



FCC - TEST REPORT

Report Number : **709502405776-00B** Date of Issue: November 19, 2024

Model : Refer to page 4

Product Type : Acoustic Thermal Imager

Applicant : FOTRIC INC.

Address : No. 14, Lane 2500, Xiupu Road, Pudong, 201201 Shanghai,
PEOPLE'S REPUBLIC OF CHINA

Manufacturer : FOTRIC INC.

Address : No. 14, Lane 2500, Xiupu Road, Pudong, 201201 Shanghai,
PEOPLE'S REPUBLIC OF CHINA

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including
Appendices : 80



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2 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
709502405776-00B	First Issue	11/19/2024

3 Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
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P.R. China

Telephone: +86 21 6141 0123

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FCC Registration No.: 820234

FCC Designation Number: CN1183

ISED CAB identifier CN0101

IC Registration No.: 31668

4 Description of the Equipment under Test

Product: Acoustic Thermal Imager

Model no.:

Fotric 330MiX	Fotric 340MiX	Fotric 850MiX	Fotric V0MiX	Fotric EE0VM	Fotric EE0IM
Fotric 331MiX	Fotric 341MiX	Fotric 851MiX	Fotric V1MiX	Fotric EE1VM	Fotric EE1IM
Fotric 332MiX	Fotric 342MiX	Fotric 852MiX	Fotric V2MiX	Fotric EE2VM	Fotric EE2IM
Fotric 333MiX	Fotric 343MiX	Fotric 853MiX	Fotric V3MiX	Fotric EE3VM	Fotric EE3IM
Fotric 334MiX	Fotric 344MiX	Fotric 854MiX	Fotric V4MiX	Fotric EE4VM	Fotric EE4IM
Fotric 335MiX	Fotric 345MiX	Fotric 855MiX	Fotric V5MiX	Fotric EE5VM	Fotric EE5IM
Fotric 336MiX	Fotric 346MiX	Fotric 856MiX	Fotric V6MiX	Fotric EE6VM	Fotric EE6IM
Fotric 337MiX	Fotric 347MiX	Fotric 857MiX	Fotric V7MiX	Fotric EE7VM	Fotric EE7IM
Fotric 338MiX	Fotric 348MiX	Fotric 858MiX	Fotric V8MiX	Fotric EE8VM	Fotric EE8IM
Fotric 339MiX	Fotric 349MiX	Fotric 859MiX	Fotric V9MiX	Fotric EE9VM	Fotric EE9IM
Fotric 3310MiX	Fotric 3410MiX	Fotric 8510MiX	Fotric V10MiX	Fotric EE10VM	Fotric EE10IM
WWZDH2	WVZDH2	RUZDH2	4ZDH2	LLZ4D	LLZHD
WWYDH2	WVYDH2	RUYDH2	4YDH2	LLY4D	LLYHD
WWXDH2	WVXDH2	RUXDH2	4XDH2	LLX4D	LLXHD
WWWDH2	WVWDH2	RUWDH2	4WDH2	LLW4D	LLWHD
WWVDH2	WVVDH2	RUVDH2	4VDH2	LLV4D	LLVHD
WWUDH2	WVUDH2	RUUDH2	4UDH2	LLU4D	LLUHD
WWTDH2	WVTDH2	RUTDH2	4TDH2	LLT4D	LLTHD
WWSDH2	WVSDH2	RUSDH2	4SDH2	LLS4D	LLSHD
WWRDH2	WVRDH2	RURDH2	4RDH2	LLR4D	LLRHD
WWQDH2	WVQDH2	RUQDH2	4QDH2	LLQ4D	LLQHD
WWYZDH2	WVYZDH2	RUYZDH2	4YZDH2	LLYZ4D	LLYZHD
UniC78Mix	5CHNDH2				

FCC ID: 2AZTCFCAC2IN1F

Options and accessories: NA

Rating: DC 7.4V for Acoustic Thermal Imager
Input: AC 100-240V, 50/60Hz, Output DC 12V for adapter

RF Transmission Frequency:
For Bluetooth: 2402~2480MHz
For 2.4G Wi-Fi: 802.11b/g/n-HT20: 2412~2462 MHz
802.11n-HT40: 2422~2452 MHz
For 5G Wi-Fi: 5180~5240 MHz (U-NII-1)
5260~5320 MHz (U-NII-2A)
5500~5720 MHz (U-NII-2C)
5745~5825 MHz (U-NII-3)

No. of Operated Channel: 79 channels for Bluetooth EDR

Ch	Fre (MH)	Ch	Fre (MH)	Ch	Fre (MH)	Ch	Fre (MH)	Ch	Fre (MHz)
1	2402	17	2418	33	2434	49	2450	65	2466
2	2403	18	2419	34	2435	50	2451	66	2467
3	2404	19	2420	35	2436	51	2452	67	2468
4	2405	20	2421	36	2437	52	2453	68	2469
5	2406	21	2422	37	2438	53	2454	69	2470
6	2407	22	2423	38	2439	54	2455	70	2471
7	2408	23	2424	39	2440	55	2456	71	2472
8	2409	24	2425	40	2441	56	2457	72	2473
9	2410	25	2426	41	2442	57	2458	73	2474
10	2411	26	2427	42	2443	58	2459	74	2475
11	2412	27	2428	43	2444	59	2460	75	2476
12	2413	28	2429	44	2445	60	2461	76	2477
13	2414	29	2430	45	2446	61	2462	77	2478
14	2415	30	2431	46	2447	62	2463	78	2479
15	2416	31	2432	47	2448	63	2464	79	2480
16	2417	32	2433	48	2449	64	2465		

40 channels for Bluetooth 4.2 BLE

Ch	Fre(MHz)	Ch	Fre(MHz)	Ch	Fre(MHz)	Ch	Fre(MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

2.4GHz WIFI: 11 for 802.11b/802.11g/802.11(H20);
7 for 802.11n(HT40)

802.11b/g/n(HT20)				802.11n(HT40)			
Ch	Fre(MHz)	Ch	Fre(MHz)	Ch	Fre(MHz)	Ch	Fre(MHz)
1	2412	7	2442	3	2422	8	2447MHz
2	2417	8	2447	4	2427	9	2452MHz
3	2422	9	2452	5	2432		
4	2427	10	2457	6	2437		
5	2432	11	2462	7	2442		
6	2437						

5180~5240 MHz (U-NII-1):

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
40	5200	48	5240

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
42	5210

5260~5320 MHz (U-NII-2A)

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
56	5280	64	5320

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	62	5310

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
58	5290		

5500~5720 MHz (U-NII-2C)

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
104	5520	128	5640
108	5540	132	5660
112	5560	136	5680
116	5580	140	5700
120	5600	144	5720

6 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	126	5630
110	5550	134	5670
118	5590	142	5710

3 channels are provided for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5530	138	5690
122	5610		

5745~5825 MHz (U-NII-3): Channel 149 – 165

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	161	5805
153	5765	165	5825
157	5785		

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
155	5755

Modulation:	Bluetooth EDR FHSS: GFSK, $\pi/4$ DQPSK, 8DPSK Bluetooth 4.2+BLE DHSS: GFSK For Wi-Fi: Direct Sequence Spread Spectrum (DSSS) for 802.11b Orthogonal Frequency Division Multiplexing (OFDM) for 802.11a/b/g/n/ac
Hardware Version:	V02
Software Version:	V6.4.2
Data speed:	1. Bluetooth EDR FHSS: 1Mbps, 2Mbps, 3Mbps 2. Bluetooth 4.2+BLE DHSS: 1Mbps 3. Wi-Fi: 11b 1 ~ 11Mbps, 11g/a 6 ~ 54Mbps, 11n HT20 6.5 ~ 72.2Mbps, 11n HT 40 13.5 ~ 150Mbps, 11ac VHT40 13.5 ~ 200Mbps, 11ac VHT80 29.3 ~ 433.3Mbps
Antenna Type:	PIFA Antenna
Antenna Gain:	1.76dBi for 2.4GHz; 5.96dBi for 5GHz
Description of the EUT:	The Equipment Under Test (EUT) is an Acoustic Thermal Imager with Bluetooth and Wi-Fi Module. The EUT support Bluetooth EDR, BLE function, Wi-Fi 2.4GHz and Wi-Fi 5GHz. According to the client's declaration, all the models share the same schematic, hardware circuit, PCB layout, including RF parameters, except for the number of enabled microphone modules. We chose model Fotric V0MiX to perform all the tests and listed the worst data in this report. Only 2.4GHz Wi-Fi RF testing results were included in this report.



Test sample no.: SHA-832647-2 (RF Conducted); SHA-832647-3 (RF Radiated)

The sample's mentioned in this report is/are submitted/ supplied/ manufactured by client. The laboratory therefore assumes no responsibility for accuracy of information on the brand name, model number, origin of manufacture, consignment or any information supplied.



5 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart C 10-1-2023 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

All the test methods were according to KDB 558074 D01 15.247 Meas Guidance v05r02 Measurement Guidance and ANSI C63.10-2020.

6 Summary of Test Results

Technical Requirements						
FCC Part 15 Subpart C						
Test Condition		Pages	Test Site	Test Result		
				Pass	Fail	N/A
§15.207	Conducted emission AC power port	16-20	Site 1	☒	☐	☐
§15.247 (b) (3)	Conducted peak output power	21-31	Site 1	☒	☐	☐
§15.247(a)(1)	20dB bandwidth	---	---	☐	☐	☒
§15.247(a)(1)	Carrier frequency separation	---	---	☐	☐	☒
§15.247(a)(1)(iii)	Number of hopping frequencies	---	---	☐	☐	☒
§15.247(a)(1)(iii)	Dwell Time	---	---	☐	☐	☒
§15.247(a)(2)	6dB bandwidth	32-40	Site 1	☒	☐	☐
§15.247(e)	Power spectral density	41-45	Site 1	☒	☐	☐
§15.247(d)	Spurious RF conducted emissions	46-58	Site 1	☒	☐	☐
§15.247(d)	Band edge	59-67	Site 1	☒	☐	☐
§15.247(d) & §15.209	Spurious radiated emissions for transmitter	68-76	Site 1	☒	☐	☐
§15.203	Antenna requirement	See note 1		☒	☐	☐

Remark 1: N/A – Not Applicable.

Note 1: The EUT uses a PIFA antenna, which gain is 1.76dBi for 2.4GHz and 5.96dBi for 5GHz. In accordance to §15.203, It is considered sufficiently to comply with the provisions of this section.

7 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: 2AZTCFCAC2IN1F complies with Section 15.205, 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C rules.

