

TEST REPORT

Reference No...... : WTX25X08224705W001
FCC ID..... : 2AIWVH101
Applicant..... : Udisense Inc. DBA: Nanit
Address..... : 244 Fifth Avenue, Suite #2702, New York, New York 10001, United States
Manufacturer..... : Udisense Inc. DBA: Nanit
Address..... : 244 Fifth Avenue, Suite #2702, New York, New York 10001, United States
Product Name..... : 8 inch Tablet Terminal (Nanit Home)
Model No...... : H101
Standards..... : FCC Part 15.407
Date of Receipt sample..... : 2025-08-21
Date of Test..... : 2025-08-21 to 2025-09-12
Date of Issue..... : 2025-09-12
Test Report Form No...... : WTX_Part 15_407W
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

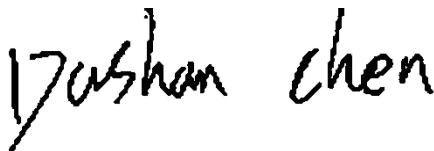
Prepared By:

Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road,
Block 70 Bao'an District, Shenzhen, Guangdong, China

Tel.: +86-755-33663308 Fax.: +86-755-33663309 Email: sem@waltek.com.cn

Tested by:



Dashan Chen/Project Engineer

Approved by:



Jason Su/Manager

TABLE OF CONTENTS

1. GENERAL INFORMATION	5
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
1.2 TEST STANDARDS	6
1.3 TEST METHODOLOGY	6
1.4 TABLE FOR PARAMETERS OF TEST SOFTWARE SETTING	6
1.5 EUT OPERATING DURING TEST	8
1.6 TEST FACILITY	8
1.7 EUT SETUP AND TEST MODE	9
1.8 MEASUREMENT UNCERTAINTY	10
1.9 TEST EQUIPMENT LIST AND DETAILS	11
2. SUMMARY OF TEST RESULTS	15
3. ANTENNA REQUIREMENT	16
3.1 STANDARD APPLICABLE	16
3.2 EVALUATION INFORMATION	16
4. AUTOMATICALLY DISCONTINUE TRANSMISSION	17
4.1 STANDARD APPLICABLE	17
4.2 SUMMARY OF TEST RESULTS	17
5. POWER SPECTRAL DENSITY	18
5.1 STANDARD APPLICABLE	18
5.2 TEST PROCEDURE	18
5.3 SUMMARY OF TEST RESULTS/PLOTS	19
6. EMISSION BANDWIDTH AND OCCUPIED BANDWIDTH	20
6.1 STANDARD APPLICABLE	20
6.2 TEST PROCEDURE	20
6.3 SUMMARY OF TEST RESULTS/PLOTS	22
7. MAXIMUM CONDUCTED OUTPUT POWER	23
7.1 STANDARD APPLICABLE	23
7.2 TEST PROCEDURE	23
7.3 SUMMARY OF TEST RESULTS/PLOTS	24
8. RADIATED SPURIOUS EMISSIONS	25
8.1 STANDARD APPLICABLE	25
8.2 TEST PROCEDURE	25
8.3 TEST RECEIVER SETUP	27
8.4 CORRECTED AMPLITUDE & MARGIN CALCULATION	27
8.5 SUMMARY OF TEST RESULTS/PLOTS	27
9. FREQUENCY STABILITY	66
9.1 STANDARD APPLICABLE	66
9.2 TEST PROCEDURE	66
9.3 SUMMARY OF TEST RESULTS/PLOTS	66
10. CONDUCTED EMISSIONS	67
10.1 TEST PROCEDURE	67
10.2 BASIC TEST SETUP BLOCK DIAGRAM	67
10.3 TEST RECEIVER SETUP	67
10.4 SUMMARY OF TEST RESULTS/PLOTS	67
APPENDIX SUMMARY	70
APPENDIX A1: EMISSION BANDWIDTH	71
APPENDIX A2: OCCUPIED CHANNEL BANDWIDTH	93
APPENDIX A3: MIN EMISSION BANDWIDTH	115
APPENDIX B: DUTY CYCLE	121
APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER	143
APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY	165

Reference No.: WTX25X08224705W001

APPENDIXE: FREQUENCY STABILITY 187

APPENDIX PHOTOGRAPHS 212

Report version

Version No.	Date of issue	Description
Rev.00	2025-09-12	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	8 inch Tablet Terminal (Nanit Home)
Trade Name:	Nanit
Model No.:	H101
Adding Model(s):	/
Rated Voltage:	DC 5V from adapter or DC 3.8V from battery
Battery Capacity:	4000mAh
Power Adapter:	GW12-050210CU Input:AC100-240V 50/60Hz 0.4A Output:DC5V2.1A
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Support Standards:	802.11a, 802.11n(HT20), 802.11n-HT40, 802.11ac-VHT20, 802.11ac-VHT40,802.11ac-VHT80
Frequency Range:	5180-5240MHz, 5260-5320MHz 5500-5700MHz, 5745-5825MHz
Max. RF Output Power:	15.87dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM
Type of Antenna:	FPC Antenna
Antenna Gain:	3.45dBi
<i>Note The Antenna Gain is provided by the customer and can affect the validity of results.</i>	

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.407: General technical requirements.

ANSI C63.10-2020: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

KDB789033 D02 v02r01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-Nii) Devices Part 15, Subparte.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, KDB789033 D02 v02r01. The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Table for parameters of Test Software setting

Enter *****83781***** into the set search bar to enter the engineer mode, you can start to test. During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Mode	Test Frequency (MHz)												
	NCB: 20MHz												
	5180	5200	5240	5260	5300	5320	5500	5580	5700	5720	5745	5785	5825
802.11a 6Mbps	16	16	16	16	16	16	16	16	16	16	16	16	16
802.11n-HT20 MCS0	15	15	15	15	15	15	15	15	15	15	15	15	15
802.11ac-VHT20 MCS0	14	14	14	14	14	14	14	14	14	14	14	14	14
Mode	NCB: 40MHz												
	5190	5230	5270	5310	5510	5550	5670	5710	5755	5795			
802.11n-HT40 MCS0	15	15	15	15	15	15	15	15	15	15			15
802.11ac-VHT40 MCS0	14	14	14	14	14	14	14	14	14	14			14

Mode	NCB: 80MHz					
	5210	5290	5530	5610	5690	5775
802.11ac-VHT80 MCS0	14	14	14	14	14	14

1.5 EUT Operating during test

EUT was programmed to be in continuously transmitting mode. During the test, EUT operation to normal function and programs under Android were executed.

1.6 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. 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. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A and the CAB identifier is CN0057.

1.7 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	802.11a	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM2	802.11n-HT20	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM3	802.11ac-VHT20	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM4	802.11n-HT40	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz,5755MHz,5795MHz
TM5	802.11ac-VHT40	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz,5755MHz,5795MHz
TM6	802.11ac-VHT80	5210MHz,5290MHz,5530MHz,5610MHz,5775MHz

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	45~75 %
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
Type-C Cable	1.75	Unshielded	Without Ferrite

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	TianYi 100-14IBD	PF0F4ABV

1.8 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	0.57dB
Occupied Bandwidth	Conducted	0.015MHz
Power Spectral Density	Conducted	1.8dB
Conducted Spurious Emission	Conducted	2.17dB
Conducted Emissions	Conducted	9-150kHz, 3.74dB
		0.15-30MHz, 3.34dB
Transmitter Spurious Emissions	Radiated	30-200MHz, 4.52dB
		0.2-1GHz 5.56dB
		1-6GHz, 3.84dB
		6-18GHz, 3.92dB

1.9 Test Equipment List and Details

Fixed asset Number	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
WTXE1041A 1001	Communication Tester	Rohde & Schwarz	CMW500	148650	2025-02-23	2026-02-22
WTXE1005A 1005	Spectrum Analyzer	Agilent	N9020A	US471401 02	2025-02-23	2026-02-22
WTXE1084A 1001	Spectrum Analyzer	Agilent	N9020A	MY543205 48	2025-02-23	2026-02-22
WTXE1004A 1-001	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2025-02-23	2026-02-22
WTXE1103A 1003	Attenuator	Pasternack	PE4007-4	/	2025-02-23	2026-02-22
WTXE1003A 1-005	Coaxial Cable	/	0M4RFC	/	2025-02-23	2026-02-22
WTXW1105A 1010	Spectrum Analyzer	KEYSIGHT	N9020A	MY512856 77	2025-02-23	2026-02-22
WTXE1105A 1008	RF Control Unit	Tonscend	JS0806-2	24F80620 870	2025-02-23	2026-02-22
☐ Chamber A: Below 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/03 5	2025-02-23	2026-02-22
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2025-02-23	2026-02-22
WTXE1007A 1001	Amplifier	HP	8447F	2805A034 75	2025-02-23	2026-02-22
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2026-02-25
WTXE1010A 1006	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2025-02-23	2026-02-22
WTXE1104A 1032-1	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1032-2	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1032-3	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
☐ Chamber A: Above 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/03 5	2025-02-23	2026-02-22
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2025-02-23	2026-02-22

WTXE1065A 1001	Amplifier	C&D	PAP-1.0G18	14918	2025-02-23	2026-02-22
WTXE1010A 1005	Horn Antenna	ETS	3117	00086197	2025-02-23	2026-02-22
WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2026-03-16
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2025-02-23	2026-02-22
WTXE1104A 1033-1	Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
WTXE1104A 1033-2	Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
WTXE1104A 1033-3	Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
☐ Chamber B:Below 1GHz						
WTXE1010A 1006	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2024-03-17	2027-03-16
WTXE1038A 1001	Amplifier	Agilent	8447D	2944A104 57	2025-02-23	2026-02-22
WTXE1001A 1002	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2025-02-23	2026-02-22
WTXE1104A 1031-1	Coaxial Cable	/	1.5MRFC-LWB3	/	2025-02-23	2026-02-22
WTXE1104A 1031-2	Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
WTXE1104A 1031-3	Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
☒ Chamber C:Below 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2025-02-23	2026-02-22
WTXE1010A 1013-1	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2024-04-18	2027-04-17
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2026-02-25
WTXE1007A 1002	Amplifier	HP	8447F	2944A038 69	2025-02-23	2026-02-22
WTXE1104A 1034-1	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1034-2	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22

WTXE1104A 1034-3	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
☒ Chamber C: Above 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2025-02-23	2026-02-22
WTXE1103A 1005	Horn Antenna	POAM	RTF-118A	1820	2025-06-13	2027-06-12
WTXE1103A 1006	Amplifier	Tonscend	TAP01018050	AP22E806 235	2025-02-23	2026-02-22
WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2026-03-16
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2025-02-23	2026-02-22
WTXE1104A 1035-1	Coaxial Cable	/	RC-18G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1035-2	Coaxial Cable	/	RC-18G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1035-3	Coaxial Cable	/	RC-18G-N-M	/	2025-02-23	2026-02-22
☐ Conducted Room 1#						
WTXE1104A 1029	EMI Test Receiver	Rohde & Schwarz	ESCI	100525	2024-12-08	2025-12-07
WTXE1002A 1001	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2025-02-23	2026-02-22
WTXE1003A 1001	AC LISN	Schwarz beck	NSLK8126	8126-279	2025-02-23	2026-02-22
WTXE1104A 1036	Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
WTXE1104A 1038	Coaxial Cable	/	6MRFC-DP	/	2025-02-23	2026-02-22
☒ Conducted Room 2#						
WTXE1001A 1004	EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2025-02-23	2026-02-22
WTXE1003A 1003	LISN	Rohde & Schwarz	ENV 216	100097	2025-02-23	2026-02-22
WTXE1104A 1037	Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22

Software List			
Description	Manufacturer	Model	Version
EMI Test Software (Radiated Emission A)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)
EMI Test Software (Radiated Emission B)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)
EMI Test Software (Radiated Emission C)	Farad	EZ-EMC	RA-03A1-2 (1.1.4.2)
EMI Test Software (Conducted Emission Room 1#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3
EMI Test Software (Conducted Emission Room 2#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3
RF Test System	Tonscend	JS1120-3	V3.5.39

*Remark: indicates software version used in the compliance certification testing.

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§15.203; §15.405	Antenna Requirement	Compliant
15.407 (c)	Automatically Discontinue Transmission	Compliant
§15.207; §15.407(b)(6)	Conducted Emission	Compliant
§15.407(a)(1),(2)	Power Spectral Density	Compliant
§15.407(e)	Emission Bandwidth and Occupied Bandwidth	Compliant
§15.407(a)(1),(2)	Maximum Conducted Output Power	Compliant
§15.407(b)(1),(2),(3),(4)	Undesirable emission	Compliant
§15.205; §15.209; §15.407(b)(1),(2),(3)	Radiated Emission	Compliant
§15.407(g)	Frequency Stability	Compliant
§15.407(h)	Dynamic Frequency Selection (DFS)	Compliant

N/A: Not applicable.

3. Antenna Requirement

3.1 Standard Applicable

According to FCC Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.2 Evaluation Information

This product has a FPC antenna, fulfill the requirement of this section.

4. Automatically Discontinue Transmission

4.1 Standard Applicable

According to FCC Part 15.407(c), the device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

4.2 Summary of Test Results

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

5. Power Spectral Density

5.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25GHz.

(iv) For mobile and portable client devices in the 5.15-5.25GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6dBi. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or $11 \text{ dBm} + 10 \log B$, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

5.2 Test Procedure

According to 789033 D02 v02r01 General UNII Test Procedures New Rules v02, the following is the measurement procedure.

For devices operating in the bands 5.15-5.25GHz, 5.25-5.35GHz, and 5.47-5.725GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85GHz, the rules specify a measurement bandwidth of 500kHz. Many spectrum analyzers do not have 500kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500kHz, "provided that the measured power is integrated over the full

reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1MHz, or 500kHz). If measurements are performed using a reduced resolution bandwidth ($< 1\text{MHz}$, or $< 500\text{kHz}$) and integrated over 1 MHz, or 500kHz bandwidth, the following adjustments to the procedures apply:

- a) Set $\text{RBW} \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $\text{VBW} \geq 3 \text{ RBW}$.
- c) If measurement bandwidth of Maximum PSD is specified in 500kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 500\text{kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 1\text{MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100kHz for the sections 5.c) and 5.d) above, since $\text{RBW}=100\text{kHz}$ is available on nearly all spectrum analyzers.

5.3 Summary of Test Results/Plots

Please refer to Appendix D

6. Emission Bandwidth and Occupied Bandwidth

6.1 Standard Applicable

According to 15.407(a) and (e):

(1) For the band 5.15-5.25GHz.

(iv) For mobile and portable client devices in the 5.15-5.25GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or $11\text{dBm} + 10 \log B$, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(e) Within the 5.725-5.85GHz band, the minimum 6dB bandwidth of U-NII devices shall be at least 500kHz.

6.2 Test Procedure

According to 789033 D02 v02r0r section C&D, the following is the measurement procedure.

1. Emission Bandwidth (EBW)

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 26dB 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%.

2. Minimum Emission Bandwidth for the band 5.725-5.85GHz Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

D. 99 Percent Occupied Bandwidth

The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section II.G.3.d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the EBW to 789033 D02 v02r01 General UNII Test Procedures New Rules v01 define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:

- 1. Set center frequency to the nominal EUT channel center frequency.
- 2. Set span = 1.5 times to 5.0 times the OBW.
- 3. Set RBW = 1 % to 5 % of the OBW
- 4. Set VBW $\geq 3 \times$ RBW
- 5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- 6. Use the 99 % power bandwidth function of the instrument (if available).
- 7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency.

Reference No.: WTX25X08224705W001

The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

6.3 Summary of Test Results/Plots

Please refer to Appendix A

7. Maximum Conducted Output Power

7.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25GHz.

(iv) For mobile and portable client devices in the 5.15-5.25GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or $11\text{dBm} + 10 \log B$, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

7.2 Test Procedure

According to KDB789033 D02 v02r01 section E, the following is the measurement procedure.

- (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (ii) Set RBW = 1MHz.
- (iii) Set VBW $\geq$ 3MHz.
- (iv) Number of points in sweep $\geq$ 2 Span / RBW. (This ensures that bin-to-bin spacing is $\leq$ RBW/2, so that

narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle $\geq$ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".

(viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

7.3 Summary of Test Results/Plots

Please refer to Appendix C

8. Radiated Spurious Emissions

8.1 Standard Applicable

According to §15.407(b), undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

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

According to §15.407(b)(6), Unwanted emissions below 1GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

According to §15.407(b)(7), The provisions of §15.205 apply to intentional radiators operating under this section.

789033 D02 v02r01 General UNII Test Procedures New Rules v01

If radiated measurements are performed, field strength is then converted to EIRP as follows:

$$\text{EIRP} = ((E \cdot d)^2) / 30$$

where:

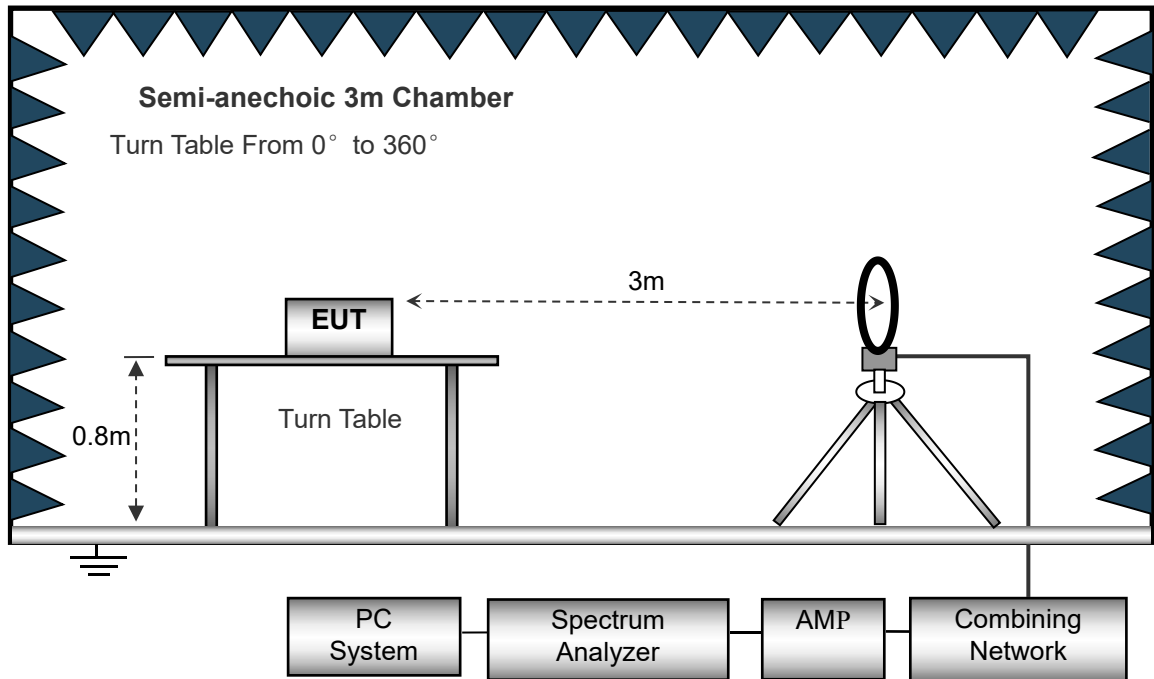
- E is the field strength in V/m;
- d is the measurement distance in meters;
- EIRP is the equivalent isotropically radiated power in watts.

