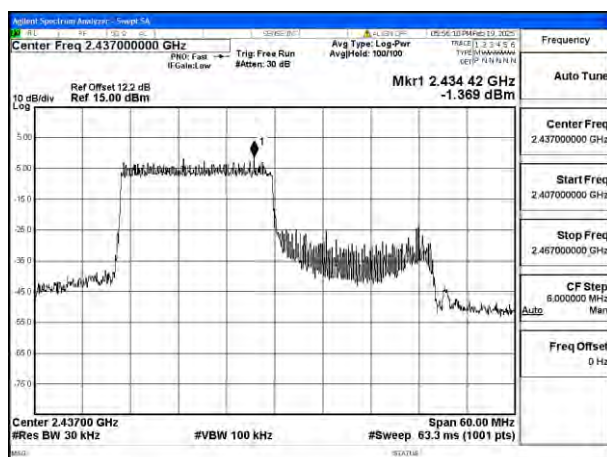


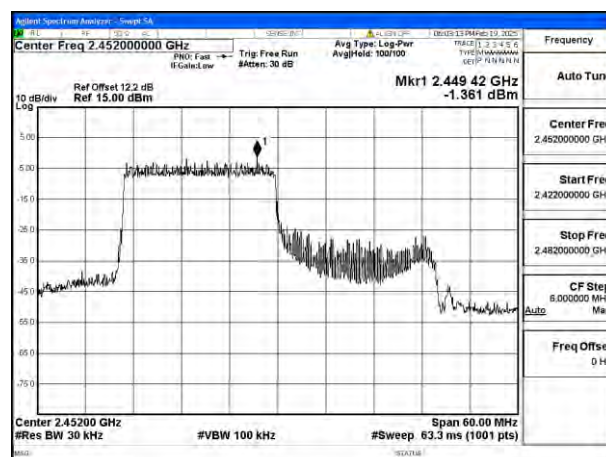


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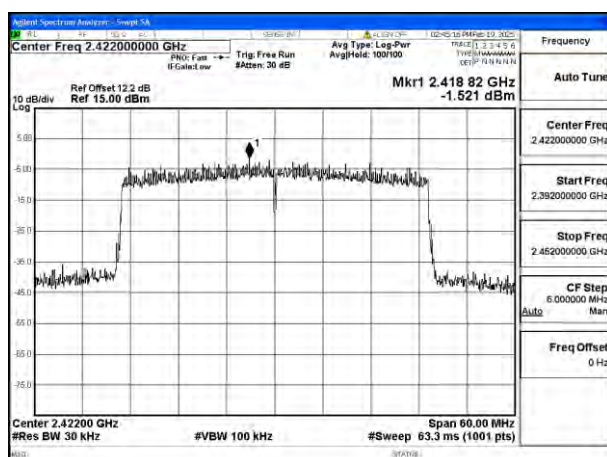
Test Report No.: PSU-NQN2502260117RF02



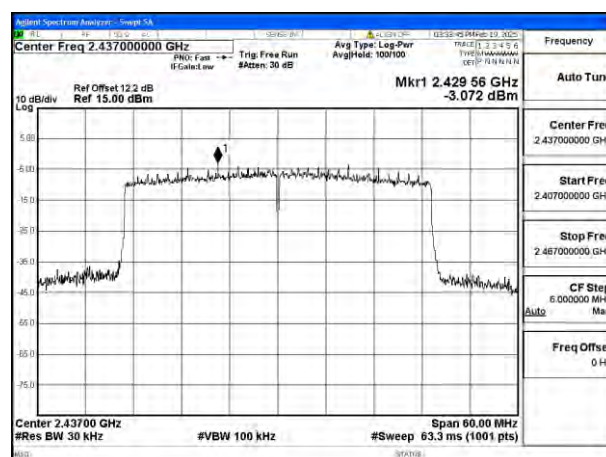
Mode:802.11ax HE40 Tone:242T
Frequency:2437MHz Ant:Chain1



Mode:802.11ax HE40 Tone:242T
Frequency:2452MHz Ant:Chain1



Mode:802.11ax HE40 Tone:484T
Frequency:2422MHz Ant:Chain0

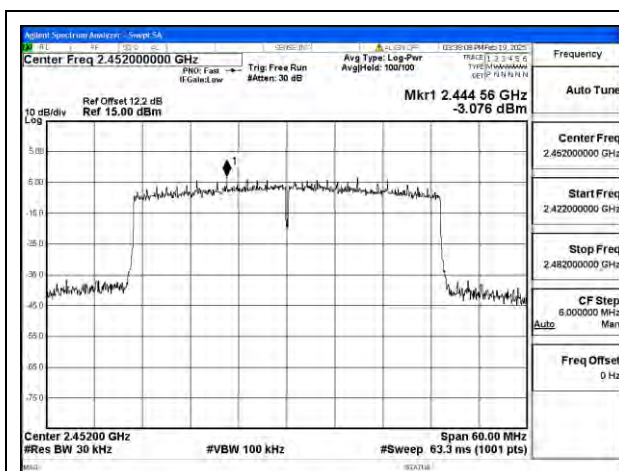


Mode:802.11ax HE40 Tone:484T
Frequency:2437MHz Ant:Chain0

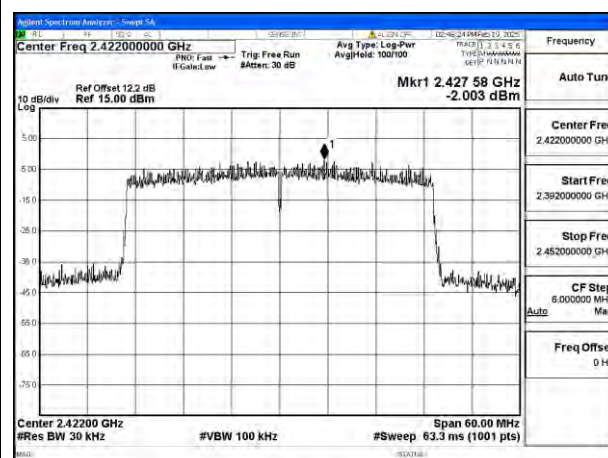


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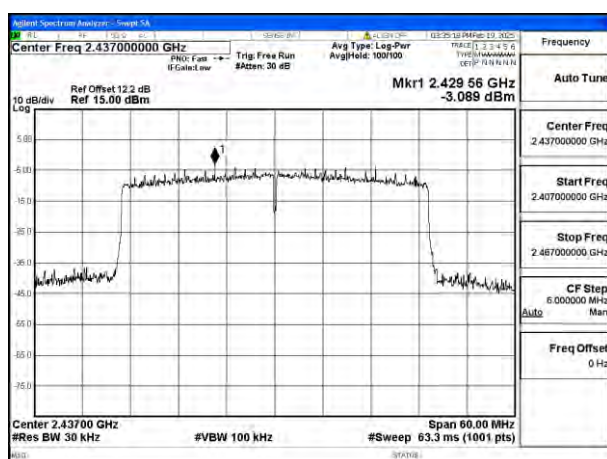
Test Report No.: PSU-NQN2502260117RF02



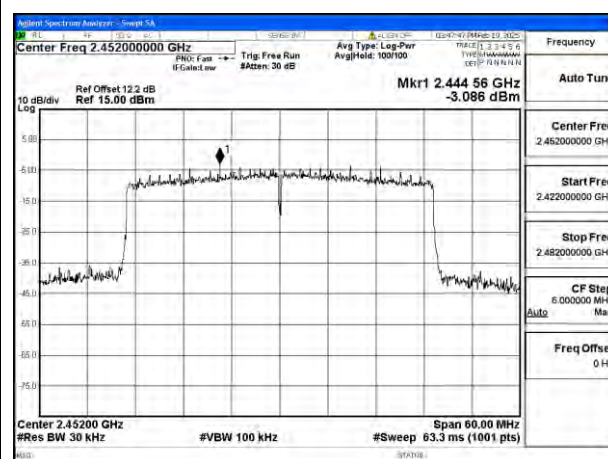
Mode:802.11ax HE40 Tone:484T
Frequency:2452MHz Ant:Chain0



Mode:802.11ax HE40 Tone:484T
Frequency:2422MHz Ant:Chain1



Mode:802.11ax HE40 Tone:484T
Frequency:2437MHz Ant:Chain1



Mode:802.11ax HE40 Tone:484T
Frequency:2452MHz Ant:Chain1

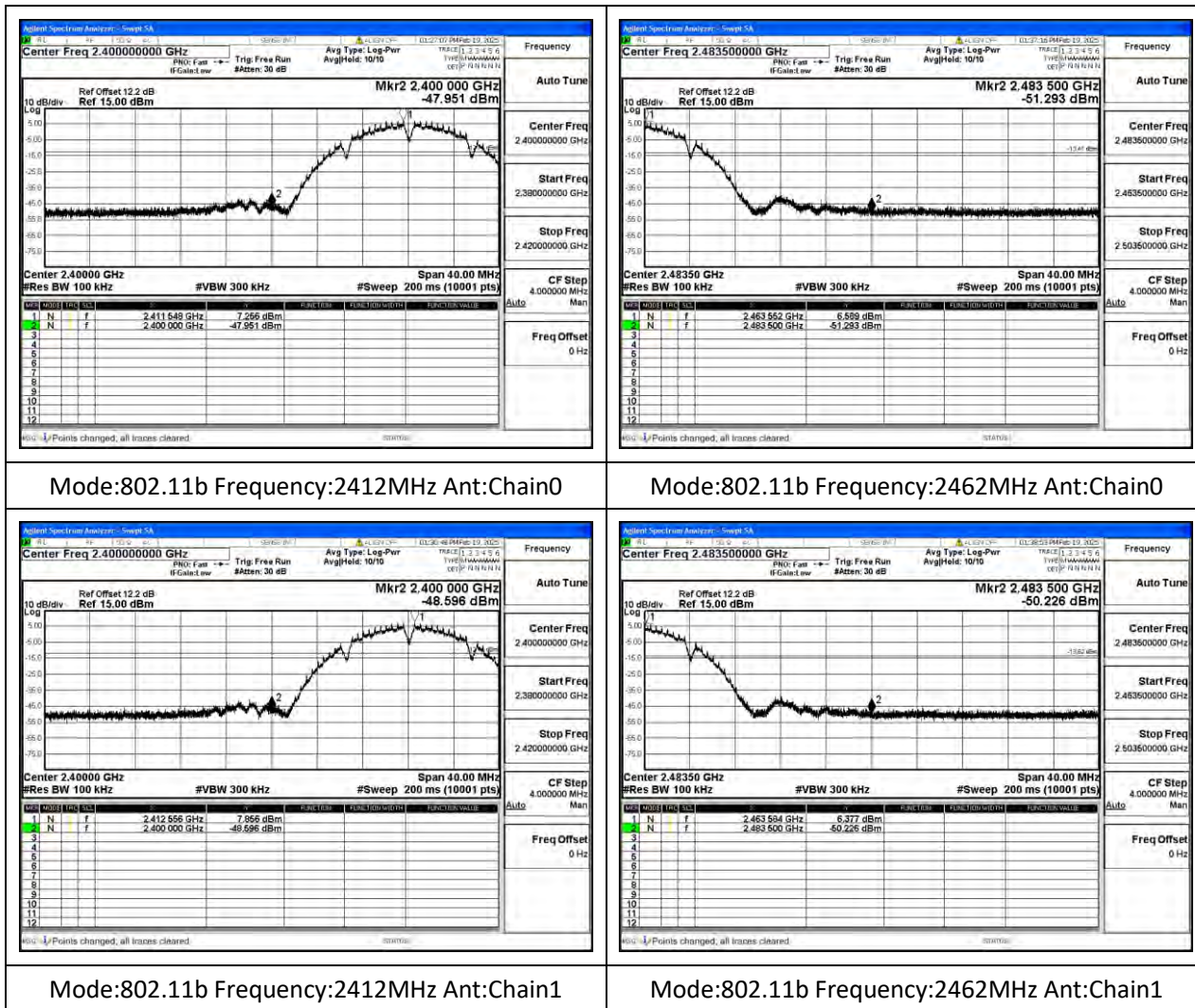


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BAND EDGE MEASUREMENTS

TEST GRAPHS

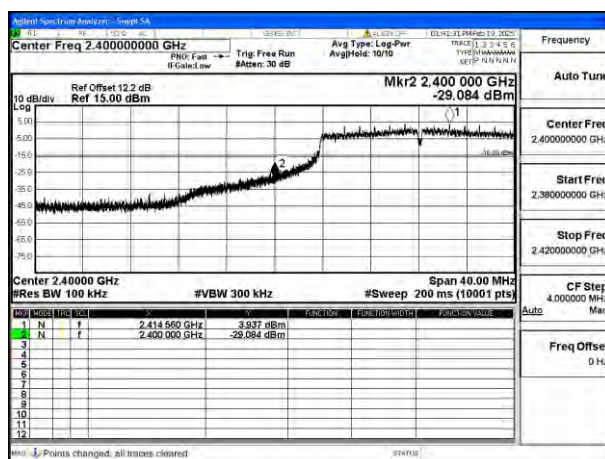
Test Mode: 802.11b



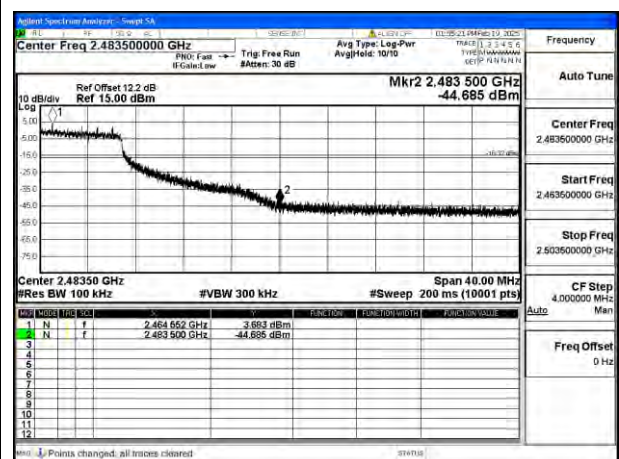
Test Mode: 802.11g



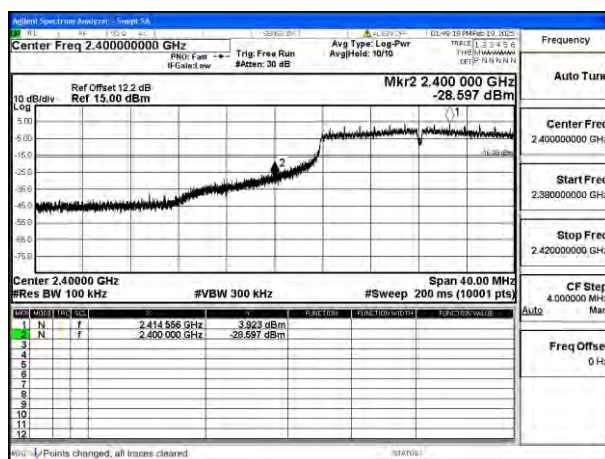
BUREAU VERITAS Test Report No.: PSU-NQN2502260117RF02



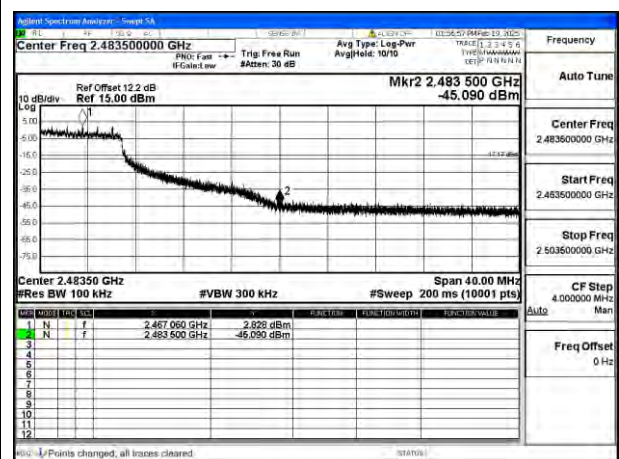
Mode:802.11g Frequency:2412MHz Ant:Chain0



