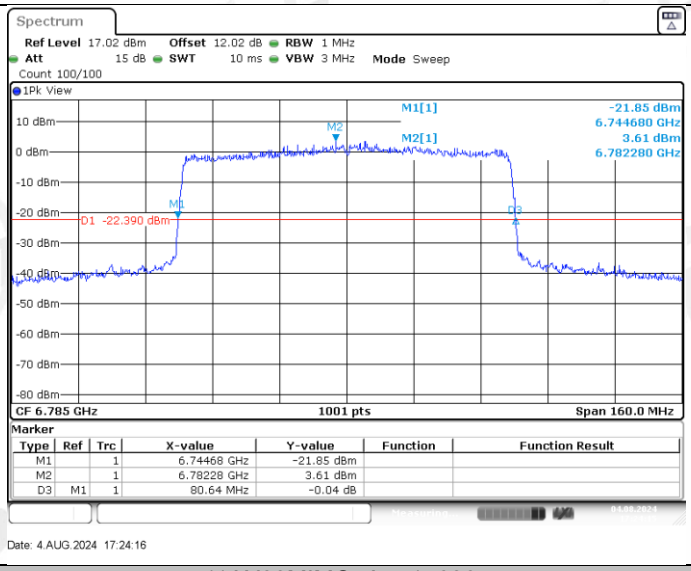
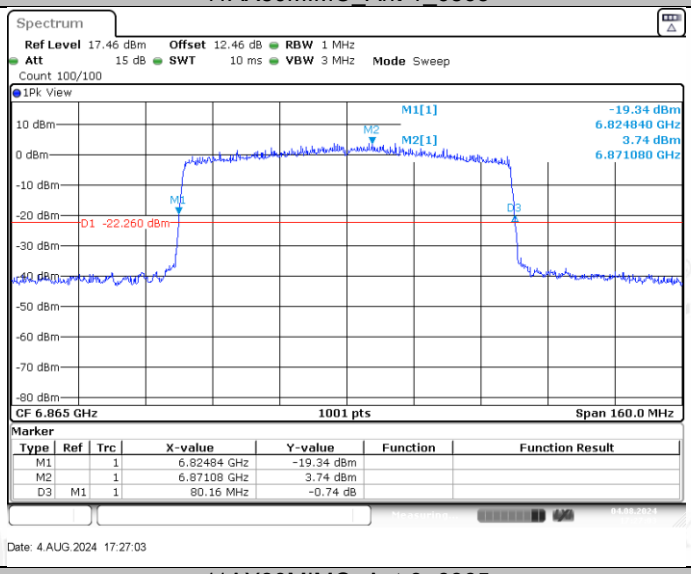


11AX80MIMO_Ant-1_6865



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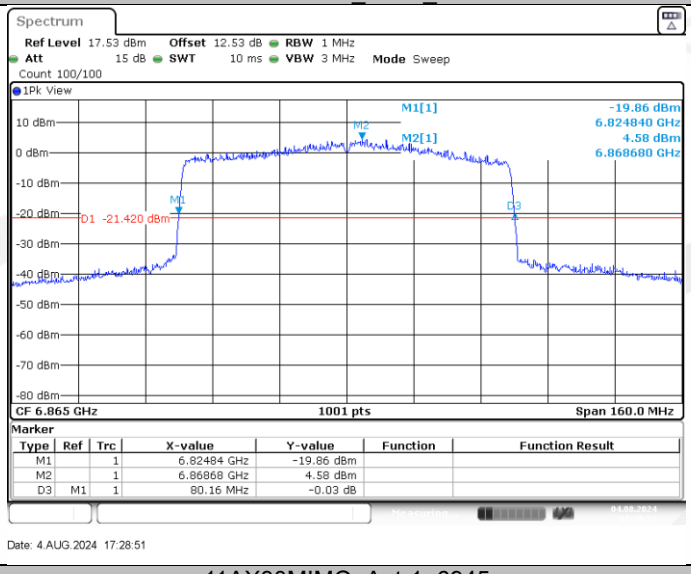
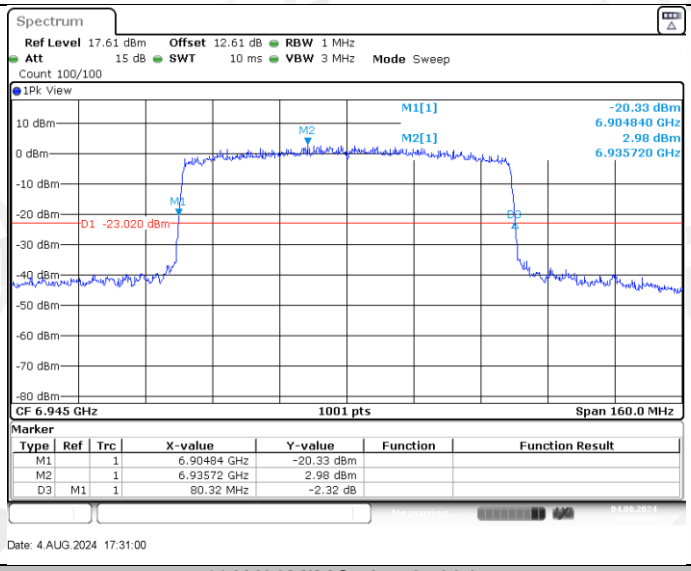


11AX80MIMO_Ant-1_6945



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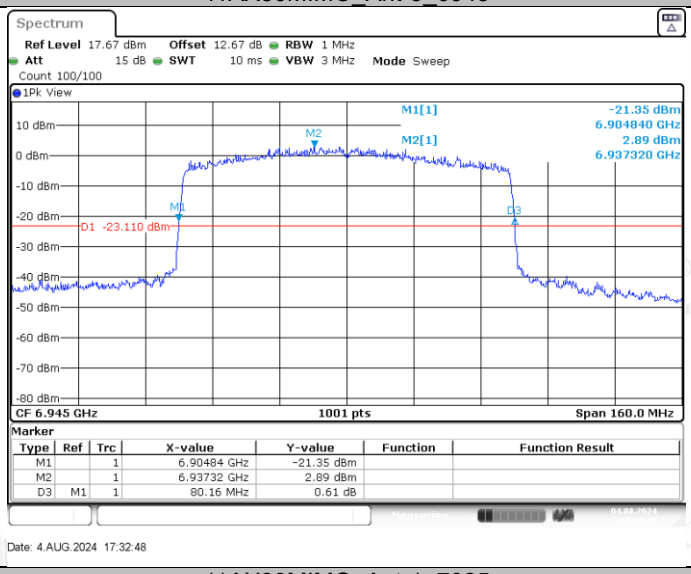
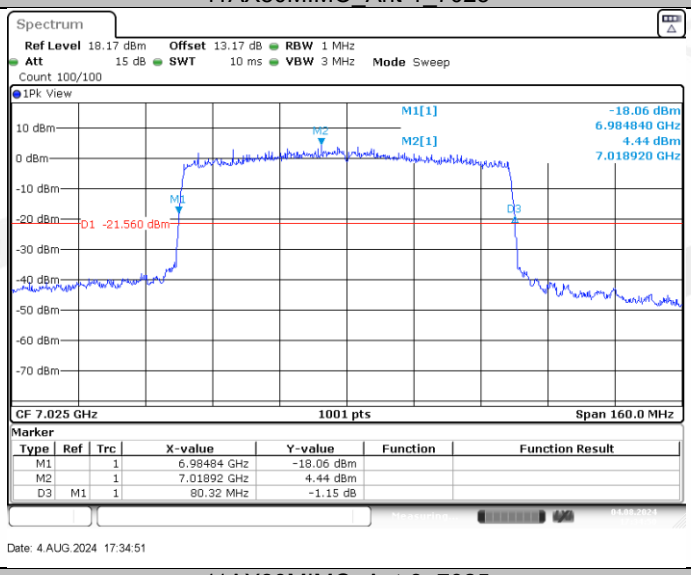


11AX80MIMO_Ant-1_7025



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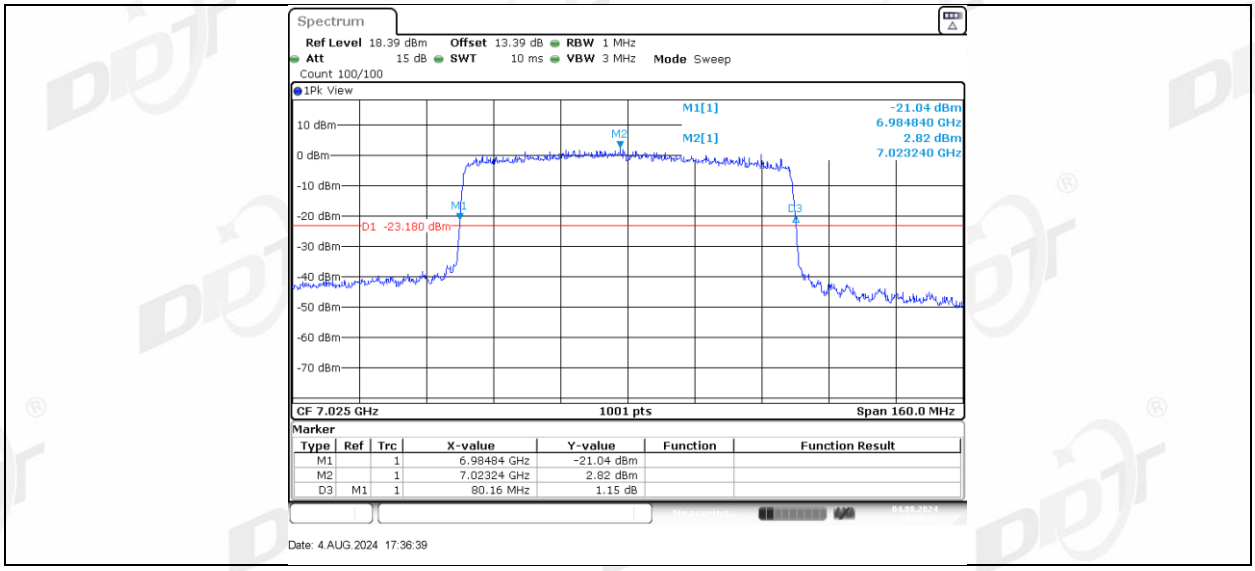
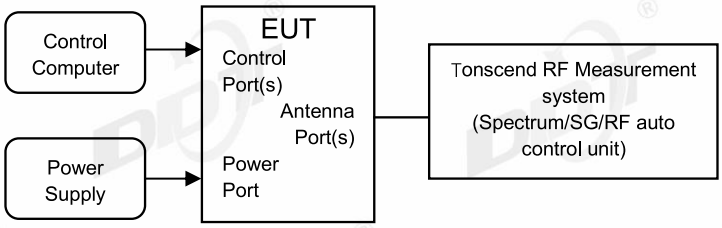

Spectrum
Ref Level 18.39 dBm Offset 13.39 dB RBW 1 MHz
Att 15 dB SWT 10 ms VBW 3 MHz Mode Sweep
Count 100/100
1Pk View
M1[1] -21.04 dBm
6.984840 GHz
M2[1] 2.82 dBm
7.023240 GHz
D1 -23.180 dBm
CF 7.025 GHz
1001 pts
Span 160.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 6.98484 GHz -21.04 dBm
M2 1 7.02324 GHz 2.82 dBm
D3 M1 1 80.16 MHz 1.15 dB
Date: 4.AUG.2024 17:36:39

5. 99% Bandwidth

5.1. Block diagram of test setup



5.2. Limits

The occupied bandwidth of an RLAN device shall not exceed 320 MHz.

5.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	1% to 5% of the OBW
VBW	approximately three times the RBW
Trace	Max hold

(2) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

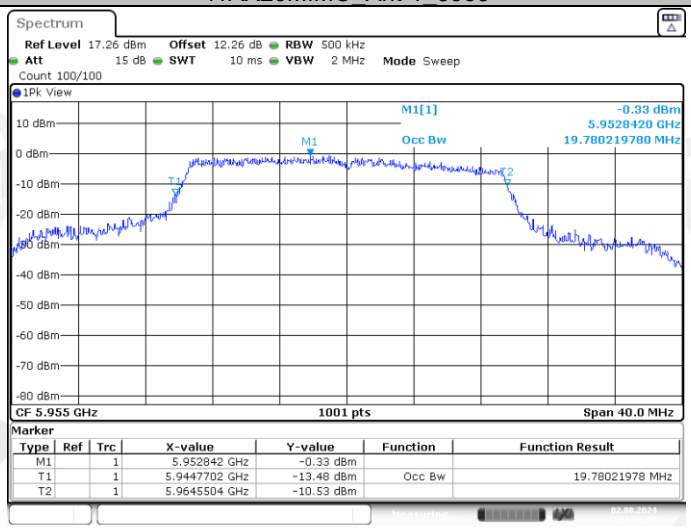
5.4. Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AX20MIMO	Ant-1	5955	19.78	5944.7702	5964.5504	≤320	PASS
	Ant-3	5955	19.62	5945.0899	5964.7103	≤320	PASS
	Ant-1	6175	19.62	6165.2098	6184.8302	≤320	PASS
	Ant-3	6175	19.5	6165.1299	6184.6304	≤320	PASS
	Ant-1	6415	19.78	6405.0100	6424.7902	≤320	PASS
	Ant-3	6415	19.66	6405.0500	6424.7103	≤320	PASS
	Ant-1	6435	19.82	6425.0899	6444.9101	≤320	PASS
	Ant-3	6435	19.7	6424.9700	6444.6703	≤320	PASS
	Ant-1	6475	19.66	6465.1698	6484.8302	≤320	PASS
	Ant-3	6475	19.54	6465.1698	6484.7103	≤320	PASS
	Ant-1	6515	19.74	6505.0899	6524.8302	≤320	PASS
	Ant-3	6515	19.78	6505.2098	6524.9900	≤320	PASS
	Ant-1	6535	19.74	6525.1299	6544.8701	≤320	PASS
	Ant-3	6535	19.62	6525.2098	6544.8302	≤320	PASS
	Ant-1	6695	19.74	6685.0899	6704.8302	≤320	PASS
	Ant-3	6695	19.66	6684.9700	6704.6304	≤320	PASS
	Ant-1	6855	19.74	6845.1299	6864.8701	≤320	PASS
	Ant-3	6855	19.7	6845.2498	6864.9500	≤320	PASS
	Ant-1	6875	19.62	6865.1698	6884.7902	≤320	PASS
	Ant-3	6875	19.54	6865.1299	6884.6703	≤320	PASS
	Ant-1	6895	19.78	6885.0899	6904.8701	≤320	PASS
	Ant-3	6895	19.66	6885.0100	6904.6703	≤320	PASS
	Ant-1	6995	19.7	6985.1299	7004.8302	≤320	PASS
	Ant-3	6995	19.5	6985.2498	7004.7502	≤320	PASS
	Ant-1	7095	19.74	7085.0899	7104.8302	≤320	PASS
	Ant-3	7095	19.54	7085.1698	7104.7103	≤320	PASS
	Ant-1	7115	19.301	7105.2897	7124.5904	≤320	PASS
	Ant-3	7115	19.381	7105.2498	7124.6304	≤320	PASS
11AX40MIMO	Ant-1	5965	37.562	5946.1389	5983.7013	≤320	PASS
	Ant-3	5965	37.642	5946.0589	5983.7013	≤320	PASS
	Ant-1	6165	37.642	6146.2188	6183.8611	≤320	PASS
	Ant-3	6165	37.483	6146.1389	6183.6214	≤320	PASS
	Ant-1	6405	37.562	6386.1389	6423.7013	≤320	PASS
	Ant-3	6405	37.403	6386.2188	6423.6214	≤320	PASS
	Ant-1	6445	37.562	6426.2188	6463.7812	≤320	PASS
	Ant-3	6445	37.722	6426.1389	6463.8611	≤320	PASS
	Ant-1	6485	37.642	6466.1389	6503.7812	≤320	PASS
	Ant-3	6485	37.403	6466.1389	6503.5415	≤320	PASS
	Ant-1	6525	37.642	6506.1389	6543.7812	≤320	PASS
	Ant-3	6525	37.483	6506.3786	6543.8611	≤320	PASS
	Ant-1	6565	37.722	6546.1389	6583.8611	≤320	PASS
	Ant-3	6565	37.642	6546.0589	6583.7013	≤320	PASS
	Ant-1	6685	37.562	6666.1389	6703.7013	≤320	PASS
	Ant-3	6685	37.403	6666.1389	6703.5415	≤320	PASS
	Ant-1	6845	37.562	6826.2188	6863.7812	≤320	PASS
	Ant-3	6845	37.722	6826.1389	6863.8611	≤320	PASS
	Ant-1	6885	37.562	6866.1389	6903.7013	≤320	PASS
	Ant-3	6885	37.403	6866.1389	6903.5415	≤320	PASS
	Ant-1	6925	37.483	6906.2188	6943.7013	≤320	PASS
	Ant-3	6925	37.243	6906.4585	6943.7013	≤320	PASS
	Ant-1	6965	37.483	6946.2188	6983.7013	≤320	PASS
	Ant-3	6965	37.722	6946.0589	6983.7812	≤320	PASS
	Ant-1	7085	37.722	7066.0589	7103.7812	≤320	PASS
	Ant-3	7085	37.722	7066.0589	7103.7812	≤320	PASS
11AX80MIMO	Ant-1	5985	77.203	5946.3187	6023.5215	≤320	PASS
	Ant-3	5985	77.522	5946.1588	6023.6813	≤320	PASS
	Ant-1	6145	77.043	6106.6384	6183.6813	≤320	PASS
	Ant-3	6145	76.244	6106.9580	6183.2018	≤320	PASS
	Ant-1	6385	76.563	6346.6384	6423.2018	≤320	PASS
	Ant-3	6385	77.203	6346.1588	6423.3616	≤320	PASS

