

Table of Contents

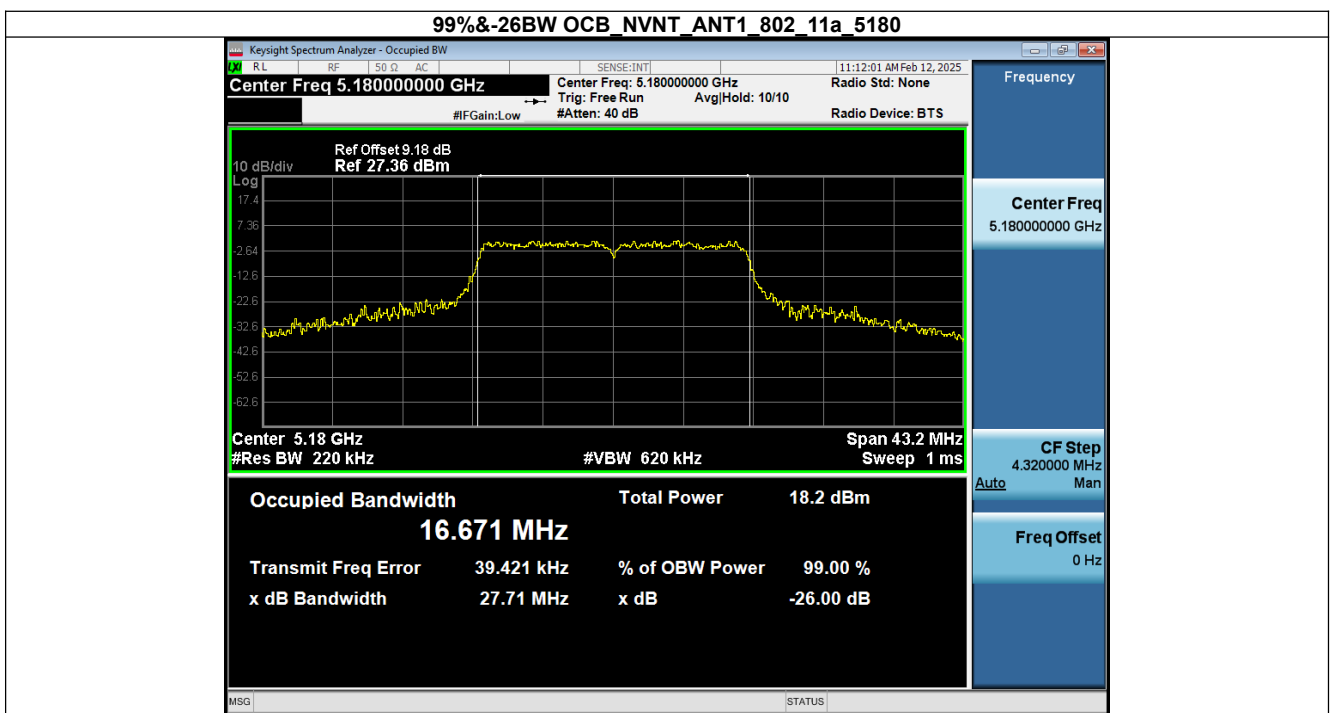
1. -26dB and 99% Emission Bandwidth	2
2. Duty Cycle	6
3. Maximum Conducted Output Power	9
4. Power Spectral Density	12
5. Bandedge	15
6. Spurious Emission	17
7. Frequency Stability	20

FCC ID:2A77D-S850

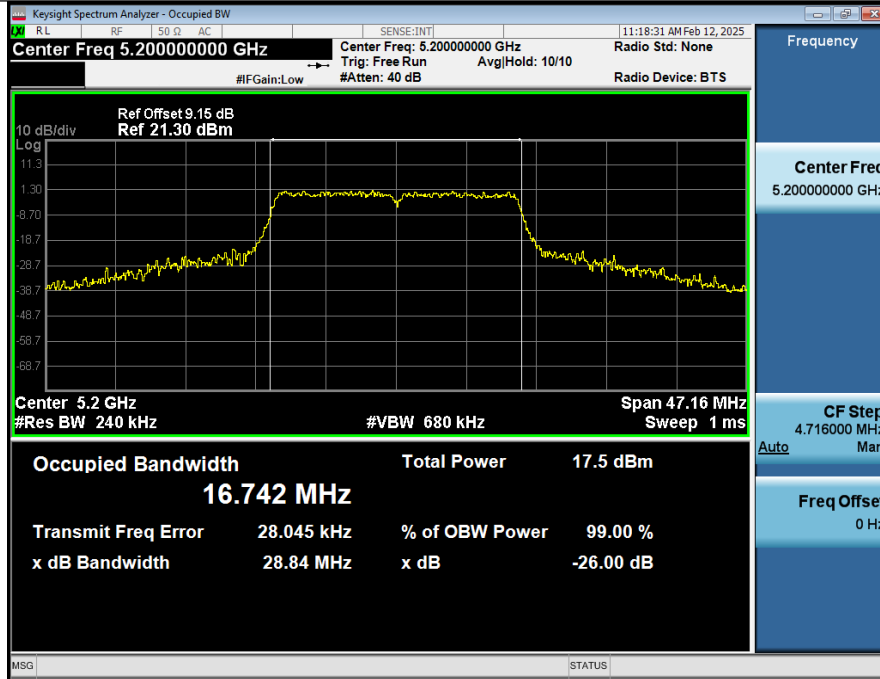
FCC_5.2G_WIFI (Part15.407) Test Data

1. -26dB and 99% Emission Bandwidth

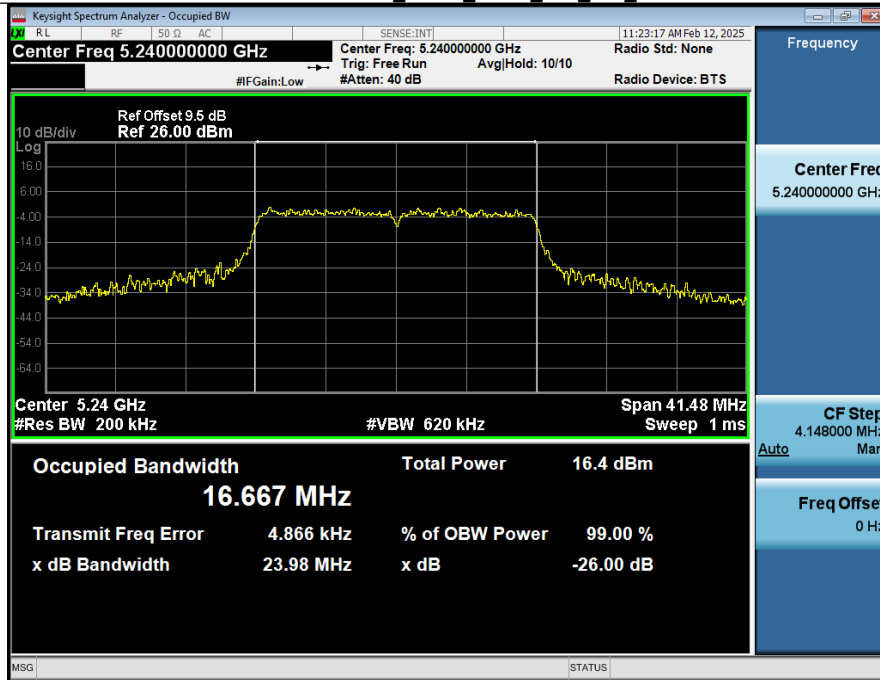
Condition	Antenna	Modulation	Frequency(MHz)	- 26dB_Emission_Bandwidth(MHz)	Occupied Bandwidth(MHz)
NVNT	ANT1	802.11a	5180.00	27.71	16.671
NVNT	ANT1	802.11a	5200.00	28.84	16.742
NVNT	ANT1	802.11a	5240.00	23.98	16.667
NVNT	ANT1	802.11n(HT20)	5180.00	27.53	17.836
NVNT	ANT1	802.11n(HT20)	5200.00	27.96	17.799
NVNT	ANT1	802.11n(HT20)	5240.00	31.45	17.771



