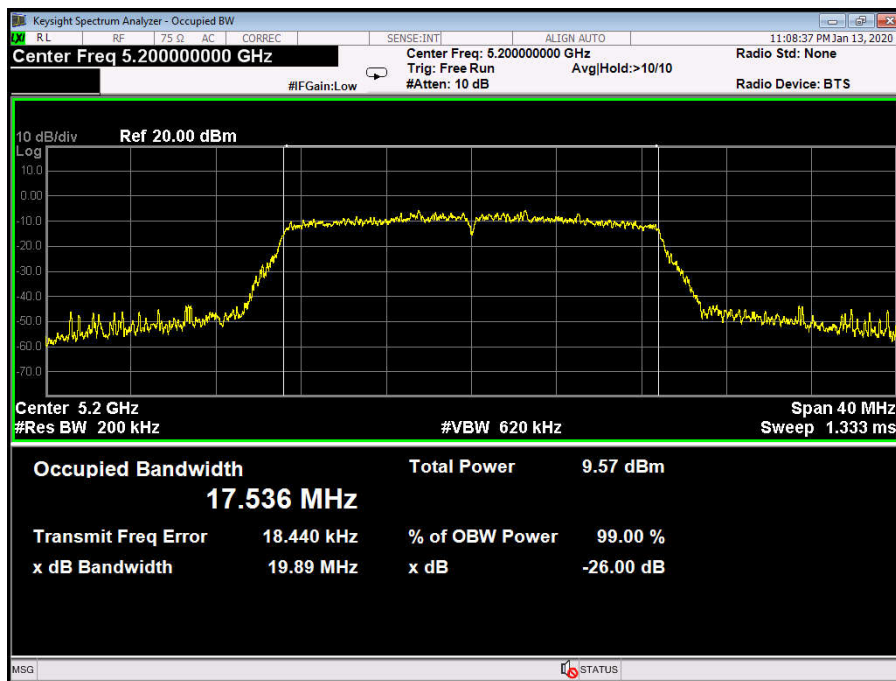


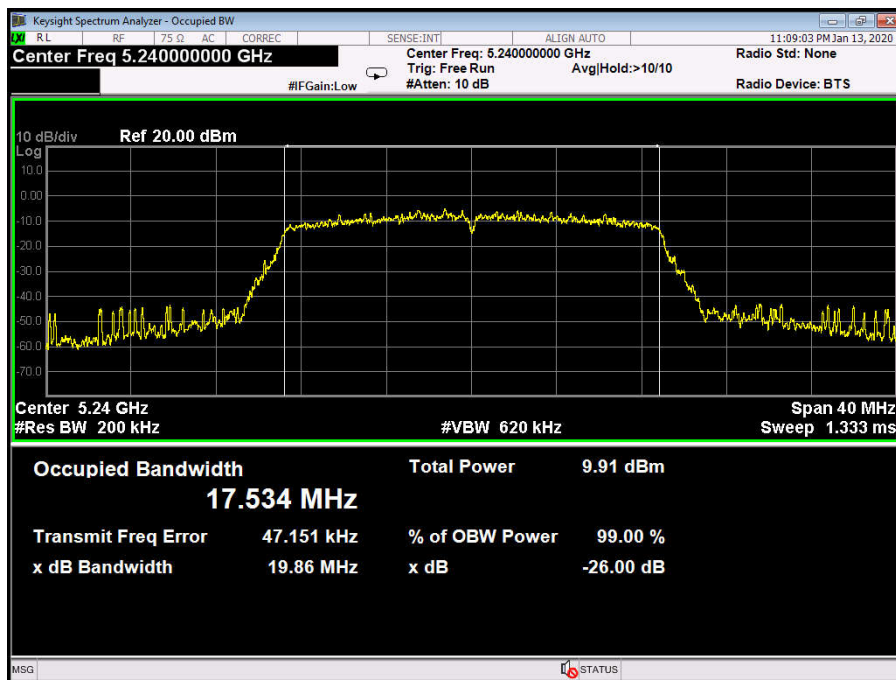
802.11n(HT20) Mode

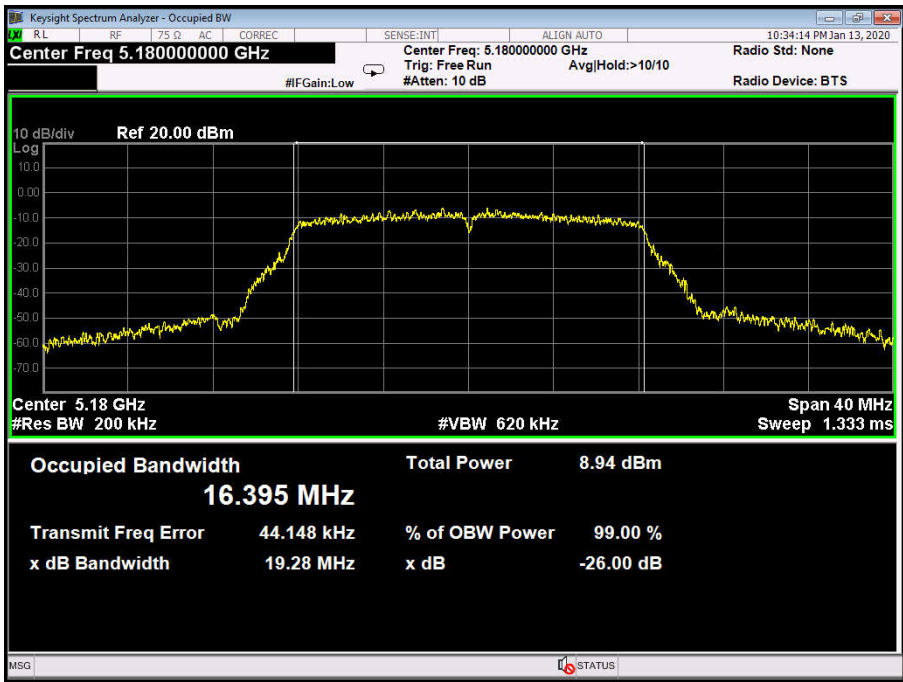
5200 MHz



802.11n(HT20) Mode

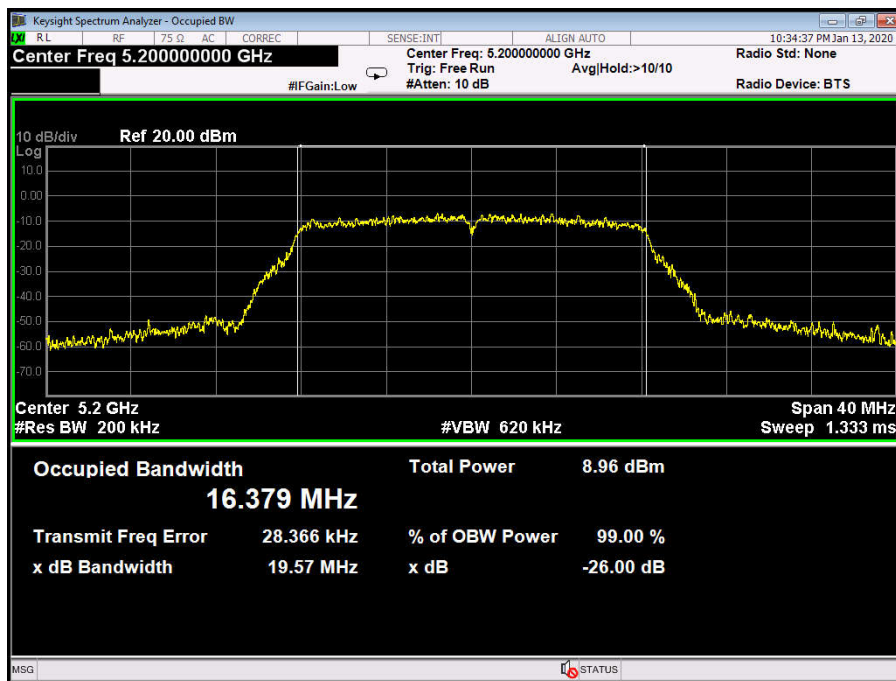
5240 MHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
36	5180	20.67	17.723
40	5200	20.38	17.710
48	5240	20.59	17.718
802.11ac(VHT20) Mode			
5180 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq 5.180000000 GHz Center Freq: 5.180000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS 10 dB/div Ref 20.00 dBm Center 5.18 GHz #Res BW 200 kHz #VBW 620 kHz Span 40 MHz Sweep 1.333 ms Occupied Bandwidth 16.395 MHz Total Power 8.94 dBm Transmit Freq Error 44.148 kHz % of OBW Power 99.00 % x dB Bandwidth 19.28 MHz x dB -26.00 dB			