	Ant-1	6465	76.883	6426.6384	6503.5215	≤320	PASS
	Ant-3	6465	76.563	6426.7982	6503.3616	≤320	PASS
	Ant-1	6545	77.043	6506.6384	6583.6813	≤320	PASS
	Ant-3	6545	76.404	6506.9580	6583.3616	≤320	PASS
	Ant-1	6625	76.883	6586.4785	6663.3616	≤320	PASS
	Ant-3	6625	76.723	6586.6384	6663.3616	≤320	PASS
	Ant-1	6705	76.563	6666.6384	6743.2018	≤320	PASS
	Ant-3	6705	77.363	6666.3187	6743.6813	≤320	PASS
	Ant-1	6785	76.723	6746.6384	6823.3616	≤320	PASS
	Ant-3	6785	77.203	6746.4785	6823.6813	≤320	PASS
	Ant-1	6865	76.883	6826.6384	6903.5215	≤320	PASS
	Ant-3	6865	76.563	6826.6384	6903.2018	≤320	PASS
	Ant-1	6945	76.883	6906.4785	6983.3616	≤320	PASS
	Ant-3	6945	76.244	6906.9580	6983.2018	≤320	PASS
	Ant-1	7025	76.883	6986.4785	7063.3616	≤320	PASS
	Ant-3	7025	76.883	6986.4785	7063.3616	≤320	PASS

5.5. Test Graphs

11AX20MIMO_Ant-1_5955



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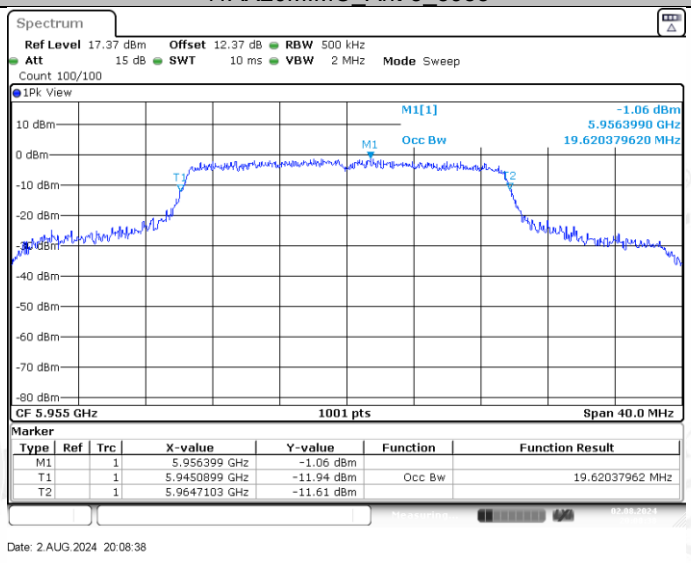

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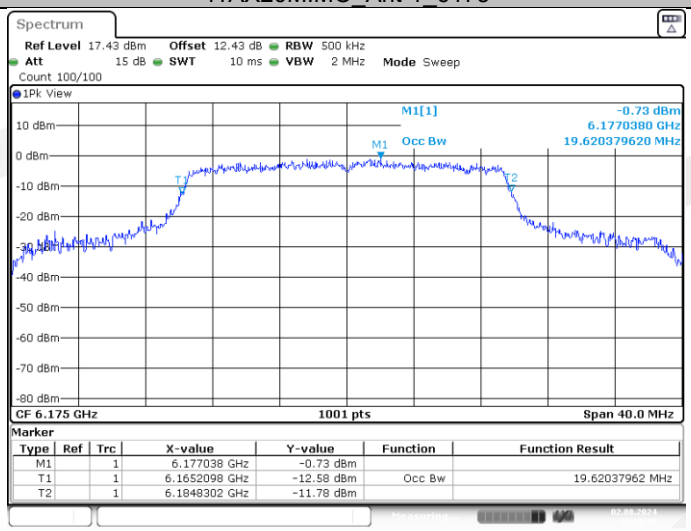

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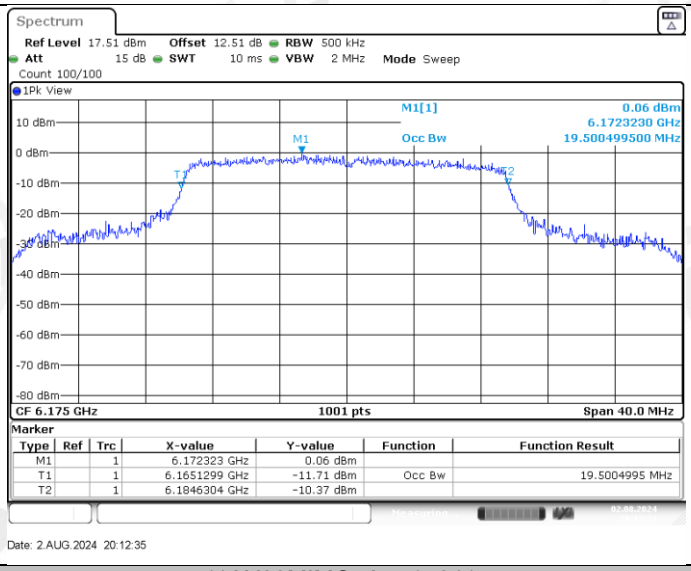

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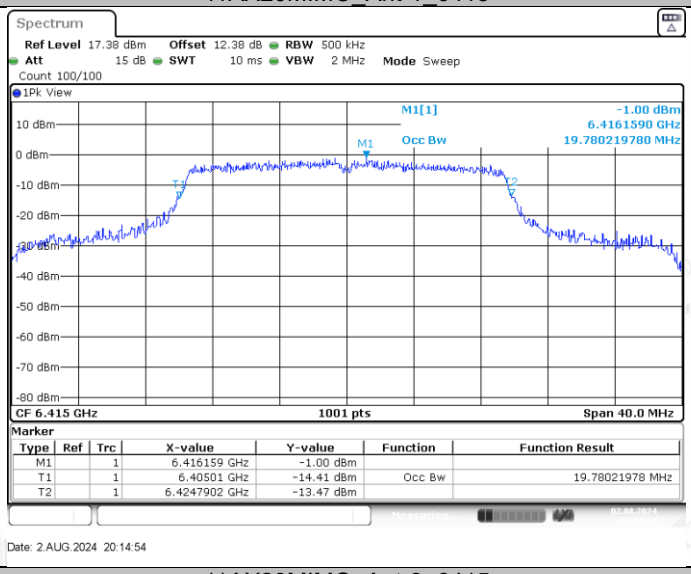

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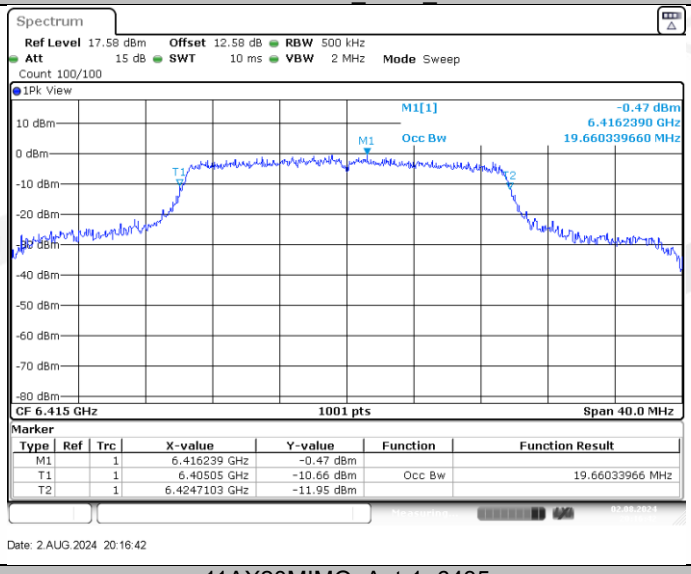

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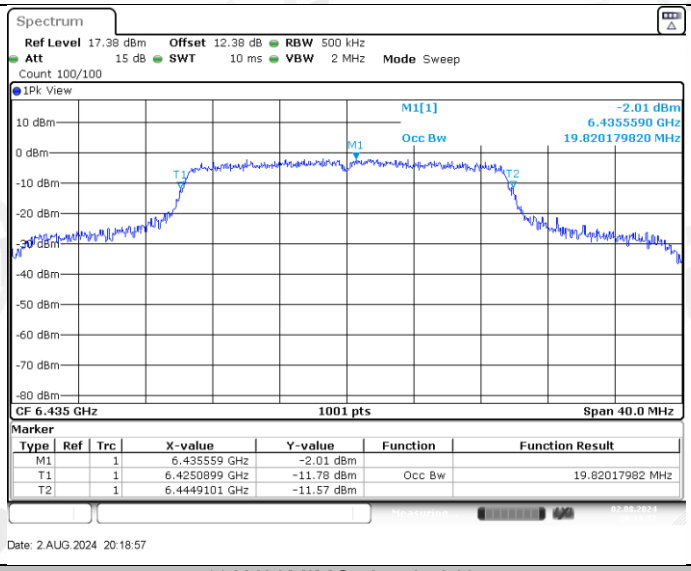

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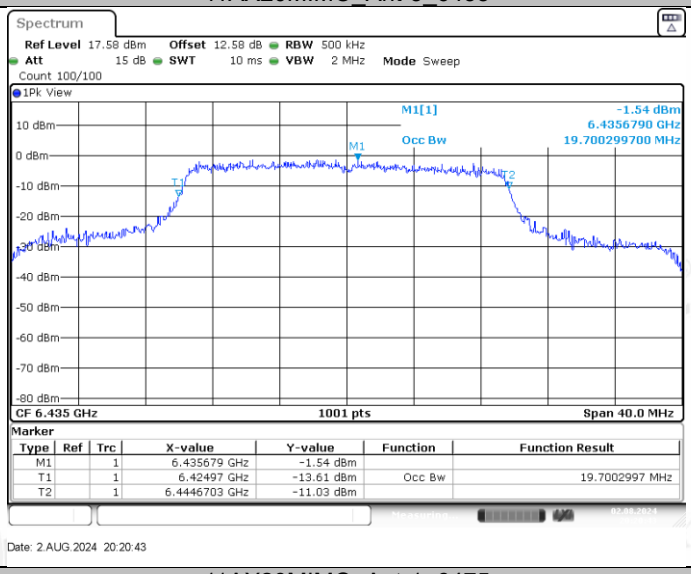

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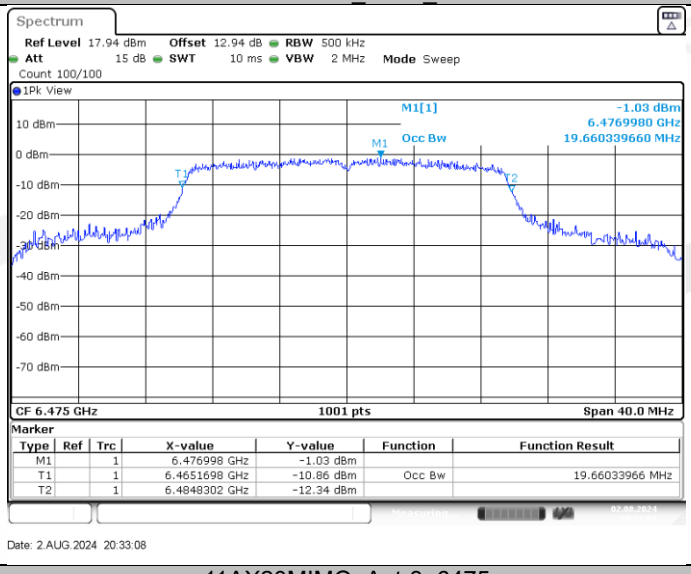

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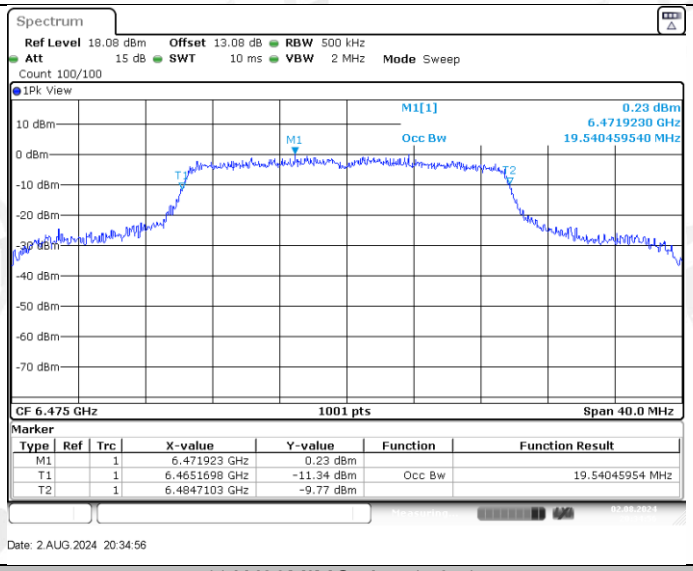

