

FCC- TEST REPORT

Report Number : **68.760.22.0423.01** Date of Issue: **2022-06-10**

Model : **CPPM1**

Product Type : Camera

Applicant : GoPro, Inc.

Address : 3025 Clearview Way, San Mateo, CA 94402, USA

Manufacturer : GoPro, Inc.

Address : 3025 Clearview Way, San Mateo, CA 94402, USA

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including Appendices : **200**

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District,
Shenzhen, 518052 China

FCC Designation Number: CN5009

FCC Registration No.: 514049

Telephone: 86 755 8828 6998
Fax: 86 755 8828 5299

3 Description of the Equipment Under Test

Product:	Camera
Model no.:	CPPM1
FCC ID:	CNFCPPM1
Rating:	3.85VDC
RF Transmission Frequency:	5.180GHz~5.240GHz; 5.260GHz~5.320GHz; 5.500GHz~5.720GHz; 5.745GHz~5.825GHz
Modulation:	802.11a: BPSK, QPSK, 16QAM, 64QAM 802.11n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM
Antenna Type:	Internal Integrated Metal Antenna
Antenna Ports	Ant 1
Antenna Gain:	1.30dBi max for 5.180GHz~5.240GHz; 2.30dBi max for 5.260GHz~5.320GHz; 2.90dBi max for 5.500GHz~5.720GHz; 2.20dBi max for 5.745GHz~5.825GHz
Description of the EUT:	The Equipment Under Test (EUT) is a Camera supports 2.4GHz Bluetooth/WIFI, 5GHz WIFI functions.

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart E, October 1, 2020 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart E - Unlicensed National Information Infrastructure Devices

Test Method:

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices

5 Summary of Test Results

Technical Requirements			
FCC Part 15 Subpart E			
Test Condition	Test Result		
	Pass	Fail	N/A
15.207 Conducted Emission AC Power Port	☒	☐	☐
15.407(e) Emission bandwidth	☒	☐	☐
15.407(a) Maximum Conducted Output Power	☒	☐	☐
15.407(a) Maximum Power Spectral Density	☒	☐	☐
15.407(b)(1), 15.407(b)(2), 15.407(b)(3), 15.407(b)(4), 15.407(b)(8), 15.407(b)(9), 15.209 Unwanted Emissions	☒	☐	☐
15.407(g) Frequencies Stability	☒	☐	☐
15.407(h) Dynamic Frequency Selection (DFS).	☒	☐	☐
15.203 Antenna Requirement	☒ See note 1	☐	☐

Remark: The EUT can be configured as a master and slave device without Radar Detection. When operating as Slave Device without Radar Detection, it will work on 5.180GHz~5.240GHz; 5.260GHz~5.320GHz; 5.500GHz~5.700GHz; 5.745GHz~5.825GHz. When operating as Master Device without Radar Detection, it will work on 5.180GHz~5.240GHz, 5.745GHz~5.825GHz.

Note 1: The EUT uses an Internal Integrated Metal Antenna, which gain is 1.30dBi max for 5.180GHz~5.240GHz; 2.30dBi max for 5.260GHz~5.320GHz; 2.90dBi max for 5.500GHz~5.720GHz; 2.20dBi max for 5.745GHz~5.825GHz. It is considered sufficiently to comply with the provisions of this section.

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: CNFCPPM1, complies with Section 15.203, 15.205, 15.207, 15.209, 15.407 of the FCC Part 15, Subpart E.

The Model: CPPM1 supports Bluetooth Low Energy/Bluetooth BDR+EDR /WIFI functions, power by 3.85VDC, 1506mAh supplied by a rechargeable Lithium Ion Battery or 5VDC supplied by USB type C port.

The TX and RX range is 2402MHz-2480MHz for Bluetooth, 2412MHz – 2462MHz for 2.4GHz WIFI, 5180MHz – 5320MHz, 5500MHz – 5720MHz, 5745MHz – 5825MHz for 5GHz WIFI.

This report is for the 5GHz Wi-Fi.

SUMMARY:

All tests according to the regulations cited on page 6 were

■ - Performed

□ - **Not** Performed

The Equipment Under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

Sample Received Date: 2022-05-25

Testing Start Date: 2022-05-30

Testing End Date: 2022-06-09

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch

Reviewed by:

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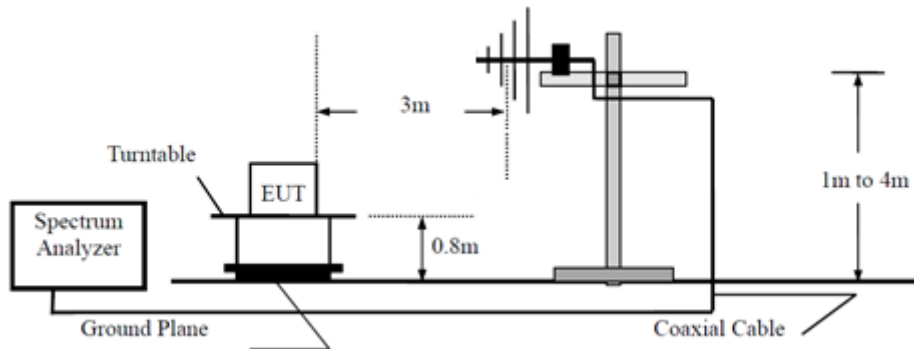


Carry Cai
Test Engineer

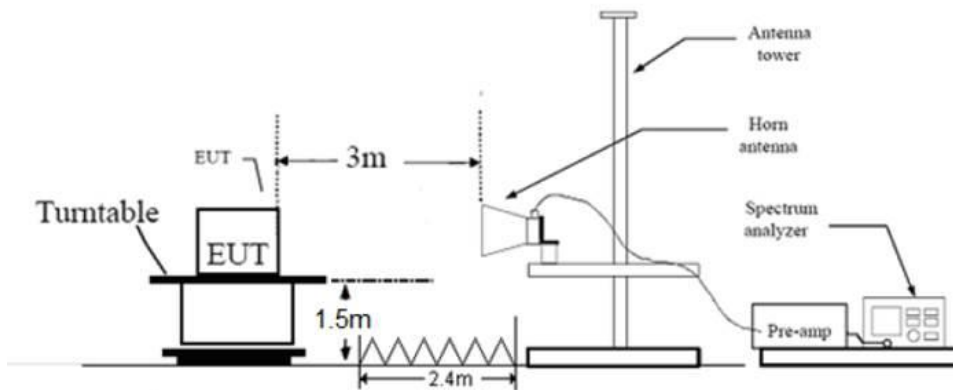
7 Test setups

7.1 Radiated test setups

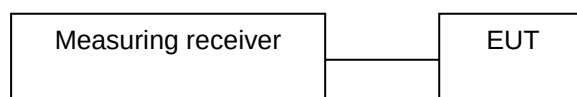
Below 1GHz



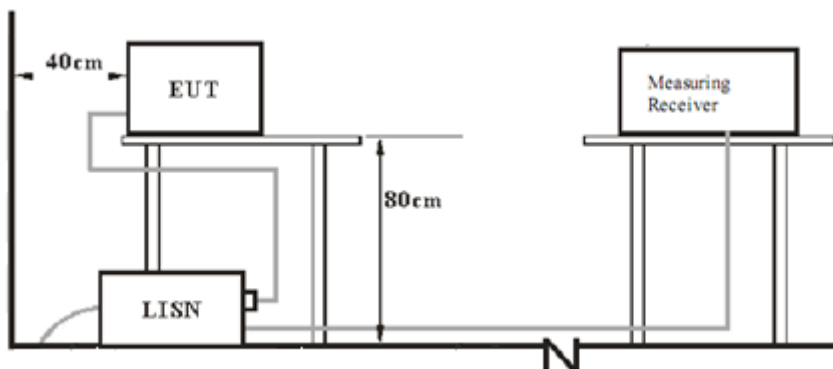
Above 1GHz



7.2 Conducted RF test setups



7.3 AC Power Line Conducted Emission test setups



8. Systems test configuration

Auxiliary Equipment Used during Test:

Description	Manufacturer	Model no.	Serial no.
LAPTOP	Lenove	ThinkPad T460s	SL10K24796 JS
USB TYPE C CABLE	GOPRO	0.46M (LENGTH)	--
AC ADAPTER	APPLE	A1401	--

The system was configured to channel:

Test Mode	Channel (MHz)		
802.11a, 802.11n HT20 802.11ac VHT20	5G WIFI-Band 1		
	CH36 (5180MHz)	CH40 (5200MHz)	CH48 (5240MHz)
	5G WIFI-Band 2		
	CH52 (5260MHz)	CH56 (5280MHz)	CH64 (5320MHz)
	5G WIFI-Band 3		
	CH100 (5500MHz)	CH116 (5580MHz)	CH140 (5700MHz)
	CH144 (5720MHz)		
	5G WIFI-Band 4		
CH149 (5745MHz)	CH157(5785MHz)	CH165 (5825MHz)	

Test Mode	Channel (MHz)		
802.11n HT40 802.11ac VHT40	5G WIFI-Band 1		
	CH38(5190MHz)	CH46 (5230MHz)	
	5G WIFI-Band 2		
	CH54(5270MHz)	CH62(5310MHz)	
	5G WIFI-Band 3		
	CH102(5510MHz)	CH110(5550MHz)	CH134(5670MHz)
	CH 142 (5710MHz)		
	5G WIFI-Band 4		
	CH151(5755MHz)	CH159(5795MHz)	

Test Mode	Channel (MHz)		
802.11ac VHT80	5G WIFI-Band 1		
	CH42(5210MHz)		
	5G WIFI-Band 2		
	CH58(5290MHz)		
	5G WIFI-Band 3		
	CH106(5530MHz)	CH122(5610MHz)	CH138(5690MHz)
	5G WIFI-Band 4		
	CH155(5775MHz)		

Test Software Information:

Test Software Version		QRCT (V3.0-186.0) from QUALCOMM	
Mode	Channel	Setting TX Power	Data Rate
802.11a	5180	15	11g 6 Mbps
802.11a	5320	15	11g 6 Mbps
802.11a	5500	15	11g 6 Mbps
802.11a	5700	15	11g 6 Mbps
802.11n HT20	5180	15	MCS0 6.5 Mbps
802.11n HT20	5320	15	MCS0 6.5 Mbps
802.11n HT20	5500	15	MCS0 6.5 Mbps
802.11n HT20	5700	15	MCS0 6.5 Mbps
802.11n HT40	5190	15	MCS0 13.5 Mbps(40MHz)
802.11n HT40	5310	15	MCS0 13.5 Mbps(40MHz)
802.11n HT40	5510	15	MCS0 13.5 Mbps(40MHz)
802.11n HT40	5670	15	MCS0 13.5 Mbps(40MHz)
802.11ac VHT20	5180	15	11ac MCS0 NGI 6.5 Mbps(20MHz),
802.11ac VHT20	5320	15	11ac MCS0 NGI 6.5 Mbps(20MHz),
802.11ac VHT20	5500	15	11ac MCS0 NGI 6.5 Mbps(20MHz),
802.11ac VHT20	5700	15	11ac MCS0 NGI 6.5 Mbps(20MHz),
802.11ac VHT40	5190	15	11ac MCS0 NGI 13.5 Mbps(40MHz)
802.11ac VHT40	5310	15	11ac MCS0 NGI 13.5 Mbps(40MHz)
802.11ac VHT40	5510	15	11ac MCS0 NGI 13.5 Mbps(40MHz)
802.11ac VHT40	5670	15	11ac MCS0 NGI 13.5 Mbps(40MHz)
802.11ac VHT80	5210	14	11ac MCS0 NGI 29.3 Mbps(80MHz)
802.11ac VHT80	5290	13.5	11ac MCS0 NGI 29.3 Mbps(80MHz)
802.11ac VHT80	5530	13.5	11ac MCS0 NGI 29.3 Mbps(80MHz)
802.11ac VHT80	5610	15	11ac MCS0 NGI 29.3 Mbps(80MHz)
802.11ac VHT80	5690	15	11ac MCS0 NGI 29.3 Mbps(80MHz)
802.11a	5745	11	11g 6 Mbps
802.11a	5785	11	11g 6 Mbps
802.11a	5825	11	11g 6 Mbps
802.11n HT20	5745	11	MCS0 6.5 Mbps
802.11n HT20	5785	11.5	MCS0 6.5 Mbps
802.11n HT20	5825	11	MCS0 6.5 Mbps
802.11n HT40	5755	11	MCS0 13.5 Mbps(40MHz)
802.11n HT40	5795	11	MCS0 13.5 Mbps(40MHz)
802.11ac VHT20	5745	11	11ac MCS0 NGI 6.5 Mbps (20MHz)
802.11ac VHT20	5785	11	11ac MCS0 NGI 6.5 Mbps (20MHz)
802.11ac VHT20	5825	11	11ac MCS0 NGI 6.5 Mbps (20MHz)
802.11ac VHT40	5755	11	11ac MCS0 NGI 29.3 Mbps (40MHz)
802.11ac VHT40	5795	11.5	11ac MCS0 NGI 29.3 Mbps (40MHz)
802.11ac VHT80	5775	11.5	11ac MCS0 NGI 29.3 Mbps (80MHz)

9 Technical Requirement

9.1 Conducted Emission

Test Method

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. Both sides of AC line were checked for maximum conducted interference.
6. The frequency range from 150 kHz to 30 MHz was searched.
7. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively

Limit

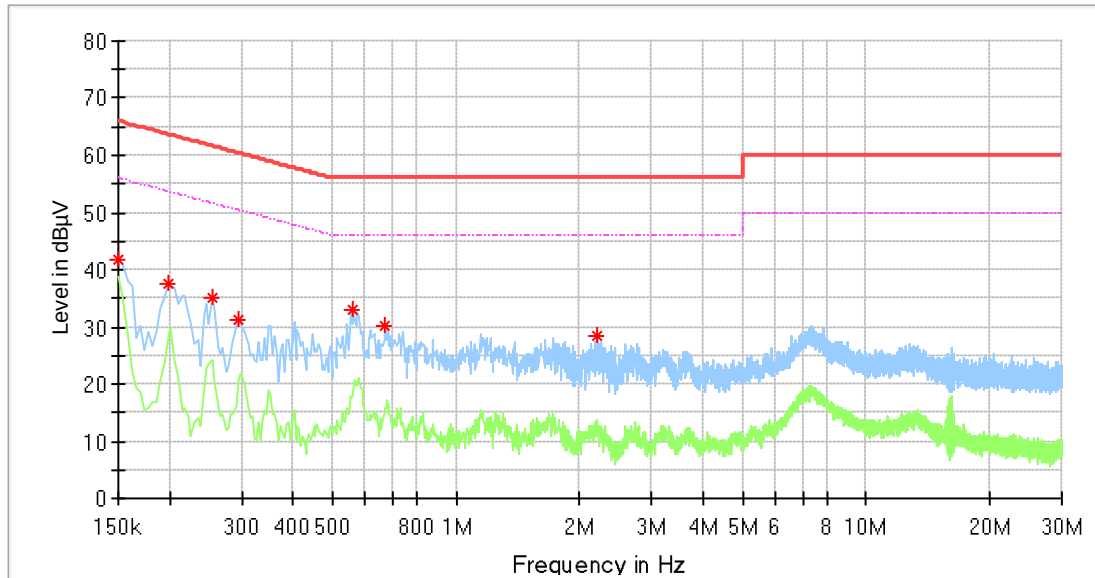
According to §15.207, conducted emissions limit as below:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Remark: “*” Decreasing linearly with logarithm of the frequency

Conducted Emission

Product Type : Camera
 M/N : CPPM1
 Operating Condition : Charging + TX
 Test Specification : Power Line, Live
 Comment : AC 120V/60Hz (External adapter)



Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.150000	41.73	---	66.00	24.27	L1	9.74
0.198000	37.69	---	63.69	26.00	L1	9.70
0.254000	35.05	---	61.63	26.57	L1	9.67
0.294000	31.38	---	60.41	29.03	L1	9.66
0.562000	33.02	---	56.00	22.98	L1	9.65
0.670000	30.16	---	56.00	25.84	L1	9.65
2.218000	28.47	---	56.00	27.53	L1	9.70

Remark:

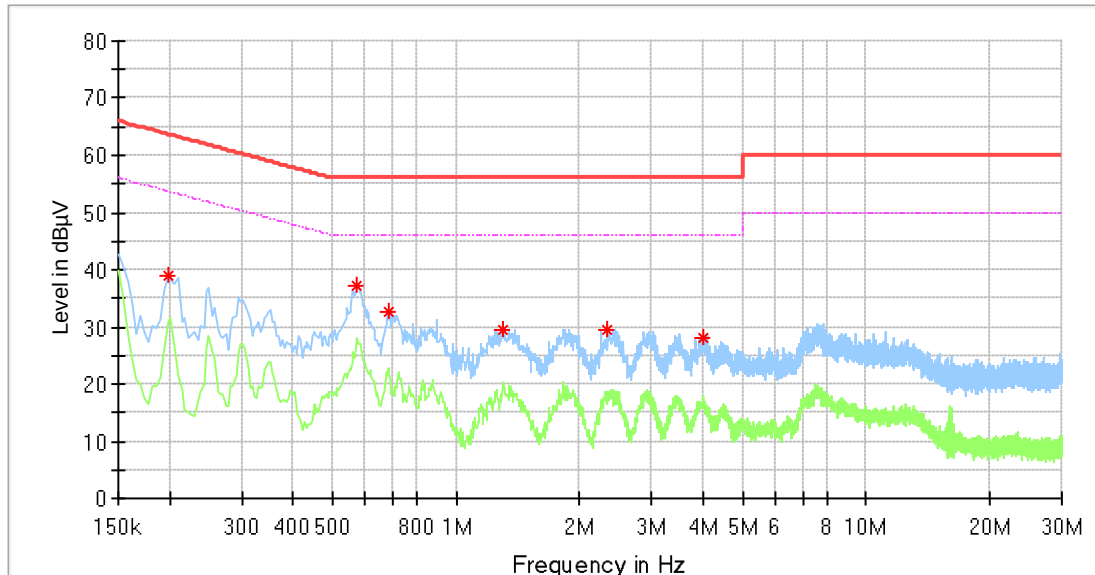
Level=Reading Level + Correction Factor

Correction Factor=Cable Loss + LISN Factor

(The Reading Level is recorded by software which is not shown in the sheet)

Conducted Emission

Product Type : Camera
 M/N : CPPM1
 Operating Condition : Charging + TX
 Test Specification : Power Line, Neutral
 Comment : AC 120V/60Hz (External adapter)



Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.198000	38.86	---	63.69	24.83	N	9.74
0.574000	37.34	---	56.00	18.66	N	9.68
0.682000	32.54	---	56.00	23.46	N	9.68
1.298000	29.52	---	56.00	26.48	N	9.71
2.342000	29.32	---	56.00	26.68	N	9.75
3.994000	28.07	---	56.00	27.93	N	9.82

Remark:

Level=Reading Level + Correction Factor

Correction Factor=Cable Loss + LISN Factor

(The Reading Level is recorded by software which is not shown in the sheet)

9.2 Emission bandwidth

The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.

1. Test Method of 26dB Bandwidth

According to C63.10

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Limit: No limit

2. Test Method of 6dB Bandwidth

According to C63.10

- a) Set RBW = 100KHz
- b) Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) 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.

