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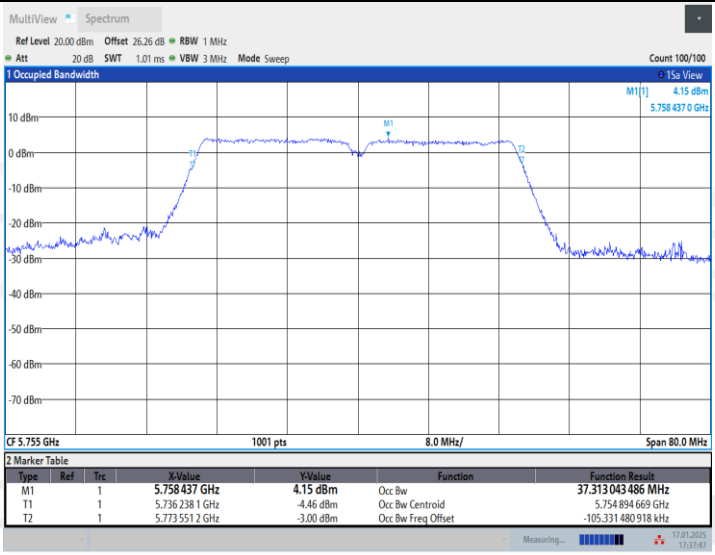

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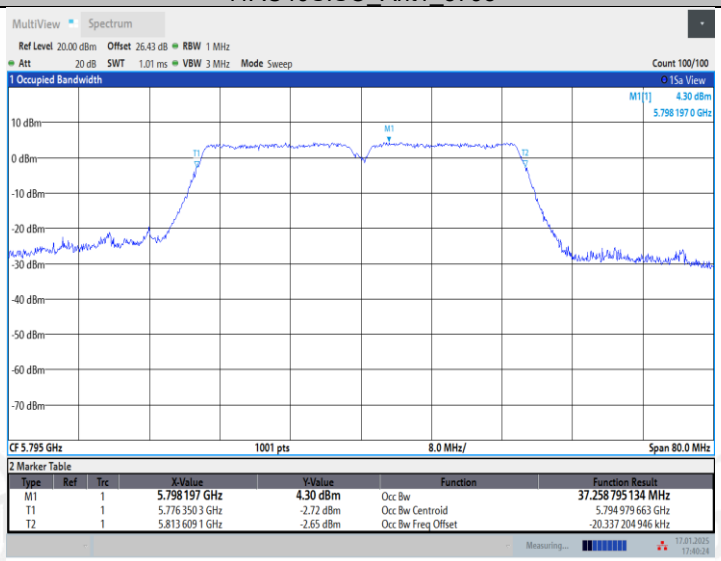

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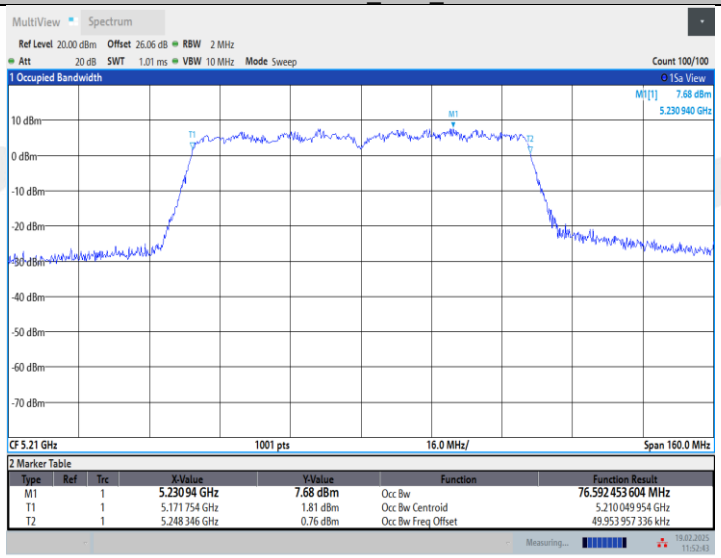

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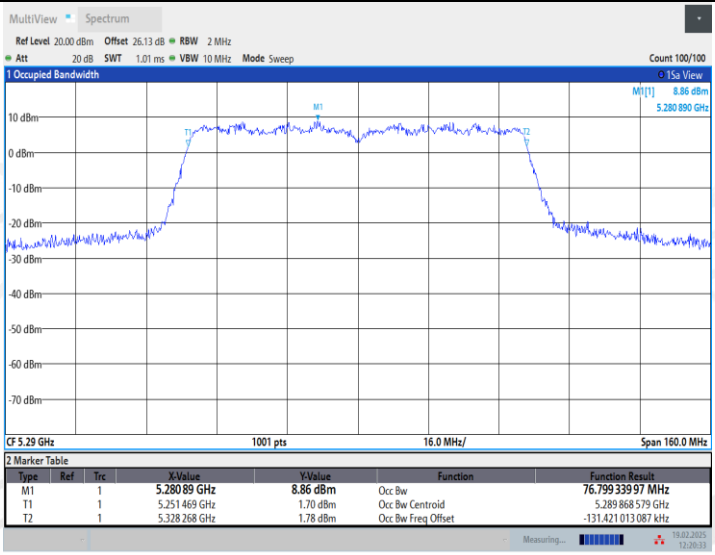

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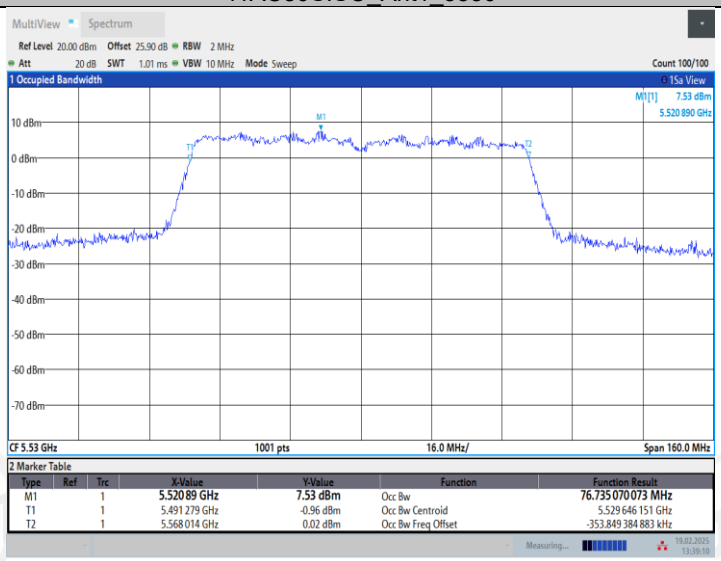

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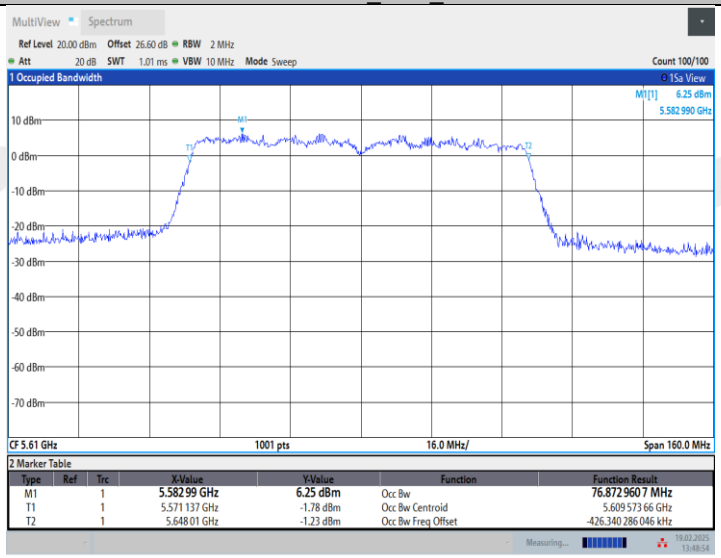

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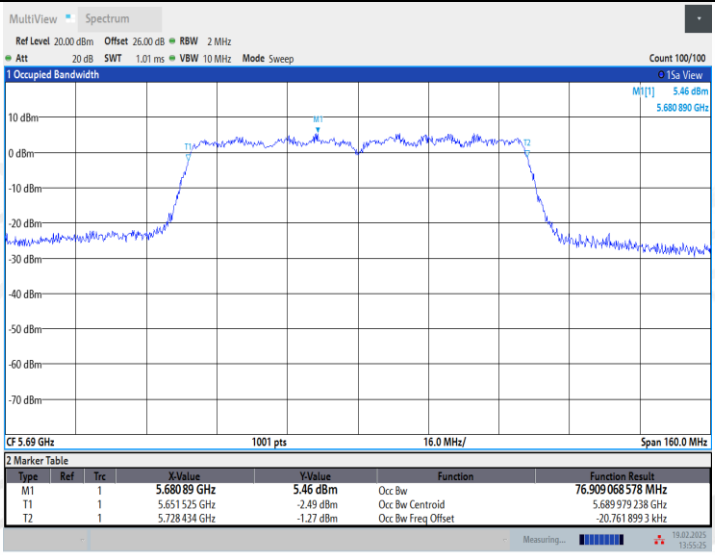

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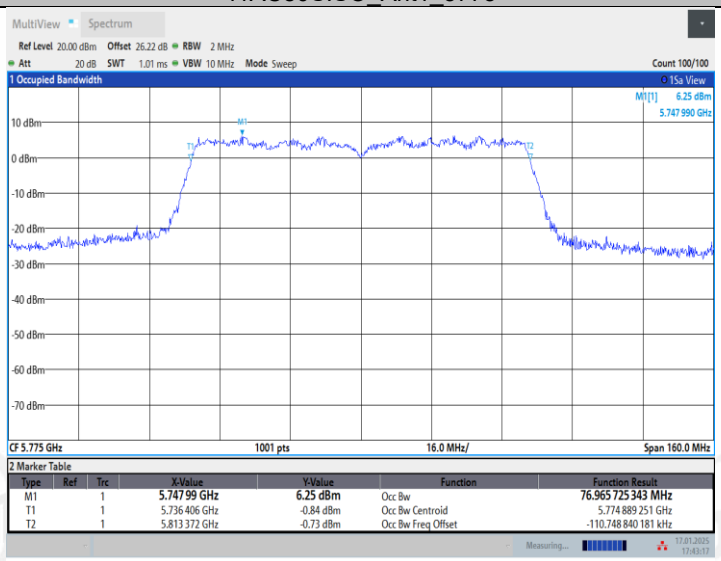
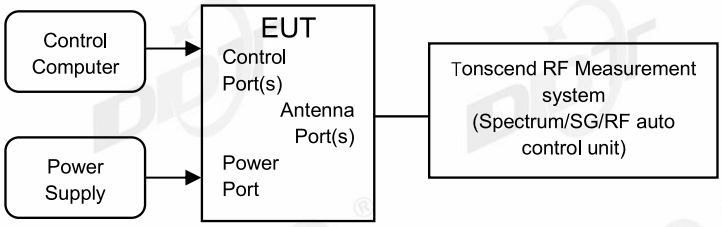


17:43:17 17.01.2025

7. Duty Cycle

7.1. Block diagram of test setup



7.2. Limit

Just for Report.

7.3. 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.
Trace Mode: Clear Write.
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

7.4. Test result

Test Engineer:	Zoe Peng	Test Site:	RF Measurement System 4#
Ambient Condition:	22.9-23.2℃, 43.1-47.6%RH	Test Date:	2025.01.17-2025.02.19
Test Power Supply:	DC 12V	Sample Number:	S24122405-004

Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	2.06	2.10	98.10
		5200	2.06	2.10	98.10
		5240	2.06	2.10	98.10
		5260	2.06	2.10	98.10
		5280	2.06	2.10	98.10
		5320	2.06	2.10	98.10
		5500	2.07	2.11	98.10
		5580	2.07	2.10	98.57
		5700	2.07	2.11	98.10
		5720	2.07	2.10	98.57
		5745	2.07	2.11	98.10
		5785	2.07	2.10	98.57
		5825	2.07	2.10	98.57
11N20SISO	Ant1	5180	1.93	1.97	97.97
		5200	1.93	1.97	97.97
		5240	1.93	1.96	98.47
		5260	1.92	1.96	97.96
		5280	1.92	1.96	97.96
		5320	1.92	1.96	97.96
		5500	1.93	1.97	97.97
		5580	1.93	1.96	98.47

		5700	1.93	1.96	98.47
		5720	1.93	1.96	98.47
		5745	1.92	1.96	97.96
		5785	1.92	1.96	97.96
		5825	1.92	1.96	97.96
11N40SISO	Ant1	5190	0.95	0.99	95.96
		5230	0.95	0.99	95.96
		5270	0.95	0.98	96.94
		5310	0.95	0.98	96.94
		5510	0.95	0.99	95.96
		5550	0.95	0.99	95.96
		5670	0.95	0.98	96.94
		5710	0.95	0.99	95.96
		5755	0.95	0.98	96.94
		5795	0.95	0.99	95.96
11AC20SISO	Ant1	5180	1.93	1.97	97.97
		5200	1.93	1.97	97.97
		5240	1.93	1.97	97.97
		5260	1.93	1.97	97.97
		5280	1.93	1.97	97.97
		5320	1.93	1.97	97.97
		5500	1.93	1.97	97.97
		5580	1.94	1.97	98.48
		5700	1.94	1.97	98.48
		5720	1.94	1.97	98.48
		5745	1.93	1.97	97.97

		5785	1.93	1.97	97.97
		5825	1.94	1.97	98.48
11AC40SISO	Ant1	5190	0.95	0.99	95.96
		5230	0.95	0.99	95.96
		5270	0.95	0.99	95.96
		5310	0.95	0.99	95.96
		5510	0.95	0.99	95.96
		5550	0.95	0.99	95.96
		5670	0.95	0.99	95.96
		5710	0.95	0.99	95.96
		5755	0.95	0.99	95.96
		5795	0.95	0.99	95.96
11AC80SISO	Ant1	5210	0.47	0.51	92.16
		5290	0.46	0.50	92.00
		5530	0.46	0.50	92.00
		5610	0.46	0.50	92.00
		5690	0.47	0.51	92.16
		5775	0.46	0.50	92.00

7.5. Test graphs

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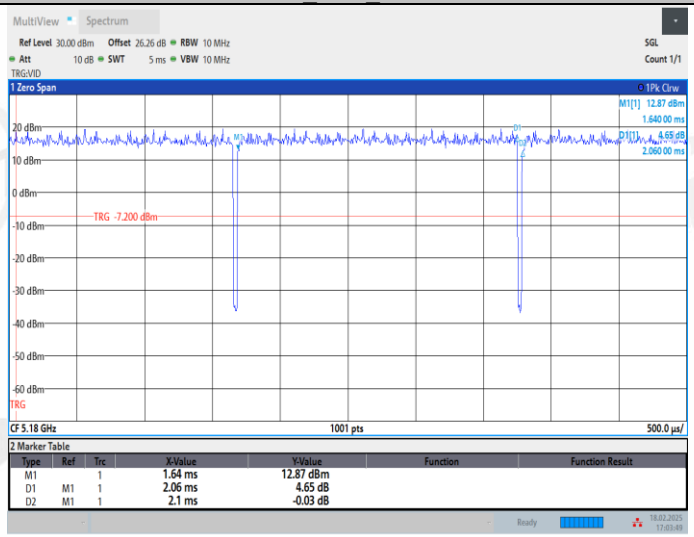

