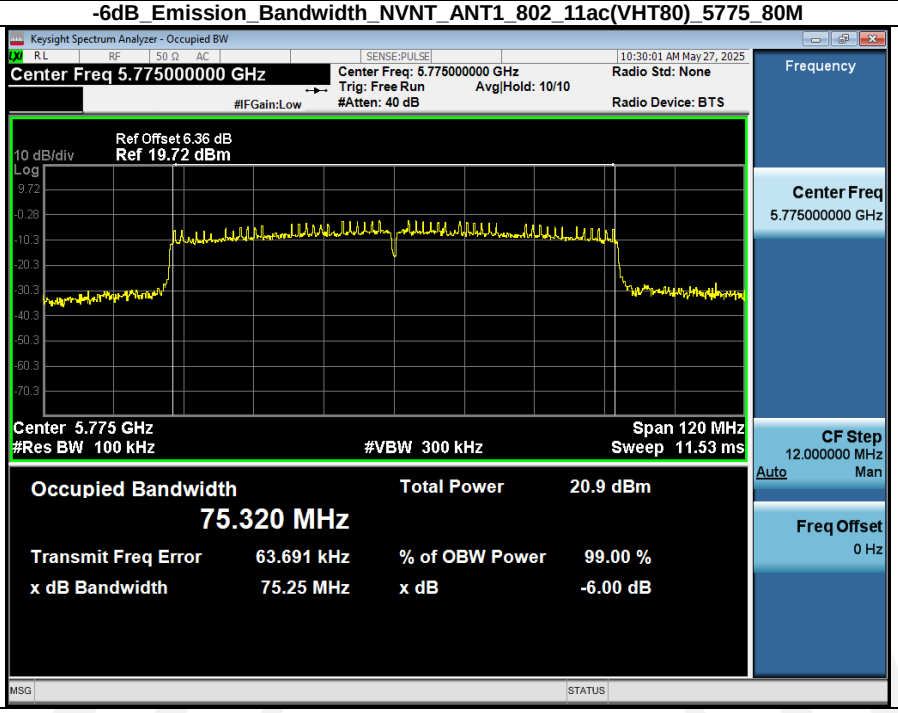
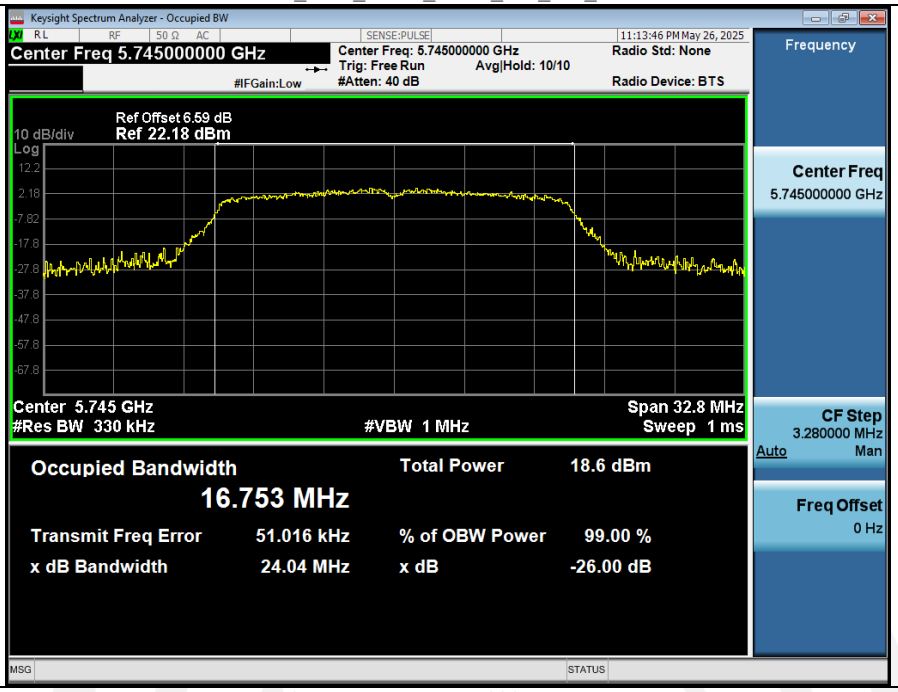
-6dB_Emission_Bandwidth_NVNT_ANT1_802_11ac(VHT80)_5775_80M


Condition	Antenna	Modulation	Frequency(MHz)	-26dB_Emission_Bandwidth(MHz)	Occupied Bandwidth(MHz)
NVNT	ANT1	802.11a	5745.00	23.81	16.75
NVNT	ANT1	802.11a	5785.00	23.41	16.80
NVNT	ANT1	802.11a	5825.00	22.68	16.76
NVNT	ANT1	802.11n(HT20)	5745.00	24.20	17.82
NVNT	ANT1	802.11n(HT20)	5785.00	24.08	17.85
NVNT	ANT1	802.11n(HT20)	5825.00	27.20	18.05
NVNT	ANT1	802.11ac(VHT20)	5745.00	23.23	17.86
NVNT	ANT1	802.11ac(VHT20)	5785.00	28.37	17.96
NVNT	ANT1	802.11ac(VHT20)	5825.00	27.50	18.04
NVNT	ANT1	802.11n(HT40)	5755.00	66.64	36.61
NVNT	ANT1	802.11n(HT40)	5795.00	67.44	36.70
NVNT	ANT1	802.11ac(VHT40)	5755.00	59.41	36.53
NVNT	ANT1	802.11ac(VHT40)	5795.00	60.19	36.64
NVNT	ANT1	802.11ac(VHT80)	5775.00	102.92	75.52

99%_OCB_NVNT_ANT1_802_11a_5745



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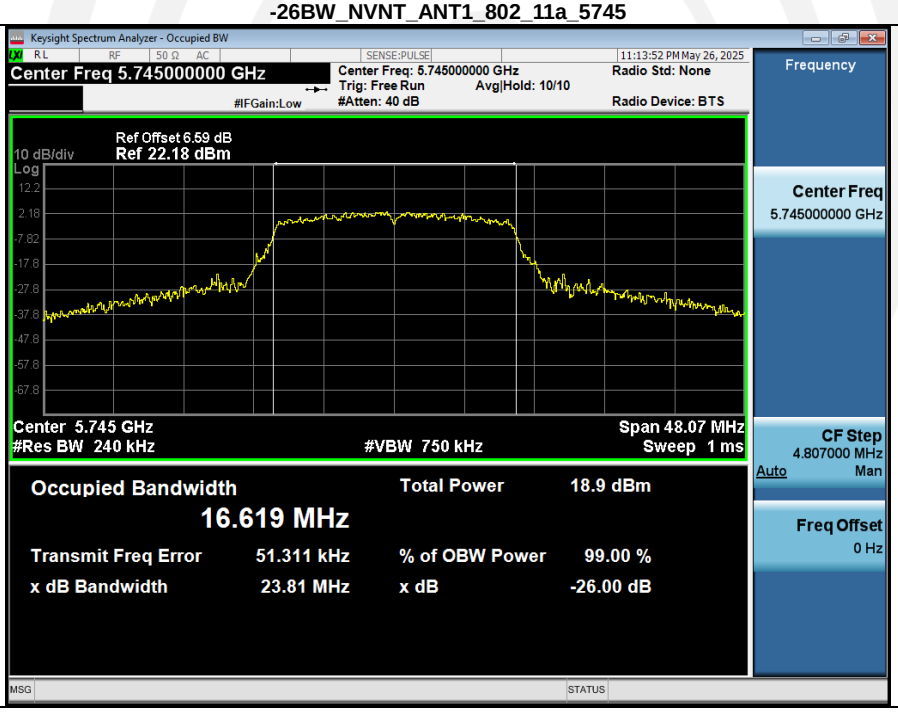

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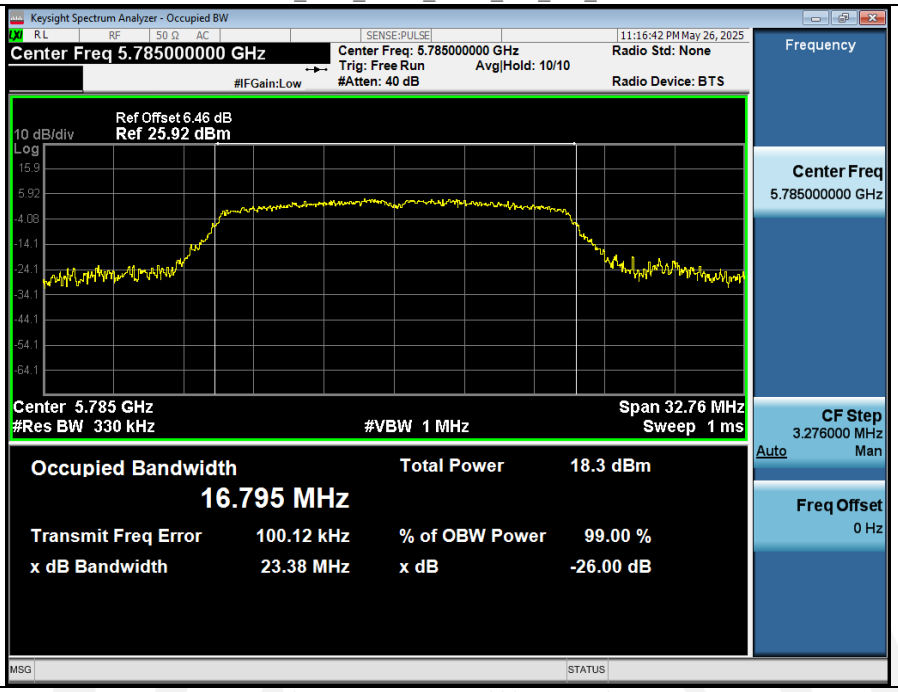

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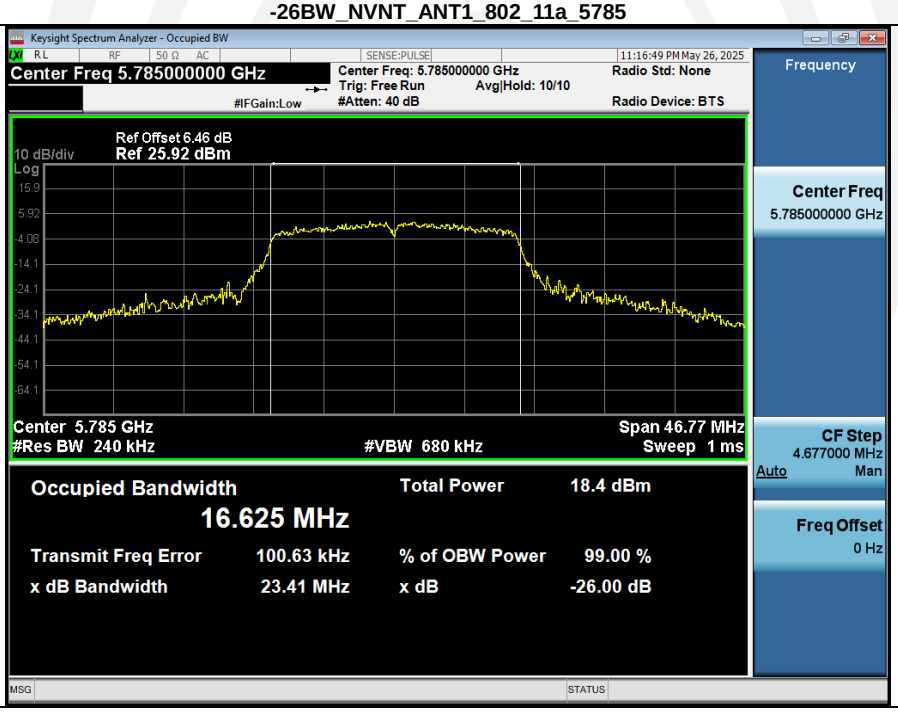

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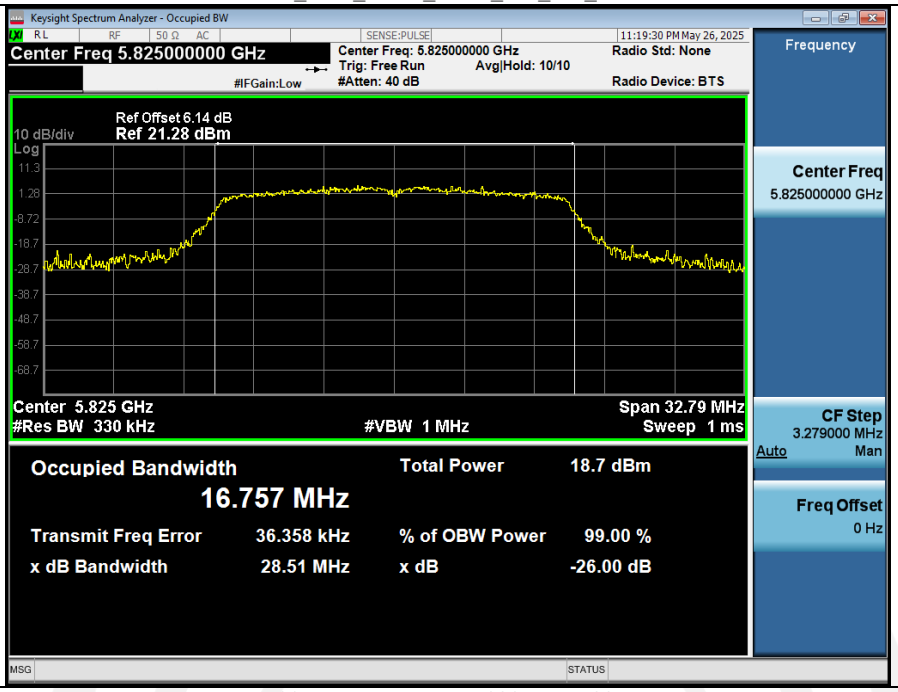

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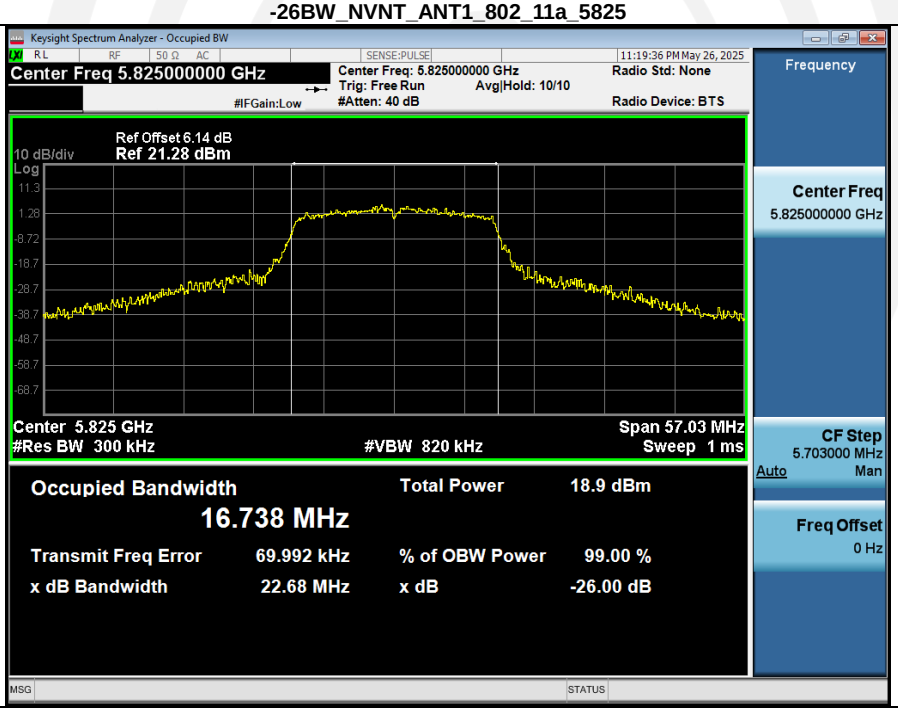
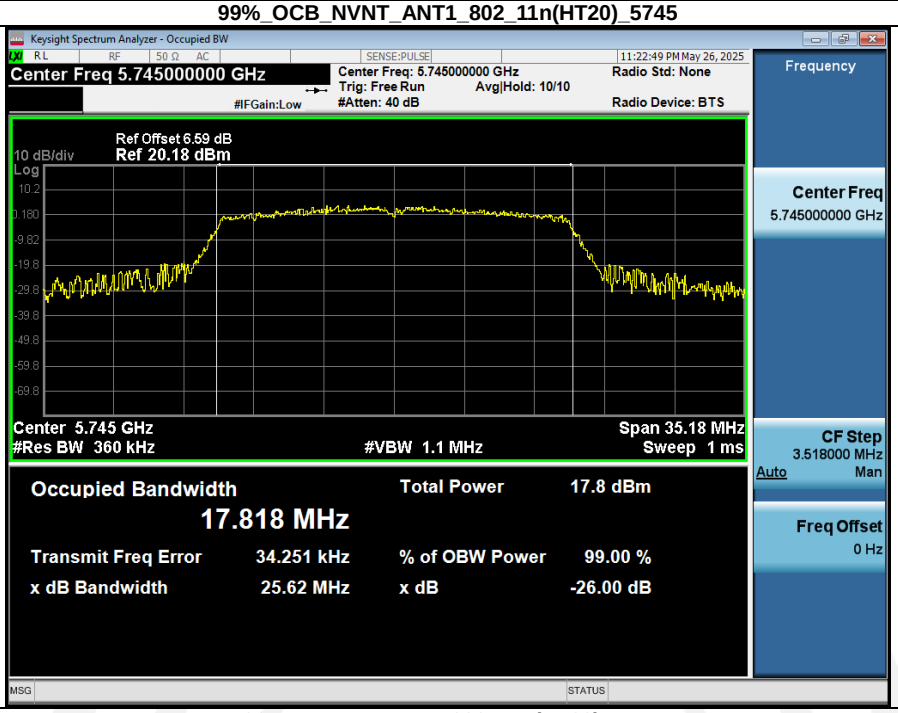


99%_OCB_NVNT_ANT1_802_11n(HT20)_5745



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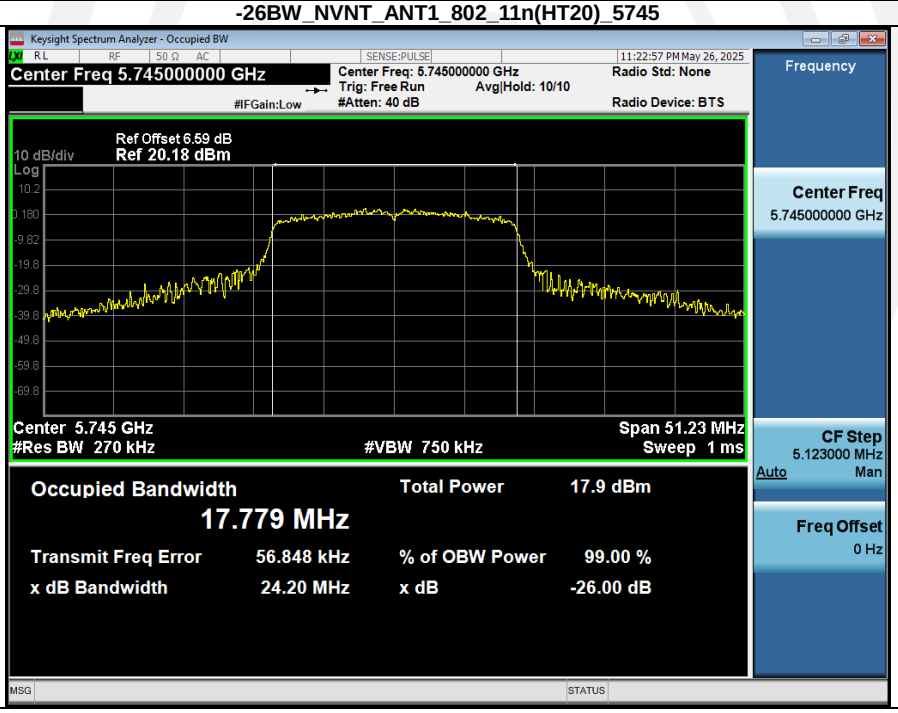

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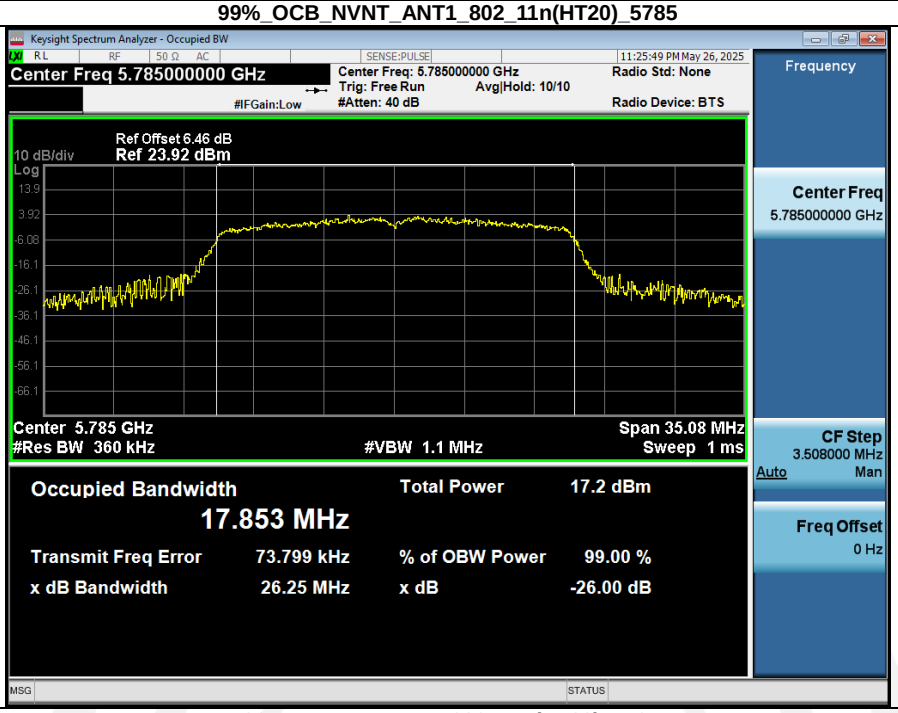
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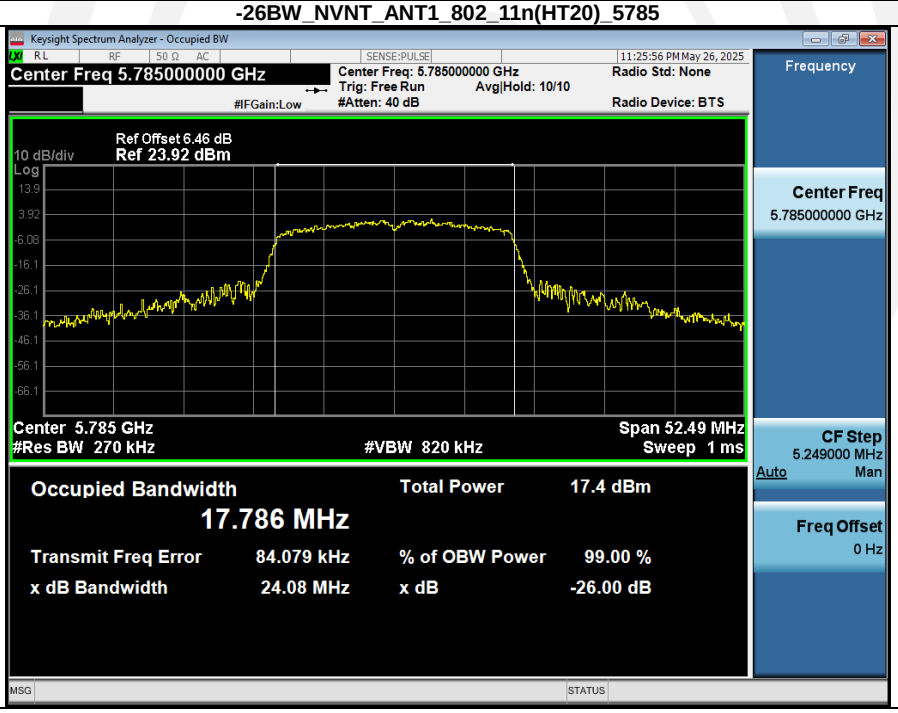

