

FCC - TEST REPORTReport Number : **709502100625-00** Date of Issue: November 1, 2021Model : **FOTRIC 348A etc. (Details refer to page 4)**

Product Type : Infrared Thermal Camera

FCC ID : 2AZTCFALCON

Applicant : FOTRIC INC.

Address : No. 14, Lane 2500, Xiupu Road, Pudong, 201201 Shanghai,
PEOPLE'S REPUBLIC OF CHINA

Manufacturer : FOTRIC INC.

Address : No. 14, Lane 2500, Xiupu Road, Pudong, 201201 Shanghai,
PEOPLE'S REPUBLIC OF CHINATest Result : ☒ Positive ☐ NegativeTotal pages including
Appendices : 247

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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. Shanghai Branch
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3 Description of the Equipment under Test

Product:	Infrared Thermal Camera
Model no.:	FOTRIC 343G, FOTRIC 343P, FOTRIC 343A, FOTRIC 343M, FOTRIC 343E, FOTRIC 343X, FOTRIC 343T, FOTRIC 343B, FOTRIC 343G+, FOTRIC 343P+, FOTRIC 343A+, FOTRIC 343M+, FOTRIC 343E+, FOTRIC 343X+, FOTRIC 343T+, FOTRIC 343B+, FOTRIC 344G, FOTRIC 344P, FOTRIC 344A, FOTRIC 344M, FOTRIC 344E, FOTRIC 344X, FOTRIC 344T, FOTRIC 344B, FOTRIC 344G+, FOTRIC 344P+, FOTRIC 344A+, FOTRIC 344M+, FOTRIC 344E+, FOTRIC 344X+, FOTRIC 344T+, FOTRIC 344B+, FOTRIC 345G, FOTRIC 345P, FOTRIC 345A, FOTRIC 345M, FOTRIC 345E, FOTRIC 345X, FOTRIC 345T, FOTRIC 345B, FOTRIC 345G+, FOTRIC 345P+, FOTRIC 345A+, FOTRIC 345M+, FOTRIC 345E+, FOTRIC 345X+, FOTRIC 345T+, FOTRIC 345B+, FOTRIC 346G, FOTRIC 346P, FOTRIC 346A, FOTRIC 346M, FOTRIC 346E, FOTRIC 346X, FOTRIC 346T, FOTRIC 346B, FOTRIC 346G+, FOTRIC 346P+, FOTRIC 346A+, FOTRIC 346M+, FOTRIC 346E+, FOTRIC 346X+, FOTRIC 346T+, FOTRIC 346B+, FOTRIC 347G, FOTRIC 347P, FOTRIC 347A, FOTRIC 347M, FOTRIC 347E, FOTRIC 347X, FOTRIC 347T, FOTRIC 347B, FOTRIC 347G+, FOTRIC 347P+, FOTRIC 347A+, FOTRIC 347M+, FOTRIC 347E+, FOTRIC 347X+, FOTRIC 347T+, FOTRIC 347B+, FOTRIC 348G, FOTRIC 348P, FOTRIC 348A, FOTRIC 348M, FOTRIC 348E, FOTRIC 348X, FOTRIC 348T, FOTRIC 348B, FOTRIC 348G+, FOTRIC 348P+, FOTRIC 348A+, FOTRIC 348M+, FOTRIC 348E+, FOTRIC 348X+, FOTRIC 348T+, FOTRIC 348B+
Sample(s) Tested:	FOTRIC 348A
FCC ID:	2AZTCFALCON
Options and accessories:	Test harness
Rating:	AC 100-240V, 50/60Hz for adapter DC 12V for Camera
RF Transmission Frequency:	2402~2480MHz for Bluetooth For 2.4G & 5G Wi-Fi For 802.11b/g/n-HT20: 2412~2462 MHz For 802.11n-HT40: 2422~2452 MHz 5180~5240 MHz (U-NII-1) 5260~5320 MHz (U-NII-2A) 5500~5720 MHz (U-NII-2C) 5745~5825 MHz (U-NII-3)

No. of Operated Channel: 79 channels for Bluetooth 4.2+EDR
40 channels for Bluetooth 4.2 BLE
For 2.4GHz Wi-Fi

Operation Frequency each of channel For 802.11b/g/n(H20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Operation Frequency each of channel For 802.11n(H40)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
		4	2427MHz	7	2442MHz		
		5	2432MHz	8	2447MHz		
3	2422MHz	6	2437MHz	9	2452MHz		

5180~5240 MHz (U-NII-1)

5260~5320 MHz (U-NII-2A)

5500~5720 MHz (U-NII-2C)

5745~5825 MHz (U-NII-3)

Modulation: Bluetooth 4.2+EDR FHSS: GFSK, $\pi/4$ DQPSK, 8DPSK
Bluetooth 4.2+BLE DHSS: GFSK
For Wi-Fi: Direct Sequence Spread Spectrum (DSSS) for 802.11b
Orthogonal Frequency Division Multiplexing (OFDM) for 802.11a/b/g/n/ac

Hardware Version: V02A

Software Version: 2.0.4

Data speed: 1. Bluetooth 4.2+EDR FHSS: 1Mbps, 2Mbps, 3Mbps
2. Bluetooth 4.2+BLE DHSS: 1Mbps
3. Wi-Fi: 11b 1 ~ 11Mbps,
11g/a 6 ~ 54Mbps, 11n HT20 6.5 ~ 72.2Mbps,
11n HT 40 13.5 ~ 150Mbps,
11ac VHT40 13.5 ~ 200Mbps,
11ac VHT80 29.3 ~ 433.3Mbps

Duty Cycle: 100%

Antenna Type: PIFA Antenna

Antenna Gain: 2.5dBi

Description of the EUT: The Equipment Under Test (EUT) is an Infrared Thermal Camera with Bluetooth and Wi-Fi Module. The EUT support Bluetooth 4.2+EDR and support BLE function and Wi-Fi operated at 5GHz and 2.4GHz.
Only 5G Wi-Fi included in this report.

Test sample no.: SHA-564832-1

The sample's mentioned in this report is/are submitted/ supplied/ manufactured by client. The laboratory therefore assumes no responsibility for accuracy of information on the brand name, model number, origin of manufacture, consignment, antenna gain or any information supplied.



4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart E, 2021 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart E - Unlicensed National Information Infrastructure Devices

Test Method:
FCC KDB 558074 D01 15.247 Meas Guidance v05r02
KDB 789033 D02 General UNII Test Procedures New Rules v02r01
ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices

5 Summary of Test Results

Technical Requirements						
FCC Part 15 Subpart C						
Test Condition		Pages	Test Site	Test Result		
				Pass	Fail	N/A
§15.207	Conducted emission AC power port	14-16	Site 1	☒	☐	☐
§15.407(e)	Emission bandwidth	17-64	Site 1	☒	☐	☐
15.407(a)(i)	Maximum Conducted Output Power	65-66	Site 1	☒	☐	☐
15.407(a)(i)	Maximum Power Spectral Density	67-89	Site 1	☒	☐	☐
§15.407(g)	Frequencies Stability	90-101	Site 1	☒	☐	☐
§15.407(b)(1), 15.407(b)(2), 15.407(b)(3), 15.407(b)(4), 15.407(b)(5), 15.407(b)(6), 15.407(b)(7), 15.209	Unwanted Emissions	102-243	Site 1	☒	☐	☐
§15.203	Antenna requirement	See note 1		☒	☐	☐

Remark 1: The EUT only operation at 5G Wi-Fi UNII Band (5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5720MHz, 5745MHz-5825MHz). The EUT operate as Clients Device without Radar Detection.

Note 1: The EUT uses a patch antenna, which gain is 2.5dBi. In accordance to §15.203, It is considered sufficiently to comply with the provisions of this section.

15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: 2AZTCFALCON complies with Section 15.207, 15.209, 15.407 of the FCC Part 15, Subpart E Rules.

This report is only for 5GHz Wi-Fi. The TX and RX range is 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5720MHz, 5745MHz-5825MHz.

According to the client's declaration, all the models have the same electrical circuit board and mechanical structure, except pixel, or shell color differences, so we chose the FOTRIC 348A to perform all the tests.

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: April 26, 2021

Testing Start Date: April 27, 2021

Testing End Date: August 9, 2021

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

Reviewed by:

Prepared by:

Tested by:



Hui TONG
Review Engineer



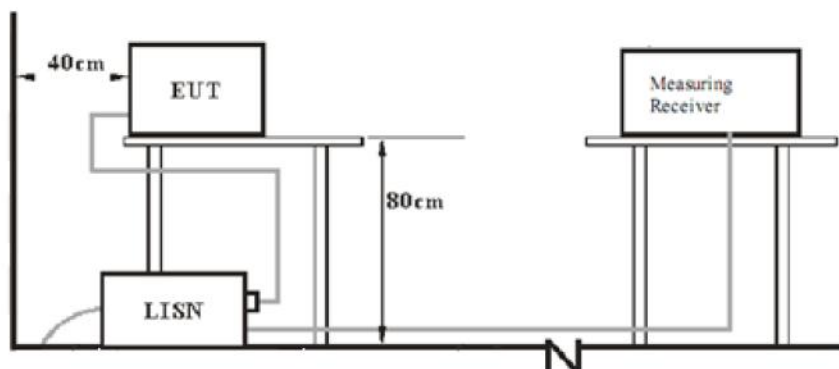
Zhining ZHANG
Project Engineer



Wenqiang LU
Test Engineer

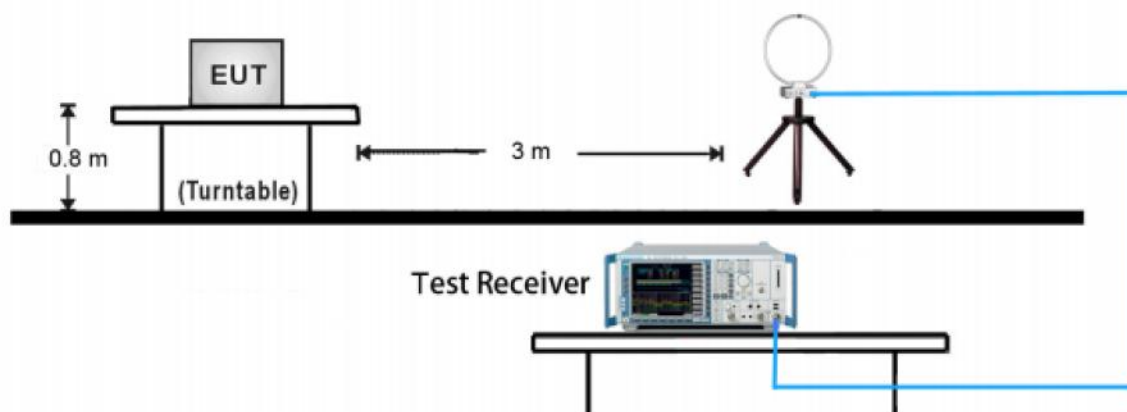
7 Test Setups

7.1 AC Power Line Conducted Emission test setups

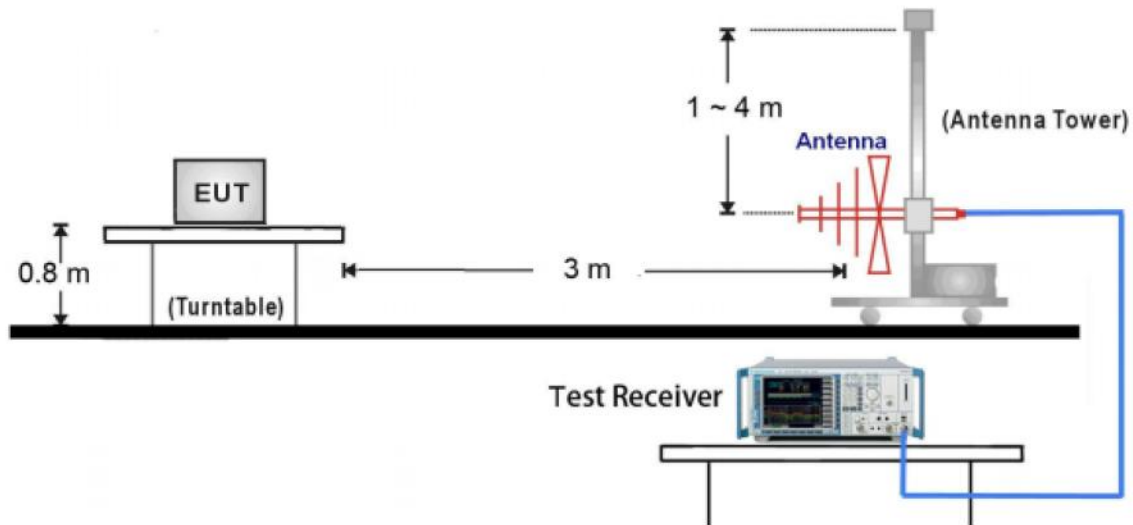


7.2 Radiated test setups

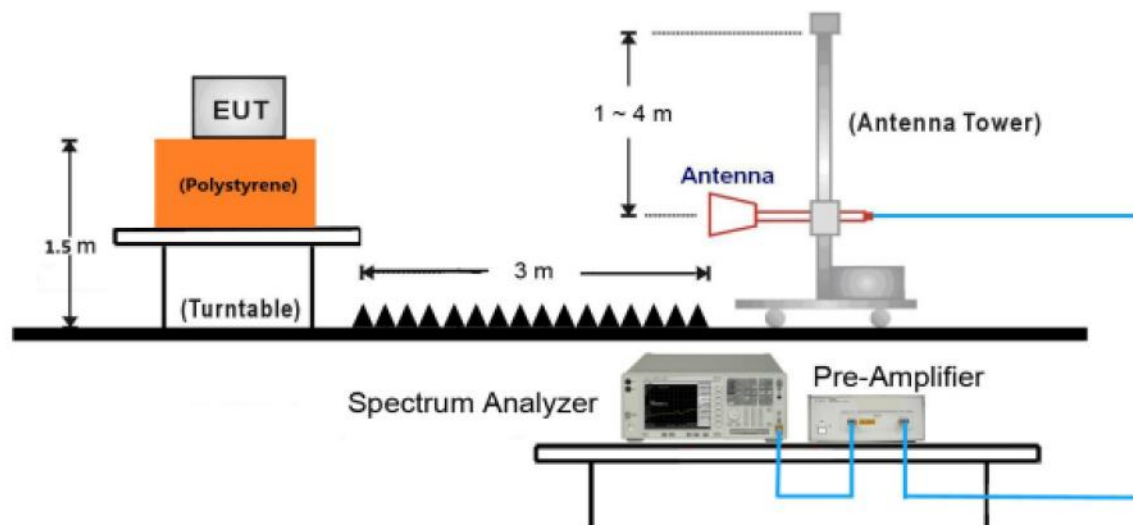
9kHz ~ 30MHz Test Setup:



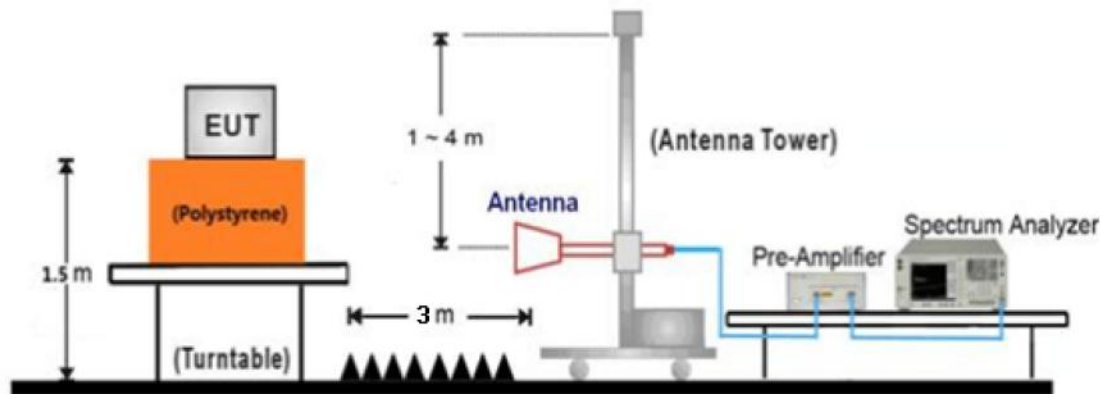
30MHz ~ 1GHz Test Setup:



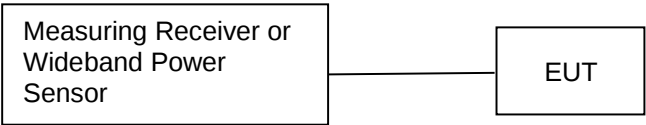
1GHz ~ 18GHz Test Setup:



18GHz ~ 40GHz Test Setup:



7.3 Conducted RF test setups



8 Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
Notebook	Lenove	X240	--

Test software: QRCT.exe, which used to control the EUT in continues transmitting mode.

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)
	CH142 (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)	CH123 (5610MHz)	CH138 (5690MHz)
	5G WIFI-Band 4		
	CH155 (5775MHz)		

Note: According to FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01, Channels: CH 142 (5710MHz) and CH 144 (5720MHz) were chose to perform Conducted output power and emission bandwidth testing.

The pre-test has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates.

Modulation Type	Data Rate
802.11a OFDM	6Mbps
802.11n (HT20): OFDM	MCS0 (6.5Mbps)
802.11n (HT40): OFDM	MCS0 (13.5Mbps)
802.11ac (VHT20): OFDM	11ac 6.5Mbps (20MHz)
802.11ac (VHT40): OFDM	11ac 13.5Mbps (40MHz)
802.11ac (VHT80): OFDM	11ac 29.3Mbps (80MHz)

Device Capabilities

Duty Cycle: 100%

Note: 2.4GHz WLAN (DTS) operation is possible in 20MHz, and 40MHz channel bandwidths.
5GHz WLAN (DTS) operation is possible in 20MHz, 40MHz and 80MHz channel bandwidths.

9 Technical Requirement

9.1 Conducted Emission

Test Method

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. A EMI test receiver is used to test the emissions from both sides of AC line

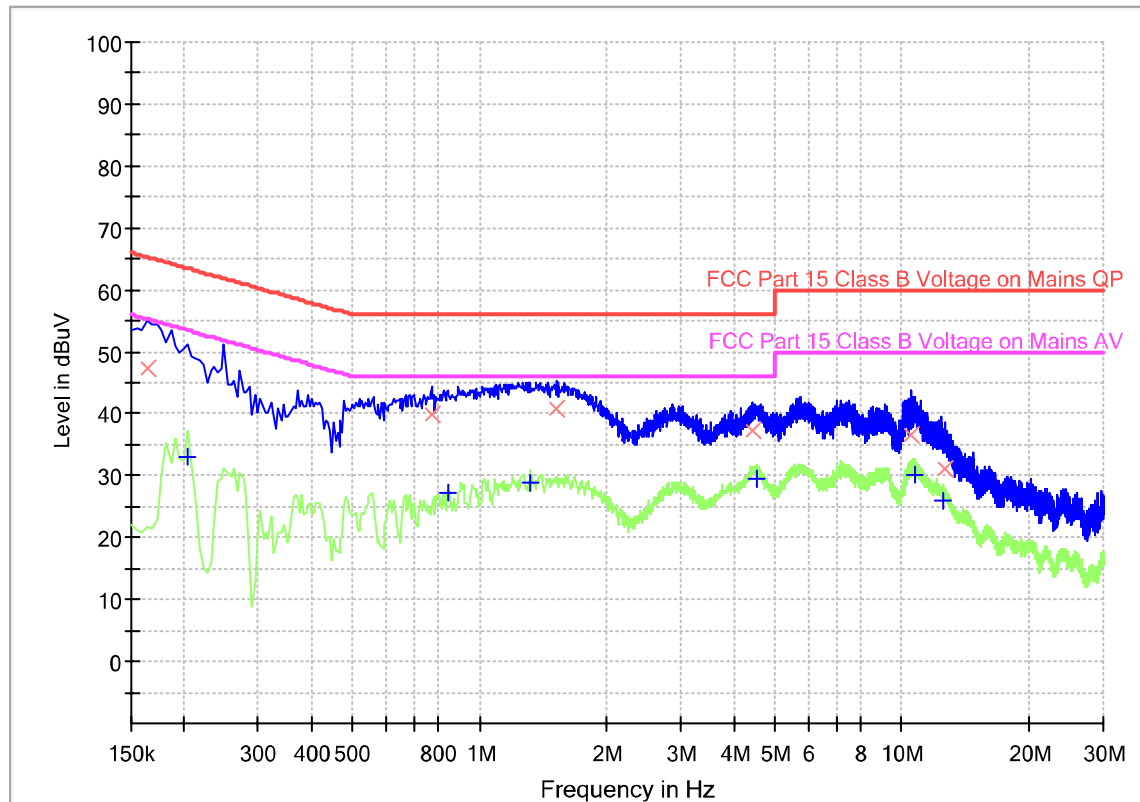
Limit

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

Decreasing linearly with logarithm of the frequency

Conducted Emission

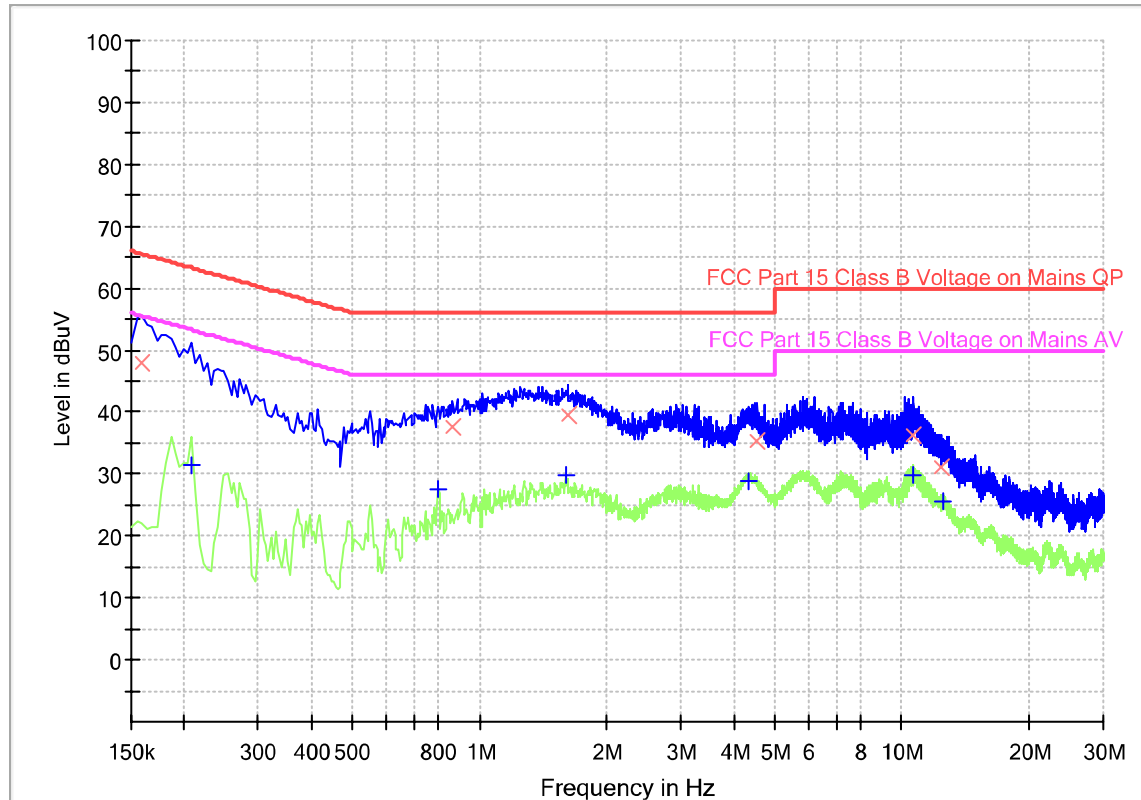
Product Type : Infrared Thermal Camera
 M/N : FOTRIC 348A
 Operating Condition : Mode 1: Tx_802.11N HT20, 5600MHz
 Test Specification : L-Line
 Comment : AC 120V/60Hz (charging mode)



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.163500	47.17	---	65.28	18.11	1000.0	9.000	L1	19.5
0.204000	---	33.19	53.45	20.26	1000.0	9.000	L1	19.5
0.771000	39.84	---	56.00	16.16	1000.0	9.000	L1	19.5
0.843000	---	27.23	46.00	18.77	1000.0	9.000	L1	19.5
1.320000	---	28.88	46.00	17.12	1000.0	9.000	L1	19.5
1.527000	40.88	---	56.00	15.12	1000.0	9.000	L1	19.5
4.425000	37.15	---	56.00	18.85	1000.0	9.000	L1	19.5
4.542000	---	29.59	46.00	16.41	1000.0	9.000	L1	19.5
10.482000	36.72	---	60.00	23.28	1000.0	9.000	L1	19.7
10.734000	---	30.20	50.00	19.80	1000.0	9.000	L1	19.7
12.529500	---	26.04	50.00	23.96	1000.0	9.000	L1	19.7
12.709500	31.08	---	60.00	28.92	1000.0	9.000	L1	19.7

Product Type : Infrared Thermal Camera
 M/N : FOTRIC 348A
 Operating Condition : Mode 1: Tx_802.11N HT20, 5600MHz
 Test Specification : N-Line
 Comment : AC 120V/60Hz (charging mode)



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.159000	47.88	---	65.52	17.64	1000.0	9.000	N	19.5
0.208500	---	31.31	53.26	21.95	1000.0	9.000	N	19.5
0.798000	---	27.48	46.00	18.52	1000.0	9.000	N	19.5
0.865500	37.52	---	56.00	18.48	1000.0	9.000	N	19.5
1.599000	---	29.92	46.00	16.08	1000.0	9.000	N	19.5
1.626000	39.50	---	56.00	16.50	1000.0	9.000	N	19.5
4.344000	---	28.93	46.00	17.07	1000.0	9.000	N	19.6
4.555500	35.32	---	56.00	20.68	1000.0	9.000	N	19.6
10.626000	---	29.88	50.00	20.12	1000.0	9.000	N	19.8
10.675500	36.17	---	60.00	23.83	1000.0	9.000	N	19.8
12.408000	31.05	---	60.00	28.95	1000.0	9.000	N	19.8
12.453000	---	25.54	50.00	24.46	1000.0	9.000	N	19.8

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB) + 10dB Attenuator

9.2 Emission bandwidth

1、 Test Method of 26dB Bandwidth

According to KDB789033 D02

- 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 KDB789033 D02

- a) Set RBW = 100KHz
- b) Set the video bandwidth (VBW) $\geq 3 \times$ 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 KDB789033 D02

- 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 $\geq 3 \cdot$ 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

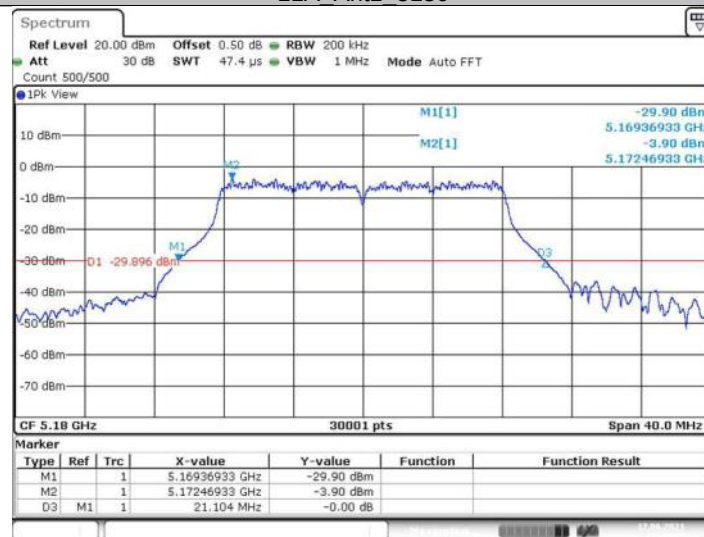
Test result as below table:

26dB Bandwidth Test Result:

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	21.104	5169.369	5190.473	---	PASS
		5200	21.877	5188.995	5210.872	---	PASS
		5240	21.857	5228.761	5250.619	---	PASS
		5260	21.361	5249.291	5270.652	---	PASS
		5280	21.380	5269.377	5290.757	---	PASS
		5320	21.584	5309.069	5330.653	---	PASS
		5500	21.671	5489.035	5510.705	---	PASS
		5600	21.273	5589.433	5610.707	---	PASS
		5700	21.001	5689.347	5710.348	---	PASS
		5720	21.193	5709.197	5730.391	---	PASS
		5720_UNII-2C	15.803	5709.197	5725	---	PASS
		5720_UNII-3	5.391	5725	5730.391	---	PASS
		5745	21.653	5734.263	5755.916	---	PASS
		5785	21.459	5774.248	5795.707	---	PASS
		5825	21.680	5814.333	5836.013	---	PASS
11N20SISO	Ant1	5180	21.841	5169.112	5190.953	---	PASS
		5200	22.108	5188.817	5210.925	---	PASS
		5240	21.657	5228.908	5250.565	---	PASS
		5260	21.984	5248.916	5270.900	---	PASS
		5280	21.873	5269.224	5291.097	---	PASS
		5320	21.424	5309.269	5330.693	---	PASS
		5500	22.000	5489.124	5511.124	---	PASS
		5600	21.839	5589.061	5610.900	---	PASS
		5700	21.580	5689.111	5710.691	---	PASS
		5720	21.765	5709.004	5730.769	---	PASS
		5720_UNII-2C	15.996	5709.004	5725	---	PASS
		5720_UNII-3	5.769	5725	5730.769	---	PASS
		5745	21.891	5733.833	5755.724	---	PASS
		5785	21.733	5774.224	5795.957	---	PASS
		5825	22.055	5813.929	5835.984	---	PASS
11N40SISO	Ant1	5190	44.213	5167.917	5212.131	---	PASS
		5230	44.779	5207.189	5251.968	---	PASS
		5270	44.685	5247.413	5292.099	---	PASS
		5310	45.173	5287.547	5332.720	---	PASS
		5510	43.936	5488.064	5532.000	---	PASS
		5755	44.699	5732.232	5776.931	---	PASS
		5795	43.563	5773.008	5816.571	---	PASS
11AC20SISO	Ant1	5180	21.635	5169.075	5190.709	---	PASS
		5200	21.673	5188.984	5210.657	---	PASS
		5240	21.693	5229.112	5250.805	---	PASS
		5260	21.628	5249.103	5270.731	---	PASS
		5280	21.400	5269.228	5290.628	---	PASS
		5320	21.629	5309.091	5330.720	---	PASS
		5500	21.796	5489.120	5510.916	---	PASS
		5600	21.600	5589.173	5610.773	---	PASS
		5700	21.705	5689.068	5710.773	---	PASS
		5720	21.680	5709.088	5730.768	---	PASS
		5720_UNII-2C	15.912	5709.088	5725	---	PASS
		5720_UNII-3	5.768	5725	5730.768	---	PASS
		5745	21.685	5734.073	5755.759	---	PASS
		5785	21.604	5774.160	5795.764	---	PASS

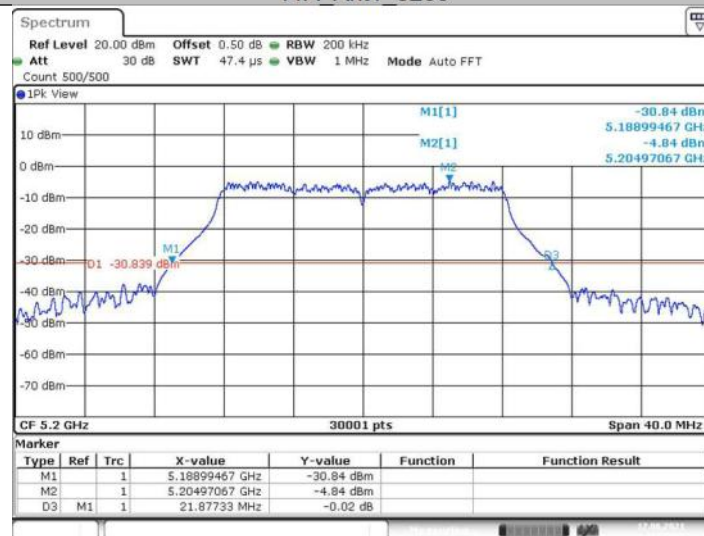
		5825	21.780	5813.980	5835.760	---	PASS
11AC40SISO	Ant1	5190	43.213	5167.757	5210.971	---	PASS
		5230	43.264	5207.720	5250.984	---	PASS
		5270	43.488	5247.683	5291.171	---	PASS
		5310	43.637	5287.627	5331.264	---	PASS
		5510	43.432	5487.853	5531.285	---	PASS
		5755	43.147	5732.880	5776.027	---	PASS
		5795	43.107	5772.989	5816.096	---	PASS
11AC80SISO	Ant1	5210	84.731	5167.925	5252.656	---	PASS
		5290	85.637	5248.005	5333.643	---	PASS
		5530	84.773	5488.464	5573.237	---	PASS
		5775	84.512	5732.856	5817.368	---	PASS

