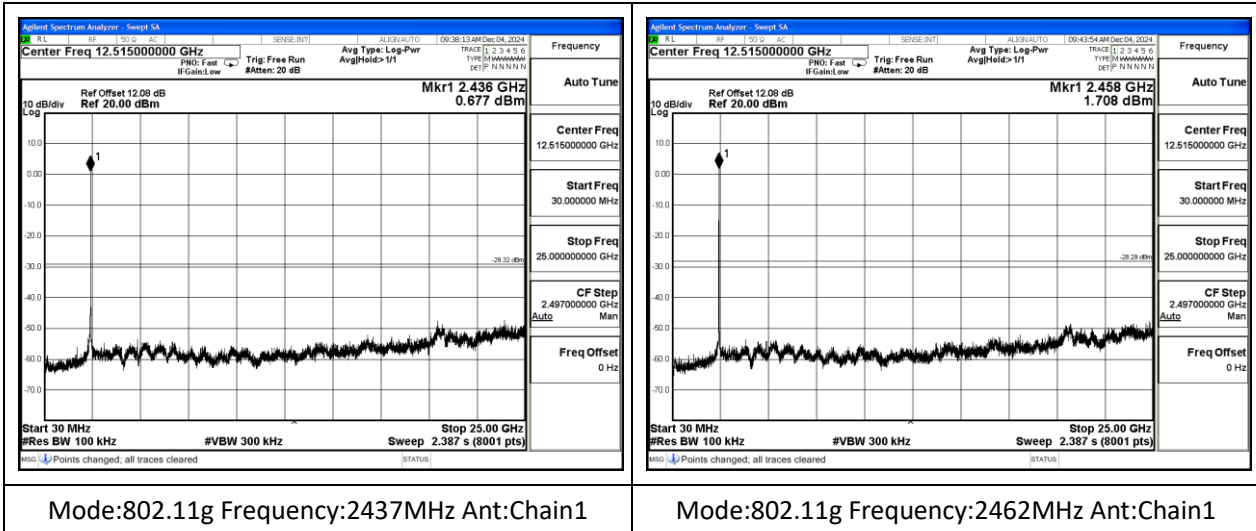
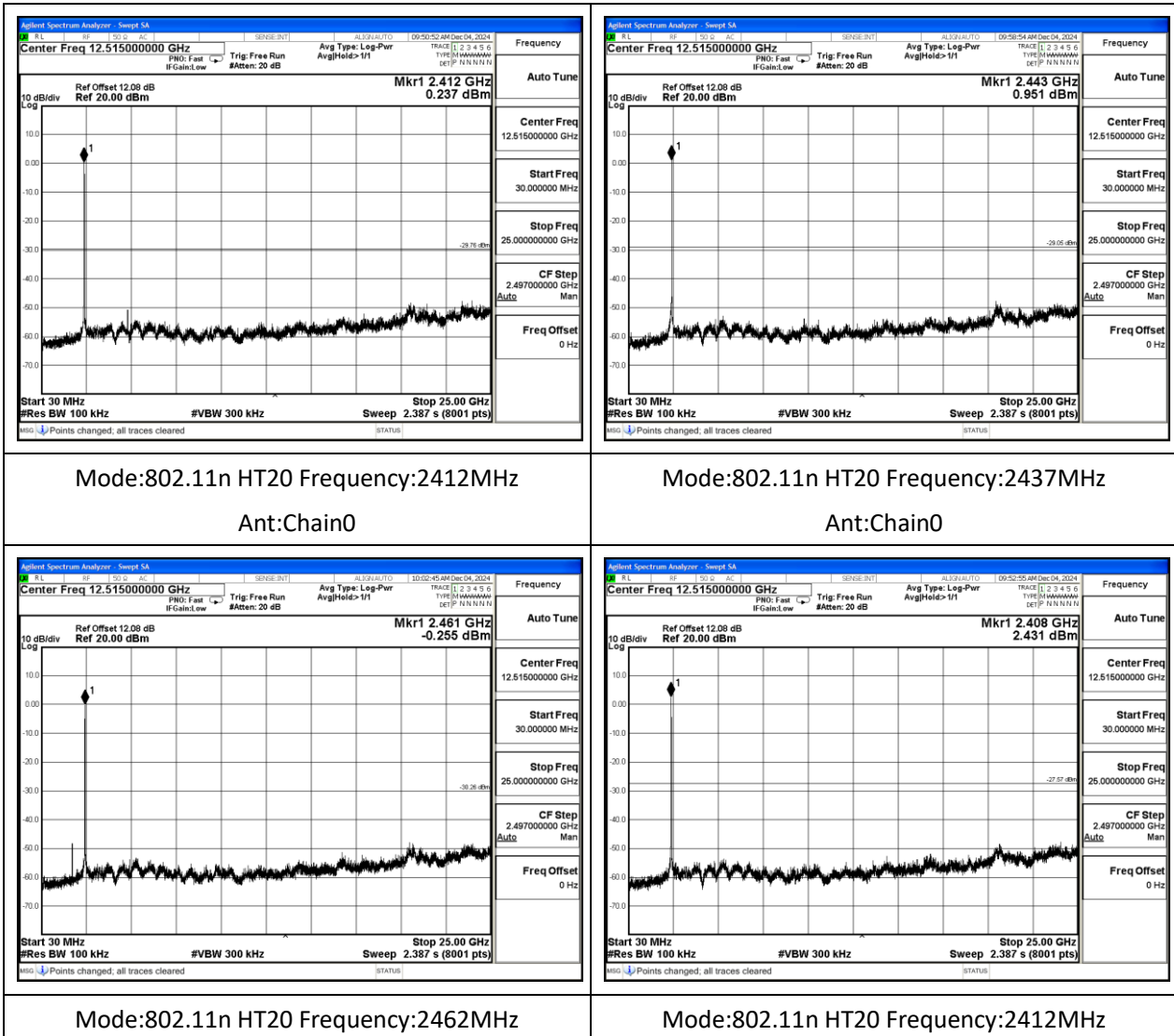




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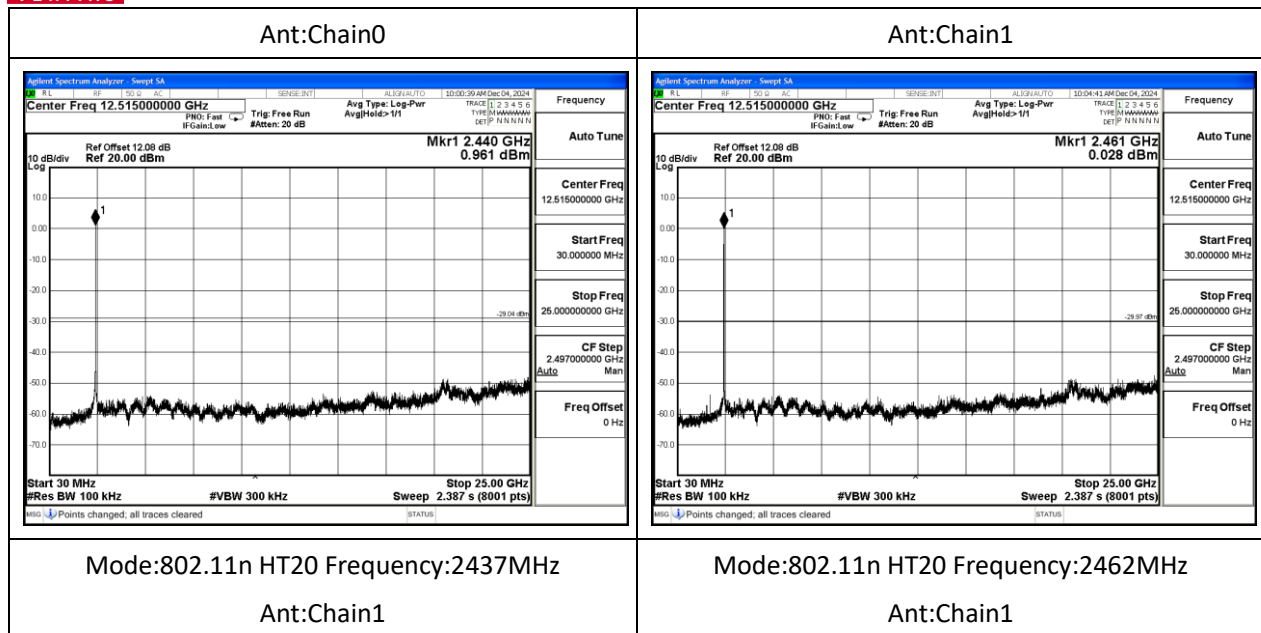


