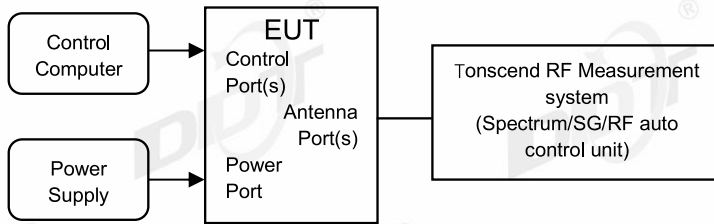


6. 99% Bandwidth

6.1. Block diagram of test setup



6.2. Limits

Just for Report.

6.3. 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

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

6.4. Test result

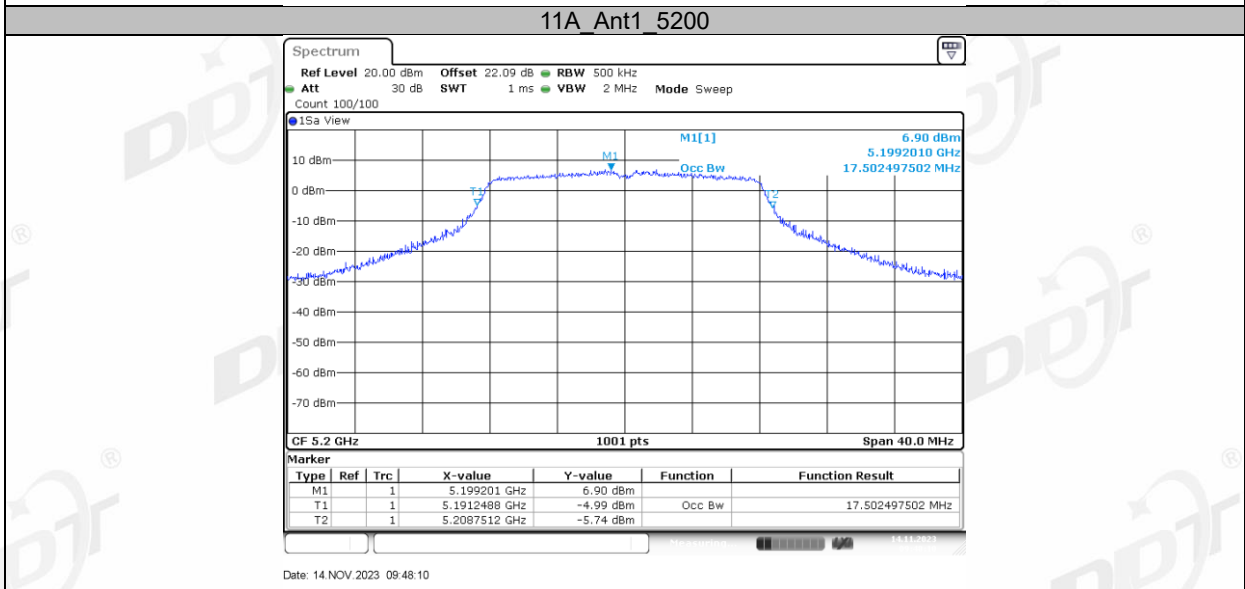
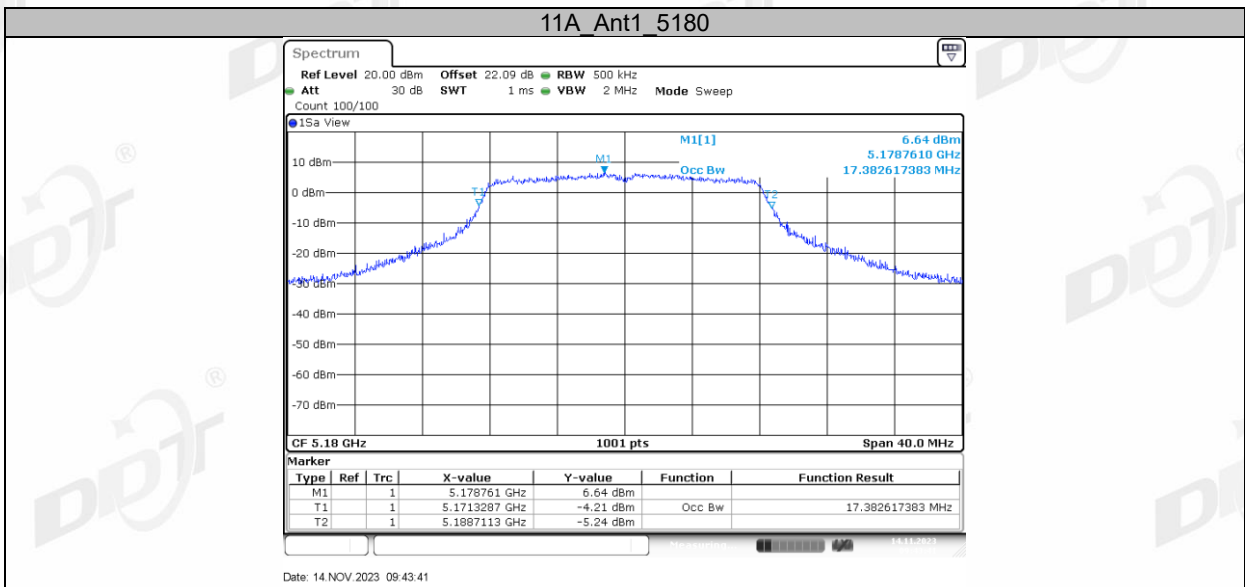
Test Engineer:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	25.3℃, 45.7%RH	Test Date:	2023.11.07-2023.11.08
Test Power Supply:	AC 230V	EUT:	All-In-One Desktop Android HiFi Music Player
Sample Number:	S23101912-01	Model No.:	F3051R

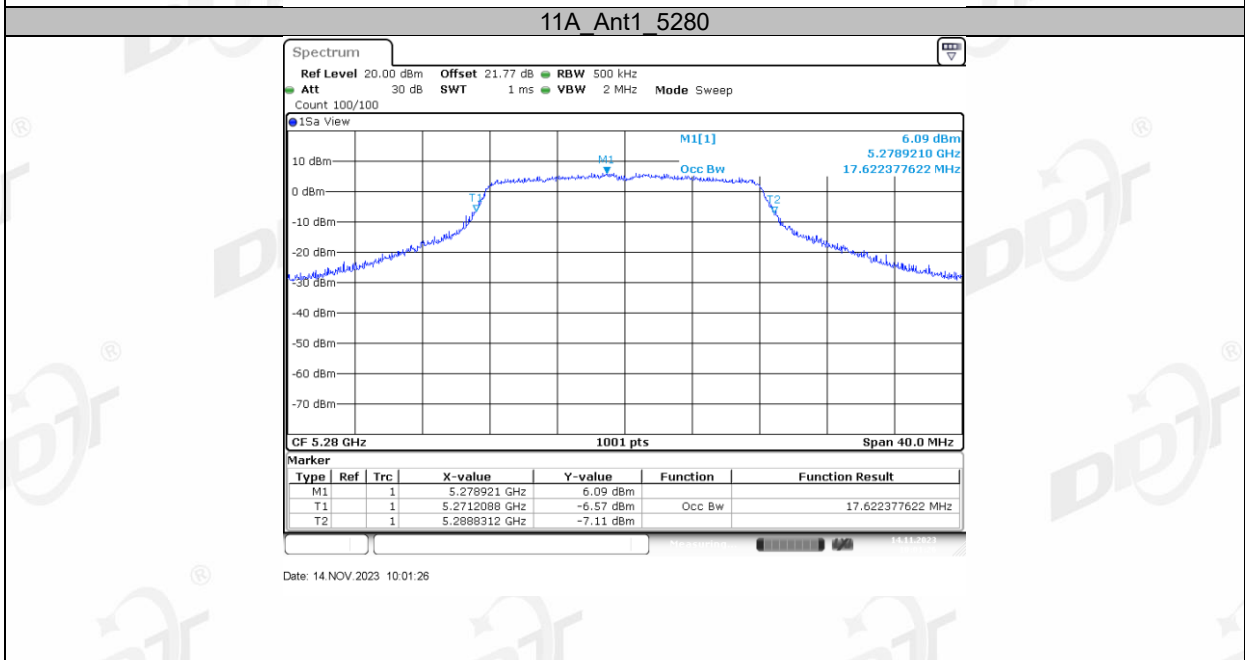
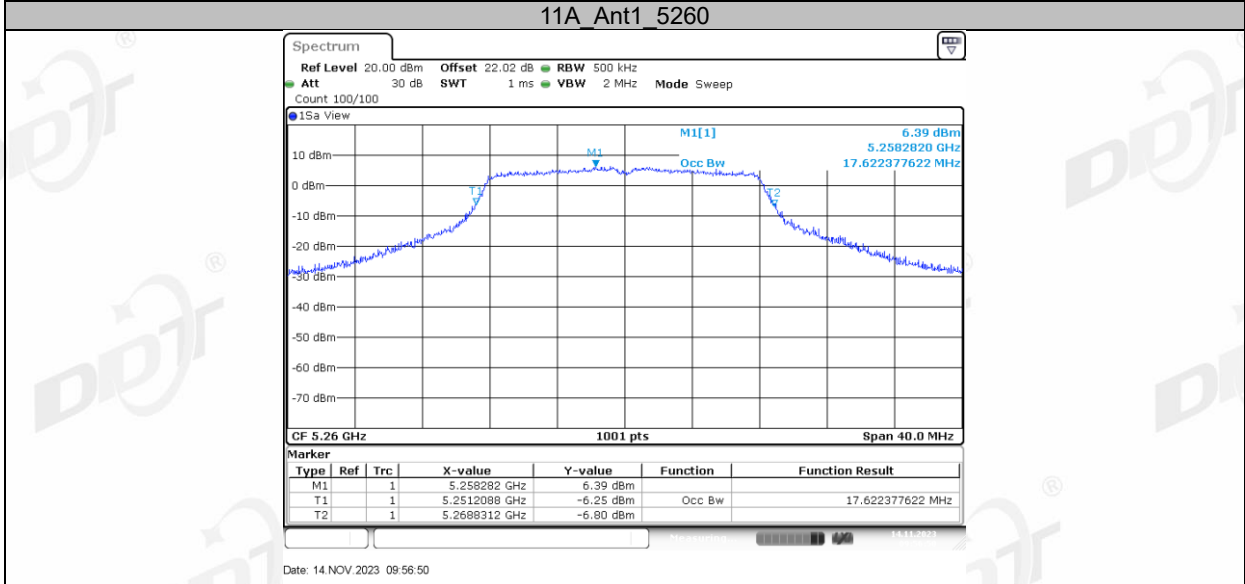
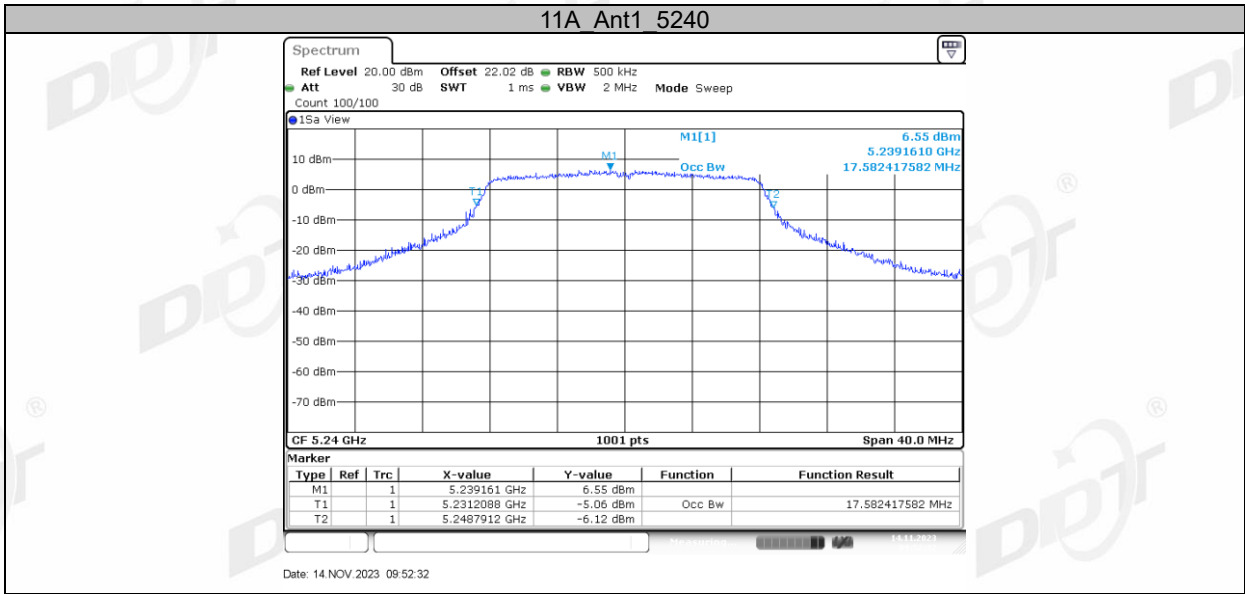
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	17.383	5171.3287	5188.7113	---	---
		5200	17.502	5191.2488	5208.7512	---	---
		5240	17.582	5231.2088	5248.7912	---	---
		5260	17.622	5251.2088	5268.8312	---	---
		5280	17.622	5271.2088	5288.8312	---	---
		5320	17.622	5311.1688	5328.7912	---	---
		5500	17.542	5491.2488	5508.7912	---	---
		5580	17.502	5571.2887	5588.7912	---	---
		5700	17.343	5691.3287	5708.6713	---	---
		5720	17.383	5711.3287	5728.7113	---	---
		5720_UNII-2C	13.671	5711.3287	5725.0000	---	---
		5720_UNII-3	3.711	5725.0000	5728.7113	---	---
		5745	17.343	5736.3287	5753.6713	---	---
		5785	17.343	5776.2887	5793.6314	---	---
		5825	17.383	5816.2887	5833.6713	---	---
11N20SISO	Ant1	5180	18.422	5170.8092	5189.2308	---	---
		5200	18.581	5190.6893	5209.2707	---	---
		5240	18.581	5230.6893	5249.2707	---	---
		5260	18.621	5250.6893	5269.3107	---	---
		5280	18.621	5270.6494	5289.2707	---	---
		5320	18.661	5310.6494	5329.3107	---	---
		5500	18.621	5490.6893	5509.3107	---	---
		5580	18.501	5570.7692	5589.2707	---	---
		5700	18.422	5690.7692	5709.1908	---	---
		5720	18.422	5710.7692	5729.1908	---	---
		5720_UNII-2C	14.231	5710.7692	5725.0000	---	---
		5720_UNII-3	4.191	5725.0000	5729.1908	---	---
		5745	18.422	5735.7692	5754.1908	---	---
		5785	18.422	5775.7692	5794.1908	---	---
		5825	18.501	5815.7293	5834.2308	---	---
11N40SISO	Ant1	5190	36.763	5171.6184	5208.3816	---	---

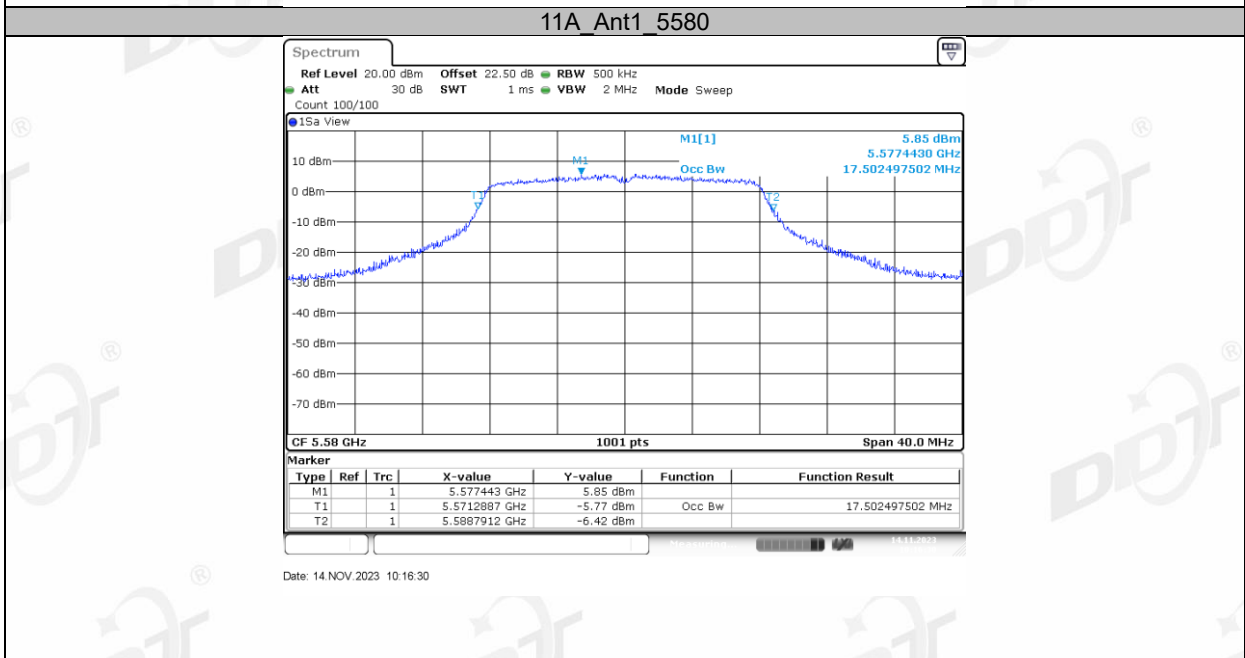
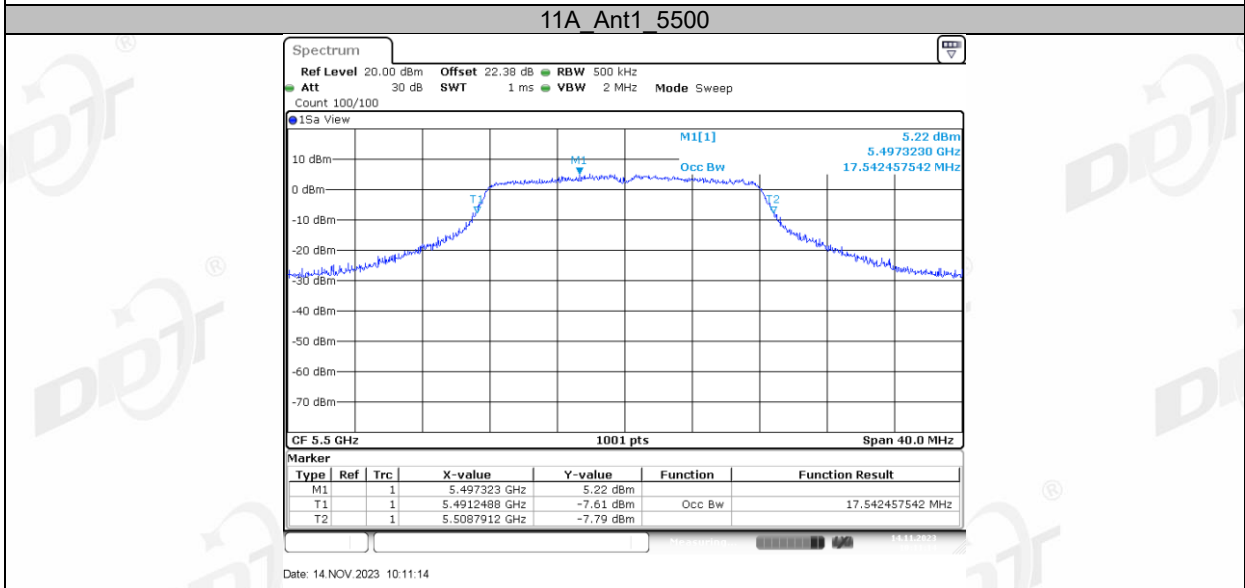
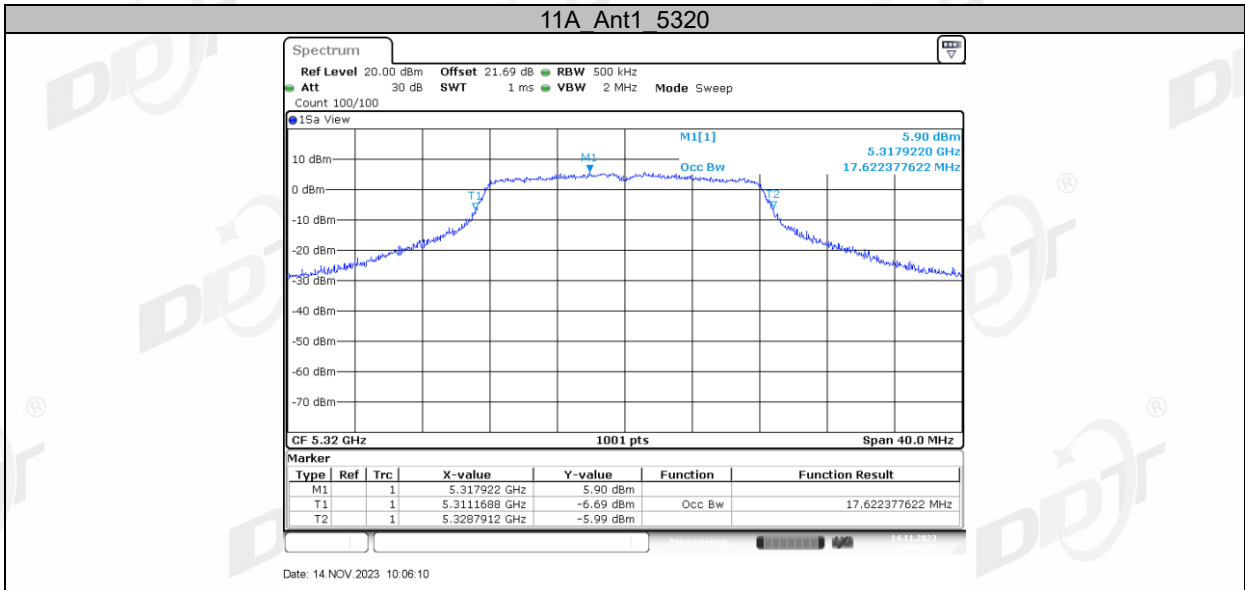
		5230	36.683	5211.6983	5248.3816	---	---
		5270	36.843	5251.6184	5288.4615	---	---
		5310	36.683	5291.6184	5328.3017	---	---
		5510	36.763	5491.6184	5528.3816	---	---
		5550	36.843	5531.5385	5568.3816	---	---
		5670	36.683	5651.6983	5688.3816	---	---
		5710	36.683	5691.6983	5728.3816	---	---
		5710_UNII-2C	33.302	5691.6983	5725.0000	---	---
		5710_UNII-3	3.382	5725.0000	5728.3816	---	---
		5755	36.763	5736.6184	5773.3816	---	---
5795	36.683	5776.6184	5813.3017	---	---		
11AC20SISO	Ant1	5180	18.422	5170.8092	5189.2308	---	---
		5200	18.501	5190.7293	5209.2308	---	---
		5240	18.501	5230.7293	5249.2308	---	---
		5260	18.581	5250.6893	5269.2707	---	---
		5280	18.501	5270.7293	5289.2308	---	---
		5320	18.501	5310.6893	5329.1908	---	---
		5500	18.541	5490.7293	5509.2707	---	---
		5580	18.541	5570.7293	5589.2707	---	---
		5700	18.422	5690.7692	5709.1908	---	---
		5720	18.462	5710.7692	5729.2308	---	---
		5720_UNII-2C	14.231	5710.7692	5725.0000	---	---
		5720_UNII-3	4.231	5725.0000	5729.2308	---	---
		5745	18.422	5735.7692	5754.1908	---	---
		5785	18.422	5775.7293	5794.1508	---	---
5825	18.501	5815.7293	5834.2308	---	---		
11AC40SISO	Ant1	5190	36.603	5171.6983	5208.3017	---	---
		5230	36.683	5211.6983	5248.3816	---	---
		5270	36.683	5251.6983	5288.3816	---	---
		5310	36.763	5291.6184	5328.3816	---	---
		5510	36.843	5491.6184	5528.4615	---	---
		5550	36.763	5531.6184	5568.3816	---	---
		5670	36.683	5651.6983	5688.3816	---	---
		5710	36.603	5691.6983	5728.3017	---	---
		5710_UNII-2C	33.302	5691.6983	5725.0000	---	---
		5710_UNII-3	3.302	5725.0000	5728.3017	---	---
		5755	36.603	5736.6983	5773.3017	---	---
5795	36.683	5776.6184	5813.3017	---	---		
11AC80SISO	Ant1	5210	76.563	5171.7982	5248.3616	---	---

