Appendix for 15.407

Appendix for 15.407 1

1. Bandwidth 2

    1.1 Test Result 2

    1.2 Test Graph - Emission Bandwidth and 99% Occupied Bandwidth 3

2. Maximum Conducted Output Power 10

    2.1 Test Result 10

    2.2 Test Graph 11

3. Maximum Power Spectral Density (PSD) 21

    3.1 Test Result 21

    3.2 Test Graph 21

4. Frequency Stability 31

    4.1 Test Result 31

1. Bandwidth

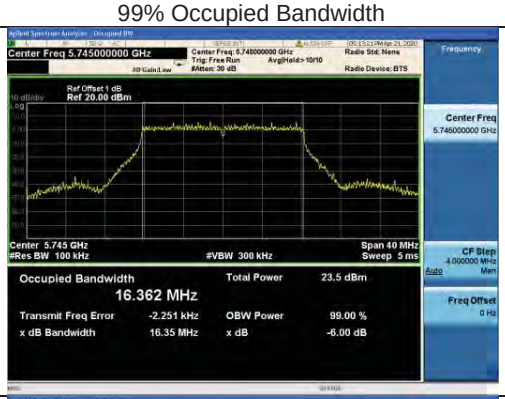
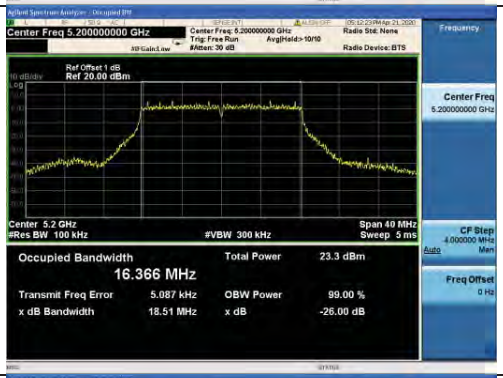
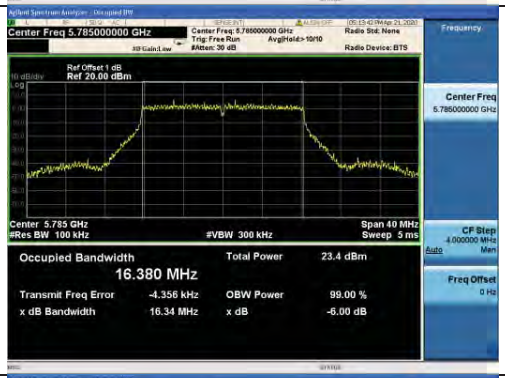
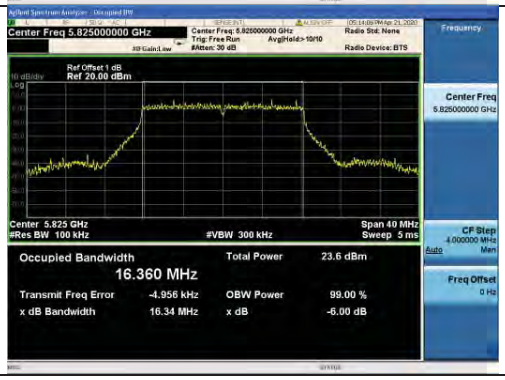
1.1 Test Result

Test Mode	Frequency (MHz)	TX Type	Emission Bandwidth			Verdict
			Test Result (MHz)		Limits (MHz)	
			Ant1	Ant2		
802.11a	5180	SISO	18.52	18.43	/	PASS
	5200	SISO	18.51	18.46	/	PASS
	5240	SISO	18.75	18.31	/	PASS
	5745	SISO	16.35	16.35	≥0.5	PASS
	5785	SISO	16.34	16.34	≥0.5	PASS
	5825	SISO	16.34	16.36	≥0.5	PASS
802.11n(HT20)	5180	SISO	19.34	19.41	/	PASS
	5200	SISO	19.54	19.71	/	PASS
	5240	SISO	19.42	19.35	/	PASS
	5745	SISO	17.57	17.58	≥0.5	PASS
	5785	SISO	17.58	17.63	≥0.5	PASS
	5825	SISO	17.59	17.21	≥0.5	PASS
802.11n(HT40)	5190	SISO	38.56	38.11	/	PASS
	5230	SISO	38.22	38.21	/	PASS
	5755	SISO	35.67	36.29	≥0.5	PASS
	5795	SISO	34.44	36.04	≥0.5	PASS
802.11ac(VHT20)	5180	SISO	19.30	19.50	/	PASS
	5200	SISO	19.36	19.41	/	PASS
	5240	SISO	19.44	19.46	/	PASS
	5745	SISO	17.61	17.57	≥0.5	PASS
	5785	SISO	17.59	17.59	≥0.5	PASS
	5825	SISO	17.57	17.63	≥0.5	PASS
802.11ac(VHT40)	5190	SISO	37.91	38.49	/	PASS
	5230	SISO	38.60	38.51	/	PASS
	5755	SISO	35.66	35.73	≥0.5	PASS
	5795	SISO	35.70	35.45	≥0.5	PASS
802.11ac(VHT80)	5210	SISO	79.51	79.51	/	PASS
	5775	SISO	76.41	76.46	≥0.5	PASS

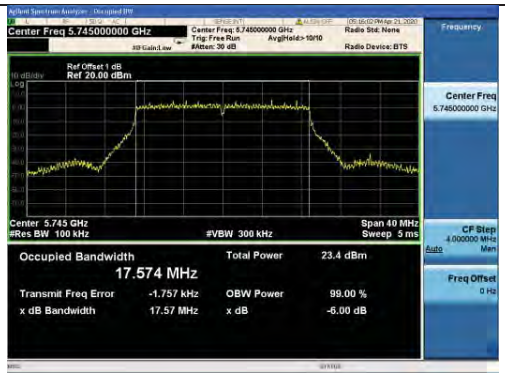
Test Mode	Frequency (MHz)	TX Type	99% Occupied Bandwidth		
			Test Result (MHz)		
			Ant1	Ant2	
802.11a	5180	SISO	16.362	16.364	Only for Report Use
	5200	SISO	16.366	16.368	Only for Report Use
	5240	SISO	16.359	16.380	Only for Report Use
	5745	SISO	16.362	16.368	Only for Report Use
	5785	SISO	16.380	16.380	Only for Report Use
	5825	SISO	16.360	16.361	Only for Report Use
802.11n(HT20)	5180	SISO	17.576	17.578	Only for Report Use
	5200	SISO	17.580	17.571	Only for Report Use
	5240	SISO	17.577	17.573	Only for Report Use
	5745	SISO	17.574	17.580	Only for Report Use
	5785	SISO	17.576	17.582	Only for Report Use
	5825	SISO	17.587	17.575	Only for Report Use
802.11n(HT40)	5190	SISO	35.909	35.888	Only for Report Use
	5230	SISO	35.939	35.944	Only for Report Use
	5755	SISO	35.926	35.964	Only for Report Use
	5795	SISO	35.905	35.923	Only for Report Use

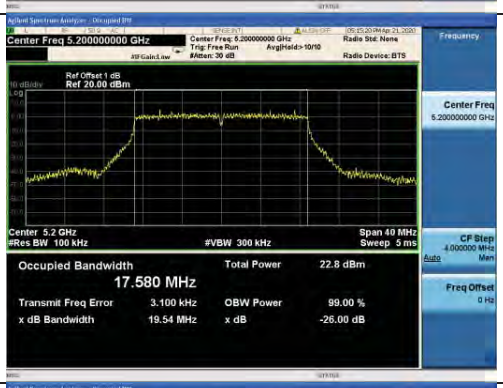
802.11ac(VHT20)	5180	SISO	17.580	17.549	Only for Report Use
	5200	SISO	17.572	17.556	Only for Report Use
	5240	SISO	17.574	17.583	Only for Report Use
	5745	SISO	17.575	17.560	Only for Report Use
	5785	SISO	17.578	17.584	Only for Report Use
	5825	SISO	17.580	17.578	Only for Report Use
802.11ac(VHT40)	5190	SISO	35.948	35.896	Only for Report Use
	5230	SISO	35.925	35.957	Only for Report Use
	5755	SISO	35.942	35.931	Only for Report Use
	5795	SISO	35.934	35.886	Only for Report Use
802.11ac(VHT80)	5210	SISO	75.642	75.579	Only for Report Use
	5775	SISO	75.591	75.655	Only for Report Use

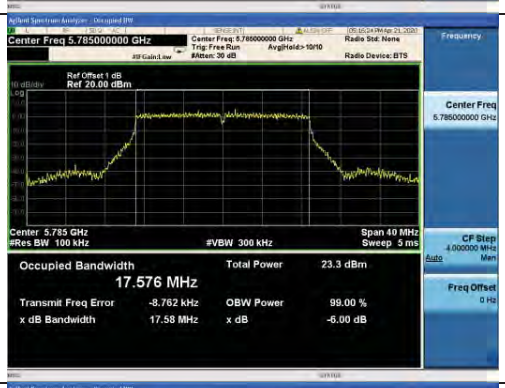
1.2 Test Graph - Emission Bandwidth and 99% Occupied Bandwidth

Ant1	
802.11a	
Emission Bandwidth	99% Occupied Bandwidth
	
	
	
802.11n(HT20	

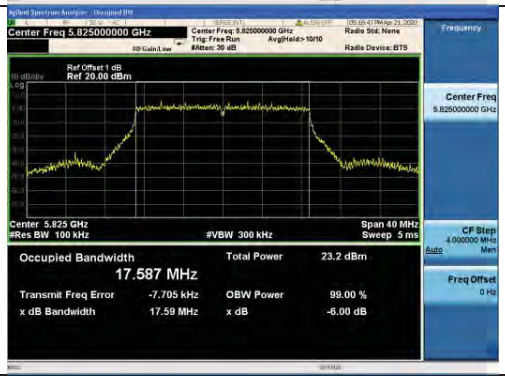
Center Freq 5.180000000 GHz
Center Freq: 5.180000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.18 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.576 MHz
Total Power 23.0 dBm
Transmit Freq Error 10.888 kHz
OBW Power 99.00 %
x dB Bandwidth 19.34 MHz
x dB -26.00 dB
Frequency
Center Freq
5.180000000 GHz
CF Step
4.000000 MHz
Freq Offset
0 Hz


Center Freq 5.745000000 GHz
Center Freq: 5.745000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.745 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.574 MHz
Total Power 23.4 dBm
Transmit Freq Error -1.757 kHz
OBW Power 99.00 %
x dB Bandwidth 17.57 MHz
x dB -6.00 dB
Frequency
Center Freq
5.745000000 GHz
CF Step
4.000000 MHz
Freq Offset
0 Hz

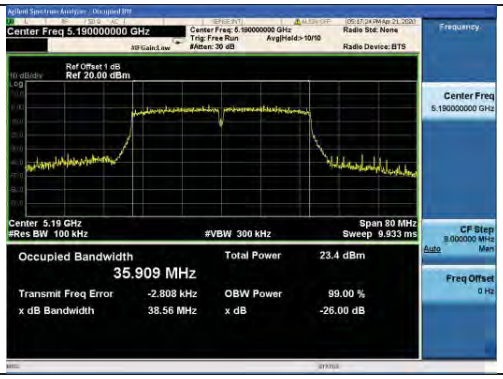

Center Freq 5.200000000 GHz
Center Freq: 5.200000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.2 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.580 MHz
Total Power 22.8 dBm
Transmit Freq Error 3.100 kHz
OBW Power 99.00 %
x dB Bandwidth 19.54 MHz
x dB -26.00 dB
Frequency
Center Freq
5.200000000 GHz
CF Step
4.000000 MHz
Freq Offset
0 Hz

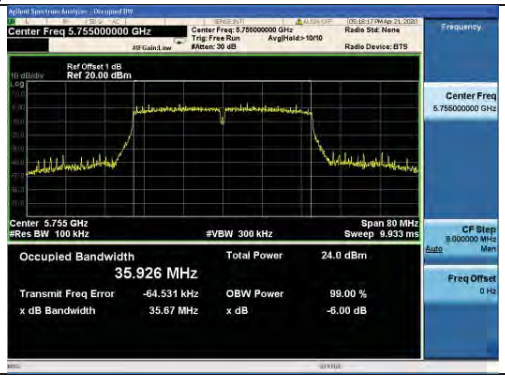

Center Freq 5.785000000 GHz
Center Freq: 5.785000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.785 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.576 MHz
Total Power 23.3 dBm
Transmit Freq Error -8.762 kHz
OBW Power 99.00 %
x dB Bandwidth 17.58 MHz
x dB -6.00 dB
Frequency
Center Freq
5.785000000 GHz
CF Step
4.000000 MHz
Freq Offset
0 Hz

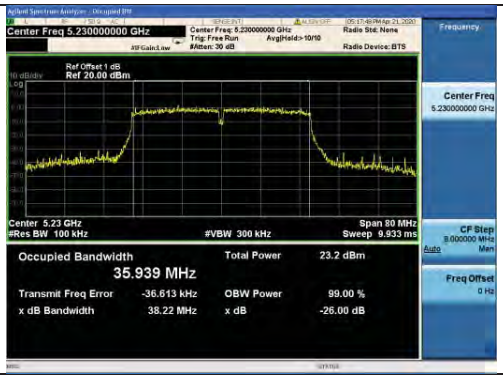
Center Freq 5.240000000 GHz
Center Freq: 5.240000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.24 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.577 MHz
Total Power 22.5 dBm
Transmit Freq Error 3.187 kHz
OBW Power 99.00 %
x dB Bandwidth 19.42 MHz
x dB -26.00 dB
Frequency
Center Freq
5.240000000 GHz
CF Step
4.000000 MHz
Freq Offset
0 Hz

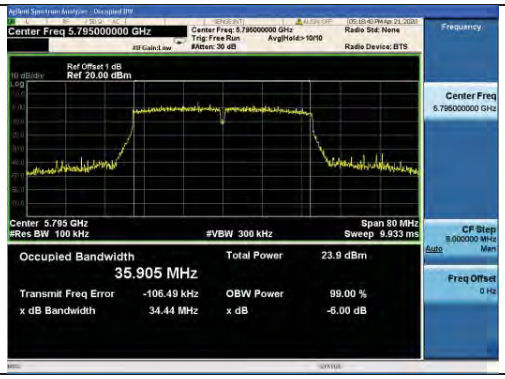

Center Freq 5.825000000 GHz
Center Freq: 5.825000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.825 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.587 MHz
Total Power 23.2 dBm
Transmit Freq Error -7.705 kHz
OBW Power 99.00 %
x dB Bandwidth 17.59 MHz
x dB -6.00 dB
Frequency
Center Freq
5.825000000 GHz
CF Step
4.000000 MHz
Freq Offset
0 Hz