Limit: $\geq 500\text{KHz}$

3. Test Method of 99% Bandwidth

According to C63.10

- a) Set center frequency to the nominal EUT channel center frequency
- b) Set span = 1.5 times to 5.0 times the OBW.
- c) Set RBW = 1 % to 5 % of the OBW
- d) Set VBW $\geq 3 \cdot \text{RBW}$
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99 % power bandwidth function of the instrument (if available).
- g) If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

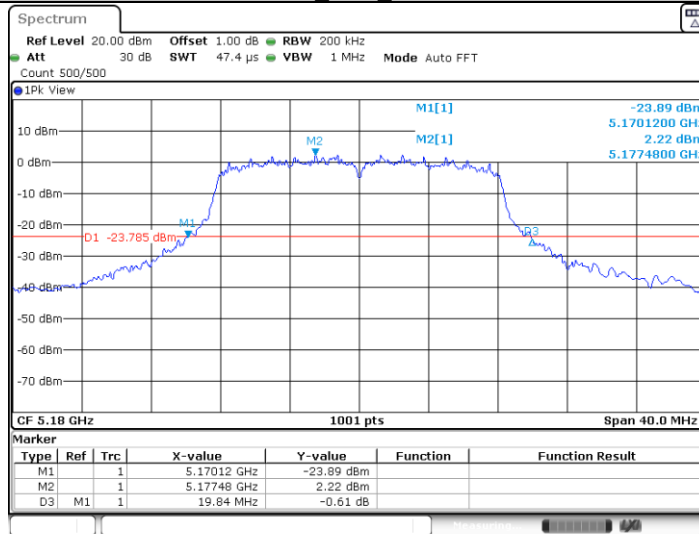
Limit: No limit

26dB Bandwidth Test result

Test Mode	Antenna	Channel [MHz]	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	19.840	5170.120	5189.960	---	PASS
		5200	19.600	5190.240	5209.840	---	PASS
		5240	19.960	5230.120	5250.080	---	PASS
		5260	19.840	5249.920	5269.760	---	PASS
		5280	19.680	5270.200	5289.880	---	PASS
		5320	19.960	5310.080	5330.040	---	PASS
		5500	19.560	5490.400	5509.960	---	PASS
		5580	19.600	5570.120	5589.720	---	PASS
		5700	19.800	5690.120	5709.920	---	PASS
		5720	20.040	5710.280	5730.320	---	PASS
		5720 UNII-2C	14.72	5710.280	5725	---	PASS
		5720 UNII-3	5.32	5725	5730.320	---	PASS
		5745	20.120	5734.160	5754.280	---	PASS
		5785	19.120	5775.360	5794.480	---	PASS
		5825	18.960	5815.520	5834.480	---	PASS
11N20SISO	Ant1	5180	20.040	5169.960	5190.000	---	PASS
		5200	20.040	5190.000	5210.040	---	PASS
		5240	19.840	5230.040	5249.880	---	PASS
		5260	20.120	5249.840	5269.960	---	PASS
		5280	20.160	5269.760	5289.920	---	PASS
		5320	19.920	5310.080	5330.000	---	PASS
		5500	19.920	5490.040	5509.960	---	PASS
		5580	19.840	5570.040	5589.880	---	PASS
		5700	20.200	5689.880	5710.080	---	PASS
		5720	20.360	5709.720	5730.080	---	PASS
		5720 UNII-2C	15.28	5709.720	5725	---	PASS
		5720 UNII-3	5.08	5725	5730.080	---	PASS
		5745	19.800	5735.040	5754.840	---	PASS
		5785	19.880	5775.040	5794.920	---	PASS
		5825	20.000	5815.040	5835.040	---	PASS
11N40SISO	Ant1	5190	44.960	5167.600	5212.560	---	PASS
		5230	43.520	5208.400	5251.920	---	PASS
		5270	52.480	5246.960	5299.440	---	PASS
		5310	41.840	5289.120	5330.960	---	PASS
		5510	45.600	5487.120	5532.720	---	PASS
		5550	46.000	5526.880	5572.880	---	PASS
		5670	45.280	5647.600	5692.880	---	PASS
		5710	45.360	5687.680	5733.040	---	PASS
		5710 UNII-2C	37.32	5687.680	5725	---	PASS
		5710 UNII-3	8.04	5725	5733.040	---	PASS
		5755	44.320	5733.080	5777.400	---	PASS
		5795	41.440	5774.200	5815.640	---	PASS
11AC20SISO	Ant1	5180	20.120	5169.960	5190.080	---	PASS
		5200	20.040	5189.920	5209.960	---	PASS
		5240	19.960	5230.040	5250.000	---	PASS
		5260	19.760	5250.080	5269.840	---	PASS
		5280	19.880	5270.040	5289.920	---	PASS
		5320	19.880	5310.000	5329.880	---	PASS
		5500	19.840	5490.080	5509.920	---	PASS
		5580	19.880	5570.080	5589.960	---	PASS
		5700	20.040	5690.080	5710.120	---	PASS
		5720	19.960	5709.960	5729.920	---	PASS
		5720 UNII-2C	15.04	5709.960	5725	---	PASS

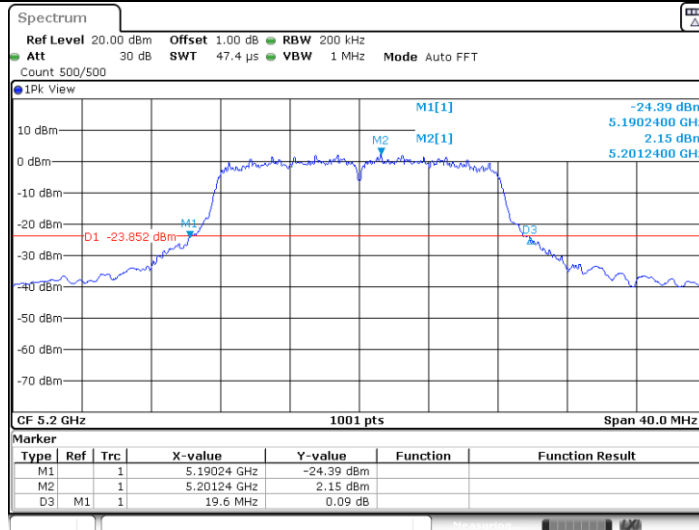
		5720 UNII-3	4.92	5725	5729.920	---	PASS
		5745	19.840	5735.040	5754.880	---	PASS
		5785	20.040	5774.880	5794.920	---	PASS
		5825	19.840	5815.120	5834.960	---	PASS
11AC40SISO	Ant1	5190	44.480	5167.920	5212.400	---	PASS
		5230	45.760	5206.720	5252.480	---	PASS
		5270	45.680	5247.360	5293.040	---	PASS
		5310	41.280	5289.280	5330.560	---	PASS
		5510	44.800	5488.160	5532.960	---	PASS
		5550	41.440	5529.360	5570.800	---	PASS
		5670	46.160	5647.200	5693.360	---	PASS
		5710	46.560	5686.400	5732.960	---	PASS
		5710 UNII-2C	38.6	5686.400	5725	---	PASS
		5710 UNII-3	7.96	5725	5732.960	---	PASS
		5755	45.360	5732.040	5777.400	---	PASS
		5795	45.440	5771.720	5817.160	---	PASS
11AC80SISO	Ant1	5210	82.720	5168.880	5251.600	---	PASS
		5290	82.880	5248.400	5331.280	---	PASS
		5530	83.360	5487.920	5571.280	---	PASS
		5610	82.720	5568.720	5651.440	---	PASS
		5690	84.800	5646.960	5731.760	---	PASS
		5690 UNII-2C	78.04	5646.960	5725	---	PASS
		5690 UNII-3	6.76	5725	5731.760	---	PASS
		5775	82.400	5733.400	5815.800	---	PASS

11A Ant1 5180



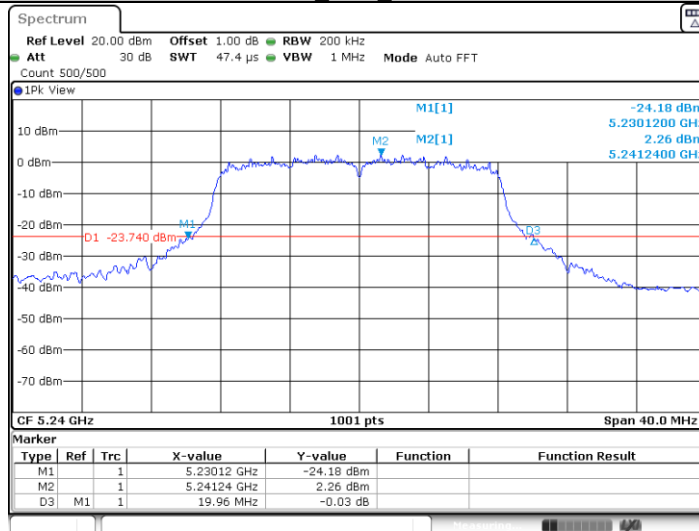
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11A Ant1 5200



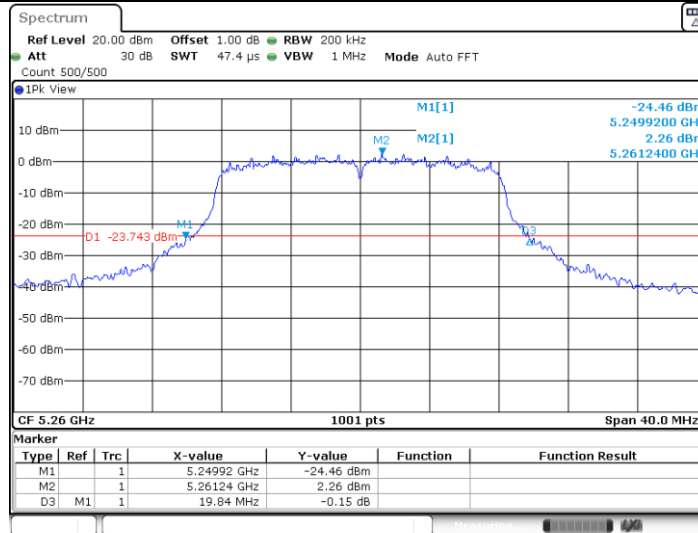
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11A Ant1 5240



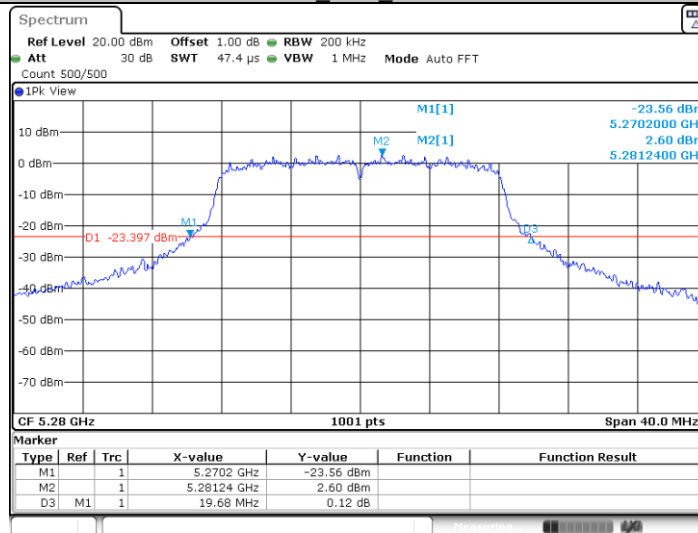
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11A Ant1 5260