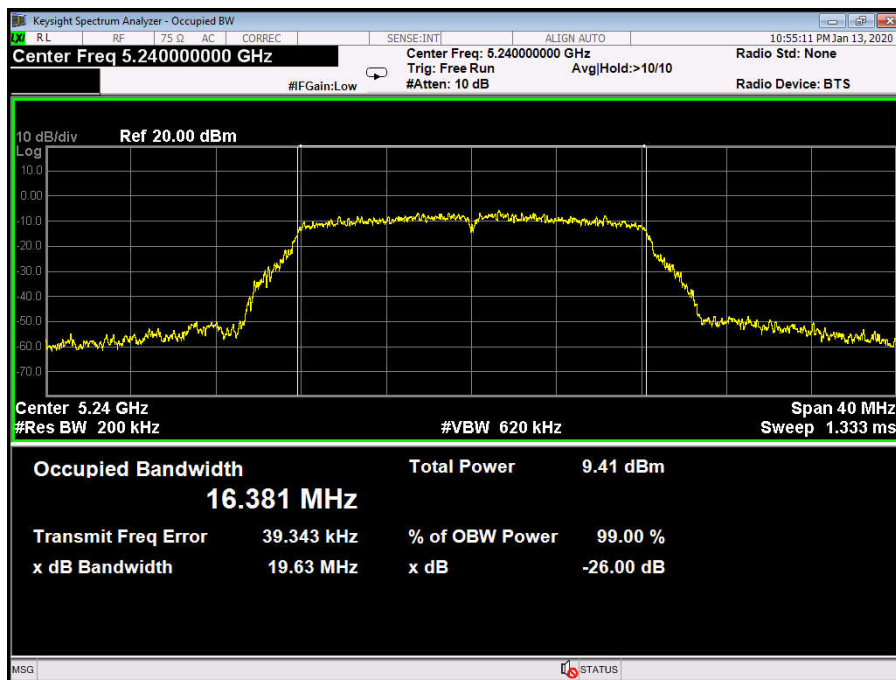
802.11ac(VHT20) Mode

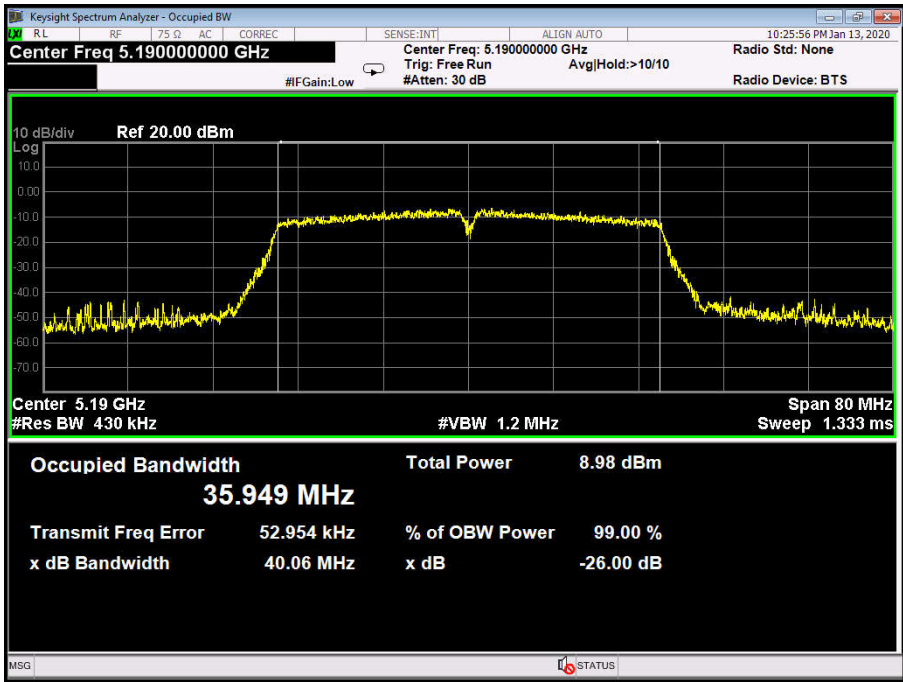
5200 MHz



802.11ac(VHT20) Mode

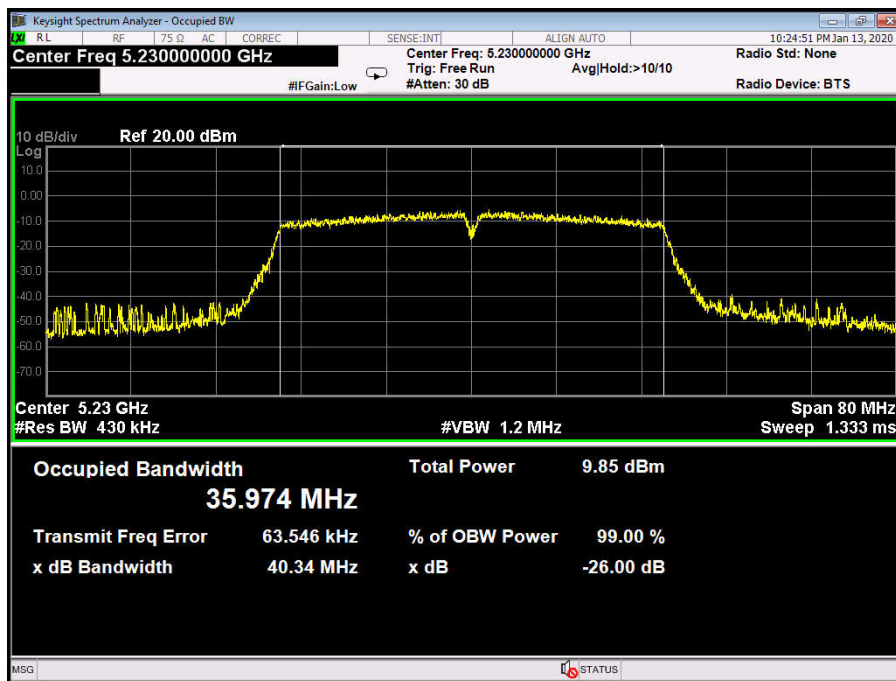
5240 MHz

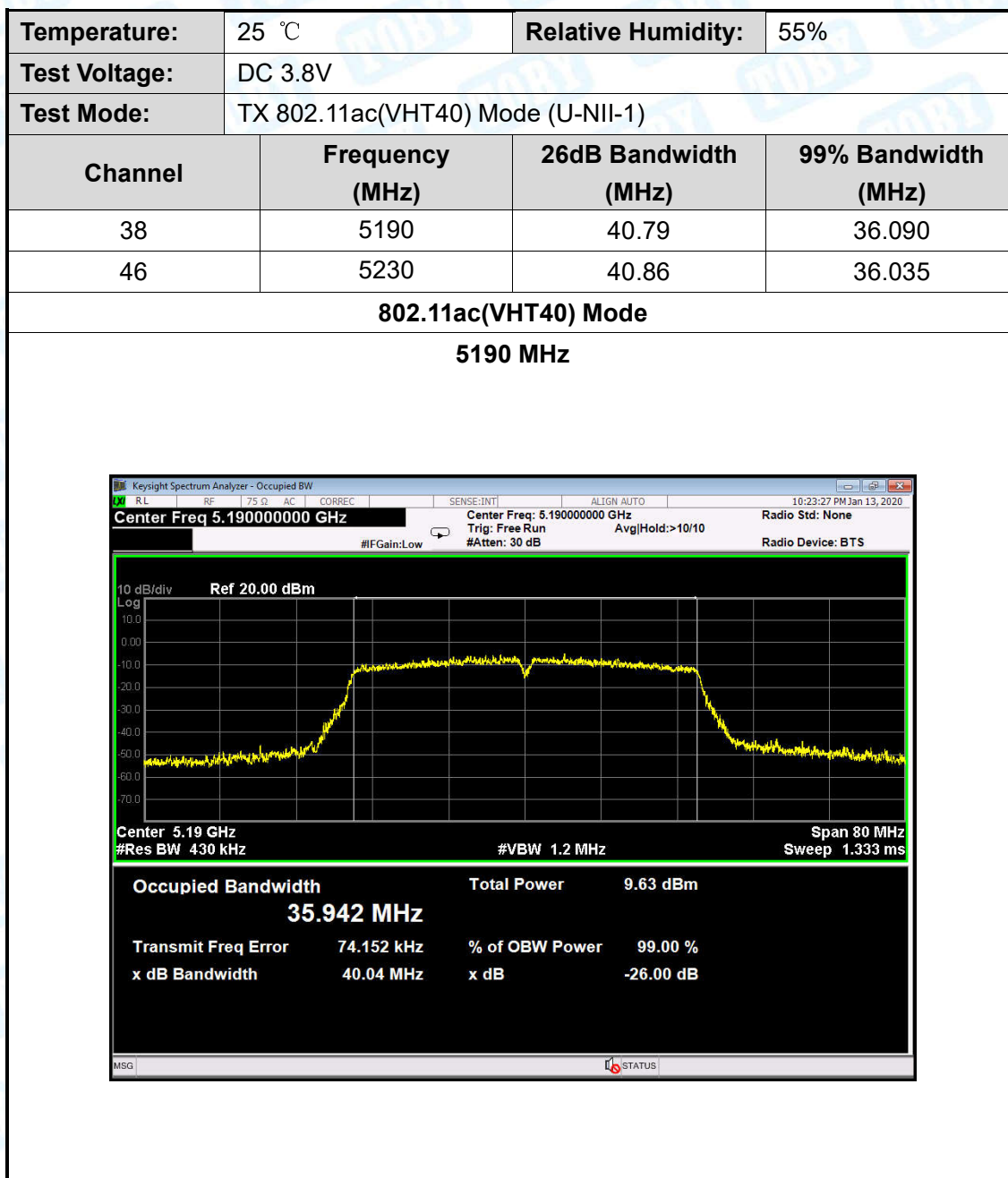


Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11N(HT40) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
38	5190	40.95	36.047
46	5230	46.63	36.087
802.11N(HT40) Mode			
5190 MHz			
			

