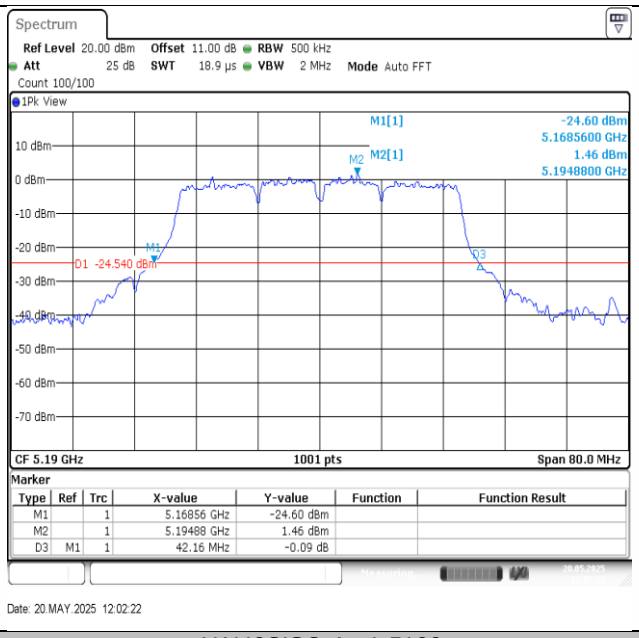
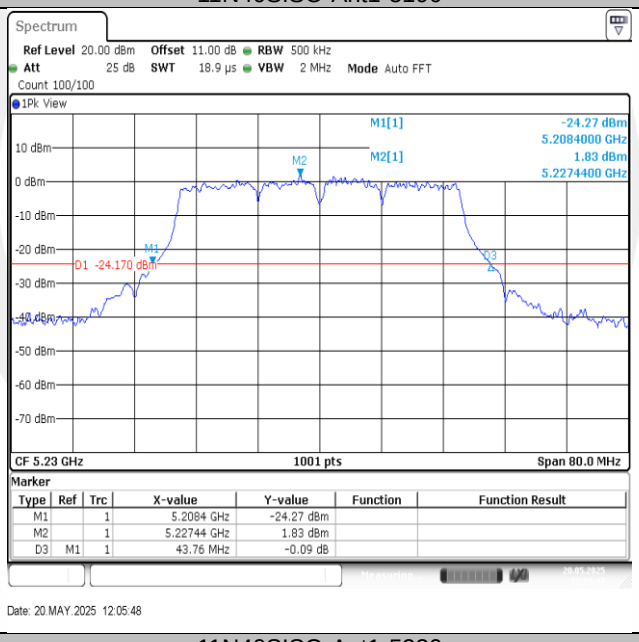
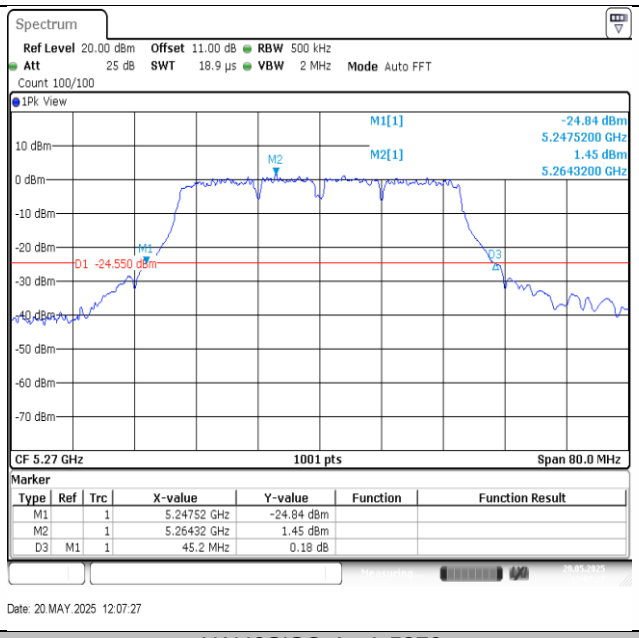