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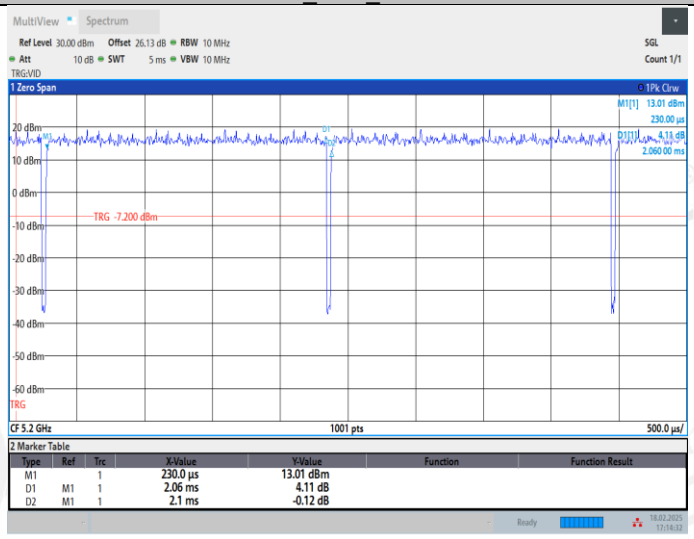

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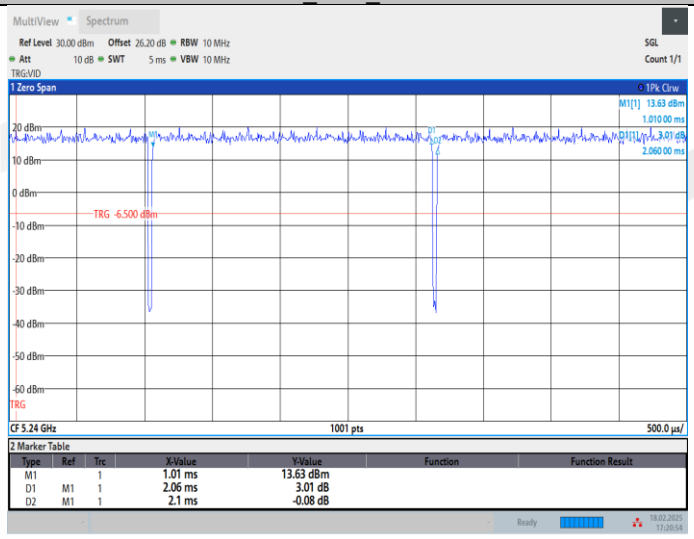

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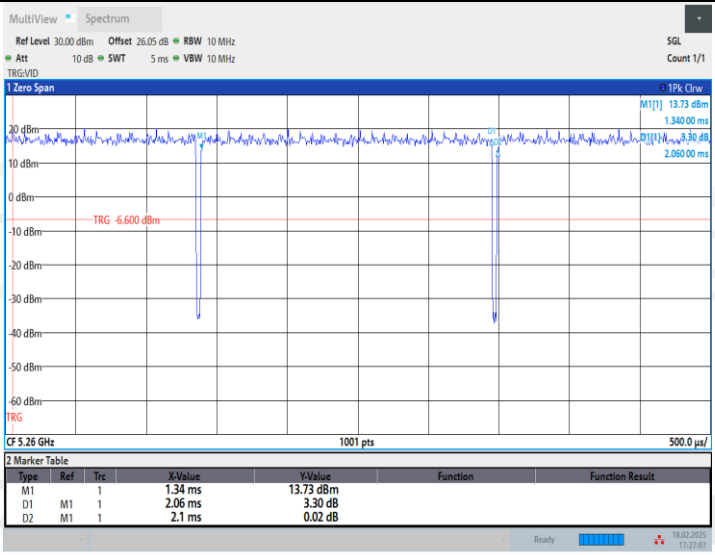

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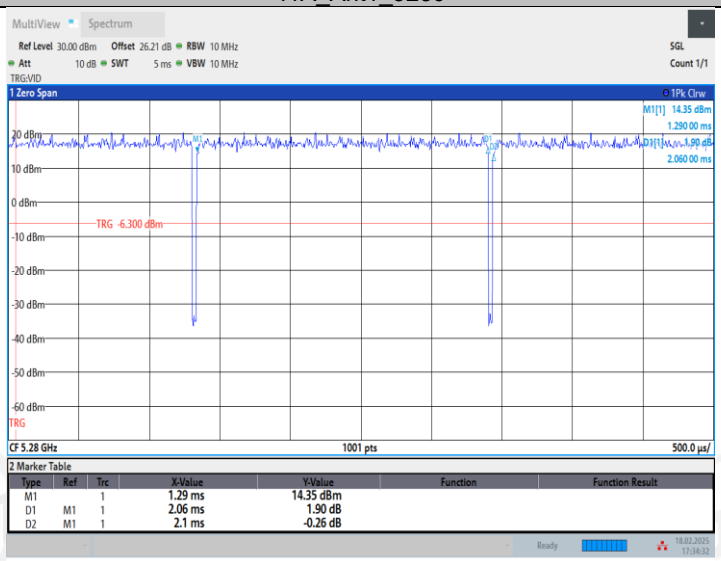

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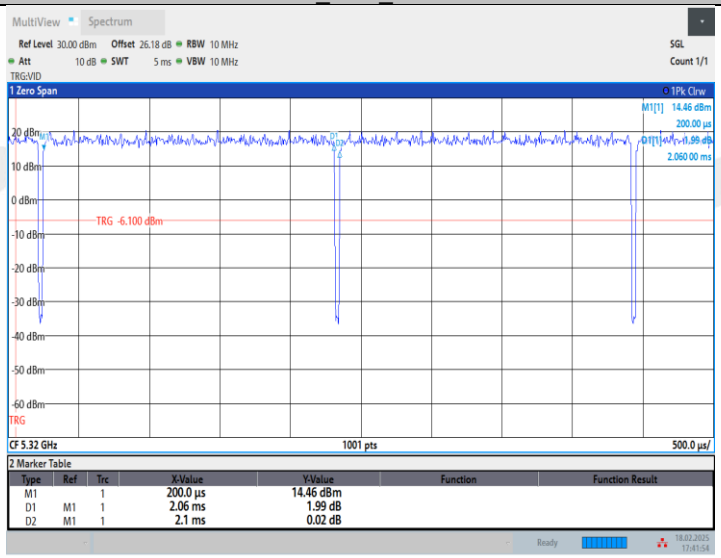

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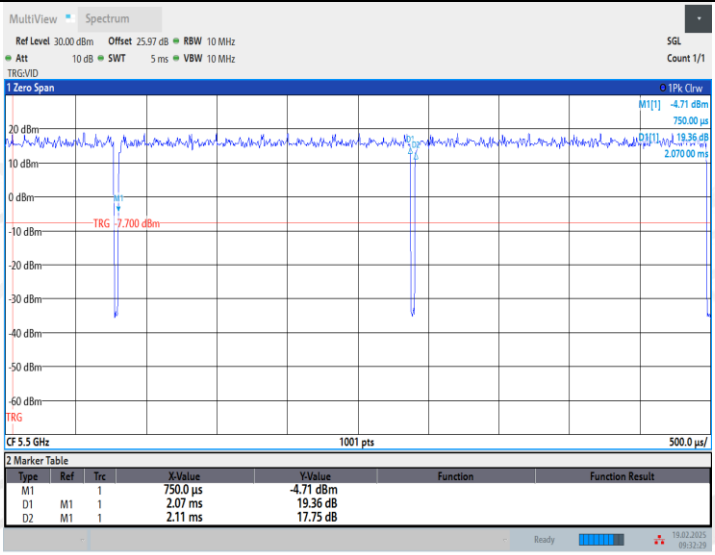

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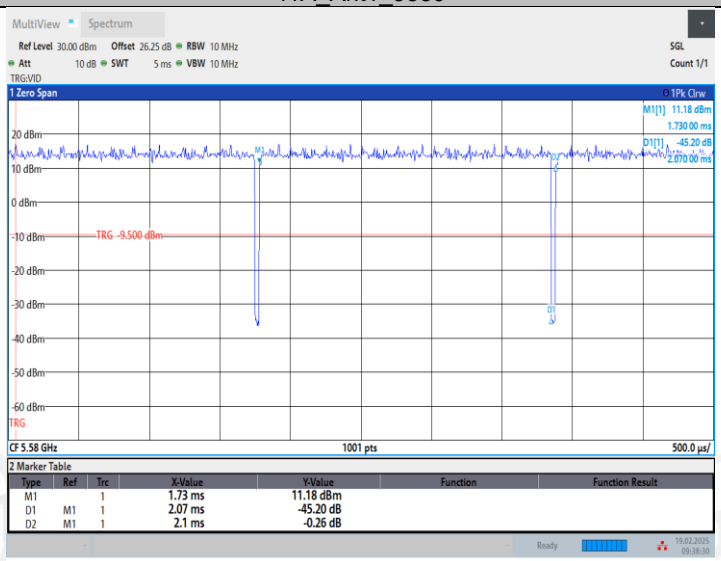

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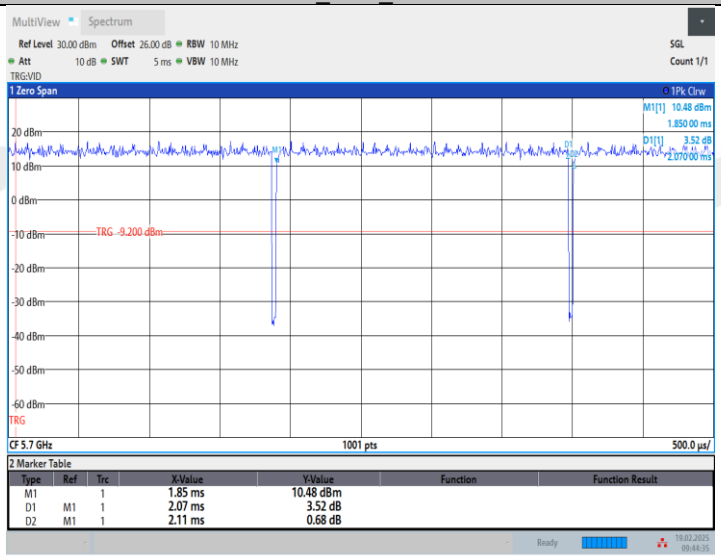

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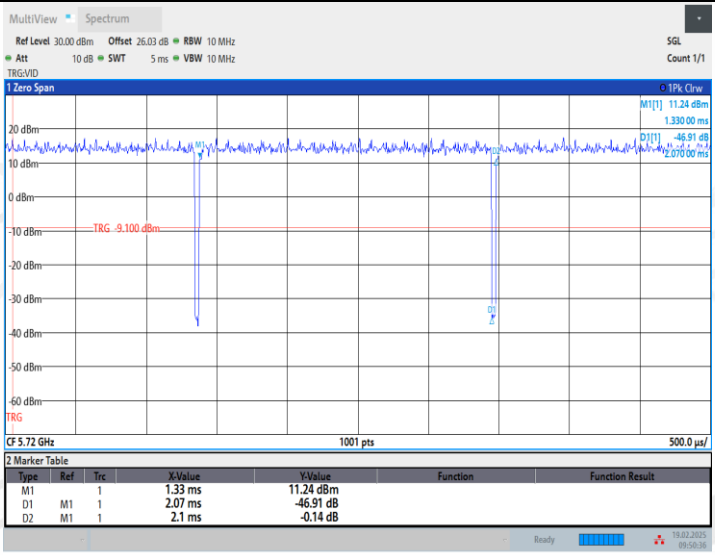

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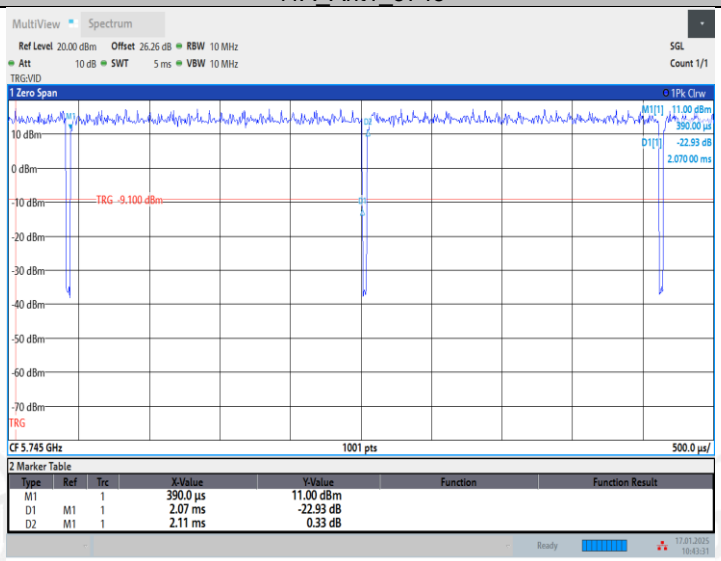

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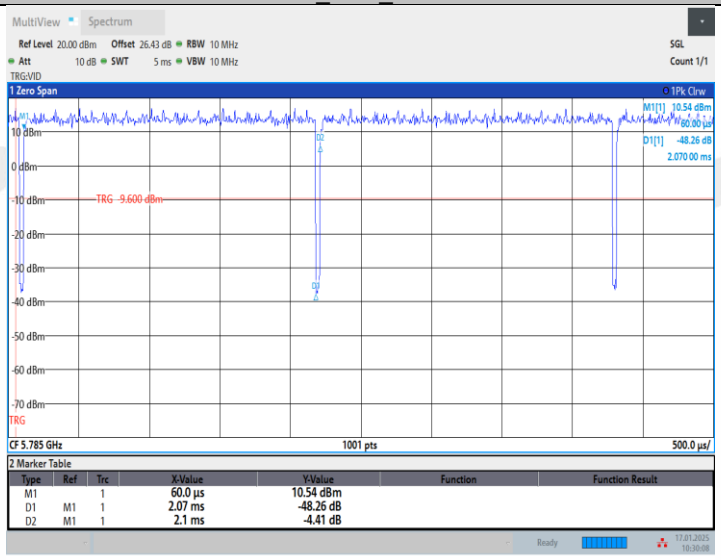

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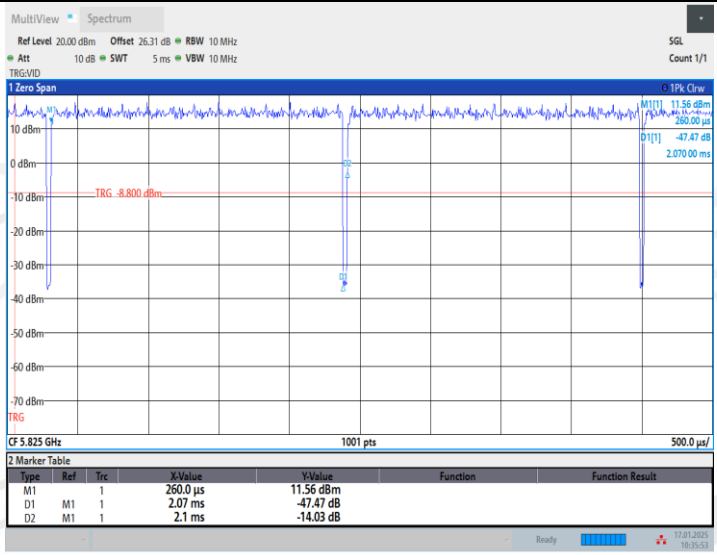