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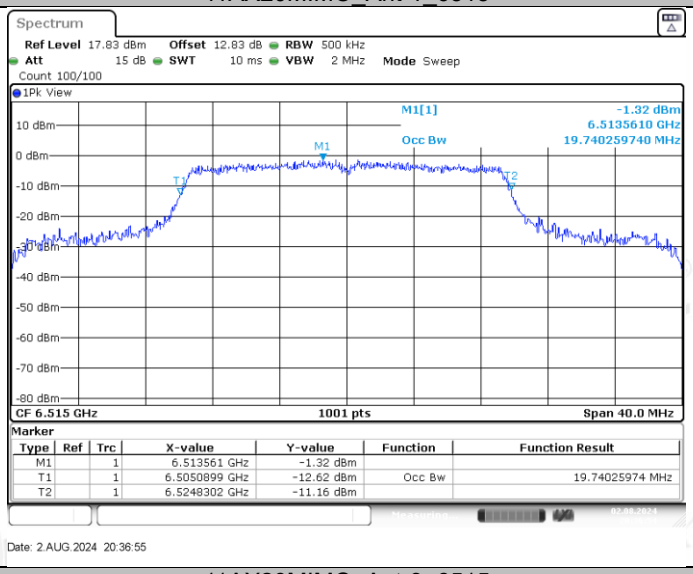

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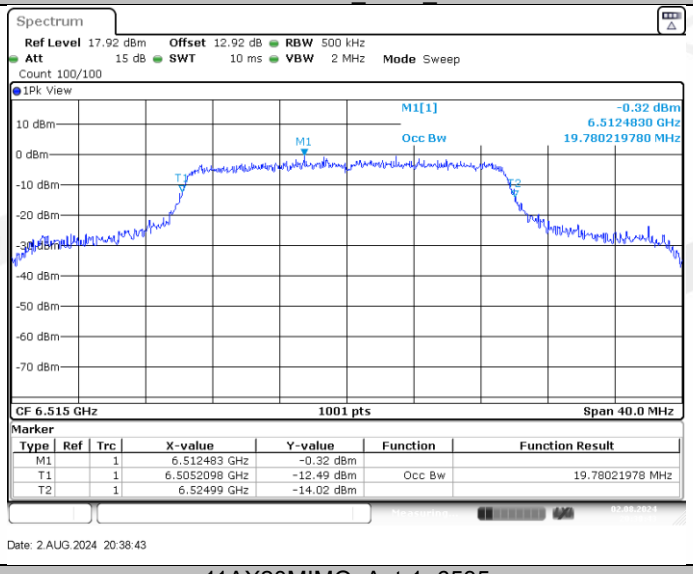

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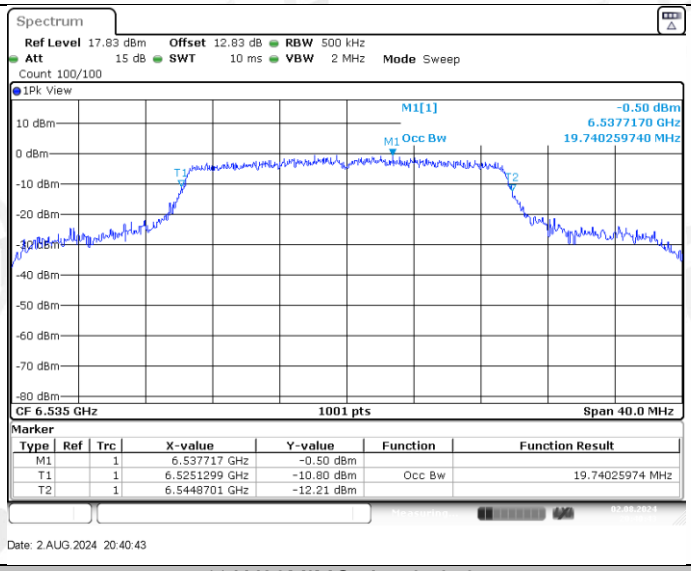

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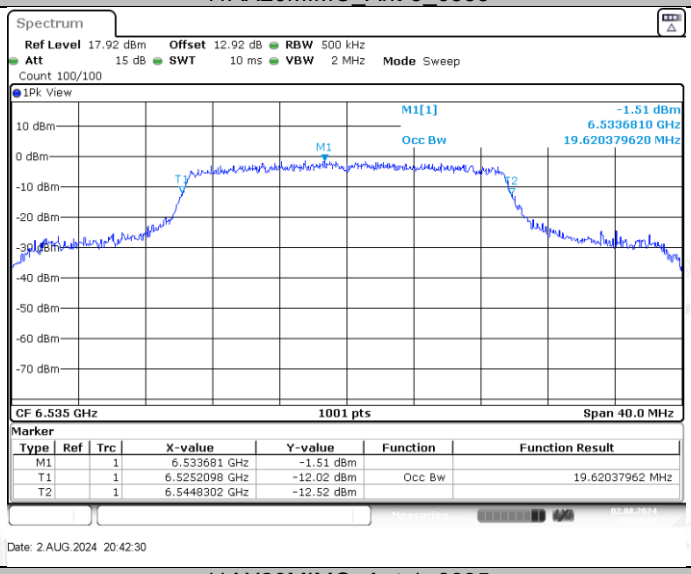

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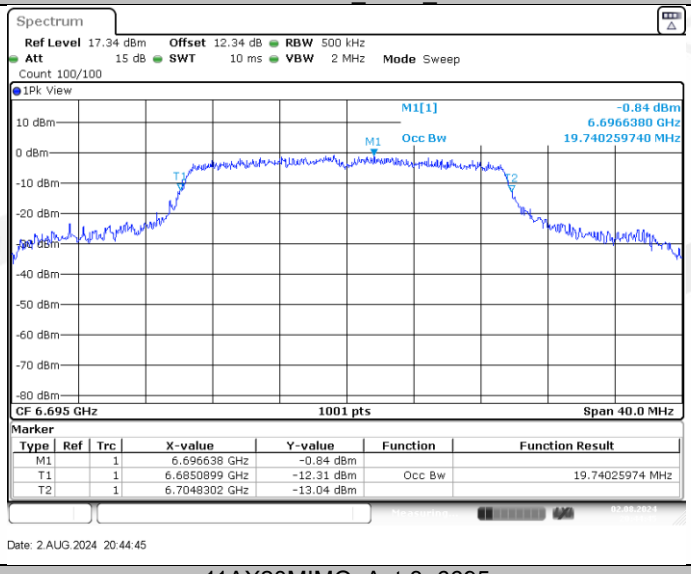

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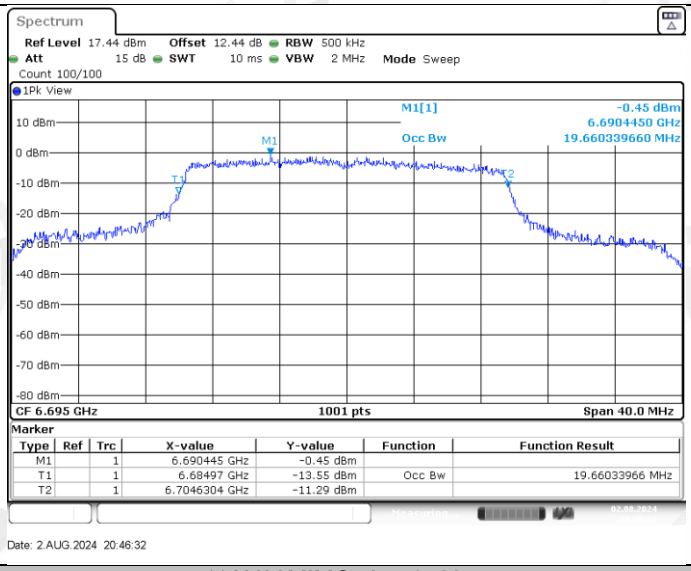

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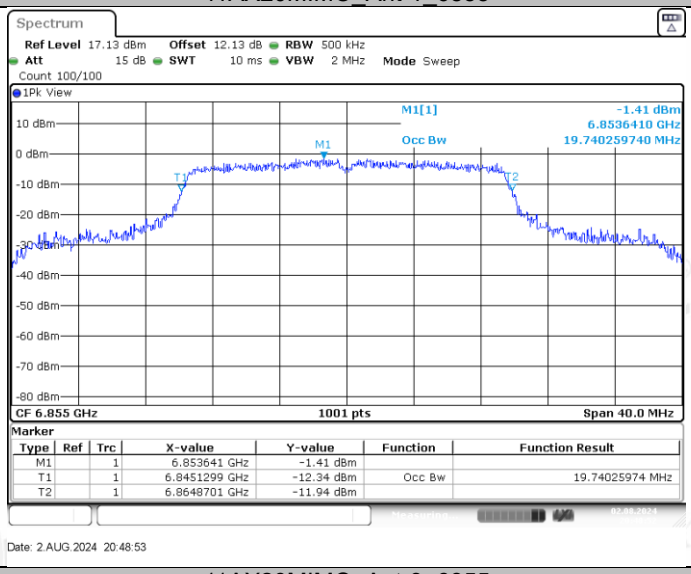

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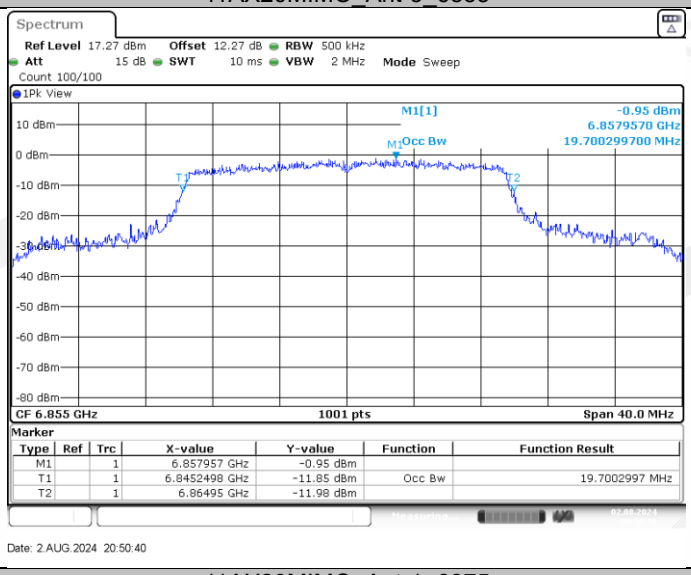

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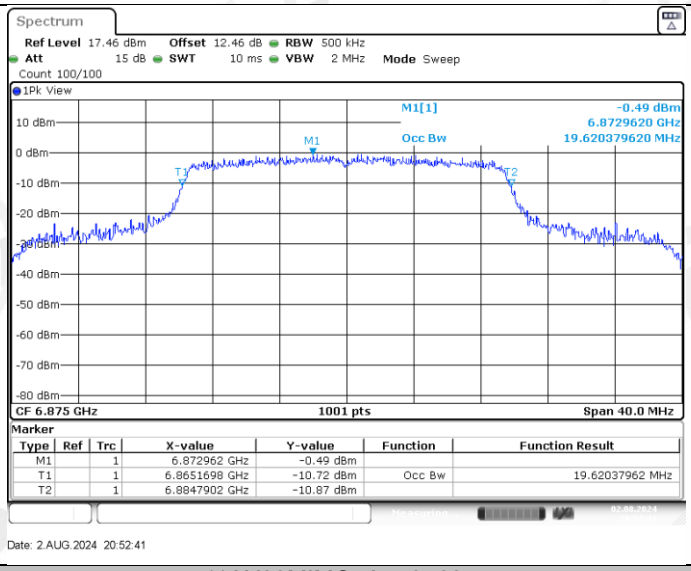

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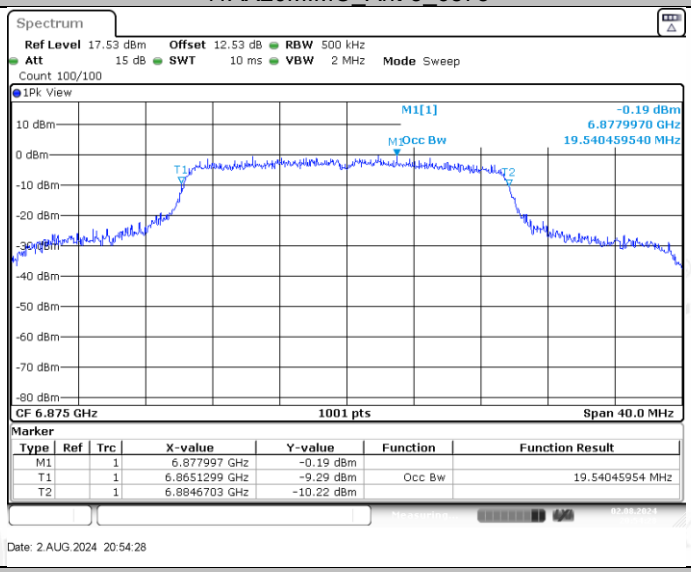

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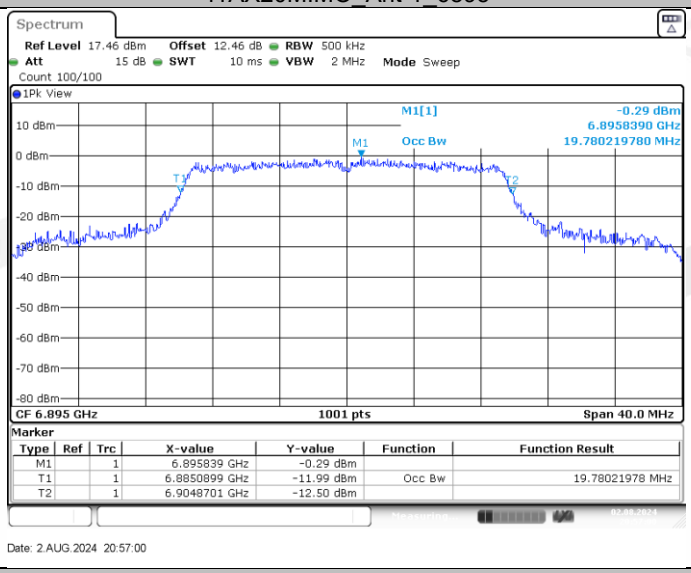

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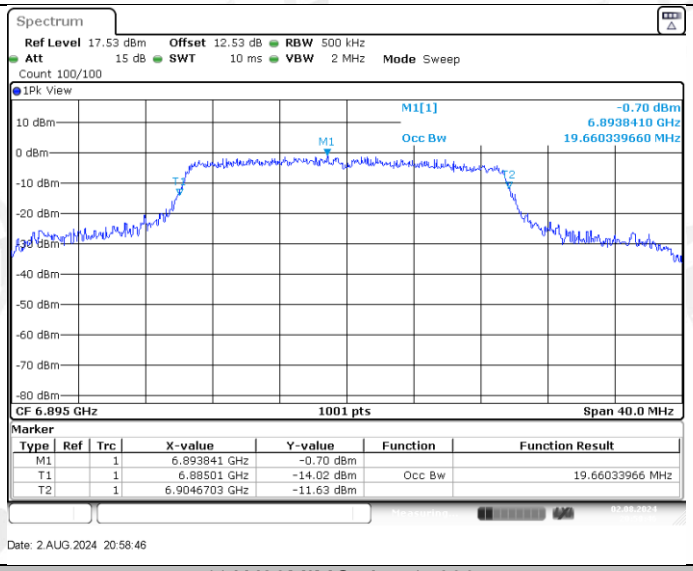