Test Mode: 802.11n HT20

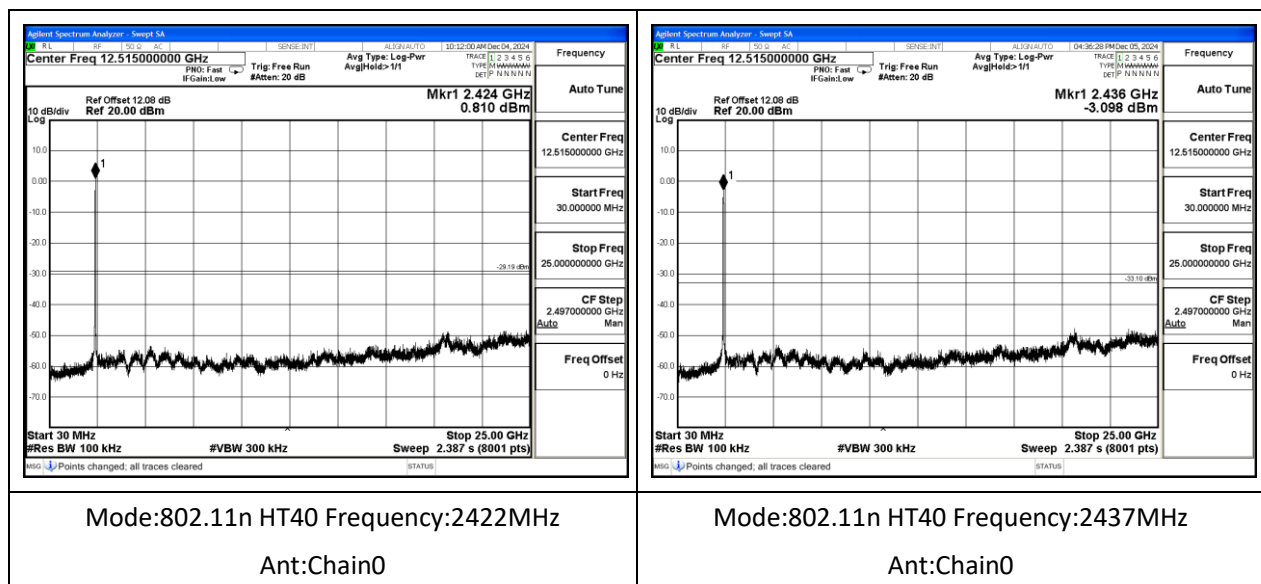




BUREAU VERITAS Test Report No.: PSU-NQN2412200117RF02

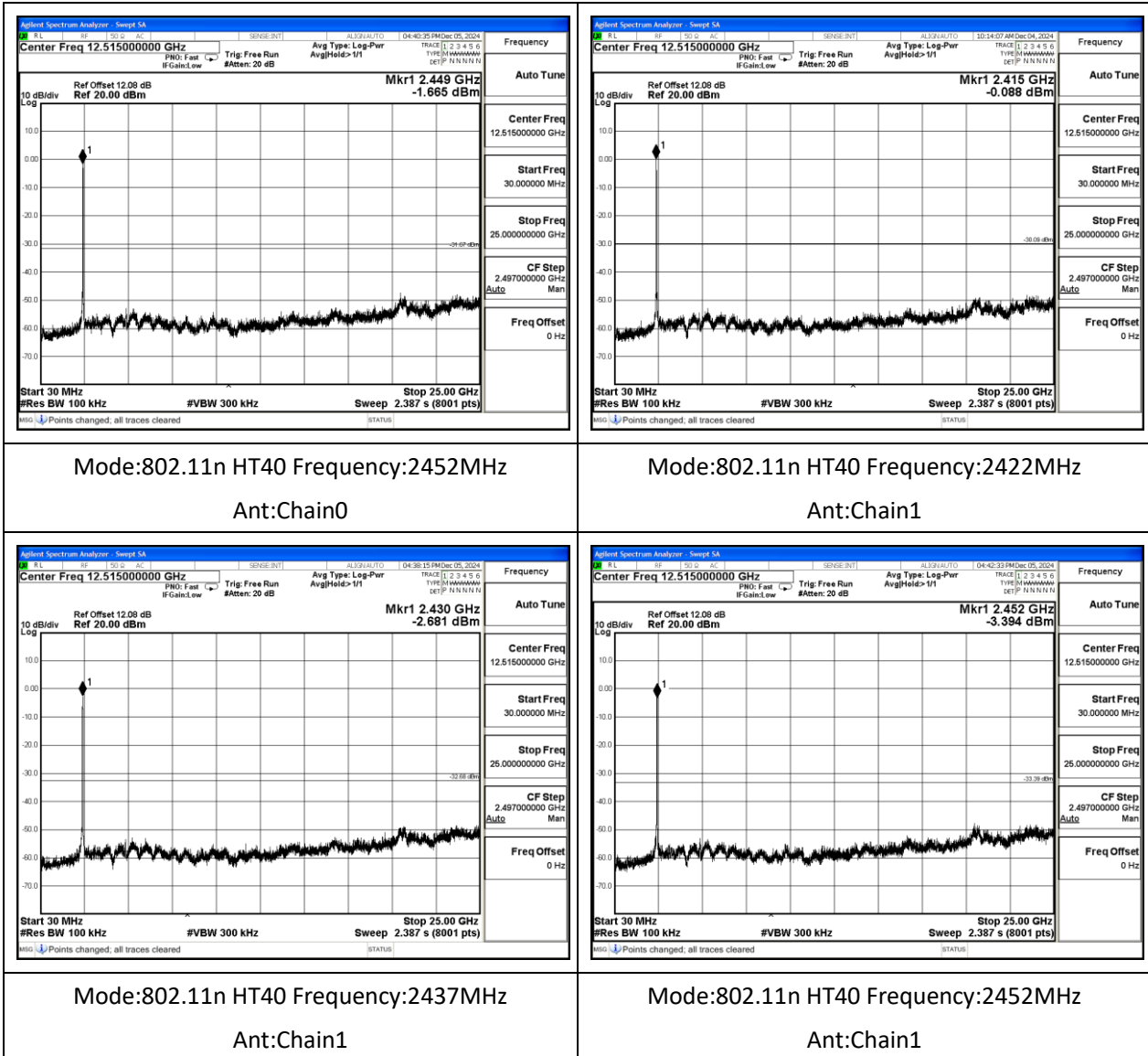


Test Mode: 802.11n HT40





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

Modulation Type	Frequency (MHz)	Antenna	Plot	Duty Cycle	Correction Factor(dB)
802.11b	2412	Chain0	Fig.1	99.97%	0
802.11b	2412	Chain1	Fig.2	99.94%	0
802.11g	2412	Chain0	Fig.3	99.58%	0
802.11g	2412	Chain1	Fig.4	99.60%	0
802.11n HT20	2412	Chain0	Fig.5	99.62%	0
802.11n HT20	2412	Chain1	Fig.6	99.61%	0
802.11n HT40	2422	Chain0	Fig.7	99.13%	0
802.11n HT40	2422	Chain1	Fig.8	99.06%	0

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



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TEST GRAPHS

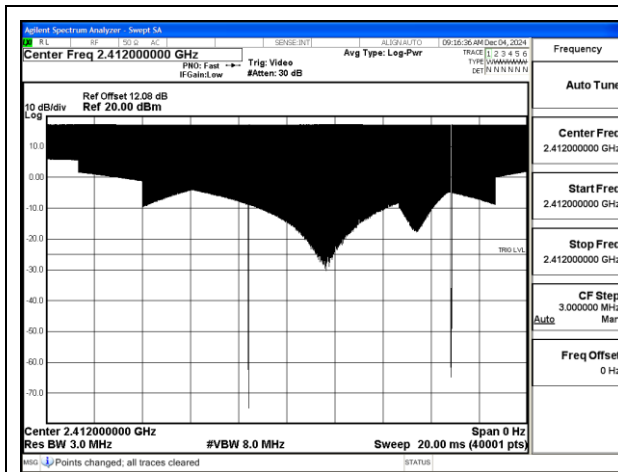


Fig.1

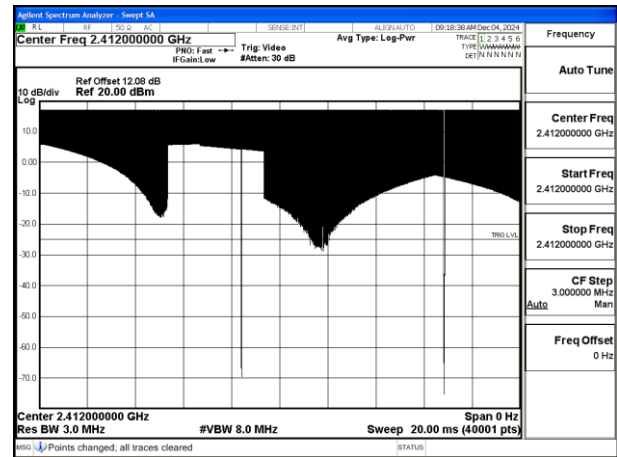


Fig.2

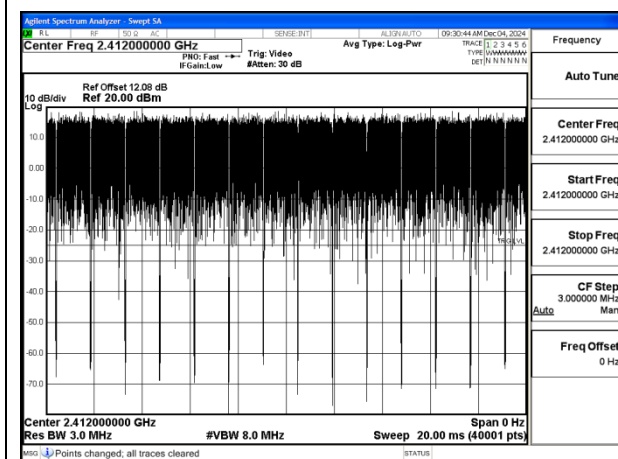


Fig.3

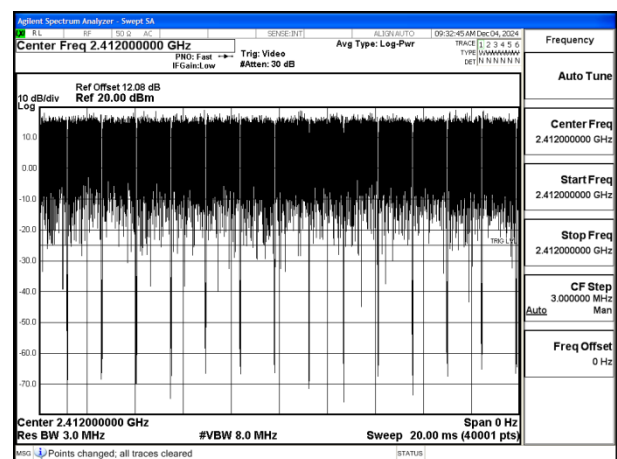


Fig.4

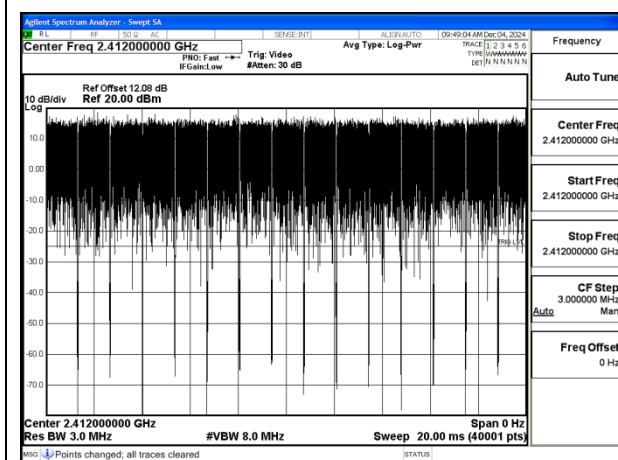


Fig.5

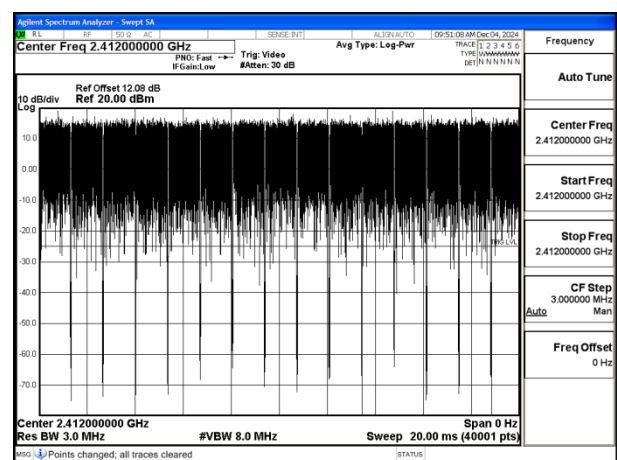


Fig.6

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Email: customerservice.sw@bureauveritas.com