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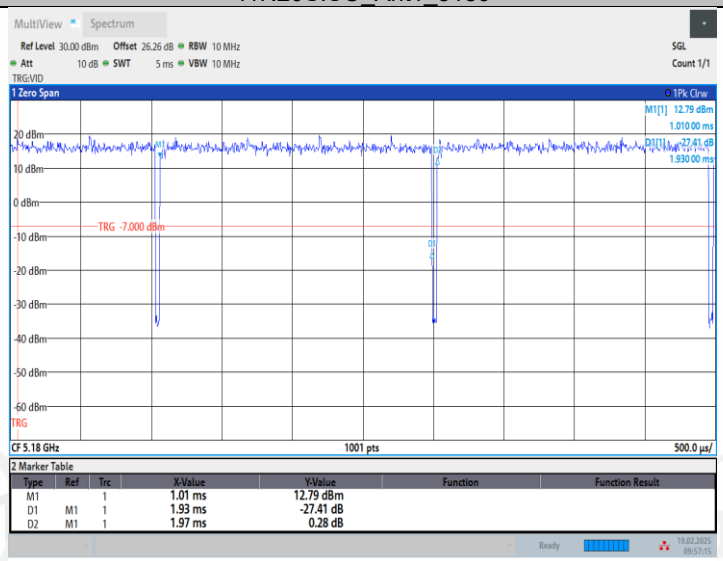

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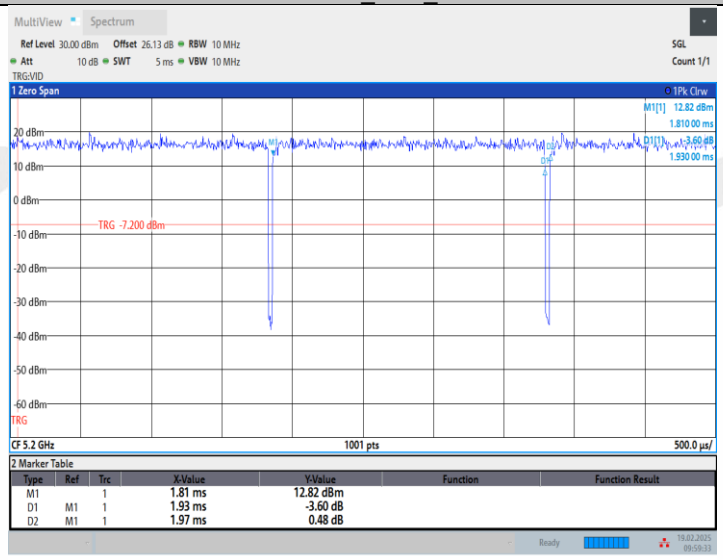

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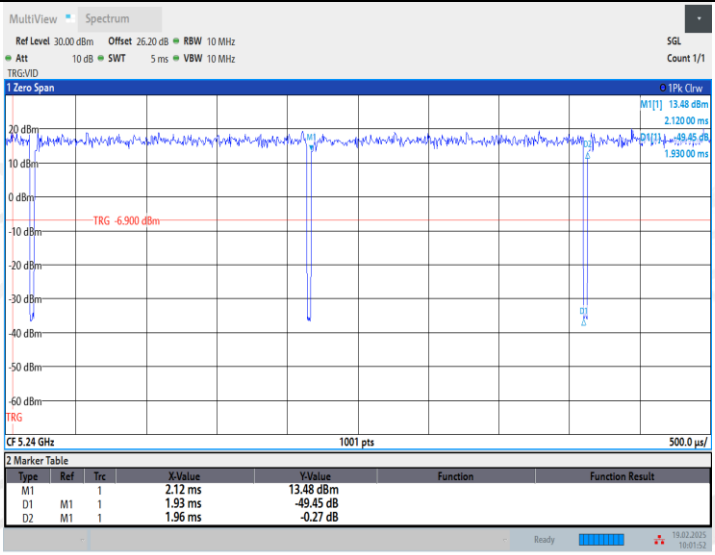

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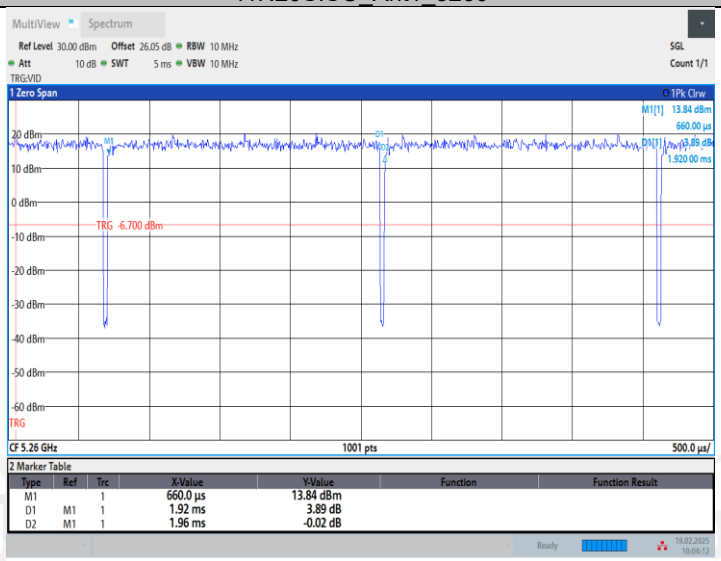

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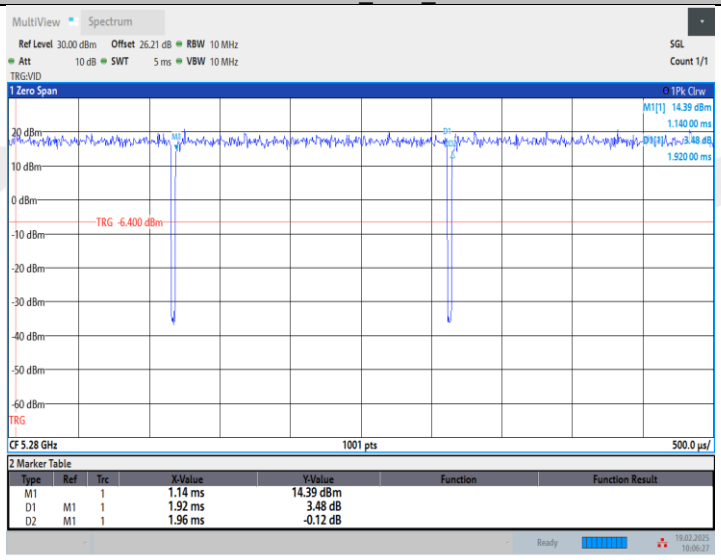

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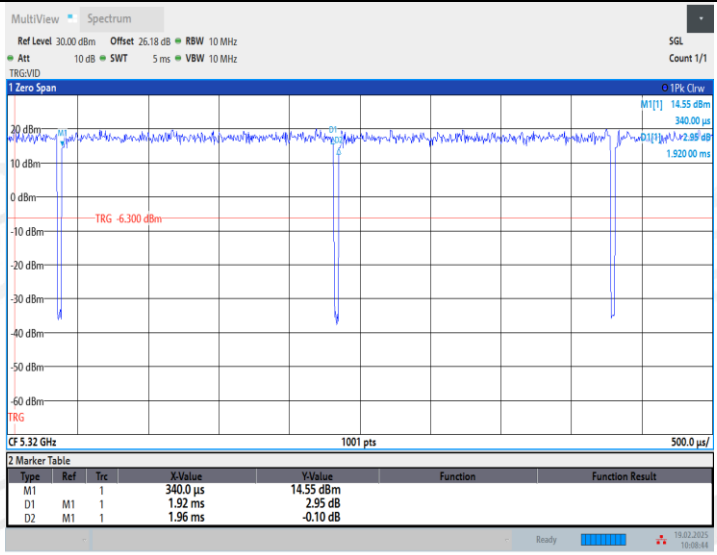

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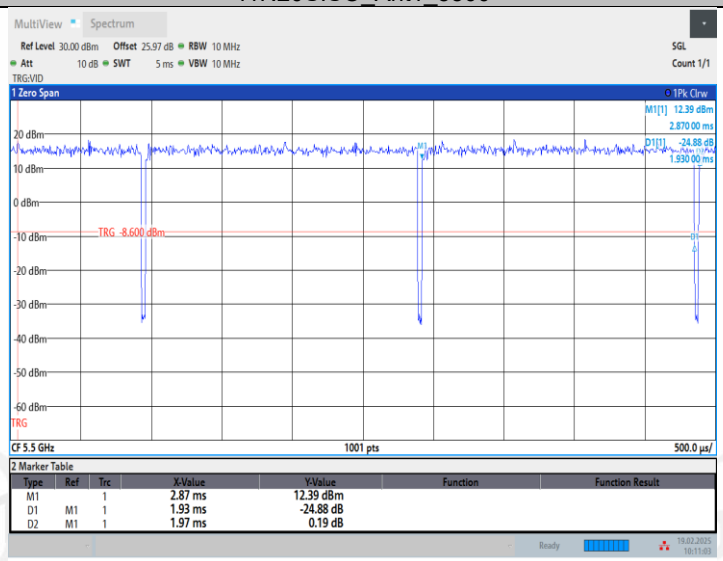

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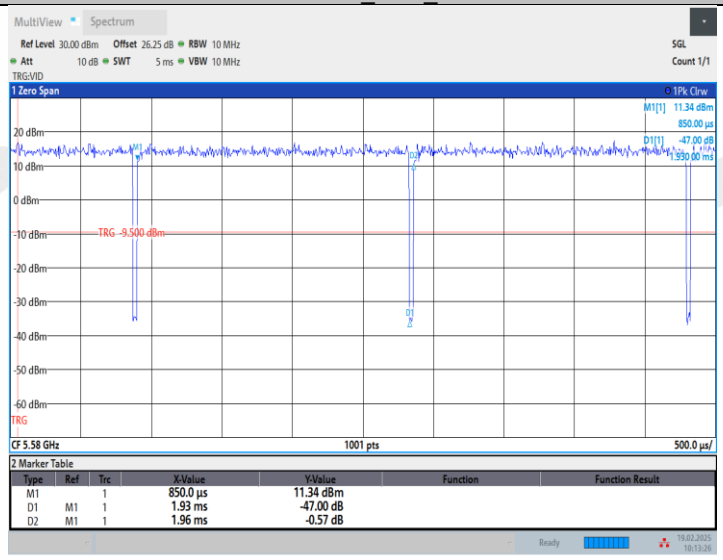

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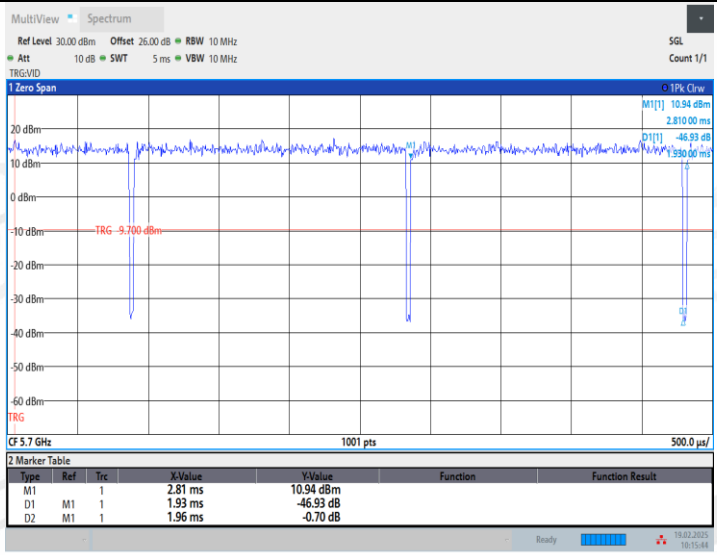

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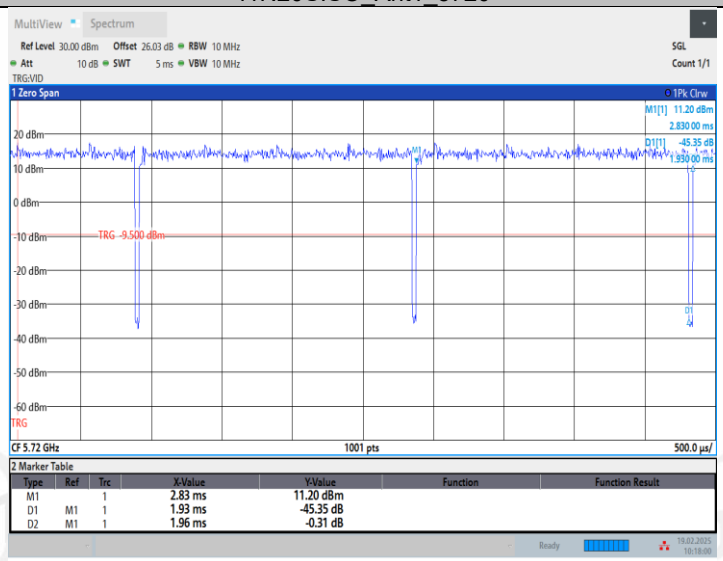

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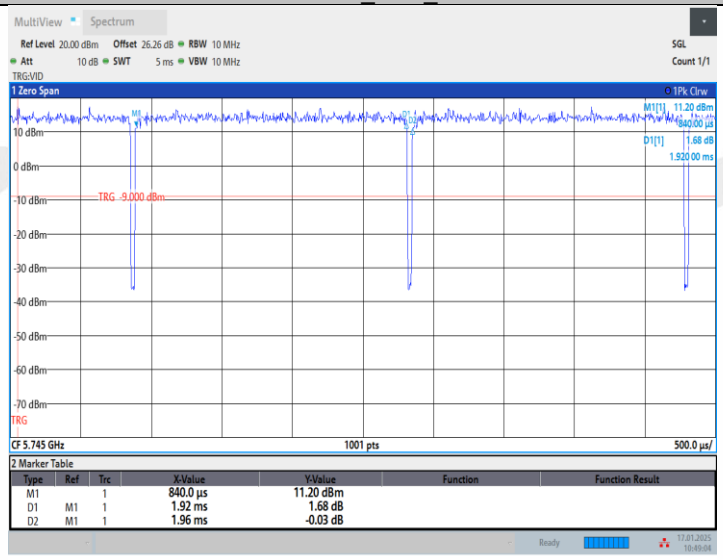

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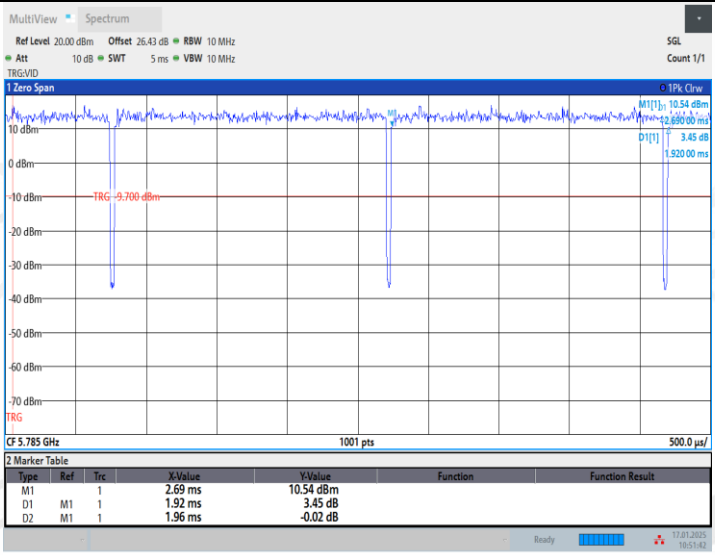

