

dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations

8.3.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.3.4 Test Procedure

Methods refer to FCC KDB 789033

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

8.3.5 Test Results

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	0.47	≤11.00	PASS
		5200	0.68	≤11.00	PASS
		5240	1.15	≤11.00	PASS
		5260	0.31	≤11.00	PASS
		5280	1.11	≤11.00	PASS
		5320	0.75	≤11.00	PASS
		5500	0.58	≤11.00	PASS
		5580	2.73	≤11.00	PASS
		5700	1.60	≤11.00	PASS
		5745	-1.80	≤30.00	PASS
		5785	-1.18	≤30.00	PASS
		5825	-2.01	≤30.00	PASS
11N20SISO	Ant1	5180	-0.16	≤11.00	PASS
		5200	0.05	≤11.00	PASS
		5240	-0.06	≤11.00	PASS
		5260	0.42	≤11.00	PASS
		5280	0.58	≤11.00	PASS
		5320	0.59	≤11.00	PASS
		5500	-0.13	≤11.00	PASS
		5580	1.92	≤11.00	PASS
		5700	1.78	≤11.00	PASS
		5745	-1.55	≤30.00	PASS
		5785	-2.30	≤30.00	PASS
		5825	-2.14	≤30.00	PASS
11N40SISO	Ant1	5190	-2.29	≤11.00	PASS
		5230	-1.71	≤11.00	PASS
		5270	-1.45	≤11.00	PASS
		5310	-2.29	≤11.00	PASS
		5510	-1.82	≤11.00	PASS
		5550	-0.91	≤11.00	PASS
		5670	-1.12	≤11.00	PASS
		5755	-3.44	≤30.00	PASS
		5795	-3.83	≤30.00	PASS
11AC20SISO	Ant1	5180	0.96	≤11.00	PASS
		5200	0.74	≤11.00	PASS
		5240	1.62	≤11.00	PASS
		5260	0.97	≤11.00	PASS
		5280	1.10	≤11.00	PASS
		5320	1.09	≤11.00	PASS
		5500	0.81	≤11.00	PASS
		5580	2.12	≤11.00	PASS
		5700	1.90	≤11.00	PASS
		5745	-1.41	≤30.00	PASS
		5785	-1.45	≤30.00	PASS
		5825	-1.91	≤30.00	PASS
11AC40SISO	Ant1	5190	-1.52	≤11.00	PASS
		5230	-1.85	≤11.00	PASS
		5270	-1.45	≤11.00	PASS
		5310	-1.30	≤11.00	PASS

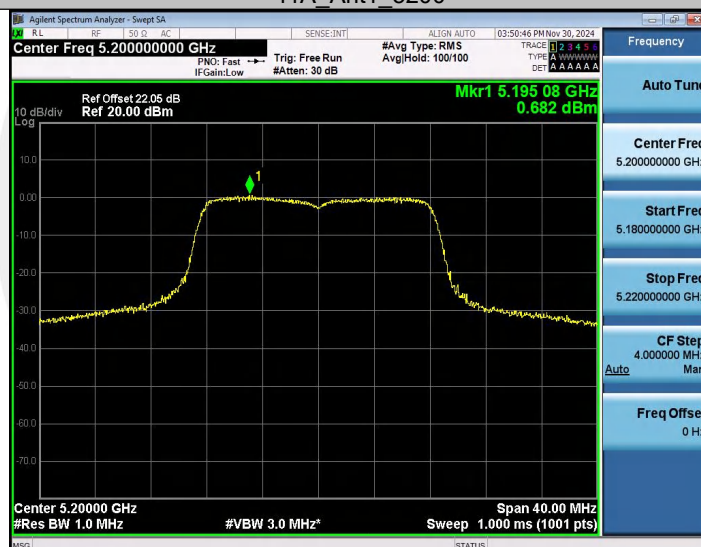
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		5550	-0.39	≤11.00	PASS
		5670	-0.47	≤11.00	PASS
		5755	-4.88	≤30.00	PASS
		5795	-4.07	≤30.00	PASS
		5210	-2.98	≤11.00	PASS
		5290	-2.66	≤11.00	PASS
		5530	-1.74	≤11.00	PASS
		5610	-1.38	≤11.00	PASS
		5775	-5.30	≤30.00	PASS