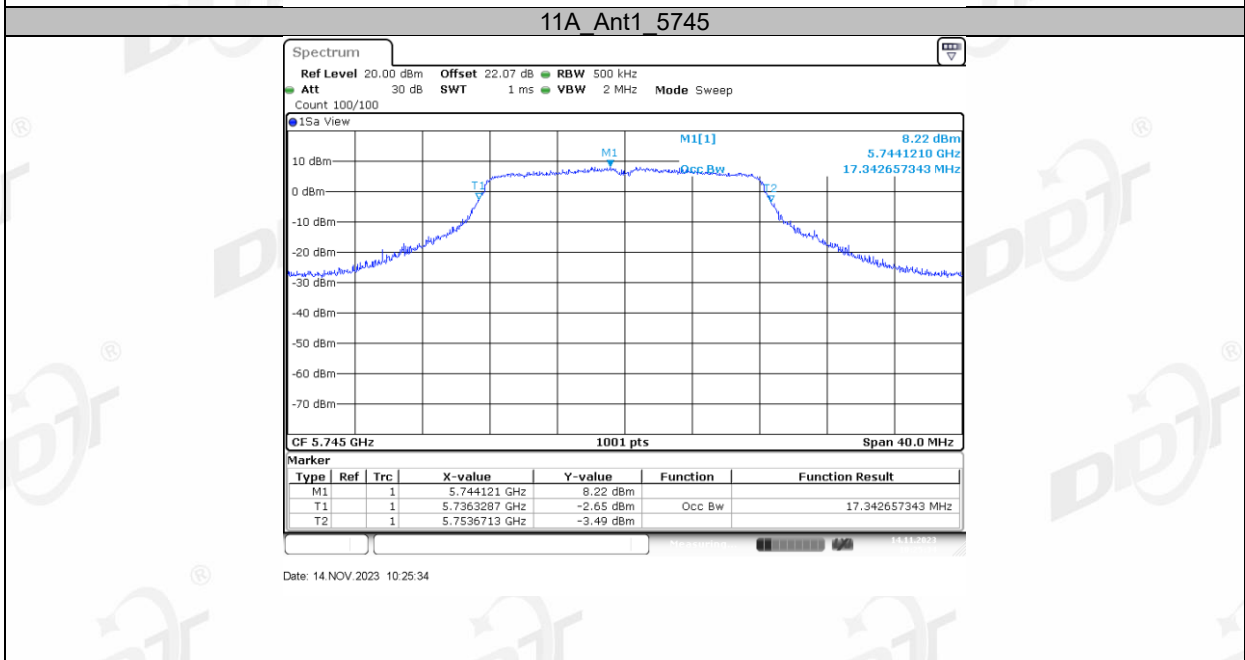
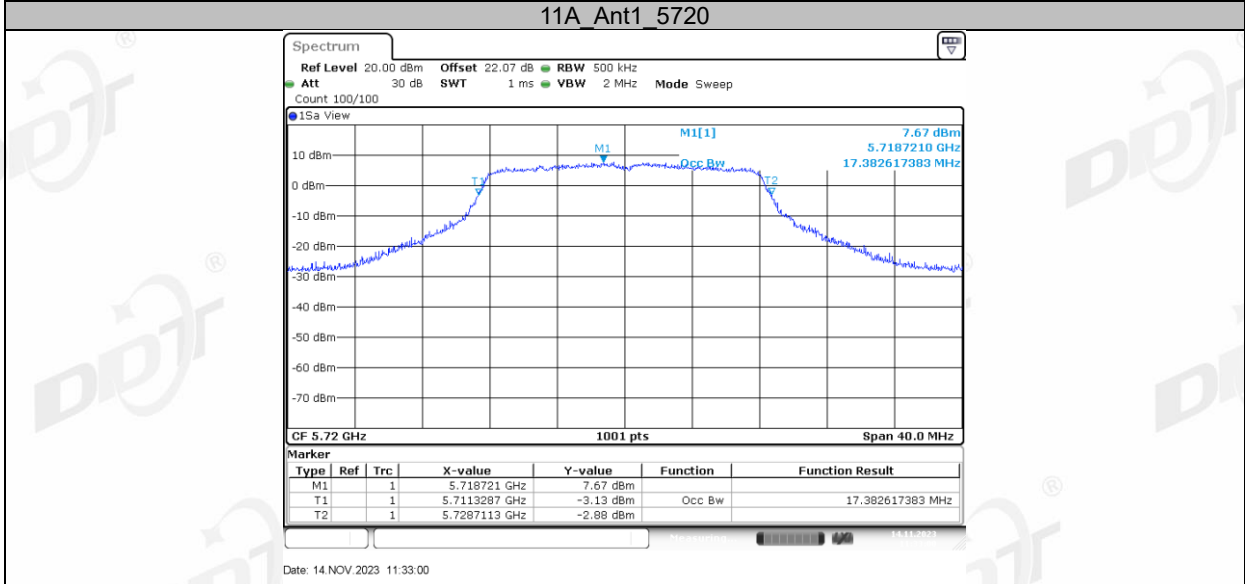
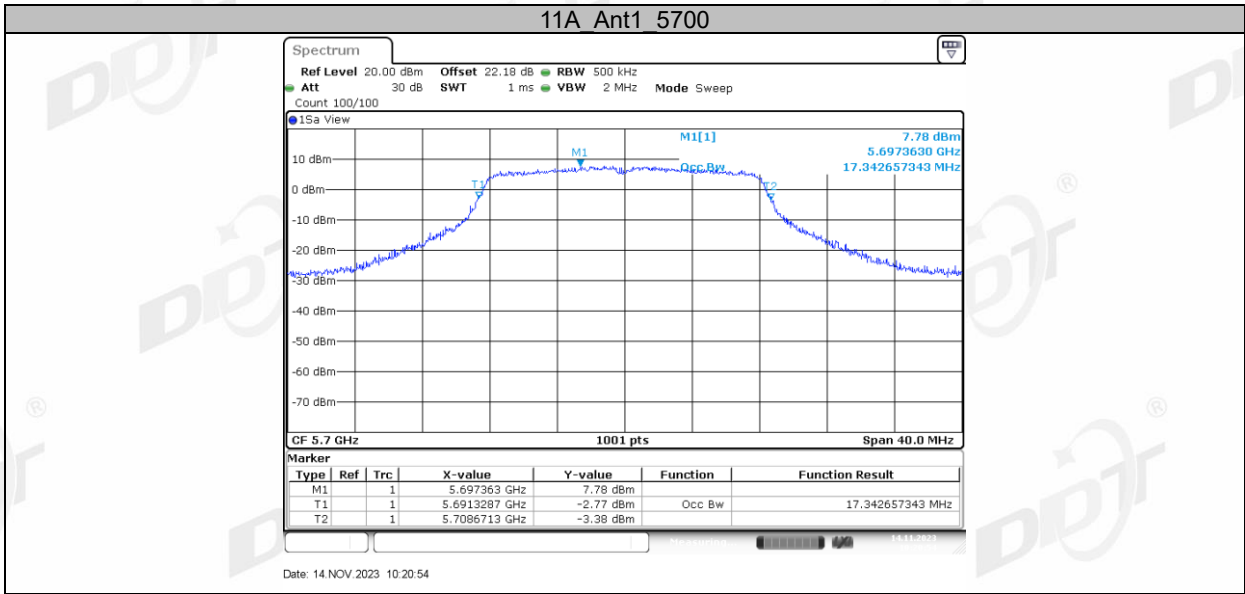
	5290	76.563	5251.7982	5328.3616	---	---
	5530	76.563	5491.7982	5568.3616	---	---
	5610	76.563	5571.9580	5648.5215	---	---
	5690	76.404	5651.9580	5728.3616	---	---
	5690_UNII-2C	73.042	5651.9580	5725.0000	---	---
	5690_UNII-3	3.362	5725.0000	5728.3616	---	---
	5775	76.244	5736.7982	5813.0420	---	---

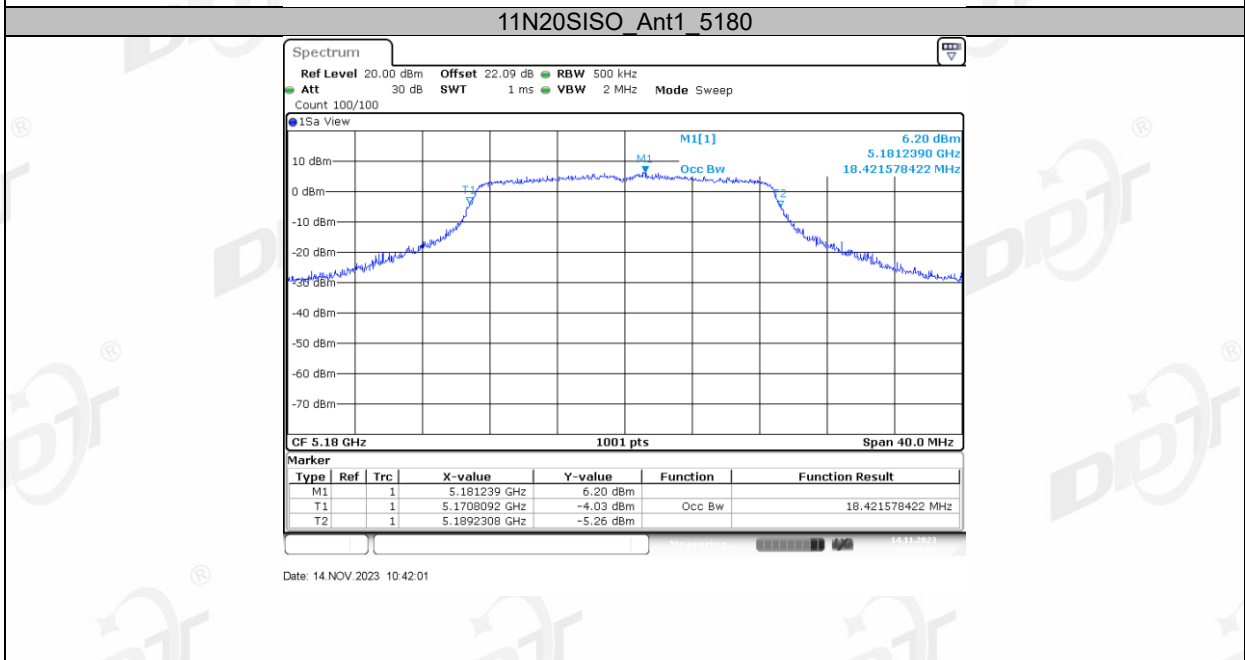
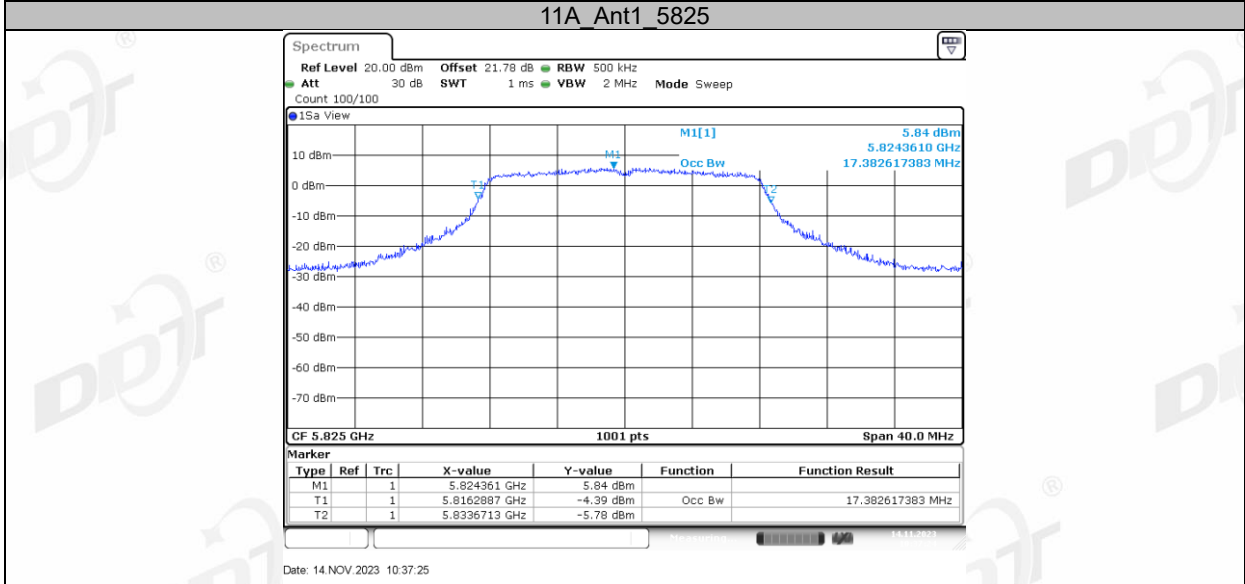
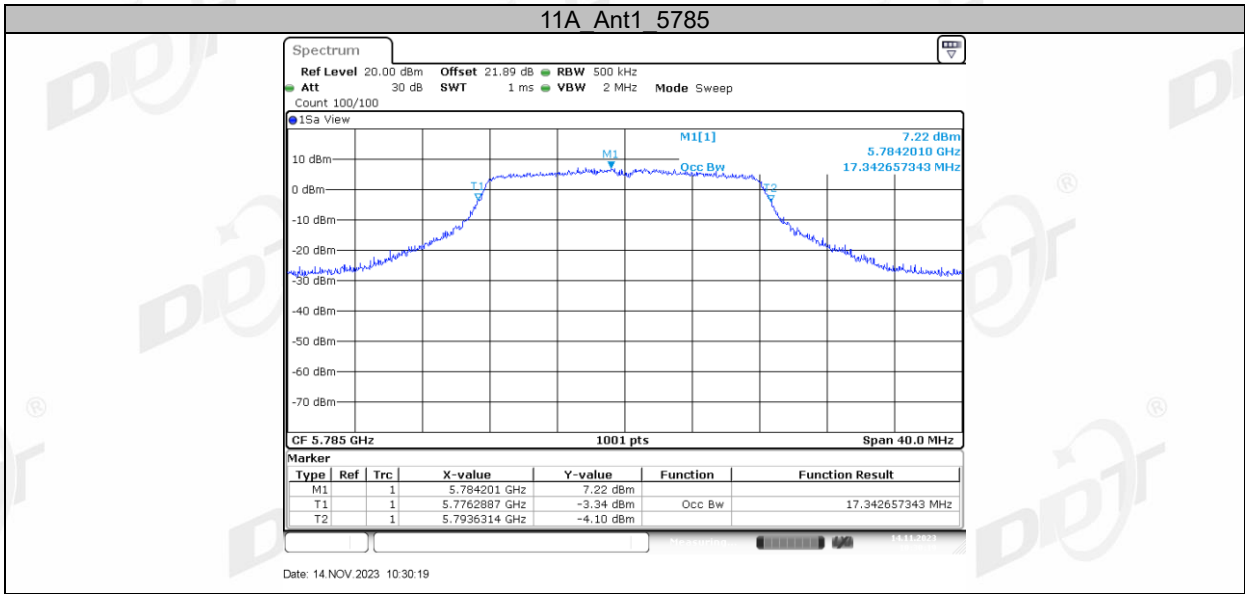
6.5. Test graphs

