Table of Contents

1. -6dB Emission Bandwidth 2
2. -26dB and 99% Emission Bandwidth 10
3. Duty Cycle 25
4. Maximum Conducted Output Power 33
5. Power Spectral Density 41
6. Bandedge 49
7. Spurious Emission 56
8. Frequency Stability 64

240422 FCC ID WIFI5.8
FCC_5.8G_WIFI (Part15.407) Test Data

1. -6dB Emission Bandwidth

Condition	Antenna	Mode	Frequency(MHz)	-6dB_Emission_Bandwidth(MHz)	Limit(MHz)	Result
NVNT	ANT1	802.11a	5745.00	16.406	0.500	Pass
NVNT	ANT1	802.11a	5785.00	16.404	0.500	Pass
NVNT	ANT1	802.11a	5825.00	16.378	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	17.553	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	17.421	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	17.423	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	17.553	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	17.414	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	17.417	0.500	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	35.728	0.500	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	36.027	0.500	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	35.622	0.500	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	35.769	0.500	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	75.708	0.500	Pass

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11a_5745_20M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11a_5785_20M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11a_5825_20M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11n(HT20)_5745_20M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11n(HT20)_5785_20M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11n(HT20)_5825_20M

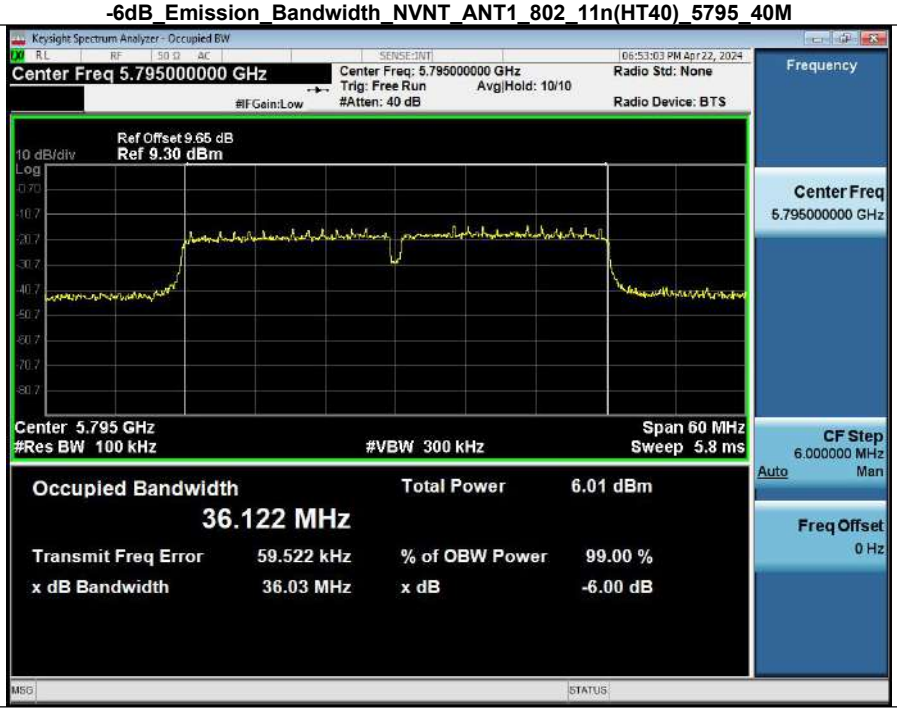
-6dB_Emission_Bandwidth_NVNT_ANT1_802_11ac(VHT20)_5745_20M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11ac(VHT20)_5785_20M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11ac(VHT20)_5825_20M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11n(HT40)_5755_40M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11n(HT40)_5795_40M



-6dB_Emission_Bandwidth_NVNT_ANT1_802_11ac(VHT40)_5755_40M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11ac(VHT40)_5795_40M

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11ac(VHT80)_5775_80M

Keysight Spectrum Analyzer - Occupied BW
Center Freq 5.775000000 GHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
07:07:19 PM Apr 22, 2024
Frequency
Ref Offset 10.43 dB
10 dB/div
Ref 10.86 dBm
Log
Center Freq
5.775000000 GHz
Center 5.775 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120 MHz
Sweep 11.53 ms
CF Step
12.000000 MHz
Auto
Man
Occupied Bandwidth
75.911 MHz
Total Power 7.02 dBm
Transmit Freq Error 100.55 kHz
% of OBW Power 99.00 %
x dB Bandwidth 75.71 MHz
x dB -6.00 dB
Freq Offset
0 Hz
MSG
STATUS

2. -26dB and 99% Emission Bandwidth

Condition	Antenna	Modulation	Frequency(MHz)	-26dB_Emission_Bandwidth(MHz)	Occupied Bandwidth(MHz)
NVNT	ANT1	802.11a	5745.00	32.38	16.96
NVNT	ANT1	802.11a	5785.00	32.99	16.96
NVNT	ANT1	802.11a	5825.00	31.23	16.92
NVNT	ANT1	802.11n(HT20)	5745.00	33.98	17.98
NVNT	ANT1	802.11n(HT20)	5785.00	33.59	17.95
NVNT	ANT1	802.11n(HT20)	5825.00	34.64	17.92
NVNT	ANT1	802.11ac(VHT20)	5745.00	34.62	17.98
NVNT	ANT1	802.11ac(VHT20)	5785.00	33.10	17.96
NVNT	ANT1	802.11ac(VHT20)	5825.00	31.05	17.92
NVNT	ANT1	802.11n(HT40)	5755.00	72.54	36.76
NVNT	ANT1	802.11n(HT40)	5795.00	72.27	36.60
NVNT	ANT1	802.11ac(VHT40)	5755.00	72.35	36.69
NVNT	ANT1	802.11ac(VHT40)	5795.00	70.34	36.62
NVNT	ANT1	802.11ac(VHT80)	5775.00	151.83	77.00

