



FCC TEST REPORT

FCC ID: 2A9EU-XK-B002S

On Behalf of

Shenzhen Xianku Intelligent Co.,Ltd.

3D Foot Scanner

Model No.: XK-B002S, XK-*B** (“*”=0-9、A-Z、a-z or blank)**

Prepared for : Shenzhen Xianku Intelligent Co.,Ltd.
Address : 2401, Block C, Minzhi Shareholding Commercial Center, Beizhan
Community, Minzhi Subdistrict, Longhua District, Shenzhen, China

Prepared By : Shenzhen PSI Testing Co., Ltd.
Address : 1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road,
Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Report Number : psi2507101-C01-R09
Date of Receipt : July 14, 2025
Date of Test : July 14, 2025 – November 29, 2025
Date of Report : November 29, 2025
Version Number : V0

TABLE OF CONTENTS

Description	Page
1. Summary Of Standards And Results	6
1.1. Description of Standards and Results	6
2. General Information	7
2.1. Description of Device (EUT)	7
2.2. Accessories of Device (EUT)	8
2.3. Tested Supporting System Details	8
2.4. Block Diagram of Connection Between EUT and Simulators	8
2.5. Test Mode Description	9
2.6. Software test version and power setting information	29
2.7. Test Conditions	29
2.8. Test Facility	30
2.9. Measurement Uncertainty	30
2.10. Test Equipment List	31
3. Spurious Emission	32
3.1. Test Limits	32
3.1. Block Diagram of Test setup	33
3.2. Test Procedure	34
3.3. Test Results	35
4. Power Line Conducted Emission	46
4.1. Test Limits	46
4.2. Test Procedure	46
4.3. Test Setup	46
4.4. Test Results	47
5. Out-of-band Emissions	50
5.1. Test Limits	50
5.2. Test Procedure	50
5.3. Test Setup	50
5.4. Test Results	50
6. Conducted Maximum Output Power	81
6.1. Test limits	81
6.2. Test Procedure	81
6.3. Test Setup	81
6.4. Test Results	82
7. Peak Power Spectral Density	84
7.1. Test limits	84
7.2. Test Procedure	84
7.3. Test Setup	84
7.4. Test Results	85
8. Bandwidth	111
8.1. Test limits	111
8.2. Test Procedure	111
8.3. Test Setup	111
8.4. Test Results	111

9. Band Edge Test	144
9.1. Test Limit	144
9.2. Block Diagram of Test Setup	144
9.3. Test Procedure	144
9.4. Test Results	145
10. Antenna Requirement	161
10.1. Standard Requirement	161
10.2. Antenna Connected Construction	161
10.3. Results	161
11. Photos of test setup	162
12. Photos of EUT	162



TEST REPORT DECLARATION

Applicant : Shenzhen Xianku Intelligent Co.,Ltd.
Address : 2401, Block C, Minzhi Shareholding Commercial Center, Beizhan Community,
Minzhi Subdistrict, Longhua District, Shenzhen, China
Manufacturer : Shenzhen Xianku Intelligent Co.,Ltd.
Address : 2401, Block C, Minzhi Shareholding Commercial Center, Beizhan Community,
Minzhi Subdistrict, Longhua District, Shenzhen, China
EUT Description : 3D Foot Scanner
(A) Model No. : XK-B002S, XK-*B**** ("*" = 0-9、A-Z、a-z or blank)
(B) Trademark : **XIANKU**

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247

ANSI C63.10-2020

Test Result: PASS

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC Part15 requirements.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....:

Jensen Wang
Test Engineer

Jensen Wang

Approved by (name + signature).....:

Simple Guan
Project Manager

Simple Guan

Date of issue.....:

November 29, 2025

Revision History

Revision	Issue Date	Revisions	Revised By
V0	November 29, 2025	Initial released Issue	Jensen Wang



1. Summary Of Standards And Results

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Test Item	Standards Paragraph	Result
Conducted Emission	FCC Part 15: 15.207 ANSI C63.10-2020	P
6dB Bandwidth	FCC PART 15:15.247(a)(2), ANSI C63.10-2020	P
Output Power	FCC Part 15: 15.247(b)(3), ANSI C63.10-2020	P
Radiated Spurious Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d), ANSI C63.10-2020	P
Conducted Spurious, Band Edge Emission	FCC Part 15: 15.247(d), ANSI C63.10-2020	P
Power Spectral Density	FCC PART 15:15.247(e), ANSI C63.10-2020	P
Radiated Band Edge Emission	FCC Part 15: 15.247(d), ANSI C63.10-2020	P
Antenna Requirement	FCC Part 15: 15.203	P
Note: 1. P is an abbreviation for Pass. 2. F is an abbreviation for Fail. 3. N/A is an abbreviation for Not Applicable. 4. Conclusion determination rules of this report: Unless there are clear provisions on measurement uncertainty in the standard or customer requirements, decision by actual test data without considering measurement uncertainty. 5. Measurement method usage KDB 558074 D01 15.247 Meas Guidance v05r02.		

2. General Information

2.1. Description of Device (EUT)

Product Name : 3D Foot Scanner
 Model : XK-B002S, XK-*B**** ("*"=0-9、A-Z、a-z or blank)
 Diff : There is no difference except the name of the model. All tests are made with the XK-B002S model.
 Test Voltage : AC 100-240V, 50/60Hz

Radio technology	: 2.4G WiFi
Operation frequency	: 2412MHz-2462MHz for IEEE 802.11 b, g, n/HT20, ax20 2422MHz-2452MHz for IEEE 802.11 n/HT40, ax40
Channel No.	: 802.11b/802.11g/802.11n(HT20)/ 802.11ax20: 11CH 802.11(HT40)/802.11ax40: 7CH
Modulation type	: IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n:OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (64QAM, 16QAM, QPSK, BPSK, 256QAM)
Antenna Type	: Internal antenna 1, maximum gain is 2.73dBi. Internal antenna 2, maximum gain is 1.35dBi.
PMN	: N/A
HVIN	: N/A
Software version	: V1.0
Hardware version/FVIN	: V1.0
Note	: Antenna information is provided by applicant. Testing lab is not responsible for the accuracy of the information.

2.2. Accessories of Device (EUT)

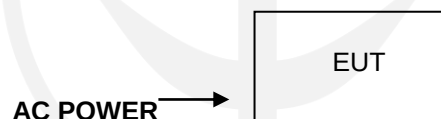
Accessories : N/A
Manufacturer : N/A
Model : N/A
Rating : N/A

Accessories : N/A
Manufacturer : N/A
Model : N/A
Rating : N/A

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number
1	N/A	N/A	N/A	N/A

2.4. Block Diagram of Connection Between EUT and Simulators



2.5. Test Mode Description

Keeping TX			
Mode	Data rate (Mbps)	Channel	Frequency(MHz)
IEEE 802.11 b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11 g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11 n/HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11 n/HT40	13.5	Low :CH1	2422
	13.5	Middle:CH4	2437
	13.5	High:CH7	2452
IEEE 802.11 ax20	8	Low :CH1	2412
	8	Middle: CH7	2442
	8	High: CH13	2472
IEEE 802.11 ax40	16	Low :CH3	2422
	16	Middle: CH7	2442
	16	High: CH11	2462
Note: According exploratory test, EUT will have maximum output power in those data rate. So those data rate were used for all test.			

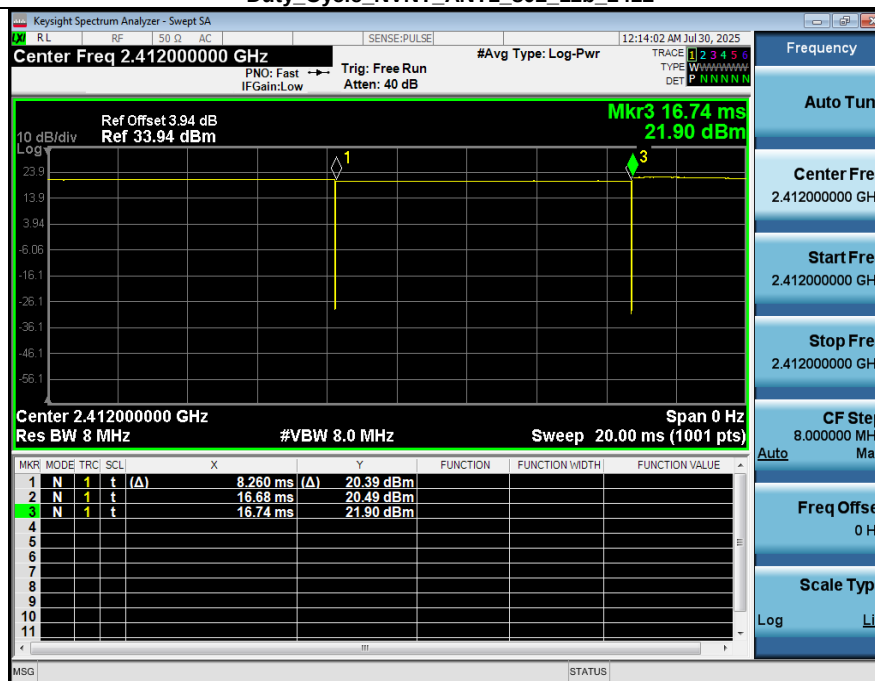
Channel list:					
For IEEE 802.11b, g, n/HT20, ax20					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2412	CH5	2432	CH9	2452
CH2	2417	CH6	2437	CH10	2457
CH3	2422	CH7	2442	CH11	2462
CH4	2427	CH8	2447		

For IEEE 802.11 n/HT40, ax40					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2422	CH5	2442		
CH2	2427	CH6	2447		
CH3	2432	CH7	2452		
CH4	2437				

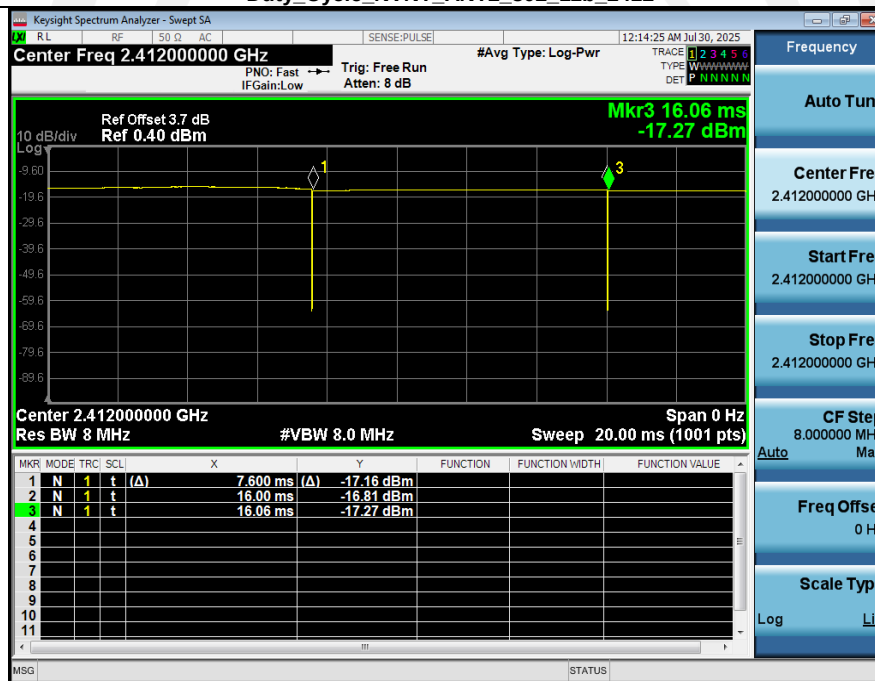
Note: duty cycle see below:

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.53	0.00
NVNT	ANT2	802.11b	2412.00	99.53	0.00
NVNT	ANT1	802.11b	2437.00	99.53	0.00
NVNT	ANT2	802.11b	2437.00	99.76	0.00
NVNT	ANT1	802.11b	2462.00	99.53	0.00
NVNT	ANT2	802.11b	2462.00	99.53	0.00
NVNT	ANT1	802.11g	2412.00	97.22	0.12
NVNT	ANT2	802.11g	2412.00	97.26	0.12
NVNT	ANT1	802.11g	2437.00	97.26	0.12
NVNT	ANT2	802.11g	2437.00	97.26	0.12
NVNT	ANT1	802.11g	2462.00	97.26	0.12
NVNT	ANT2	802.11g	2462.00	97.22	0.12
NVNT	ANT1	802.11n(HT20)	2412.00	94.44	0.25
NVNT	ANT2	802.11n(HT20)	2412.00	94.59	0.24
NVNT	ANT1	802.11n(HT20)	2437.00	94.44	0.25
NVNT	ANT2	802.11n(HT20)	2437.00	94.44	0.25
NVNT	ANT1	802.11n(HT20)	2462.00	97.22	0.12
NVNT	ANT2	802.11n(HT20)	2462.00	94.59	0.24
NVNT	ANT1	802.11n(HT40)	2422.00	95.00	0.22
NVNT	ANT2	802.11n(HT40)	2422.00	90.48	0.43
NVNT	ANT1	802.11n(HT40)	2437.00	90.00	0.46
NVNT	ANT2	802.11n(HT40)	2437.00	90.00	0.46
NVNT	ANT1	802.11n(HT40)	2452.00	90.00	0.46
NVNT	ANT2	802.11n(HT40)	2452.00	90.48	0.43
NVNT	ANT1	802.11ax(HE20)	2412.00	84.62	0.73
NVNT	ANT2	802.11ax(HE20)	2412.00	84.62	0.73
NVNT	ANT1	802.11ax(HE20)	2437.00	84.62	0.73
NVNT	ANT2	802.11ax(HE20)	2437.00	84.62	0.73
NVNT	ANT1	802.11ax(HE20)	2462.00	84.62	0.73
NVNT	ANT2	802.11ax(HE20)	2462.00	84.62	0.73
NVNT	ANT1	802.11ax(HE40)	2422.00	92.31	0.35
NVNT	ANT2	802.11ax(HE40)	2422.00	84.62	0.73
NVNT	ANT1	802.11ax(HE40)	2437.00	84.62	0.73
NVNT	ANT2	802.11ax(HE40)	2437.00	92.31	0.35
NVNT	ANT1	802.11ax(HE40)	2452.00	84.62	0.73
NVNT	ANT2	802.11ax(HE40)	2452.00	92.31	0.35

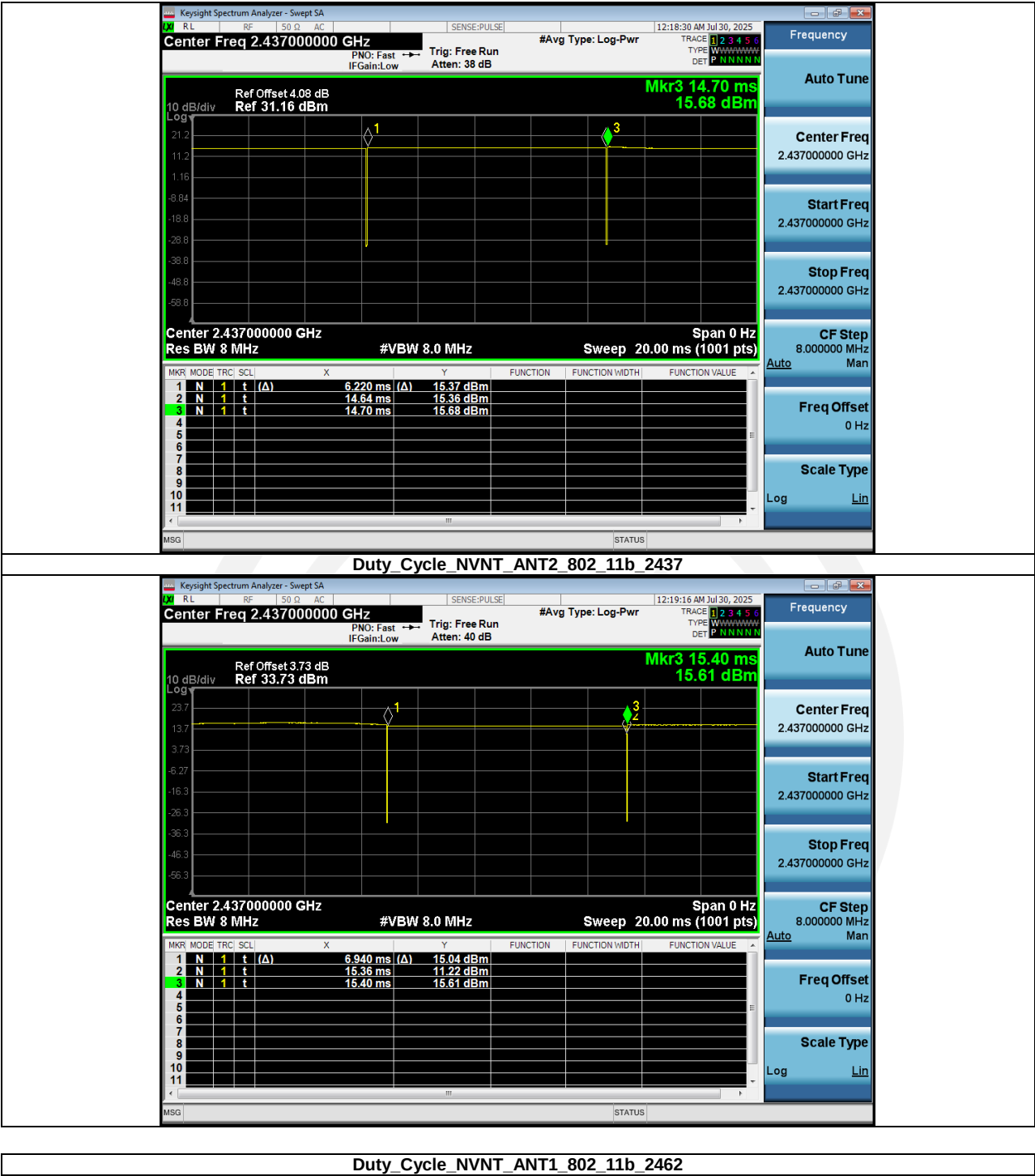
Duty Cycle NVNT_ANT1_802_11b_2412

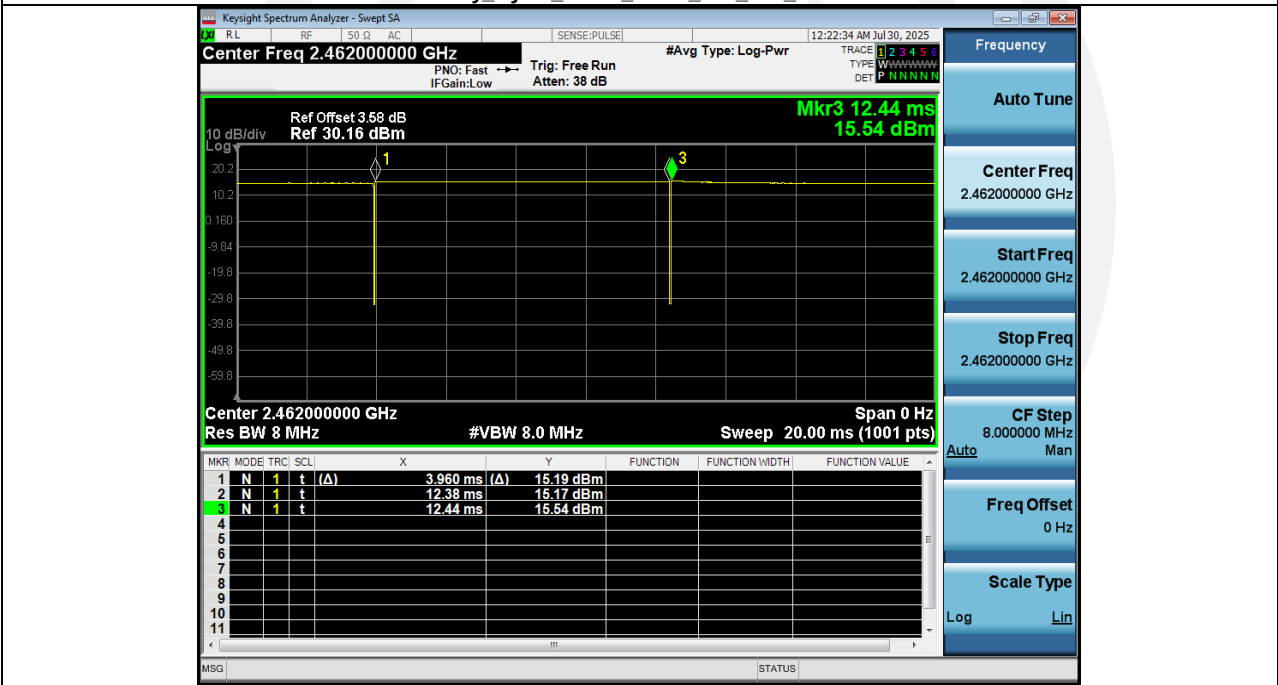
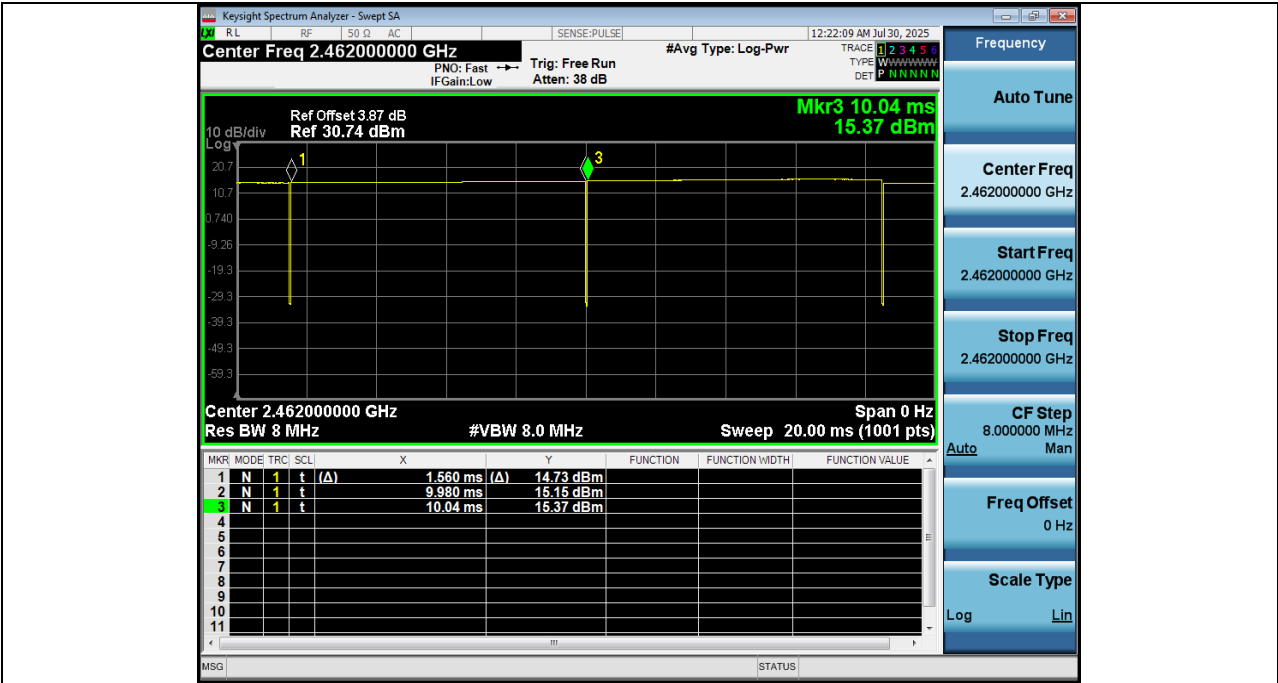


