Layout



9.4. Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100047	2014/03/27	2015/03/26

9.5. Test Result and Data

Test Date: Aug. 22, 2014 Temperature: 25℃

Atmospheric pressure: 1020 hPa Humidity: 65%

802.11a mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5180	22.97	29.09
Middle	5220	26.46	34.60
High	5240	25.44	34.76
Worst		26.46	34.76

802.11n HT20 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5180	21.12	30.88
Middle	5220	20.89	35.61
High	5240	23.58	48.41
Worst		23.58	48.41

802.11n HT40 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5190	41.20	71.24
High	5230	42.30	79.62
Worst		42.30	79.62

802.11ac VHT20 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5180	20.96	37.40
Middle	5220	20.72	42.27
High	5240	20.94	42.88
Worst		20.96	42.88

802.11ac VHT40 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5190	41.69	54.74
High	5230	42.95	57.42
Worst		42.95	57.42

802.11ac VHT80 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Middle	5210	81.56	119.1
Worst		81.56	119.1

802.11a mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5745	20.07	20.88
Middle	5785	20.17	20.75
High	5825	20.52	20.60
Worst		20.52	20.88

802.11n HT20 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5745	20.36	20.50
Middle	5785	20.37	20.77
High	5825	20.36	20.42
Worst		20.37	20.77

802.11n HT40 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5755	39.91	40.49
High	5795	40.12	40.41
Worst		40.12	40.49

802.11ac VHT20 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5745	20.28	20.67
Middle	5785	20.34	20.60
High	5825	20.48	20.63
Worst		20.48	20.67

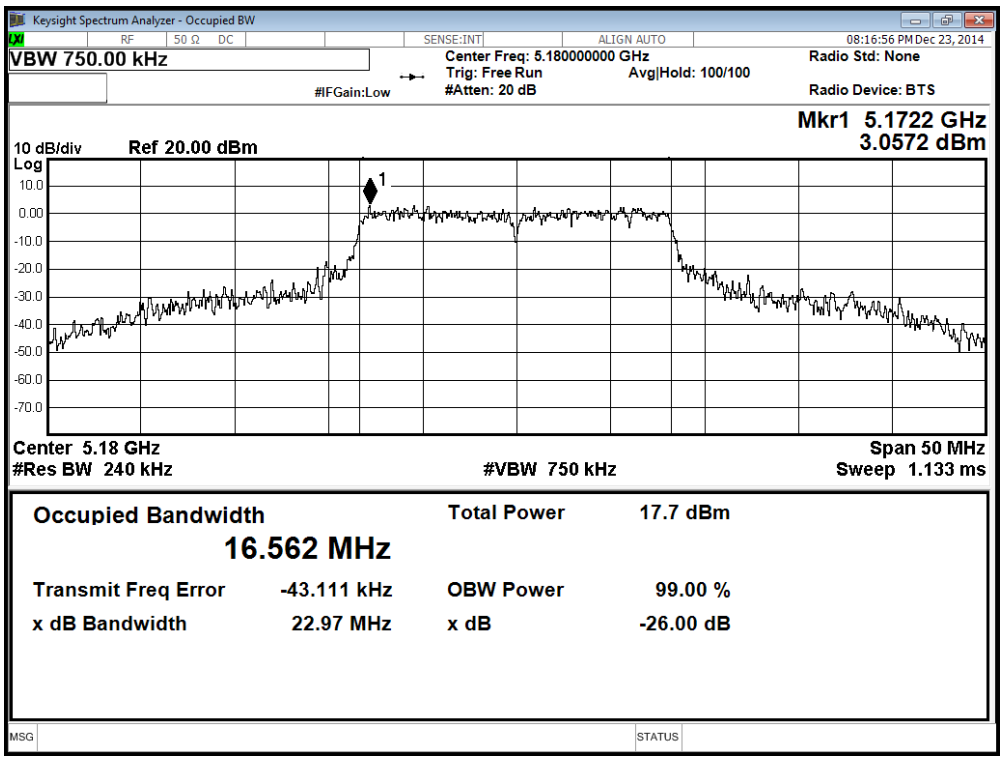
802.11ac VHT40 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Low	5755	40.05	40.08
High	5795	39.74	40.24
Worst		40.05	40.24

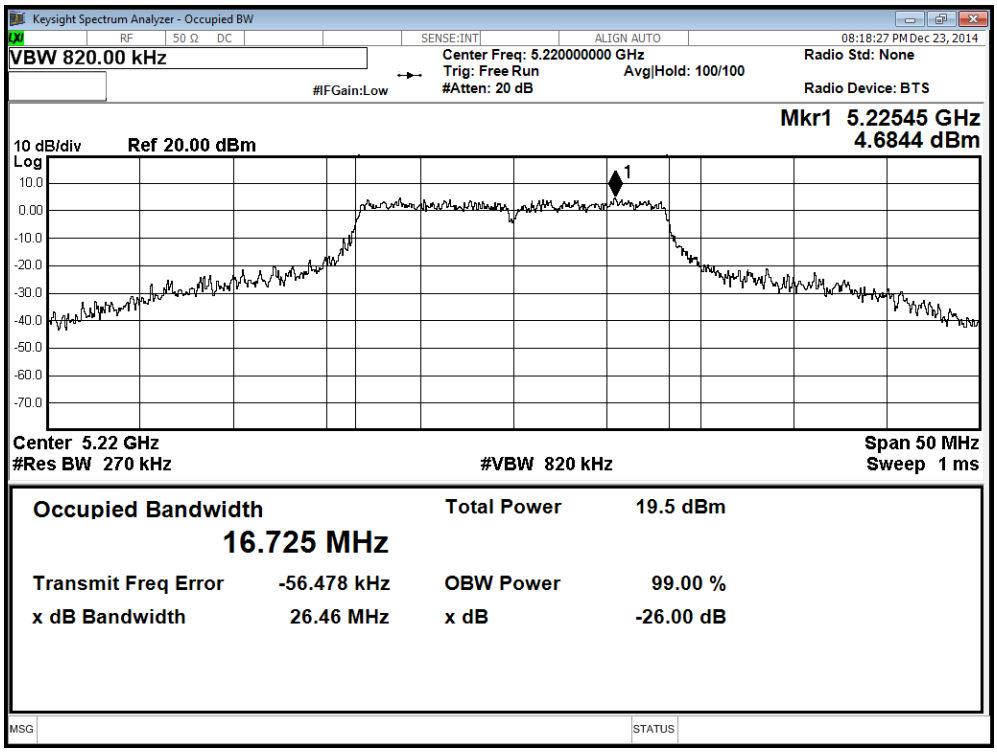
802.11ac VHT80 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A 26dB Bandwidth (MHz)	Ant. B 26dB Bandwidth (MHz)
Middle	5775	78.49	78.58
Worst		78.49	78.58

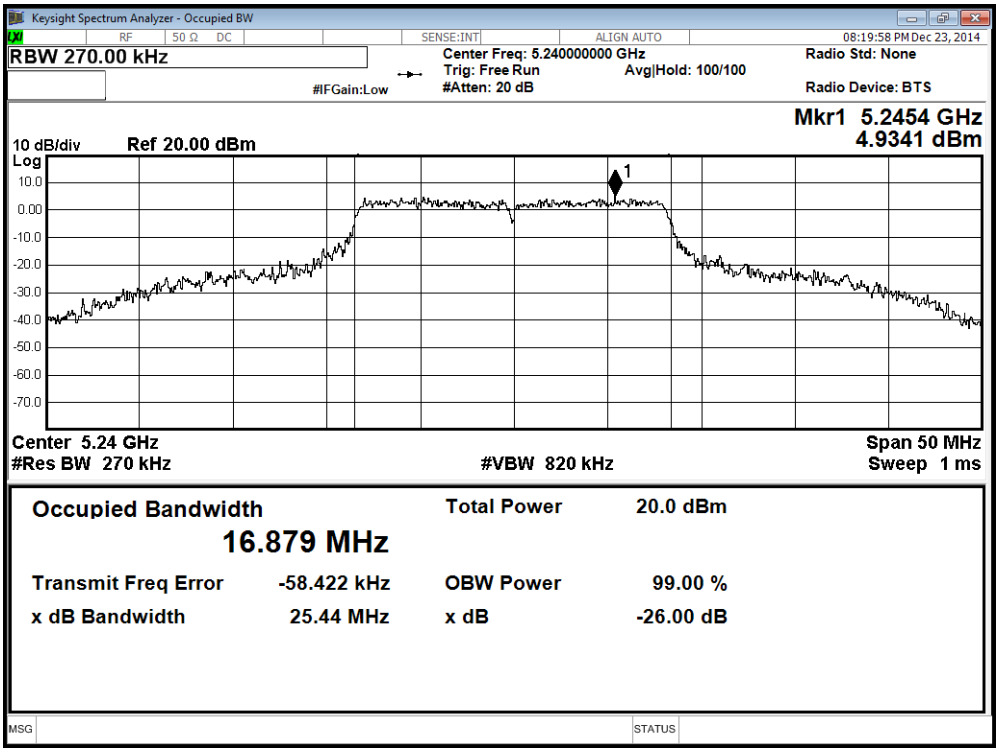
<5.2G Band>
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 36



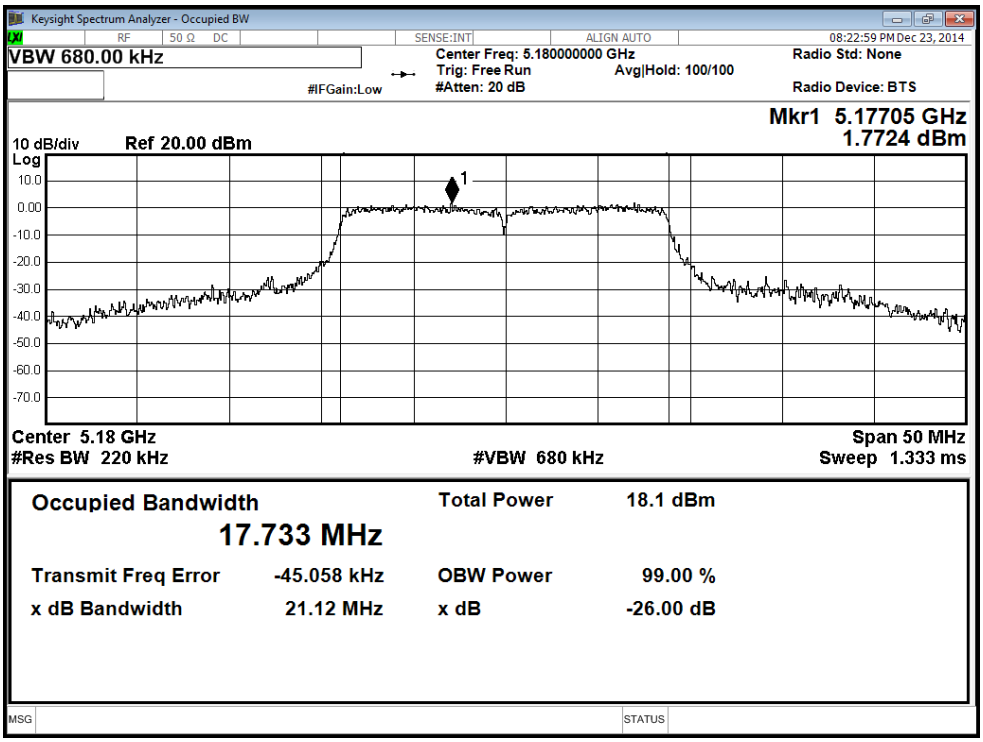
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 44



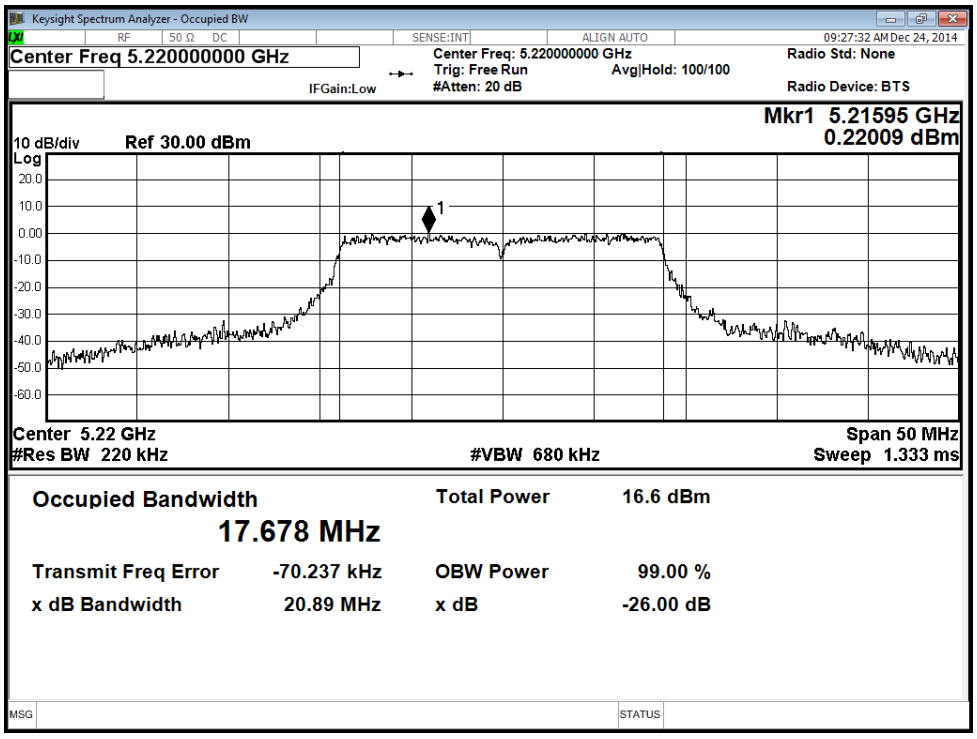
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 48



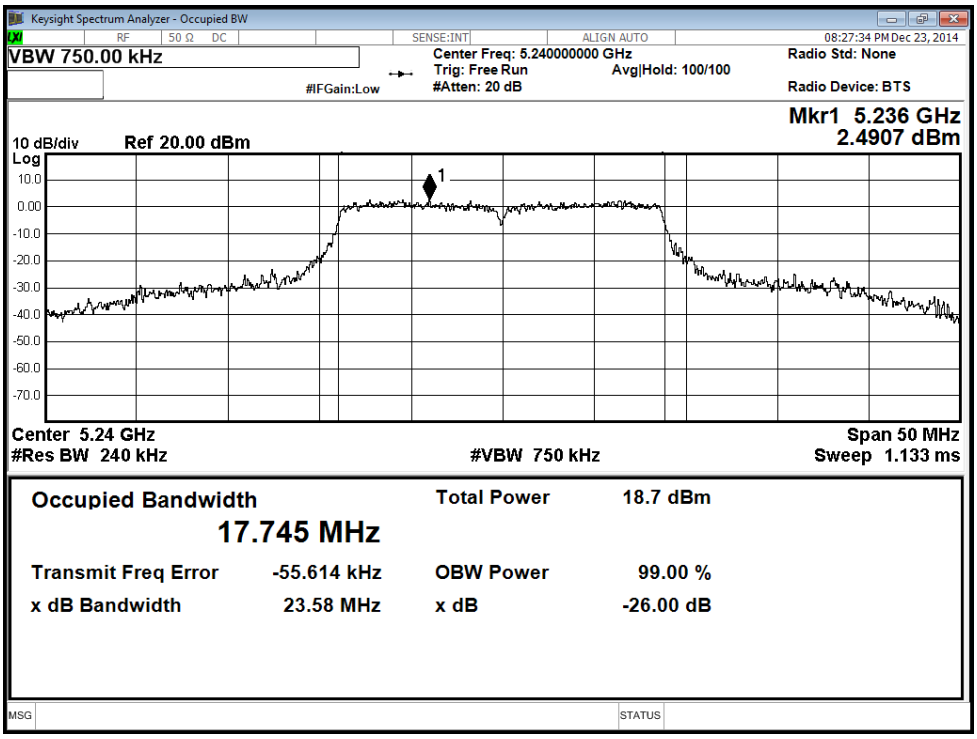
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 36



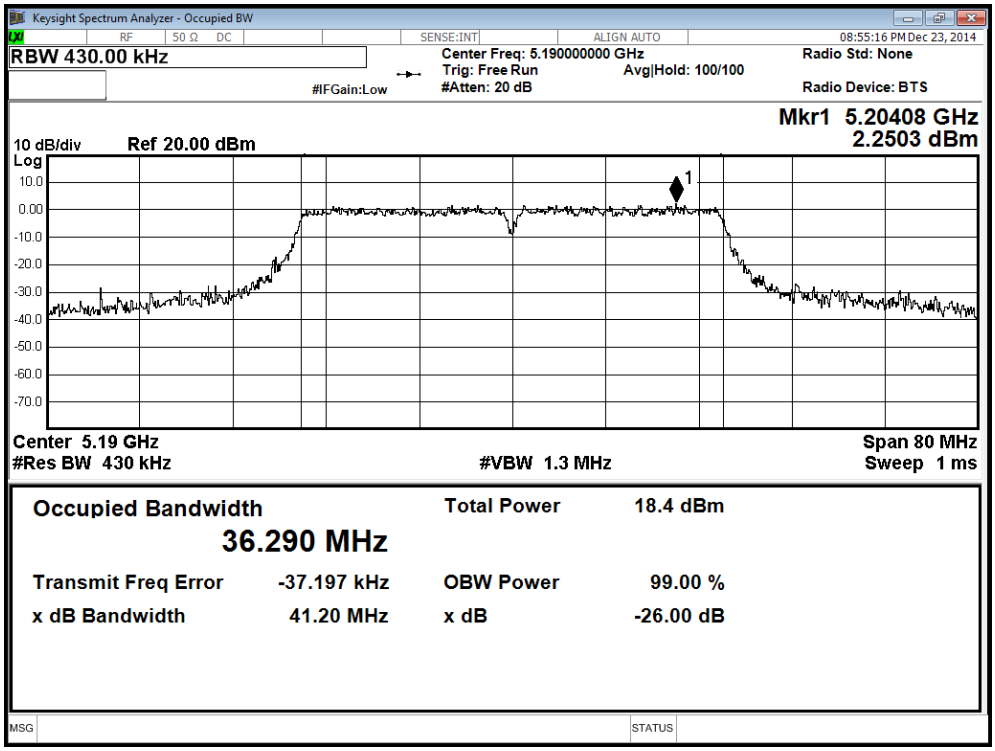
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 44



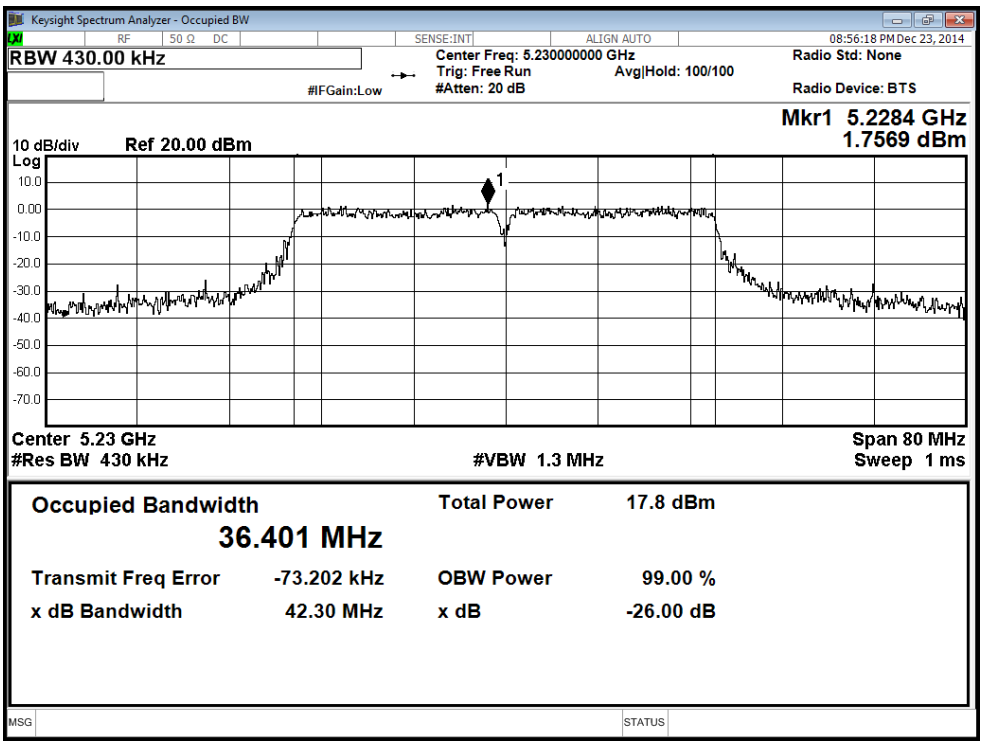
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 48



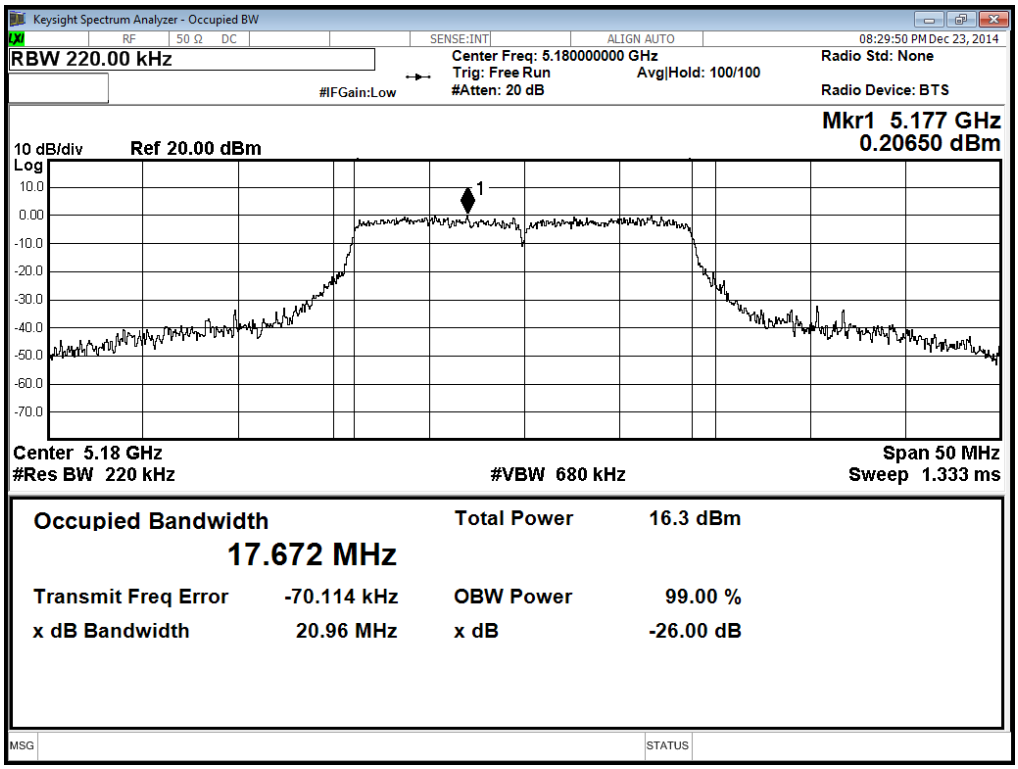
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 38



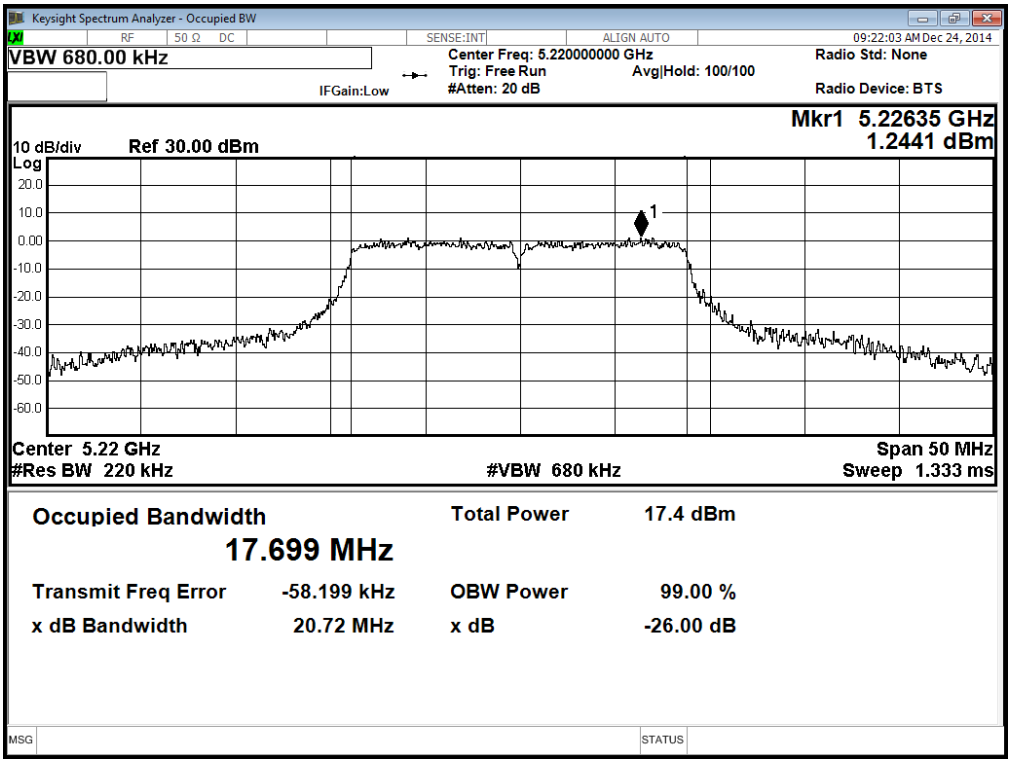
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 46



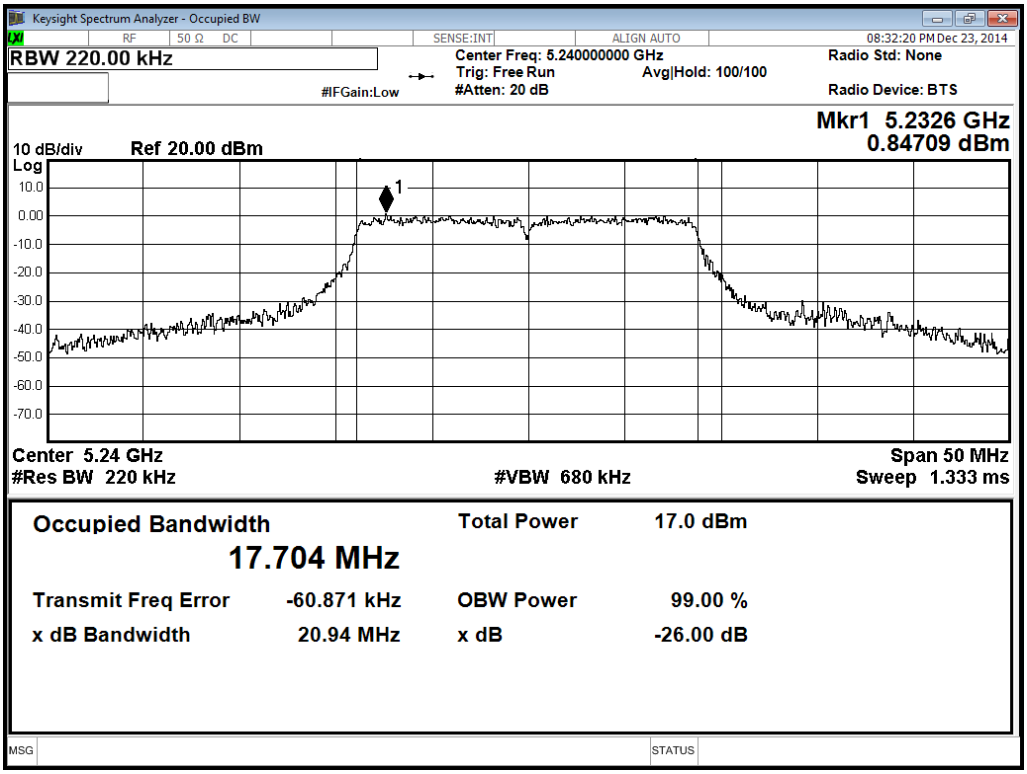
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 36



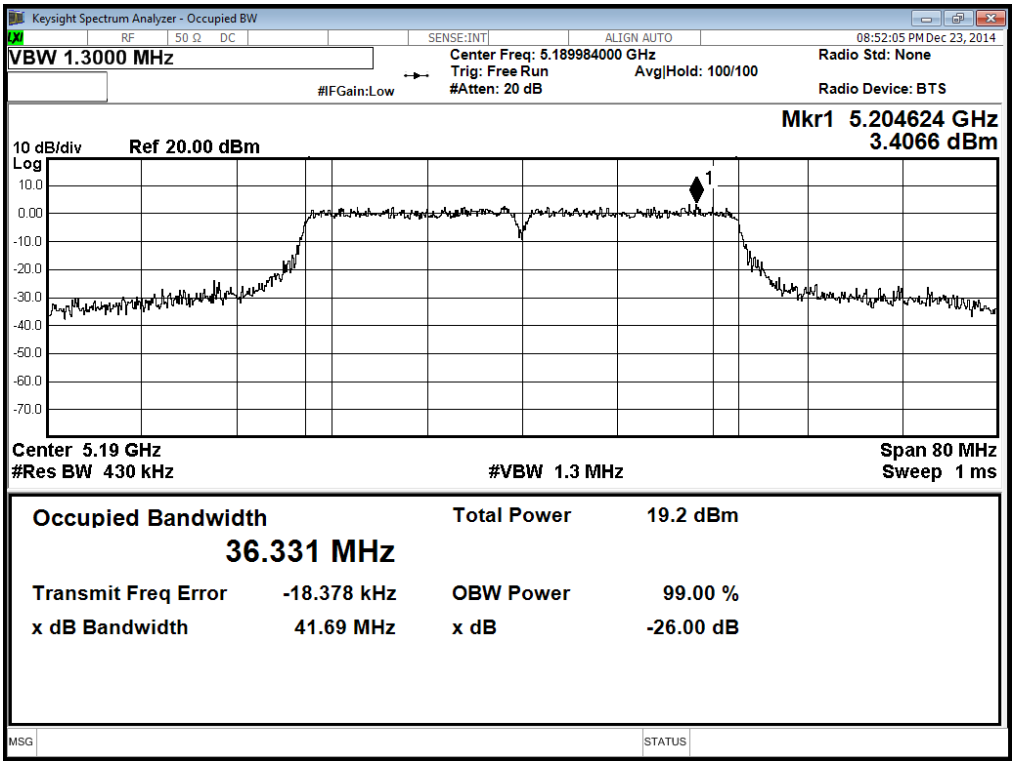
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 44



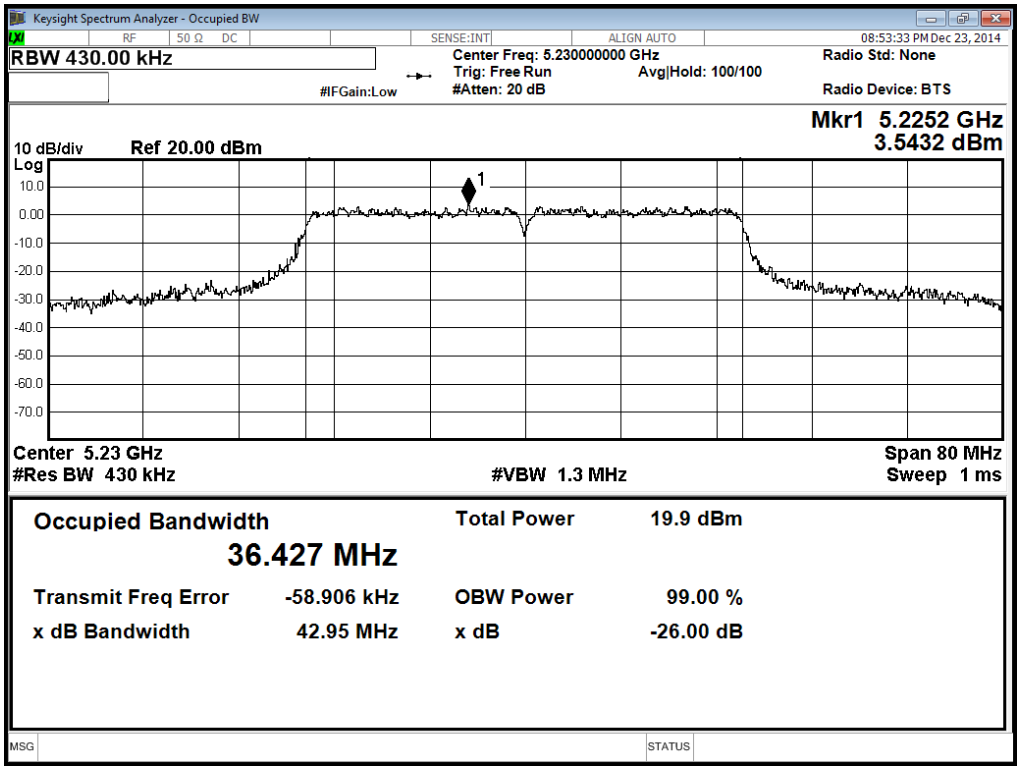
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 48



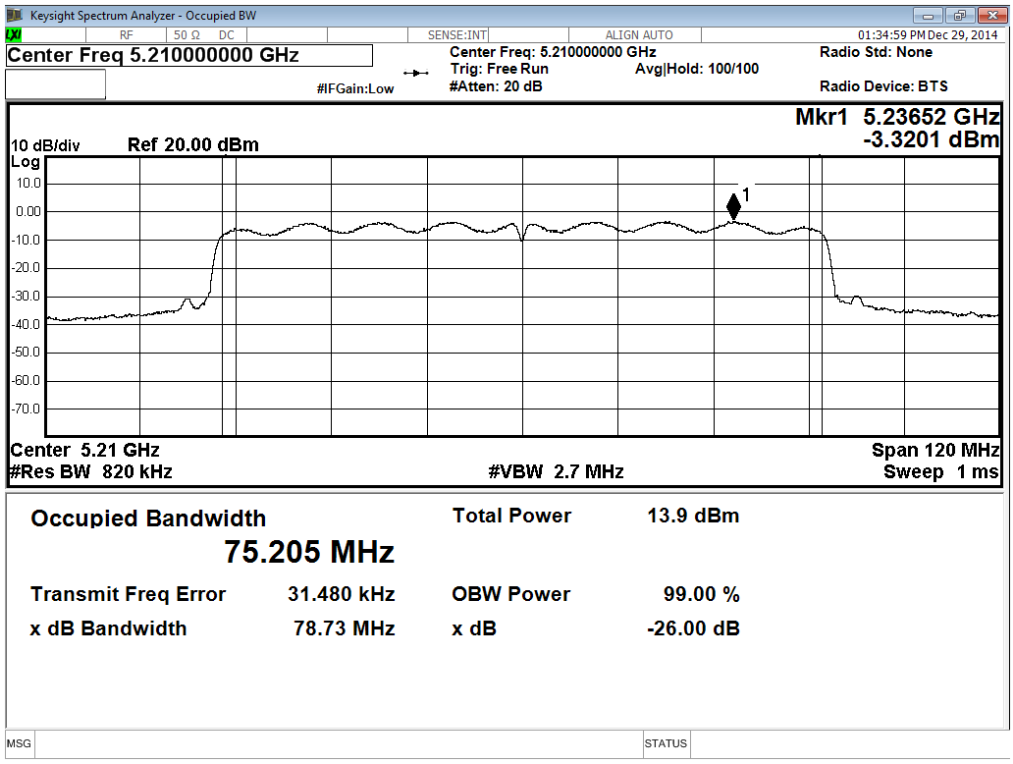
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 38