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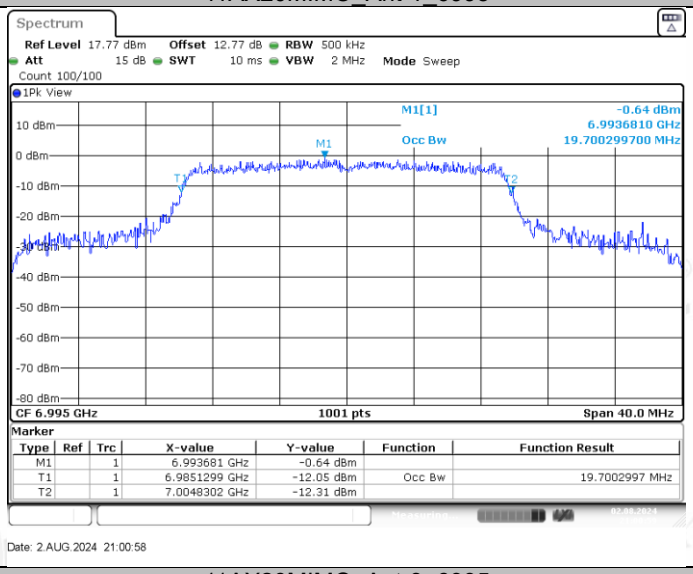

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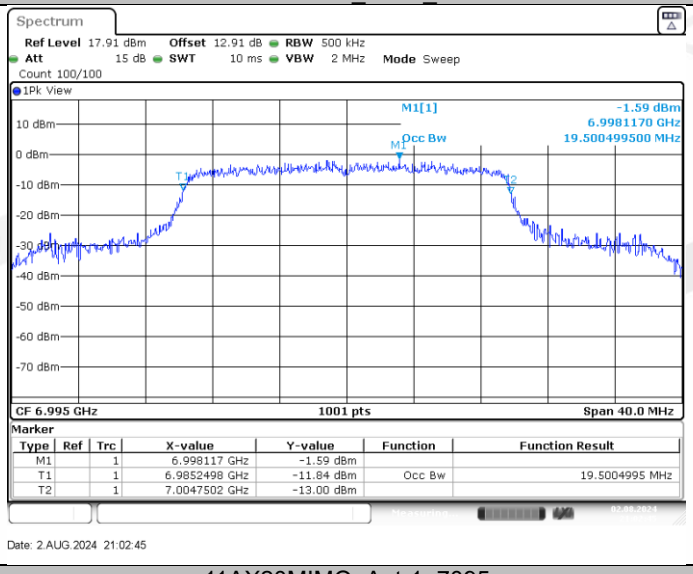

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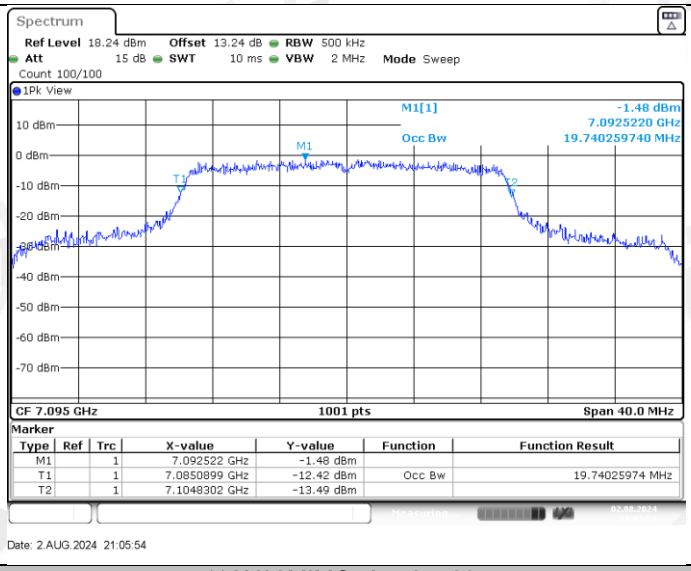

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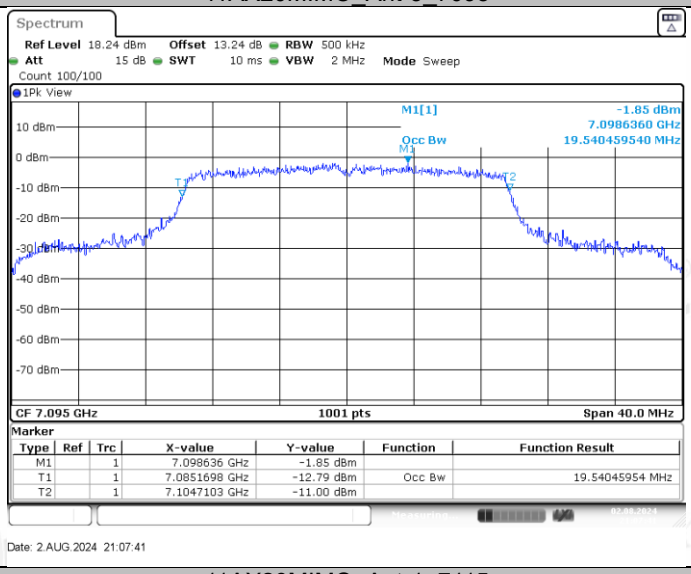

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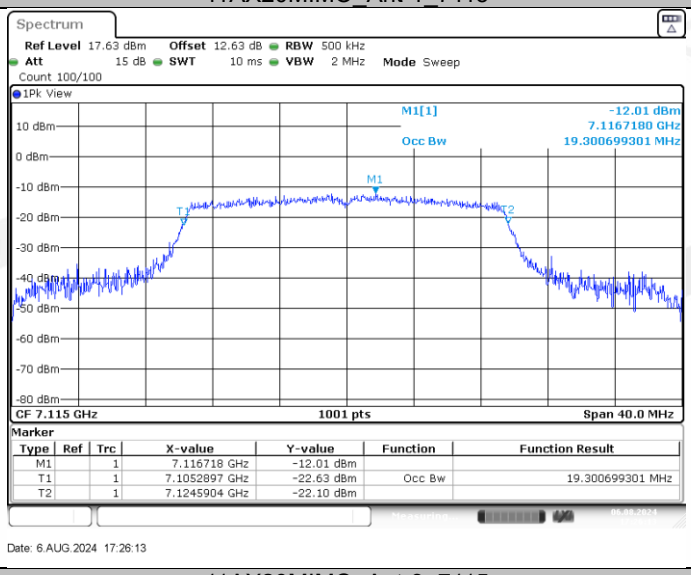

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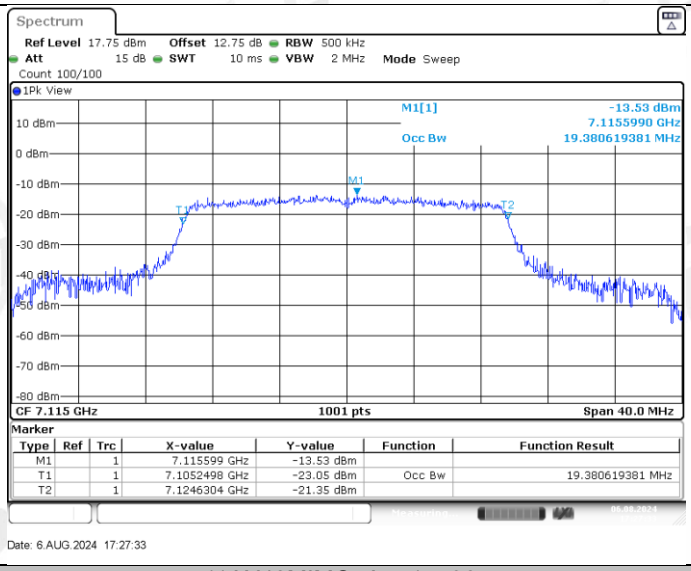

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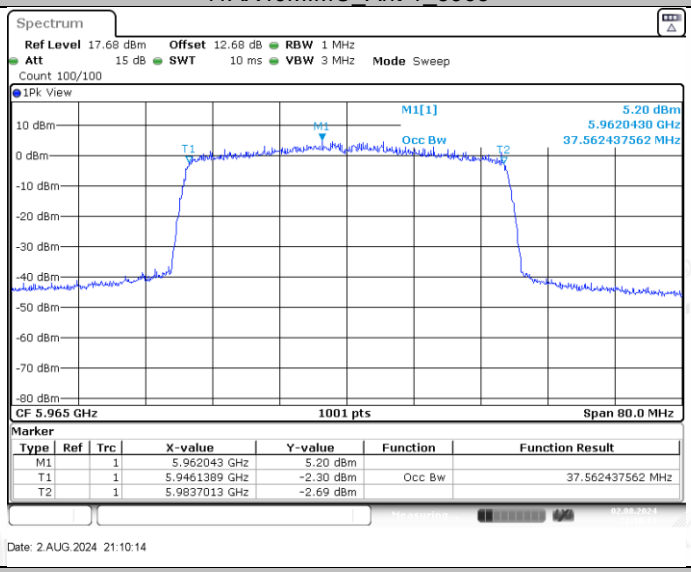

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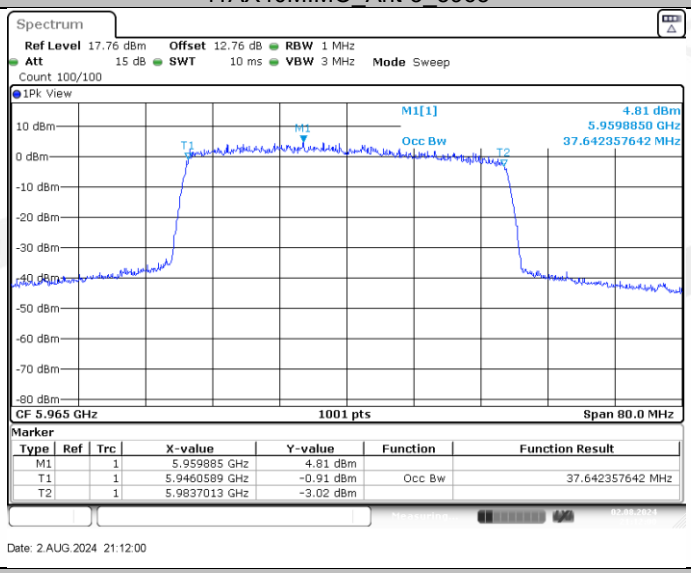

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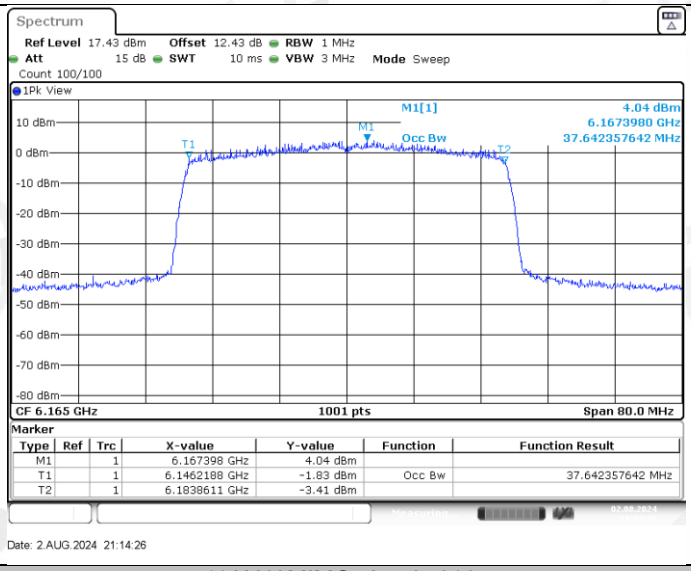

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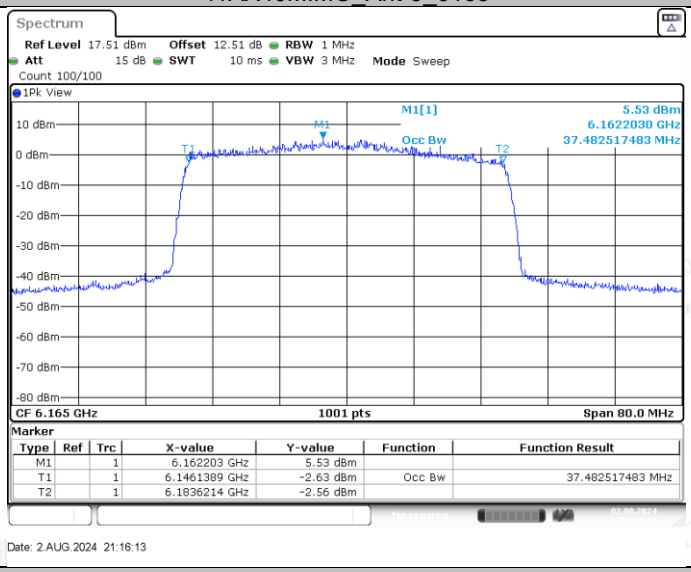

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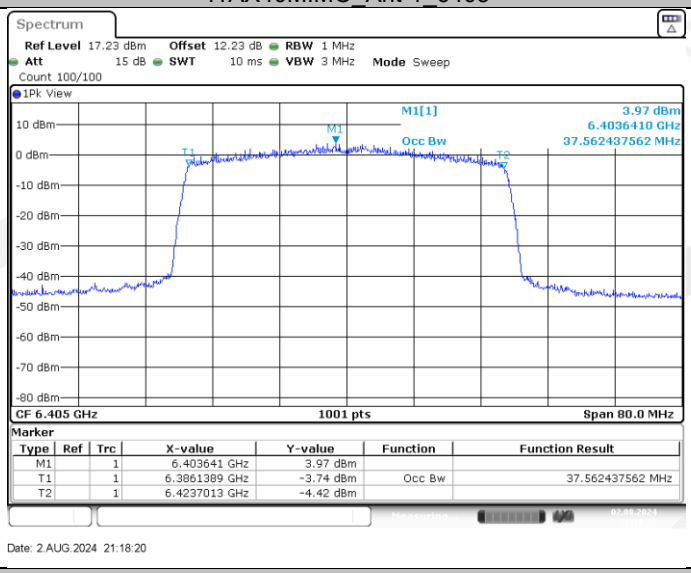

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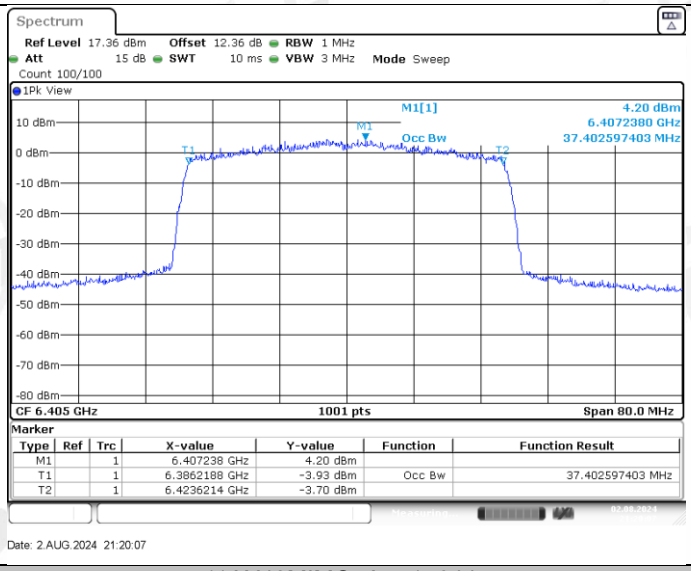

