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Report Template Version: V05
Report Template Revision Date: 2018-07-06

Test Report

Report No.:	CQASZ20230901752E-02
Applicant:	TOPDON TECHNOLOGY Co., Ltd.
Address of Applicant:	Unit 2005 20/F, Qianhai Shimao Tower,Qianhai Shenzhen-Hong kong Cooperation Zone Shenzhen China
Equipment Under Test (EUT):	
Product:	Professional Diagnostic Tool
Model No.:	ArtiDiag500, ArtiDiag500S, ArtiDiag600, ArtiDiag600S
Teat Model No.:	ArtiDiag500
Brand Name:	TOPDON
FCC ID:	2AVYW-AD500O3
Standards:	47 CFR Part 15, Subpart E KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Date of Receipt:	2023-09-26
Date of Test:	2023-09-26 to 2023-11-27
Date of Issue:	2023-11-27
Test Result:	**PASS***

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

Tested By: lewis zhou

(Lewis Zhou)

Reviewed By: Timo Lei

(Timo Lei)

Approved By: Jack Ai

(Jack Ai)

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20230901752E-02	Rev.01	Initial report	2023-11-27

2 Test Summary

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

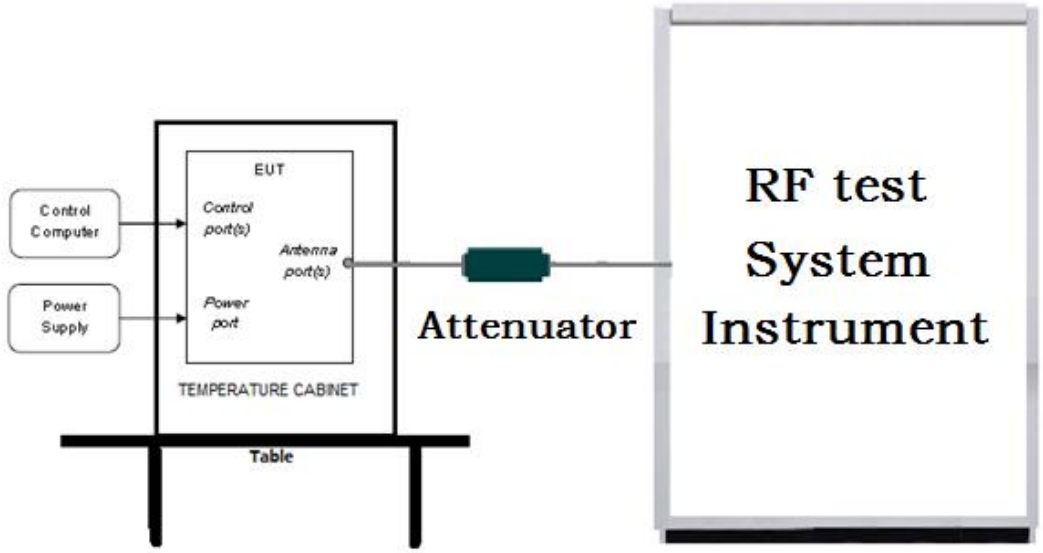
Remark:
The tested sample(s) and the sample information are provided by the client.
Tx: In this whole report Tx (or tx) means Transmitter.
Rx: In this whole report Rx (or rx) means Receiver.
RF: In this whole report RF means Radiated Frequency.
CH: In this whole report CH means channel.
Volt: In this whole report Volt means Voltage.
Temp: In this whole report Temp means Temperature.
Humid: In this whole report Humid means humidity.
Press: In this whole report Press means Pressure.
N/A: In this whole report not application

3 Content

4 Test Requirement

4.1 Test setup

4.1.1 For Conducted test setup



4.1.2 For Radiated Emissions test setup

Radiated Emissions setup:

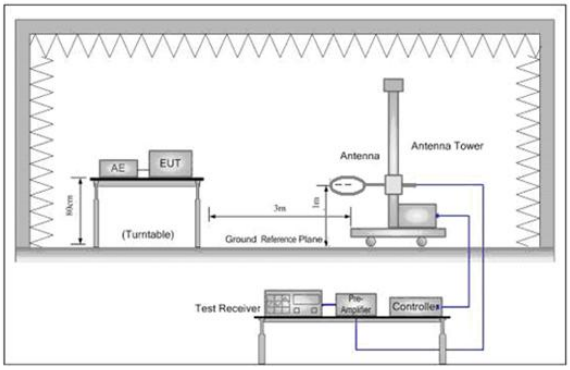


Figure 1. Below 30MHz

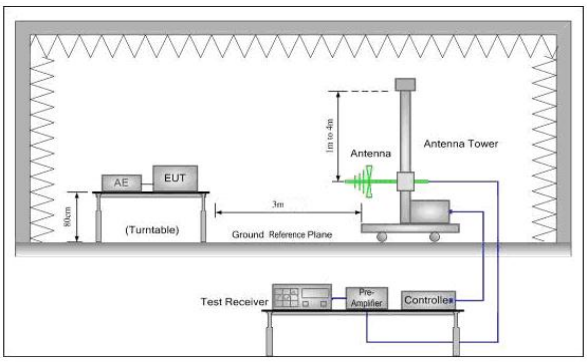


Figure 2. 30MHz to 1GHz

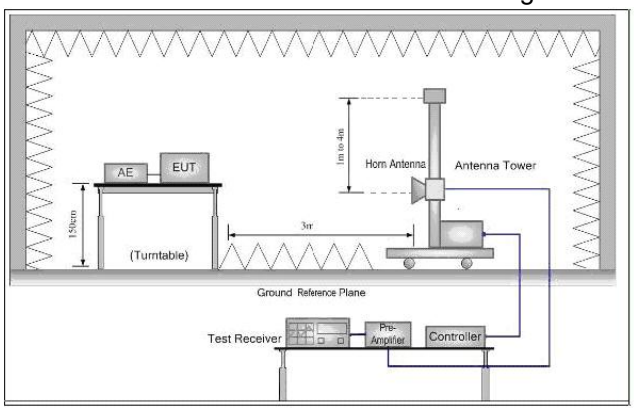
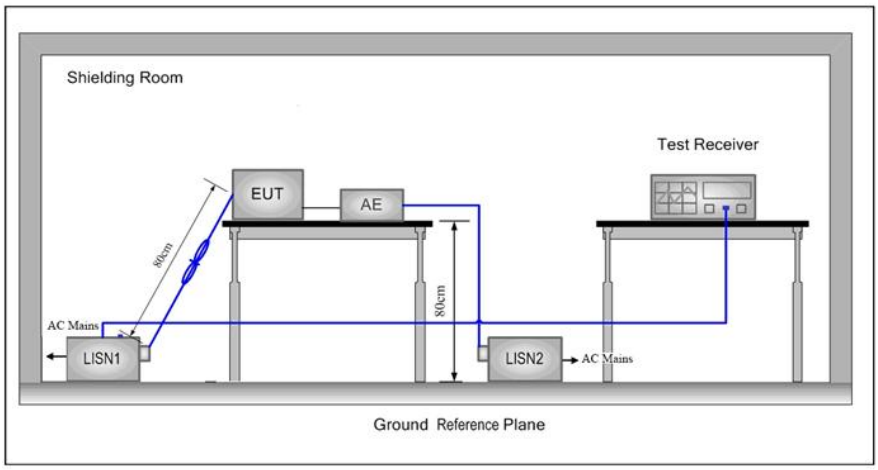


Figure 3. Above 1GHz

4.1.3 For Conducted Emissions test setup

Conducted Emissions setup



4.2 Test Environment

Operating Environment:		
Conducted Emissions:		
Temperature:	25.6 °C	
Humidity:	60 % RH	
Atmospheric Pressure:	1009 mbar	
Radiated Emissions:		
Temperature:	25.5 °C	
Humidity:	54 % RH	
Atmospheric Pressure:	1009mbar	
Radio conducted item test (RF Conducted test room):		
Temperature:	25.3 °C	
Humidity:	50 % RH	
Atmospheric Pressure:	1009 mbar	
Test Condition	Temperature (°C)	Voltage (V)
TN/VN	+15 to +35	5
TL/VL	0	4.5
TH/VL	50	4.5
TL/VH	0	5.5
TH/VH	50	5.5

Remark:

1)The EUT just work in such extreme temperature of 0 °C to 50 °C and the extreme voltage of 4.5V to 5.5V, so here the EUT is tested in the temperature of 0 °C to 50 °C and the voltage of 4.5V to 5.5V.

2)VN: Normal Voltage; TN: Normal Temperature;

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

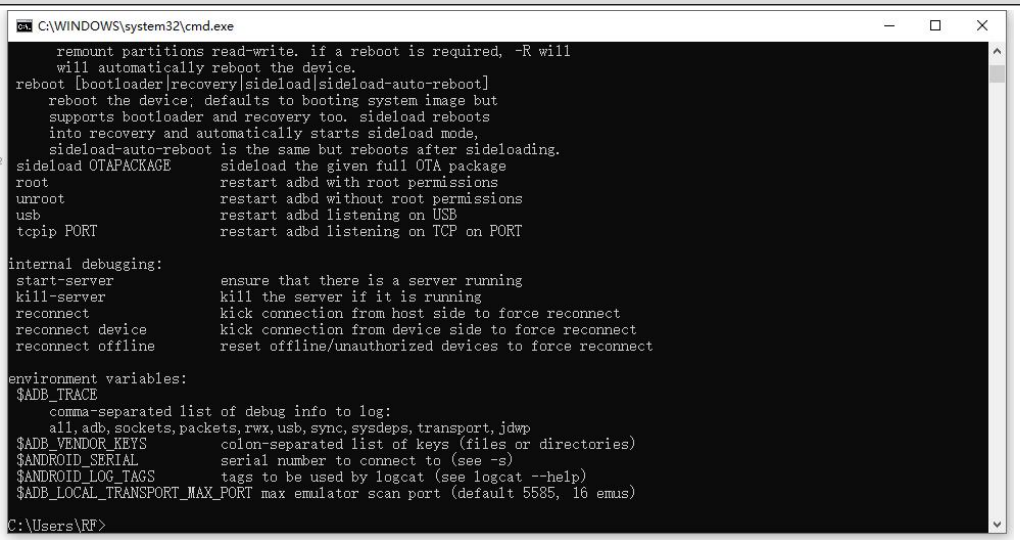
VL: Low Extreme Test Voltage; VH: High Extreme Test Voltage.

4.3 Test Condition

Test channel:

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(M)	High(H)
802.11a/n/ac(20M)	5150MHz ~5250 MHz	Channel 36	Channel 40	Channel 48
		5180MHz	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

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

5 General Information

5.1 Client Information

Applicant:	TOPDON TECHNOLOGY Co., Ltd.
Address of Applicant:	Unit 2005 20/F, Qianhai Shimao Tower,Qianhai Shenzhen-Hong kong Cooperation Zone Shenzhen China
Manufacturer:	TOPDON TECHNOLOGY Co., Ltd.
Address of Manufacturer:	Unit 2005 20/F, Qianhai Shimao Tower,Qianhai Shenzhen-Hong kong Cooperation Zone Shenzhen China
Factory:	TOPDON TECHNOLOGY Co., Ltd.
Address of Factory:	Unit 2005 20/F, Qianhai Shimao Tower,Qianhai Shenzhen-Hong kong Cooperation Zone Shenzhen China

5.2 General Description of EUT

Product Name:	Professional Diagnostic Tool
Model No.:	ArtiDiag500, ArtiDiag500S, ArtiDiag600, ArtiDiag600S
Test Model No.:	ArtiDiag500
Trade Mark:	TOPDON
Software Version:	V1.0
Hardware Version:	V04
EUT Power Supply:	Li-ion battery: DC 3.7V 3350mAh, Charge by DC 5V for adapter
EUT Supports Radios application:	2.4GHz: Wi-Fi: 802.11b/g/n(HT20): 2412MHz~2462MHz; 5GHz: Wi-Fi: U-NII-1: 5.15-5.25GHz; U-NII-3: 5.725-5.850GHz
EUT Type:	Client devices

5.3 Product Specification subjective to this standard

Operation Frequency:	IEEE 802.11a/n/ac(20M): 5150MHz ~5250 MHz IEEE802.11n/ac(40M): 5150MHz ~5250 MHz IEEE802.11ac(80M): 5150MHz ~5250 MHz IEEE 802.11a/n/ac(20M): 5725MHz ~5850 MHz IEEE802.11n/ac(40M): 5725MHz ~5850 MHz IEEE802.11ac(80M): 5725MHz ~5850 MHz
Channel Numbers:	IEEE 802.11a/n/ac(20M): 5150MHz ~5250MHz/ 4 channel IEEE 802.11n/ac(40M): 5150MHz ~5250MHz/ 2 channel IEEE 802.11ac(80M): 5150MHz ~5250MHz/ 1 channel IEEE 802.11a/n/ac(20M): 5725MHz ~5850MHz/ 5 channel IEEE 802.11n/ac(40M): 5725MHz ~5850MHz/ 2 channel IEEE 802.11ac(80M): 5725MHz ~5850MHz/ 1 channel
Type of Modulation:	OFDM
Sample Type:	☐ Mobile ☒ Portable
Test Software of EUT:	TOPDON
Antenna Type:	FPC antenna
Antenna gain:	1.39dBi@5GHz: Wi-Fi: U-NII-1, 3.31dBi@5GHz: Wi-Fi: U-NII-3
Cable loss:	1.0 dB

Note:

ModelNo.:ArtiDiag500, ArtiDiag500S, ArtiDiag600, ArtiDiag600S

Their electrical circuit design, layout, components used and internal wiring are identical,

Only the model names are different

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.