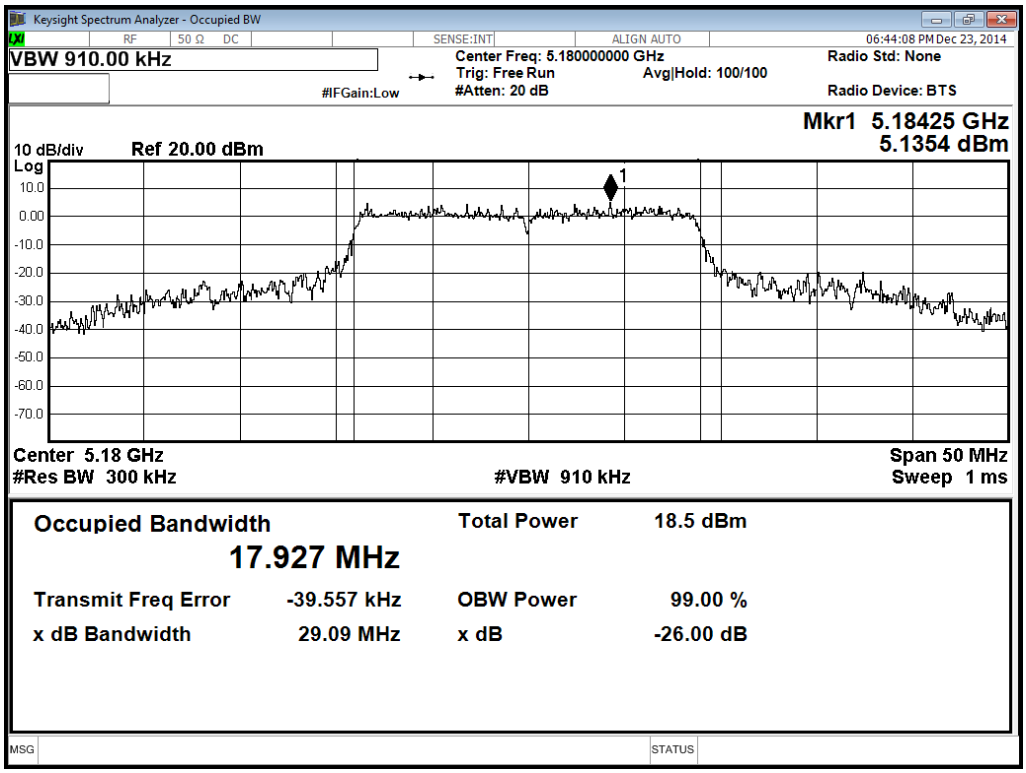
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 46



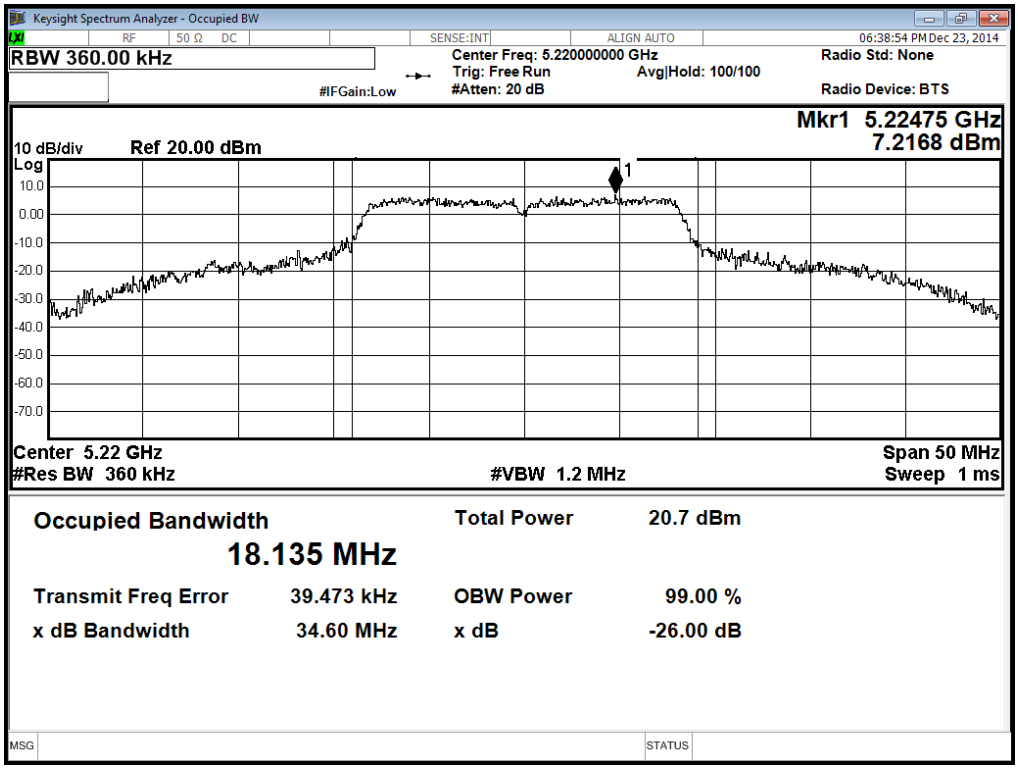
Modulation Standard: 802.11ac VHT80 (270Mbps), ANT A
Channel: 42



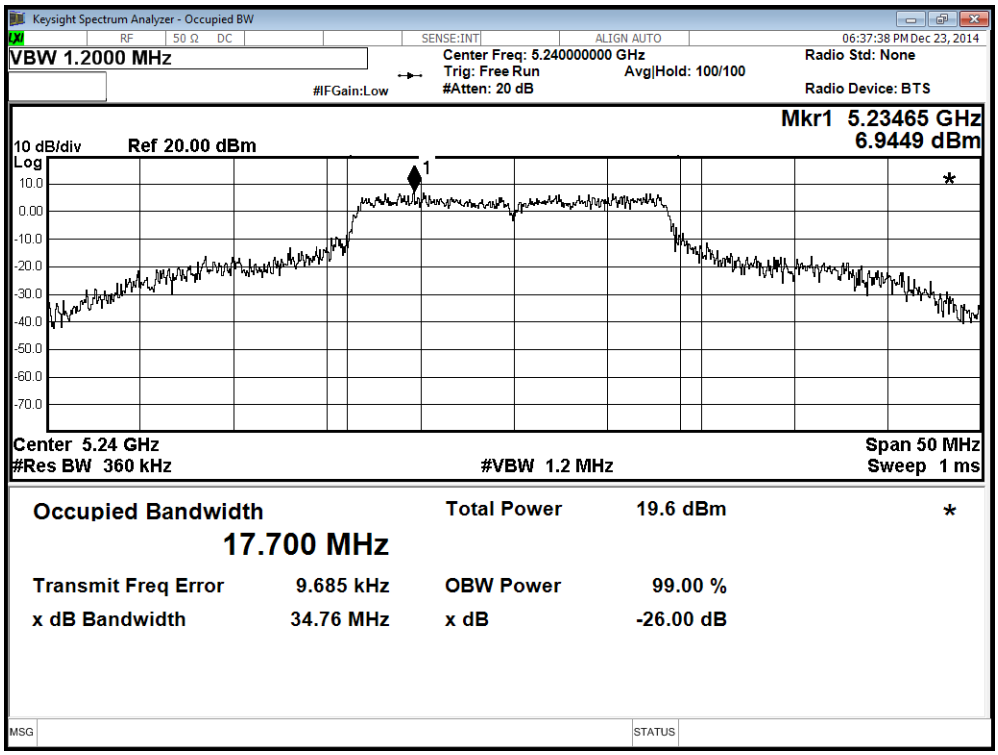
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 36



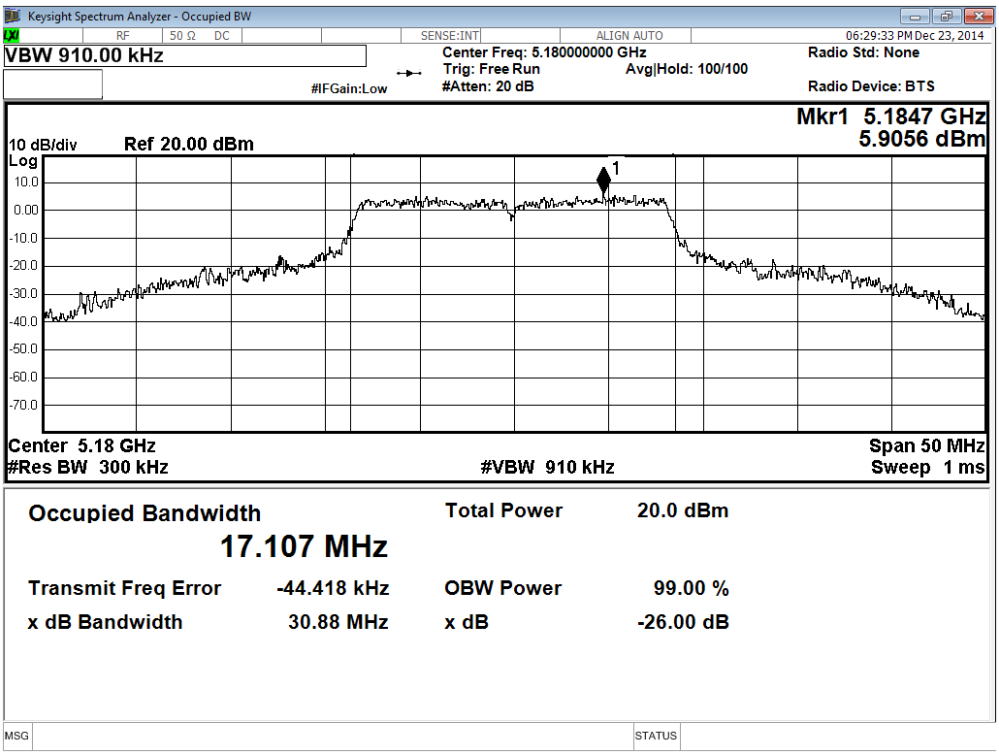
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 44



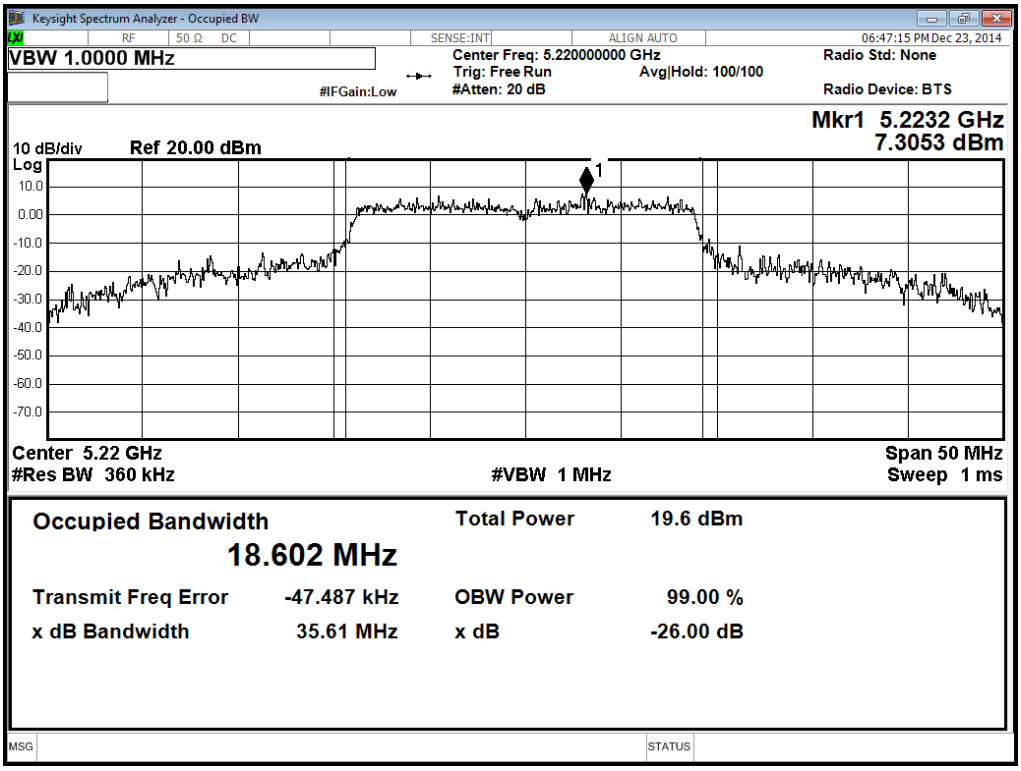
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 48



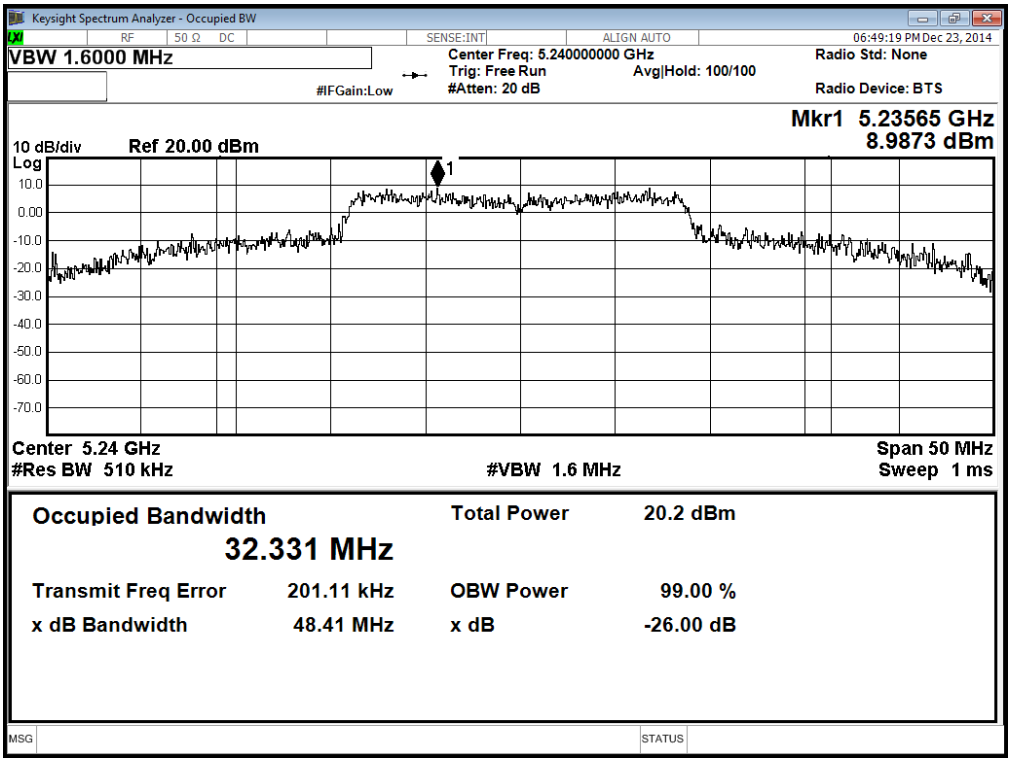
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 36



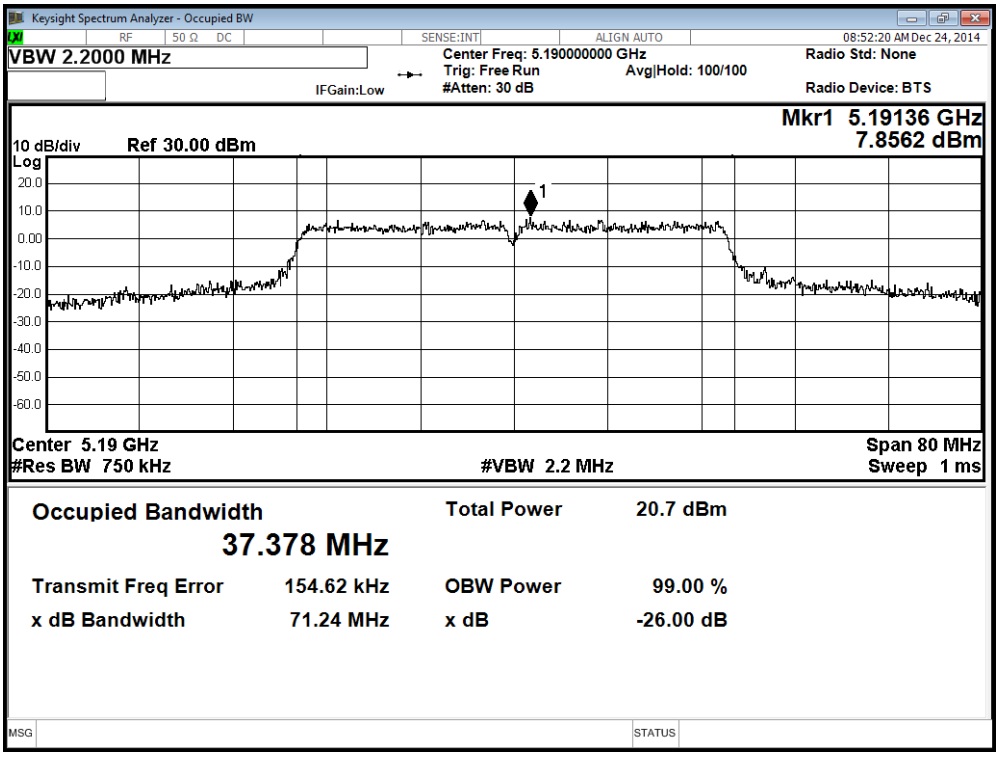
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 44



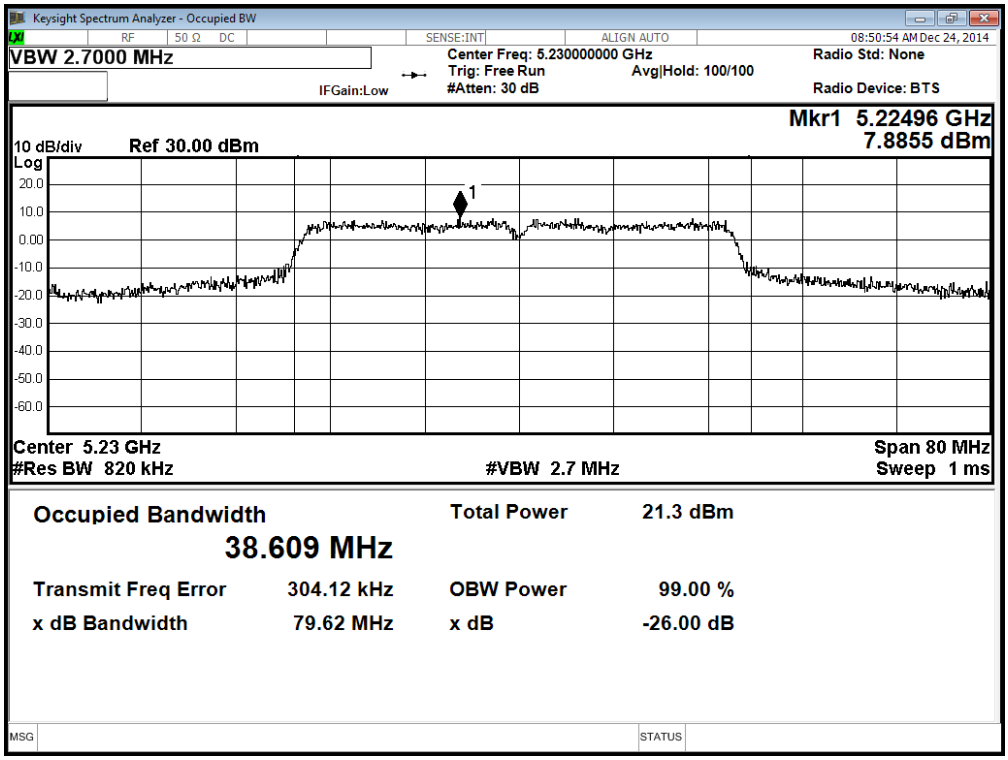
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 48



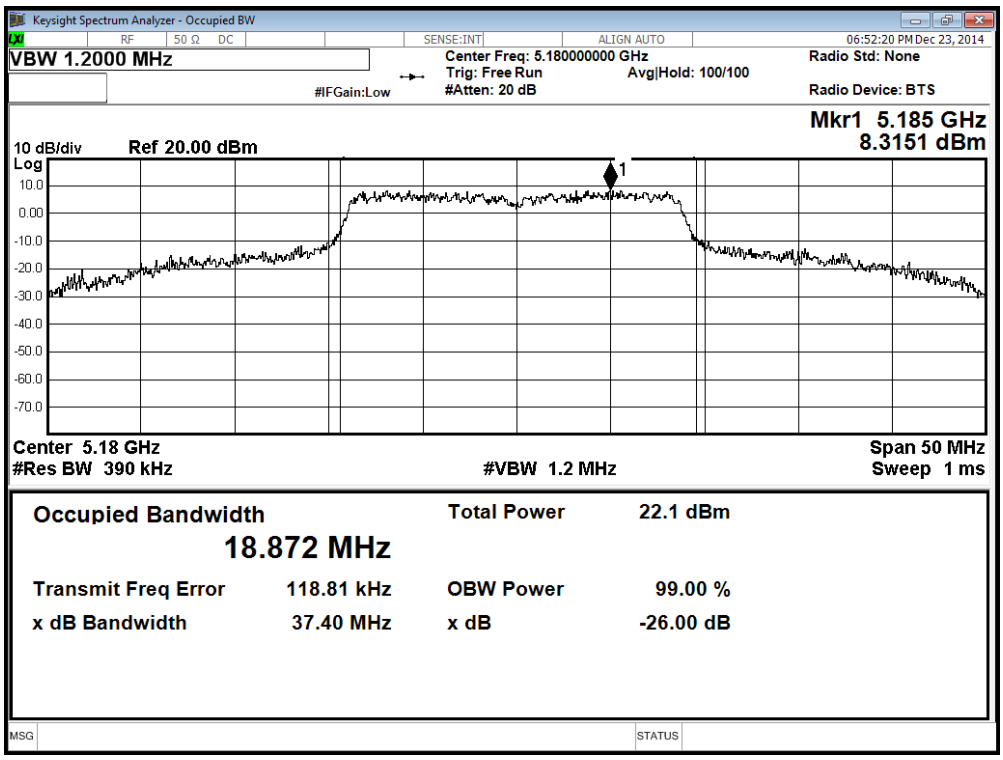
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 38



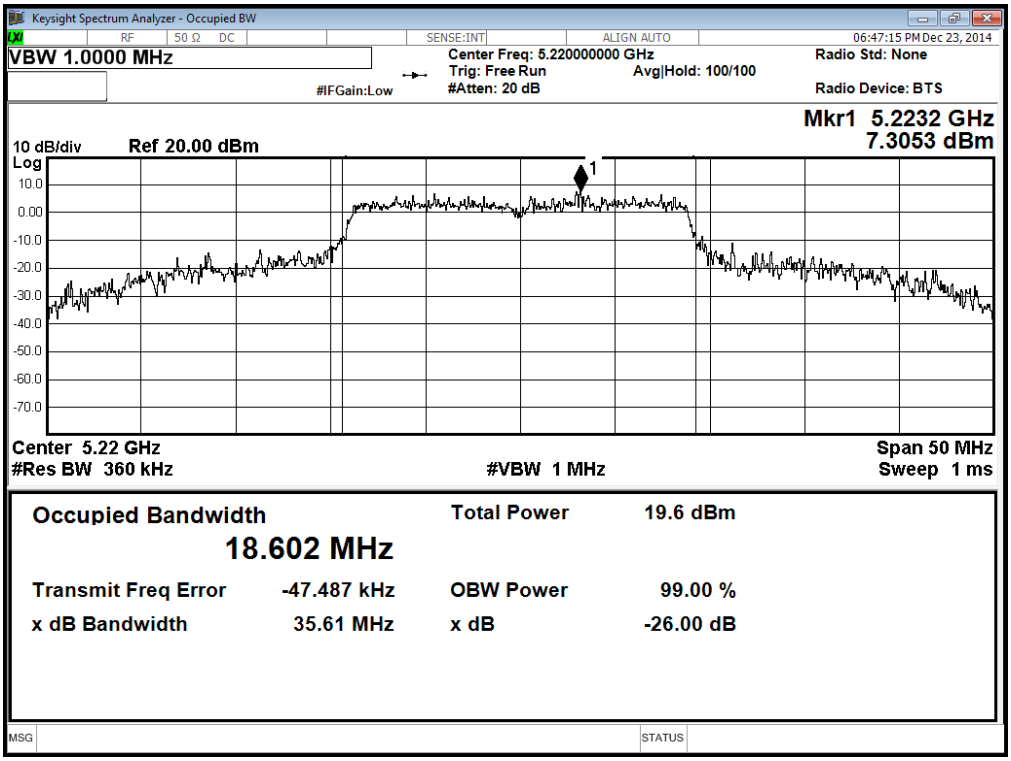
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 46



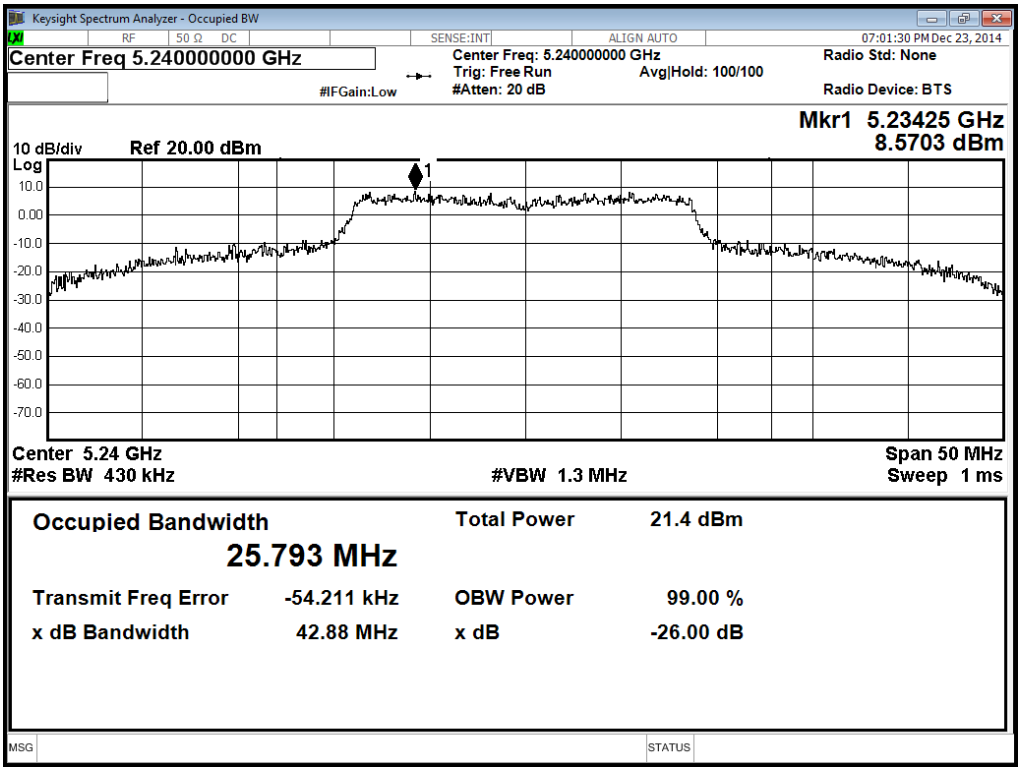
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 36



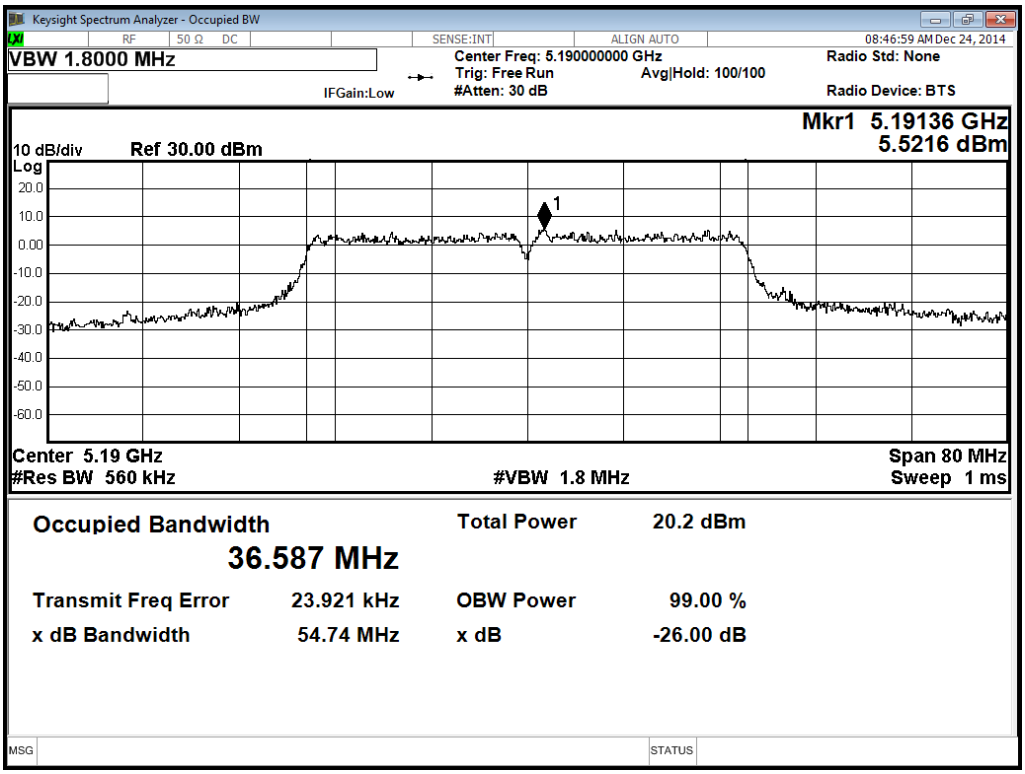
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 44



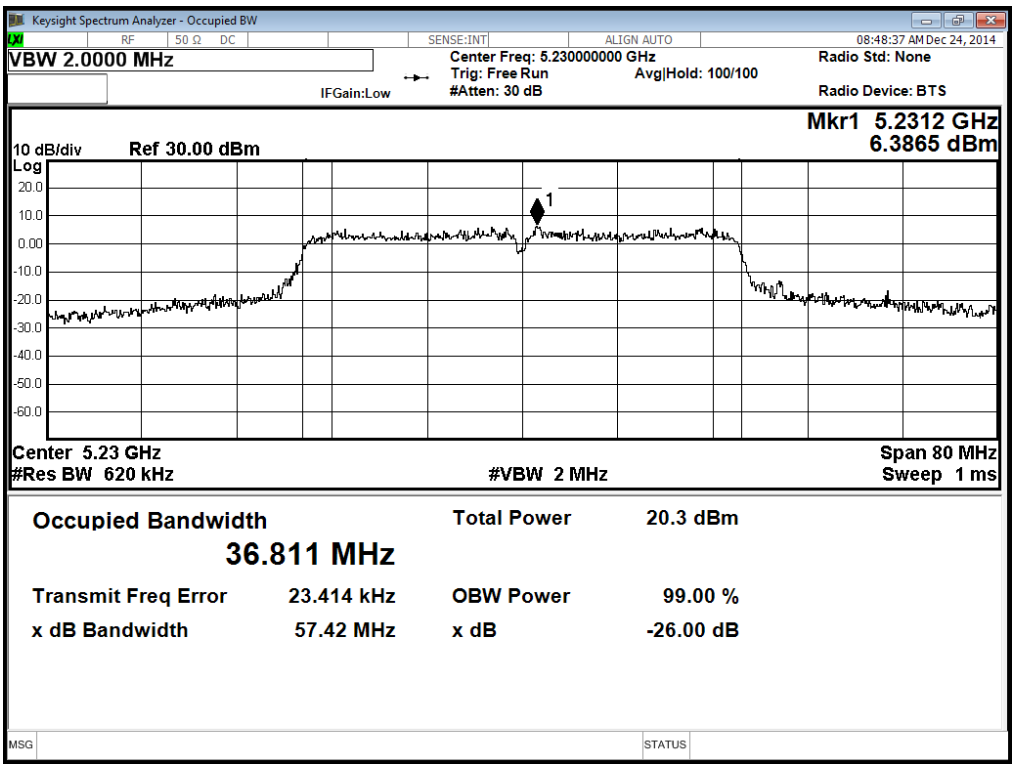
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 48



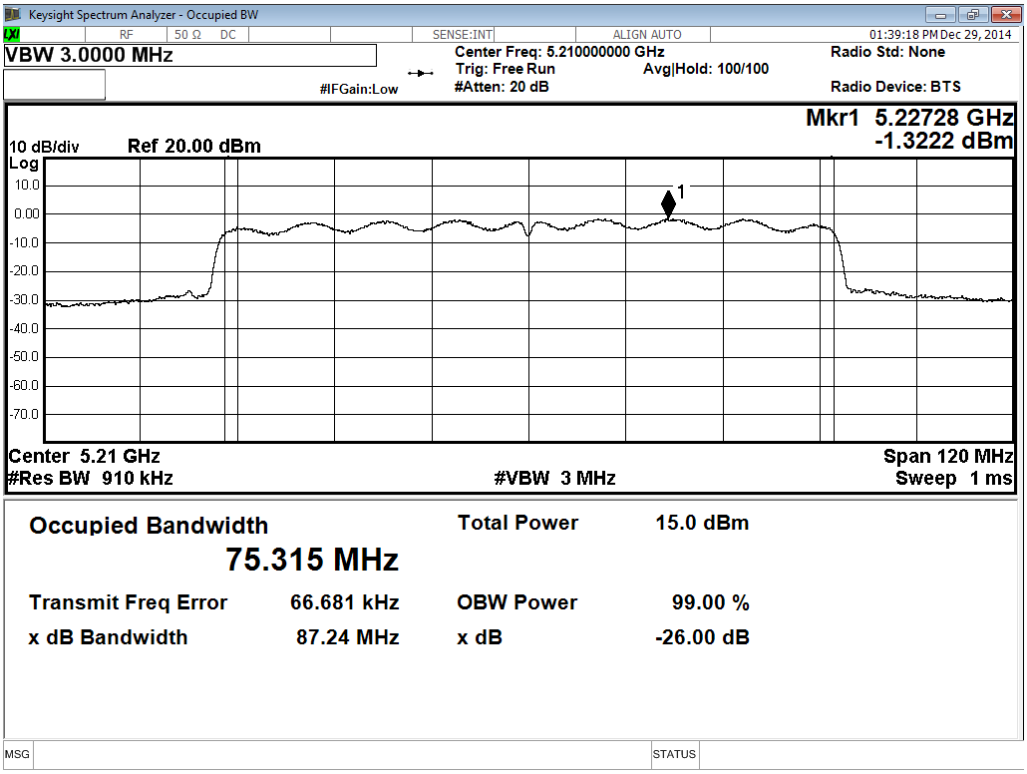
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 38



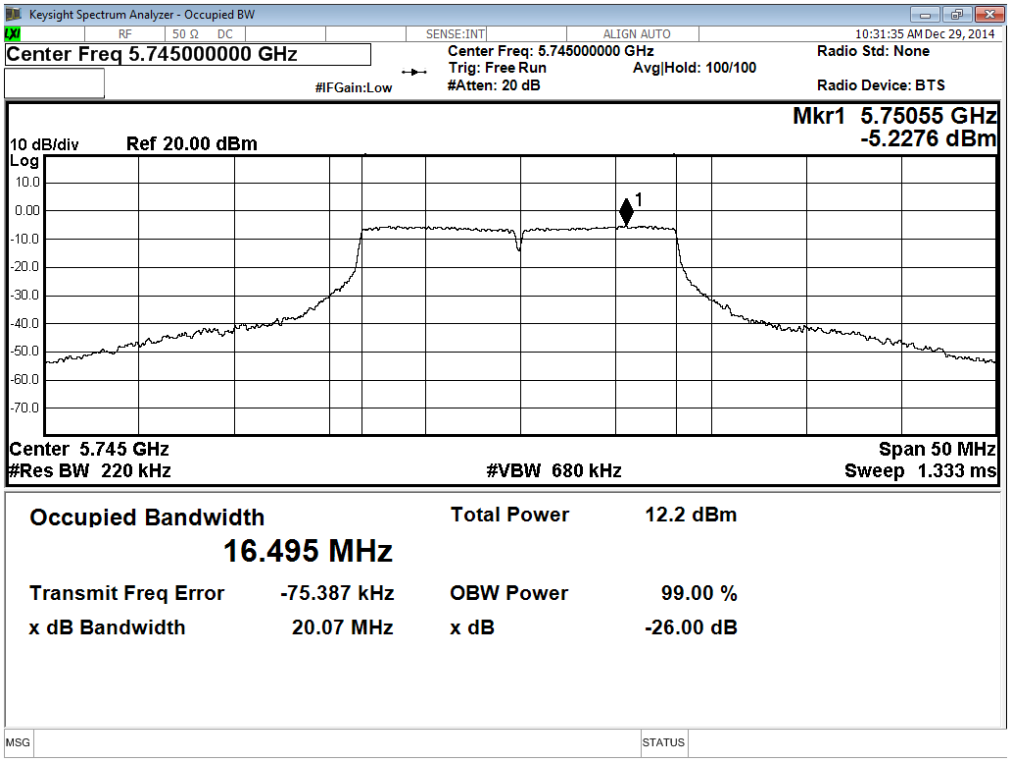
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 46



