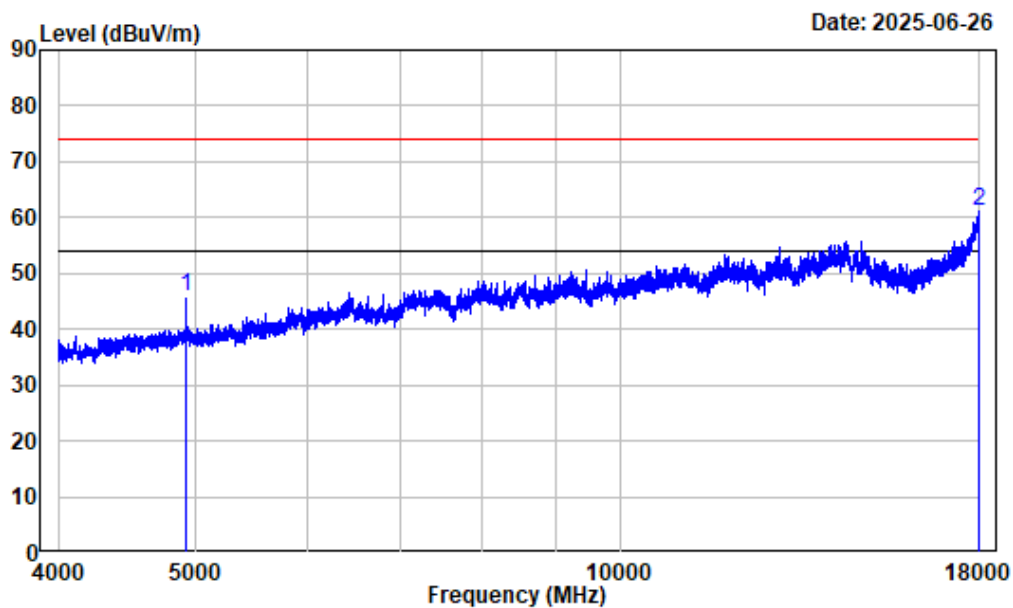


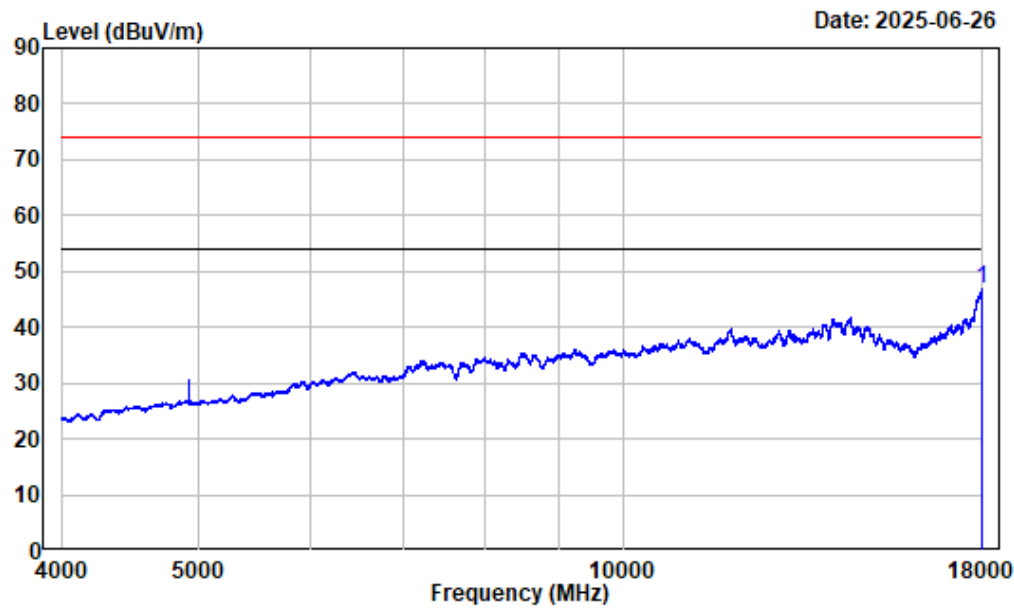
4-18GHz_Horizontal_Peak_2.4GWi-Fi_g_ANT1_2462MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g_ant1-2462

Freq Factor		Read		Limit	Over	Remark
		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 4924.000	-7.57	53.34	45.77	74.00	-28.23	Peak
2 17977.250	13.09	48.19	61.28	74.00	-12.72	Peak

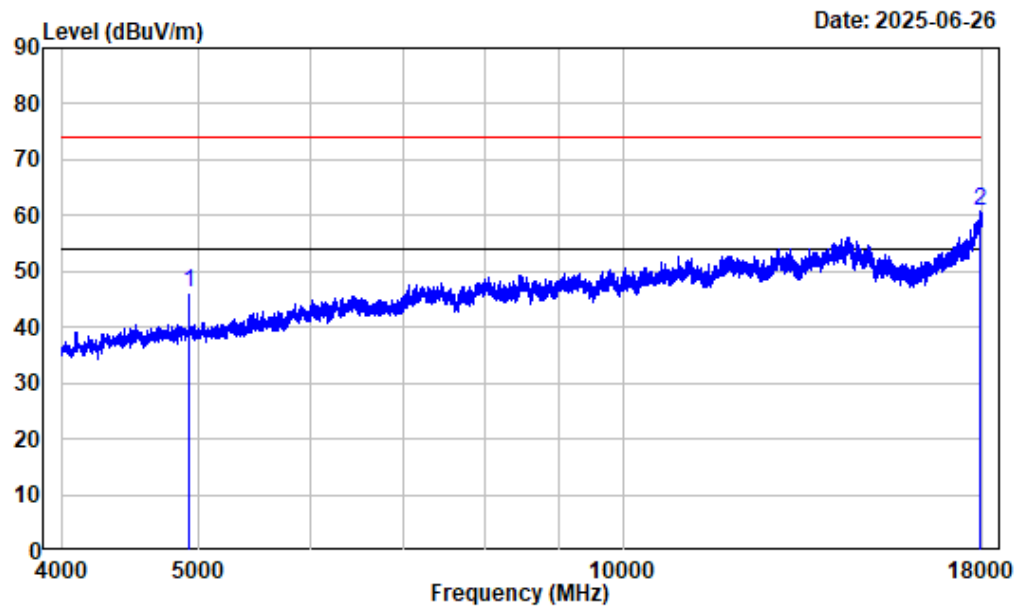
4-18GHz_Horizontal_Average_2.4GWi-Fi_g_ANT1_2462MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-g_ant1-2462

Freq Factor		Read	Limit	Over	Remark
		Level	Level	Line	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1 17998.630	13.19	33.73	46.92	54.00	-7.08 Average

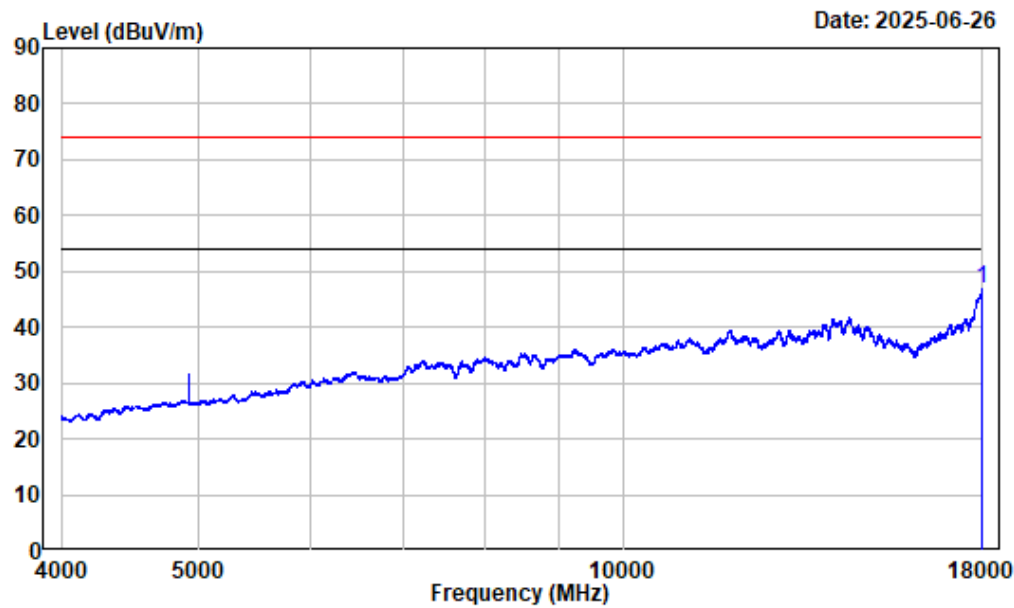
4-18GHz_Vertical_Peak_2.4GWi-Fi_g_ANT1_2462MHz



Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-g_ant1-2462

Freq Factor		Read Level		Limit	Over	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 4924.000	-7.57	53.78	46.21	74.00	-27.79	Peak
2 17940.490	12.90	47.87	60.77	74.00	-13.23	Peak

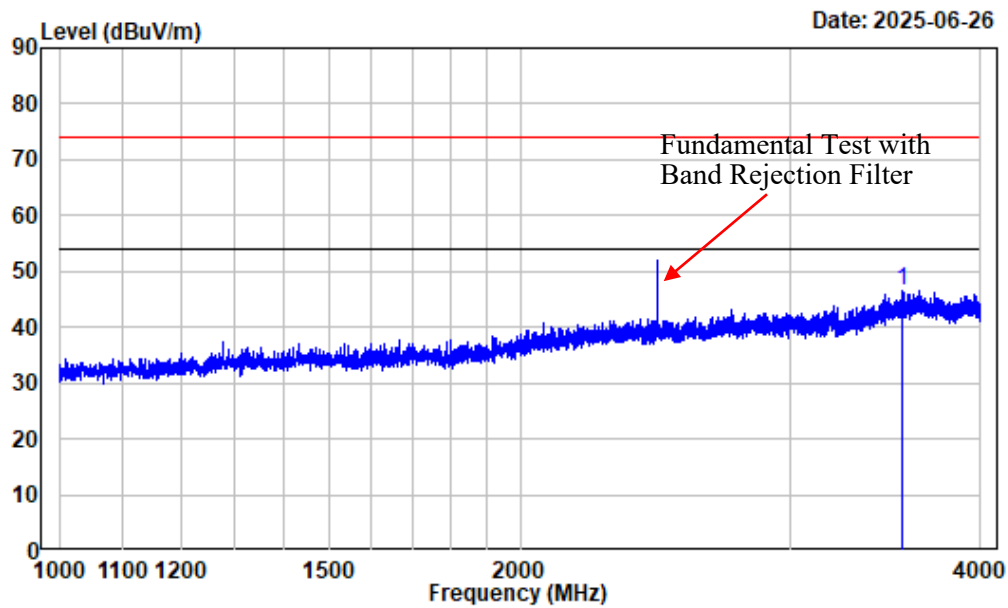
4-18GHz_Vertical_Average_2.4GWi-Fi_g_ANT1_2462MHz



Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-g_ant1-2462

Freq Factor		Read Level		Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17998.250	13.20	33.72	46.92	54.00	-7.08	Average

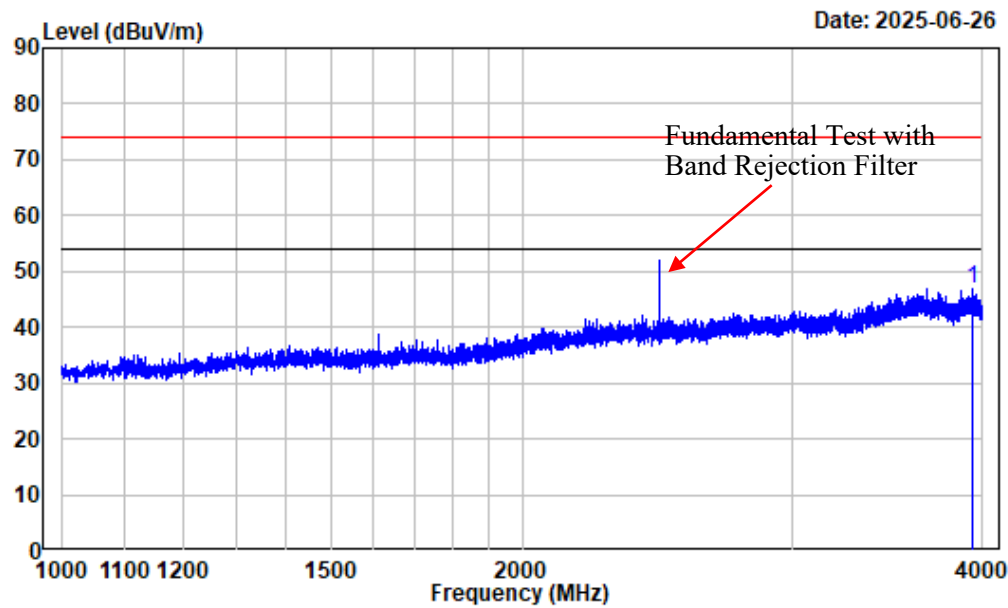
1-4GHz_Horizontal_2.4GWi-Fi_n20_2462MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

Freq Factor		Read Level		Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 3555.569	-9.79	56.32	46.53	74.00	-27.47	Peak

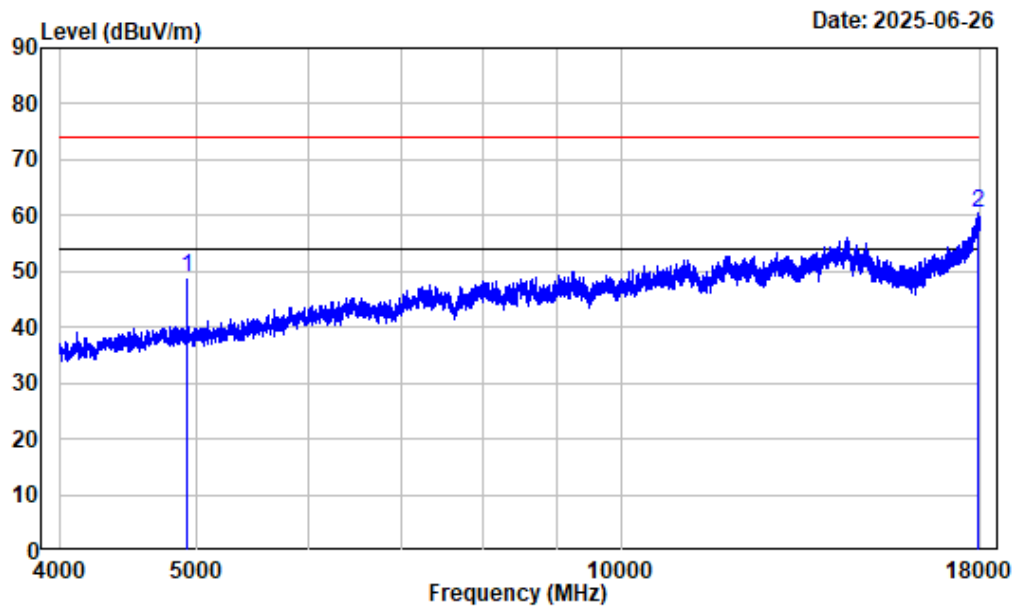
1-4GHz_Vertical_2.4GWi-Fi_n20_2462MHz



Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWi-Fi-n20-2462

Freq Factor		Read Level		Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 3943.743	-9.39	56.16	46.77	74.00	-27.23	Peak