Description	Manufacturer	Model No.	Certification	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	2023/09/08	2024/09/07
Spectrum analyzer	R&S	FSU26	CQA-038	2023/09/08	2024/09/07
Spectrum analyzer	R&S	FSU40	CQA-075	2023/09/08	2024/09/07
Preamplifier	MITEQ	AFS4-00010300-18-10P-4	CQA-035	2023/09/08	2024/09/07
Preamplifier	MITEQ	AMF-6D-02001800-29-20P	CQA-036	2023/09/08	2024/09/07
Preamplifier	EMCI	EMC184055SE	CQA-089	2023/09/08	2024/09/07
Loop antenna	Schwarzbeck	FMZB1516	CQA-060	2021/09/16	2024/09/15
Bilog Antenna	R&S	HL562	CQA-011	2021/09/16	2024/09/15
Horn Antenna	R&S	HF906	CQA-012	2021/09/16	2024/09/15
Horn Antenna	Schwarzbeck	BBHA 9170	CQA-088	2021/09/16	2024/09/15
Coaxial Cable (Above 1GHz)	CQA	N/A	C007	2023/09/08	2024/09/07
Coaxial Cable (Below 1GHz)	CQA	N/A	C013	2023/09/08	2024/09/07
RF cable(9KHz~40GHz)	CQA	RF-01	CQA-079	2023/09/08	2024/09/07
Antenna Connector	CQA	RFC-01	CQA-080	2023/09/08	2024/09/07
Power Sensor	KEYSIGHT	U2021XA	CQA-30	2023/09/08	2024/09/07
N1918A Power Analysis Manager Power Panel	Agilent	N1918A	CQA-074	2023/09/08	2024/09/07
Power meter	R&S	NRVD	CQA-029	2023/09/08	2024/09/07
Power divider	MIDWEST	PWD-2533-02-SMA-79	CQA-067	2023/09/08	2024/09/07
EMI Test Receiver	R&S	ESR7	CQA-005	2023/09/08	2024/09/07
LISN	R&S	ENV216	CQA-003	2023/09/08	2024/09/07
Coaxial cable	CQA	N/A	CQA-C009	2023/09/08	2024/09/07
DC power	KEYSIGHT	E3631A	CQA-028	2023/09/08	2024/09/07

Test software:

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

7 Radio Technical Requirements Specification

Reference documents for testing:

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

Appendix A): Emission Bandwidth

26dB Emission bandwidth

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

Test Method: KDB 789033 D02 II C 1

6 dB bandwidth (5.725-5.85 GHz band)

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

Test Method: KDB 789033 D02 II C 2

Limit: ≥500 kHz

Test Procedure:

a) Set RBW = approximately 1% of the emission bandwidth.

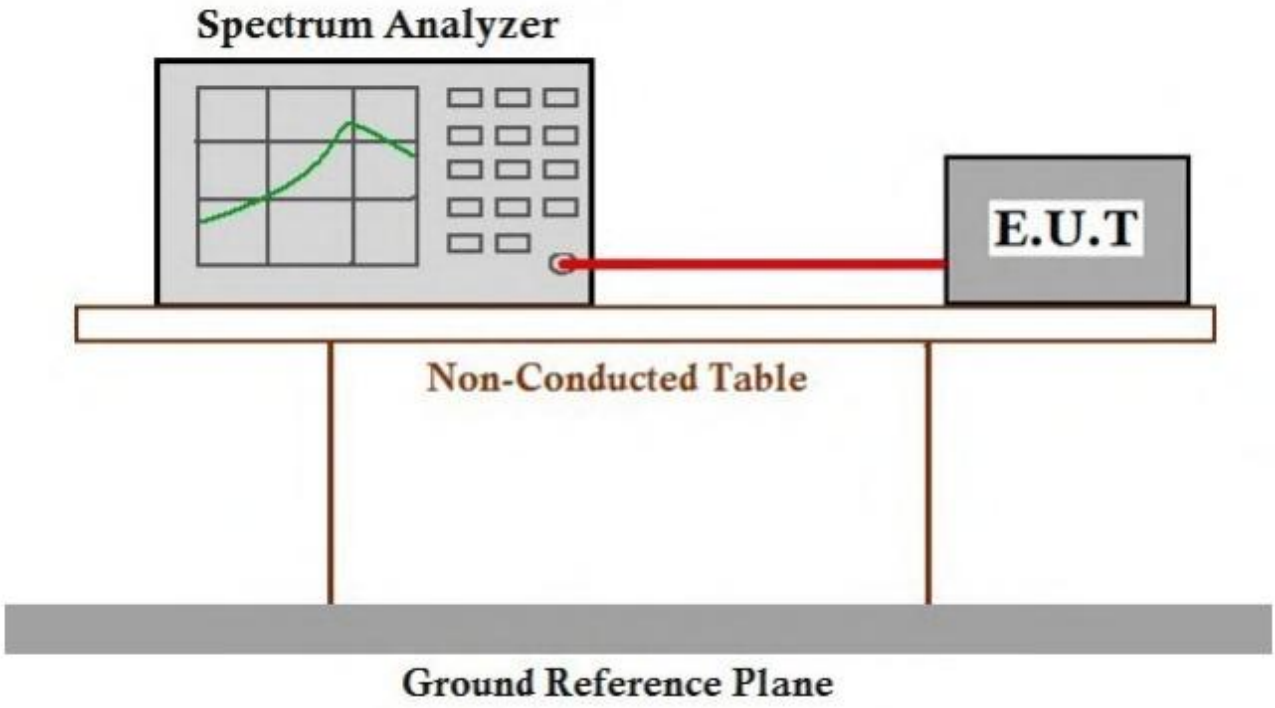
b) Set the VBW > RBW.

c) Detector = Peak.

d) Trace mode = max hold.

e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Test Setup Diagram



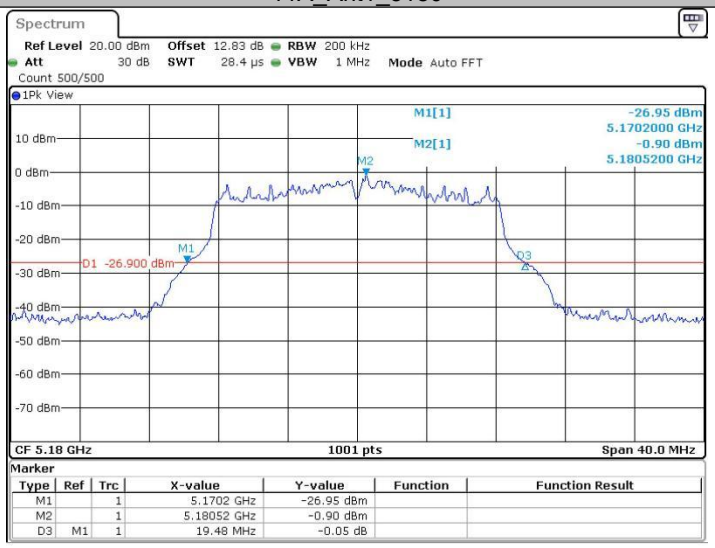
Result Table

TestMode	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]
11A	5180	19.48	5170.20	5189.68
	5200	19.72	5190.20	5209.92
	5240	19.92	5230.36	5250.28
	5745	19.96	5735.20	5755.16
	5785	19.96	5775.16	5795.12
	5825	20.08	5814.92	5835.00
11N20SISO	5180	20.44	5169.68	5190.12
	5200	20.72	5189.76	5210.48
	5240	21.00	5229.56	5250.56
	5745	21.20	5734.44	5755.64
	5785	21.36	5774.24	5795.60
	5825	20.84	5814.52	5835.36
11N40SISO	5190	38.24	5170.80	5209.04
	5230	39.36	5210.32	5249.68
	5755	39.12	5735.56	5774.68
	5795	39.04	5775.64	5814.68
11AC20SISO	5180	21.24	5169.40	5190.64
	5200	20.20	5189.96	5210.16
	5240	20.84	5229.64	5250.48
	5745	21.08	5734.48	5755.56
	5785	21.16	5774.32	5795.48
	5825	21.08	5814.36	5835.44
11AC40SISO	5190	39.76	5169.76	5209.52
	5230	38.80	5210.72	5249.52
	5755	38.88	5735.56	5774.44
	5795	38.96	5775.56	5814.52
11AC80SISO	5210	83.20	5167.76	5250.96
	5775	81.12	5733.72	5814.84

TestMode	Freq(MHz)	6db EBW [MHz]	Limit[MHz]	Verdict
11A	5745	15.64	0.5	PASS
	5785	15.72	0.5	PASS
	5825	15.72	0.5	PASS
11N20SISO	5745	17.60	0.5	PASS
	5785	17.64	0.5	PASS
	5825	17.56	0.5	PASS
11N40SISO	5755	35.20	0.5	PASS
	5795	36.00	0.5	PASS
11AC20SISO	5745	17.56	0.5	PASS
	5785	17.60	0.5	PASS
	5825	17.56	0.5	PASS
11AC40SISO	5755	35.04	0.5	PASS
	5795	35.76	0.5	PASS
11AC80SISO	5755	35.04	0.5	PASS

Test Graph

11A_Ant1_5180



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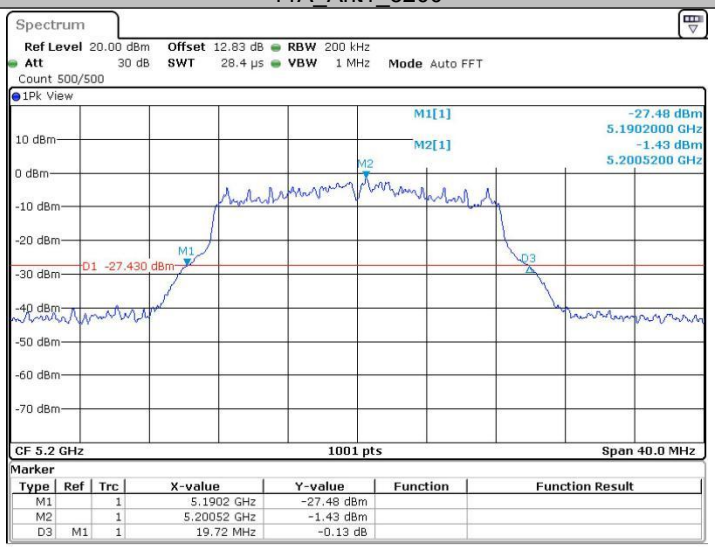
11A_Ant1_5200



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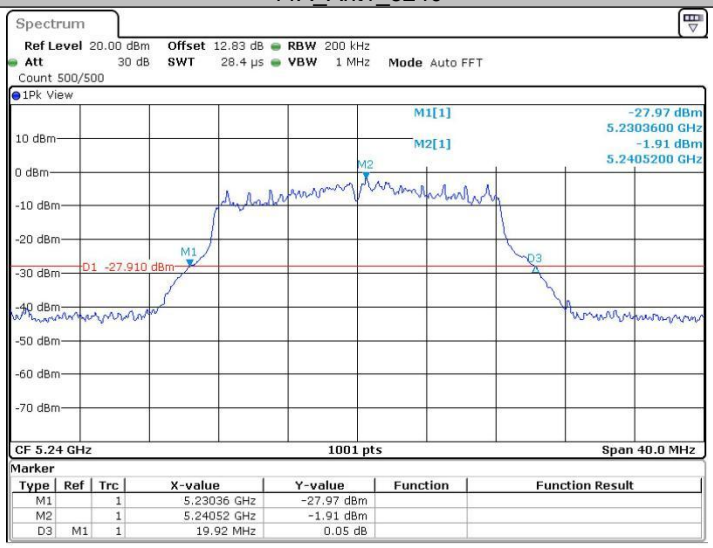

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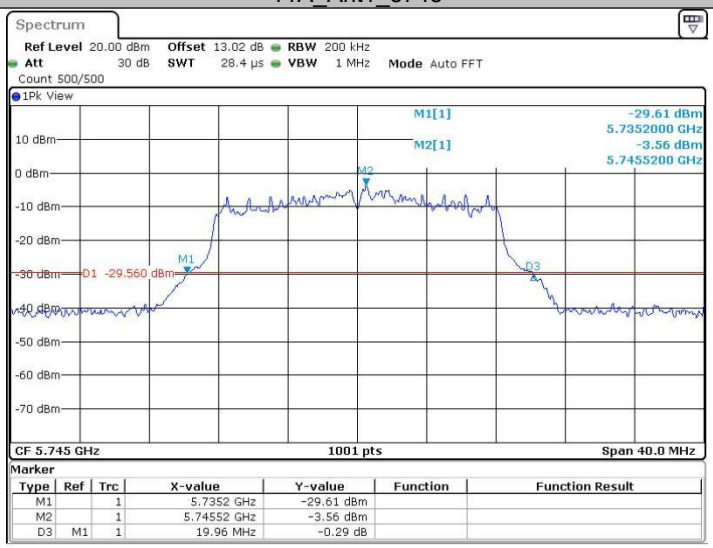
11A_Ant1_5745



