



FCC AND ISCED CERTIFICATION TEST REPORT

Applicant	:	Hisense Commercial Display Co.,Ltd.
Address of Applicant	:	No. 218, Qianwangang Road, Huangdao District, Qingdao, Shandong, P.R. China
Manufacturer	:	Hisense Commercial Display Co.,Ltd.
Address of Manufacturer	:	No. 218, Qianwangang Road, Huangdao District, Qingdao, Shandong, P.R. China
Equipment under Test	:	Wireless cast
Model No.	:	HT007E, HT008E, HT009E
FCC ID	:	2A9IW-HT007E
IC	:	27082-HT007E
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart E, RSS-247 Issue 3 August 2023, ANSI C63.10:2013, 789033 D02 General U-NII Test Procedures New Rules v02r01, 662911 D01 Multiple Transmitter Output v02r01, RSS-Gen Issue 5 April 2018
Report No.	:	DDT-RE24071734-1E02
Issue Date	:	2024/08/09
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

Table of Contents

1.	Summary of Test Results	7
2.	General Test Information.....	8
2.1.	Description of EUT.....	8
2.2.	Accessories of EUT	9
2.3.	Block diagram of EUT configuration for test.....	10
2.4.	Decision of final test mode	10
2.5.	Deviations of test standard	12
2.6.	Test environment conditions.....	12
2.7.	Test laboratory	12
2.8.	Measurement uncertainty	13
3.	Equipment Used During Conductive Test	14
4.	26dB Bandwidth.....	15
4.1.	Block diagram of test setup	15
4.2.	Limits.....	15
4.3.	Test procedure.....	15
4.4.	Test result	16
4.5.	Test graphs	18
5.	6dB Bandwidth.....	40
5.1.	Block diagram of test setup	40
5.2.	Limits.....	40
5.3.	Test procedure.....	40
5.4.	Test result B4.....	41
5.5.	Test graphs B4.....	42
6.	99% Bandwidth.....	47
6.1.	Block diagram of test setup	47
6.2.	Limits.....	47
6.3.	Test procedure.....	47
6.4.	Test result	48
6.5.	Test graphs.....	50
7.	Duty Cycle.....	72
7.1.	Block diagram of test setup	72
7.2.	Limit.....	72
7.3.	Test procedure.....	72
7.4.	Test result	73
7.5.	Test graphs.....	75
8.	Maximum Output Power	97

8.1.	Block diagram of test setup	97
8.2.	Limits.....	97
8.3.	Test procedure.....	97
8.4.	Test result channel power	98
9.	Power Spectral Density	100
9.1.	Block diagram of test setup	100
9.2.	Limits.....	100
9.3.	Test procedure.....	100
9.4.	Test result	102
9.5.	Test graphs	104
10.	Frequency Stability Measurement.....	128
10.1.	Limit of Frequency Stability	128
10.2.	Measuring Instruments	128
10.3.	Test procedures	128
10.4.	Test setup	128
10.5.	Test result	129
11.	Dynamic Frequency Selection.....	135
11.1.	Applicability of DFS requirements	135
11.2.	Limit.....	136
11.3.	Parameters of radar test waveforms	136
11.4.	Calibration of radar waveform	137
11.5.	Channel closing transmission time, channel move time and non-occupancy period.....	139
11.6.	Test setup	139
11.7.	Test result	141
12.	Antenna Requirements	142
12.1.	Limit.....	142
12.2.	Result.....	142
13.	Radiated Emission.....	143
13.1.	Test equipment	143
13.2.	Block diagram of test setup	144
13.3.	Limits.....	145
13.4.	Assistant equipment used for test	147
13.5.	Test procedure.....	147
13.6.	Test result	148
13.7.	Test data	149
14.	Band Edge Compliance	179
14.1.	Test equipment	179
14.2.	Block diagram of test setup	180

14.3.	Limits.....	180
14.4.	Assistant equipment used for test	180
14.5.	Test procedure.....	180
14.6.	Test result	181
14.7.	Test data	182
15.	Power Line Conducted Emissions.....	270
15.1.	Test equipment.....	270
15.2.	Block diagram of test setup	270
15.3.	Limits.....	270
15.4.	Assistant equipment used for test	270
15.5.	Test procedure.....	271
15.6.	Test result	271
15.7.	Test data	272
16.	Test Setup Photograph.....	274
17.	Photos of the EUT	277

Test Report Declare

Applicant	:	Hisense Commercial Display Co.,Ltd.
Address of Applicant	:	No. 218, Qianwangang Road, Huangdao District, Qingdao, Shandong, P.R. China
Equipment under Test	:	Wireless cast
Model No.	:	HT007E, HT008E, HT009E
Manufacturer	:	Hisense Commercial Display Co.,Ltd.
Address of Manufacturer	:	No. 218, Qianwangang Road, Huangdao District, Qingdao, Shandong, P.R. China

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart E,
RSS-247 Issue 3 August 2023,
ANSI C63.10:2013,
789033 D02 General U-NII Test Procedures New Rules v02r01,
662911 D01 Multiple Transmitter Output v02r01,
RSS-Gen Issue 5 April 2018

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-RE24071734-1E02		
Date of Receipt:	2024/07/23	Date of Test:	2024/07/23~2024/08/09

Prepared By:**Tiger Mo/Engineer****Approved By:****Damon Hu/EMC Manager**

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

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	2024/08/09	

1. Summary of Test Results

No.	Test Parameter	Clause No.	Condition	Result
1	6/26db Bandwidth and 99% Bandwidth	FCC 15.407 (e), RSS-247 Clause 6.2	/	Pass
2	Output Power	FCC 15.407 (a) ; RSS-247 Clause 6.2	/	Pass
3	Power Spectral Density	FCC 15.407 (a) ; RSS-247 Clause 6.2	/	Pass
4	Frequency Stability Measurement	FCC 15.407 (g); RSS-247 Clause 6.2; RSS-GEN Clause 8.9	/	Pass
5	Radiated Emission	FCC 15.407 (b); FCC 15.209; FCC 15.205; RSS-247 Clause 6.2; RSS-GEN Clause 8.9	/	Pass
6	Band Edge Compliance	FCC 15.407 (b); FCC 15.209; FCC 15.205; RSS-247 Clause 6.2; RSS-GEN Clause 8.9	/	Pass
7	Power Line Conducted Emissions	FCC Part 15: 15.207(a), RSS-Gen Issue 5 clause 8.8	/	Pass
8	Dynamic Frequency Selection	FCC 15.407 (h); RSS-247 Clause 6.8	/	Pass
9	Antenna Requirement	FCC Part 15: 15.203, RSS-Gen Issue 5 clause 6.8	/	Pass

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	: Wireless cast
Model Number	: HT007E, HT008E, HT009E
Difference of model number	: Above models are identical in schematic, appearance and structure, only the Model Number is different for all the models, therefore the test performed on the model HT007E.
EUT Function Description	: Please reference user manual of this device
Power Supply	: DC 5V From Type-C Port

Note: This EUT support 2.4 GHz WLAN, 5 GHz WLAN, this report only for 5 GHz WLAN.

Radio Technology	: IEEE 802.11a/n/ac
Operation frequency	: IEEE 802.11a: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5720MHz, 5745MHz-5825MHz IEEE 802.11n HT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5720MHz, 5745MHz-5825MHz IEEE 802.11n HT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5710MHz, 5755MHz-5795MHz IEEE 802.11ac VHT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5720MHz, 5745MHz-5825MHz IEEE 802.11ac VHT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5710MHz, 5755MHz-5795MHz IEEE 802.11ac VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz
Modulation	: IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)

Antenna information		
Antenna Type	ceramic antenna	
Max Antenna Gain (dBi)	Ant1 Gain	
	IEEE 802.11a	3.5
	IEEE 802.11n HT20	3.5
	IEEE 802.11n HT40	3.5
	IEEE 802.11ac VHT20	3.5
	IEEE 802.11ac VHT40	3.5
	IEEE 802.11ac VHT80	3.5

Channel information					
IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
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
112	5560	126	5630	/	/
116	5580	134	5670	/	/
120	5600	142	5710	/	/
124	5620	/	/	/	/
128	5640	/	/	/	/
132	5660	/	/	/	/
136	5680	/	/	/	/
140	5700	/	/	/	/
144	5720	/	/	/	/
UNII-3					
149	5745	151	5755	155	5775
153	5765	159	5795	/	/
157	5785	/	/	/	/
161	5805	/	/	/	/
165	5825	/	/	/	/
Note: Band 5600-5650MHz will be disabled when shipped to Canada					

Note : “☑” means to be chosen or applicable; “☐” means don’t to be chosen or not applicable; This note applies to entire report.

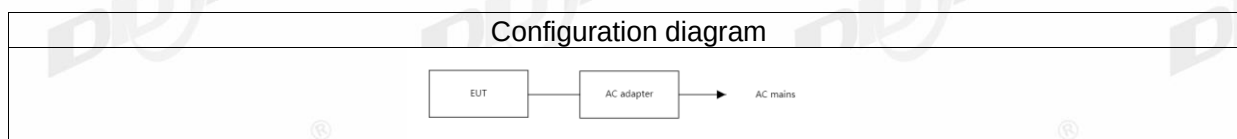
Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's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

“☑” means to be chosen or applicable; “☐” means don’t to be chosen or not applicable; This note applies to entire report.

2.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
/	/	/	/

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 select test channel, wireless mode as below table.

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

Tested mode, channel, and data rate information				
Mode	Setting Tx Power	Data rate (Mbps) (see Note)	Channel	Frequency (MHz)
	ANT1			
IEEE 802.11a	12	6	Low: CH36	5180
	12	6	Middle: CH40	5200
	12	6	High: CH48	5240
	12	6	Low: CH52	5260
	12	6	Middle: CH56	5280
	12	6	High: CH64	5320
	12	6	Low: CH100	5500
	12	6	Middle: CH116	5580
	12	6	High: CH140	5700
	12	6	Straddle:CH144	5720
	14	6	Low: CH149	5745
	14	6	Middle: CH157	5785
	14	6	High: CH165	5825
IEEE 802.11n HT20	12	MCS 0	Low: CH36	5180
	12	MCS 0	Middle: CH40	5200
	12	MCS 0	High: CH48	5240
	12	MCS 0	Low: CH52	5260
	12	MCS 0	Middle: CH56	5280
	12	MCS 0	High: CH64	5320
	12	MCS 0	Low: CH100	5500
	12	MCS 0	Middle: CH116	5580
	12	MCS 0	High: CH140	5700
	12	MCS 0	Straddle:CH144	5720
	14	MCS 0	Low: CH149	5745
	14	MCS 0	Middle: CH157	5785

	14	MCS 0	High: CH165	5825
IEEE 802.11n HT40	12	MCS 0	Low: CH38	5190
	12	MCS 0	Middle: CH46	5230
	12	MCS 0	High: CH54	5270
	12	MCS 0	Low: CH62	5310
	12	MCS 0	Middle: CH102	5510
	12	MCS 0	High: CH110	5550
	12	MCS 0	Low: CH134	5670
	12	MCS 0	Straddle: CH142	5710
	14	MCS 0	Middle: CH151	5755
	14	MCS 0	High: CH159	5795
	14	MCS 0	Low: CH165	5825
IEEE 802.11ac VHT20	12	MCS 0	Low: CH36	5180
	12	MCS 0	Middle: CH40	5200
	12	MCS 0	High: CH48	5240
	12	MCS 0	Low: CH52	5260
	12	MCS 0	Middle: CH56	5280
	12	MCS 0	High: CH64	5320
	12	MCS 0	Low: CH100	5500
	12	MCS 0	Middle: CH116	5580
	12	MCS 0	High: CH140	5700
	12	MCS 0	Straddle:CH144	5720
	14	MCS 0	Low: CH149	5745
	14	MCS 0	Middle: CH157	5785
	14	MCS 0	High: CH165	5825
	14	MCS 0	Low: CH165	5825
IEEE 802.11 ac VHT40	12	MCS 0	Low: CH38	5190
	12	MCS 0	Middle: CH46	5230
	12	MCS 0	High: CH54	5270
	12	MCS 0	Low: CH62	5310
	12	MCS 0	Middle: CH102	5510
	12	MCS 0	High: CH110	5550
	12	MCS 0	Low: CH134	5670
	12	MCS 0	Straddle: CH142	5710
	14	MCS 0	Middle: CH151	5755
	14	MCS 0	High: CH159	5795
	14	MCS 0	Low: CH165	5825
IEEE 802.11ac VHT80	12	MCS 0	CH42	5210
	12	MCS 0	CH58	5290
	12	MCS 0	CH106	5530
	12	MCS 0	CH122	5610
	12	MCS 0	CH138	5690
	12	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. 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-20155, G-20118

2.8. Measurement uncertainty

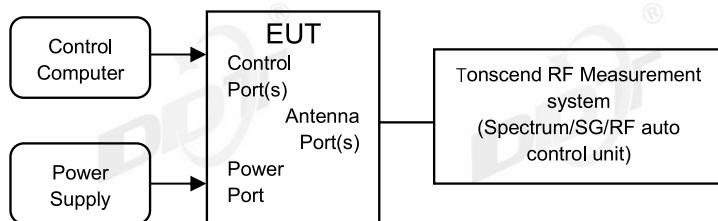
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Frequencies Stability	6.7×10^{-8} (Antenna couple method) 5.5×10^{-8} (Conducted method)
Conducted spurious emissions	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 1.40 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$) 1.66 dB ($8 \text{ GHz} \leq f < 26.5 \text{ GHz}$)
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
☑RF Connected Test (RF Measurement System 4#)				
Signal &Spectrum Analyzer	R&S	FSV3044	101173	2025/03/31
Wideband Radio Communication Tester	R&S	CMW500	168801	2025/03/31
MXG Vector Signal Generator	Agilent	N5182A	MY48180737	2025/03/31
PSG Vector Signal Generator	Agilent	E8267D	US49060192	2024/09/05
RF Control Unit	Tonsend	JS0806-2	21I8060485	2025/03/31
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2025/04/22
Test Software	Tonscend	JS1120-3	Ver.3.2.22	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

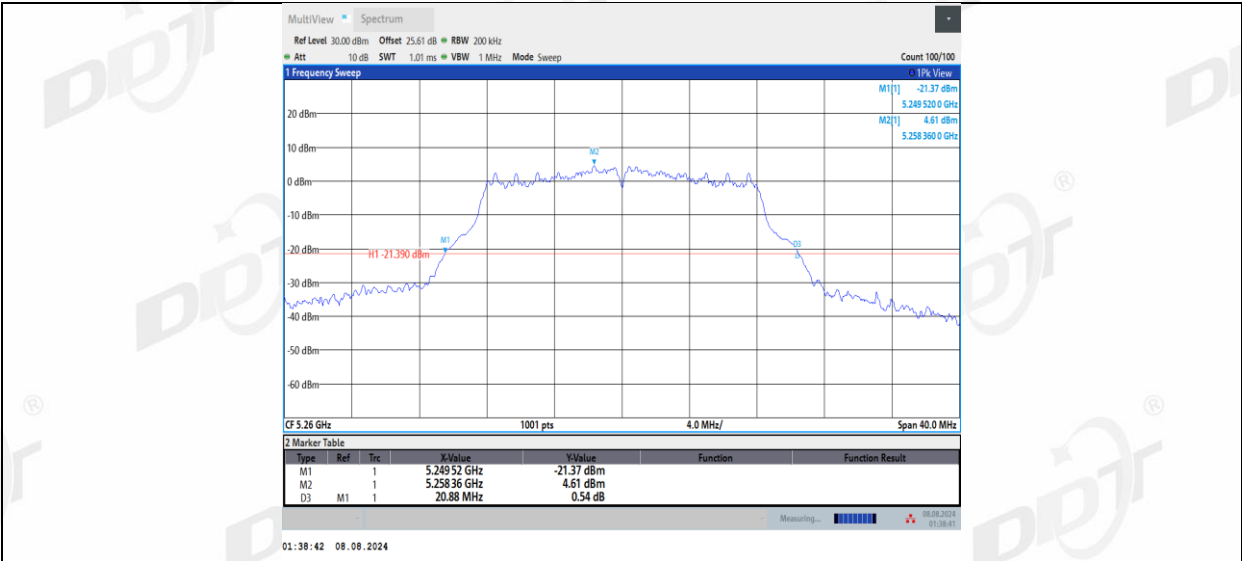
Test Engineer:	Haofeng	Test Site:	RF Measurement System 4#
Ambient Condition:	26.9℃,45.5%RH	Test Date:	2024.08.06-2024.08.08
Test Power Supply:	DC 5V	Sample Number:	S24071734-003

Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.92	5169.52	5190.44	---	---
		5200	20.88	5189.56	5210.44	---	---
		5240	20.88	5229.52	5250.40	---	---
		5260	20.88	5249.52	5270.40	---	---
		5280	20.88	5269.52	5290.40	---	---
		5320	20.92	5309.48	5330.40	---	---
		5500	21.24	5489.40	5510.64	---	---
		5580	21.16	5569.48	5590.64	---	---
		5700	21.00	5689.52	5710.52	---	---
		5720	20.92	5709.56	5730.48	---	---
		5720 UNII-2C	15.44	5709.56	5725	---	---
		5720 UNII-3	5.48	5725	5730.48	---	---
		5745	21.00	5734.44	5755.44	---	---
		5785	20.96	5774.48	5795.44	---	---
		5825	20.96	5814.48	5835.44	---	---
11N20SISO	Ant1	5180	21.24	5169.36	5190.60	---	---
		5200	21.44	5189.24	5210.68	---	---
		5240	21.48	5229.20	5250.68	---	---
		5260	21.36	5249.28	5270.64	---	---
		5280	21.32	5269.32	5290.64	---	---
		5320	21.44	5309.20	5330.64	---	---
		5500	21.36	5489.32	5510.68	---	---
		5580	21.64	5569.16	5590.80	---	---
		5700	21.40	5689.24	5710.64	---	---
		5720	21.32	5709.32	5730.64	---	---
		5720 UNII-2C	15.68	5709.32	5725	---	---
		5720 UNII-3	5.64	5725	5730.64	---	---
		5745	21.36	5734.36	5755.72	---	---
		5785	21.64	5774.20	5795.84	---	---
		5825	21.48	5814.24	5835.72	---	---
11N40SISO	Ant1	5190	39.84	5170.08	5209.92	---	---
		5230	40.00	5209.92	5249.92	---	---
		5270	40.00	5250.00	5290.00	---	---
		5310	39.84	5290.00	5329.84	---	---
		5510	39.84	5490.08	5529.92	---	---
		5550	40.00	5529.92	5569.92	---	---
		5670	39.92	5650.08	5690.00	---	---
		5710	39.92	5690.00	5729.92	---	---
		5710 UNII-2C	35	5690.00	5725	---	---
		5710 UNII-3	4.92	5725	5729.92	---	---
		5755	47.60	5735.00	5782.60	---	---
		5795	47.36	5775.16	5822.52	---	---
11AC20SISO	Ant1	5180	21.32	5169.32	5190.64	---	---
		5200	21.28	5189.36	5210.64	---	---
		5240	21.32	5229.24	5250.56	---	---
		5260	21.24	5249.32	5270.56	---	---
		5280	21.36	5269.32	5290.68	---	---
		5320	21.20	5309.32	5330.52	---	---
		5500	21.24	5489.36	5510.60	---	---
		5580	21.48	5569.24	5590.72	---	---
		5700	21.28	5689.36	5710.64	---	---
		5720	21.28	5709.40	5730.68	---	---
		5720 UNII-2C	15.6	5709.40	5725	---	---
		5720 UNII-3	5.68	5725	5730.68	---	---
		5745	21.56	5734.28	5755.84	---	---
		5785	22.80	5773.36	5796.16	---	---