99%_OCB_NVNT_ANT1_802_11a_5745

-26BW_NVNT_ANT1_802_11a_5745

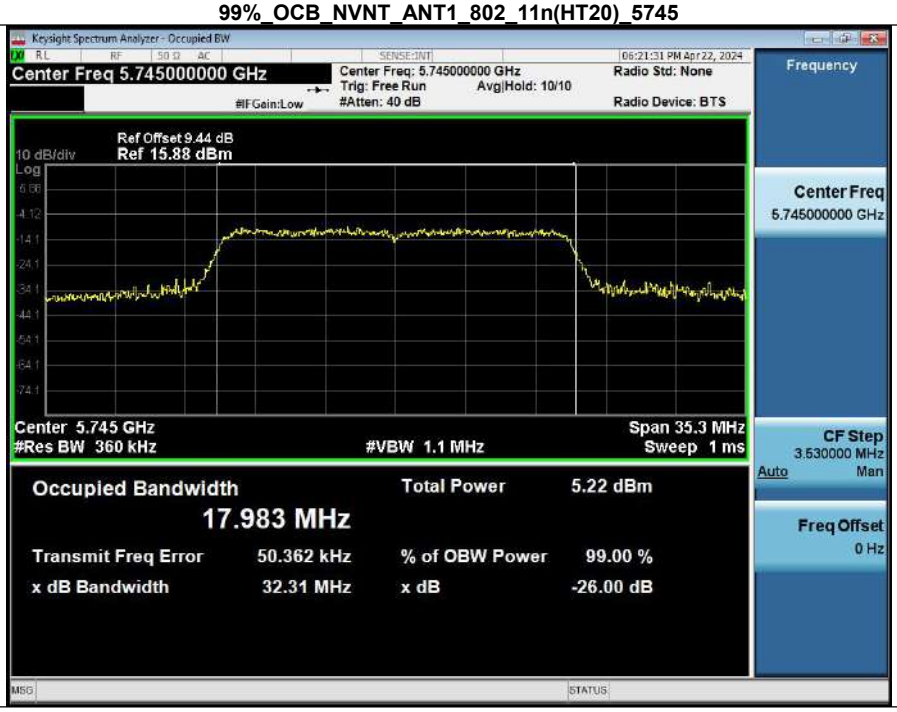
99%_OCB_NVNT_ANT1_802_11a_5785

-26BW_NVNT_ANT1_802_11a_5785

99%_OCB_NVNT_ANT1_802_11a_5825

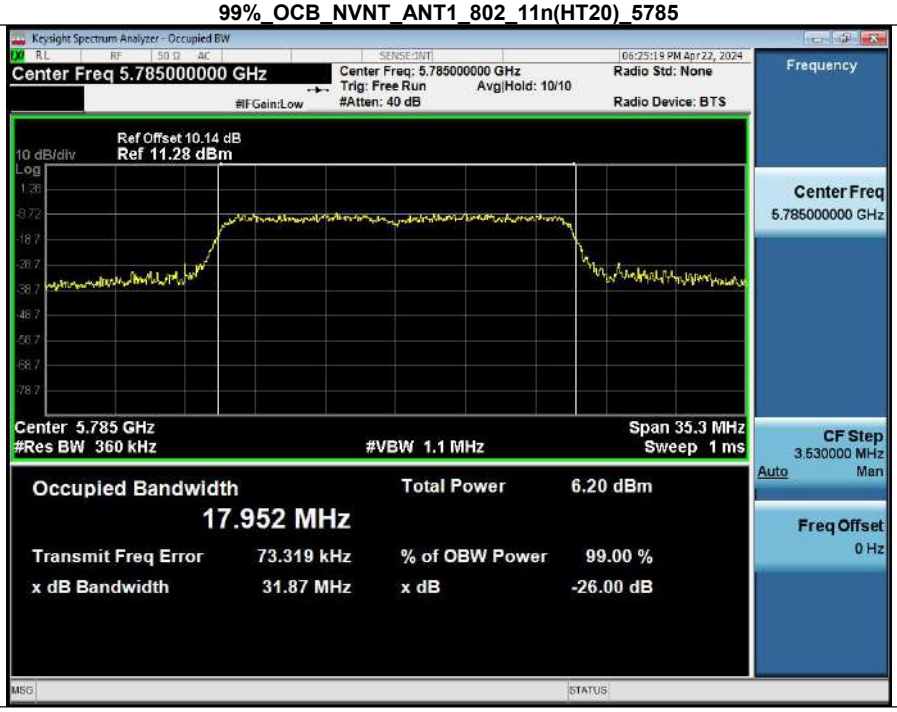
-26BW_NVNT_ANT1_802_11a_5825

99%_OCB_NVNT_ANT1_802_11n(HT20)_5745

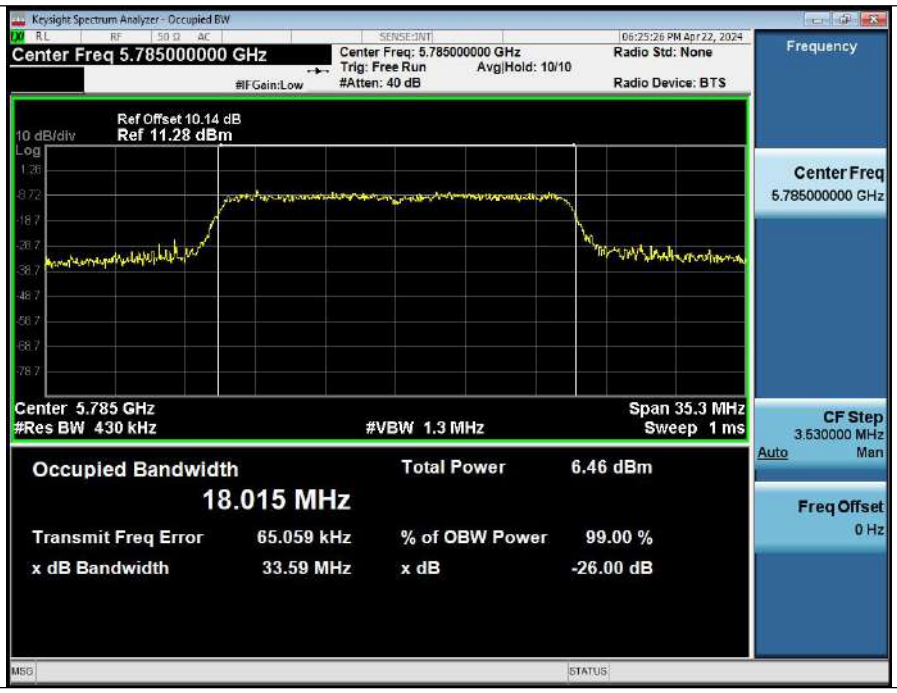


-26BW_NVNT_ANT1_802_11n(HT20)_5745

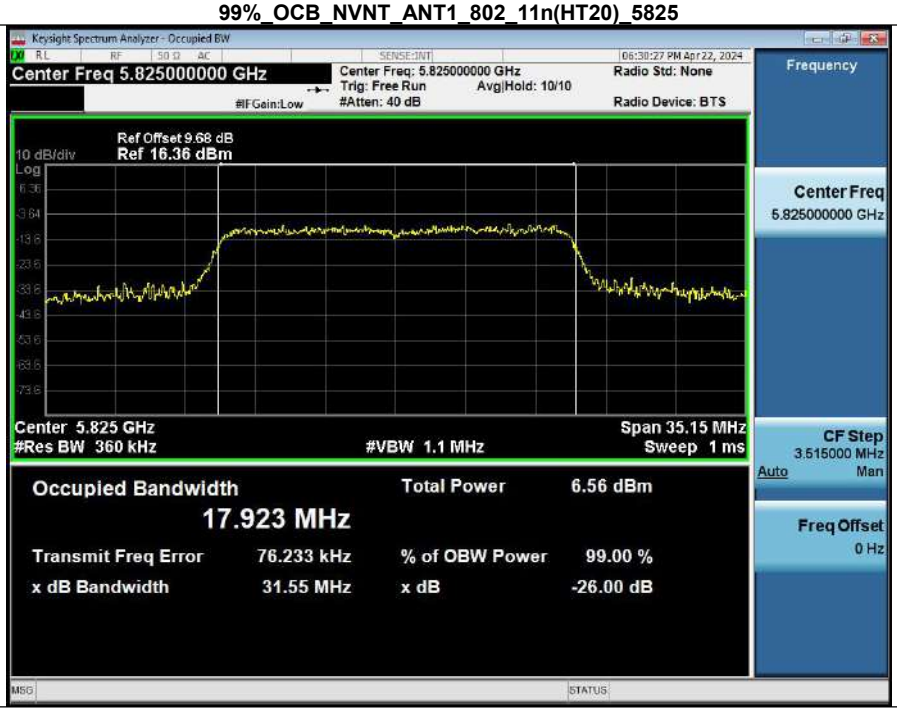
99%_OCB_NVNT_ANT1_802_11n(HT20)_5785



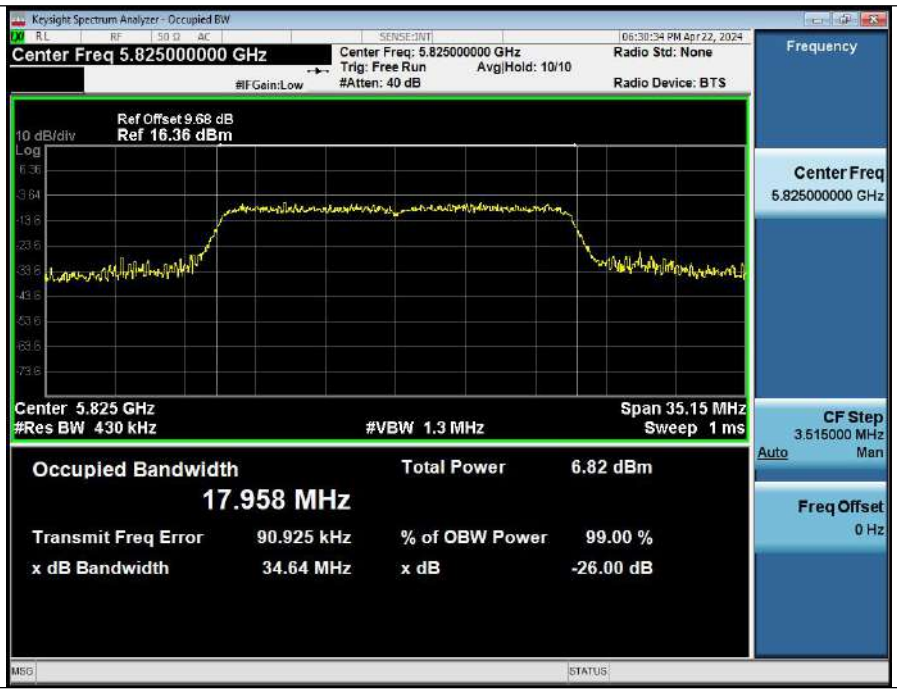
-26BW_NVNT_ANT1_802_11n(HT20)_5785



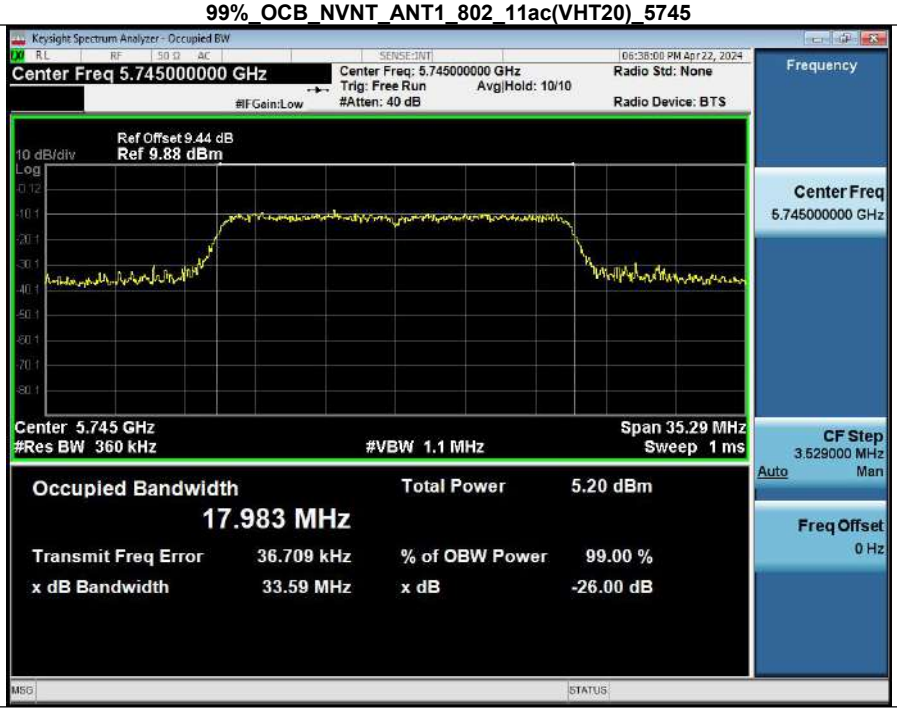
99%_OCB_NVNT_ANT1_802_11n(HT20)_5825



-26BW_NVNT_ANT1_802_11n(HT20)_5825

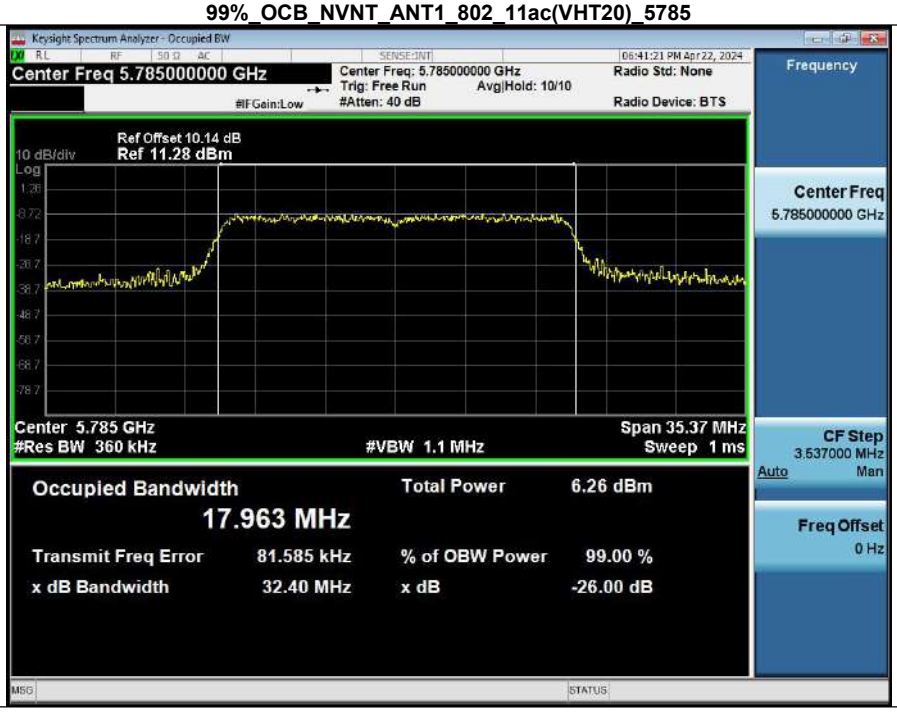


99%_OCB_NVNT_ANT1_802_11ac(VHT20)_5745

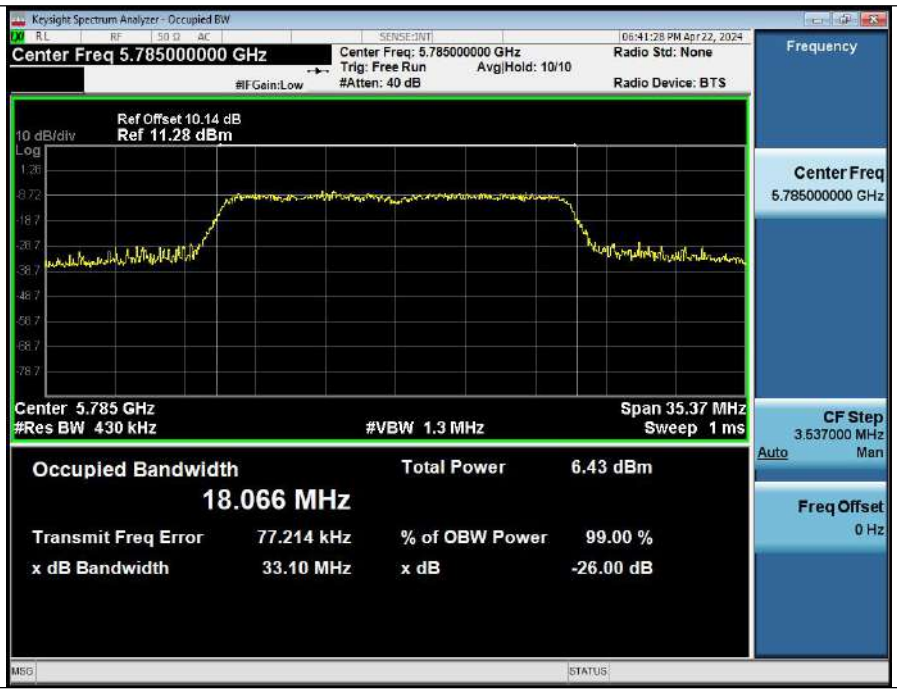


-26BW_NVNT_ANT1_802_11ac(VHT20)_5745

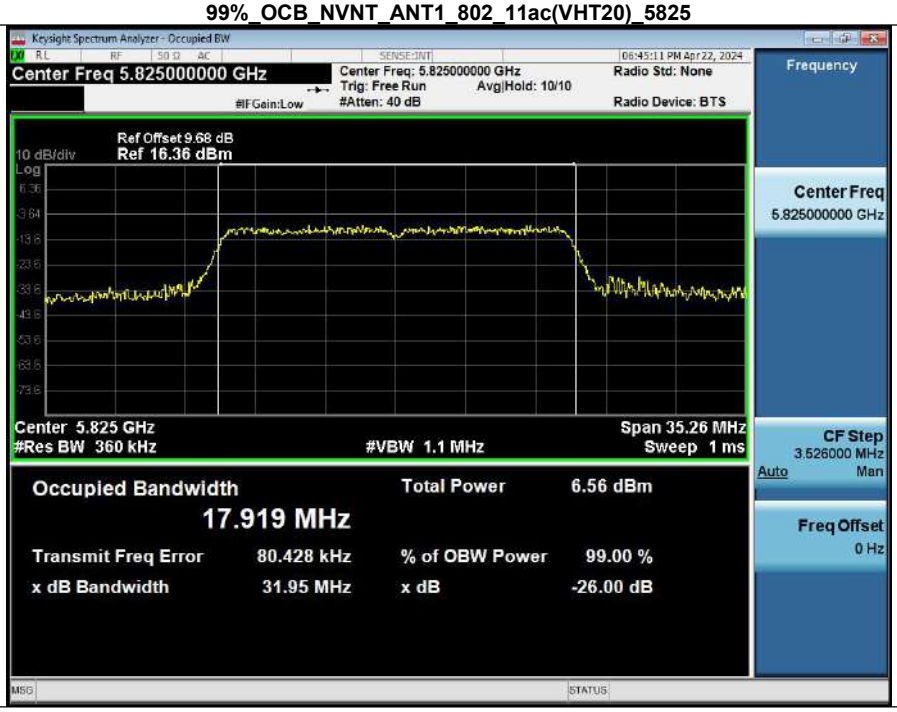
99%_OCB_NVNT_ANT1_802_11ac(VHT20)_5785



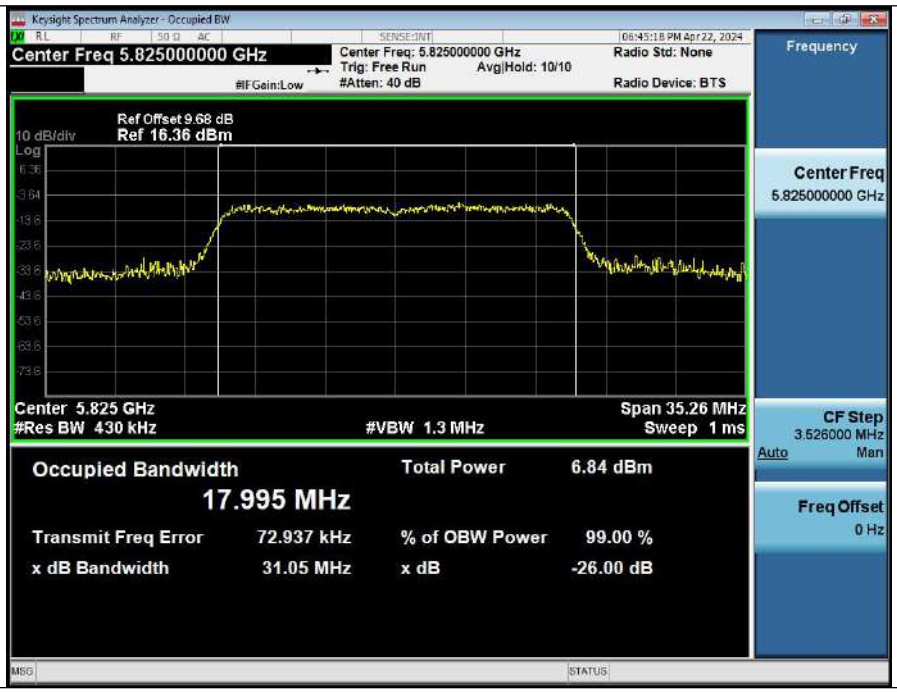
-26BW_NVNT_ANT1_802_11ac(VHT20)_5785



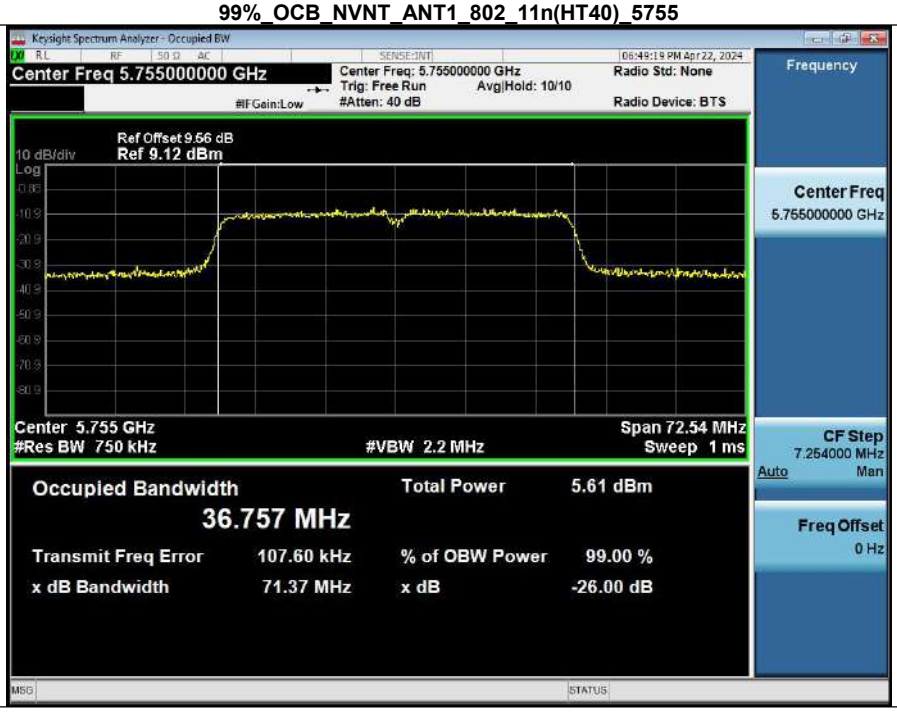
99%_OCB_NVNT_ANT1_802_11ac(VHT20)_5825



-26BW_NVNT_ANT1_802_11ac(VHT20)_5825

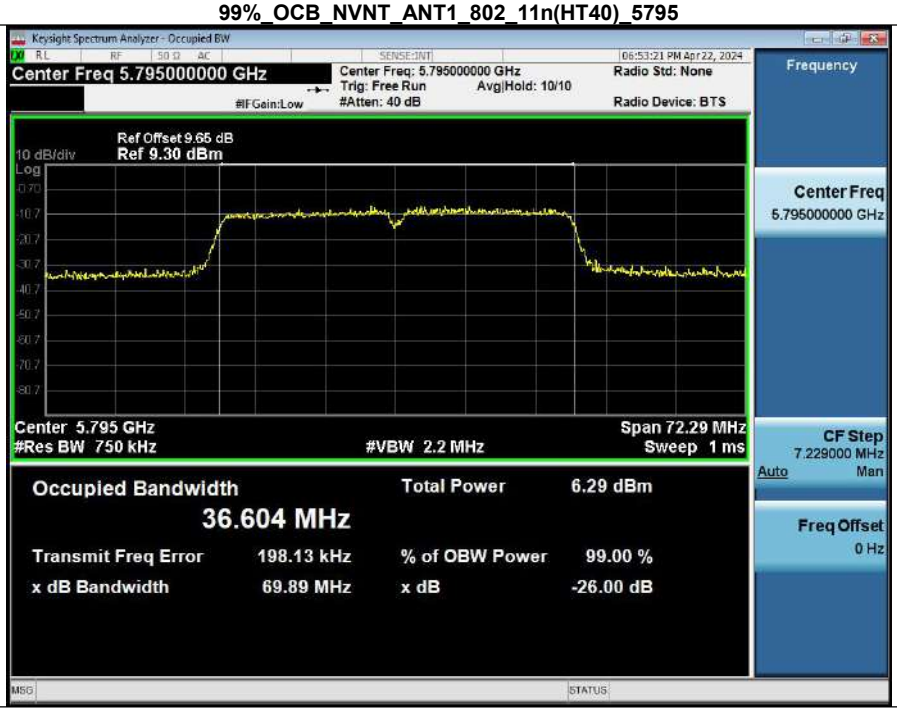


99%_OCB_NVNT_ANT1_802_11n(HT40)_5755



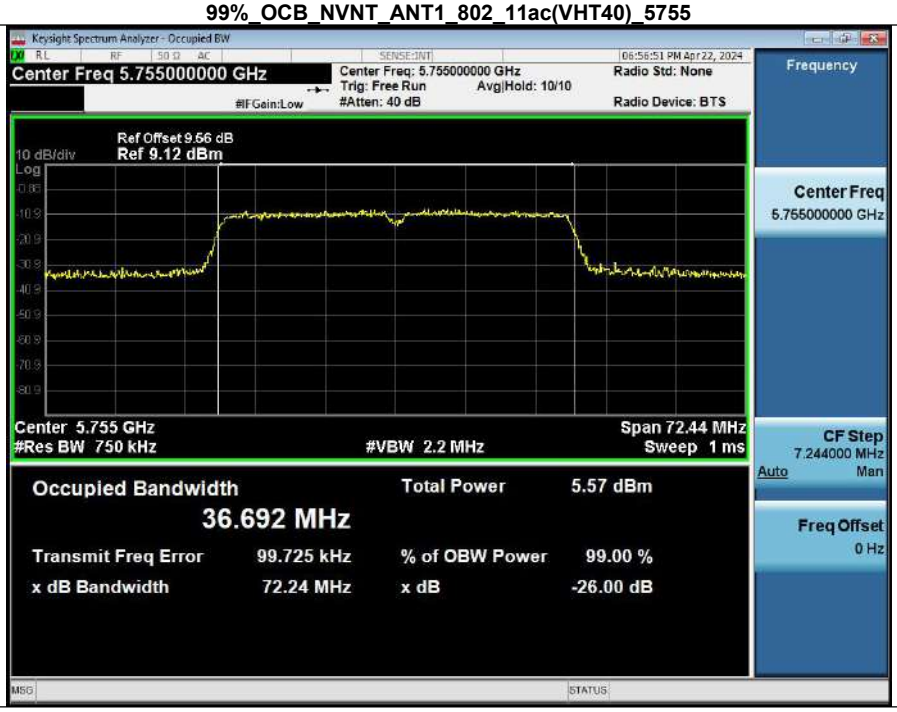
-26BW_NVNT_ANT1_802_11n(HT40)_5755

99%_OCB_NVNT_ANT1_802_11n(HT40)_5795



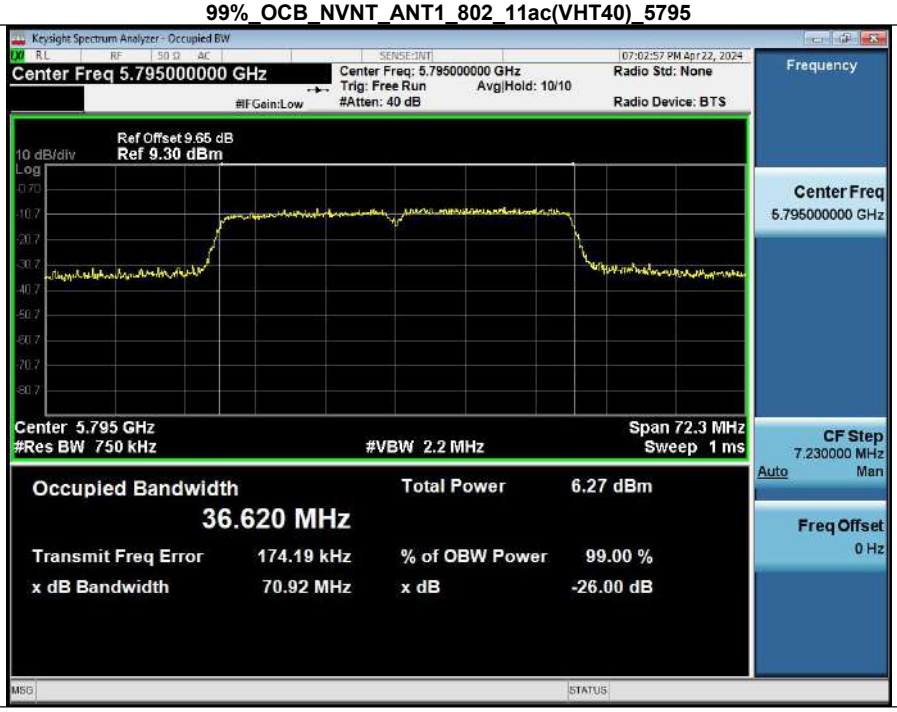
-26BW_NVNT_ANT1_802_11n(HT40)_5795

99%_OCB_NVNT_ANT1_802_11ac(VHT40)_5755



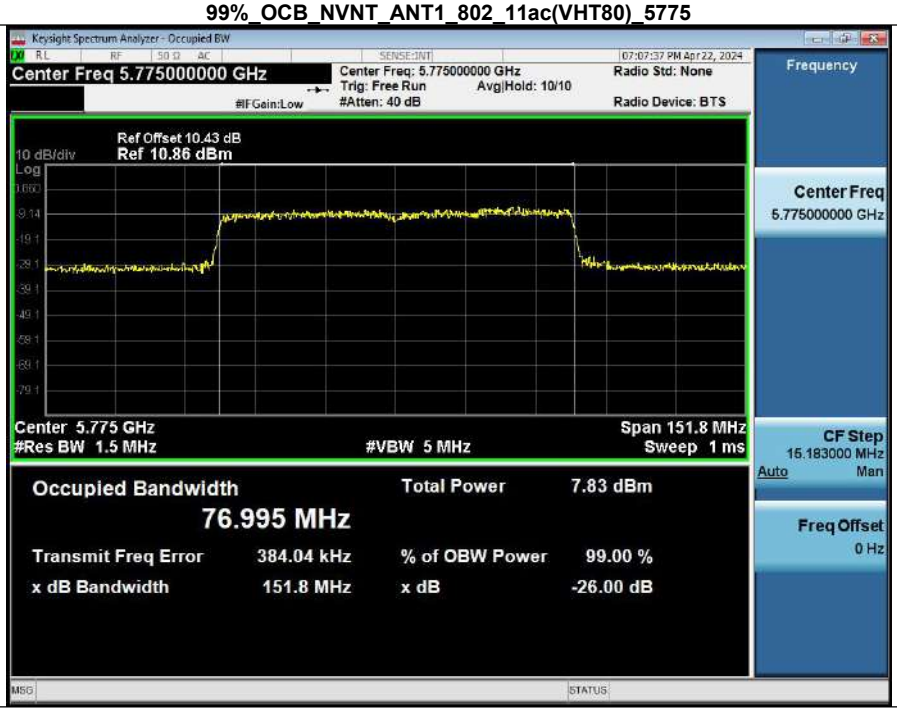
-26BW_NVNT_ANT1_802_11ac(VHT40)_5755

99%_OCB_NVNT_ANT1_802_11ac(VHT40)_5795



-26BW_NVNT_ANT1_802_11ac(VHT40)_5795

99%_OCB_NVNT_ANT1_802_11ac(VHT80)_5775