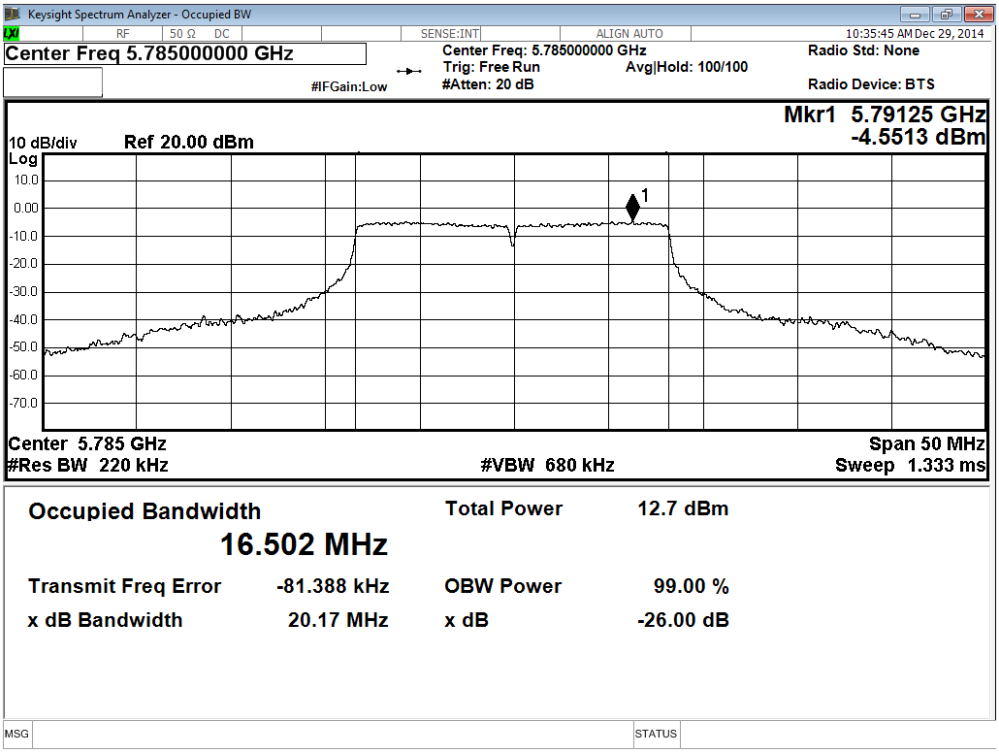
Modulation Standard: 802.11ac VHT80 (270Mbps), ANT B
Channel: 42



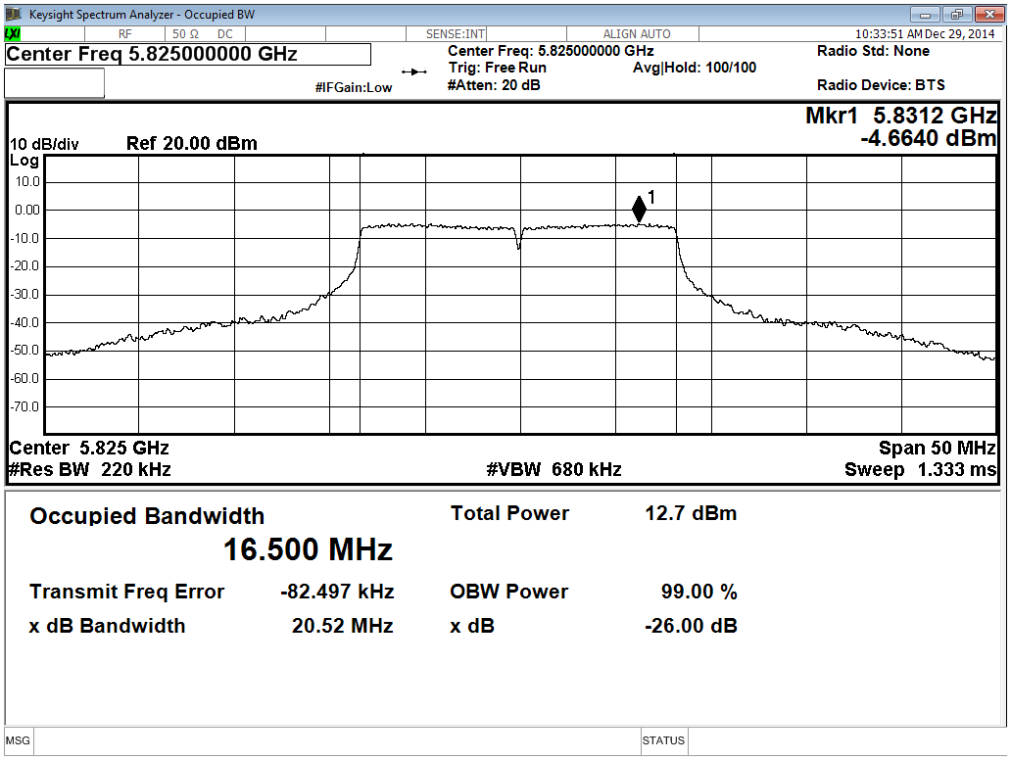
<5.8G Band>
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 149



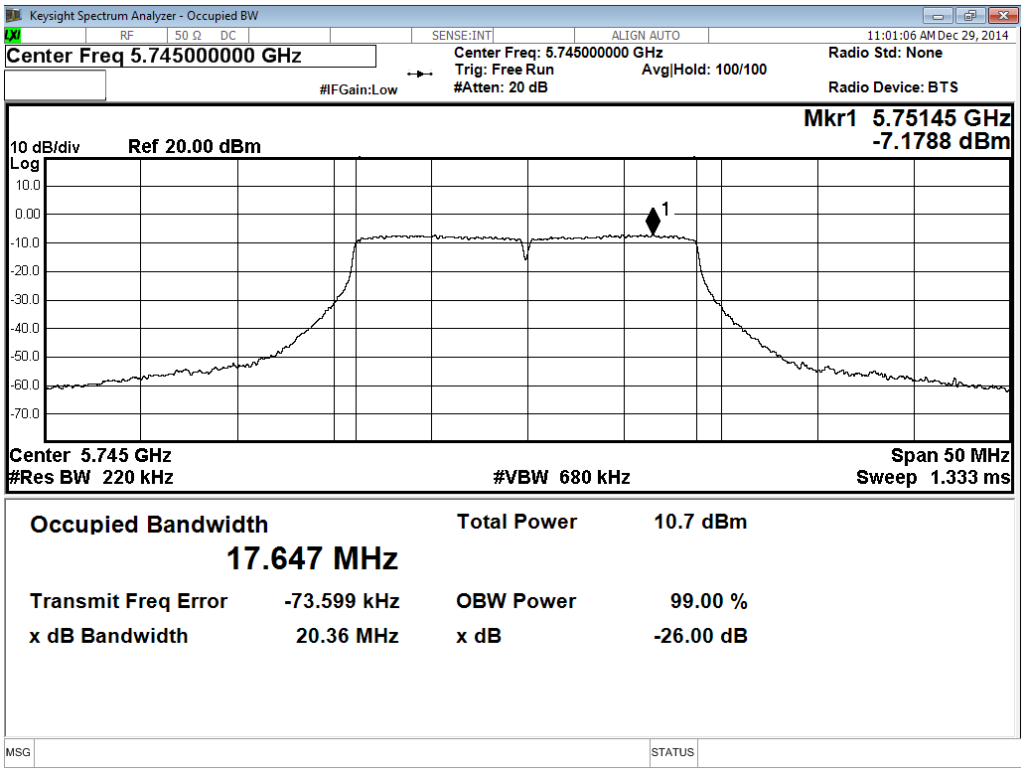
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 157



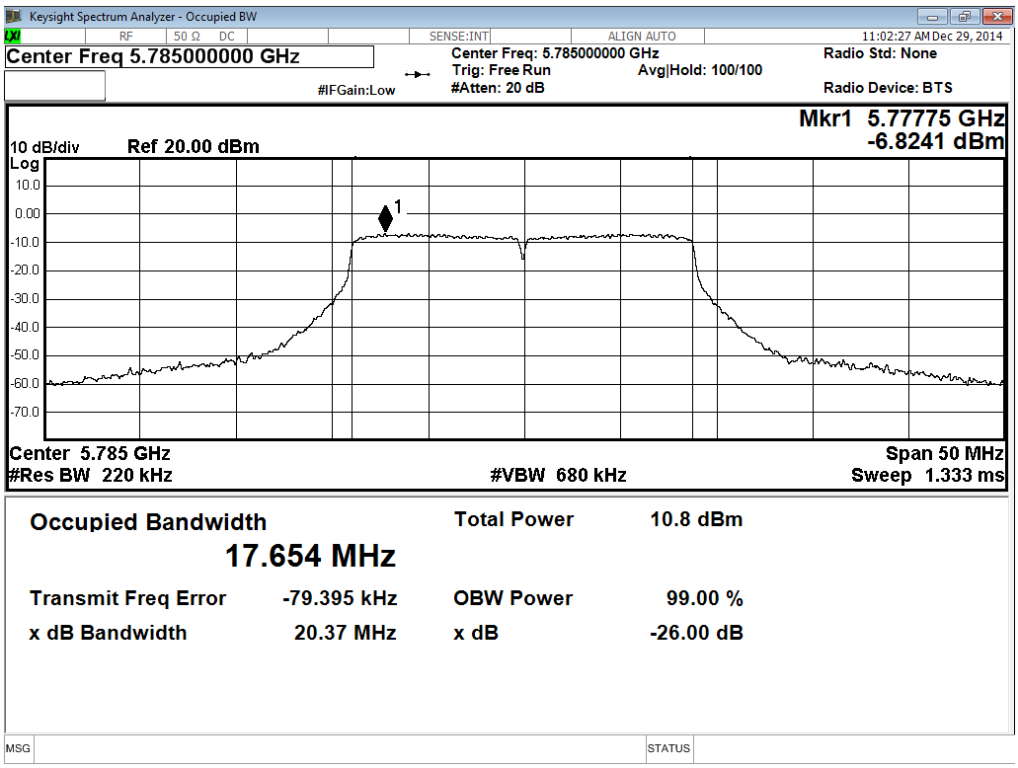
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 165



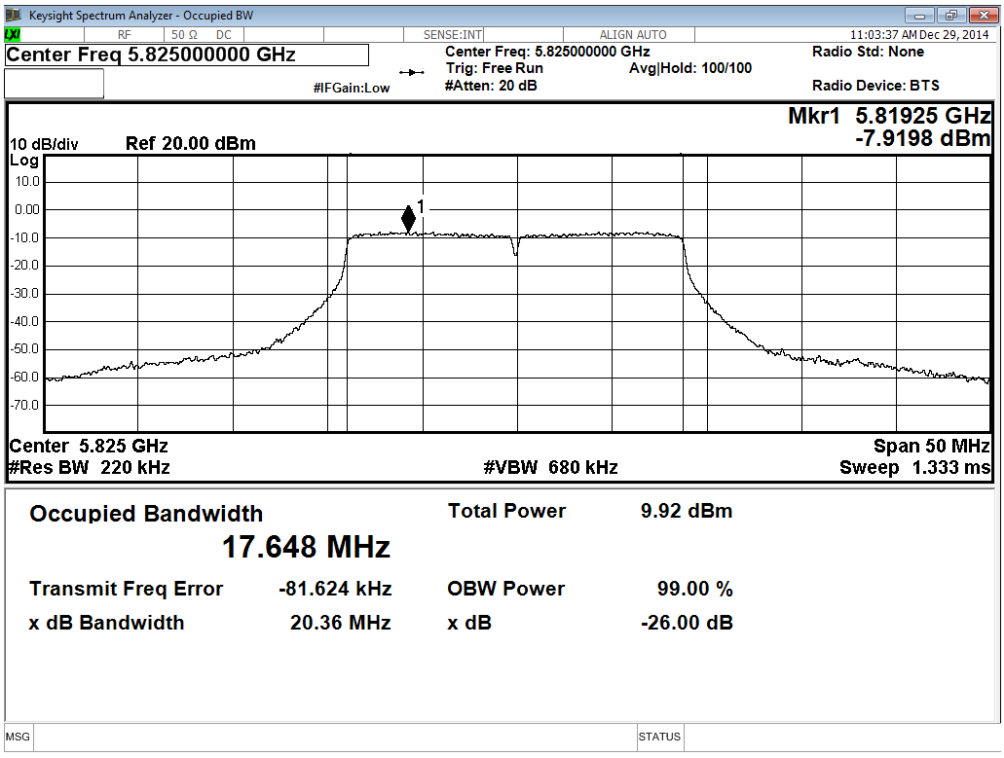
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 149



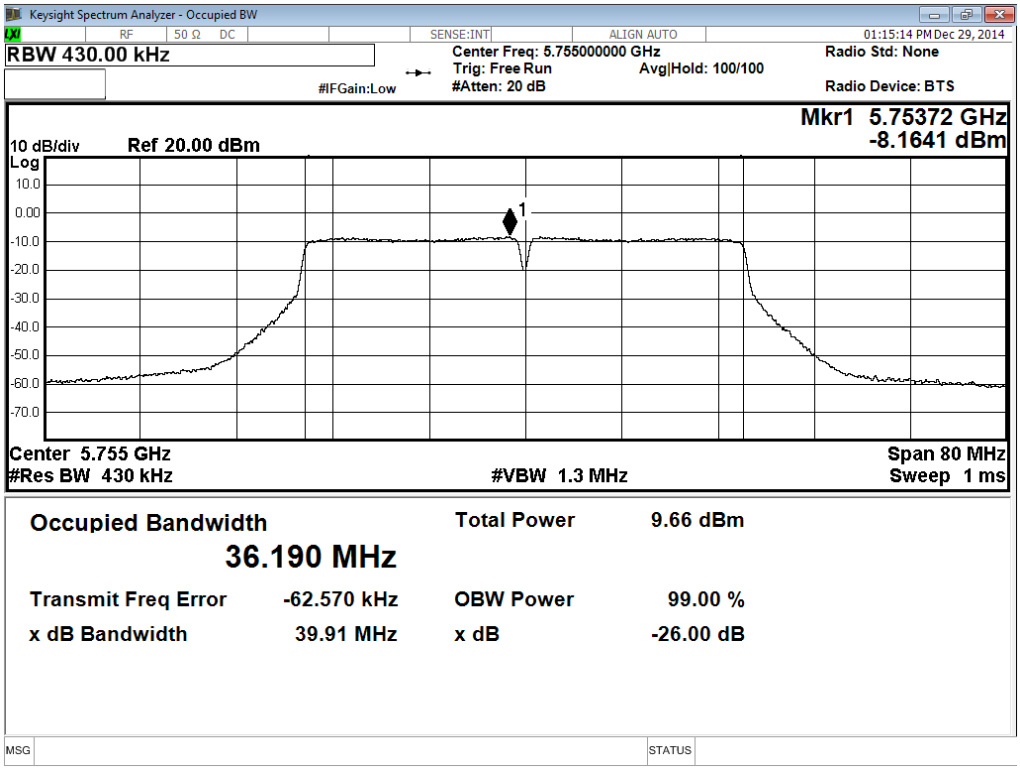
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 157



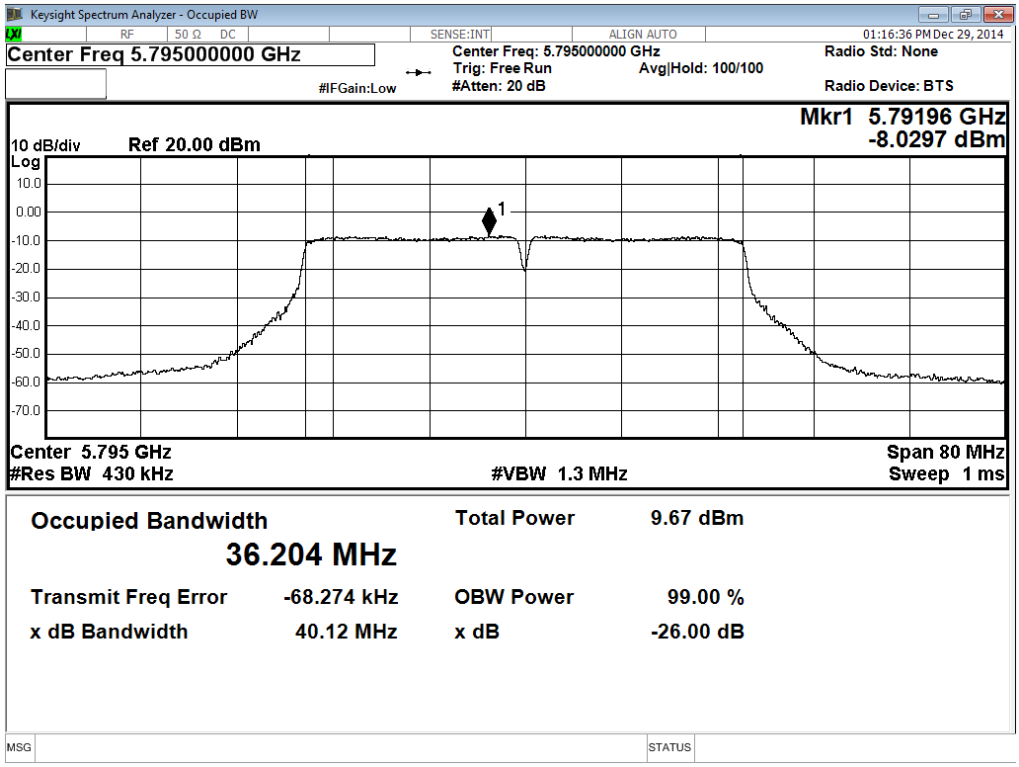
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 165



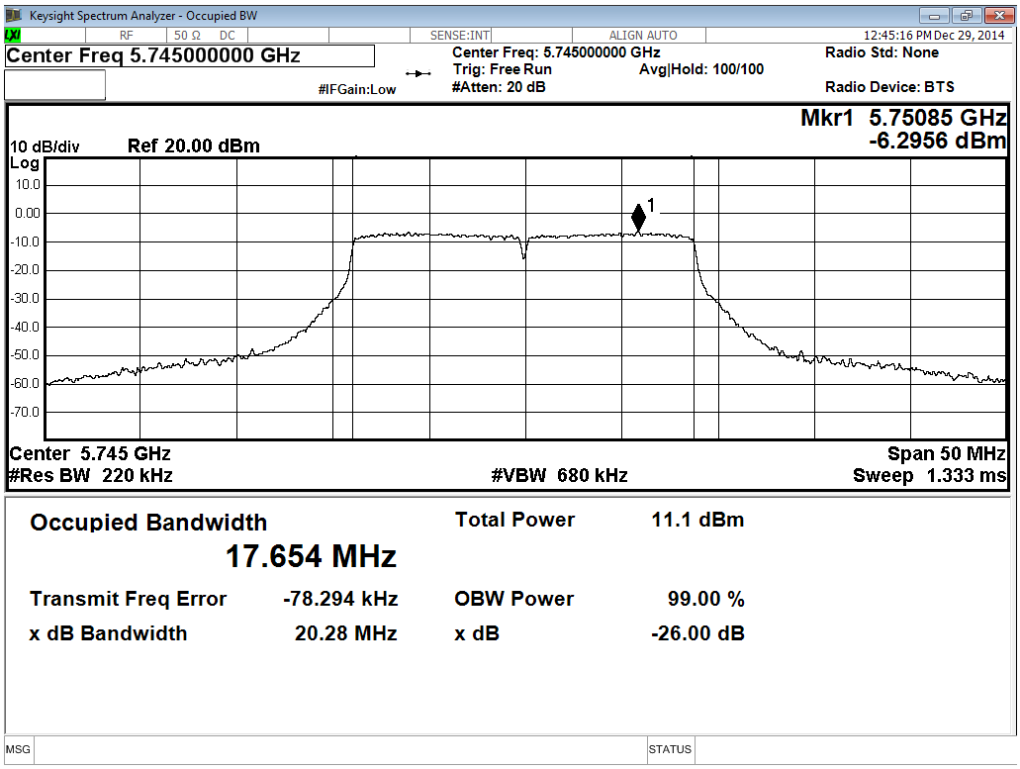
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 151



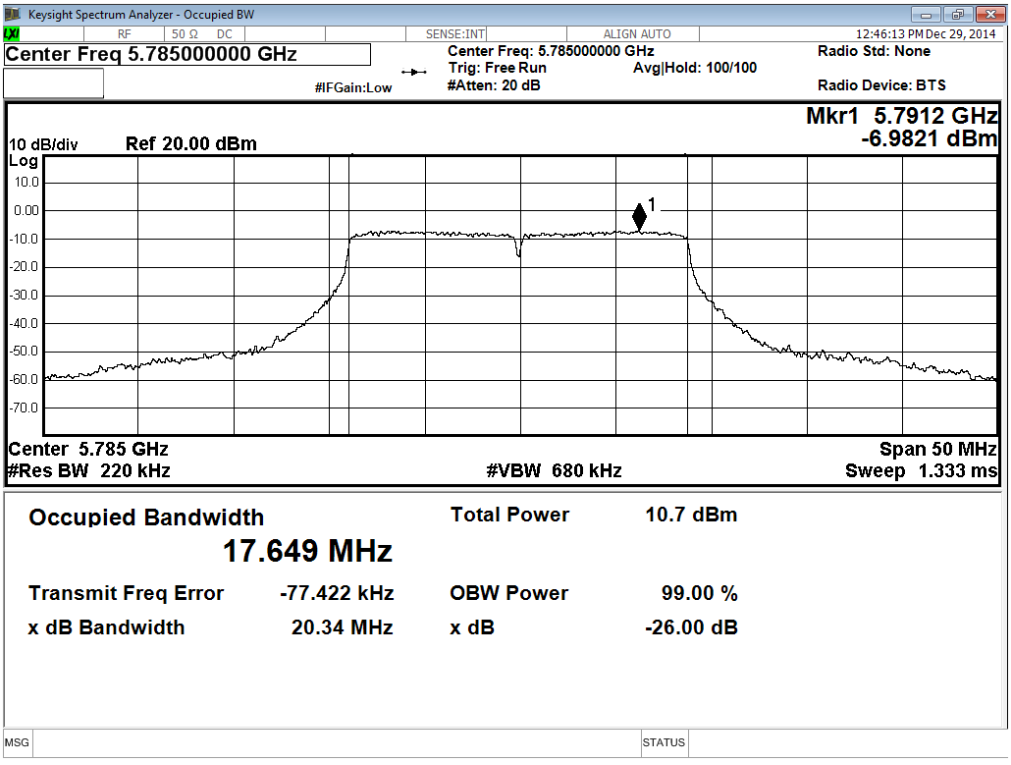
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 159



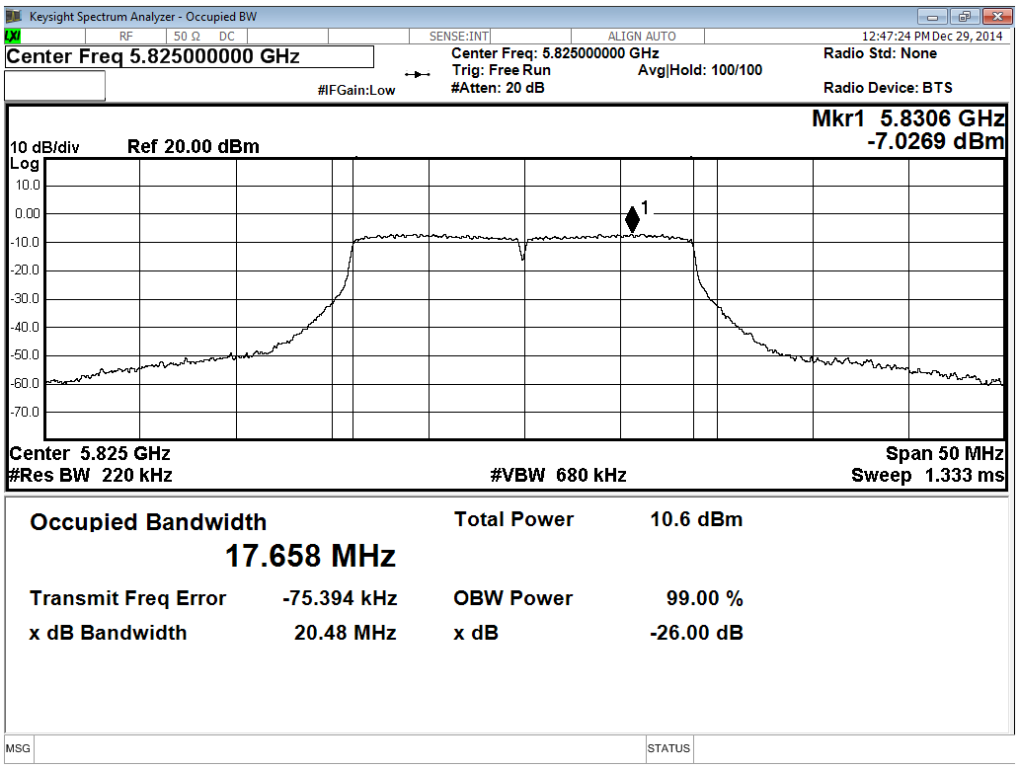
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 149



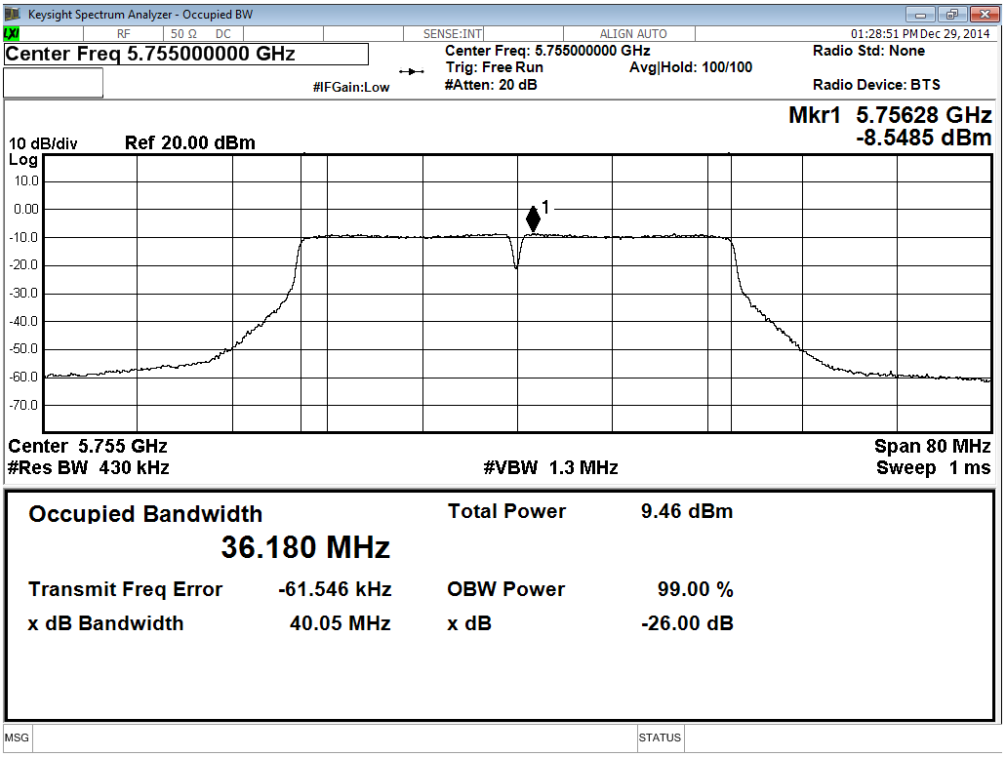
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 157



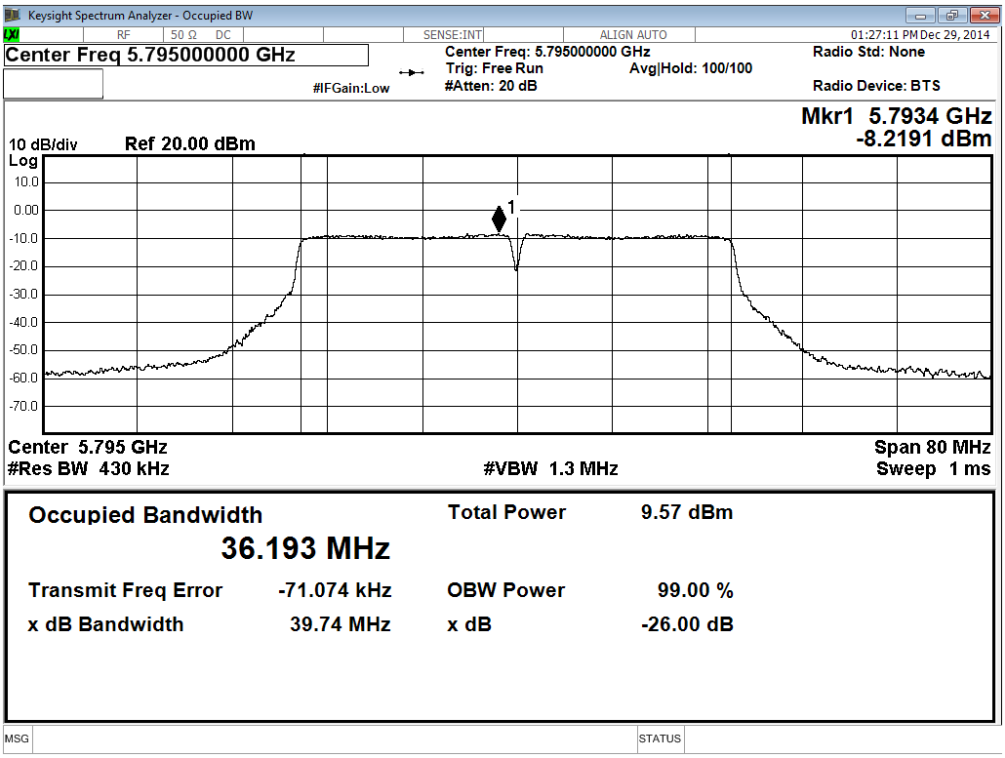
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 165



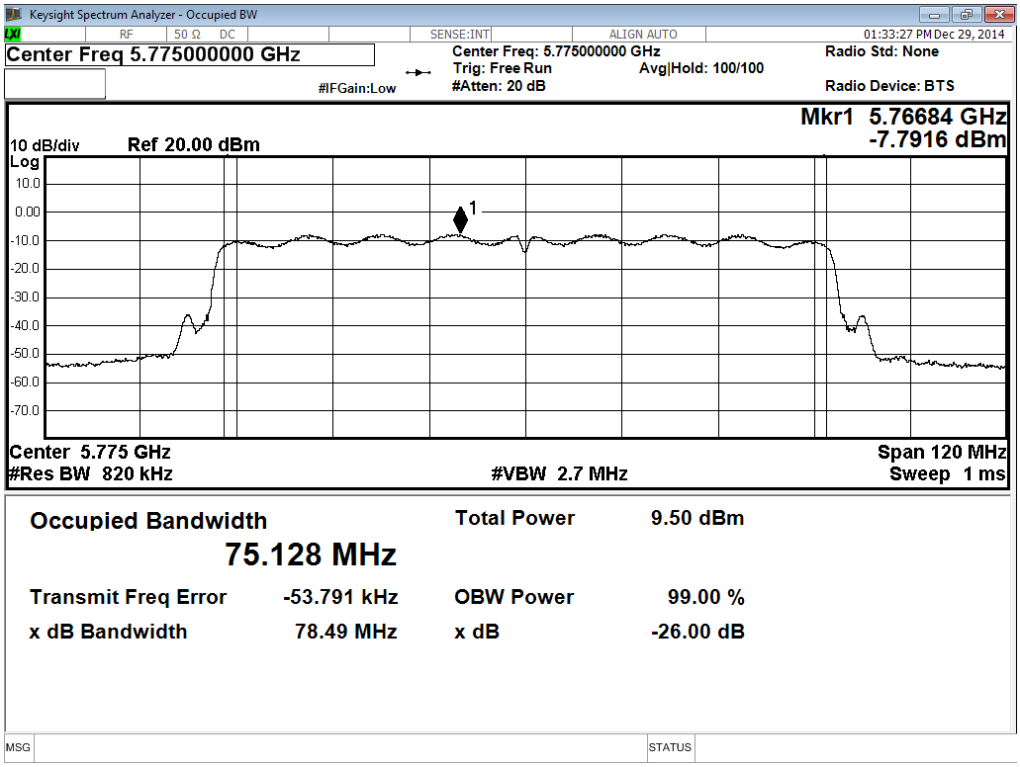
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 151



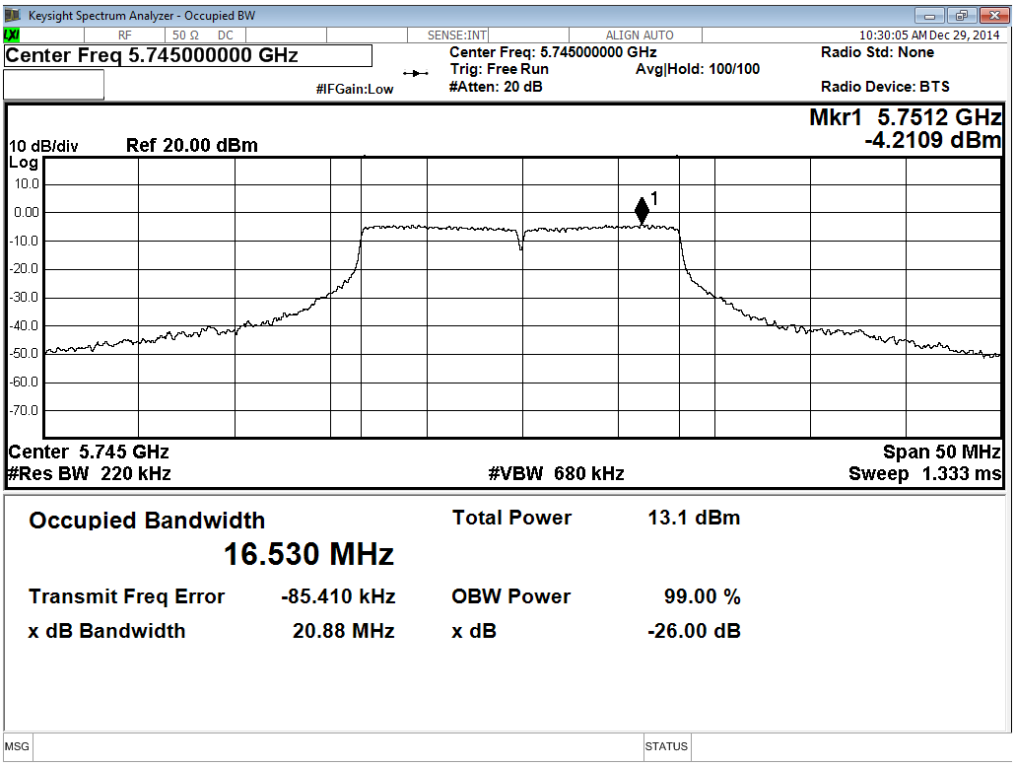
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 159



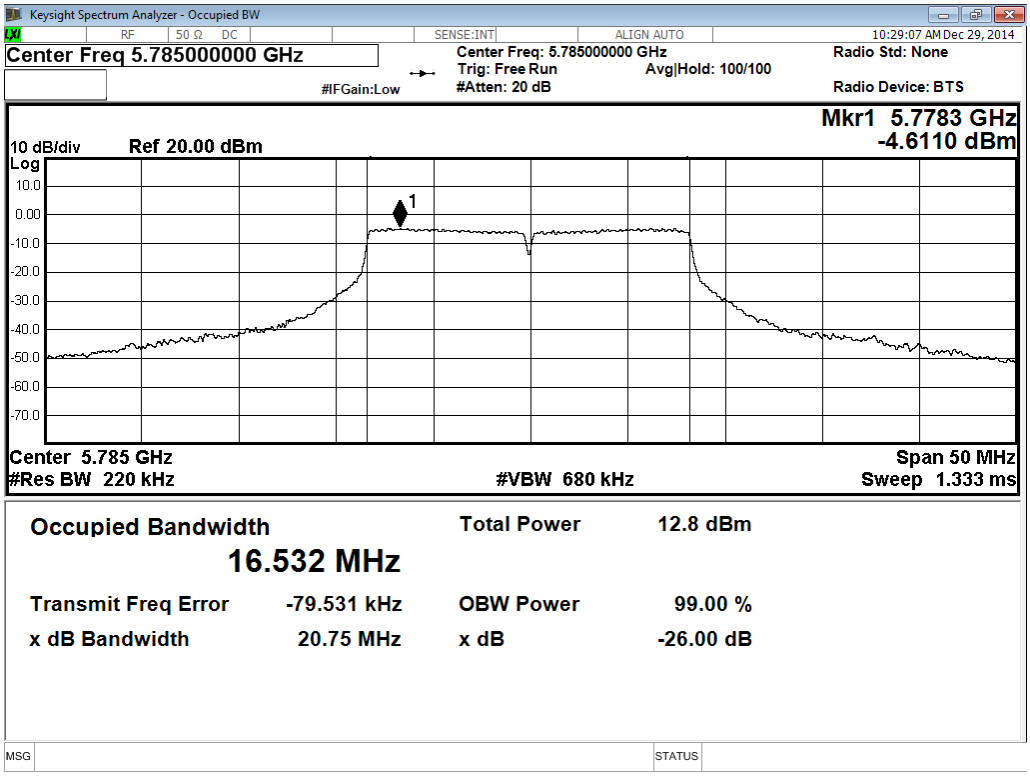
Modulation Standard: 802.11ac VHT80 (270Mbps), ANT A
Channel: 155