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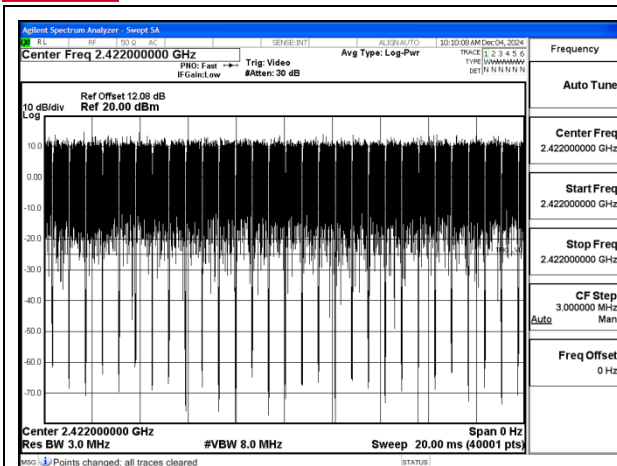


Fig.7

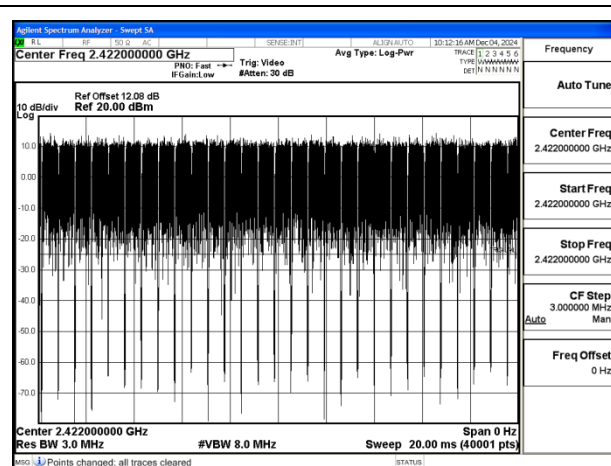


Fig.8



7 APPENDIX 2 BLE

DTS BANDWIDTH

TEST RESULT

Test Mode	Carrier frequency (MHz)	6dB Bandwidth(KHz)
GFSK (LE 1Mbps)	2402	698.4
GFSK (LE 1Mbps)	2440	707.8
GFSK (LE 1Mbps)	2480	705.4

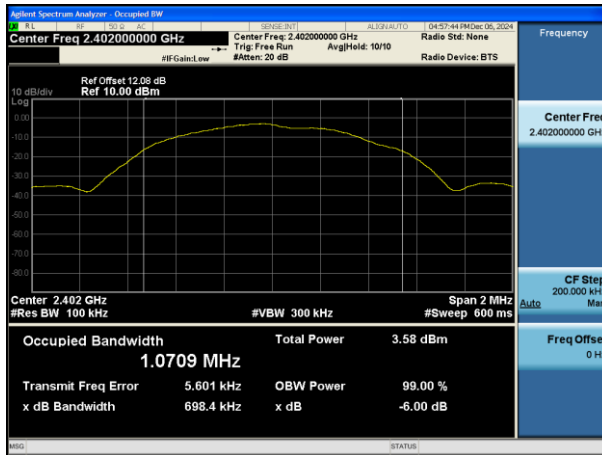
Test Mode	Carrier frequency (MHz)	6dB Bandwidth(KHz)
GFSK (LE 2Mbps)	2402	1267.9
GFSK (LE 2Mbps)	2440	1227.9
GFSK (LE 2Mbps)	2480	1230.5

Test Mode	Carrier frequency (MHz)	6dB Bandwidth(KHz)
Coded 125K	2402	645.4
Coded 125K	2440	645.5
Coded 125K	2480	645.1

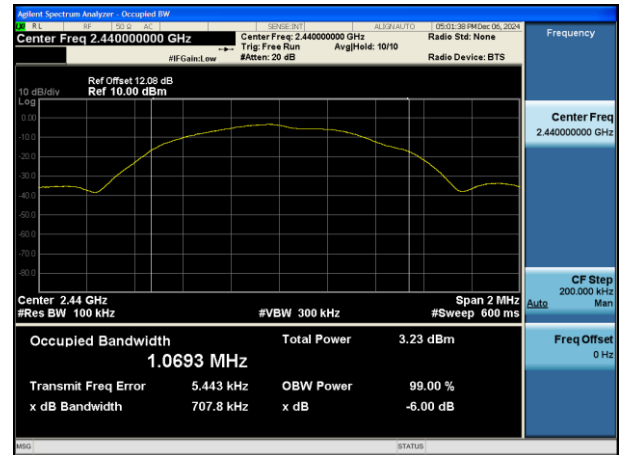
Test Mode	Carrier frequency (MHz)	6dB Bandwidth(KHz)
Coded 500K	2402	709.4
Coded 500K	2440	734.5
Coded 500K	2480	696.0

TEST GRAPHS

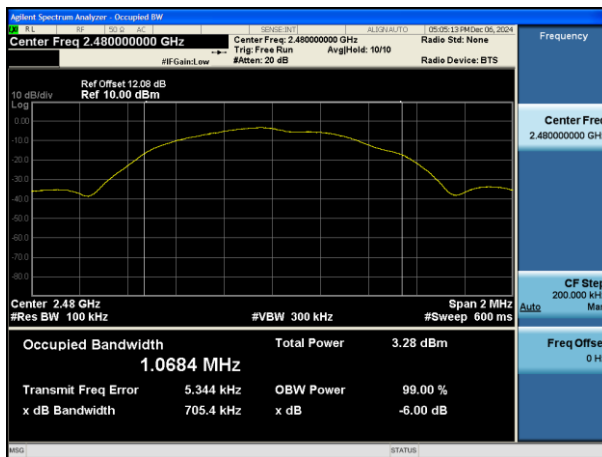
Test Mode: GFSK (LE 1Mbps)



Test Mode:GFSK (LE 1Mbps) 2402MHz



Test Mode:GFSK (LE 1Mbps) 2440MHz



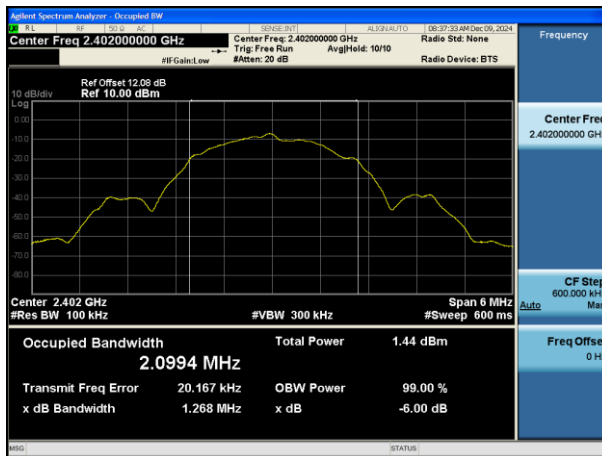
Test Mode:GFSK (LE 1Mbps) 2480MHz



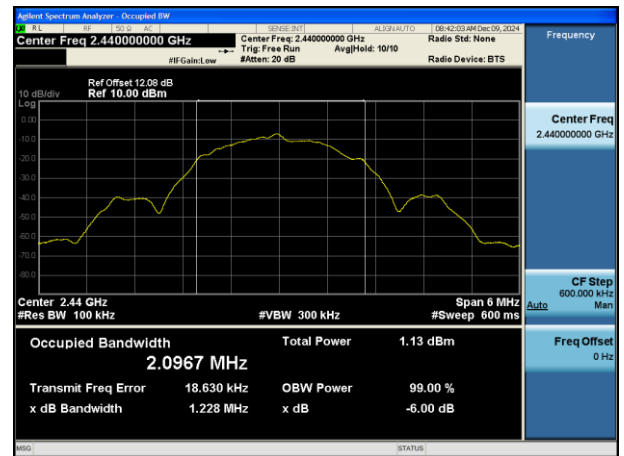
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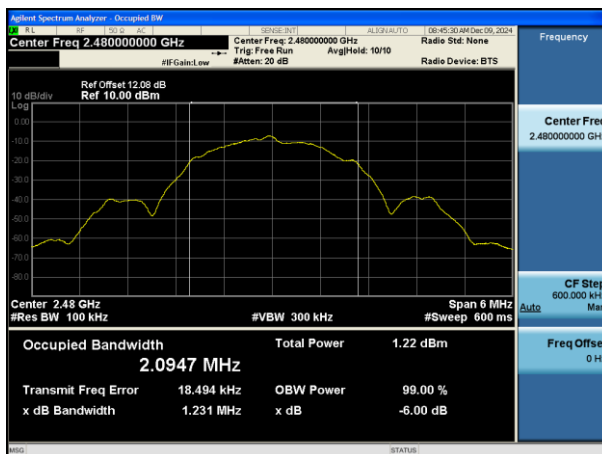
Test Mode: GFSK (LE 2Mbps)



Test Mode:GFSK (LE 2Mbps) 2402MHz



Test Mode:GFSK (LE 2Mbps) 2440MHz



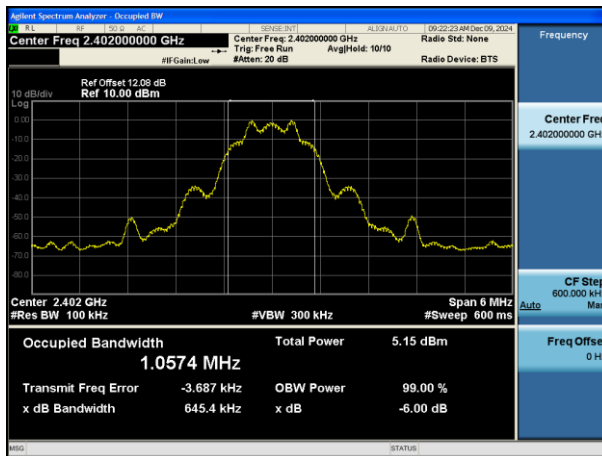
Test Mode:GFSK (LE 2Mbps) 2480MHz



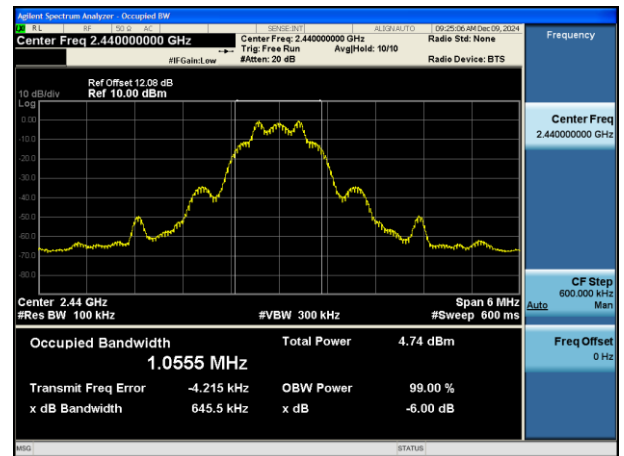
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Test Report No.: PSU-NQN2412200117RF02

