



FCC AND ISCED CERTIFICATION TEST REPORT

Applicant	:	BYD Auto Industry Company Limited
Address of Applicant	:	No. 3001, 3007 HengPing Road, Pingshan, Shenzhen, P.R. China
Manufacturer	:	BYD Auto Industry Company Limited
Address of Manufacturer	:	No. 3001, 3007 HengPing Road, Pingshan, Shenzhen, P.R. China
Equipment under Test	:	In-vehicle Multimedia Host
Model No.	:	MTD421-B2
FCC ID	:	SD4-MTD421-B2
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart E, ANSI C63.10-2020, 789033 D02 General U-NII Test Procedures New Rules v02r01, 662911 D01 Multiple Transmitter Output v02r01
Report No.	:	DDT-RE25060926-1E11
Issue Date	:	2026/04/03
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

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Test Report Declare

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Equipment under Test	:	In-vehicle Multimedia Host
Model No.	:	MTD421-B2
Manufacturer	:	BYD Auto Industry Company Limited
Address of Manufacturer	:	No. 3001, 3007 HengPing Road, Pingshan, Shenzhen, P.R. China

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart E,
ANSI C63.10-2020,
789033 D02 General U-NII Test Procedures New Rules v02r01,
662911 D01 Multiple Transmitter Output v02r01

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE25060926-1E11		
Date of Receipt:	2025/08/13	Date of Test:	2025/08/19 - 2026/02/12

Created: Jacky Huang	Reviewed: Johnson Huang	Approved: Ella Gong
		
2025/12/29	2026/04/03	2026/04/03

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Version	Revision Content	Issue Date	Approved
V0	Initial issue	2026/04/03	Ella Gong

1. Summary of Test Results

No.	Test Parameter	Clause No.	Condition	Result
1	6/26db Bandwidth and 99% Bandwidth	FCC 15.407 (e)	/	Pass
2	Output Power	FCC 15.407 (a)	/	Pass
3	Power Spectral Density	FCC 15.407 (a)	/	Pass
4	Frequency Stability Measurement	FCC 15.407 (g)	/	Pass
5	Radiated Emission	FCC 15.407 (b); FCC 15.209; FCC 15.205	/	Pass
6	Band Edge Compliance	FCC 15.407 (b); FCC 15.209; FCC 15.205	/	Pass
7	Antenna Requirement	FCC Part 15: 15.203	/	Pass
8	Dynamic Frequency Selection	FCC 15.407 (h)	/	Pass
9	Power Line Conducted Emissions	FCC Part 15: 15.207(a)	/	N/A
Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.				

2. General Test Information

2.1. Description of EUT

EUT Name	: In-vehicle Multimedia Host
Model Number	: MTD421-B2
EUT Function Description	: Please reference user manual of this device
Power Supply	: DC 12V
Antenna Type	: External antenna
Max Antenna Gain (dBi)	: 3.56

Radio Technology	: IEEE 802.11a/n/ac/ax
Operation channel frequency	: U-NII-1: 5180 MHz to 5240 MHz U-NII-2A: 5260 MHz to 5320 MHz U-NII-2C: 5500 MHz to 5720 MHz U-NII-3: 5745 MHz to 5825 MHz
Modulation	: IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDM, OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)

Channel information					
IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20) IEEE 802.11ax (HE20)		IEEE 802.11n (HT40) IEEE802.11ac (VHT40) IEEE 802.11ax (HE40)		IEEE 802.11ac (VHT80) IEEE 802.11ax (HE80)	
UNII-1					
CH	Frequency (MHz)	CH	Frequency (MHz)	CH	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	/	/
44	5220	/	/	/	/
48	5240	/	/	/	/
UNII-2A					
52	5260	54	5270	58	5290
56	5280	62	5310	/	/
60	5300	/	/	/	/
64	5320	/	/	/	/
UNII-2C					
100	5500	102	5510	106	5530
104	5520	110	5550	122	5610
108	5540	118	5590	138	5690 (Straddle)
112	5560	126	5630	/	/
116	5580	134	5670	/	/

120	5600	142	5710 (Straddle)	/	/
124	5620	/	/	/	/
128	5640	/	/	/	/
132	5660	/	/	/	/
136	5680	/	/	/	/
140	5700	/	/	/	/
144	5720 (Straddle)	/	/	/	/
UNII-3					
149	5745	151	5755	155	5775
153	5765	159	5795	/	/
157	5785	/	/	/	/
161	5805	/	/	/	/
165	5825	/	/	/	/

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
Connecting cable	N/A	N/A	length: 2.0m, unshielded
Power cable	N/A	N/A	length: 2.0m, unshielded
Display cable	N/A	N/A	length: 2.0m, shielded
Bluetooth/WIFI antenna	N/A	N/A	length: 2.00m, shielded

2.3. Block diagram of EUT configuration for test



2.4. Decision of final test mode

According pre-test, the worst test modes were reported as below:

Test software: adb.exe

The test software was used to control EUT work in Continuous Tx mode and Rx mode, and select test channel, wireless mode as below table.

The pathloss of external cable: 2dB (According to the manufacturer's claims)

Tested mode, Tx Power Setting, Data rate, Channel, and Frequency				
Tested mode	Tx Power Setting	Data rate (Mbps) (see Note)	Test Channel	Frequency (MHz)
	ANT1			
IEEE 802.11a	65	6	LCH: CH36	5180
		6	MCH: CH40	5200
		6	HCH: CH48	5240
		6	LCH: CH52	5260
		6	MCH: CH56	5280
		6	HCH: CH64	5320
		6	LCH: CH100	5500
		6	MCH: CH116	5580
		6	HCH: CH140	5700
		6	Straddle: CH144	5720
		6	LCH: CH149	5745
		6	MCH: CH157	5785
		6	HCH: CH165	5825
IEEE 802.11n HT20	65	MCS 0	LCH: CH36	5180
		MCS 0	MCH: CH40	5200
		MCS 0	HCH: CH48	5240
	58	MCS 0	LCH: CH52	5260
		MCS 0	MCH: CH56	5280
		MCS 0	HCH: CH64	5320
		MCS 0	LCH: CH100	5500
		MCS 0	MCH: CH116	5580
		MCS 0	HCH: CH140	5700
		MCS 0	Straddle: CH144	5720
	65	MCS 0	LCH: CH149	5745
		MCS 0	MCH: CH157	5785
		MCS 0	HCH: CH165	5825
IEEE 802.11n HT40	62	MCS 0	LCH: CH38	5190
		MCS 0	HCH: CH46	5230
		MCS 0	LCH: CH54	5270
		MCS 0	HCH: CH62	5310
		MCS 0	LCH: CH102	5510
		MCS 0	MCH: CH110	5550

IEEE 802.11ac VHT20	65	MCS 0	HCH: CH134	5670
		MCS 0	LCH: CH151	5755
		MCS 0	HCH: CH159	5795
		MCS 0	LCH: CH36	5180
		MCS 0	MCH: CH40	5200
		MCS 0	HCH: CH48	5240
		MCS 0	LCH: CH52	5260
		MCS 0	MCH: CH56	5280
		MCS 0	HCH: CH64	5320
		MCS 0	LCH: CH100	5500
		MCS 0	MCH: CH116	5580
		MCS 0	HCH: CH140	5700
		MCS 0	Straddle: CH144	5720
		MCS 0	LCH: CH149	5745
		MCS 0	MCH: CH157	5785
		MCS 0	HCH: CH165	5825
IEEE 802.11 ac VHT40	53	MCS 0	LCH: CH38	5190
		MCS 0	HCH: CH46	5230
		MCS 0	LCH: CH54	5270
		MCS 0	HCH: CH62	5310
		MCS 0	LCH: CH102	5510
		MCS 0	MCH: CH110	5550
		MCS 0	HCH: CH134	5670
		MCS 0	Straddle: CH151	5710
		MCS 0	LCH: CH159	5755
		MCS 0	HCH: CH36	5795
IEEE 802.11ac VHT80	53	MCS 0	CH42	5210
		MCS 0	CH58	5290
		MCS 0	LCH: CH106	5530
		MCS 0	HCH: CH122	5610
		MCS 0	Straddle: CH138	5690
		MCS 0	CH155	5775
IEEE 802.11ax HE20	SU: 61 RU: 7	MCS 0	LCH: CH36	5180
		MCS 0	MCH: CH40	5200
		MCS 0	HCH: CH48	5240
	SU: 61 RU: 6	MCS 0	LCH: CH52	5260
		MCS 0	MCH: CH56	5280
		MCS 0	HCH: CH64	5320
		MCS 0	LCH: CH100	5500
		MCS 0	MCH: CH116	5580
		MCS 0	HCH: CH140	5700
		MCS 0	Straddle: CH144	5720
	SU: 61 RU: 7	MCS 0	LCH: CH149	5745

IEEE 802.11ax HE40	SU: 53 RU: 9	MCS 0	MCH: CH157	5785
		MCS 0	HCH: CH165	5825
	SU: 53 RU: 10	MCS 0	LCH: CH38	5190
		MCS 0	HCH: CH46	5230
		MCS 0	LCH: CH54	5270
		MCS 0	HCH: CH62	5310
		MCS 0	LCH: CH102	5510
		MCS 0	MCH: CH110	5550
		MCS 0	HCH: CH134	5670
		MCS 0	Straddle: CH151	5710
	SU: 53 RU: 6	MCS 0	LCH: CH159	5755
		MCS 0	HCH: CH36	5795
IEEE 802.11ax HE80	SU: 53 RU: 9	MCS 0	CH42	5210
	SU: 53 RU: 10	MCS 0	CH58	5290
		MCS 0	LCH: CH106	5530
		MCS 0	HCH: CH122	5610
		MCS 0	Straddle: CH138	5690
	SU: 53 RU: 6	MCS 0	CH155	5775

Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

2.5. Deviations of test standard

No deviation.

2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	+15°C to +35 °C
Humidity range:	20% to 75%
Pressure range:	86 kPa to 106 kPa

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

2.7. Assistant Equipment

Assistant Equipment	Manufacturer	Model number	Description
ASUS Router	ASUS	GT-AXE11000	FCC ID: MSQ-RTAXJF00

2.8. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

2.9. Measurement uncertainty

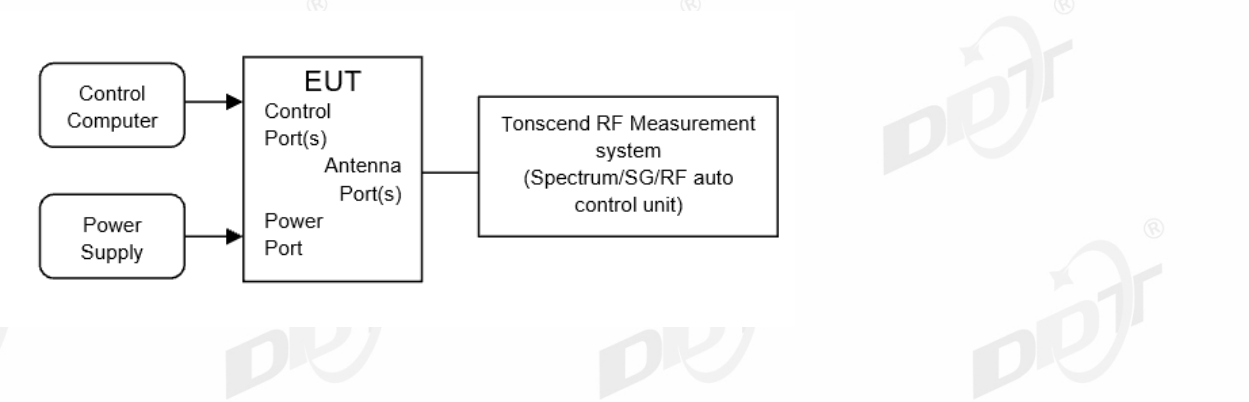
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB (10 MHz ≤ f < 3.6 GHz);
	1.38 dB (3.6 GHz ≤ f < 8 GHz)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB (10 MHz ≤ f < 3.6 GHz);
	1.38 dB (3.6 GHz ≤ f < 8 GHz)
Frequencies Stability	6.7 × 10 ⁻⁸ (Antenna couple method)
	5.5 × 10 ⁻⁸ (Conducted method)
Conducted spurious emissions	0.86 dB (10 MHz ≤ f < 3.6 GHz);
	1.40 dB (3.6 GHz ≤ f < 8 GHz)
	1.66 dB (8 GHz ≤ f < 26.5 GHz)
Uncertainty for radio frequency (RBW < 20 kHz)	3×10 ⁻⁸
Temperature	0.4 °C
Humidity	2 %
Uncertainty for Radiation Emission test (9 kHz – 30 MHz)	3.44 dB
Uncertainty for Radiation Emission test (30 MHz - 1 GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1 GHz - 40 GHz)	4.10 dB (1 - 6 GHz)
	4.40 dB (6 GHz - 18 GHz)
	3.54 dB (18 GHz - 26 GHz)
	4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power line conduction emission test	3.34dB (150KHz-30MHz)
	3.72dB (9KHz-150KHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3. Equipment Used During Conductive Test

Equipment	Manufacturer	Model No.	Serial Number	Due Date	Cal. Interval
☑ RF Connected Test (RF Measurement System 1#)					
SIGNAL ANALYZER	R&S	FSQ26	101272	2026/03/28	1 Year
Wideband Radio Communication Tester	R&S	CMW500	120259	2026/03/28	1 Year
MXG Vector Signal Generator	KEYSIGHT	N5182B	MY59100192	2026/03/28	1 Year
MXG Vector Signal Generator	Agilent	N5182A	MY19060405	2026/03/28	1 Year
RF Control Unit	Tonscend	JS0806-2	158060010	2026/03/28	1 Year
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2026/03/28	1 Year
Test Software	Tonscend	JS1120-3	V3.6.21	N/A	N/A
☑ RF Connected Test (RF Measurement System 4#)					
Signal &Spectrum Analyzer	R&S	FSV3044	101173	2026/03/28	1 Year
Wideband Radio Communication Tester	R&S	CMW500	168801	2026/03/28	1 Year
MXG Vector Signal Generator	Agilent	N5182A	MY48180737	2026/03/28	1 Year
PSG Vector Signal Generator	Agilent	E8267D	US49060192	2026/08/10	1 Year
RF Control Unit	Tonscend	JS0806-2	2118060485	2026/03/28	1 Year
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2026/03/28	1 Year
Test Software	Tonscend	JS1120-3	V3.6.21	N/A	N/A

4. 26dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
26 dB Bandwidth	---	5150 - 5250
	---	5250 - 5350
	---	For FCC: 5470 - 5725 For IC: 5470 - 5600 5650 - 5725

4.3. Test procedure

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	approximately 1% of the emission bandwidth.
VBW	> RBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

4.4. Test result

Test Engineer:	Wayne Huang	Test Site:	RF Measurement System 1# RF Measurement System 4#
Ambient Condition:	24.4℃,47.3%RH-23.6℃,43.8%RH	Test Date:	2025.10.25-2026.01.06
Test Power Supply:	DC 12V	Sample Number:	S25060926-001

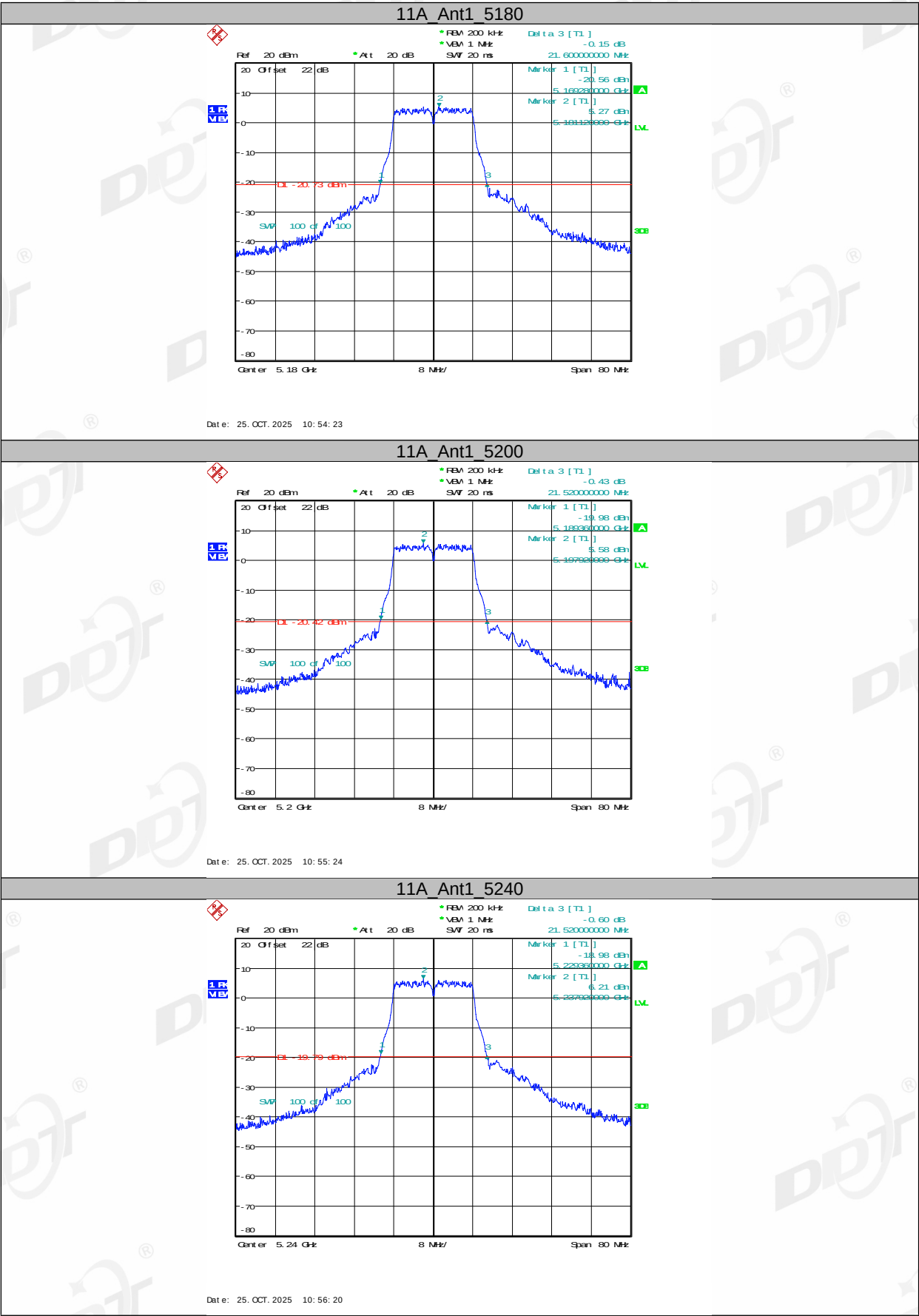
Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	21.60	5169.28	5190.88	---	---
		5200	21.52	5189.36	5210.88	---	---
		5240	21.52	5229.36	5250.88	---	---
		5260	21.68	5249.20	5270.88	---	---
		5280	21.60	5269.28	5290.88	---	---
		5320	23.92	5309.20	5333.12	---	---
		5500	28.64	5485.92	5514.56	---	---
		5580	32.40	5563.28	5595.68	---	---
		5700	34.00	5683.20	5717.20	---	---
		5720	32.76	5703.32	5736.08	---	---
		5720_UNII-2C	21.68	5703.32	5725	---	---
		5720_UNII-3	11.08	5725	5736.08	---	---
		5745	21.52	5734.28	5755.80	---	---
		5785	21.68	5774.12	5795.80	---	---
		5825	21.60	5814.12	5835.72	---	---
11N20SISO	Ant1	5180	23.12	5168.48	5191.60	---	---
		5200	23.52	5187.84	5211.36	---	---
		5240	28.16	5227.92	5256.08	---	---
		5260	22.00	5249.04	5271.04	---	---
		5280	30.56	5266.64	5297.20	---	---
		5320	22.16	5309.12	5331.28	---	---
		5500	22.40	5488.96	5511.36	---	---
		5580	28.32	5566.88	5595.20	---	---
		5700	26.32	5687.12	5713.44	---	---
		5720	32.08	5704.04	5736.12	---	---
		5720_UNII-2C	20.96	5704.04	5725	---	---

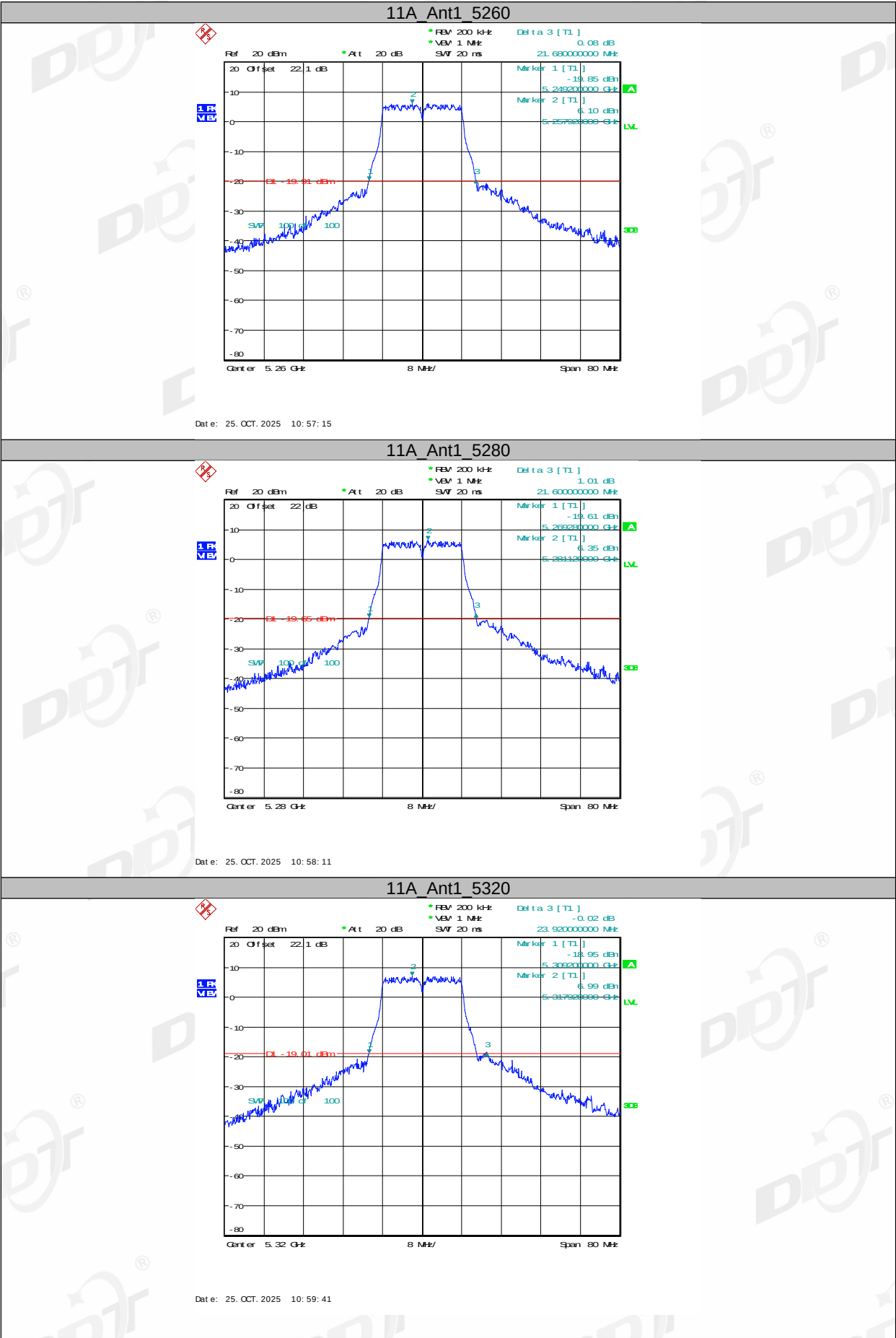
		5720_UNII-3	11.12	5725	5736.12	---	---
		5745	27.36	5731.72	5759.08	---	---
		5785	27.12	5772.44	5799.56	---	---
		5825	23.92	5812.68	5836.60	---	---
11N40SISO	Ant1	5190	52.32	5168.08	5220.40	---	---
		5230	53.60	5206.16	5259.76	---	---
		5270	53.60	5247.92	5301.52	---	---
		5310	53.12	5289.68	5342.80	---	---
		5510	78.40	5475.44	5553.84	---	---
		5550	79.84	5511.92	5591.76	---	---
		5670	80.80	5630.48	5711.28	---	---
		5710	74.64	5674.56	5749.20	---	---
		5710_UNII-2C	50.44	5674.56	5725	---	---
		5710_UNII-3	24.2	5725	5749.20	---	---
		5755	55.20	5729.08	5784.28	---	---
		5795	52.64	5770.04	5822.68	---	---
11AC20SISO	Ant1	5180	25.12	5168.48	5193.60	---	---
		5200	26.72	5187.12	5213.84	---	---
		5240	27.28	5227.84	5255.12	---	---
		5260	29.04	5247.20	5276.24	---	---
		5280	26.72	5266.88	5293.60	---	---
		5320	30.56	5306.96	5337.52	---	---
		5500	38.48	5483.20	5521.68	---	---
		5580	38.48	5561.60	5600.08	---	---
		5700	39.28	5680.40	5719.68	---	---
		5720	39.80	5700.16	5739.96	---	---
		5720_UNII-2C	24.84	5700.16	5725	---	---
		5720_UNII-3	14.96	5725	5739.96	---	---
		5745	27.52	5731.64	5759.16	---	---
		5785	28.16	5770.52	5798.68	---	---
		5825	28.32	5810.52	5838.84	---	---
11AC40SISO	Ant1	5190	41.92	5170.00	5211.92	---	---