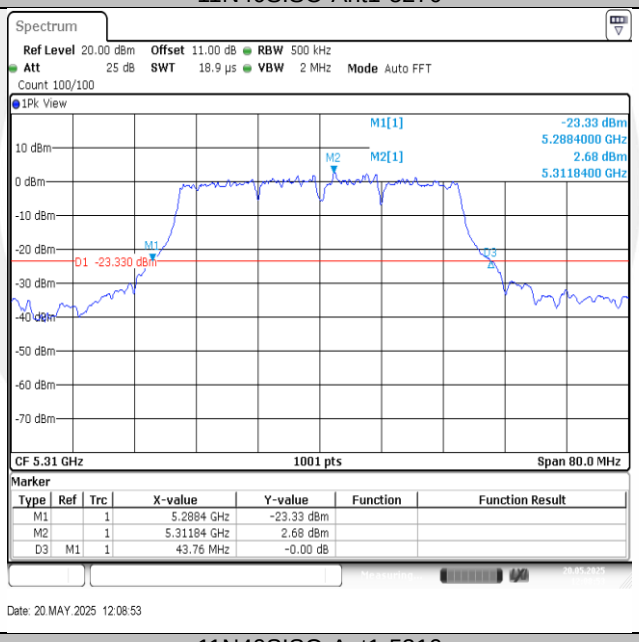
11N40SISO-Ant1-5190



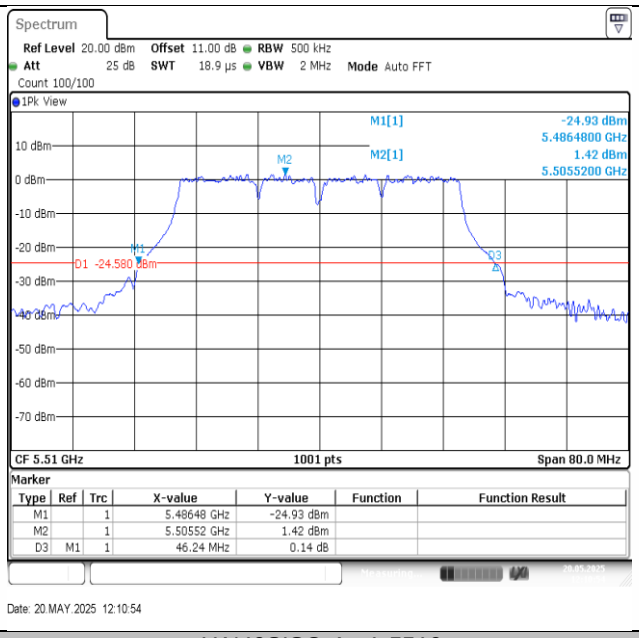
11N40SISO-Ant1-5230



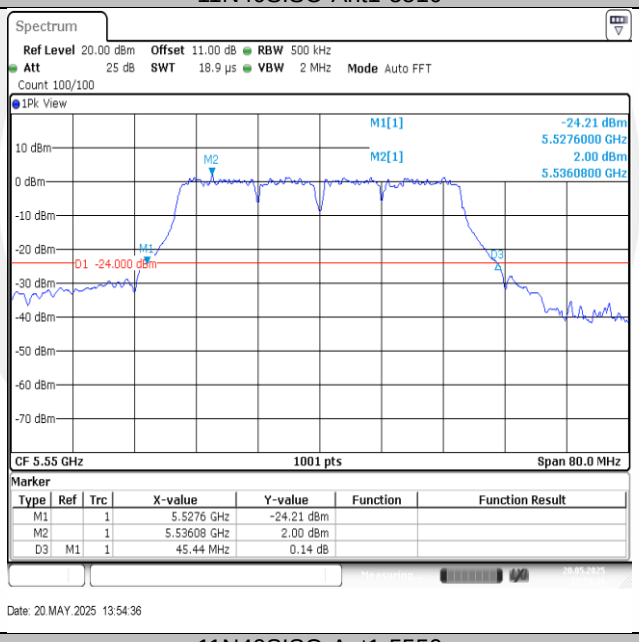
11N40SISO-Ant1-5270



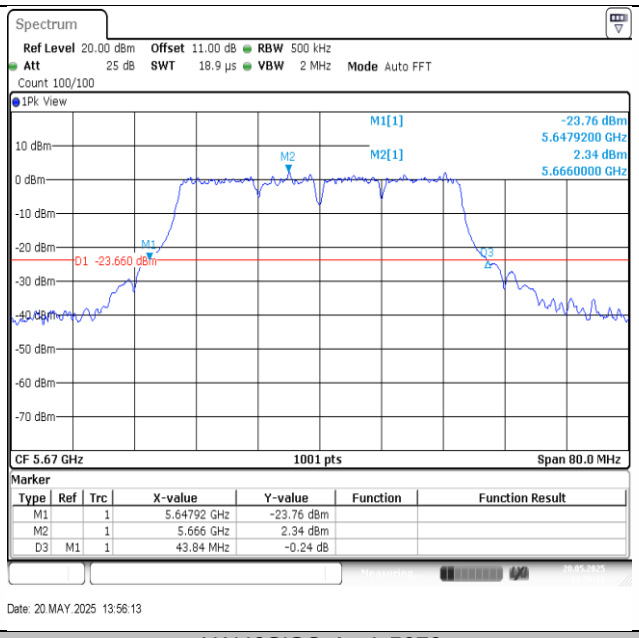
11N40SISO-Ant1-5310



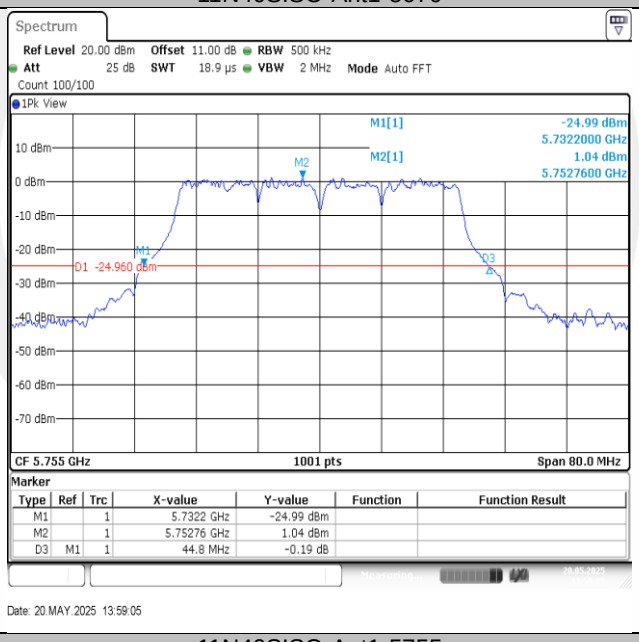
11N40SISO-Ant1-5510



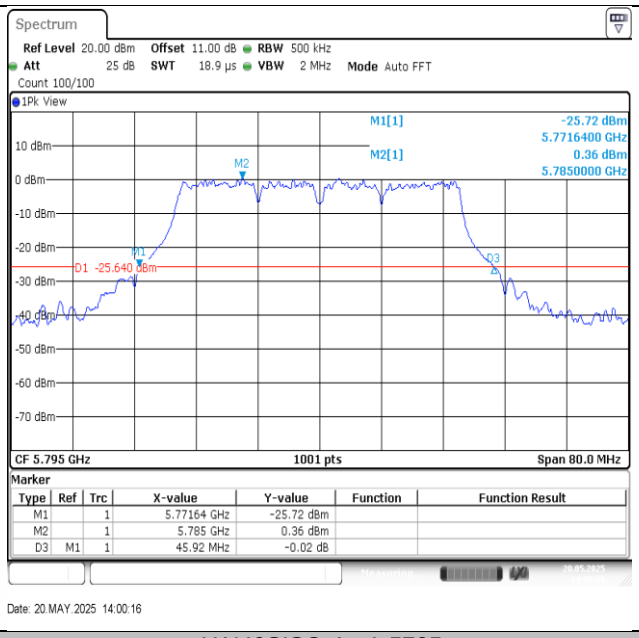
11N40SISO-Ant1-5550



11N40SISO-Ant1-5670



11N40SISO-Ant1-5755

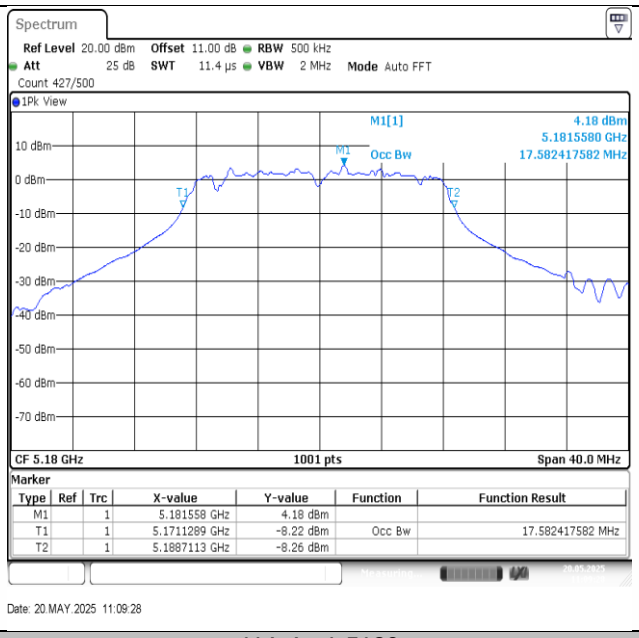


11N40SISO-Ant1-5795

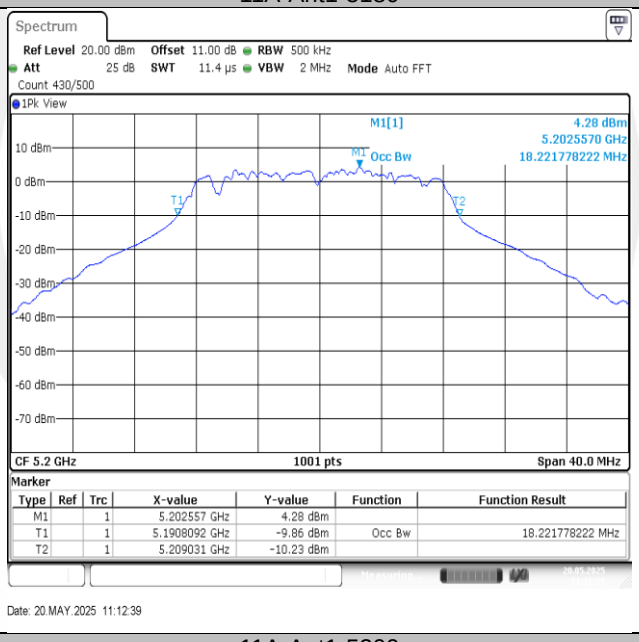
Occupied channel bandwidth

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.582	5171.1289	5188.7113	---	---
11A	Ant1	5200	18.222	5190.8092	5209.0310	---	---
11A	Ant1	5240	17.063	5231.6084	5248.6713	---	---
11A	Ant1	5260	17.303	5251.4885	5268.7912	---	---
11A	Ant1	5280	17.263	5271.0490	5288.3117	---	---
11A	Ant1	5320	17.782	5310.9291	5328.7113	---	---
11A	Ant1	5500	17.782	5490.6893	5508.4715	---	---
11A	Ant1	5580	17.183	5571.4086	5588.5914	---	---
11A	Ant1	5700	17.862	5691.0090	5708.8711	---	---
11A	Ant1	5745	18.302	5736.4486	5754.7502	---	---
11A	Ant1	5785	17.343	5776.5285	5793.8711	---	---
11A	Ant1	5825	17.942	5816.1688	5834.1109	---	---
11AC20SISO	Ant1	5180	18.821	5170.8492	5189.6703	---	---
11AC20SISO	Ant1	5200	18.222	5190.9291	5209.1508	---	---
11AC20SISO	Ant1	5240	18.462	5230.7692	5249.2308	---	---
11AC20SISO	Ant1	5260	18.142	5250.7692	5268.9111	---	---
11AC20SISO	Ant1	5280	18.142	5270.8092	5288.9510	---	---
11AC20SISO	Ant1	5320	17.982	5310.9291	5328.9111	---	---
11AC20SISO	Ant1	5500	19.740	5489.6503	5509.3906	---	---
11AC20SISO	Ant1	5580	18.302	5570.6893	5588.9910	---	---
11AC20SISO	Ant1	5700	18.541	5690.9690	5709.5105	---	---
11AC20SISO	Ant1	5745	18.462	5735.7293	5754.1908	---	---
11AC20SISO	Ant1	5785	18.901	5775.6094	5794.5105	---	---
11AC20SISO	Ant1	5825	18.901	5815.3696	5834.2707	---	---
11AC40SISO	Ant1	5190	36.603	5171.7782	5208.3816	---	---
11AC40SISO	Ant1	5230	36.843	5211.8581	5248.7013	---	---
11AC40SISO	Ant1	5270	36.603	5251.7782	5288.3816	---	---
11AC40SISO	Ant1	5310	36.923	5291.1389	5328.0619	---	---
11AC40SISO	Ant1	5510	36.444	5491.6983	5528.1419	---	---
11AC40SISO	Ant1	5550	37.083	5531.6184	5568.7013	---	---
11AC40SISO	Ant1	5670	36.923	5651.6184	5688.5415	---	---
11AC40SISO	Ant1	5755	36.603	5736.5385	5773.1419	---	---
11AC40SISO	Ant1	5795	36.923	5776.6184	5813.5415	---	---
11AX20SISO	Ant1	5180	19.021	5170.4895	5189.5105	---	---
11AX20SISO	Ant1	5200	19.021	5190.4096	5209.4306	---	---
11AX20SISO	Ant1	5240	19.061	5230.4096	5249.4705	---	---
11AX20SISO	Ant1	5260	19.141	5250.4496	5269.5904	---	---
11AX20SISO	Ant1	5280	19.141	5270.4496	5289.5904	---	---
11AX20SISO	Ant1	5320	19.141	5310.3696	5329.5105	---	---
11AX20SISO	Ant1	5500	19.381	5490.1299	5509.5105	---	---
11AX20SISO	Ant1	5580	19.101	5570.4496	5589.5504	---	---
11AX20SISO	Ant1	5700	19.221	5690.3696	5709.5904	---	---
11AX20SISO	Ant1	5745	19.221	5735.4496	5754.6703	---	---
11AX20SISO	Ant1	5785	19.381	5775.3297	5794.7103	---	---
11AX20SISO	Ant1	5825	19.221	5815.4096	5834.6304	---	---
11AX40SISO	Ant1	5190	38.841	5170.8991	5209.7403	---	---
11AX40SISO	Ant1	5230	37.962	5210.9790	5248.9411	---	---
11AX40SISO	Ant1	5270	37.802	5251.2188	5289.0210	---	---
11AX40SISO	Ant1	5310	38.042	5291.0589	5329.1009	---	---
11AX40SISO	Ant1	5510	38.042	5490.8991	5528.9411	---	---
11AX40SISO	Ant1	5550	38.202	5530.8991	5569.1009	---	---
11AX40SISO	Ant1	5670	38.282	5650.8991	5689.1808	---	---
11AX40SISO	Ant1	5755	38.601	5735.2597	5773.8611	---	---
11AX40SISO	Ant1	5795	37.882	5775.8991	5813.7812	---	---
11N20SISO	Ant1	5180	18.302	5170.8492	5189.1508	---	---
11N20SISO	Ant1	5200	18.901	5190.8891	5209.7902	---	---
11N20SISO	Ant1	5240	18.382	5231.0090	5249.3906	---	---
11N20SISO	Ant1	5260	18.342	5250.6094	5268.9510	---	---

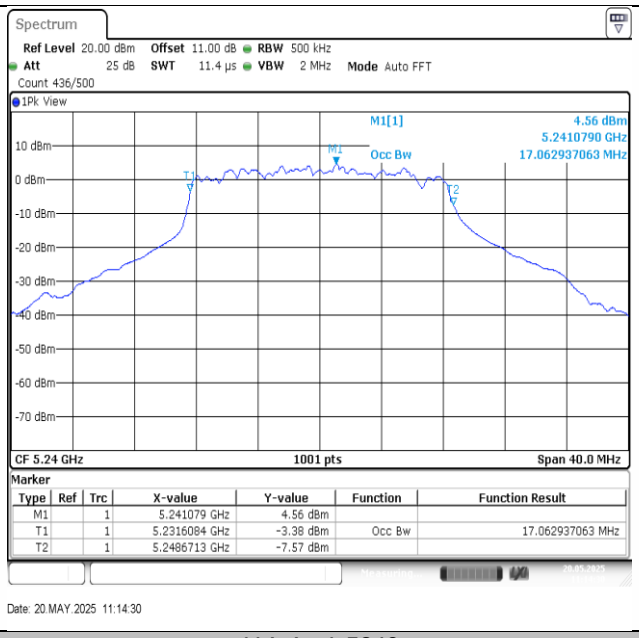
11N20SISO	Ant1	5280	18.222	5270.6893	5288.9111	---	---
11N20SISO	Ant1	5320	18.222	5310.7692	5328.9910	---	---
11N20SISO	Ant1	5500	18.102	5491.1289	5509.2308	---	---
11N20SISO	Ant1	5580	19.381	5570.0100	5589.3906	---	---
11N20SISO	Ant1	5700	18.621	5690.8092	5709.4306	---	---
11N20SISO	Ant1	5745	18.182	5735.9690	5754.1508	---	---
11N20SISO	Ant1	5785	18.222	5776.0090	5794.2308	---	---
11N20SISO	Ant1	5825	18.741	5815.4895	5834.2308	---	---
11N40SISO	Ant1	5190	36.523	5171.7782	5208.3017	---	---
11N40SISO	Ant1	5230	36.364	5211.6983	5248.0619	---	---
11N40SISO	Ant1	5270	36.523	5251.6983	5288.2218	---	---
11N40SISO	Ant1	5310	36.923	5291.5385	5328.4615	---	---
11N40SISO	Ant1	5510	36.843	5491.3786	5528.2218	---	---
11N40SISO	Ant1	5550	36.923	5531.7782	5568.7013	---	---
11N40SISO	Ant1	5670	36.523	5651.6983	5688.2218	---	---
11N40SISO	Ant1	5755	36.843	5736.5385	5773.3816	---	---
11N40SISO	Ant1	5795	37.323	5775.8192	5813.1419	---	---