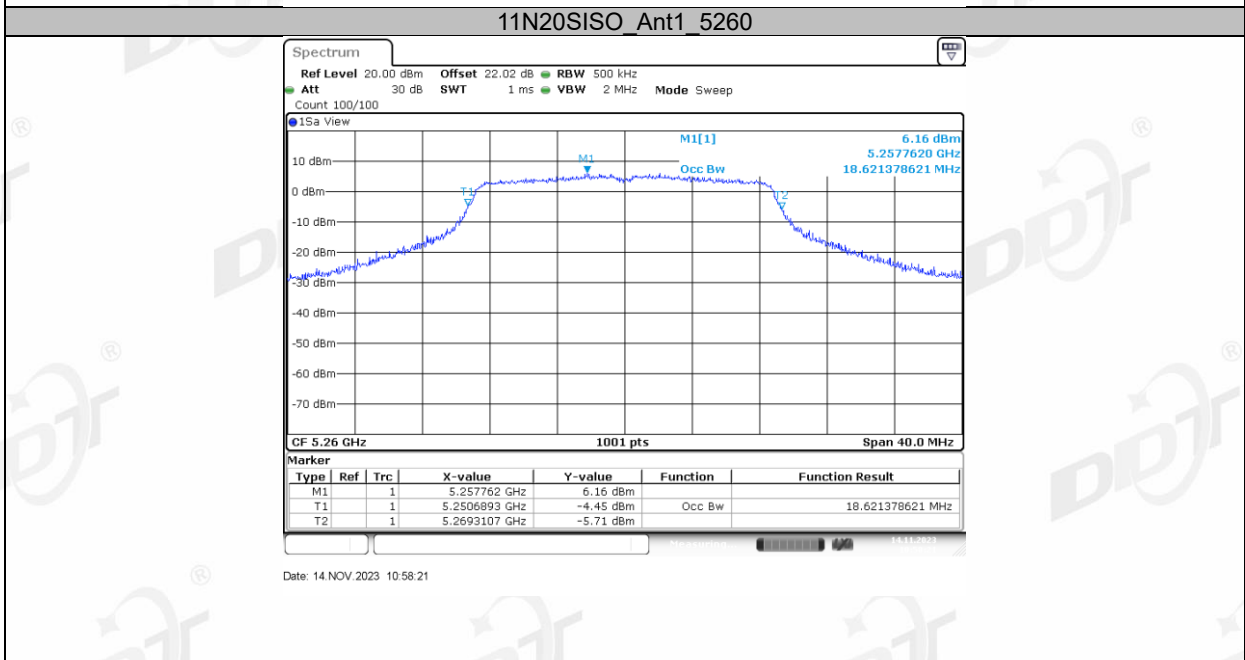
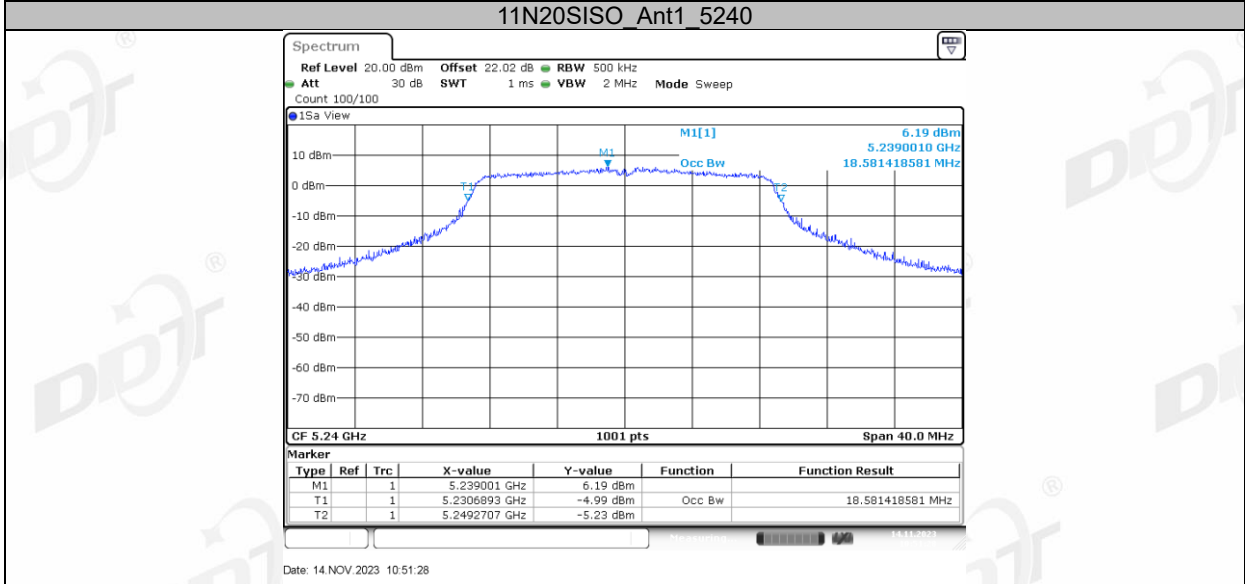
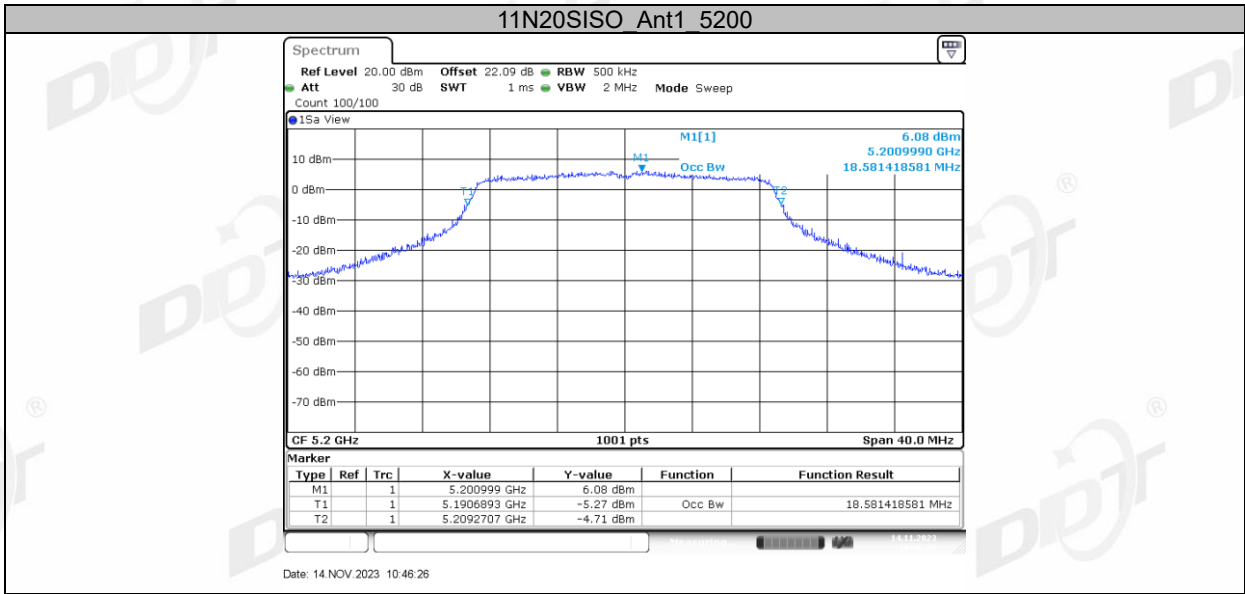


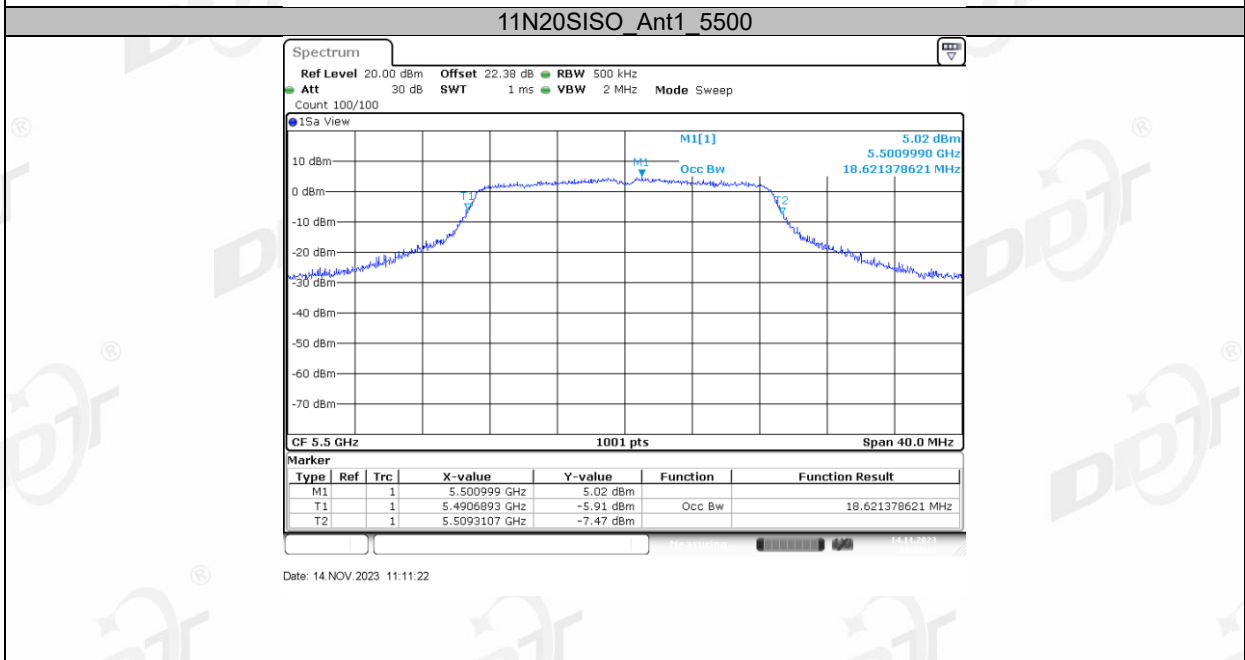
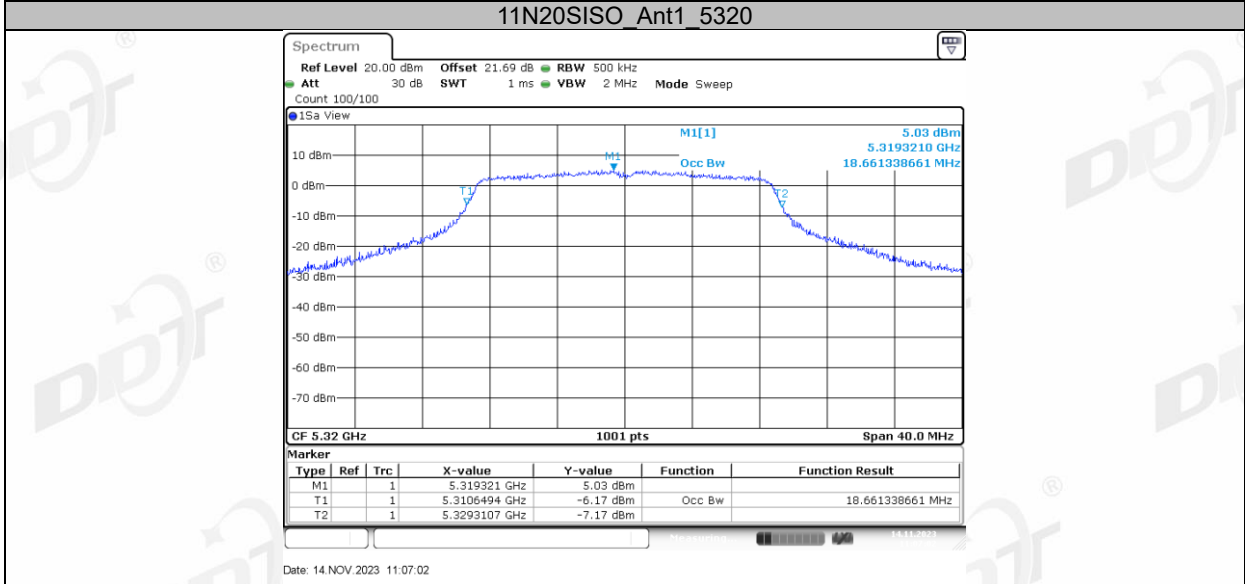
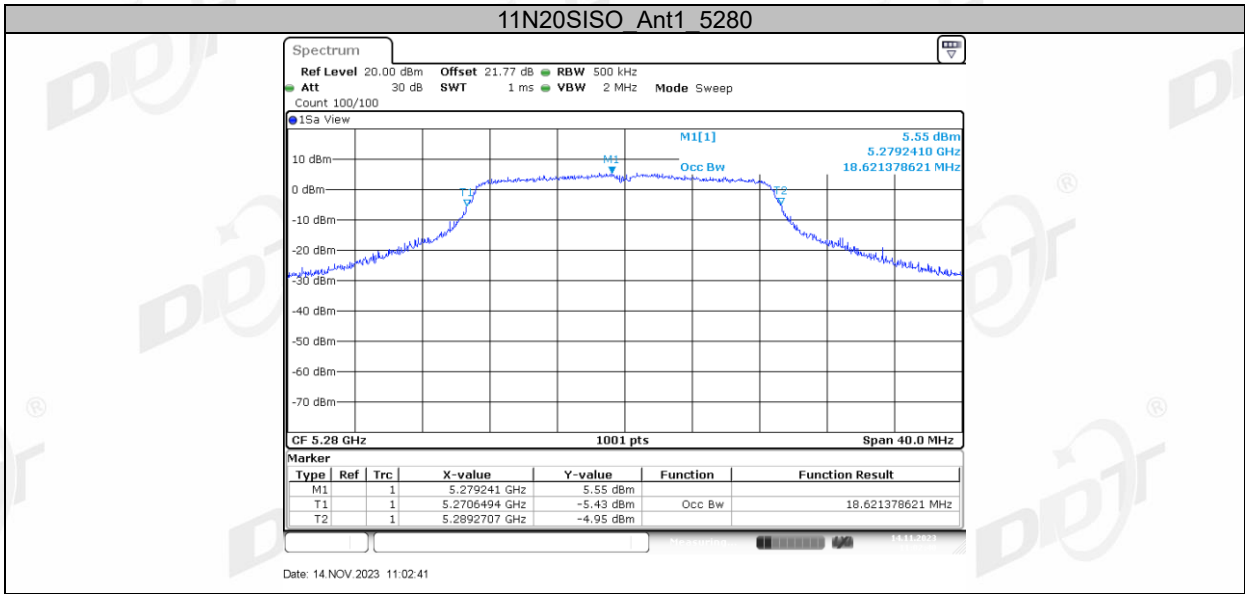


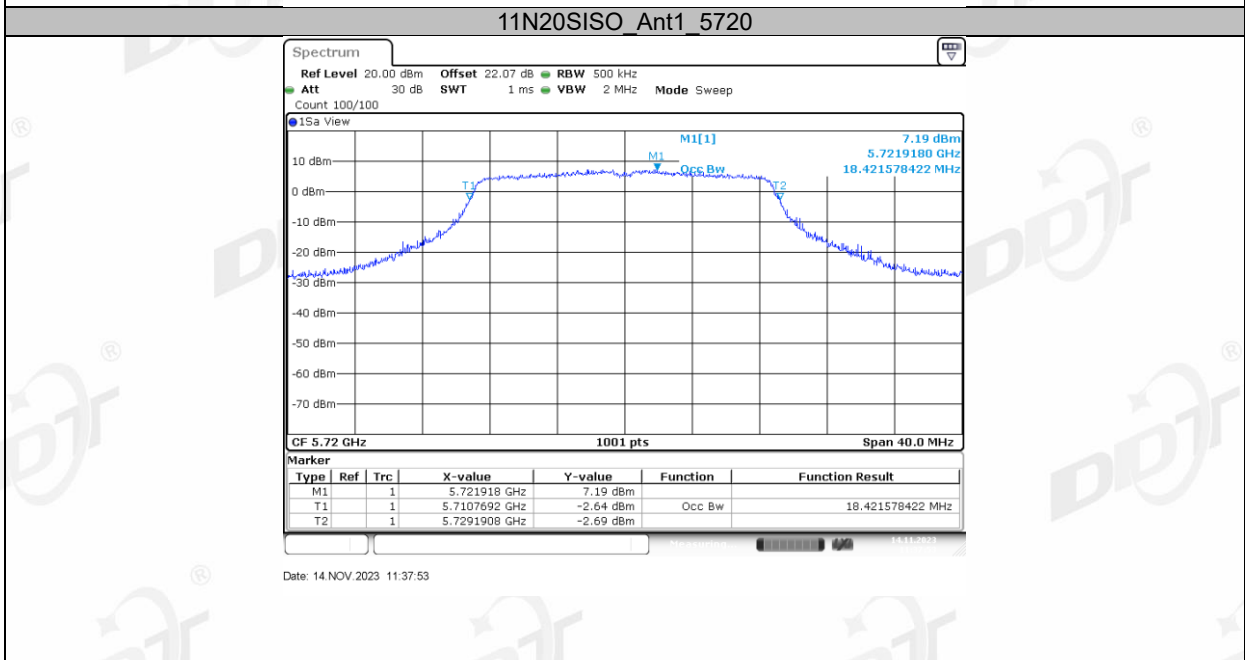
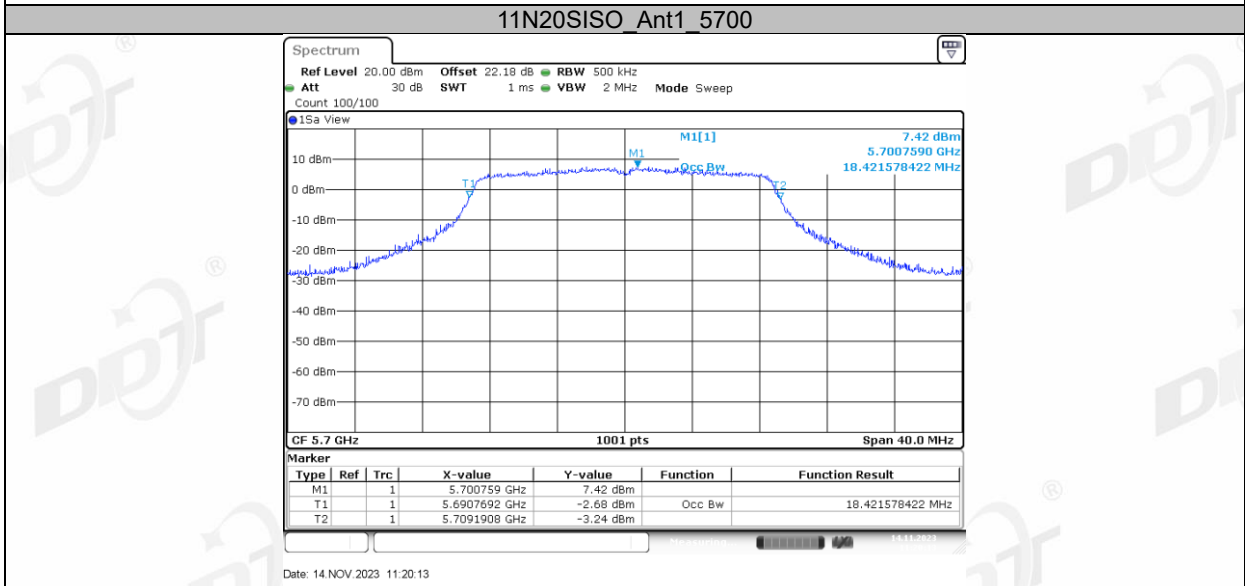
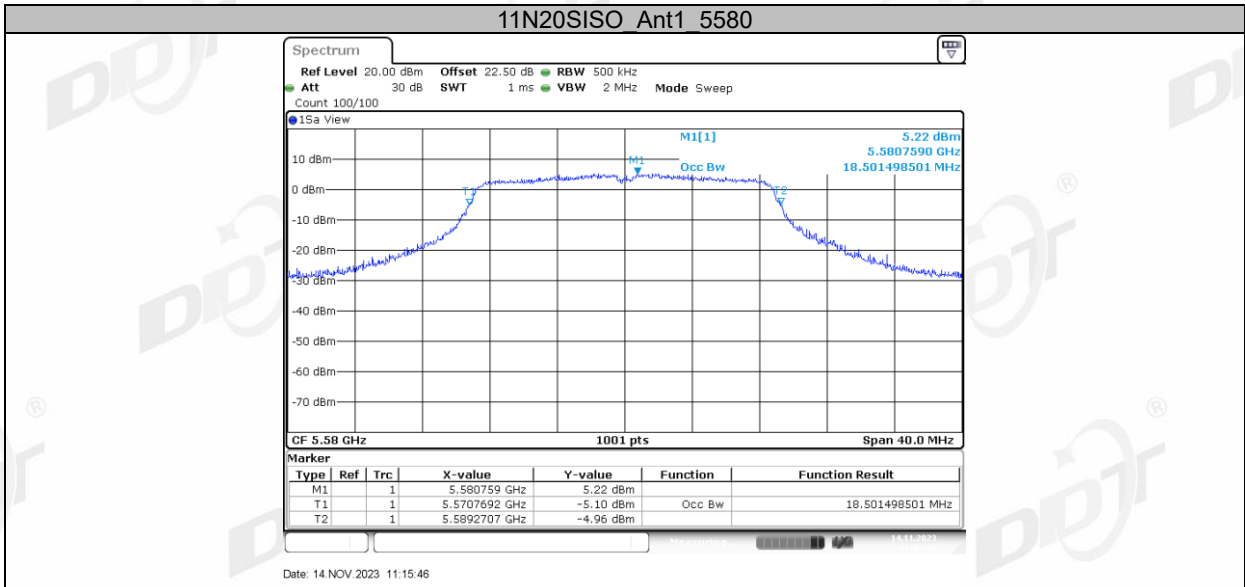