802.11n(HT40)

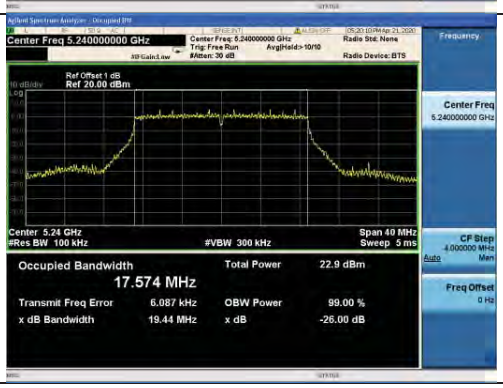

Center Freq 5.190000000 GHz
Center Freq: 5.190000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.19 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 80 MHz
Sweep 9.933 ms
Occupied Bandwidth
35.909 MHz
Total Power 23.4 dBm
Transmit Freq Error -2.808 kHz
OBW Power 99.00 %
x dB Bandwidth 38.56 MHz
x dB -26.00 dB
Frequency
Center Freq
5.190000000 GHz
CF Step
8.000000 MHz
Freq Offset
0 Hz


Center Freq 5.755000000 GHz
Center Freq: 5.755000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.755 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 80 MHz
Sweep 9.933 ms
Occupied Bandwidth
35.926 MHz
Total Power 24.0 dBm
Transmit Freq Error -64.531 kHz
OBW Power 99.00 %
x dB Bandwidth 35.67 MHz
x dB -6.00 dB
Frequency
Center Freq
5.755000000 GHz
CF Step
8.000000 MHz
Freq Offset
0 Hz

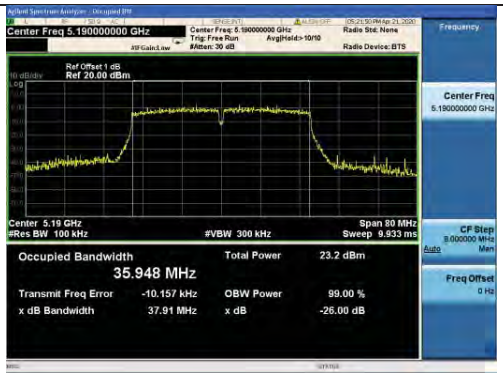


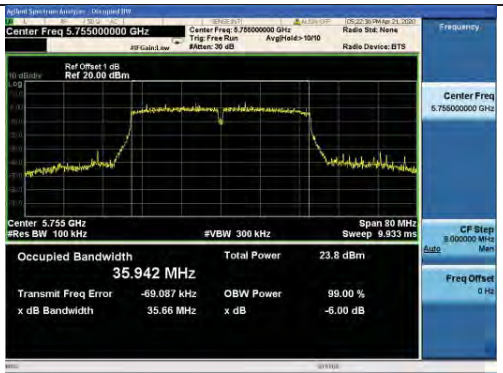


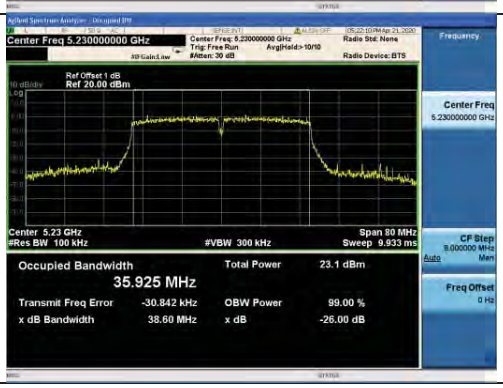
802.11ac(HT20)

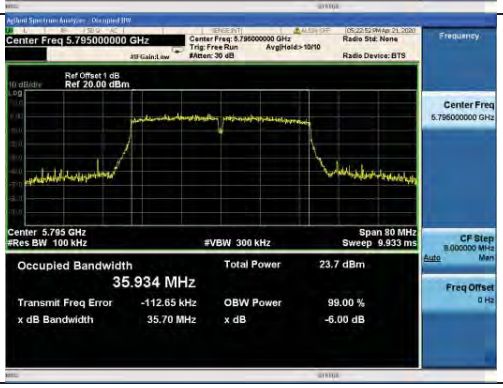


802.11ac(HT40)

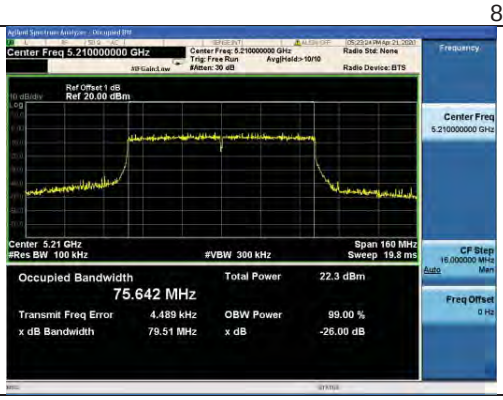




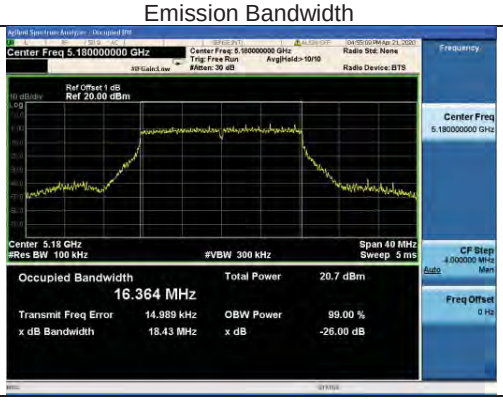


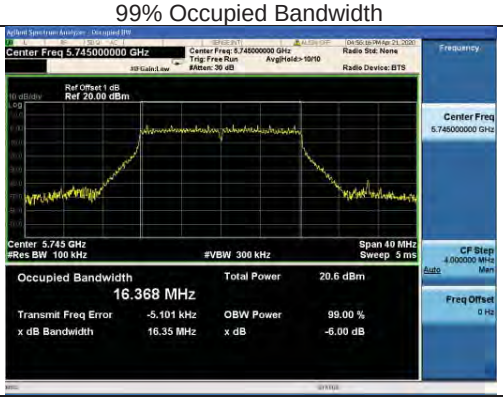


802.11ac(HT80)

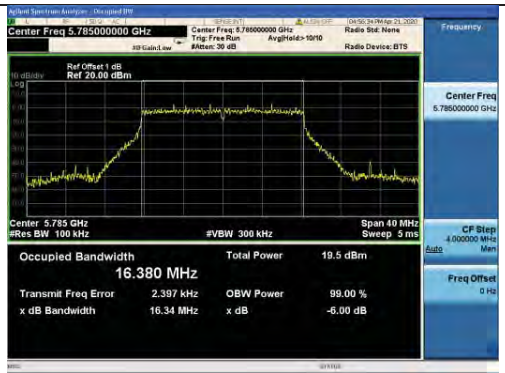


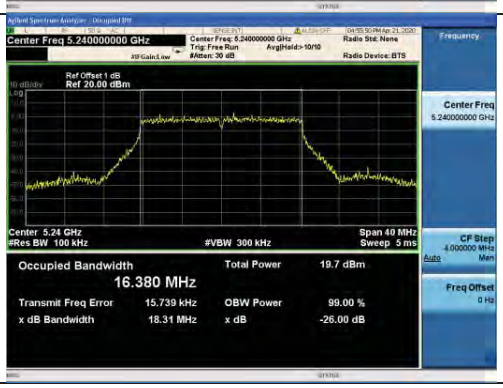
Ant2	
802.11a	
Emission Bandwidth	99% Occupied Bandwidth

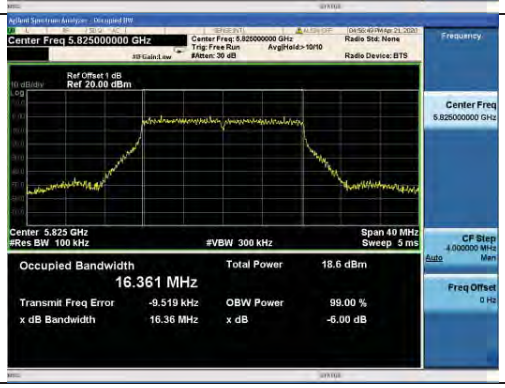




Center Freq 5.200000000 GHz
Ref Offset 1 dB
Ref 20.00 dBm
Center 5.2 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
16.368 MHz
Total Power 20.4 dBm
Transmit Freq Error 2.222 kHz
OBW Power 99.00 %
x dB Bandwidth 18.46 MHz
x dB -26.00 dB


Center Freq 5.785000000 GHz
Ref Offset 1 dB
Ref 20.00 dBm
Center 5.785 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
16.380 MHz
Total Power 19.5 dBm
Transmit Freq Error 2.397 kHz
OBW Power 99.00 %
x dB Bandwidth 16.34 MHz
x dB -6.00 dB


Center Freq 5.240000000 GHz
Ref Offset 1 dB
Ref 20.00 dBm
Center 5.24 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
16.380 MHz
Total Power 19.7 dBm
Transmit Freq Error 15.739 kHz
OBW Power 99.00 %
x dB Bandwidth 18.31 MHz
x dB -26.00 dB


Center Freq 5.825000000 GHz
Ref Offset 1 dB
Ref 20.00 dBm
Center 5.825 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
16.361 MHz
Total Power 18.6 dBm
Transmit Freq Error -9.519 kHz
OBW Power 99.00 %
x dB Bandwidth 16.36 MHz
x dB -6.00 dB

802.11n(HT20)

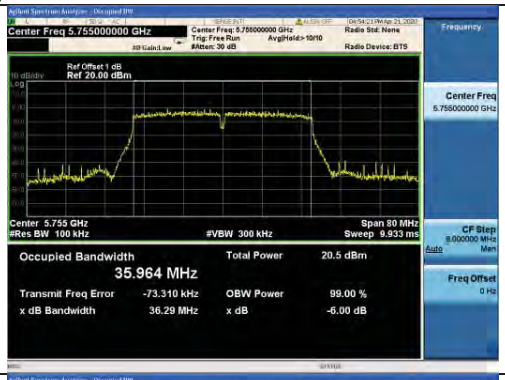
Center Freq 5.180000000 GHz
Ref Offset 1 dB
Ref 20.00 dBm
Center 5.18 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.578 MHz
Total Power 20.4 dBm
Transmit Freq Error 17.844 kHz
OBW Power 99.00 %
x dB Bandwidth 19.41 MHz
x dB -26.00 dB

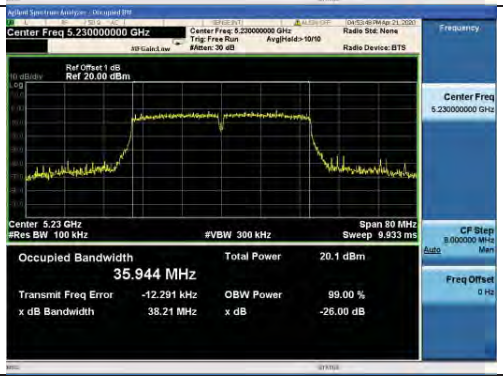
Center Freq 5.745000000 GHz
Ref Offset 1 dB
Ref 20.00 dBm
Center 5.745 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.580 MHz
Total Power 20.3 dBm
Transmit Freq Error -3.510 kHz
OBW Power 99.00 %
x dB Bandwidth 17.58 MHz
x dB -6.00 dB

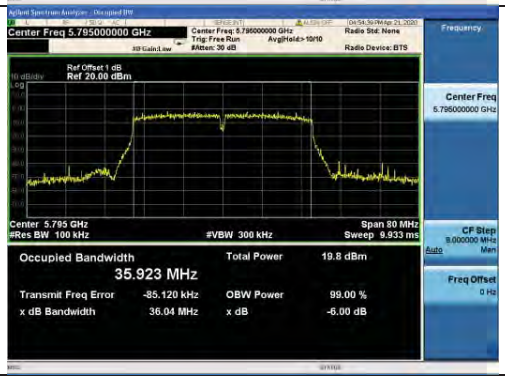
Center Freq 5.200000000 GHz
Ref Offset 1 dB
Ref 20.00 dBm
Center 5.2 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.571 MHz
Total Power 20.1 dBm
Transmit Freq Error 6.497 kHz
OBW Power 99.00 %
x dB Bandwidth 19.71 MHz
x dB -26.00 dB

Center Freq 5.785000000 GHz
Ref Offset 1 dB
Ref 20.00 dBm
Center 5.785 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40 MHz
Sweep 5 ms
Occupied Bandwidth
17.582 MHz
Total Power 19.4 dBm
Transmit Freq Error -334 Hz
OBW Power 99.00 %
x dB Bandwidth 17.63 MHz
x dB -6.00 dB

802.11n(HT40)