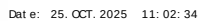
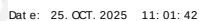
		5230	41.76	5209.84	5251.60	---	---
		5270	41.76	5249.84	5291.60	---	---
		5310	42.40	5289.84	5332.24	---	---
		5510	45.44	5489.84	5535.28	---	---
		5550	43.20	5529.84	5573.04	---	---
		5670	41.76	5649.68	5691.44	---	---
		5710	73.52	5675.44	5748.96	---	---
		5710_UNII-2C	49.56	5675.44	5725	---	---
		5710_UNII-3	23.96	5725	5748.96	---	---
		5755	42.24	5734.68	5776.92	---	---
		5795	41.28	5774.84	5816.12	---	---
11AC80SISO	Ant1	5210	81.92	5169.04	5250.96	---	---
		5290	82.24	5249.04	5331.28	---	---
		5530	111.36	5478.80	5590.16	---	---
		5610	96.32	5569.04	5665.36	---	---
		5690	133.92	5620.24	5754.16	---	---
		5690_UNII-2C	104.76	5620.24	5725	---	---
		5690_UNII-3	29.16	5725	5754.16	---	---
		5775	82.24	5734.04	5816.28	---	---
11AX20SISO	Ant1	5180	21.68	5169.28	5190.96	---	---
		5200	21.76	5189.20	5210.96	---	---
		5240	21.68	5229.20	5250.88	---	---
		5260	21.60	5249.28	5270.88	---	---
		5280	21.60	5269.28	5290.88	---	---
		5320	21.68	5309.20	5330.88	---	---
		5500	25.12	5487.52	5512.64	---	---
		5580	32.08	5564.00	5596.08	---	---
		5700	32.24	5684.08	5716.32	---	---
		5720	39.60	5700.28	5739.88	---	---
		5720_UNII-2C	24.72	5700.28	5725	---	---
		5720_UNII-3	14.88	5725	5739.88	---	---
		5745	21.68	5734.28	5755.96	---	---

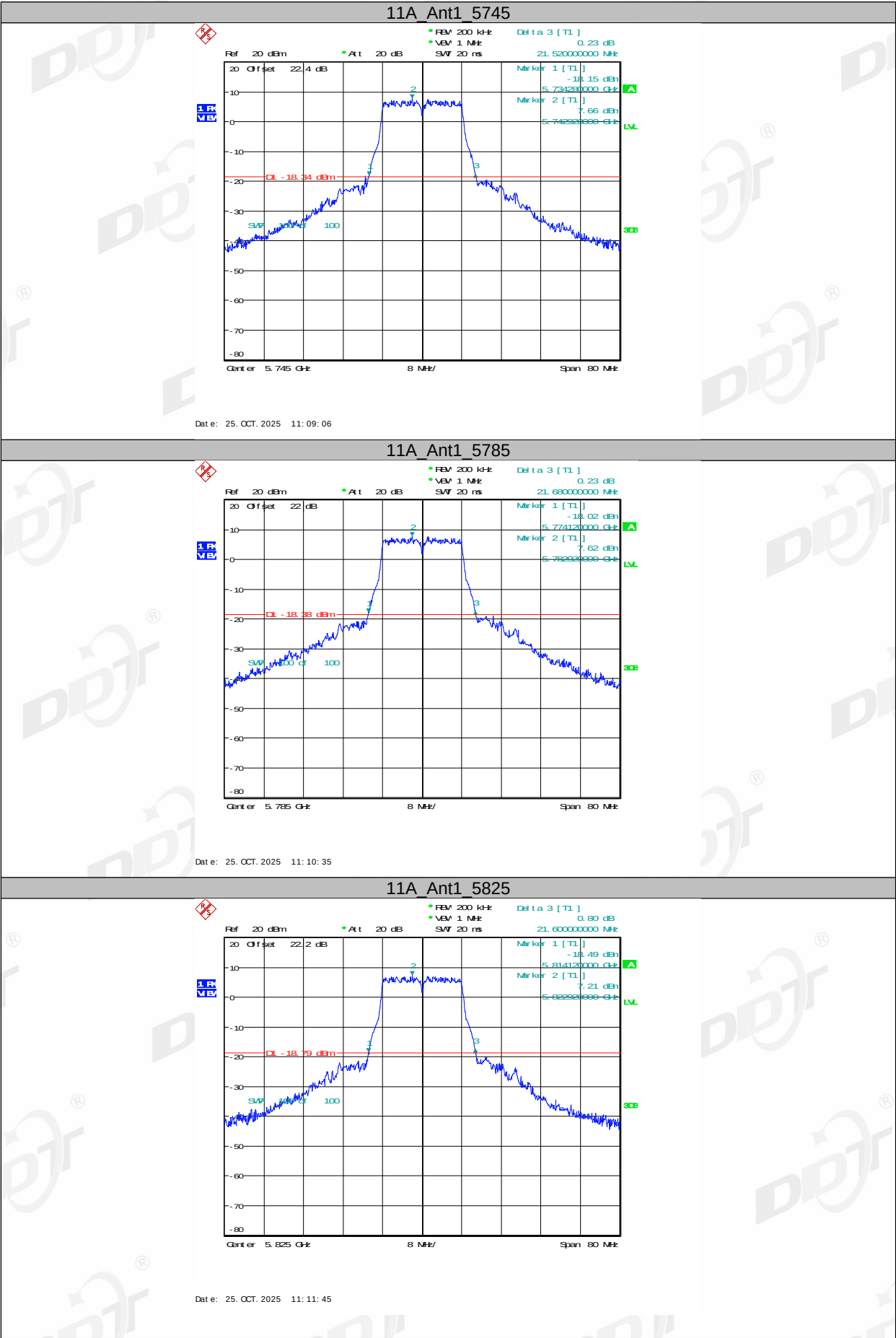
		5785	21.68	5774.20	5795.88	---	---
		5825	21.84	5814.12	5835.96	---	---
11AX40SISO	Ant1	5190	40.80	5169.84	5210.64	---	---
		5230	40.96	5209.84	5250.80	---	---
		5270	40.64	5249.84	5290.48	---	---
		5310	40.48	5290.00	5330.48	---	---
		5510	40.80	5489.68	5530.48	---	---
		5550	40.48	5530.00	5570.48	---	---
		5670	40.48	5649.84	5690.32	---	---
		5710	64.32	5678.08	5742.40	---	---
		5710_UNII-2C	46.92	5678.08	5725	---	---
		5710_UNII-3	17.4	5725	5742.40	---	---
		5755	40.32	5735.00	5775.32	---	---
		5795	40.32	5775.00	5815.32	---	---
11AX80SISO	Ant1	5210	81.92	5169.04	5250.96	---	---
		5290	81.60	5249.36	5330.96	---	---
		5530	101.76	5480.08	5581.84	---	---
		5610	110.72	5555.60	5666.32	---	---
		5690	97.92	5648.40	5746.32	---	---
		5690_UNII-2C	76.6	5648.40	5725	---	---
		5690_UNII-3	21.32	5725	5746.32	---	---
		5775	81.92	5734.04	5815.96	---	---

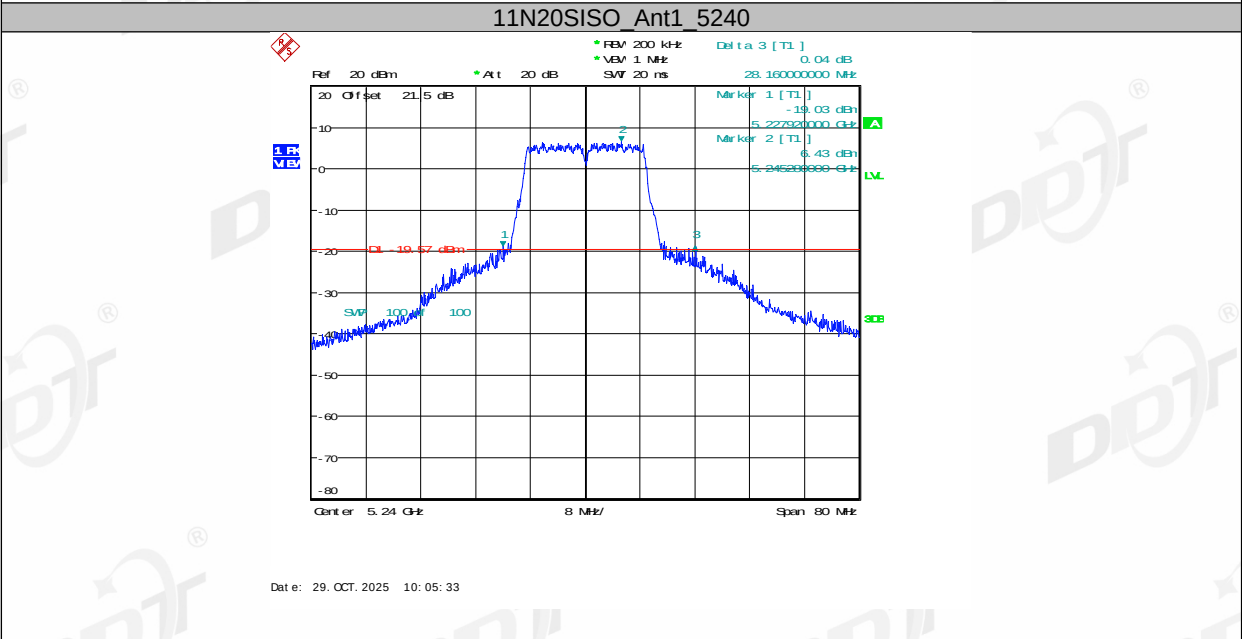
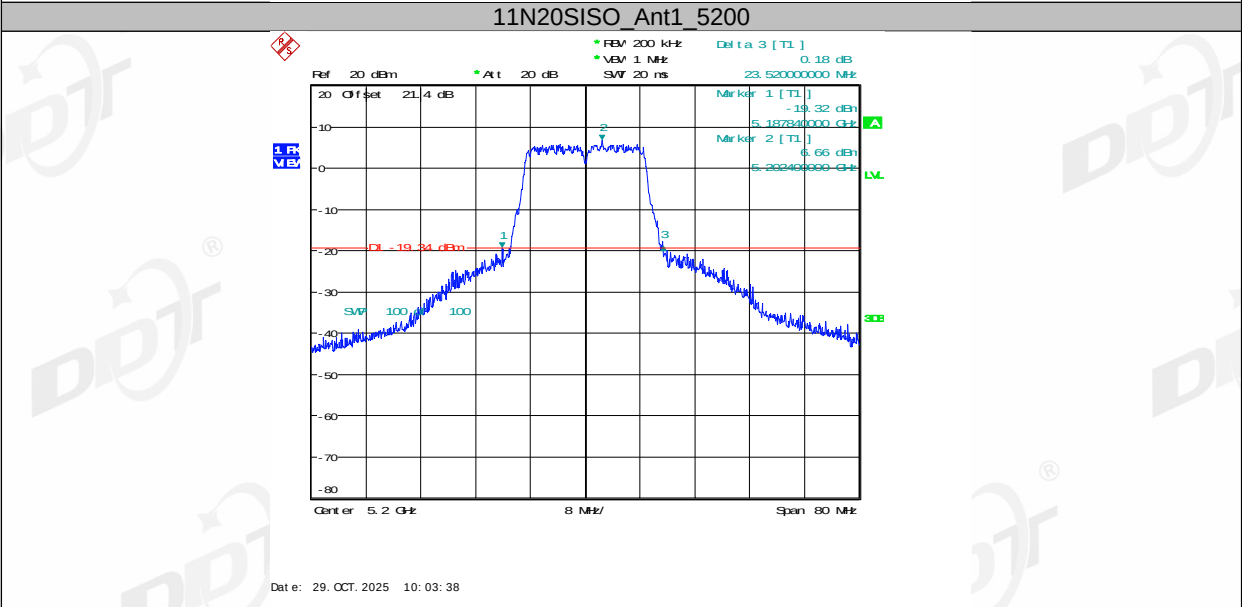
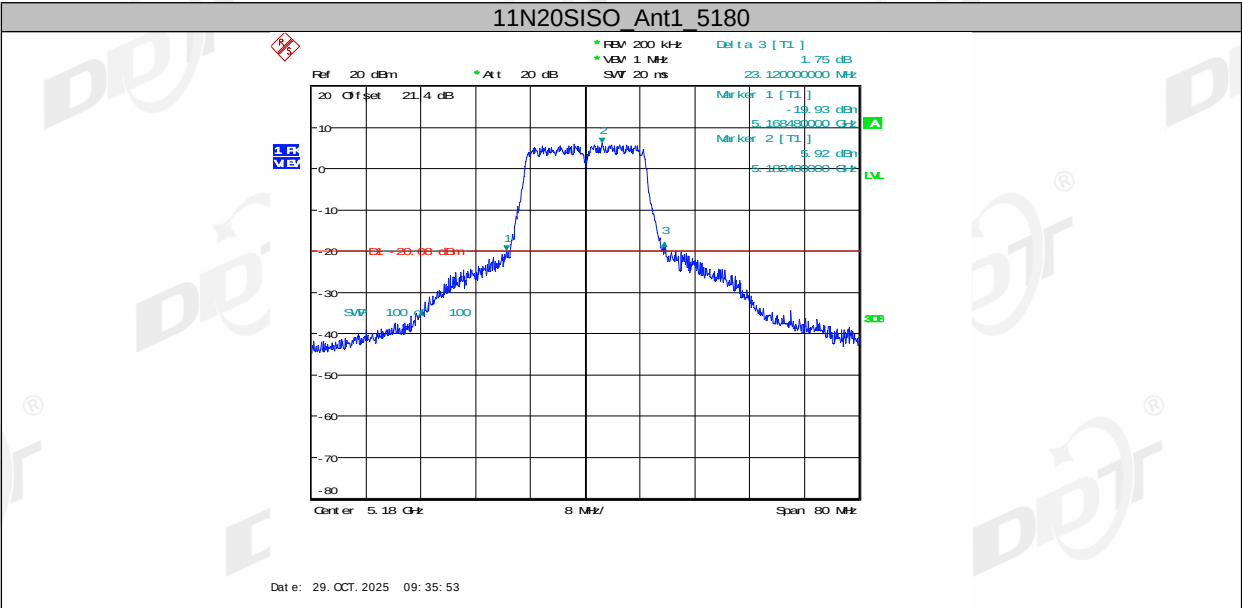
4.5. Test graphs

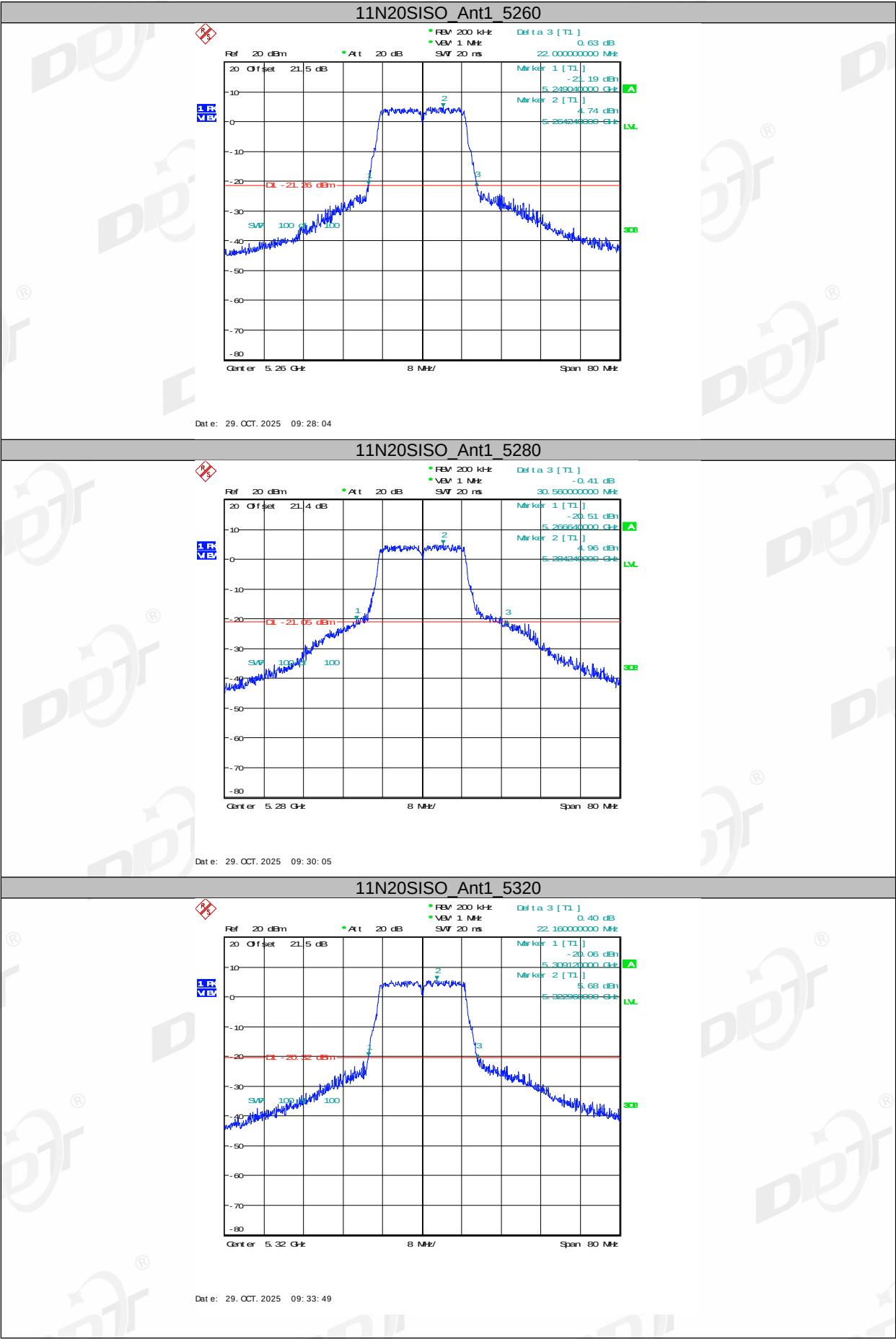


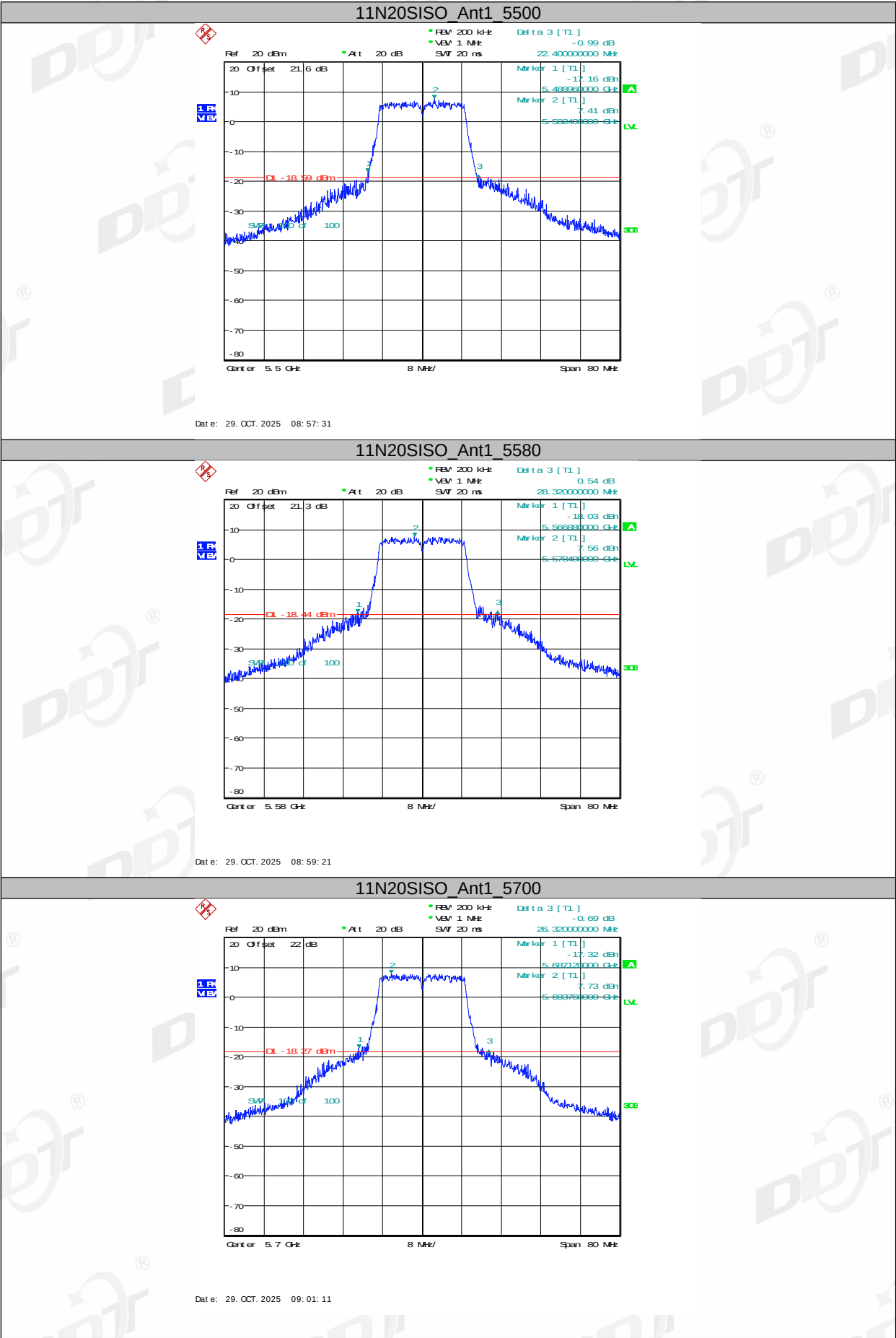


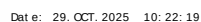
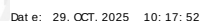