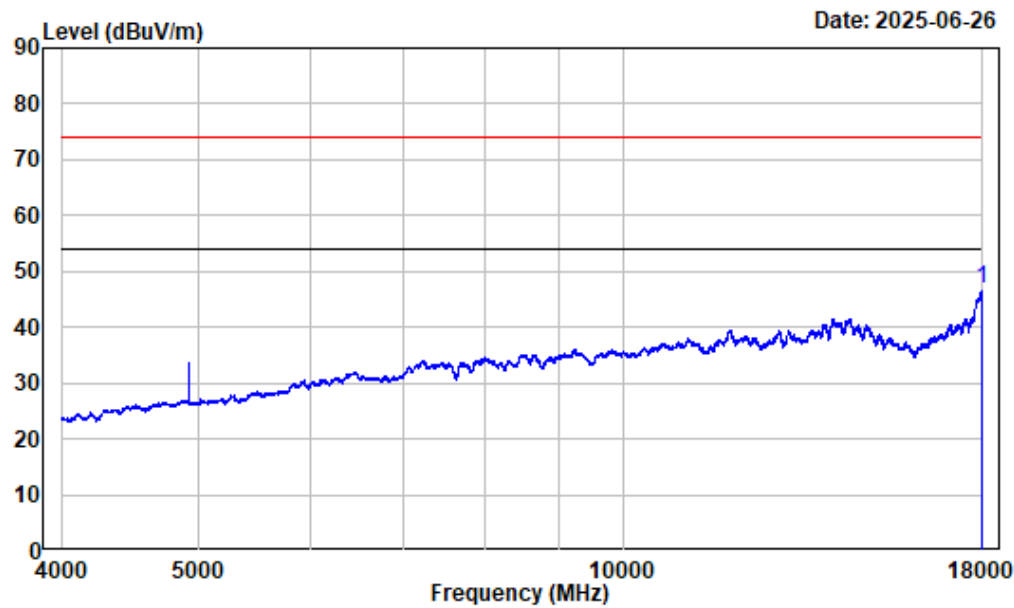
4-18GHz_Horizontal_Peak_2.4GWi-Fi_n20_2462MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

Freq Factor		Read		Limit	Over	Remark
		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 4924.000	-7.57	56.63	49.06	74.00	-24.94	Peak
2 17952.740	12.97	47.55	60.52	74.00	-13.48	Peak

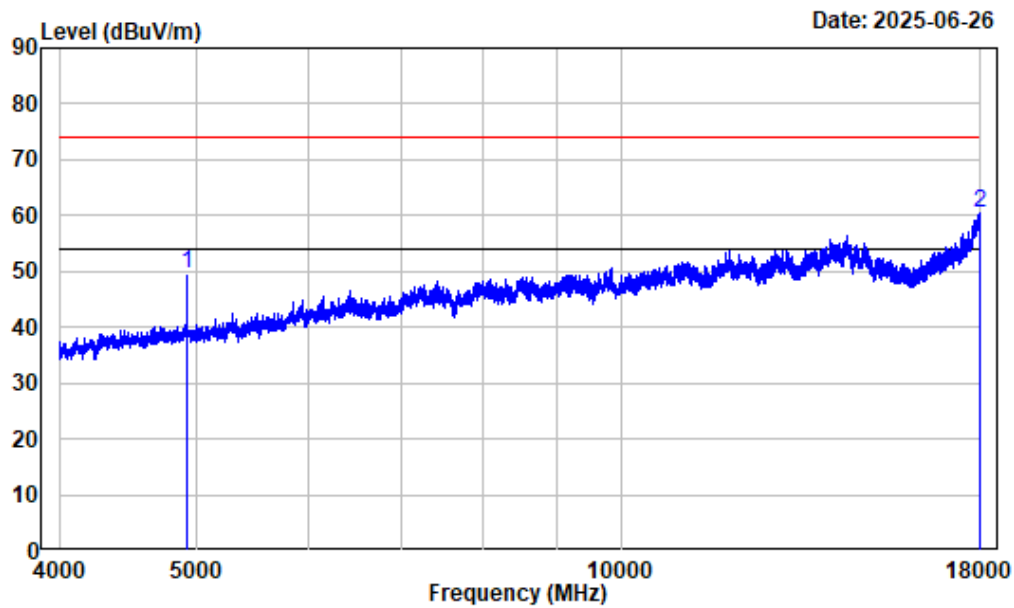
4-18GHz_Horizontal_Average_2.4GWi-Fi_n20_2462MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-n20-2462

Freq Factor		Read Level		Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17998.250	13.20	33.81	47.01	54.00	-6.99	Average

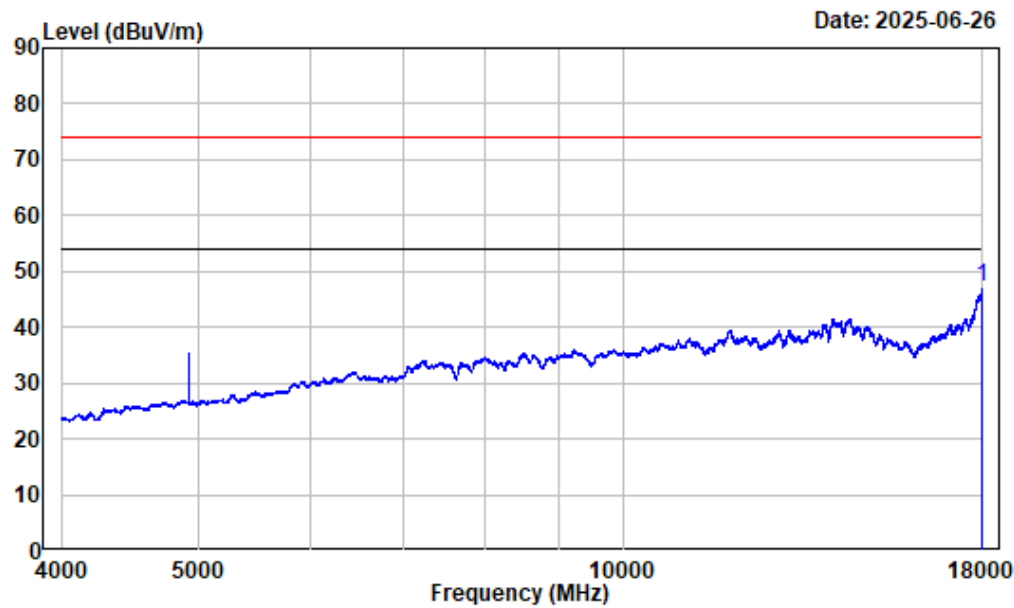
4-18GHz_Vertical_Peak_2.4GWi-Fi_n20_2462MHz



Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWi-Fi-n20-2462

Freq Factor		Read		Limit	Over	Remark
		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 4924.000	-7.57	57.18	49.61	74.00	-24.39	Peak
2 17977.250	13.09	47.51	60.60	74.00	-13.40	Peak

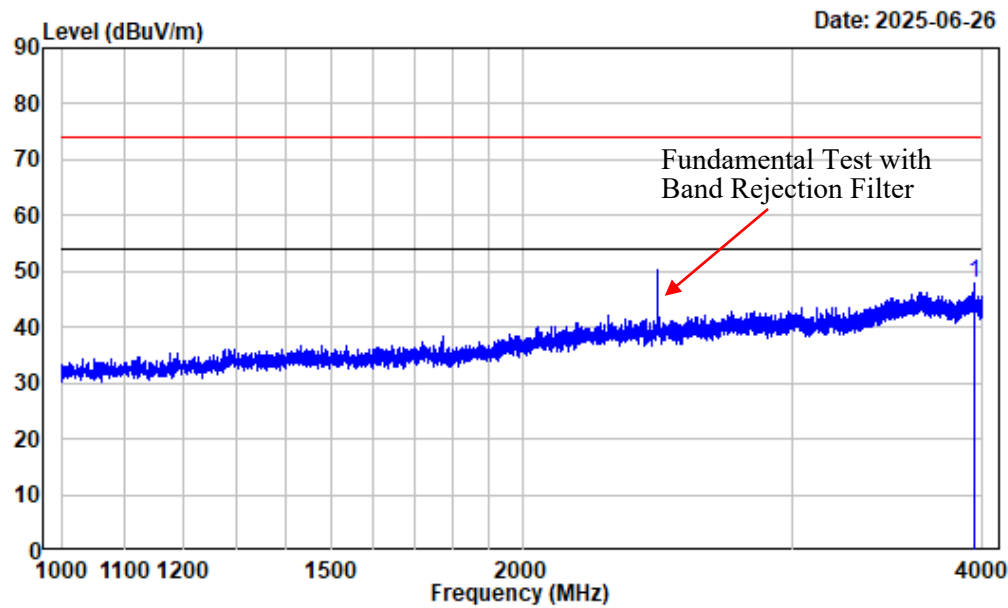
4-18GHz_Vertical_Average_2.4GWi-Fi_n20_2462MHz



Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4GWiFi-n20-2462

Freq Factor		Read Level		Limit	Over	Remark
				Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17998.250	13.19	33.87	47.06	54.00	-6.94	Average

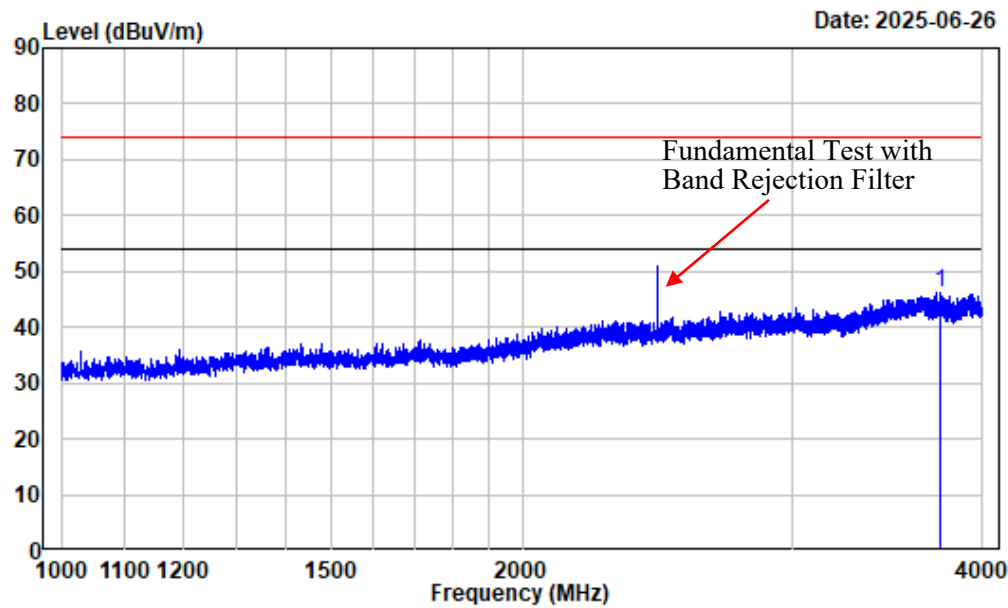
1-4GHz_Horizontal_2.4GWi-Fi_n40_2452MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2452

Freq Factor		Read Level		Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3950.869	-9.32	57.08	47.76	74.00	-26.24 Peak

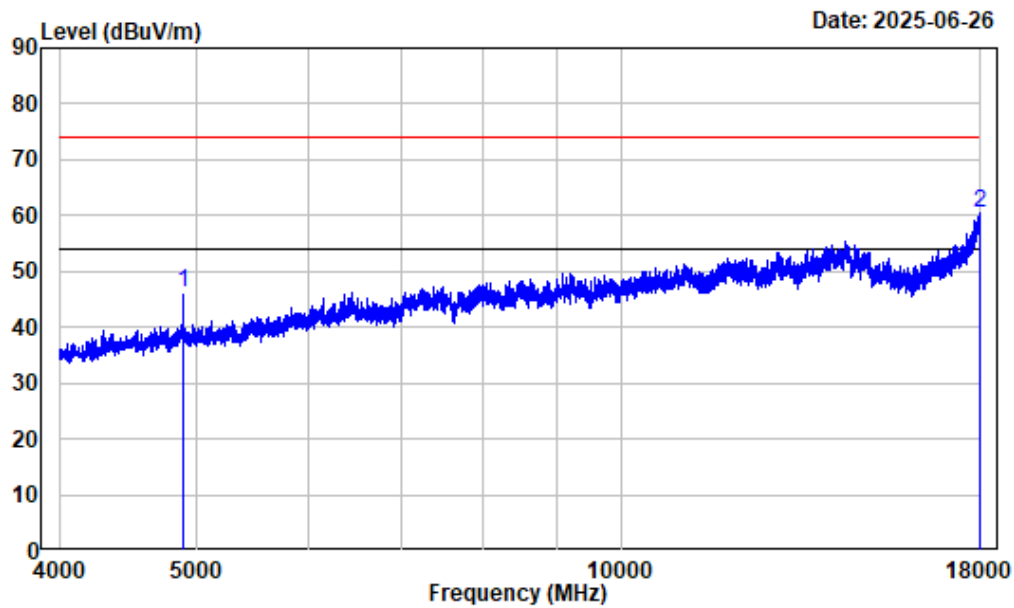
1-4GHz_Vertical_2.4GWi-Fi_n40_2452MHz



Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWi-Fi-n40-2452

Freq Factor		Read Level		Limit	Over	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3750.594	-9.61	55.78	46.17	74.00	-27.83 Peak

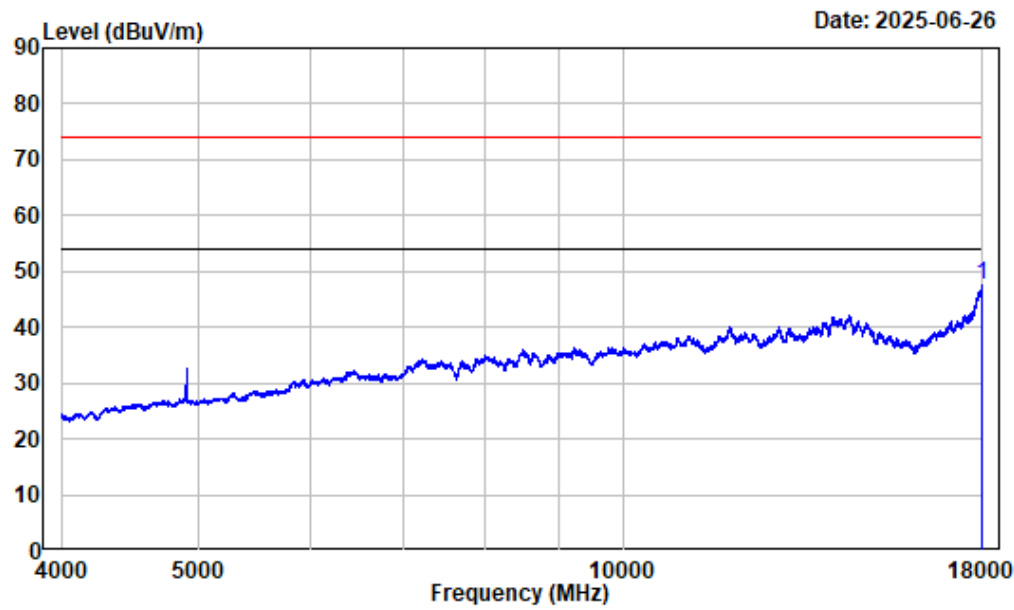
4-18GHz_Horizontal_Peak_2.4GWi-Fi_n40_2452MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n40-2452

Freq Factor		Read	Limit	Over	Remark
		Level	Level	Line	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1 4904.000	-7.53	53.78	46.25	74.00	-27.75 Peak
2 17979.000	13.09	47.49	60.58	74.00	-13.42 Peak