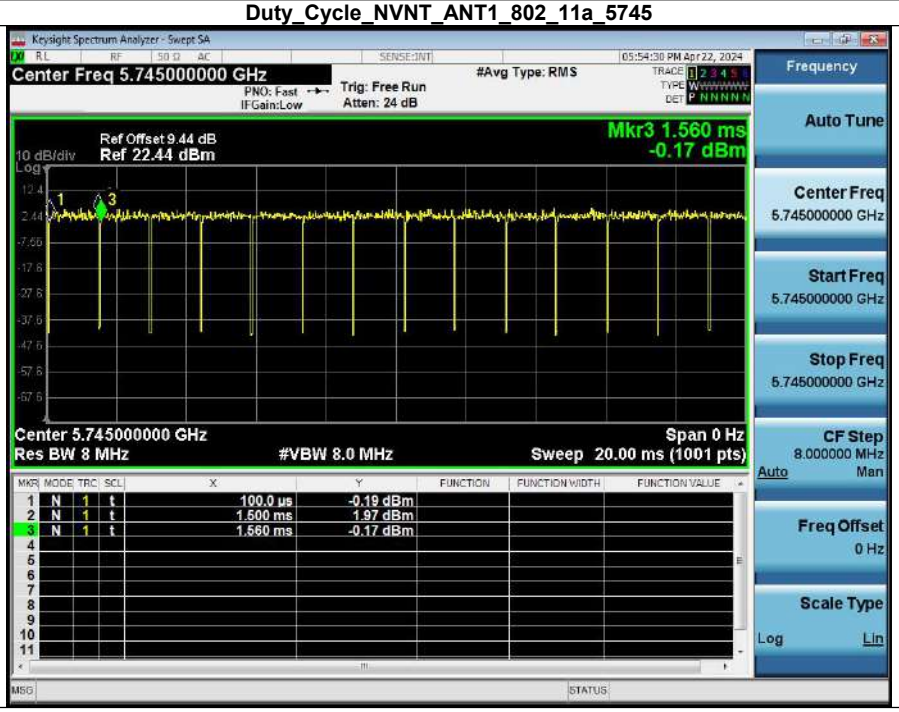
-26BW_NVNT_ANT1_802_11ac(VHT80)_5775

Keysight Spectrum Analyzer - Occupied BW
Center Freq 5.775000000 GHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
07:07:44 PM Apr 22, 2024
Frequency
Ref Offset 10.43 dB
10 dB/div
Ref 10.86 dBm
Log
Center Freq
5.775000000 GHz
Center 5.775 GHz
#Res BW 2 MHz
#VBW 6 MHz
Span 151.8 MHz
Sweep 1 ms
CF Step
15.183000 MHz
Auto
Man
Occupied Bandwidth
77.435 MHz
Total Power 8.17 dBm
Transmit Freq Error 396.87 kHz
% of OBW Power 99.00 %
x dB Bandwidth 151.8 MHz
x dB -26.00 dB
Freq Offset
0 Hz
MSG
STATUS

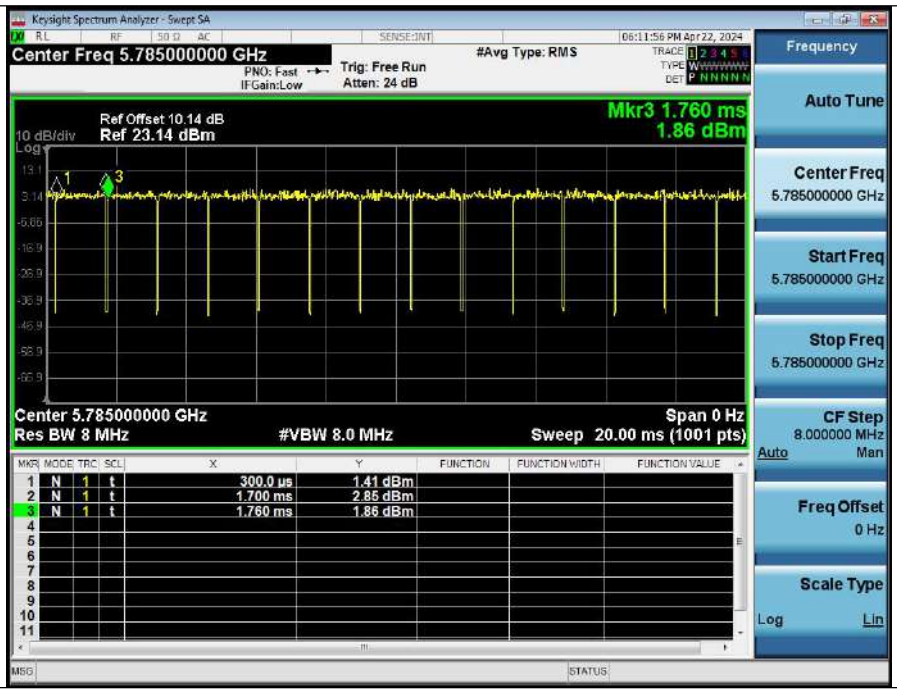
3. Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty_factor
NVNT	ANT1	802.11a	5745.00	95.89	0.18
NVNT	ANT1	802.11a	5785.00	95.89	0.18
NVNT	ANT1	802.11a	5825.00	97.22	0.12
NVNT	ANT1	802.11n(HT20)	5745.00	95.16	0.22
NVNT	ANT1	802.11n(HT20)	5785.00	95.16	0.22
NVNT	ANT1	802.11n(HT20)	5825.00	96.72	0.14
NVNT	ANT1	802.11ac(VHT20)	5745.00	96.77	0.14
NVNT	ANT1	802.11ac(VHT20)	5785.00	96.77	0.14
NVNT	ANT1	802.11ac(VHT20)	5825.00	95.16	0.22
NVNT	ANT1	802.11n(HT40)	5755.00	90.63	0.43
NVNT	ANT1	802.11n(HT40)	5795.00	93.75	0.28
NVNT	ANT1	802.11ac(VHT40)	5755.00	90.63	0.43
NVNT	ANT1	802.11ac(VHT40)	5795.00	90.91	0.41
NVNT	ANT1	802.11ac(VHT80)	5775.00	83.33	0.79

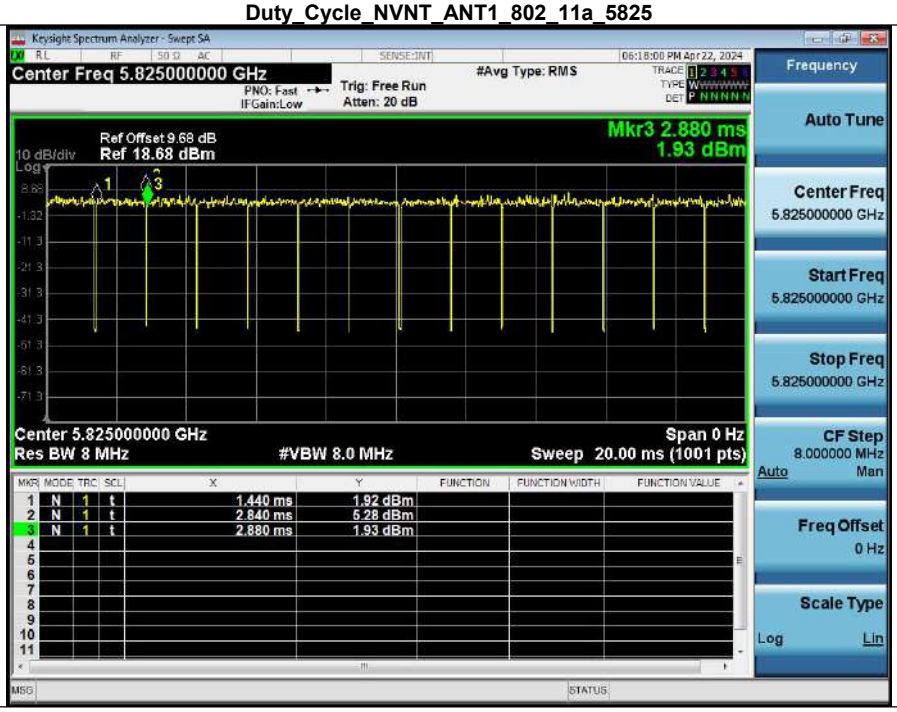
Duty_Cycle_NVNT_ANT1_802_11a_5745



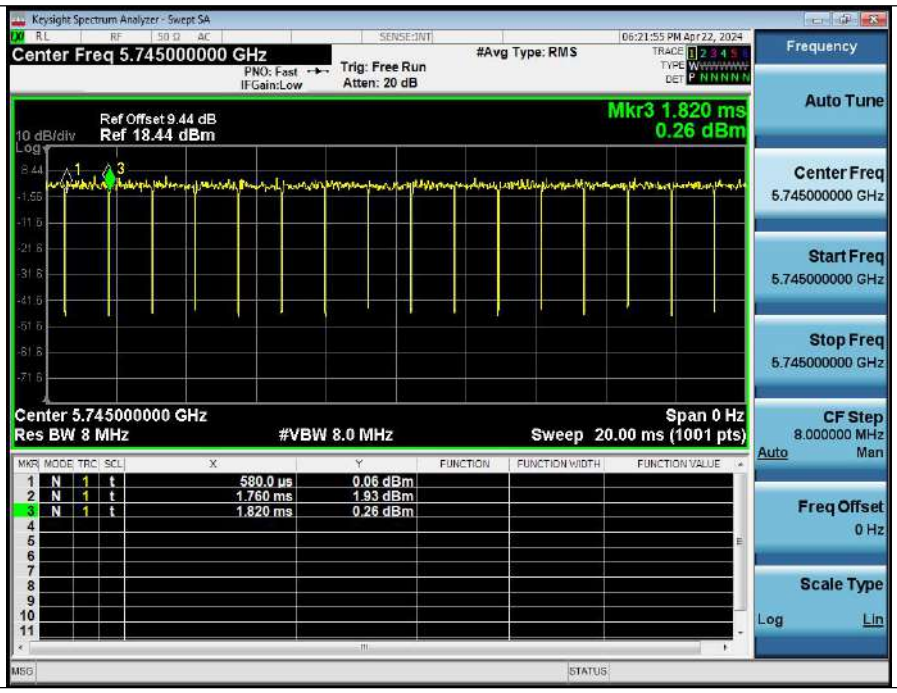
Duty_Cycle_NVNT_ANT1_802_11a_5785



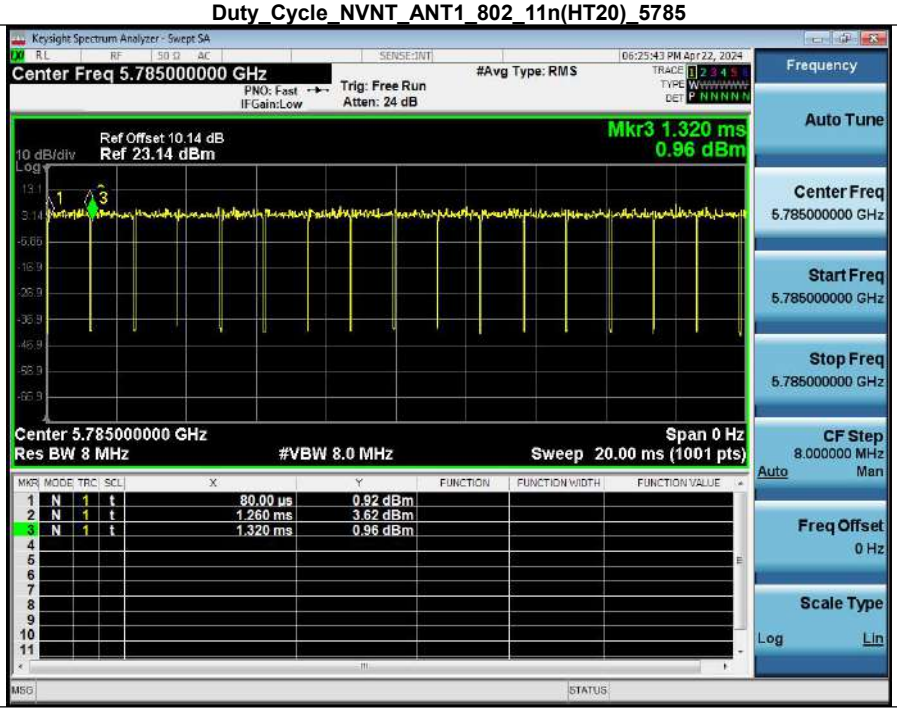
Duty_Cycle_NVNT_ANT1_802_11a_5825



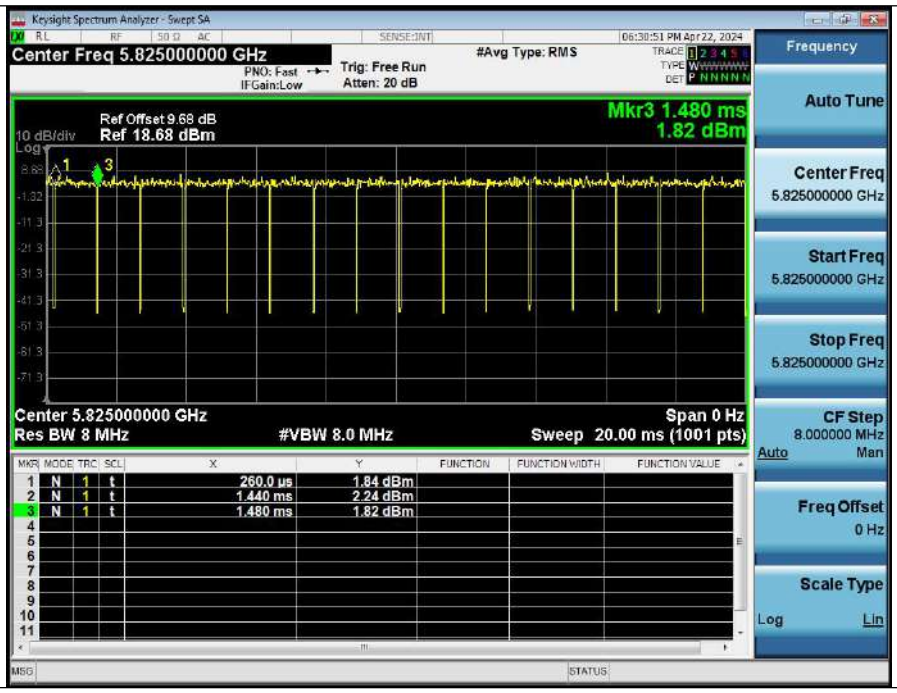
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_5745