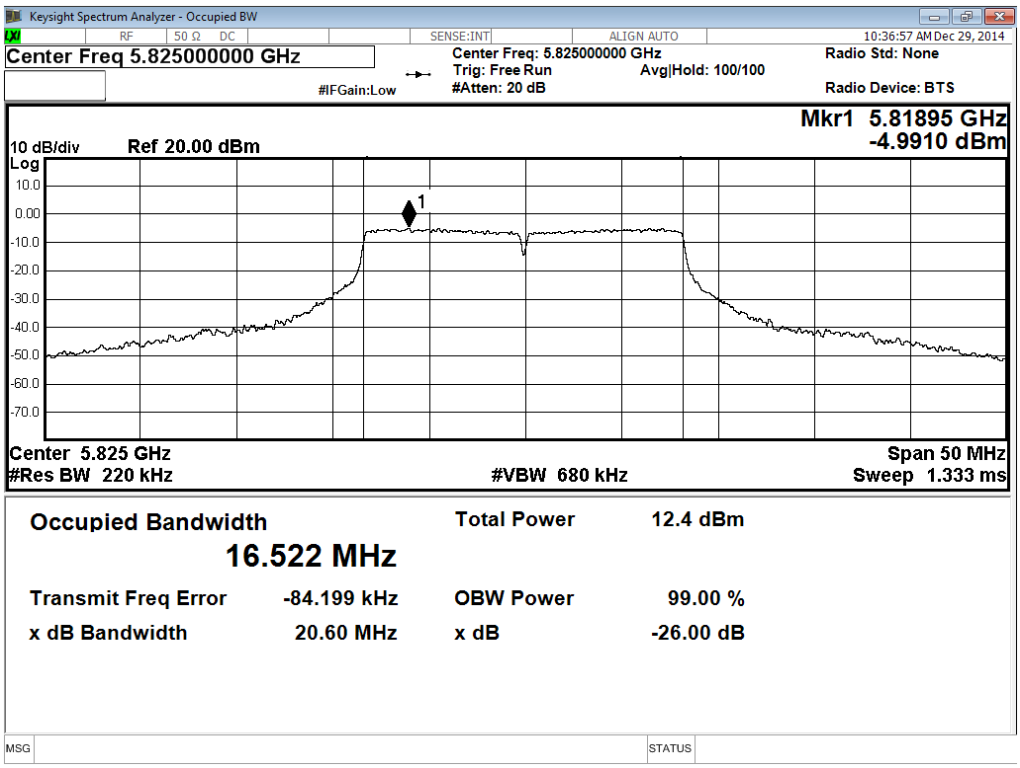
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 149



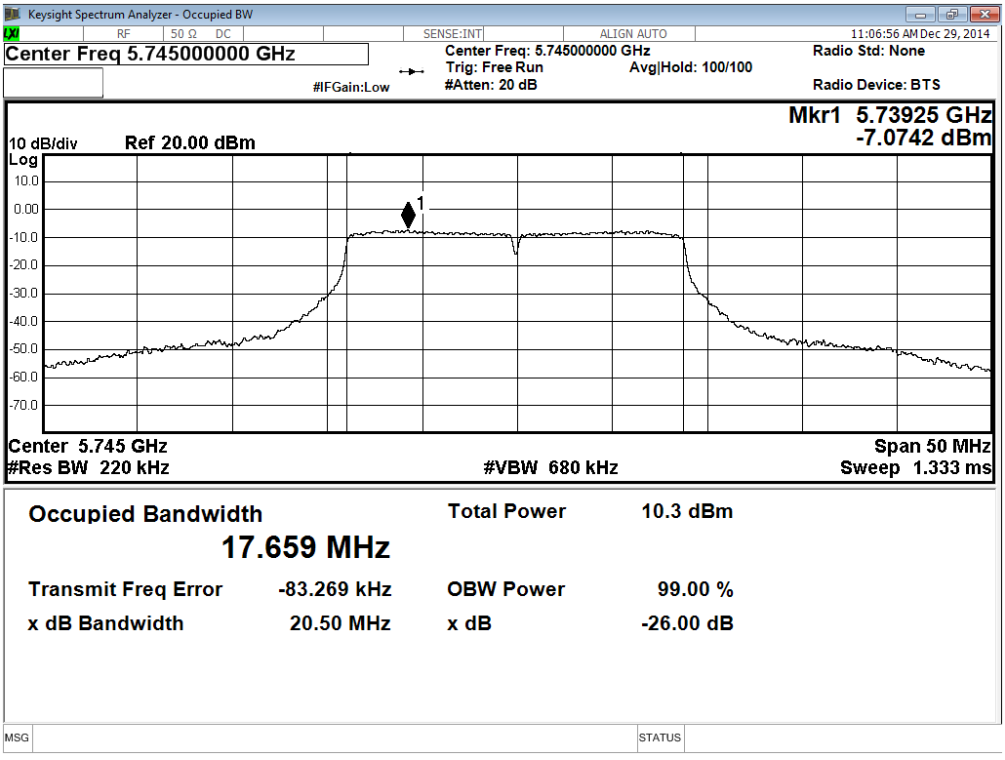
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 157



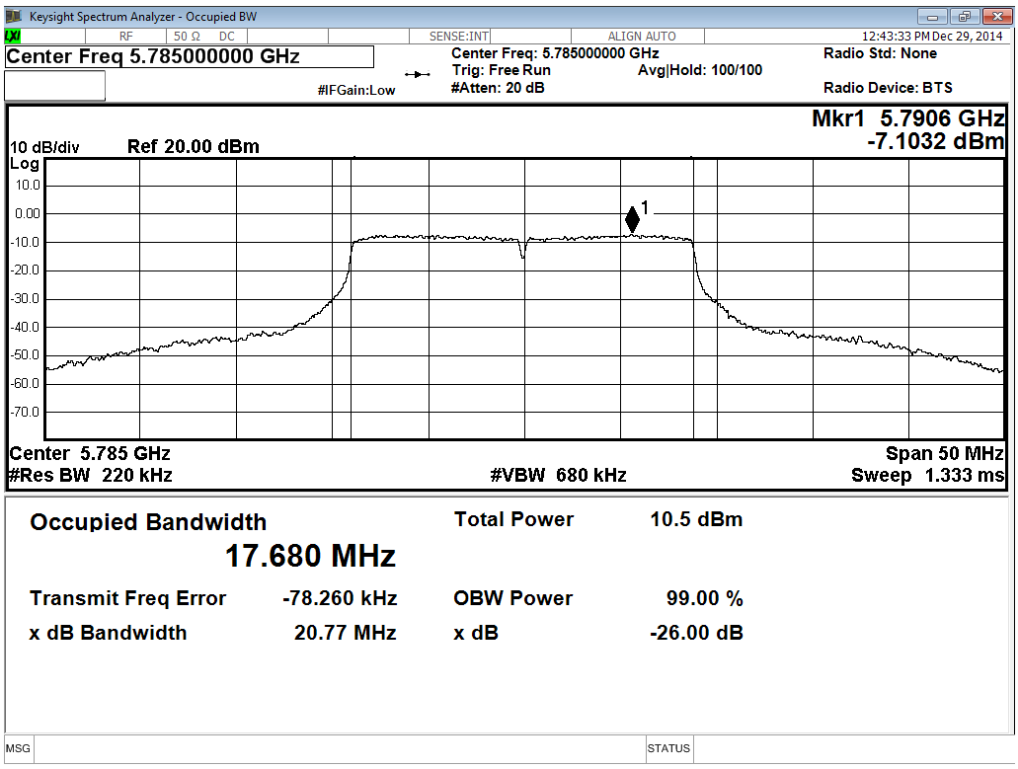
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 165



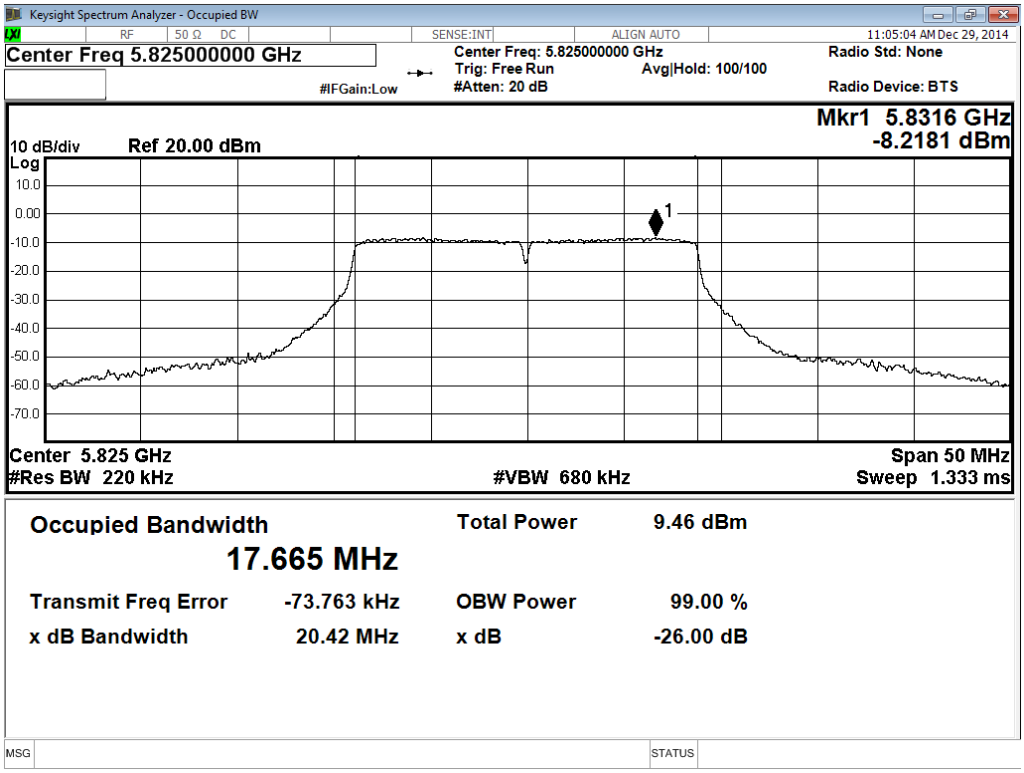
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 149



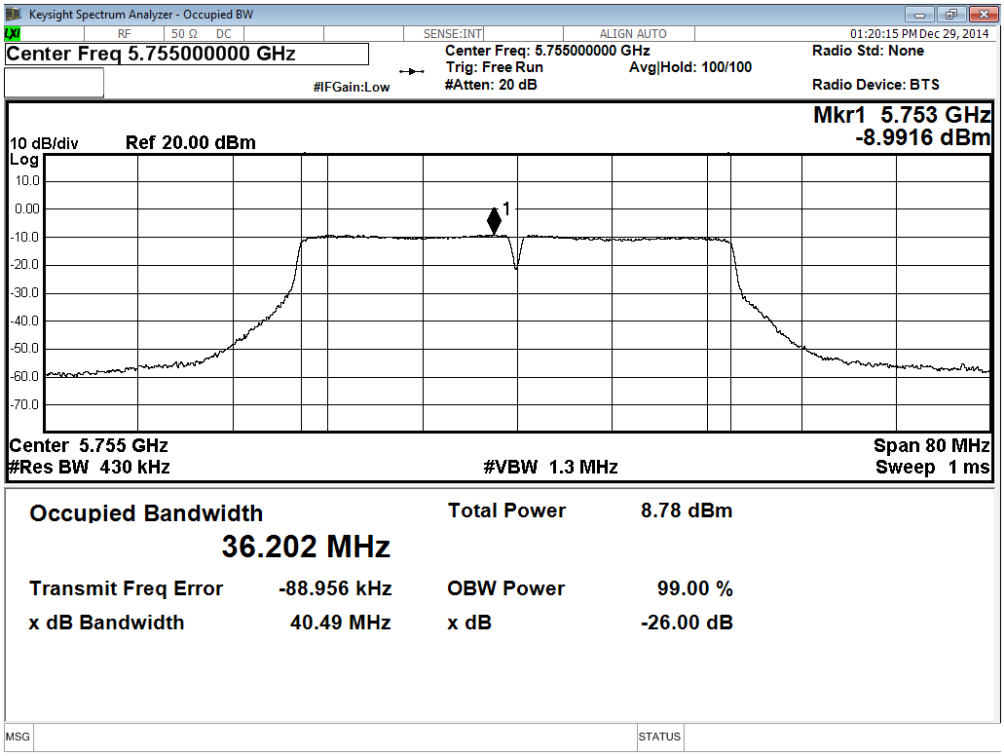
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 157



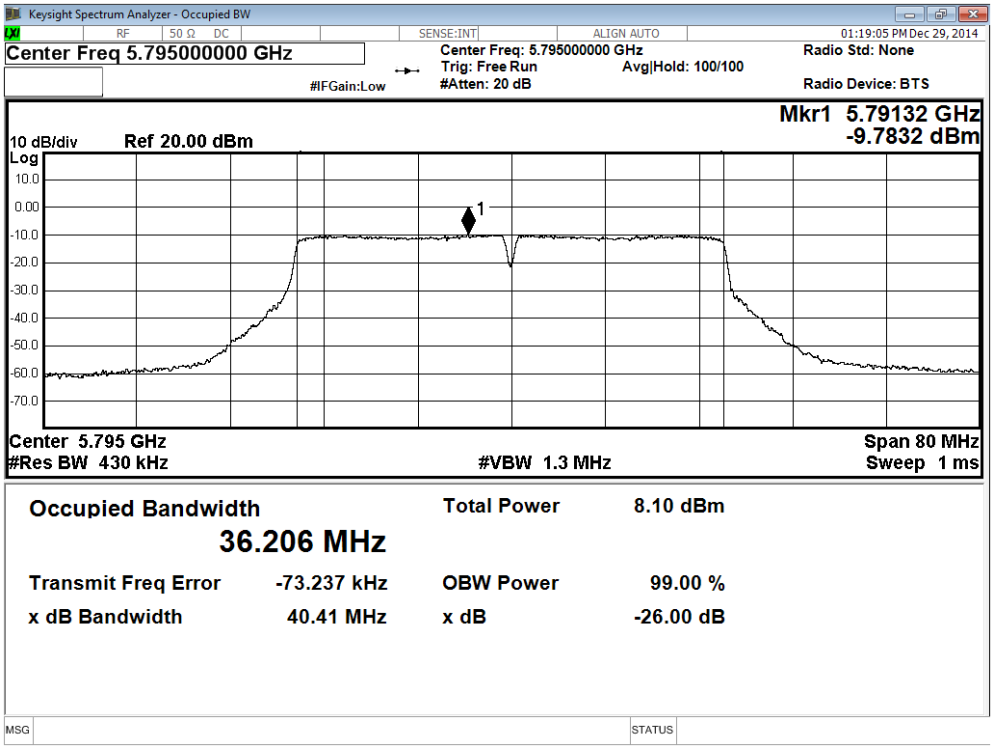
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 165



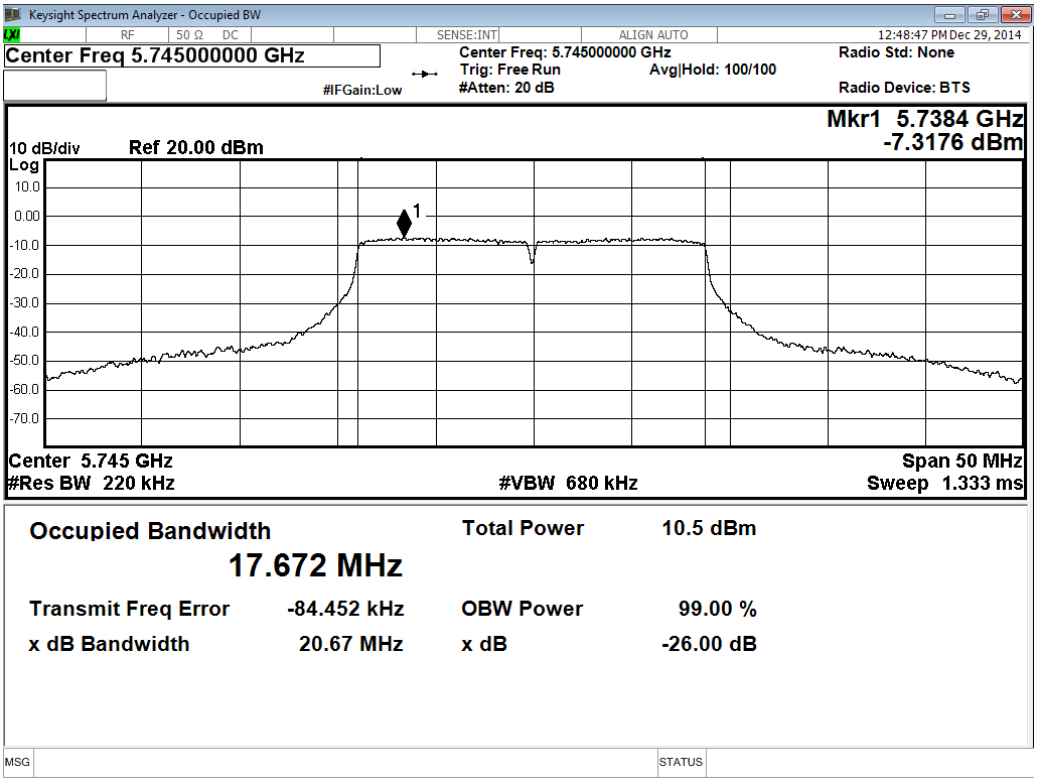
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 151



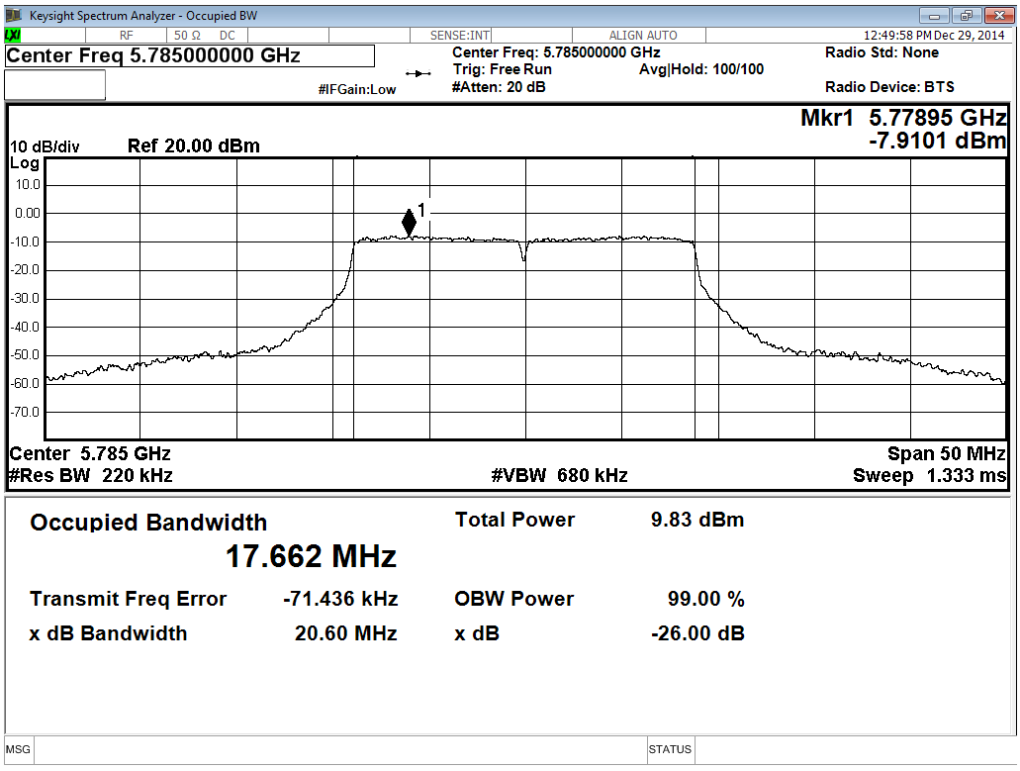
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 159



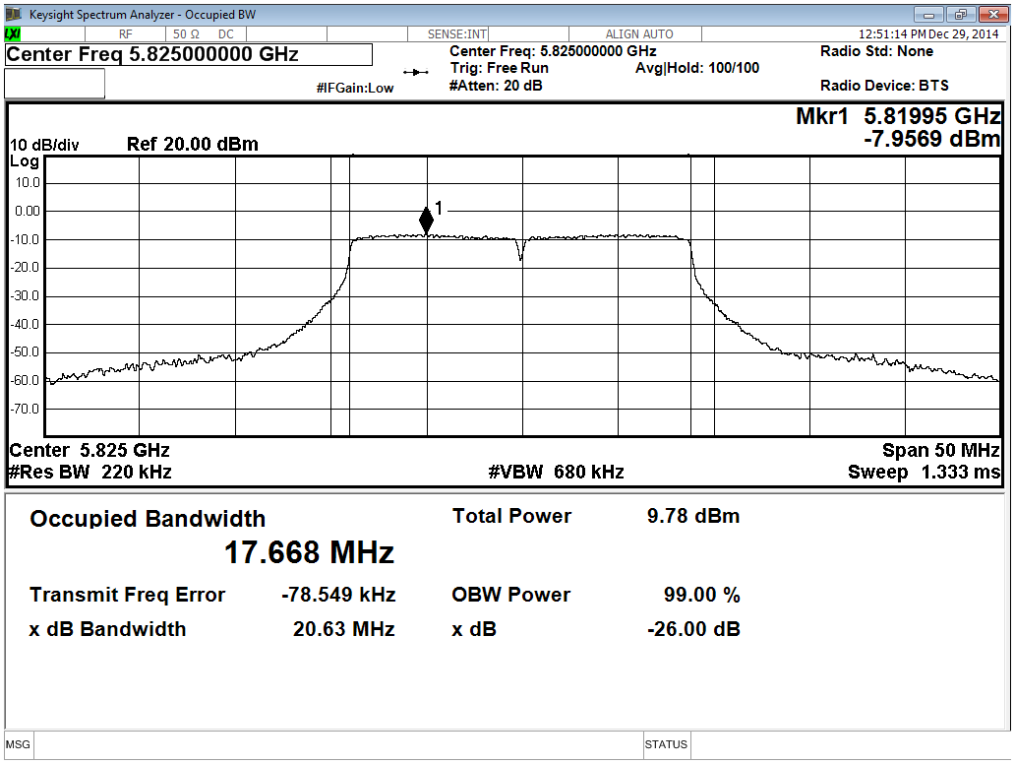
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 149



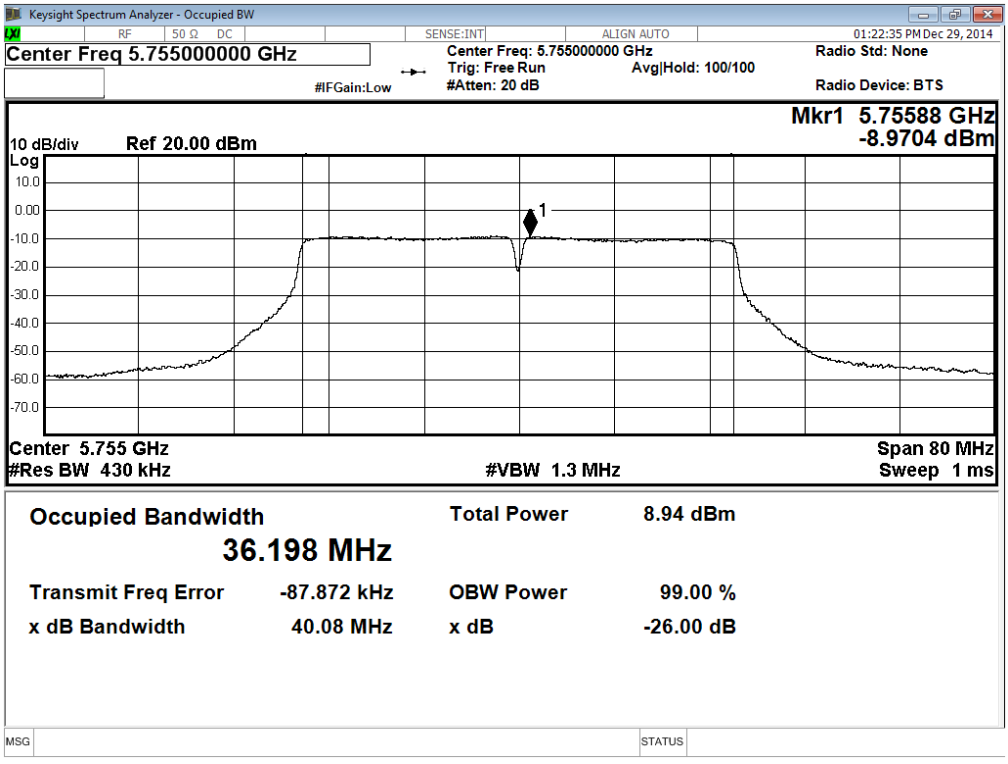
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 157



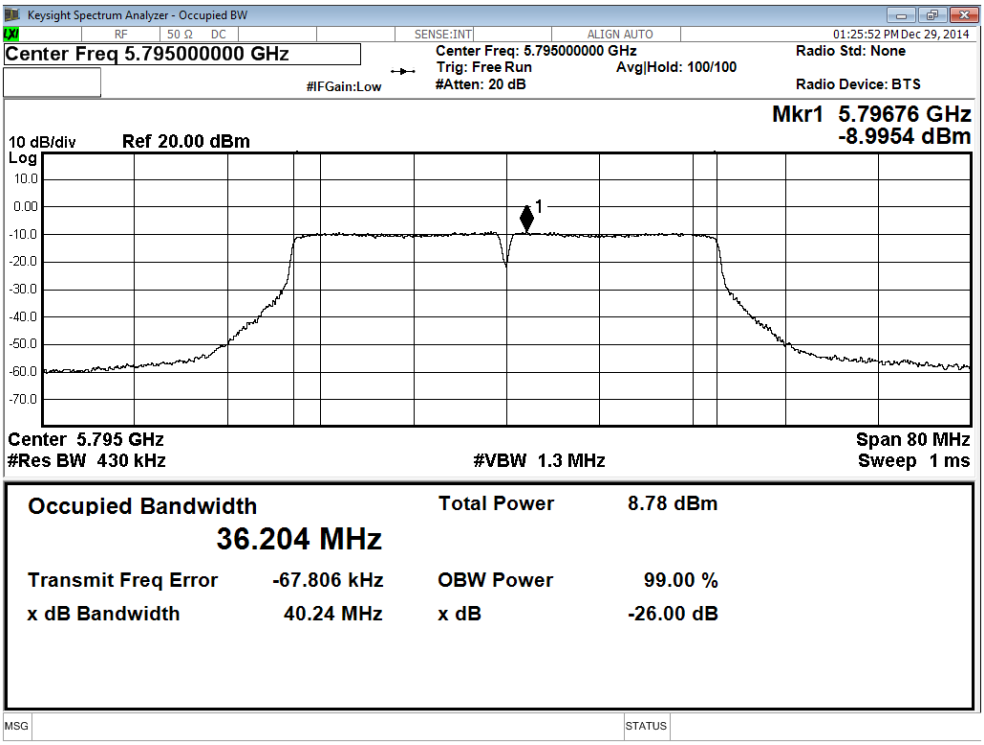
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 165



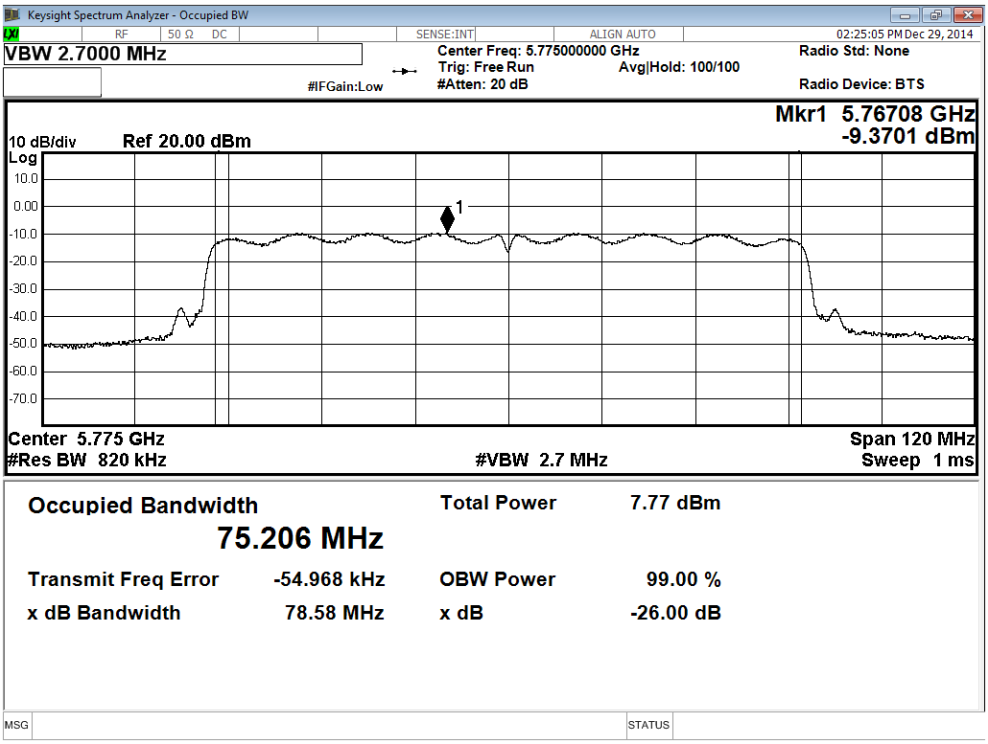
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 151



Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 159



Modulation Standard: 802.11ac VHT80 (270Mbps), ANT B
Channel: 155



10. Average Power

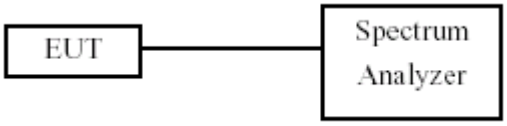
10.1. Test Limit

None; for reporting purposes only.

10.2. Test Procedure

The transmitter output is connected to a power meter.
The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

10.3. Test Setup Layout



10.4. Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100047	2014/03/27	2015/03/26

10.5. Test Result and Data

Test Date: Aug. 22, 2014 Temperature: 25℃

Atmospheric pressure: 1020 hPa Humidity: 65%

802.11a mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5180	11.59	13.55
Middle	5220	11.73	13.62
High	5240	11.76	13.59
Worst		11.76	13.62

802.11n HT20 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5180	11.40	13.72
Middle	5220	11.75	13.16
High	5240	11.92	14.02
Worst		11.92	14.02

802.11n HT40 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5190	11.72	14.13
High	5230	11.36	13.93
Worst		11.72	14.13

802.11ac VHT20 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5180	11.20	13.77
Middle	5220	11.78	14.02
High	5240	11.47	13.62
Worst		11.78	14.02

802.11ac VHT40 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5190	11.43	13.65
High	5230	11.60	13.95
Worst		11.60	13.95

802.11ac VHT80 mode in the 5.2G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Middle	5210	15.04	15.68
Worst		15.04	15.68

802.11a mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5745	13.38	13.47
Middle	5785	13.58	13.44
High	5825	13.66	13.51
Worst		13.66	13.51

802.11n HT20 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5745	13.62	13.35
Middle	5785	13.24	13.32
High	5825	13.35	13.27
Worst		13.62	13.35

802.11n HT40 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5755	13.56	13.56
High	5795	13.12	13.49
Worst		13.56	13.56

802.11ac VHT20 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5745	13.29	13.44
Middle	5785	13.24	13.40
High	5825	13.20	13.24
Worst		13.29	13.44

802.11ac VHT40 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Low	5755	13.33	13.89
High	5795	13.21	13.87
Worst		13.33	13.89

802.11ac VHT80 mode in the 5.8G Band

Channel	Frequency (MHz)	Ant. A Avg Power (dBm)	Ant. B Avg Power (dBm)
Middle	5775	13.45	13.21
Worst		13.45	13.21

11. Output Power and PPSD

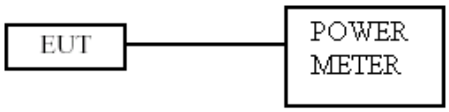
11.1. Test Limit

FCC §15.407 (a) (1)
For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

11.2. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was Measured with an average power meter employing a video bandwidth greater than 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.
802.11an (BW≦40MHz) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter)
Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)
802.11ac (BW=80MHz) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).
When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D01 section F) procedure is used for measurements.