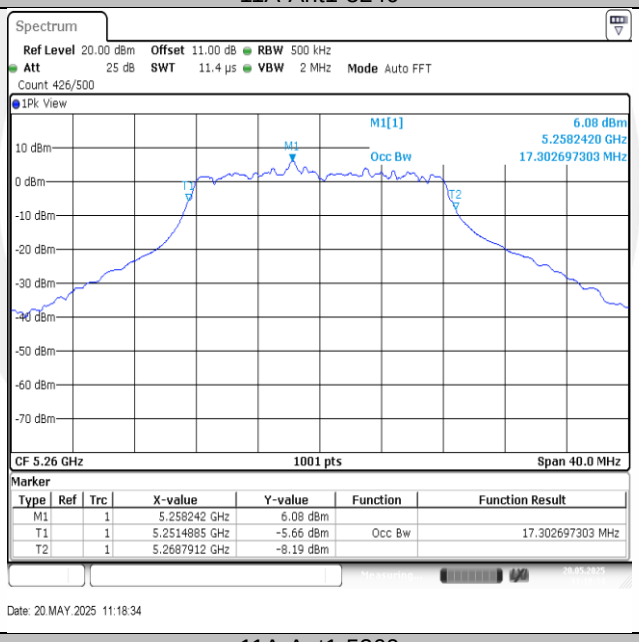
11A-Ant1-5180



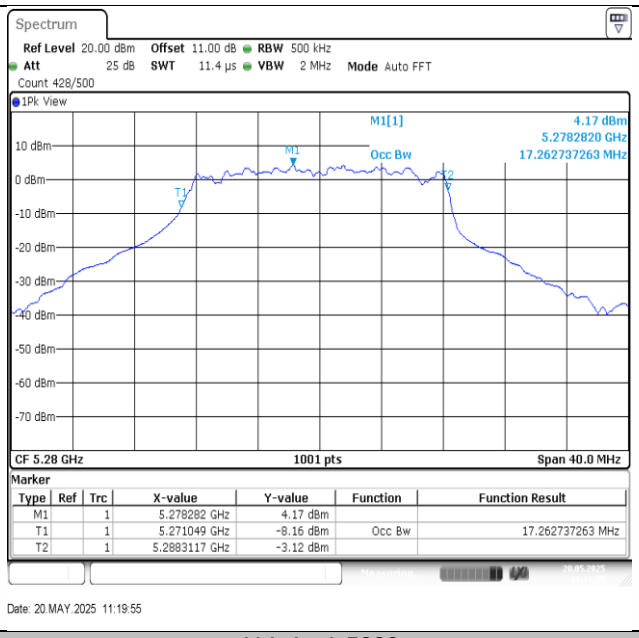
11A-Ant1-5200



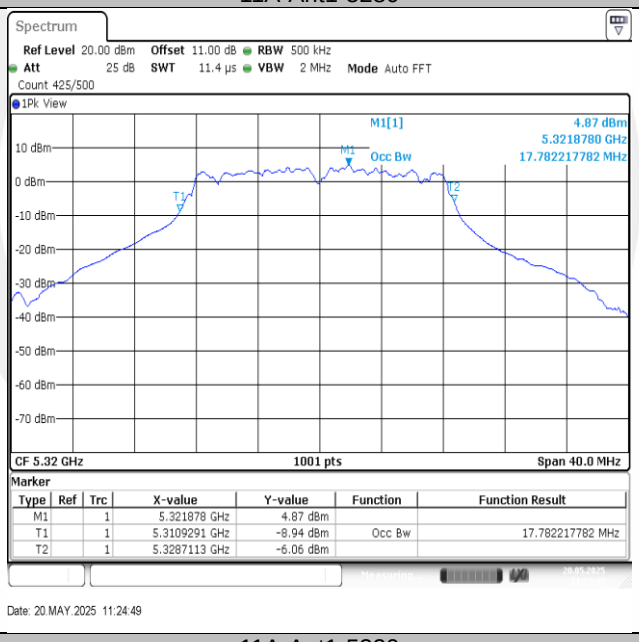
11A-Ant1-5240



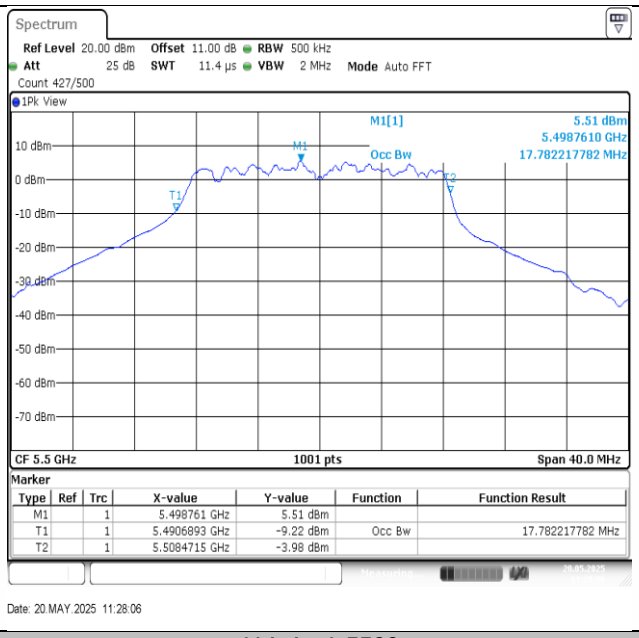
11A-Ant1-5260



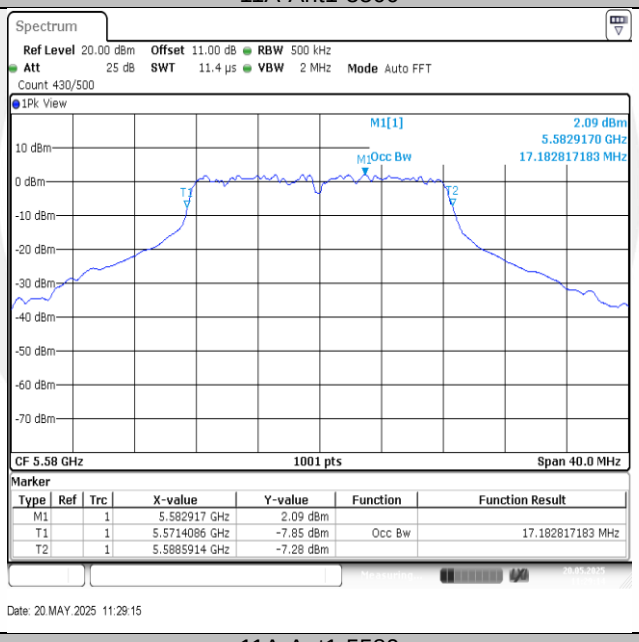
11A-Ant1-5280



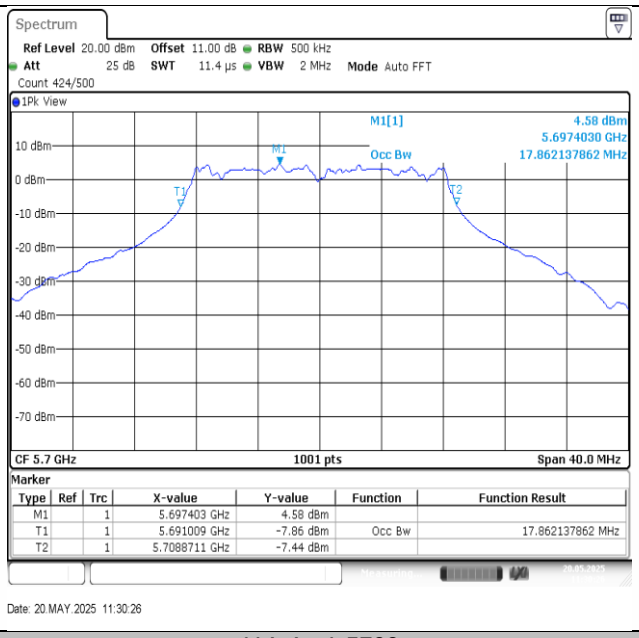
11A-Ant1-5320



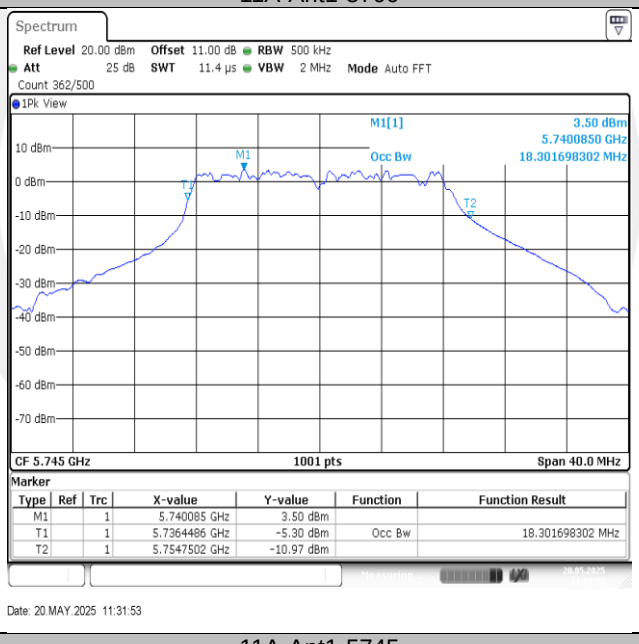
11A-Ant1-5500



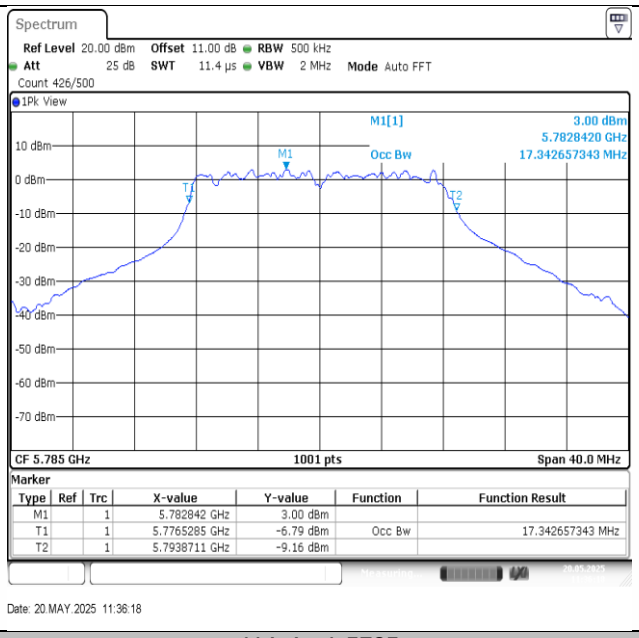
11A-Ant1-5580



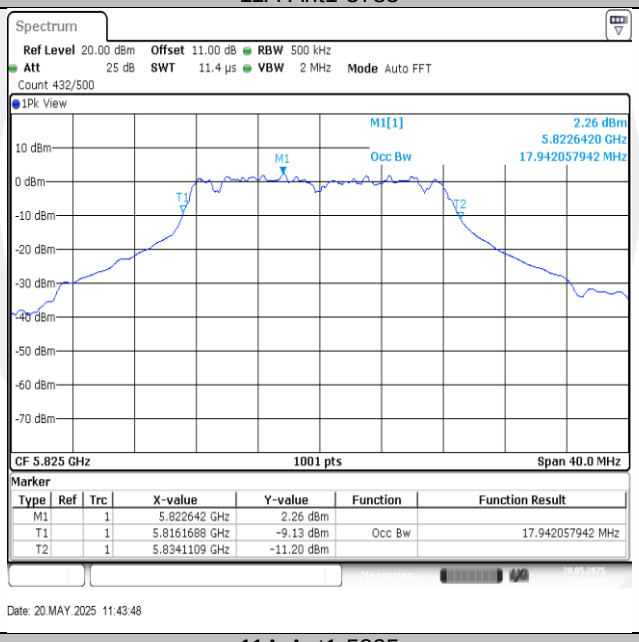
11A-Ant1-5700



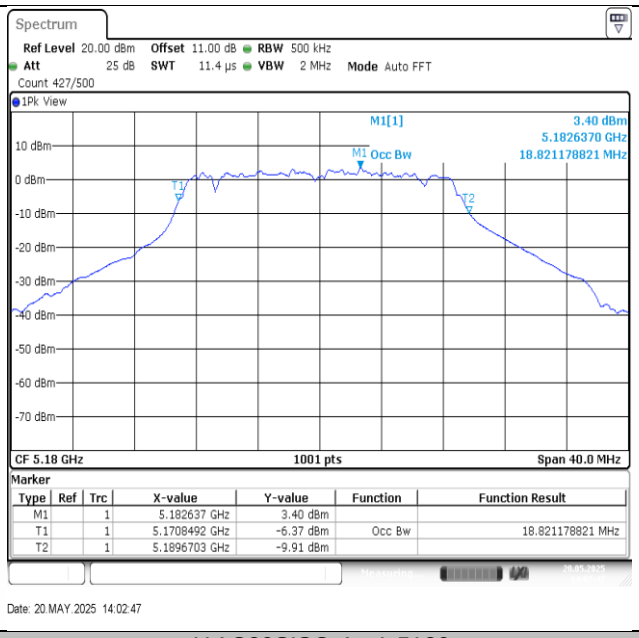
11A-Ant1-5745



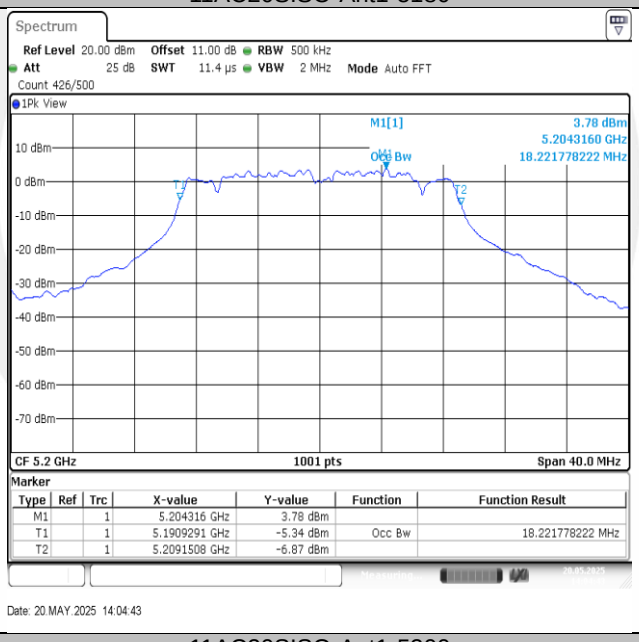
11A-Ant1-5785



11A-Ant1-5825



11AC20SISO-Ant1-5180



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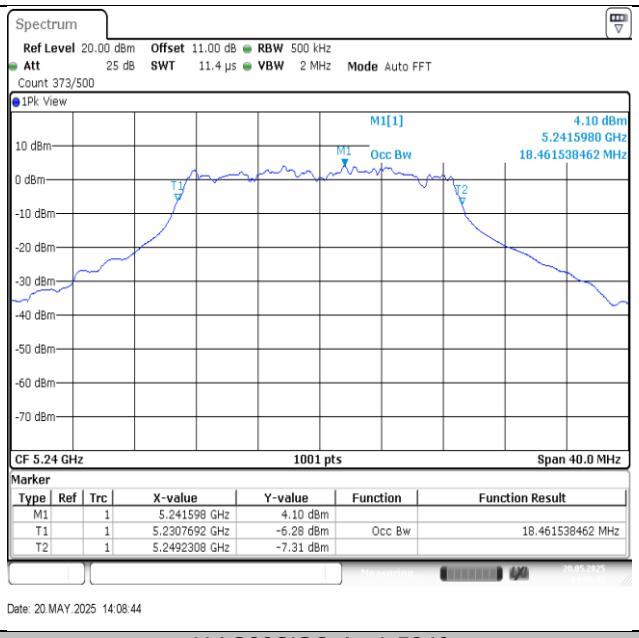

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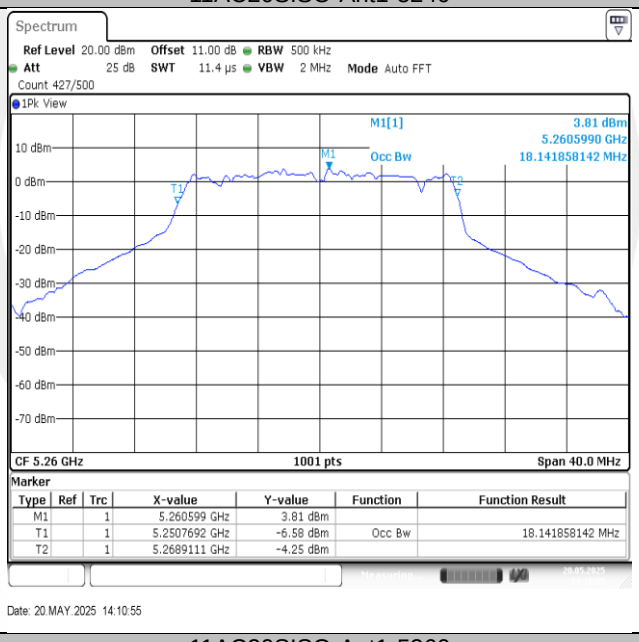

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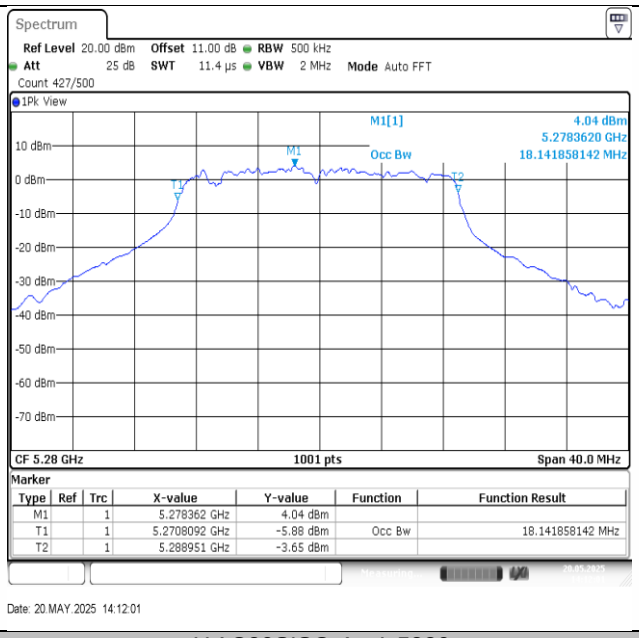

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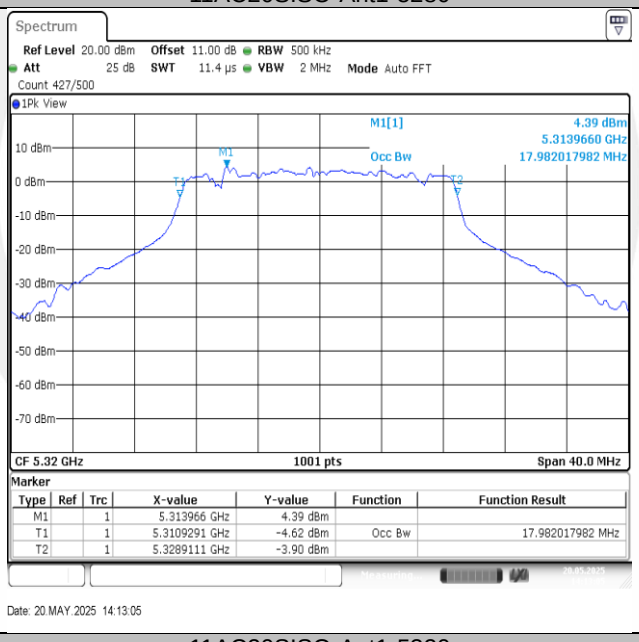

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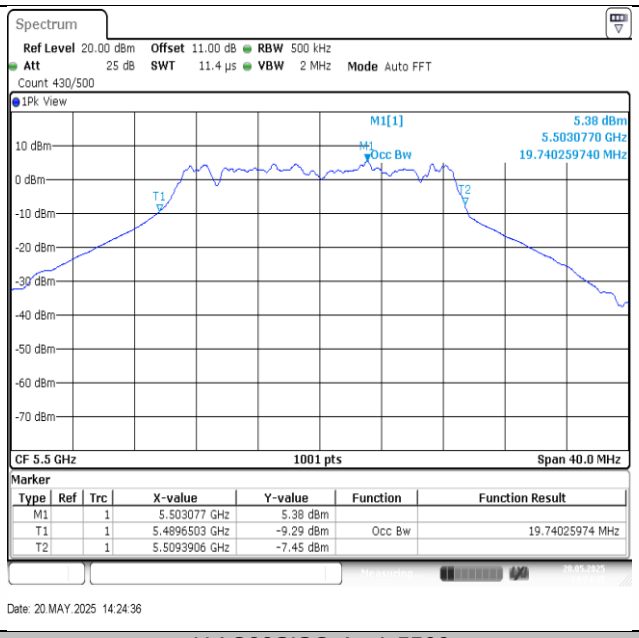
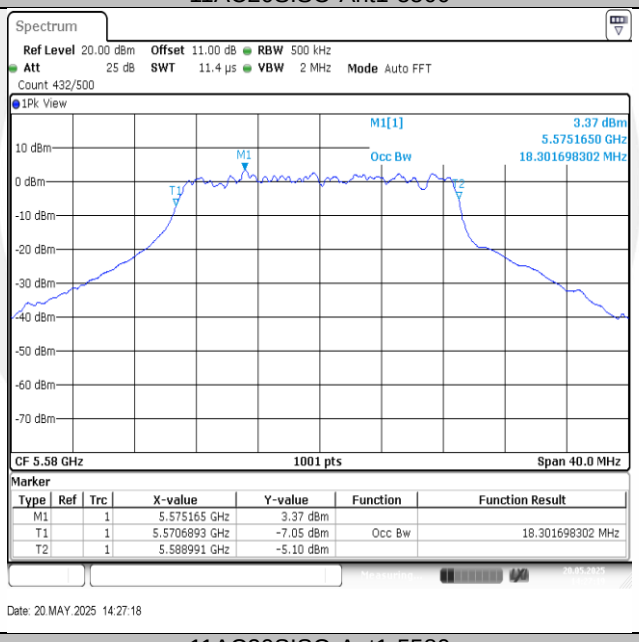


