Appendix for 15.247

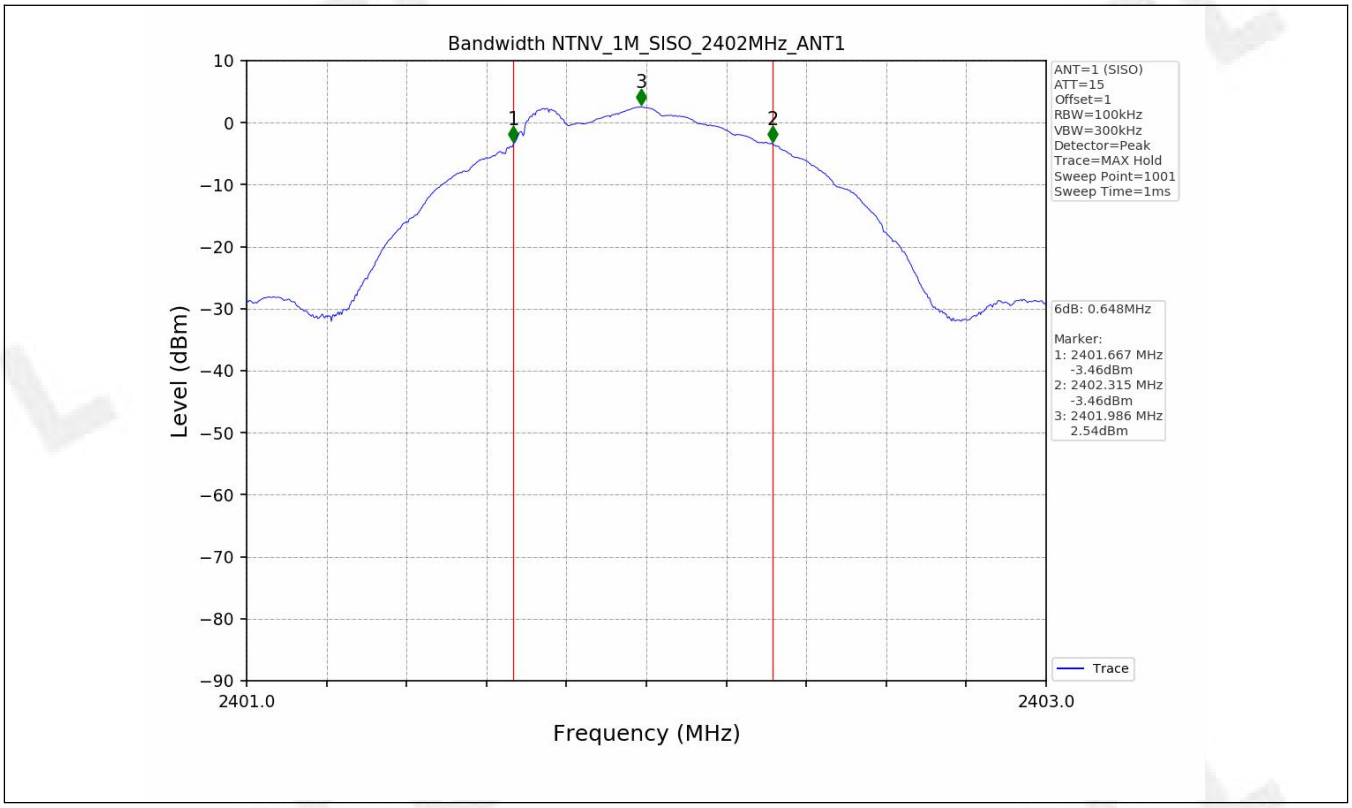
1. Bandwidth

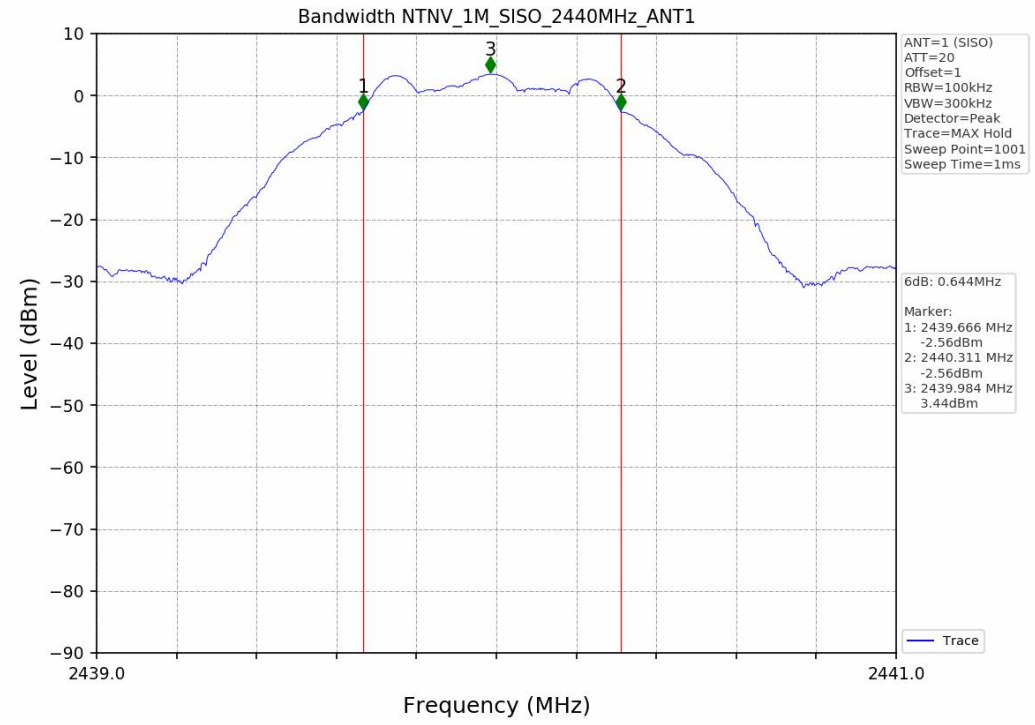
1.1 Test Result

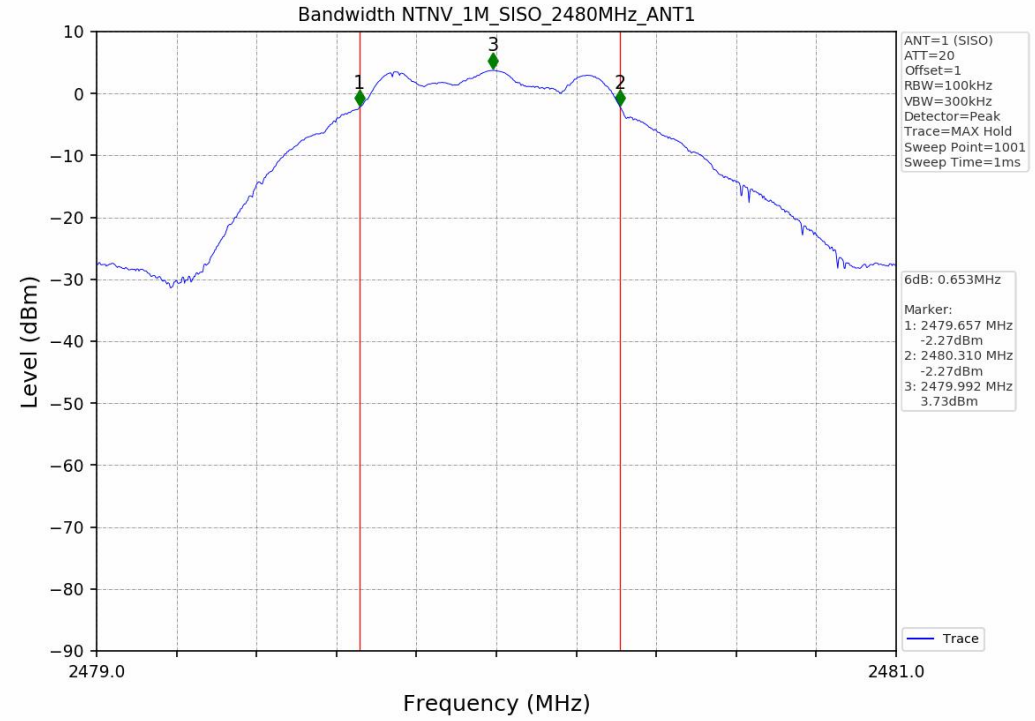
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth Test Result (MHz)	Limits (kHz)	Verdict
1M	2402	SISO	1	0.648	≧500	PASS
	2440	SISO	1	0.644	≧500	PASS
	2480	SISO	1	0.653	≧500	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth Test Result (MHz)	
1M	2402	SISO	1	1.047	Only for Report Use
	2440	SISO	1	1.031	Only for Report Use
	2480	SISO	1	1.029	Only for Report Use