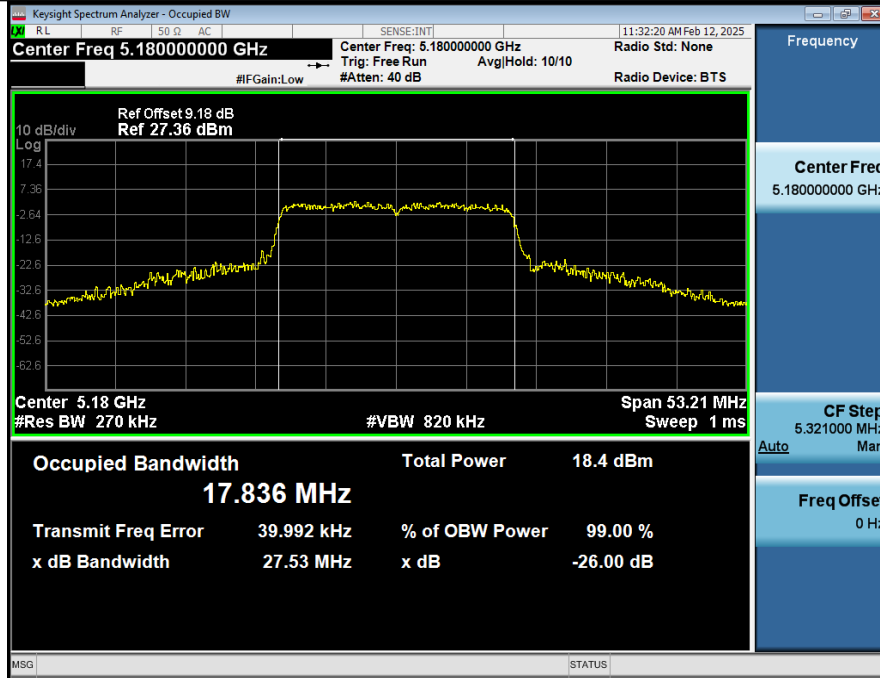
99%&-26BW OCB_NVNT_ANT1_802_11a_5200



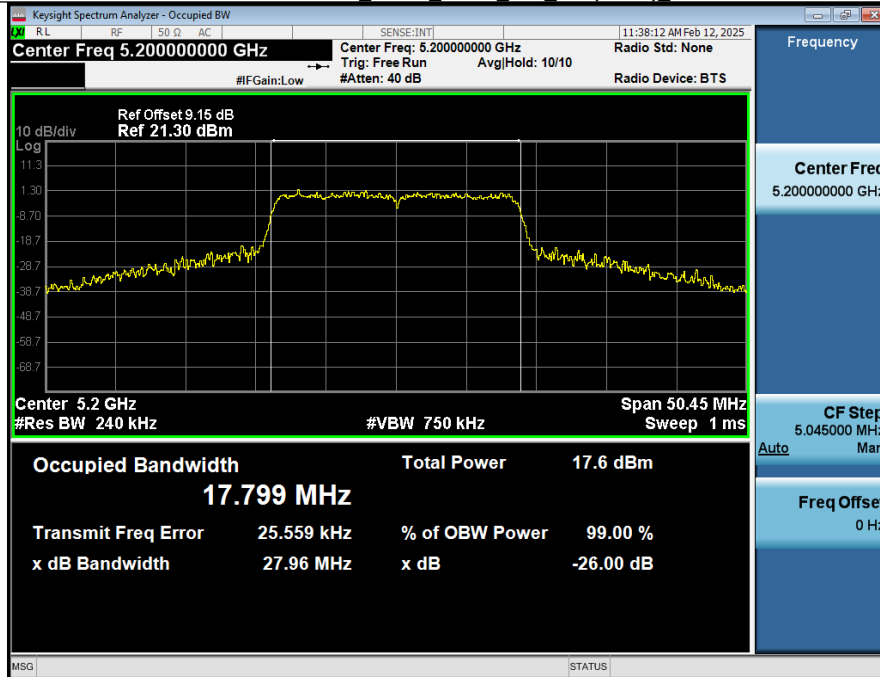
99%&-26BW OCB_NVNT_ANT1_802_11a_5240

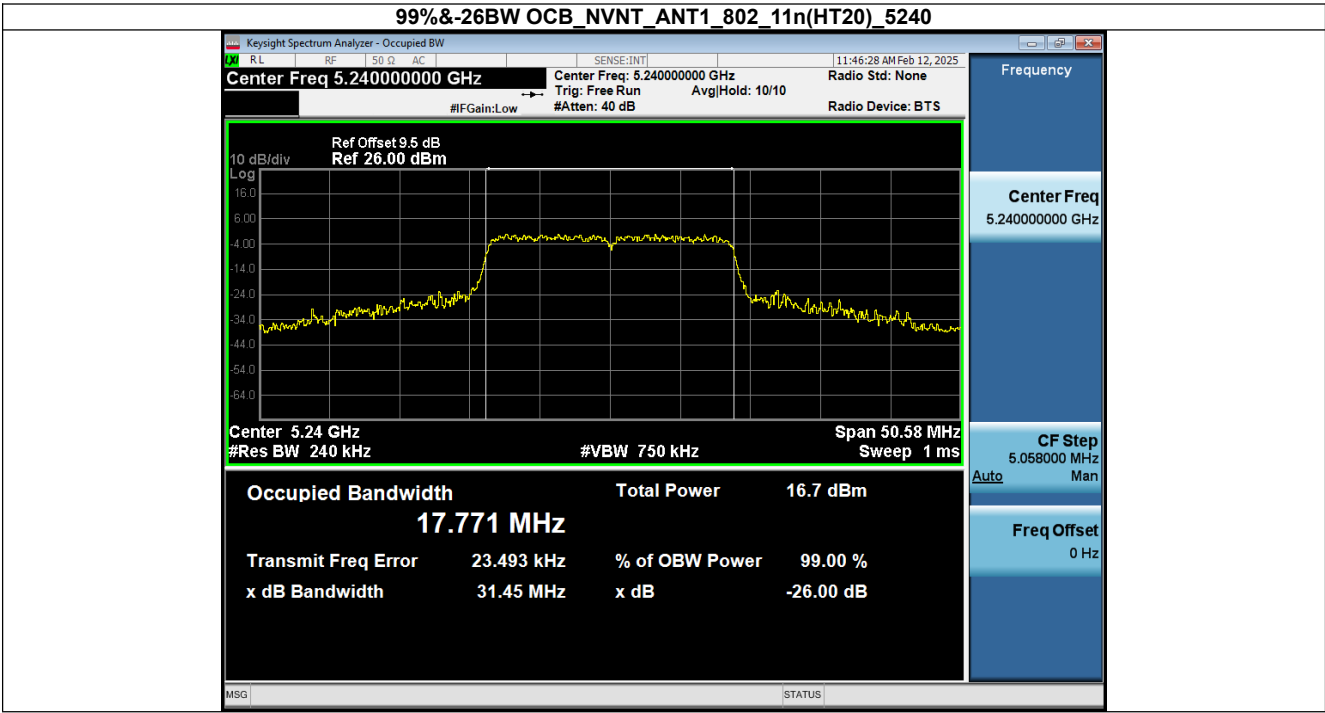


99%&-26BW OCB_NVNT_ANT1_802_11n(HT20)_5180



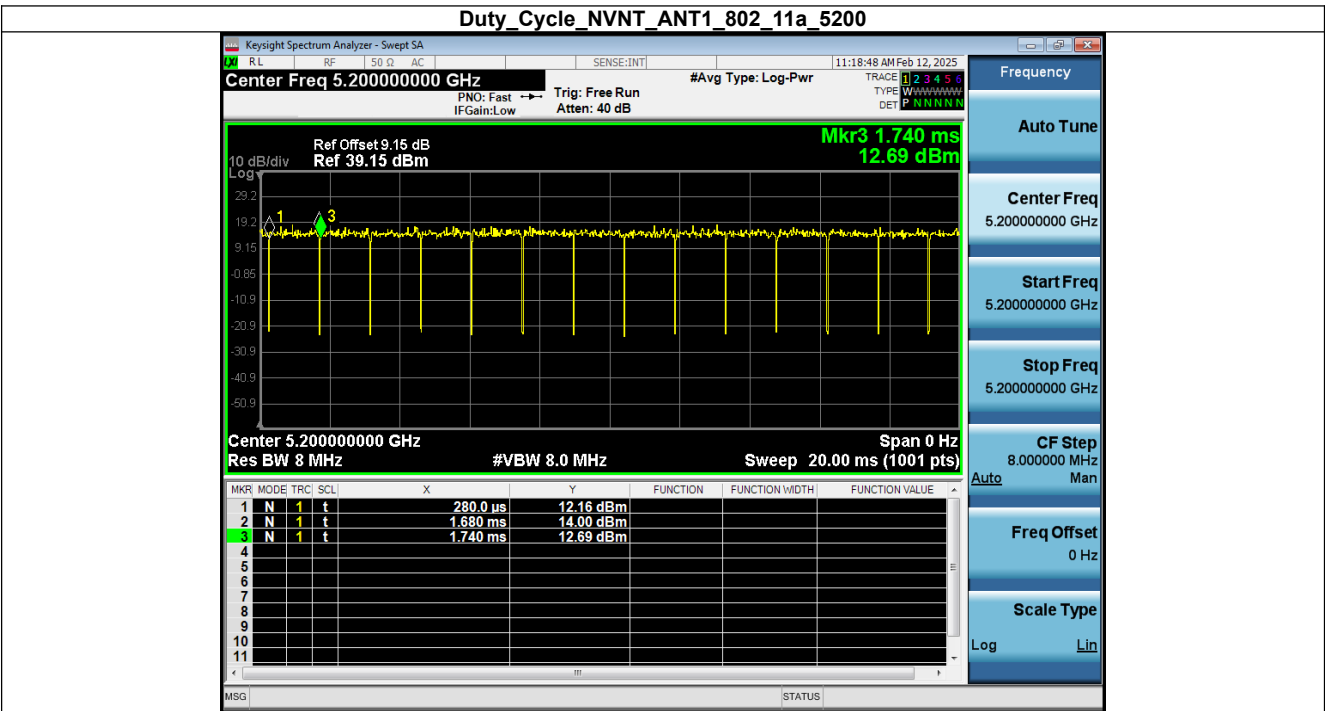
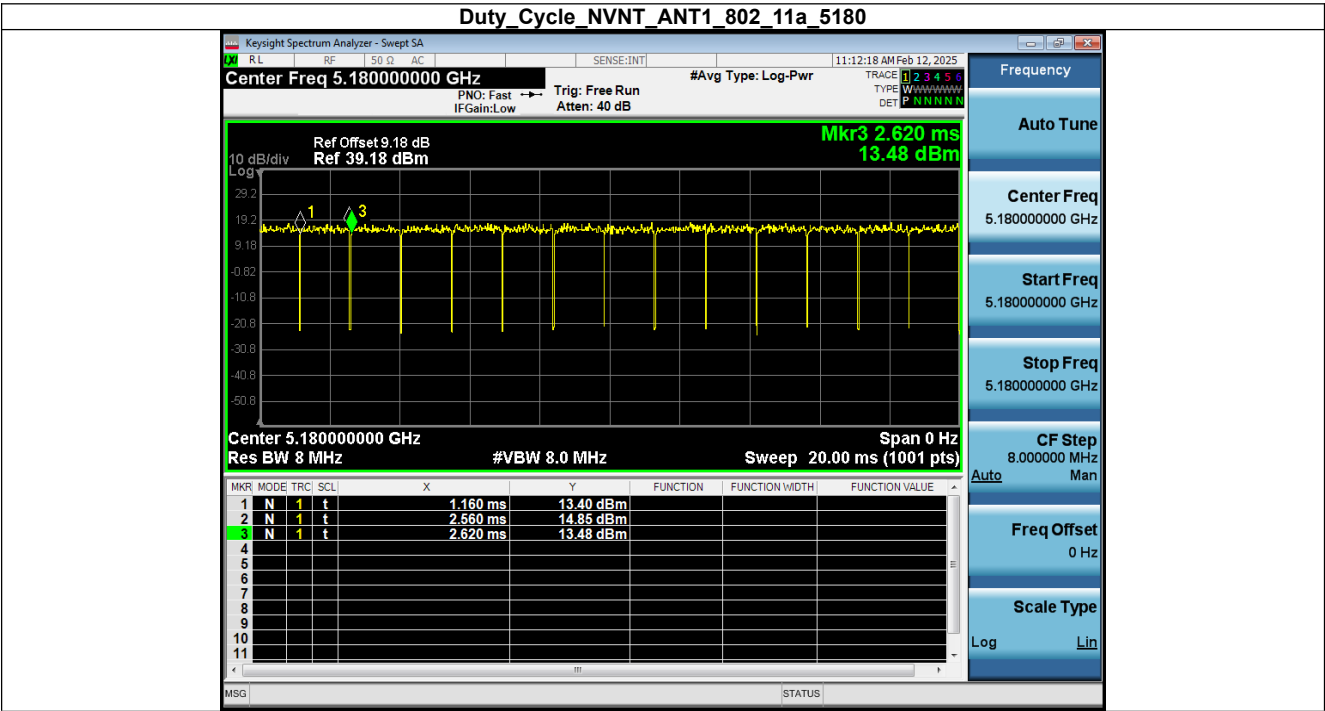
99%&-26BW OCB_NVNT_ANT1_802_11n(HT20)_5200