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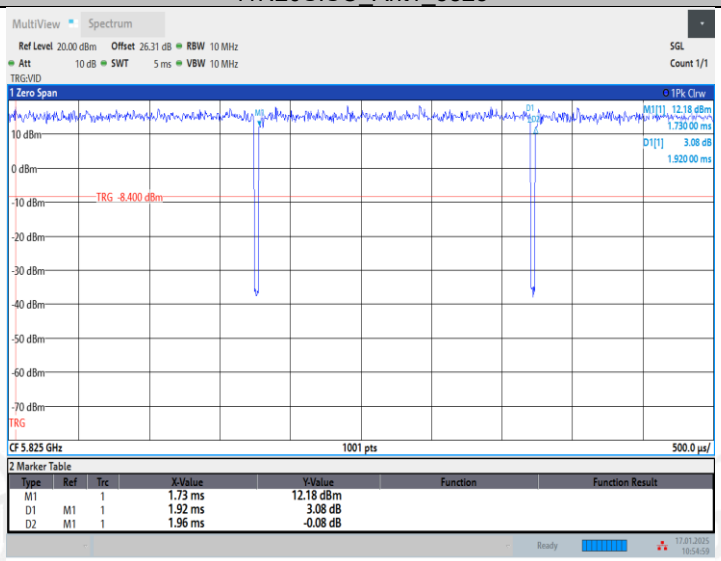

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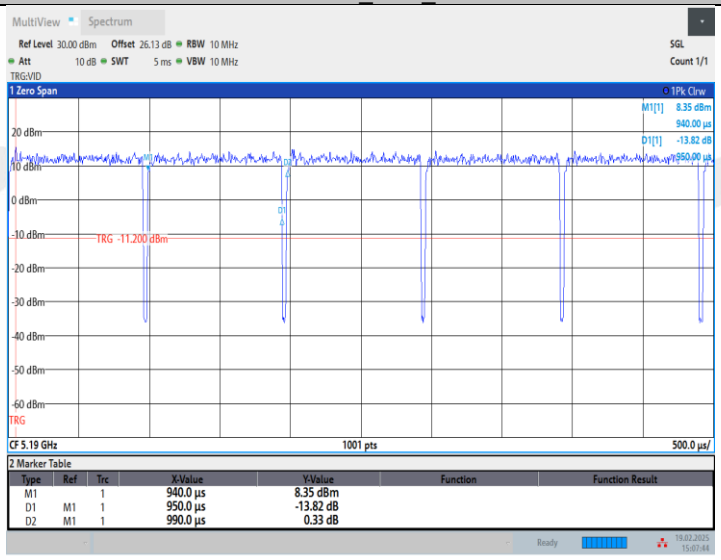

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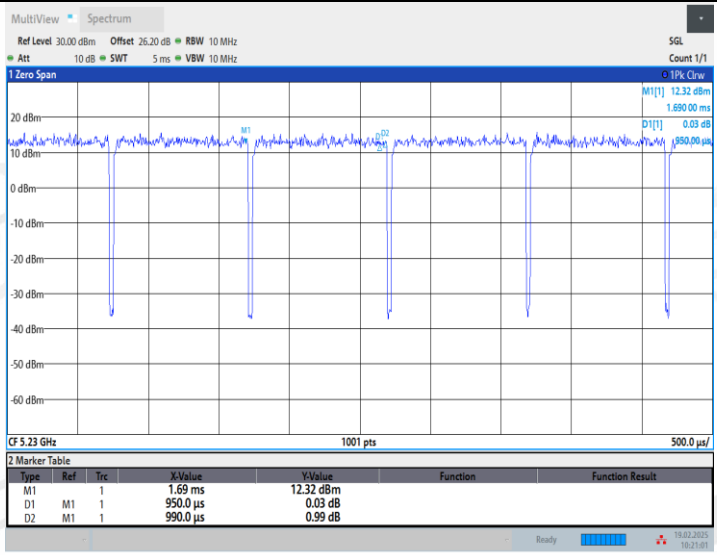

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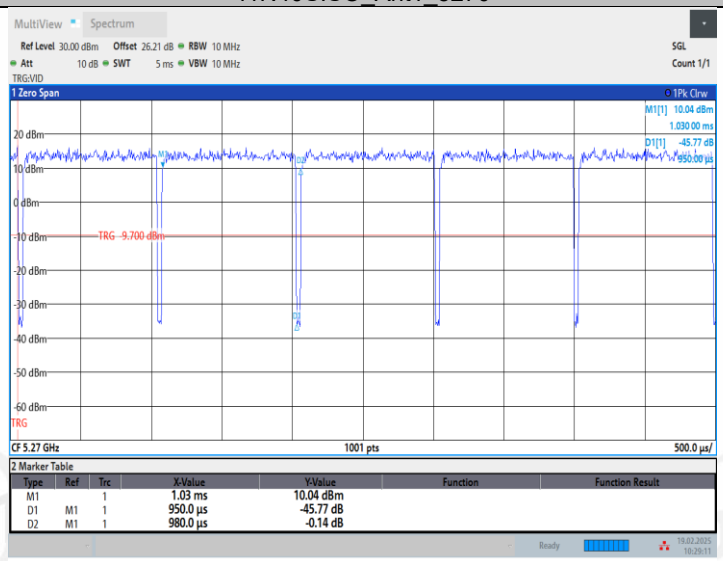

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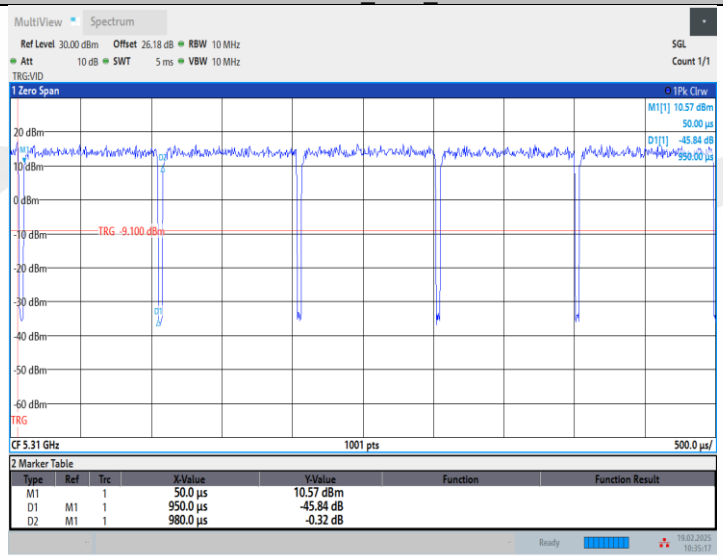

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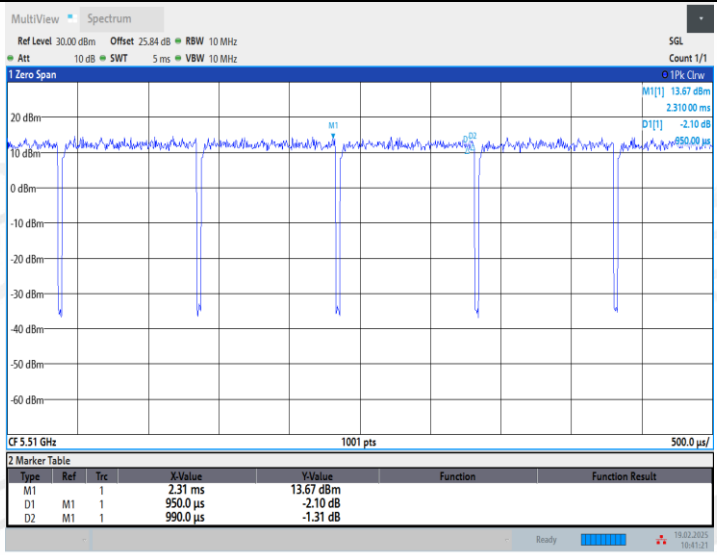

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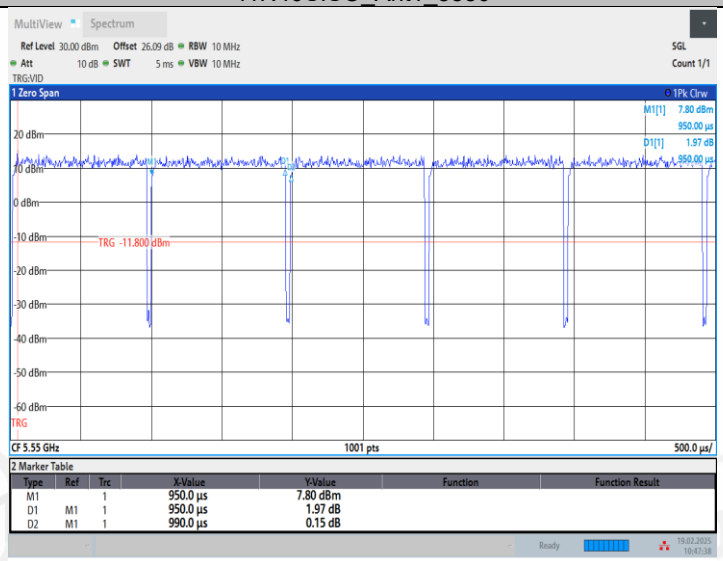

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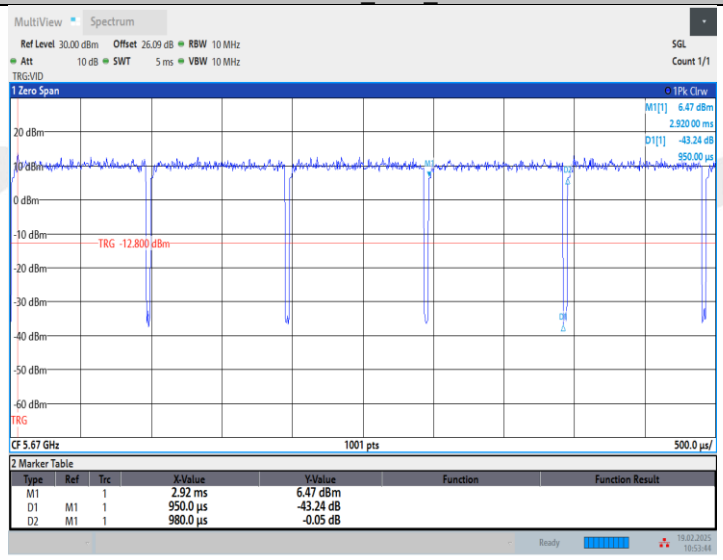

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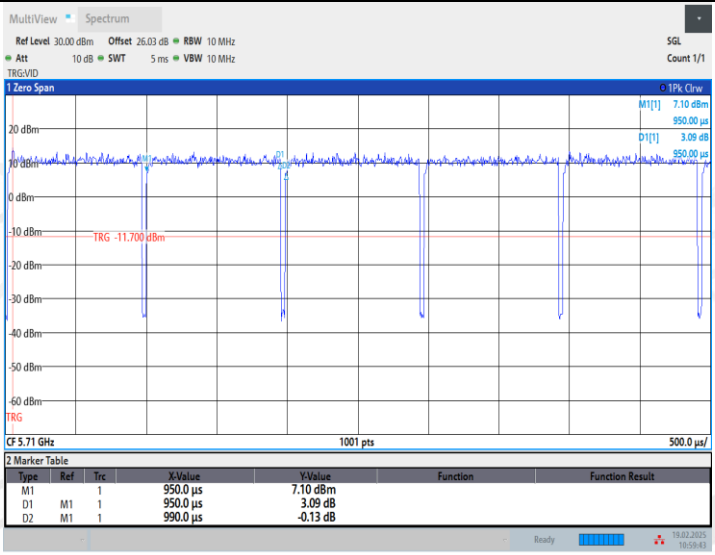

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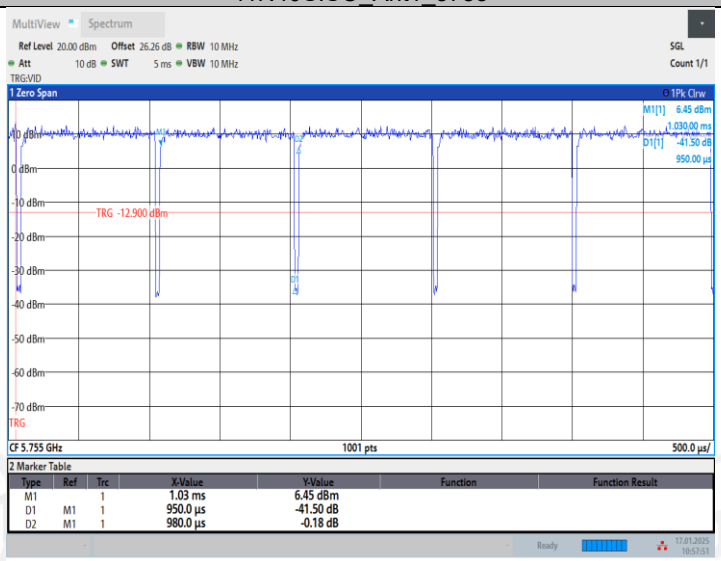

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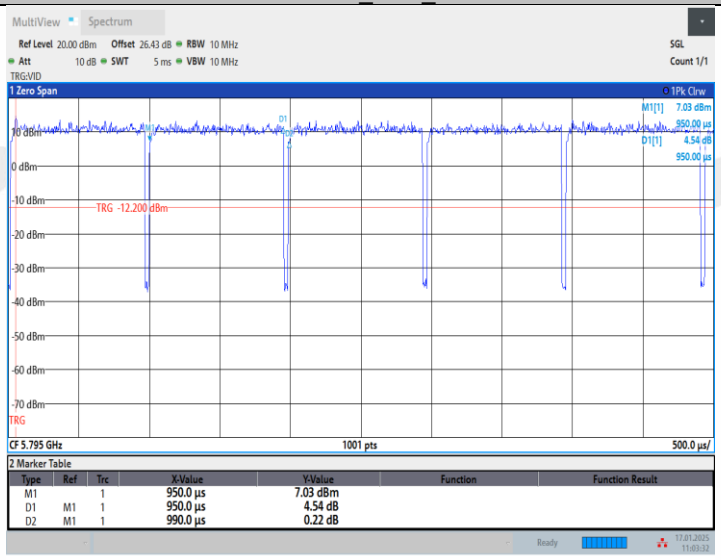

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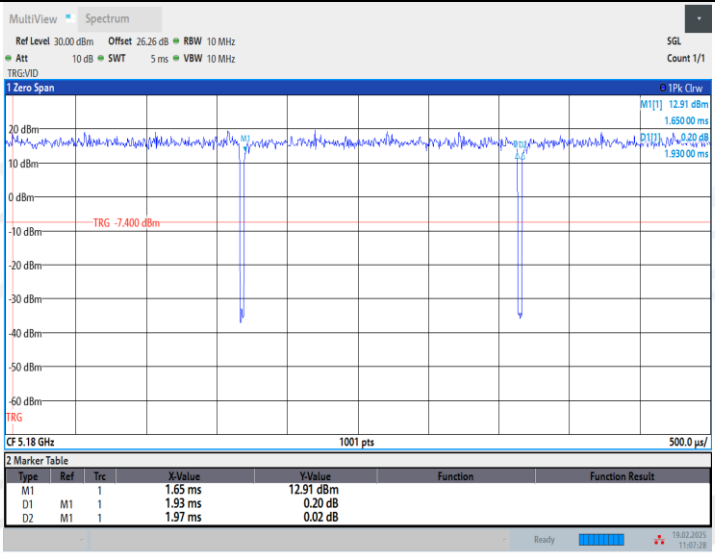