11AC20SISO-Ant1-5500



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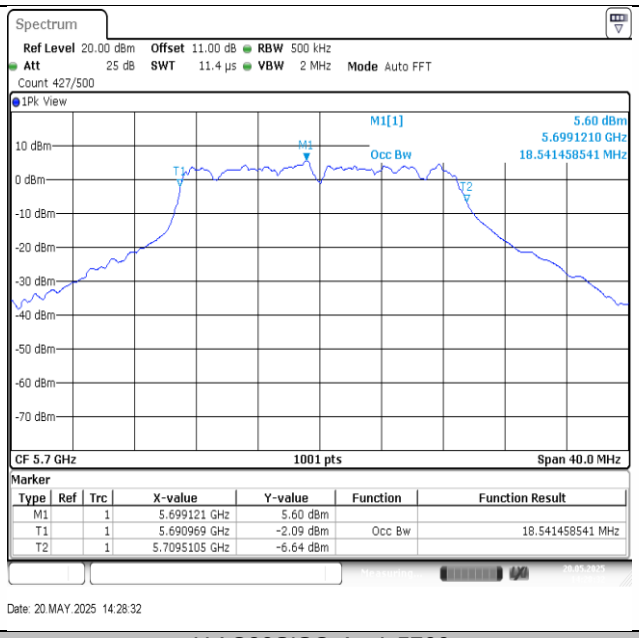

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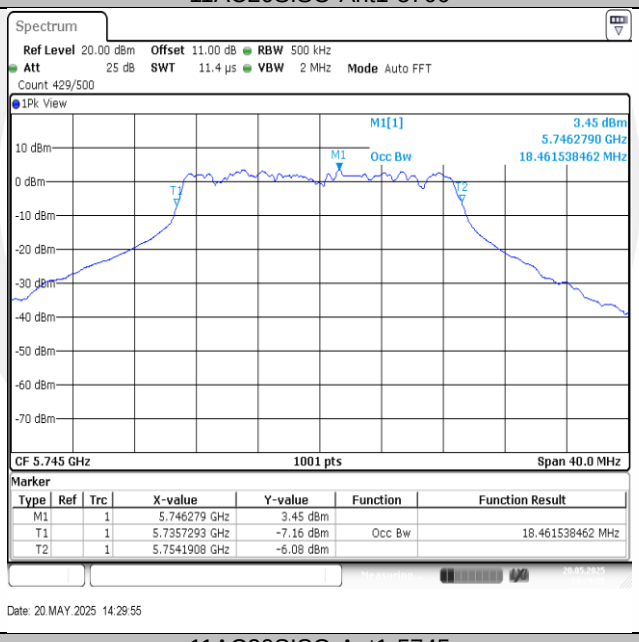

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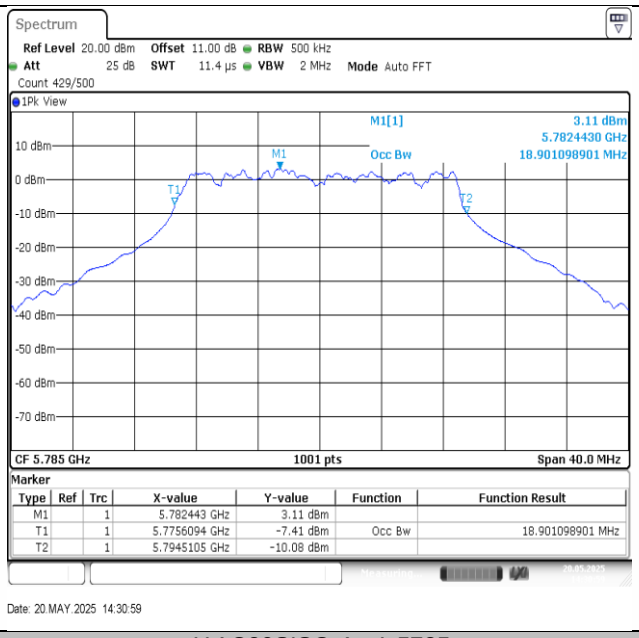
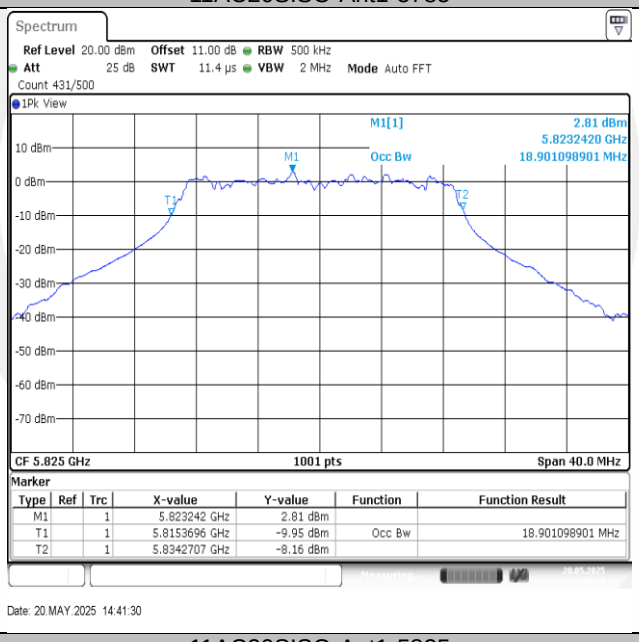
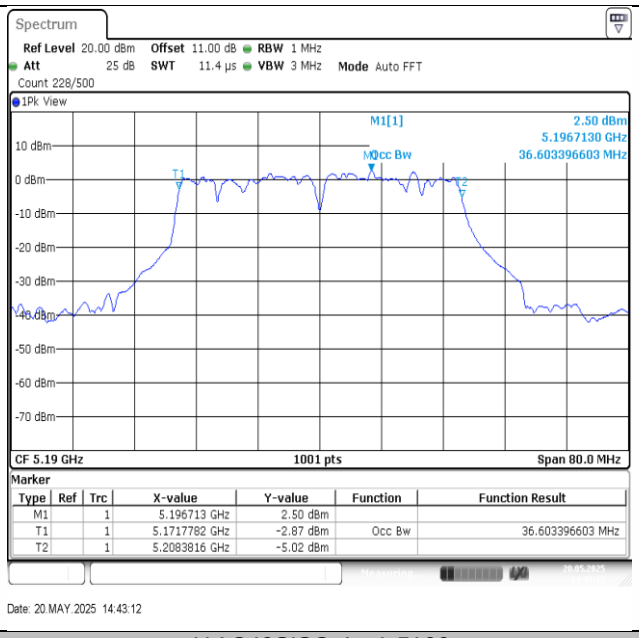


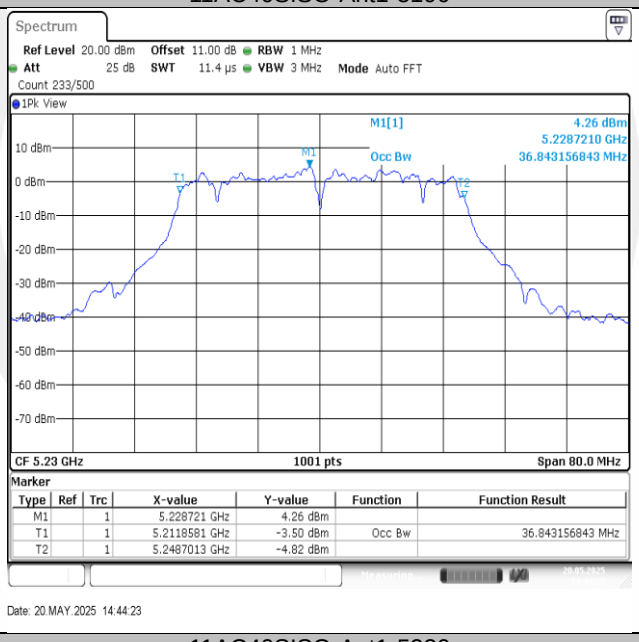
11AC20SISO-Ant1-5785



11AC20SISO-Ant1-5825

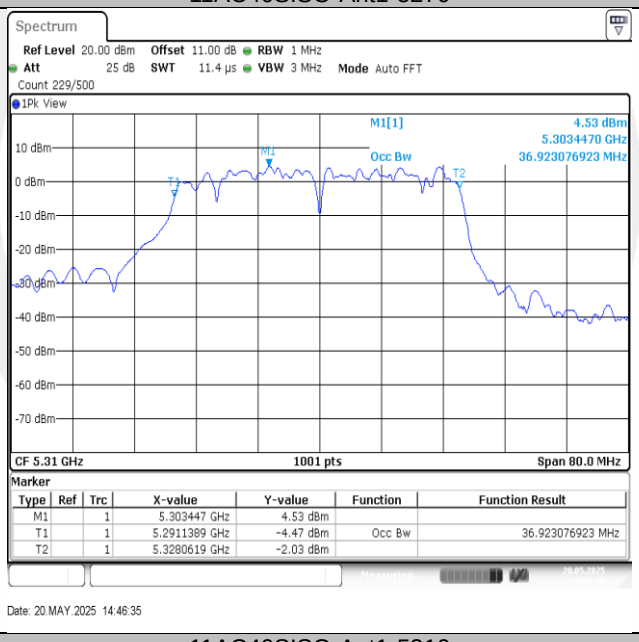


11AC40SISO-Ant1-5190



11AC40SISO-Ant1-5230

11AC40SISO-Ant1-5270



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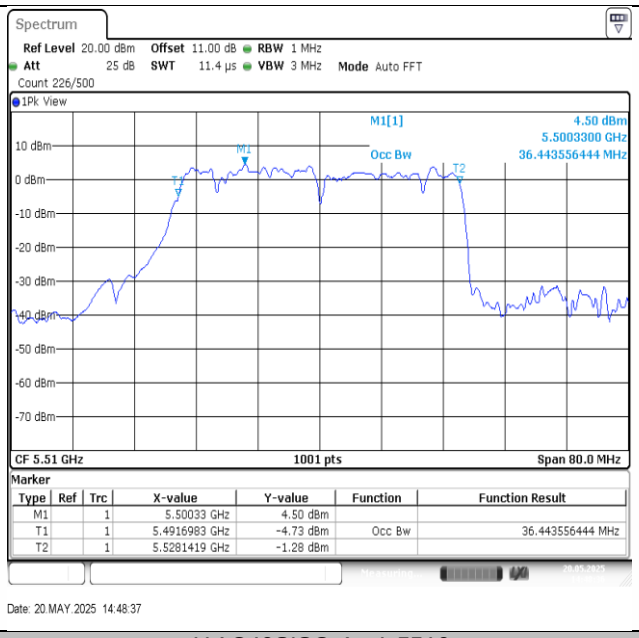

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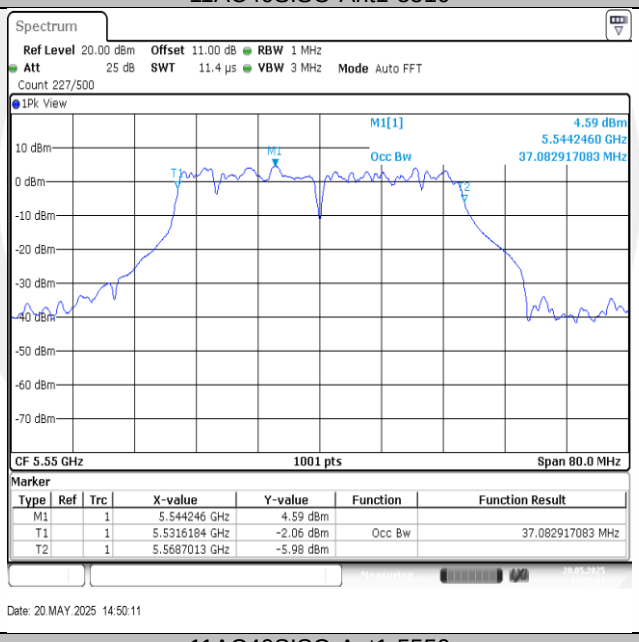

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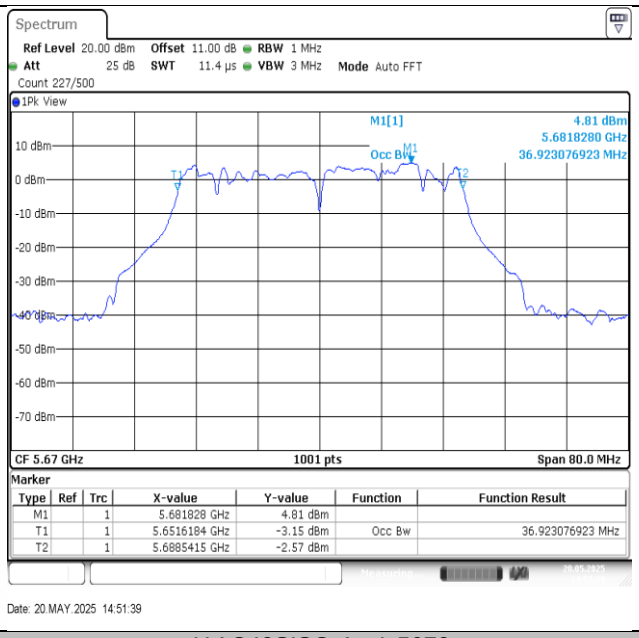

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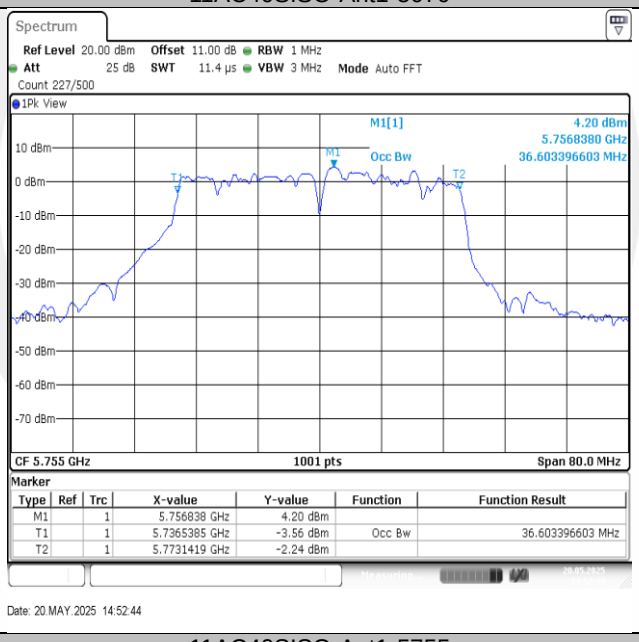

