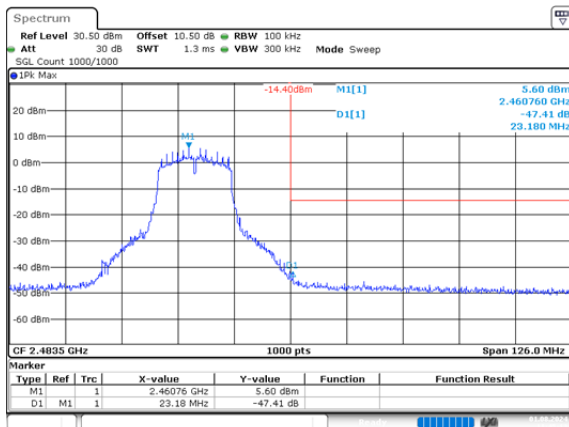
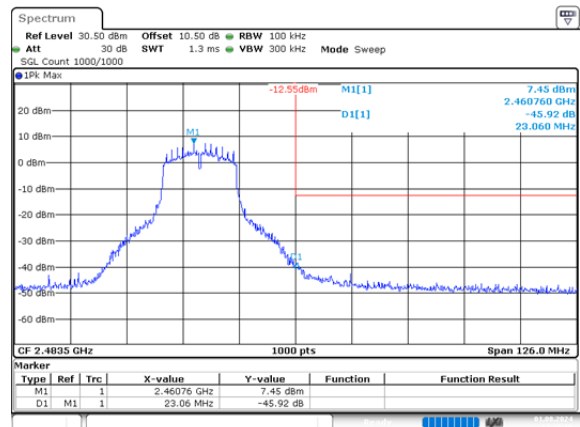