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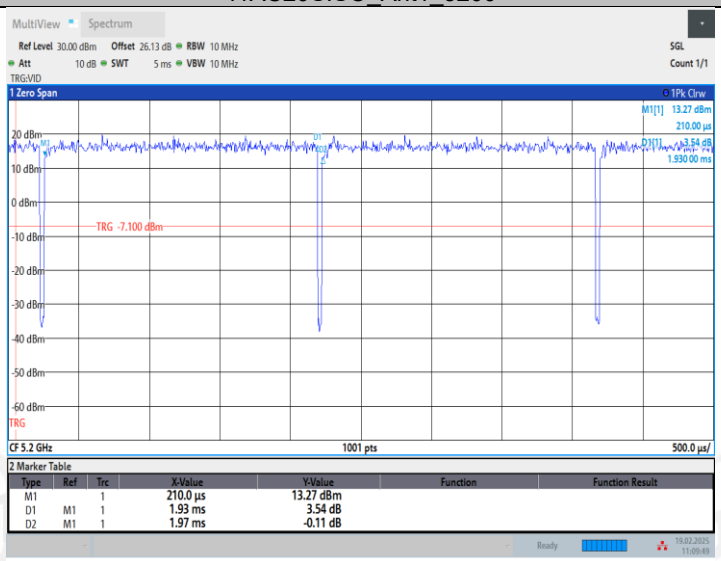

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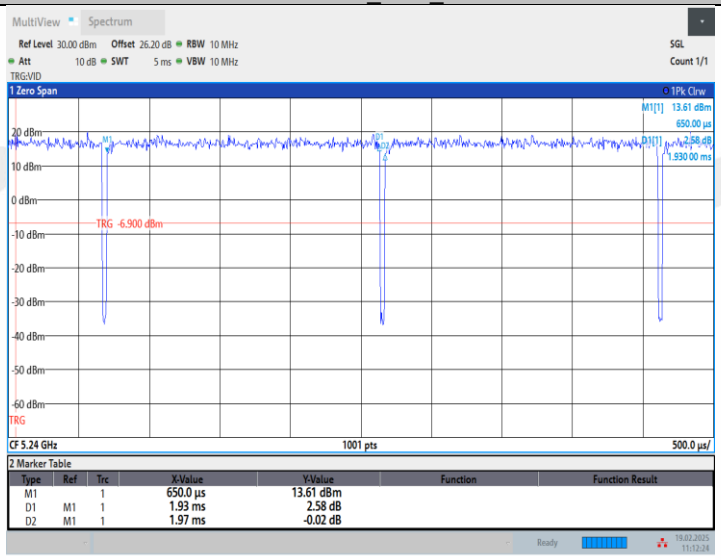

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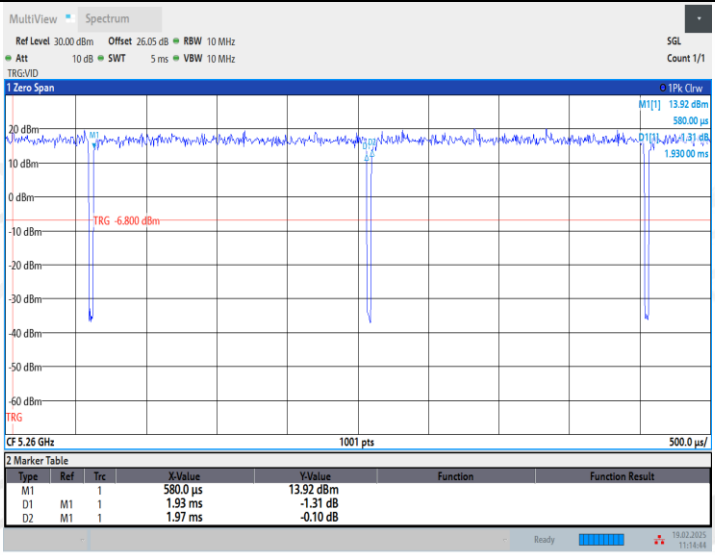

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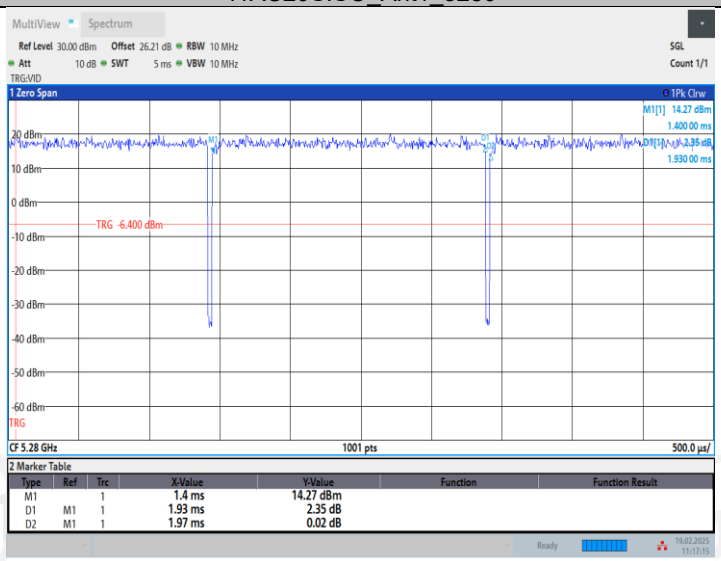

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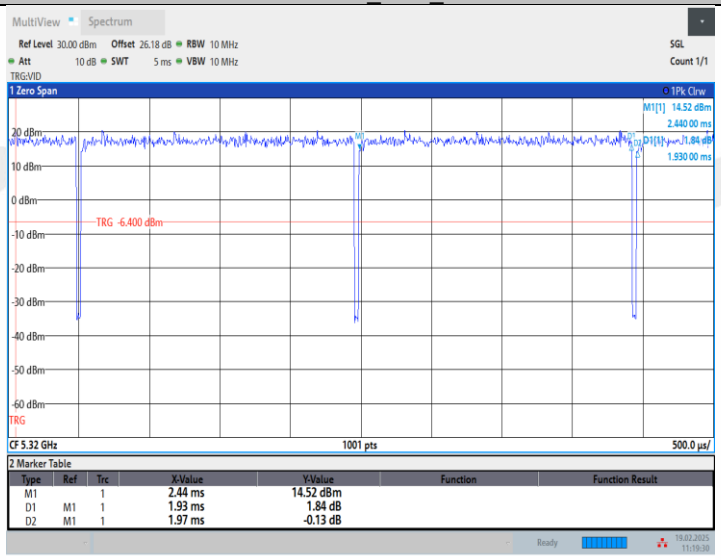

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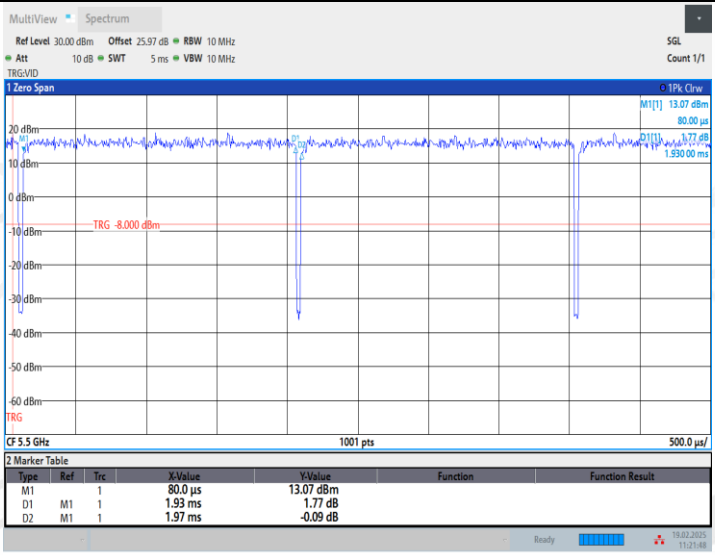

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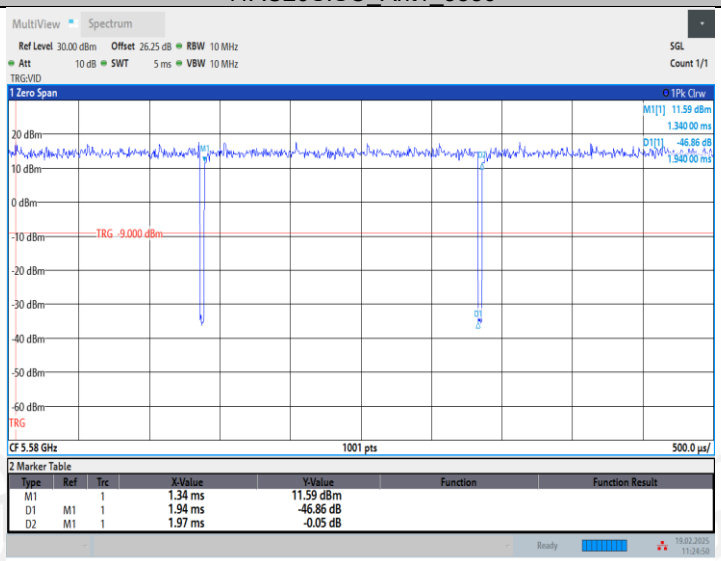

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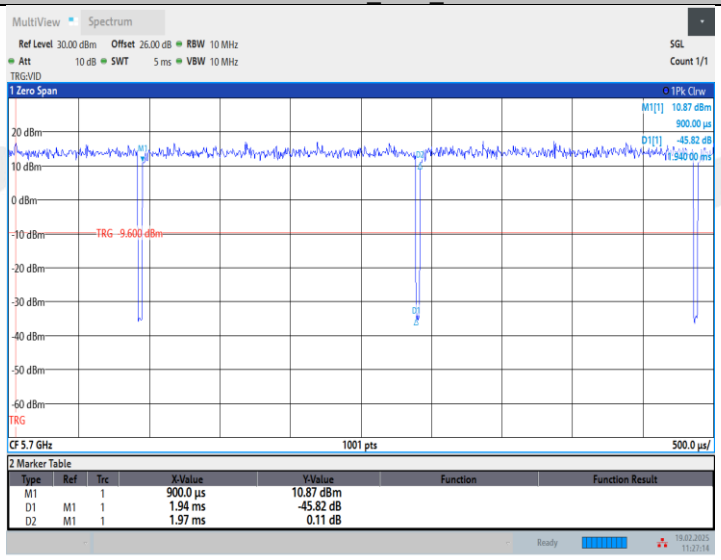

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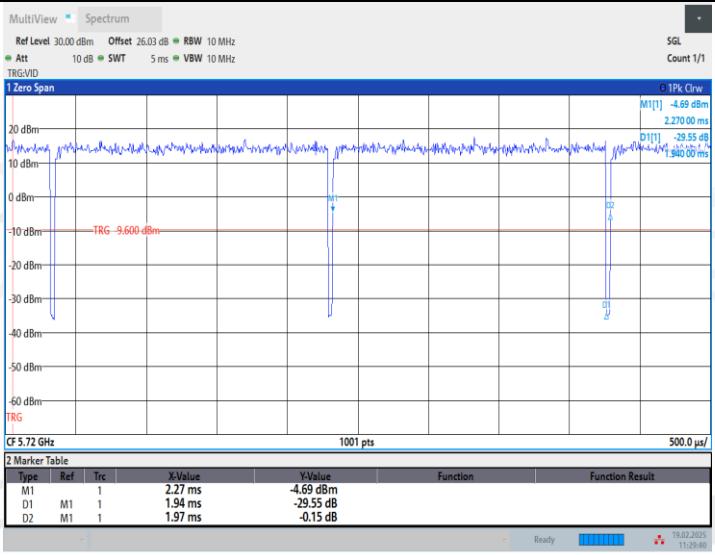

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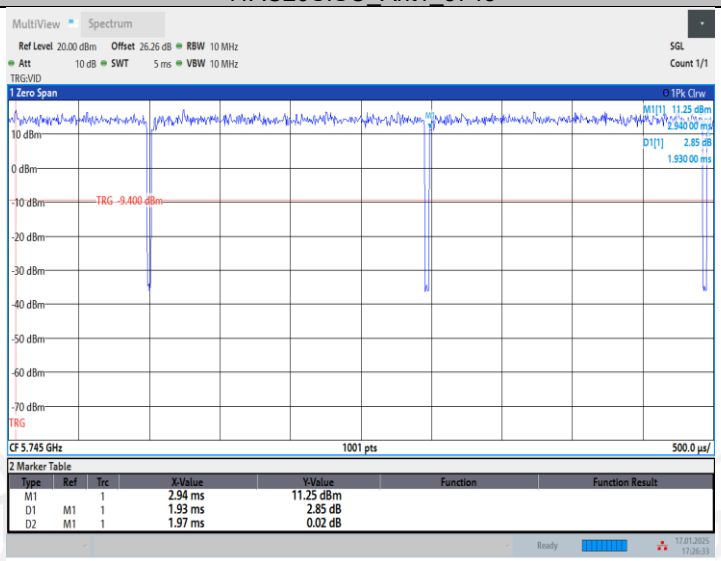

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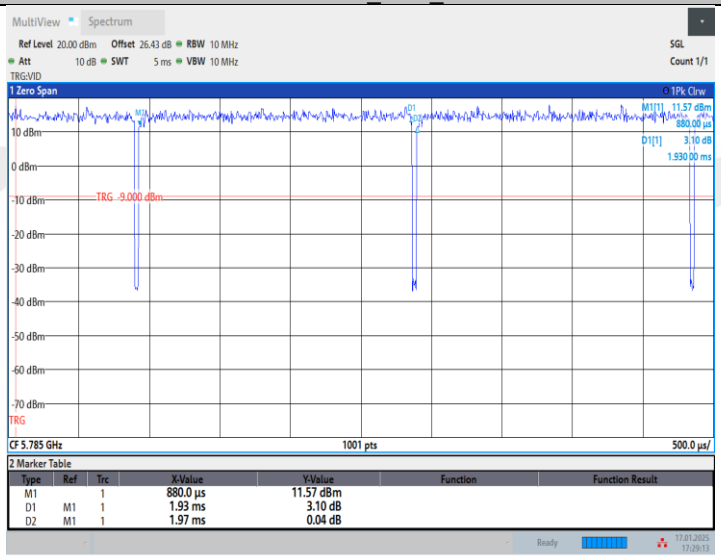

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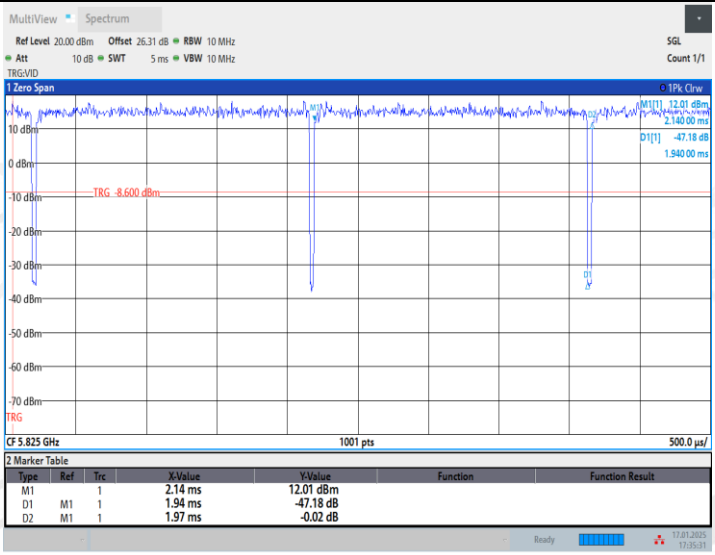