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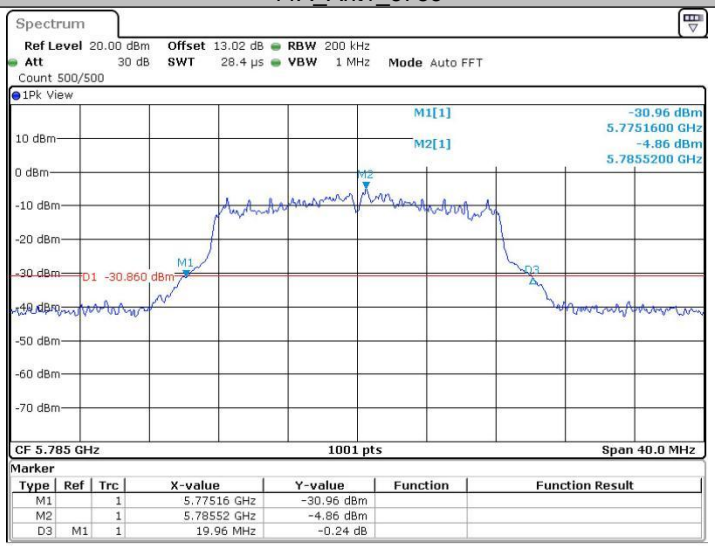

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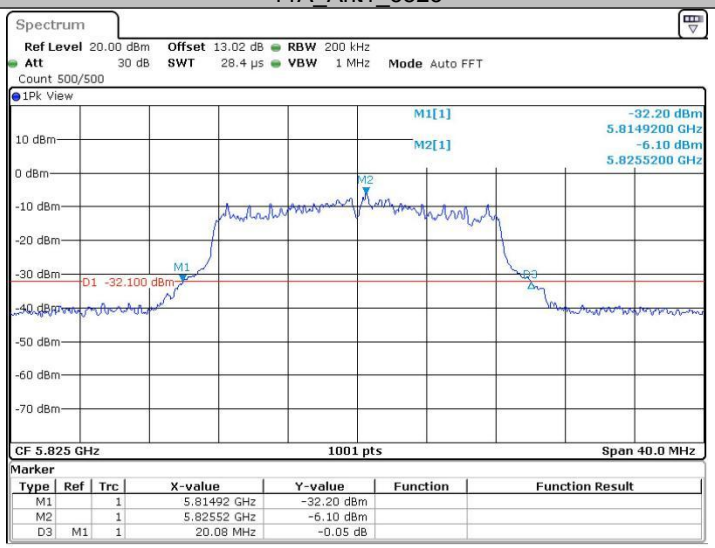

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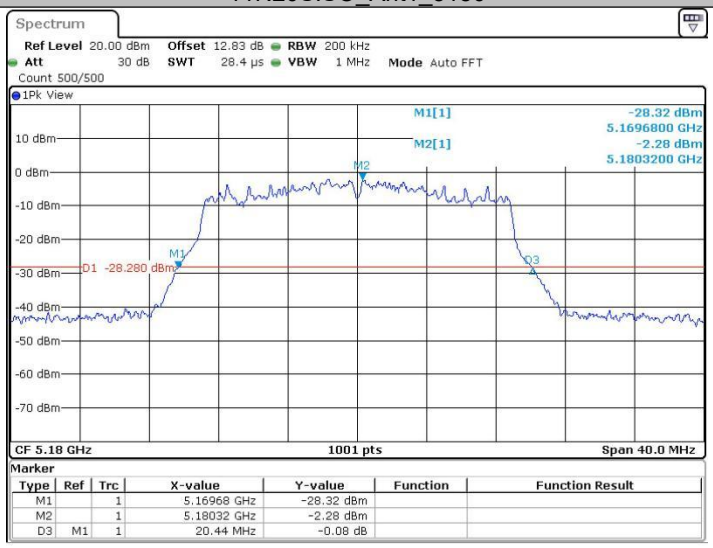

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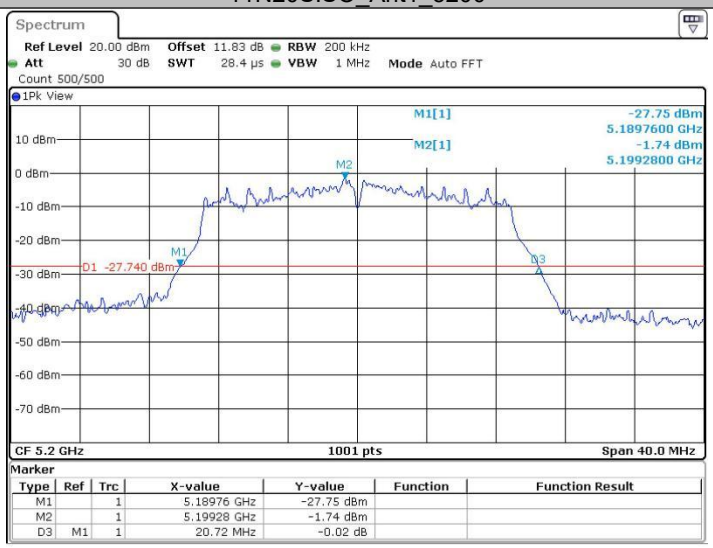

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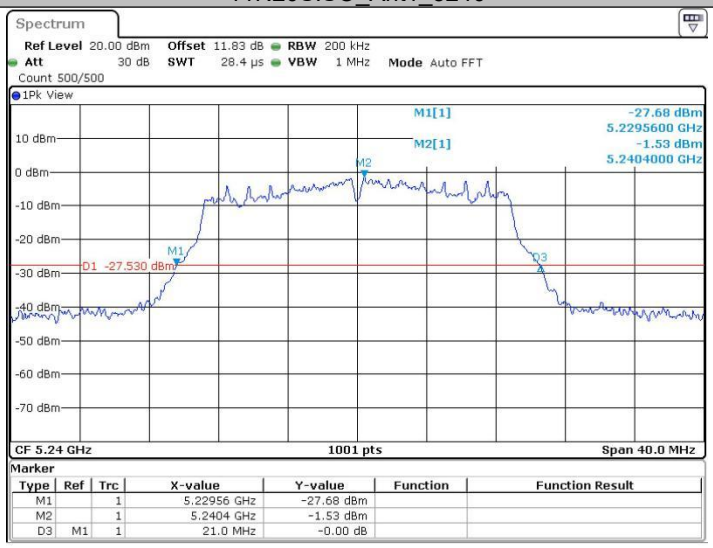

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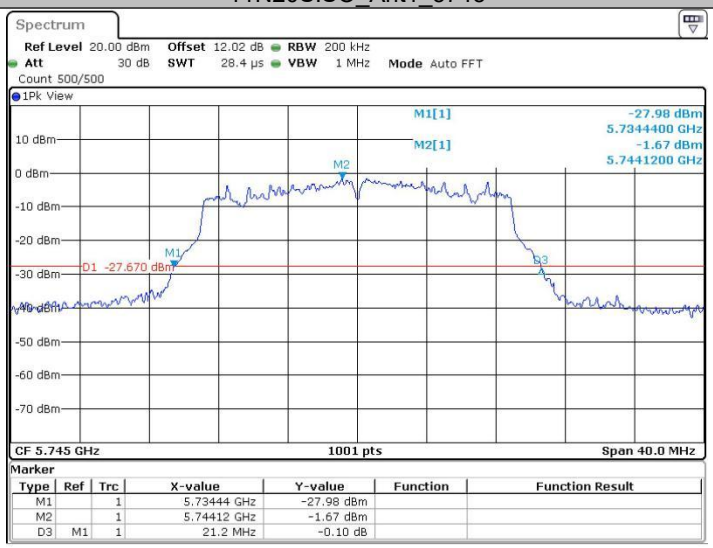

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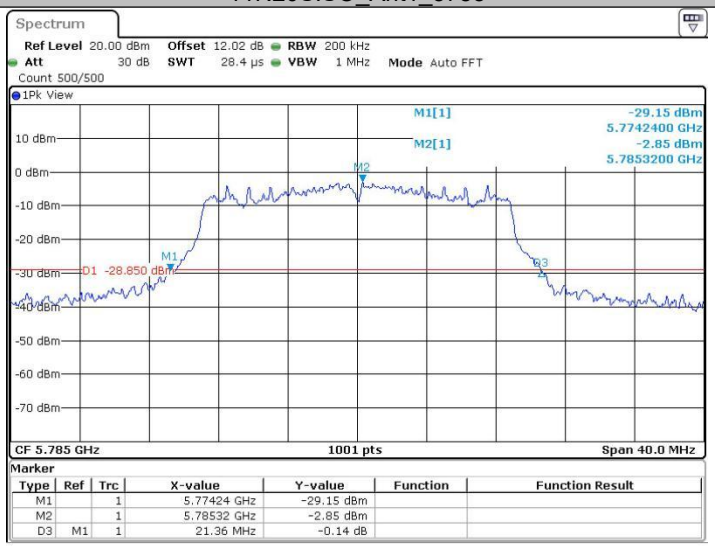

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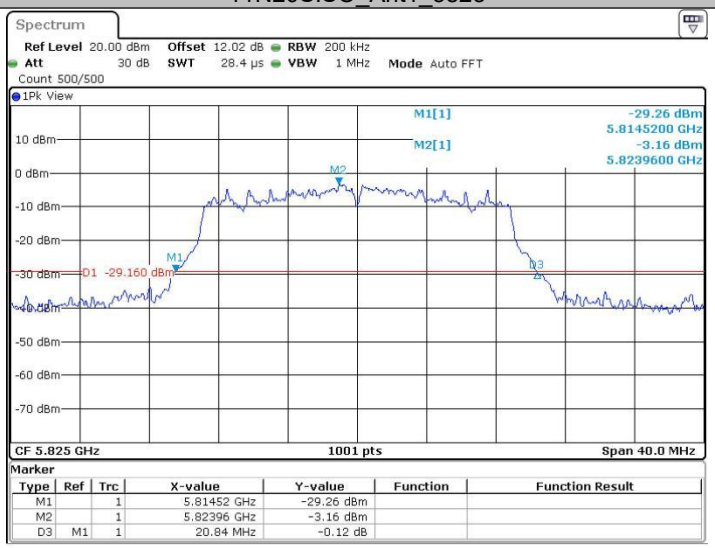

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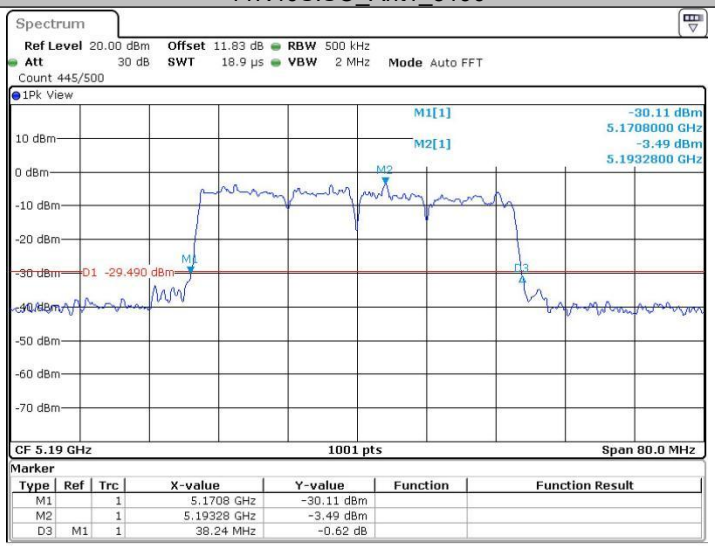

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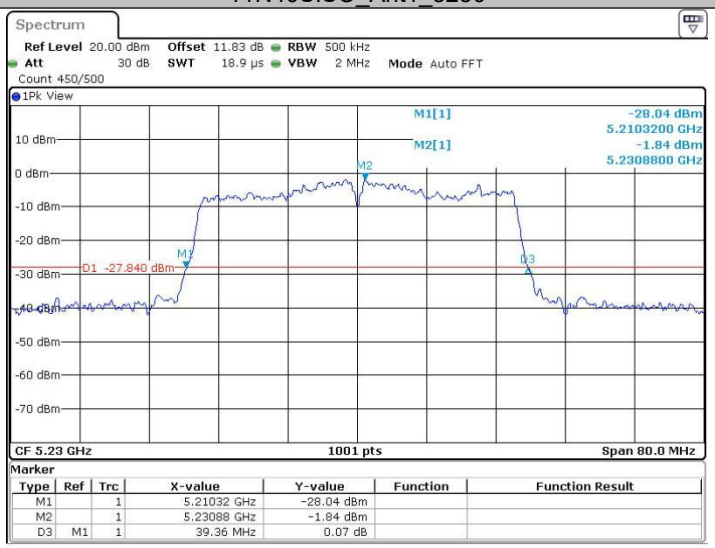

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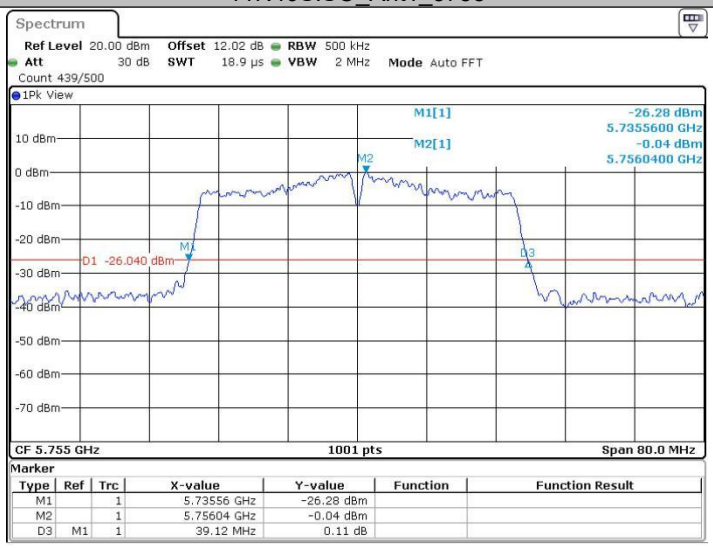