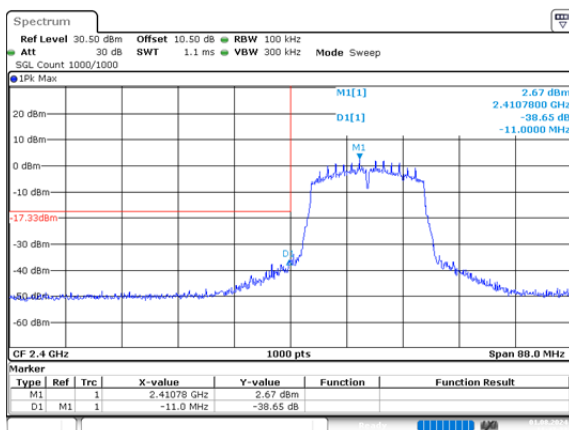
g_2462MHz_Chain 0 47.41dB



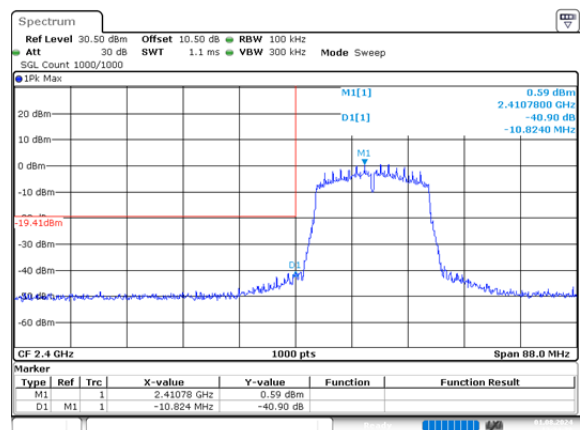
g_2462MHz_Chain 1 45.92dB



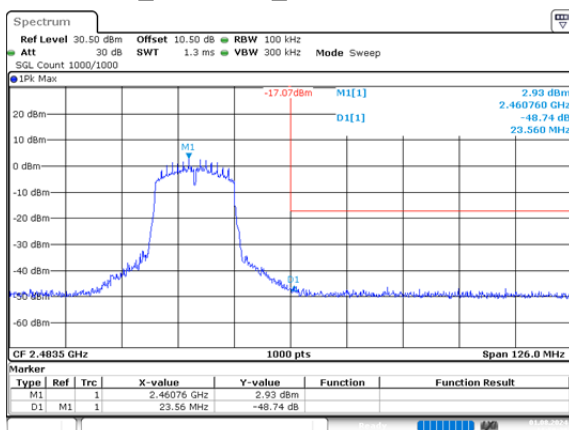
n20_2412MHz_Chain 0 38.65dB



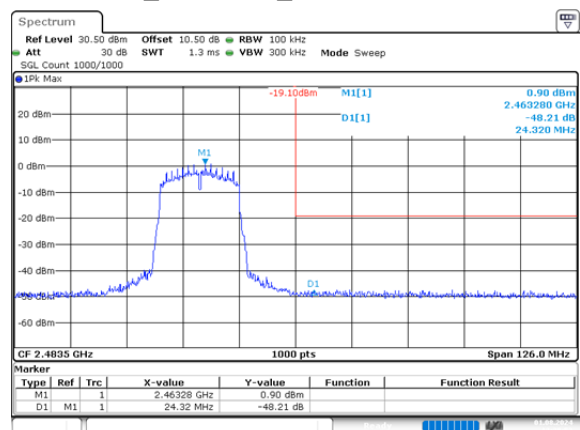
n20_2412MHz_Chain 1 40.90dB



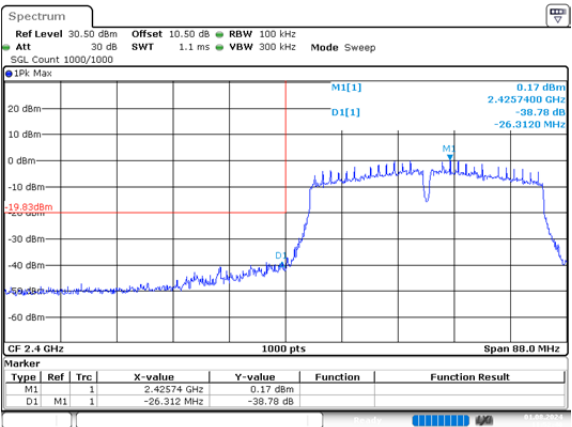
n20_2462MHz_Chain 0 48.74dB



n20_2462MHz_Chain 1 48.21dB

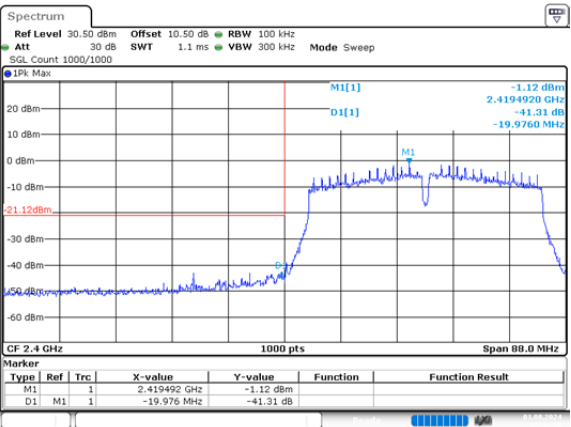


n40_2422MHz_Chain 0 38.78dB



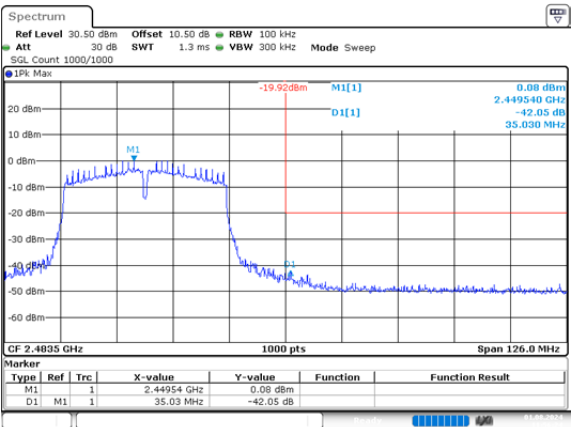
ProjectNo.:2403V24649E-RF Tester:Tao Zhu
Date: 1.AUG.2024 11:52:40