This report is only for the 2.4GHz Wi-Fi test report

SUMMARY:

All tests according to the regulations cited on page 5 were

■ - Performed

□ - **Not** Performed

The Equipment under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

Sample Received Date: July 12, 2024

Testing Start Date: July 12, 2024

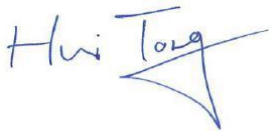
Testing End Date: October 23, 2024

-TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

Reviewed by:

Prepared by:

Tested by:



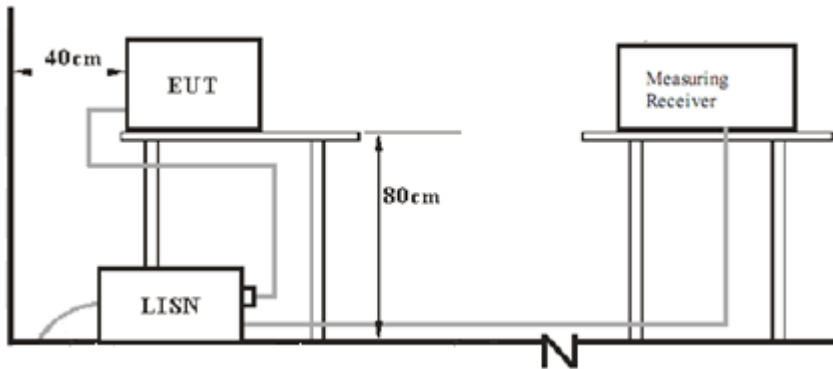
Hui TONG
Review Engineer

Wenqiang LU
Project Engineer

Chengjie GUO
Test Engineer

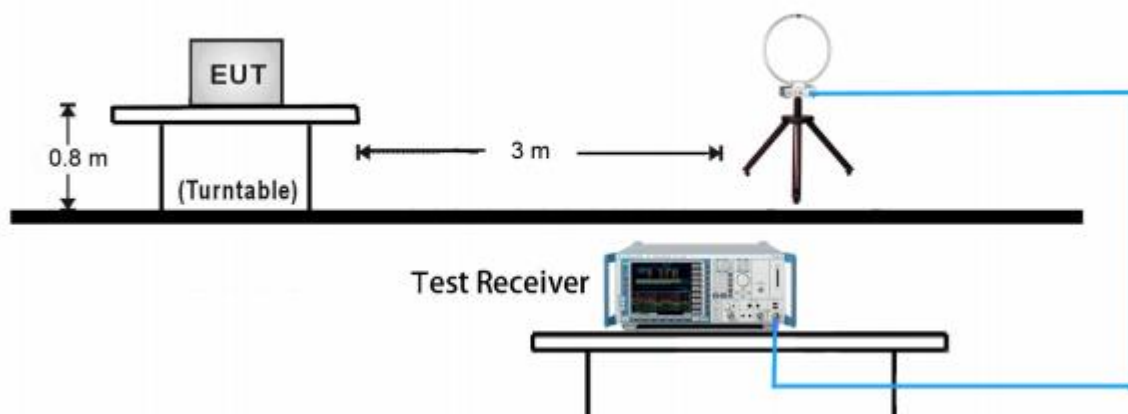
8 Test Setups

8.1 AC Power Line Conducted Emission test setups

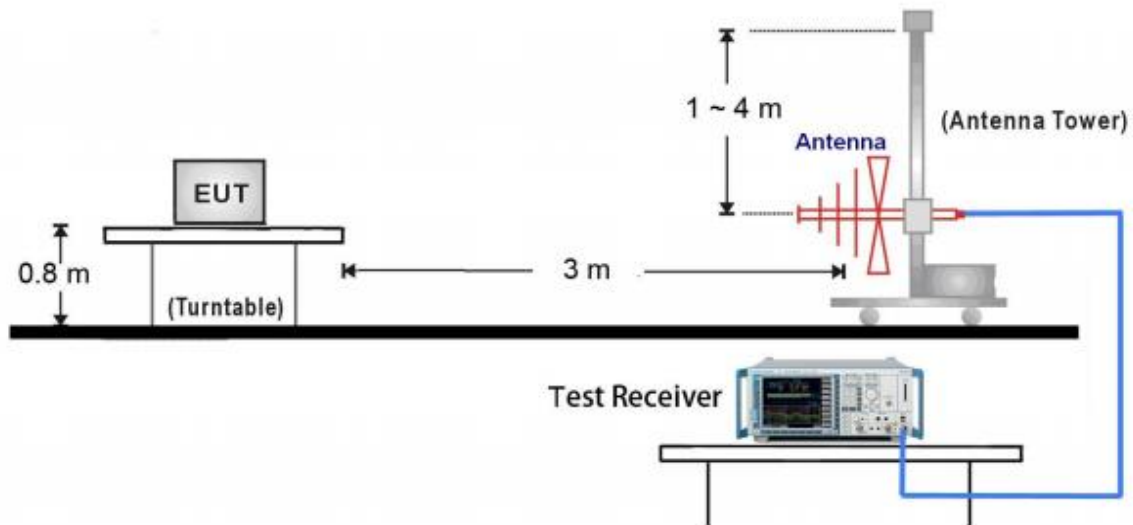


8.2 Radiated test setups

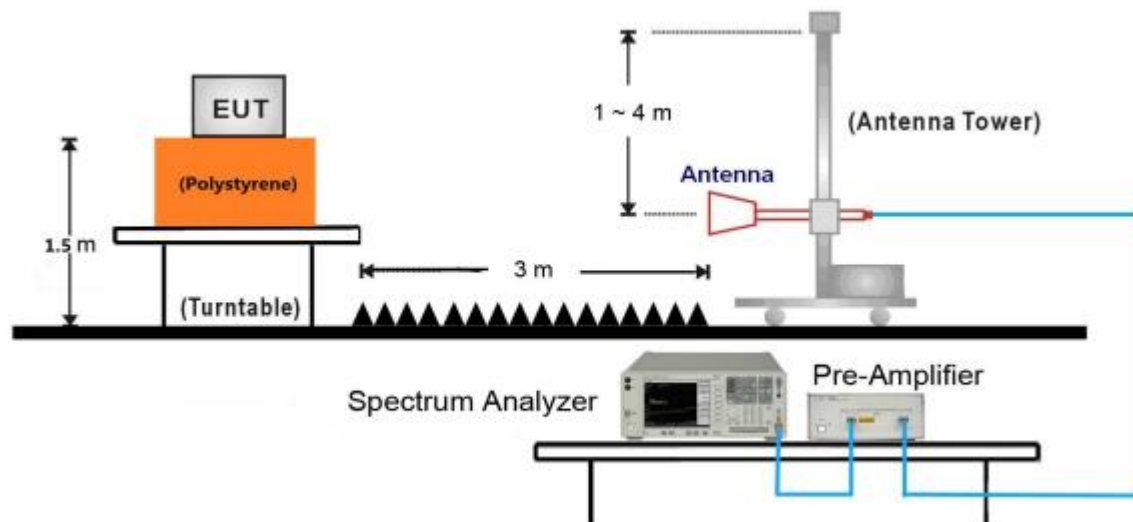
9kHz ~ 30MHz Test Setup:



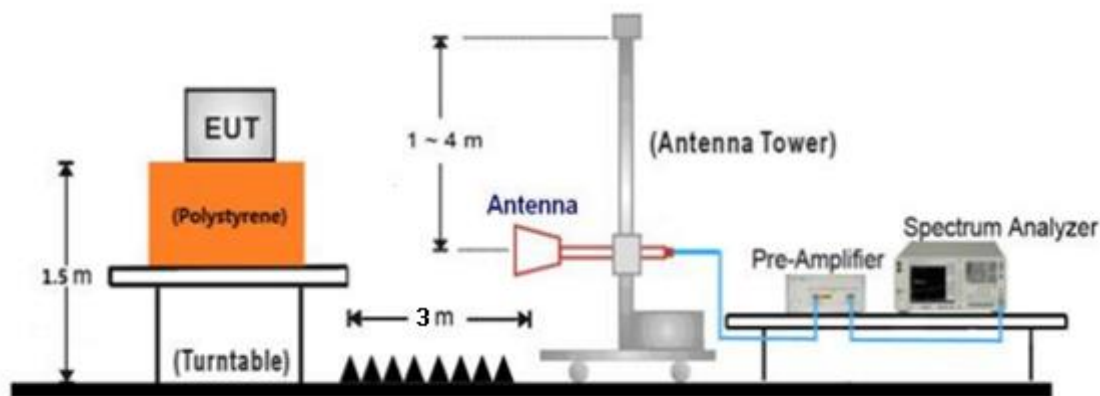
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:

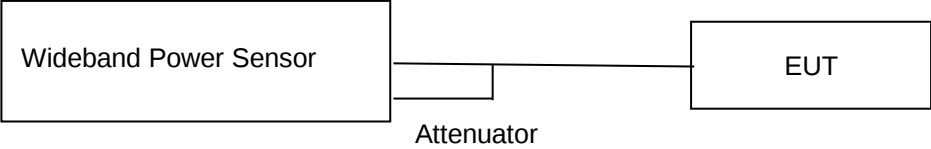


18GHz ~ 25GHz Test Setup:

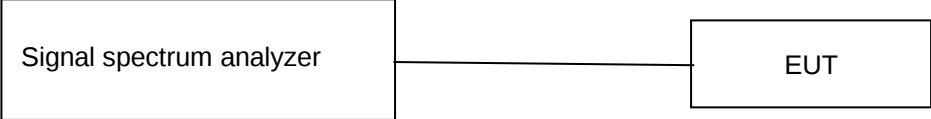


8.3 Conducted RF test setups

For Conducted peak output power



For other test items



9 Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
Notebook	Lenovo	E470	PF-OU5TS7 17/09

Test software: QRCT.exe

Test Mode Applicability and Tested Channel Detail:

Mode	Tested Channel	Data Rate (Mbps)	Modulation	Index Value (Power level setting)
802.11b	1	1	CCK	17
	6	1	CCK	17
	11	1	CCK	17
802.11g	1	6	OFDM	13
	6	6	OFDM	13
	11	6	OFDM	13
802.11n HT20	1	MCS0	OFDM	12
	6	MCS0	OFDM	12
	11	MCS0	OFDM	12
802.11n HT40	3	MCS0	OFDM	11
	6	MCS0	OFDM	11
	9	MCS0	OFDM	11

Non-hopping mode: The system was configured to operate at a signal channel transmitting. The test software allows the configuration and operation at the worst-case duty and the highest transmit power.