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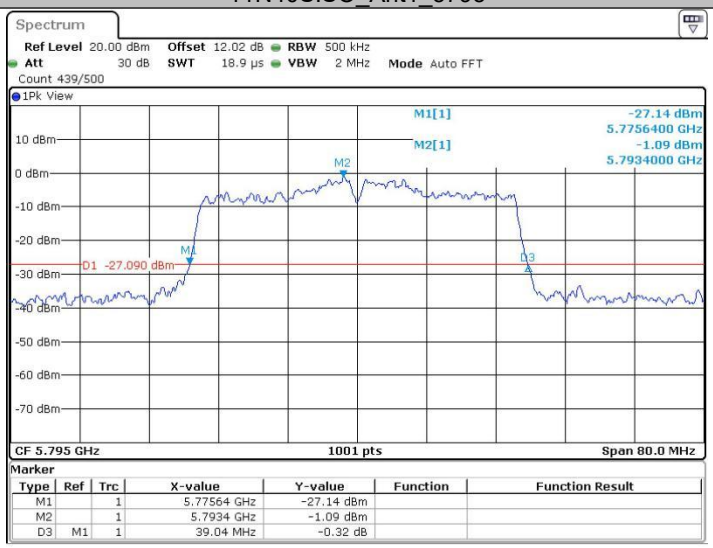

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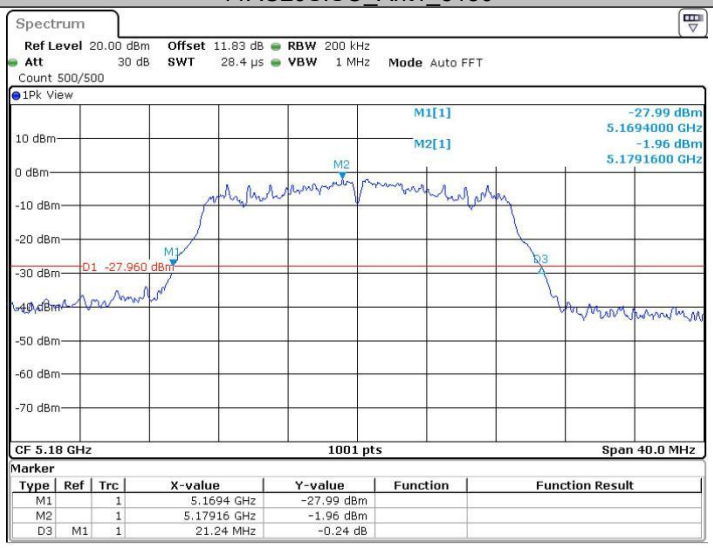

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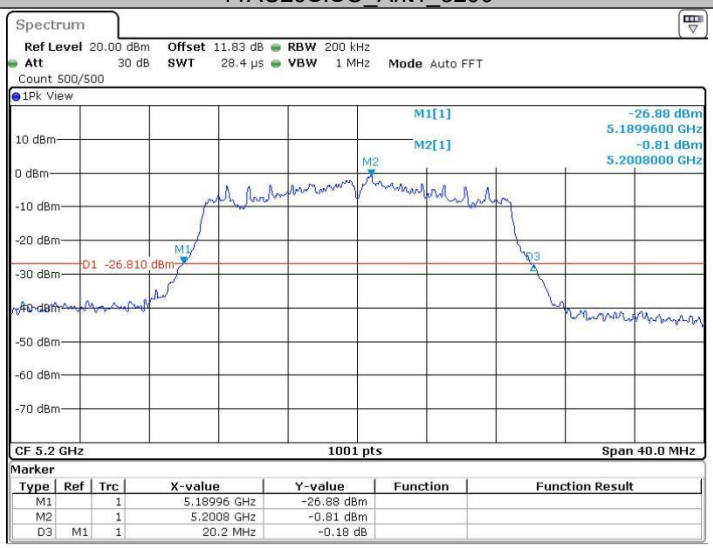

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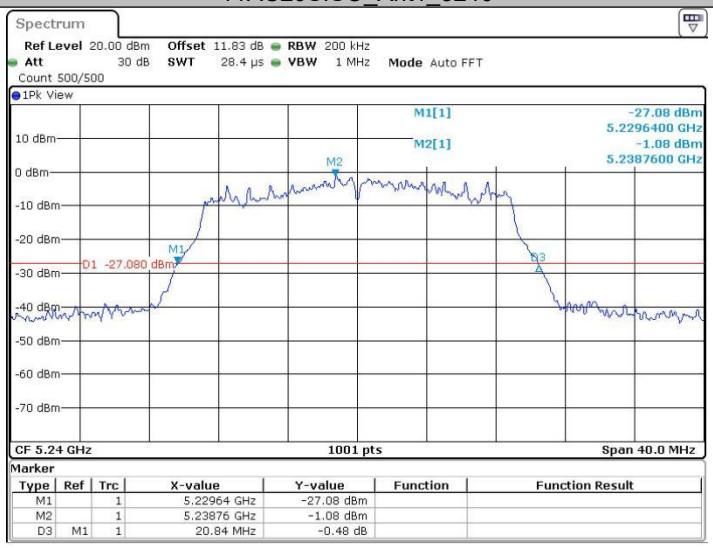

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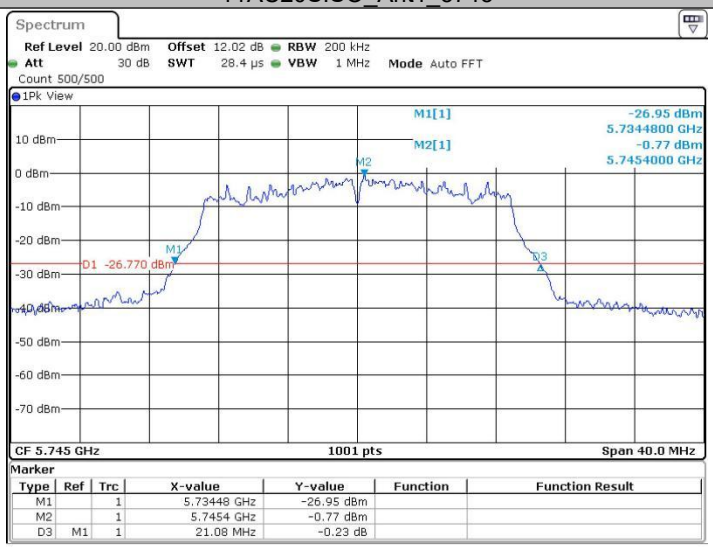

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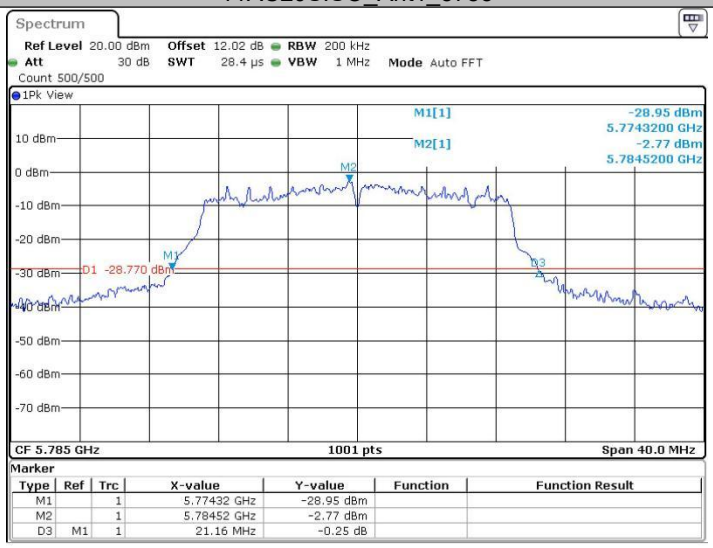

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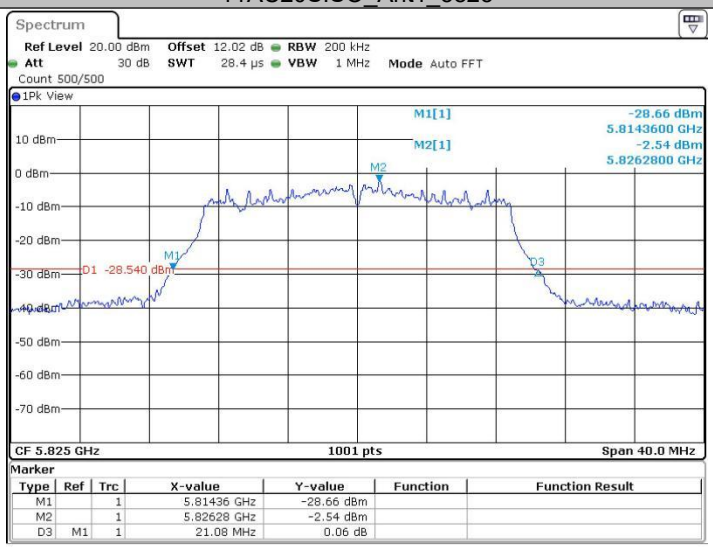

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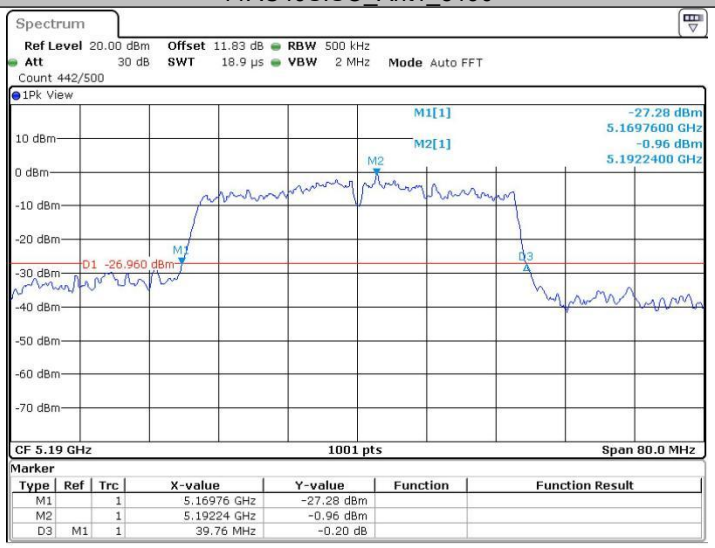

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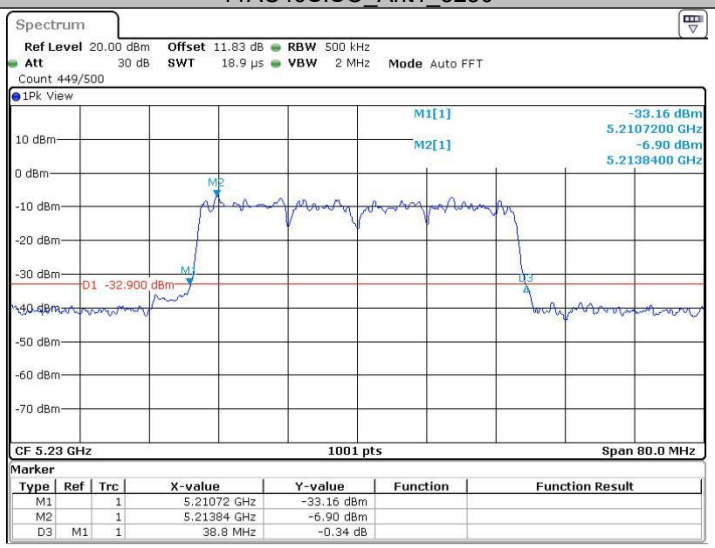

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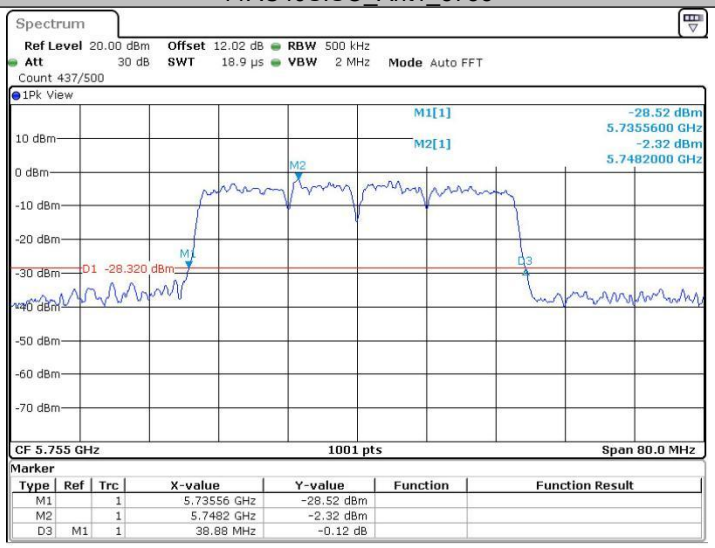

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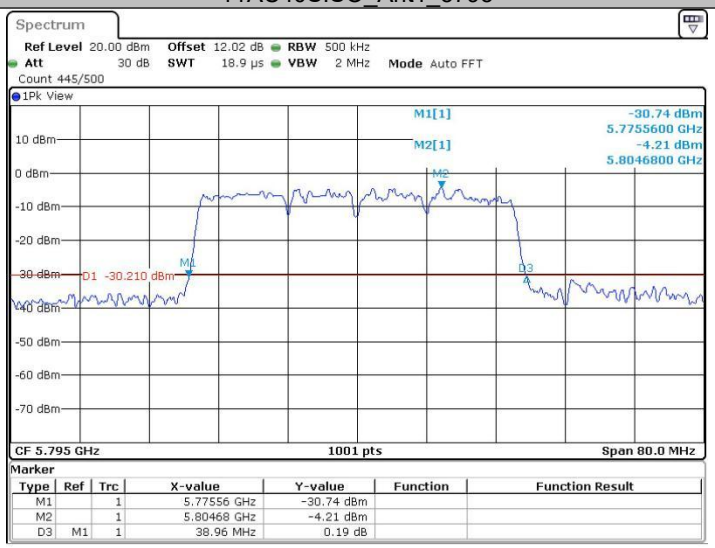