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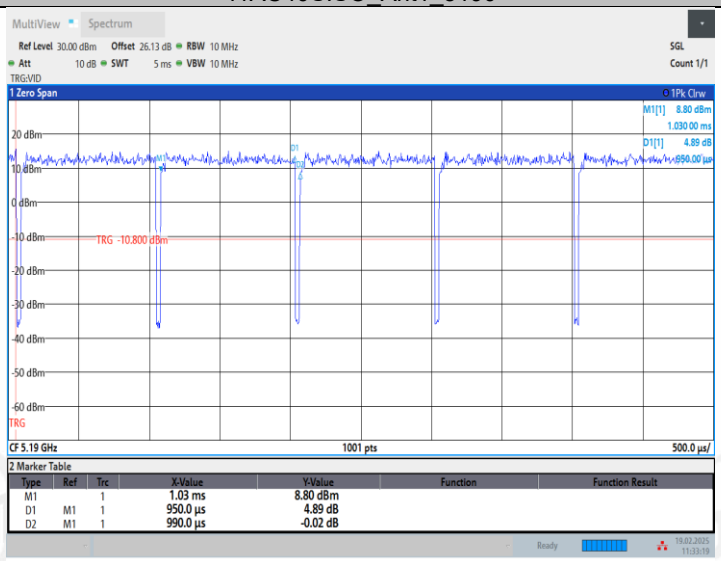

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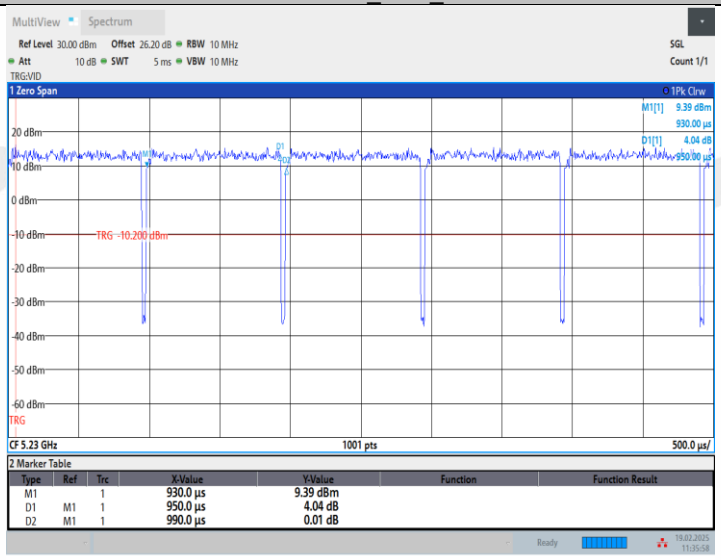

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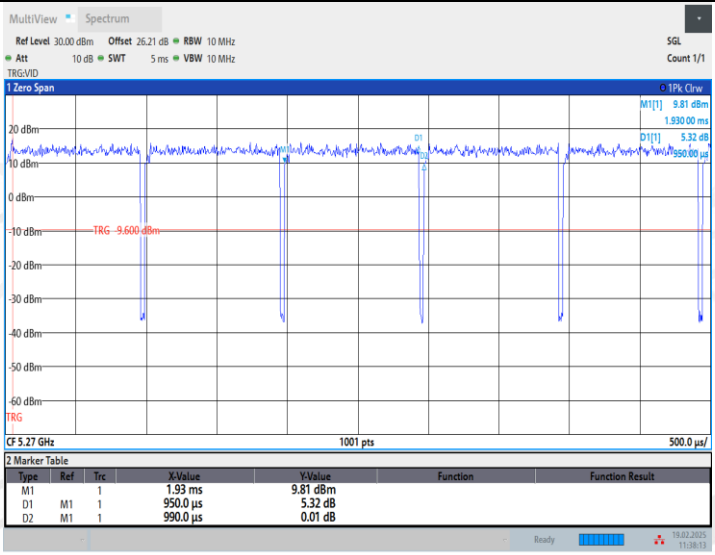

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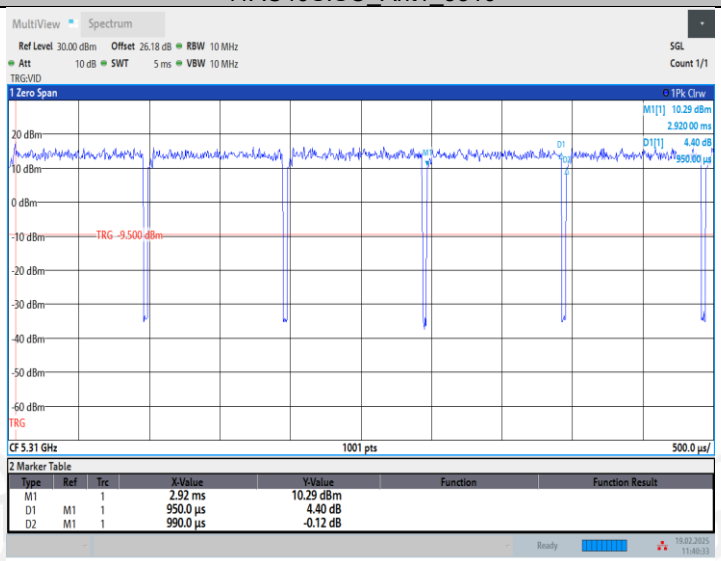

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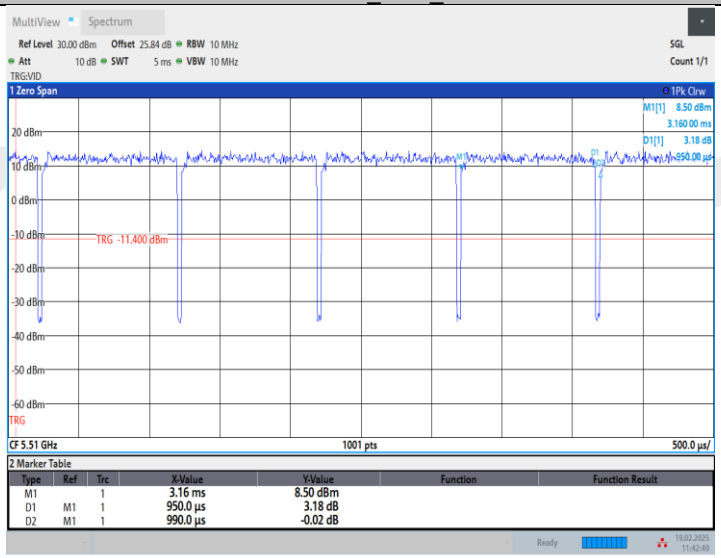
11AC40SISO_Ant1_5510



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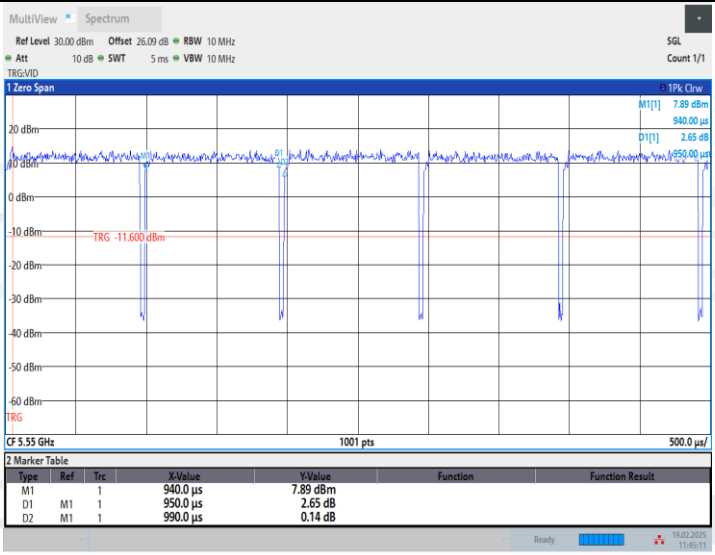

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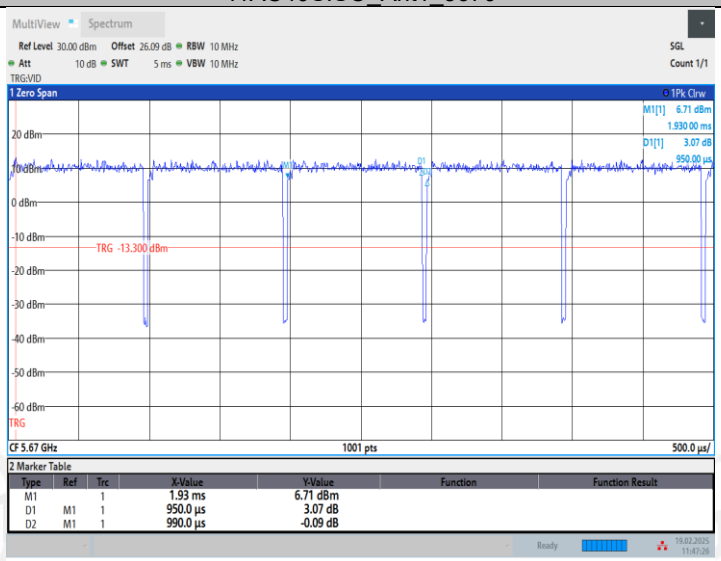

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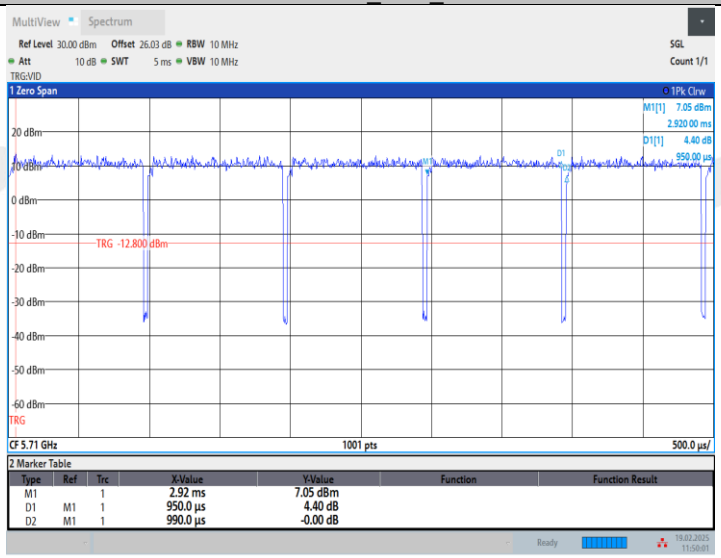
11AC40SISO_Ant1_5710



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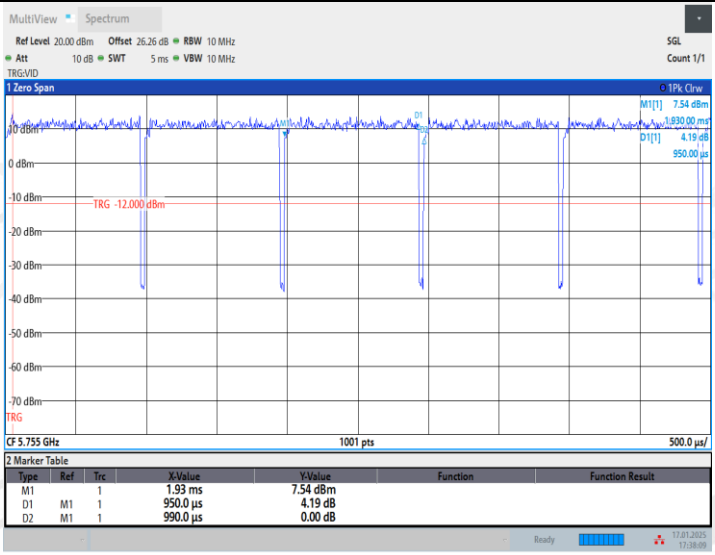

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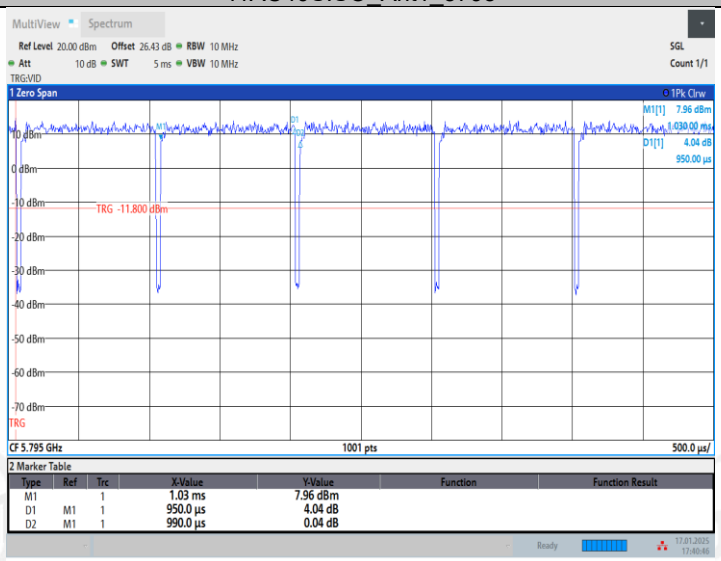

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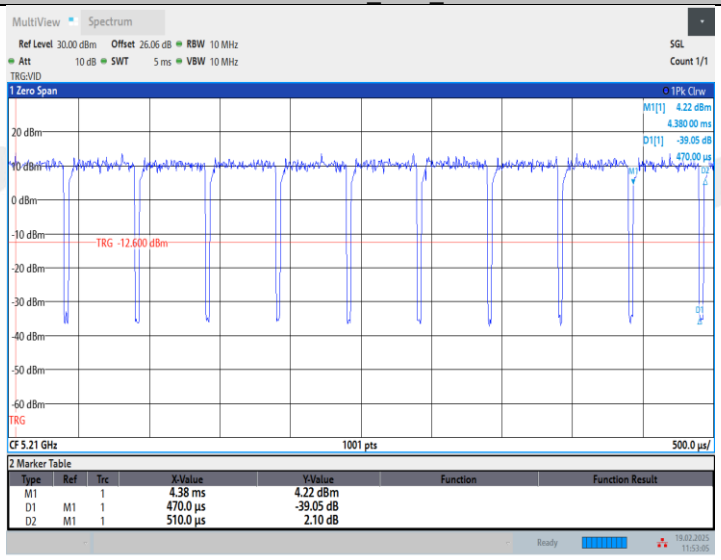
11AC80SISO_Ant1_5210



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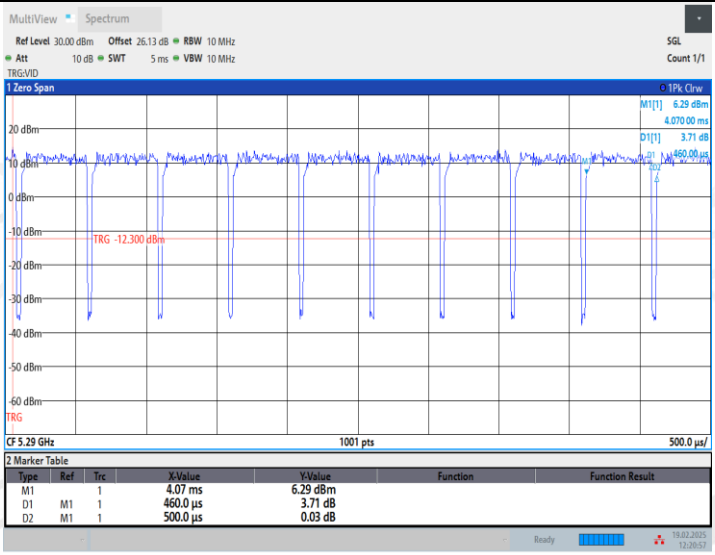