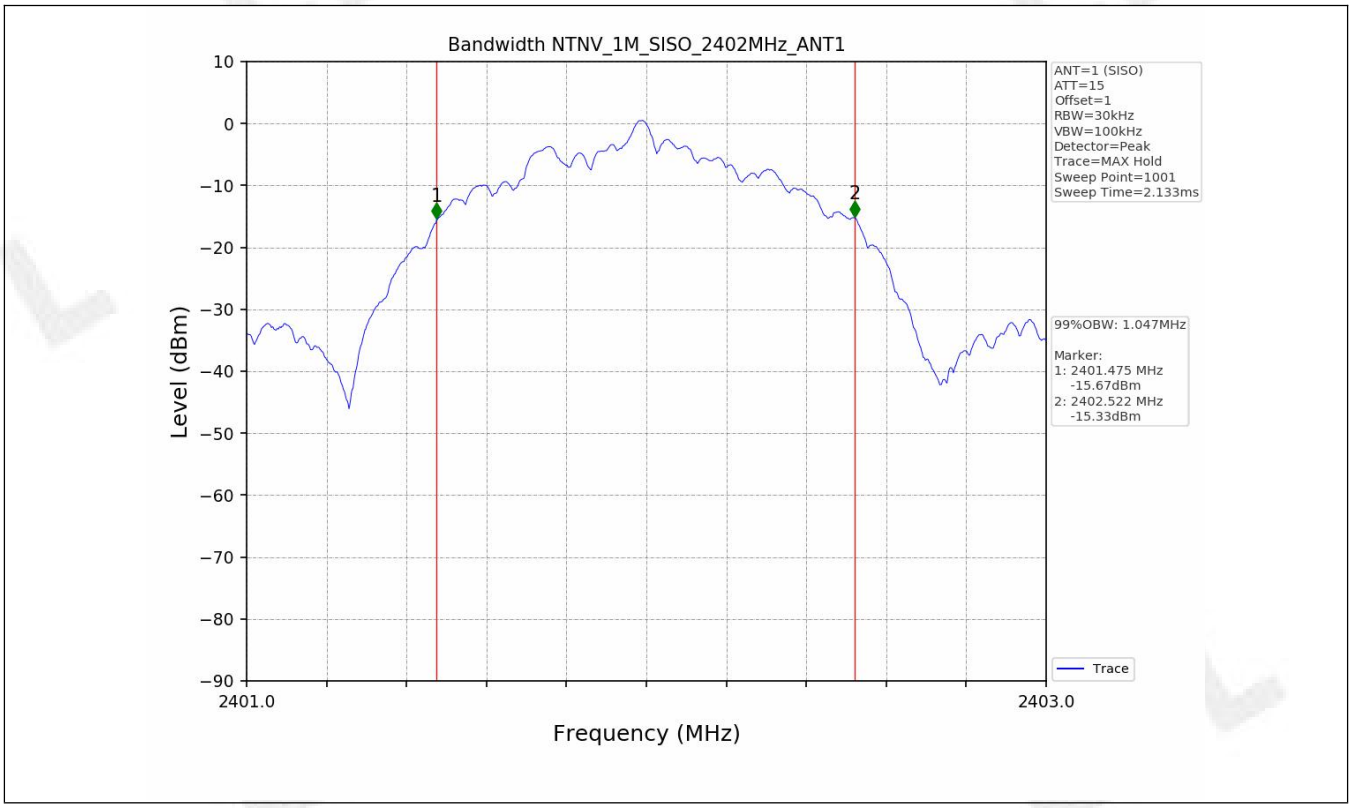
1.2 Test Graph - 6dB Bandwidth

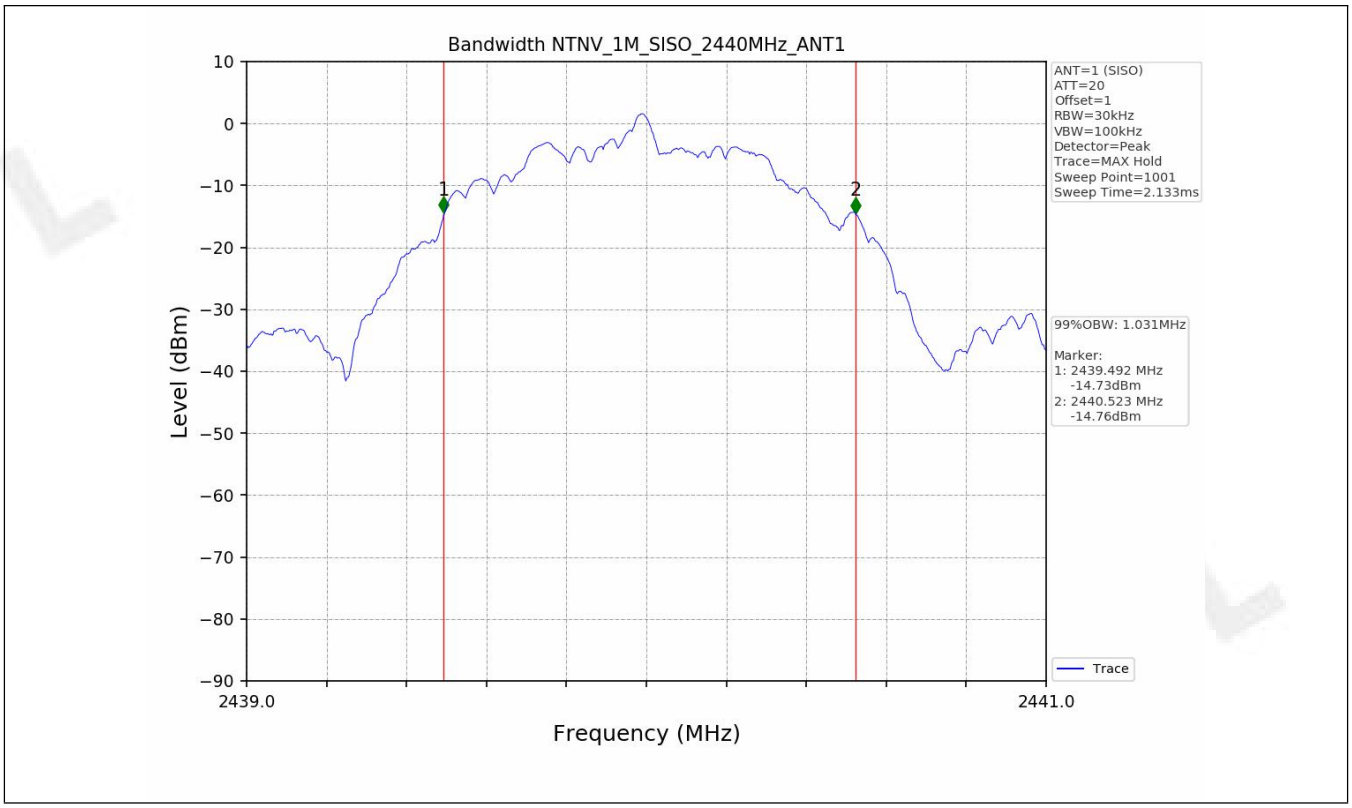


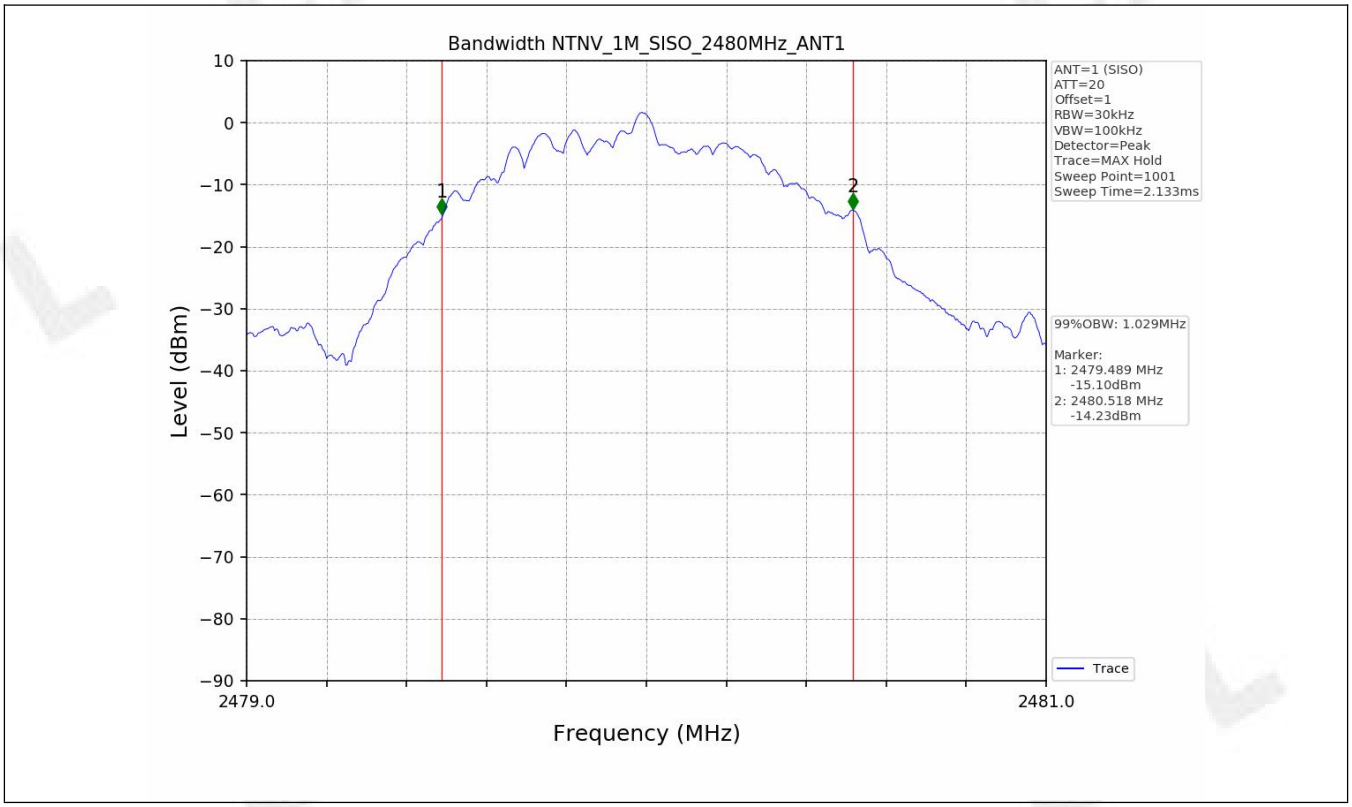

Bandwidth NTNV_1M_SISO_2440MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
6dB: 0.644MHz
Marker:
1: 2439.666 MHz
-2.56dBm
2: 2440.311 MHz
-2.56dBm
3: 2439.984 MHz
3.44dBm
Trace
Level (dBm)
Frequency (MHz)
2439.0
2441.0


Bandwidth NTNV_1M_SISO_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
6dB: 0.653MHz
Marker:
1: 2479.657 MHz
-2.27dBm
2: 2480.310 MHz
-2.27dBm
3: 2479.992 MHz
3.73dBm
Trace
Level (dBm)
Frequency (MHz)
2479.0
2481.0