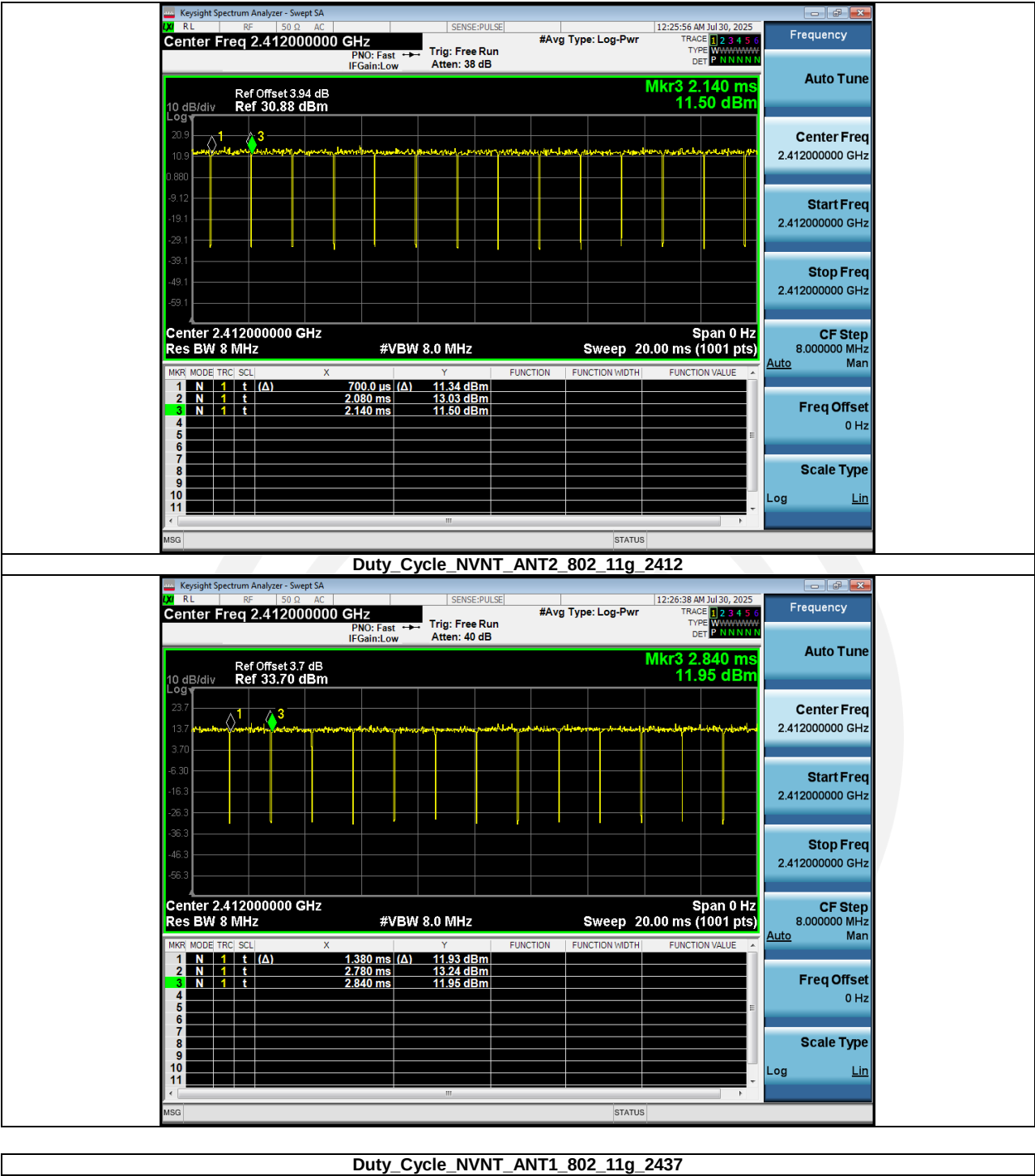
Duty Cycle NVNT_ANT2_802_11b_2412



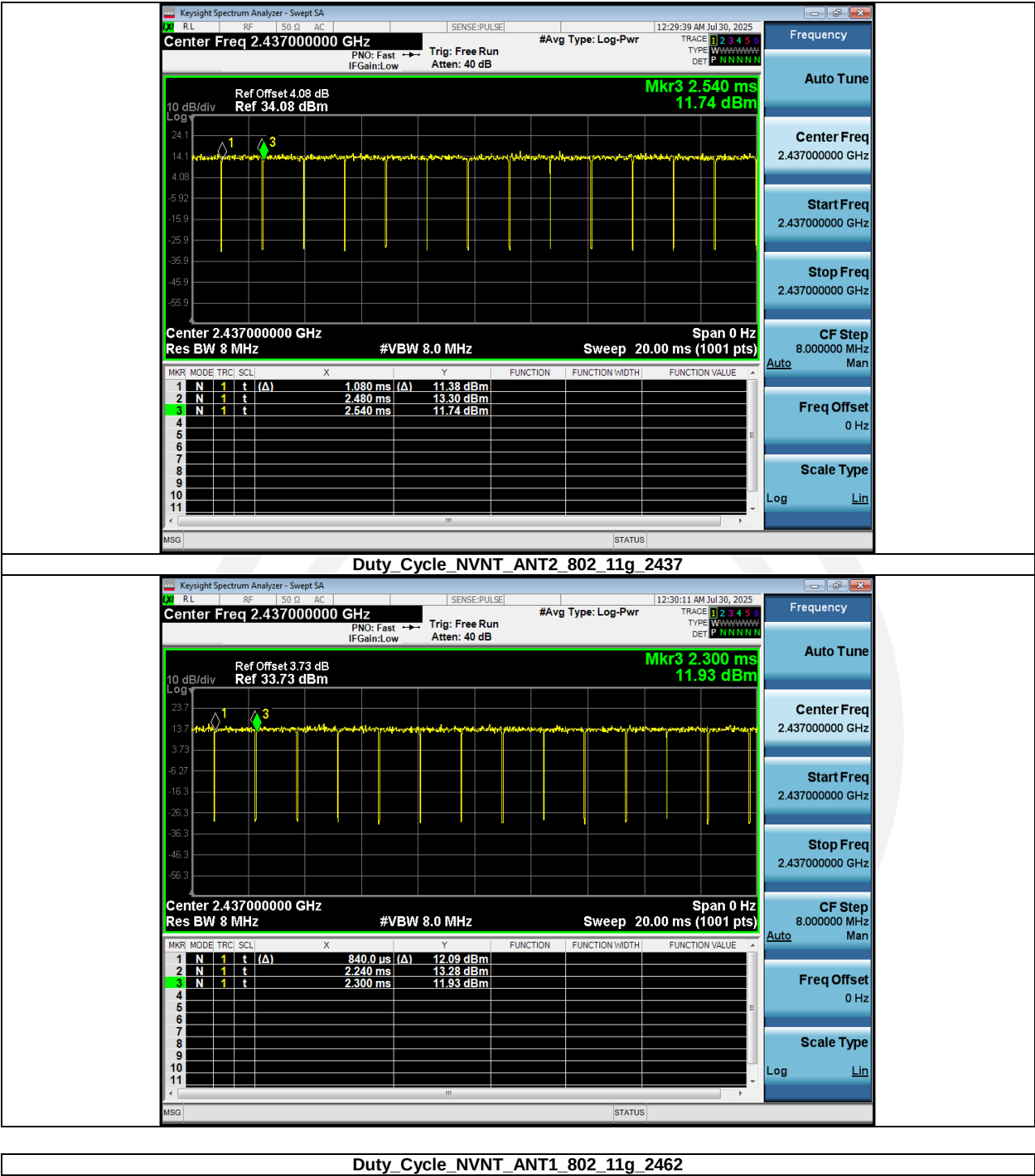
Duty Cycle NVNT_ANT1_802_11b_2437



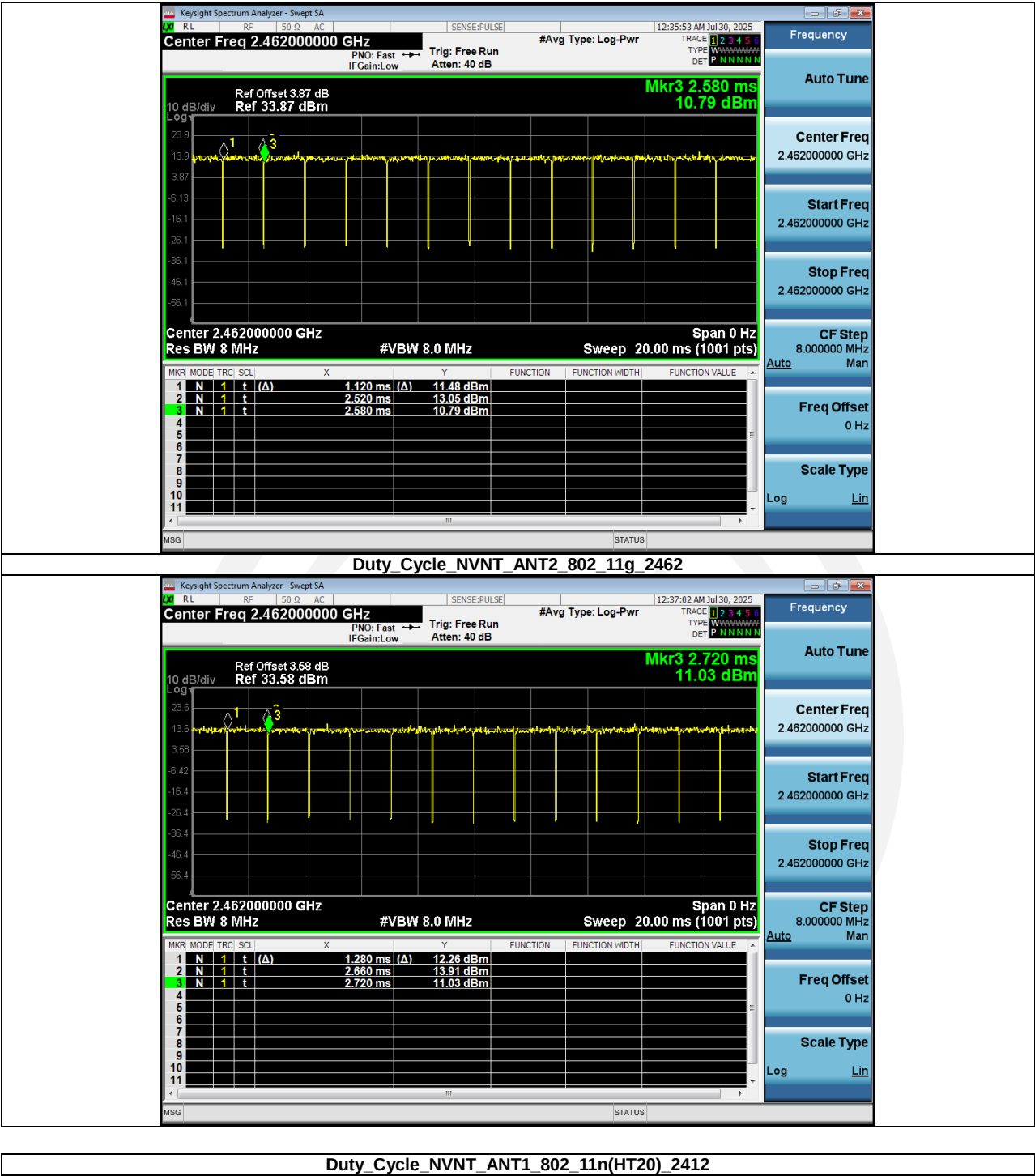


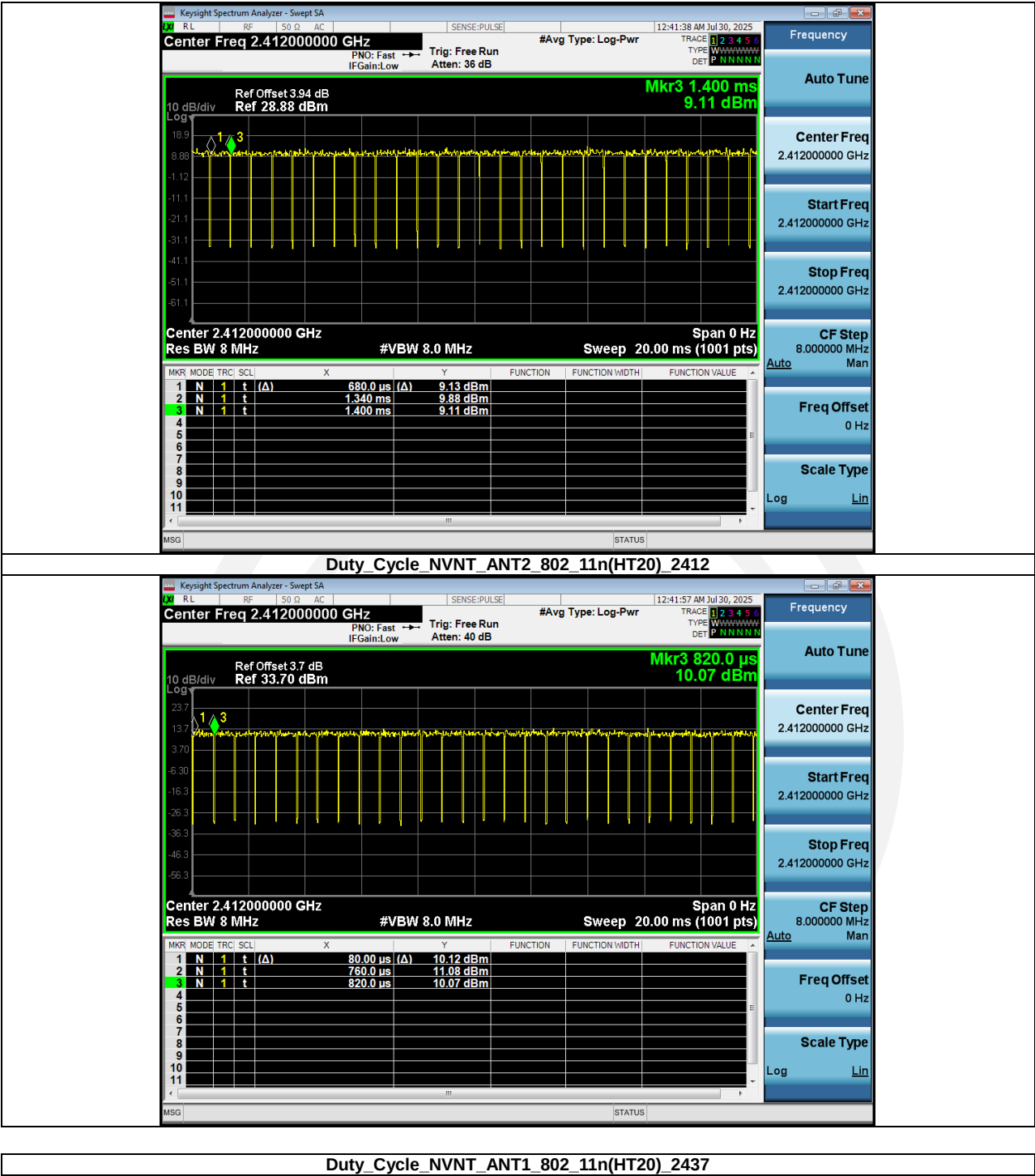


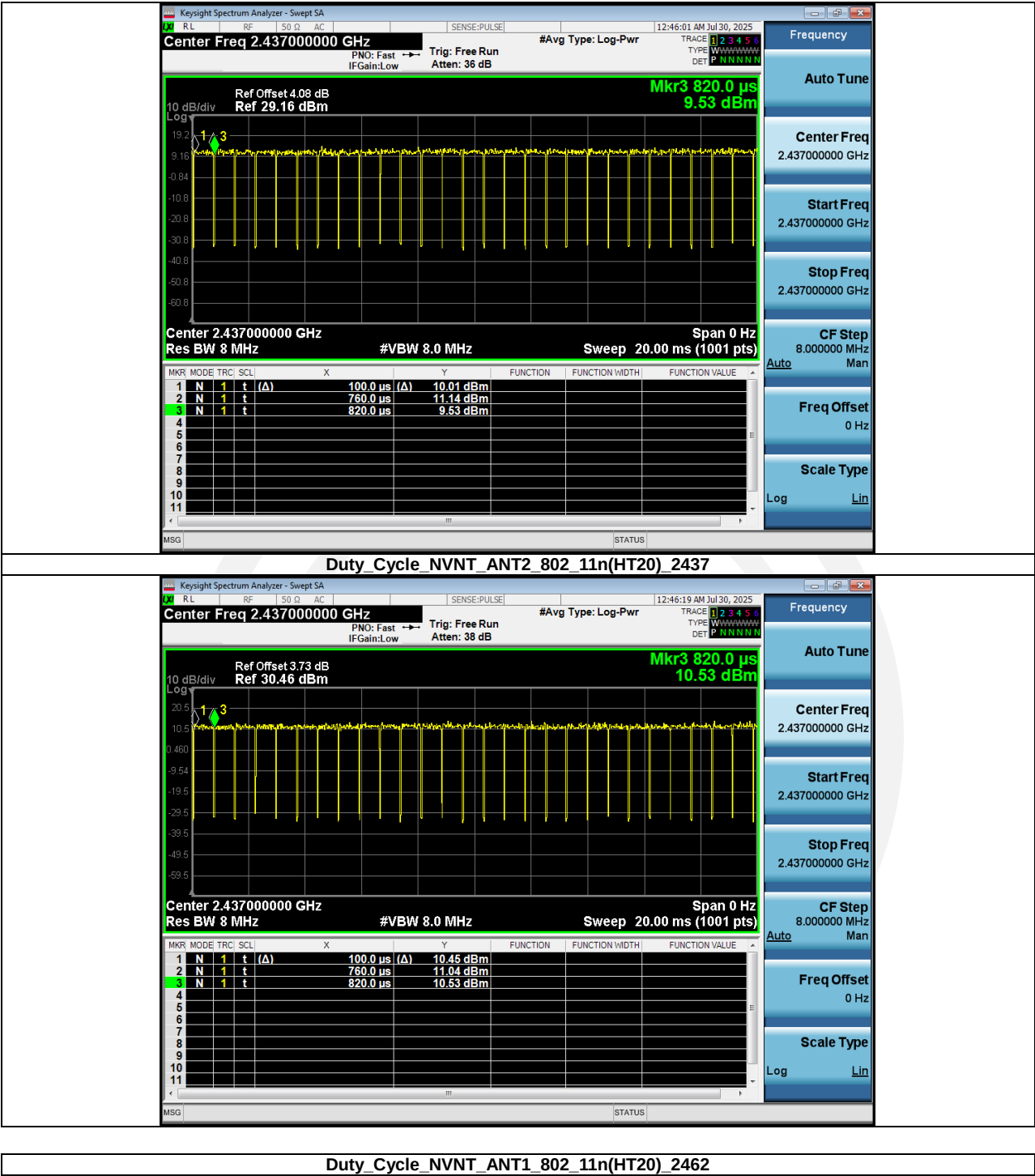
Duty Cycle NVNT ANT1 802 11g 2437

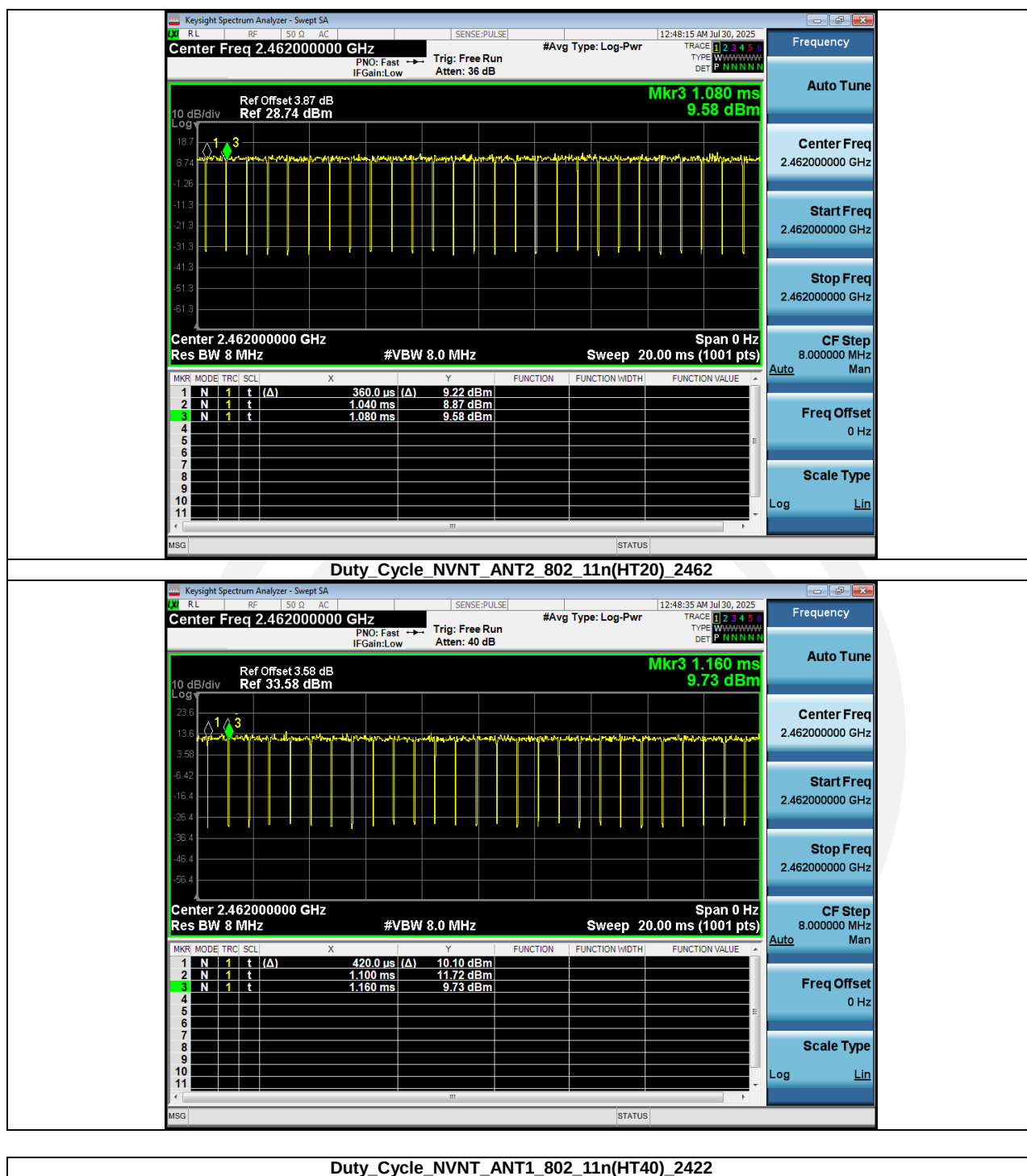


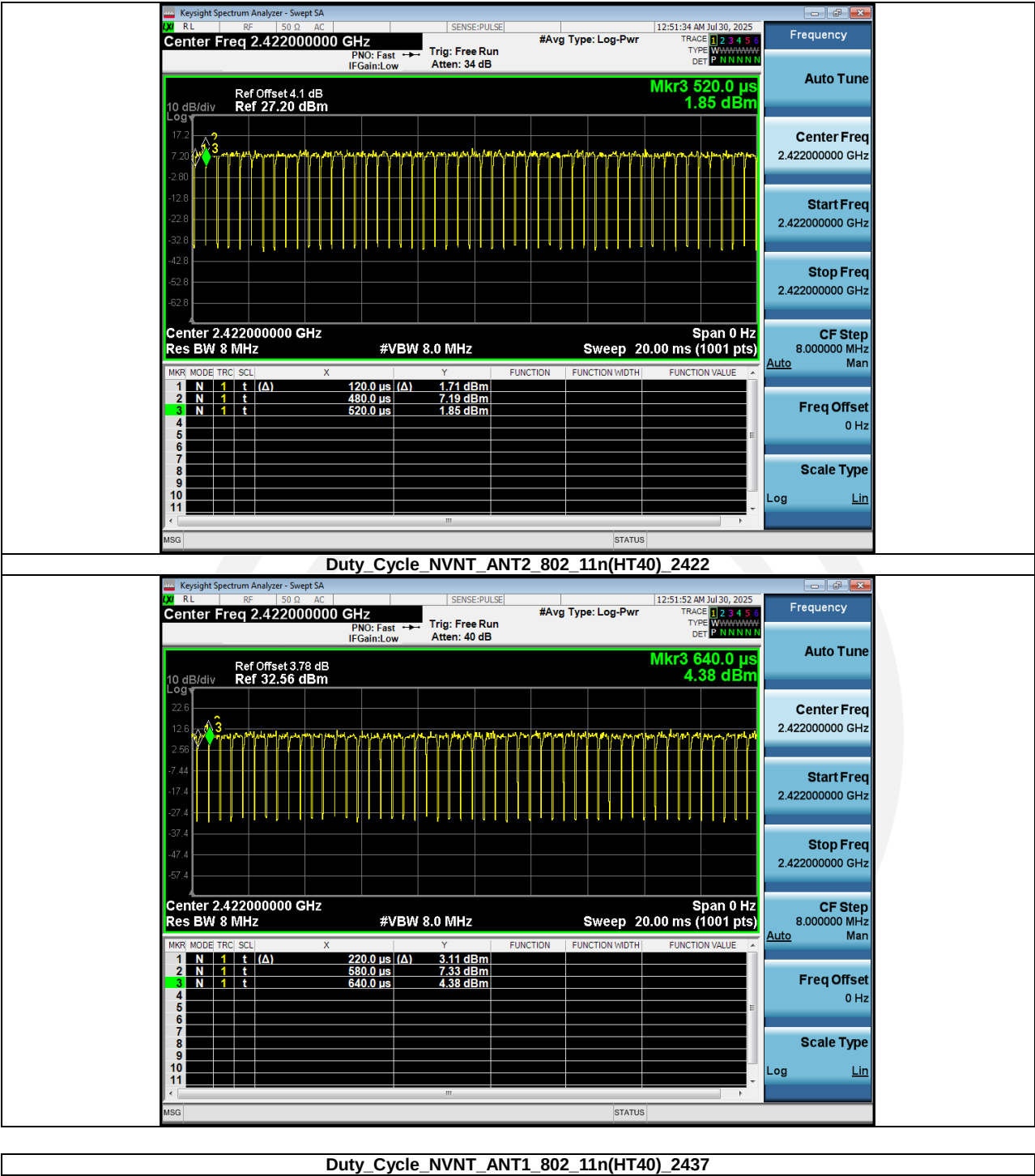
Duty Cycle NVNT ANT1 802 11g 2462

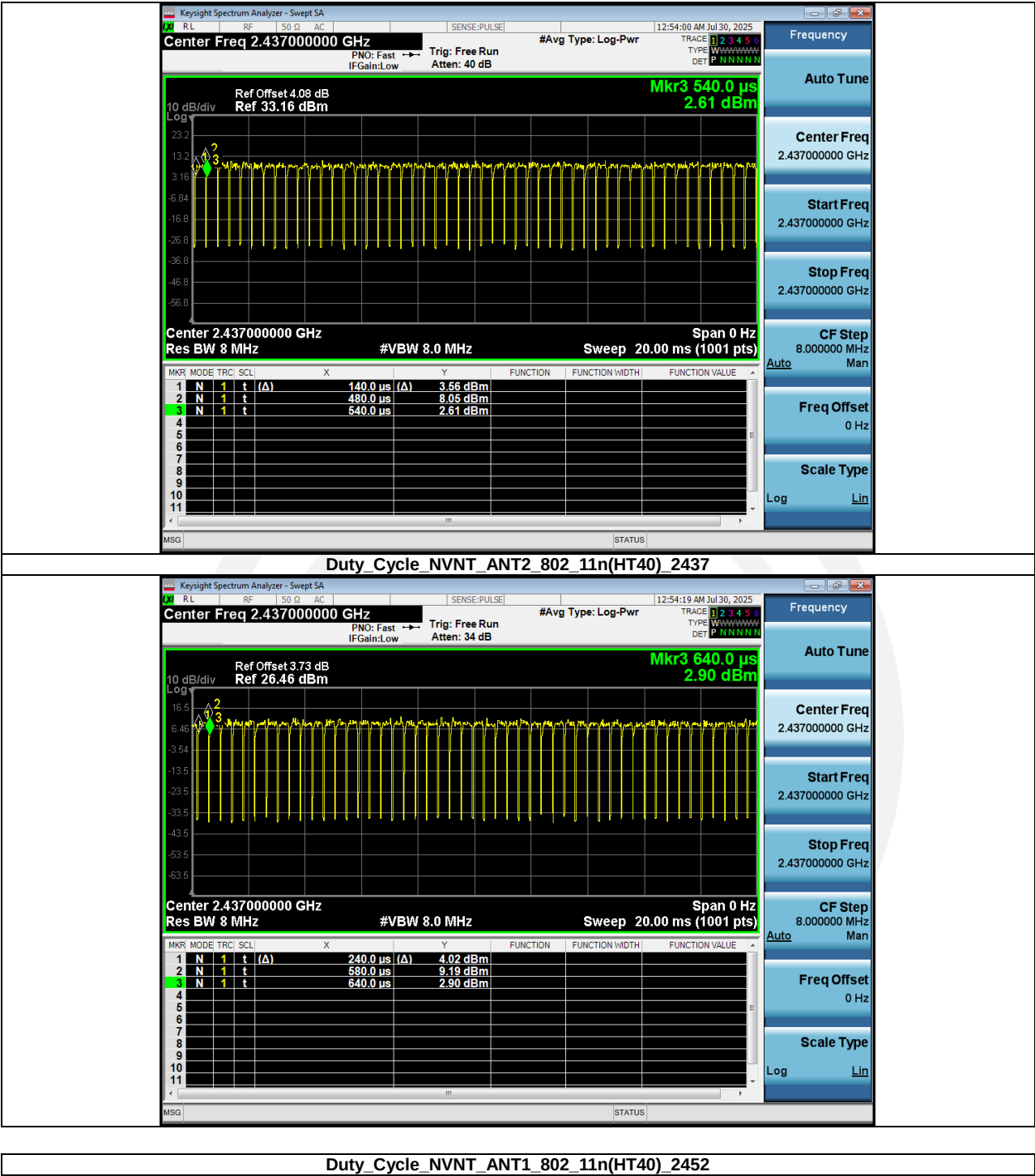


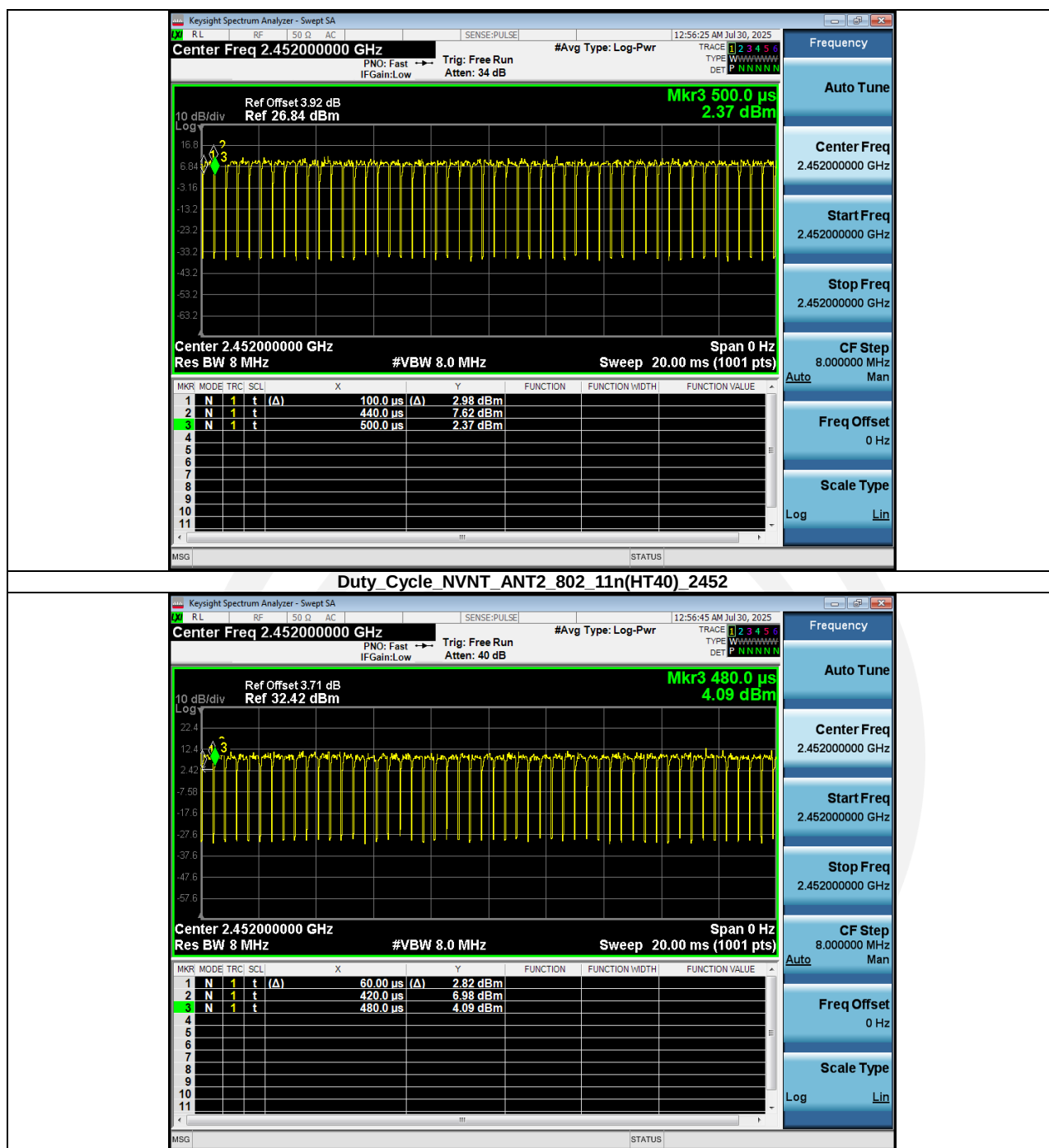


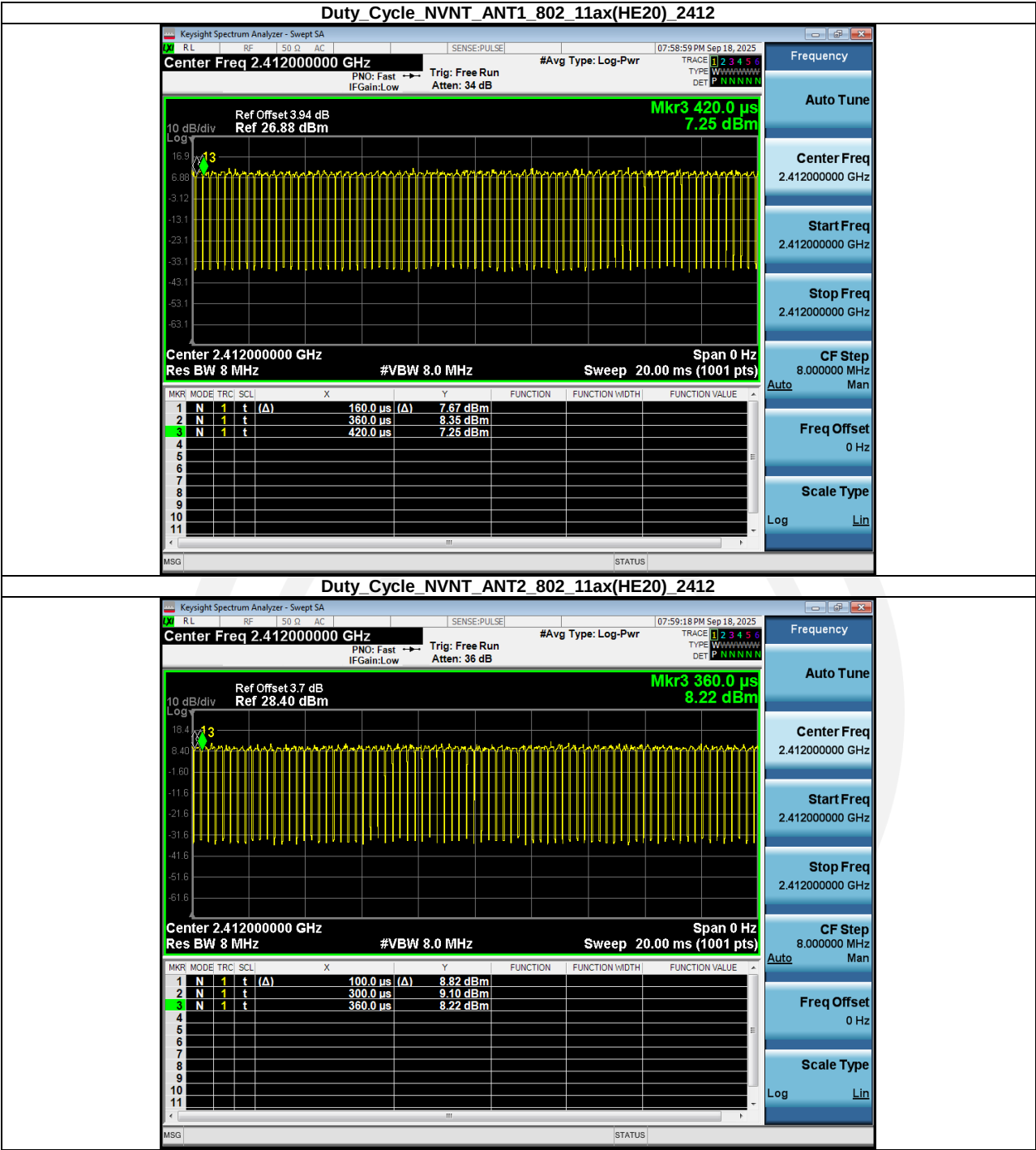