10 Technical Requirement

10.1 Conducted Emission

Test Method

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. An EMI test receiver is used to test the emissions from both sides of AC line

Limit

According to §15.207, conducted emissions limit as below:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

*Decreasing linearly with logarithm of the frequency

Conducted Emission

Conducted Emission worse case test result as below:

150k-30MHz Conducted Emission Test

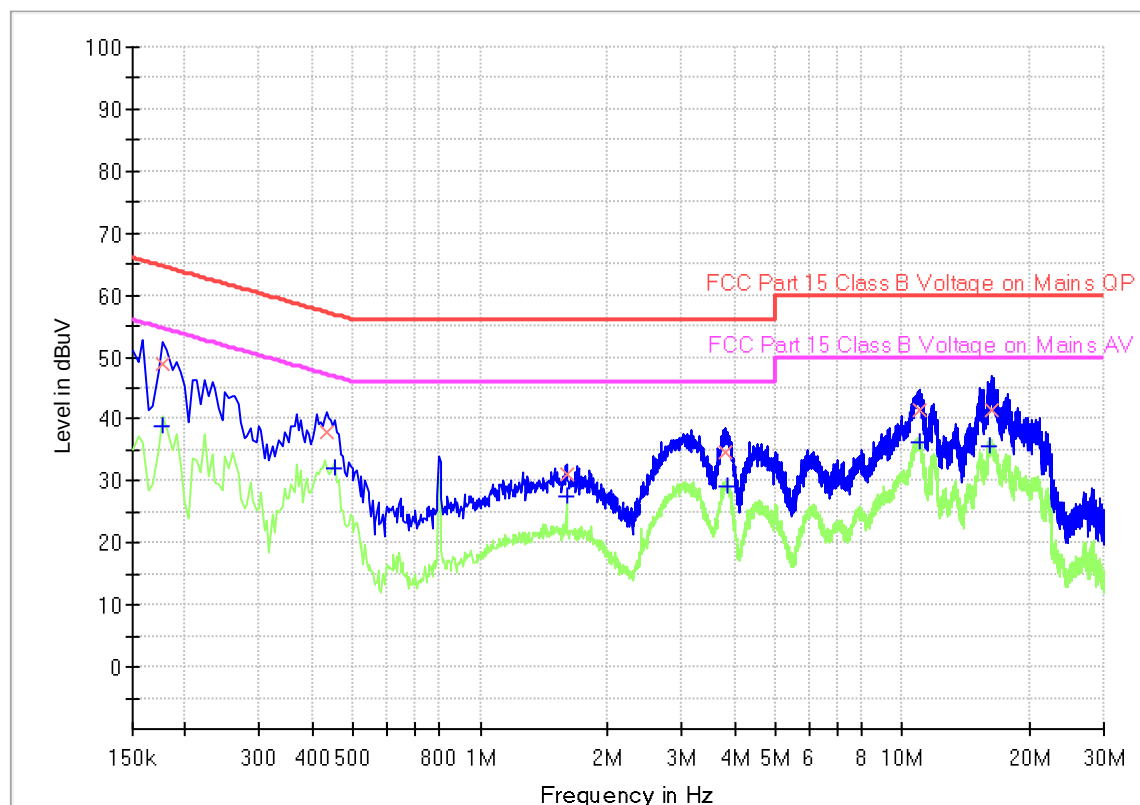
EUT Information

EUT Name: Acoustic Thermal Imager
 Model: Fotric V0MiX
 Client: FOTRIC INC
 Op Cond: Power on, TX_2437 at 802.11n HT40, AC 120V/60Hz (worse case)
 Operator: Chengjie GUO
 Standard: FCC Part 15.207(a)
 Comment: Phase L
 Sample No.: SHA-832647-2

Scan Setup: Voltage with 2-Line-LISN pre [EMI conducted]

Hardware Setup: Voltage with 2-Line-LISN
 Receiver: [ESR 3]
 Level Unit: dBuV

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamplifier
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0.02 s	0 dB
150 kHz - 30 MHz	4.5 kHz	PK+; AVG	9 kHz	0.01 s	0 dB



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.177000	---	38.81	54.63	15.82	1000.0	9.000	L1	19.4
0.177000	48.98	---	64.63	15.65	1000.0	9.000	L1	19.4
0.433500	37.90	---	57.19	19.29	1000.0	9.000	L1	19.5
0.451500	---	32.03	46.85	14.82	1000.0	9.000	L1	19.5
1.599000	---	27.58	46.00	18.42	1000.0	9.000	L1	19.5
1.599000	31.20	---	56.00	24.80	1000.0	9.000	L1	19.5
3.822000	34.70	---	56.00	21.30	1000.0	9.000	L1	19.6
3.849000	---	29.26	46.00	16.74	1000.0	9.000	L1	19.6
10.927500	---	36.31	50.00	13.69	1000.0	9.000	L1	19.8
10.941000	41.33	---	60.00	18.67	1000.0	9.000	L1	19.8
16.116000	---	35.70	50.00	14.30	1000.0	9.000	L1	20.1
16.251000	41.39	---	60.00	18.61	1000.0	9.000	L1	20.1

Note 1: Measure Level = Reading Level + Factor

Factor = Cable Loss + LISN Factor + 10dB Attenuator

(The Reading Level is recorded by software which is not shown in the sheet)

150k-30MHz Conducted Emission Test

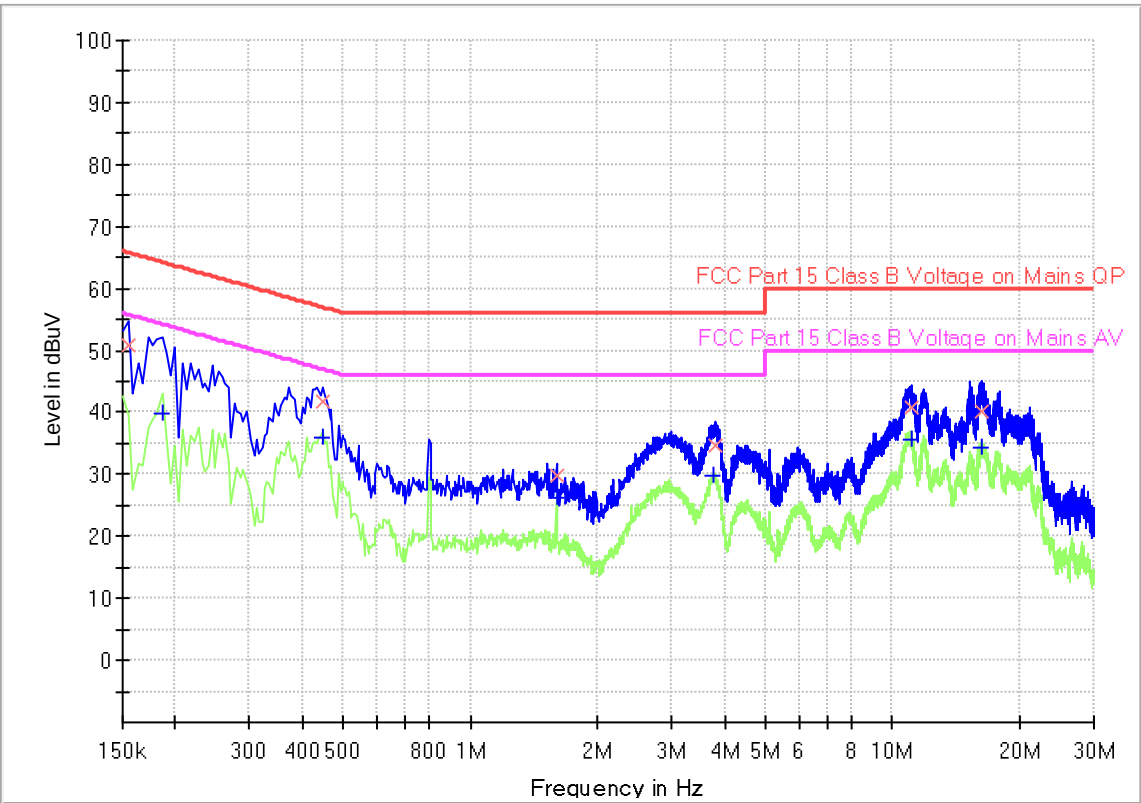
EUT Information

EUT Name:	Acoustic Thermal Imager
Model	Fotric V0MiX
Client:	FOTRIC INC
Op Cond	Power on, TX_2437 at 802.11n HT40, AC 120V/60Hz (worse case)
Operator:	Chengjie GUO
Standard	FCC Part 15.207(a)
Comment:	Phase N
Sample No.:	SHA-832647-2

Scan Setup: Voltage with 2-Line-LISN pre [EMI conducted]

Hardware Setup:	Voltage with 2-Line-LISN
Receiver:	[ESR 3]
Level Unit:	dBuV

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamplifier
9 kHz - 150 kHz	100 Hz	PK+	200 Hz	0.02 s	0 dB
150 kHz - 30 MHz	4.5 kHz	PK+; AVG	9 kHz	0.01 s	0 dB



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.154500	50.94	---	65.75	14.81	1000.0	9.000	N	19.4
0.186000	---	39.92	54.21	14.29	1000.0	9.000	N	19.4
0.447000	---	35.98	46.93	10.95	1000.0	9.000	N	19.5
0.447000	41.63	---	56.93	15.30	1000.0	9.000	N	19.5
1.599000	---	26.16	46.00	19.84	1000.0	9.000	N	19.5
1.599000	29.91	---	56.00	26.09	1000.0	9.000	N	19.5
3.772500	---	29.65	46.00	16.35	1000.0	9.000	N	19.6
3.786000	34.61	---	56.00	21.39	1000.0	9.000	N	19.6
11.058000	40.65	---	60.00	19.35	1000.0	9.000	N	19.7
11.058000	---	35.61	50.00	14.39	1000.0	9.000	N	19.7
16.188000	---	34.29	50.00	15.71	1000.0	9.000	N	20.0
16.219500	40.17	---	60.00	19.83	1000.0	9.000	N	20.0

Note 1: Measure Level = Reading Level + Factor

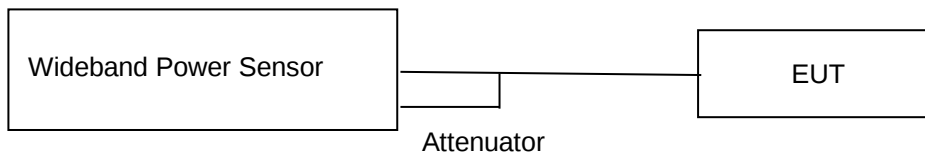
Factor = Cable Loss + LISN Factor + 10dB Attenuator

(The Reading Level is recorded by software which is not shown in the sheet)

10.2 Conducted peak output power

Test Method (1)

- 1) The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.
- 2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
- 3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- 4) Measure the peak power of the transmitter. This measurement is a peak over both the ON and OFF periods of the transmitter.