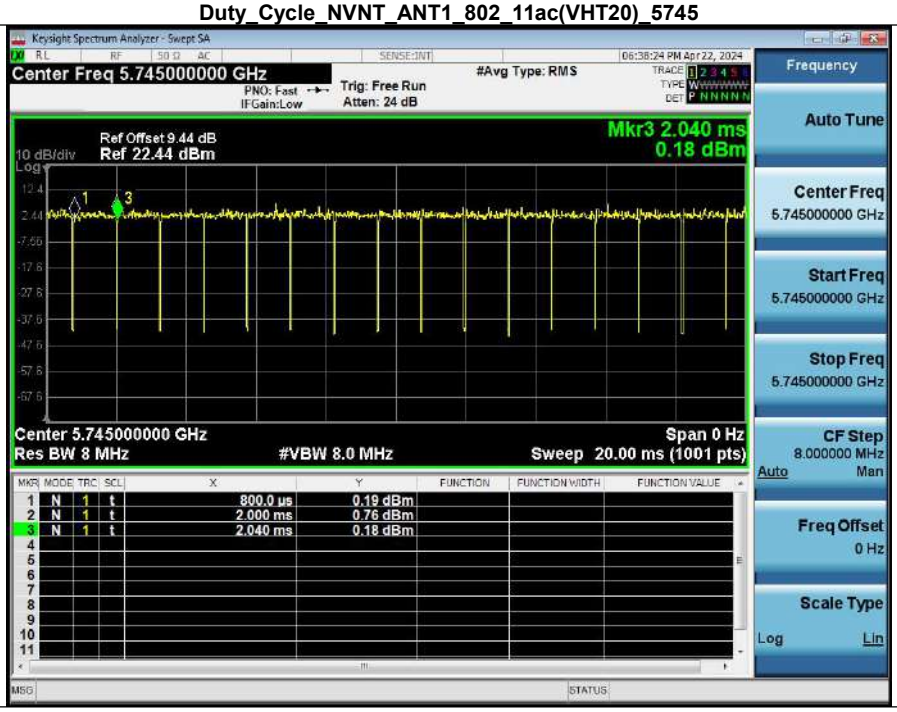
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_5785



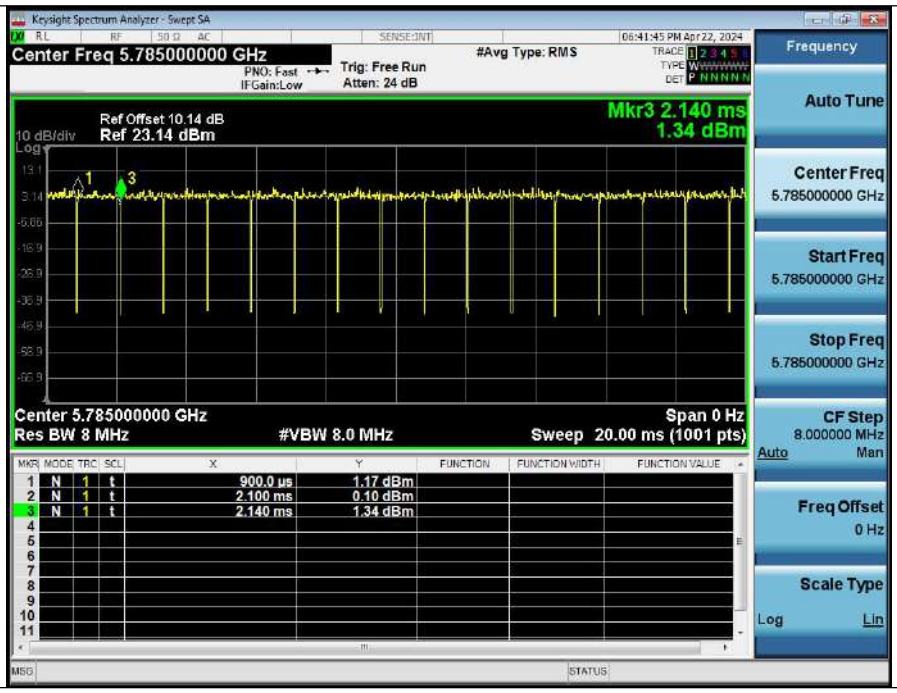
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_5825



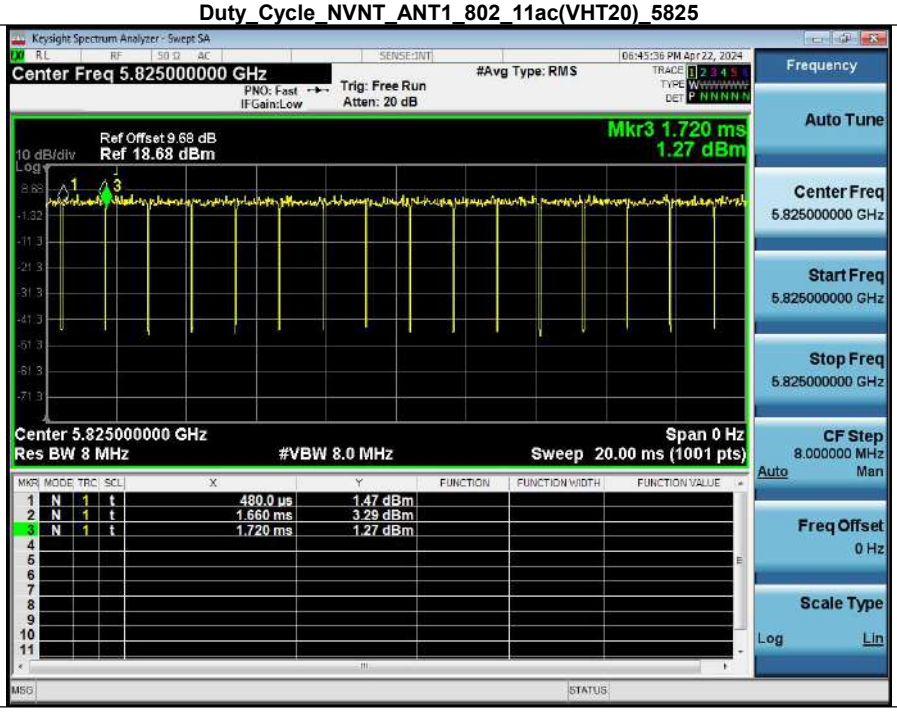
Duty_Cycle_NVNT_ANT1_802_11ac(VHT20)_5745



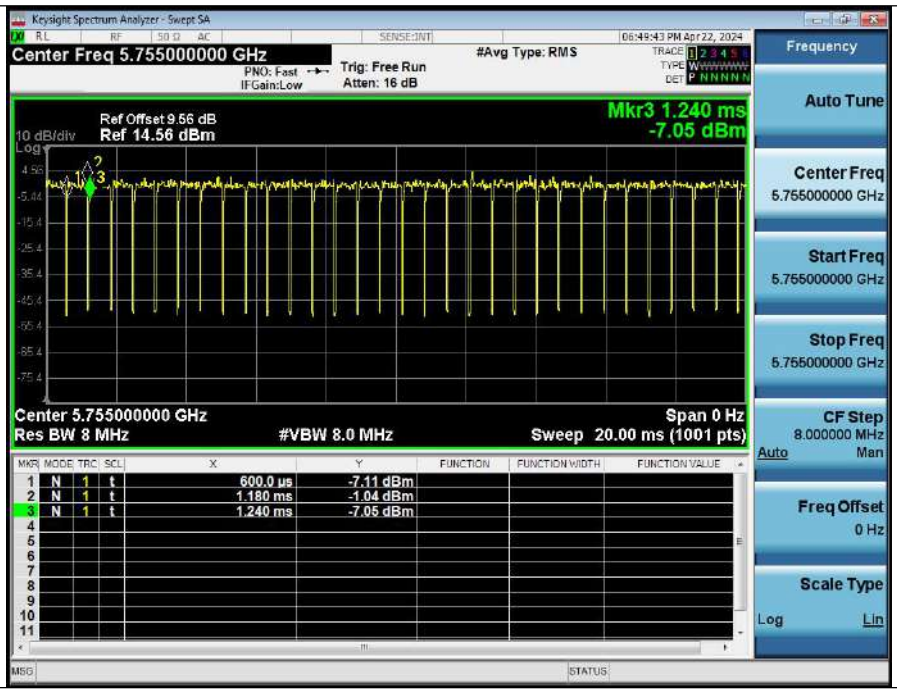
Duty_Cycle_NVNT_ANT1_802_11ac(VHT20)_5785



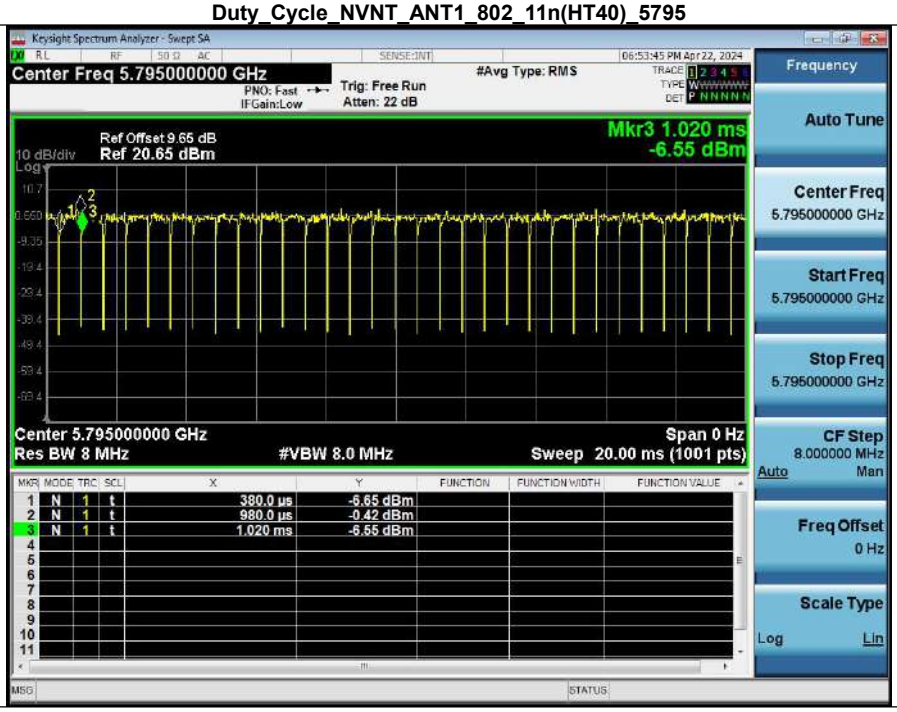
Duty_Cycle_NVNT_ANT1_802_11ac(VHT20)_5825



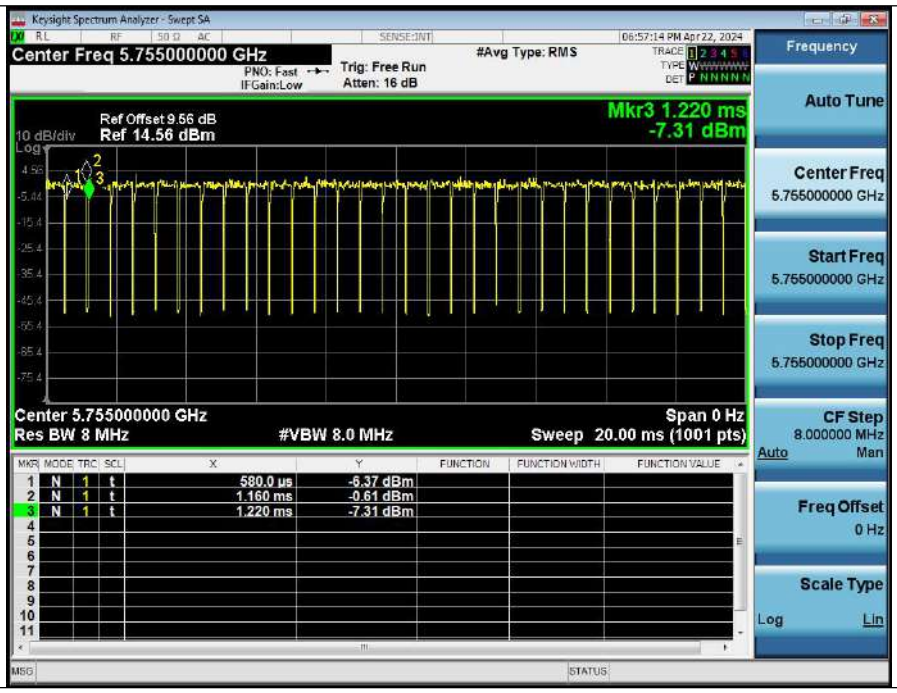
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_5755



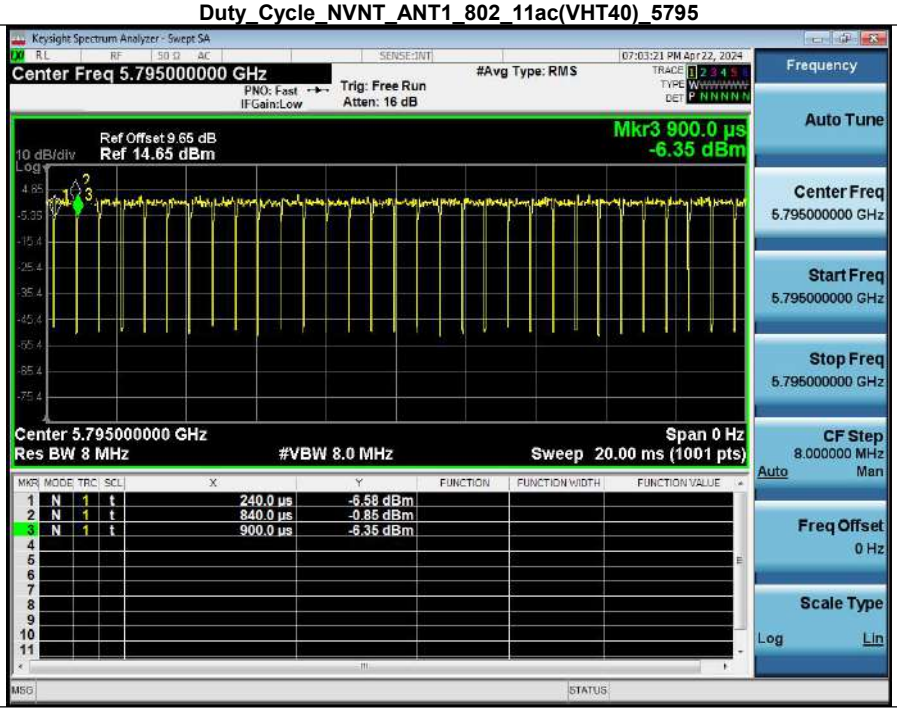
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_5795



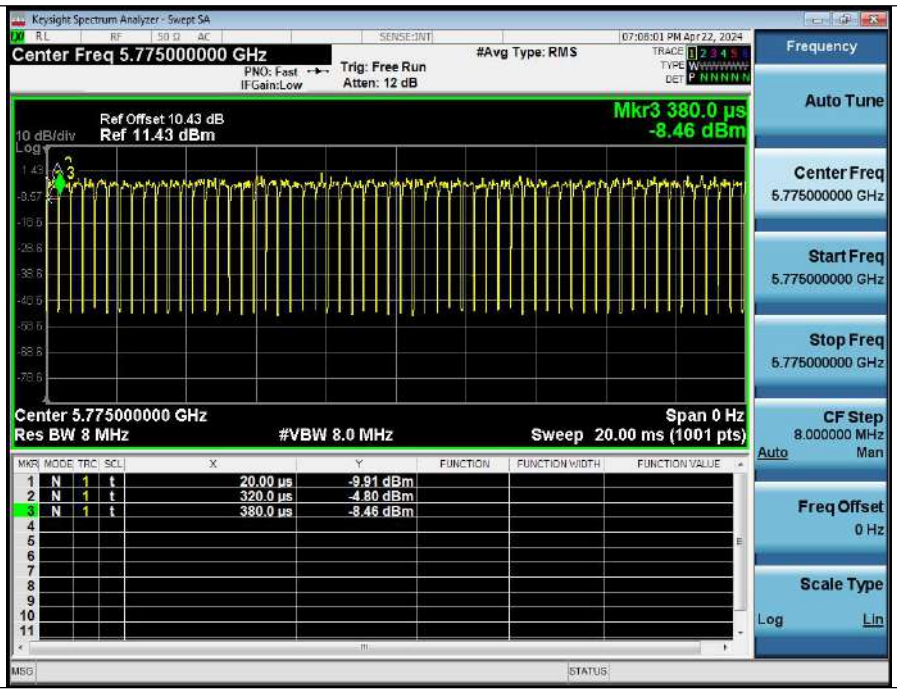
Duty_Cycle_NVNT_ANT1_802_11ac(VHT40)_5755