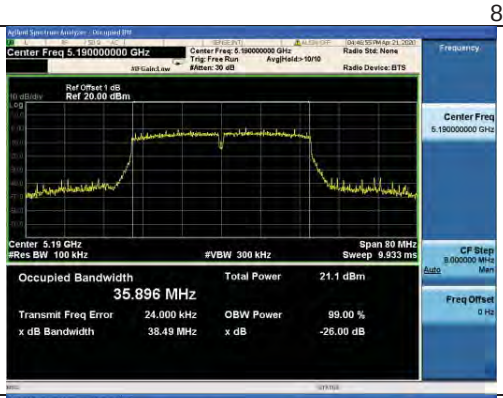


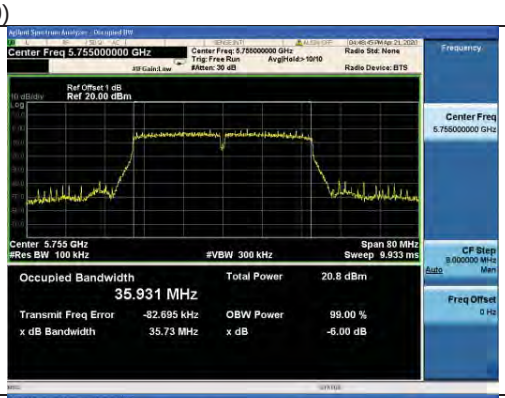


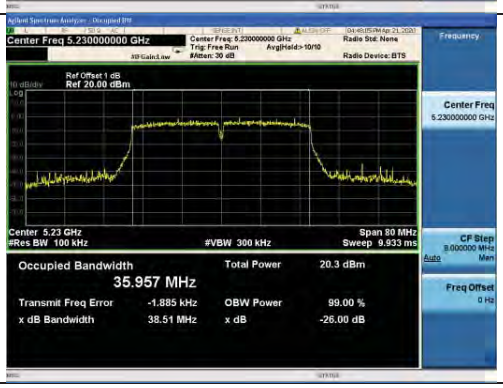


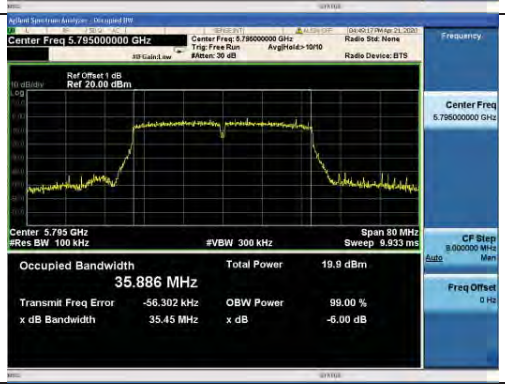
802.11a(HT20)

802.11ac(HT40)

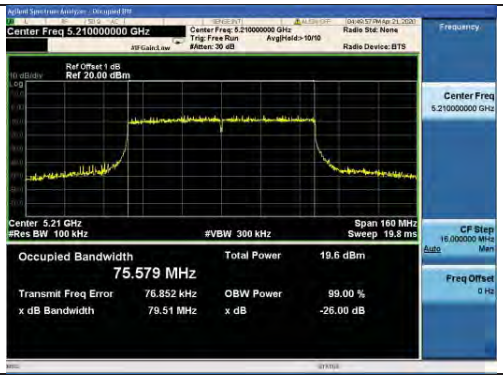


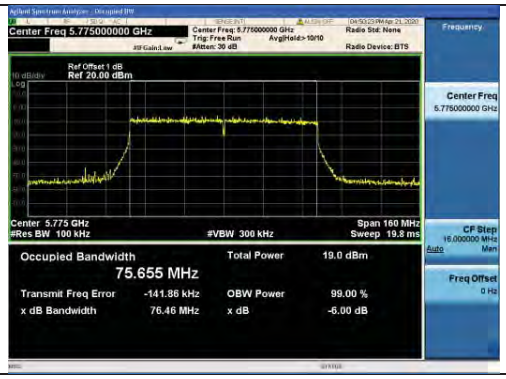






802.11ac(HT80)



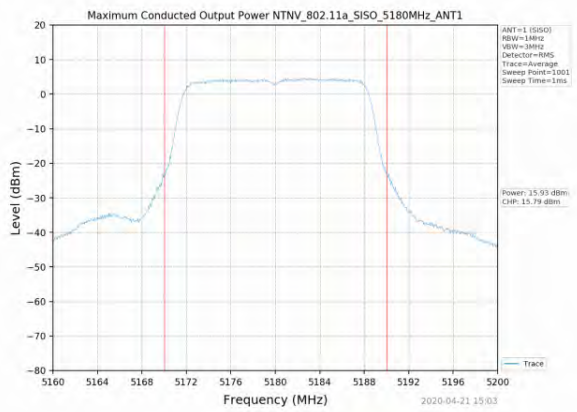
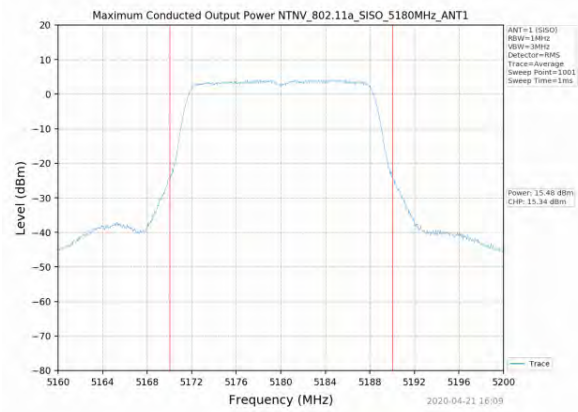
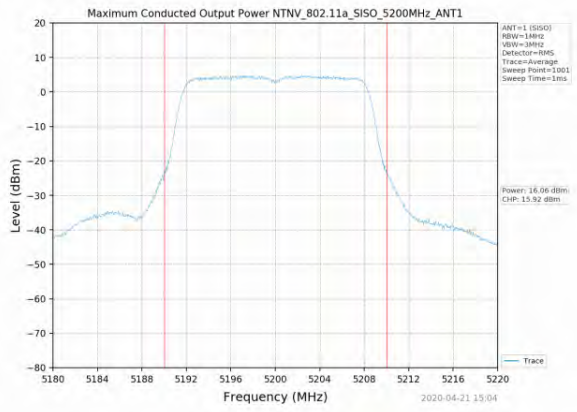
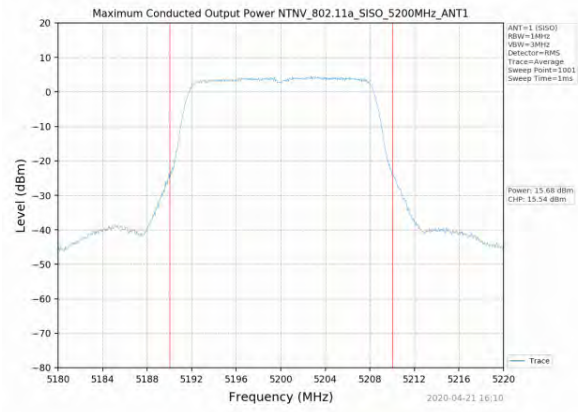
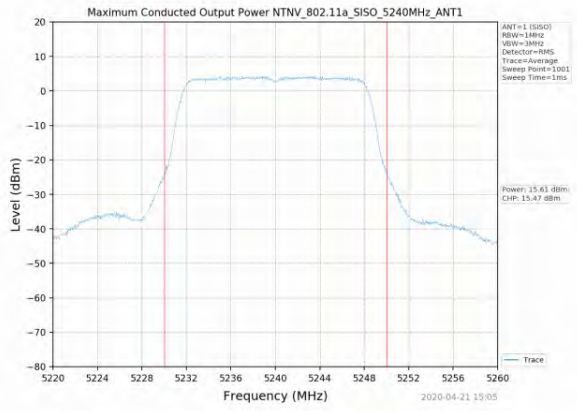
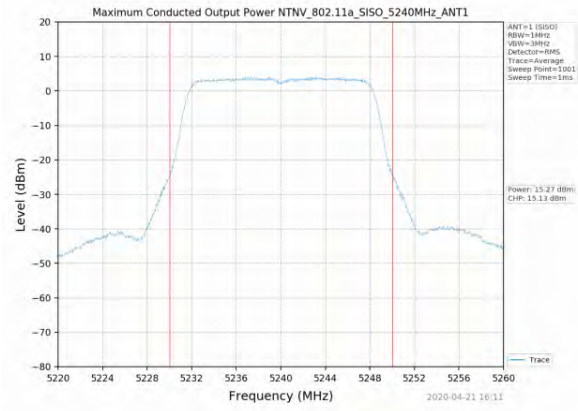


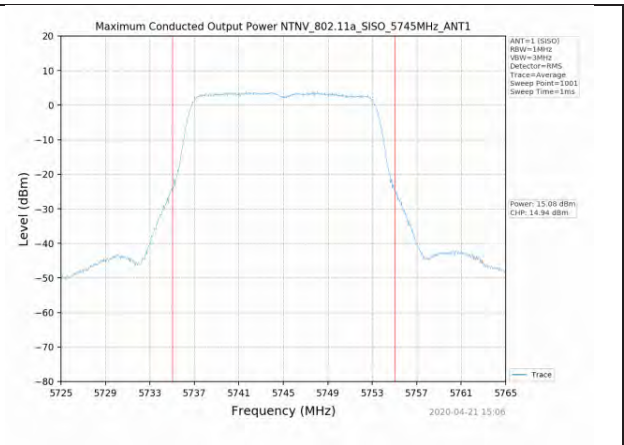
2. Maximum Conducted Output Power

2.1 Test Result

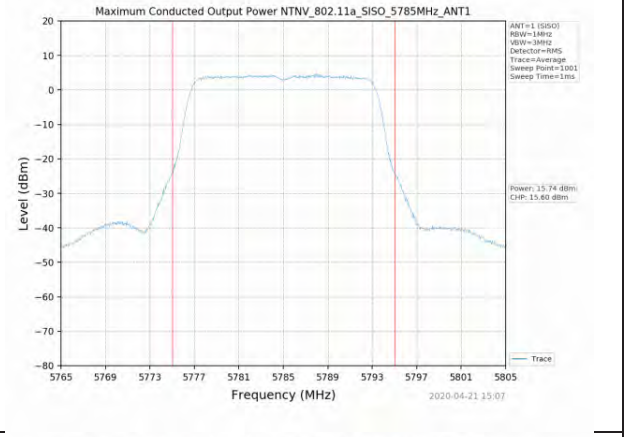
Test Mode	Frequency (MHz)	Tx Type	Measured Output Power (dBm)			Limits (dBm)	Verdict
			Ant1	Ant2	Output power Total		
802.11a	5180	SISO	15.93	15.48	/	≤24	PASS
	5200	SISO	16.06	15.68	/	≤24	PASS
	5240	SISO	15.61	15.27	/	≤24	PASS
	5745	SISO	15.08	14.59	/	≤30	PASS
	5785	SISO	15.74	14.04	/	≤30	PASS
	5825	SISO	15.89	13.17	/	≤30	PASS
802.11n	5180	SISO	15.50	15.05	18.29	≤23.99	PASS
	5190	SISO	16.72	16.02	19.39	≤23.99	PASS
	5200	SISO	15.64	15.24	18.45	≤23.99	PASS
	5230	SISO	16.36	16.00	19.19	≤23.99	PASS
	5240	SISO	15.17	14.91	18.05	≤23.99	PASS
	5745	SISO	14.83	14.69	17.77	≤29.99	PASS
	5755	SISO	15.90	15.38	18.66	≤29.99	PASS
	5785	SISO	15.38	13.94	17.73	≤29.99	PASS
	5795	SISO	16.55	14.69	18.73	≤29.99	PASS
	5825	SISO	15.55	12.92	17.44	≤29.99	PASS
802.11ac	5180	SISO	14.67	16.20	18.51	≤23.99	PASS
	5190	SISO	16.54	16.13	19.35	≤23.99	PASS
	5200	SISO	17.42	16.19	19.86	≤23.99	PASS
	5210	SISO	16.64	16.12	19.40	≤23.99	PASS
	5230	SISO	16.13	15.89	19.02	≤23.99	PASS
	5240	SISO	17.35	15.90	19.70	≤23.99	PASS
	5745	SISO	17.38	13.54	18.88	≤29.99	PASS
	5755	SISO	15.87	14.75	18.36	≤29.99	PASS
	5775	SISO	16.46	14.40	18.56	≤29.99	PASS
	5785	SISO	15.76	12.98	17.60	≤29.99	PASS
	5795	SISO	16.55	14.07	18.49	≤29.99	PASS
	5825	SISO	15.74	12.22	17.34	≤29.99	PASS

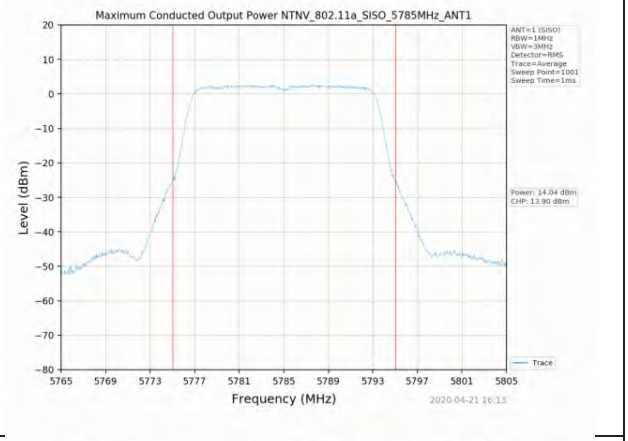
2.2 Test Graph

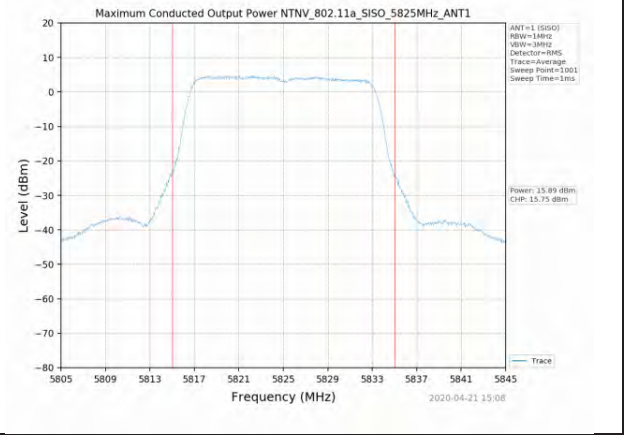
Ant1	Ant2
	
	
	

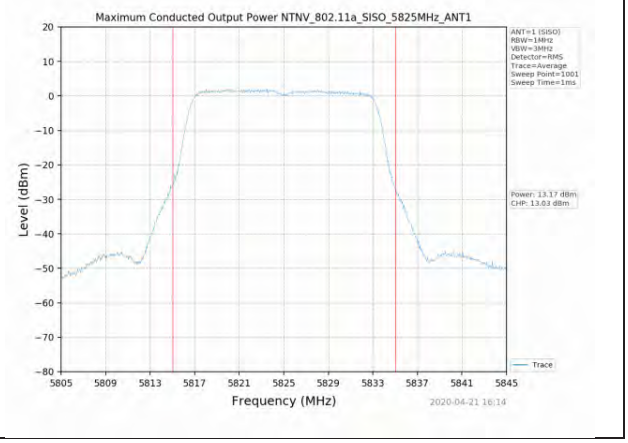

Maximum Conducted Output Power NTNV_802.11a_SISO_5745MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.08 dBm
CHP: 14.94 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:06