Mode:802.11g Frequency:2462MHz Ant:Chain0

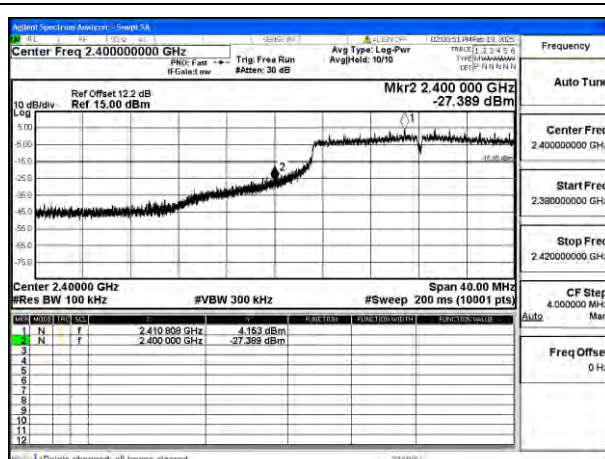


Mode:802.11g Frequency:2412MHz Ant:Chain1

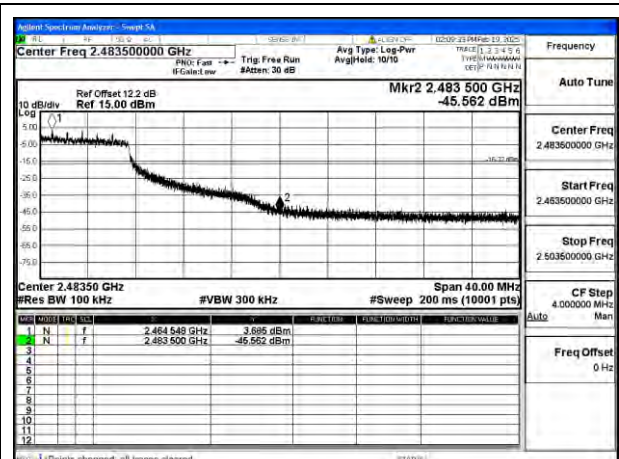


Mode:802.11g Frequency:2462MHz Ant:Chain1

Test Mode: 802.11n HT20



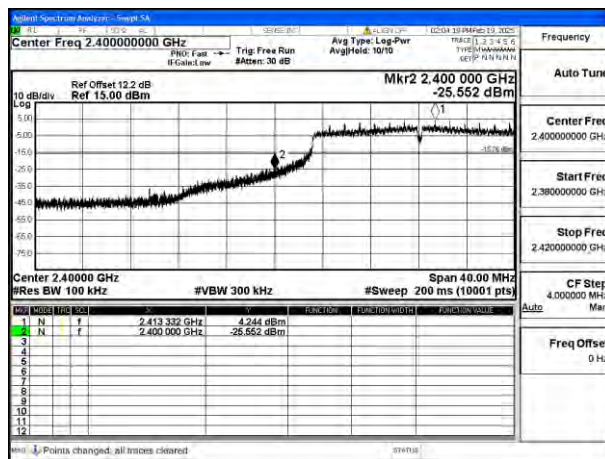
Mode:802.11n HT20 Frequency:2412MHz
Ant:Chain0



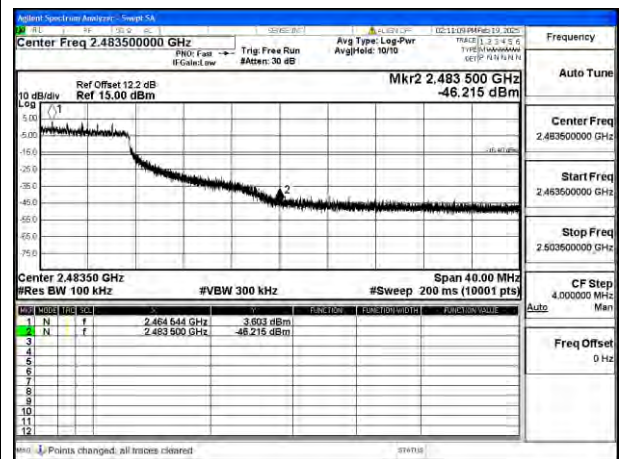
Mode:802.11n HT20 Frequency:2462MHz
Ant:Chain0



BUREAU VERITAS Test Report No.: PSU-NQN2502260117RF02

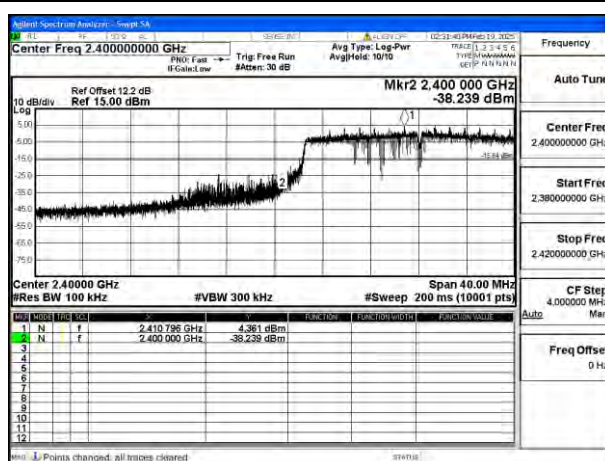


Mode:802.11n HT20 Frequency:2412MHz
Ant:Chain1

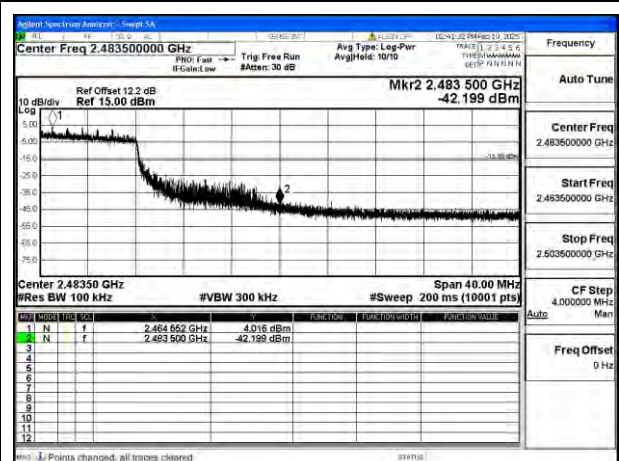


Mode:802.11n HT20 Frequency:2462MHz
Ant:Chain1

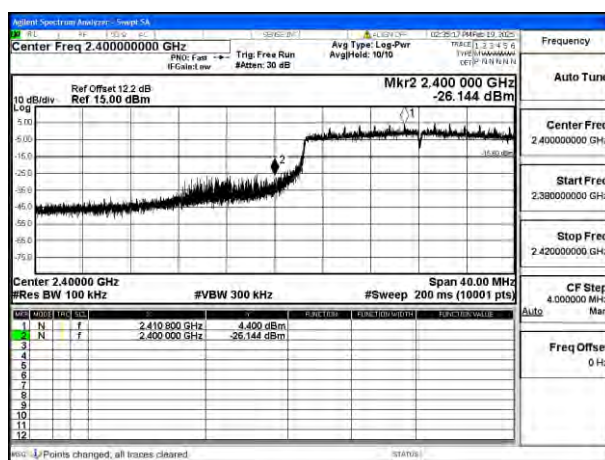
Test Mode: 802.11ax HE20



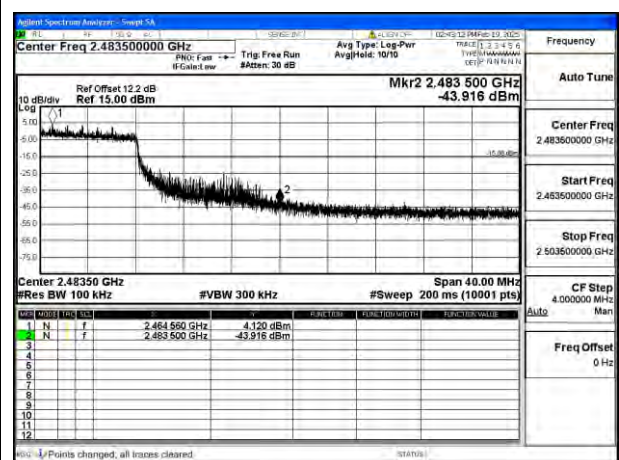
Mode:802.11ax HE20 Frequency:2412MHz
Ant:Chain0



Mode:802.11ax HE20 Frequency:2462MHz
Ant:Chain0



Mode:802.11ax HE20 Frequency:2412MHz



Mode:802.11ax HE20 Frequency:2462MHz

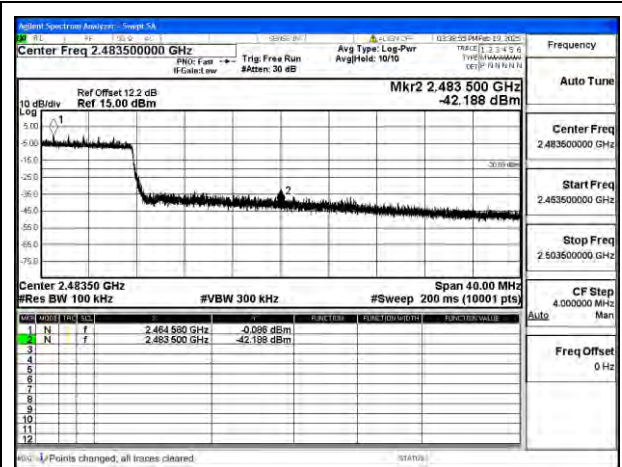
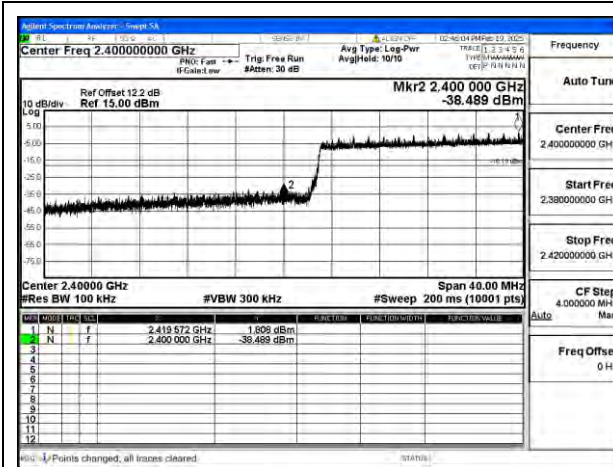


BUREAU VERITAS Test Report No.: PSU-NQN2502260117RF02

Ant:Chain1

Ant:Chain1

Test Mode: 802.11ax HE40

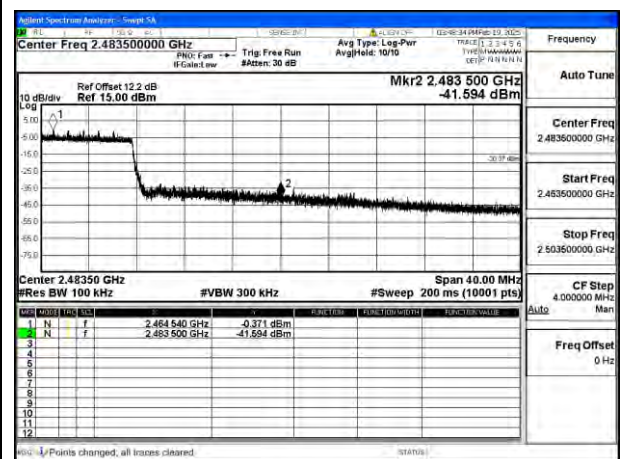
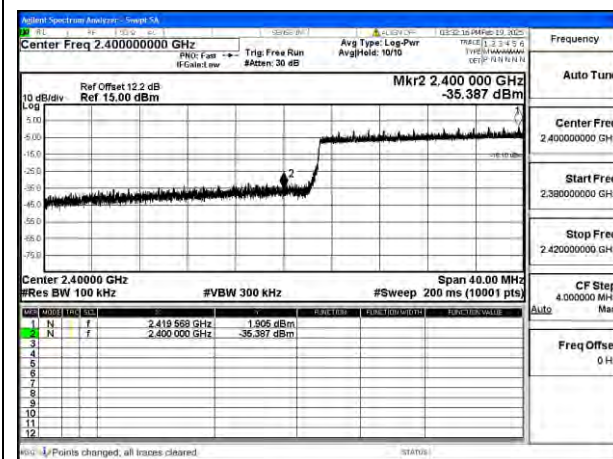


Mode:802.11ax HE40 Frequency:2422MHz

Mode:802.11ax HE40 Frequency:2452MHz

Ant:Chain0

Ant:Chain0



Mode:802.11ax HE40 Frequency:2422MHz

Mode:802.11ax HE40 Frequency:2452MHz

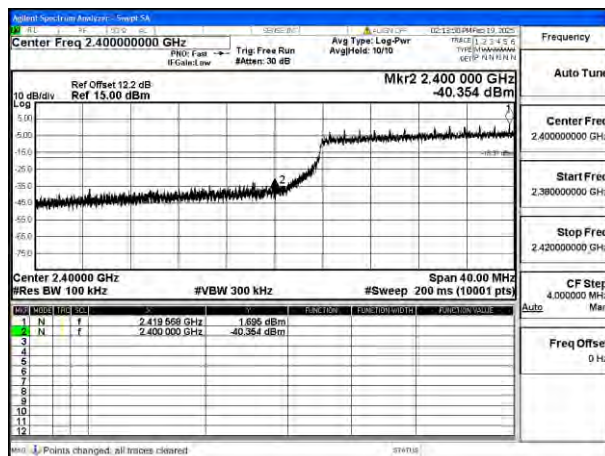
Ant:Chain1

Ant:Chain1

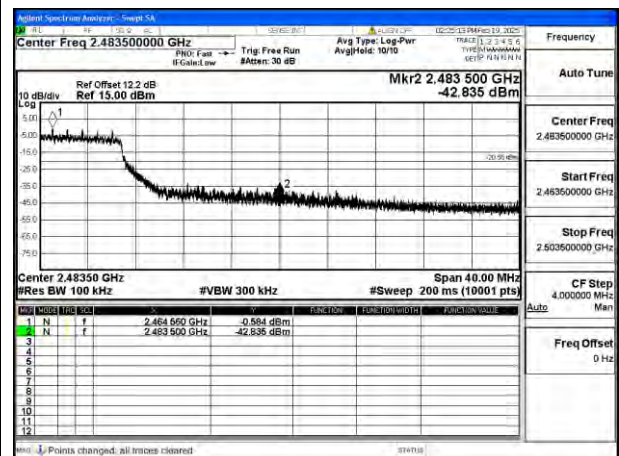
Test Mode: 802.11n HT40



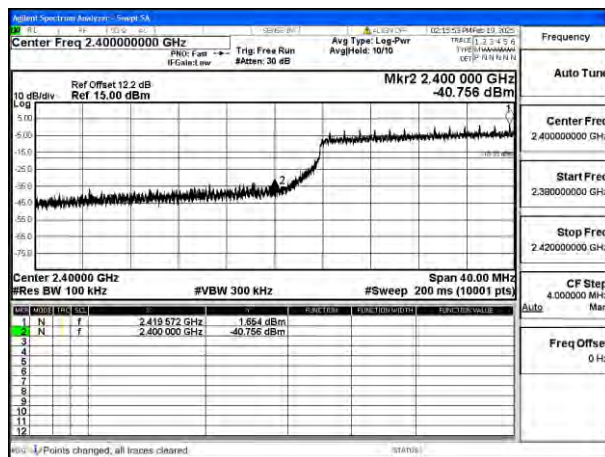
BUREAU VERITAS Test Report No.: PSU-NQN2502260117RF02



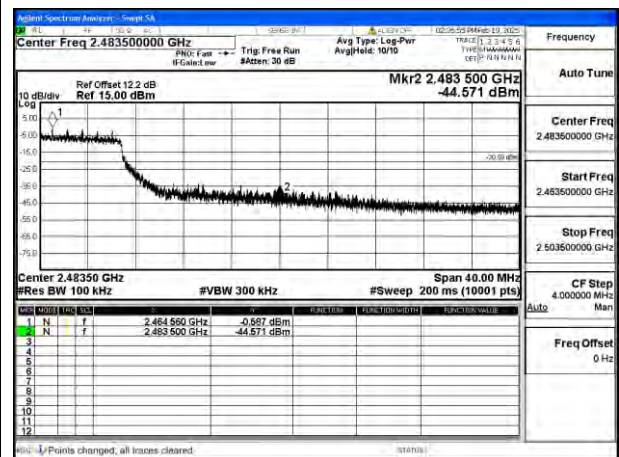
Mode:802.11n HT40 Frequency:2422MHz
Ant:Chain0