Duty_Cycle_NVNT_ANT1_802_11ac(VHT40)_5795



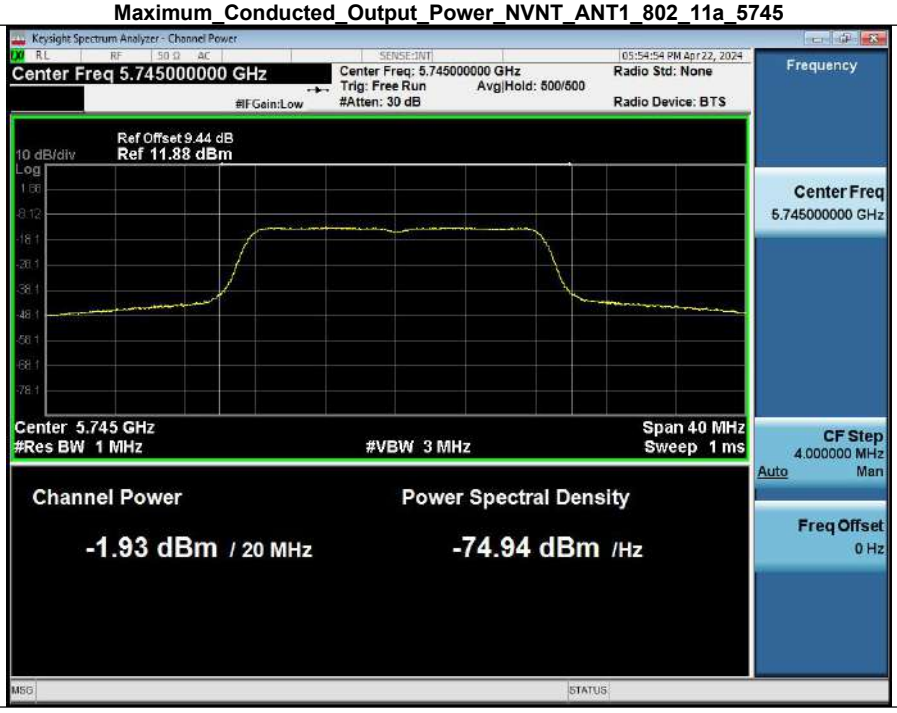
Duty_Cycle_NVNT_ANT1_802_11ac(VHT80)_5775


Keysight Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 12 dB
#Avg Type: RMS
07:08:01 PM Apr 22, 2024
Frequency
Auto Tune
Ref Offset 10.43 dB
10 dB/div
Ref 11.43 dBm
Mkr3 380.0 µs
-8.46 dBm
Center Freq
5.775000000 GHz
Start Freq
5.775000000 GHz
Stop Freq
5.775000000 GHz
Center 5.775000000 GHz
Span 0 Hz
Res BW 8 MHz
#VBW 8.0 MHz
Sweep 20.00 ms (1001 pts)
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 t 20.00 µs -9.91 dBm
2 N 1 t 320.0 µs -4.80 dBm
3 N 1 t 380.0 µs -8.46 dBm
MSG
STATUS

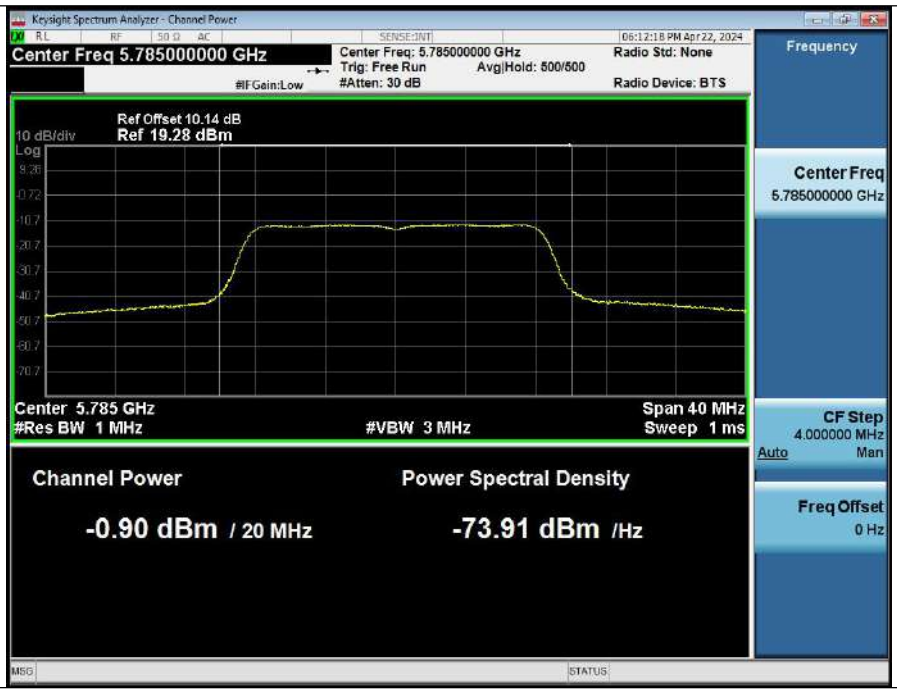
4. Maximum Conducted Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5745.00	-1.93	0.18	-1.75	30	Pass
NVNT	ANT1	802.11a	5785.00	-0.90	0.18	-0.72	30	Pass
NVNT	ANT1	802.11a	5825.00	-0.47	0.12	-0.35	30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	-1.54	0.22	-1.32	30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	-0.56	0.22	-0.34	30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	-0.10	0.14	0.04	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	-1.54	0.14	-1.40	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	-0.56	0.14	-0.42	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	-0.16	0.22	0.06	30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	-2.17	0.43	-1.74	30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	-1.47	0.28	-1.19	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	-2.17	0.43	-1.74	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	-1.49	0.41	-1.08	30	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	-1.32	0.79	-0.53	30	Pass

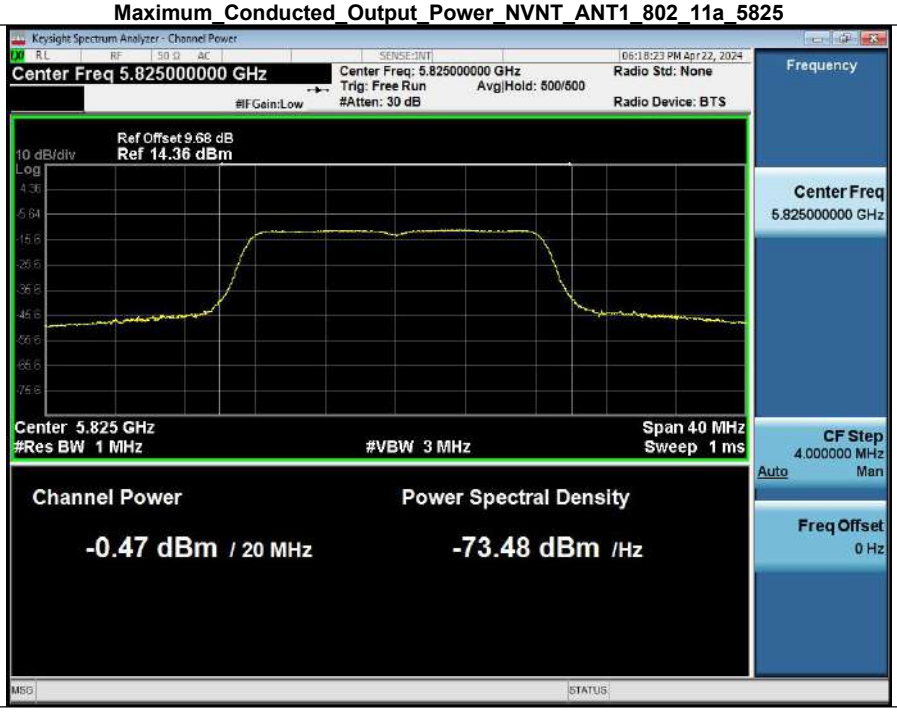
Maximum_Conducted_Output_Power_NVNT_ANT1_802_11a_5745



Maximum_Conducted_Output_Power_NVNT_ANT1_802_11a_5785



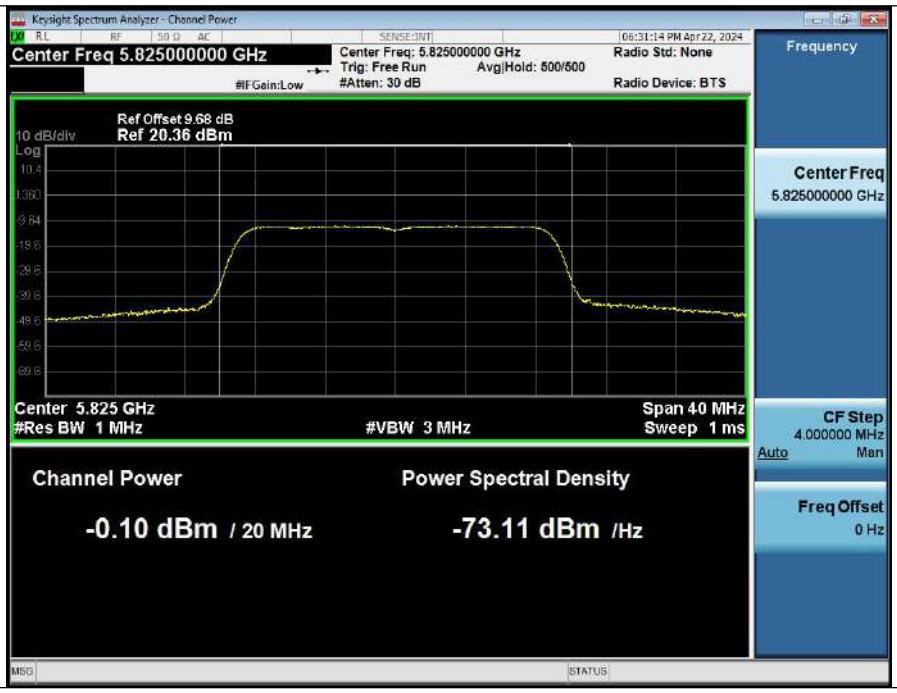
Maximum_Conducted_Output_Power_NVNT_ANT1_802_11a_5825



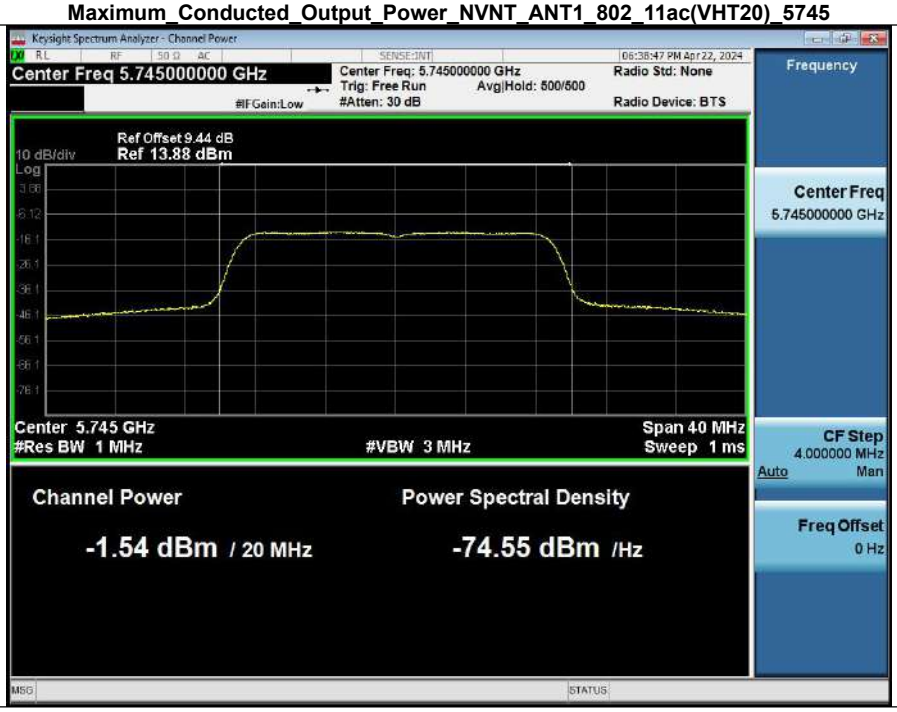
Maximum_Conducted_Output_Power_NVNT_ANT1_802_11n(HT20)_5745

Maximum_Conducted_Output_Power_NVNT_ANT1_802_11n(HT20)_5785

Maximum_Conducted_Output_Power_NVNT_ANT1_802_11n(HT20)_5825

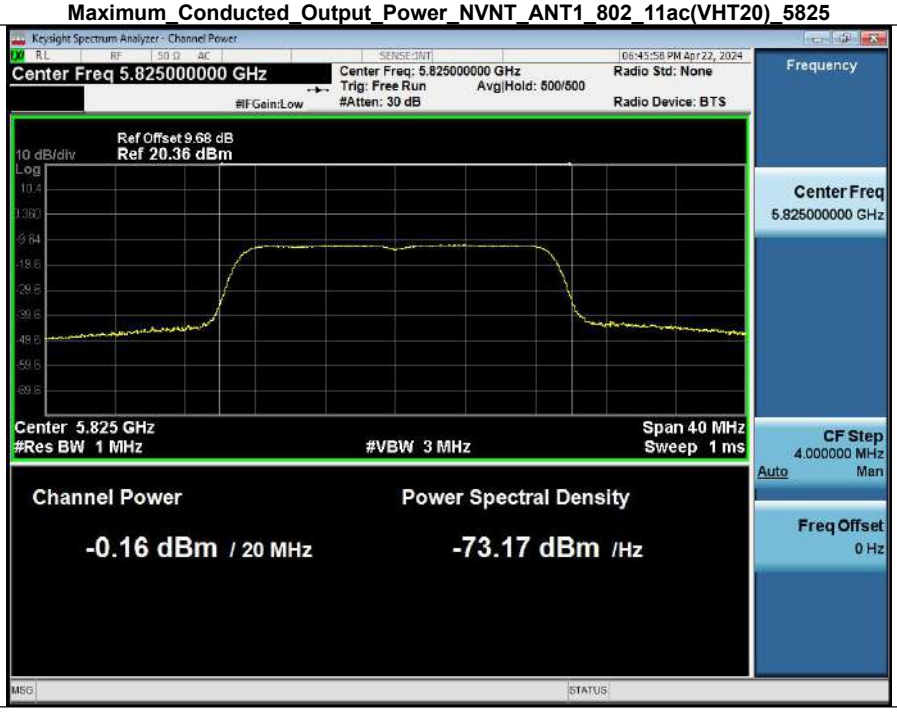


Maximum_Conducted_Output_Power_NVNT_ANT1_802_11ac(VHT20)_5745



Maximum_Conducted_Output_Power_NVNT_ANT1_802_11ac(VHT20)_5785

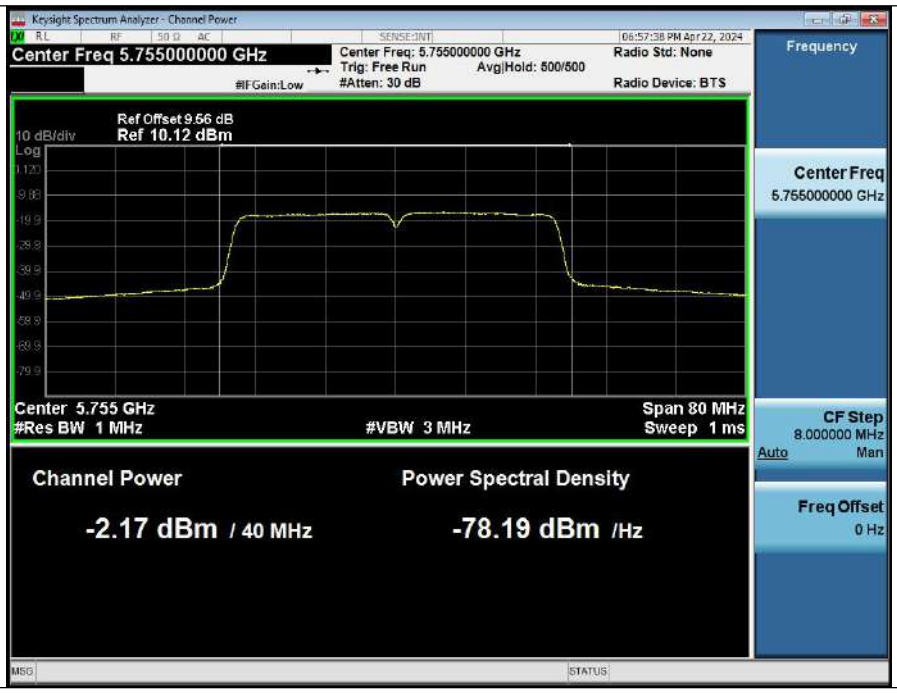
Maximum_Conducted_Output_Power_NVNT_ANT1_802_11ac(VHT20)_5825