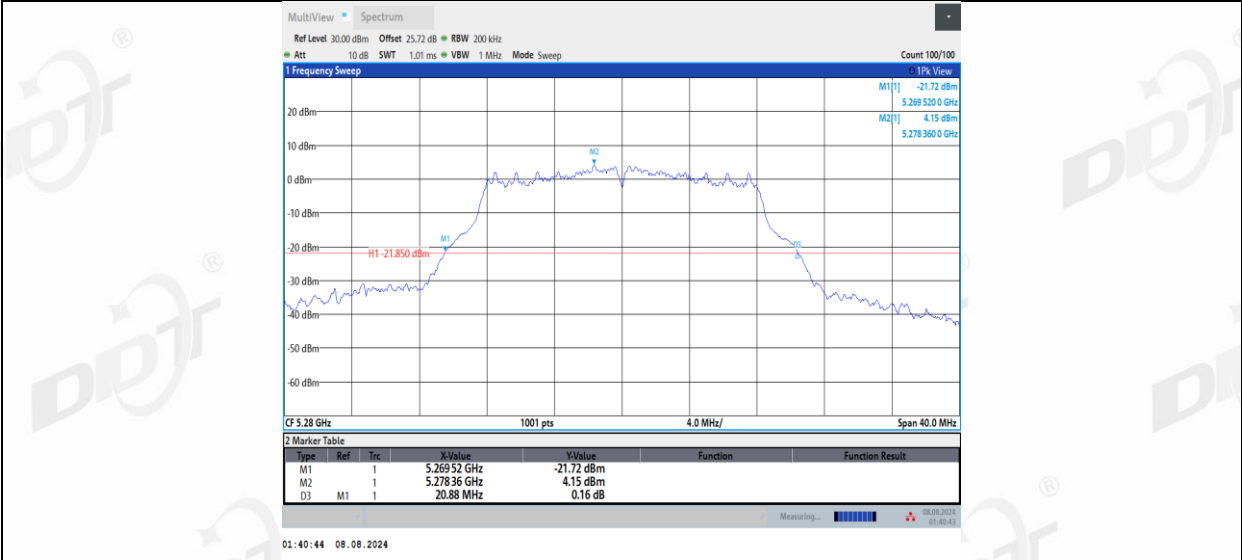
		5825	22.36	5813.40	5835.76	---	---
11AC40SISO	Ant1	5190	40.16	5169.92	5210.08	---	---
		5230	40.16	5209.84	5250.00	---	---
		5270	39.84	5250.00	5289.84	---	---
		5310	40.08	5289.92	5330.00	---	---
		5510	40.00	5490.00	5530.00	---	---
		5550	40.00	5530.08	5570.08	---	---
		5670	40.00	5650.08	5690.08	---	---
		5710	39.84	5690.08	5729.92	---	---
		5710 UNII-2C	34.92	5690.08	5725	---	---
		5710 UNII-3	4.92	5725	5729.92	---	---
		5755	46.32	5735.00	5781.32	---	---
		5795	42.72	5775.08	5817.80	---	---
11AC80SISO	Ant1	5210	80.96	5169.52	5250.48	---	---
		5290	81.60	5249.04	5330.64	---	---
		5530	81.28	5489.52	5570.80	---	---
		5610	81.44	5569.52	5650.96	---	---
		5690	81.60	5649.52	5731.12	---	---
		5690 UNII-2C	75.48	5649.52	5725	---	---
		5690 UNII-3	6.12	5725	5731.12	---	---
		5775	88.96	5734.52	5823.48	---	---