802.11N(HT40) Mode

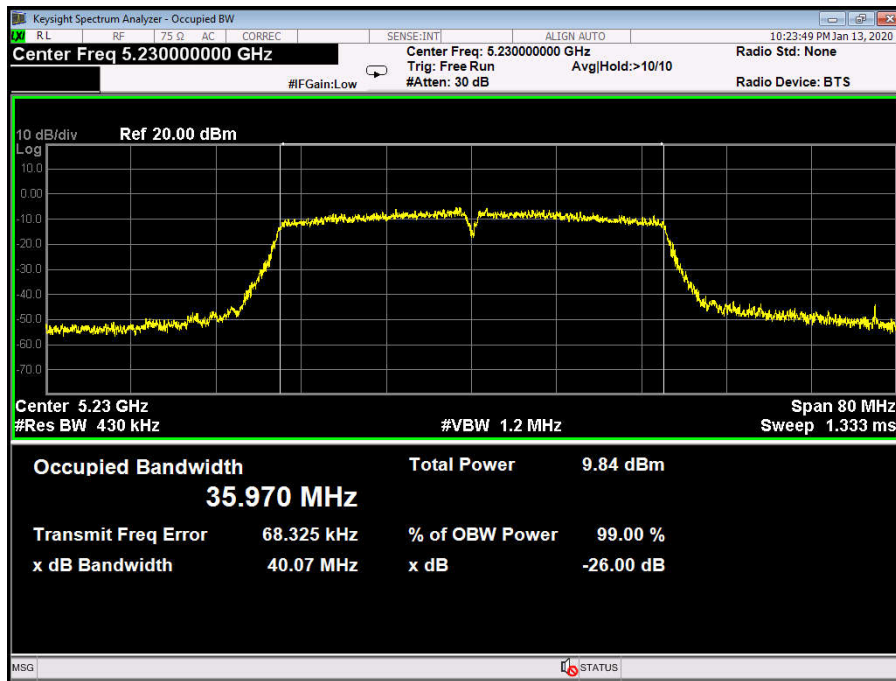
5230 MHz

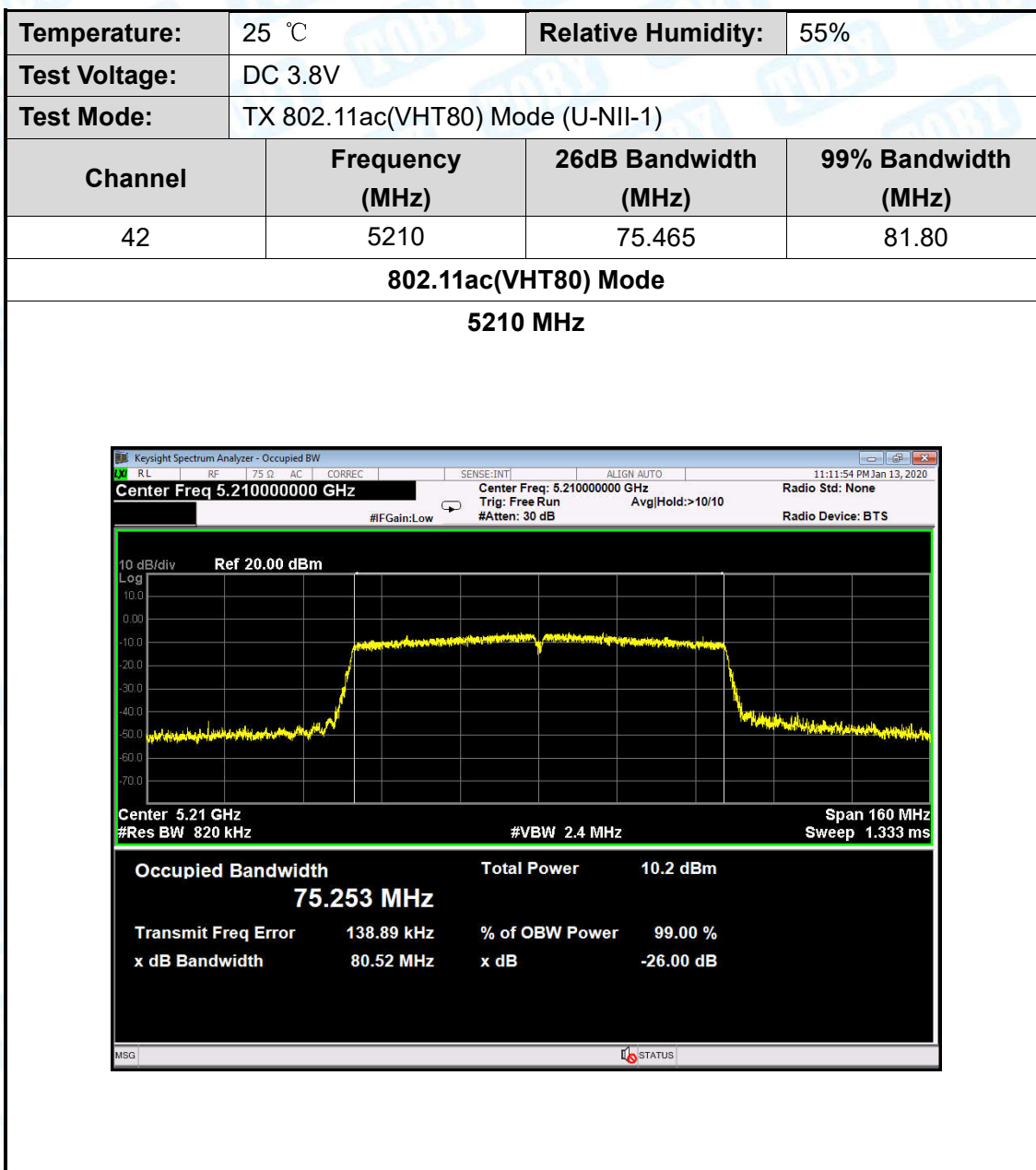


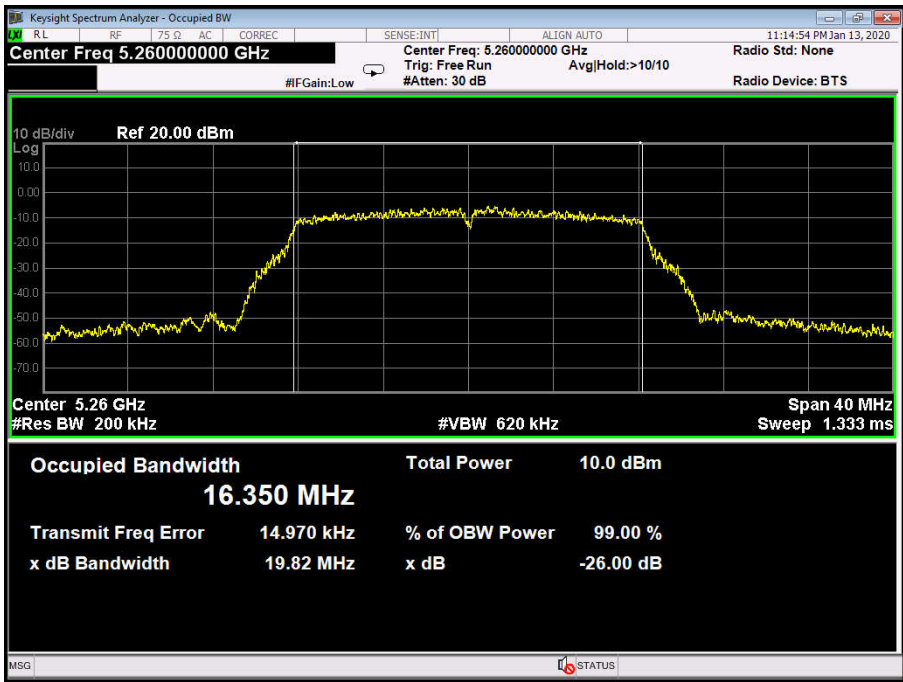


802.11ac(VHT40) Mode

5230 MHz

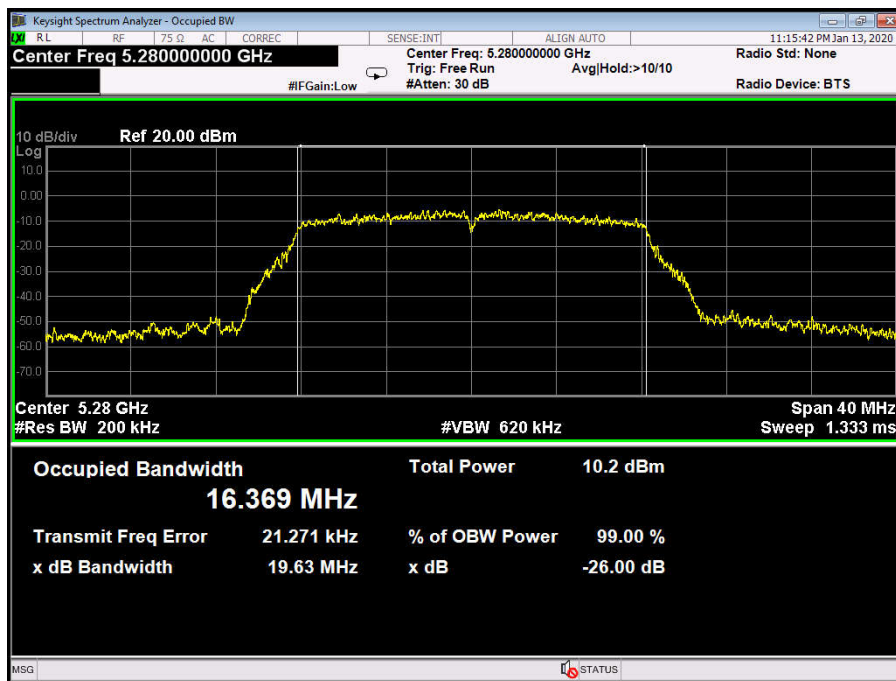




Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11a Mode (U-NII-2A)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
52	5260	20.20	16.672
56	5280	20.04	16.664
64	5320	20.32	16.684
802.11a Mode			
5260 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq 5.260000000 GHz Center Freq: 5.260000000 GHz Trig: Free Run #Gain: Low #Atten: 30 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS 10 dB/div Ref 20.00 dBm Center 5.26 GHz #Res BW 200 kHz #VBW 620 kHz Span 40 MHz Sweep 1.333 ms Occupied Bandwidth 16.350 MHz Total Power 10.0 dBm Transmit Freq Error 14.970 kHz % of OBW Power 99.00 % x dB Bandwidth 19.82 MHz x dB -26.00 dB			