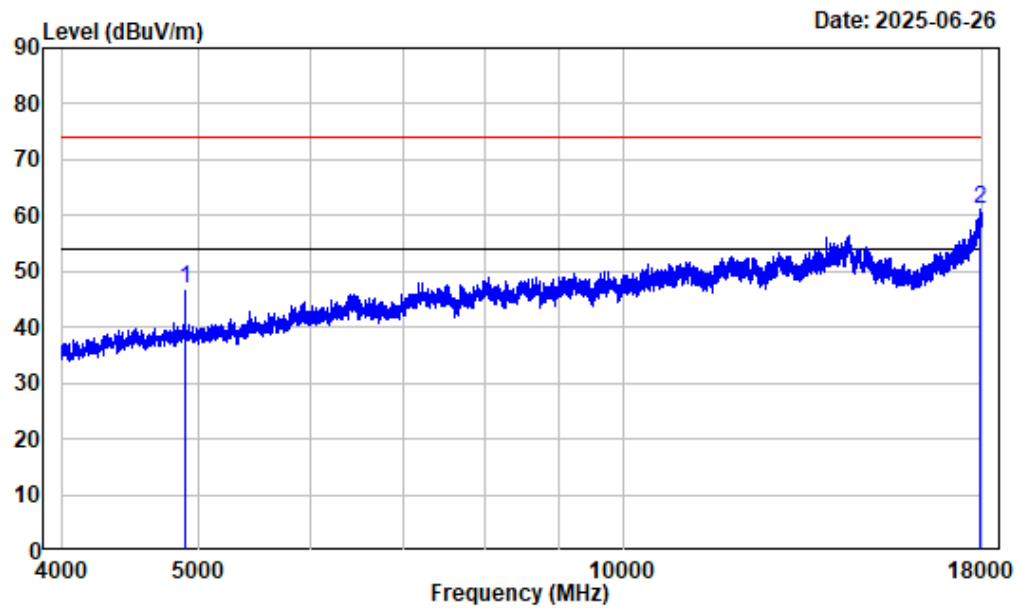
4-18GHz_Horizontal_Average_2.4GWi-Fi_n40_2452MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak
Note : 2.4GWiFi-n40-2452

Freq Factor		Read Level		Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17984.250	13.12	34.29	47.41	54.00	-6.59	Average

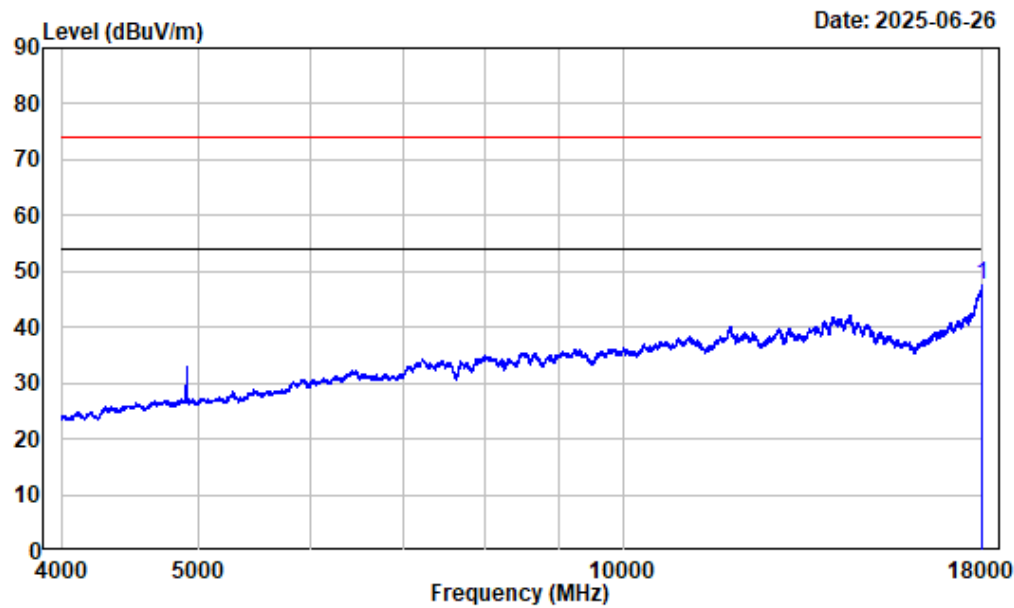
4-18GHz_Vertical_Peak_2.4GWi-Fi_n40_2452MHz



Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWi-Fi-n40-2452

Freq Factor		Read	Limit	Over	Remark
		Level	Level	Line	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1 4904.000	-7.53	54.24	46.71	74.00	-27.29 Peak
2 17950.990	12.96	48.11	61.07	74.00	-12.93 Peak

4-18GHz_Vertical_Average_2.4GWi-Fi_n40_2452MHz

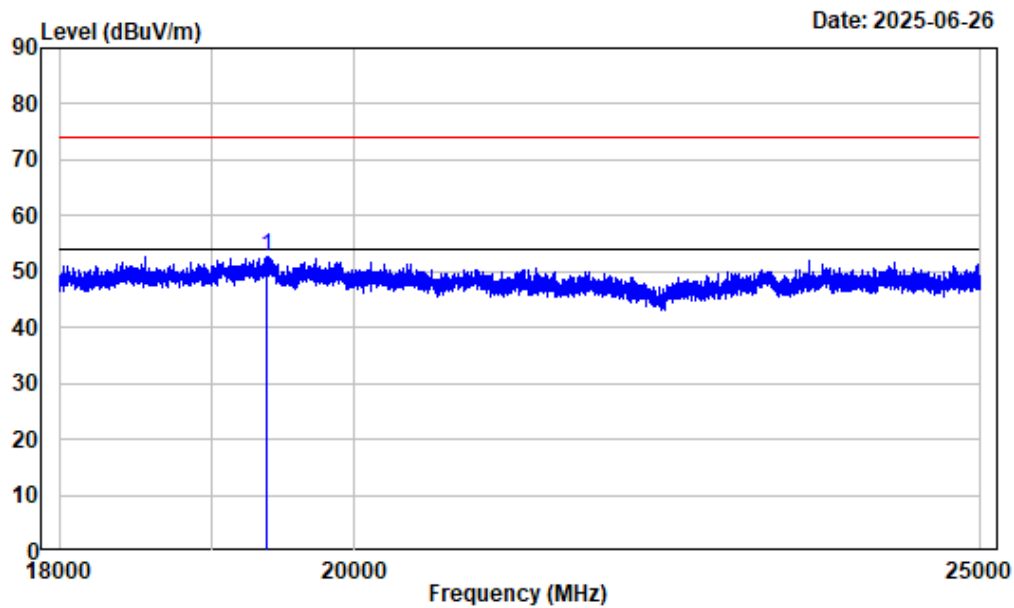


Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Average reading:RBW:1MHz VBW:2kHz Detector:Peak
Note : 2.4GWiFi-n40-2452

Freq Factor		Read Level		Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 17986.000	13.13	34.25	47.38	54.00	-6.62	Average

18-25GHz (Only Listed with the worst harmonic margin test plot):

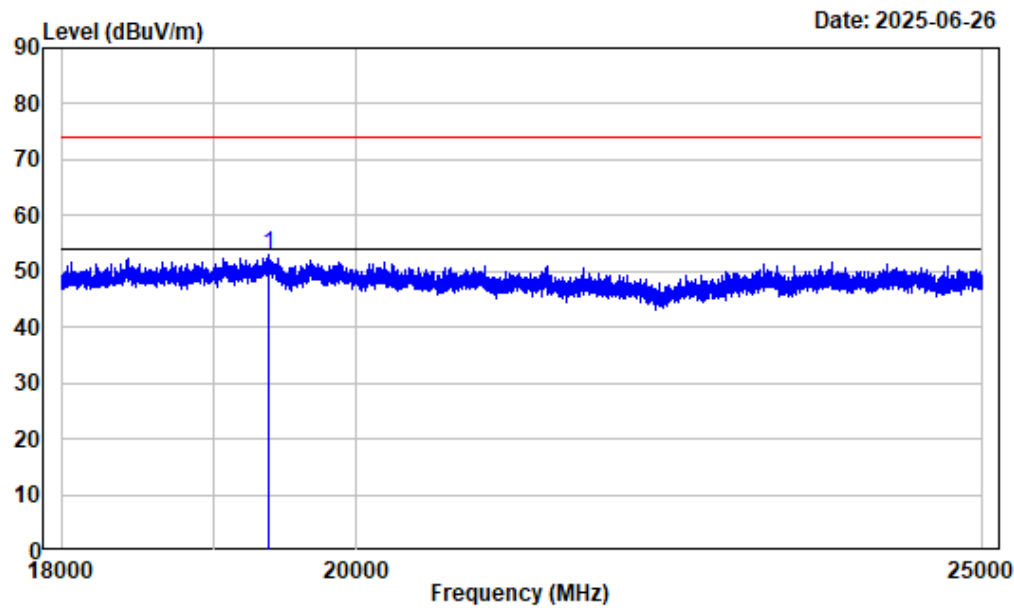
18-25GHz_Horizontal_2.4GWi-Fi_n20_2462MHz



Condition : Horizontal
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

Freq Factor		Read Level		Limit	Over	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 19380.920	15.45	37.25	52.70	74.00	-21.30	Peak

18-25GHz_Vertical_2.4GWi-Fi_n20_2462MHz



Condition : Vertical
Project No. : 2501U29284E-RF
Tester : Zenos Qiao
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4GWiFi-n20-2462

Freq Factor		Read	Limit	Over	Remark
MHz	dB/m	Level	Level	Line	
		dBuV	dBuV/m	dBuV/m	dB
1 19387.050	15.45	37.43	52.88	74.00	-21.12 Peak

6dB Emission Bandwidth

Test Information:

Sample No.:	348G-1	Test Date:	2025/06/30
Test Site:	RF	Test Mode:	Transmitting
Tester:	Cheeb Huang	Test Result:	Pass

Environmental Conditions:

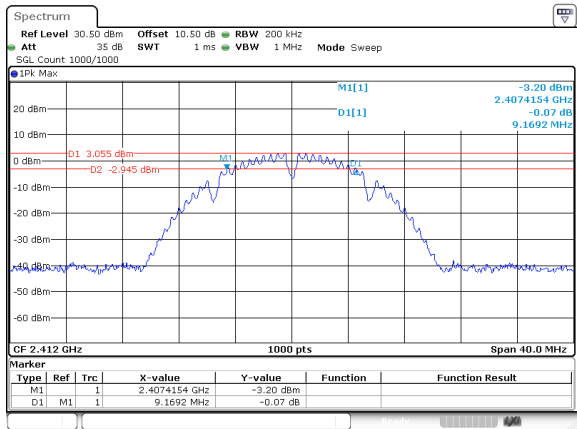
Temperature: (°C)	25.1	Relative Humidity: (%)	51	ATM Pressure: (kPa)	101.4
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Test Data:

Mode	Antenna	Test Frequency (MHz)	Result (MHz)	Limit (MHz)	Verdict
802.11b	Chain 0	2412	9.169	≥ 0.5	Pass
		2437	9.169	≥ 0.5	Pass
		2462	9.169	≥ 0.5	Pass
	Chain 1	2412	9.169	≥ 0.5	Pass
		2437	9.169	≥ 0.5	Pass
		2462	9.169	≥ 0.5	Pass
802.11g	Chain 0	2412	16.016	≥ 0.5	Pass
		2437	16.056	≥ 0.5	Pass
		2462	16.056	≥ 0.5	Pass
	Chain 1	2412	16.056	≥ 0.5	Pass
		2437	16.016	≥ 0.5	Pass
		2462	15.976	≥ 0.5	Pass
802.11n20	Chain 0	2412	17.257	≥ 0.5	Pass
		2437	17.057	≥ 0.5	Pass
		2462	17.257	≥ 0.5	Pass
	Chain 1	2412	16.857	≥ 0.5	Pass
		2437	16.657	≥ 0.5	Pass
		2462	16.577	≥ 0.5	Pass
802.11n40	Chain 0	2422	36.196	≥ 0.5	Pass
		2437	35.155	≥ 0.5	Pass
		2452	35.796	≥ 0.5	Pass
	Chain 1	2422	35.075	≥ 0.5	Pass
		2437	34.274	≥ 0.5	Pass
		2452	34.675	≥ 0.5	Pass

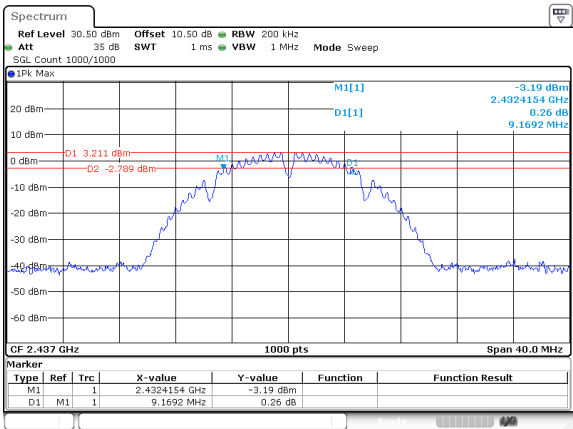
Chain 0

802.11b_2412MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:48:21

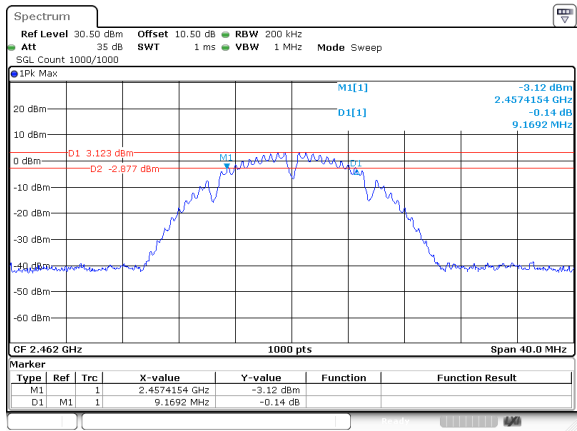
802.11b_2437MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:51:01

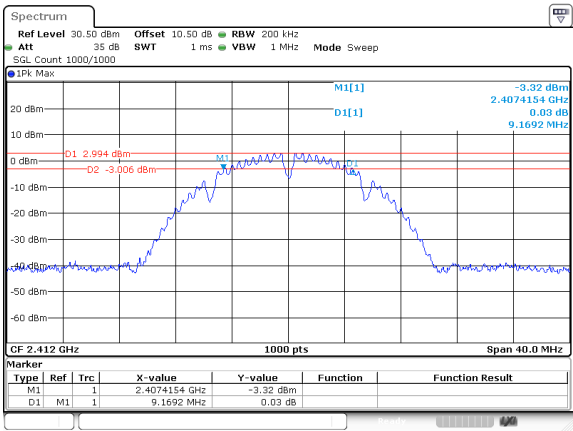
Chain 1

802.11b_2462MHz_Chain 0



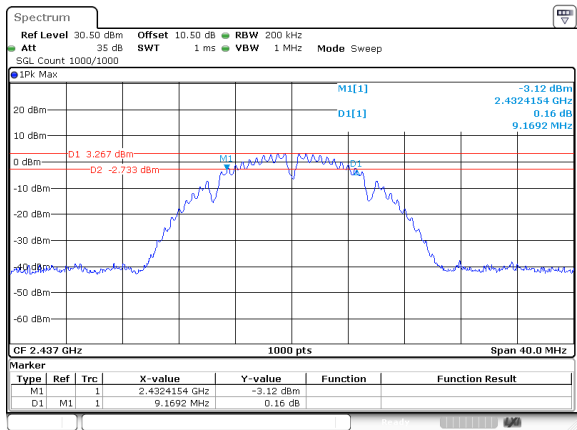
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:53:17

802.11b_2412MHz_Chain 1



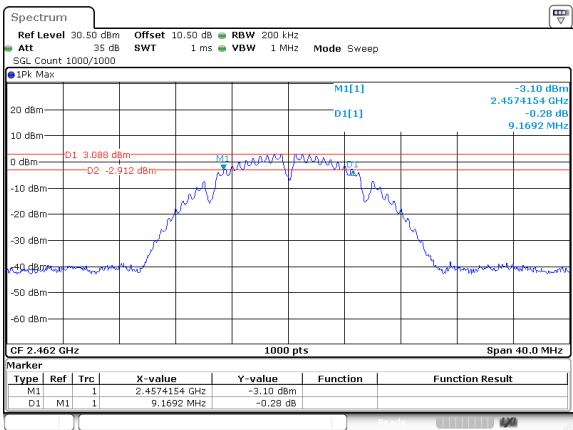
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:03:42