8.2 Test Procedure

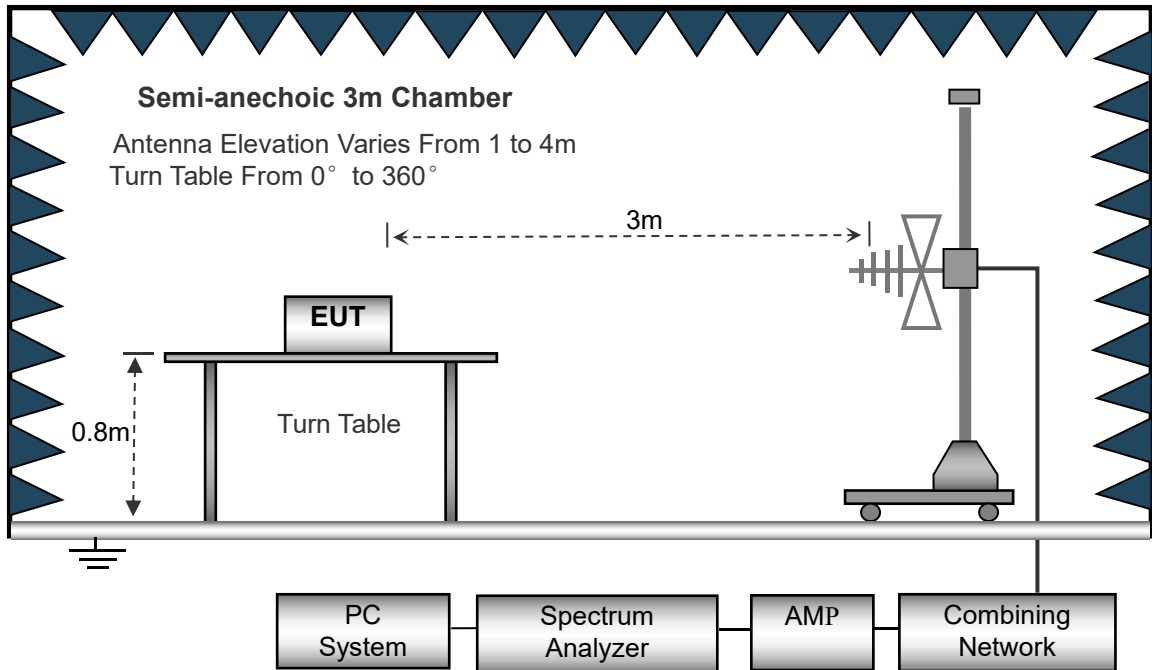
The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.205 15.407(b)(6) and FCC Part 15.209 Limit..

The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle. The spacing between the peripherals was 10cm.

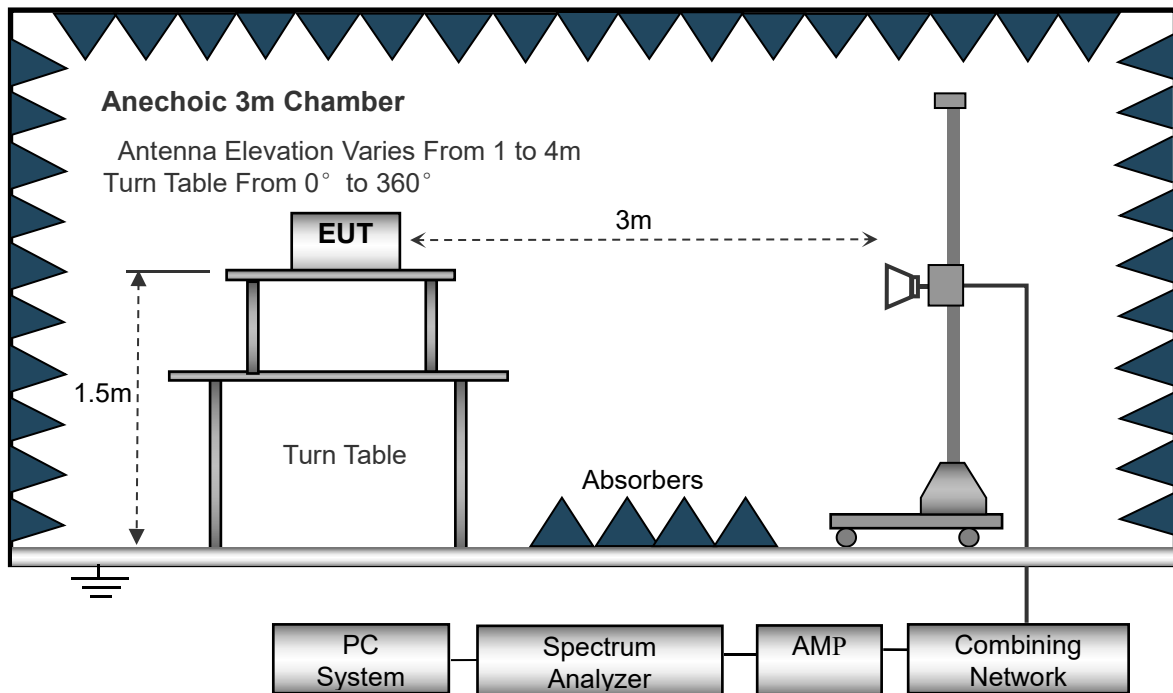
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30MHz to 1GHz.



The test setup for emission measurement above 1GHz.



8.3 Test Receiver Setup

During the radiated emission test for above 1GHz, the test receiver was set with the following configurations:

For peak detector:

RBW = 1000kHz, VBW = 3000kHz, Sweep Time = Auto

For average detector:

RBW = 1000kHz, VBW = 10Hz, Sweep Time = Auto

8.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dB μ V means the emission is 6dB μ V below the maximum limit for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

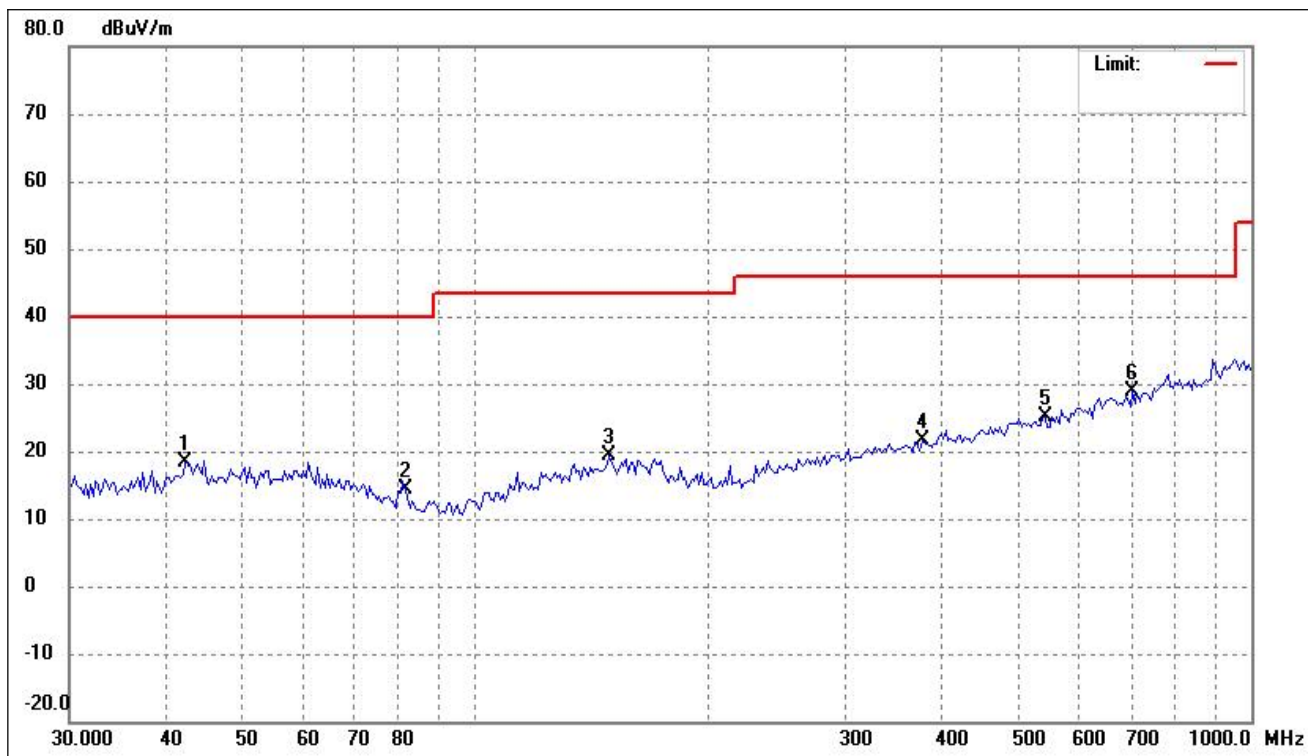
8.5 Summary of Test Results/Plots

Note: this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

- Spurious Emission From 30MHz to 1GHz
- 5150-5250MHz

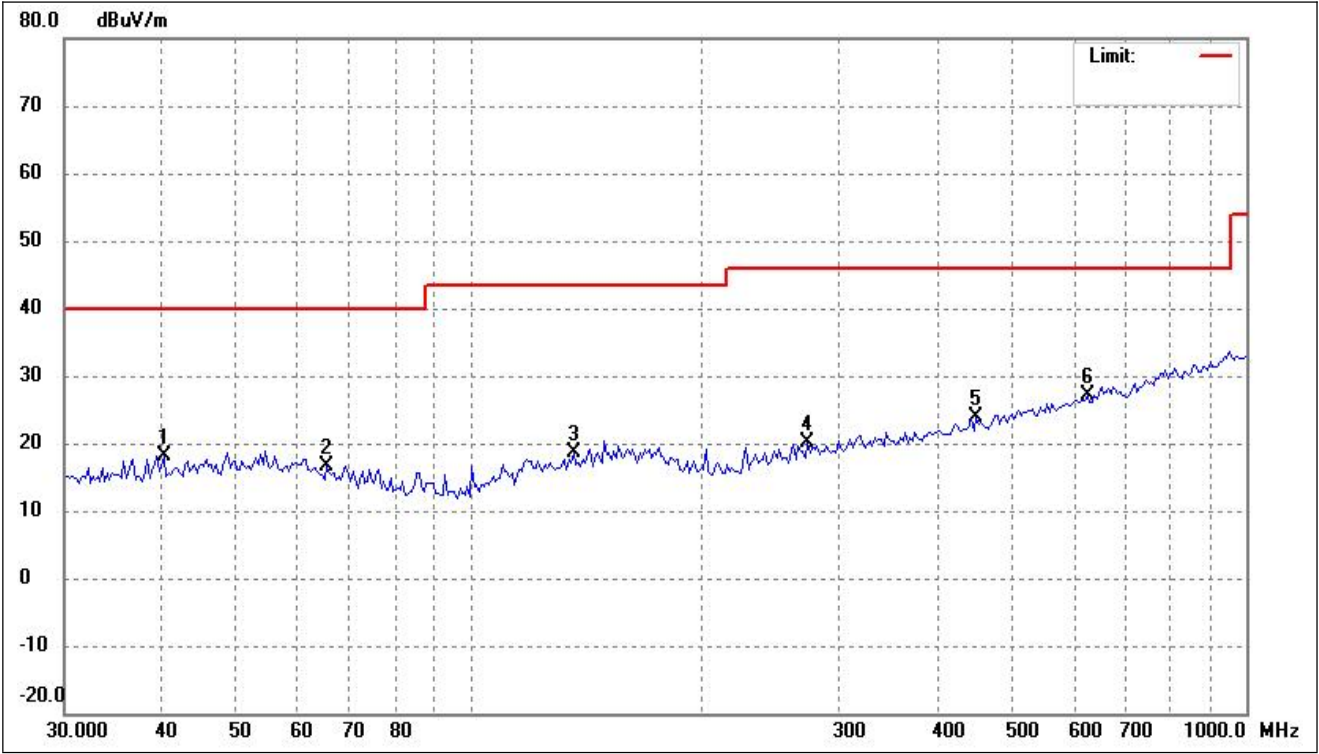
802.11a(worst case)

Test Channel	5180MHz(Worst case)	Polarity:	Horizontal
--------------	---------------------	-----------	------------



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.3313	27.80	-9.34	18.46	40.00	-21.54	-	-	peak
2	81.3739	27.81	-13.32	14.49	40.00	-25.51	-	-	peak
3	148.9173	28.41	-8.91	19.50	43.50	-24.00	-	-	peak
4	376.5227	28.18	-6.55	21.63	46.00	-24.37	-	-	peak
5	542.6103	28.89	-3.81	25.08	46.00	-20.92	-	-	peak
6	703.7314	29.87	-0.88	28.99	46.00	-17.01	-	-	peak

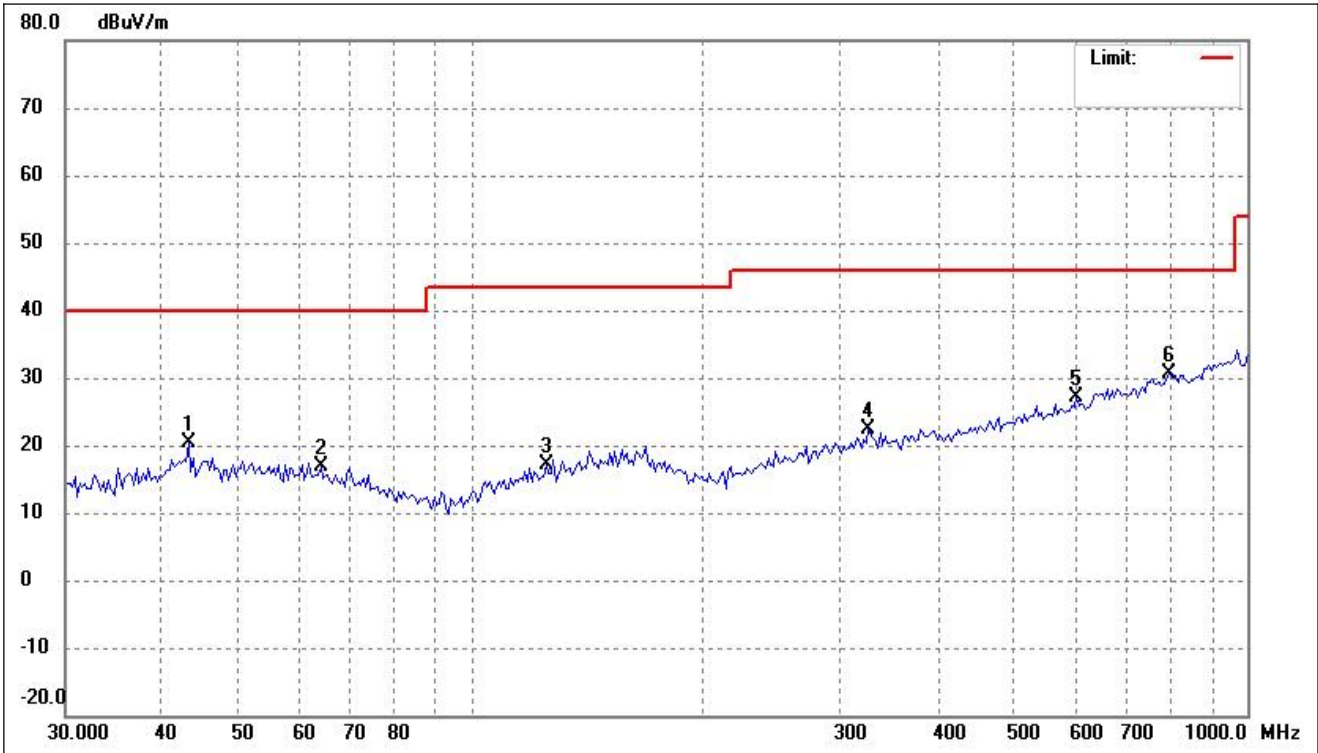
802.11a(worst case)			
Test Channel	5180MHz(Worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.2994	27.80	-9.55	18.25	40.00	-21.75	-	-	peak
2	65.4452	26.86	-10.26	16.60	40.00	-23.40	-	-	peak
3	135.9162	28.15	-9.60	18.55	43.50	-24.95	-	-	peak
4	272.5245	28.76	-8.66	20.10	46.00	-25.90	-	-	peak
5	448.8361	28.94	-5.00	23.94	46.00	-22.06	-	-	peak
6	624.4897	29.20	-2.14	27.06	46.00	-18.94	-	-	peak