11.3. Test Setup Layout



11.4. Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100047	2014/03/27	2015/03/26

11.5. Test Result and Data

Test Date: Aug. 22, 2014 Temperature: 25℃

Atmospheric pressure: 1056 hPa Humidity: 52%

5.2G Band

Modulation Standard: IEEE 802.11a (6Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	22.97	16.562	29.09	17.972	5.23
Middle	5220	26.46	16.752	34.60	18.135	5.23
High	5240	25.44	16.879	34.76	17.700	5.23

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5180	24	---	11	10
Middle	5220	24	---	11	10
High	5240	24	---	11	10
Duty Cycle CF (dB)		0.86	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5180	14.86	14.79	15.72	15.65	23.22	-7.57
Middle	5220	14.95	15.61	15.81	16.47	23.22	-6.75
High	5240	15.27	16.00	16.13	16.86	23.11	-6.25

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5180	1.847	1.784	2.707	2.644	10	-7.36
Middle	5220	1.944	2.603	2.804	3.463	10	-6.54
High	5240	2.261	2.988	3.121	3.848	10	-6.15

Modulation Standard: IEEE 802.11an, HT20 (6Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	21.12	17.733	30.88	17.107	5.23
Middle	5220	20.89	17.678	35.61	18.602	5.23
High	5240	23.58	17.745	48.41	32.331	5.23

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5180	24	---	11	10
Middle	5220	24	---	11	10
High	5240	24	---	11	10
Duty Cycle CF (dB)		1.10	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5180	12.07	15.11	13.17	16.21	23.22	-7.01
Middle	5220	13.34	15.88	14.44	16.98	23.22	-6.24
High	5240	16.47	17.73	17.57	18.83	23.11	-4.28

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5180	-0.9359	2.099	0.16	3.20	10	-6.80
Middle	5220	0.325	2.873	1.43	3.97	10	-6.03
High	5240	3.455	4.717	4.56	5.82	10	-4.18

Modulation Standard: IEEE 802.11an, HT40 (13.5Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5190	41.20	36.290	71.24	37.378	5.23
Middle	5230	42.30	36.401	79.62	38.609	5.23

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5190	24	---	11	10
Middle	5230	24	---	11	10
Duty Cycle CF (dB)		1.43	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5190	13.16	15.55	14.59	16.98	23.22	-6.24
Middle	5230	13.2	15.66	14.63	17.09	23.22	-6.13

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5180	-2.863	-0.4692	-1.433	0.9608	10	-9.04
Middle	5220	-2.816	2.603	-1.386	4.033	10	-5.97

Modulation Standard: IEEE 802.11ac, VHT20 (54Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	20.96	17.672	37.40	18.872	5.23
Middle	5220	20.72	17.699	42.27	24.650	5.23
High	5240	20.94	17.704	42.88	25.793	5.23

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5180	24	---	11	10
Middle	5220	24	---	11	10
High	5240	24	---	11	10
Duty Cycle CF (dB)		0.55	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5180	12.74	15.61	13.29	16.16	23.22	-7.06
Middle	5220	12.80	16.03	13.35	16.58	23.22	-6.64
High	5240	13.06	16.27	13.61	16.82	23.11	-6.29

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5180	-0.2694	2.600	0.2806	3.150	10	-6.85
Middle	5220	-0.2096	3.015	0.3404	3.565	10	-6.44
High	5240	0.05368	3.260	0.60368	3.810	10	-6.19

Modulation Standard: IEEE 802.11ac, VHT40 (130Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5190	41.69	36.331	54.74	36.587	5.23
Middle	5230	42.95	36.427	57.42	36.811	5.23

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5190	24	---	11	10
Middle	5230	24	---	11	10
Duty Cycle CF (dB)		1.74	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5190	13.98	15.20	15.72	16.94	23.22	-6.28
Middle	5230	14.39	15.36	15.25	16.22	23.22	-7

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5190	-2.036	-0.8181	-0.296	0.9219	10	-9.08
Middle	5230	-1.635	-0.6654	-0.3608	0.1946	10	-9.81

Modulation Standard: IEEE 802.11ac, VHT80 (270Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5210	81.56	75.349	119.1	75.979	5.23

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5210	24	---	11	10
Duty Cycle CF (dB)		0.77	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5210	12.80	14.77	13.57	15.54	23.22	-7.68

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5210	-6.232	-4.256	-5.462	-3.486	10	-13.49

Test Date: Aug. 22, 2014 Temperature: 25℃

Atmospheric pressure: 1056 hPa Humidity: 52%

5.8G Band

Modulation Standard: IEEE 802.11a (6Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	16.30	16.562	16.40	17.972	4.68
Middle	5785	16.40	16.752	16.40	18.135	4.68
High	5825	16.20	16.879	16.40	17.700	4.68

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	24	---	11	10
Middle	5785	24	---	11	10
High	5825	24	---	11	10
Duty Cycle CF (dB)		0.86	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5745	13.04	13.48	13.9	14.34	23.22	-8.88
Middle	5785	13.08	12.89	13.94	13.75	23.22	-9.47
High	5825	11.35	11.88	12.21	12.74	23.11	-10.37

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5745	0.0287	0.4737	0.8887	1.3337	10	-8.67
Middle	5785	0.0727	-0.122	0.9327	0.738	10	-9.26
High	5825	-1.656	-1.129	-0.796	-0.269	10	-10.27

Modulation Standard: IEEE 802.11an, HT20 (6Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	17.50	17.733	17.50	17.107	4.68
Middle	5785	17.20	17.678	17.50	18.602	4.68
High	5825	17.60	17.745	17.50	32.331	4.68

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	24	---	11	10
Middle	5785	24	---	11	10
High	5825	24	---	11	10
Duty Cycle CF (dB)		1.10	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5745	9.88	10.75	10.98	11.85	23.22	-11.37
Middle	5785	11.09	9.78	12.19	10.88	23.22	-12.34
High	5825	10.39	9.35	11.49	10.45	23.11	-12.66

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5745	-3.135	-2.257	-2.04	-1.16	10	-11.16
Middle	5785	-1.923	-3.232	-0.82	-2.13	10	-12.13
High	5825	-2.617	-3.644	-1.52	-2.54	10	-12.54

Modulation Standard: IEEE 802.11an, HT40 (13.5Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5755	36.20	36.290	35.96	37.378	4.68
Middle	5795	36.00	36.401	36.00	38.609	4.68

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5755	24	---	11	10
Middle	5795	24	---	11	10
Duty Cycle CF (dB)		1.43	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5755	10.17	8.88	11.6	10.31	23.22	-12.91
Middle	5795	9.64	8.51	11.07	9.94	23.22	-13.28

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5755	-5.848	-7.138	-4.418	-5.708	10	-15.71
Middle	5795	-6.376	-7.513	-4.946	-6.083	10	-16.08

Modulation Standard: IEEE 802.11ac, VHT20 (54Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	17.50	17.672	17.40	18.872	**4.68**
Middle	5785	17.60	17.699	17.60	24.650	**4.68**
High	5825	17.40	17.704	17.60	25.793	**4.68**

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	24	---	11	10
Middle	5785	24	---	11	10
High	5825	24	---	11	10
Duty Cycle CF (dB)		0.55	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5745	11.08	10.35	11.63	10.9	23.22	-12.32
Middle	5785	10.99	9.35	11.54	9.9	23.22	-13.32
High	5825	8.98	9.17	9.53	9.72	23.11	-13.39

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5745	-1.931	-2.658	-1.381	-2.108	10	-12.11
Middle	5785	-2.023	-3.664	-1.473	-3.114	10	-13.11
High	5825	-4.031	-3.836	-3.481	-3.286	10	-13.29

Modulation Standard: IEEE 802.11ac, VHT40 (130Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5755	36.00	36.331	35.96	36.587	**4.68**
Middle	5795	35.96	36.427	36.00	36.811	**4.68**

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5755	24	---	11	10
Middle	5795	24	---	11	10
Duty Cycle CF (dB)		1.74	Included in Calculations of Corr'd Power & PPSD		

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5755	9.76	8.75	11.5	10.49	23.22	-12.73
Middle	5795	9.66	8.65	11.4	10.39	23.22	-12.83

Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5755	-5.265	-7.271	-3.525	-5.531	10	-15.53
Middle	5795	-6.358	-7.367	-4.618	-5.627	10	-15.63

Modulation Standard: IEEE 802.11ac, VHT80 (270Mbps)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Ant. A 26 dB BW (MHz)	Ant. A Min 99% BW (MHz)	Ant. B 26 dB BW (MHz)	Ant. B Min 99% BW (MHz)	Directional Gain (dBi)
Low	5775	75.28	75.128	75.28	75.206	4.68

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	PPSD Limit (dBm)
Low	5775	24	---	11	10
Duty Cycle CF (dB)		0.77	Included in Calculations of Corr'd Power & PPSD		

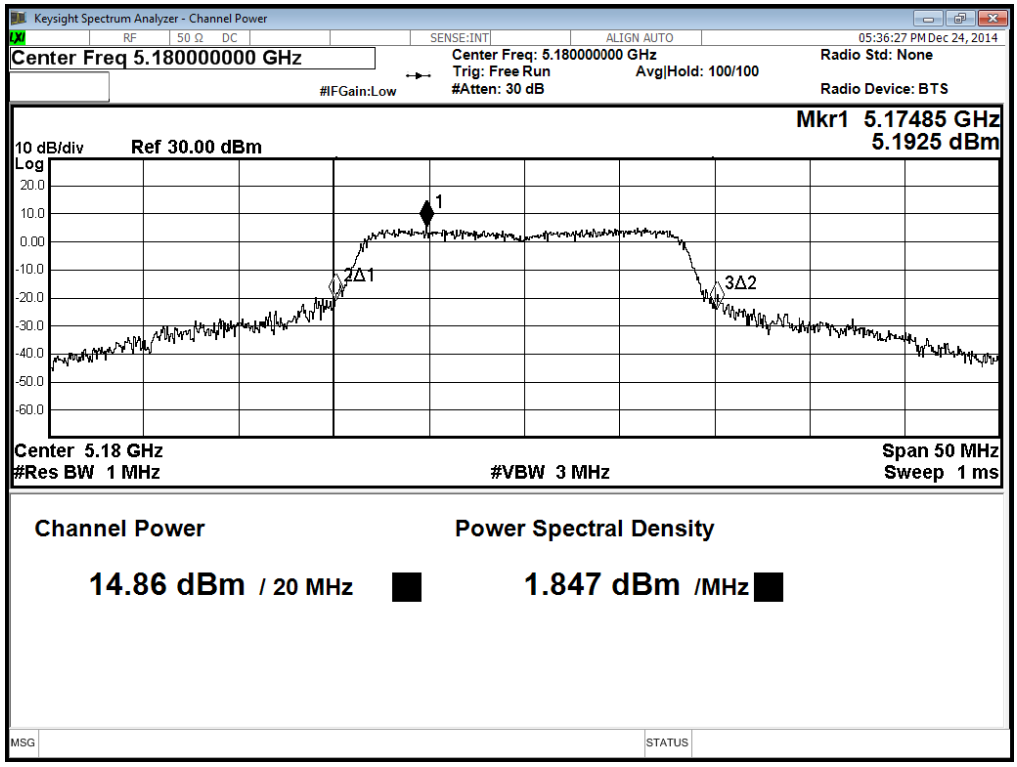
Output Power Results

Channel	Frequency (MHz)	Ant. A Meas Power (dBm)	Ant. B Meas Power (dBm)	Ant. A Total Corr'd Power (dBm)	Ant. B Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dBm)
Low	5775	8.65	7.22	9.42	7.99	23.22	-15.23

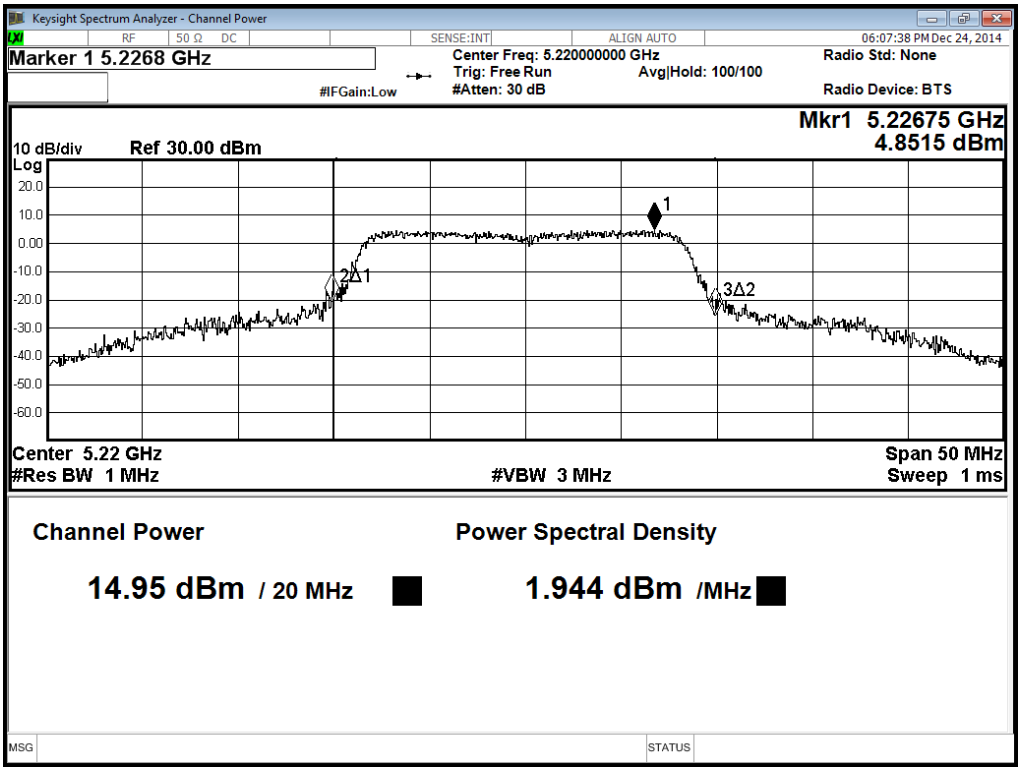
Output Power Results

Channel	Frequency (MHz)	Ant. A Meas PPSD (dBm)	Ant. B Meas PPSD (dBm)	Ant. A Total Corr'd PPSD (dBm)	Ant. B Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dBm)
Low	5775	-10.38	-11.81	-9.61	-11.04	10	-21.04

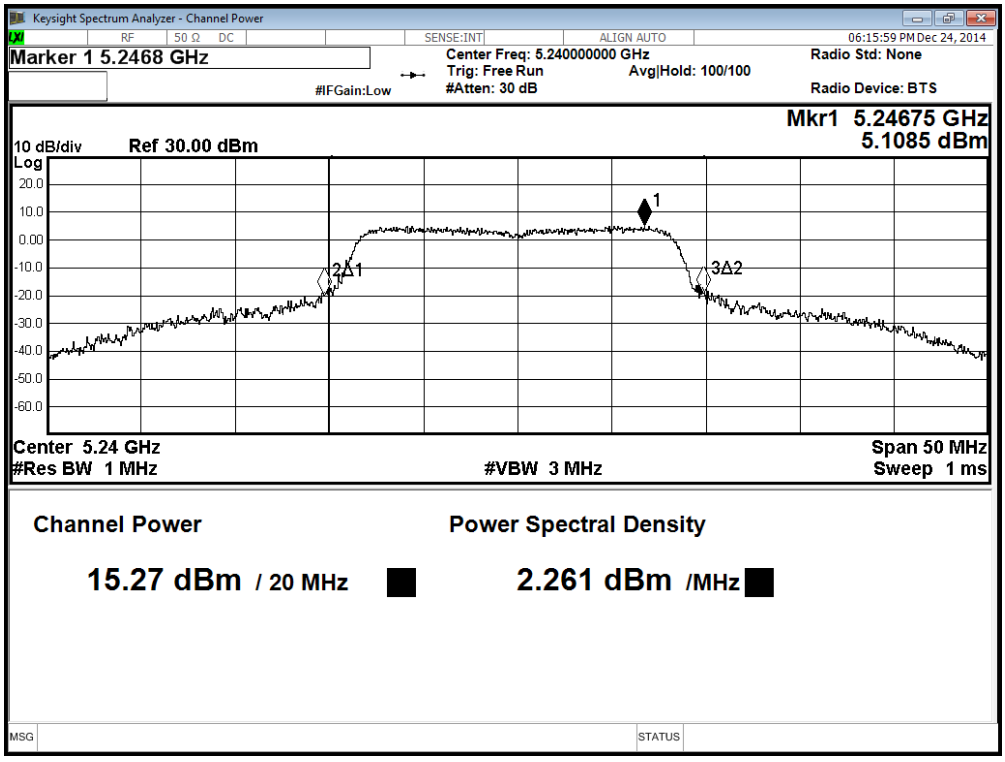
<5.2G Band>
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 36



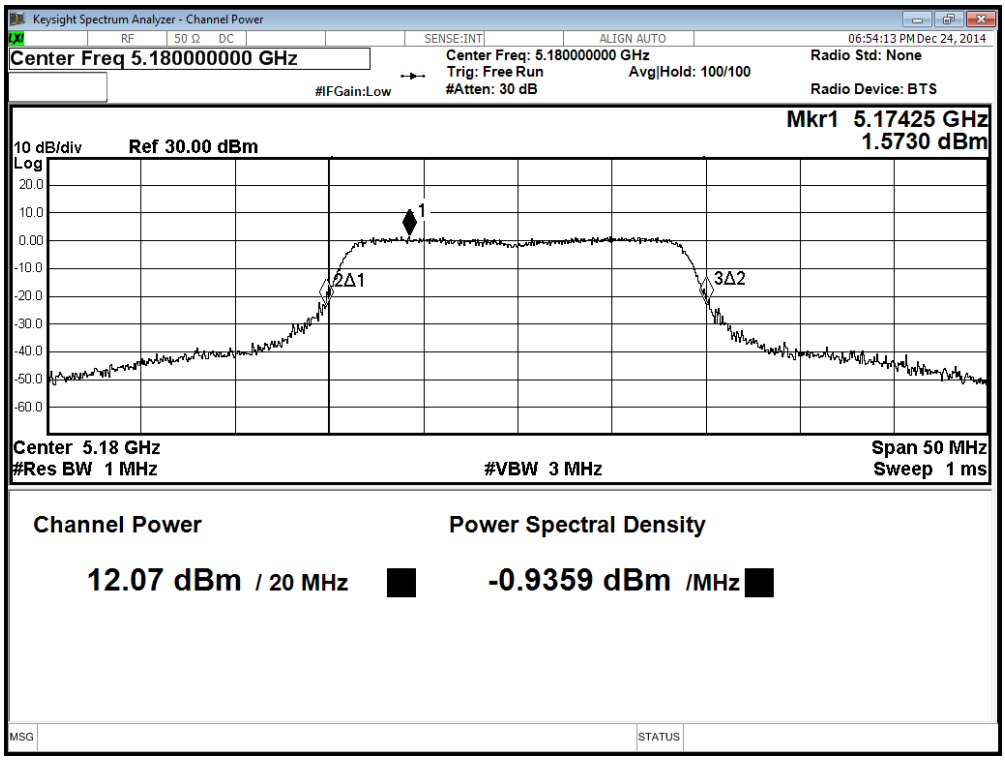
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 44



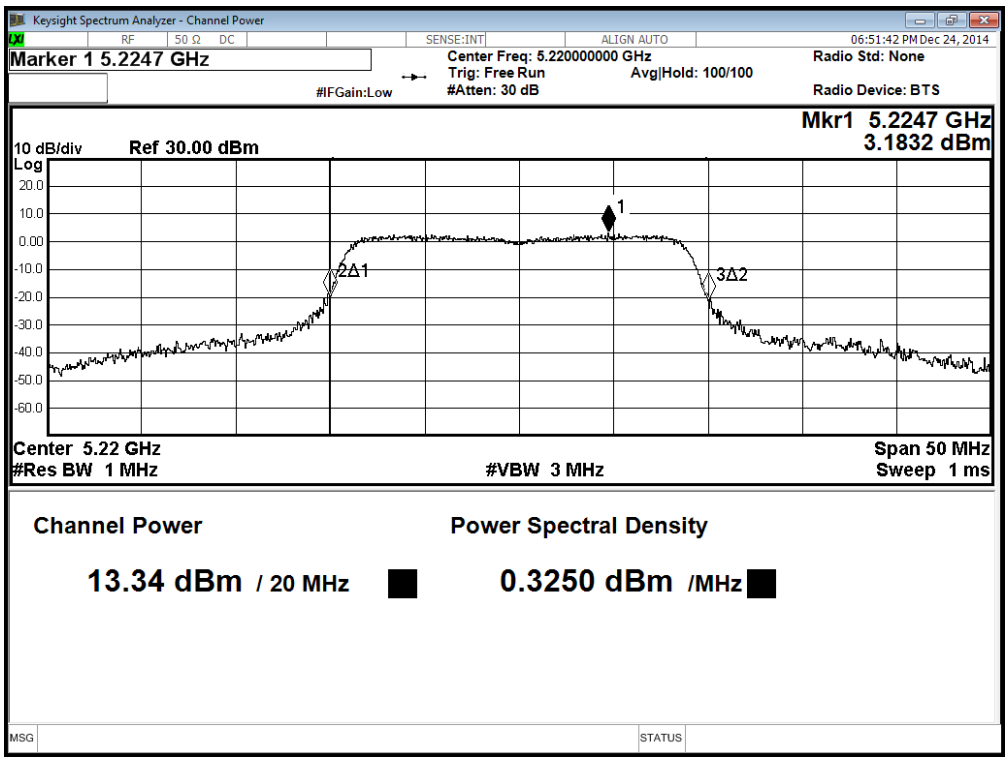
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 48



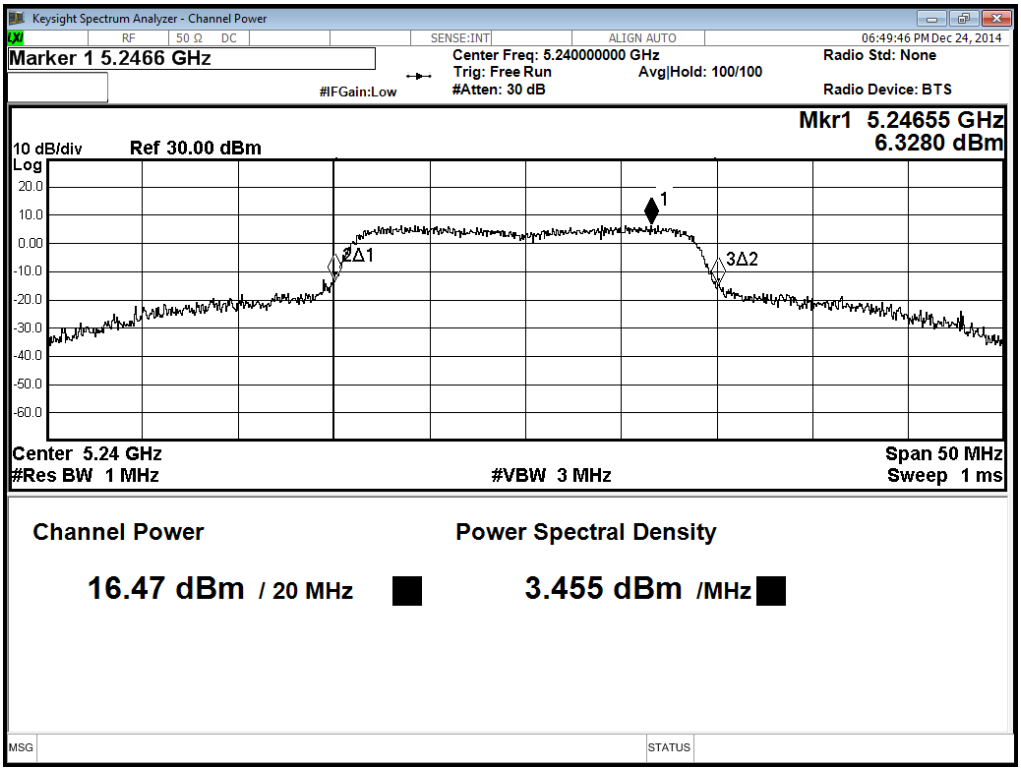
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 36



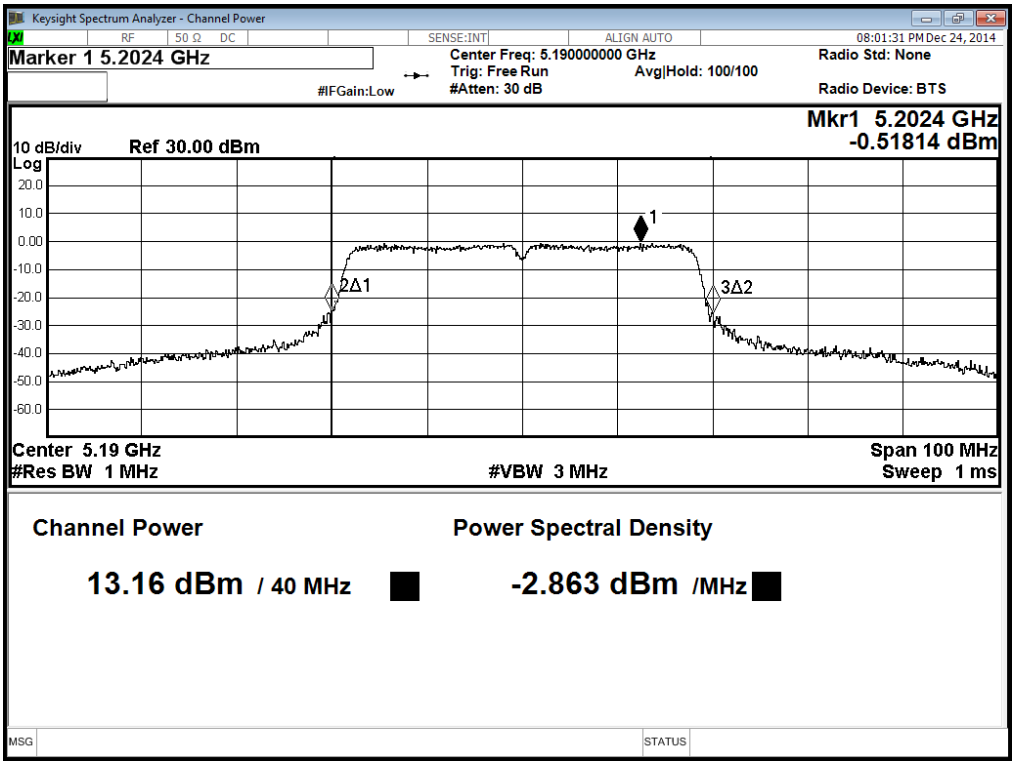
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 44



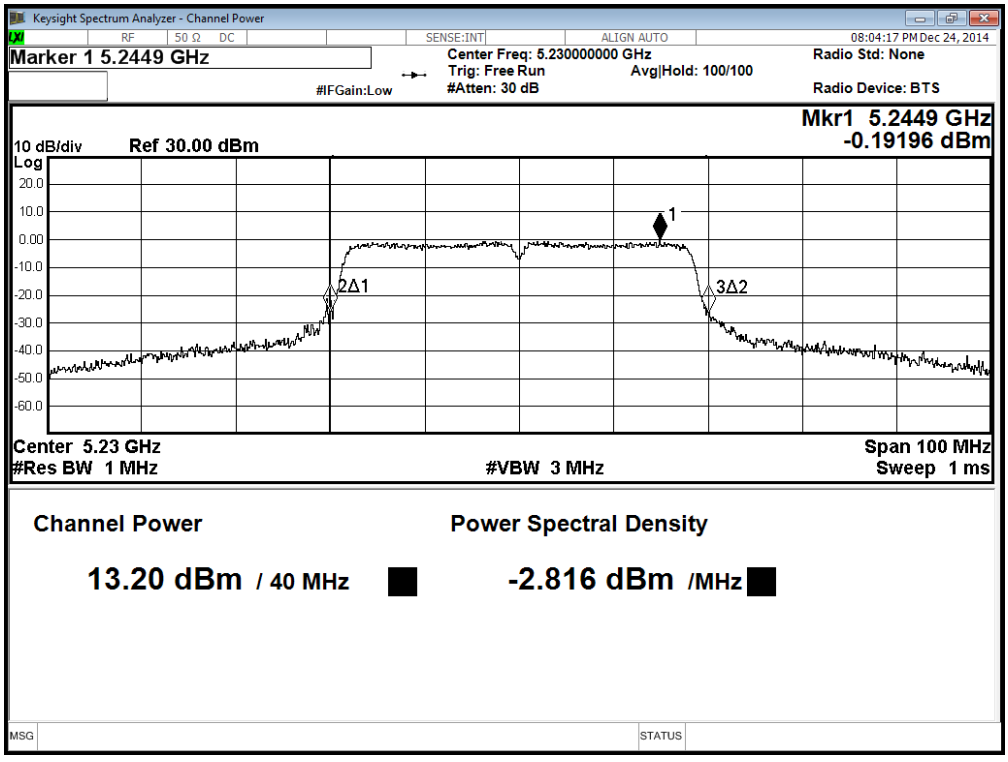
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 48



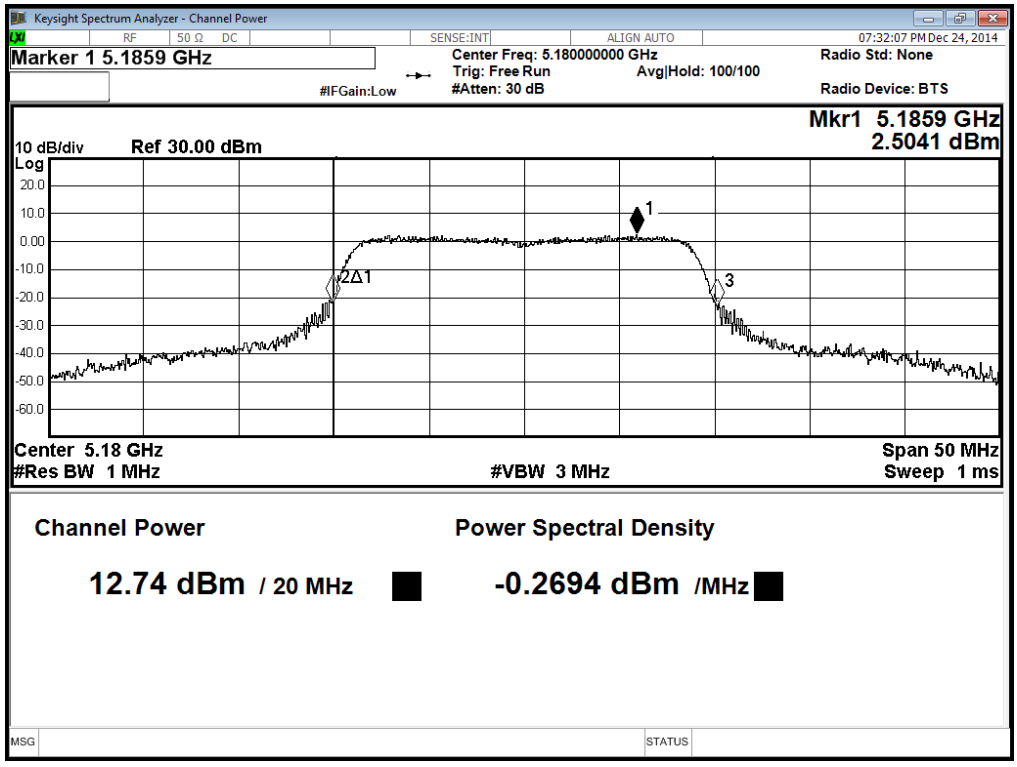
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 38



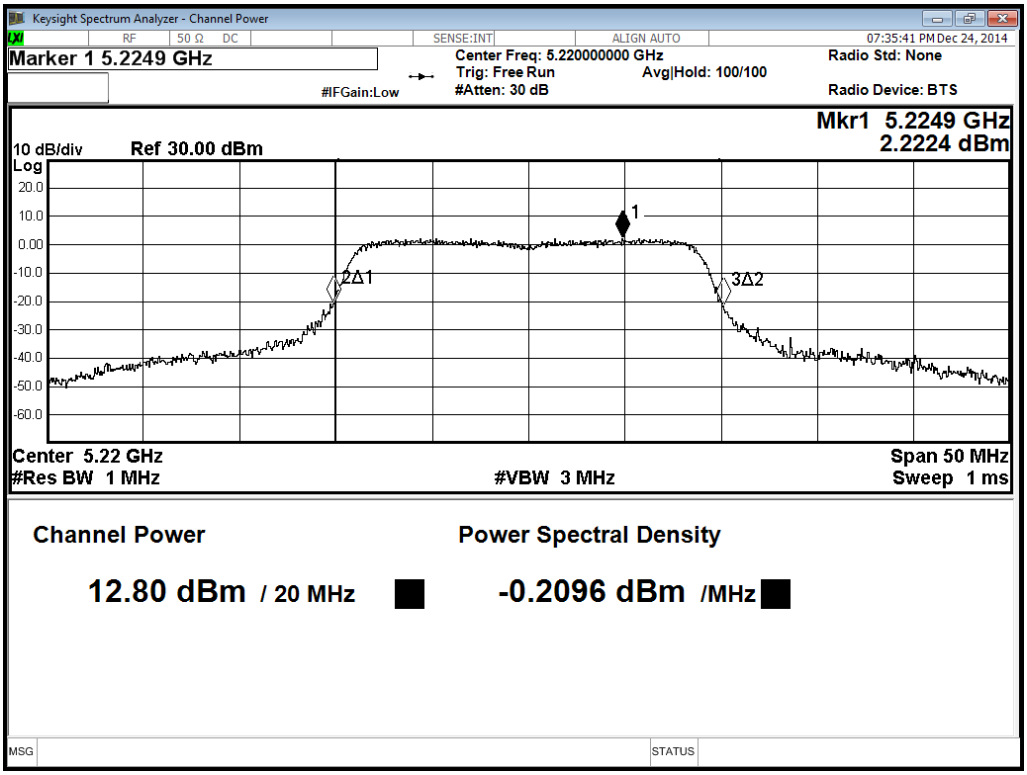
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 46



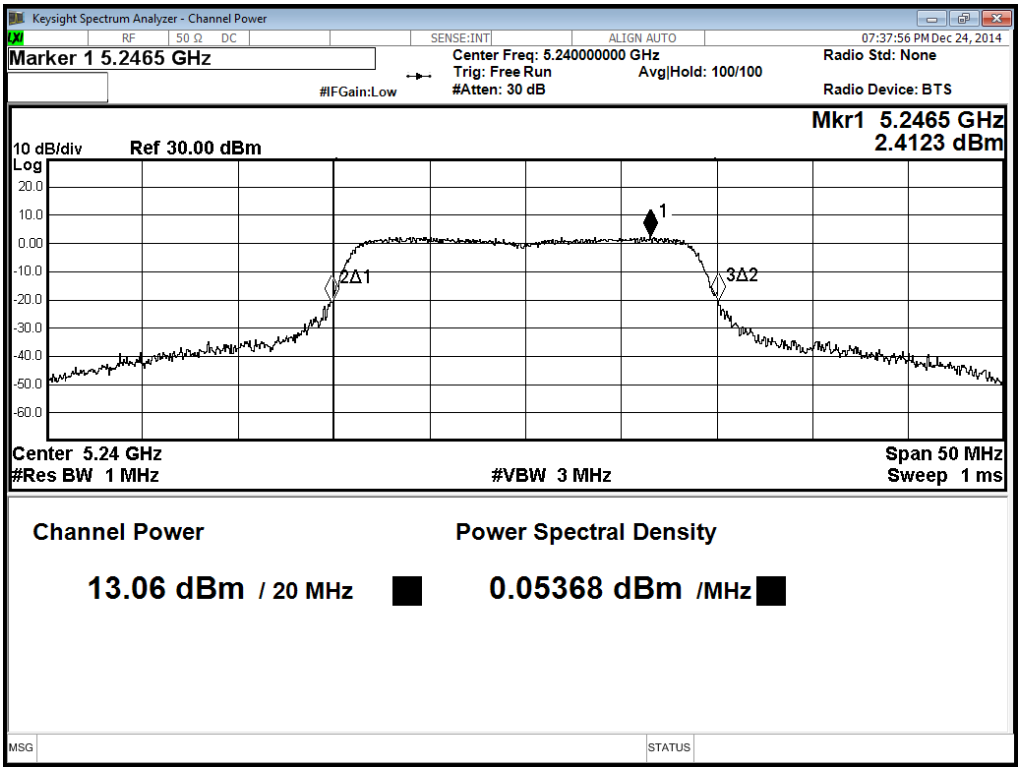
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 36



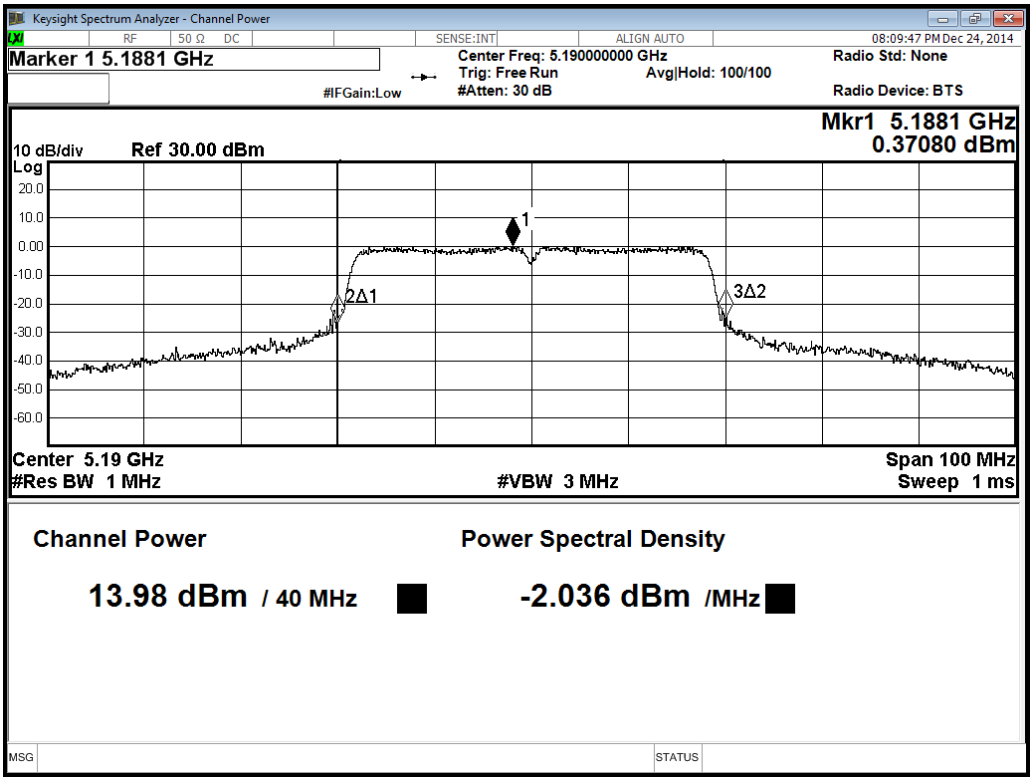
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 44



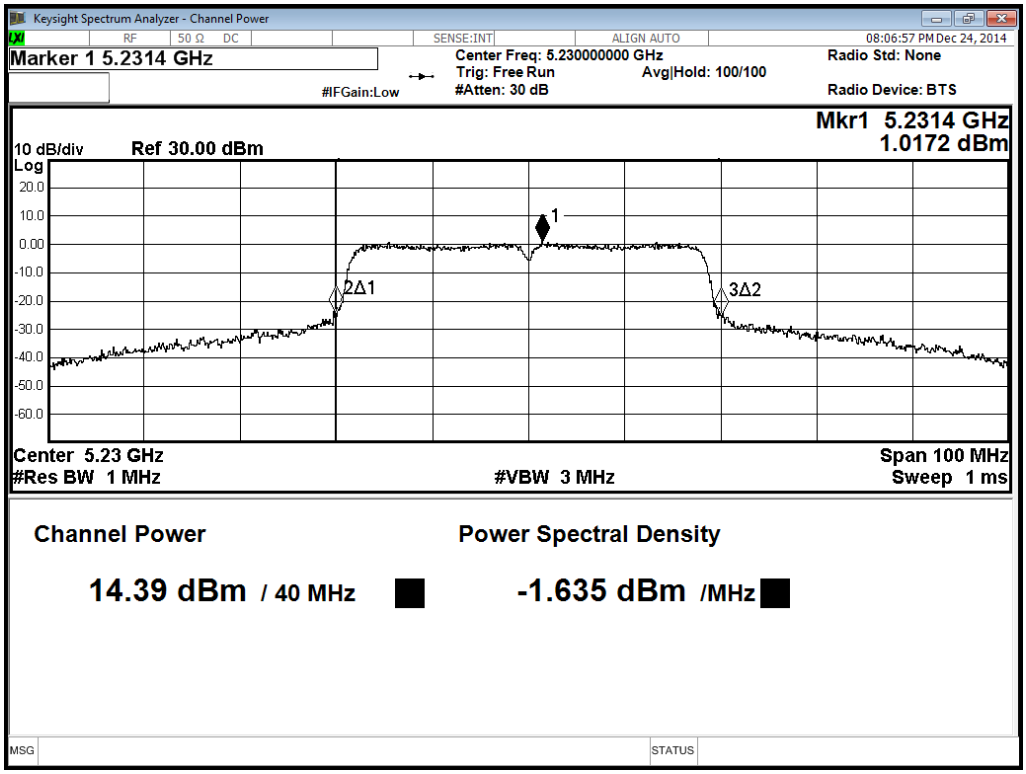
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 48