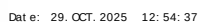
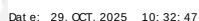


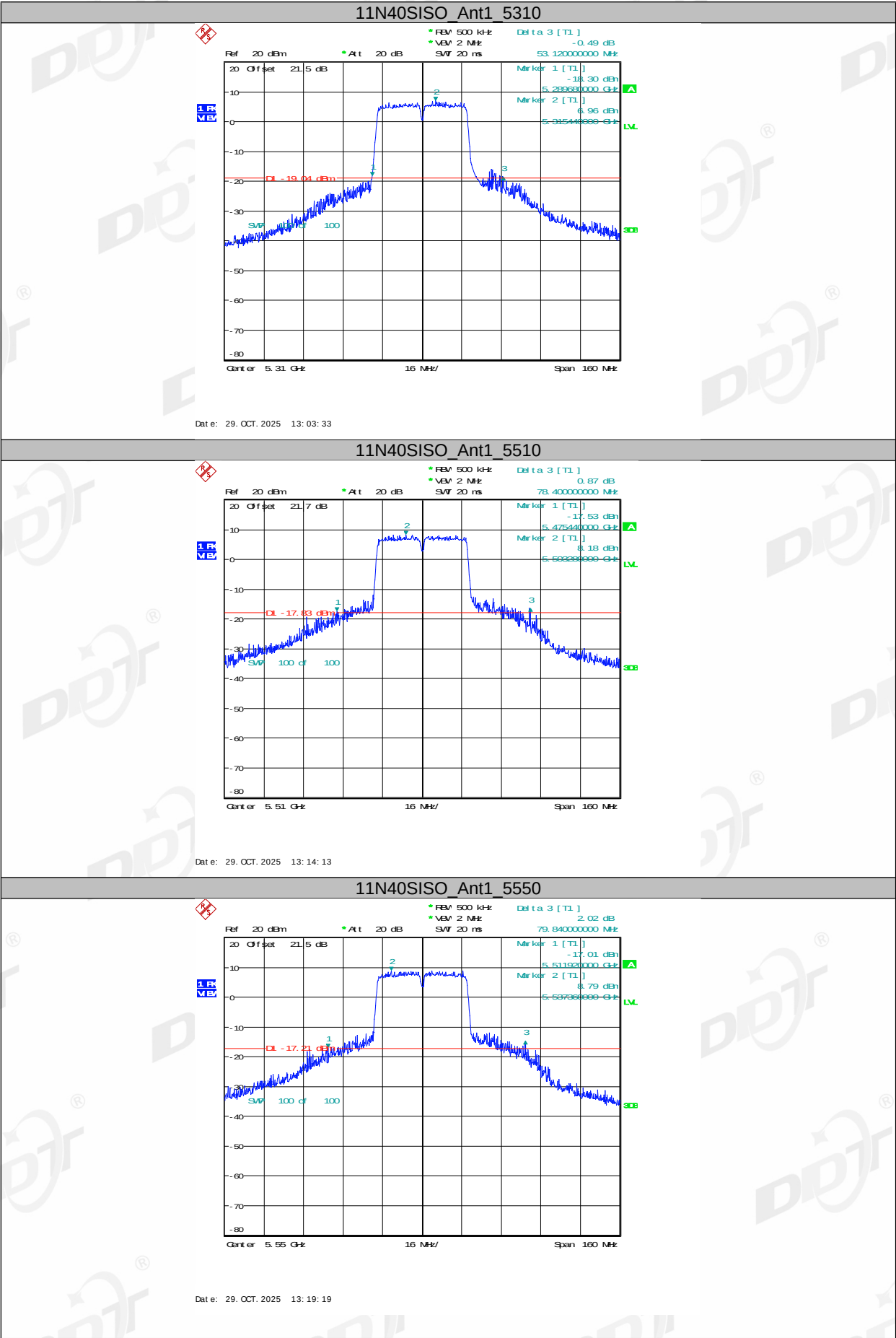


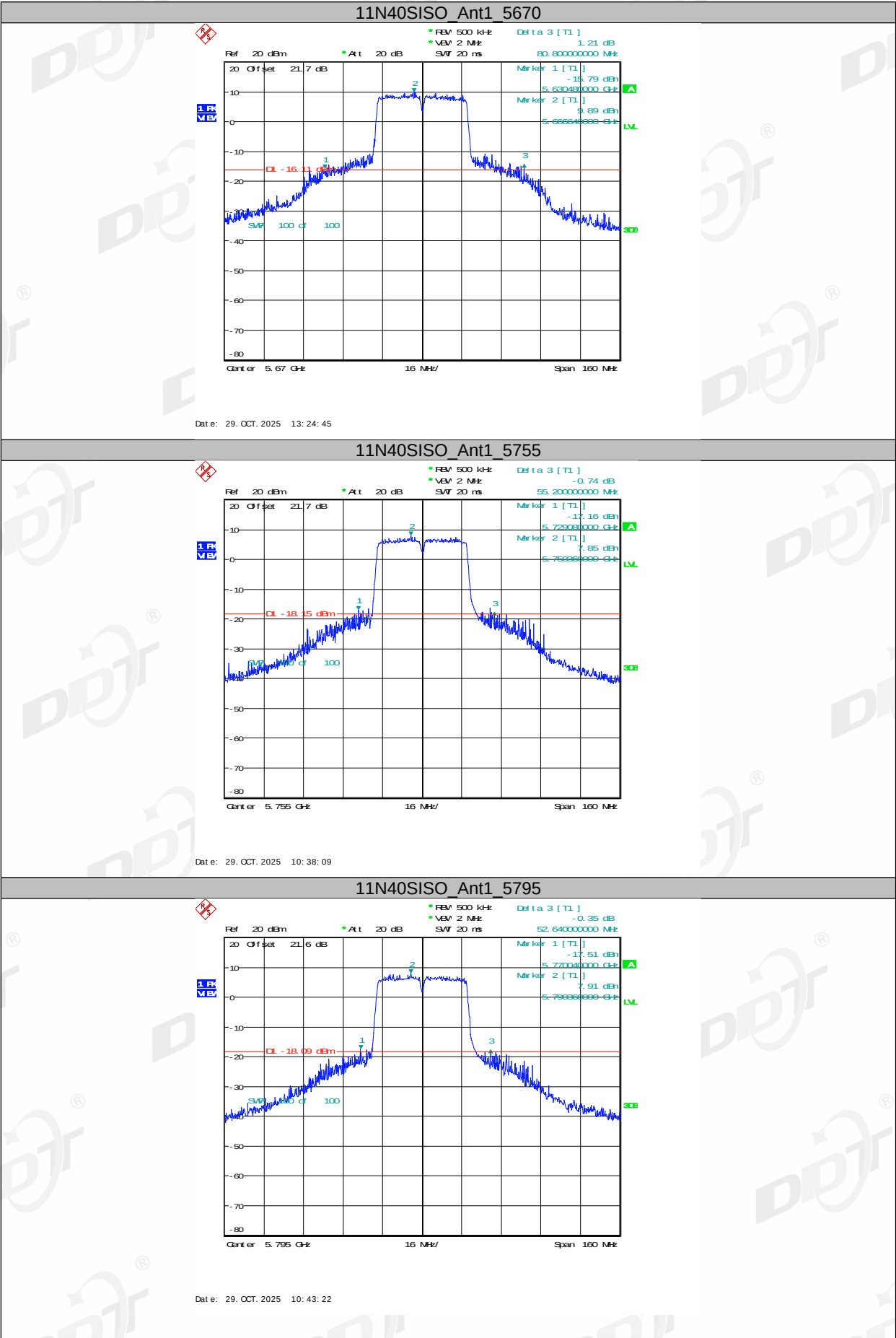


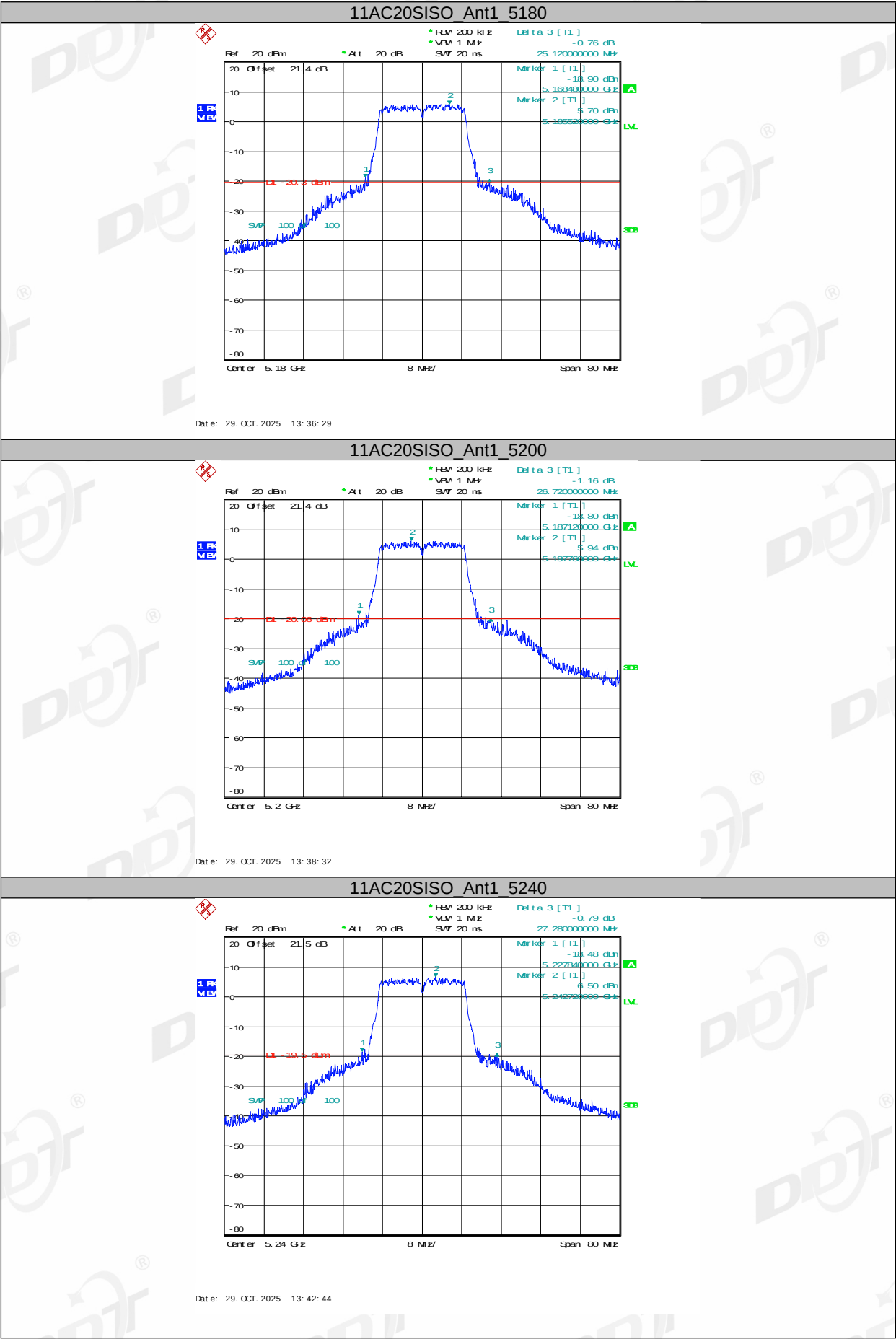


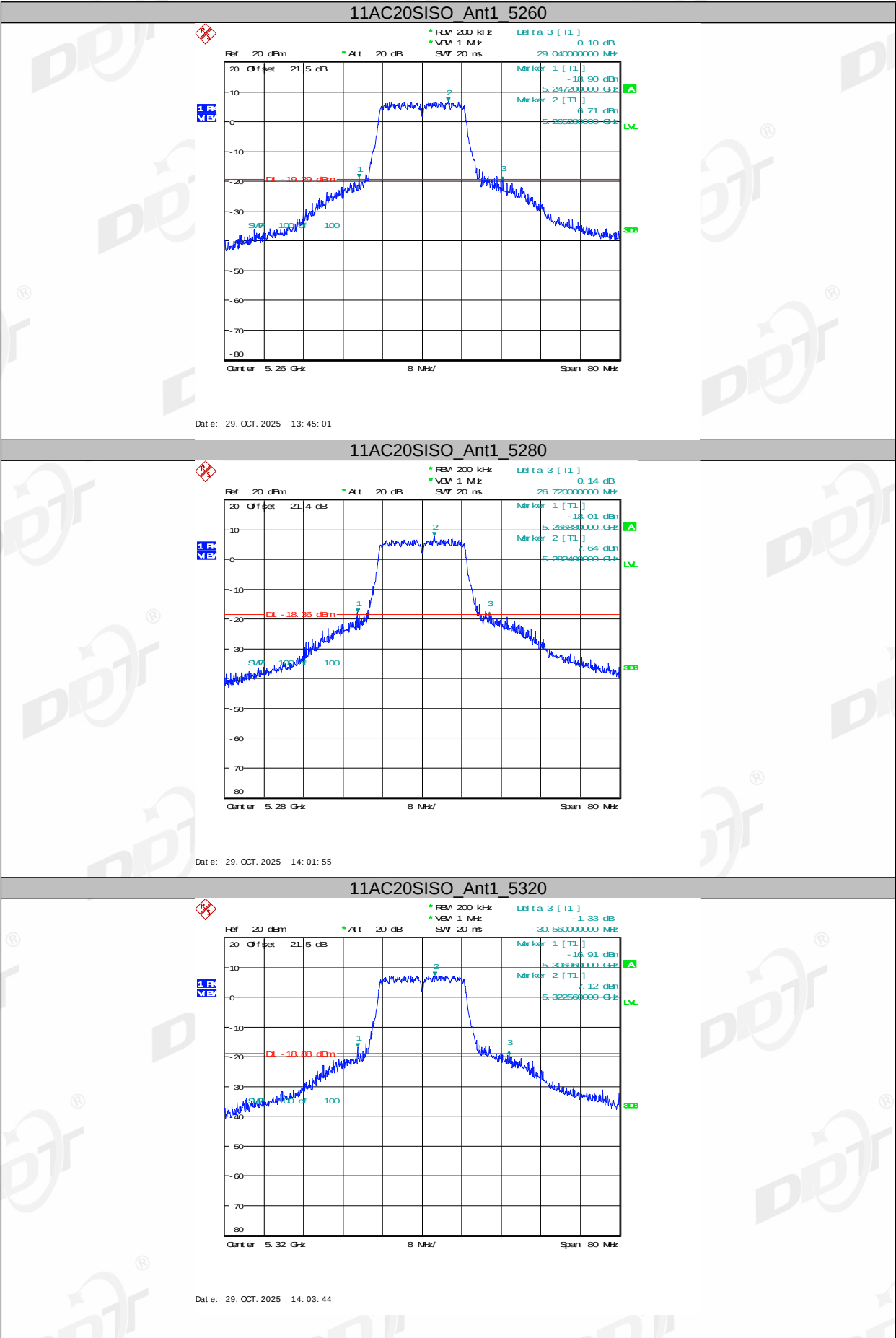


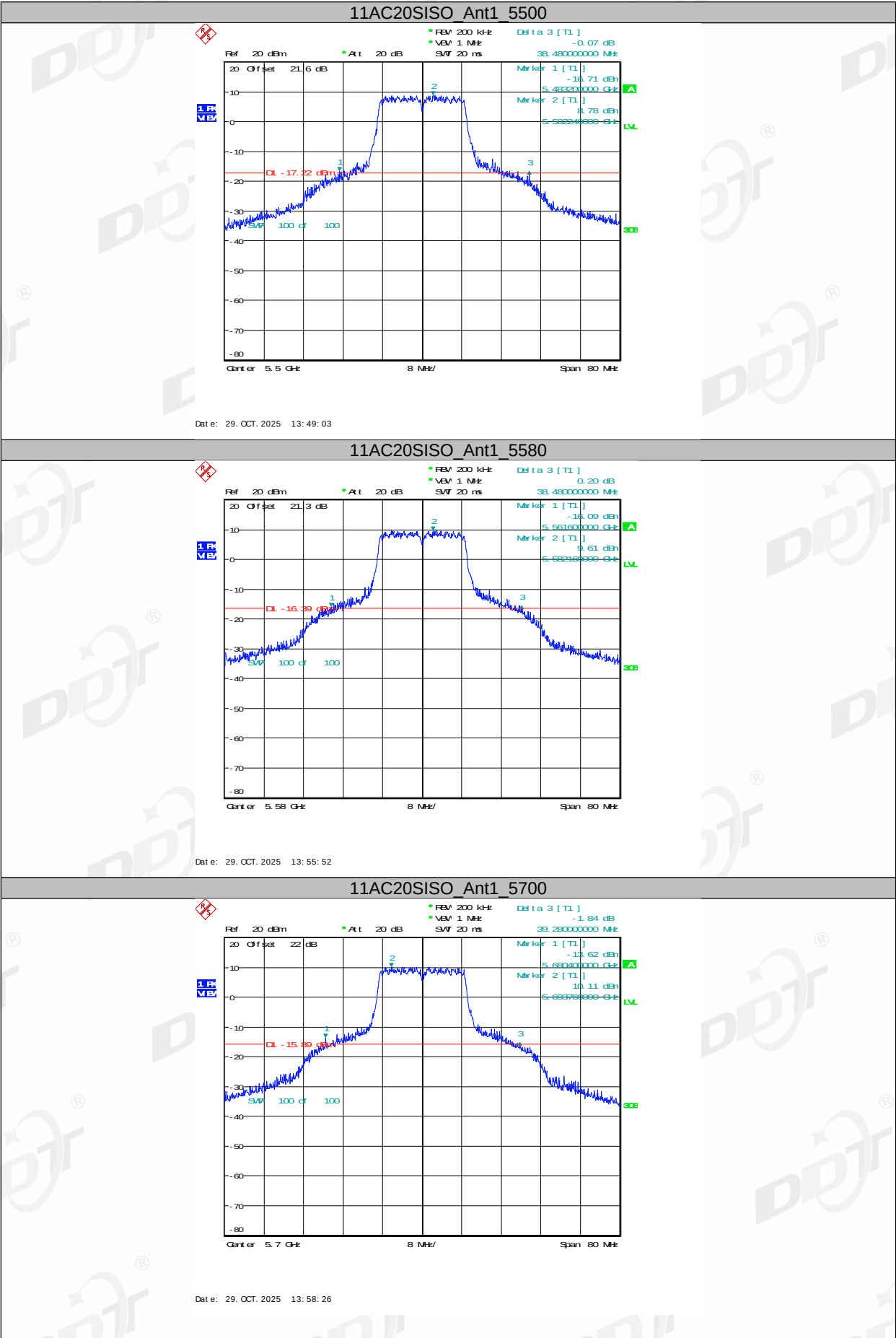