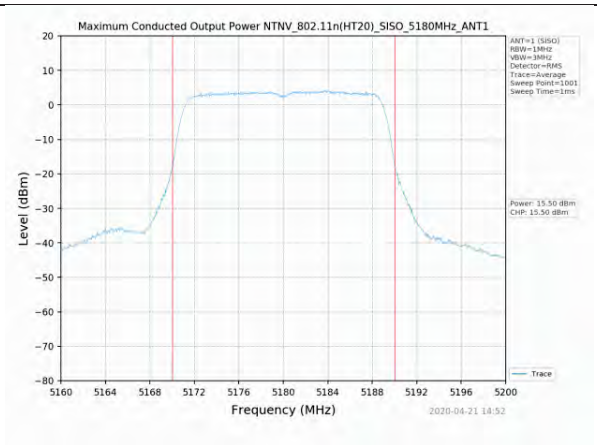
Maximum Conducted Output Power NTNV_802.11a_SISO_5745MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.59 dBm
CHP: 14.45 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 16:12

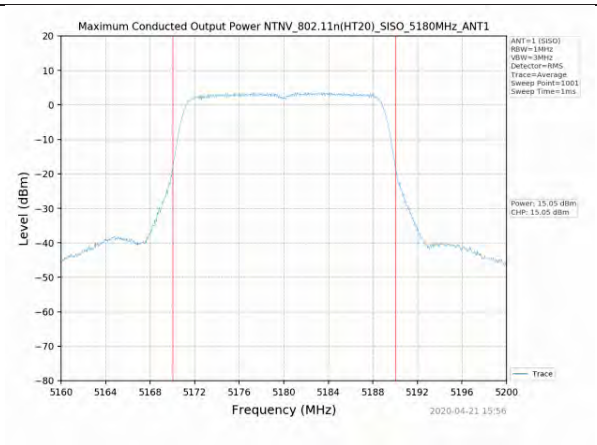

Maximum Conducted Output Power NTNV_802.11a_SISO_5785MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.74 dBm
CHP: 15.60 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:07

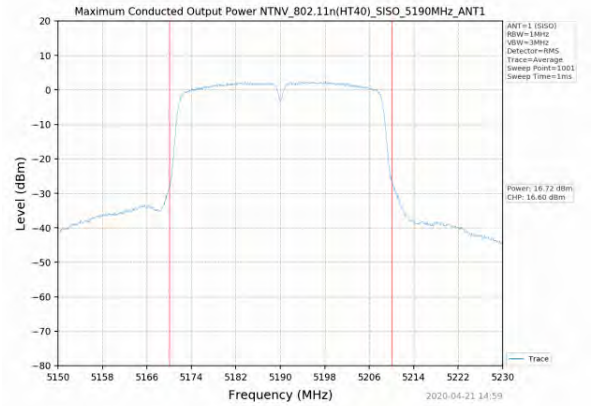

Maximum Conducted Output Power NTNV_802.11a_SISO_5785MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.04 dBm
CHP: 13.90 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 16:13

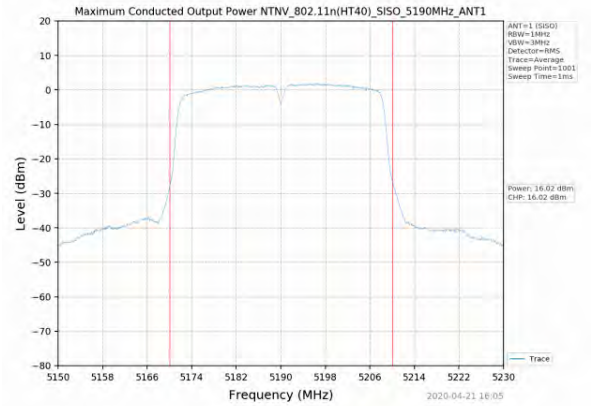

Maximum Conducted Output Power NTNV_802.11a_SISO_5825MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.89 dBm
CHP: 15.75 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:08

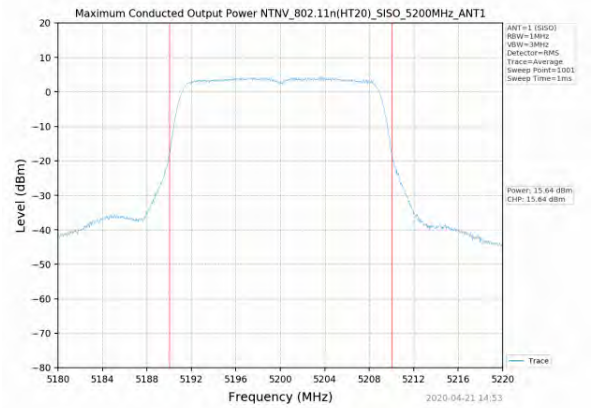

Maximum Conducted Output Power NTNV_802.11a_SISO_5825MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 13.17 dBm
CHP: 13.03 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 16:14

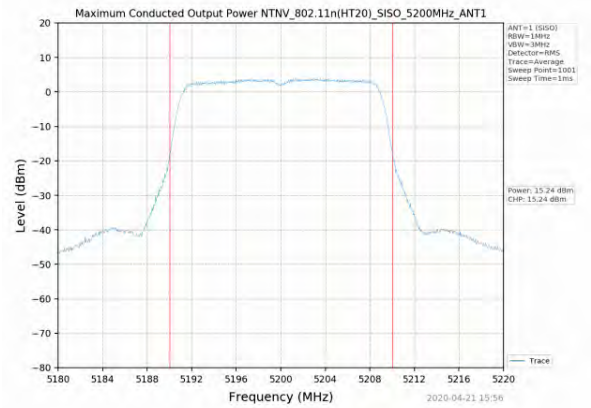

Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5180MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.50 dBm
CHP: 15.50 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:52


Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5180MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.05 dBm
CHP: 15.05 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:56

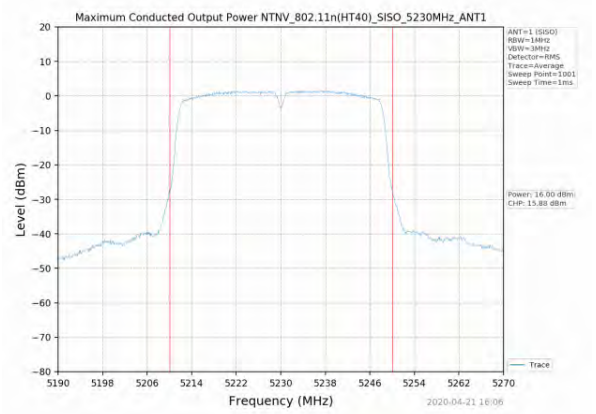

Maximum Conducted Output Power NTNV_802.11n(HT40)_SISO_5190MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.72 dBm
CHP: 16.60 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:59

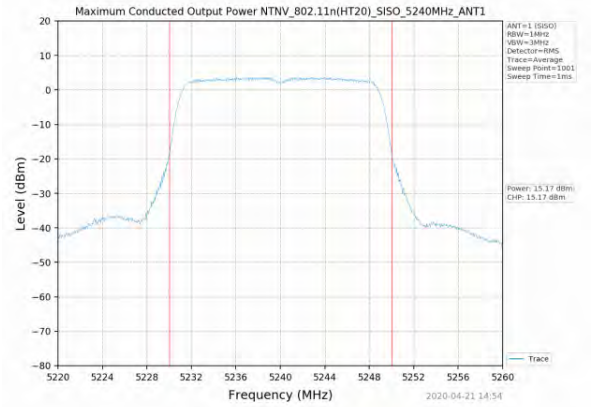

Maximum Conducted Output Power NTNV_802.11n(HT40)_SISO_5190MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.02 dBm
CHP: 16.02 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 16:05


Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5200MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.64 dBm
CHP: 15.64 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:53


Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5200MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.24 dBm
CHP: 15.24 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:56

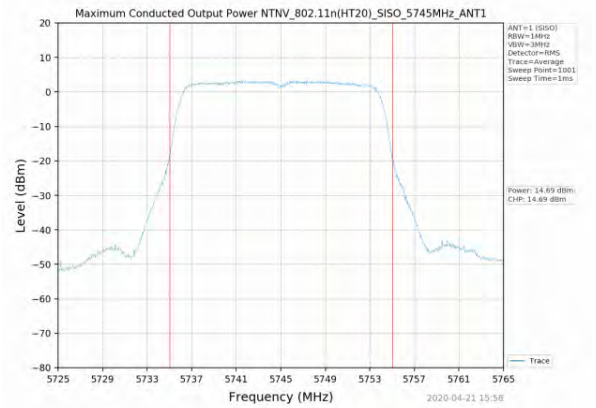
Maximum Conducted Output Power NTNV_802.11n(HT40)_SISO_5230MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.36 dBm
CHP: 16.24 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:00

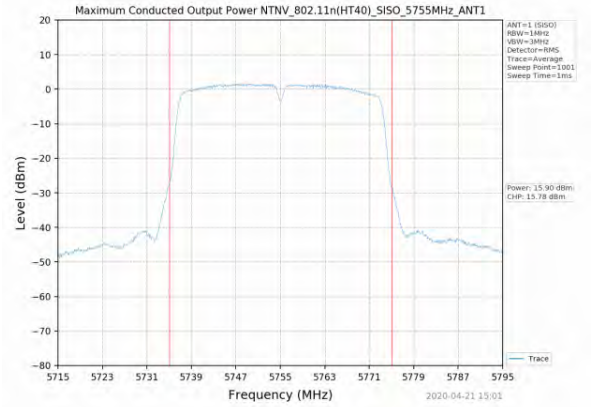

Maximum Conducted Output Power NTNV_802.11n(HT40)_SISO_5230MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.00 dBm
CHP: 15.88 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 16:06

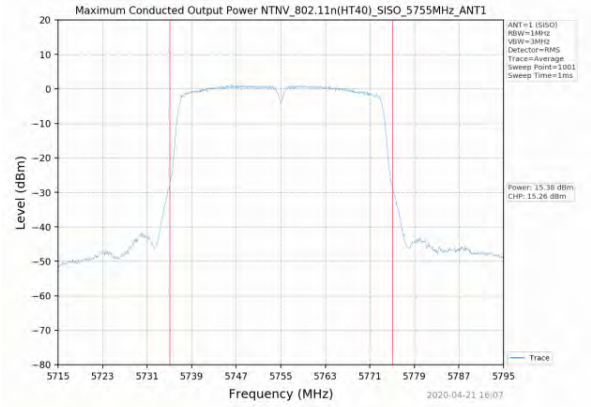

Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5240MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.17 dBm
CHP: 15.17 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:54

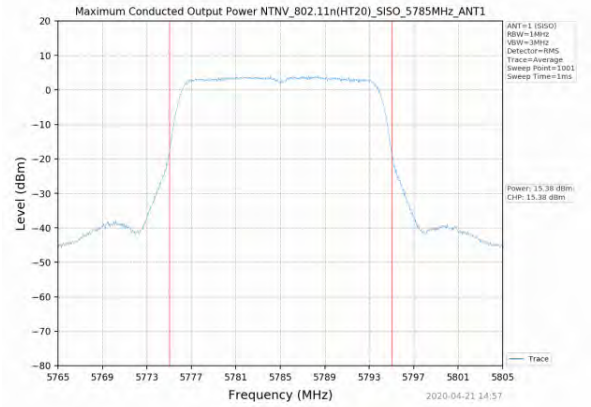
Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5240MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.91 dBm
CHP: 14.91 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:57

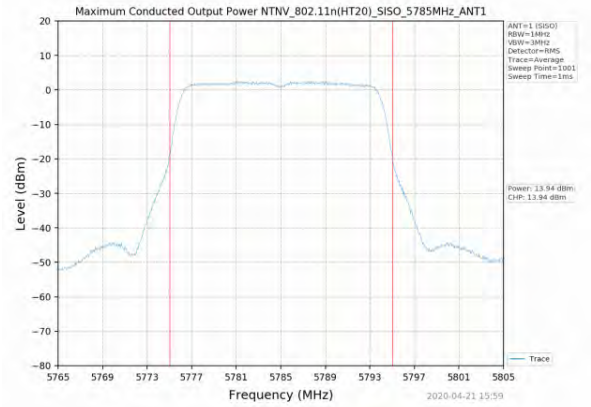
Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5745MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.83 dBm
CHP: 14.83 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:55

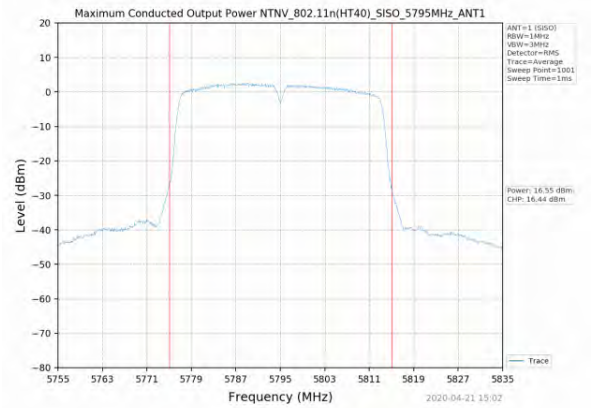

Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5745MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.69 dBm
CHP: 14.69 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:58

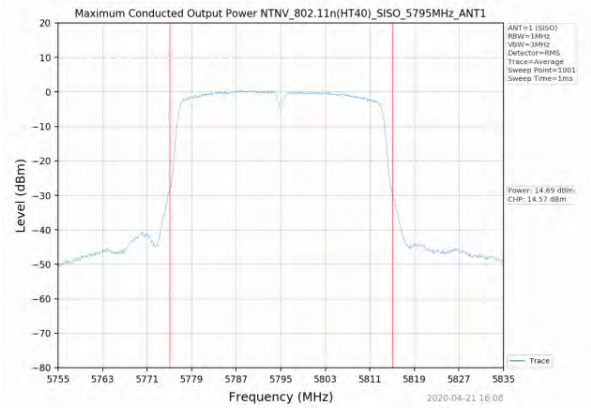

Maximum Conducted Output Power NTNV_802.11n(HT40)_SISO_5755MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.90 dBm
CHP: 15.78 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:01