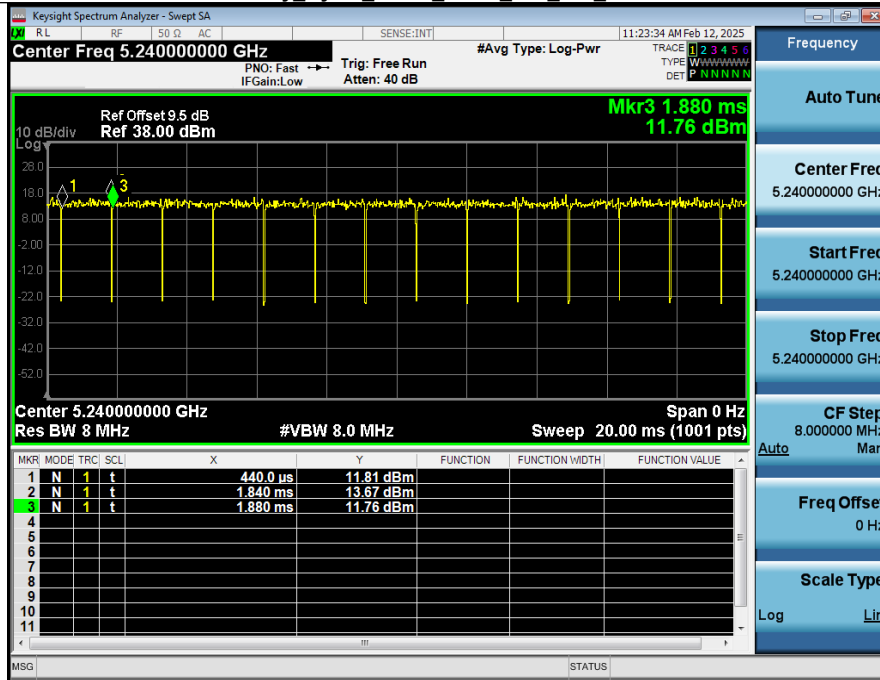


2. Duty Cycle

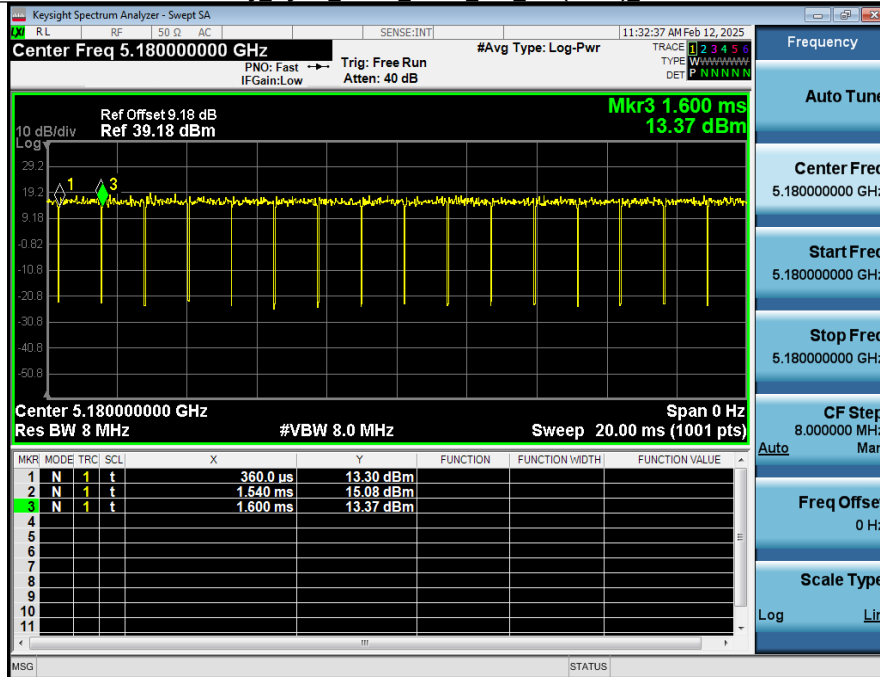
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty_factor
NVNT	ANT1	802.11a	5180.00	95.89	0.18
NVNT	ANT1	802.11a	5200.00	95.89	0.18
NVNT	ANT1	802.11a	5240.00	97.22	0.12
NVNT	ANT1	802.11n(HT20)	5180.00	95.16	0.22
NVNT	ANT1	802.11n(HT20)	5200.00	96.72	0.14
NVNT	ANT1	802.11n(HT20)	5240.00	95.16	0.22



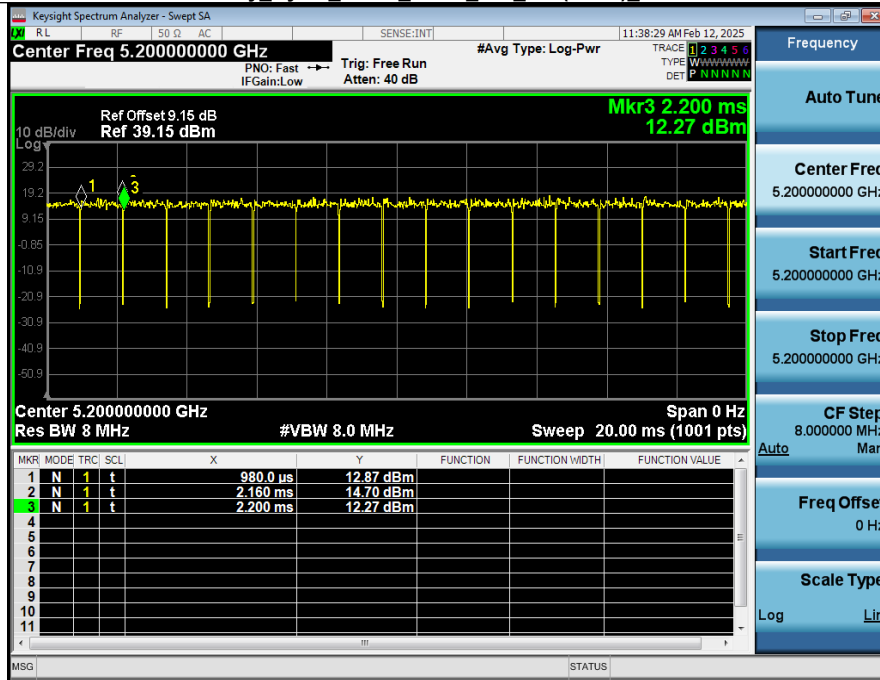
Duty Cycle NVNT_ANT1_802_11a_5240



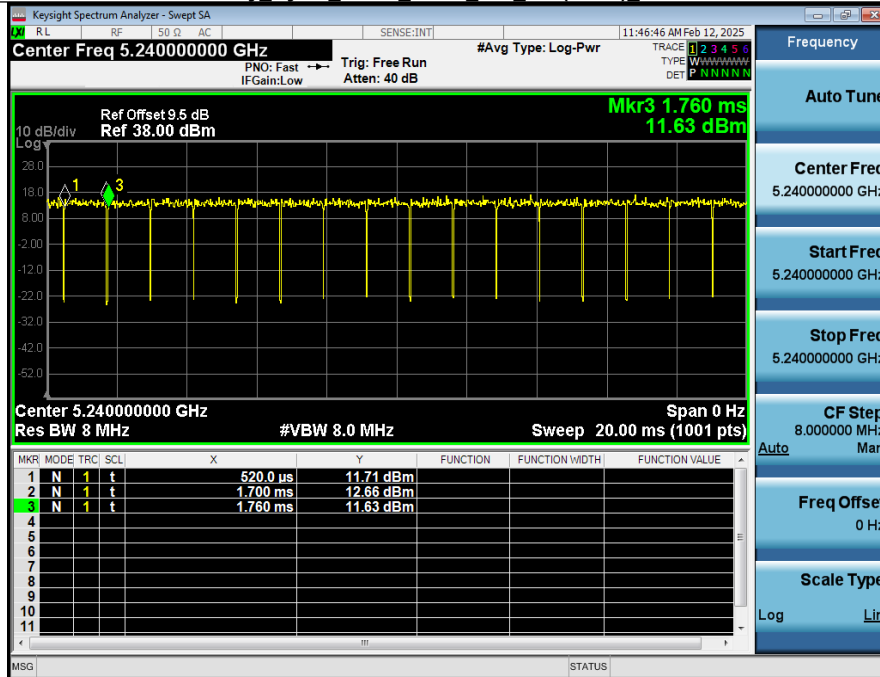
Duty Cycle NVNT_ANT1_802_11n(HT20)_5180



Duty Cycle NVNT_ANT1_802_11n(HT20)_5200

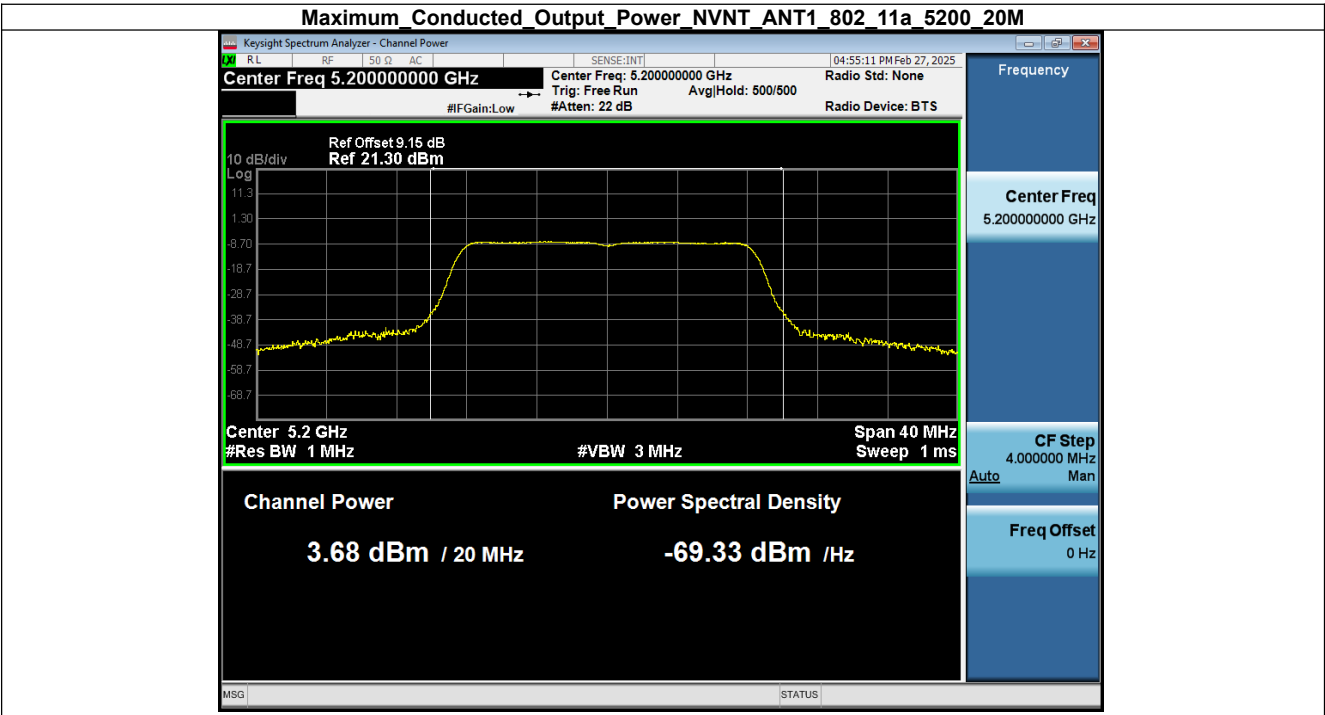
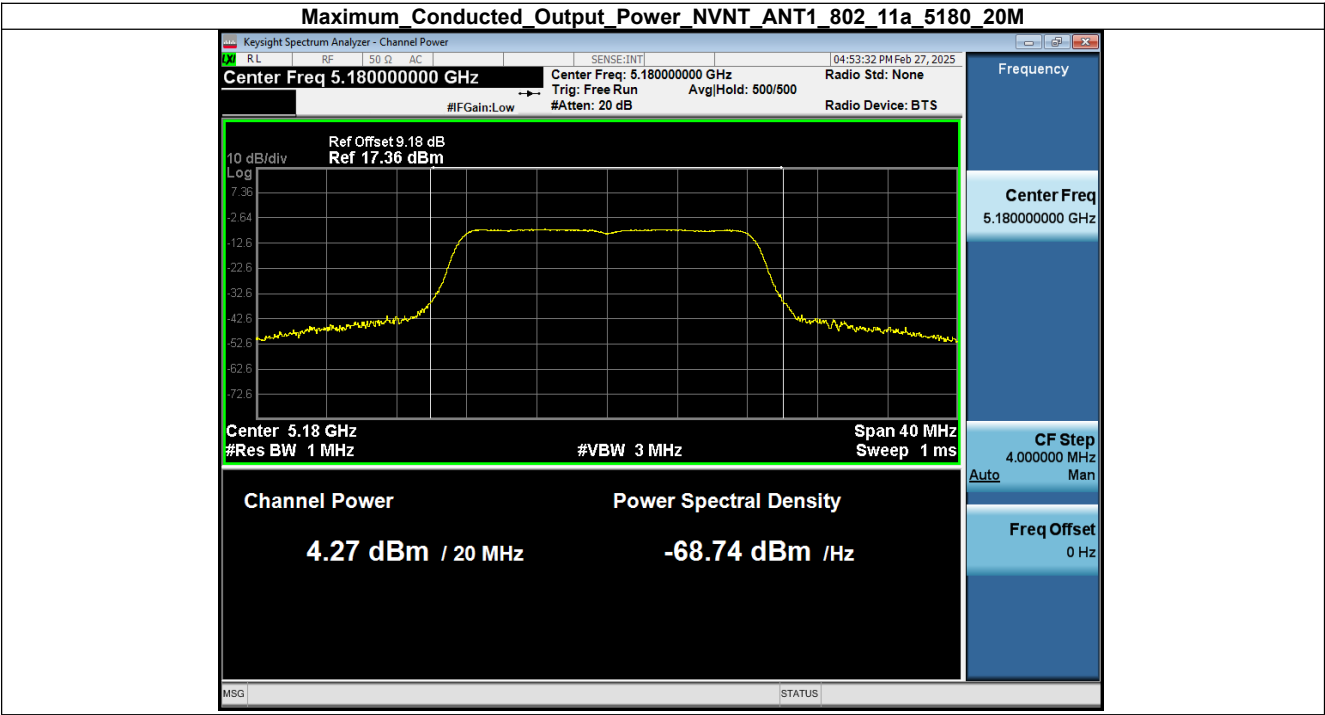