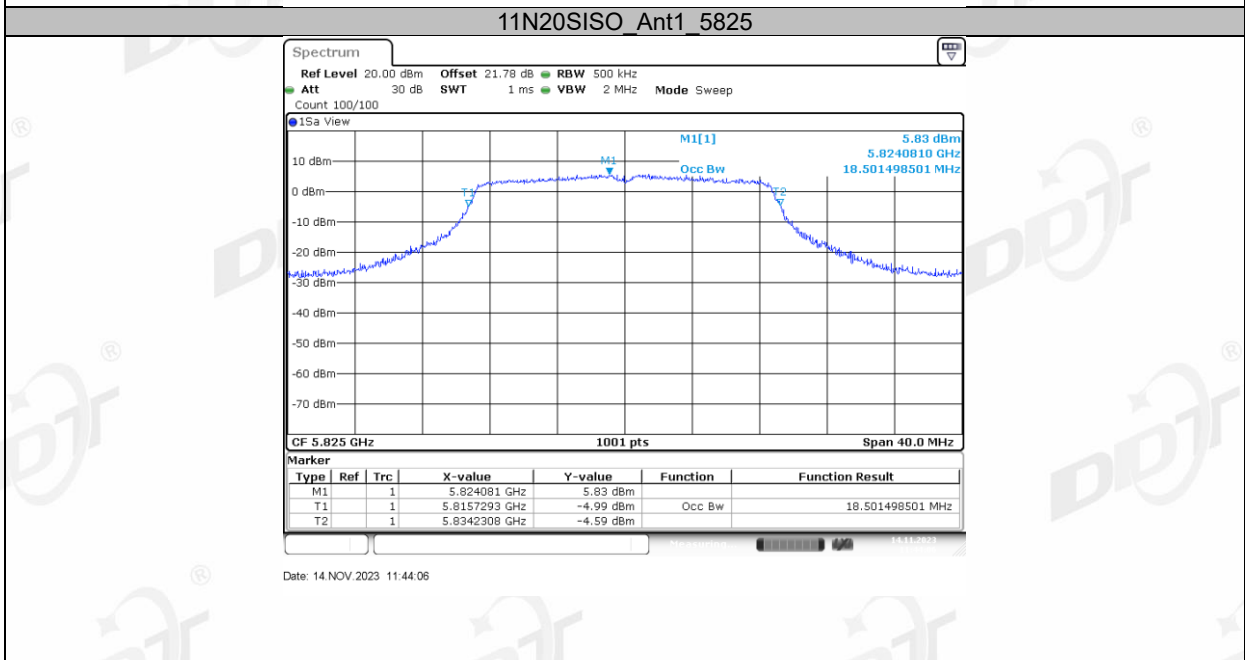
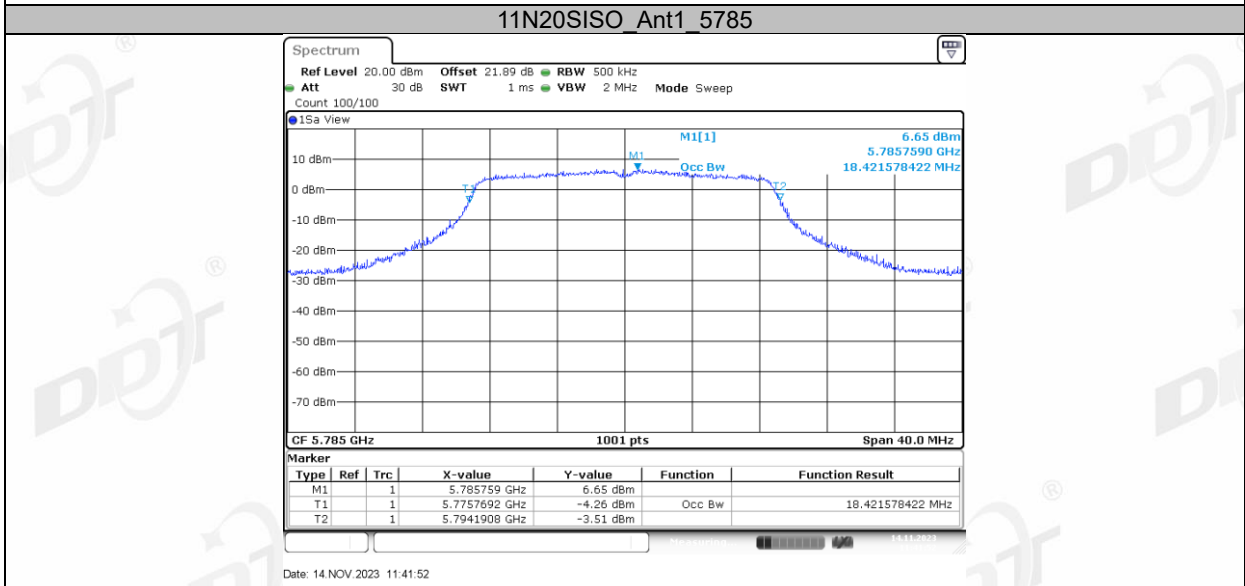
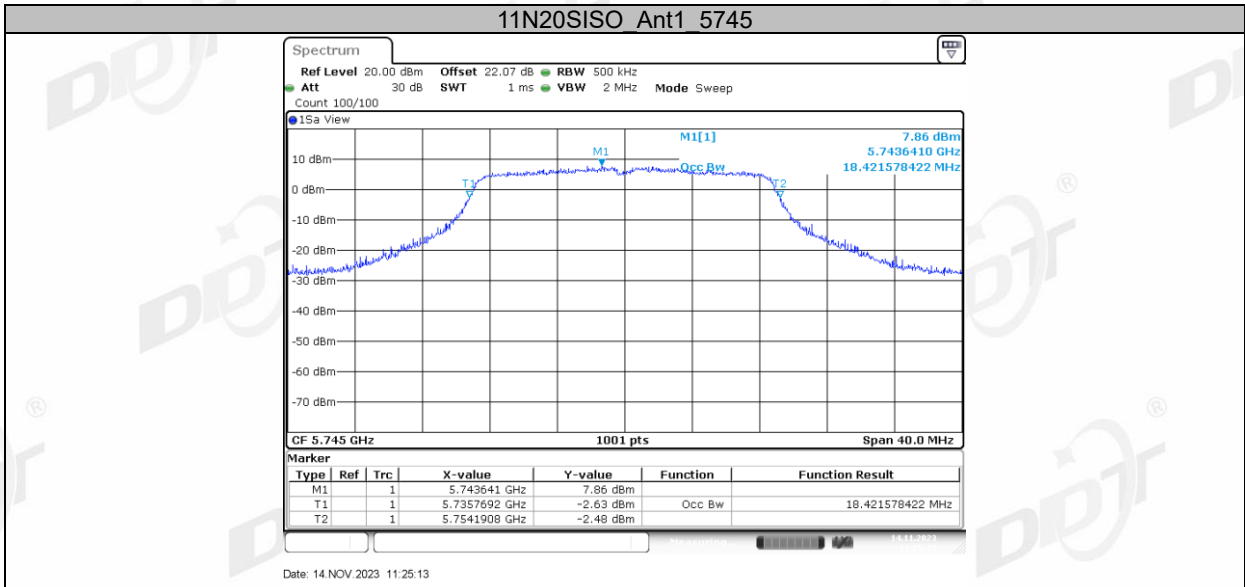


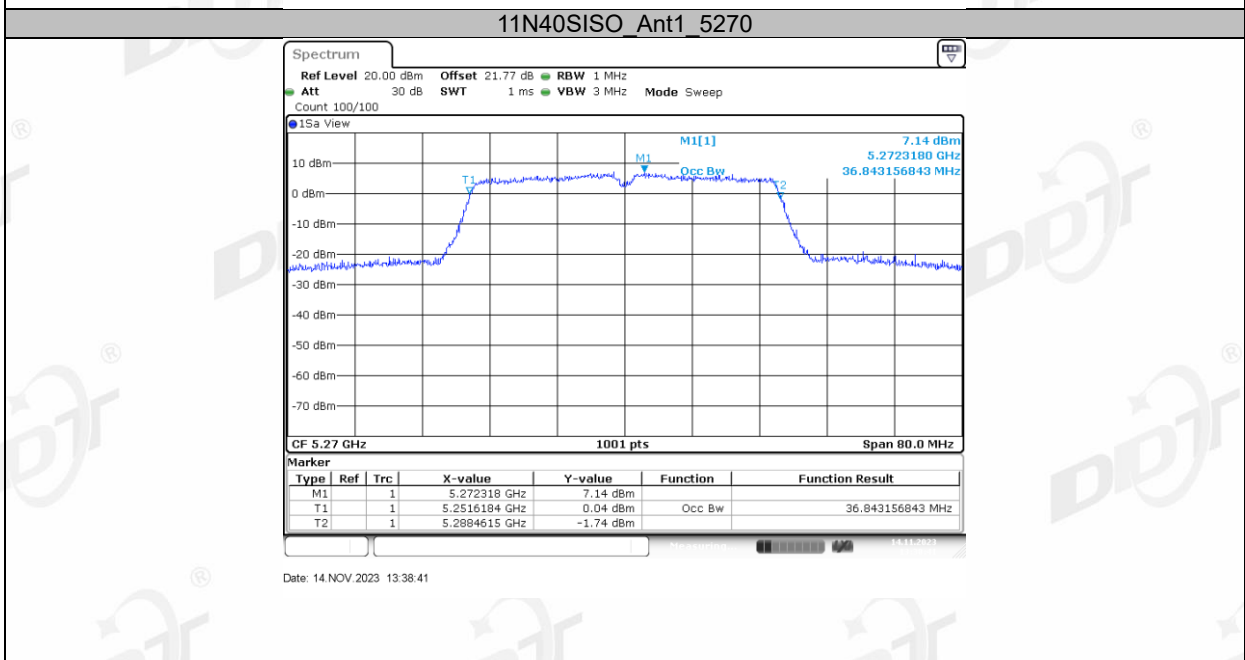
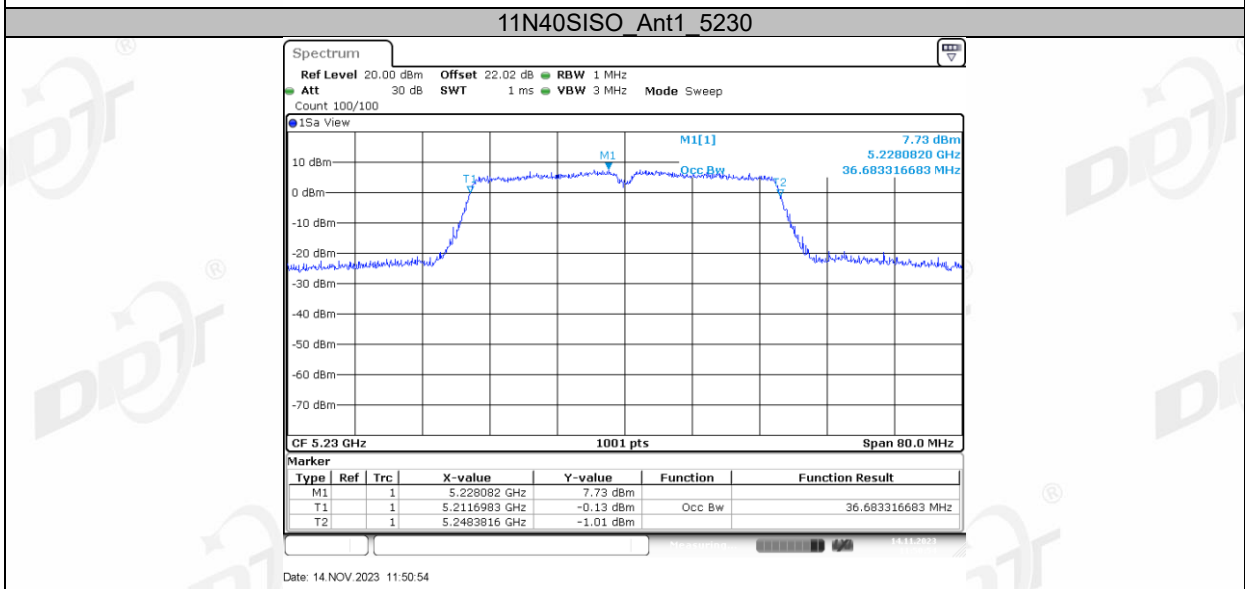
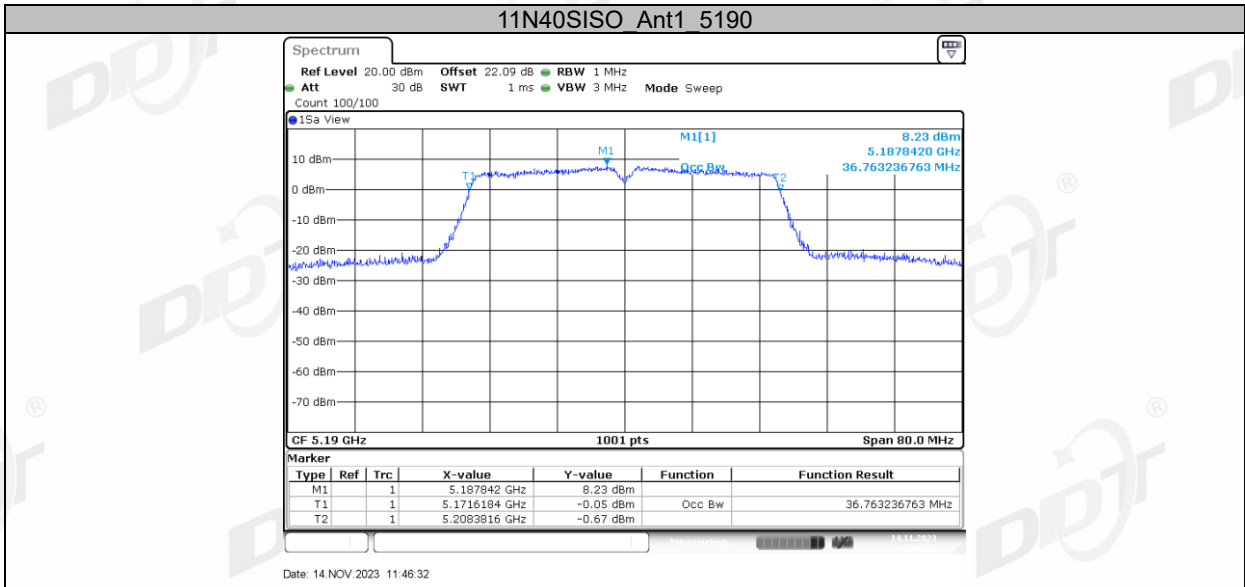


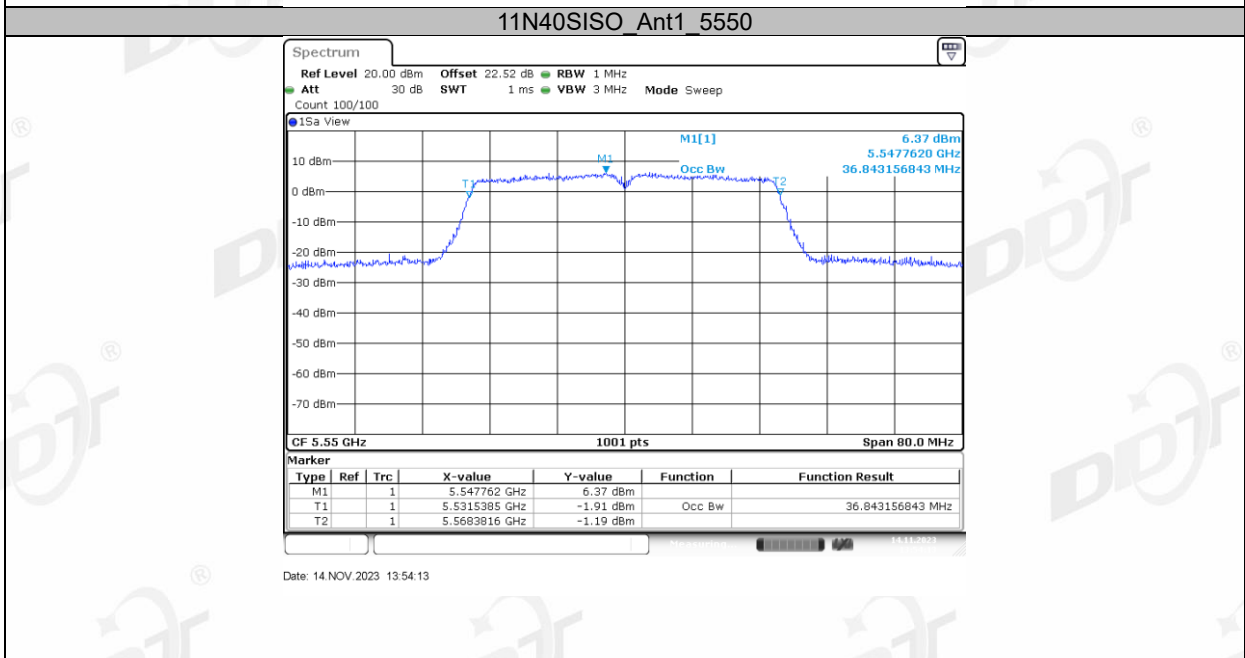
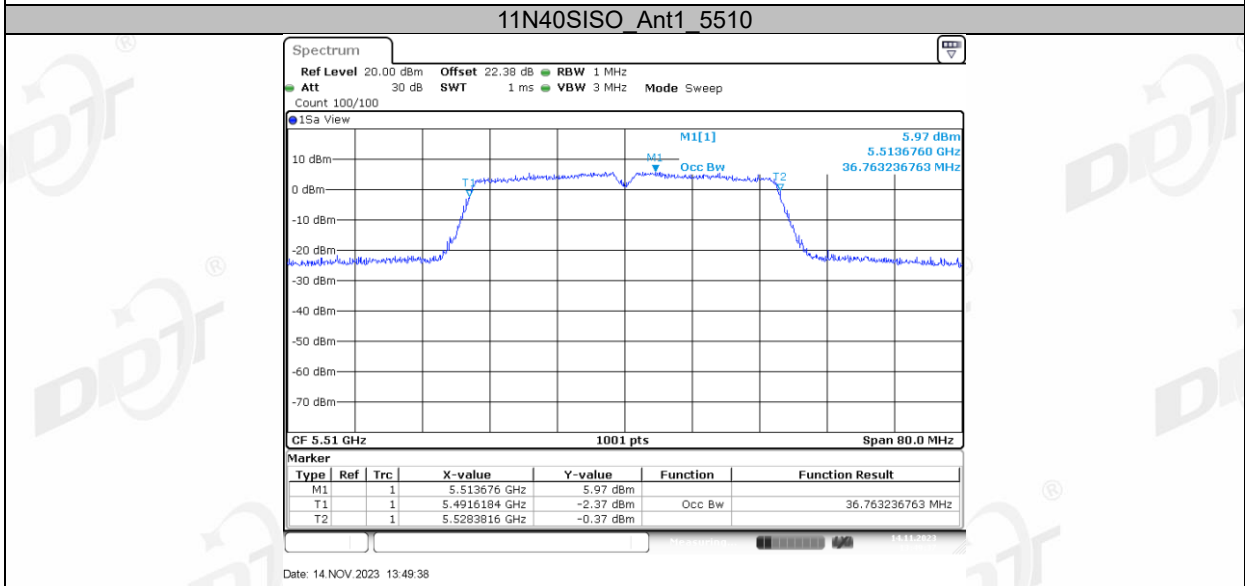
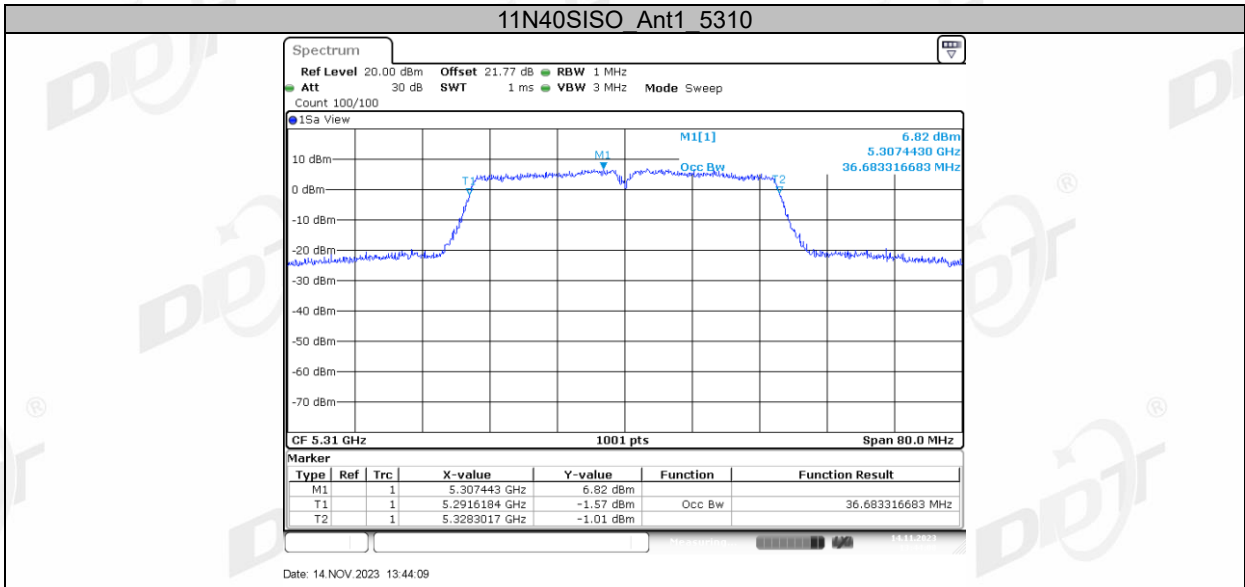