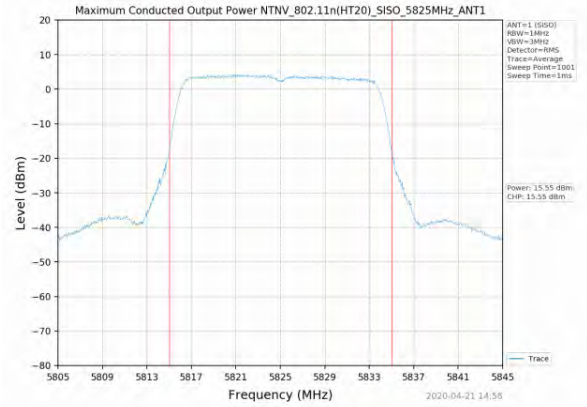

Maximum Conducted Output Power NTNV_802.11n(HT40)_SISO_5755MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.38 dBm
CHP: 15.26 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 16:07

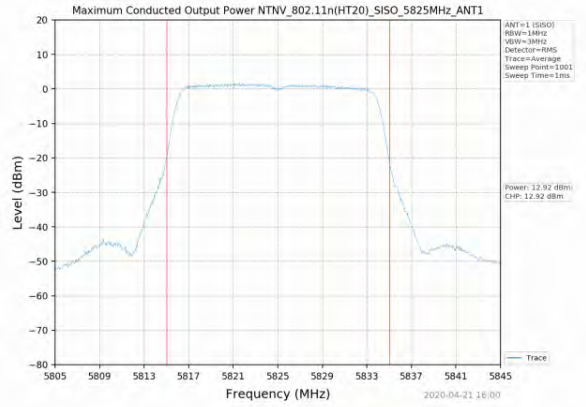

Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5785MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.38 dBm
CHP: 15.38 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:57

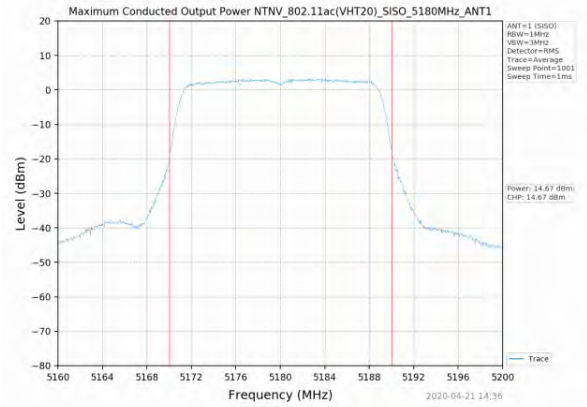

Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5785MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 13.94 dBm
CHP: 13.94 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:59


Maximum Conducted Output Power NTNV_802.11n(HT40)_SISO_5795MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.55 dBm
CHP: 16.44 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:02


Maximum Conducted Output Power NTNV_802.11n(HT40)_SISO_5795MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.69 dBm
CHP: 14.57 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 16:08


Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5825MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.55 dBm
CHP: 15.55 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:58

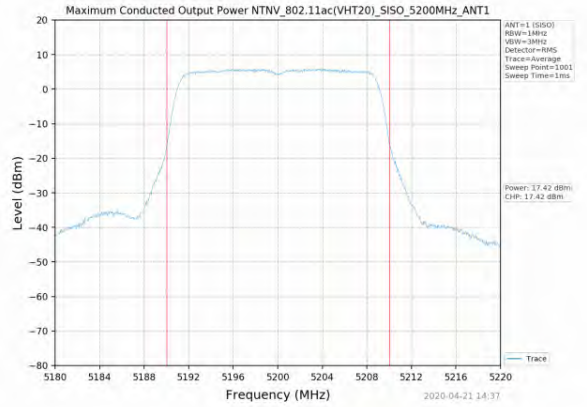

Maximum Conducted Output Power NTNV_802.11n(HT20)_SISO_5825MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 12.92 dBm
CHP: 12.92 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 16:00

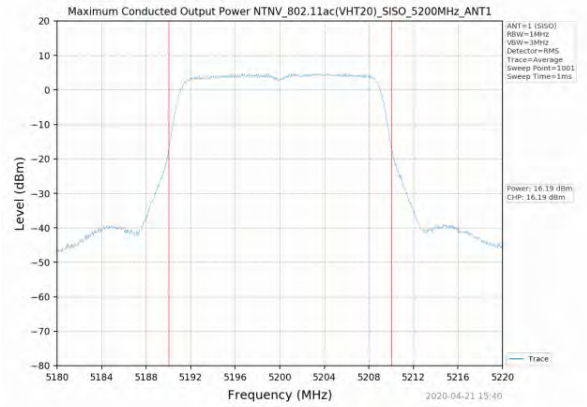

Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5180MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.67 dBm
CHP: 14.67 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:36

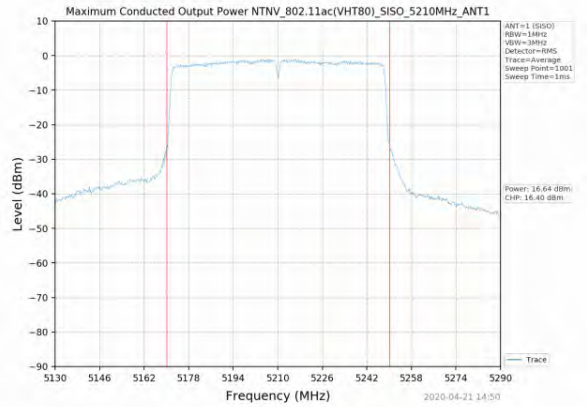
Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5180MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.20 dBm
CHP: 16.20 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:38

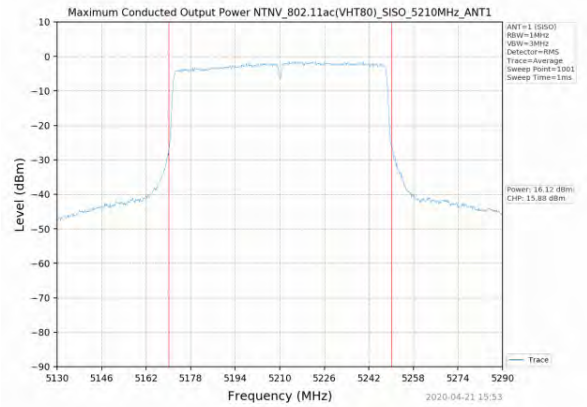
Maximum Conducted Output Power NTNV_802.11ac(VHT40)_SISO_5190MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.54 dBm
CHP: 16.43 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:45

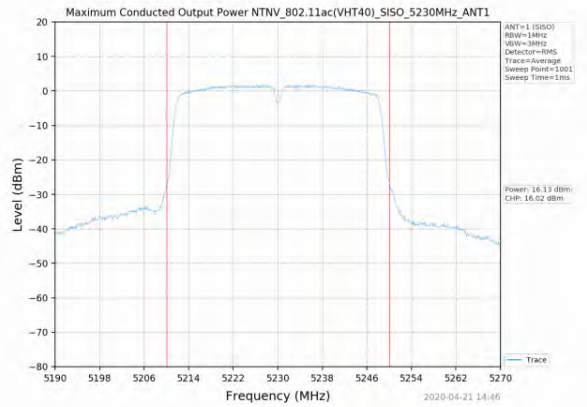
Maximum Conducted Output Power NTNV_802.11ac(VHT40)_SISO_5190MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.13 dBm
CHP: 16.02 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:48

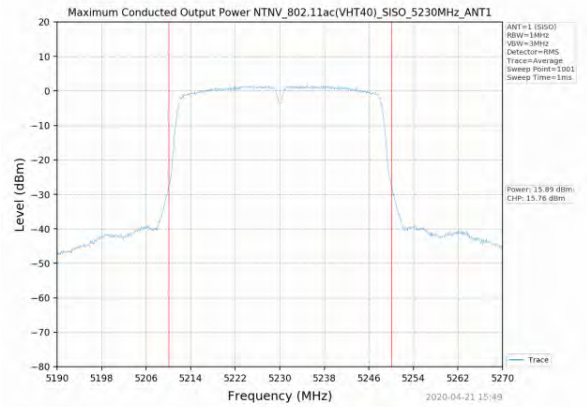

Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5200MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 17.42 dBm
CHP: 17.42 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:37

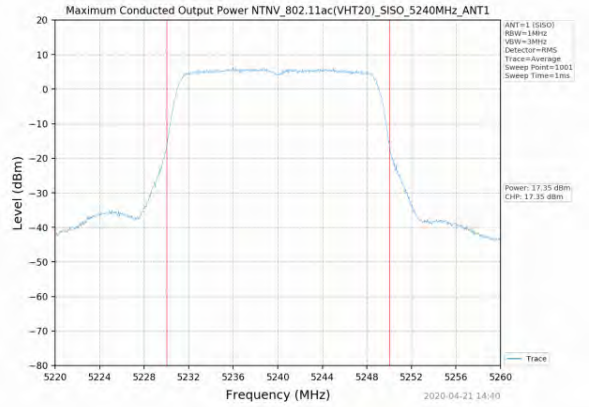

Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5200MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.19 dBm
CHP: 16.19 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:40


Maximum Conducted Output Power NTNV_802.11ac(VHT80)_SISO_5210MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.64 dBm
CHP: 16.40 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:50


Maximum Conducted Output Power NTNV_802.11ac(VHT80)_SISO_5210MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.12 dBm
CHP: 15.88 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:53


Maximum Conducted Output Power NTNV_802.11ac(VHT40)_SISO_5230MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.13 dBm
CHP: 16.02 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:46

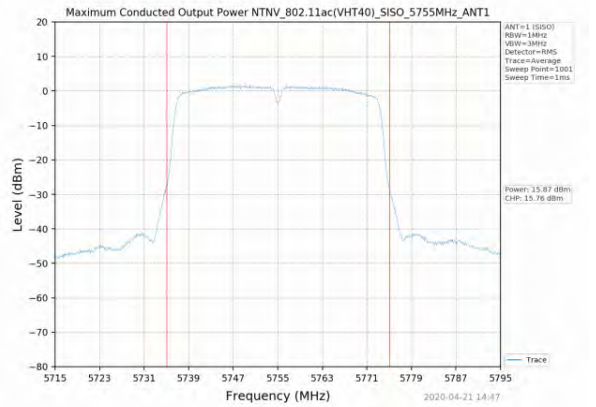

Maximum Conducted Output Power NTNV_802.11ac(VHT40)_SISO_5230MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.89 dBm
CHP: 15.76 dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:49

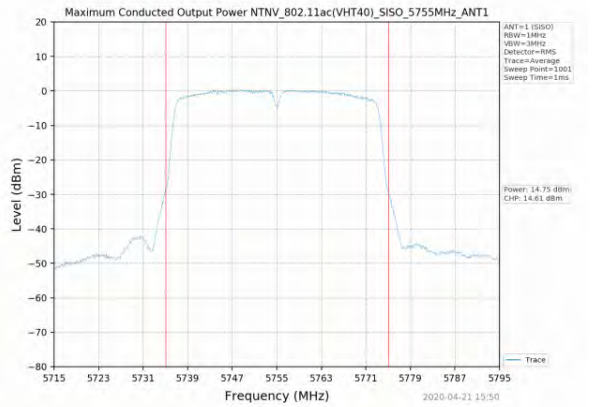

Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5240MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 17.35 dBm
CHP: 17.35 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:40

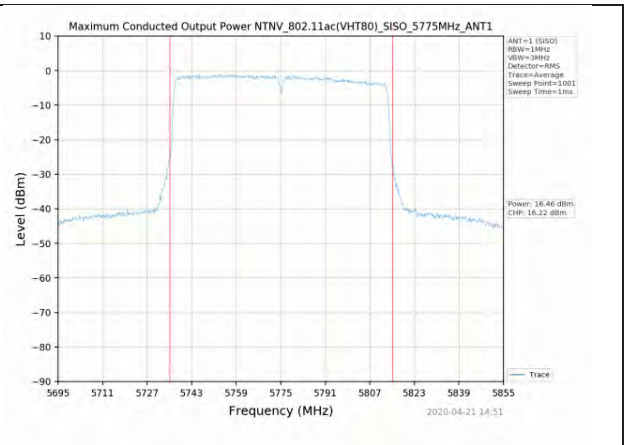
Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5240MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.90 dBm
CHP: 15.90 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:42

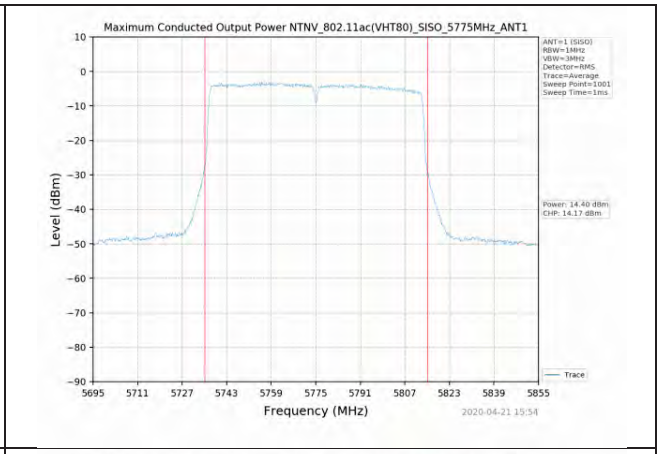
Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5745MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 17.38 dBm
CHP: 17.38 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:41

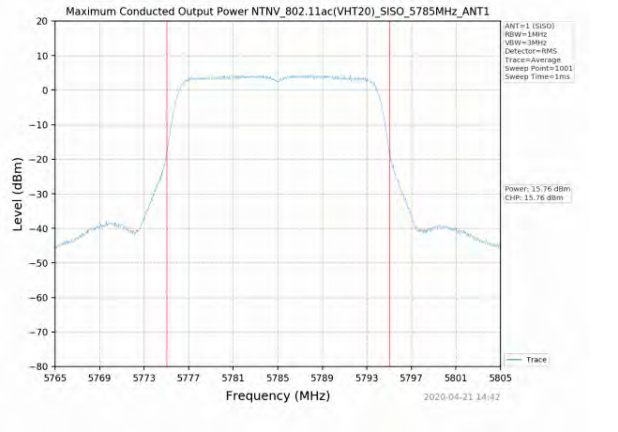
Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5745MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 13.54 dBm
CHP: 13.54 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:43