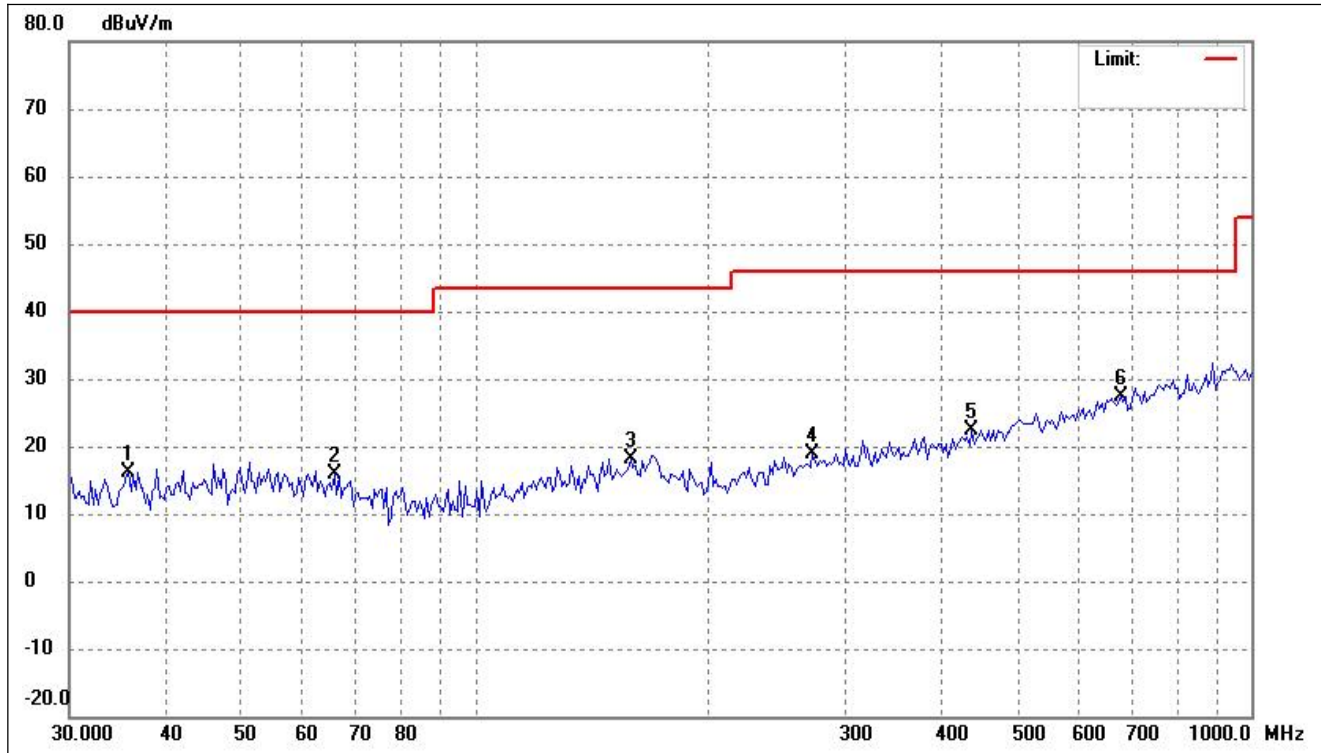
➤ 5250-5350MHz

802.11a(worst case)			
Test Channel	5260MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	43.2332	29.62	-9.23	20.39	40.00	-19.61	-	-	peak
2	64.0799	26.90	-10.08	16.82	40.00	-23.18	-	-	peak
3	124.9249	27.68	-10.50	17.18	43.50	-26.32	-	-	peak
4	324.8644	29.61	-7.18	22.43	46.00	-23.57	-	-	peak
5	602.9287	29.19	-2.06	27.13	46.00	-18.87	-	-	peak
6	793.0281	29.83	0.89	30.72	46.00	-15.28	-	-	peak

802.11a(worst case)			
Test Channel	5260MHz(worst case)	Polarity:	Vertical

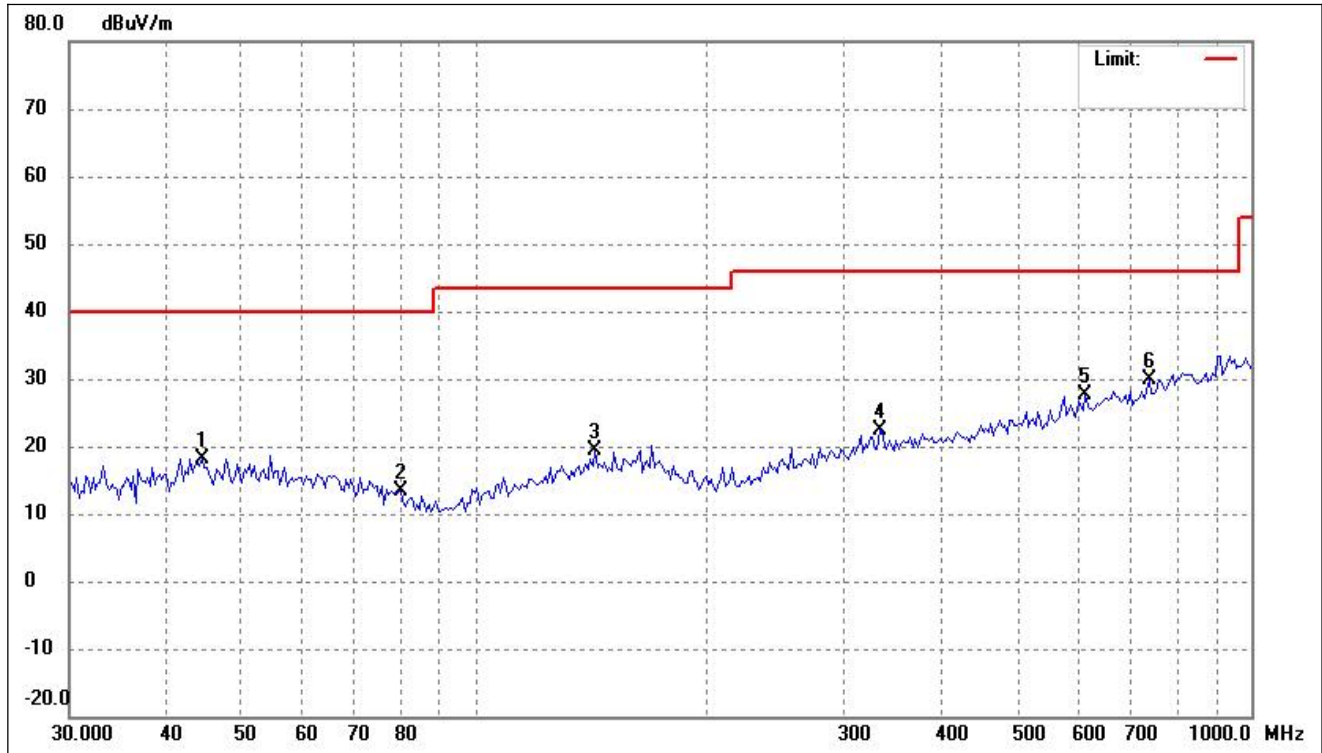


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.7616	26.20	-10.13	16.07	40.00	-23.93	-	-	peak
2	65.9067	26.26	-10.34	15.92	40.00	-24.08	-	-	peak
3	158.6397	26.74	-8.56	18.18	43.50	-25.32	-	-	peak
4	272.5245	27.53	-8.66	18.87	46.00	-27.13	-	-	peak
5	436.3956	27.82	-5.41	22.41	46.00	-23.59	-	-	peak
6	679.4345	28.59	-1.11	27.48	46.00	-18.52	-	-	peak

➤ 5470-5725MHz

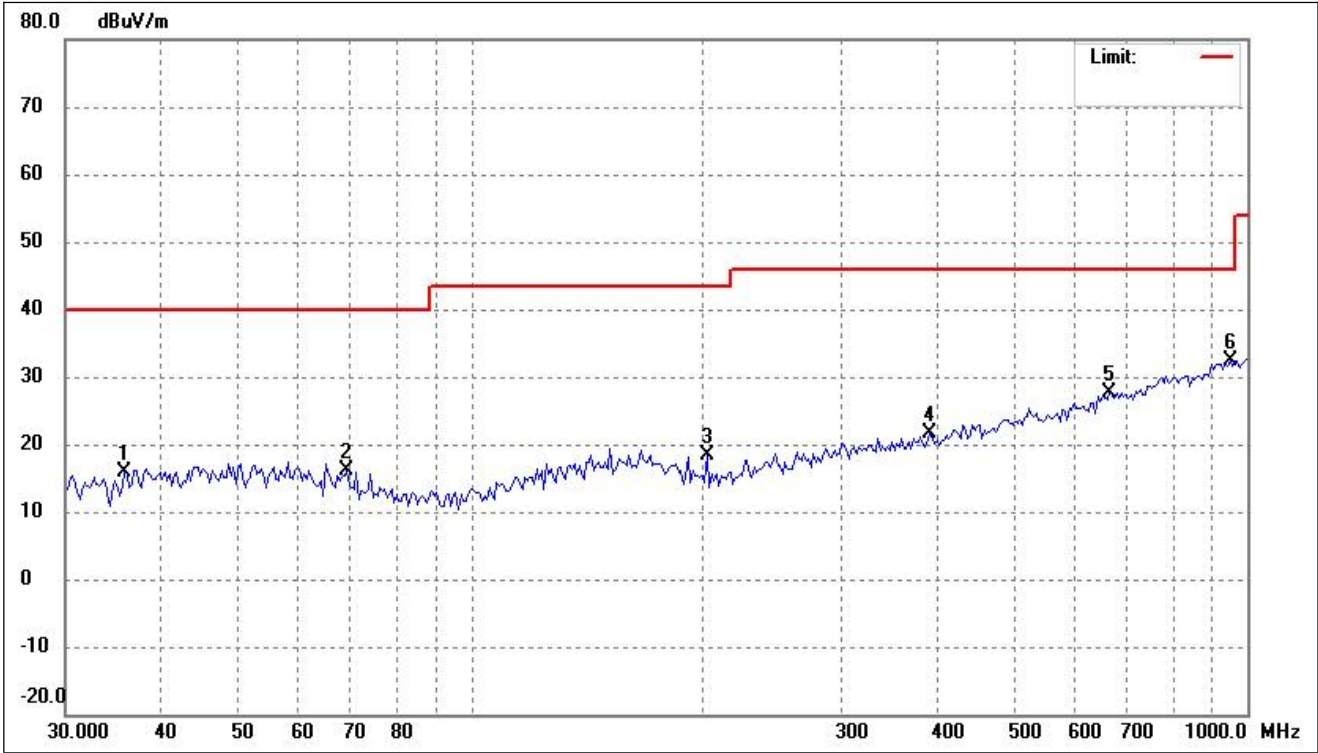
802.11a(worst case)

Test Channel	5500MHz(worst case)	Polarity:	Horizontal
--------------	---------------------	-----------	------------



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	44.4657	27.28	-9.10	18.18	40.00	-21.82	-	-	peak
2	80.2383	26.34	-13.08	13.26	40.00	-26.74	-	-	peak
3	142.7691	28.46	-9.19	19.27	43.50	-24.23	-	-	peak
4	331.7857	29.50	-7.08	22.42	46.00	-23.58	-	-	peak
5	611.4623	29.74	-2.09	27.65	46.00	-18.35	-	-	peak
6	739.2136	29.93	-0.06	29.87	46.00	-16.13	-	-	peak

802.11a(worst case)			
Test Channel	5500MHz(worst case)	Polarity:	Vertical

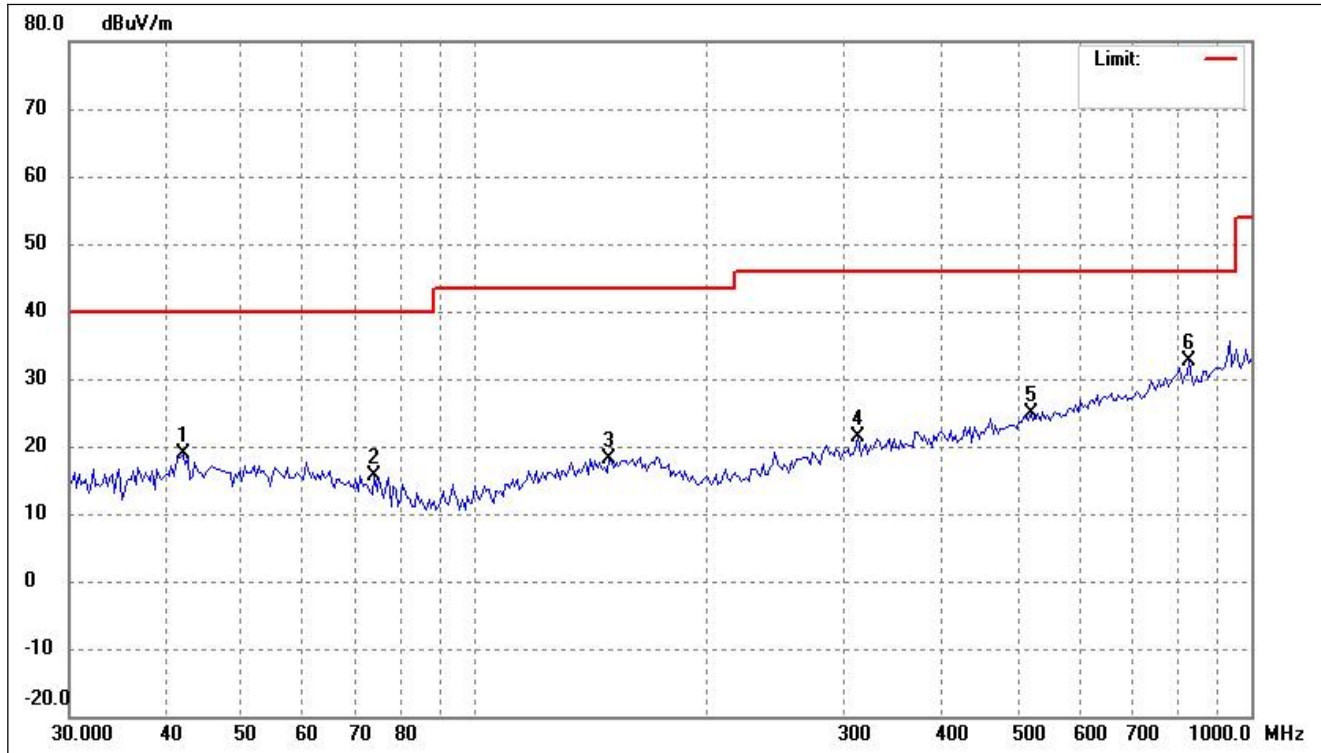


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.7616	26.13	-10.13	16.00	40.00	-24.00	-	-	peak
2	69.2297	27.02	-10.99	16.03	40.00	-23.97	-	-	peak
3	201.4538	29.79	-11.52	18.27	43.50	-25.23	-	-	peak
4	389.9874	27.95	-6.29	21.66	46.00	-24.34	-	-	peak
5	665.2609	28.73	-1.22	27.51	46.00	-18.49	-	-	peak
6	952.0000	29.53	2.95	32.48	46.00	-13.52	-	-	peak

➤ 5725-5850MHz

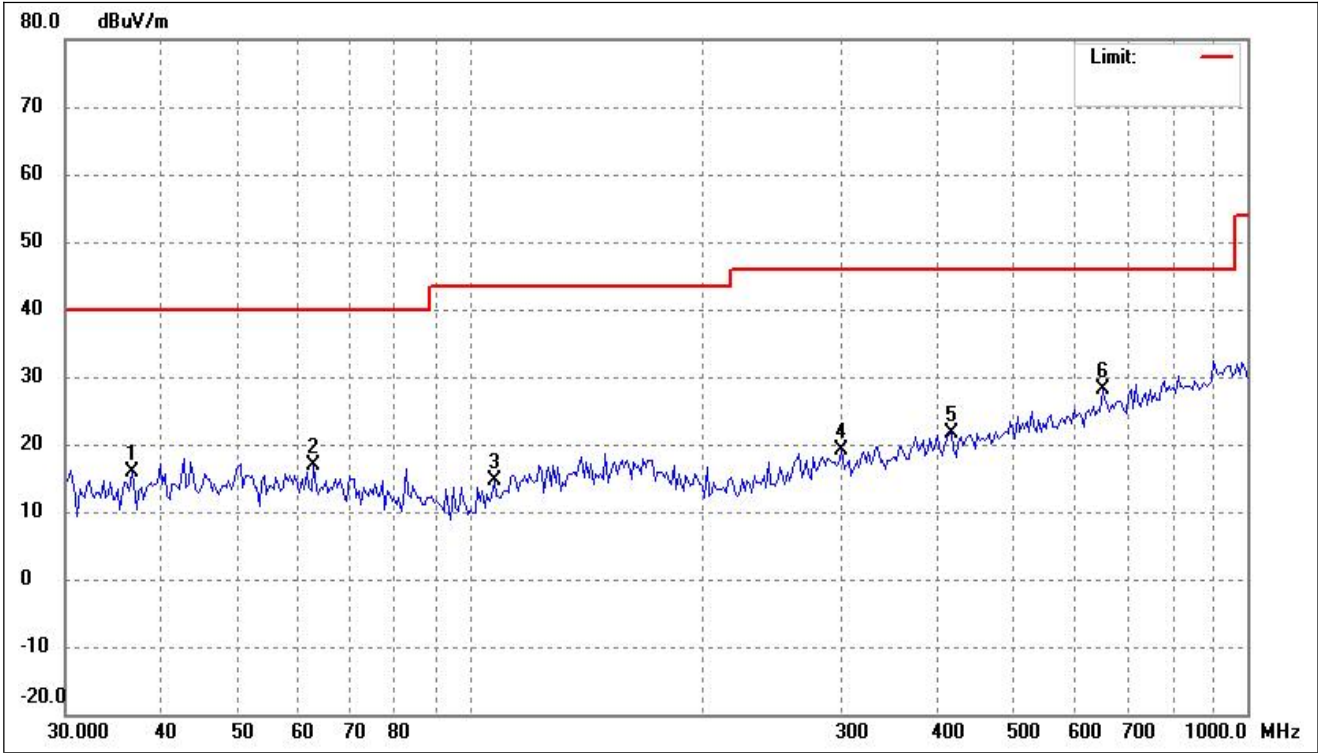
802.11a(worst case)

Test Channel	5745MHz(worst case)	Polarity:	Horizontal
--------------	---------------------	-----------	------------



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.0349	28.28	-9.39	18.89	40.00	-21.11	-	-	peak
2	74.2696	27.59	-11.92	15.67	40.00	-24.33	-	-	peak
3	148.9173	27.14	-8.91	18.23	43.50	-25.27	-	-	peak
4	311.4519	28.92	-7.48	21.44	46.00	-24.56	-	-	peak
5	520.2078	28.88	-3.94	24.94	46.00	-21.06	-	-	peak
6	833.0126	31.55	0.98	32.53	46.00	-13.47	-	-	peak

802.11a(worst case)			
Test Channel	5745MHz(worst case)	Polarity:	Vertical

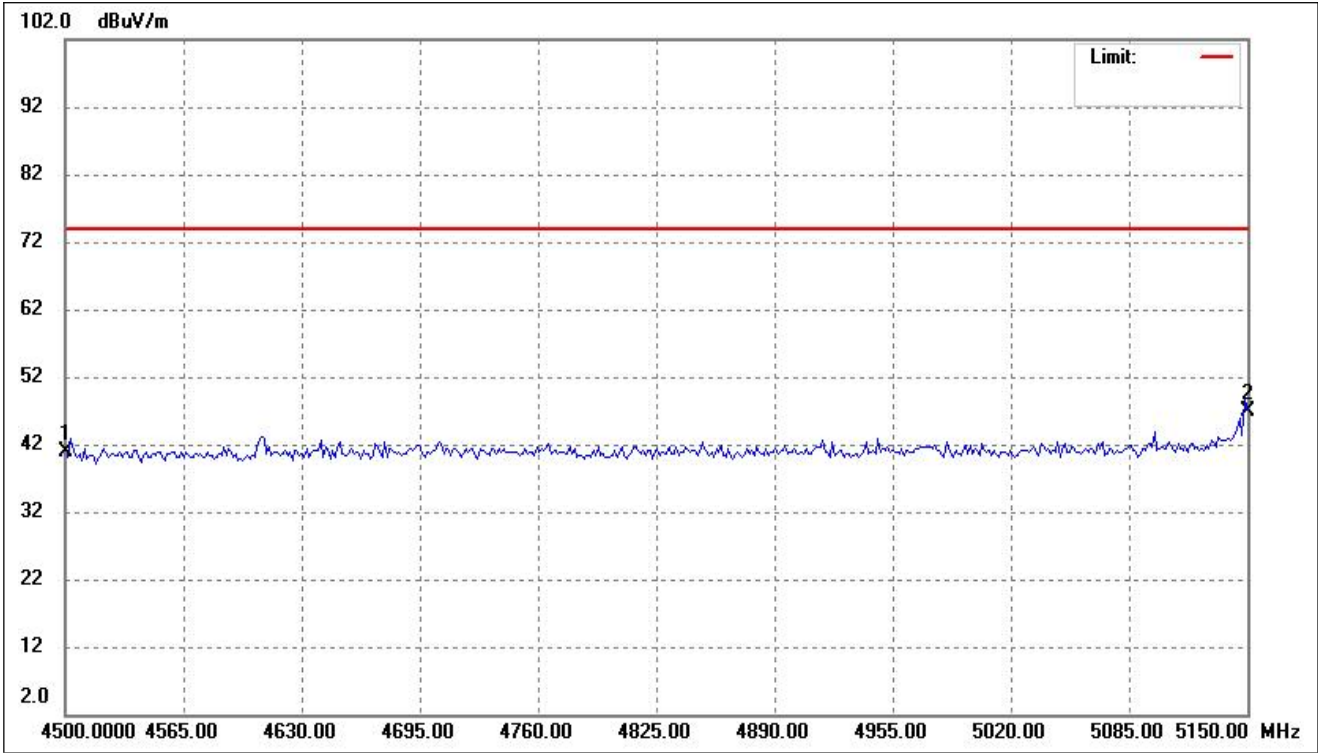


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	36.5235	25.99	-10.01	15.98	40.00	-24.02	-	-	peak
2	62.7432	26.82	-9.92	16.90	40.00	-23.10	-	-	peak
3	107.0306	27.07	-12.41	14.66	43.50	-28.84	-	-	peak
4	300.6988	26.87	-7.73	19.14	46.00	-26.86	-	-	peak
5	415.4486	27.46	-5.89	21.57	46.00	-24.43	-	-	peak
6	651.3830	29.49	-1.33	28.16	46.00	-17.84	-	-	peak

Remark: ‘-’Means’ the test Degree and Height are not recorded by the test software and only show the worst case in the test report.