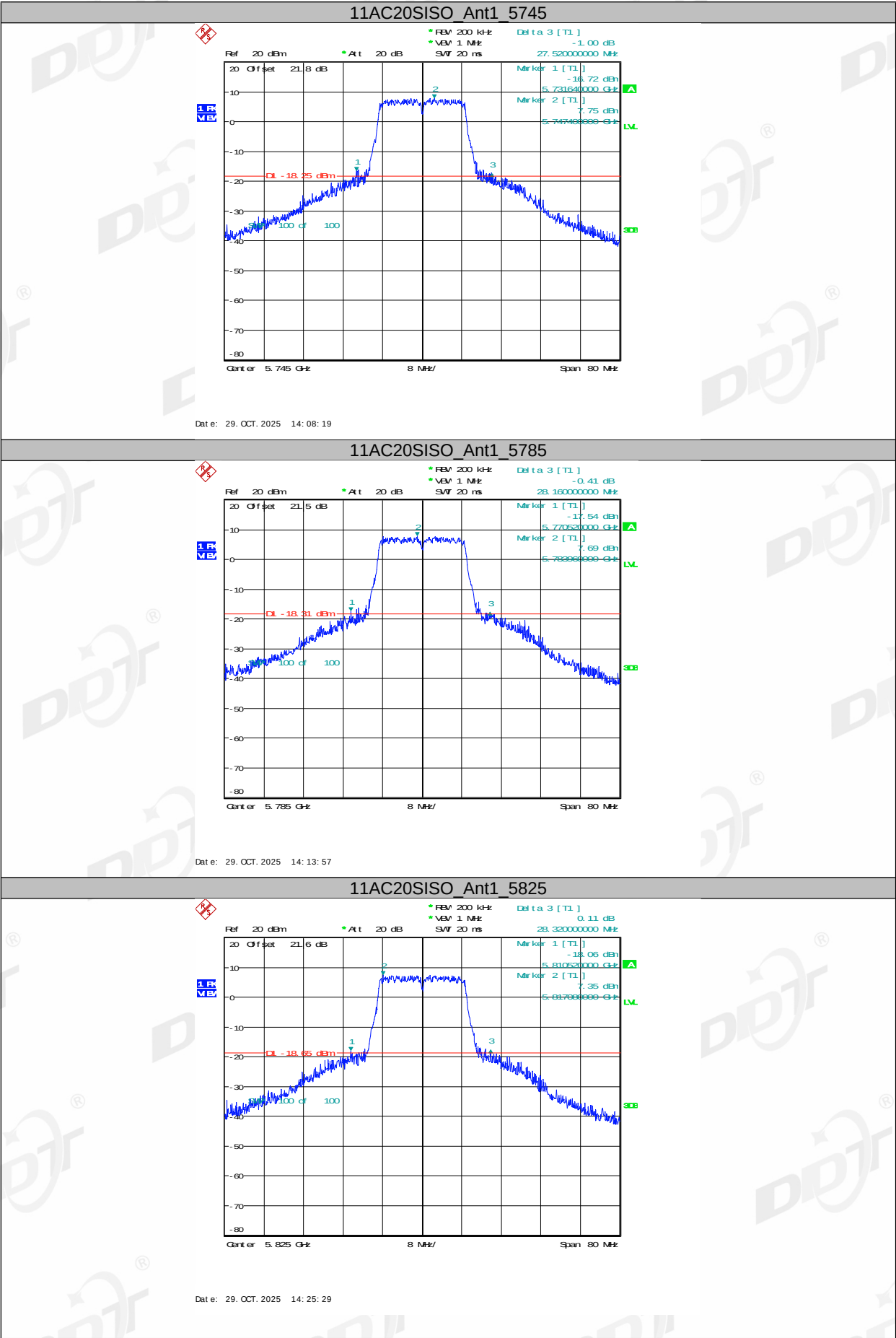


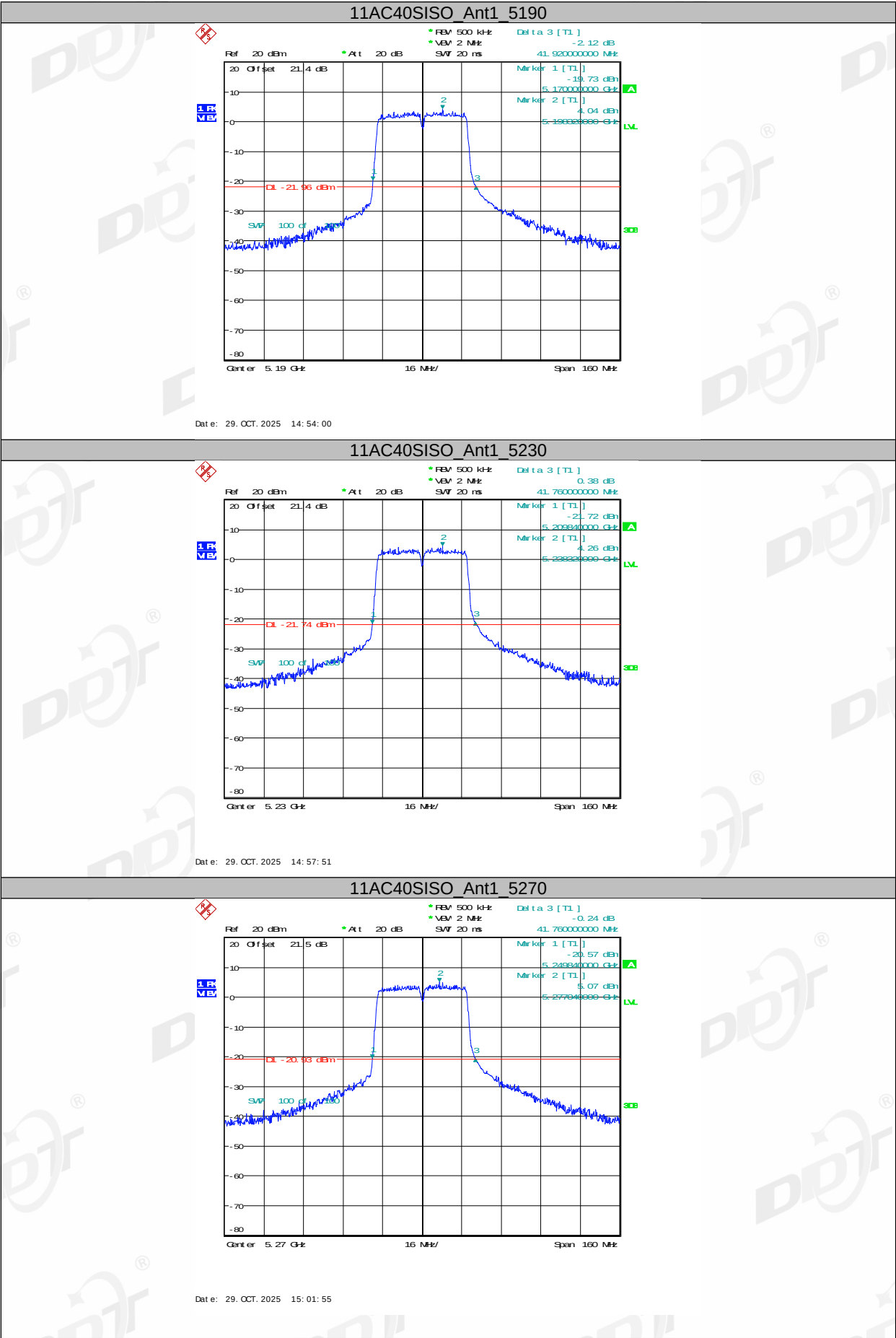


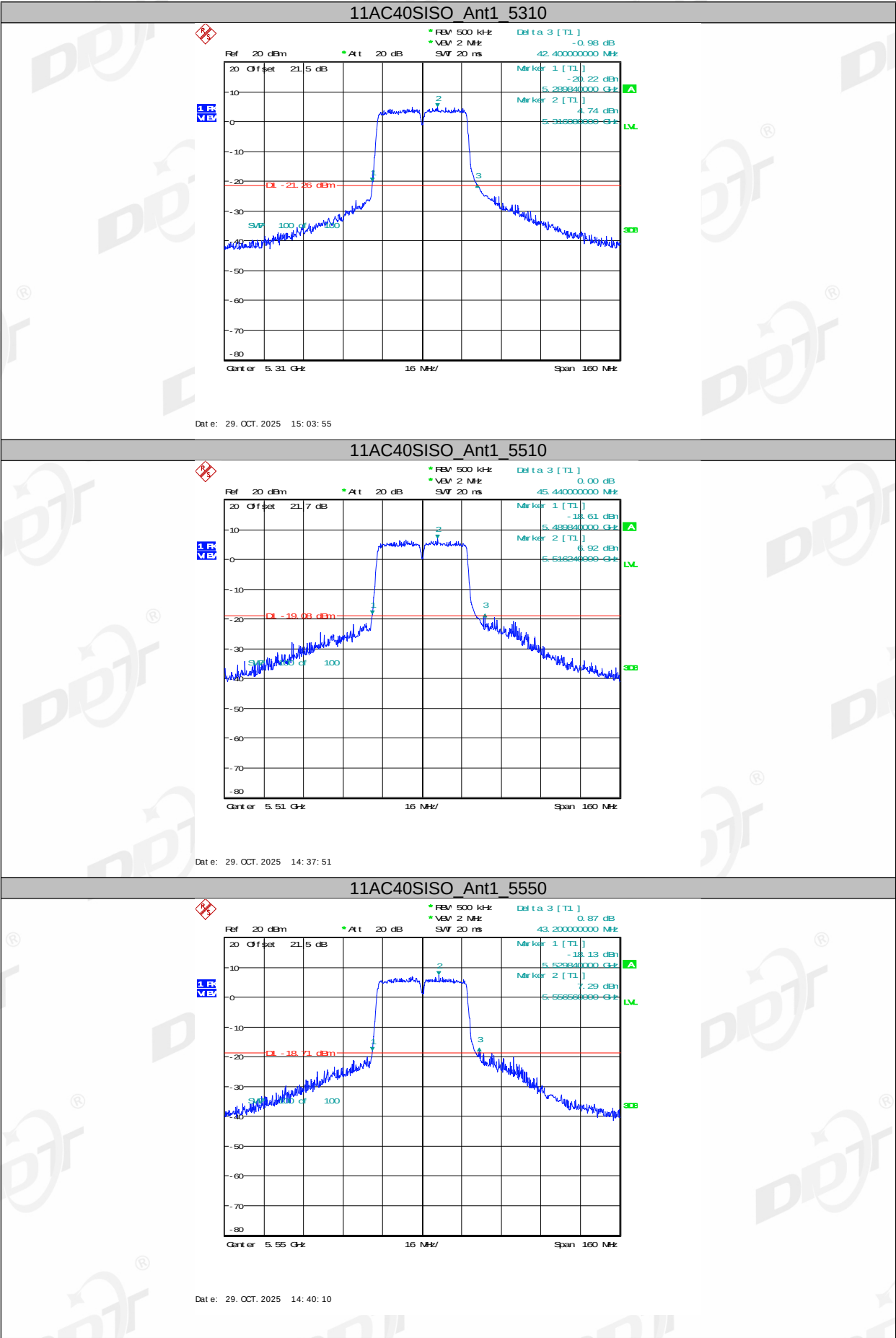


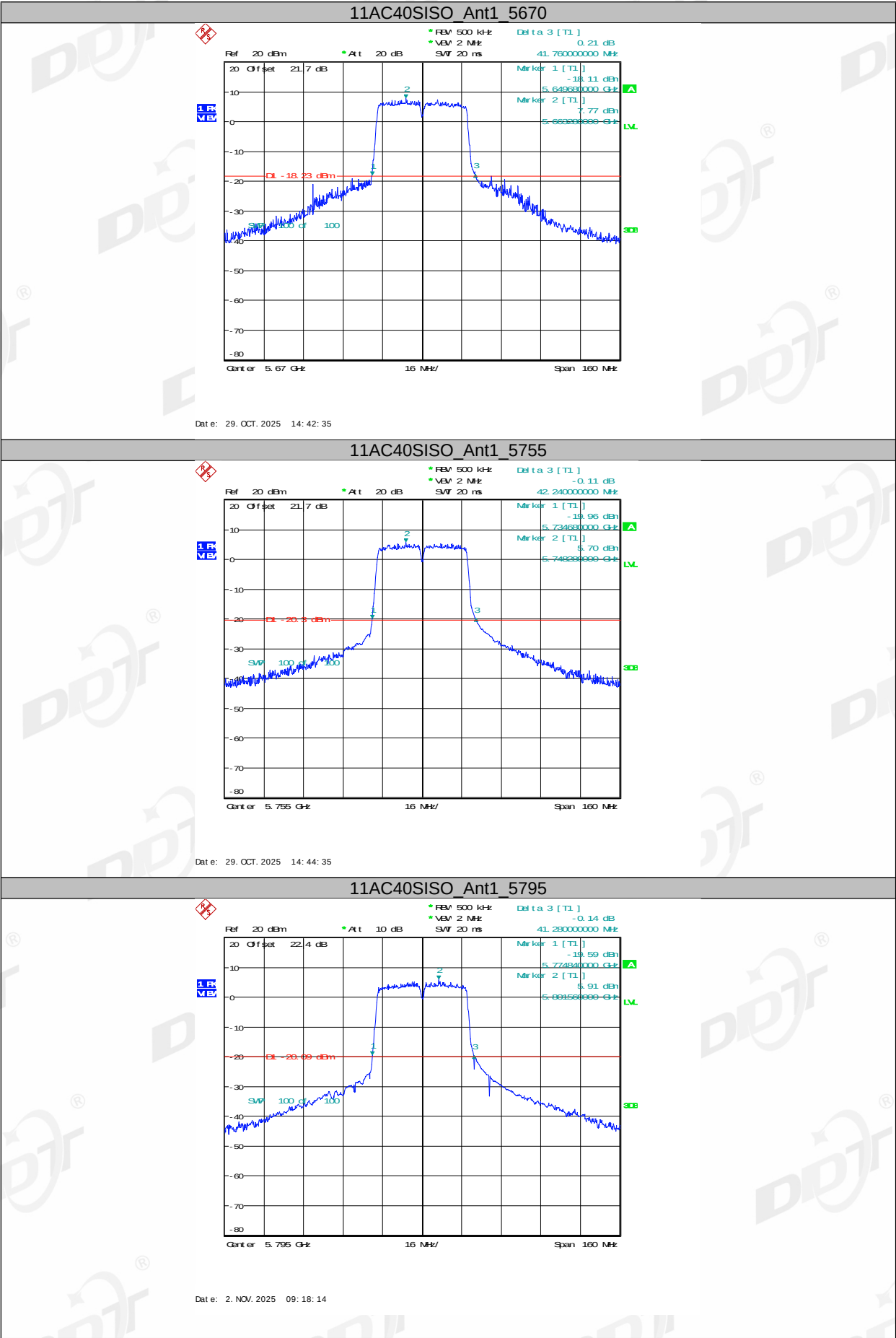


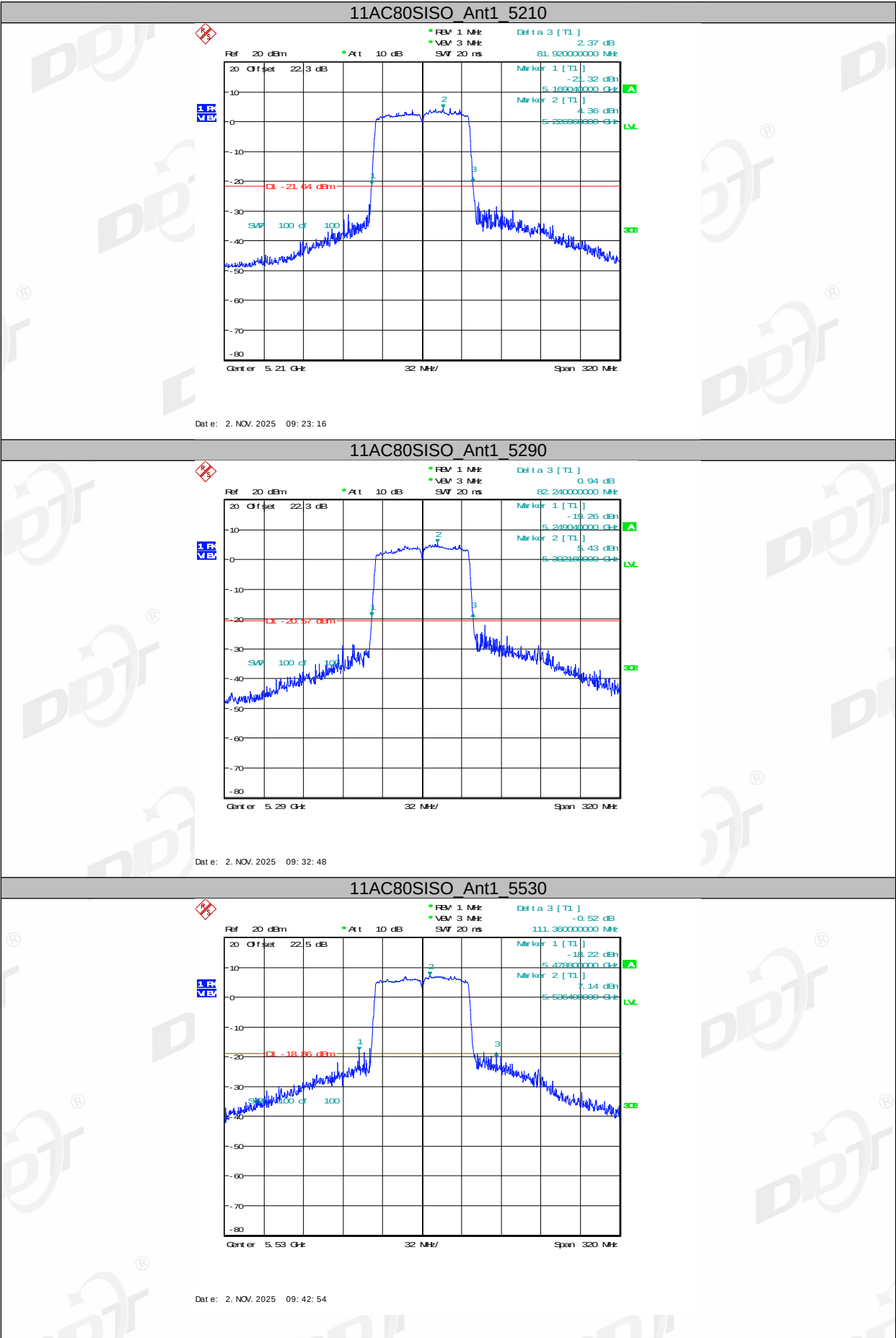


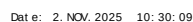
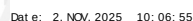
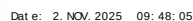