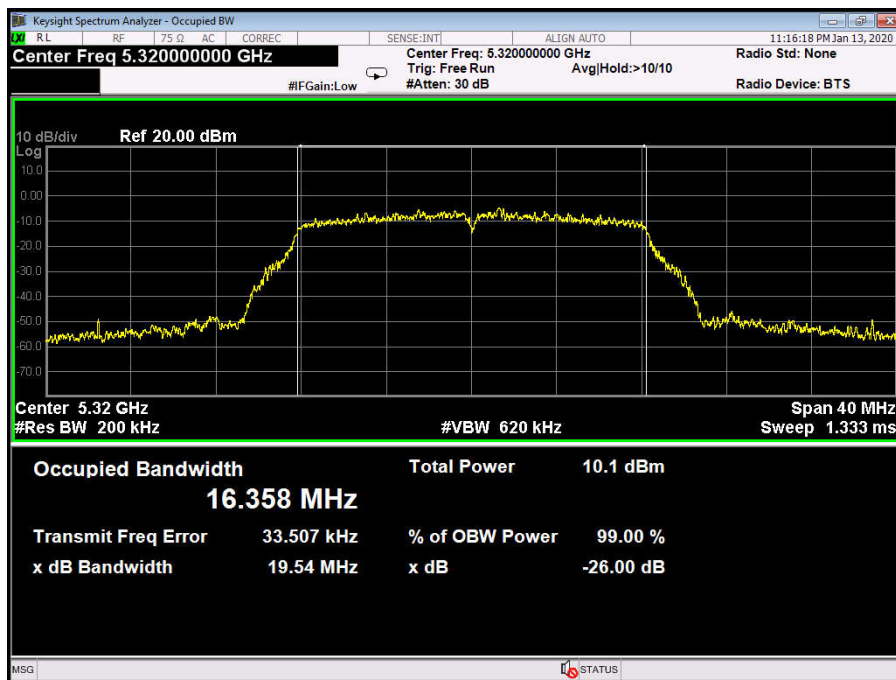
802.11a Mode

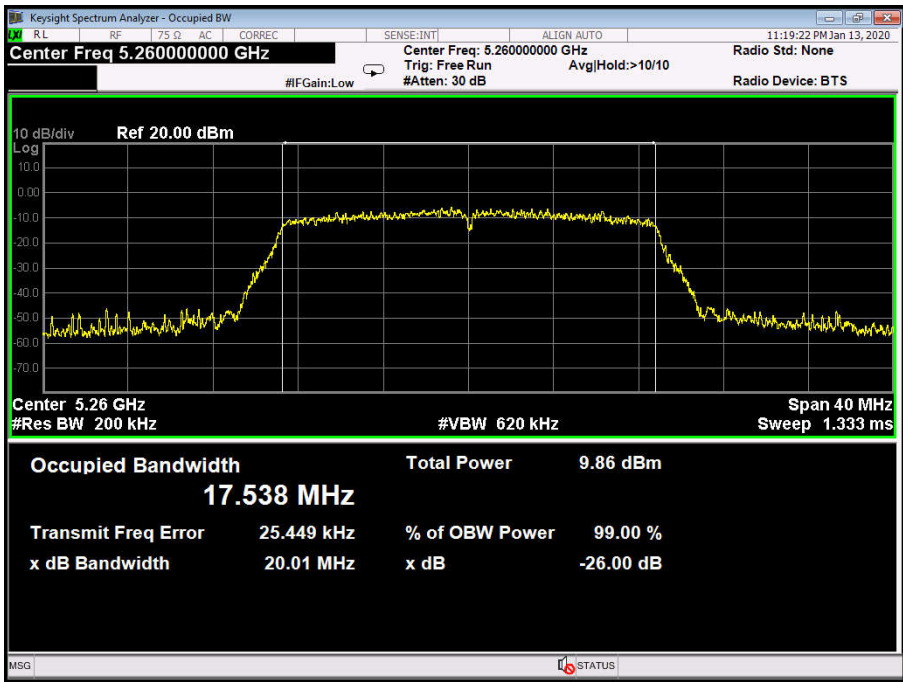
5280 MHz



802.11a Mode

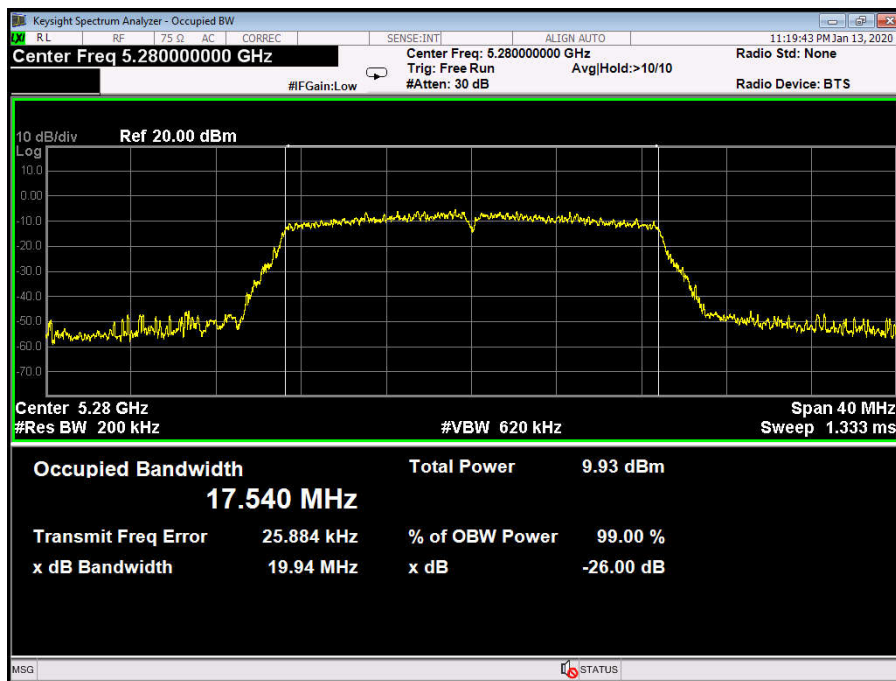
5320 MHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11n(HT20) Mode (U-NII-2A)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
52	5260	22.56	17.766
56	5280	23.76	17.755
64	5320	20.23	17.731
802.11n(HT20) Mode			
5260 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq 5.260000000 GHz Center Freq: 5.260000000 GHz Trig: Free Run #Atten: 30 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS 10 dB/div Ref 20.00 dBm Center 5.26 GHz #Res BW 200 kHz #VBW 620 kHz Span 40 MHz Sweep 1.333 ms Occupied Bandwidth 17.538 MHz Total Power 9.86 dBm Transmit Freq Error 25.449 kHz % of OBW Power 99.00 % x dB Bandwidth 20.01 MHz x dB -26.00 dB			

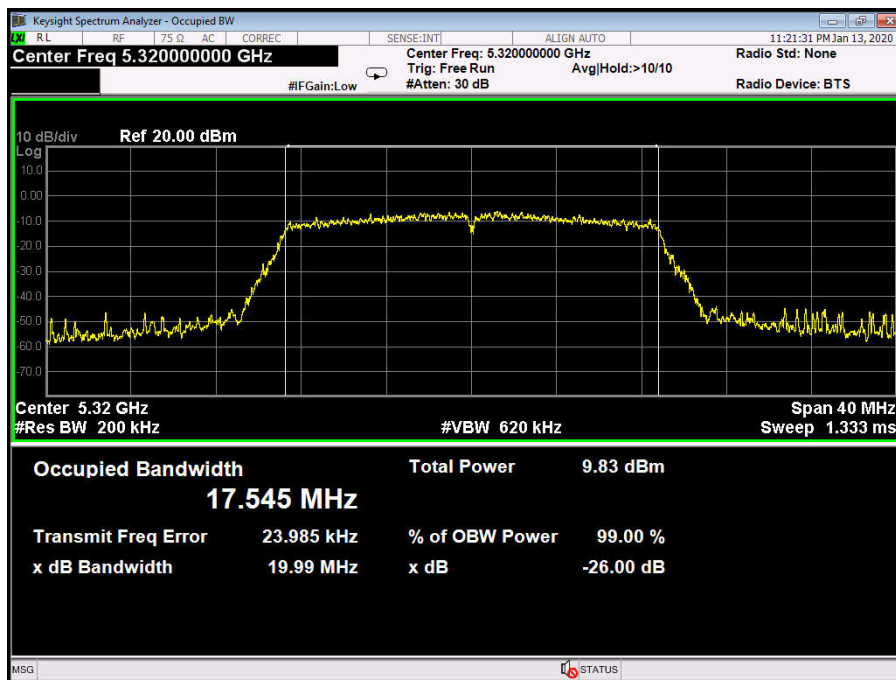
802.11n(HT20) Mode

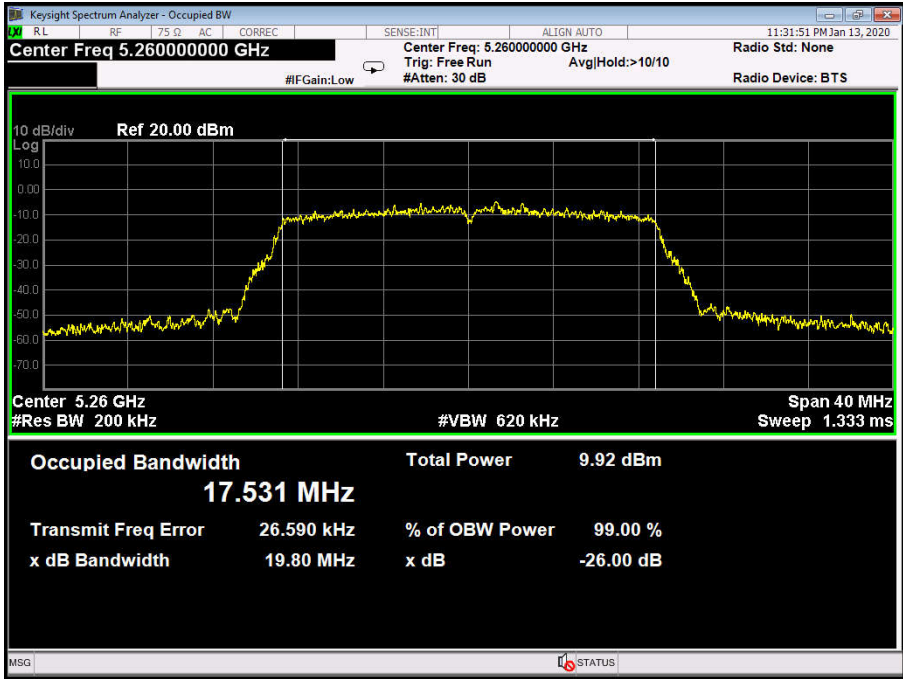
5280 MHz



802.11n(HT20) Mode

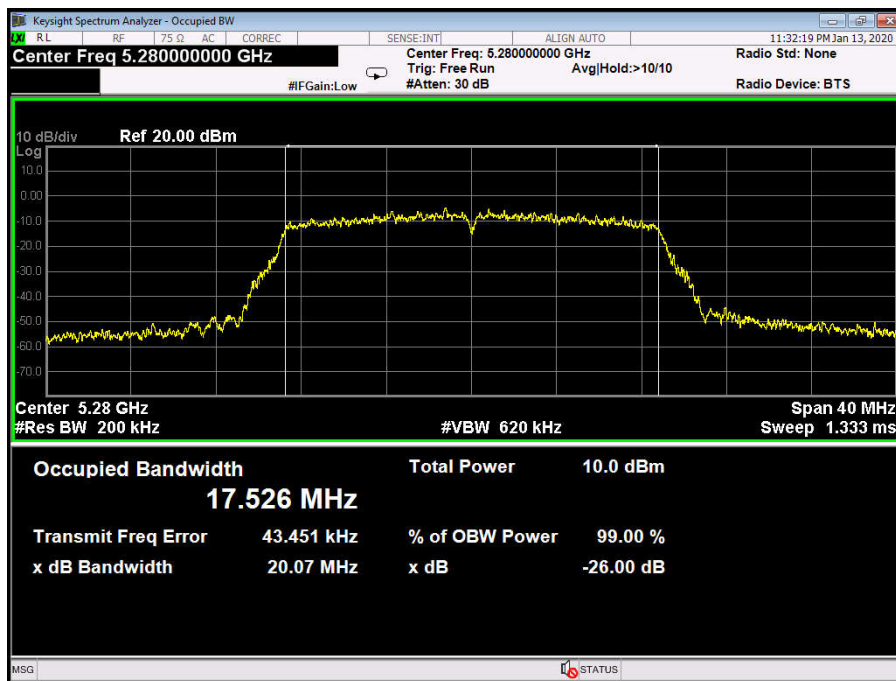
5320 MHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-2A)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
52	5260	20.54	17.694
56	5280	20.54	17.684
64	5320	20.63	17.708
802.11ac(VHT20) Mode			
5260 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq 5.260000000 GHz Center Freq: 5.260000000 GHz Trig: Free Run #Gain: Low #Atten: 30 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS 10 dB/div Ref 20.00 dBm Center 5.26 GHz #Res BW 200 kHz #VBW 620 kHz Span 40 MHz Sweep 1.333 ms Occupied Bandwidth 17.531 MHz Total Power 9.92 dBm Transmit Freq Error 26.590 kHz % of OBW Power 99.00 % x dB Bandwidth 19.80 MHz x dB -26.00 dB			