Mode:802.11n HT40 Frequency:2452MHz
Ant:Chain0



Mode:802.11n HT40 Frequency:2422MHz
Ant:Chain1



Mode:802.11n HT40 Frequency:2452MHz
Ant:Chain1



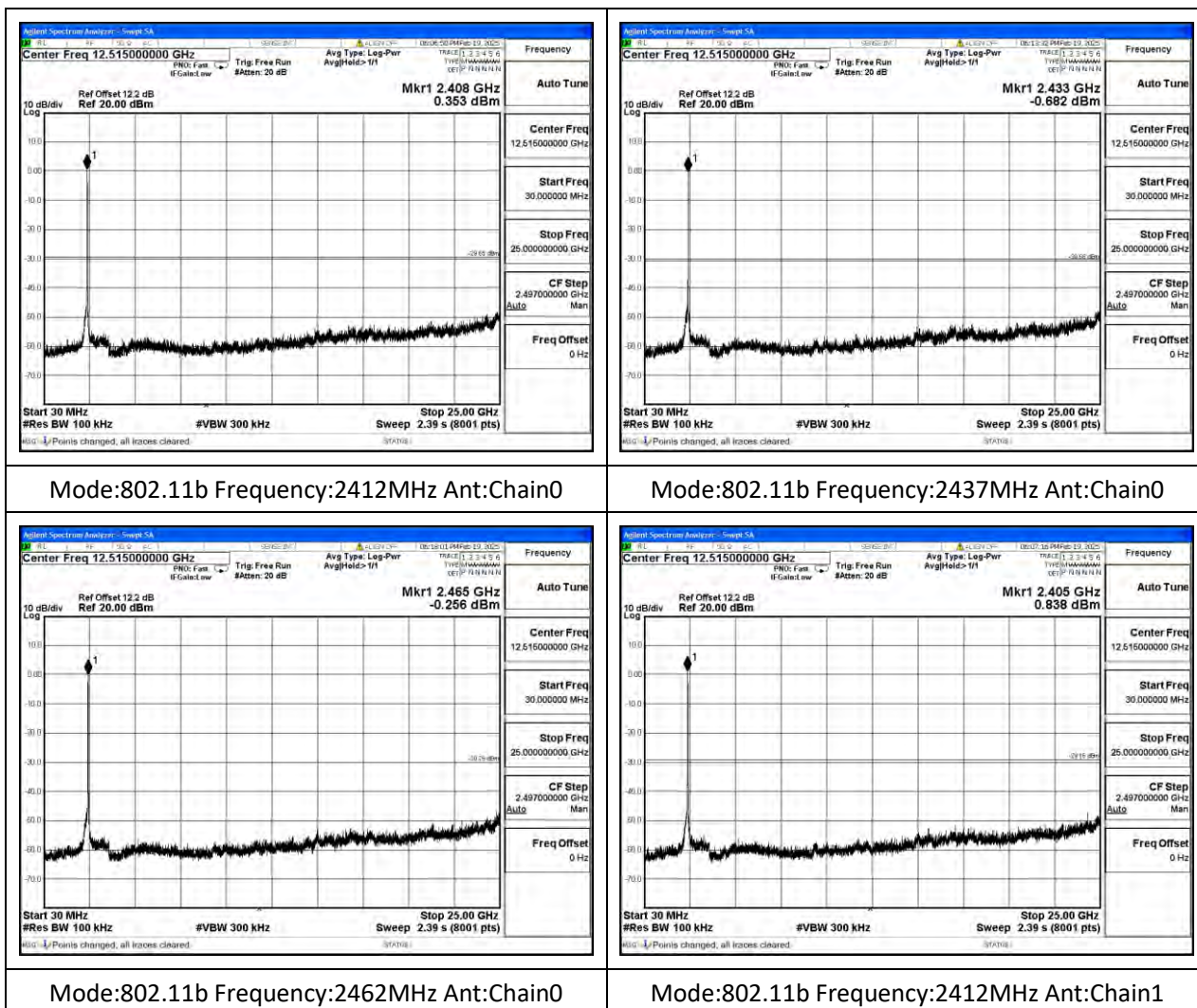
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Test Report No.: PSU-NQN2502260117RF02

CONDUCTED SPURIOUS EMISSION

TEST GRAPHS

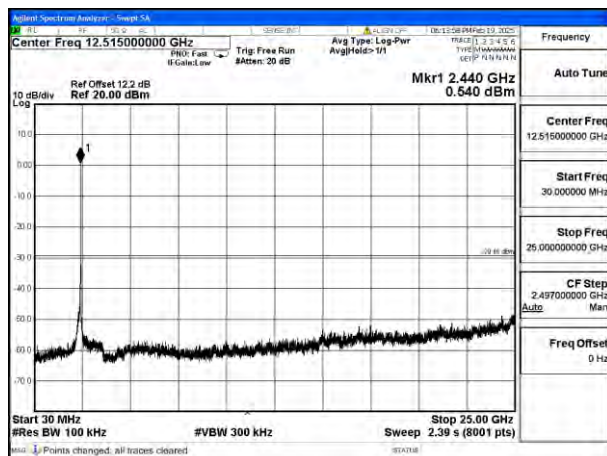
Test Mode: 802.11b



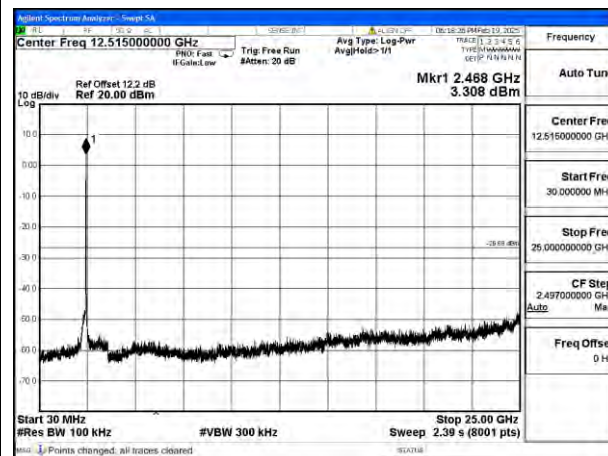


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Test Report No.: PSU-NQN2502260117RF02

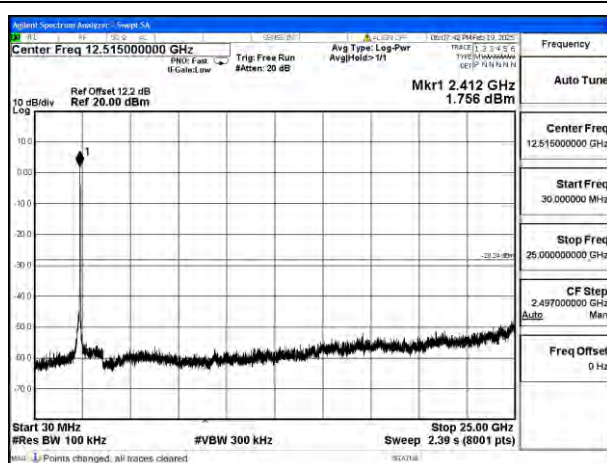


Mode:802.11b Frequency:2437MHz Ant:Chain1

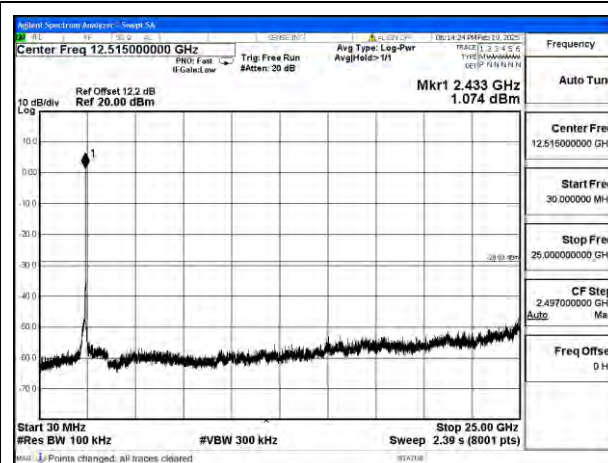


Mode:802.11b Frequency:2462MHz Ant:Chain1

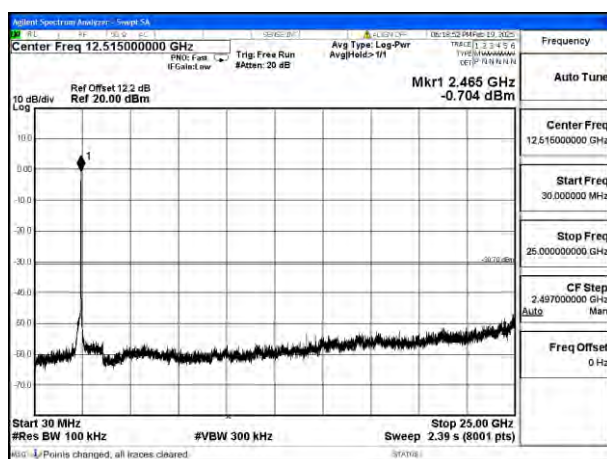
Test Mode: 802.11g



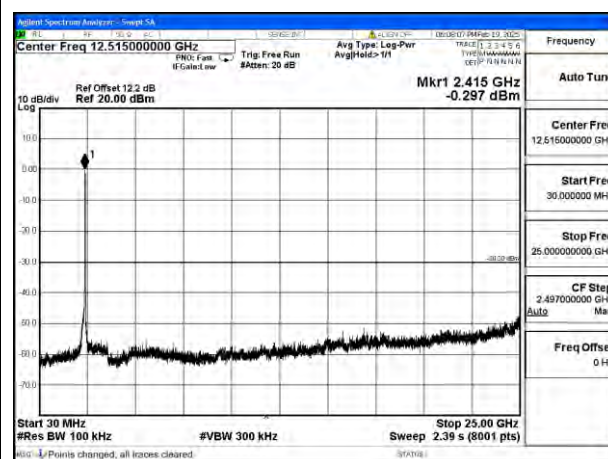
Mode:802.11g Frequency:2412MHz Ant:Chain0



Mode:802.11g Frequency:2437MHz Ant:Chain0



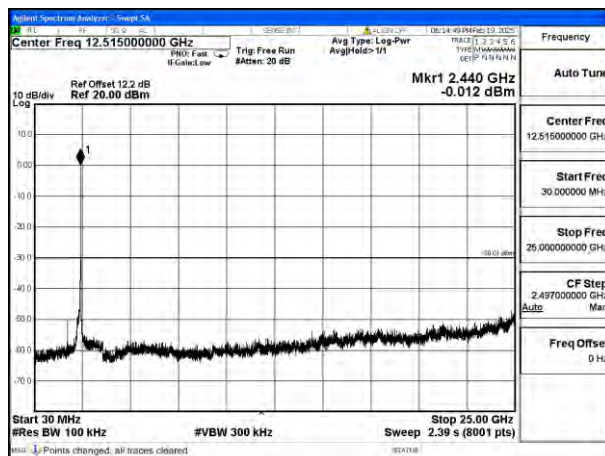
Mode:802.11g Frequency:2462MHz Ant:Chain0



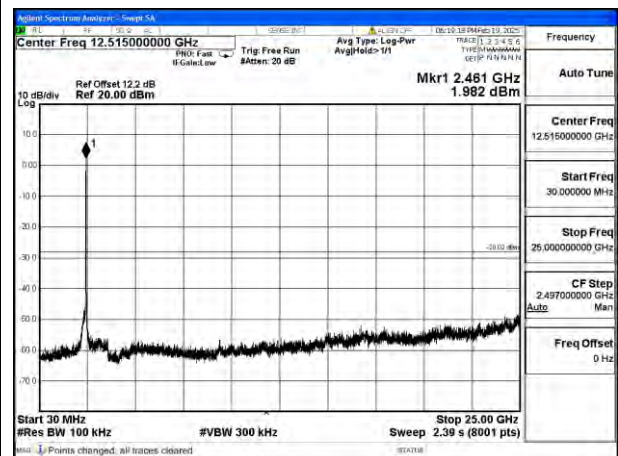
Mode:802.11g Frequency:2412MHz Ant:Chain1



BUREAU VERITAS Test Report No.: PSU-NQN2502260117RF02

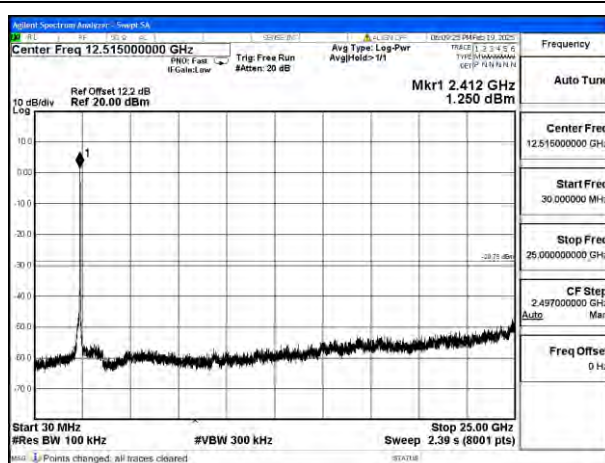


Mode:802.11g Frequency:2437MHz Ant:Chain1

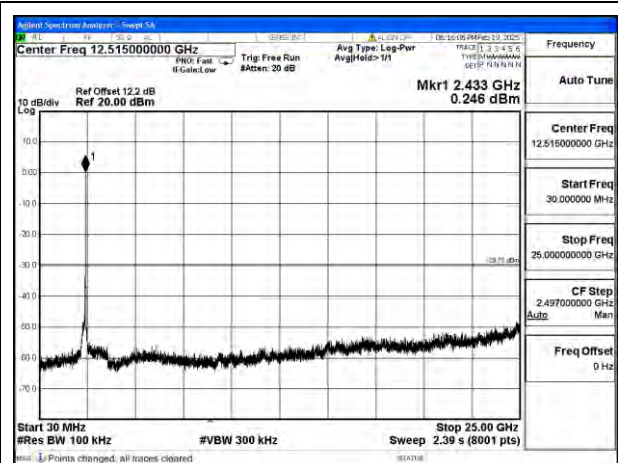


Mode:802.11g Frequency:2462MHz Ant:Chain1

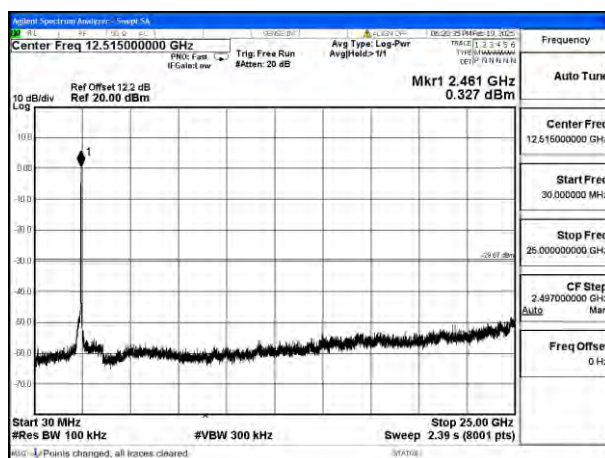
Test Mode: 802.11n HT20



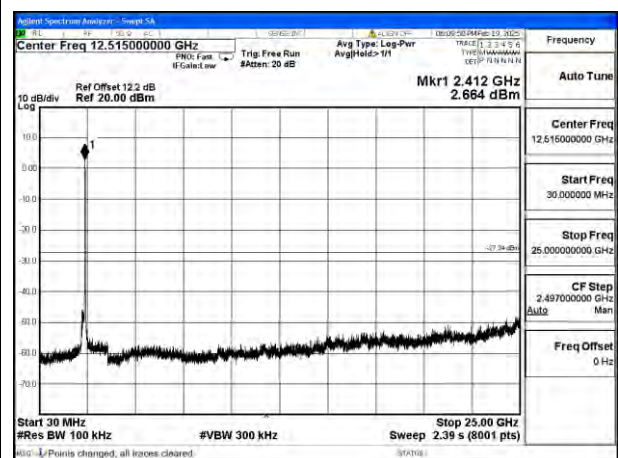
Mode:802.11n HT20 Frequency:2412MHz
Ant:Chain0



Mode:802.11n HT20 Frequency:2437MHz
Ant:Chain0



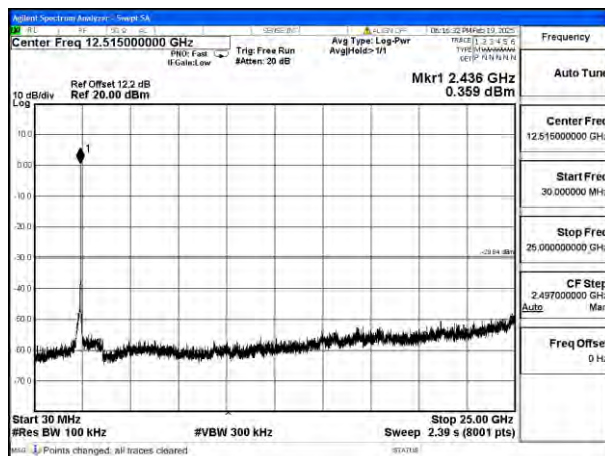
Mode:802.11n HT20 Frequency:2462MHz
Ant:Chain0