Duty Cycle NVNT_ANT1_802_11n(HT20)_5240

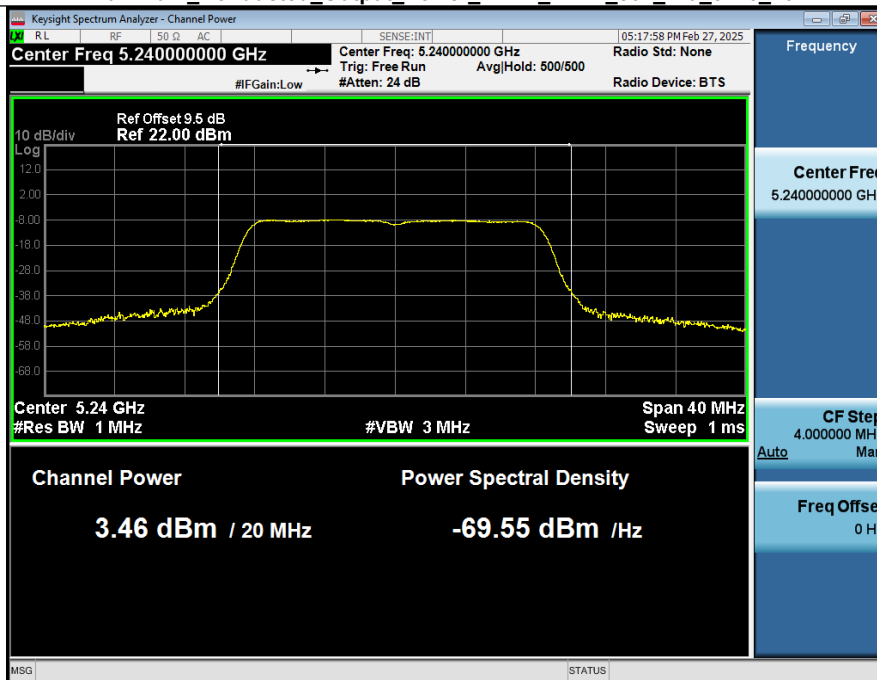


3. Maximum Conducted Output Power

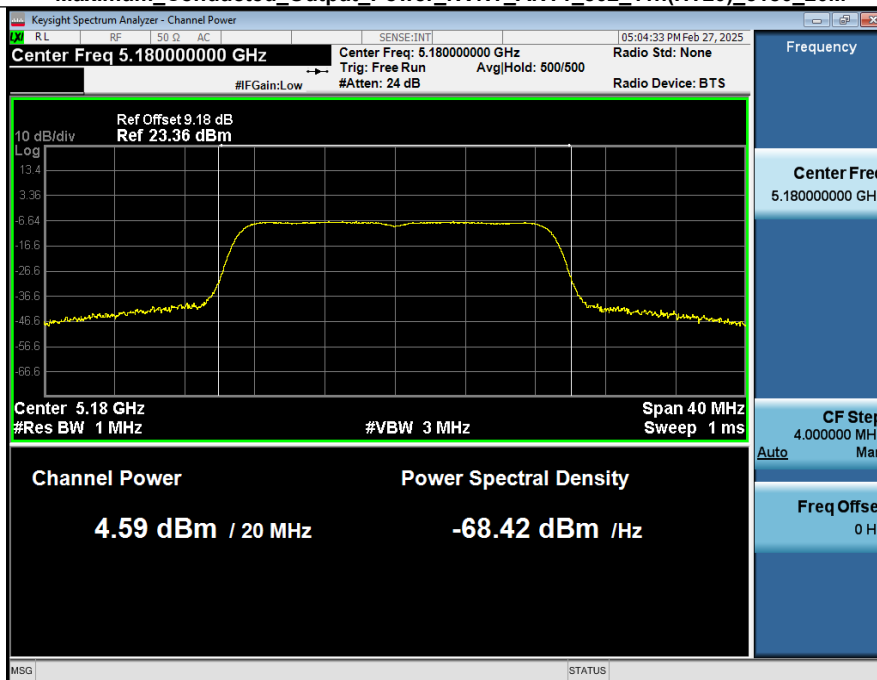
Condition	Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	4.27	0.18	4.45	24	Pass
NVNT	ANT1	802.11a	5200.00	3.68	0.18	3.86	24	Pass
NVNT	ANT1	802.11a	5240.00	3.46	0.18	3.64	24	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	4.59	0.22	4.81	24	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	4.13	0.14	4.27	24	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	3.38	0.22	3.60	24	Pass



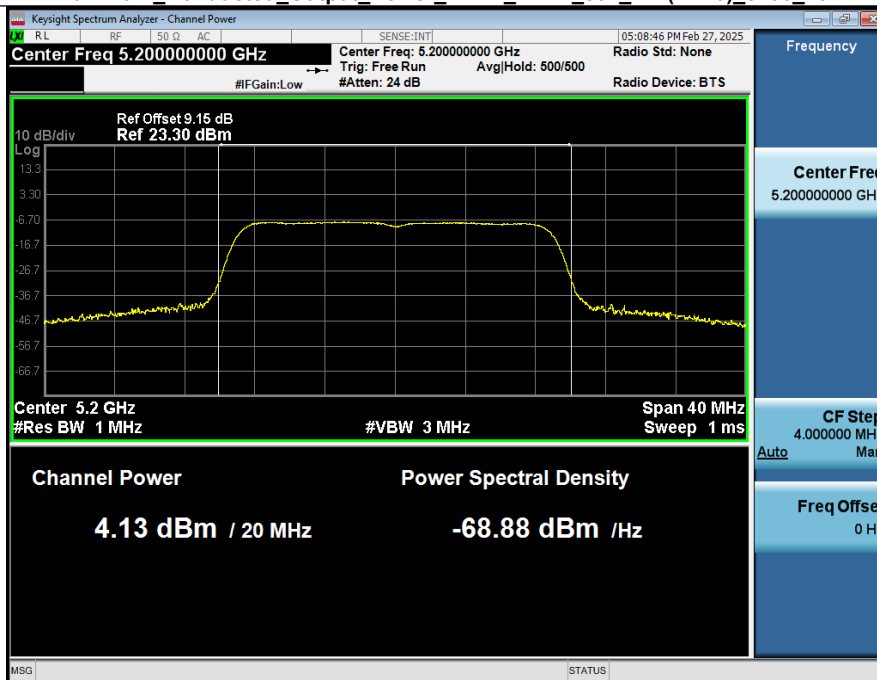
Maximum Conducted Output Power_NVNT_ANT1_802_11a_5240_20M



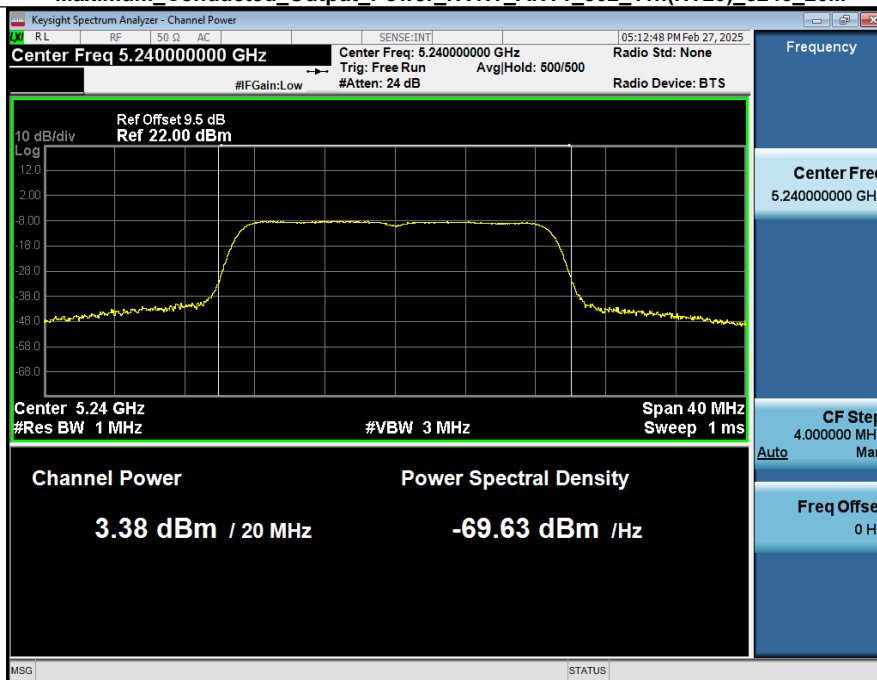
Maximum Conducted Output Power_NVNT_ANT1_802_11n(HT20)_5180_20M