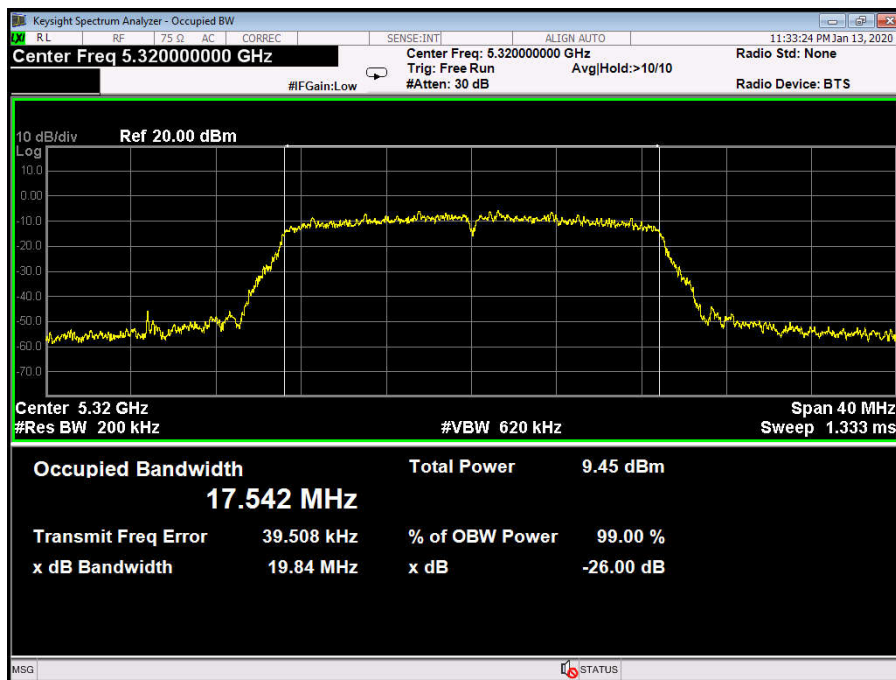
802.11ac(VHT20) Mode

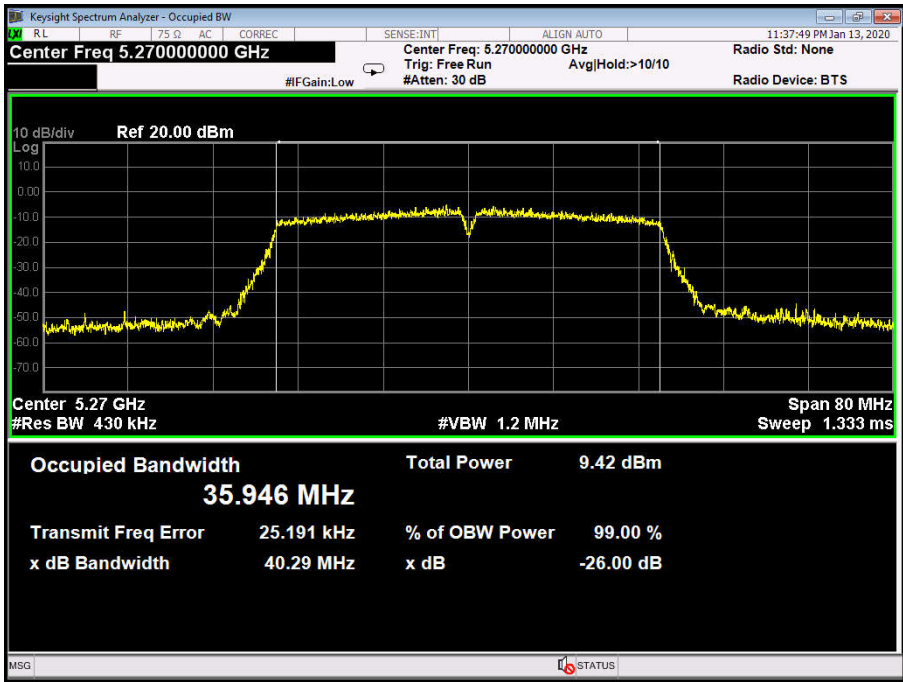
5280 MHz



802.11ac(VHT20) Mode

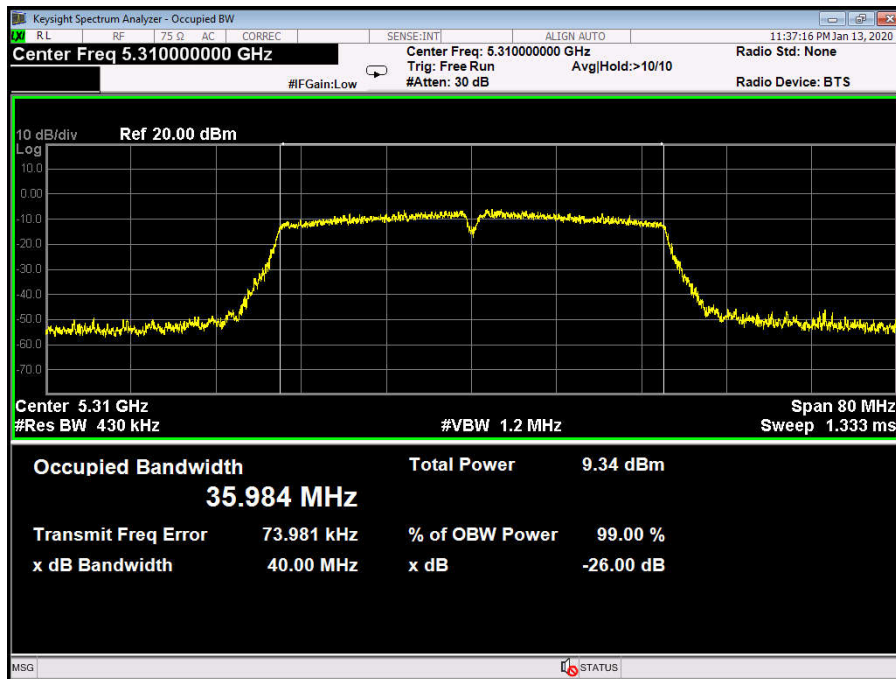
5320 MHz

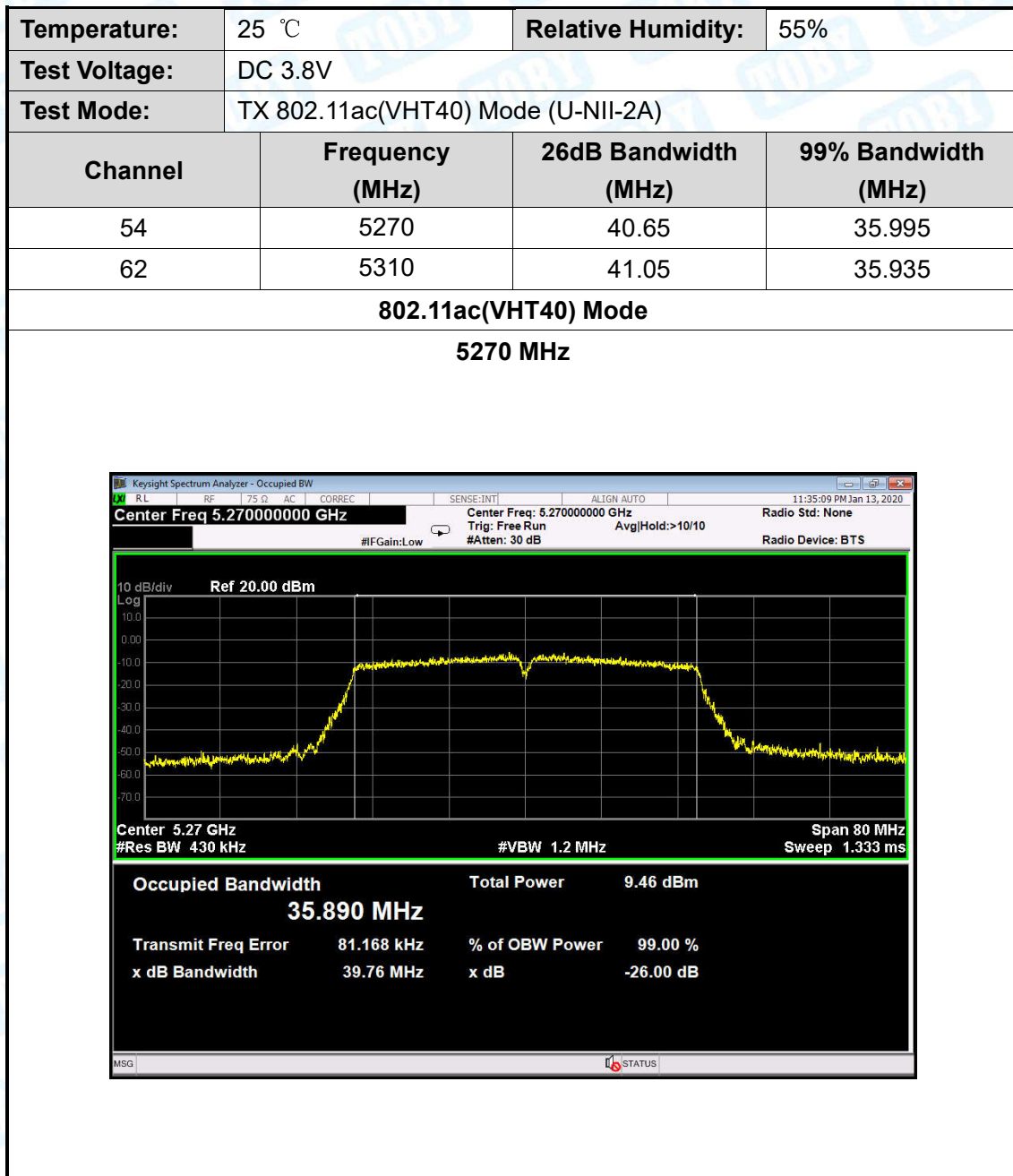


Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11N(HT40) Mode (U-NII-2A)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
54	5270	40.92	36.043
62	5310	40.97	36.004
802.11N(HT40) Mode			
5270 MHz			
			