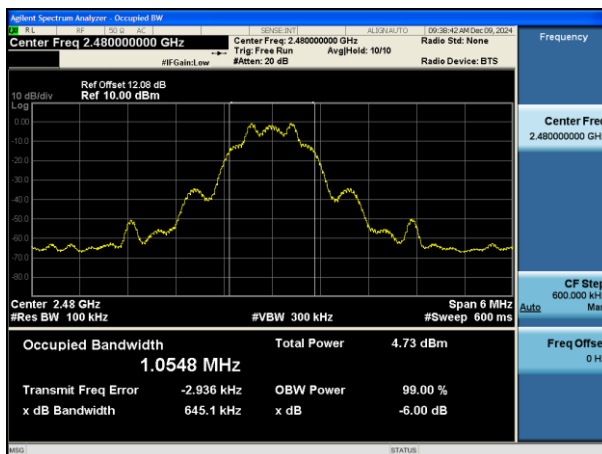
Test Mode: Coded 125K



Test Mode:Coded 125K 2402MHz



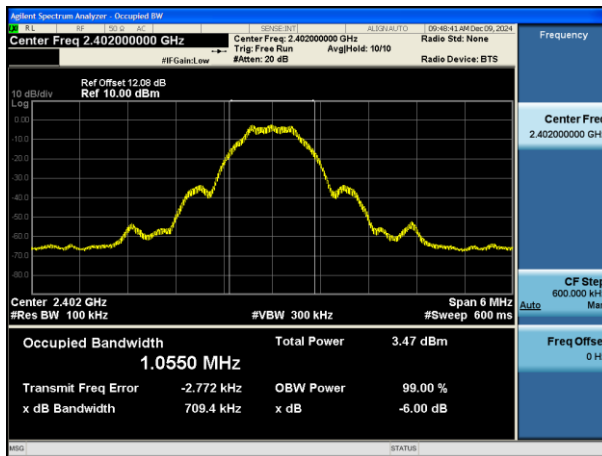
Test Mode:Coded 125K 2440MHz



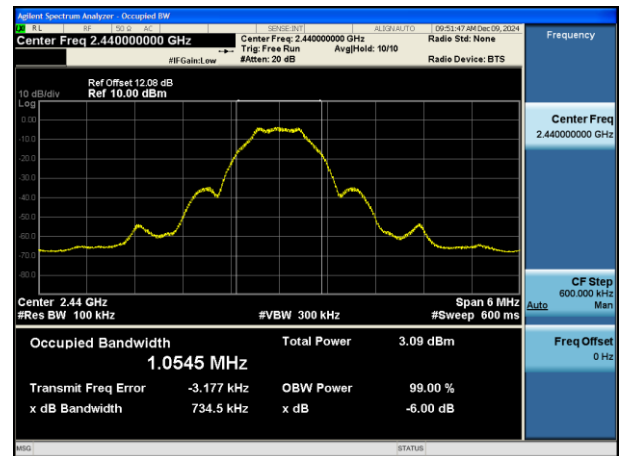
Test Mode:Coded 125K 2480MHz



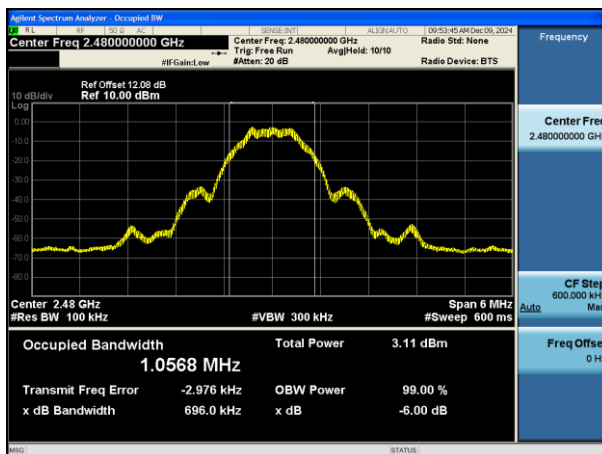
Test Mode: Coded 500K



Test Mode:Coded 500K 2402MHz



Test Mode:Coded 500K 2440MHz



Test Mode:Coded 500K 2480MHz

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

Test Mode	Carrier frequency (MHz)	99% Bandwidth(kHz)
GFSK (LE 1Mbps)	2402	1041.9
GFSK (LE 1Mbps)	2440	1040.5
GFSK (LE 1Mbps)	2480	1039.8

Test Mode	Carrier frequency (MHz)	99% Bandwidth(kHz)
GFSK (LE 2Mbps)	2402	2077.5
GFSK (LE 2Mbps)	2440	2074.7
GFSK (LE 2Mbps)	2480	2073.2

Test Mode	Carrier frequency (MHz)	99% Bandwidth(kHz)
Coded 125K	2402	1033.5
Coded 125K	2440	1031.3
Coded 125K	2480	1031.1

Test Mode	Carrier frequency (MHz)	99% Bandwidth(kHz)
Coded 500K	2402	1034.7
Coded 500K	2440	1033.1
Coded 500K	2480	1032.6



TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)

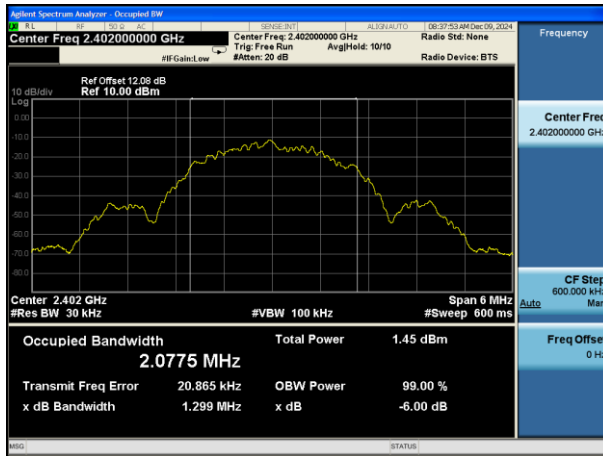




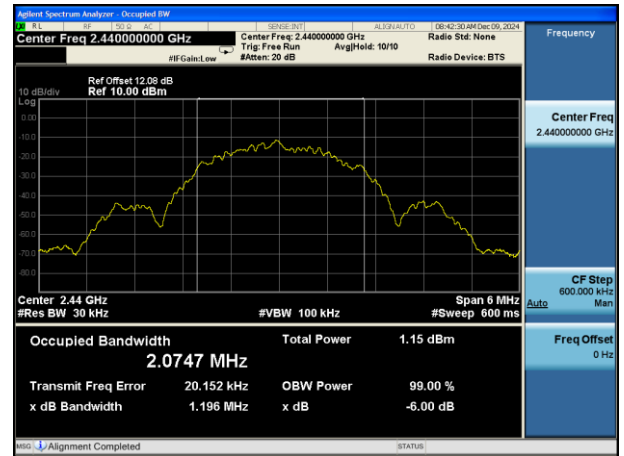
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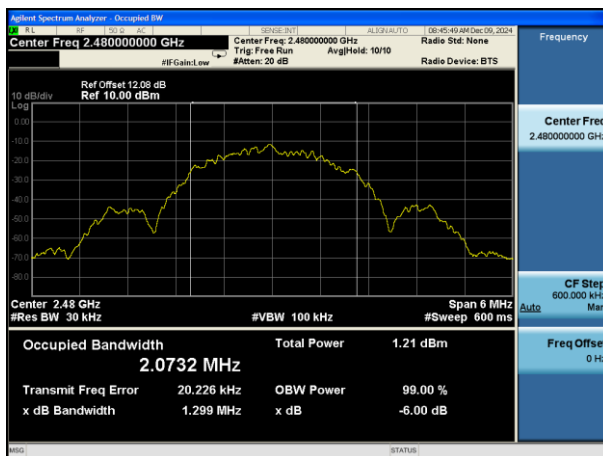
Test Mode: GFSK (LE 2Mbps)



Test Mode:GFSK (LE 2Mbps) 2402MHz



Test Mode:GFSK (LE 2Mbps) 2440MHz



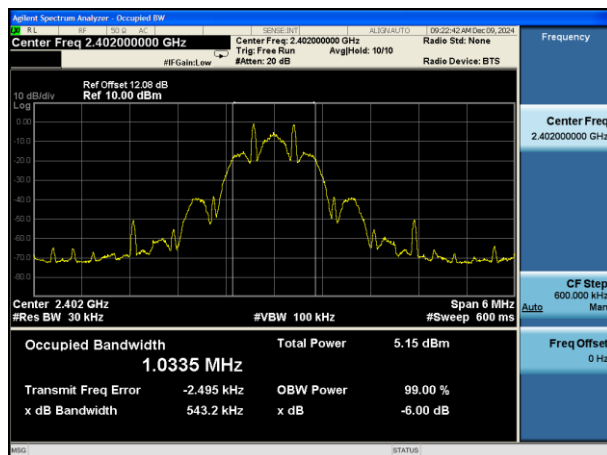
Test Mode:GFSK (LE 2Mbps) 2480MHz



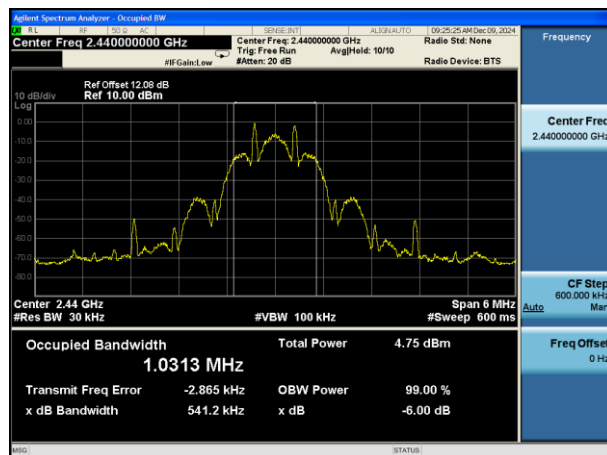
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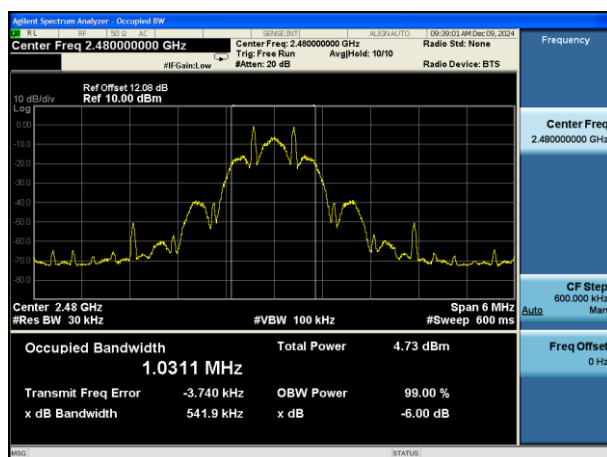
Test Mode: Coded 125K