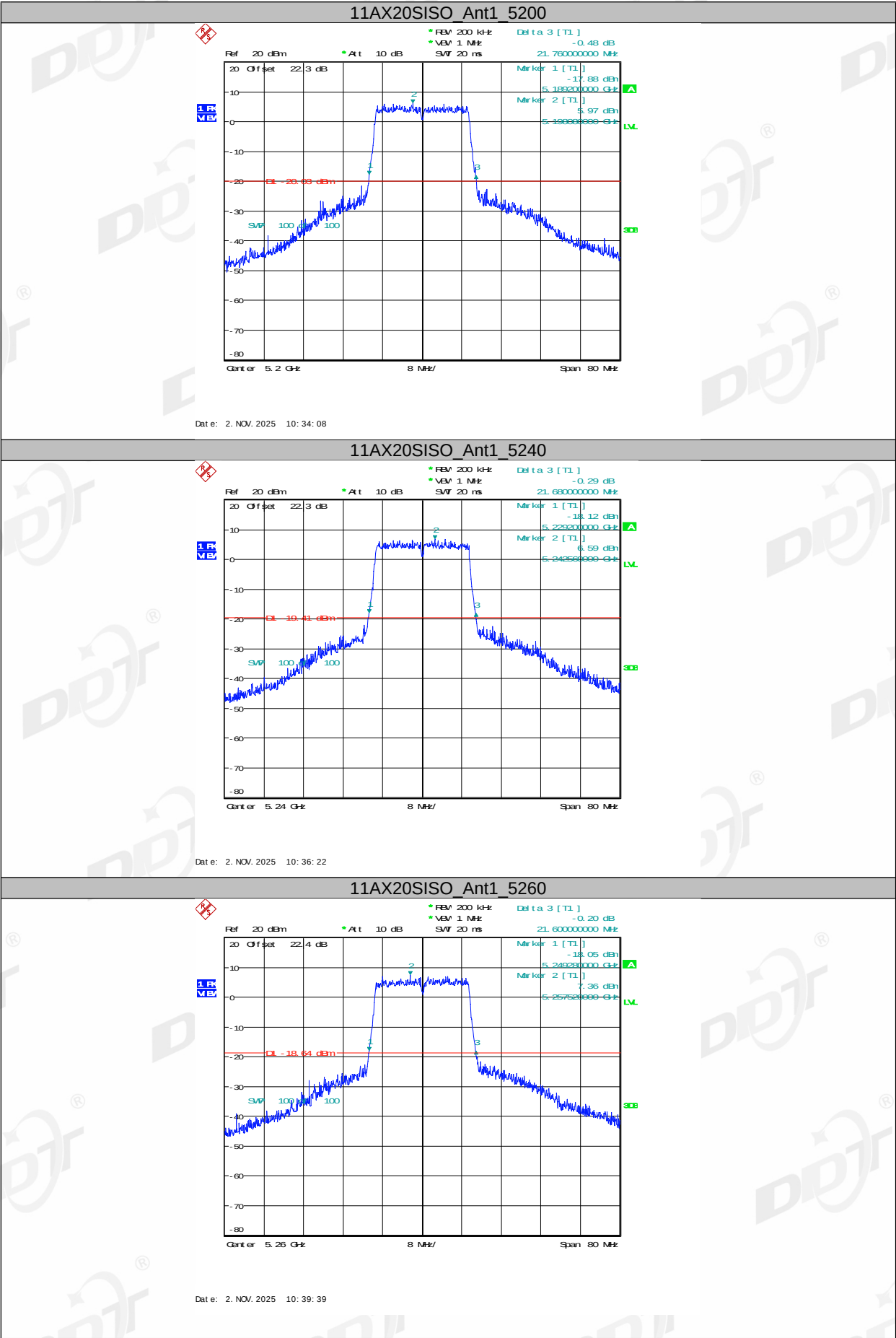


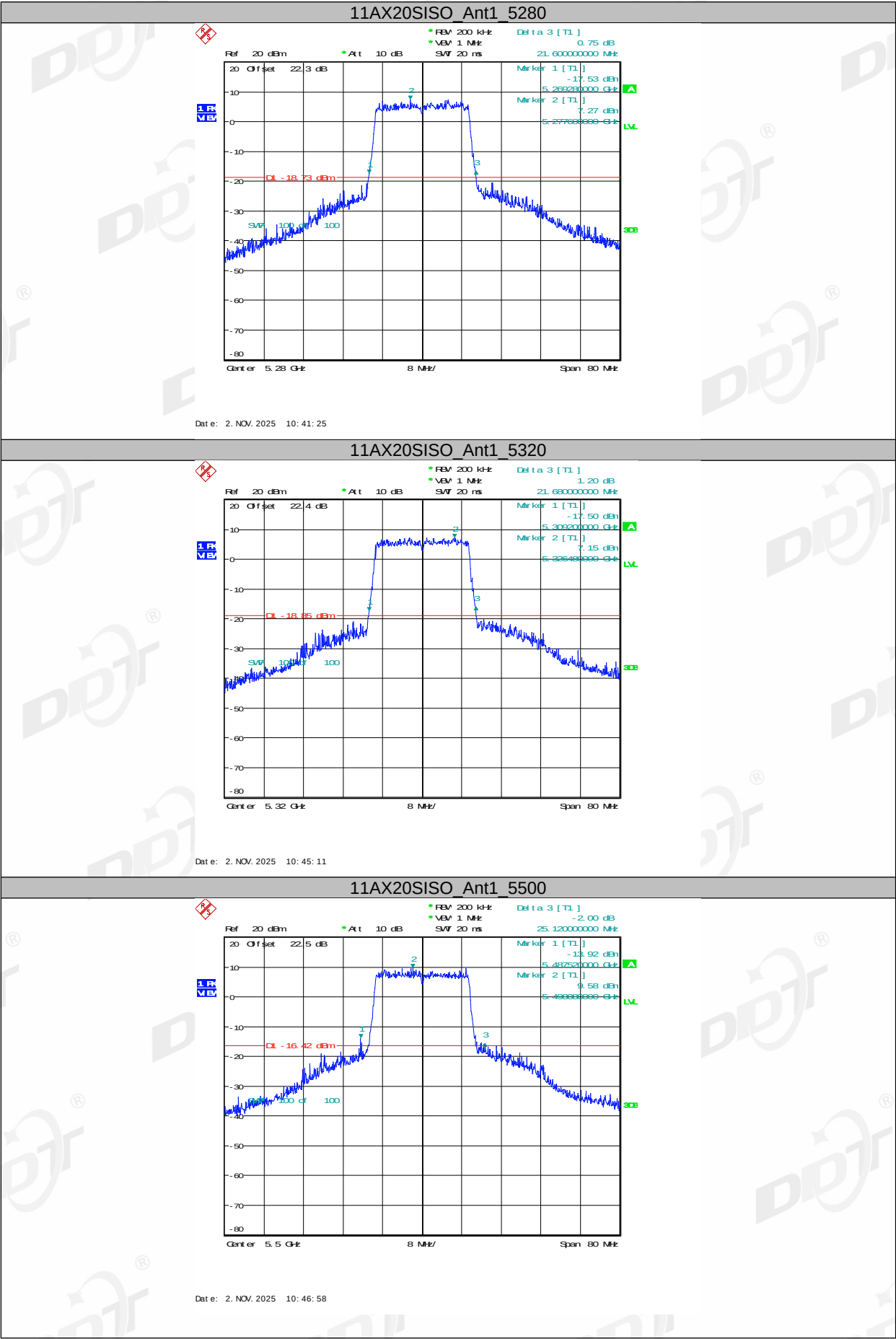


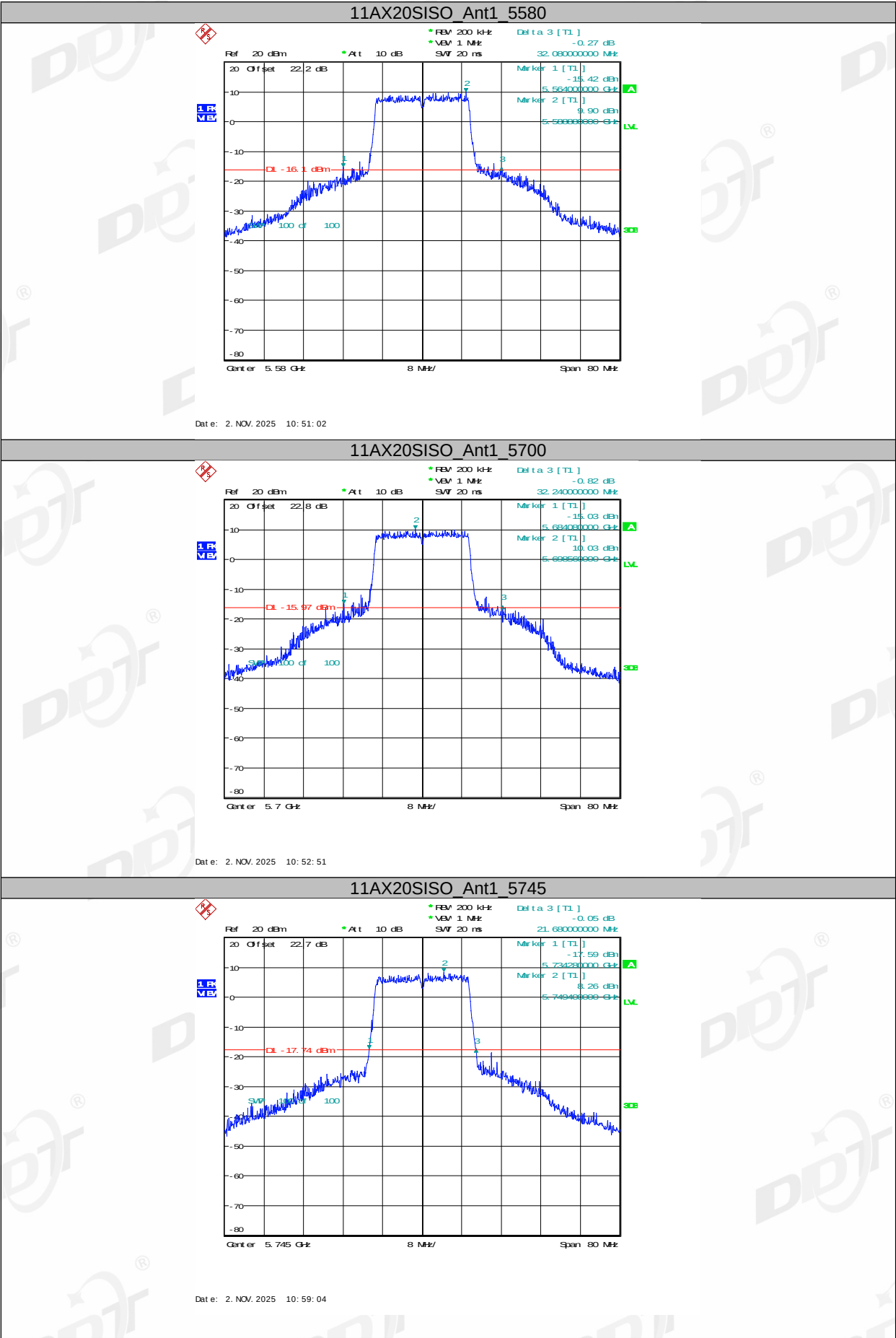


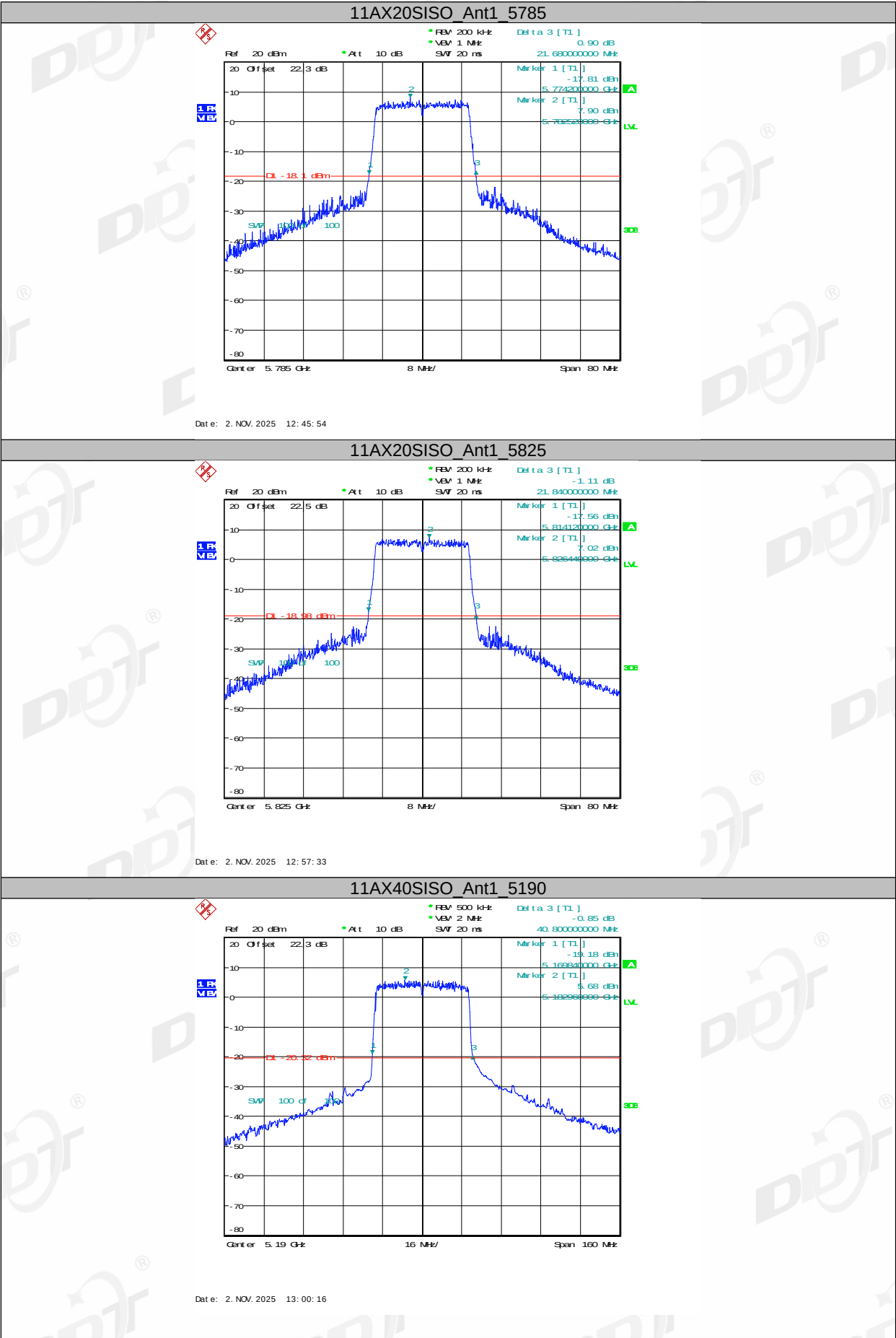


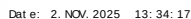
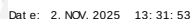
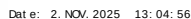


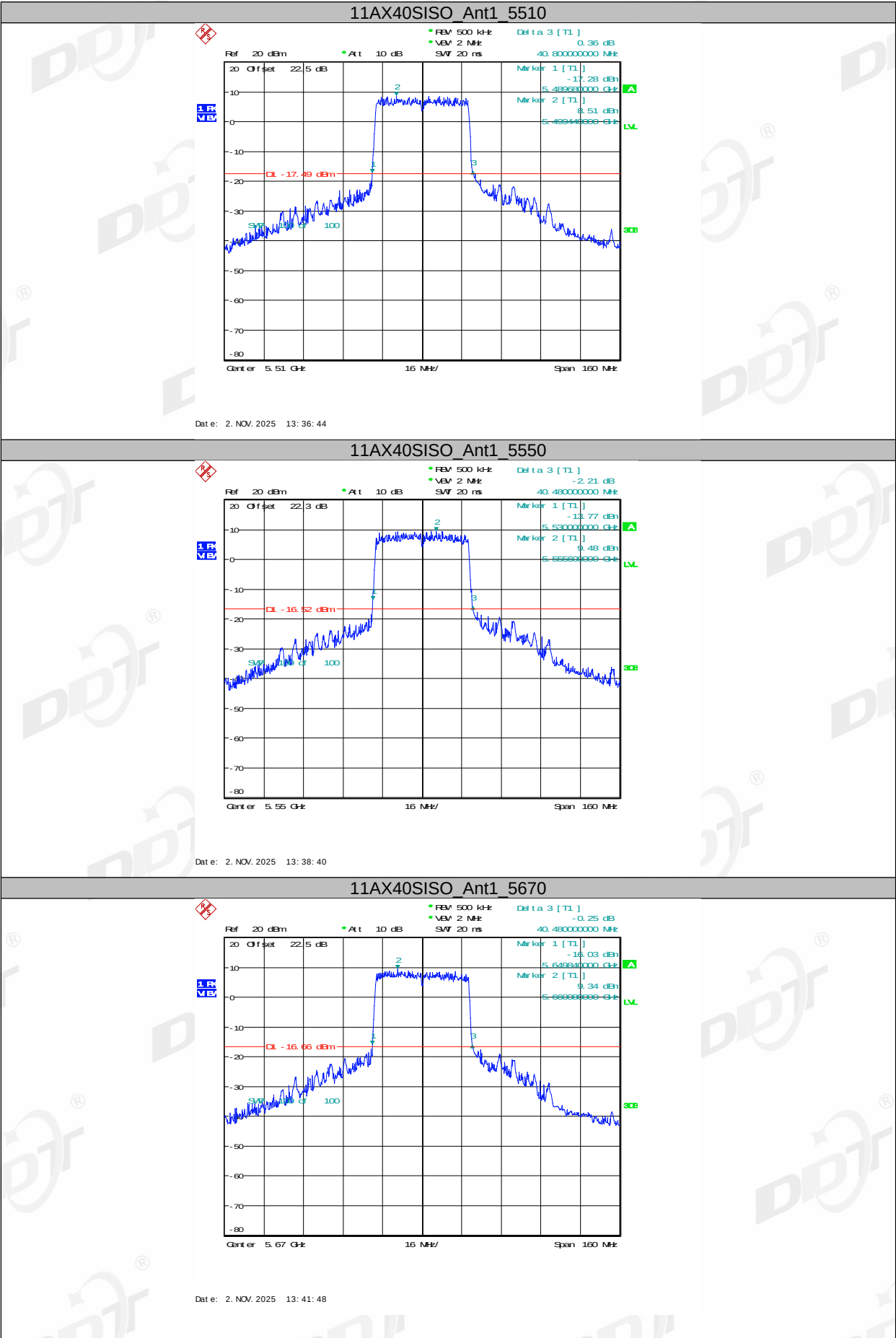


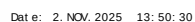
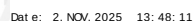
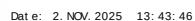


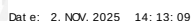


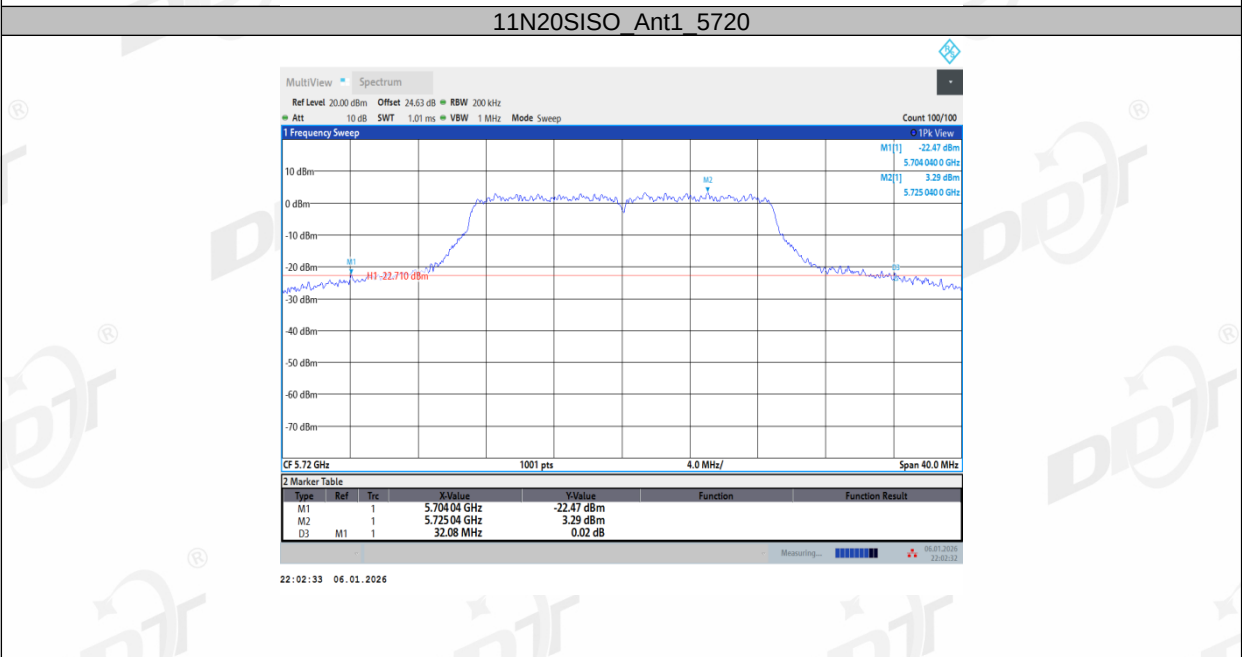
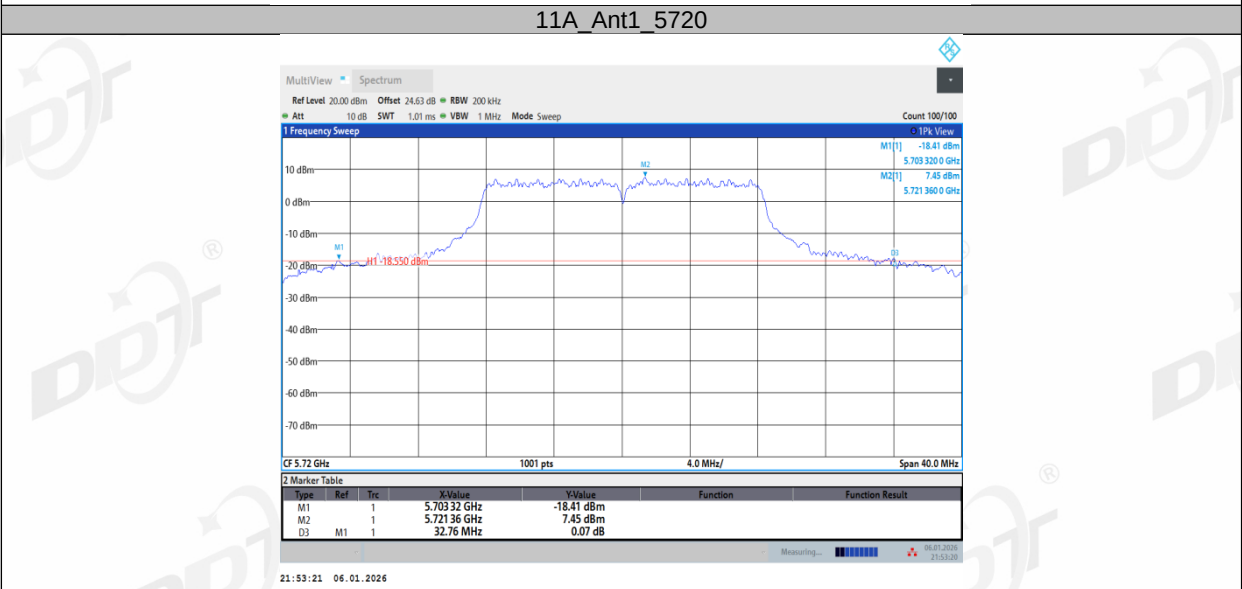
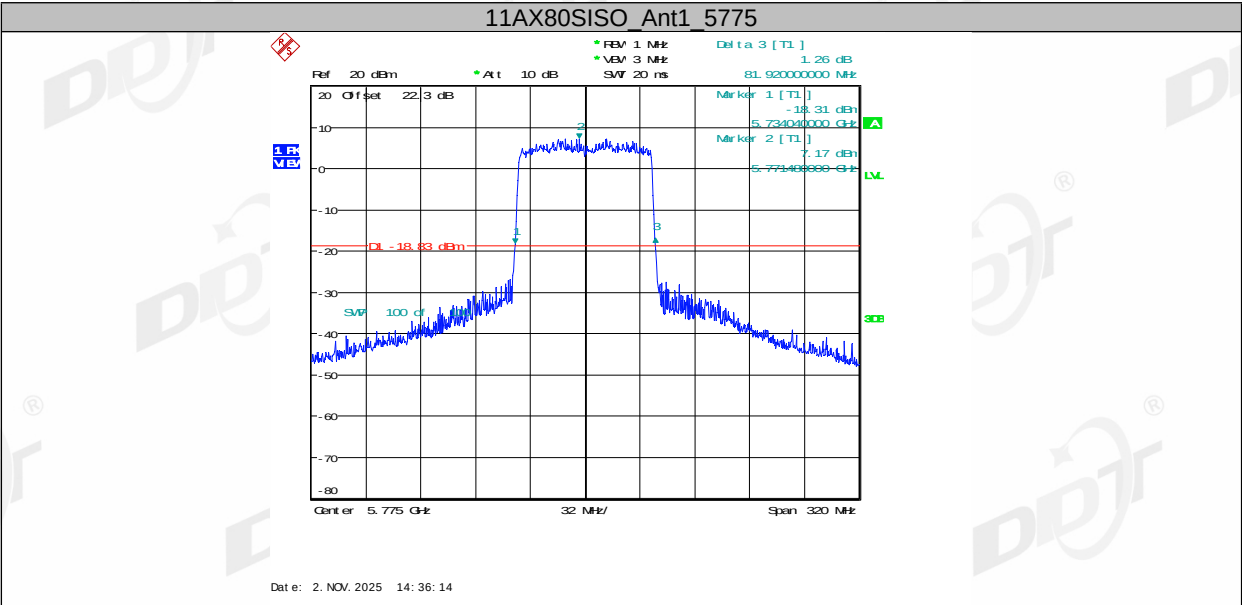






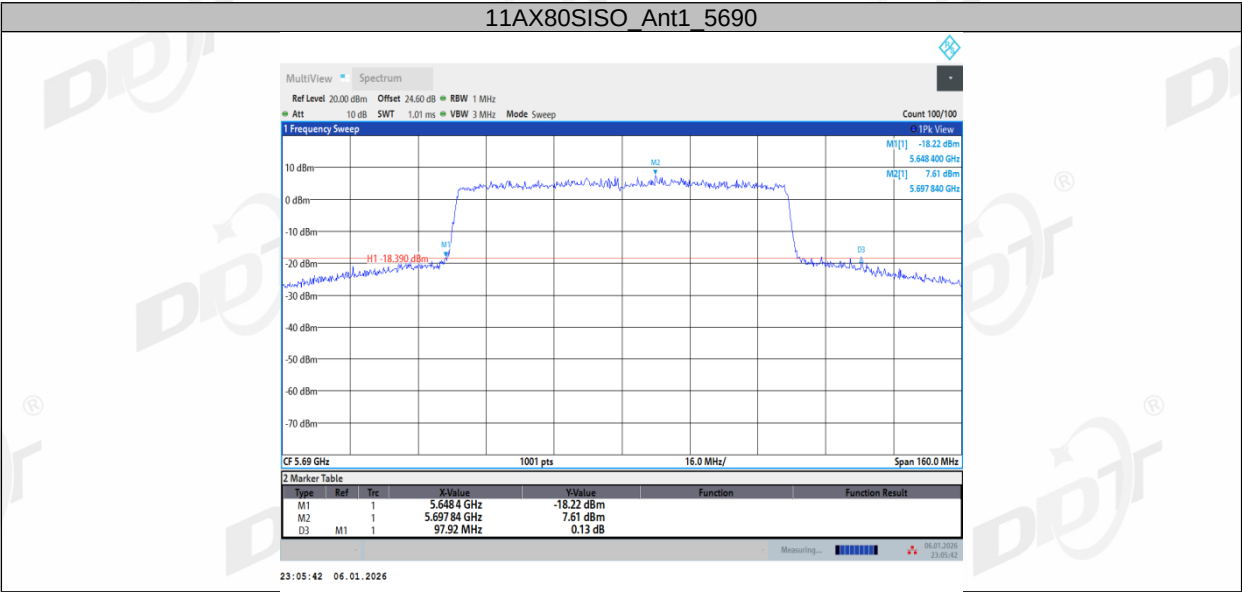






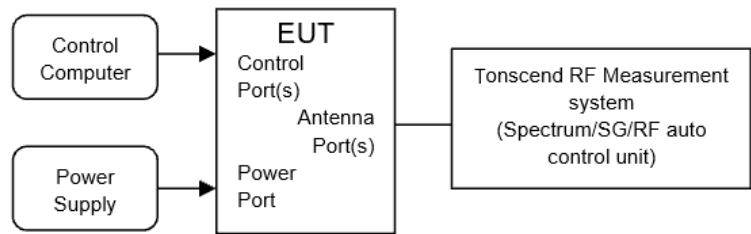






5. 6dB Bandwidth

5.1. Block diagram of test setup



5.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
6 dB Bandwidth	Minimum 500 kHz	5725 - 5850

5.3. Test procedure

Connect EUT’s antenna output to spectrum analyzer by RF cable.