Wideband Power Sensor conducted test setup

Test Method (2)

1. Measure the duty cycle D of the transmitter output signal.
2. Set span to at least 1.5 times the OBW.
3. Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz.
4. Set VBW $\geq [3 \times \text{RBW}]$.
5. Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = RMS (i.e., power averaging), if available. Otherwise, use the sample detector mode.
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
10. Compute power by integrating the spectrum across the OBW of the signal using the instrument’s band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
11. Add $[10 \log (1 / D)]$, where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission).

Limits

According to §15.247 (b) (3) conducted peak output power limit as below:

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤ 1	≤ 30

Test result (conducted peak) as below:

802.11b

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2412MHz	18.47	Pass
Middle channel 2437MHz	19.38	Pass
High channel 2462MHz	19.21	Pass

802.11g

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2412MHz	20.22	Pass
Middle channel 2437MHz	21.44	Pass
High channel 2462MHz	20.89	Pass

802.11n(HT20)

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2412MHz	19.74	Pass
Middle channel 2437MHz	20.63	Pass
High channel 2462MHz	20.37	Pass

i802.11n(HT40)

Frequency (MHz)	Conducted Peak Output Power(dBm)	Result
Low channel 2422MHz	19.81	Pass
Middle channel 2437MHz	20.47	Pass
High channel 2452MHz	20.23	Pass



Test result (average power) as below table:

802.11b

Frequency (MHz)	Duty cycle Factor (dB)	Conducted Power (dBm)	Total Power(average) (dBm)	Result
Low channel 2412MHz	0.1	15.15	15.25	Pass
Middle channel 2437MHz	0.1	15.93	16.03	Pass
High channel 2462MHz	0.1	16.36	16.46	Pass

802.11g

Frequency (MHz)	Duty cycle Factor (dB)	Conducted Power (dBm)	Total Power(average) (dBm)	Result
Low channel 2412MHz	0.59	9.99	10.58	Pass
Middle channel 2437MHz	0.59	10.74	11.33	Pass
High channel 2462MHz	0.59	10.92	11.51	Pass

802.11n(HT20)

Frequency (MHz)	Duty cycle Factor (dB)	Conducted Power (dBm)	Total Power(average) (dBm)	Result
Low channel 2412MHz	0.63	9.42	10.05	Pass
Middle channel 2437MHz	0.63	9.58	10.21	Pass
High channel 2462MHz	0.63	9.91	10.54	Pass

802.11n(HT40)

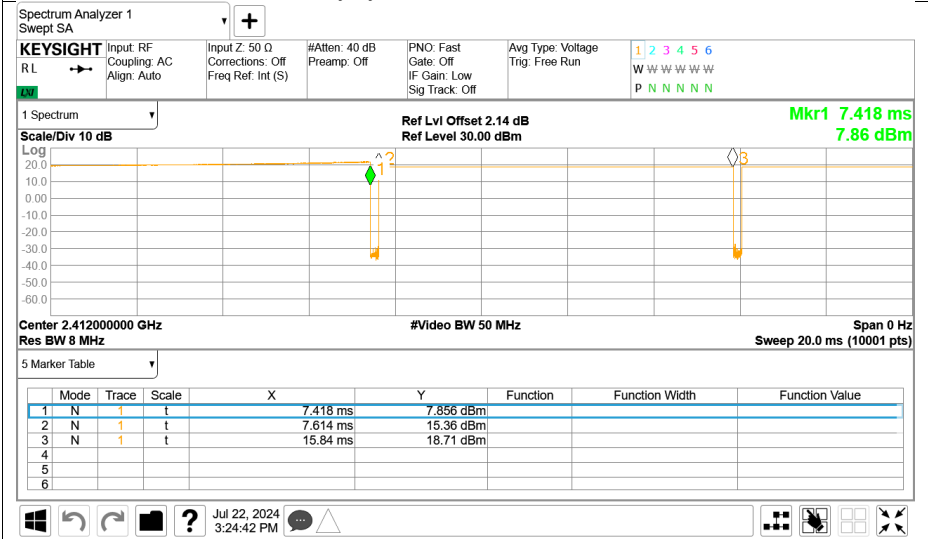
Frequency (MHz)	Duty cycle Factor (dB)	Conducted Power (dBm)	Total Power(average) (dBm)	Result
Low channel 2422MHz	1.18	7.62	8.8	Pass
Middle channel 2437MHz	1.17	8.53	9.7	Pass
High channel 2452MHz	1.17	8.25	9.42	Pass