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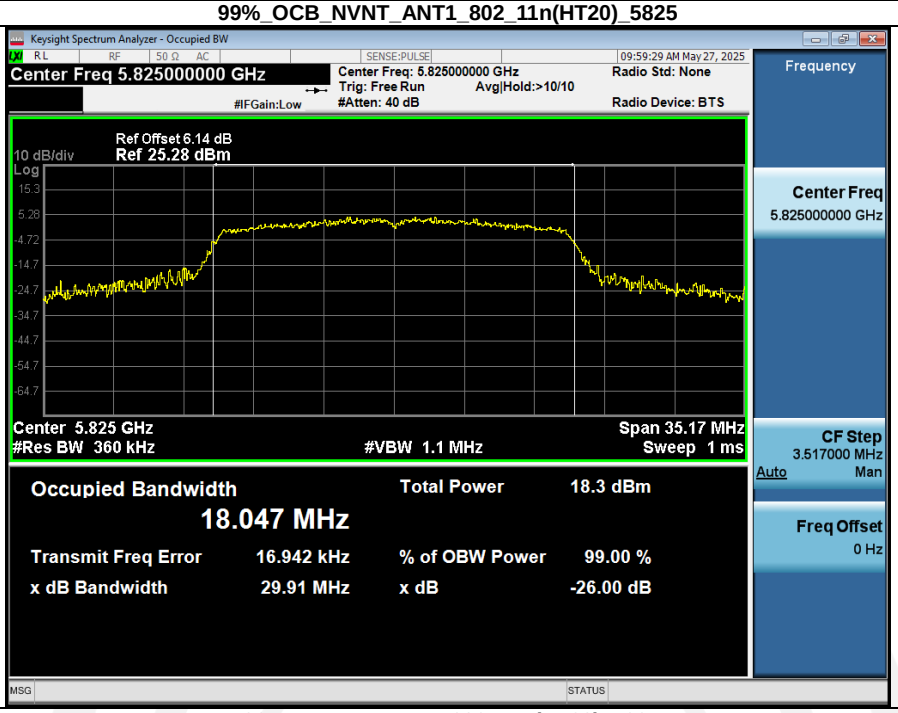

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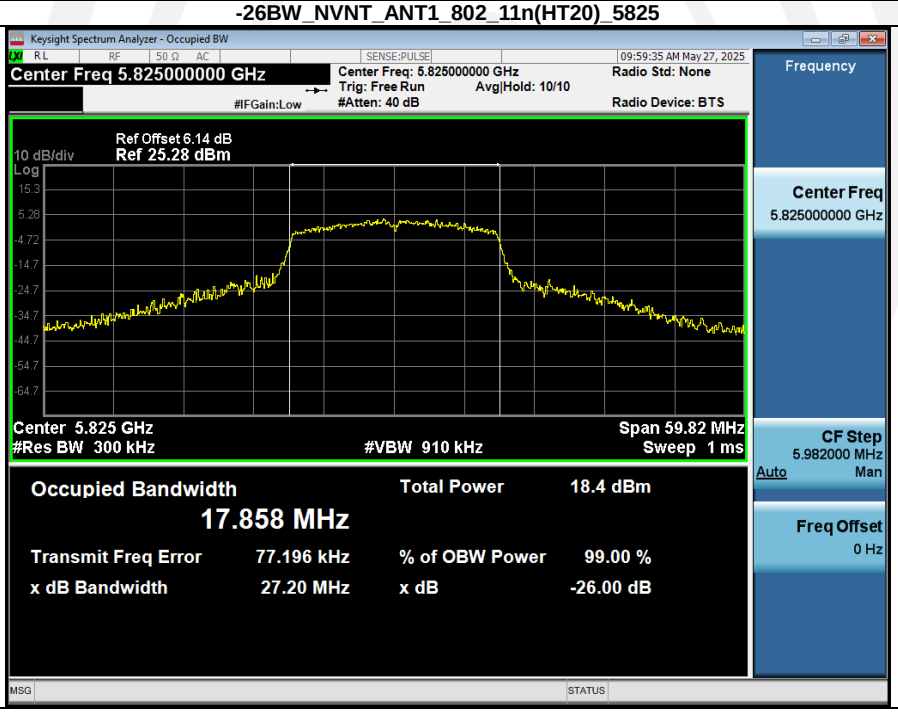
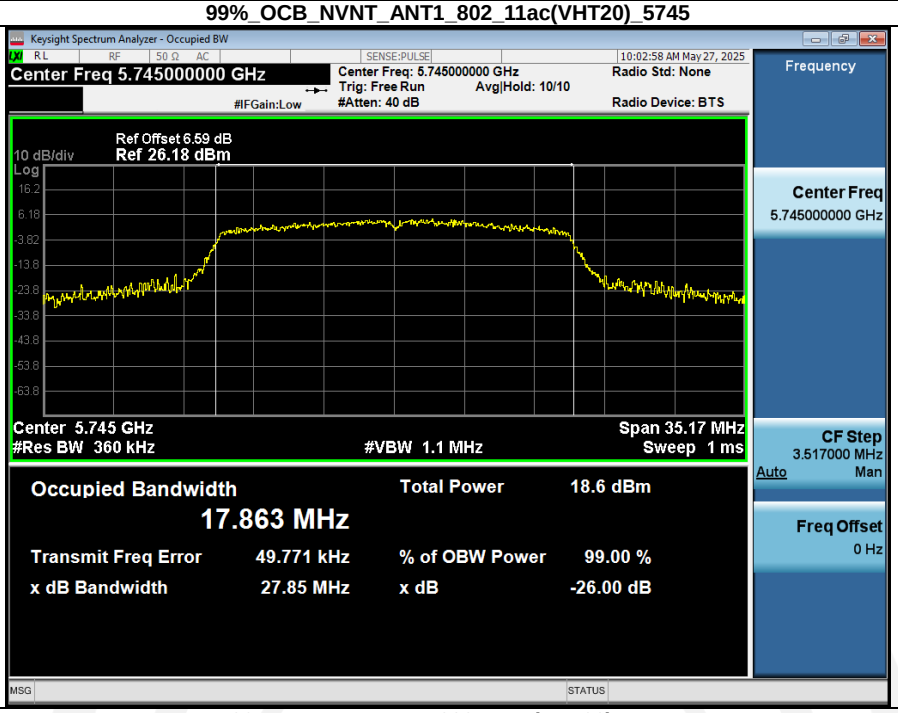


99%_OCB_NVNT_ANT1_802_11ac(VHT20)_5745

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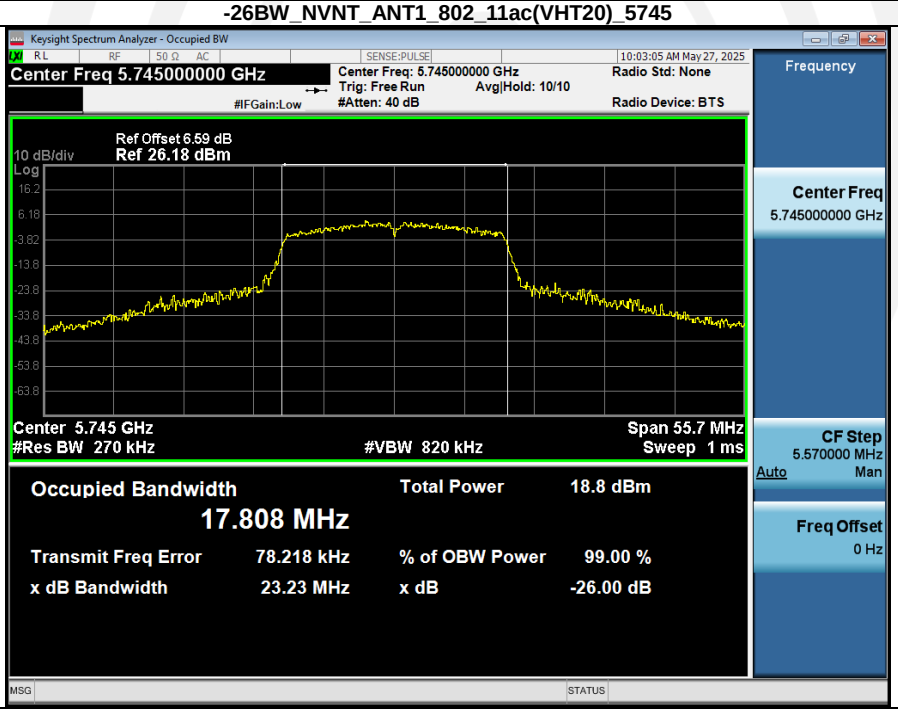
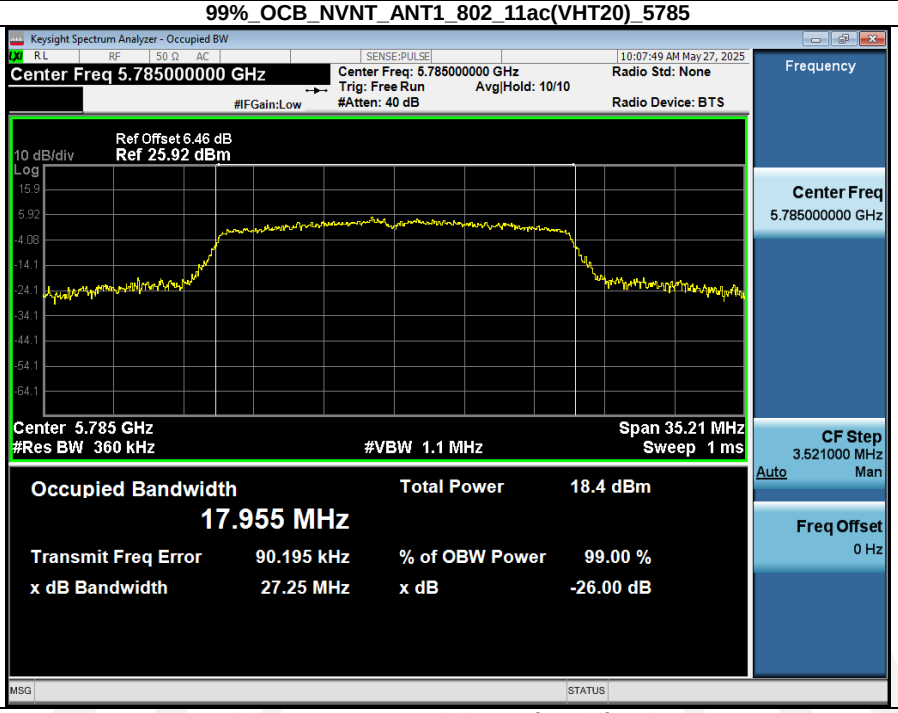


99%_OCB_NVNT_ANT1_802_11ac(VHT20)_5785

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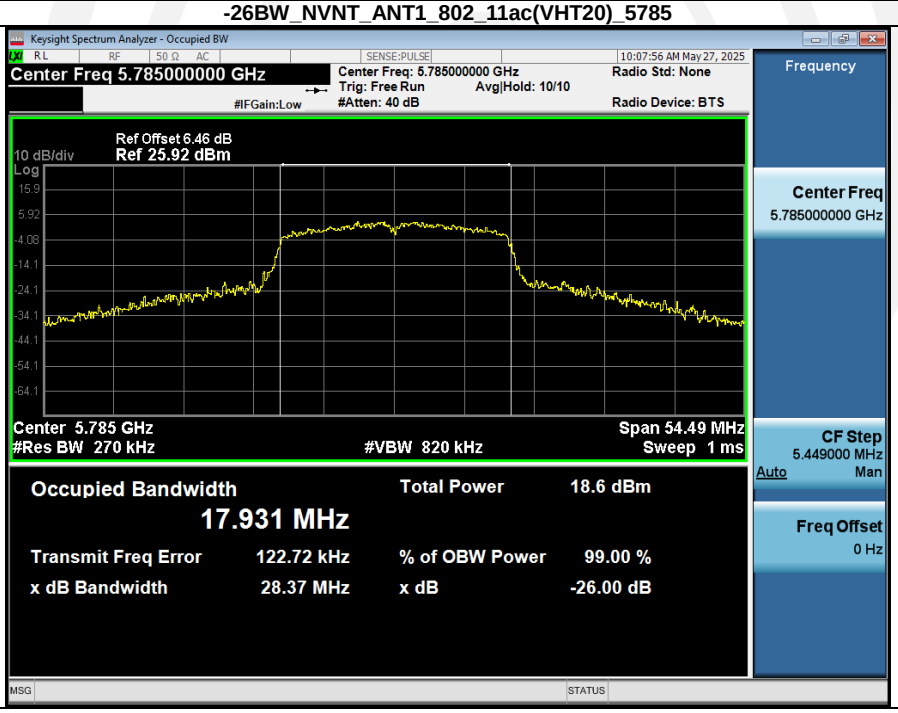

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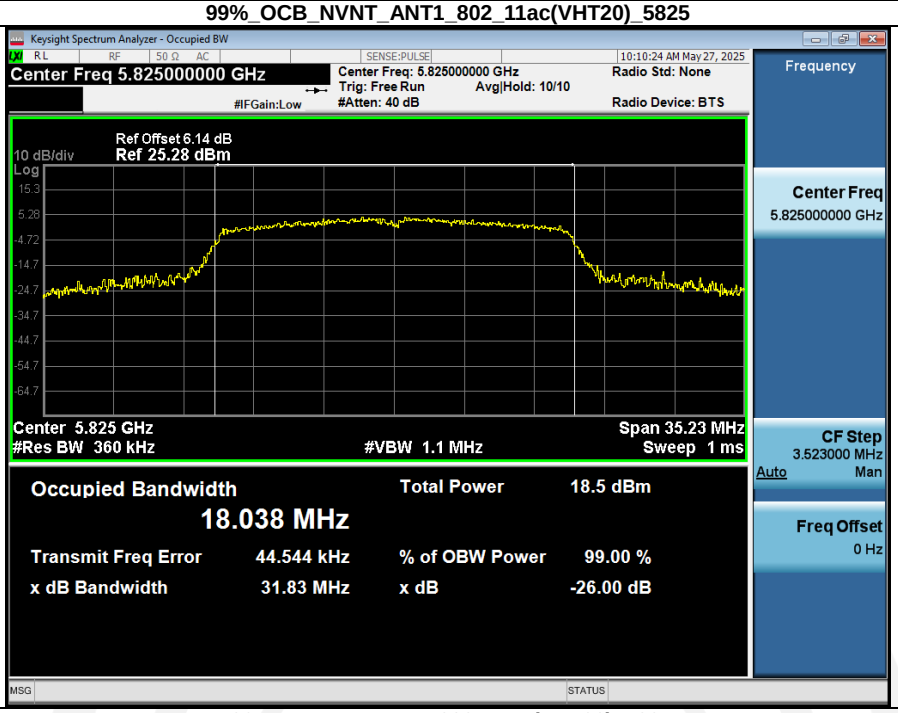

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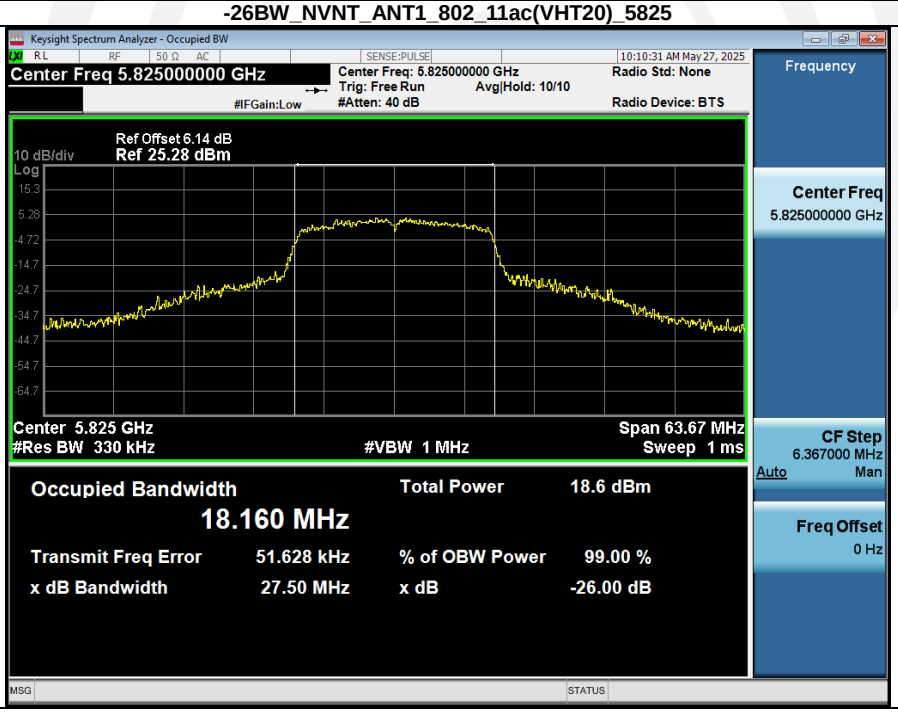

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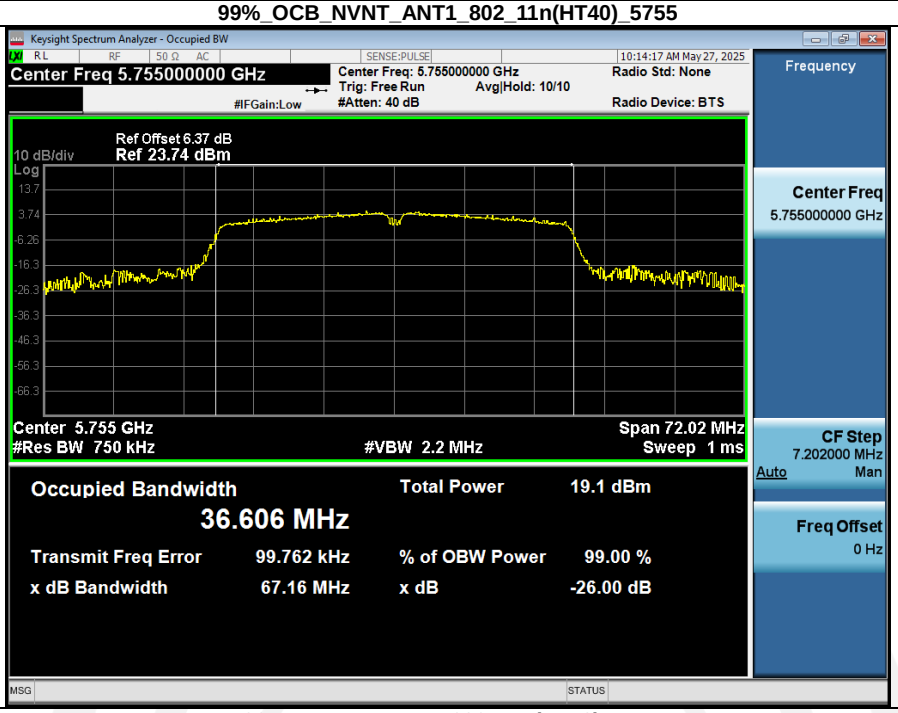

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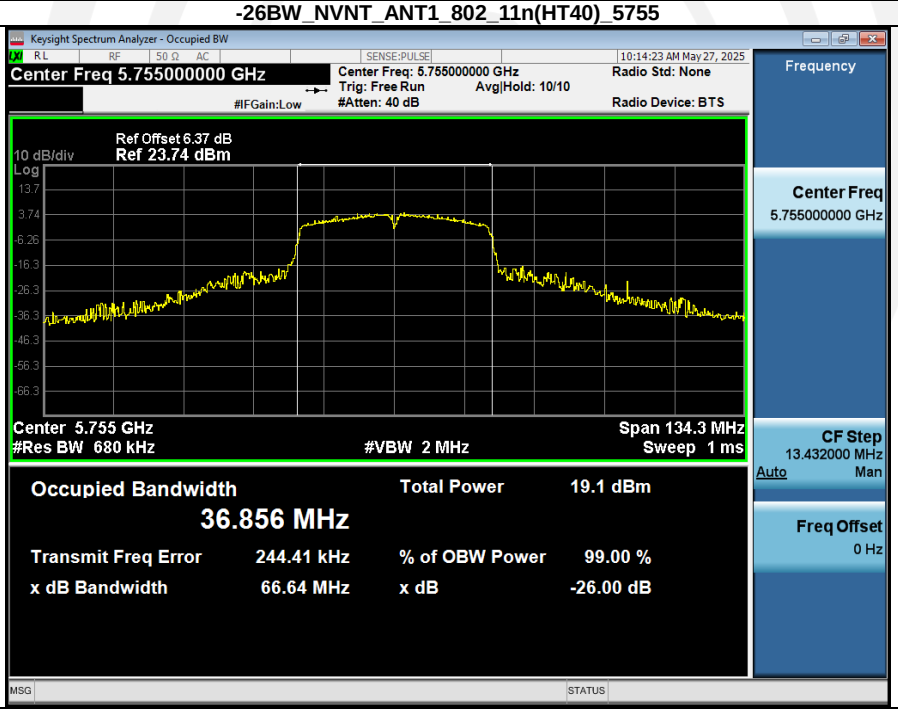