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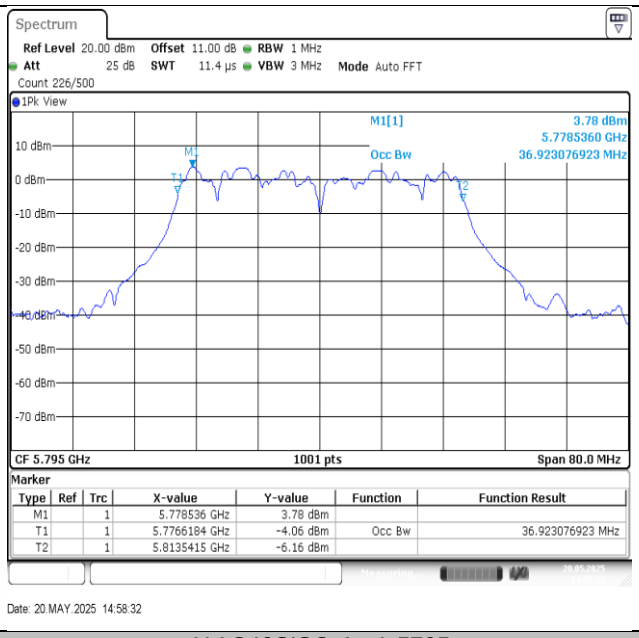

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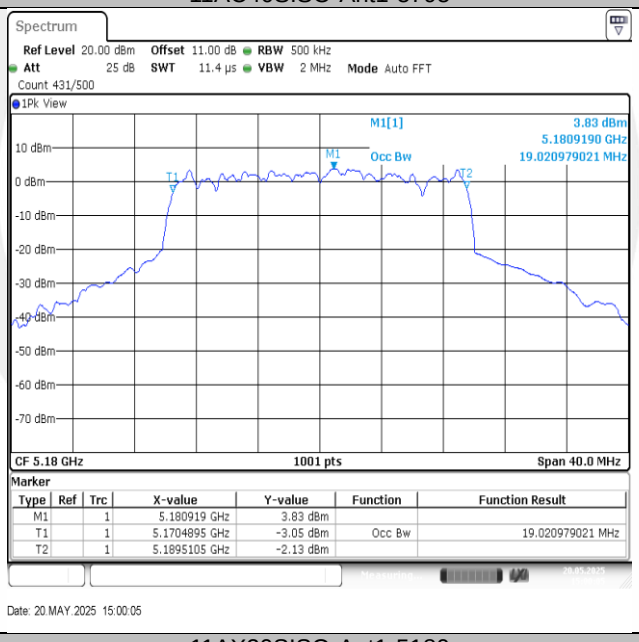

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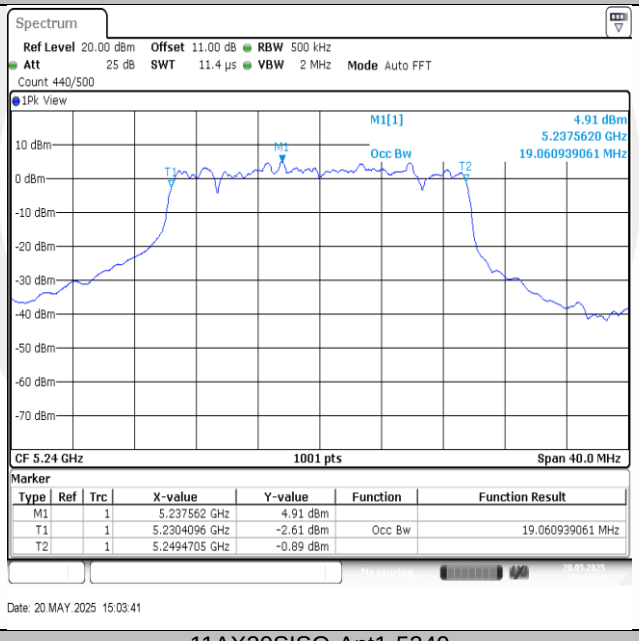

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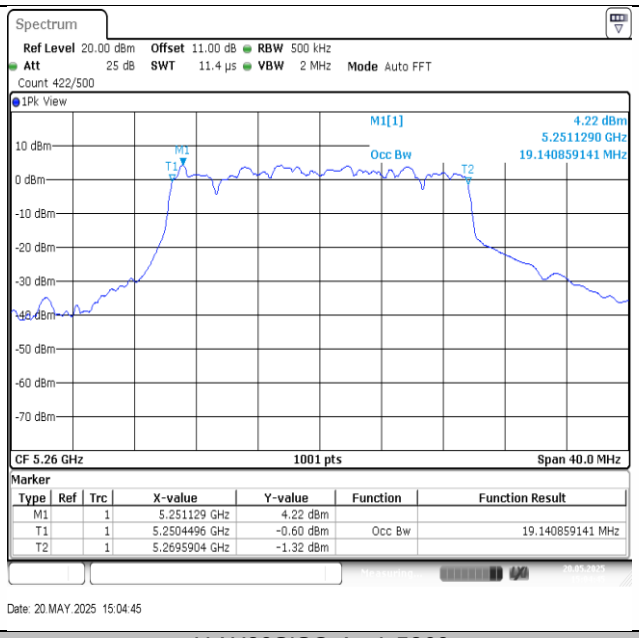

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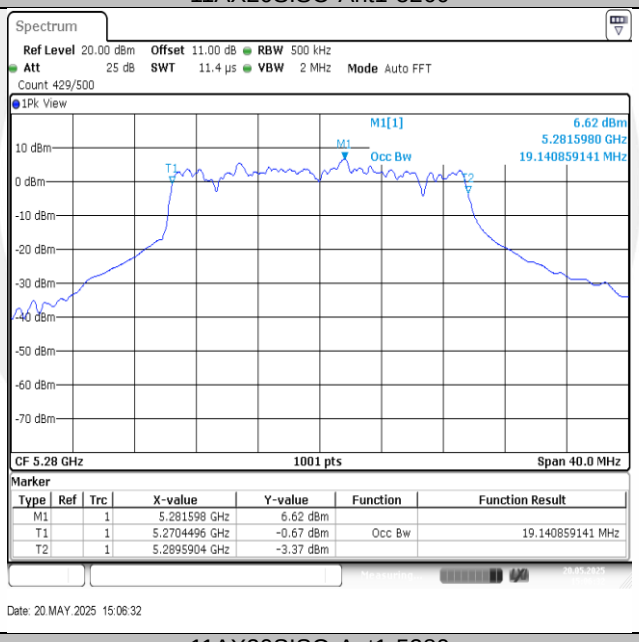

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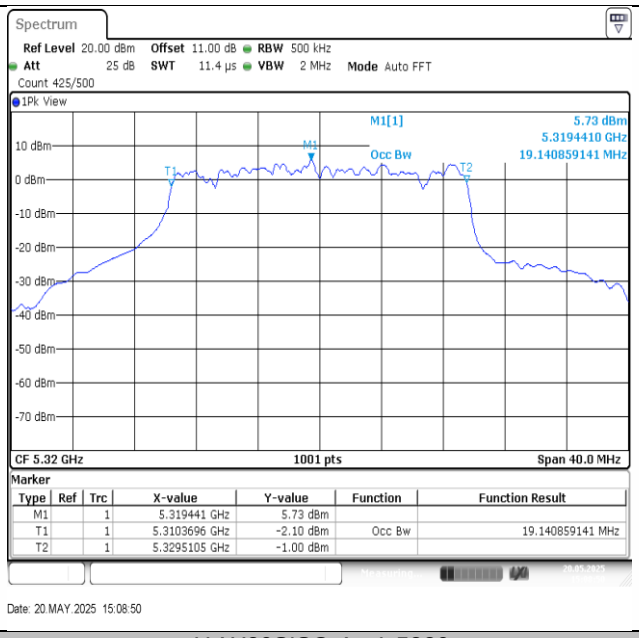

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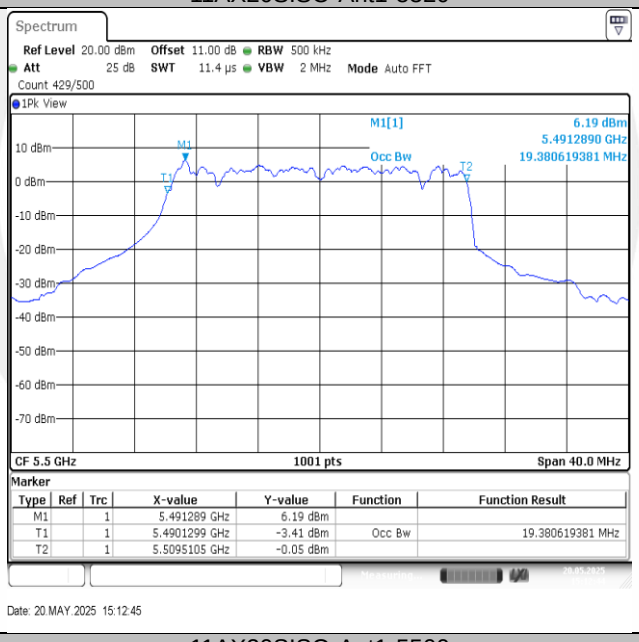

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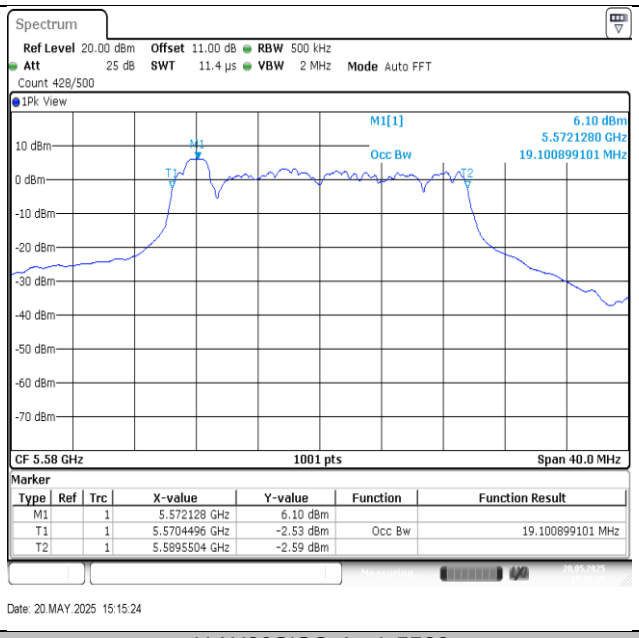

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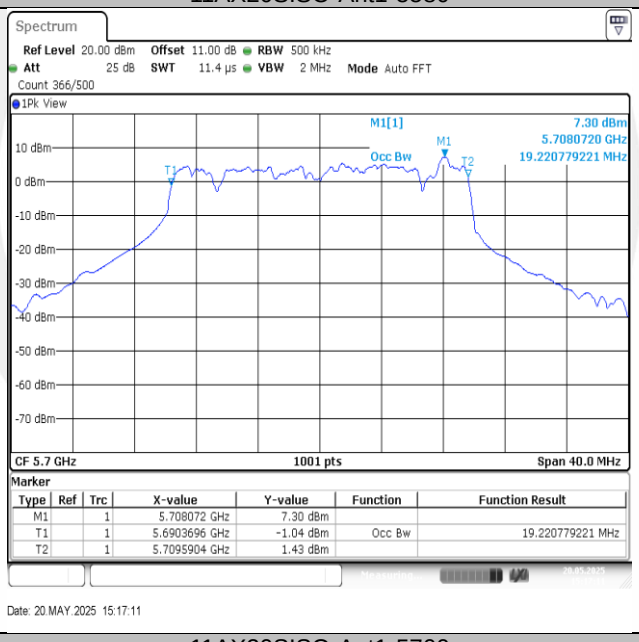

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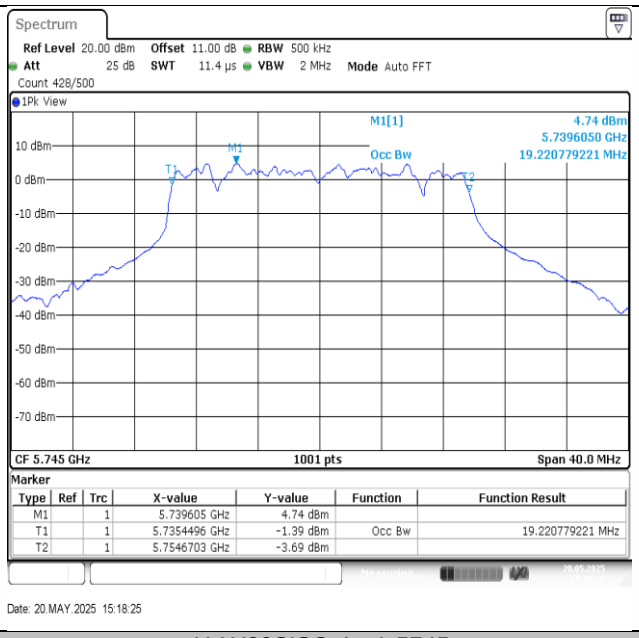

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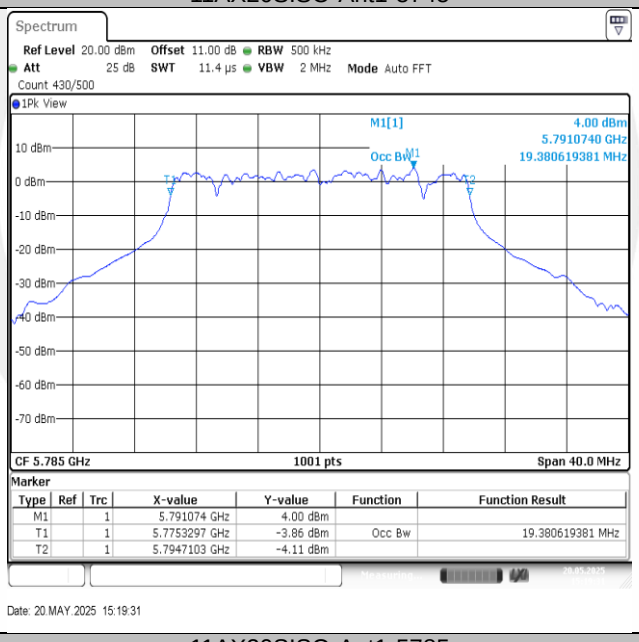

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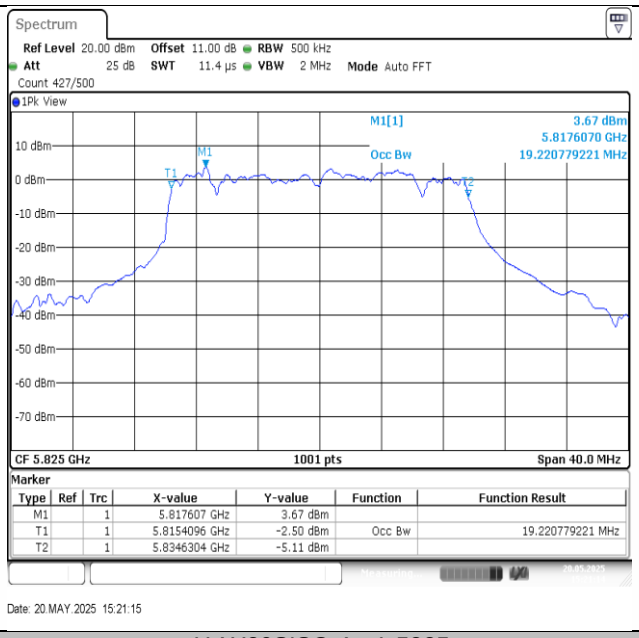