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth: RBW=100 kHz For 26 dB Bandwidth: approximately 1% of the emission bandwidth.
VBW	For 6 dB Bandwidth: VBW=300 kHz For 26 dB Bandwidth: >3 RBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

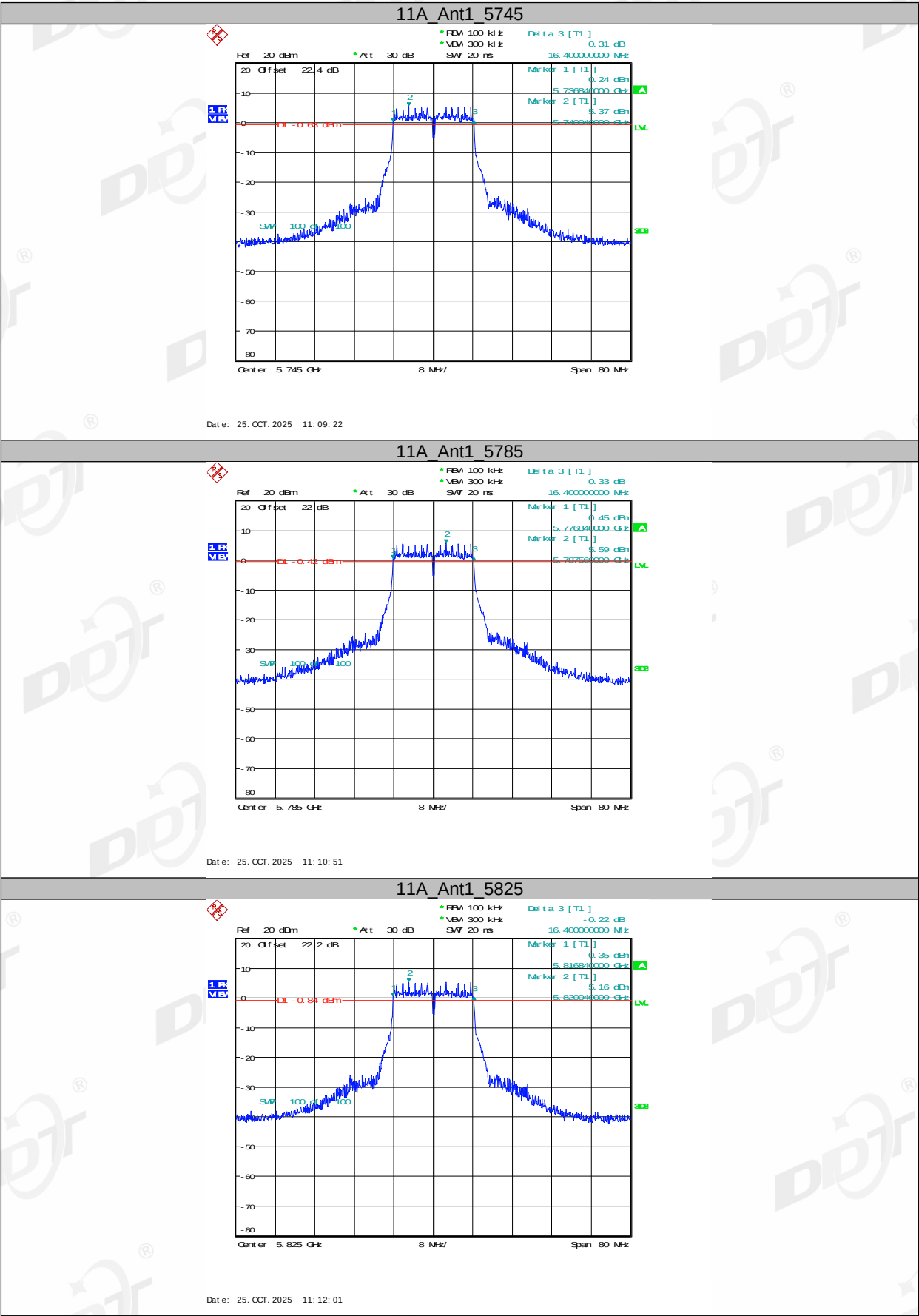
5.4. Test result B4

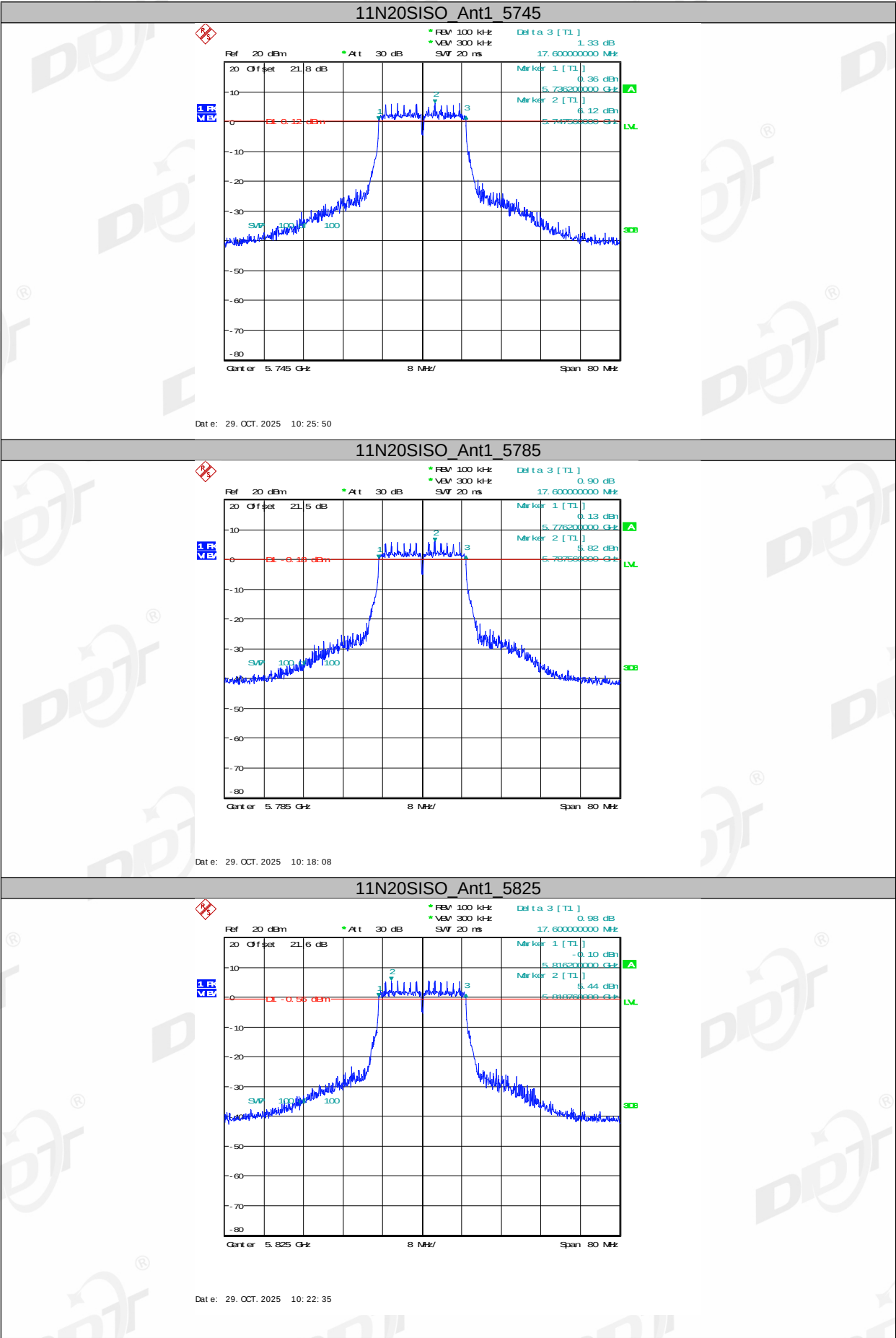
Test Engineer:	Wayne Huang	Test Site:	RF Measurement System 1# RF Measurement System 4#
Ambient Condition:	24.4℃, 47.3%RH-23.6℃,43.8%RH	Test Date:	2025.10.25-2026-01.06
Test Power Supply:	DC 12V	Sample Number:	S25060926-001

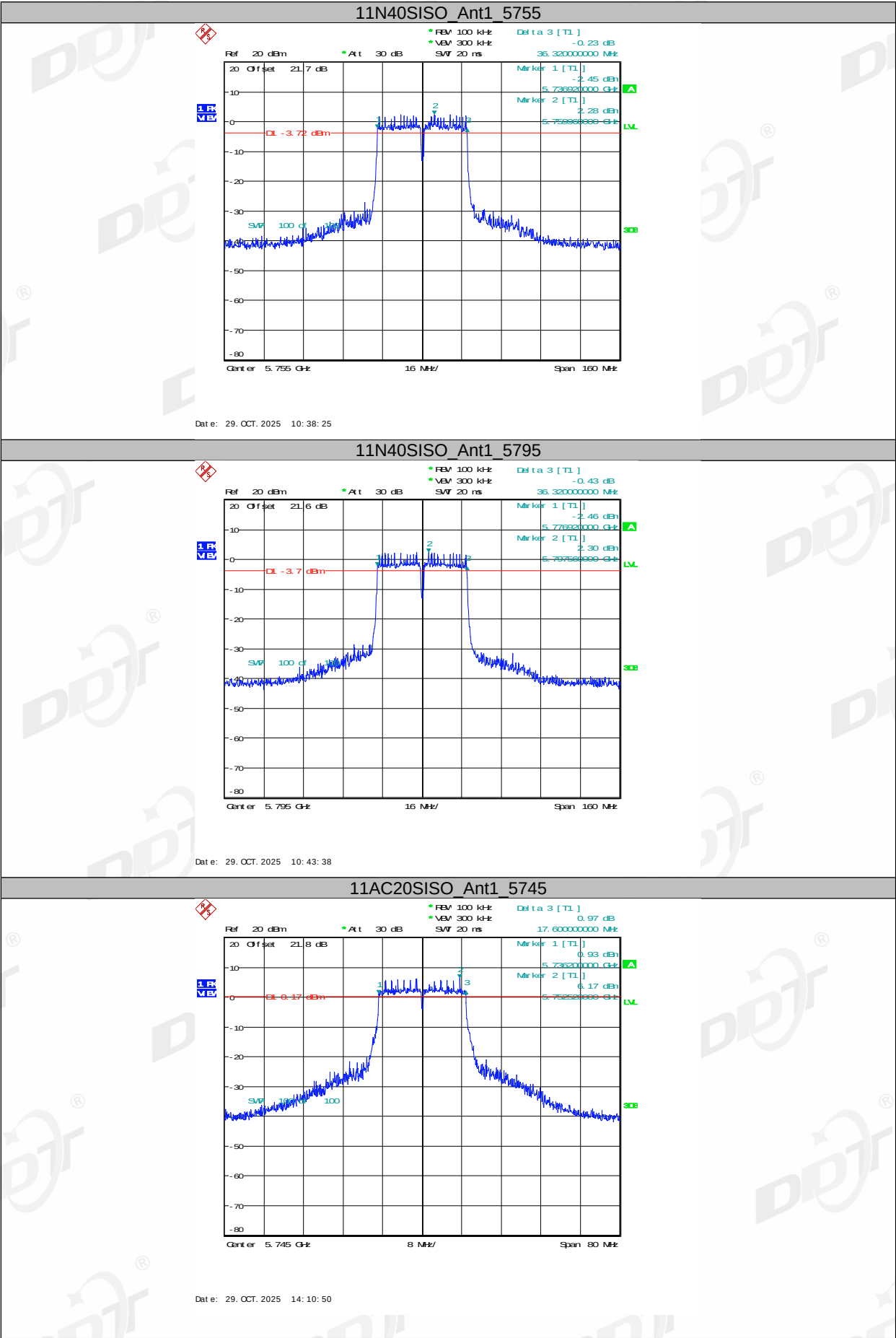
Test Mode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.40	5736.84	5753.24	0.5	PASS
		5785	16.40	5776.84	5793.24	0.5	PASS
		5825	16.40	5816.84	5833.24	0.5	PASS
11N20SISO	Ant1	5745	17.60	5736.20	5753.80	0.5	PASS
		5785	17.60	5776.20	5793.80	0.5	PASS
		5825	17.60	5816.20	5833.80	0.5	PASS
11N40SISO	Ant1	5755	36.32	5736.92	5773.24	0.5	PASS
		5795	36.32	5776.92	5813.24	0.5	PASS
11AC20SISO	Ant1	5745	17.60	5736.20	5753.80	0.5	PASS
		5785	17.60	5776.20	5793.80	0.5	PASS
		5825	17.60	5816.20	5833.80	0.5	PASS
11AC40SISO	Ant1	5755	36.32	5736.92	5773.24	0.5	PASS
		5795	36.32	5776.92	5813.24	0.5	PASS
11AC80SISO	Ant1	5775	75.20	5737.56	5812.76	0.5	PASS
11AX20SISO	Ant1	5745	18.96	5735.56	5754.52	0.5	PASS
		5785	18.96	5775.56	5794.52	0.5	PASS
		5825	18.96	5815.56	5834.52	0.5	PASS
11AX40SISO	Ant1	5755	37.44	5736.28	5773.72	0.5	PASS
		5795	37.44	5776.28	5813.72	0.5	PASS
11AX80SISO	Ant1	5775	76.48	5736.92	5813.40	0.5	PASS

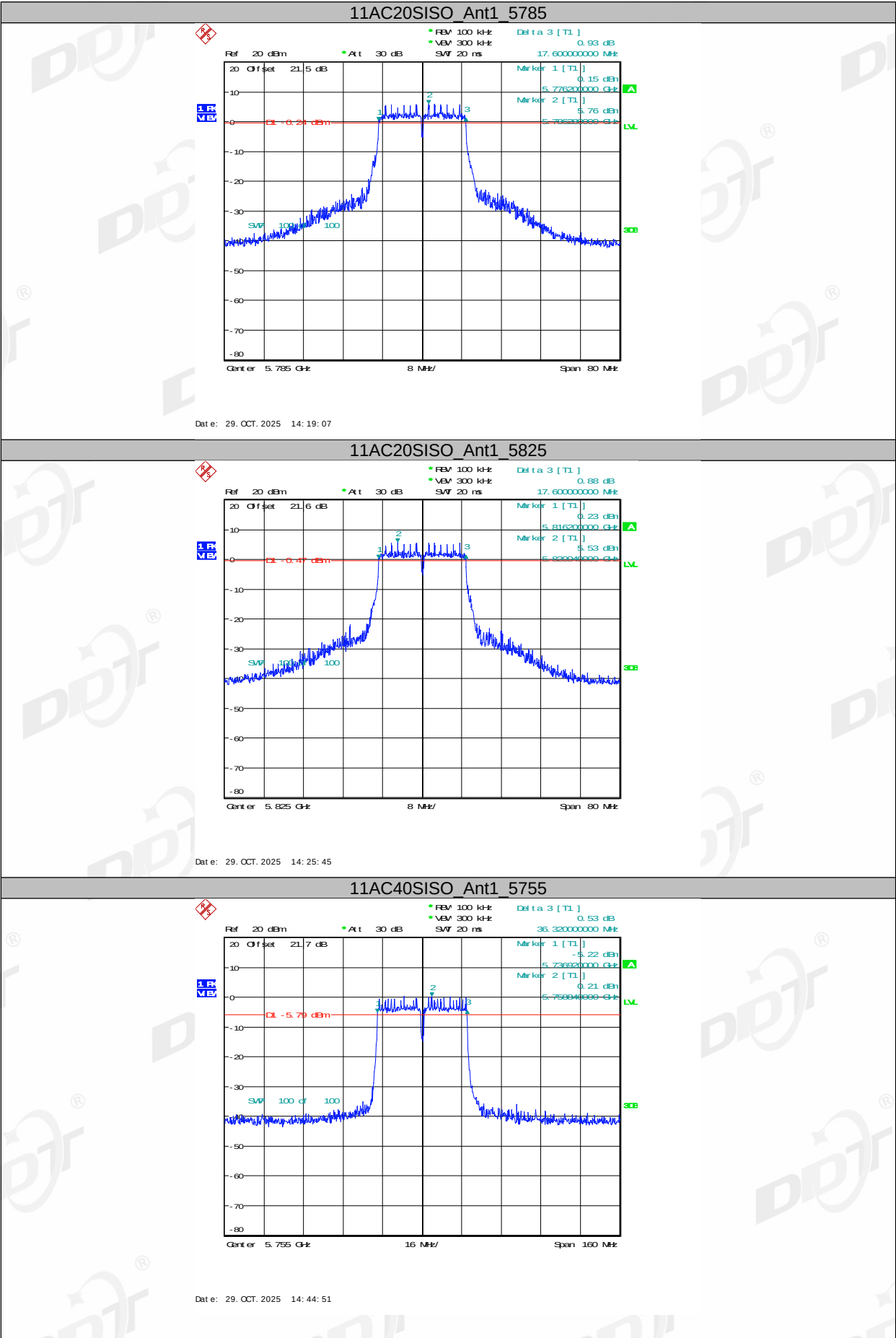
Test Mode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5720	16.36	5711.84	5728.20	---	---
		5720_UNII-2C	13.16	5711.84	5725	---	---
		5720_UNII-3	3.2	5725	5728.20	0.5	PASS
11N20SISO	Ant1	5720	17.56	5711.24	5728.80	---	---
		5720_UNII-2C	13.76	5711.24	5725	---	---
		5720_UNII-3	3.8	5725	5728.80	0.5	PASS
11N40SISO	Ant1	5710	36.32	5691.92	5728.24	---	---
		5710_UNII-2C	33.08	5691.92	5725	---	---
		5710_UNII-3	3.24	5725	5728.24	0.5	PASS
11AC20SISO	Ant1	5720	17.60	5711.20	5728.80	---	---
		5720_UNII-2C	13.8	5711.20	5725	---	---
		5720_UNII-3	3.8	5725	5728.80	0.5	PASS
11AC40SISO	Ant1	5710	36.32	5691.92	5728.24	---	---
		5710_UNII-2C	33.08	5691.92	5725	---	---
		5710_UNII-3	3.24	5725	5728.24	0.5	PASS
11AC80SISO	Ant1	5690	76.00	5652.08	5728.08	---	---
		5690_UNII-2C	72.92	5652.08	5725	---	---
		5690_UNII-3	3.08	5725	5728.08	0.5	PASS
11AX20SISO	Ant1	5720	19.04	5710.48	5729.52	---	---
		5720_UNII-2C	14.52	5710.48	5725	---	---
		5720_UNII-3	4.52	5725	5729.52	0.5	PASS
11AX40SISO	Ant1	5710	37.68	5691.20	5728.88	---	---
		5710_UNII-2C	33.8	5691.20	5725	---	---
		5710_UNII-3	3.88	5725	5728.88	0.5	PASS
11AX80SISO	Ant1	5690	77.28	5651.44	5728.72	---	---
		5690_UNII-2C	73.56	5651.44	5725	---	---
		5690_UNII-3	3.72	5725	5728.72	0.5	PASS