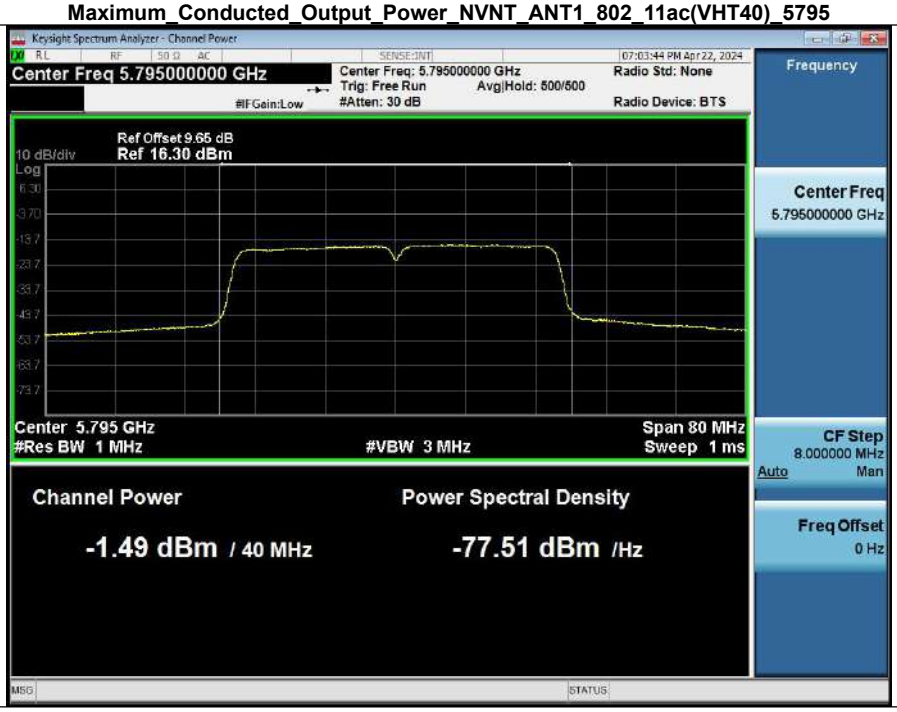
Maximum_Conducted_Output_Power_NVNT_ANT1_802_11n(HT40)_5755

Maximum_Conducted_Output_Power_NVNT_ANT1_802_11n(HT40)_5795

Maximum_Conducted_Output_Power_NVNT_ANT1_802_11ac(VHT40)_5755



Maximum_Conducted_Output_Power_NVNT_ANT1_802_11ac(VHT40)_5795



Maximum_Conducted_Output_Power_NVNT_ANT1_802_11ac(VHT80)_5775

Keysight Spectrum Analyzer - Channel Power
Center Freq 5.775000000 GHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold: 500/500
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
07:08:25 PM Apr 22, 2024
Frequency
Ref Offset 10.43 dB
10 dB/div
Ref 10.86 dBm
Log
Center Freq
5.775000000 GHz
Center 5.775 GHz
#Res BW 1 MHz
#VBW 3 MHz
Span 120 MHz
Sweep 1 ms
CF Step
12.000000 MHz
Auto
Man
Channel Power
-1.32 dBm / 80 MHz
Power Spectral Density
-80.35 dBm /Hz
Freq Offset
0 Hz
MSG
STATUS

5. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	PSD_SA(dBm/RBW)	Duty factor(dB)	RB factor(dB)	PSD(dBm/500kHz)	limit(dBm/500kHz)	Result
NVNT	ANT1	802.11a	5745.00	-16.00	0.18	-0	-15.91	30	Pass
NVNT	ANT1	802.11a	5785.00	-14.77	0.18	-0	-14.68	30	Pass
NVNT	ANT1	802.11a	5825.00	-14.40	0.12	-0	-14.37	30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	-15.73	0.22	-0	-15.60	30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	-14.71	0.22	-0	-14.58	30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	-14.35	0.14	-0	-14.29	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	-15.70	0.14	-0	-15.65	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	-14.77	0.14	-0	-14.72	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	-14.42	0.22	-0	-14.29	30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	-19.19	0.43	-0	-18.85	30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	-18.38	0.28	-0	-18.19	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	-19.21	0.43	-0	-18.87	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	-18.37	0.41	-0	-18.04	30	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	-20.70	0.79	-0	-20.00	30	Pass

Power_Spectral_Density_NVNT_ANT1_802_11a_5745

Power_Spectral_Density_NVNT_ANT1_802_11a_5785

Power_Spectral_Density_NVNT_ANT1_802_11a_5825

Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5745

Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5785

Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5825

Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5745

Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5785

Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5825

Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_5755

Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_5795

Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT40)_5755

Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT40)_5795

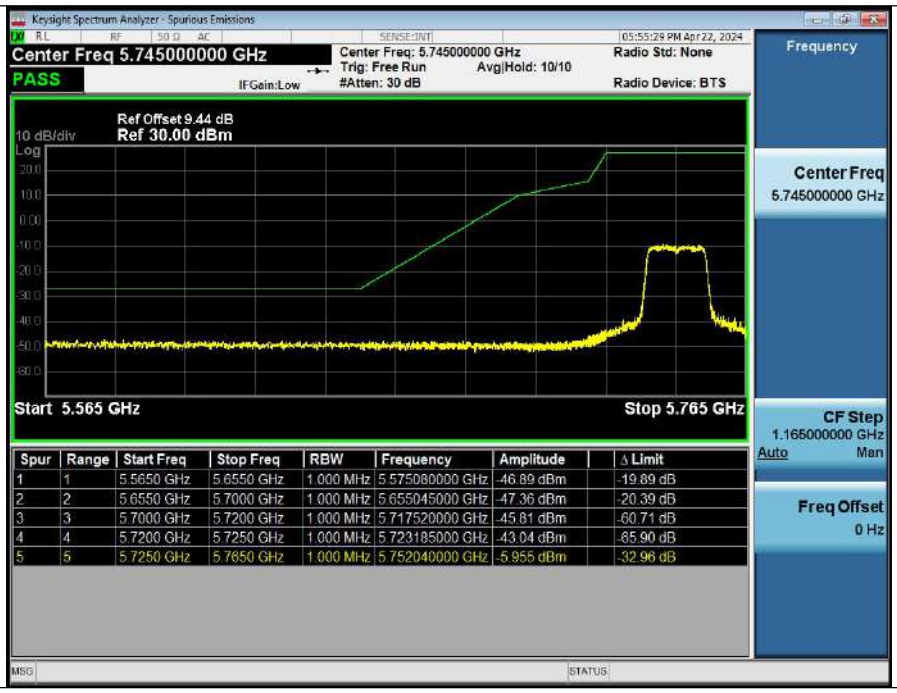
Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT80)_5775

Keysight Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 12 dB
#Avg Type: RMS
Avg|Hold: 100/100
07:08:43 PM Apr 22, 2024
Ref Offset 10.43 dB
10 dB/div
Ref 10.86 dBm
Log
Mkr1 5.812 56 GHz
-20.701 dBm
Center 5.77500 GHz
#Res BW 510 kHz
#VBW 3.0 MHz*
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.715000000 GHz
Stop Freq
5.835000000 GHz
CF Step
12.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Frequency Area(MHz)	Frequency(MHz)	Amplitude(dBm)	Limit(dBm)	Result
NVNT	ANT1	802.11a	LCH	5565-5655	5575.080	-46.89	-27.00	Pass
NVNT	ANT1	802.11a	LCH	5655-5700	5655.045	-47.36	-26.96	Pass
NVNT	ANT1	802.11a	LCH	5700-5720	5717.520	-45.81	14.91	Pass
NVNT	ANT1	802.11a	LCH	5720-5725	5723.185	-43.04	22.86	Pass
NVNT	ANT1	802.11a	HCH	5850-5855	5852.265	-45.01	21.84	Pass
NVNT	ANT1	802.11a	HCH	5855-5875	5874.700	-47.15	10.08	Pass
NVNT	ANT1	802.11a	HCH	5875-5920	5918.380	-47.06	-25.67	Pass
NVNT	ANT1	802.11a	HCH	5920-6005	5950.430	-41.68	-27.00	Pass
NVNT	ANT1	802.11n(HT20)	LCH	5565-5655	5568.780	-46.57	-27.00	Pass
NVNT	ANT1	802.11n(HT20)	LCH	5655-5700	5661.345	-47.39	-21.78	Pass
NVNT	ANT1	802.11n(HT20)	LCH	5700-5720	5716.820	-46.36	14.71	Pass
NVNT	ANT1	802.11n(HT20)	LCH	5720-5725	5723.920	-41.11	24.54	Pass
NVNT	ANT1	802.11n(HT20)	HCH	5850-5855	5853.935	-44.69	18.03	Pass
NVNT	ANT1	802.11n(HT20)	HCH	5855-5875	5874.700	-46.88	10.08	Pass
NVNT	ANT1	802.11n(HT20)	HCH	5875-5920	5919.460	-46.68	-26.56	Pass
NVNT	ANT1	802.11n(HT20)	HCH	5920-6005	5972.615	-41.77	-27.00	Pass
NVNT	ANT1	802.11ac(VHT20)	LCH	5565-5655	5570.580	-46.60	-27.00	Pass
NVNT	ANT1	802.11ac(VHT20)	LCH	5655-5700	5664.270	-47.29	-19.38	Pass
NVNT	ANT1	802.11ac(VHT20)	LCH	5700-5720	5714.160	-46.40	13.96	Pass
NVNT	ANT1	802.11ac(VHT20)	LCH	5720-5725	5721.720	-42.41	19.52	Pass
NVNT	ANT1	802.11ac(VHT20)	HCH	5850-5855	5851.430	-44.12	23.74	Pass
NVNT	ANT1	802.11ac(VHT20)	HCH	5855-5875	5871.600	-46.30	10.95	Pass
NVNT	ANT1	802.11ac(VHT20)	HCH	5875-5920	5914.465	-47.26	-22.45	Pass
NVNT	ANT1	802.11ac(VHT20)	HCH	5920-6005	5930.710	-42.42	-27.00	Pass
NVNT	ANT1	802.11n(HT40)	LCH	5595-5655	5636.040	-47.06	-27.00	Pass
NVNT	ANT1	802.11n(HT40)	LCH	5655-5700	5665.125	-47.23	-18.68	Pass
NVNT	ANT1	802.11n(HT40)	LCH	5700-5720	5715.200	-46.22	14.26	Pass
NVNT	ANT1	802.11n(HT40)	LCH	5720-5725	5720.505	-44.46	16.75	Pass
NVNT	ANT1	802.11n(HT40)	HCH	5850-5855	5853.590	-47.07	18.81	Pass
NVNT	ANT1	802.11n(HT40)	HCH	5855-5875	5873.800	-46.05	10.34	Pass
NVNT	ANT1	802.11n(HT40)	HCH	5875-5920	5919.280	-47.00	-26.41	Pass
NVNT	ANT1	802.11n(HT40)	HCH	5920-5955	5926.860	-42.33	-27.00	Pass
NVNT	ANT1	802.11ac(VHT40)	LCH	5595-5655	5644.500	-46.70	-27.00	Pass
NVNT	ANT1	802.11ac(VHT40)	LCH	5655-5700	5669.715	-47.27	-14.90	Pass
NVNT	ANT1	802.11ac(VHT40)	LCH	5700-5720	5718.200	-45.20	15.10	Pass
NVNT	ANT1	802.11ac(VHT40)	LCH	5720-5725	5722.425	-43.95	21.13	Pass
NVNT	ANT1	802.11ac(VHT40)	HCH	5850-5855	5854.575	-47.10	16.57	Pass
NVNT	ANT1	802.11ac(VHT40)	HCH	5855-5875	5870.140	-46.53	11.36	Pass
NVNT	ANT1	802.11ac(VHT40)	HCH	5875-5920	5919.055	-46.56	-26.22	Pass
NVNT	ANT1	802.11ac(VHT40)	HCH	5920-5955	5927.875	-41.44	-27.00	Pass
NVNT	ANT1	802.11ac(VHT80)	MCH	5650-5655	5654.225	-46.01	-27.00	Pass
NVNT	ANT1	802.11ac(VHT80)	MCH	5655-5700	5668.725	-46.57	-15.71	Pass
NVNT	ANT1	802.11ac(VHT80)	MCH	5700-5720	5704.680	-45.87	11.31	Pass
NVNT	ANT1	802.11ac(VHT80)	MCH	5720-5725	5722.055	-44.00	20.29	Pass
NVNT	ANT1	802.11ac(VHT80)	MCH	5850-5855	5854.970	-44.12	15.67	Pass
NVNT	ANT1	802.11ac(VHT80)	MCH	5855-5875	5872.440	-44.53	10.72	Pass
NVNT	ANT1	802.11ac(VHT80)	MCH	5875-5920	5918.830	-46.04	-26.04	Pass
NVNT	ANT1	802.11ac(VHT80)	MCH	5920-5925	5920.370	-41.54	-27.00	Pass
Reamrk: Antenna gain is covered in the test.								

Bandedge_NVNT_ANT1_802_11a_5745

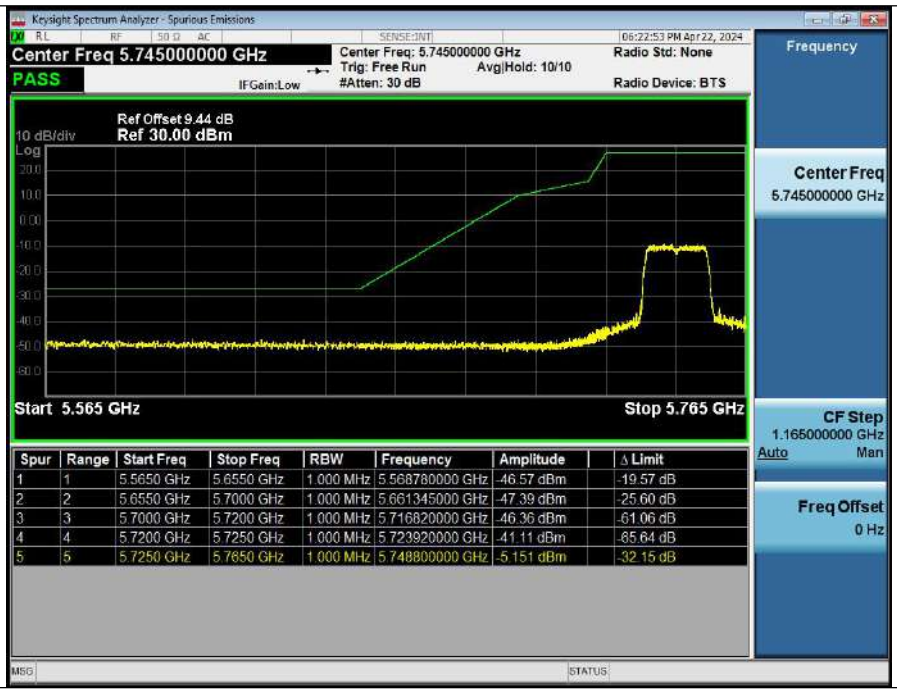


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.5650 GHz	5.6550 GHz	1.000 MHz	5.575080000 GHz	-46.89 dBm	-19.89 dB
2	2	5.6550 GHz	5.7000 GHz	1.000 MHz	5.655045000 GHz	-47.36 dBm	-20.39 dB
3	3	5.7000 GHz	5.7200 GHz	1.000 MHz	5.717520000 GHz	-45.81 dBm	-60.71 dB
4	4	5.7200 GHz	5.7250 GHz	1.000 MHz	5.723185000 GHz	-43.04 dBm	-85.90 dB
5	5	5.7250 GHz	5.7650 GHz	1.000 MHz	5.752040000 GHz	-5.955 dBm	-32.96 dB

Bandedge_NVNT_ANT1_802_11a_5825

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.8050 GHz	5.8500 GHz	1.000 MHz	5.828445000 GHz	-7.809 dBm	-34.81 dB
2	2	5.8500 GHz	5.8550 GHz	1.000 MHz	5.852265000 GHz	-45.01 dBm	-66.85 dB
3	3	5.8550 GHz	5.8750 GHz	1.000 MHz	5.874700000 GHz	-47.15 dBm	-57.24 dB
4	4	5.8750 GHz	5.9200 GHz	1.000 MHz	5.918380000 GHz	-47.08 dBm	-21.43 dB
5	5	5.9200 GHz	6.0050 GHz	1.000 MHz	5.950430000 GHz	-41.68 dBm	-14.68 dB