Maximum_Conducted_Output_Power_NVNT_ANT1_802_11n(HT20)_5200_20M

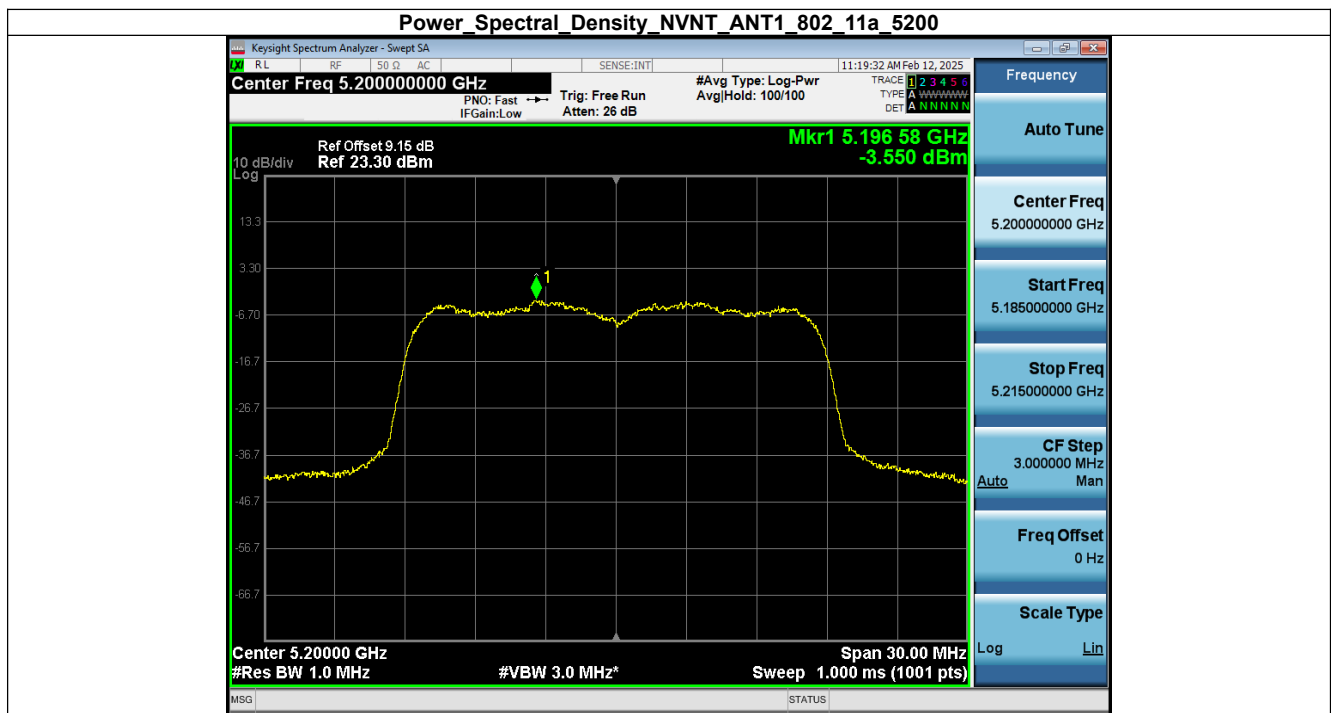
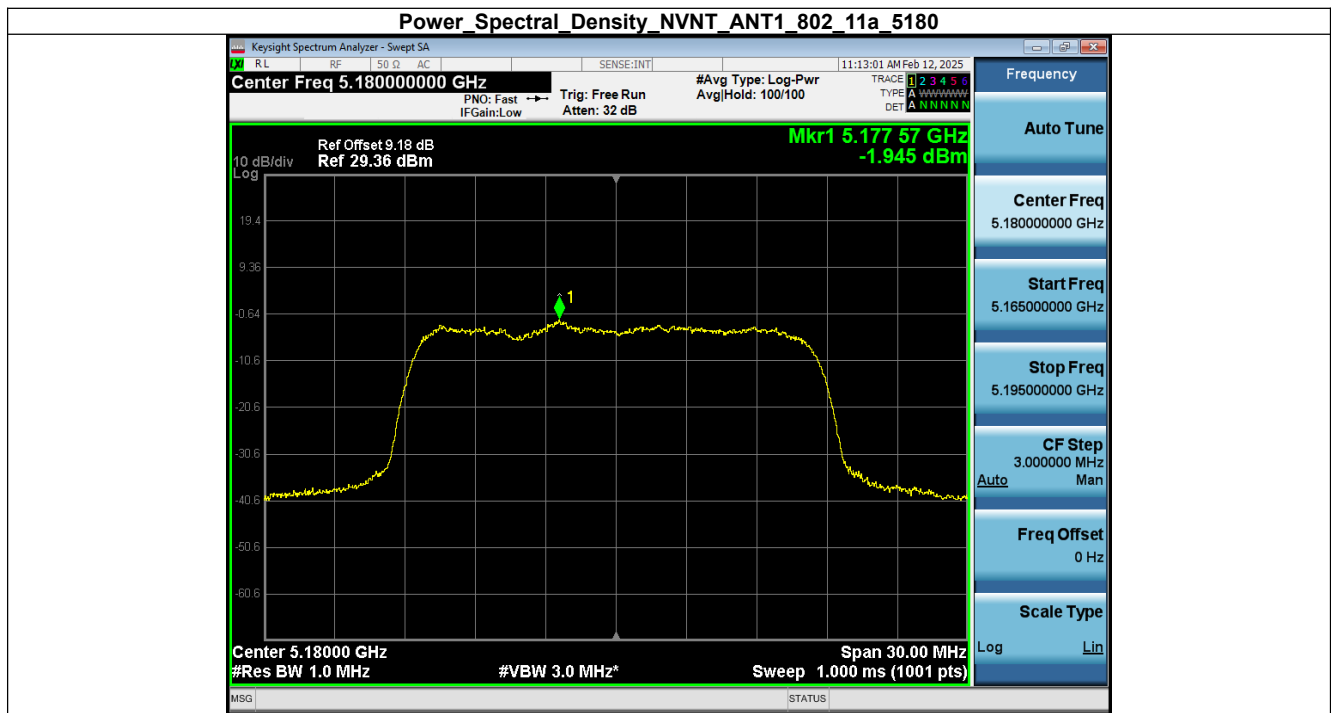


Maximum_Conducted_Output_Power_NVNT_ANT1_802_11n(HT20)_5240_20M

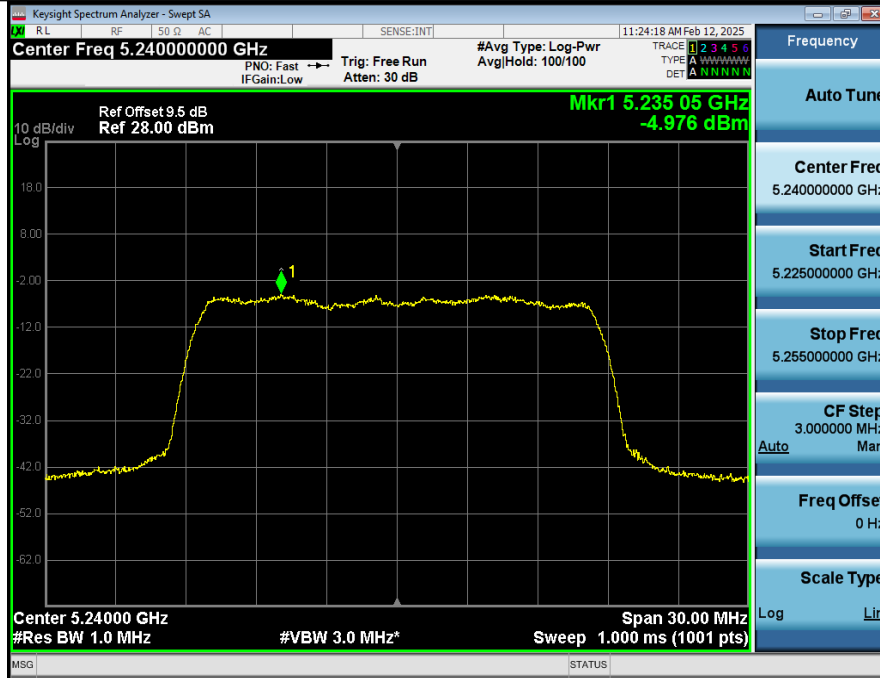


4. Power Spectral Density

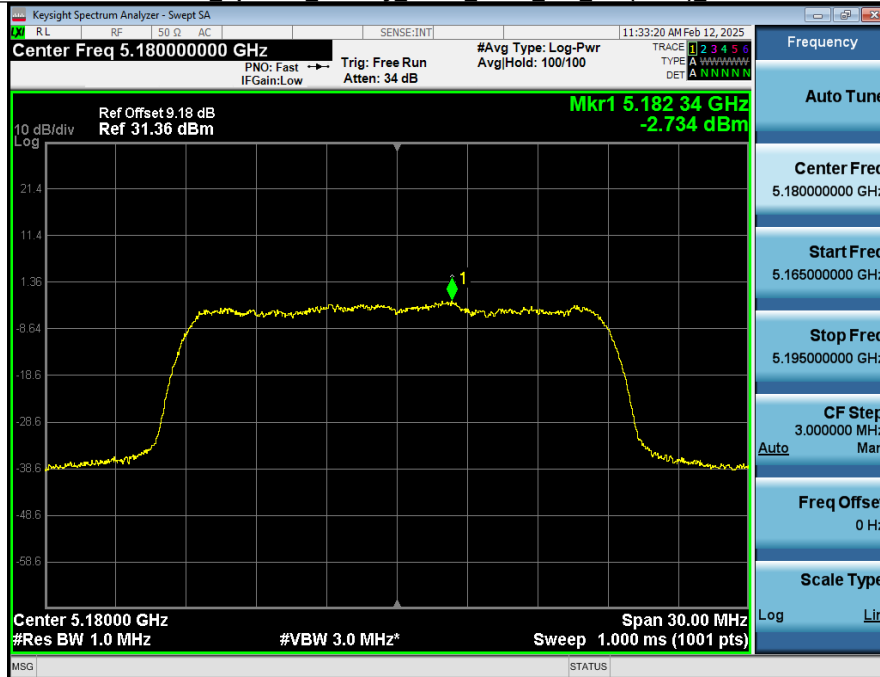
Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/MHz)	Duty factor(dB)	Total PSD(dBm/MHz)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	-1.95	0.18	-1.77	11	Pass
NVNT	ANT1	802.11a	5200.00	-3.55	0.18	-3.37	11	Pass
NVNT	ANT1	802.11a	5240.00	-4.98	0.12	-4.86	11	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	-2.73	0.22	-2.51	11	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	-3.14	0.14	-3.00	11	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	-4.56	0.22	-4.34	11	Pass



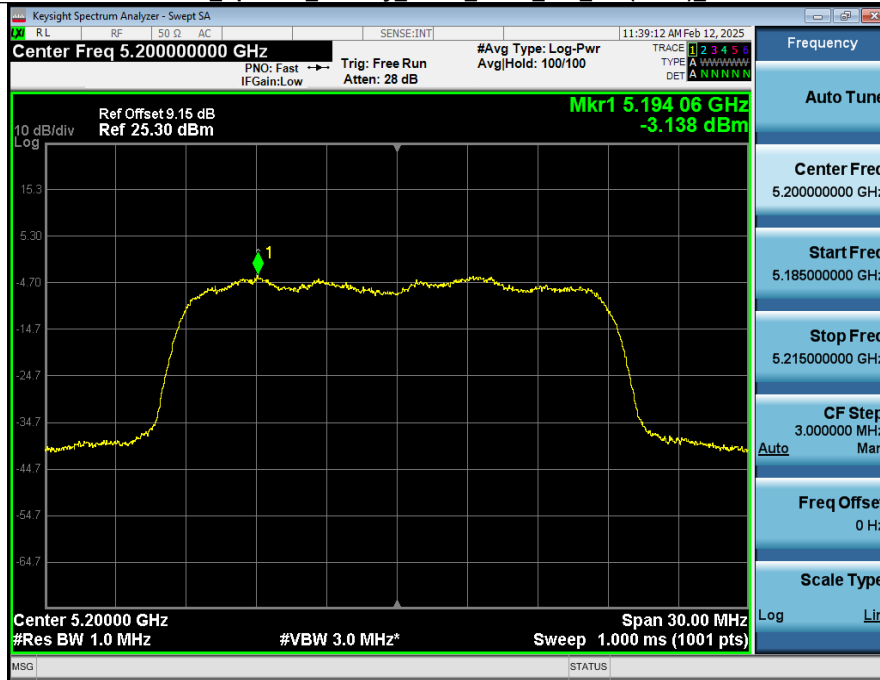
Power Spectral Density NVNT_ANT1_802_11a_5240