Test Mode:Coded 125K 2402MHz



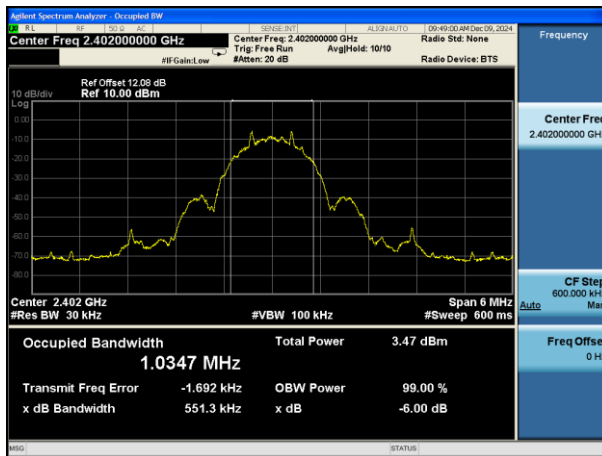
Test Mode:Coded 125K 2440MHz



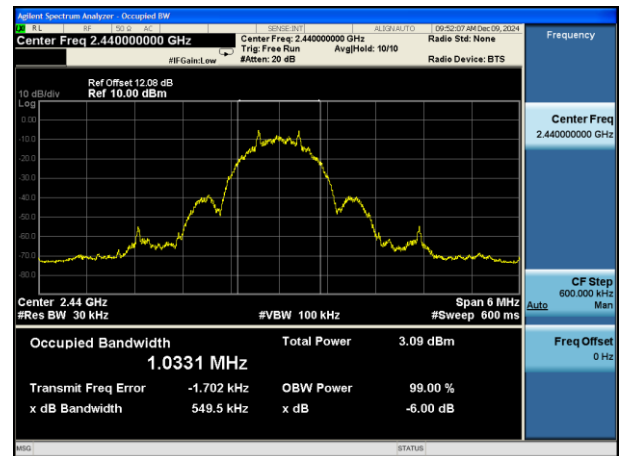
Test Mode:Coded 125K 2480MHz



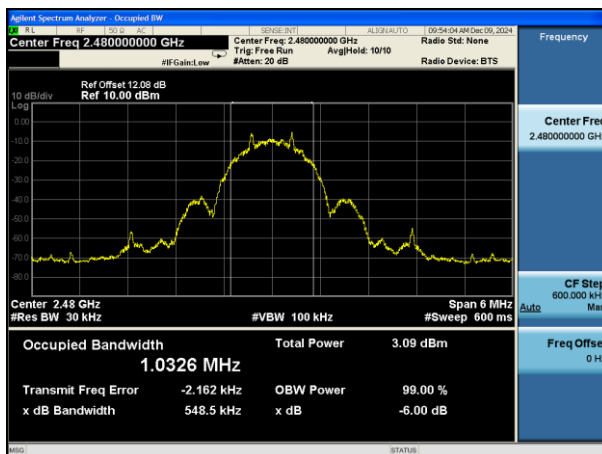
Test Mode: Coded 500K



Test Mode:Coded 500K 2402MHz



Test Mode:Coded 500K 2440MHz



Test Mode:Coded 500K 2480MHz

**MAXIMUM CONDUCTED OUTPUT POWER****TEST RESULT**

Modulation type	Conducted Peak Power(dBm)		
	2402MHz	2440MHz	2480MHz
GFSK (LE 1Mbps)	6.35	5.92	6.16
GFSK (LE 2Mbps)	6.70	6.54	6.32
Coded 125K	6.49	5.90	5.86
Coded 500K	6.39	5.99	5.95

Modulation type	Conducted Average Power(dBm)		
	2402MHz	2440MHz	2480MHz
GFSK (LE 1Mbps)	5.91	5.03	4.83
GFSK (LE 2Mbps)	5.46	5.19	5.21
Coded 125K	4.90	4.92	5.00
Coded 500K	5.15	6.20	4.38

EIRP

Modulation type	Peak EIRP(dBm)		
	2402MHz	2440MHz	2480MHz
GFSK (LE 1Mbps)	7.41	6.98	7.22
GFSK (LE 2Mbps)	7.76	7.60	7.38
Coded 125K	7.55	6.96	6.92
Coded 500K	7.45	7.05	7.01

Modulation type	Average EIRP(dBm)		
	2402MHz	2440MHz	2480MHz
GFSK (LE 1Mbps)	6.97	6.09	5.89
GFSK (LE 2Mbps)	6.52	6.25	6.27
Coded 125K	5.96	5.98	6.06
Coded 500K	6.21	7.26	5.44

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	-9.4
GFSK (LE 1Mbps)	2440	19	-9.6
GFSK (LE 1Mbps)	2480	39	-9.6

Test Mode	Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
GFSK (LE 2Mbps)	2402	0	-11.0
GFSK (LE 2Mbps)	2440	19	-11.6
GFSK (LE 2Mbps)	2480	39	-11.4

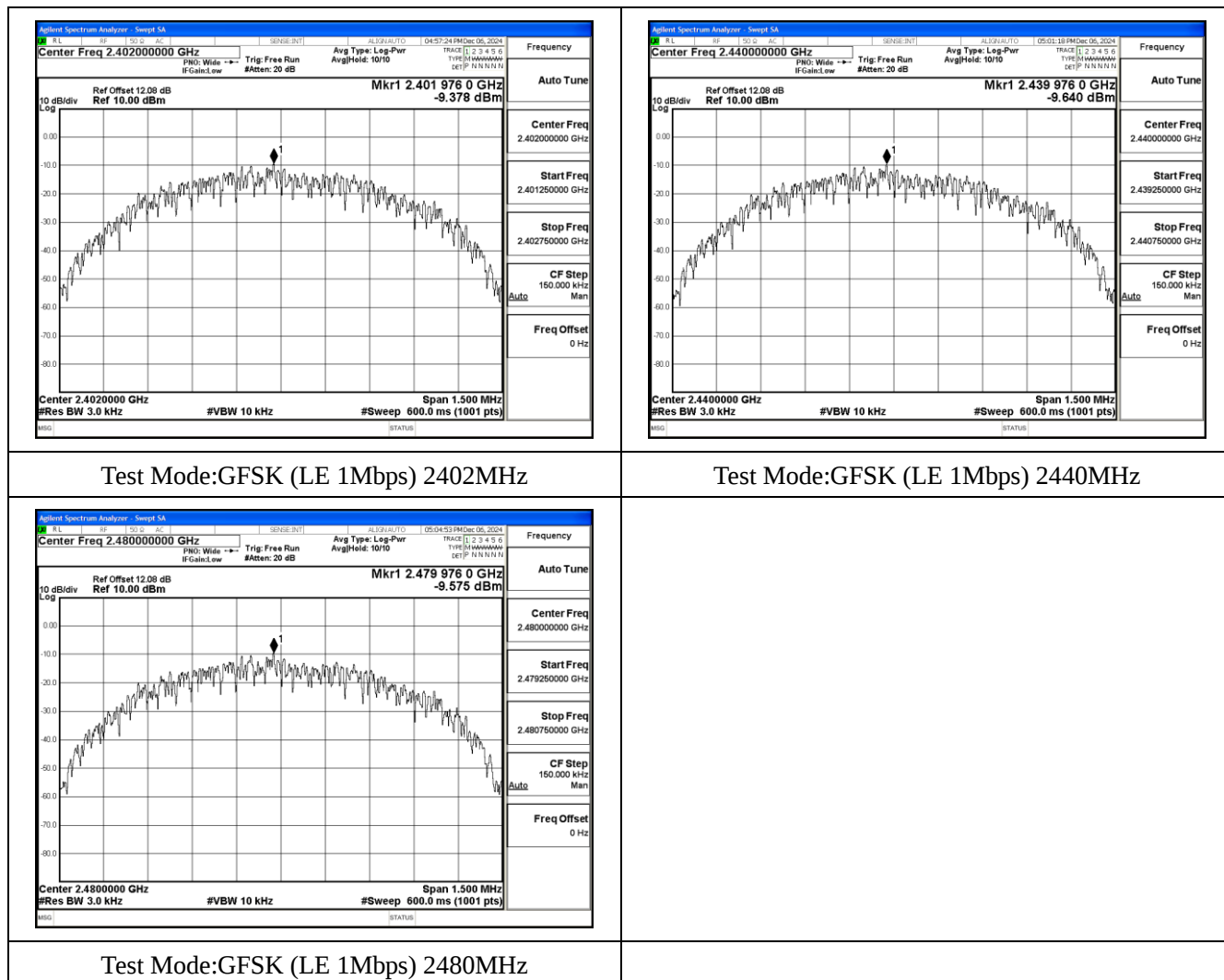
Test Mode	Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
Coded 125K	2402	0	0.1
Coded 125K	2440	19	-0.4
Coded 125K	2480	39	-0.4

Test Mode	Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
Coded 500K	2402	0	-0.4
Coded 500K	2440	19	-0.8
Coded 500K	2480	39	-0.8



TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)

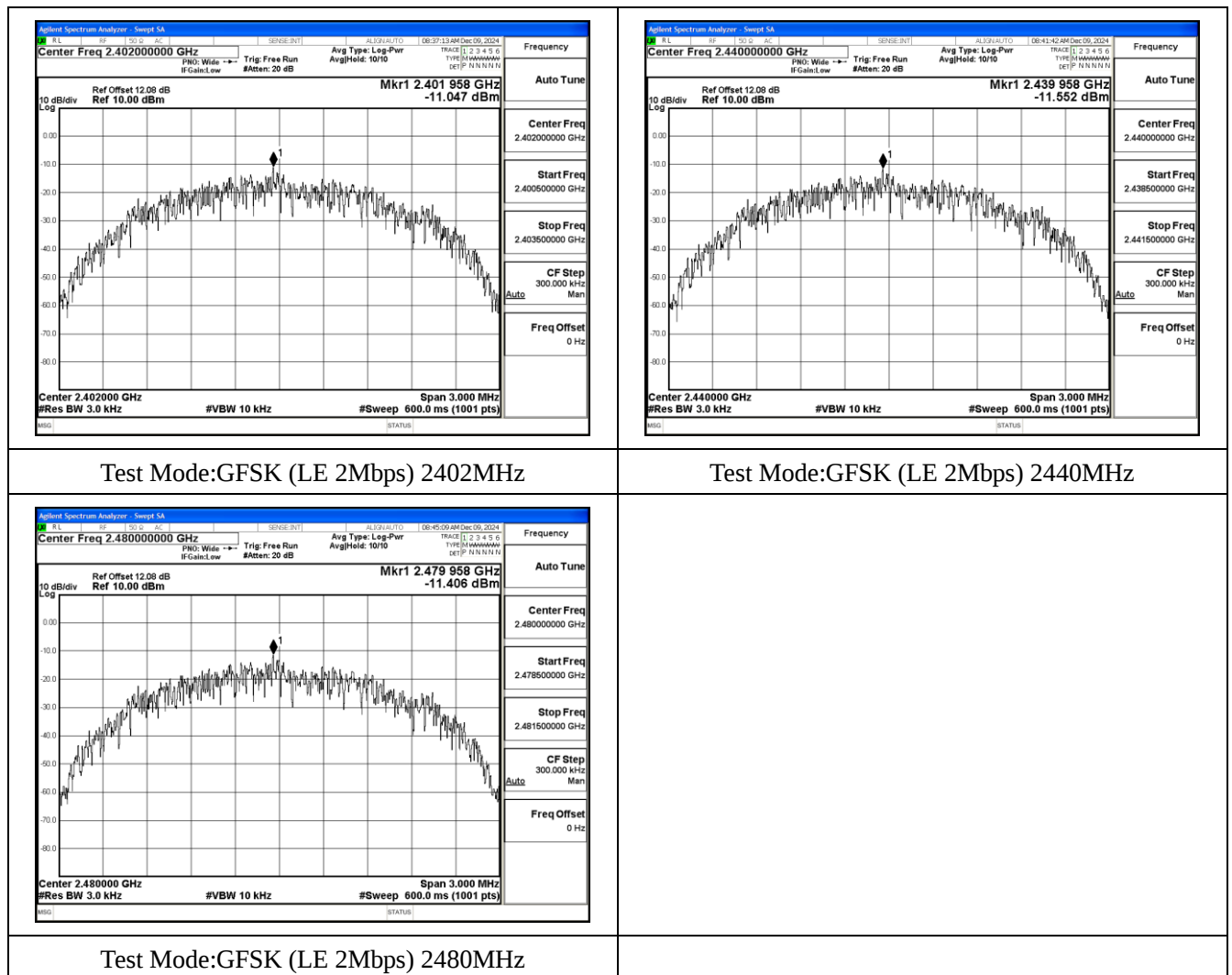




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Test Mode: GFSK (LE 2Mbps)