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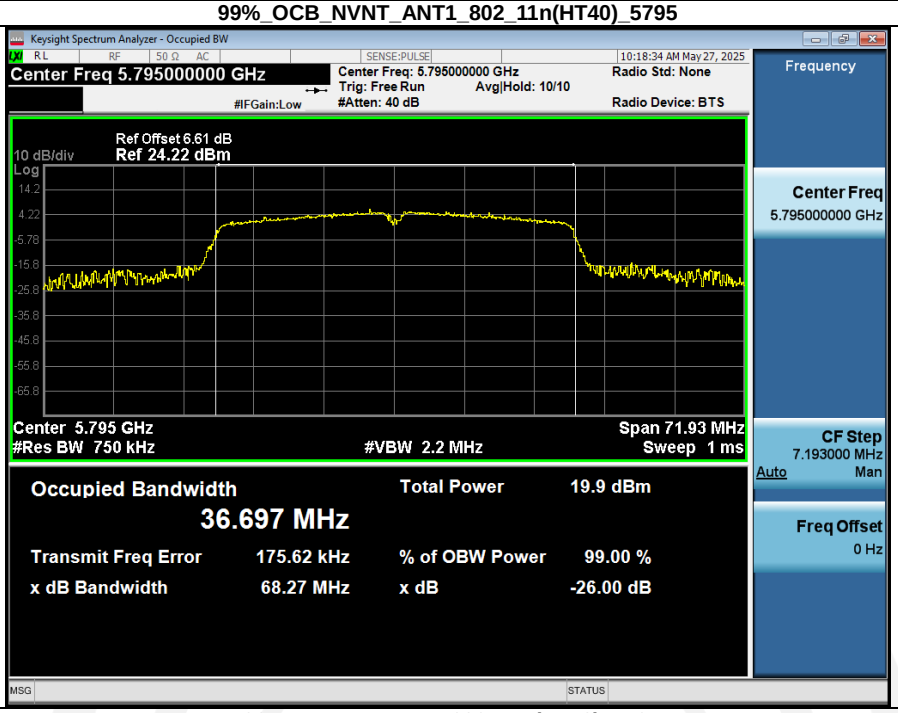

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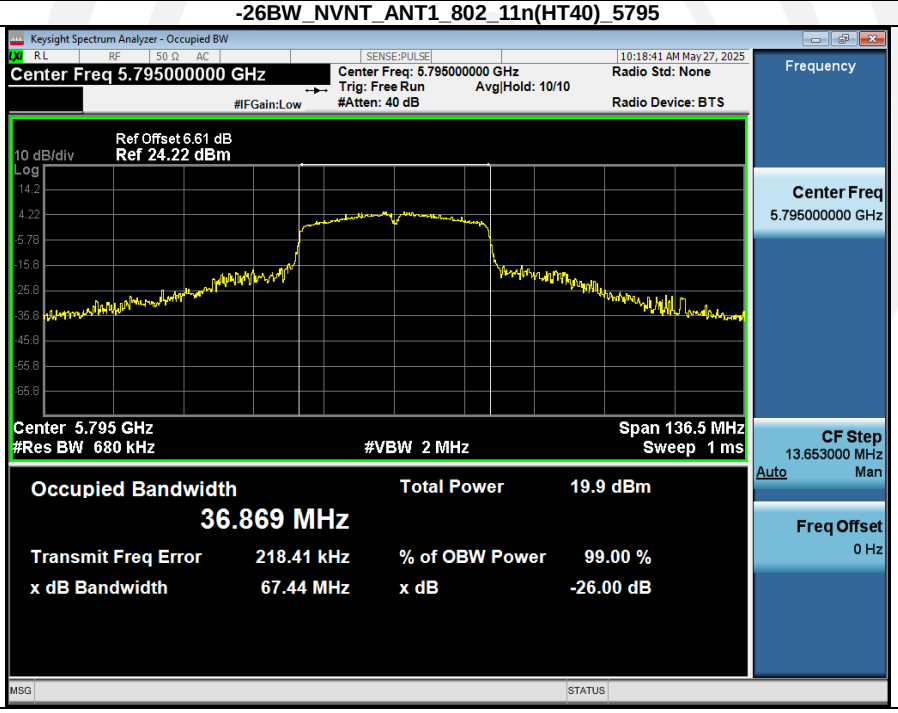

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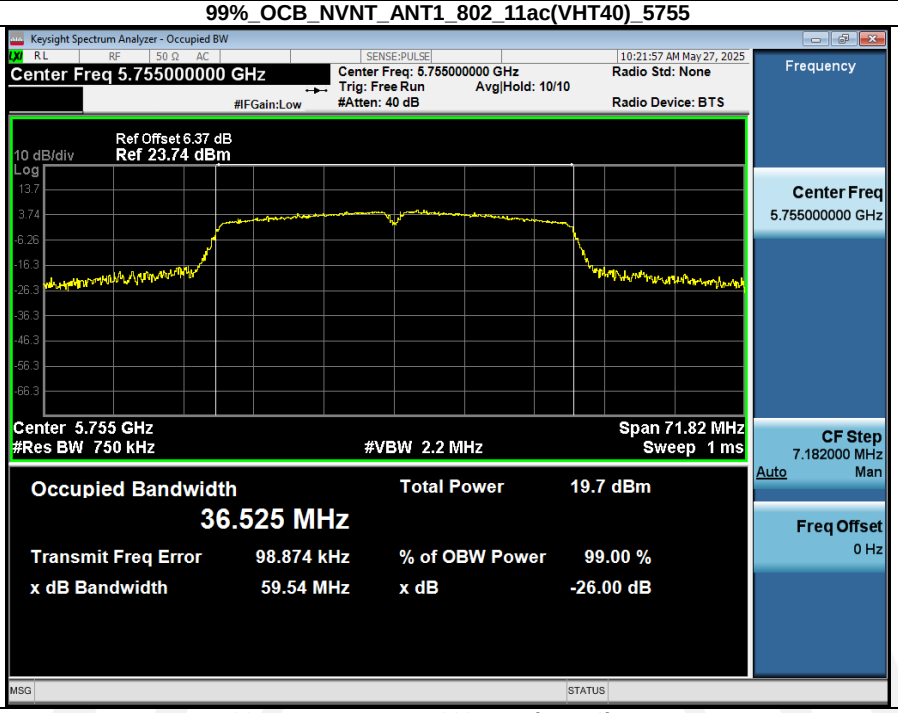
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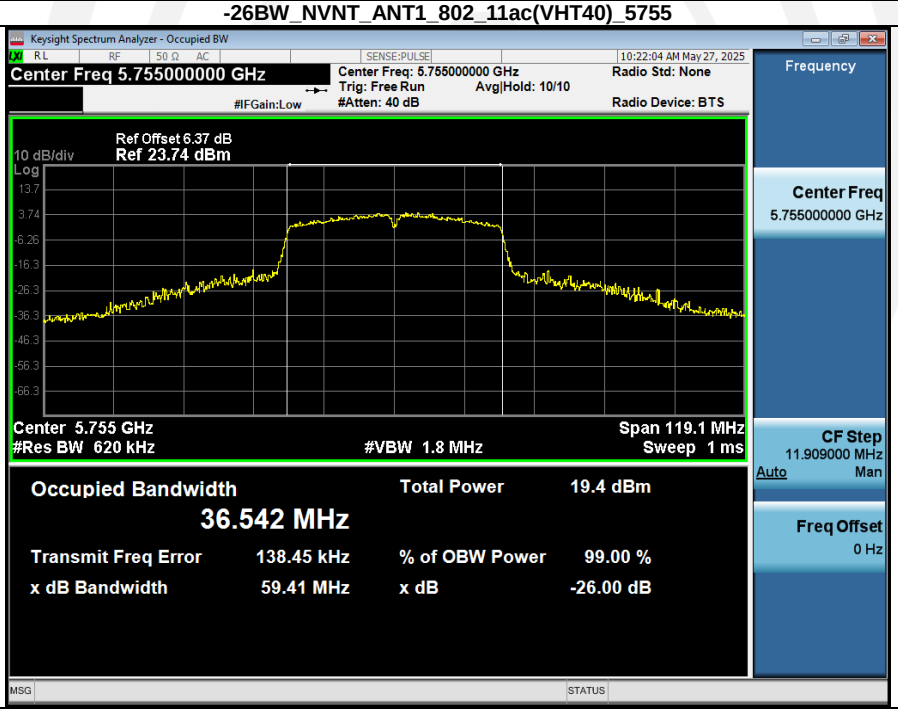

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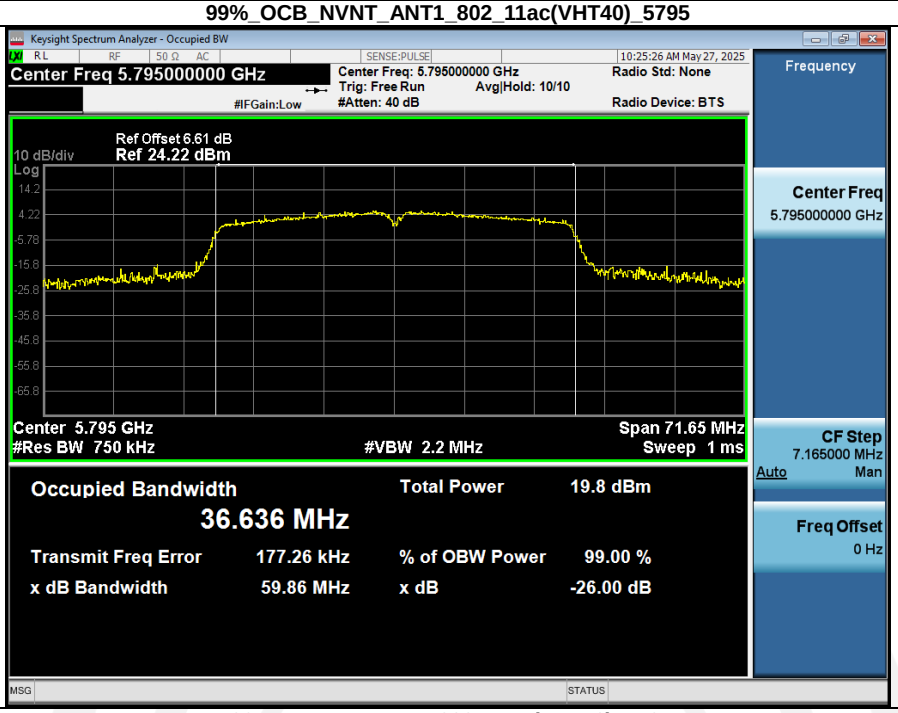
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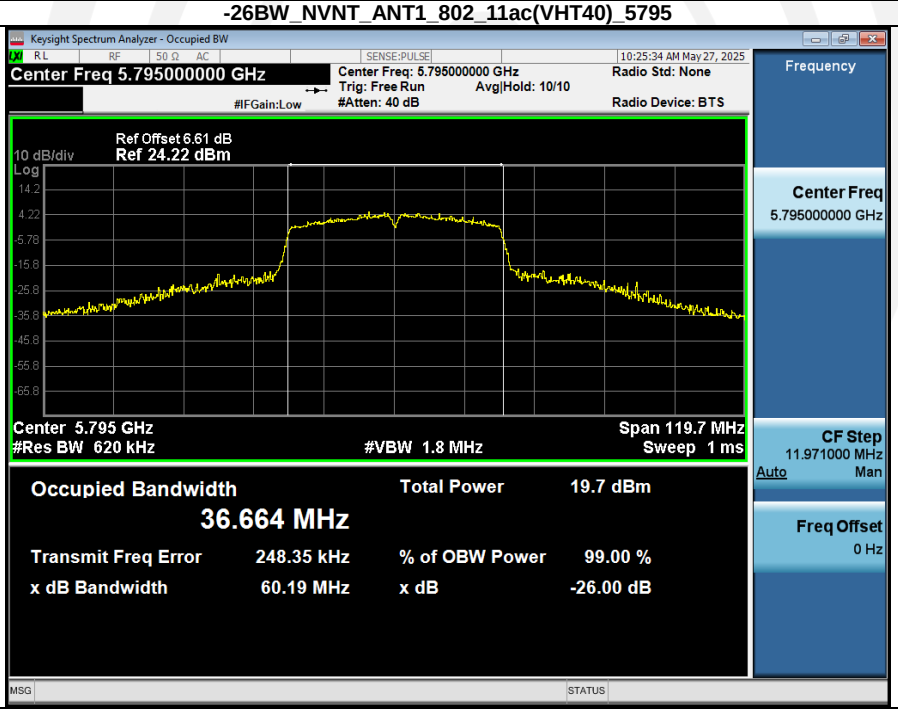
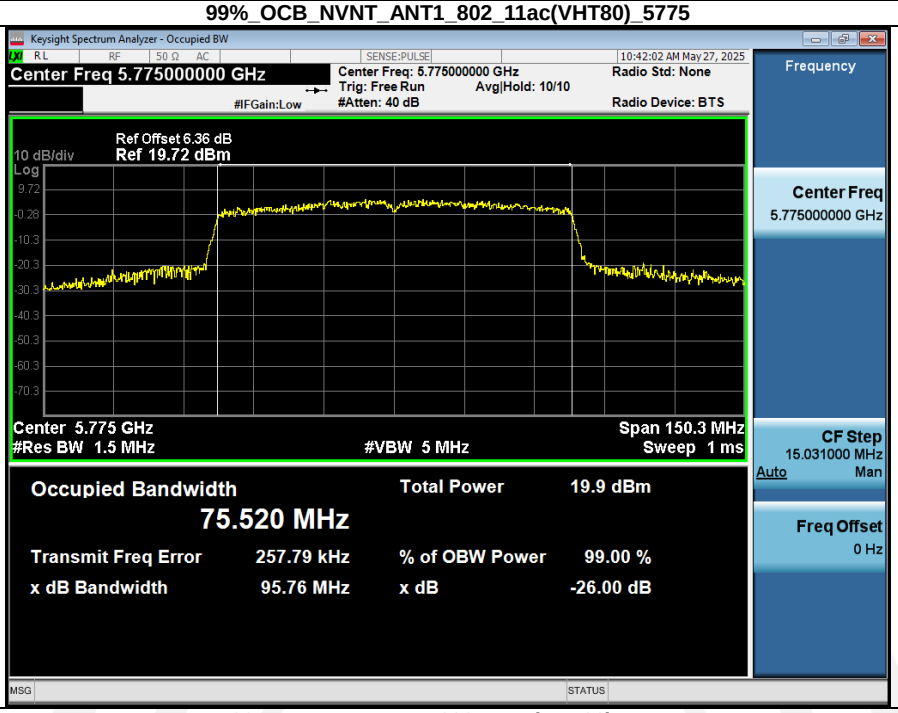


99%_OCB_NVNT_ANT1_802_11ac(VHT80)_5775



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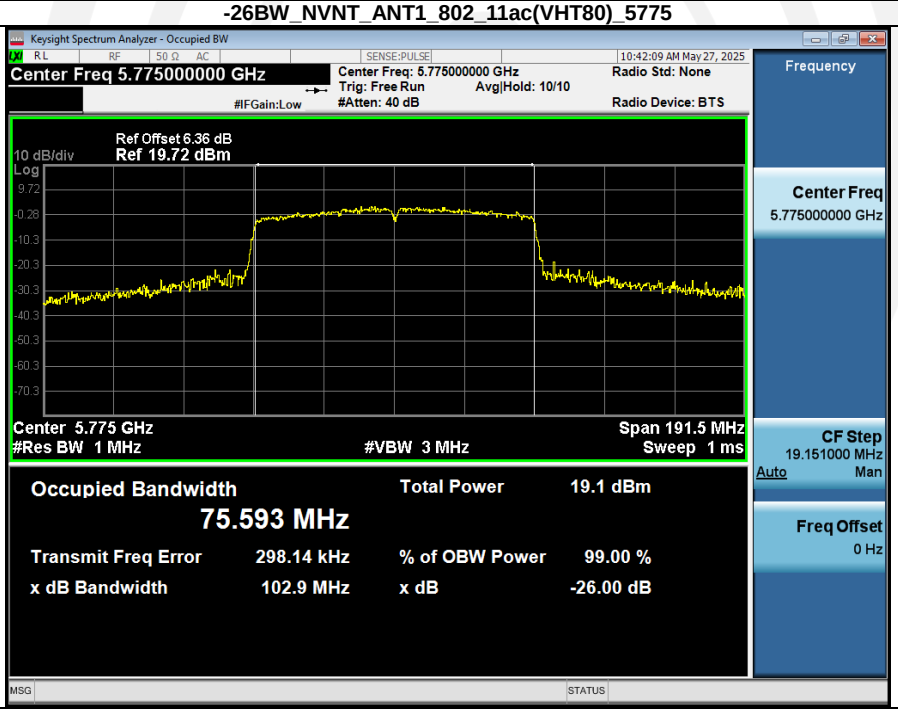
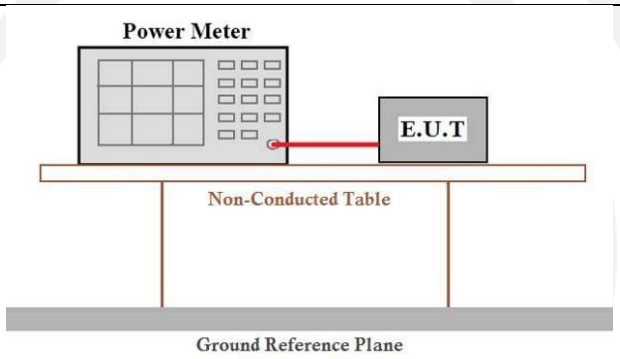


4.4 Peak Transmit Power

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 E Section 15.407, RSS-247 §6.2</td></tr>
<tr><td>Test Method:</td><td>KDB 789033 D02 General UNII Test Procedures New Rules v02r01</td></tr>
<tr><td>Limit:</td><td>For the band 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW.
For the band 5.725-5.85GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 1W.
IC:
<table>
<tr><th>Section</th><th>Test Item</th><th>Limit</th><th>FrequencyRange (MHz)</th><th>Result</th></tr>
<tr><td>6.2.1.1</td><td rowspan="3">Peak Output Power</td><td>200 mW or 10 + 10 log₁₀B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz</td><td>5150-5250</td><td rowspan="3">PASS</td></tr>
<tr><td>6.2.2.1
6.2.3.1</td><td>The lesser of 250 mW or 11 dBm + 10 log (26 dB emission bandwidth)</td><td>5250-5350
5470-5725</td></tr>
<tr><td>6.2.4.1</td><td>1 watt</td><td>5725-5825</td></tr>
</table></td></tr>
<tr><td>Test setup:</td><td> 
</td></tr>
<tr><td>Test procedure:</td><td>Measurement using an RF average power meter
(i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied
a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
(ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section B).
(iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
(iv) Adjust the measurement in dBm by adding 10 log(1/x) where x is the duty cycle (e.g., 10log(1/0.25) if the duty cycle is 25 percent).</td></tr>
<tr><td>Test Instruments:</td><td>Refer to section 3.0 for details</td></tr>
<tr><td>Test mode:</td><td>Refer to section 2.2 for details</td></tr>
<tr><td>Test results:</td><td>Pass</td></tr>
</table>

Measurement Data

Band 1 (5150-5250 MHz) SISO:

Condition	Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	11.21	0.42	11.63	24	Pass
NVNT	ANT2	802.11a	5180.00	11.39	0.42	11.81	24	Pass
NVNT	ANT1	802.11a	5200.00	11.08	0.44	11.52	24	Pass
NVNT	ANT2	802.11a	5200.00	11.71	0.45	12.16	24	Pass
NVNT	ANT1	802.11a	5240.00	11.55	0.47	12.02	24	Pass
NVNT	ANT2	802.11a	5240.00	11.48	0.44	11.92	24	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	11.66	0.52	12.18	24	Pass
NVNT	ANT2	802.11n(HT20)	5180.00	11.60	0.52	12.12	24	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	10.36	0.52	10.88	24	Pass
NVNT	ANT2	802.11n(HT20)	5200.00	11.59	0.52	12.11	24	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	11.17	0.56	11.73	24	Pass
NVNT	ANT2	802.11n(HT20)	5240.00	11.32	0.59	11.91	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5180.00	11.35	0.52	11.87	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5180.00	9.37	0.52	9.89	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5200.00	11.79	0.48	12.27	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5200.00	11.75	0.52	12.27	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5240.00	10.00	0.52	10.52	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5240.00	10.09	0.58	10.67	24	Pass
NVNT	ANT1	802.11n(HT40)	5190.00	9.80	1.06	10.86	24	Pass
NVNT	ANT2	802.11n(HT40)	5190.00	9.99	1.06	11.05	24	Pass
NVNT	ANT1	802.11n(HT40)	5230.00	10.96	0.94	11.90	24	Pass
NVNT	ANT2	802.11n(HT40)	5230.00	9.24	0.91	10.15	24	Pass
NVNT	ANT1	802.11ac(VHT40)	5190.00	11.46	1.06	12.52	24	Pass
NVNT	ANT2	802.11ac(VHT40)	5190.00	10.19	1.06	11.25	24	Pass
NVNT	ANT1	802.11ac(VHT40)	5230.00	9.64	0.91	10.55	24	Pass
NVNT	ANT2	802.11ac(VHT40)	5230.00	9.21	0.91	10.12	24	Pass
NVNT	ANT1	802.11ac(VHT80)	5210.00	10.55	1.81	12.36	24	Pass
NVNT	ANT2	802.11ac(VHT80)	5210.00	9.52	1.86	11.38	24	Pass

Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty_factor
ANT1	802.11a	5180.00	90.78	0.42
ANT2	802.11a	5180.00	90.78	0.42
ANT1	802.11a	5200.00	90.36	0.44
ANT2	802.11a	5200.00	90.16	0.45
ANT1	802.11a	5240.00	89.74	0.47
ANT2	802.11a	5240.00	90.36	0.44
ANT1	802.11n(HT20)	5180.00	88.72	0.52
ANT2	802.11n(HT20)	5180.00	88.72	0.52
ANT1	802.11n(HT20)	5200.00	88.72	0.52
ANT2	802.11n(HT20)	5200.00	88.72	0.52
ANT1	802.11n(HT20)	5240.00	87.90	0.56
ANT2	802.11n(HT20)	5240.00	87.30	0.59
ANT1	802.11ac(VHT20)	5180.00	88.72	0.52
ANT2	802.11ac(VHT20)	5180.00	88.72	0.52
ANT1	802.11ac(VHT20)	5200.00	89.54	0.48
ANT2	802.11ac(VHT20)	5200.00	88.72	0.52
ANT1	802.11ac(VHT20)	5240.00	88.72	0.52
ANT2	802.11ac(VHT20)	5240.00	87.50	0.58
ANT1	802.11n(HT40)	5190.00	78.34	1.06
ANT2	802.11n(HT40)	5190.00	78.34	1.06
ANT1	802.11n(HT40)	5230.00	80.54	0.94
ANT2	802.11n(HT40)	5230.00	81.10	0.91
ANT1	802.11ac(VHT40)	5190.00	78.34	1.06
ANT2	802.11ac(VHT40)	5190.00	78.34	1.06
ANT1	802.11ac(VHT40)	5230.00	81.10	0.91
ANT2	802.11ac(VHT40)	5230.00	81.10	0.91
ANT1	802.11ac(VHT80)	5210.00	65.92	1.81
ANT2	802.11ac(VHT80)	5210.00	65.16	1.86