4.5. Test graphs

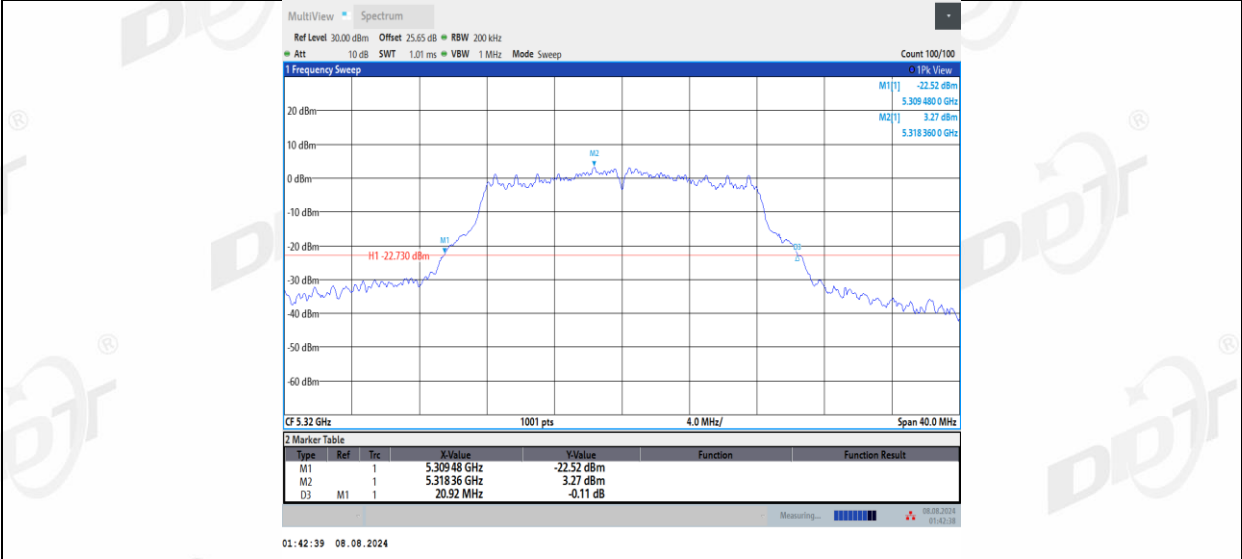




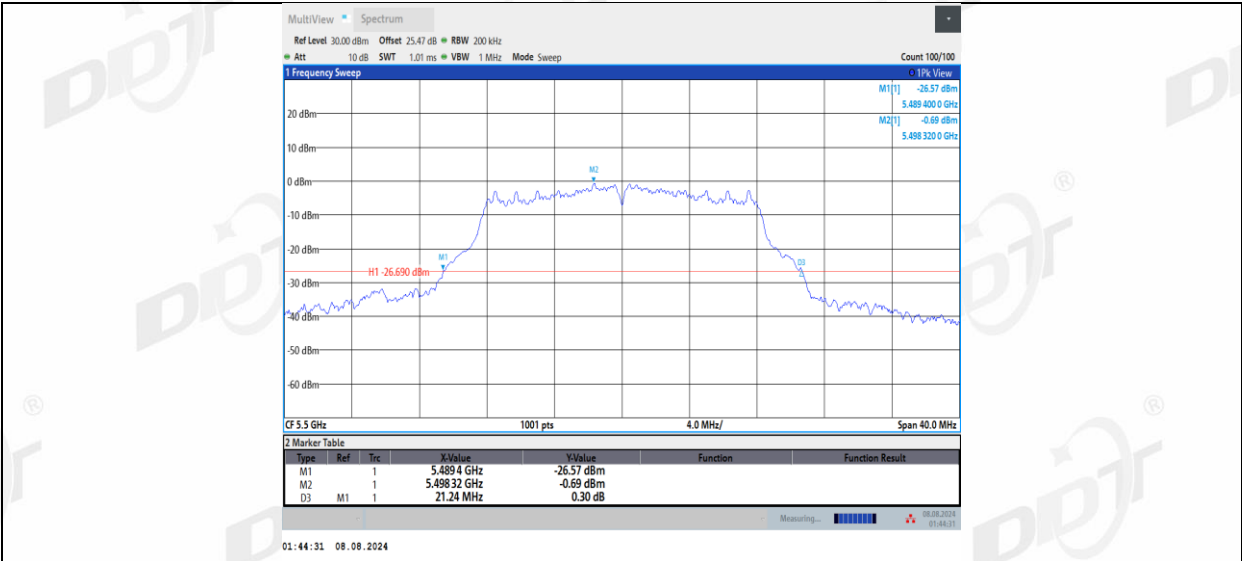
11A_Ant1_5280



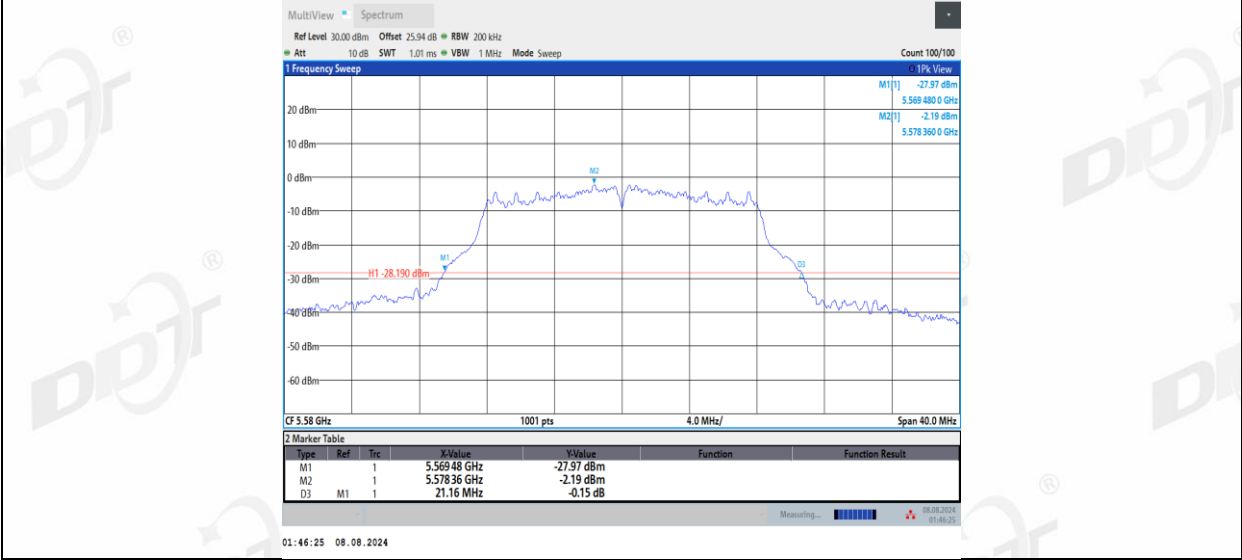
11A_Ant1_5320



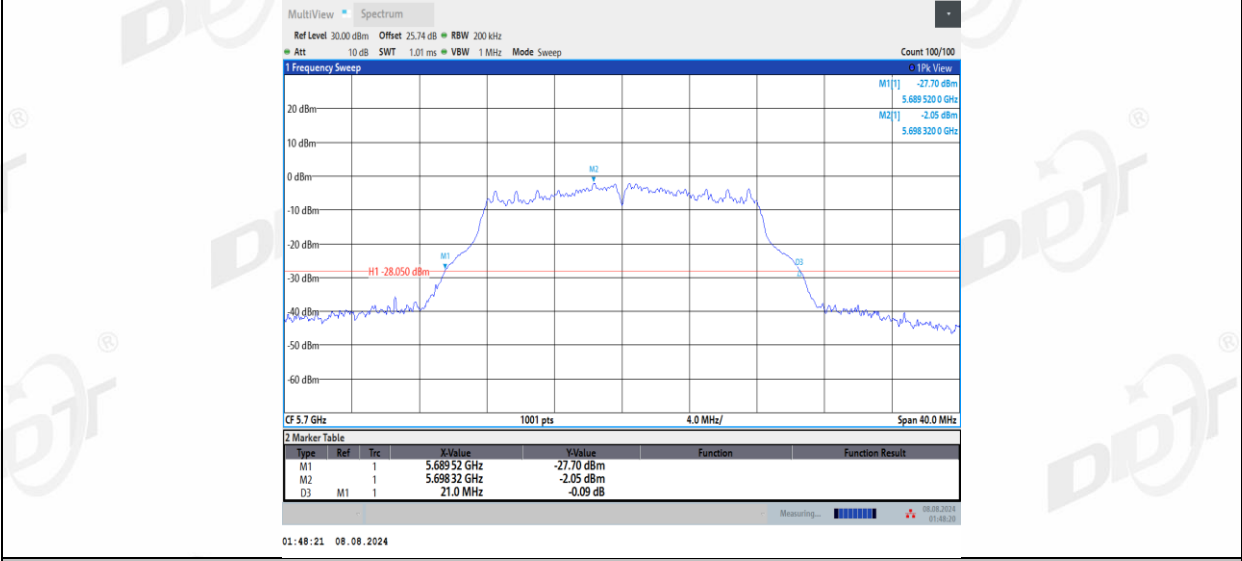
11A_Ant1_5500



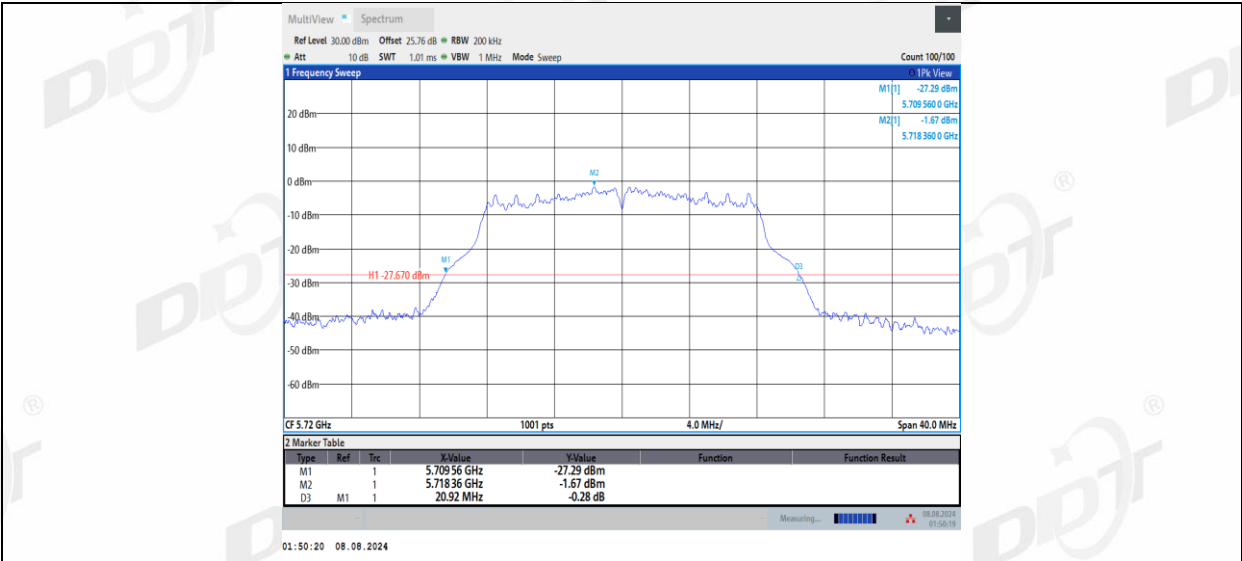
11A_Ant1_5580



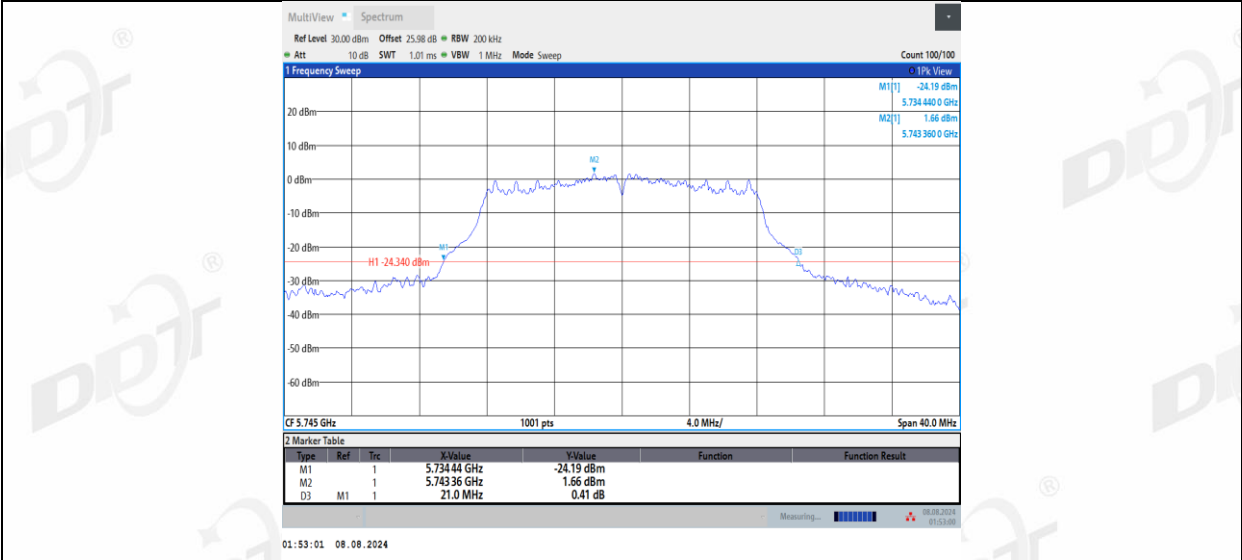
11A_Ant1_5700



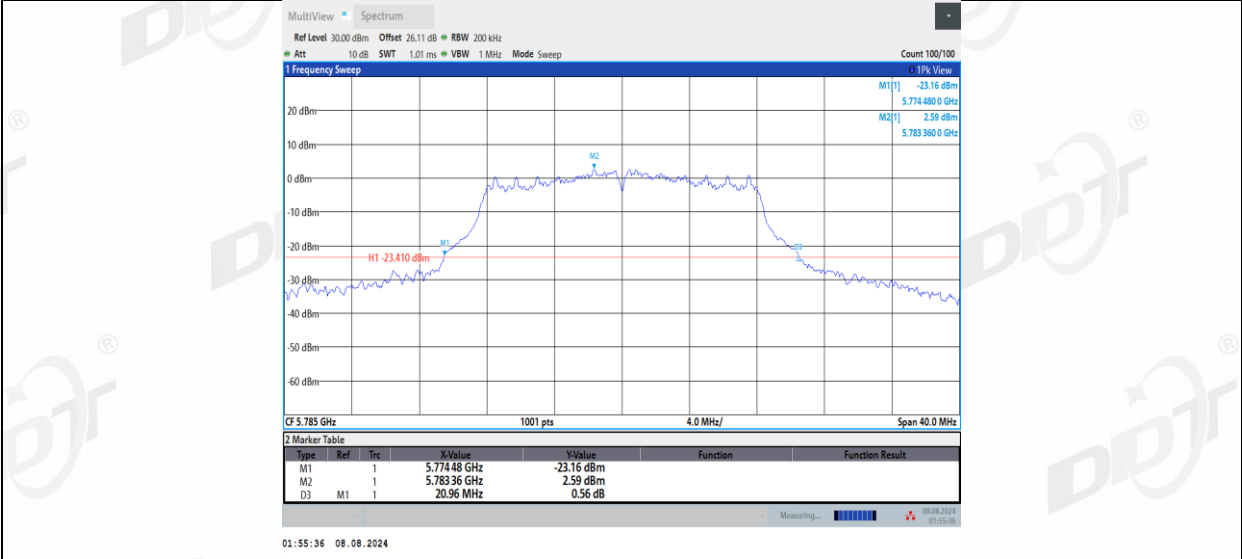
11A_Ant1_5720



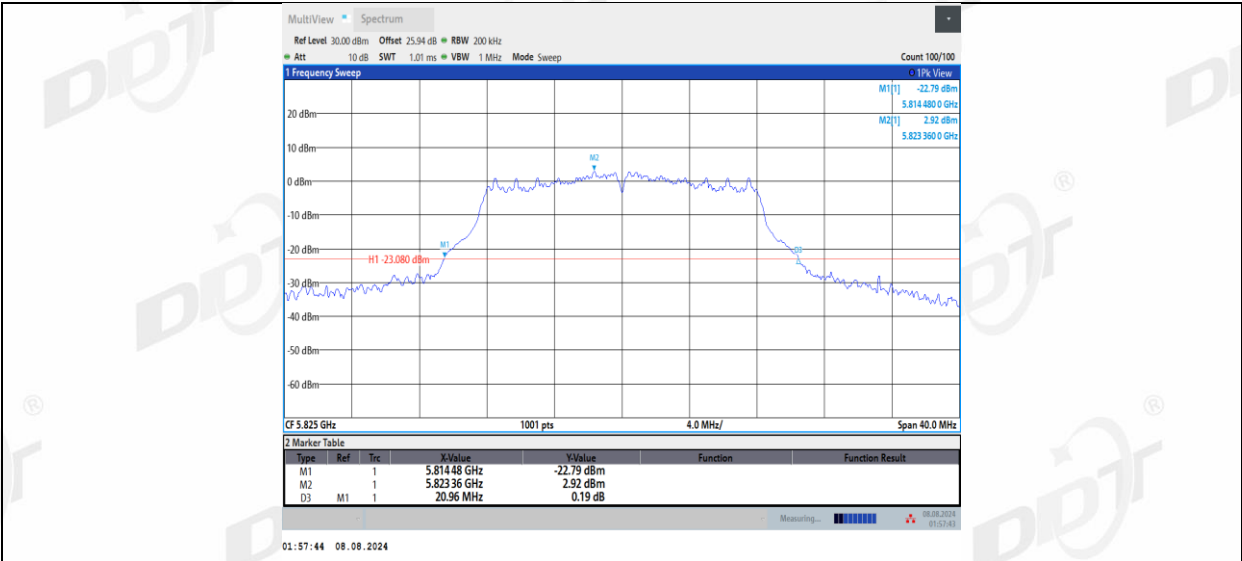
11A_Ant1_5745



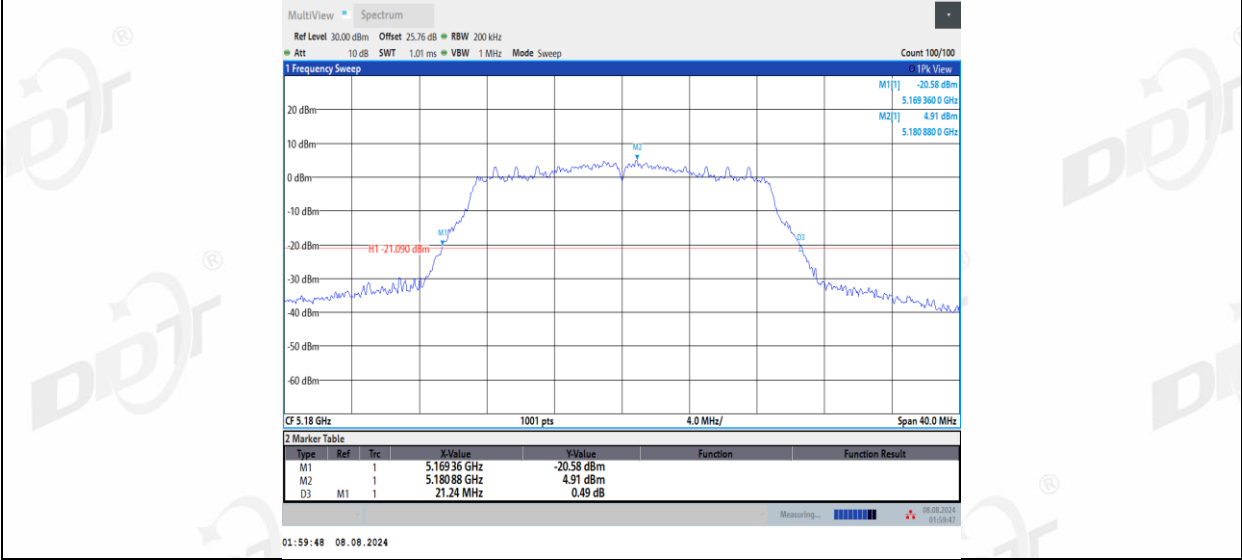
11A_Ant1_5785



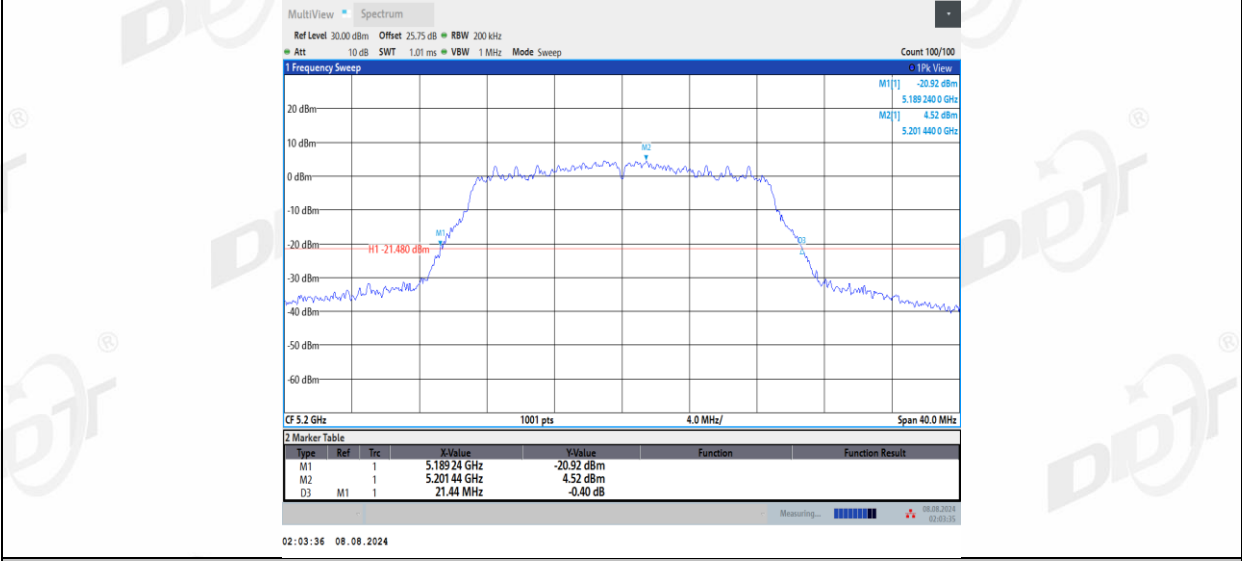
11A_Ant1_5825



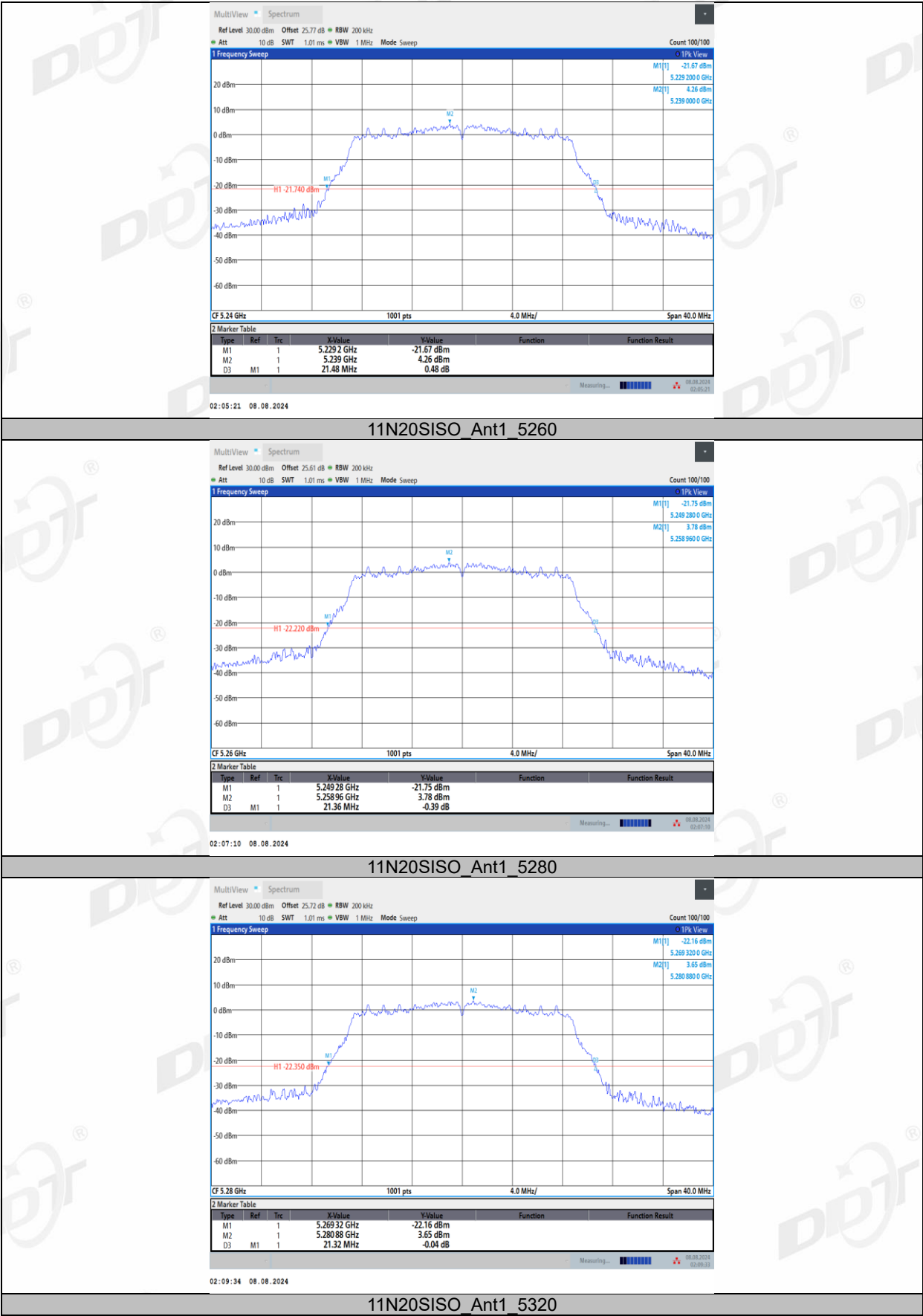
11N20SISO_Ant1_5180

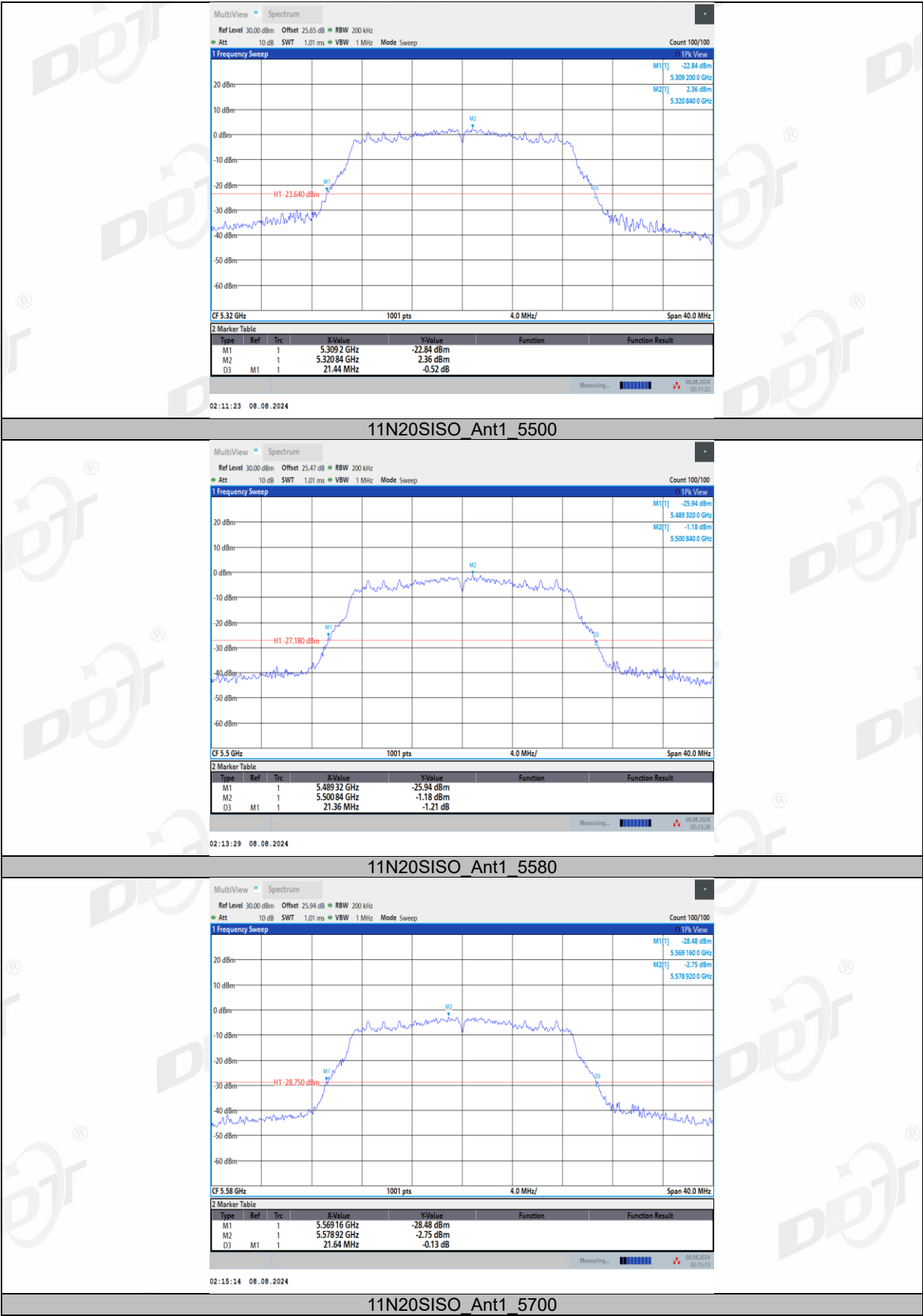


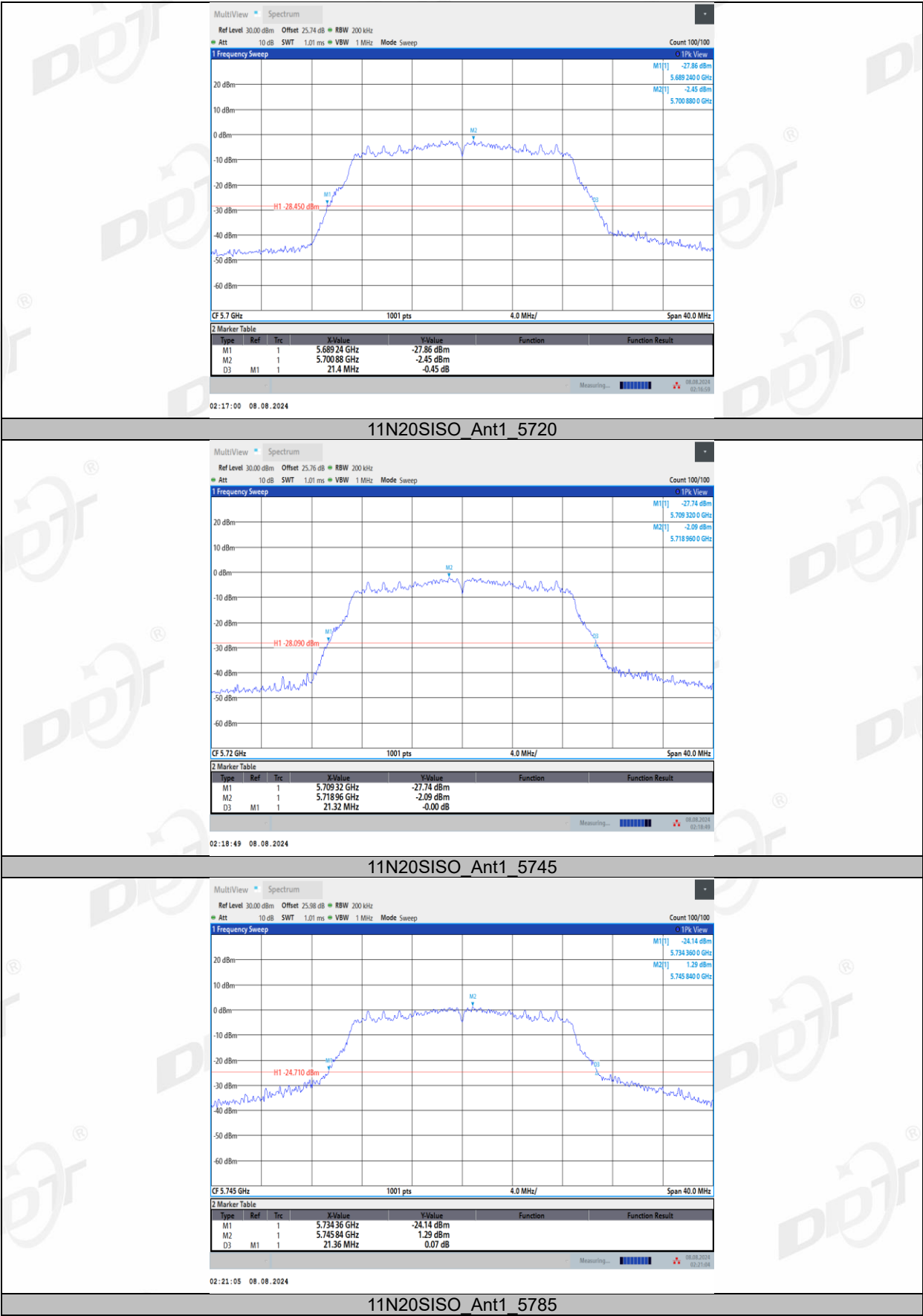
11N20SISO_Ant1_5200

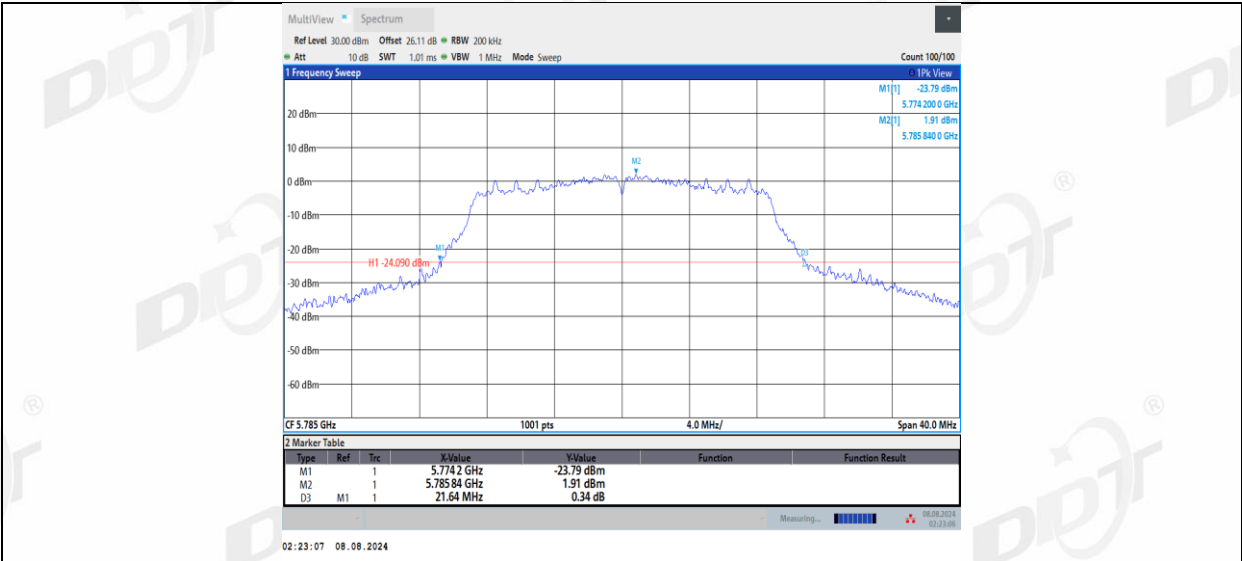