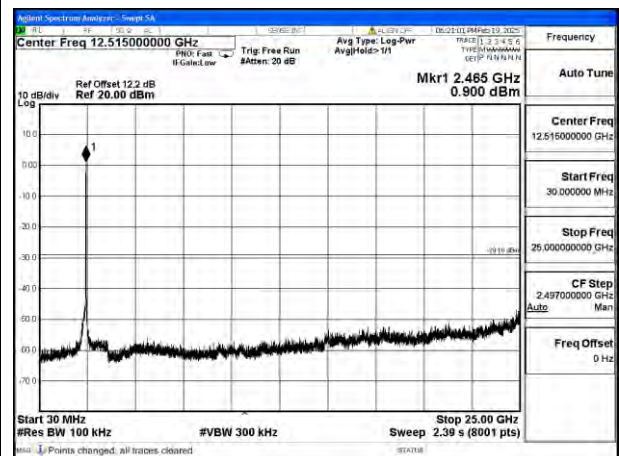
Mode:802.11n HT20 Frequency:2412MHz
Ant:Chain1



BUREAU VERITAS Test Report No.: PSU-NQN2502260117RF02

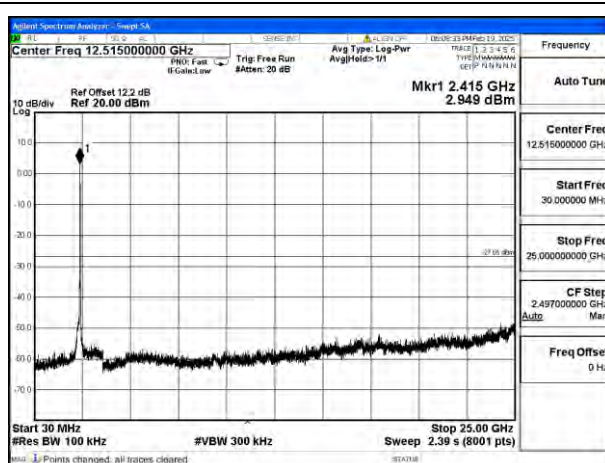


Mode:802.11n HT20 Frequency:2437MHz
Ant:Chain1

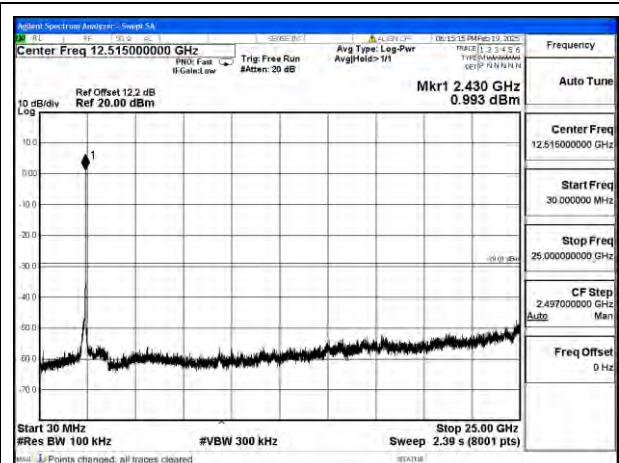


Mode:802.11n HT20 Frequency:2462MHz
Ant:Chain1

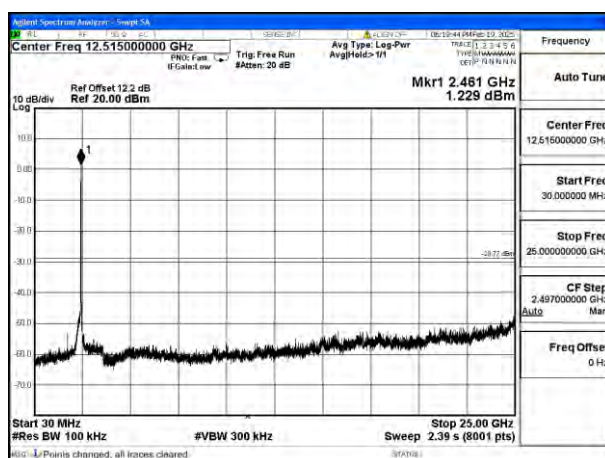
Test Mode: 802.11ax HE20



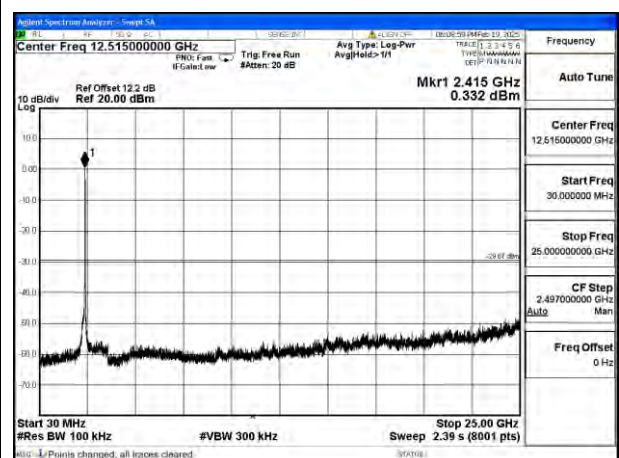
Mode:802.11ax HE20 Frequency:2412MHz
Ant:Chain0



Mode:802.11ax HE20 Frequency:2437MHz
Ant:Chain0



Mode:802.11ax HE20 Frequency:2462MHz

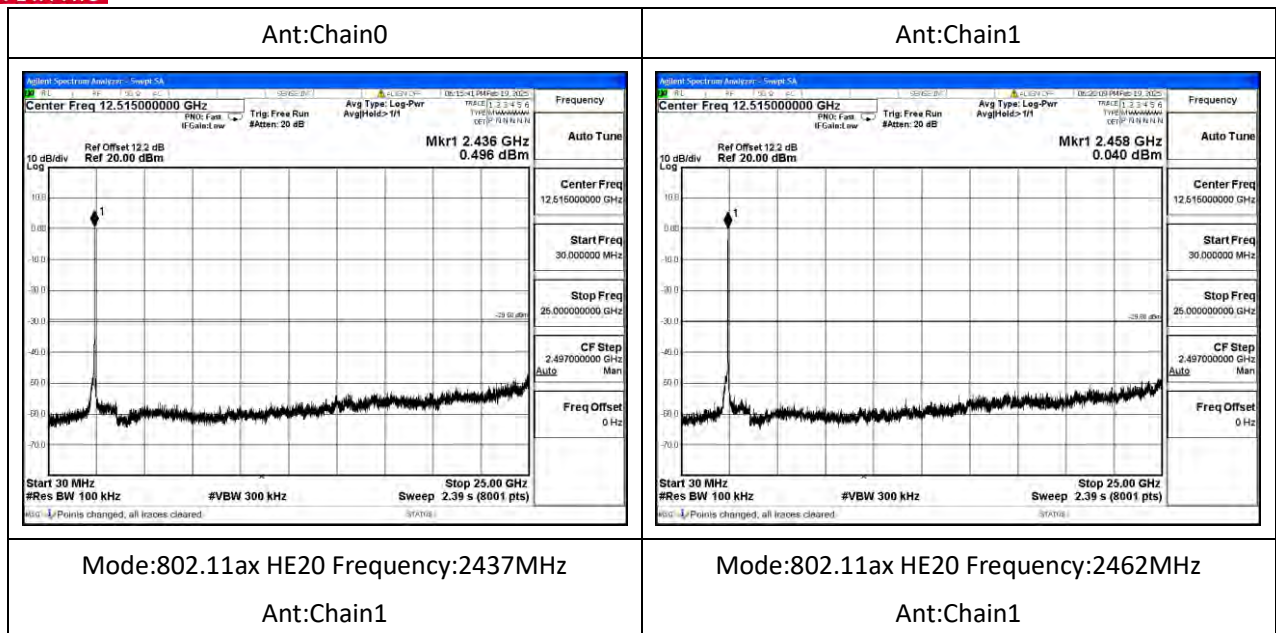


Mode:802.11ax HE20 Frequency:2412MHz

Huarui 7layers High Technology
(Suzhou) Co., Ltd.

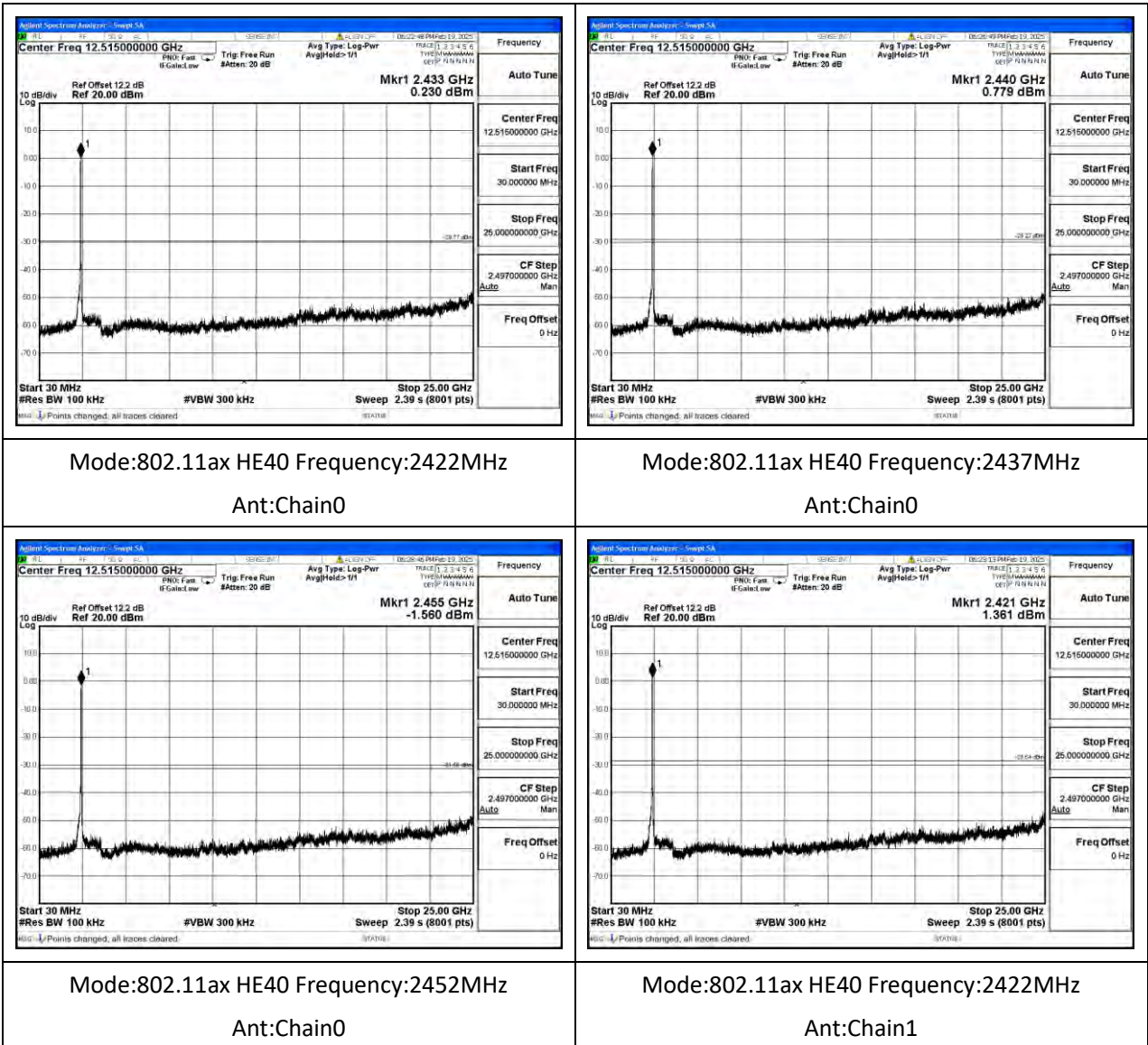
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province

Tel: +86 (0557) 368 1008





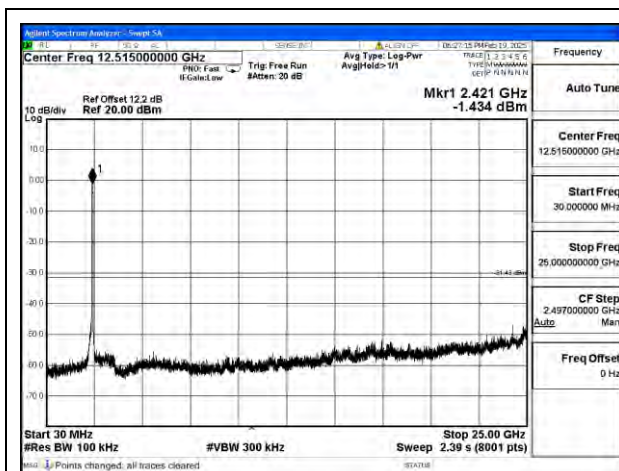
Test Mode: 802.11ax HE40





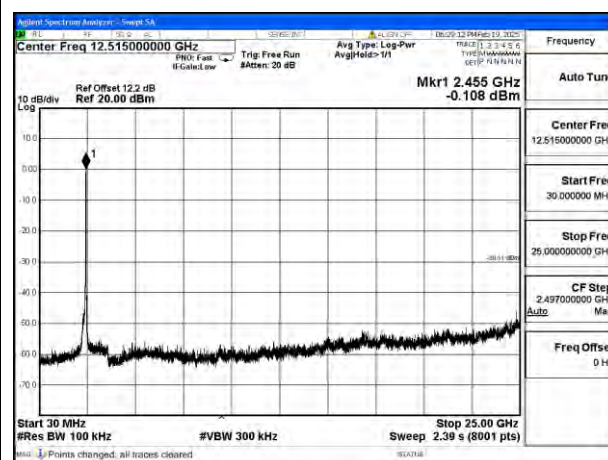
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Mode:802.11ax HE40 Frequency:2437MHz

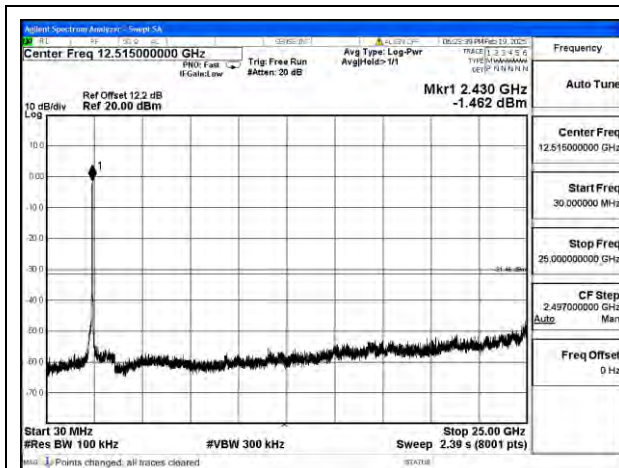
Ant:Chain1



Mode:802.11ax HE40 Frequency:2452MHz

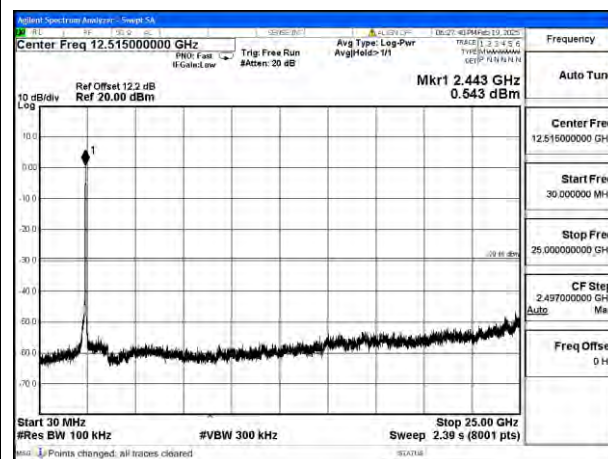
Ant:Chain1

Test Mode: 802.11n HT40



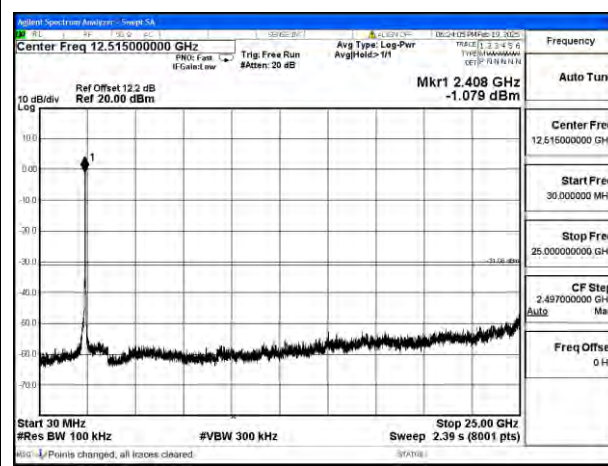
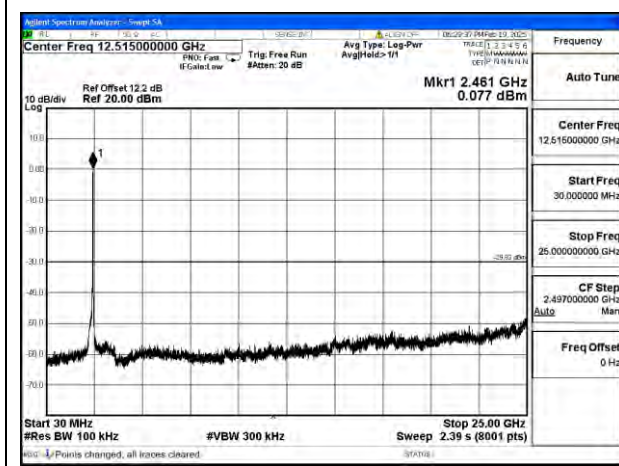
Mode:802.11n HT40 Frequency:2422MHz