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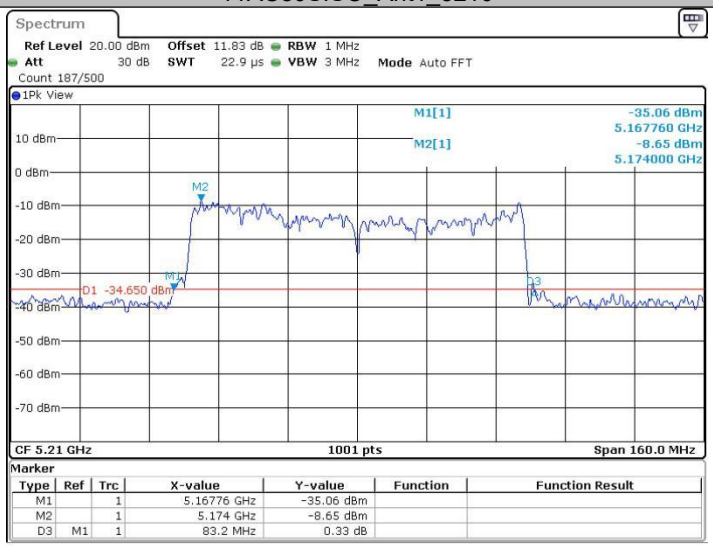

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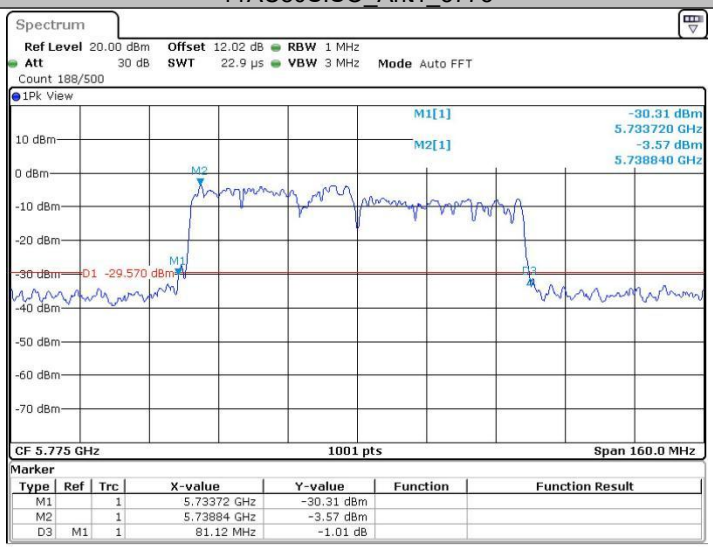

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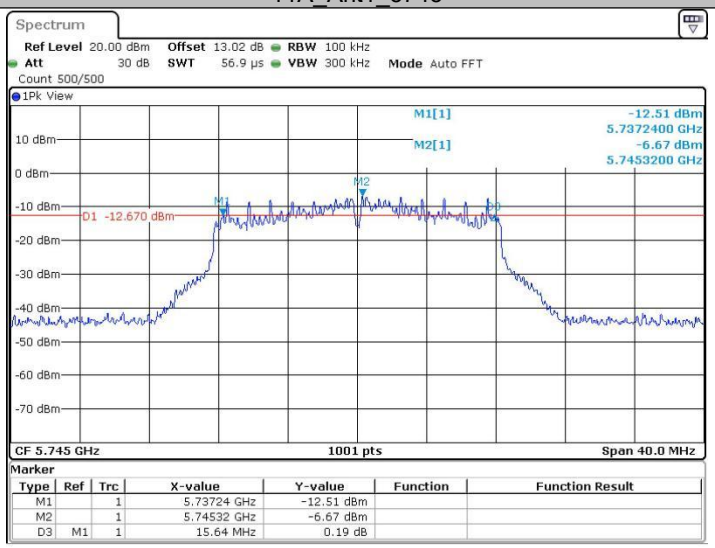

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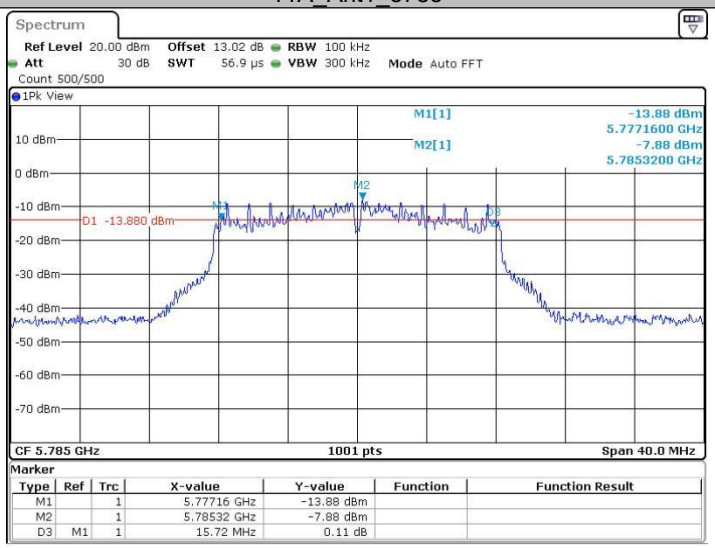

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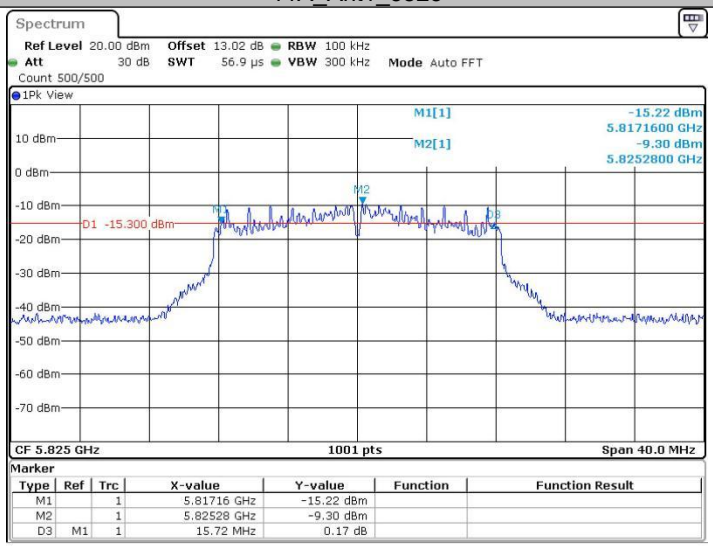

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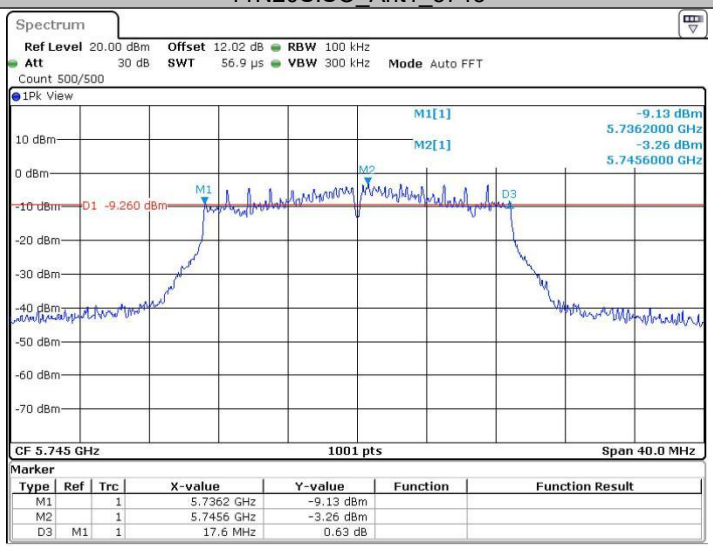

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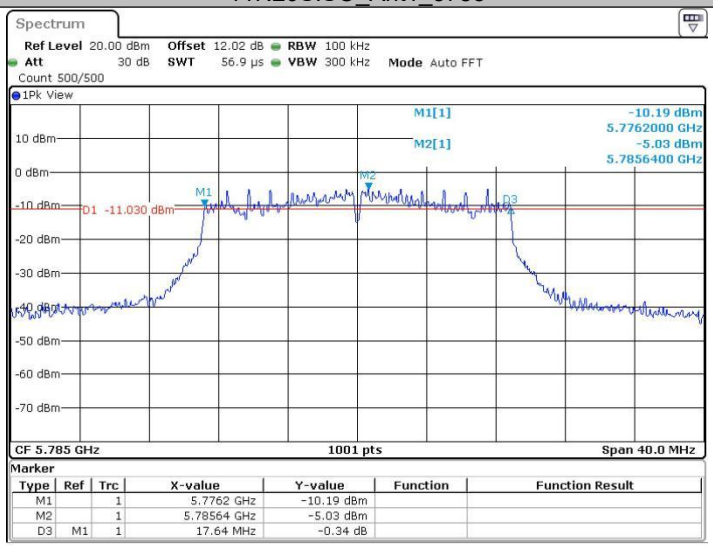

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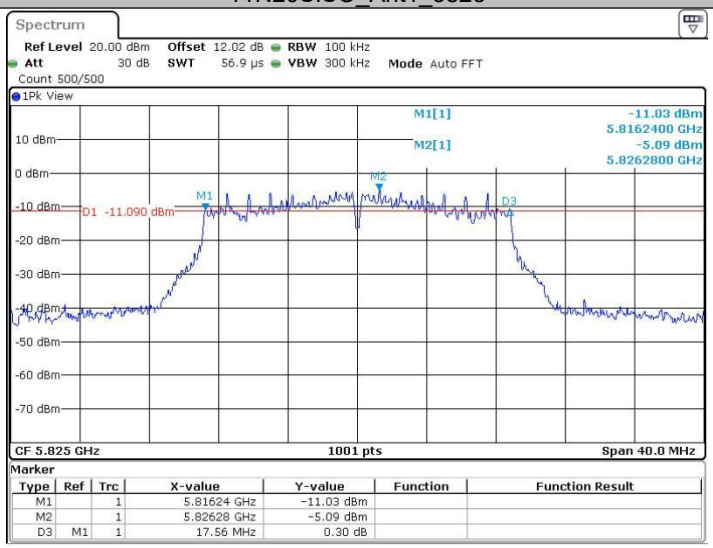

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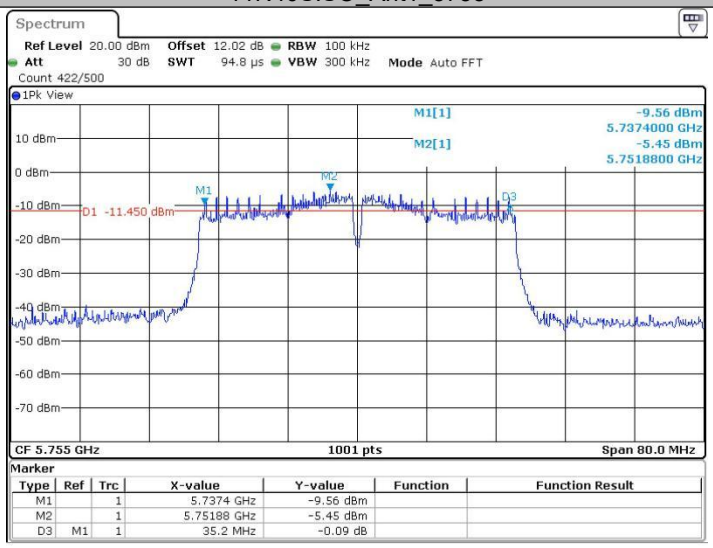

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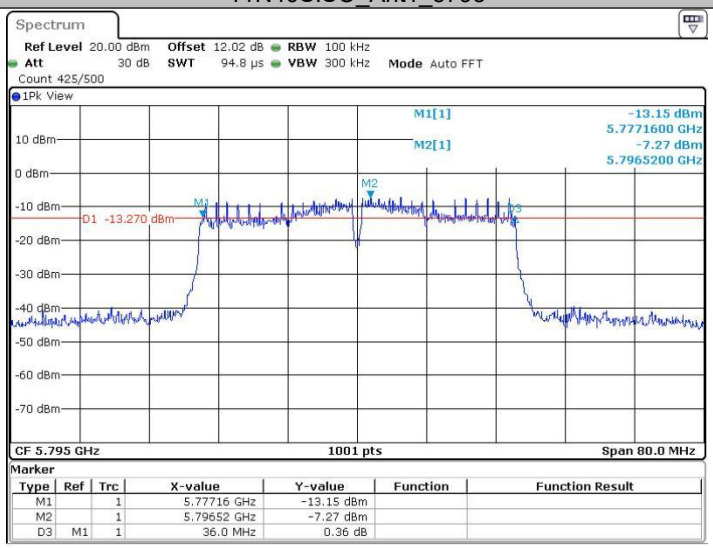