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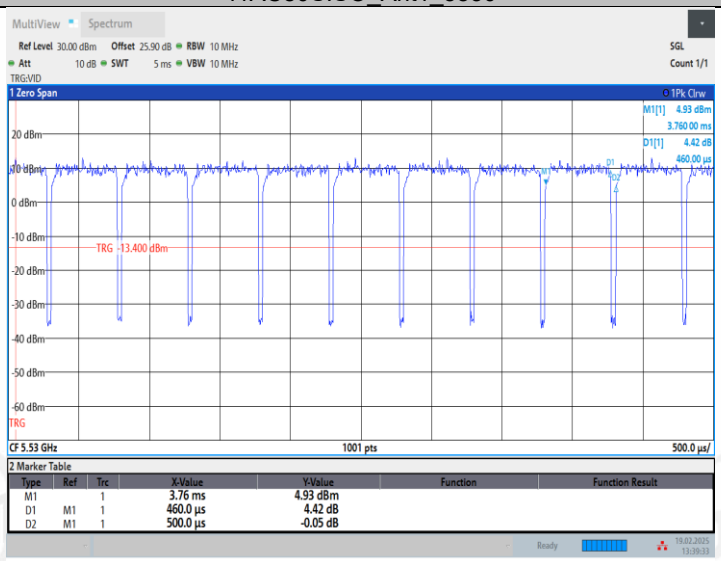

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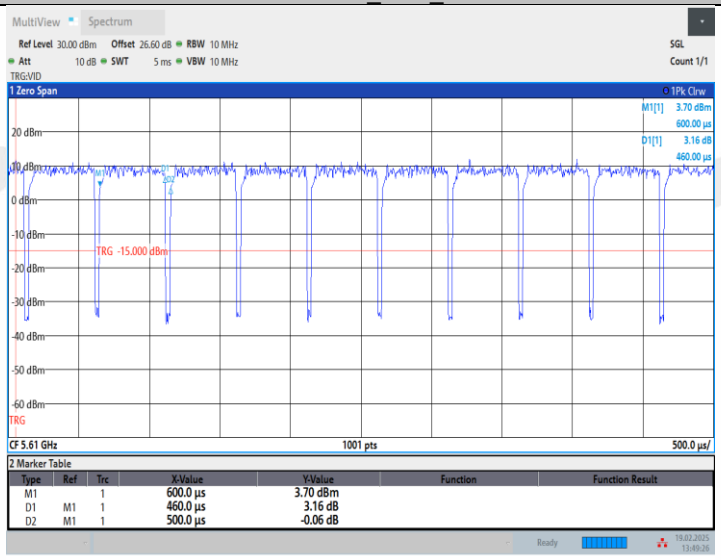

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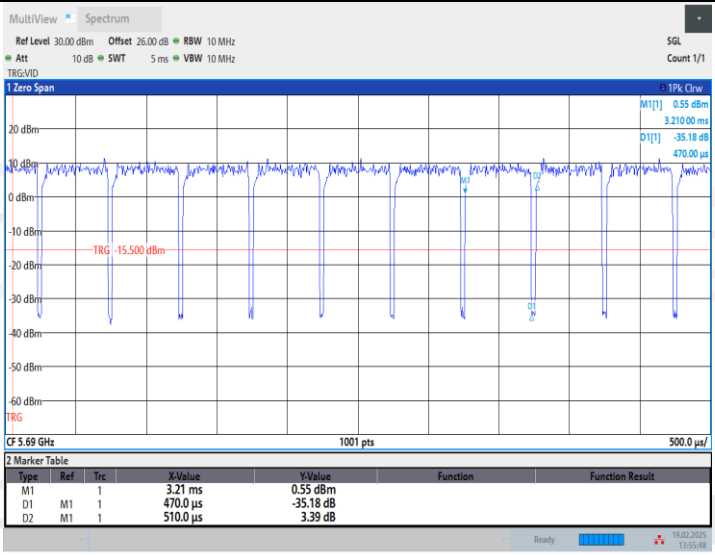

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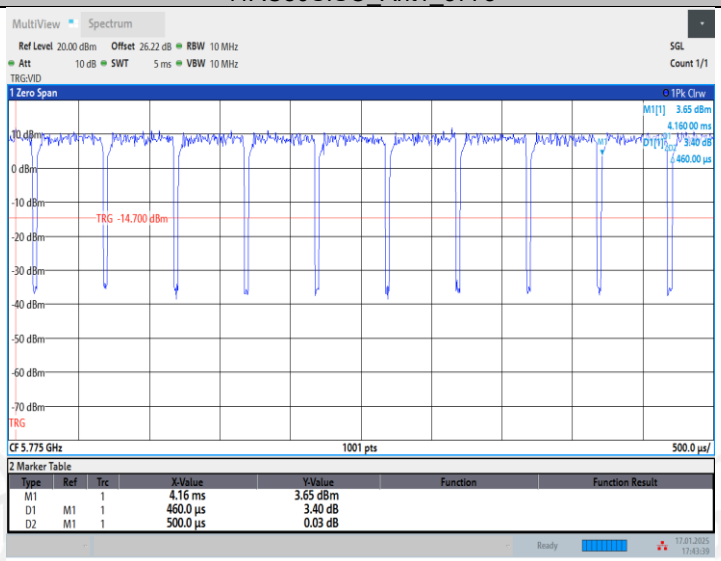
11AC80SISO_Ant1_5775



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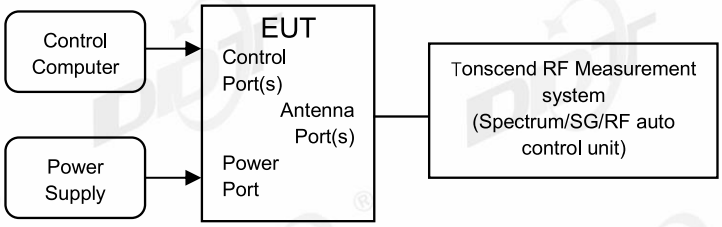
8. Maximum Output Power

8.1. Block diagram of test setup



8.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Maximum Output Power	outdoor access point: 1 W (30 dBm) indoor access point: 1 W (30 dBm) fixed point-to-point access points1 W (30 dBm) client devices: 250 mW (24 dBm)	5150-5250
	250 mW (24 dBm) or 11 + 10 $\log_{10}$ B	5250-5350
	250 mW (24 dBm) or 11 + 10 $\log_{10}$ B	5470 - 5725
	1 Watt (30 dBm)	5725-5850
Note: For FCC: B=26 bandwidth		

8.3. Test procedure

Connect each EUT's antenna output to power sensor by RF cable and attenuator

Measure the output power of each antenna port by power sensor.

8.4. Test result channel power

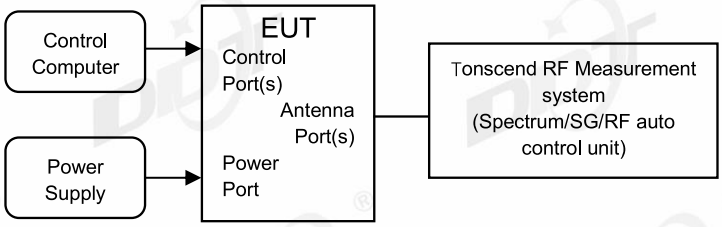
Test Engineer:	Zoe Peng	Test Site:	RF Measurement System 4#
Ambient Condition:	22.9-23.2℃, 43.1-47.6%RH	Test Date:	2025.01.17-2025.02.19
Test Power Supply:	DC 12V	Sample Number:	S24122405-004

Test Mode	Antenna	Freq (MHz)	Channel Powert [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	FCC Limit [dBm]	EIRP [dBm]	Verdict
11A	Ant1	5180	12.74	98.10	0.08	12.82	≤23.98	18.24	PASS
		5200	12.73	98.10	0.08	12.81	≤23.98	18.23	PASS
		5240	12.84	98.10	0.08	12.92	≤23.98	18.34	PASS
		5260	13.21	98.10	0.08	13.29	≤23.98	18.34	PASS
		5280	13.51	98.10	0.08	13.59	≤23.98	18.64	PASS
		5320	13.56	98.10	0.08	13.64	≤23.98	18.69	PASS
		5500	12.44	98.10	0.08	12.52	≤23.98	18.24	PASS
		5580	12.49	98.57	0.06	12.55	≤23.98	18.27	PASS
		5700	12.87	98.10	0.08	12.95	≤23.98	18.67	PASS
		5720	12.65	98.57	0.06	12.71	≤23.98	18.43	PASS
		5745	11.03	98.10	0.08	11.11	≤30.00	15.87	PASS
		5785	11.20	98.57	0.06	11.26	≤30.00	16.02	PASS
		5825	12.23	98.57	0.06	12.29	≤30.00	17.05	PASS
11N20SISO	Ant1	5180	12.43	97.97	0.09	12.52	≤23.98	17.94	PASS
		5200	12.75	97.97	0.09	12.84	≤23.98	18.26	PASS
		5240	12.88	98.47	0.07	12.95	≤23.98	18.37	PASS
		5260	13.42	97.96	0.09	13.51	≤23.98	18.56	PASS
		5280	13.73	97.96	0.09	13.82	≤23.98	18.87	PASS
		5320	13.85	97.96	0.09	13.94	≤23.98	18.99	PASS
		5500	12.40	97.97	0.09	12.49	≤23.98	18.21	PASS
		5580	12.43	98.47	0.07	12.50	≤23.98	18.22	PASS
		5700	12.82	98.47	0.07	12.89	≤23.98	18.61	PASS
		5720	12.59	98.47	0.07	12.66	≤23.98	18.38	PASS
		5745	11.00	97.96	0.09	11.09	≤30.00	15.85	PASS
		5785	11.16	97.96	0.09	11.25	≤30.00	16.01	PASS
		5825	12.00	97.96	0.09	12.09	≤30.00	16.85	PASS
11N40SISO	Ant1	5190	12.32	95.96	0.18	12.50	≤23.98	17.92	PASS
		5230	12.95	95.96	0.18	13.13	≤23.98	18.55	PASS
		5270	13.34	96.94	0.13	13.47	≤23.98	18.52	PASS

		5310	13.89	96.94	0.13	14.02	≤23.98	19.07	PASS
		5510	12.22	95.96	0.18	12.40	≤23.98	18.12	PASS
		5550	12.14	95.96	0.18	12.32	≤23.98	18.04	PASS
		5670	12.88	96.94	0.13	13.01	≤23.98	18.73	PASS
		5710	12.66	95.96	0.18	12.84	≤23.98	18.56	PASS
		5755	10.96	96.94	0.13	11.09	≤30.00	15.85	PASS
		5795	11.25	95.96	0.18	11.43	≤30.00	16.19	PASS
11AC20SISO	Ant1	5180	12.53	97.97	0.09	12.62	≤23.98	18.04	PASS
		5200	12.81	97.97	0.09	12.90	≤23.98	18.32	PASS
		5240	13.18	97.97	0.09	13.27	≤23.98	18.69	PASS
		5260	13.43	97.97	0.09	13.52	≤23.98	18.57	PASS
		5280	13.77	97.97	0.09	13.86	≤23.98	18.91	PASS
		5320	13.75	97.97	0.09	13.84	≤23.98	18.89	PASS
		5500	12.41	97.97	0.09	12.50	≤23.98	18.22	PASS
		5580	12.45	98.48	0.07	12.52	≤23.98	18.24	PASS
		5700	12.82	98.48	0.07	12.89	≤23.98	18.61	PASS
		5720	12.61	98.48	0.07	12.68	≤23.98	18.40	PASS
		5745	11.41	97.97	0.09	11.50	≤30.00	16.26	PASS
		5785	11.46	97.97	0.09	11.55	≤30.00	16.31	PASS
		5825	12.21	98.48	0.07	12.28	≤30.00	17.04	PASS
11AC40SISO	Ant1	5190	12.54	95.96	0.18	12.72	≤23.98	18.14	PASS
		5230	13.01	95.96	0.18	13.19	≤23.98	18.61	PASS
		5270	13.48	95.96	0.18	13.66	≤23.98	18.71	PASS
		5310	13.95	95.96	0.18	14.13	≤23.98	19.18	PASS
		5510	12.20	95.96	0.18	12.38	≤23.98	18.10	PASS
		5550	12.15	95.96	0.18	12.33	≤23.98	18.05	PASS
		5670	12.87	95.96	0.18	13.05	≤23.98	18.77	PASS
		5710	12.73	95.96	0.18	12.91	≤23.98	18.63	PASS
		5755	11.34	95.96	0.18	11.52	≤30.00	16.28	PASS
		5795	11.54	95.96	0.18	11.72	≤30.00	16.48	PASS
11AC80SISO	Ant1	5210	12.62	92.16	0.35	12.97	≤23.98	18.39	PASS
		5290	13.69	92.00	0.36	14.05	≤23.98	19.10	PASS
		5530	12.09	92.00	0.36	12.45	≤23.98	18.17	PASS
		5610	12.18	92.00	0.36	12.54	≤23.98	18.26	PASS
		5690	12.05	92.16	0.35	12.40	≤23.98	18.12	PASS
		5775	11.40	92.00	0.36	11.76	≤30.00	16.52	PASS

9. Power Spectral Density

9.1. Block diagram of test setup



9.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	Other than Mobile and portable:17 dBm/MHz Mobile and portable client devices:11 dBm/MHz	5150-5250
	11 dBm/MHz	5250-5350
	11 dBm/MHz	5470 - 5725
	30 dBm/500 kHz	5725-5850

9.3. Test procedure

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.