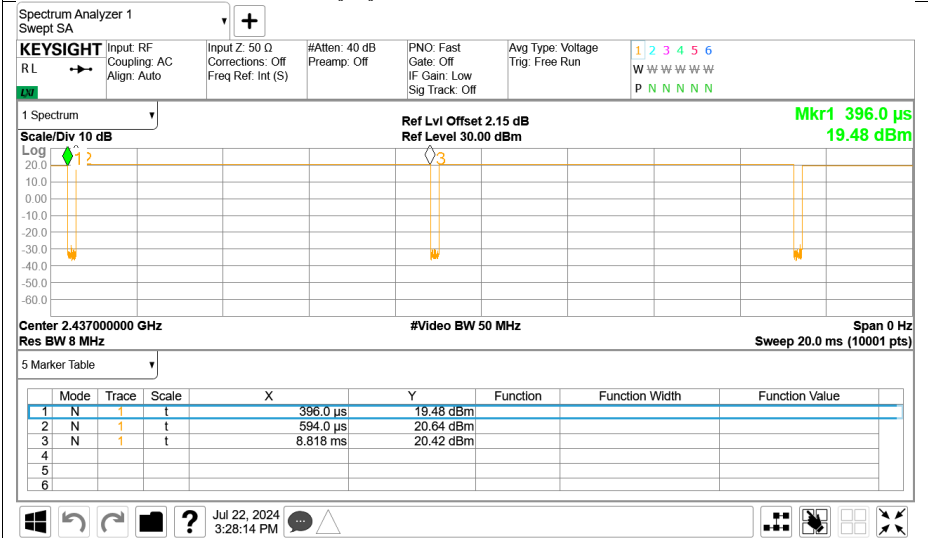
Duty cycle

Test Graphs

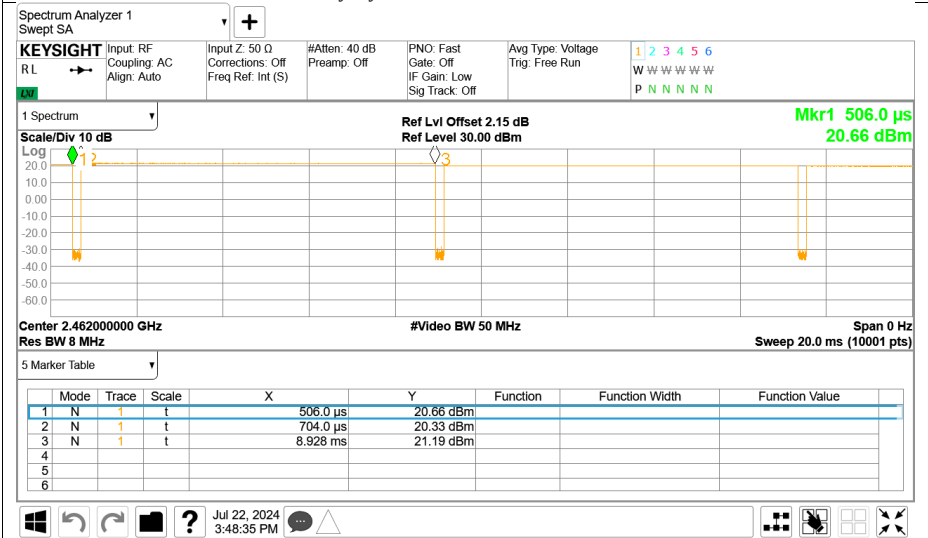
Duty Cycle NVNT b 2412MHz Ant1

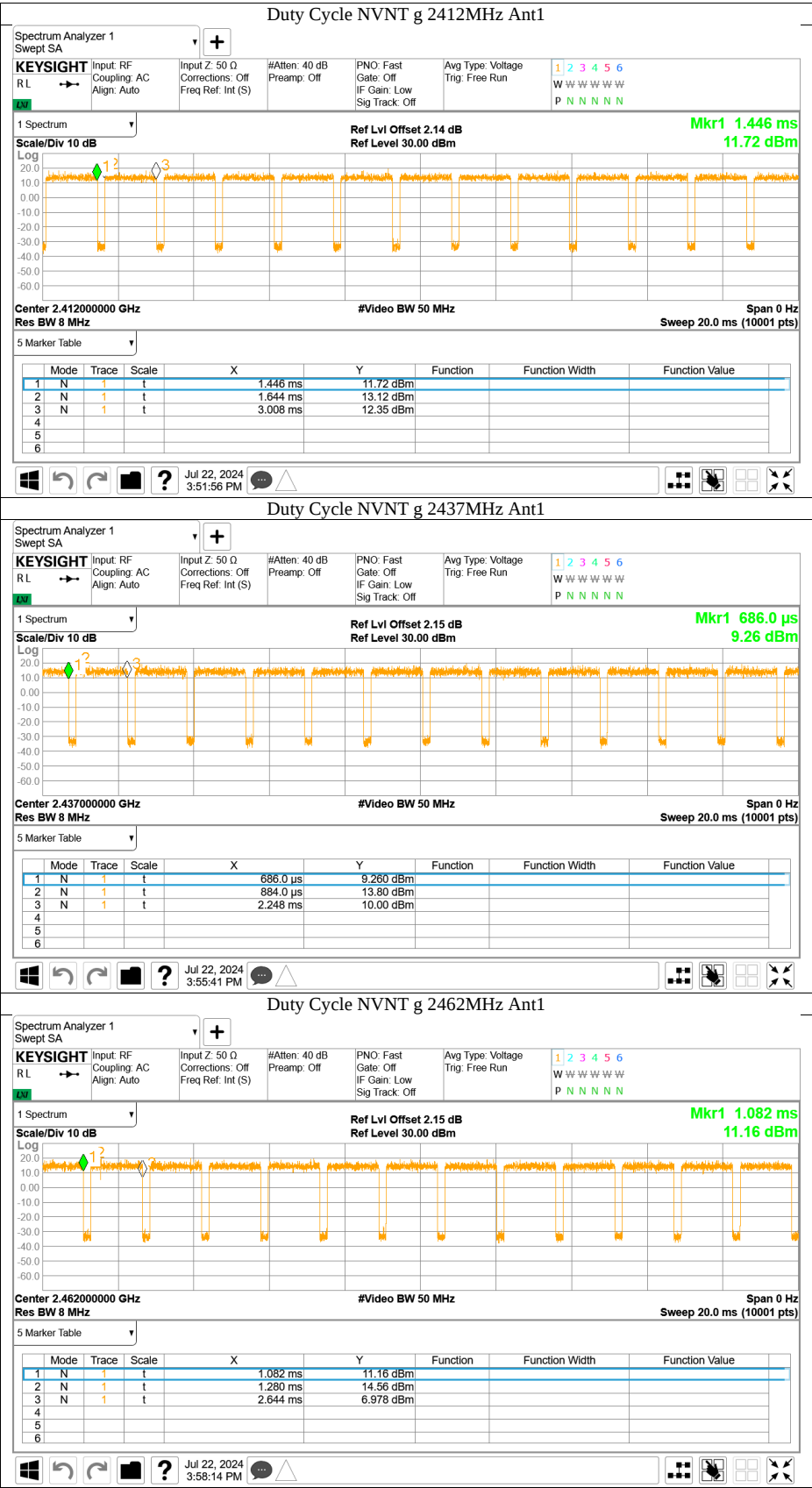


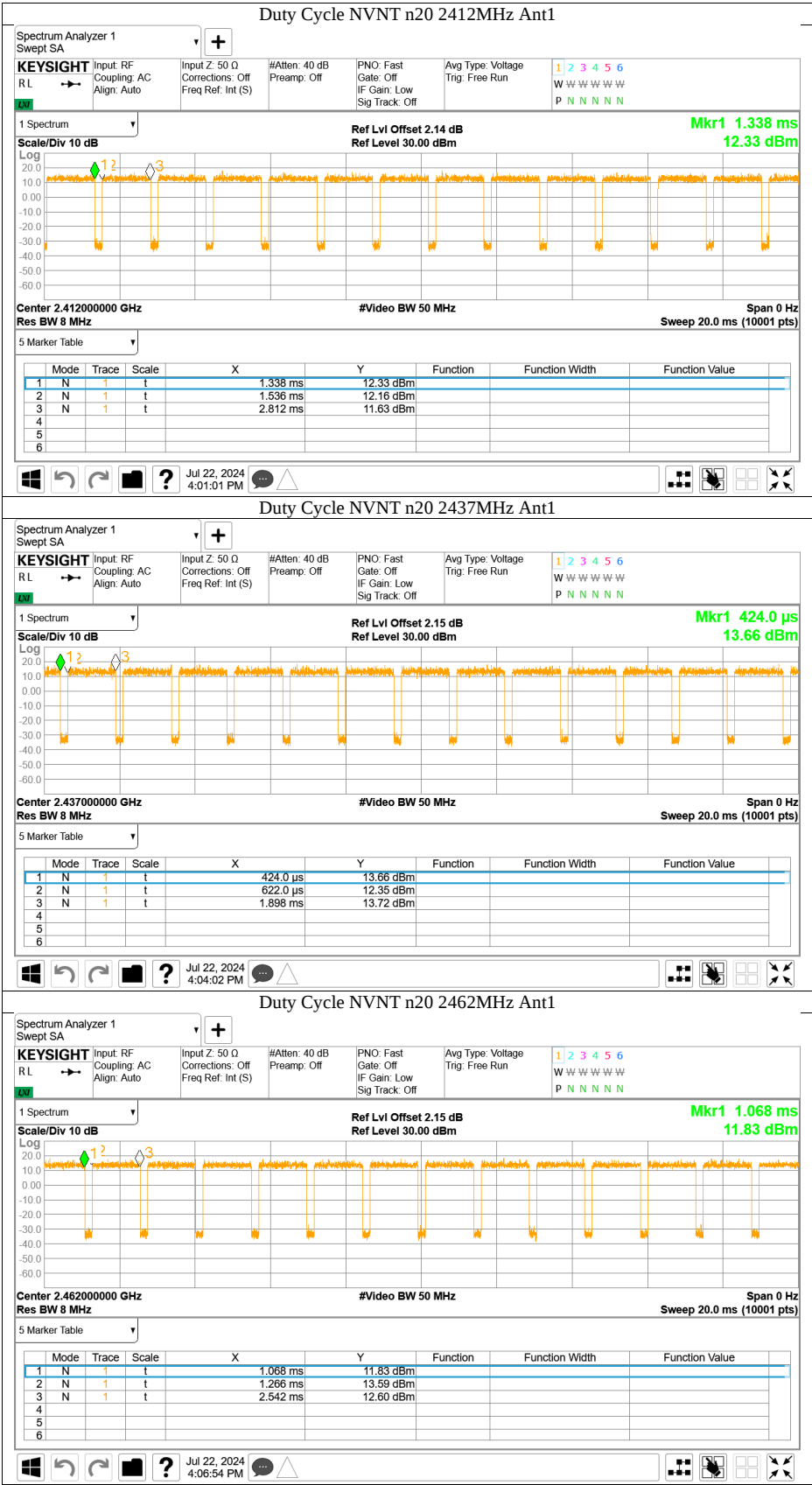
Duty Cycle NVNT b 2437MHz Ant1

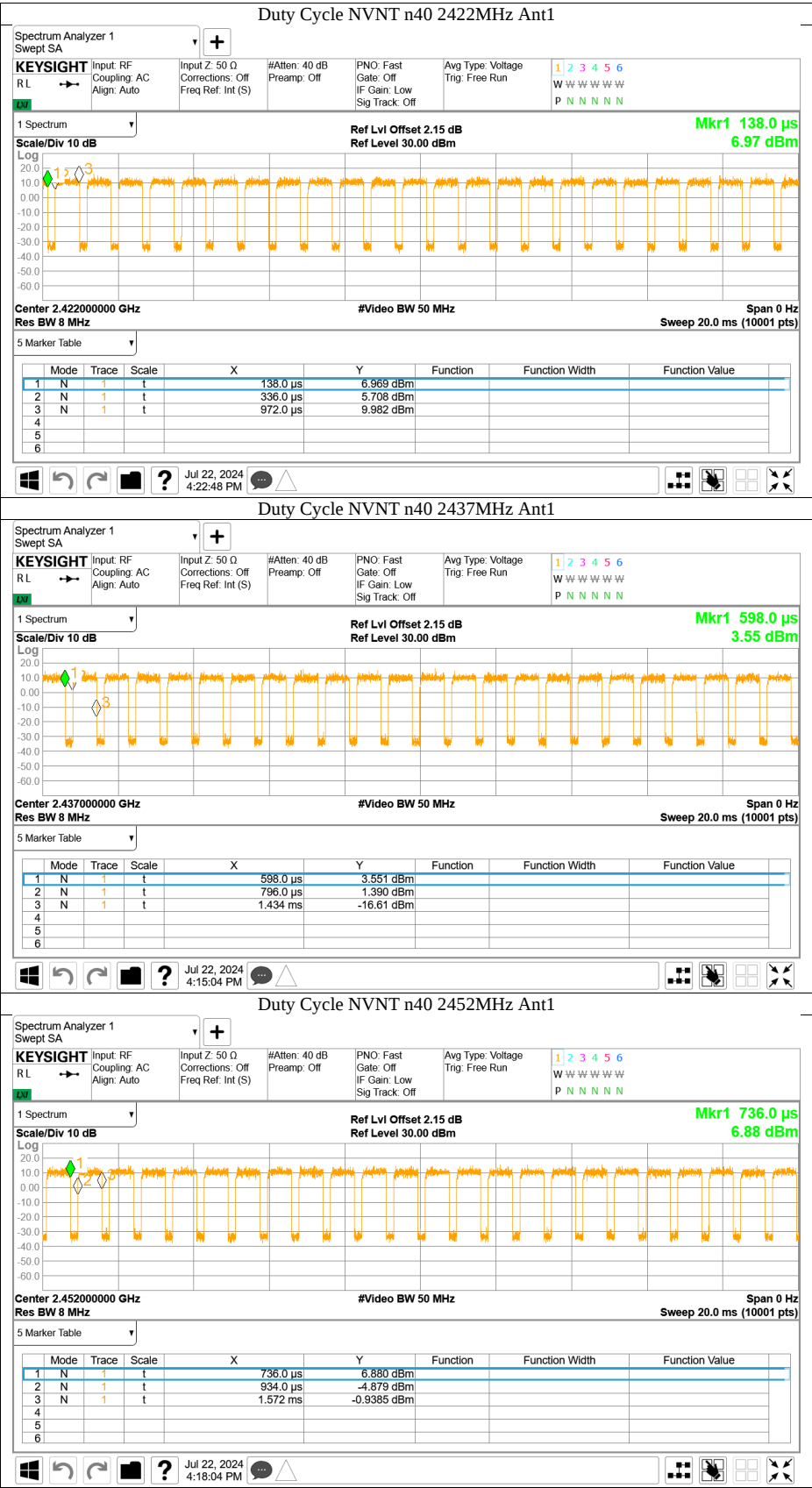


Duty Cycle NVNT b 2462MHz Ant1



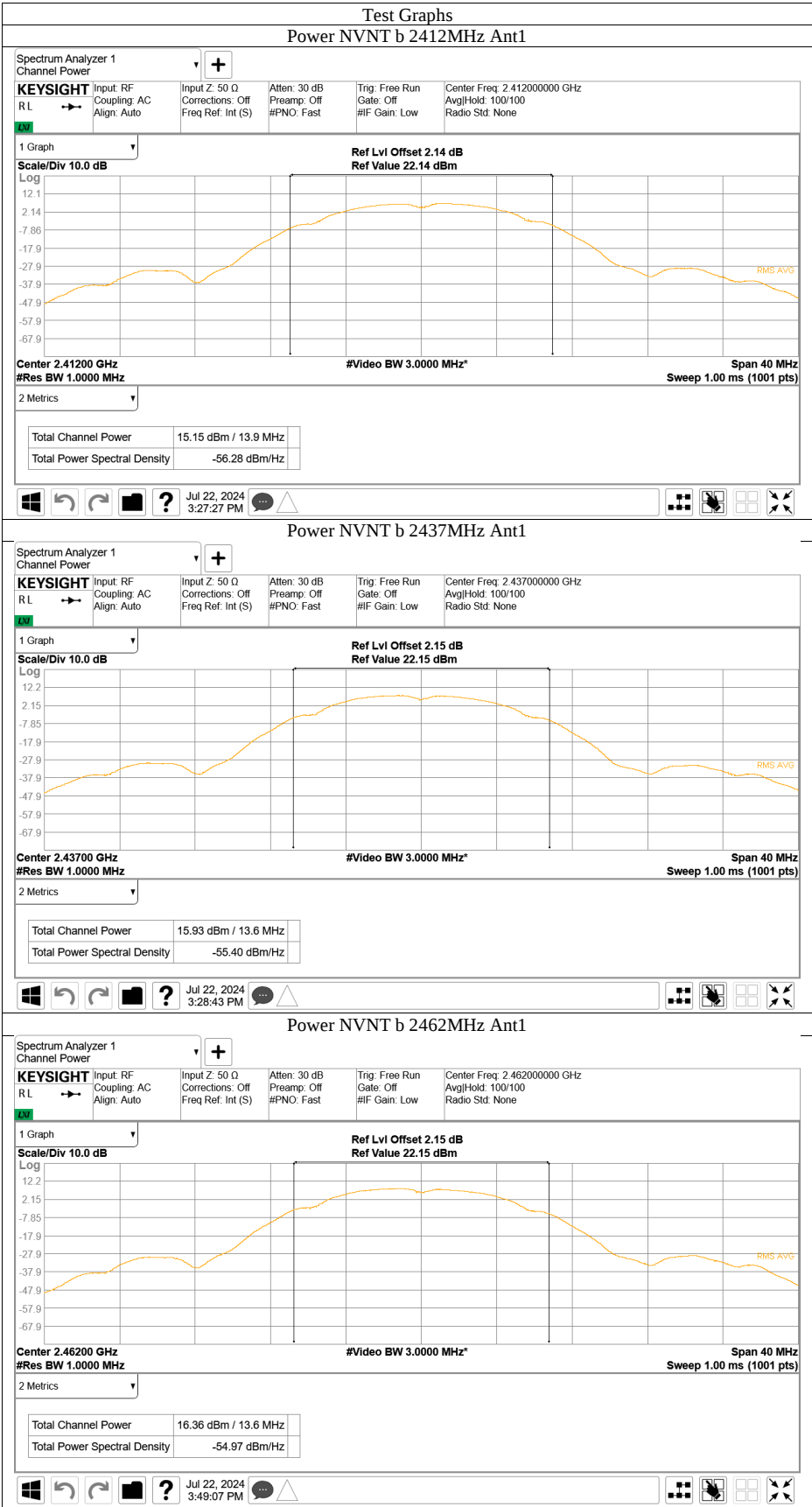


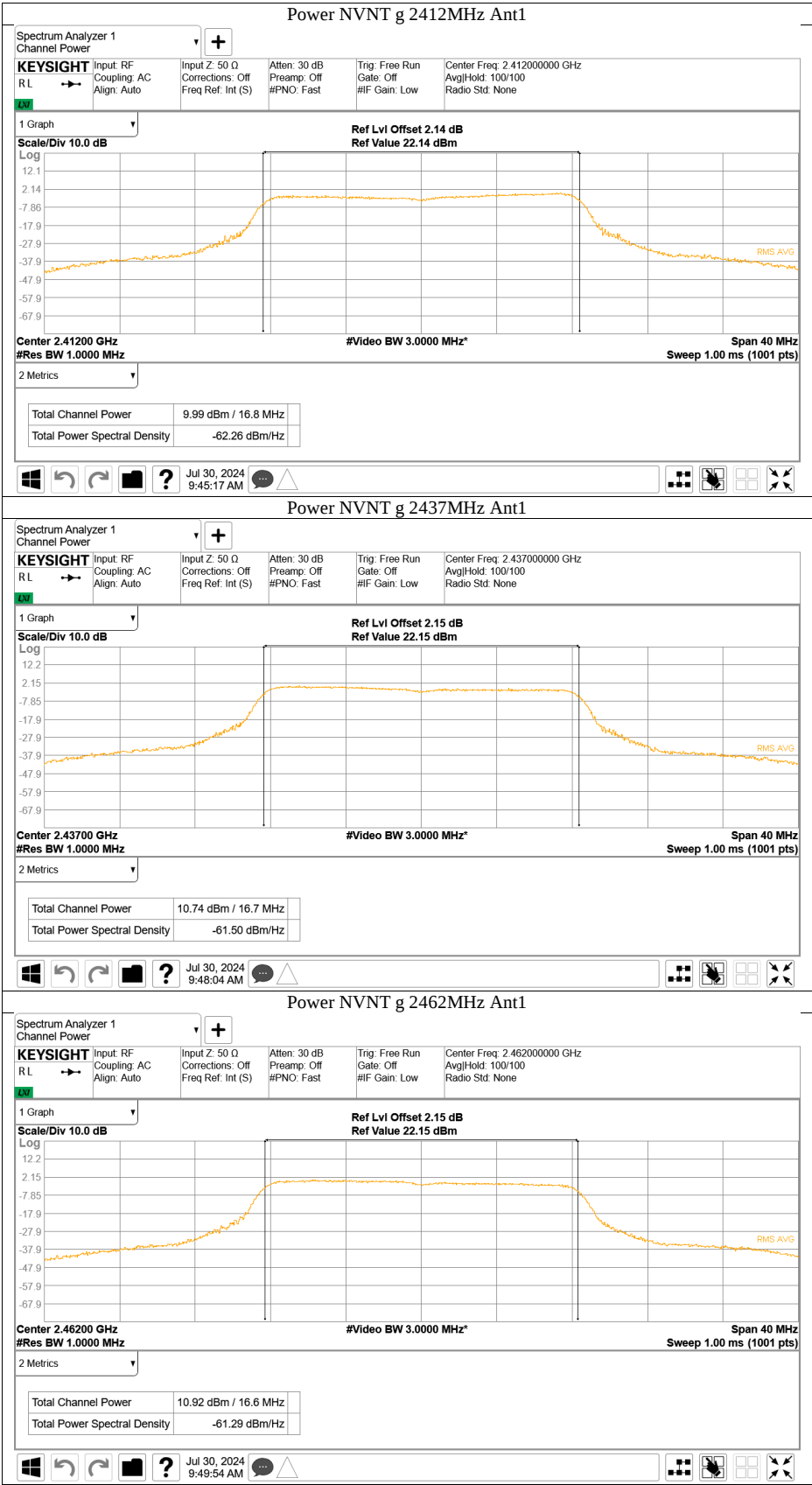


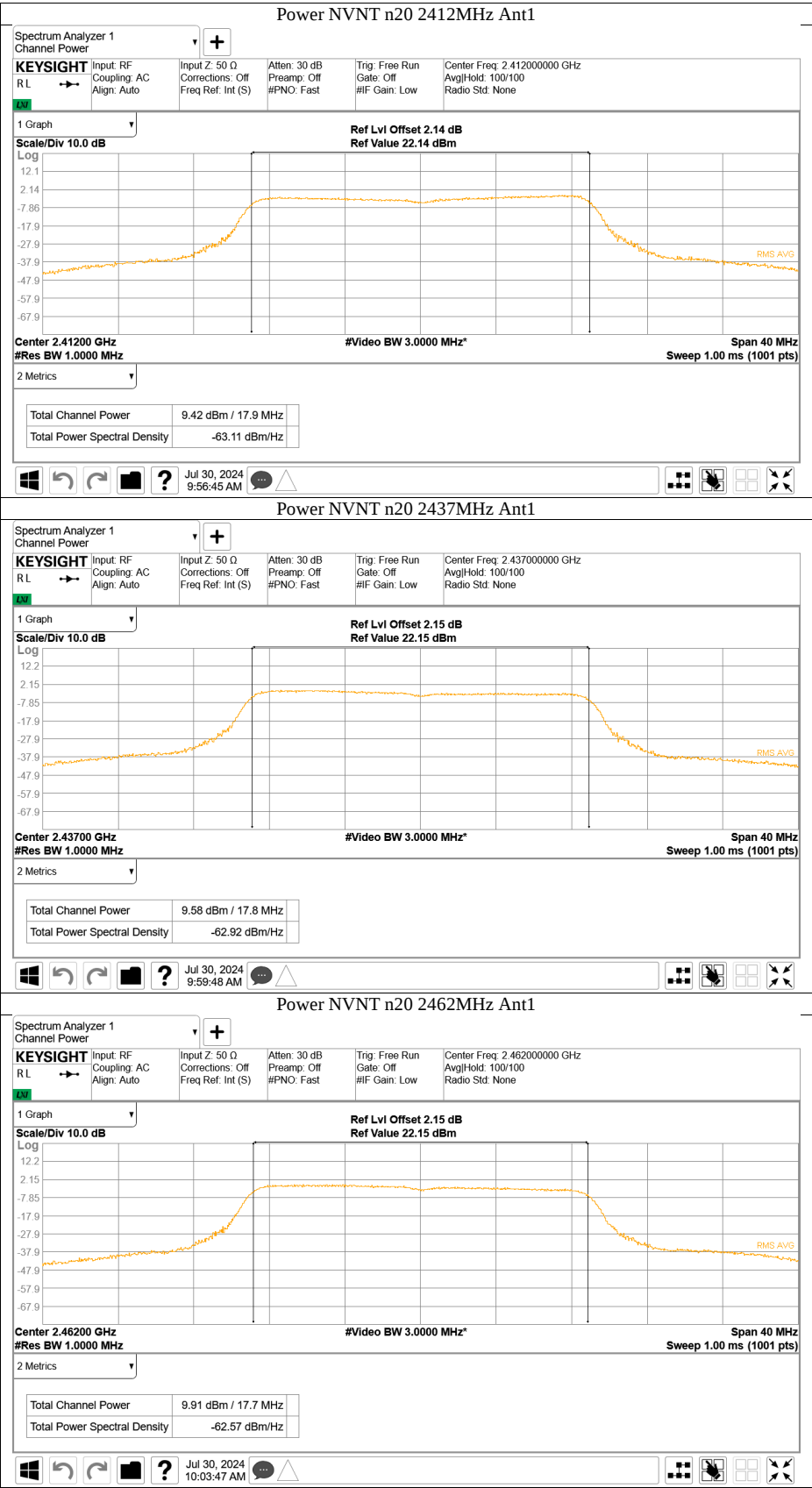