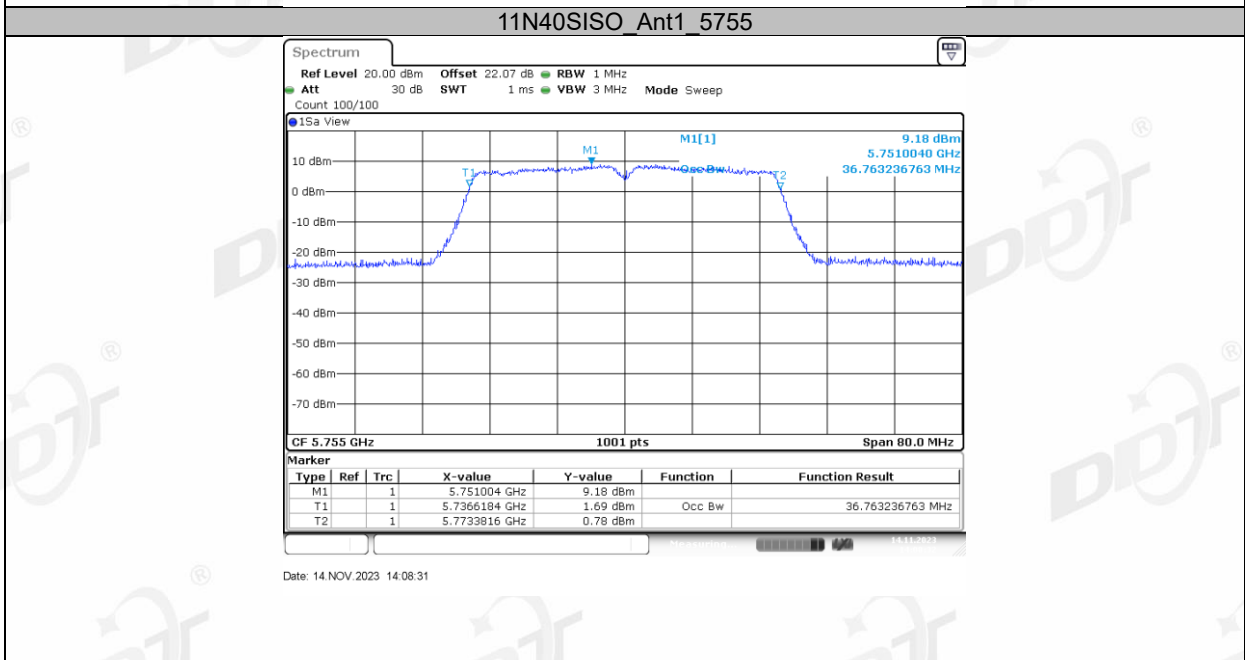
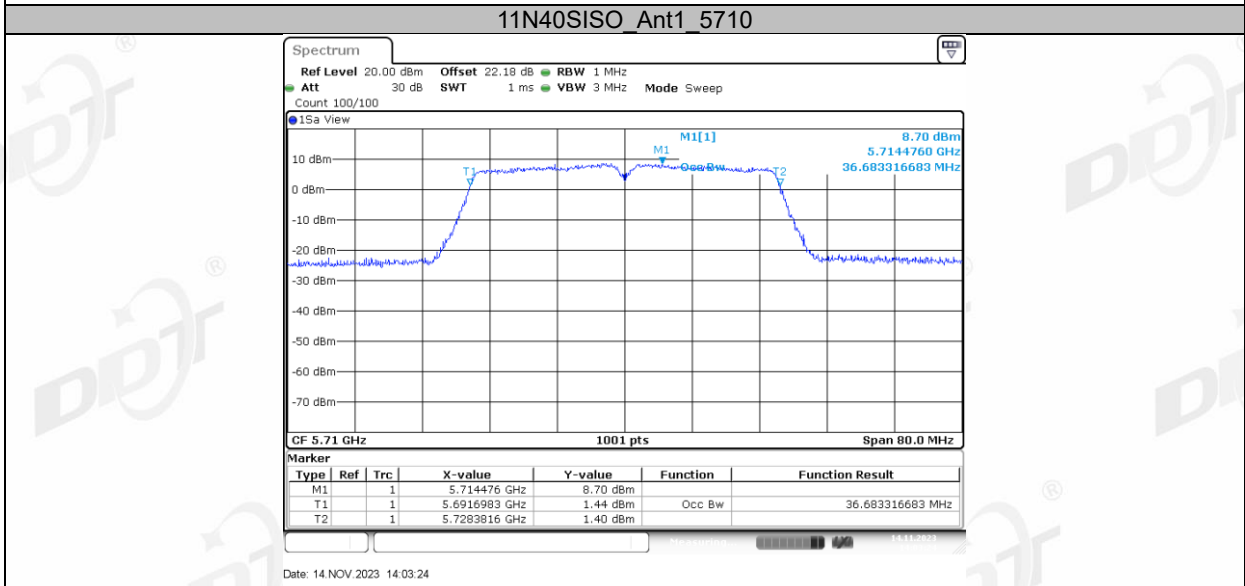
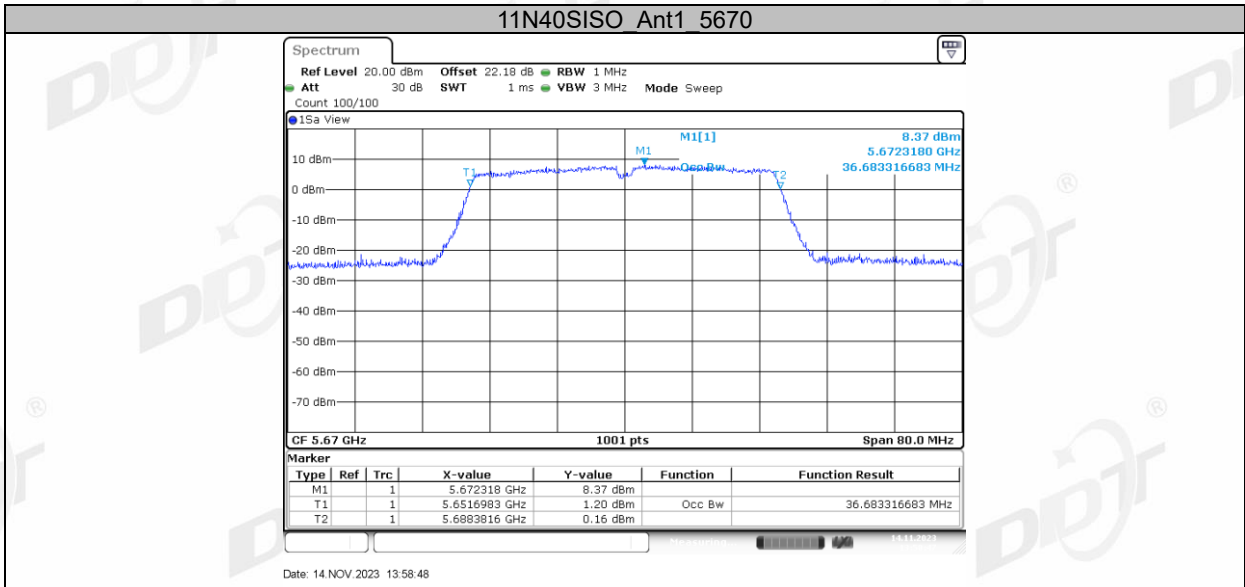


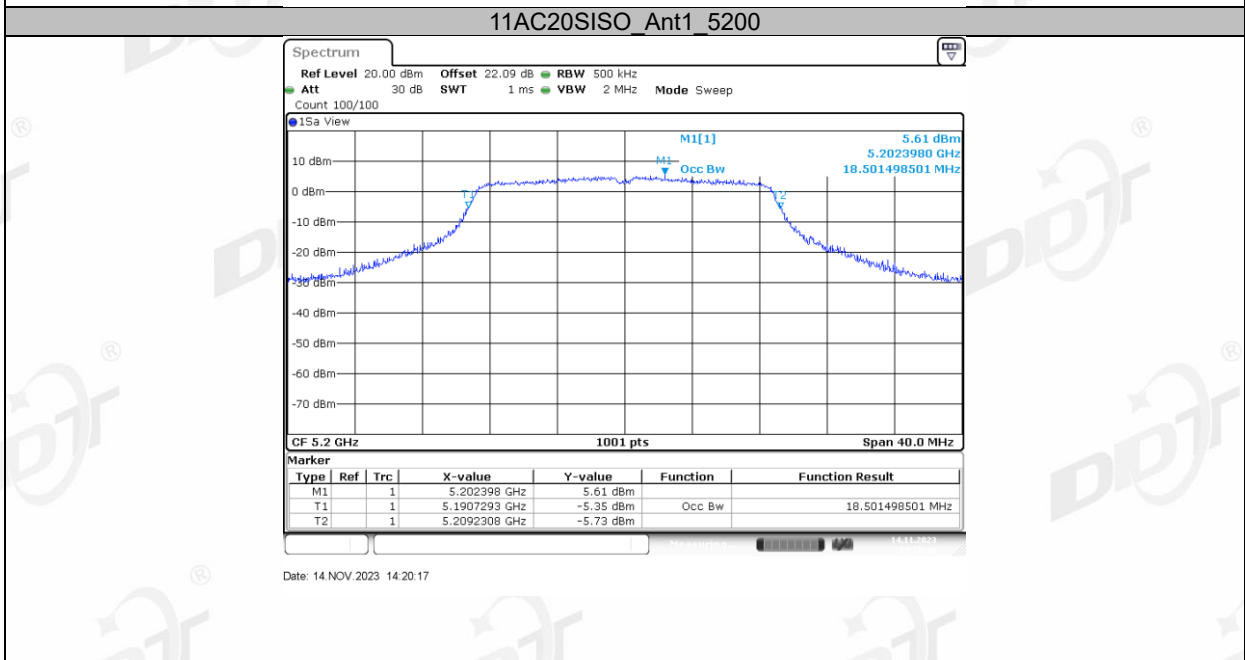
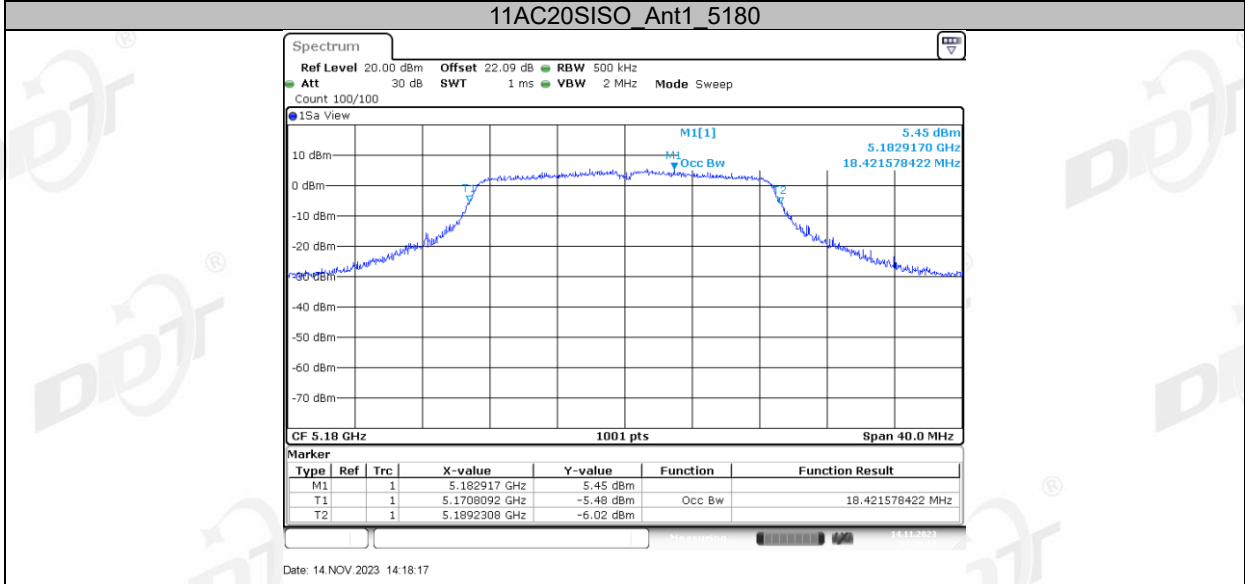
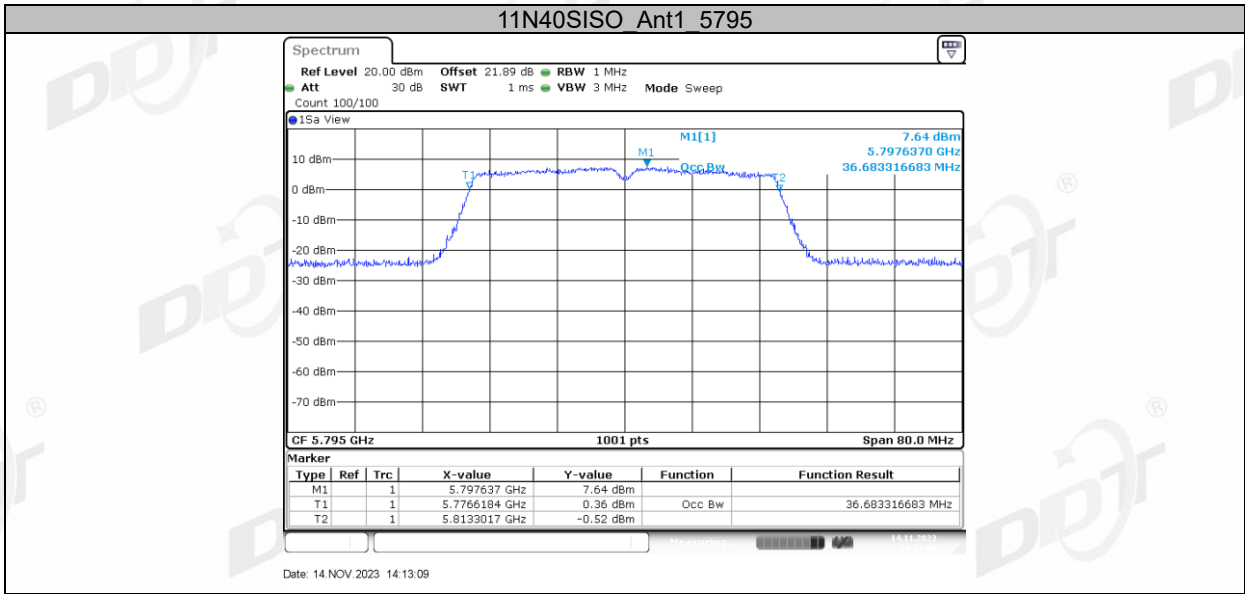


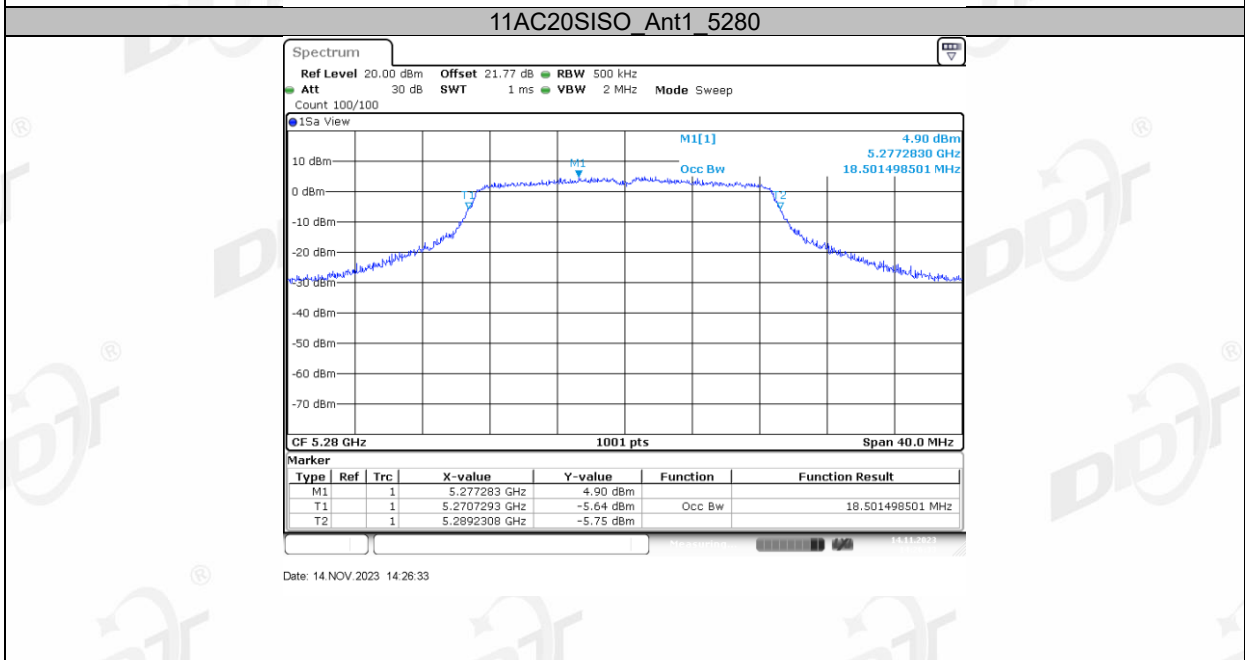
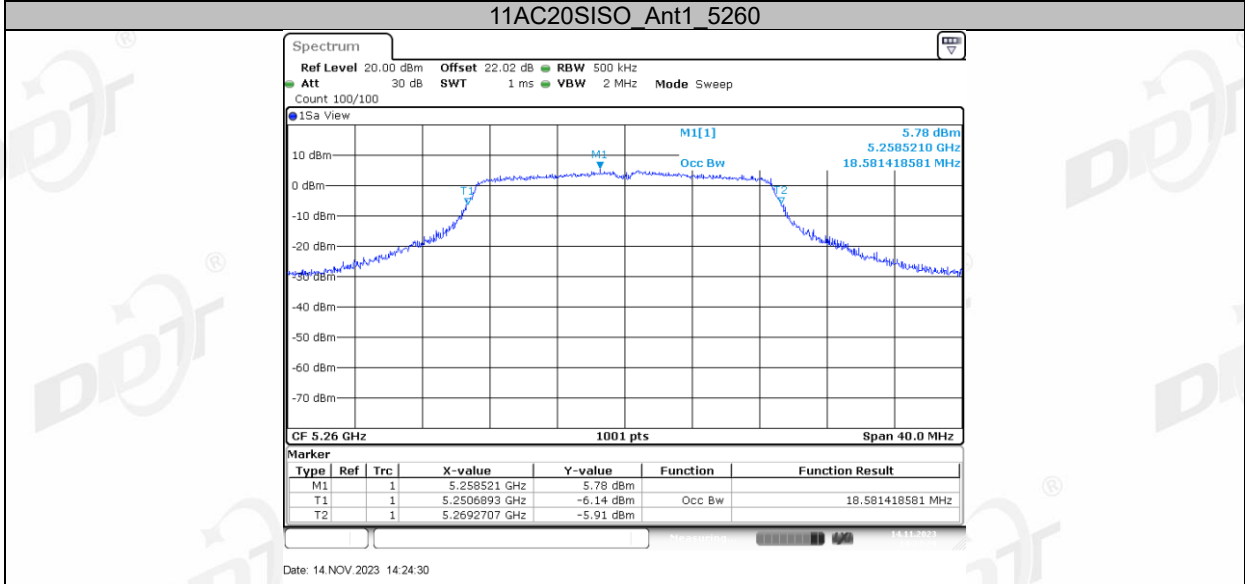
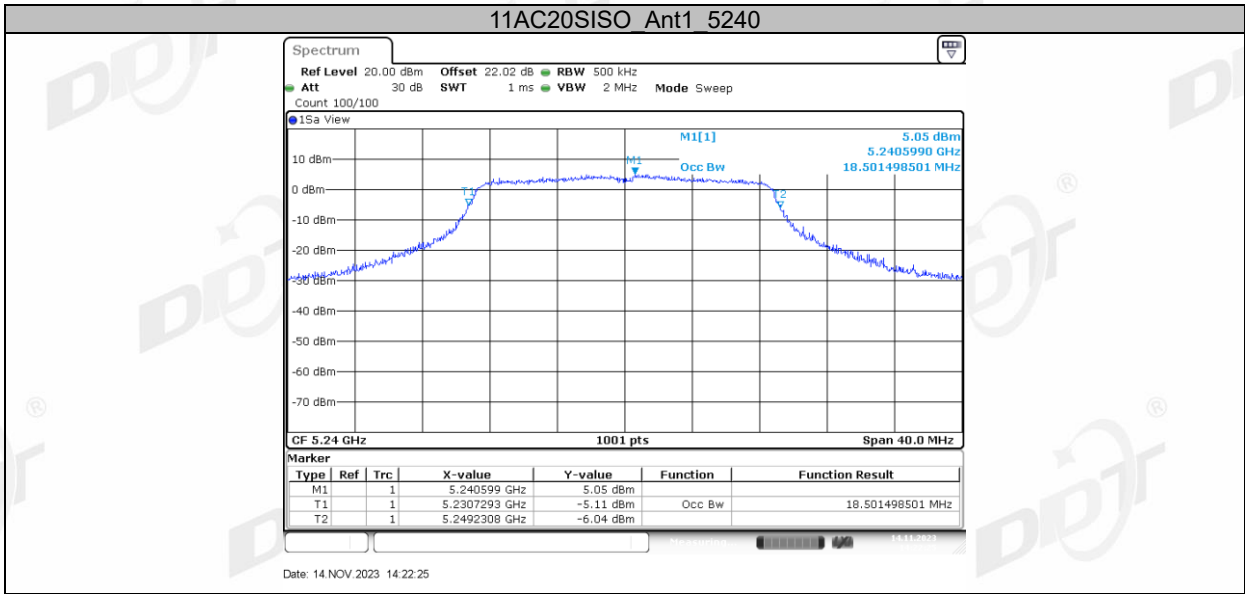