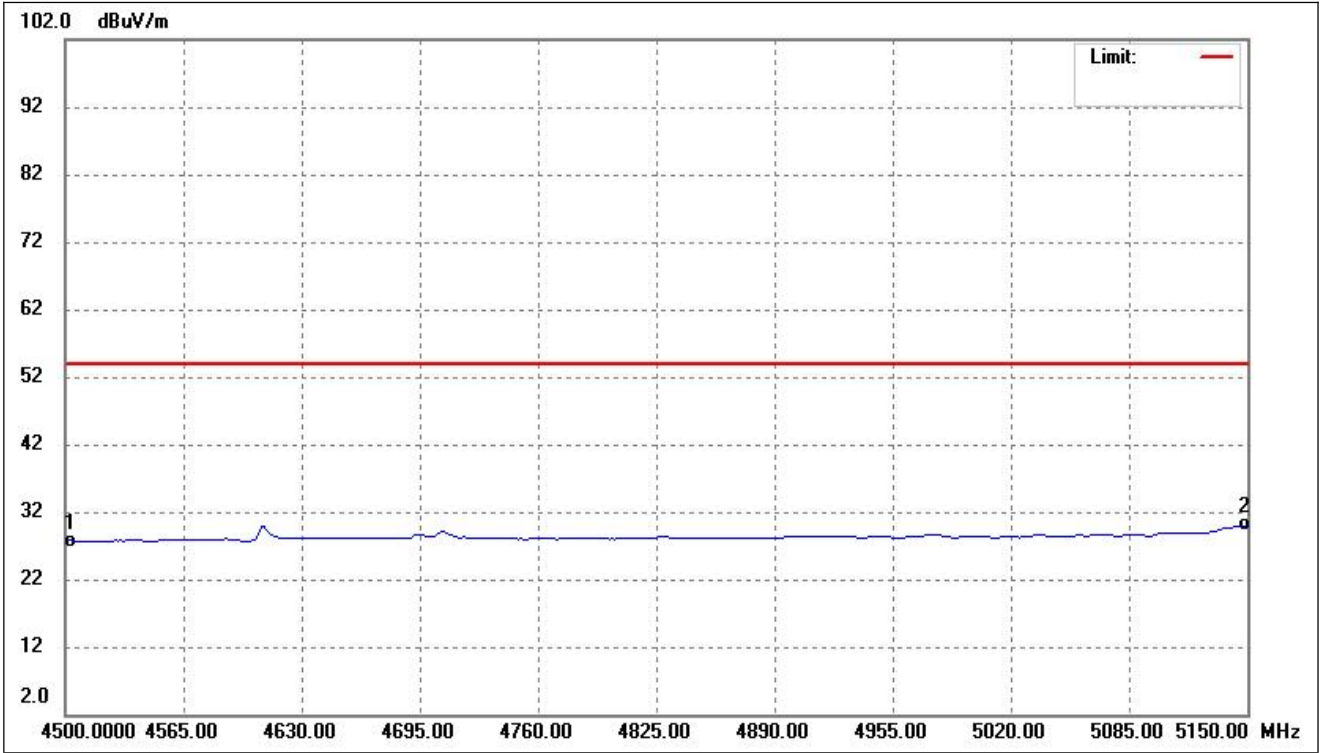
➤ Spurious Emission above 1GHz

802.11a- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



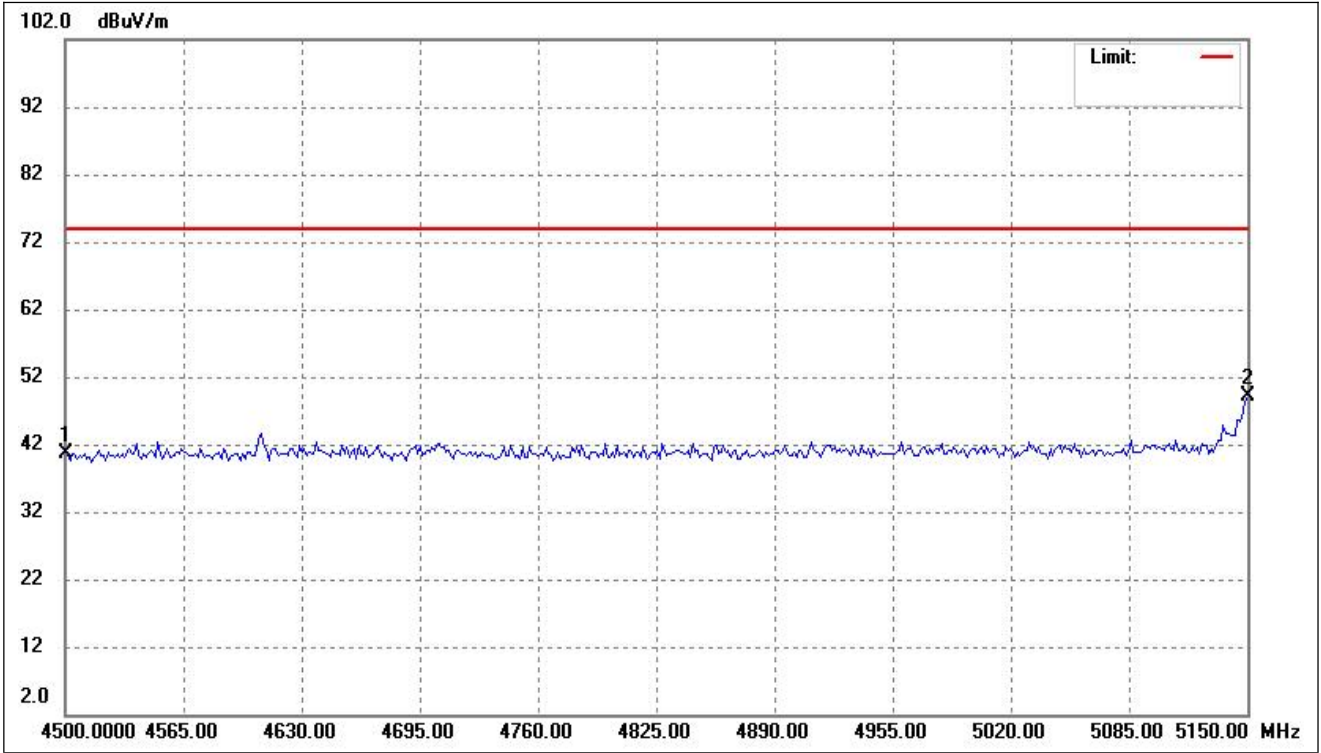
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	54.39	-13.60	40.79	74.00	-33.21	-	-	peak
2	5150.000	58.98	-12.21	46.77	74.00	-27.23	-	-	peak

802.11a- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



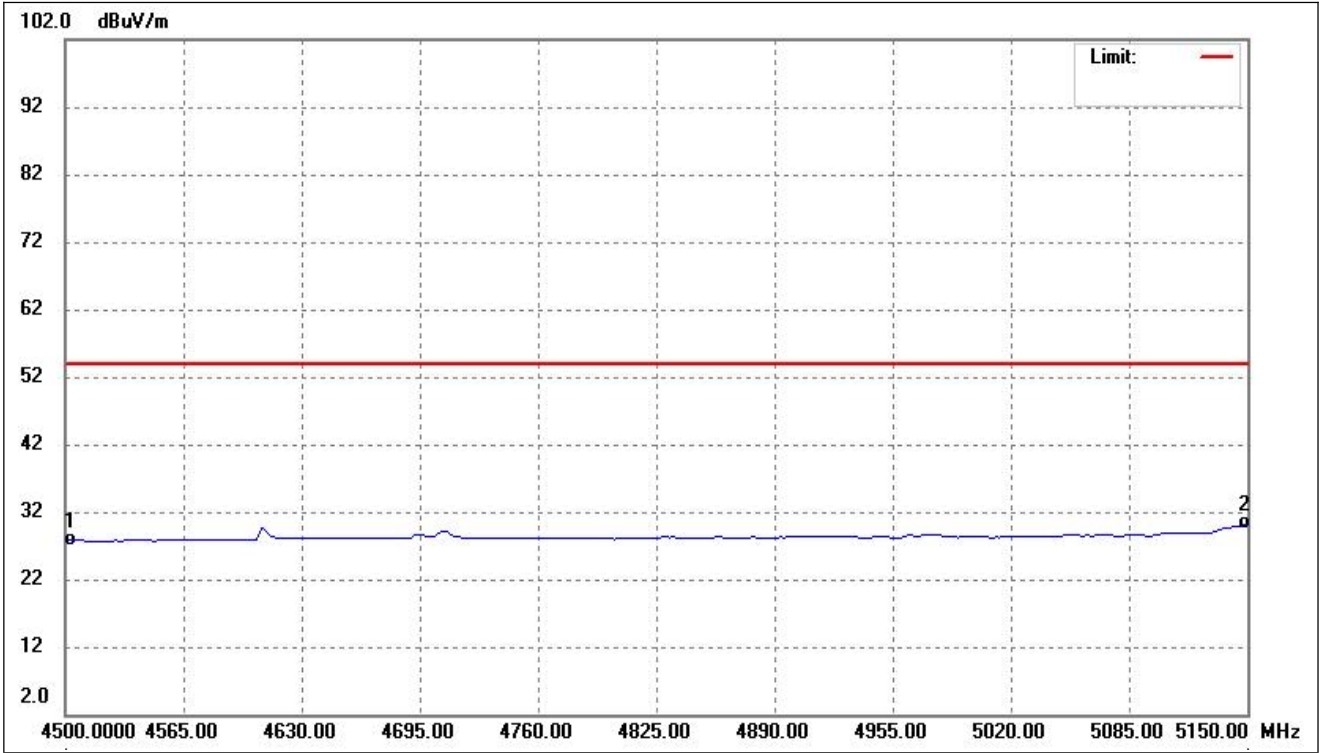
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	41.35	-13.60	27.75	54.00	-26.25	-	-	AVG
2	5150.000	42.23	-12.21	30.02	54.00	-23.98	-	-	AVG

802.11n-HT20- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



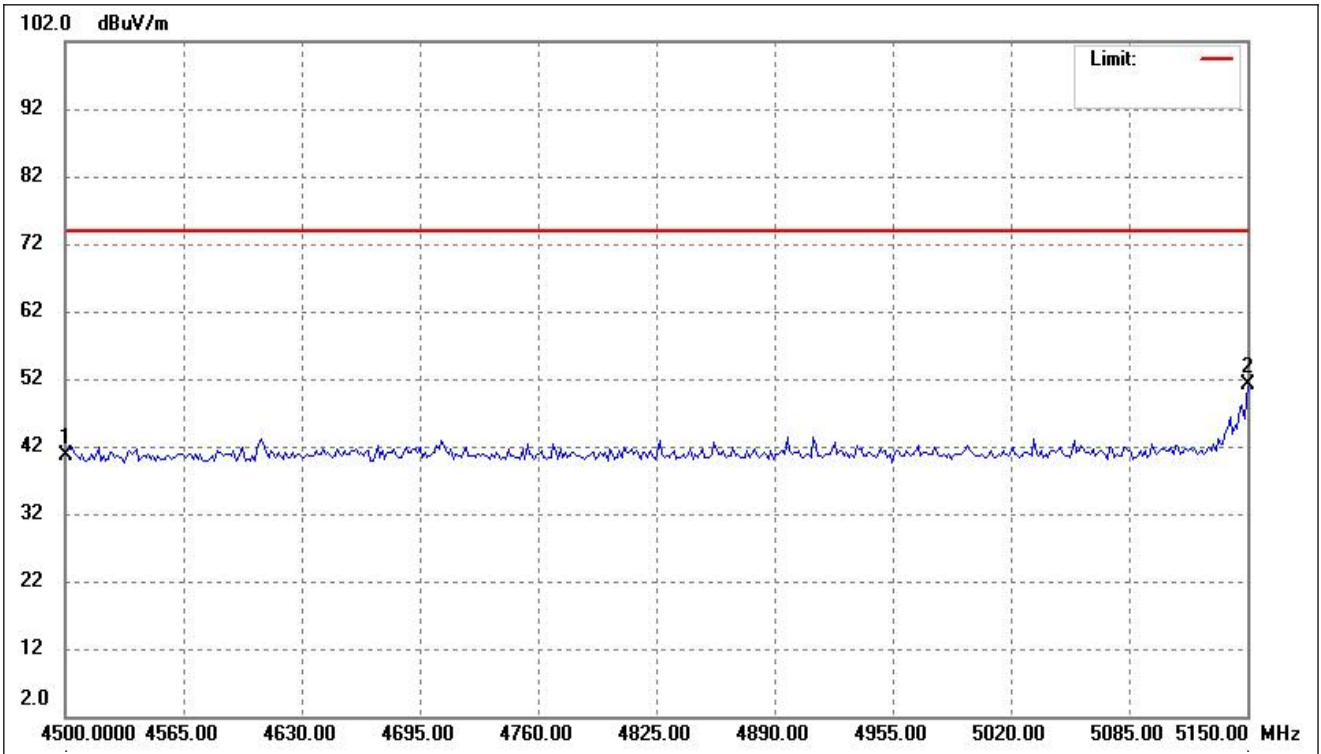
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	54.12	-13.60	40.52	74.00	-33.48	-	-	peak
2	5150.000	61.24	-12.21	49.03	74.00	-24.97	-	-	peak

802.11n-HT20- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



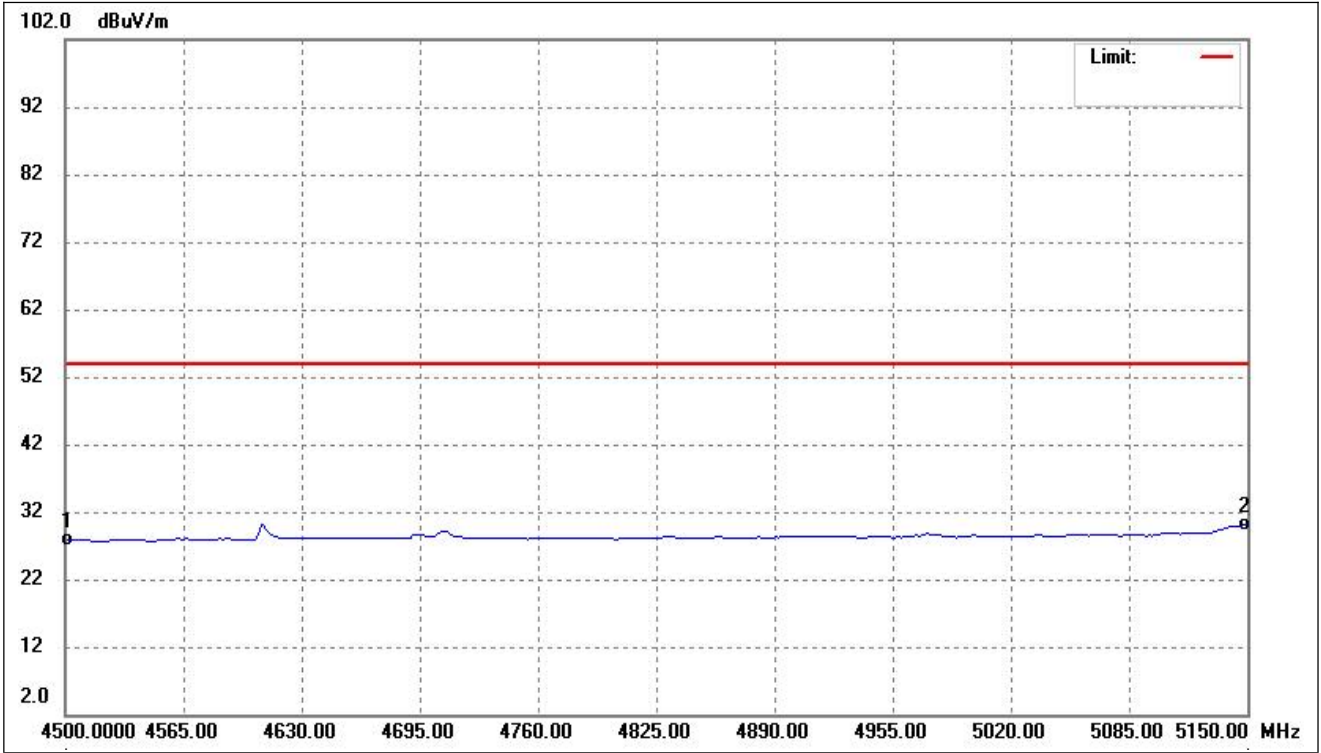
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	41.45	-13.60	27.85	54.00	-26.15	-	-	AVG
2	5150.000	42.47	-12.21	30.26	54.00	-23.74	-	-	AVG