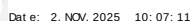
5.5. Test graphs B4

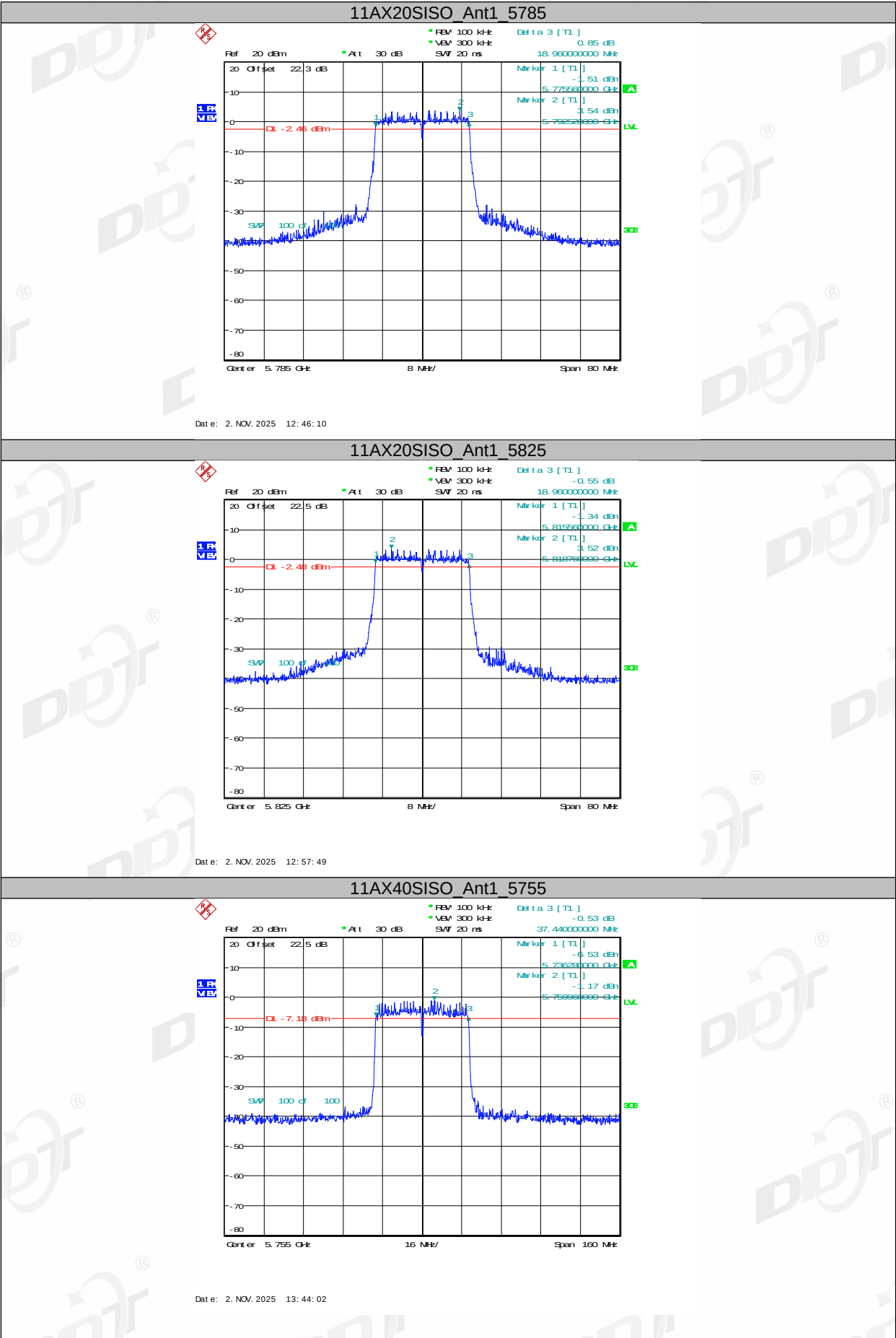


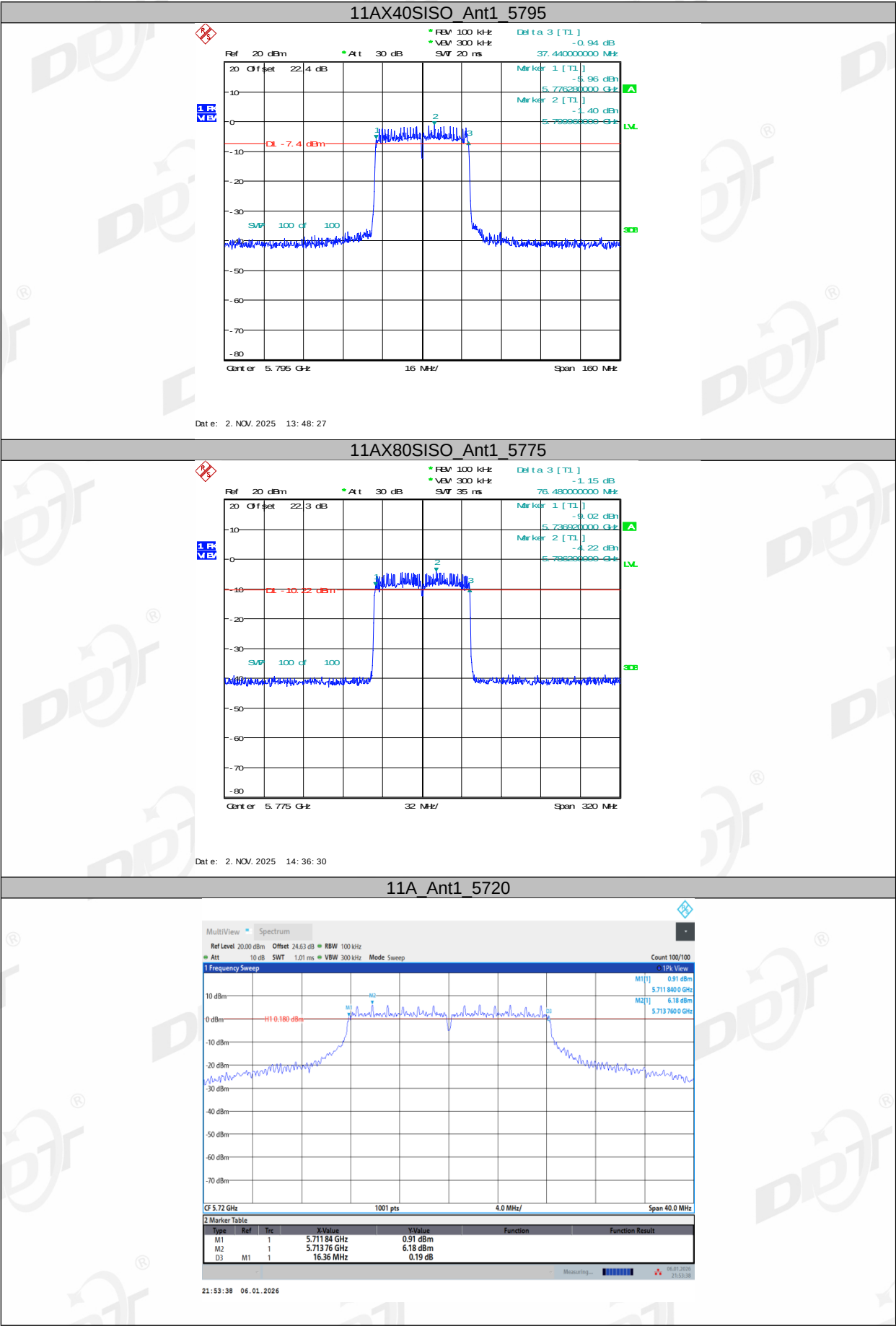






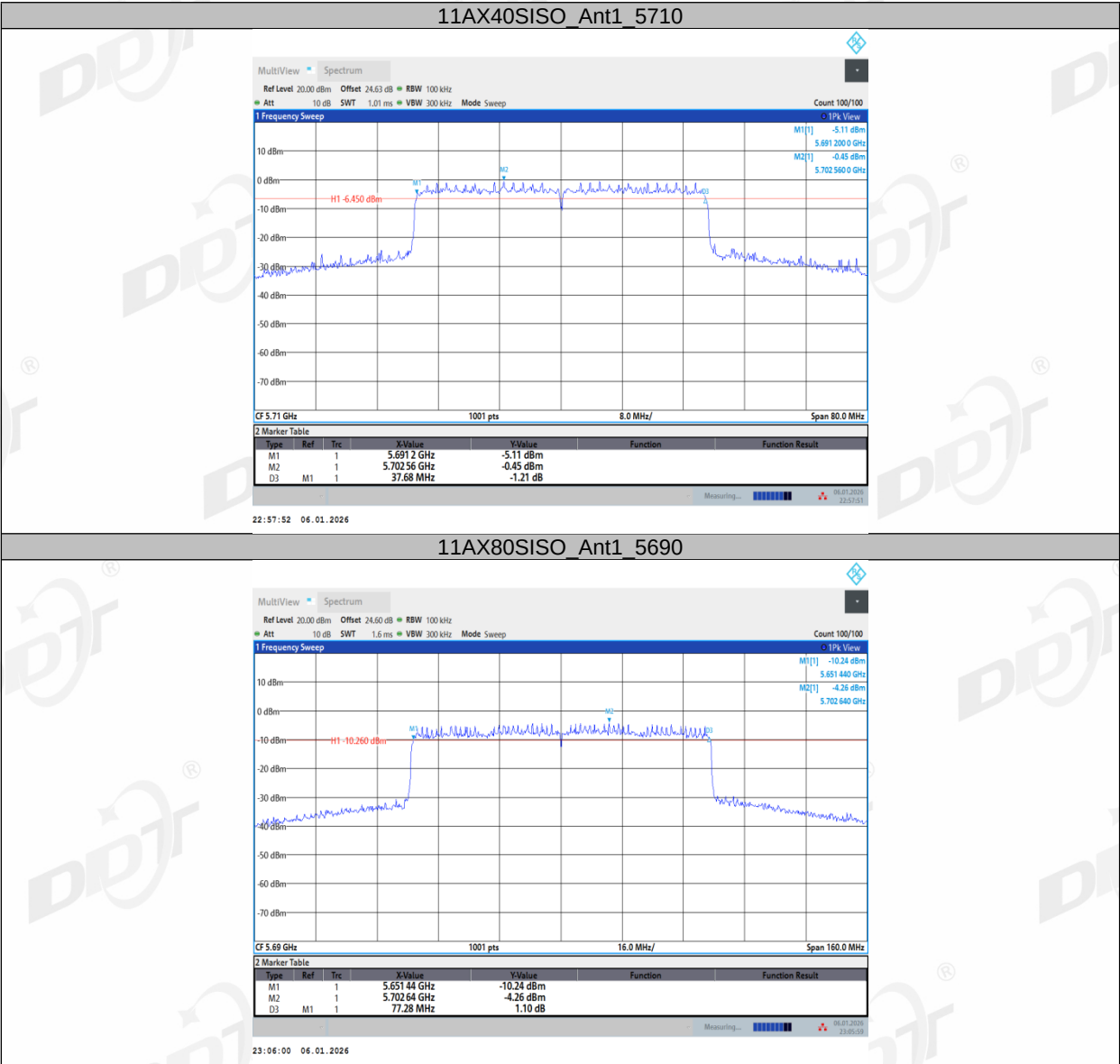






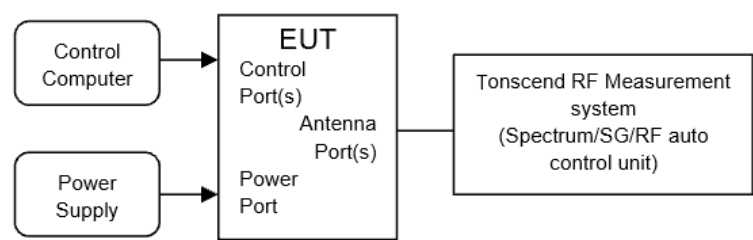






6. 99% Bandwidth

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

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

6.4. Test result

Test Engineer:	Wayne Huang	Test Site:	RF Measurement System 1# RF Measurement System 4#
Ambient Condition:	24.4℃, 47.3%RH-23.6℃,43.8%RH	Test Date:	2025.10.25-2526.01.06
Test Power Supply:	DC 12V	Sample Number:	S25060926-001

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	17.760	5171.2000	5188.9600	---	---
		5200	17.760	5191.2000	5208.9600	---	---
		5240	17.760	5231.1200	5248.8800	---	---
		5260	17.760	5251.1200	5268.8800	---	---
		5280	17.760	5271.2000	5288.9600	---	---
		5320	18.000	5311.0400	5329.0400	---	---
		5500	18.080	5491.0400	5509.1200	---	---
		5580	18.720	5570.7200	5589.4400	---	---
		5700	18.640	5690.6400	5709.2800	---	---
		5720	19.521	5710.4441	5729.9648	---	---
		5720_UNII-2C	14.556	5710.4441	5725	---	---
		5720_UNII-3	4.965	5725	5729.9648	---	---
		5745	17.680	5736.2000	5753.8800	---	---
		5785	17.840	5776.2000	5794.0400	---	---
		5825	17.680	5816.1200	5833.8000	---	---
11N20SISO	Ant1	5180	18.800	5170.6400	5189.4400	---	---
		5200	18.720	5190.6400	5209.3600	---	---
		5240	18.720	5230.6400	5249.3600	---	---
		5260	18.560	5250.7200	5269.2800	---	---

		5280	18.960	5270.6400	5289.6000	---	---
		5320	18.640	5310.7200	5329.3600	---	---
		5500	18.640	5490.7200	5509.3600	---	---
		5580	18.880	5570.5600	5589.4400	---	---
		5700	18.800	5690.6400	5709.4400	---	---
		5720	19.342	5710.4031	5729.7455	---	---
		5720_UNII-2C	14.597	5710.4031	5725	---	---
		5720_UNII-3	4.745	5725	5729.7455	---	---
		5745	18.640	5735.7200	5754.3600	---	---
		5785	18.640	5775.6400	5794.2800	---	---
		5825	18.800	5815.5600	5834.3600	---	---
11N40SISO	Ant1	5190	36.800	5171.6000	5208.4000	---	---
		5230	36.960	5211.6000	5248.5600	---	---
		5270	36.800	5251.6000	5288.4000	---	---
		5310	36.800	5291.6000	5328.4000	---	---
		5510	36.960	5491.6000	5528.5600	---	---
		5550	36.960	5531.6000	5568.5600	---	---
		5670	37.280	5651.2800	5688.5600	---	---
		5710	37.493	5691.3597	5728.8530	---	---
		5710_UNII-2C	33.64	5691.3597	5725	---	---
		5710_UNII-3	3.853	5725	5728.8530	---	---
		5755	36.800	5736.6000	5773.4000	---	---
		5795	36.640	5776.6000	5813.2400	---	---
11AC20SISO	Ant1	5180	18.640	5170.6400	5189.2800	---	---

		5200	18.800	5190.6400	5209.4400	---	---
		5240	18.640	5230.6400	5249.2800	---	---
		5260	18.720	5250.6400	5269.3600	---	---
		5280	18.800	5270.6400	5289.4400	---	---
		5320	18.720	5310.7200	5329.4400	---	---
		5500	18.960	5490.5600	5509.5200	---	---
		5580	19.520	5570.3200	5589.8400	---	---
		5700	19.600	5690.2400	5709.8400	---	---
		5720	19.708	5710.2545	5729.9627	---	---
		5720_UNII-2C	14.746	5710.2545	5725	---	---
		5720_UNII-3	4.963	5725	5729.9627	---	---
		5745	18.720	5735.6400	5754.3600	---	---
		5785	18.720	5775.6400	5794.3600	---	---
		5825	18.720	5815.6400	5834.3600	---	---
11AC40SISO	Ant1	5190	36.640	5171.7600	5208.4000	---	---
		5230	36.640	5211.7600	5248.4000	---	---
		5270	36.640	5251.7600	5288.4000	---	---
		5310	36.640	5291.7600	5328.4000	---	---
		5510	36.800	5491.6000	5528.4000	---	---
		5550	36.640	5531.7600	5568.4000	---	---
		5670	36.800	5651.6000	5688.4000	---	---
		5710	37.414	5691.3312	5728.7449	---	---
		5710_UNII-2C	33.669	5691.3312	5725	---	---
		5710_UNII-3	3.745	5725	5728.7449	---	---

		5755	36.640	5736.7600	5773.4000	---	---
		5795	36.640	5776.7600	5813.4000	---	---
11AC80SISO	Ant1	5210	76.160	5171.9200	5248.0800	---	---
		5290	76.480	5251.9200	5328.4000	---	---
		5530	76.160	5491.9200	5568.0800	---	---
		5610	76.160	5571.9200	5648.0800	---	---
		5690	76.741	5651.6911	5728.4321	---	---
		5690_UNII-2C	73.309	5651.6911	5725	---	---
		5690_UNII-3	3.432	5725	5728.4321	---	---
		5775	76.480	5736.6000	5813.0800	---	---
11AX20SISO	Ant1	5180	19.440	5170.3200	5189.7600	---	---
		5200	19.360	5190.3200	5209.6800	---	---
		5240	19.280	5230.4000	5249.6800	---	---
		5260	19.440	5250.3200	5269.7600	---	---
		5280	19.440	5270.3200	5289.7600	---	---
		5320	19.360	5310.4000	5329.7600	---	---
		5500	19.440	5490.2400	5509.6800	---	---
		5580	19.440	5570.3200	5589.7600	---	---
		5700	19.600	5690.1600	5709.7600	---	---
		5720	19.699	5710.2071	5729.9060	---	---
		5720_UNII-2C	14.793	5710.2071	5725	---	---
		5720_UNII-3	4.906	5725	5729.9060	---	---
		5745	19.360	5735.3200	5754.6800	---	---
		5785	19.360	5775.3200	5794.6800	---	---

		5825	19.360	5815.3200	5834.6800	---	---
11AX40SISO	Ant1	5190	37.920	5171.1200	5209.0400	---	---
		5230	37.920	5211.1200	5249.0400	---	---
		5270	37.920	5251.1200	5289.0400	---	---
		5310	37.920	5291.1200	5329.0400	---	---
		5510	37.920	5490.9600	5528.8800	---	---
		5550	37.920	5530.9600	5568.8800	---	---
		5670	38.080	5650.9600	5689.0400	---	---
		5710	38.207	5690.9485	5729.1557	---	---
		5710_UNII-2C	34.051	5690.9485	5725	---	---
		5710_UNII-3	4.156	5725	5729.1557	---	---
		5755	37.920	5735.9600	5773.8800	---	---
		5795	38.080	5775.9600	5814.0400	---	---
11AX80SISO	Ant1	5210	77.440	5171.2800	5248.7200	---	---
		5290	77.440	5251.2800	5328.7200	---	---
		5530	78.080	5490.9600	5569.0400	---	---
		5610	78.080	5570.9600	5649.0400	---	---
		5690	77.768	5651.1152	5728.8835	---	---
		5690_UNII-2C	73.885	5651.1152	5725	---	---
		5690_UNII-3	3.883	5725	5728.8835	---	---
		5775	77.760	5735.9600	5813.7200	---	---

11A Ant1_5180

Ref 20 dBm Att 20 dB SWF 20 ns Marker 1 [T1] 8.52 dB

CEBV 7.760000000 MHz
Temp 1 [T1 C/MV] -3.34 dBm
5.171200000 GHz
Temp 2 [T1 C/MV] -3.91 dBm
5.188900000 GHz

20 GHz set 22 dB

1 S VBY

SWF 100 100

Center 5.18 GHz 8 MHz/ Span 80 MHz

Date: 25. OCT. 2025 10:54:38

11A Ant1_5200

Ref 20 dBm Att 20 dB SWF 20 ns Marker 1 [T1] 8.77 dB

CEBV 7.760000000 MHz
Temp 1 [T1 C/MV] -3.87 dBm
5.191200000 GHz
Temp 2 [T1 C/MV] -4.68 dBm
5.208900000 GHz

20 GHz set 22 dB

1 S VBY

SWF 100 100

Center 5.2 GHz 8 MHz/ Span 80 MHz

Date: 25. OCT. 2025 10:55:38

11A Ant1_5240

Ref 20 dBm Att 20 dB SWF 20 ns Marker 1 [T1] 8.61 dB

CEBV 7.760000000 MHz
Temp 1 [T1 C/MV] -3.79 dBm
5.231120000 GHz
Temp 2 [T1 C/MV] -4.62 dBm
5.248880000 GHz

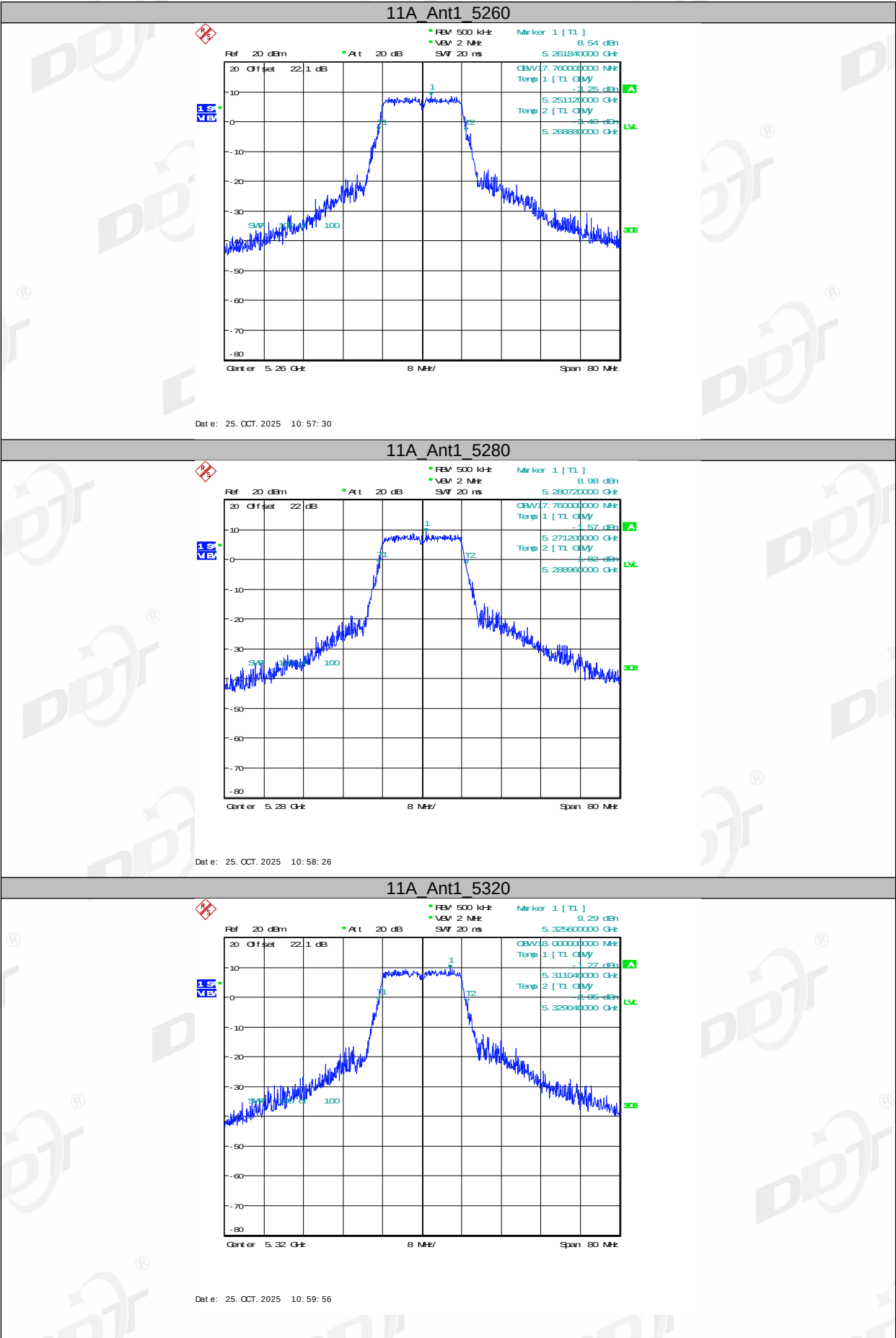
20 GHz set 22 dB

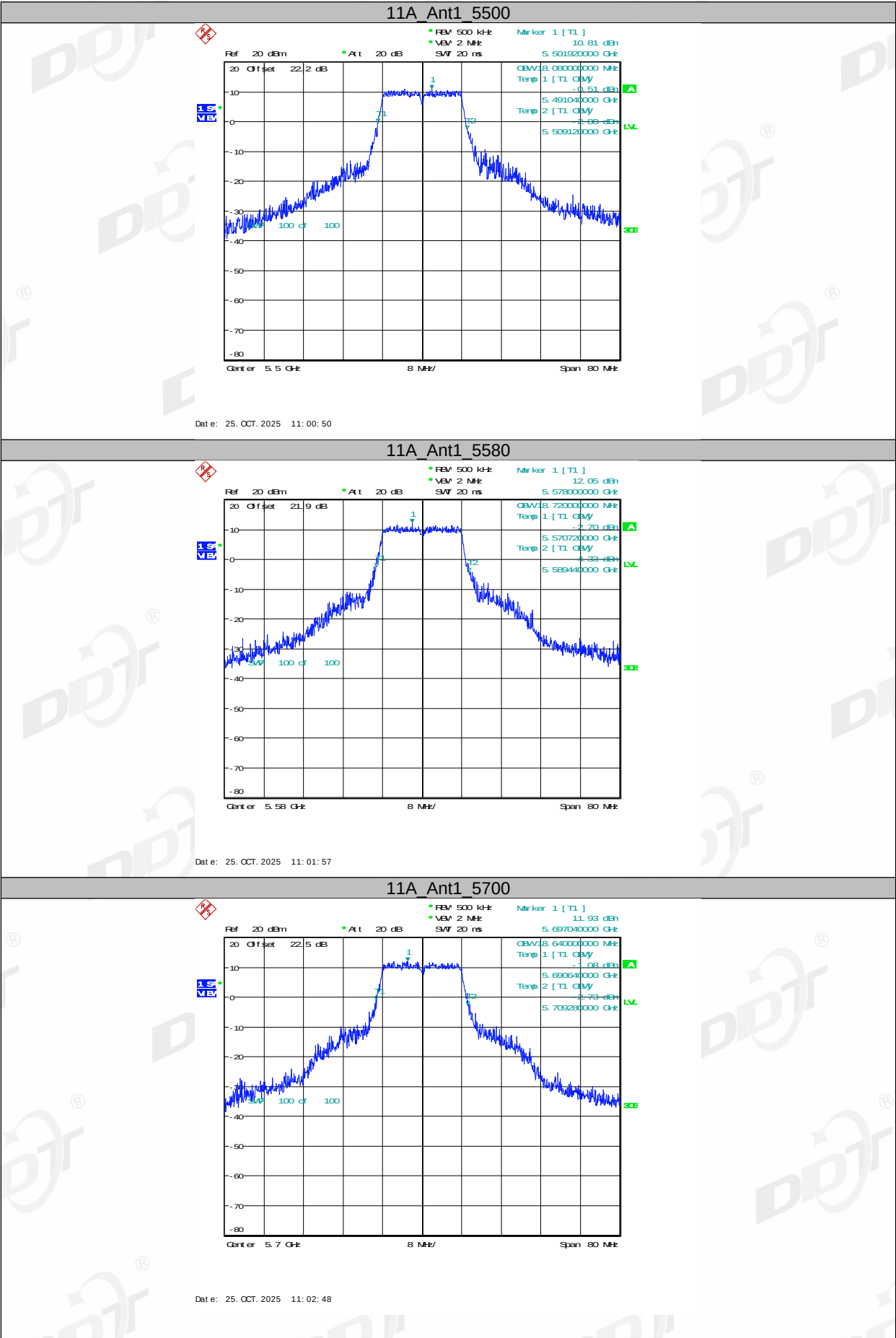
1 S VBY

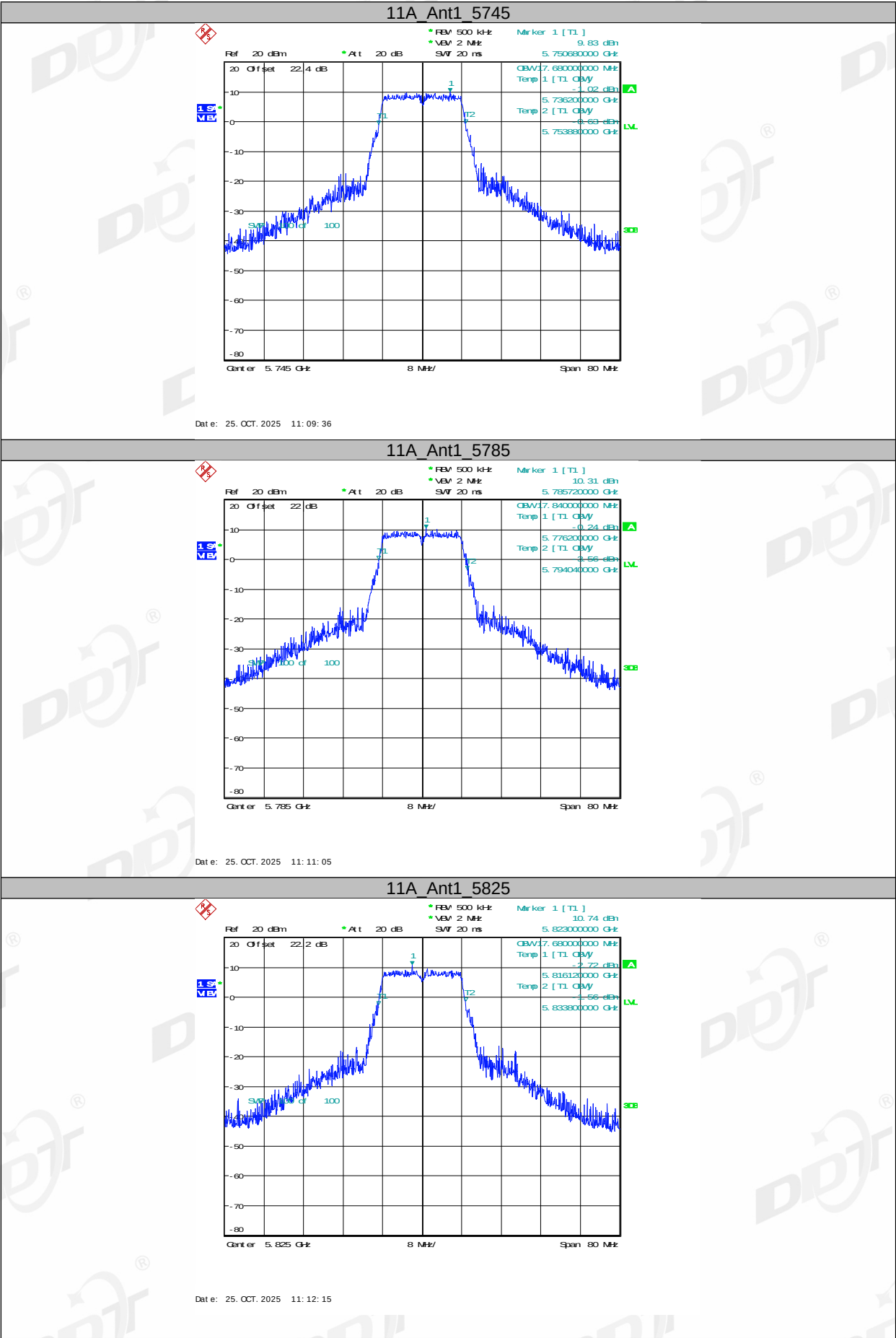
SWF 100 100

Center 5.24 GHz 8 MHz/ Span 80 MHz

Date: 25. OCT. 2025 10:56:35







11A_Ant1_5785

Ref 20 dBm

Att 20 dB

RBW 500 kHz

VBW 2 MHz

SWF 20 ns

Marker 1 [T1]