11A Ant1 5180



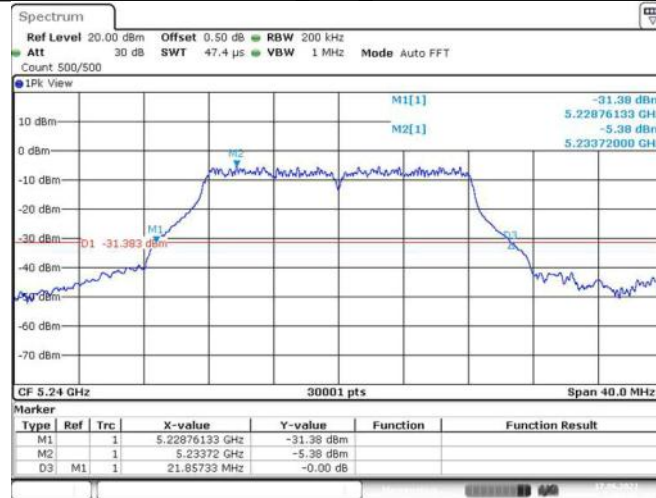
Date: 17 JUN 2021 11:44:27

11A Ant1 5200



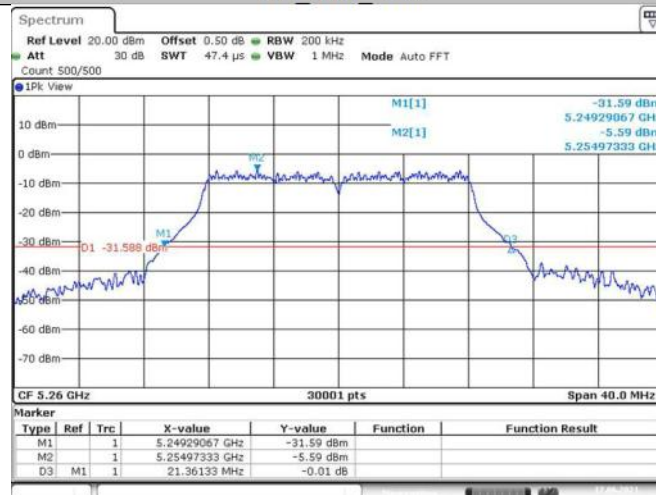
Date: 17 JUN 2021 11:55:58

11A Ant1 5240



Date: 17 JUN 2021 12:51:27

11A Ant1 5260



Date: 17 JUN 2021 12:57:06

11A Ant1 5280



Date: 17 JUN 2021 13:02:29

11A Ant1 5320



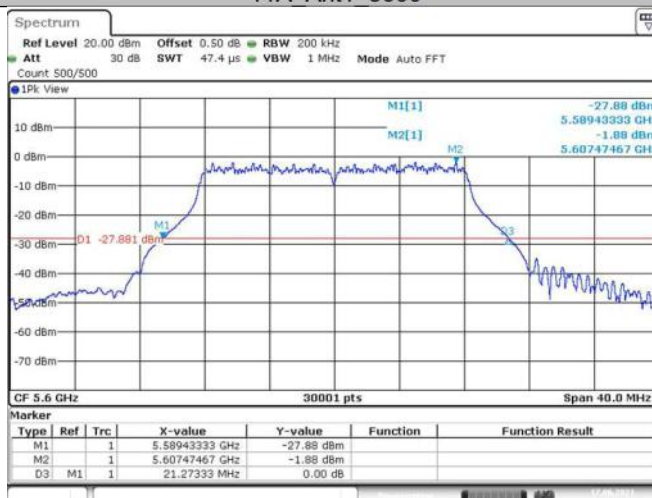
Date: 17 JUN 2021 13:07:51

11A Ant1 5500



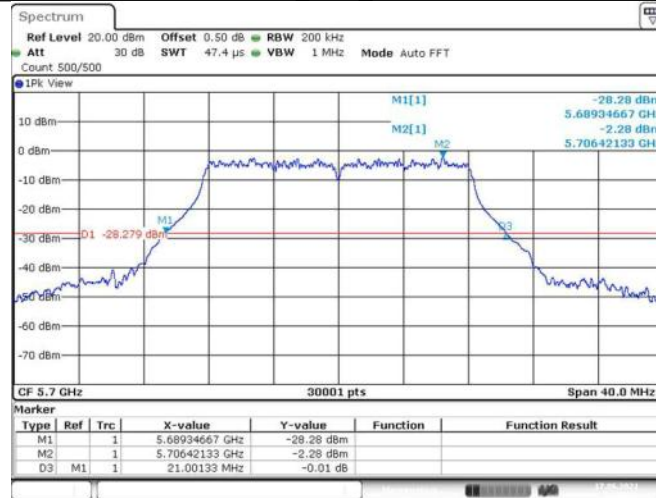
Date: 17 JUN 2021 13:13:45

11A Ant1 5600



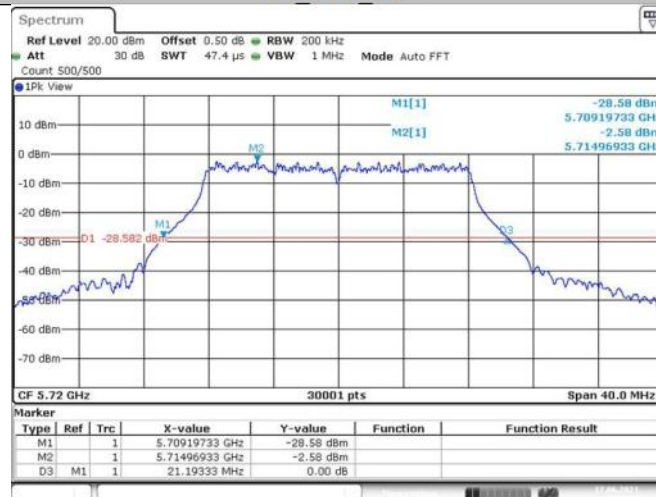
Date: 17 JUN 2021 13:19:11

11A Ant1 5700



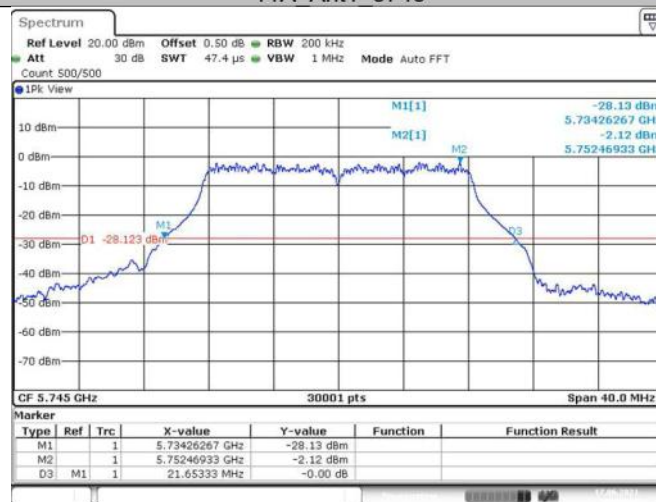
Date: 17 JUN 2021 13:24:27

11A Ant1 5720



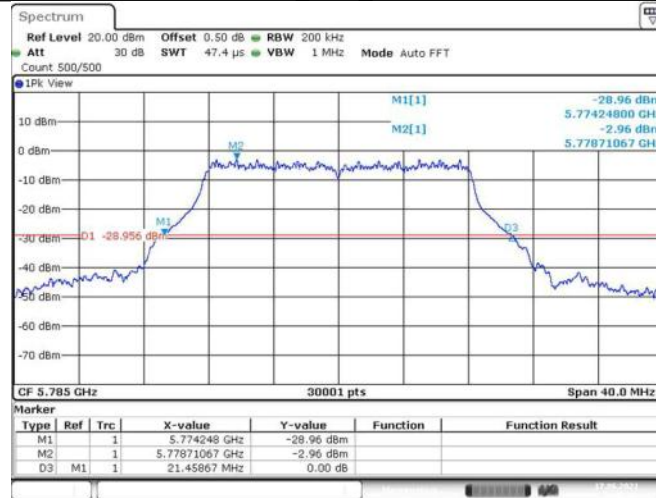
Date: 17 JUN 2021 13:29:57

11A Ant1 5745



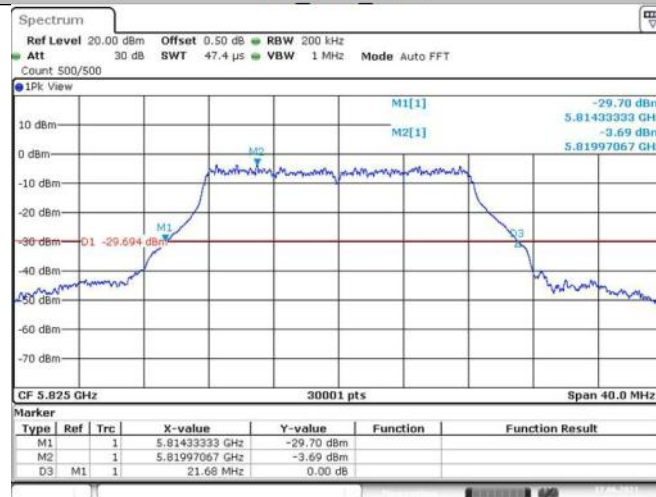
Date: 17 JUN 2021 13:36:01

11A Ant1 5785



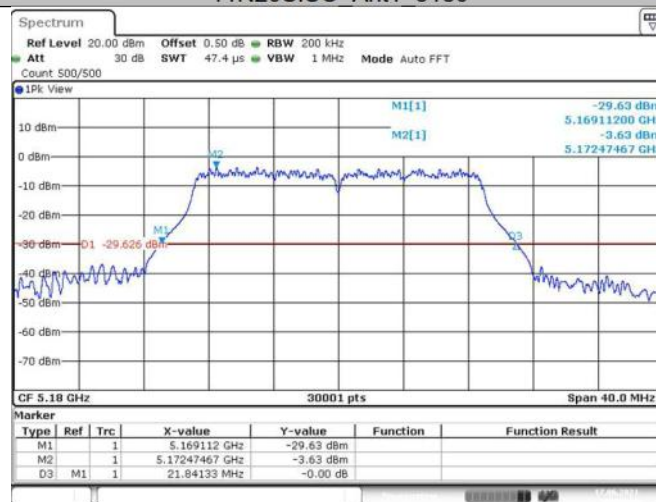
Date: 17 JUN 2021 13:42:00

11A Ant1 5825



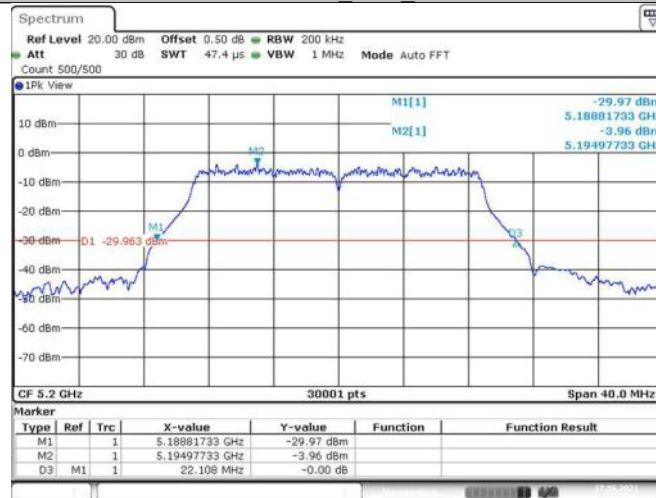
Date: 17 JUN 2021 13:47:42

11N20SISO Ant1 5180



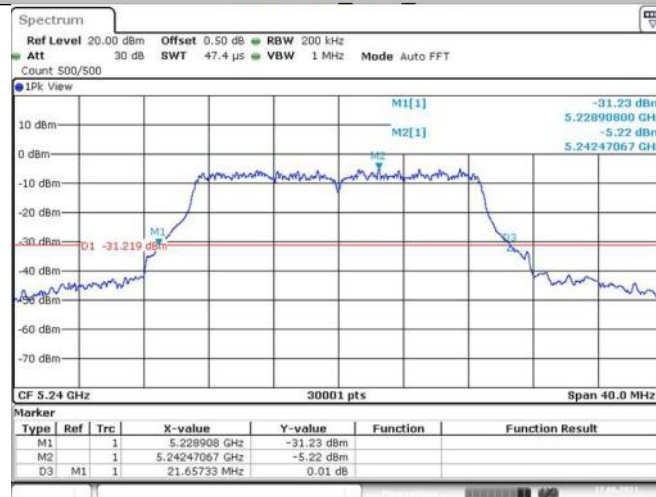
Date: 17 JUN 2021 13:54:31

11N20SISO Ant1 5200



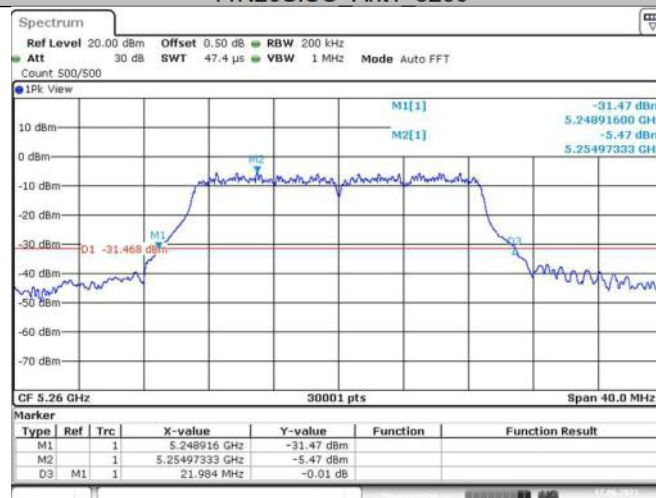
Date: 17 JUN 2021 14:14:19

11N20SISO Ant1 5240



Date: 17 JUN 2021 14:19:48

11N20SISO Ant1 5260



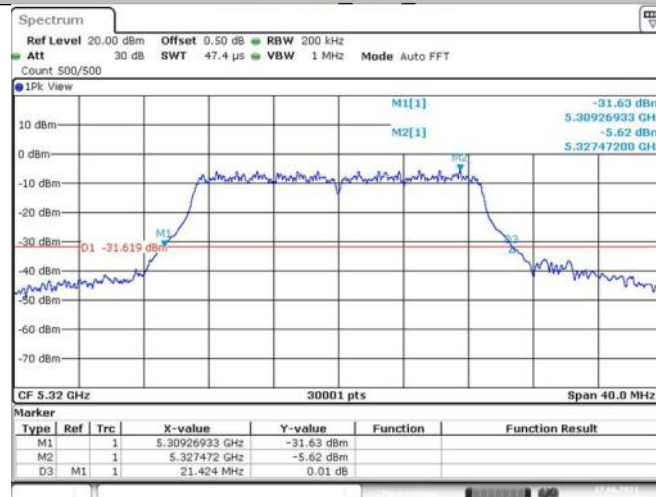
Date: 17 JUN 2021 14:25:24

11N20SISO Ant1 5280



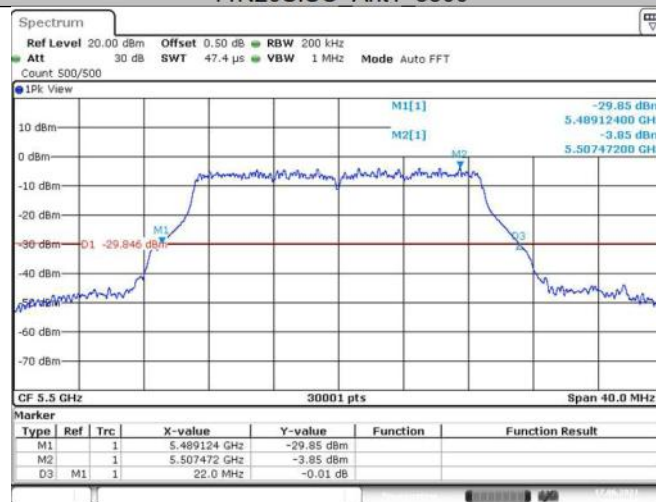
Date: 17 JUN 2021 14:30:35

11N20SISO Ant1 5320



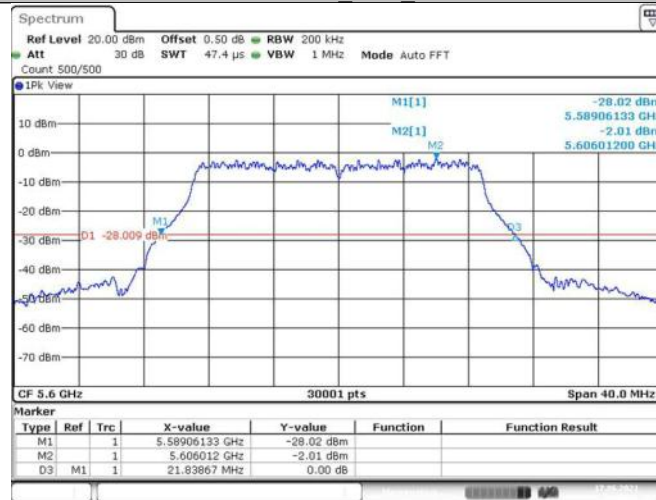
Date: 17 JUN 2021 14:35:48

11N20SISO Ant1 5500



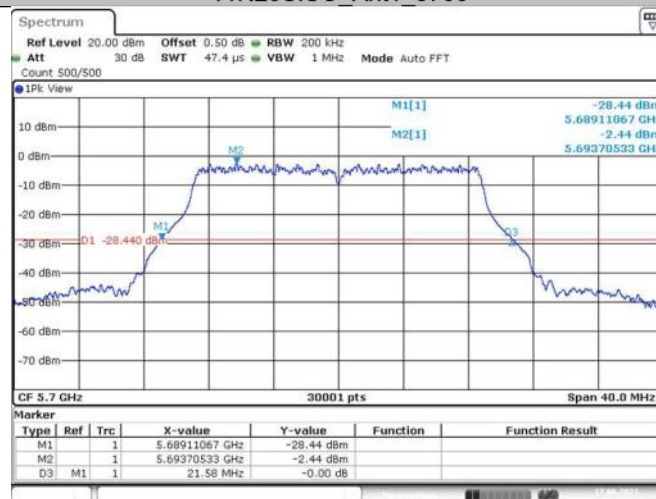
Date: 17 JUN 2021 14:41:17

11N20SISO Ant1 5600



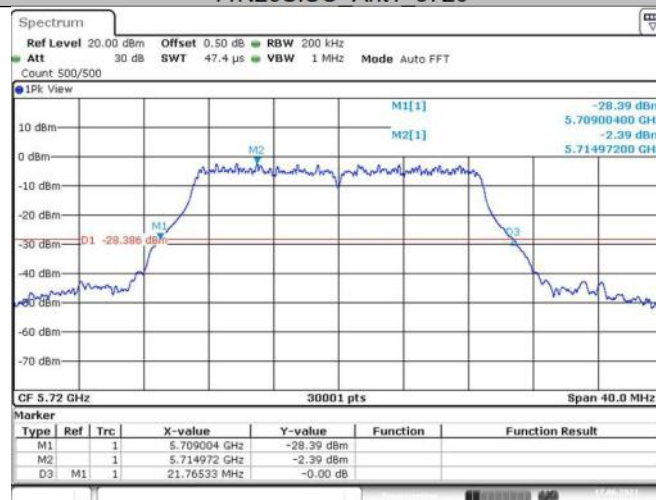
Date: 17 JUN 2021 14:46:52

11N20SISO Ant1 5700



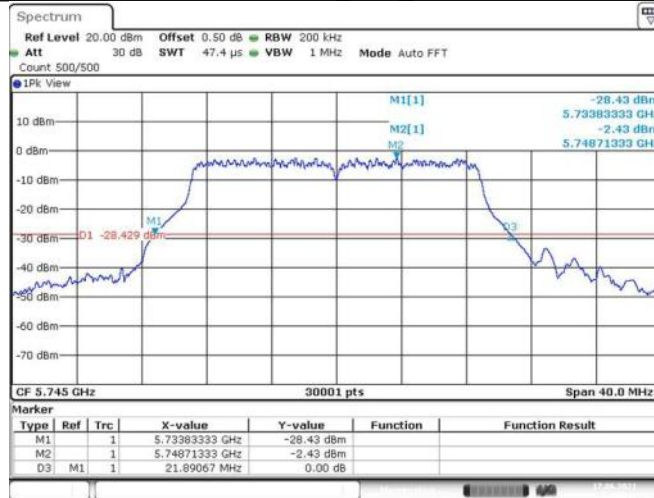
Date: 17 JUN 2021 14:52:21

11N20SISO Ant1 5720



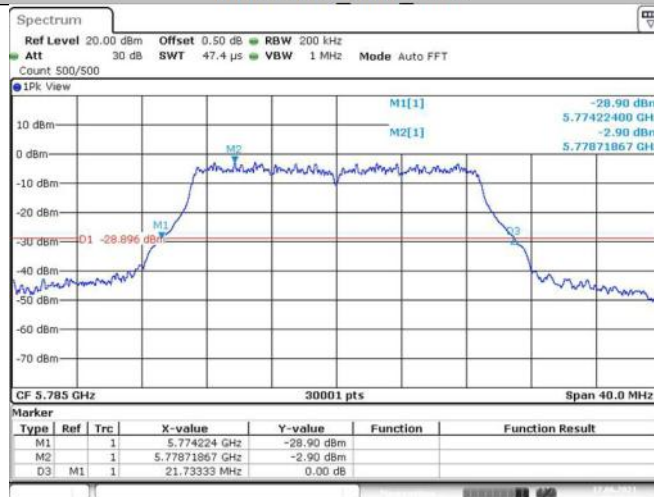
Date: 17 JUN 2021 14:57:53

11N20SISO Ant1 5745



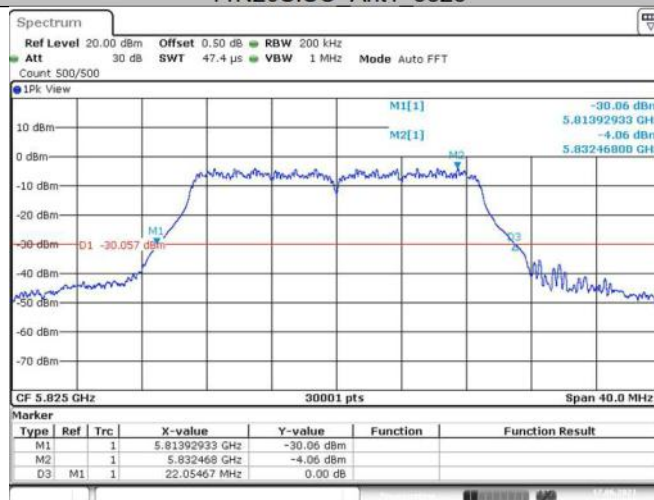
Date: 17 JUN 2021 15:04:42

11N20SISO Ant1 5785



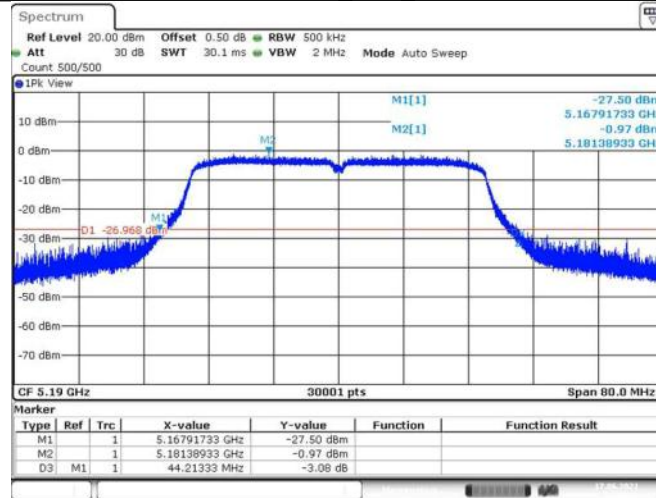
Date: 17 JUN 2021 15:10:18

11N20SISO Ant1 5825



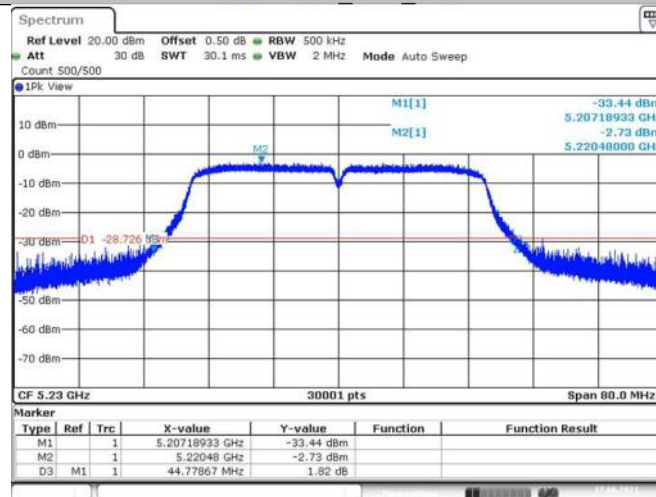
Date: 17 JUN 2021 15:15:54

11N40SISO Ant1 5190



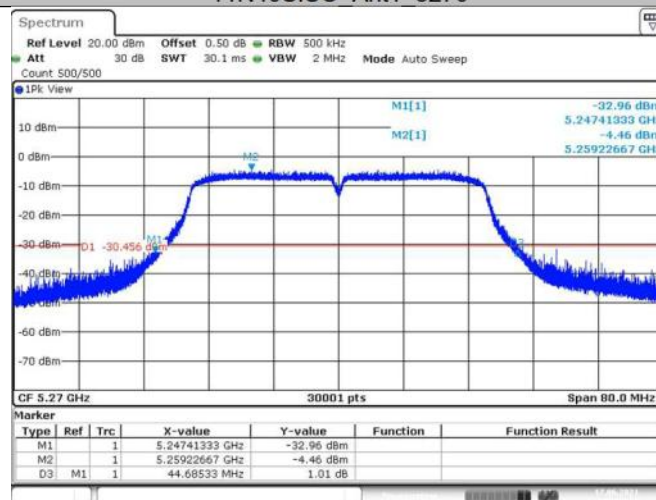
Date: 17 JUN 2021 15:23:39

11N40SISO Ant1 5230



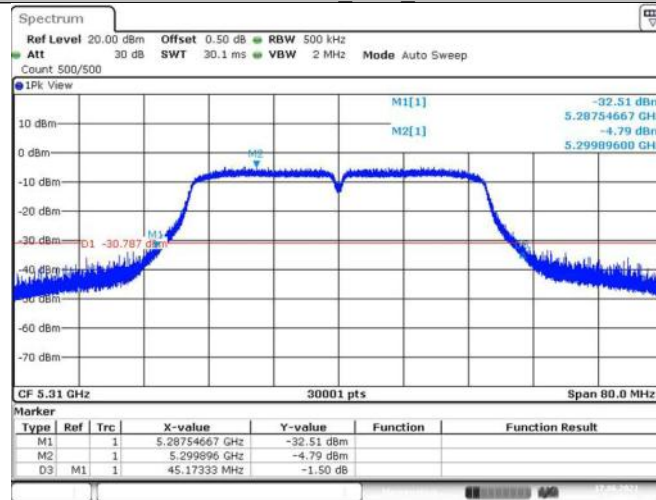
Date: 17 JUN 2021 15:30:15

11N40SISO Ant1 5270



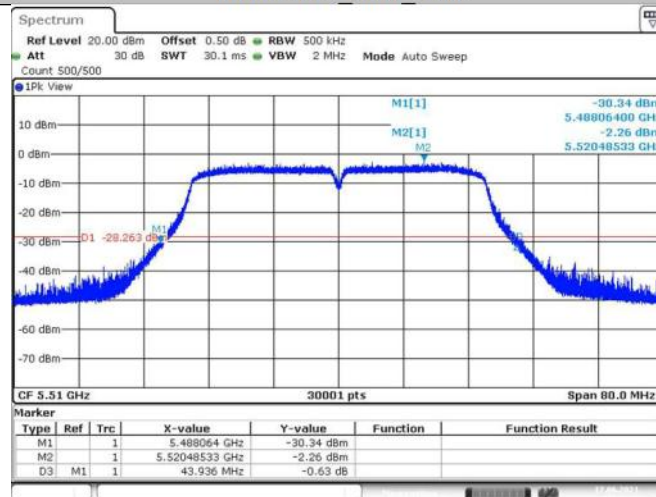
Date: 17 JUN 2021 15:38:14

11N40SISO Ant1 5310



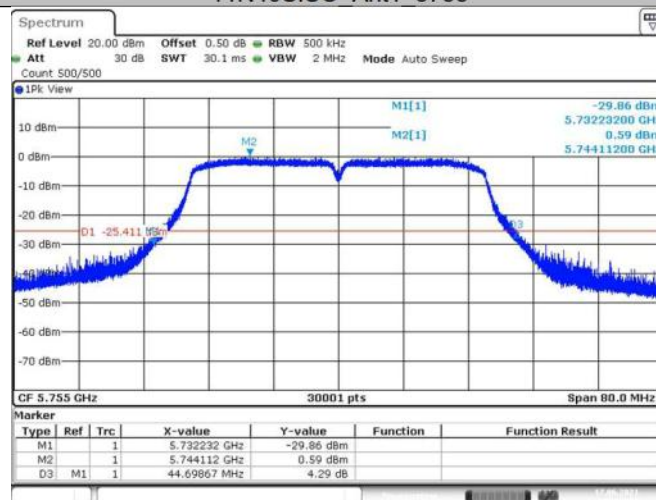
Date: 17 JUN 2021 15:44:02

11N40SISO Ant1 5510



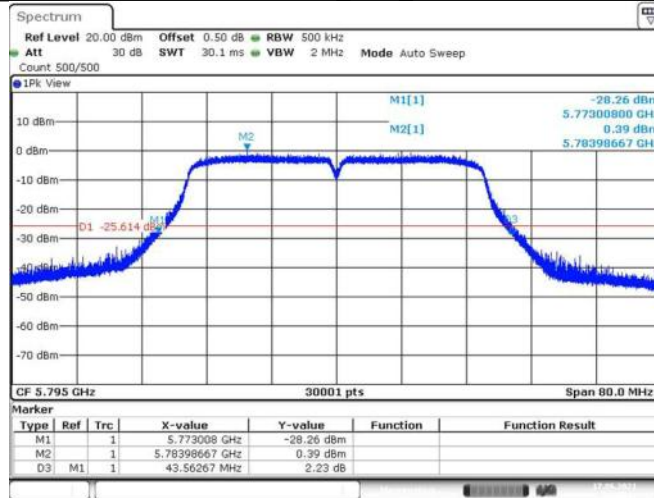
Date: 17 JUN 2021 15:49:46

11N40SISO Ant1 5755



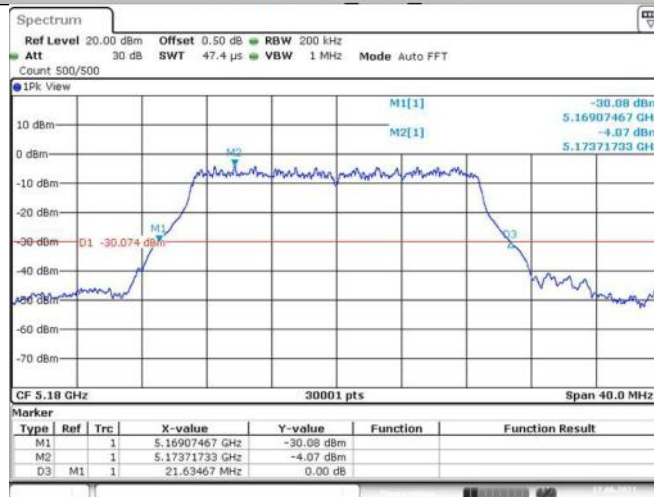
Date: 17 JUN 2021 15:55:36

11N40SISO Ant1 5795



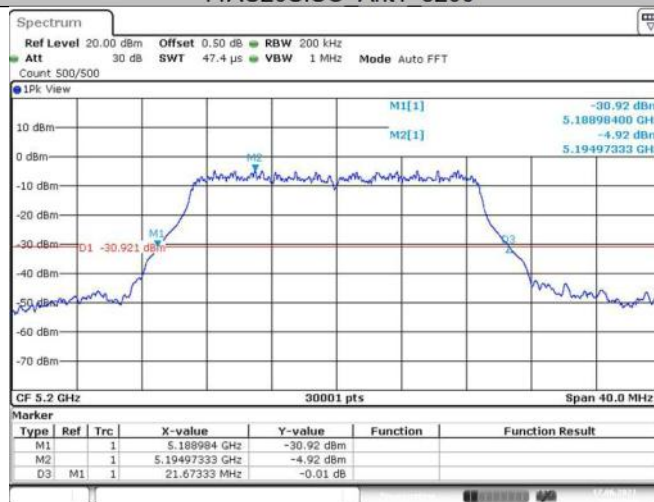
Date: 17 JUN 2021 16:05:41

11AC20SISO Ant1 5180



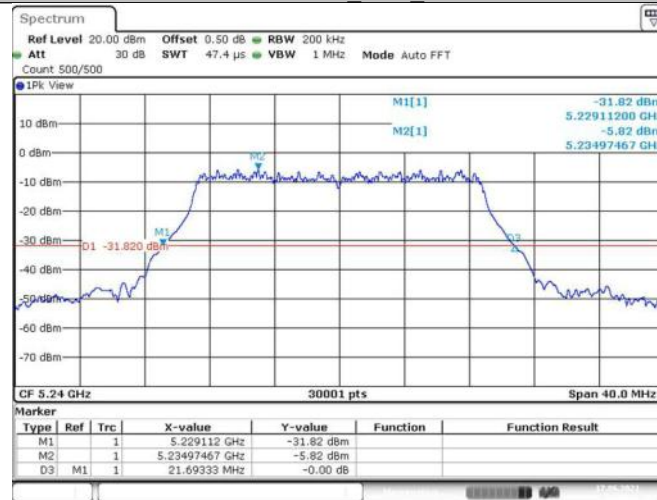
Date: 17 JUN 2021 16:12:11

11AC20SISO Ant1 5200



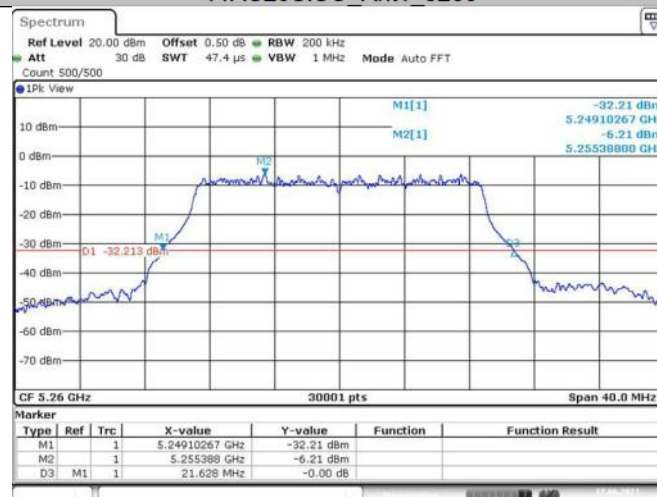
Date: 17 JUN 2021 16:17:44

11AC20SISO Ant1 5240



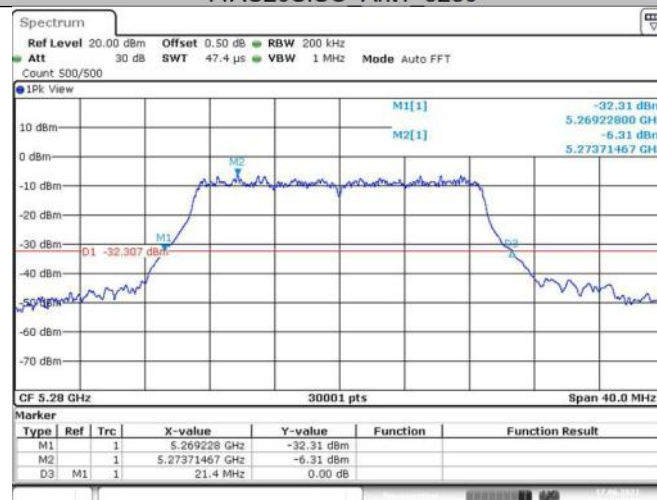
Date: 17 JUN 2021 16:23:13

11AC20SISO Ant1 5260



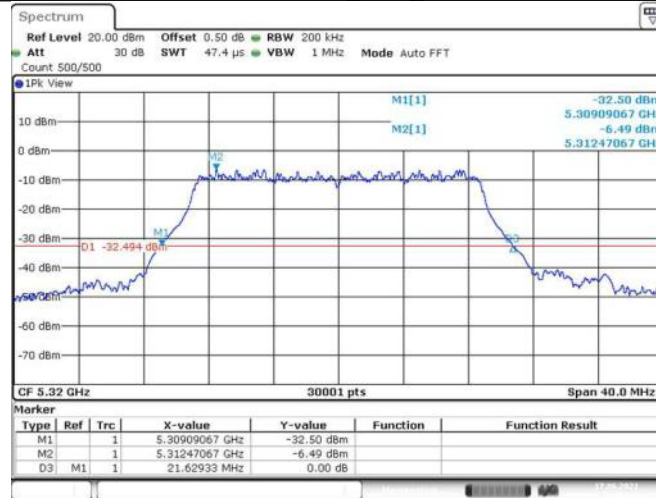
Date: 17 JUN 2021 16:29:38

11AC20SISO Ant1 5280



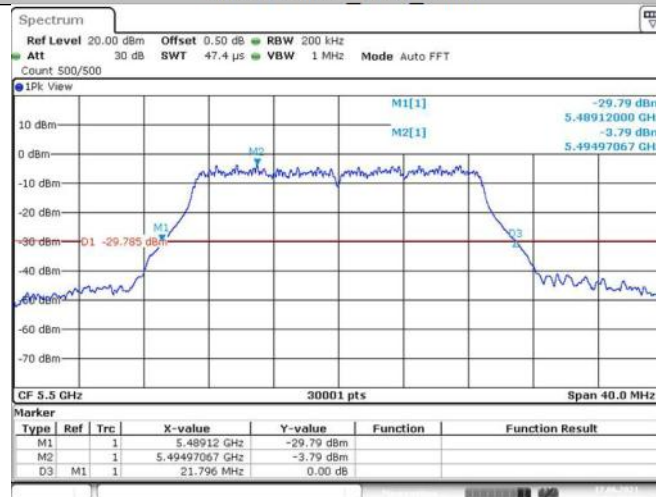
Date: 17 JUN 2021 16:35:24

11AC20SISO Ant1 5320



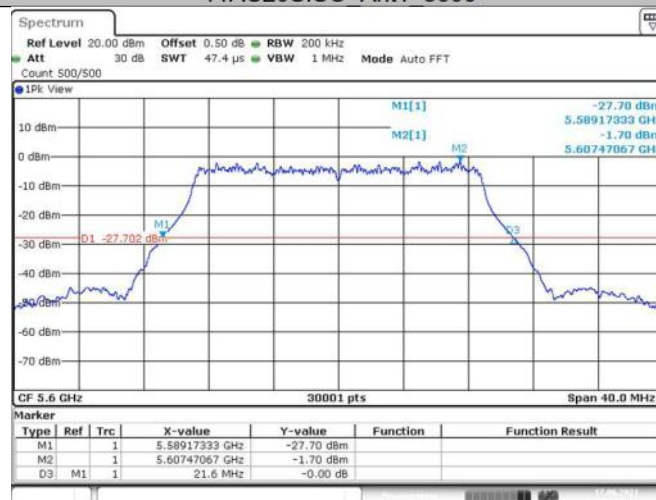
Date: 17 JUN 2021 16:41:08

11AC20SISO Ant1 5500



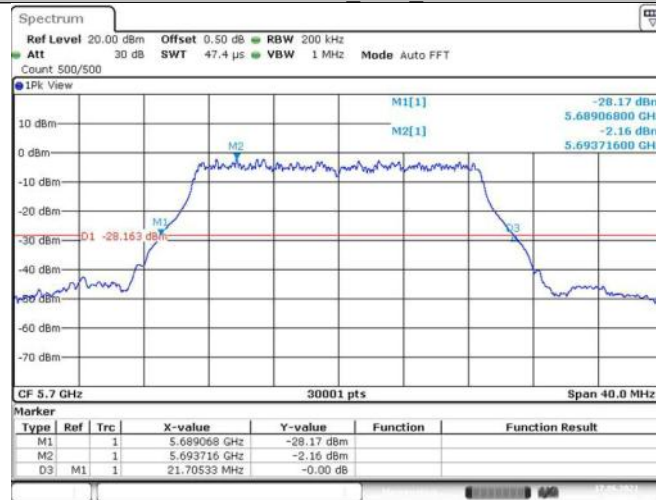
Date: 17 JUN 2021 16:48:37

11AC20SISO Ant1 5600



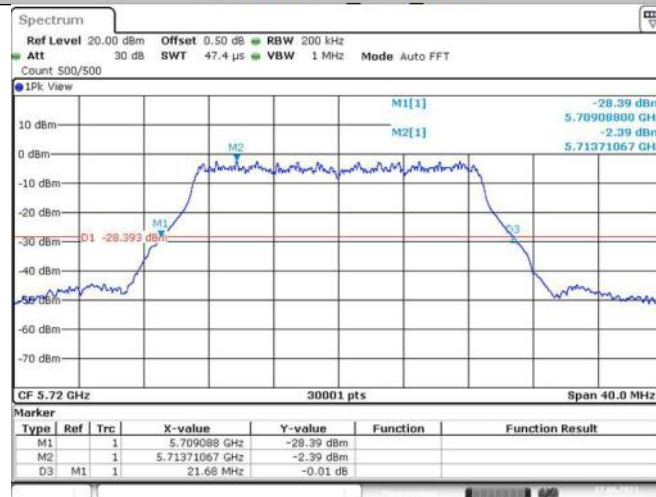
Date: 17 JUN 2021 16:54:10

11AC20SISO Ant1 5700



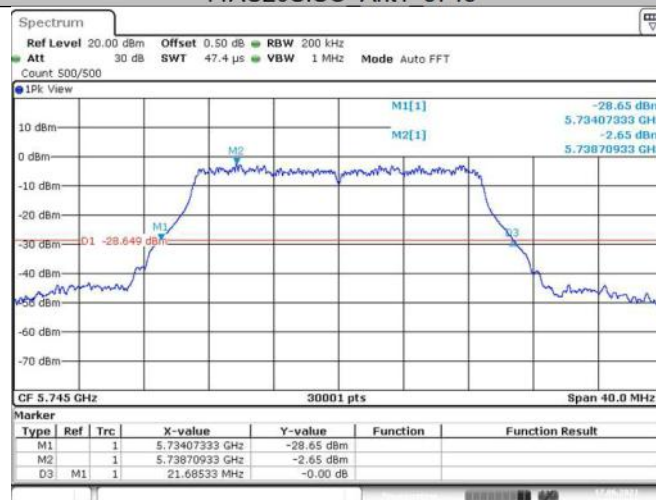
Date: 17 JUN 2021 16:59:36

11AC20SISO Ant1 5720



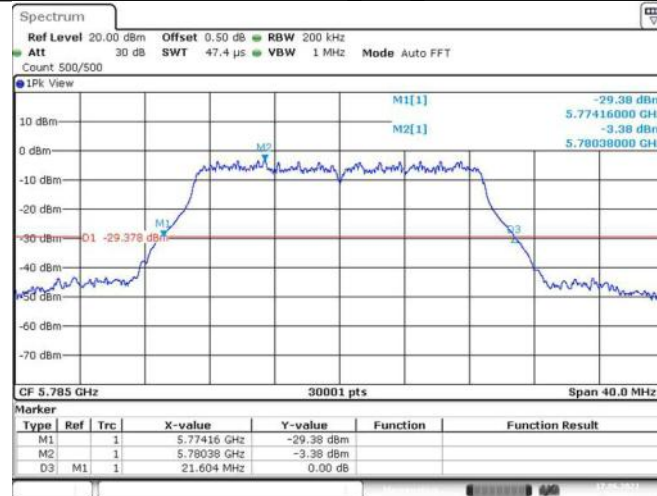
Date: 17 JUN 2021 17:05:42

11AC20SISO Ant1 5745



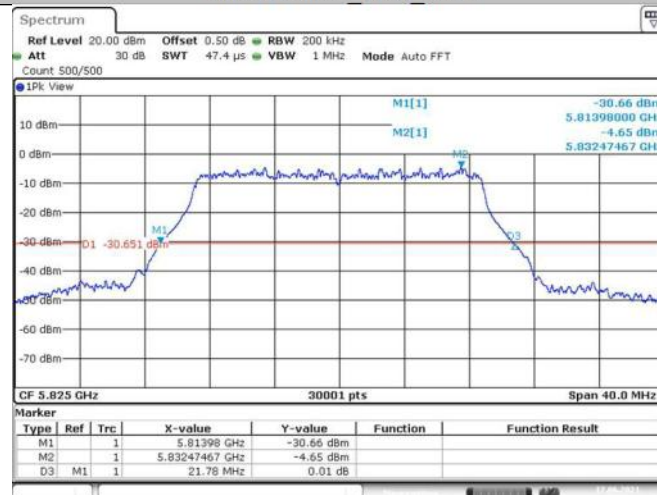
Date: 17 JUN 2021 17:12:06

11AC20SISO Ant1 5785