802.11b_2437MHz_Chain 1



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:06:31

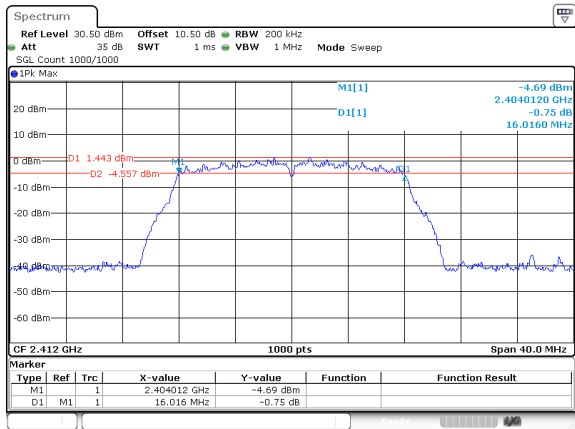
802.11b_2462MHz_Chain 1



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:08:56

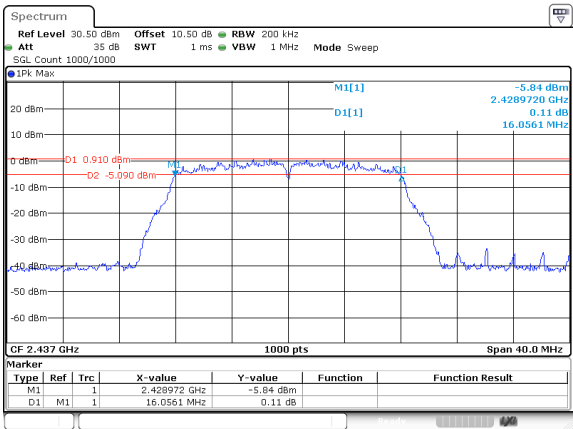
Chain 0

802.11g_2412MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 11:07:11

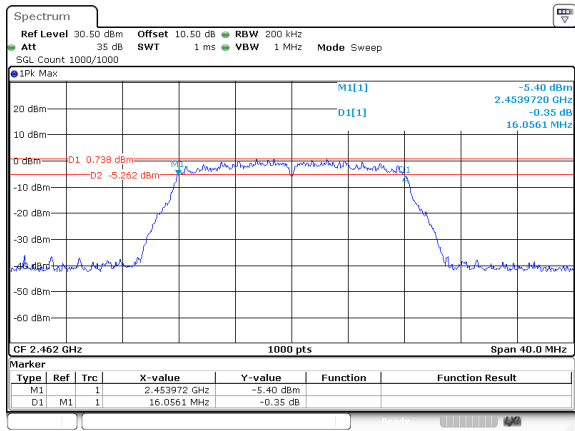
802.11g_2437MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 12:00:51

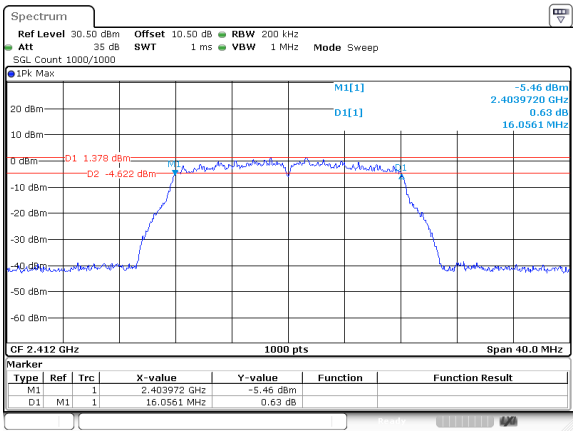
Chain 1

802.11g_2462MHz_Chain 0



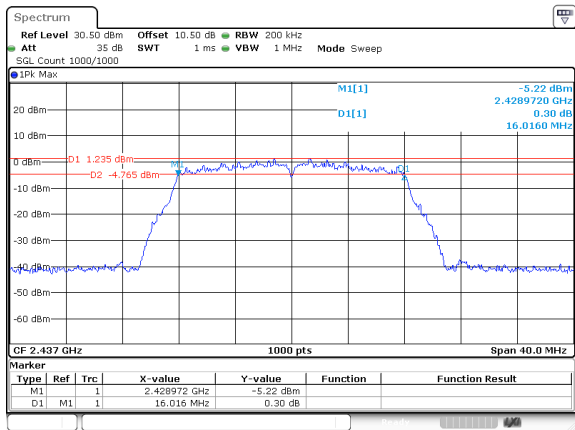
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 12:03:51

802.11g_2412MHz_Chain 1



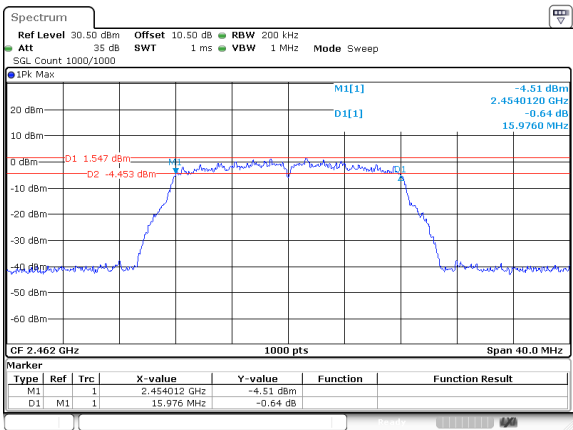
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 14:12:41

802.11g_2437MHz_Chain 1



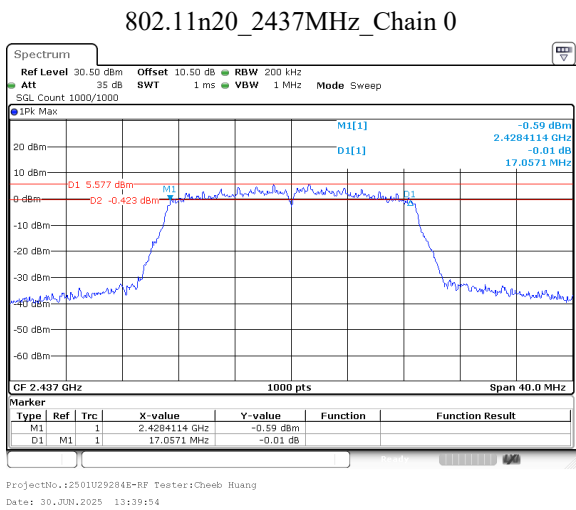
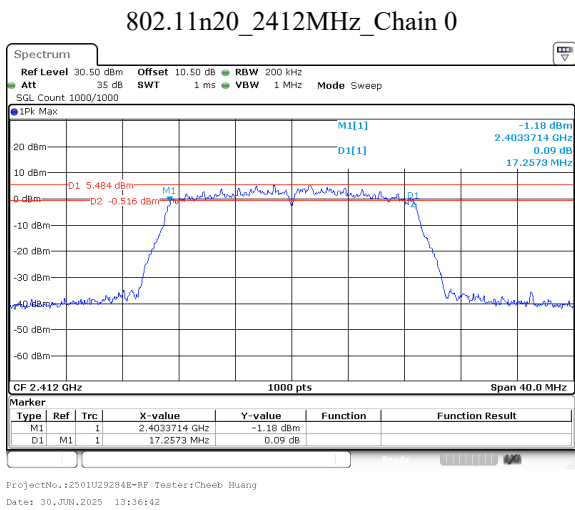
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 14:16:09

802.11g_2462MHz_Chain 1

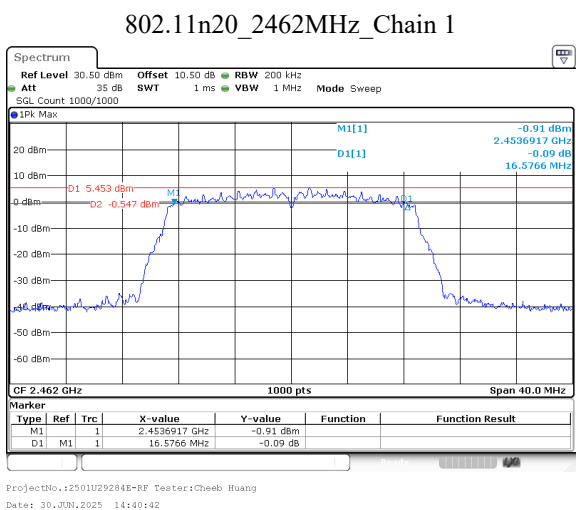
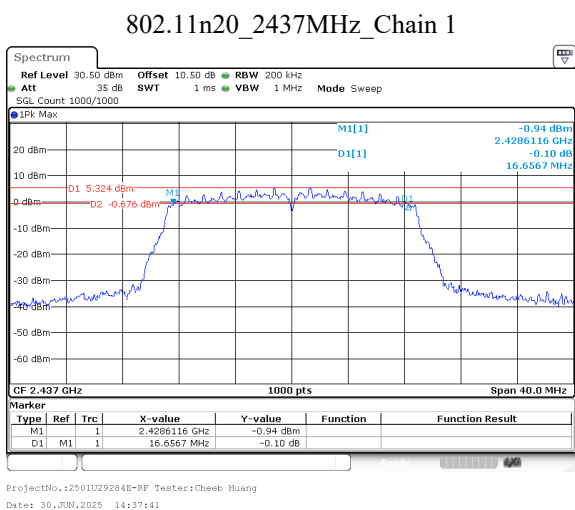
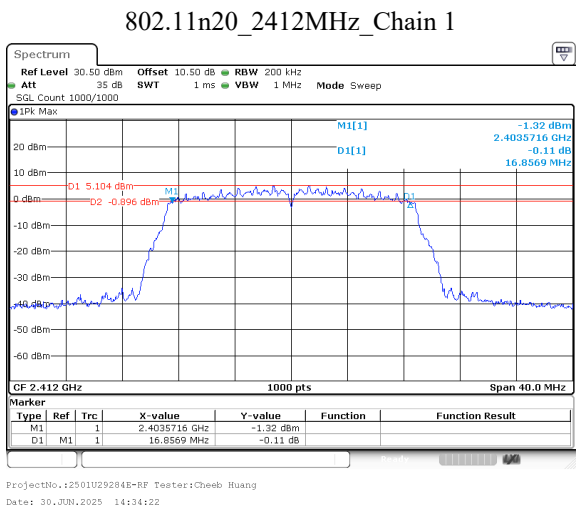
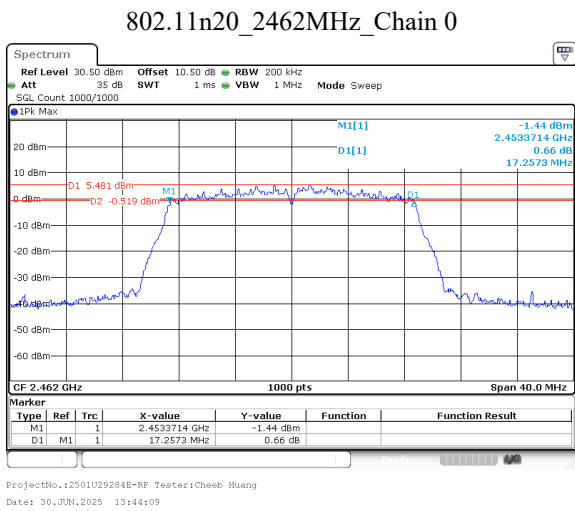


ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 14:31:06

Chain 0



Chain 1



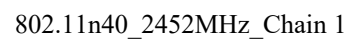
802.11n40_2422MHz_Chain 0



802.11n40_2452MHz_Chain 0



802.11n40_2437MHz_Chain 1



99% Occupied Bandwidth

Test Information:

Sample No.:	348G-1	Test Date:	2025/06/30
Test Site:	RF	Test Mode:	Transmitting
Tester:	Cheeb Huang	Test Result:	Pass

Environmental Conditions:

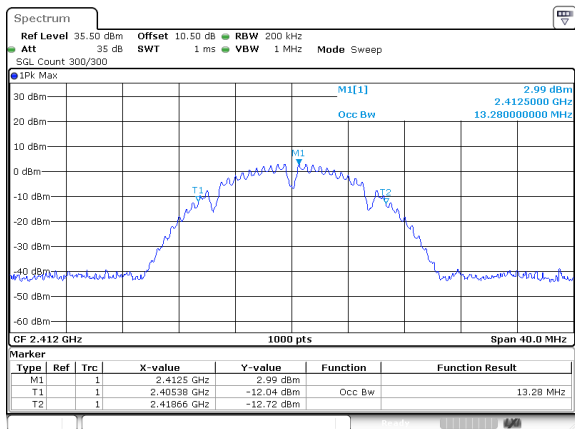
Temperature: (°C)	25.1	Relative Humidity: (%)	51	ATM Pressure: (kPa)	101.4
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Test Data:

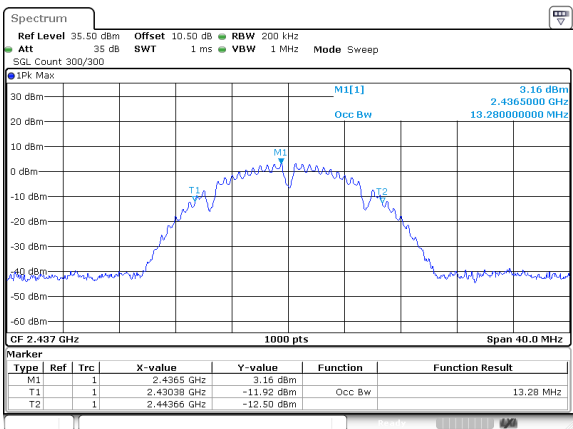
Mode	Antenna	Test Frequency (MHz)	99% OBW (MHz)
802.11b	Chain 0	2412	13.280
		2437	13.280
		2462	13.240
	Chain 1	2412	13.320
		2437	13.320
		2462	13.320
802.11g	Chain 0	2412	16.480
		2437	16.480
		2462	16.440
	Chain 1	2412	16.480
		2437	16.480
		2462	16.480
802.11n20	Chain 0	2412	17.560
		2437	17.560
		2462	17.560
	Chain 1	2412	17.560
		2437	17.560
		2462	17.560
802.11n40	Chain 0	2422	36.080
		2437	36
		2452	36.080
	Chain 1	2422	36.160
		2437	36.080
		2452	36.160