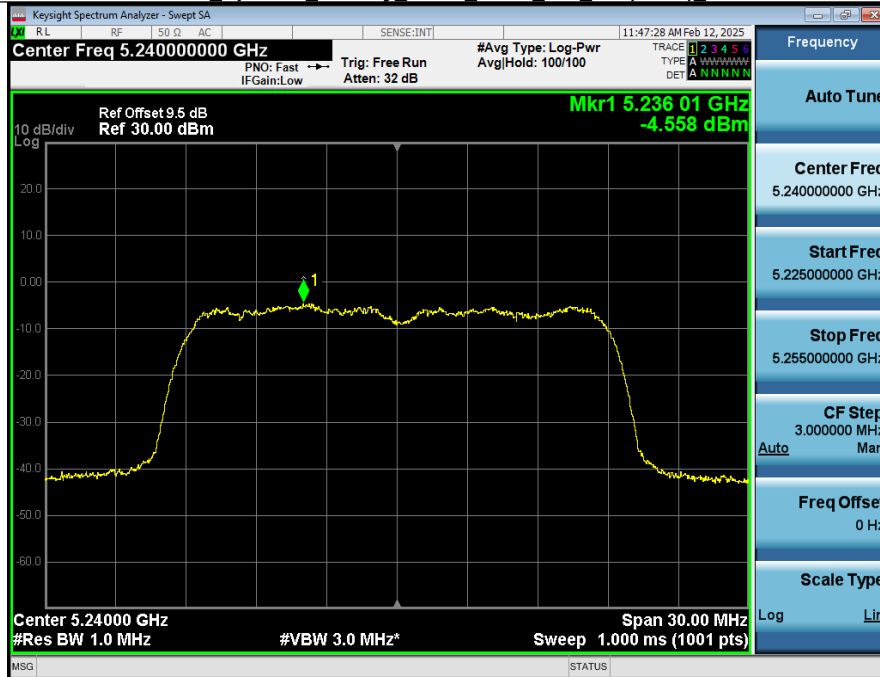
Power Spectral Density NVNT_ANT1_802_11n(HT20)_5180



Power Spectral Density NVNT_ANT1_802_11n(HT20)_5200



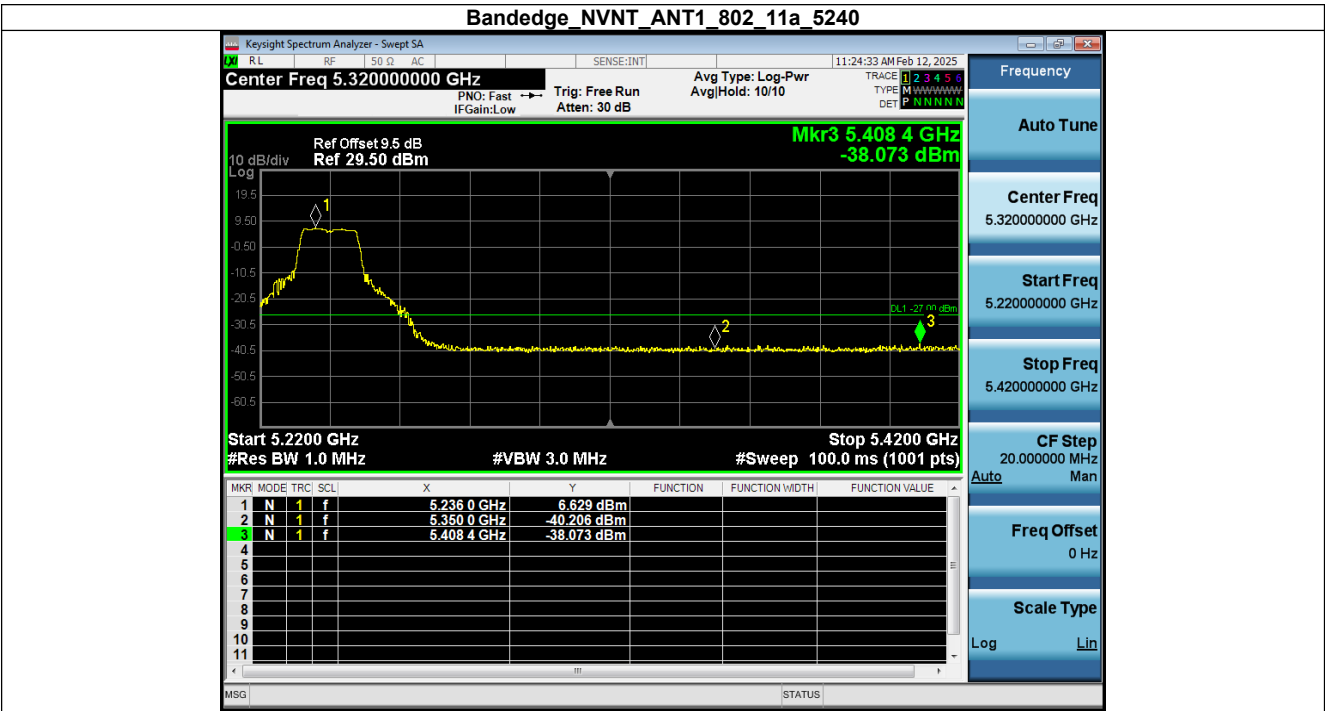
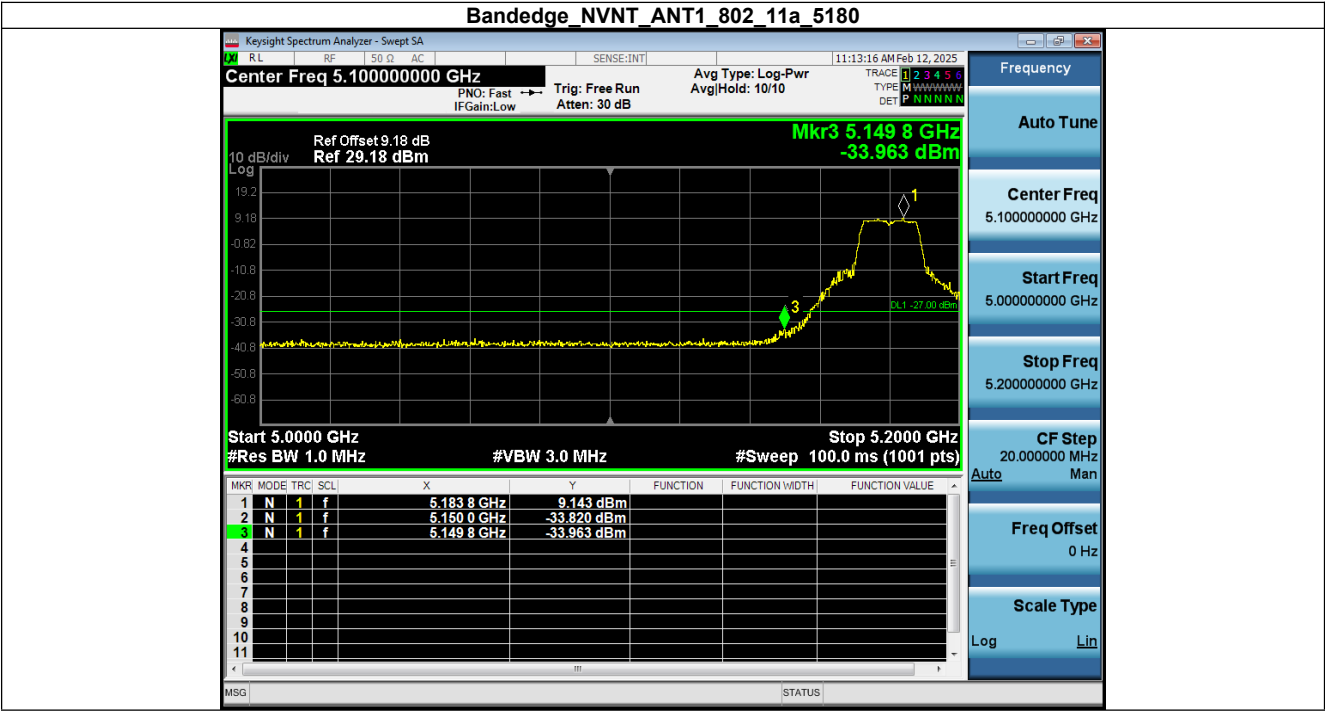
Power Spectral Density NVNT_ANT1_802_11n(HT20)_5240



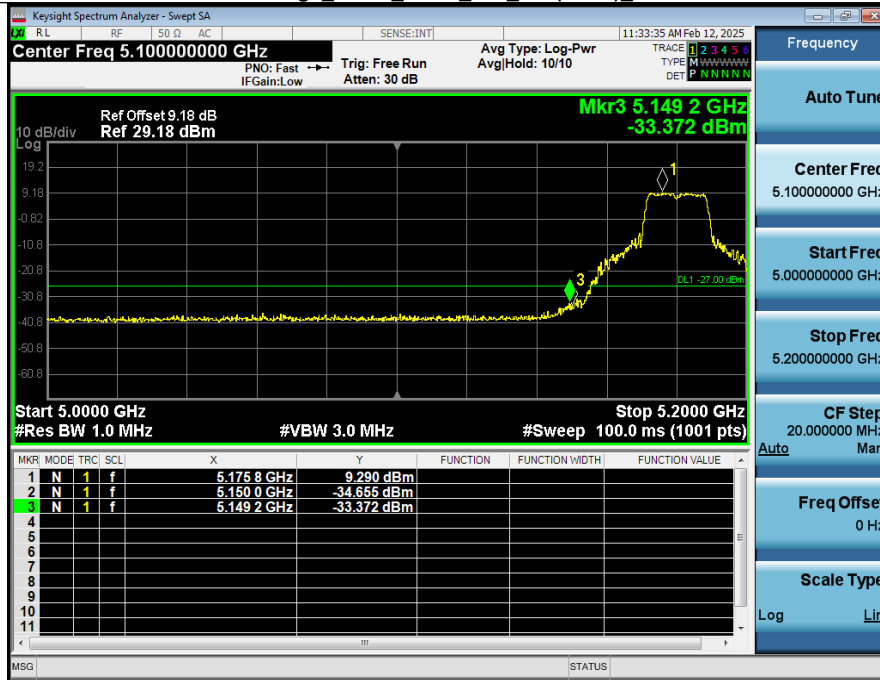
5. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark Frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	5149.80	-33.96	-27	Pass
NVNT	ANT1	802.11a	5240.00	5408.40	-38.07	-27	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	5149.20	-33.37	-27	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	5405.20	-38.19	-27	Pass

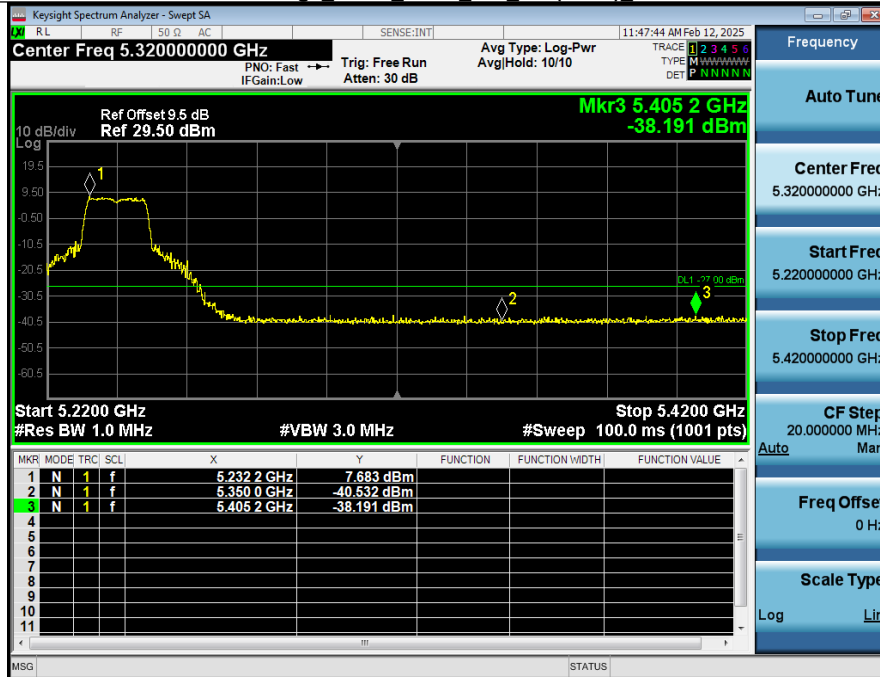
Note:The test diagram has integrated antenna gain to Offset Settings.