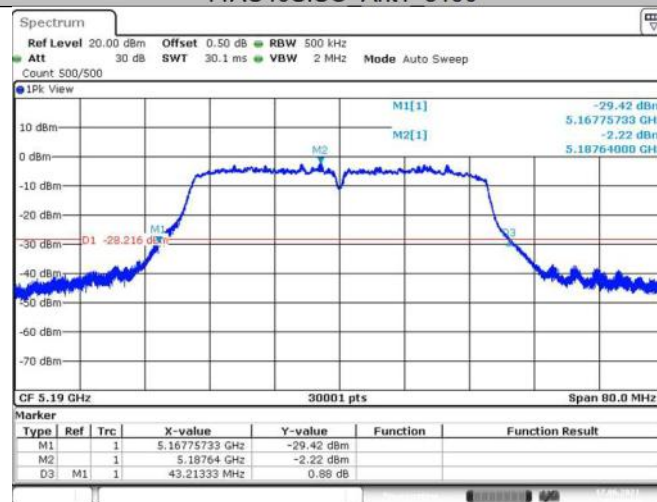
Date: 17 JUN 2021 18:56:31

11AC20SISO Ant1 5825



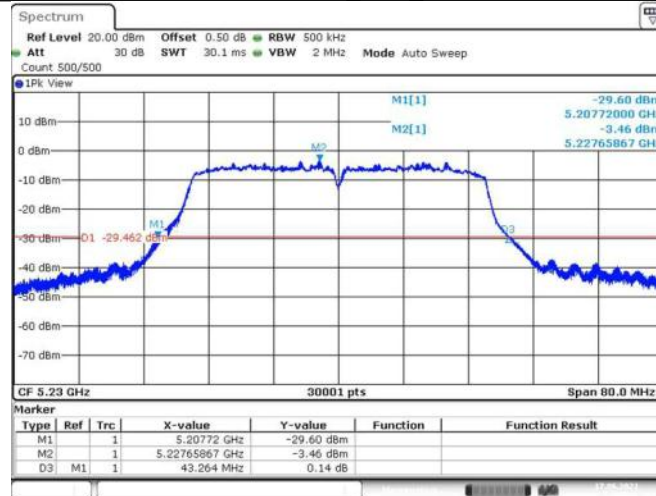
Date: 17 JUN 2021 17:23:22

11AC40SISO Ant1 5190



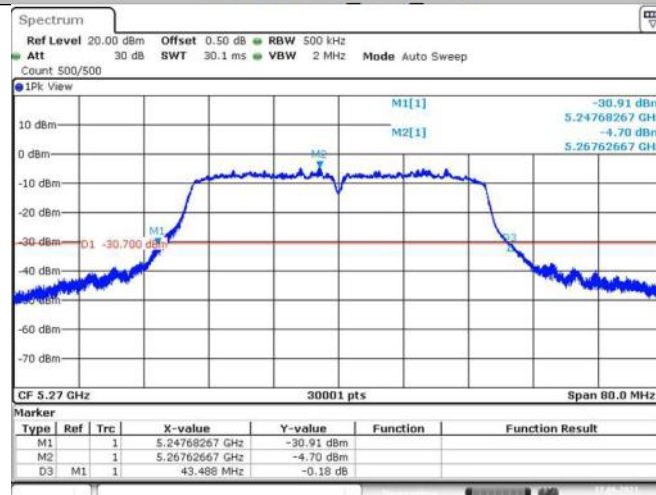
Date: 17 JUN 2021 17:29:54

11AC40SISO Ant1 5230



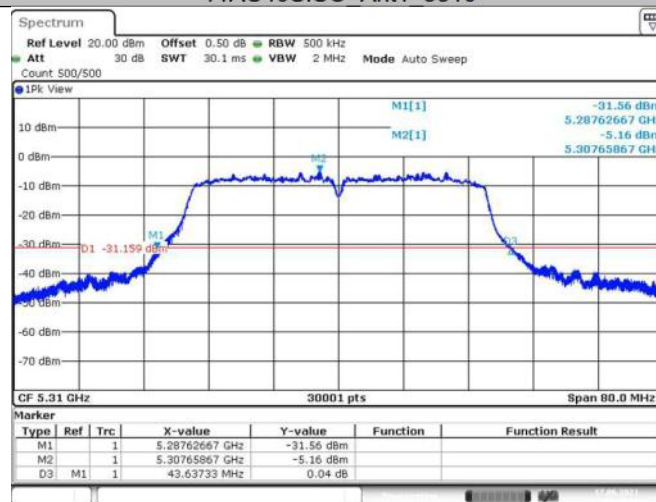
Date: 17 JUN 2021 17:35:47

11AC40SISO Ant1 5270



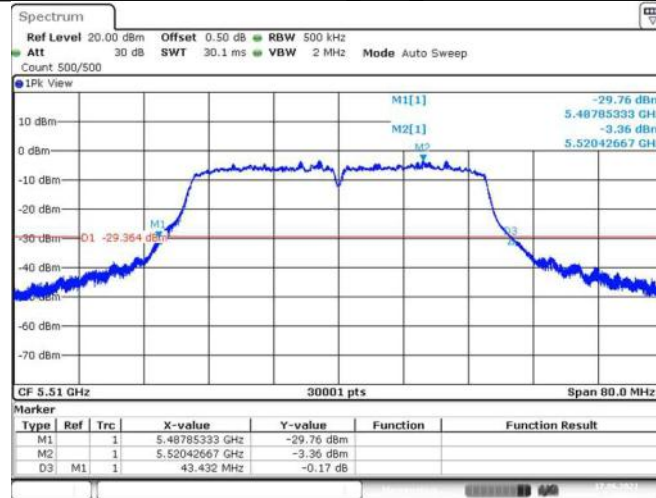
Date: 17 JUN 2021 17:41:35

11AC40SISO Ant1 5310



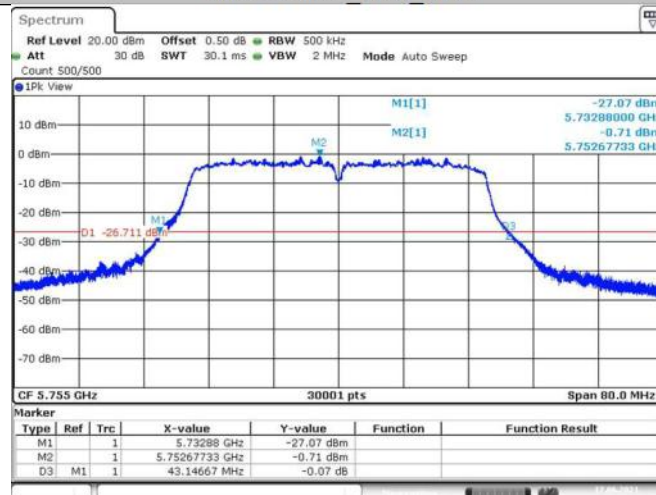
Date: 17 JUN 2021 17:47:01

11AC40SISO Ant1 5510



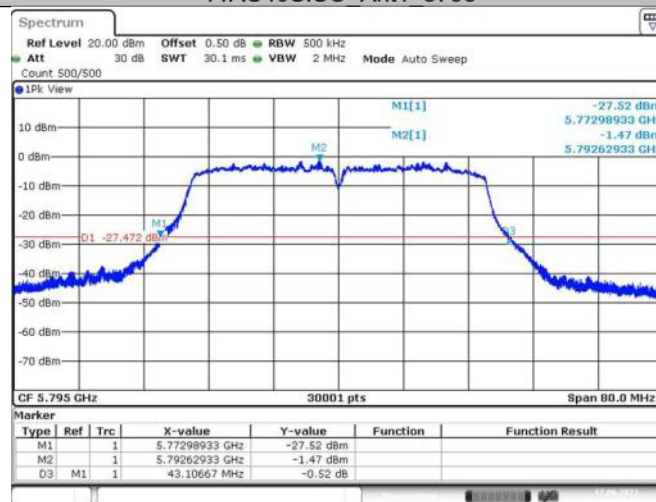
Date: 17 JUN 2021 17:53:04

11AC40SISO Ant1 5755



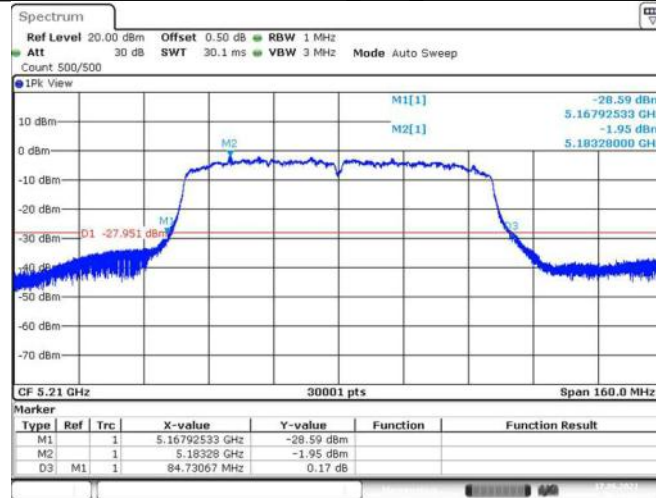
Date: 17 JUN 2021 17:59:01

11AC40SISO Ant1 5795



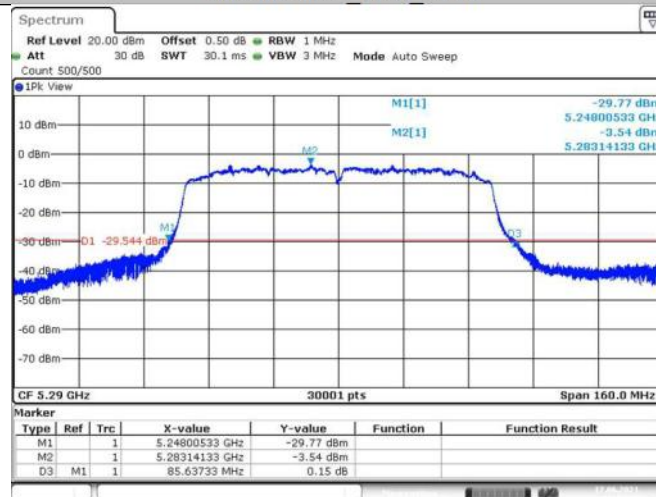
Date: 17 JUN 2021 18:05:01

11AC80SISO Ant1 5210



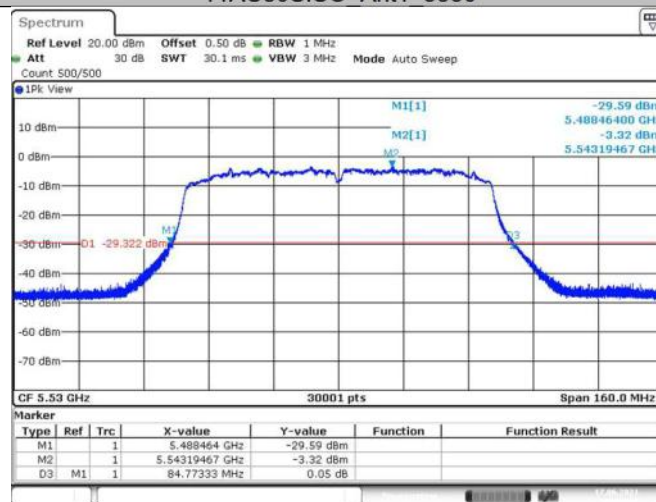
Date: 17 JUN 2021 18:11:33

11AC80SISO Ant1 5290



Date: 17 JUN 2021 18:17:47

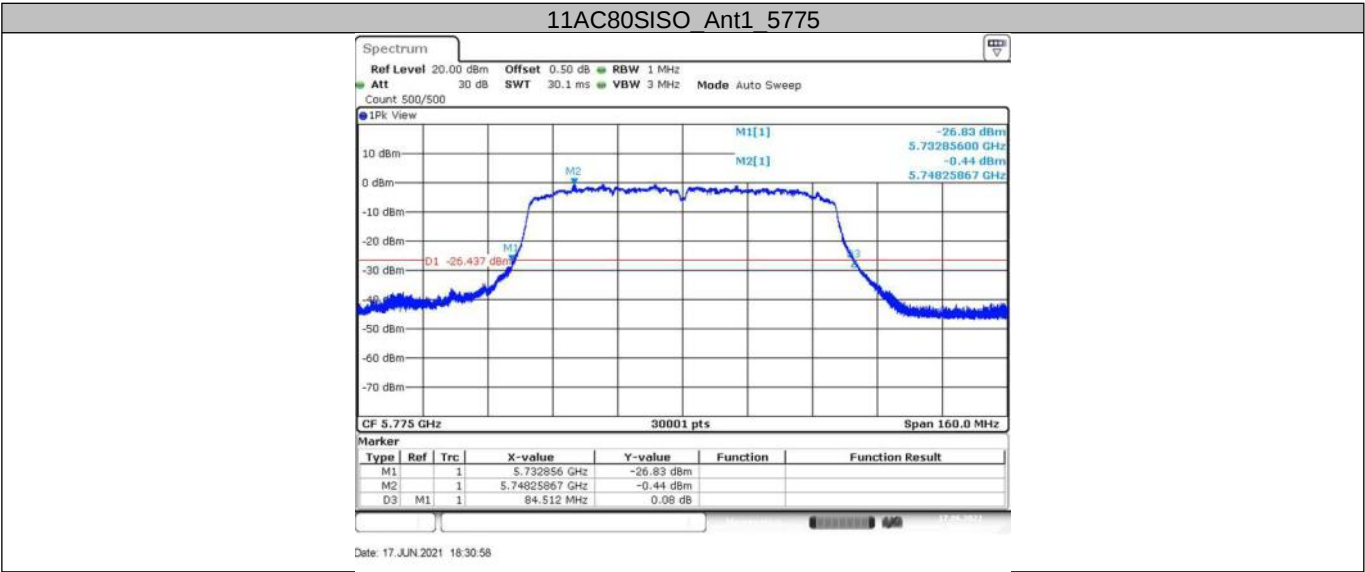
11AC80SISO Ant1 5530



Date: 17 JUN 2021 18:23:45



China

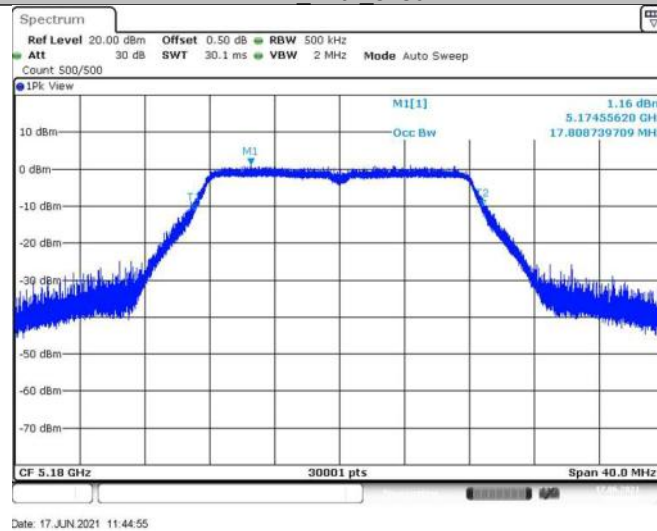


99% Bandwidth Test Result

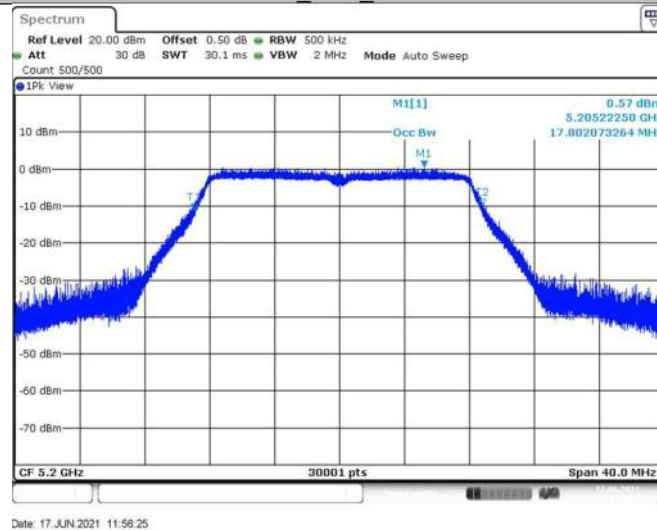
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.809	5171.018	5188.826	---	PASS
		5200	17.802	5191.019	5208.821	---	PASS
		5240	17.815	5231.039	5248.854	---	PASS
		5260	17.829	5251.034	5268.862	---	PASS
		5280	17.838	5271.032	5288.870	---	PASS
		5320	17.855	5311.031	5328.886	---	PASS
		5500	17.787	5491.075	5508.862	---	PASS
		5600	17.777	5591.075	5608.852	---	PASS
		5700	17.777	5691.035	5708.812	---	PASS
		5720	17.775	5711.042	5728.817	---	PASS
		5720_UNII-2C	13.958	5711.042	5725	---	PASS
		5720_UNII-3	3.817	5725	5728.817	---	PASS
		5745	17.783	5736.043	5753.826	---	PASS
		5785	17.786	5776.039	5793.825	---	PASS
		5825	17.787	5816.034	5833.821	---	PASS
11N20SISO	Ant1	5180	18.63	5170.631	5189.261	---	PASS
		5200	18.635	5190.636	5209.272	---	PASS
		5240	18.659	5230.635	5249.294	---	PASS
		5260	18.65	5250.640	5269.290	---	PASS
		5280	18.666	5270.639	5289.305	---	PASS
		5320	18.67	5310.643	5329.313	---	PASS
		5500	18.622	5490.674	5509.296	---	PASS
		5600	18.618	5590.664	5609.282	---	PASS
		5700	18.627	5690.626	5709.253	---	PASS
		5720	18.611	5710.647	5729.258	---	PASS
		5720_UNII-2C	14.353	5710.647	5725	---	PASS
		5720_UNII-3	4.258	5725	5729.258	---	PASS
		5745	18.623	5735.639	5754.262	---	PASS
		5785	18.614	5775.650	5794.264	---	PASS
		5825	18.619	5815.642	5834.261	---	PASS
11N40SISO	Ant1	5190	36.769	5171.513	5208.282	---	PASS
		5230	36.759	5211.561	5248.319	---	PASS
		5270	36.727	5251.601	5288.327	---	PASS
		5310	36.751	5291.609	5328.359	---	PASS
		5510	36.695	5491.681	5528.375	---	PASS
		5755	36.695	5736.566	5773.261	---	PASS
		5795	36.708	5776.577	5813.285	---	PASS
11AC20SISO	Ant1	5180	18.59	5170.626	5189.216	---	PASS
		5200	18.577	5190.631	5209.208	---	PASS
		5240	18.585	5230.638	5249.222	---	PASS
		5260	18.59	5250.640	5269.230	---	PASS
		5280	18.585	5270.648	5289.233	---	PASS
		5320	18.601	5310.647	5329.248	---	PASS
		5500	18.578	5490.667	5509.245	---	PASS
		5600	18.574	5590.651	5609.225	---	PASS
		5700	18.574	5690.624	5709.198	---	PASS
		5720	18.581	5710.626	5729.206	---	PASS
		5720_UNII-2C	14.374	5710.626	5725	---	PASS
		5720_UNII-3	4.206	5725	5729.206	---	PASS
		5745	18.578	5735.628	5754.206	---	PASS
		5785	18.586	5775.628	5794.214	---	PASS
		5825	18.585	5815.623	5834.208	---	PASS

11AC40SISO	Ant1	5190	36.823	5171.385	5208.207	---	PASS
		5230	36.825	5211.409	5248.234	---	PASS
		5270	36.82	5251.441	5288.261	---	PASS
		5310	36.812	5291.457	5328.269	---	PASS
		5510	36.745	5491.558	5528.303	---	PASS
		5755	36.817	5736.406	5773.223	---	PASS
		5795	36.812	5776.425	5813.237	---	PASS
11AC80SISO	Ant1	5210	75.187	5172.359	5247.545	---	PASS
		5290	75.203	5252.524	5327.727	---	PASS
		5530	74.942	5492.855	5567.796	---	PASS
		5775	74.984	5737.529	5812.513	---	PASS