11N20SISO_Ant1_5240

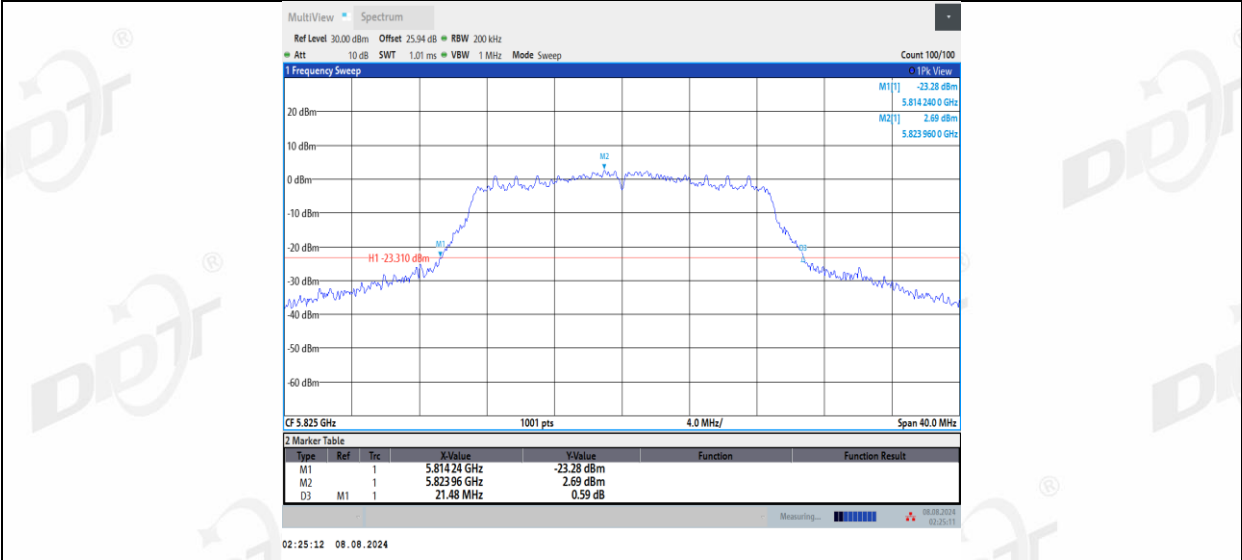




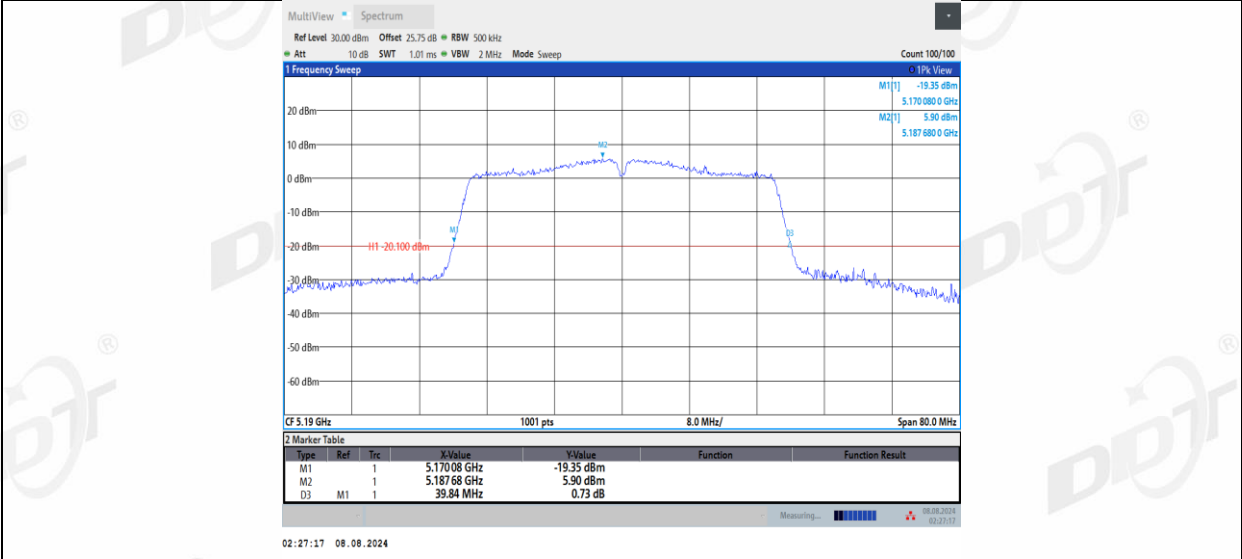




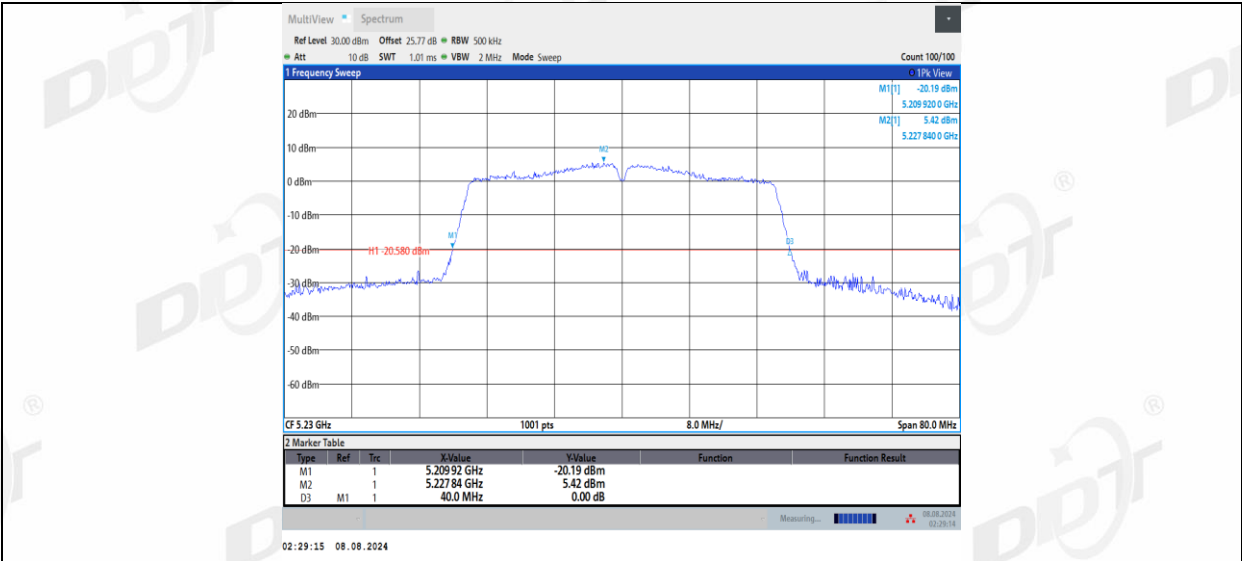
11N20SISO_Ant1_5825



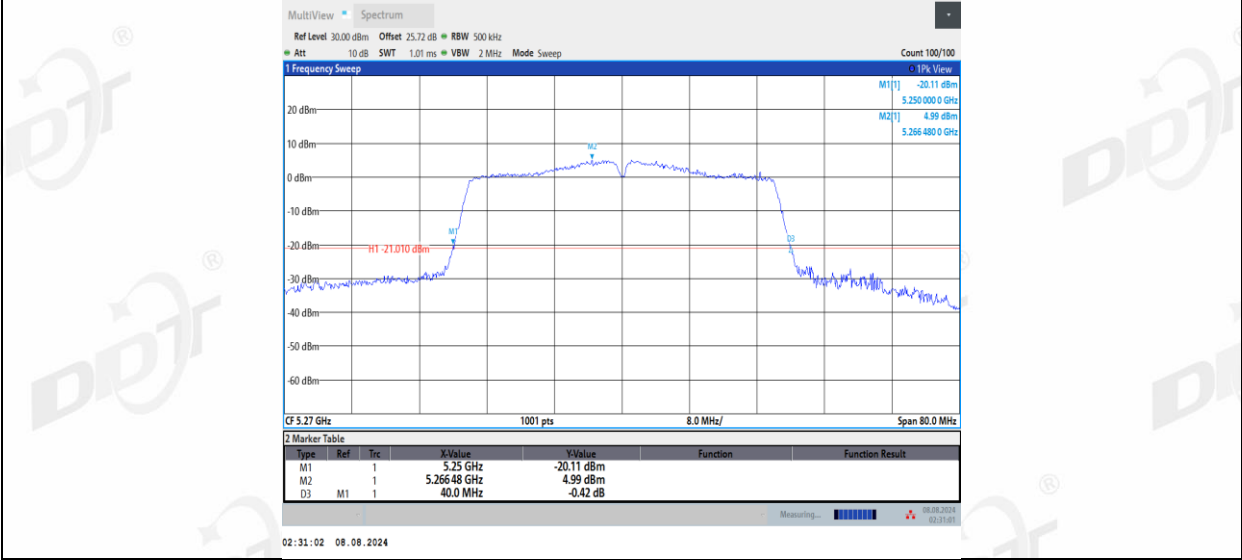
11N40SISO_Ant1_5190



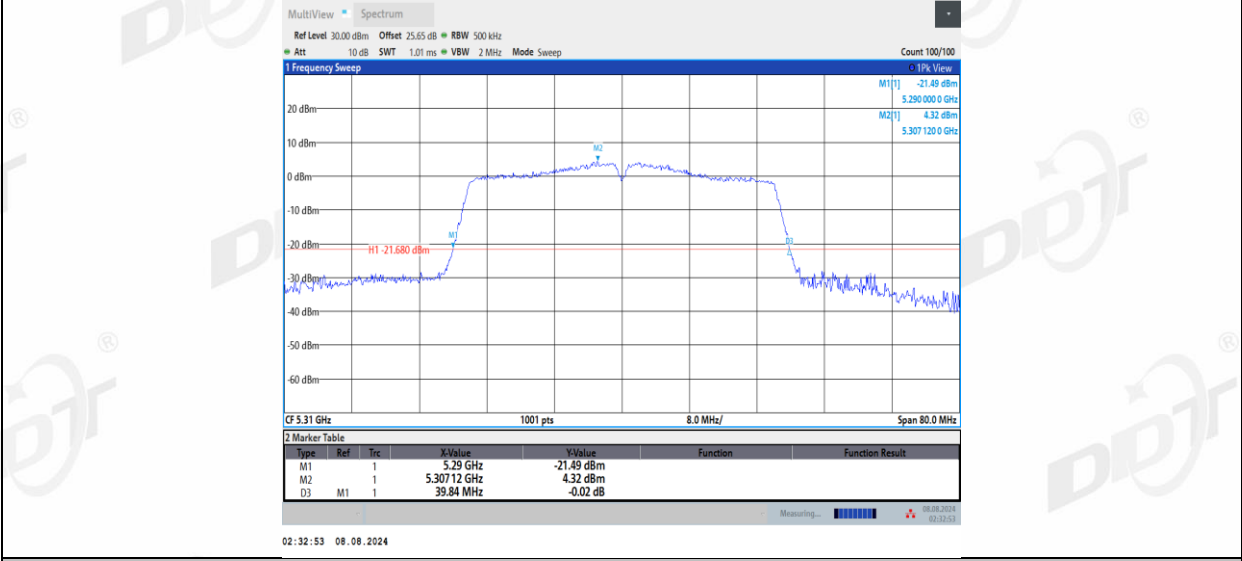
11N40SISO_Ant1_5230



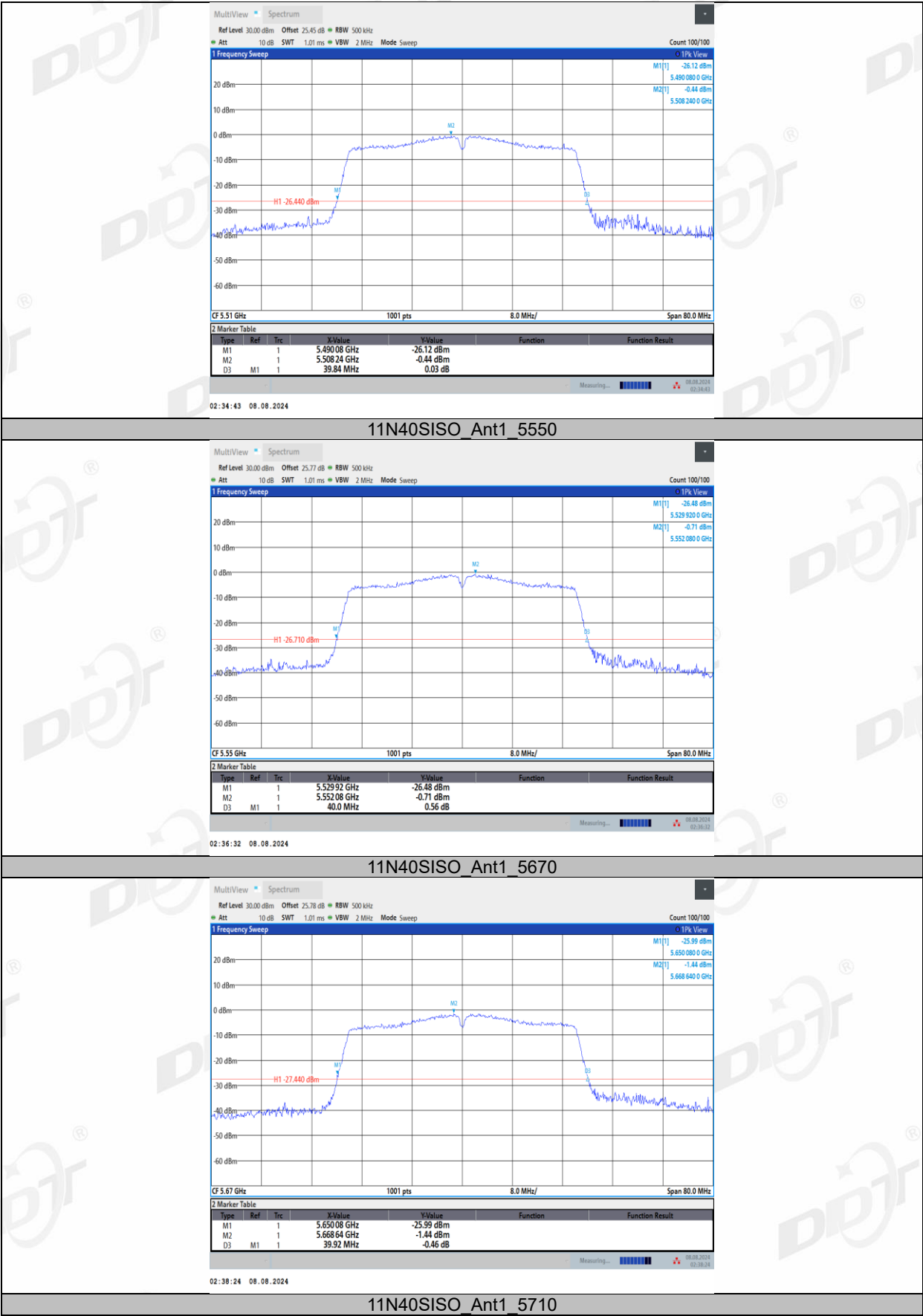
11N40SISO_Ant1_5270

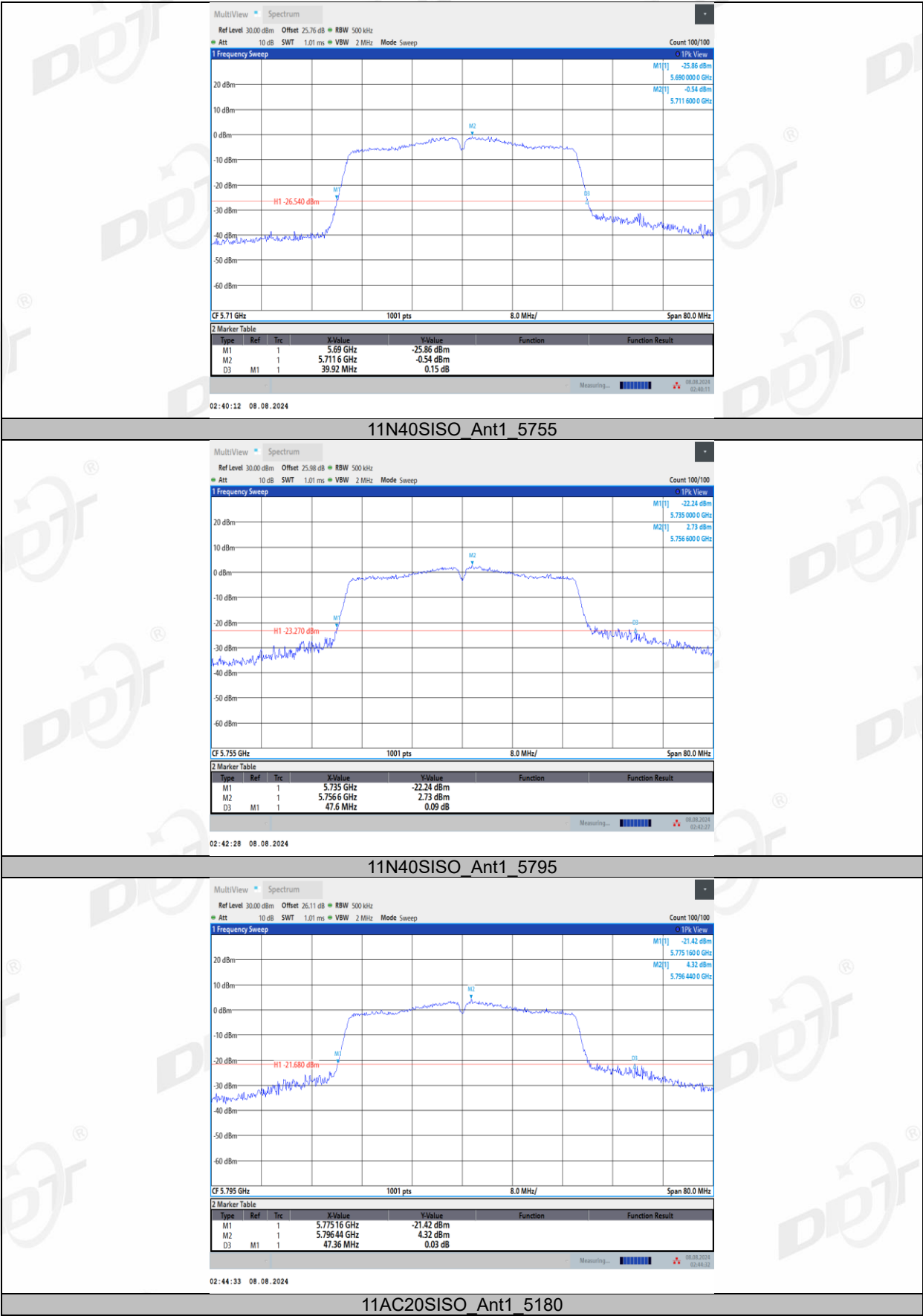


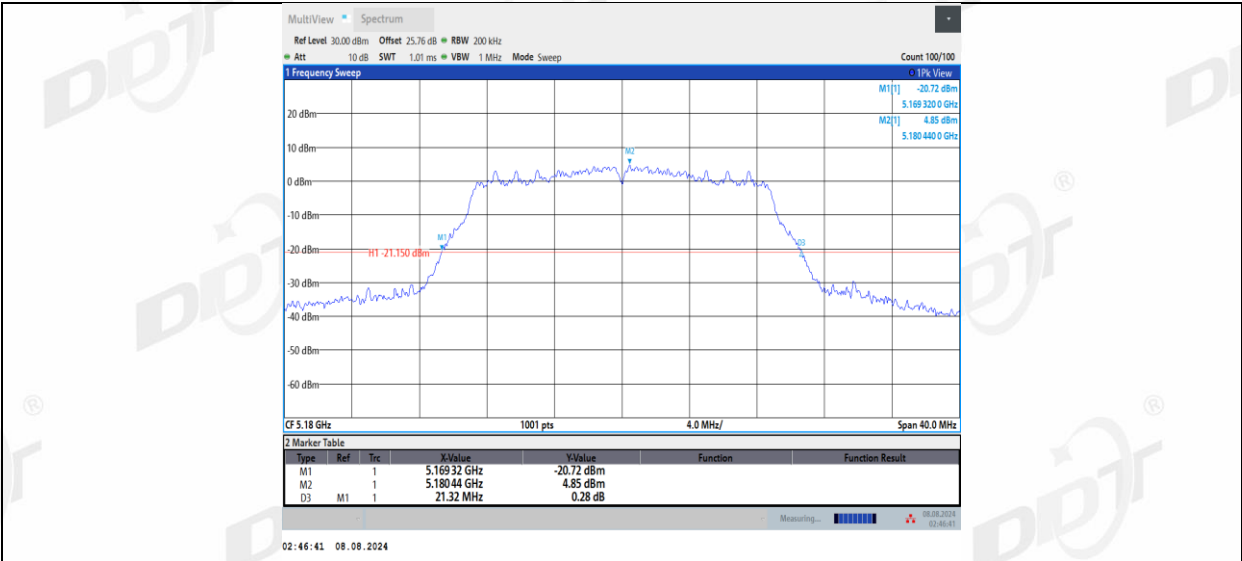
11N40SISO_Ant1_5310



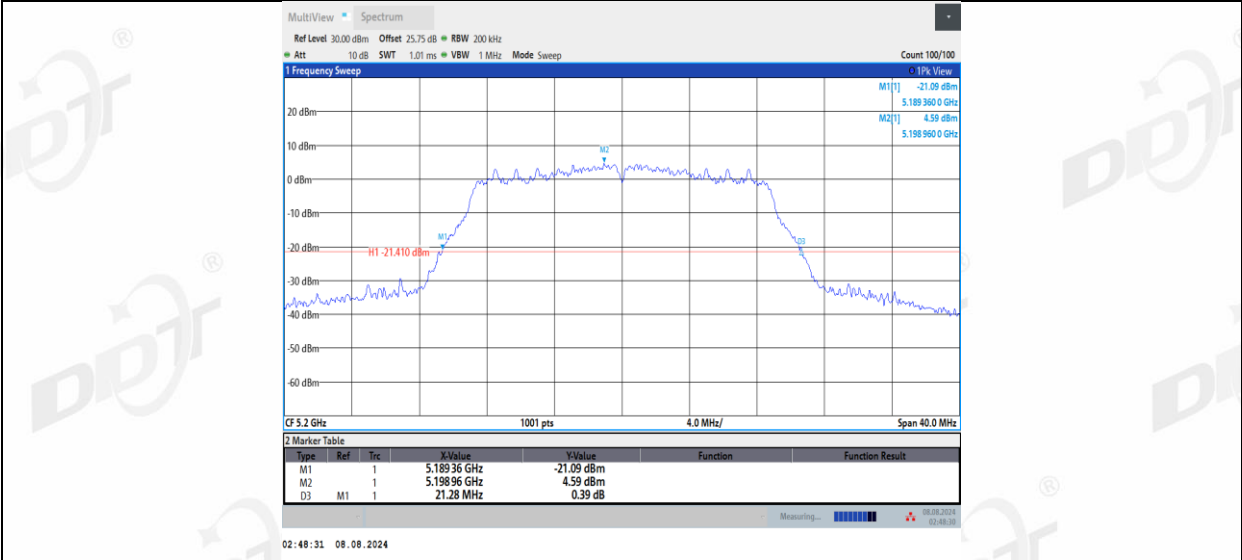
11N40SISO_Ant1_5510



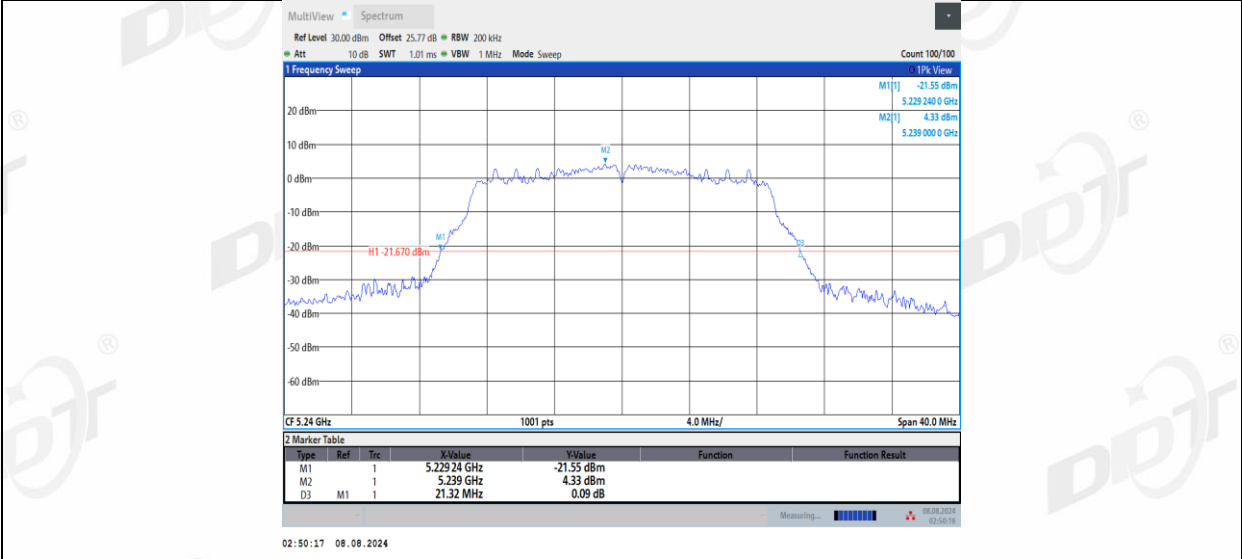




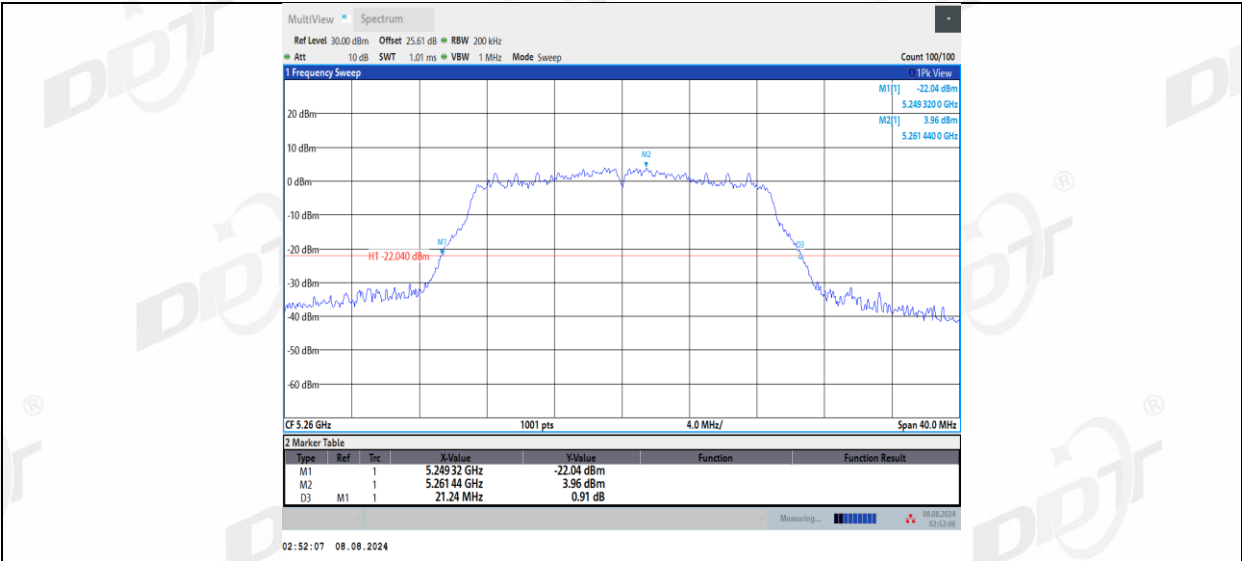
11AC20SISO_Ant1_5200



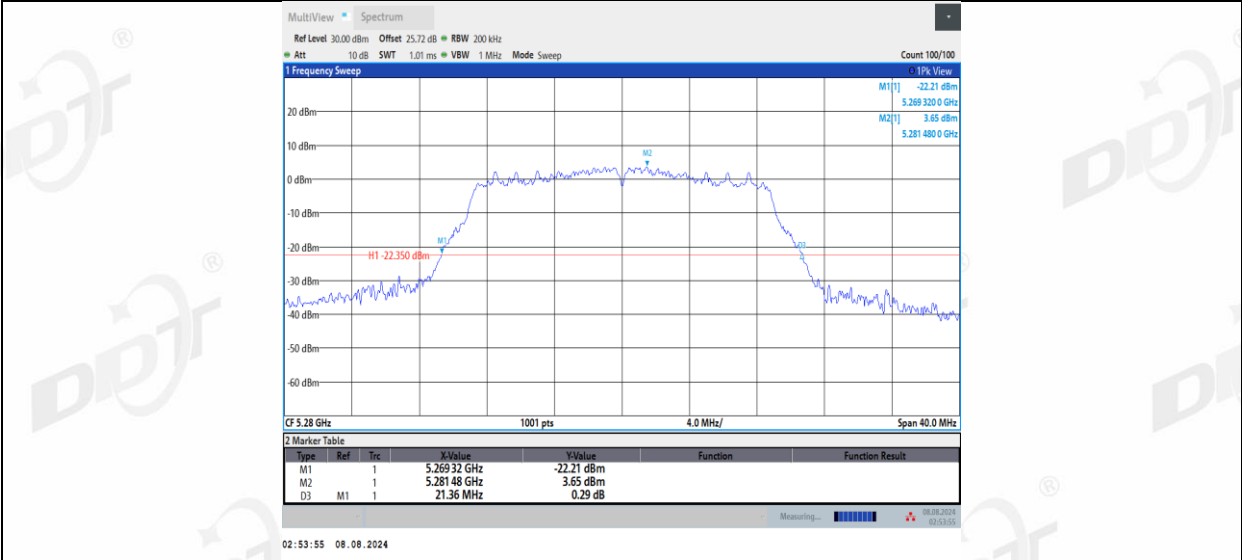
11AC20SISO_Ant1_5240



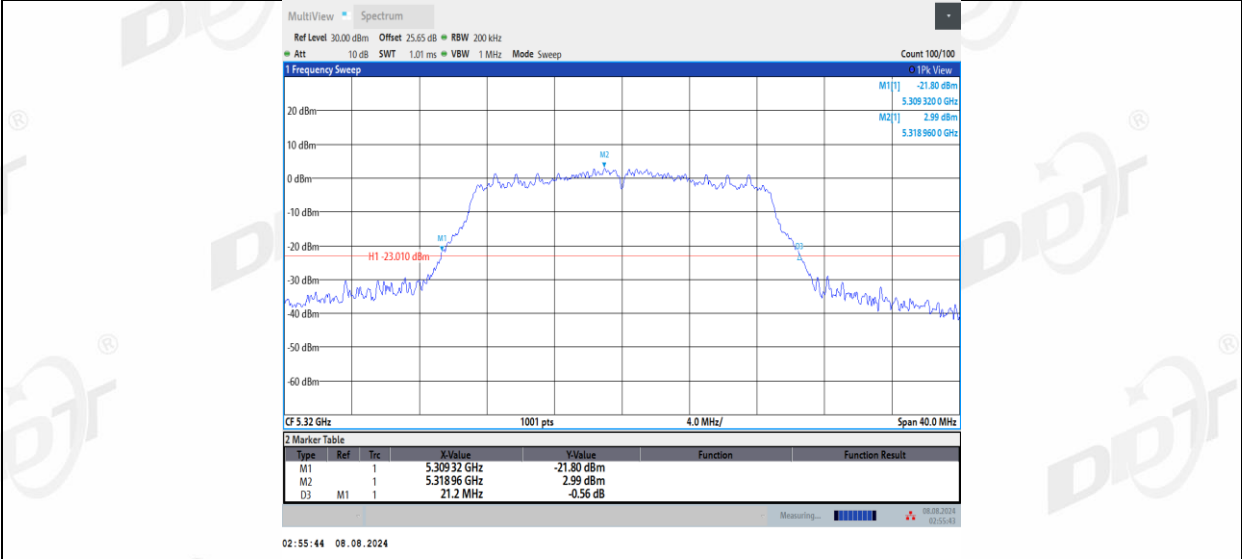
11AC20SISO_Ant1_5260