Ant:Chain0

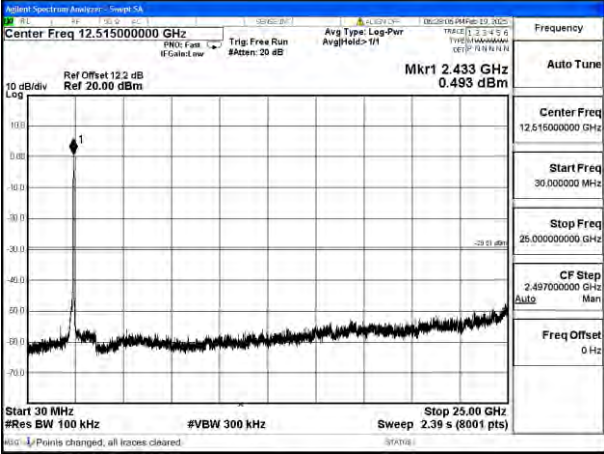
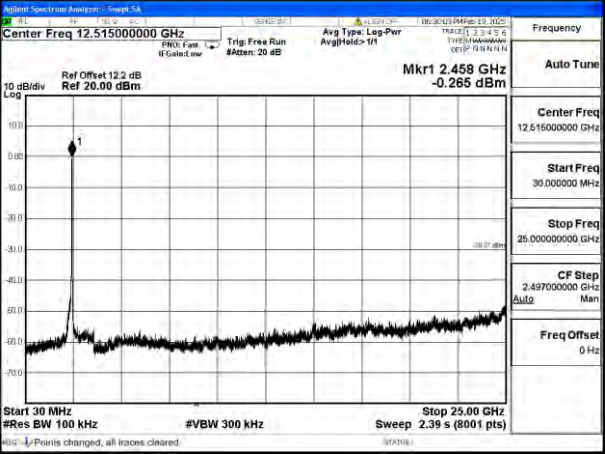


Mode:802.11n HT40 Frequency:2437MHz

Ant:Chain0

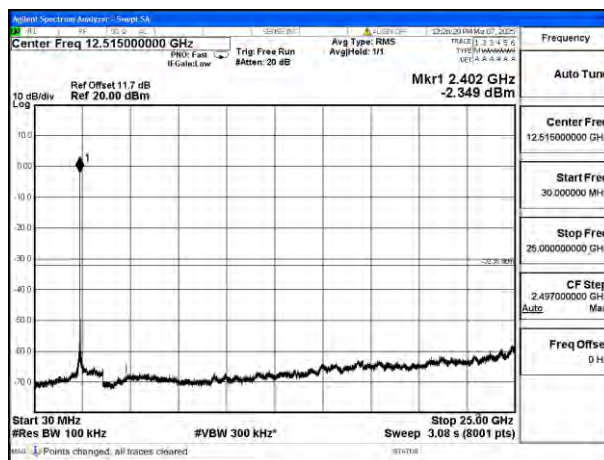




<p>Mode:802.11n HT40 Frequency:2452MHz</p> <p>Ant:Chain0</p> 	<p>Mode:802.11n HT40 Frequency:2422MHz</p> <p>Ant:Chain1</p> 
<p>Mode:802.11n HT40 Frequency:2437MHz</p> <p>Ant:Chain1</p>	<p>Mode:802.11n HT40 Frequency:2452MHz</p> <p>Ant:Chain1</p>



Test Mode: 802.11ax HE20 26T



Mode:802.11ax HE20 Tone:26T Frequency:2412MHz
Ant:Chain0



Mode:802.11ax HE20 Tone:26T Frequency:2437MHz
Ant:Chain0



Mode:802.11ax HE20 Tone:26T Frequency:2462MHz
Ant:Chain0

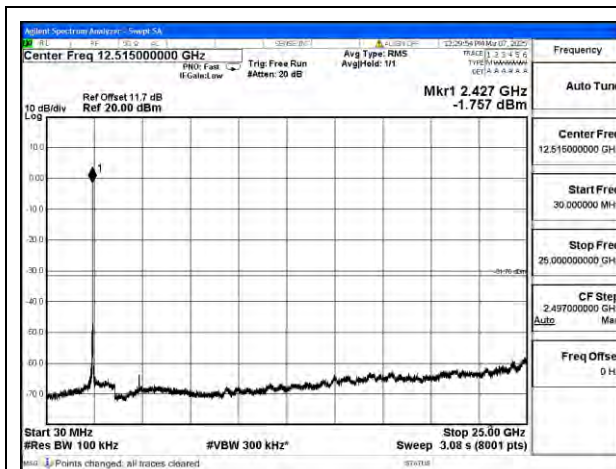


Mode:802.11ax HE20 Tone:26T Frequency:2412MHz
Ant:Chain1



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Mode:802.11ax HE20 Tone:26T Frequency:2437MHz

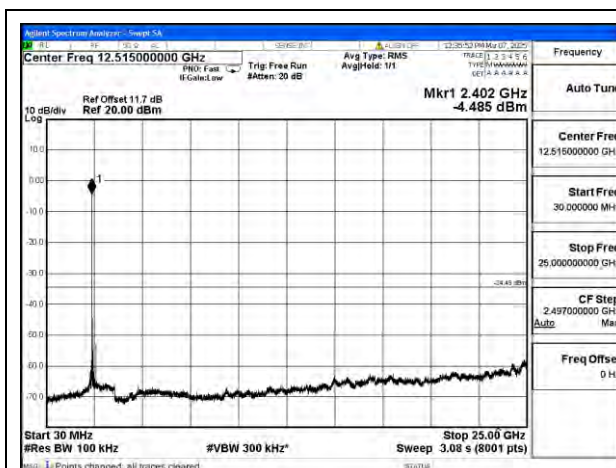
Ant:Chain1



Mode:802.11ax HE20 Tone:26T Frequency:2462MHz

Ant:Chain1

Test Mode: 802.11ax HE40 26T



Mode:802.11ax HE40 TONE:26T

Frequency:2422MHz Ant:Chain0



Mode:802.11ax HE40 TONE:26T

Frequency:2437MHz Ant:Chain0



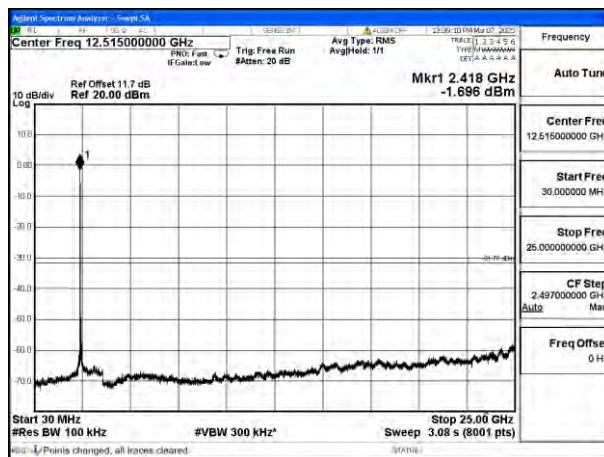
BUREAU VERITAS Test Report No.: PSU-NQN2502260117RF02



Mode:802.11ax HE40 TONE:26T
Frequency:2452MHz Ant:Chain0



Mode:802.11ax HE40 TONE:26T
Frequency:2422MHz Ant:Chain1



Mode:802.11ax HE40 TONE:26T
Frequency:2437MHz Ant:Chain1



Mode:802.11ax HE40 TONE:26T
Frequency:2452MHz Ant:Chain1

**DUTY CYCLE****TEST RESULT**

Modulation Type	Frequency (MHz)	Antenna	Plot	Duty Cycle	Correction Factor(dB)
802.11b	2412	Chain0	Fig.1	98.62%	0
802.11b	2412	Chain1	Fig.2	99.06%	0
802.11g	2412	Chain0	Fig.3	94.18%	0.26
802.11g	2412	Chain1	Fig.4	94.22%	0.26
802.11n HT20	2412	Chain0	Fig.5	93.79%	0.28
802.11n HT20	2412	Chain1	Fig.6	93.68%	0.28
802.11ax HE20	2412	Chain0	Fig.7	83.74%	0.77
802.11ax HE20	2412	Chain1	Fig.8	83.56%	0.78
802.11n HT40	2422	Chain0	Fig.9	89.14%	0.50
802.11n HT40	2422	Chain1	Fig.10	89.00%	0.51
802.11ax HE40	2422	Chain0	Fig.11	82.98%	0.81
802.11ax HE40	2422	Chain1	Fig.12	83.02%	0.81

Note: Correction Factor= $10 \cdot \log(1/\text{Duty Cycle})$



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Test Report No.: PSU-NQN2502260117RF02

TEST GRAPHS

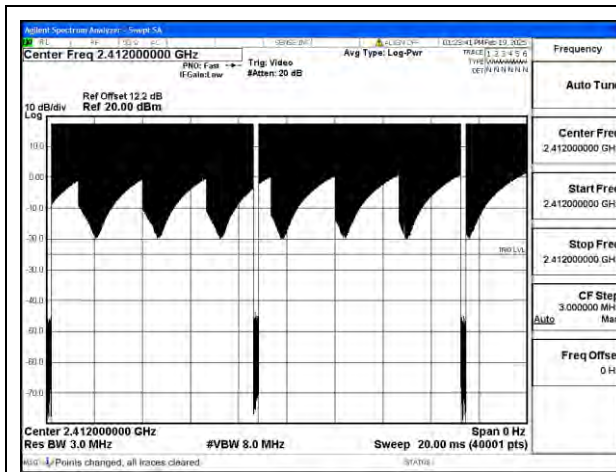


Fig.1

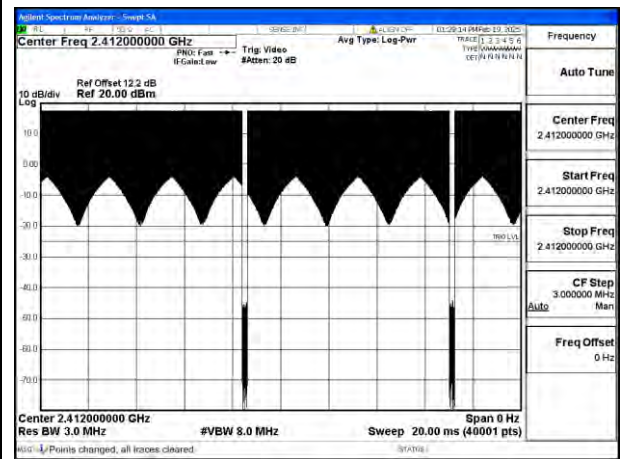


Fig.2

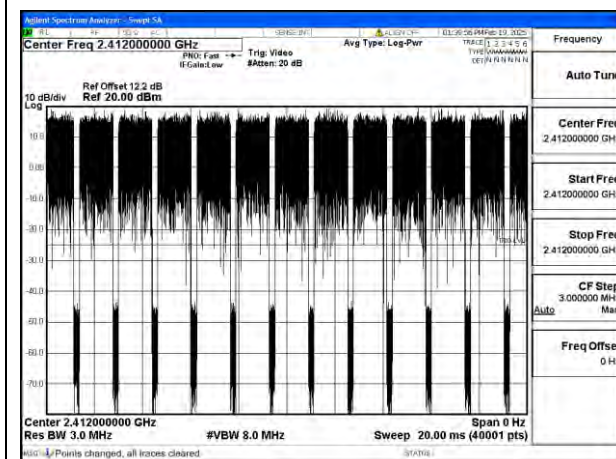


Fig.3

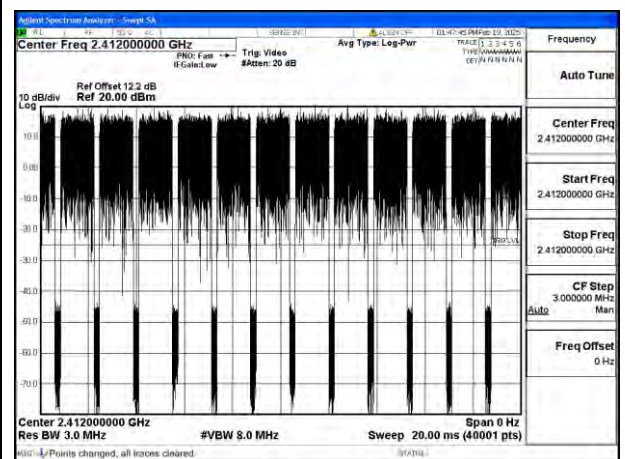


Fig.4

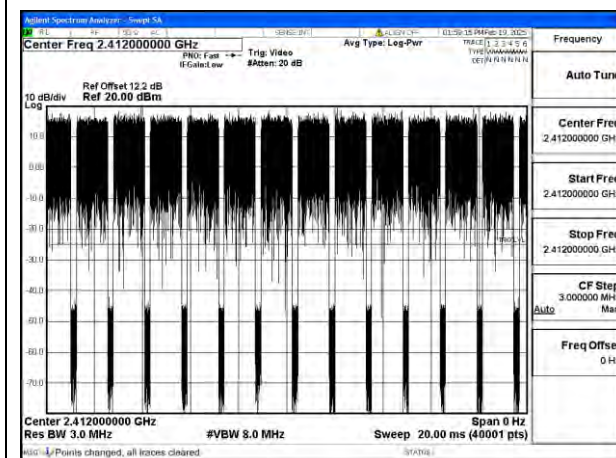


Fig.5

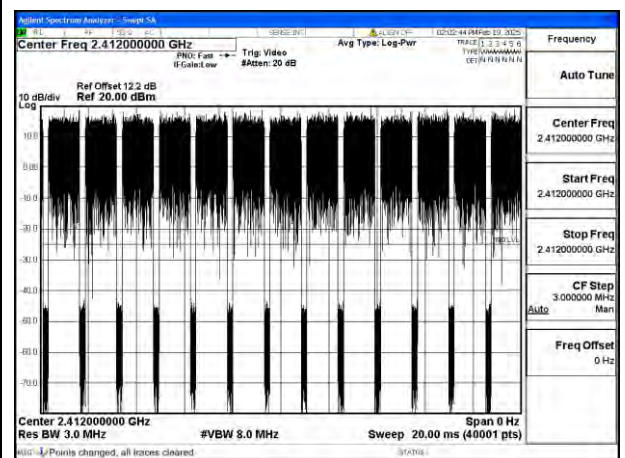


Fig.6



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Test Report No.: PSU-NQN2502260117RF02

