



Shenzhen Huaxia Testing Technology Co., Ltd

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Telephone: +86-755-26648640
Fax: +86-755-26648637
Website: www.cqa-cert.com

Report Template Version: V05
Report Template Revision Date: 2021-11-03

Test Report

Report No.: CQASZ20220701221E-03
Applicant: Shenzhen Jiteng Network Technology Co., Ltd
Address of Applicant: No.1202, Bitian Pavilion, Bizhong Garden, No.10 Bibo First Street, Bibo Community
Huangbei Street, Luohu District, Shenzhen City, China
Equipment Under Test (EUT):
Product: Mini PC
Model No.: MiniAir 11
Teat Model No.: MiniAir 11
Brand Name: GEEKOM
FCC ID: 2AY4C-GM0402
Standards: 47 CFR Part 15, Subpart E
ANSI C63.10-2013
KDB 789033 D02 General UNII Test Procedures New Rules v02
KDB 662911 D01 Multiple Transmitter Output v02r01
Date of Receipt: 2022-07-18
Date of Test: 2022-07-18 to 2022-08-15
Date of Issue: 2022-09-02
Test Result: **PASS***

*In the configuration tested, the EUT complied with the standards specified above

Tested By: _____

Lewis Zhou

(Lewis Zhou)

Reviewed By: _____

Timo Lei

(Timo Lei)

Approved By: _____

Jack Ai

(Jack Ai)



1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20220701221E-03	Rev.01	Initial report	2022-09-02

2 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203	ANSI C63.10-2013; KDB789033	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Subpart E Section 15.207	ANSI C63.10-2013; KDB789033	PASS
Maximum Conducted Output Power	47 CFR Part 15 Subpart C Section 15.407 (a)	ANSI C63.10-2013; KDB789033	PASS
Emission Bandwidth	47 CFR Part 15 Subpart C Section 15.407 (a)(e)	ANSI C63.10-2013; KDB789033	PASS
Maximum Power Spectral Density	47 CFR Part 15 Subpart E Section 15.407 (a)	ANSI C63.10-2013; KDB789033	PASS
Band Edge Measurements	47 CFR Part 15 Subpart C Section 15.209 & 15.407(b)	ANSI C63.10-2013; KDB789033	PASS
Frequency stability	47 CFR Part 15 Subpart E Section 15.407 (g)	ANSI C63.10-2013; KDB789033	PASS
Operation in the absence of information to the transmit	47 CFR Part 15 Subpart E Section 15.407 (c)	47 CFR Part 15 Subpart E	PASS
Radiated Spurious Emissions	47 CFR Part 15 Subpart E Section 15.407 (b)	ANSI C63.10-2013; KDB789033	PASS

Remark:

The tested sample(s) and the sample information are provided by the client.

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.

RF: In this whole report RF means Radiated Frequency.

CH: In this whole report CH means channel.

Volt: In this whole report Volt means Voltage.

Temp: In this whole report Temp means Temperature.

Humid: In this whole report Humid means humidity.

Press: In this whole report Press means Pressure.

N/A: In this whole report not application

3 Content

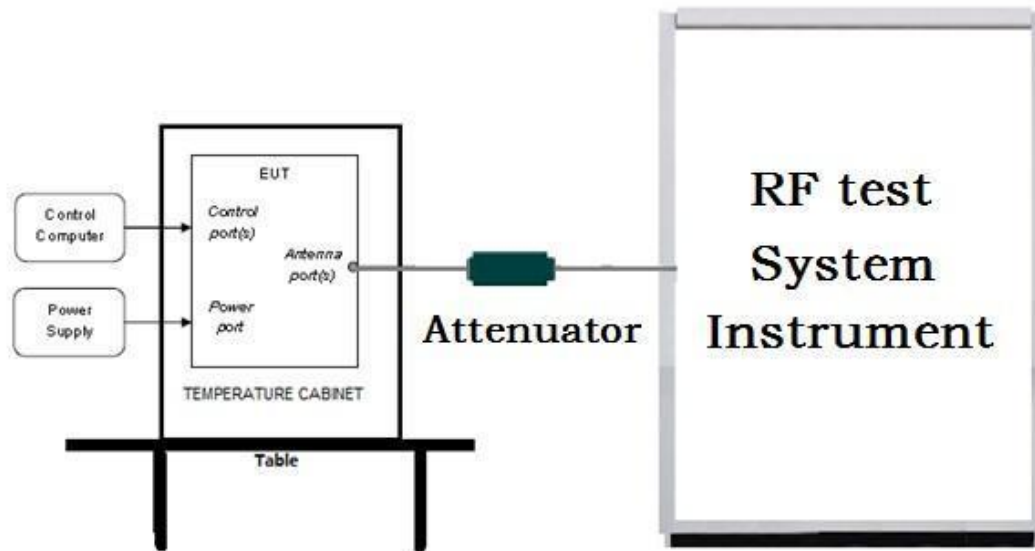
	Page
1 VERSION	2
2 TEST SUMMARY	3
3 CONTENT	4
4 TEST REQUIREMENT	6
4.1 TEST SETUP	6
4.1.1 For Conducted test setup	6
4.1.2 For Radiated Emissions test setup	6
4.1.3 For Conducted Emissions test setup	7
4.2 TEST ENVIRONMENT	7
4.3 TEST CONDITION	8
5 GENERAL INFORMATION	9
5.1 CLIENT INFORMATION	9
5.2 GENERAL DESCRIPTION OF EUT	9
5.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD	10
5.4 OPERATION FREQUENCY EACH OF CHANNEL	10
5.5 DESCRIPTION OF SUPPORT UNITS	11
5.6 TEST LOCATION	11
5.7 TEST FACILITY	11
5.8 DEVIATION FROM STANDARDS	11
5.9 ABNORMALITIES FROM STANDARD CONDITIONS	11
5.10 OTHER INFORMATION REQUESTED BY THE CUSTOMER	11
5.11 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2)	11
6 EQUIPMENTS LIST	12
7 RADIO TECHNICAL REQUIREMENTS SPECIFICATION	13
<i>Appendix A): Emission Bandwidth</i>	<i>14</i>
<i>ANT1</i>	<i>15</i>
APPENDIX A1: EMISSION BANDWIDTH	15
<i>Test Result</i>	<i>15</i>
<i>Test Graphs</i>	<i>16</i>
<i>Appendix A2: Occupied channel bandwidth</i>	<i>30</i>
<i>Test Result</i>	<i>30</i>
<i>Test Graphs</i>	<i>31</i>
<i>Appendix A3: Min emission bandwidth</i>	<i>45</i>
<i>Test Result</i>	<i>45</i>
<i>Test Graphs</i>	<i>46</i>
<i>ANT2</i>	<i>53</i>
<i>Appendix A1: Emission Bandwidth</i>	<i>53</i>
<i>Test Result</i>	<i>53</i>
<i>Test Graphs</i>	<i>54</i>
<i>Appendix A2: Occupied channel bandwidth</i>	<i>68</i>
<i>Test Result</i>	<i>68</i>
<i>Test Graphs</i>	<i>69</i>
<i>Appendix A3: Min emission bandwidth</i>	<i>83</i>
<i>Test Result</i>	<i>83</i>
<i>Test Graphs</i>	<i>84</i>
<i>Appendix B): Maximum Conduct Output Power</i>	<i>91</i>
<i>Test Graphs</i>	<i>94</i>
<i>Test Graphs</i>	<i>109</i>
<i>Test Graphs</i>	<i>126</i>

<i>Test Graphs</i>	141
<i>Appendix C): Maximum Power Spectral Density</i>	156
<i>Ant1</i>	158
<i>Test Result</i>	158
<i>Test Graphs</i>	159
<i>Ant2</i>	173
<i>Test Result</i>	173
<i>Test Graphs</i>	174
<i>Ant1+Ant2</i>	188
<i>Appendix D): Band Edge Measurements</i>	189
<i>Test Graphs</i>	191
<i>Ant2</i>	203
<i>Appendix E): Frequency Stability</i>	215
<i>Appendix F): Antenna Requirement</i>	218
<i>Appendix G): Operation in the absence of information to the transmit</i>	219
<i>Appendix H): AC Power Line Conducted Emission</i>	220
<i>Appendix I): Restricted bands around fundamental frequency (Radiated Emission)</i>	223
<i>Appendix J): Radiated Spurious Emissions</i>	229
8 PHOTOGRAPHS - EUT TEST SETUP	236
8.1 RADIATED EMISSION	236
8.2 CONDUCTED EMISSION	237
9 PHOTOGRAPHS - EUT CONSTRUCTIONAL DETAILS	238

4 Test Requirement

4.1 Test setup

4.1.1 For Conducted test setup



4.1.2 For Radiated Emissions test setup

Radiated Emissions setup:

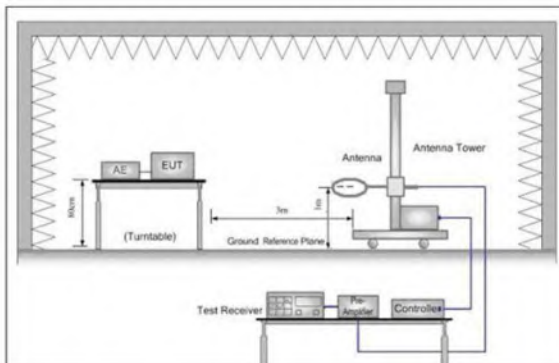


Figure 1. Below 30MHz

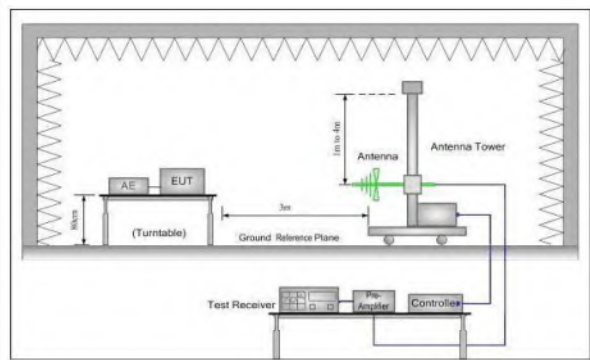


Figure 2. 30MHz to 1GHz

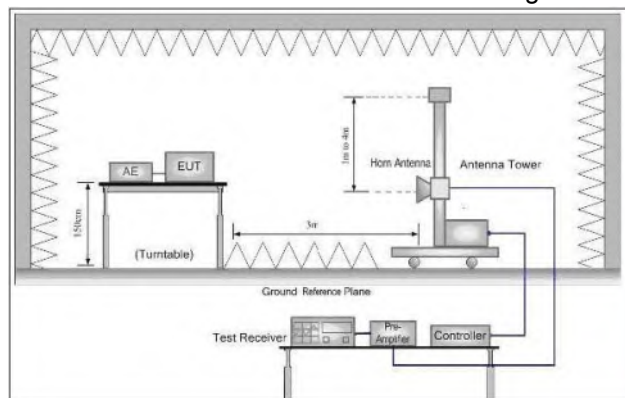
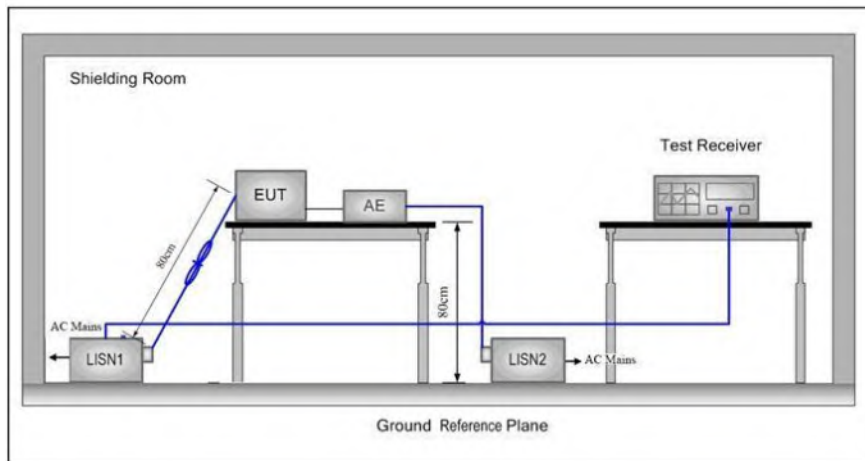


Figure 3. Above 1GHz

4.1.3 For Conducted Emissions test setup

Conducted Emissions setup



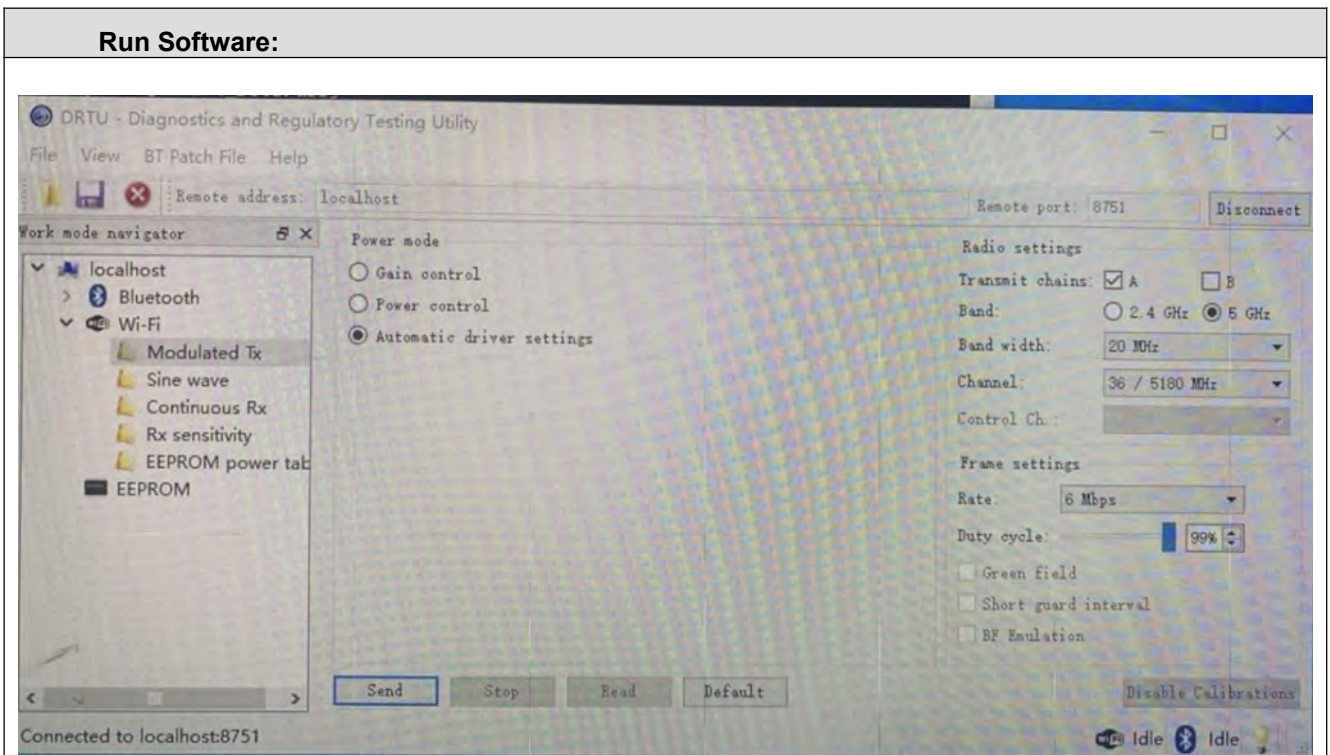
4.2 Test Environment

Operating Environment:		
Conducted Emissions:		
Temperature:	25.2 °C	
Humidity:	60 % RH	
Atmospheric Pressure:	1009 mbar	
Radiated Emissions:		
Temperature:	25.4 °C	
Humidity:	54 % RH	
Atmospheric Pressure:	1009mbar	
Radio conducted item test (RF Conducted test room):		
Temperature:	25.4 °C	
Humidity:	50 % RH	
Atmospheric Pressure:	1009 mbar	
Test Condition	Temperature (°C)	Voltage (V)
TN/VN	+15 to +35	19
TL/VL	-20	17.1
TH/VL	50	17.1
TL/VH	-20	20.9
TH/VH	50	20.9
Remark:		
1)The test extreme temperature is -20 °C to 50 °C and the test extreme voltage is 17.1V to 20.9V, The manufacturer specified maximum ambient temperature is 0-45 °C.		
2)VN: Normal Voltage; TN: Normal Temperature;		
TL: Low Extreme Test Temperature; TH: High Extreme Test Temperature;		
VL: Low Extreme Test Voltage; VH: High Extreme Test Voltage.		

4.3 Test Condition

Test channel:

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(M)	High(H)
802.11a/n/ac(20M)	5150MHz ~5250 MHz	Channel 36	Channel 40	Channel 48
		5180MHz	5220MHz	5240MHz
802.11n/ac(40M)	5150MHz ~5250 MHz	Channel 38	N/A	Channel 46
		5190MHz	N/A	5230MHz
802.11ac(80M)	5150MHz ~5250 MHz	N/A	Channel 42	N/A
		N/A	5210MHz	N/A
802.11a/n/ac(20M)	5725MHz ~5850 MHz	Channel 149	Channel 157	Channel 165
		5745MHz	5785MHz	5825MHz
802.11n/ac(40M)	5725MHz ~5850 MHz	Channel 151	N/A	Channel 159
		5755MHz	N/A	5795MHz
802.11ac(80M)	5725MHz ~5850 MHz	N/A	Channel 155	N/A
		N/A	5775MHz	N/A



Test mode:

Pre-scan under all rate at lowest channel for Ant1

Through Pre-scan, 6Mbps is the worst case of 802.11a (20M); MCS0 is the worst case of 802.11n (20M); MCS0 is the worst case of 802.11ac (20M); MCS0 is the worst case of 802.11n(40M); MCS0 is the worst case of 802.11ac (40M); MCS0 is the worst case of 802.11ac(80M).

5 General Information

5.1 Client Information

Applicant:	Shenzhen Jiteng Network Technology Co., Ltd
Address of Applicant:	No.1202, Bitian Pavilion, Bizhong Garden, No.10 Bibo First Street, Bibo Community Huangbei Street, Luohu District, Shenzhen City, China
Manufacturer:	Shenzhen Jiteng Network Technology Co., Ltd
Address of Manufacturer:	No.1202, Bitian Pavilion, Bizhong Garden, No.10 Bibo First Street, Bibo Community Huangbei Street, Luohu District, Shenzhen City, China
Factory:	SHENZHEN 3NOD ELECTRONICS CO., LTD
Address of Factory:	No.74, Yangyong Road, Yanluo street, Tangxiayong Community, Songgang, Baoan, Shenzhen, Guangdong, P.R.China

5.2 General Description of EUT

Product Name:	Mini PC
Model No.:	MiniAir 11
Test Model No.:	MiniAir 11
Trade Mark:	GEEKOM
Power Supply:	Model:A481-1902360U I/P:100-240V~50-60Hz, 1.5A Output: DC 19.0V \pm 2.36A
EUT Supports Radios application:	BT: 2402-2480MHz 2.4GHz: Wi-Fi: 802.11b/g/n(HT20): 2412MHz~2462MHz; 802.11n(HT40): 2422MHz~2452MHz 5GHz: Wi-Fi: U-NII-1: 5.15-5.25GHz; U-NII-3: 5.725-5.850GHz
EUT Type:	Client devices

5.3 Product Specification subjective to this standard

Operation Frequency:	IEEE 802.11a/n/ac(20M): 5150MHz ~5250 MHz IEEE802.11n/ac(40M): 5150MHz ~5250 MHz IEEE802.11ac(80M): 5150MHz ~5250 MHz IEEE 802.11a/n/ac(20M): 5725MHz ~5850 MHz IEEE802.11n/ac(40M): 5725MHz ~5850 MHz IEEE802.11ac(80M): 5725MHz ~5850 MHz
Channel Numbers:	IEEE 802.11a/n/ac(20M): 5150MHz ~5250MHz/ 4 channel IEEE 802.11n/ac(40M): 5150MHz ~5250MHz/ 2 channel IEEE 802.11ac(80M): 5150MHz ~5250MHz/ 1 channel IEEE 802.11a/n/ac(20M): 5725MHz ~5850MHz/ 5 channel IEEE 802.11n/ac(40M): 5725MHz ~5850MHz/ 2 channel IEEE 802.11ac(80M): 5725MHz ~5850MHz/ 1 channel
Type of Modulation:	OFDM
Sample Type:	<input checked="" type="checkbox"/> Mobile <input type="checkbox"/> Portable <input type="checkbox"/> Fix Location
Test Software of EUT:	DRTU
Antenna Type:	metal antenna
Antenna gain:	Ant 1: 4.46dBi; Ant2: 3.04dBi (provided by the applicant)

5.4 Operation Frequency each of channel

For 802.11a/n/ac(20M) Operation in the 5150MHz ~5250 MHz band			
Channel	Frequency	Channel	Frequency
36	5180MHz	44	5220MHz
40	5220MHz	48	5240MHz
For 802.11a/n/ac(20M) Operation in the 5725MHz ~5850 MHz band			
Channel	Frequency	Channel	Frequency
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz	NA	NA

For 802.11n/ac(40M) Operation in the 5150MHz ~5250 MHz band			
Channel	Frequency	Channel	Frequency
38	5190MHz	46	5230MHz
For 802.11n/ac(40M) Operation in the 5725MHz ~5850 MHz band			
Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

For 802.11ac(80M) Operation in the 5150MHz ~5250 MHz band			
Channel	Frequency	Channel	Frequency
42	5210MHz	NA	NA
For 802.11ac(80M) Operation in the 5725MHz ~5850 MHz band			
Channel	Frequency	Channel	Frequency
155	5775MHz	NA	NA

5.5 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.	Certification	Supplied by
/	/	/	/	/

5.6 Test Location

All tests were performed at:

Shenzhen Huaxia Testing Technology Co., Ltd.

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua New District, Shenzhen, Guangdong, China

5.7 Test Facility

- **A2LA (Certificate No. 4742.01)**

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4742.01.

- **FCC Registration No.: 522263**

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.:522263

5.8 Deviation from Standards

None.

5.9 Abnormalities from Standard Conditions

None.

5.10 Other Information Requested by the Customer

None.

5.11 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	3×10^{-8}
2	RF power, conducted	0.86dB
3	Radiated Spurious emission test	5.12dB (Below 1GHz)
		4.6dB (Above 1GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.8°C
6	Humidity test	2.0%
7	DC power voltages	0.5%

6 Equipments List

Test Equipment	Manufacturer	Model No.	Instrument No.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR7	CQA-005	2021/09/10	2022/09/09
Spectrum analyzer	R&S	FSU26	CQA-038	2021/09/10	2022/09/09
Spectrum analyzer	R&S	FSU40	CQA-075	2021/09/10	2022/09/09
Preamplifier	MITEQ	AFS4-00010300-18-10P-4	CQA-035	2021/09/10	2022/09/09
Preamplifier	MITEQ	AMF-6D-02001800-29-20P	CQA-036	2021/09/10	2022/09/09
Preamplifier	EMCI	EMC184055SE	CQA-089	2021/09/10	2022/09/09
Loop antenna	Schwarzbeck	FMZB1516	CQA-060	2021/09/16	2024/09/15
Bilog Antenna	R&S	HL562	CQA-011	2021/09/16	2024/09/15
Horn Antenna	R&S	HF906	CQA-012	2021/09/16	2024/09/15
Horn Antenna	Schwarzbeck	BBHA 9170	CQA-088	2021/09/16	2024/09/15
Coaxial Cable (Above 1GHz)	CQA	N/A	C007	2021/09/10	2022/09/09
Coaxial Cable (Below 1GHz)	CQA	N/A	C013	2021/09/10	2022/09/09
RF cable(9KHz~40GHz)	CQA	RF-01	CQA-079	2021/09/10	2022/09/09
Antenna Connector	CQA	RFC-01	CQA-080	2021/09/10	2022/09/09
Power Sensor	KEYSIGHT	U2021XA	CQA-30	2021/09/10	2022/09/09
N1918A Power Analysis Manager Power Panel	Agilent	N1918A	CQA-074	2021/09/10	2022/09/09
Power meter	R&S	NRVD	CQA-029	2021/09/10	2022/09/09
Power divider	MIDWEST	PWD-2533-02-SMA-79	CQA-067	2021/09/10	2022/09/09
EMI Test Receiver	R&S	ESR7	CQA-005	2021/09/10	2022/09/09
LISN	R&S	ENV216	CQA-003	2021/09/10	2022/09/09
Coaxial cable	CQA	N/A	CQA-C009	2021/09/10	2022/09/09
DC power	KEYSIGHT	E3631A	CQA-028	2021/09/10	2022/09/09

Test software:

	Manufacturer	Software brand
Radiated Emissions test software	Tonscend	JS1120-3
Conducted Emissions test software	Audix	e3
RF Conducted test software	Audix	e3

7 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title
1	FCC Part15E	Subpart C-Intentional Radiators
2	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices
3	KDB 789033 D02 General U-NII Test Procedures New Rules v02r01	Guidelines for compliance testing of unlicensed national information infrastructure (U-NII) device part 15, subpart E
4	KDB 662911 D01 Multiple Transmitter Output v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band

Appendix A): Emission Bandwidth

26dB Emission bandwidth

Test Requirement: 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II C 1

6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart C 15.407 (e)

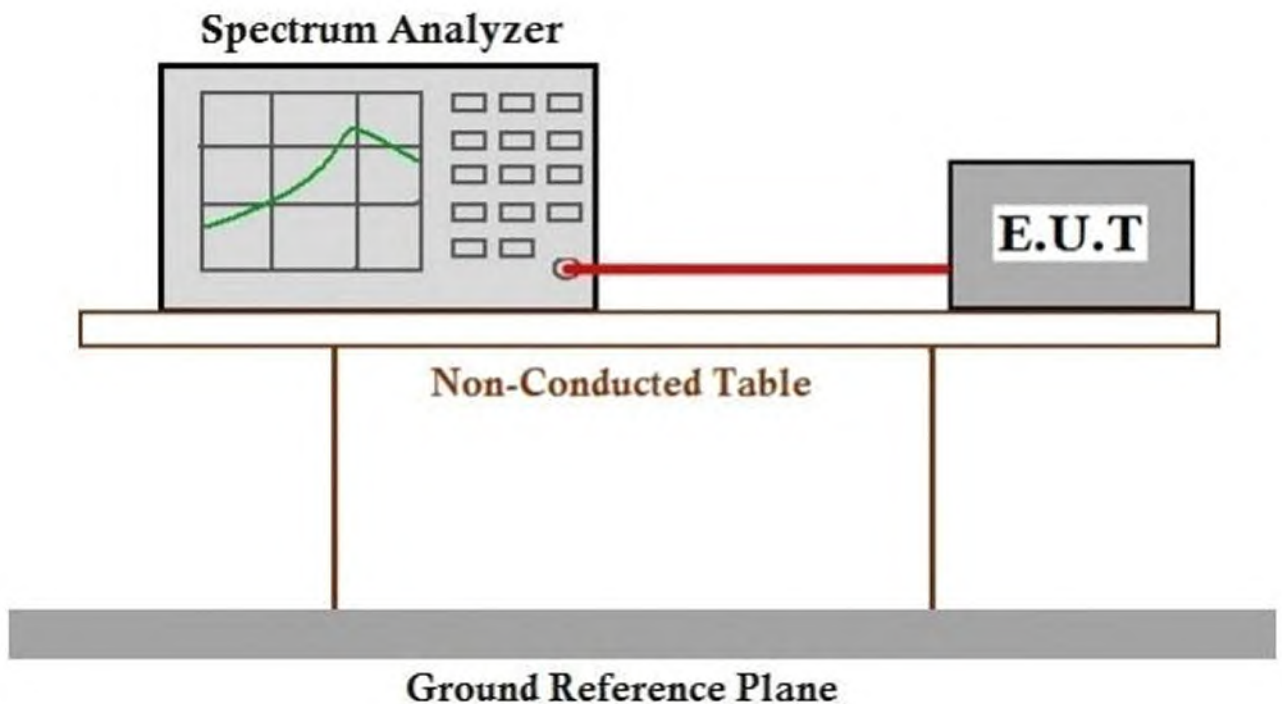
Test Method: KDB 789033 D02 II C 2

Limit: ≥ 500 kHz

Test Procedure:

- 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%.

Test Setup Diagram

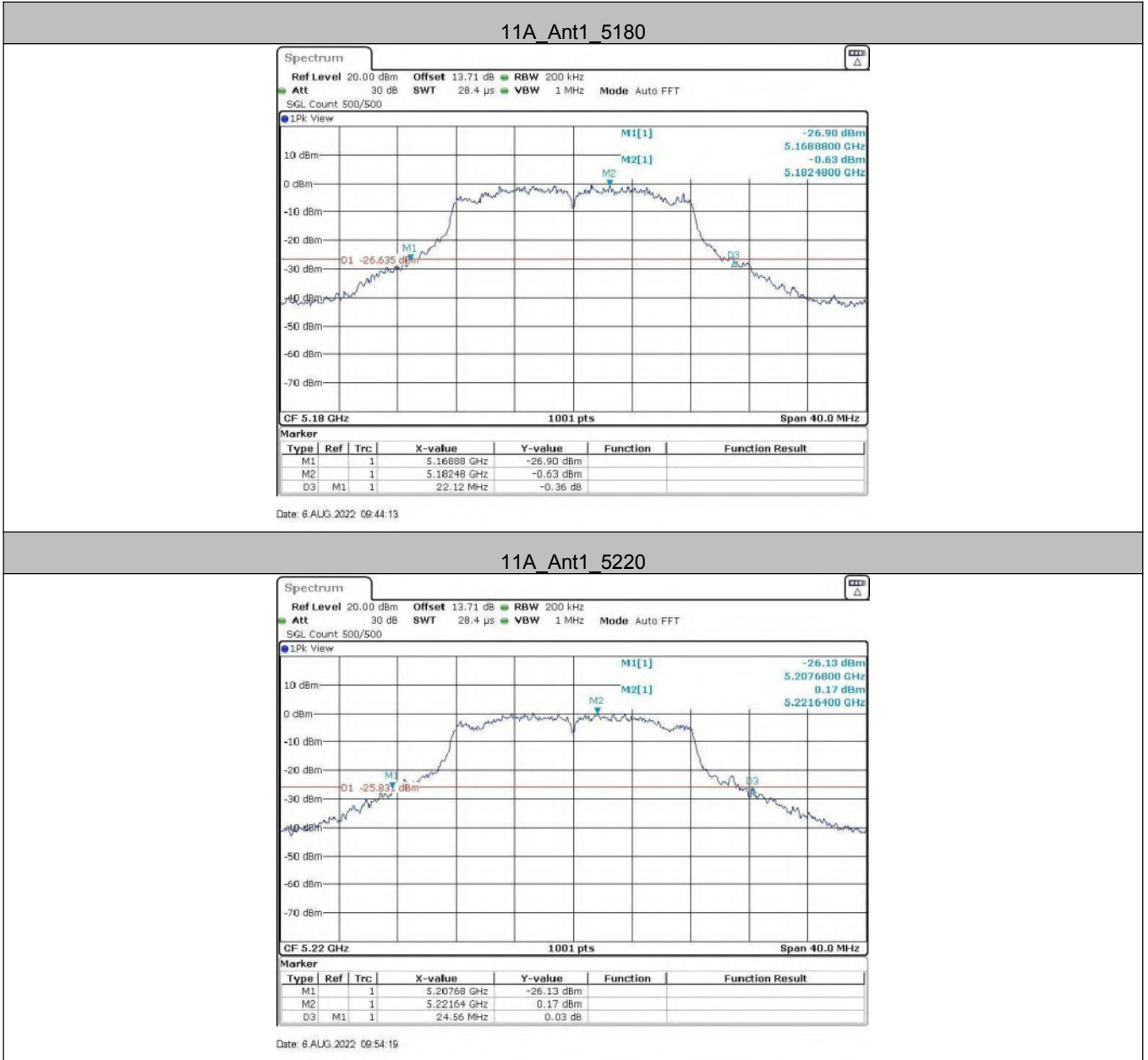


ANT1

Appendix A1: Emission Bandwidth
Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	22.120	5168.880	5191.000	---	PASS
		5220	24.560	5207.680	5232.240	---	PASS
		5240	22.240	5229.480	5251.720	---	PASS
		5745	21.520	5734.680	5756.200	---	PASS
		5785	23.240	5773.400	5796.640	---	PASS
		5825	22.120	5813.640	5835.760	---	PASS
11N20SISO	Ant1	5180	22.440	5168.920	5191.360	---	PASS
		5220	23.400	5208.000	5231.400	---	PASS
		5240	22.720	5228.920	5251.640	---	PASS
		5745	22.120	5734.440	5756.560	---	PASS
		5785	21.920	5774.040	5795.960	---	PASS
		5825	21.440	5814.480	5835.920	---	PASS
11N40SISO	Ant1	5190	43.360	5167.360	5210.720	---	PASS
		5230	45.280	5207.440	5252.720	---	PASS
		5755	42.000	5734.200	5776.200	---	PASS
		5795	41.760	5774.360	5816.120	---	PASS
11AC20SISO	Ant1	5180	22.000	5168.680	5190.680	---	PASS
		5220	23.360	5207.640	5231.000	---	PASS
		5240	21.960	5229.360	5251.320	---	PASS
		5745	23.200	5733.600	5756.800	---	PASS
		5785	21.720	5774.000	5795.720	---	PASS
		5825	22.520	5813.760	5836.280	---	PASS
11AC40SISO	Ant1	5190	43.440	5167.680	5211.120	---	PASS
		5230	44.560	5207.760	5252.320	---	PASS
		5755	41.920	5733.800	5775.720	---	PASS
		5795	42.080	5774.040	5816.120	---	PASS
11AC80SISO	Ant1	5210	81.760	5169.040	5250.800	---	PASS
		5775	80.960	5735.000	5815.960	---	PASS

Test Graphs



11A_Ant1_5240



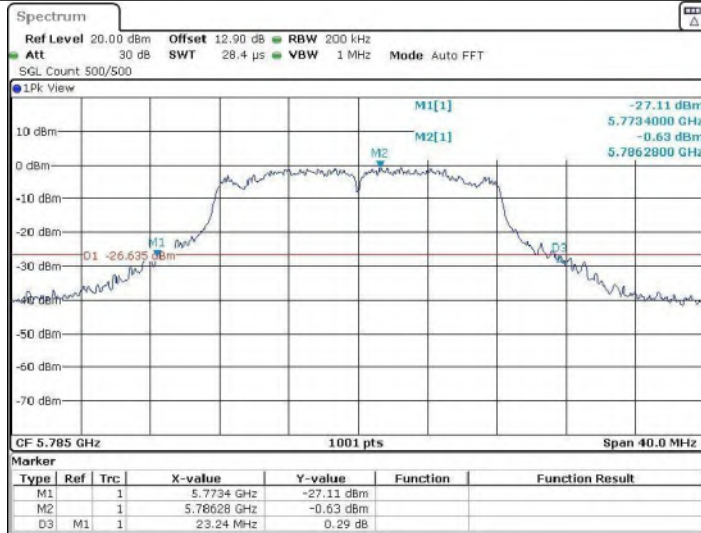
Date: 6 AUG.2022 10:00:06

11A_Ant1_5745



Date: 6 AUG.2022 10:06:46

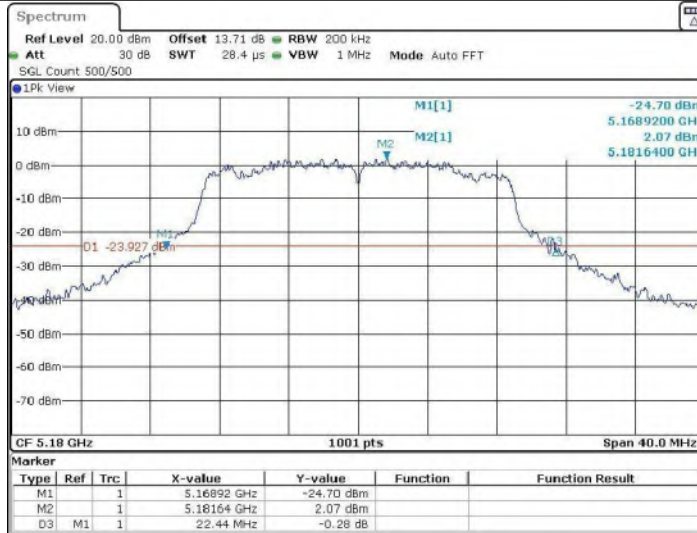
11A_Ant1_5785



11A_Ant1_5825

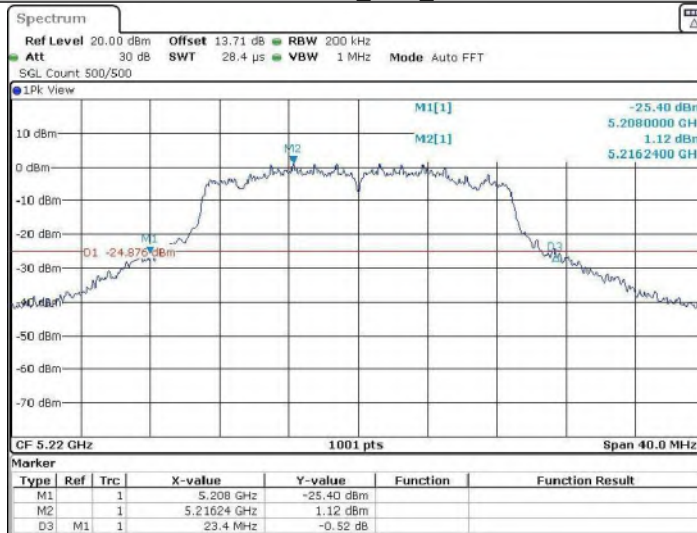


11N20SISO_Ant1_5180



Date: 6 AUG.2022 10:25:43

11N20SISO_Ant1_5220



Date: 6 AUG.2022 10:31:30

11N20SISO_Ant1_5240



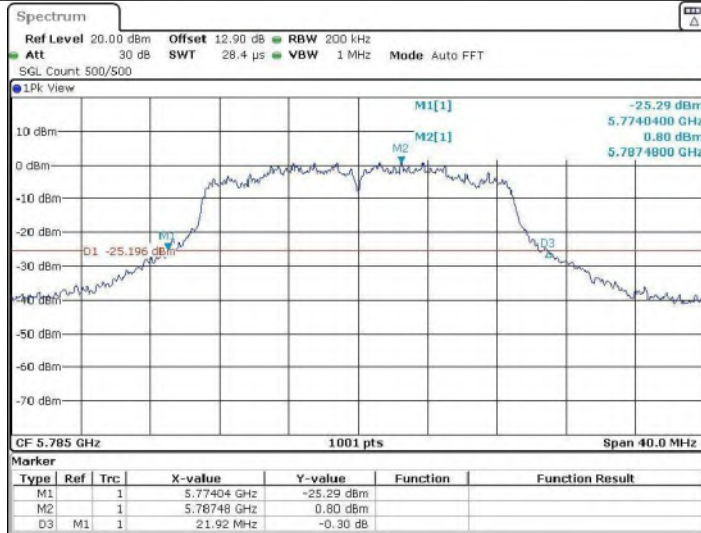
Date: 6 AUG 2022 10:35:58

11N20SISO_Ant1_5745

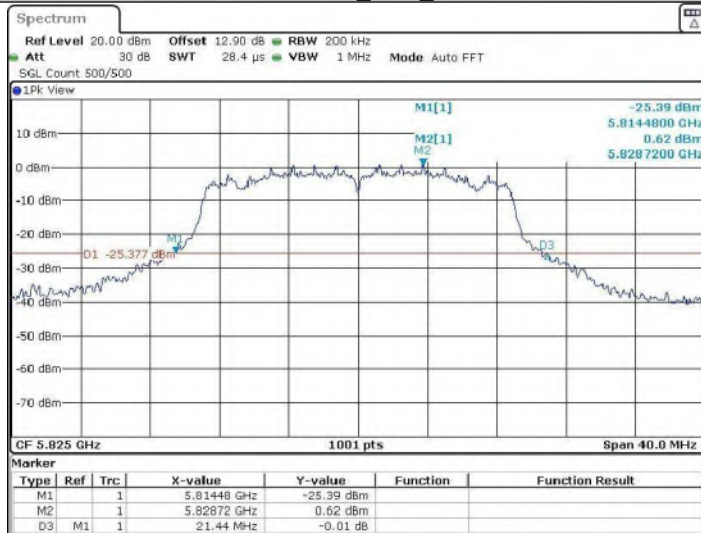


Date: 6 AUG 2022 10:41:58

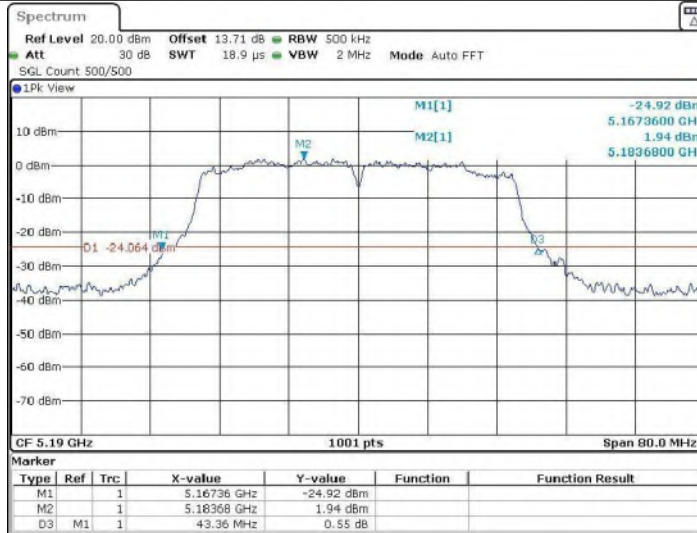
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825

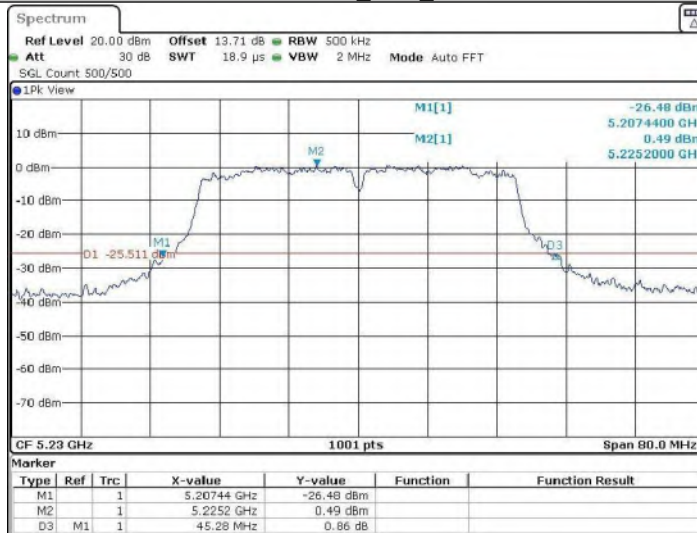


11N40SISO_Ant1_5190



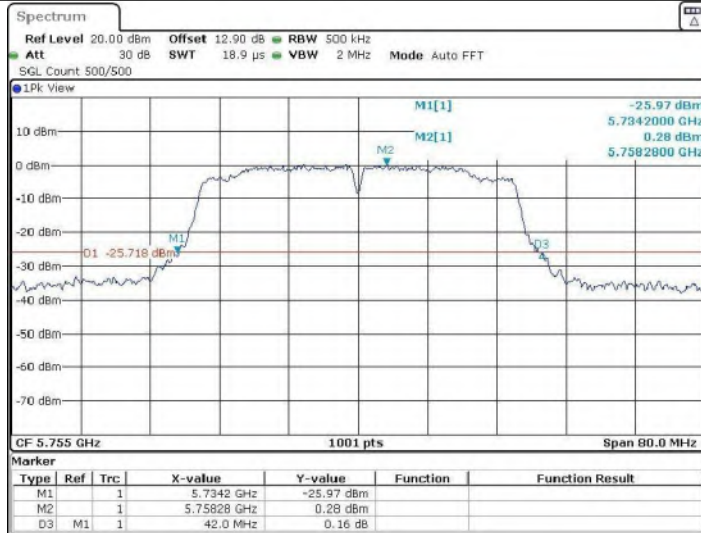
Date: 6 AUG.2022 10:58:54

11N40SISO_Ant1_5230



Date: 6 AUG.2022 11:04:33

11N40SISO_Ant1_5755



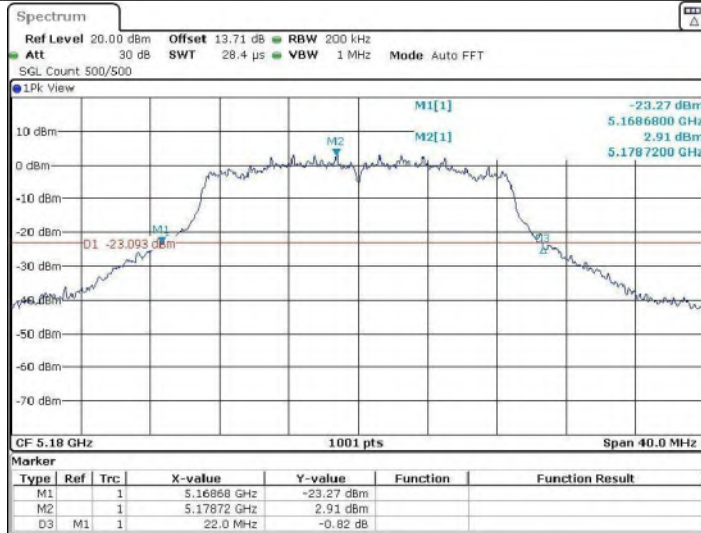
Date: 6 AUG.2022 11:14:02

11N40SISO_Ant1_5795



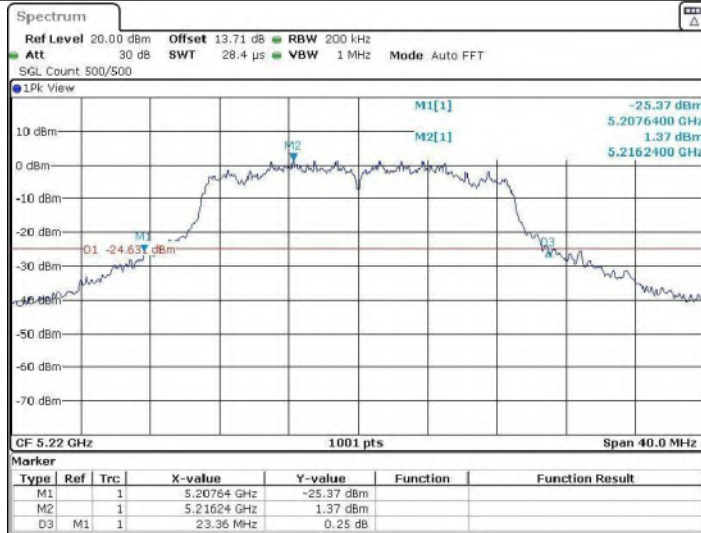
Date: 6 AUG.2022 11:21:10

11AC20SISO_Ant1_5180



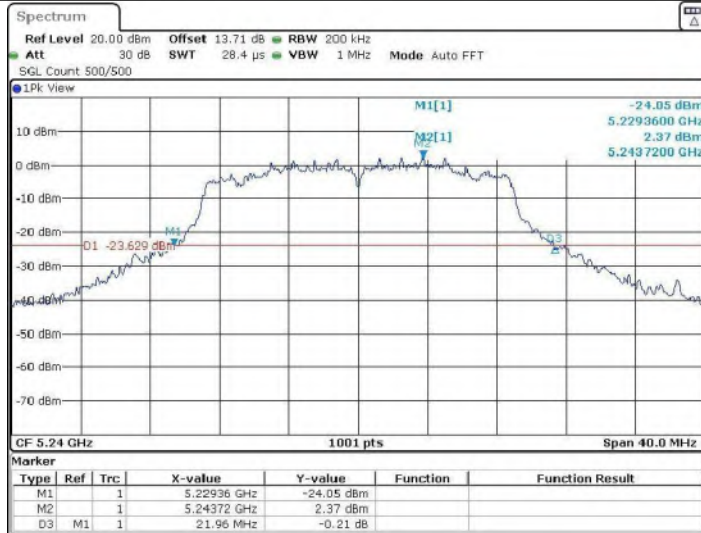
Date: 6 AUG.2022 11:27:33

11AC20SISO_Ant1_5220



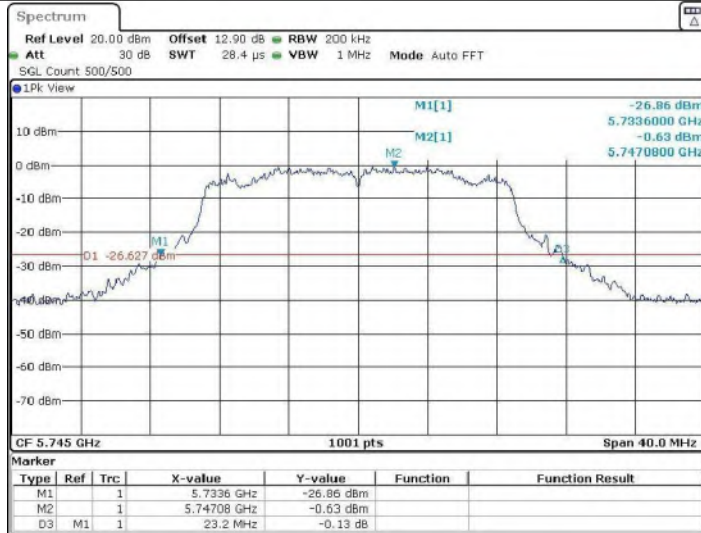
Date: 6 AUG.2022 11:33:46

11AC20SISO_Ant1_5240



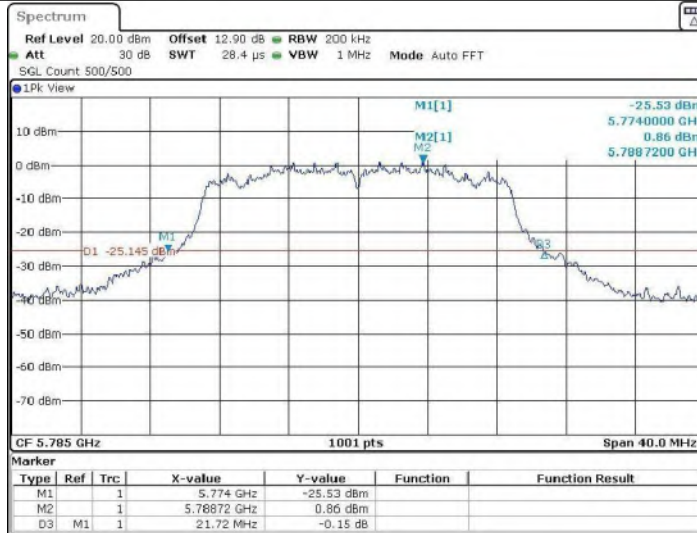
Date: 6 AUG 2022 11:38:07

11AC20SISO_Ant1_5745



Date: 6 AUG 2022 11:43:47

11AC20SISO_Ant1_5785



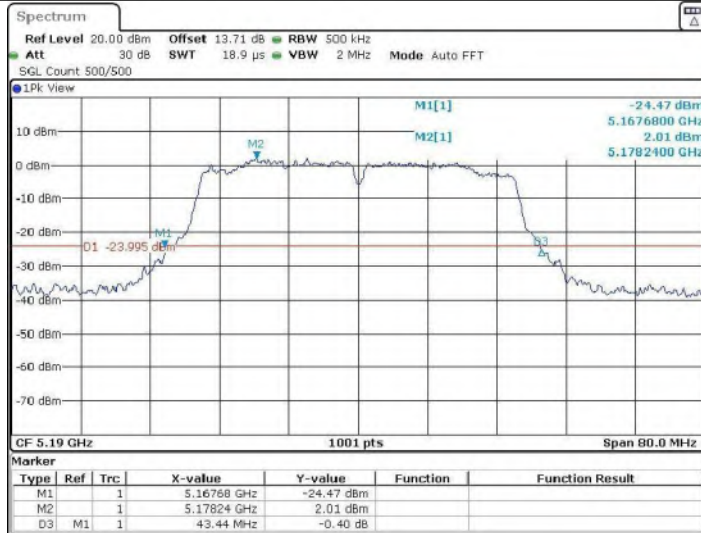
Date: 6 AUG.2022 11:50:28

11AC20SISO_Ant1_5825



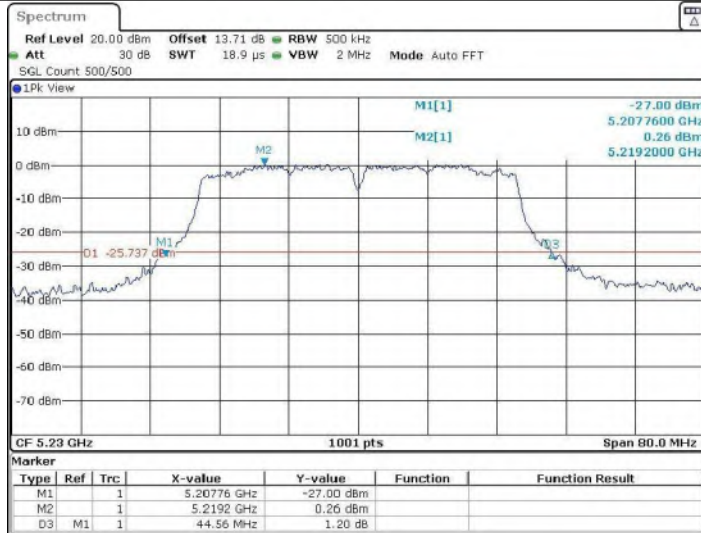
Date: 6 AUG.2022 11:55:15

11AC40SISO_Ant1_5190



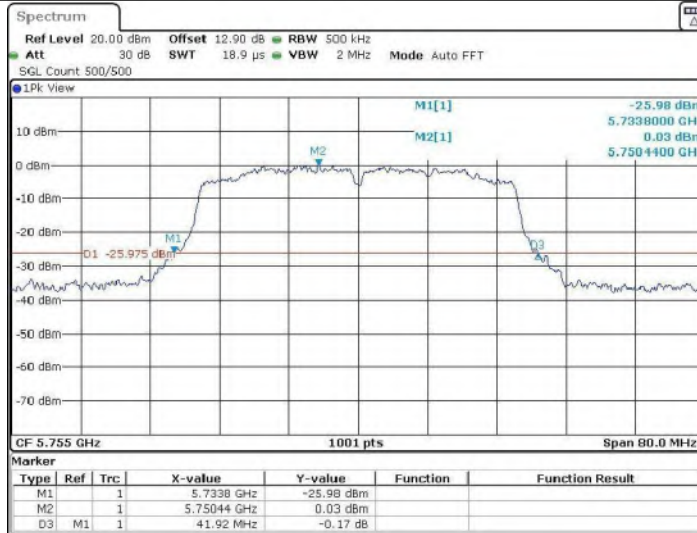
Date: 6 AUG.2022 12:00:50

11AC40SISO_Ant1_5230

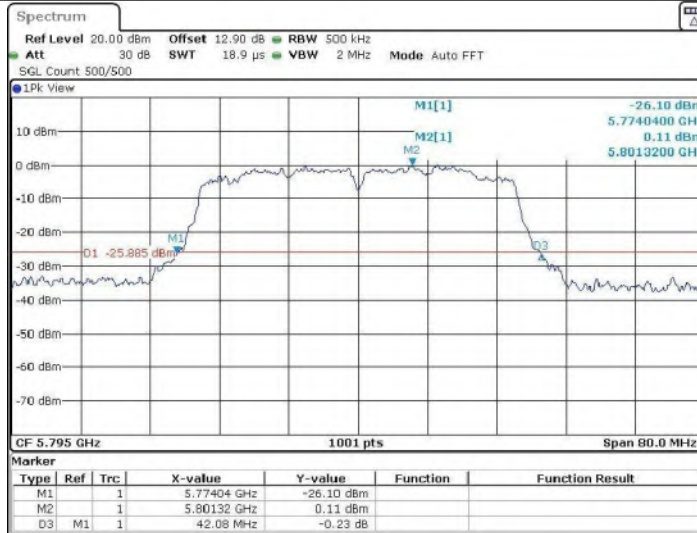


Date: 6 AUG.2022 12:06:18

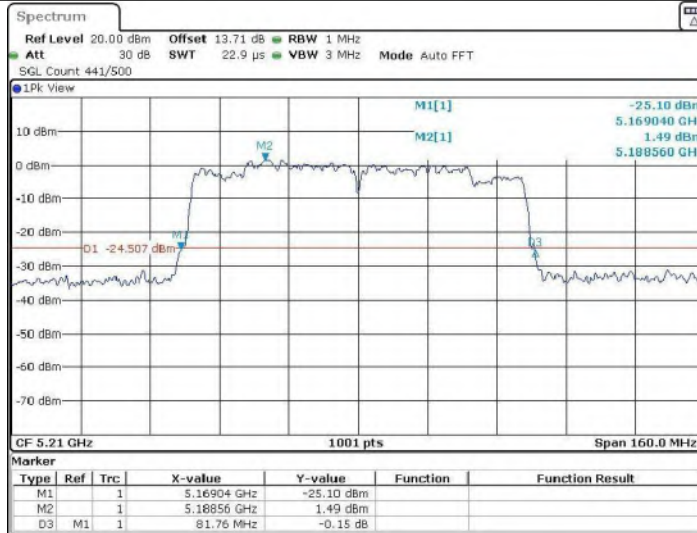
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

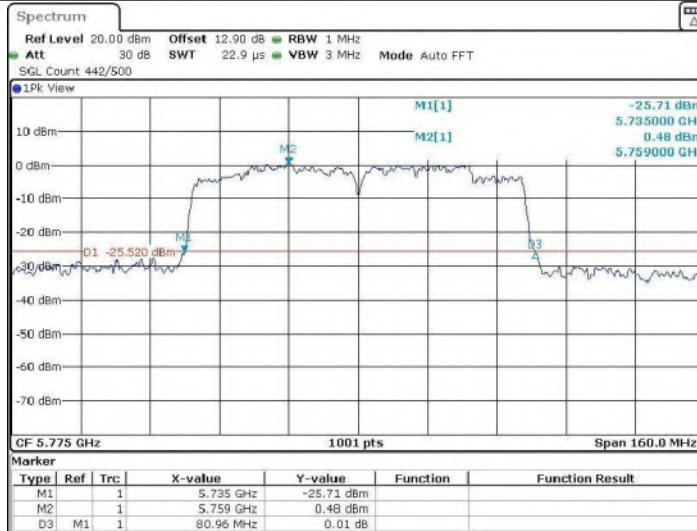


11AC80SISO_Ant1_5210



Date: 6 AUG.2022 12:25:13

11AC80SISO_Ant1_5775



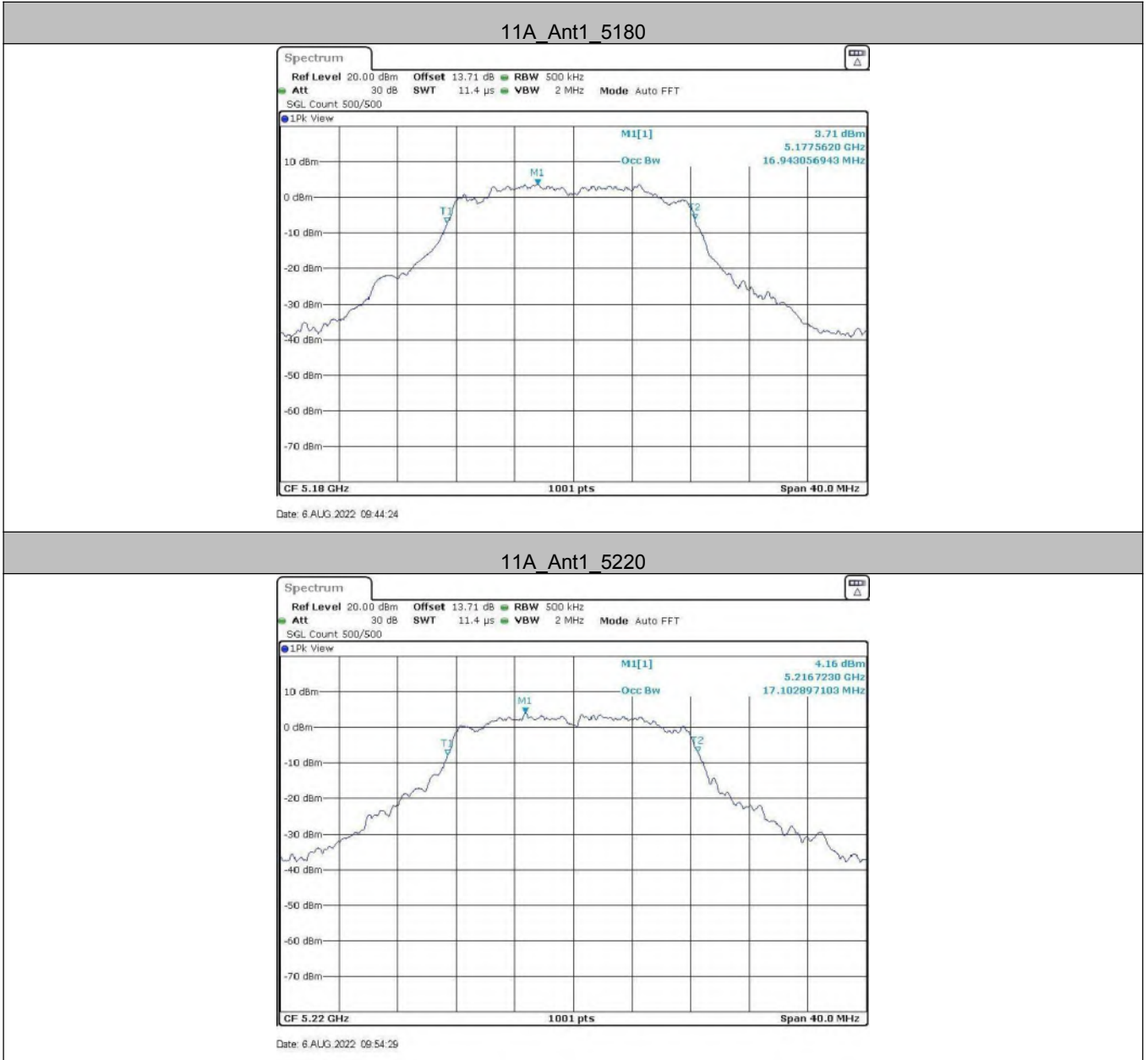
Date: 6 AUG.2022 12:32:12

Appendix A2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.943	5171.369	5188.312	---	PASS
		5220	17.103	5211.409	5228.511	---	PASS
		5240	17.143	5231.568	5248.711	---	PASS
		5745	16.943	5736.528	5753.472	---	PASS
		5785	16.943	5776.568	5793.511	---	PASS
		5825	16.983	5816.449	5833.432	---	PASS
11N20SISO	Ant1	5180	18.062	5170.889	5188.951	---	PASS
		5220	18.022	5210.889	5228.911	---	PASS
		5240	18.062	5231.089	5249.151	---	PASS
		5745	18.102	5736.049	5754.151	---	PASS
		5785	17.902	5776.089	5793.991	---	PASS
		5825	18.022	5815.929	5833.951	---	PASS
11N40SISO	Ant1	5190	36.364	5171.698	5208.062	---	PASS
		5230	36.523	5211.778	5248.302	---	PASS
		5755	36.044	5736.938	5772.982	---	PASS
		5795	36.044	5776.938	5812.982	---	PASS
11AC20SISO	Ant1	5180	18.062	5170.969	5189.031	---	PASS
		5220	18.102	5210.809	5228.911	---	PASS
		5240	18.342	5230.969	5249.311	---	PASS
		5745	17.982	5735.969	5753.951	---	PASS
		5785	18.262	5775.849	5794.111	---	PASS
		5825	18.022	5815.929	5833.951	---	PASS
11AC40SISO	Ant1	5190	36.204	5171.858	5208.062	---	PASS
		5230	36.523	5211.778	5248.302	---	PASS
		5755	36.124	5736.858	5772.982	---	PASS
		5795	36.204	5776.938	5813.142	---	PASS
11AC80SISO	Ant1	5210	76.084	5171.638	5247.722	---	PASS
		5775	75.764	5737.118	5812.882	---	PASS

Test Graphs



11A_Ant1_5240



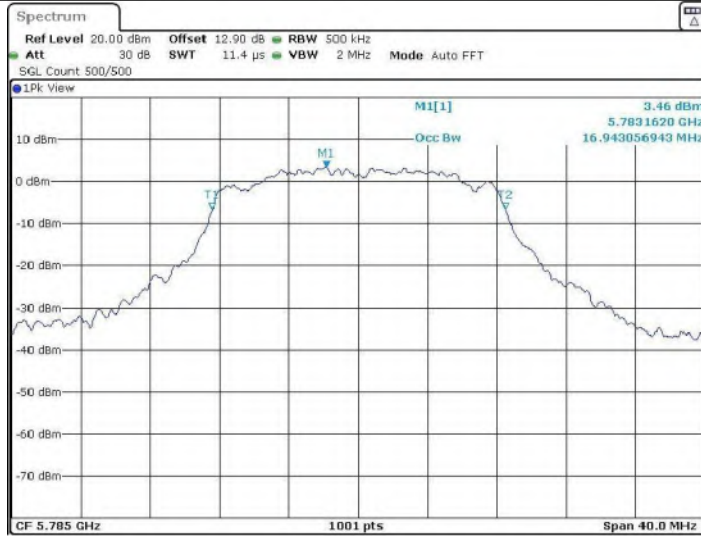
Date: 6 AUG.2022 10:00:18

11A_Ant1_5745



Date: 6 AUG.2022 10:07:09

11A_Ant1_5785



Date: 6 AUG.2022 10:13:54

11A_Ant1_5825



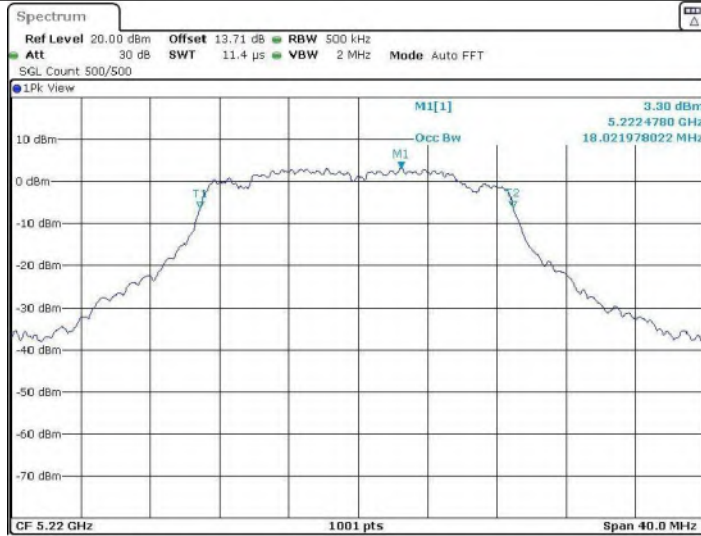
Date: 6 AUG.2022 10:19:56

11N20SISO_Ant1_5180



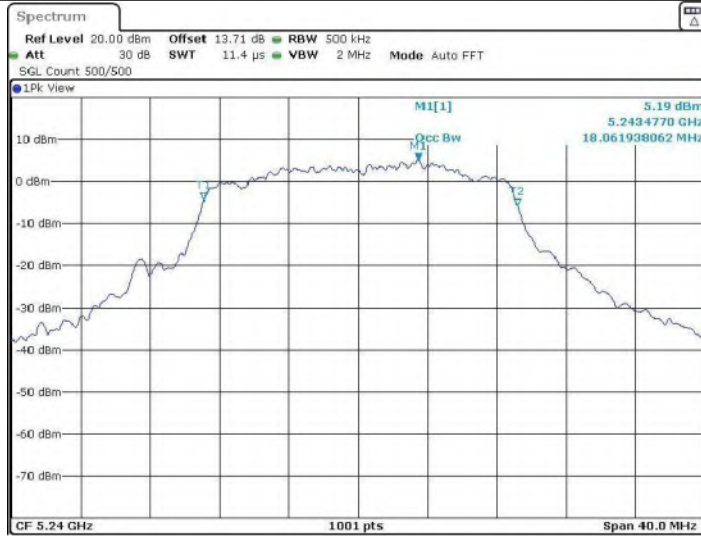
Date: 6 AUG.2022 10:25:54

11N20SISO_Ant1_5220



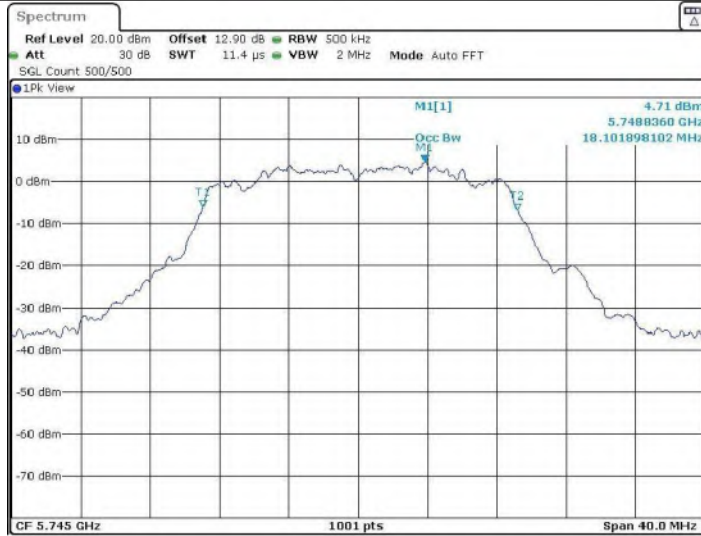
Date: 6 AUG.2022 10:31:40

11N20SISO_Ant1_5240



Date: 6 AUG.2022 10:36:06

11N20SISO_Ant1_5745



Date: 6 AUG.2022 10:42:20

11N20SISO_Ant1_5785



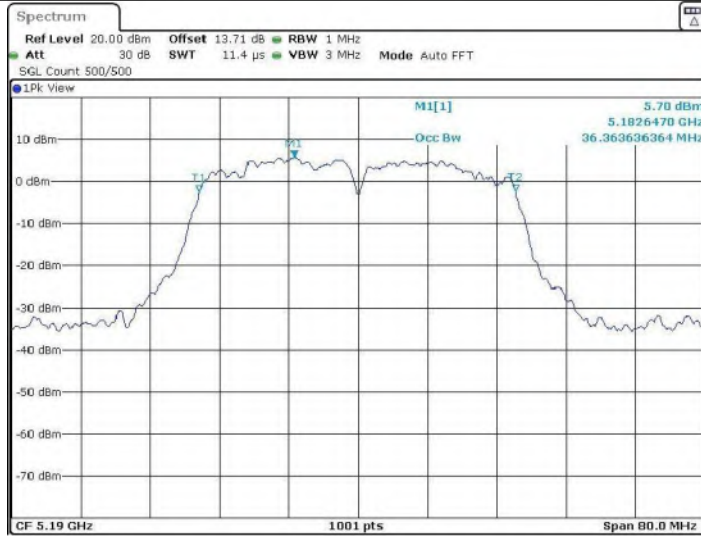
Date: 6 AUG.2022 10:48:31

11N20SISO_Ant1_5825



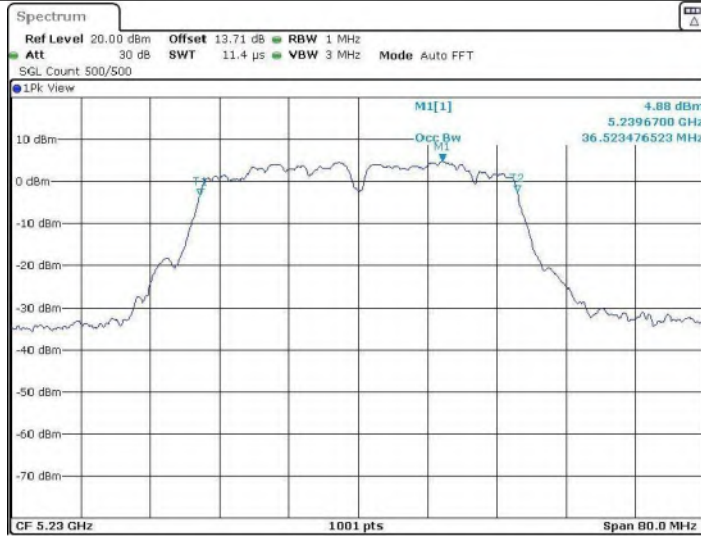
Date: 6 AUG.2022 10:53:07

11N40SISO_Ant1_5190



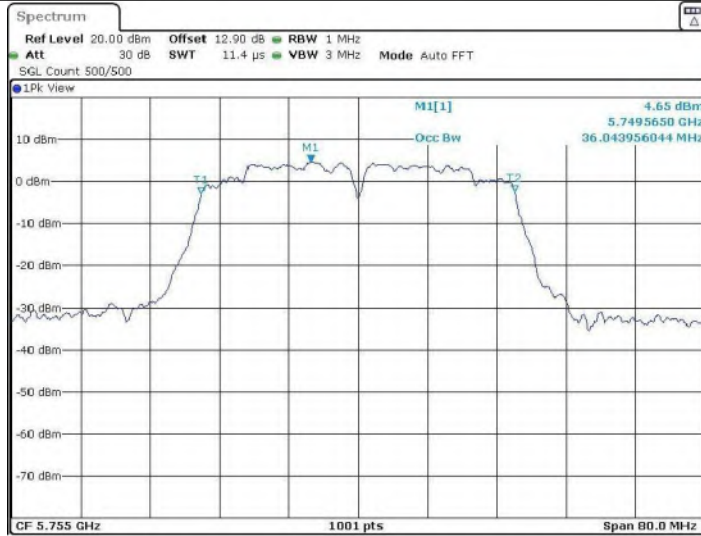
Date: 6 AUG.2022 10:59:04

11N40SISO_Ant1_5230



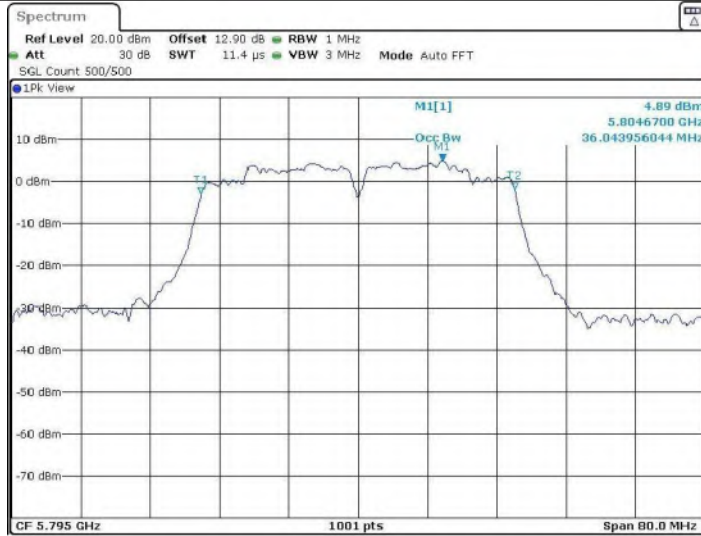
Date: 6 AUG.2022 11:04:43

11N40SISO_Ant1_5755



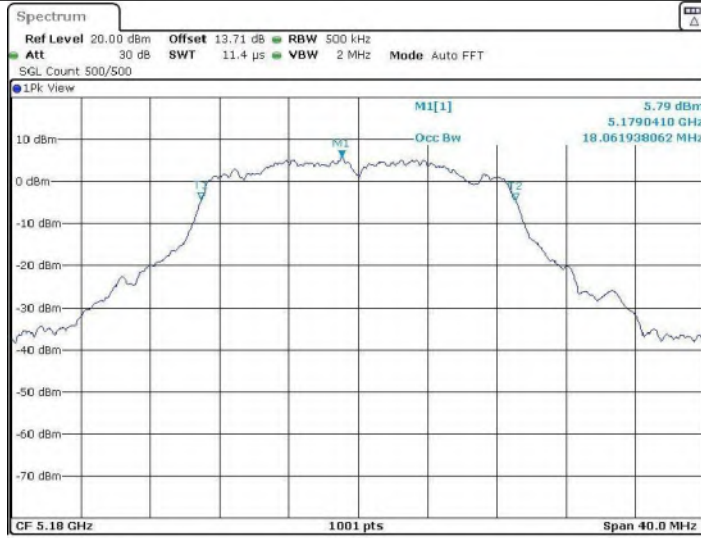
Date: 6 AUG.2022 11:14:25

11N40SISO_Ant1_5795



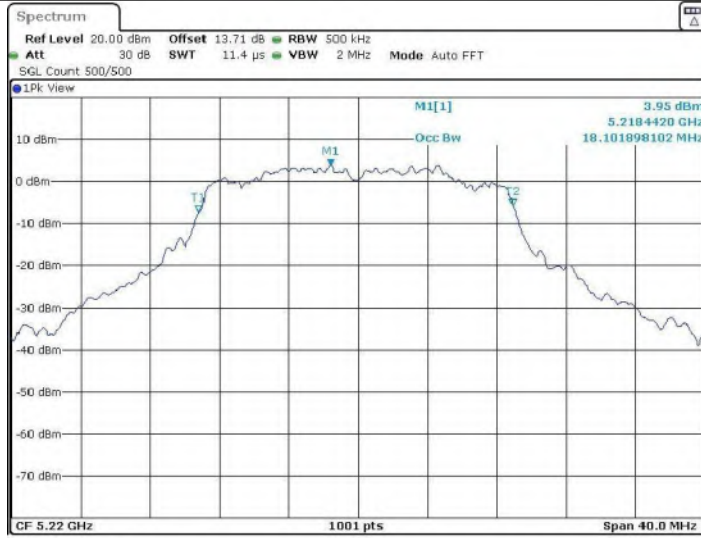
Date: 6 AUG.2022 11:21:32

11AC20SISO_Ant1_5180



Date: 6 AUG.2022 11:27:43

11AC20SISO_Ant1_5220



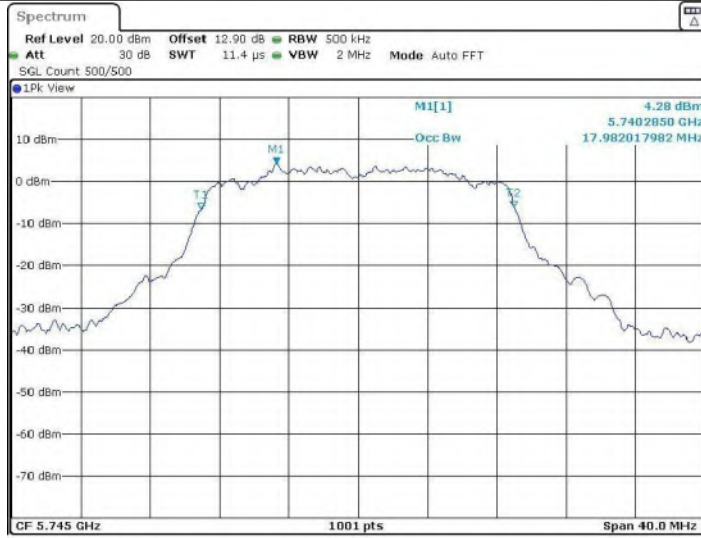
Date: 6 AUG.2022 11:33:57

11AC20SISO_Ant1_5240



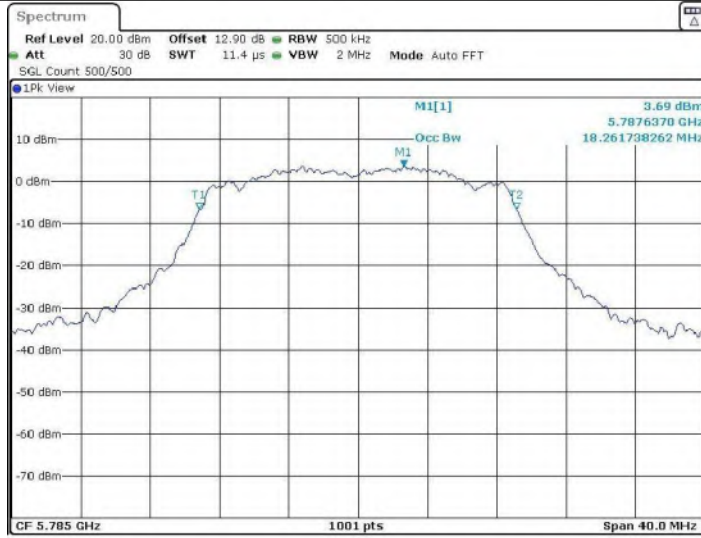
Date: 6 AUG.2022 11:36:18

11AC20SISO_Ant1_5745



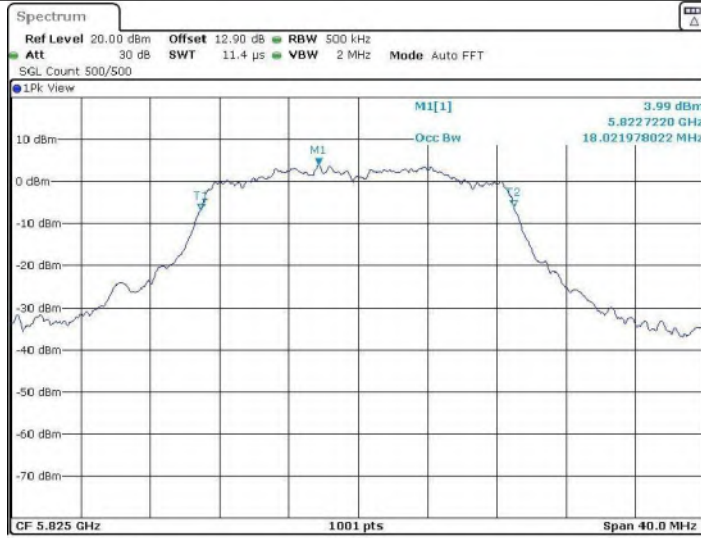
Date: 6 AUG.2022 11:44:09

11AC20SISO_Ant1_5785



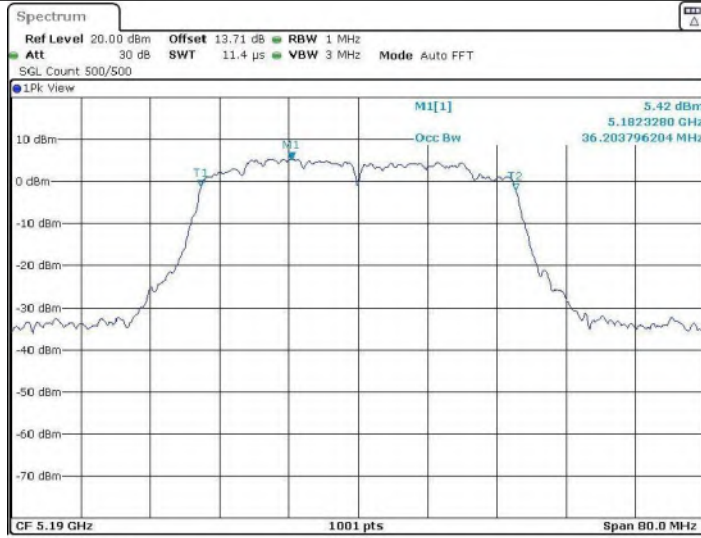
Date: 6 AUG.2022 11:50:51

11AC20SISO_Ant1_5825



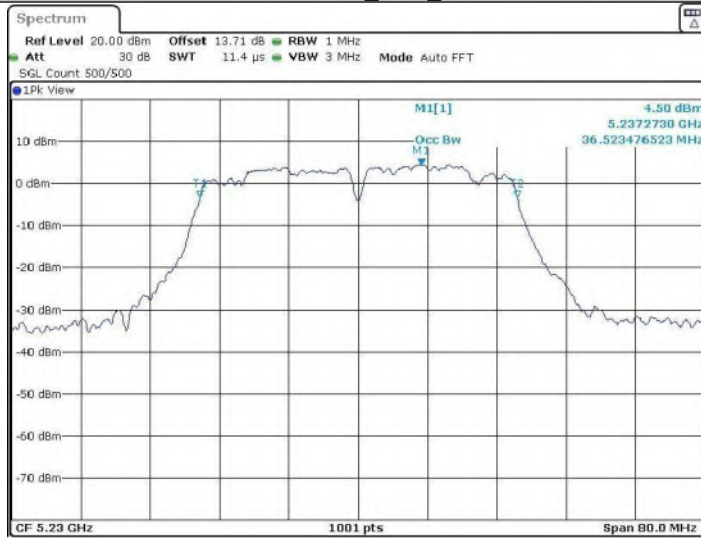
Date: 6 AUG.2022 11:55:37

11AC40SISO_Ant1_5190



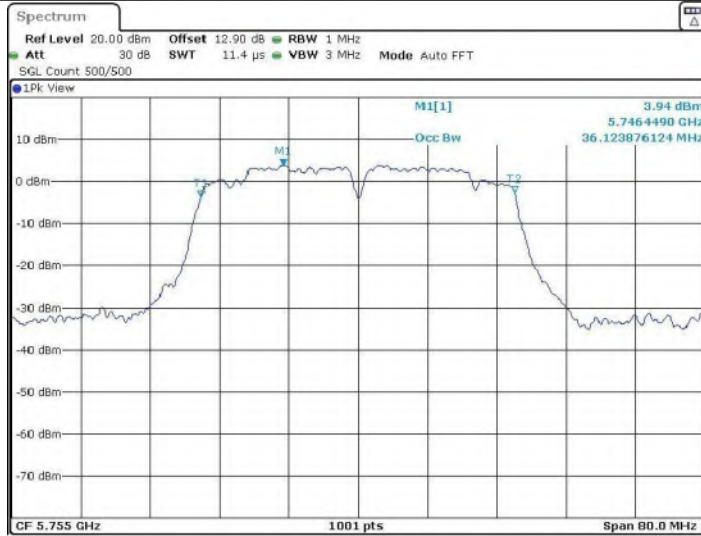
Date: 6 AUG.2022 12:01:01

11AC40SISO_Ant1_5230



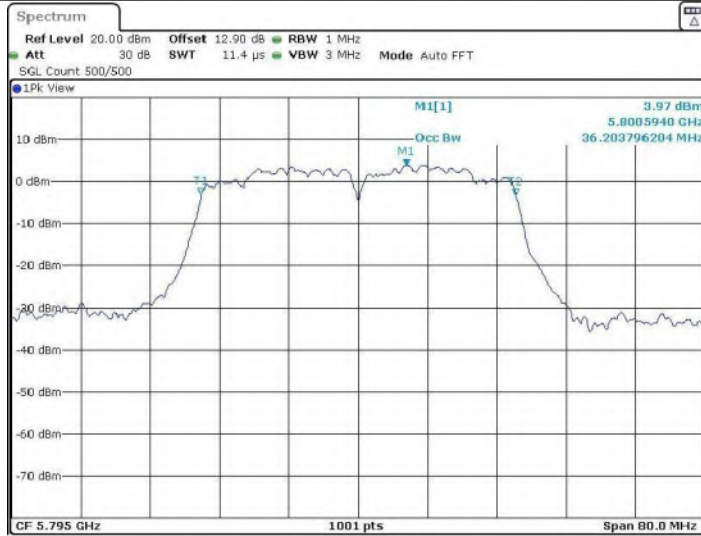
Date: 6 AUG.2022 12:06:28

11AC40SISO_Ant1_5755



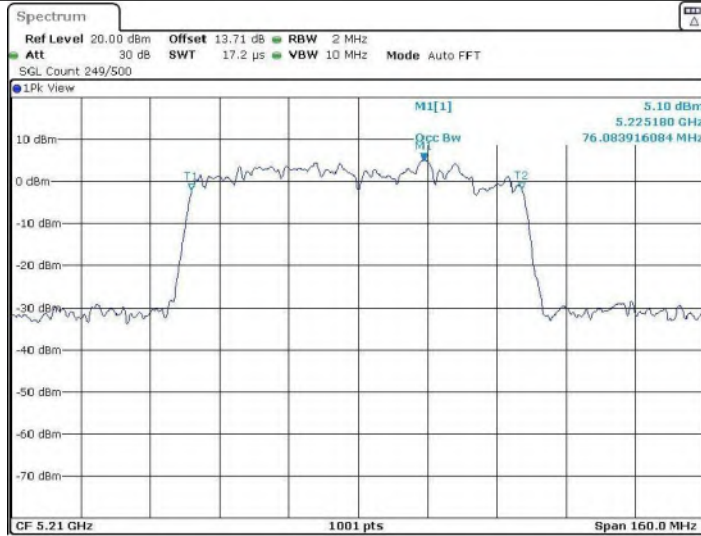
Date: 6 AUG.2022 12:14:11

11AC40SISO_Ant1_5795



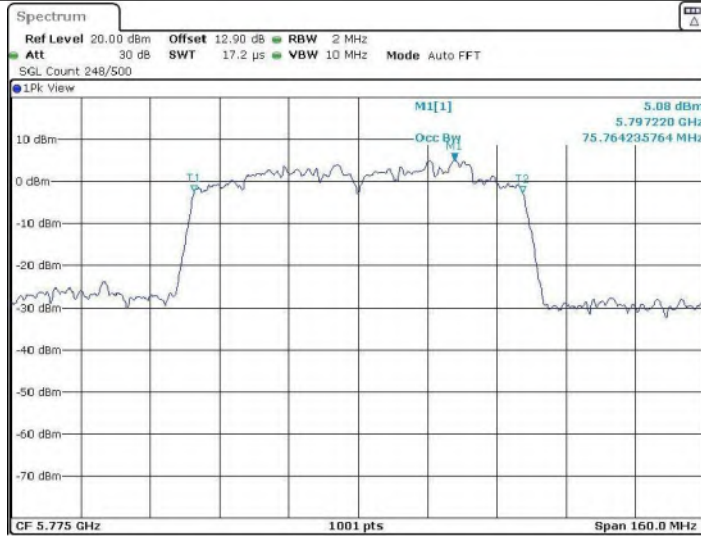
Date: 6 AUG.2022 12:19:59

11AC80SISO_Ant1_5210



Date: 6 AUG.2022 12:25:23

11AC80SISO_Ant1_5775

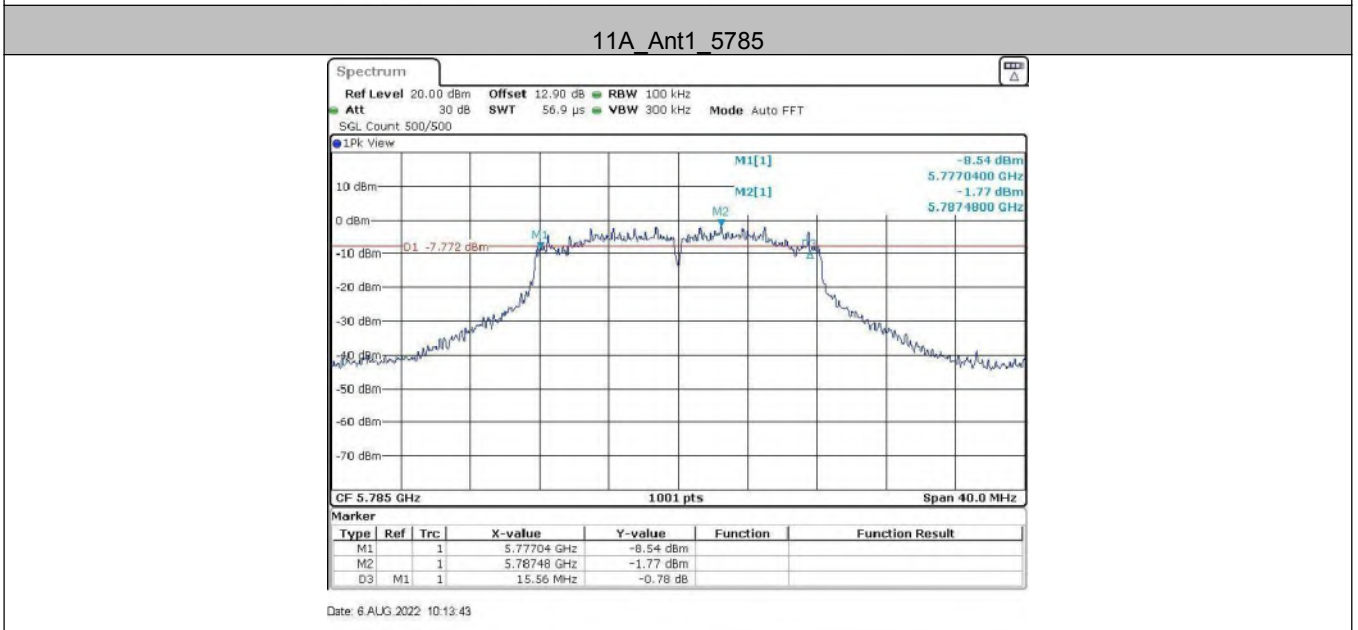


Date: 6 AUG.2022 12:32:34

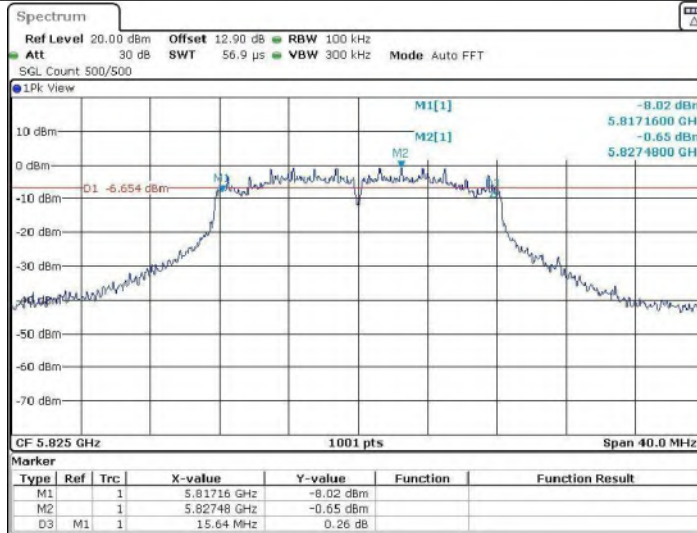
Appendix A3: Min emission bandwidth
Test Result

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.440	5737.360	5752.800	0.5	PASS
		5785	15.560	5777.040	5792.600	0.5	PASS
		5825	15.640	5817.160	5832.800	0.5	PASS
11N20SISO	Ant1	5745	15.160	5737.400	5752.560	0.5	PASS
		5785	15.120	5777.480	5792.600	0.5	PASS
		5825	15.200	5817.400	5832.600	0.5	PASS
11N40SISO	Ant1	5755	35.280	5737.320	5772.600	0.5	PASS
		5795	35.280	5777.320	5812.600	0.5	PASS
11AC20SISO	Ant1	5745	14.520	5738.640	5753.160	0.5	PASS
		5785	16.960	5776.560	5793.520	0.5	PASS
		5825	17.280	5816.160	5833.440	0.5	PASS
11AC40SISO	Ant1	5755	35.280	5737.320	5772.600	0.5	PASS
		5795	35.280	5777.320	5812.600	0.5	PASS
11AC80SISO	Ant1	5775	75.520	5737.240	5812.760	0.5	PASS

Test Graphs

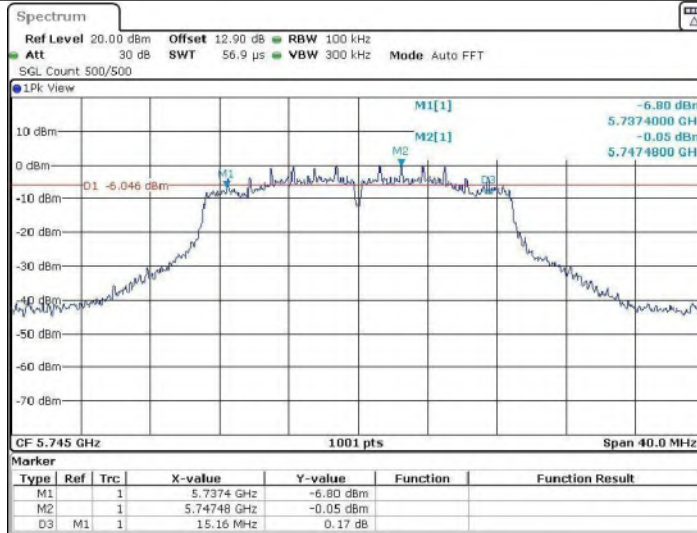


11A_Ant1_5825



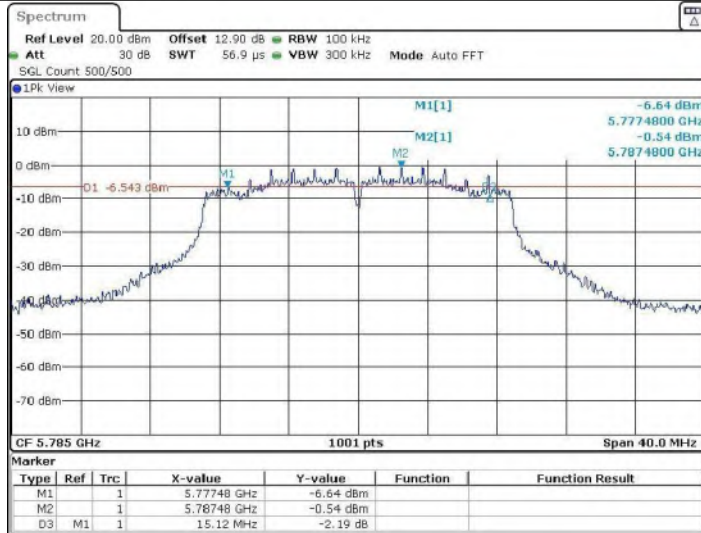
Date: 6 AUG 2022 10:19:45

11N20SISO_Ant1_5745



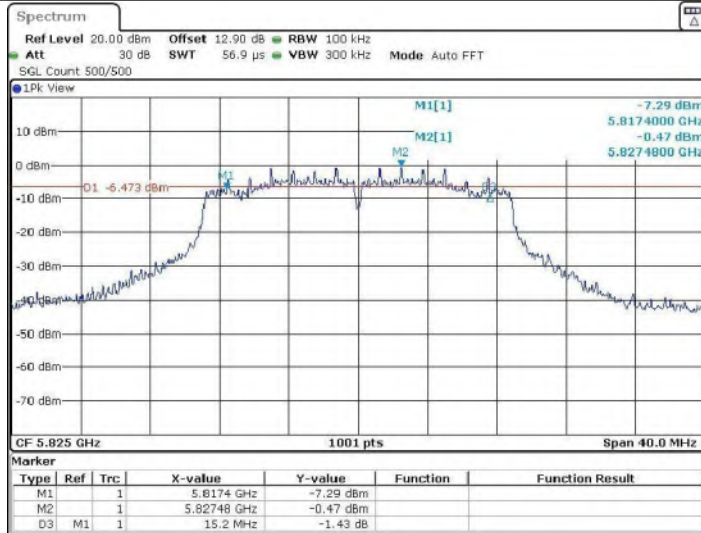
Date: 6 AUG 2022 10:42:10

11N20SISO_Ant1_5785



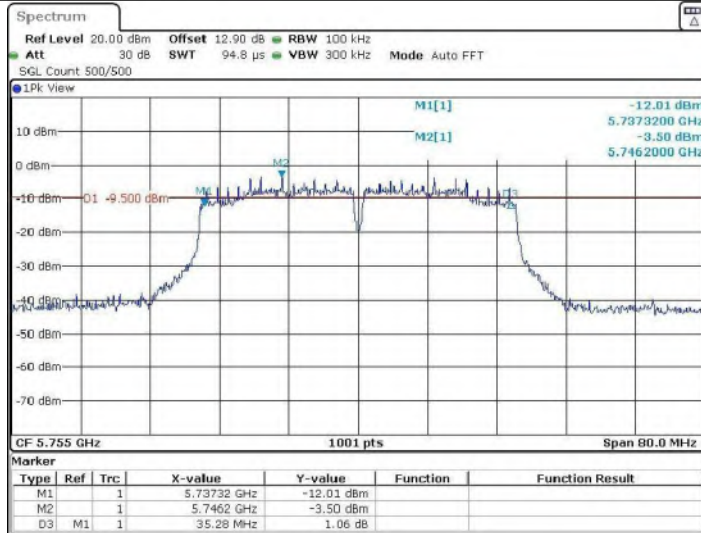
Date: 6 AUG 2022 10:48:21

11N20SISO_Ant1_5825



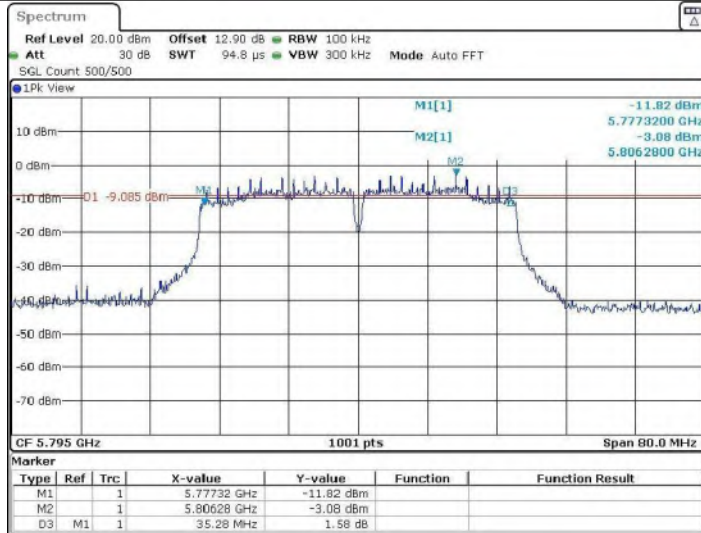
Date: 6 AUG 2022 10:52:56

11N40SISO_Ant1_5755



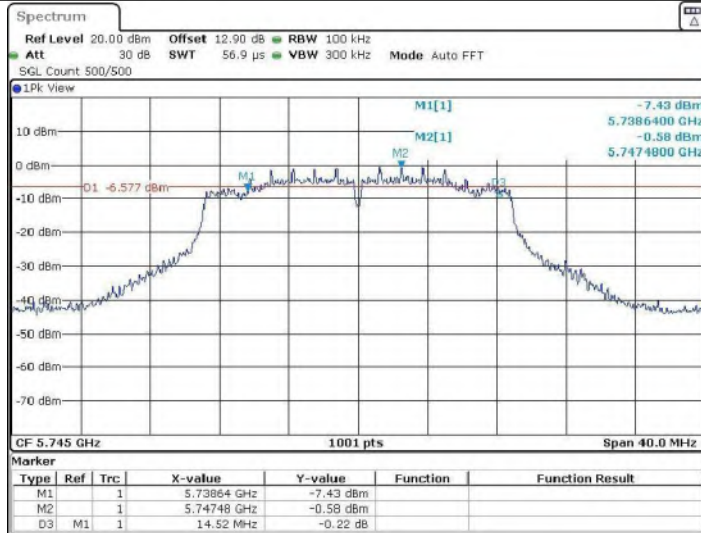
Date: 6 AUG.2022 11:14:14

11N40SISO_Ant1_5795



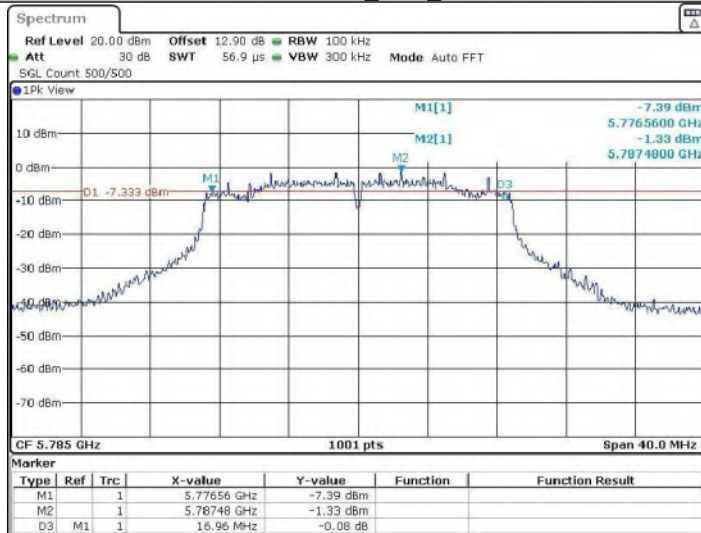
Date: 6 AUG.2022 11:21:22

11AC20SISO_Ant1_5745



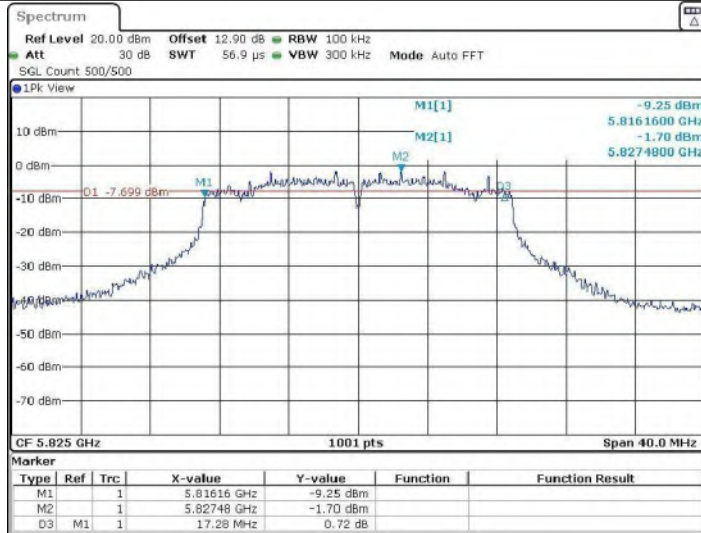
Date: 6 AUG 2022 11:43:59

11AC20SISO_Ant1_5785



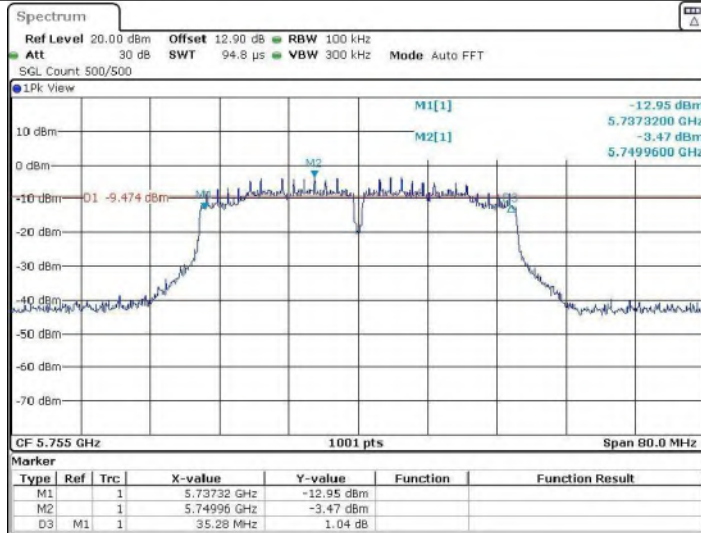
Date: 6 AUG 2022 11:50:40

11AC20SISO_Ant1_5825



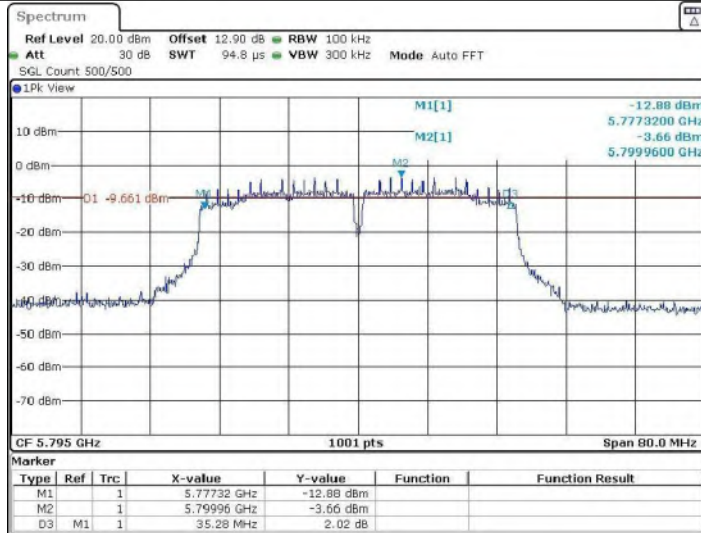
Date: 6 AUG 2022 11:55:27

11AC40SISO_Ant1_5755



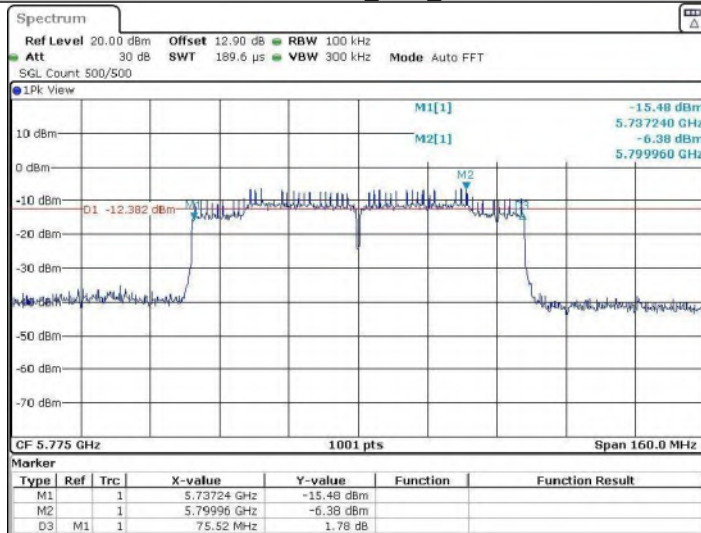
Date: 6 AUG 2022 12:14:01

11AC40SISO_Ant1_5795



Date: 6 AUG 2022 12:19:48

11AC80SISO_Ant1_5775



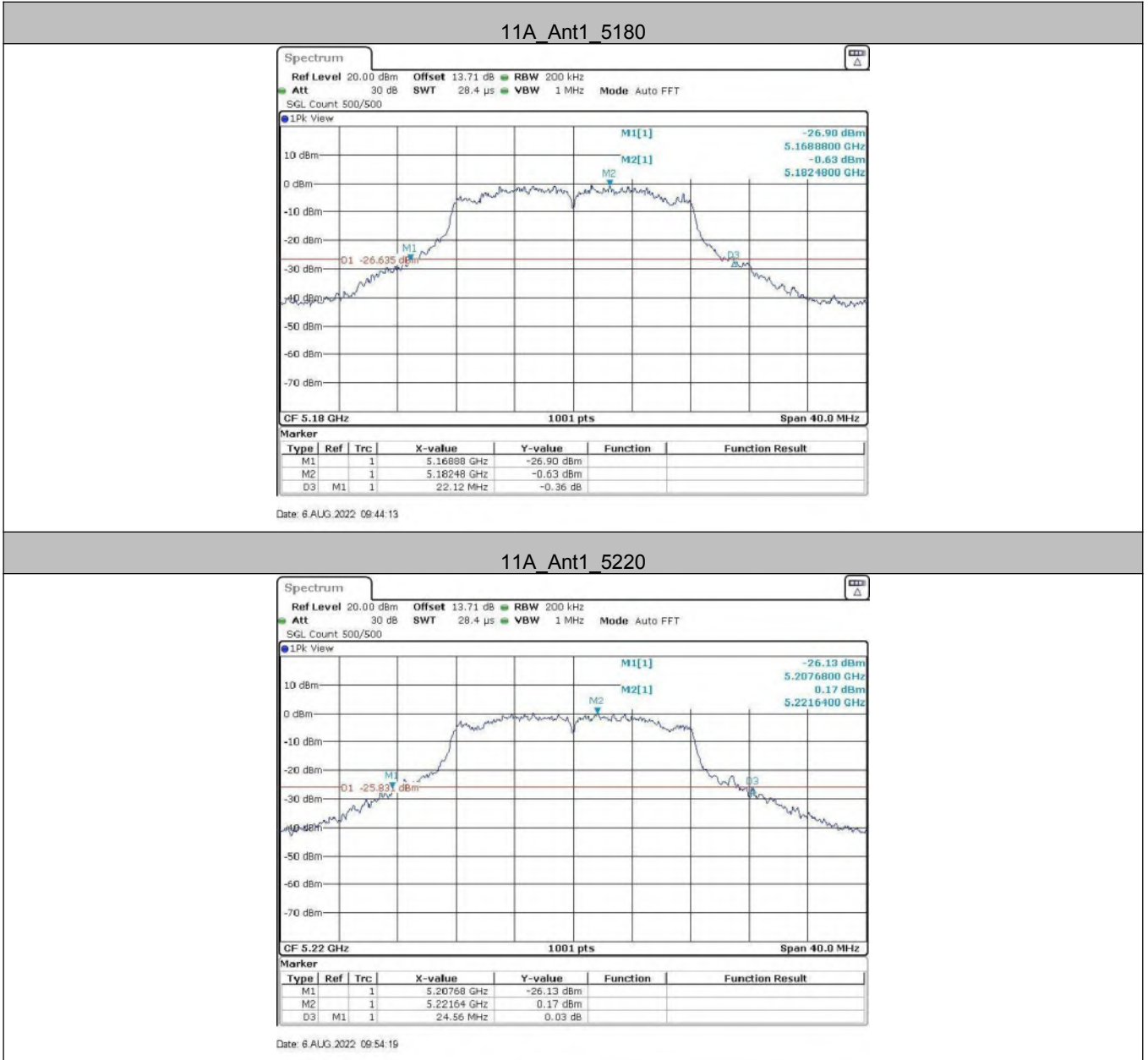
Date: 6 AUG 2022 12:32:24

ANT2
Appendix A1: Emission Bandwidth

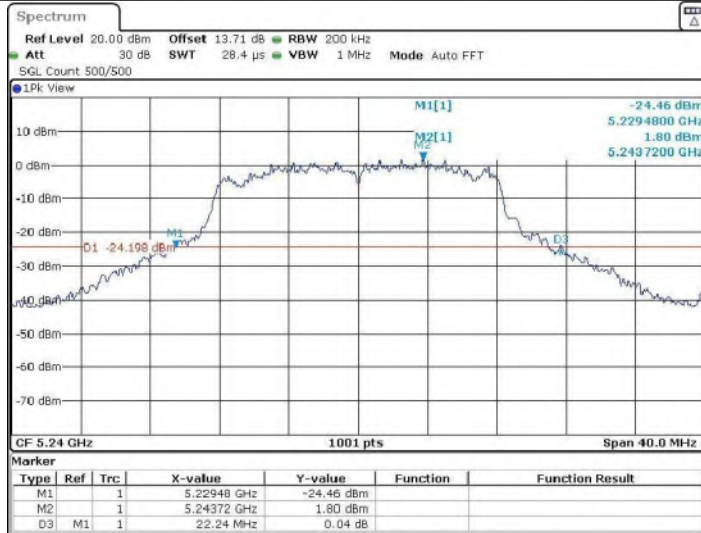
Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	22.120	5168.880	5191.000	---	PASS
		5220	24.560	5207.680	5232.240	---	PASS
		5240	22.240	5229.480	5251.720	---	PASS
		5745	21.520	5734.680	5756.200	---	PASS
		5785	23.240	5773.400	5796.640	---	PASS
		5825	22.120	5813.640	5835.760	---	PASS
11N20SISO	Ant1	5180	22.440	5168.920	5191.360	---	PASS
		5220	23.400	5208.000	5231.400	---	PASS
		5240	22.720	5228.920	5251.640	---	PASS
		5745	22.120	5734.440	5756.560	---	PASS
		5785	21.920	5774.040	5795.960	---	PASS
		5825	21.440	5814.480	5835.920	---	PASS
11N40SISO	Ant1	5190	43.360	5167.360	5210.720	---	PASS
		5230	45.280	5207.440	5252.720	---	PASS
		5755	42.000	5734.200	5776.200	---	PASS
		5795	41.760	5774.360	5816.120	---	PASS
11AC20SISO	Ant1	5180	22.000	5168.680	5190.680	---	PASS
		5220	23.360	5207.640	5231.000	---	PASS
		5240	21.960	5229.360	5251.320	---	PASS
		5745	23.200	5733.600	5756.800	---	PASS
		5785	21.720	5774.000	5795.720	---	PASS
		5825	22.520	5813.760	5836.280	---	PASS
11AC40SISO	Ant1	5190	43.440	5167.680	5211.120	---	PASS
		5230	44.560	5207.760	5252.320	---	PASS
		5755	41.920	5733.800	5775.720	---	PASS
		5795	42.080	5774.040	5816.120	---	PASS
11AC80SISO	Ant1	5210	81.760	5169.040	5250.800	---	PASS
		5775	80.960	5735.000	5815.960	---	PASS

Test Graphs



11A_Ant1_5240



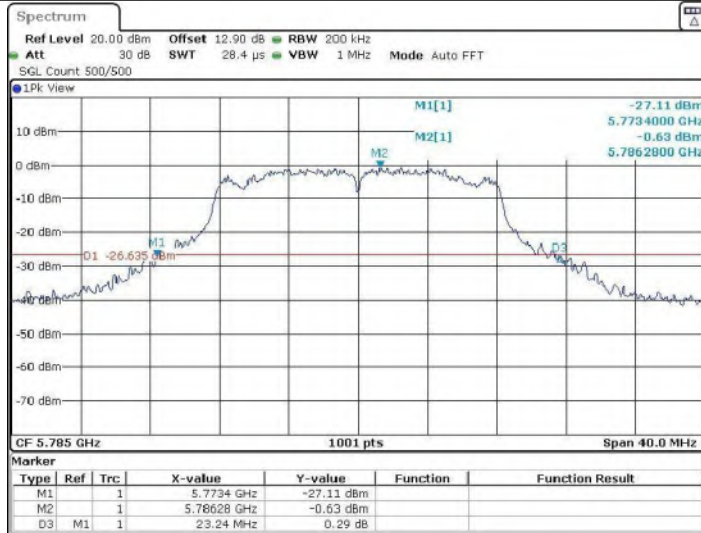
Date: 6 AUG.2022 10:00:06

11A_Ant1_5745



Date: 6 AUG.2022 10:06:46

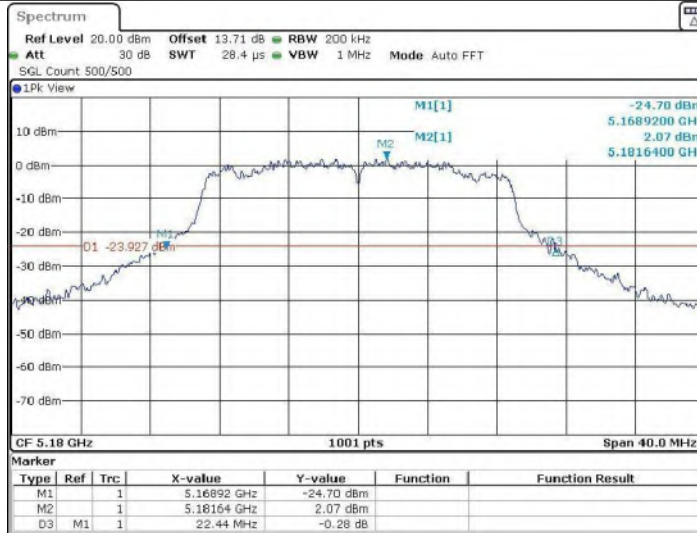
11A_Ant1_5785



11A_Ant1_5825

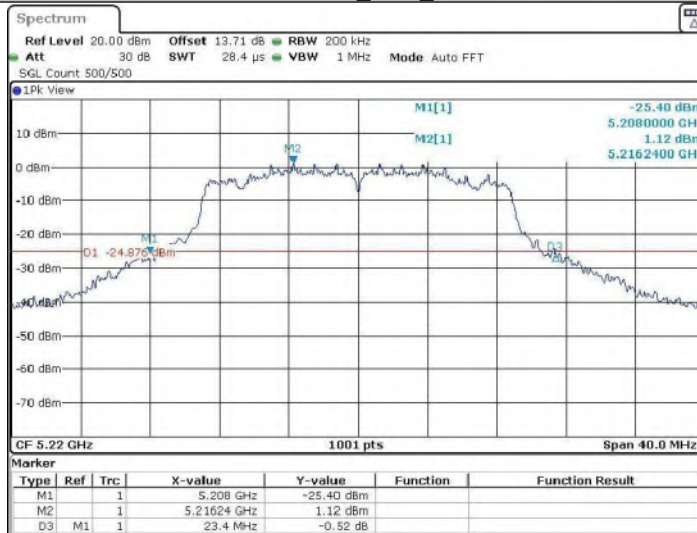


11N20SISO_Ant1_5180



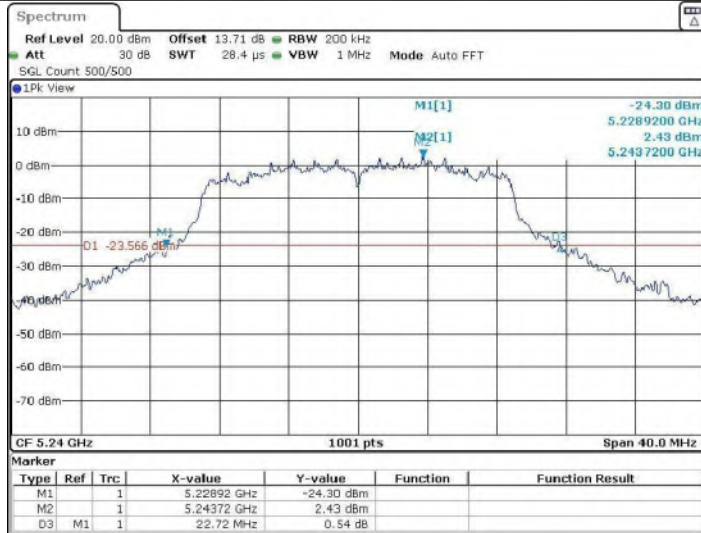
Date: 6 AUG.2022 10:25:43

11N20SISO_Ant1_5220



Date: 6 AUG.2022 10:31:30

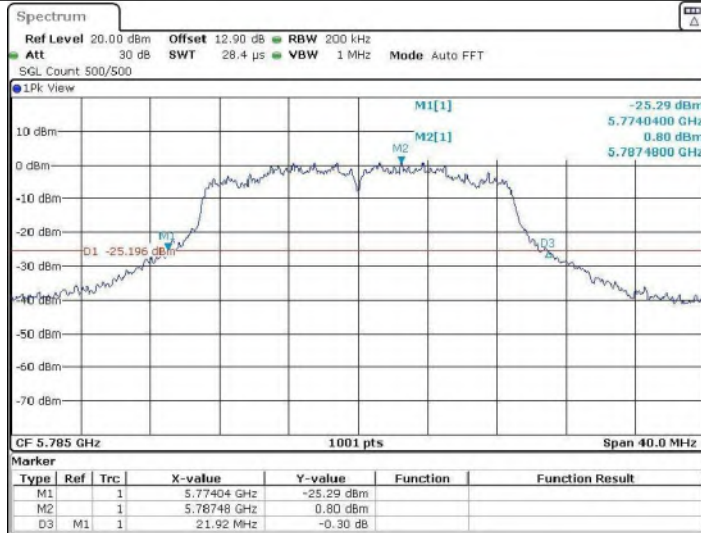
11N20SISO_Ant1_5240



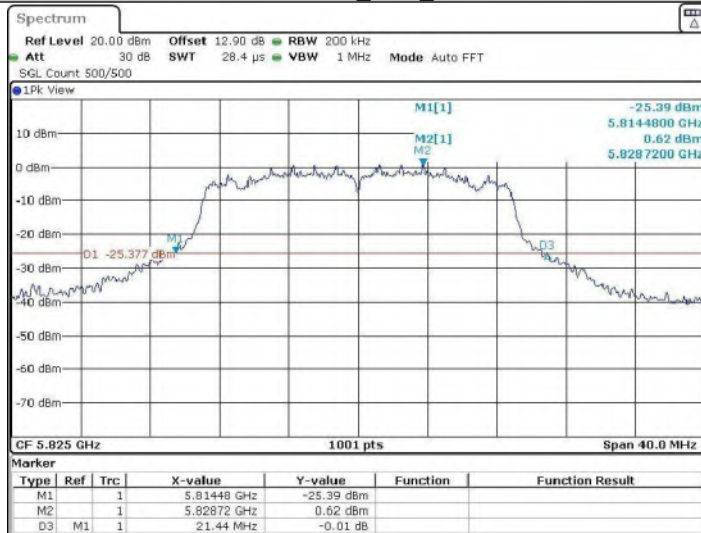
11N20SISO_Ant1_5745



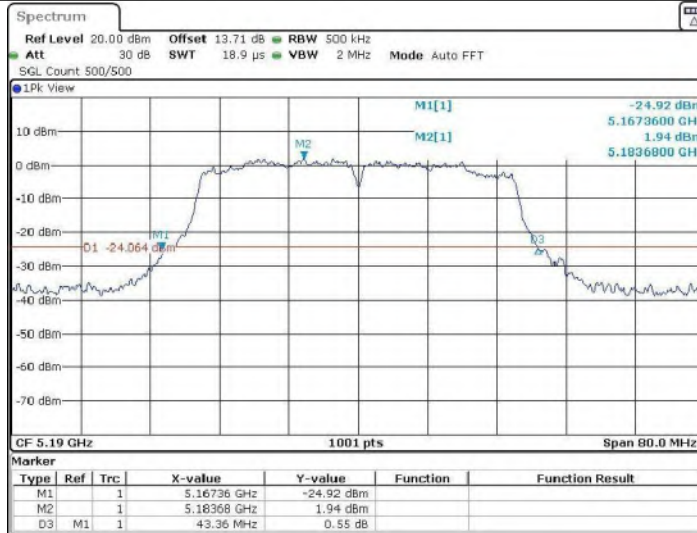
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825

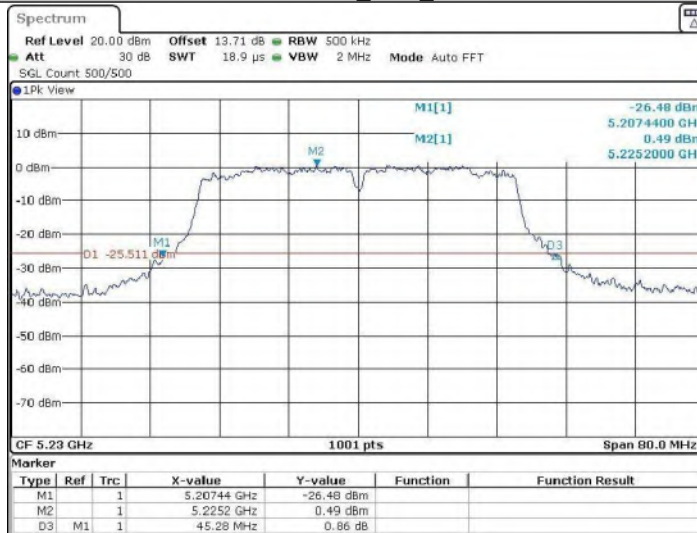


11N40SISO_Ant1_5190



Date: 6 AUG.2022 10:58:54

11N40SISO_Ant1_5230



Date: 6 AUG.2022 11:04:33