11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



11A_Ant1_5260



11A_Ant1_5280



11A_Ant1_5320



11A_Ant1_5500



11A_Ant1_5580



11A_Ant1_5700



11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO Ant1 5180



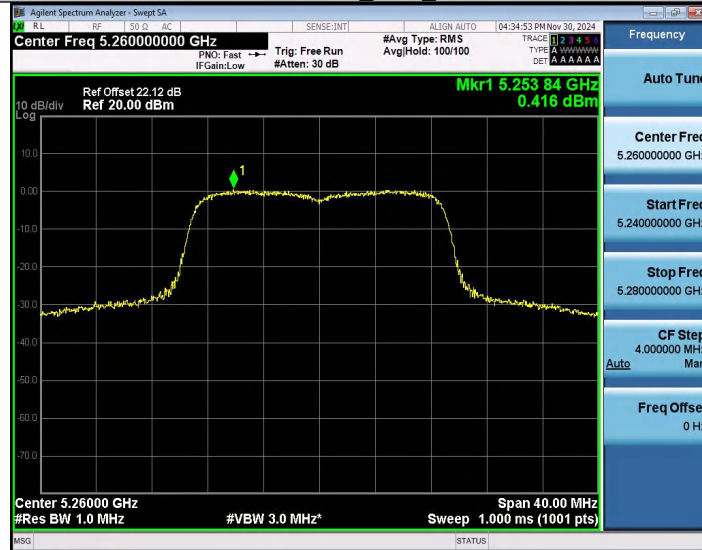
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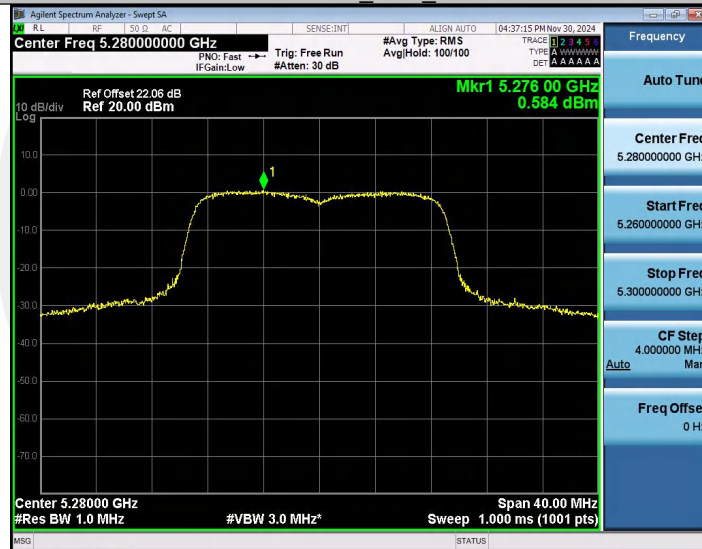
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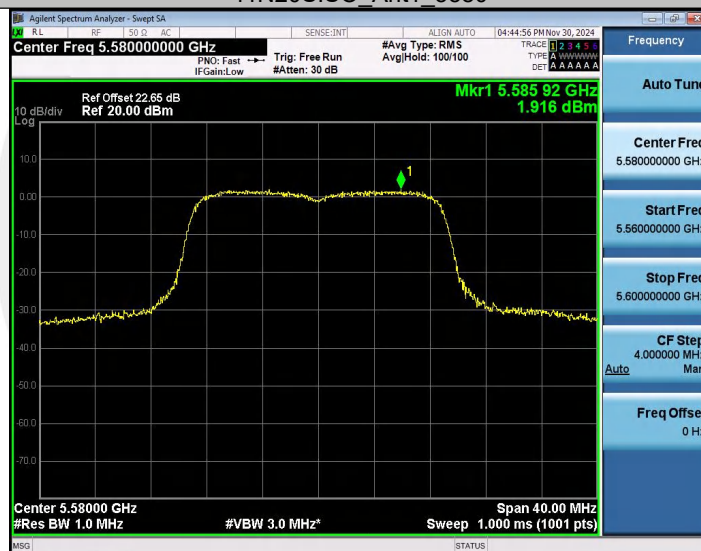
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11N20SISO_Ant1_5500