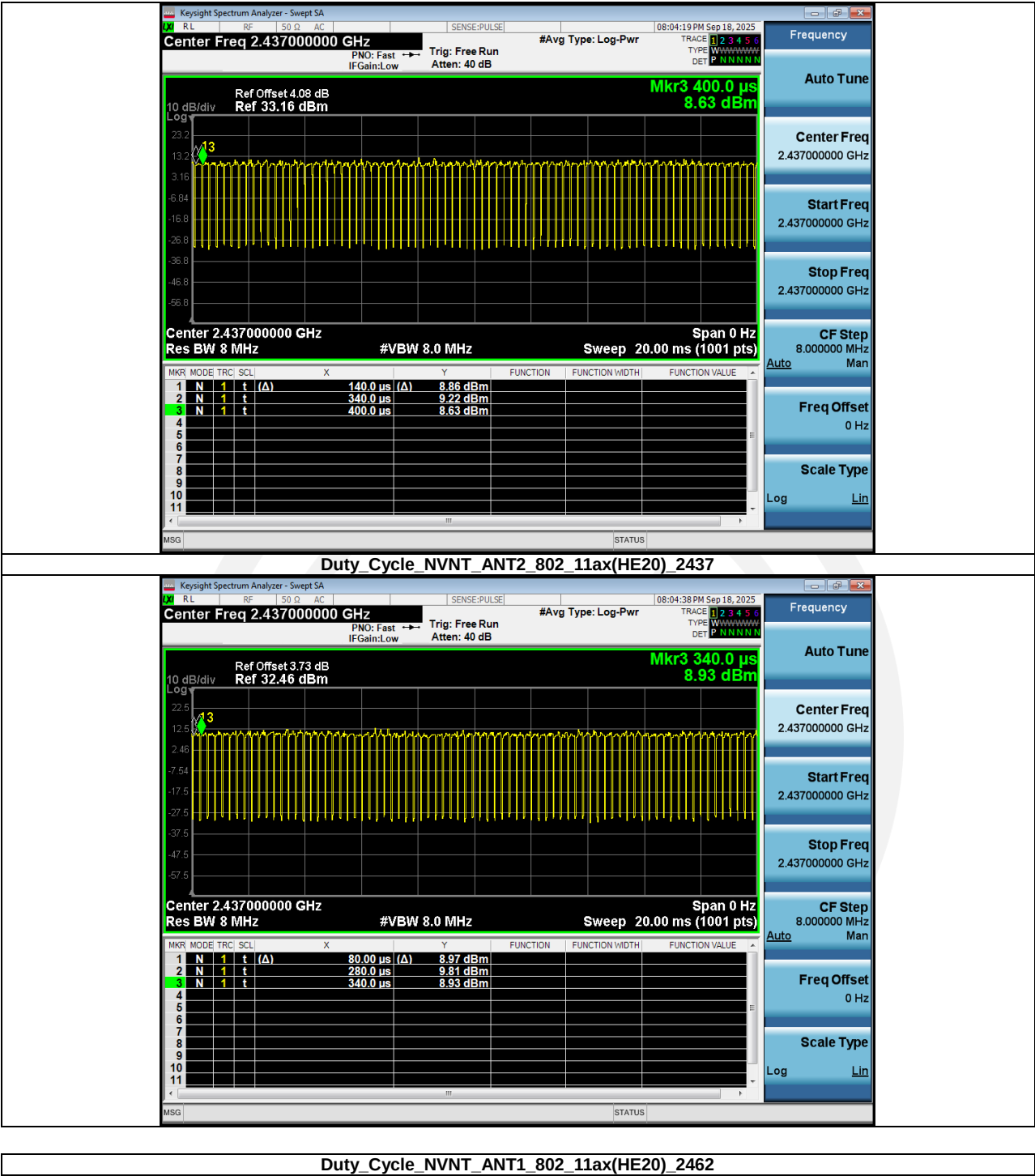


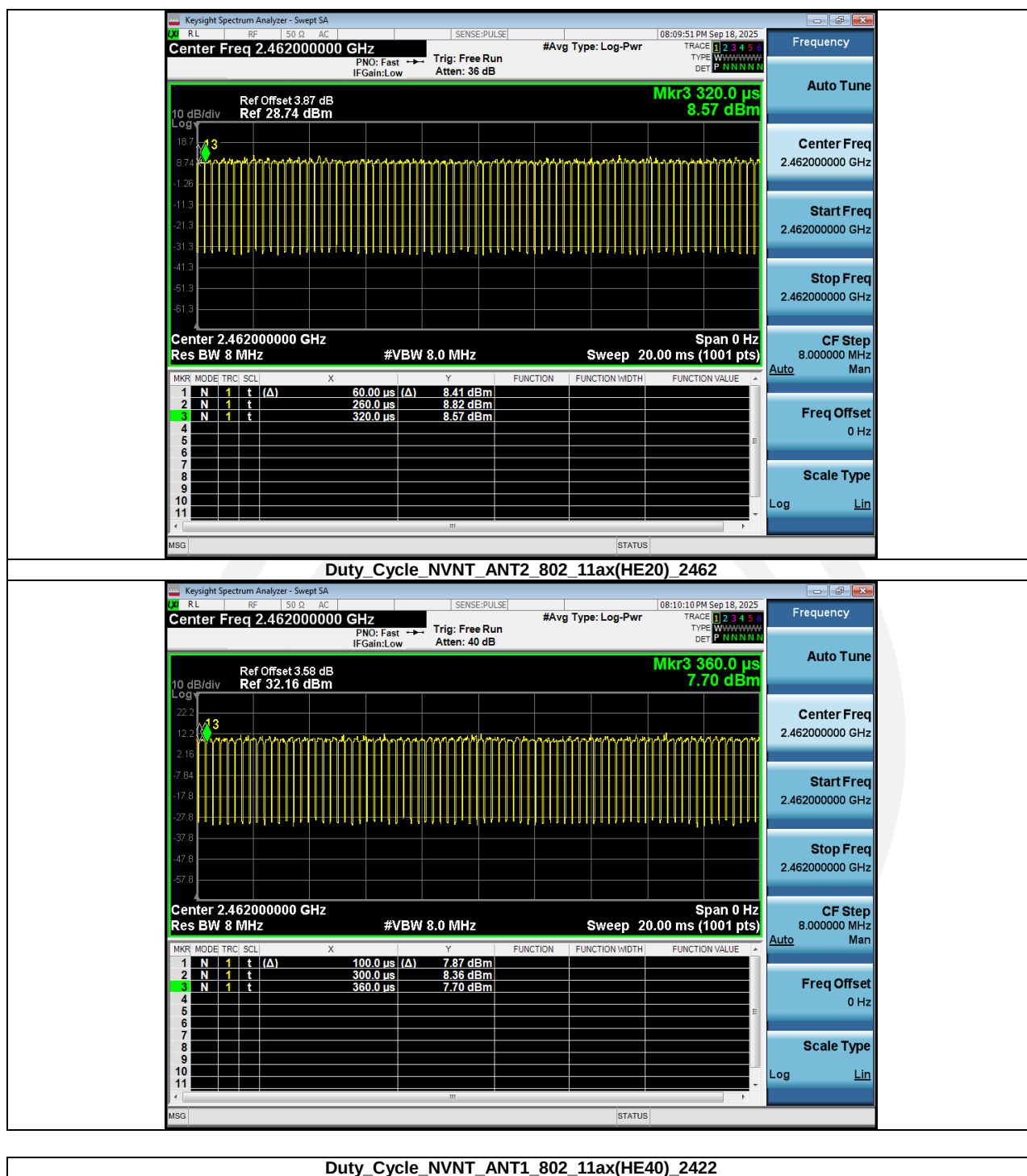


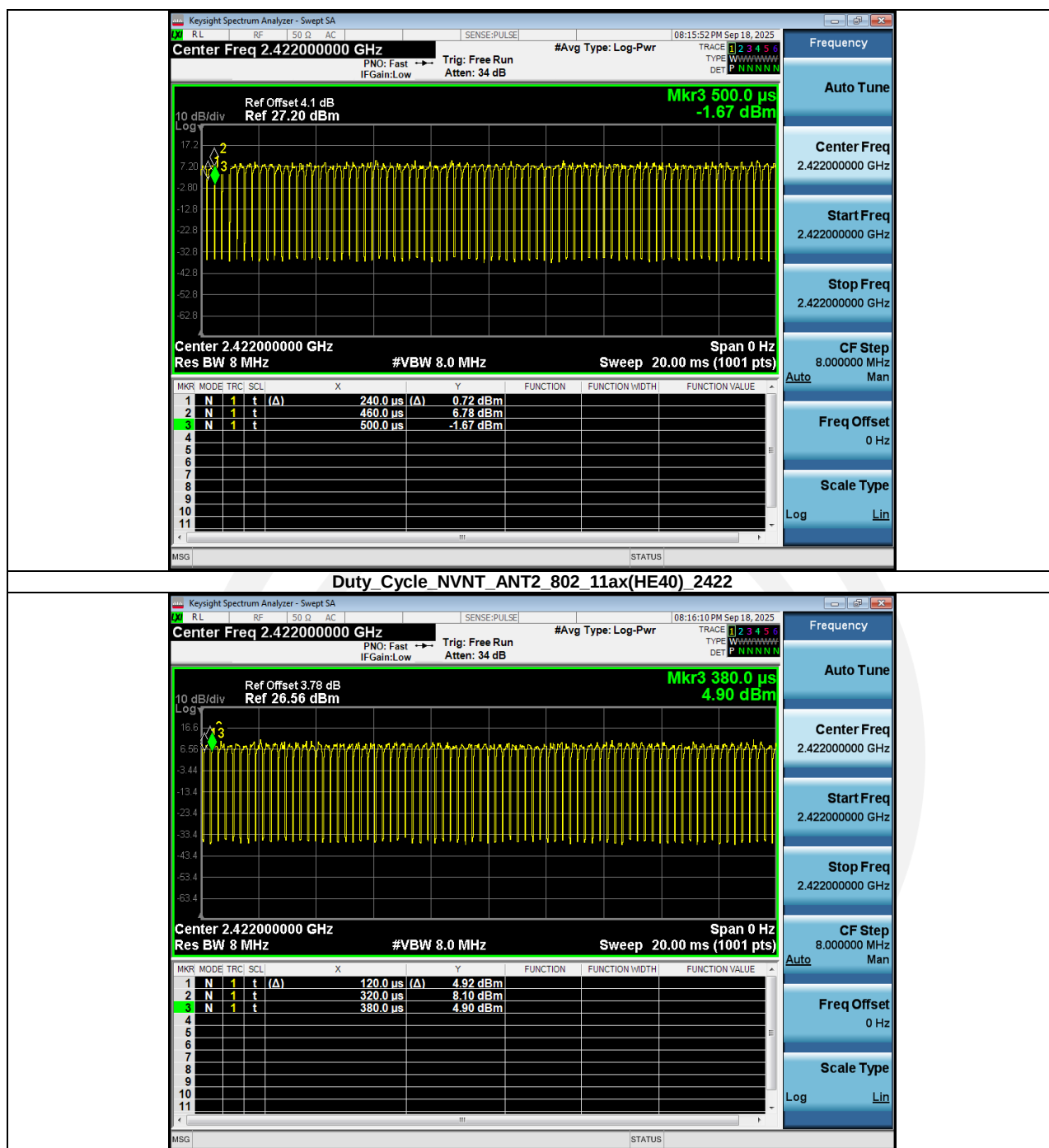


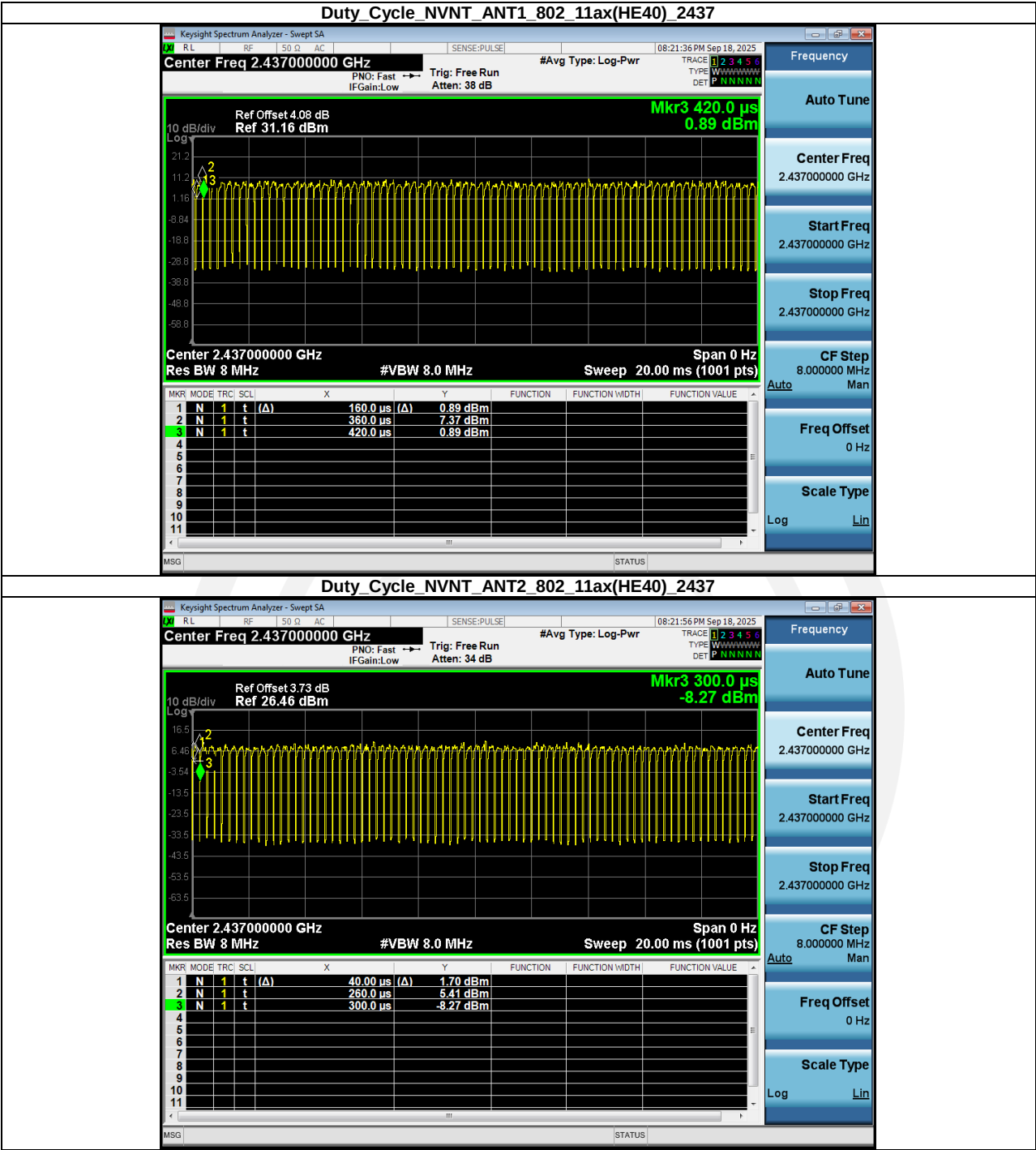


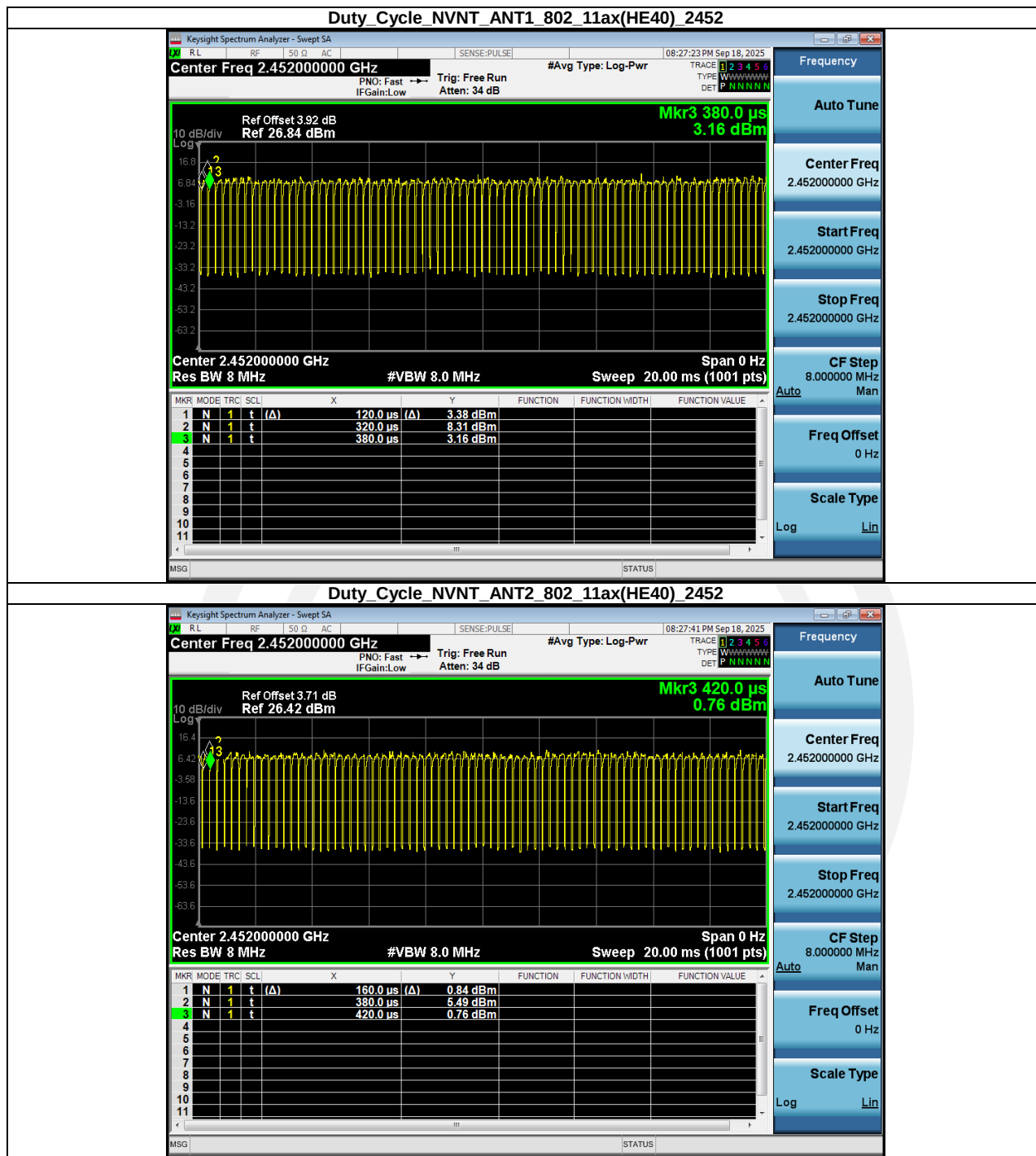
Duty Cycle_NVNT_ANT1_802_11ax(HE20)_2437











2.6. Software test version and power setting information

Software testing version	cmd.exe V1.0		
Mode	The client 's preset testing software is used to control the operation of EUT in continuous transmission mode and select the testing channel, wireless mode:		
Power level setup by client			
Mode	Channel	Frequency (MHz)	Soft Set
IEEE 802.11b/g/n20/ax20	Low :CH1	2412	TX level is set as defaults
	Middle: CH6	2437	TX level is set as defaults
	High: CH11	2462	TX level is set as defaults
IEEE 802.11n40/ax40	Low :CH3	2422	TX level is set as defaults
	Middle: CH6	2437	TX level is set as defaults
	High: CH9	2452	TX level is set as defaults

2.7. Test Conditions

Items	Required	Actual
Temperature range:	15-35℃	26℃
Humidity range:	25-75%	54%
Pressure range:	86-106kPa	98kPa

2.8. Test Facility

Shenzhen PSI Testing Co., Ltd.