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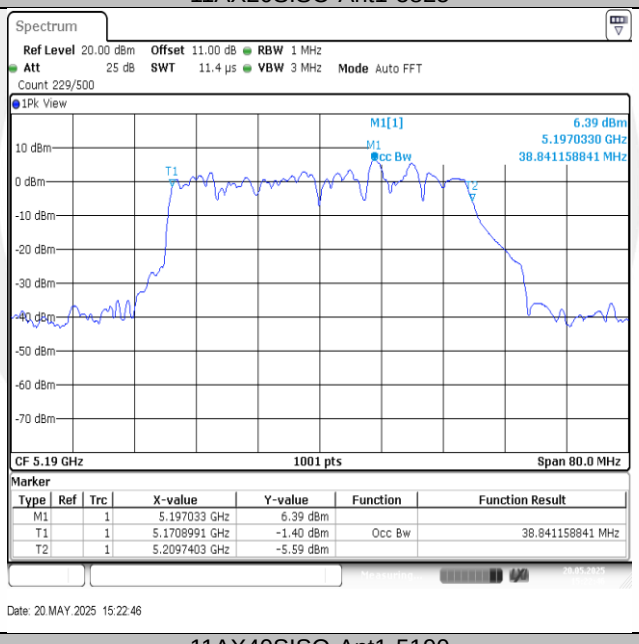

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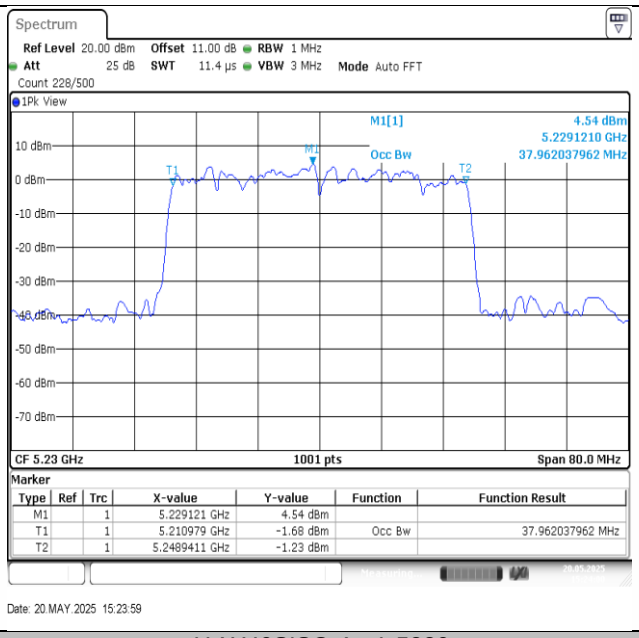

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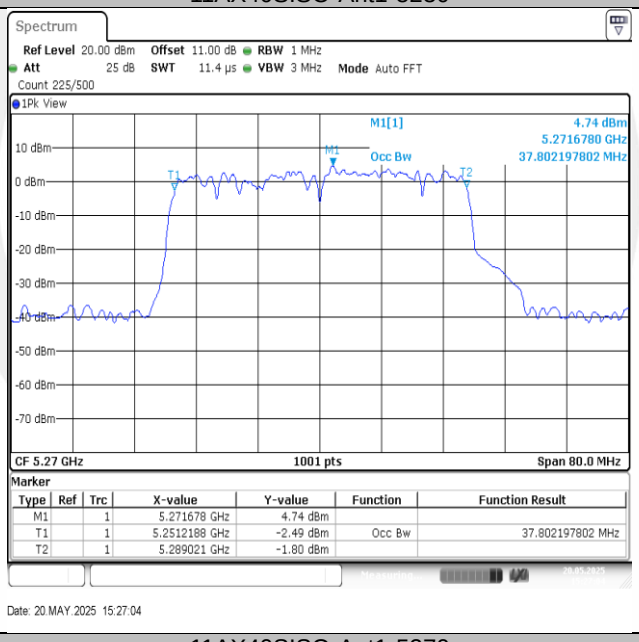

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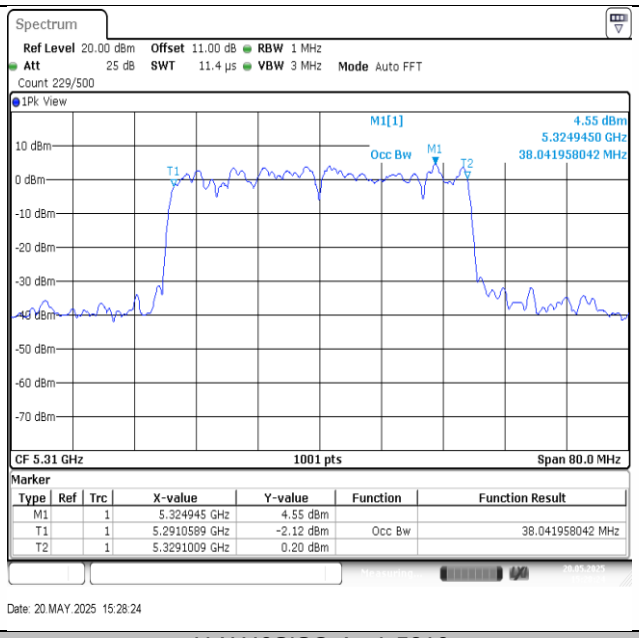

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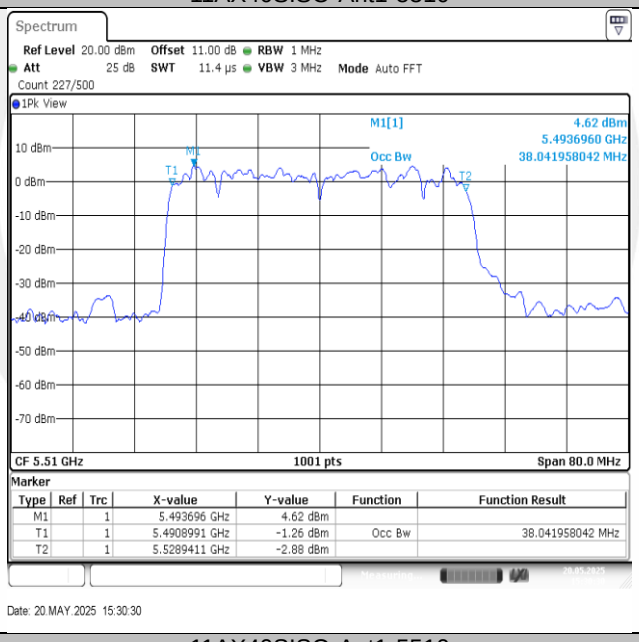

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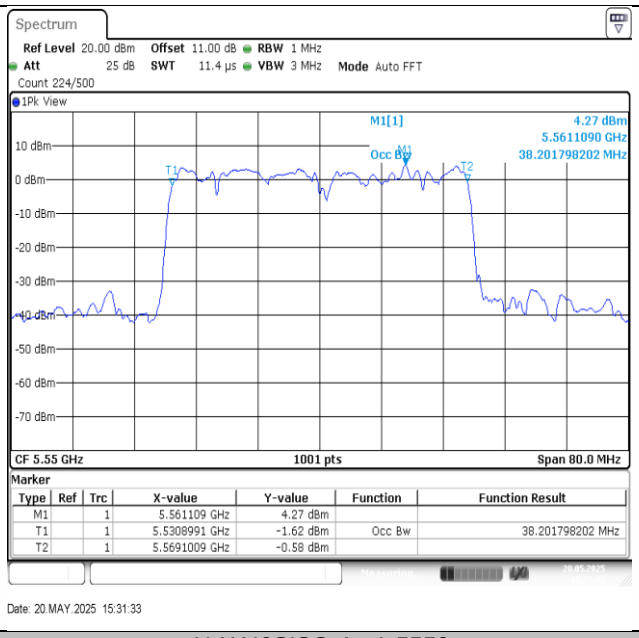

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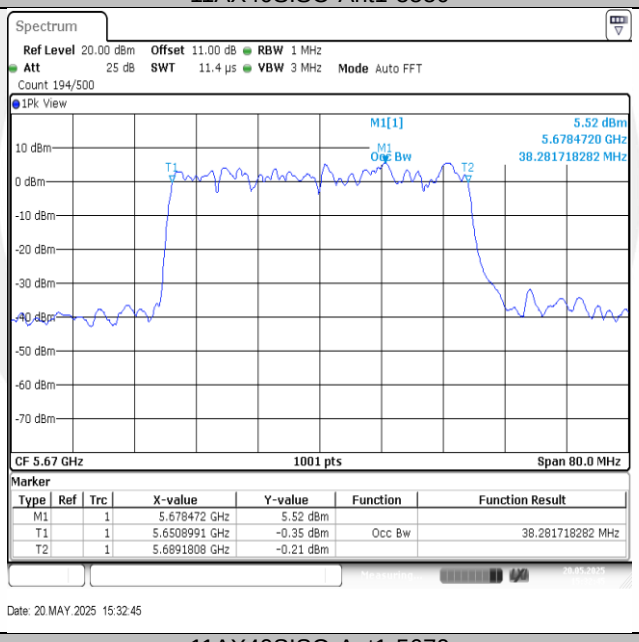

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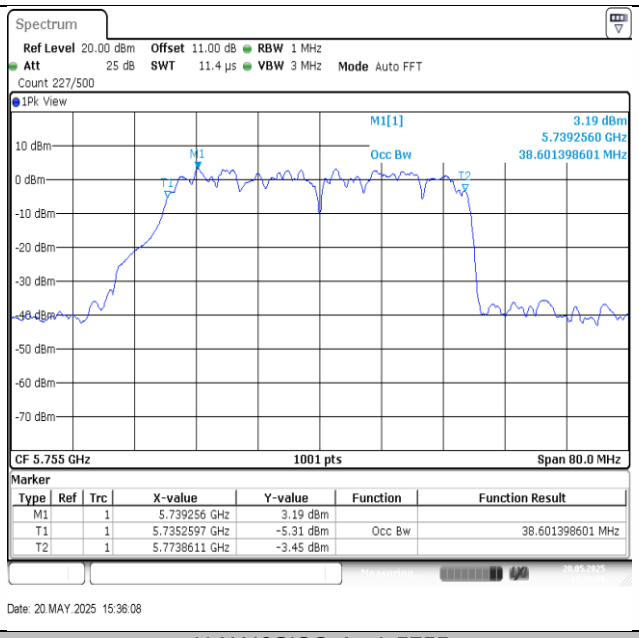

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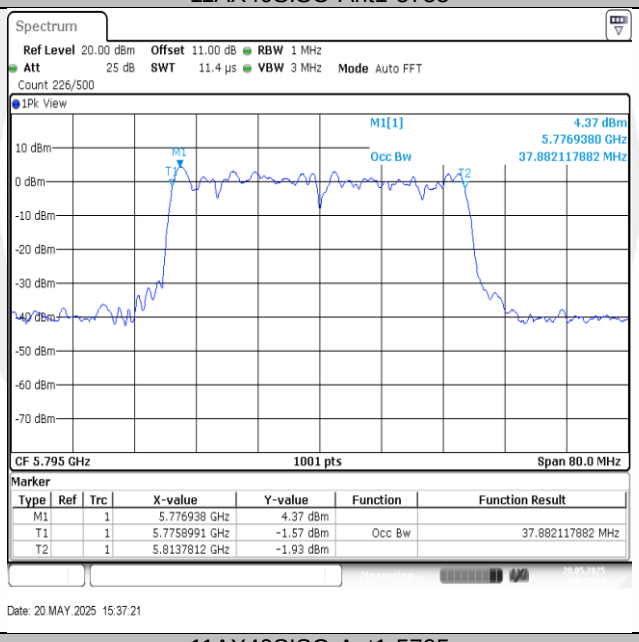

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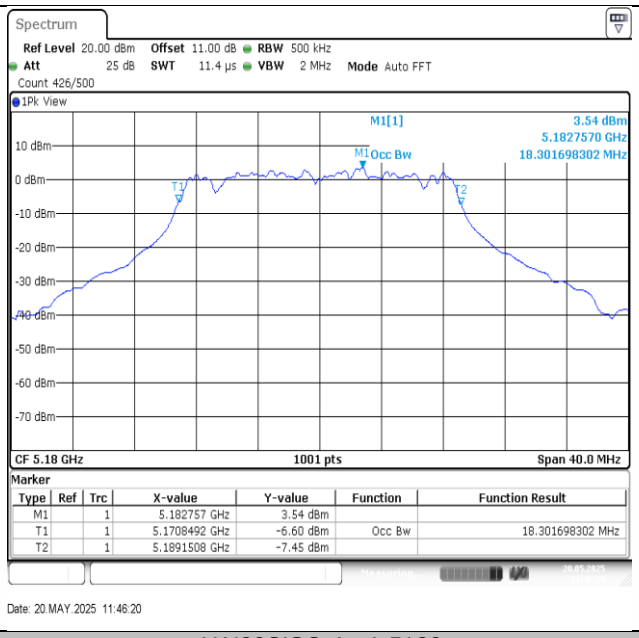

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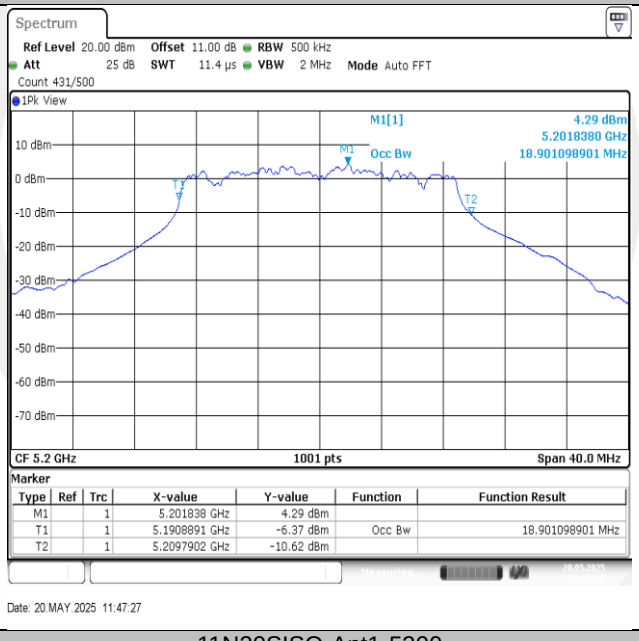