Connect the UUT to the spectrum analyser and use the following settings:

5150 MHz~5250 MHz, 5250 MHz~5350 MHz, 5470 MHz~5725 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

5725 MHz-5850 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

9.4. Test result

Test Engineer:	Zoe Peng	Test Site:	RF Measurement System 4#
Ambient Condition:	22.9-23.2℃, 43.1-47.6%RH	Test Date:	2025.01.17-2025.02.19
Test Power Supply:	DC 12V	Sample Number:	S24122405-004

Test Mode	Antenna	Freq (MHz)	Result [dBm/MHz]	Limit [dBm/MHz]	EIRP [dBm/MHz]	Verdict
11A	Ant1	5180	0.05	≤11.00	5.47	PASS
		5200	0.56	≤11.00	5.98	PASS
		5240	1.00	≤11.00	6.42	PASS
		5260	1.28	≤11.00	6.33	PASS
		5280	1.72	≤11.00	6.77	PASS
		5320	1.90	≤11.00	6.95	PASS
		5500	-0.20	≤11.00	5.52	PASS
		5580	-0.04	≤11.00	5.68	PASS
		5700	0.40	≤11.00	6.12	PASS
		5720_UNII-2C	0.23	≤11.00	5.95	PASS
		5720_UNII-3	-2.92	≤30.00	1.84	PASS
		5745	-4.21	≤30.00	0.55	PASS
		5785	-4.93	≤30.00	-0.17	PASS
		5825	-3.35	≤30.00	1.41	PASS
11N20SISO	Ant1	5180	0.09	≤11.00	5.51	PASS
		5200	0.42	≤11.00	5.84	PASS
		5240	0.76	≤11.00	6.18	PASS
		5260	1.06	≤11.00	6.11	PASS
		5280	1.51	≤11.00	6.56	PASS
		5320	0.93	≤11.00	5.98	PASS
		5500	0.22	≤11.00	5.94	PASS
		5580	-0.32	≤11.00	5.40	PASS

		5700	0.10	≤11.00	5.82	PASS
		5720_UNII-2C	-0.04	≤11.00	5.68	PASS
		5720_UNII-3	-3.25	≤30.00	1.51	PASS
		5745	-4.88	≤30.00	-0.12	PASS
		5785	-4.58	≤30.00	0.18	PASS
		5825	-4.26	≤30.00	0.50	PASS
11N40SISO	Ant1	5190	-2.91	≤11.00	2.51	PASS
		5230	-2.46	≤11.00	2.96	PASS
		5270	-1.89	≤11.00	3.16	PASS
		5310	-1.57	≤11.00	3.48	PASS
		5510	-3.09	≤11.00	2.63	PASS
		5550	-3.41	≤11.00	2.31	PASS
		5670	-2.94	≤11.00	2.78	PASS
		5710_UNII-2C	-2.95	≤11.00	2.77	PASS
		5710_UNII-3	-6.39	≤30.00	-1.63	PASS
		5755	-7.68	≤30.00	-2.92	PASS
		5795	-7.39	≤30.00	-2.63	PASS
11AC20SISO	Ant1	5180	0.14	≤11.00	5.56	PASS
		5200	0.50	≤11.00	5.92	PASS
		5240	0.75	≤11.00	6.17	PASS
		5260	1.04	≤11.00	6.09	PASS
		5280	1.32	≤11.00	6.37	PASS
		5320	1.75	≤11.00	6.80	PASS
		5500	0.17	≤11.00	5.89	PASS
		5580	-0.27	≤11.00	5.45	PASS
		5700	0.11	≤11.00	5.83	PASS

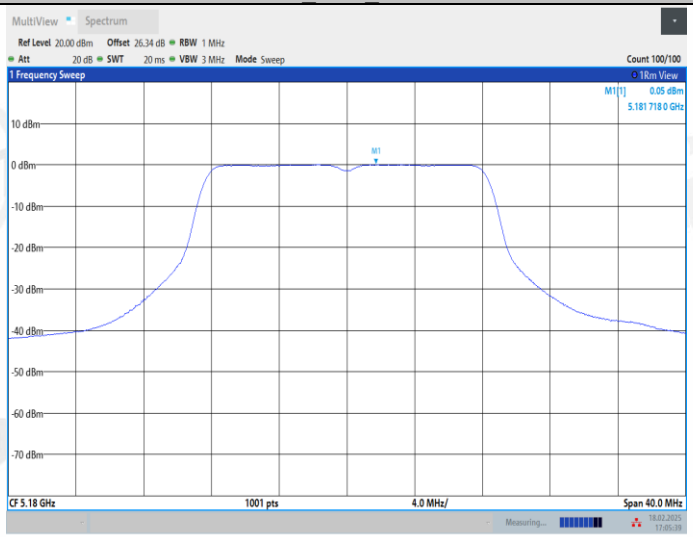
		5720_UNII-2C	-0.09	≤11.00	5.63	PASS
		5720_UNII-3	-3.24	≤30.00	1.52	PASS
		5745	-4.31	≤30.00	0.45	PASS
		5785	-4.26	≤30.00	0.50	PASS
		5825	-3.30	≤30.00	1.46	PASS
11AC40SISO	Ant1	5190	-2.95	≤11.00	2.47	PASS
		5230	-2.44	≤11.00	2.98	PASS
		5270	-1.87	≤11.00	3.18	PASS
		5310	-1.52	≤11.00	3.53	PASS
		5510	-3.58	≤11.00	2.14	PASS
		5550	-3.41	≤11.00	2.31	PASS
		5670	-2.96	≤11.00	2.76	PASS
		5710_UNII-2C	-2.93	≤11.00	2.79	PASS
		5710_UNII-3	-6.38	≤30.00	-1.62	PASS
		5755	-6.99	≤30.00	-2.23	PASS
		5795	-6.86	≤30.00	-2.10	PASS
11AC80SISO	Ant1	5210	-5.74	≤11.00	-0.32	PASS
		5290	-4.51	≤11.00	0.54	PASS
		5530	-6.19	≤11.00	-0.47	PASS
		5610	-5.88	≤11.00	-0.16	PASS
		5690_UNII-2C	-6.00	≤11.00	-0.28	PASS
		5690_UNII-3	-9.30	≤30.00	-4.54	PASS
		5775	-9.72	≤30.00	-4.96	PASS

Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

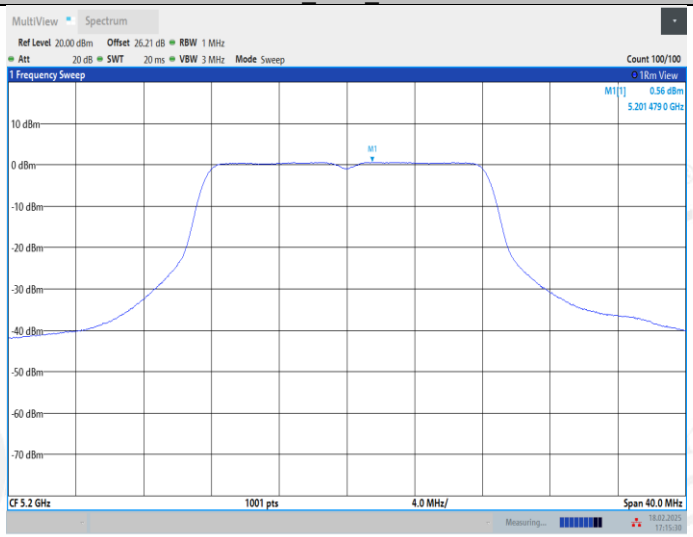
2.The Duty Cycle Factor is compensated in the graph.

9.5. Test graphs

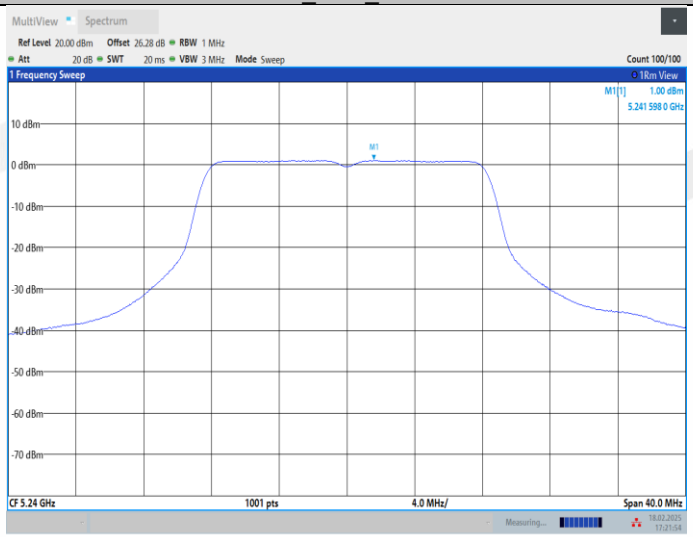
11A_Ant1_5180



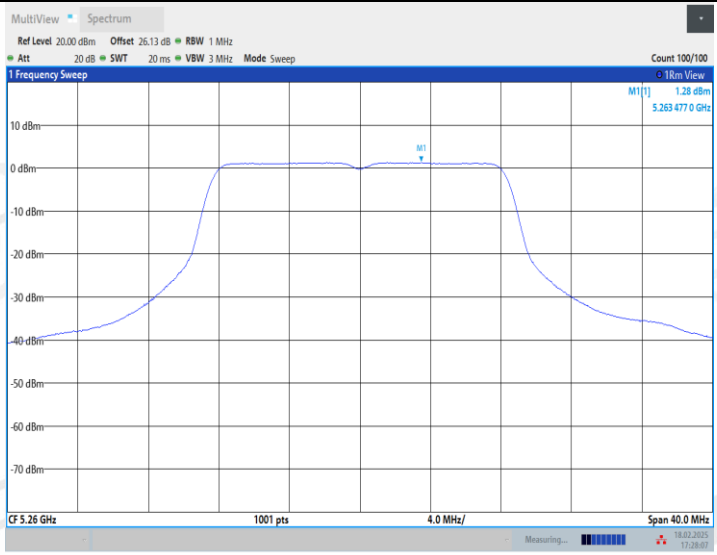
11A_Ant1_5200



11A_Ant1_5240



11A_Ant1_5260



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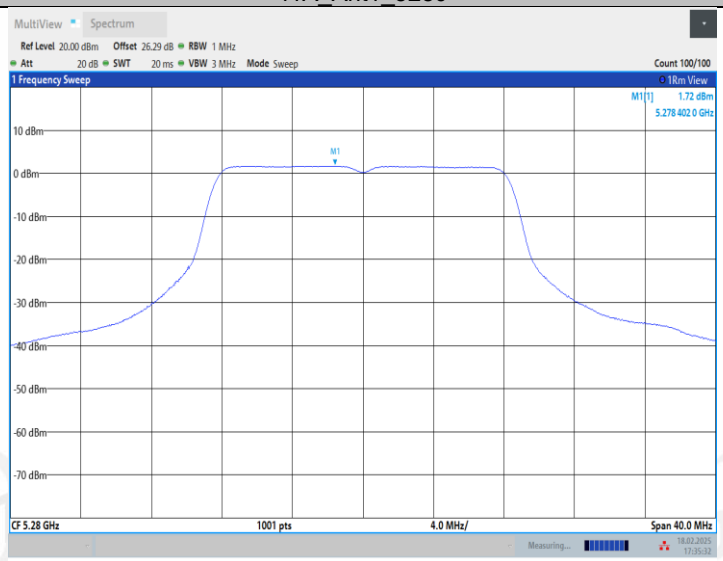
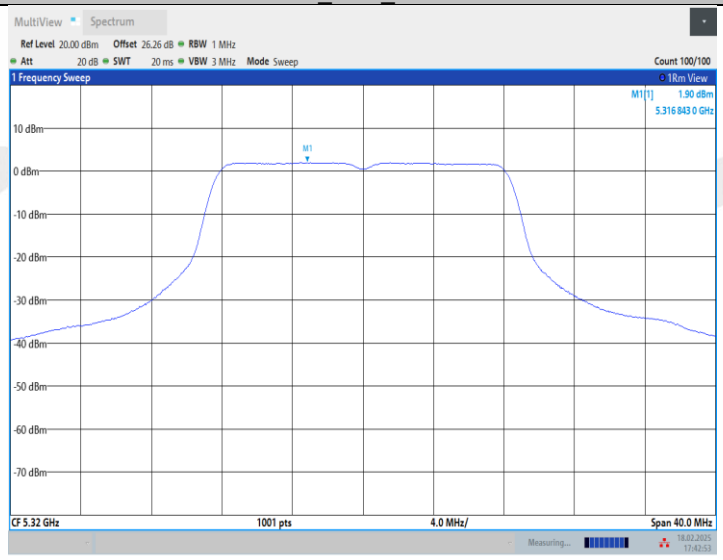


11A_Ant1_5320



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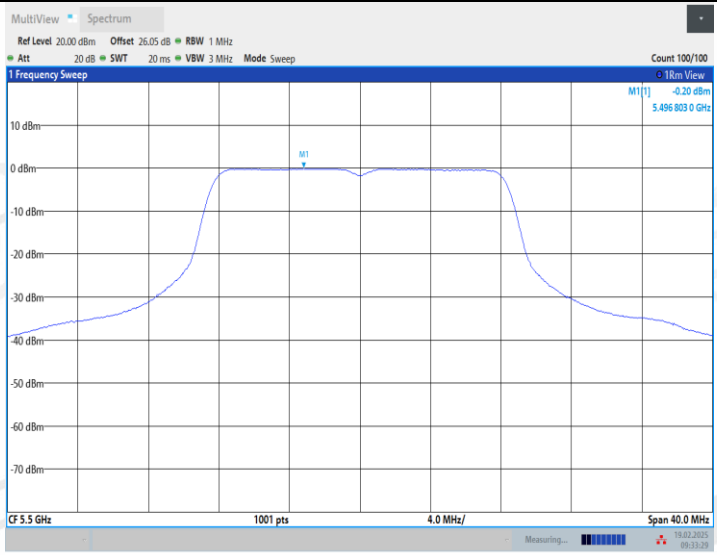
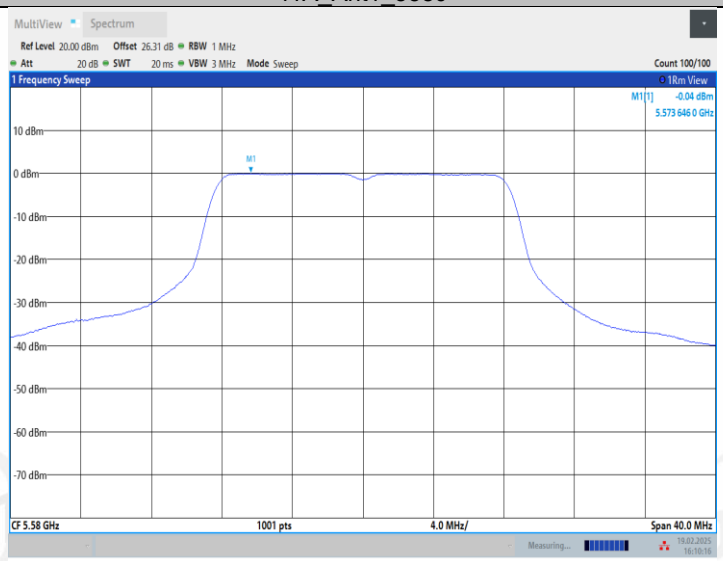


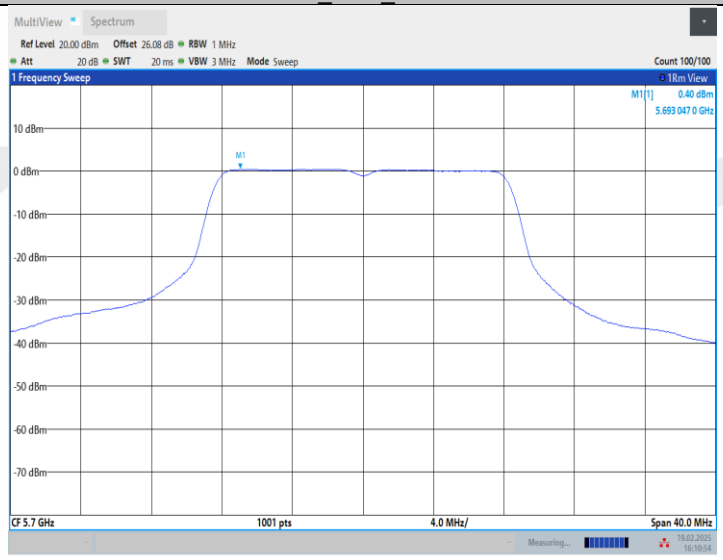
09:33:30 19.02.2025

11A_Ant1_5580



16:10:16 19.02.2025

11A_Ant1_5700



16:10:55 19.02.2025