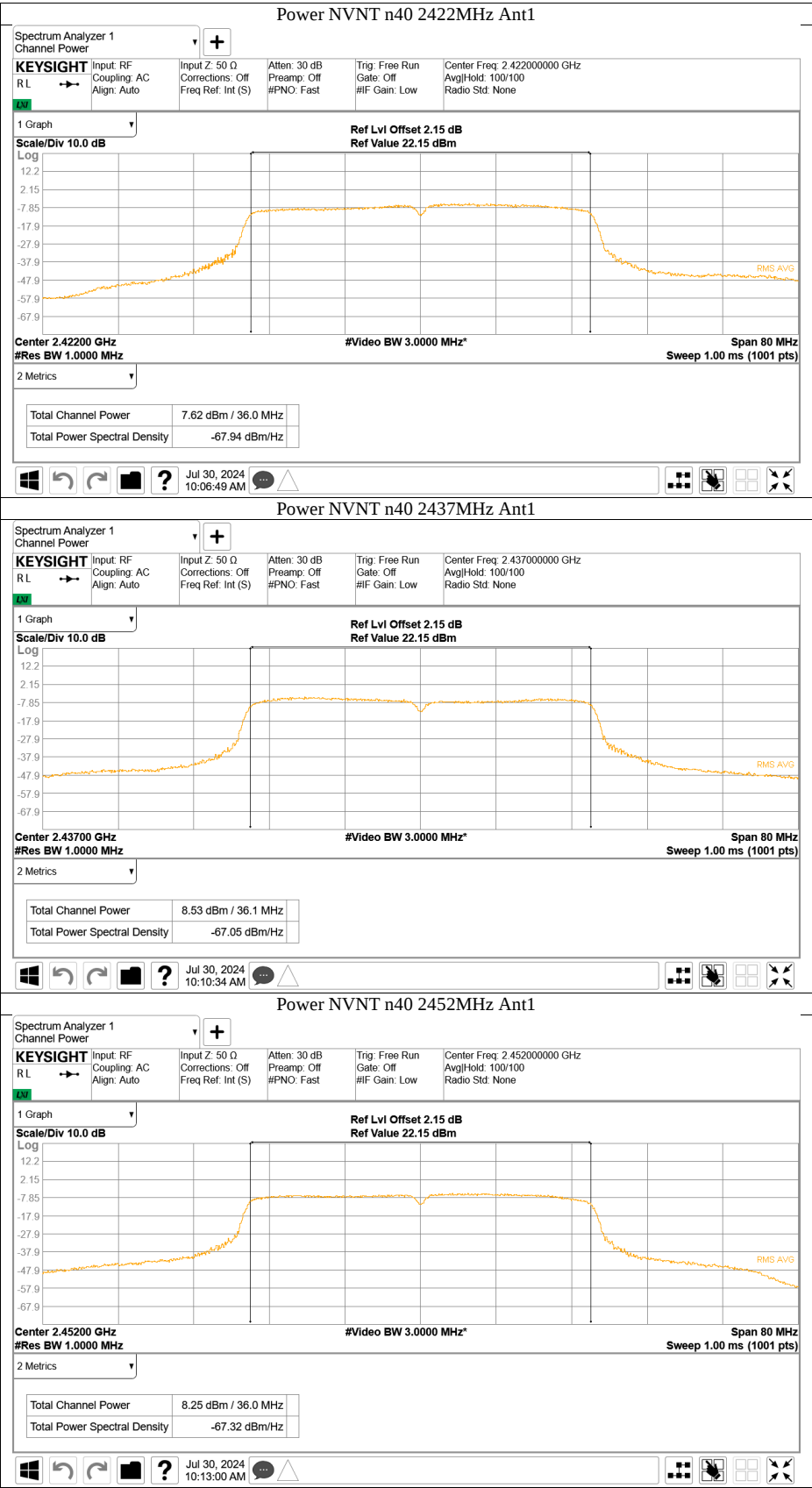


Conducted Output Power









10.36dB bandwidth and 99% Occupied Bandwidth

Test Method for 6 dB Bandwidth

1. Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
2. Set the VBW $\geq [3 \times \text{RBW}]$.
3. Detector = peak.
4. Trace mode = max-hold.
5. Sweep = No faster than coupled (auto) time.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value.

Test Method for 99 % Bandwidth