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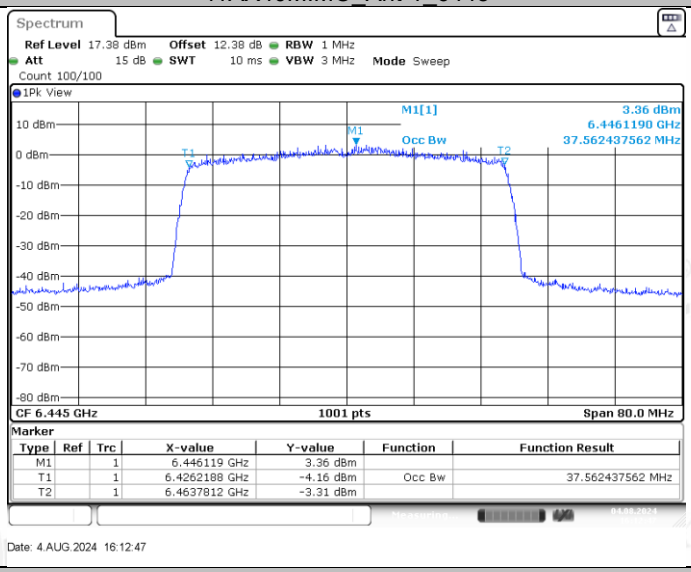

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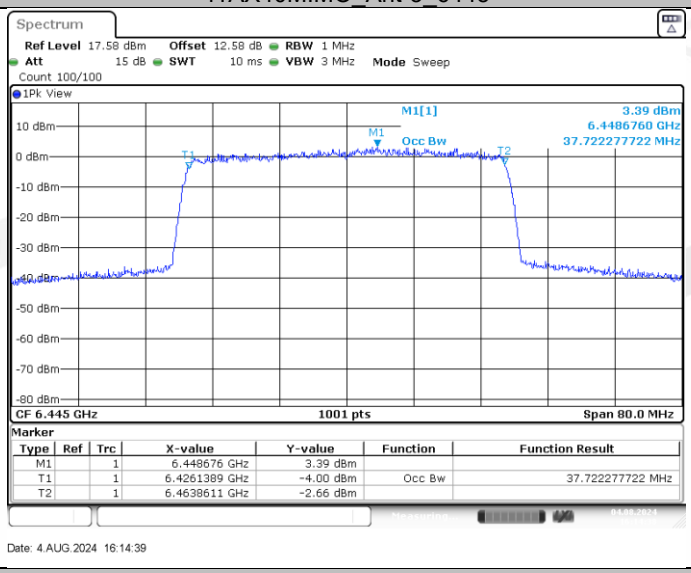

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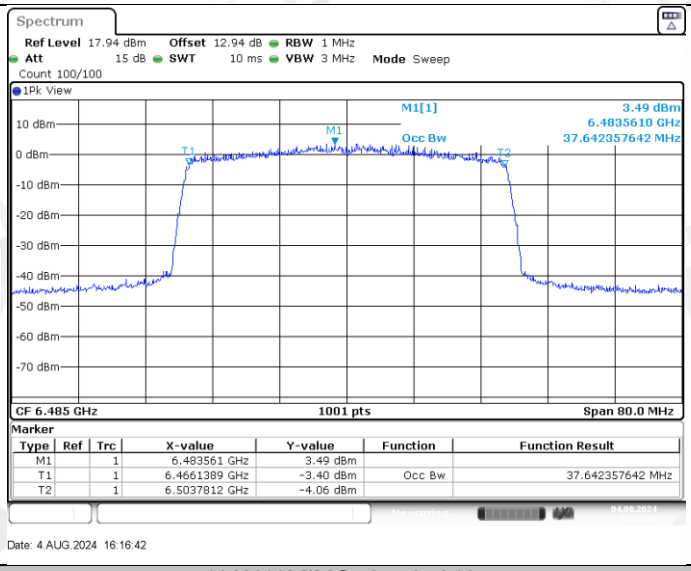

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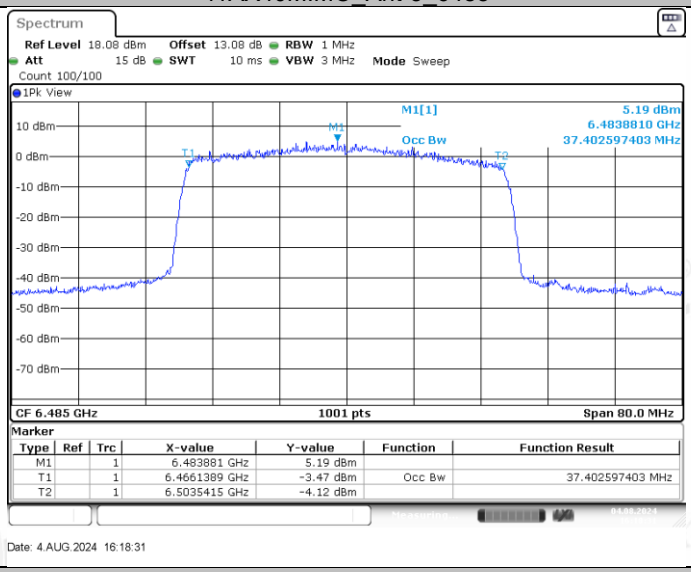

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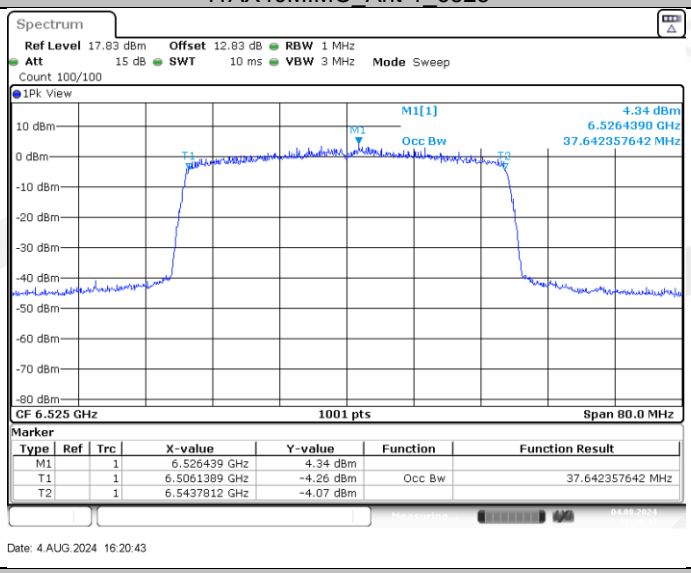

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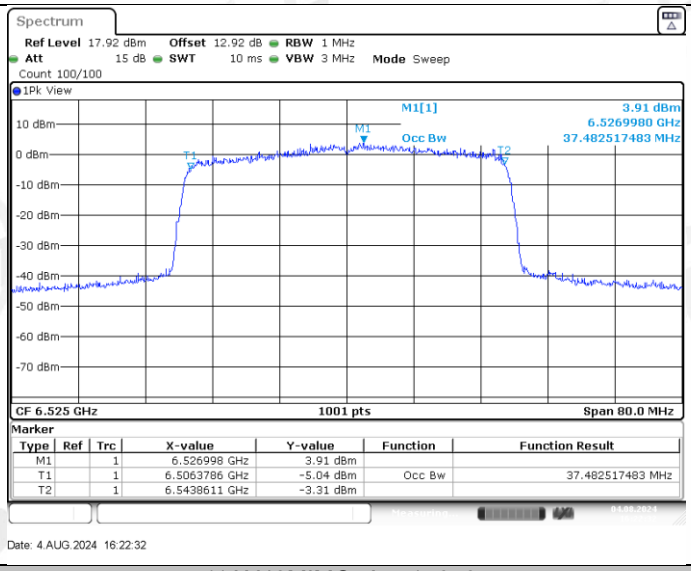

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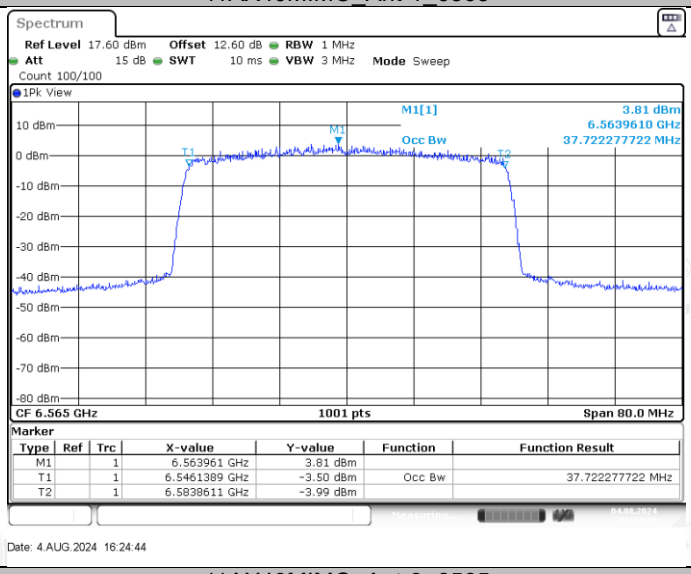

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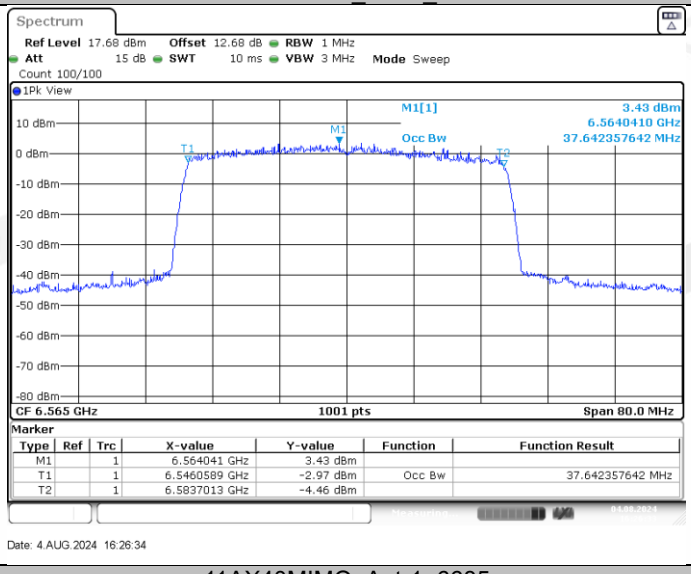

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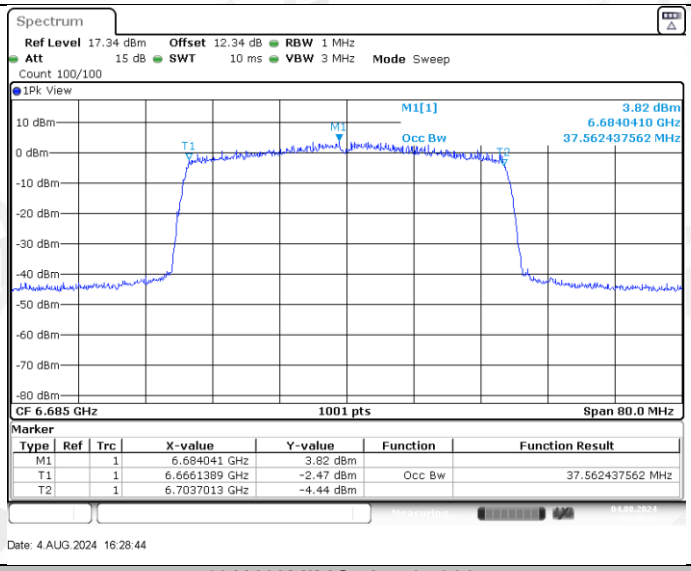

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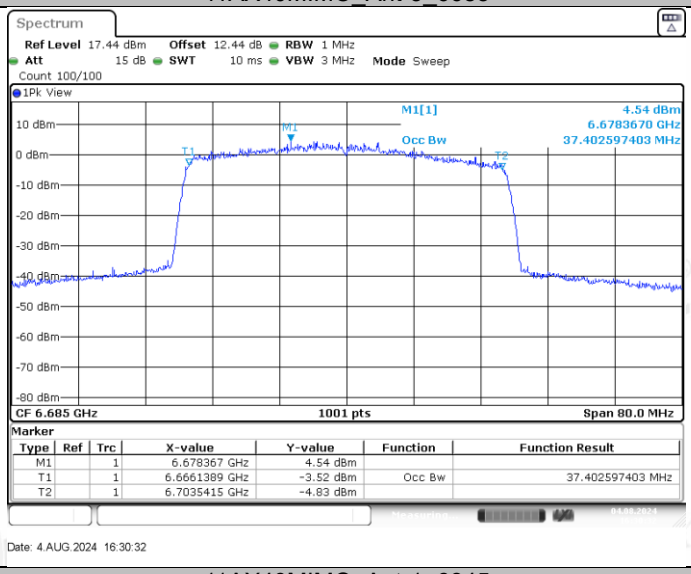

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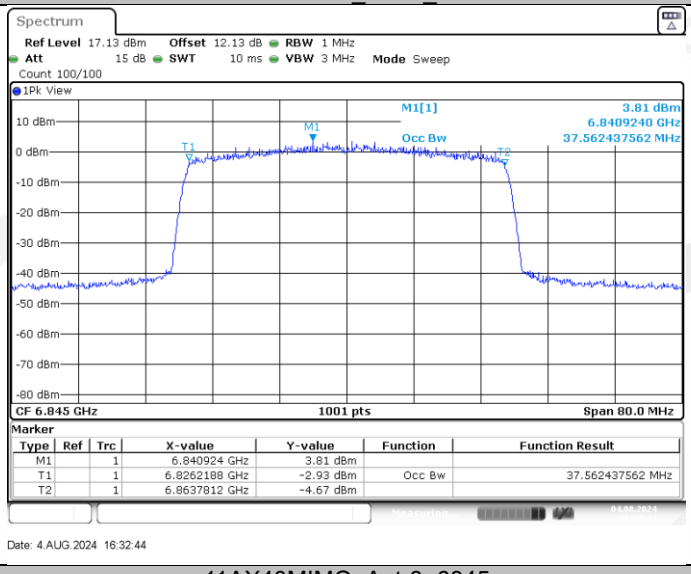

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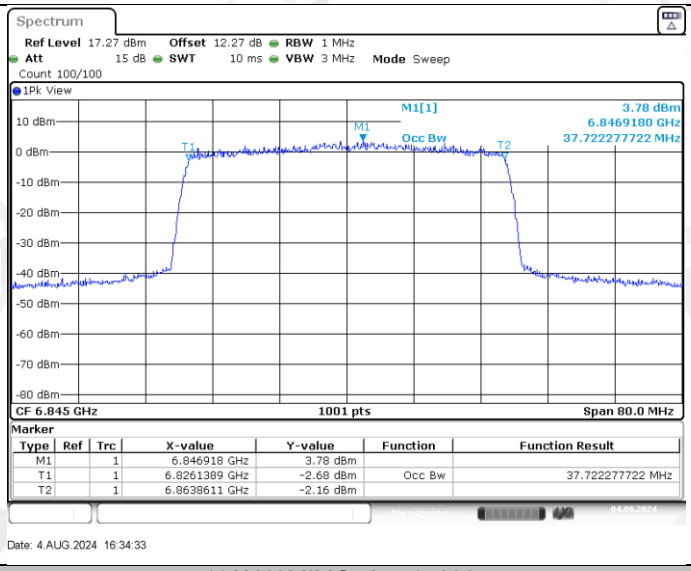