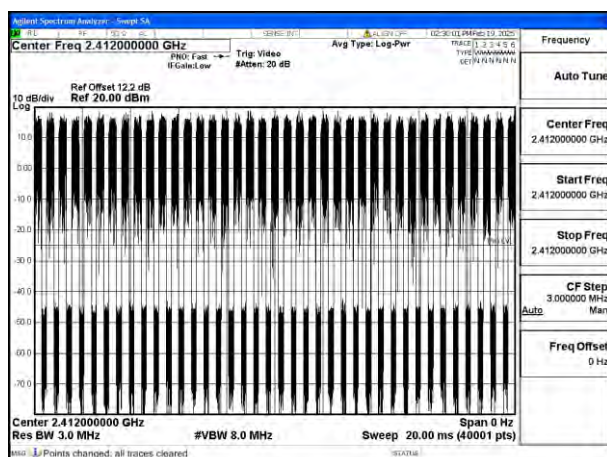


Fig.7

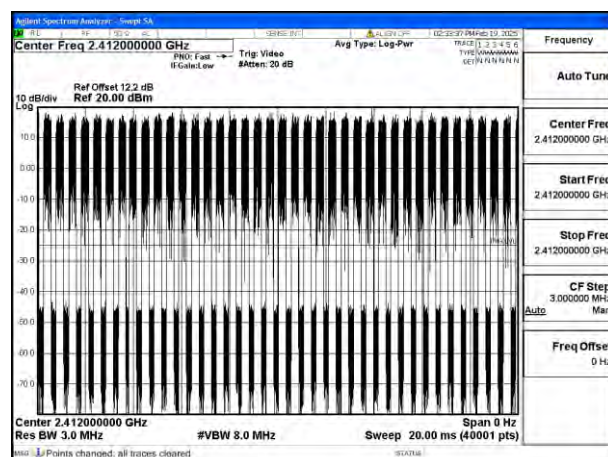


Fig.8

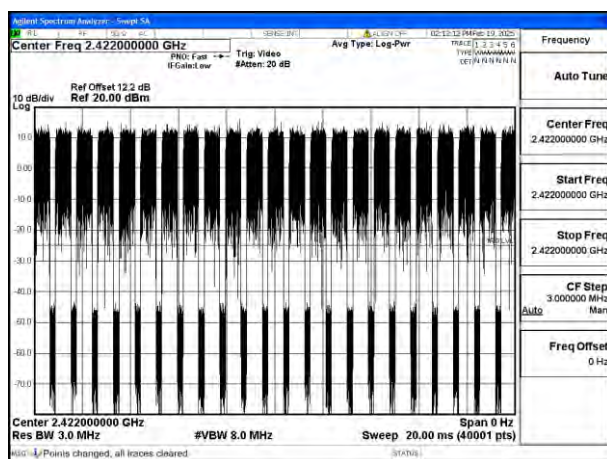


Fig.9

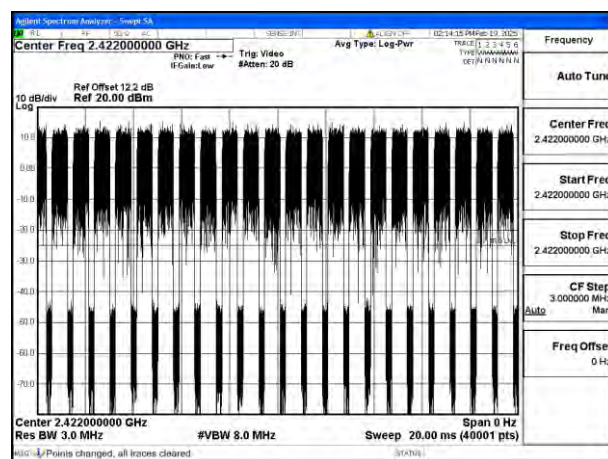


Fig.10

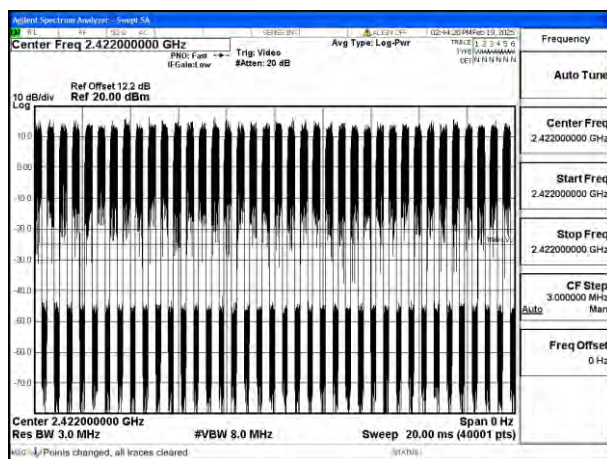


Fig.11

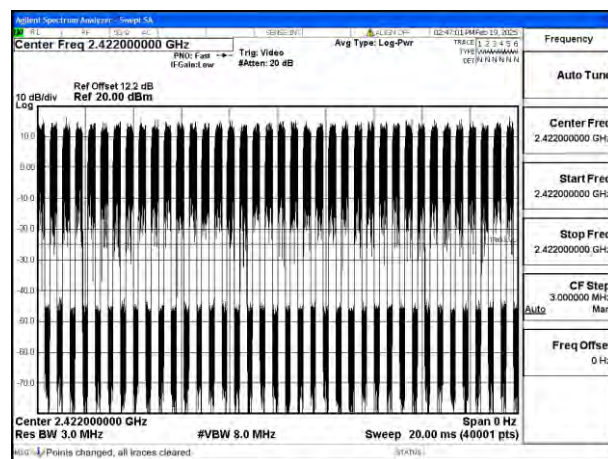


Fig.12



7 APPENDIX 2 BLE

DTS BANDWIDTH

TEST RESULT

Test Mode	Carrier frequency (MHz)	6dB Bandwidth(KHz)
GFSK (LE 1Mbps)	2402	562.2
GFSK (LE 1Mbps)	2440	564.1
GFSK (LE 1Mbps)	2480	561.0

Test Mode	Carrier frequency (MHz)	6dB Bandwidth(KHz)
GFSK (LE 2Mbps)	2402	842.7
GFSK (LE 2Mbps)	2440	841.9
GFSK (LE 2Mbps)	2480	852.6

Test Mode	Carrier frequency (MHz)	6dB Bandwidth(KHz)
Coded 125K	2402	641.8
Coded 125K	2440	633.9
Coded 125K	2480	645.5

Test Mode	Carrier frequency (MHz)	6dB Bandwidth(KHz)
Coded 500K	2402	634.2
Coded 500K	2440	645.1
Coded 500K	2480	650.2



TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)



Test Mode:GFSK (LE 1Mbps) 2402MHz



Test Mode:GFSK (LE 1Mbps) 2440MHz



Test Mode:GFSK (LE 1Mbps) 2480MHz



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VERITAS

Test Report No.: PSU-NQN2502260117RF02

Test Mode: GFSK (LE 2Mbps)



Test Mode:GFSK (LE 2Mbps) 2402MHz



Test Mode:GFSK (LE 2Mbps) 2440MHz



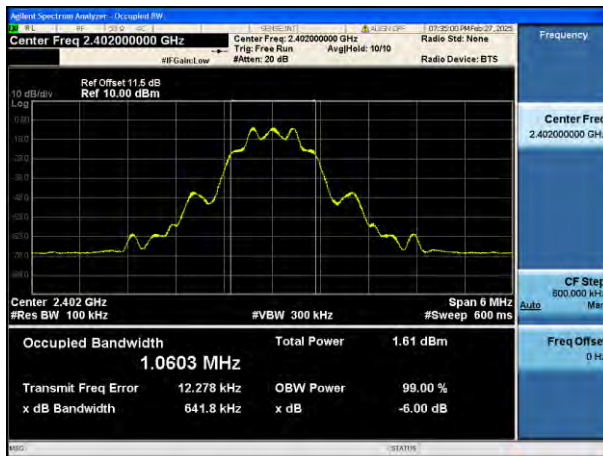
Test Mode:GFSK (LE 2Mbps) 2480MHz



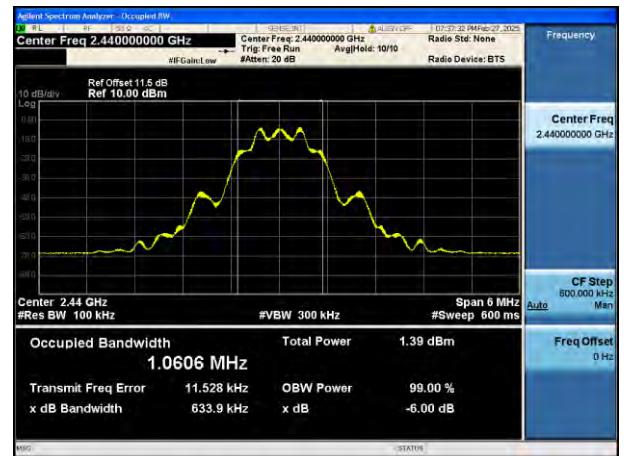
BUREAU
VERITAS

Test Report No.: PSU-NQN2502260117RF02

Test Mode: Coded 125K



Test Mode:Coded 125K 2402MHz



Test Mode:Coded 125K 2440MHz



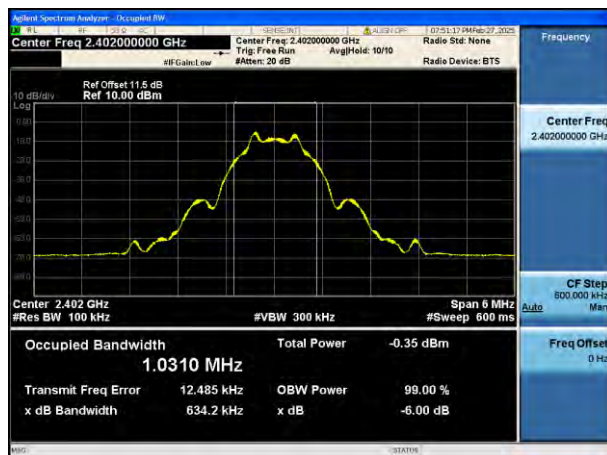
Test Mode:Coded 125K 2480MHz



BUREAU
VERITAS

Test Report No.: PSU-NQN2502260117RF02

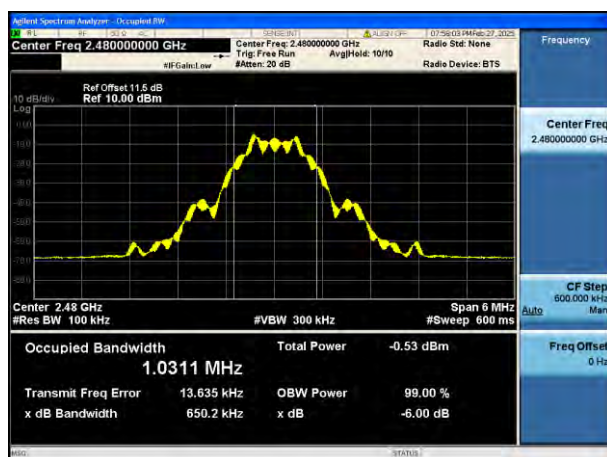
Test Mode: Coded 500K



Test Mode:Coded 500K 2402MHz



Test Mode:Coded 500K 2440MHz



Test Mode:Coded 500K 2480MHz

**OCCUPIED CHANNEL BANDWIDTH****TEST RESULT**

Test Mode	Carrier frequency (MHz)	99% Bandwidth(kHz)
GFSK (LE 1Mbps)	2402	1069.3
GFSK (LE 1Mbps)	2440	1069.1
GFSK (LE 1Mbps)	2480	1069.1

Test Mode	Carrier frequency (MHz)	99% Bandwidth(kHz)
GFSK (LE 2Mbps)	2402	2088.5
GFSK (LE 2Mbps)	2440	2089.2
GFSK (LE 2Mbps)	2480	2088.5

Test Mode	Carrier frequency (MHz)	99% Bandwidth(kHz)
Coded 125K	2402	1059.9
Coded 125K	2440	1060.5
Coded 125K	2480	1060.6

Test Mode	Carrier frequency (MHz)	99% Bandwidth(kHz)
Coded 500K	2402	1029.9
Coded 500K	2440	1030.2
Coded 500K	2480	1030.4



TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)





BUREAU
VERITAS

Test Report No.: PSU-NQN2502260117RF02

Test Mode: GFSK (LE 2Mbps)



Test Mode:GFSK (LE 2Mbps) 2402MHz



Test Mode:GFSK (LE 2Mbps) 2440MHz



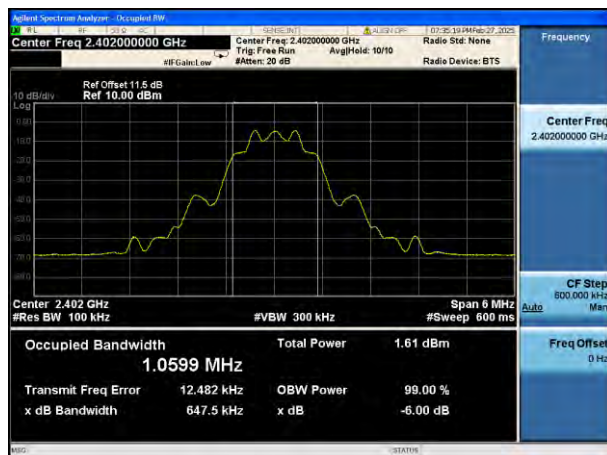
Test Mode:GFSK (LE 2Mbps) 2480MHz



BUREAU
VERITAS

Test Report No.: PSU-NQN2502260117RF02

Test Mode: Coded 125K



Test Mode:Coded 125K 2402MHz



Test Mode:Coded 125K 2440MHz



Test Mode:Coded 125K 2480MHz



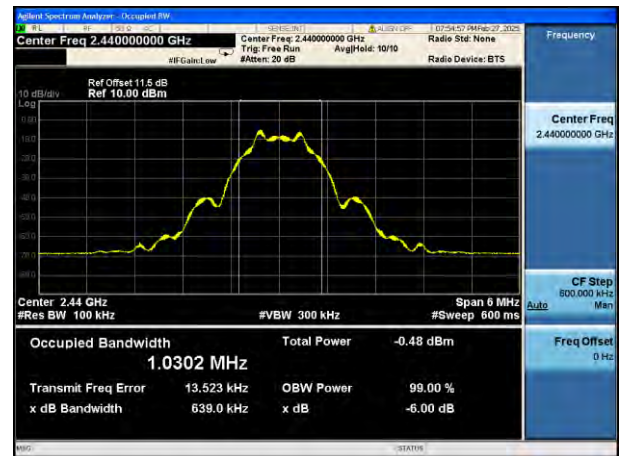
BUREAU
VERITAS

Test Report No.: PSU-NQN2502260117RF02

Test Mode: Coded 500K



Test Mode:Coded 500K 2402MHz



Test Mode:Coded 500K 2440MHz



Test Mode:Coded 500K 2480MHz



MAXIMUM CONDUCTED OUTPUT POWER

TEST RESULT

Conducted Power

Modulation type	Conducted Peak Power(dBm)		
	2402MHz	2440MHz	2480MHz
GFSK (LE 1Mbps)	4.26	4.07	4.01
GFSK (LE 2Mbps)	4.15	3.96	3.98
Coded 125K	4.15	3.92	4.01
Coded 500K	4.22	4.02	3.97

Modulation type	Conducted Average Power(dBm)		
	2402MHz	2440MHz	2480MHz
GFSK (LE 1Mbps)	1.91	1.97	0.68
GFSK (LE 2Mbps)	2.24	0.13	-0.28
Coded 125K	4.01	3.27	3.28
Coded 500K	3.32	4.02	2.27

EIRP

Modulation type	Peak EIRP(dBm)		
	2402MHz	2440MHz	2480MHz
GFSK (LE 1Mbps)	7.81	7.62	7.56
GFSK (LE 2Mbps)	7.70	7.51	7.53
Coded 125K	7.70	7.46	7.56
Coded 500K	7.77	7.57	7.52

Modulation type	Average EIRP(dBm)		
	2402MHz	2440MHz	2480MHz
GFSK (LE 1Mbps)	5.46	5.52	4.23
GFSK (LE 2Mbps)	5.79	3.68	3.27
Coded 125K	7.56	6.82	6.83
Coded 500K	6.87	7.57	5.82

EIRP (dBm)=Conducted Power(dBm)+Antenna Gain(dBi)

**MAXIMUM POWER SPECTRAL DENSITY****TEST RESULT**

Test Mode	Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
GFSK (LE 1Mbps)	2402	0	-15.2
GFSK (LE 1Mbps)	2440	19	-15.2
GFSK (LE 1Mbps)	2480	39	-15.2

Test Mode	Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
GFSK (LE 2Mbps)	2402	0	-18.7
GFSK (LE 2Mbps)	2440	19	-18.7
GFSK (LE 2Mbps)	2480	39	-18.9