MIMO:

Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted_Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11n(HT20)	5180.00	**15.16**	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5200.00	14.55	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5240.00	14.83	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5180.00	14.00	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5200.00	15.28	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5240.00	13.61	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5190.00	13.97	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5230.00	14.12	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5190.00	14.94	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5230.00	13.35	30	Pass
NVNT	MIMO_TX	802.11ac(VHT80)	5210.00	14.91	30	Pass

Band 2 (5260-5320 MHz) SISO:

Condition	Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5260.00	12.74	0.12	12.86	24	Pass
NVNT	ANT2	802.11a	5260.00	12.94	0.12	13.06	24	Pass
NVNT	ANT1	802.11a	5300.00	12.20	0.12	12.32	24	Pass
NVNT	ANT2	802.11a	5300.00	11.54	0.12	11.66	24	Pass
NVNT	ANT1	802.11a	5320.00	12.78	0.09	12.87	24	Pass
NVNT	ANT2	802.11a	5320.00	12.16	0.12	12.28	24	Pass
NVNT	ANT1	802.11n(HT20)	5260.00	10.53	0.52	11.05	24	Pass
NVNT	ANT2	802.11n(HT20)	5260.00	10.17	0.52	10.69	24	Pass
NVNT	ANT1	802.11n(HT20)	5300.00	10.50	0.49	10.99	24	Pass
NVNT	ANT2	802.11n(HT20)	5300.00	10.67	0.49	11.16	24	Pass
NVNT	ANT1	802.11n(HT20)	5320.00	9.91	0.52	10.43	24	Pass
NVNT	ANT2	802.11n(HT20)	5320.00	10.34	0.59	10.93	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5260.00	10.89	0.52	11.41	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5260.00	11.38	0.55	11.93	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5300.00	10.02	0.52	10.54	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5300.00	10.64	0.52	11.16	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5320.00	9.93	0.58	10.51	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5320.00	10.27	0.52	10.79	24	Pass
NVNT	ANT1	802.11n(HT40)	5270.00	10.75	0.98	11.73	24	Pass
NVNT	ANT2	802.11n(HT40)	5270.00	11.08	1.12	12.20	24	Pass
NVNT	ANT1	802.11n(HT40)	5310.00	9.72	1.04	10.76	24	Pass
NVNT	ANT2	802.11n(HT40)	5310.00	10.24	1.12	11.36	24	Pass
NVNT	ANT1	802.11ac(VHT40)	5270.00	10.40	0.98	11.38	24	Pass
NVNT	ANT2	802.11ac(VHT40)	5270.00	11.00	1.04	12.04	24	Pass
NVNT	ANT1	802.11ac(VHT40)	5310.00	9.88	1.04	10.92	24	Pass
NVNT	ANT2	802.11ac(VHT40)	5310.00	10.17	1.04	11.21	24	Pass
NVNT	ANT1	802.11ac(VHT80)	5290.00	9.67	1.66	11.33	24	Pass
NVNT	ANT2	802.11ac(VHT80)	5290.00	10.21	1.66	11.87	24	Pass

Antenna	Modulation	Frequency(MHz)	Duty cycle(%)	Duty_factor
ANT1	802.11a	5260.00	97.27	0.12
ANT2	802.11a	5260.00	97.27	0.12
ANT1	802.11a	5300.00	97.27	0.12
ANT2	802.11a	5300.00	97.27	0.12
ANT1	802.11a	5320.00	97.95	0.09
ANT2	802.11a	5320.00	97.27	0.12
ANT1	802.11n(HT20)	5260.00	88.72	0.52
ANT2	802.11n(HT20)	5260.00	88.72	0.52
ANT1	802.11n(HT20)	5300.00	89.33	0.49
ANT2	802.11n(HT20)	5300.00	89.33	0.49
ANT1	802.11n(HT20)	5320.00	88.72	0.52
ANT2	802.11n(HT20)	5320.00	87.30	0.59
ANT1	802.11ac(VHT20)	5260.00	88.72	0.52
ANT2	802.11ac(VHT20)	5260.00	88.10	0.55
ANT1	802.11ac(VHT20)	5300.00	88.72	0.52
ANT2	802.11ac(VHT20)	5300.00	88.72	0.52
ANT1	802.11ac(VHT20)	5320.00	87.50	0.58
ANT2	802.11ac(VHT20)	5320.00	88.72	0.52
ANT1	802.11n(HT40)	5270.00	79.80	0.98
ANT2	802.11n(HT40)	5270.00	77.27	1.12
ANT1	802.11n(HT40)	5310.00	78.70	1.04
ANT2	802.11n(HT40)	5310.00	77.27	1.12
ANT1	802.11ac(VHT40)	5270.00	79.80	0.98
ANT2	802.11ac(VHT40)	5270.00	78.70	1.04
ANT1	802.11ac(VHT40)	5310.00	78.70	1.04
ANT2	802.11ac(VHT40)	5310.00	78.70	1.04
ANT1	802.11ac(VHT80)	5290.00	68.23	1.66
ANT2	802.11ac(VHT80)	5290.00	68.23	1.66

MIMO:

Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted _Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11n(HT20)	5260.00	13.88	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5300.00	14.09	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5320.00	13.70	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5260.00	14.69	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5300.00	13.87	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5320.00	13.67	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5270.00	**14.98**	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5310.00	14.08	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5270.00	14.74	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5310.00	14.08	30	Pass
NVNT	MIMO_TX	802.11ac(VHT80)	5290.00	14.62	30	Pass

Band 3 (5500-5570 MHz) SISO:

Condition	Antenna	Modulation	Frequency(MHz)	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5500	10.02	0.12	10.14	24	Pass
NVNT	ANT2	802.11a	5500	10.40	0.12	10.52	24	Pass
NVNT	ANT1	802.11a	5600	10.21	0.12	10.33	24	Pass
NVNT	ANT2	802.11a	5600	10.22	0.09	10.31	24	Pass
NVNT	ANT1	802.11a	5700.00	11.21	0.09	11.30	24	Pass
NVNT	ANT2	802.11a	5700.00	11.64	0.09	11.73	24	Pass
NVNT	ANT1	802.11n(HT20)	5500	10.09	0.10	10.19	24	Pass
NVNT	ANT2	802.11n(HT20)	5500	10.20	0.13	10.33	24	Pass
NVNT	ANT1	802.11n(HT20)	5600	10.45	0.13	10.58	24	Pass
NVNT	ANT2	802.11n(HT20)	5600	8.91	0.10	9.01	24	Pass
NVNT	ANT1	802.11n(HT20)	5700.00	12.49	0.10	12.59	24	Pass
NVNT	ANT2	802.11n(HT20)	5700.00	12.46	0.10	12.56	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5500	10.30	0.10	10.40	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5500	10.08	0.13	10.21	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5600	10.48	0.10	10.58	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5600	10.29	0.10	10.39	24	Pass
NVNT	ANT1	802.11ac(VHT20)	5700.00	12.38	0.10	12.48	24	Pass
NVNT	ANT2	802.11ac(VHT20)	5700.00	10.45	0.13	10.58	24	Pass
NVNT	ANT1	802.11n(HT40)	5510	8.75	0.20	8.95	24	Pass
NVNT	ANT2	802.11n(HT40)	5510	8.52	0.26	8.78	24	Pass
NVNT	ANT1	802.11n(HT40)	5590	10.26	0.20	10.46	24	Pass
NVNT	ANT2	802.11n(HT40)	5590	11.10	0.20	11.30	24	Pass
NVNT	ANT1	802.11n(HT40)	5670	13.52	0.20	13.72	24	Pass
NVNT	ANT2	802.11n(HT40)	5670	13.34	0.26	13.60	24	Pass
NVNT	ANT1	802.11ac(VHT40)	5510	11.13	0.19	11.32	24	Pass
NVNT	ANT2	802.11ac(VHT40)	5510	10.73	0.26	10.99	24	Pass
NVNT	ANT1	802.11ac(VHT40)	5590	11.22	0.26	11.48	24	Pass
NVNT	ANT2	802.11ac(VHT40)	5590	10.10	0.20	10.30	24	Pass
NVNT	ANT1	802.11ac(VHT40)	5670	13.44	0.20	13.64	24	Pass
NVNT	ANT2	802.11ac(VHT40)	5670	13.58	0.20	13.78	24	Pass
NVNT	ANT1	802.11ac(VHT80)	5530	10.13	0.38	10.51	24	Pass
NVNT	ANT2	802.11ac(VHT80)	5530	10.60	0.51	11.11	24	Pass
NVNT	ANT1	802.11ac(VHT80)	5610	10.94	0.51	11.45	24	Pass
NVNT	ANT2	802.11ac(VHT80)	5610	10.70	0.38	11.08	24	Pass

Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty_factor
ANT1	802.11a	5500.00	97.27	0.12
ANT2	802.11a	5500.00	97.27	0.12
ANT1	802.11a	5600.00	97.27	0.12
ANT2	802.11a	5600.00	97.95	0.09
ANT1	802.11a	5700.00	97.95	0.09
ANT2	802.11a	5700.00	97.95	0.09
ANT1	802.11n(HT20)	5500.00	97.72	0.1
ANT2	802.11n(HT20)	5500.00	97.05	0.13
ANT1	802.11n(HT20)	5600.00	97.05	0.13
ANT2	802.11n(HT20)	5600.00	97.72	0.1
ANT1	802.11n(HT20)	5700.00	97.72	0.1
ANT2	802.11n(HT20)	5700.00	97.72	0.1
ANT1	802.11ac(VHT20)	5500.00	97.72	0.1
ANT2	802.11ac(VHT20)	5500.00	97.05	0.13
ANT1	802.11ac(VHT20)	5600.00	97.72	0.1
ANT2	802.11ac(VHT20)	5600.00	97.72	0.1
ANT1	802.11ac(VHT20)	5700.00	97.72	0.1
ANT2	802.11ac(VHT20)	5700.00	97.05	0.13
ANT1	802.11n(HT40)	5510.00	95.50	0.2
ANT2	802.11n(HT40)	5510.00	94.19	0.26
ANT1	802.11n(HT40)	5590.00	95.50	0.2
ANT2	802.11n(HT40)	5590.00	95.50	0.2
ANT1	802.11ac(VHT40)	5510.00	95.50	0.2
ANT2	802.11ac(VHT40)	5510.00	94.19	0.26
ANT1	802.11ac(VHT40)	5590.00	95.72	0.19
ANT2	802.11ac(VHT40)	5590.00	94.19	0.26
ANT1	802.11ac(VHT40)	5670.00	94.19	0.26
ANT2	802.11ac(VHT40)	5670.00	95.50	0.2
ANT1	802.11ac(VHT80)	5530.00	95.50	0.2
ANT2	802.11ac(VHT80)	5530.00	95.50	0.2
ANT1	802.11ac(VHT80)	5610.00	91.62	0.38
ANT2	802.11ac(VHT80)	5610.00	88.92	0.51

MIMO:

Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted _Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11n(HT20)	5500	13.27	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5600	12.87	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5700.00	15.59	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5500	13.32	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5600	13.50	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5700.00	14.64	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5510	11.88	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5590	13.91	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5670	16.67	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5510	14.17	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5590	13.94	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5670	**16.72**	30	Pass
NVNT	MIMO_TX	802.11ac(VHT80)	5530	13.83	30	Pass
NVNT	MIMO_TX	802.11ac(VHT80)	5610	14.28	30	Pass

Band 4 (5725 – 5850 MHz) SISO:

Condition	Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5745.00	13.59	0.09	13.68	30	Pass
NVNT	ANT2	802.11a	5745.00	13.20	0.09	13.29	30	Pass
NVNT	ANT1	802.11a	5785.00	13.08	0.12	13.20	30	Pass
NVNT	ANT2	802.11a	5785.00	12.64	0.12	12.76	30	Pass
NVNT	ANT1	802.11a	5825.00	11.95	0.12	12.07	30	Pass
NVNT	ANT2	802.11a	5825.00	12.62	0.12	12.74	30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	12.90	0.13	13.03	30	Pass
NVNT	ANT2	802.11n(HT20)	5745.00	13.17	0.13	13.30	30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	13.01	0.10	13.11	30	Pass
NVNT	ANT2	802.11n(HT20)	5785.00	12.35	0.10	12.45	30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	12.10	0.10	12.20	30	Pass
NVNT	ANT2	802.11n(HT20)	5825.00	12.90	0.13	13.03	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	13.51	0.10	13.61	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5745.00	11.66	0.10	11.76	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	12.80	0.13	12.93	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5785.00	12.63	0.13	12.76	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	12.27	0.10	12.37	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5825.00	12.07	0.10	12.17	30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	12.05	0.00	12.05	30	Pass
NVNT	ANT2	802.11n(HT40)	5755.00	12.21	0.26	12.47	30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	12.31	0.26	12.57	30	Pass
NVNT	ANT2	802.11n(HT40)	5795.00	12.11	0.26	12.37	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	10.86	0.26	11.12	30	Pass
NVNT	ANT2	802.11ac(VHT40)	5755.00	12.27	0.13	12.40	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	13.31	0.26	13.57	30	Pass
NVNT	ANT2	802.11ac(VHT40)	5795.00	12.92	0.26	13.18	30	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	11.84	0.38	12.22	30	Pass
NVNT	ANT2	802.11ac(VHT80)	5775.00	12.31	0.51	12.82	30	Pass

Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty_factor
ANT1	802.11a	5745.00	97.95	0.09
ANT2	802.11a	5745.00	97.95	0.09
ANT1	802.11a	5785.00	97.27	0.12
ANT2	802.11a	5785.00	97.27	0.12
ANT1	802.11a	5825.00	97.27	0.12
ANT2	802.11a	5825.00	97.27	0.12
ANT1	802.11n(HT20)	5745.00	97.05	0.13
ANT2	802.11n(HT20)	5745.00	97.05	0.13
ANT1	802.11n(HT20)	5785.00	97.72	0.1
ANT2	802.11n(HT20)	5785.00	97.72	0.1
ANT1	802.11n(HT20)	5825.00	97.72	0.1
ANT2	802.11n(HT20)	5825.00	97.05	0.13
ANT1	802.11ac(VHT20)	5745.00	97.72	0.1
ANT2	802.11ac(VHT20)	5745.00	97.72	0.1
ANT1	802.11ac(VHT20)	5785.00	97.05	0.13
ANT2	802.11ac(VHT20)	5785.00	97.05	0.13
ANT1	802.11ac(VHT20)	5825.00	97.72	0.1
ANT2	802.11ac(VHT20)	5825.00	97.72	0.1
ANT1	802.11n(HT40)	5755.00	100.00	0
ANT2	802.11n(HT40)	5755.00	94.19	0.26
ANT1	802.11n(HT40)	5795.00	94.19	0.26
ANT2	802.11n(HT40)	5795.00	94.19	0.26
ANT1	802.11ac(VHT40)	5755.00	94.19	0.26
ANT2	802.11ac(VHT40)	5755.00	97.05	0.13
ANT1	802.11ac(VHT40)	5795.00	94.19	0.26
ANT2	802.11ac(VHT40)	5795.00	94.19	0.26
ANT1	802.11ac(VHT80)	5775.00	91.62	0.38
ANT2	802.11ac(VHT80)	5775.00	88.92	0.51

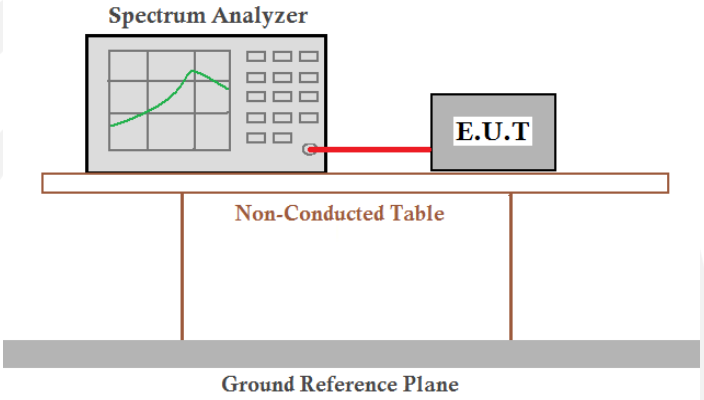
MIMO:

Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted_ Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11n(HT20)	5745.00	16.18	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5785.00	15.80	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5825.00	15.65	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5745.00	15.79	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5785.00	15.86	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5825.00	15.28	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5755.00	15.28	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5795.00	15.48	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5755.00	14.82	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5795.00	**16.39**	30	Pass
NVNT	MIMO_TX	802.11ac(VHT80)	5775.00	15.54	30	Pass

Note: The measure-and-sum technique shall be used for measuring in-band transmit power of a device. Total power is the sum of the conducted power levels measured at the various output ports.

(First measure the power (mW) of each antenna separately, and the total power is equal to Ant1mW + Ant2mW+….)

4.5 Power Spectral Density

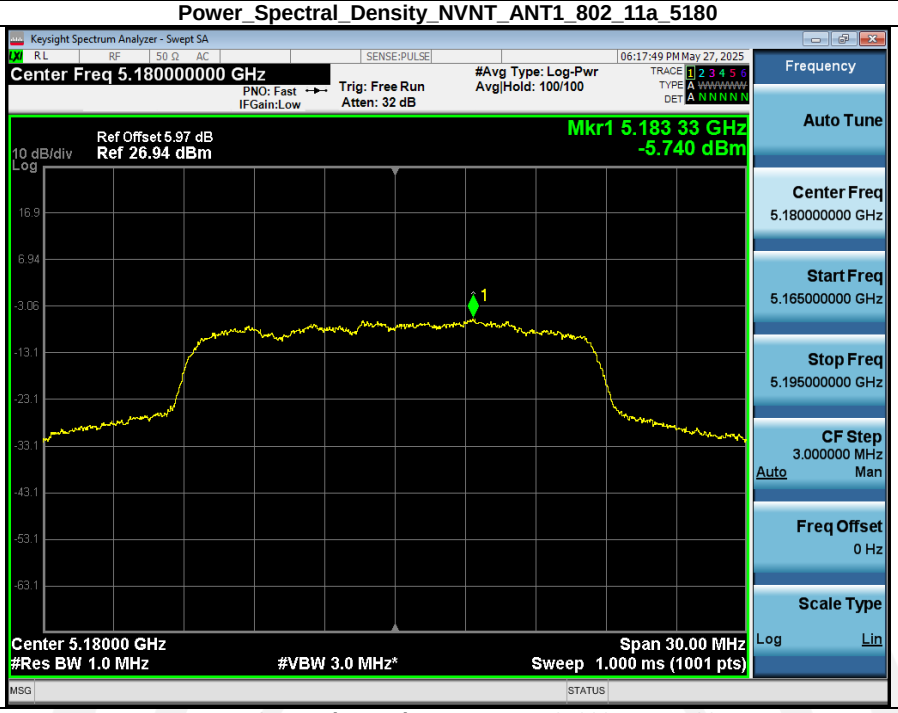
Test Requirement:	FCC Part15 E Section 15.407, RSS-247 §6.2
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	FCC: 1.≤11.00dBm/MHz for 5150MHz-5250MHz, 5250-5350MHz and 5470-5725 MHz 2.≤30.00dBm/500KHz for 5725MHz-5850MHz IC: 1.For the 5.15-5.25 GHz, The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band. 2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.
Test setup:	
Test procedure:	1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, “Compute power…”. 2) Use the peak search function on the instrument to find the peak of the spectrum. 3) Make the following adjustments to the peak value of the spectrum, if applicable: a) If Method SA-2 or SA-2 Alternative was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum. b) If Method SA-3 Alternative was used and the linear mode was used in step E)2)g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging. 4) The result is the PSD.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data

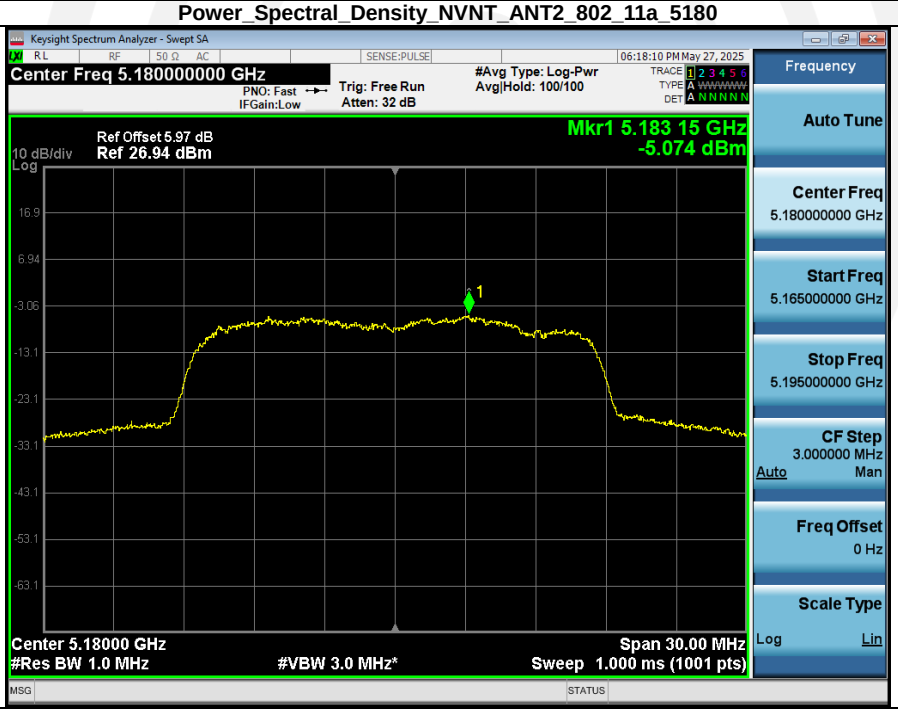
Band 1 (5150-5250 MHz) SISO:

Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/MHz)	Duty factor(dB)	Total PSD(dBm/MHz)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	-5.74	0.42	-5.32	11	Pass
NVNT	ANT2	802.11a	5180.00	-5.07	0.42	-4.65	11	Pass
NVNT	ANT1	802.11a	5200.00	-5.67	0.44	-5.23	11	Pass
NVNT	ANT2	802.11a	5200.00	-7.78	0.45	-7.33	11	Pass
NVNT	ANT1	802.11a	5240.00	-5.49	0.47	-5.02	11	Pass
NVNT	ANT2	802.11a	5240.00	-5.82	0.44	-5.38	11	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	-6.85	0.52	-6.33	11	Pass
NVNT	ANT2	802.11n(HT20)	5180.00	-7.69	0.52	-7.17	11	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	-4.53	0.52	-4.01	11	Pass
NVNT	ANT2	802.11n(HT20)	5200.00	-7.47	0.52	-6.95	11	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	-5.97	0.56	-5.41	11	Pass
NVNT	ANT2	802.11n(HT20)	5240.00	-6.37	0.59	-5.78	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5180.00	-4.35	0.52	-3.83	11	Pass
NVNT	ANT2	802.11ac(VHT20)	5180.00	-6.63	0.52	-6.11	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5200.00	-7.36	0.48	-6.88	11	Pass
NVNT	ANT2	802.11ac(VHT20)	5200.00	-7.13	0.52	-6.61	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5240.00	-26.23	0.52	-25.71	11	Pass
NVNT	ANT2	802.11ac(VHT20)	5240.00	-24.34	0.58	-23.77	11	Pass
NVNT	ANT1	802.11n(HT40)	5190.00	-18.41	1.06	-17.35	11	Pass
NVNT	ANT2	802.11n(HT40)	5190.00	-13.65	1.06	-12.59	11	Pass
NVNT	ANT1	802.11n(HT40)	5230.00	-14.87	0.94	-13.93	11	Pass
NVNT	ANT2	802.11n(HT40)	5230.00	-16.11	0.91	-15.20	11	Pass
NVNT	ANT1	802.11ac(VHT40)	5190.00	-12.66	1.06	-11.60	11	Pass
NVNT	ANT2	802.11ac(VHT40)	5190.00	-14.10	1.06	-13.04	11	Pass
NVNT	ANT1	802.11ac(VHT40)	5230.00	-12.41	0.91	-11.50	11	Pass
NVNT	ANT2	802.11ac(VHT40)	5230.00	-16.22	0.91	-15.31	11	Pass
NVNT	ANT1	802.11ac(VHT80)	5210.00	-22.47	1.81	-20.66	11	Pass
NVNT	ANT2	802.11ac(VHT80)	5210.00	-26.57	1.86	-24.71	11	Pass

Power_Spectral_Density_NVNT_ANT1_802_11a_5180

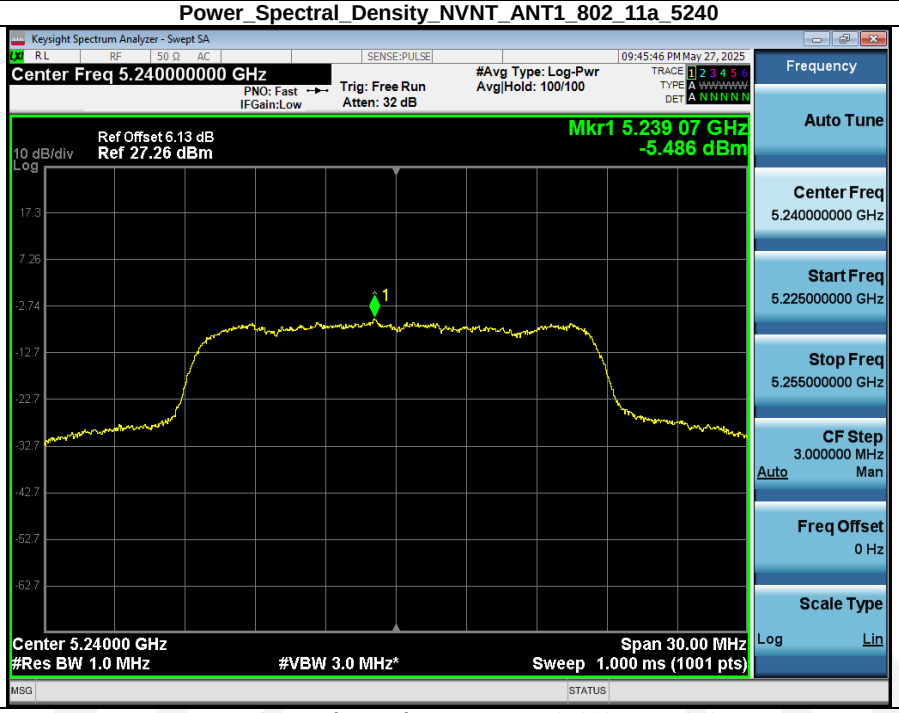


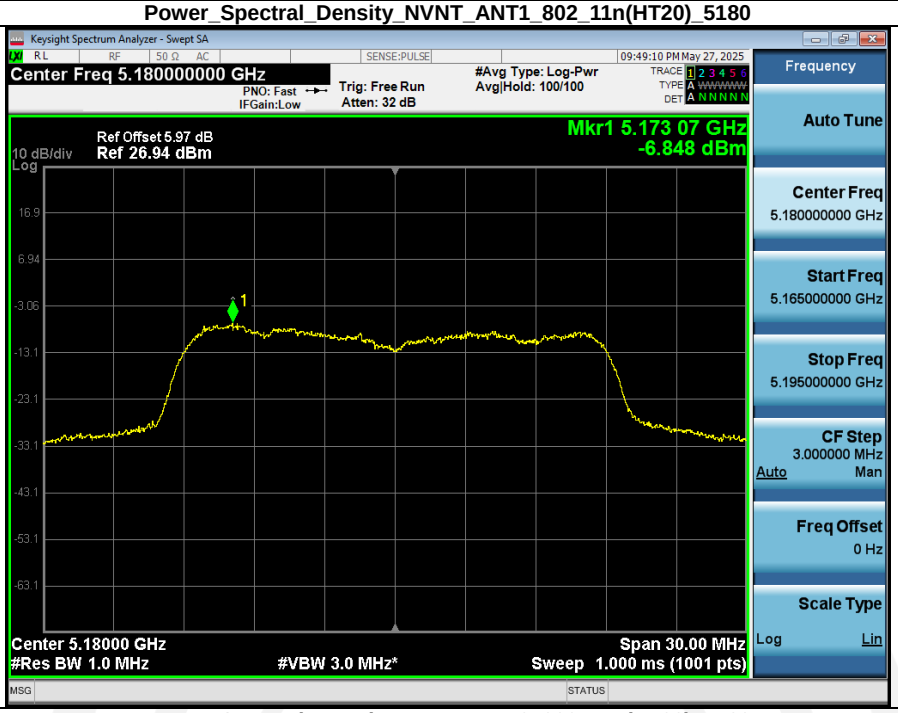
Power_Spectral_Density_NVNT_ANT2_802_11a_5180



Power_Spectral_Density_NVNT_ANT1_802_11a_5200

Power_Spectral_Density_NVNT_ANT2_802_11a_5200


Power_Spectral_Density_NVNT_ANT1_802_11a_5240

Power_Spectral_Density_NVNT_ANT2_802_11a_5240


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5180

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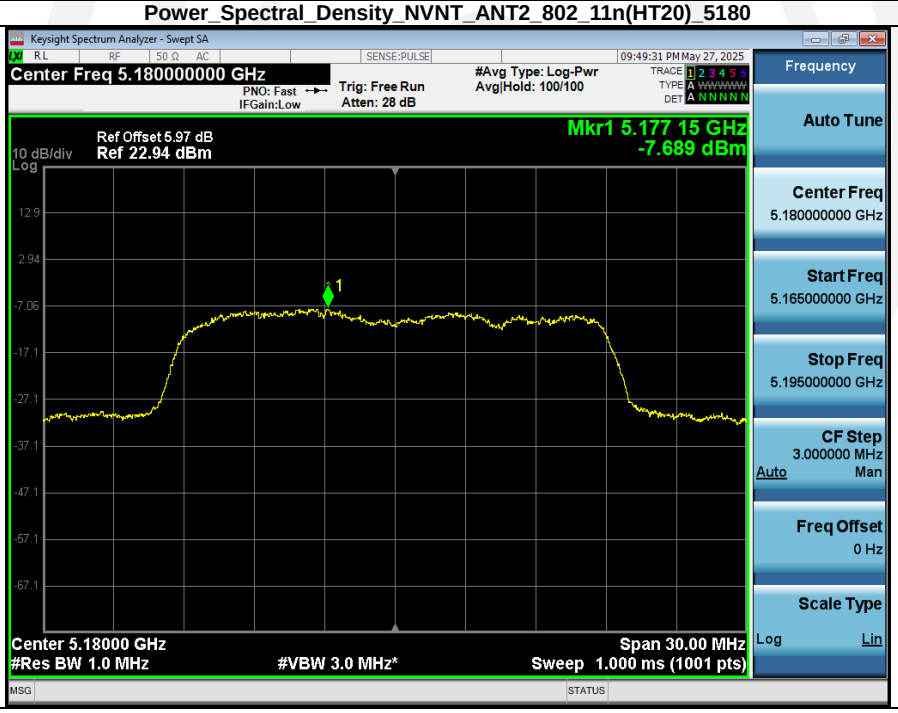
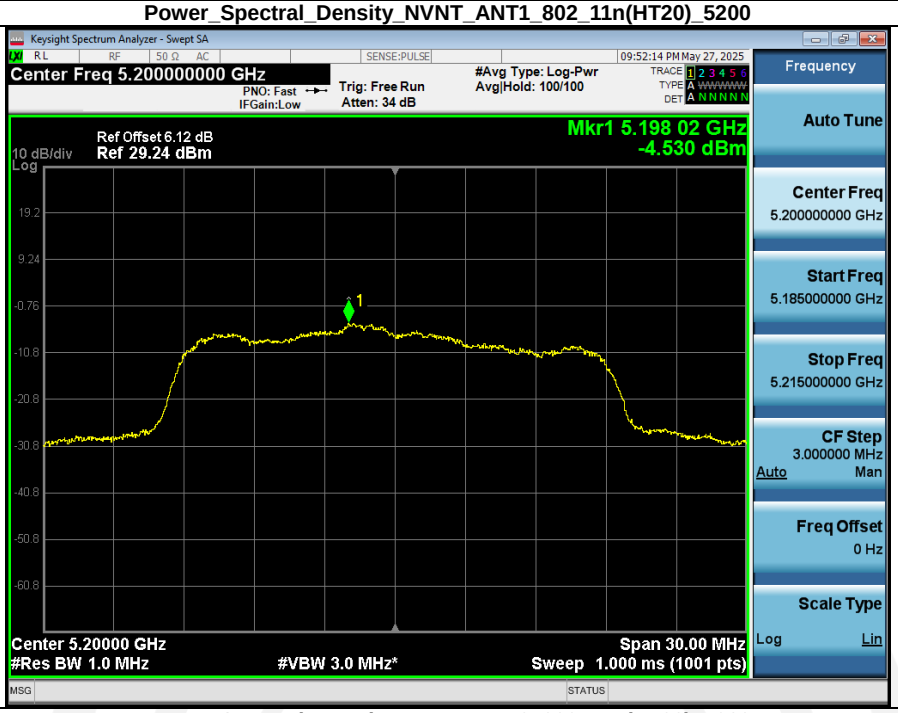


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5200

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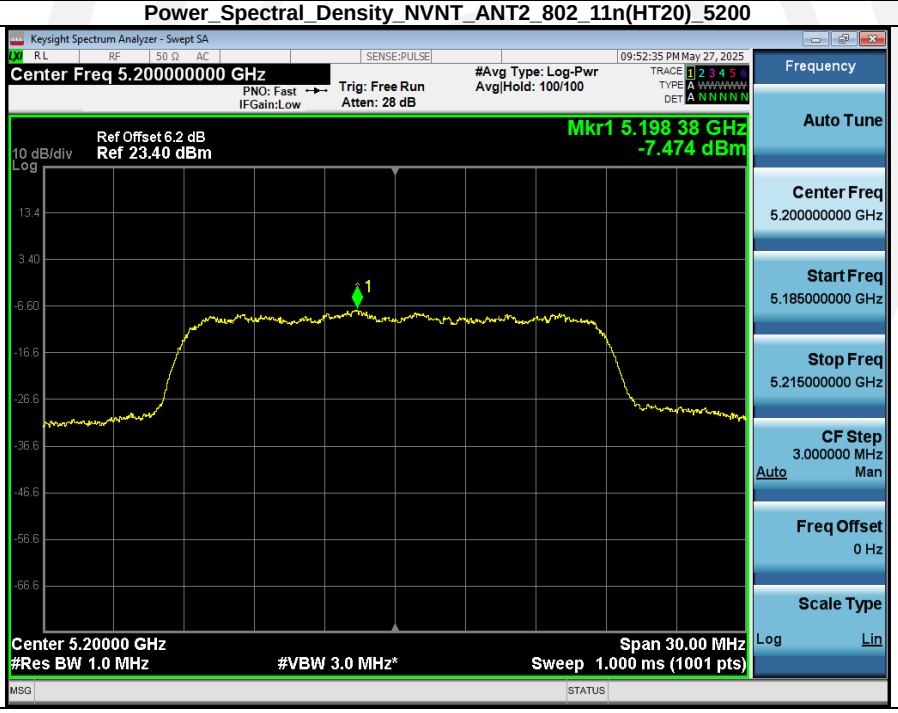
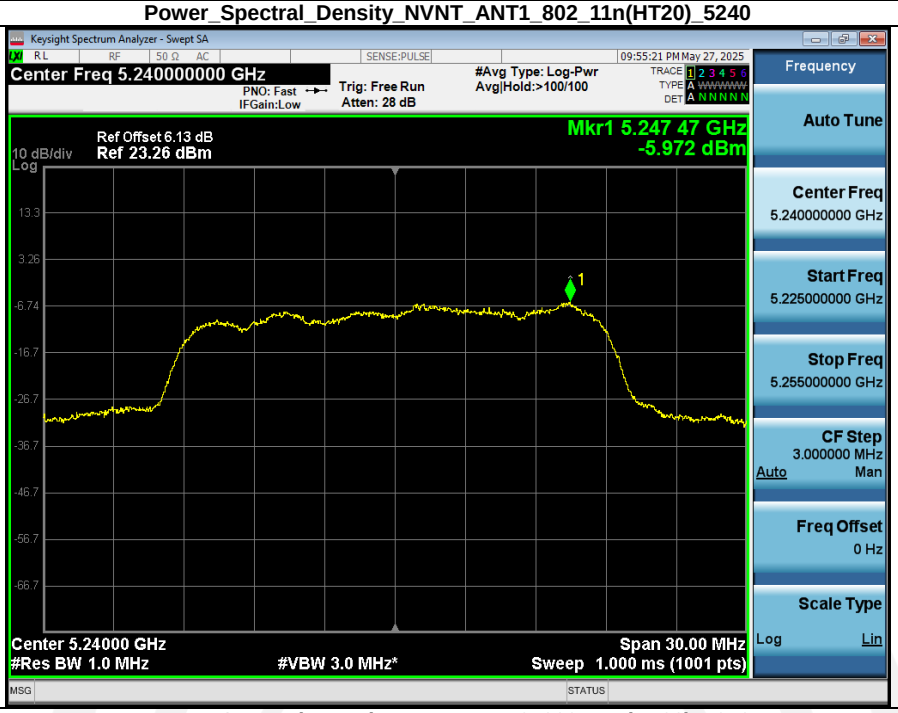
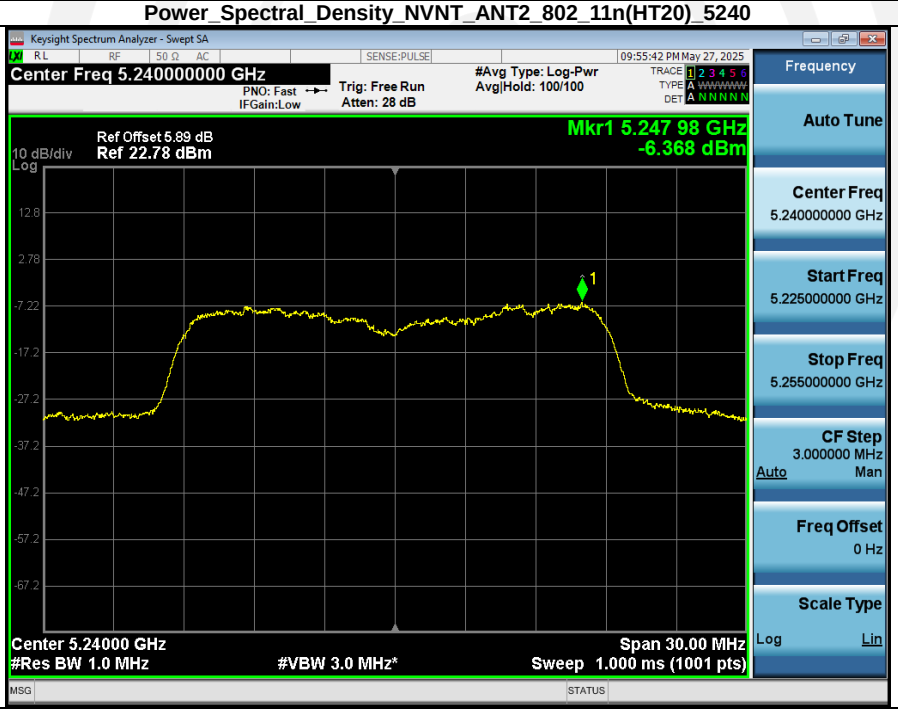
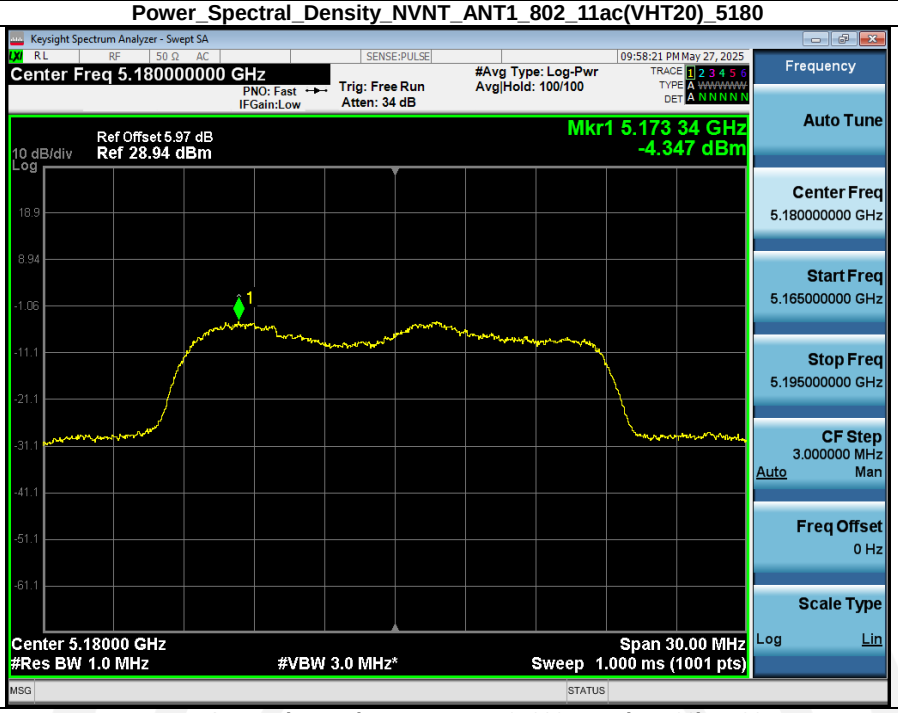
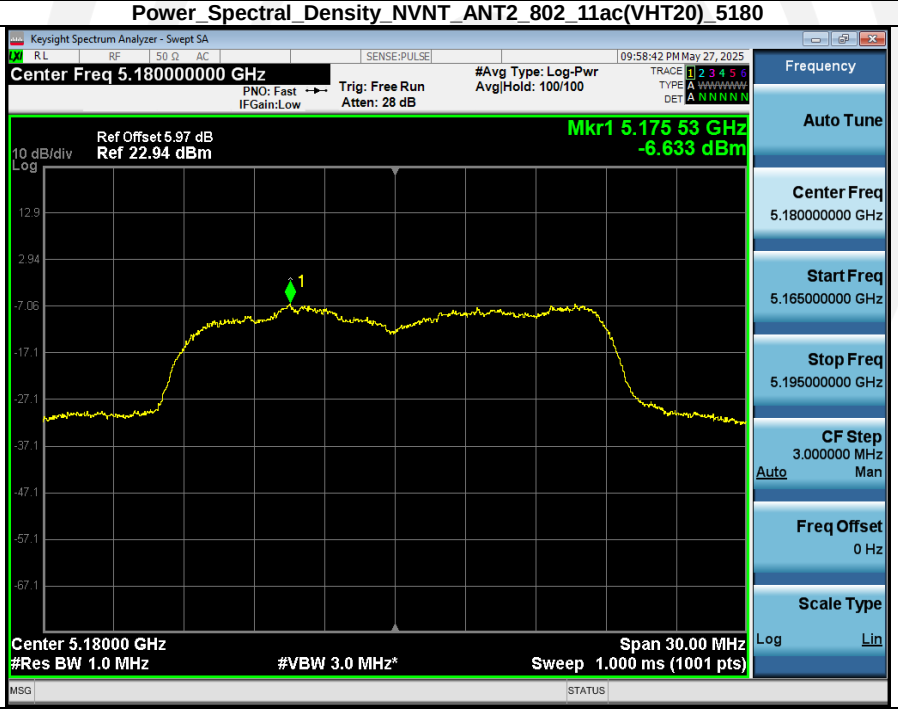