Chain 0

802.11b_2412MHz_Chain 0

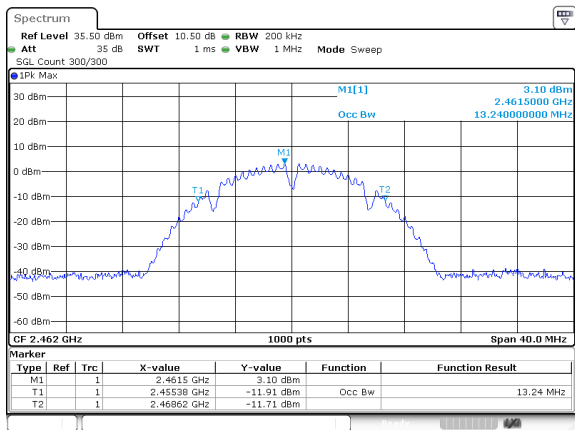


802.11b_2437MHz_Chain 0

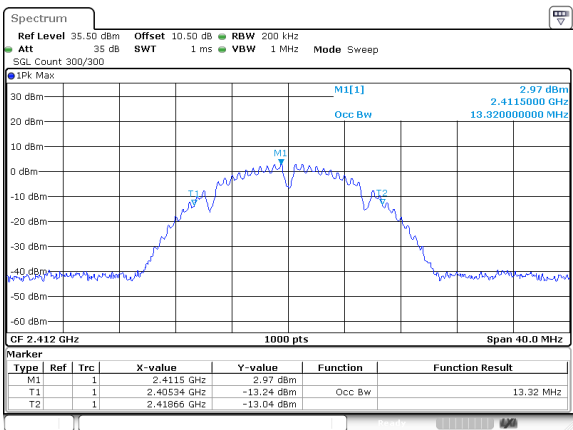


Chain 1

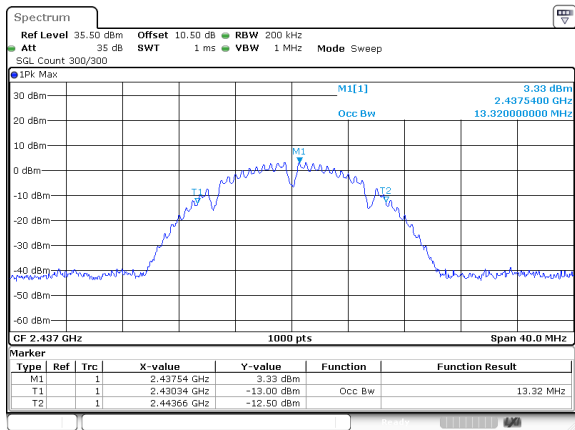
802.11b_2462MHz_Chain 0



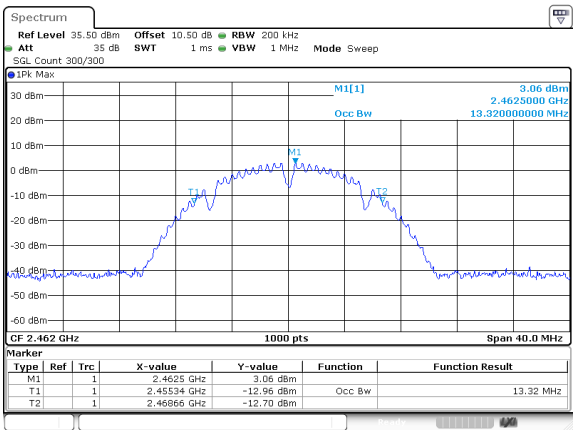
802.11b_2412MHz_Chain 1



802.11b_2437MHz_Chain 1

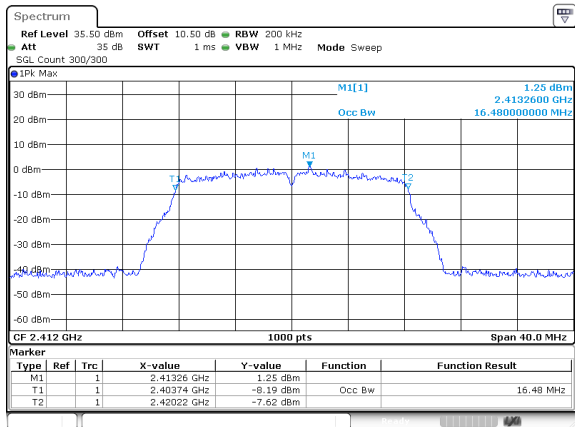


802.11b_2462MHz_Chain 1

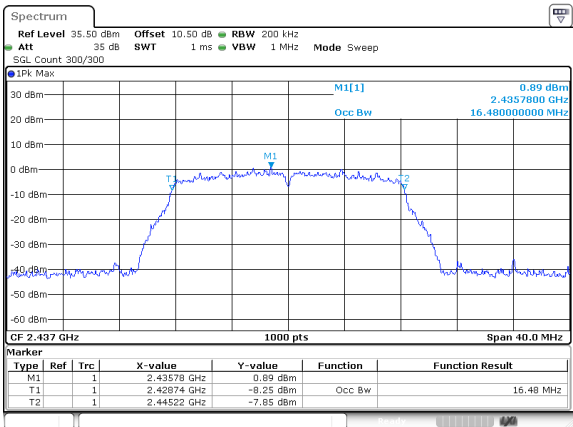


Chain 0

802.11g_2412MHz_Chain 0

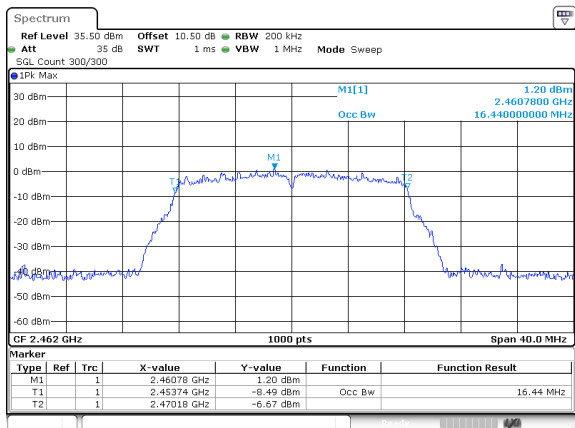


802.11g_2437MHz_Chain 0

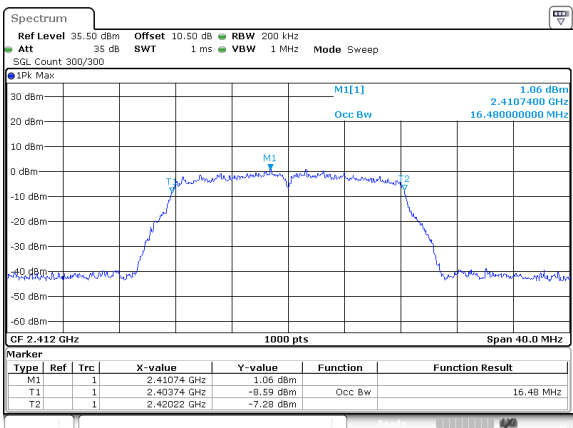


Chain 1

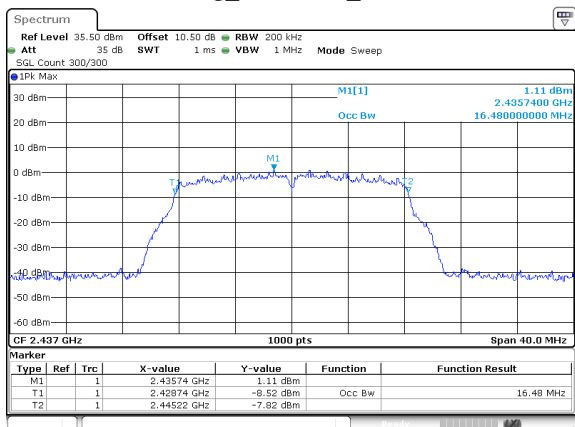
802.11g_2462MHz_Chain 0



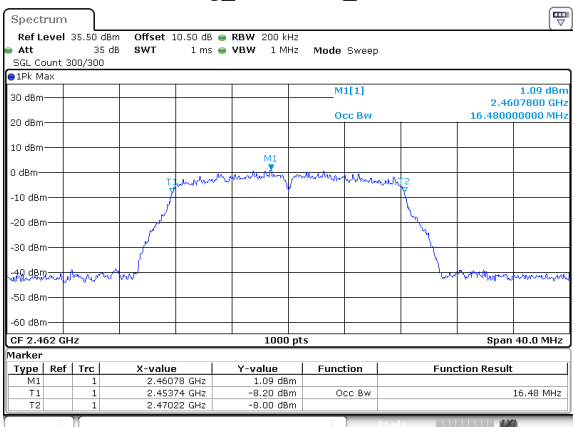
802.11g_2412MHz_Chain 1



802.11g_2437MHz_Chain 1

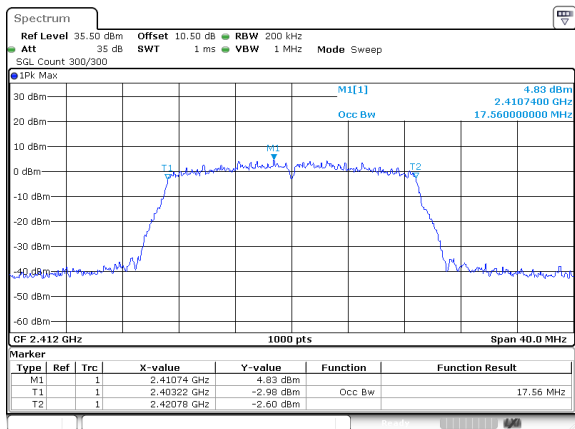


802.11g_2462MHz_Chain 1



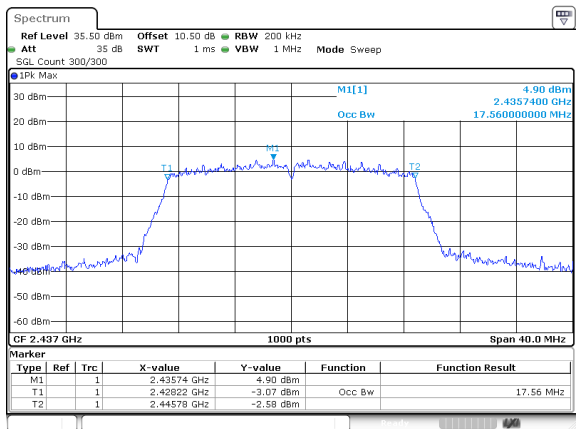
Chain 0

802.11n20_2412MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 13:07:05

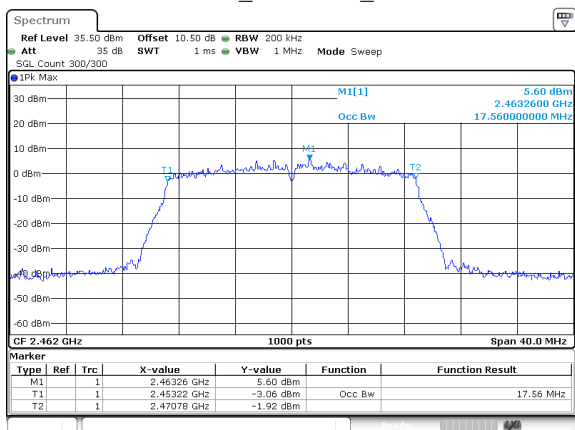
802.11n20_2437MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 13:40:14

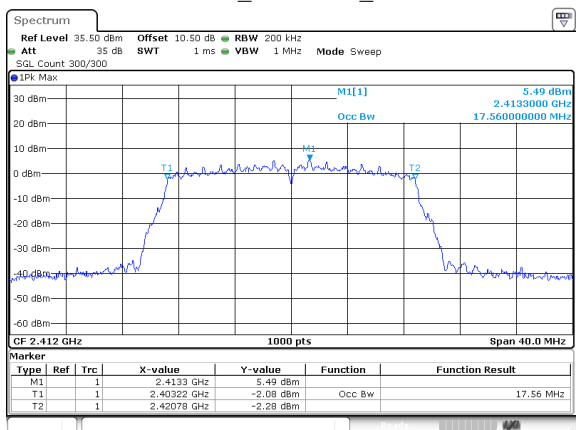
Chain 1

802.11n20_2462MHz_Chain 0



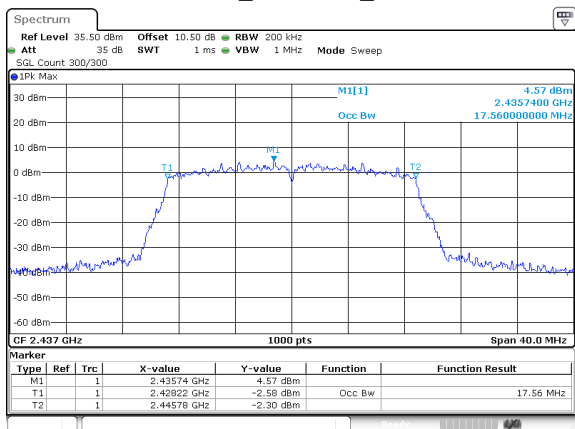
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 13:44:31

802.11n20_2412MHz_Chain 1



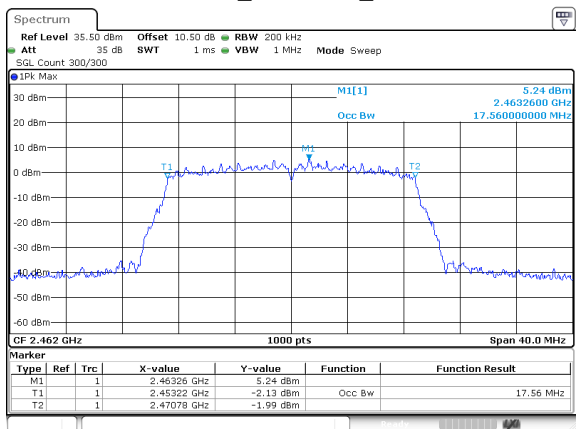
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:34:47

802.11n20_2437MHz_Chain 1



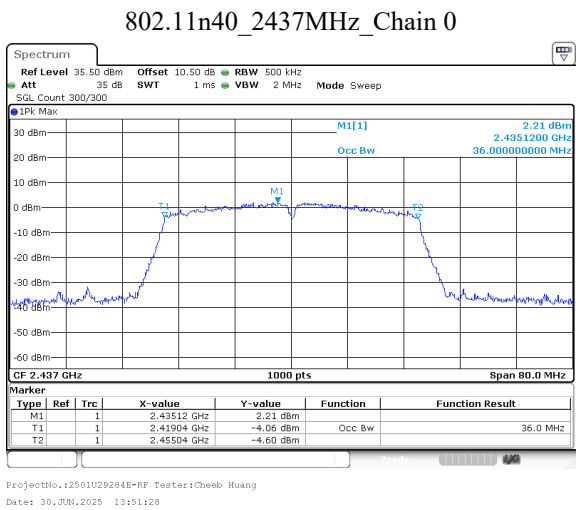
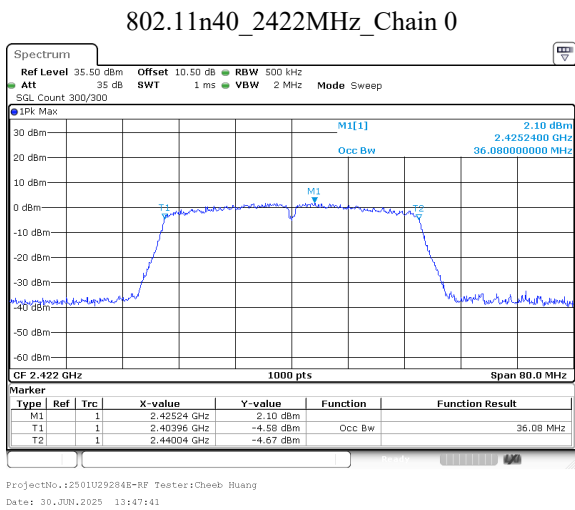
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:38:02

802.11n20_2462MHz_Chain 1

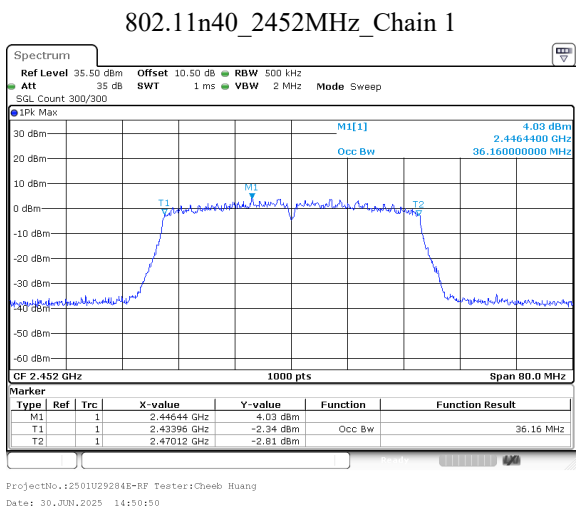
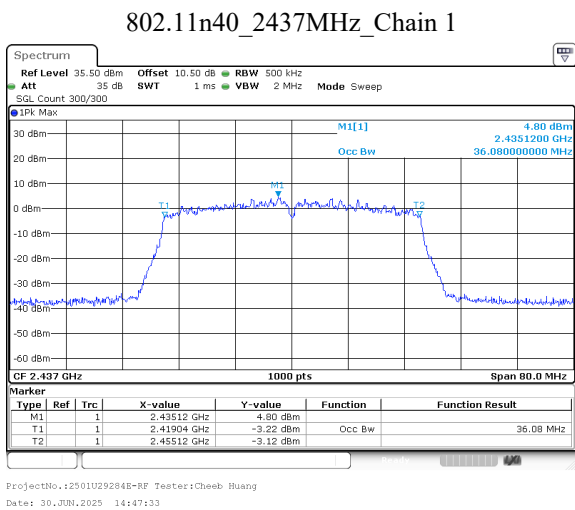
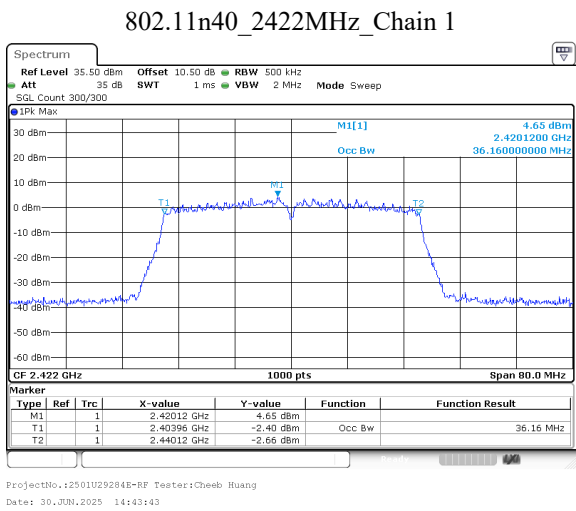
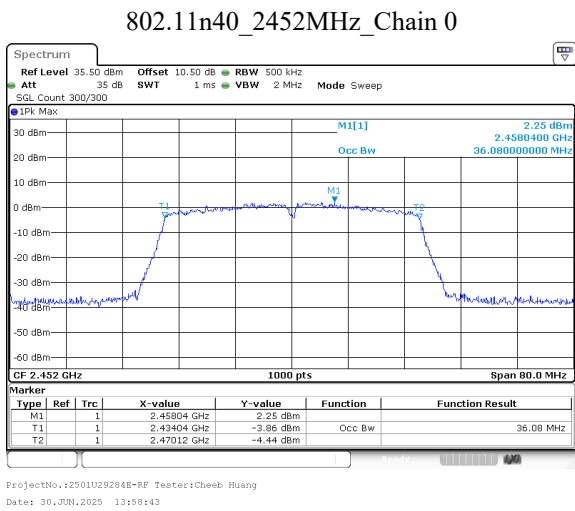


ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:41:05

Chain 0



Chain 1



Maximum Conducted Output Power

Test Information:

Sample No.:	348G-1	Test Date:	2025/06/30
Test Site:	RF	Test Mode:	Transmitting
Tester:	Cheeb Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.1	Relative Humidity: (%)	51	ATM Pressure: (kPa)	101.4
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Test Data:

Mode	Antenna	Test Frequency (MHz)	Peak Output Power(dBm)	Average Output Power(dBm)	Limit (dBm)	Verdict
802.11b	Chain 0	2412	14.23	11.11	30	Pass
		2437	14.39	11.34	30	Pass
		2462	14.24	11.17	30	Pass
	Chain 1	2412	14.20	11.17	30	Pass
		2437	14.55	11.40	30	Pass
		2462	14.20	11.09	30	Pass
802.11g	Chain 0	2412	17.85	10.53	30	Pass
		2437	17.81	10.47	30	Pass
		2462	17.87	10.48	30	Pass
	Chain 1	2412	17.91	10.63	30	Pass
		2437	17.87	10.53	30	Pass
		2462	17.87	10.58	30	Pass
802.11n20	Chain 0	2412	21.90	14.26	30	Pass
		2437	21.75	14.19	30	Pass
		2462	21.96	14.31	30	Pass
	Chain 1	2412	22.25	14.66	30	Pass
		2437	22.14	14.31	30	Pass
		2462	22.24	14.42	30	Pass
	Chain 0+Chain 1	2412	25.09	17.47	30	Pass
		2437	24.96	17.26	30	Pass
		2462	25.11	17.38	30	Pass
802.11n40	Chain 0	2422	18.80	11.31	30	Pass
		2437	18.94	11.39	30	Pass
		2452	18.94	11.35	30	Pass
	Chain 1	2422	19.12	11.31	30	Pass
		2437	19.29	11.33	30	Pass
		2452	19.29	11.36	30	Pass
	Chain 0+Chain 1	2422	21.97	14.32	30	Pass
		2437	22.13	14.37	30	Pass
		2452	22.13	14.37	30	Pass

Note: For 802.11n modes, the device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01:

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the k_{th} antenna is being fed by spatial stream j , or zero if it is not;

G_k is the gain in dBi of the k_{th} antenna.

Chain 0 Gain:	2.77	dBi	Directional gain:	5.83	dBi
Chain 1 Gain:	2.87	dBi			

Power Spectral Density

Test Information:

Sample No.:	348G-1	Test Date:	2025/06/30
Test Site:	RF	Test Mode:	Transmitting
Tester:	Cheeb Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.1	Relative Humidity: (%)	51	ATM Pressure: (kPa)	101.4
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Test Data:

Mode	Antenna	Test Frequency (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
802.11b	Chain 0	2412	0.91	8	Pass
		2437	1.06	8	Pass
		2462	-0.69	8	Pass
	Chain 1	2412	0.83	8	Pass
		2437	1.21	8	Pass
		2462	-0.13	8	Pass
802.11g	Chain 0	2412	-13.84	8	Pass
		2437	-15.62	8	Pass
		2462	-14.85	8	Pass
	Chain 1	2412	-13.29	8	Pass
		2437	-15.03	8	Pass
		2462	-15.04	8	Pass
802.11n20	Chain 0	2412	-10.48	8	Pass
		2437	-10.75	8	Pass
		2462	-11.28	8	Pass
	Chain 1	2412	-8.64	8	Pass
		2437	-8.53	8	Pass
		2462	-9.21	8	Pass
	Chain 0+Chain 1	2412	-6.45	8	Pass
		2437	-6.49	8	Pass
		2462	-7.11	8	Pass
802.11n40	Chain 0	2422	-16.00	8	Pass
		2437	-16.74	8	Pass
		2452	-16.81	8	Pass
	Chain 1	2422	-17.03	8	Pass
		2437	-16.75	8	Pass
		2452	-15.69	8	Pass
	Chain 0+Chain 1	2422	-13.47	8	Pass
		2437	-13.73	8	Pass
		2452	-13.20	8	Pass

Note: For 802.11n modes, the device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01:

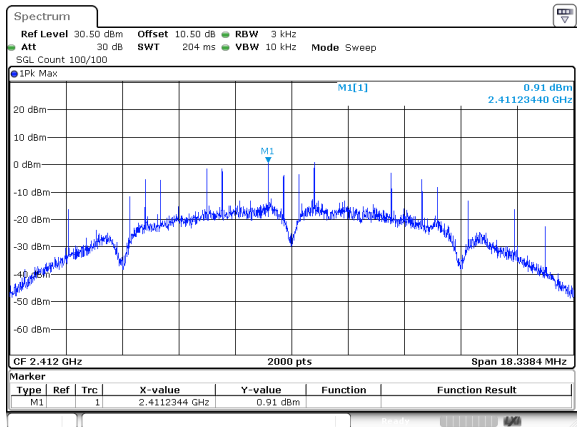
•
$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where
Each antenna is driven by no more than one spatial stream;
N_{SS} = the number of independent spatial streams of data;
N_{ANT} = the total number of antennas
g_{j,k} = 10^{G_k/20} if the k_{th} antenna is being fed by spatial stream j, or zero if it is not;
G_k is the gain in dBi of the k_{th} antenna.

Chain 0 Gain:	2.77	dBi	Directional gain:	5.83	dBi
Chain 1 Gain:	2.87	dBi			

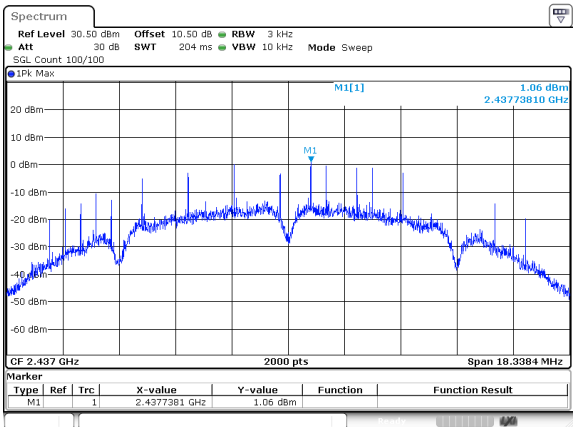
Chain 0

802.11b_2412MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:50:01

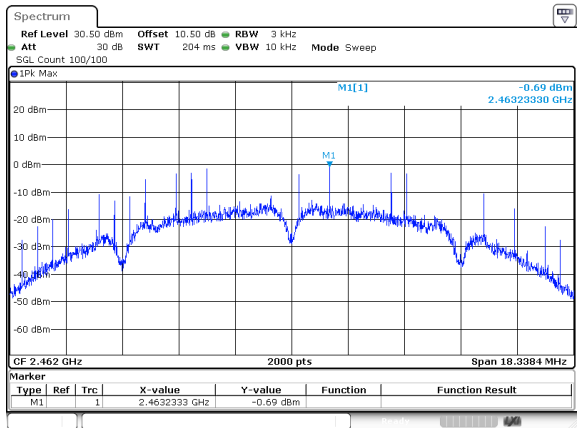
802.11b_2437MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:52:13

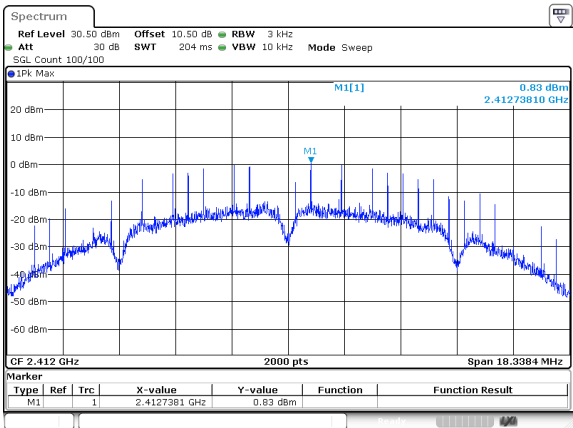
Chain 1

802.11b_2462MHz_Chain 0



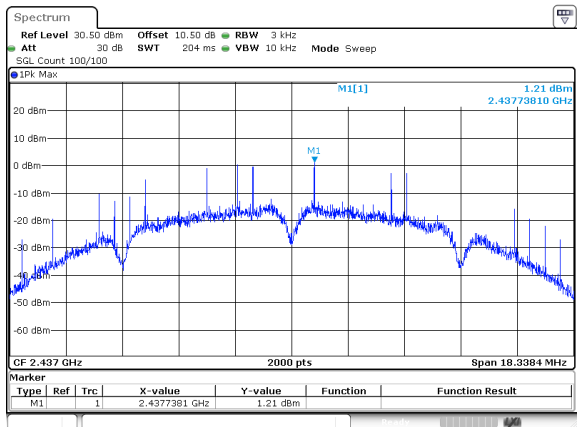
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:55:03

802.11b_2412MHz_Chain 1



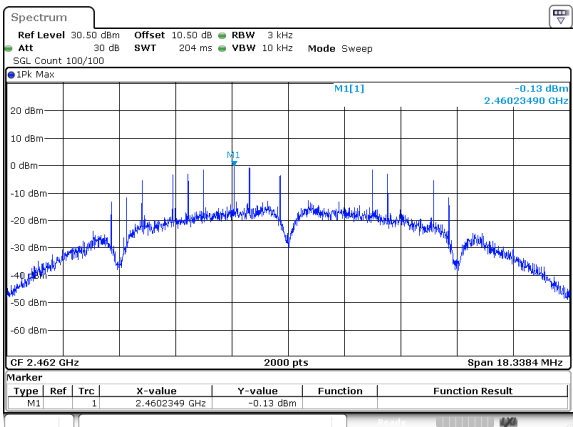
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:05:20

802.11b_2437MHz_Chain 1



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:07:45

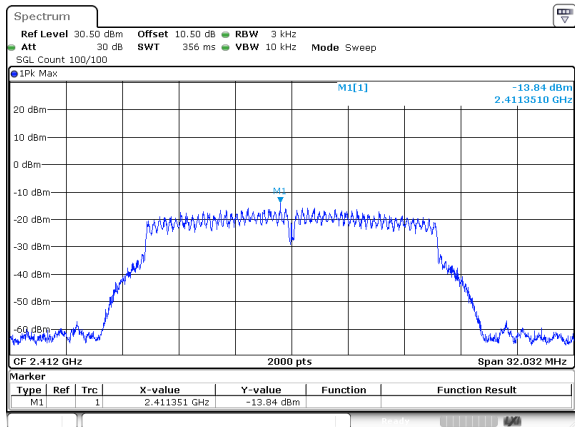
802.11b_2462MHz_Chain 1



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:10:34

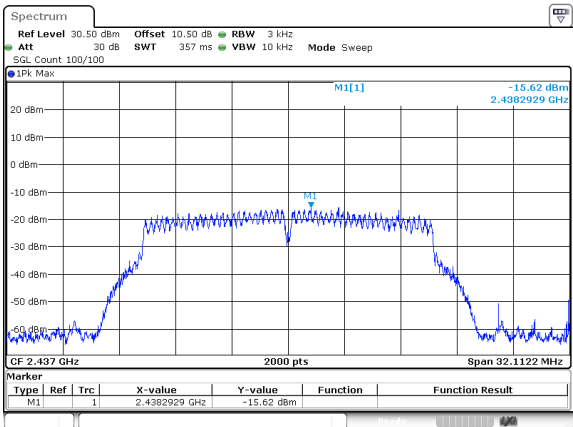
Chain 0

802.11g_2412MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:59:12

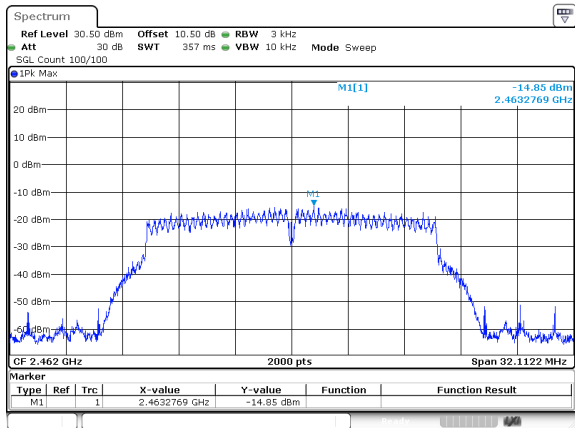
802.11g_2437MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 12:02:51

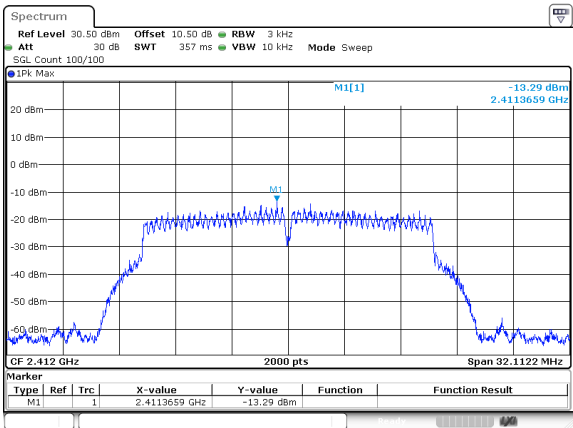
Chain 1

802.11g_2462MHz_Chain 0



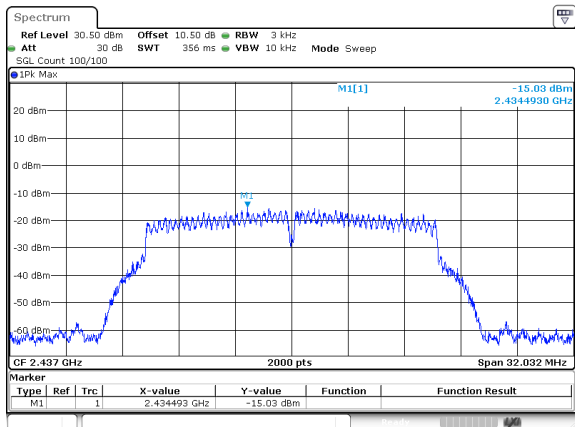
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 12:06:46