1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

September 13, 2023 File on Federal Communication Commission

Registration Number: 916281

September 21, 2023 Certificated by IC

Registration Number: 31123

CAB identifier: CN0158

2.9. Measurement Uncertainty

(95% confidence levels, k=2)

Item	Uncertainty
Power Line Conducted Emissions Test	2.13dB
Radiation Emission test in 3m chamber(Below 30MHz)	4.07dB
Radiation Emission test in 3m chamber(30MHz to 1GHz)	4.51dB
Radiation Emission test in 3m chamber(1GHz to 18GHz)	5.07dB
Radiation Emission test in 3m chamber(18GHz to 40GHz)	5.21dB
Radio Frequency	48.24KHz
Conducted RF Power	0.41dB
Power Spectral Density	0.39 dB
Occupied-Bandwidth	968Hz
Duty Cycle	1%
Conducted-Spurious Emission	1.26dB

2.10. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Last Cal.	Cal. Interval
1.	9*6*6 anechoic chamber	SKET	9*6*6	N/A	/	2022.12.20	3 Year
2.	Test Receiver	Rohde&Schwarz	ESCI 7	101032/003	4.42 SP3	2024.12.18	1 Year
3.	L.I.S.N.#1	Rohde&Schwarz	ENV216	102282	/	2024.12.18	1 Year
4.	L.I.S.N.#2	RFT	NNB111	13835240	/	2024.12.18	1 Year
5.	Loop Antenna	Schwarz beck	FMZB 1519B	00128	/	2025.01.02	2 Year
6.	Bilog Antenna	Schwarz beck	VULB 9168	01448	/	2025.01.02	2 Year
7.	Spectrum Analyzer	Rohde&Schwarz	FSV-40N	101648	3.70	2024.12.18	1 Year
8.	Horn Antenna	Schwarz beck	BBHA 9120 D	02706	/	2025.01.02	2 Year
9.	Amplifier	SKET	LAPA_01G18 G-45dB	SK20220329 01	/	2024.12.18	1 Year
10.	Horn Antenna	Schwarz beck	BBHA 9170	00946	/	2024.12.31	2 Year
11.	Amplifier	SKET	LNPA_0118G -45	SK20200108 01	/	2024.12.18	1 Year
12.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.02 -1111533-Fz	/	2024.12.18	1 Year
13.	RF Sensor Unit	Tachoy	TR1029-2	20220428P0 08	/	2024.12.18	1 Year
14.	Spectrum Analyzer	Agilent	N9020A	MY51281067	A.14.03	2024.12.18	1 Year
15.	Temp. & Humid Chamber	Auchno	9606	/	/	2024.12.18	1 Year
16.	Regulated DC Power Supply	Xinouhua	ADC120V10 A	2022112516 38		2024.12.18	1 Year
17.	Cable	SKET	Cable-RE-1	#02/#03	/	2024.12.18	1 Year
18.	Cable	SKET	Cable-RE-2	#01	/	2024.12.18	1 Year
19.	Cable	SKET	Cable-RE-3	#04	/	2024.12.18	1 Year
20.	Cable	SKET	Cable-CE-1	A-E-24	/	2024.12.18	1 Year
21.	6dB Attenuator	Schwarzbeck	DGA 9552N 6dB	CK4186	/	2024.12.18	1 Year
22.	Power meter	Agilent	E4419B	GB40202121	/	2024.12.18	1 Year
23.	Comprehensive Test Instrument	Rohde&Schwarz	CMW 500	145266	/	2024.12.18	1 Year
For Test Software Information							
Item	Software Name	Manufacturer	Version				
RE	EZ EMC	Farad	PSI-3A1				
CE	EZ EMC	Farad	PSI-3A1				
RF	RTS	TACHOY	V1.0.0				

3. Spurious Emission

3.1. Test Limits

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100 **	3
88-216	150 **	3
216-960	200 **	3
Above 960	500	3

Note: The peak limit is 20 dB higher than the average limit

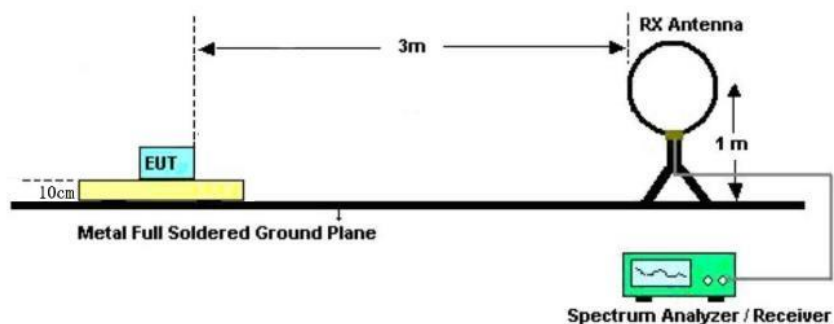
All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

15.205 Restricted frequency band

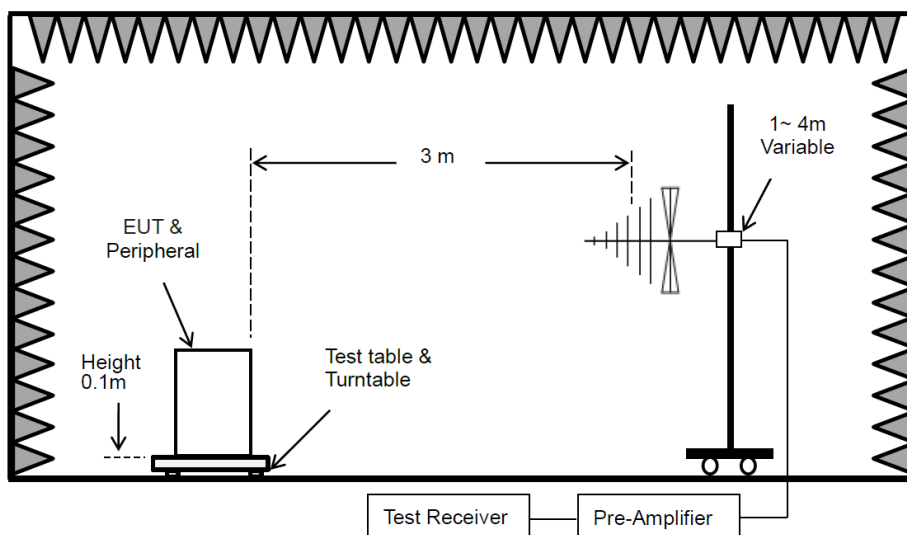
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

3.2. Block Diagram of Test setup

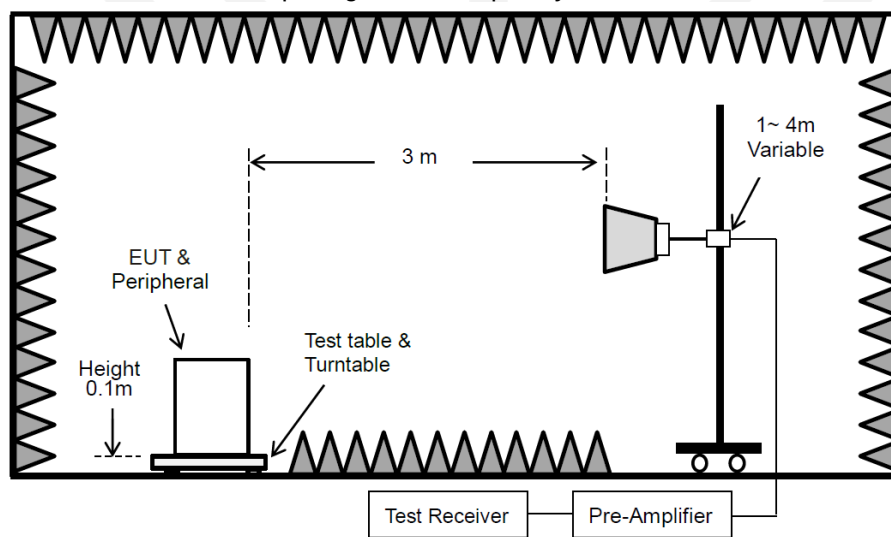
a. In 3m Anechoic Chamber Test Setup Diagram for below 30MHz



b. In 3m Anechoic Chamber Test Setup Diagram for below 1GHz



c. In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



3.3. Test Procedure

- (1) EUT was placed on a non-metallic table, 10 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and simulator
- (3) Test antenna was located 3m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
 - (a) Change work frequency or channel of device if practicable.
 - (b) Change modulation type of device if practicable.
 - (c) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated
- (5) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10-2020 on Radiated Emission test.
- (6) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure.

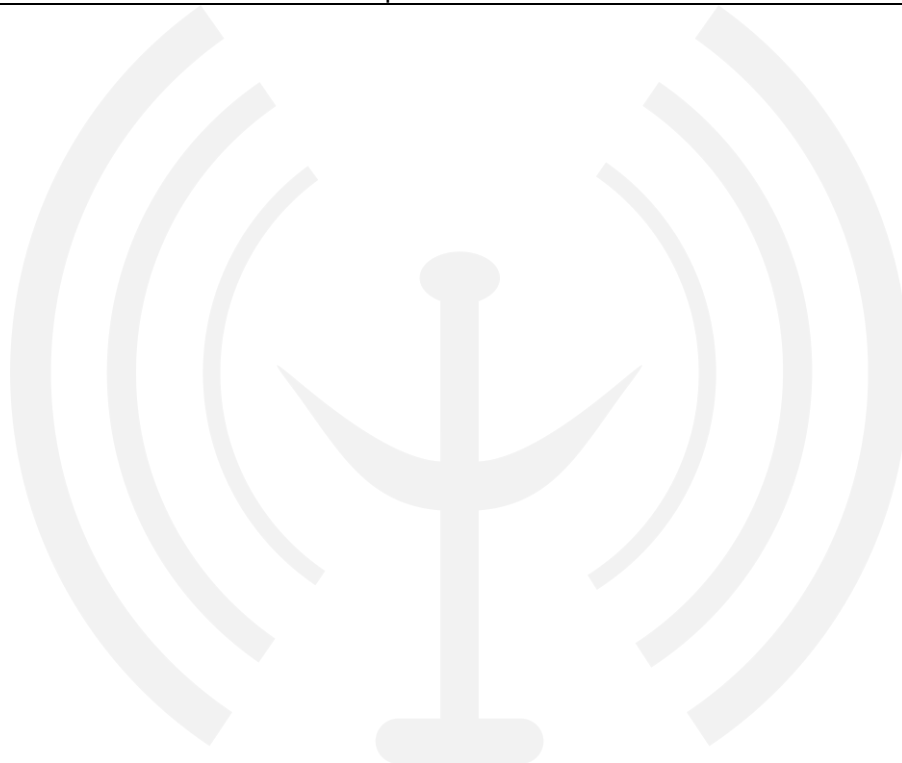
Test setup information:

9KHz~150KHz	RBW200Hz	VBW1KHz
150KHz~30MHz	RBW9KHz	VBW 30KHz
30MHZ~1GHz	RBW120KHz	VBW 300KHz
Above1GHz	RBW1MHz	VBW 3MHz

3.4. Test Results

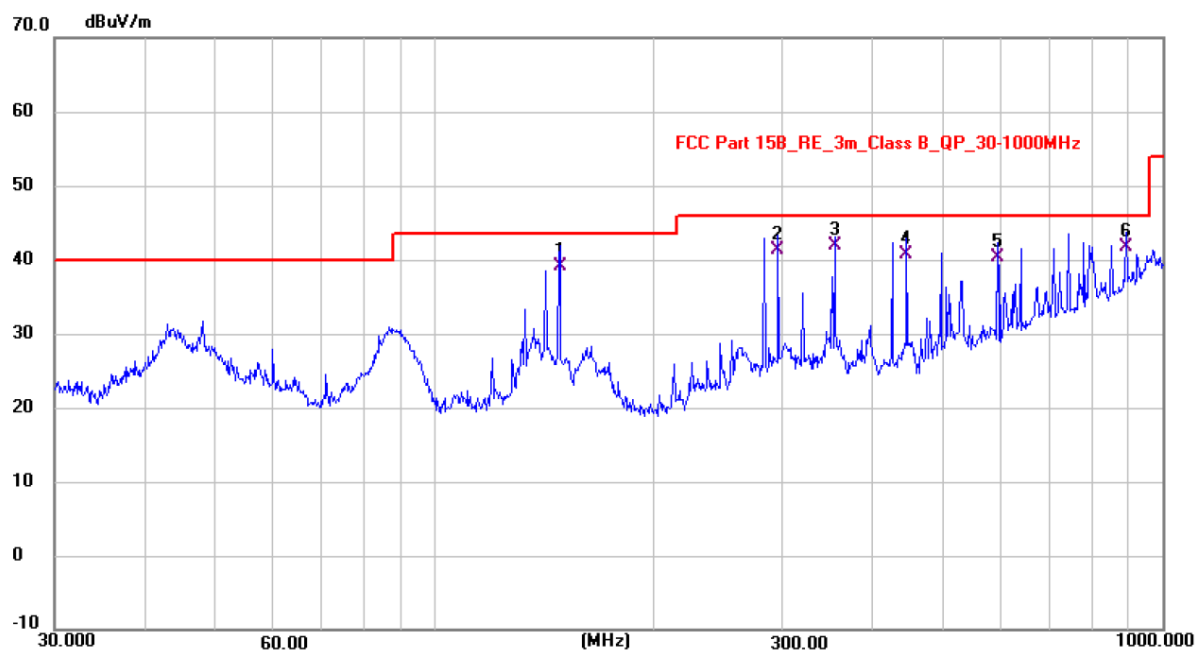
We have scanned from 9kHz to the 10th harmonic of the EUT's highest frequency.
Detailed information please see the following page.

From 9KHz to 30MHz:	
Test Date : 2025.07.24	Temperature : 26℃
Test Engineer : Jensen Wang	Humidity : 54%
Test Mode : IEEE 802.11b mode	
Test Results : PASS	
Note:	The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



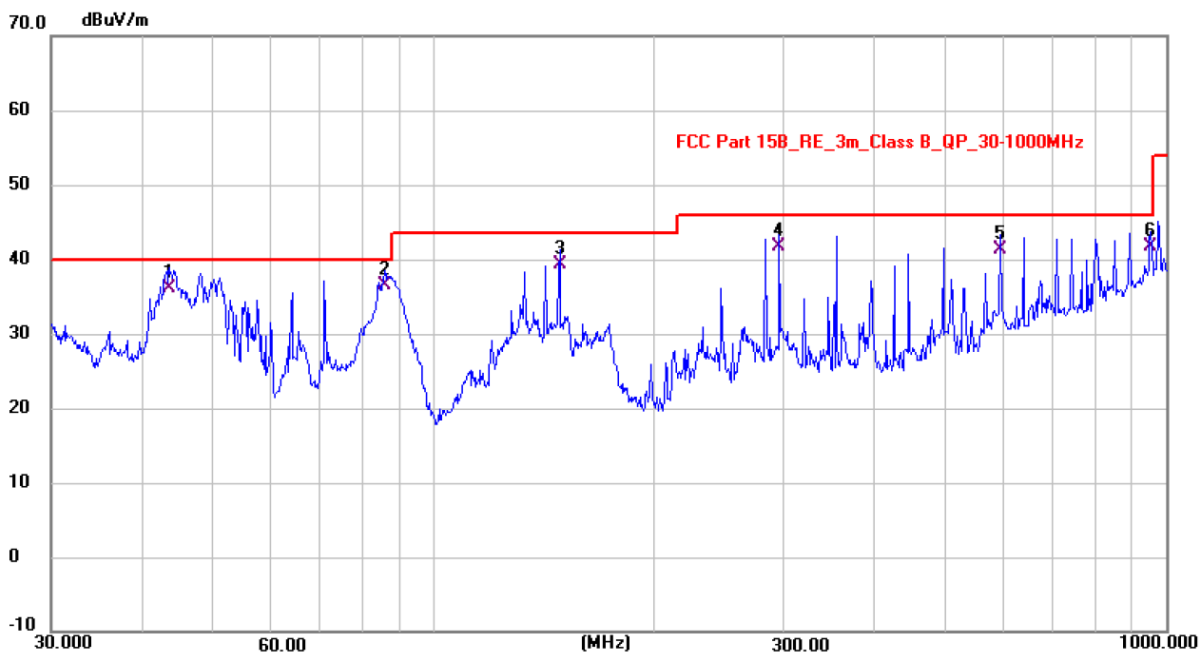
From 30MHz to 1000MHz:	
Test Date : 2025.07.24	Temperature : 26℃
Test Engineer : Jensen Wang	Humidity : 54%
Test Mode : IEEE 802.11b mode	
Test Results : PASS	
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out. 3. All modes have been tested, and only worst data of IEEE 802.11b mode, Channel 2412MHz was listed in this report.



Polarization: Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	148.5061	24.97	14.09	39.06	43.50	-4.44	QP
2	297.0937	26.41	14.85	41.26	46.00	-4.74	QP
3 *	355.1157	25.50	16.46	41.96	46.00	-4.04	QP
4	445.6320	21.84	18.83	40.67	46.00	-5.33	QP
5	594.0901	17.61	22.72	40.33	46.00	-5.67	QP
6	891.1182	13.78	27.91	41.69	46.00	-4.31	QP

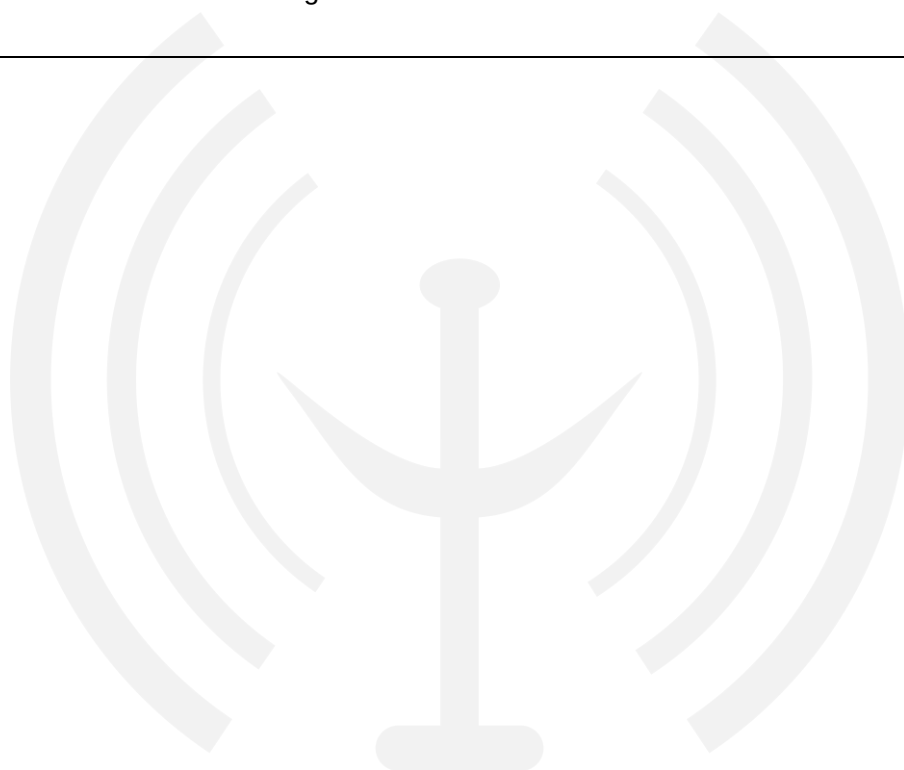
Level = Reading + Factor Margin = Level - Limit

Polarization: Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	43.6011	21.70	14.42	36.12	40.00	-3.88	QP
2 *	85.8230	26.92	9.62	36.54	40.00	-3.46	QP
3	148.5061	25.18	14.09	39.27	43.50	-4.23	QP
4	296.9635	26.83	14.84	41.67	46.00	-4.33	QP
5	594.0901	18.51	22.72	41.23	46.00	-4.77	QP
6	955.0194	13.02	28.64	41.66	46.00	-4.34	QP

Level = Reading + Factor Margin = Level - Limit

From 1GHz to 25GHz:	
Test Date : 2025.07.24	Temperature : 26℃
Test Engineer : Jensen Wang	Humidity : 54%
Test Mode : WIFI mode	
Test Results : PASS	
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out. 3. If the limits for the measurement with the average detector are met when using a receiver with a quasi-peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.



Test Mode : IEEE 802.11b TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4824	V	58.43	-13.18	45.25	74.00	-28.75	Peak
2	4824	V	49.93	-13.18	36.75	54.00	-17.25	Avg
3	7236	--	--	--	--	--	--	--
4	9648	--	--	--	--	--	--	--
5	4824	H	56.10	-13.18	42.92	74.00	-31.08	Peak
6	4824	H	48.44	-13.18	35.26	54.00	-18.74	Avg
7	7236	--	--	--	--	--	--	--
8	9648	--	--	--	--	--	--	--
Test Mode : IEEE 802.11b TX Mid								
1	4874	V	58.80	-13.00	45.80	74.00	-28.20	Peak
2	4874	V	48.31	-13.00	35.31	54.00	-18.69	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	56.18	-13.00	43.18	74.00	-30.82	Peak
6	4874	H	45.39	-13.00	32.39	54.00	-21.61	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11b TX High								
1	4924	V	58.36	-12.83	45.53	74.00	-28.47	Peak
2	4924	V	47.96	-12.83	35.13	54.00	-18.87	Avg
3	7386	--	--	--	--	--	--	--
4	9848	--	--	--	--	--	--	--
5	4924	H	57.85	-12.83	45.02	74.00	-28.98	Peak
6	4924	H	46.82	-12.83	33.99	54.00	-20.01	Avg
7	7386	--	--	--	--	--	--	--
8	9848	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor, Margin= Result-Limit.								