Bandedge_NVNT_ANT1_802_11n(HT20)_5180



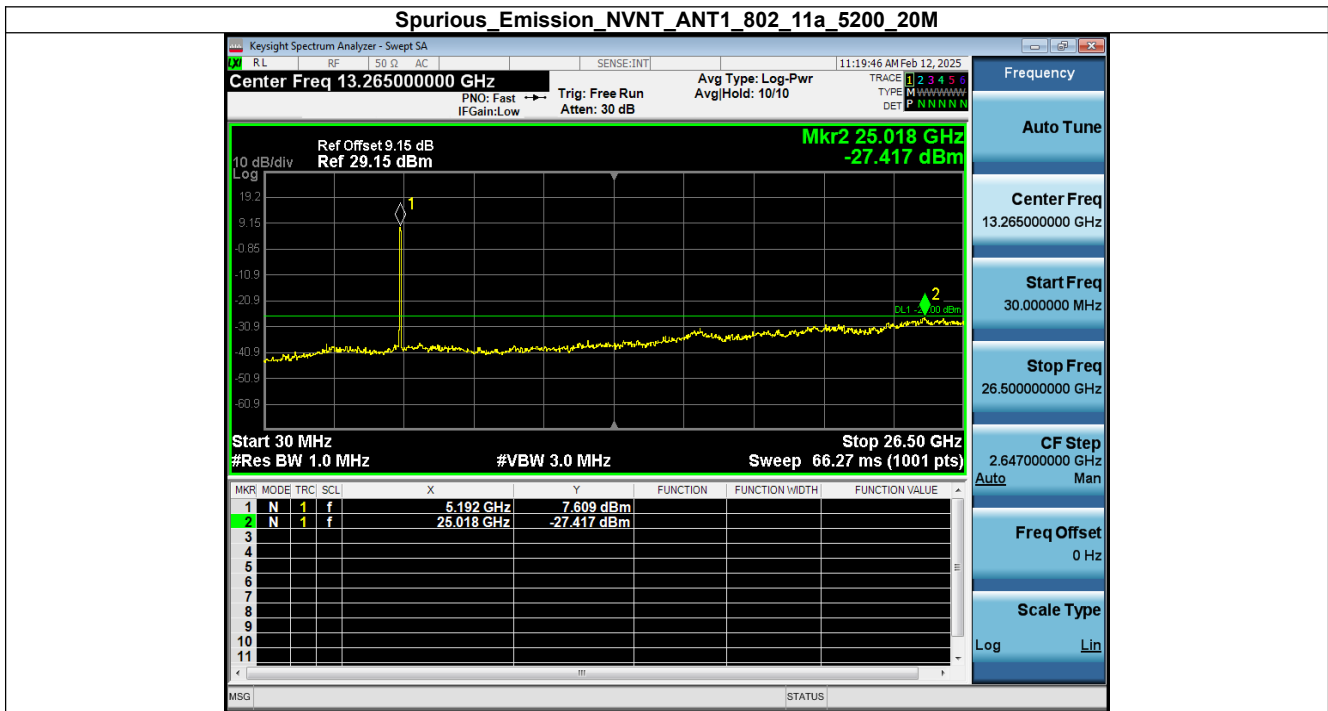
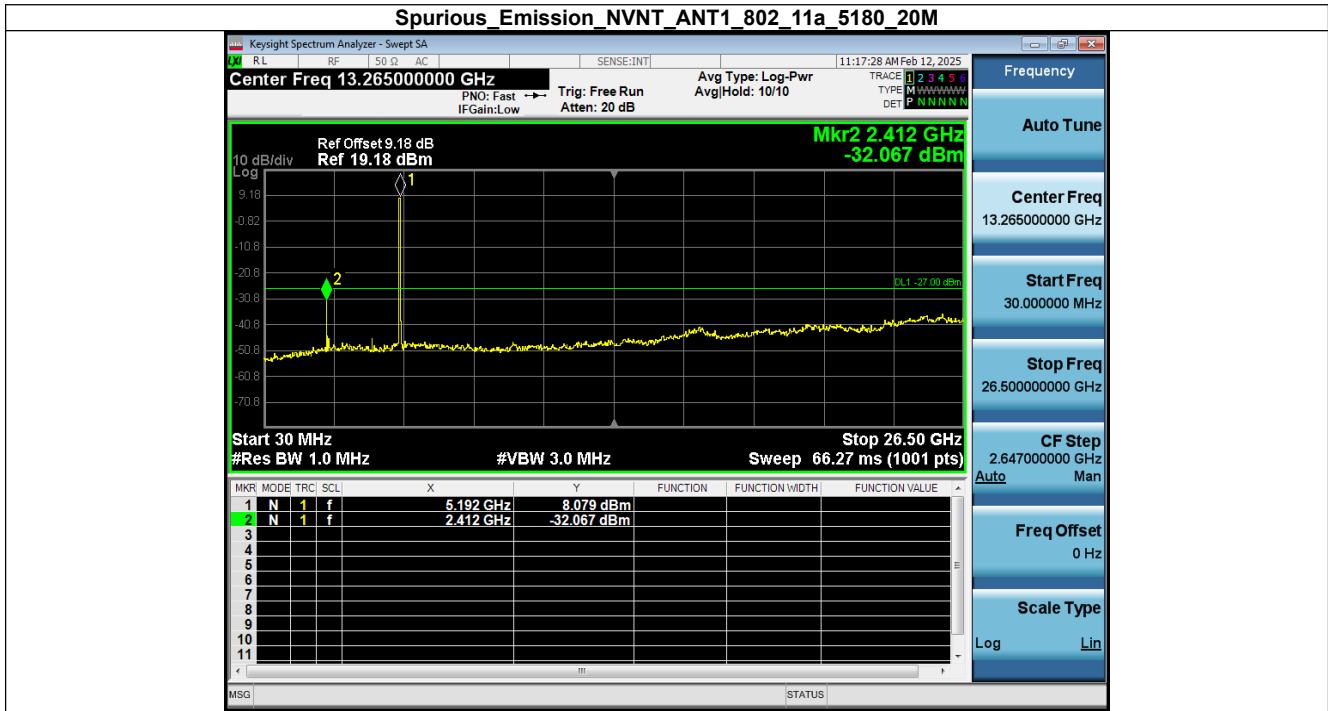
Bandedge_NVNT_ANT1_802_11n(HT20)_5240



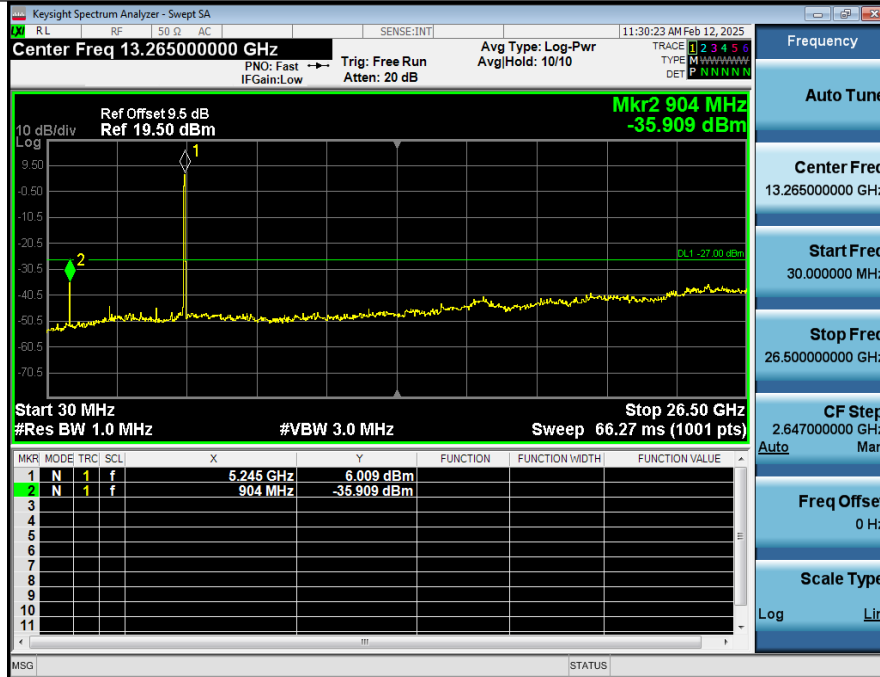
6. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark Frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	2412.30	-32.07	-27	Pass
NVNT	ANT1	802.11a	5200.00	25017.68	-27.42	-27	Pass
NVNT	ANT1	802.11a	5240.00	903.51	-35.91	-27	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	25811.78	-36.60	-27	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	24488.28	-27.39	-27	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	24964.74	-36.74	-27	Pass

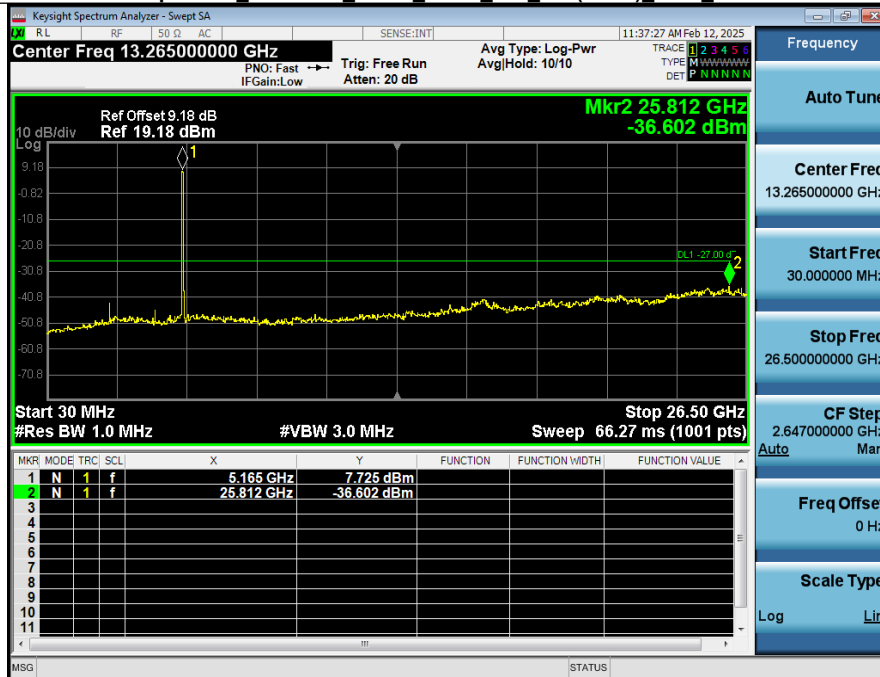
Note:1. The antenna gain is compensated in the test data.
2. 26.5GHz-40GHz the Spurious leve margin is the largest, so the test data only reflects 30MHz-26.5GHz