Bandedge_NVNT_ANT1_802_11n(HT20)_5745

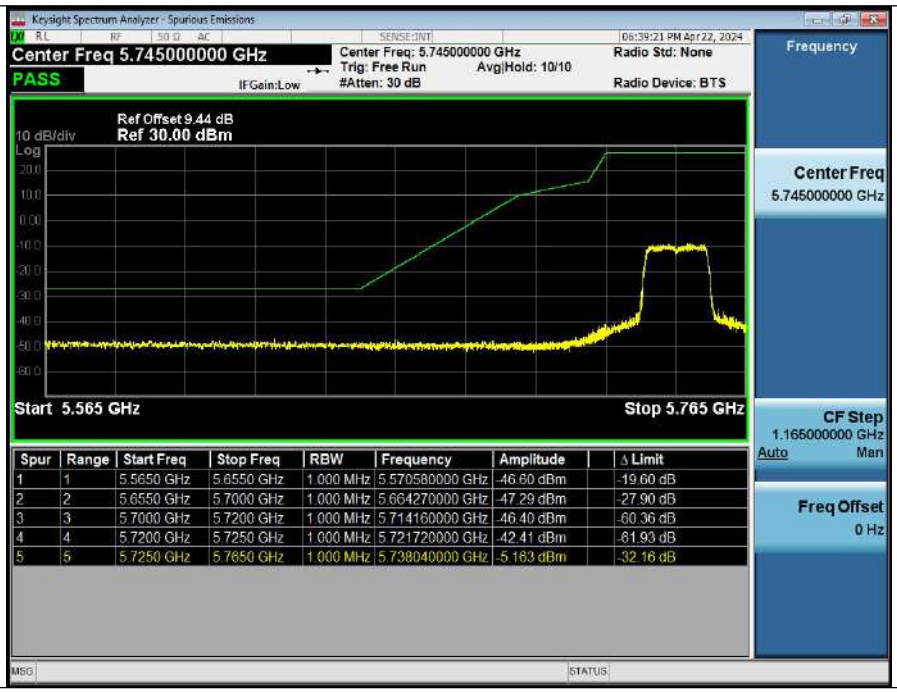


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.5650 GHz	5.6550 GHz	1.000 MHz	5.568780000 GHz	-46.57 dBm	-19.57 dB
2	2	5.6550 GHz	5.7000 GHz	1.000 MHz	5.661345000 GHz	-47.39 dBm	-25.60 dB
3	3	5.7000 GHz	5.7200 GHz	1.000 MHz	5.716820000 GHz	-46.36 dBm	-61.06 dB
4	4	5.7200 GHz	5.7250 GHz	1.000 MHz	5.723920000 GHz	-41.11 dBm	-85.64 dB
5	5	5.7250 GHz	5.7650 GHz	1.000 MHz	5.748800000 GHz	-5.151 dBm	-32.15 dB

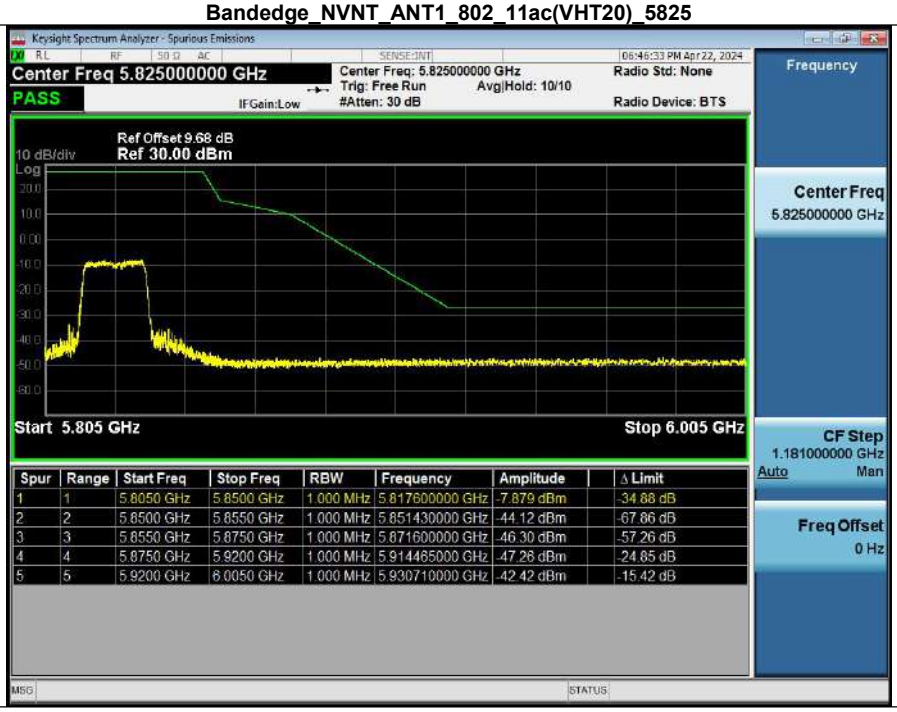
Bandedge_NVNT_ANT1_802_11n(HT20)_5825

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.8050 GHz	5.8500 GHz	1.000 MHz	5.827185000 GHz	-7.375 dBm	-34.37 dB
2	2	5.8500 GHz	5.8550 GHz	1.000 MHz	5.853935000 GHz	-44.69 dBm	-62.73 dB
3	3	5.8550 GHz	5.8750 GHz	1.000 MHz	5.874700000 GHz	-46.88 dBm	-56.97 dB
4	4	5.8750 GHz	5.9200 GHz	1.000 MHz	5.919460000 GHz	-46.68 dBm	-20.16 dB
5	5	5.9200 GHz	6.0050 GHz	1.000 MHz	5.972615000 GHz	-41.77 dBm	-14.77 dB

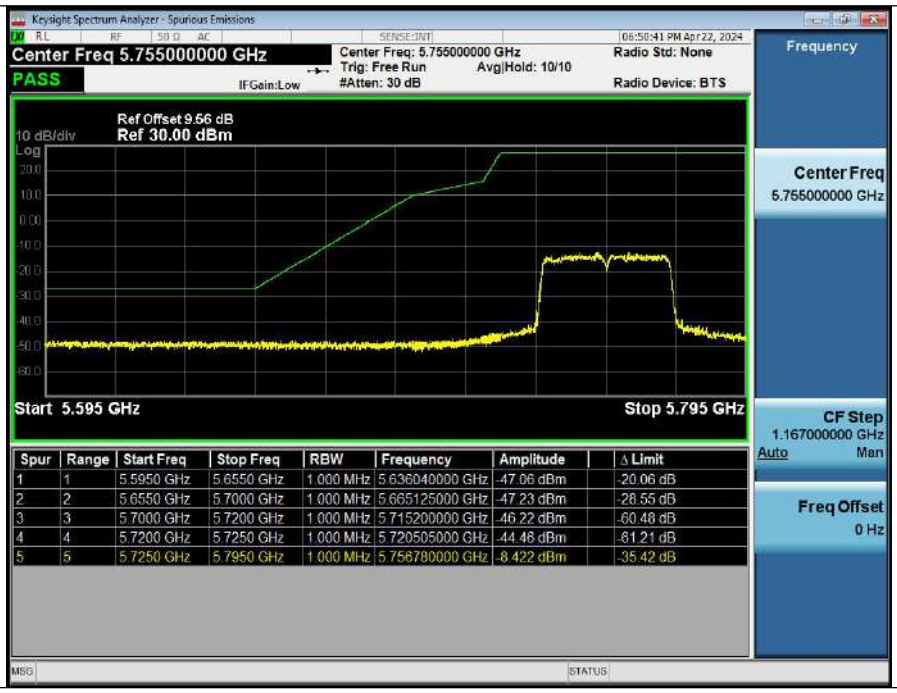
Bandedge_NVNT_ANT1_802_11ac(VHT20)_5745



Bandedge_NVNT_ANT1_802_11ac(VHT20)_5825



Bandedge_NVNT_ANT1_802_11n(HT40)_5755

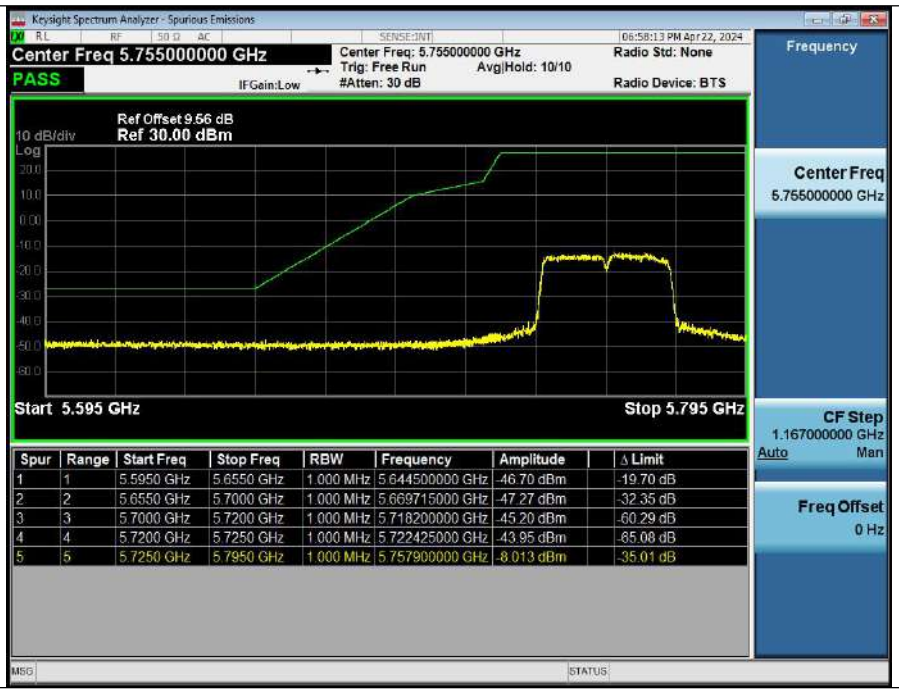


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.5950 GHz	5.6550 GHz	1.000 MHz	5.636040000 GHz	-47.06 dBm	-20.06 dB
2	2	5.6550 GHz	5.7000 GHz	1.000 MHz	5.665125000 GHz	-47.23 dBm	-28.55 dB
3	3	5.7000 GHz	5.7200 GHz	1.000 MHz	5.715200000 GHz	-46.22 dBm	-60.48 dB
4	4	5.7200 GHz	5.7250 GHz	1.000 MHz	5.720505000 GHz	-44.46 dBm	-81.21 dB
5	5	5.7250 GHz	5.7950 GHz	1.000 MHz	5.756780000 GHz	-8.422 dBm	-35.42 dB

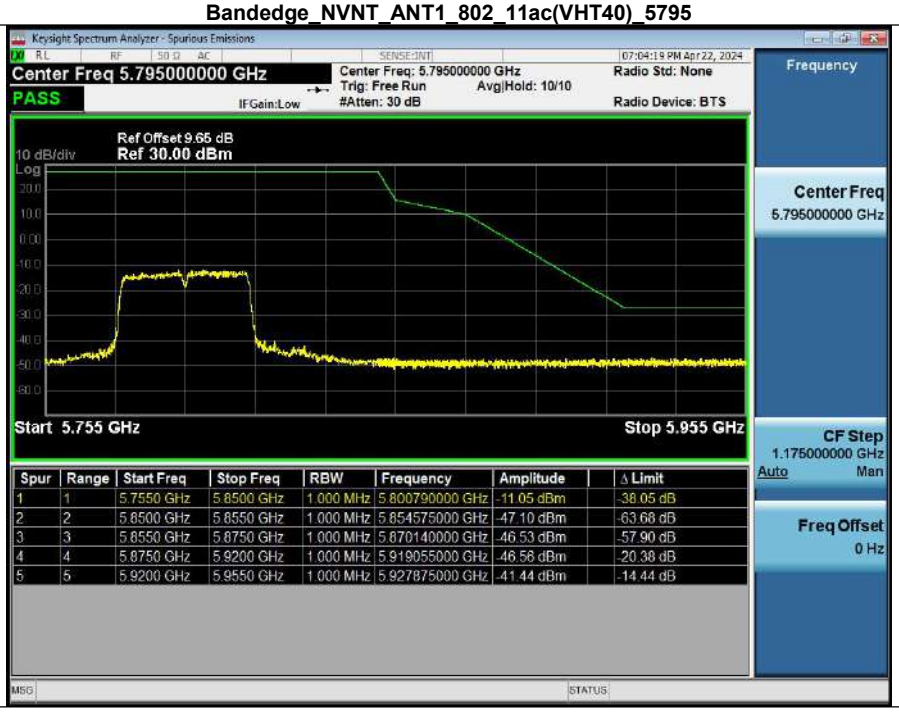
Bandedge_NVNT_ANT1_802_11n(HT40)_5795

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.7550 GHz	5.8500 GHz	1.000 MHz	5.802690000 GHz	-11.62 dBm	-38.62 dB
2	2	5.8500 GHz	5.8550 GHz	1.000 MHz	5.853590000 GHz	-47.07 dBm	-65.89 dB
3	3	5.8550 GHz	5.8750 GHz	1.000 MHz	5.873800000 GHz	-46.05 dBm	-56.39 dB
4	4	5.8750 GHz	5.9200 GHz	1.000 MHz	5.919280000 GHz	-47.00 dBm	-20.63 dB
5	5	5.9200 GHz	5.9550 GHz	1.000 MHz	5.926860000 GHz	-42.33 dBm	-15.33 dB

Bandedge_NVNT_ANT1_802_11ac(VHT40)_5755



Bandedge_NVNT_ANT1_802_11ac(VHT40)_5795



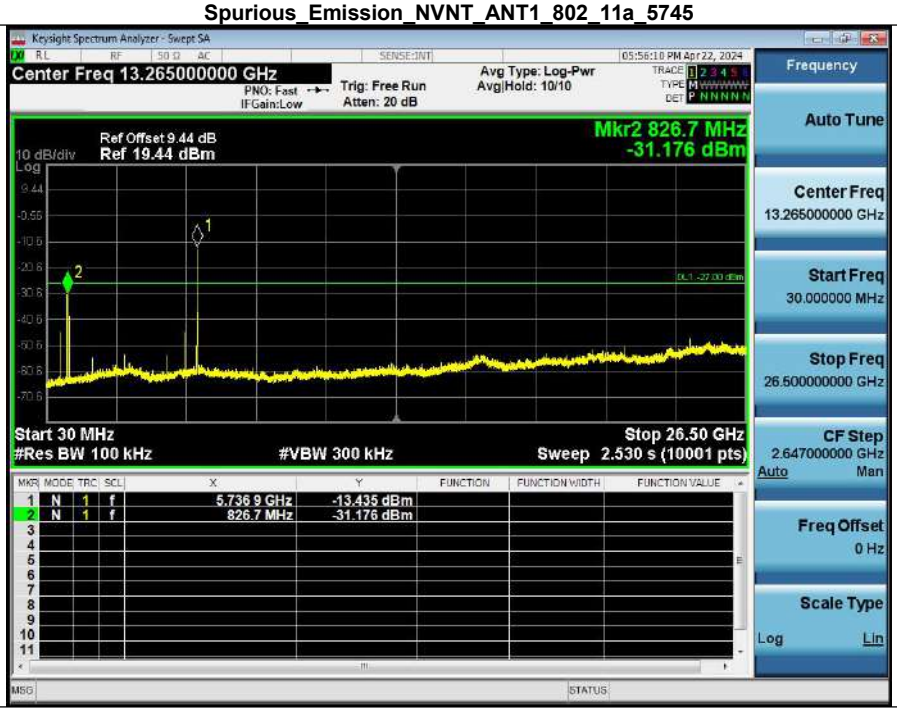
Bandedge_NVNT_ANT1_802_11ac(VHT80)_5775_low

Bandedge_NVNT_ANT1_802_11ac(VHT80)_5775_up

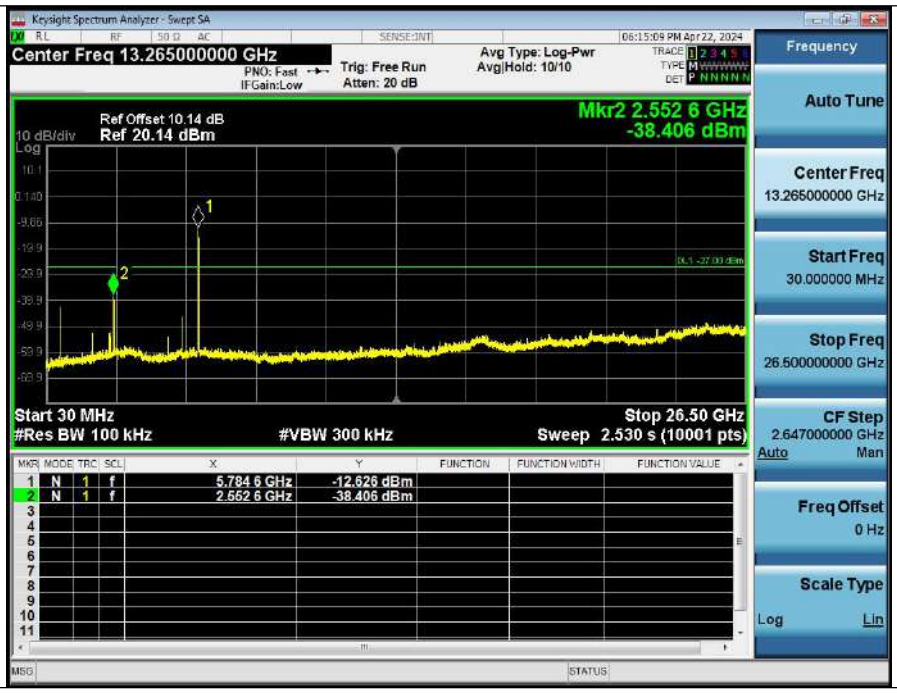
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark Frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5745.00	826.75	-31.18	-27	Pass
NVNT	ANT1	802.11a	5785.00	2552.59	-38.41	-27	Pass
NVNT	ANT1	802.11a	5825.00	707.63	-39.05	-27	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	25700.61	-49.03	-27	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	5241.94	-47.30	-27	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	596.46	-41.95	-27	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	2536.71	-33.77	-27	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	726.16	-32.62	-27	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	596.46	-40.29	-27	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	596.46	-43.25	-27	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	704.99	-34.26	-27	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	596.46	-38.85	-27	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	715.57	-32.08	-27	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	596.46	-41.42	-27	Pass
Reamrk: Antenna gain is covered in the test.							