n40_2422MHz_Chain 1 41.31dB



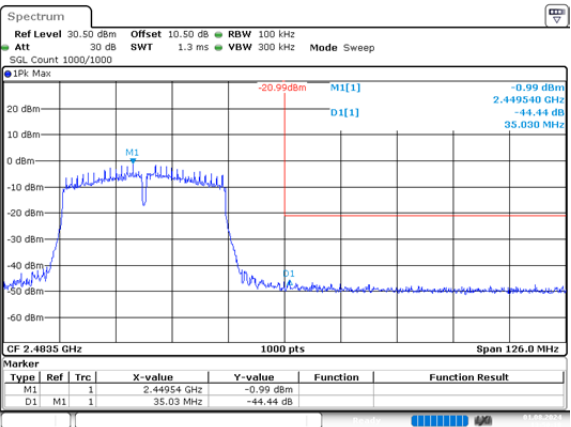
ProjectNo.:2403V24649E-RF Tester:Tao Zhu
Date: 1.AUG.2024 13:42:30

n40_2452MHz_Chain 0 42.05dB



ProjectNo.:2403V24649E-RF Tester:Tao Zhu
Date: 1.AUG.2024 11:56:24

n40_2452MHz_Chain 1 44.44dB



ProjectNo.:2403V24649E-RF Tester:Tao Zhu
Date: 1.AUG.2024 13:50:18

4.6 Duty Cycle

Test Information:

Serial No.:	20WK-1	Test Date:	2024/8/1
Test Site:	RF	Test Mode:	Transmitting
Tester:	Tao Zhu	Test Result:	N/A

Environmental Conditions:

Temperature: (°C):	26.3	Relative Humidity: (%)	67	ATM Pressure: (kPa)	100.7
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101591	2024/04/01	2025/03/31
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
HuiXunDa	DC Block	SMA-JK 18G	DCB181108042	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-1 8G	21060301	Each time	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

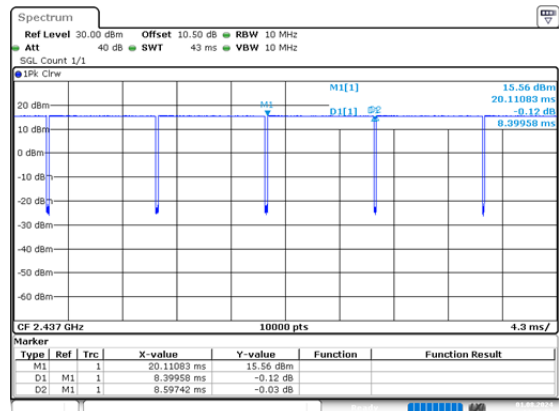
2412~2462

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/Ton (Hz)	VBW Setting (kHz)
b_2437MHz_Chain 0	8.400	8.597	97.71	0.10	119	0.200
g_2437MHz_Chain 0	1.393	1.617	86.15	0.65	718	1
n20_2437MHz_Chain 0	0.669	0.901	74.25	1.29	1495	2
n40_2437MHz_Chain 0	0.347	0.625	55.52	2.56	2882	3

Duty Cycle = Ton/(Ton+Toff)*100%

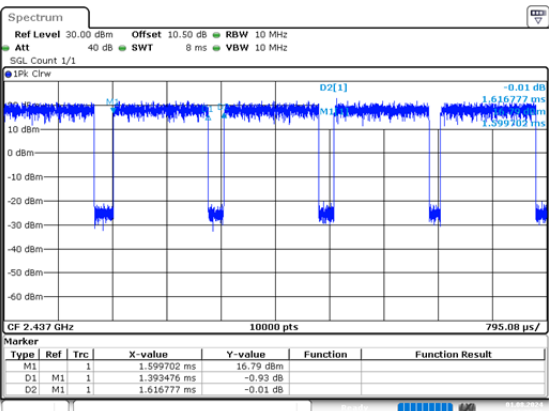
2412~2462

b_2437MHz_Chain 0
8.400ms,8.597ms



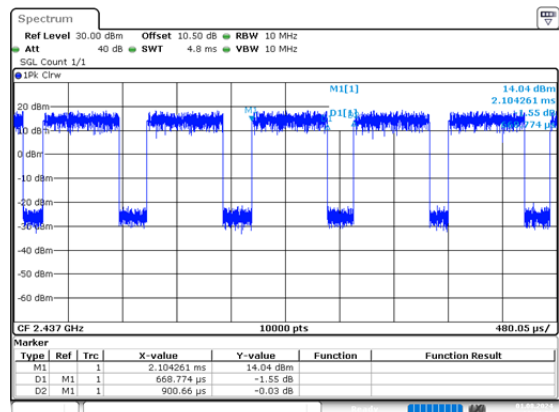
ProjectNo.:2403V24649E-RF Tester:Tao Zhu
Date: 1.AUG.2024 14:29:57