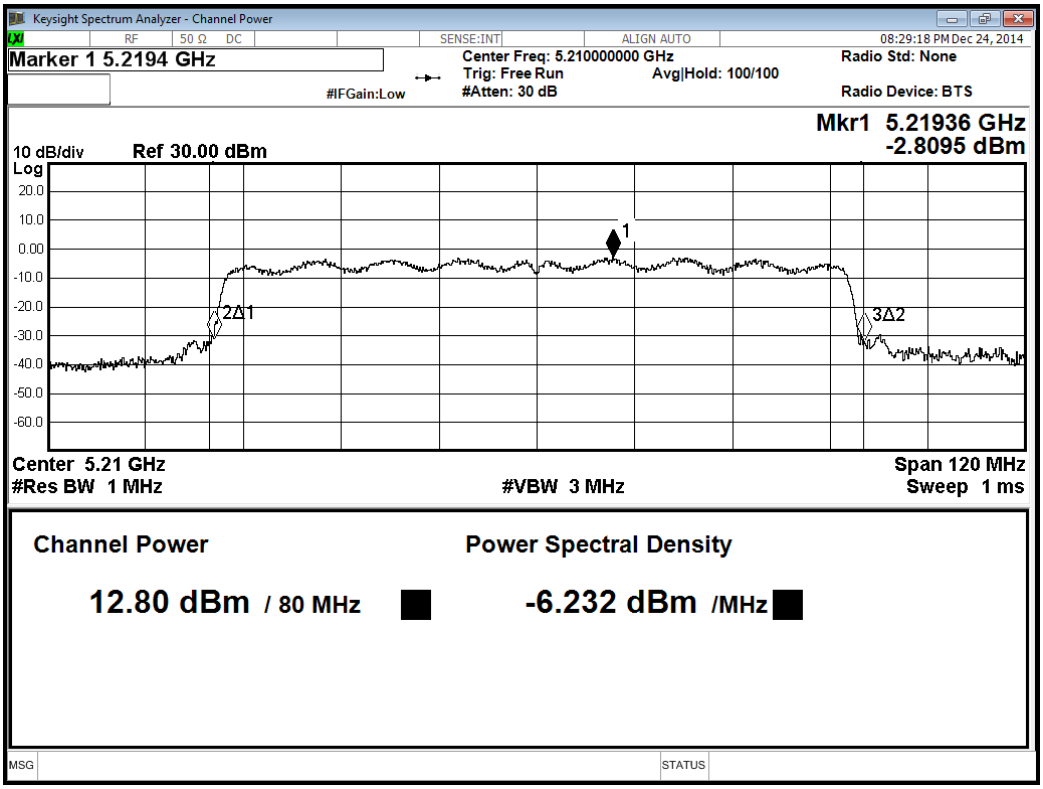
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 38



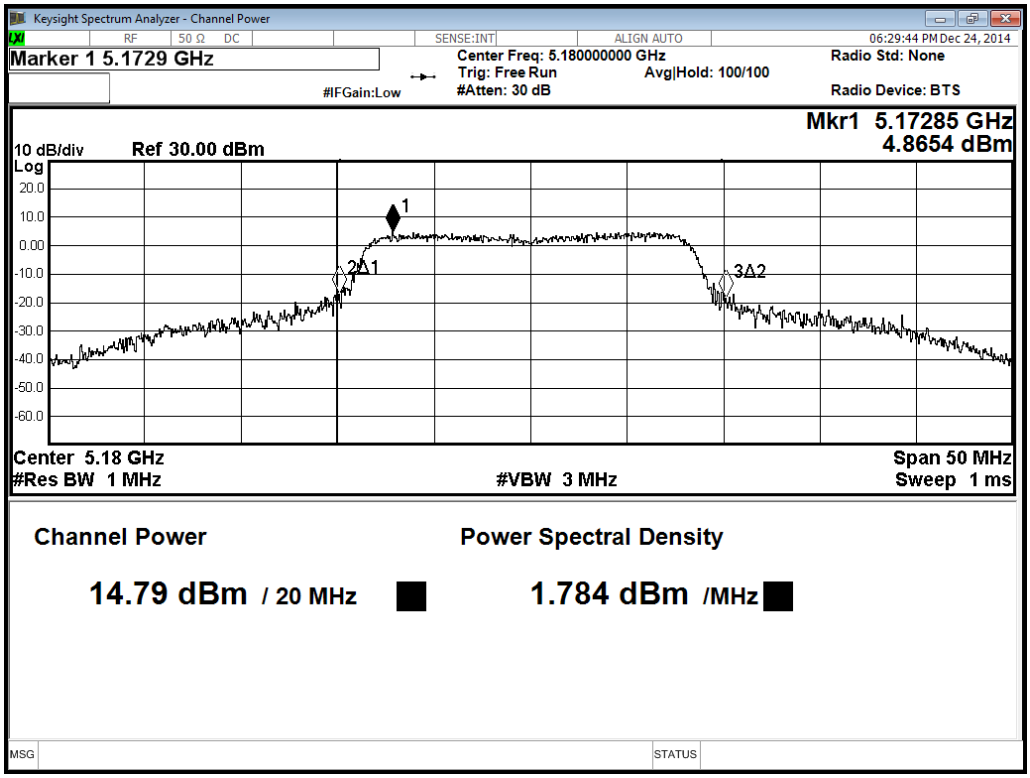
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 46



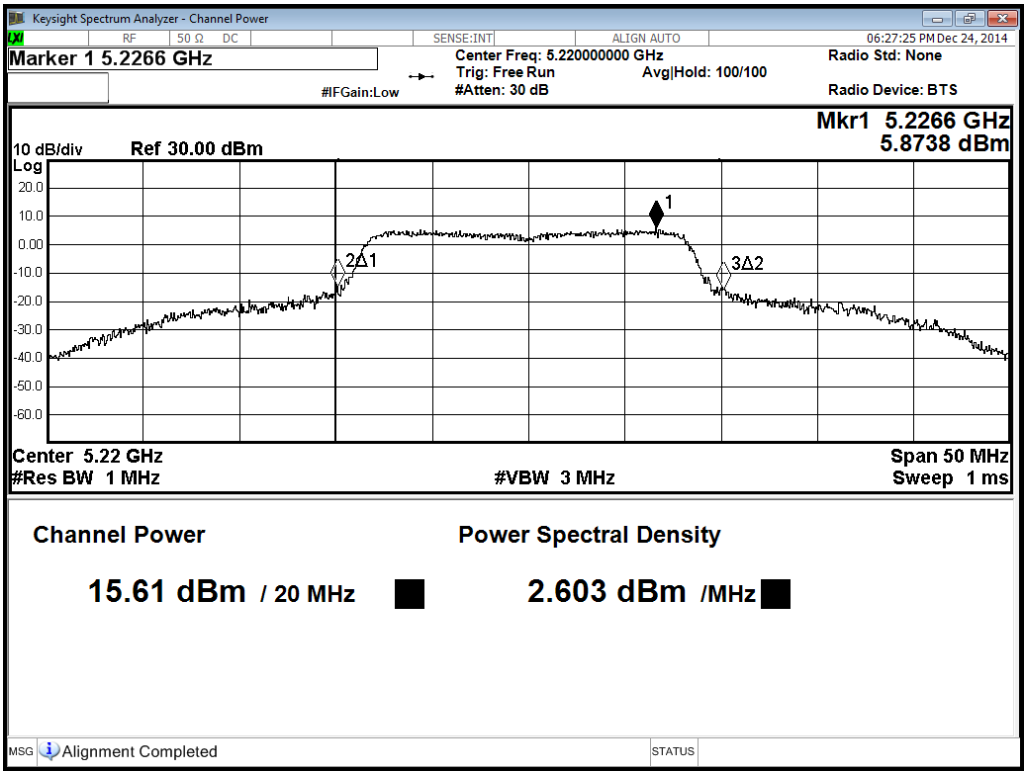
Modulation Standard: 802.11ac VHT80 (270Mbps), ANT A
Channel: 42



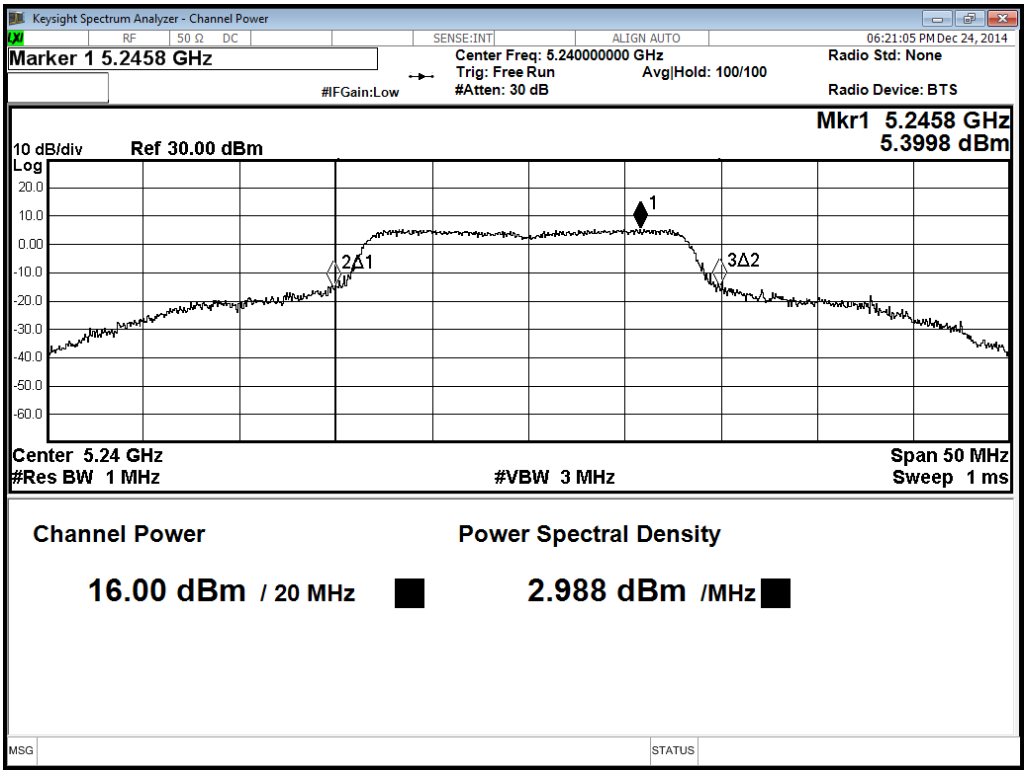
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 36



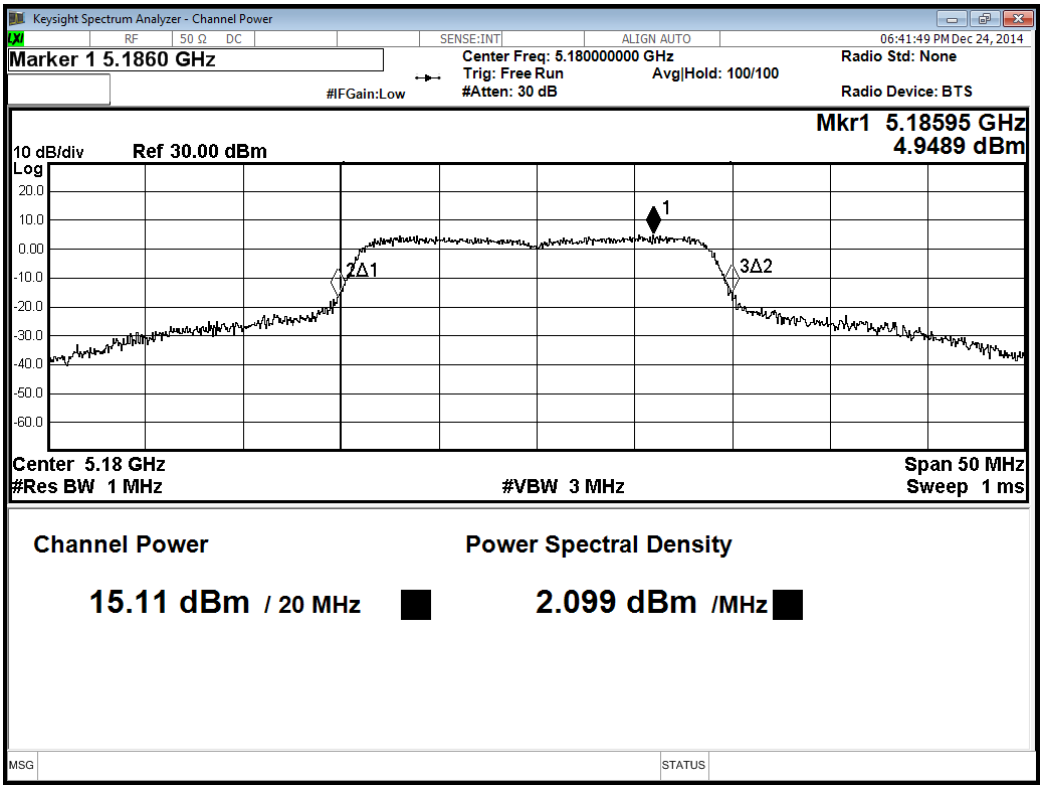
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 44



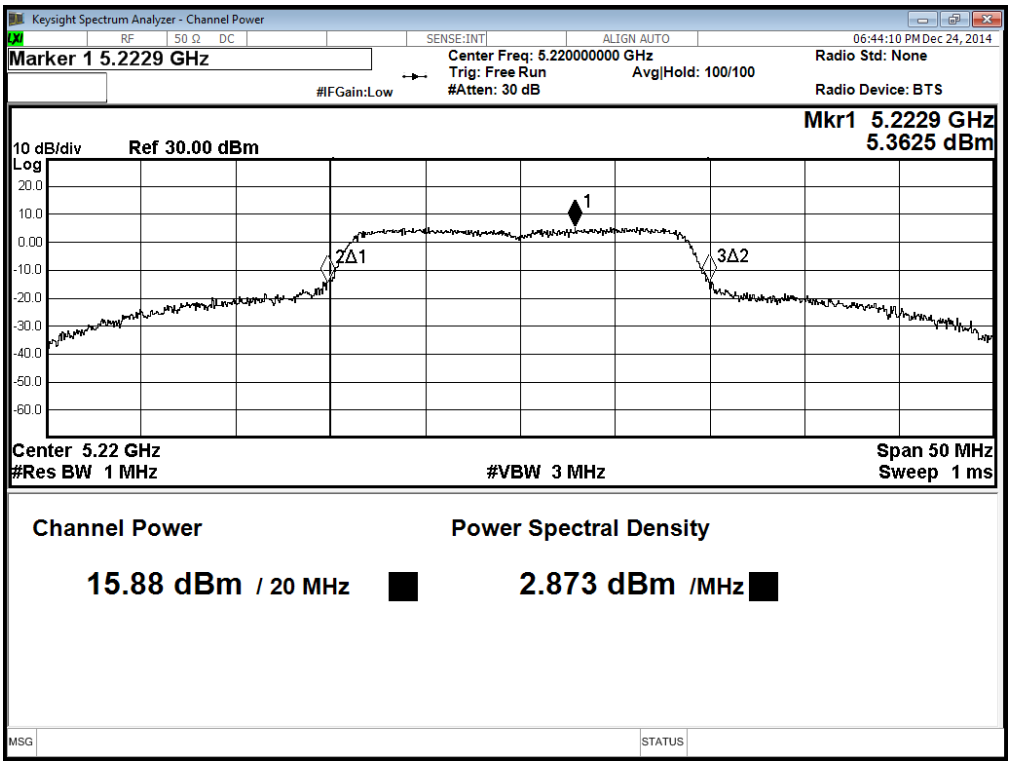
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 48



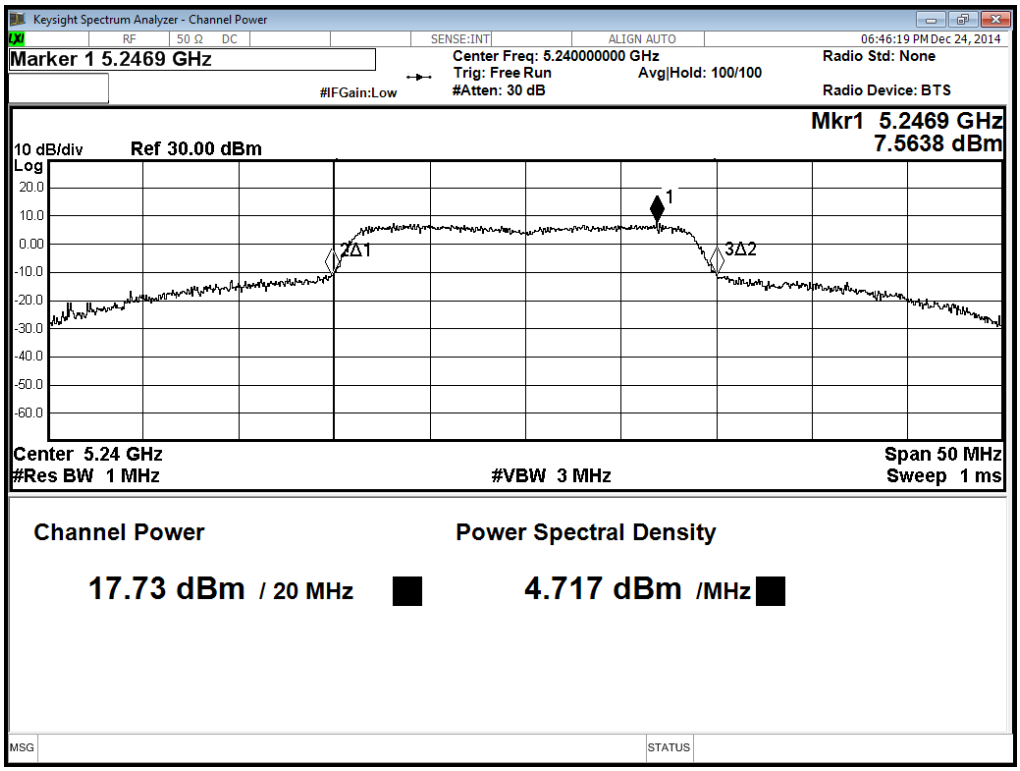
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 36



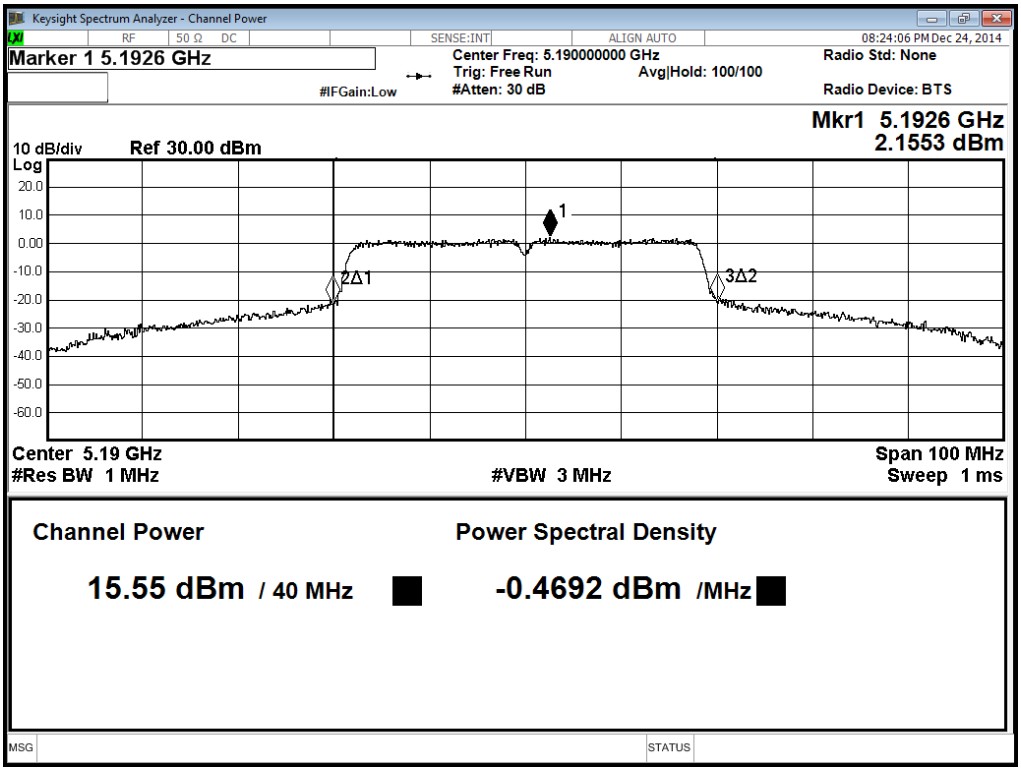
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 44



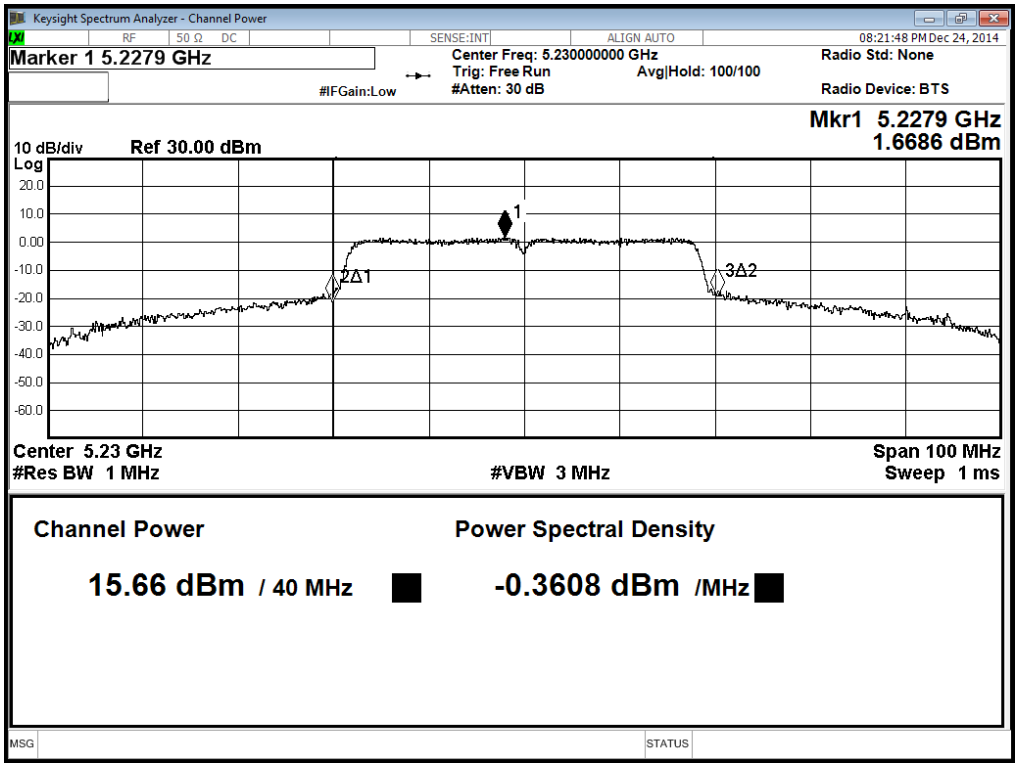
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 48



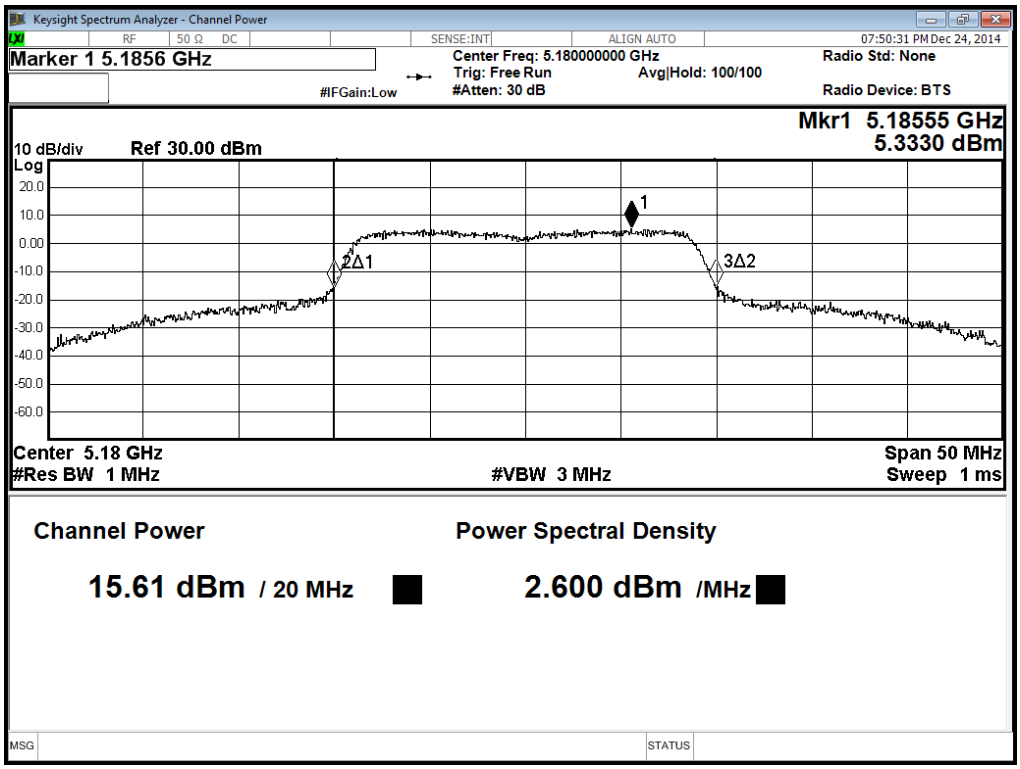
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 38



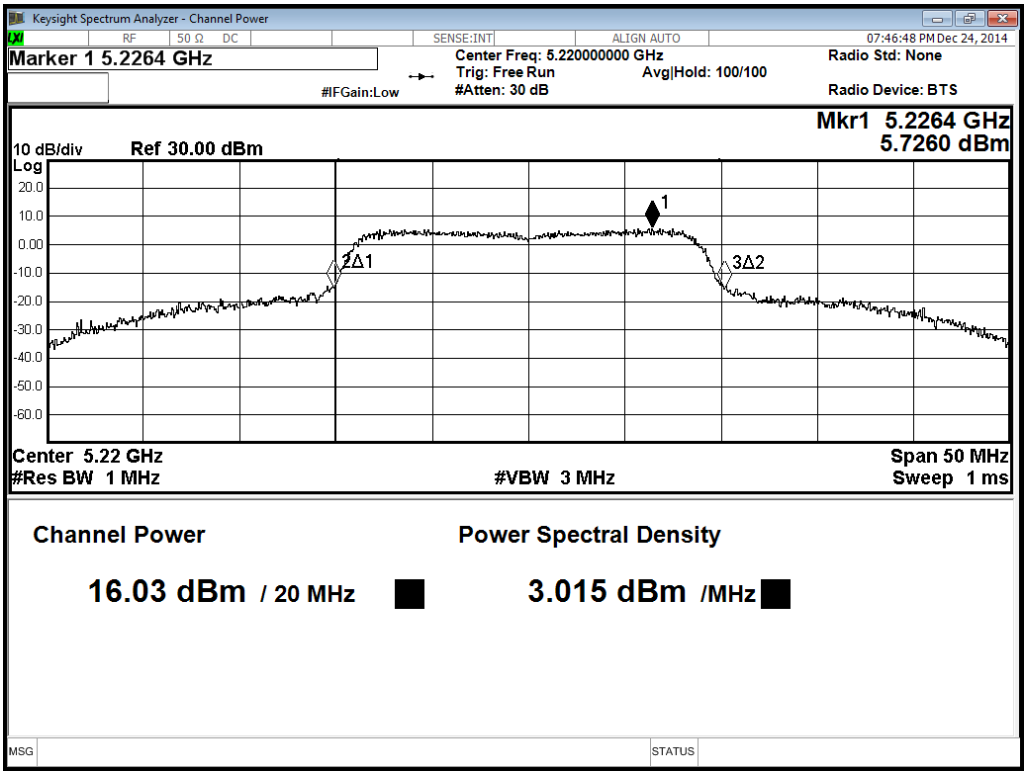
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 46



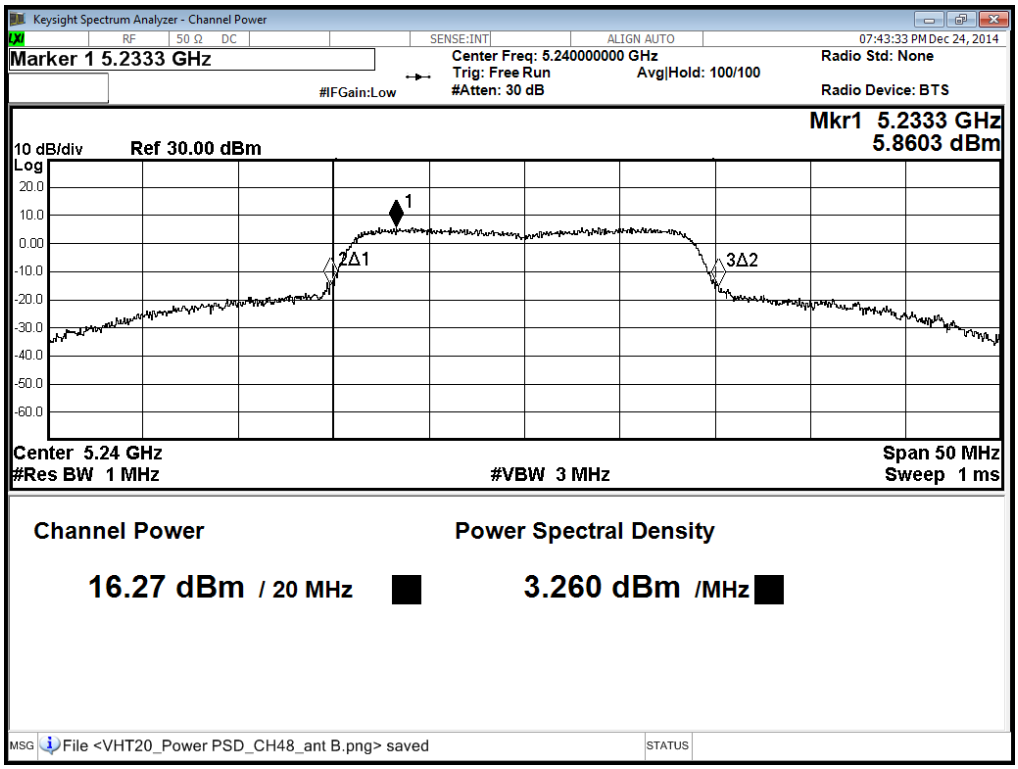
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 36



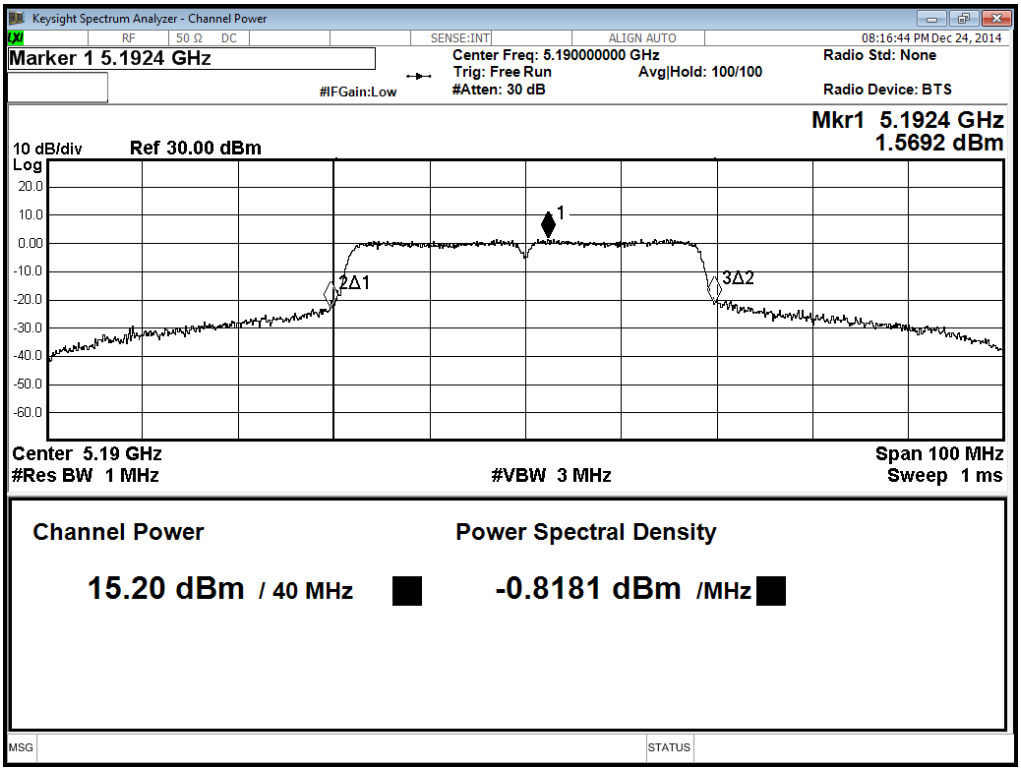
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 44



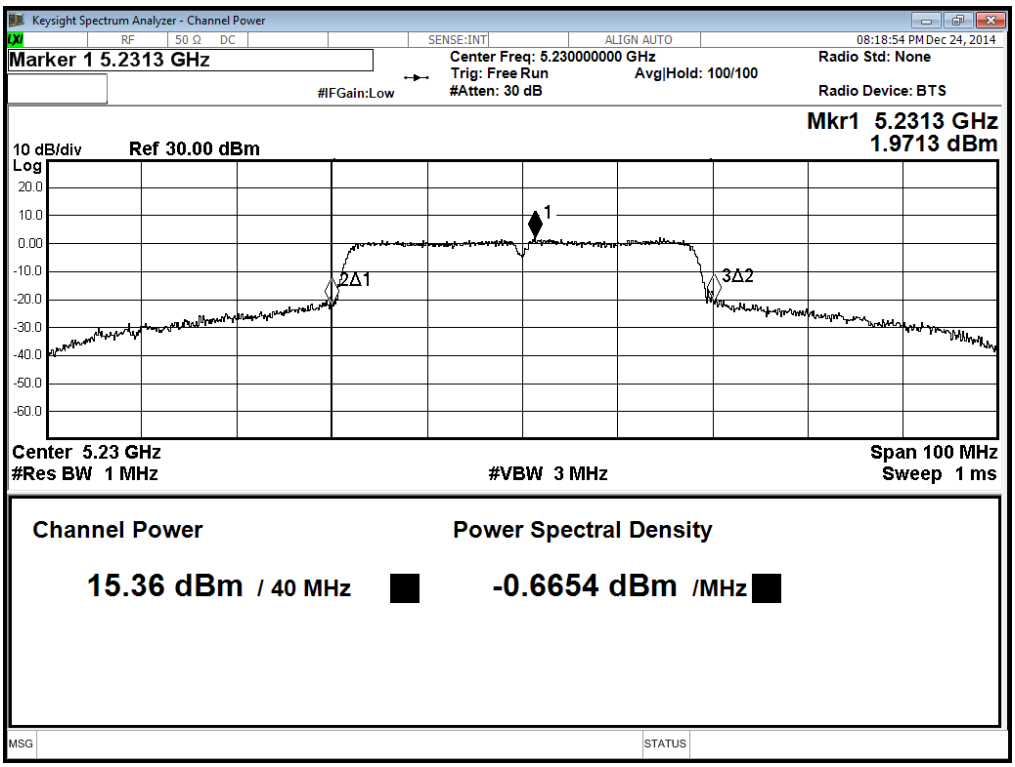
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 48