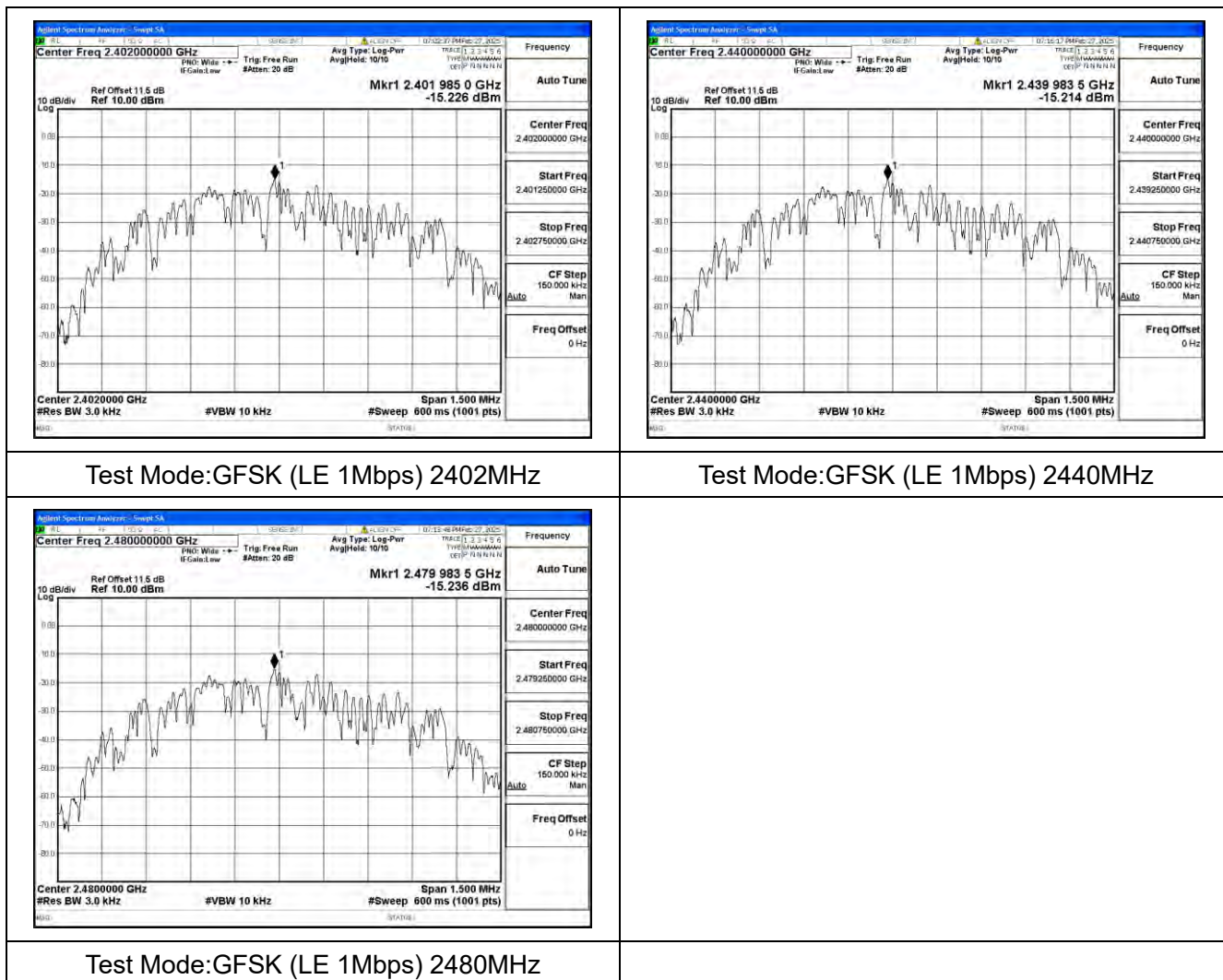
Test Mode	Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
Coded 125K	2402	0	-2.1
Coded 125K	2440	19	-2.4
Coded 125K	2480	39	-2.4

Test Mode	Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
Coded 500K	2402	0	-2.4
Coded 500K	2440	19	-2.3
Coded 500K	2480	39	-2.4



TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)

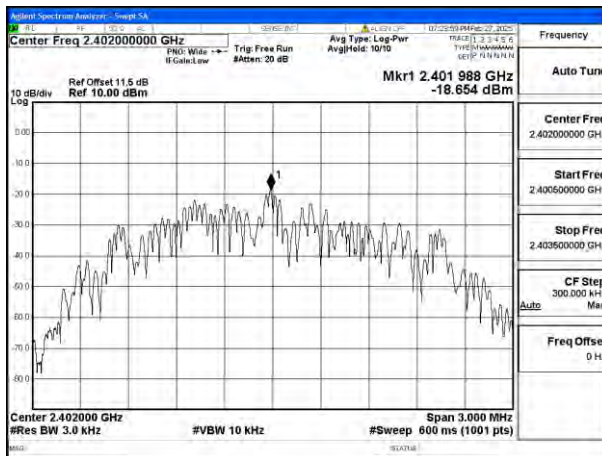




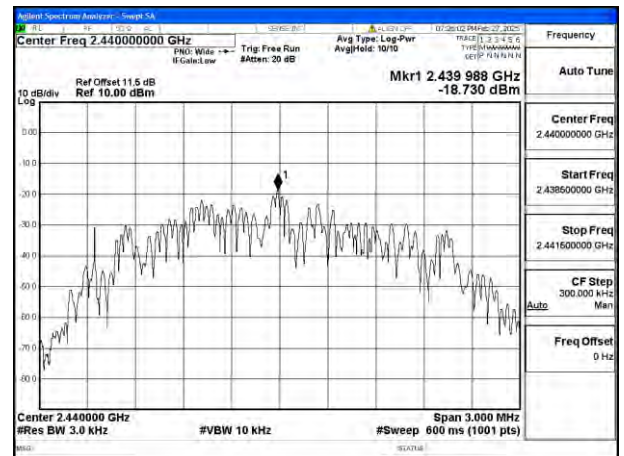
BUREAU
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Test Report No.: PSU-NQN2502260117RF02

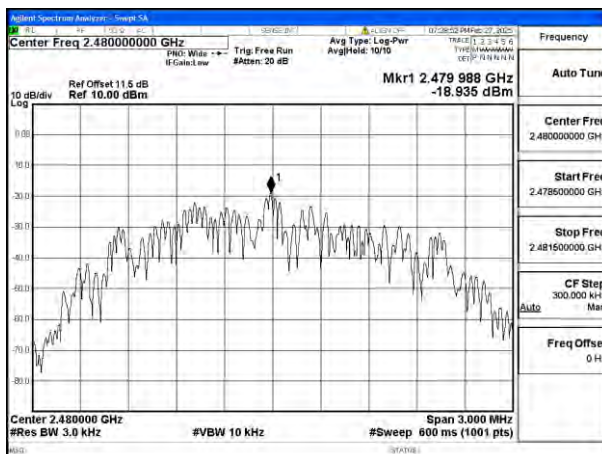
Test Mode: GFSK (LE 2Mbps)



Test Mode:GFSK (LE 2Mbps) 2402MHz



Test Mode:GFSK (LE 2Mbps) 2440MHz



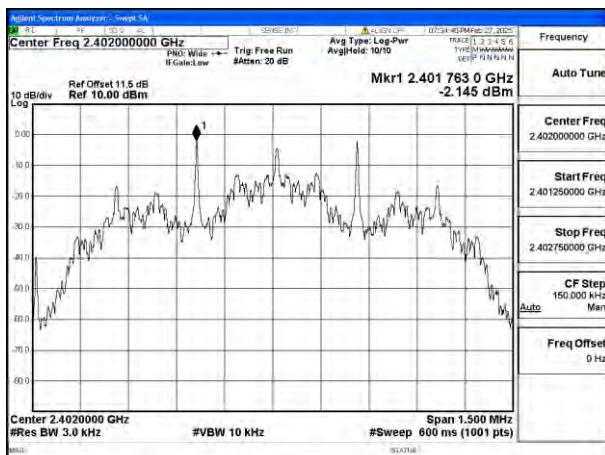
Test Mode:GFSK (LE 2Mbps) 2480MHz



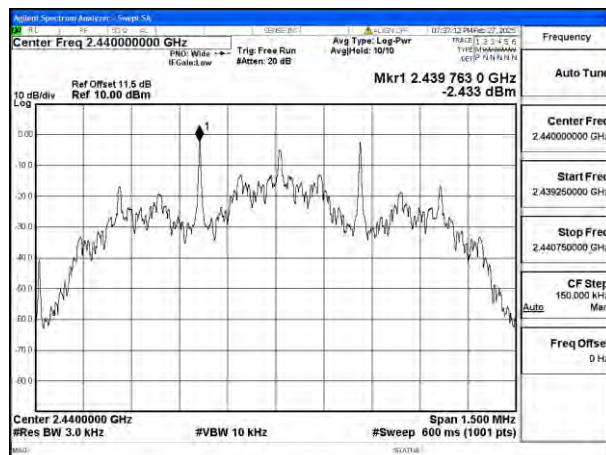
BUREAU
VERITAS

Test Report No.: PSU-NQN2502260117RF02

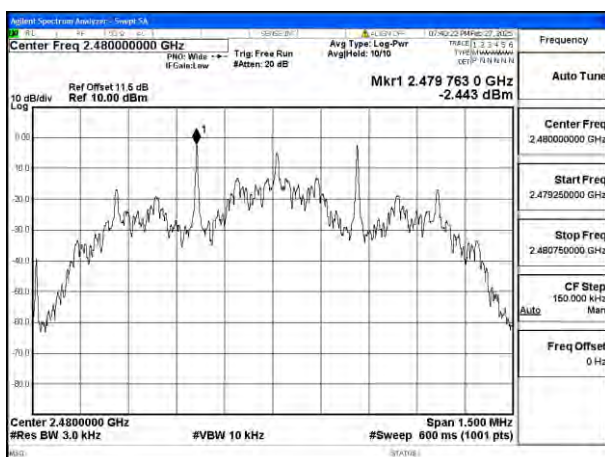
Test Mode: Coded 125K



Test Mode:Coded 125K 2402MHz



Test Mode:Coded 125K 2440MHz



Test Mode:Coded 125K 2480MHz



Test Mode: Coded 500K

Test Mode:Coded 500K 2402MHz	Test Mode:Coded 500K 2440MHz
Test Mode:Coded 500K 2480MHz	

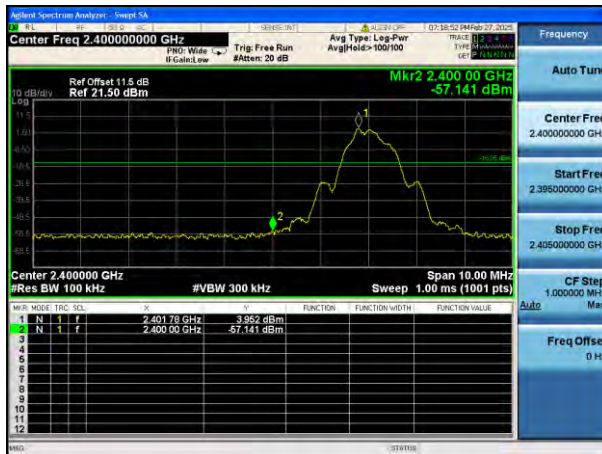


BAND EDGE MEASUREMENTS

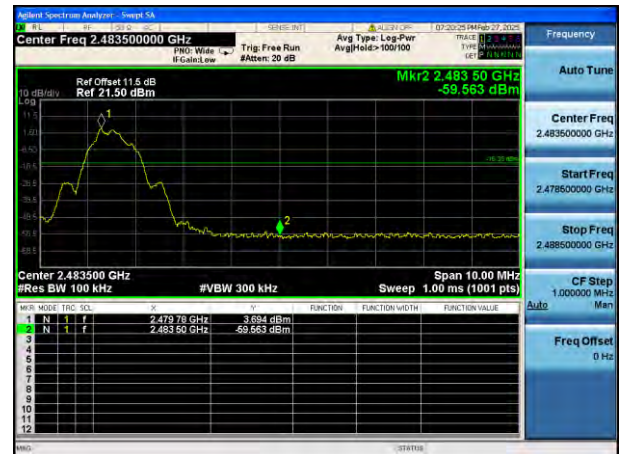
TEST RESULT

TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)



CH0



CH39

Test Mode: GFSK (LE 2Mbps)