802.11ac-VHT20- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



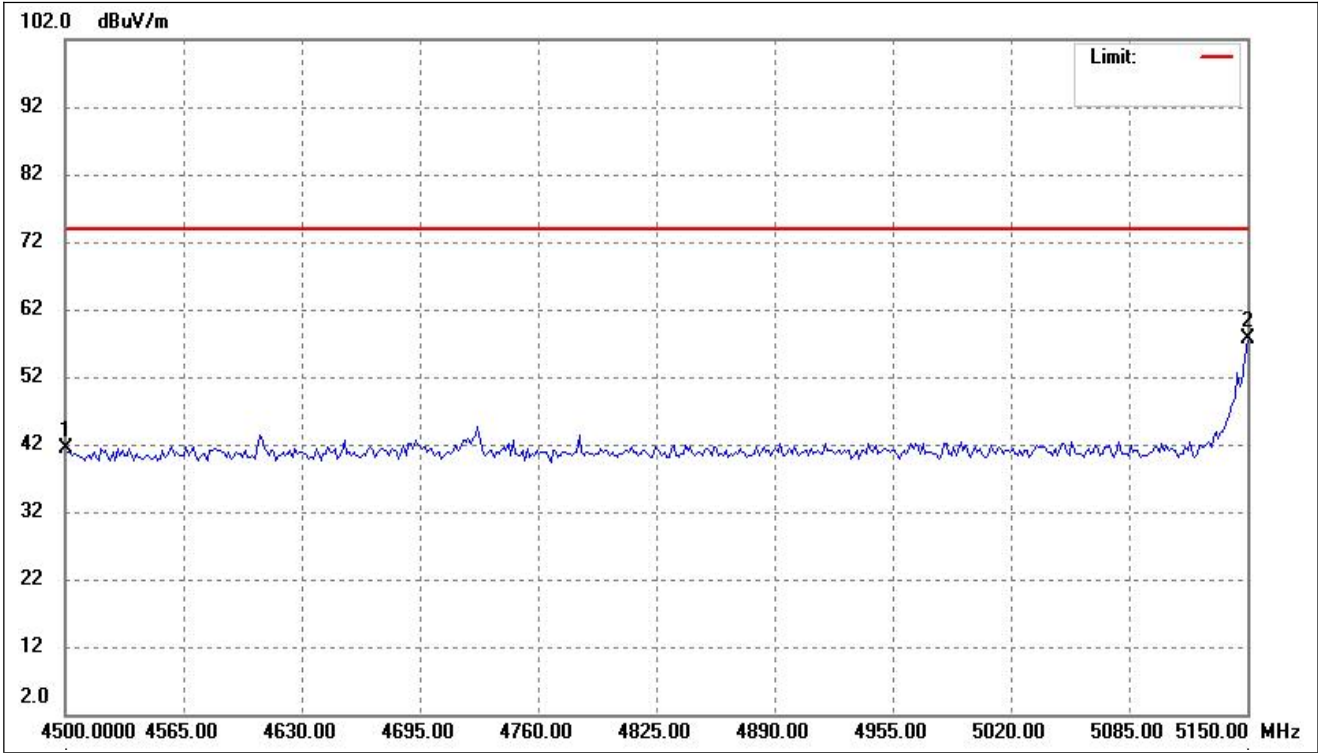
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	54.13	-13.60	40.53	74.00	-33.47	-	-	peak
2	5150.000	63.38	-12.21	51.17	74.00	-22.83	-	-	peak

802.11ac-VHT20- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



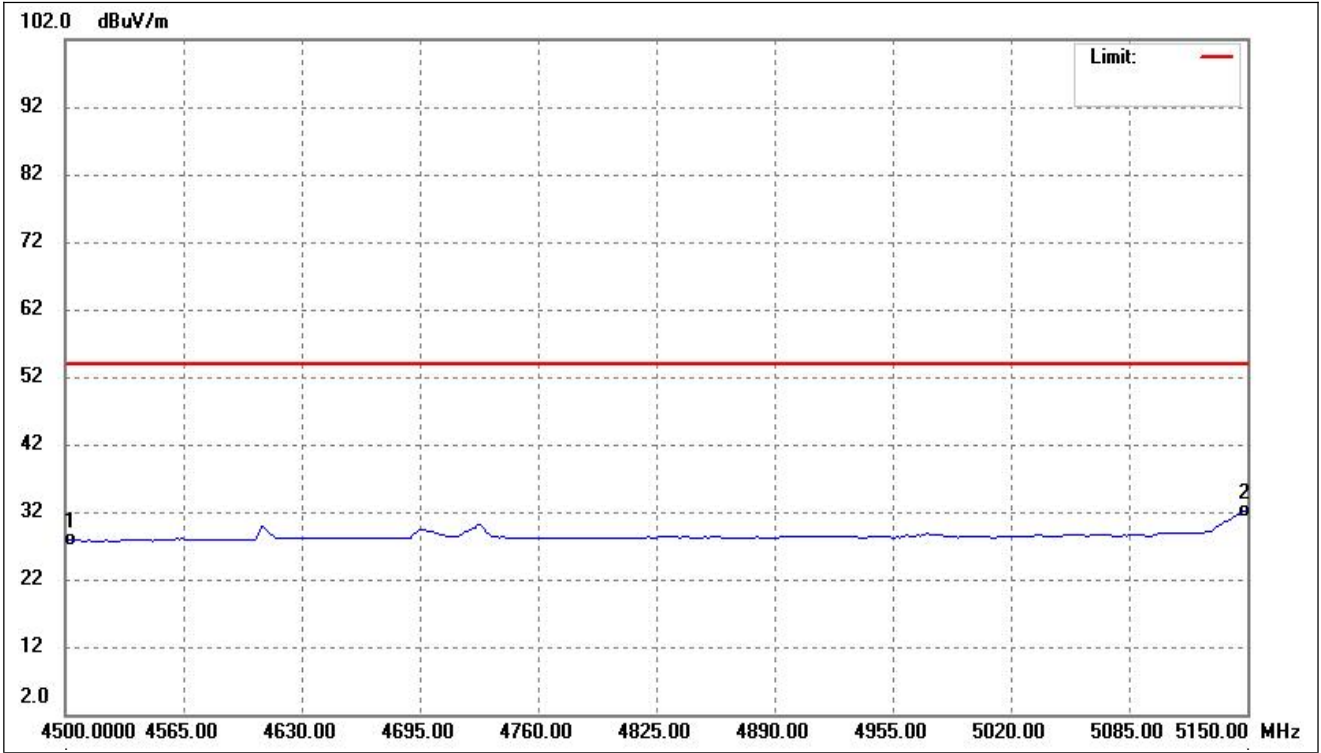
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	41.42	-13.60	27.82	54.00	-26.18	-	-	AVG
2	5150.000	42.33	-12.21	30.12	54.00	-23.88	-	-	AVG

802.11n-HT40- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



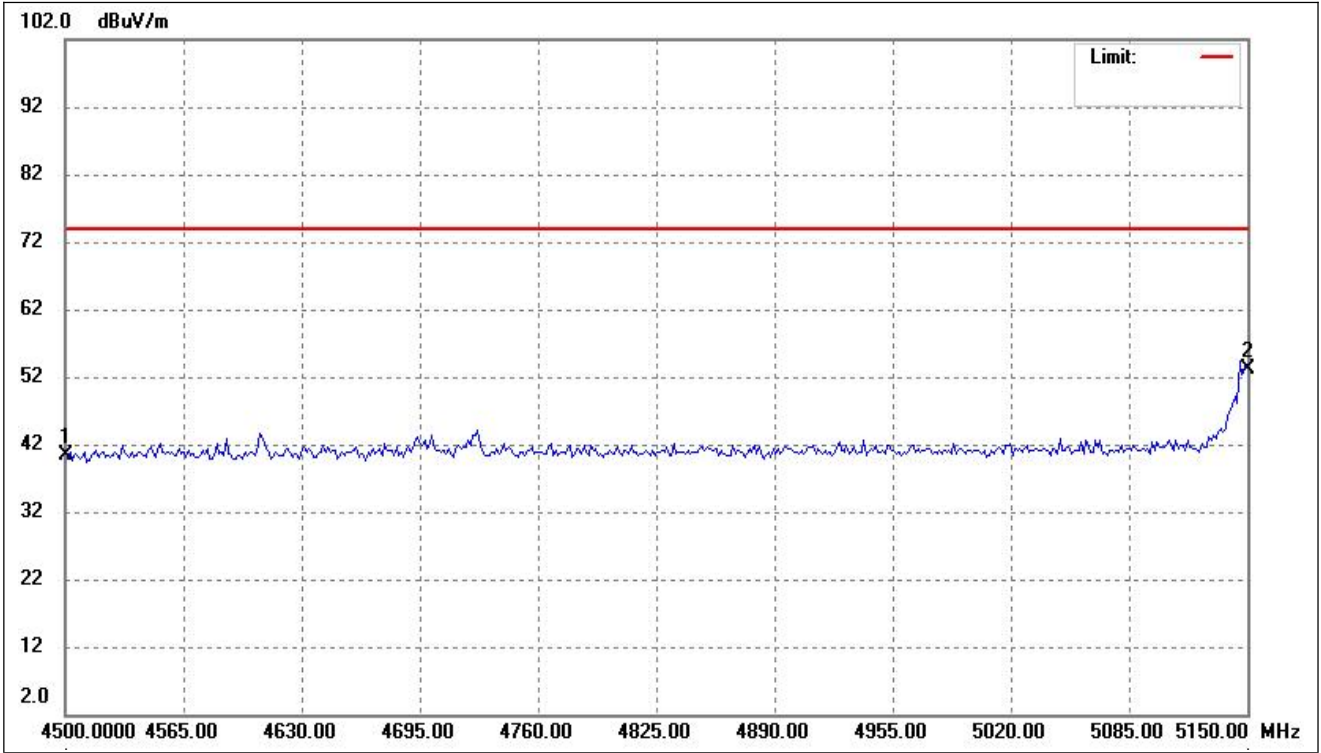
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	54.93	-13.60	41.33	74.00	-32.67	-	-	peak
2	5150.000	69.95	-12.21	57.74	74.00	-16.26	-	-	peak

802.11n-HT40- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



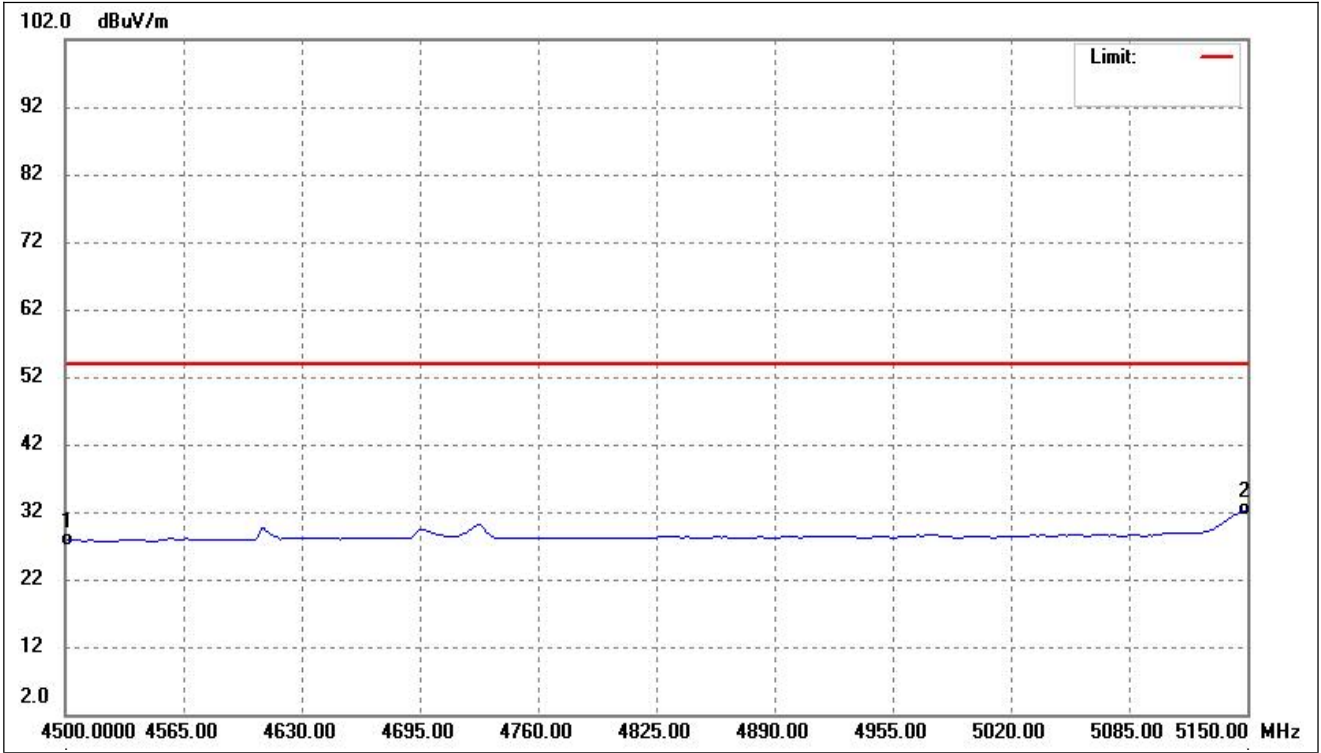
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	41.43	-13.60	27.83	54.00	-26.17	-	-	AVG
2	5150.000	44.42	-12.21	32.21	54.00	-21.79	-	-	AVG

802.11ac-VHT40- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



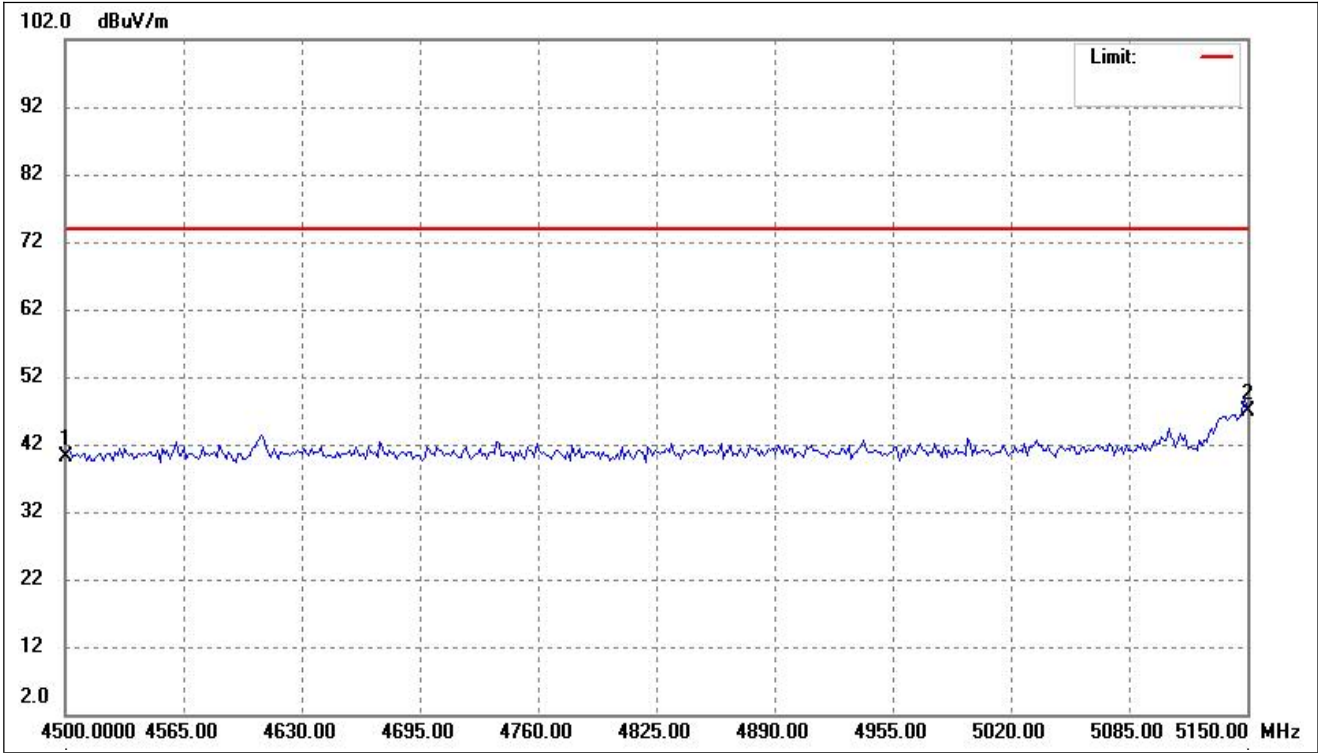
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	53.94	-13.60	40.34	74.00	-33.66	-	-	peak
2	5150.000	65.39	-12.21	53.18	74.00	-20.82	-	-	peak

802.11ac-VHT40- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



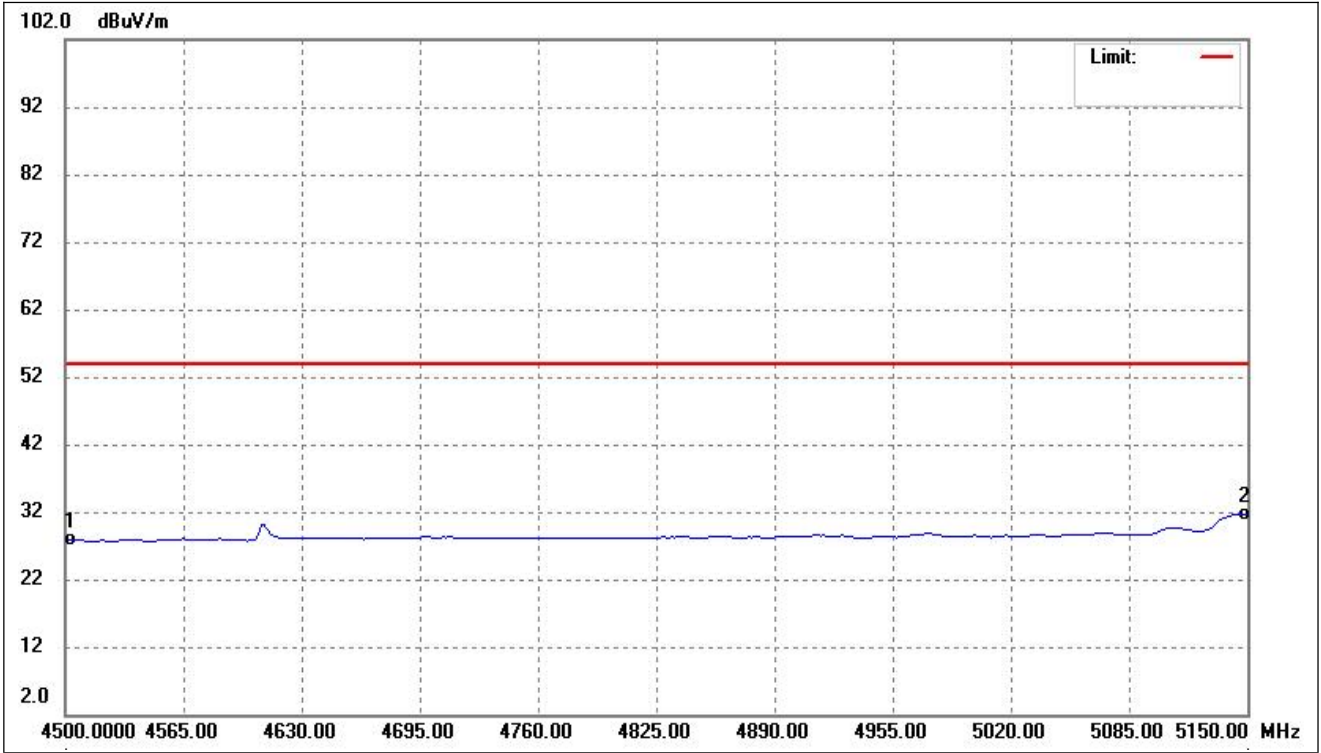
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	41.42	-13.60	27.82	54.00	-26.18	-	-	AVG
2	5150.000	44.49	-12.21	32.28	54.00	-21.72	-	-	AVG

802.11ac-VHT80- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	53.72	-13.60	40.12	74.00	-33.88	-	-	peak
2	5150.000	59.20	-12.21	46.99	74.00	-27.01	-	-	peak

802.11ac-VHT80- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Vertical(worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	41.39	-13.60	27.79	54.00	-26.21	-	-	AVG
2	5150.000	43.90	-12.21	31.69	54.00	-22.31	-	-	AVG

Note: The Restricted Bandedge was tested in Horizontal /Vertical and the worst case position data was reported.