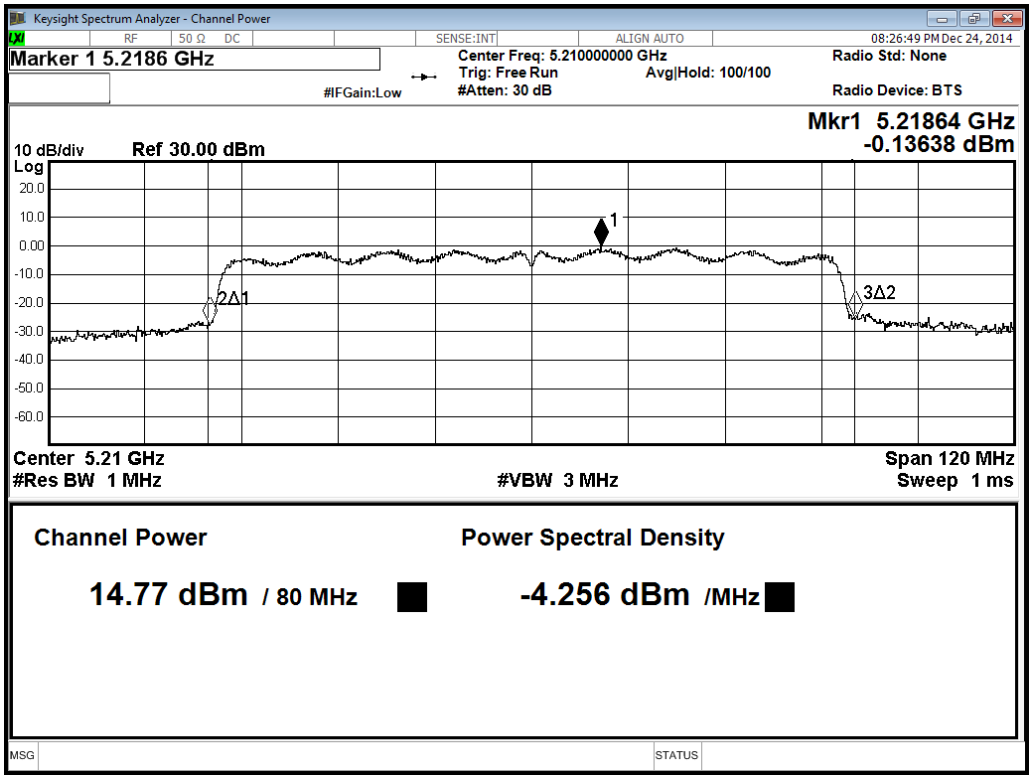
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 38



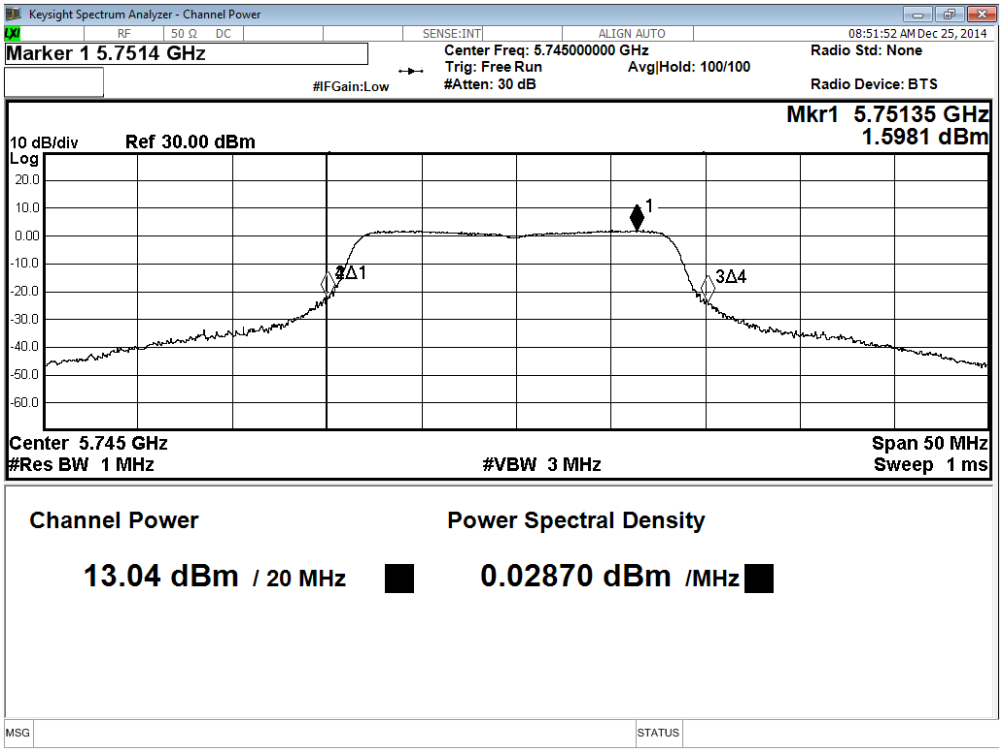
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 46



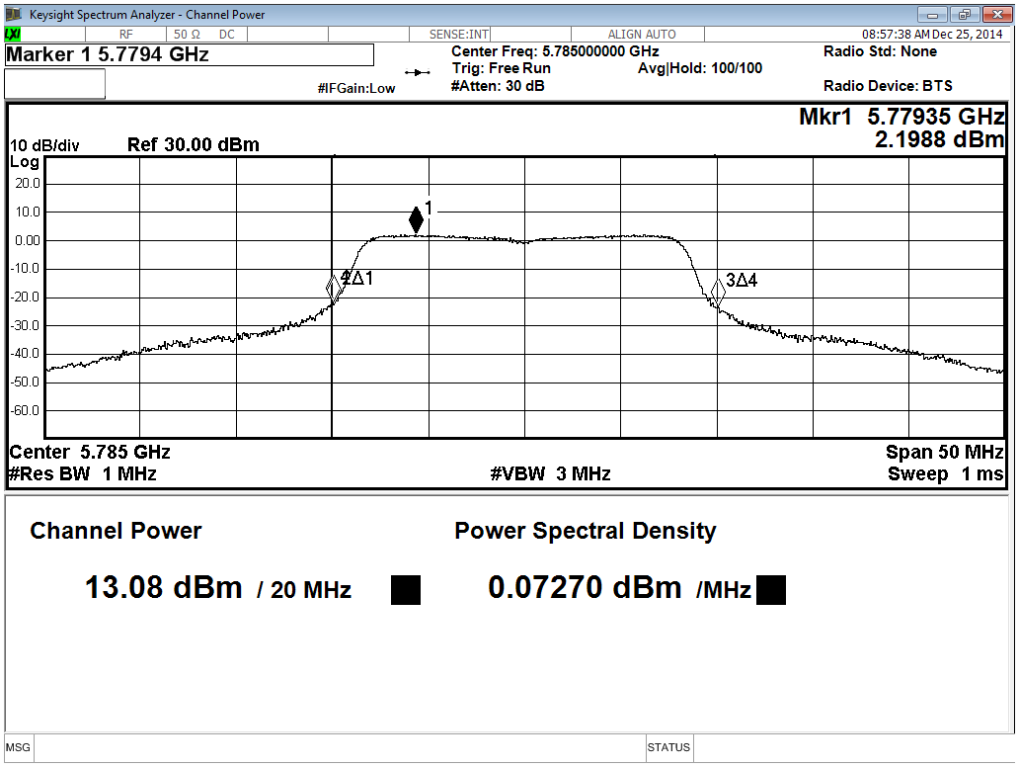
Modulation Standard: 802.11ac VHT80 (270Mbps), ANT B
Channel: 42



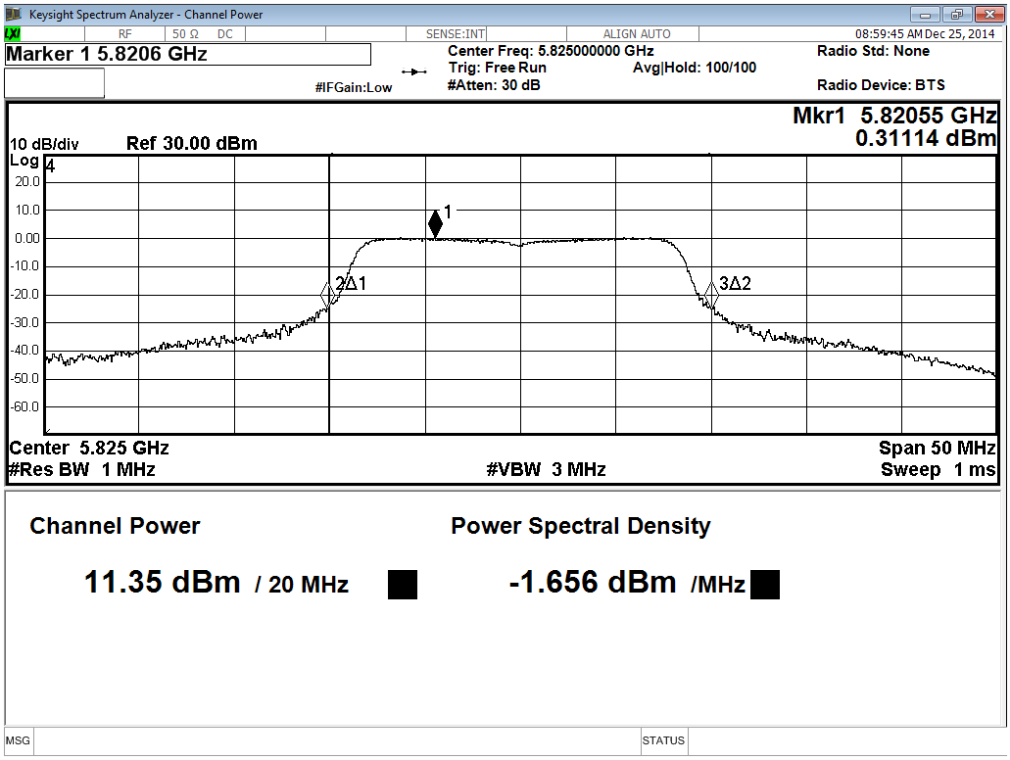
<5.8G Band>
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 149



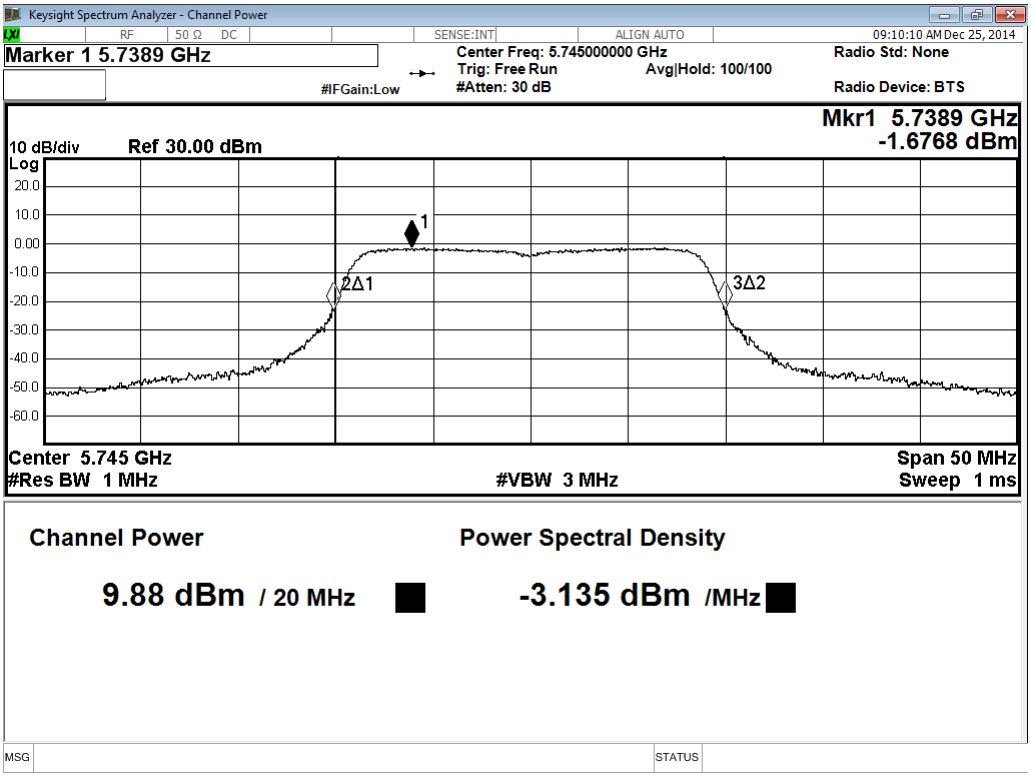
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 157



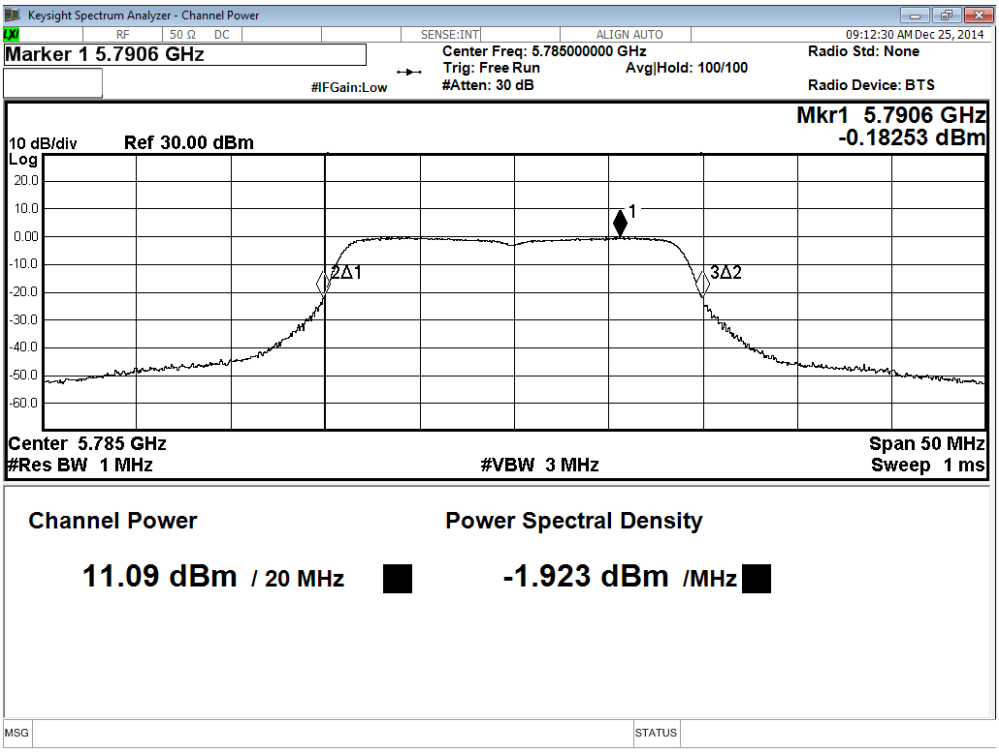
Modulation Standard: 802.11a (6Mbps), ANT A
Channel: 165



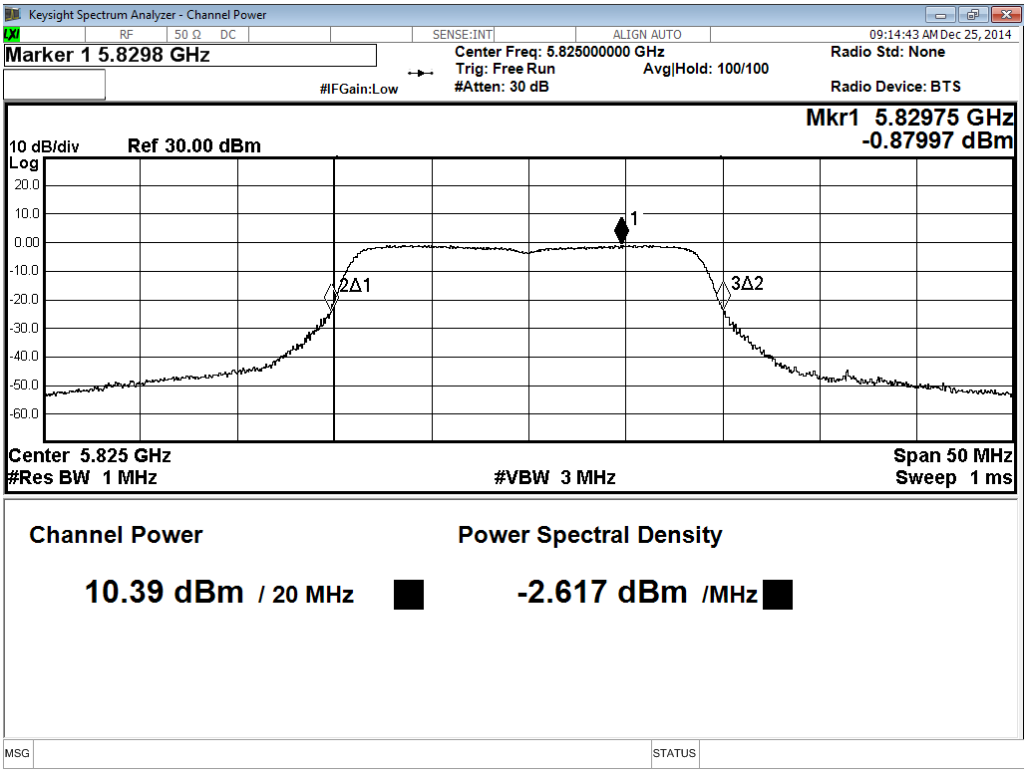
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 149



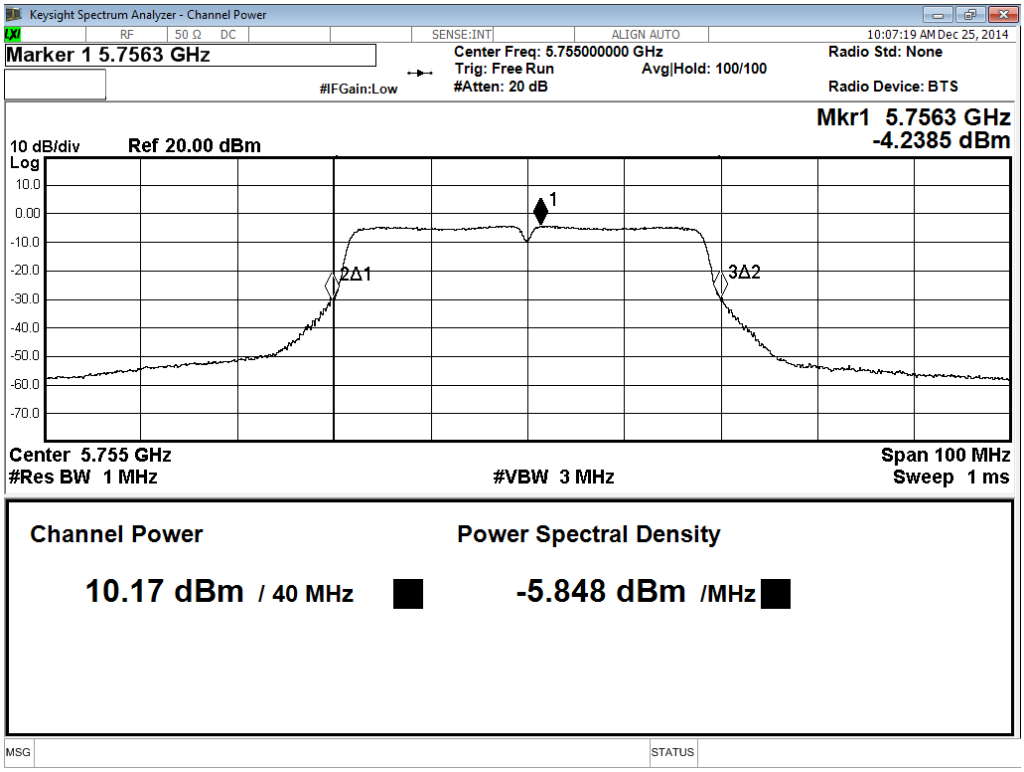
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 157



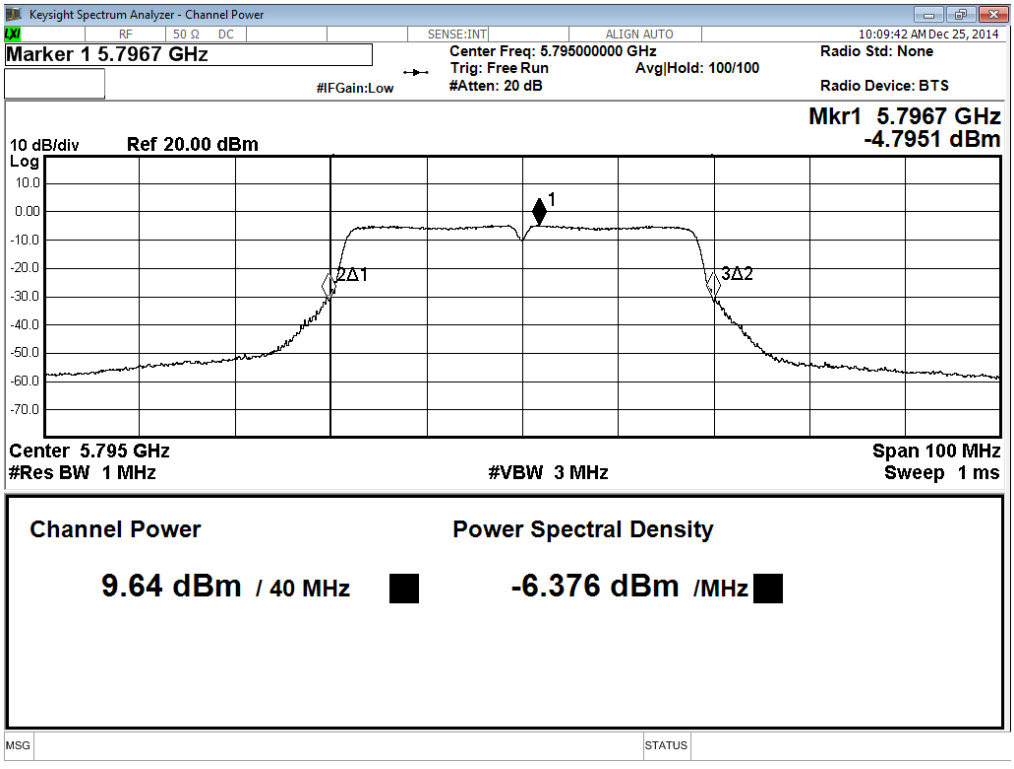
Modulation Standard: 802.11an HT20 (6Mbps), ANT A
Channel: 165



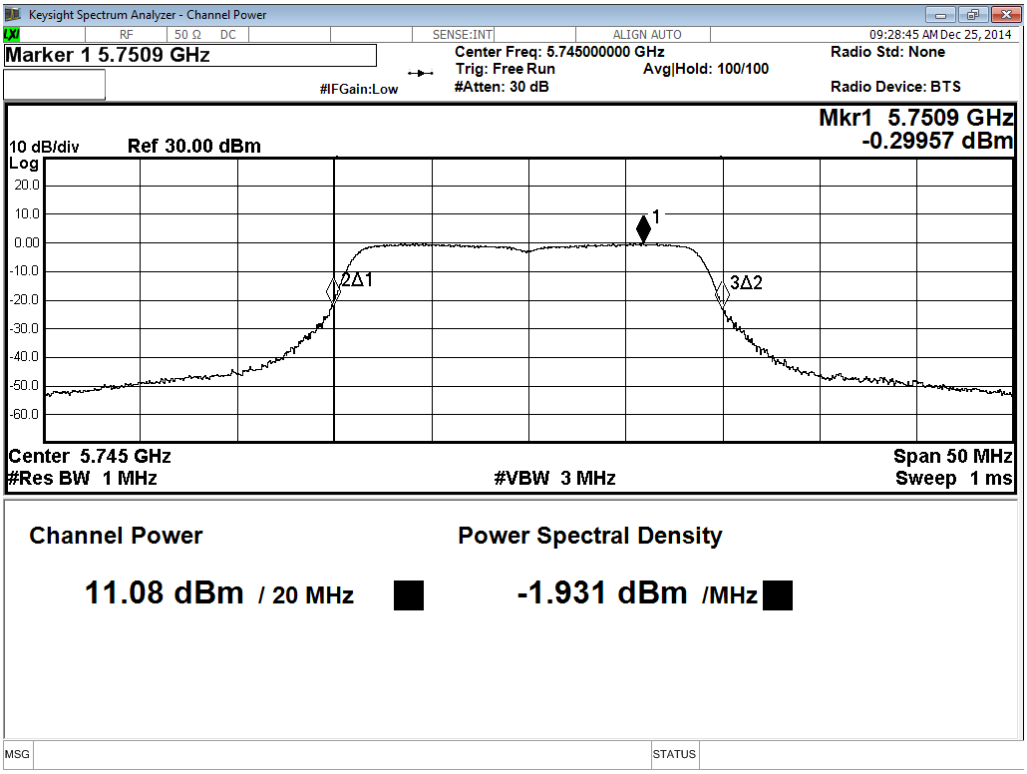
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 151



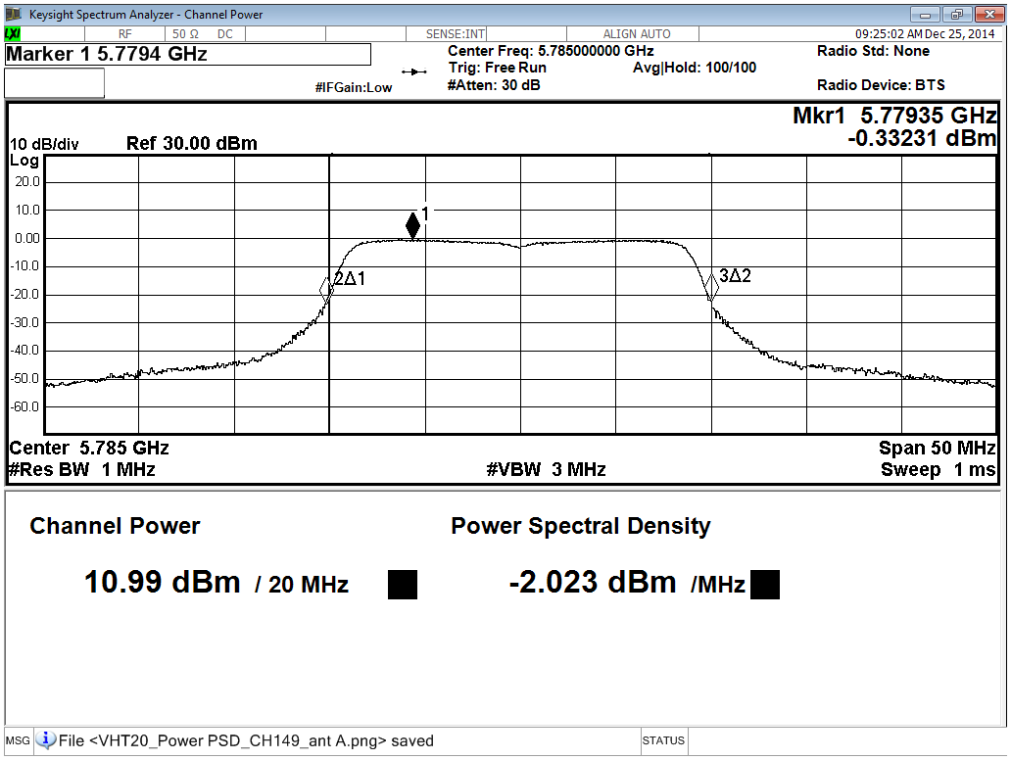
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT A
Channel: 159



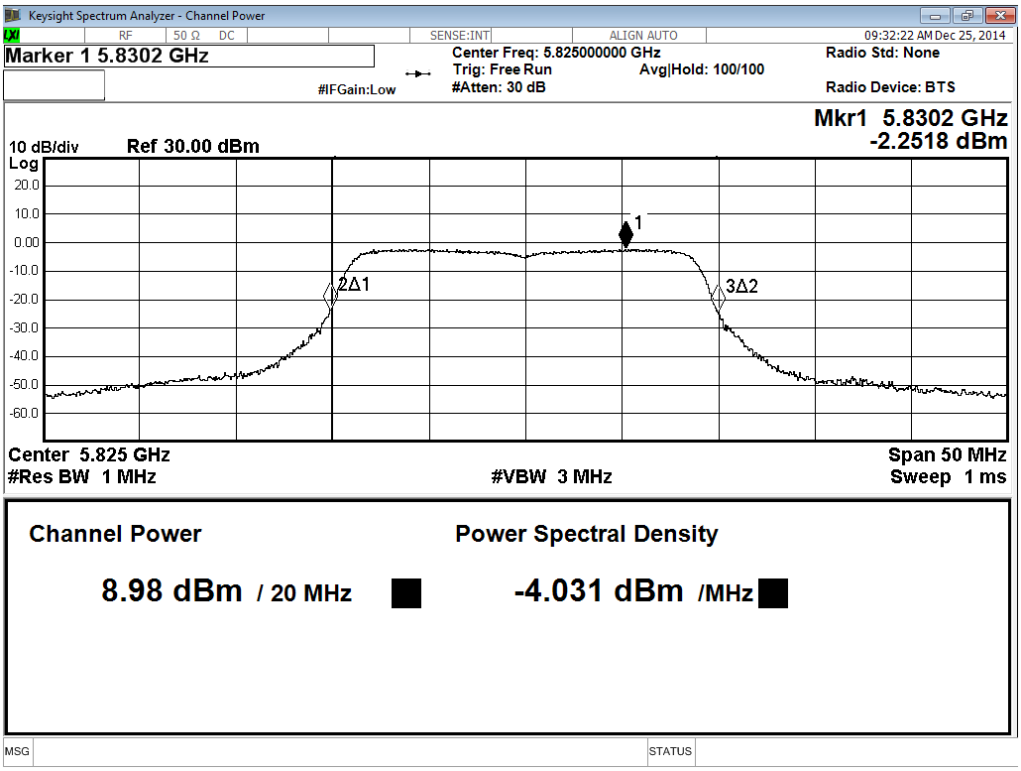
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 149



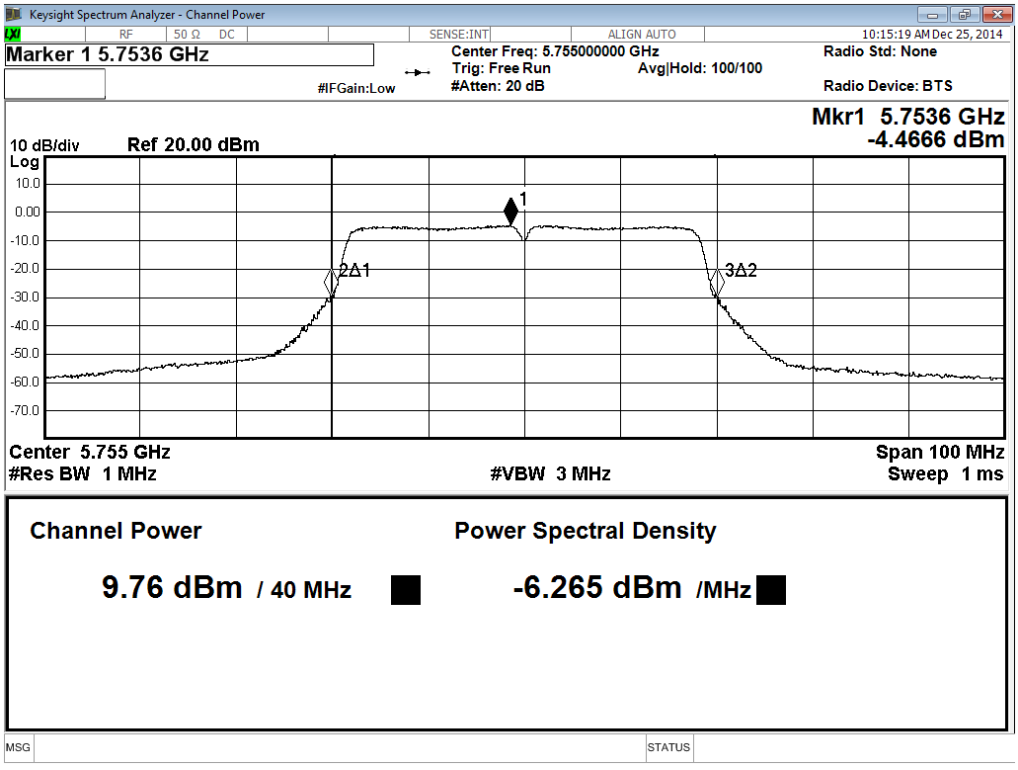
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 157



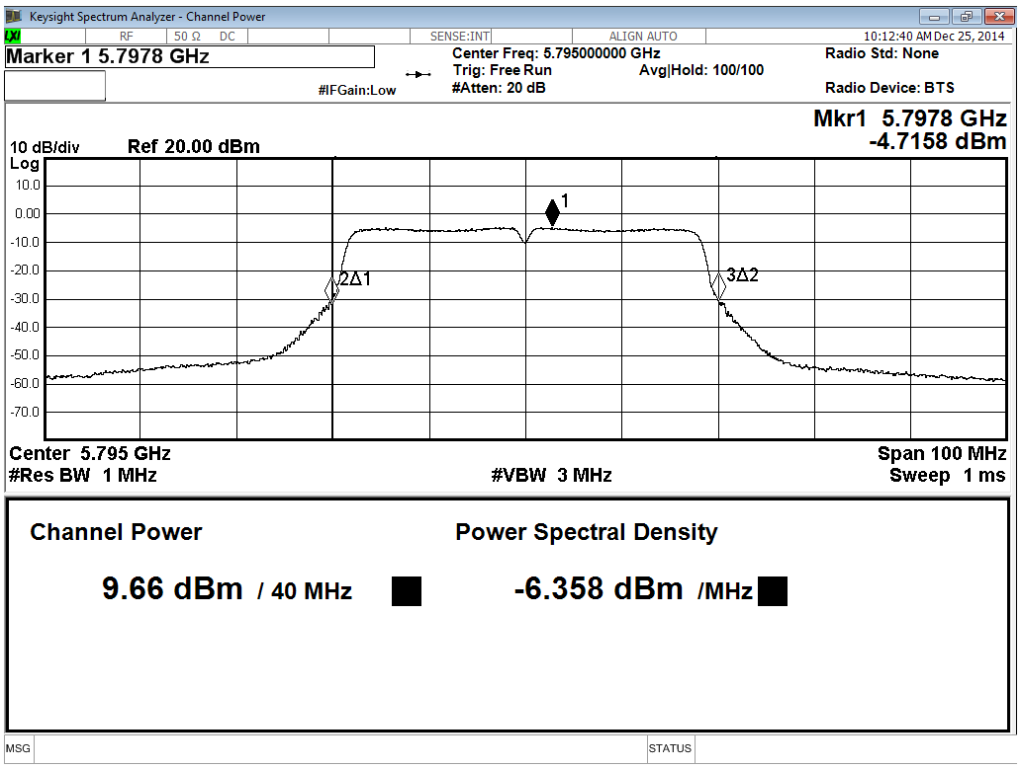
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT A
Channel: 165



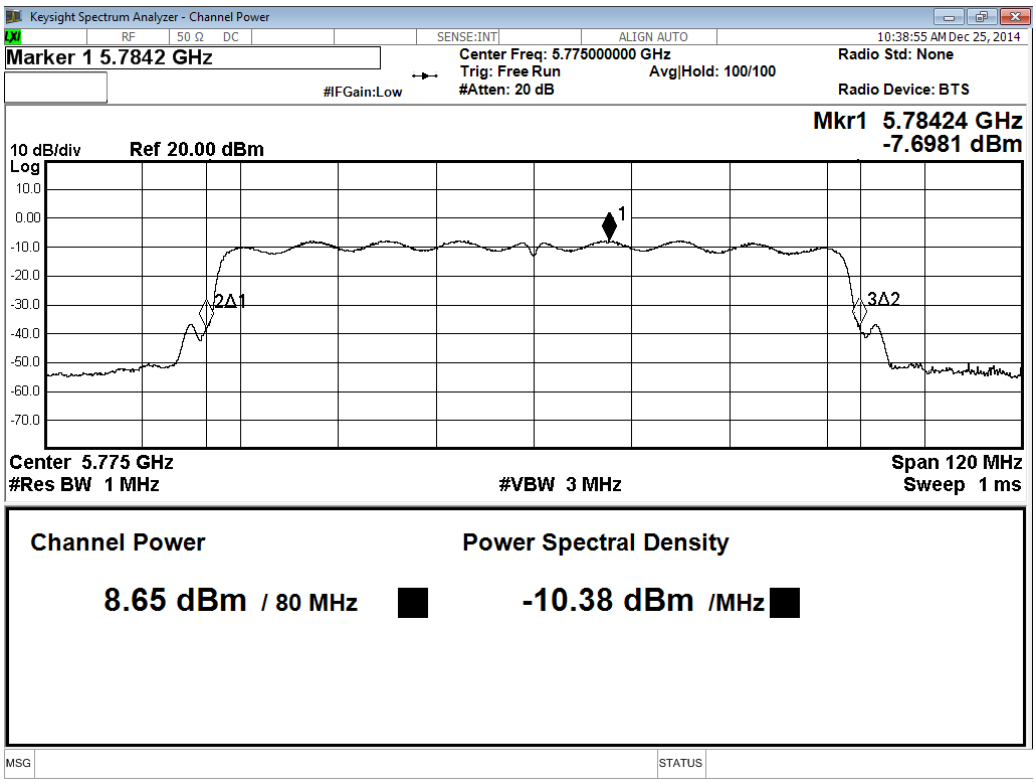
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 151