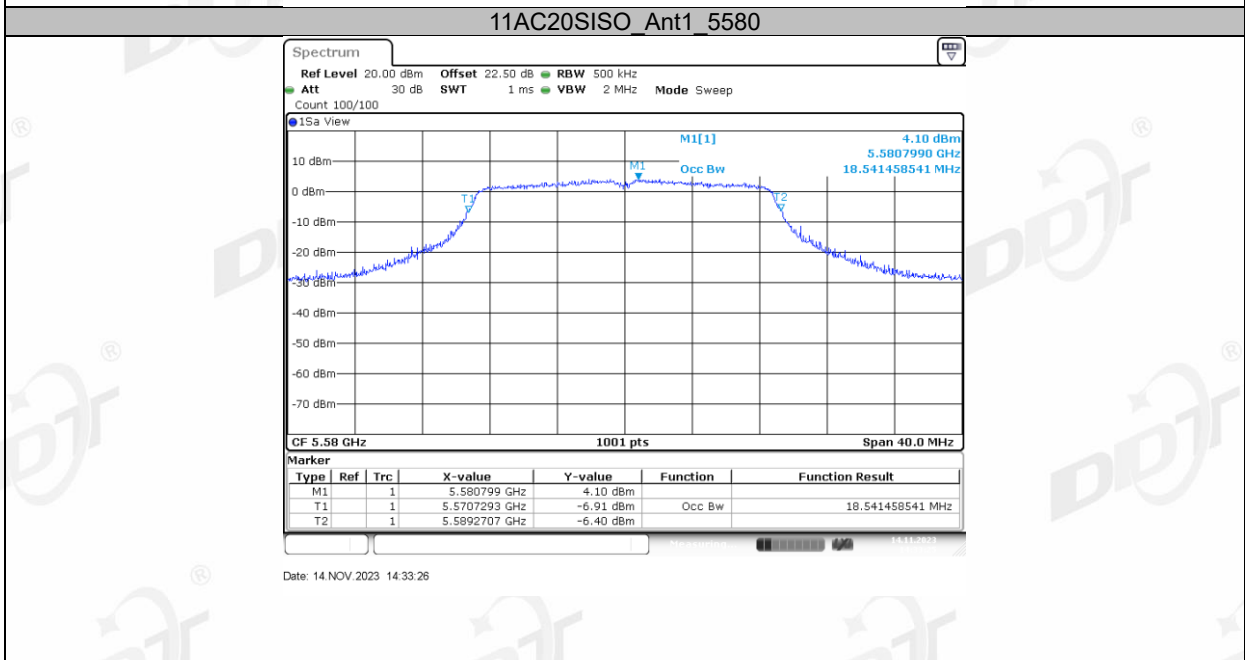
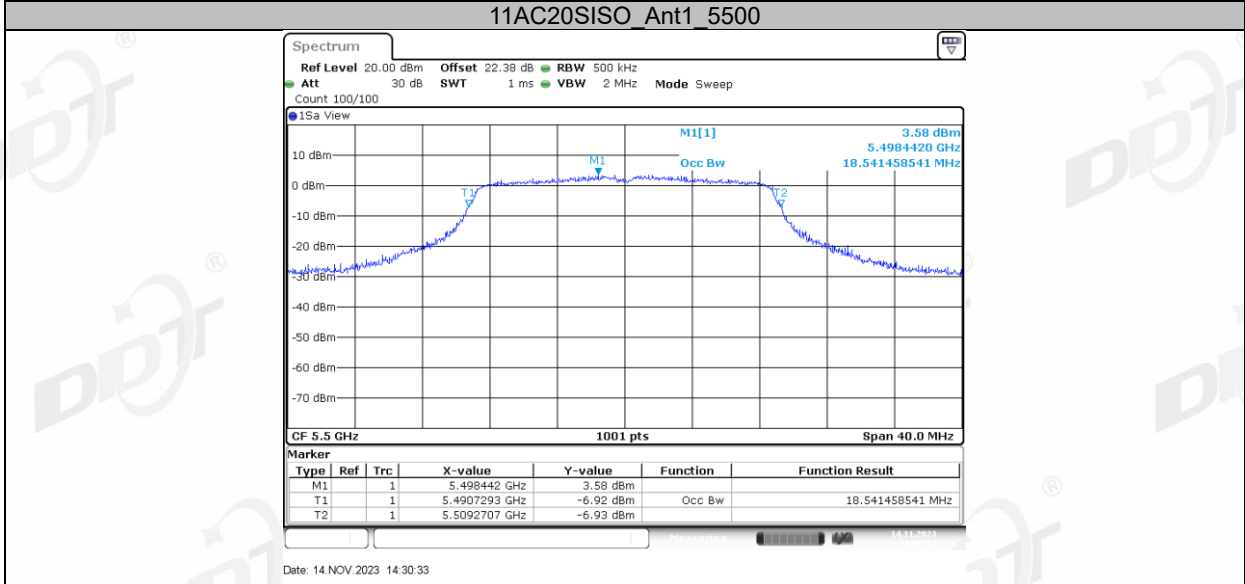
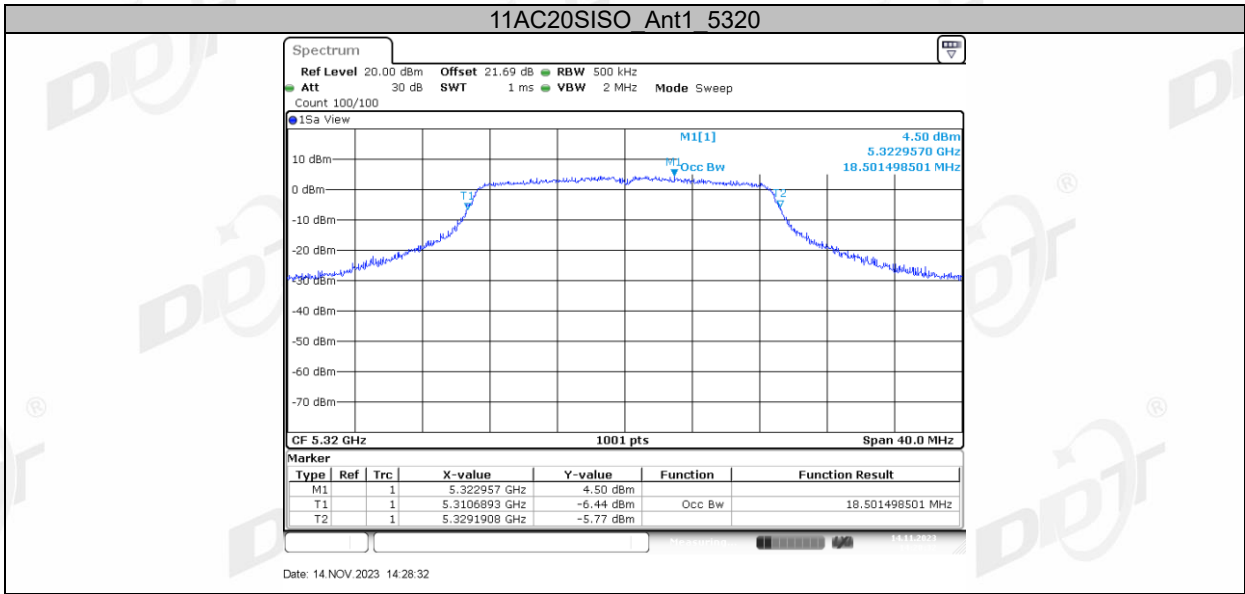


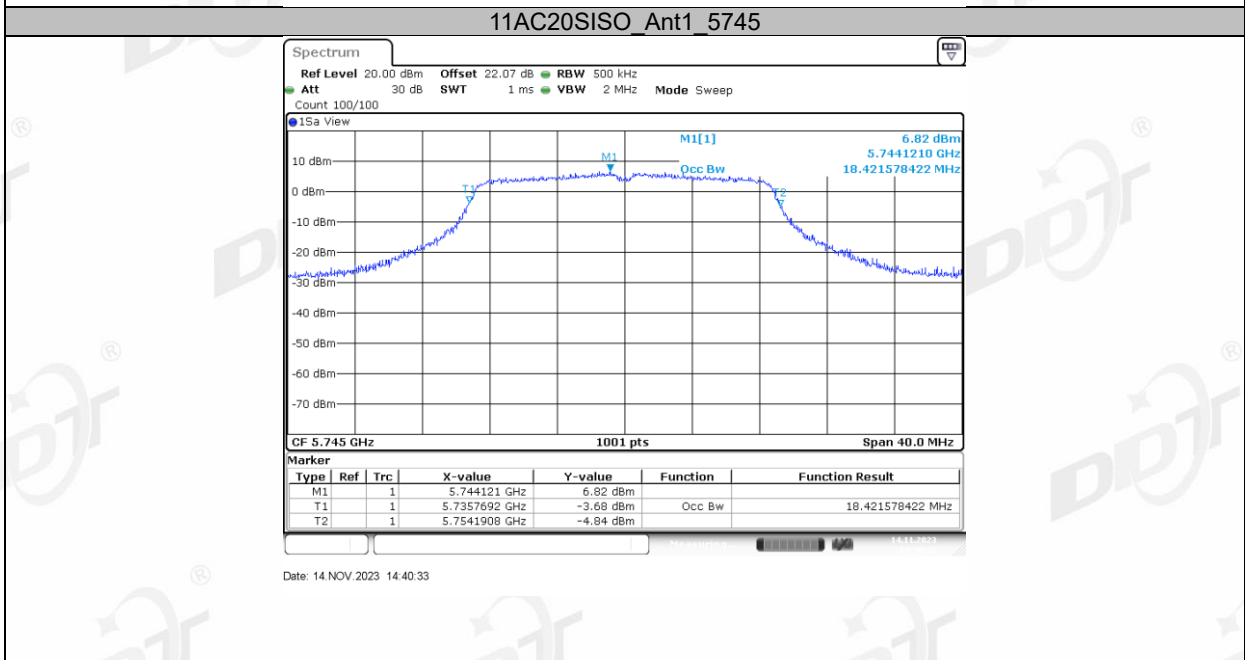
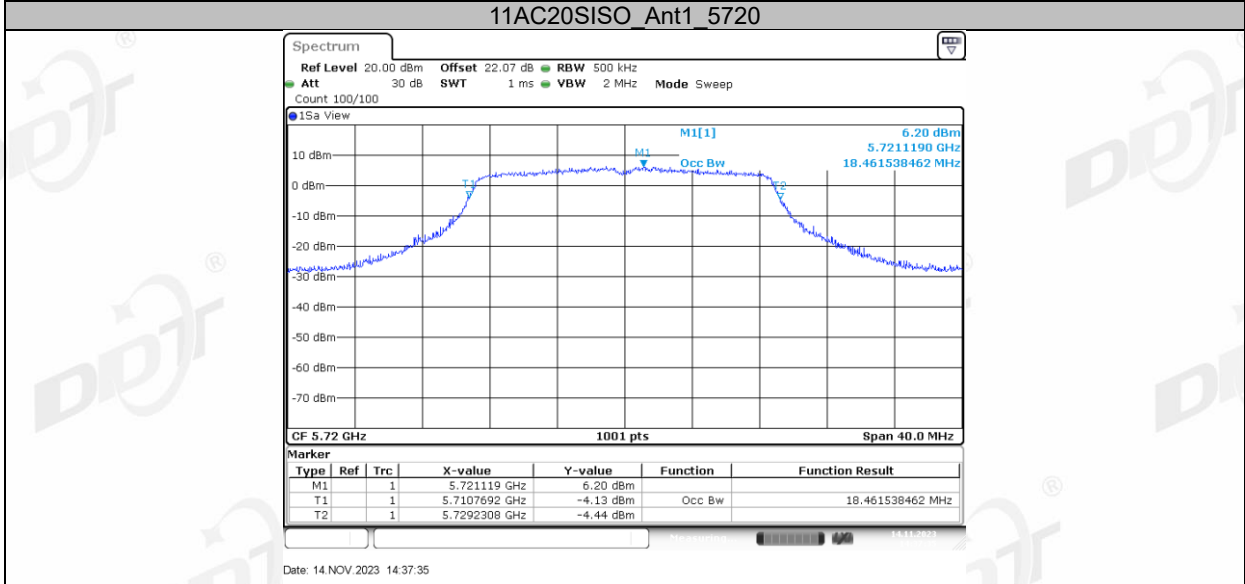
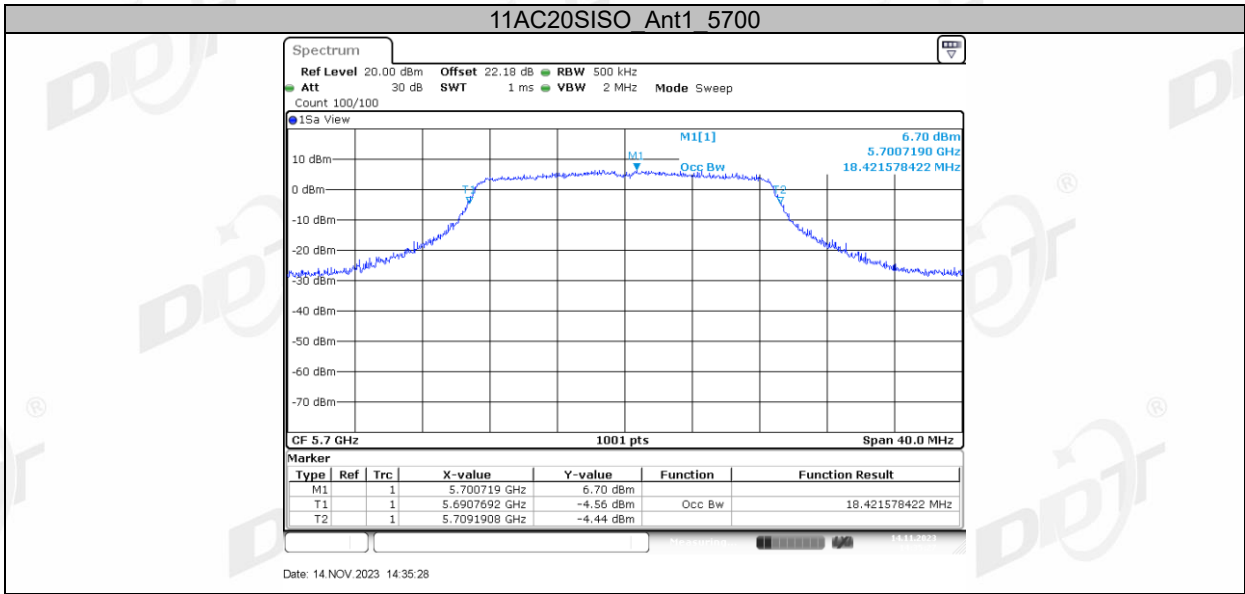


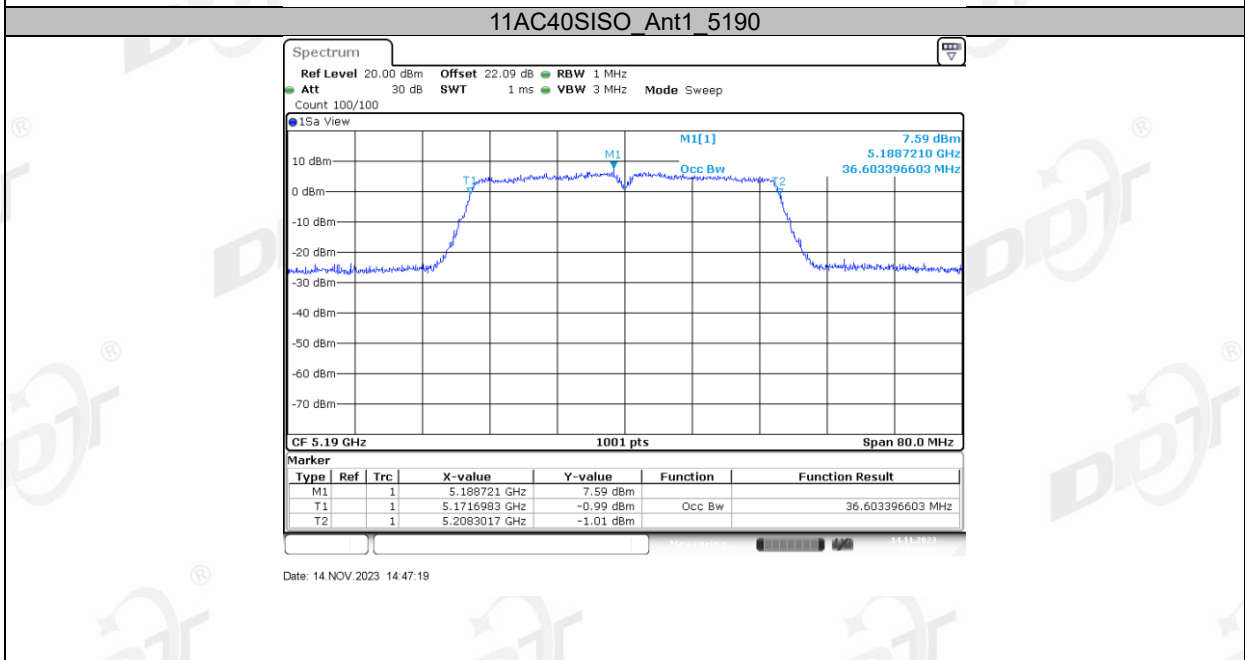
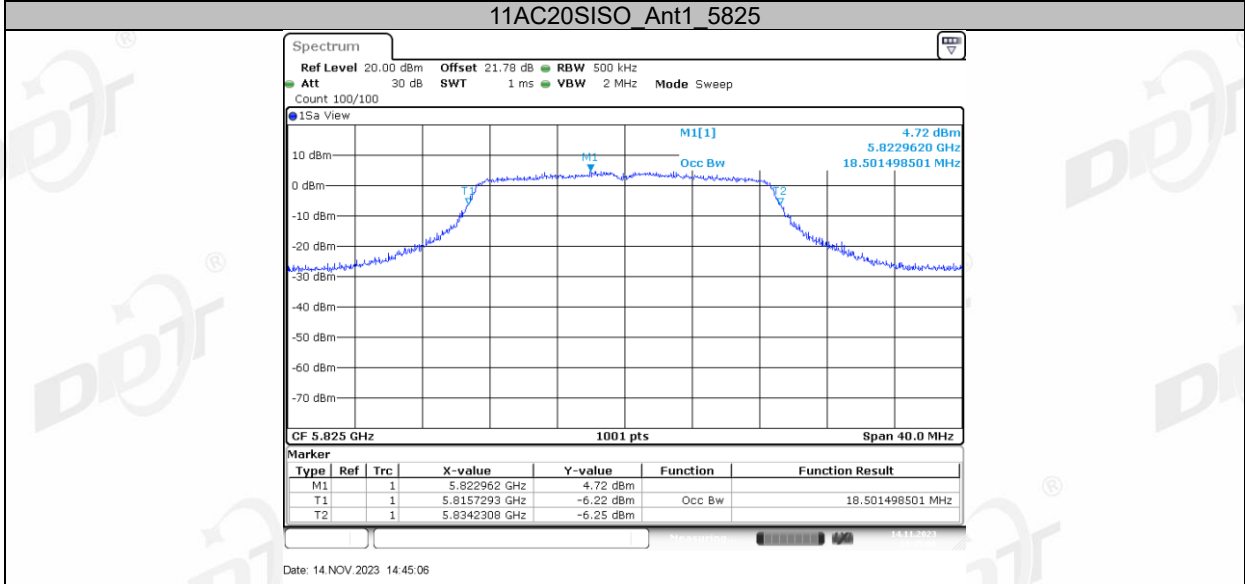
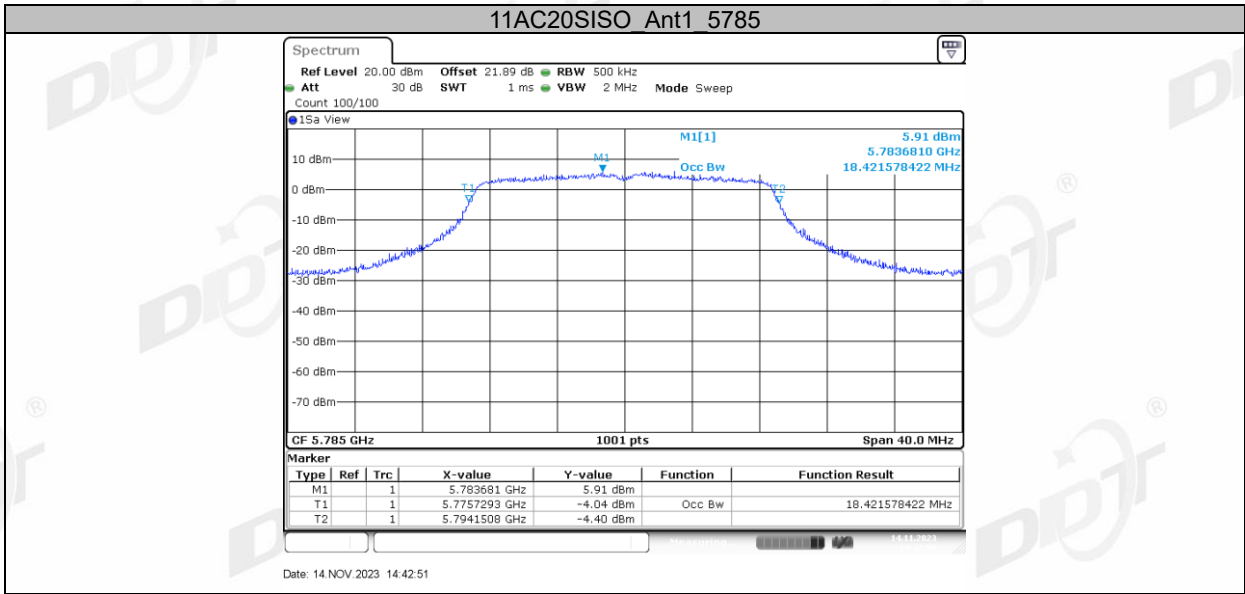