Test Mode : IEEE 802.11g TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4824	V	59.56	-13.18	46.38	74.00	-27.62	Peak
2	4824	V	46.95	-13.18	33.77	54.00	-20.23	Avg
3	7236	--	--	--	--	--	--	--
4	9648	--	--	--	--	--	--	--
5	4824	H	55.18	-13.18	42.00	74.00	-32.00	Peak
6	4824	H	45.37	-13.18	32.19	54.00	-21.81	Avg
7	7236	--	--	--	--	--	--	--
8	9648	--	--	--	--	--	--	--
Test Mode : IEEE 802.11g TX Mid								
1	4874	V	56.89	-13.00	43.89	74.00	-30.11	Peak
2	4874	V	49.69	-13.00	36.69	54.00	-17.31	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	56.38	-13.00	43.38	74.00	-30.62	Peak
6	4874	H	45.83	-13.00	32.83	54.00	-21.17	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11g TX High								
1	4924	V	60.35	-12.83	47.52	74.00	-26.48	Peak
2	4924	V	48.83	-12.83	36.00	54.00	-18.00	Avg
3	7386	--	--	--	--	--	--	--
4	9848	--	--	--	--	--	--	--
5	4924	H	54.89	-12.83	42.06	74.00	-31.94	Peak
6	4924	H	46.88	-12.83	34.05	54.00	-19.95	Avg
7	7386	--	--	--	--	--	--	--
8	9848	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor, Margin= Result-Limit.								

Test Mode : IEEE 802.11n/HT20 TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4824	V	59.86	-13.18	46.68	74.00	-27.32	Peak
2	4824	V	47.16	-13.18	33.98	54.00	-20.02	Avg
3	7236	--	--	--	--	--	--	--
4	9648	--	--	--	--	--	--	--
5	4824	H	56.10	-13.18	42.92	74.00	-31.08	Peak
6	4824	H	44.89	-13.18	31.71	54.00	-22.29	Avg
7	7236	--	--	--	--	--	--	--
8	9648	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HT20 TX Mid								
1	4874	V	59.76	-13.00	46.76	74.00	-27.24	Peak
2	4874	V	49.71	-13.00	36.71	54.00	-17.29	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	55.68	-13.00	42.68	74.00	-31.32	Peak
6	4874	H	47.88	-13.00	34.88	54.00	-19.12	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HT20 TX High								
1	4924	V	58.54	-12.83	45.71	74.00	-28.29	Peak
2	4924	V	48.99	-12.83	36.16	54.00	-17.84	Avg
3	7386	--	--	--	--	--	--	--
4	9848	--	--	--	--	--	--	--
5	4924	H	57.95	-12.83	45.12	74.00	-28.88	Peak
6	4924	H	44.63	-12.83	31.80	54.00	-22.20	Avg
7	7386	--	--	--	--	--	--	--
8	9848	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor, Margin= Result-Limit.								

Test Mode : IEEE 802.11n/HT40 TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4844	V	58.80	-13.11	45.69	74.00	-28.31	Peak
2	4844	V	47.22	-13.11	34.11	54.00	-19.89	Avg
3	7266	--	--	--	--	--	--	--
4	9688	--	--	--	--	--	--	--
5	4844	H	55.30	-13.11	42.19	74.00	-31.81	Peak
6	4844	H	45.44	-13.11	32.33	54.00	-21.67	Avg
7	7266	--	--	--	--	--	--	--
8	9688	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HT40 TX Mid								
1	4874	V	58.85	-13.00	45.85	74.00	-28.15	Peak
2	4874	V	48.89	-13.00	35.89	54.00	-18.11	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	56.42	-13.00	43.42	74.00	-30.58	Peak
6	4874	H	46.67	-13.00	33.67	54.00	-20.33	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HT40 TX High								
1	4904	V	58.77	-12.90	45.87	74.00	-28.13	Peak
2	4904	V	48.10	-12.90	35.20	54.00	-18.80	Avg
3	7356	--	--	--	--	--	--	--
4	9808	--	--	--	--	--	--	--
5	4904	H	56.08	-12.90	43.18	74.00	-30.82	Peak
6	4904	H	47.24	-12.90	34.34	54.00	-19.66	Avg
7	7356	--	--	--	--	--	--	--
8	9808	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor, Margin= Result-Limit.								

Test Mode : IEEE 802.11ax20 TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4824	V	58.73	-13.18	45.55	74.00	-28.45	Peak
2	4824	V	48.93	-13.18	35.75	54.00	-18.25	Avg
3	7236	--	--	--	--	--	--	--
4	9648	--	--	--	--	--	--	--
5	4824	H	54.66	-13.18	41.48	74.00	-32.52	Peak
6	4824	H	46.10	-13.18	32.92	54.00	-21.08	Avg
7	7236	--	--	--	--	--	--	--
8	9648	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HTax20 TX Mid								
1	4874	V	56.86	-13.00	43.86	74.00	-30.14	Peak
2	4874	V	48.90	-13.00	35.90	54.00	-18.10	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	58.19	-13.00	45.19	74.00	-28.81	Peak
6	4874	H	47.95	-13.00	34.95	54.00	-19.05	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11ax20 TX High								
1	4924	V	56.70	-12.83	43.87	74.00	-30.13	Peak
2	4924	V	50.29	-12.83	37.46	54.00	-16.54	Avg
3	7386	--	--	--	--	--	--	--
4	9848	--	--	--	--	--	--	--
5	4924	H	55.84	-12.83	43.01	74.00	-30.99	Peak
6	4924	H	47.17	-12.83	34.34	54.00	-19.66	Avg
7	7386	--	--	--	--	--	--	--
8	9848	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor, Margin= Result-Limit.								

Test Mode : IEEE 802.11ax40 TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4844	V	58.21	-13.11	45.10	74.00	-28.90	Peak
2	4844	V	47.46	-13.11	34.35	54.00	-19.65	Avg
3	7266	--	--	--	--	--	--	--
4	9688	--	--	--	--	--	--	--
5	4844	H	56.70	-13.11	43.59	74.00	-30.41	Peak
6	4844	H	46.51	-13.11	33.40	54.00	-20.60	Avg
7	7266	--	--	--	--	--	--	--
8	9688	--	--	--	--	--	--	--
Test Mode : IEEE 802.11ax40 TX Mid								
1	4874	V	60.07	-13.00	47.07	74.00	-26.93	Peak
2	4874	V	47.57	-13.00	34.57	54.00	-19.43	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	58.33	-13.00	45.33	74.00	-28.67	Peak
6	4874	H	47.78	-13.00	34.78	54.00	-19.22	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11ax40 TX High								
1	4904	V	60.33	-12.90	47.43	74.00	-26.57	Peak
2	4904	V	50.52	-12.90	37.62	54.00	-16.38	Avg
3	7356	--	--	--	--	--	--	--
4	9808	--	--	--	--	--	--	--
5	4904	H	55.59	-12.90	42.69	74.00	-31.31	Peak
6	4904	H	47.74	-12.90	34.84	54.00	-19.16	Avg
7	7356	--	--	--	--	--	--	--
8	9808	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor, Margin= Result-Limit.								

4. Power Line Conducted Emission

4.1. Test Limits

Frequency (MHz)	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 -0.50	66 -56*	56 - 46*
0.50 -5.00	56	46
5.00 -30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

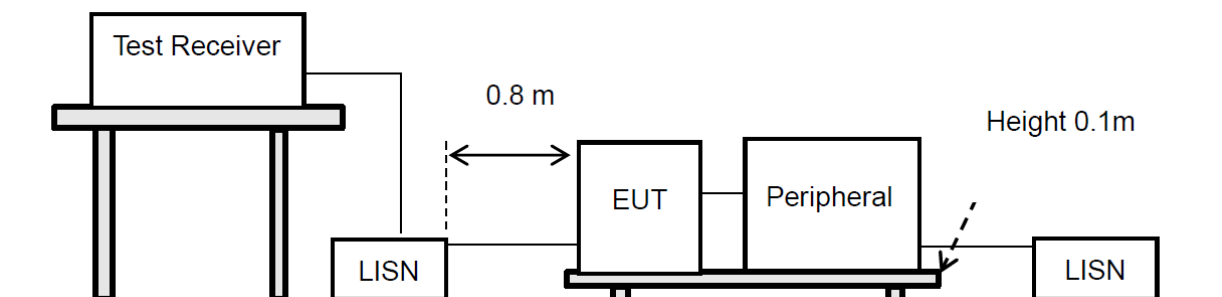
3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2. Test Procedure

The EUT is put on the plane 0.1m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10-2020 on Conducted Emission Measurement.

The bandwidth of test receiver is set at 9 kHz.

4.3. Test Setup



4.4. Test Results

Test Date	: 2025.07.24	Temperature	: 26℃
Test Engineer	: Jensen Wang	Humidity	: 54%
Test Mode	: WIFI mode		
Test Results	: PASS		

Note: 1. The test results are listed in next pages.

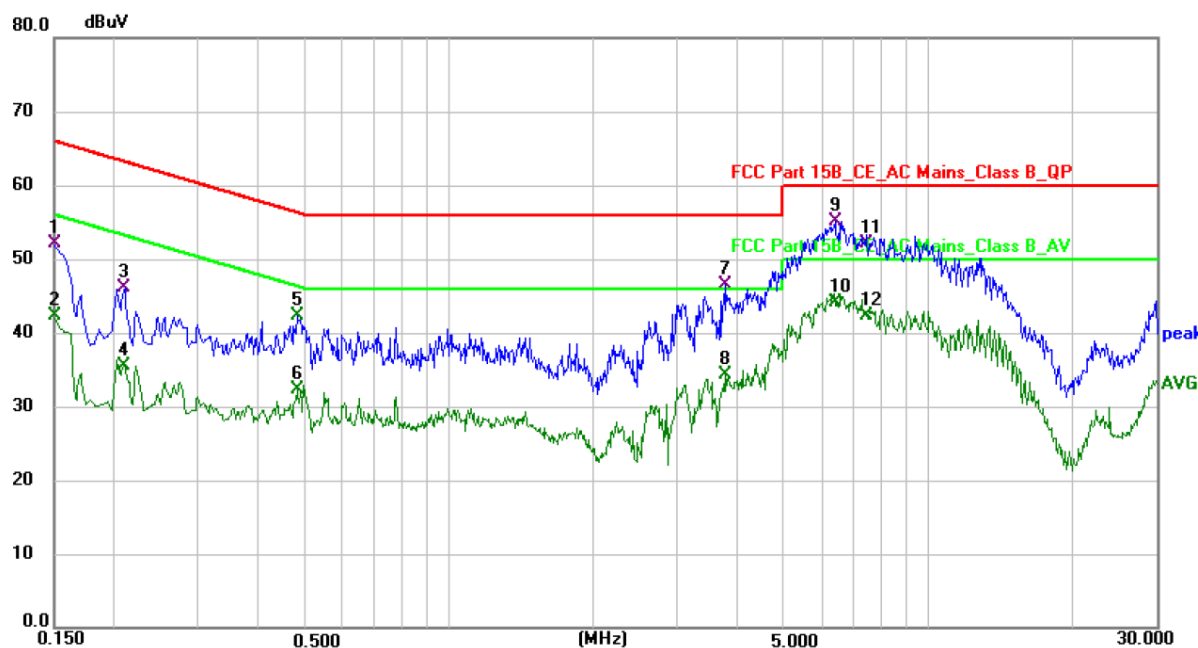
2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out.

3. If the limits for the measurement with the average detector are met when using a receiver with a quasi-peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.

4. All modes have been tested, and only worst data of b mode, Channel 2412MHz (AC 120V/ 60Hz) was listed in this report.



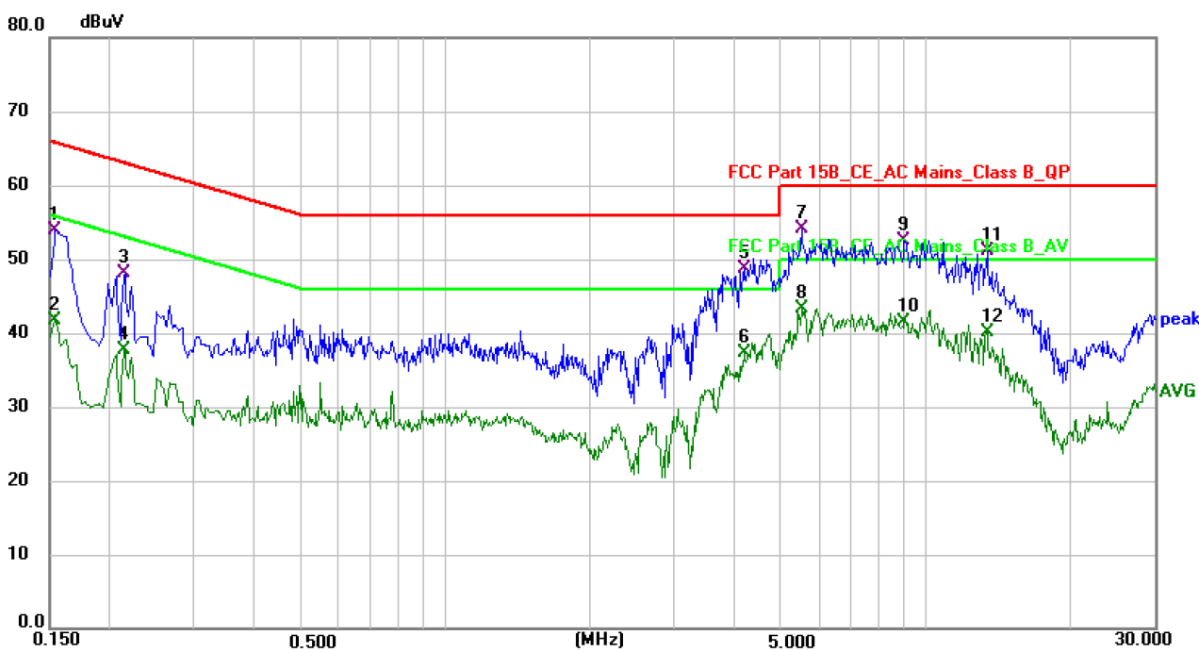
Polarization: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1500	42.10	9.94	52.04	66.00	-13.96	QP
2	0.1500	32.29	9.94	42.23	56.00	-13.77	AVG
3	0.2100	36.07	9.95	46.02	63.21	-17.19	QP
4	0.2100	25.58	9.95	35.53	53.21	-17.68	AVG
5 *	0.4820	32.48	9.86	42.34	46.30	-3.96	AVG
6	0.4820	22.48	9.86	32.34	46.30	-13.96	AVG
7	3.7780	37.12	9.39	46.51	56.00	-9.49	QP
8	3.7780	24.83	9.39	34.22	46.00	-11.78	AVG
9	6.3859	45.53	9.58	55.11	60.00	-4.89	QP
10	6.3859	34.58	9.58	44.16	50.00	-5.84	AVG
11	7.4180	42.40	9.64	52.04	60.00	-7.96	QP
12	7.4180	32.63	9.64	42.27	50.00	-7.73	AVG

Note: Level = Reading + Factor Margin = Level - Limit

Polarization: N



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1539	44.19	9.79	53.98	65.79	-11.81	QP
2	0.1539	31.95	9.79	41.74	55.79	-14.05	AVG
3	0.2140	38.08	10.01	48.09	63.05	-14.96	QP
4	0.2140	27.65	10.01	37.66	53.05	-15.39	AVG
5	4.1900	39.15	9.55	48.70	56.00	-7.30	QP
6	4.1900	27.81	9.55	37.36	46.00	-8.64	AVG
7 *	5.5180	44.59	9.54	54.13	60.00	-5.87	QP
8	5.5180	33.69	9.54	43.23	50.00	-6.77	AVG
9	9.0380	43.04	9.41	52.45	60.00	-7.55	QP
10	9.0380	32.14	9.41	41.55	50.00	-8.45	AVG
11	13.4300	41.45	9.75	51.20	60.00	-8.80	QP
12	13.4300	30.41	9.75	40.16	50.00	-9.84	AVG

Note: Level = Reading + Factor Margin = Level - Limit

5. Out-of-band Emissions

5.1. Test Limits

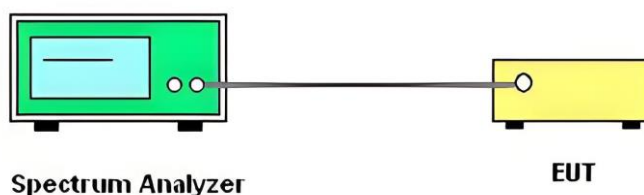
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.

5.2. Test Procedure

ANSI C63.10-2020 Section 11.11.1, Section 11.11.2, Section 11.11.3

Connect the transmitter output to spectrum analyzer using a low loss RF cable, and set the spectrum analyzer to RBW=100 kHz, VBW= 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, band edge and out-of-band emissions.

5.3. Test Setup

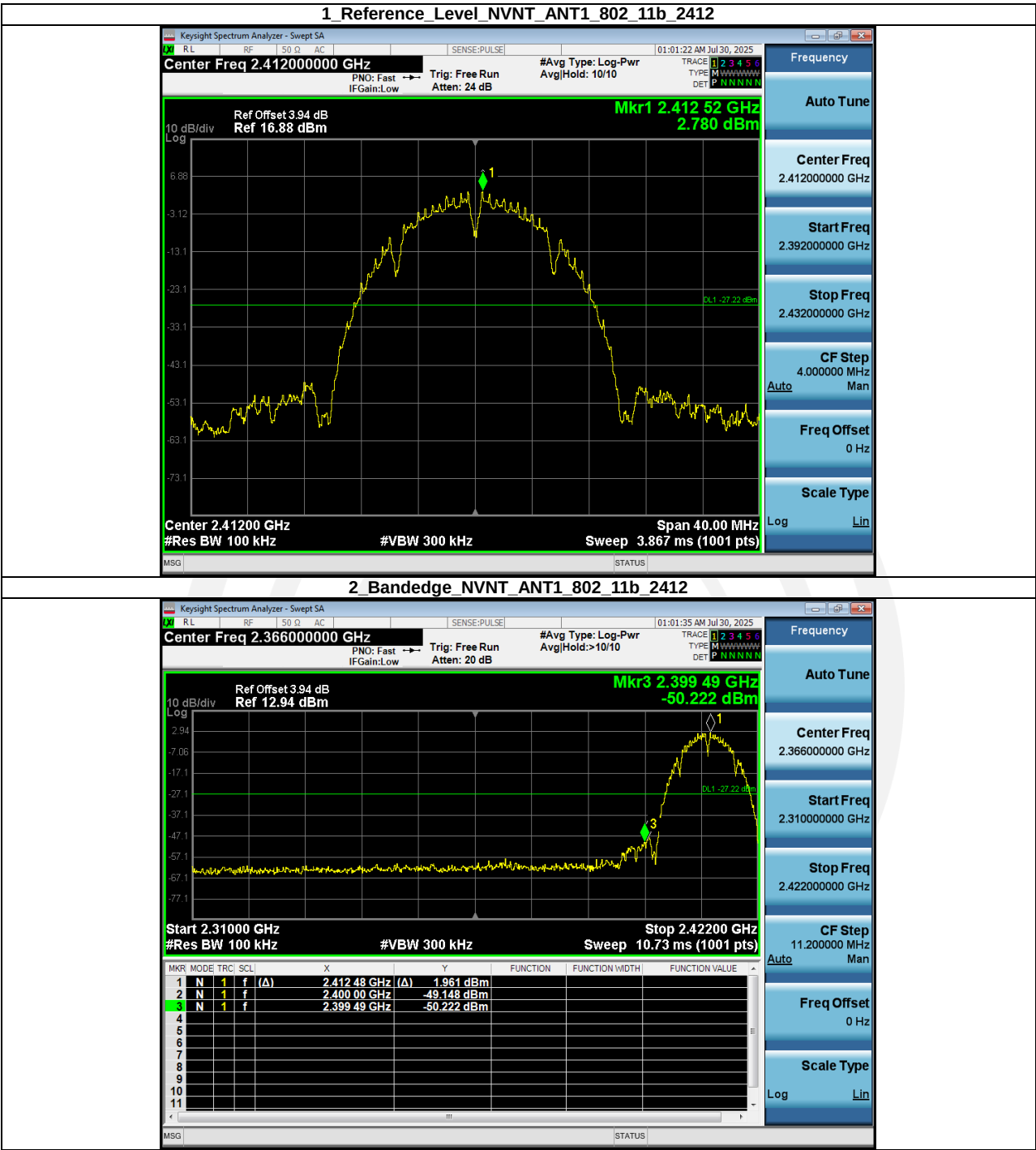


5.4. Test Results

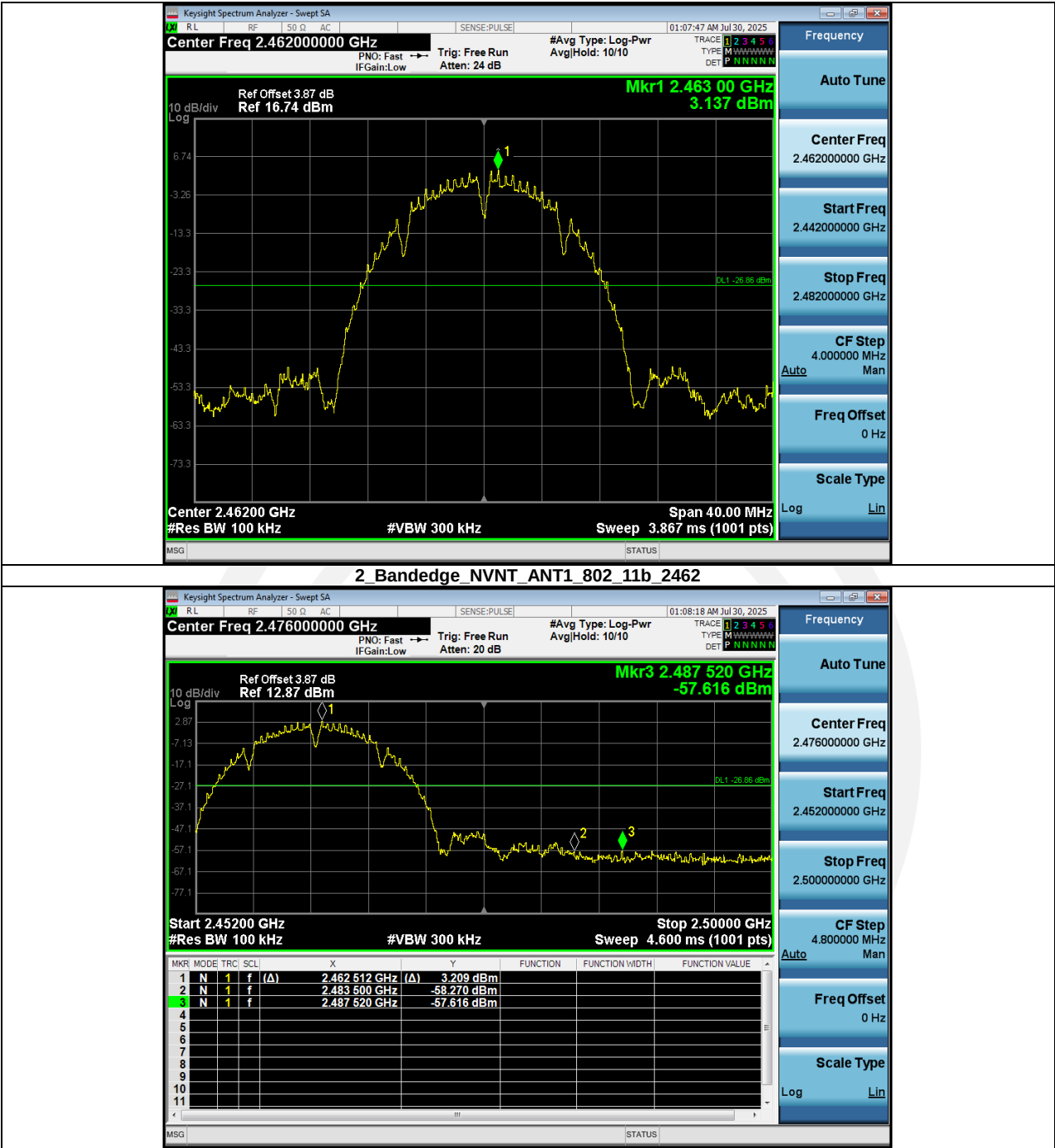
PASS.