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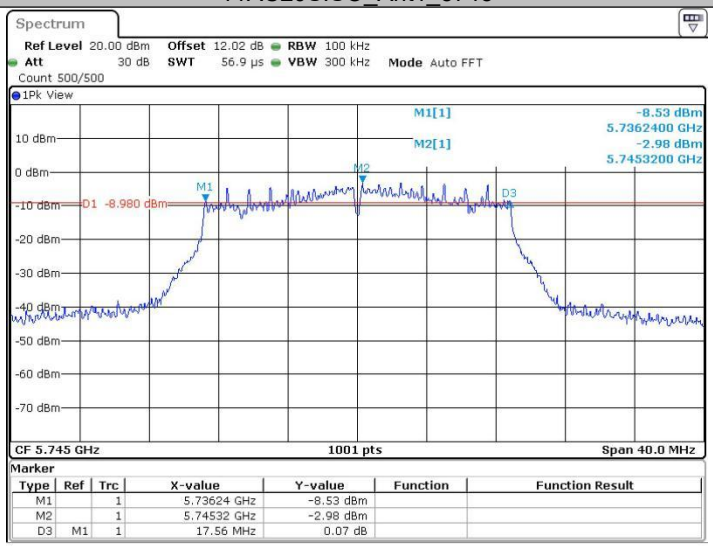

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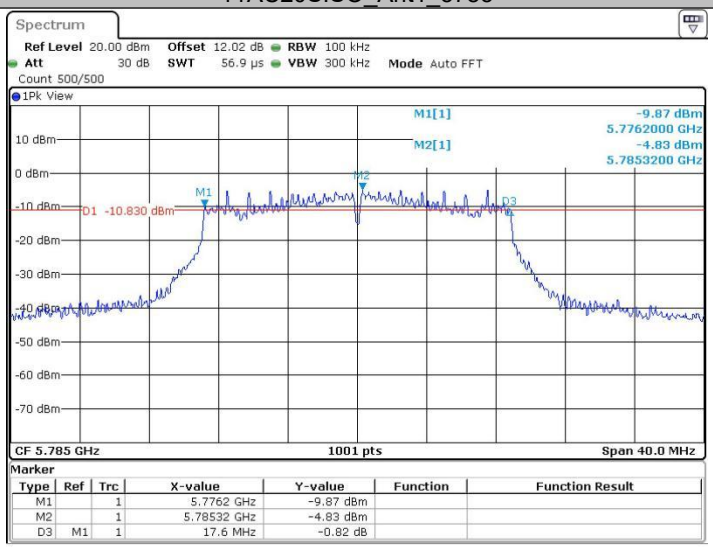

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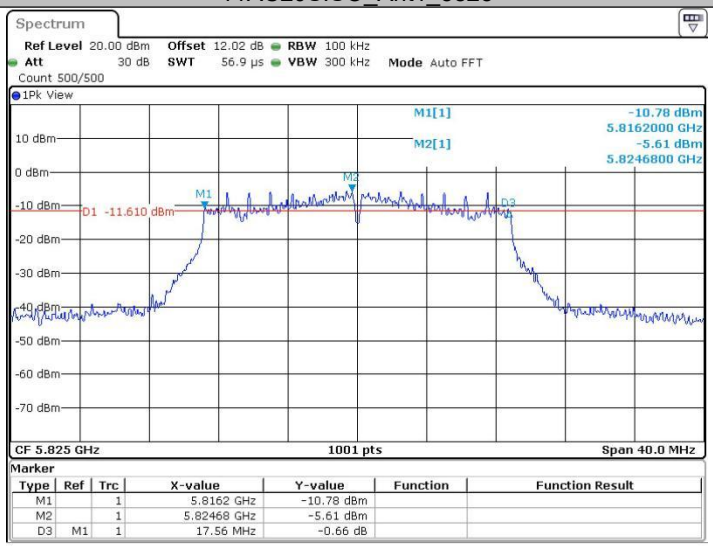

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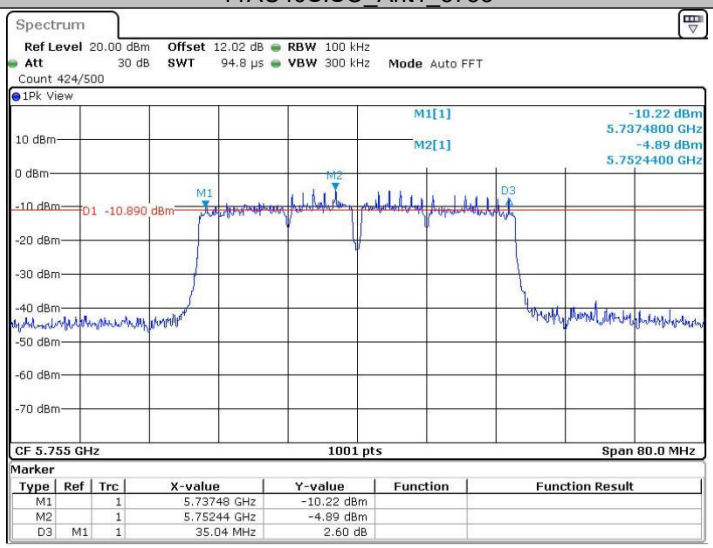

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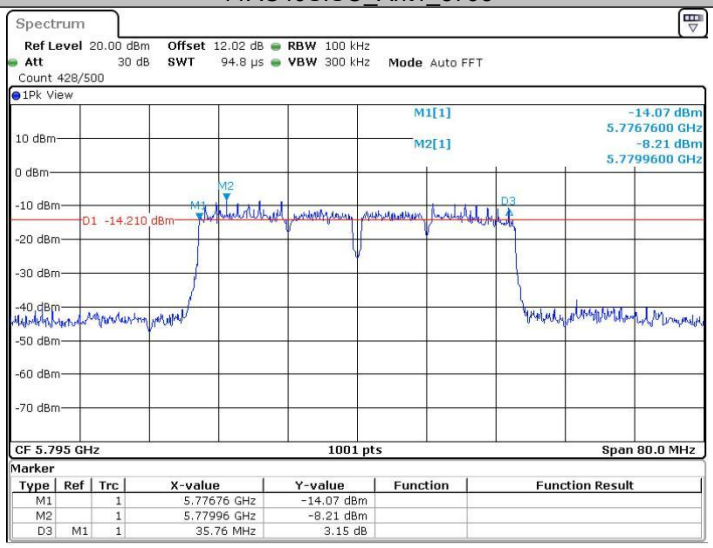

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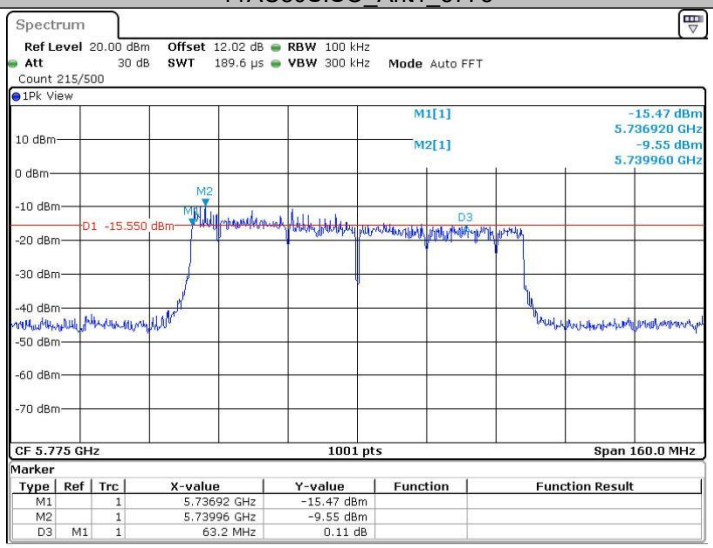


Date: 25.OCT.2023 15:30:44

Appendix B): Maximum Conduct Output Power

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

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) for client device or 11dBm+10logB*
5470-5725	≤250mW(24dBm) for client device or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

Test Procedure:

Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

(1) Set RBW = 1 MHz.

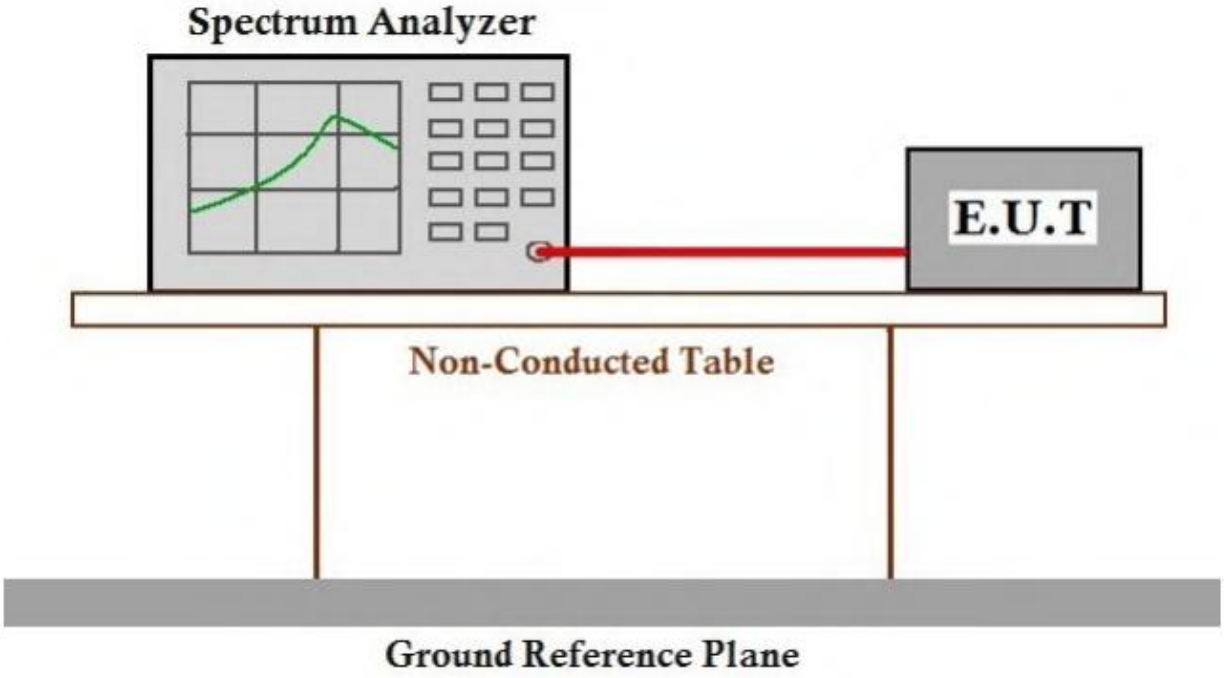
(2) Set VBW ≥ 3 MHz.

(3) Detector = power average

(4) Sweep time = auto.

(5) Add duty cycle to the measured average power.

Test Setup Diagram



Measurement Data

Test Mode	Antenna	Freq(MHz)	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	7.76	≤23.98	PASS
		5200	6.77	≤23.98	PASS
		5240	7.21	≤23.98	PASS
		5745	6.60	≤30.00	PASS
		5785	5.20	≤30.00	PASS
		5825	4.51	≤30.00	PASS
11N20SISO	Ant1	5180	7.15	≤23.98	PASS
		5200	6.47	≤23.98	PASS
		5240	6.79	≤23.98	PASS
		5745	7.61	≤30.00	PASS
		5785	6.86	≤30.00	PASS
		5825	6.38	≤30.00	PASS
11N40SISO	Ant1	5190	6.58	≤23.98	PASS
		5230	6.26	≤23.98	PASS
		5755	7.64	≤30.00	PASS
		5795	6.46	≤30.00	PASS
11AC20SISO	Ant1	5180	8.20	≤23.98	PASS
		5200	7.54	≤23.98	PASS
		5240	7.99	≤23.98	PASS
		5745	8.94	≤30.00	PASS
		5785	8.19	≤30.00	PASS
		5825	7.54	≤30.00	PASS
11AC40SISO	Ant1	5190	7.59	≤23.98	PASS
		5230	8.75	≤23.98	PASS
		5755	9.91	≤30.00	PASS
		5795	9.63	≤30.00	PASS
11AC80SISO	Ant1	5210	6.76	≤23.98	PASS
		5775	4.99	≤30.00	PASS

Appendix C): Maximum Power Spectral Density

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

Test Method: KDB 789033 D02 II F

Test Procedure:

For 5150-5725MHz:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on operation frequency individually.
3. Set RBW = 1MHz.
4. Set the VBW ≥3*RBW. Detector = Peak. Trace mode = max hold.

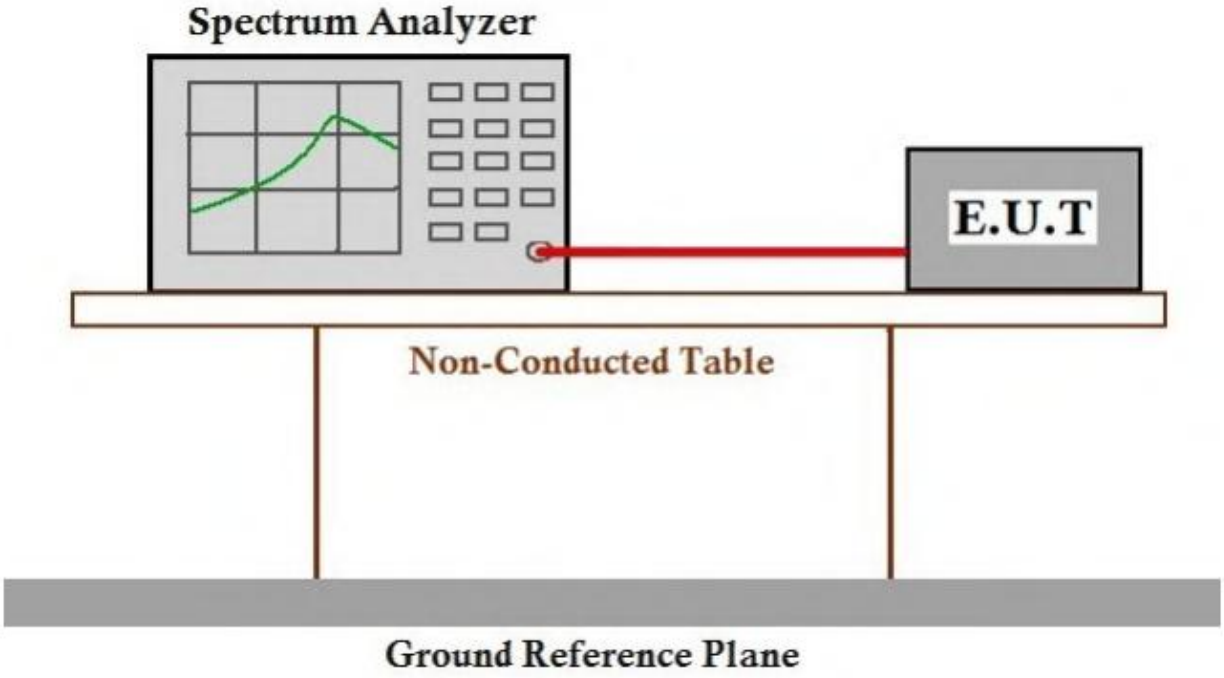
For 5725-5850MHz:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on operation frequency individually.
3. Set RBW = 500KHz.
4. Set the VBW ≥3*RBW. Detector = Peak. Trace mode = max hold.