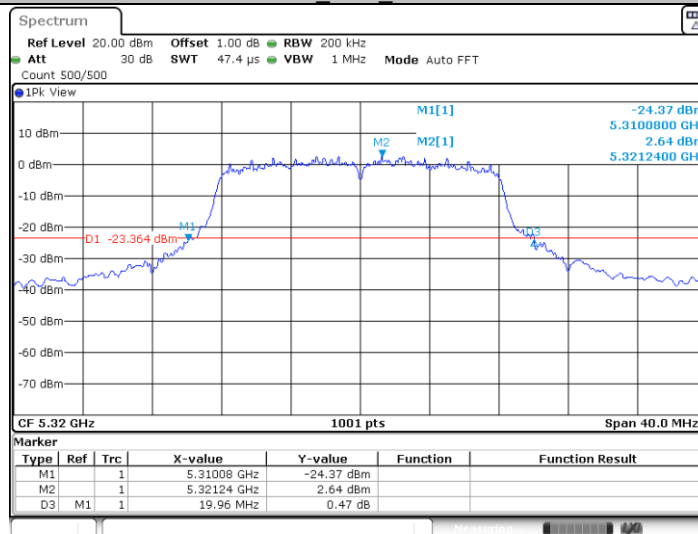
Date: 31.MAY.2022 22:28:04

11A Ant1 5280



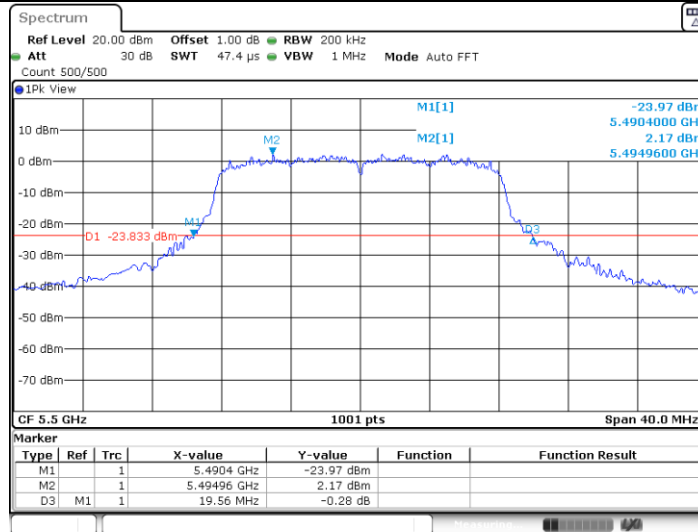
Date: 31.MAY.2022 22:29:50

11A Ant1 5320



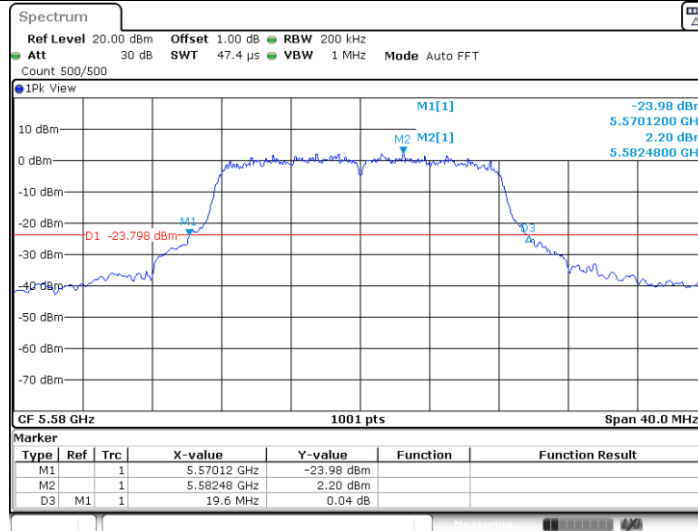
Date: 31.MAY.2022 22:31:29

11A_Ant1_5500



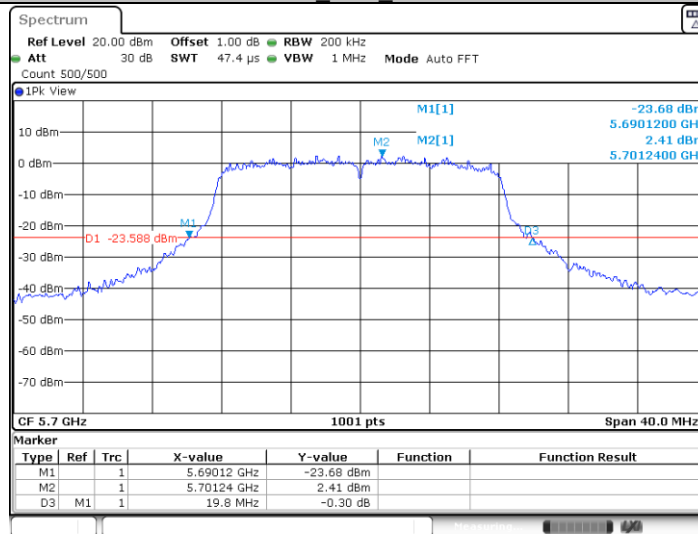
Date: 31.MAY.2022 22:33:25

11A_Ant1_5580



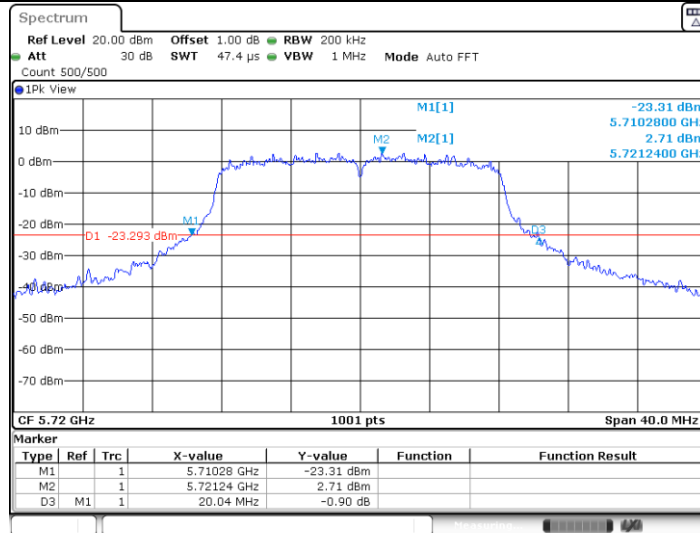
Date: 31.MAY.2022 22:36:54

11A_Ant1_5700



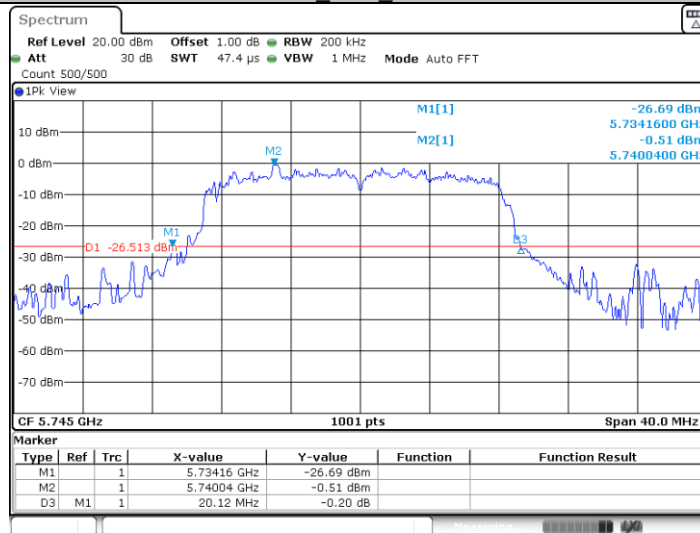
Date: 31.MAY.2022 22:39:44

11A Ant1 5720



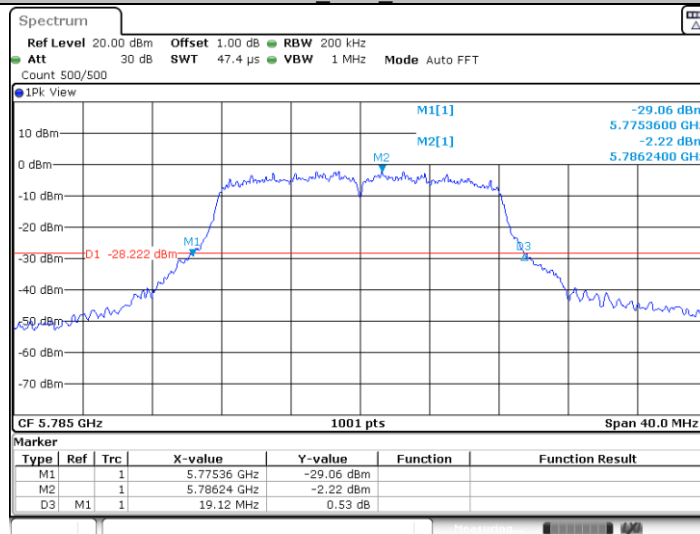
Date: 31.MAY.2022 22:42:24

11A Ant1 5745



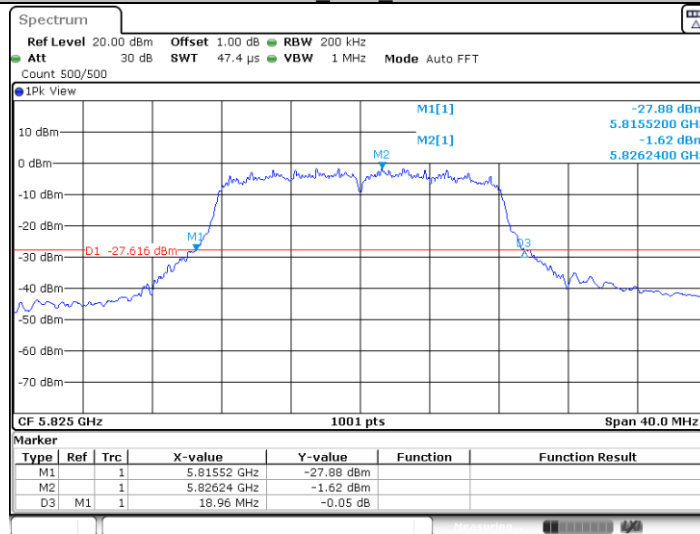
Date: 31.MAY.2022 22:45:01

11A Ant1 5785



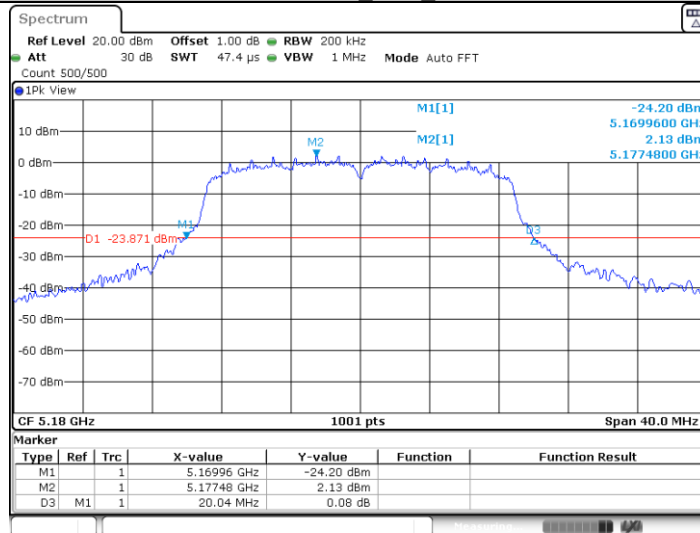
Date: 31.MAY.2022 22:47:33

11A_Ant1_5825



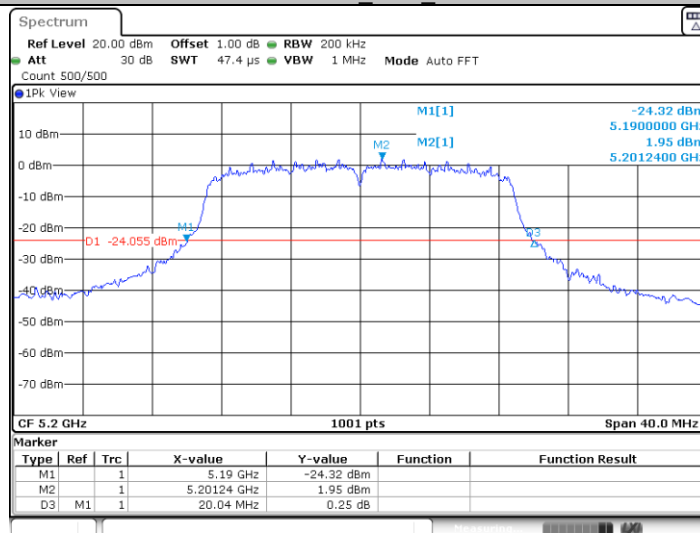
Date: 31.MAY.2022 22:49:25

11N20SISO_Ant1_5180



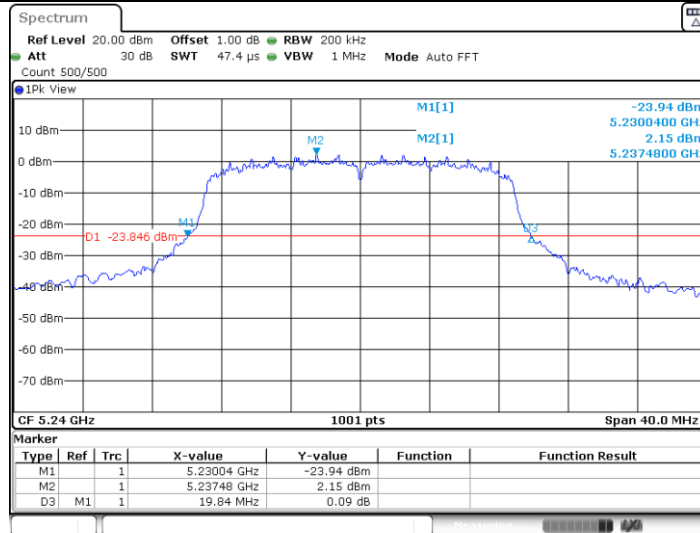
Date: 31.MAY.2022 22:52:19

11N20SISO_Ant1_5200



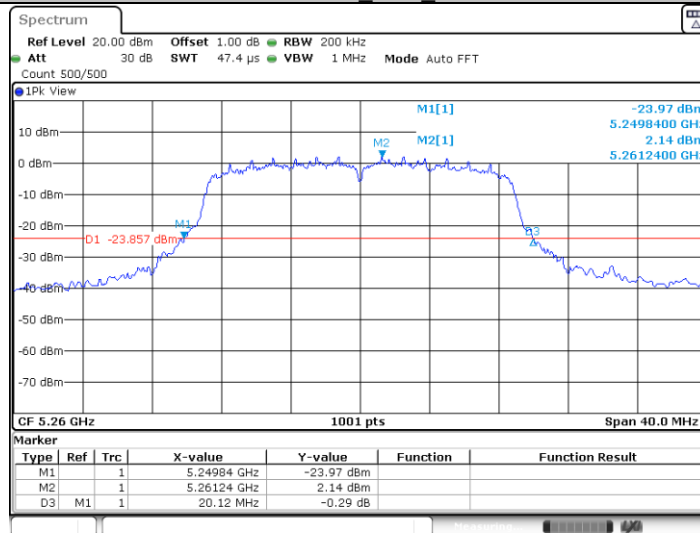
Date: 31.MAY.2022 22:54:38

11N20SISO_Ant1_5240



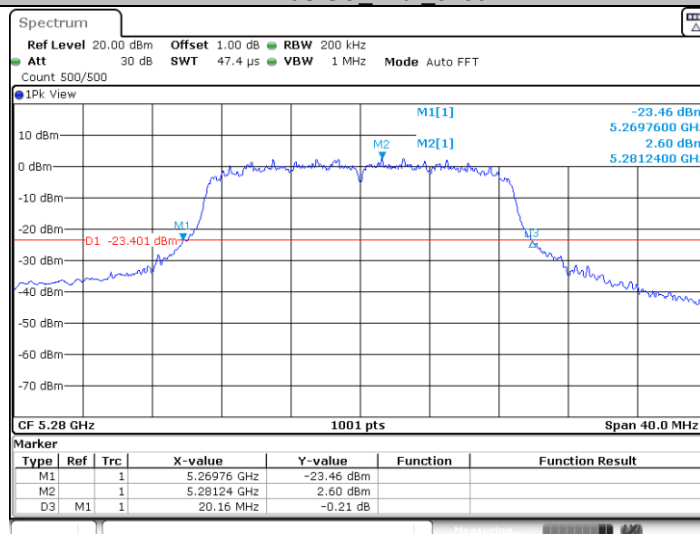
Date: 31.MAY.2022 22:57:01

11N20SISO_Ant1_5260



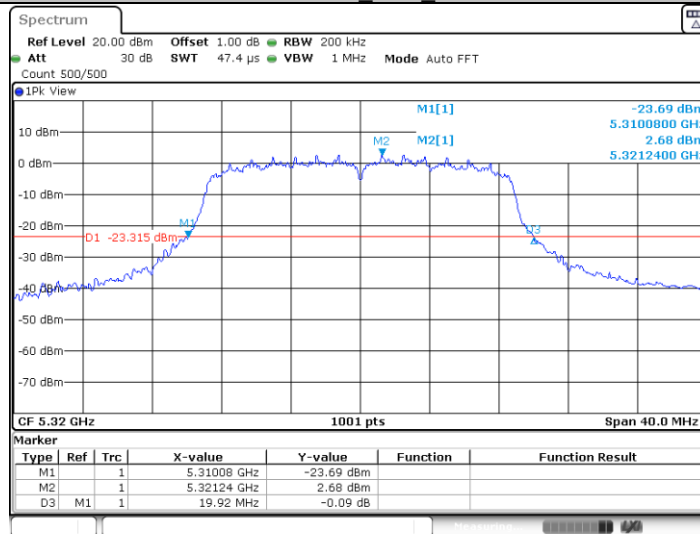
Date: 31.MAY.2022 22:58:43

11N20SISO_Ant1_5280



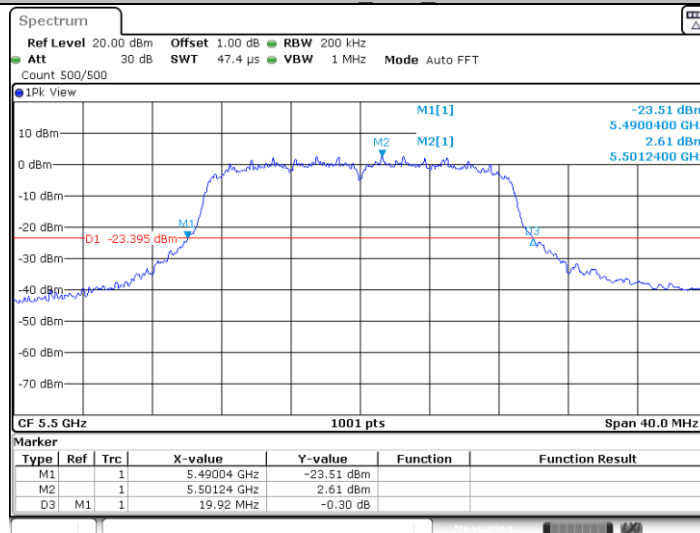
Date: 31.MAY.2022 23:00:46

11N20SISO_Ant1_5320



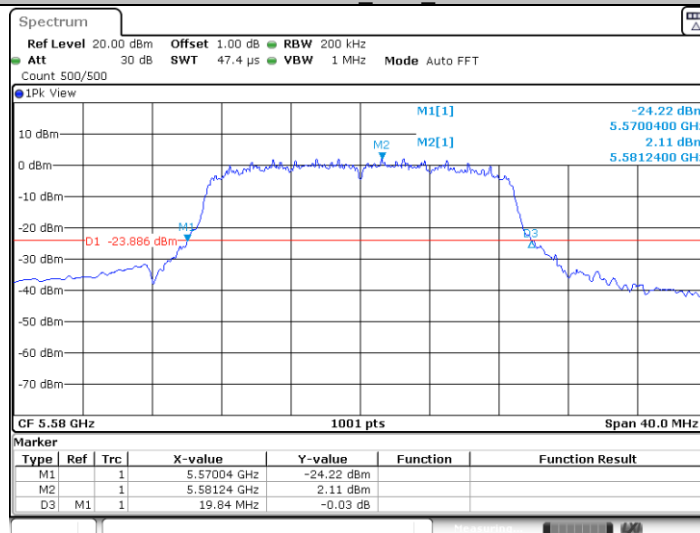
Date: 31.MAY.2022 23:02:21

11N20SISO_Ant1_5500



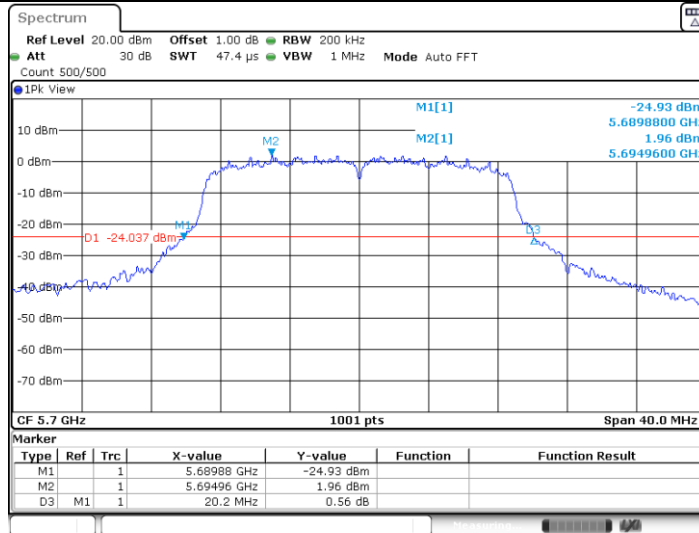
Date: 31.MAY.2022 23:05:13

11N20SISO_Ant1_5580



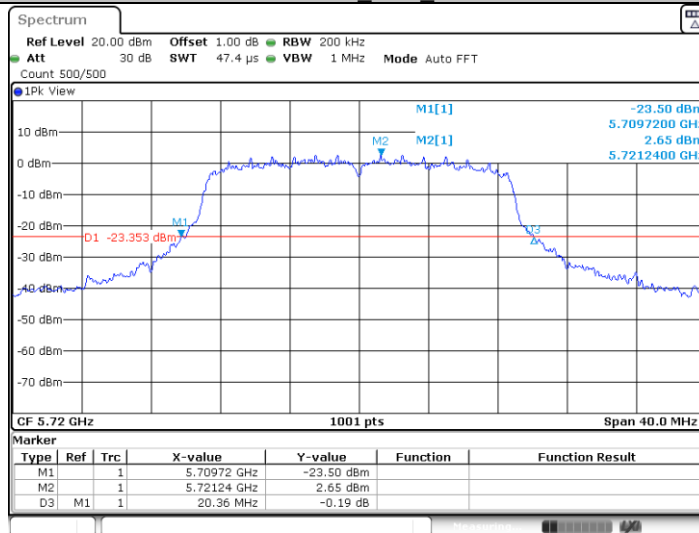
Date: 31.MAY.2022 23:07:28

11N20SISO_Ant1_5700



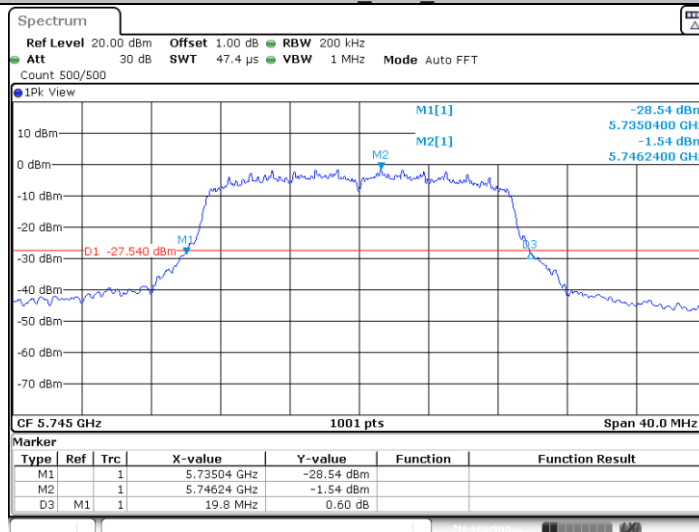
Date: 31.MAY.2022 23:09:07

11N20SISO_Ant1_5720



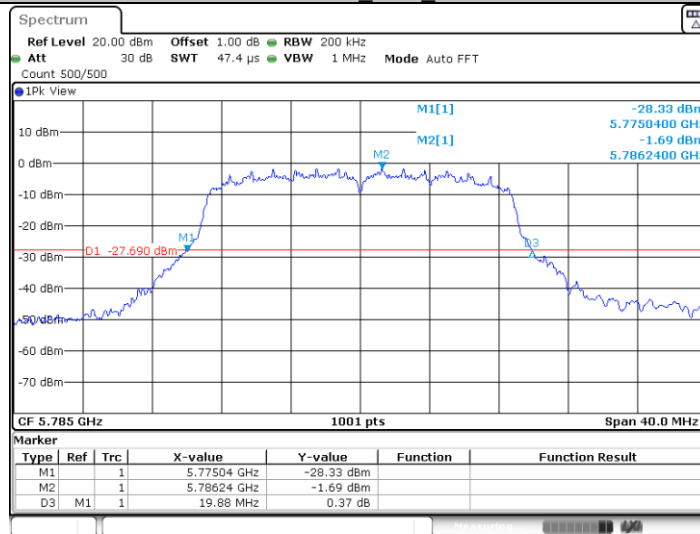
Date: 31.MAY.2022 23:10:53

11N20SISO_Ant1_5745



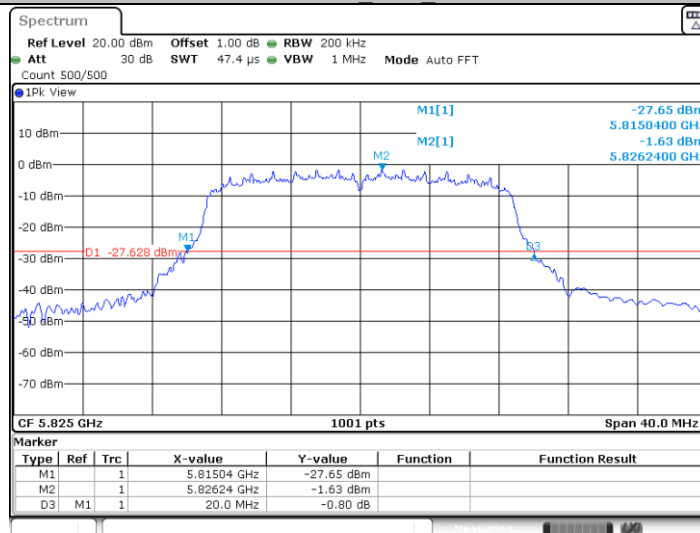
Date: 31.MAY.2022 23:13:25

11N20SISO_Ant1_5785



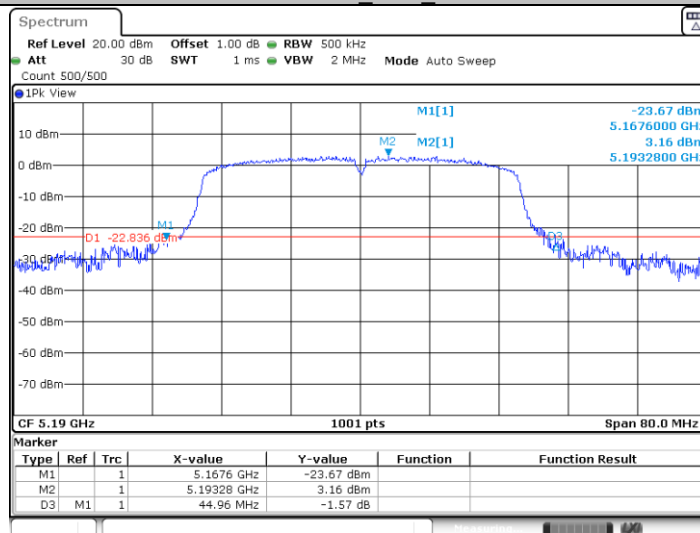
Date: 31.MAY.2022 23:16:25

11N20SISO_Ant1_5825