1.3 Test Graph - 99% Occupied Bandwidth





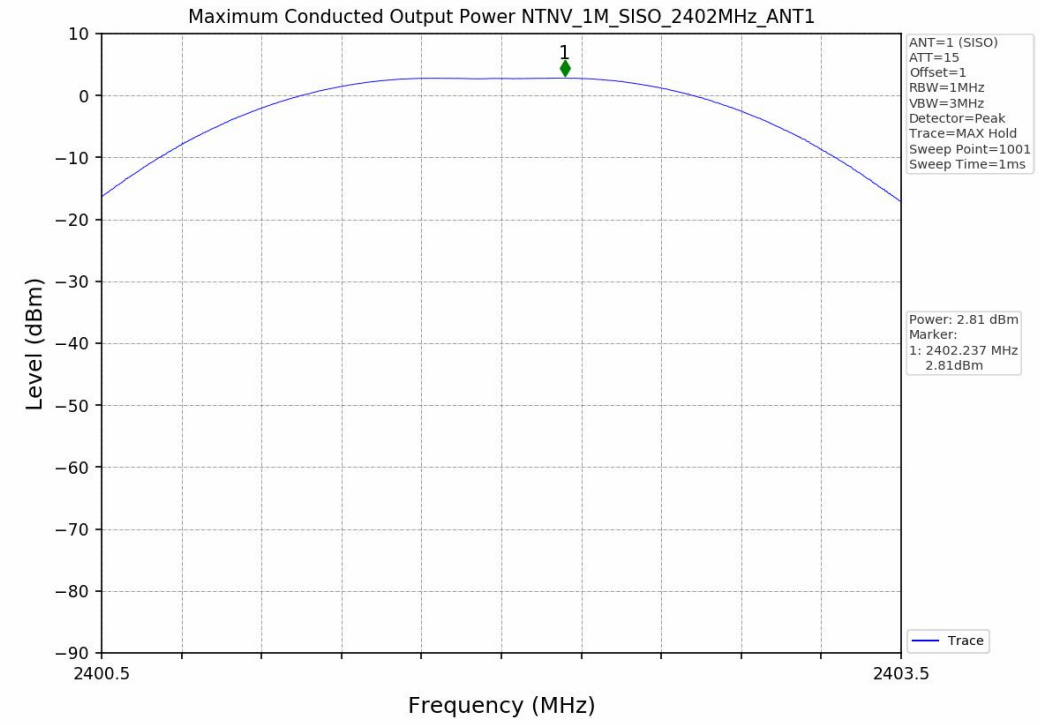


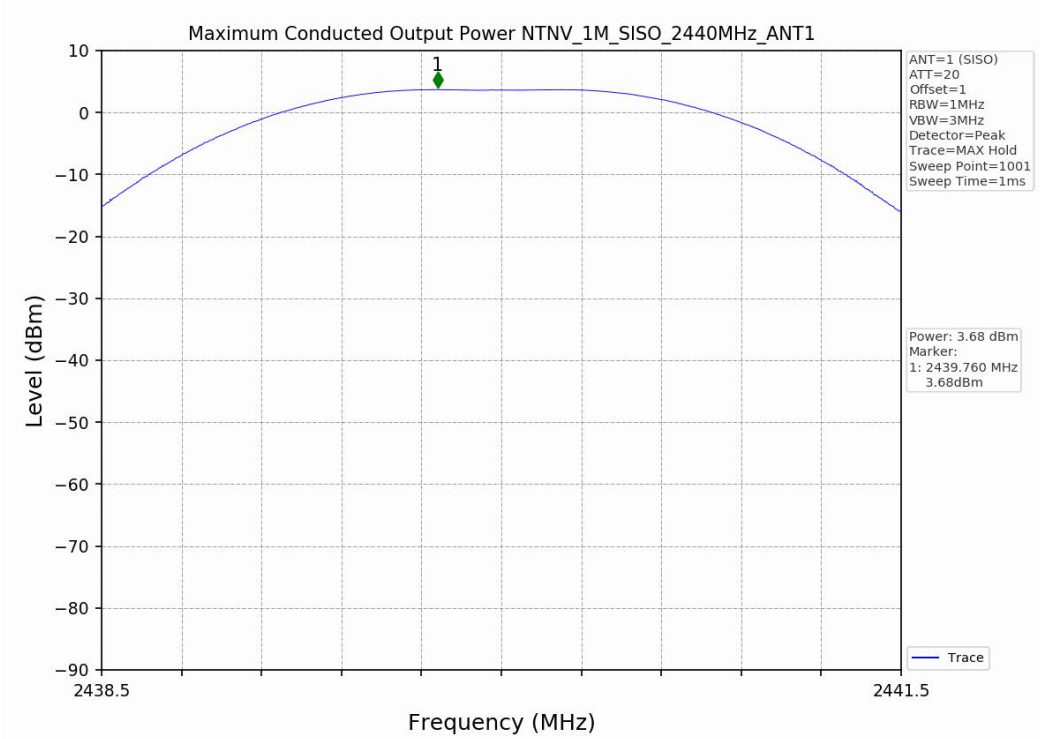
2. Maximum Conducted Output Power

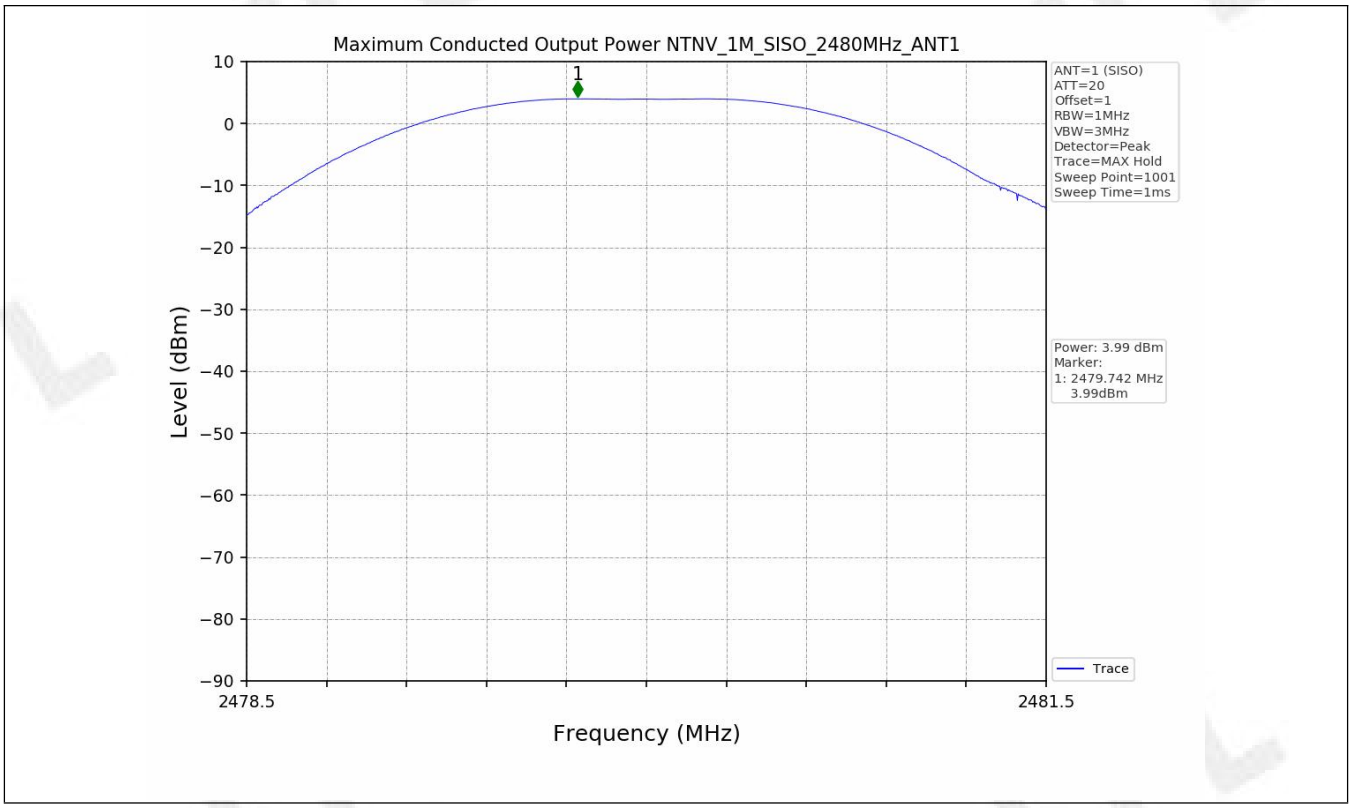
2.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
1M	2402	SISO	2.81	30	PASS
	2440	SISO	3.68	30	PASS
	2480	SISO	3.99	30	PASS

2.2 Test Graph


Maximum Conducted Output Power NTNV_1M_SISO_2402MHz_ANT1
ANT=1 (SISO)
ATT=15
Offset=1
RBW=1MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 2.81 dBm
Marker:
1: 2402.237 MHz
2.81dBm
Trace
Level (dBm)
Frequency (MHz)
2400.5
2403.5