802.11g_2412MHz_Chain 1



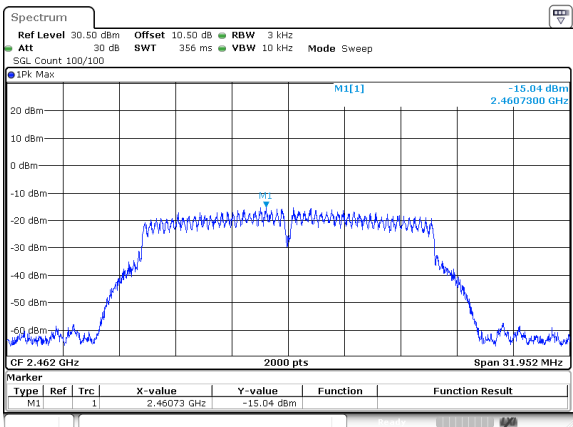
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:11:38

802.11g_2437MHz_Chain 1



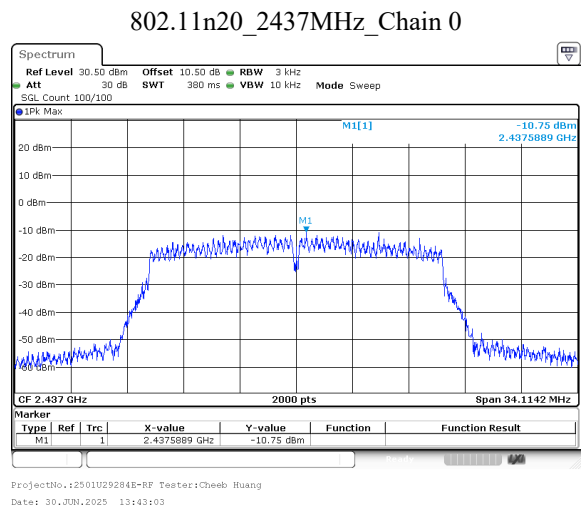
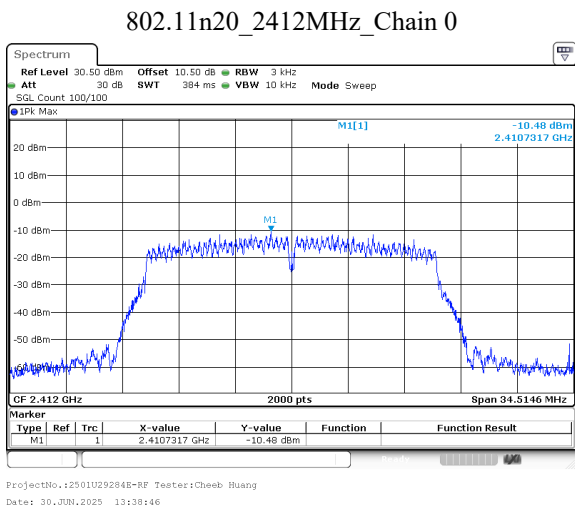
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:17:46

802.11g_2462MHz_Chain 1

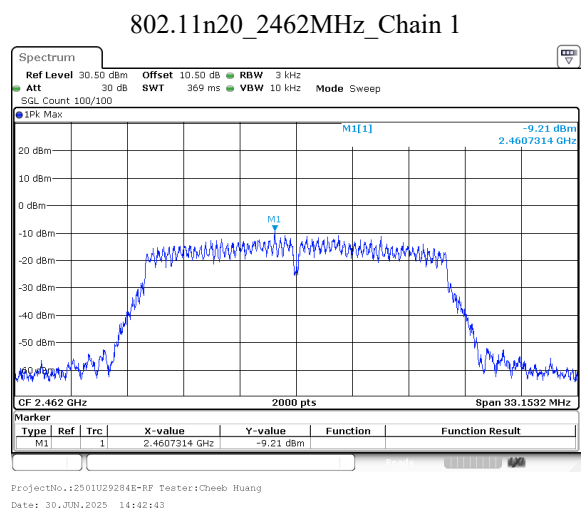
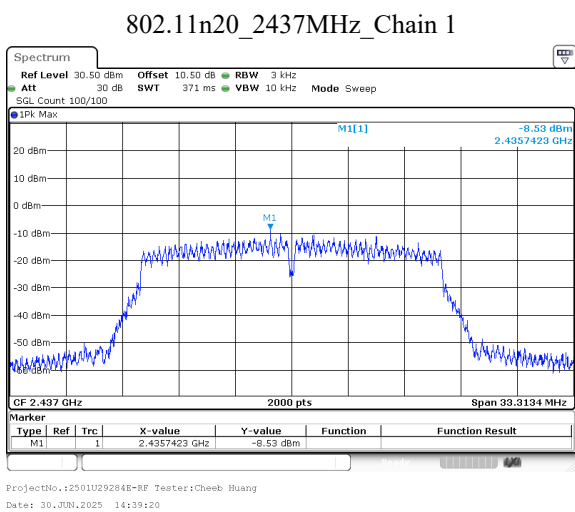
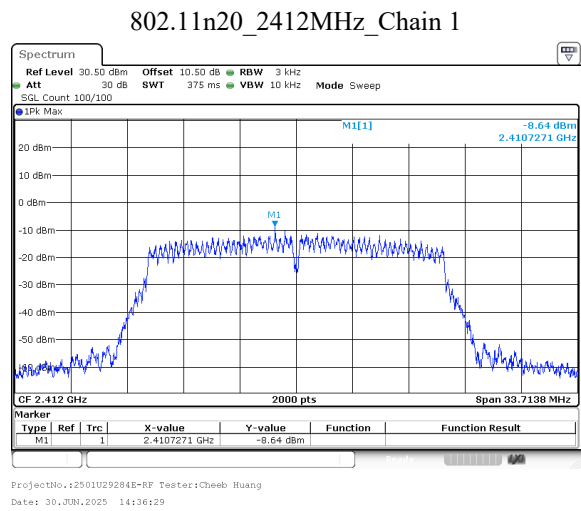
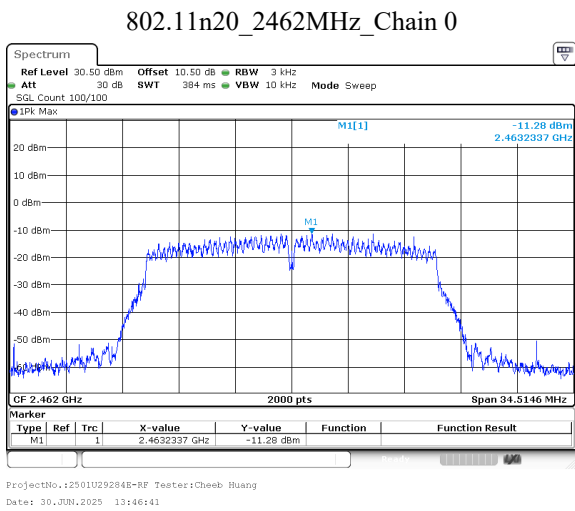


ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:33:02

Chain 0

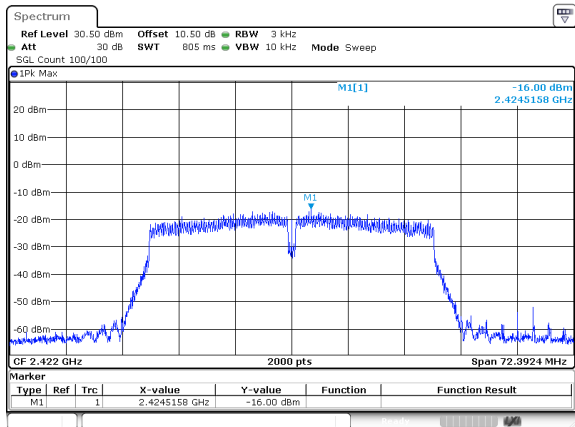


Chain 1



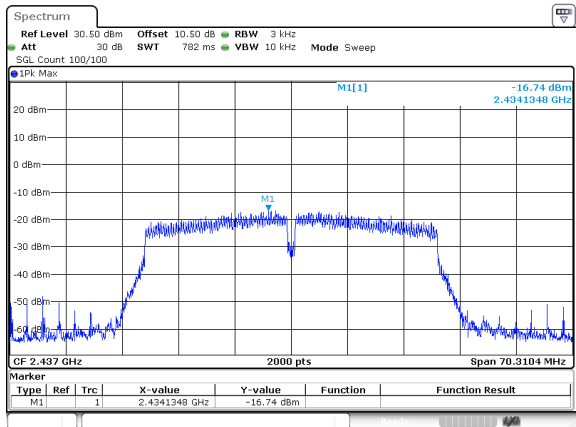
Chain 0

802.11n40_2422MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 13:50:50

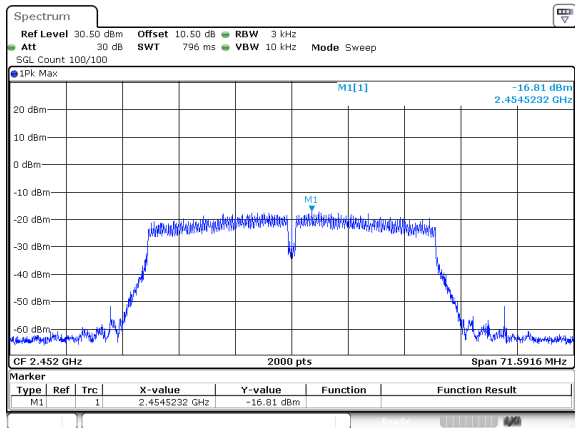
802.11n40_2437MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 13:53:41

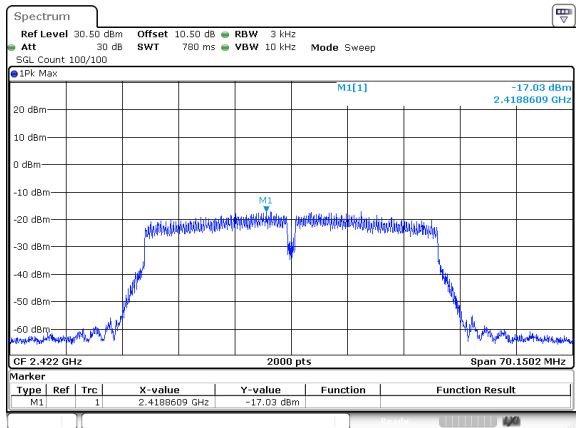
Chain 1

802.11n40_2452MHz_Chain 0



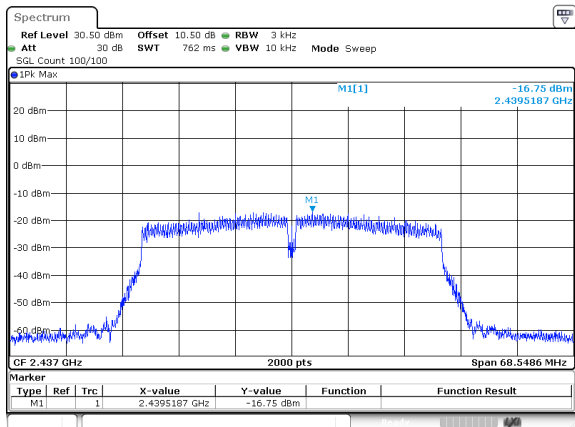
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:01:23

802.11n40_2422MHz_Chain 1



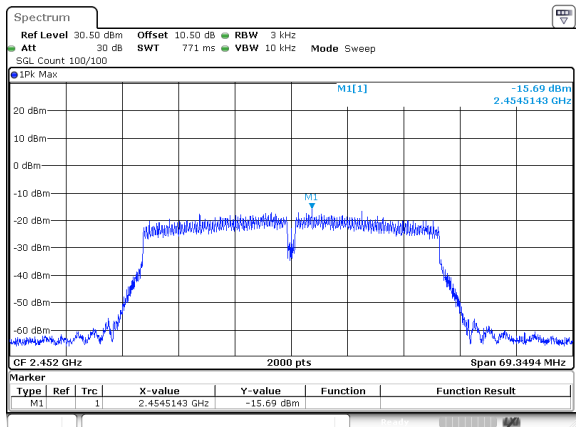
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:46:20

802.11n40_2437MHz_Chain 1



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:49:44

802.11n40_2452MHz_Chain 1



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:53:26

100 kHz Bandwidth of Frequency Band Edge

Test Information:

Sample No.:	348G-1	Test Date:	2025/06/30
Test Site:	RF	Test Mode:	Transmitting
Tester:	Cheeb Huang	Test Result:	Pass

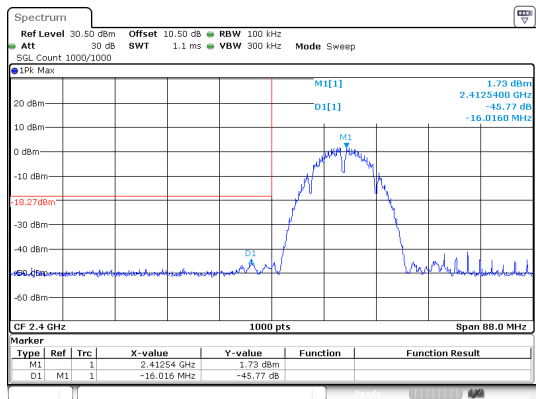
Environmental Conditions:

Temperature: (°C)	25.1	Relative Humidity: (%)	51	ATM Pressure: (kPa)	101.4
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Test Data:

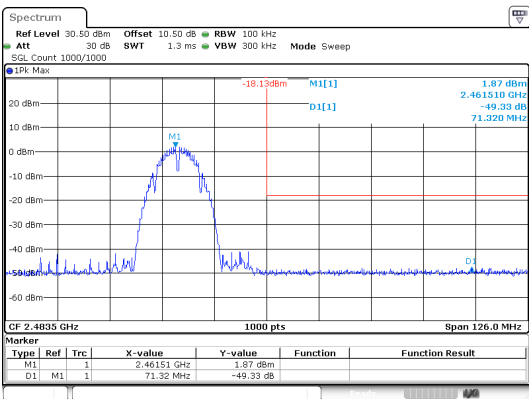
Chain 0

802.11b_2412MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:49:24

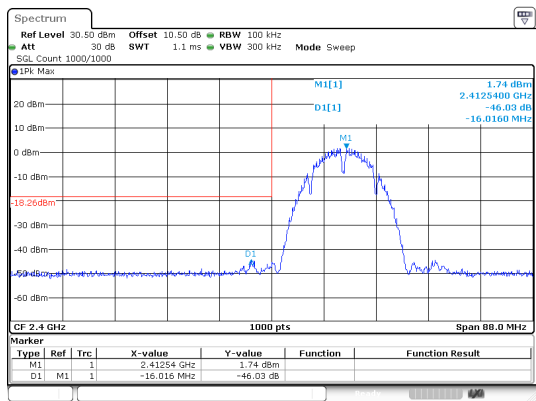
802.11b_2462MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:54:25