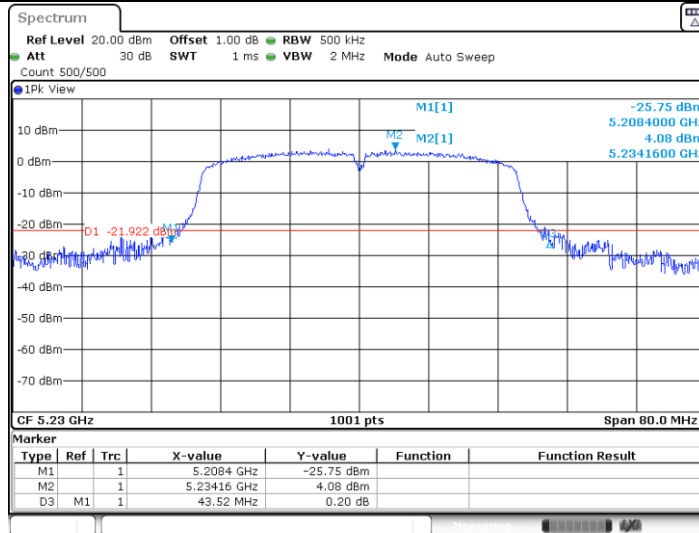
Date: 31.MAY.2022 23:18:36

11N40SISO_Ant1_5190



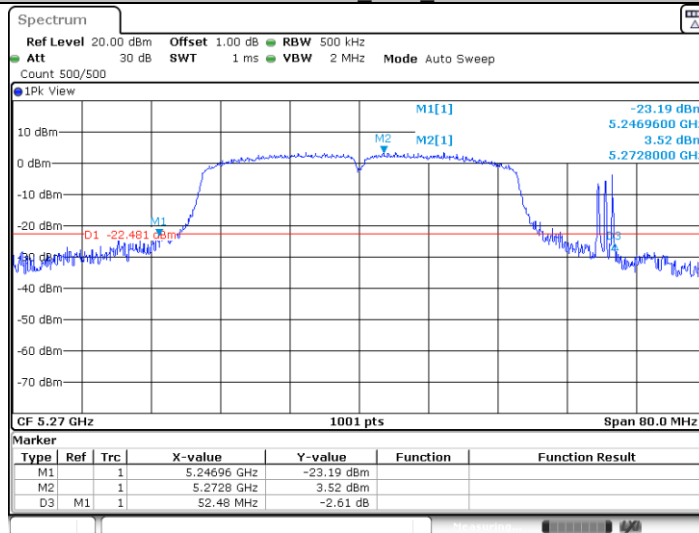
Date: 1.JUN.2022 10:12:37

11N40SISO_Ant1_5230



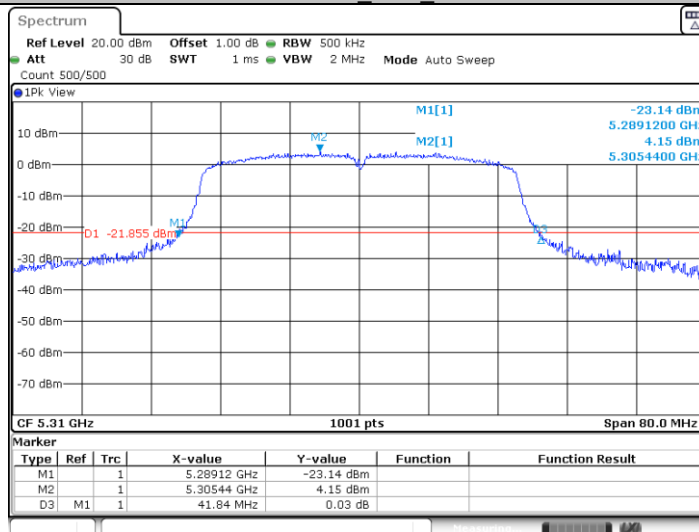
Date: 1 JUN 2022 10:15:18

11N40SISO_Ant1_5270



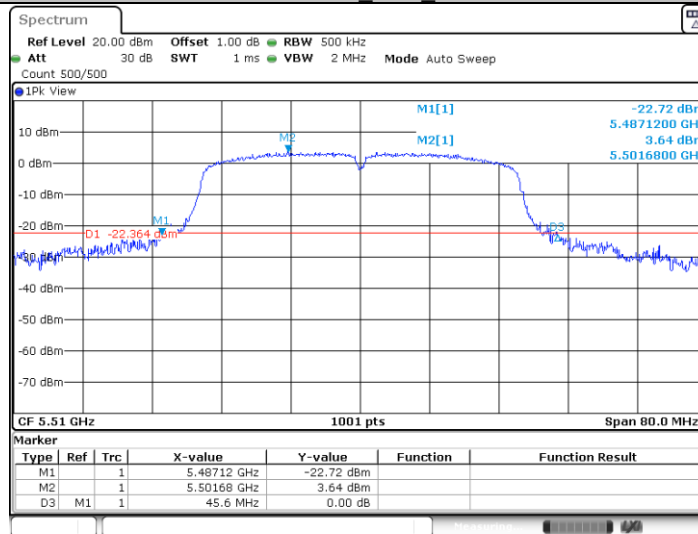
Date: 1 JUN 2022 10:17:19

11N40SISO_Ant1_5310



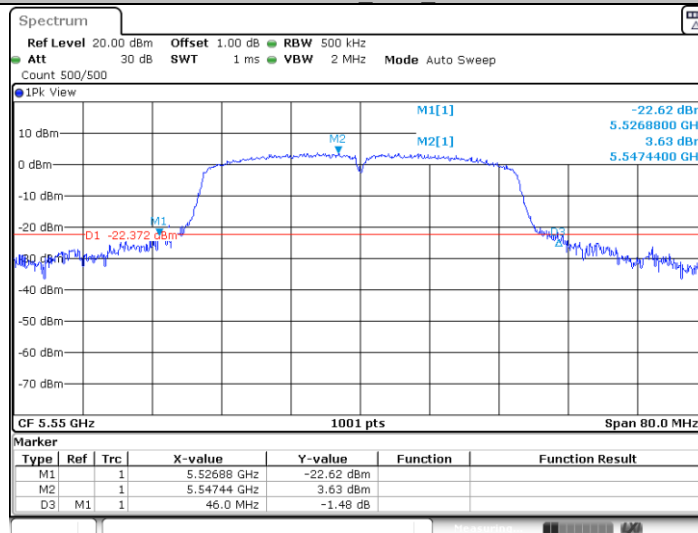
Date: 1 JUN 2022 10:19:04

11N40SISO_Ant1_5510



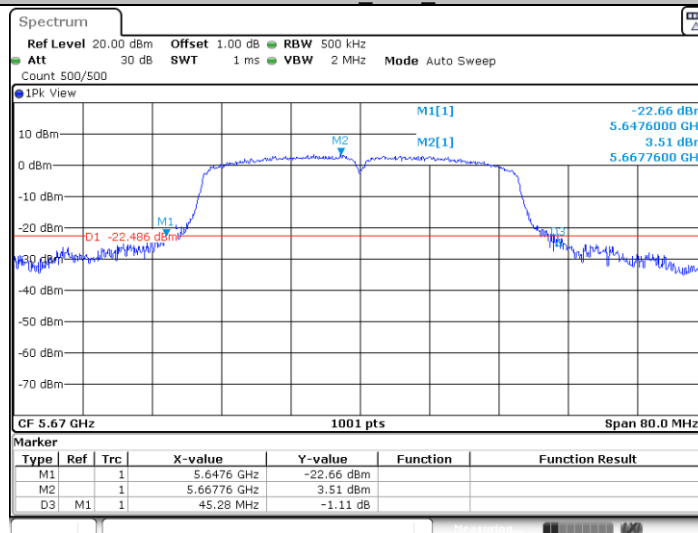
Date: 1.JUN.2022 10:22:17

11N40SISO_Ant1_5550



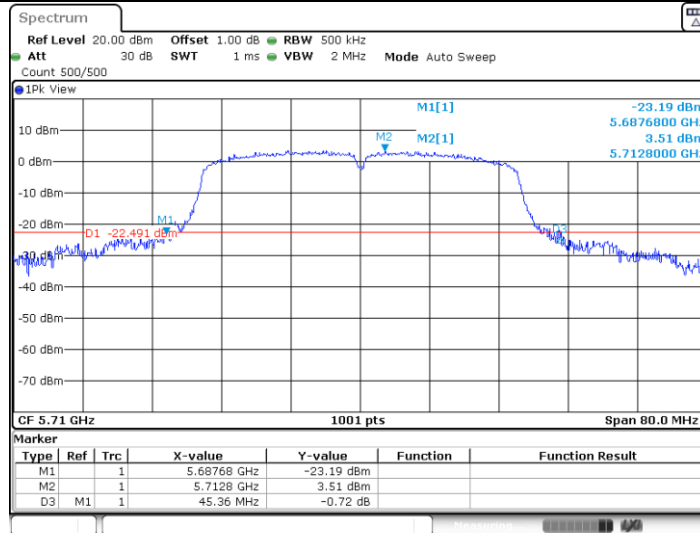
Date: 1.JUN.2022 10:24:27

11N40SISO_Ant1_5670



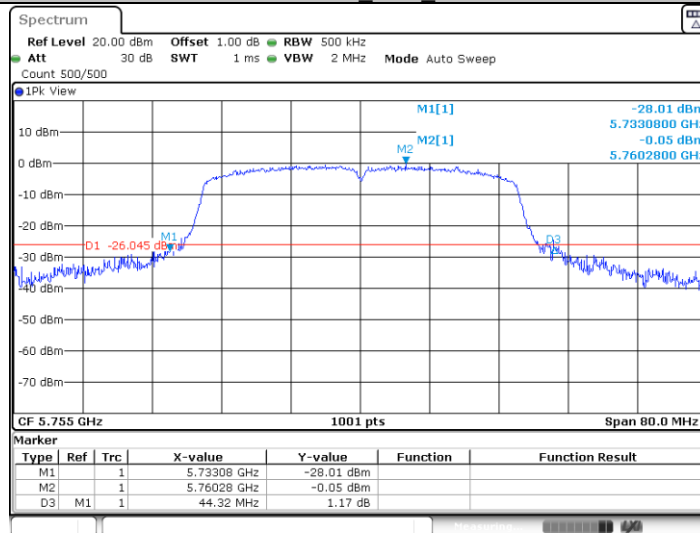
Date: 1.JUN.2022 10:26:38

11N40SISO_Ant1_5710



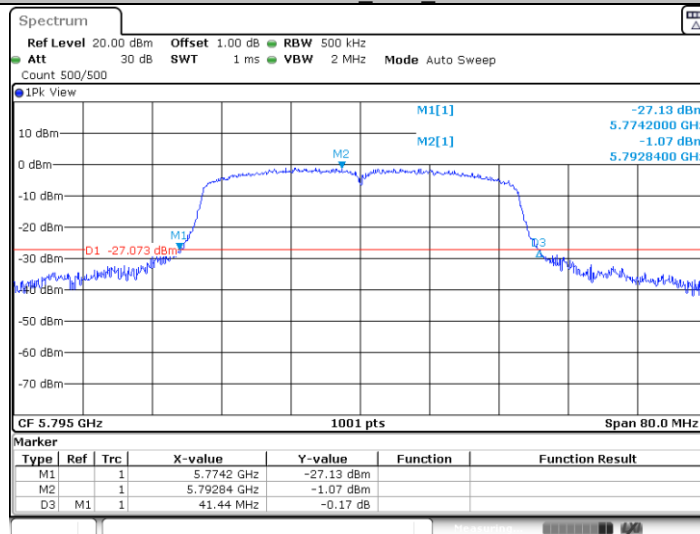
Date: 1 JUN 2022 10:28:50

11N40SISO_Ant1_5755



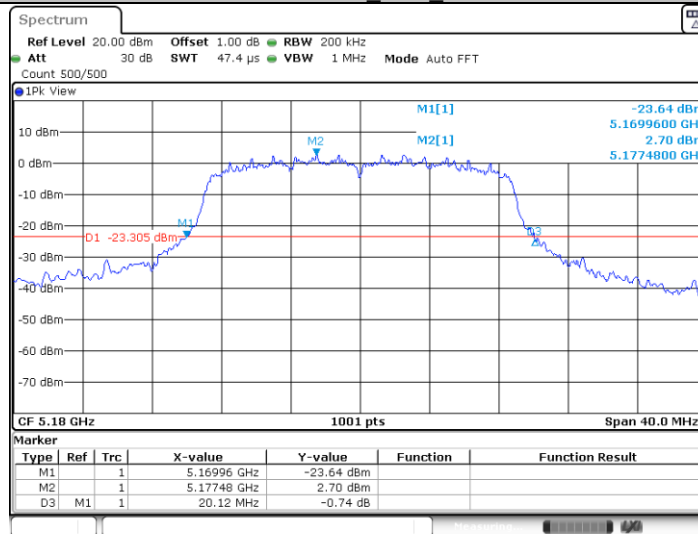
Date: 1 JUN 2022 10:31:13

11N40SISO_Ant1_5795



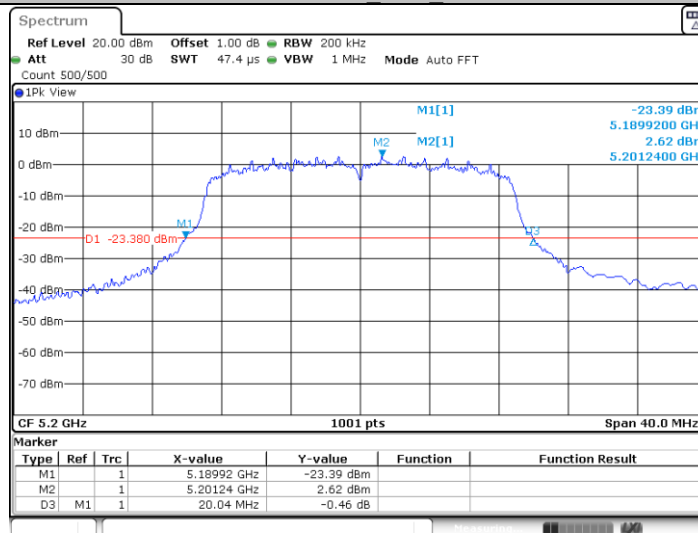
Date: 1 JUN 2022 10:33:23

11AC20SISO Ant1 5180



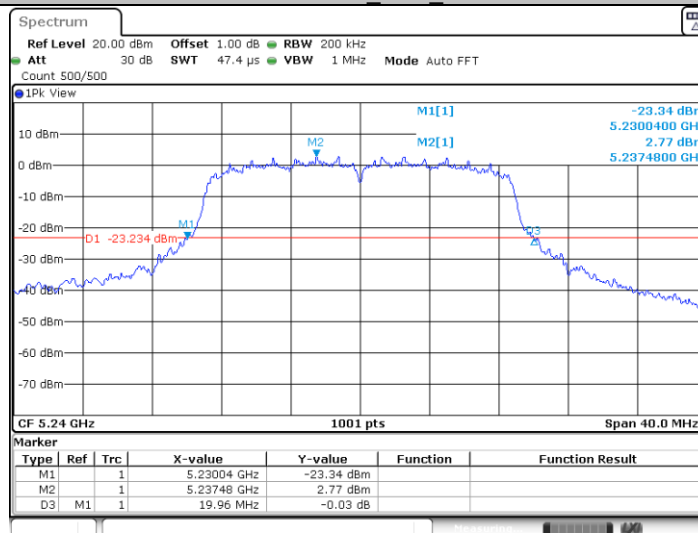
Date: 1.JUN.2022 10:36:51

11AC20SISO Ant1 5200



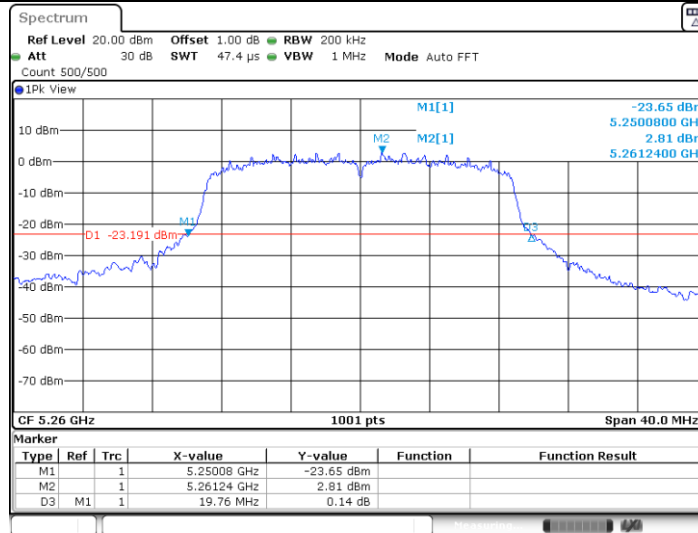
Date: 1.JUN.2022 10:39:16

11AC20SISO Ant1 5240



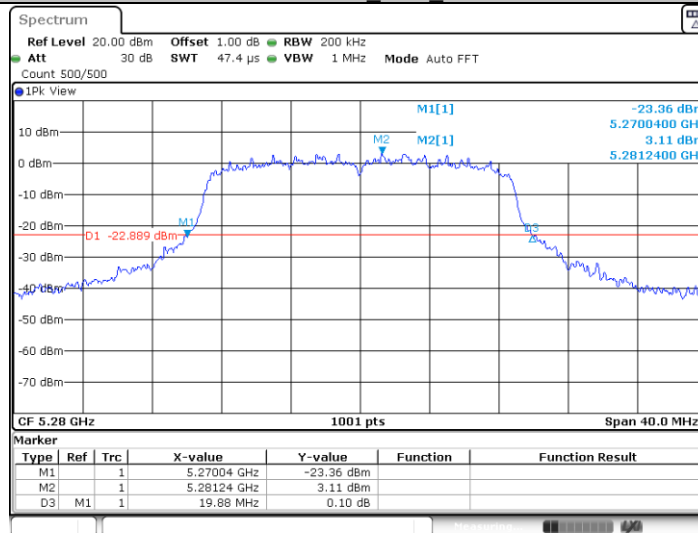
Date: 1.JUN.2022 10:40:57

11AC20SISO_Ant1_5260



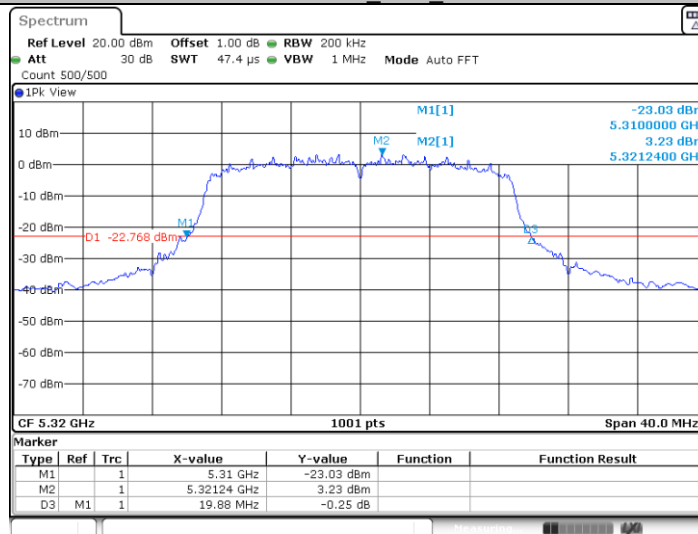
Date: 1 JUN 2022 10:42:33

11AC20SISO_Ant1_5280



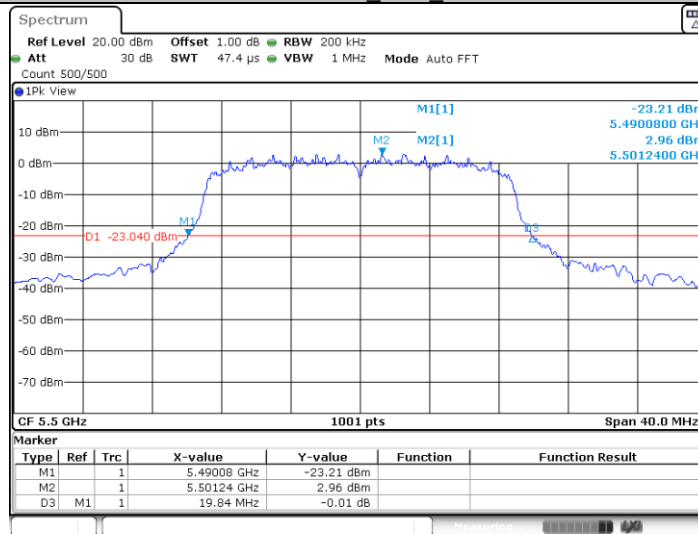
Date: 1 JUN 2022 10:44:11

11AC20SISO_Ant1_5320



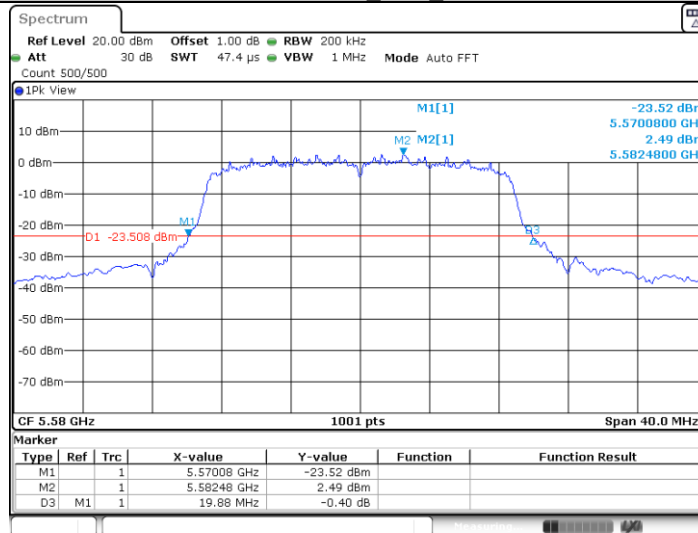
Date: 1 JUN 2022 10:46:00

11AC20SISO_Ant1_5500



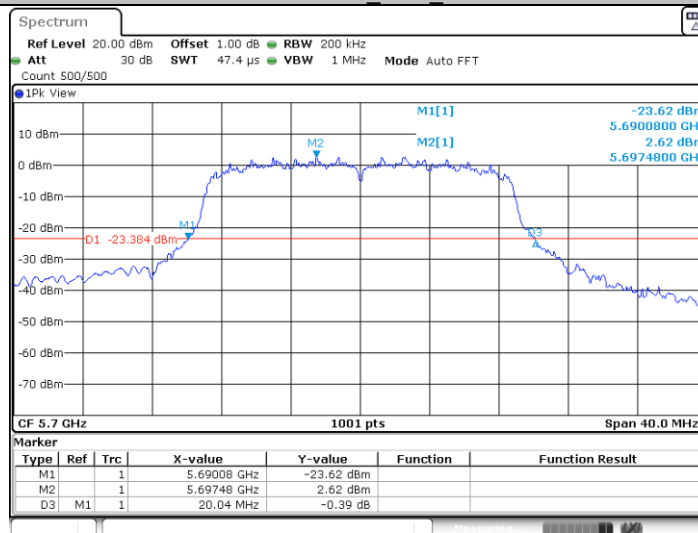
Date: 1.JUN.2022 10:47:59

11AC20SISO_Ant1_5580



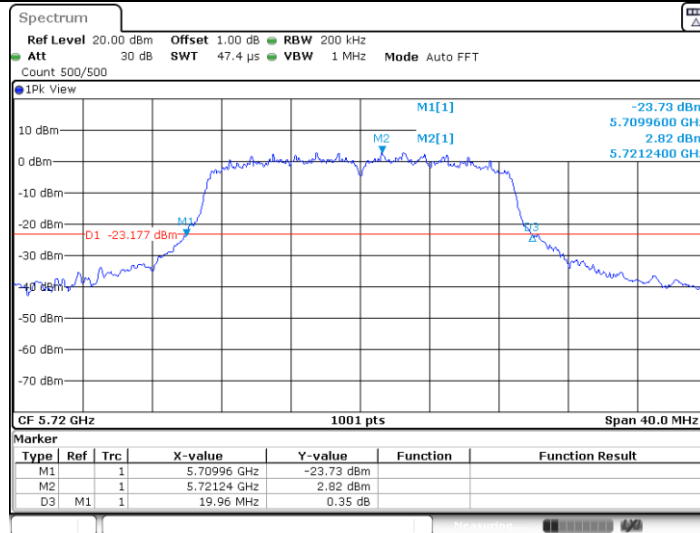
Date: 1.JUN.2022 10:49:53

11AC20SISO_Ant1_5700



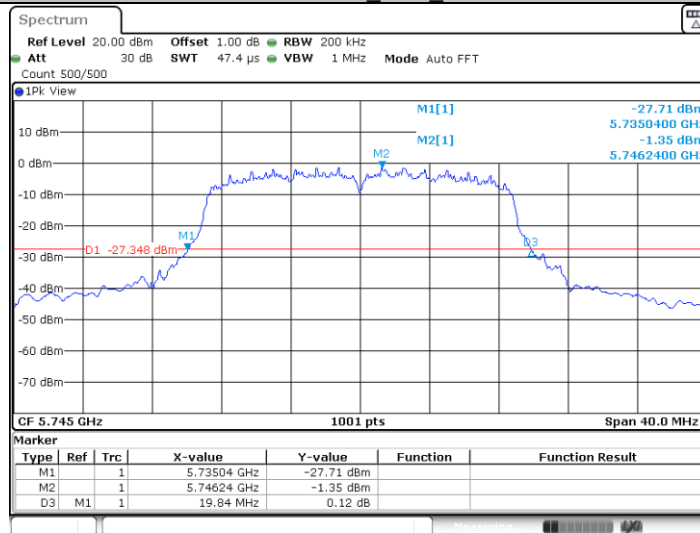
Date: 1.JUN.2022 10:51:43

11AC20SISO_Ant1_5720



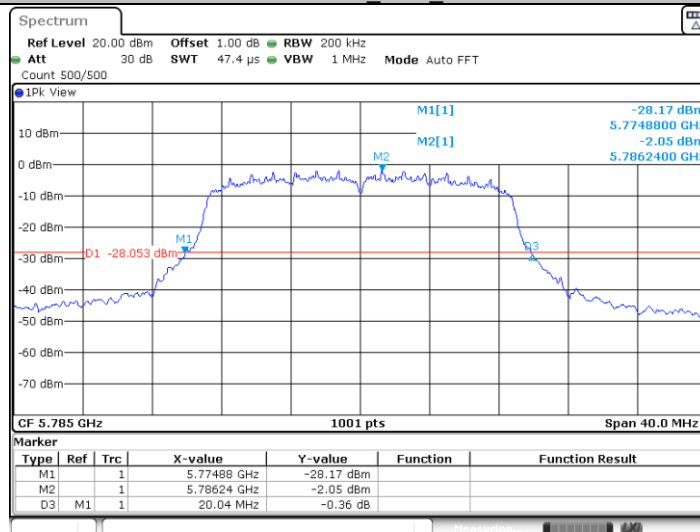
Date: 1 JUN 2022 10:53:39

11AC20SISO_Ant1_5745



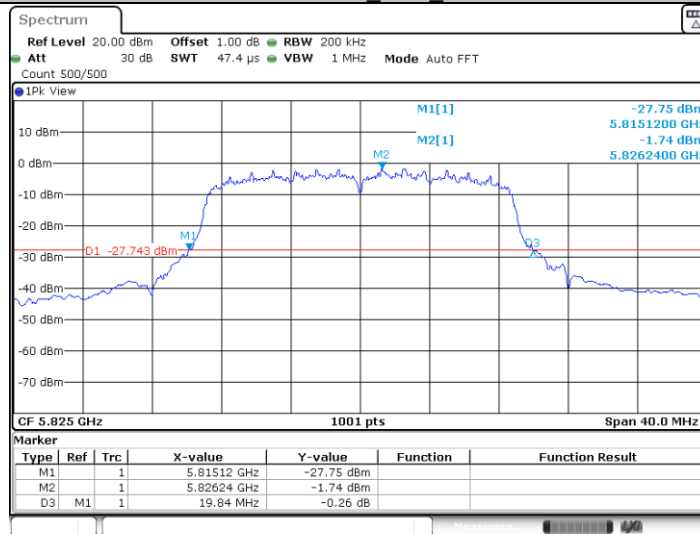
Date: 1 JUN 2022 10:56:40