The test results are listed in next pages.

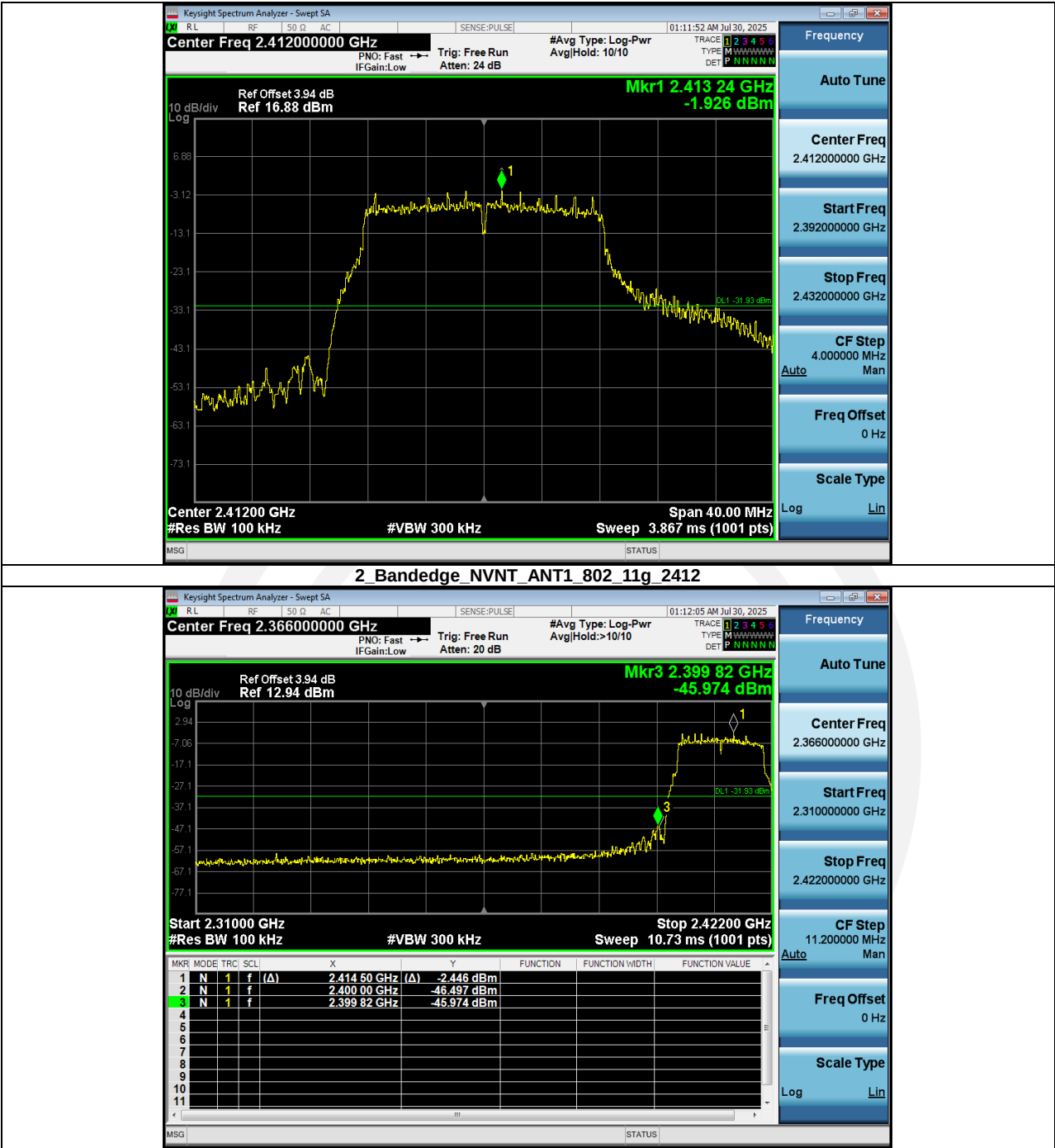
Band Edge: Pass.



1 Reference Level NVNT_ANT1_802_11b_2462

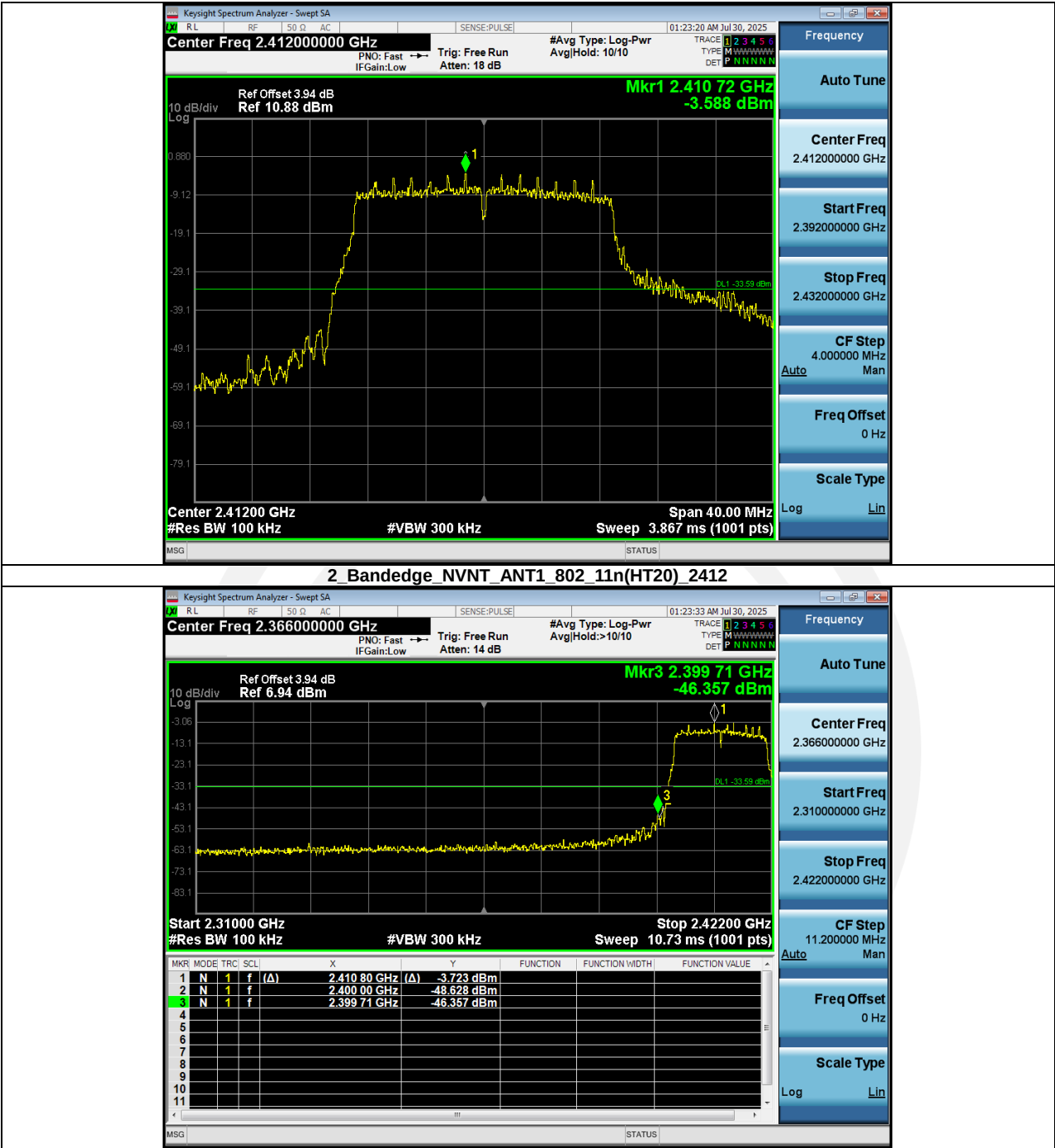


1. Reference Level NVNT_ANT1_802_11g_2412



1. Reference Level NVNT_ANT1_802_11g_2462

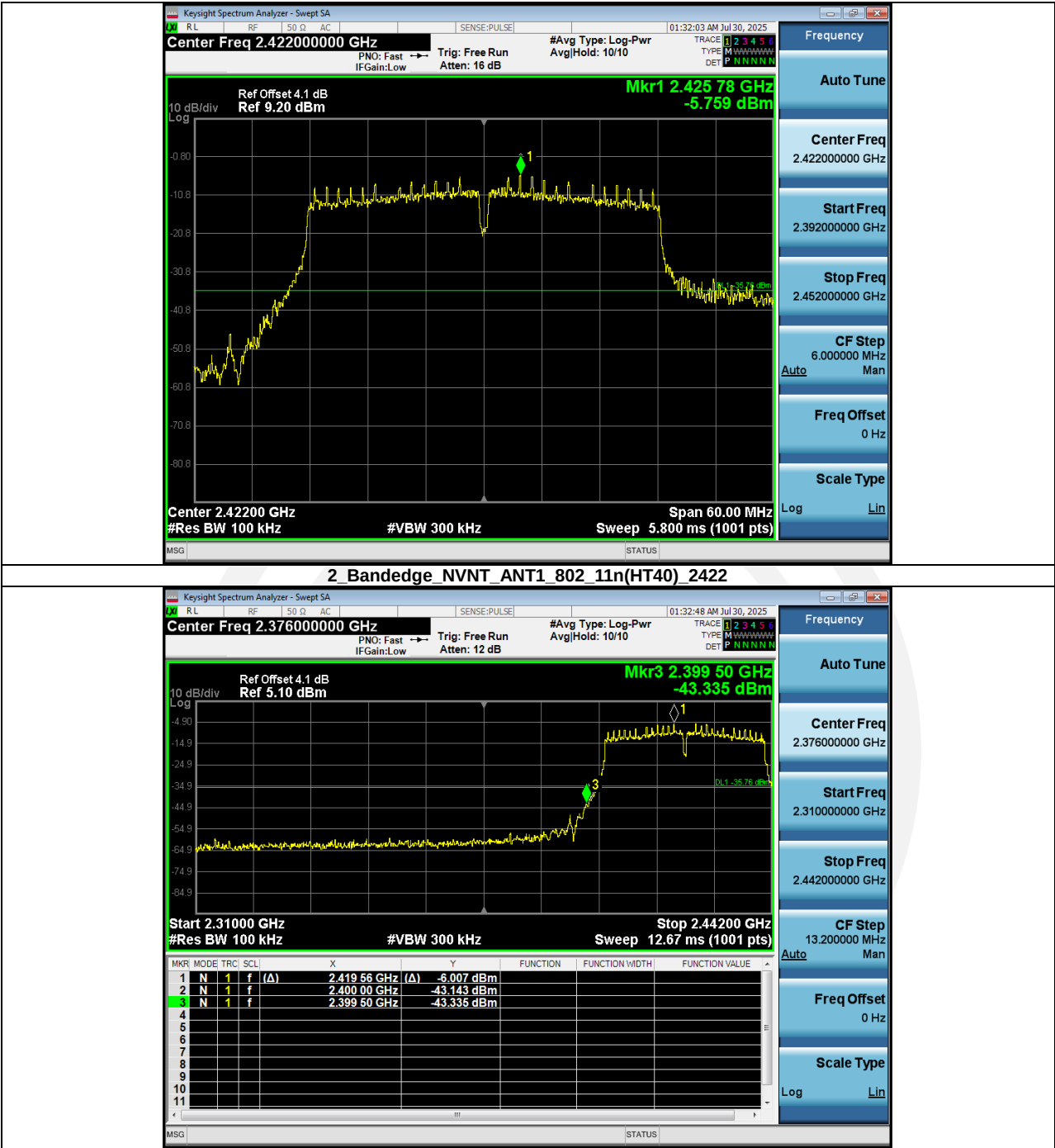


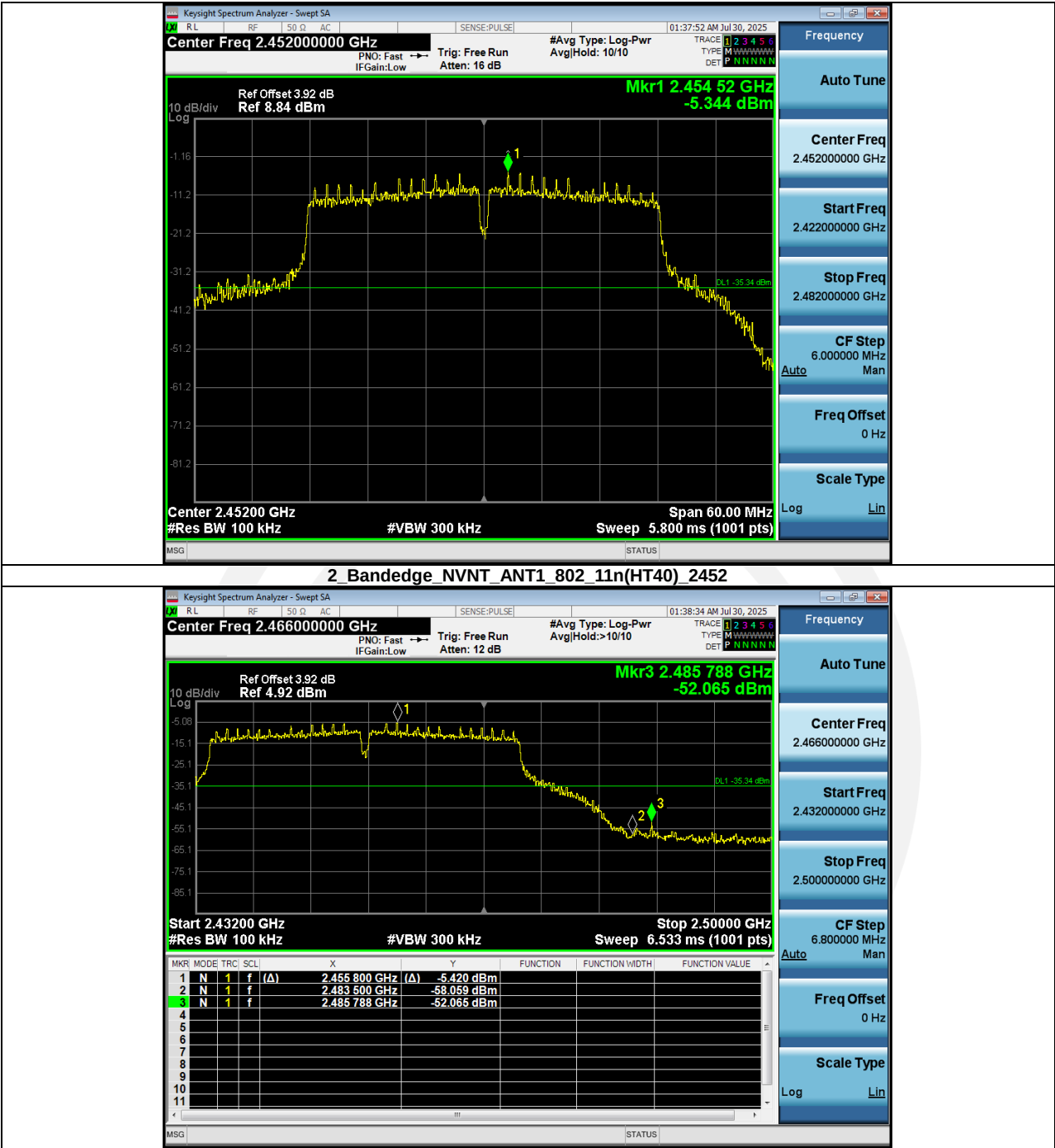


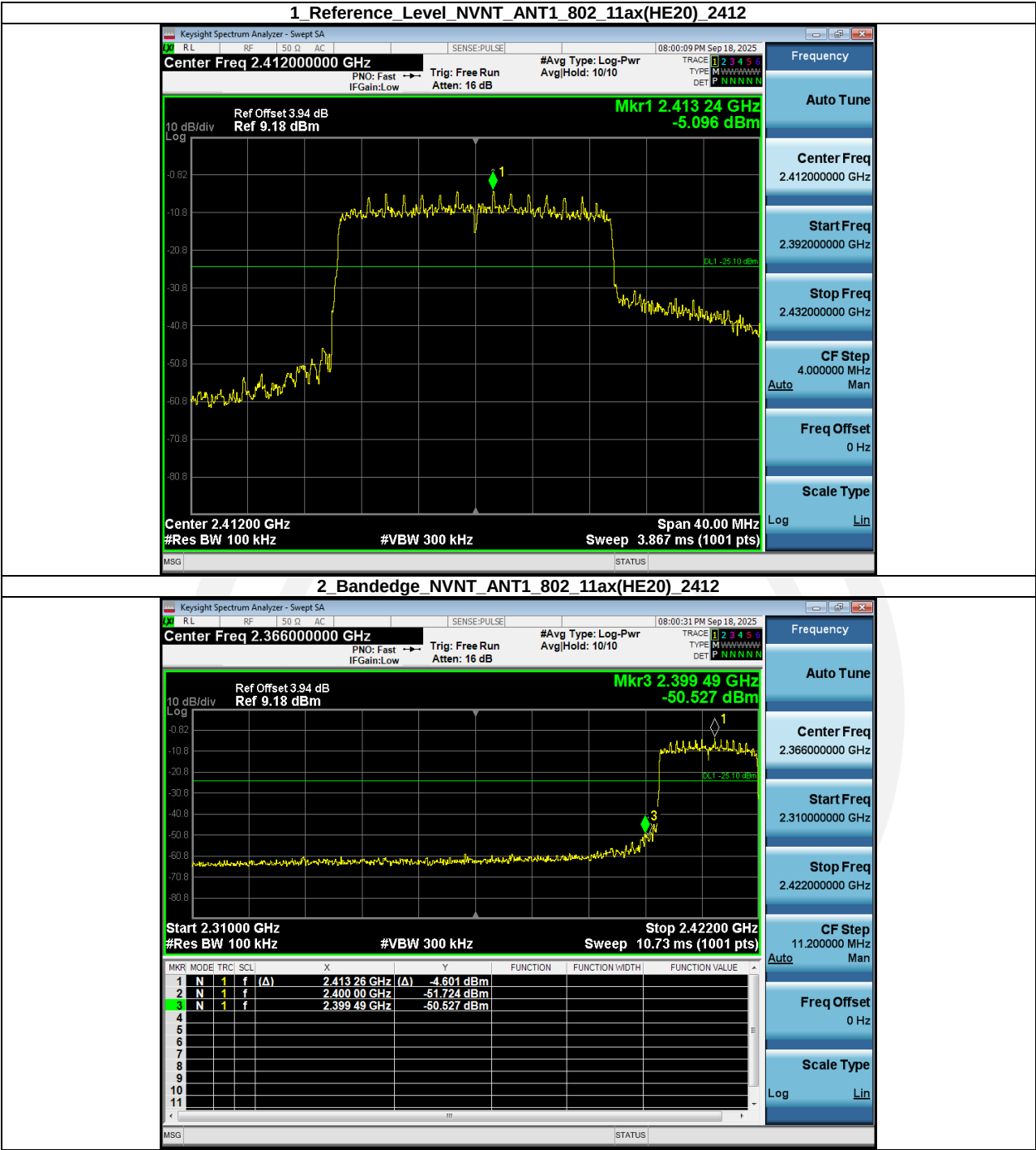
1 Reference Level NVNT_ANT1_802_11n(HT20)_2462