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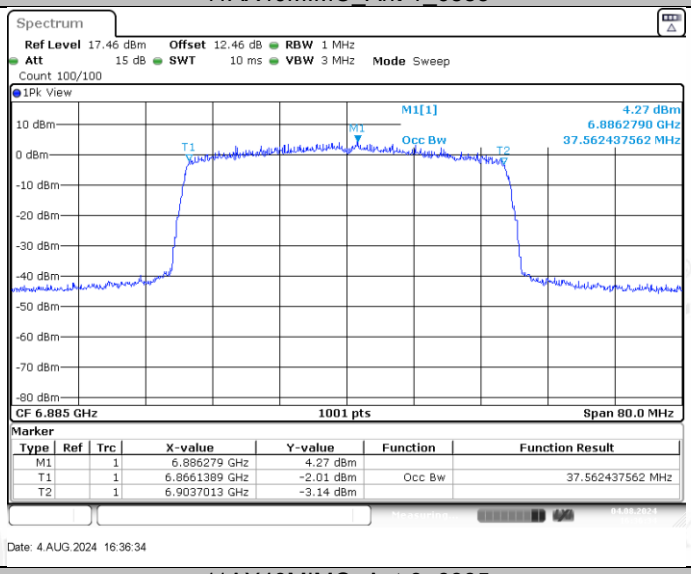

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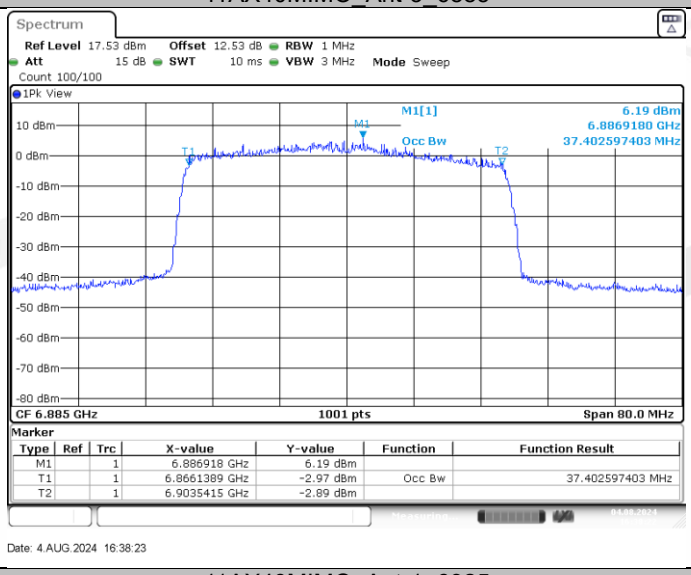

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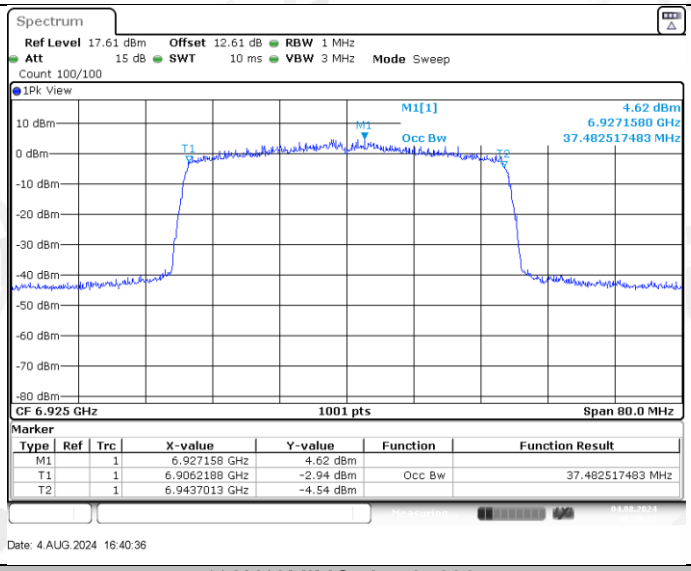

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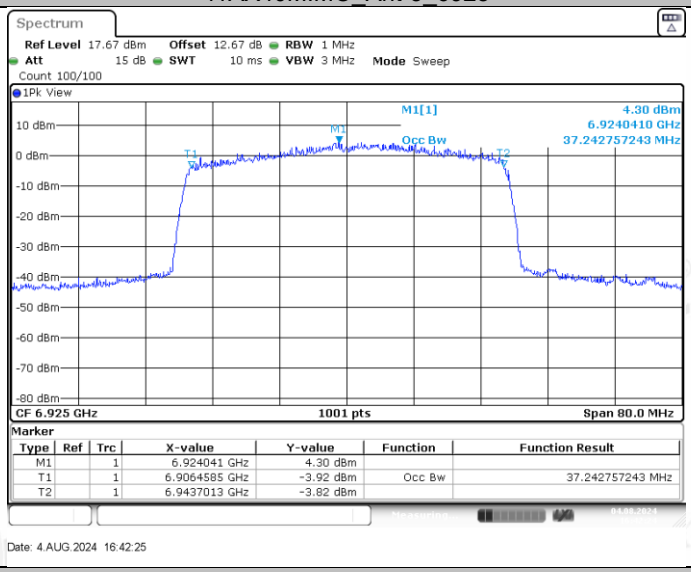

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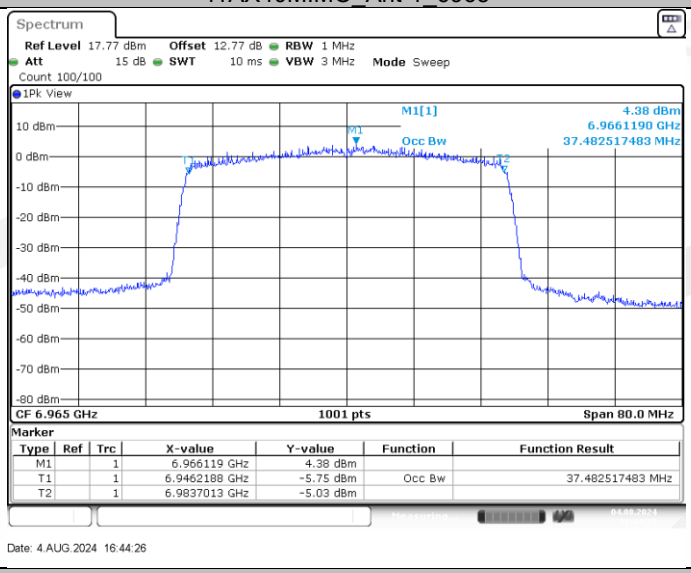

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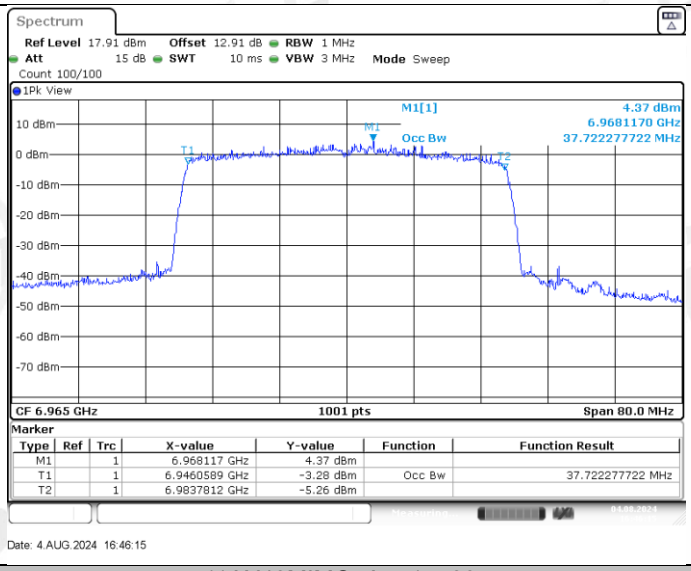

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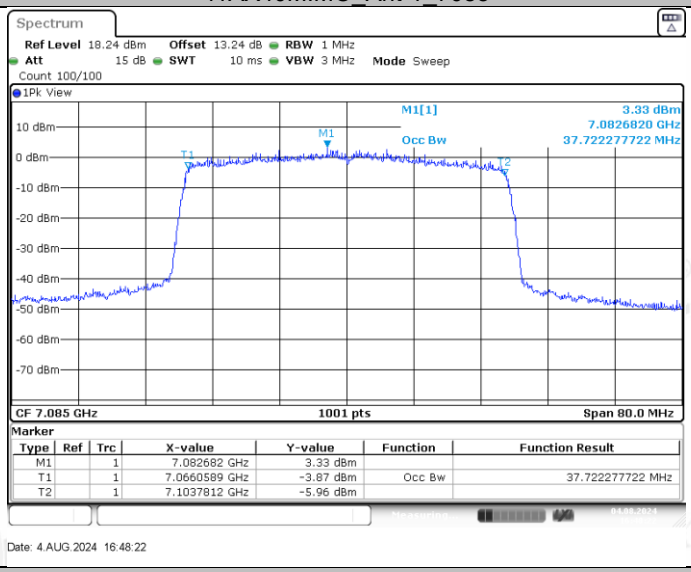

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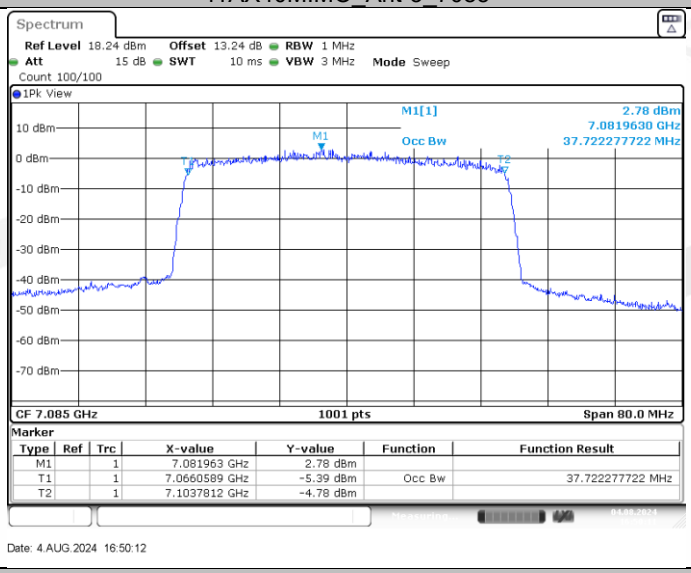

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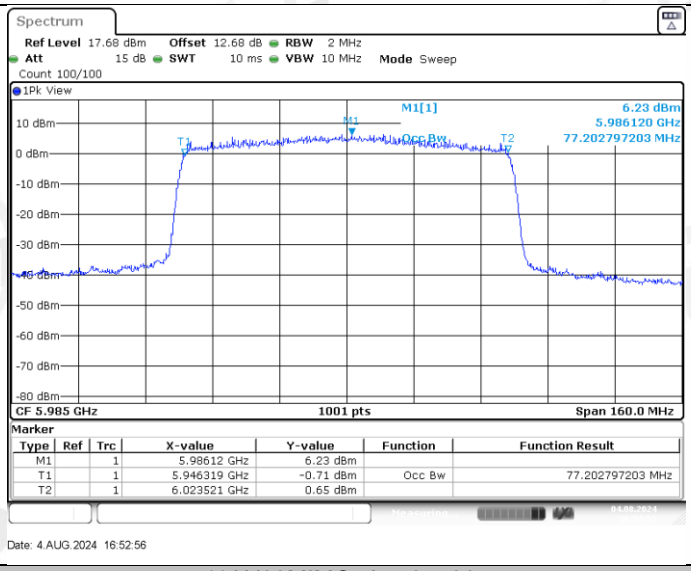

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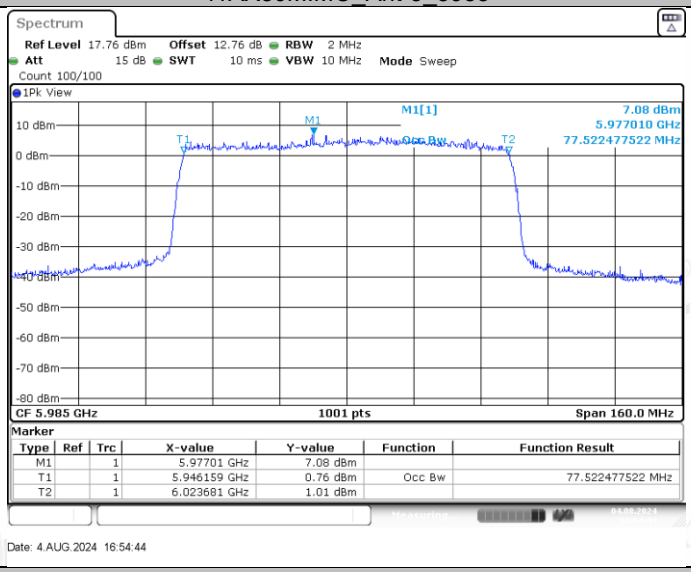

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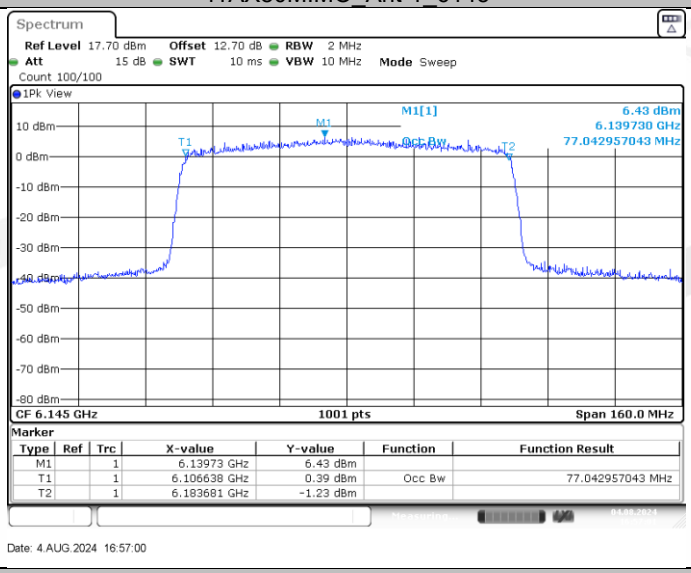

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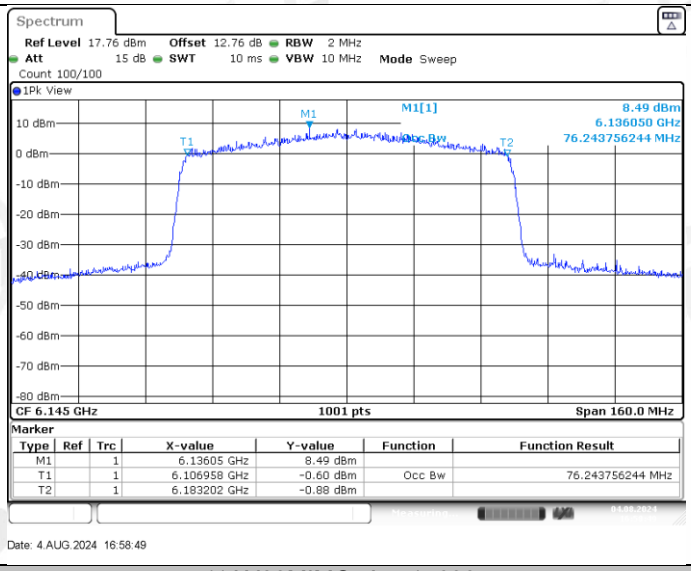