11AC20SISO_Ant1_5785



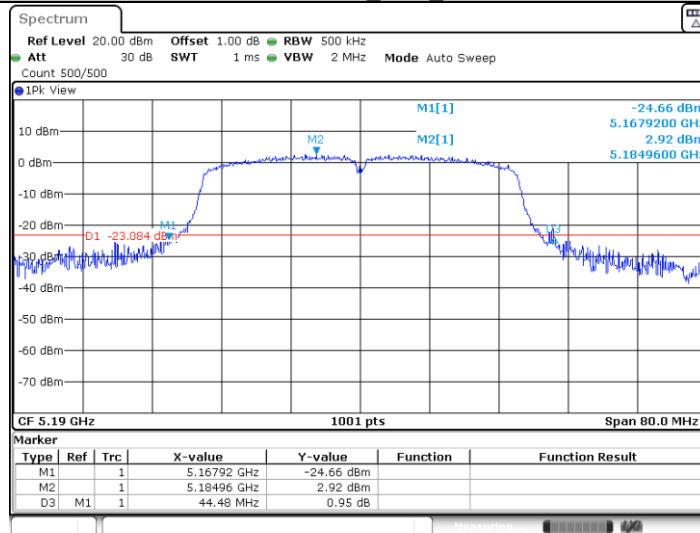
Date: 1 JUN 2022 10:59:18

11AC20SISO Ant1_5825



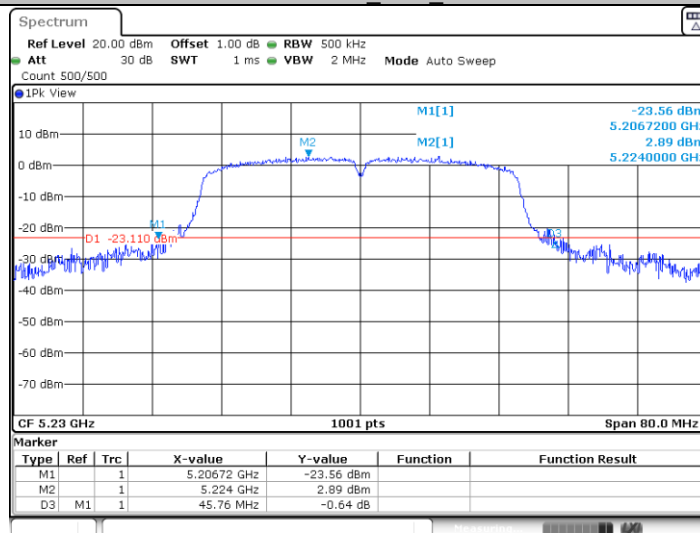
Date: 1.JUN.2022 11:01:15

11AC40SISO Ant1_5190



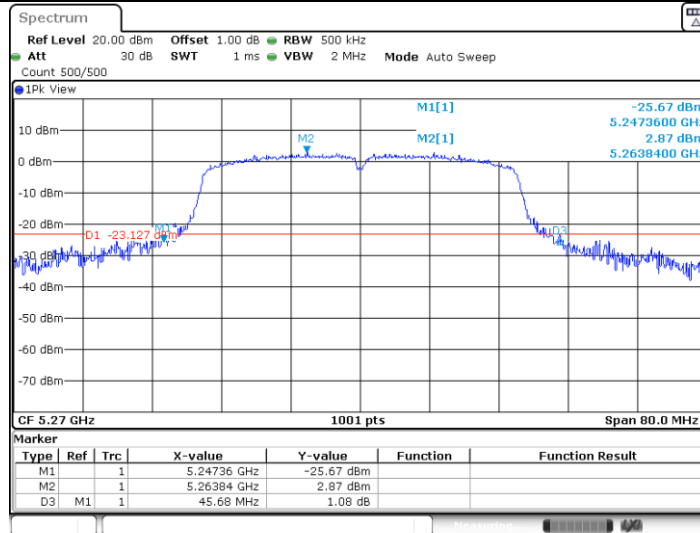
Date: 1.JUN.2022 11:04:21

11AC40SISO Ant1_5230



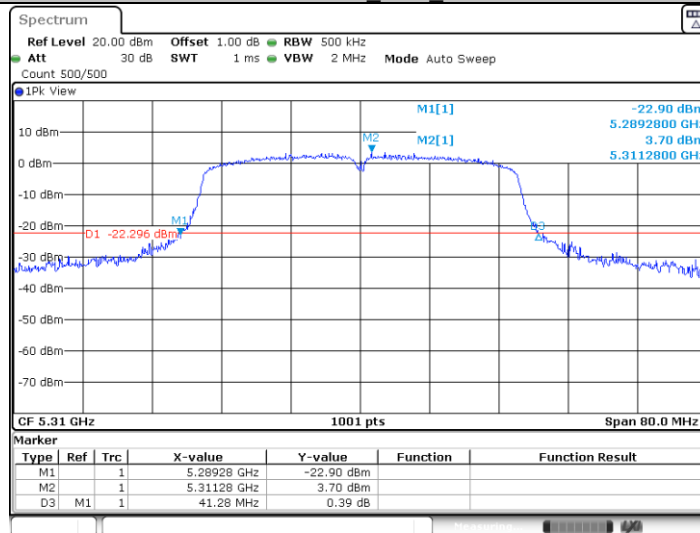
Date: 1.JUN.2022 11:07:12

11AC40SISO_Ant1_5270



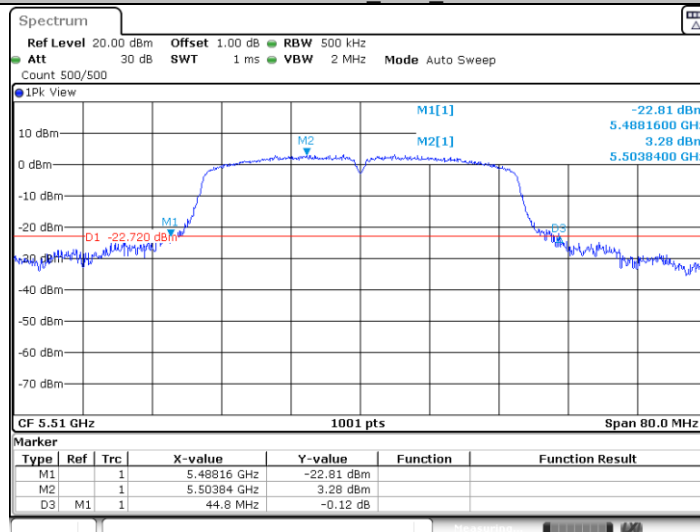
Date: 1 JUN 2022 11:12:29

11AC40SISO_Ant1_5310



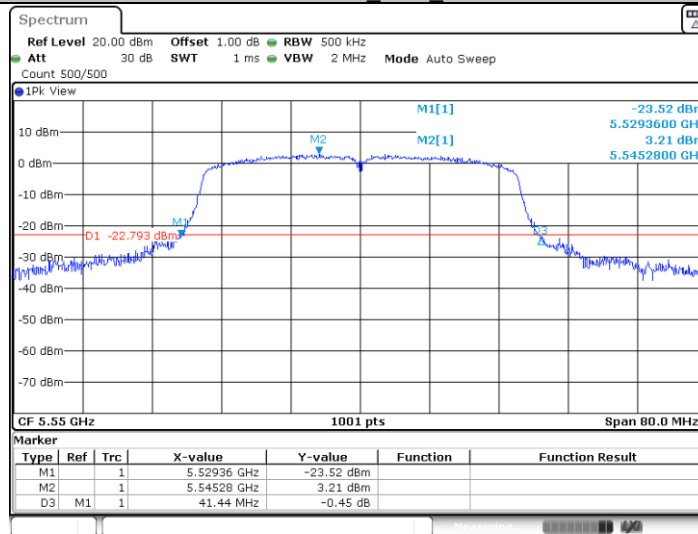
Date: 1 JUN 2022 11:14:11

11AC40SISO_Ant1_5510



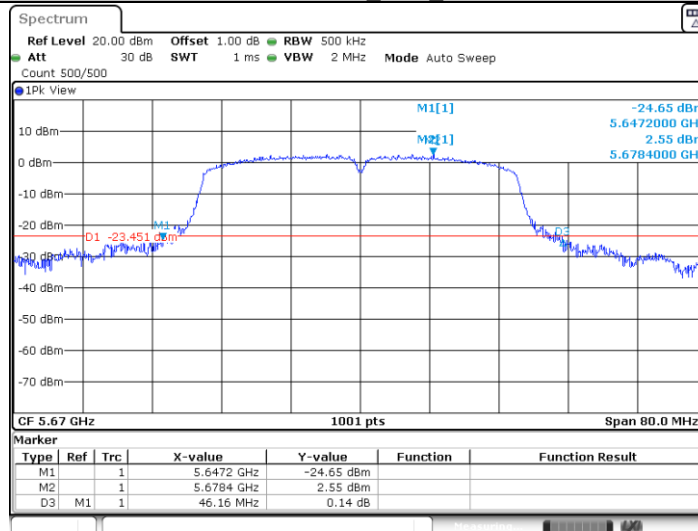
Date: 1 JUN 2022 11:17:40

11AC40SISO_Ant1_5550



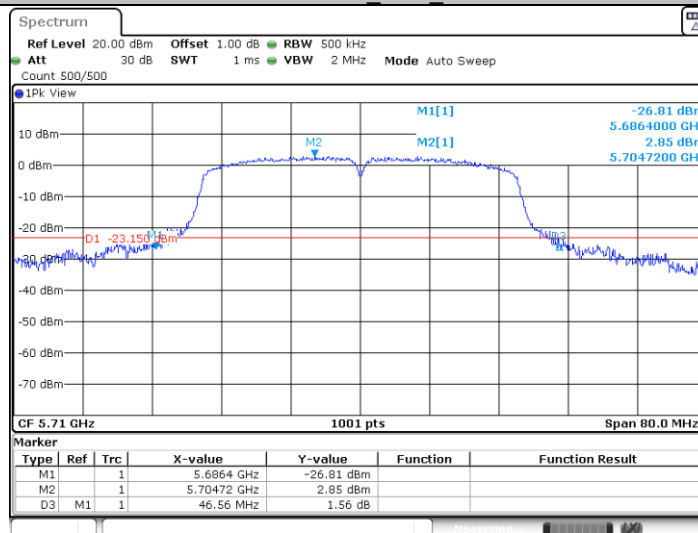
Date: 1.JUN.2022 11:20:05

11AC40SISO_Ant1_5670



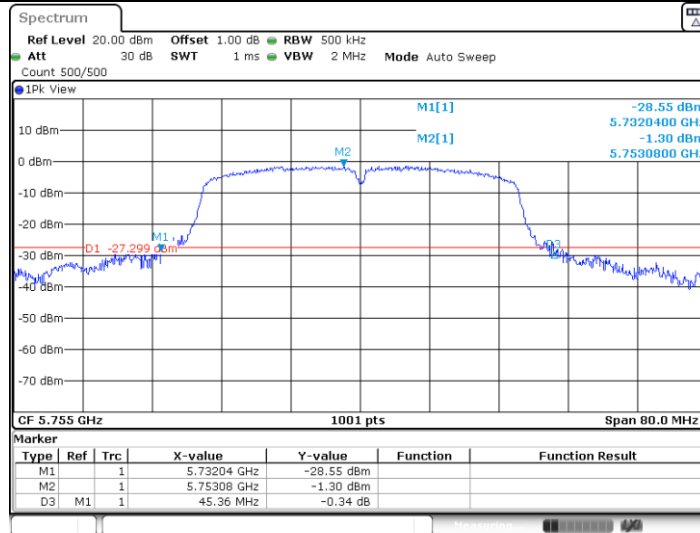
Date: 1.JUN.2022 11:23:20

11AC40SISO_Ant1_5710



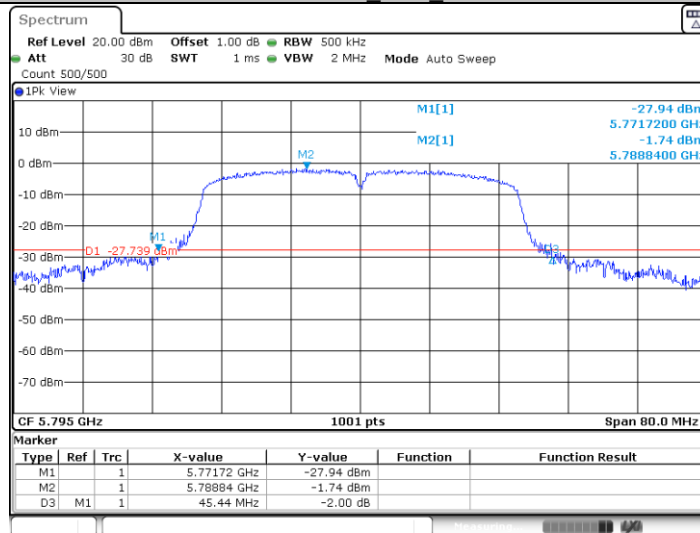
Date: 1.JUN.2022 11:25:12

11AC40SISO_Ant1_5755



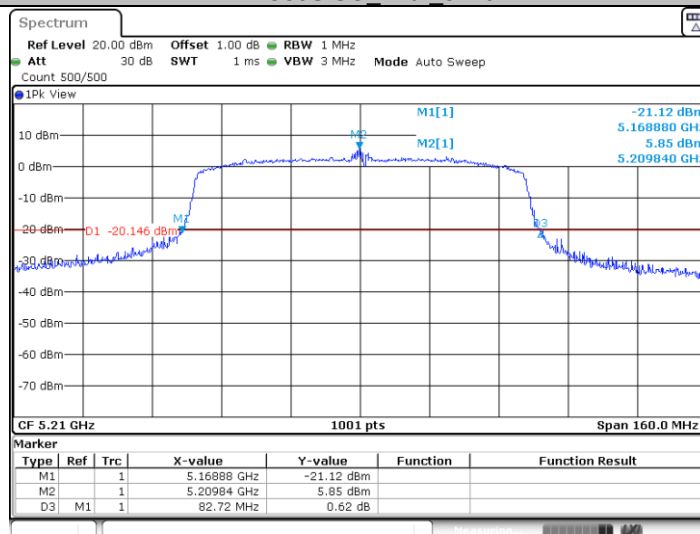
Date: 1 JUN 2022 11:28:03

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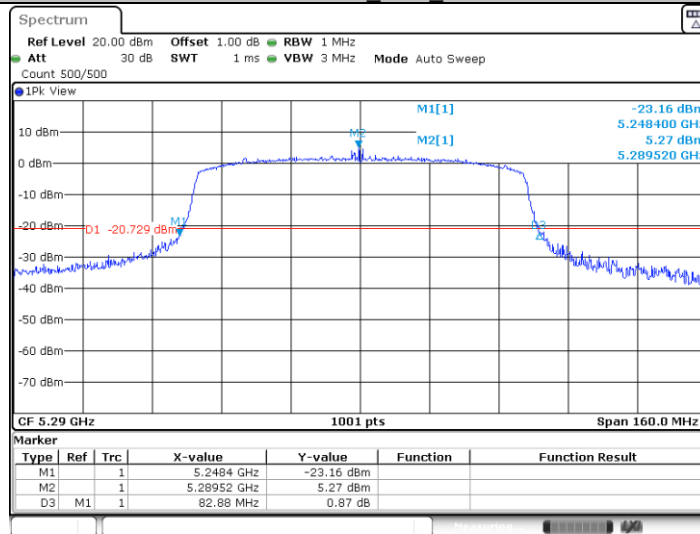
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11AC80SISO_Ant1_5210



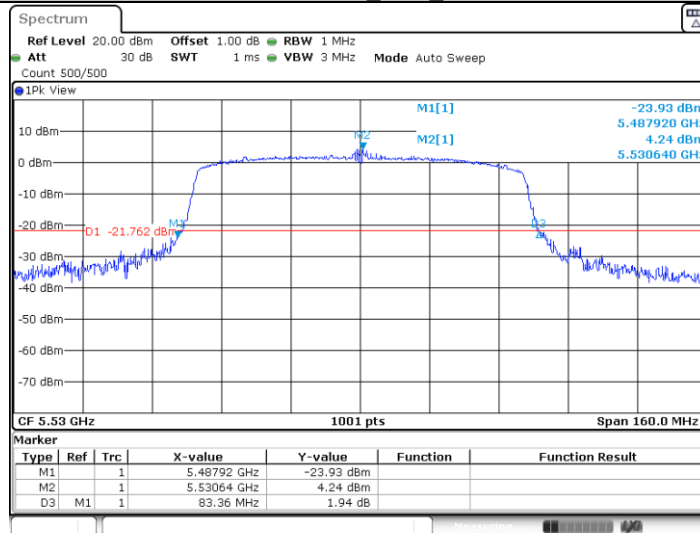
Date: 1 JUN 2022 11:37:53

11AC80SISO Ant1 5290



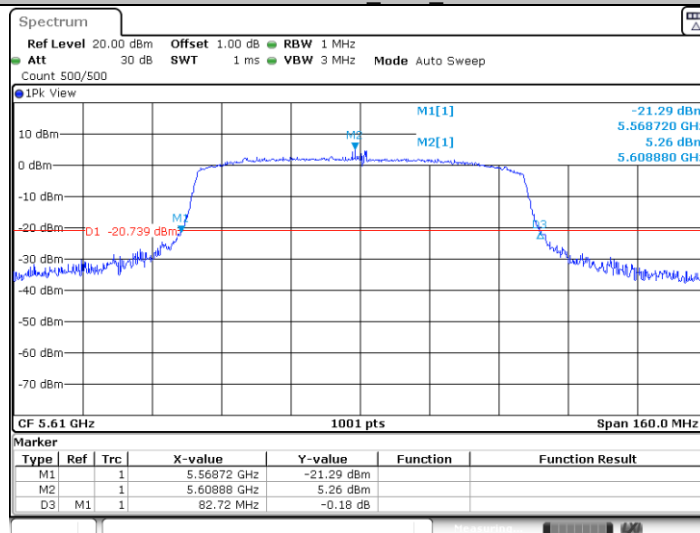
Date: 1.JUN.2022 11:40:37

11AC80SISO Ant1 5530

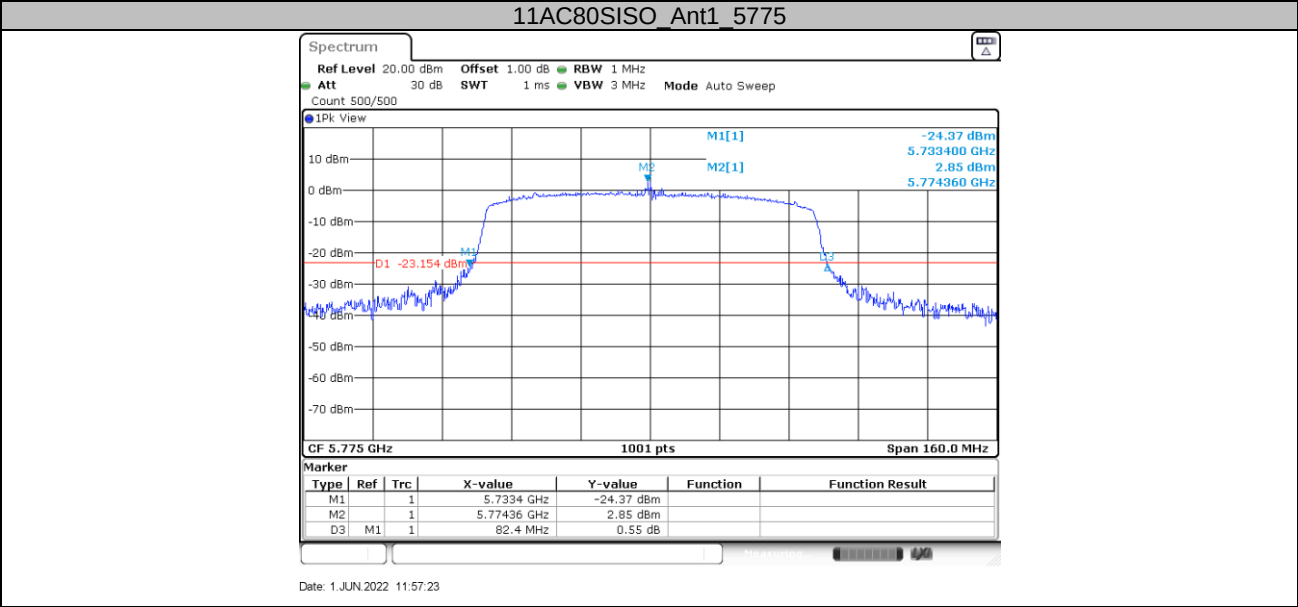
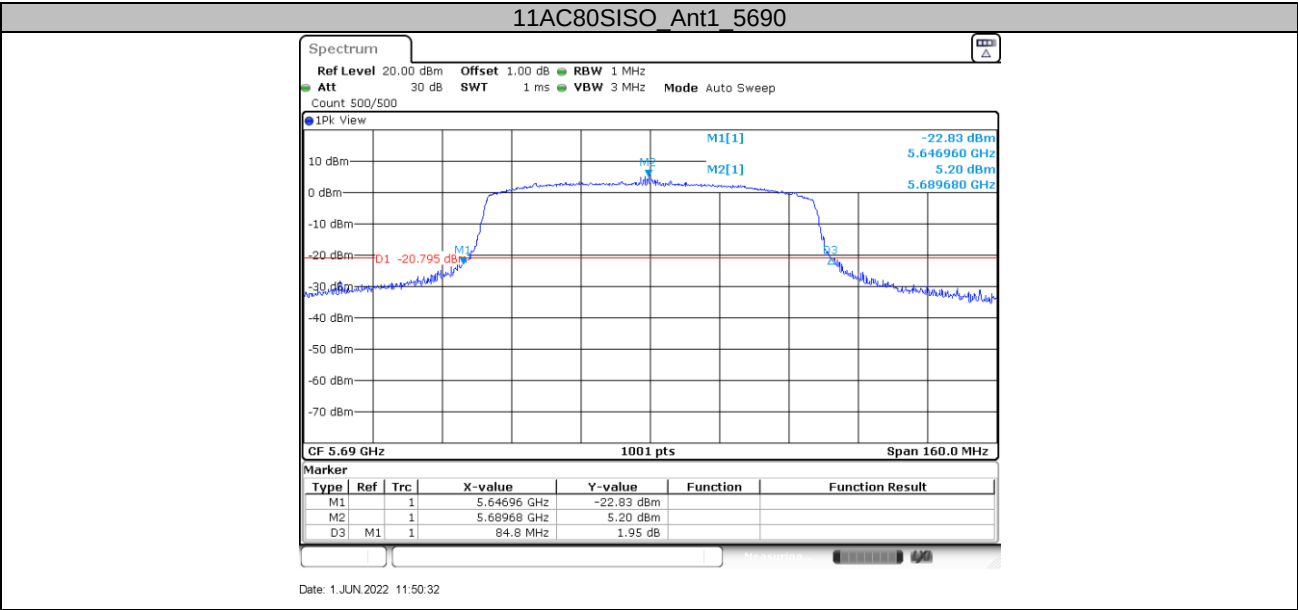


Date: 1.JUN.2022 11:42:26

11AC80SISO Ant1 5610



Date: 1.JUN.2022 11:47:36

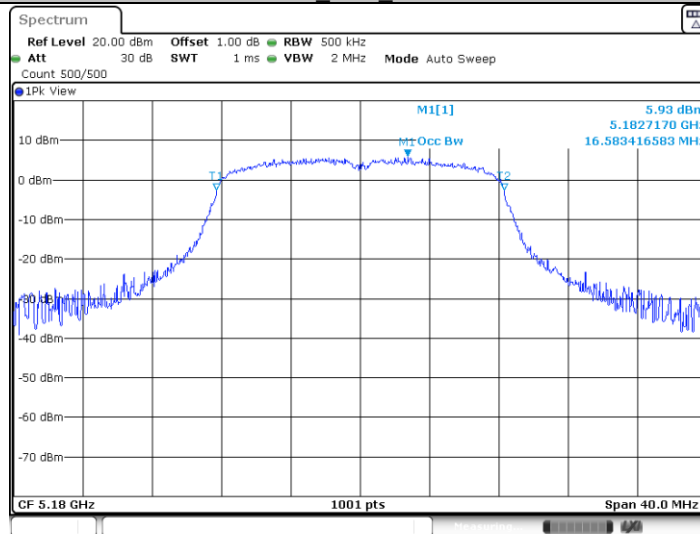


99% Bandwidth Test Result

TestMode	Antenna	Channel [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	16.583	5171.688	5188.272	---	PASS
		5200	16.623	5191.688	5208.312	---	PASS
		5240	16.623	5231.688	5248.312	---	PASS
		5260	16.623	5251.688	5268.312	---	PASS
		5280	16.623	5271.688	5288.312	---	PASS
		5320	16.623	5311.688	5328.312	---	PASS
		5500	16.623	5491.688	5508.312	---	PASS