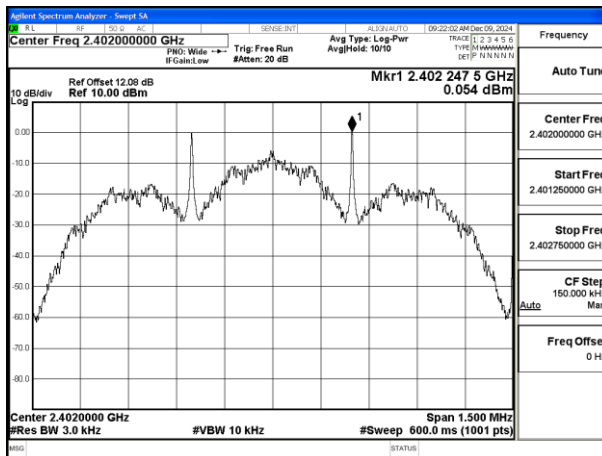




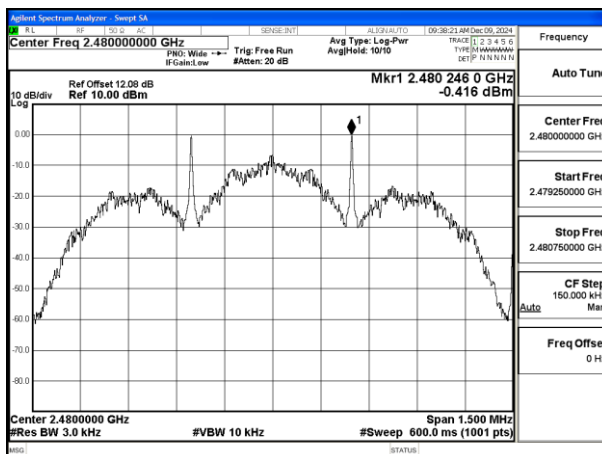
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Test Report No.: PSU-NQN2412200117RF02

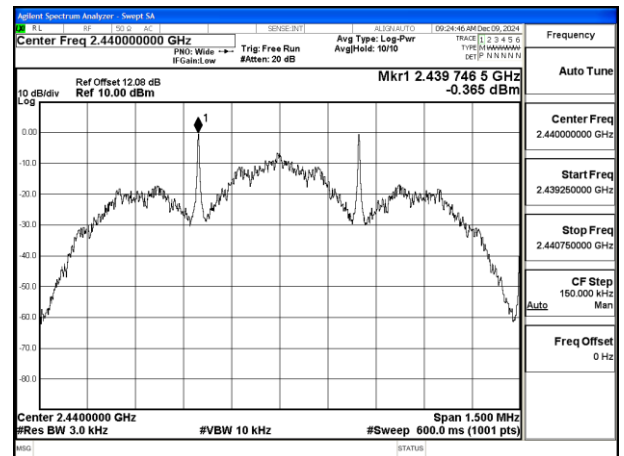
Test Mode: Coded 125K



Test Mode:Coded 125K 2402MHz



Test Mode:Coded 125K 2480MHz



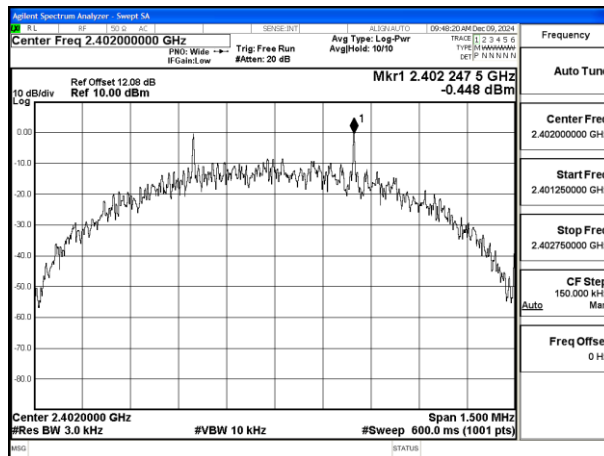
Test Mode:Coded 125K 2440MHz



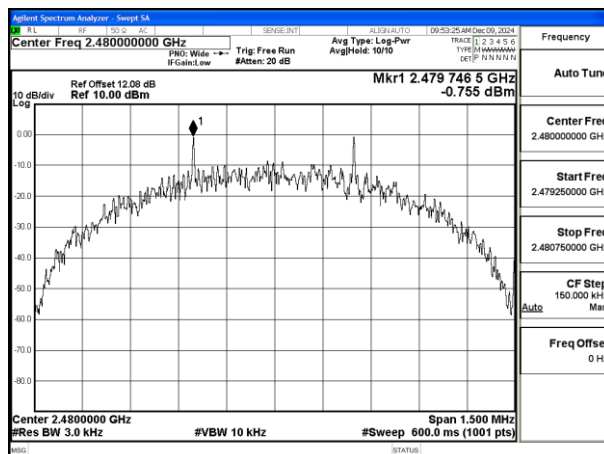
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Test Report No.: PSU-NQN2412200117RF02

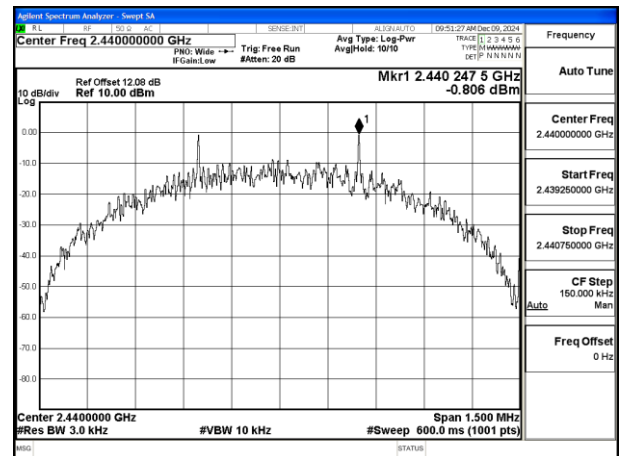
Test Mode: Coded 500K



Test Mode:Coded 500K 2402MHz



Test Mode:Coded 500K 2480MHz



Test Mode:Coded 500K 2440MHz



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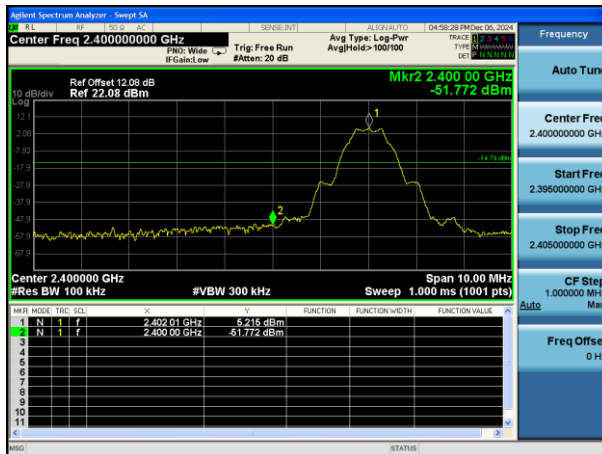
Test Report No.: PSU-NQN2412200117RF02

BAND EDGE MEASUREMENTS

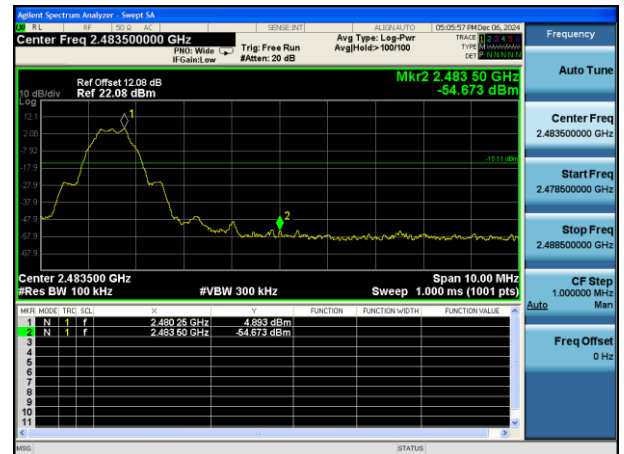
TEST RESULT

TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)

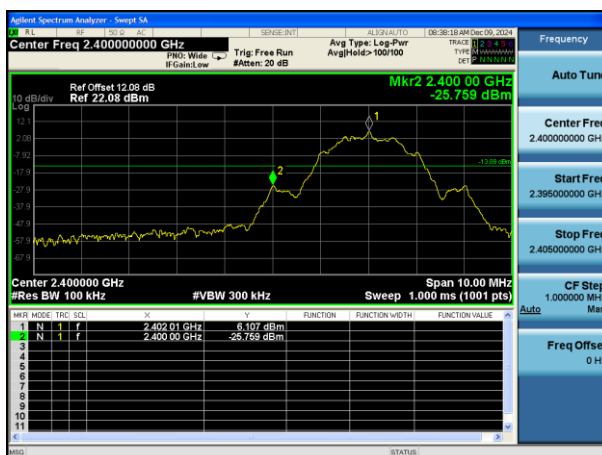


CH0



CH39

Test Mode: GFSK (LE 2Mbps)