Remark: '- 'Means' the test Degree and Height is not recorded by the test software and only show the worst case in the test report.

- For the frequency band 5.150-5.250GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11a)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	56.32	7.11	63.43	74	-10.57	H	PK
10360	40.28	7.11	47.39	54	-6.61	H	AV
10360	57.94	7.11	65.05	74	-8.95	V	PK
10360	38.29	7.11	45.40	54	-8.60	V	AV
Middle Channel (5200MHz)							
10400	58.19	7.22	65.41	74	-8.59	H	PK
10400	41.74	7.22	48.96	54	-5.04	H	AV
10400	57.54	7.22	64.76	74	-9.24	V	PK
10400	39.80	7.22	47.02	54	-6.98	V	AV
High Channel (5240MHz)							
10480	55.75	7.69	63.44	74	-10.56	H	PK
10480	38.35	7.69	46.04	54	-7.96	H	AV
10480	57.10	7.69	64.79	74	-9.21	V	PK
10480	39.84	7.69	47.53	54	-6.47	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5260MHz)							
10520	57.57	7.96	65.53	74	-8.47	H	PK
10520	41.25	7.96	49.21	54	-4.79	H	AV
10520	58.71	7.96	66.67	74	-7.33	V	PK
10520	41.16	7.96	49.12	54	-4.88	V	AV
Middle Channel (5280MHz)							
10560	57.72	8.02	65.74	74	-8.26	H	PK
10560	38.75	8.02	46.77	54	-7.23	H	AV
10560	58.83	8.02	66.85	74	-7.15	V	PK
10560	39.25	8.02	47.27	54	-6.73	V	AV
High Channel (5320MHz)							
10640	55.62	8.35	63.97	74	-10.03	H	PK
10640	38.57	8.35	46.92	54	-7.08	H	AV
10640	58.44	8.35	66.79	74	-7.21	V	PK
10640	38.34	8.35	46.69	54	-7.31	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	55.94	8.82	64.76	74	-9.24	H	PK
11000	S38.36	8.82	47.18	54	-6.82	H	AV
11000	57.22	8.82	66.04	74	-7.96	V	PK
11000	41.12	8.82	49.94	54	-4.06	V	AV
Middle Channel (5600MHz)							
11200	57.53	8.92	66.45	74	-7.55	H	PK
11200	41.36	8.92	50.28	54	-3.72	H	AV
11200	55.35	8.92	64.27	74	-9.73	V	PK
11200	40.21	8.92	49.13	54	-4.87	V	AV
High Channel (5700MHz)							
11400	55.25	9.36	64.61	74	-9.39	H	PK
11400	41.37	9.36	50.73	54	-3.27	H	AV
11400	55.00	9.36	64.36	74	-9.64	V	PK
11400	38.96	9.36	48.32	54	-5.68	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	55.17	9.45	64.62	74	-9.38	H	PK
11490	40.83	9.45	50.28	54	-3.72	H	AV
11490	58.54	9.45	67.99	74	-6.01	V	PK
11490	41.18	9.45	50.63	54	-3.37	V	AV
Middle Channel (5785MHz)							
11570	55.04	9.62	64.66	74	-9.34	H	PK
11570	39.09	9.62	48.71	54	-5.29	H	AV
11570	56.32	9.62	65.94	74	-8.06	V	PK
11570	40.28	9.62	49.90	54	-4.10	V	AV
High Channel (5825MHz)							
11650	58.96	9.84	68.80	74	-5.20	H	PK
11650	39.54	9.84	49.38	54	-4.62	H	AV
11650	55.62	9.84	65.46	74	-8.54	V	PK
11650	41.40	9.84	51.24	54	-2.76	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-43.27	-27
Highest	Above 5350	-42.51	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-42.47	-27
Highest	Above 5350	-41.76	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-42.17	-27
Highest	Above 5725	-39.82	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.76	-27
	5650 to 5700	-33.64	-27 to -17
	5700 to 5720	-27.13	-17 to 15.6
	5720 to 5725	-17.27	15.6 to 27
Highest	5850 to 5855	-14.34	27 to 15.6
	5855 to 5875	-21.25	15.6 to -17
	5875 to 5925	-33.16	-17 to -27
	Above 5925	-38.22	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11n HT20)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	58.28	7.11	65.39	74	-8.61	H	PK
10360	40.97	7.11	48.08	54	-5.92	H	AV
10360	55.07	7.11	62.18	74	-11.82	V	PK
10360	40.95	7.11	48.06	54	-5.94	V	AV
Middle Channel (5200MHz)							
10400	57.97	7.22	65.19	74	-8.81	H	PK
10400	41.07	7.22	48.29	54	-5.71	H	AV
10400	58.91	7.22	66.13	74	-7.87	V	PK
10400	38.61	7.22	45.83	54	-8.17	V	AV
High Channel (5240MHz)							
10480	56.99	7.69	64.68	74	-9.32	H	PK
10480	39.46	7.69	47.15	54	-6.85	H	AV
10480	55.54	7.69	63.23	74	-10.77	V	PK
10480	38.33	7.69	46.02	54	-7.98	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5260MHz)							
10520	57.71	7.96	65.67	74	-8.33	H	PK
10520	38.73	7.96	46.69	54	-7.31	H	AV
10520	56.89	7.96	64.85	74	-9.15	V	PK
10520	40.68	7.96	48.64	54	-5.36	V	AV
Middle Channel (5280MHz)							
10560	56.09	8.02	64.11	74	-9.89	H	PK
10560	39.07	8.02	47.09	54	-6.91	H	AV
10560	58.60	8.02	66.62	74	-7.38	V	PK
10560	41.86	8.02	49.88	54	-4.12	V	AV
High Channel (5320MHz)							
10640	58.70	8.35	67.05	74	-6.95	H	PK
10640	39.05	8.35	47.40	54	-6.60	H	AV
10640	55.92	8.35	64.27	74	-9.73	V	PK
10640	39.78	8.35	48.13	54	-5.87	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	56.88	8.82	65.70	74	-8.30	H	PK
11000	41.83	8.82	50.65	54	-3.35	H	AV
11000	58.14	8.82	66.96	74	-7.04	V	PK
11000	38.31	8.82	47.13	54	-6.87	V	AV
Middle Channel (5600MHz)							
11200	58.11	8.92	67.03	74	-6.97	H	PK
11200	40.35	8.92	49.27	54	-4.73	H	AV
11200	56.85	8.92	65.77	74	-8.23	V	PK
11200	38.89	8.92	47.81	54	-6.19	V	AV
High Channel (5700MHz)							
11400	57.21	9.84	67.05	74	-6.95	H	PK
11400	39.92	9.84	49.76	54	-4.24	H	AV
11400	55.93	9.84	65.77	74	-8.23	V	PK
11400	40.99	9.84	50.83	54	-3.17	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	55.64	9.45	65.09	74	-8.91	H	PK
11490	39.68	9.45	49.13	54	-4.87	H	AV
11490	56.95	9.45	66.40	74	-7.60	V	PK
11490	38.60	9.45	48.05	54	-5.95	V	AV
Middle Channel (5785MHz)							
11570	56.99	9.62	66.61	74	-7.39	H	PK
11570	39.74	9.62	49.36	54	-4.64	H	AV
11570	55.82	9.62	65.44	74	-8.56	V	PK
11570	38.41	9.62	48.03	54	-5.97	V	AV
High Channel (5825MHz)							
11650	55.04	9.84	64.88	74	-9.12	H	PK
11650	40.48	9.84	50.32	54	-3.68	H	AV
11650	58.87	9.84	68.71	74	-5.29	V	PK
11650	40.85	9.84	50.69	54	-3.31	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.16	-27
Highest	Above 5350	-41.42	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-41.70	-27
Highest	Above 5350	-42.53	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-38.61	-27
Highest	Above 5725	-39.49	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.21	-27
	5650 to 5700	-33.12	-27 to -17
	5700 to 5720	-27.36	-17 to 15.6
	5720 to 5725	-17.59	15.6 to 27
Highest	5850 to 5855	-14.21	27 to 15.6
	5855 to 5875	-21.47	15.6 to -17
	5875 to 5925	-33.29	-17 to -27
	Above 5925	-38.19	-27

Note: the data just list the worst cases

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac HT20)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	58.12	7.11	65.23	74	-8.77	H	PK
10360	39.04	7.11	46.15	54	-7.85	H	AV
10360	56.65	7.11	63.76	74	-10.24	V	PK
10360	38.89	7.11	46.00	54	-8.00	V	AV
Middle Channel (5200MHz)							
10400	56.25	7.22	63.47	74	-10.53	H	PK
10400	40.87	7.22	48.09	54	-5.91	H	AV
10400	56.62	7.22	63.84	74	-10.16	V	PK
10400	40.40	7.22	47.62	54	-6.38	V	AV
High Channel (5240MHz)							
10480	55.33	7.69	63.02	74	-10.98	H	PK
10480	38.93	7.69	46.62	54	-7.38	H	AV
10480	57.66	7.69	65.35	74	-8.65	V	PK
10480	39.58	7.69	47.27	54	-6.73	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5260MHz)							
10520	57.85	7.96	65.81	74	-8.19	H	PK
10520	39.64	7.96	47.60	54	-6.40	H	AV
10520	57.46	7.96	65.42	74	-8.58	V	PK
10520	40.82	7.96	48.78	54	-5.22	V	AV
Middle Channel (5280MHz)							
10560	58.47	8.02	66.49	74	-7.51	H	PK
10560	38.55	8.02	46.57	54	-7.43	H	AV
10560	56.21	8.02	64.23	74	-9.77	V	PK
10560	40.57	8.02	48.59	54	-5.41	V	AV
High Channel (5320MHz)							
10640	55.67	8.35	64.02	74	-9.98	H	PK
10640	41.23	8.35	49.58	54	-4.42	H	AV
10640	58.08	8.35	66.43	74	-7.57	V	PK
10640	41.82	8.35	50.17	54	-3.83	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	57.82	8.82	66.64	74	-7.36	H	PK
11000	39.62	8.82	48.44	54	-5.56	H	AV
11000	58.86	8.82	67.68	74	-6.32	V	PK
11000	40.44	8.82	49.26	54	-4.74	V	AV
Middle Channel (5600MHz)							
11200	55.69	8.92	64.61	74	-9.39	H	PK
11200	39.88	8.92	48.80	54	-5.20	H	AV
11200	55.21	8.92	64.13	74	-9.87	V	PK
11200	39.74	8.92	48.66	54	-5.34	V	AV
High Channel (5700MHz)							
11400	57.59	9.84	67.43	74	-6.57	H	PK
11400	39.30	9.84	49.14	54	-4.86	H	AV
11400	55.46	9.84	65.30	74	-8.70	V	PK
11400	38.00	9.84	47.84	54	-6.16	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	56.21	9.45	65.66	74	-8.34	H	PK
11490	39.87	9.45	49.32	54	-4.68	H	AV
11490	56.80	9.45	66.25	74	-7.75	V	PK
11490	40.22	9.45	49.67	54	-4.33	V	AV
Middle Channel (5785MHz)							
11570	56.19	9.62	65.81	74	-8.19	H	PK
11570	38.07	9.62	47.69	54	-6.31	H	AV
11570	58.95	9.62	68.57	74	-5.43	V	PK
11570	39.62	9.62	49.24	54	-4.76	V	AV
High Channel (5825MHz)							
11650	58.70	9.84	68.54	74	-5.46	H	PK
11650	39.89	9.84	49.73	54	-4.27	H	AV
11650	58.76	9.84	68.60	74	-5.40	V	PK
11650	39.32	9.84	49.16	54	-4.84	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.17	-27
Highest	Above 5350	-41.25	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-41.31	-27
Highest	Above 5350	-42.81	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-38.56	-27
Highest	Above 5725	-39.71	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.65	-27
	5650 to 5700	-33.24	-27 to -17
	5700 to 5720	-27.69	-17 to 15.6
	5720 to 5725	-17.75	15.6 to 27
Highest	5850 to 5855	-14.34	27 to 15.6
	5855 to 5875	-21.72	15.6 to -17
	5875 to 5925	-33.65	-17 to -27
	Above 5925	-38.49	-27

Note: the data just list the worst cases

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11n HT40)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	58.39	7.89	66.28	74	-7.72	H	PK
10380	40.69	7.89	48.58	54	-5.42	H	AV
10380	57.61	7.89	65.50	74	-8.50	V	PK
10380	38.00	7.89	45.89	54	-8.11	V	AV
High Channel (5230MHz)							
10460	57.39	7.97	65.36	74	-8.64	H	PK
10460	41.88	7.97	49.85	54	-4.15	H	AV
10460	57.77	7.97	65.74	74	-8.26	V	PK
10460	41.53	7.97	49.50	54	-4.50	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5270MHz)							
10540	56.78	8.16	64.94	74	-9.06	H	PK
10540	40.38	8.16	48.54	54	-5.46	H	AV
10540	55.79	8.16	63.95	74	-10.05	V	PK
10540	40.29	8.16	48.45	54	-5.55	V	AV
High Channel (5310MHz)							
10620	57.67	8.57	66.24	74	-7.76	H	PK
10620	38.49	8.57	47.06	54	-6.94	H	AV
10620	57.97	8.57	66.54	74	-7.46	V	PK
10620	41.52	8.57	50.09	54	-3.91	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5510MHz)							
11020	56.42	9.16	65.58	74	-8.42	H	PK
11020	40.25	9.16	49.41	54	-4.59	H	AV
11020	57.61	9.16	66.77	74	-7.23	V	PK
11020	40.47	9.16	49.63	54	-4.37	V	AV
Middle Channel (5590MHz)							
11180	58.00	9.29	67.29	74	-6.71	H	PK
11180	40.21	9.29	49.50	54	-4.50	H	AV
11180	58.89	9.29	68.18	74	-5.82	V	PK
11180	39.98	9.29	49.27	54	-4.73	V	AV
High Channel (5670MHz)							
11340	57.96	9.43	67.39	74	-6.61	H	PK
11340	40.01	9.43	49.44	54	-4.56	H	AV
11340	58.13	9.43	67.56	74	-6.44	V	PK
11340	38.60	9.43	48.03	54	-5.97	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	57.43	9.27	66.70	74	-7.30	H	PK
11510	40.79	9.27	50.06	54	-3.94	H	AV
11510	57.57	9.27	66.84	74	-7.16	V	PK
11510	40.59	9.27	49.86	54	-4.14	V	AV
High Channel (5795MHz)							
11590	55.53	9.45	64.98	74	-9.02	H	PK
11590	41.19	9.45	50.64	54	-3.36	H	AV
11590	57.27	9.45	66.72	74	-7.28	V	PK
11590	41.67	9.45	51.12	54	-2.88	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.48	-27
Highest	Above 5350	-38.71	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.66	-27
Highest	Above 5350	-38.59	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-35.21	-27
Highest	Above 5725	-37.16	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.12	-27
	5650 to 5700	-33.76	-27 to -17
	5700 to 5720	-27.34	-17 to 15.6
	5720 to 5725	-17.59	15.6 to 27
Highest	5850 to 5855	-14.24	27 to 15.6
	5855 to 5875	-21.39	15.6 to -17
	5875 to 5925	-33.18	-17 to -27
	Above 5925	-38.67	-27
Note: the data just list the worst cases			