Maximum Conducted Output Power NTNV_1M_SISO_2440MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=1MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 3.68 dBm
Marker:
1: 2439.760 MHz
3.68dBm
Trace
Level (dBm)
Frequency (MHz)
2438.5
2441.5

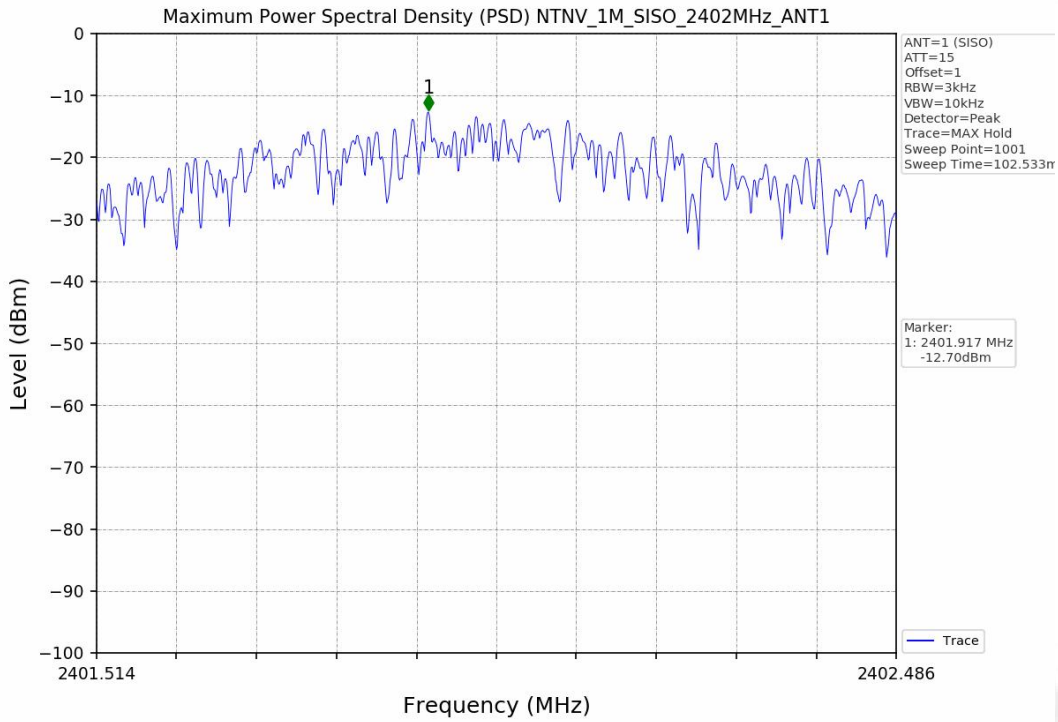


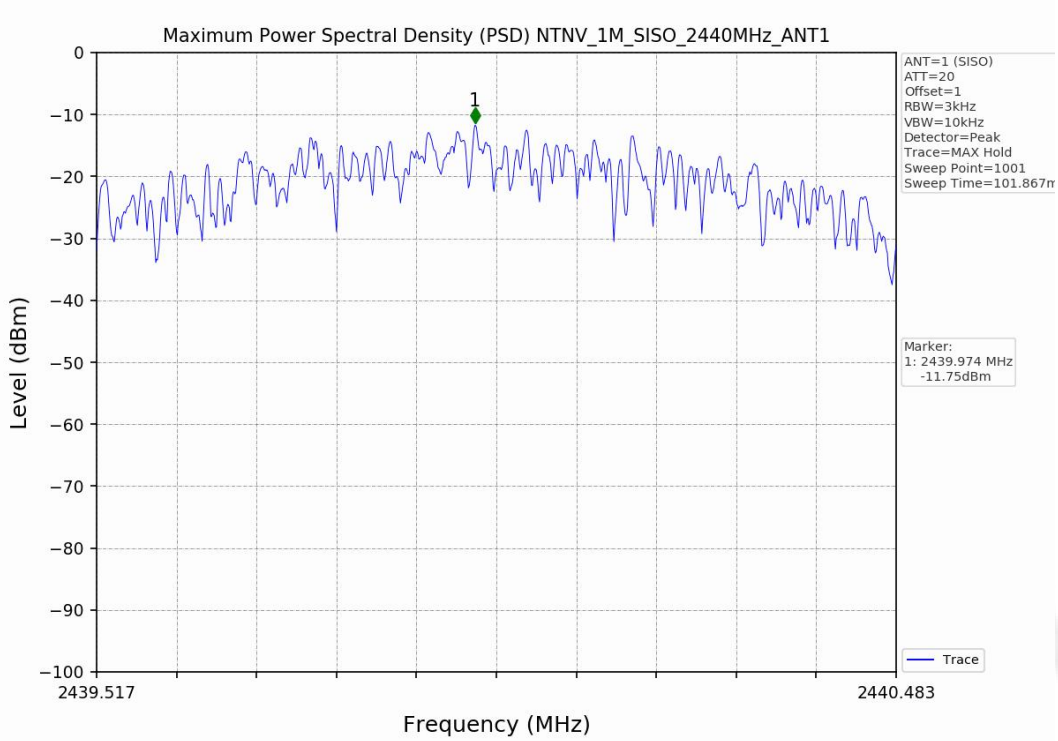
3. Maximum Power Spectral Density (PSD)