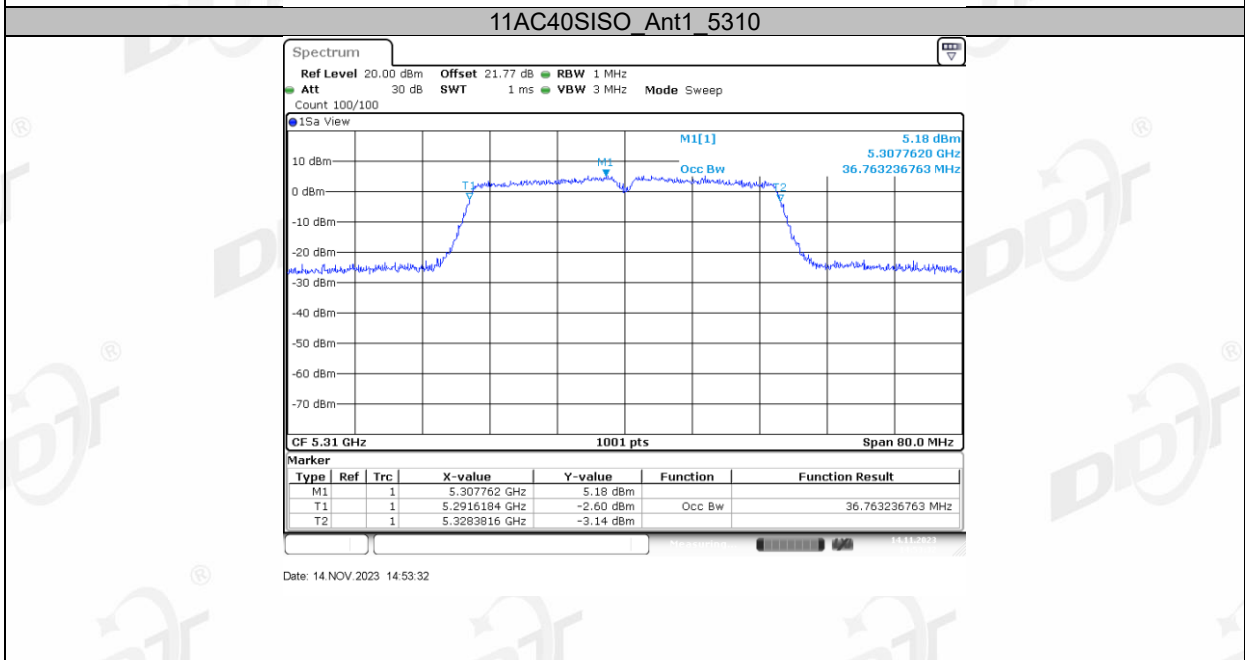
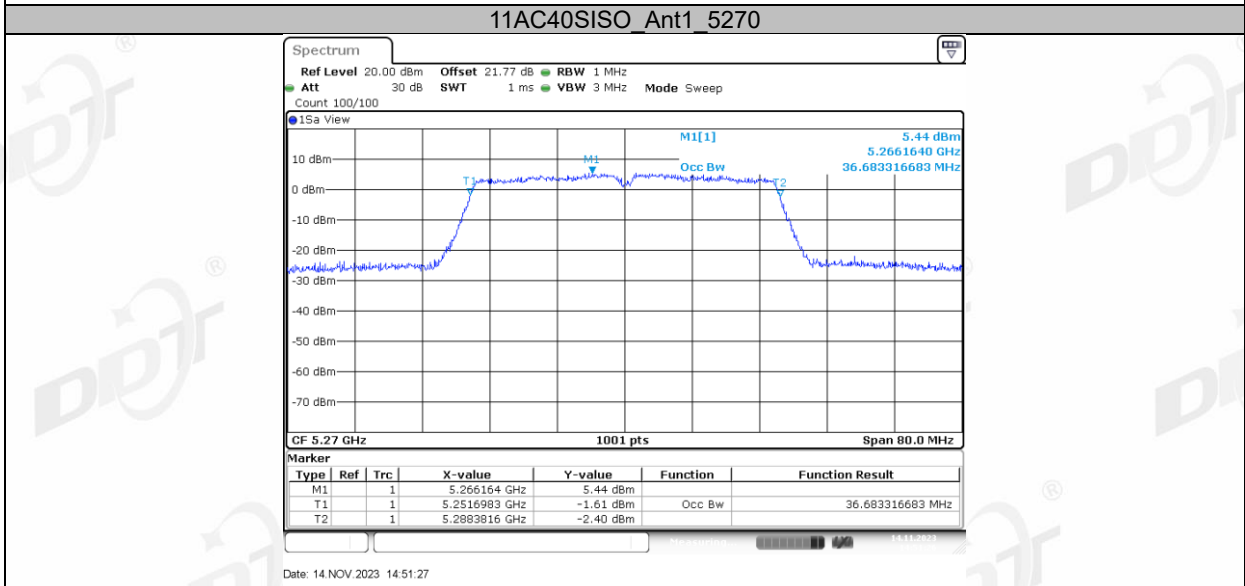
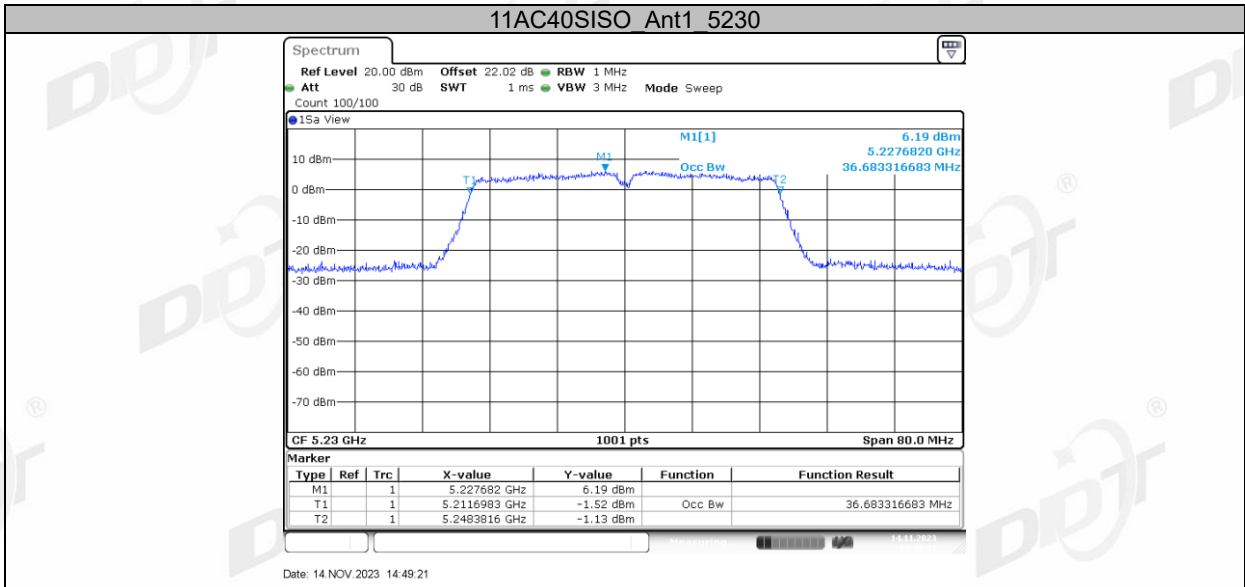


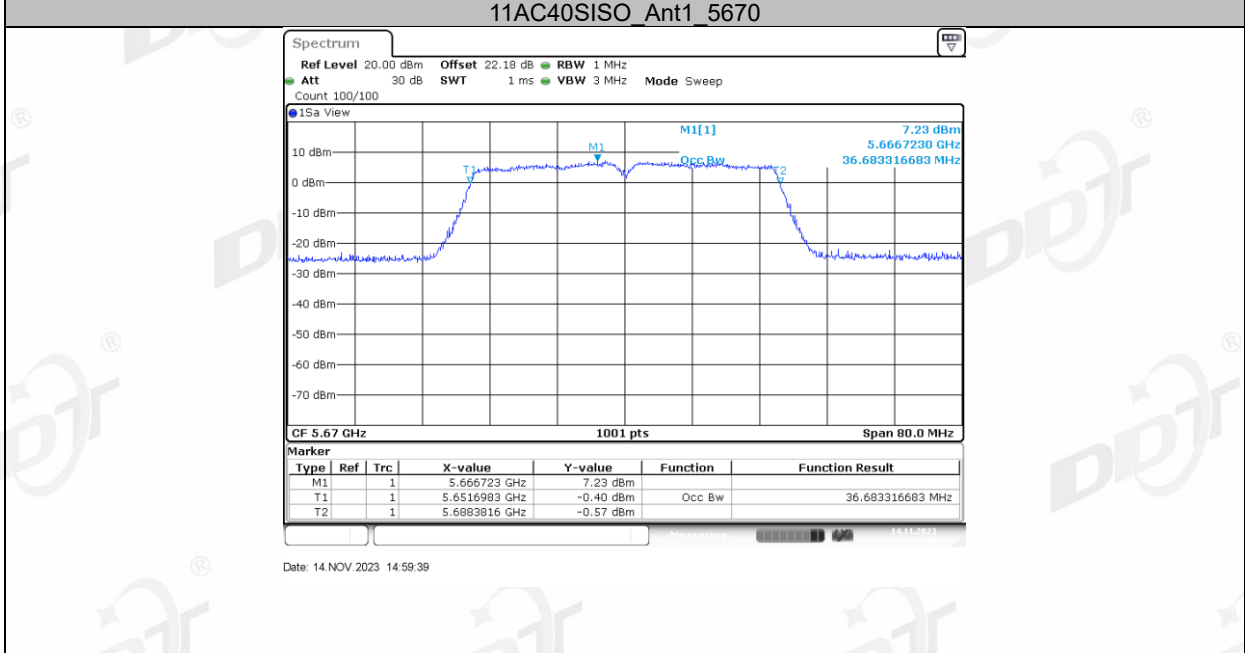
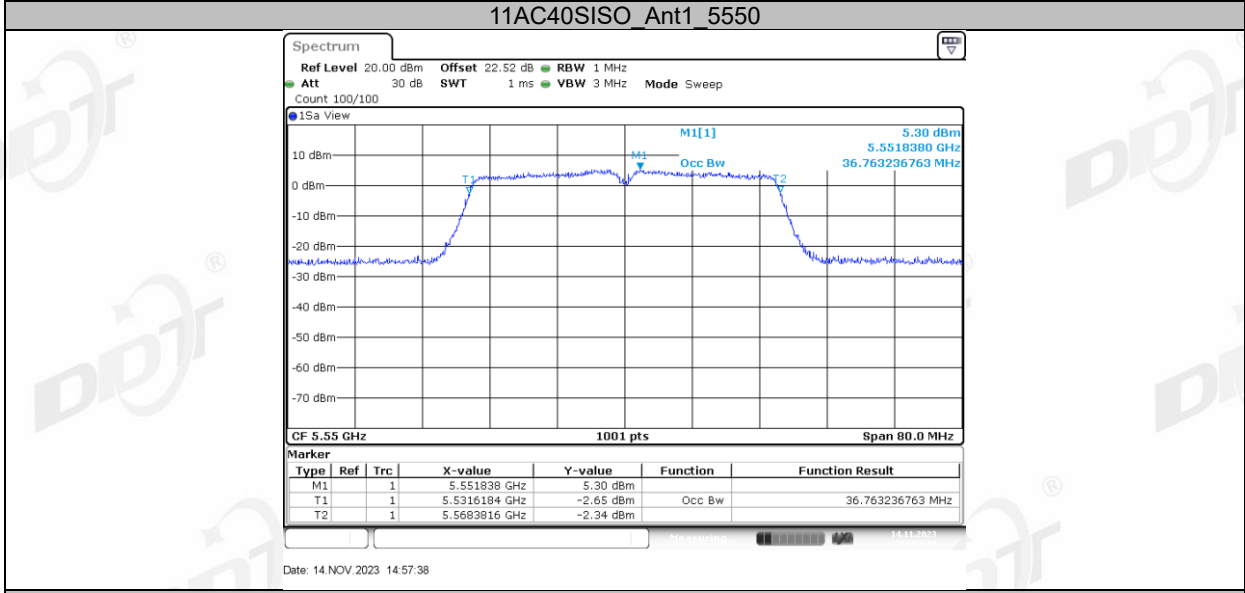
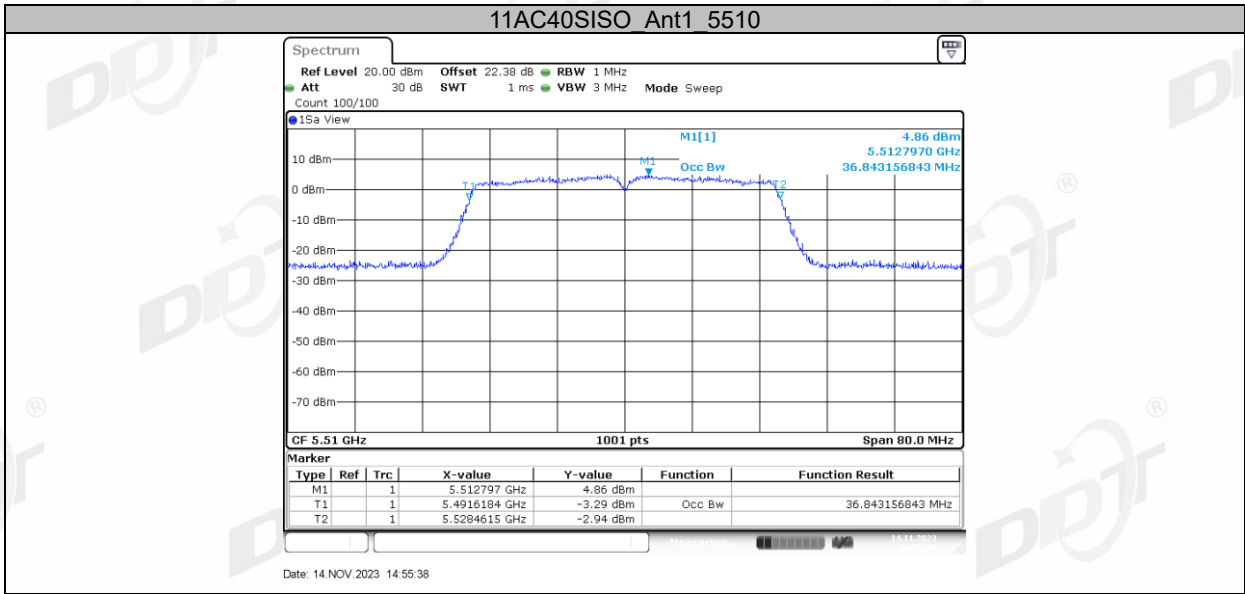


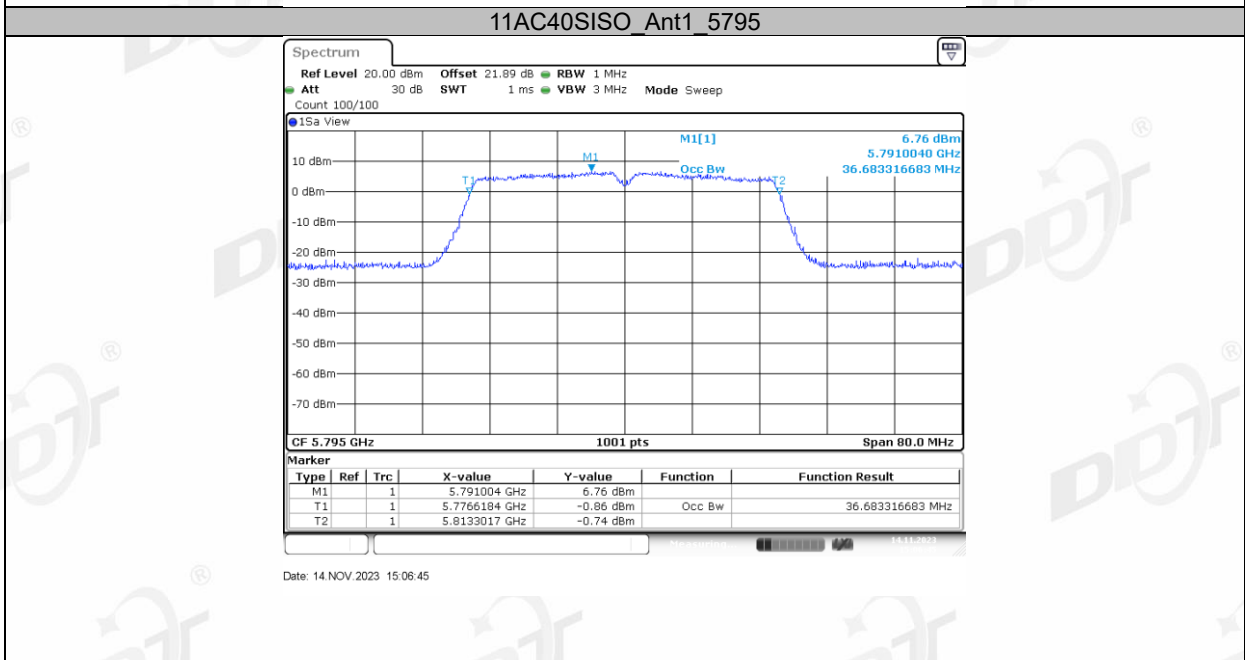
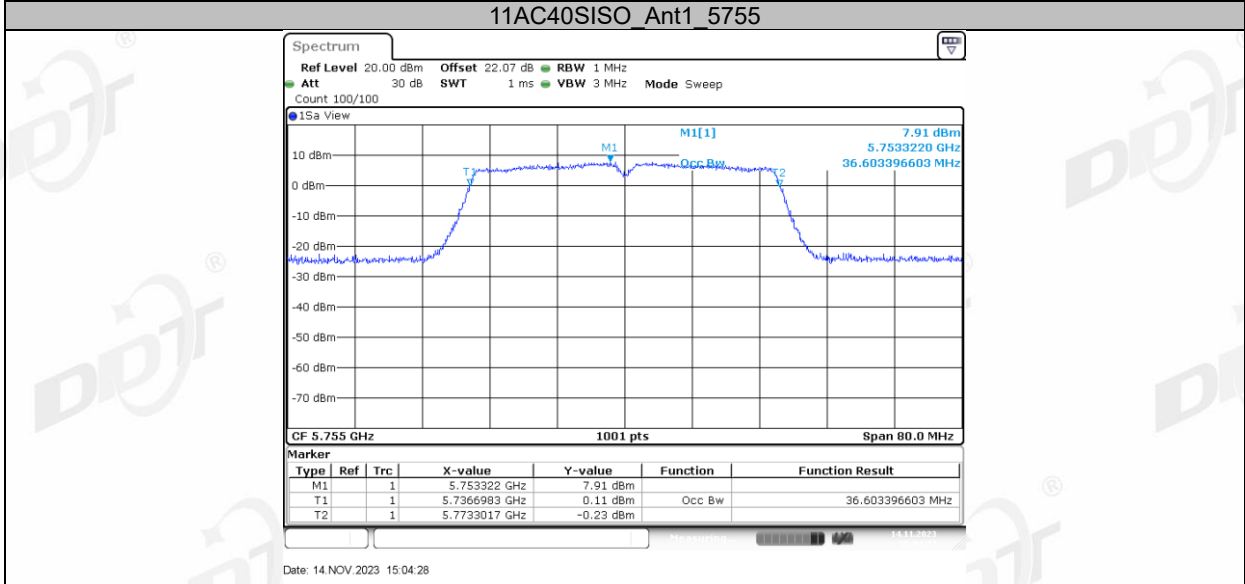
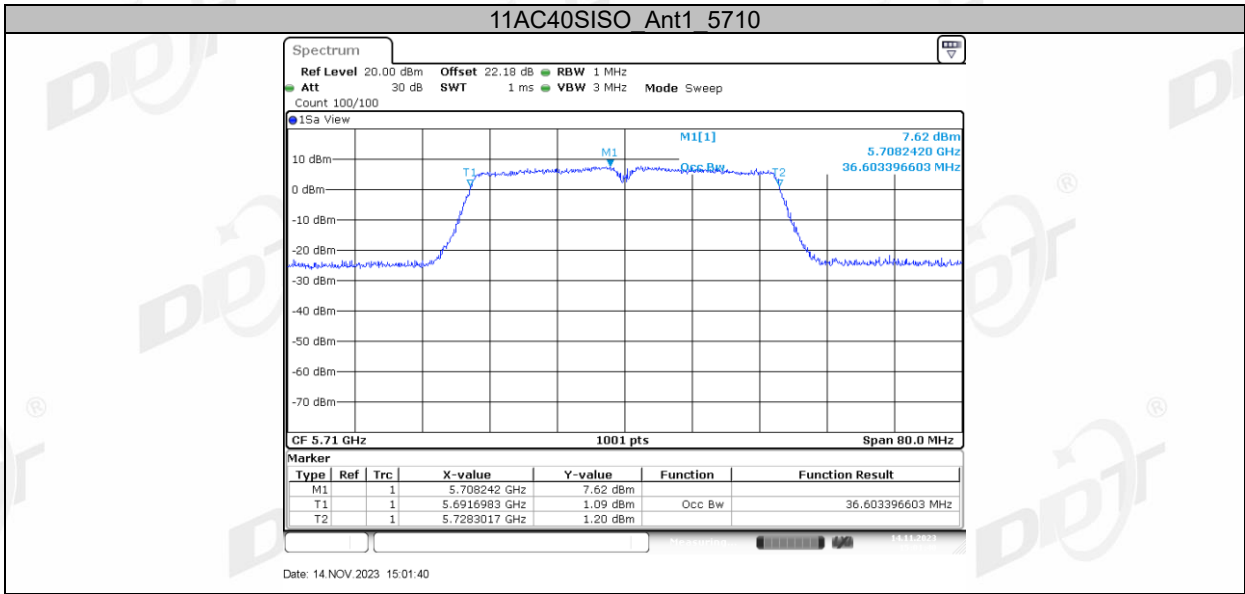