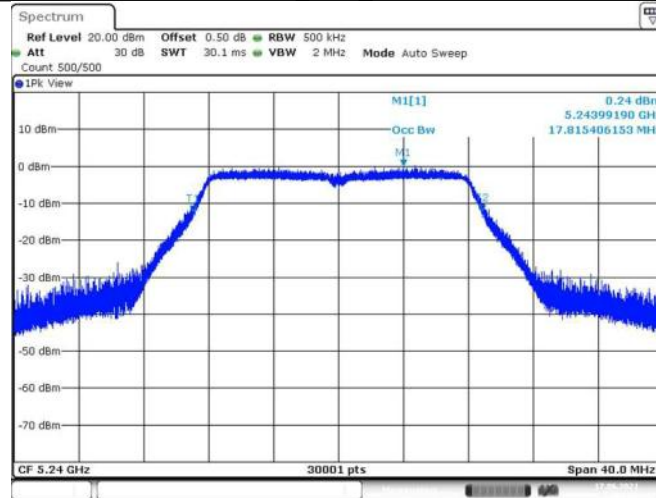
11A_Ant1_5180



11A_Ant1_5200

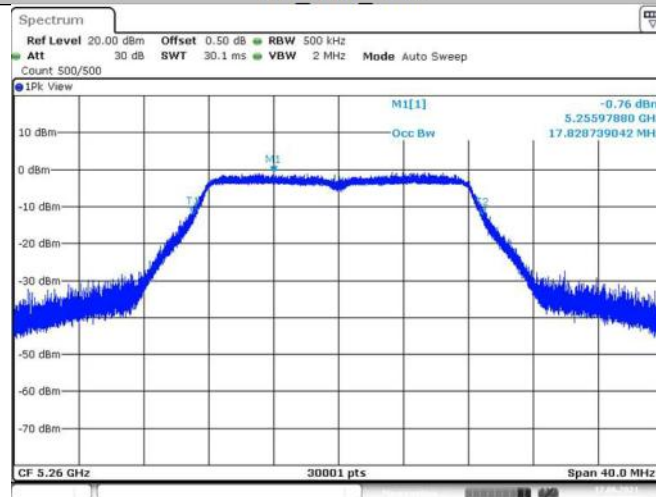


11A Ant1 5240



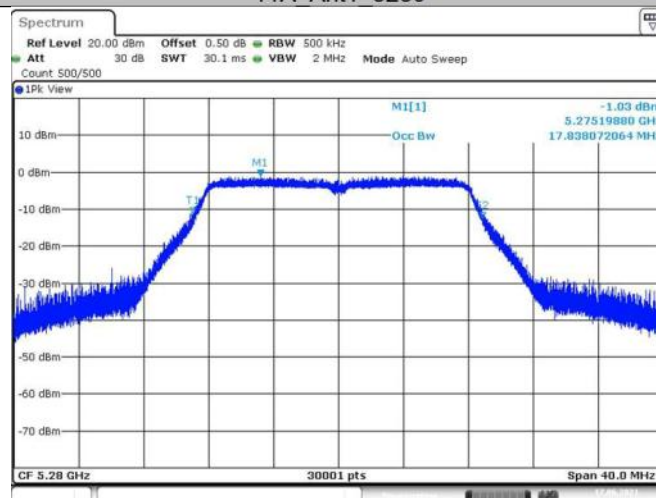
Date: 17 JUN 2021 12:51:54

11A Ant1 5260



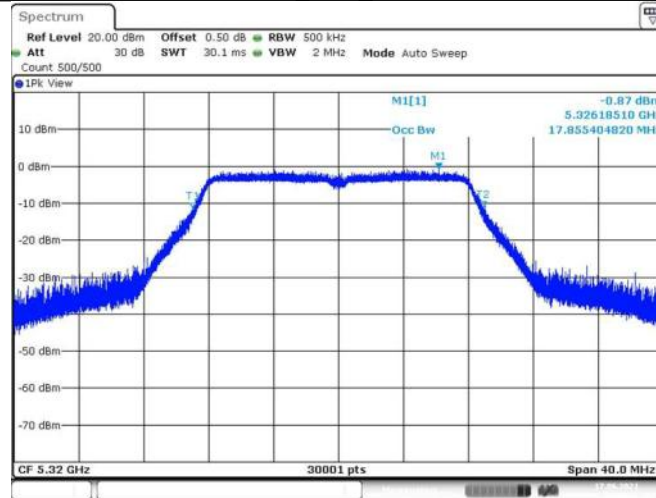
Date: 17 JUN 2021 12:57:33

11A Ant1 5280



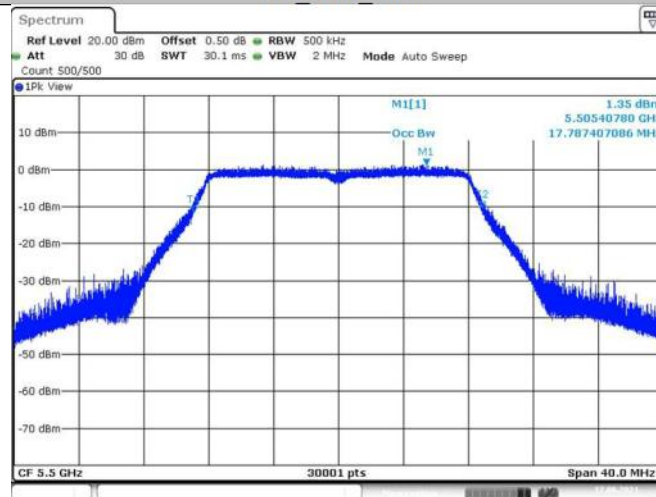
Date: 17 JUN 2021 13:02:56

11A Ant1 5320



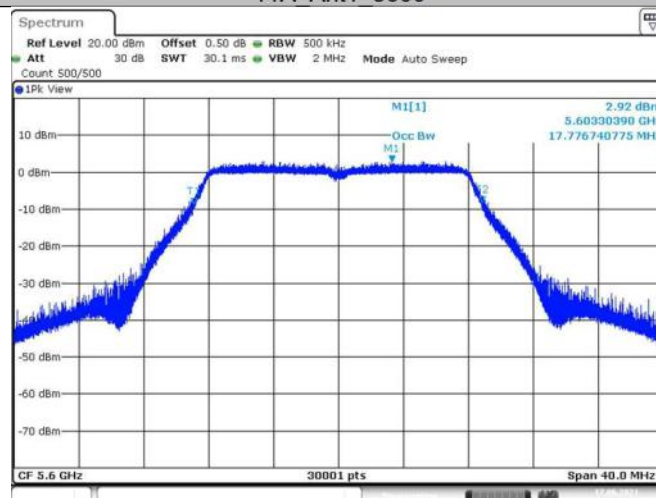
Date: 17 JUN 2021 13:08:17

11A Ant1 5500



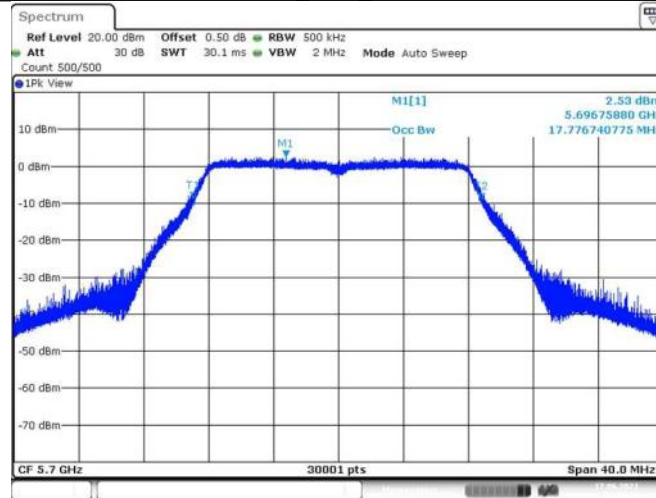
Date: 17 JUN 2021 13:14:12

11A Ant1 5600



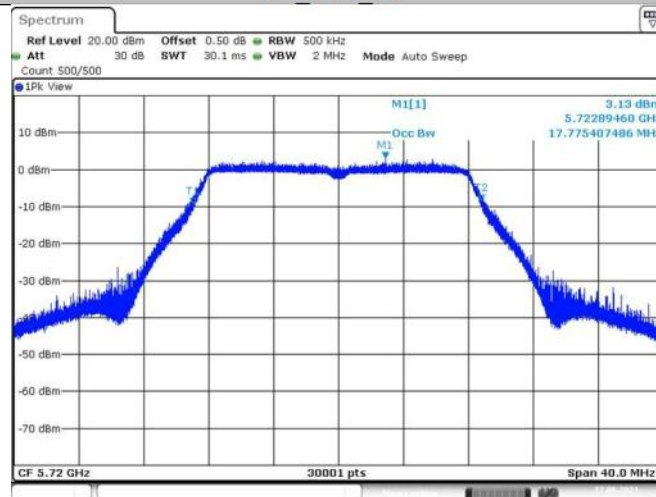
Date: 17 JUN 2021 13:19:38

11A Ant1 5700



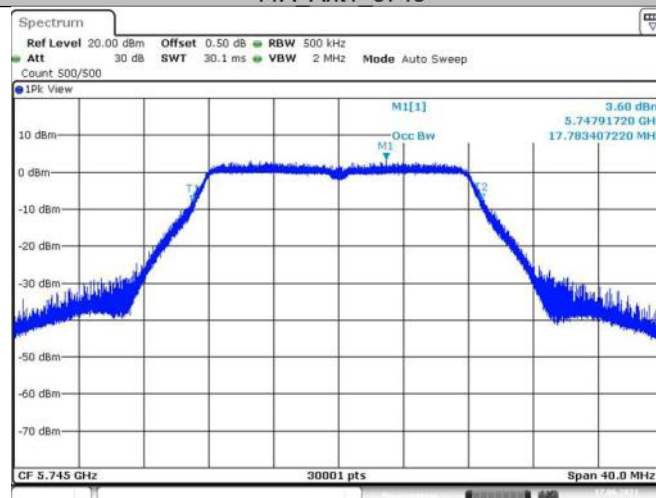
Date: 17 JUN 2021 13:24:54

11A Ant1 5720



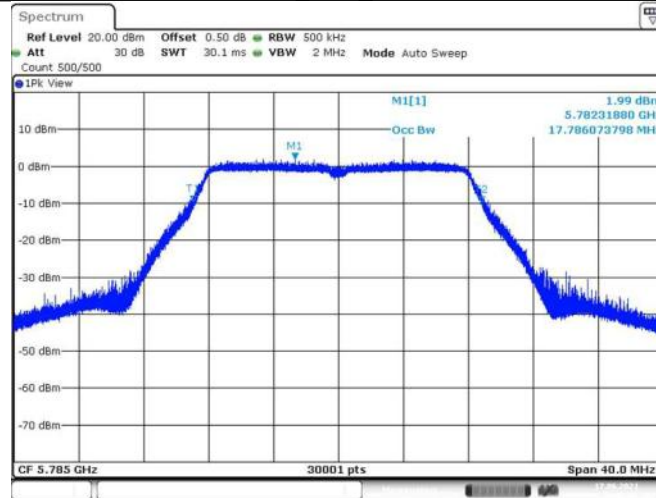
Date: 17 JUN 2021 13:30:25

11A Ant1 5745



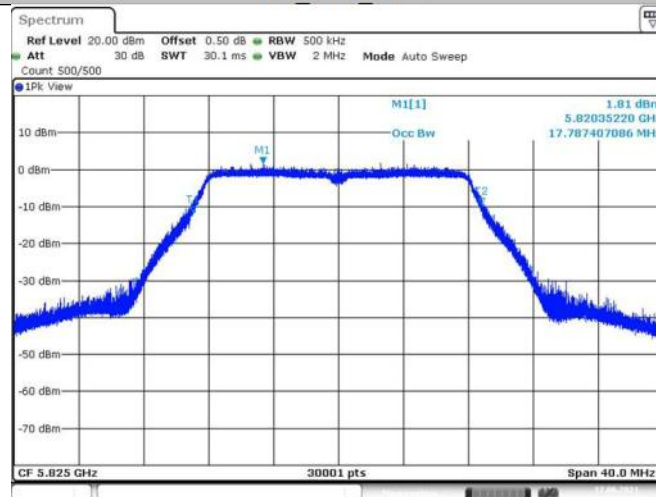
Date: 17 JUN 2021 13:36:36

11A Ant1 5785



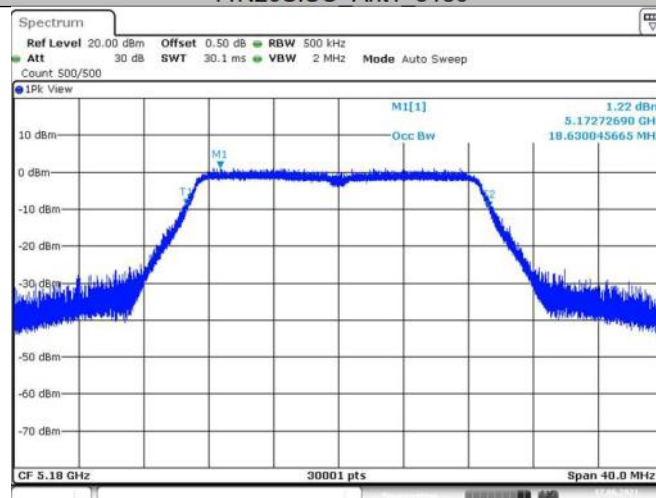
Date: 17 JUN 2021 13:42:35

11A Ant1 5825



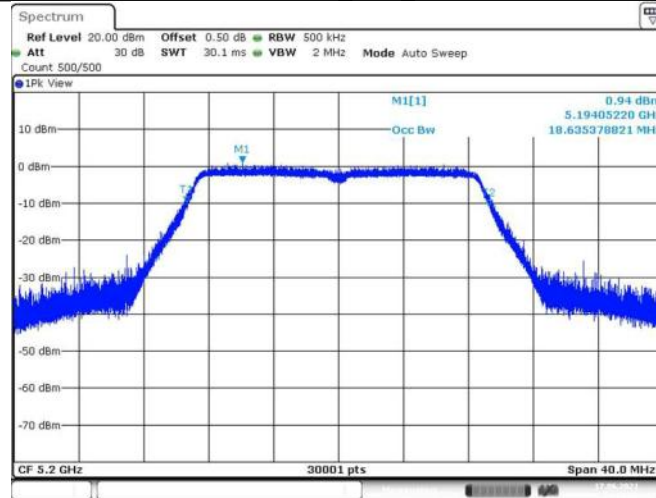
Date: 17 JUN 2021 13:48:17

11N20SISO Ant1 5180



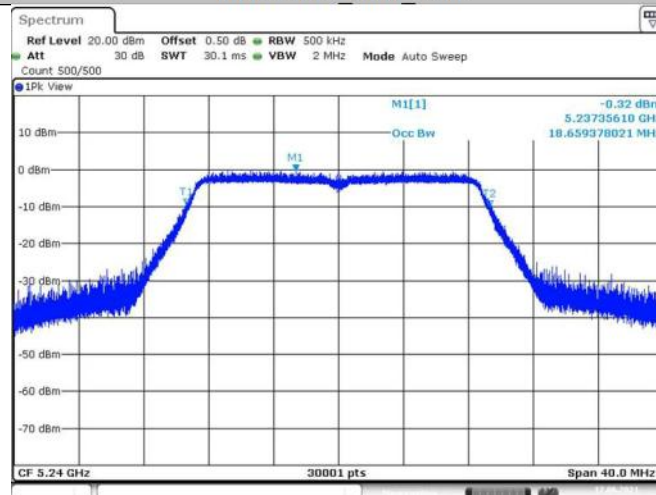
Date: 17 JUN 2021 13:54:58

11N20SISO Ant1 5200



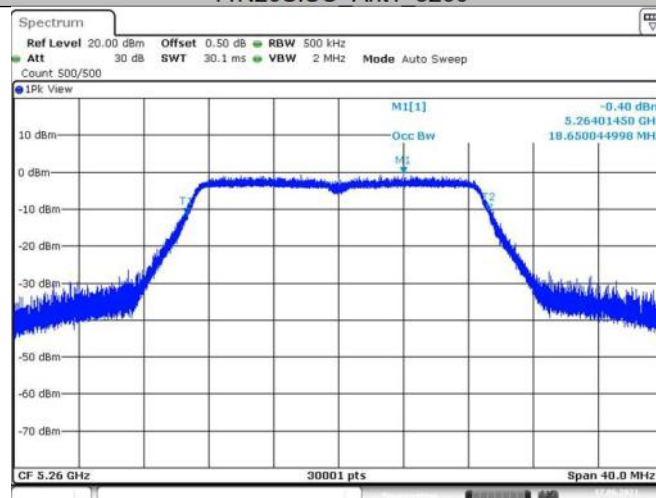
Date: 17 JUN 2021 14:14:46

11N20SISO Ant1 5240



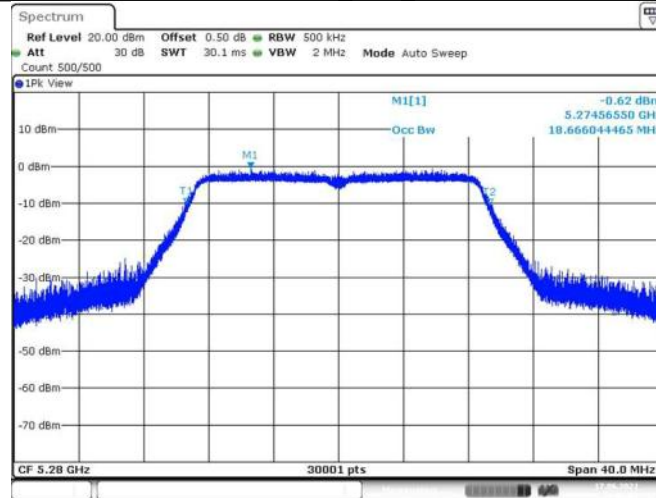
Date: 17 JUN 2021 14:20:14

11N20SISO Ant1 5260



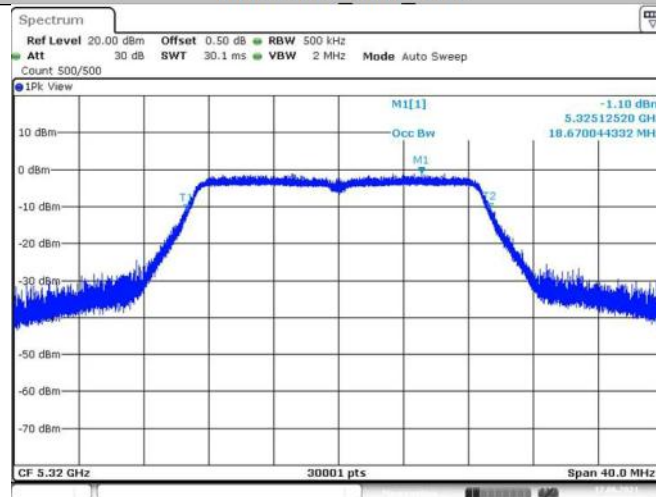
Date: 17 JUN 2021 14:25:51

11N20SISO Ant1 5280



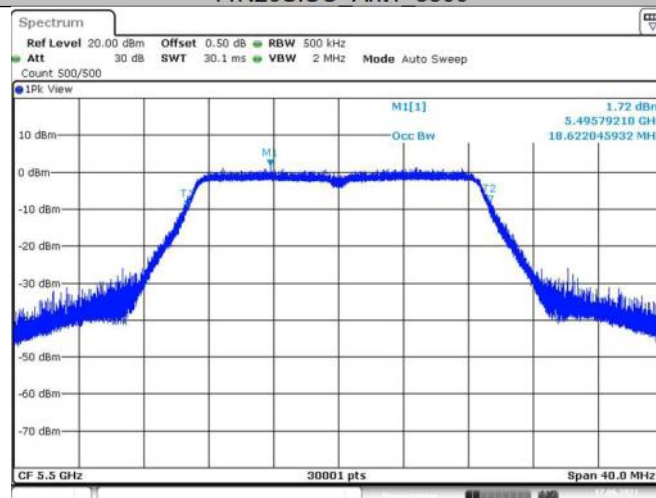
Date: 17 JUN 2021 14:31:02

11N20SISO Ant1 5320



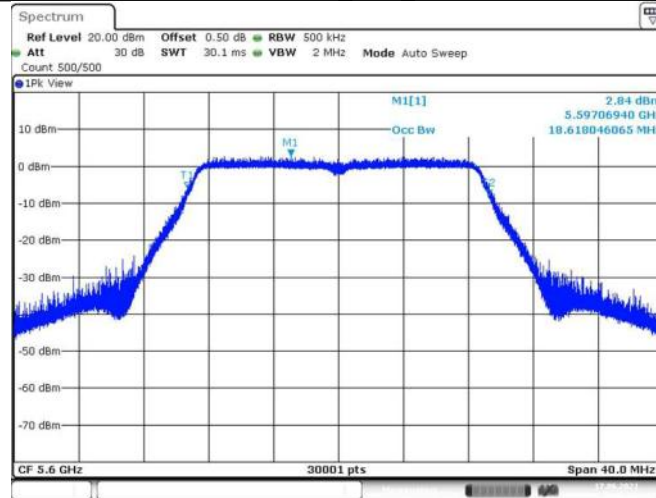
Date: 17 JUN 2021 14:36:14

11N20SISO Ant1 5500



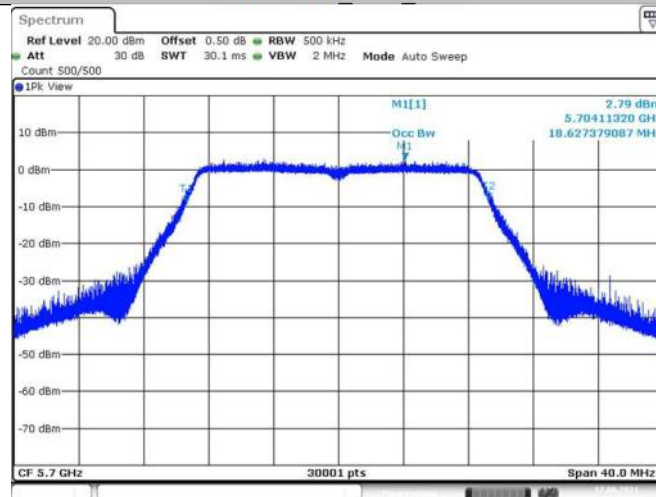
Date: 17 JUN 2021 14:41:44

11N20SISO Ant1 5600



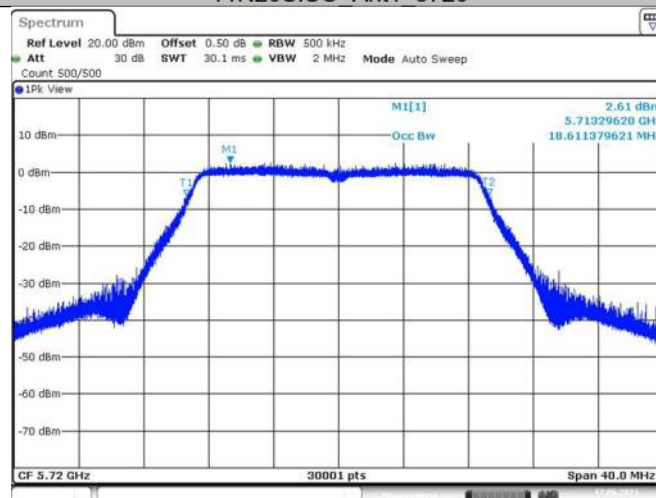
Date: 17 JUN 2021 14:47:19

11N20SISO Ant1 5700



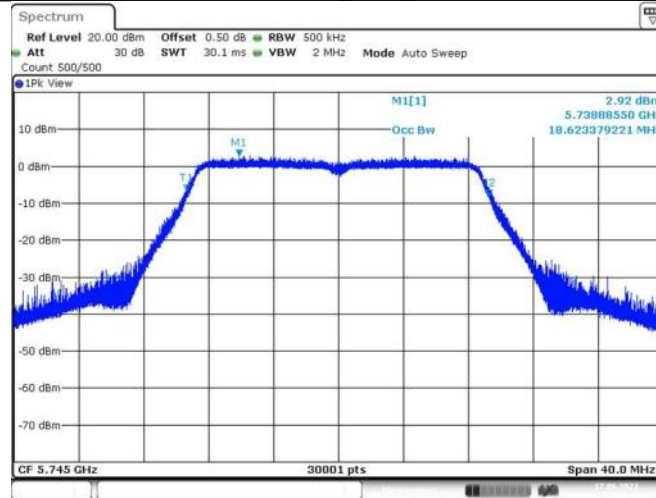
Date: 17 JUN 2021 14:52:47

11N20SISO Ant1 5720



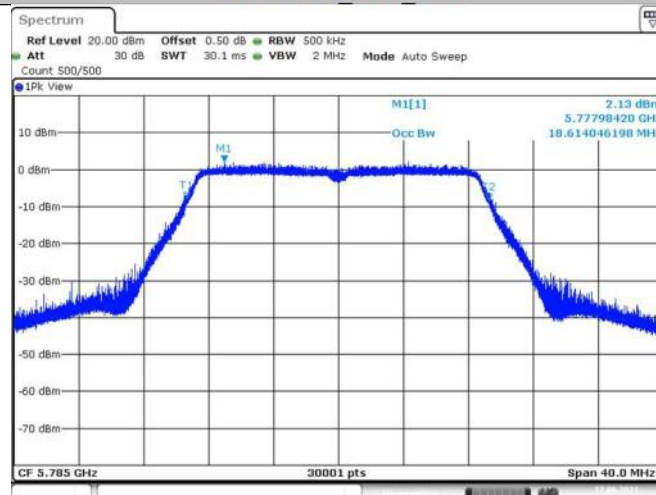
Date: 17 JUN 2021 14:58:20

11N20SISO Ant1 5745



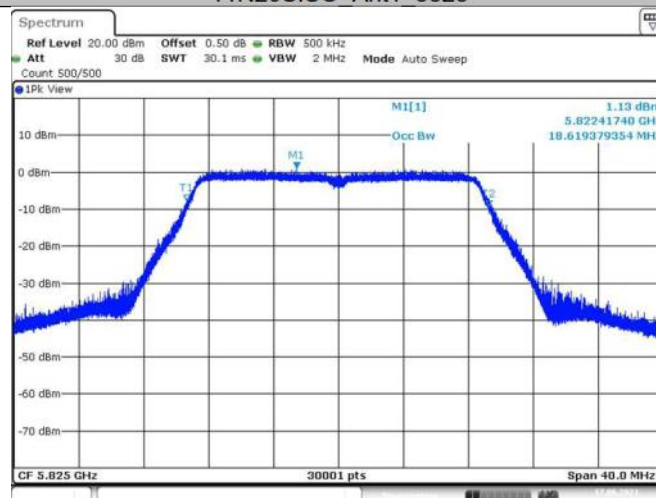
Date: 17 JUN 2021 15:05:16

11N20SISO Ant1 5785



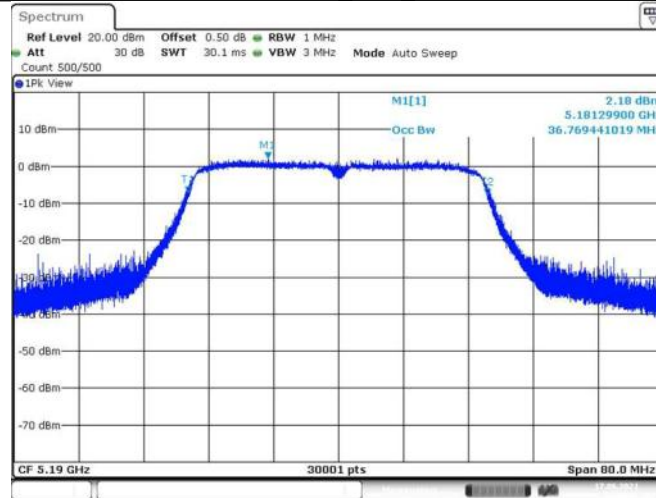
Date: 17 JUN 2021 15:10:53

11N20SISO Ant1 5825



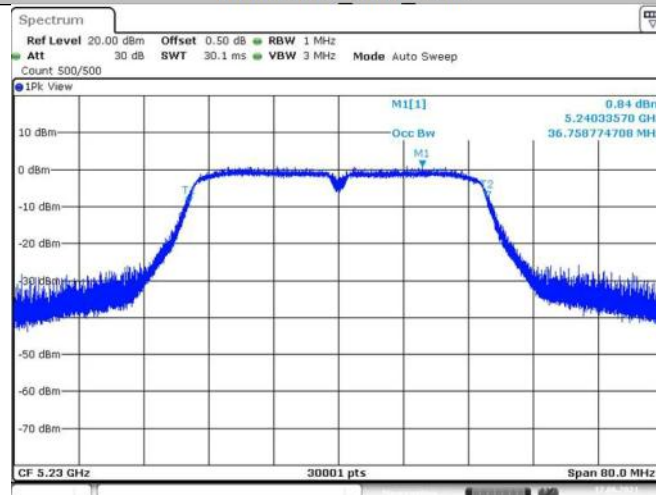
Date: 17 JUN 2021 15:16:29

11N40SISO Ant1 5190



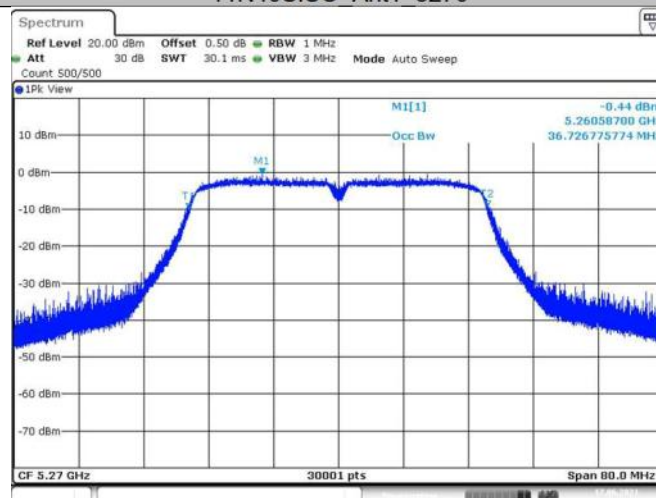
Date: 17 JUN 2021 15:24:06

11N40SISO Ant1 5230



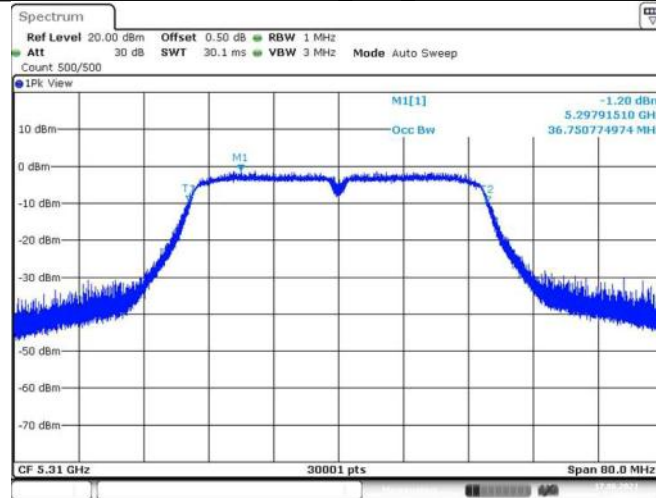
Date: 17 JUN 2021 15:30:42

11N40SISO Ant1 5270



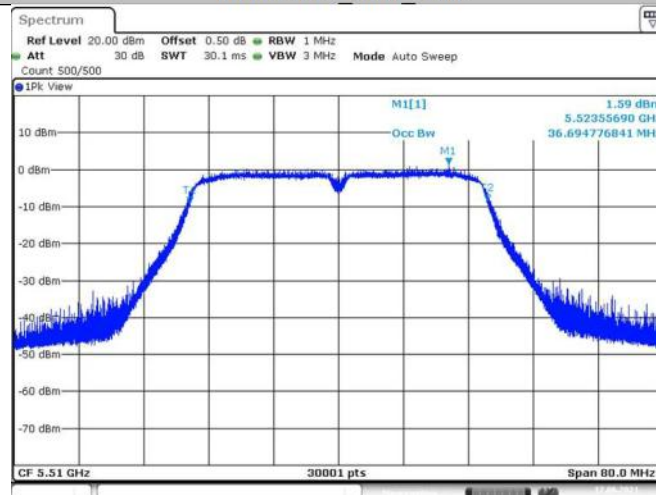
Date: 17 JUN 2021 15:38:41

11N40SISO Ant1 5310



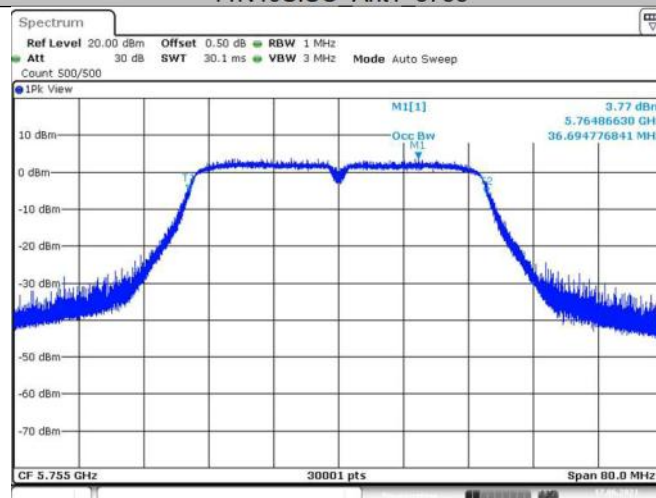
Date: 17 JUN 2021 15:44:29

11N40SISO Ant1 5510



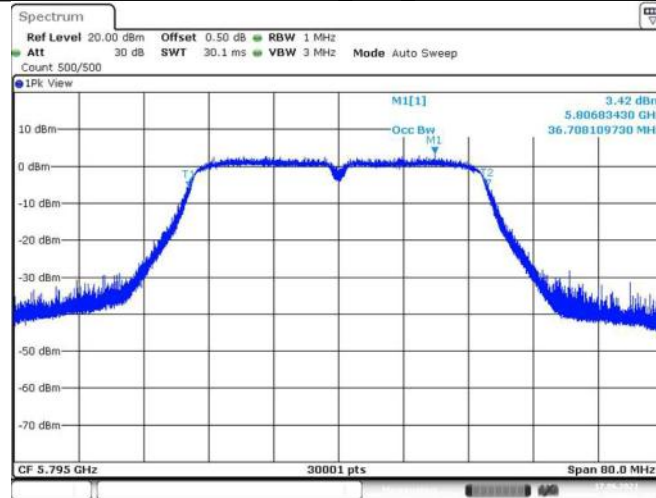
Date: 17 JUN 2021 15:50:12

11N40SISO Ant1 5755



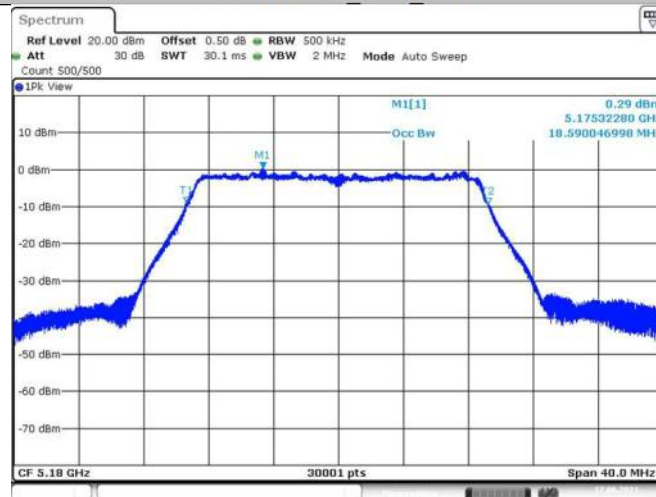
Date: 17 JUN 2021 15:56:10

11N40SISO Ant1 5795



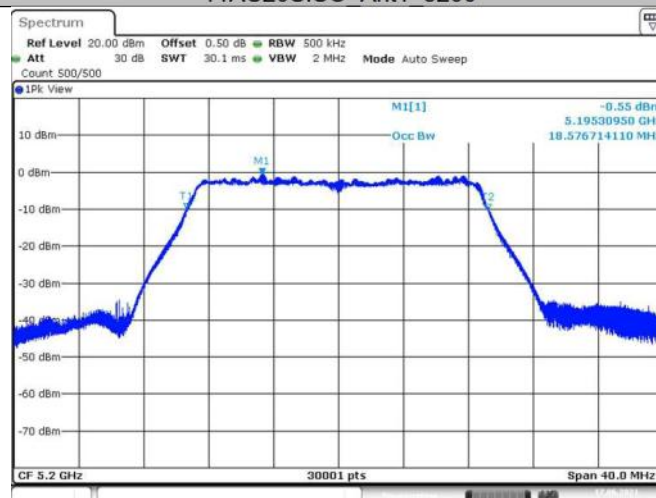
Date: 17 JUN 2021 16:06:15

11AC20SISO Ant1 5180



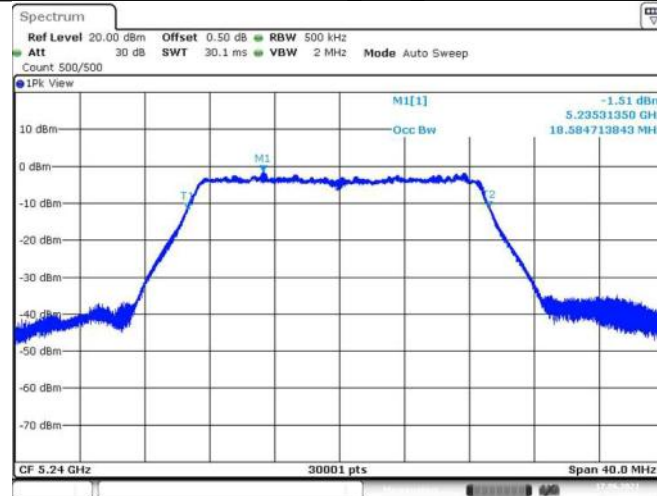
Date: 17 JUN 2021 16:12:39

11AC20SISO Ant1 5200



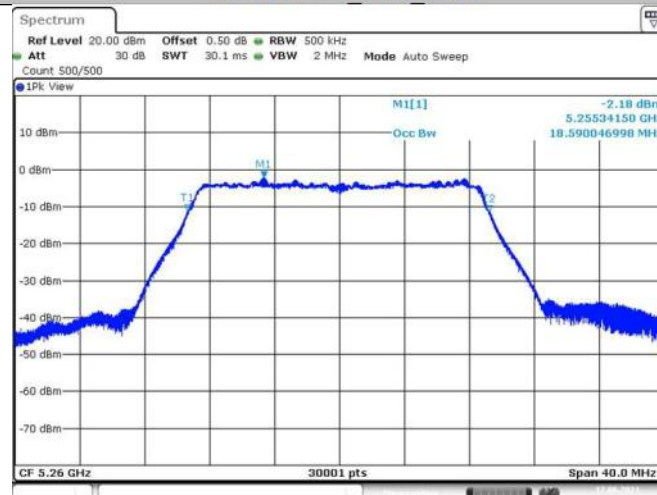
Date: 17 JUN 2021 16:18:11

11AC20SISO Ant1 5240



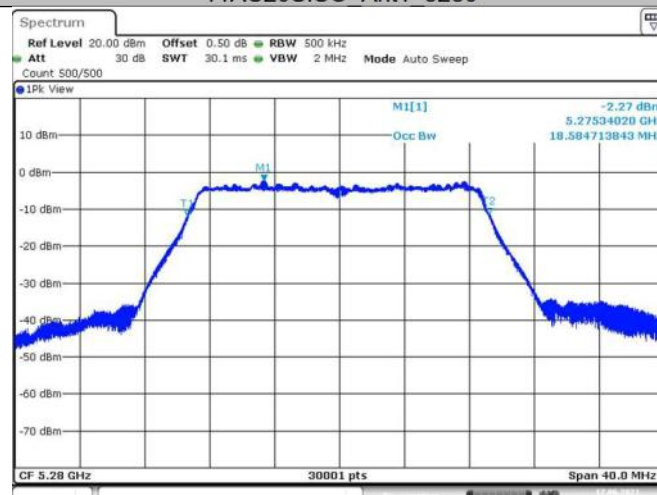
Date: 17 JUN 2021 16:23:40

11AC20SISO Ant1 5260



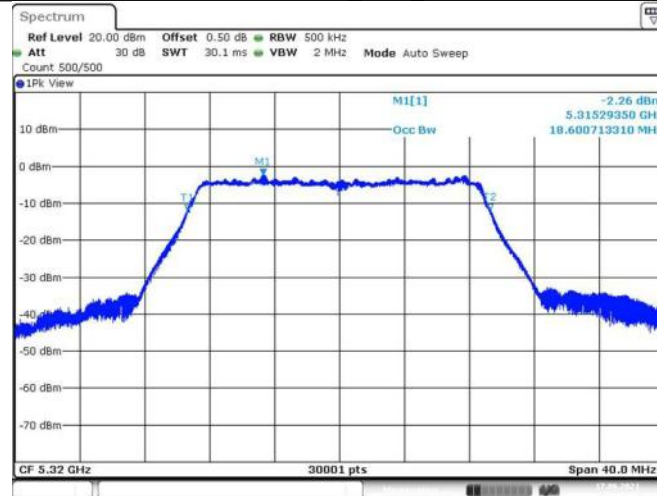
Date: 17 JUN 2021 16:30:05

11AC20SISO Ant1 5280



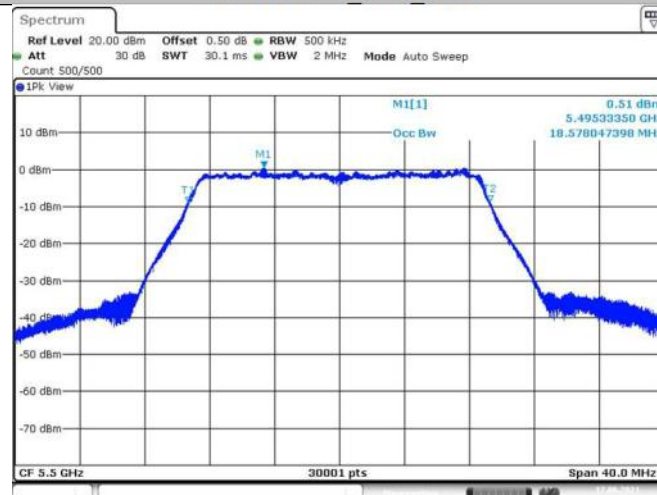
Date: 17 JUN 2021 16:35:51

11AC20SISO Ant1 5320



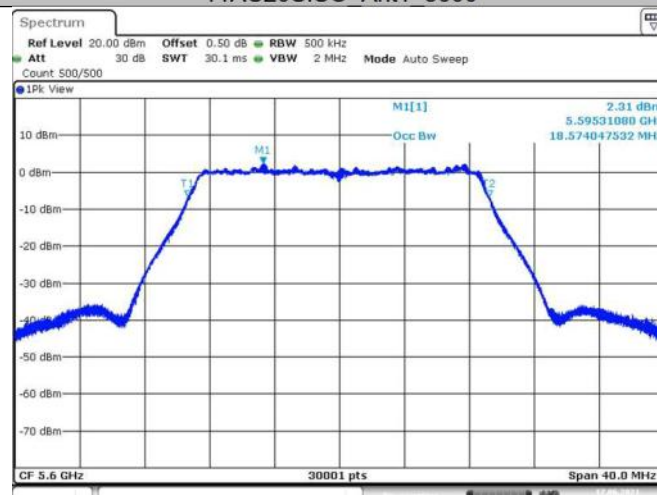
Date: 17 JUN 2021 16:41:35

11AC20SISO Ant1 5500



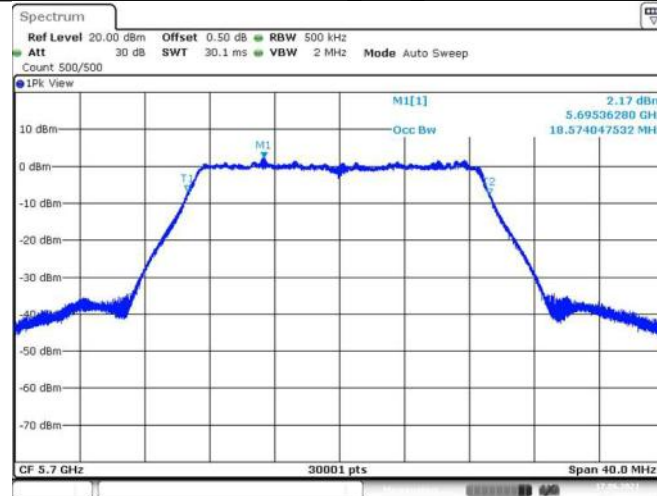
Date: 17 JUN 2021 16:49:04

11AC20SISO Ant1 5600



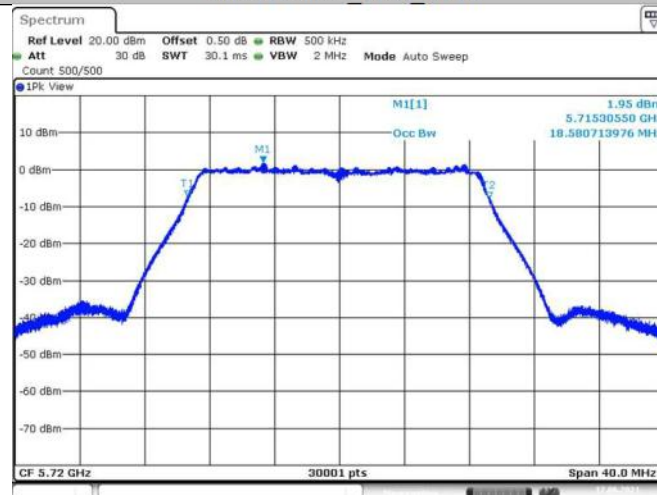
Date: 17 JUN 2021 16:54:37

11AC20SISO Ant1 5700



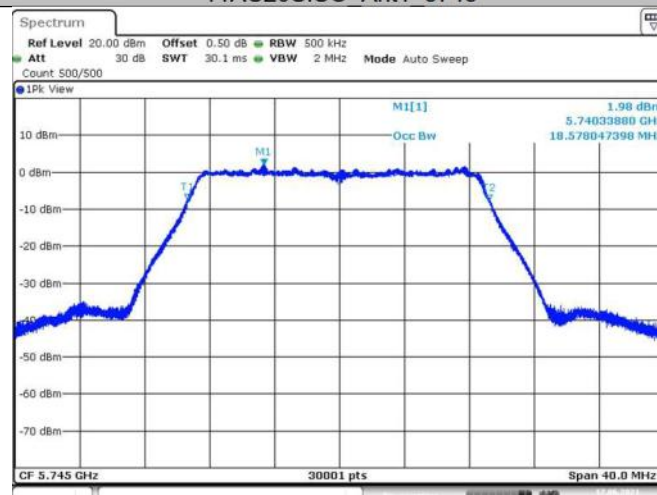
Date: 17 JUN 2021 17:00:03

11AC20SISO Ant1 5720



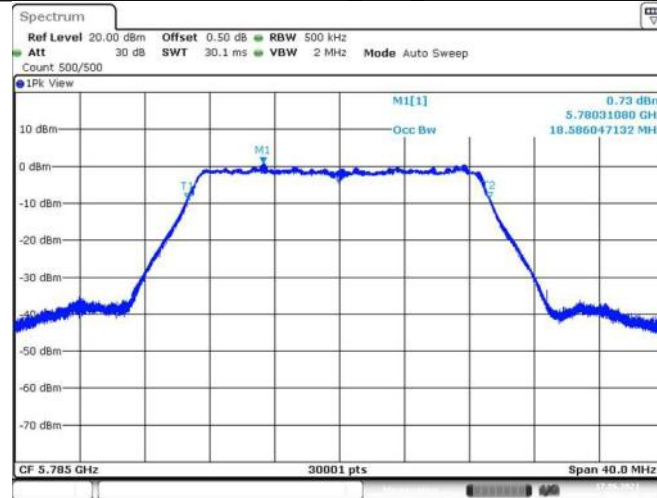
Date: 17 JUN 2021 17:06:10

11AC20SISO Ant1 5745

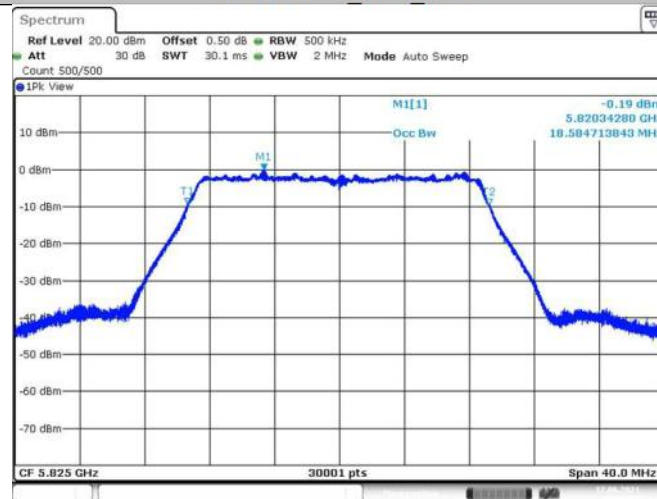


Date: 17 JUN 2021 17:12:42

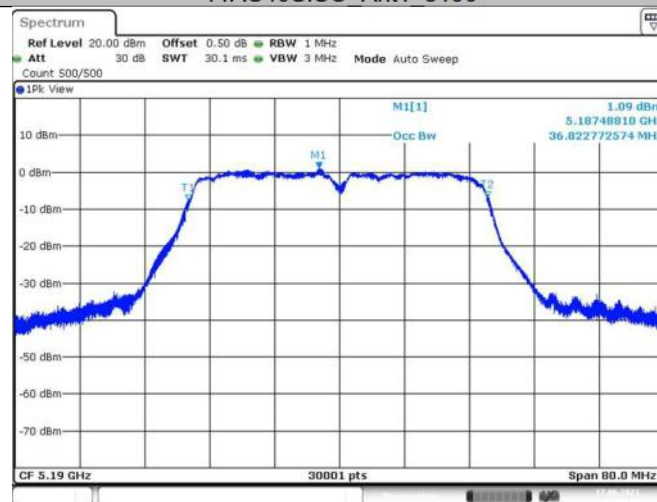
11AC20SISO Ant1 5785



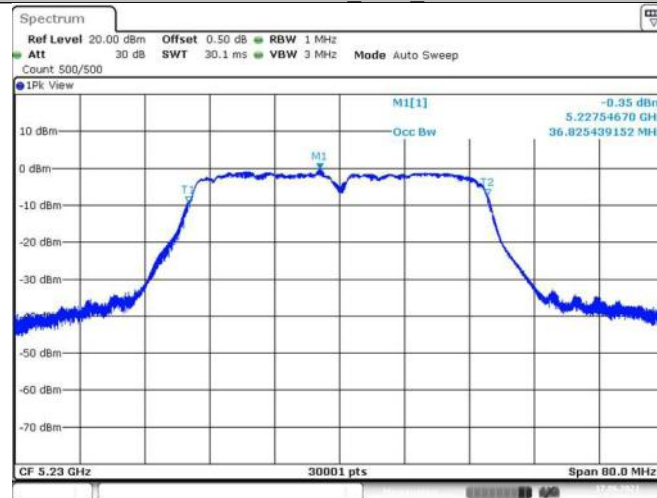
11AC20SISO Ant1 5825



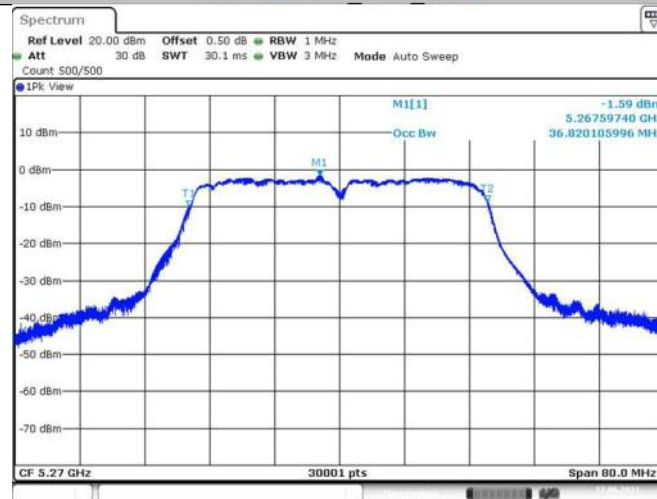
11AC40SISO Ant1 5190



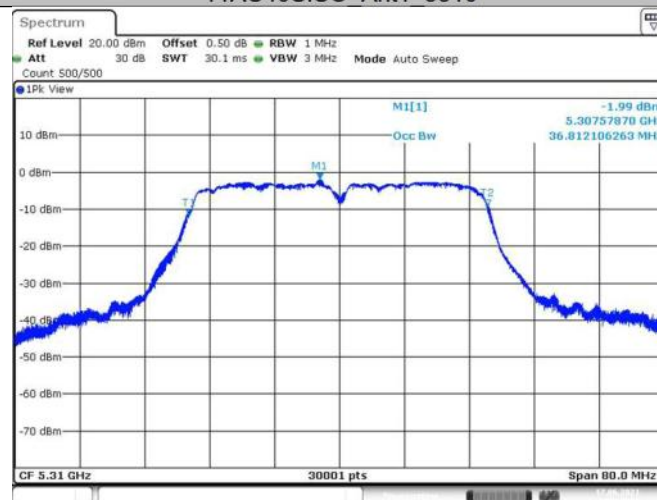
11AC40SISO Ant1 5230



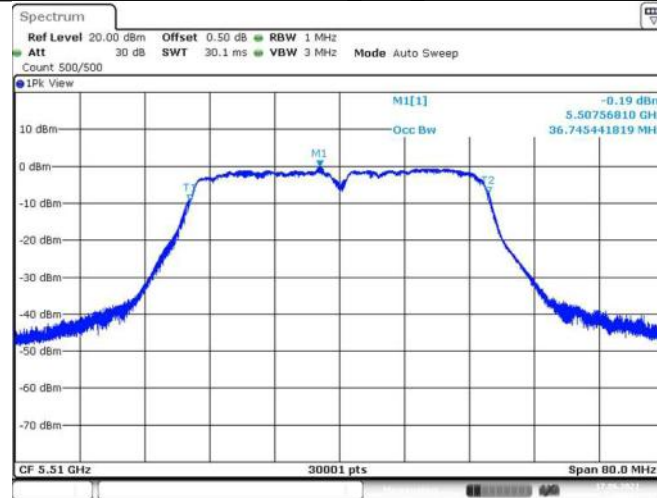
11AC40SISO Ant1 5270



11AC40SISO Ant1 5310

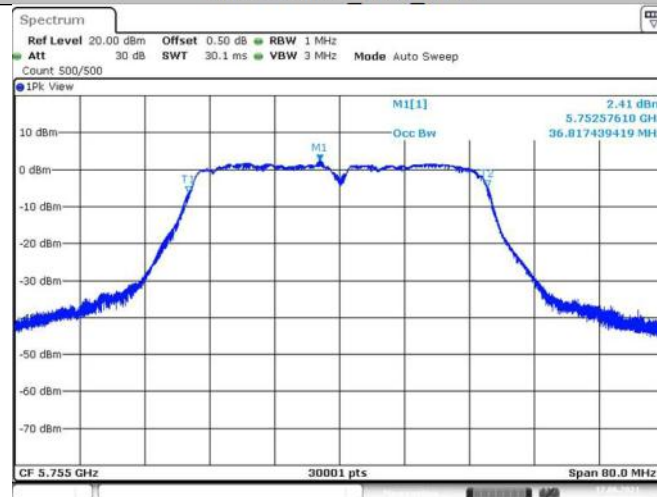


11AC40SISO Ant1 5510



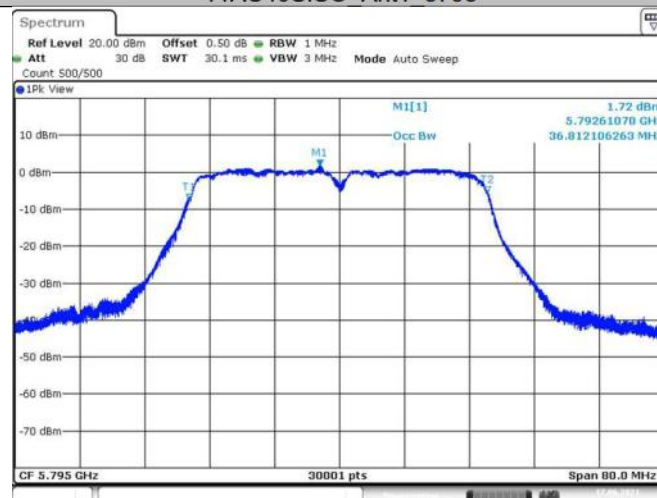
Date: 17 JUN 2021 17:53:31

11AC40SISO Ant1 5755



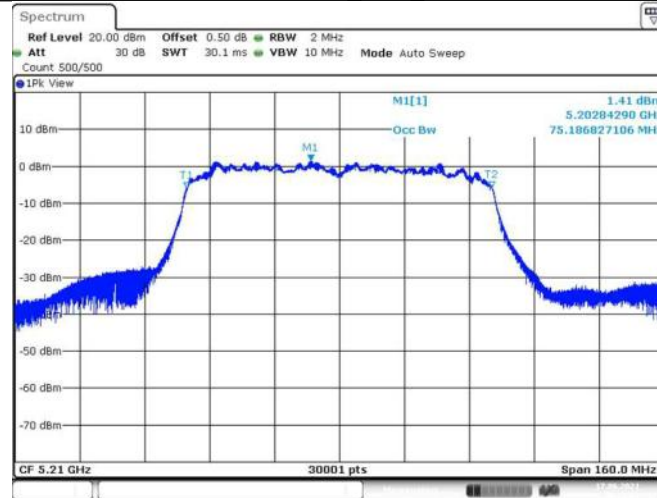
Date: 17 JUN 2021 17:59:36

11AC40SISO Ant1 5795



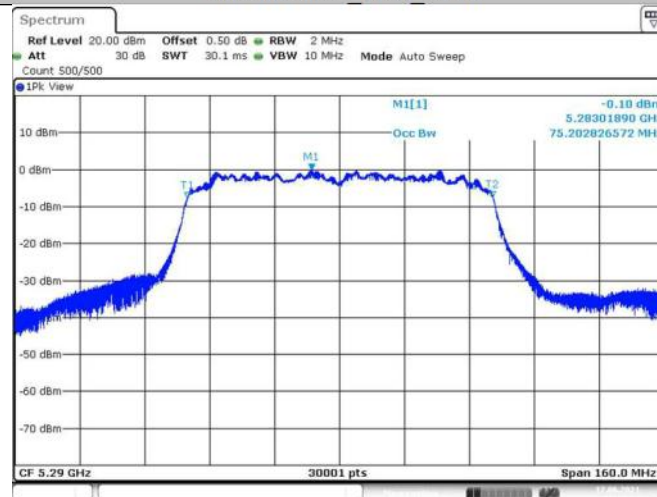
Date: 17 JUN 2021 18:05:36

11AC80SISO Ant1 5210



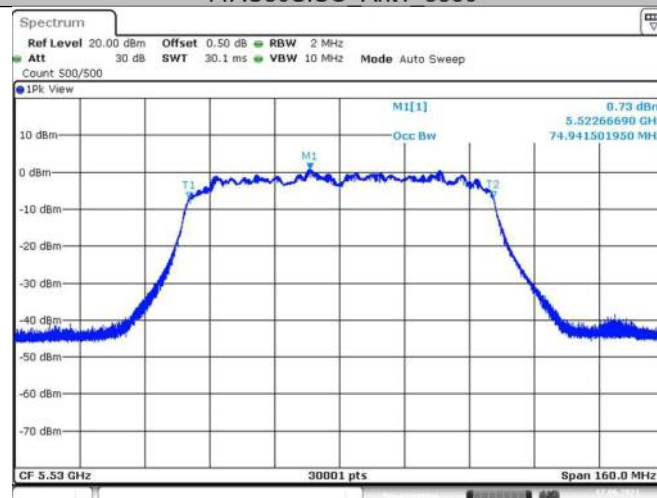
Date: 17 JUN 2021 18:12:00

11AC80SISO Ant1 5290

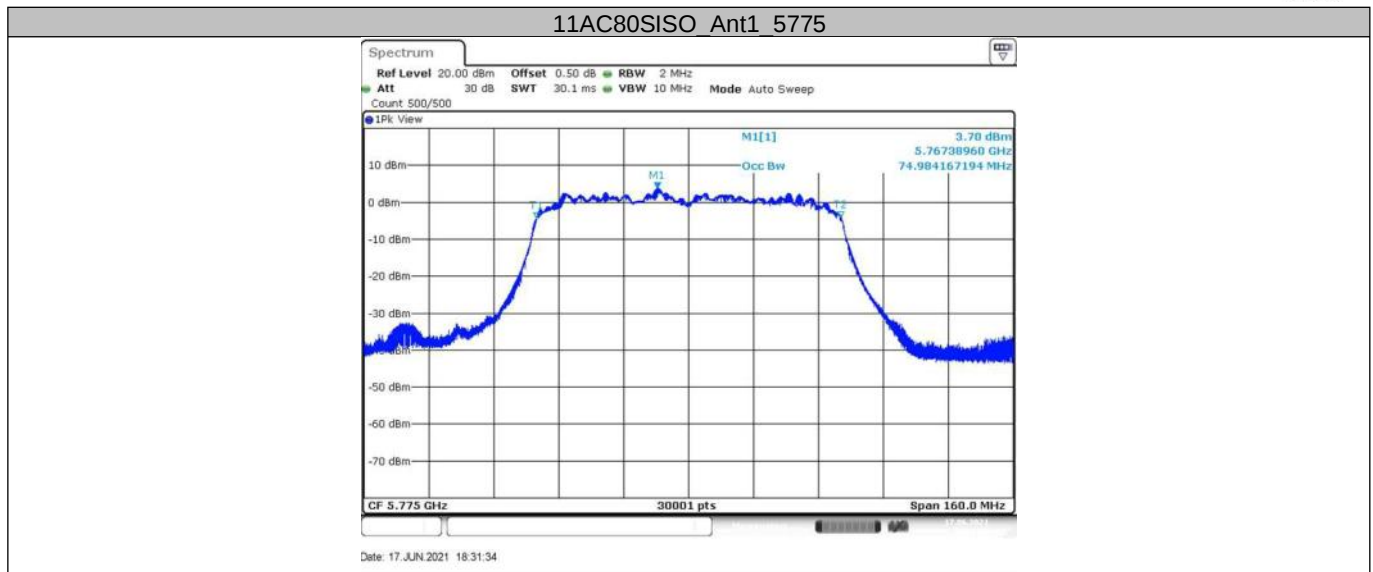


Date: 17 JUN 2021 18:18:14

11AC80SISO Ant1 5530

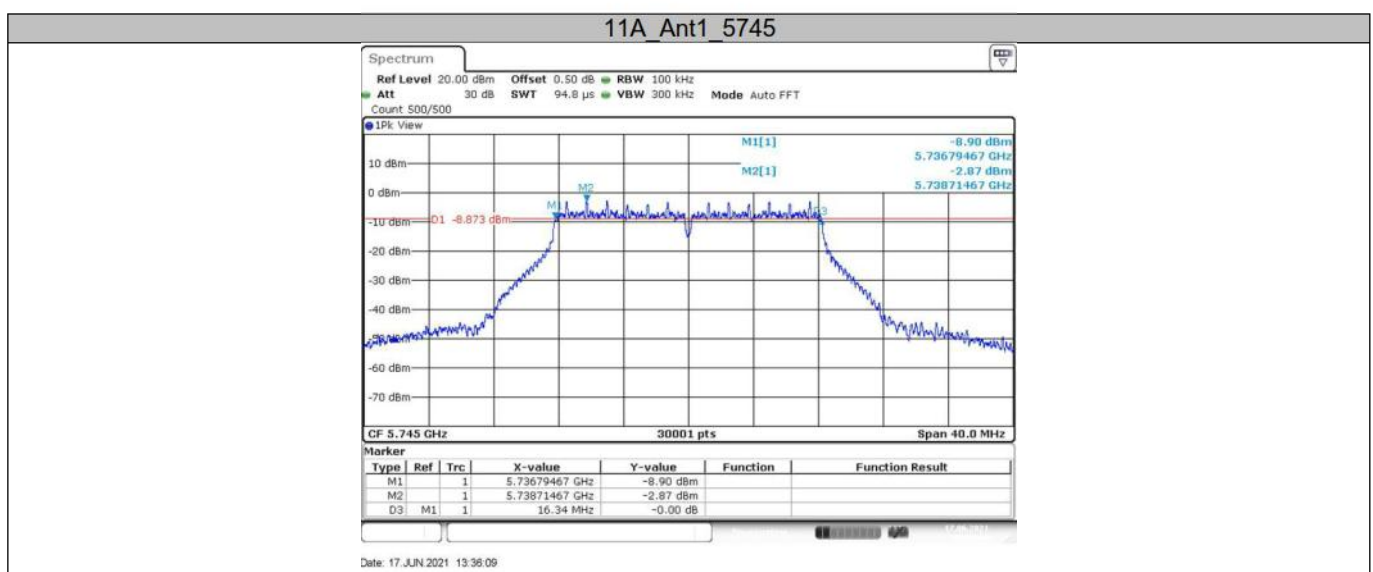


Date: 17 JUN 2021 18:24:12

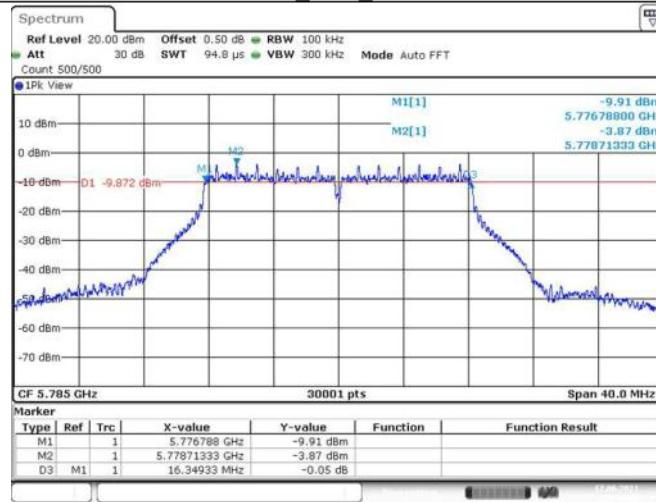


6dB Bandwidth Test Result

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.340	5736.795	5753.135	0.5	PASS
		5785	16.349	5776.788	5793.137	0.5	PASS
		5825	16.347	5816.787	5833.133	0.5	PASS
11N20SISO	Ant1	5745	17.583	5736.179	5753.761	0.5	PASS
		5785	17.595	5776.164	5793.759	0.5	PASS
		5825	17.599	5816.164	5833.763	0.5	PASS
11N40SISO	Ant1	5755	35.133	5737.408	5772.541	0.5	PASS
		5795	35.123	5777.408	5812.531	0.5	PASS
11AC20SISO	Ant1	5745	17.581	5736.173	5753.755	0.5	PASS
		5785	17.576	5776.176	5793.752	0.5	PASS
		5825	17.575	5816.173	5833.748	0.5	PASS
11AC40SISO	Ant1	5755	35.325	5737.213	5772.539	0.5	PASS
		5795	35.168	5777.400	5812.568	0.5	PASS
11AC80SISO	Ant1	5775	73.819	5738.675	5812.493	0.5	PASS

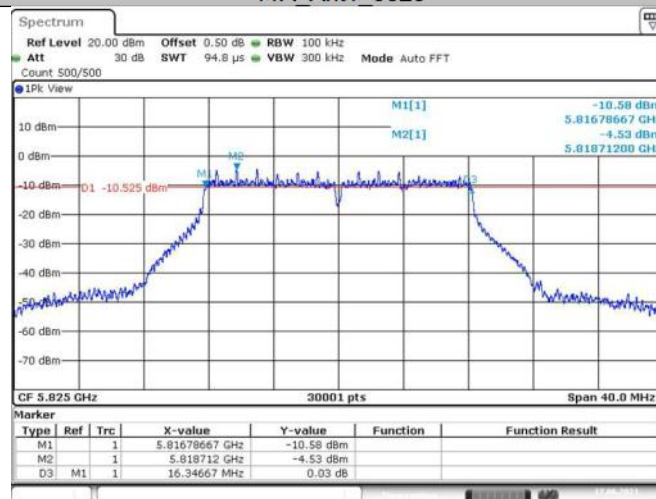


11A_Ant1_5785



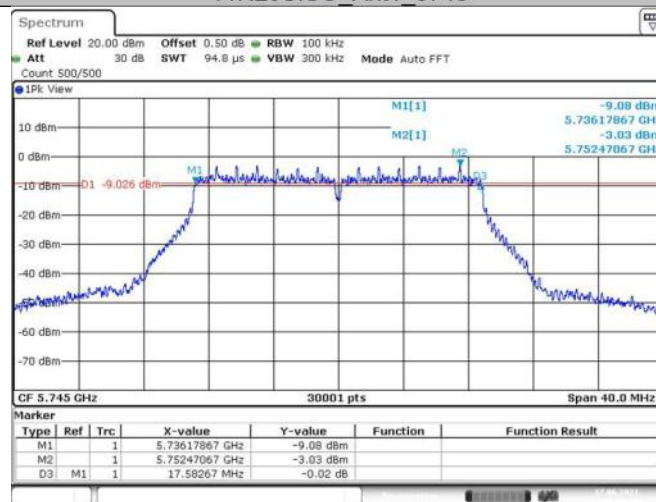
Date: 17 JUN 2021 13:42:09

11A_Ant1_5825



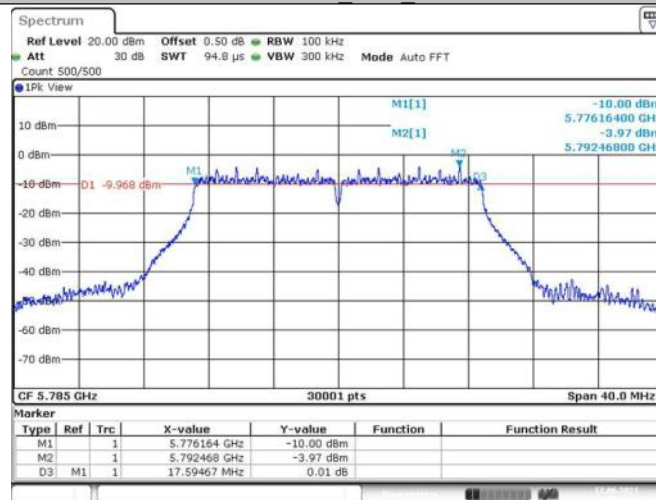
Date: 17 JUN 2021 13:47:50

11N20SISO_Ant1_5745



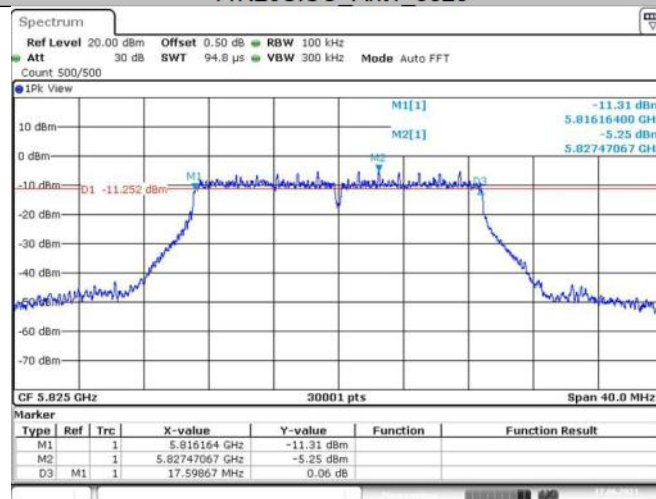
Date: 17 JUN 2021 15:04:50

11N20SISO_Ant1_5785



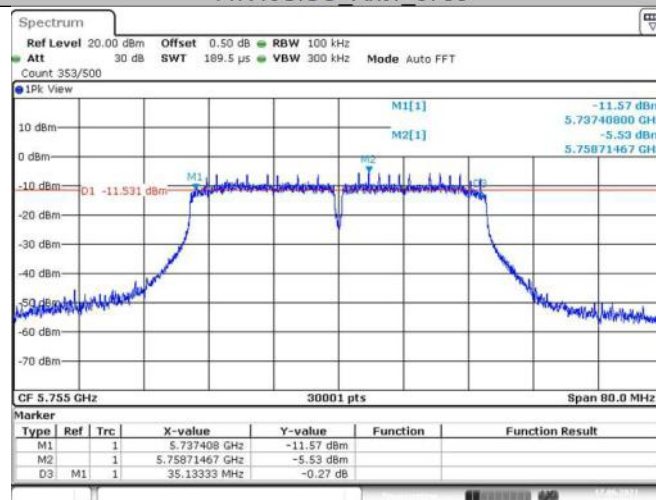
Date: 17 JUN 2021 15:10:26

11N20SISO_Ant1_5825



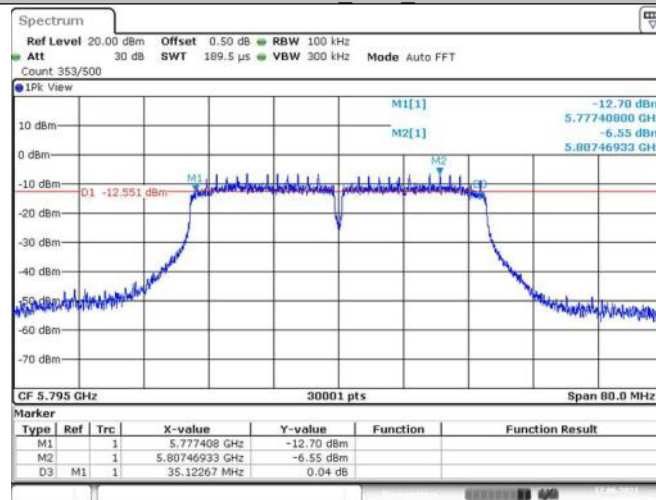
Date: 17 JUN 2021 15:16:02

11N40SISO_Ant1_5755



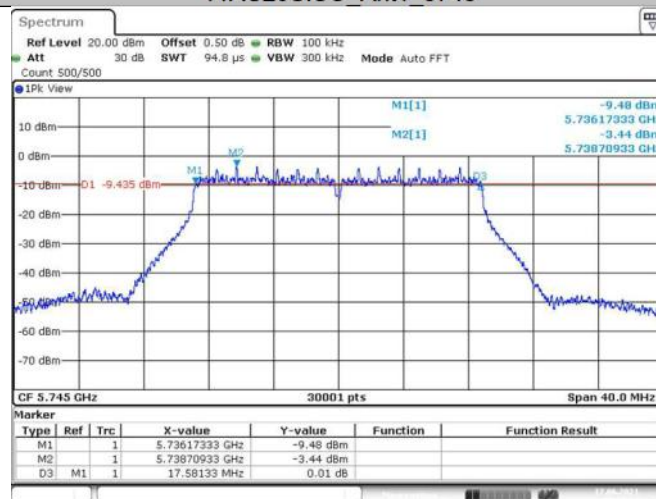
Date: 17 JUN 2021 15:55:44

11N40SISO_Ant1_5795



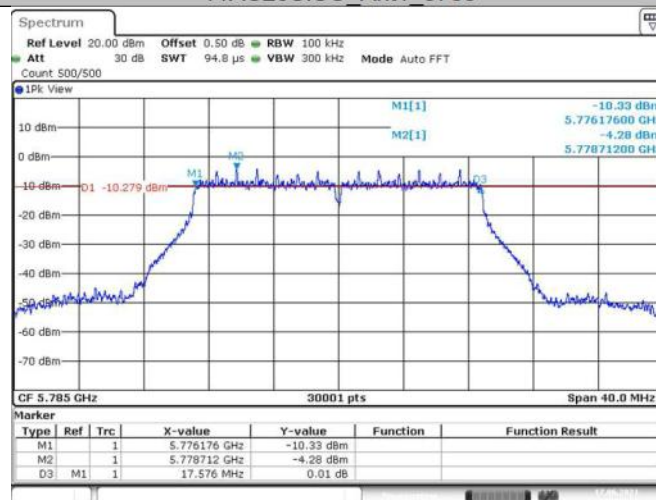
Date: 17 JUN 2021 16:05:49

11AC20SISO_Ant1_5745



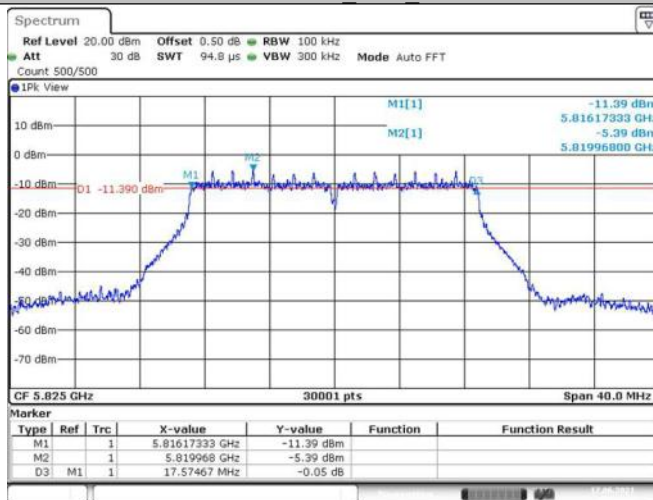
Date: 17 JUN 2021 17:12:15

11AC20SISO_Ant1_5785



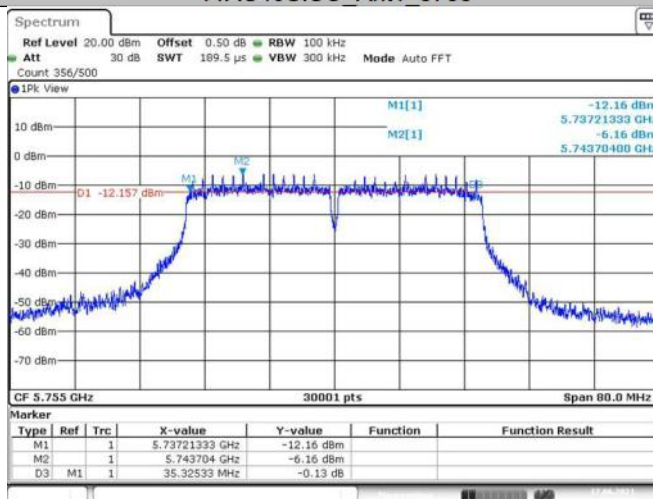
Date: 17 JUN 2021 18:56:39

11AC20SISO_Ant1_5825



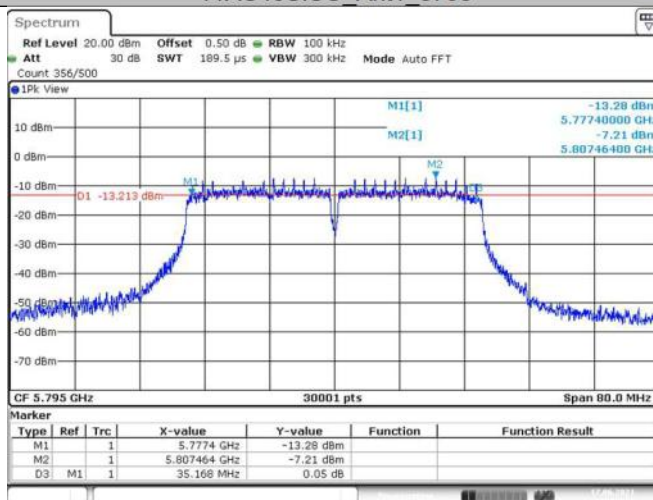
Date: 17 JUN 2021 17:23:30

11AC40SISO_Ant1_5755



Date: 17 JUN 2021 17:59:09

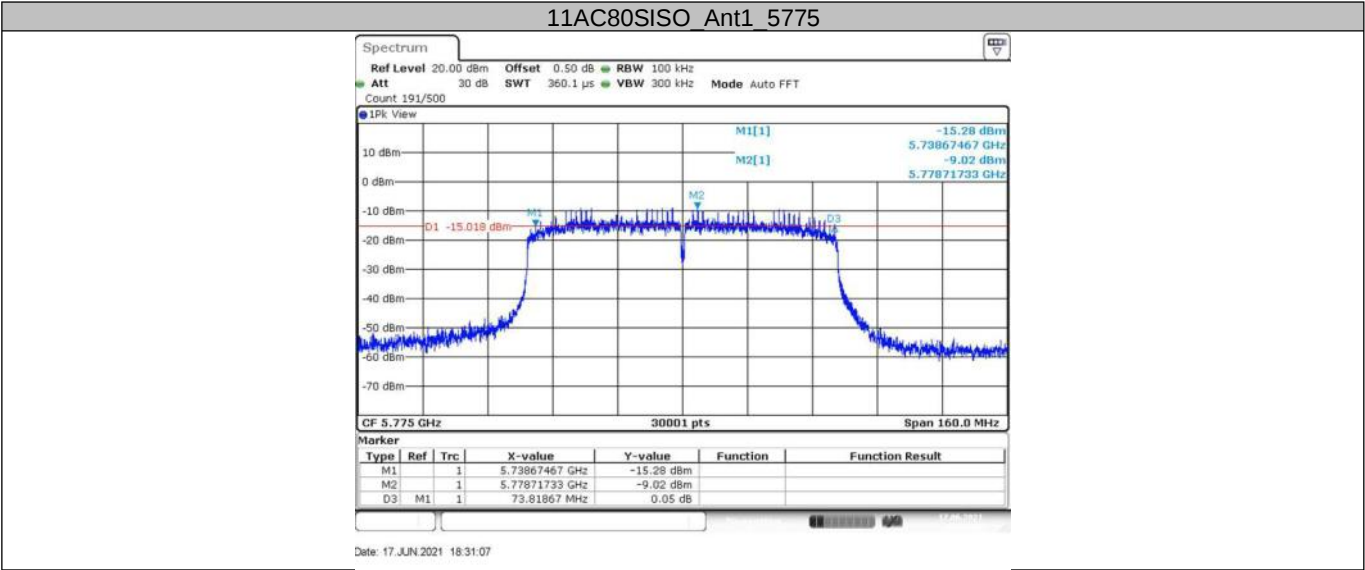
11AC40SISO_Ant1_5795



Date: 17 JUN 2021 18:05:09



China



9.3 Maximum conducted output power

Test Method

According to C63.10, the EUT was placed on 0.8m height table, the RF output of EUT was connected to the test power meter by RF cable. The path loss was compensated to the results for each measurement.

(1) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:

The EUT is configured to transmit continuously or to transmit with a constant duty cycle.

At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.

The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

(2) If the transmitter does not transmit continuously, measure the duty cycle, x , of the transmitter output signal as described in II.B.

(3) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.

(4) Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25%).

Limits:

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26dB emission bandwidth in megahertz.

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

Test result as below table

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	7.58	≤ 23.98	PASS
		5200	7.05	≤ 23.98	PASS
		5240	6.27	≤ 23.98	PASS
		5260	5.87	≤ 23.98	PASS
		5280	5.88	≤ 23.98	PASS
		5320	5.89	≤ 23.98	PASS
		5500	7.23	≤ 23.98	PASS
		5600	9.06	≤ 23.98	PASS
		5700	8.42	≤ 23.98	PASS
		5720	8.13	≤ 22.99	PASS
		5745	8.46	≤ 30	PASS
		5785	7.25	≤ 30	PASS
		5825	6.2	≤ 30	PASS

11N20SISO	Ant1	5180	7.7	<=23.98	PASS
		5200	7.12	<=23.98	PASS
		5240	6.4	<=23.98	PASS
		5260	6.1	<=23.98	PASS
		5280	5.93	<=23.98	PASS
		5320	5.91	<=23.98	PASS
		5500	7.31	<=23.98	PASS
		5600	9.18	<=23.98	PASS
		5700	8.51	<=23.98	PASS
		5720	8.3	<=23.04	PASS
		5745	8.41	<=30	PASS
		5785	7.22	<=30	PASS
		5825	6.22	<=30	PASS
11N40SISO	Ant1	5190	7.51	<=23.98	PASS
		5230	6.82	<=23.98	PASS
		5270	4.56	<=23.98	PASS
		5310	4.28	<=23.98	PASS
		5510	5.75	<=23.98	PASS
		5755	8.31	<=30	PASS
		5795	7.37	<=30	PASS
11AC20SISO	Ant1	5180	6.85	<=23.98	PASS
		5200	6.49	<=23.98	PASS
		5240	5.6	<=23.98	PASS
		5260	5.28	<=23.98	PASS
		5280	5.12	<=23.98	PASS
		5320	5.04	<=23.98	PASS
		5500	7.31	<=23.98	PASS
		5600	9.13	<=23.98	PASS
		5700	8.44	<=23.98	PASS
		5720	8.17	<=23.02	PASS
		5745	7.79	<=30	PASS
		5785	6.76	<=30	PASS
		5825	5.59	<=30	PASS
11AC40SISO	Ant1	5190	7.11	<=23.98	PASS
		5230	6.36	<=23.98	PASS
		5270	4.44	<=23.98	PASS
		5310	4.18	<=23.98	PASS
		5510	5.71	<=23.98	PASS
		5755	7.95	<=30	PASS
		5795	6.65	<=30	PASS
11AC80SISO	Ant1	5210	6.36	<=23.98	PASS
		5290	5.24	<=23.98	PASS
		5530	4.81	<=23.98	PASS
		5775	6.82	<=30	PASS

9.4 Maximum power spectral density

Test Method

According to C63.10, the EUT was placed on 0.8m height table, the RF output of EUT was connected to the test power meter by RF cable. The path loss was compensated to the results for each measurement.

1. Create an average power spectrum for the EUT operating mode being tested by following the instructions in II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power...." (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
 2. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
 3. Make the following adjustments to the peak value of the spectrum, if applicable:
 - a) If Method SA-2 or SA-2 Alternative was used, add $10 \log (1/x)$, where x is the duty cycle, to the peak of the spectrum.
 - b) If Method SA-3 Alternative was used and the linear mode was used in II.E.2.g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.
 4. The result is the Maximum PSD over 1 MHz reference bandwidth.
 5. For devices operating in the bands 5.15–5.25 GHz, 5.25–5.35 GHz, and 5.47–5.725 GHz, the preceding procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725–5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:
 - a) Set $RBW \geq 1/T$, where T is defined in II.B.I.a).
 - b) Set $VBW \geq 3$ RBW.
 - c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500 \text{ kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
 - d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
 - e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.
- Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the II.F.5.c) and II.F.5.d), since $RBW=100 \text{ kHz}$ is available on nearly all spectrum analyzers.

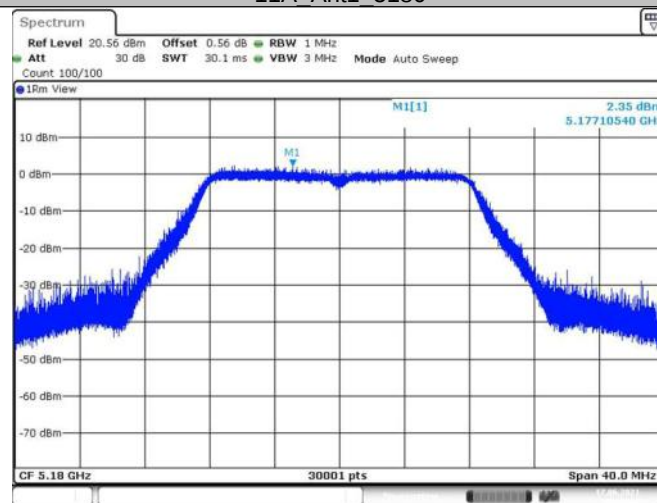
Limit: The maximum power spectral density shall not exceed 11dBm for the 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725 GHz Band in any 1 megahertz band.
For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30dBm in any 1 500kHz band.

Test Result:

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	2.35	<=11	PASS
		5200	1.75	<=11	PASS
		5240	0.76	<=11	PASS
		5260	0.37	<=11	PASS
		5280	0.49	<=11	PASS
		5320	0.25	<=11	PASS
		5500	2.45	<=11	PASS
		5600	4.51	<=11	PASS
		5700	4.38	<=11	PASS
		5720 UNII-2C	3.86	<=11	PASS
		5720 UNII-3	1.16	<=11	PASS
		5745	1.91	<=30	PASS
		5785	1.09	<=30	PASS
		5825	0.45	<=30	PASS
11N20SISO	Ant1	5180	2.67	<=11	PASS
		5200	2.06	<=11	PASS
		5240	1.08	<=11	PASS
		5260	0.42	<=11	PASS
		5280	0.32	<=11	PASS
		5320	-0.41	<=11	PASS
		5500	2.13	<=11	PASS
		5600	4.07	<=11	PASS
		5700	3.77	<=11	PASS
		5720 UNII-2C	3.41	<=11	PASS
		5720 UNII-3	0.94	<=11	PASS
		5745	2.12	<=30	PASS
		5785	0.97	<=30	PASS
		5825	0.44	<=30	PASS
11N40SISO	Ant1	5190	0.14	<=11	PASS
		5230	-1.43	<=11	PASS
		5270	-3.2	<=11	PASS
		5310	-3.8	<=11	PASS
		5510	-1.54	<=11	PASS
		5755	-0.85	<=30	PASS
		5795	-1.45	<=30	PASS
11AC20SISO	Ant1	5180	1.46	<=11	PASS
		5200	0.35	<=11	PASS
		5240	-0.54	<=11	PASS
		5260	-1.06	<=11	PASS
		5280	-1.07	<=11	PASS
		5320	-0.99	<=11	PASS
		5500	1.93	<=11	PASS
		5600	3.89	<=11	PASS
		5700	3.05	<=11	PASS
		5720 UNII-2C	2.73	<=11	PASS
		5720 UNII-3	0.67	<=11	PASS
		5745	1.2	<=30	PASS
		5785	0.36	<=30	PASS
		5825	-0.79	<=30	PASS

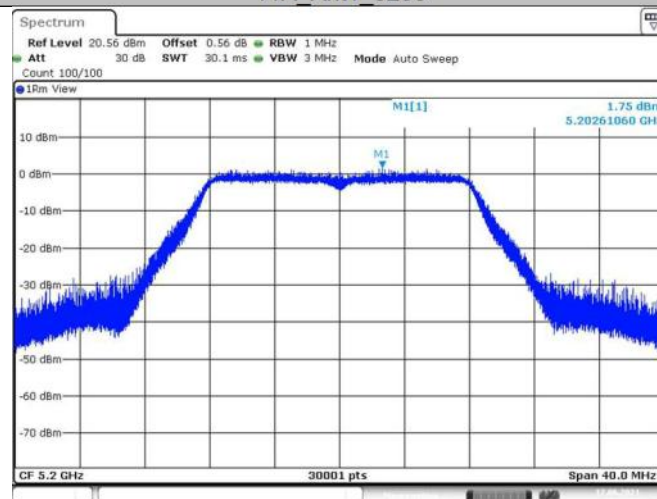
11AC40SISO	Ant1	5190	-0.94	<=11	PASS
		5230	-2.21	<=11	PASS
		5270	-3.48	<=11	PASS
		5310	-3.81	<=11	PASS
		5510	-1.78	<=11	PASS
		5755	-1.34	<=30	PASS
		5795	-1.94	<=30	PASS
11AC80SISO	Ant1	5210	-3.56	<=11	PASS
		5290	-5.19	<=11	PASS
		5530	-4.84	<=11	PASS
		5775	-4.58	<=30	PASS

11A Ant1 5180



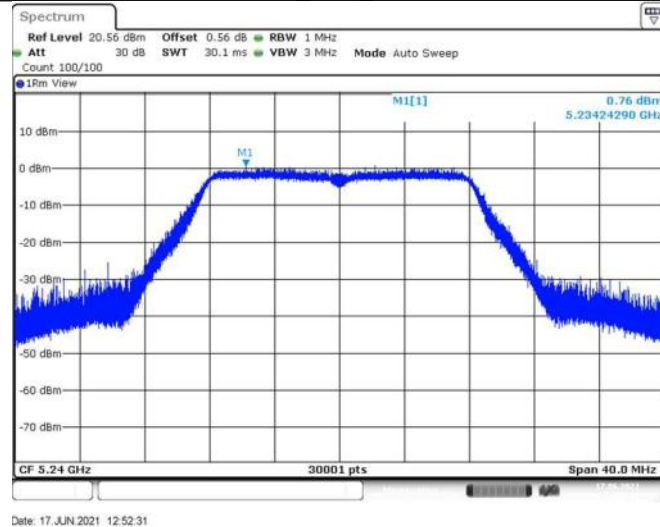
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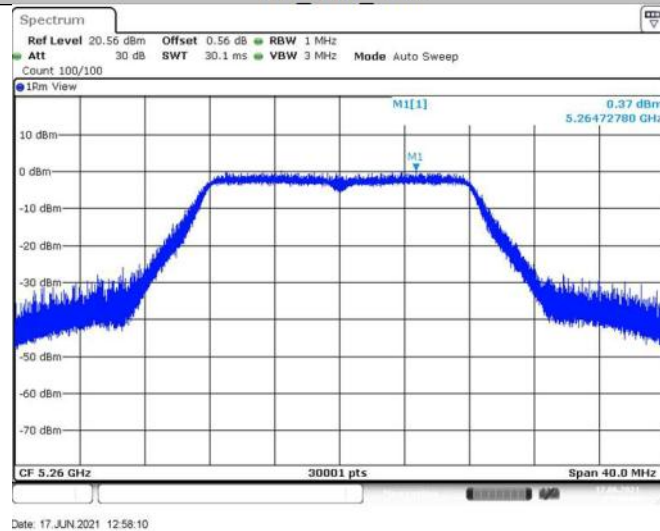


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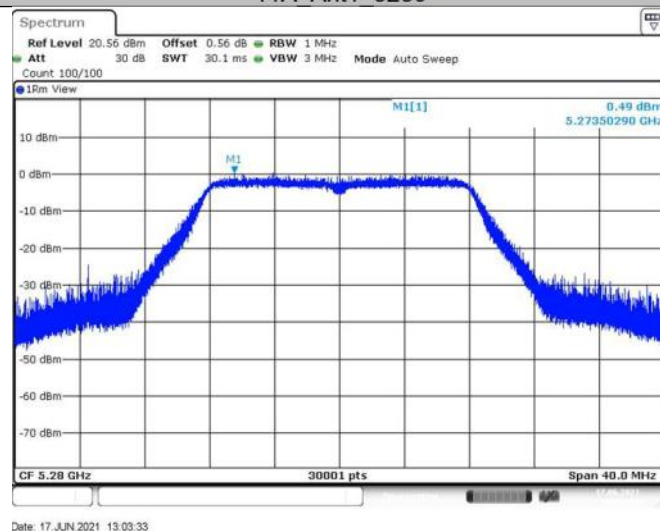
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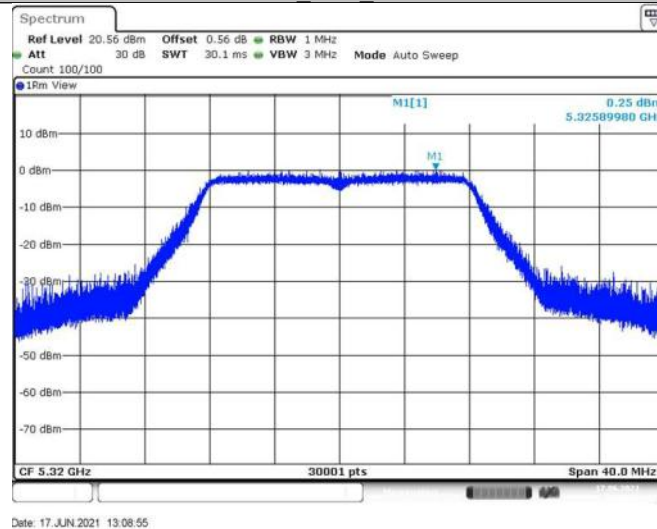
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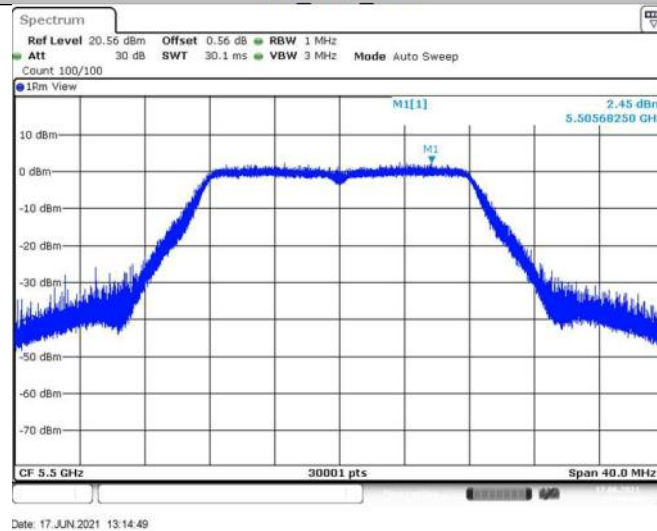
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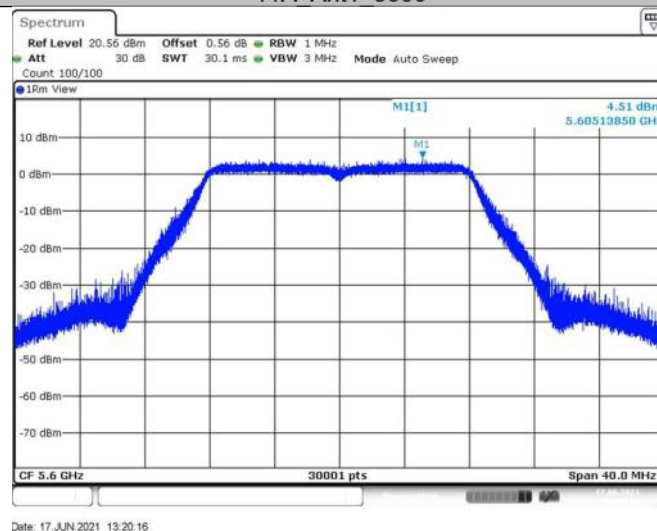
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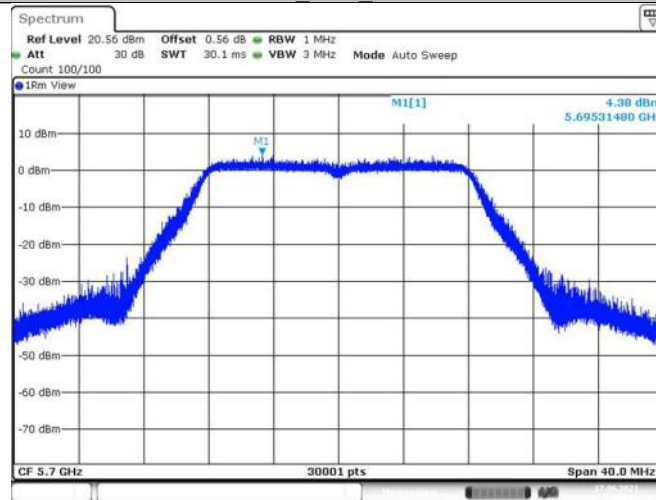
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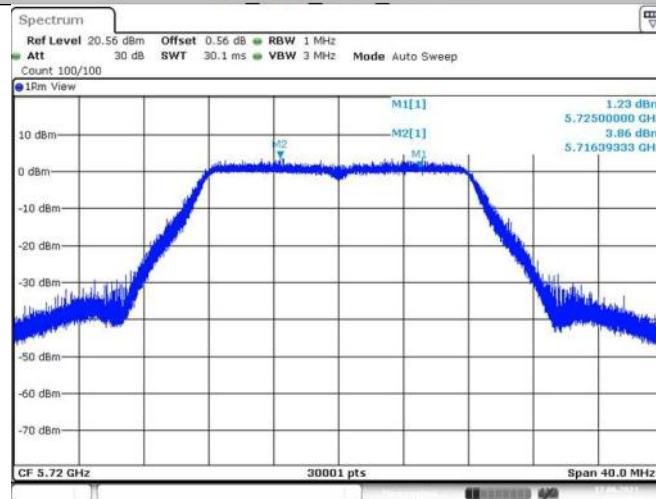
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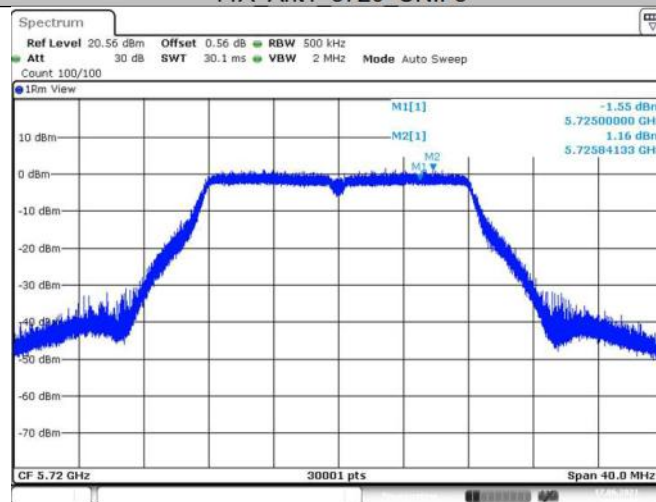
11A Ant1 5700



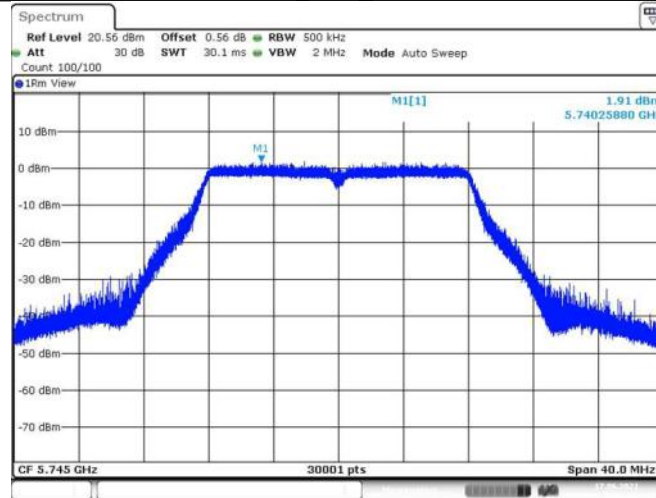
11A Ant1 5720 UNII-2C



11A Ant1 5720 UNII-3

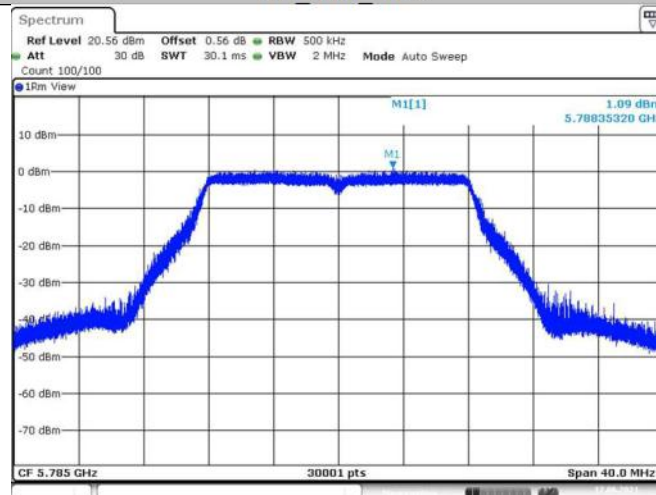


11A Ant1 5745



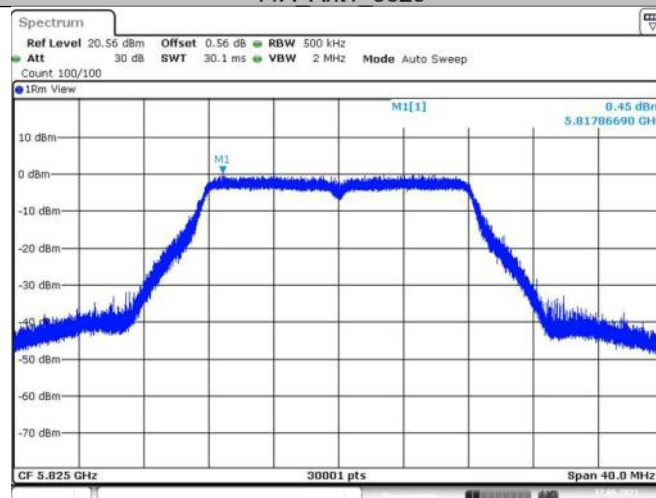
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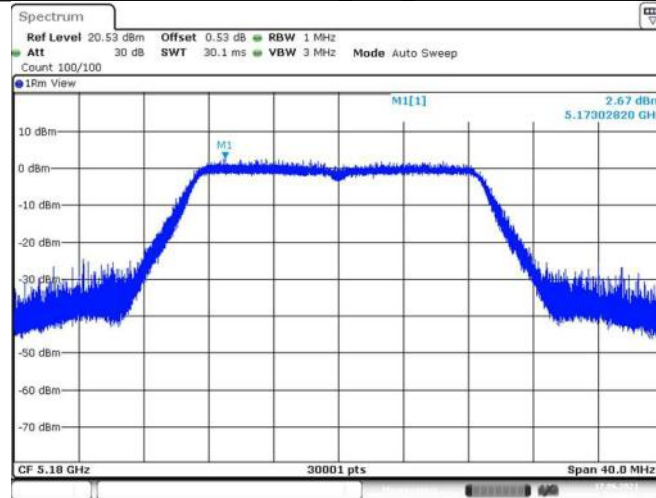
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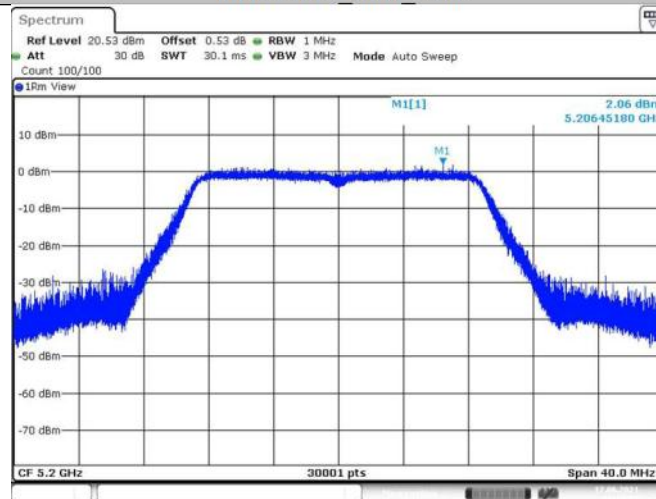


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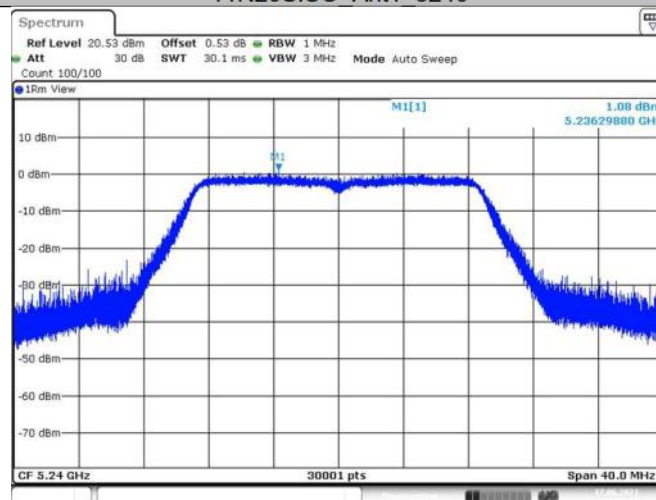
11N20SISO Ant1 5180



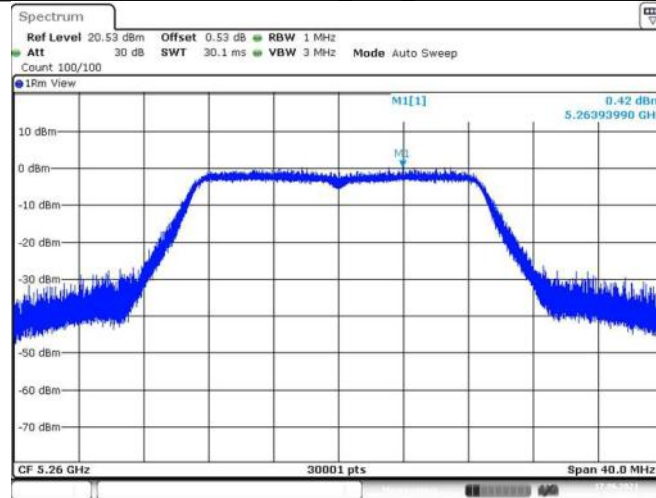
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11N20SISO Ant1 5240

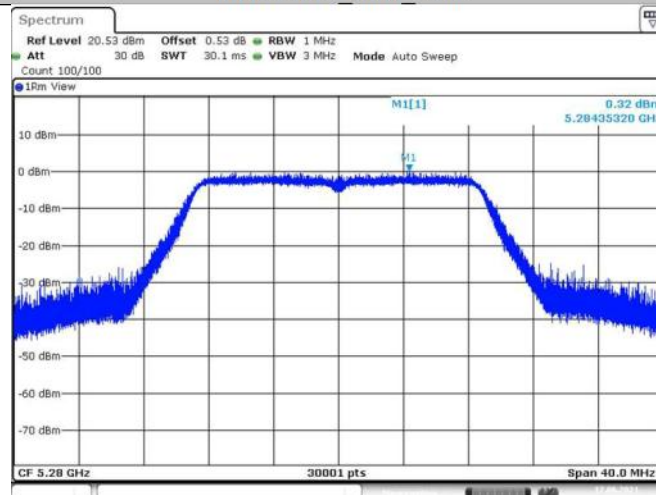


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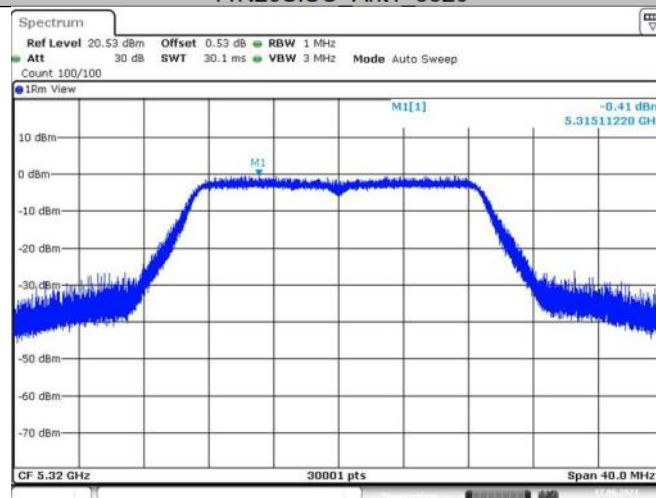
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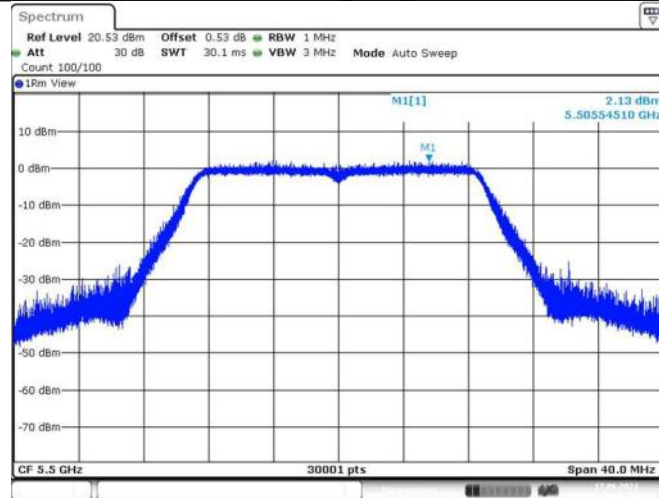
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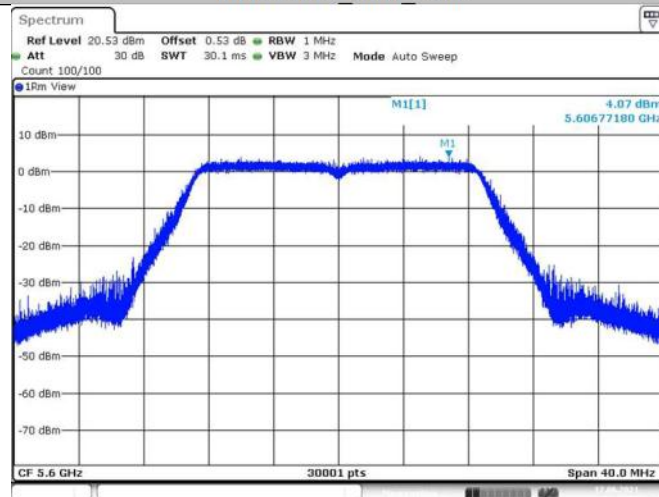
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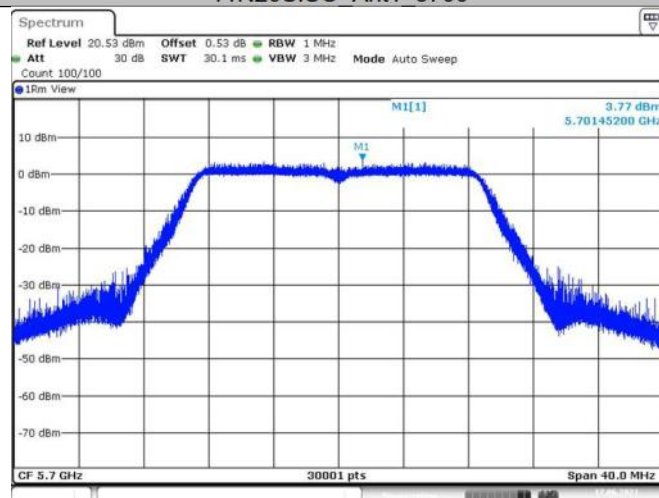
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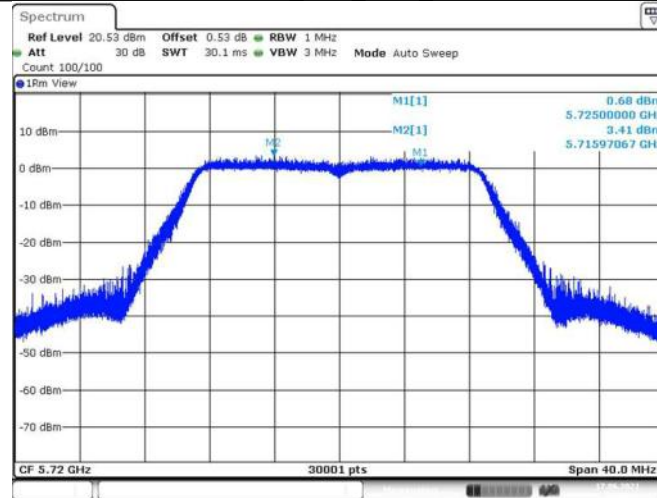
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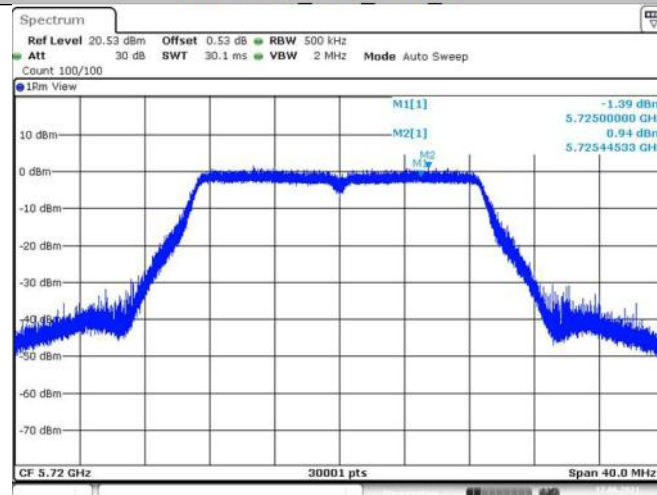
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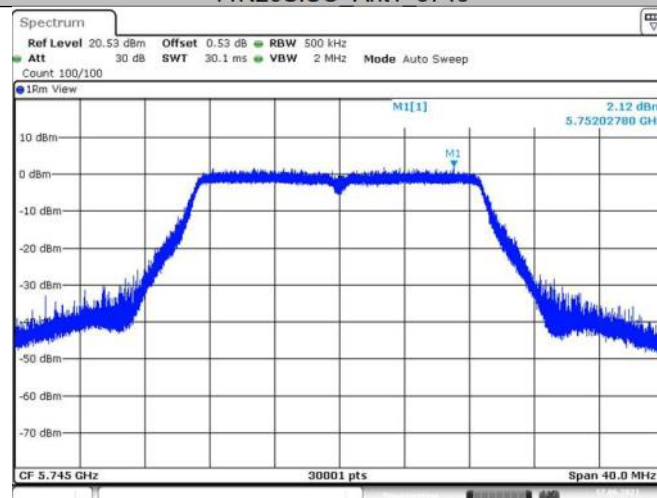
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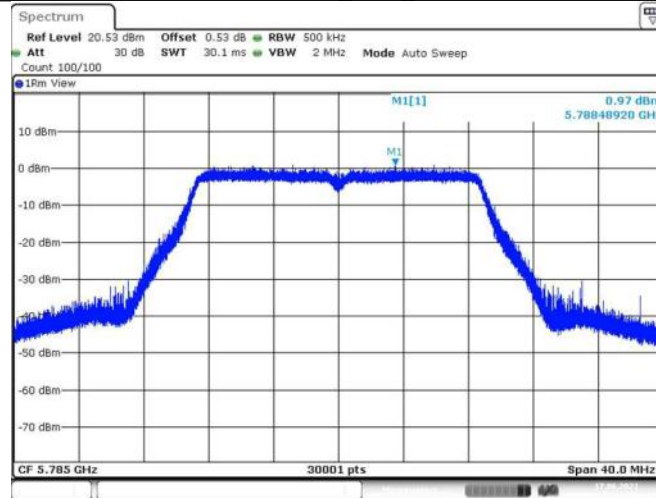
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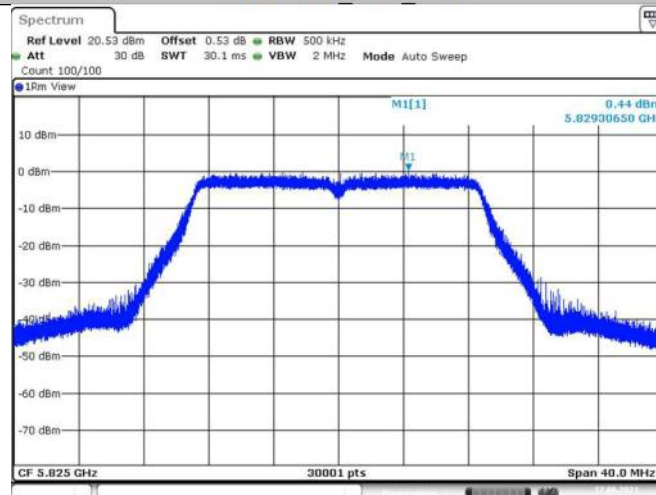
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11N20SISO Ant1 5785



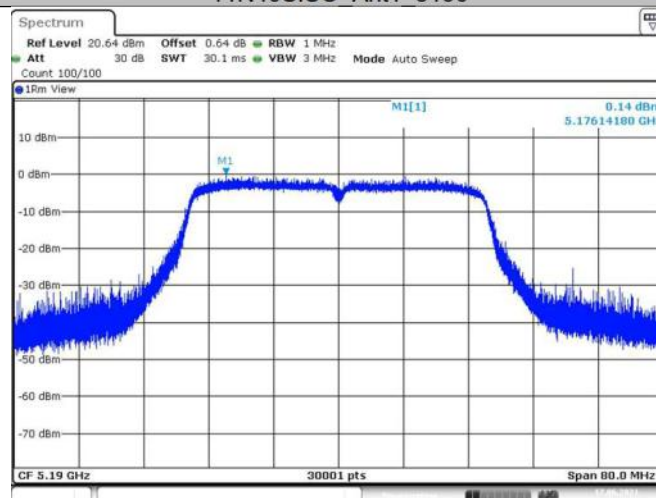
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11N20SISO Ant1 5825



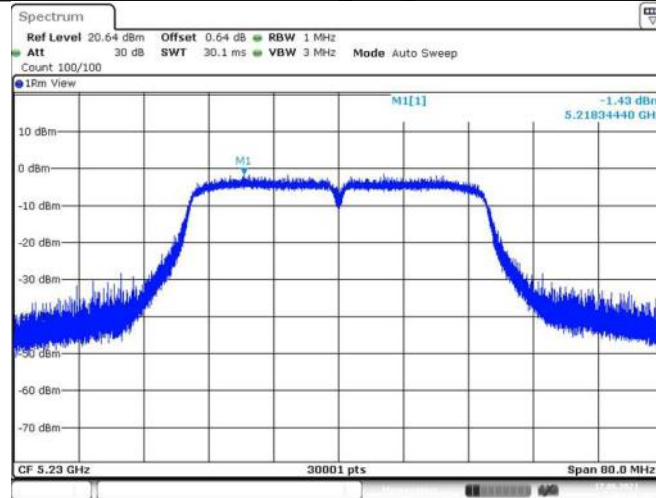
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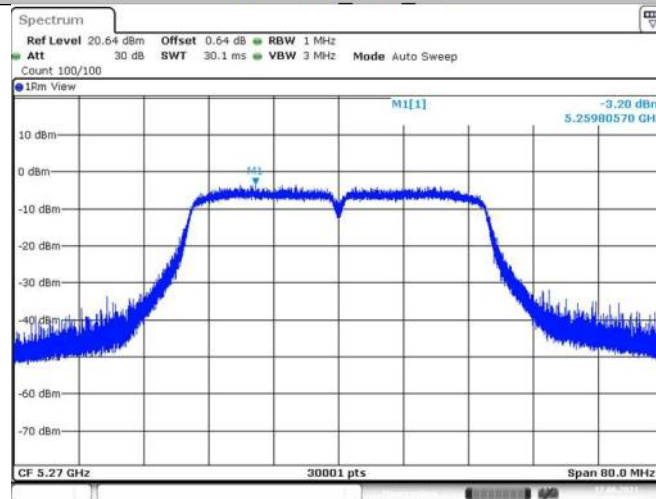


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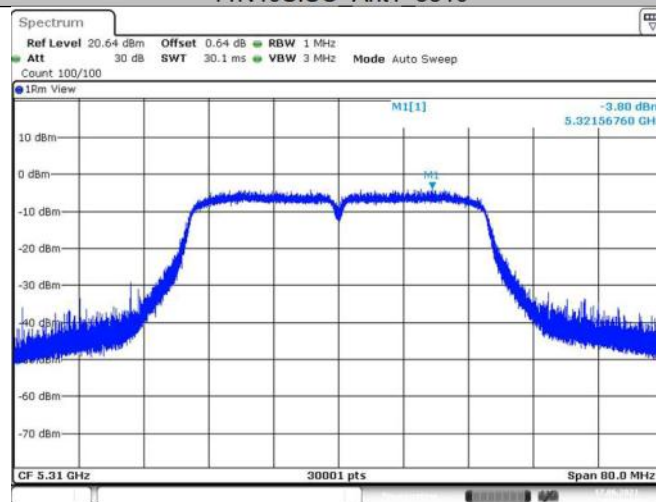
11N40SISO Ant1 5230



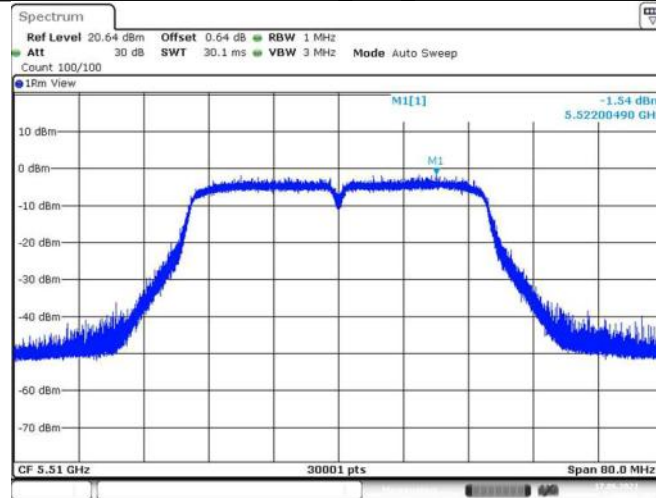
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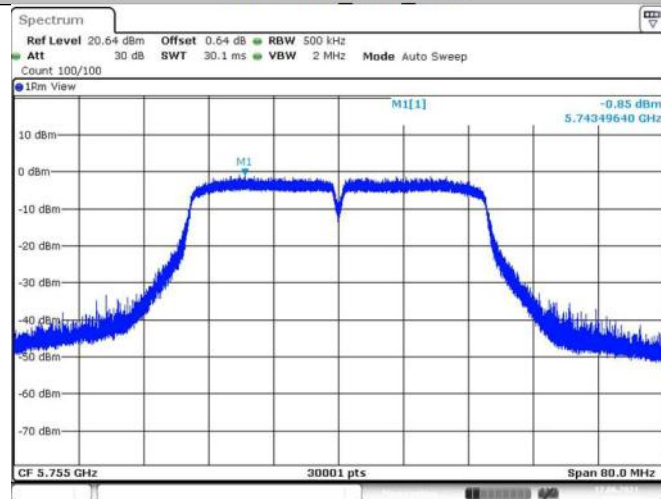
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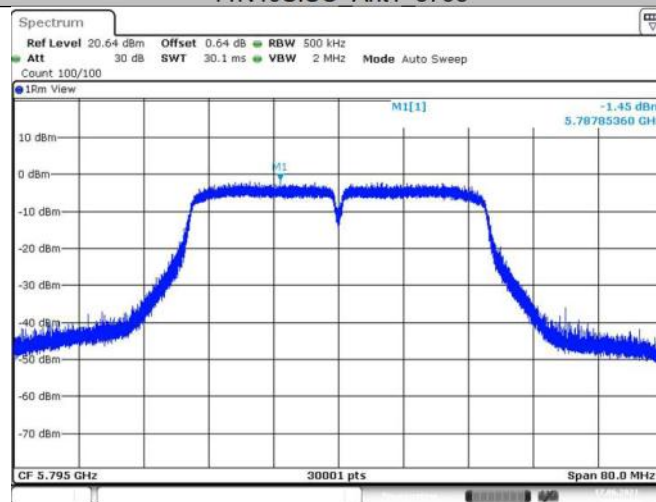
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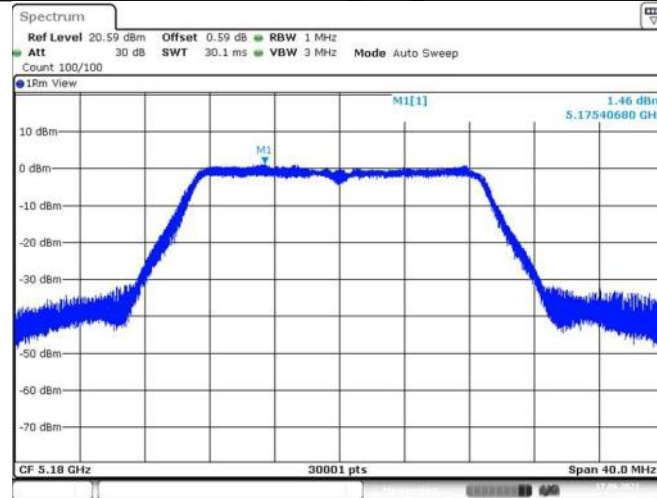
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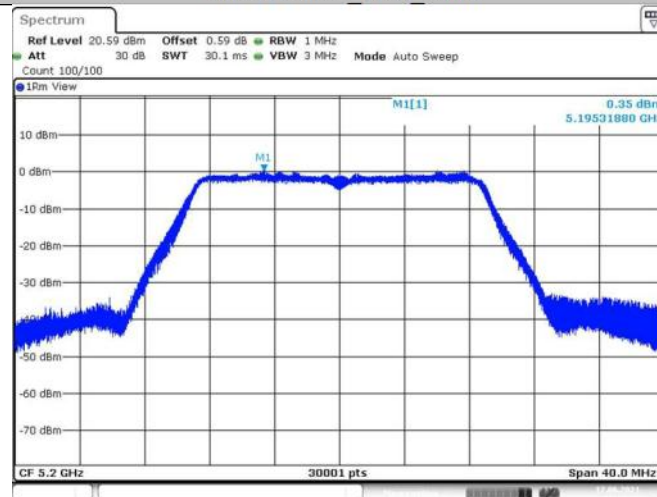


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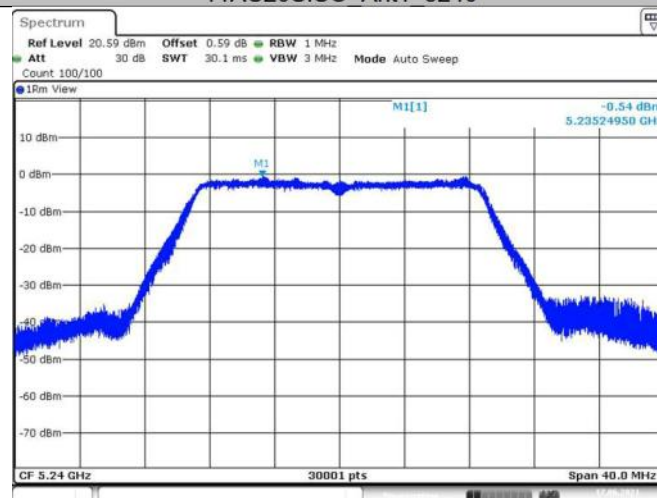
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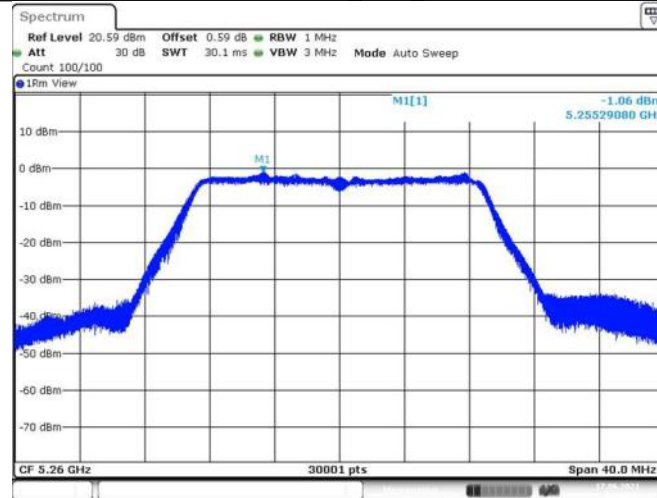
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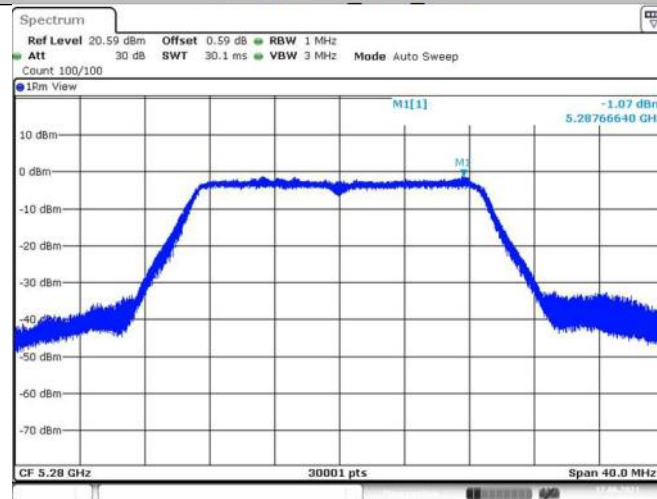


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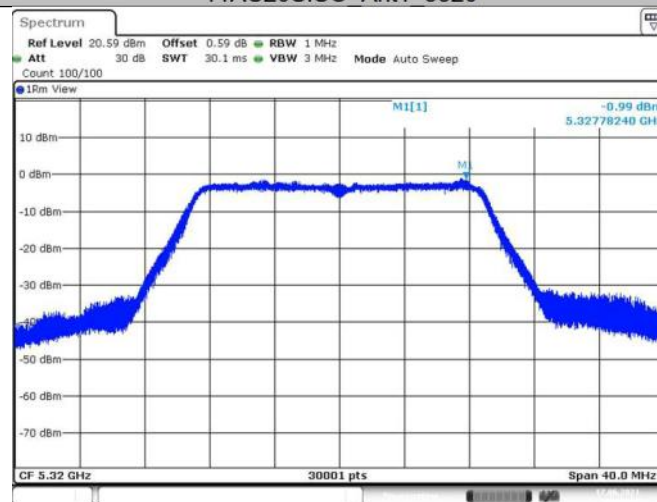
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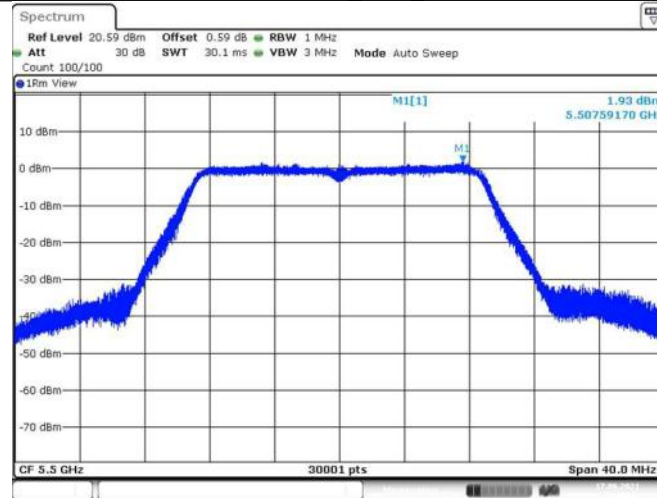
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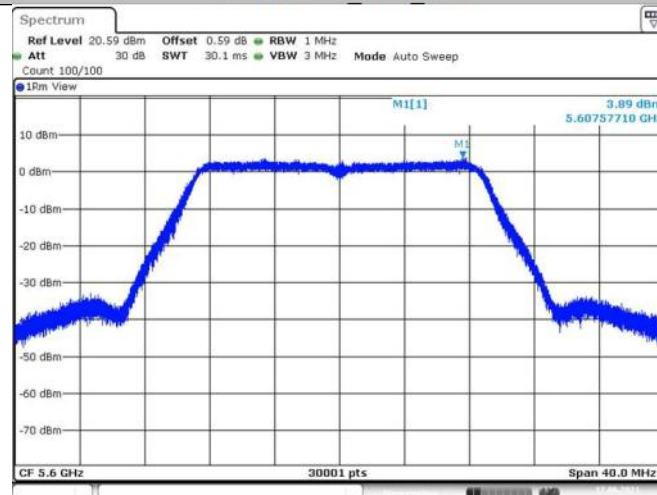


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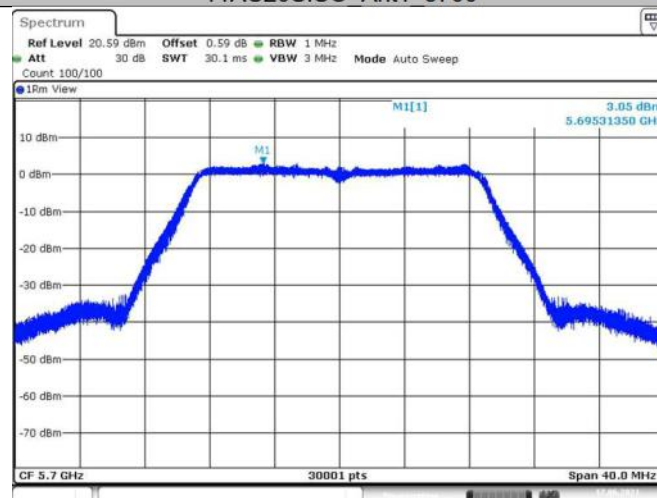
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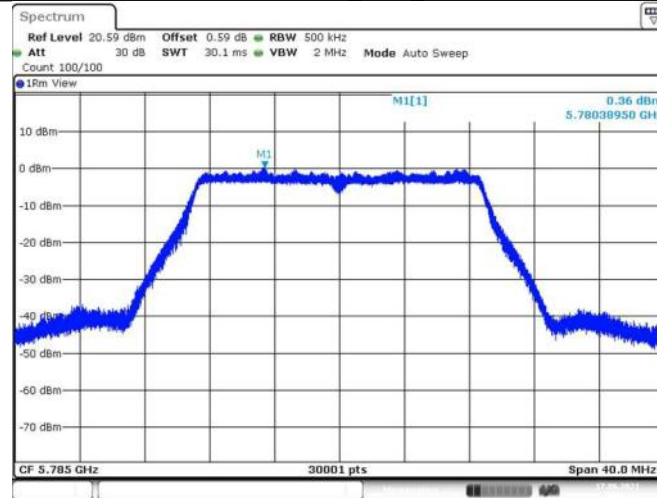
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11AC20SISO Ant1 5700



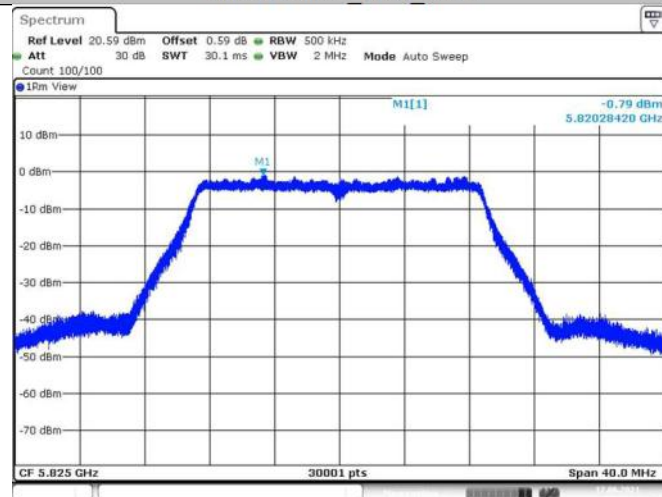
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11AC20SISO Ant1 5785



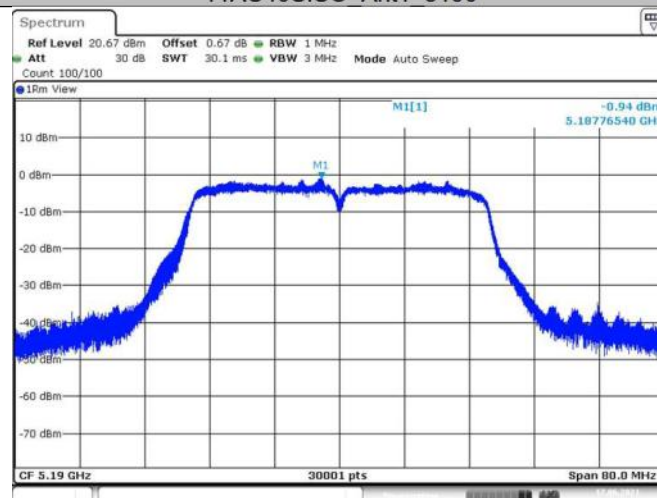
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11AC20SISO Ant1 5825



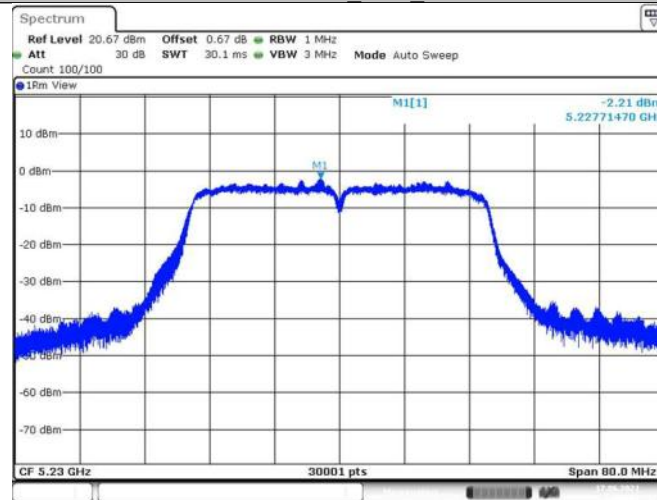
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11AC40SISO Ant1 5190



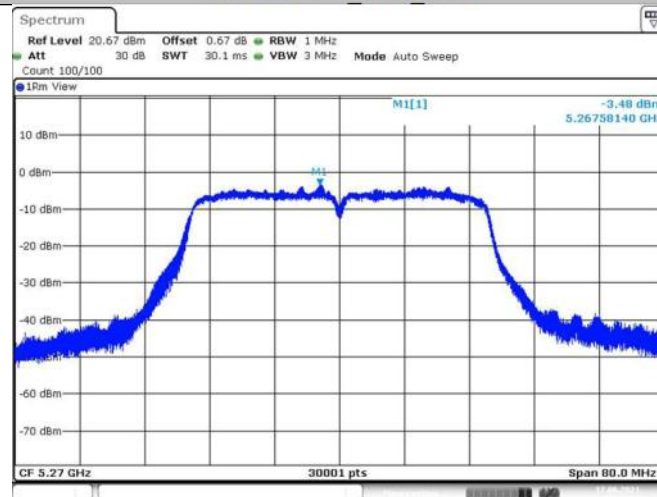
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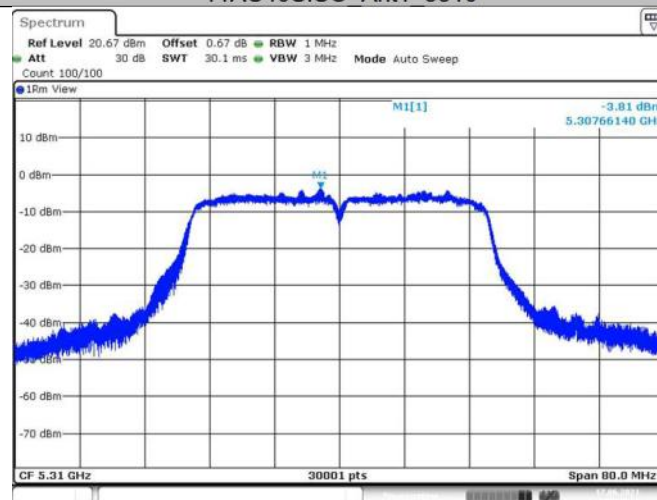
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11AC40SISO Ant1 5270