- For the frequency band 5.150-5.250GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac HT40)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	58.04	7.89	65.93	74	-8.07	H	PK
10380	38.62	7.89	46.51	54	-7.49	H	AV
10380	57.96	7.89	65.85	74	-8.15	V	PK
10380	41.13	7.89	49.02	54	-4.98	V	AV
High Channel (5230MHz)							
10460	58.18	7.97	66.15	74	-7.85	H	PK
10460	40.14	7.97	48.11	54	-5.89	H	AV
10460	58.16	7.97	66.13	74	-7.87	V	PK
10460	39.12	7.97	47.09	54	-6.91	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5270MHz)							
10540	57.10	8.16	65.26	74	-8.74	H	PK
10540	38.79	8.16	46.95	54	-7.05	H	AV
10540	57.95	8.16	66.11	74	-7.89	V	PK
10540	39.08	8.16	47.24	54	-6.76	V	AV
High Channel (5310MHz)							
10620	58.17	8.57	66.74	74	-7.26	H	PK
10620	38.04	8.57	46.61	54	-7.39	H	AV
10620	56.60	8.57	65.17	74	-8.83	V	PK
10620	40.87	8.57	49.44	54	-4.56	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5510MHz)							
11020	55.43	9.16	64.59	74	-9.41	H	PK
11020	38.63	9.16	47.79	54	-6.21	H	AV
11020	56.16	9.16	65.32	74	-8.68	V	PK
11020	40.53	9.16	49.69	54	-4.31	V	AV
Middle Channel (5590MHz)							
11180	56.15	9.29	65.44	74	-8.56	H	PK
11180	39.67	9.29	48.96	54	-5.04	H	AV
11180	56.93	9.29	66.22	74	-7.78	V	PK
11180	39.35	9.29	48.64	54	-5.36	V	AV
High Channel (5670MHz)							
11340	56.79	9.43	66.22	74	-7.78	H	PK
11340	40.95	9.43	50.38	54	-3.62	H	AV
11340	56.78	9.43	66.21	74	-7.79	V	PK
11340	41.07	9.43	50.50	54	-3.50	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	58.74	9.27	68.01	74	-5.99	H	PK
11510	39.36	9.27	48.63	54	-5.37	H	AV
11510	56.70	9.27	65.97	74	-8.03	V	PK
11510	38.85	9.27	48.12	54	-5.88	V	AV
High Channel (5795MHz)							
11590	55.61	9.45	65.06	74	-8.94	H	PK
11590	38.02	9.45	47.47	54	-6.53	H	AV
11590	55.18	9.45	64.63	74	-9.37	V	PK
11590	41.32	9.45	50.77	54	-3.23	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.24	-27
Highest	Above 5350	-38.81	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.65	-27
Highest	Above 5350	-38.49	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-36.24	-27
Highest	Above 5725	-37.53	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.26	-27
	5650 to 5700	-33.67	-27 to -17
	5700 to 5720	-27.52	-17 to 15.6
	5720 to 5725	-17.70	15.6 to 27
Highest	5850 to 5855	-14.29	27 to 15.6
	5855 to 5875	-21.35	15.6 to -17
	5875 to 5925	-33.47	-17 to -27
	Above 5925	-38.21	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac VHT80)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5210MHz							
10420	58.28	7.53	65.81	74	-8.19	H	PK
10420	39.54	7.53	47.07	54	-6.93	H	AV
10420	56.30	7.53	63.83	74	-10.17	H	PK
10420	41.49	7.53	49.02	54	-4.98	H	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5290MHz							
10580	57.11	7.95	65.06	74	-8.94	H	PK
10580	39.47	7.95	47.42	54	-6.58	H	AV
10580	56.66	7.95	64.61	74	-9.39	V	PK
10580	38.30	7.95	46.25	54	-7.75	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5530MHz)							
11060	57.31	9.42	66.73	74	-7.27	H	PK
11060	38.59	9.42	48.01	54	-5.99	H	AV
11060	56.16	9.42	65.58	74	-8.42	V	PK
11060	38.40	9.42	47.82	54	-6.18	V	AV
High Channel (5610MHz)							
11220	56.91	9.69	66.60	74	-7.40	H	PK
11220	38.49	9.69	48.18	54	-5.82	H	AV
11220	56.02	9.69	65.71	74	-8.29	V	PK
11220	40.91	9.69	50.60	54	-3.40	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	56.01	9.93	65.94	74	-8.06	H	PK
11550	40.14	9.93	50.07	54	-3.93	H	AV
11550	58.38	9.93	68.31	74	-5.69	V	PK
11550	39.82	9.93	49.75	54	-4.25	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.13	-27
Highest	Above 5350	-36.47	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.59	-27
Highest	Above 5350	-36.64	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-39.24	-27
Highest	Above 5725	-37.68	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.17	-27
	5650 to 5700	-33.29	-27 to -17
	5700 to 5720	-27.35	-17 to 15.6
	5720 to 5725	-17.64	15.6 to 27
Highest	5850 to 5855	-14.48	27 to 15.6
	5855 to 5875	-22.49	15.6 to -17
	5875 to 5925	-33.28	-17 to -27
	Above 5925	-38.31	-27
Note: the data just list the worst cases			

Note: Testing is carried out with frequency rang 9kHz to 40Ghz, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

9. Frequency Stability

9.1 Standard Applicable

According to §15.407(g), manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

9.2 Test Procedure

According to §2.1055, the following test procedure was performed.

The Frequency Stability is measured directly with a Frequency Domain Analyzer. Frequency Deviation in ppm is calculated from the measured peak to peak value.

The Carrier Frequency Stability over Power Supply Voltage and over Temperature is measured with a Frequency Domain Analyzer in histogram mode.

9.3 Summary of Test Results/Plots

Please refer to Appendix E

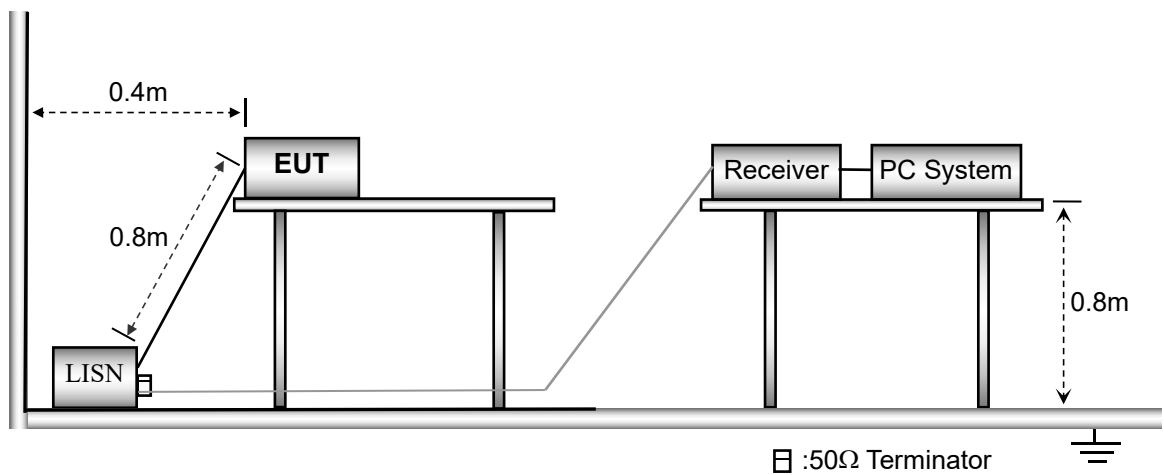
10. Conducted Emissions

10.1 Test Procedure

The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle. The spacing between the peripherals was 10cm.

10.2 Basic Test Setup Block Diagram



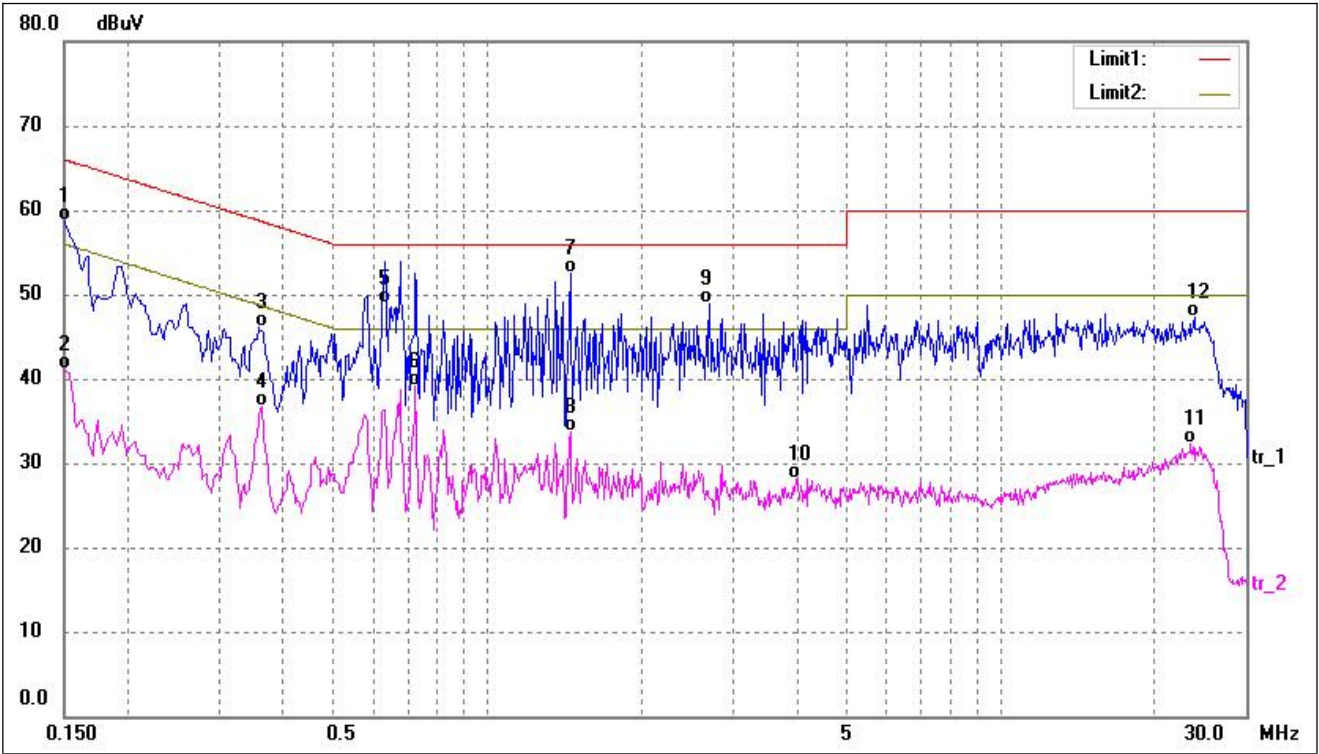
10.3 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency.....	150kHz
Stop Frequency.....	30MHz
Sweep Speed.....	Auto
IF Bandwidth.....	10kHz
Quasi-Peak Adapter Bandwidth.....	9kHz
Quasi-Peak Adapter Mode.....	Normal

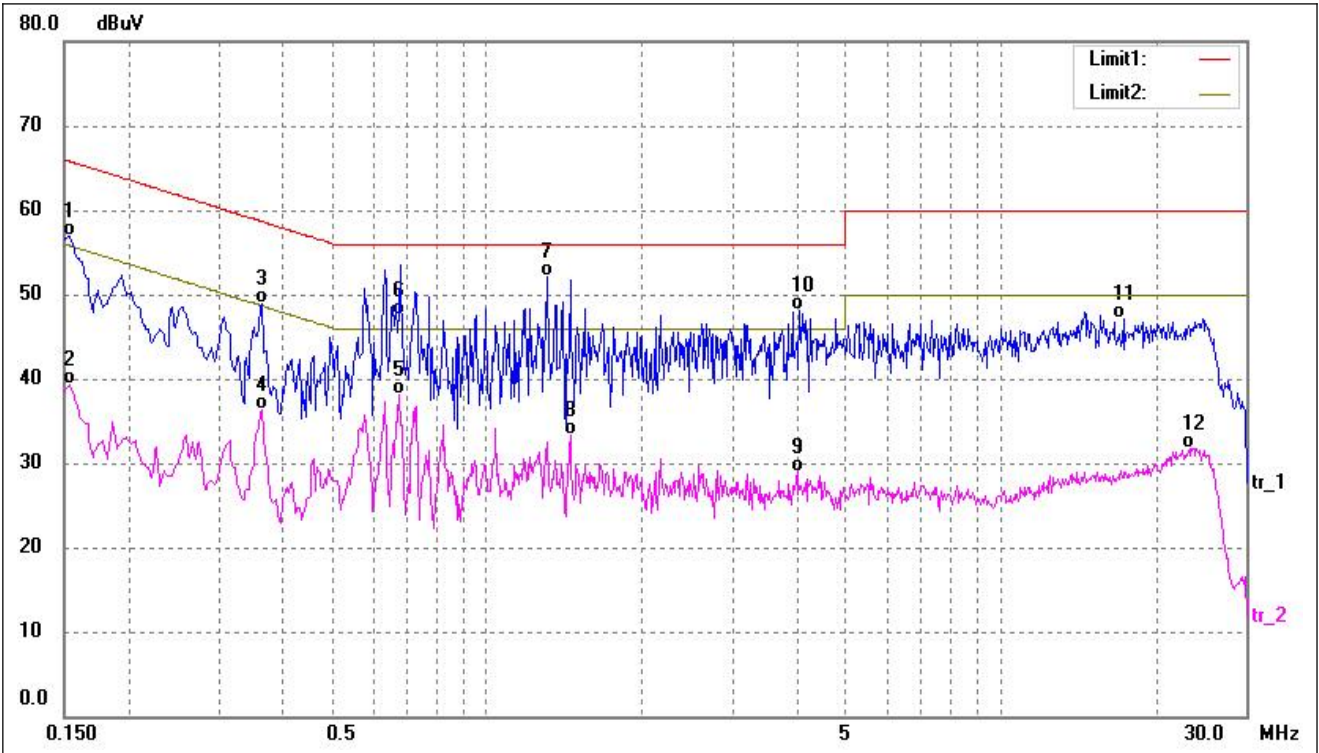
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
-----------	---------------	-------------	-----------	---------



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1500	49.19	9.53	58.72	65.99	-7.27	QP
2	0.1500	31.48	9.53	41.01	55.99	-14.98	AVG
3	0.3580	36.60	9.58	46.18	58.77	-12.59	QP
4	0.3620	27.09	9.58	36.67	48.68	-12.01	AVG
5	0.6300	39.34	9.51	48.85	56.00	-7.15	QP
6	0.7260	29.64	9.53	39.17	46.00	-6.83	AVG
7*	1.4500	42.76	9.69	52.45	56.00	-3.55	QP
8	1.4500	24.09	9.69	33.78	46.00	-12.22	AVG
9	2.7100	39.03	9.81	48.84	56.00	-7.16	QP
10	3.9860	18.57	9.56	28.13	46.00	-17.87	AVG
11	23.4420	22.28	9.94	32.22	50.00	-17.78	AVG
12	23.7660	37.27	9.95	47.22	60.00	-12.78	QP

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
-----------	---------------	-------------	-----------	------



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1539	47.42	9.55	56.97	65.78	-8.81	QP
2	0.1539	29.80	9.55	39.35	55.78	-16.43	AVG
3	0.3620	39.42	9.58	49.00	58.68	-9.68	QP
4	0.3620	26.81	9.58	36.39	48.68	-12.29	AVG
5	0.6740	28.57	9.53	38.10	46.00	-7.90	AVG
6	0.6780	37.97	9.53	47.50	56.00	-8.50	QP
7*	1.3060	42.52	9.61	52.13	56.00	-3.87	QP
8	1.4540	23.60	9.69	33.29	46.00	-12.71	AVG
9	4.0260	19.44	9.56	29.00	46.00	-17.00	AVG
10	4.0620	38.57	9.56	48.13	56.00	-7.87	QP
11	17.3819	37.47	9.72	47.19	60.00	-12.81	QP
12	23.3140	21.86	9.94	31.80	50.00	-18.20	AVG

APPENDIX SUMMARY

Project No.	WTX25X08224705W001	Test Engineer	BAldi
Start date	2025/8/25	Finish date	2025/9/8
Temperature	22.6℃	Humidity	57%
RF specifications	5G-WiFi		

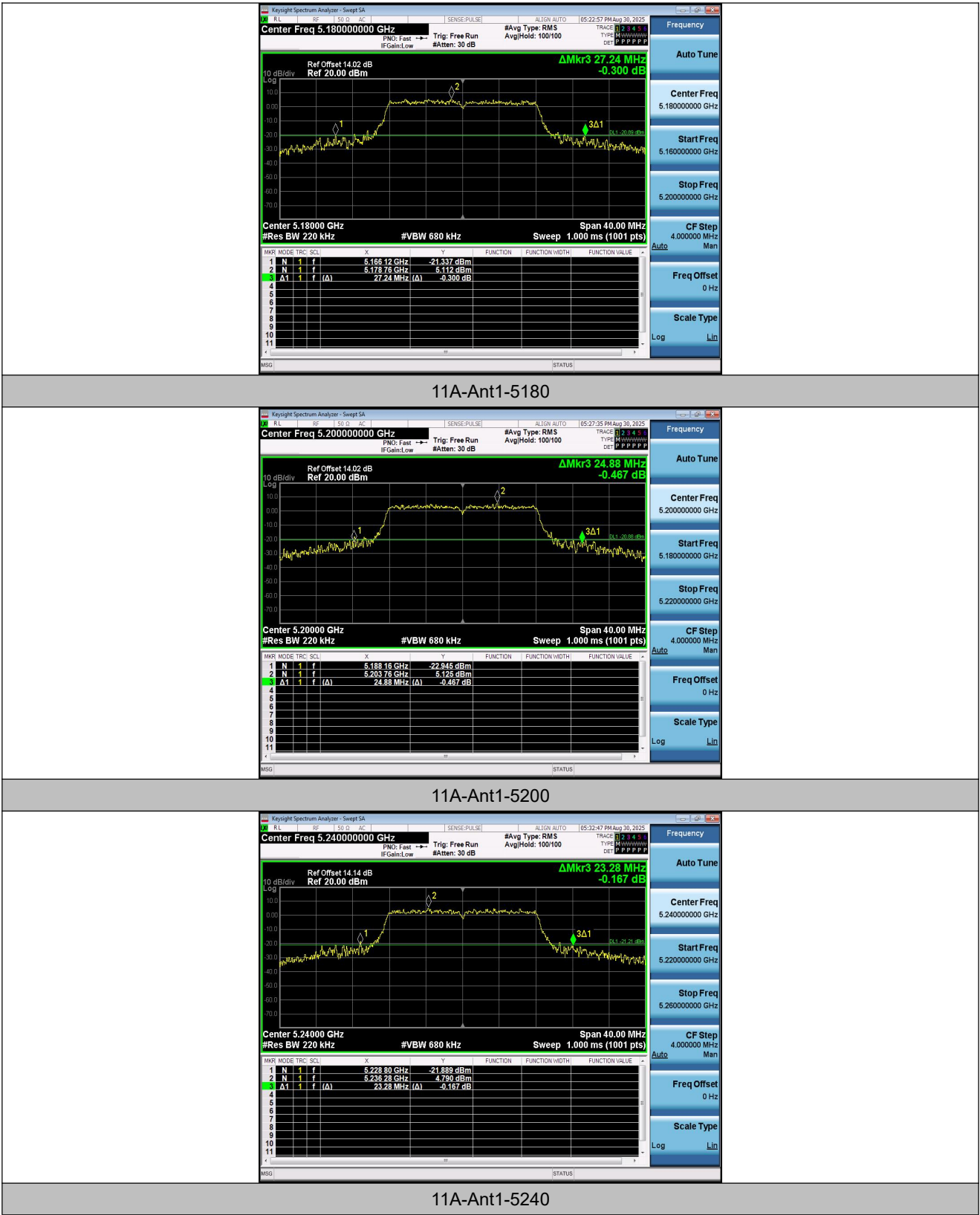
APPENDIX	Description of Test Item	Result
A	Emission Bandwidth & Occupied channel bandwidth & Min emission bandwidth	Compliant
B	Duty Cycle	Compliant
C	Maximum conducted output power	Compliant
D	Maximum power spectral density	Compliant
E	Frequency Stability	Compliant