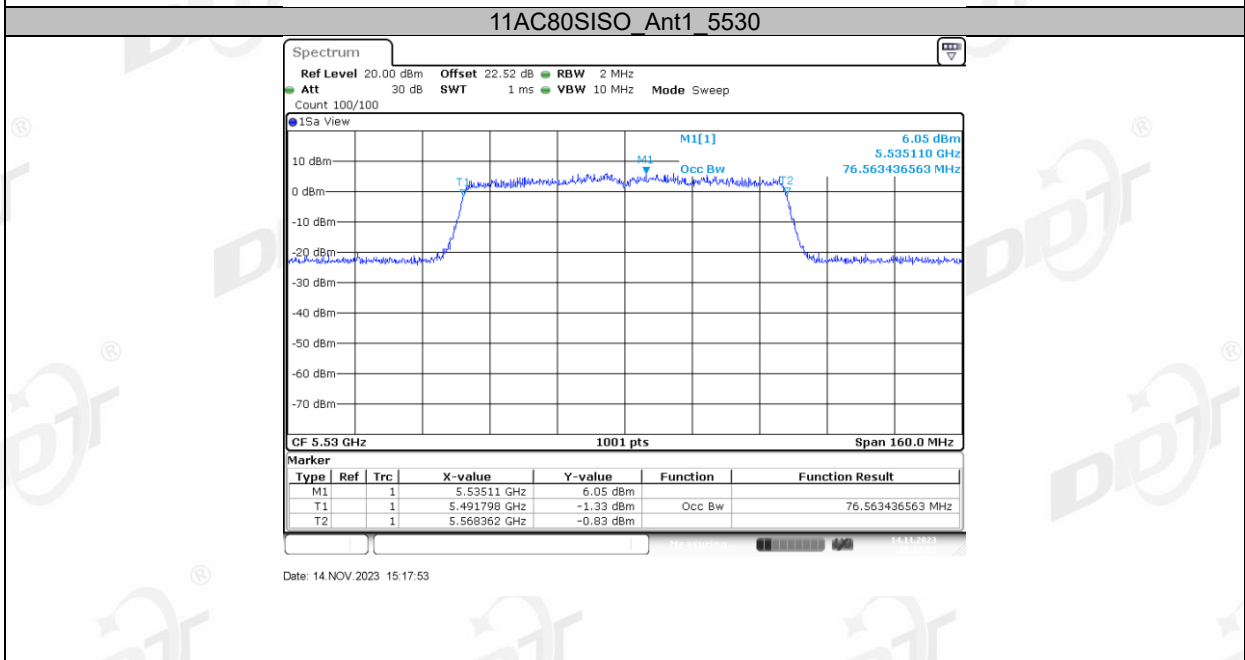
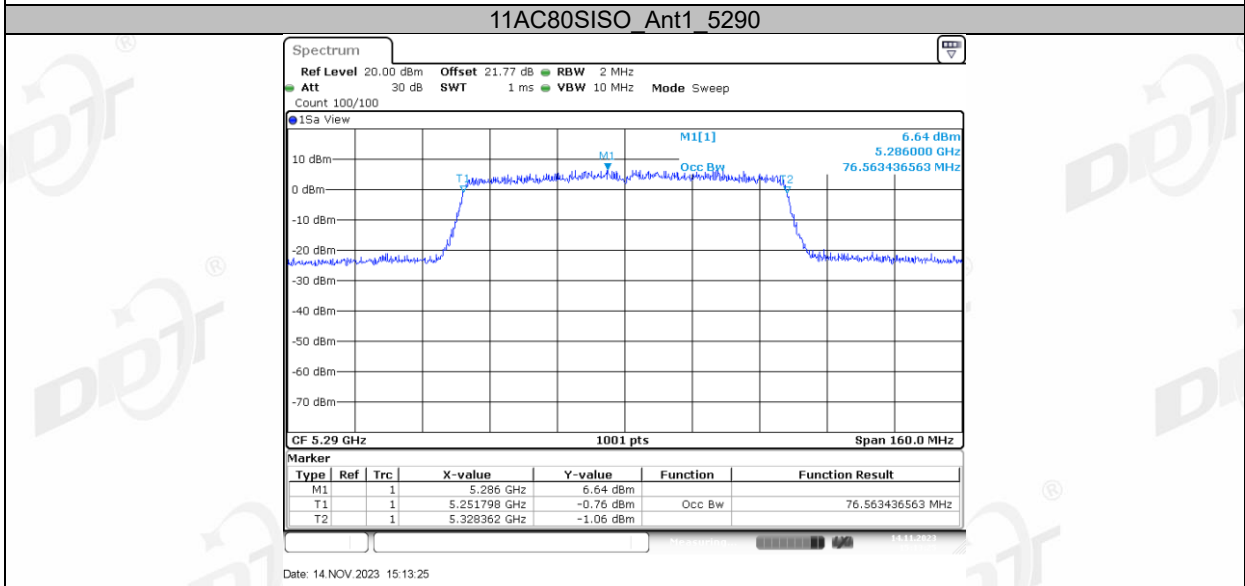
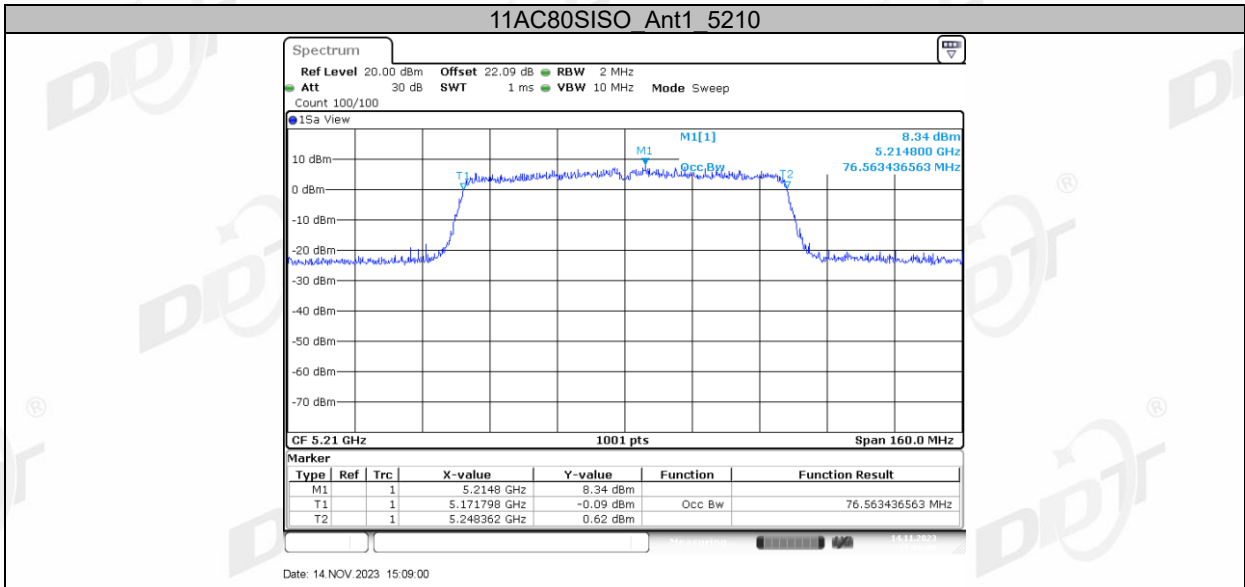


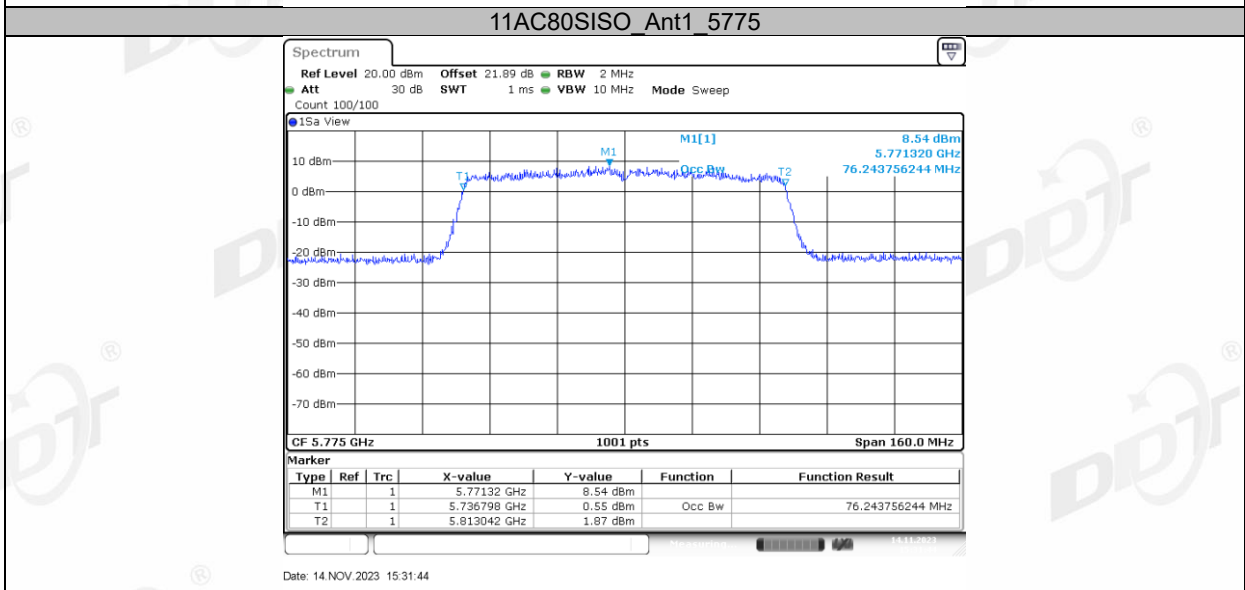
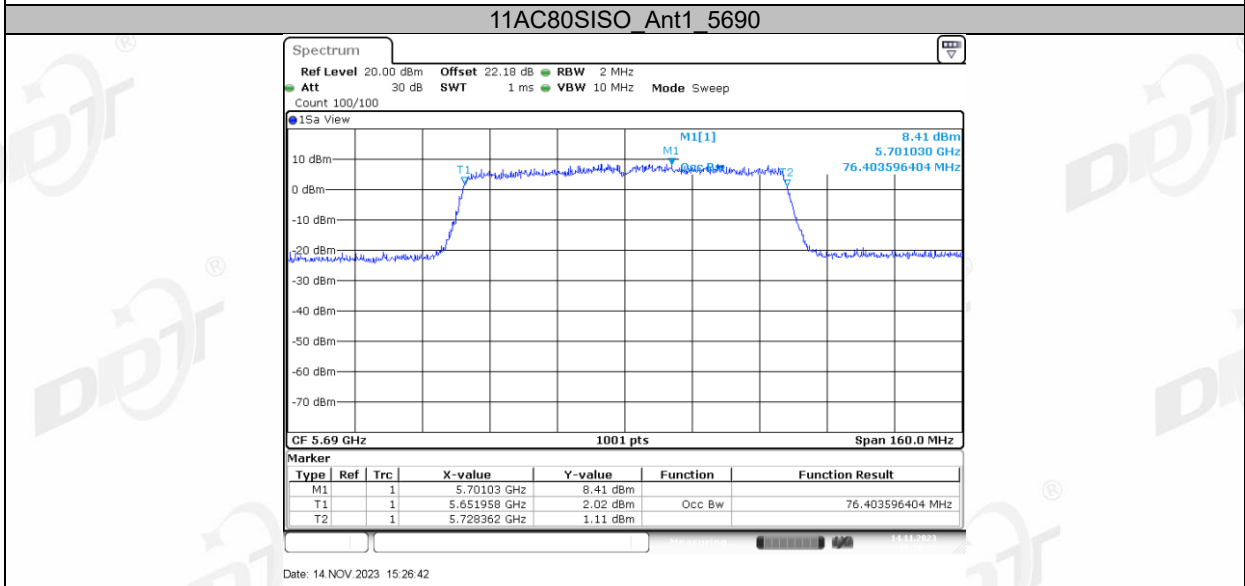
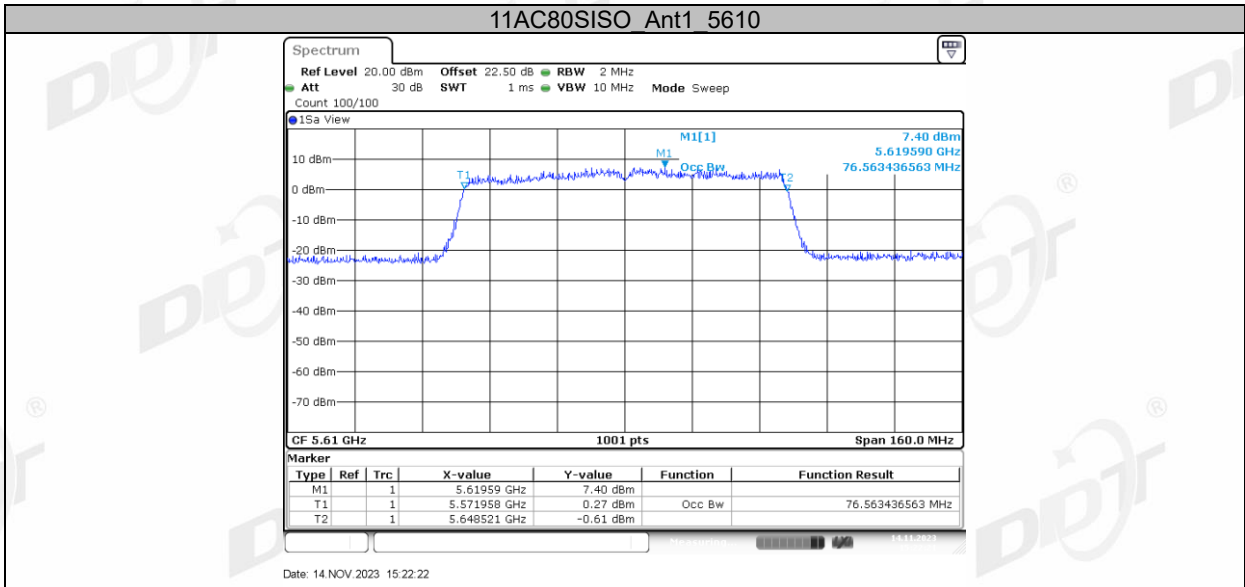






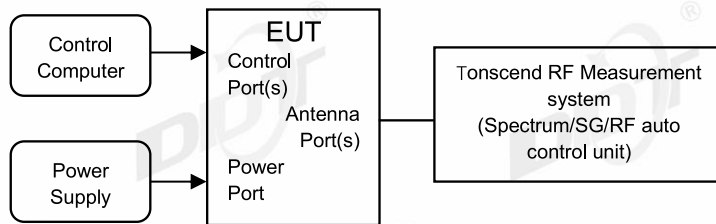






7. Duty Cycle

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:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	25.3℃, 45.7%RH	Test Date:	2023.11.07-2023.11.08
Test Power Supply:	AC 230V	EUT:	All-In-One Desktop Android HiFi Music Player
Sample Number:	S23101912-01	Model No.:	F3051R

Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	2.04	2.07	98.55
		5200	2.03	2.06	98.54
		5240	2.04	2.07	98.55
		5260	2.03	2.06	98.54
		5280	2.03	2.06	98.54
		5320	2.04	2.07	98.55
		5500	2.03	2.07	98.07
		5580	2.03	2.07	98.07
		5700	2.03	2.06	98.54
		5720	2.03	2.07	98.07
		5745	2.03	2.07	98.07
		5785	2.03	2.07	98.07
		5825	2.03	2.07	98.07
11N20SISO	Ant1	5180	1.89	1.92	98.44
		5200	1.89	1.93	97.93
		5240	1.89	1.93	97.93
		5260	1.89	1.93	97.93
		5280	1.90	1.93	98.45
		5320	1.89	1.93	97.93
		5500	1.89	1.93	97.93
		5580	1.89	1.93	97.93
		5700	1.89	1.93	97.93
		5720	1.89	1.93	97.93
		5745	1.89	1.93	97.93
		5785	1.89	1.93	97.93
		5825	1.89	1.93	97.93
11N40SISO	Ant1	5190	0.93	0.97	95.88
		5230	0.93	0.97	95.88
		5270	0.93	0.97	95.88
		5310	0.93	0.96	96.88
		5510	0.93	0.97	95.88

		5550	0.93	0.97	95.88
		5670	0.93	0.96	96.88
		5710	0.93	0.97	95.88
		5755	0.93	0.97	95.88
		5795	0.93	0.96	96.88
11AC20SISO	Ant1	5180	1.91	1.94	98.45
		5200	1.90	1.94	97.94
		5240	1.91	1.94	98.45
		5260	1.90	1.94	97.94
		5280	1.90	1.94	97.94
		5320	1.90	1.94	97.94
		5500	1.90	1.94	97.94
		5580	1.91	1.94	98.45
		5700	1.91	1.94	98.45
		5720	1.90	1.94	97.94
		5745	1.91	1.94	98.45
		5785	1.90	1.94	97.94
		5825	1.90	1.94	97.94
11AC40SISO	Ant1	5190	0.93	0.97	95.88
		5230	0.94	0.97	96.91
		5270	0.94	0.98	95.92
		5310	0.93	0.97	95.88
		5510	0.94	0.97	96.91
		5550	0.94	0.98	95.92
		5670	0.94	0.98	95.92
		5710	0.93	0.97	95.88
		5755	0.93	0.97	95.88
		5795	0.94	0.97	96.91
11AC80SISO	Ant1	5210	0.46	0.50	92.00
		5290	0.45	0.49	91.84
		5530	0.46	0.50	92.00
		5610	0.45	0.49	91.84
		5690	0.45	0.49	91.84
		5775	0.46	0.50	92.00

7.5. Test graphs