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5240

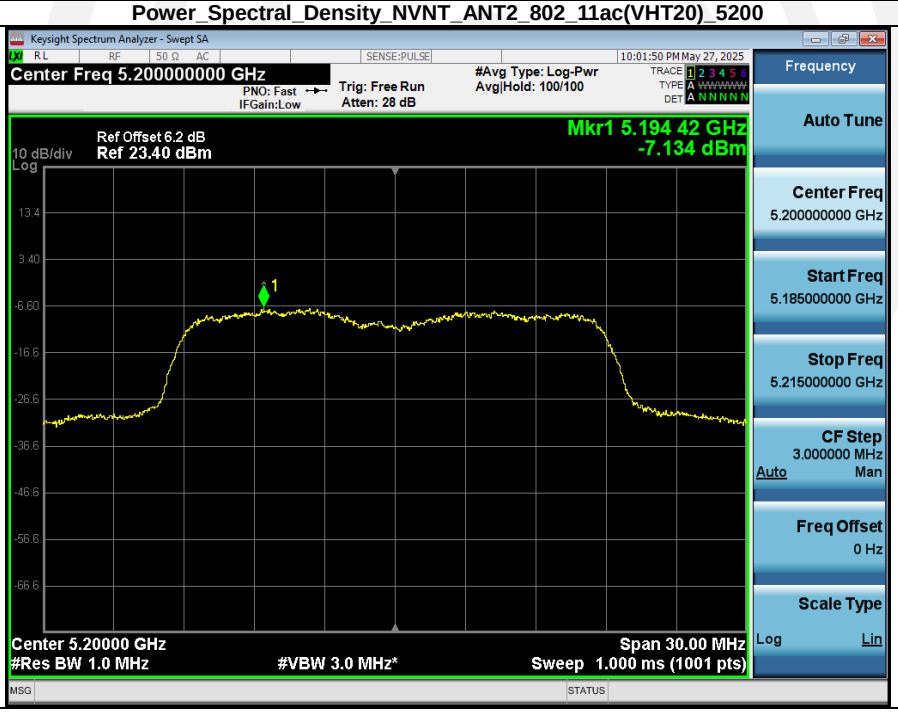


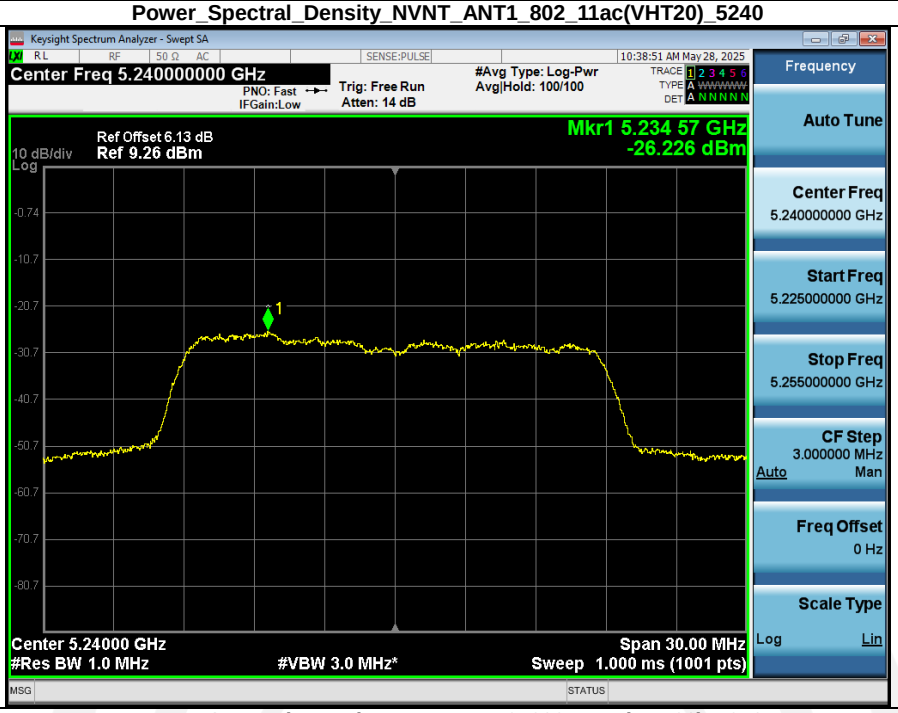
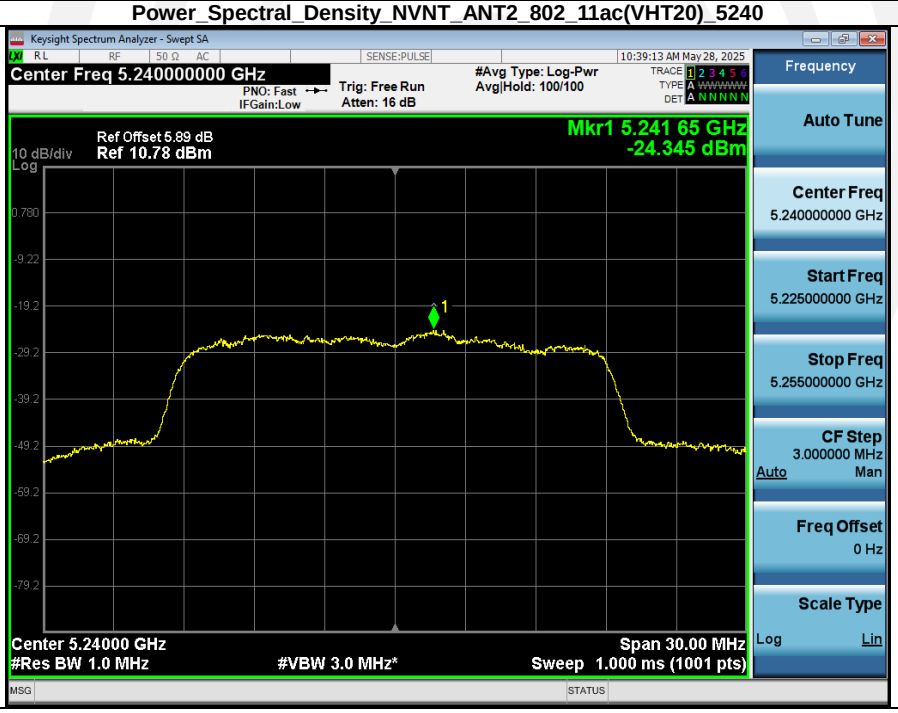
Power_Spectral_Density_NVNT_ANT2_802_11n(HT20)_5240



Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5180

Power_Spectral_Density_NVNT_ANT2_802_11ac(VHT20)_5180


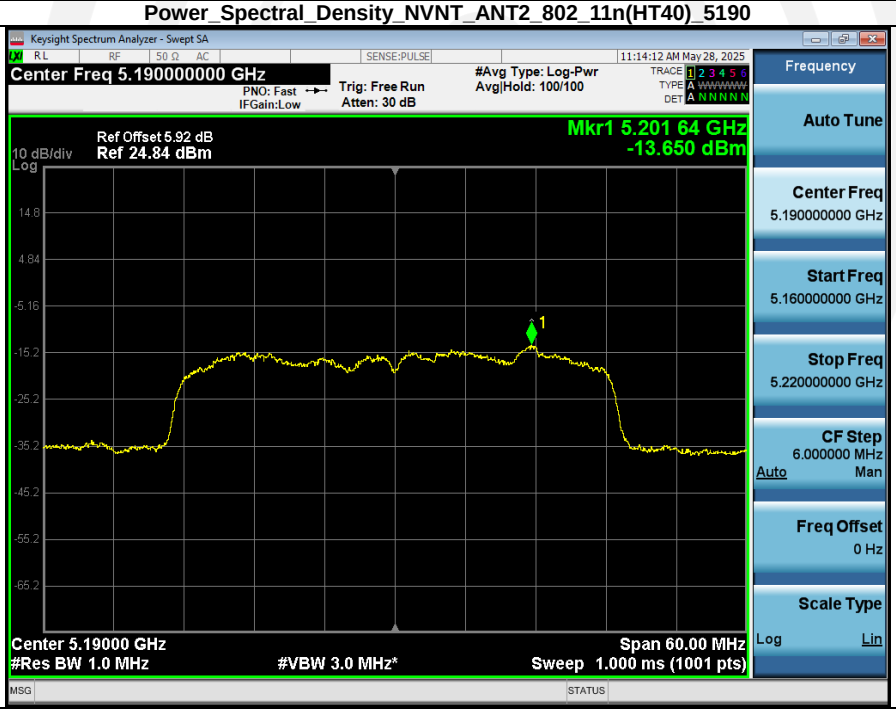
Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5200

Power_Spectral_Density_NVNT_ANT2_802_11ac(VHT20)_5200


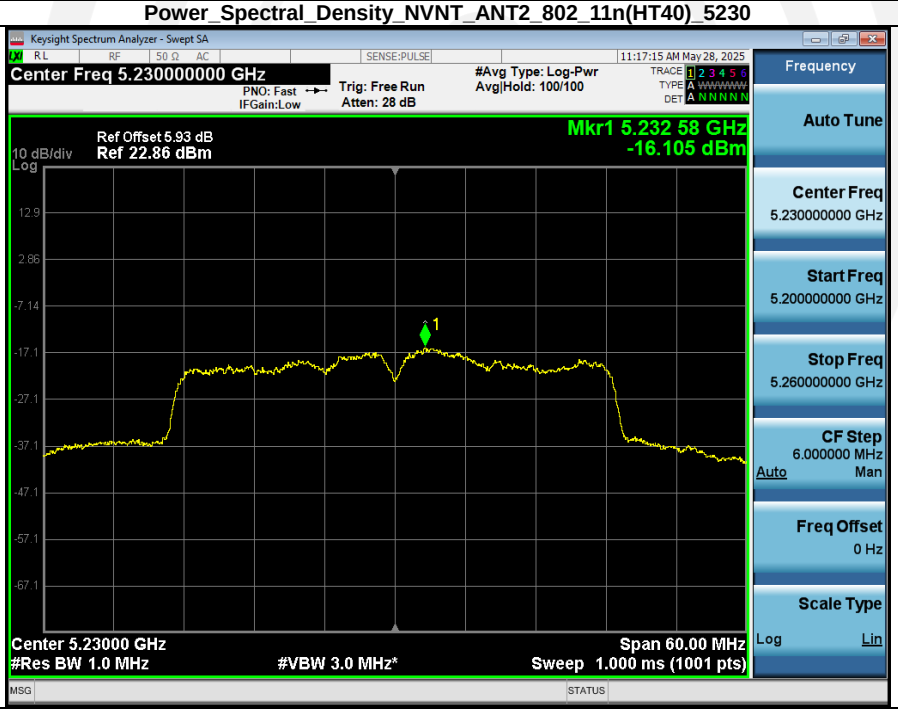
Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5240

Power_Spectral_Density_NVNT_ANT2_802_11ac(VHT20)_5240


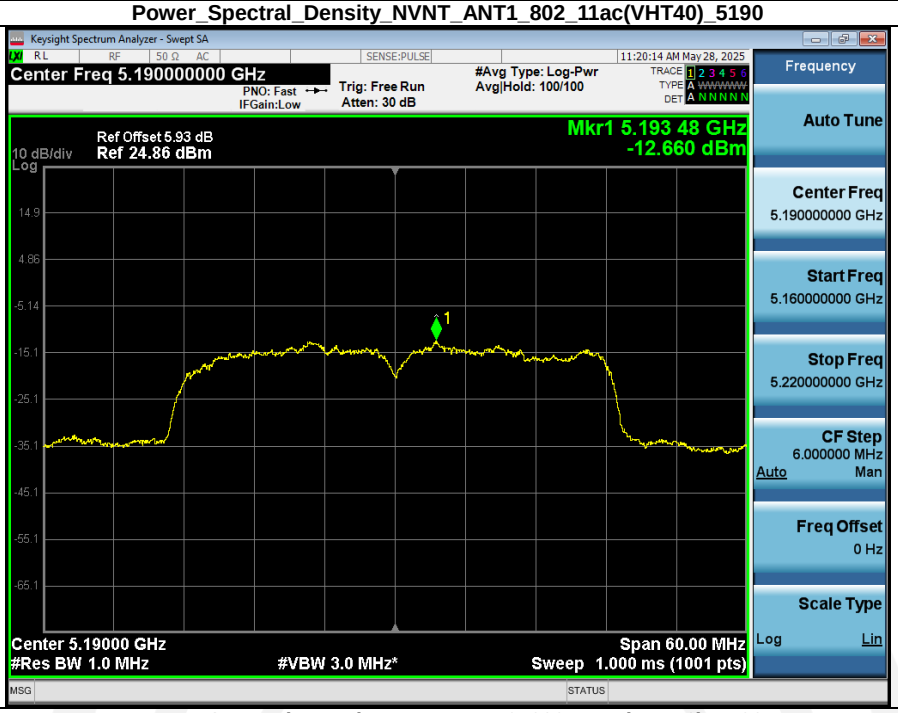
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_5190

Power_Spectral_Density_NVNT_ANT2_802_11n(HT40)_5190



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_5230

Power_Spectral_Density_NVNT_ANT2_802_11n(HT40)_5230


Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT40)_5190

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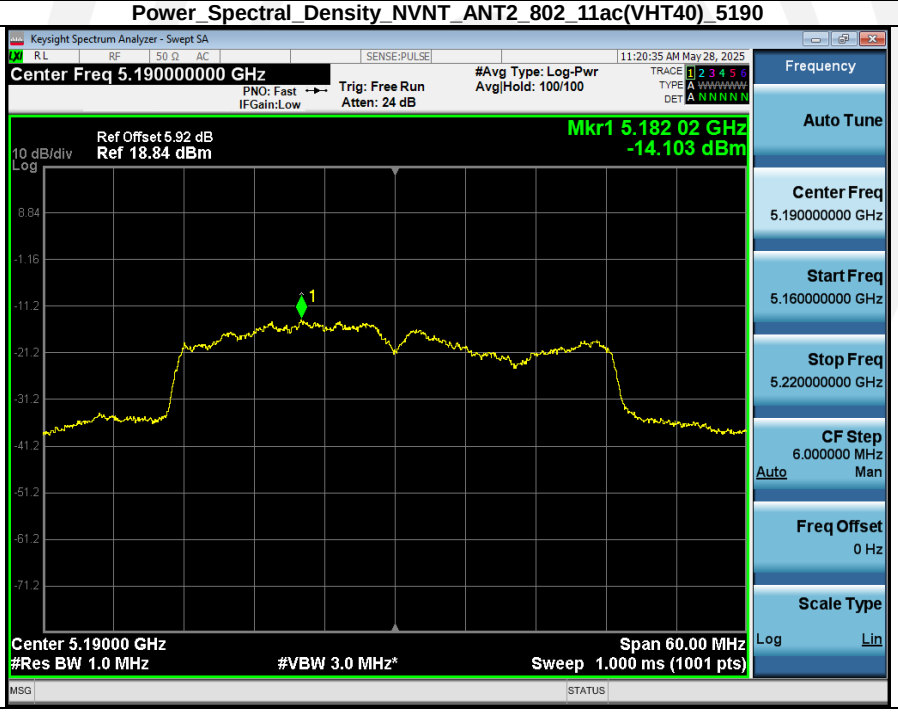
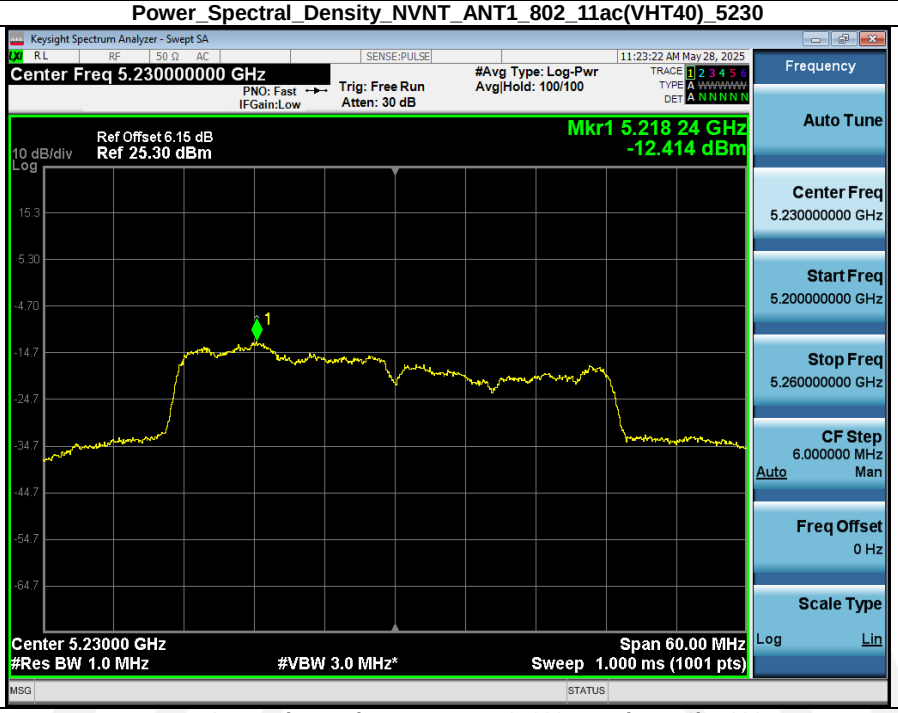


Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT40)_5230

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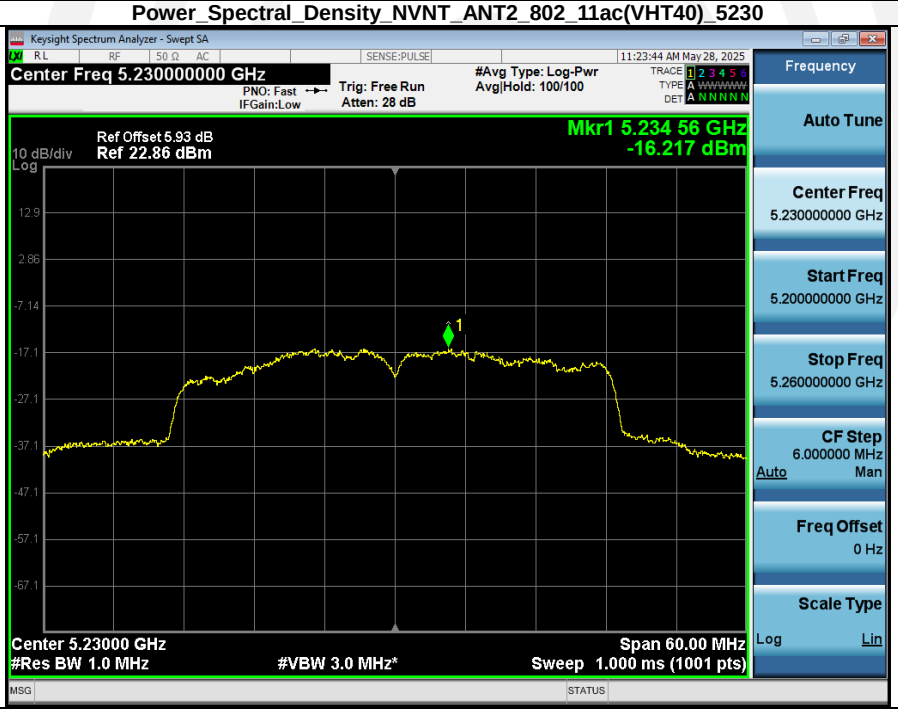
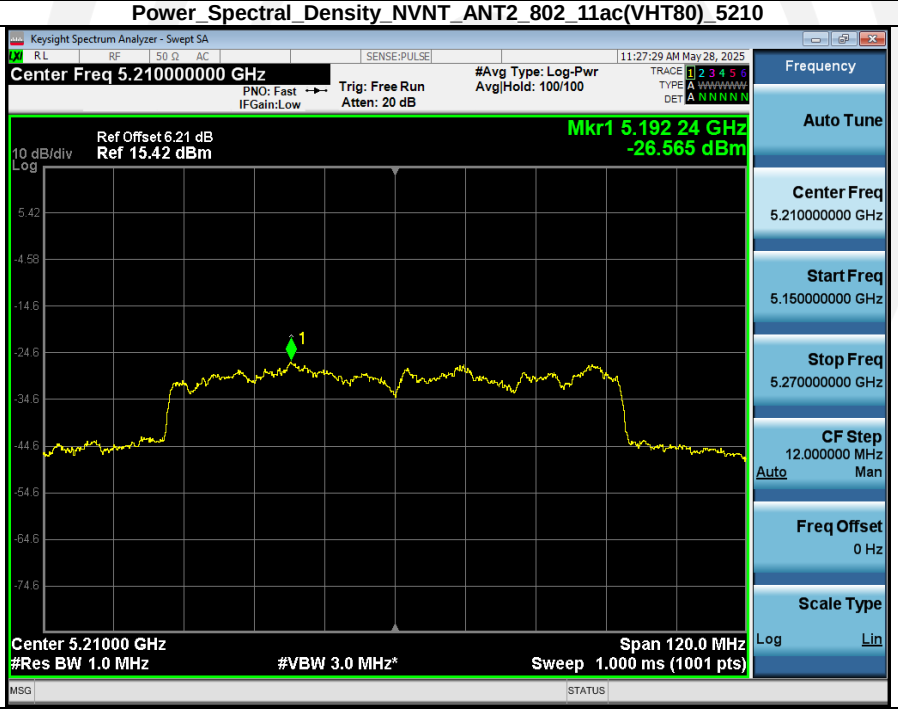
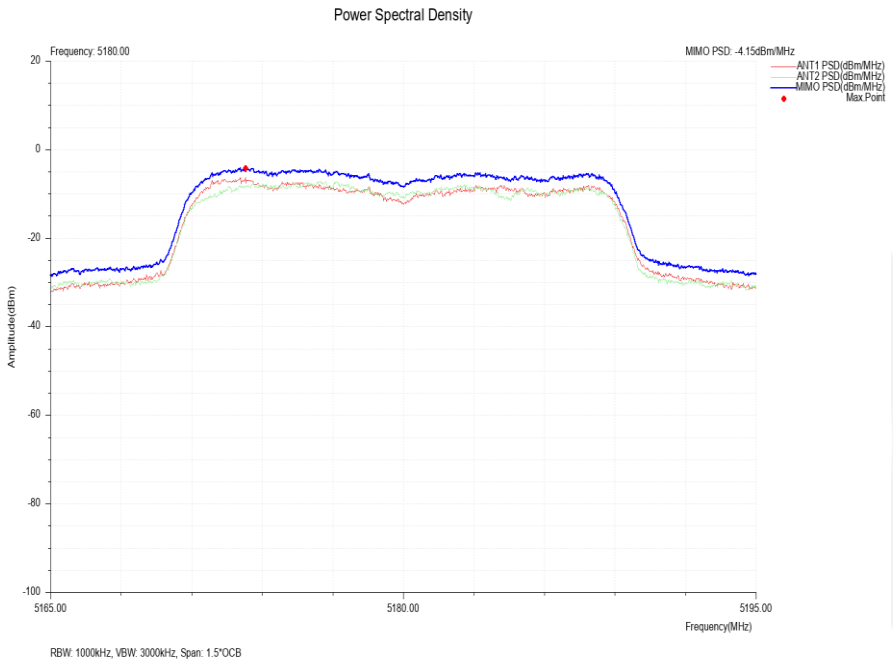


Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT80)_5210

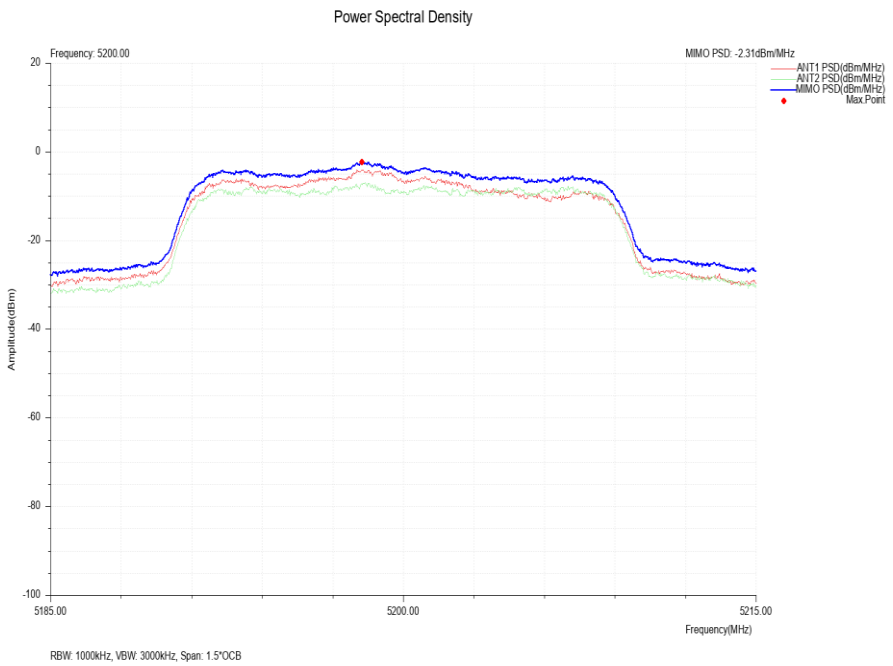
Power_Spectral_Density_NVNT_ANT2_802_11ac(VHT80)_5210