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

Test Setup Diagram



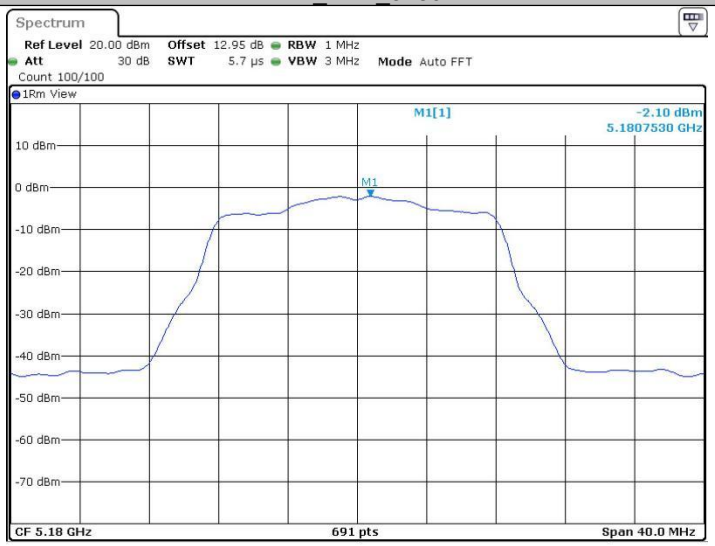
Result Table

TestMode	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	5180	-2.1	≤11.00	PASS
	5200	-2.34	≤11.00	PASS
	5240	-2.26	≤11.00	PASS
	5745	-5.18	≤30.00	PASS
	5785	-7.42	≤30.00	PASS
	5825	-8.22	≤30.00	PASS
11N20SISO	5180	-1.98	≤11.00	PASS
	5200	-3.33	≤11.00	PASS
	5240	-3.64	≤11.00	PASS
	5745	-5.06	≤30.00	PASS
	5785	-5.89	≤30.00	PASS
	5825	-6.69	≤30.00	PASS
11N40SISO	5190	-6.35	≤11.00	PASS
	5230	-6.52	≤11.00	PASS
	5755	-7.55	≤30.00	PASS
	5795	-8.66	≤30.00	PASS
11AC20SISO	5180	-1.72	≤11.00	PASS
	5200	-1.69	≤11.00	PASS
	5240	-1.64	≤11.00	PASS
	5745	-3.64	≤30.00	PASS
	5785	-4.38	≤30.00	PASS
	5825	-5.22	≤30.00	PASS
11AC40SISO	5190	-5.27	≤11.00	PASS
	5230	-4.37	≤11.00	PASS
	5755	-4.94	≤30.00	PASS
	5795	-5.66	≤30.00	PASS
11AC80SISO	5210	-9.26	≤11.00	PASS
	5775	-13.35	≤30.00	PASS

Remark:

PSD = Meas PSD + Duty Cycle Factor

11A_Ant1_5180



11A_Ant1_5200

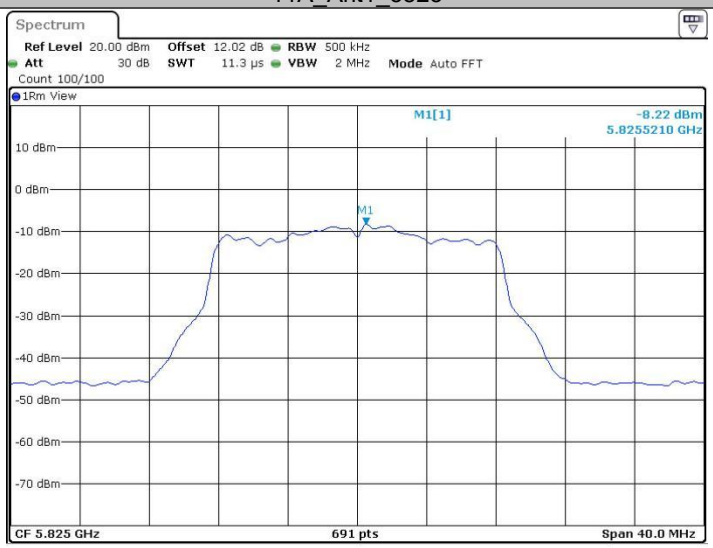
11A_Ant1_5240

11A_Ant1_5745

11A_Ant1_5785

Date: 18.NOV.2023 13:07:35

11A_Ant1_5825



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11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

Date: 18.NOV.2023 13:18:27

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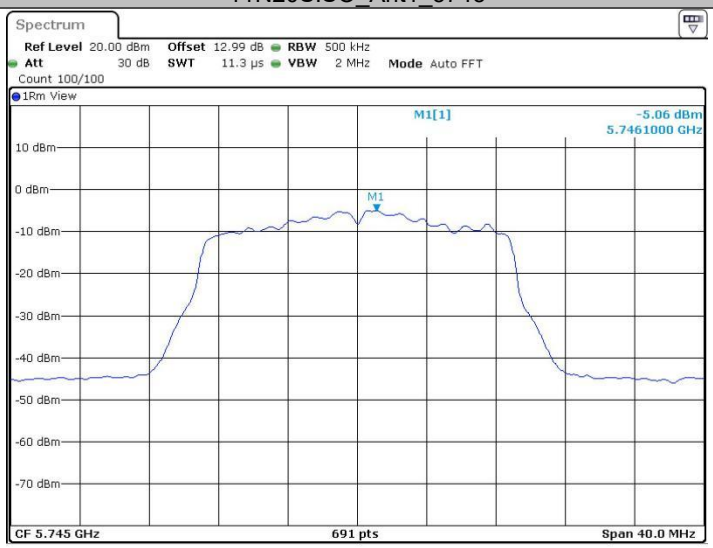

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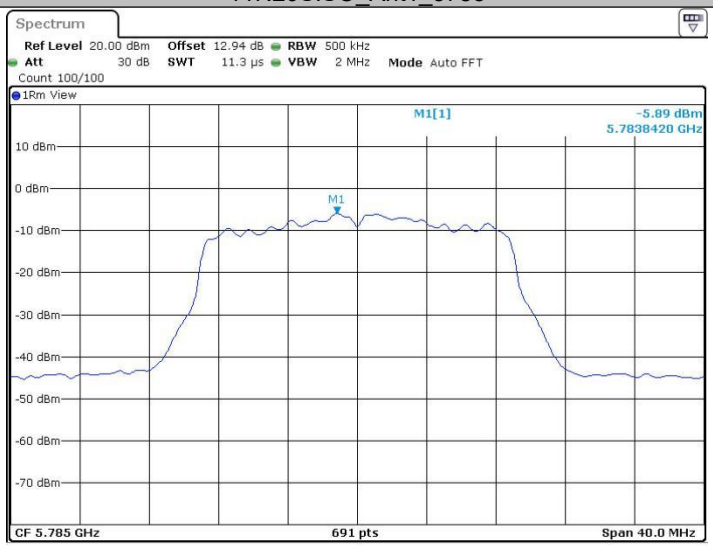

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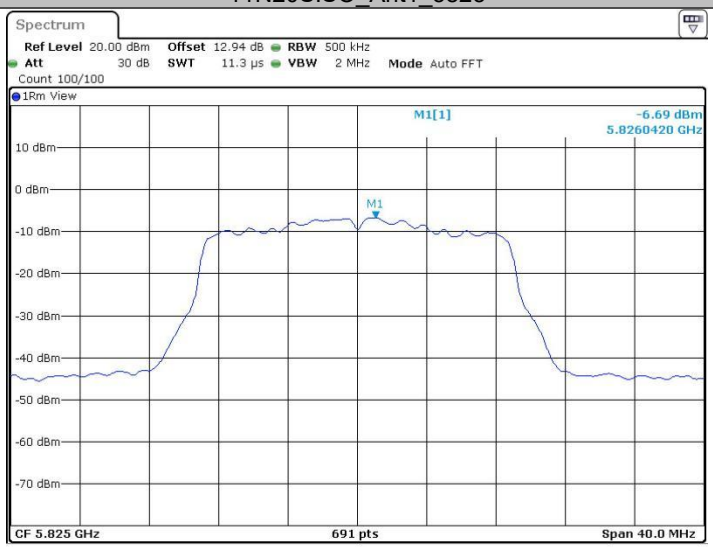

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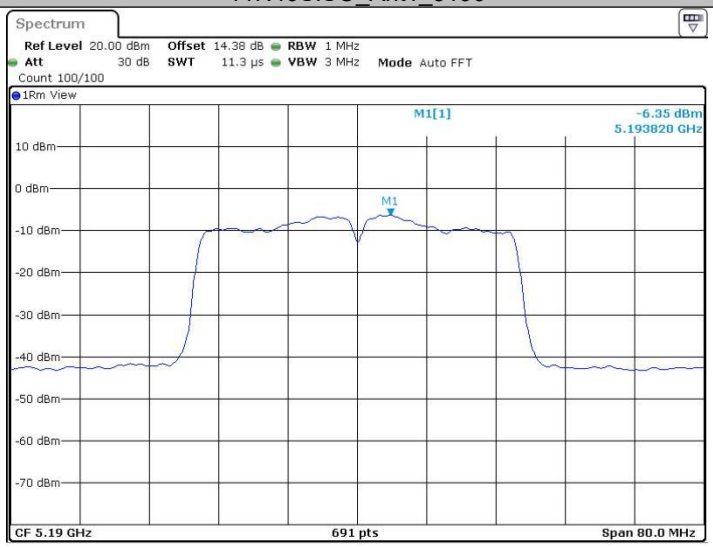

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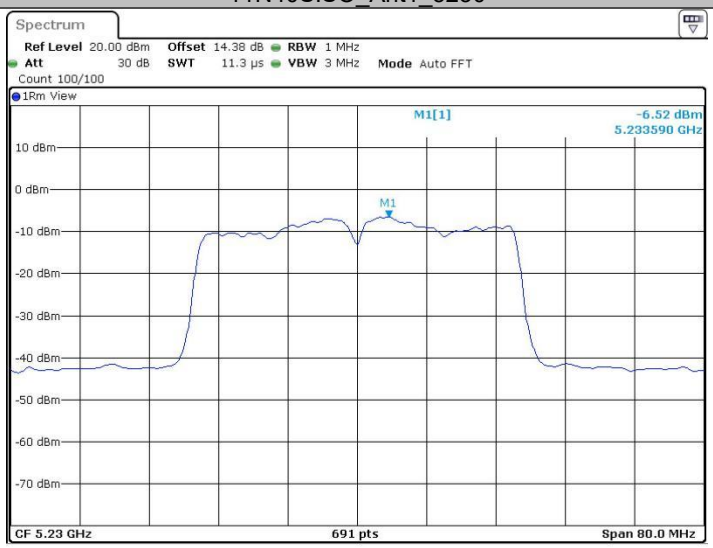

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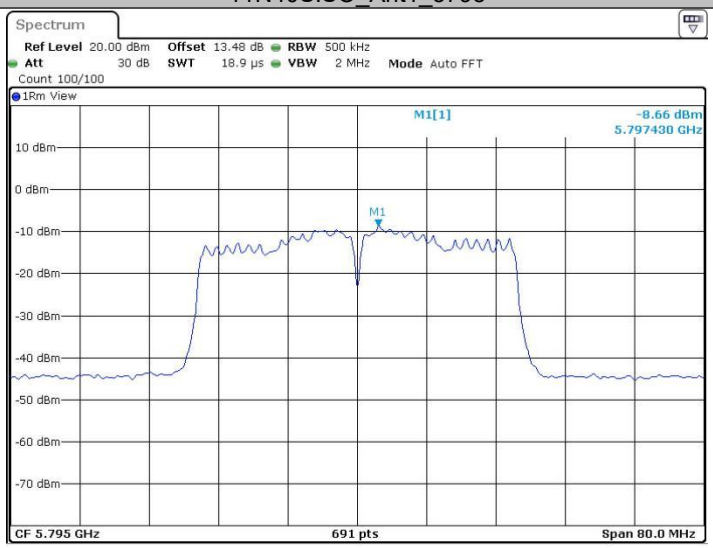 Date: 18.NOV.2023 13:45:50