11N20SISO_Ant1_5580



11N20SISO_Ant1_5700



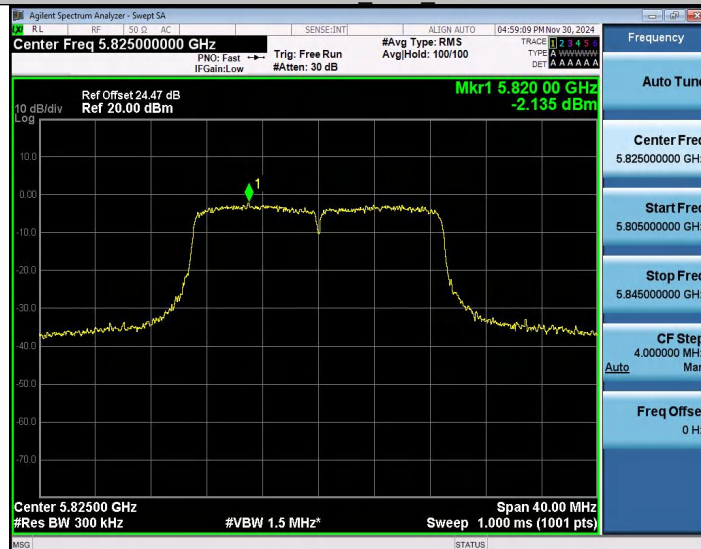
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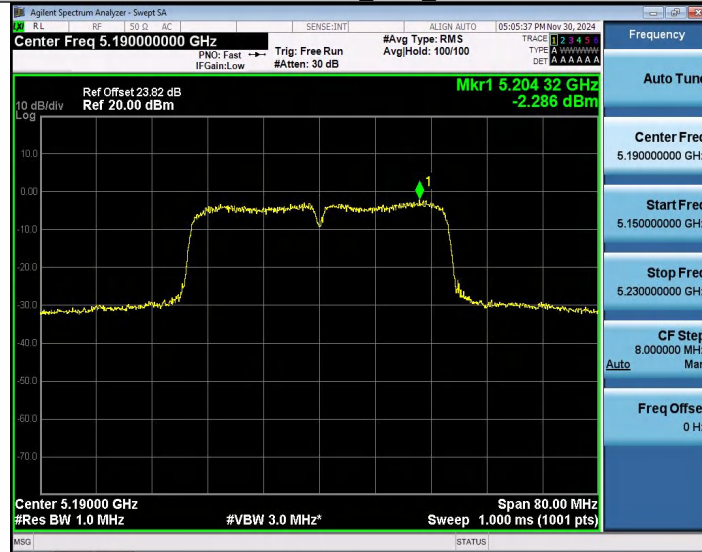
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11N20SISO_Ant1_5825



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11N40SISO_Ant1_5270



11N40SISO_Ant1_5310



11N40SISO_Ant1_5510



11N40SISO_Ant1_5550



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11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