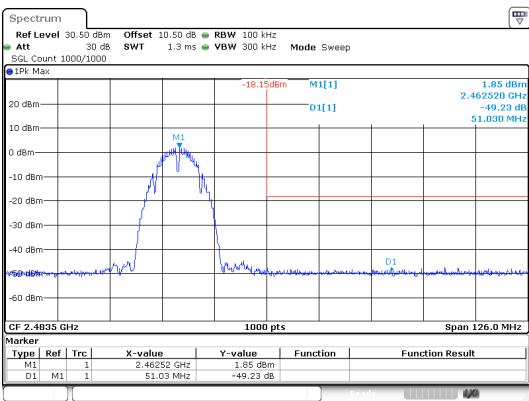
Chain 1

802.11b_2412MHz_Chain 1



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:04:42

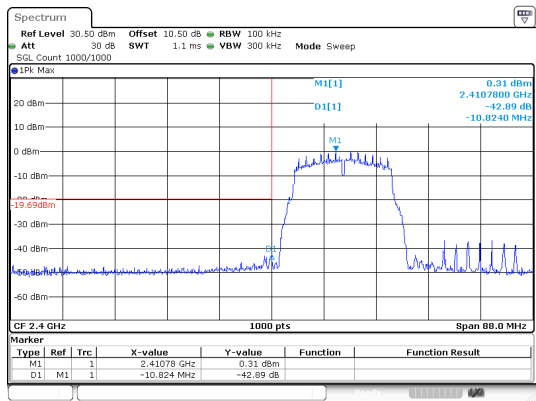
802.11b_2462MHz_Chain 1



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 14:09:56

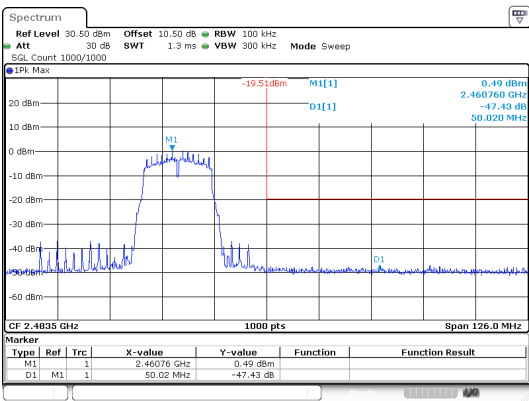
Chain 0

802.11g_2412MHz_Chain 0



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 11:58:14

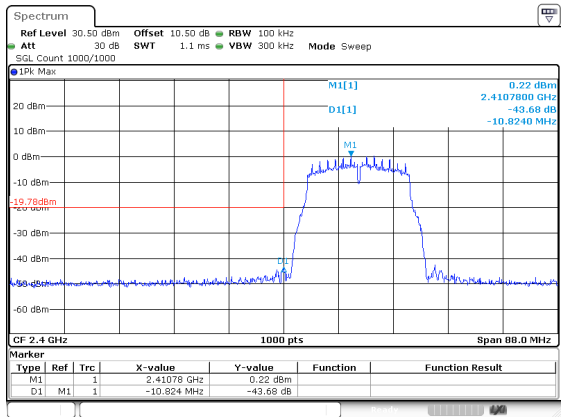
802.11g_2462MHz_Chain 0



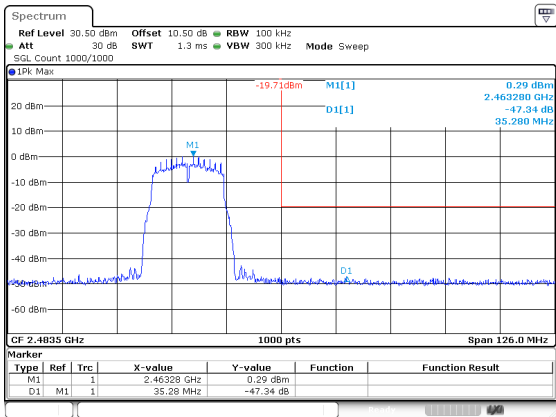
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30 JUN 2025 12:05:48

Chain 1

802.11g_2412MHz_Chain 1

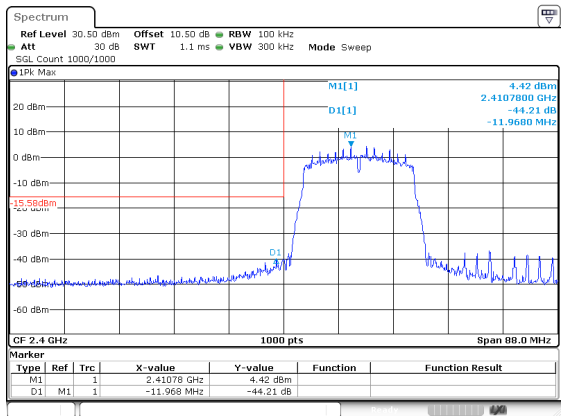


802.11g_2462MHz_Chain 1

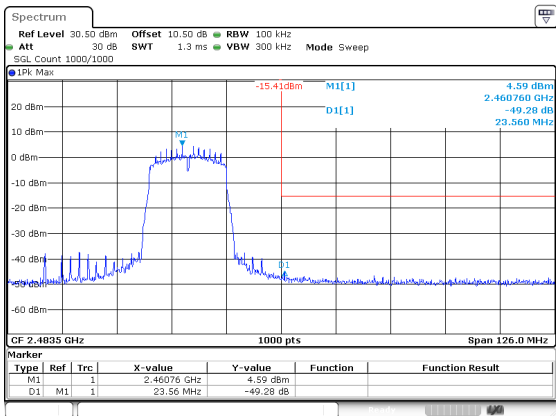


Chain 0

802.11n20_2412MHz_Chain 0

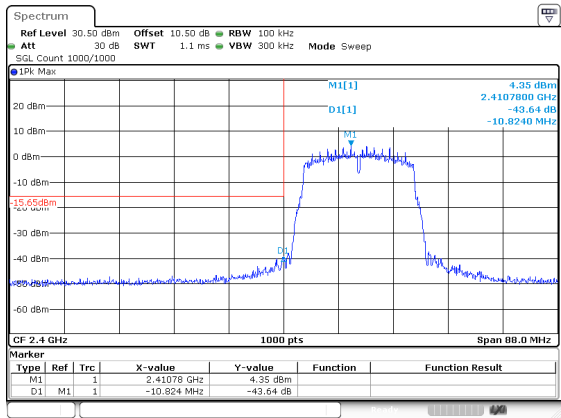


802.11n20_2462MHz_Chain 0

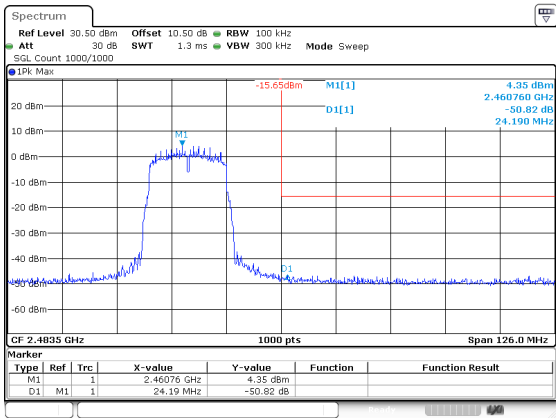


Chain 1

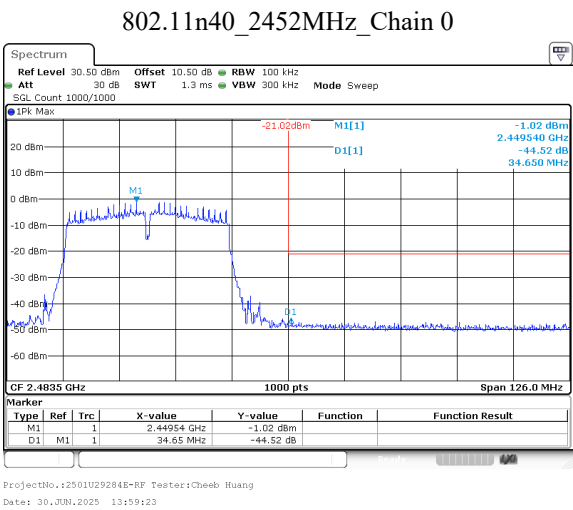
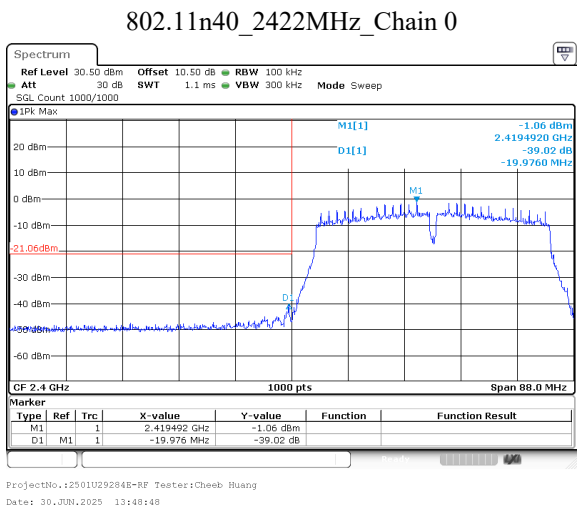
802.11n20_2412MHz_Chain 1



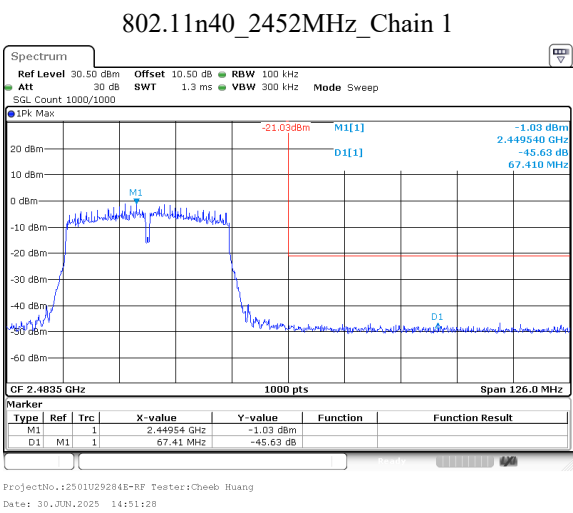
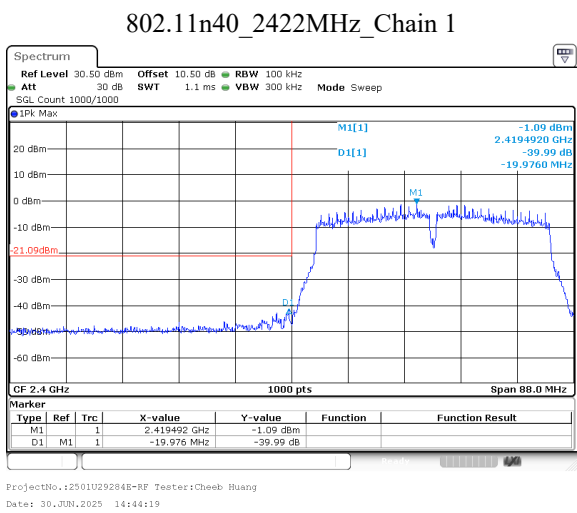
802.11n20_2462MHz_Chain 1



Chain 0



Chain 1



Duty Cycle**Test Information:**

Sample No.:	348G-1	Test Date:	2025/06/30
Test Site:	RF	Test Mode:	Transmitting
Tester:	Cheeb Huang	Test Result:	Pass

Environmental Conditions:

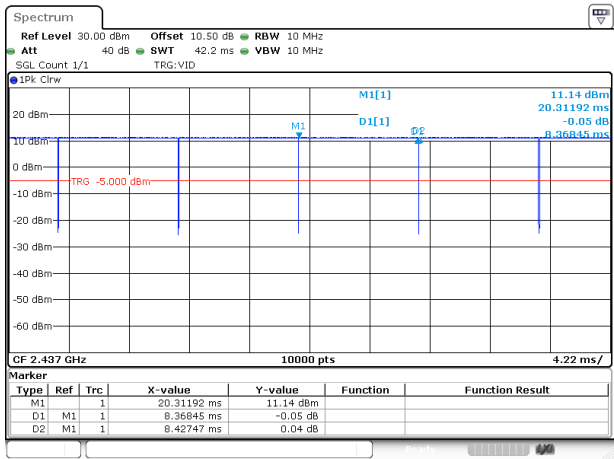
Temperature: (°C)	25.1	Relative Humidity: (%)	51	ATM Pressure: (kPa)	101.4
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Test Data:

Mode	Test Frequency (MHz)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor(dB)	1/Ton (Hz)	VBW Setting (kHz)
802.11b	2437	8.368	8.427	99.30	/	/	0.010
802.11g	2437	1.378	1.433	96.16	0.17	726	1
802.11n20	2437	1.290	1.345	95.91	0.18	775	1
802.11n40	2437	0.647	0.701	92.30	0.35	1546	2

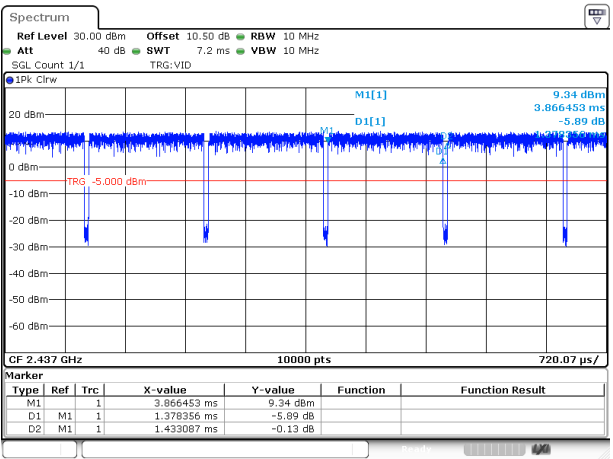
$$\text{Duty Cycle} = \text{Ton}/(\text{Ton}+\text{Toff})*100\%$$

802.11b_2437MHz



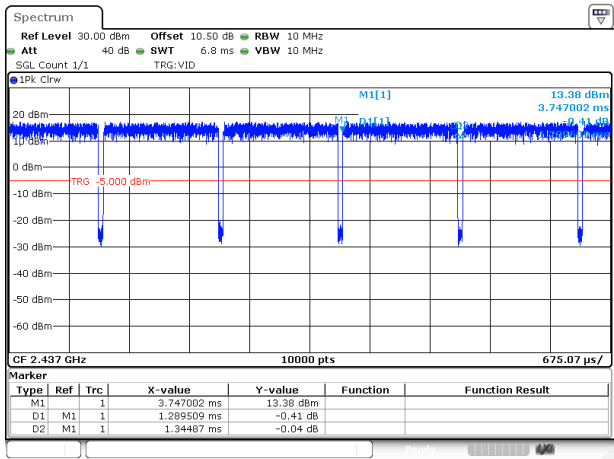
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 11:37:43

802.11g_2437MHz



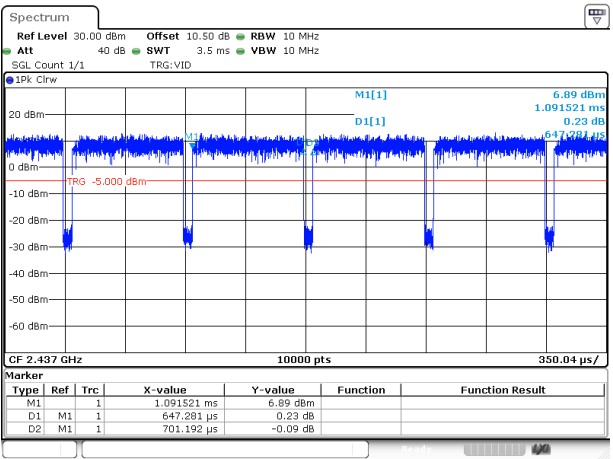
ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 11:39:28

802.11n20_2437MHz



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 11:40:53

802.11n40_2437MHz



ProjectNo.:2501U29284E-RF Tester:Cheeb Huang
Date: 30.JUN.2025 11:41:41

RF EXPOSURE EVALUATION

MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Result

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

For worst case:

Mode	Frequency (MHz)	Antenna Gain [#]		Max Tune-up Power [#]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
BT	2402-2480	2.64	1.84	9.0	7.94	20	0.0029	1.0
BLE	2402-2480	2.64	1.84	2.5	1.78	20	0.0007	1.0
2.4G Wi-Fi	2412-2462	5.83	3.83	25.5	354.81	20	0.2703	1.0
5G Wi-Fi	5150-5250	5.67	3.69	18.0	63.10	20	0.0463	1.0
	5725-5850	5.18	3.30	19.0	79.43	20	0.0521	1.0

Note:

- 1) The tune up conducted power and antenna gain was declared by the applicant.
- 2) For the Wi-Fi mode, the antenna gain should be the directional gain.
- 3) The BT and Wi-Fi can transmit at same time, the 2.4G and 5G Wi-Fi cannot transmit at same time.

Simultaneous transmitting consideration (worst case):

The ratio= $MPE_{BT}/limit + MPE_{2.4G\ Wi-Fi}/limit = 0.0029/1.0 + 0.2703/1.0 = 0.273 < 1.0$

So simultaneous exposure is compliant.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant.

EUT PHOTOGRAPHS

Please refer to the attachment 2501U29284E-RF External photo and 2501U29284E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2501U29284E-RF-00B Test Setup photo.

***** **END OF REPORT** *****