802.11N(HT40) Mode

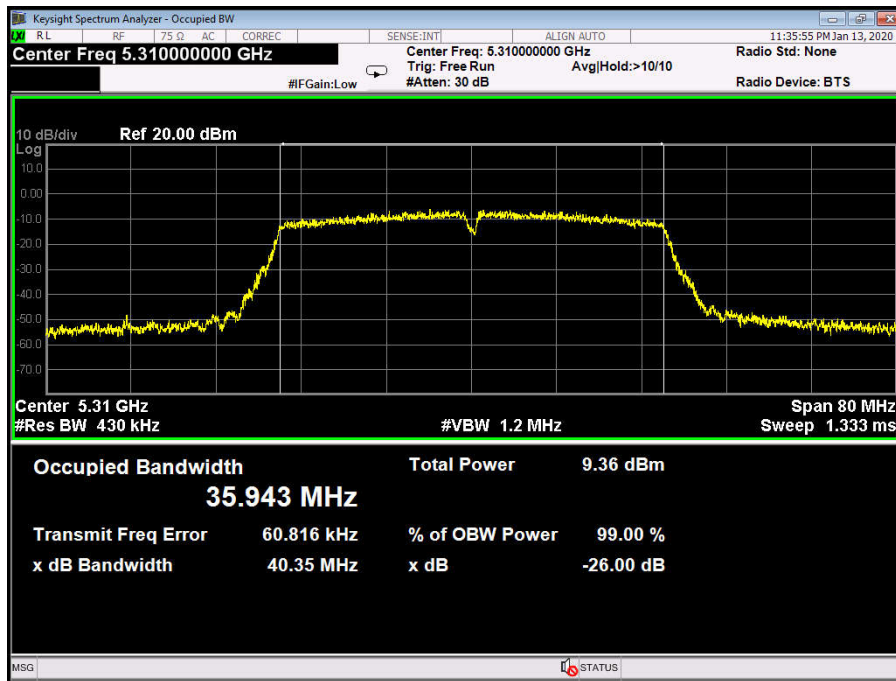
5310 MHz

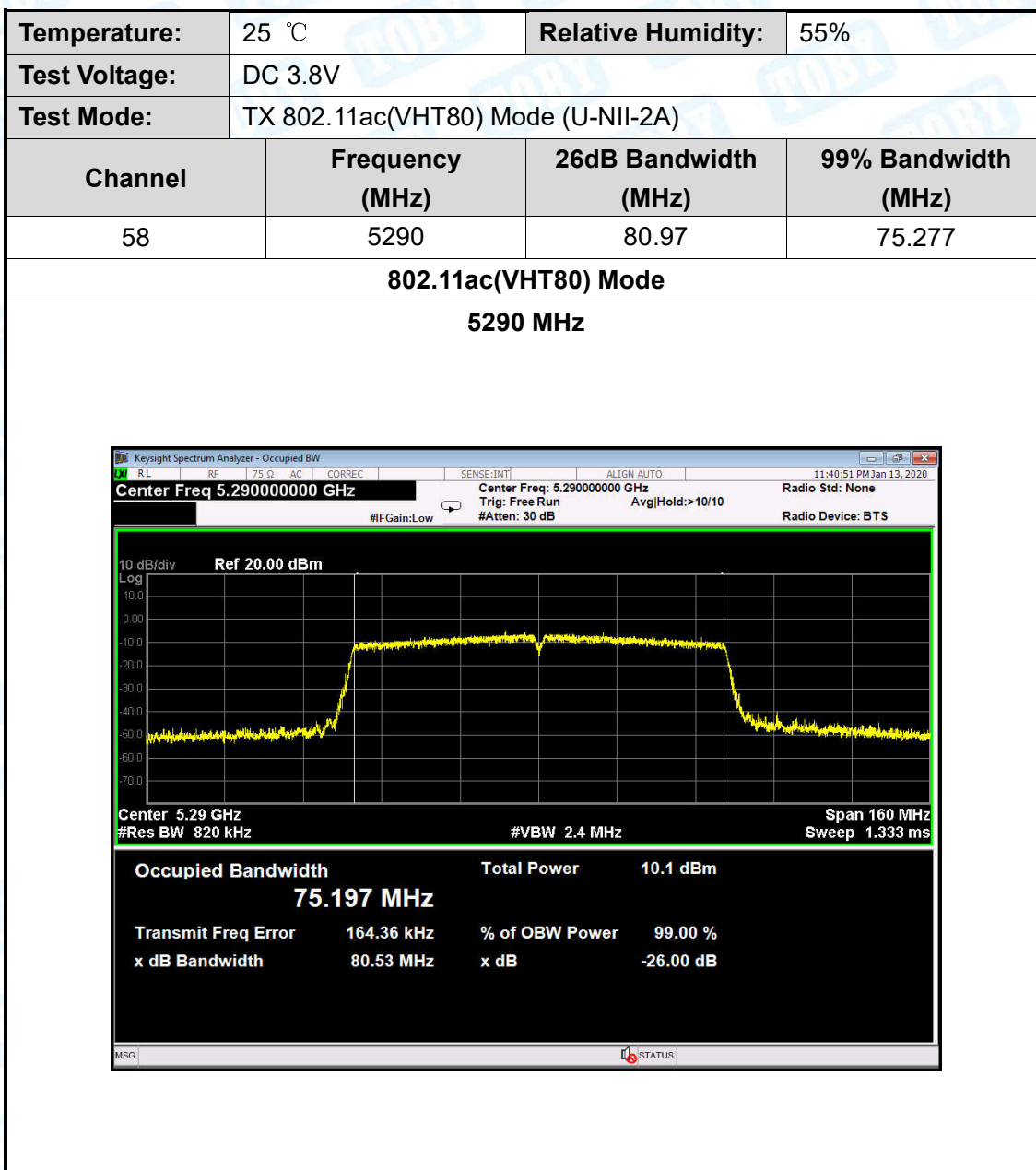


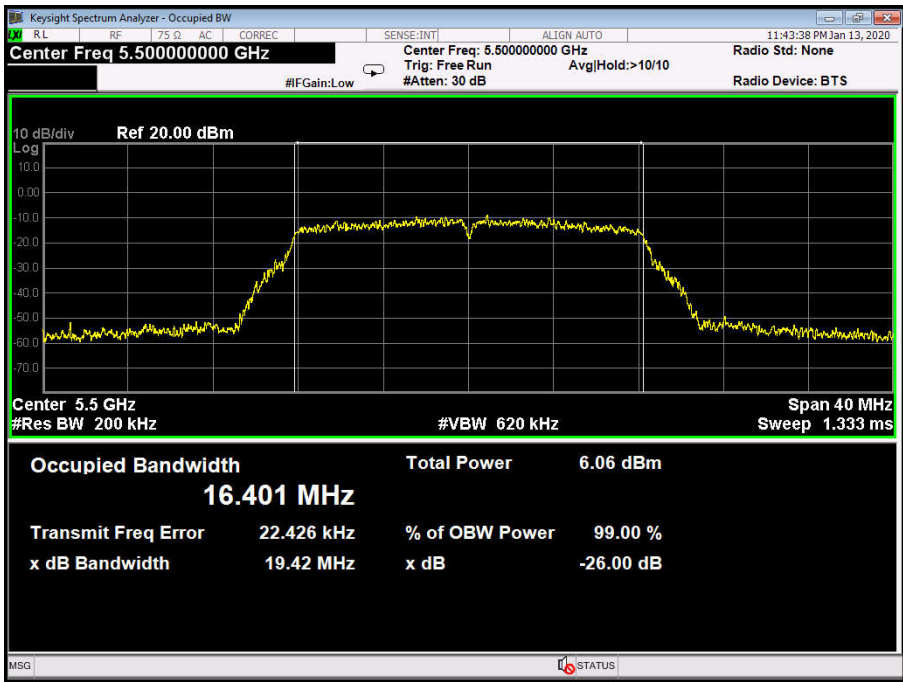


802.11ac(VHT40) Mode

5310 MHz

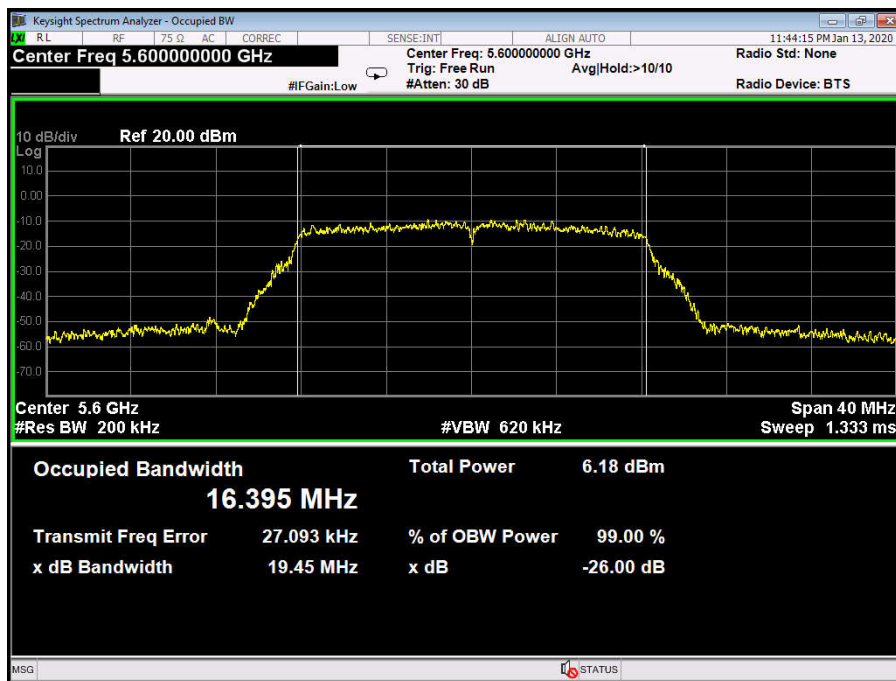




Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11a Mode (U-NII-2C)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
100	5500	19.42	16.401
116	5600	19.45	16.395
144	5700	19.29	16.397
802.11a Mode			
5500 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq 5.500000000 GHz Center Freq: 5.500000000 GHz Trig: Free Run #Atten: 30 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS 10 dB/div Ref 20.00 dBm Center 5.5 GHz #Res BW 200 kHz #VBW 620 kHz Span 40 MHz Sweep 1.333 ms Occupied Bandwidth 16.401 MHz Total Power 6.06 dBm Transmit Freq Error 22.426 kHz % of OBW Power 99.00 % x dB Bandwidth 19.42 MHz x dB -26.00 dB			