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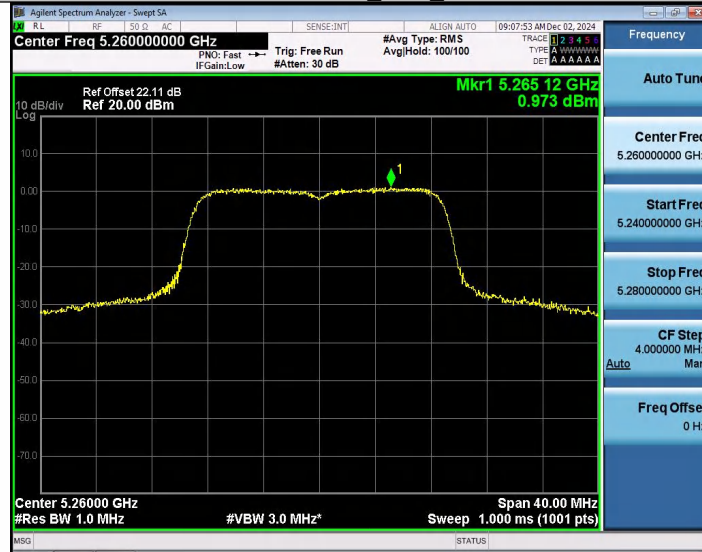
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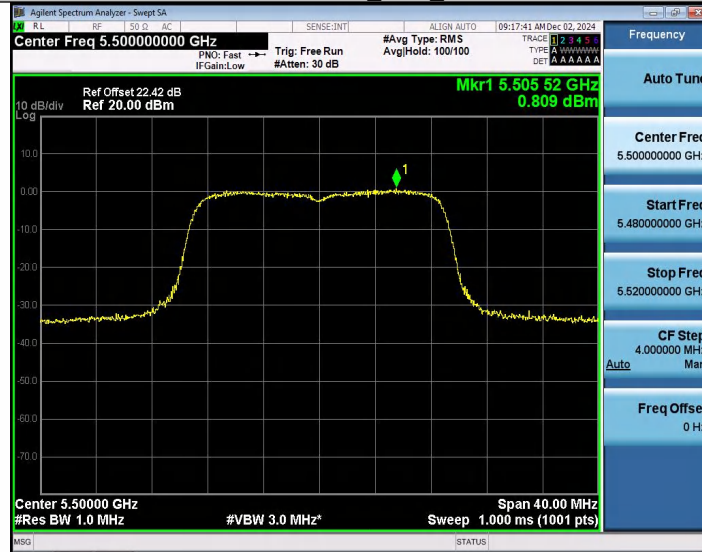
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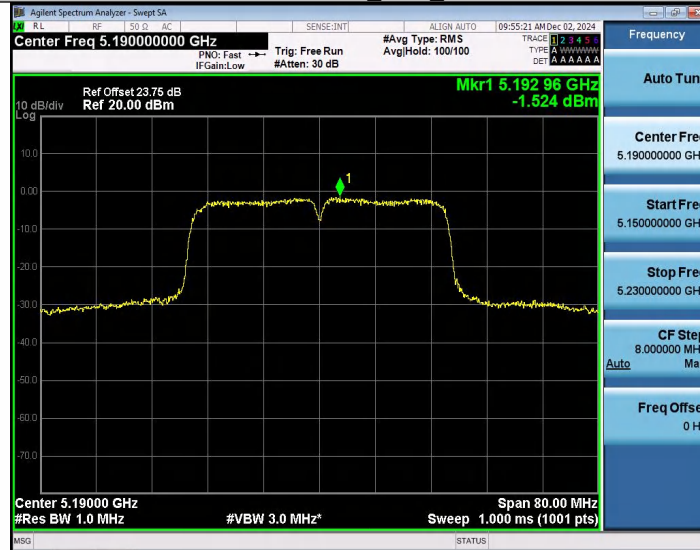
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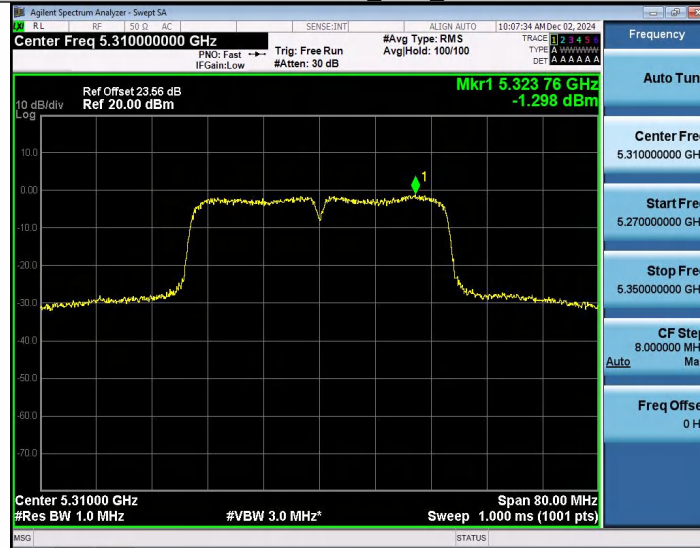
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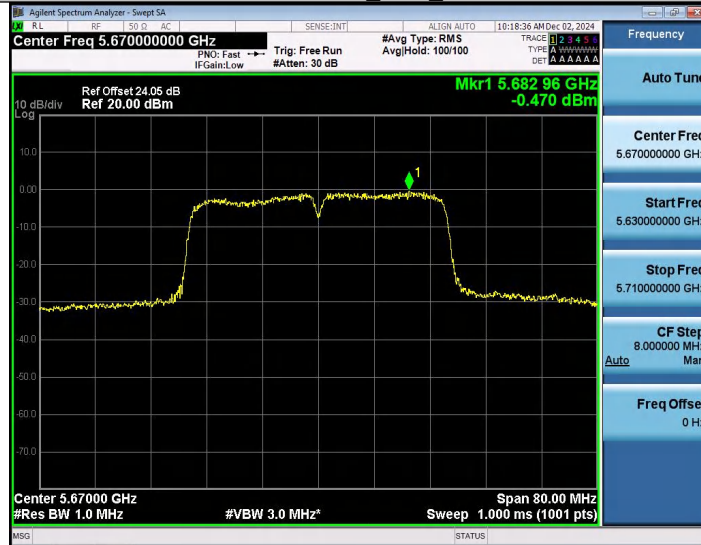
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11AC40SISO_Ant1_5550