CH0



CH39

Test Mode: Coded 125K



BUREAU VERITAS Test Report No.: PSU-NQN2502260117RF02

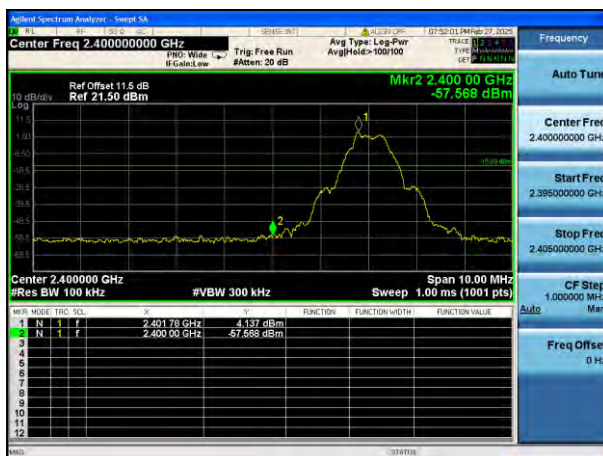


CH0

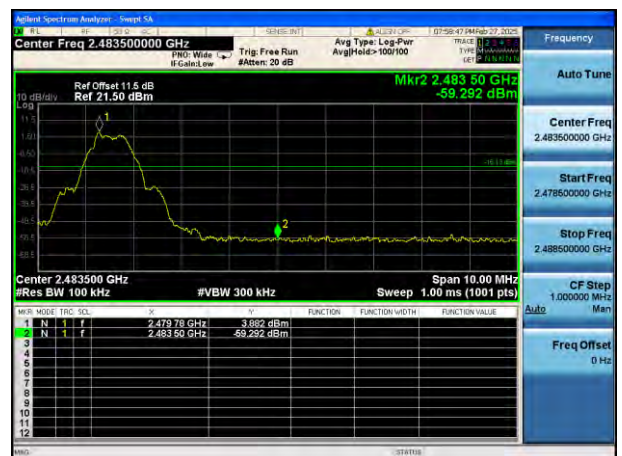


CH39

Test Mode: Coded 500K



CH0

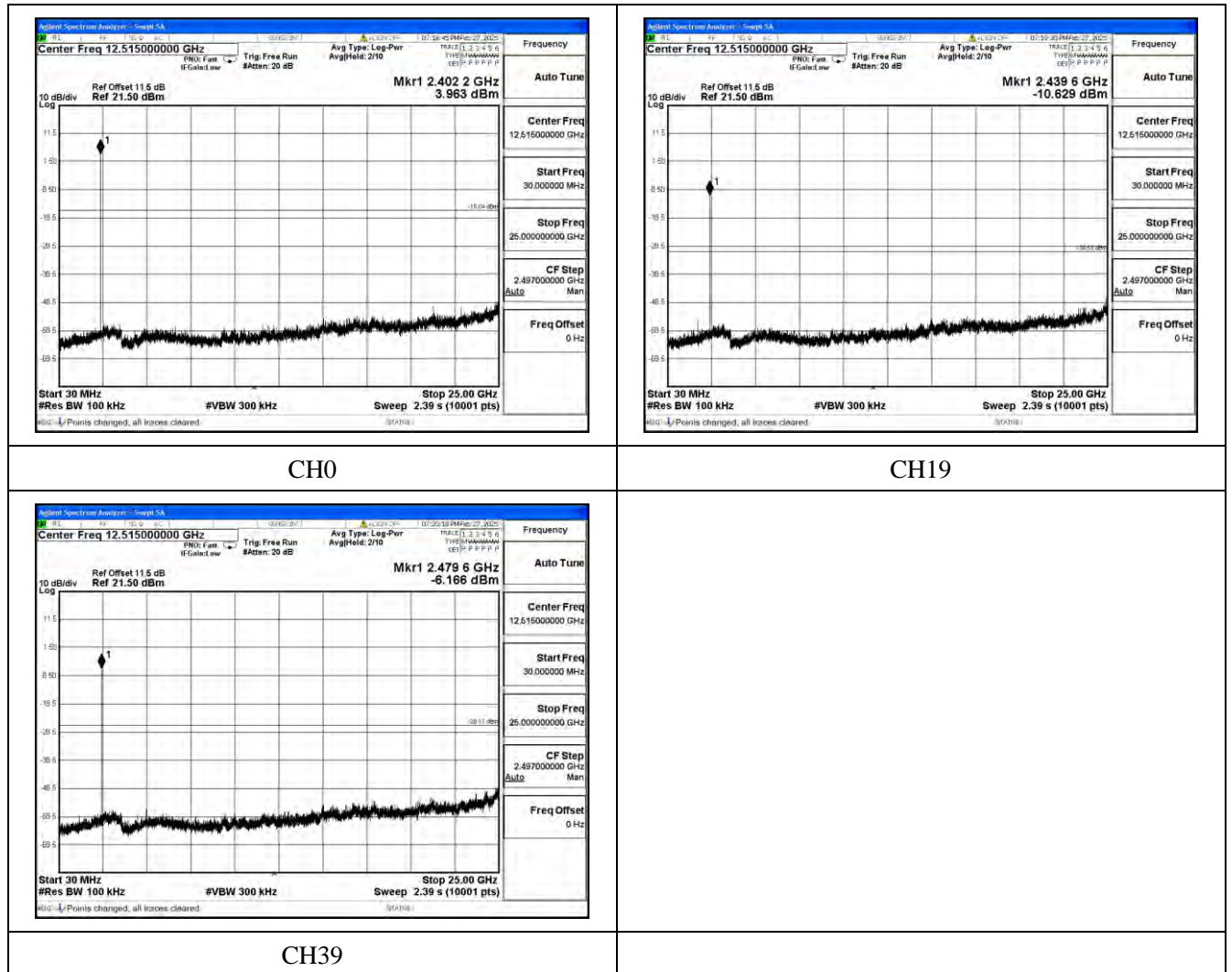


CH39



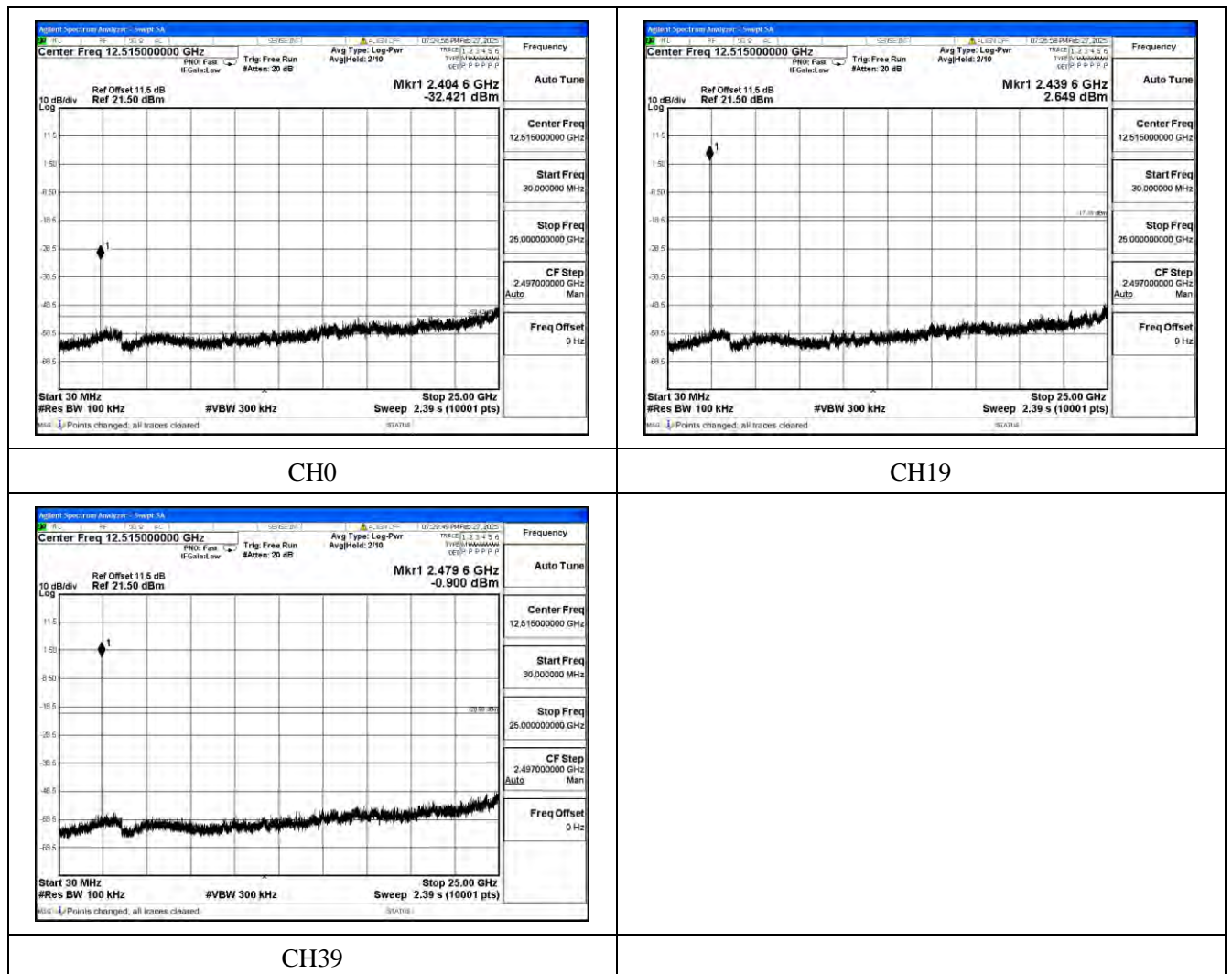
CONDUCTED SPURIOUS EMISSION TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)





Test Mode: GFSK (LE 2Mbps)

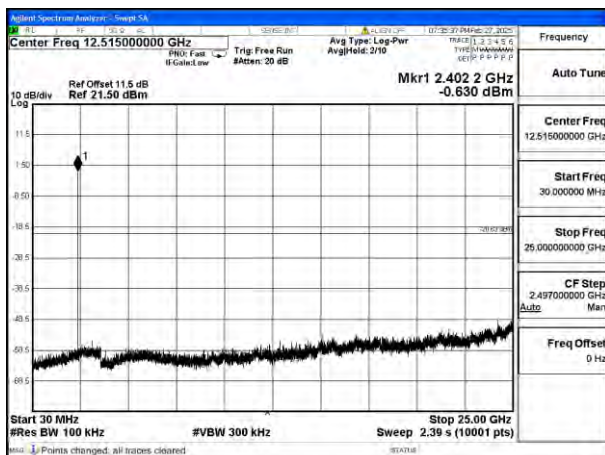




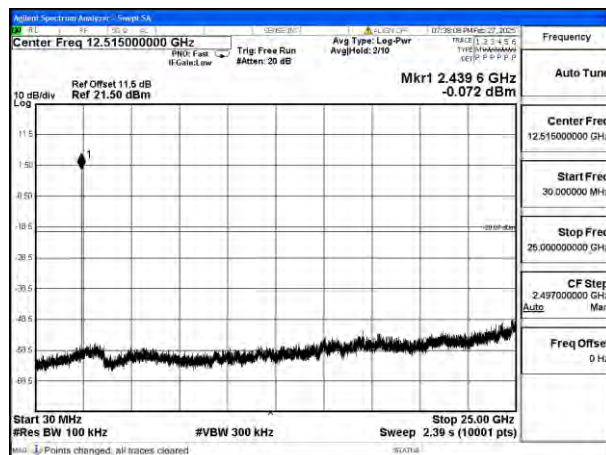
BUREAU
VERITAS

Test Report No.: PSU-NQN2502260117RF02

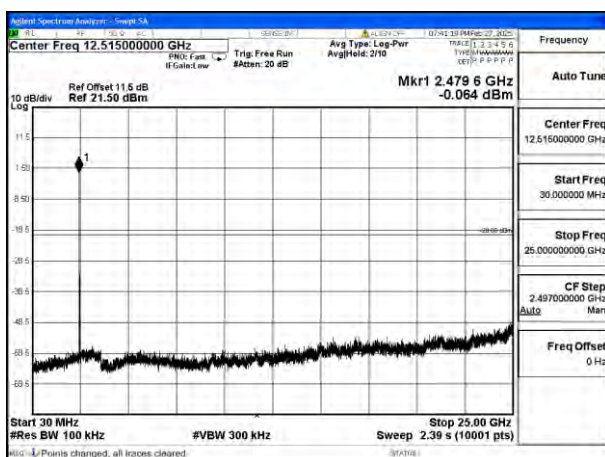
Test Mode: Coded 125K



CH0



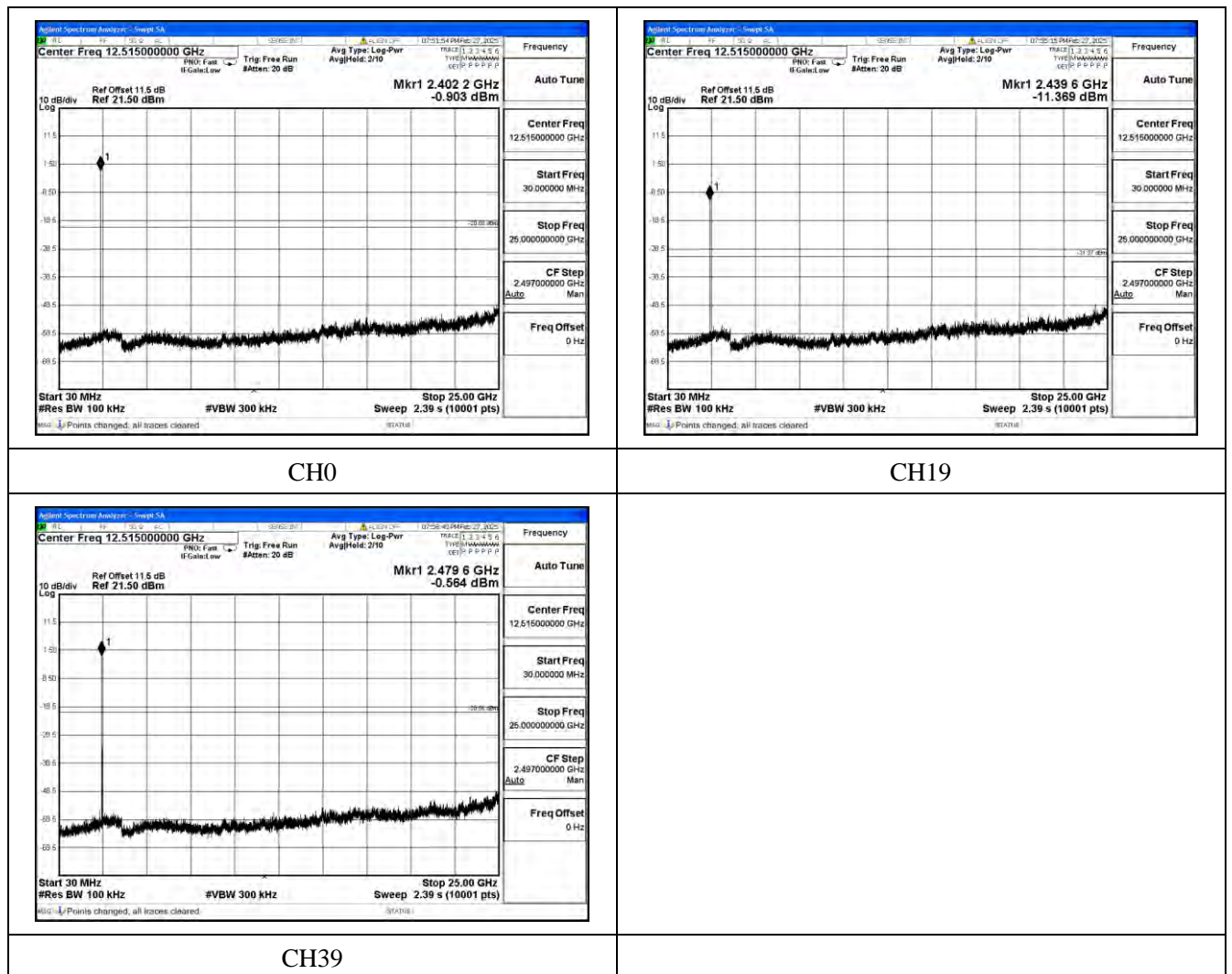
CH19



CH39



Test Mode: Coded 500K





DUTY CYCLE

TEST RESULT

Test Mode	Frequency (MHz)	Plot	Duty Cycle	Correction Factor(dB)	Antenna Gain(dBi)
GFSK (LE 1Mbps)	2402	Fig.1	19.50%	7.10	3.55

Note: Correction Factor= $10 \cdot \log(1/\text{Duty Cycle})$

Test Mode	Frequency (MHz)	Plot	Duty Cycle	Correction Factor(dB)	Antenna Gain(dBi)
GFSK (LE 2Mbps)	2402	Fig.2	14.40%	8.42	3.55

Note: Correction Factor= $10 \cdot \log(1/\text{Duty Cycle})$

Test Mode	Frequency (MHz)	Plot	Duty Cycle	Correction Factor(dB)	Antenna Gain(dBi)
Coded 125K	2402	Fig.3	61.10%	2.14	3.55

Note: Correction Factor= $10 \cdot \log(1/\text{Duty Cycle})$

Test Mode	Frequency (MHz)	Plot	Duty Cycle	Correction Factor(dB)	Antenna Gain(dBi)
Coded 500K	2402	Fig.4	41.30%	3.84	3.55

Note: Correction Factor= $10 \cdot \log(1/\text{Duty Cycle})$



TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)

Test Mode: GFSK (LE 2Mbps)



Fig.1

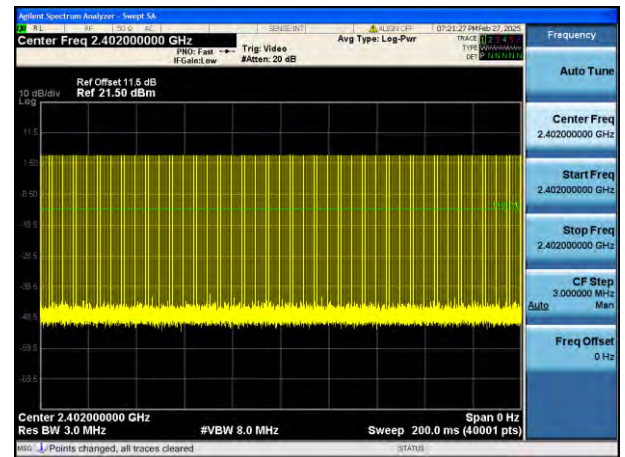


Fig.2

Test Mode: Coded 125K

Test Mode: Coded 500K

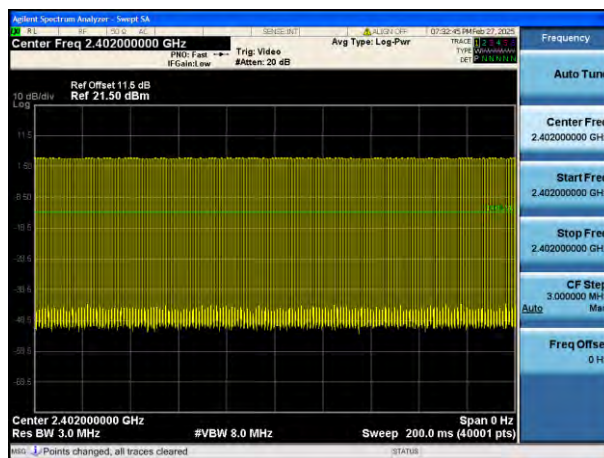


Fig.3

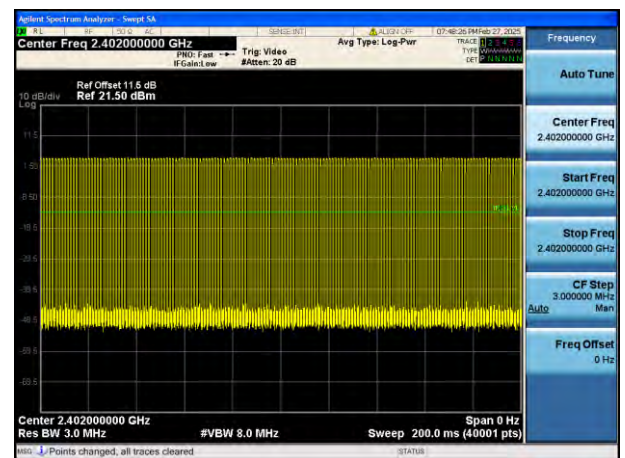


Fig.4

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