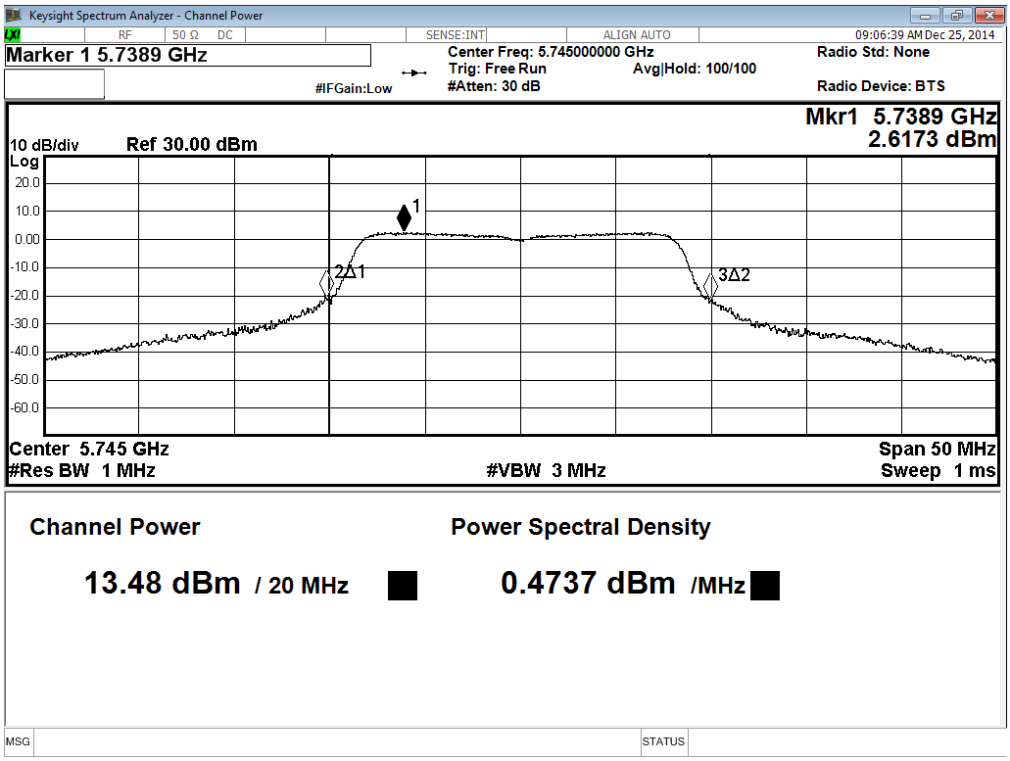
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT A
Channel: 159



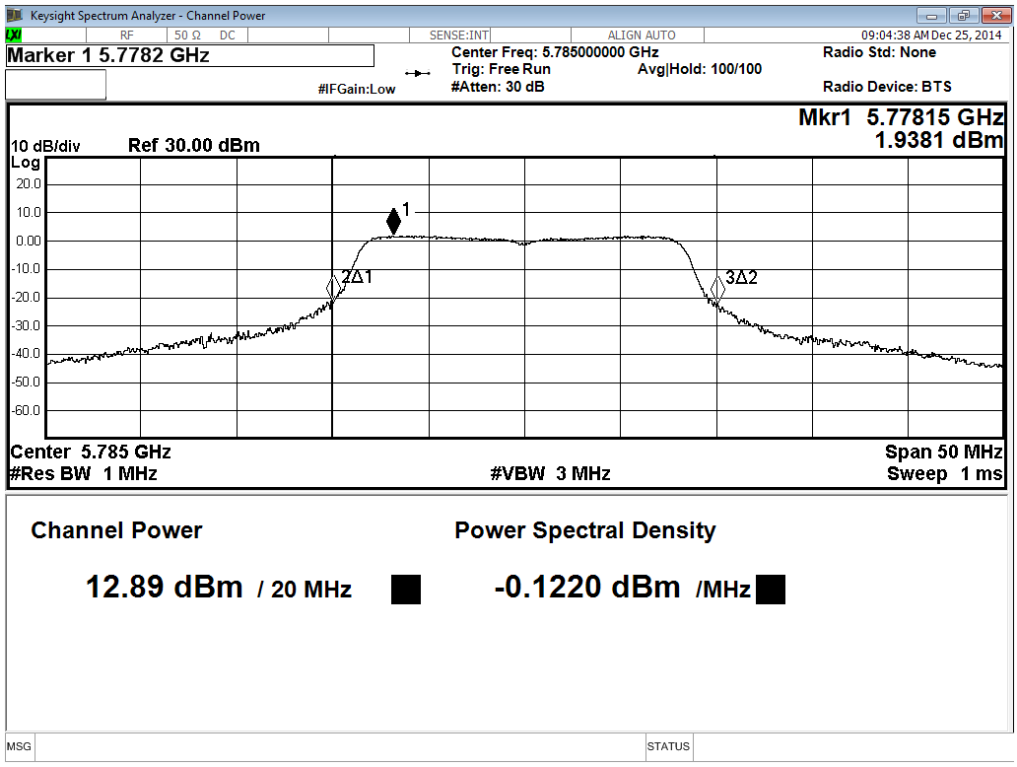
Modulation Standard: 802.11ac VHT80 (270Mbps), ANT A
Channel: 155



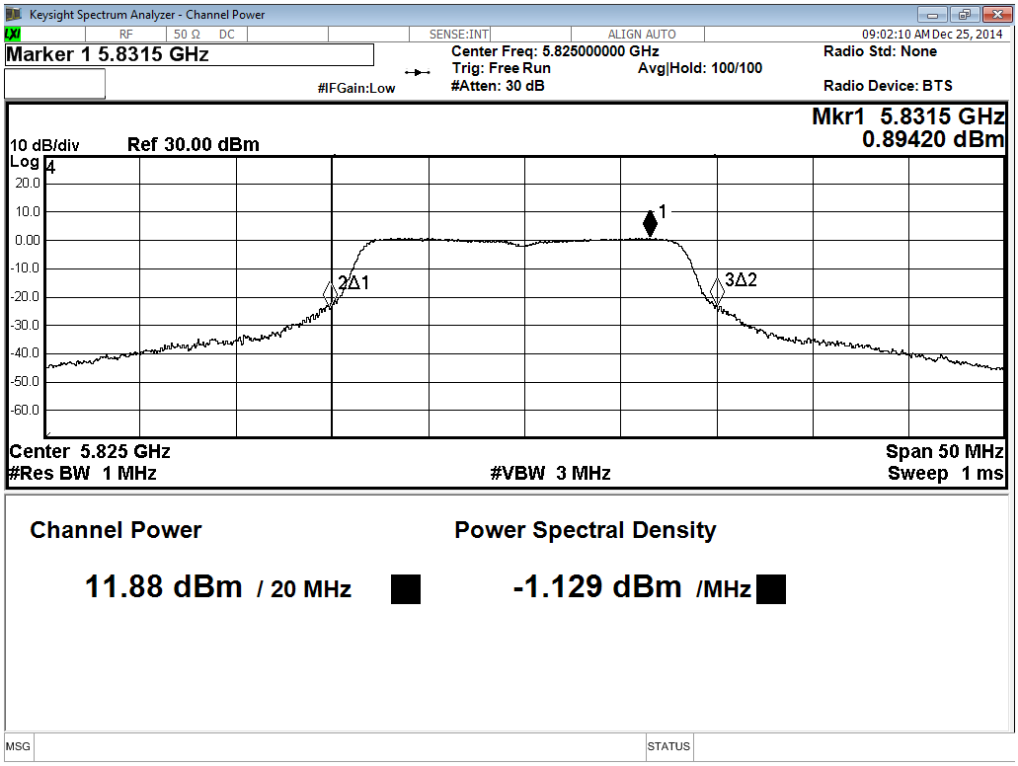
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 149



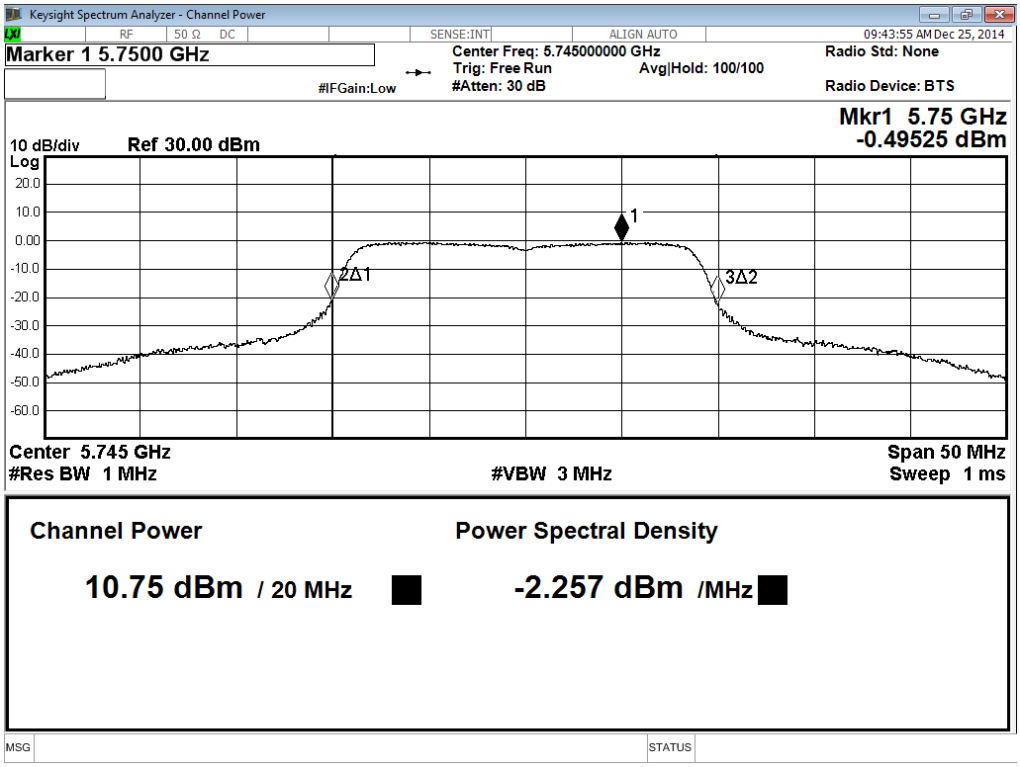
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 157



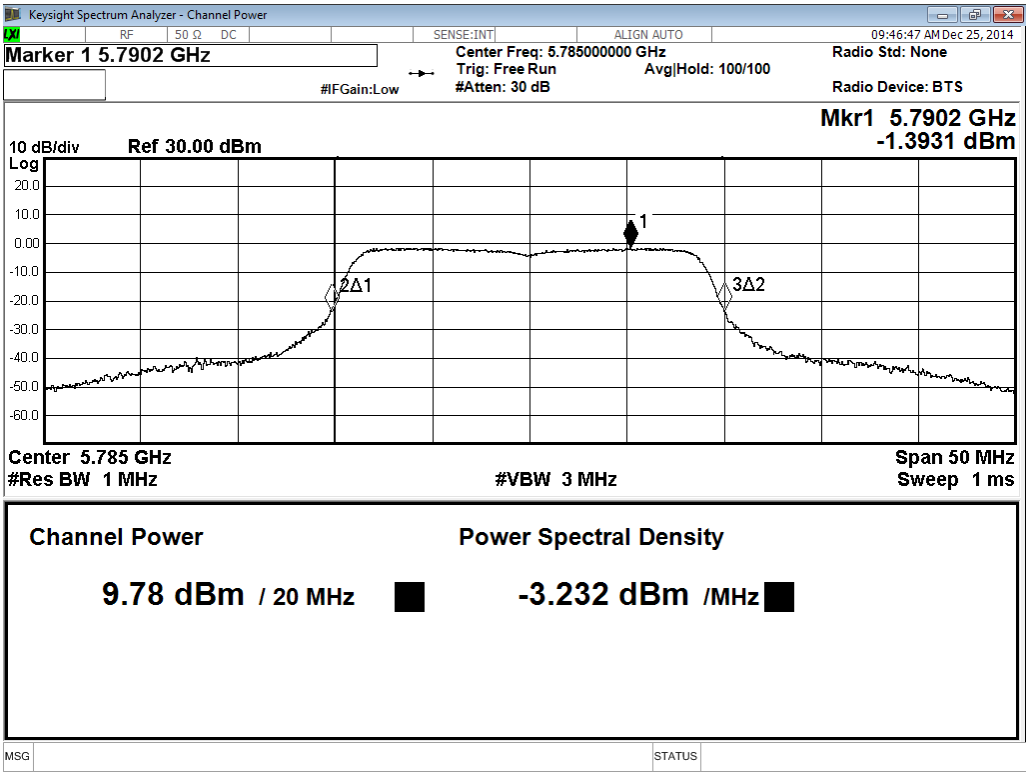
Modulation Standard: 802.11a (6Mbps), ANT B
Channel: 165



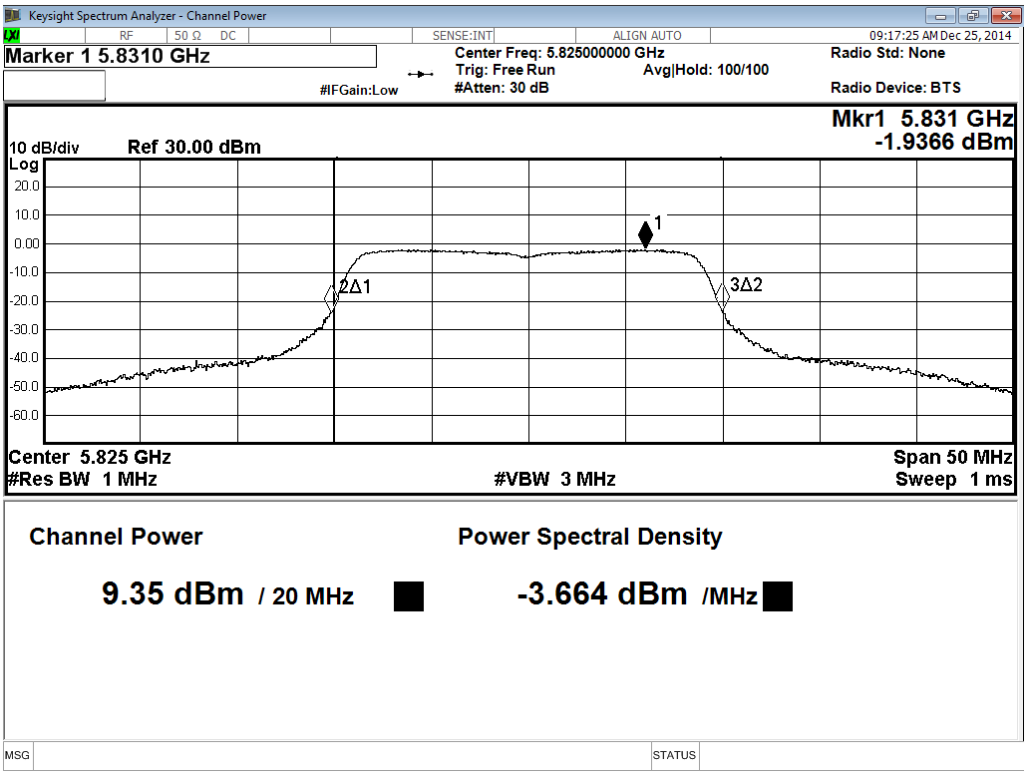
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 149



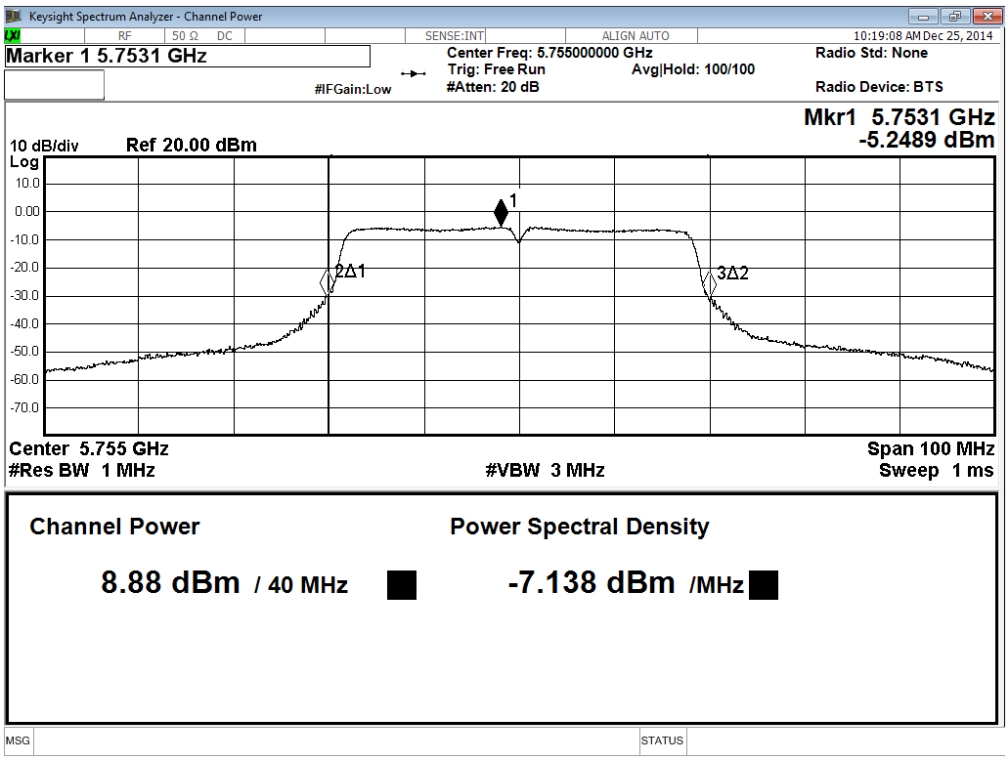
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 157



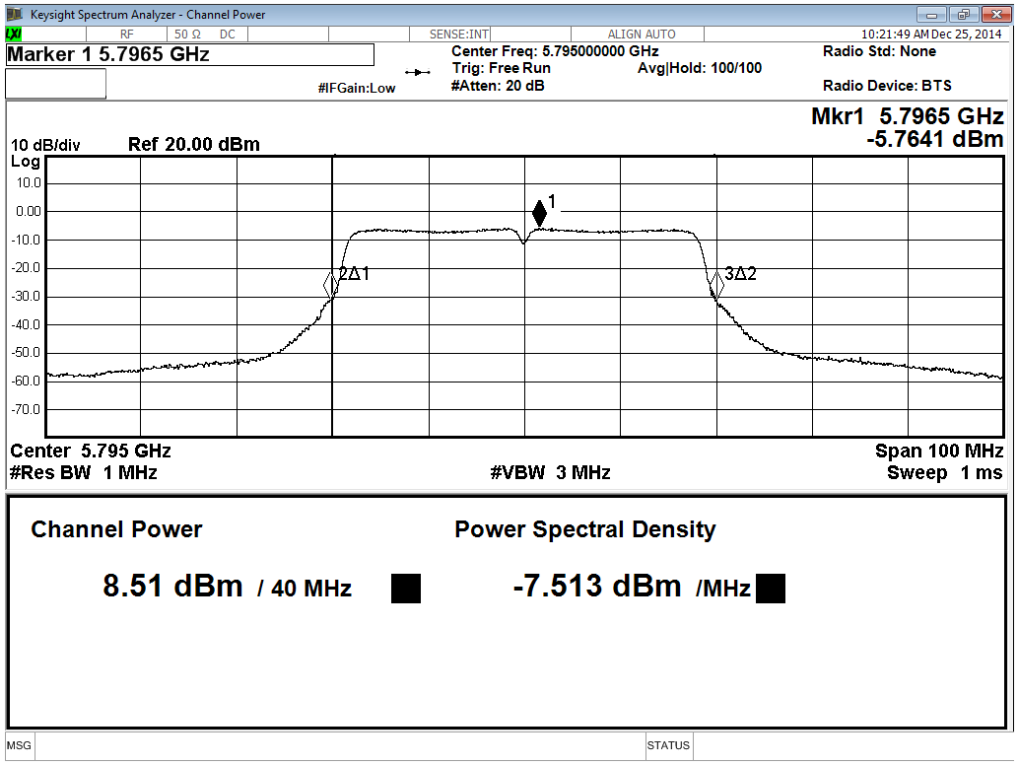
Modulation Standard: 802.11an HT20 (6Mbps), ANT B
Channel: 165



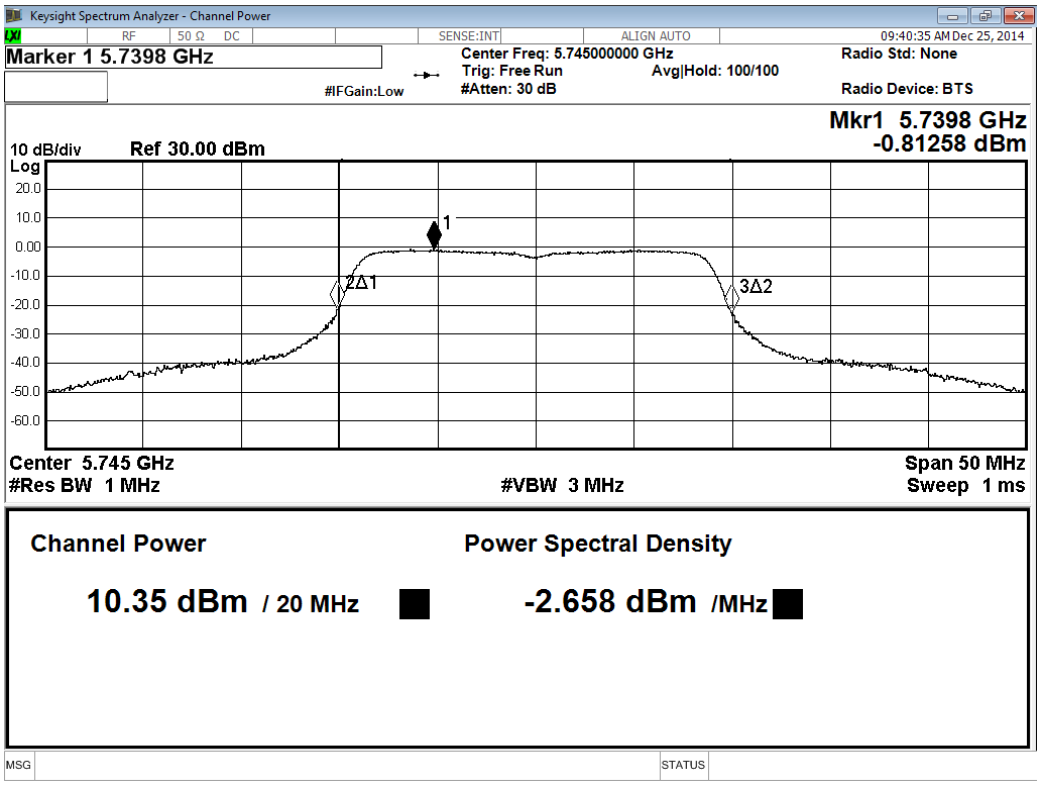
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 151



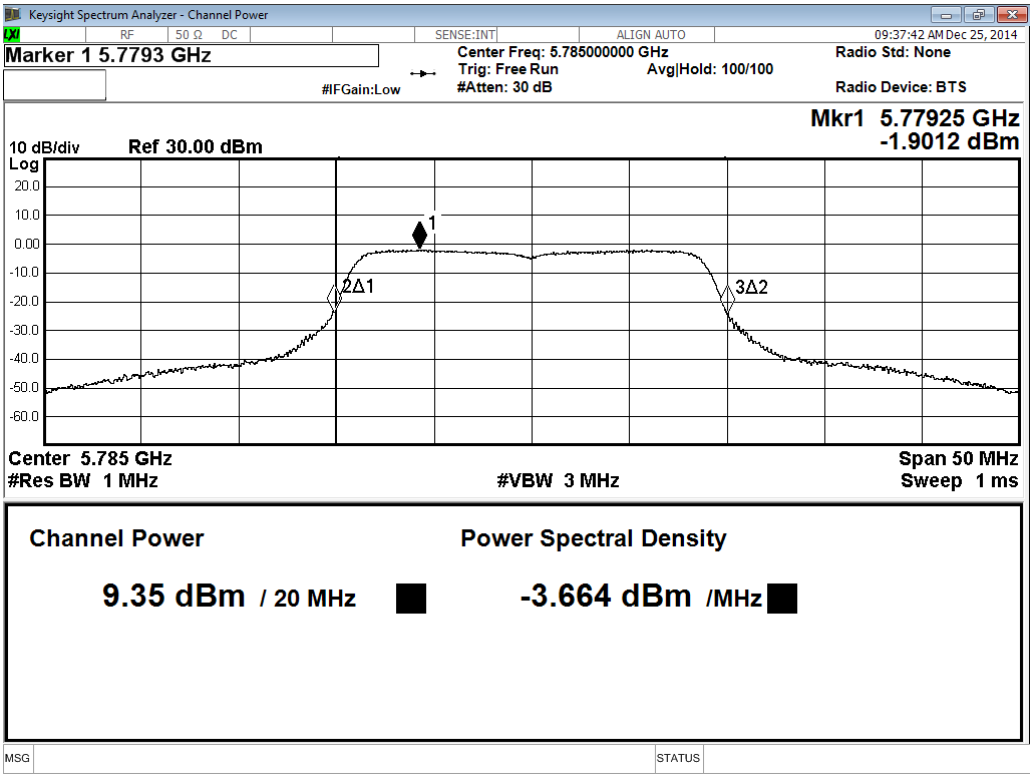
Modulation Standard: 802.11an HT40 (13.5Mbps), ANT B
Channel: 159



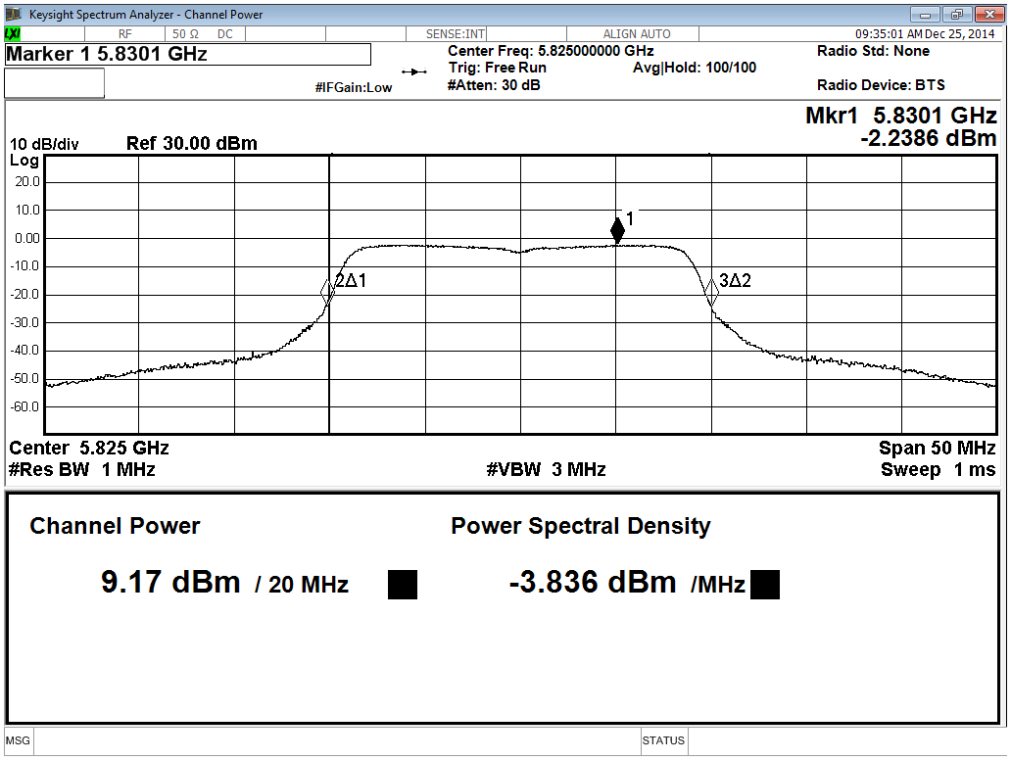
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 149



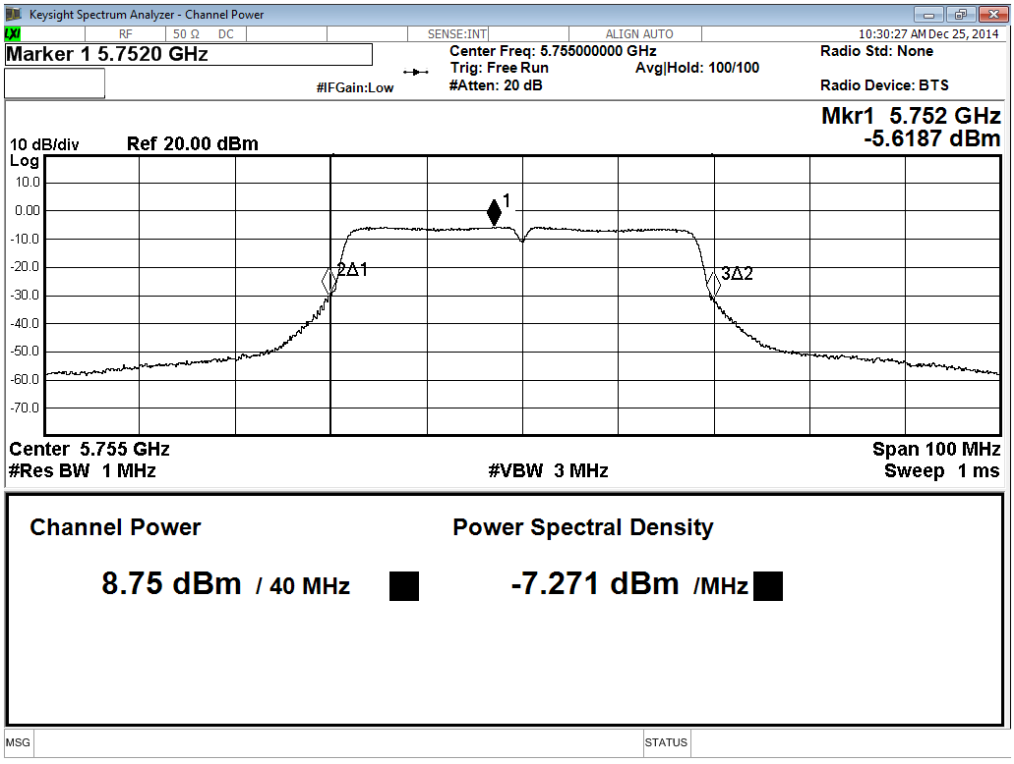
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 157



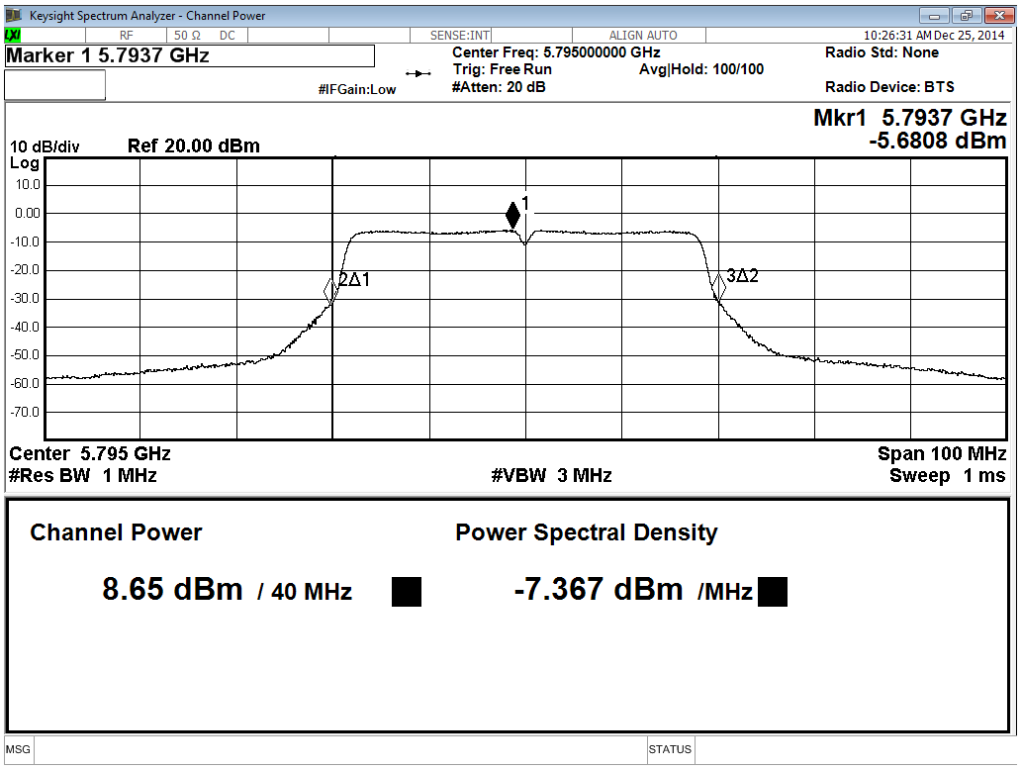
Modulation Standard: 802.11ac VHT20 (54Mbps), ANT B
Channel: 165



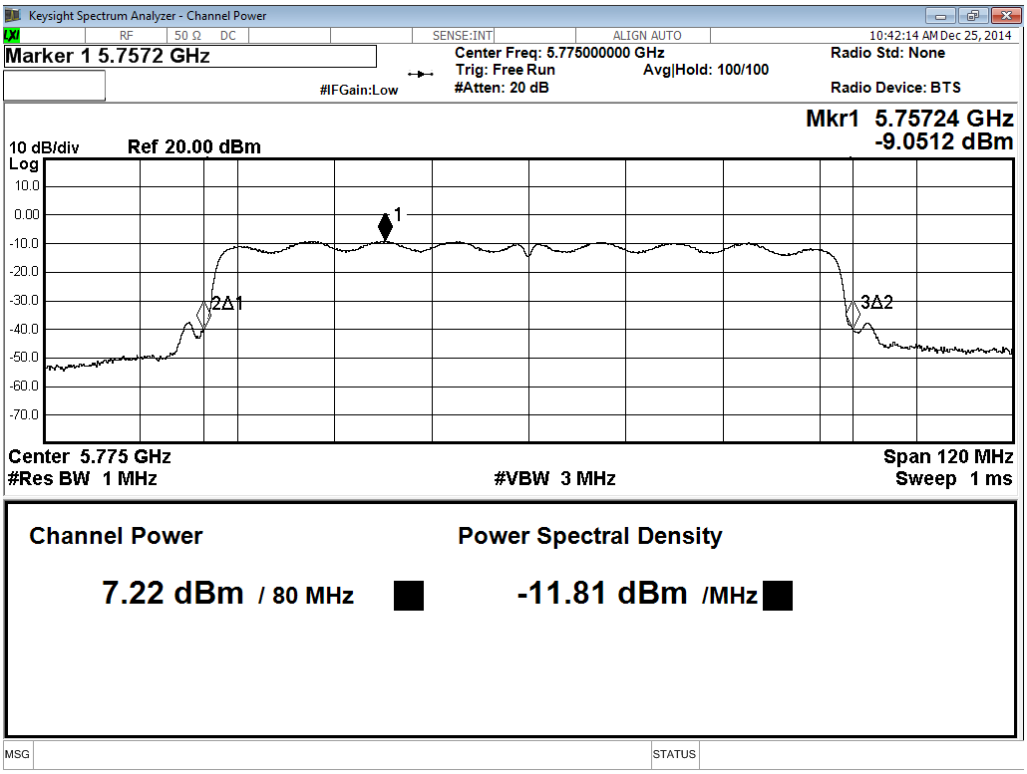
Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 151



Modulation Standard: 802.11ac VHT40 (130Mbps), ANT B
Channel: 159



Modulation Standard: 802.11ac VHT80 (270Mbps), ANT B
Channel: 155



12. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.150
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

**: Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz