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Report Template Version: V04
Report Template Revision Date: 2018-07-06

Test Report

Report No. :	CQASZ20191101241E-02
Applicant:	Winstars Technology Limited
Address of Applicant:	Block 4, Taisong Industrial Park, Dalang Street, Longhua Town, Bao'an District, Shenzhen, China
Equipment Under Test (EUT):	
Product:	Wireless Repeater
Model No.:	WS-WN575A2, WL-WN575A2, WS-WN575A3, WL-WN575A3, WS-WN575A4, WL-WN575A4, WS-WN575A5, WL-WN575A5, WS-WN575B5, WL-WN575B5, WS-WN578R2, WL-WN578R2, WS-WN578HR2, WL-WN578HR2, WS-WN578S2, WL-WN578S2, WS-WN579G3, WL-WN579G3, WS-WN579X3, WL-WN579X3, AERIAL X, AERIAL MAX, AERIAL S2, AERIAL S2H, AERIAL S2Q, AERIAL S2M
Test Model No.:	WL-WN575A3
Brand Name:	N/A
FCC ID:	NZ3-WN0001
Standards:	47 CFR Part 15, Subpart E
	KDB 789033 D02 General UNII Test Procedures New Rules v02
	KDB 558074 D01 Meas Guidance v05
Date of Receipt:	2019-11-29
Date of Test:	2019-11-29 to 2019-12-31
Date of Issue:	2019-12-31
Test Result :	**PASS***

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

Tested By : Tom chen.

(Tom chen)

Reviewed By: Aaron Ma

(Aaron Ma)

Approved By: Jack Ai

(Jack Ai)

SHENZHEN HUAXIA TESTING TECHNOLOGY CO. LTD APPROVED

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20191101241E-02	Rev.01	Initial report	2019-12-31

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	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Subpart E Section 15.407 (b)(6)	ANSI C63.10-2013	PASS
Conducted Output Power and transmit power control mechanism	47 CFR Part 15 Subpart E Section 15.407 (a)(1)(2)(4)(h)(1)	ANSI C63.10-2013	PASS
Emission Bandwidth	47 CFR Part 15 Subpart E Section 15.407 (a)(1)(2)	ANSI C63.10-2013	PASS
Peak Power Spectral Density	47 CFR Part 15 Subpart E Section 15.407 (a)(1)(2)(5)	ANSI C63.10-2013	PASS
Frequency stability	47 CFR Part 15 Subpart E Section 15.407 (g)	ANSI C63.10-2013	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)(1)(2)(3)(5)(6)(7)(8)	ANSI C63.10-2013	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15 Subpart E Section 15.407 (b)(6)(7)(8)	ANSI C63.10-2013	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

Model No.: WS-WN575A2,WL-WN575A2,WS-WN575A3,WL-WN575A3,WS-WN575A4,WL-WN575A4, WS-WN575A5,WL-WN575A5,WS-WN575B5,WL-WN575B5,WS-WN578R2,WL-WN578R2, WS-WN578HR2,WL-WN578HR2,WS-WN578S2,WL-WN578S2,WS-WN579G3,WL-WN579G3, WS-WN579X3,WL-WN579X3,AERIAL X,AERIAL MAX,AERIAL S2,AERIAL S2H,AERIAL S2Q, AERIAL S2M

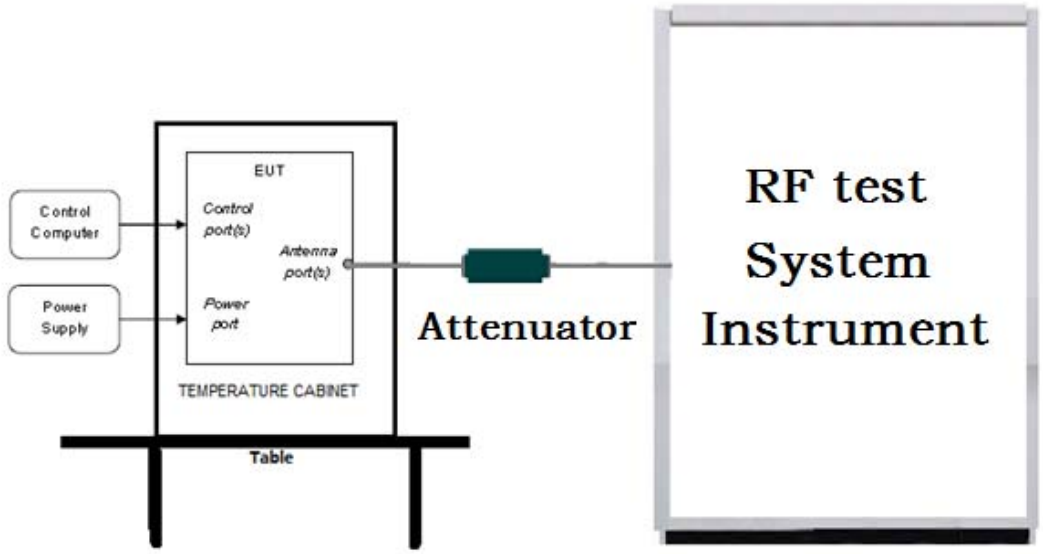
Only the model WL-WN575A3 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being color of appearance and model name.

3 Content

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:

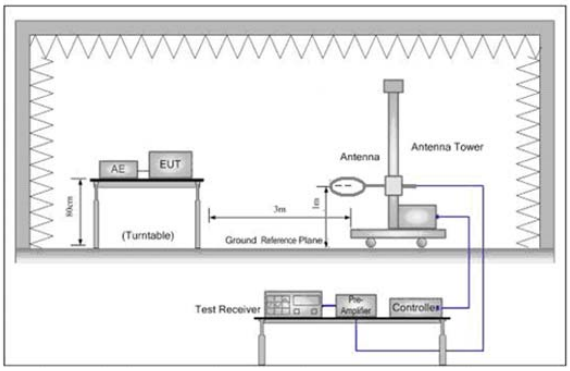


Figure 1. Below 30MHz

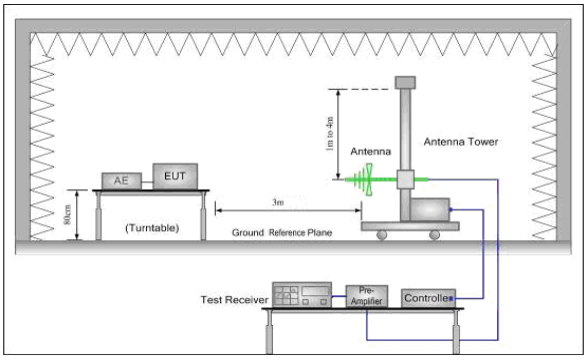


Figure 2. 30MHz to 1GHz

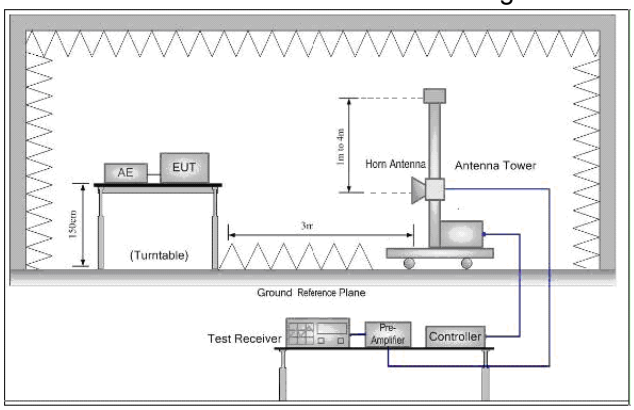
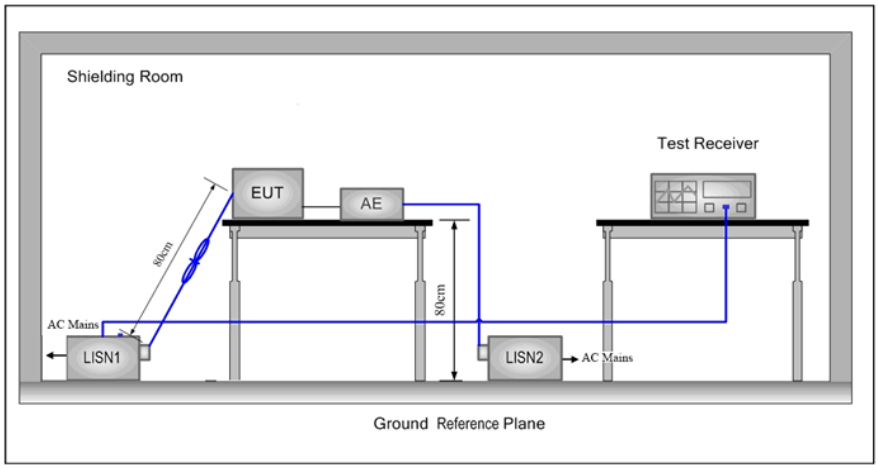


Figure 3. Above 1GHz

4.1.3 For Conducted Emissions test setup

Conducted Emissions setup



4.2 Test Environment

Operating Environment:		
Radiated Emissions:		
Temperature:	23.3 °C	
Humidity:	48 % RH	
Atmospheric Pressure:	1015 mbar	
Conducted Emissions:		
Temperature:	23.8 °C	
Humidity:	36 % RH	
Atmospheric Pressure:	1015 mbar	
Radio conducted item test (RF Conducted test room):		
Humidity:	42 % RH	
Atmospheric Pressure:	1015 mbar	
Test Condition	Temperature (°C)	Voltage (V)
TN/VN	+15 to +35	120
TL/VL	-20	108
TH/VL	50	108
TL/VH	-20	132
TH/VH	50	132

Remark:

1)The EUT just work in such extreme temperature of -20 °C to 50 °C and the extreme voltage of 108 V to 132 V, so here the EUT is tested in the temperature of -20 °C to 50 °C and the voltage of 108 V to 132 V.

2VN: Normal Voltage; TN: Normal Temperature;

TL: Low Extreme Test Temperature; TH: High Extreme Test Temperature;

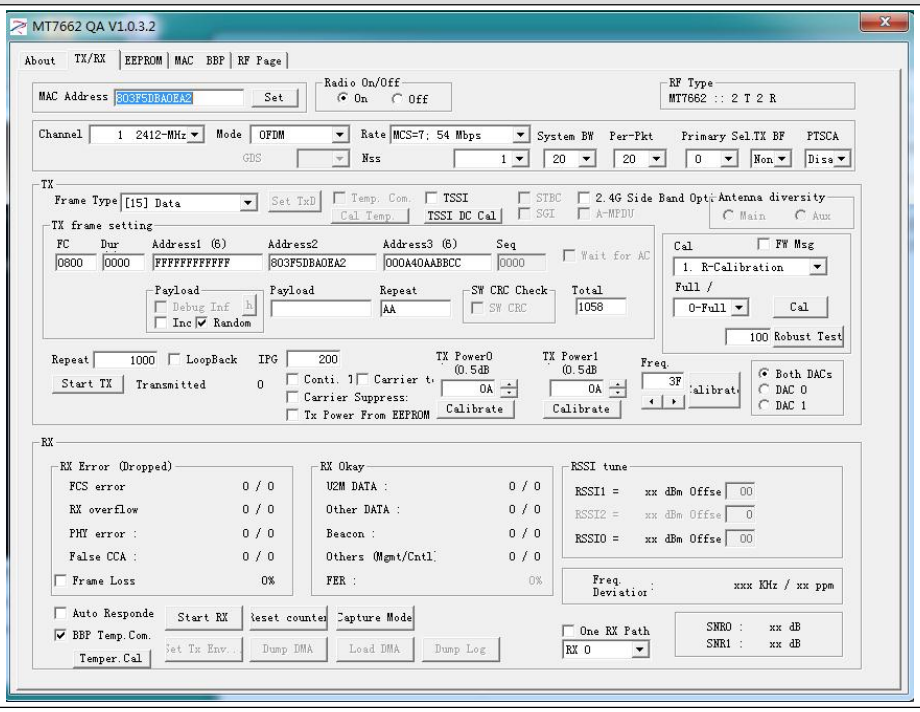
VL: Low Extreme Test Voltage; VH: High Extreme Test Voltage.

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	5200MHz	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

Run Software:



Test mode:

Pre-scan under all rate at lowest channel for Ant1 and Ant2

Through Pre-scan, 6Mbps is the worst case of 802.11a (20M) for 5150MHz ~5250 MHz;MCS0 is the worst case of 802.11n (20M) for 5150MHz ~5250 MHz;MCS0 is the worst case of 802.11ac (20M) for 5150MHz ~5250 MH;MCS0 is the worst case of 802.11n(40M) for 5150MHz ~5250 MHz;MCS0 is the worst case of 802.11ac (40M) for 5150MHz ~5250 MHz;MCS0 is the worst case of 802.11ac(80M)for 5150MHz ~5250 MHz; 6Mbps is the worst case of 802.11a (20M) for 5725MHz ~5850 MHz;MCS0 is the worst case of 802.11n (20M) for 5725MHz ~5850 MH;MCS0 is the worst case of 802.11ac (20M) for 5725MHz ~5850 MHz;MCS0 is the worst case of 802.11n (40M) for 5725MHz ~5850 MHz;MCS0 is the worst case of 802.11ac (40M) for 5725MHz ~5850 MHz;MCS0 is the worst case of 802.11ac(80M)for 5725MHz ~5850 MHz.

5 General Information

5.1 Client Information

Applicant:	Winstars Technology Limited
Address of Applicant:	Block 4, Taisong Industrial Park, Dalang Street, Longhua Town, Bao'an District, Shenzhen, China
Manufacturer:	Winstars Technology Limited
Address of Manufacturer:	Block 4, Taisong Industrial Park, Dalang Street, Longhua Town, Bao'an District, Shenzhen, China

5.2 General Description of EUT

Product Name:	Wireless Repeater
Model No.:	WS-WN575A2, WL-WN575A2, WS-WN575A3, WL-WN575A3, WS-WN575A4, WL-WN575A4, WS-WN575A5, WL-WN575A5, WS-WN575B5, WL-WN575B5, WS-WN578R2, WL-WN578R2, WS-WN578HR2, WL-WN578HR2, WS-WN578S2, WL-WN578S2, WS-WN579G3, WL-WN579G3, WS-WN579X3, WL-WN579X3, AERIAL X, AERIAL MAX, AERIAL S2, AERIAL S2H, AERIAL S2Q, AERIAL S2M
Test Model No.:	WL-WN575A3
Trade Mark:	N/A
Power Supply:	100-240V 50/60Hz

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
Channel Separation:	IEEE 802.11a/n-HT20/ac-VHT20: 20 MHz IEEE 802.11n-HT40/ac-VHT40: 40 MHz IEEE 802.11ac-VHT80/: 80 MHz
Type of Modulation:	OFDM
Sample Type:	☐ Mobile ☐ Portable ☒ Fix Location
Hardware version:	WS-WN575A3-A V1.3
Software version:	RPT75A3.V4300.180801
Test Software of EUT:	MT7662 QA V1.0.3.2 (manufacturer declare)
Antenna Type:	Omni Directional Antenna
Antenna gain:	ANT1: 3.0dBi
	ANT2: 3.0dBi

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	5200MHz	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	NA	NA
42	5210MHz	NA	NA
For 802.11ac(80M) Operation in the 5725MHz ~5850 MHz band			
Channel	Frequency	NA	NA
155	5775MHz	NA	NA

5.4 Description of Support Units

The EUT has been tested with associated equipment below.

1）Support equipment

Description	Manufacturer	Model No.	Remark	FCC certification
PC	Lenovo	ThinkPad E450c	FCC ID and DOC	CQA

2) Cable

Cable No.	Description	Manufacturer	Cable Type/Length	Supplied by
/	/	/	/	/

5.5 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

5.6 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

5.7 Deviation from Standards

None.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.

5.10 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 Equipment List

Test Equipment	Manufacturer	Model No.	Instrument No.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR7	CQA-005	2019/10/25	2020/10/24
Spectrum analyzer	R&S	FSU26	CQA-038	2019/10/25	2020/10/24
Spectrum analyzer	R&S	FSV40	CQA-075	2019/6/11	2020/6/10
Preamplifier	MITEQ	AFS4-00010300-18-10P-4	4012339	2019/10/25	2020/10/24
Preamplifier	MITEQ	AMF-6D-02001800-29-20P	CQA-036	2019/10/25	2020/10/24
Preamplifier	EMCI	EMC184055SE	CQA-089	2019/9/25	2020/9/24
Loop antenna	Schwarzbeck	FMZB1516	CQA-060	2019/10/21	2020/10/20
Bilog Antenna	R&S	HL562	CQA-011	2019/9/26	2020/9/25
Horn Antenna	R&S	HF906	CQA-012	2019/9/26	2020/9/25
Horn Antenna	Schwarzbeck	BBHA 9170	CQA-088	2019/9/25	2020/9/24
Coaxial Cable (Above 1GHz)	CQA	N/A	C007	2019/9/26	2020/9/25
Coaxial Cable (Below 1GHz)	CQA	N/A	C013	2019/9/26	2020/9/25
Antenna Connector	CQA	RFC-01	CQA-080	2019/9/26	2020/9/25
Power Sensor	KEYSIGHT	U2021XA	CQA-30	2019/9/26	2020/9/25
N1918A Power Analysis Manager Power Panel	Agilent	N1918A	CQA-074	2019/9/26	2020/9/25
Power divider	MIDWEST	PWD-2533-02-SMA-79	CQA-067	2019/9/26	2020/9/25
EMI Test Receiver	R&S	ESR7	CQA-005	2019/10/25	2020/10/24
LISN	R&S	ENV216	CQA-003	2019/10/23	2020/10/22
Coaxial cable	CQA	N/A	CQA-C009	2019/9/26	2020/9/25
high-low temperature chamber	Auchno	OJN-9606	CQA-S003	2019/9/25	2020/9/24
DC power	KEYSIGHT	E3631A	CQA-028	2019/9/26	2020/9/25

7 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title
1	47 CFR Part 15, Subpart E	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

Test Results List:

Test Requirement	Test method	Test item	Verdict	Note
Part15E Section 15.407 (a)(1)(2)	KDB789033	Emission Bandwidth and Occupied Bandwidth	PASS	Appendix A)
Part15E Section 15.407 (a)(1)(2)(4)(h)(1)	KDB789033 / KDB 662911	Conducted Output Power and transmit power control mechanism	PASS	Appendix B)
Part15E Section 15.407 (a)(1)(2)(5)	KDB789033 / KDB 662911	Power Spectral Density	PASS	Appendix C)
Part15E Section 15.407 (g)	KDB789033	Frequency stability	PASS	Appendix D)
Part15C Section 15.203	ANSI C63.10	Antenna Requirement	PASS	Appendix E)
Part15E Section 15.407 (c)	Section 15.407	Operation in the absence of information to the transmit	PASS	Appendix F)
Part15E Section 15.407 (b)(6)	ANSI C63.10	AC Power Line Conducted Emission	PASS	Appendix G)
Part15E Section 15.407 (b)(6)(7)(8)	KDB789033	Restricted bands around fundamental frequency(Radiated Emission)	PASS	Appendix H)
Part15E Section 15.407 (b)(1)(2)(3)(5)(6)(7)(8)	KDB789033	Radiated Spurious Emissions	PASS	Appendix I)

Appendix A): Emission Bandwidth

26dB emission Bandwidth:

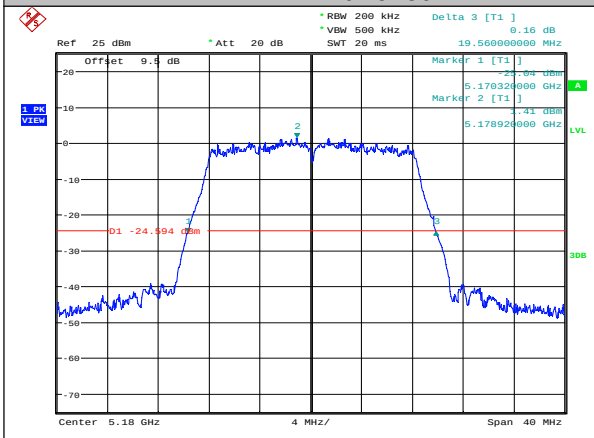
Measurement Data

Test Mode	Test Channel	Ant	EBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant1	19.560	---	PASS
11A	5180	Ant2	19.600	---	PASS
11A	5200	Ant1	19.560	---	PASS
11A	5200	Ant2	19.840	---	PASS
11A	5240	Ant1	19.680	---	PASS
11A	5240	Ant2	19.680	---	PASS
11N20SISO	5180	Ant1	20.080	---	PASS
11N20SISO	5180	Ant2	20.080	---	PASS
11N20SISO	5200	Ant1	20.120	---	PASS
11N20SISO	5200	Ant2	20.080	---	PASS
11N20SISO	5240	Ant1	20.080	---	PASS
11N20SISO	5240	Ant2	20.080	---	PASS
11N40SISO	5190	Ant1	40.640	---	PASS
11N40SISO	5190	Ant2	40.640	---	PASS
11N40SISO	5230	Ant1	41.040	---	PASS
11N40SISO	5230	Ant2	41.200	---	PASS
11AC20SISO	5180	Ant1	20.160	---	PASS
11AC20SISO	5180	Ant2	20.080	---	PASS
11AC20SISO	5200	Ant1	20.320	---	PASS
11AC20SISO	5200	Ant2	20.160	---	PASS
11AC20SISO	5240	Ant1	20.160	---	PASS
11AC20SISO	5240	Ant2	20.120	---	PASS
11AC40SISO	5190	Ant1	41.040	---	PASS
11AC40SISO	5190	Ant2	40.720	---	PASS
11AC40SISO	5230	Ant1	41.040	---	PASS
11AC40SISO	5230	Ant2	40.880	---	PASS

11AC80SISO	5210	Ant1	81.760	---	PASS
11AC80SISO	5210	Ant2	82.240	---	PASS
11N20MIMO	5180	Ant1	20.160	---	PASS
11N20MIMO	5180	Ant2	20.160	---	PASS
11N20MIMO	5200	Ant1	20.120	---	PASS
11N20MIMO	5200	Ant2	20.120	---	PASS
11N20MIMO	5240	Ant1	20.080	---	PASS
11N20MIMO	5240	Ant2	20.080	---	PASS
11N40MIMO	5190	Ant1	40.720	---	PASS
11N40MIMO	5190	Ant2	40.800	---	PASS
11N40MIMO	5230	Ant1	40.880	---	PASS
11N40MIMO	5230	Ant2	40.800	---	PASS
11AC20MIMO	5180	Ant1	20.160	---	PASS
11AC20MIMO	5180	Ant2	20.040	---	PASS
11AC20MIMO	5200	Ant1	20.120	---	PASS
11AC20MIMO	5200	Ant2	20.200	---	PASS
11AC20MIMO	5240	Ant1	20.040	---	PASS
11AC20MIMO	5240	Ant2	20.080	---	PASS
11AC40MIMO	5190	Ant1	40.720	---	PASS
11AC40MIMO	5190	Ant2	40.320	---	PASS
11AC40MIMO	5230	Ant1	40.960	---	PASS
11AC40MIMO	5230	Ant2	41.280	---	PASS
11AC80MIMO	5210	Ant1	81.920	---	PASS
11AC80MIMO	5210	Ant2	82.080	---	PASS

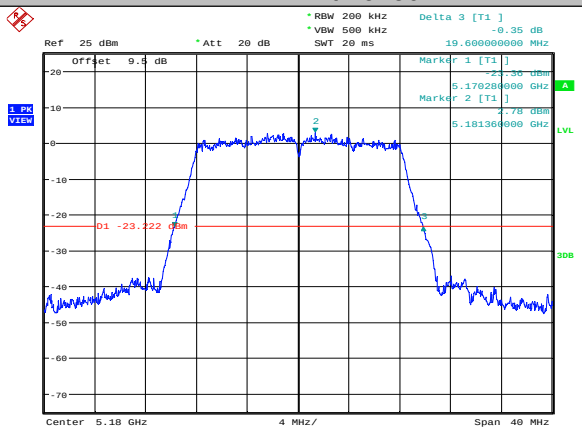
Test plot as follows:

11A-Ant1-5180



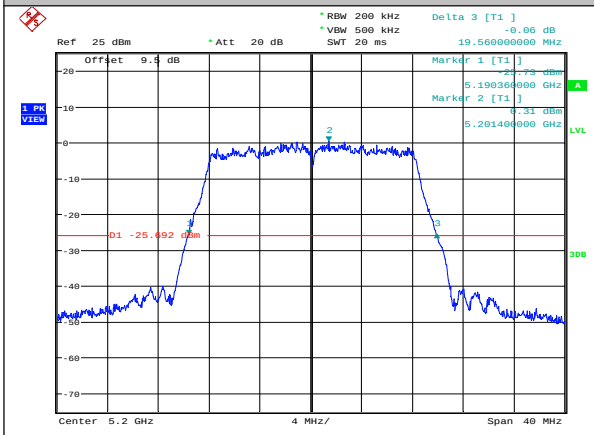
Date: 6.DEC.2019 17:54:28

11A-Ant2-5180



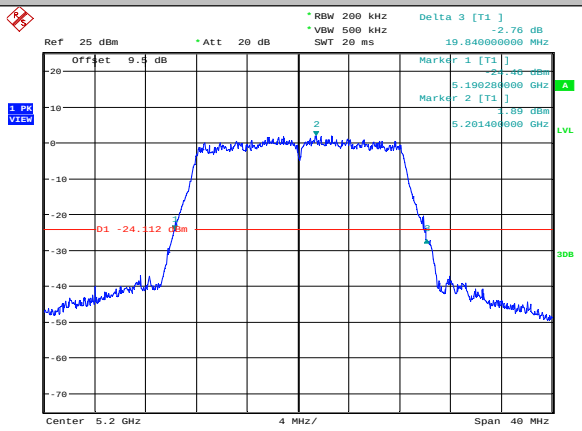
Date: 9.DEC.2019 10:38:35

11A-Ant1-5200



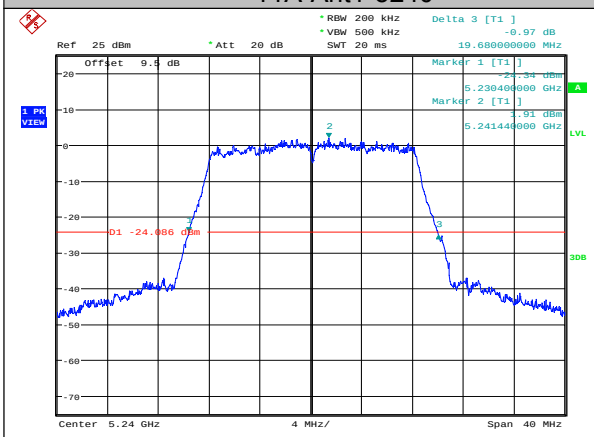
Date: 6.DEC.2019 18:00:06

11A-Ant2-5200



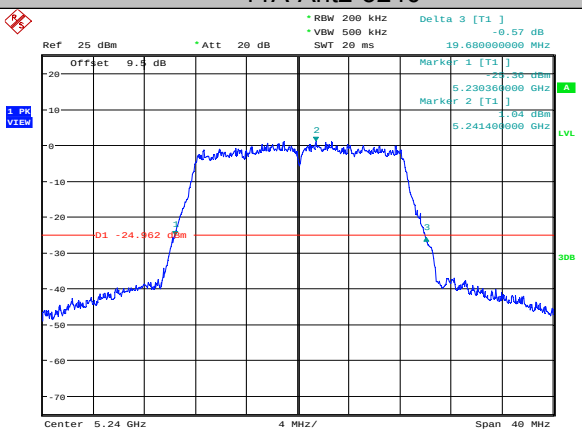
Date: 9.DEC.2019 10:46:45

11A-Ant1-5240



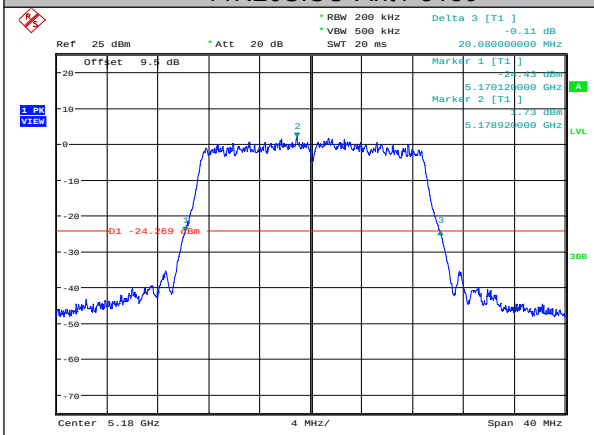
Date: 6.DEC.2019 18:07:51

11A-Ant2-5240



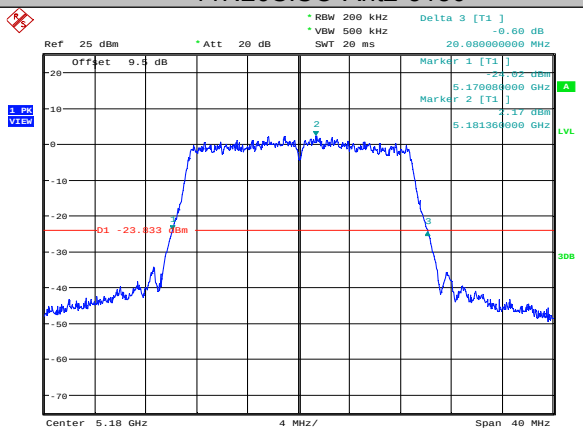
Date: 9.DEC.2019 10:54:29

11N20SISO-Ant1-5180



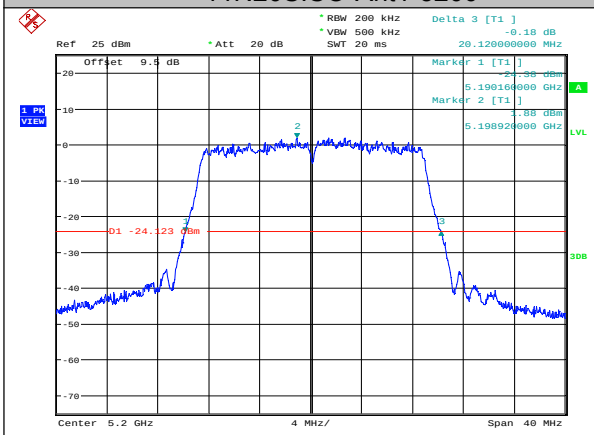
Date: 6.DEC.2019 18:28:12

11N20SISO-Ant2-5180



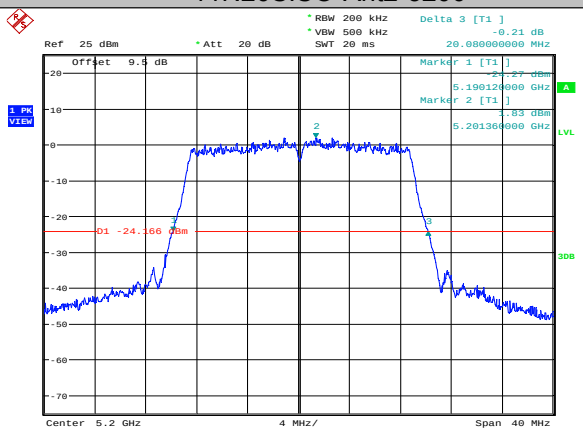
Date: 9.DEC.2019 11:16:45

11N20SISO-Ant1-5200



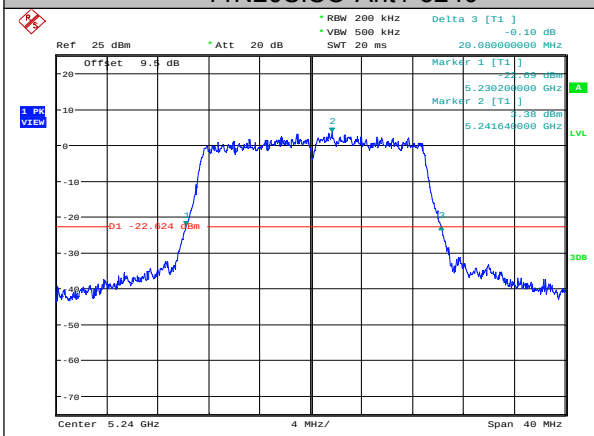
Date: 6.DEC.2019 18:41:43

11N20SISO-Ant2-5200



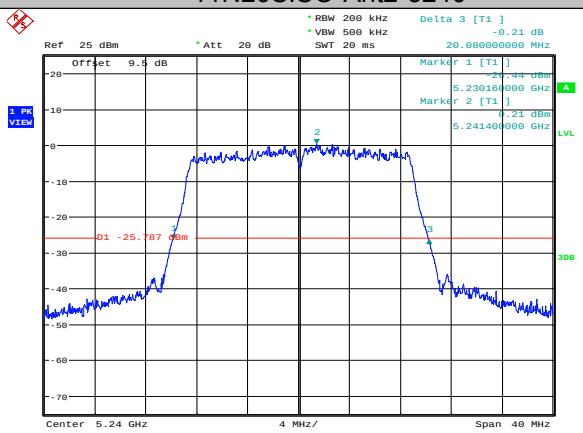
Date: 9.DEC.2019 11:22:33

11N20SISO-Ant1-5240



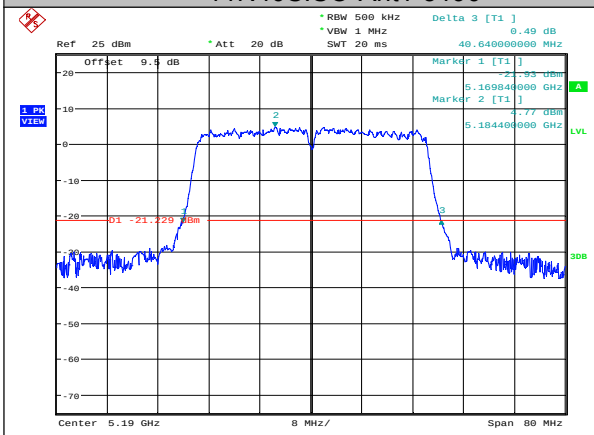
Date: 6.DEC.2019 18:46:32

11N20SISO-Ant2-5240



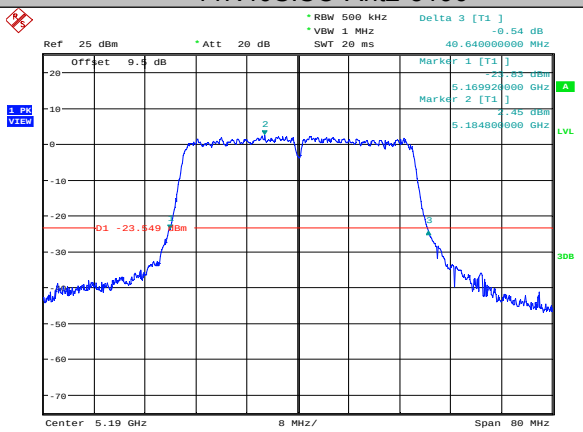
Date: 9.DEC.2019 11:27:24

11N40SISO-Ant1-5190



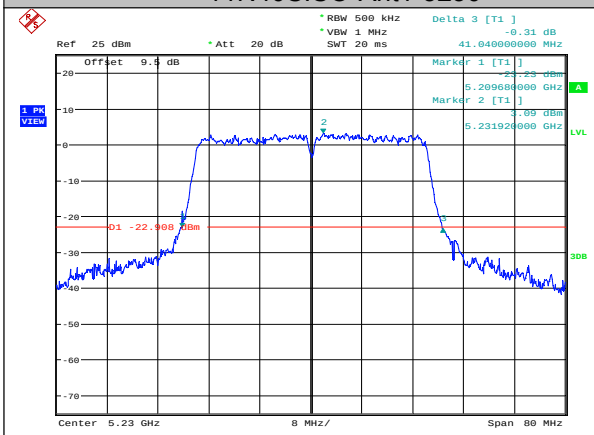
Date: 6.DEC.2019 19:04:55

11N40SISO-Ant2-5190



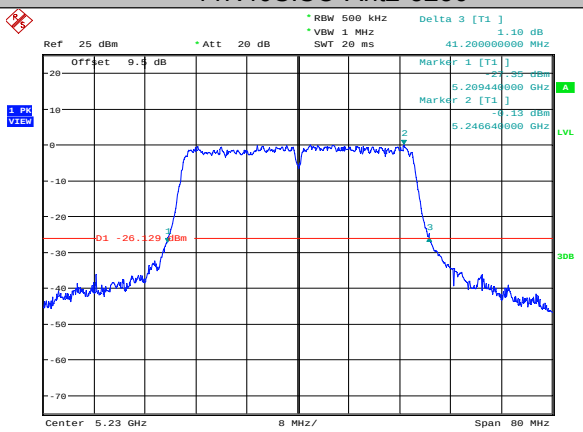
Date: 9.DEC.2019 11:47:06

11N40SISO-Ant1-5230



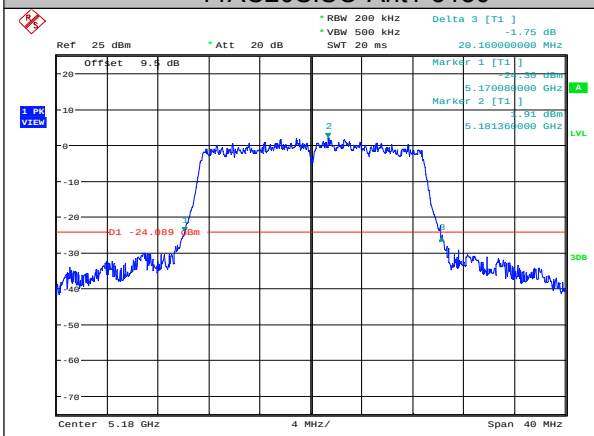
Date: 6.DEC.2019 19:11:09

11N40SISO-Ant2-5230



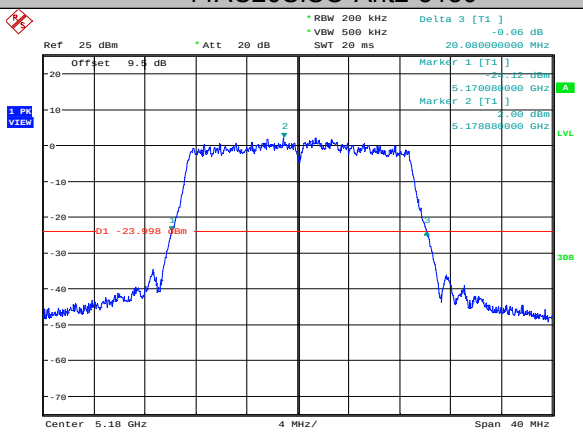
Date: 9.DEC.2019 11:52:00

11AC20SISO-Ant1-5180



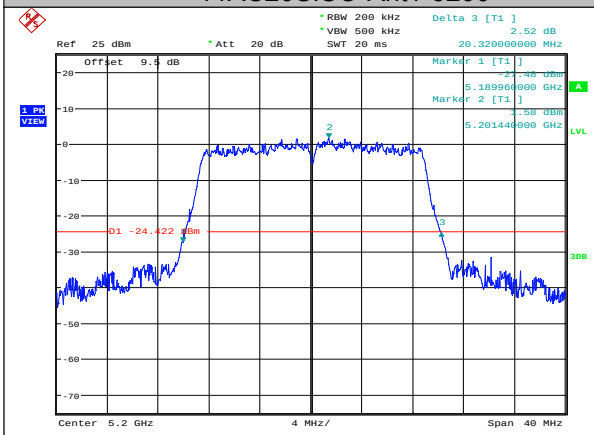
Date: 9.DEC.2019 09:20:10

11AC20SISO-Ant2-5180



Date: 9.DEC.2019 12:15:03

11AC20SISO-Ant1-5200



Date: 9.DEC.2019 09:26:09

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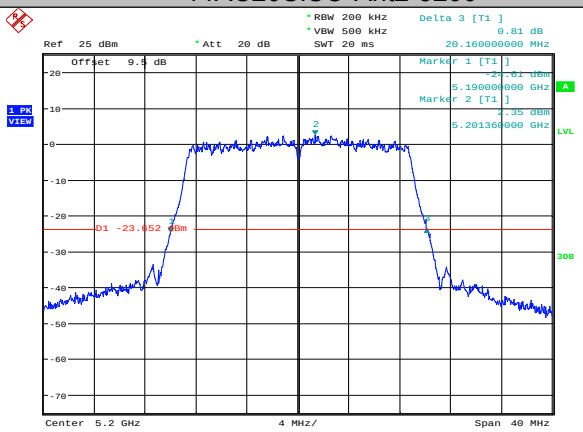
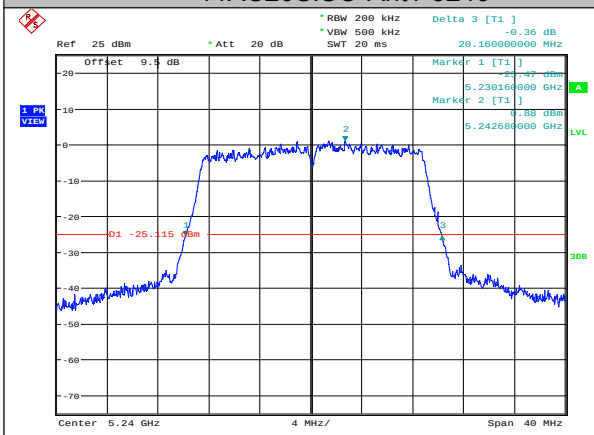


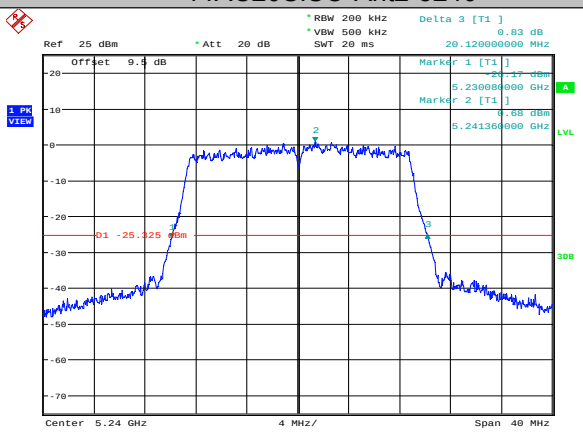
Date: 9.DEC.2019 13:38:25

11AC20SISO-Ant1-5240



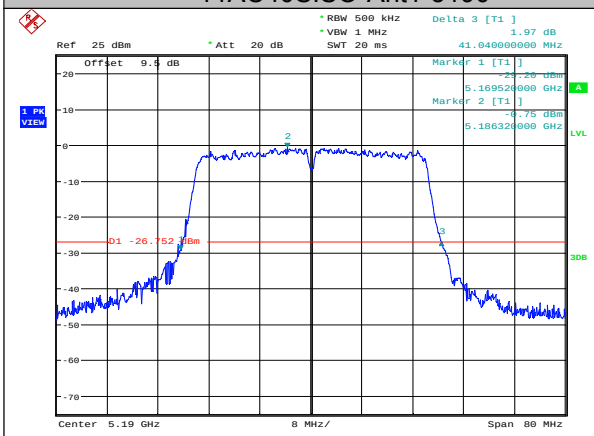
Date: 9.DEC.2019 09:31:03

11AC20SISO-Ant2-5240



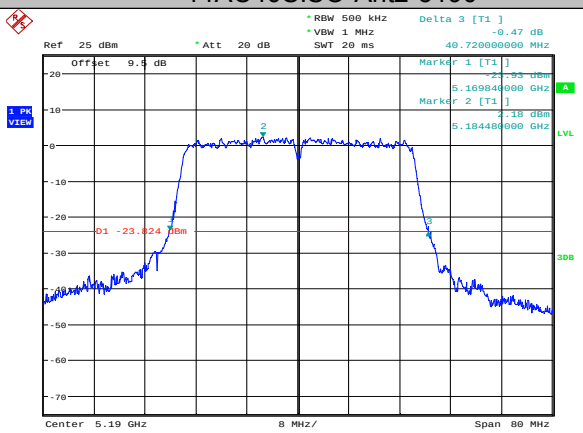
Date: 9.DEC.2019 13:43:33

11AC40SISO-Ant1-5190



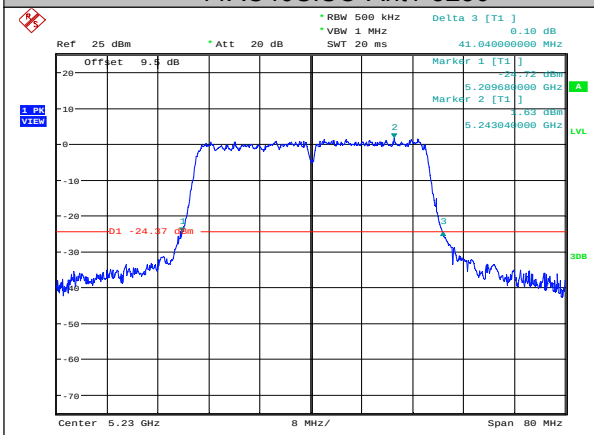
Date: 9.DEC.2019 09:50:42

11AC40SISO-Ant2-5190



Date: 9.DEC.2019 14:03:32

11AC40SISO-Ant1-5230



Date: 9.DEC.2019 09:56:31

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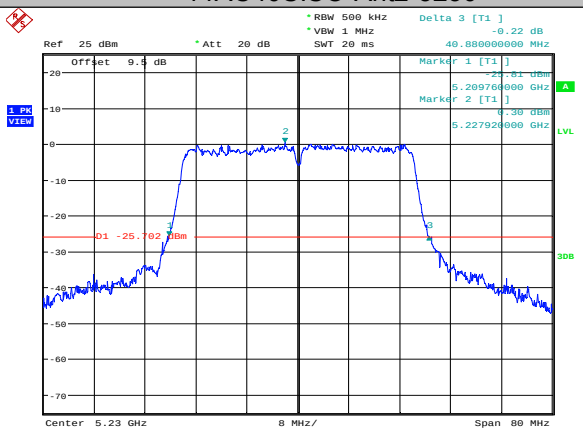
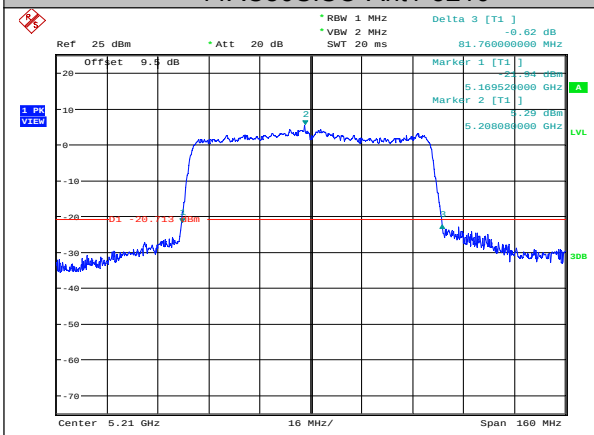


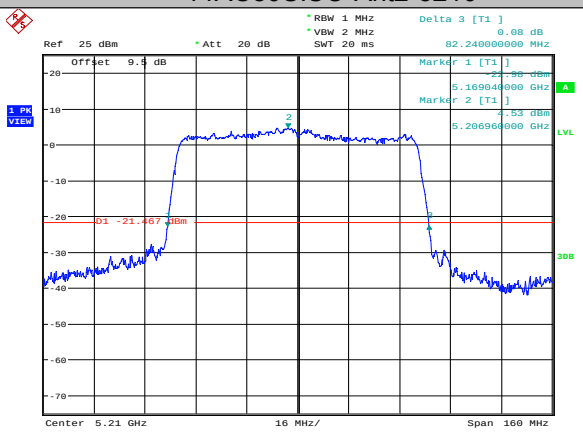
Date: 9.DEC.2019 14:08:31

11AC80SISO-Ant1-5210



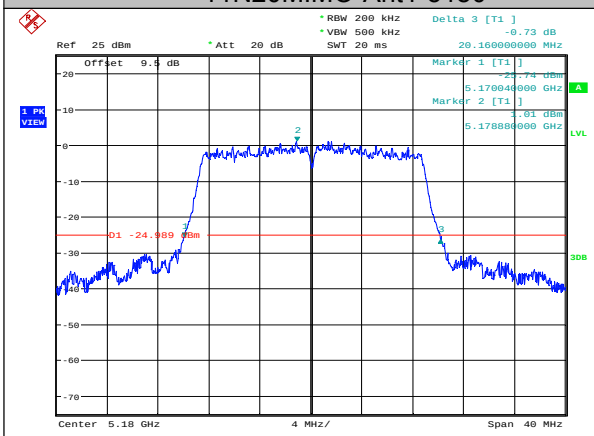
Date: 9.DEC.2019 10:15:27

11AC80SISO-Ant2-5210



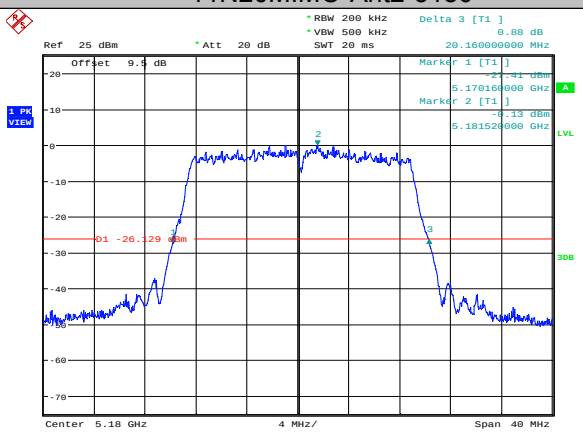
Date: 9.DEC.2019 14:24:00

11N20MIMO-Ant1-5180



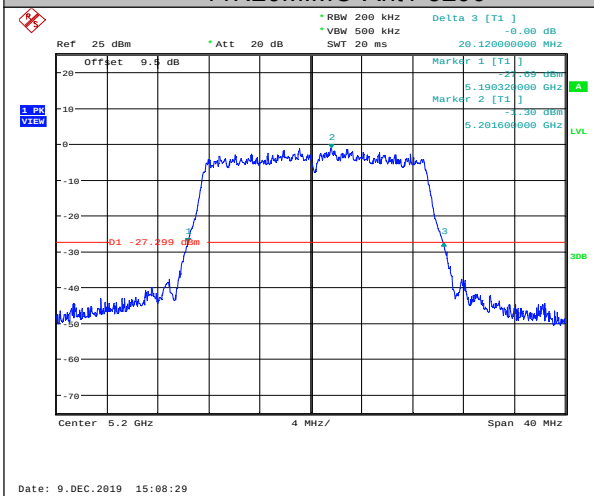
Date: 9.DEC.2019 15:02:14

11N20MIMO-Ant2-5180



Date: 9.DEC.2019 17:25:16

11N20MIMO-Ant1-5200



Date: 9.DEC.2019 15:08:29

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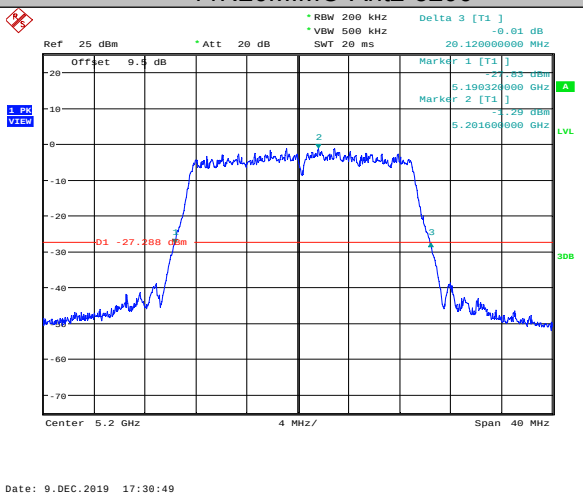
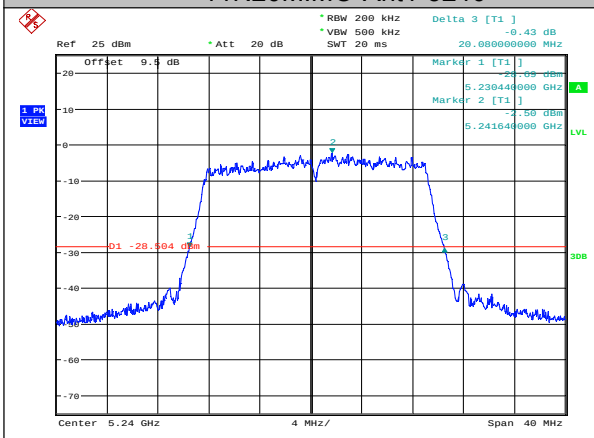


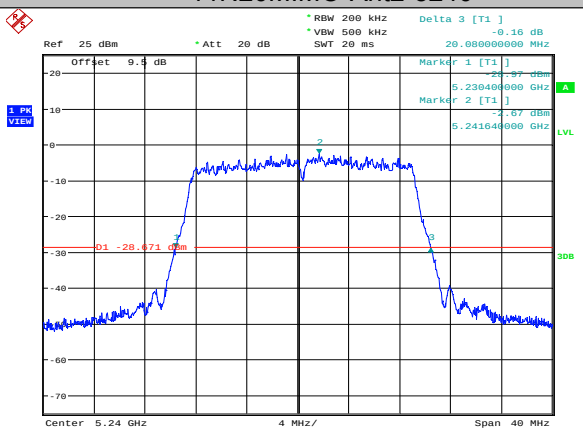
Date: 9.DEC.2019 17:30:49

11N20MIMO-Ant1-5240



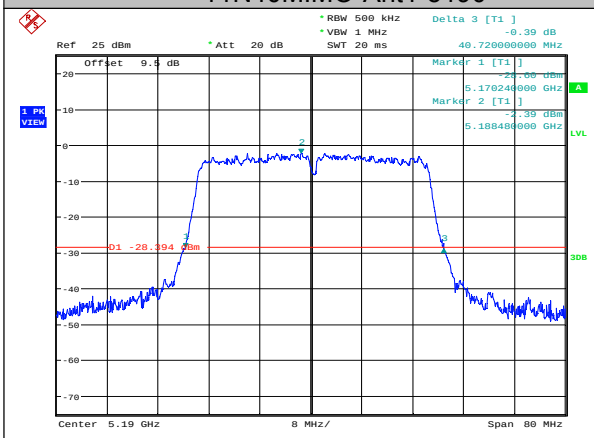
Date: 9.DEC.2019 15:13:39

11N20MIMO-Ant2-5240



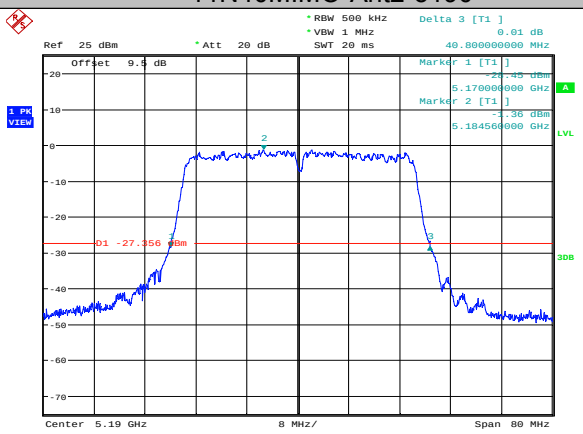
Date: 9.DEC.2019 17:37:43

11N40MIMO-Ant1-5190



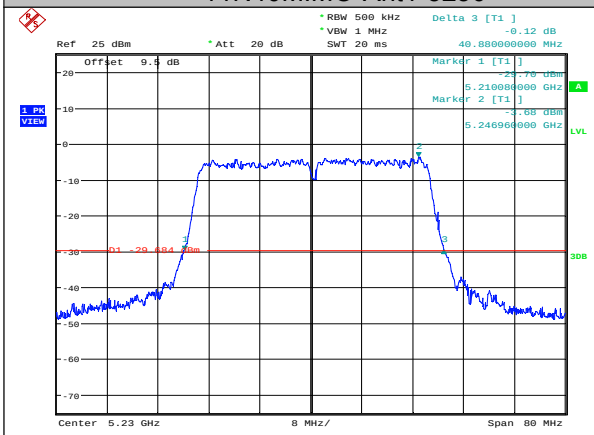
Date: 9.DEC.2019 15:35:14

11N40MIMO-Ant2-5190



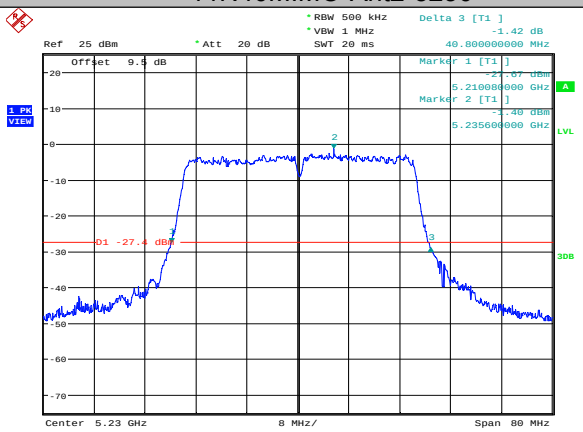
Date: 9.DEC.2019 17:57:36

11N40MIMO-Ant1-5230



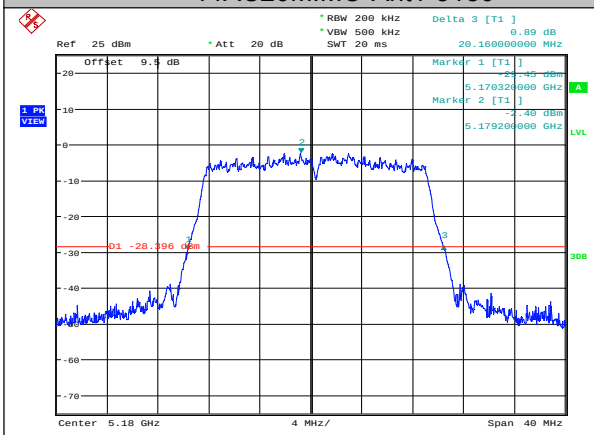
Date: 9.DEC.2019 15:40:14

11N40MIMO-Ant2-5230



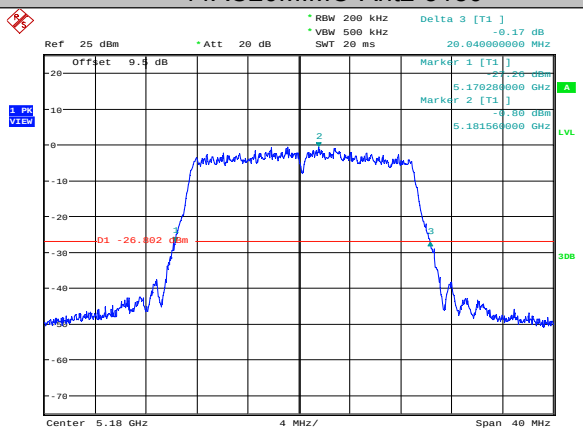
Date: 9.DEC.2019 18:02:39

11AC20MIMO-Ant1-5180



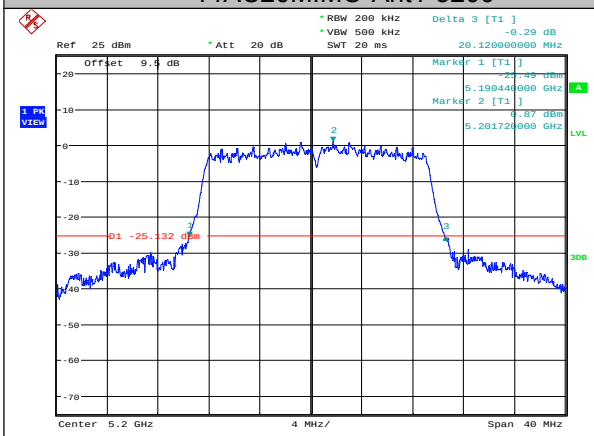
Date: 9.DEC.2019 15:57:18

11AC20MIMO-Ant2-5180



Date: 9.DEC.2019 18:20:09

11AC20MIMO-Ant1-5200



Date: 9.DEC.2019 16:02:58

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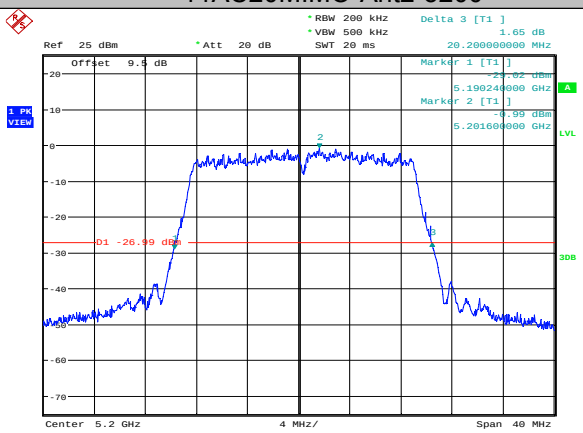
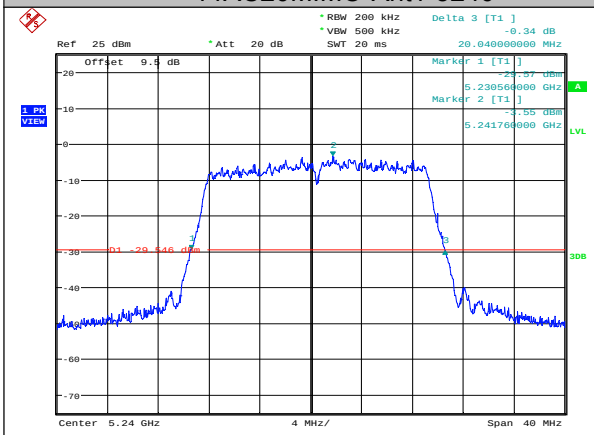


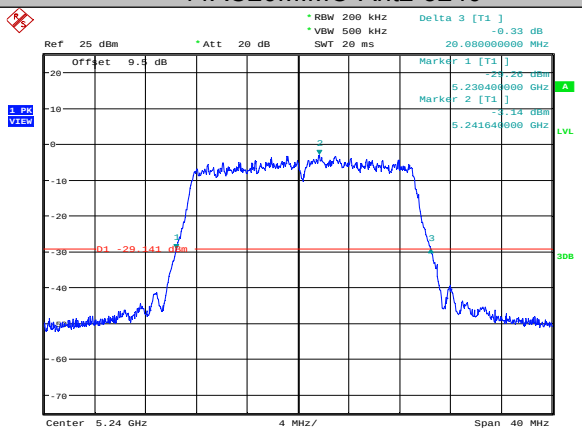
Date: 9.DEC.2019 18:25:51

11AC20MIMO-Ant1-5240



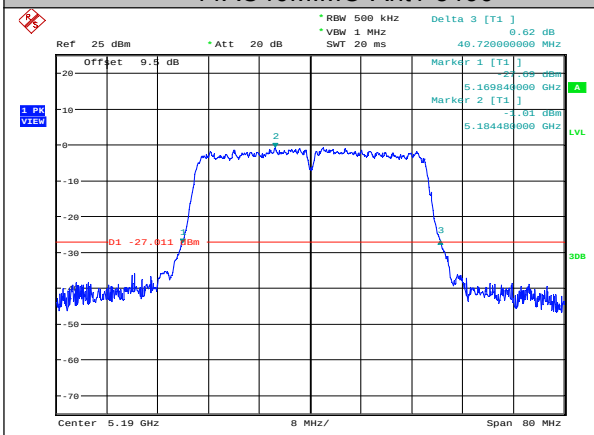
Date: 9.DEC.2019 16:09:10

11AC20MIMO-Ant2-5240



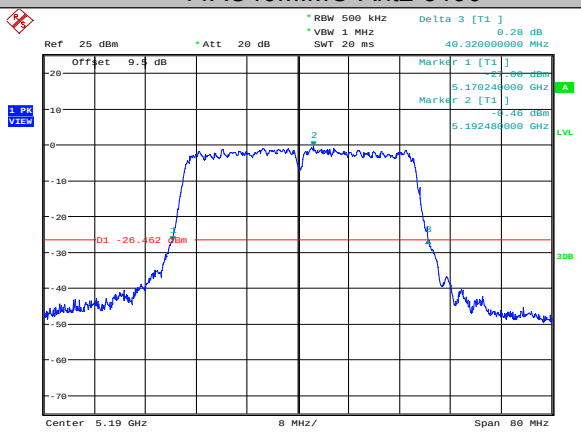
Date: 9.DEC.2019 18:30:51

11AC40MIMO-Ant1-5190



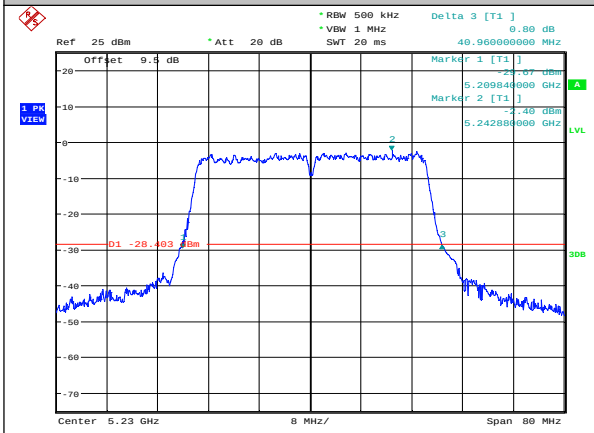
Date: 9.DEC.2019 16:49:55

11AC40MIMO-Ant2-5190



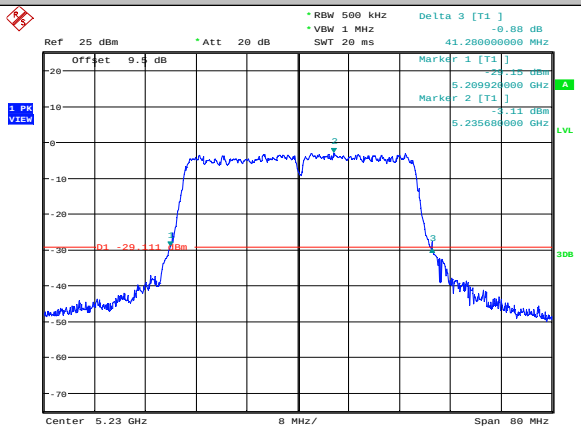
Date: 9.DEC.2019 18:49:43

11AC40MIMO-Ant1-5230

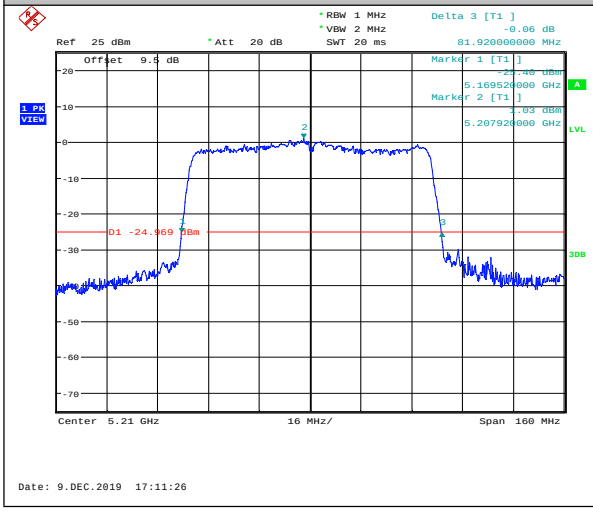
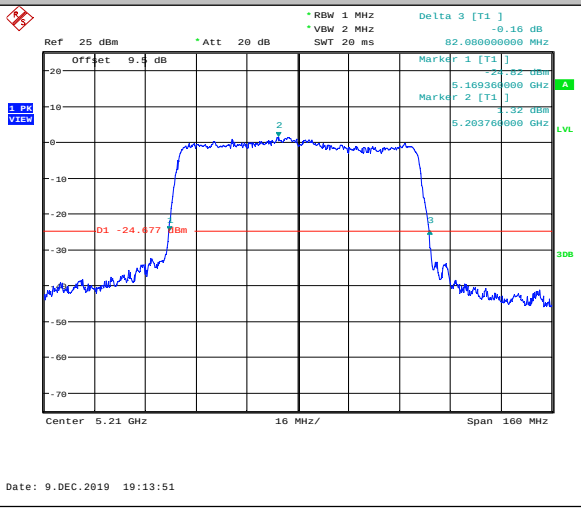


Date: 9.DEC.2019 16:55:06

11AC40MIMO-Ant2-5230



Date: 9.DEC.2019 18:57:32

11AC80MIMO-Ant1-5210	11AC80MIMO-Ant2-5210
	

6dB Occupied Bandwidth:

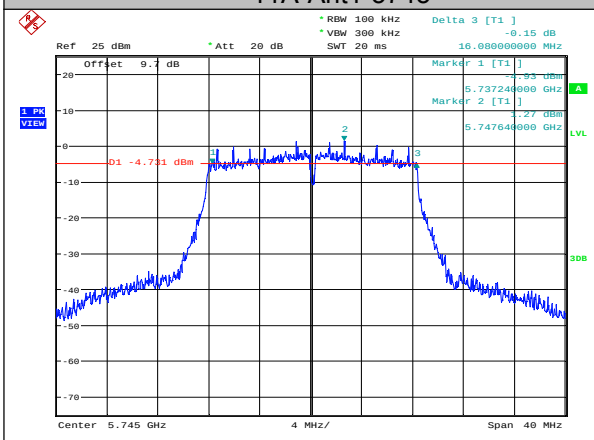
Measurement Data

Test Mode	Test Channel	Ant	EBW[MHz]	Limit[MHz]	Verdict
11A	5745	Ant1	16.080	0.5	PASS
11A	5745	Ant2	15.720	0.5	PASS
11A	5785	Ant1	16.040	0.5	PASS
11A	5785	Ant2	15.800	0.5	PASS
11A	5825	Ant1	16.400	0.5	PASS
11A	5825	Ant2	16.400	0.5	PASS
11N20SISO	5745	Ant1	16.120	0.5	PASS
11N20SISO	5745	Ant2	14.760	0.5	PASS
11N20SISO	5785	Ant1	16.760	0.5	PASS
11N20SISO	5785	Ant2	16.400	0.5	PASS
11N20SISO	5825	Ant1	17.000	0.5	PASS
11N20SISO	5825	Ant2	17.240	0.5	PASS
11N40SISO	5755	Ant1	35.200	0.5	PASS
11N40SISO	5755	Ant2	35.280	0.5	PASS
11N40SISO	5795	Ant1	35.200	0.5	PASS
11N40SISO	5795	Ant2	35.200	0.5	PASS
11AC20SISO	5745	Ant1	16.200	0.5	PASS
11AC20SISO	5745	Ant2	15.760	0.5	PASS
11AC20SISO	5785	Ant1	16.360	0.5	PASS
11AC20SISO	5785	Ant2	16.400	0.5	PASS
11AC20SISO	5825	Ant1	17.640	0.5	PASS
11AC20SISO	5825	Ant2	17.240	0.5	PASS
11AC40SISO	5755	Ant1	35.360	0.5	PASS
11AC40SISO	5755	Ant2	35.280	0.5	PASS
11AC40SISO	5795	Ant1	35.280	0.5	PASS
11AC40SISO	5795	Ant2	35.280	0.5	PASS

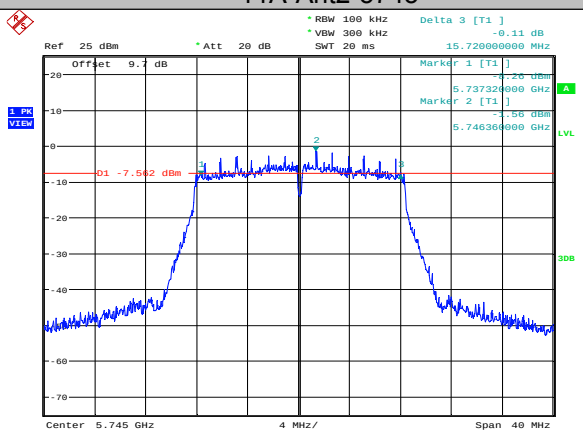
11AC80SISO	5775	Ant1	75.520	0.5	PASS
11AC80SISO	5775	Ant2	75.520	0.5	PASS
11N20MIMO	5745	Ant1	15.080	0.5	PASS
11N20MIMO	5745	Ant2	15.480	0.5	PASS
11N20MIMO	5785	Ant1	16.160	0.5	PASS
11N20MIMO	5785	Ant2	16.160	0.5	PASS
11N20MIMO	5825	Ant1	17.120	0.5	PASS
11N20MIMO	5825	Ant2	17.240	0.5	PASS
11N40MIMO	5755	Ant1	35.280	0.5	PASS
11N40MIMO	5755	Ant2	35.280	0.5	PASS
11N40MIMO	5795	Ant1	35.280	0.5	PASS
11N40MIMO	5795	Ant2	35.200	0.5	PASS
11AC20MIMO	5745	Ant1	15.600	0.5	PASS
11AC20MIMO	5745	Ant2	15.080	0.5	PASS
11AC20MIMO	5785	Ant1	16.400	0.5	PASS
11AC20MIMO	5785	Ant2	15.080	0.5	PASS
11AC20MIMO	5825	Ant1	16.960	0.5	PASS
11AC20MIMO	5825	Ant2	16.760	0.5	PASS
11AC40MIMO	5755	Ant1	35.280	0.5	PASS
11AC40MIMO	5755	Ant2	35.280	0.5	PASS
11AC40MIMO	5795	Ant1	35.280	0.5	PASS
11AC40MIMO	5795	Ant2	35.280	0.5	PASS
11AC80MIMO	5775	Ant1	74.240	0.5	PASS
11AC80MIMO	5775	Ant2	75.520	0.5	PASS

Test plot as follows:

11A-Ant1-5745



11A-Ant2-5745



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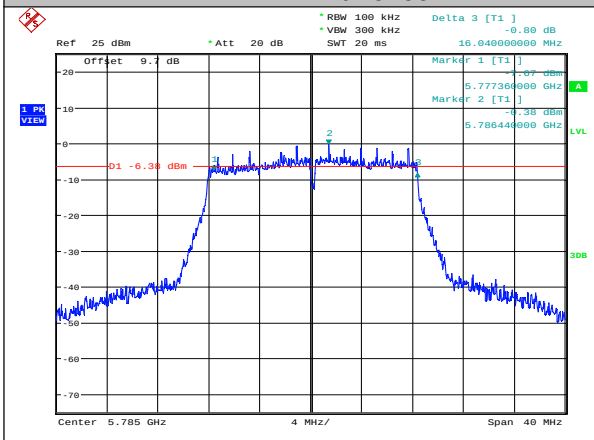

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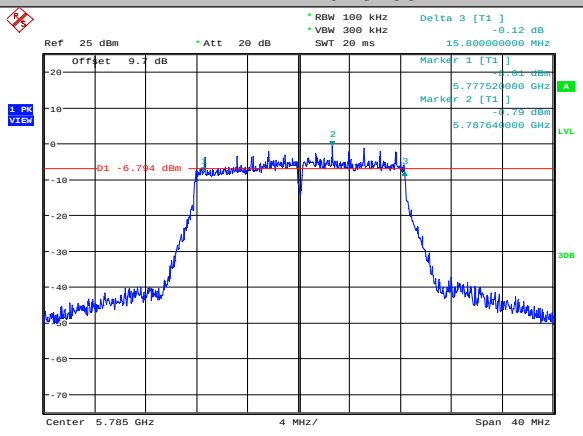

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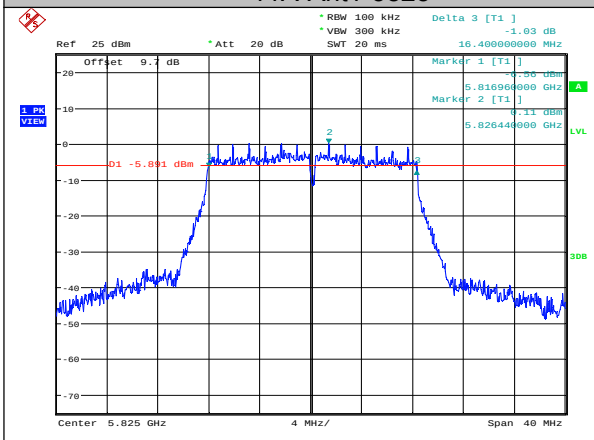

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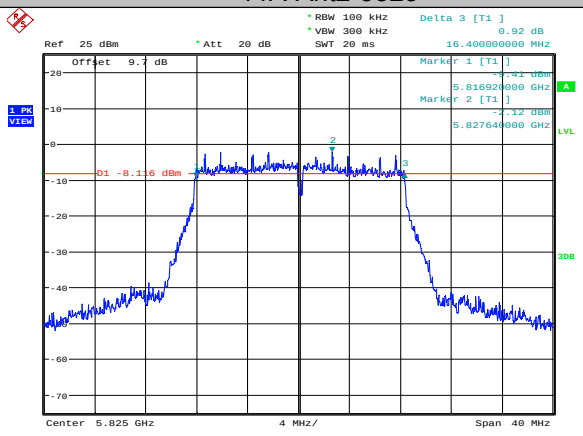

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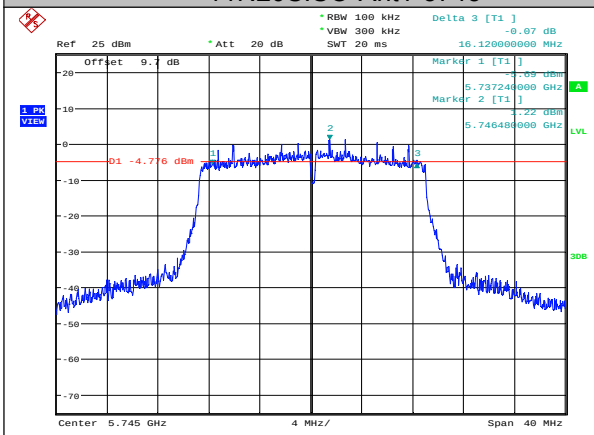

Date: 6.DEC.2019 18:51:49

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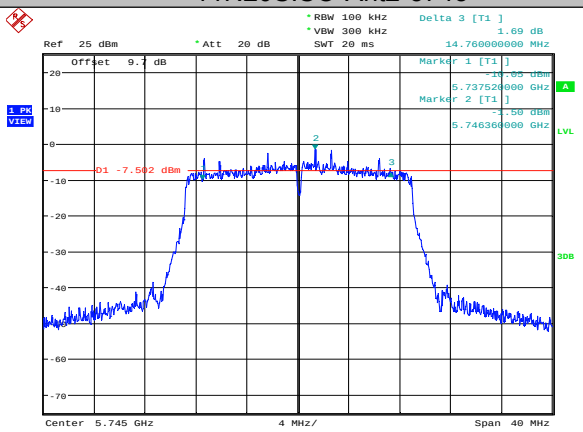

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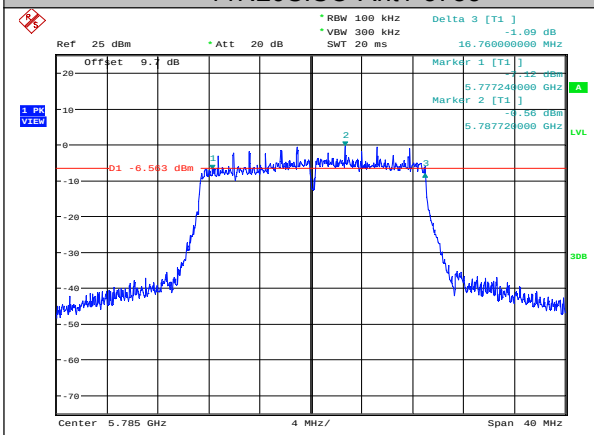

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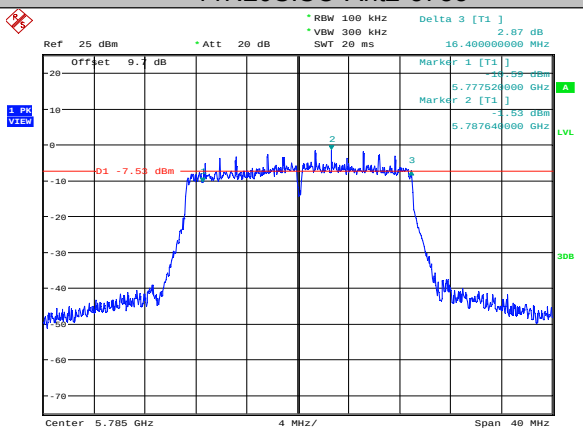

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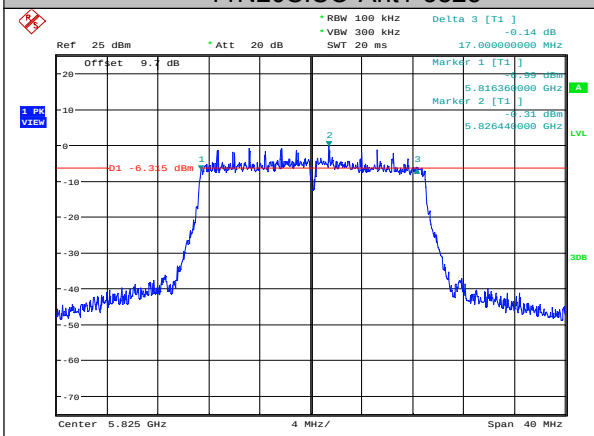

Date: 6.DEC.2019 19:00:21

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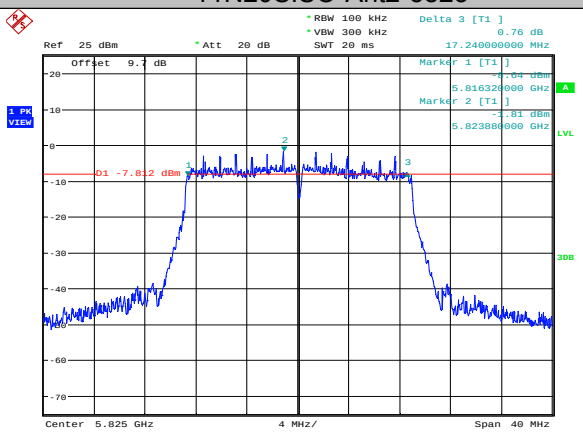
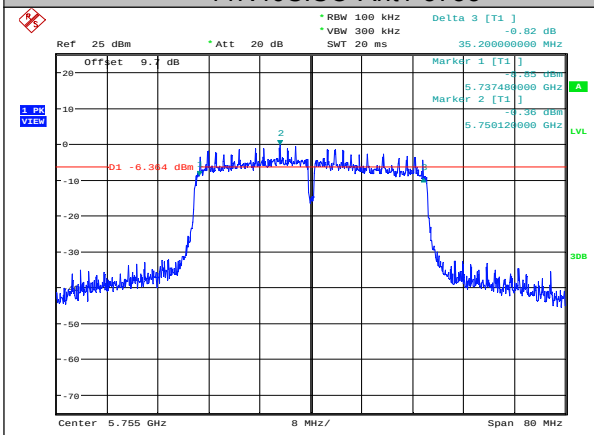


Date: 9.DEC.2019 11:41:53

11N40SISO-Ant1-5755



Date: 9.DEC.2019 09:09:09

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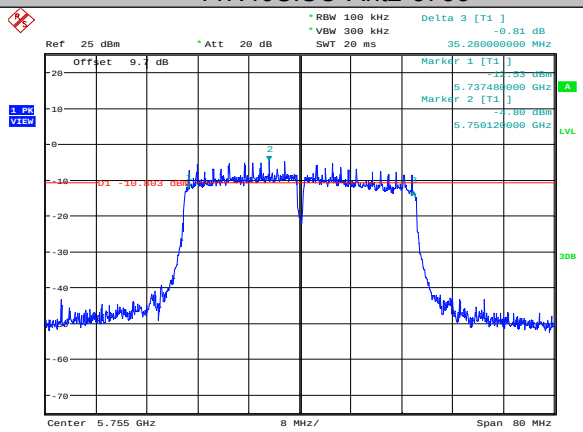

Date: 9.DEC.2019 11:57:17

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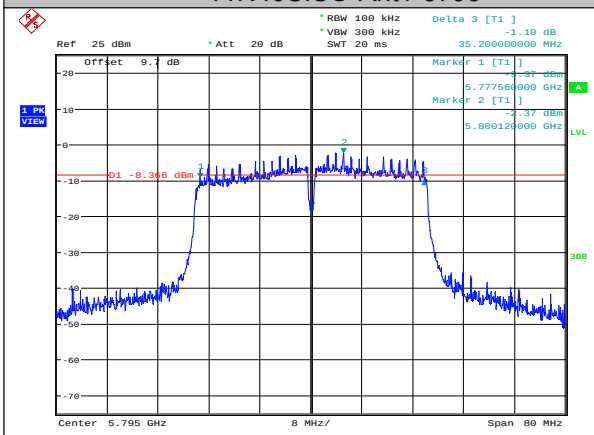

Date: 9.DEC.2019 09:14:40

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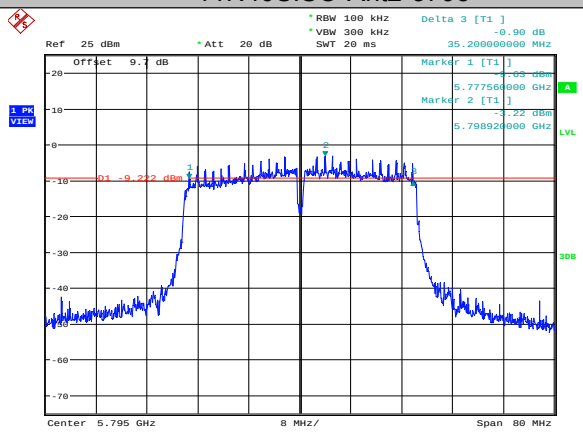

Date: 9.DEC.2019 12:02:44

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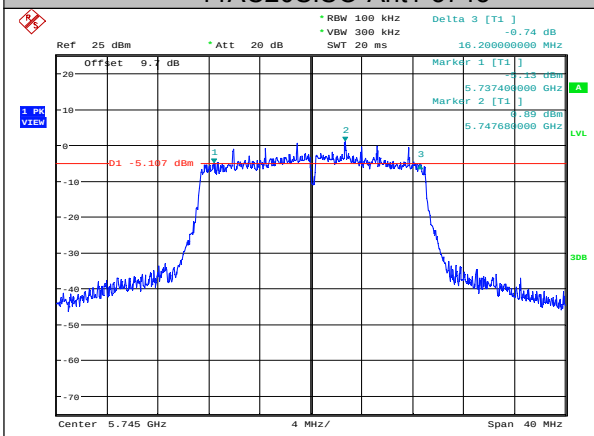

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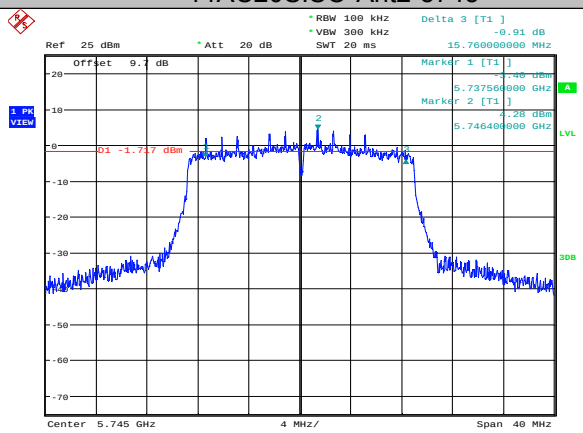

Date: 9.DEC.2019 13:49:55

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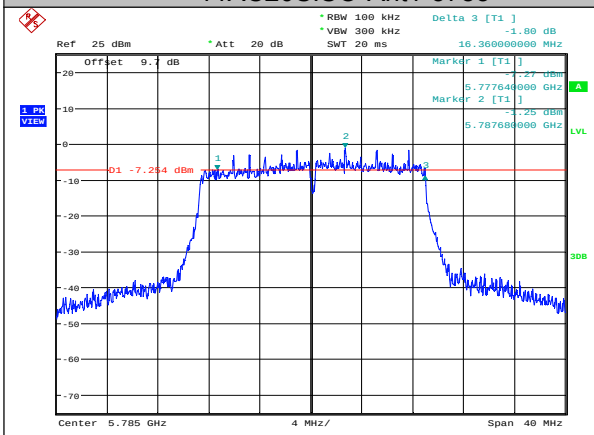

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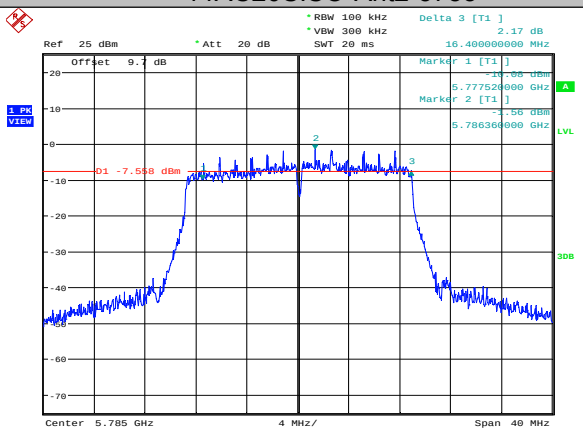

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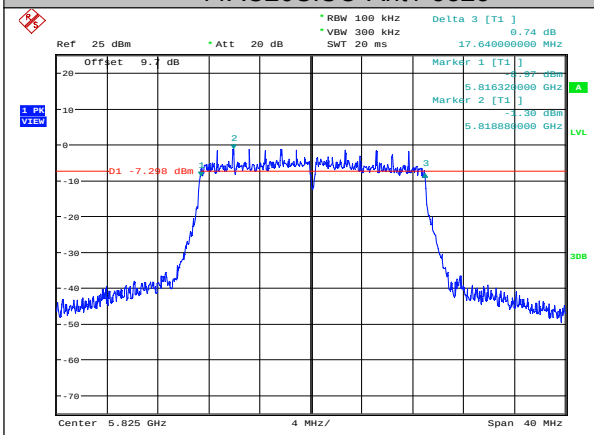

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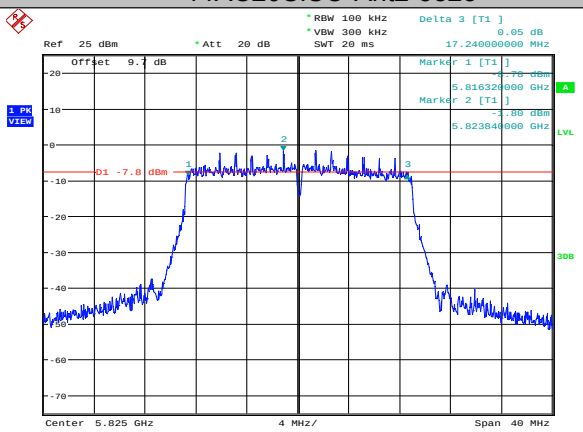

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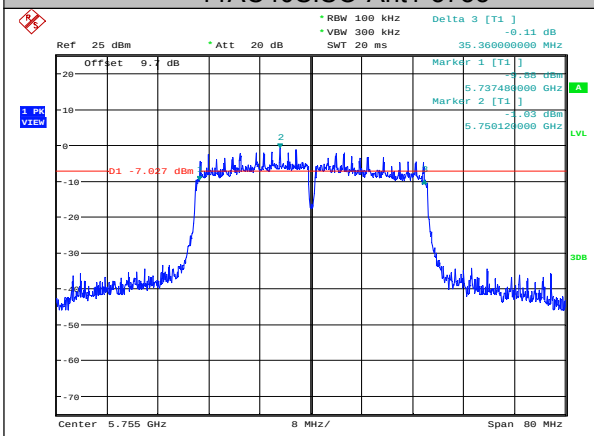

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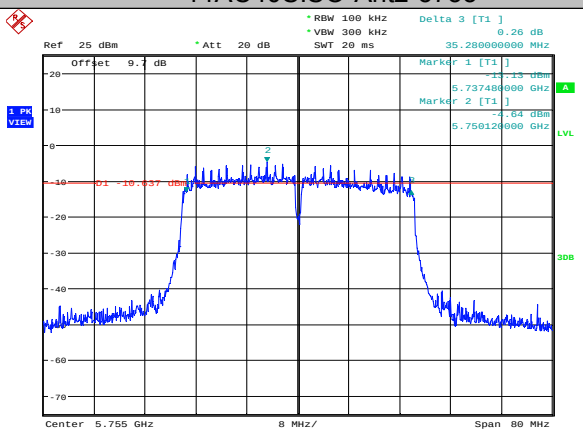

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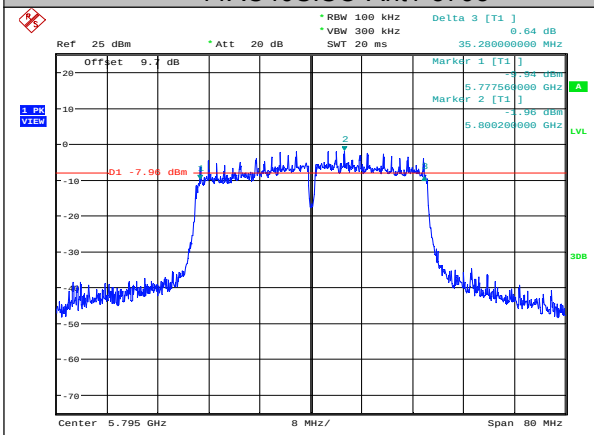

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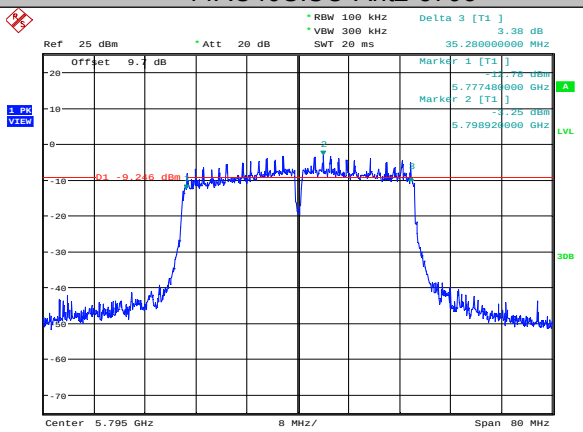

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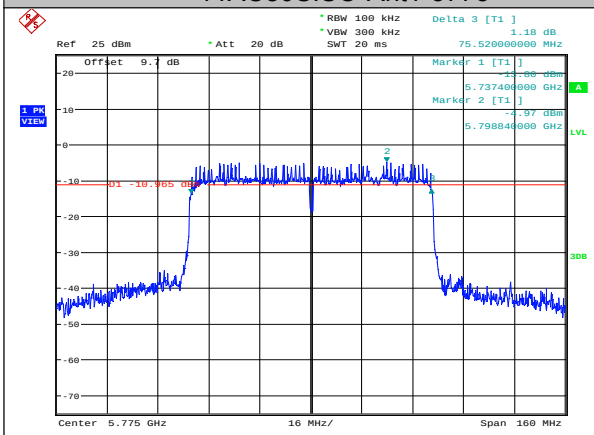

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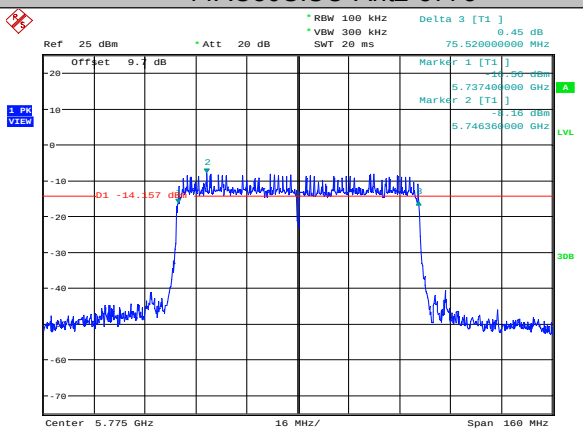

Date: 9.DEC.2019 14:30:07

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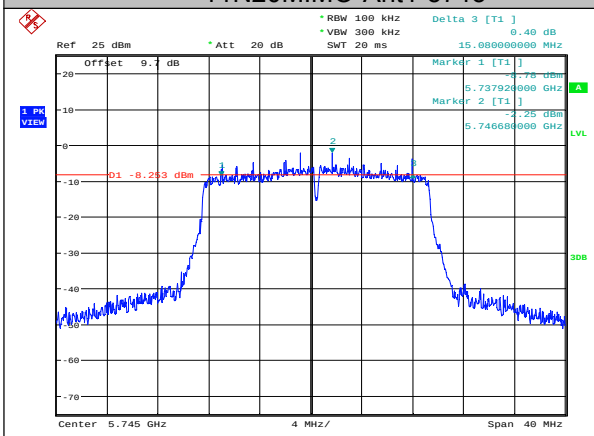

Date: 9.DEC.2019 15:19:07

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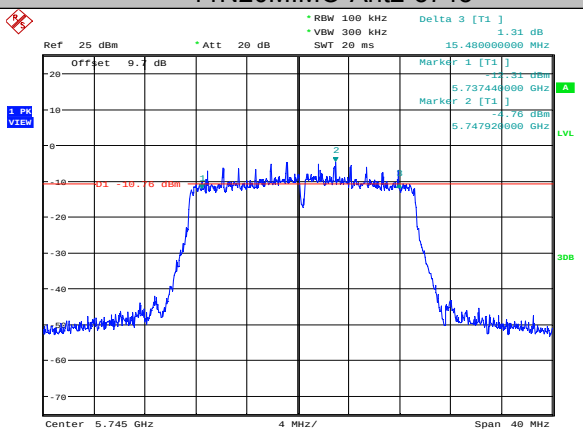

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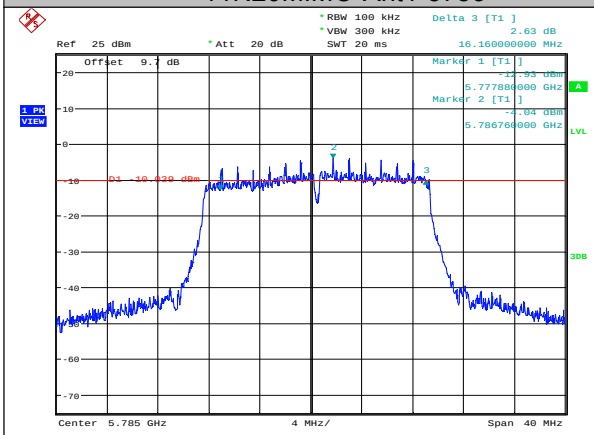

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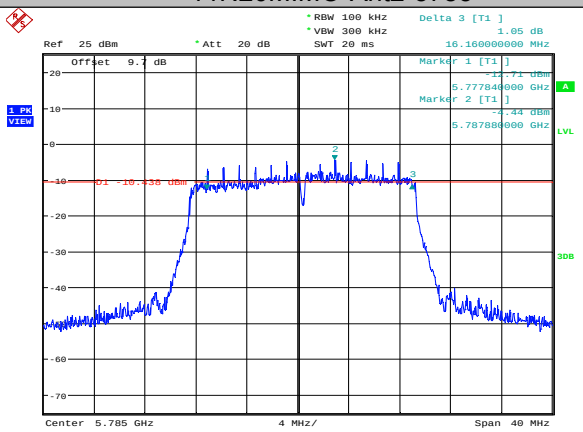

Date: 9.DEC.2019 17:47:32

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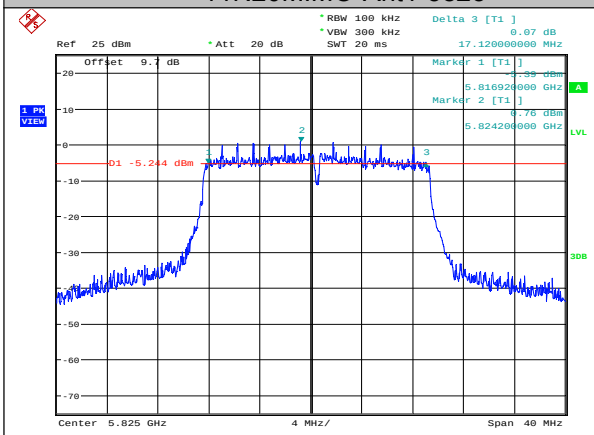

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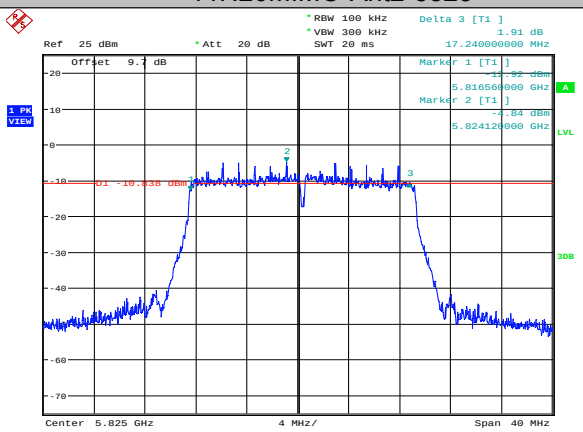
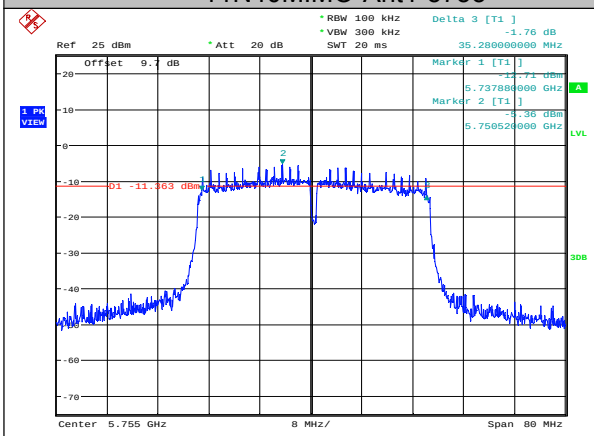


Date: 9.DEC.2019 17:52:15

11N40MIMO-Ant1-5755



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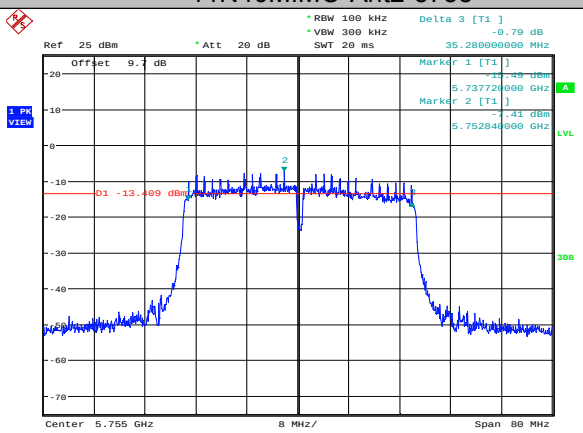

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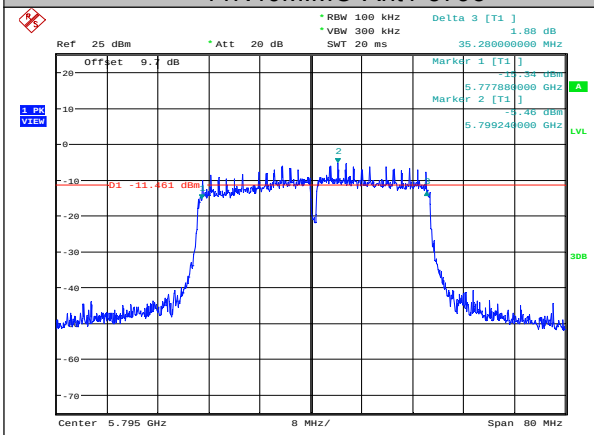

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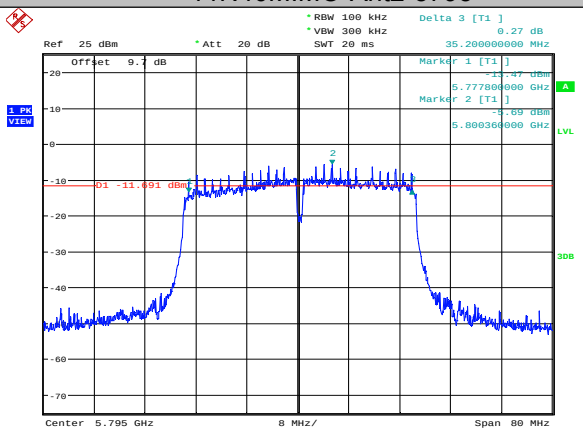

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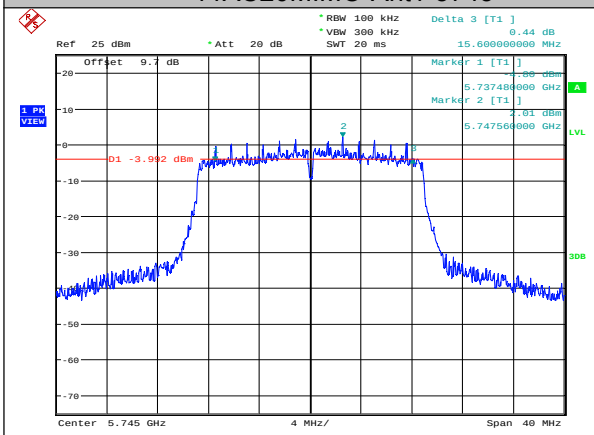

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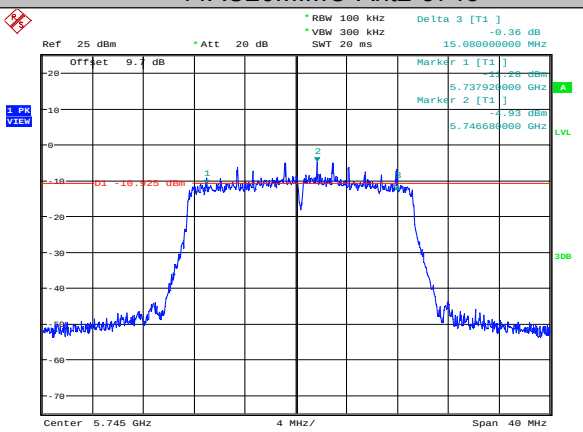

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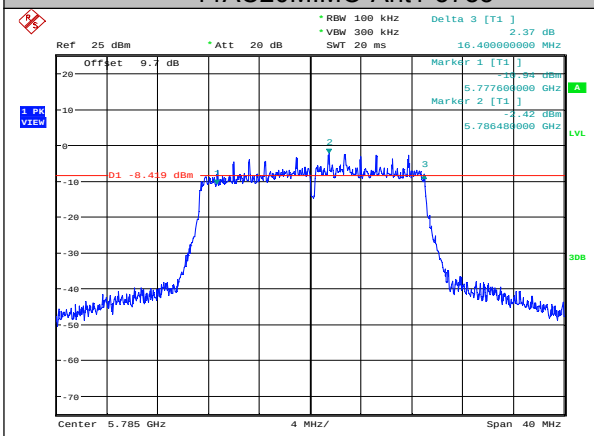

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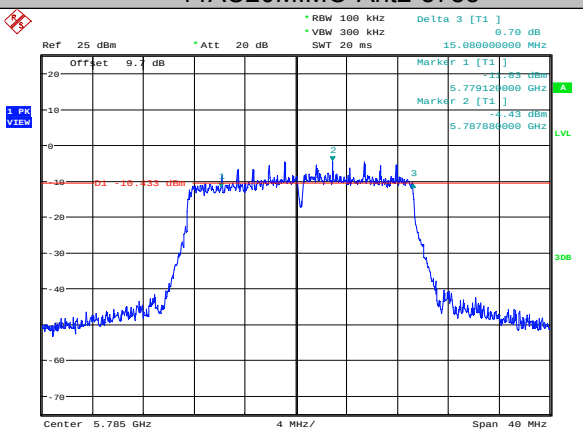

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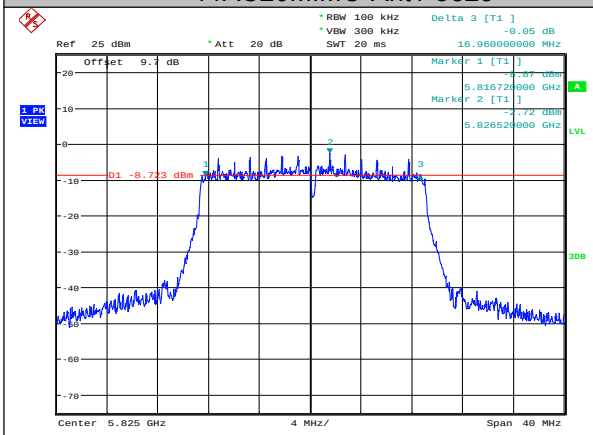

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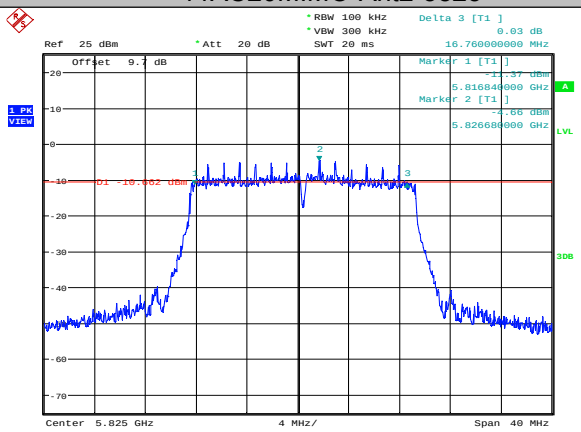

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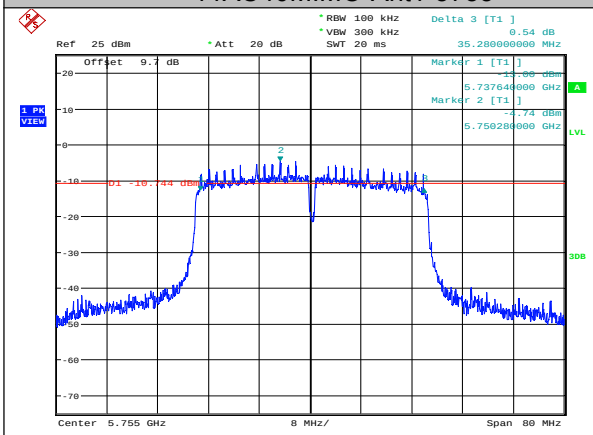

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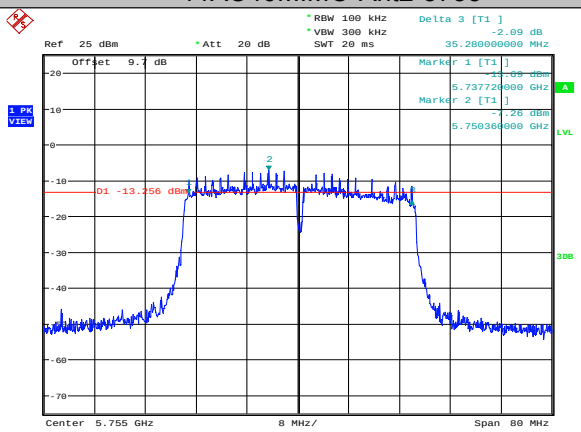

Date: 9.DEC.2019 19:02:23

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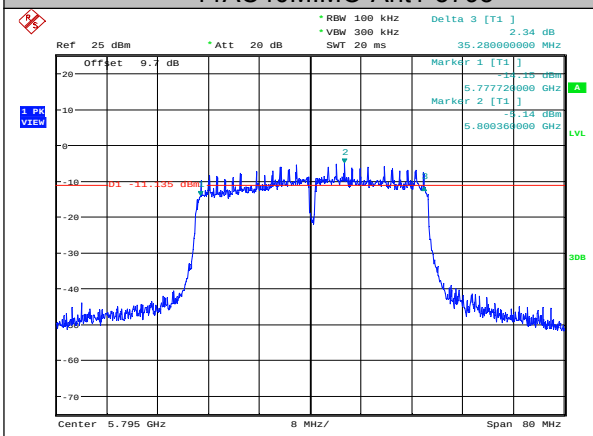

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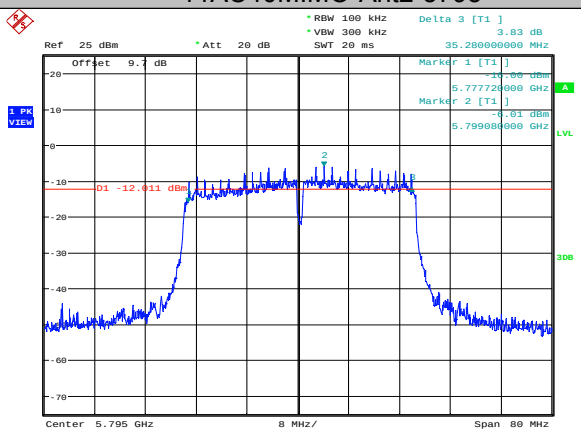
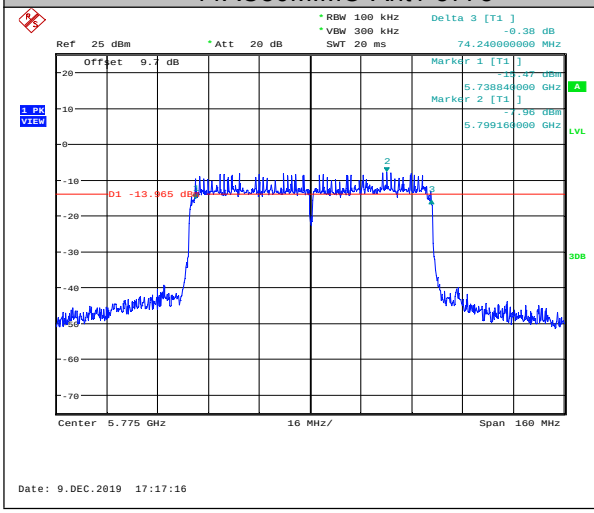
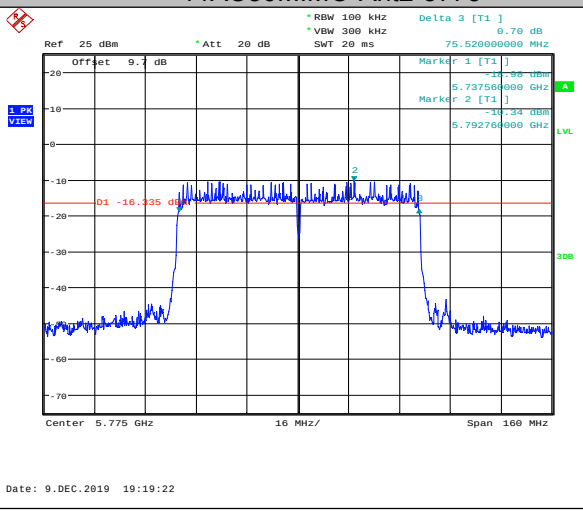


Date: 9.DEC.2019 19:08:32

11AC80MIMO-Ant1-5775	11AC80MIMO-Ant2-5775
	

99% Occupied Bandwidth:

Measurement Data

Test Mode	Test Channel	Ant	EBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant1	16.855	---	PASS
11A	5180	Ant2	16.830	---	PASS
11A	5200	Ant1	16.865	---	PASS
11A	5200	Ant2	16.830	---	PASS
11A	5240	Ant1	16.795	---	PASS
11A	5240	Ant2	16.765	---	PASS
11A	5745	Ant1	16.555	---	PASS
11A	5745	Ant2	16.770	---	PASS
11A	5785	Ant1	16.950	---	PASS
11A	5785	Ant2	16.920	---	PASS
11A	5825	Ant1	16.930	---	PASS
11A	5825	Ant2	16.990	---	PASS
11N20SISO	5180	Ant1	17.700	---	PASS
11N20SISO	5180	Ant2	17.685	---	PASS
11N20SISO	5200	Ant1	17.705	---	PASS
11N20SISO	5200	Ant2	17.690	---	PASS
11N20SISO	5240	Ant1	17.720	---	PASS
11N20SISO	5240	Ant2	17.680	---	PASS
11N20SISO	5745	Ant1	17.695	---	PASS
11N20SISO	5745	Ant2	17.655	---	PASS
11N20SISO	5785	Ant1	17.750	---	PASS
11N20SISO	5785	Ant2	17.725	---	PASS
11N20SISO	5825	Ant1	17.750	---	PASS
11N20SISO	5825	Ant2	17.750	---	PASS
11N40SISO	5190	Ant1	36.060	---	PASS
11N40SISO	5190	Ant2	36.060	---	PASS

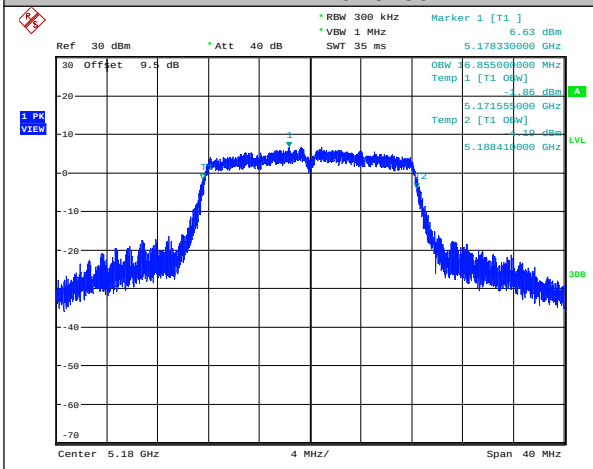
11N40SISO	5230	Ant1	36.210	---	PASS
11N40SISO	5230	Ant2	36.190	---	PASS
11N40SISO	5755	Ant1	36.100	---	PASS
11N40SISO	5755	Ant2	36.060	---	PASS
11N40SISO	5795	Ant1	36.080	---	PASS
11N40SISO	5795	Ant2	36.010	---	PASS
11AC20SISO	5180	Ant1	17.680	---	PASS
11AC20SISO	5180	Ant2	17.670	---	PASS
11AC20SISO	5200	Ant1	17.685	---	PASS
11AC20SISO	5200	Ant2	17.705	---	PASS
11AC20SISO	5240	Ant1	17.700	---	PASS
11AC20SISO	5240	Ant2	17.695	---	PASS
11AC20SISO	5745	Ant1	17.690	---	PASS
11AC20SISO	5745	Ant2	17.655	---	PASS
11AC20SISO	5785	Ant1	17.745	---	PASS
11AC20SISO	5785	Ant2	17.710	---	PASS
11AC20SISO	5825	Ant1	17.735	---	PASS
11AC20SISO	5825	Ant2	17.745	---	PASS
11AC40SISO	5190	Ant1	36.050	---	PASS
11AC40SISO	5190	Ant2	36.070	---	PASS
11AC40SISO	5230	Ant1	36.220	---	PASS
11AC40SISO	5230	Ant2	36.180	---	PASS
11AC40SISO	5755	Ant1	36.130	---	PASS
11AC40SISO	5755	Ant2	36.030	---	PASS
11AC40SISO	5795	Ant1	36.110	---	PASS
11AC40SISO	5795	Ant2	36.040	---	PASS
11AC80SISO	5210	Ant1	75.220	---	PASS
11AC80SISO	5210	Ant2	75.180	---	PASS
11AC80SISO	5775	Ant1	75.320	---	PASS

11AC80SISO	5775	Ant2	75.280	---	PASS
11N20MIMO	5180	Ant1	17.710	---	PASS
11N20MIMO	5180	Ant2	17.670	---	PASS
11N20MIMO	5200	Ant1	17.735	---	PASS
11N20MIMO	5200	Ant2	17.700	---	PASS
11N20MIMO	5240	Ant1	17.725	---	PASS
11N20MIMO	5240	Ant2	17.680	---	PASS
11N20MIMO	5745	Ant1	17.725	---	PASS
11N20MIMO	5745	Ant2	17.665	---	PASS
11N20MIMO	5785	Ant1	17.715	---	PASS
11N20MIMO	5785	Ant2	17.715	---	PASS
11N20MIMO	5825	Ant1	17.750	---	PASS
11N20MIMO	5825	Ant2	17.740	---	PASS
11N40MIMO	5190	Ant1	36.060	---	PASS
11N40MIMO	5190	Ant2	36.060	---	PASS
11N40MIMO	5230	Ant1	36.170	---	PASS
11N40MIMO	5230	Ant2	36.170	---	PASS
11N40MIMO	5755	Ant1	36.080	---	PASS
11N40MIMO	5755	Ant2	36.040	---	PASS
11N40MIMO	5795	Ant1	36.090	---	PASS
11N40MIMO	5795	Ant2	36.030	---	PASS
11AC20MIMO	5180	Ant1	17.675	---	PASS
11AC20MIMO	5180	Ant2	17.680	---	PASS
11AC20MIMO	5200	Ant1	17.685	---	PASS
11AC20MIMO	5200	Ant2	17.695	---	PASS
11AC20MIMO	5240	Ant1	17.695	---	PASS
11AC20MIMO	5240	Ant2	17.680	---	PASS
11AC20MIMO	5745	Ant1	17.685	---	PASS
11AC20MIMO	5745	Ant2	17.665	---	PASS

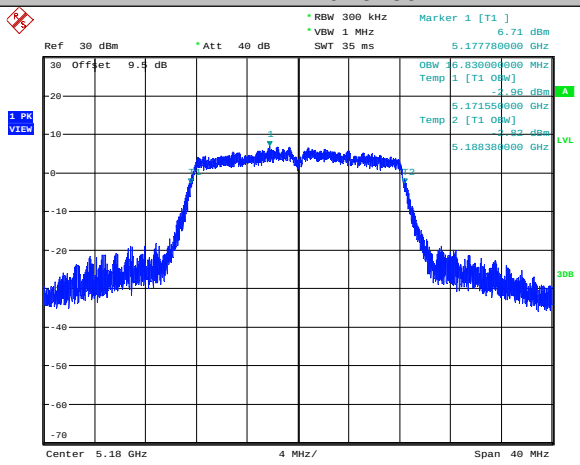
11AC20MIMO	5785	Ant1	17.730	---	PASS
11AC20MIMO	5785	Ant2	17.720	---	PASS
11AC20MIMO	5825	Ant1	17.735	---	PASS
11AC20MIMO	5825	Ant2	17.745	---	PASS
11AC40MIMO	5190	Ant1	36.060	---	PASS
11AC40MIMO	5190	Ant2	36.020	---	PASS
11AC40MIMO	5230	Ant1	36.160	---	PASS
11AC40MIMO	5230	Ant2	36.120	---	PASS
11AC40MIMO	5755	Ant1	36.100	---	PASS
11AC40MIMO	5755	Ant2	36.070	---	PASS
11AC40MIMO	5795	Ant1	36.060	---	PASS
11AC40MIMO	5795	Ant2	36.030	---	PASS
11AC80MIMO	5210	Ant1	75.100	---	PASS
11AC80MIMO	5210	Ant2	75.220	---	PASS
11AC80MIMO	5775	Ant1	75.280	---	PASS
11AC80MIMO	5775	Ant2	75.320	---	PASS

Test plot as follows:

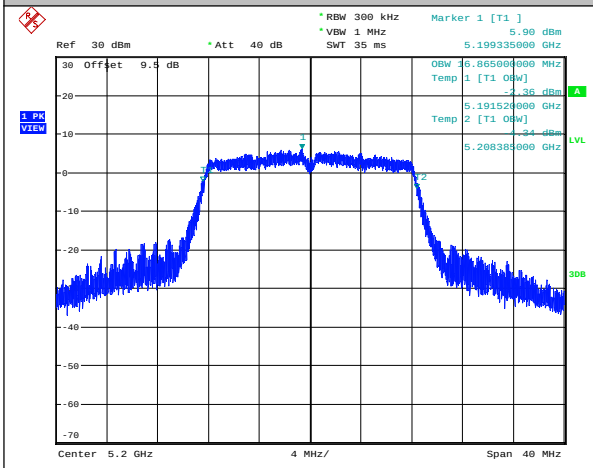
11A-Ant1-5180



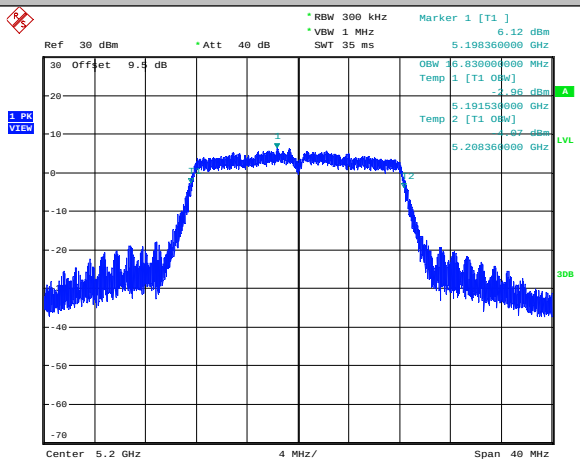
11A-Ant2-5180



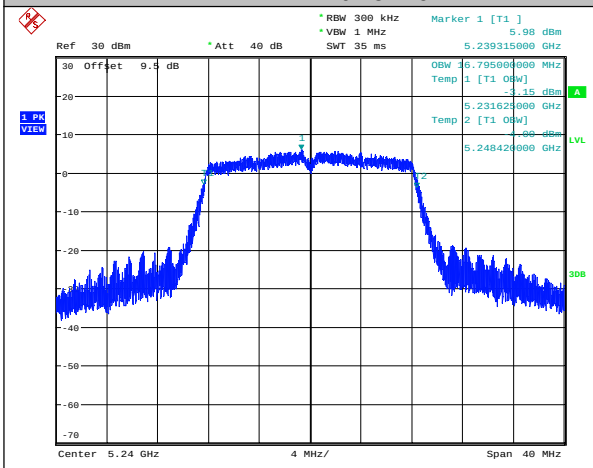
11A-Ant1-5200



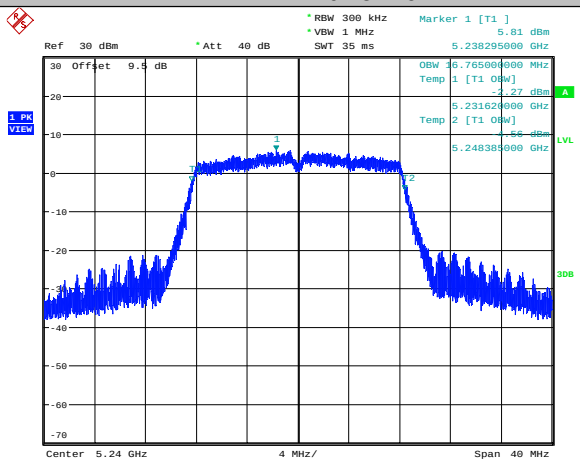
11A-Ant2-5200



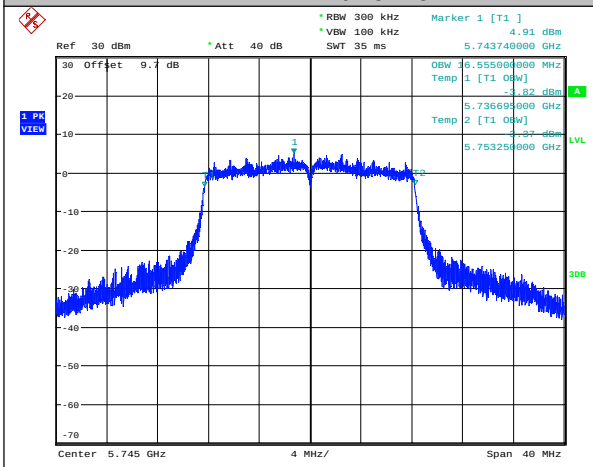
11A-Ant1-5240



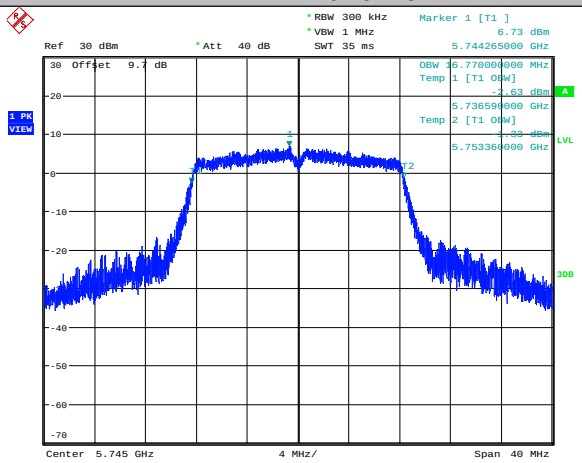
11A-Ant2-5240



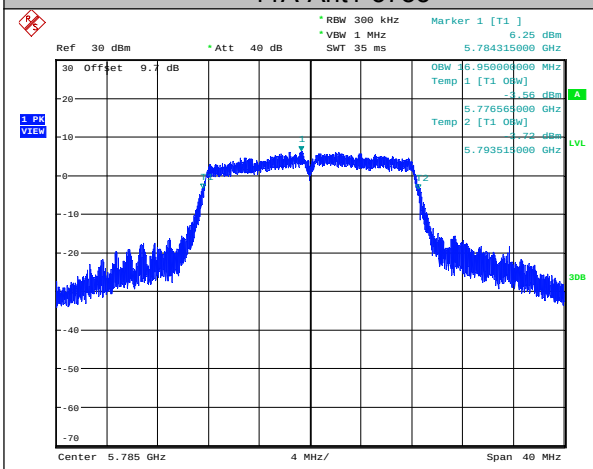
11A-Ant1-5745



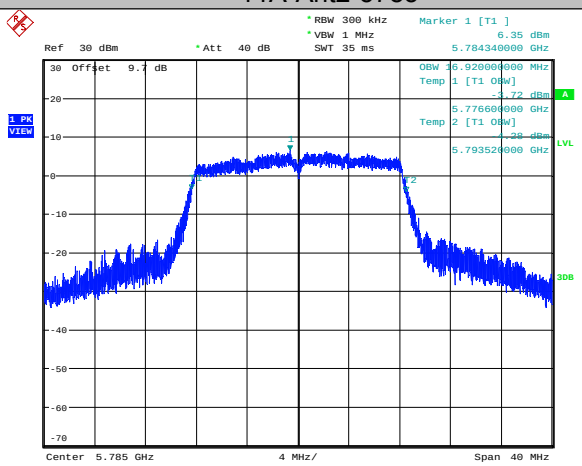
11A-Ant2-5745



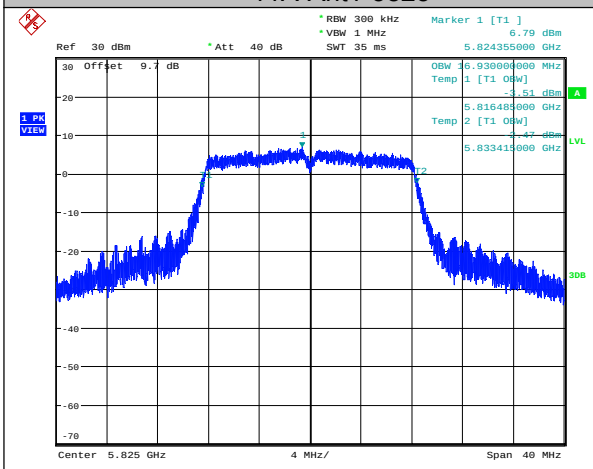
11A-Ant1-5785



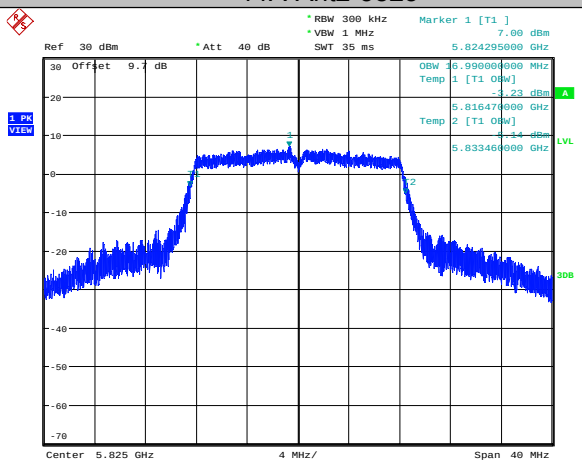
11A-Ant2-5785



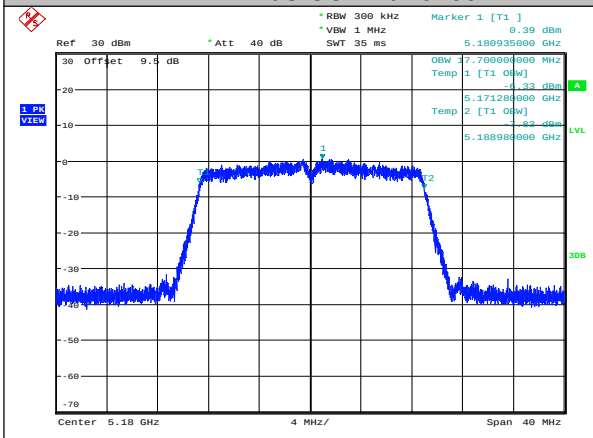
11A-Ant1-5825



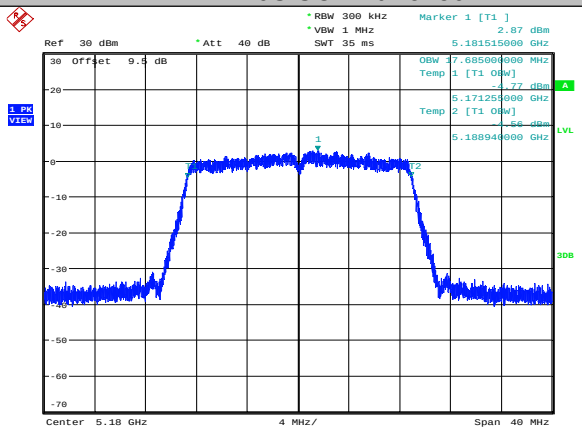
11A-Ant2-5825



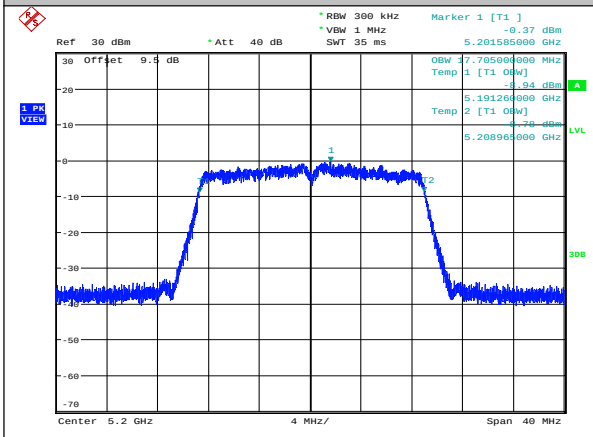
11N20SISO-Ant1-5180



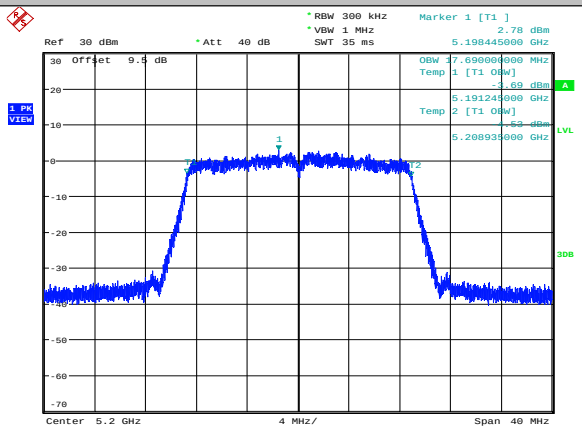
11N20SISO-Ant2-5180



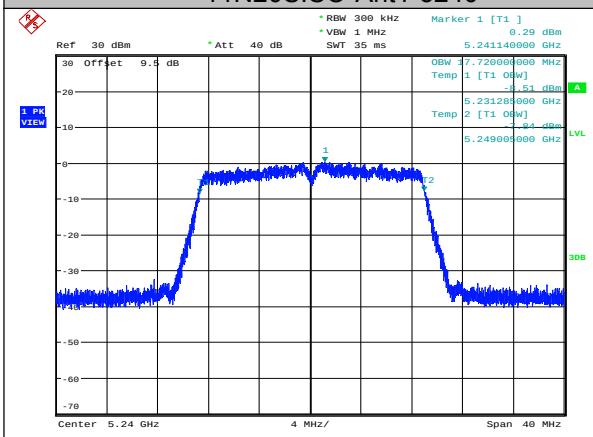
11N20SISO-Ant1-5200



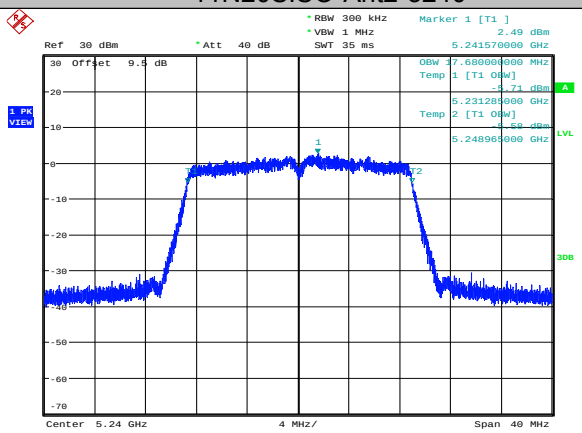
11N20SISO-Ant2-5200



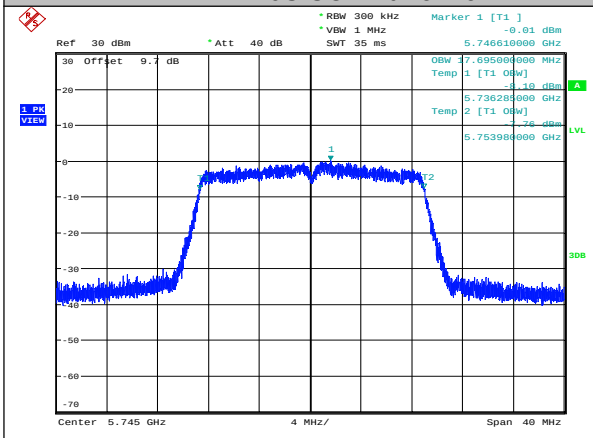
11N20SISO-Ant1-5240



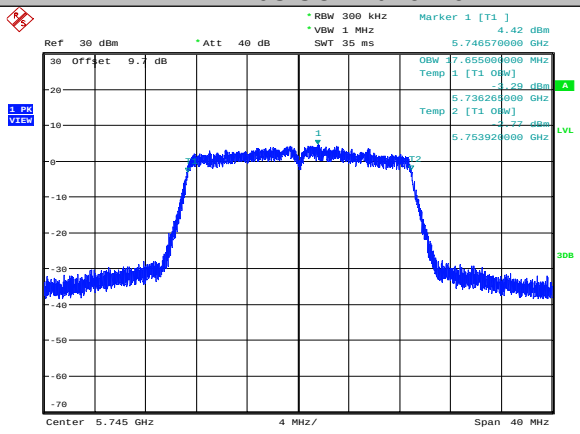
11N20SISO-Ant2-5240



11N20SISO-Ant1-5745



11N20SISO-Ant2-5745



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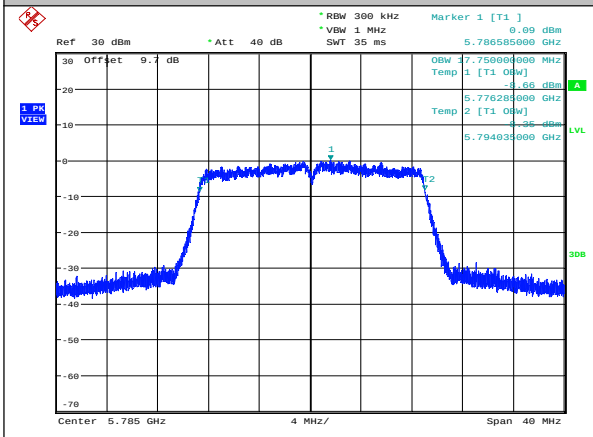
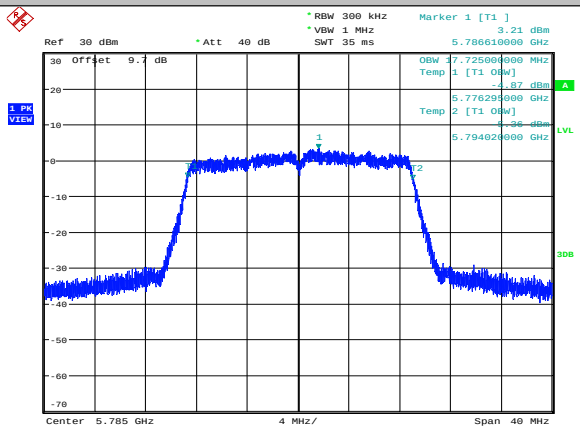
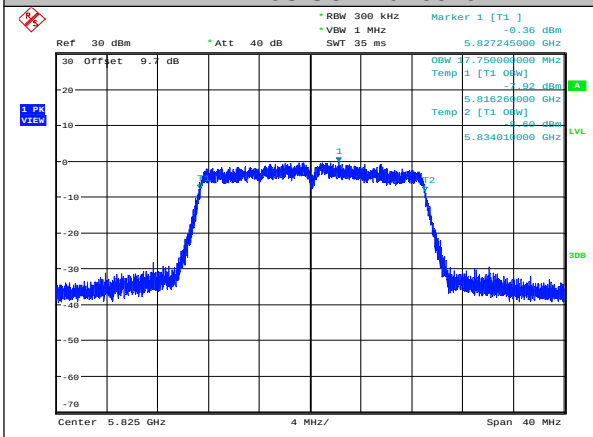


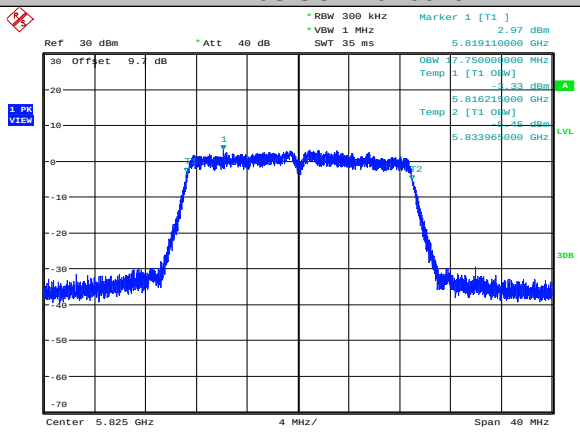
11N20SISO-Ant2-5785



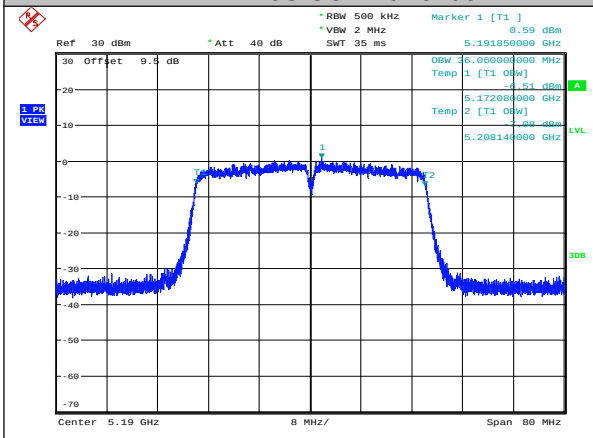
11N20SISO-Ant1-5825



11N20SISO-Ant2-5825

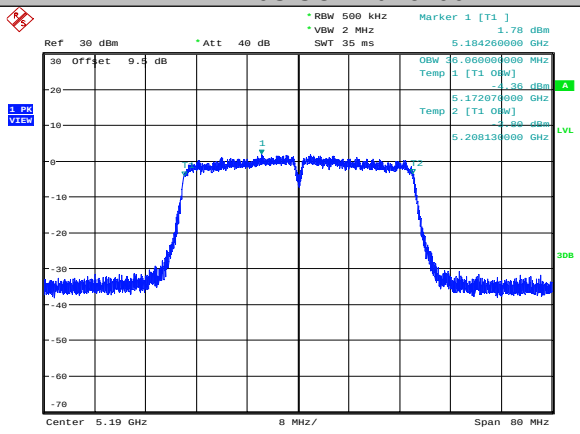


11N40SISO-Ant1-5190



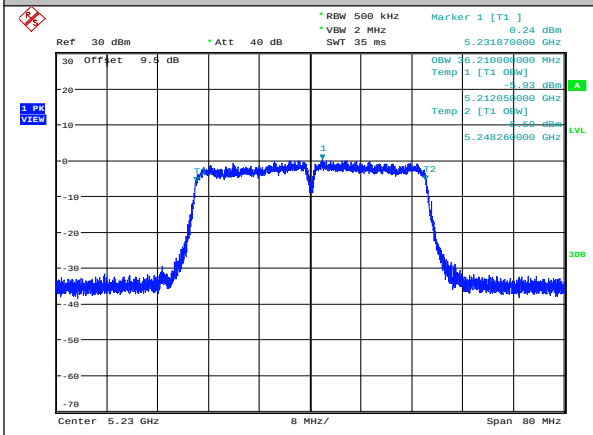
Date: 30.DEC.2019 14:58:11

11N40SISO-Ant2-5190



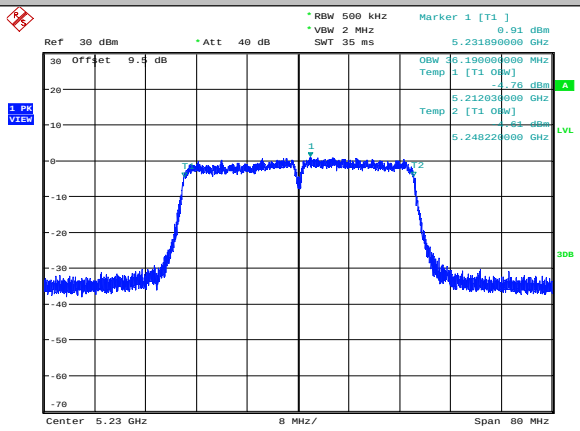
Date: 30.DEC.2019 15:15:30

11N40SISO-Ant1-5230



Date: 30.DEC.2019 14:58:42

11N40SISO-Ant2-5230



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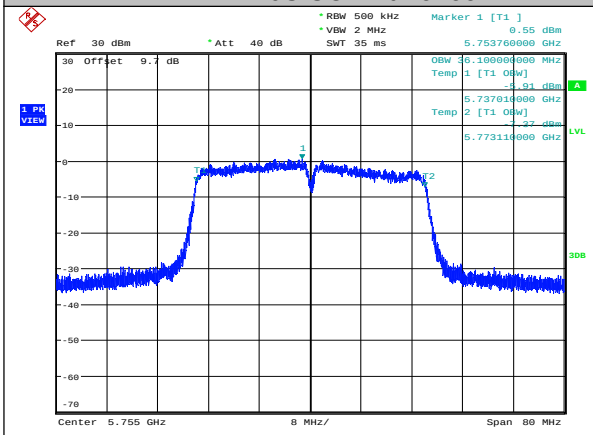
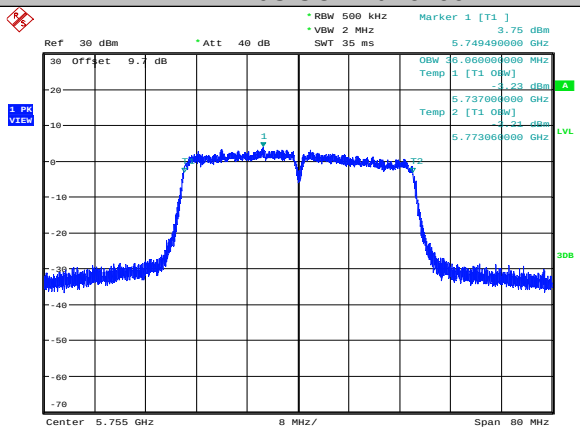
11N40SISO-Ant1-5755



Date: 30.DEC.2019 14:59:16

11N40SISO-Ant2-5755



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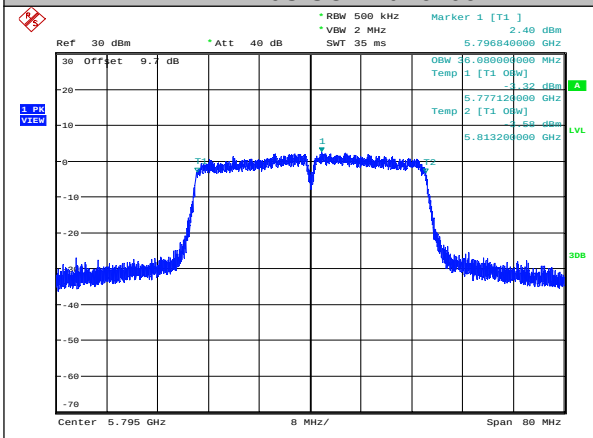	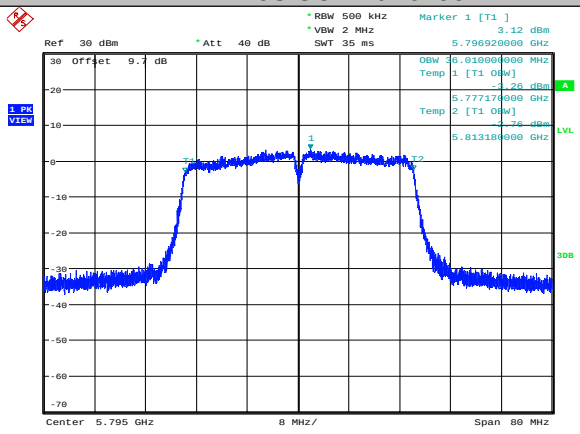
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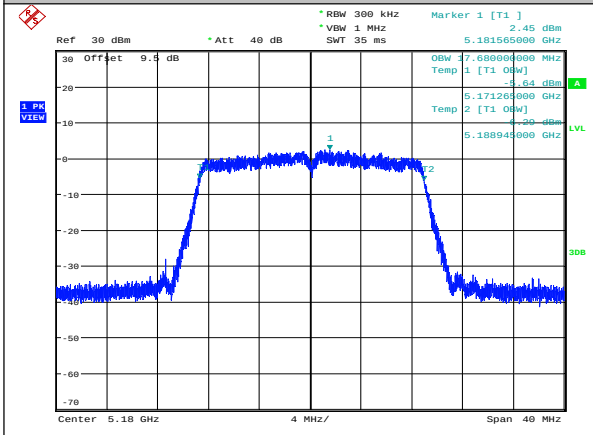
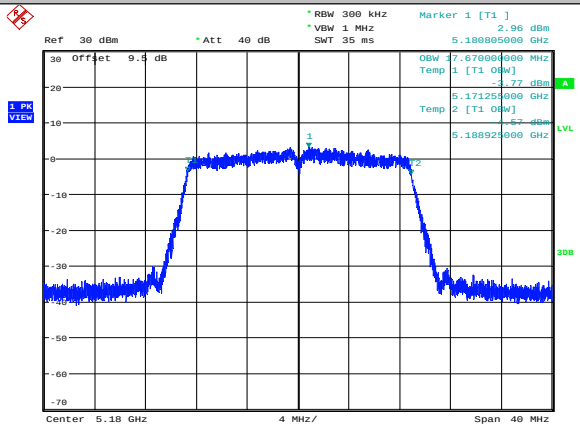
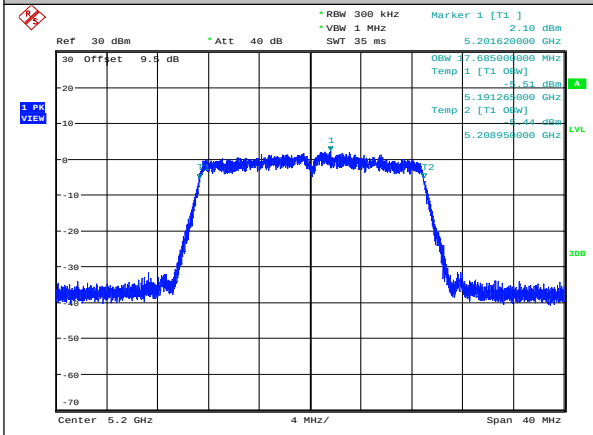
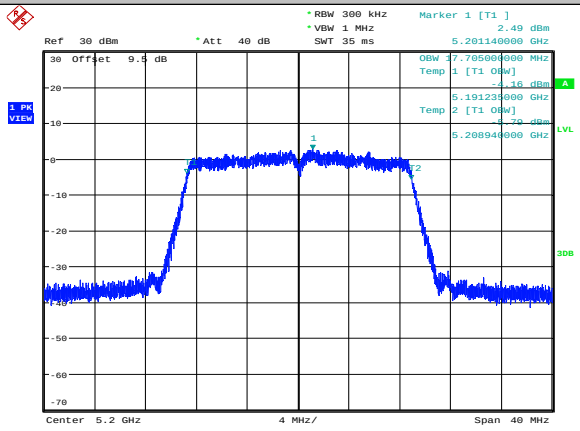
	
Date: 30.DEC.2019 15:00:25	Date: 30.DEC.2019 15:18:19
11AC20SISO-Ant1-5200	**11AC20SISO-Ant2-5200**
	
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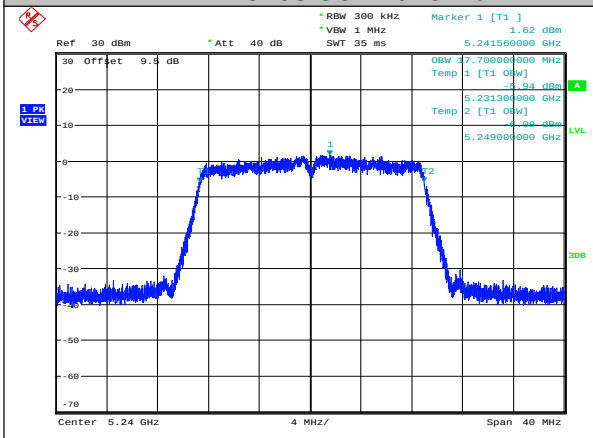
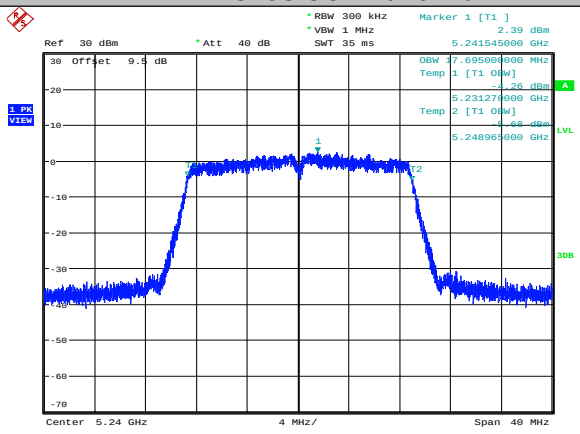
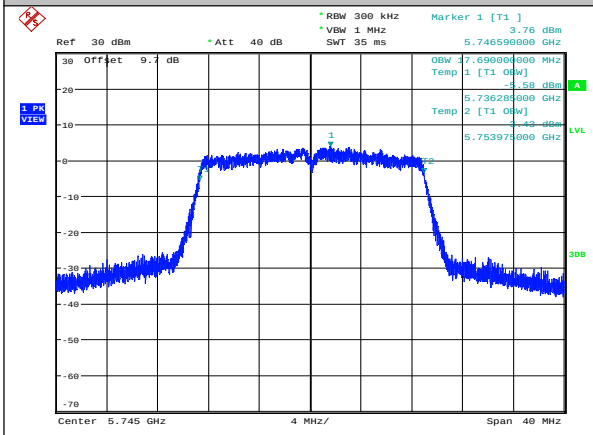
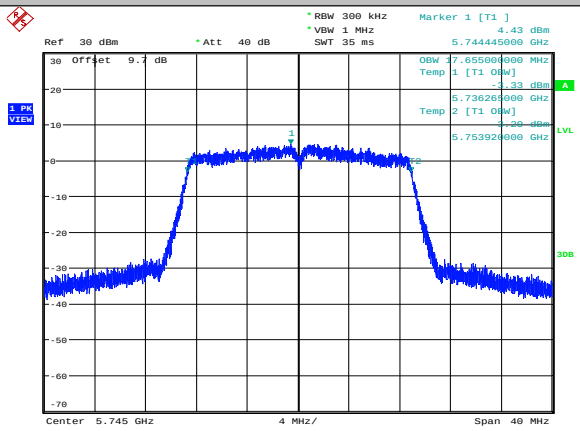
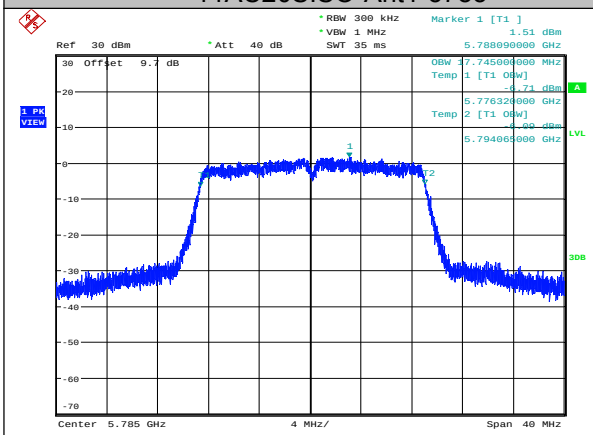
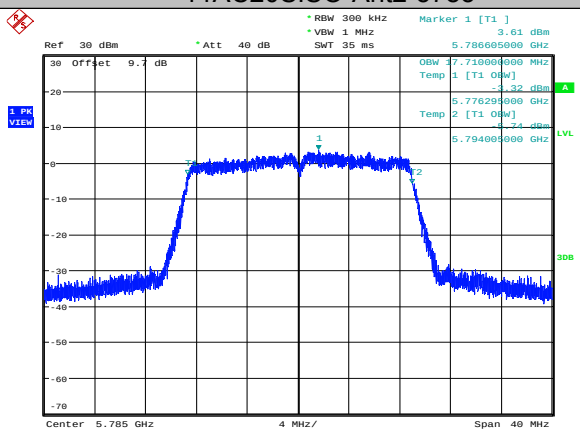
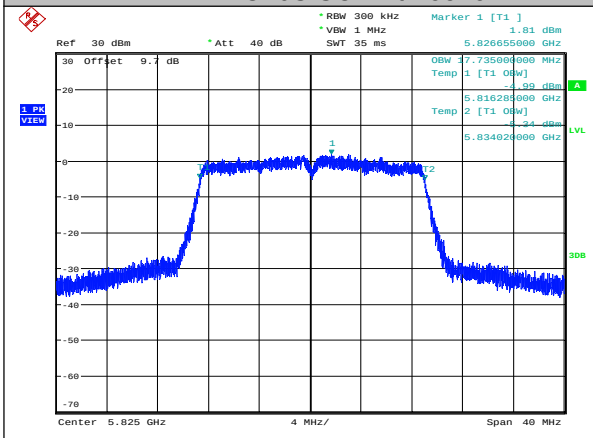
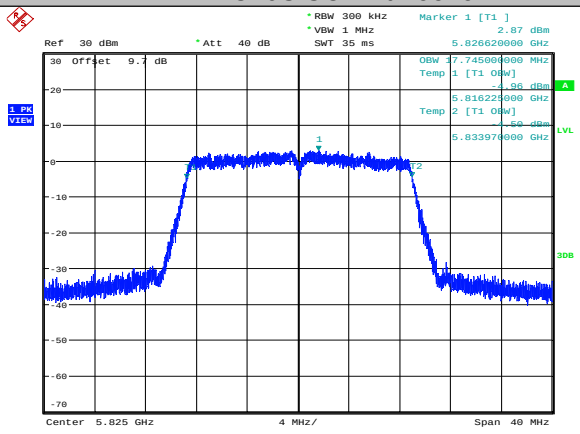
11AC20SISO-Ant1-5240	11AC20SISO-Ant2-5240
 Date: 30.DEC.2019 15:01:27	 Date: 30.DEC.2019 15:19:26
11AC20SISO-Ant1-5745	11AC20SISO-Ant2-5745
 Date: 30.DEC.2019 15:02:00	 Date: 30.DEC.2019 15:20:00
11AC20SISO-Ant1-5785	11AC20SISO-Ant2-5785
 Date: 30.DEC.2019 15:02:47	 Date: 30.DEC.2019 15:20:33

11AC20SISO-Ant1-5825



Date: 30.DEC.2019 15:03:20

11AC20SISO-Ant2-5825



Date: 30.DEC.2019 15:21:10

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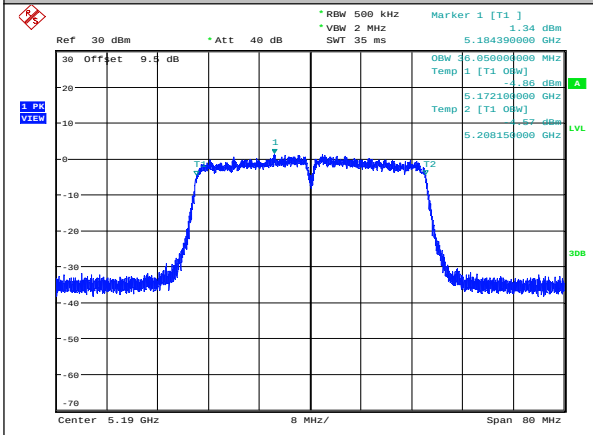

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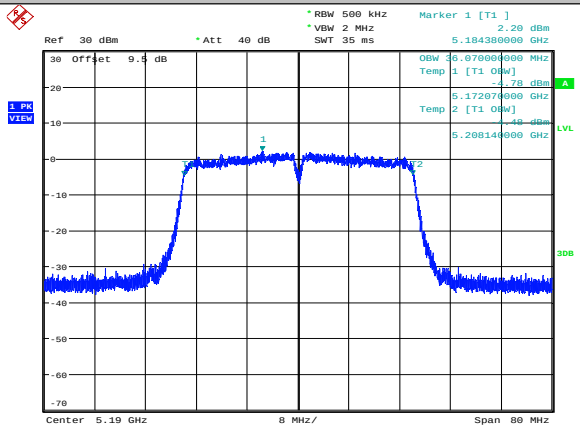

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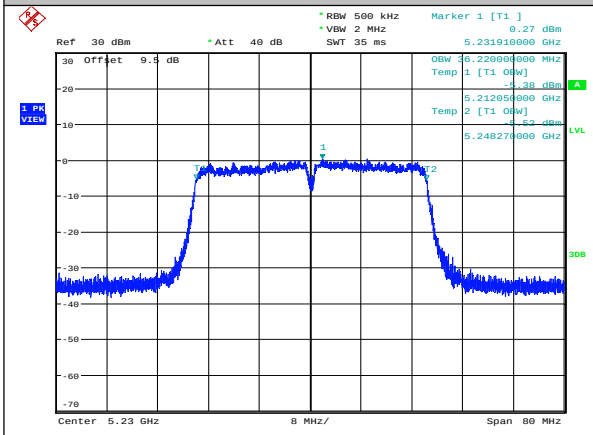

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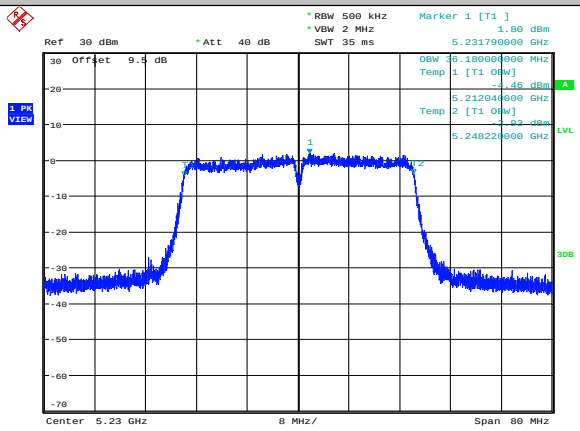

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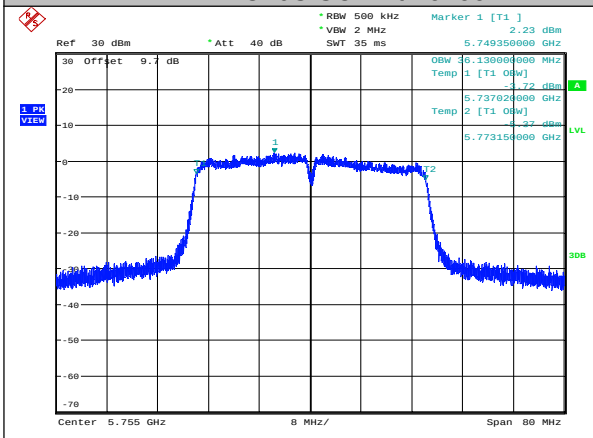	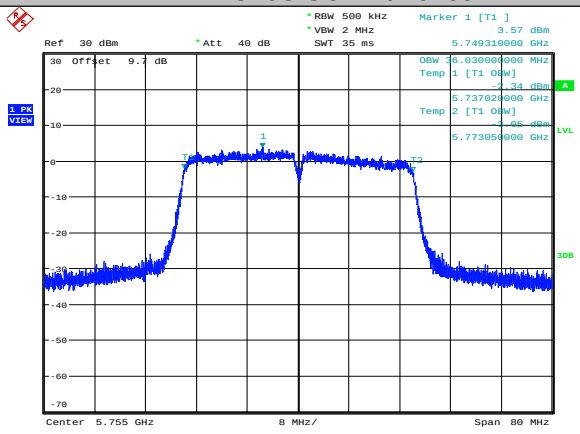
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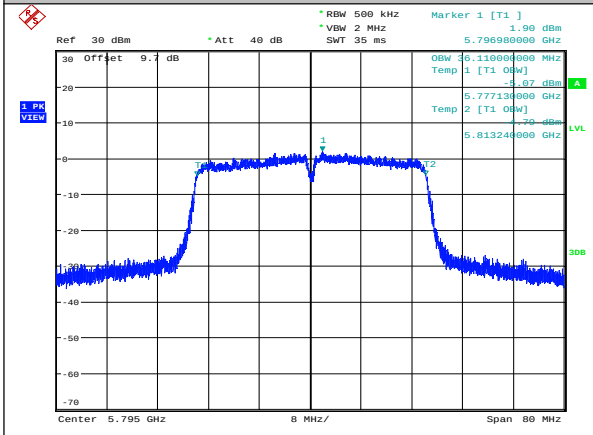	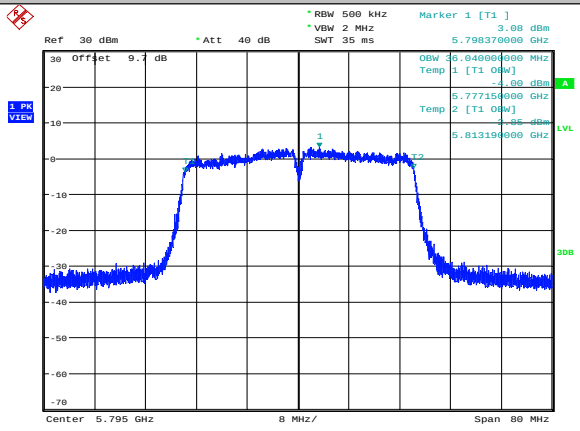
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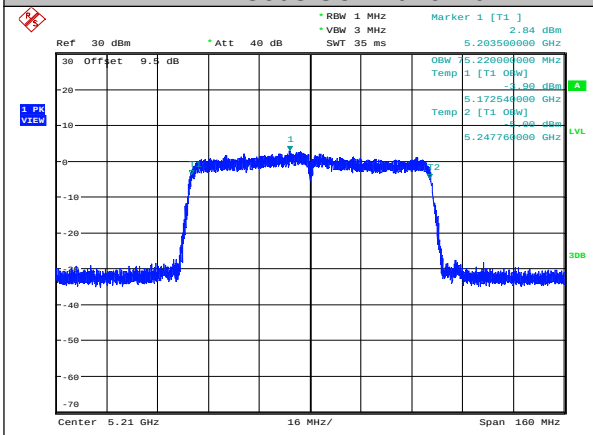	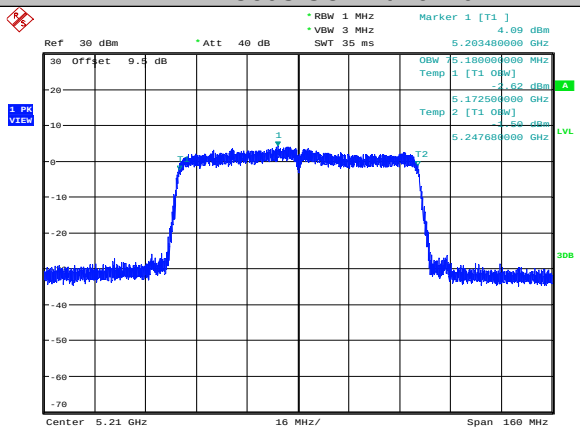
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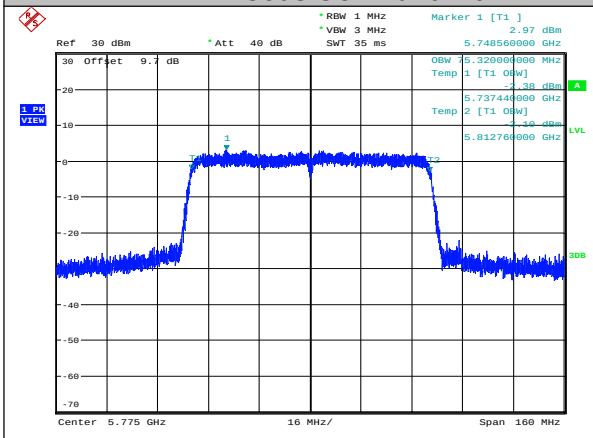
11AC80SISO-Ant1-5775



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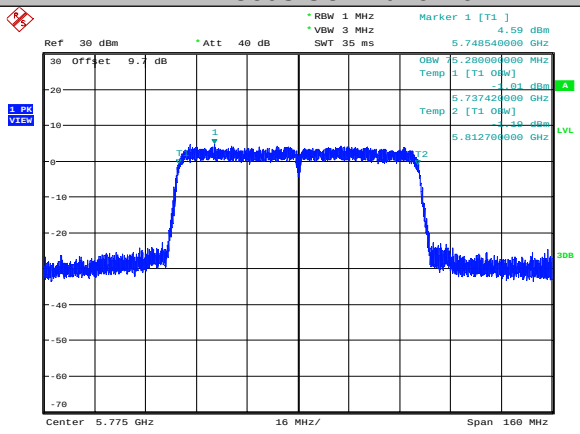
11AC80SISO-Ant2-5775



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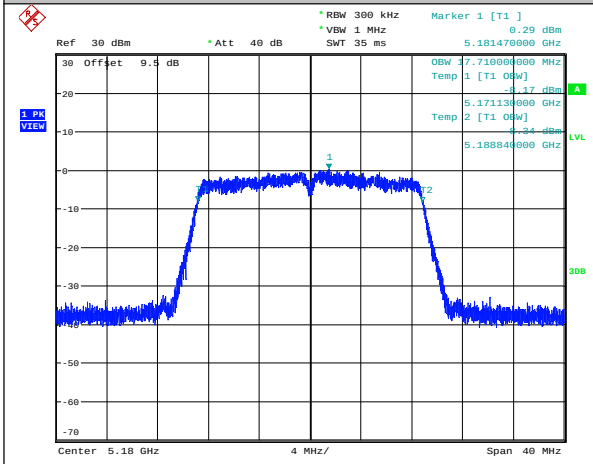
11N20MIMO-Ant1-5180



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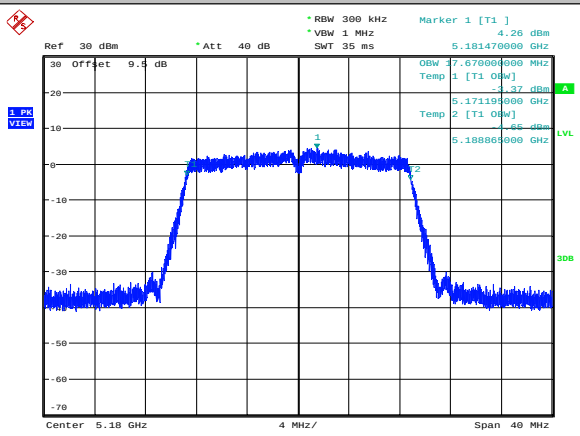

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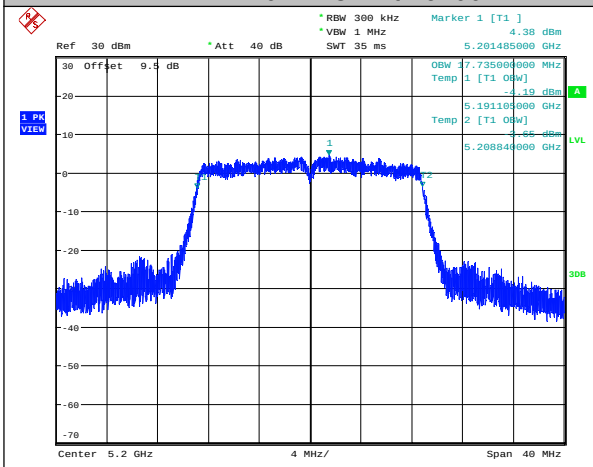

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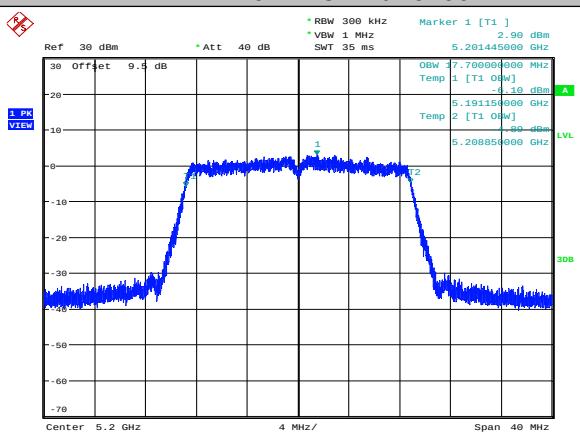

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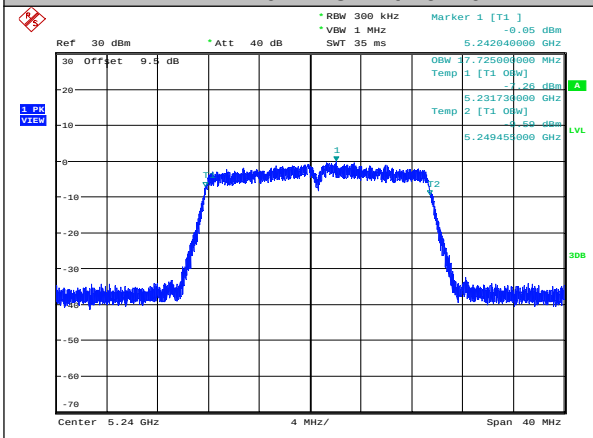

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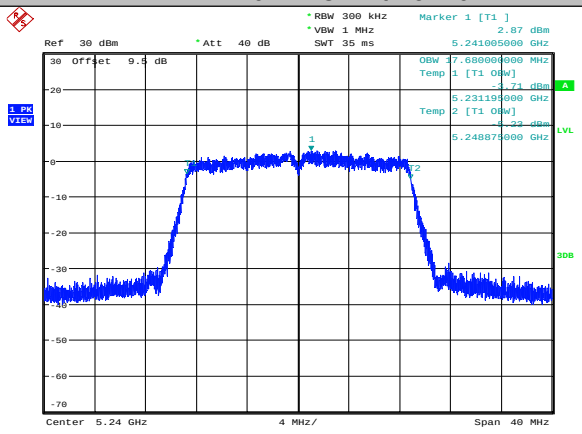

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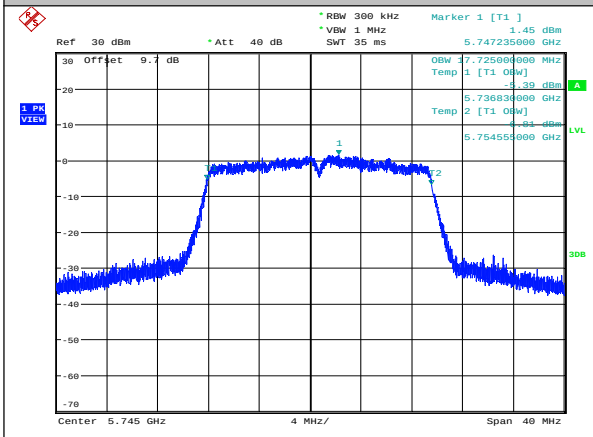

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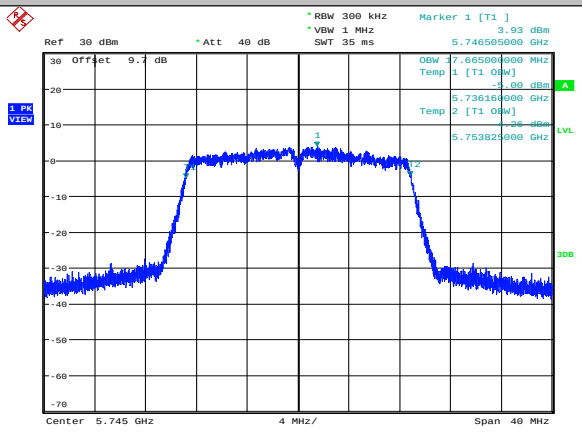

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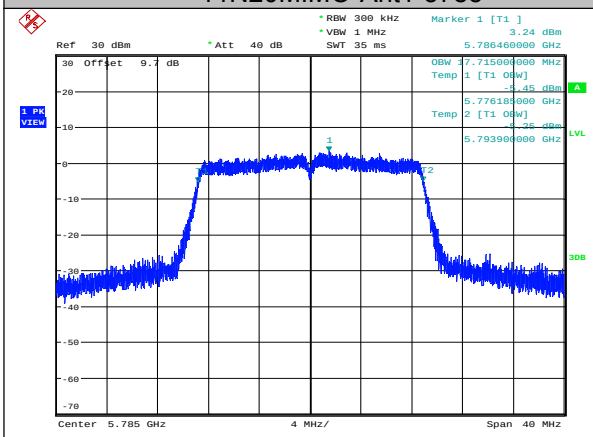

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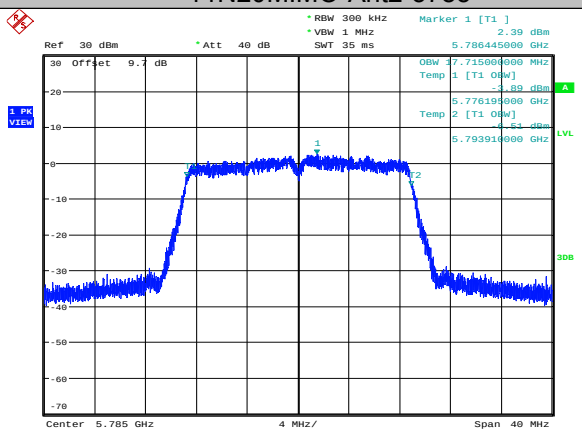

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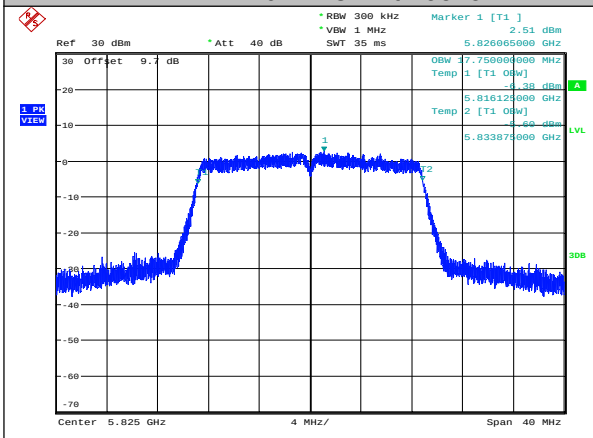

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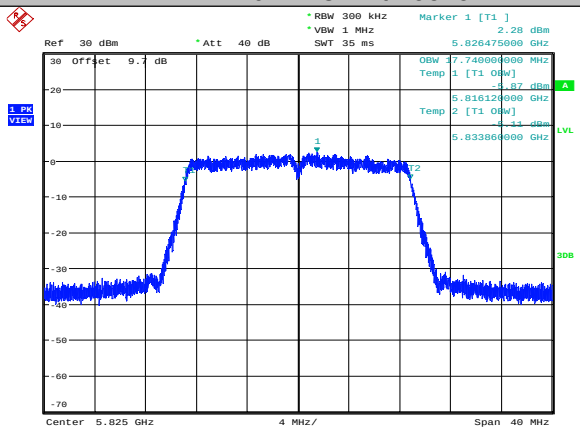

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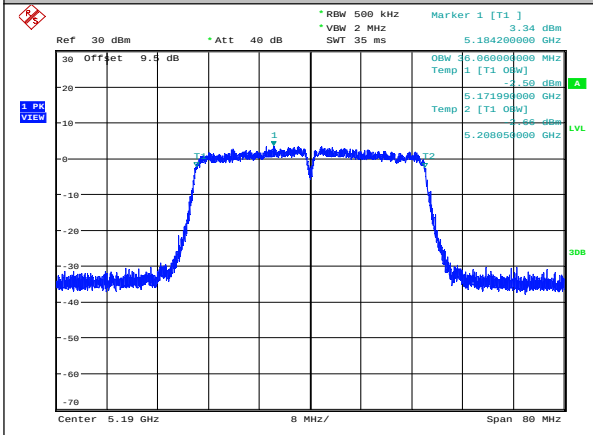

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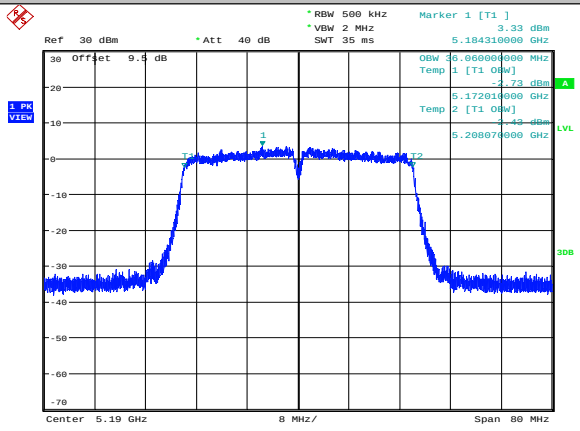

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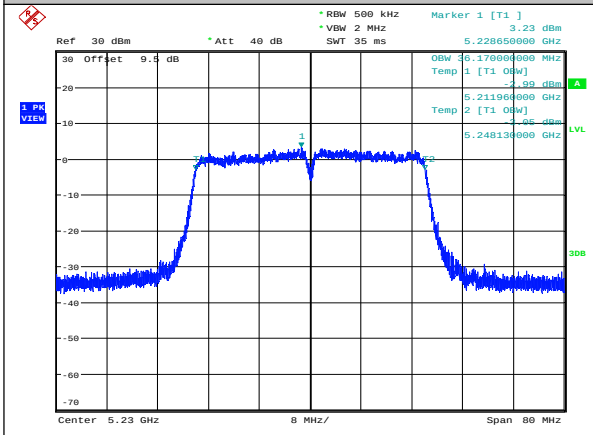

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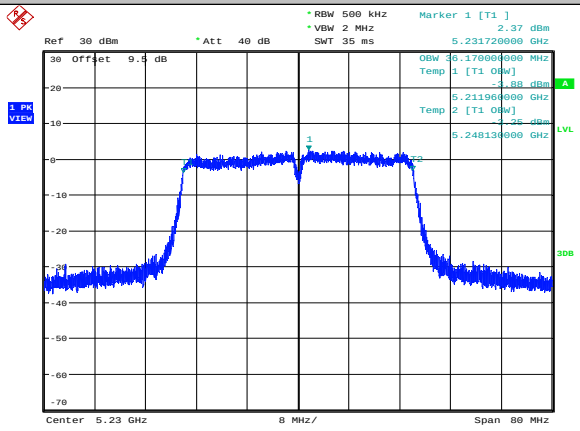

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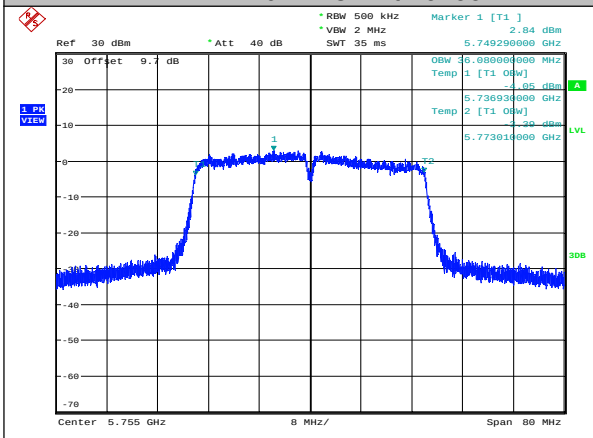

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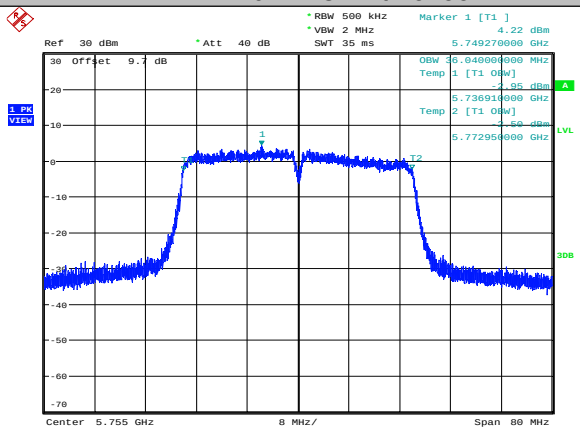

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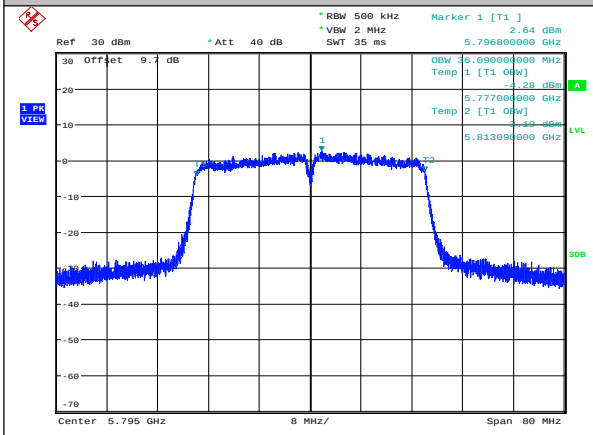
11N40MIMO-Ant1-5795



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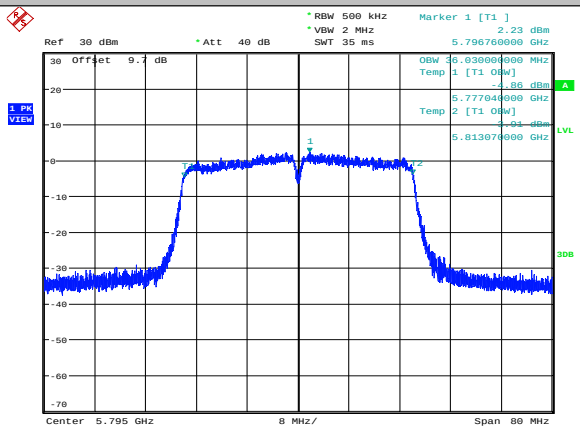
11N40MIMO-Ant2-5795



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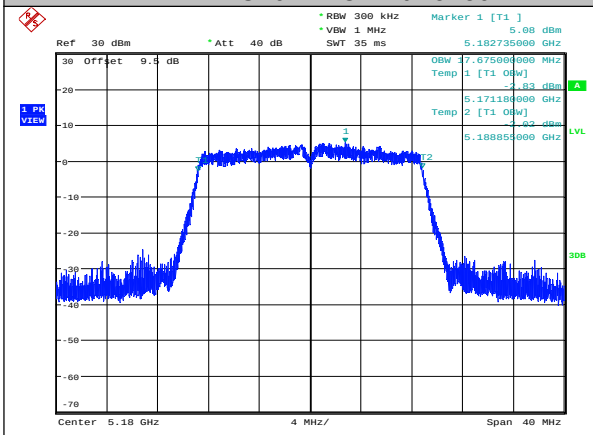
11AC20MIMO-Ant1-5180



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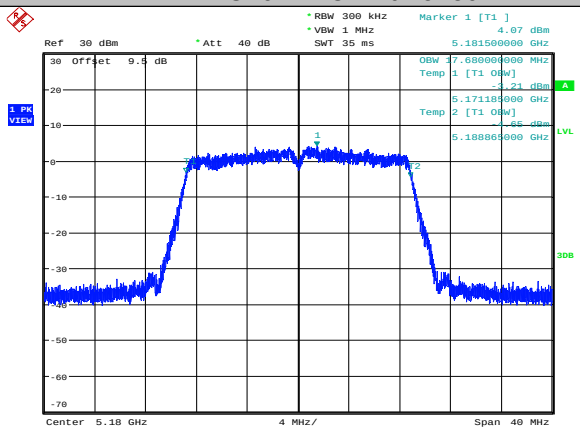

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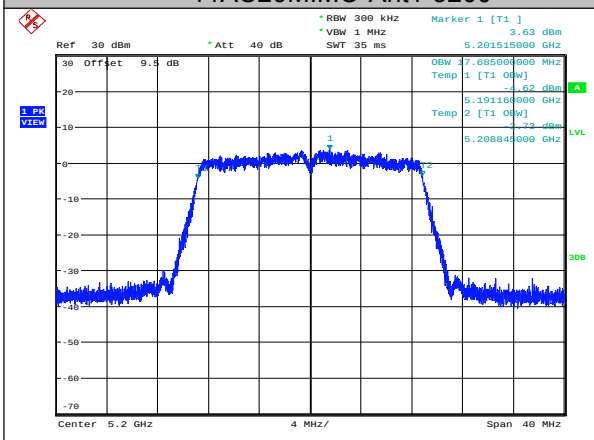
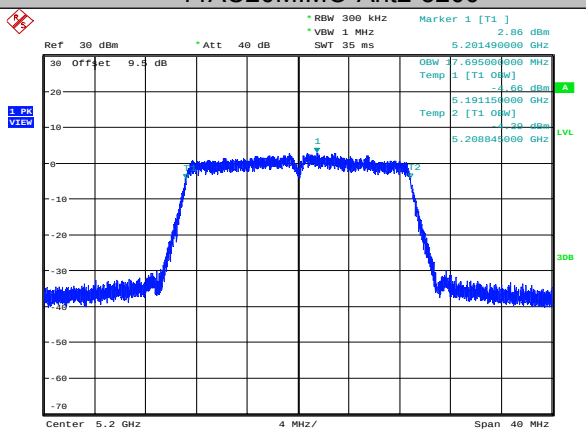
 Date: 30.DEC.2019 16:17:41	 Date: 30.DEC.2019 16:32:26
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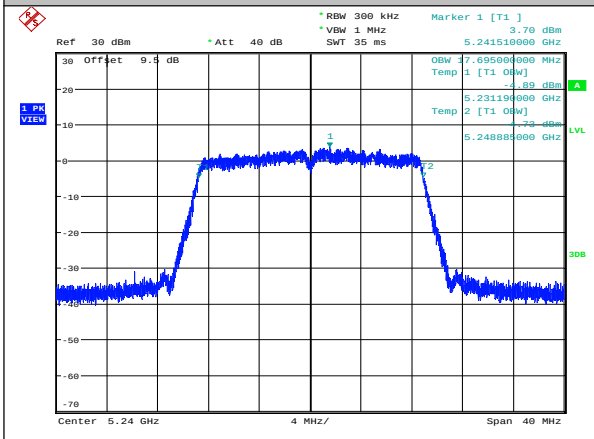
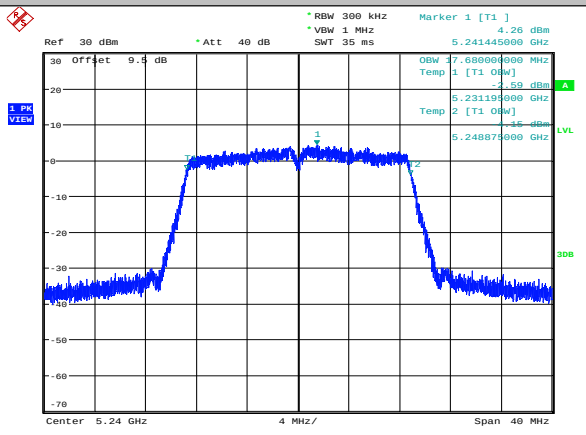
 Date: 30.DEC.2019 16:18:12	 Date: 30.DEC.2019 16:32:56
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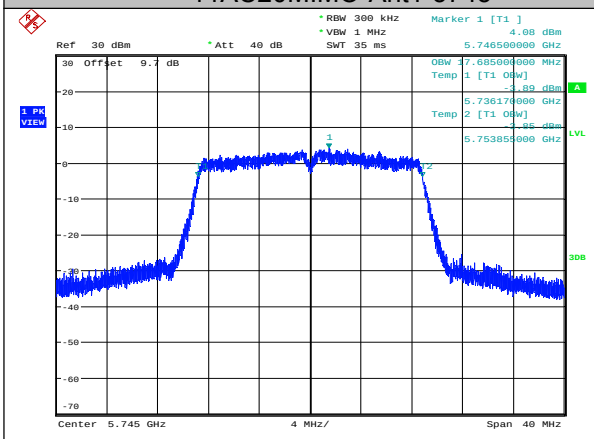
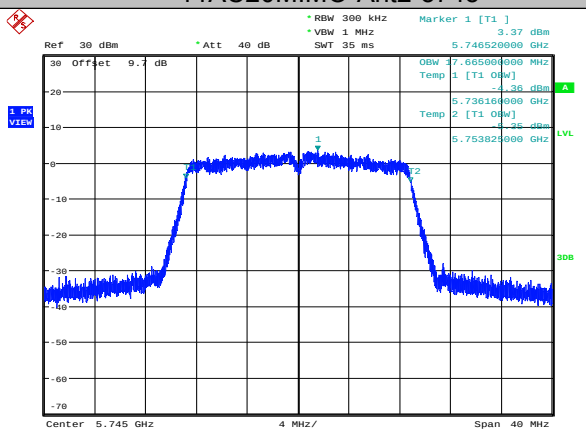
 Date: 30.DEC.2019 16:18:43	 Date: 30.DEC.2019 16:33:29

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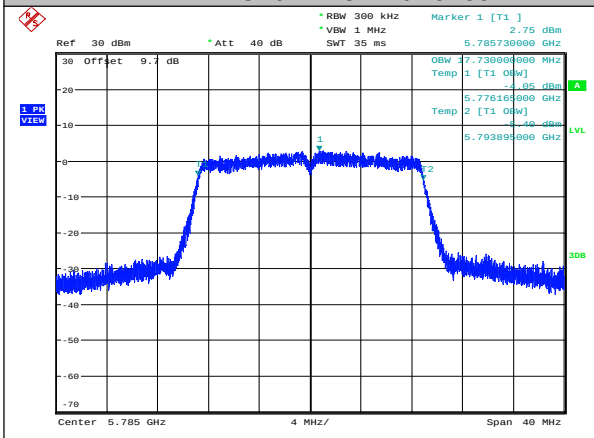	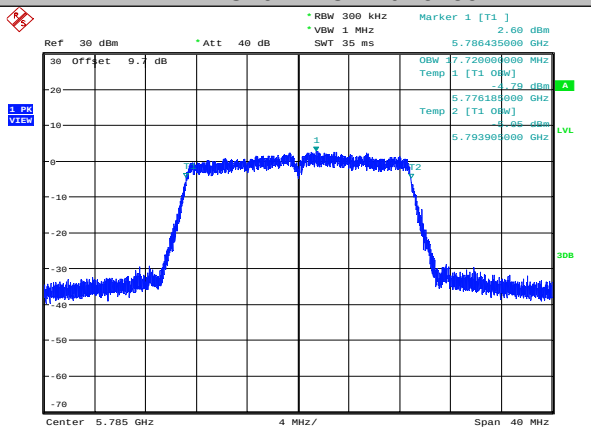
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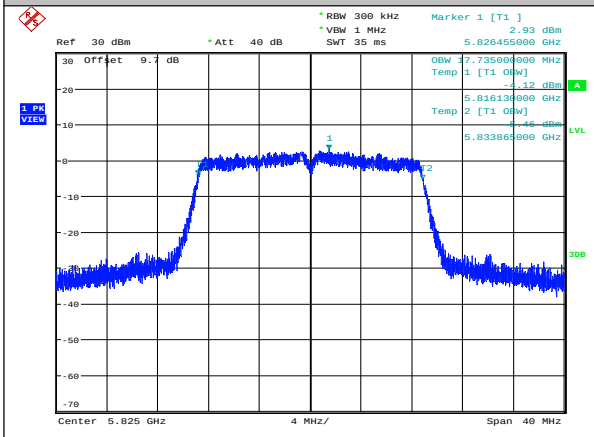	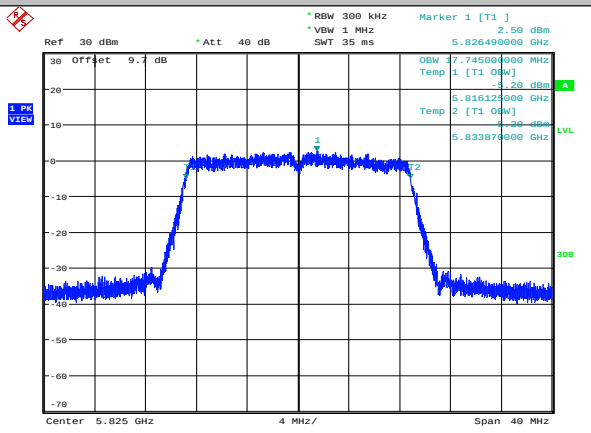
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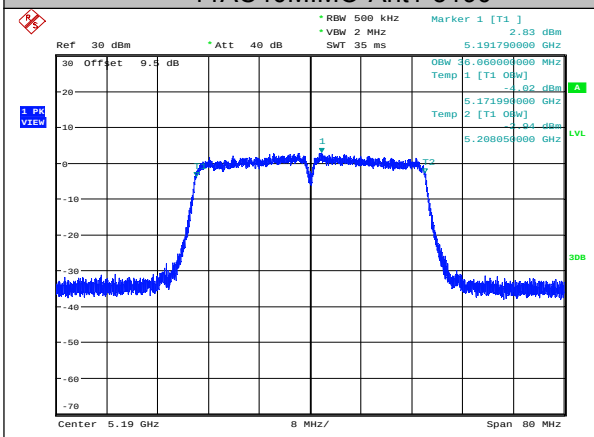	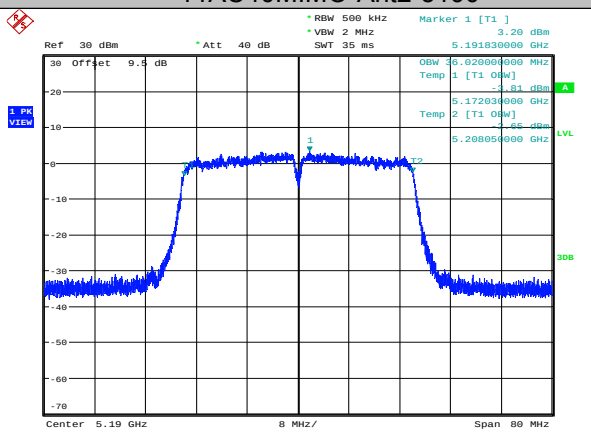
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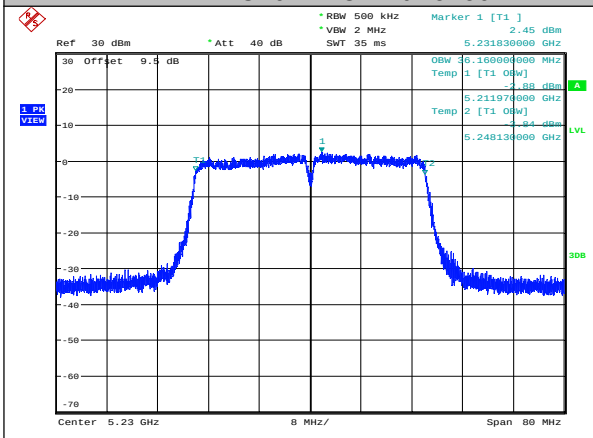
11AC40MIMO-Ant1-5230



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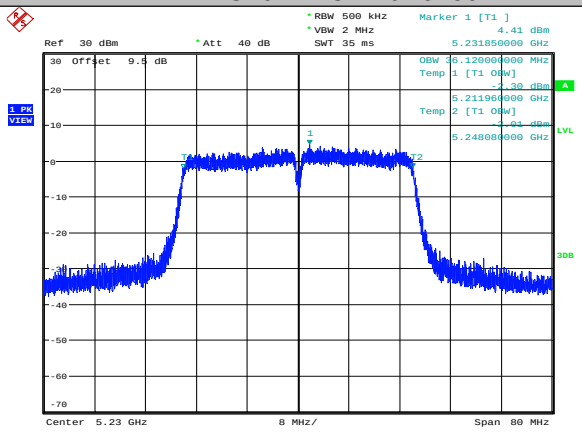

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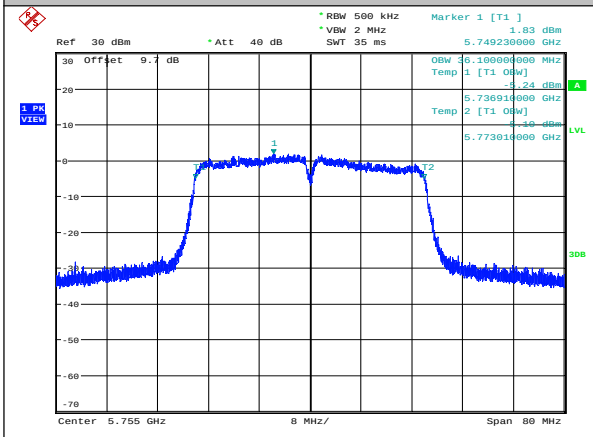

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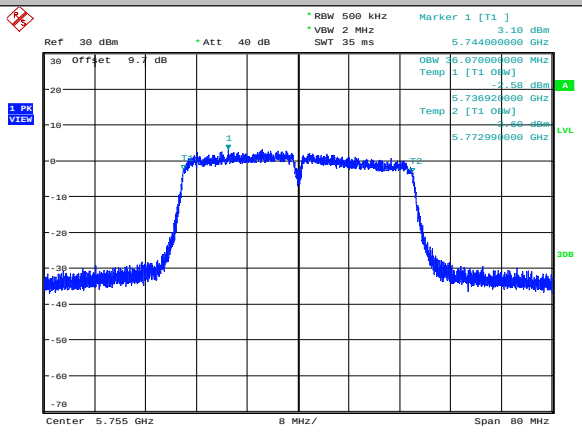

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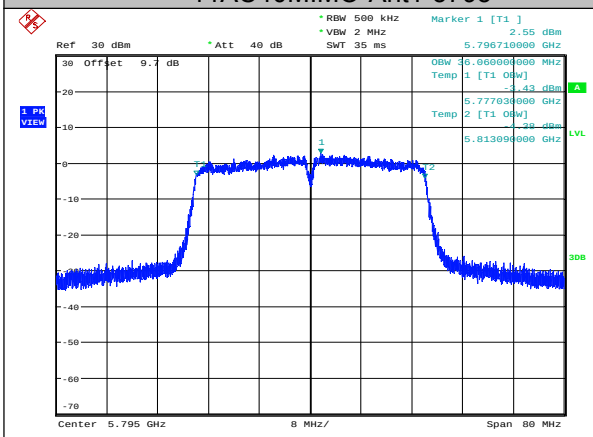

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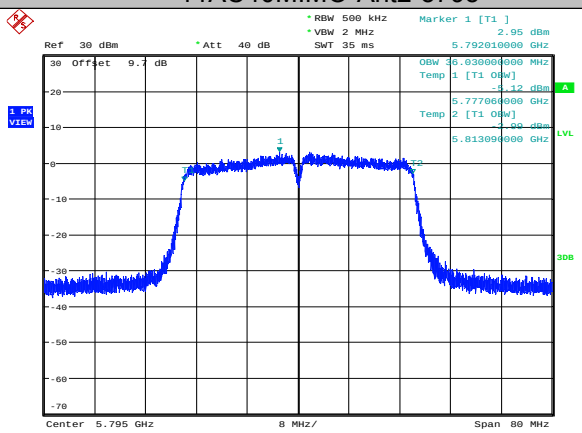

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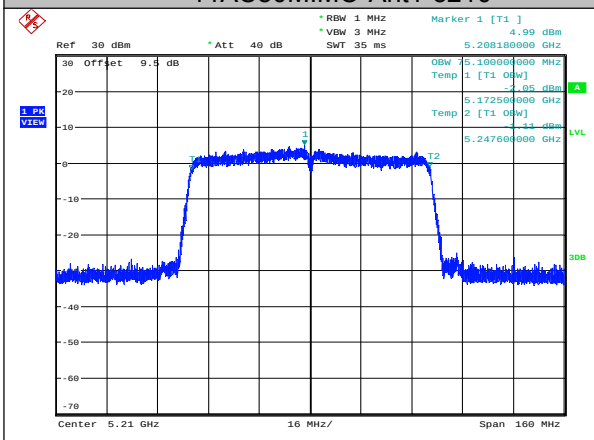	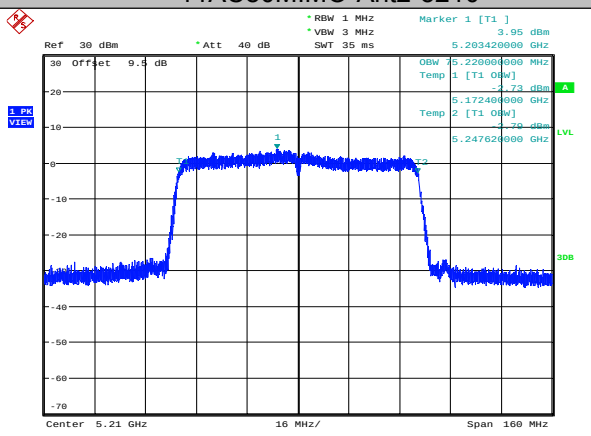
Date: 30.DEC.2019 16:23:11	Date: 30.DEC.2019 16:37:27
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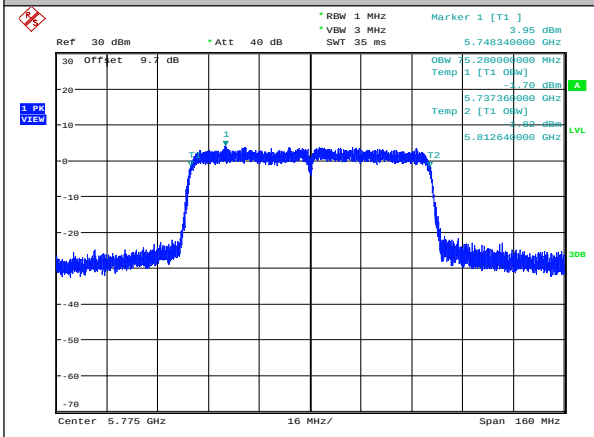
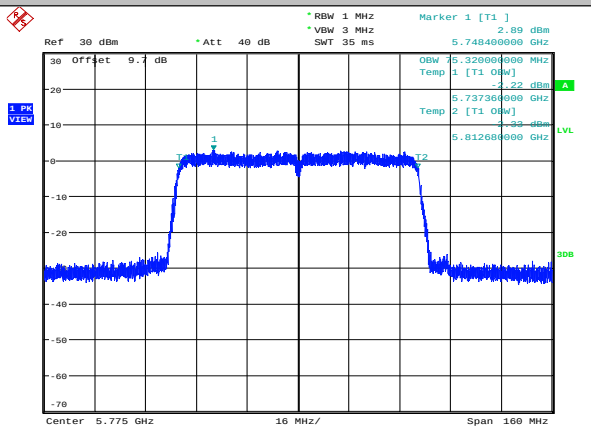
	
Date: 30.DEC.2019 16:23:54	Date: 30.DEC.2019 16:38:00

Appendix B): Maximum Conduct Output Power

Directional Antenna Gain

The TX chains are correlated, the antenna gain is equal among the chains.
Employs an antenna that operates simultaneously on multiple directional beams using the same frequency channels. No carrier aggregation techniques.
The directional gainis:

Antenna 1 Gain(dBi)	Antenna 2 Gain(dBi)
3.0	3.0

Duty Cycle:

ANT1			
Test Mode	**Channel**	**Duty Cycle[%]**	**Duty Cycle factor (dB)**
11A	5180	90.77	0.42
11A	5200	90.27	0.44
11A	5240	96.8	0.14
11A	5745	96.8	0.14
11A	5785	92.89	0.32
11A	5825	93.5	0.29
11N20SISO	5180	89.58	0.48
11N20SISO	5200	88.46	0.53
11N20SISO	5240	90.65	0.43
11N20SISO	5745	95.95	0.18
11N20SISO	5785	96.56	0.15
11N20SISO	5825	95.35	0.21
11N40SISO	5190	79.06	1.02
11N40SISO	5230	81.09	0.91
11N40SISO	5755	83.81	0.77
11N40SISO	5795	81.85	0.87
11N20MIMO	5180	90.65	0.43
11N20MIMO	5200	89.59	0.48
11N20MIMO	5240	91.27	0.40
11N20MIMO	5745	95.95	0.18
11N20MIMO	5785	89.59	0.48
11N20MIMO	5825	88.47	0.53
11N40MIMO	5190	82.88	0.82
11N40MIMO	5230	81.82	0.87
11N40MIMO	5755	93.56	0.29
11N40MIMO	5795	87.9	0.56
11AC20SISO	5180	91.88	0.37
11AC20SISO	5200	91.34	0.39
11AC20SISO	5240	95.43	0.20
11AC20SISO	5745	89.13	0.50
11AC20SISO	5785	93.11	0.31
11AC20SISO	5825	89.75	0.47

11AC40SISO	5190	86.08	0.65
11AC40SISO	5230	85.13	0.70
11AC40SISO	5755	89.24	0.49
11AC40SISO	5795	84.22	0.75
11AC80SISO	5210	70.93	1.49
11AC80SISO	5775	75.64	1.21
11AC20MIMO	5180	94.85	0.23
11AC20MIMO	5200	95.43	0.20
11AC20MIMO	5240	93.62	0.29
11AC20MIMO	5745	89.24	0.49
11AC20MIMO	5785	89.75	0.47
11AC20MIMO	5825	90.27	0.44
11AC40MIMO	5190	89.05	0.50
11AC40MIMO	5230	87.22	0.59
11AC40MIMO	5755	85.15	0.70
11AC40MIMO	5795	89.24	0.49
11AC80MIMO	5210	75.42	1.23
11AC80MIMO	5775	66	1.80

ANT2			
Test Mode	**Channel**	**Duty Cycle[%]**	**Duty Cycle factor (dB)**
11A	5180	90.27	0.44
11A	5200	96.8	0.14
11A	5240	96.31	0.16
11A	5745	90.77	0.42
11A	5785	95.12	0.22
11A	5825	90.77	0.42
11N20SISO	5180	90.65	0.43
11N20SISO	5200	89.07	0.50
11N20SISO	5240	90.65	0.43
11N20SISO	5745	88.04	0.55
11N20SISO	5785	90.12	0.45
11N20SISO	5825	90.19	0.45
11N40SISO	5190	88.95	0.51
11N40SISO	5230	81.09	0.91
11N40SISO	5755	81.85	0.87
11N40SISO	5795	78.26	1.06
11N20MIMO	5180	96.56	0.15
11N20MIMO	5200	90.12	0.45