		5580	16.623	5571.688	5588.312	---	PASS
		5700	16.623	5691.648	5708.272	---	PASS
		5720	16.623	5711.688	5728.312	---	PASS
		5720 UNII-2C	13.312	5711.688	5725	---	PASS
		5720 UNII-3	3.312	5725	5728.312	---	PASS
		5745	16.543	5736.728	5753.272	---	PASS
		5785	16.583	5776.688	5793.272	---	PASS
		5825	16.583	5816.688	5833.272	---	PASS
11N20SISO	Ant1	5180	17.662	5171.169	5188.831	---	PASS
		5200	17.662	5191.169	5208.831	---	PASS
		5240	17.582	5231.209	5248.791	---	PASS
		5260	17.662	5251.169	5268.831	---	PASS
		5280	17.662	5271.169	5288.831	---	PASS
		5320	17.662	5311.169	5328.831	---	PASS
		5500	17.662	5491.169	5508.831	---	PASS
		5580	17.662	5571.169	5588.831	---	PASS
		5700	17.622	5691.169	5708.791	---	PASS
		5720	17.662	5711.169	5728.831	---	PASS
		5720 UNII-2C	13.831	5711.169	5725	---	PASS
		5720 UNII-3	3.831	5725	5728.831	---	PASS
		5745	17.622	5736.169	5753.791	---	PASS
		5785	17.622	5776.169	5793.791	---	PASS
		5825	17.662	5816.169	5833.831	---	PASS
11N40SISO	Ant1	5190	36.284	5171.858	5208.142	---	PASS
		5230	36.204	5211.938	5248.142	---	PASS
		5270	36.284	5251.858	5288.142	---	PASS
		5310	36.124	5291.938	5328.062	---	PASS
		5510	36.284	5491.858	5528.142	---	PASS
		5550	36.284	5531.858	5568.142	---	PASS
		5670	36.284	5651.858	5688.142	---	PASS
		5710	36.284	5691.858	5728.142	---	PASS
		5710 UNII-2C	33.142	5691.858	5725	---	PASS
		5710 UNII-3	3.142	5725	5728.142	---	PASS
		5755	36.284	5736.858	5773.142	---	PASS
		5795	36.124	5776.938	5813.062	---	PASS
		5180	17.662	5171.169	5188.831	---	PASS
11AC20SISO	Ant1	5200	17.662	5191.169	5208.831	---	PASS
		5240	17.662	5231.169	5248.831	---	PASS
		5260	17.662	5251.169	5268.831	---	PASS
		5280	17.622	5271.209	5288.831	---	PASS
		5320	17.662	5311.169	5328.831	---	PASS
		5500	17.662	5491.169	5508.831	---	PASS
		5580	17.662	5571.169	5588.831	---	PASS
		5700	17.622	5691.169	5708.791	---	PASS
		5720	17.622	5711.169	5728.791	---	PASS
		5720 UNII-2C	13.831	5711.169	5725	---	PASS
		5720 UNII-3	3.831	5725	5728.831	---	PASS