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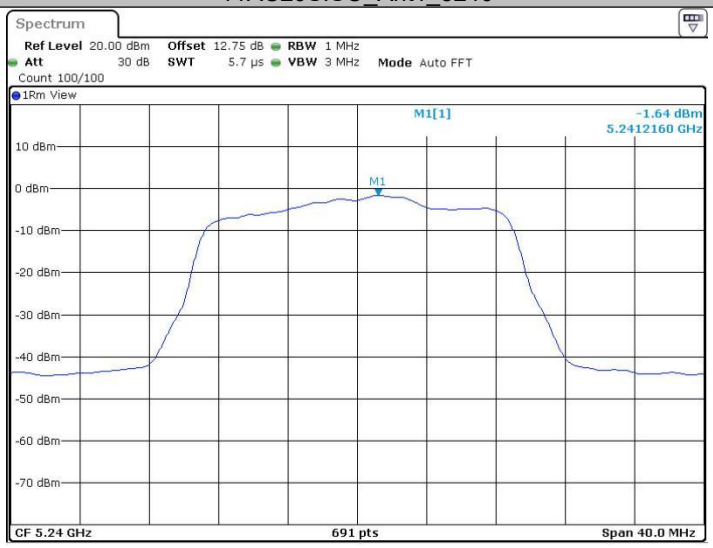

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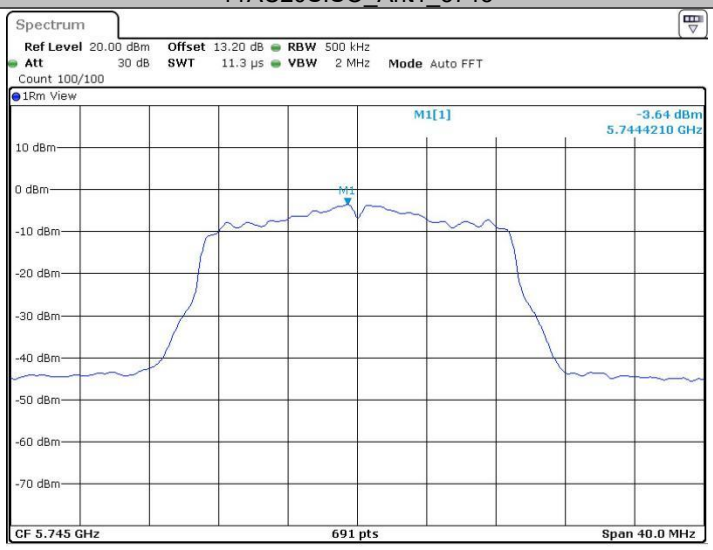

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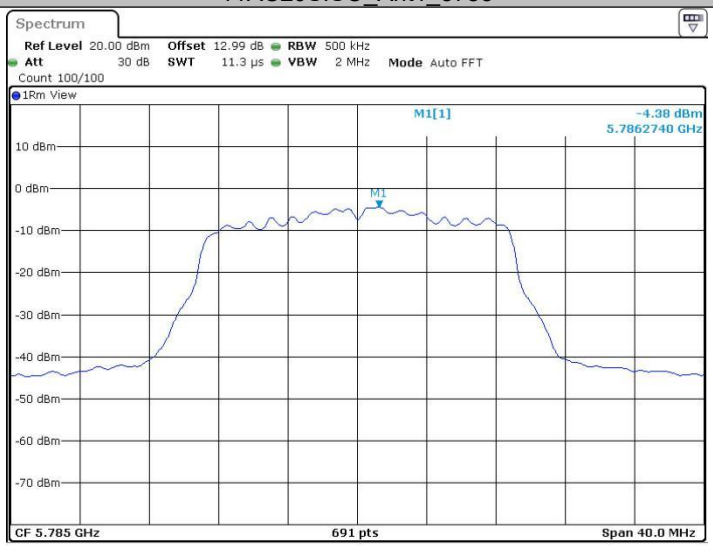 Date: 18.NOV.2023 14:06:56
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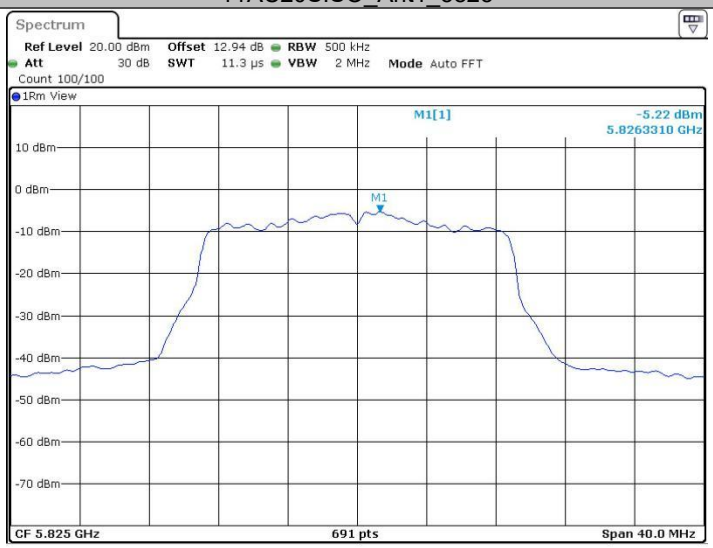 Date: 18.NOV.2023 14:10:36

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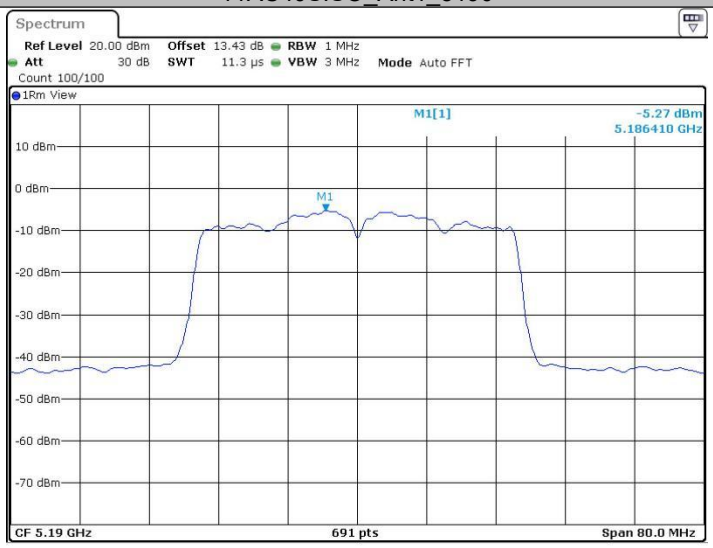

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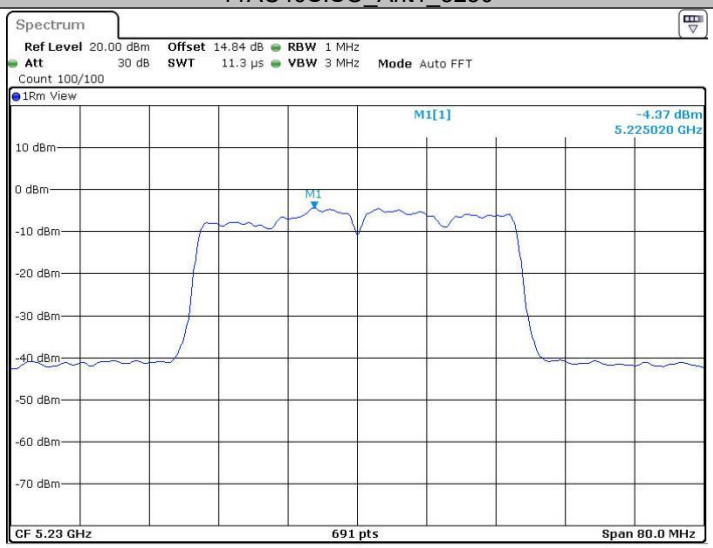

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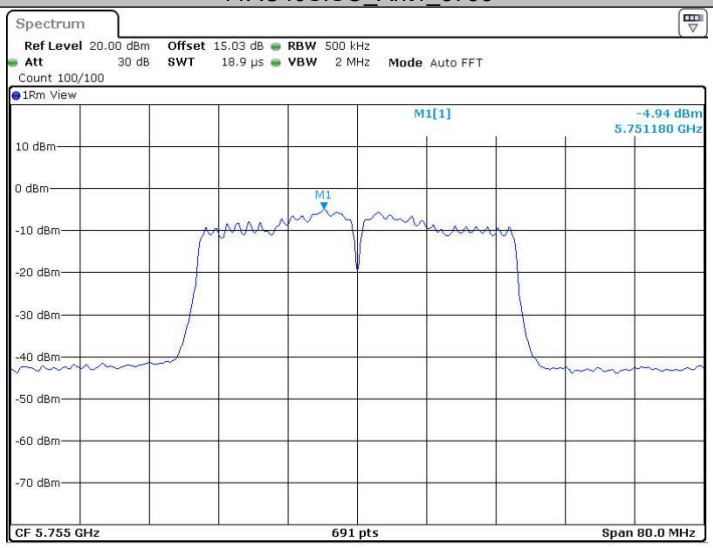 Date: 18.NOV.2023 14:56:04
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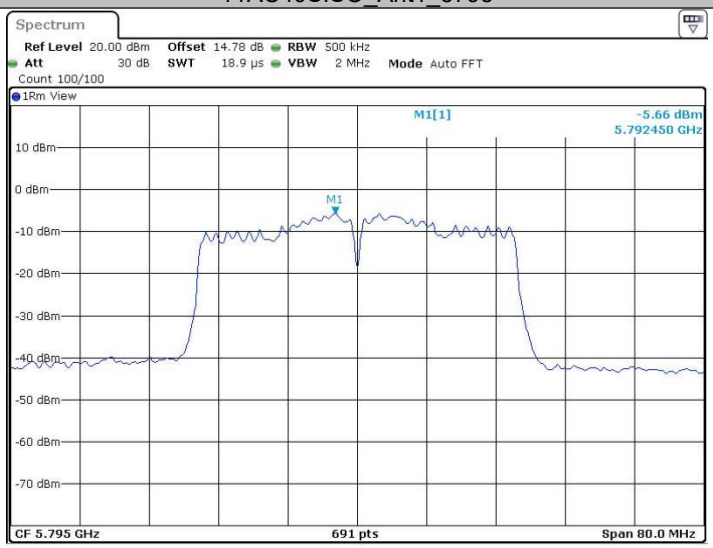 Date: 18.NOV.2023 14:58:41

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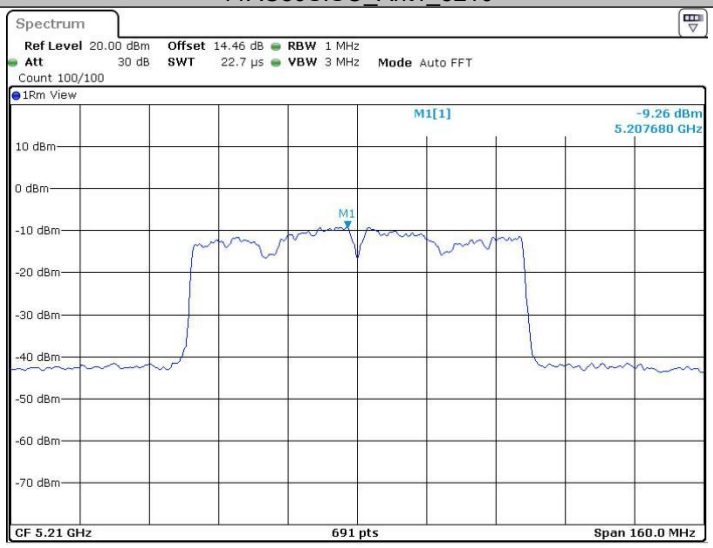

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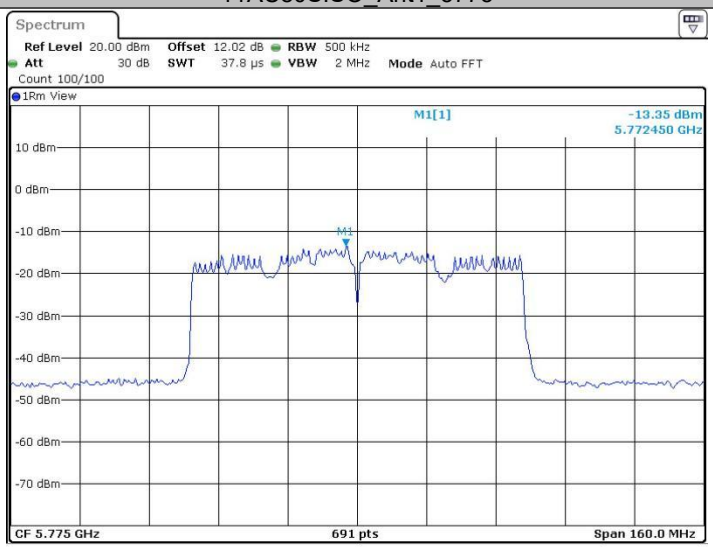

Appendix D): Band Edge Measurements

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Test Procedure:

1. The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.

2. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz ; VBW=1/on time(1KHz) / Sweep=AUTO

Limit:

For transmitters operating in the 5.15-5.25 GHz band:	All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz (68.2dBuV/m).
For transmitters operating in the 5.25-5.35 GHz band:	All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz (68.2dBuV/m).
For transmitters operating in the 5.47-5.725 GHz band:	All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz (68.2dBuV/m).
For transmitters operating in the 5.725-5.85 GHz band:	(i) All emissions shall be limited to a level of −27 dBm/MHz (68.2dBuV/m) at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz (105.2dBuV/m) at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz (110.8dBuV/m) at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz (122.2dBuV/m) at the band edge.

Test Setup Diagram