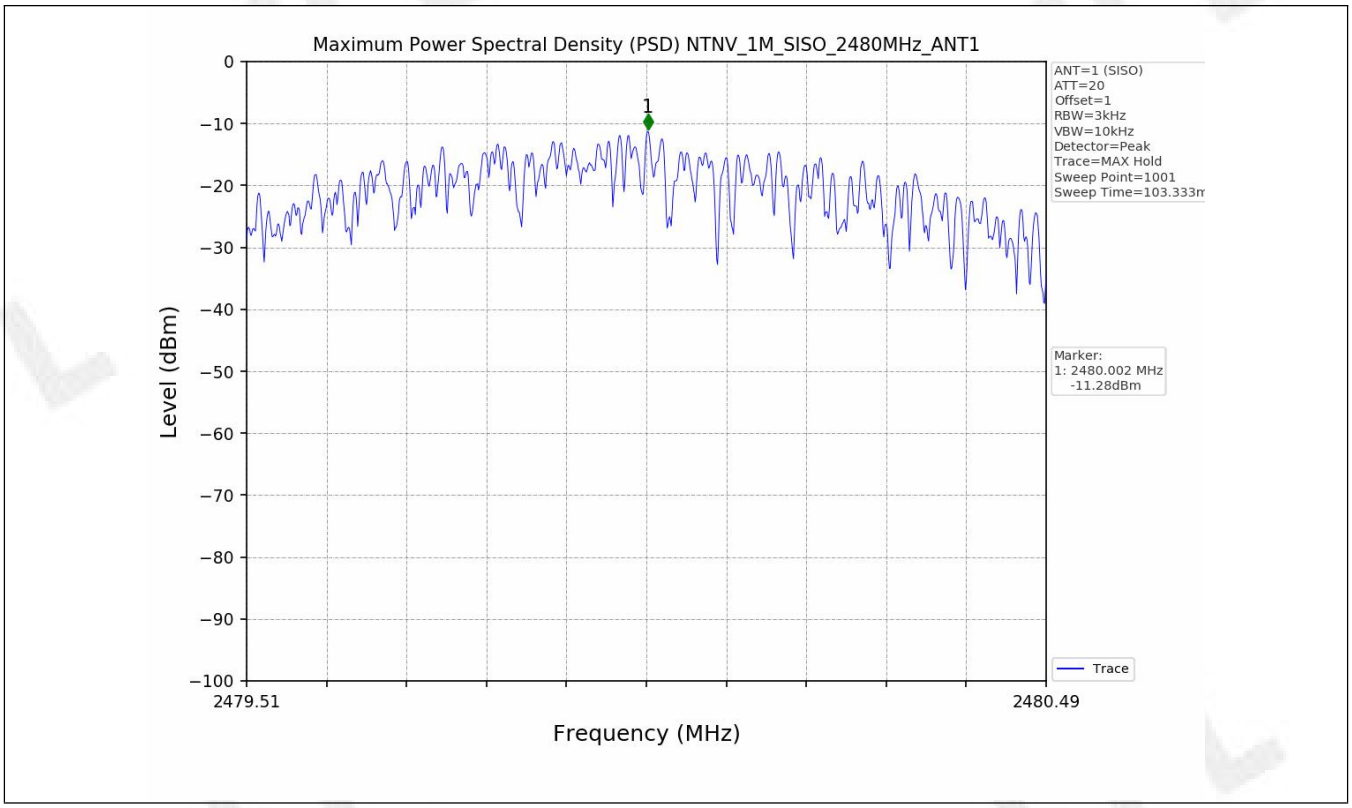
3.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
			Ant 1		
1M	2402	SISO	-12.70	≤8	PASS
	2440	SISO	-11.75	≤8	PASS
	2480	SISO	-11.28	≤8	PASS

3.2 Test Graph


Maximum Power Spectral Density (PSD) NTNV_1M_SISO_2402MHz_ANT1
ANT=1 (SISO)
ATT=15
Offset=1
RBW=3kHz
VBW=10kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=102.533m
Marker:
1: 2401.917 MHz
-12.70dBm
Trace
Level (dBm)
Frequency (MHz)
2401.514
2402.486


Maximum Power Spectral Density (PSD) NTNV_1M_SISO_2440MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3kHz
VBW=10kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=101.867m
Marker:
1: 2439.974 MHz
-11.75dBm
Trace
Level (dBm)
Frequency (MHz)
2439.517
2440.483