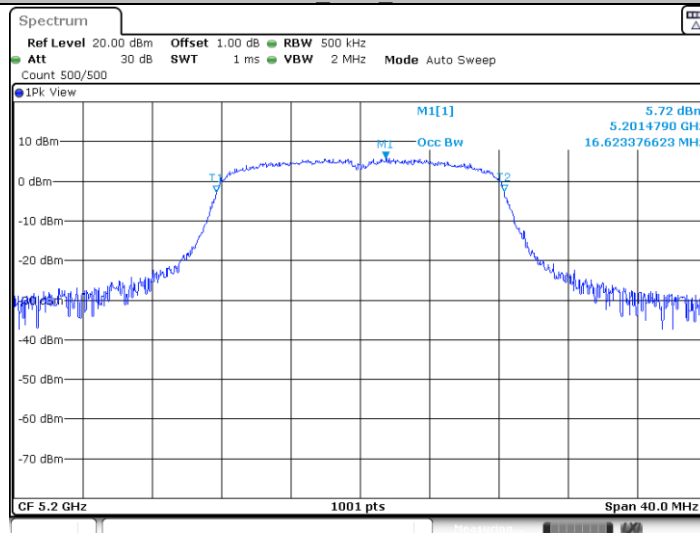
		5720 UNII-3	3.791	5725	5728.791	---	PASS
		5745	17.662	5736.169	5753.831	---	PASS
		5785	17.622	5776.169	5793.791	---	PASS
		5825	17.622	5816.169	5833.791	---	PASS
11AC40SISO	Ant1	5190	36.284	5171.858	5208.142	---	PASS
		5230	36.204	5211.938	5248.142	---	PASS
		5270	36.284	5251.858	5288.142	---	PASS
		5310	36.124	5291.938	5328.062	---	PASS
		5510	36.364	5491.858	5528.222	---	PASS
		5550	36.204	5531.858	5568.062	---	PASS
		5670	36.364	5651.778	5688.142	---	PASS
		5710	36.284	5691.778	5728.062	---	PASS
		5710 UNII-2C	33.222	5691.778	5725	---	PASS
		5710 UNII-3	3.062	5725	5728.062	---	PASS
		5755	36.204	5736.858	5773.062	---	PASS
		5795	36.364	5776.778	5813.142	---	PASS
11AC80SISO	Ant1	5210	75.125	5172.438	5247.562	---	PASS
		5290	75.125	5252.438	5327.562	---	PASS
		5530	75.285	5492.278	5567.562	---	PASS
		5610	75.125	5572.278	5647.403	---	PASS
		5690	75.125	5652.278	5727.403	---	PASS
		5690 UNII-2C	72.722	5652.278	5725	---	PASS
		5690 UNII-3	2.403	5725	5727.403	---	PASS
		5775	75.285	5737.278	5812.562	---	PASS

11A_Ant1_5180



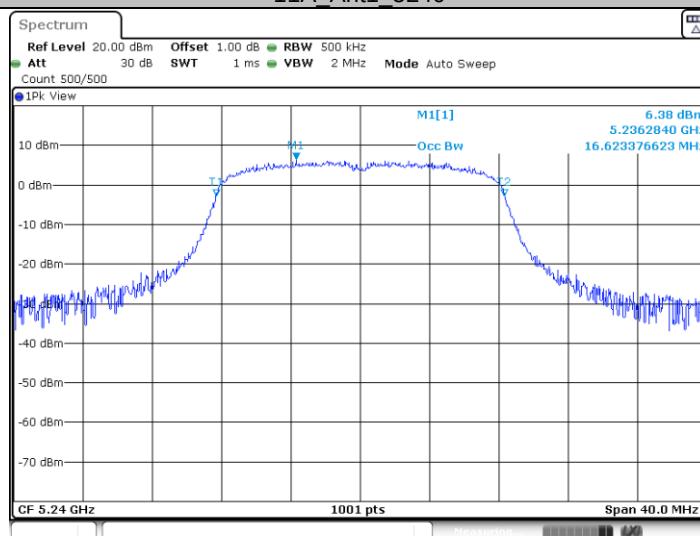
Date: 31.MAY.2022 22:22:08

11A_Ant1_5200



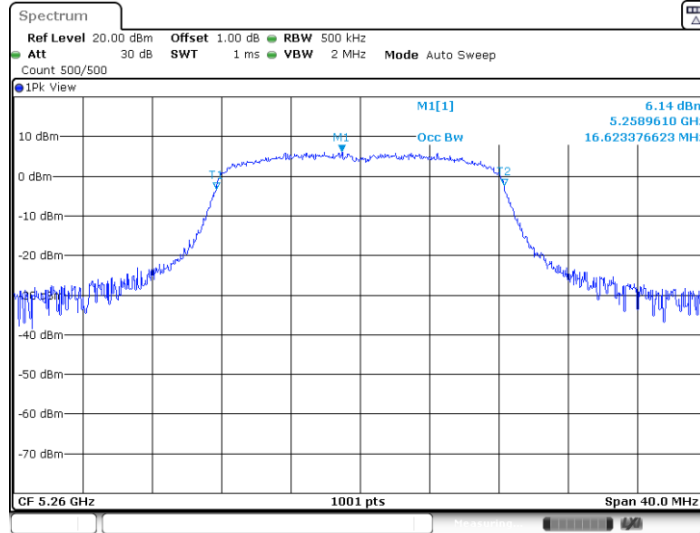
Date: 31.MAY.2022 22:24:22

11A_Ant1_5240



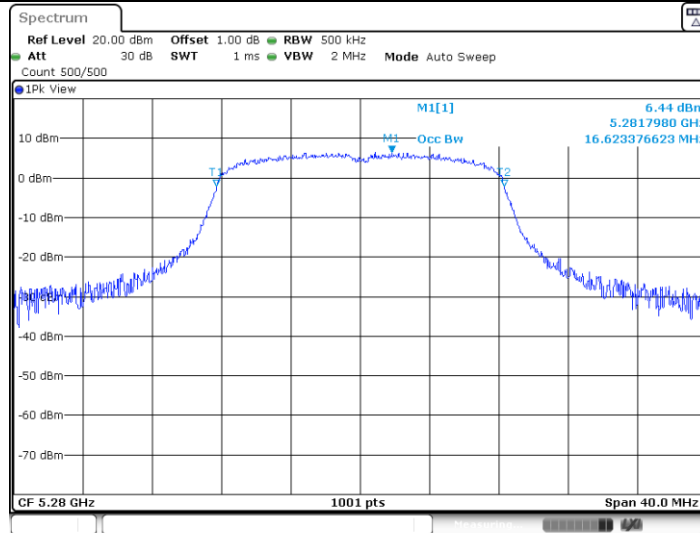
Date: 31.MAY.2022 22:26:22

11A_Ant1_5260



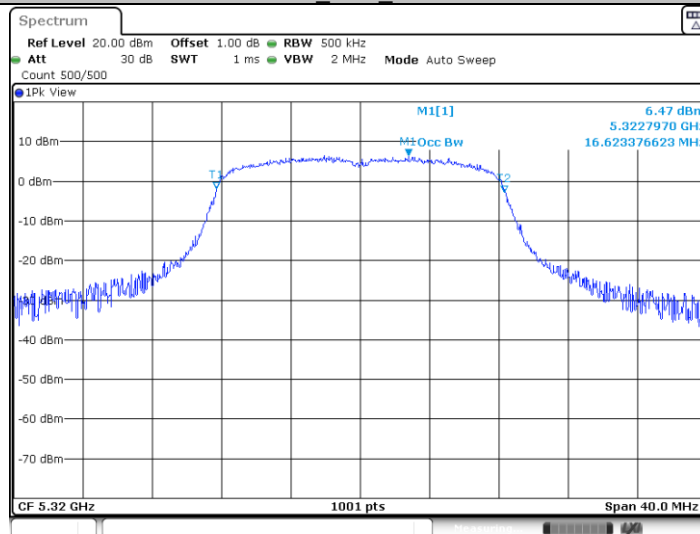
Date: 31.MAY.2022 22:28:16

11A_Ant1_5280



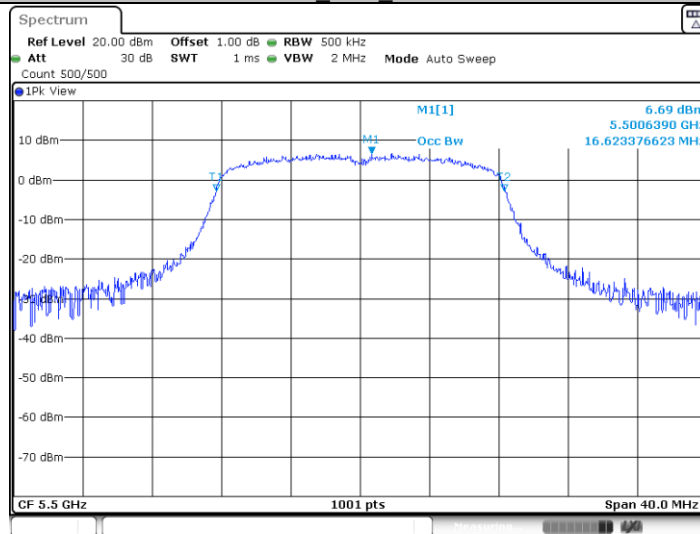
Date: 31.MAY.2022 22:30:02

11A_Ant1_5320



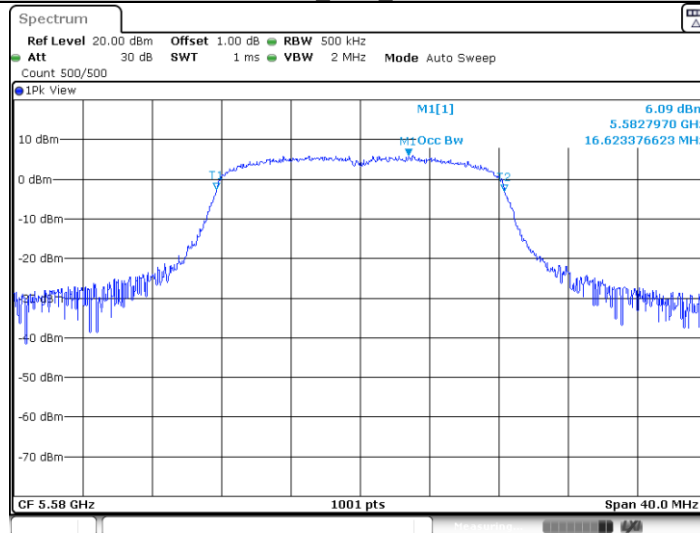
Date: 31.MAY.2022 22:31:41

11A_Ant1_5500



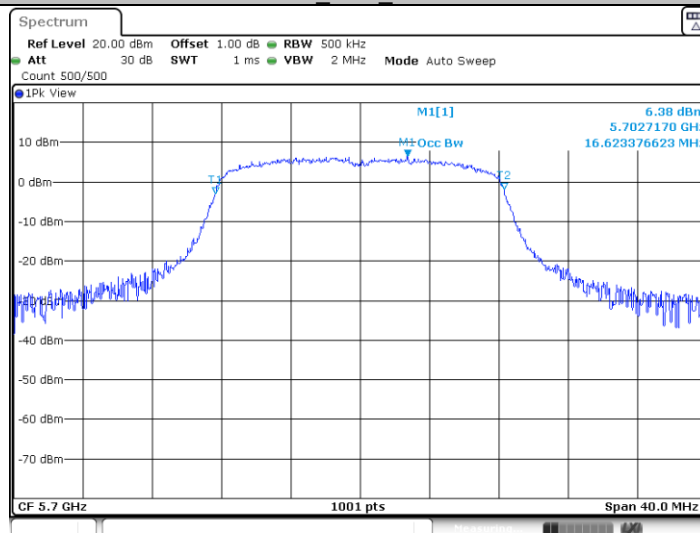
Date: 31.MAY.2022 22:33:36

11A_Ant1_5580



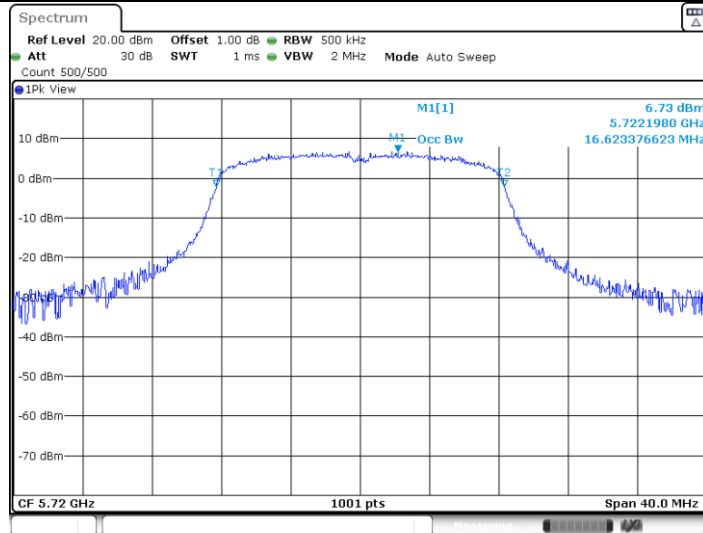
Date: 31.MAY.2022 22:37:05

11A_Ant1_5700



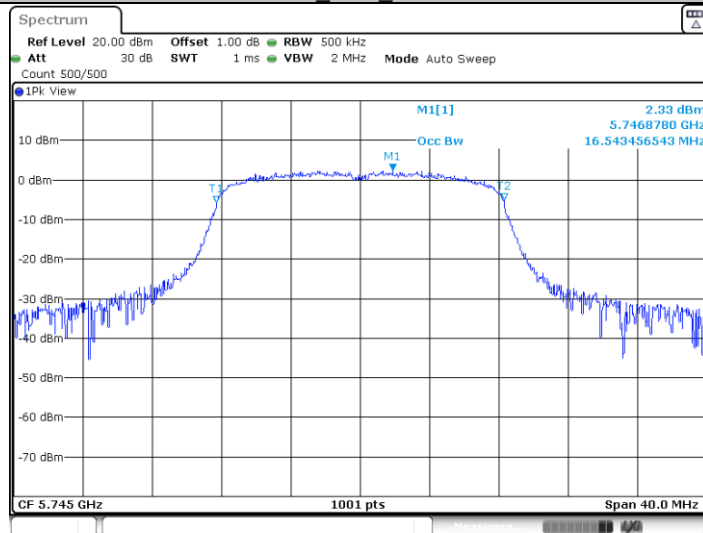
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11A Ant1 5720



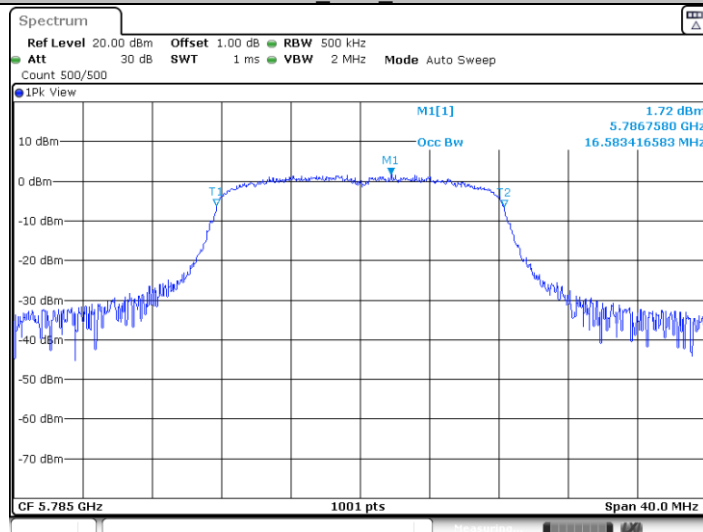
Date: 31.MAY.2022 22:42:36

11A Ant1 5745



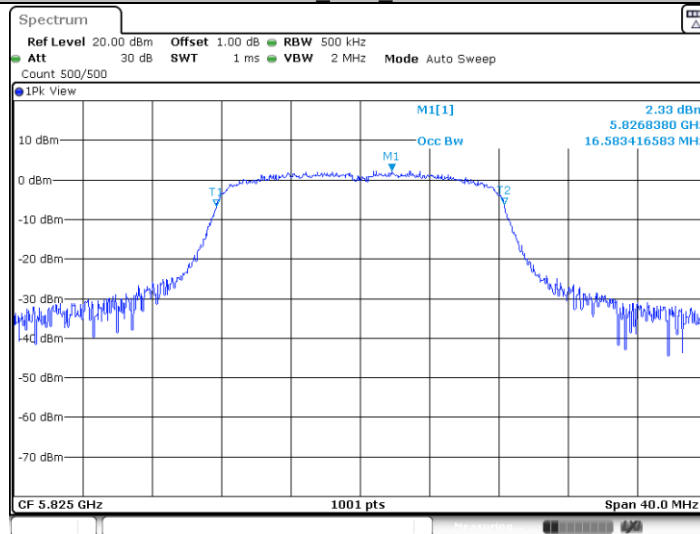
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11A Ant1 5785