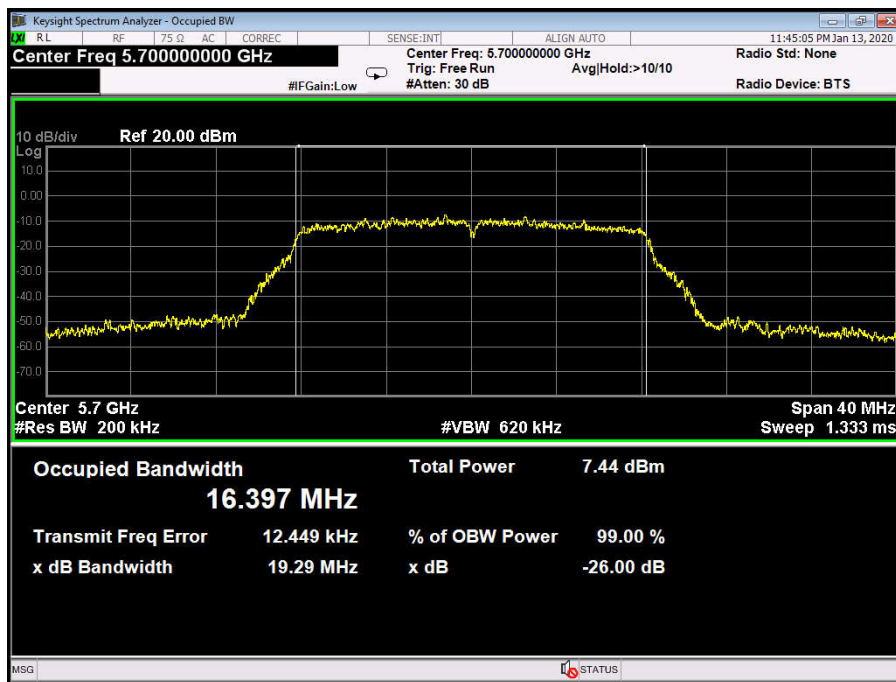
802.11a Mode

5600 MHz



802.11a Mode

5700 MHz



Temperature:	25 °C	Relative Humidity:	55%	
Test Voltage:	DC 3.8V			
Test Mode:	TX 802.11a Mode (U-NII-2C)			
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
144	5720	15.11	----	13.428
		----	3.265	3.9283
802.11a Mode				
5720 MHz Straddle 5.47-5.725GHz				

Keysight Spectrum Analyzer - Occupied BW

✓

RL

RF

75 Ω

AC

CORREC

SENSE:INTI

ALIGN: AUTO

01:56:49 AM Jan 09, 2020

VBW 1.2000 MHz

#F Gain: Low

Center Freq: 5.705000000 GHz

Trig: Free Run

Avg/Hold: >10/10

Radio Std: None

Radio Device: BTS

#Atten: 20 dB

10 dB/div

Ref 20.00 dBm

Log

10.0

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

-70.0

Center 5.705 GHz

#Res BW 200 kHz

#VBW 620 kHz

Span 40 MHz

Sweep 1 ms

Occupied Bandwidth

13.428 MHz

Total Power

6.84 dBm

Transmit Freq Error

13.229 MHz

% of OBW Power

99.00 %

x dB Bandwidth

15.11 MHz

x dB

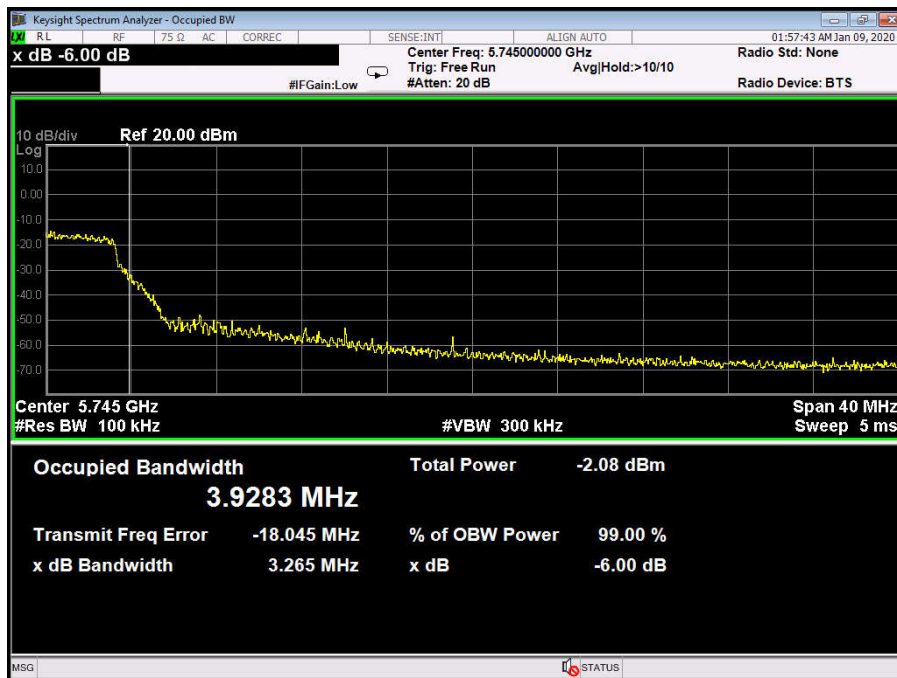
-26.00 dB

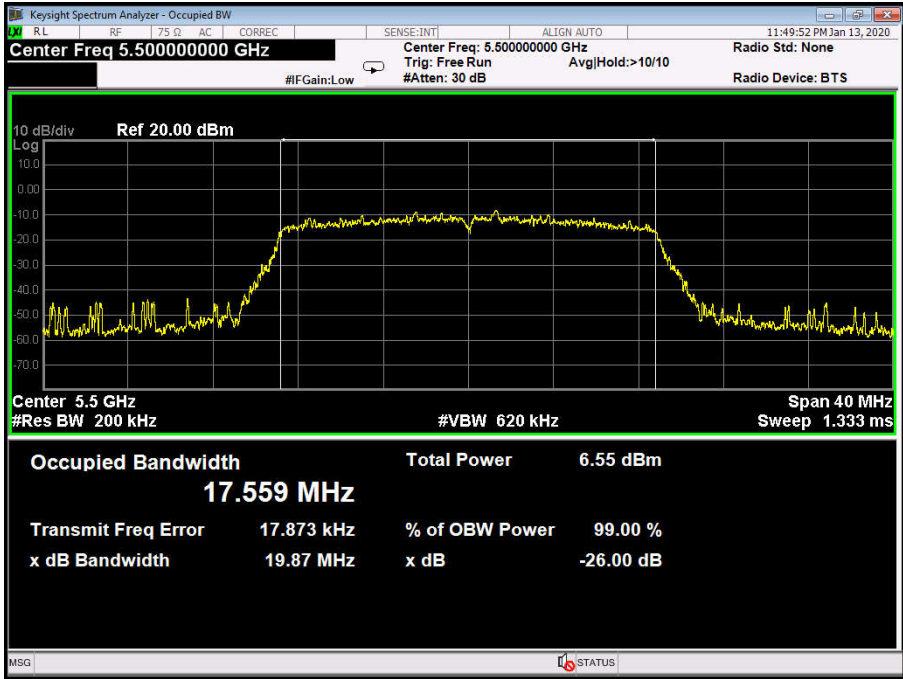
MSG

STATUS

802.11a Mode

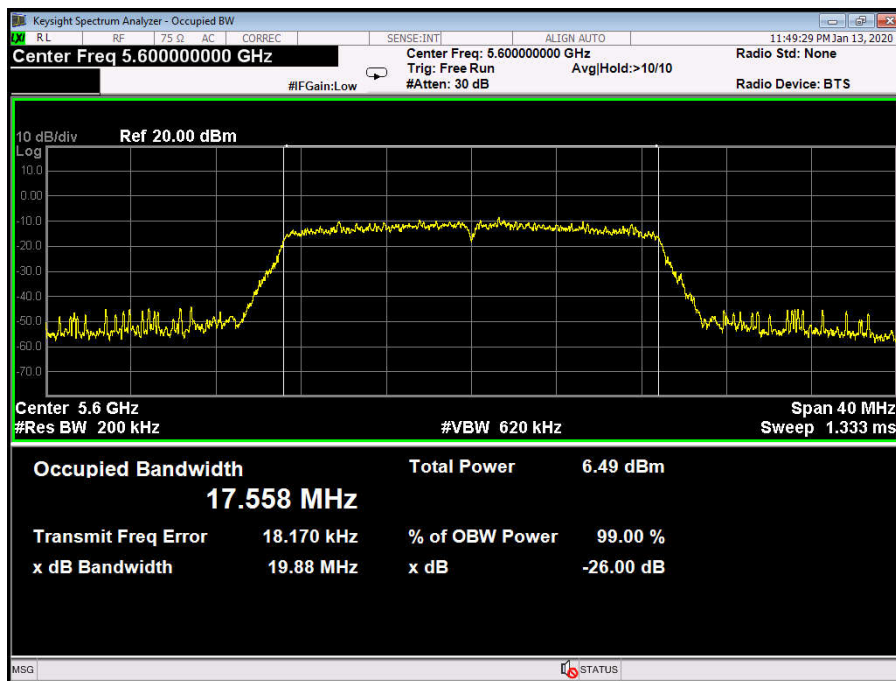
5720 MHz Straddle 5.725-5.85GHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11n(HT20) Mode (U-NII-2C)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
100	5500	19.87	17.559
116	5600	19.88	17.558
144	5700	20.01	17.522
802.11n(HT20) Mode			
5500 MHz			
			

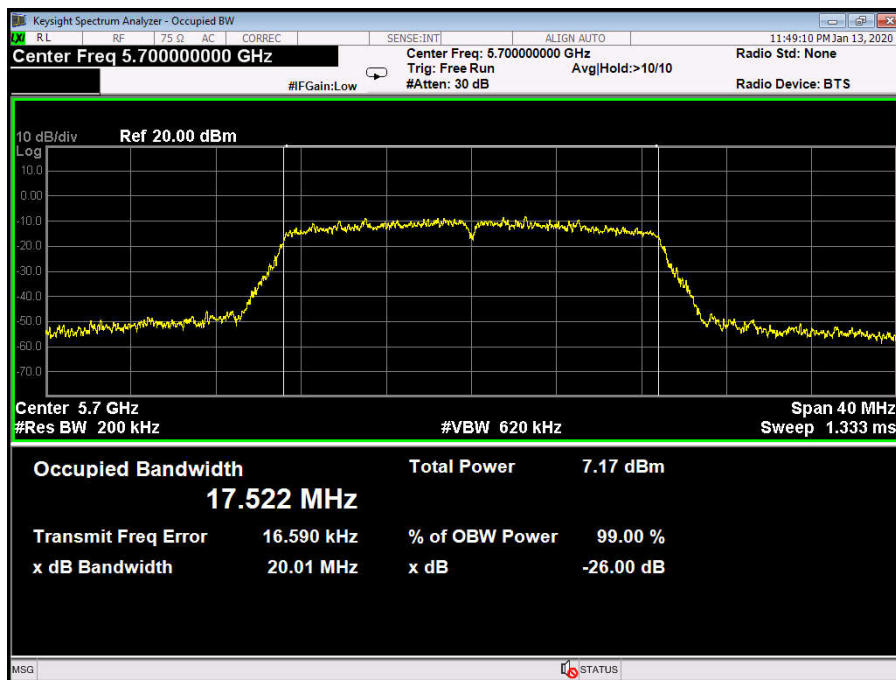
802.11n(HT20) Mode

5600 MHz



802.11n(HT20) Mode

5700 MHz



Temperature:	25 °C	Relative Humidity:		55%
Test Voltage:	DC 3.8V			
Test Mode:	TX 802.11n(HT20) Mode (U-NII-2C)			
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
144	5720	15.15	----	13.803
		----	3.876	4.2248
802.11n(HT20) Mode				
5720 MHz Straddle 5.47-5.725GHz				