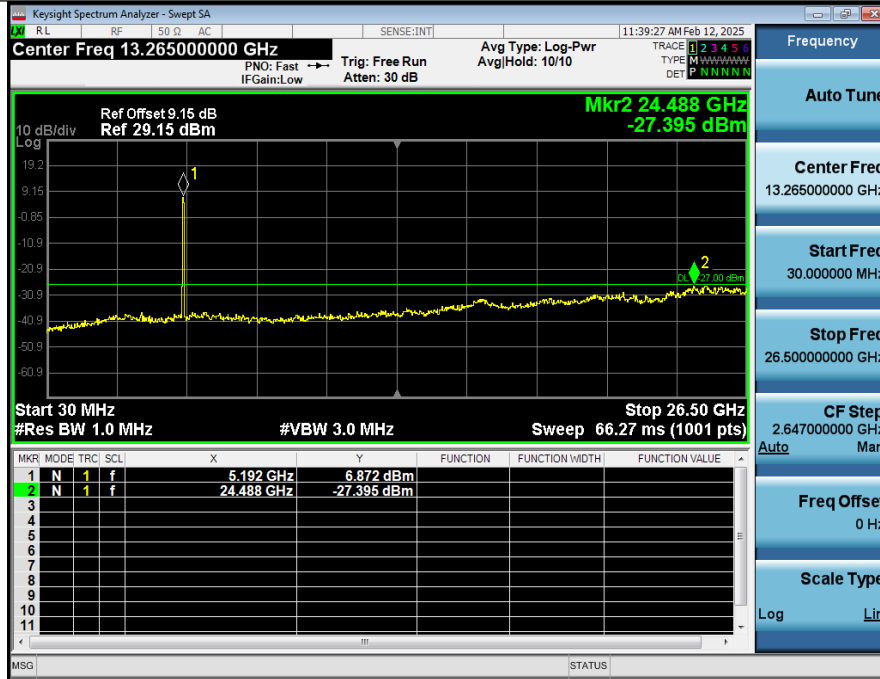
Spurious Emission NVNT_ANT1_802_11a_5240_20M



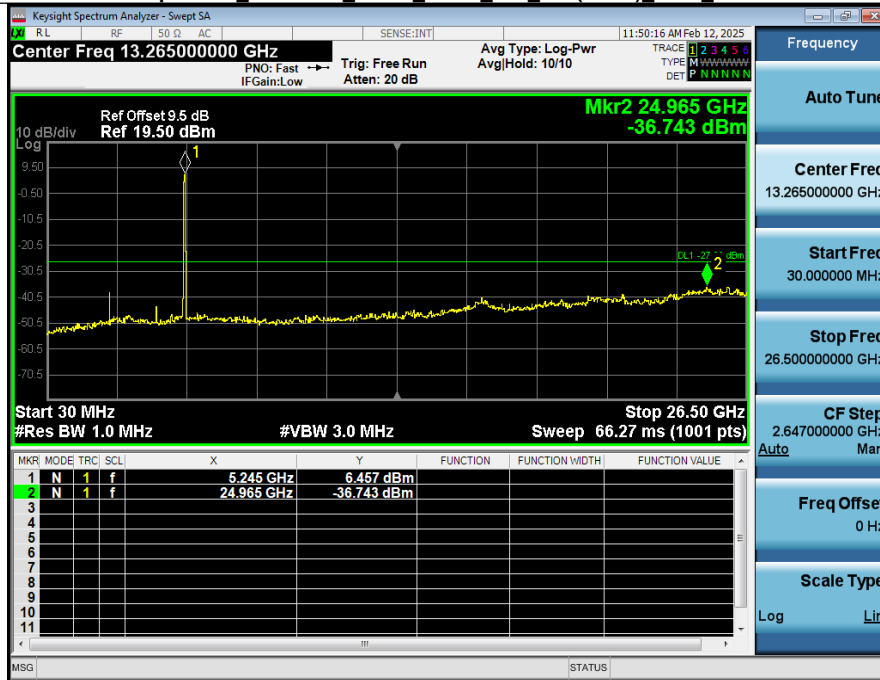
Spurious Emission NVNT_ANT1_802_11n(HT20)_5180_20M



Spurious Emission_NVNT_ANT1_802_11n(HT20)_5200_20M



Spurious Emission_NVNT_ANT1_802_11n(HT20)_5240_20M



7. Frequency Stability

Condition	Antenna	Modulation	Frequency (MHz)	Fc(MHz)	FI(MHz)	Fh(MHz)	Limit(MHz)	Result
55degrees C&&5.0V	ANT1	802.11a	5180.00	5180.050	5171.400	5188.700	5150~5250	Pass
45degrees C&&5.0V	ANT1	802.11a	5180.00	5180.024	5171.652	5188.396	5150~5250	Pass
35degrees C&&5.0V	ANT1	802.11a	5180.00	5180.020	5171.776	5188.264	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11a	5180.00	5180.018	5171.860	5188.176	5150~5250	Pass
15degrees C&&5.0V	ANT1	802.11a	5180.00	5180.008	5171.924	5188.092	5150~5250	Pass
5degrees C&&5.0V	ANT1	802.11a	5180.00	5180.006	5171.980	5188.032	5150~5250	Pass
-5degrees C&&5.0V	ANT1	802.11a	5180.00	5180.024	5172.036	5188.012	5150~5250	Pass
-15degrees C&&5.0V	ANT1	802.11a	5180.00	5180.002	5172.080	5187.924	5150~5250	Pass
25degrees C&&5.75V	ANT1	802.11a	5180.00	5179.992	5172.120	5187.864	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11a	5180.00	5179.994	5172.160	5187.828	5150~5250	Pass
25degrees C&&4.28V	ANT1	802.11a	5180.00	5180.008	5172.204	5187.812	5150~5250	Pass
55degrees C&&5.0V	ANT1	802.11a	5200.00	5200.016	5191.336	5208.696	5150~5250	Pass
45degrees C&&5.0V	ANT1	802.11a	5200.00	5200.016	5191.640	5208.392	5150~5250	Pass
35degrees C&&5.0V	ANT1	802.11a	5200.00	5200.024	5191.788	5208.260	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11a	5200.00	5200.018	5191.868	5208.168	5150~5250	Pass
15degrees C&&5.0V	ANT1	802.11a	5200.00	5200.020	5191.924	5208.116	5150~5250	Pass
5degrees C&&5.0V	ANT1	802.11a	5200.00	5200.006	5191.976	5208.036	5150~5250	Pass
-5degrees C&&5.0V	ANT1	802.11a	5200.00	5200.018	5192.032	5208.004	5150~5250	Pass
-15degrees C&&5.0V	ANT1	802.11a	5200.00	5199.998	5192.072	5207.924	5150~5250	Pass
25degrees C&&5.75V	ANT1	802.11a	5200.00	5200.002	5192.116	5207.888	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11a	5200.00	5200.000	5192.172	5207.828	5150~5250	Pass
25degrees C&&4.28V	ANT1	802.11a	5200.00	5199.996	5192.216	5207.776	5150~5250	Pass
55degrees C&&5.0V	ANT1	802.11a	5240.00	5240.024	5231.344	5248.704	5150~5250	Pass
45degrees C&&5.0V	ANT1	802.11a	5240.00	5239.998	5231.628	5248.368	5150~5250	Pass
35degrees C&&5.0V	ANT1	802.11a	5240.00	5239.996	5231.768	5248.224	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11a	5240.00	5239.994	5231.848	5248.140	5150~5250	Pass
15degrees C&&5.0V	ANT1	802.11a	5240.00	5240.008	5231.920	5248.096	5150~5250	Pass
5degrees C&&5.0V	ANT1	802.11a	5240.00	5240.002	5231.972	5248.032	5150~5250	Pass
-5degrees C&&5.0V	ANT1	802.11a	5240.00	5239.990	5232.024	5247.956	5150~5250	Pass
-15degrees C&&5.0V	ANT1	802.11a	5240.00	5239.990	5232.072	5247.908	5150~5250	Pass
25degrees C&&5.75V	ANT1	802.11a	5240.00	5240.002	5232.128	5247.876	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11a	5240.00	5239.996	5232.180	5247.812	5150~5250	Pass
25degrees C&&4.28V	ANT1	802.11a	5240.00	5239.998	5232.224	5247.772	5150~5250	Pass
55degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5180.000	5170.832	5189.168	5150~5250	Pass
45degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5180.008	5171.124	5188.892	5150~5250	Pass
35degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5180.016	5171.256	5188.776	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5180.016	5171.340	5188.692	5150~5250	Pass
15degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5180.022	5171.412	5188.632	5150~5250	Pass
5degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5180.012	5171.472	5188.552	5150~5250	Pass
-5degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5180.004	5171.536	5188.472	5150~5250	Pass
-15degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5179.992	5171.588	5188.396	5150~5250	Pass
25degrees C&&5.75V	ANT1	802.11n(HT20)	5180.00	5180.006	5171.652	5188.360	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11n(HT20)	5180.00	5180.002	5171.704	5188.300	5150~5250	Pass
25degrees C&&4.28V	ANT1	802.11n(HT20)	5180.00	5180.010	5171.756	5188.264	5150~5250	Pass
55degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5200.024	5190.868	5209.180	5150~5250	Pass
45degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5200.004	5191.116	5208.892	5150~5250	Pass
35degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5200.018	5191.252	5208.784	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5200.012	5191.336	5208.688	5150~5250	Pass
15degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5200.012	5191.412	5208.612	5150~5250	Pass
5degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5200.010	5191.480	5208.540	5150~5250	Pass
-5degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5200.014	5191.536	5208.492	5150~5250	Pass
-15degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5199.986	5191.584	5208.388	5150~5250	Pass
25degrees C&&5.75V	ANT1	802.11n(HT20)	5200.00	5199.986	5191.640	5208.332	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11n(HT20)	5200.00	5199.992	5191.692	5208.292	5150~5250	Pass
25degrees C&&4.28V	ANT1	802.11n(HT20)	5200.00	5199.990	5191.736	5208.244	5150~5250	Pass
55degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5240.024	5230.876	5249.172	5150~5250	Pass
45degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5239.998	5231.128	5248.868	5150~5250	Pass
35degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5240.012	5231.260	5248.764	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5240.006	5231.340	5248.672	5150~5250	Pass
15degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5240.006	5231.416	5248.596	5150~5250	Pass
5degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5239.996	5231.480	5248.512	5150~5250	Pass
-5degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5239.990	5231.532	5248.448	5150~5250	Pass
-15degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5239.994	5231.580	5248.408	5150~5250	Pass
25degrees C&&5.75V	ANT1	802.11n(HT20)	5240.00	5239.988	5231.636	5248.340	5150~5250	Pass
25degrees C&&5.0V	ANT1	802.11n(HT20)	5240.00	5239.982	5231.684	5248.280	5150~5250	Pass
25degrees C&&4.28V	ANT1	802.11n(HT20)	5240.00	5239.970	5231.732	5248.208	5150~5250	Pass