Condition	Antenna	Mode	Frequency (MHz)	MIMO PSD(dBm/MHz)	Limit(dBm/MHz)	Result
NVNT	MIMO_TX	802.11n(HT20)	5180.00	-4.15	11	Pass
NVNT	MIMO_TX	802.11n(HT20)	5200.00	-2.31	11	Pass
NVNT	MIMO_TX	802.11n(HT20)	5240.00	-2.86	11	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5180.00	-2.65	11	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5200.00	-4.57	11	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5240.00	-22.30	11	Pass
NVNT	MIMO_TX	802.11n(HT40)	5190.00	-12.04	11	Pass
NVNT	MIMO_TX	802.11n(HT40)	5230.00	-12.03	11	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5190.00	-9.75	11	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5230.00	-10.84	11	Pass
NVNT	MIMO_TX	802.11ac(VHT80)	5210.00	-19.56	11	Pass

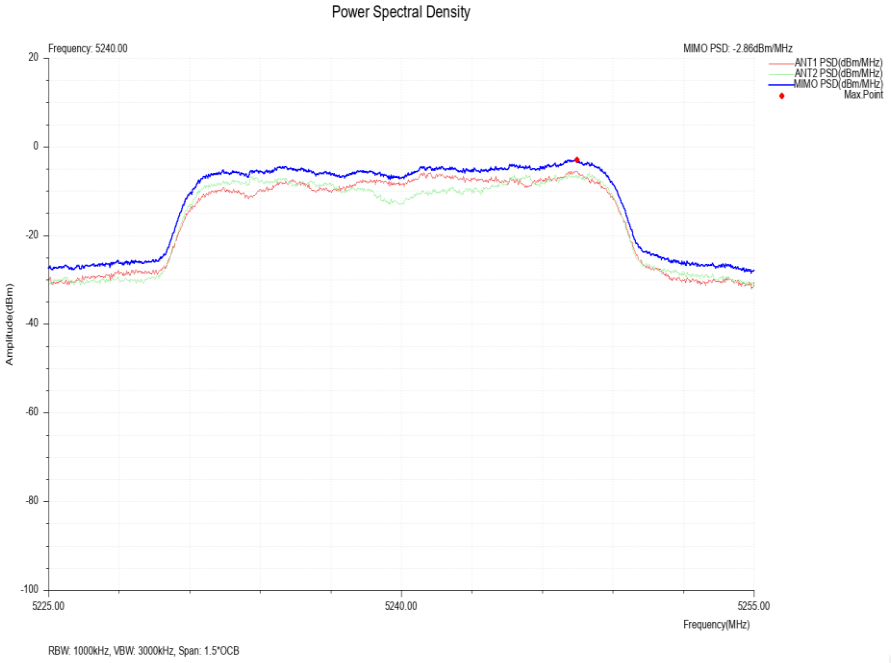
NVNT_MIMO_TX_802_11n(HT20)_Power_Spectral_Density_5180



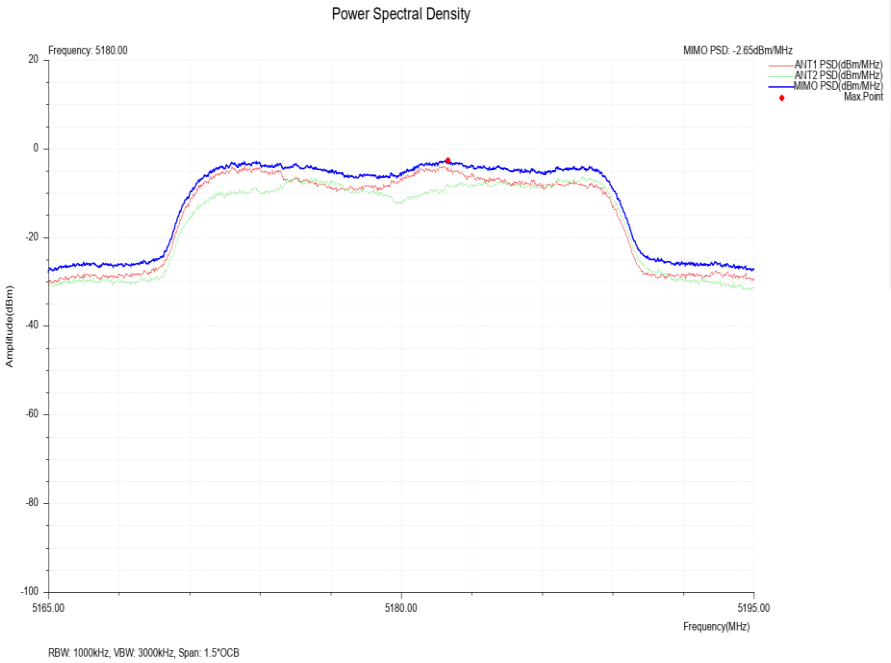
NVNT_MIMO_TX_802_11n(HT20)_Power_Spectral_Density_5200



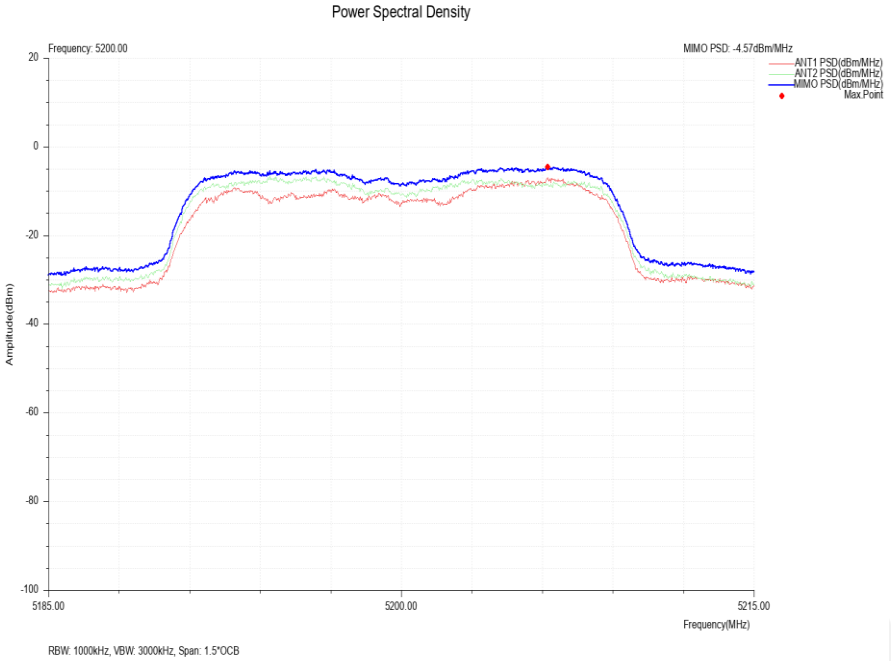
NVNT_MIMO_TX_802_11n(HT20)_Power_Spectral_Density_5240



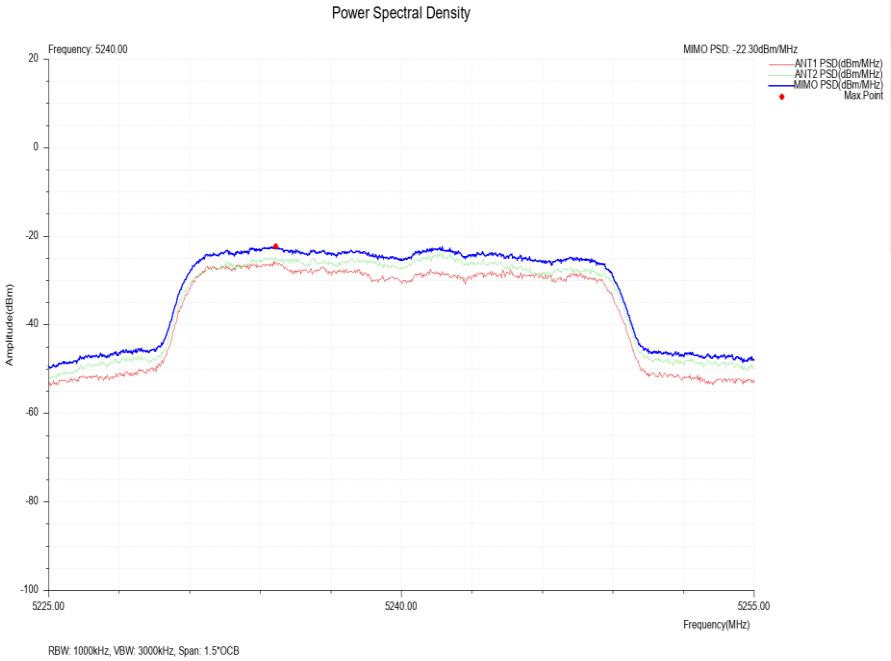
NVNT_MIMO_TX_802_11ac(VHT20)_Power_Spectral_Density_5180



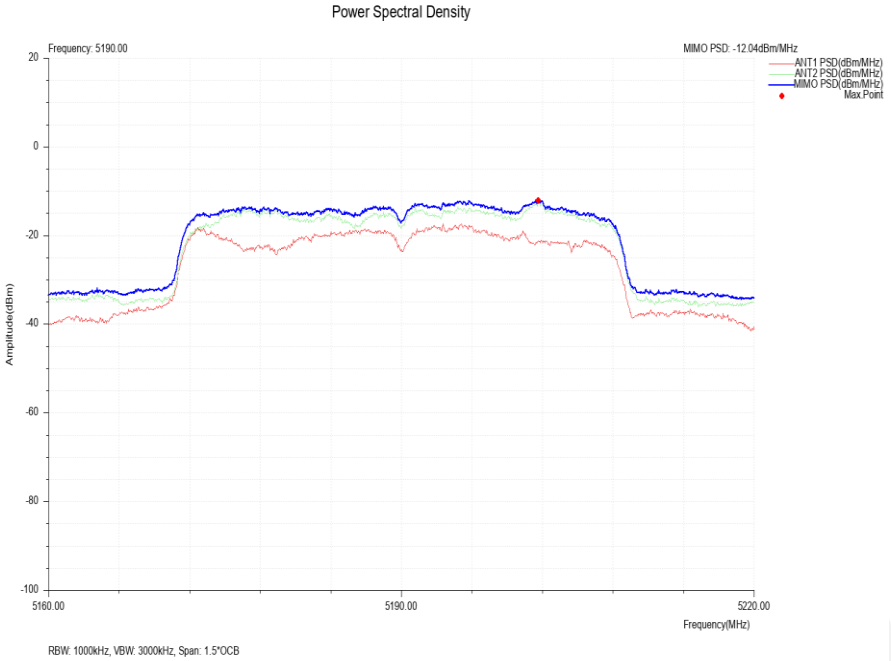
NVNT_MIMO_TX_802_11ac(VHT20)_Power_Spectral_Density_5200



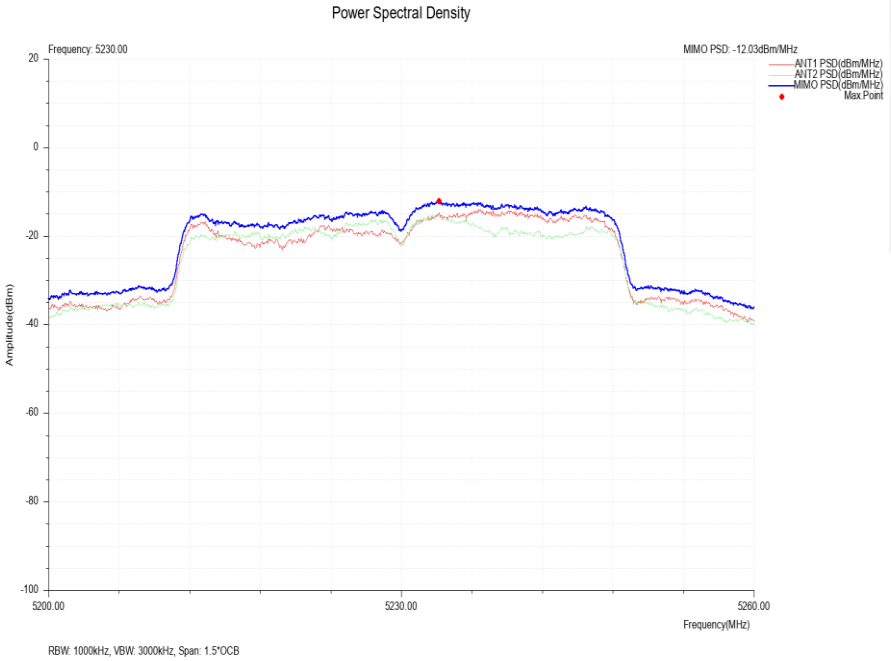
NVNT_MIMO_TX_802_11ac(VHT20)_Power_Spectral_Density_5240



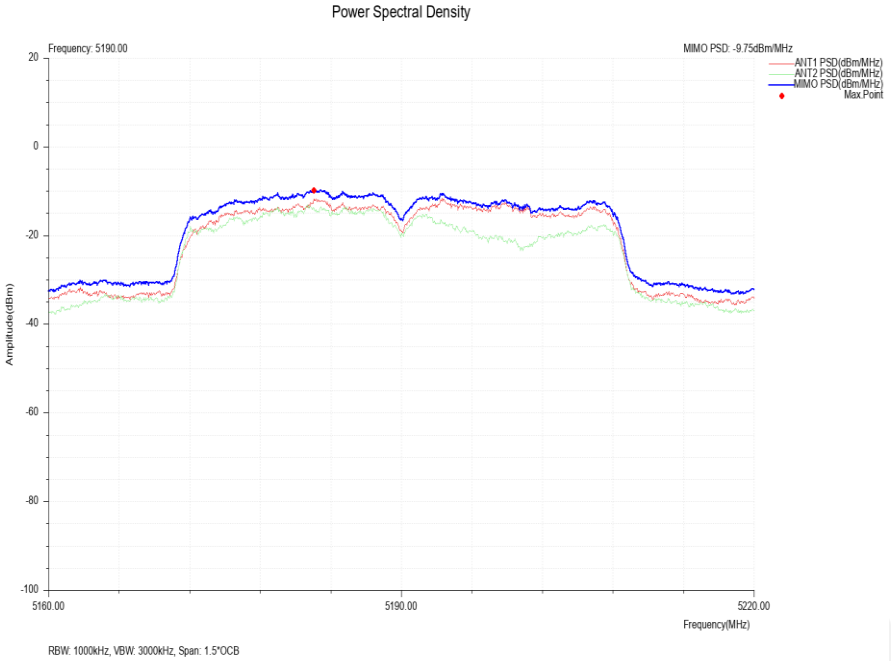
NVNT_MIMO_TX_802_11n(HT40)_Power_Spectral_Density_5190



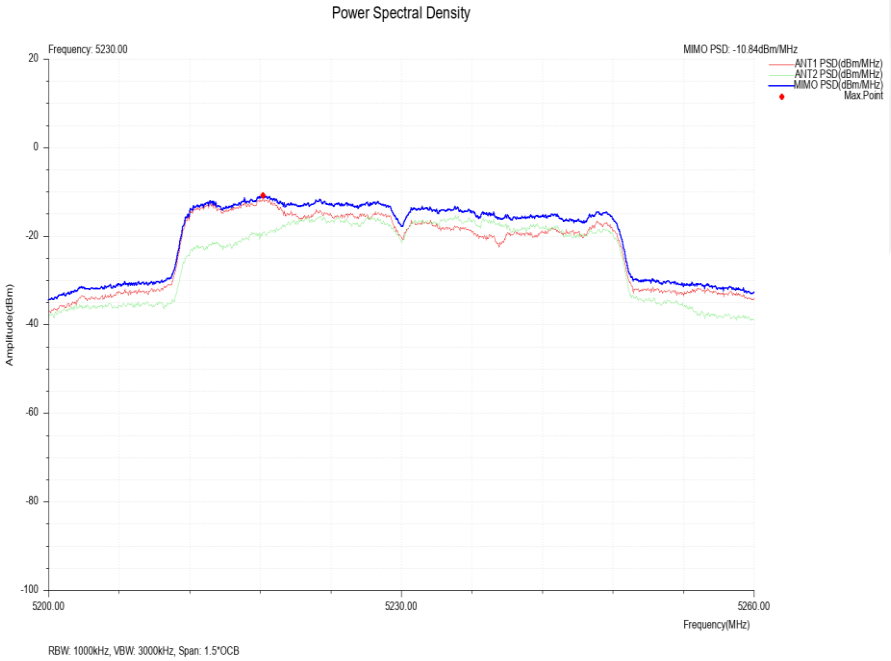
NVNT_MIMO_TX_802_11n(HT40)_Power_Spectral_Density_5230



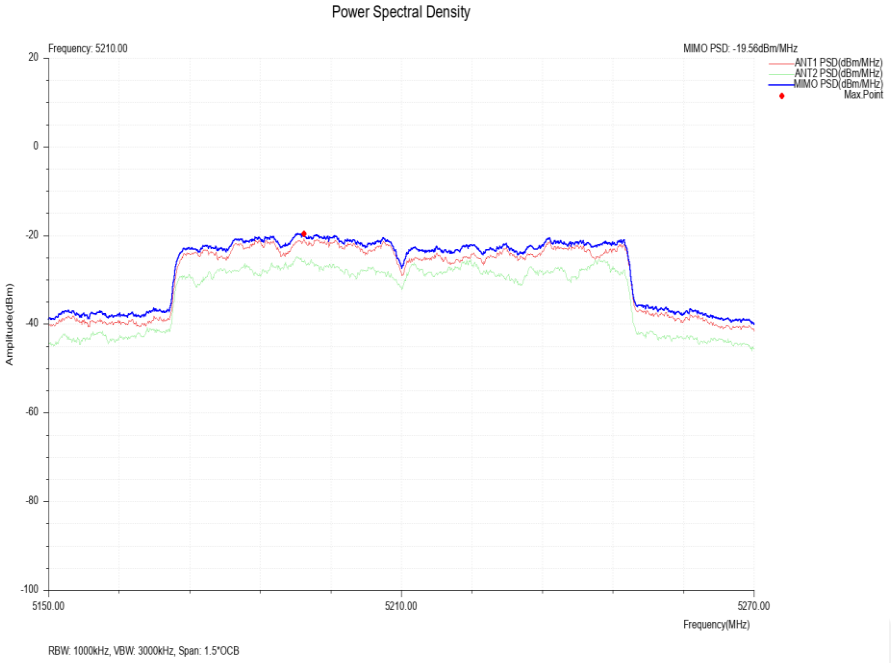
NVNT_MIMO_TX_802_11ac(VHT40)_Power_Spectral_Density_5190



NVNT_MIMO_TX_802_11ac(VHT40)_Power_Spectral_Density_5230



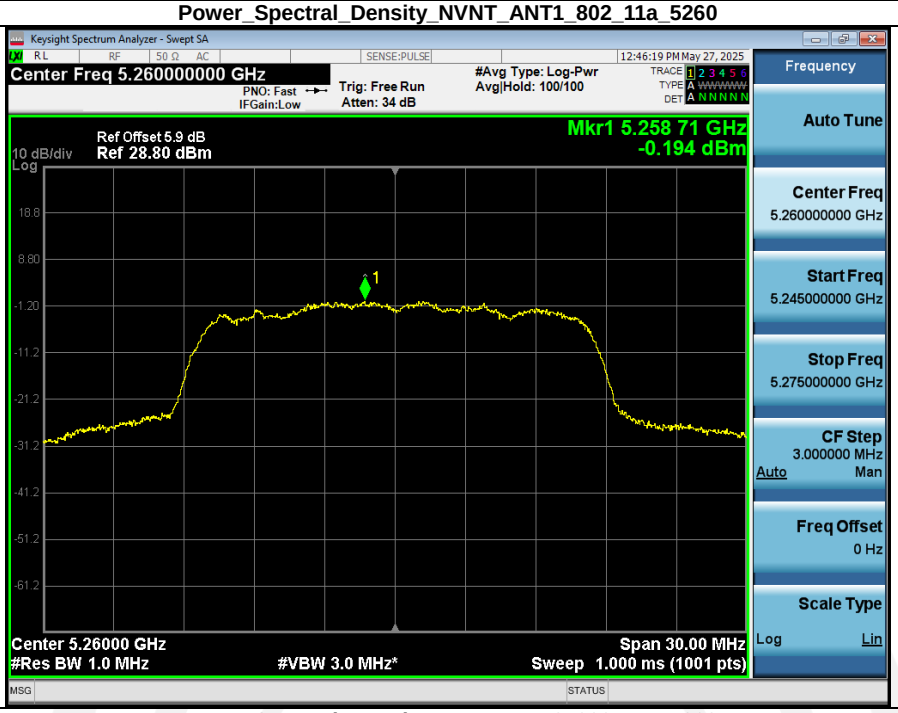
NVNT_MIMO_TX_802_11ac(VHT80)_Power_Spectral_Density_5210



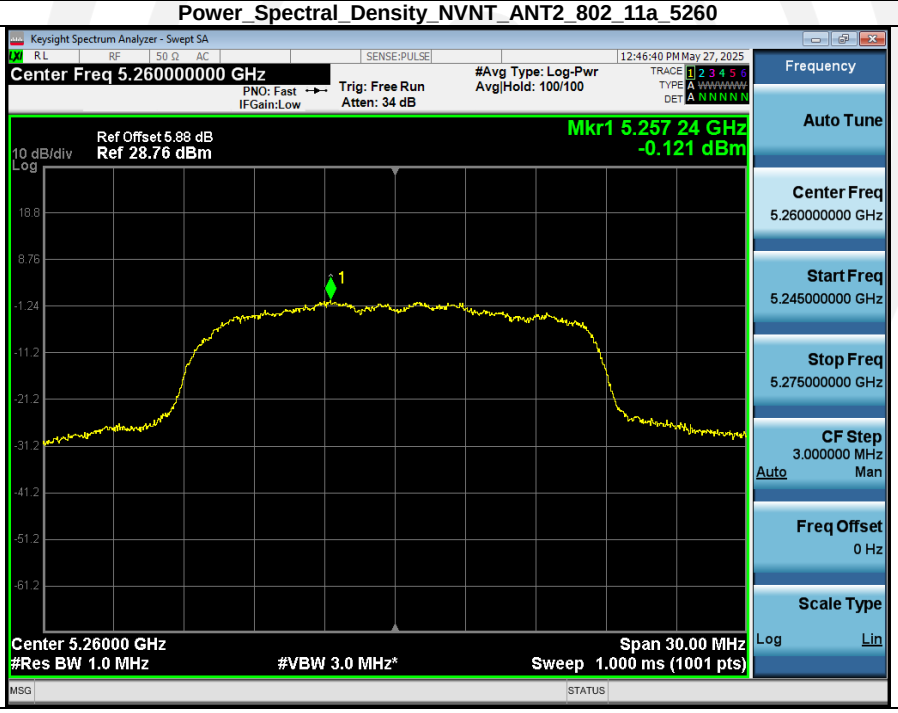
Band 2 (5260-5320 MHz) SISO:

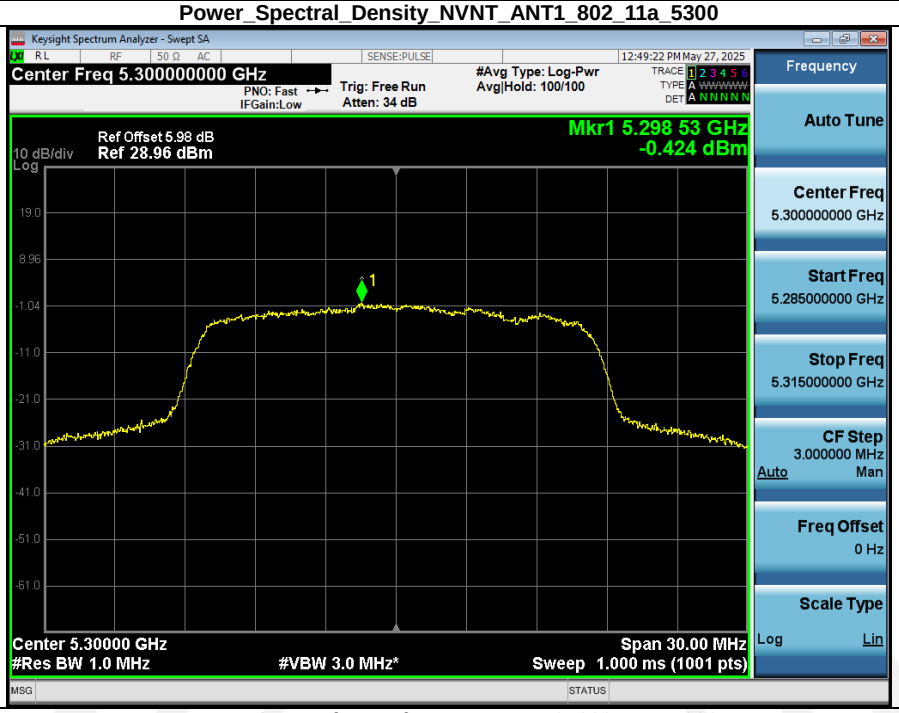
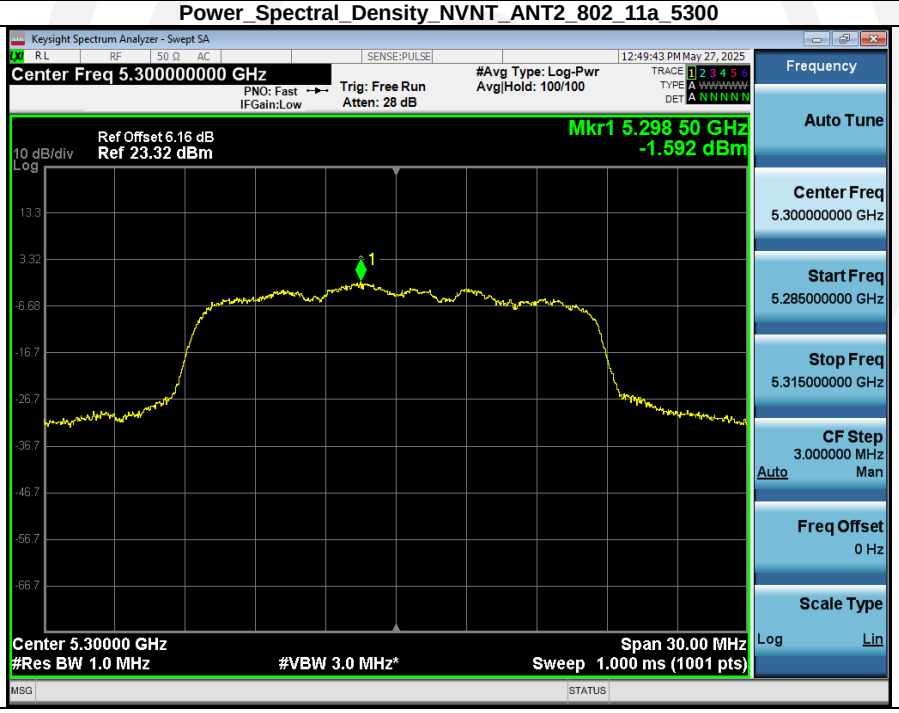
Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/MHz)	Duty factor(dB)	Total PSD(dBm/MHz)	limit(dBm)	Result
NVNT	ANT1	802.11a	5260.00	-0.19	0.12	-0.07	11	Pass
NVNT	ANT2	802.11a	5260.00	-0.12	0.12	-0.00	11	Pass
NVNT	ANT1	802.11a	5300.00	-0.42	0.12	-0.30	11	Pass
NVNT	ANT2	802.11a	5300.00	-1.59	0.12	-1.47	11	Pass
NVNT	ANT1	802.11a	5320.00	-6.93	0.09	-6.84	11	Pass
NVNT	ANT2	802.11a	5320.00	-1.50	0.12	-1.38	11	Pass
NVNT	ANT1	802.11n(HT20)	5260.00	-8.13	0.52	-7.61	11	Pass
NVNT	ANT2	802.11n(HT20)	5260.00	-9.52	0.52	-9.00	11	Pass
NVNT	ANT1	802.11n(HT20)	5300.00	-6.83	0.49	-6.34	11	Pass
NVNT	ANT2	802.11n(HT20)	5300.00	-6.78	0.49	-6.29	11	Pass
NVNT	ANT1	802.11n(HT20)	5320.00	-7.81	0.52	-7.29	11	Pass
NVNT	ANT2	802.11n(HT20)	5320.00	-7.81	0.59	-7.22	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5260.00	-7.57	0.52	-7.04	11	Pass
NVNT	ANT2	802.11ac(VHT20)	5260.00	-6.19	0.55	-5.64	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5300.00	-8.35	0.52	-7.83	11	Pass
NVNT	ANT2	802.11ac(VHT20)	5300.00	-5.99	0.52	-5.47	11	Pass
NVNT	ANT1	802.11ac(VHT20)	5320.00	-8.00	0.58	-7.42	11	Pass
NVNT	ANT2	802.11ac(VHT20)	5320.00	-6.79	0.52	-6.27	11	Pass
NVNT	ANT1	802.11n(HT40)	5270.00	-12.40	0.98	-11.42	11	Pass
NVNT	ANT2	802.11n(HT40)	5270.00	-13.45	1.12	-12.33	11	Pass
NVNT	ANT1	802.11n(HT40)	5310.00	-14.93	1.04	-13.89	11	Pass
NVNT	ANT2	802.11n(HT40)	5310.00	-14.53	1.12	-13.41	11	Pass
NVNT	ANT1	802.11ac(VHT40)	5270.00	-15.63	0.98	-14.65	11	Pass
NVNT	ANT2	802.11ac(VHT40)	5270.00	-12.71	1.04	-11.68	11	Pass
NVNT	ANT1	802.11ac(VHT40)	5310.00	-15.65	1.04	-14.61	11	Pass
NVNT	ANT2	802.11ac(VHT40)	5310.00	-16.00	1.04	-14.96	11	Pass
NVNT	ANT1	802.11ac(VHT80)	5290.00	-25.27	1.66	-23.61	11	Pass
NVNT	ANT2	802.11ac(VHT80)	5290.00	-22.58	1.66	-20.92	11	Pass

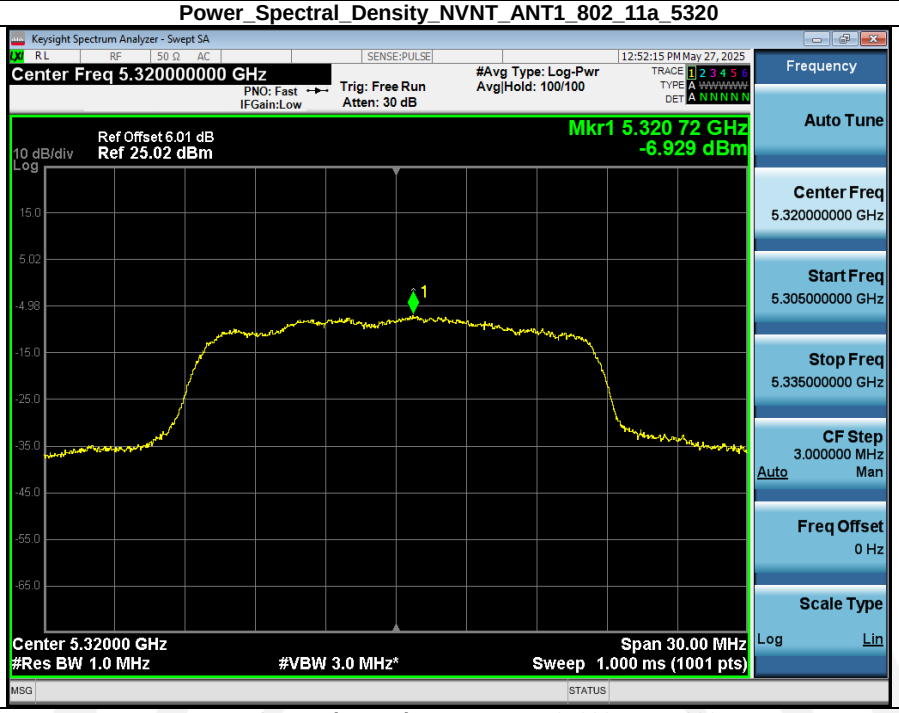
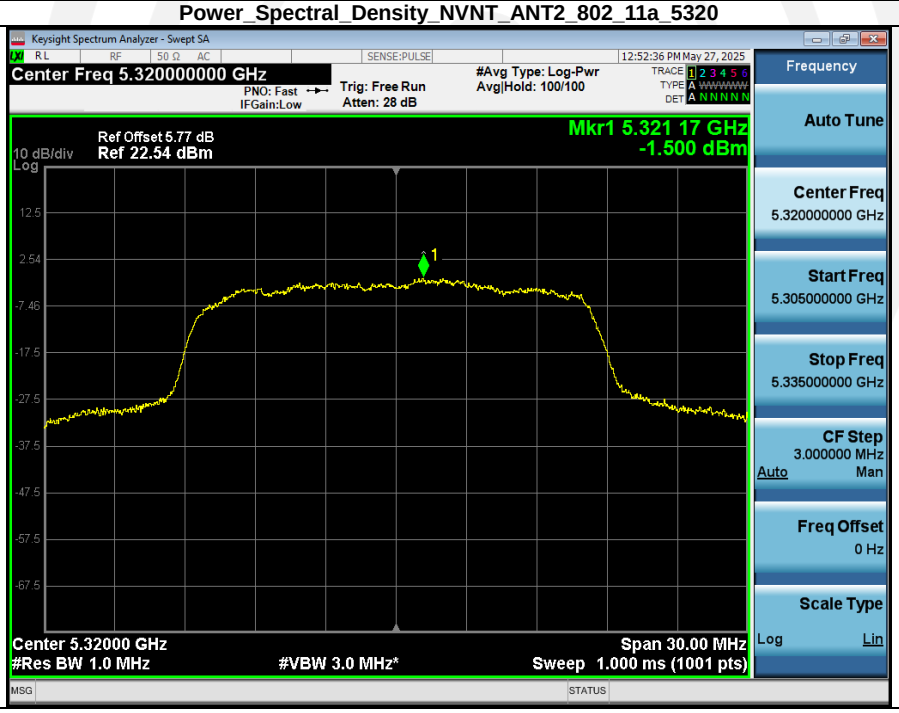
Power_Spectral_Density_NVNT_ANT1_802_11a_5260

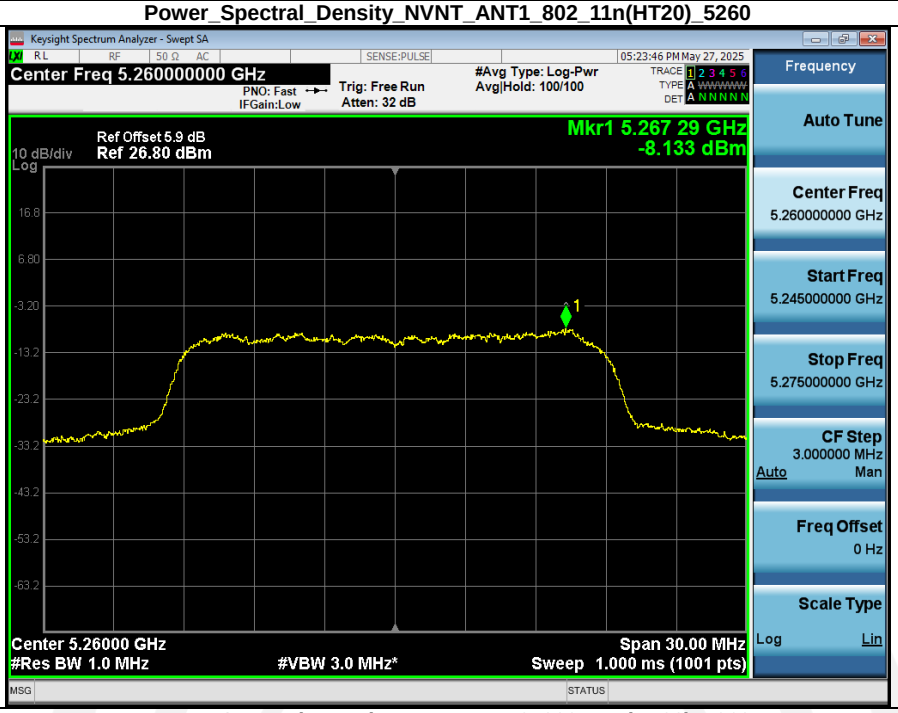


Power_Spectral_Density_NVNT_ANT2_802_11a_5260



Power_Spectral_Density_NVNT_ANT1_802_11a_5300

Power_Spectral_Density_NVNT_ANT2_802_11a_5300


Power_Spectral_Density_NVNT_ANT1_802_11a_5320

Power_Spectral_Density_NVNT_ANT2_802_11a_5320


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5260

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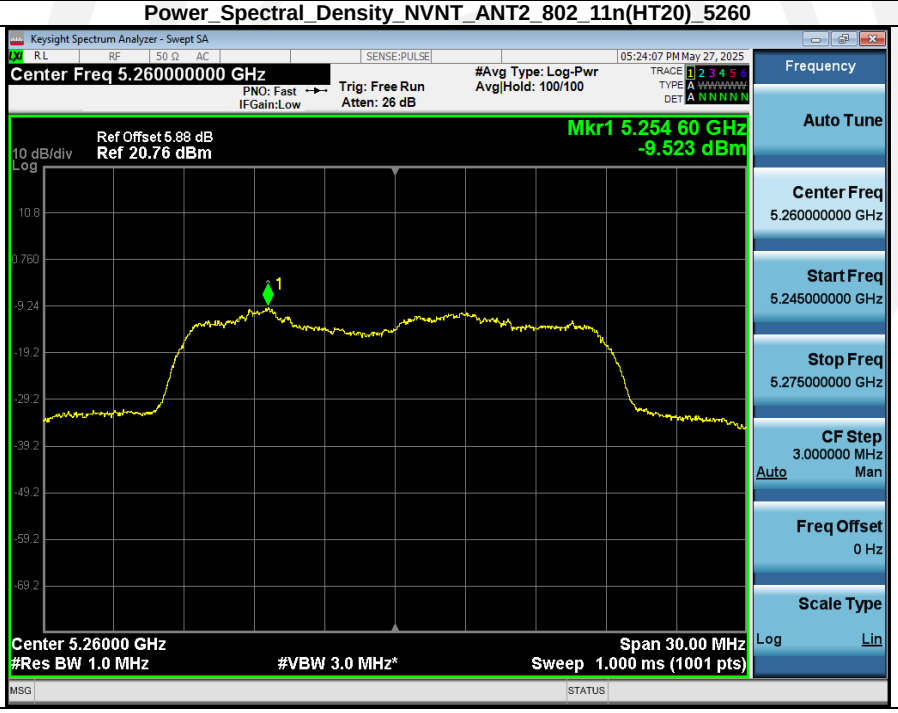

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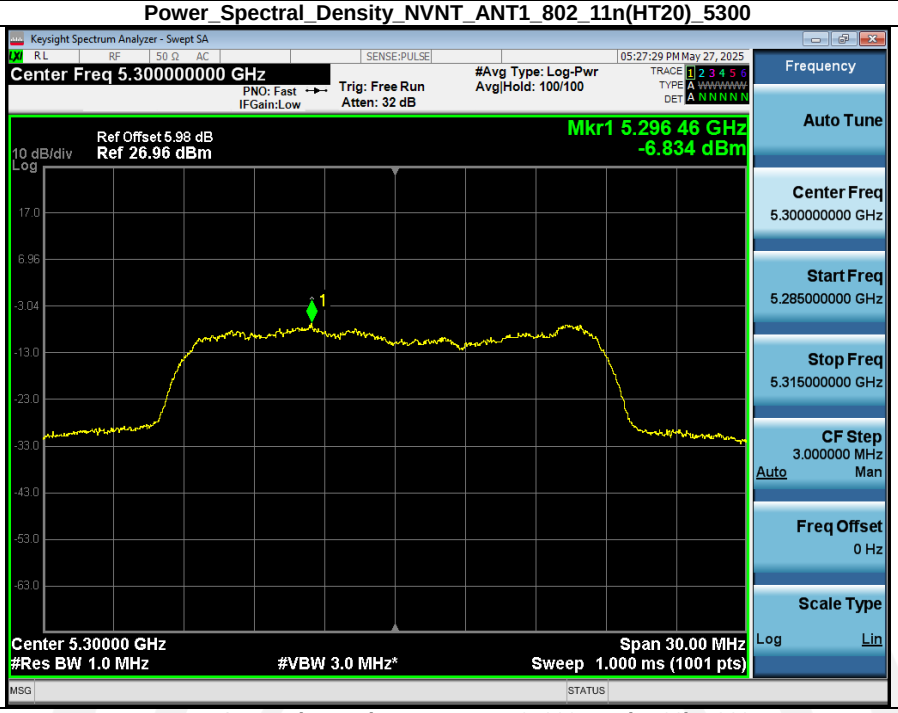
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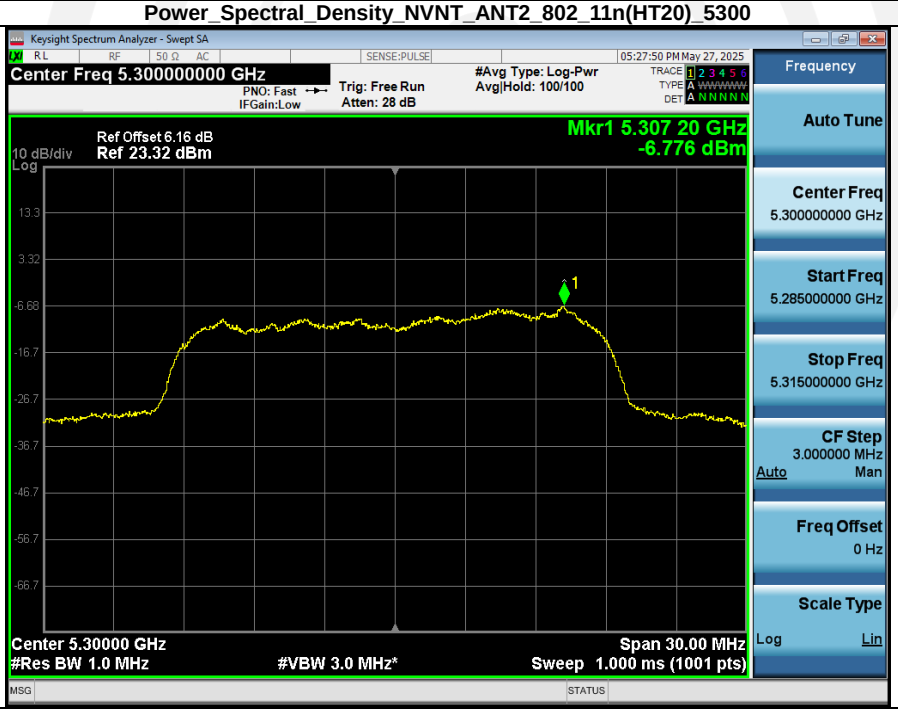

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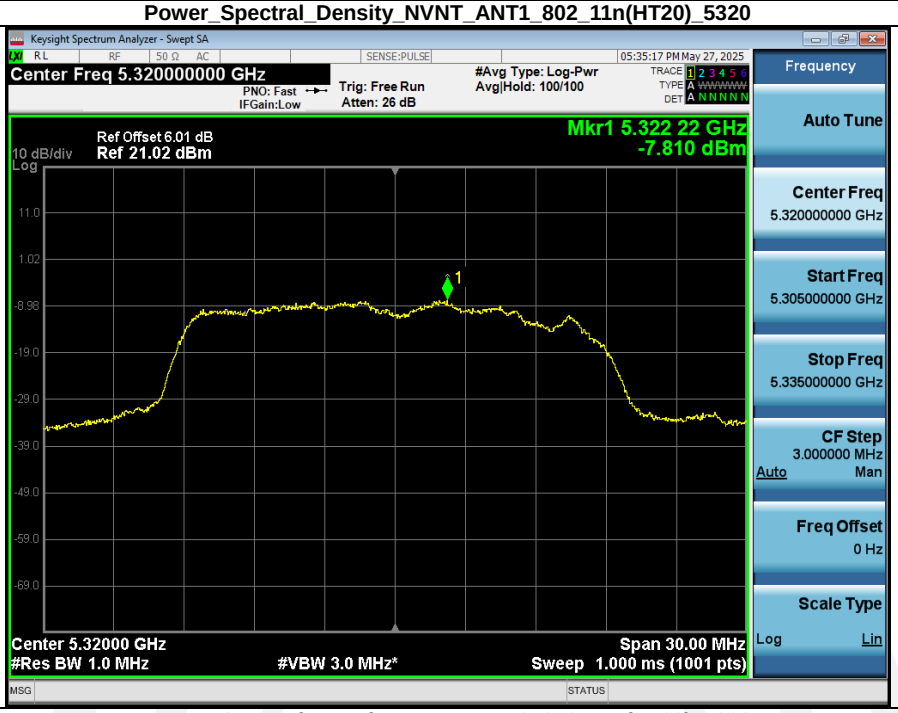
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