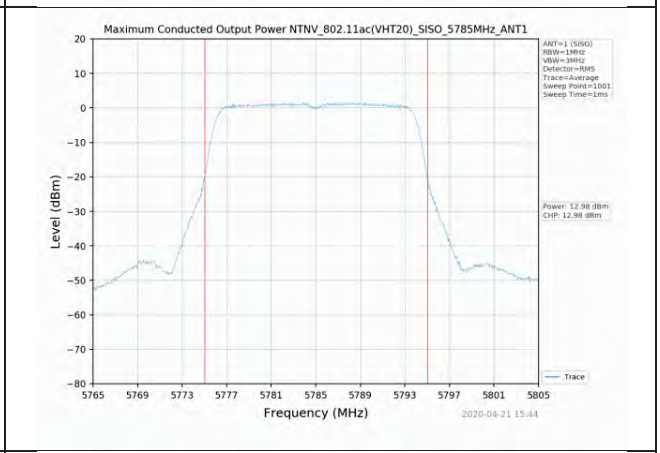

Maximum Conducted Output Power NTNV_802.11ac(VHT40)_SISO_5755MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.87 dBm
CHP: 15.76 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:47

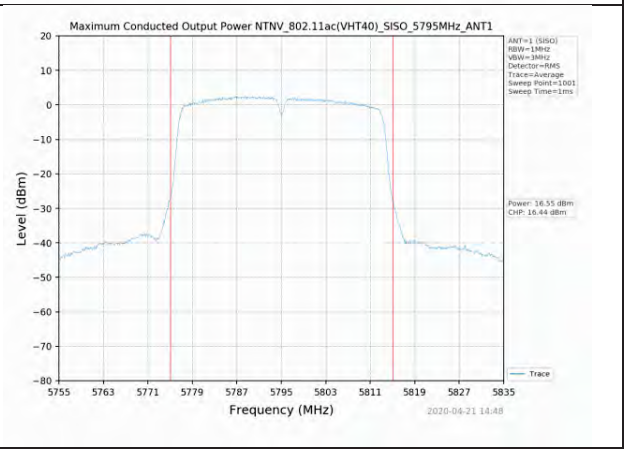

Maximum Conducted Output Power NTNV_802.11ac(VHT40)_SISO_5755MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.75 dBm
CHP: 14.61 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:50

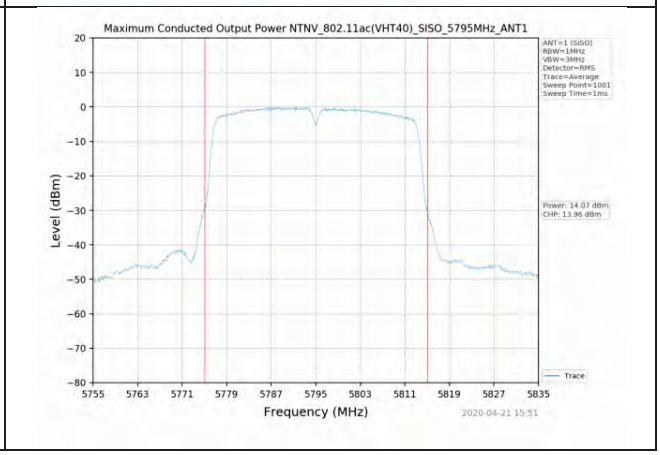

Maximum Conducted Output Power NTNV_802.11ac(VHT80)_SISO_5775MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.46 dBm
CHP: 16.22 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:51

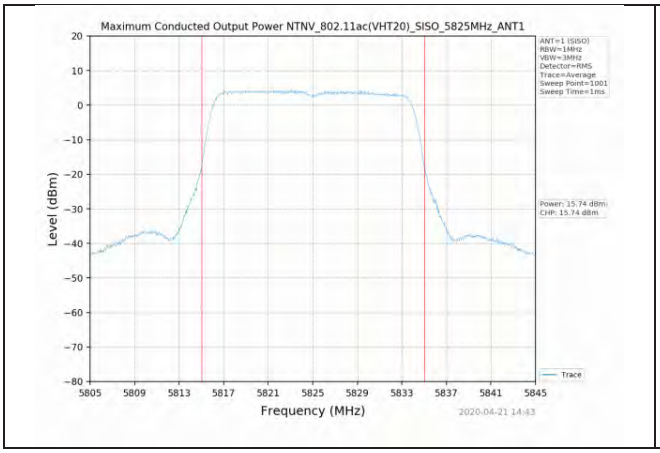

Maximum Conducted Output Power NTNV_802.11ac(VHT80)_SISO_5775MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.40 dBm
CHP: 14.17 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:54

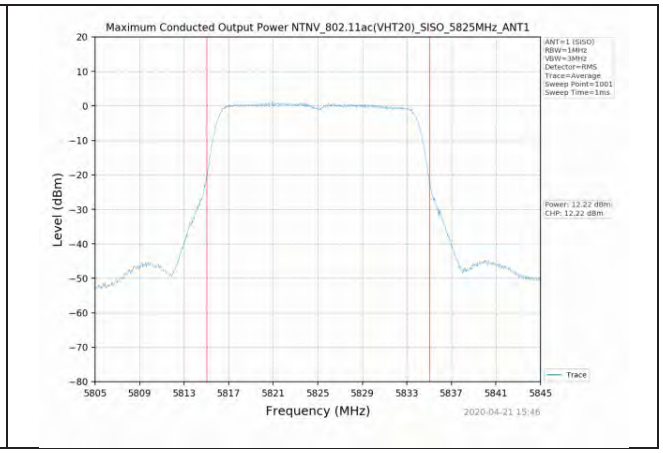

Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5785MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.76 dBm
CHP: 15.76 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:42


Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5785MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 12.98 dBm
CHP: 12.98 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:44


Maximum Conducted Output Power NTNV_802.11ac(VHT40)_SISO_5795MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 16.55 dBm
CHP: 16.44 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:48


Maximum Conducted Output Power NTNV_802.11ac(VHT40)_SISO_5795MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 14.07 dBm
CHP: 13.96 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:51


Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5825MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 15.74 dBm
CHP: 15.74 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 14:43

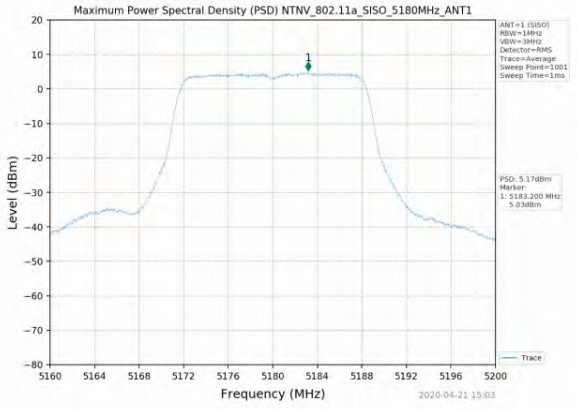
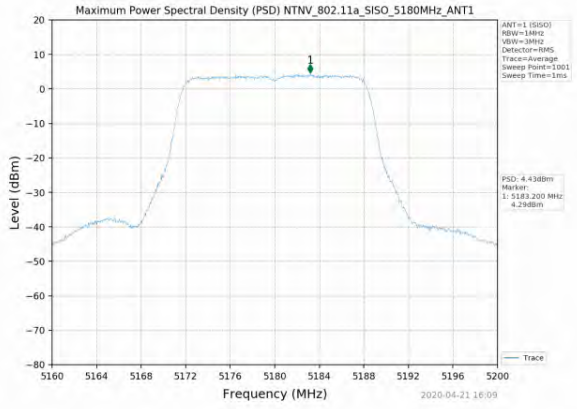
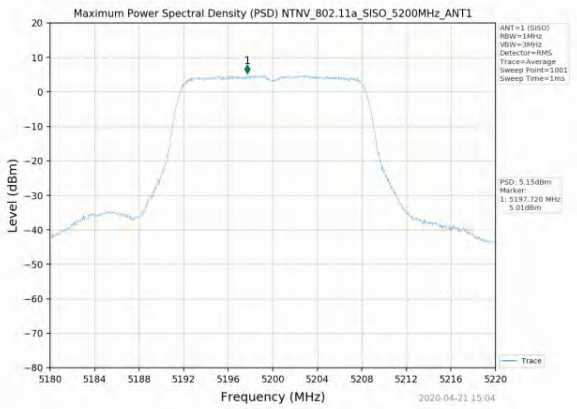
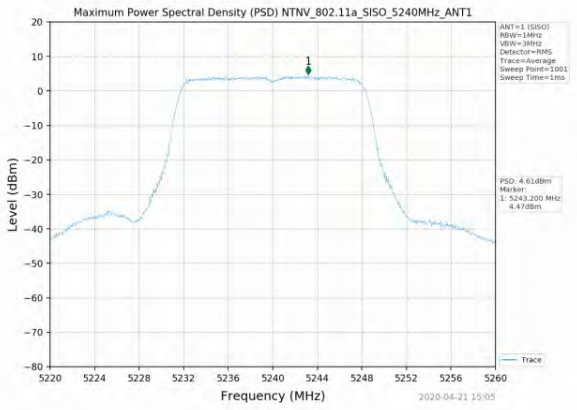
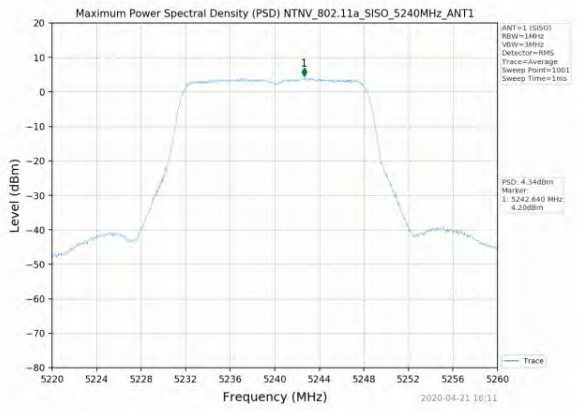

Maximum Conducted Output Power NTNV_802.11ac(VHT20)_SISO_5825MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
Power: 12.22 dBm
CHP: 12.22 dBm
Trace
Level (dBm)
Frequency (MHz)
2020-04-21 15:46

3. Maximum Power Spectral Density (PSD)

3.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/MHz)			Limits	Verdict
			Ant 1	Ant 2	Output power Total		
802.11a	5180	SISO	5.17	4.43	/	11dBm/MHz	PASS
	5200	SISO	5.15	4.76	/	11dBm/MHz	PASS
	5240	SISO	4.61	4.34	/	11dBm/MHz	PASS
	5745	SISO	4.885	6.491	/	30dBm/500KHz	PASS
	5785	SISO	4.937	5.823	/	30dBm/500KHz	PASS
	5825	SISO	4.496	4.788	/	30dBm/500KHz	PASS
802.11n(HT20)	5180	SISO	4.20	3.75	6.99	10.99dBm/MHz	PASS
	5200	SISO	4.42	4.09	7.27	10.99dBm/MHz	PASS
	5240	SISO	3.87	3.60	6.75	10.99dBm/MHz	PASS
	5745	SISO	4.921	5.753	8.37	29.99dBm/500KHz	PASS
	5785	SISO	4.551	5.035	7.81	29.99dBm/500KHz	PASS
	5825	SISO	5.507	4.420	8.01	29.99dBm/500KHz	PASS
802.11n(HT40)	5190	SISO	2.84	2.18	5.53	10.99dBm/MHz	PASS
	5230	SISO	2.37	1.80	5.10	10.99dBm/MHz	PASS
	5755	SISO	2.333	2.580	5.47	29.99dBm/500KHz	PASS
	5795	SISO	2.187	2.718	5.47	29.99dBm/500KHz	PASS
802.11ac(VHT20)	5180	SISO	5.85	4.90	8.41	10.99dBm/MHz	PASS
	5200	SISO	6.08	4.94	8.56	10.99dBm/MHz	PASS
	5240	SISO	6.04	4.85	8.5	10.99dBm/MHz	PASS
	5745	SISO	5.114	6.507	8.88	29.99dBm/500KHz	PASS
	5785	SISO	4.230	4.954	7.62	29.99dBm/500KHz	PASS
	5825	SISO	4.503	4.862	7.70	29.99dBm/500KHz	PASS
802.11ac(VHT40)	5190	SISO	2.48	2.11	5.31	10.99dBm/MHz	PASS
	5230	SISO	2.35	1.76	5.08	10.99dBm/MHz	PASS
	5755	SISO	2.185	2.279	5.24	29.99dBm/500KHz	PASS
	5795	SISO	1.939	2.371	5.17	29.99dBm/500KHz	PASS
802.11ac(VHT80)	5210	SISO	-0.74	-1.21	2.04	10.99dBm/MHz	PASS
	5775	SISO	-0.830	-0.766	2.21	29.99dBm/500KHz	PASS

3.2 Test Graph

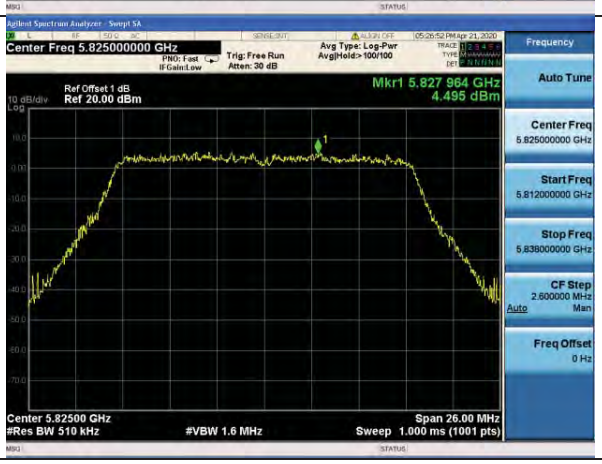
Ant1	Ant2
802.11a	
	
	
	