1. Reference Level NVNT_ANT1_802_11n(HT40)_2422

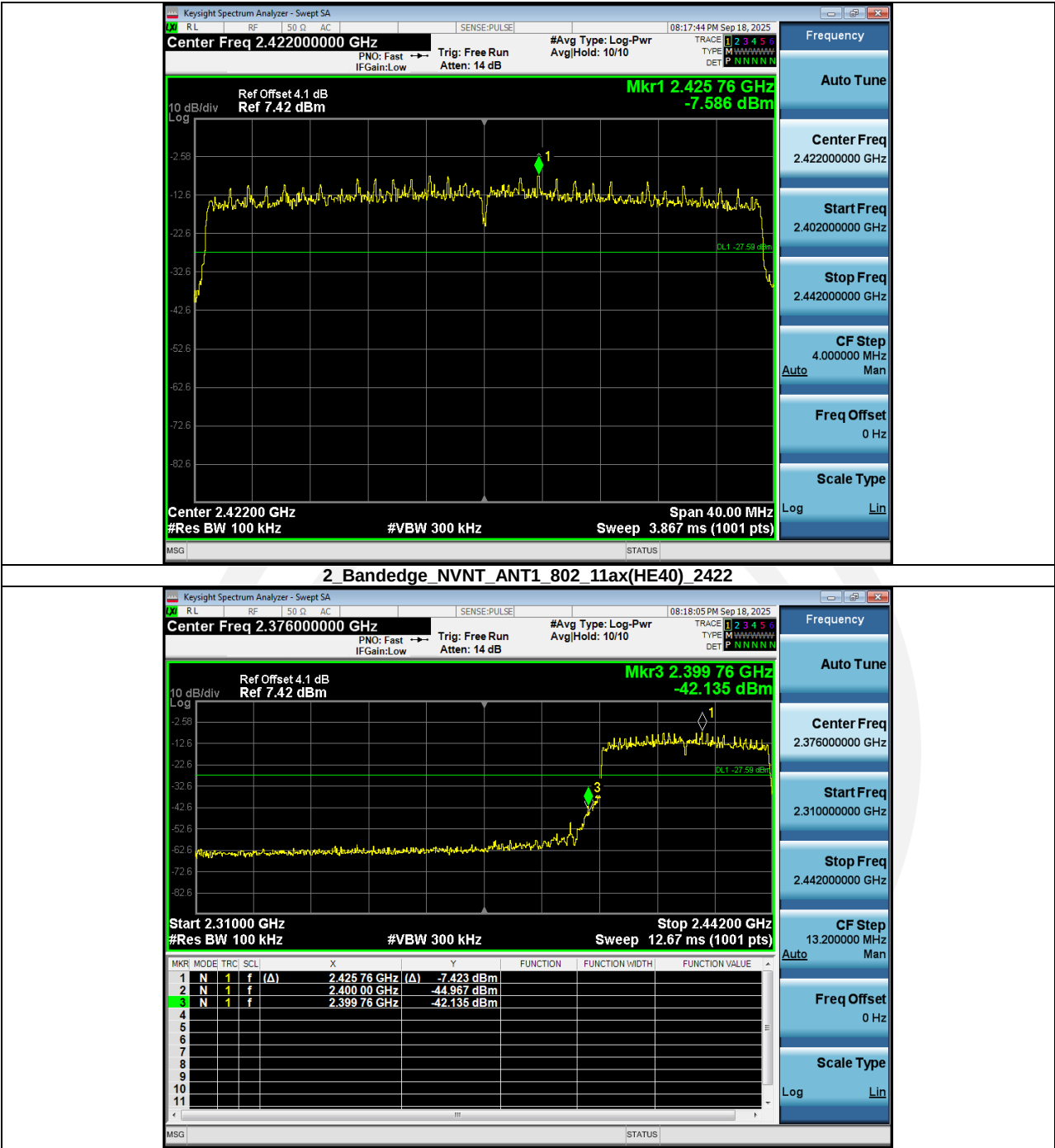




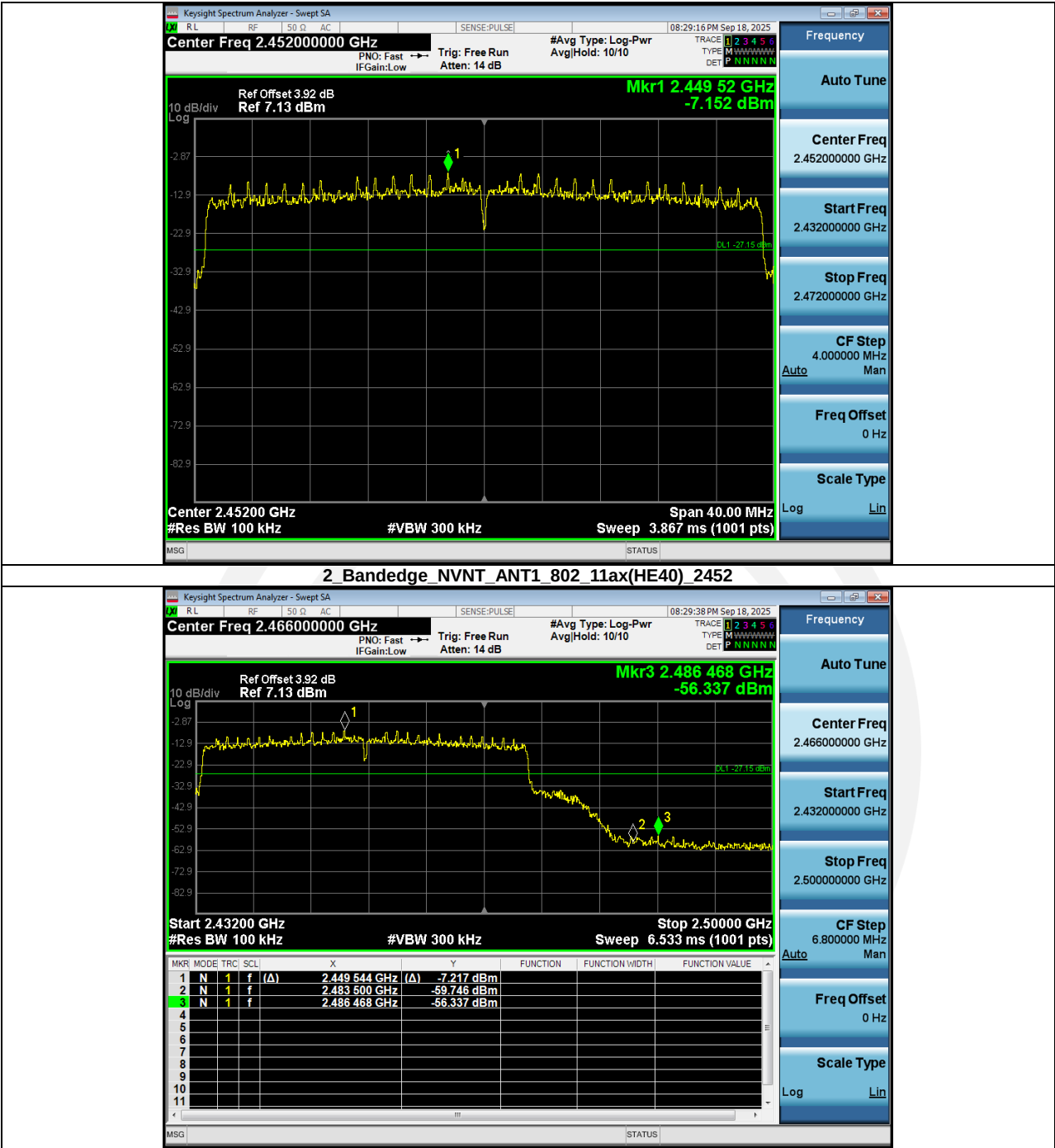


1 Reference Level NVNT_ANT1_802_11ax(HE20)_2462

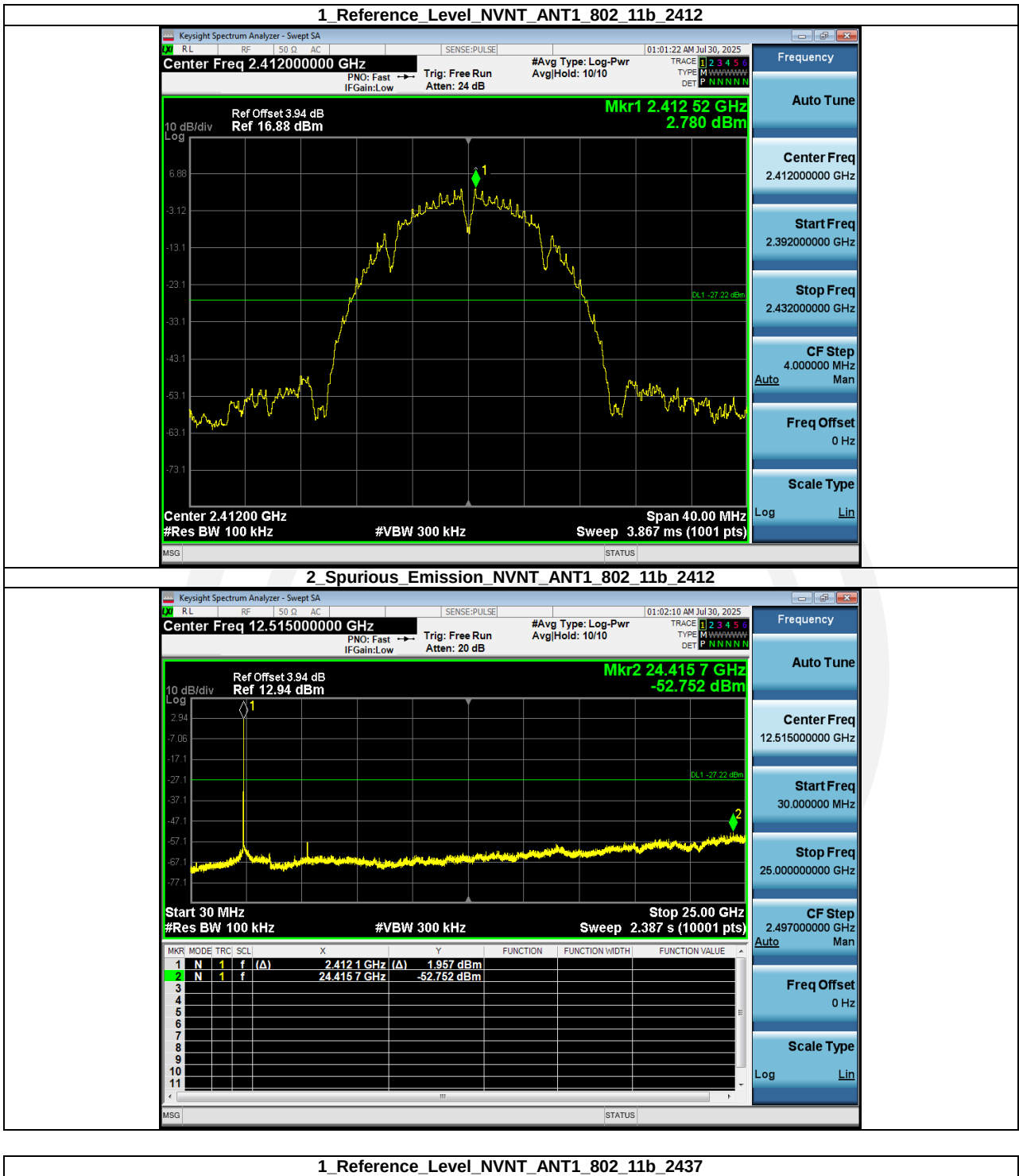


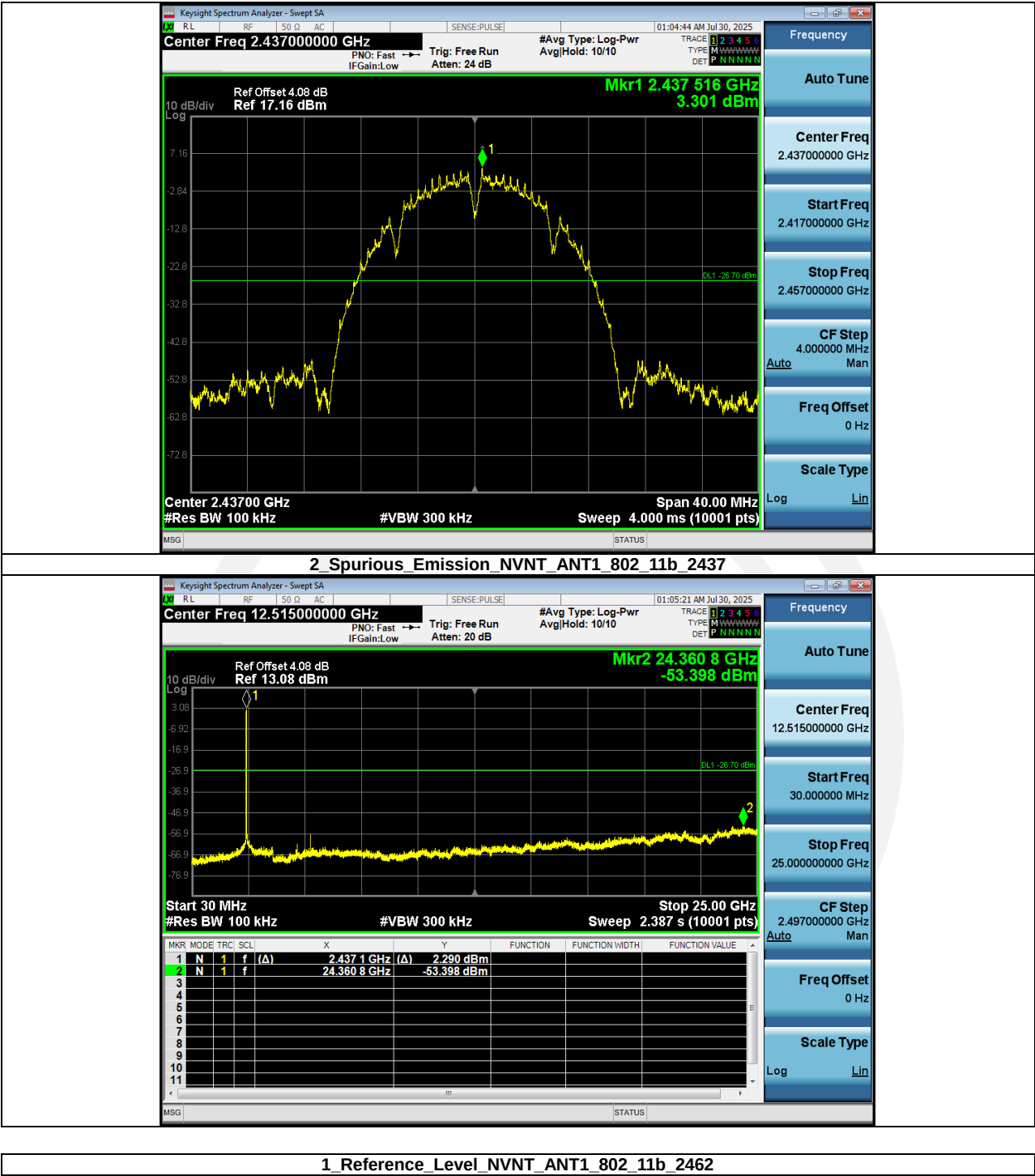


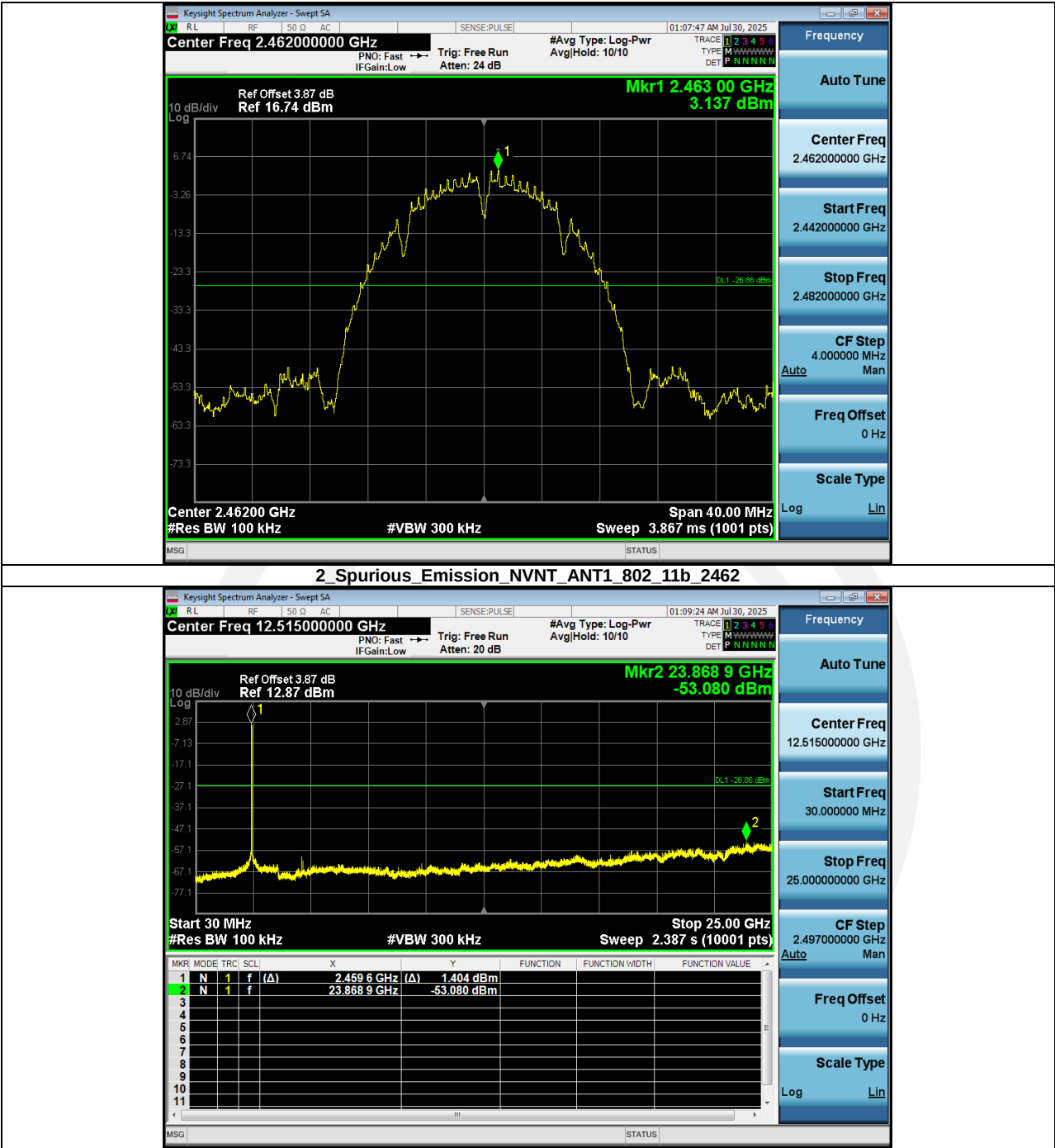
1 Reference Level NVNT ANT1_802_11ax(HE40)_2452



Conducted spurious emission: Pass.







1. Reference Level NVNT_ANT1_802_11g_2412