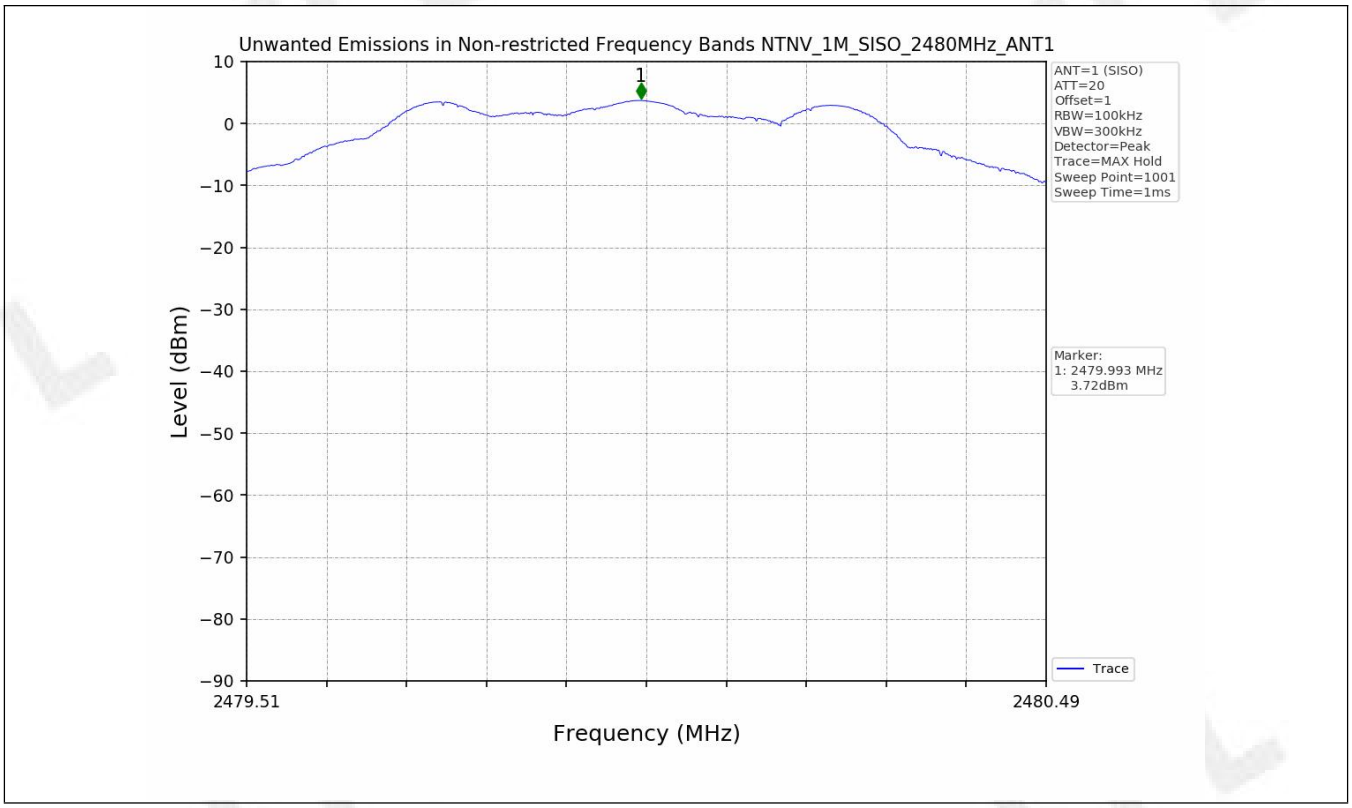


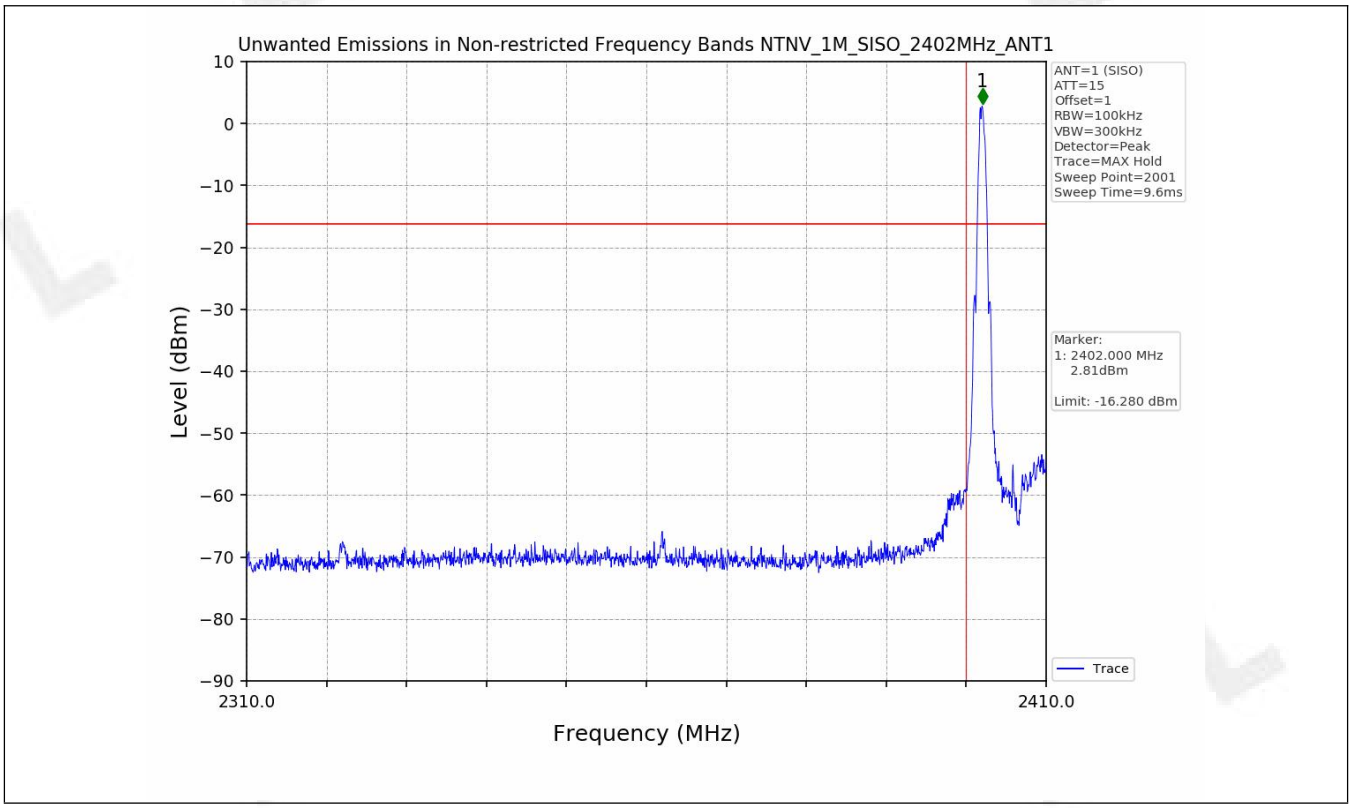
4. Unwanted Emissions in Non-restricted Frequency Bands

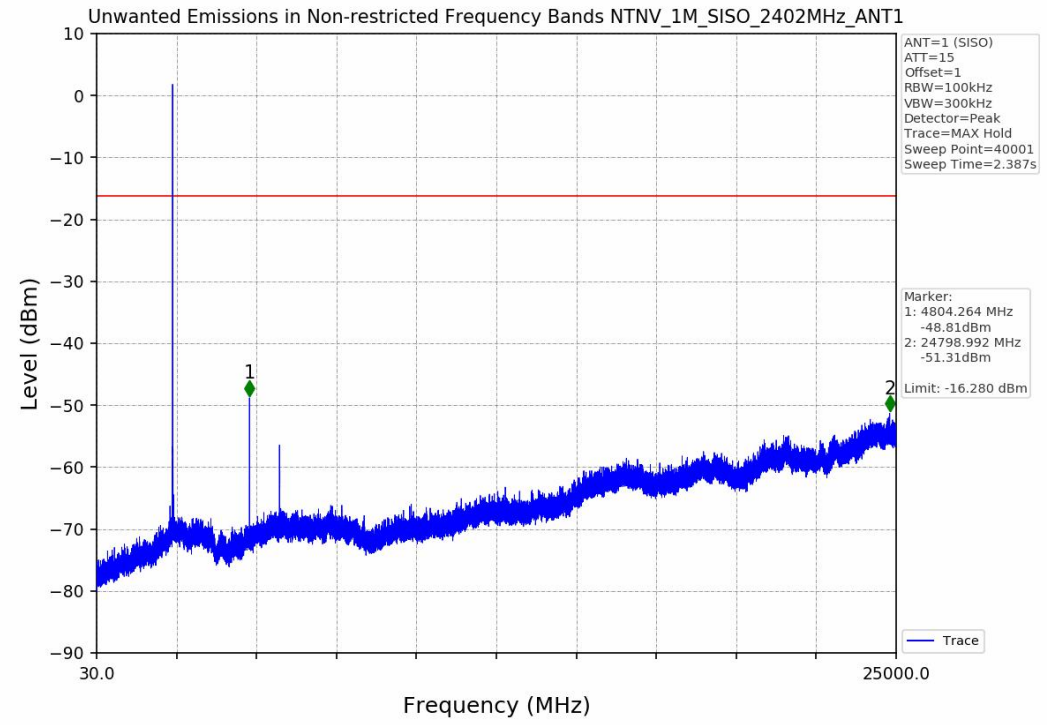
4.1 Test Result