11N20MIMO	5240	93.51	0.29
11N20MIMO	5745	88.04	0.55
11N20MIMO	5785	87.95	0.56
11N20MIMO	5825	92.38	0.34
11N40MIMO	5190	79.94	0.97
11N40MIMO	5230	82.88	0.82
11N40MIMO	5755	84.76	0.72
11N40MIMO	5795	87.9	0.56
11AC20SISO	5180	91.41	0.39
11AC20SISO	5200	91.96	0.36
11AC20SISO	5240	96.71	0.15
11AC20SISO	5745	89.15	0.50
11AC20SISO	5785	93.06	0.31
11AC20SISO	5825	96.62	0.15
11AC40SISO	5190	81.27	0.90
11AC40SISO	5230	85.15	0.70
11AC40SISO	5755	91.36	0.39
11AC40SISO	5795	91.36	0.39
11AC80SISO	5210	82.1	0.86
11AC80SISO	5775	80.36	0.95
11AC20MIMO	5180	88.22	0.54
11AC20MIMO	5200	88.15	0.55
11AC20MIMO	5240	96.02	0.18
11AC20MIMO	5745	91.41	0.39
11AC20MIMO	5785	94.18	0.26
11AC20MIMO	5825	93.05	0.31
11AC40MIMO	5190	83.15	0.80
11AC40MIMO	5230	79.73	0.98
11AC40MIMO	5755	78.92	1.03
11AC40MIMO	5795	87.22	0.59
11AC80MIMO	5210	80.42	0.95
11AC80MIMO	5775	77.17	1.13

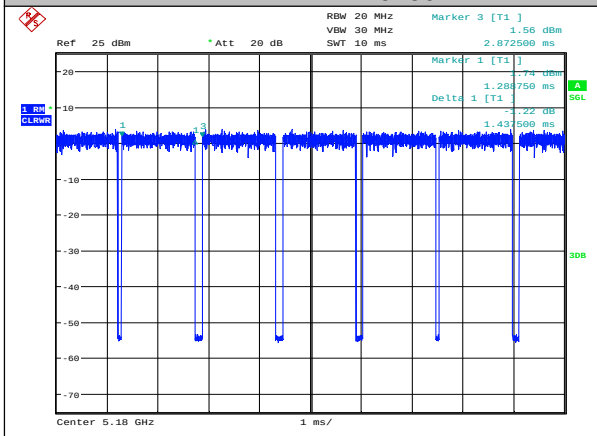
Remark:

1) Duty cycle= On Time/ Period;

2) Duty Cycle factor = 10 * log(1/ Duty cycle);

Test plot as follows:

11A-ANT1-5180



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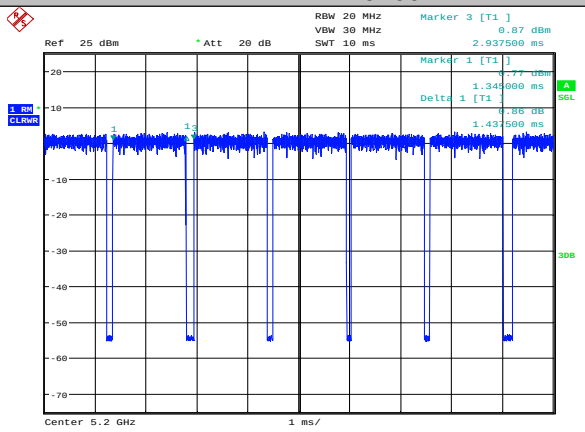

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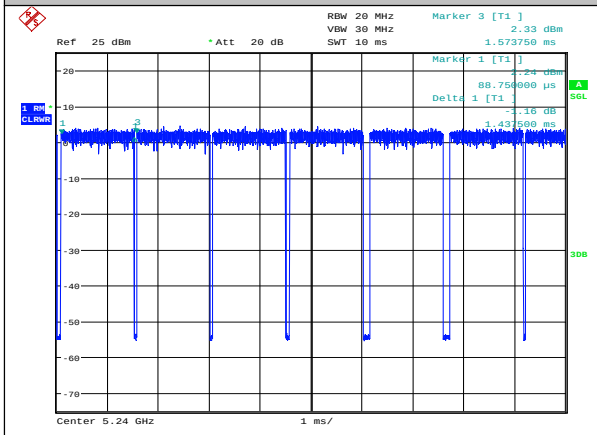

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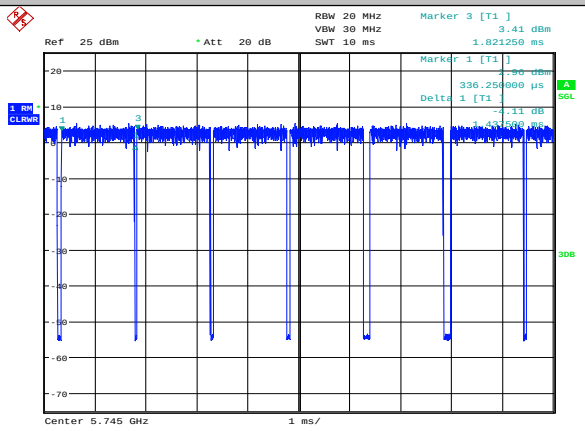

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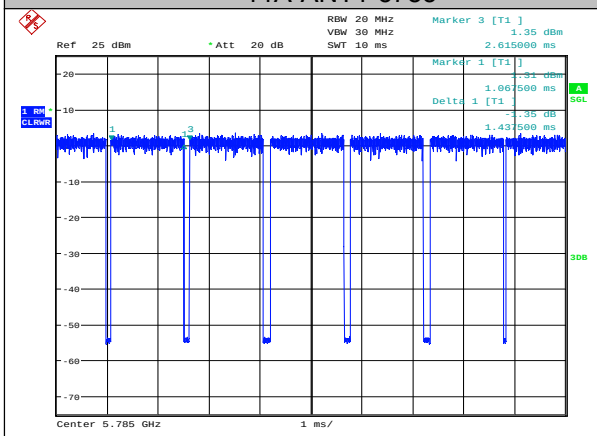

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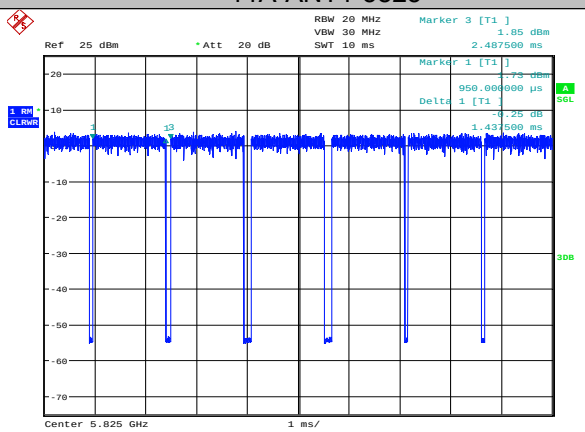

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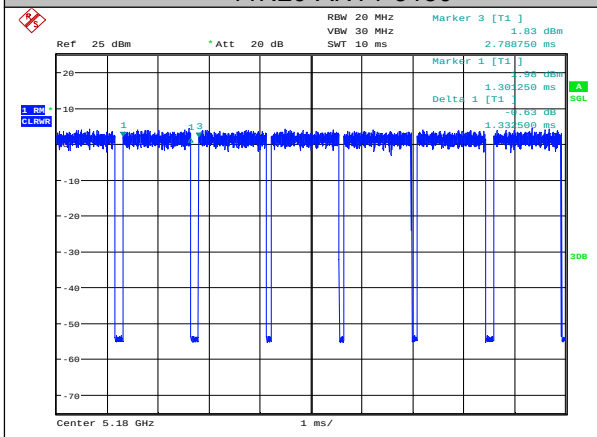

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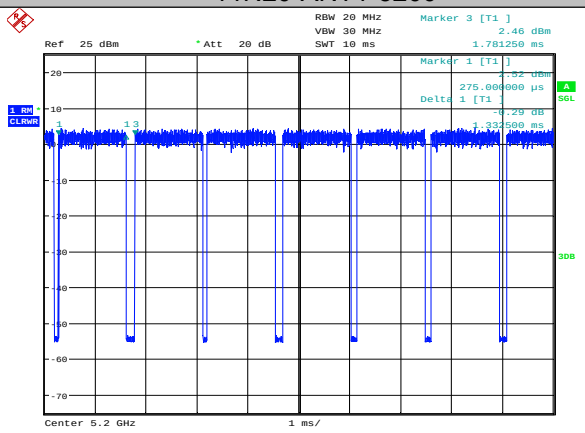

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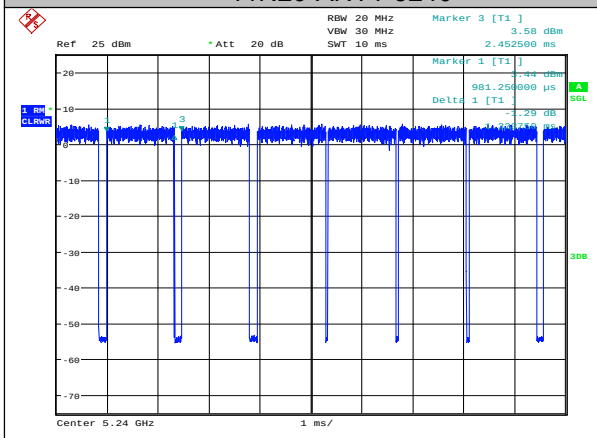

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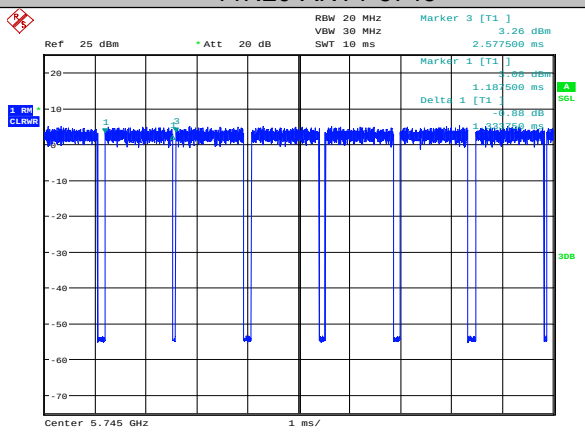

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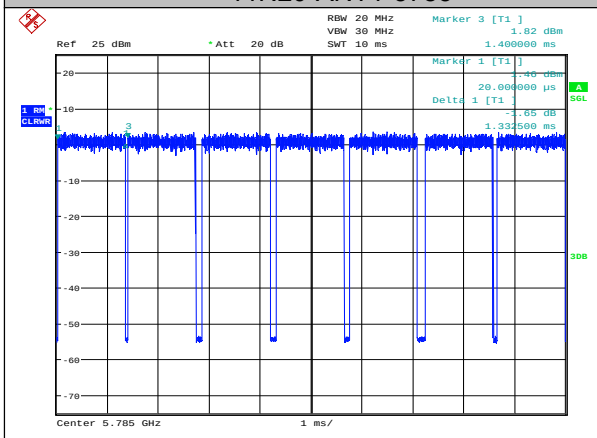

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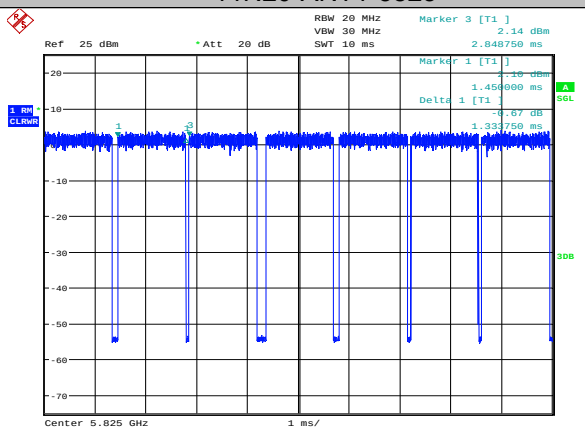

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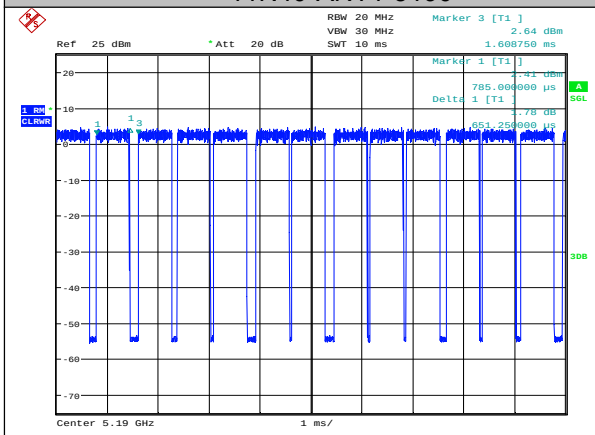

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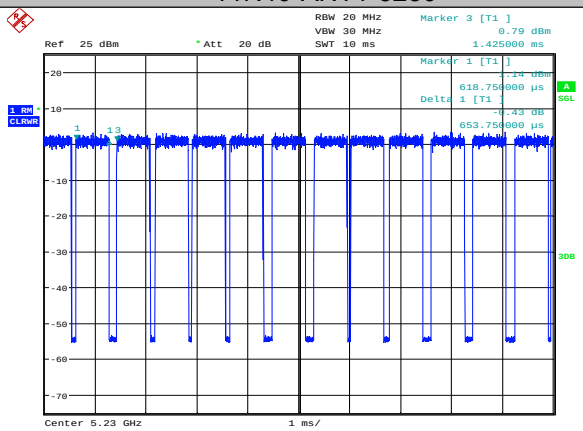

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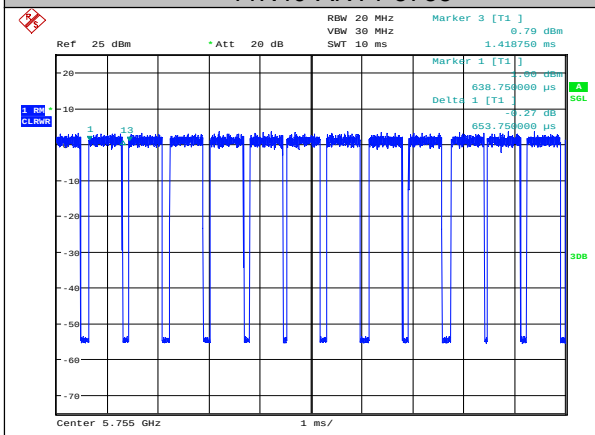

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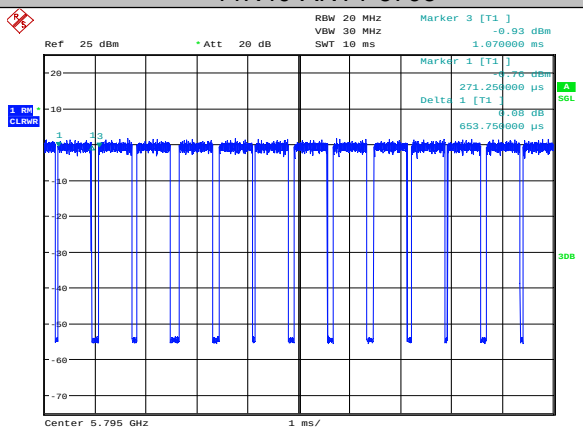

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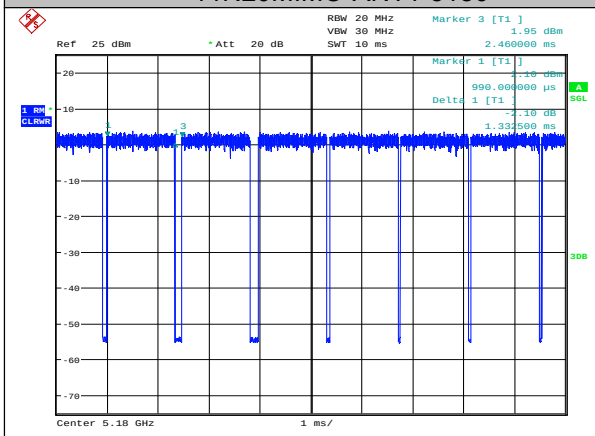

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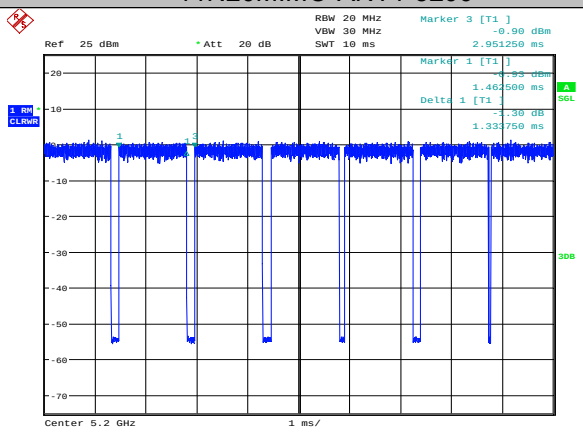

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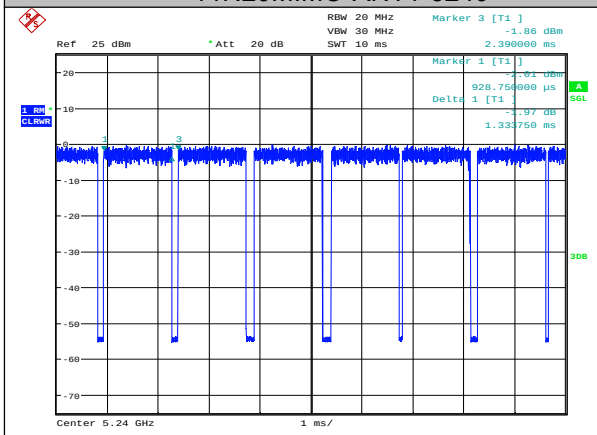

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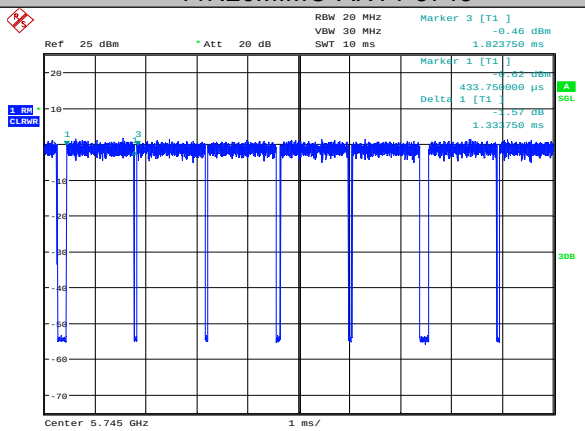

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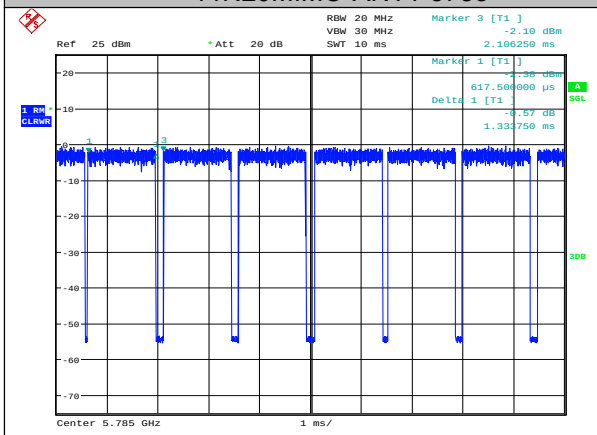

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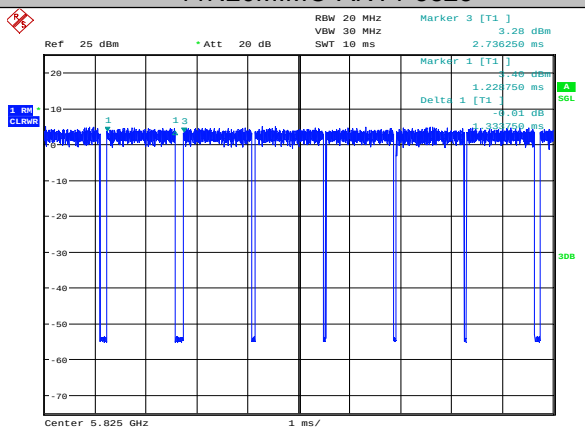

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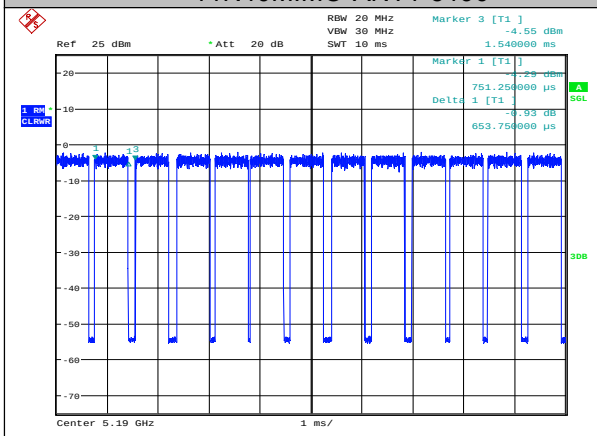

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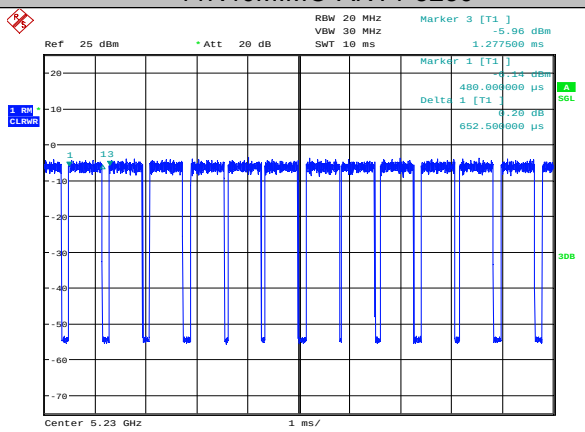

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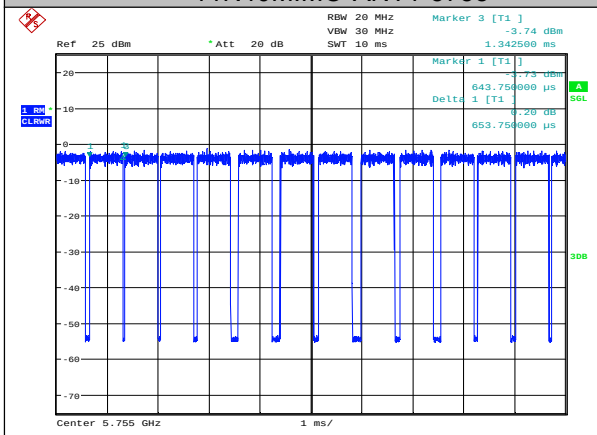

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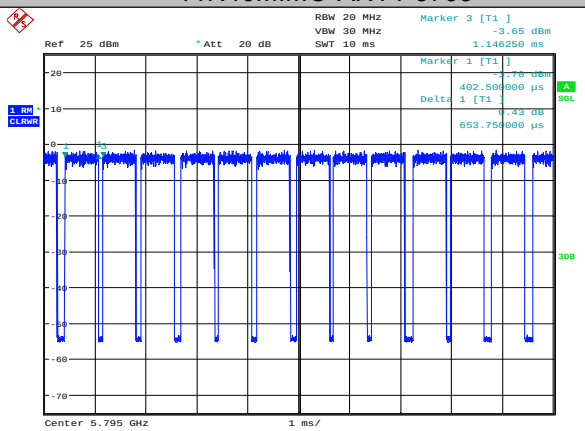
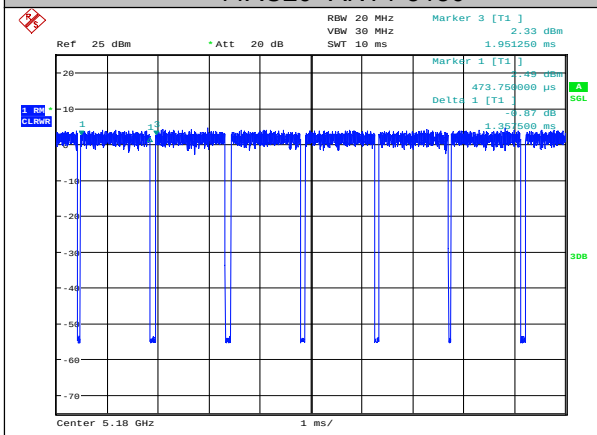


11AC20 -ANT1-5180



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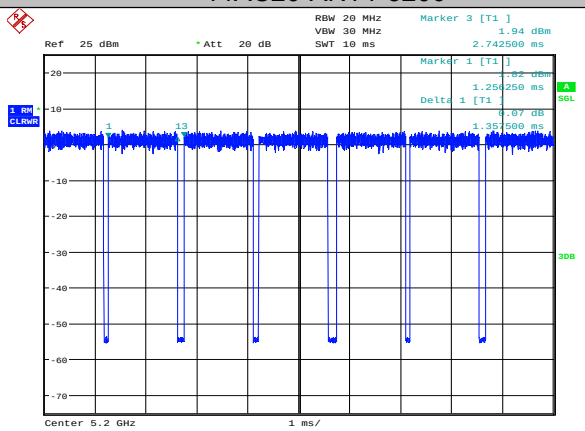

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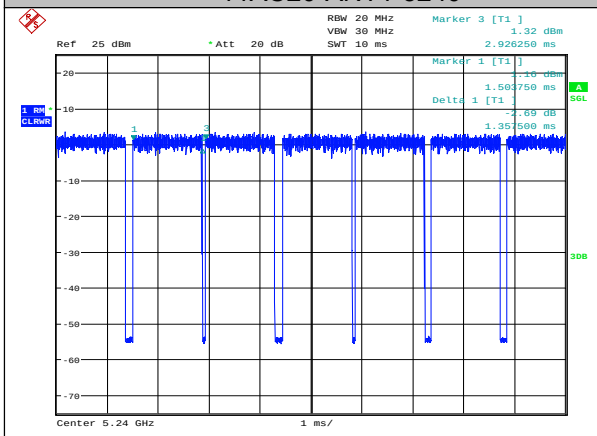

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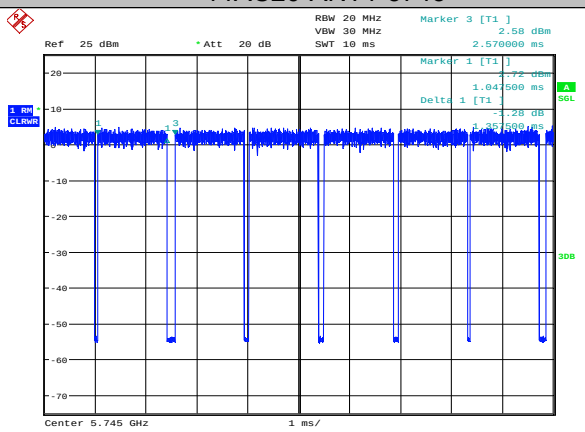

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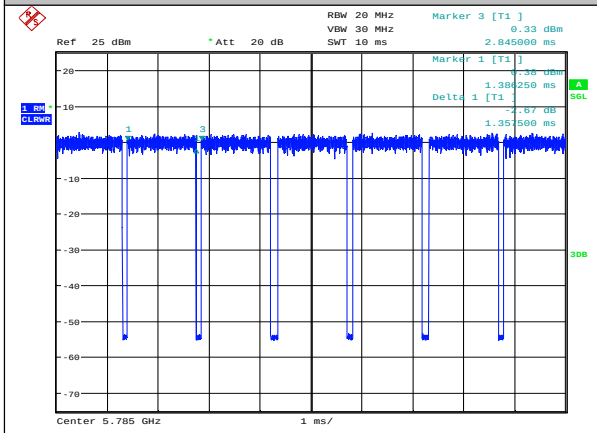

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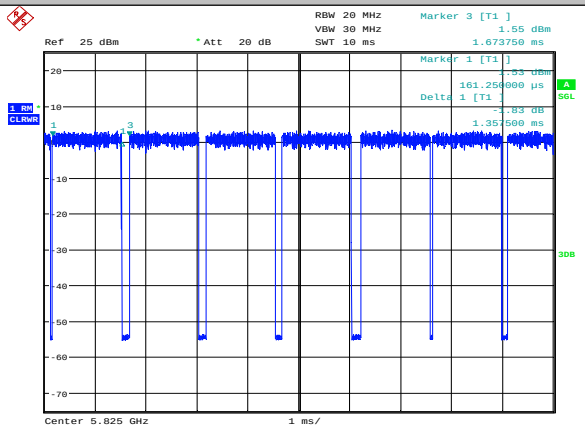

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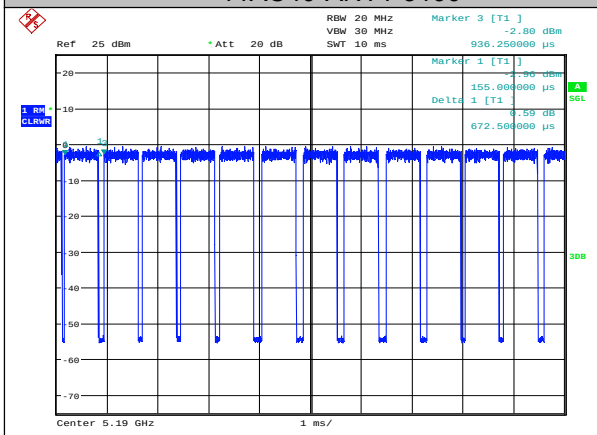

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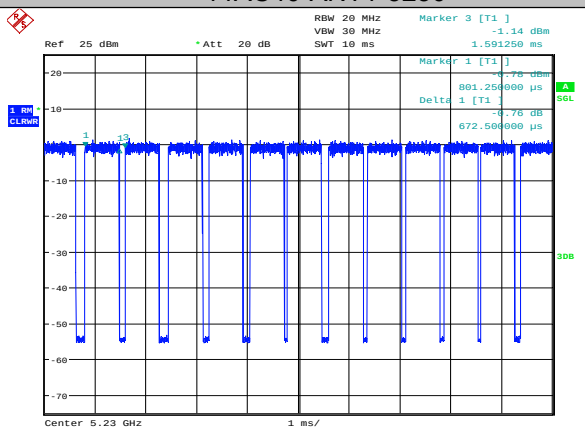

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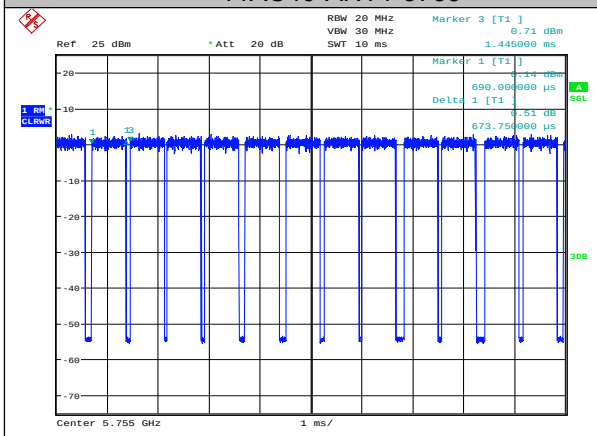

11AC40-ANT1-5795