10.31 dBm

5.785720000 GHz

20

Off set

22 dB

10

0

-10

-20

-30

-40

-50

-60

-70

-80

1

T1

T2

CBW/17.840000000 MHz

Temp 1 [T1] 0.24 dBm

5.776200000 GHz

Temp 2 [T1] 0.56 dBm

5.794040000 GHz

3dB

100

Center 5.785 GHz

8 MHz

Span 80 MHz

Date: 25. OCT. 2025 11:11:05

11A_Ant1_5825

Ref 20 dBm

Att 20 dB

RBW 500 kHz

VBW 2 MHz

SWF 20 ns

Marker 1 [T1]

10.74 dBm

5.823000000 GHz

20

Off set

22 dB

10

0

-10

-20

-30

-40

-50

-60

-70

-80

1

T1

T2

CBW/17.680000000 MHz

Temp 1 [T1] 0.22 dBm

5.816120000 GHz

Temp 2 [T1] 0.56 dBm

5.833800000 GHz

3dB

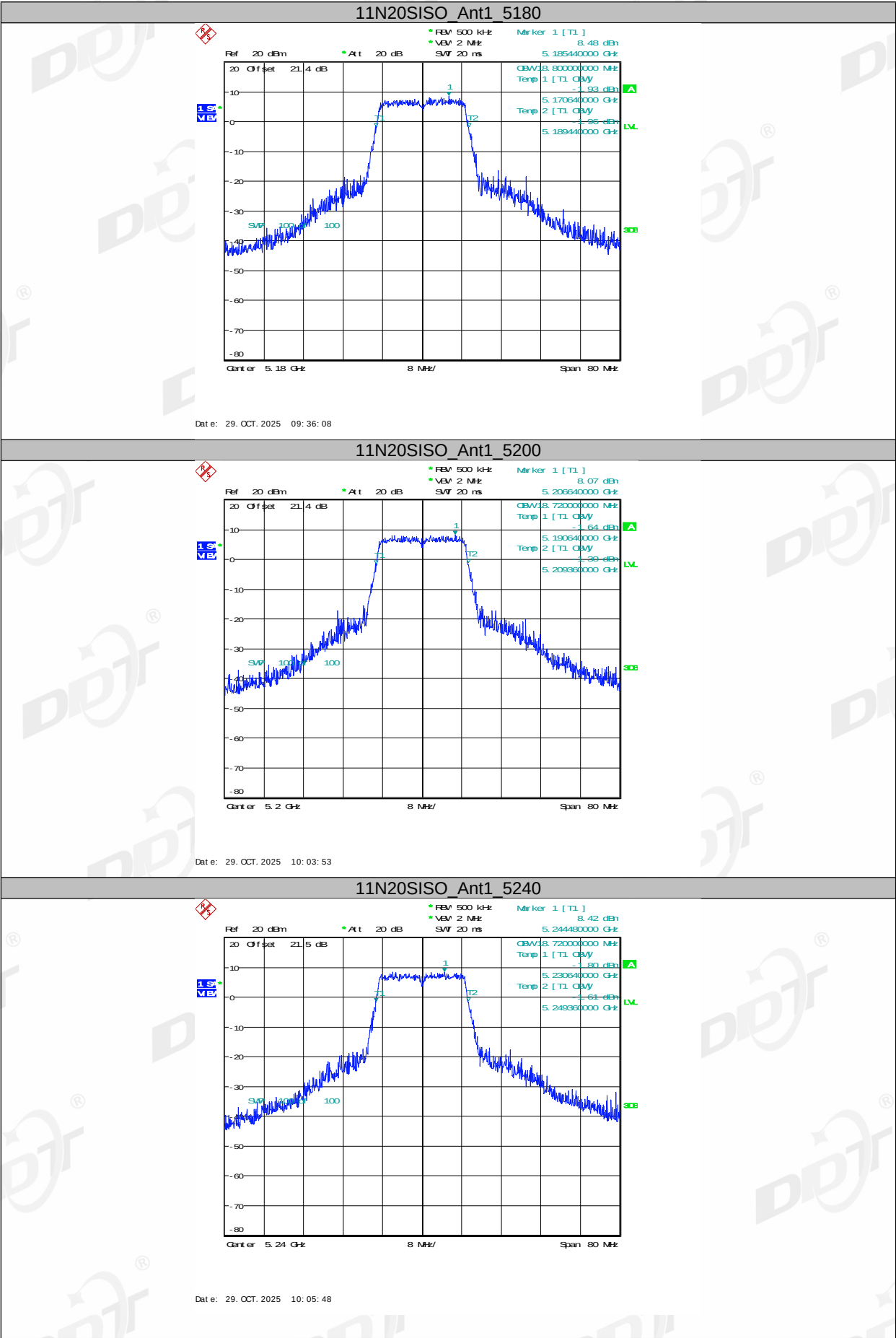
100

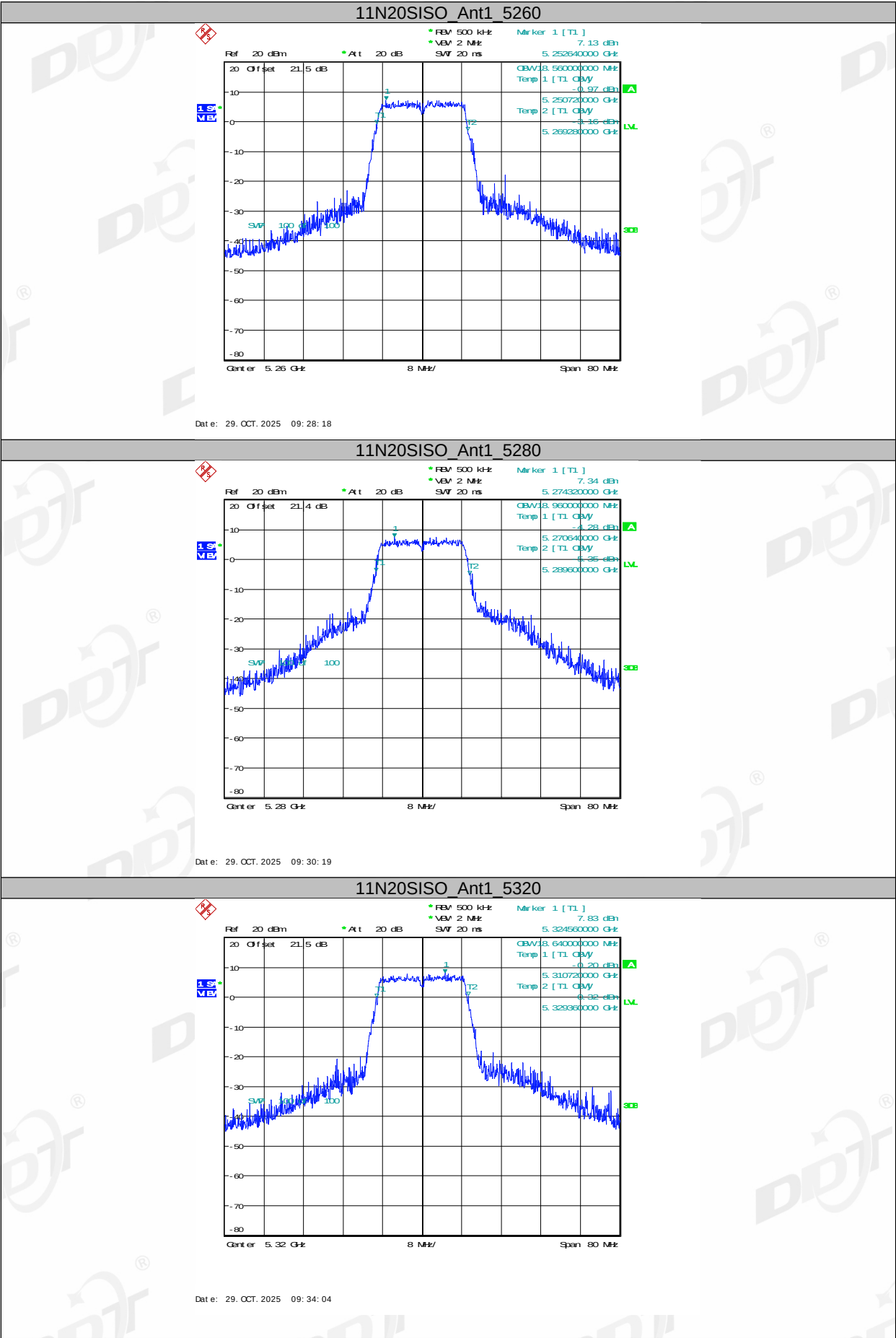
Center 5.825 GHz

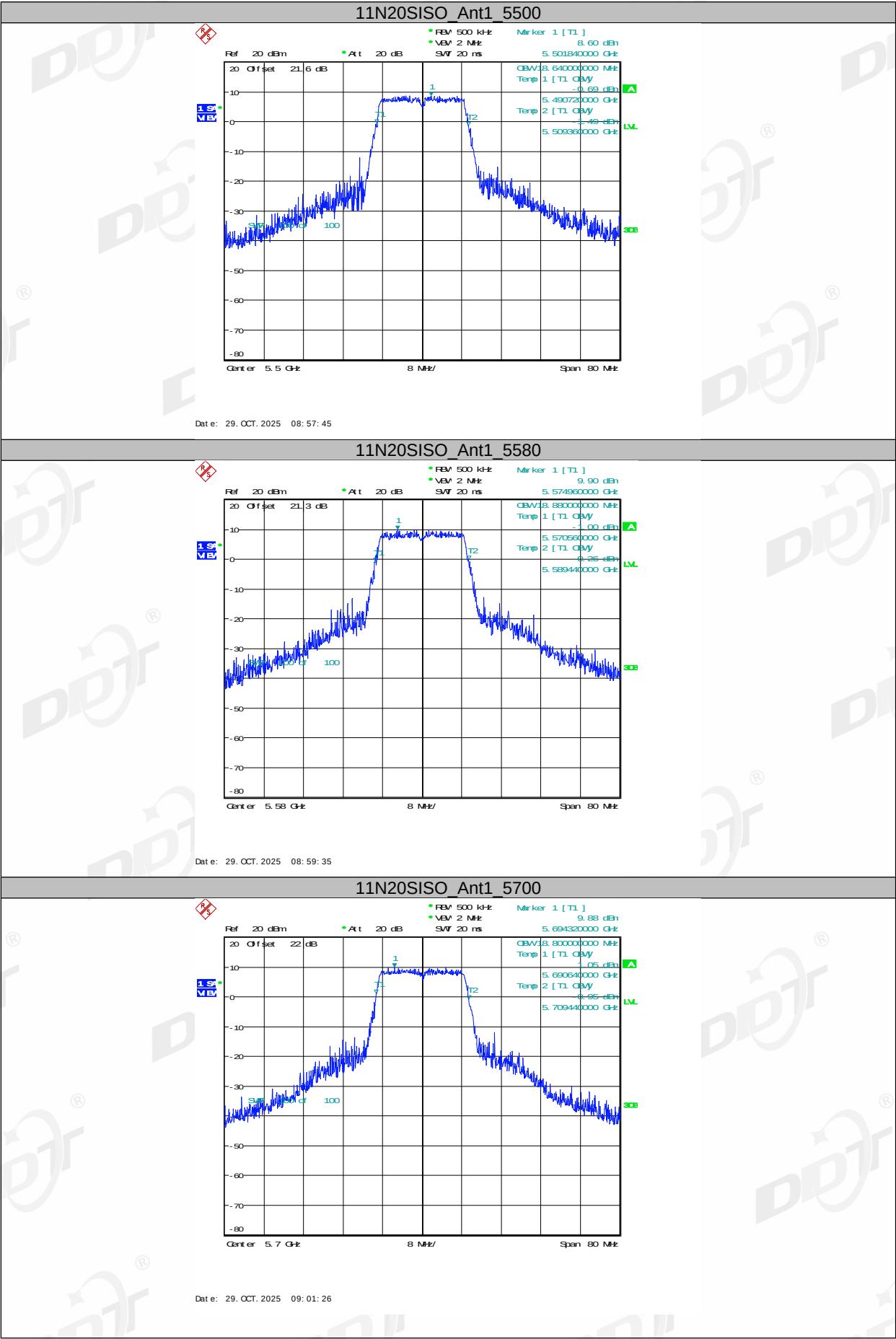
8 MHz

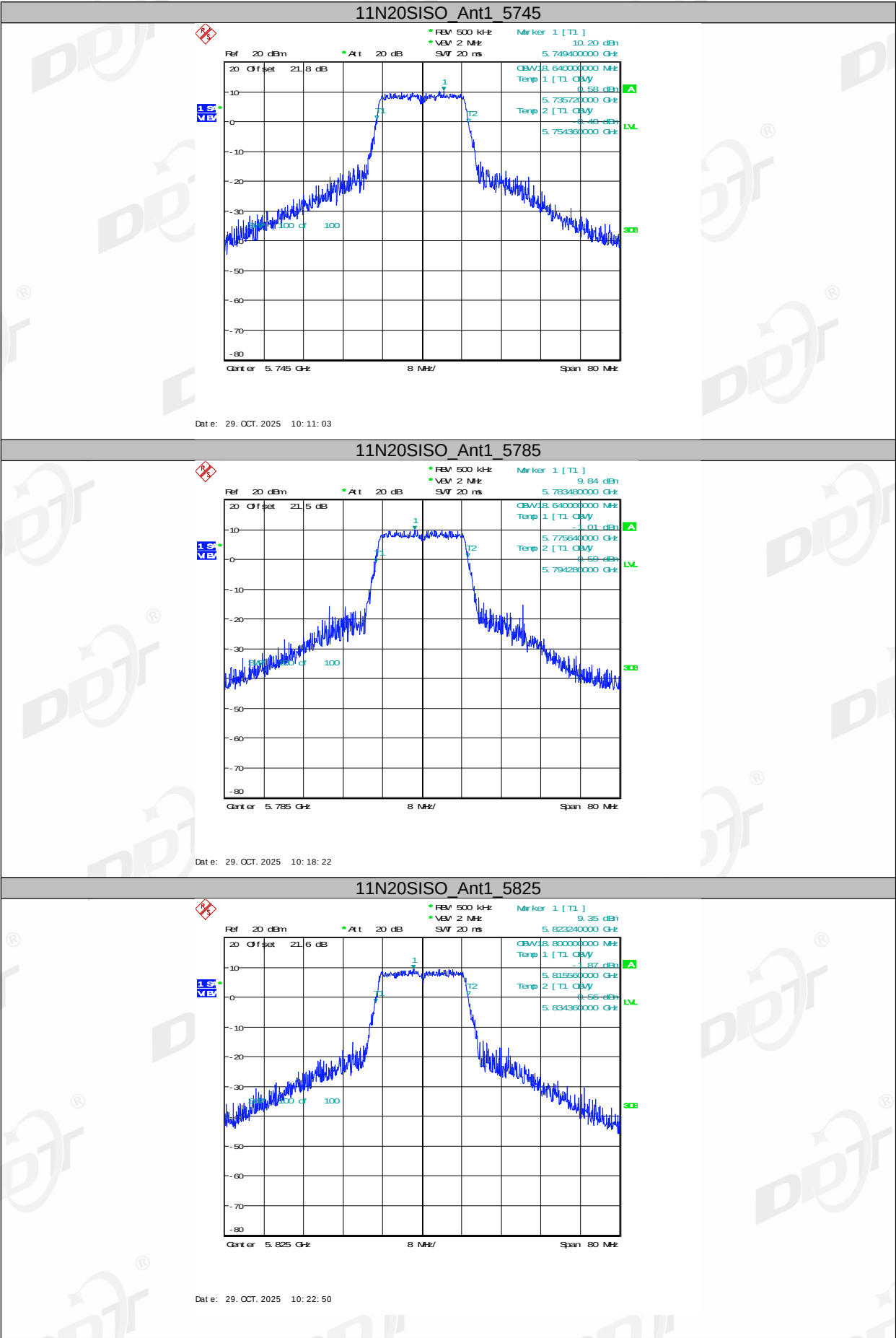
Span 80 MHz

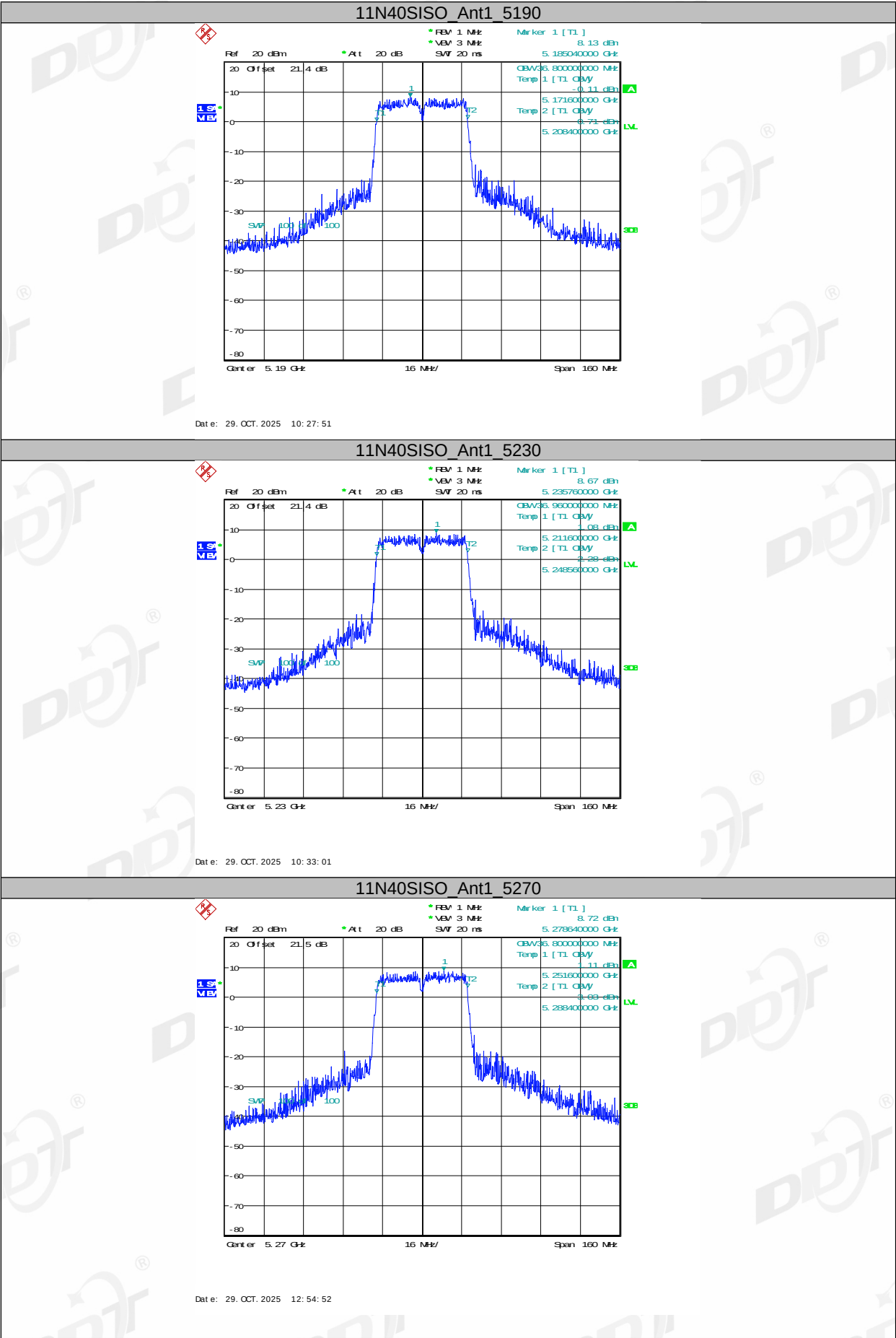
Date: 25. OCT. 2025 11:12:15











11N40SISO_Ant1_5270

Ref 20 dBm

Att 20 dB

RBW 1 MHz

VBW 3 MHz

SWF 20 ns

Marker 1 [T1]

8.72 dBm

5.278540000 GHz

CBW/36.800000000 MHz

Temp 1 [T1] 1.11 dBm

5.251600000 GHz

Temp 2 [T1] 1.63 dBm

5.288400000 GHz