1. Connect EUT test port to spectrum analyzer.
Use the following spectrum analyzer settings:
RBW=1% to 5% of the actual occupied, VBW $\geq$ 3RBW, Sweep = auto,
Detector function = peak, Trace = max hold
2. Use the occupied bandwidth measurement capability of test receiver.
8. Allow the trace to stabilize, record the occupied bandwidth value.

Limit

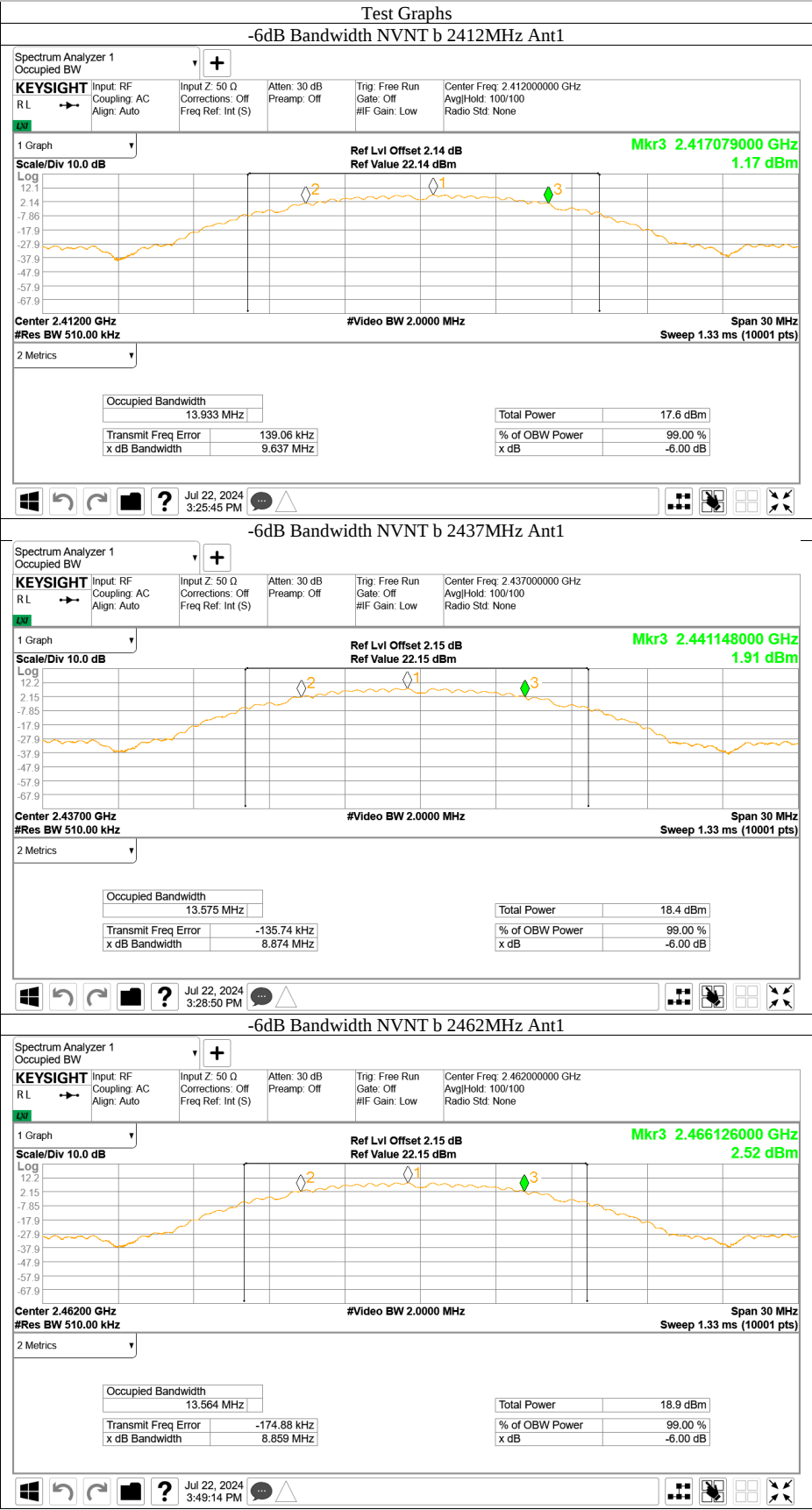
6dB bandwidth Limit [kHz]	99% bandwidth Limit [kHz]
≥ 500	--