CH0

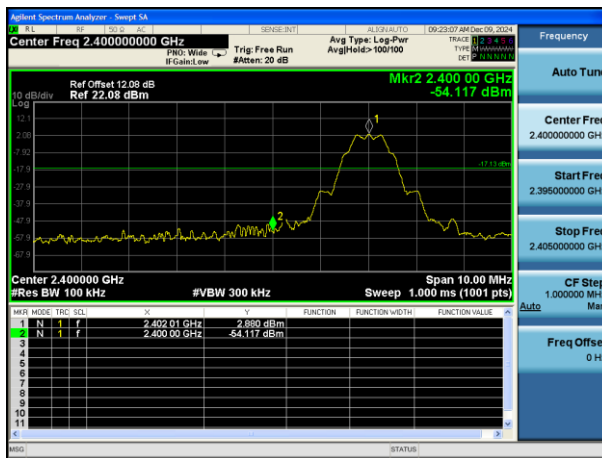


CH39

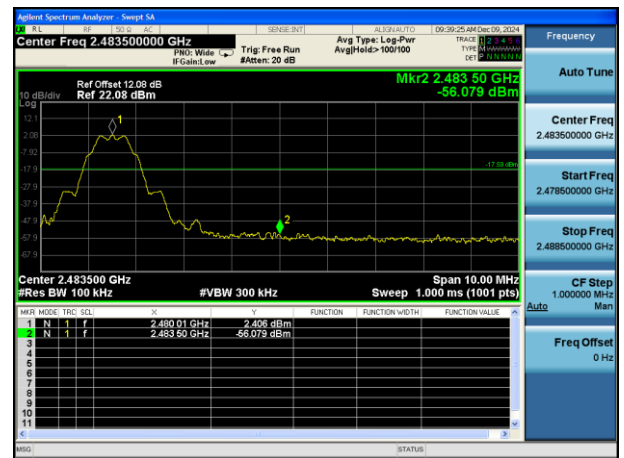


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Test Mode: Coded 125K

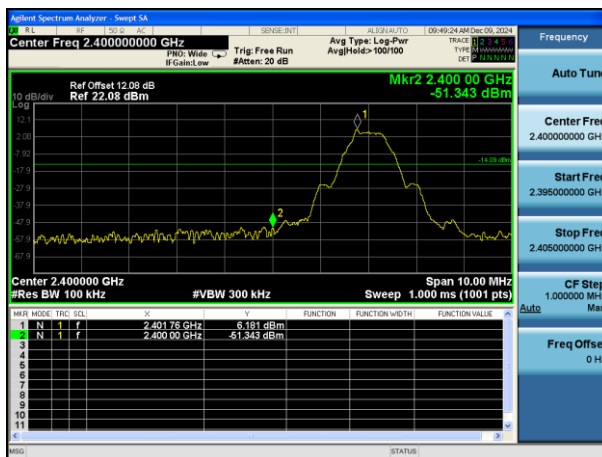


CH0



CH39

Test Mode: Coded 500K



CH0



CH39



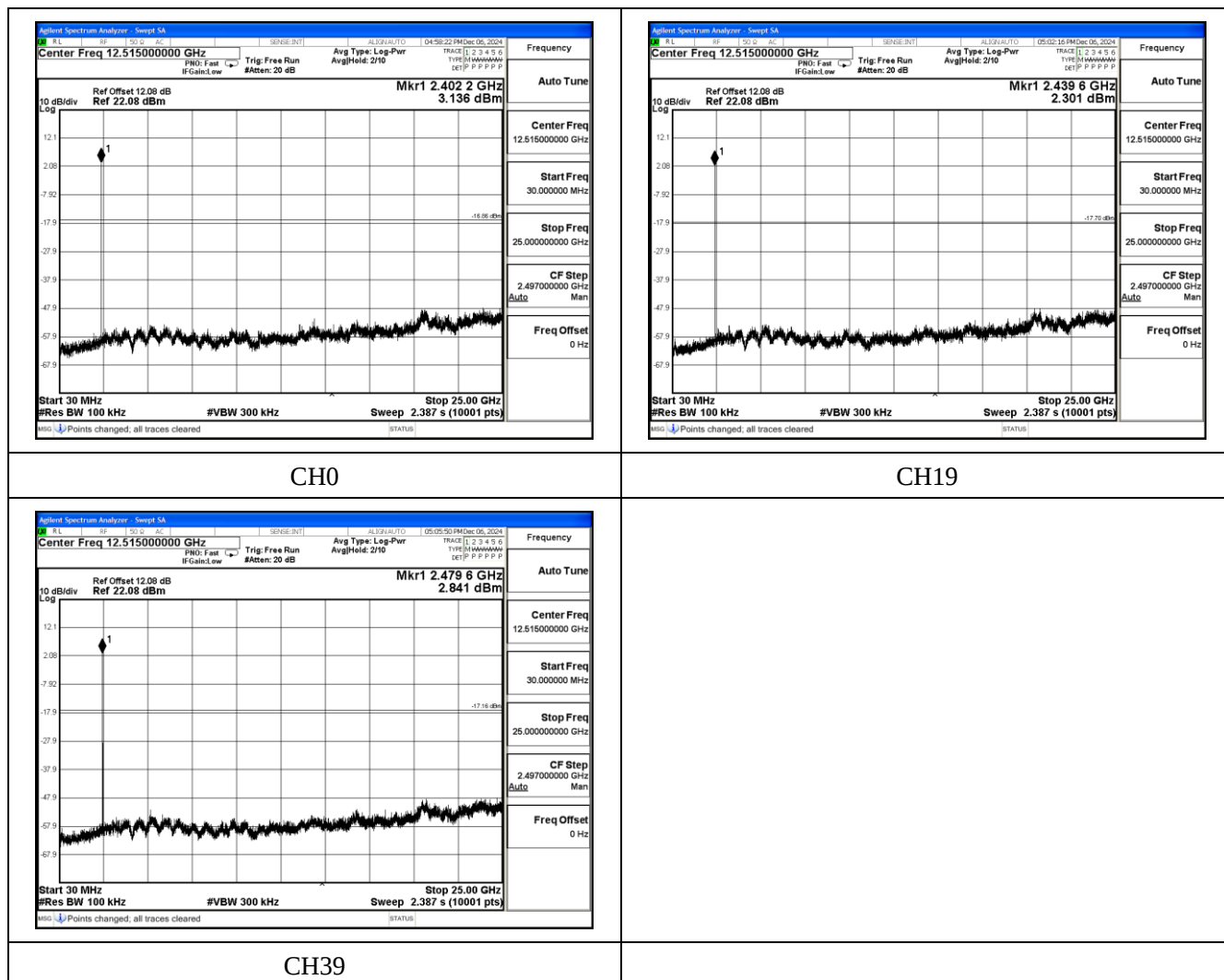
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Test Report No.: PSU-NQN2412200117RF02

CONDUCTED SPURIOUS EMISSION

TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)

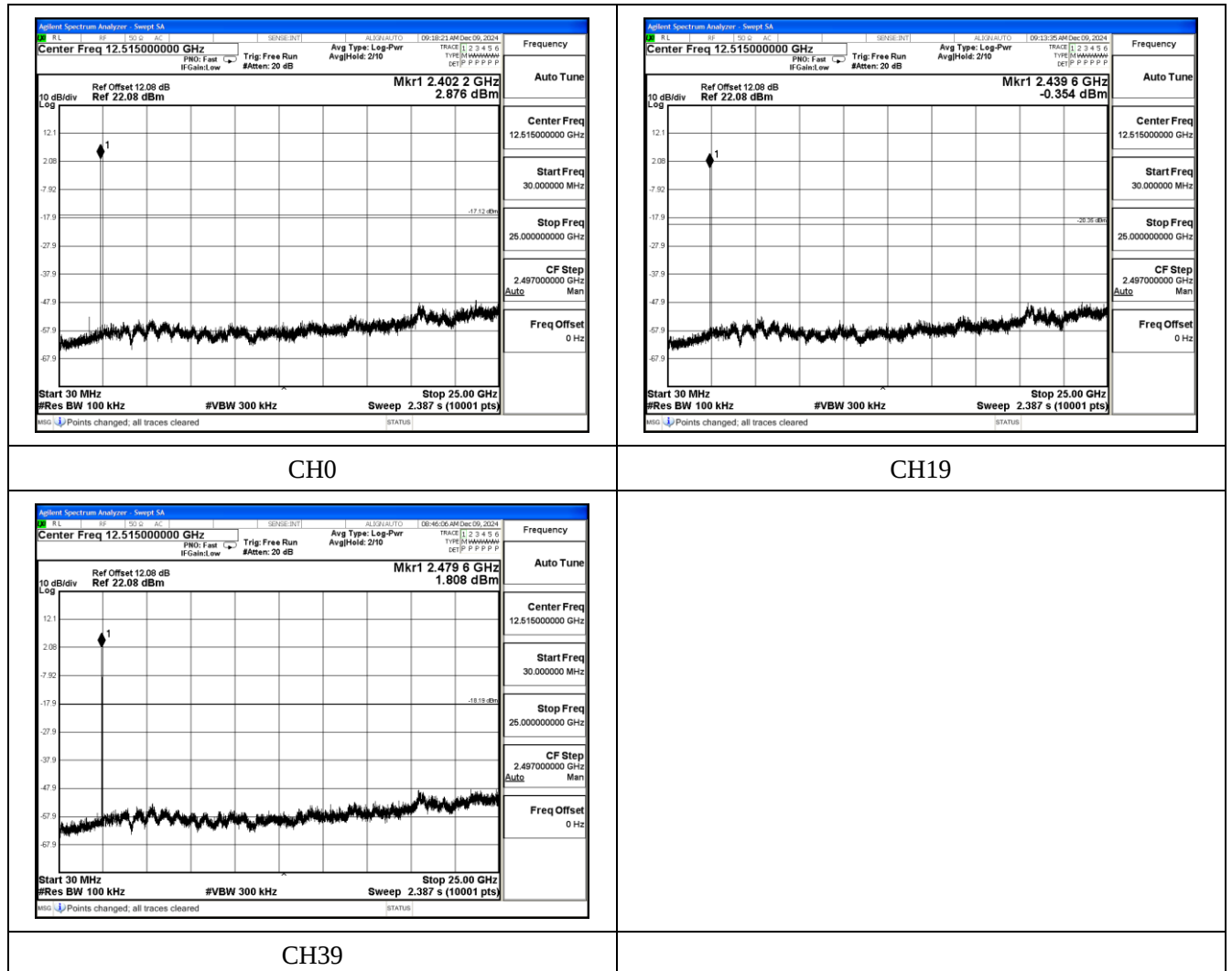




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Test Report No.: PSU-NQN2412200117RF02

Test Mode: GFSK (LE 2Mbps)