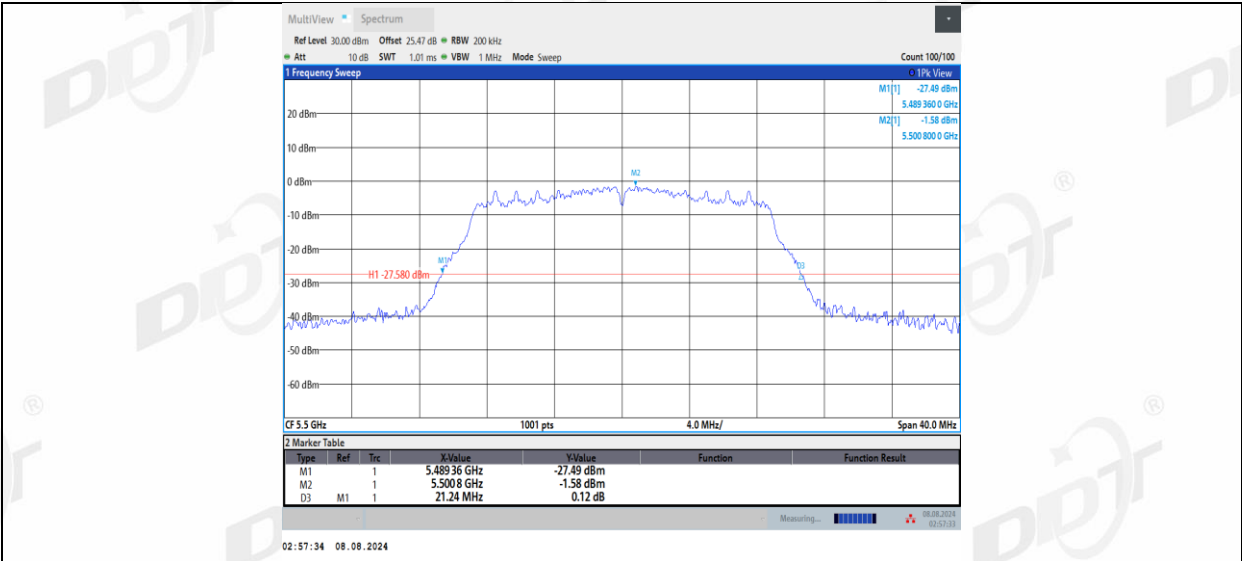
11AC20SISO_Ant1_5280



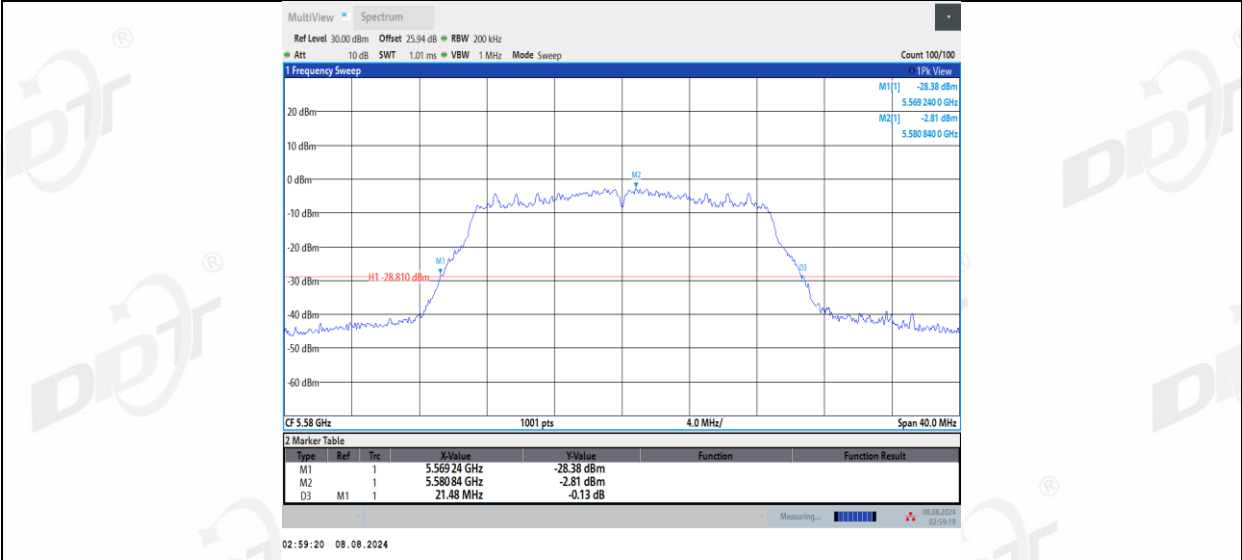
11AC20SISO_Ant1_5320



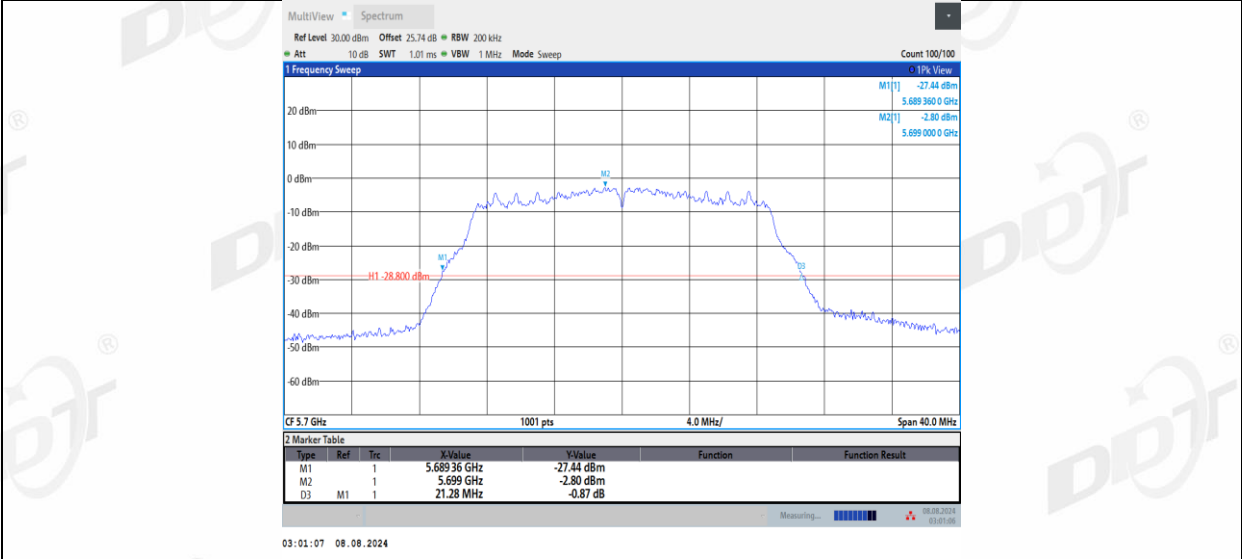
11AC20SISO_Ant1_5500



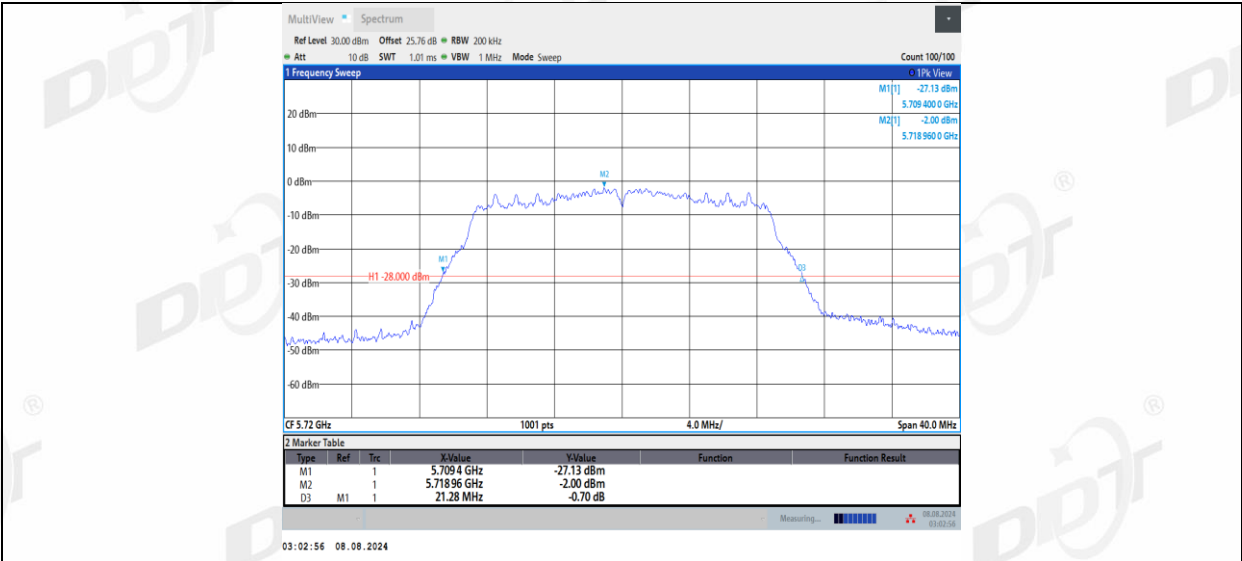
11AC20SISO_Ant1_5580



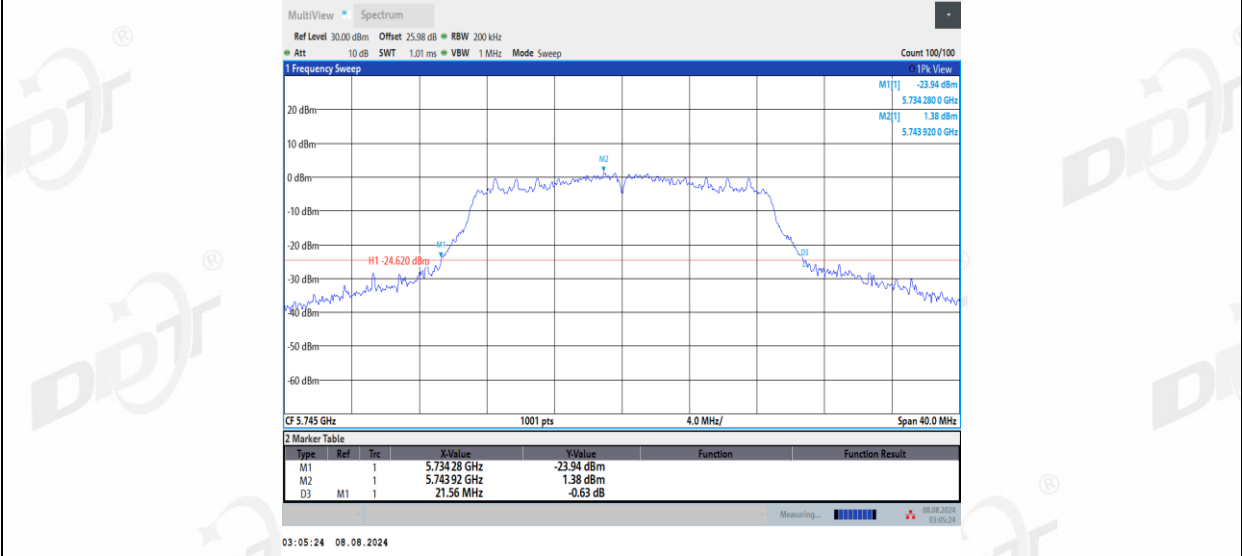
11AC20SISO_Ant1_5700



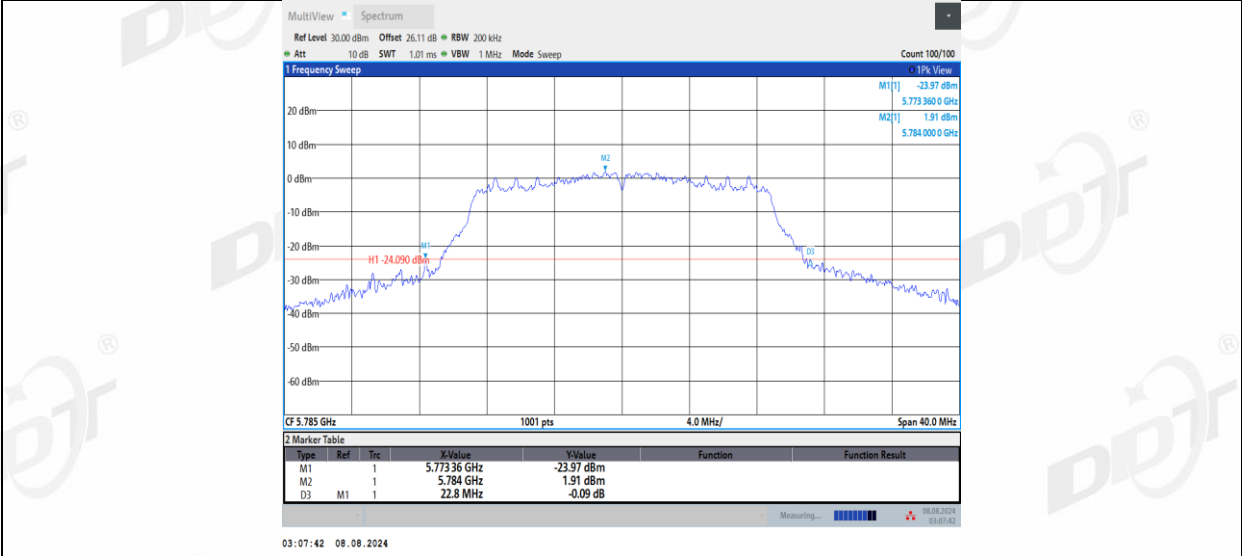
11AC20SISO_Ant1_5720



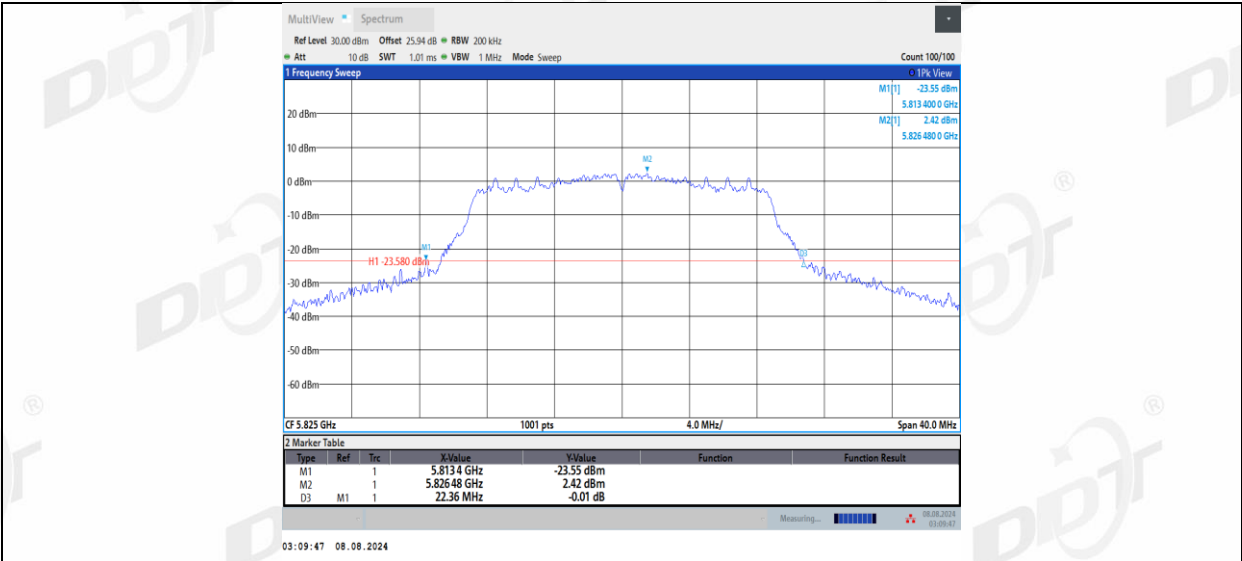
11AC20SISO_Ant1_5745



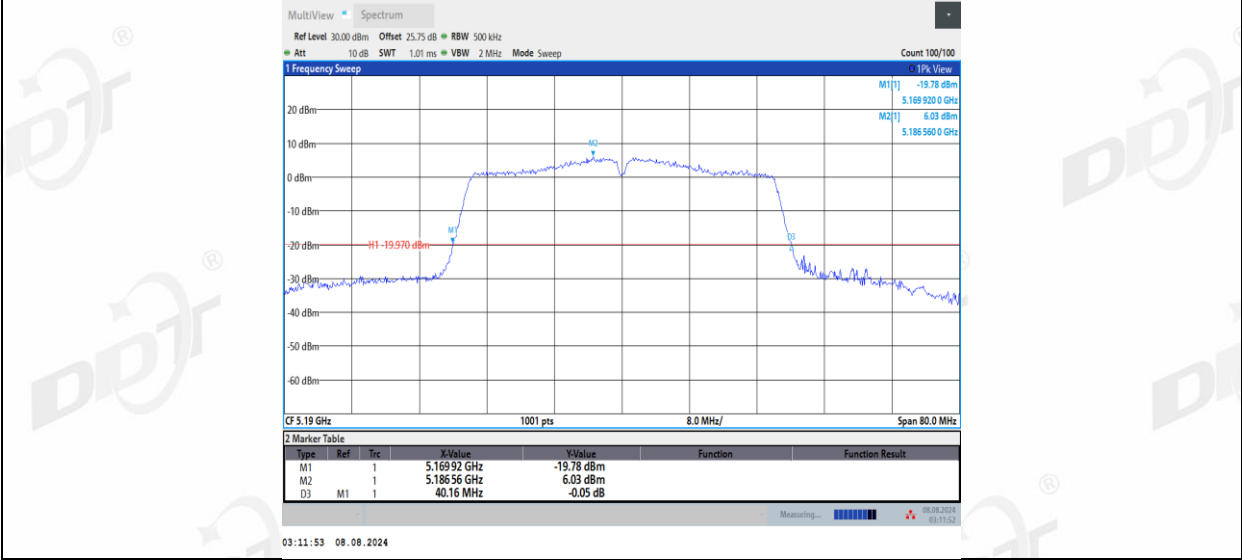
11AC20SISO_Ant1_5785



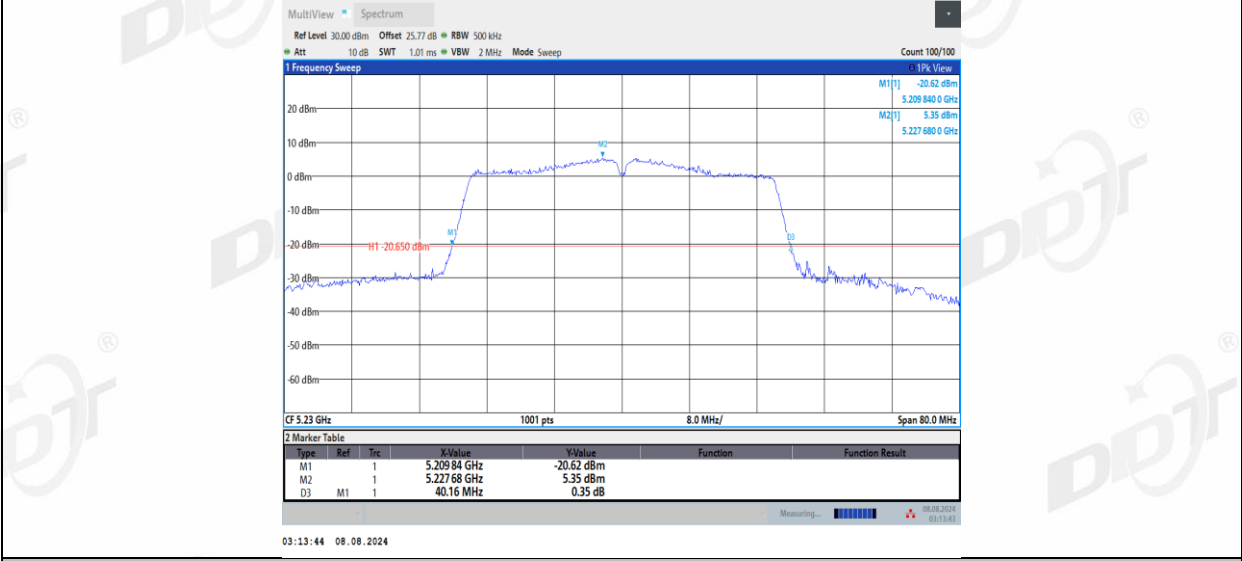
11AC20SISO_Ant1_5825



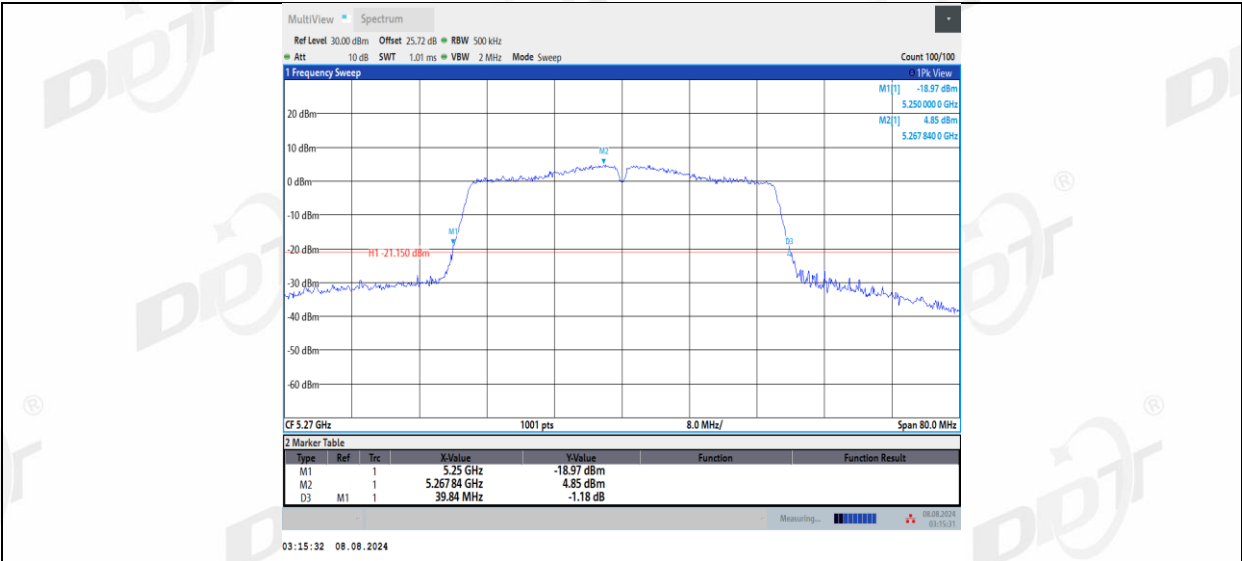
11AC40SISO_Ant1_5190



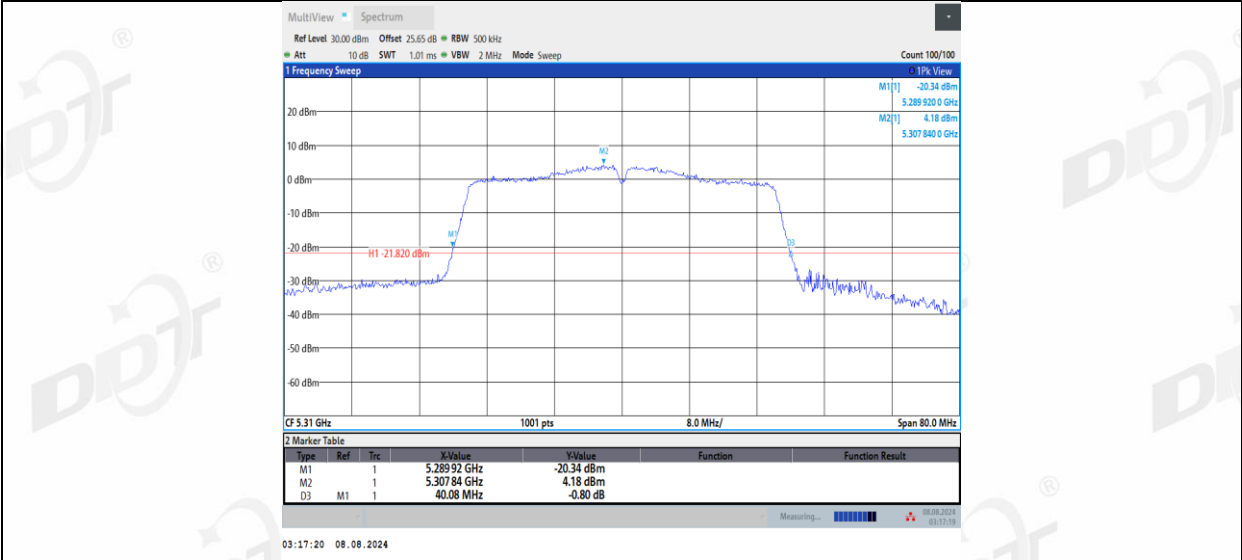
11AC40SISO_Ant1_5230



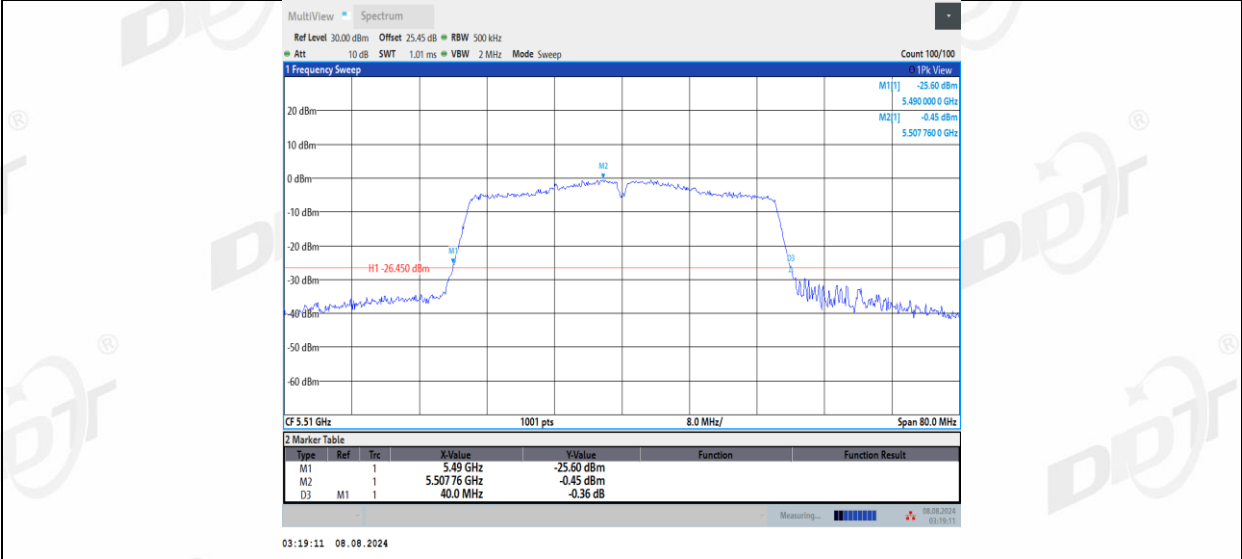
11AC40SISO_Ant1_5270