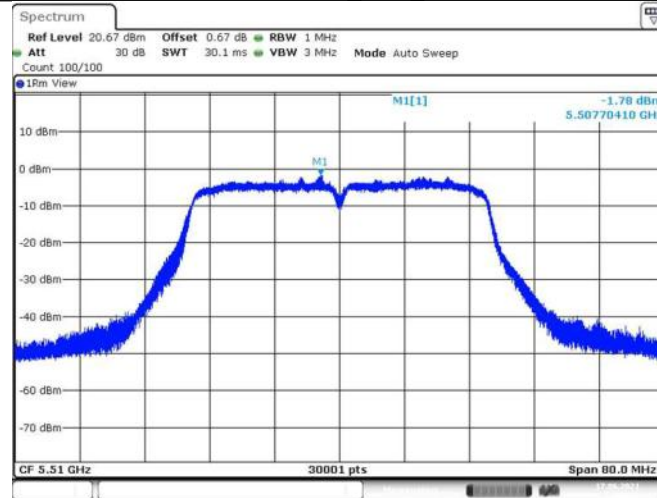
Date: 17 JUN 2021 17:42:39

11AC40SISO Ant1 5310



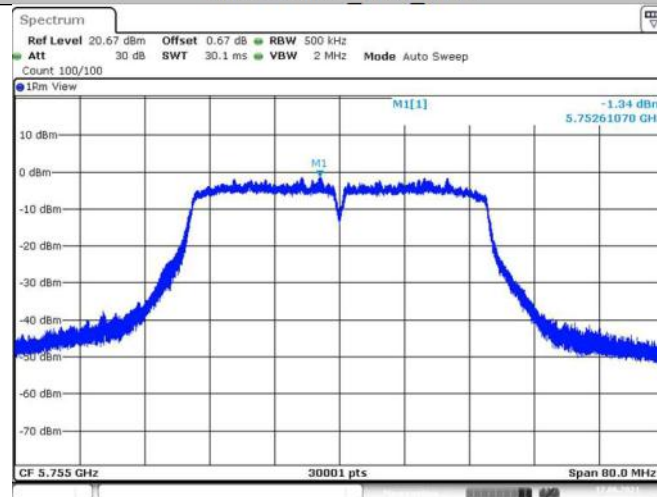
Date: 17 JUN 2021 17:48:06

11AC40SISO Ant1 5510



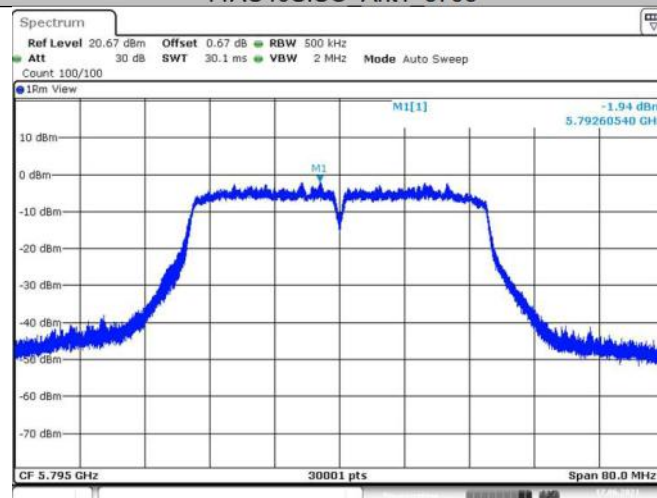
Date: 17 JUN 2021 17:54:09

11AC40SISO Ant1 5755



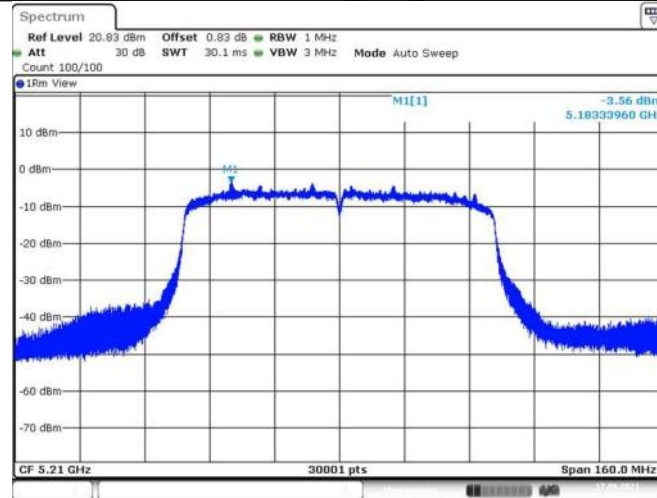
Date: 17 JUN 2021 18:00:14

11AC40SISO Ant1 5795



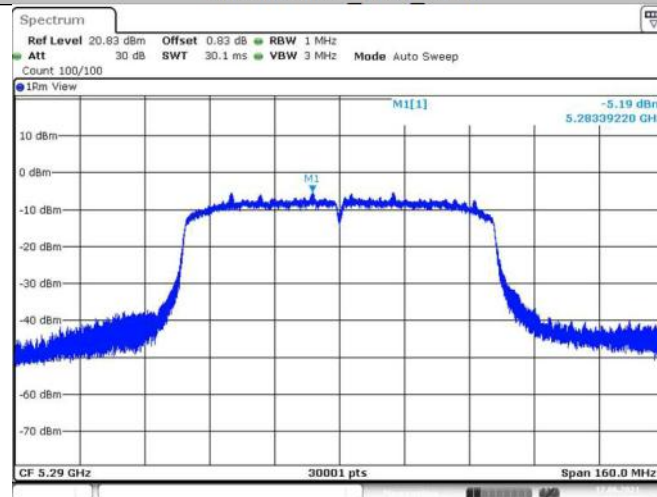
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11AC80SISO Ant1 5210



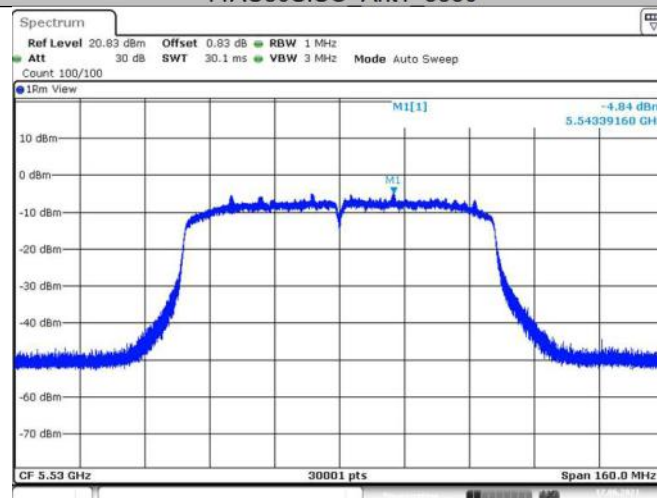
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11AC80SISO Ant1 5290



Date: 17 JUN 2021 18:18:52

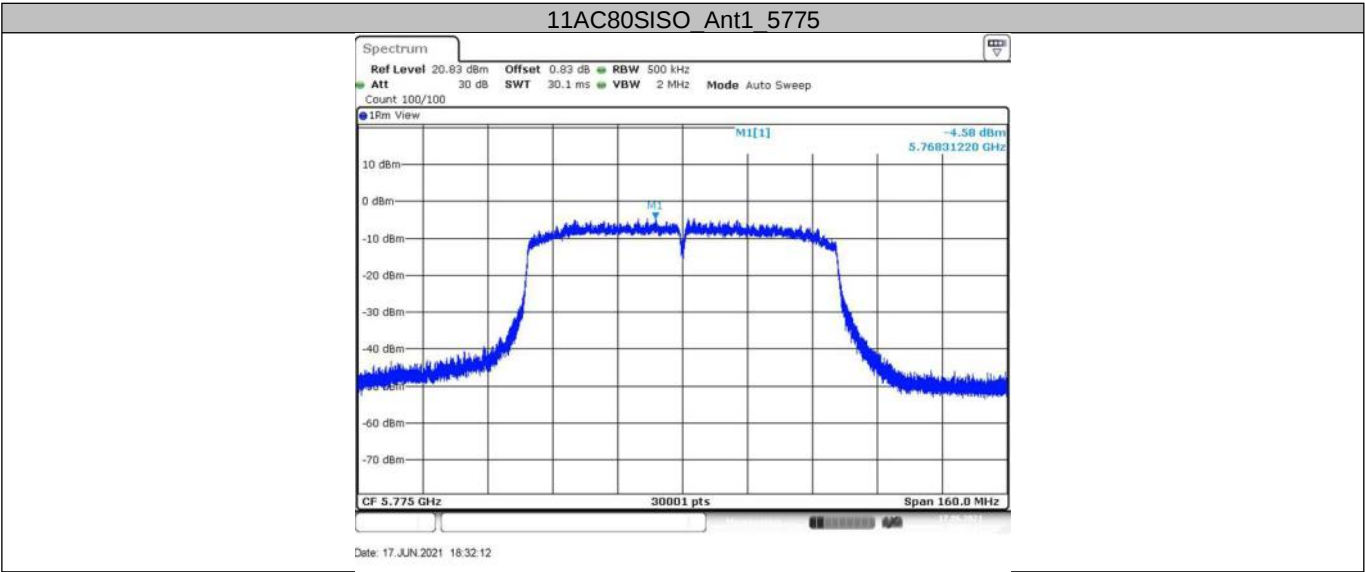
11AC80SISO Ant1 5530



Date: 17 JUN 2021 18:24:50



China



9.5 Frequencies Stability

Test Method

1. Connect the UUT to the spectrum analyzer
2. Set Centre Frequency of the channel under test.
3. Set Detector PEAK
4. Set RBW: 10KHz, VBW: 3RBW
5. Set Span: Encompass the entire emissions bandwidth (EBW) of the signal.
6. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

User manual temperature is -20 to 50 °C.

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

Limit: 20ppm

Test Results (All conditions and all modes were performed, only list Worst-Case in the report)

Remark: NV is normal Voltage: 7.4Vdc, HV is High Voltage: 8.51Vdc, LV is Low Voltage: 6.29Vdc, NT is normal Temperature: +20 °C.

TestMode	Antenna	Channel	Voltage		Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
			Voltage [Vdc]	Temperature (°C)				
11A	Ant1	5180	NV	NT	-29866	-5.765637	20	PASS
			LV	NT	-30399	-5.868533	20	PASS
			HV	NT	-30432	-5.874903	20	PASS
		5200	NV	NT	-30532	-5.871538	20	PASS
			LV	NT	-31399	-6.038269	20	PASS
			HV	NT	-31399	-6.038269	20	PASS
		5240	NV	NT	-27499	-5.247901	20	PASS
			LV	NT	-28066	-5.356107	20	PASS
			HV	NT	-28332	-5.40687	20	PASS
		5260	NV	NT	-30766	-5.849049	20	PASS
			LV	NT	-30832	-5.861597	20	PASS
			HV	NT	-30632	-5.823574	20	PASS
		5280	NV	NT	-30932	-5.858333	20	PASS
			LV	NT	-31266	-5.921591	20	PASS
			HV	NT	-31266	-5.921591	20	PASS
		5320	NV	NT	-30999	-5.82688	20	PASS
			LV	NT	-31166	-5.858271	20	PASS
			HV	NT	-31199	-5.864474	20	PASS
		5500	NV	NT	-30932	-5.624	20	PASS
			LV	NT	-31799	-5.781636	20	PASS
			HV	NT	-31699	-5.763455	20	PASS
		5600	NV	NT	-31432	-5.612857	20	PASS
			LV	NT	-32532	-5.809286	20	PASS
			HV	NT	-32599	-5.82125	20	PASS

		5700	NV	NT	-32832	-5.76	20	PASS
			LV	NT	-33432	-5.865263	20	PASS
			HV	NT	-33399	-5.859474	20	PASS
		5720	NV	NT	-33566	-5.868182	20	PASS
			LV	NT	-34266	-5.990559	20	PASS
			HV	NT	-34099	-5.961364	20	PASS
		5745	NV	NT	-33366	-5.807833	20	PASS
			LV	NT	-34099	-5.935422	20	PASS
			HV	NT	-34199	-5.952829	20	PASS
		5785	NV	NT	-33799	-5.842524	20	PASS
			LV	NT	-34299	-5.928954	20	PASS
			HV	NT	-34499	-5.963526	20	PASS
11N20SISO	Ant1	5825	NV	NT	-33432	-5.739399	20	PASS
			LV	NT	-34032	-5.842403	20	PASS
			HV	NT	-34166	-5.865408	20	PASS
		5180	NV	NT	-30266	-5.842857	20	PASS
			LV	NT	-30532	-5.894208	20	PASS
			HV	NT	-30632	-5.913514	20	PASS
		5200	NV	NT	-29099	-5.595962	20	PASS
			LV	NT	-29666	-5.705	20	PASS
			HV	NT	-29999	-5.769038	20	PASS
		5240	NV	NT	-30132	-5.750382	20	PASS
			LV	NT	-30599	-5.839504	20	PASS
			HV	NT	-31032	-5.922137	20	PASS
		5260	NV	NT	-30799	-5.855323	20	PASS
			LV	NT	-31099	-5.912357	20	PASS
			HV	NT	-31332	-5.956654	20	PASS
		5280	NV	NT	-31132	-5.896212	20	PASS
			LV	NT	-31599	-5.984659	20	PASS
			HV	NT	-31666	-5.997348	20	PASS
		5320	NV	NT	-31366	-5.895865	20	PASS
			LV	NT	-32032	-6.021053	20	PASS
			HV	NT	-32066	-6.027444	20	PASS
		5500	NV	NT	-32032	-5.824	20	PASS
			LV	NT	-32599	-5.927091	20	PASS
			HV	NT	-32566	-5.921091	20	PASS
		5600	NV	NT	-32366	-5.779643	20	PASS
			LV	NT	-32932	-5.880714	20	PASS
			HV	NT	-32899	-5.874821	20	PASS
		5700	NV	NT	-32766	-5.748421	20	PASS
			LV	NT	-33299	-5.84193	20	PASS
			HV	NT	-33266	-5.83614	20	PASS
		5720	NV	NT	-33132	-5.792308	20	PASS
			LV	NT	-33666	-5.885664	20	PASS
			HV	NT	-33632	-5.87972	20	PASS
		5745	NV	NT	-33466	-5.825239	20	PASS
			LV	NT	-34032	-5.92376	20	PASS
			HV	NT	-34232	-5.958573	20	PASS
		5785	NV	NT	-33932	-5.865514	20	PASS
			LV	NT	-34599	-5.980812	20	PASS
			HV	NT	-34832	-6.021089	20	PASS
		5825	NV	NT	-34499	-5.922575	20	PASS
			LV	NT	-34832	-5.979742	20	PASS
			HV	NT	-34866	-5.985579	20	PASS
11N40SISO	Ant1	5190	NV	NT	-29566	-5.696724	20	PASS
			LV	NT	-30399	-5.857225	20	PASS
			HV	NT	-30432	-5.863584	20	PASS
		5230	NV	NT	-30099	-5.755067	20	PASS
			LV	NT	-30732	-5.876099	20	PASS
			HV	NT	-30699	-5.86979	20	PASS

		5270	NV	NT	-30132	-5.717647	20	PASS
			LV	NT	-30732	-5.831499	20	PASS
			HV	NT	-30799	-5.844213	20	PASS
		5310	NV	NT	-30566	-5.756309	20	PASS
			LV	NT	-31099	-5.856685	20	PASS
			HV	NT	-31132	-5.8629	20	PASS
		5510	NV	NT	-31899	-5.789292	20	PASS
			LV	NT	-32466	-5.892196	20	PASS
			HV	NT	-32632	-5.922323	20	PASS
		5755	NV	NT	-32932	-5.722328	20	PASS
			LV	NT	-33899	-5.890356	20	PASS
			HV	NT	-33666	-5.84987	20	PASS
11AC20SIS O	Ant1	5795	NV	NT	-33832	-5.838136	20	PASS
			LV	NT	-34366	-5.930285	20	PASS
			HV	NT	-34466	-5.947541	20	PASS
		5180	NV	NT	-30232	-5.836293	20	PASS
			LV	NT	-30699	-5.926448	20	PASS
			HV	NT	-30932	-5.971429	20	PASS
		5200	NV	NT	-30666	-5.897308	20	PASS
			LV	NT	-30832	-5.929231	20	PASS
			HV	NT	-31066	-5.974231	20	PASS
		5240	NV	NT	-30366	-5.795038	20	PASS
			LV	NT	-30832	-5.883969	20	PASS
			HV	NT	-30966	-5.909542	20	PASS
		5260	NV	NT	-30432	-5.785551	20	PASS
			LV	NT	-30832	-5.861597	20	PASS
			HV	NT	-30932	-5.880608	20	PASS
		5280	NV	NT	-30799	-5.833144	20	PASS
			LV	NT	-31299	-5.927841	20	PASS
			HV	NT	-31466	-5.95947	20	PASS
		5320	NV	NT	-31166	-5.858271	20	PASS
			LV	NT	-31532	-5.927068	20	PASS
			HV	NT	-31632	-5.945865	20	PASS
		5500	NV	NT	-30866	-5.612	20	PASS
			LV	NT	-31799	-5.781636	20	PASS
			HV	NT	-32066	-5.830182	20	PASS
		5600	NV	NT	-32466	-5.7975	20	PASS
			LV	NT	-32766	-5.851071	20	PASS
			HV	NT	-32866	-5.868929	20	PASS
		5700	NV	NT	-32899	-5.771754	20	PASS
			LV	NT	-33499	-5.877018	20	PASS
			HV	NT	-33666	-5.906316	20	PASS
		5720	NV	NT	-33566	-5.868182	20	PASS
			LV	NT	-33966	-5.938112	20	PASS
			HV	NT	-34232	-5.984615	20	PASS
		5745	NV	NT	-33799	-5.883203	20	PASS
			LV	NT	-34332	-5.975979	20	PASS
			HV	NT	-34599	-6.022454	20	PASS
		5785	NV	NT	-34966	-6.044252	20	PASS
			LV	NT	-35232	-6.090233	20	PASS
			HV	NT	-35565	-6.147796	20	PASS
		5825	NV	NT	-34899	-5.991245	20	PASS
			LV	NT	-35232	-6.048412	20	PASS
			HV	NT	-35432	-6.082747	20	PASS
11AC40SIS O	Ant1	5190	NV	NT	-30899	-5.953565	20	PASS
			LV	NT	-31166	-6.00501	20	PASS
			HV	NT	-31132	-5.998459	20	PASS
		5230	NV	NT	-30366	-5.806119	20	PASS
			LV	NT	-30799	-5.88891	20	PASS
			HV	NT	-30966	-5.920841	20	PASS

		5270	NV	NT	-30532	-5.793548	20	PASS
			LV	NT	-31166	-5.913852	20	PASS
			HV	NT	-31232	-5.926376	20	PASS
		5310	NV	NT	-31399	-5.913183	20	PASS
			LV	NT	-32066	-6.038795	20	PASS
			HV	NT	-32099	-6.045009	20	PASS
		5510	NV	NT	-32966	-5.98294	20	PASS
			LV	NT	-33332	-6.049365	20	PASS
			HV	NT	-33599	-6.097822	20	PASS
		5755	NV	NT	-34132	-5.930843	20	PASS
			LV	NT	-34832	-6.052476	20	PASS
			HV	NT	-34932	-6.069852	20	PASS
11AC80SIS O	Ant1	5210	NV	NT	-30199	-5.796353	20	PASS
			LV	NT	-31099	-5.969098	20	PASS
			HV	NT	-31199	-5.988292	20	PASS
		5290	NV	NT	-30599	-5.78431	20	PASS
			LV	NT	-31199	-5.897732	20	PASS
			HV	NT	-31232	-5.90397	20	PASS
		5530	NV	NT	-31699	-5.732188	20	PASS
			LV	NT	-32132	-5.810488	20	PASS
			HV	NT	-32232	-5.828571	20	PASS
		5775	NV	NT	-32666	-5.65645	20	PASS
			LV	NT	-33666	-5.82961	20	PASS
			HV	NT	-33566	-5.812294	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
		5180	NV	-20	-30666	-5.920077	20	PASS
			NV	-10	-30832	-5.952124	20	PASS
			NV	0	-30766	-5.939382	20	PASS
			NV	10	-30932	-5.971429	20	PASS
			NV	20	-30966	-5.977992	20	PASS
			NV	30	-31032	-5.990734	20	PASS
			NV	40	-31332	-6.048649	20	PASS
			NV	50	-31232	-6.029344	20	PASS
		5200	NV	-20	-31466	-6.051154	20	PASS
			NV	-10	-31432	-6.044615	20	PASS
			NV	0	-31232	-6.006154	20	PASS
			NV	10	-31499	-6.0575	20	PASS
			NV	20	-31199	-5.999808	20	PASS
			NV	30	-31366	-6.031923	20	PASS
			NV	40	-31466	-6.051154	20	PASS
			NV	50	-31632	-6.083077	20	PASS
		5240	NV	-20	-28832	-5.50229	20	PASS
			NV	-10	-29166	-5.566031	20	PASS
			NV	0	-29166	-5.566031	20	PASS
			NV	10	-29399	-5.610496	20	PASS
			NV	20	-29632	-5.654962	20	PASS
			NV	30	-29666	-5.66145	20	PASS
			NV	40	-29699	-5.667748	20	PASS
			NV	50	-29966	-5.718702	20	PASS
		5260	NV	-20	-30999	-5.893346	20	PASS
			NV	-10	-31032	-5.89962	20	PASS
			NV	0	-31066	-5.906084	20	PASS
			NV	10	-31132	-5.918631	20	PASS

			NV	20	-31099	-5.912357	20	PASS
			NV	30	-31166	-5.925095	20	PASS
			NV	40	-31166	-5.925095	20	PASS
			NV	50	-31166	-5.925095	20	PASS
		5280	NV	-20	-31399	-5.94678	20	PASS
			NV	-10	-31166	-5.902652	20	PASS
			NV	0	-31399	-5.94678	20	PASS
			NV	10	-31299	-5.927841	20	PASS
			NV	20	-31499	-5.96572	20	PASS
			NV	30	-31432	-5.95303	20	PASS
			NV	40	-31332	-5.934091	20	PASS
			NV	50	-31366	-5.94053	20	PASS
		5320	NV	-20	-31299	-5.883271	20	PASS
			NV	-10	-31332	-5.889474	20	PASS
			NV	0	-31166	-5.858271	20	PASS
			NV	10	-31366	-5.895865	20	PASS
			NV	20	-31232	-5.870677	20	PASS
			NV	30	-31499	-5.920865	20	PASS
			NV	40	-31232	-5.870677	20	PASS
			NV	50	-31299	-5.883271	20	PASS
		5500	NV	-20	-32032	-5.824	20	PASS
			NV	-10	-32066	-5.830182	20	PASS
			NV	0	-32166	-5.848364	20	PASS
			NV	10	-31966	-5.812	20	PASS
			NV	20	-31966	-5.812	20	PASS
			NV	30	-31999	-5.818	20	PASS
			NV	40	-31932	-5.805818	20	PASS
			NV	50	-32099	-5.836182	20	PASS
		5600	NV	-20	-32666	-5.833214	20	PASS
			NV	-10	-32699	-5.839107	20	PASS
			NV	0	-32699	-5.839107	20	PASS
			NV	10	-32732	-5.845	20	PASS
			NV	20	-32766	-5.851071	20	PASS
			NV	30	-32932	-5.880714	20	PASS
			NV	40	-32966	-5.886786	20	PASS
			NV	50	-32899	-5.874821	20	PASS
		5700	NV	-20	-33666	-5.906316	20	PASS
			NV	-10	-33566	-5.888772	20	PASS
			NV	0	-33766	-5.92386	20	PASS
			NV	10	-33866	-5.941404	20	PASS
			NV	20	-33832	-5.935439	20	PASS
			NV	30	-33832	-5.935439	20	PASS
			NV	40	-33932	-5.952982	20	PASS
			NV	50	-33899	-5.947193	20	PASS
		5720	NV	-20	-33932	-5.932168	20	PASS
			NV	-10	-34132	-5.967133	20	PASS
			NV	0	-34099	-5.961364	20	PASS
			NV	10	-33999	-5.943881	20	PASS
			NV	20	-33932	-5.932168	20	PASS
			NV	30	-34166	-5.973077	20	PASS
			NV	40	-34266	-5.990559	20	PASS
			NV	50	-34266	-5.990559	20	PASS
		5745	NV	-20	-34332	-5.975979	20	PASS
			NV	-10	-34332	-5.975979	20	PASS
			NV	0	-34266	-5.964491	20	PASS
			NV	10	-34366	-5.981897	20	PASS
			NV	20	-34332	-5.975979	20	PASS
			NV	30	-34499	-6.005048	20	PASS
			NV	40	-34232	-5.958573	20	PASS
			NV	50	-34532	-6.010792	20	PASS

		5785	NV	-20	-34532	-5.969231	20	PASS
			NV	-10	-34566	-5.975108	20	PASS
			NV	0	-34599	-5.980812	20	PASS
			NV	10	-34532	-5.969231	20	PASS
			NV	20	-34599	-5.980812	20	PASS
			NV	30	-34466	-5.957822	20	PASS
			NV	40	-34466	-5.957822	20	PASS
			NV	50	-34532	-5.969231	20	PASS
		5825	NV	-20	-34166	-5.865408	20	PASS
			NV	-10	-34132	-5.859571	20	PASS
			NV	0	-34266	-5.882575	20	PASS
			NV	10	-34232	-5.876738	20	PASS
			NV	20	-34032	-5.842403	20	PASS
			NV	30	-34166	-5.865408	20	PASS
			NV	40	-34232	-5.876738	20	PASS
			NV	50	-34199	-5.871073	20	PASS
		5180	NV	-20	-30966	-5.977992	20	PASS
			NV	-10	-30866	-5.958687	20	PASS
			NV	0	-30899	-5.965058	20	PASS
			NV	10	-31032	-5.990734	20	PASS
			NV	20	-31066	-5.997297	20	PASS
			NV	30	-30966	-5.977992	20	PASS
			NV	40	-31066	-5.997297	20	PASS
			NV	50	-30932	-5.971429	20	PASS
		5200	NV	-20	-30032	-5.775385	20	PASS
			NV	-10	-30166	-5.801154	20	PASS
			NV	0	-30232	-5.813846	20	PASS
			NV	10	-30266	-5.820385	20	PASS
			NV	20	-30466	-5.858846	20	PASS
			NV	30	-30432	-5.852308	20	PASS
			NV	40	-30399	-5.845962	20	PASS
			NV	50	-30332	-5.833077	20	PASS
		5240	NV	-20	-30732	-5.864885	20	PASS
			NV	-10	-30899	-5.896756	20	PASS
			NV	0	-30832	-5.883969	20	PASS
			NV	10	-31066	-5.928626	20	PASS
			NV	20	-30899	-5.896756	20	PASS
			NV	30	-31132	-5.941221	20	PASS
			NV	40	-31199	-5.954008	20	PASS
			NV	50	-31099	-5.934924	20	PASS
		5260	NV	-20	-31232	-5.937643	20	PASS
			NV	-10	-31532	-5.994677	20	PASS
			NV	0	-31332	-5.956654	20	PASS
			NV	10	-31399	-5.969392	20	PASS
			NV	20	-31632	-6.013688	20	PASS
			NV	30	-31566	-6.001141	20	PASS
			NV	40	-31466	-5.982129	20	PASS
			NV	50	-31666	-6.020152	20	PASS
		5280	NV	-20	-31766	-6.016288	20	PASS
			NV	-10	-31799	-6.022538	20	PASS
			NV	0	-31932	-6.047727	20	PASS
			NV	10	-31932	-6.047727	20	PASS
			NV	20	-31966	-6.054167	20	PASS
			NV	30	-31999	-6.060417	20	PASS
			NV	40	-31966	-6.054167	20	PASS
			NV	50	-32032	-6.066667	20	PASS
		5320	NV	-20	-32066	-6.027444	20	PASS
			NV	-10	-32132	-6.03985	20	PASS
			NV	0	-32099	-6.033647	20	PASS
			NV	10	-32099	-6.033647	20	PASS

			NV	20	-31999	-6.01485	20	PASS
			NV	30	-32032	-6.021053	20	PASS
			NV	40	-32199	-6.052444	20	PASS
			NV	50	-31999	-6.01485	20	PASS
		5500	NV	-20	-32799	-5.963455	20	PASS
			NV	-10	-32699	-5.945273	20	PASS
			NV	0	-32799	-5.963455	20	PASS
			NV	10	-32932	-5.987636	20	PASS
			NV	20	-32899	-5.981636	20	PASS
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			NV	40	-32932	-5.987636	20	PASS
			NV	50	-32832	-5.969455	20	PASS
		5600	NV	-20	-32832	-5.862857	20	PASS
			NV	-10	-33099	-5.910536	20	PASS
			NV	0	-32966	-5.886786	20	PASS
			NV	10	-32899	-5.874821	20	PASS
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			NV	30	-32732	-5.845	20	PASS
			NV	40	-32932	-5.880714	20	PASS
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		5700	NV	-20	-33366	-5.853684	20	PASS
			NV	-10	-33566	-5.888772	20	PASS
			NV	0	-33466	-5.871228	20	PASS
			NV	10	-33566	-5.888772	20	PASS
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			NV	40	-33399	-5.859474	20	PASS
			NV	50	-33332	-5.847719	20	PASS
		5720	NV	-20	-33832	-5.914685	20	PASS
			NV	-10	-33966	-5.938112	20	PASS
			NV	0	-33766	-5.903147	20	PASS
			NV	10	-33766	-5.903147	20	PASS
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			NV	30	-33999	-5.943881	20	PASS
			NV	40	-33899	-5.926399	20	PASS
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		5745	NV	-20	-34166	-5.947084	20	PASS
			NV	-10	-34066	-5.929678	20	PASS
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			NV	10	-34432	-5.993386	20	PASS
			NV	20	-34266	-5.964491	20	PASS
			NV	30	-34332	-5.975979	20	PASS
			NV	40	-34332	-5.975979	20	PASS
			NV	50	-34332	-5.975979	20	PASS
		5785	NV	-20	-34732	-6.003803	20	PASS
			NV	-10	-34932	-6.038375	20	PASS
			NV	0	-34866	-6.026966	20	PASS
			NV	10	-34899	-6.032671	20	PASS
			NV	20	-34932	-6.038375	20	PASS
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			NV	40	-34666	-5.992394	20	PASS
			NV	50	-34999	-6.049957	20	PASS
		5825	NV	-20	-34832	-5.979742	20	PASS
			NV	-10	-34966	-6.002747	20	PASS
			NV	0	-34932	-5.99691	20	PASS
			NV	10	-35032	-6.014077	20	PASS
			NV	20	-34966	-6.002747	20	PASS
			NV	30	-34866	-5.985579	20	PASS
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			NV	10	-30799	-5.934297	20	PASS
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		5230	NV	-20	-30832	-5.89522	20	PASS
			NV	-10	-30999	-5.927151	20	PASS
			NV	0	-30866	-5.901721	20	PASS
			NV	10	-30732	-5.876099	20	PASS
			NV	20	-30766	-5.8826	20	PASS
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			NV	40	-30966	-5.920841	20	PASS
			NV	50	-30899	-5.908031	20	PASS
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			NV	-10	-31166	-5.913852	20	PASS
			NV	0	-31132	-5.9074	20	PASS
			NV	10	-31032	-5.888425	20	PASS
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			NV	30	-31032	-5.888425	20	PASS
			NV	40	-31232	-5.926376	20	PASS
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		5310	NV	-20	-31199	-5.875518	20	PASS
			NV	-10	-31466	-5.9258	20	PASS
			NV	0	-31399	-5.913183	20	PASS
			NV	10	-31432	-5.919397	20	PASS
			NV	20	-31499	-5.932015	20	PASS
			NV	30	-31566	-5.944633	20	PASS
			NV	40	-31632	-5.957062	20	PASS
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		5510	NV	-20	-32799	-5.952632	20	PASS
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			NV	0	-32599	-5.916334	20	PASS
			NV	10	-32699	-5.934483	20	PASS
			NV	20	-32732	-5.940472	20	PASS
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			NV	40	-32599	-5.916334	20	PASS
			NV	50	-32666	-5.928494	20	PASS
		5755	NV	-20	-33832	-5.878714	20	PASS
			NV	-10	-33932	-5.89609	20	PASS
			NV	0	-33899	-5.890356	20	PASS
			NV	10	-33866	-5.884622	20	PASS
			NV	20	-33966	-5.901998	20	PASS
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			NV	40	-33999	-5.907732	20	PASS
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		5795	NV	-20	-34466	-5.947541	20	PASS
			NV	-10	-34466	-5.947541	20	PASS
			NV	0	-34432	-5.941674	20	PASS
			NV	10	-34699	-5.987748	20	PASS
			NV	20	-34666	-5.982053	20	PASS
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			NV	40	-34699	-5.987748	20	PASS
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			NV	-10	-31132	-5.986923	20	PASS
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		5240	NV	-20	-31166	-5.94771	20	PASS
			NV	-10	-31199	-5.954008	20	PASS
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			NV	-10	-31499	-5.96572	20	PASS
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			NV	20	-31699	-6.003598	20	PASS
			NV	30	-31632	-5.990909	20	PASS
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		5320	NV	-20	-31699	-5.958459	20	PASS
			NV	-10	-31766	-5.971053	20	PASS
			NV	0	-31666	-5.952256	20	PASS
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			NV	20	-31632	-5.945865	20	PASS
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			NV	40	-32366	-5.884727	20	PASS
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			NV	-10	-33066	-5.904643	20	PASS
			NV	0	-32966	-5.886786	20	PASS
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			NV	30	-32832	-5.862857	20	PASS
			NV	40	-32766	-5.851071	20	PASS
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		5700	NV	-20	-33866	-5.941404	20	PASS
			NV	-10	-33699	-5.912105	20	PASS
			NV	0	-33932	-5.952982	20	PASS
			NV	10	-33766	-5.92386	20	PASS
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			NV	40	-33799	-5.929649	20	PASS
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		5720	NV	-20	-34032	-5.94965	20	PASS
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			NV	40	-34366	-6.008042	20	PASS
			NV	50	-34132	-5.967133	20	PASS
		5745	NV	-20	-34499	-6.005048	20	PASS
			NV	-10	-34799	-6.057267	20	PASS
			NV	0	-34866	-6.06893	20	PASS
			NV	10	-34866	-6.06893	20	PASS
			NV	20	-34966	-6.086336	20	PASS
			NV	30	-34932	-6.080418	20	PASS
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		5785	NV	-20	-35199	-6.084529	20	PASS
			NV	-10	-35265	-6.095938	20	PASS
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			NV	10	-35499	-6.136387	20	PASS
			NV	20	-35165	-6.078652	20	PASS
			NV	30	-35365	-6.113224	20	PASS
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		5825	NV	-20	-35532	-6.099914	20	PASS
			NV	-10	-35665	-6.122747	20	PASS
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			NV	0	-31466	-6.062813	20	PASS
			NV	10	-31299	-6.030636	20	PASS
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	NV			-20	-32232	-5.828571	20	PASS		
	NV			-10	-32166	-5.816637	20	PASS		
	NV			0	-32466	-5.870886	20	PASS		
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	NV			20	-32399	-5.85877	20	PASS		
	NV			30	-32366	-5.852803	20	PASS		
	NV			40	-32332	-5.846655	20	PASS		
NV	50	-32466	-5.870886	20	PASS					