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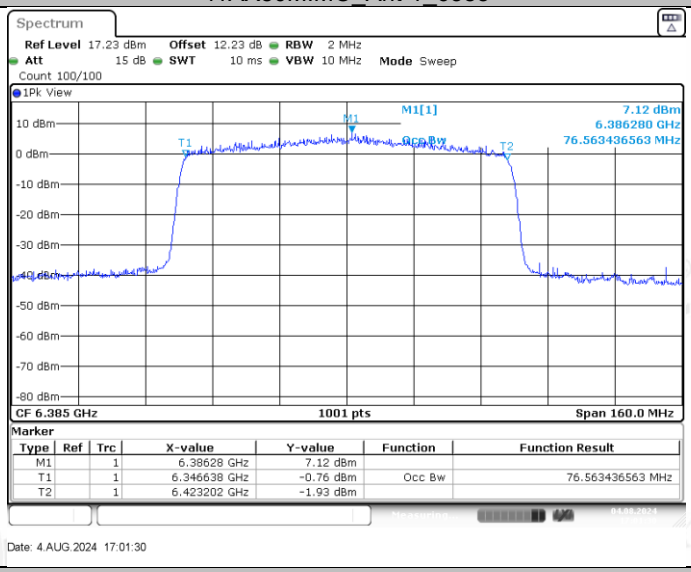

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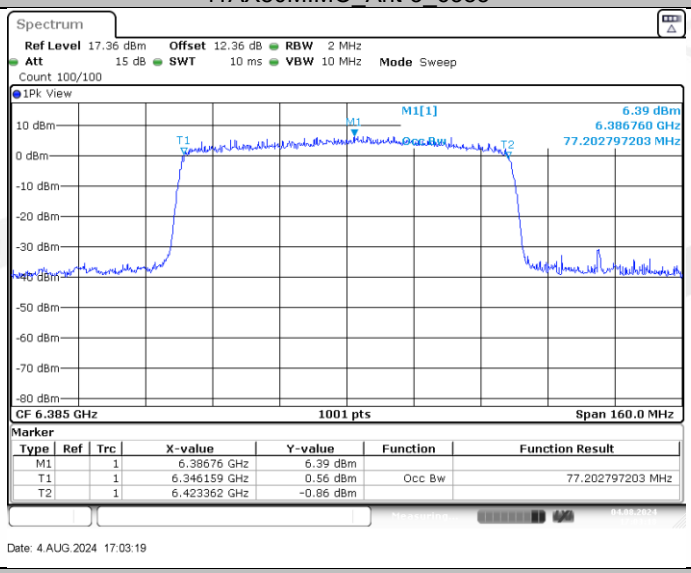

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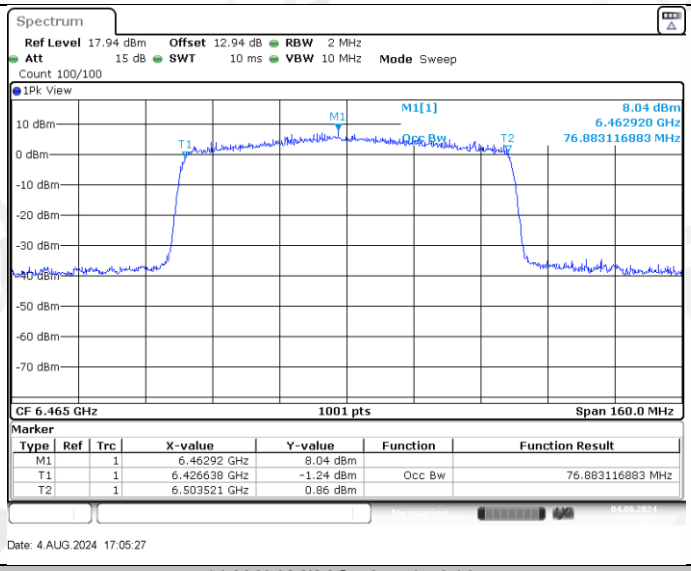

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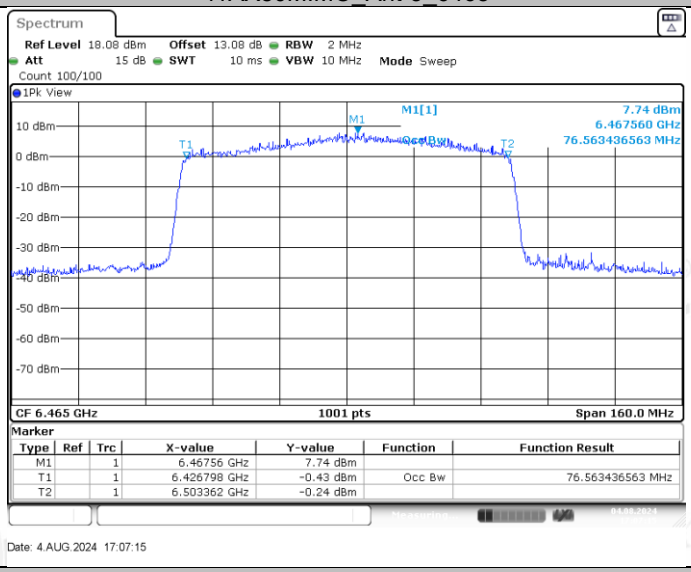

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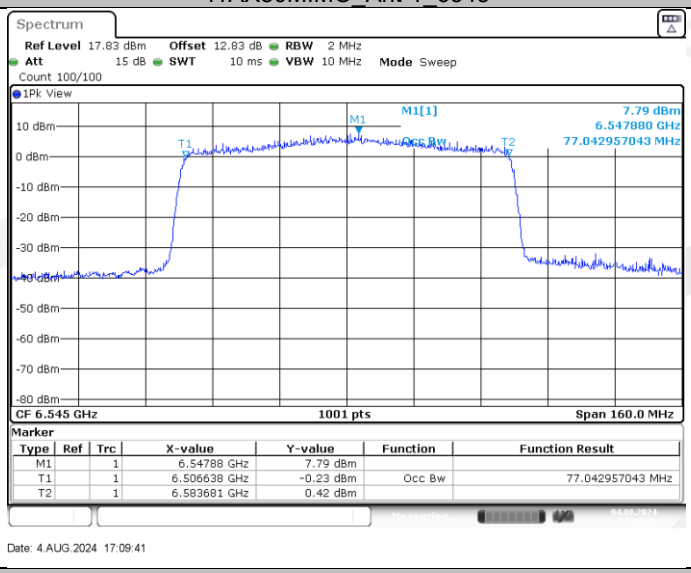

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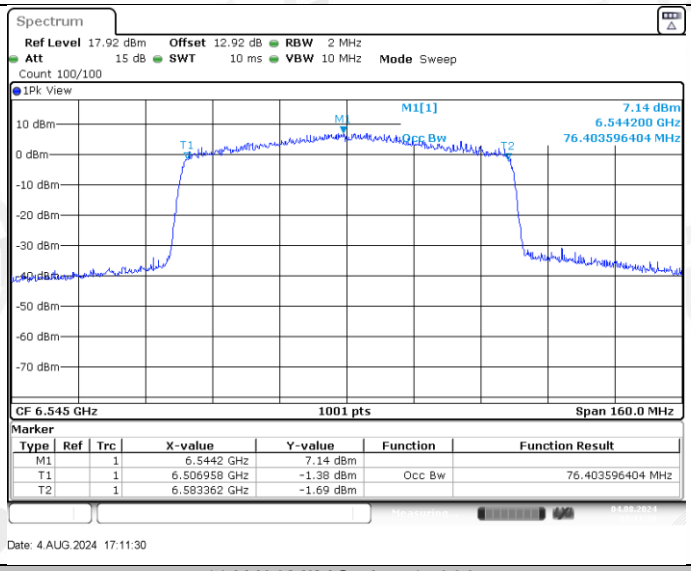

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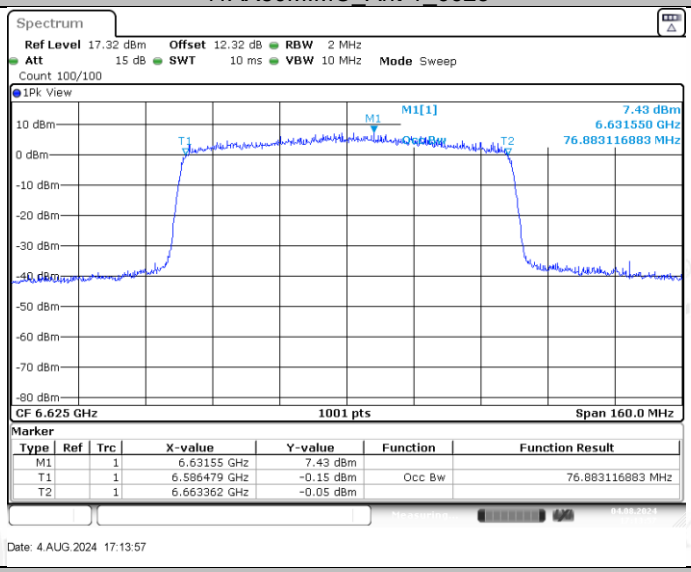

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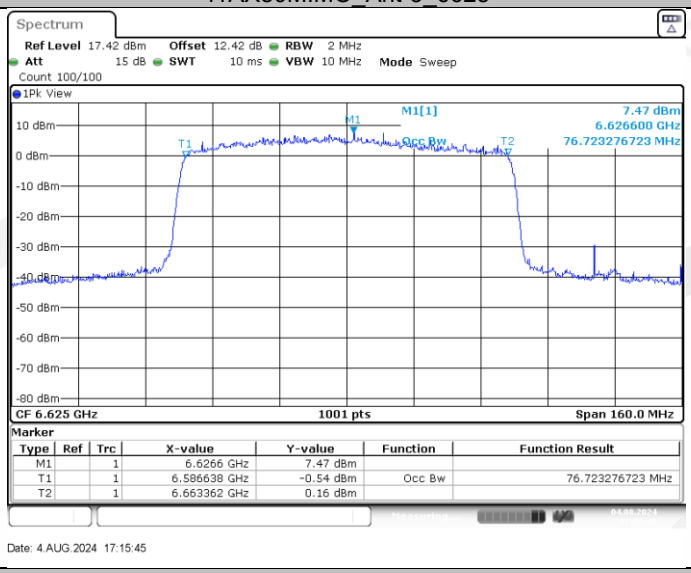

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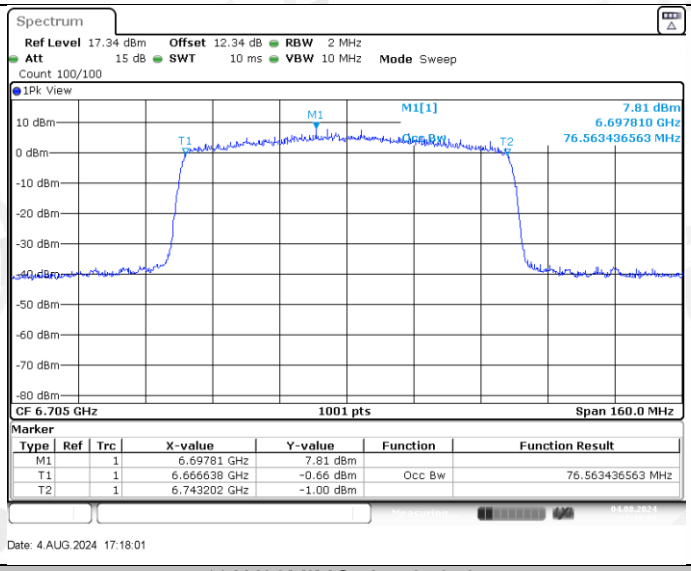

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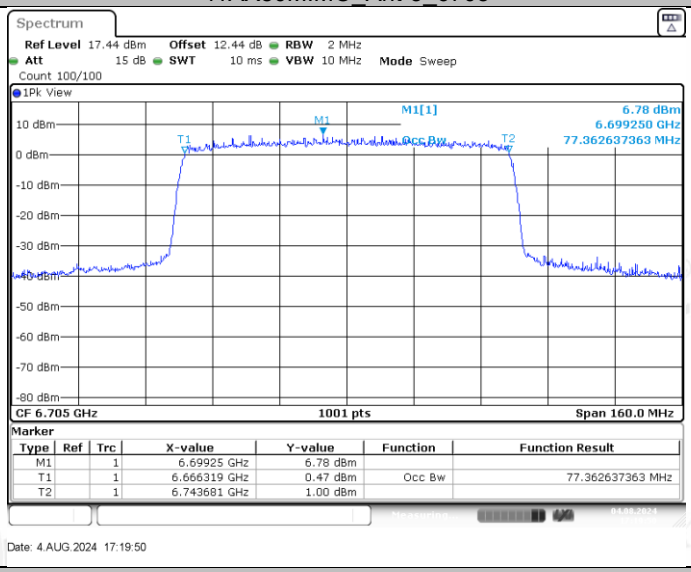

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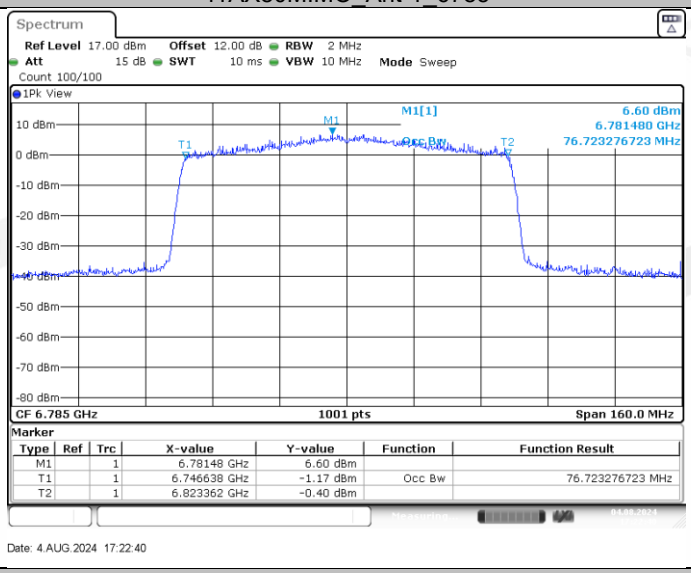

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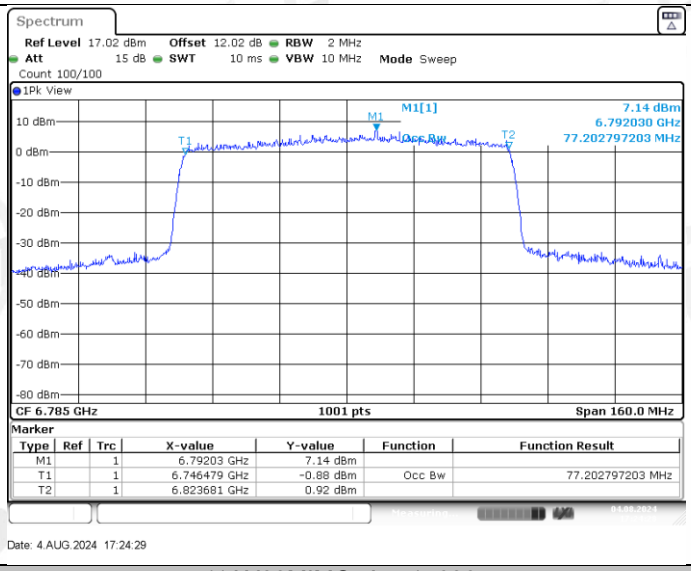