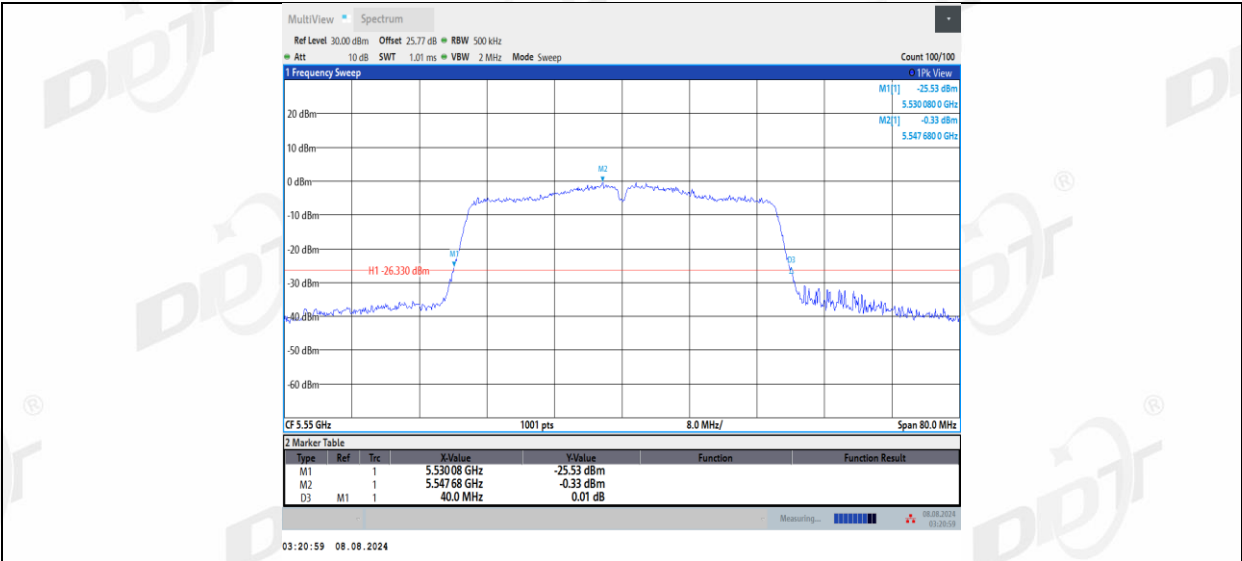
11AC40SISO_Ant1_5310



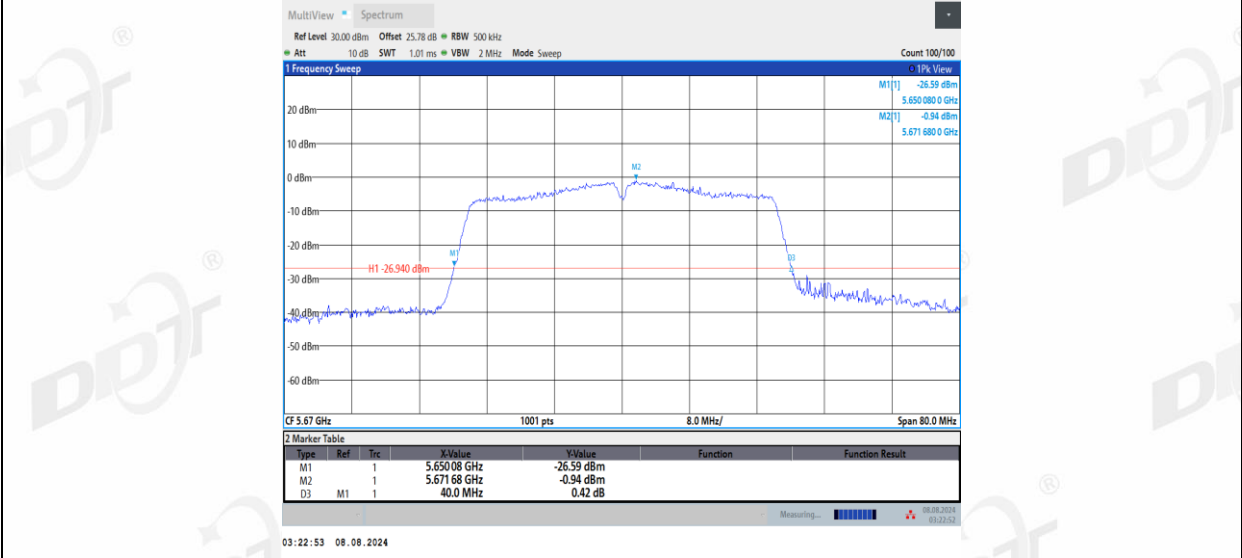
11AC40SISO_Ant1_5510



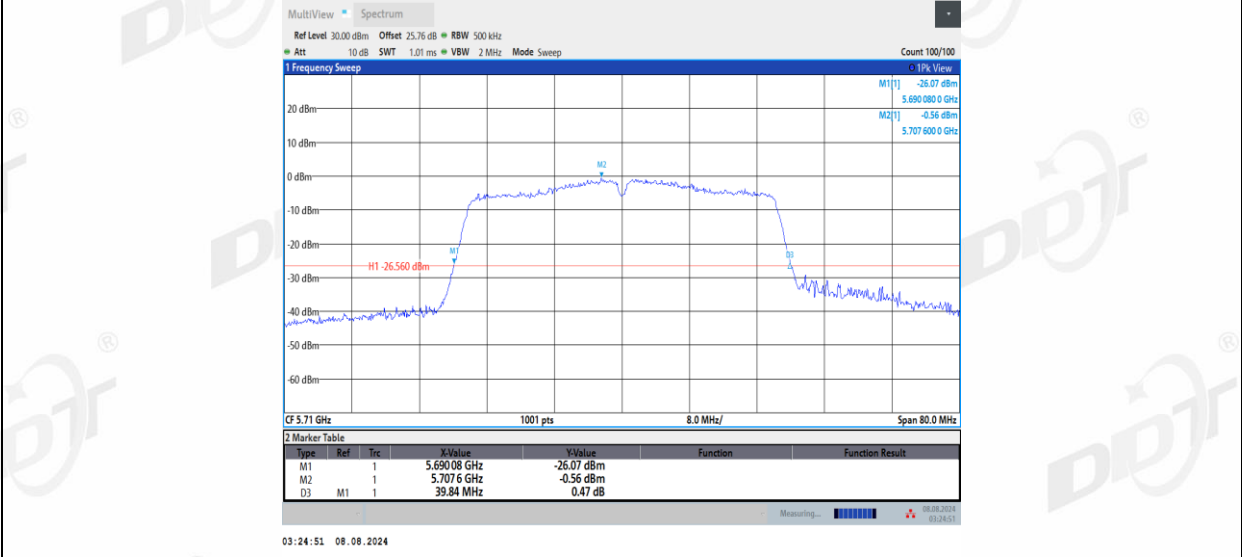
11AC40SISO_Ant1_5550



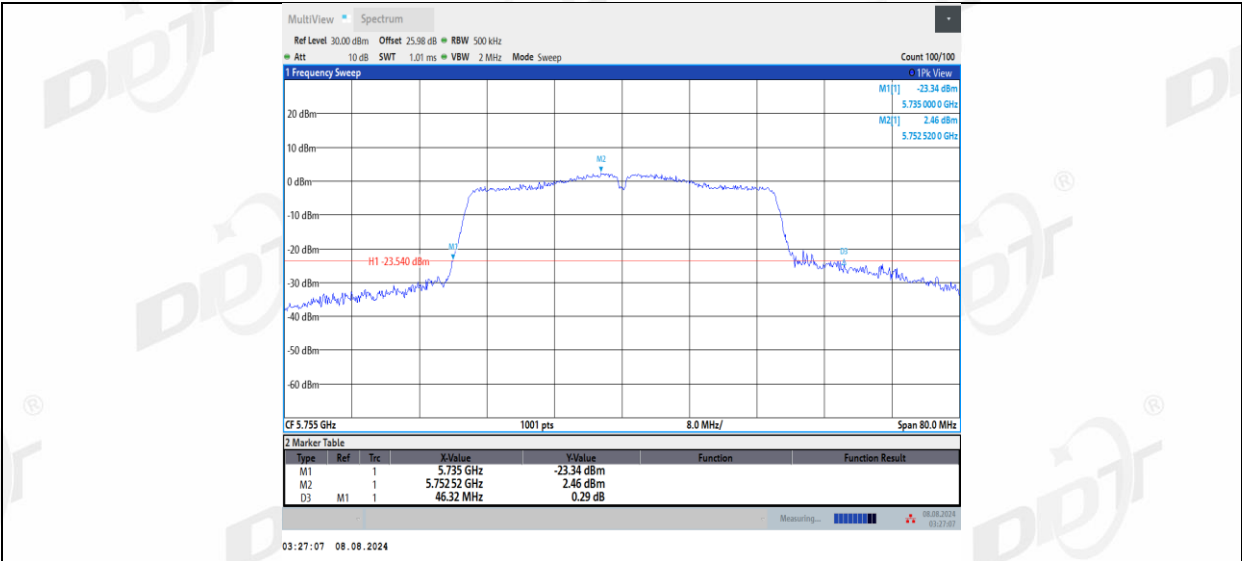
11AC40SISO_Ant1_5670



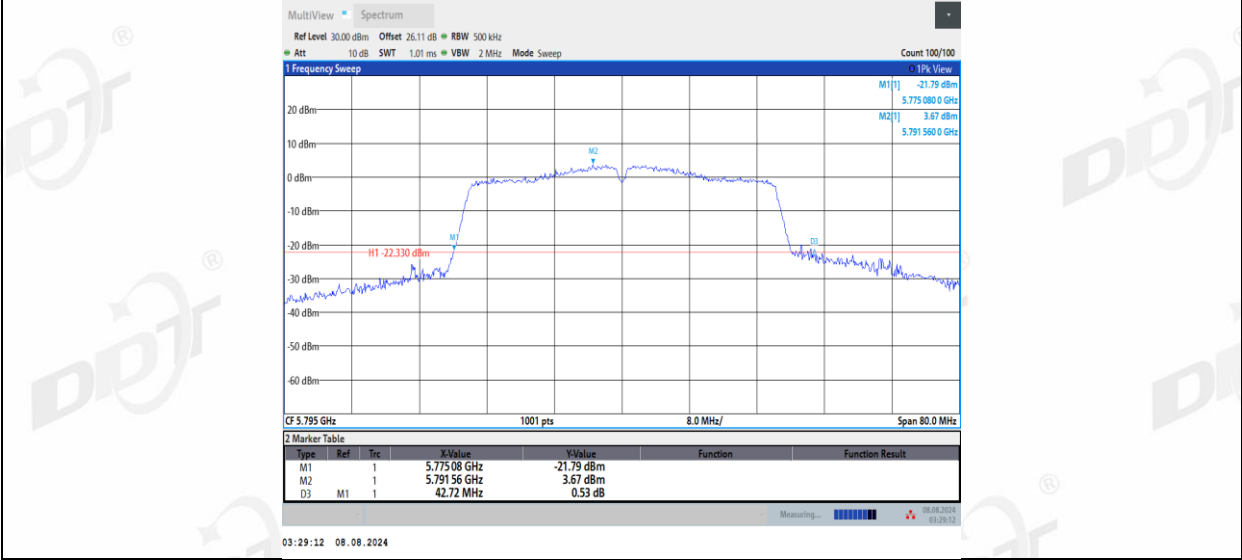
11AC40SISO_Ant1_5710



11AC40SISO_Ant1_5755



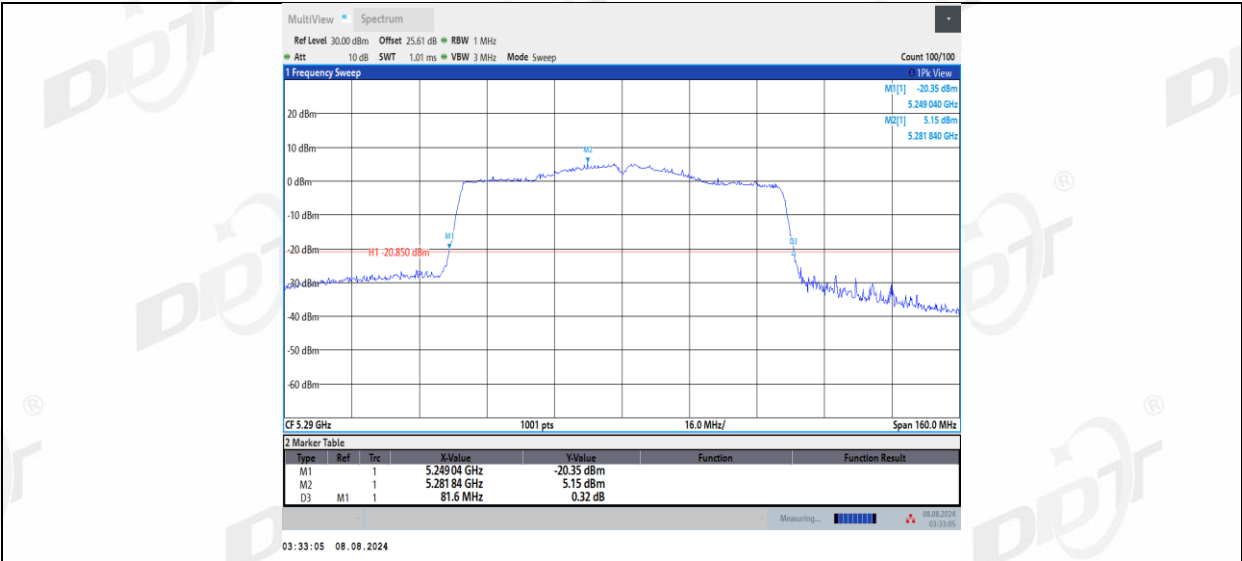
11AC40SISO_Ant1_5795



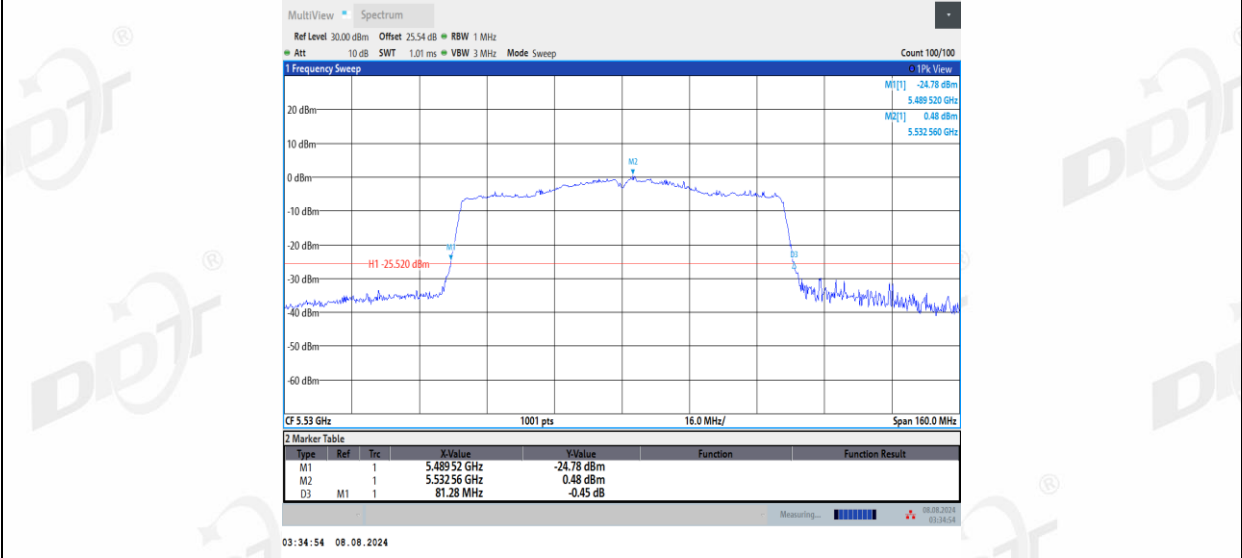
11AC80SISO_Ant1_5210



11AC80SISO_Ant1_5290



11AC80SISO_Ant1_5530



11AC80SISO_Ant1_5610

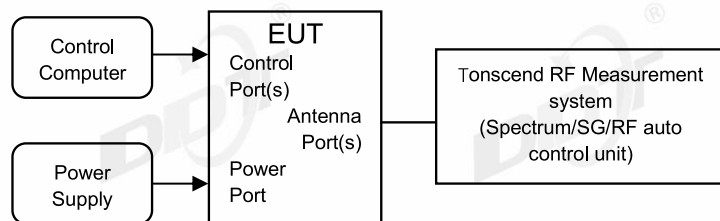


11AC80SISO_Ant1_5690



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.

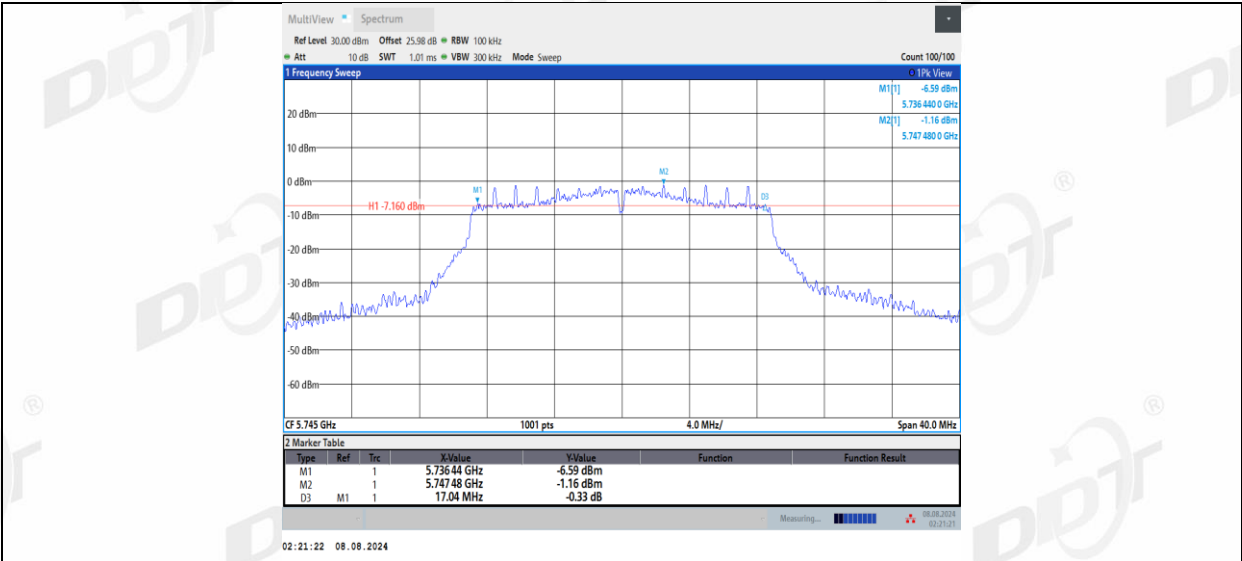
5.4. Test result B4

Test Engineer:	Haofeng	Test Site:	RF Measurement System 4#