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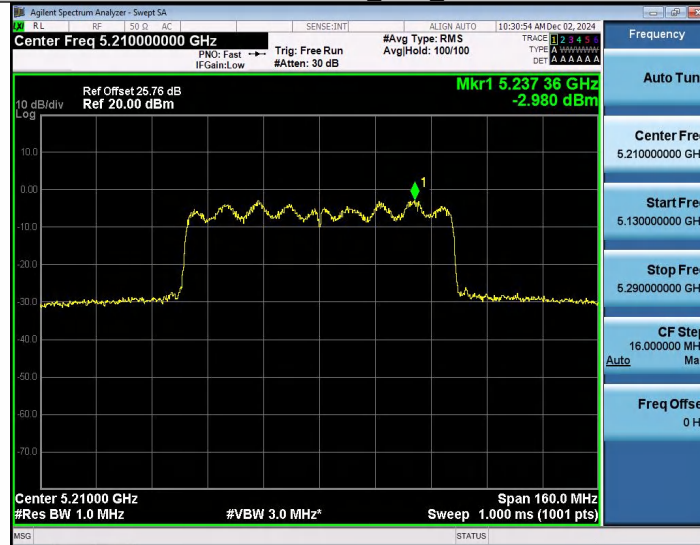
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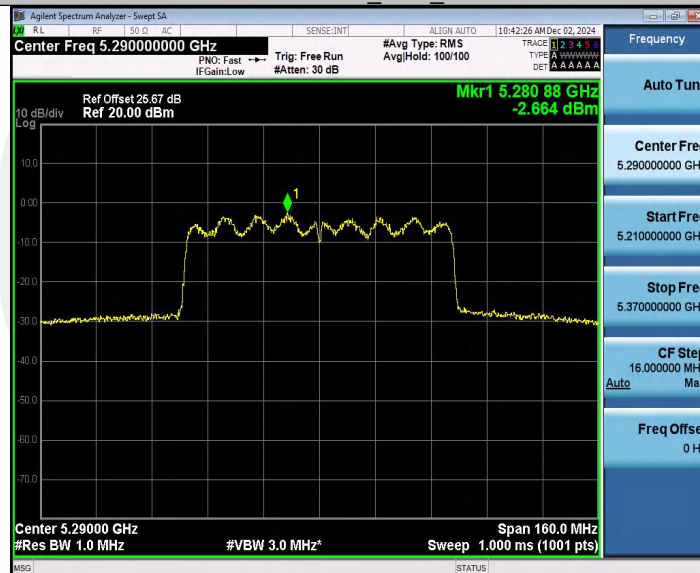
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11AC80SISO_Ant1_5210



11AC80SISO_Ant1_5290



11AC80SISO_Ant1_5530