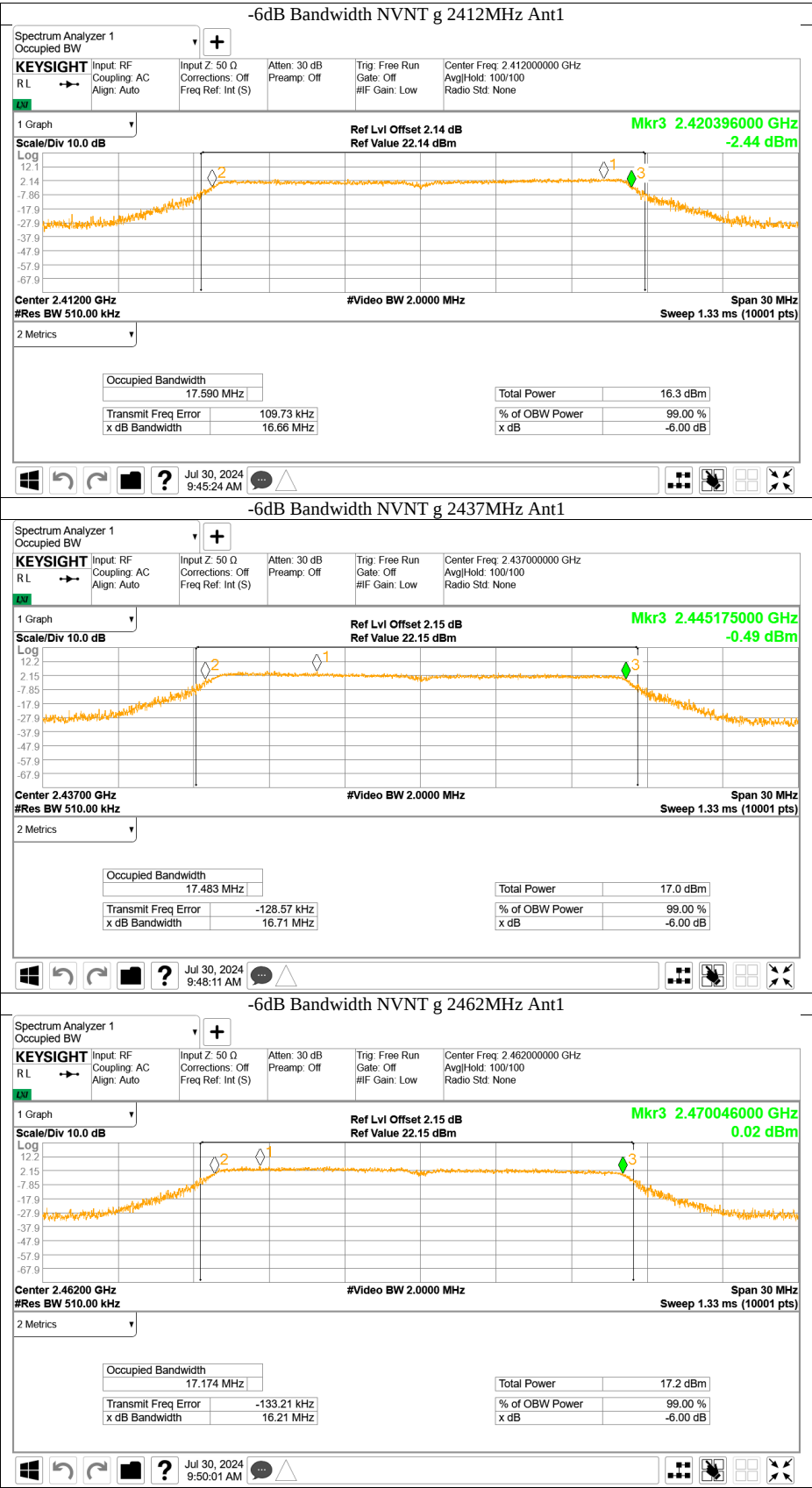
Test result

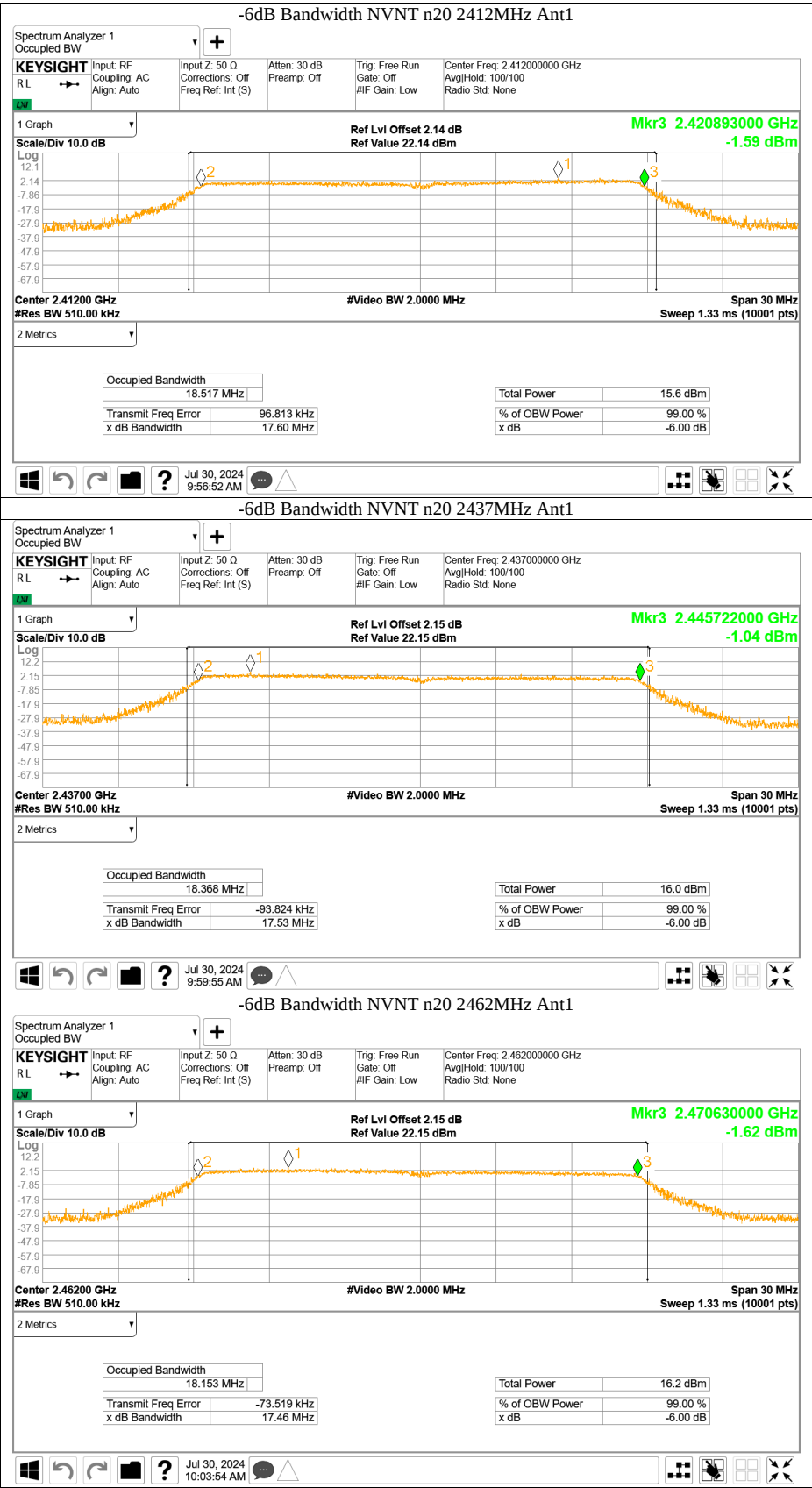
Test Mode	Frequency MHz	6dB bandwidth (MHz)		Result	99% occupied bandwidth MHz
		result	limit	verdict	result
802.11b	2412	9.637	≥ 0.5	Pass	13.928
	2437	8.874	≥ 0.5	Pass	13.566
	2462	8.859	≥ 0.5	Pass	13.557
802.11g	2412	16.656	≥ 0.5	Pass	16.791
	2437	16.711	≥ 0.5	Pass	16.733
	2462	16.207	≥ 0.5	Pass	16.625
802.11n(HT20)	2412	17.605	≥ 0.5	Pass	17.903
	2437	17.535	≥ 0.5	Pass	17.811
	2462	17.461	≥ 0.5	Pass	17.731
802.11n(HT40)	2422	35.359	≥ 0.5	Pass	35.952
	2437	35.869	≥ 0.5	Pass	36.114
	2452	35.161	≥ 0.5	Pass	36.018

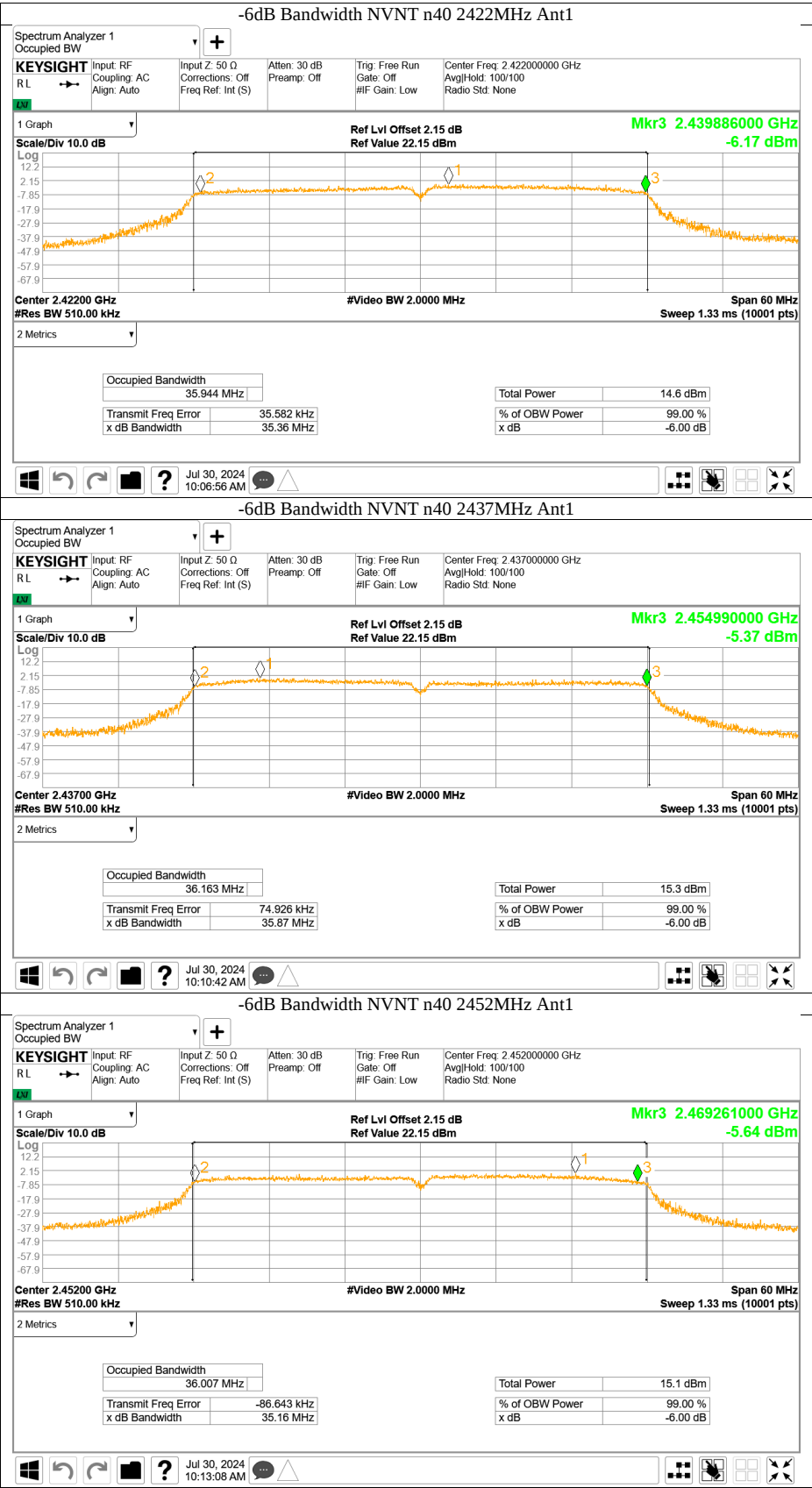


6 dB Bandwidth











99% occupied bandwidth