g_2437MHz_Chain 0
1.393ms,1.617ms



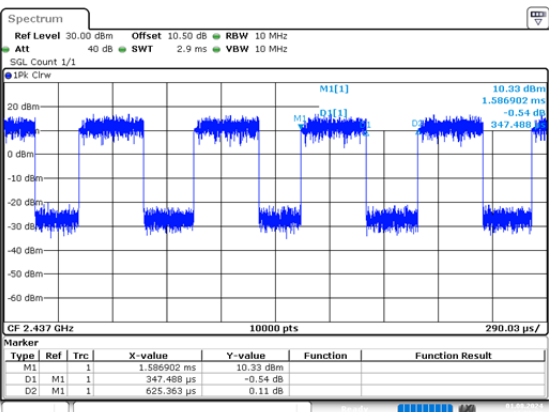
ProjectNo.:2403V24649E-RF Tester:Tao Zhu
Date: 1.AUG.2024 11:29:50

n20_2437MHz_Chain 0
0.669ms,0.901ms



ProjectNo.:2403V24649E-RF Tester:Tao Zhu
Date: 1.AUG.2024 11:31:09

n40_2437MHz_Chain 0
0.347ms,0.625ms



ProjectNo.:2403V24649E-RF Tester:Tao Zhu
Date: 1.AUG.2024 11:32:08

4.7 Maximum Conducted Output Power

Serial Number:	20WK-1	Test Date:	2024/8/1
Test Site:	RF	Test Mode:	Transmitting
Tester:	Tao Zhu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.3	Relative Humidity: (%)	67	ATM Pressure: (kPa)	100.7
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Anritsu	Power Meter	ML2495A	1106009	2023/8/4	2024/8/3
Anritsu	Pulse Power Sensor	MA2411A	10780	2023/8/4	2024/8/3
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
HuiXunDa	DC Block	SMA-JK 18G	DCB181108042	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Test Modes	Test Frequency (MHz)	Maximum Conducted Peak Output Power (dBm)			Limit (dBm)
		Chain 0	Chain 1	Total	
802.11b	2412	17.07	15.26	/	30
	2437	17.09	15.32	/	30
	2462	17.12	15.39	/	30
802.11g	2412	23.62	25.17	/	30
	2437	23.66	25.18	/	30
	2462	23.74	25.39	/	30
802.11n ht20	2412	20.54	19.25	22.95	30
	2437	20.66	19.12	22.97	30
	2462	20.68	19.31	23.06	30
802.11n ht40	2422	20.89	19.18	23.13	30
	2437	20.86	19.27	23.15	30
	2452	20.95	19.39	23.25	30

Note: The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:
 Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$,
 so directional gain = antenna gain + array gain = 2.77+0 = 2.77 dBi.

5. RF EXPOSURE EVALUATION

5.1 RF EXPOSURE EVALUATION-MAXIMUM PERMISSIBLE EXPOSURE (MPE)

5.1.1 Applicable Standard

According to subpart 15.247(i) and 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.

5.1.2 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)

5.1.3 Calculated Data:

Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
	(dBi)	(numeric)	(dBm)	(mW)			
2412-2462	2.77	1.89	26	398.11	20	0.1497	1

Note: The Conducted output power including Tune-up Tolerance provided by manufacturer

Result: The device meet FCC MPE at 20 cm distance

6. EUT PHOTOGRAPHS

Please refer to the attachment 2403V24649E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2403V24649E-RF-INP EUT INTERNAL PHOTOGRAPHS

7. TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2403V24649E-RF-00A-TSP TEST SETUP PHOTOGRAPHS.

==== END OF REPORT ====