Ambient Condition:	26.9℃,45.5%RH	Test Date:	2024.08.06-2024.08.08
Test Power Supply:	DC 5V	Sample Number:	S24071734-003

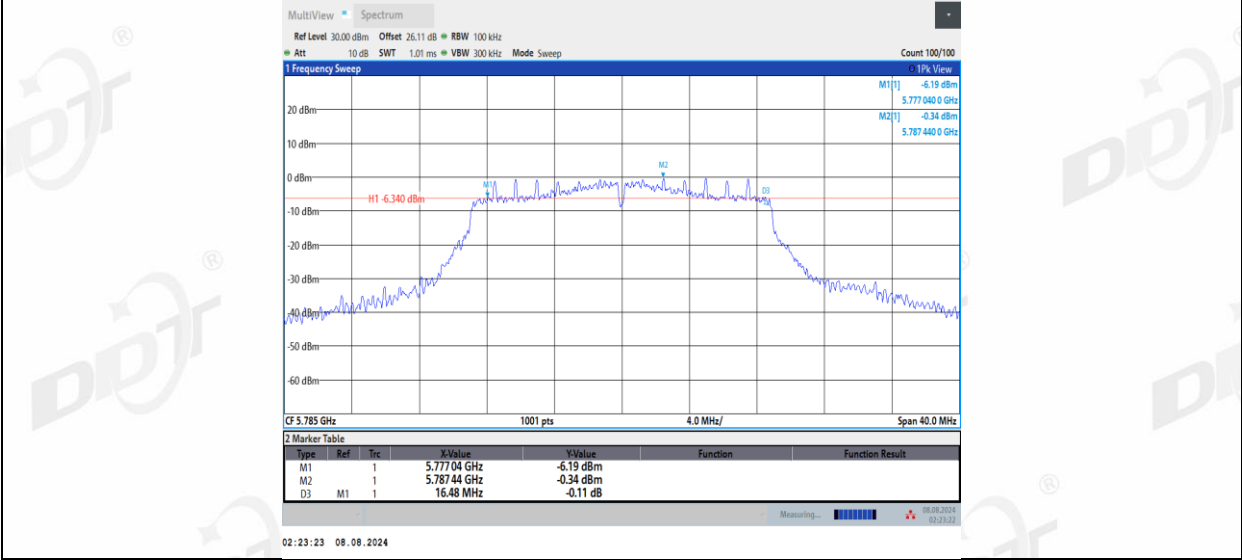
Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.28	5736.84	5753.12	0.5	PASS
		5785	16.28	5776.84	5793.12	0.5	PASS
		5825	16.32	5816.80	5833.12	0.5	PASS
11N20SISO	Ant1	5745	17.04	5736.44	5753.48	0.5	PASS
		5785	16.48	5777.04	5793.52	0.5	PASS
		5825	17.04	5816.44	5833.48	0.5	PASS
11N40SISO	Ant1	5755	35.52	5737.40	5772.92	0.5	PASS
		5795	35.52	5777.40	5812.92	0.5	PASS
11AC20SISO	Ant1	5745	17.04	5736.44	5753.48	0.5	PASS
		5785	16.76	5776.60	5793.36	0.5	PASS
		5825	16.92	5816.44	5833.36	0.5	PASS
11AC40SISO	Ant1	5755	35.52	5737.24	5772.76	0.5	PASS
		5795	35.20	5777.40	5812.60	0.5	PASS
11AC80SISO	Ant1	5775	75.20	5737.40	5812.60	0.5	PASS