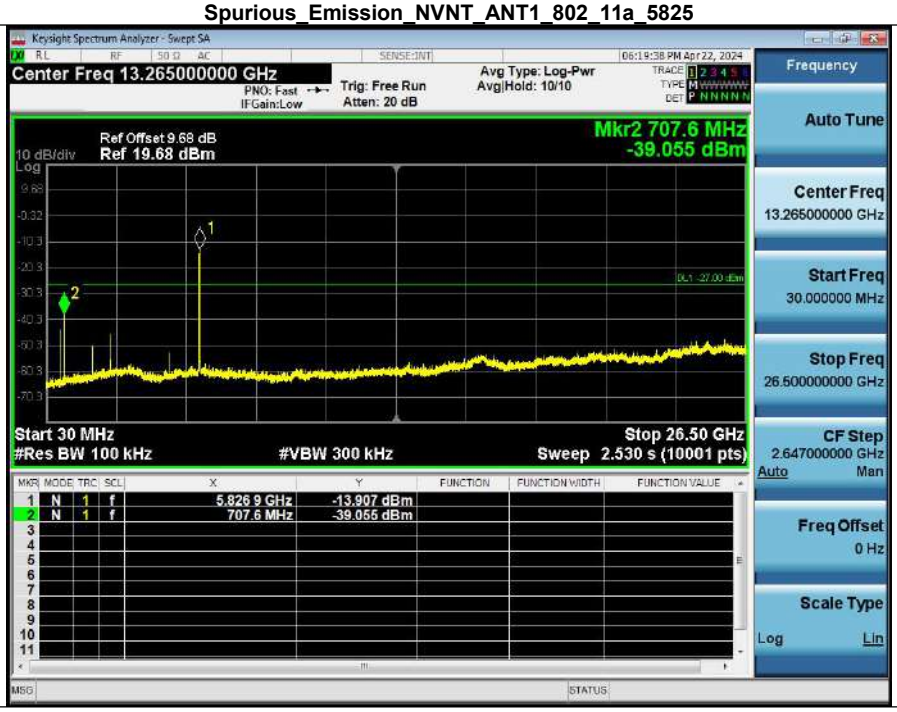
Spurious_Emission_NVNT_ANT1_802_11a_5745



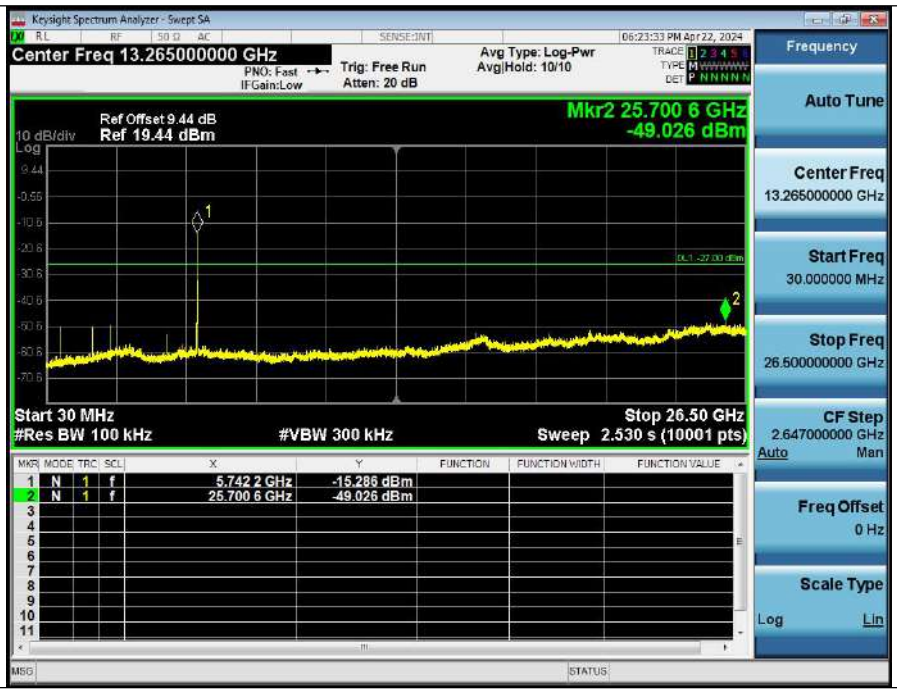
Spurious_Emission_NVNT_ANT1_802_11a_5785



Spurious_Emission_NVNT_ANT1_802_11a_5825

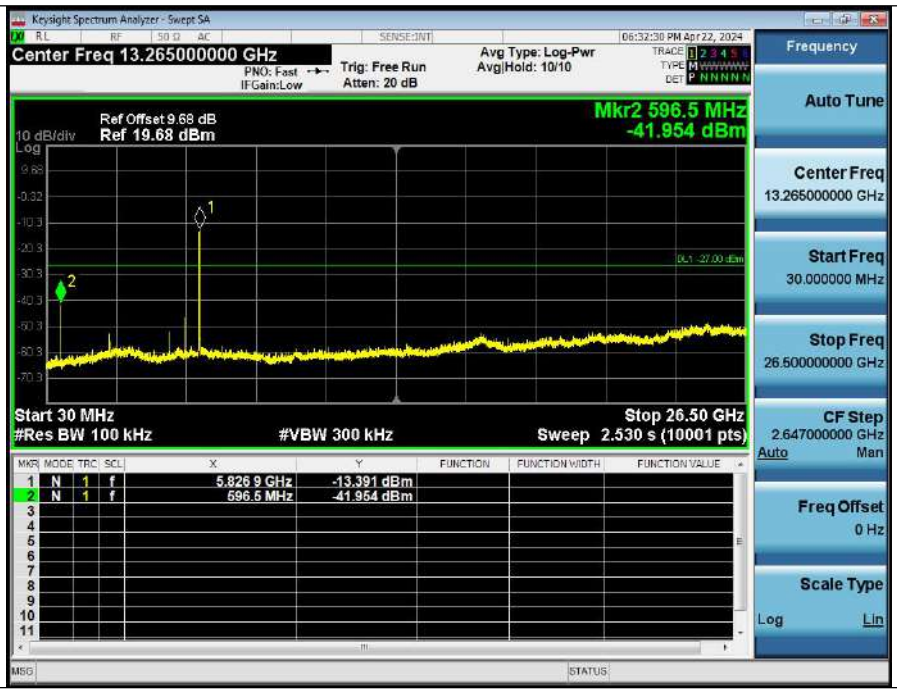


Spurious_Emission_NVNT_ANT1_802_11n(HT20)_5745



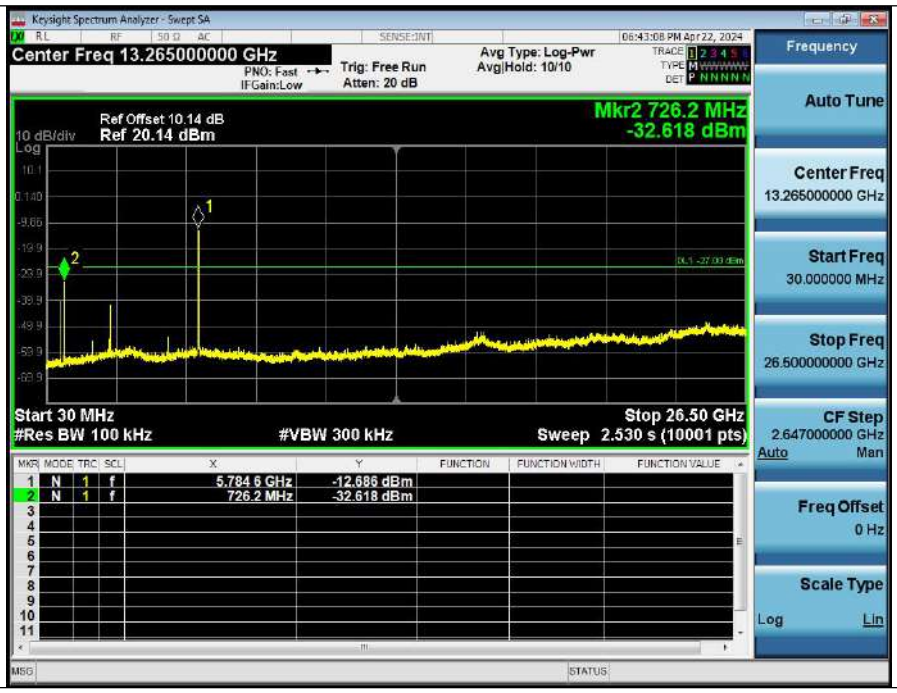
Spurious_Emission_NVNT_ANT1_802_11n(HT20)_5785

Spurious_Emission_NVNT_ANT1_802_11n(HT20)_5825



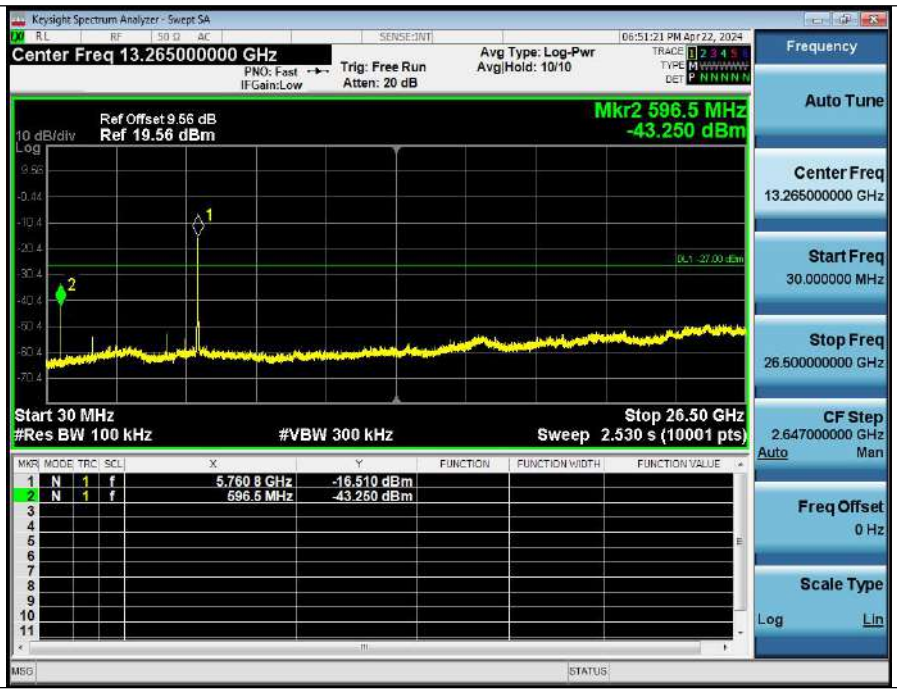
Spurious_Emission_NVNT_ANT1_802_11ac(VHT20)_5745

Spurious_Emission_NVNT_ANT1_802_11ac(VHT20)_5785



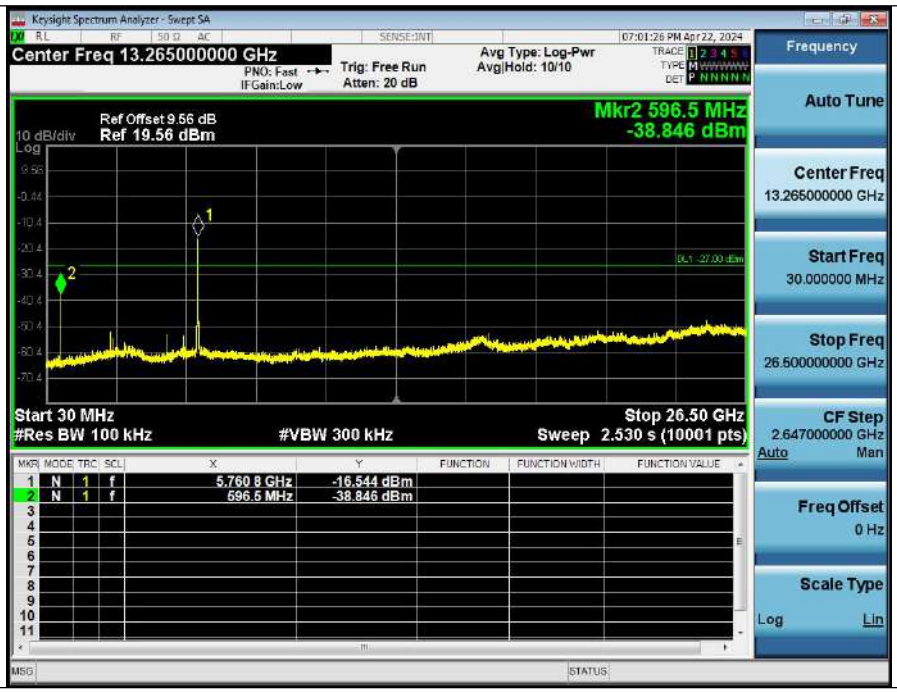
Spurious_Emission_NVNT_ANT1_802_11ac(VHT20)_5825

Spurious_Emission_NVNT_ANT1_802_11n(HT40)_5755



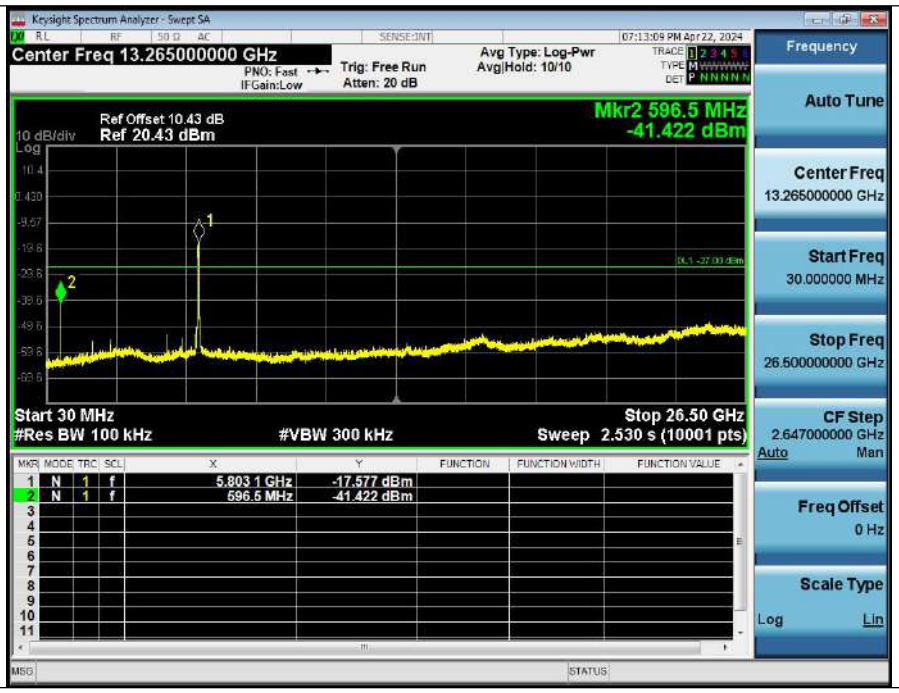
Spurious_Emission_NVNT_ANT1_802_11n(HT40)_5795

Spurious_Emission_NVNT_ANT1_802_11ac(VHT40)_5755



Spurious_Emission_NVNT_ANT1_802_11ac(VHT40)_5795

Spurious_Emission_NVNT_ANT1_802_11ac(VHT80)_5775


Keysight Spectrum Analyzer - Swept SA
Center Freq 13.265000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
07:13:09 PM Apr 22, 2024
Ref Offset 10.43 dB
10 dB/div
Ref 20.43 dBm
Mkr2 596.5 MHz
-41.422 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.530 s (10001 pts)
1 N 1 f 5.803 1 GHz -17.577 dBm
2 N 1 f 596.5 MHz -41.422 dBm
Frequency
Auto Tune
Center Freq
13.265000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.500000000 GHz
CF Step
2.647000000 GHz
Auto Man
Freq Offset
0 Hz
Scale Type
Log Lin

8. Frequency Stability

Condition	Antenna	Modulation	Frequency (MHz)	Fc(MHz)	Fl(MHz)	Fh(MHz)	Limit(MHz)	Result
NVNT	ANT1	802.11a	5745.00	5745.050	5736.292	5753.808	5725~5850	Pass
NVNT	ANT1	802.11a	5785.00	5785.114	5776.396	5793.832	5725~5850	Pass
NVNT	ANT1	802.11a	5825.00	5825.084	5816.412	5833.756	5725~5850	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	5745.100	5735.904	5754.296	5725~5850	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	5785.108	5775.900	5794.316	5725~5850	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	5825.070	5815.928	5834.212	5725~5850	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	5745.058	5735.852	5754.264	5725~5850	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	5785.100	5775.900	5794.300	5725~5850	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	5825.084	5815.928	5834.240	5725~5850	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	5755.080	5736.808	5773.352	5725~5850	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	5795.108	5776.856	5813.360	5725~5850	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	5755.092	5736.824	5773.360	5725~5850	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	5795.096	5776.848	5813.344	5725~5850	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	5775.144	5737.092	5813.196	5725~5850	Pass