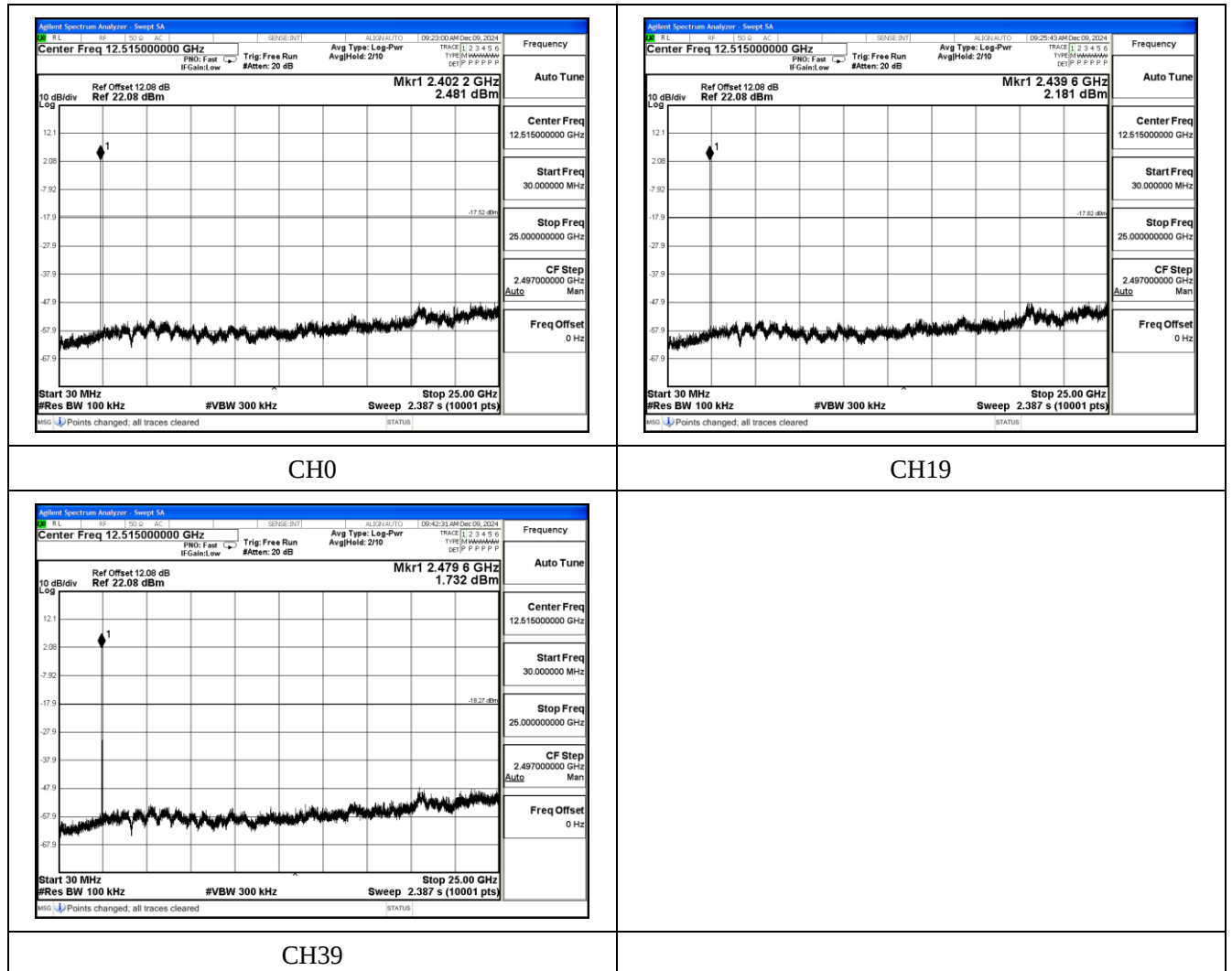




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VERITAS

Test Report No.: PSU-NQN2412200117RF02

Test Mode: Coded 125K

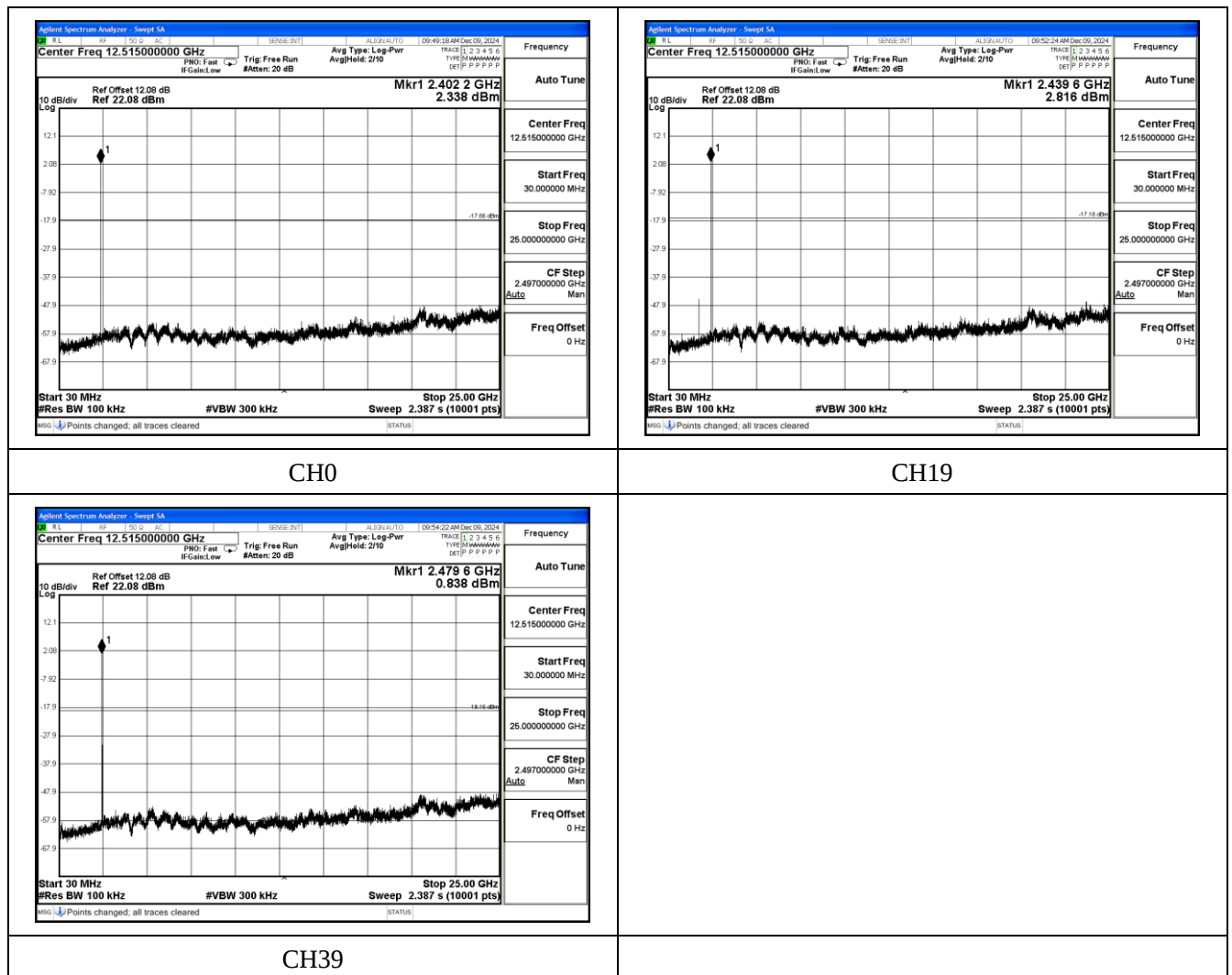




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VERITAS

Test Report No.: PSU-NQN2412200117RF02

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	65.60%	1.83	1.06

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	37.70%	4.24	1.06

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	83.70%	0.77	1.06

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	59.00%	2.29	1.06



TEST GRAPHS

Test Mode: GFSK (LE 1Mbps)

Test Mode: GFSK (LE 2Mbps)

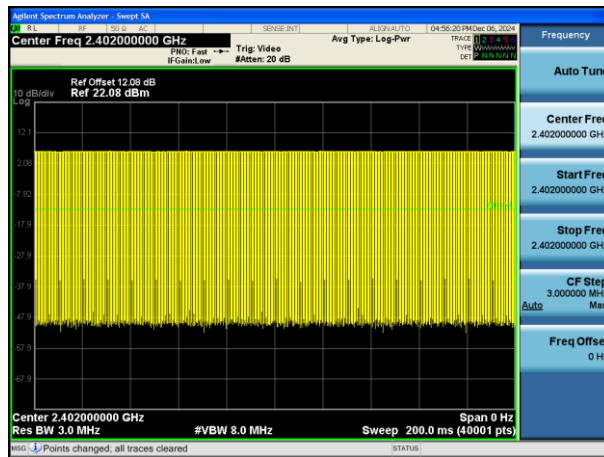


Fig.1

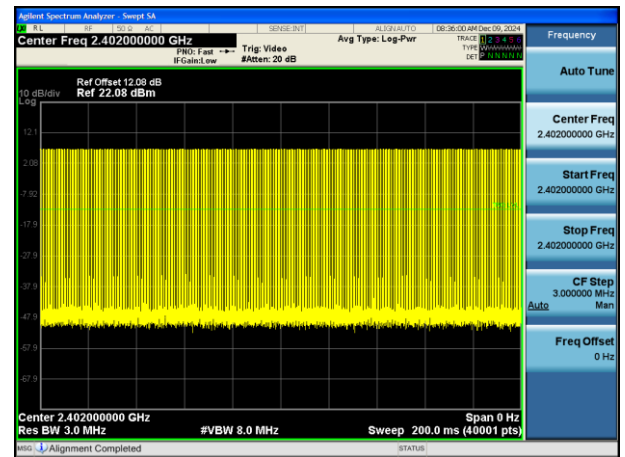


Fig.2

Test Mode: Coded 125K

Test Mode: Coded 500K

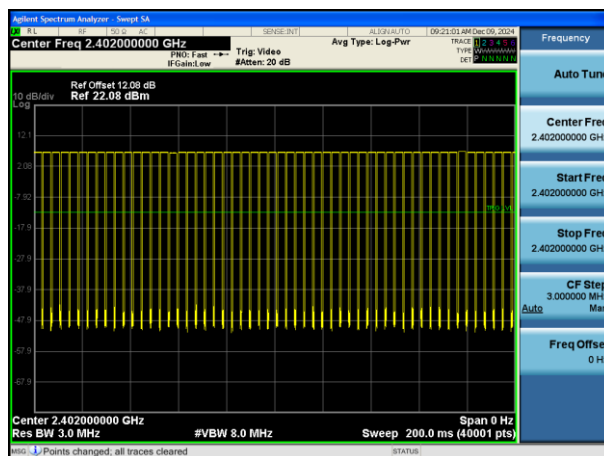


Fig.3

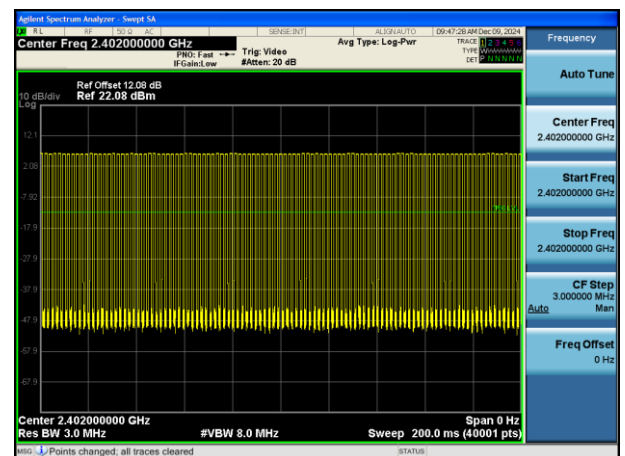


Fig.4

---END---