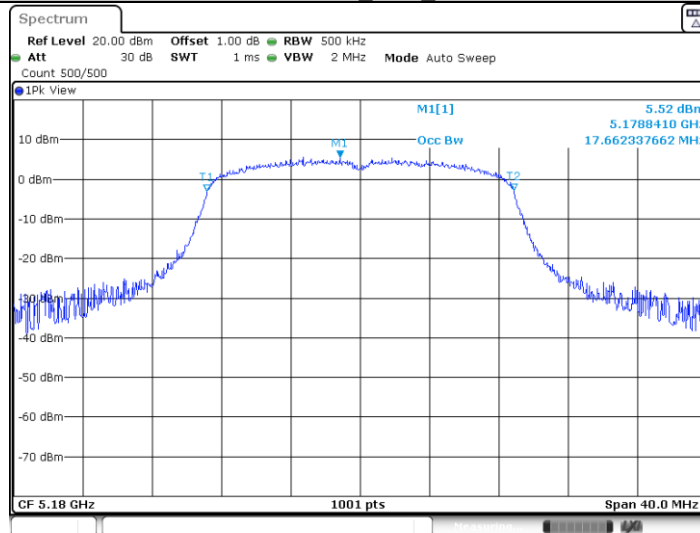
Date: 31.MAY.2022 22:48:03

11A_Ant1_5825



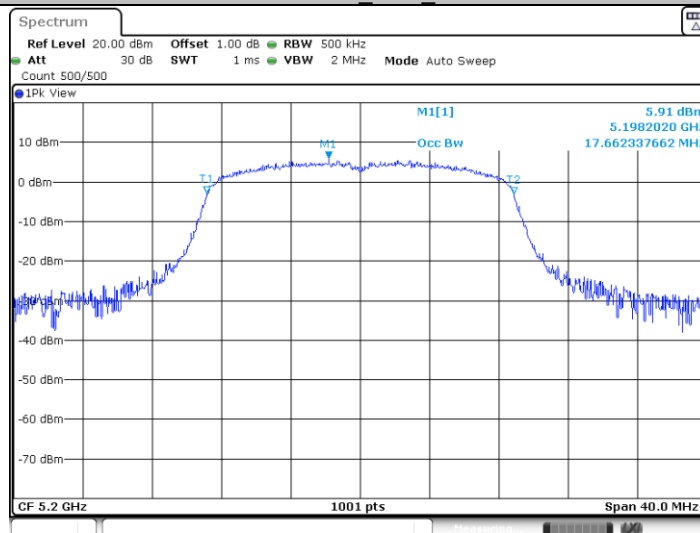
Date: 31.MAY.2022 22:49:55

11N20SISO_Ant1_5180



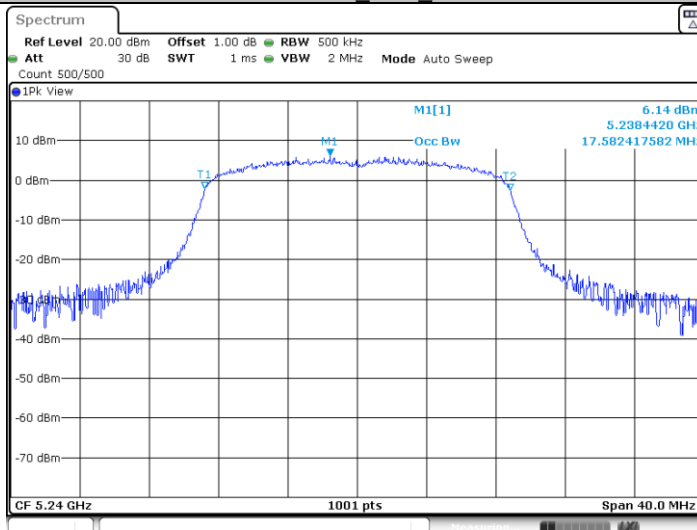
Date: 31.MAY.2022 22:52:30

11N20SISO_Ant1_5200



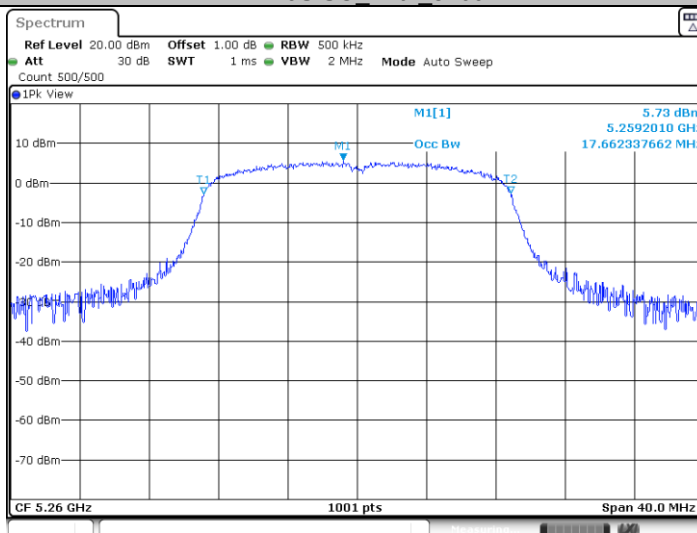
Date: 31.MAY.2022 22:54:50

11N20SISO_Ant1_5240



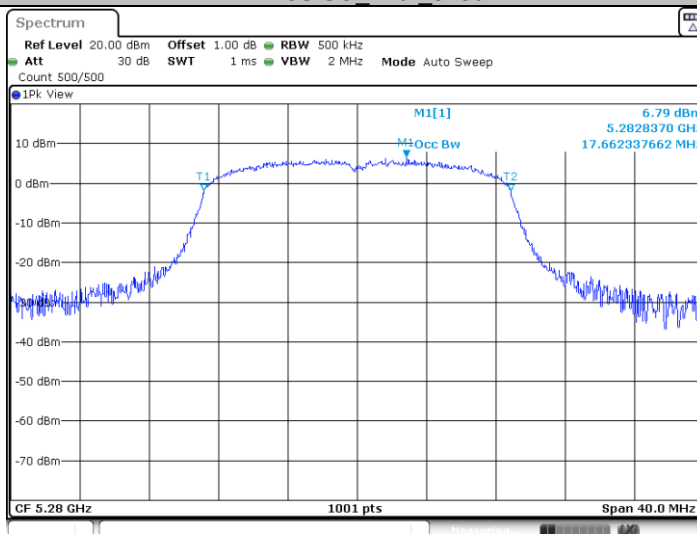
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11N20SISO_Ant1_5260



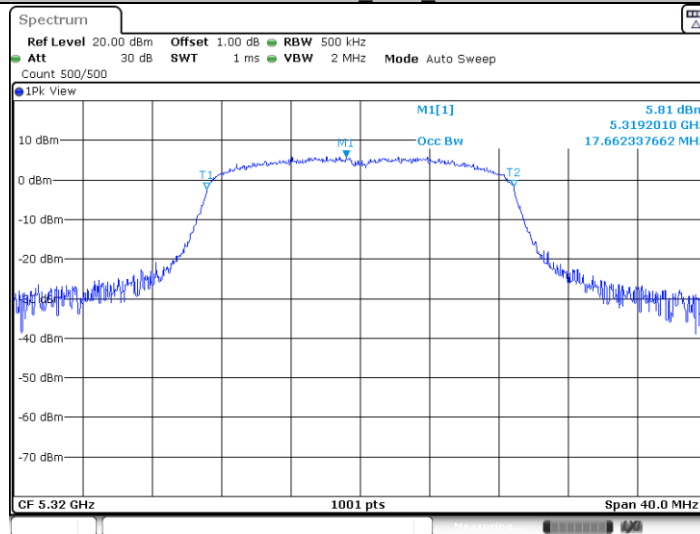
Date: 31.MAY.2022 22:58:54

11N20SISO_Ant1_5280



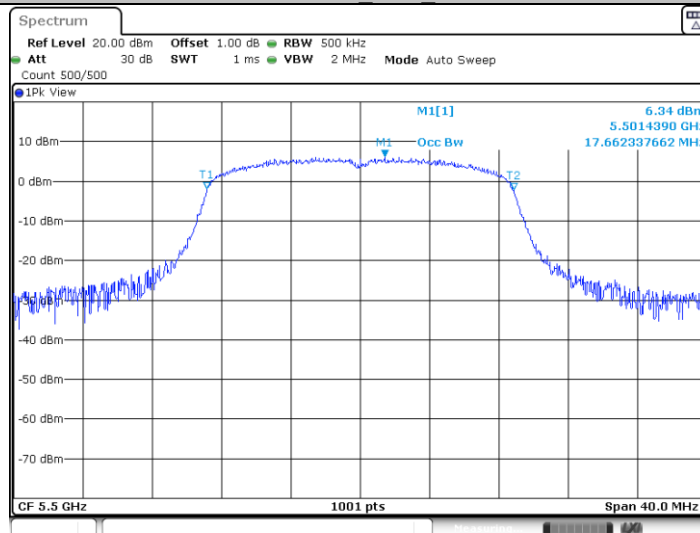
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11N20SISO_Ant1_5320



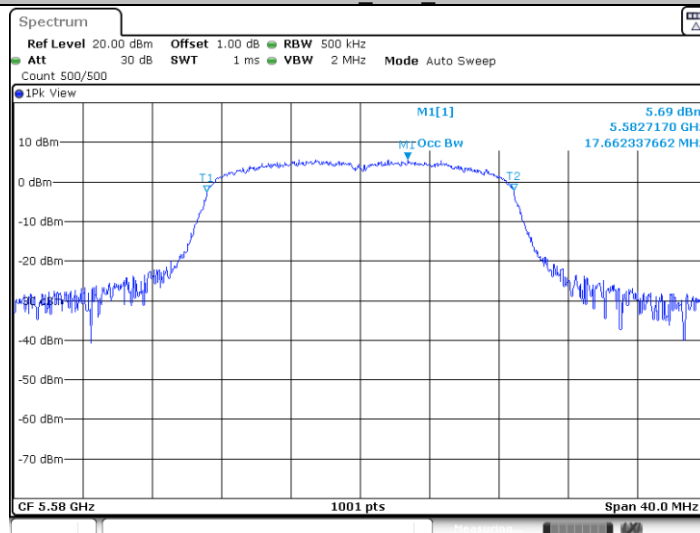
Date: 31.MAY.2022 23:02:33

11N20SISO_Ant1_5500



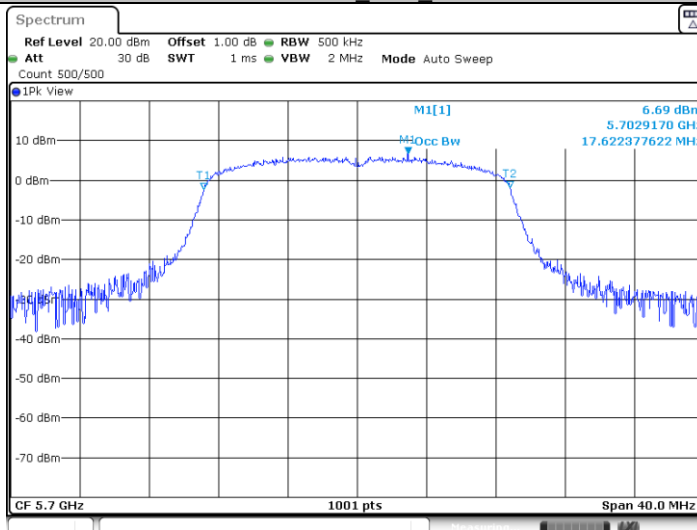
Date: 31.MAY.2022 23:05:25

11N20SISO_Ant1_5580



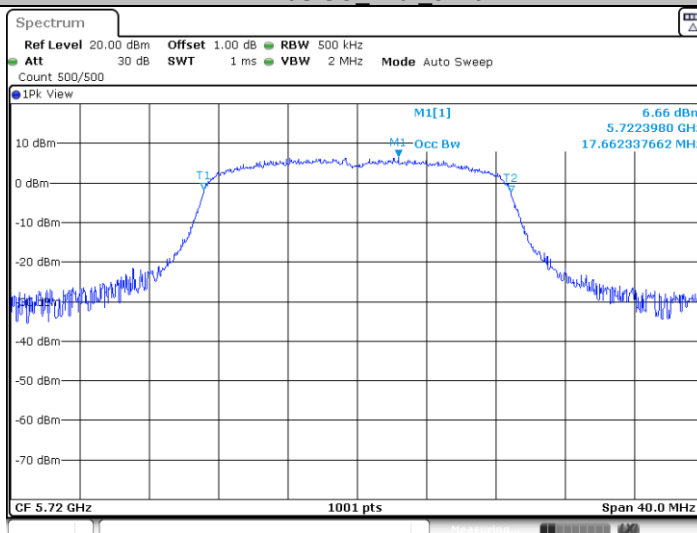
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11N20SISO_Ant1_5700



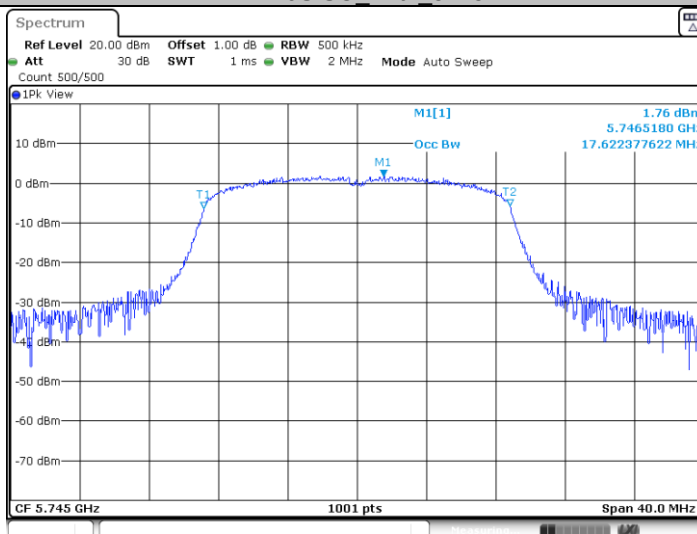
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11N20SISO_Ant1_5720



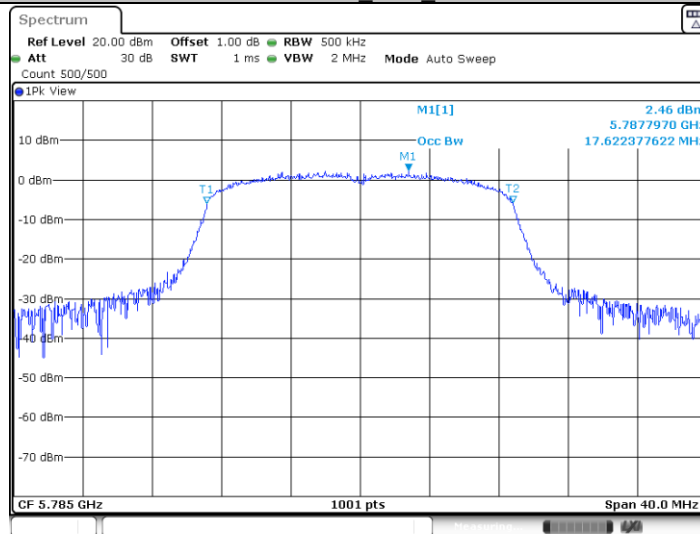
Date: 31.MAY.2022 23:11:05

11N20SISO_Ant1_5745



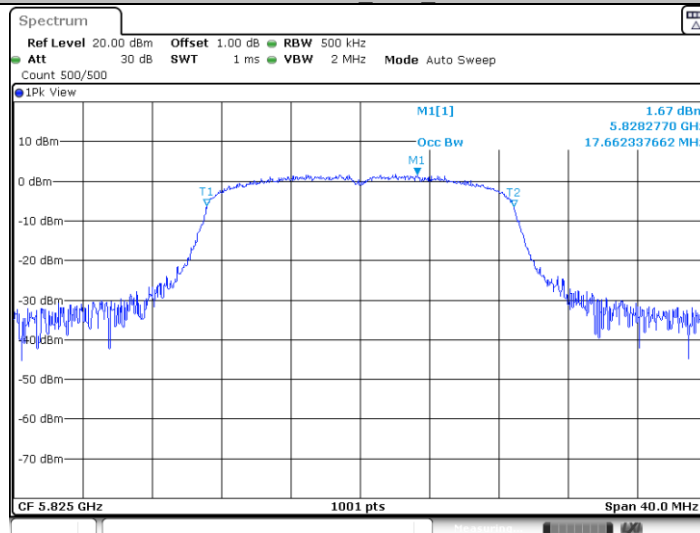
Date: 31.MAY.2022 23:13:54

11N20SISO_Ant1_5785



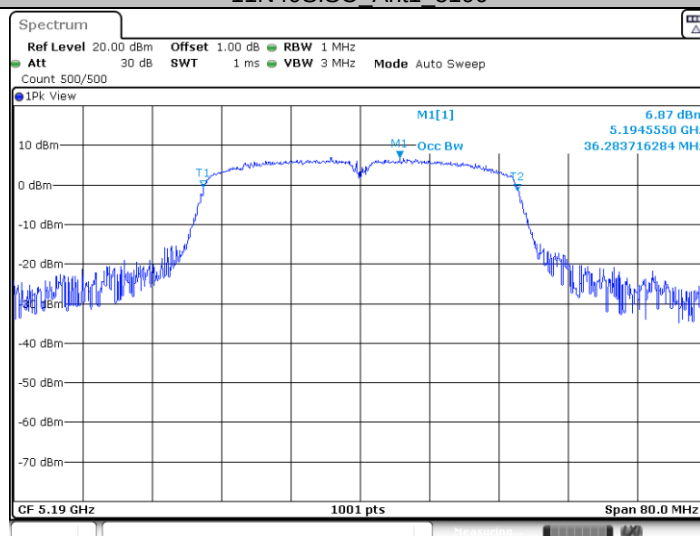
Date: 31.MAY.2022 23:16:54

11N20SISO_Ant1_5825



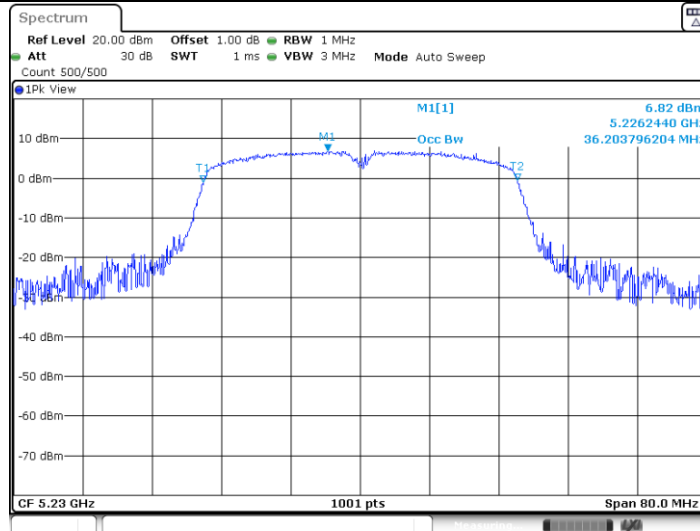
Date: 31.MAY.2022 23:19:05

11N40SISO_Ant1_5190



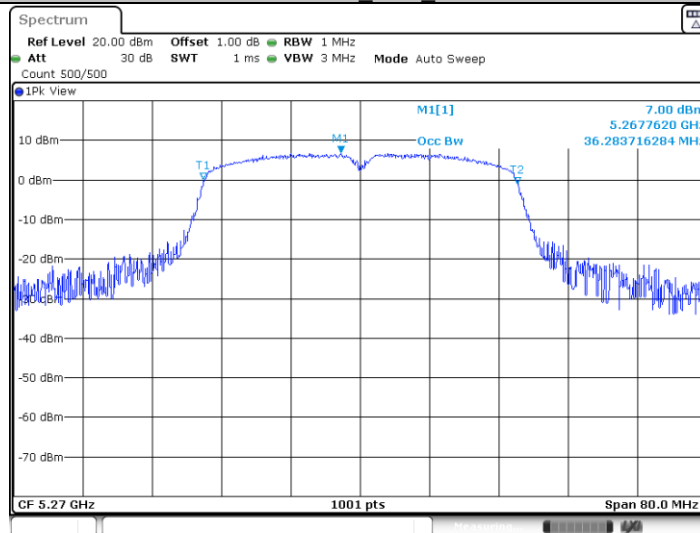
Date: 1.JUN.2022 10:12:48

11N40SISO_Ant1_5230



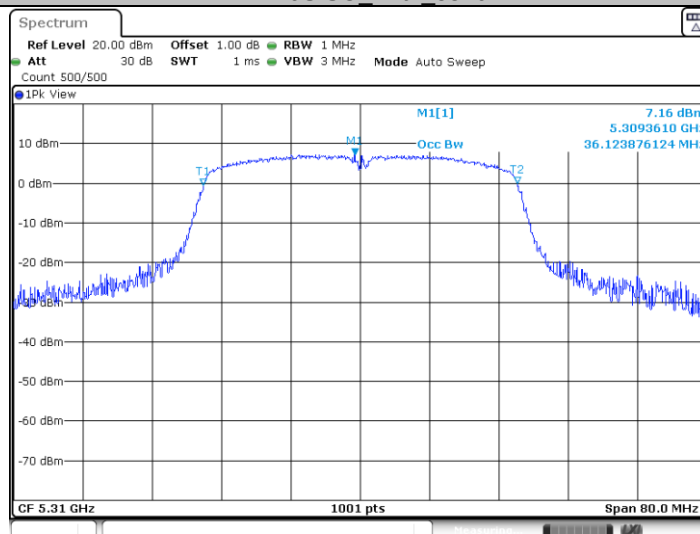
Date: 1 JUN 2022 10:15:30

11N40SISO_Ant1_5270



Date: 1 JUN 2022 10:17:30

11N40SISO_Ant1_5310



Date: 1 JUN 2022 10:19:15