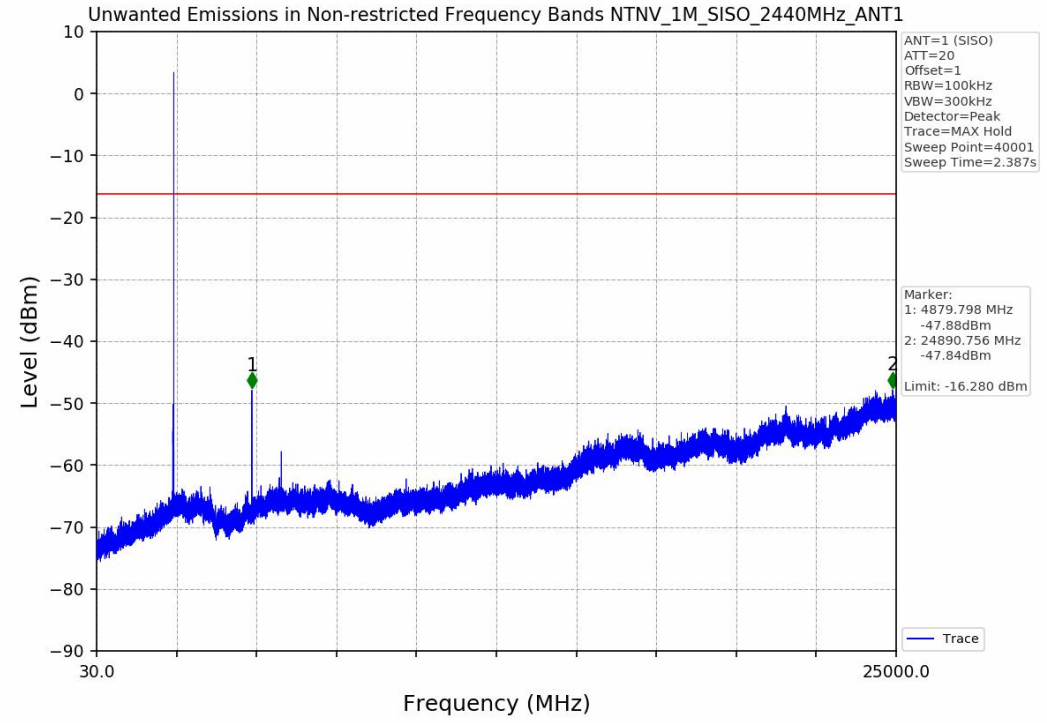
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
1M	2402	SISO	1	Refer to test graph	-16.28	PASS
	2440	SISO	1	Refer to test graph	-16.28	PASS
	2480	SISO	1	Refer to test graph	-16.28	PASS