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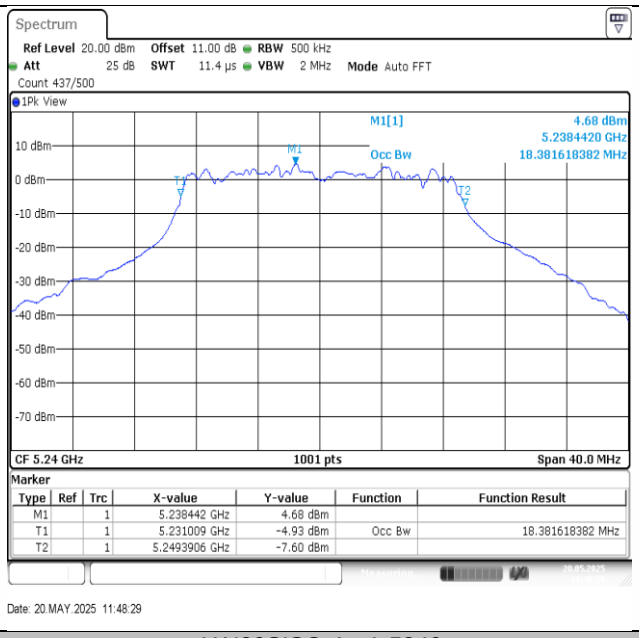

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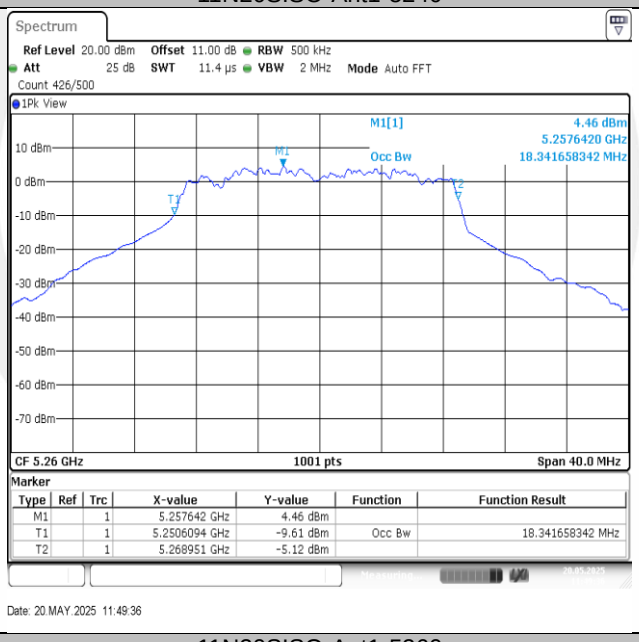

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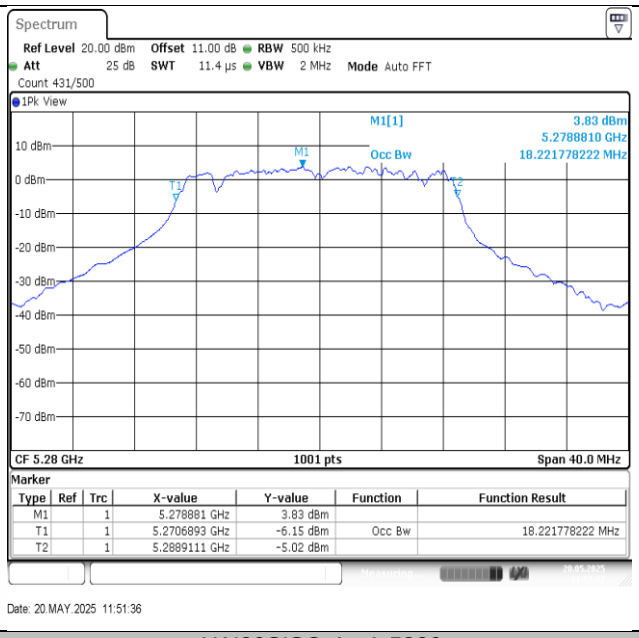

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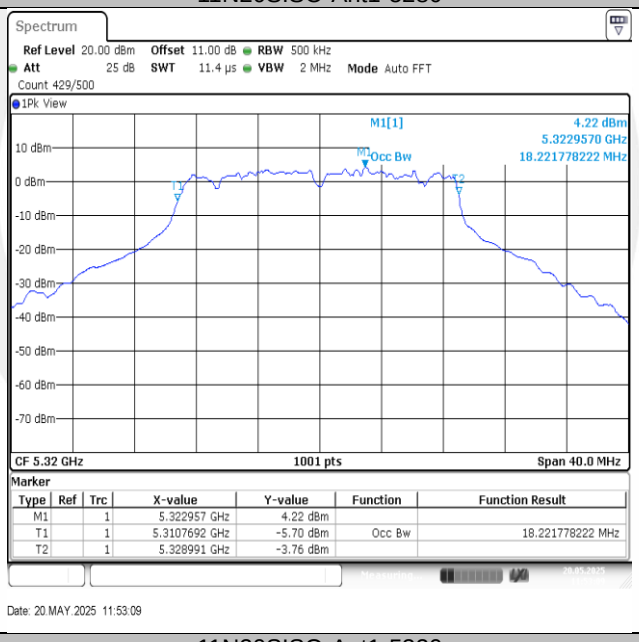

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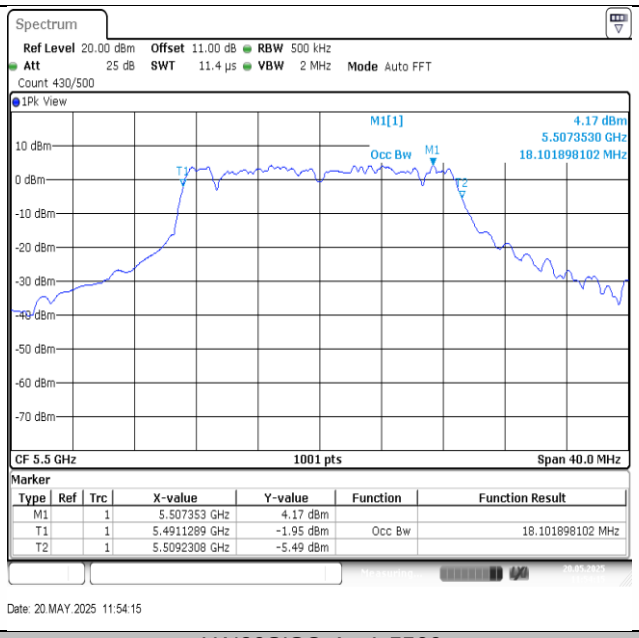

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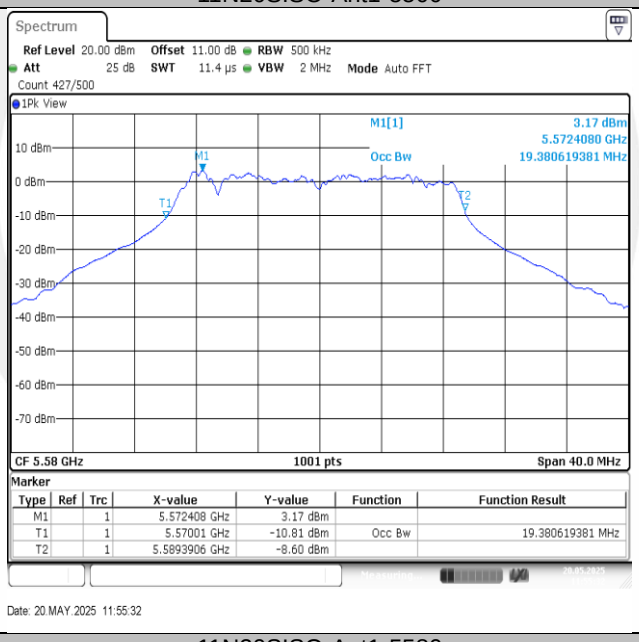

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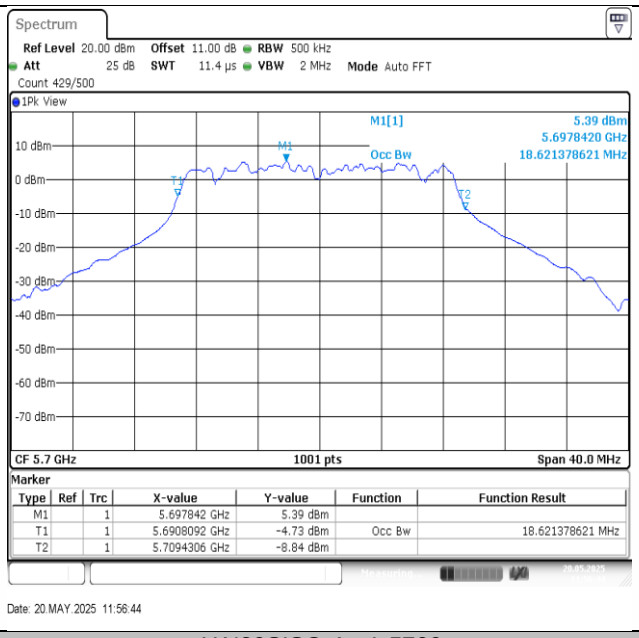

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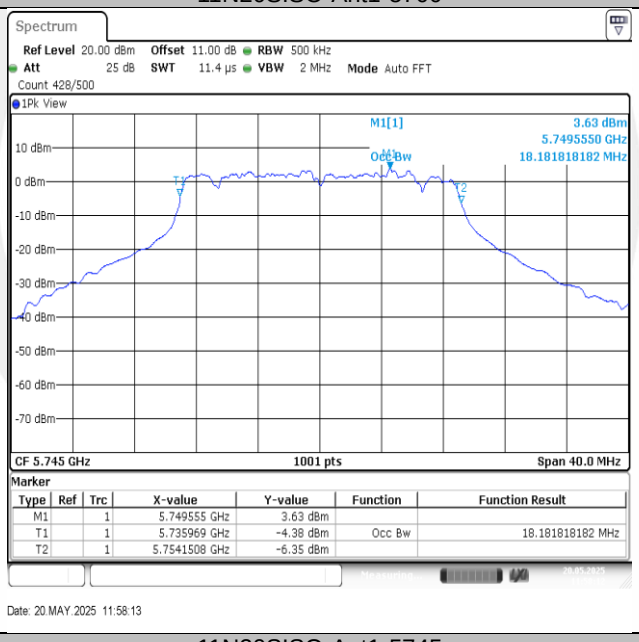

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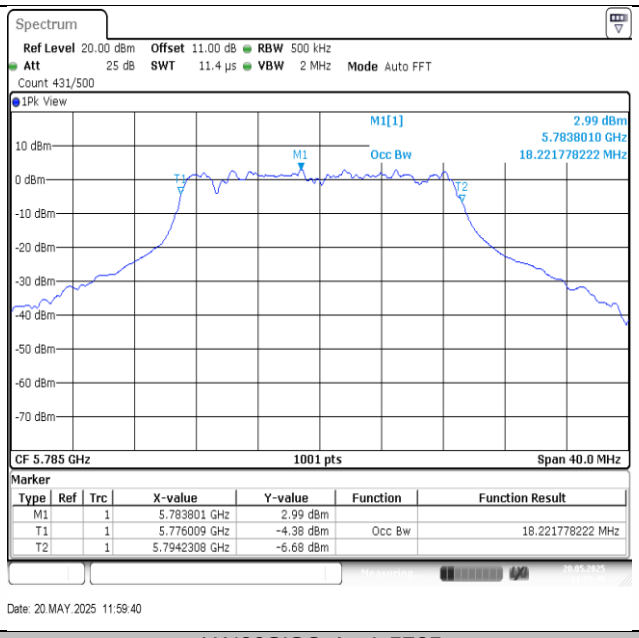

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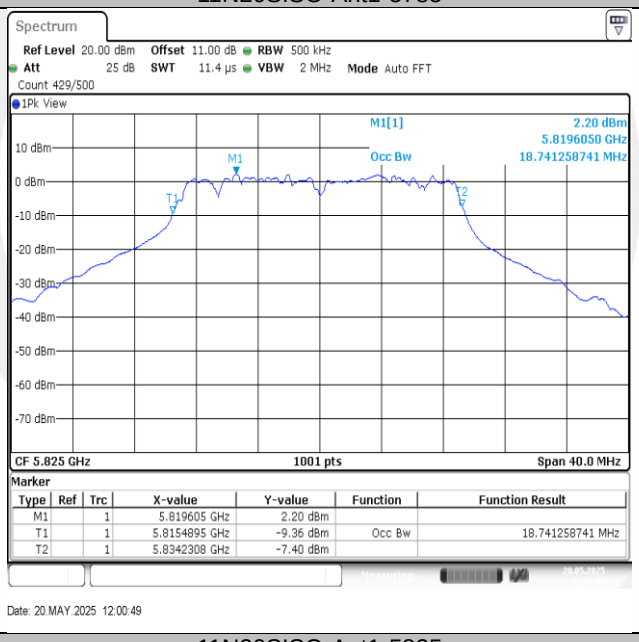

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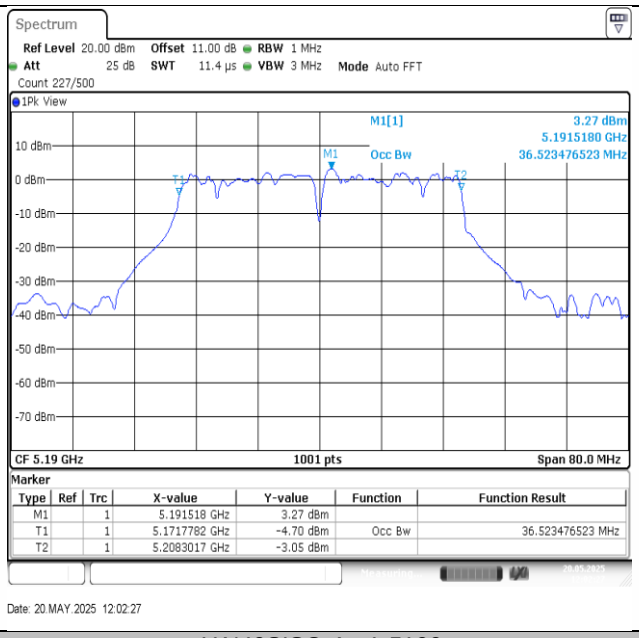

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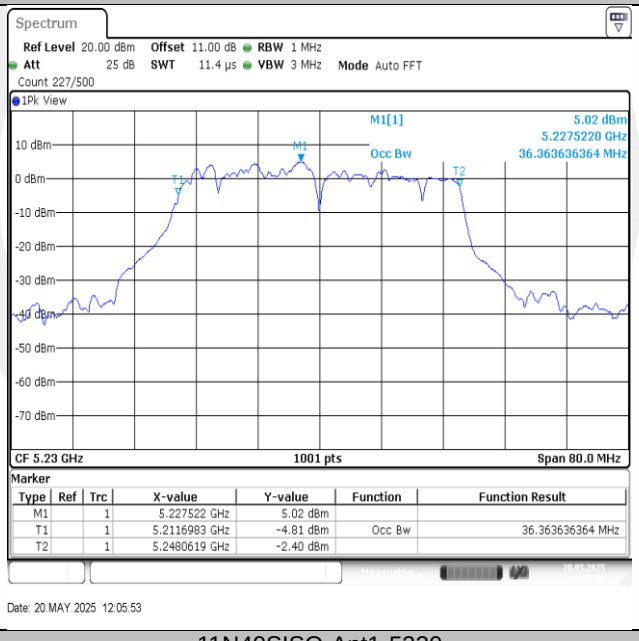