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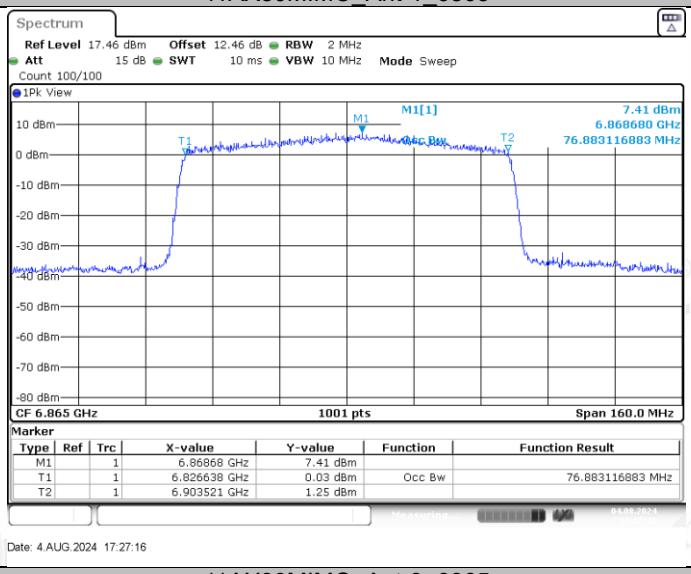

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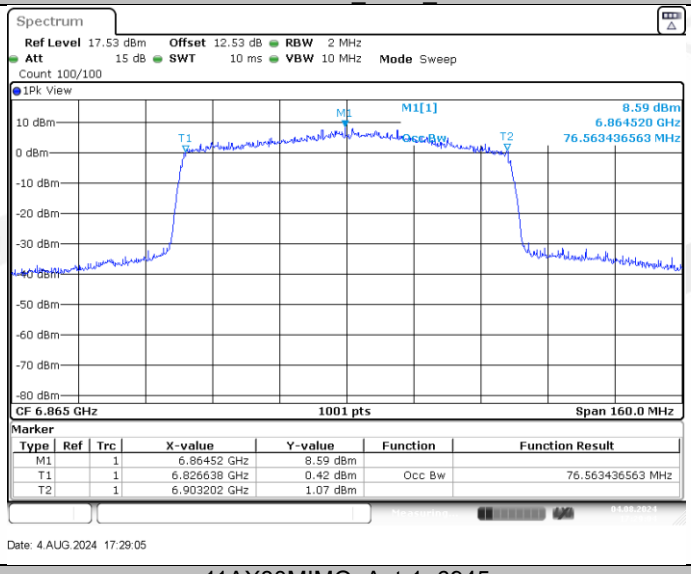

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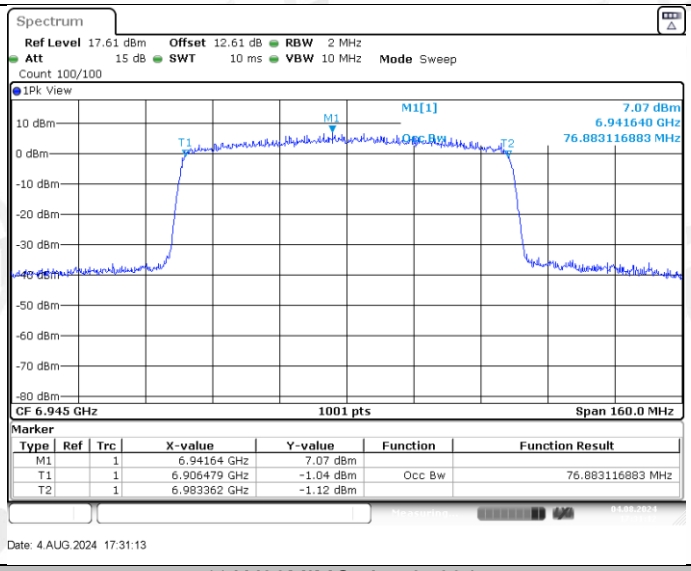

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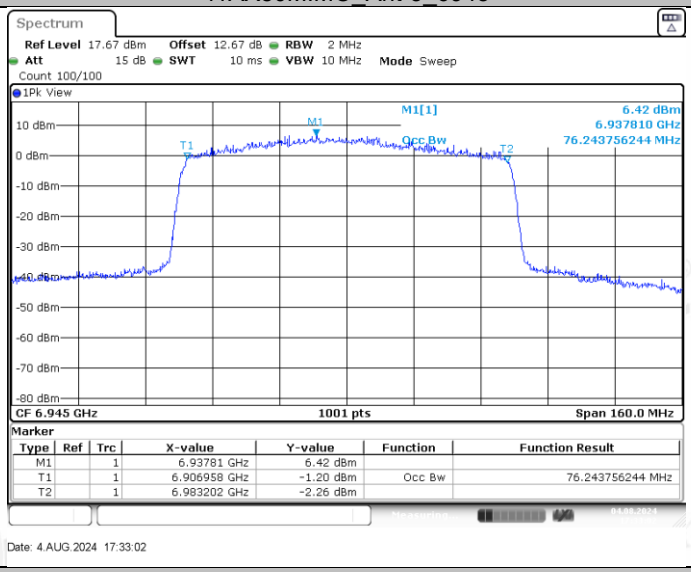

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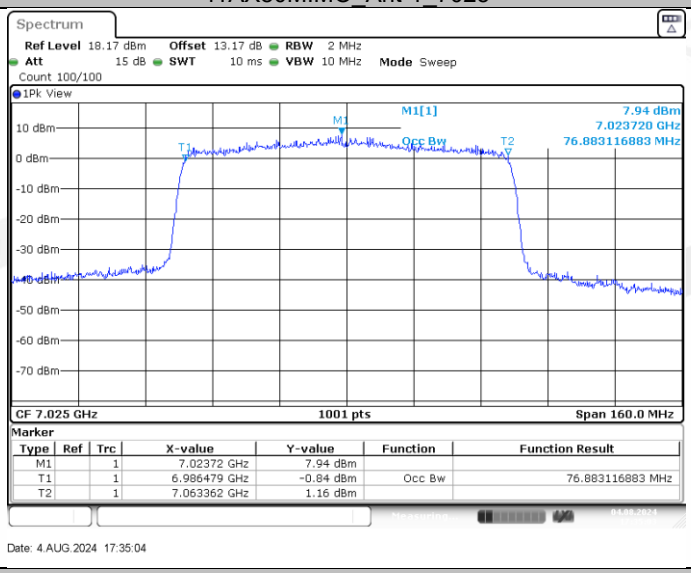

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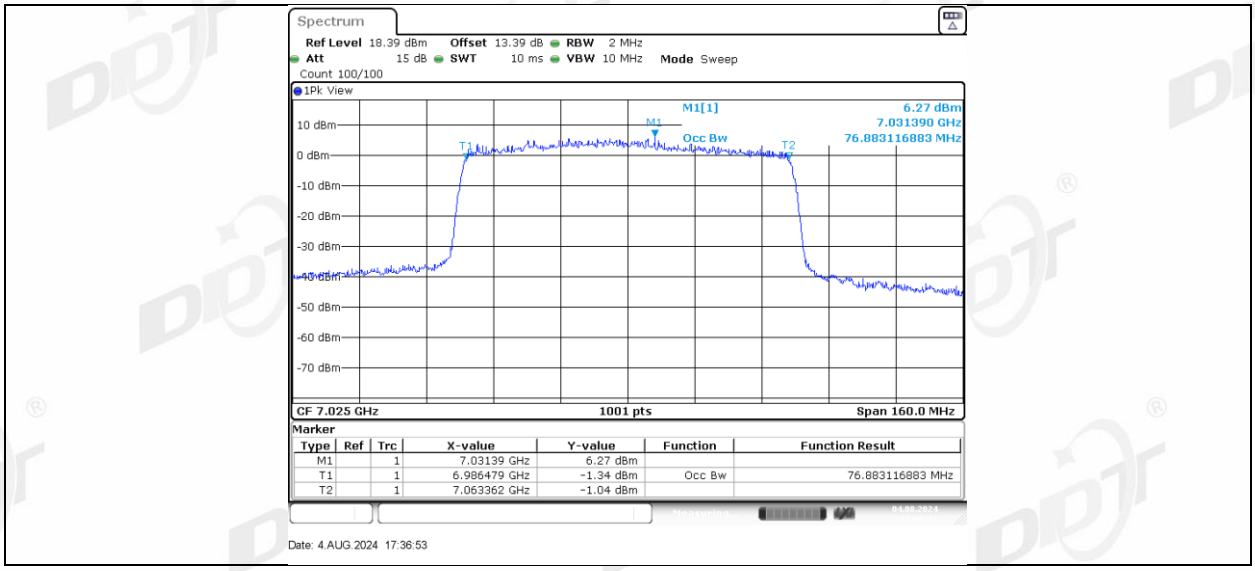
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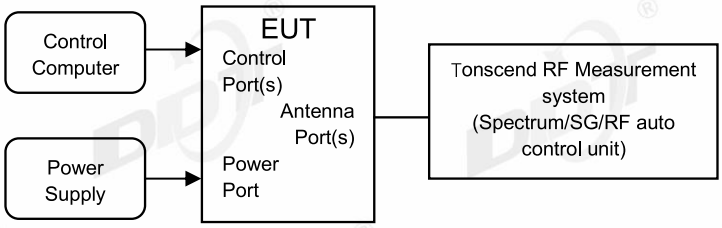
Att 15 dB SWT 10 ms VBW 10 MHz Mode Sweep
Count 100/100
1Pk View
M1[1] 6.27 dBm
7.031390 GHz
Occ Bw 76.883116883 MHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 7.025 GHz 1001 pts Span 160.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 7.03139 GHz 6.27 dBm
T1 1 6.986479 GHz -1.34 dBm Occ Bw 76.883116883 MHz
T2 1 7.063362 GHz -1.04 dBm
Date: 4.AUG.2024 17:36:53

6. Duty Cycle

6.1. Block diagram of test setup



6.2. Limit

Just for Report.

6.3. Test procedure

(1) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, The cable loss and attenuator loss have been put into spectrum analyzer as amplitude offset.

set the Spectrum Analyzer as below:

Centre Frequency: The centre frequency of the middle hopping channel.

Resolution BW: 10 MHz.

Video BW: 10 MHz.

Span: Zero span.

Detector: Peak.

Sweep: Video Trigger

(2) When the trace is complete, measure the sending time of 1 burst and the duty cycle of 1 burst cycle.

(3) Calculate dwell time follow below formula:

Duty cycle= Pulse's on time / Burst cycle

6.4. Test Result

Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11AX20MIMO	Ant-1	5955	0.20	0.40	50.00	---	---
	Ant-3	5955	0.20	0.40	50.00	---	---
	Ant-1	6175	0.20	0.39	51.28	---	---
	Ant-3	6175	0.20	0.40	50.00	---	---
	Ant-1	6415	0.20	0.55	36.36	---	---
	Ant-3	6415	0.20	0.40	50.00	---	---
	Ant-1	6435	0.20	0.40	50.00	---	---
	Ant-3	6435	0.20	0.40	50.00	---	---
	Ant-1	6475	0.20	0.40	50.00	---	---
	Ant-3	6475	0.20	0.40	50.00	---	---
	Ant-1	6515	0.20	0.40	50.00	---	---
	Ant-3	6515	0.20	0.40	50.00	---	---
	Ant-1	6535	0.20	0.40	50.00	---	---
	Ant-3	6535	0.20	0.40	50.00	---	---
	Ant-1	6695	0.20	0.40	50.00	---	---
	Ant-3	6695	0.20	0.40	50.00	---	---
	Ant-1	6855	0.20	0.40	50.00	---	---
	Ant-3	6855	0.20	0.40	50.00	---	---
	Ant-1	6875	0.20	0.40	50.00	---	---
	Ant-3	6875	0.20	0.40	50.00	---	---
	Ant-1	6895	0.20	0.40	50.00	---	---
	Ant-3	6895	0.20	0.40	50.00	---	---
	Ant-1	6995	0.20	0.40	50.00	---	---
	Ant-3	6995	0.20	0.40	50.00	---	---
	Ant-1	7095	0.20	0.40	50.00	---	---
	Ant-3	7095	0.20	0.40	50.00	---	---
	Ant-1	7115	0.56	0.95	58.95	---	---
	Ant-3	7115	0.55	0.94	58.51	---	---
11AX40MIMO	Ant-1	5965	0.32	0.71	45.07	---	---
	Ant-3	5965	0.32	0.71	45.07	---	---
	Ant-1	6165	0.32	0.71	45.07	---	---
	Ant-3	6165	0.32	0.71	45.07	---	---
	Ant-1	6405	0.32	0.71	45.07	---	---
	Ant-3	6405	0.32	0.71	45.07	---	---
	Ant-1	6445	0.20	0.40	50.00	---	---
	Ant-3	6445	0.20	0.40	50.00	---	---
	Ant-1	6485	0.20	0.40	50.00	---	---
	Ant-3	6485	0.20	0.40	50.00	---	---
	Ant-1	6525	0.20	0.40	50.00	---	---
	Ant-3	6525	0.20	0.40	50.00	---	---
	Ant-1	6565	0.20	0.40	50.00	---	---
	Ant-3	6565	0.20	0.40	50.00	---	---
	Ant-1	6685	0.20	0.40	50.00	---	---
	Ant-3	6685	0.20	0.40	50.00	---	---
	Ant-1	6845	0.20	0.40	50.00	---	---
	Ant-3	6845	0.20	0.40	50.00	---	---
	Ant-1	6885	0.20	0.40	50.00	---	---
	Ant-3	6885	0.20	0.40	50.00	---	---
	Ant-1	6925	0.20	0.40	50.00	---	---
	Ant-3	6925	0.20	0.40	50.00	---	---
	Ant-1	6965	0.20	0.40	50.00	---	---
	Ant-3	6965	0.20	0.40	50.00	---	---
	Ant-1	7085	0.20	0.40	50.00	---	---
	Ant-3	7085	0.20	0.40	50.00	---	---
11AX80MIMO	Ant-1	5985	0.19	0.45	42.22	---	---
	Ant-3	5985	0.19	0.42	45.24	---	---
	Ant-1	6145	0.19	0.43	44.19	---	---
	Ant-3	6145	0.19	0.43	44.19	---	---
	Ant-1	6385	0.19	0.44	43.18	---	---

	Ant-3	6385	0.19	0.43	44.19	---	---
	Ant-1	6465	0.19	0.44	43.18	---	---
	Ant-3	6465	0.19	0.42	45.24	---	---
	Ant-1	6545	0.19	0.44	43.18	---	---
	Ant-3	6545	0.19	0.44	43.18	---	---
	Ant-1	6625	0.19	0.44	43.18	---	---
	Ant-3	6625	0.19	0.42	45.24	---	---
	Ant-1	6705	0.19	0.43	44.19	---	---
	Ant-3	6705	0.19	0.42	45.24	---	---
	Ant-1	6785	0.19	0.44	43.18	---	---
	Ant-3	6785	0.19	0.42	45.24	---	---
	Ant-1	6865	0.19	0.42	45.24	---	---
	Ant-3	6865	0.19	0.43	44.19	---	---
	Ant-1	6945	0.19	0.44	43.18	---	---
	Ant-3	6945	0.19	0.43	44.19	---	---
	Ant-1	7025	0.19	0.45	42.22	---	---
	Ant-3	7025	0.19	0.44	43.18	---	---