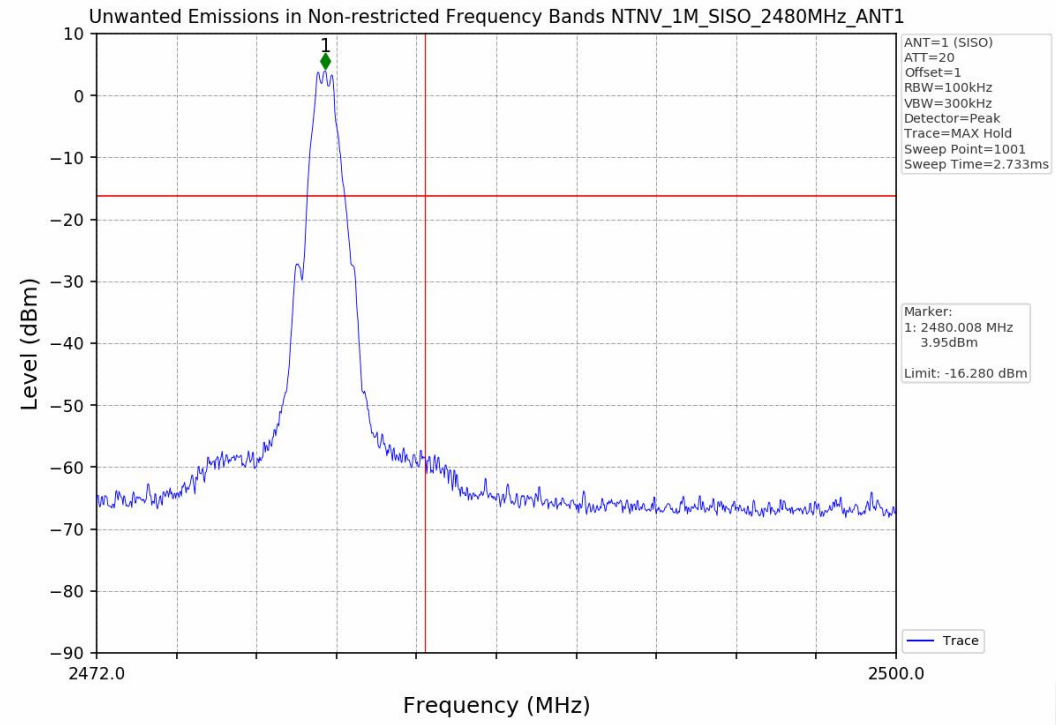
4.2 Test Graph

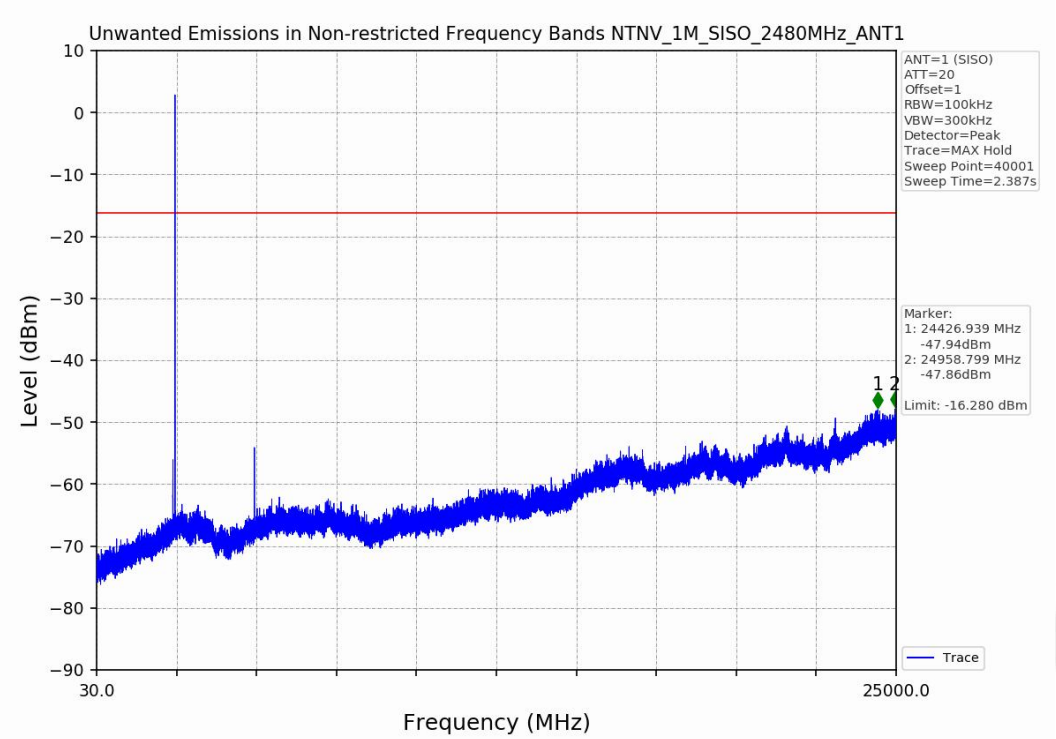

Unwanted Emissions in Non-restricted Frequency Bands NTNV_1M_SISO_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Marker:
1: 2479.993 MHz
3.72dBm
Trace
Level (dBm)
Frequency (MHz)
2479.51
2480.49


Unwanted Emissions in Non-restricted Frequency Bands NTNV_1M_SISO_2402MHz_ANT1
ANT=1 (SISO)
ATT=15
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=2001
Sweep Time=9.6ms
Marker:
1: 2402.000 MHz
2.81dBm
Limit: -16.280 dBm
Trace
Level (dBm)
Frequency (MHz)
2310.0
2410.0


Unwanted Emissions in Non-restricted Frequency Bands NTNV_1M_SISO_2402MHz_ANT1
ANT=1 (SISO)
ATT=15
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=40001
Sweep Time=2.387s
Marker:
1: 4804.264 MHz
-48.81dBm
2: 24798.992 MHz
-51.31dBm
Limit: -16.280 dBm
Trace
Level (dBm)
Frequency (MHz)
30.0
25000.0


Unwanted Emissions in Non-restricted Frequency Bands NTNV_1M_SISO_2440MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=40001
Sweep Time=2.387s
Marker:
1: 4879.798 MHz
-47.88dBm
2: 24890.756 MHz
-47.84dBm
Limit: -16.280 dBm
Trace
Level (dBm)
Frequency (MHz)
30.0
25000.0


Unwanted Emissions in Non-restricted Frequency Bands NTNV_1M_SISO_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.733ms
Marker:
1: 2480.008 MHz
3.95dBm
Limit: -16.280 dBm
Trace
Level (dBm)
Frequency (MHz)
2472.0
2500.0


Unwanted Emissions in Non-restricted Frequency Bands NTNV_1M_SISO_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=40001
Sweep Time=2.387s
Marker:
1: 24426.939 MHz
-47.94dBm
2: 24958.799 MHz
-47.86dBm
Limit: -16.280 dBm
Trace
Level (dBm)
Frequency (MHz)
30.0
25000.0