5.5. Test graphs B4

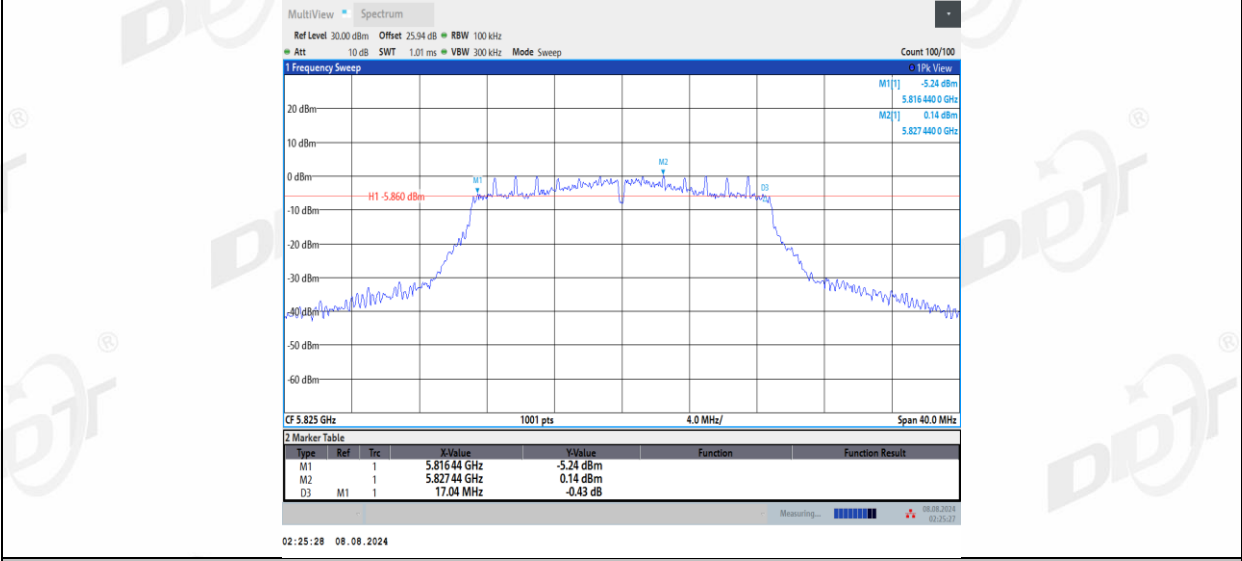




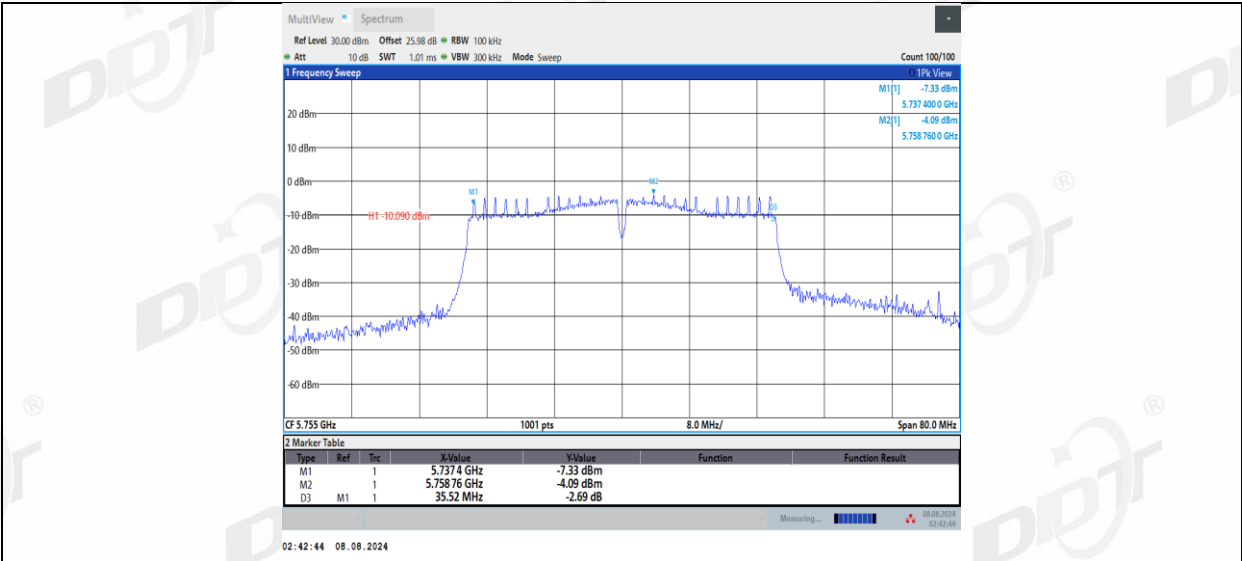
11N20SISO_Ant1_5785



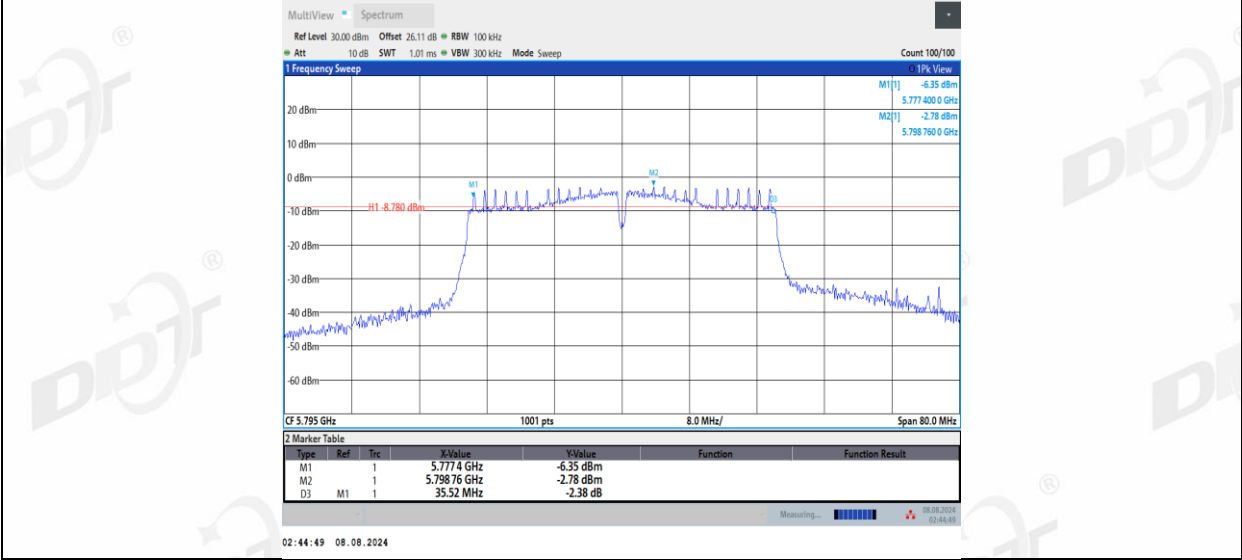
11N20SISO_Ant1_5825



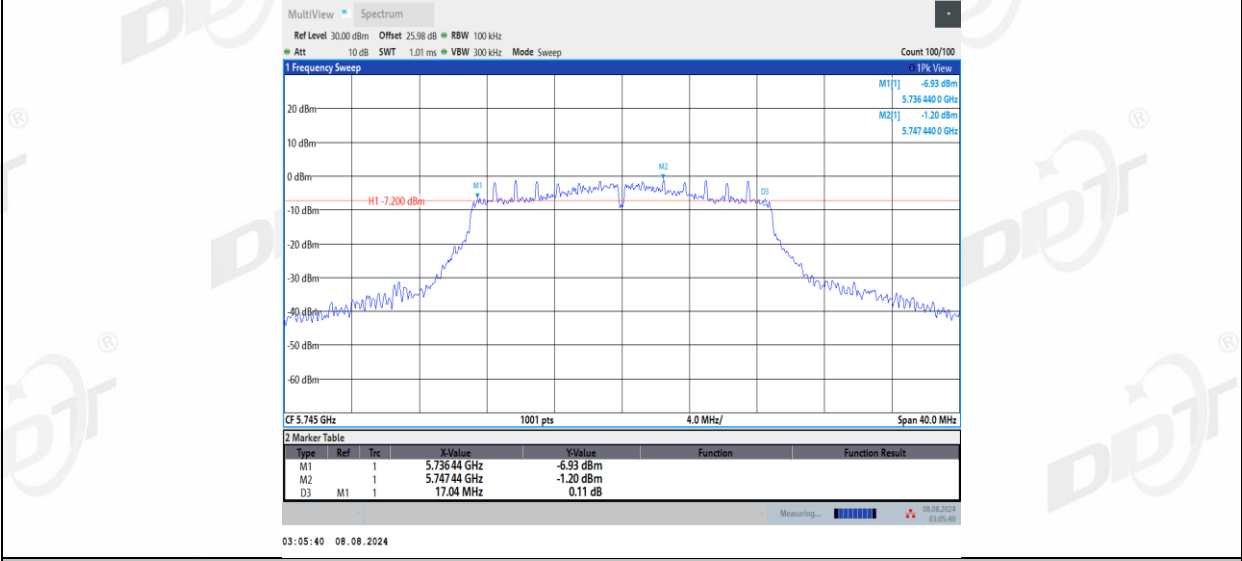
11N40SISO_Ant1_5755



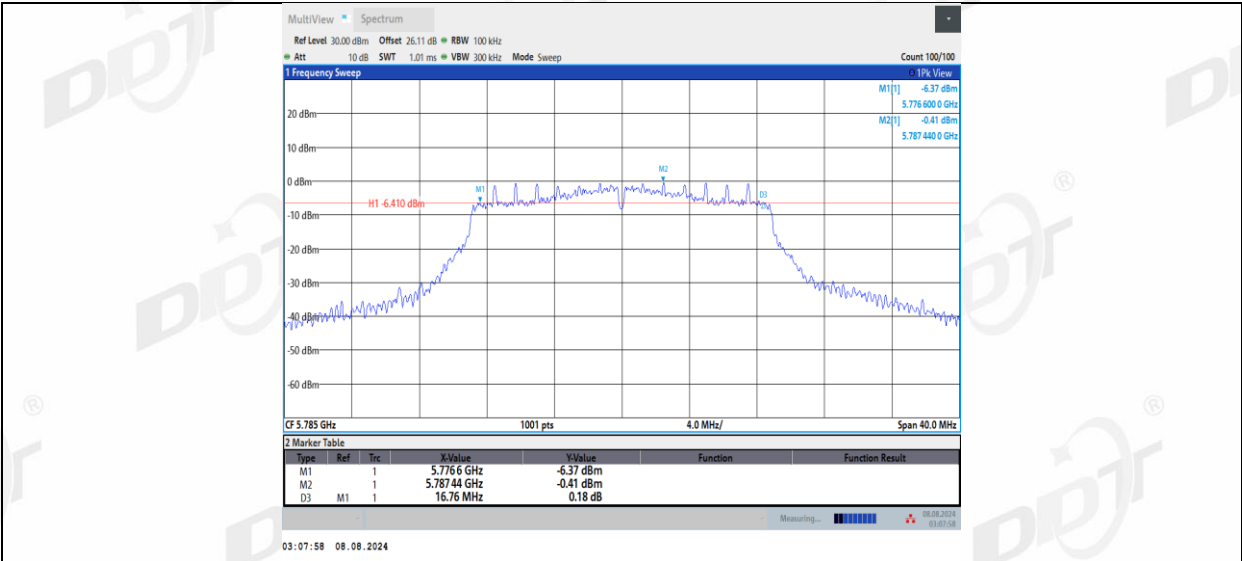
11N40SISO_Ant1_5795



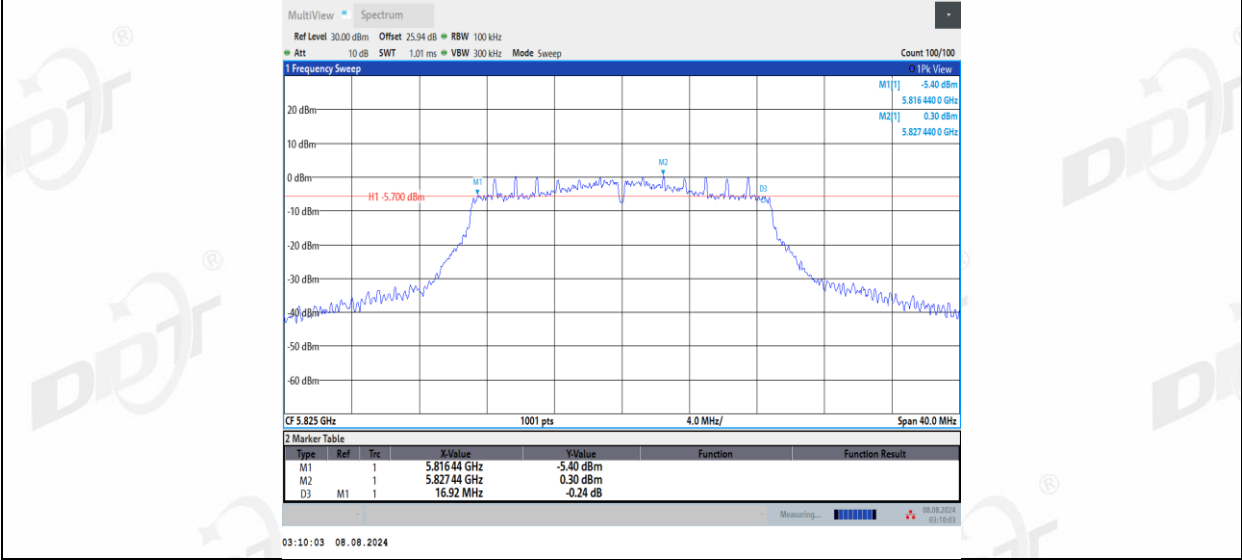
11AC20SISO_Ant1_5745



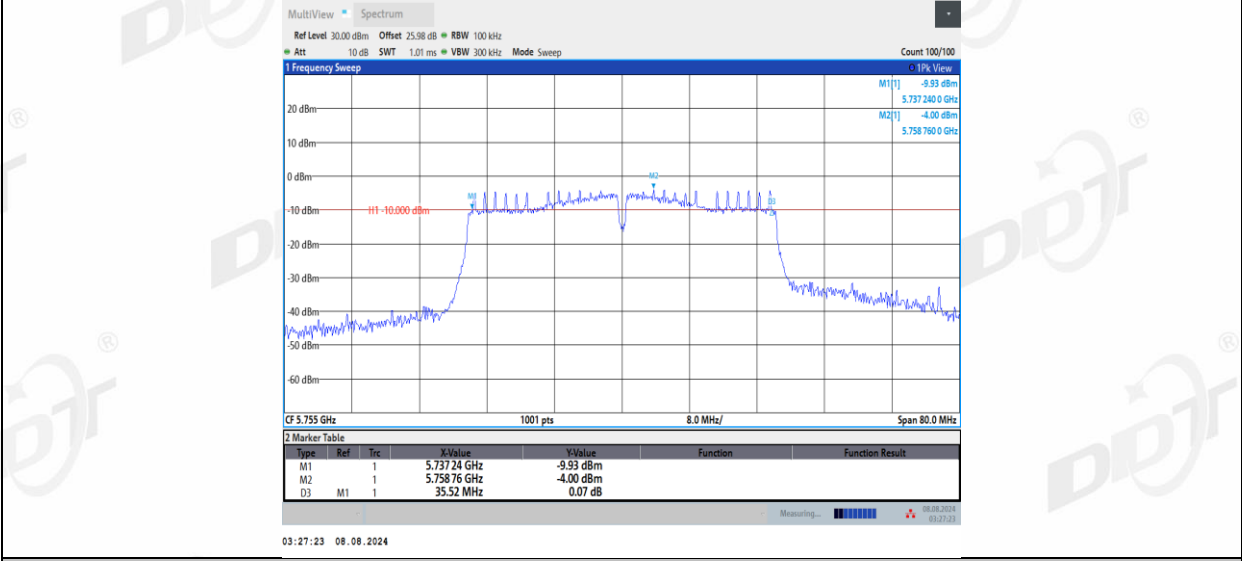
11AC20SISO_Ant1_5785



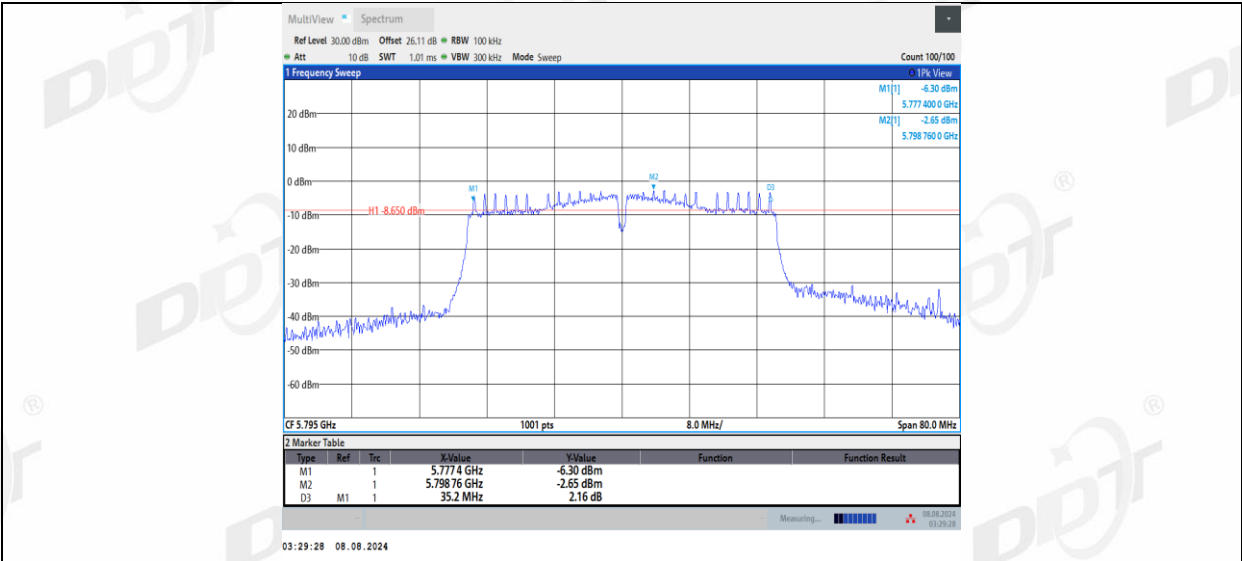
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775