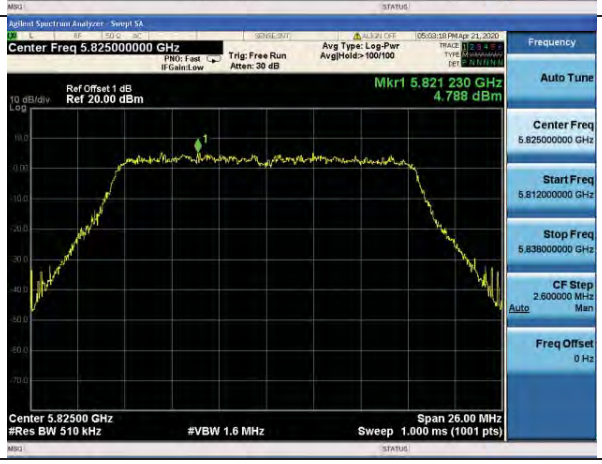
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:26:06 PM Apr 21, 2020
Frequency
Auto Tune
Mkr1 5.739 306 GHz
4.885 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Log
Center Freq
5.745000000 GHz
Start Freq
5.732000000 GHz
Stop Freq
5.758000000 GHz
CF Step
2.600000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.74500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:04:03 PM Apr 21, 2020
Frequency
Auto Tune
Mkr1 5.739 306 GHz
6.491 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Log
Center Freq
5.745000000 GHz
Start Freq
5.732000000 GHz
Stop Freq
5.758000000 GHz
CF Step
2.600000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.74500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)

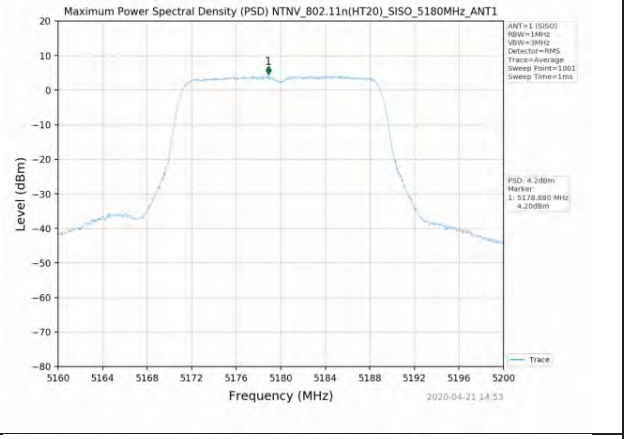
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:26:35 PM Apr 21, 2020
Frequency
Auto Tune
Mkr1 5.788 016 GHz
4.937 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Log
Center Freq
5.785000000 GHz
Start Freq
5.772000000 GHz
Stop Freq
5.798000000 GHz
CF Step
2.600000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.78500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)

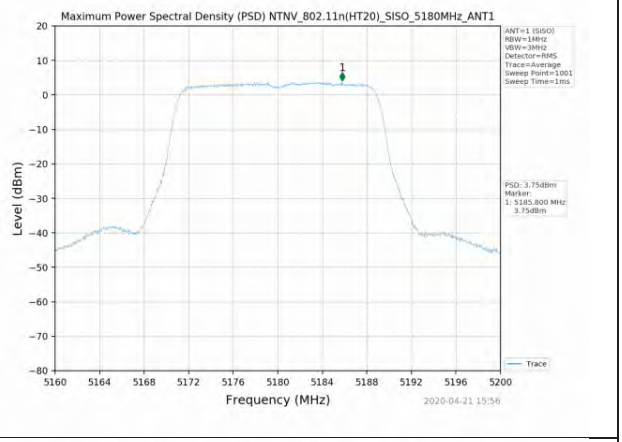
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:03:40 PM Apr 21, 2020
Frequency
Auto Tune
Mkr1 5.779 358 GHz
5.823 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Log
Center Freq
5.785000000 GHz
Start Freq
5.772000000 GHz
Stop Freq
5.798000000 GHz
CF Step
2.600000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.78500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)

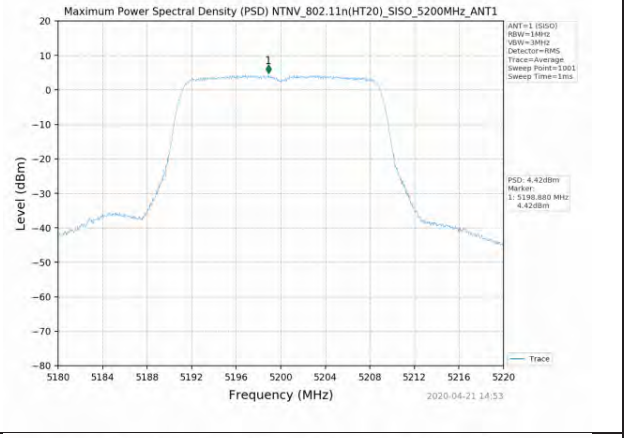

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:26:52 PM Apr 21, 2020
Frequency
Auto Tune
Mkr1 5.827 964 GHz
4.495 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Log
Center Freq
5.825000000 GHz
Start Freq
5.812000000 GHz
Stop Freq
5.838000000 GHz
CF Step
2.600000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.82500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)

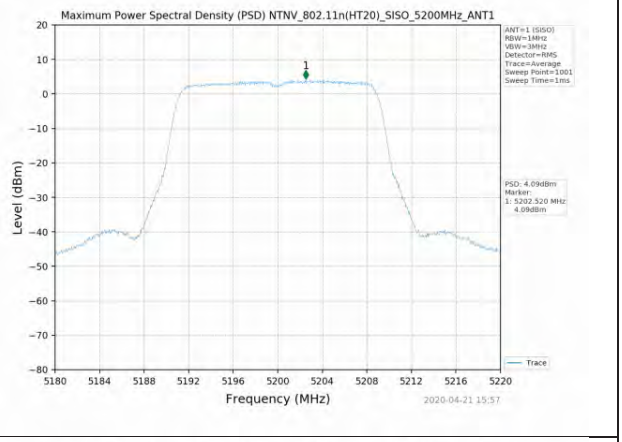

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:03:18 PM Apr 21, 2020
Frequency
Auto Tune
Mkr1 5.821 230 GHz
4.788 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Log
Center Freq
5.825000000 GHz
Start Freq
5.812000000 GHz
Stop Freq
5.838000000 GHz
CF Step
2.600000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.82500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)

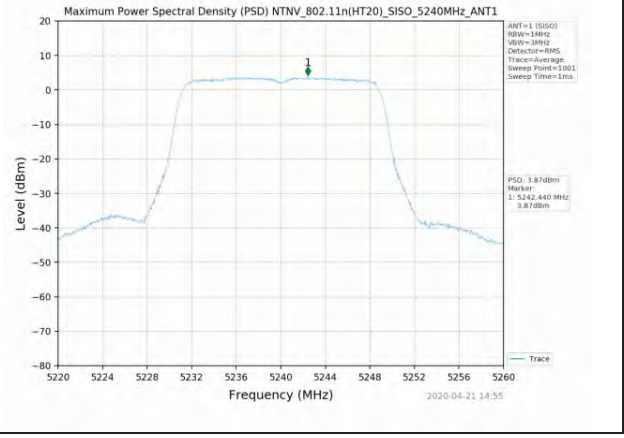
802.11n(HT20)

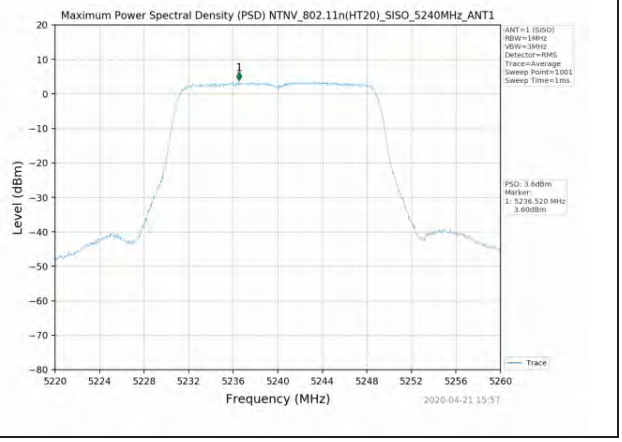

Maximum Power Spectral Density (PSD) NTNV_802.11n(HT20)_SISO_5180MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
PSD: 4.2dBm
Marker:
1: 5178.880 MHz
4.20dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:53


Maximum Power Spectral Density (PSD) NTNV_802.11n(HT20)_SISO_5180MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
PSD: 3.75dBm
Marker:
1: 5185.800 MHz
3.75dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:56


Maximum Power Spectral Density (PSD) NTNV_802.11n(HT20)_SISO_5200MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
PSD: 4.42dBm
Marker:
1: 5198.880 MHz
4.42dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:53


Maximum Power Spectral Density (PSD) NTNV_802.11n(HT20)_SISO_5200MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
PSD: 4.09dBm
Marker:
1: 5202.520 MHz
4.09dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:57


Maximum Power Spectral Density (PSD) NTNV_802.11n(HT20)_SISO_5240MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
PSD: 3.87dBm
Marker:
1: 5242.440 MHz
3.87dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 14:55


Maximum Power Spectral Density (PSD) NTNV_802.11n(HT20)_SISO_5240MHz_ANT1
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
PSD: 3.6dBm
Marker:
1: 5236.520 MHz
3.60dBm
Level (dBm)
Frequency (MHz)
Trace
2020-04-21 15:57

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.745000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.746 976 GHz
4.921 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.74500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.745000000 GHz
Start Freq 5.732000000 GHz
Stop Freq 5.758000000 GHz
CF Step 2.600000 MHz
Freq Offset 0 Hz

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.745000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.747 002 GHz
5.753 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.74500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.745000000 GHz
Start Freq 5.732000000 GHz
Stop Freq 5.758000000 GHz
CF Step 2.600000 MHz
Freq Offset 0 Hz

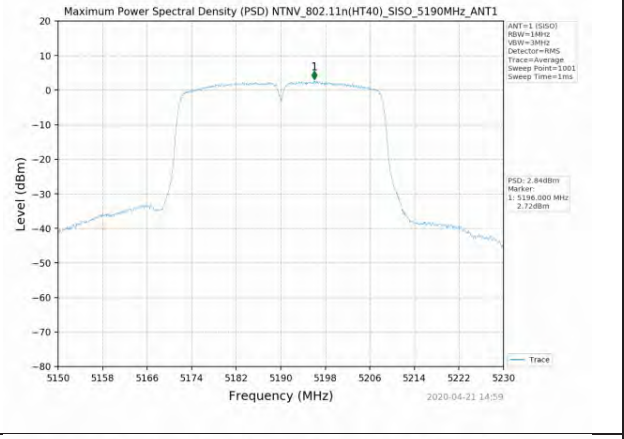
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.778 838 GHz
4.551 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.78500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.785000000 GHz
Start Freq 5.772000000 GHz
Stop Freq 5.798000000 GHz
CF Step 2.600000 MHz
Freq Offset 0 Hz

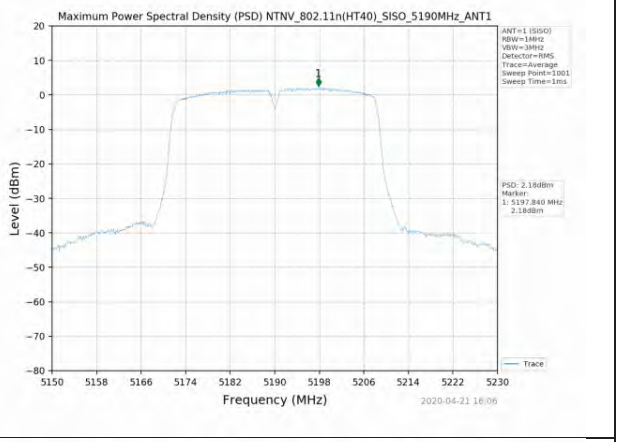
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.784 402 GHz
5.035 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.78500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.785000000 GHz
Start Freq 5.772000000 GHz
Stop Freq 5.798000000 GHz
CF Step 2.600000 MHz
Freq Offset 0 Hz

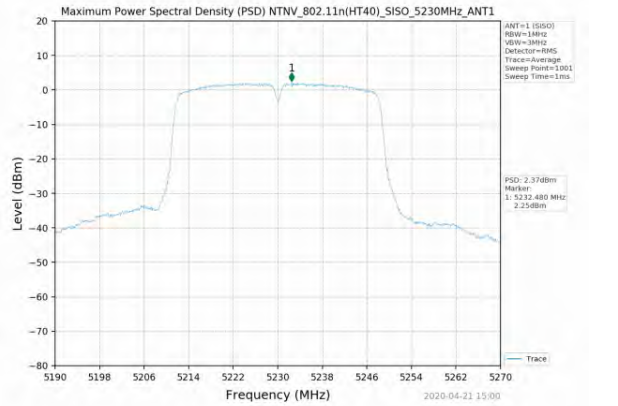
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.825000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.824 324 GHz
5.507 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.82500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.825000000 GHz
Start Freq 5.812000000 GHz
Stop Freq 5.838000000 GHz
CF Step 2.600000 MHz
Freq Offset 0 Hz

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.825000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.824 064 GHz
4.420 dBm
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
Center 5.82500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq 5.825000000 GHz
Start Freq 5.812000000 GHz
Stop Freq 5.838000000 GHz
CF Step 2.600000 MHz
Freq Offset 0 Hz

802.11n(HT40)


Maximum Power Spectral Density (PSD) NTNV_802.11n(HT40)_SISO_5190MHz_ANT1
Level (dBm)
Frequency (MHz)
2020-04-21 14:59


Maximum Power Spectral Density (PSD) NTNV_802.11n(HT40)_SISO_5190MHz_ANT1
Level (dBm)
Frequency (MHz)
2020-04-21 16:06