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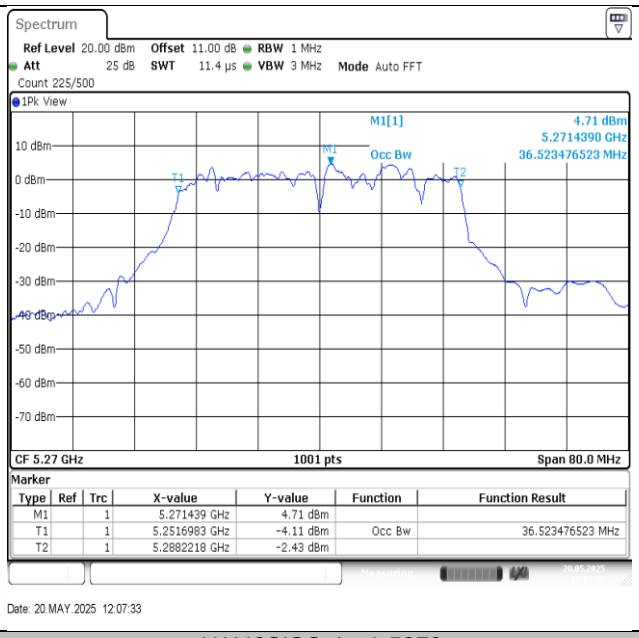

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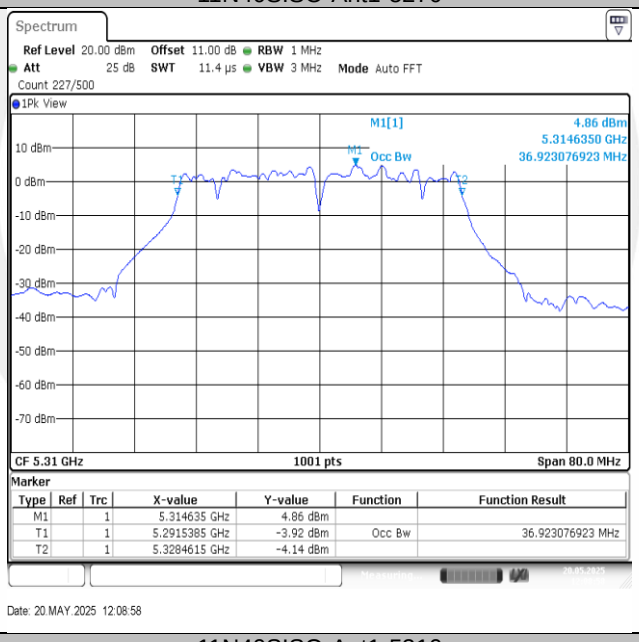

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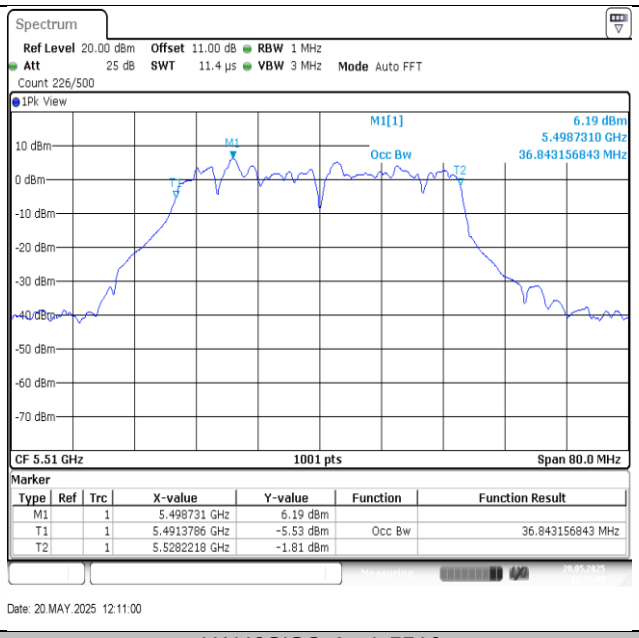

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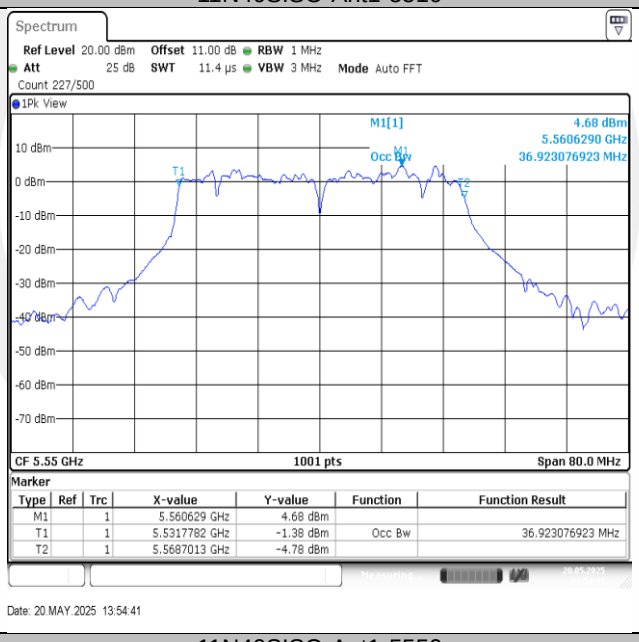

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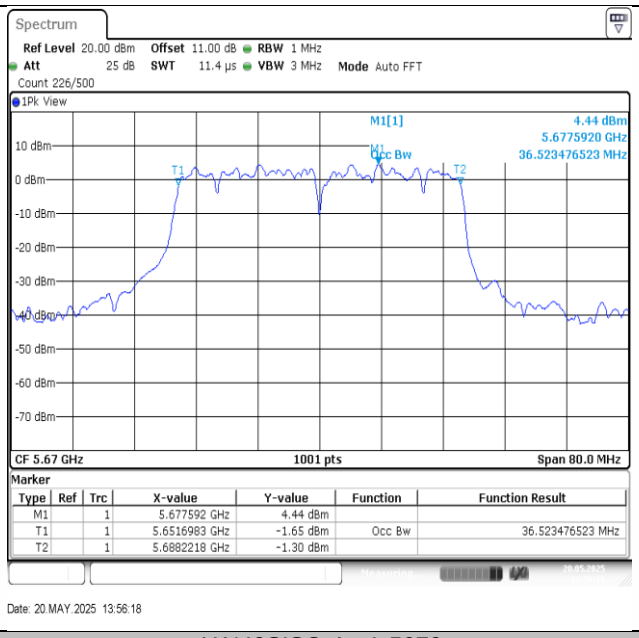

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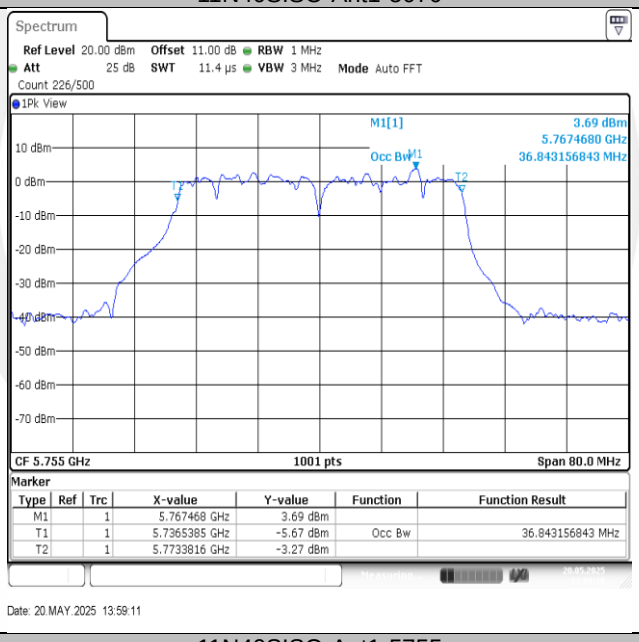

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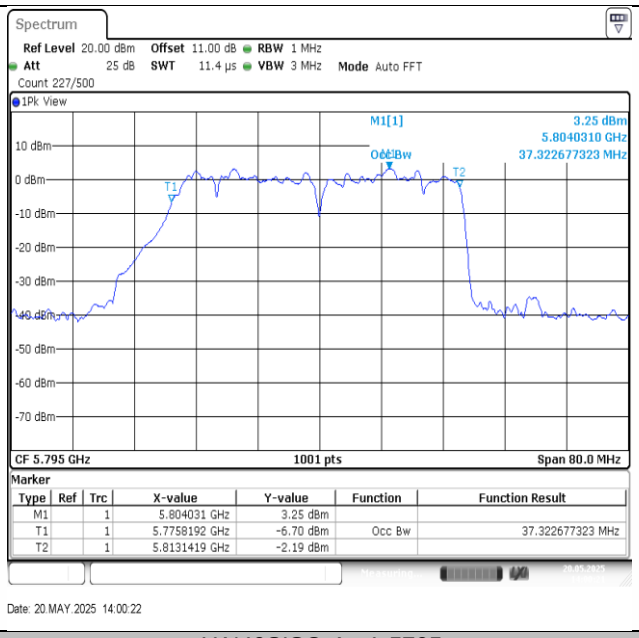

11N40SISO-Ant1-5795

8.2 MAXIMUM CONDUCTED OUTPUT POWER

8.2.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNIIBand I
According to FCC Part 15.407(a)(2) for UNIIBand II-A and UNIIBand II-C
According to FCC Part 15.407(a)(3) for UNIIBand III
According to 789033 D02 Section II(E)
According to RSS 247, 6.2

8.2.2 Conformance Limit

FCC Limit:

■ For the band 5.15-5.25 GHz

(a)(1) (i) For an outdoor access point, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(a) (1) (ii) For an indoor access point, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(a) (1) (iii) For fixed point-to-point access points, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. 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.

(a) (1) (iv) For client devices, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands

(a) (2)The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the band 5.725-5.85 GHz

(a) (3)The maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power 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

IC Limit:

- Frequency band 5150-5250 MHz

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz.

- Frequency band 5250-5350 MHz

The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less.
The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

- Frequency bands 5470-5600 MHz and 5650-5725 MHz

The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less.
The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

- Frequency band 5725-5850 MHz

The maximum conducted output power shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point 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-multipointsystems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

8.2.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.2.4 Test Procedure

The maximum average conducted output power can be measured using Method PM-G (Measurement using a gated RF average power meter):
Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

a. The Transmitter output (antenna port) was connected to the power meter.
b. Turn on the EUT and power meter and then record the power value.
c. Repeat above procedures on all channels needed to be tested.

8.2.5 Test Results

Temperature:	25 ˚C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

Note: N/A

Test Mode	Antenna	Frequency[MHz]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A	Ant1	5180	16.75	7.76	11.12	≤23.98	4.40	15.52	---	PASS
11A	Ant1	5200	16.75	7.76	11.48	≤23.98	4.40	15.88	---	PASS
11A	Ant1	5240	16.83	7.74	11.74	≤23.98	4.40	16.14	---	PASS
11A	Ant1	5260	16.75	7.76	11.91	≤23.98	4.40	16.31	---	PASS
11A	Ant1	5280	16.75	7.76	12.07	≤23.98	4.40	16.47	---	PASS
11A	Ant1	5320	16.75	7.76	12.39	≤23.98	4.40	16.79	---	PASS
11A	Ant1	5500	16.75	7.76	12.63	≤23.98	4.40	17.03	---	PASS
11A	Ant1	5580	16.75	7.76	10.66	≤23.98	4.40	15.06	---	PASS
11A	Ant1	5700	16.75	7.76	12.70	≤23.98	4.40	17.10	---	PASS
11A	Ant1	5745	16.75	7.76	11.79	≤30.00	4.40	16.19	---	PASS
11A	Ant1	5785	16.75	7.76	10.88	≤30.00	4.40	15.28	---	PASS
11A	Ant1	5825	16.75	7.76	10.23	≤30.00	4.40	14.63	---	PASS
11AC20SISO	Ant1	5180	15.86	8.00	11.30	≤23.98	4.40	15.70	---	PASS
11AC20SISO	Ant1	5200	15.86	8.00	11.50	≤23.98	4.40	15.90	---	PASS
11AC20SISO	Ant1	5240	15.86	8.00	11.85	≤23.98	4.40	16.25	---	PASS
11AC20SISO	Ant1	5260	15.86	8.00	12.10	≤23.98	4.40	16.50	---	PASS
11AC20SISO	Ant1	5280	15.86	8.00	12.32	≤23.98	4.40	16.72	---	PASS
11AC20SISO	Ant1	5320	15.86	8.00	12.49	≤23.98	4.40	16.89	---	PASS
11AC20SISO	Ant1	5500	15.86	8.00	12.75	≤23.98	4.40	17.15	---	PASS
11AC20SISO	Ant1	5580	15.84	8.00	10.92	≤23.98	4.40	15.32	---	PASS
11AC20SISO	Ant1	5700	15.86	8.00	13.02	≤23.98	4.40	17.42	---	PASS
11AC20SISO	Ant1	5745	15.86	8.00	12.05	≤30.00	4.40	16.45	---	PASS
11AC20SISO	Ant1	5785	15.86	8.00	11.16	≤30.00	4.40	15.56	---	PASS
11AC20SISO	Ant1	5825	15.86	8.00	10.32	≤30.00	4.40	14.72	---	PASS
11AC40SISO	Ant1	5190	8.23	10.85	11.59	≤23.98	4.40	15.99	---	PASS
11AC40SISO	Ant1	5230	8.23	10.85	12.11	≤23.98	4.40	16.51	---	PASS
11AC40SISO	Ant1	5270	8.23	10.85	12.41	≤23.98	4.40	16.81	---	PASS
11AC40SISO	Ant1	5310	8.65	10.63	12.34	≤23.98	4.40	16.74	---	PASS
11AC40SISO	Ant1	5510	8.65	10.63	12.71	≤23.98	4.40	17.11	---	PASS
11AC40SISO	Ant1	5550	8.23	10.85	12.71	≤23.98	4.40	17.11	---	PASS
11AC40SISO	Ant1	5670	8.65	10.63	12.62	≤23.98	4.40	17.02	---	PASS
11AC40SISO	Ant1	5755	8.23	10.85	11.97	≤30.00	4.40	16.37	---	PASS
11AC40SI	Ant1	5795	8.23	10.85	11.24	≤30.00	4.40	15.64	---	PASS