Appendix A1: Emission Bandwidth**Test Result**

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	27.240	5166.120	5193.360	---	---
11A	Ant1	5200	24.880	5188.160	5213.040	---	---
11A	Ant1	5240	23.280	5228.800	5252.080	---	---
11A	Ant1	5260	24.600	5247.640	5272.240	---	---
11A	Ant1	5280	23.800	5268.080	5291.880	---	---
11A	Ant1	5320	27.600	5308.040	5335.640	---	---
11A	Ant1	5500	24.680	5488.080	5512.760	---	---
11A	Ant1	5580	25.400	5568.080	5593.480	---	---
11A	Ant1	5700	22.520	5689.720	5712.240	---	---
11A	Ant1	5745	26.360	5731.400	5757.760	---	---
11A	Ant1	5785	22.480	5774.160	5796.640	---	---
11A	Ant1	5825	21.320	5814.640	5835.960	---	---
11N20SISO	Ant1	5180	26.680	5165.280	5191.960	---	---
11N20SISO	Ant1	5200	27.160	5185.600	5212.760	---	---
11N20SISO	Ant1	5240	28.360	5225.240	5253.600	---	---
11N20SISO	Ant1	5260	26.720	5245.360	5272.080	---	---
11N20SISO	Ant1	5280	28.000	5265.200	5293.200	---	---
11N20SISO	Ant1	5320	27.320	5305.880	5333.200	---	---
11N20SISO	Ant1	5500	28.200	5486.360	5514.560	---	---
11N20SISO	Ant1	5580	29.000	5565.200	5594.200	---	---
11N20SISO	Ant1	5700	27.960	5685.200	5713.160	---	---
11N20SISO	Ant1	5745	28.240	5730.160	5758.400	---	---
11N20SISO	Ant1	5785	28.880	5771.240	5800.120	---	---
11N20SISO	Ant1	5825	26.040	5812.440	5838.480	---	---
11N40SISO	Ant1	5190	48.400	5164.960	5213.360	---	---
11N40SISO	Ant1	5230	47.680	5206.160	5253.840	---	---
11N40SISO	Ant1	5270	47.280	5247.440	5294.720	---	---
11N40SISO	Ant1	5310	48.480	5286.320	5334.800	---	---
11N40SISO	Ant1	5510	48.320	5486.320	5534.640	---	---
11N40SISO	Ant1	5550	46.480	5526.160	5572.640	---	---
11N40SISO	Ant1	5670	49.040	5647.120	5696.160	---	---
11N40SISO	Ant1	5755	49.920	5731.320	5781.240	---	---
11N40SISO	Ant1	5795	48.560	5771.320	5819.880	---	---
11AC20SISO	Ant1	5180	24.600	5167.680	5192.280	---	---
11AC20SISO	Ant1	5200	24.640	5189.120	5213.760	---	---
11AC20SISO	Ant1	5240	27.600	5227.040	5254.640	---	---
11AC20SISO	Ant1	5260	26.920	5246.600	5273.520	---	---
11AC20SISO	Ant1	5280	22.120	5269.720	5291.840	---	---

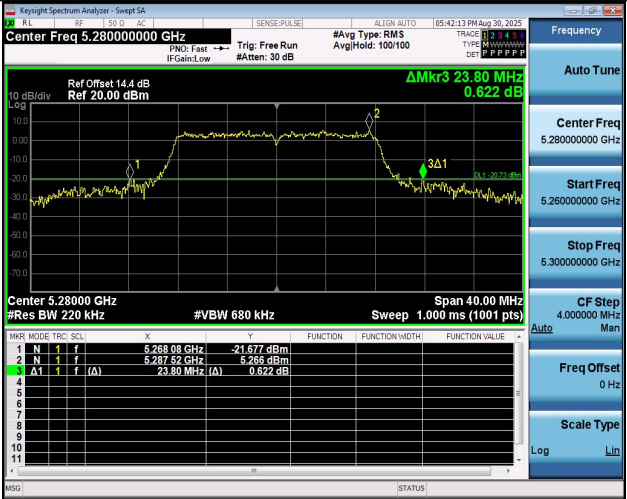
11AC20SISO	Ant1	5320	24.400	5307.480	5331.880	---	---
11AC20SISO	Ant1	5500	25.200	5487.600	5512.800	---	---
11AC20SISO	Ant1	5580	26.680	5565.640	5592.320	---	---
11AC20SISO	Ant1	5700	29.400	5686.400	5715.800	---	---
11AC20SISO	Ant1	5745	26.000	5730.920	5756.920	---	---
11AC20SISO	Ant1	5785	25.680	5772.640	5798.320	---	---
11AC20SISO	Ant1	5825	26.280	5810.680	5836.960	---	---
11AC40SISO	Ant1	5190	60.560	5161.840	5222.400	---	---
11AC40SISO	Ant1	5230	59.920	5201.920	5261.840	---	---
11AC40SISO	Ant1	5270	60.320	5242.400	5302.720	---	---
11AC40SISO	Ant1	5310	54.080	5281.360	5335.440	---	---
11AC40SISO	Ant1	5510	60.320	5481.600	5541.920	---	---
11AC40SISO	Ant1	5550	61.120	5521.280	5582.400	---	---
11AC40SISO	Ant1	5670	54.400	5641.680	5696.080	---	---
11AC40SISO	Ant1	5755	53.040	5726.200	5779.240	---	---
11AC40SISO	Ant1	5795	54.400	5766.600	5821.000	---	---
11AC80SISO	Ant1	5210	84.800	5170.640	5255.440	---	---
11AC80SISO	Ant1	5290	82.560	5249.520	5332.080	---	---
11AC80SISO	Ant1	5530	82.720	5487.120	5569.840	---	---
11AC80SISO	Ant1	5610	85.920	5569.840	5655.760	---	---
11AC80SISO	Ant1	5775	80.960	5735.640	5816.600	---	---

Test Graphs





11A-Ant1-5260



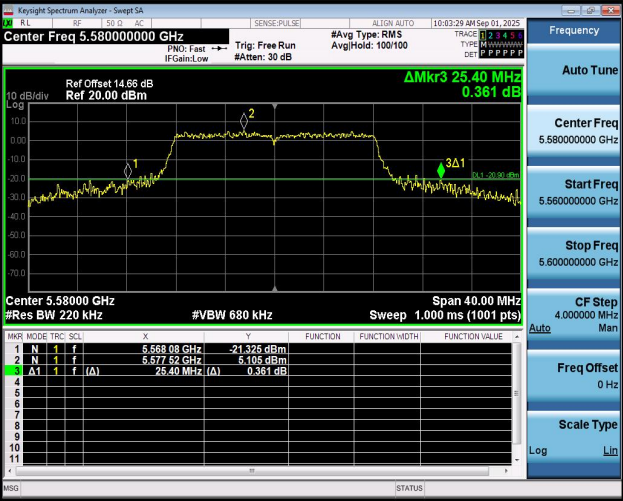
11A-Ant1-5280



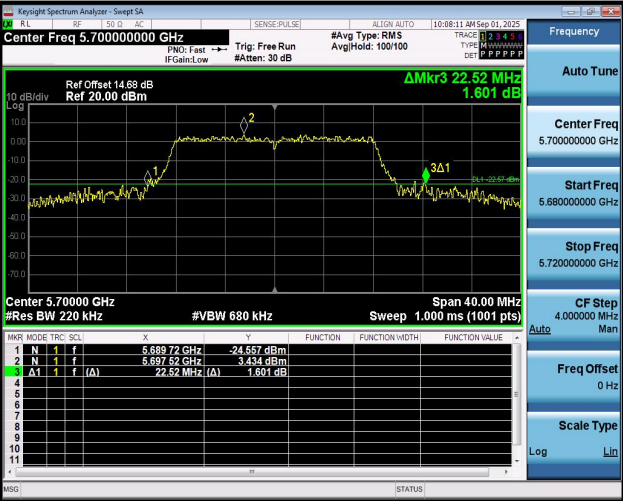
11A-Ant1-5320



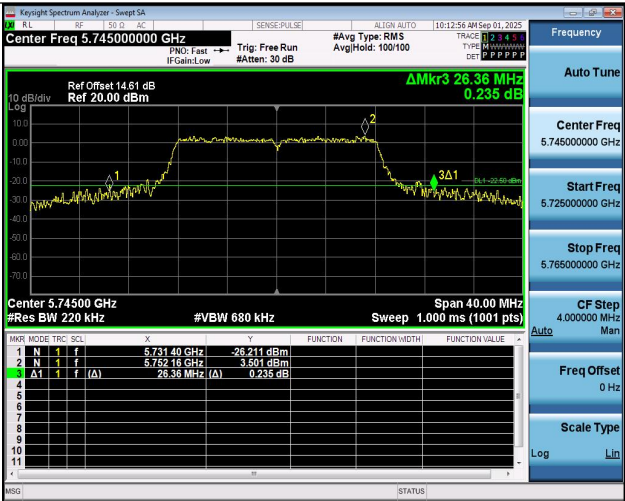
11A-Ant1-5500



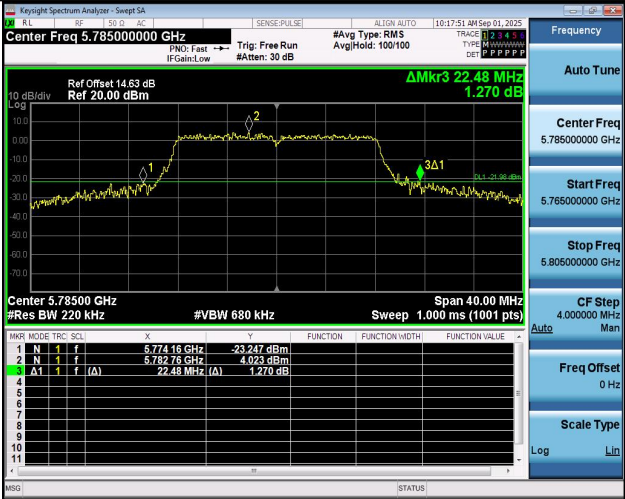
11A-Ant1-5580



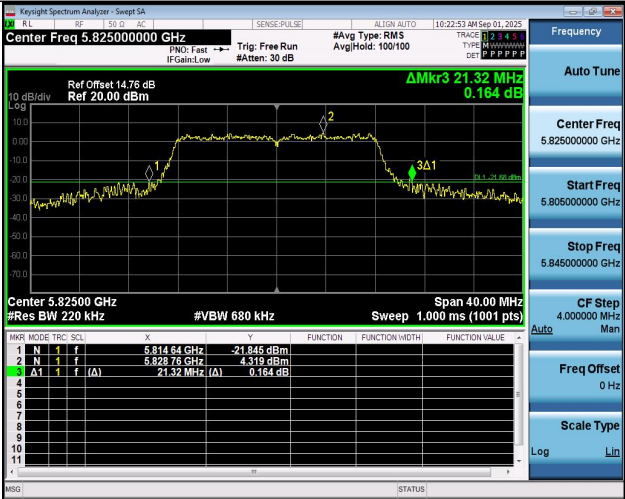
11A-Ant1-5700



11A-Ant1-5745



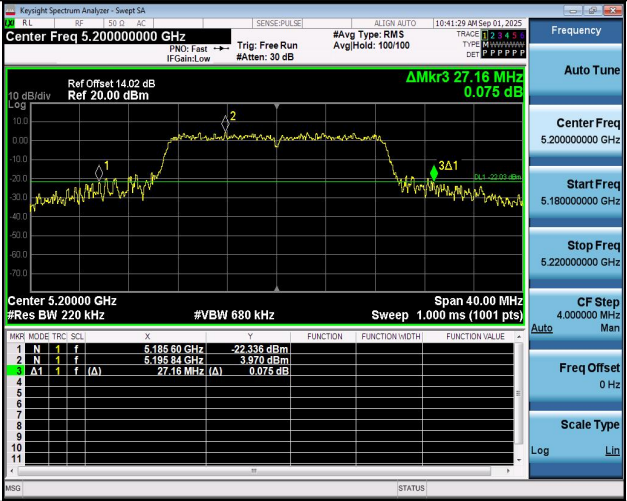
11A-Ant1-5785



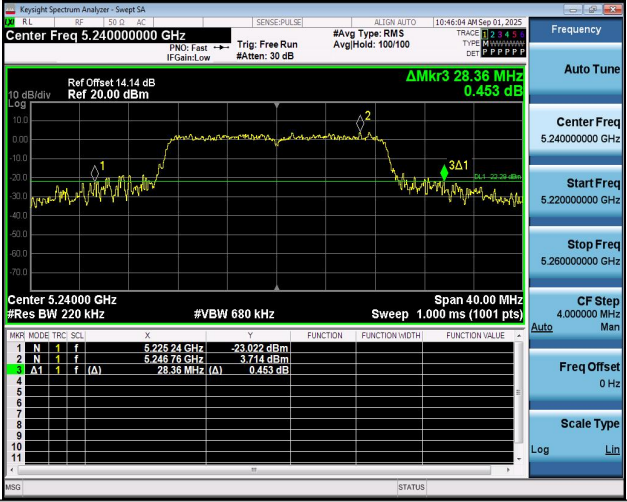
11A-Ant1-5825



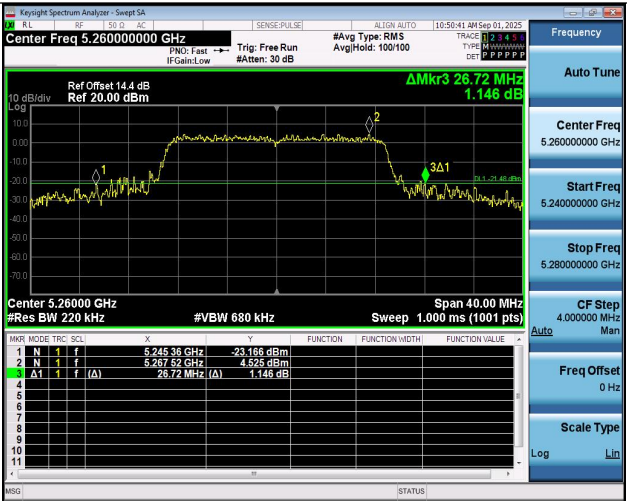
11N20SISO-Ant1-5180



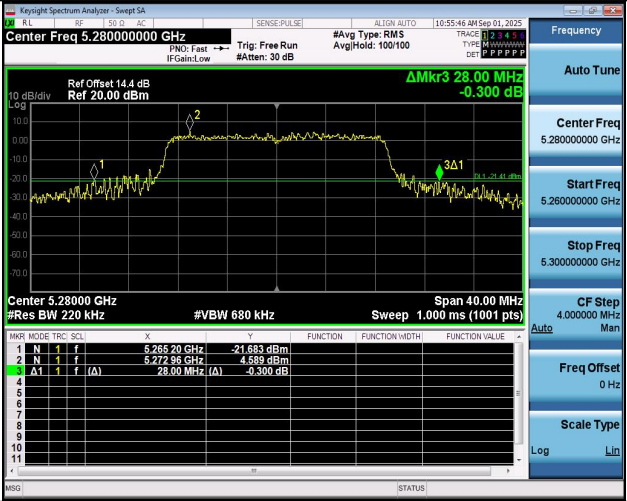
11N20SISO-Ant1-5200



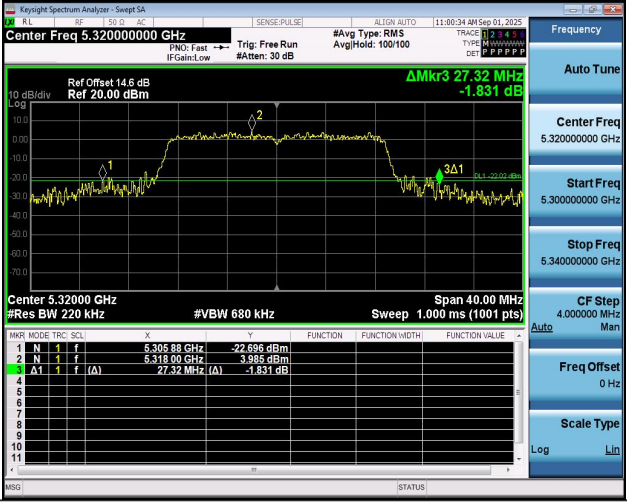
11N20SISO-Ant1-5240



11N20SISO-Ant1-5260



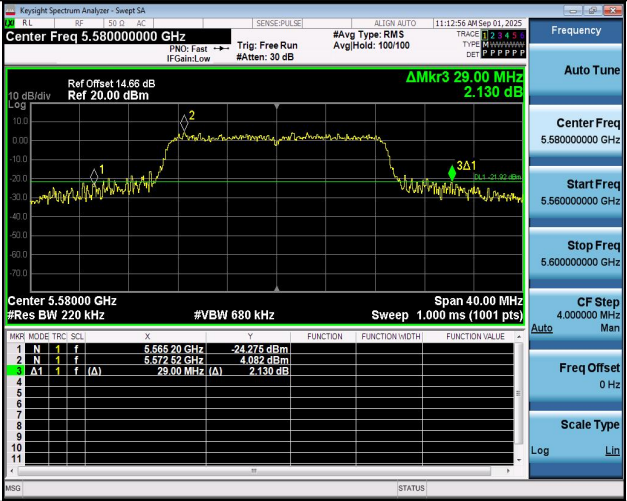
11N20SISO-Ant1-5280



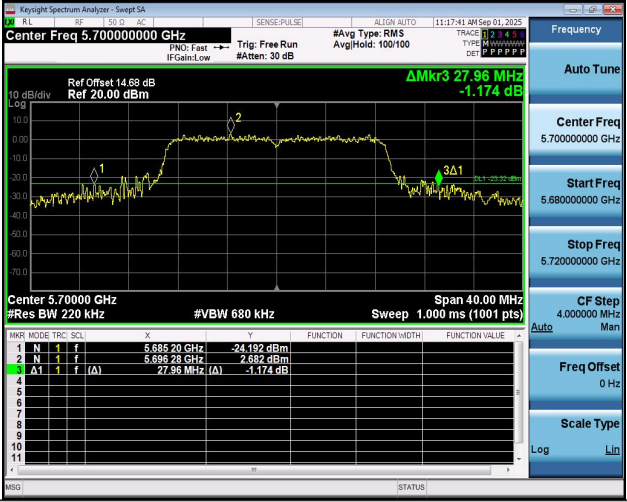
11N20SISO-Ant1-5320



11N20SISO-Ant1-5500



11N20SISO-Ant1-5580



11N20SISO-Ant1-5700