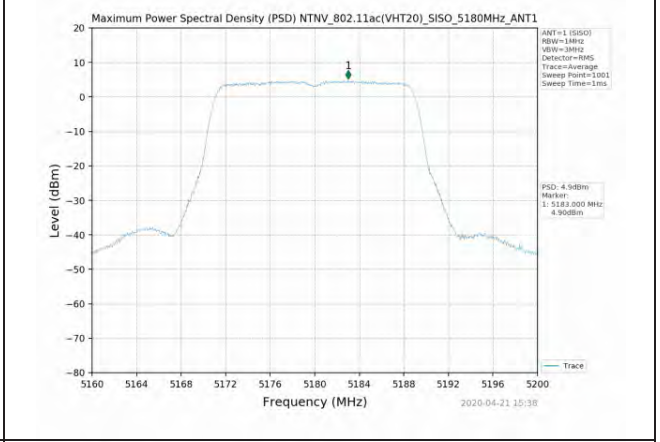

Maximum Power Spectral Density (PSD) NTNV_802.11n(HT40)_SISO_5230MHz_ANT1
Level (dBm)
Frequency (MHz)
2020-04-21 15:00

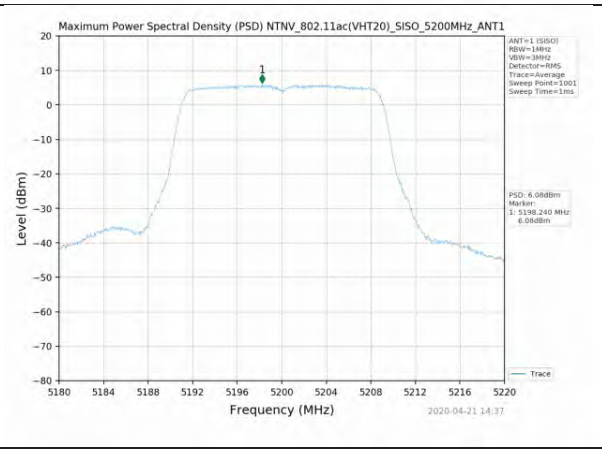
Maximum Power Spectral Density (PSD) NTNV_802.11n(HT40)_SISO_5230MHz_ANT1
Level (dBm)
Frequency (MHz)
2020-04-21 16:06

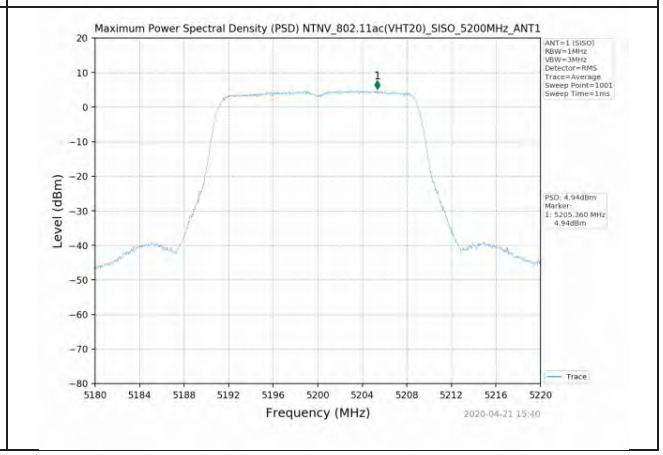
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.755000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.766 194 GHz
2.333 dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Center 5.75500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 58.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.726000000 GHz
Stop Freq
5.784000000 GHz
CF Step
5.800000 MHz
Auto
Man
Freq Offset
0 Hz

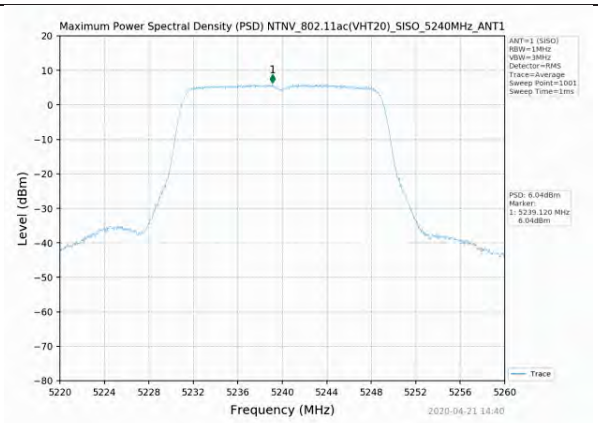
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.755000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.740 094 GHz
2.580 dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Center 5.75500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 58.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.726000000 GHz
Stop Freq
5.784000000 GHz
CF Step
5.800000 MHz
Auto
Man
Freq Offset
0 Hz

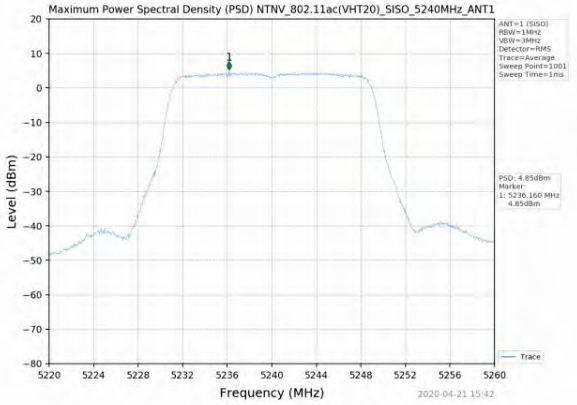
802.11ac(HT20)








Maximum Power Spectral Density (PSD) NTNV_802.11ac(VHT20)_SISO_5240MHz_ANT1
Level (dBm)
Frequency (MHz)
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
PSD: 6.04dBm
Marker:
1: 5239.120 MHz
6.04dBm
Trace
2020-04-21 14:40


Maximum Power Spectral Density (PSD) NTNV_802.11ac(VHT20)_SISO_5240MHz_ANT1
Level (dBm)
Frequency (MHz)
ANT=1 (SISO)
RBW=1MHz
VBW=3MHz
Detector=RMS
Trace=Average
Sweep Point=1001
Sweep Time=1ms
PSD: 4.85dBm
Marker:
1: 5236.160 MHz
4.85dBm
Trace
2020-04-21 15:42

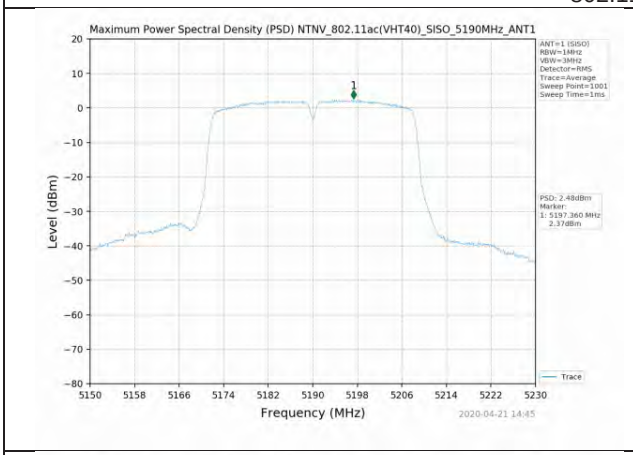
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.745000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.741 308 GHz
5.114 dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Center 5.74500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.732000000 GHz
Stop Freq
5.758000000 GHz
CF Step
2.600000 MHz
Auto
Man
Freq Offset
0 Hz

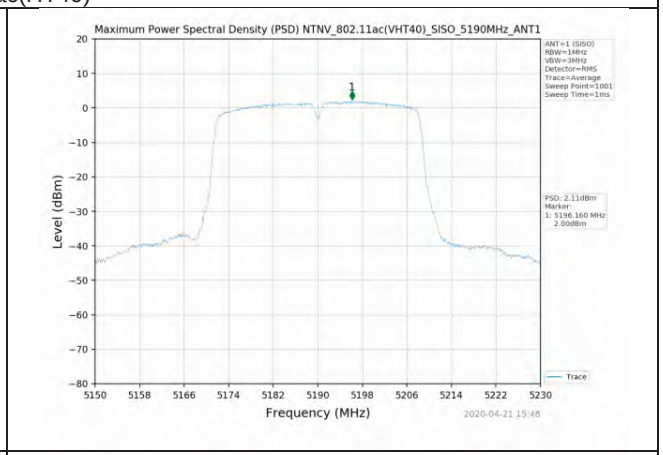
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.745000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.744 272 GHz
6.507 dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Center 5.74500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.732000000 GHz
Stop Freq
5.758000000 GHz
CF Step
2.600000 MHz
Auto
Man
Freq Offset
0 Hz

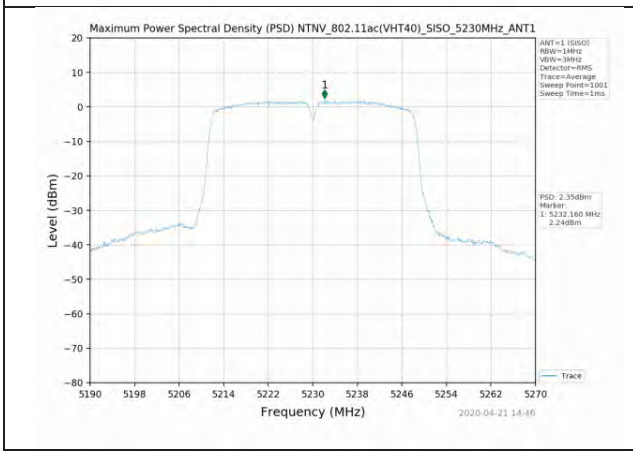
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.779 384 GHz
4.230 dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Center 5.78500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.772000000 GHz
Stop Freq
5.798000000 GHz
CF Step
2.600000 MHz
Auto
Man
Freq Offset
0 Hz

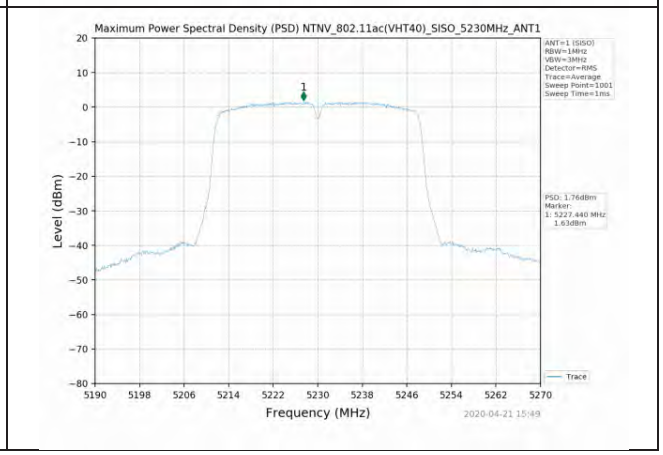
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.785000000 GHz
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.781 152 GHz
4.954 dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Center 5.78500 GHz
#Res BW 510 kHz
#VBW 1.6 MHz
Span 26.00 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.772000000 GHz
Stop Freq
5.798000000 GHz
CF Step
2.600000 MHz
Auto
Man
Freq Offset
0 Hz

802.11ac(HT40)

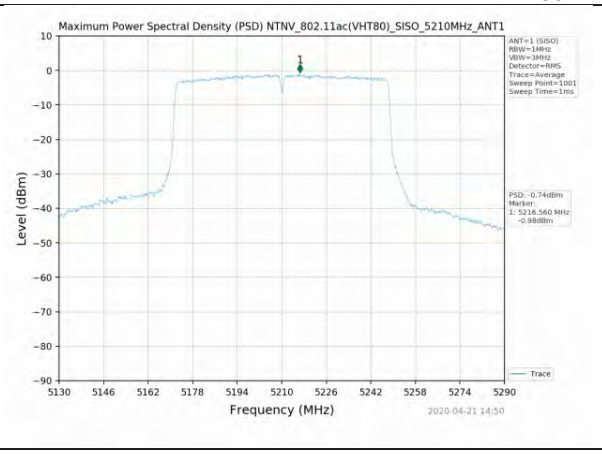


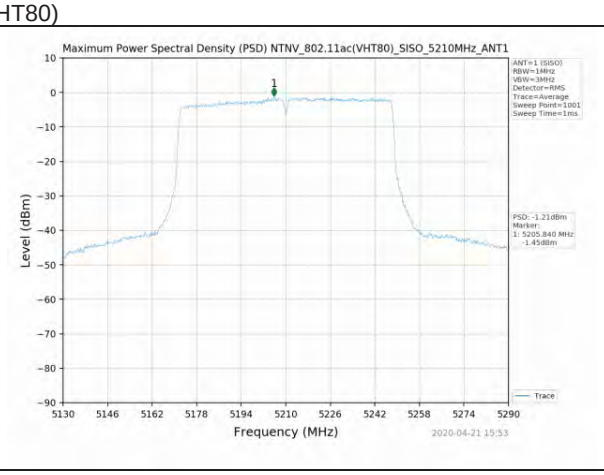


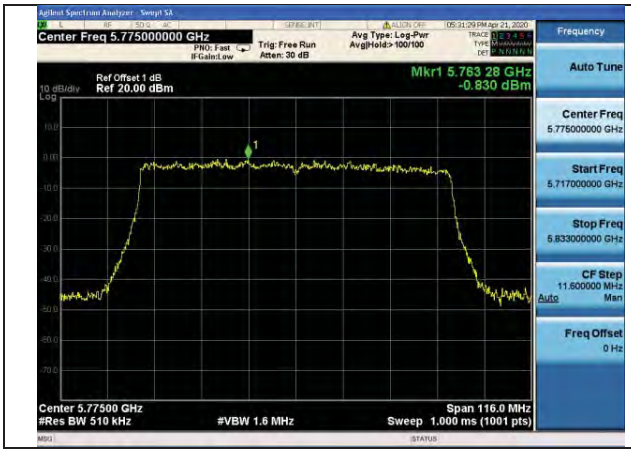




802.11ac(HT80)







4. Frequency Stability

4.1 Test Result

Test Condition	Test Mode	Test Frequency [MHz]	Result[ppm]		Limit [ppm]	Verdict
			Ant1	Ant2		
NTNV	Carrier	5180	-0.19	-0.19	<=20	PASS
		5190	-0.19	-0.19	<=20	PASS
		5200	-0.19	-0.19	<=20	PASS
		5210	-0.19	-0.19	<=20	PASS
		5230	-0.19	-0.19	<=20	PASS
		5240	-0.19	-0.38	<=20	PASS
		5745	-0.17	-0.35	<=20	PASS
		5755	-0.17	-0.17	<=20	PASS
		5775	-0.17	-0.17	<=20	PASS
		5785	-0.17	-0.35	<=20	PASS
		5795	-0.17	-0.35	<=20	PASS
		5825	-0.34	-0.34	<=20	PASS