Keysight Spectrum Analyzer - Occupied BW

RL

RF

75 Ω

AC

CORREC

SENSE:INT

ALIGN: AUTO

01:59:14 AM Jan 09, 2020

Center Freq 5.705000000 GHz

Center Freq: 5.705000000 GHz

Trig: Free Run

Avg/Hold: >10/10

Radio Std: None

#FGain: Low

#Atten: 20 dB

Radio Device: BTS

10 dB/div

Ref 20.00 dBm

Log

10.0

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

-70.0

Center 5.705 GHz

#Res BW 200 kHz

#VBW 620 kHz

Span 40 MHz

Sweep 1 ms

Occupied Bandwidth

13.803 MHz

Total Power

5.34 dBm

Transmit Freq Error

13.043 MHz

% of OBW Power

99.00 %

x dB Bandwidth

15.15 MHz

x dB

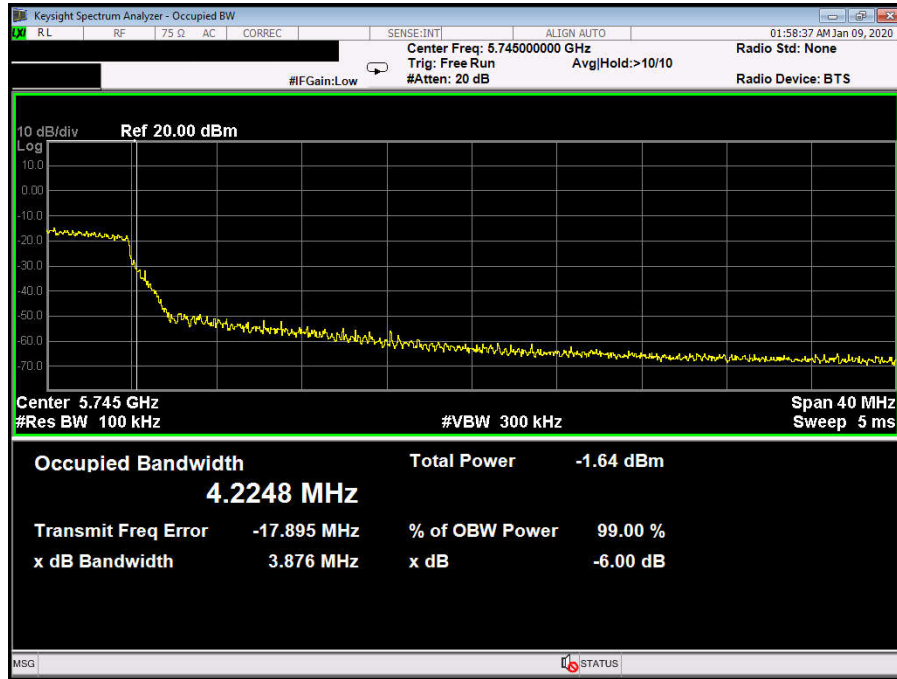
-26.00 dB

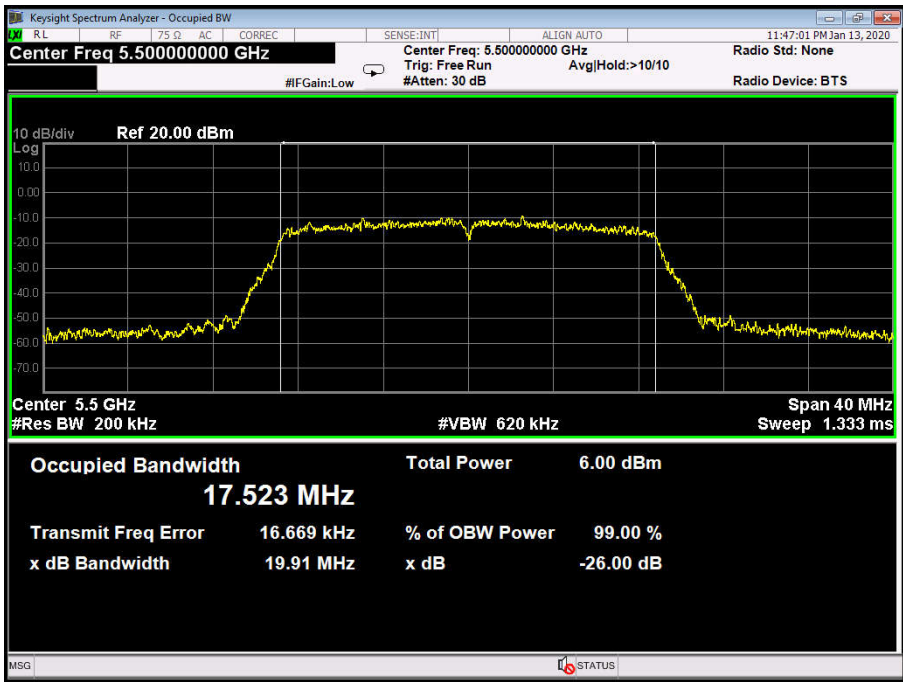
MSG

STATUS

802.11n(HT20) Mode

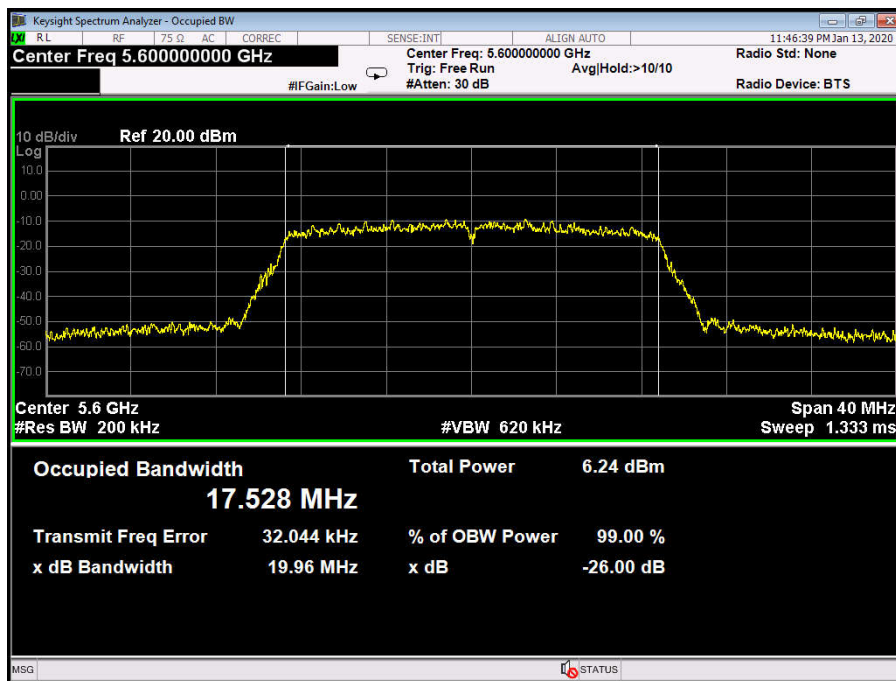
5720 MHz Straddle 5.725-5.85GHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-2C)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
100	5500	19.91	17.523
116	5600	19.96	17.528
144	5700	20.03	17.573
802.11ac(VHT20) Mode			
5500 MHz			
			

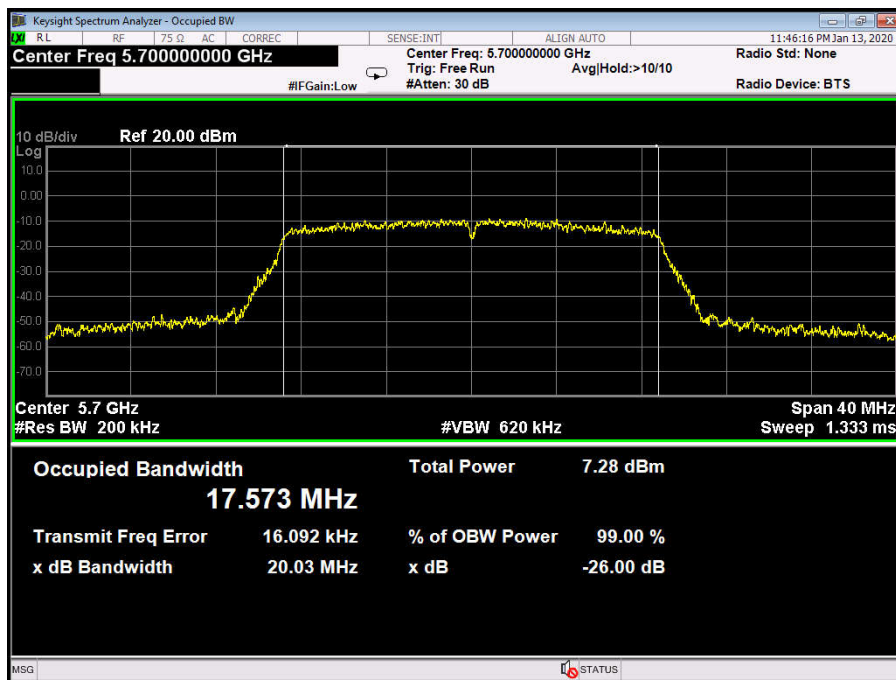
802.11ac(VHT20) Mode

5600 MHz



802.11ac(VHT20) Mode

5700 MHz



Temperature:	25 °C	Relative Humidity:	55%	
Test Voltage:	DC 3.8V			
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-2C)			
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
144	5720	15.17	----	13.851
		----	3.892	4.1934
802.11ac(VHT20) Mode				
5720 MHz Straddle 5.47-5.725GHz				

Keysight Spectrum Analyzer - Occupied BW

RL

RF

75 Ω

AC

CORREC

SENSE:INT

ALIGN AUTO

02:00:28 AM Jan 09, 2020

Center Freq 5.705000000 GHz

Center Freq: 5.705000000 GHz

Trig: Free Run

Avg/Hold: >10/10

Radio Std: None

#FGain: Low

#Atten: 20 dB

Radio Device: BTS

10 dB/div

Ref 20.00 dBm

Log

10.0

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

-70.0

Center 5.705 GHz

#Res BW 200 kHz

#VBW 620 kHz

Span 40 MHz

Sweep 1 ms

Occupied Bandwidth

13.851 MHz

Total Power

5.90 dBm

Transmit Freq Error

13.007 MHz

% of OBW Power

99.00 %

x dB Bandwidth

15.17 MHz

x dB

-26.00 dB

MSG

STATUS

802.11ac(VHT20) Mode

5720 MHz Straddle 5.725-5.85GHz

