Appendix for 15.247

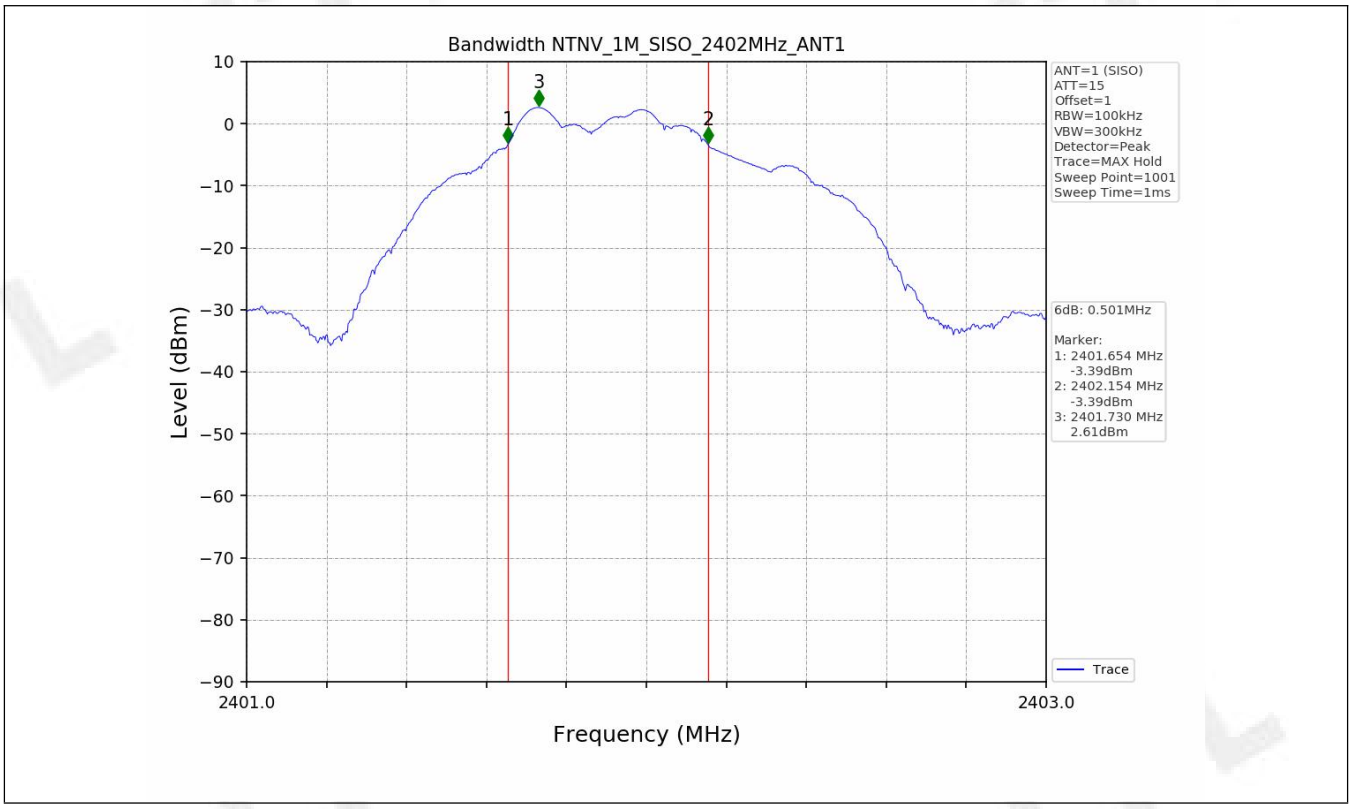
1. Bandwidth

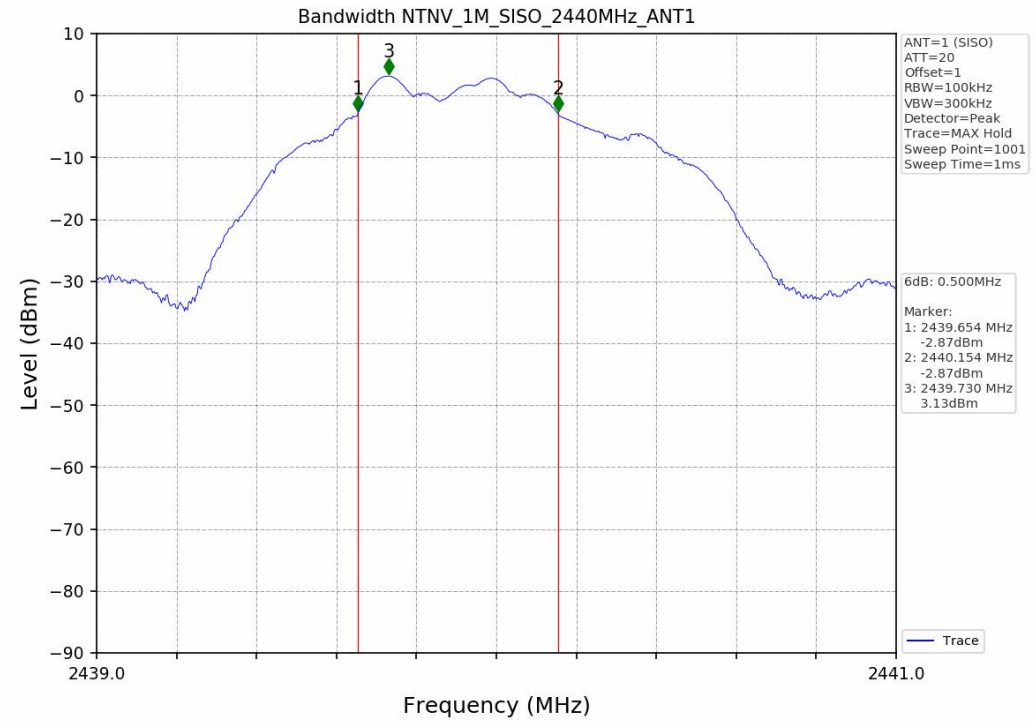
1.1 Test Result

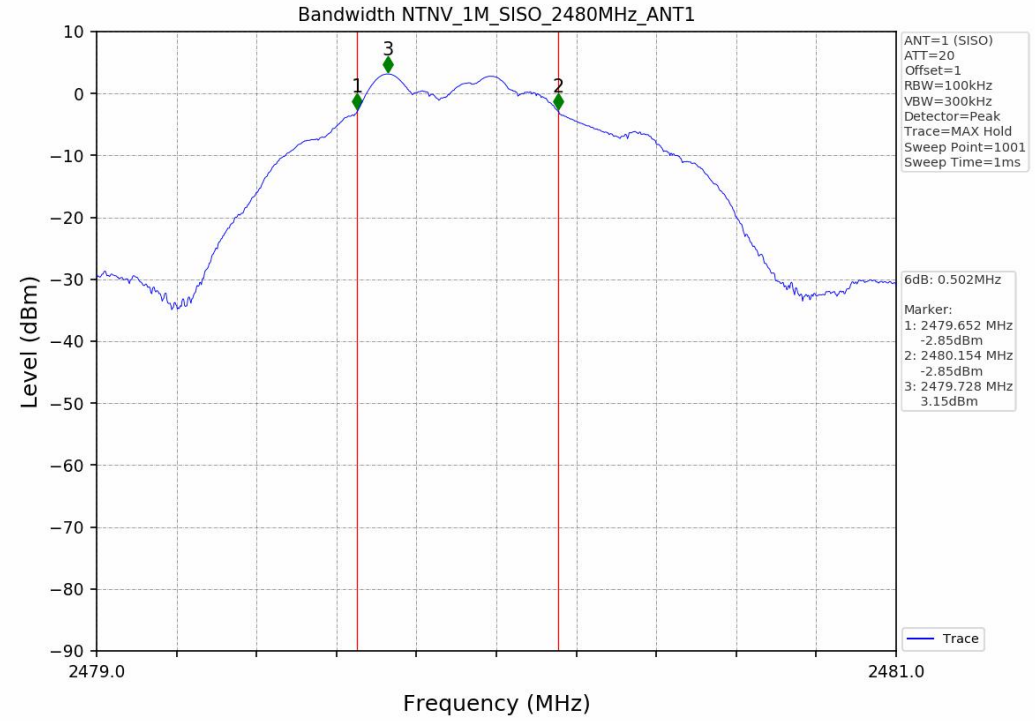
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth Test Result (MHz)	Limits (MHz)	Verdict
1M	2402	SISO	1	0.501	≥0.500	PASS
	2440	SISO	1	0.500	≥0.500	PASS
	2480	SISO	1	0.502	≥0.500	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth Test Result (MHz)	
1M	2402	SISO	1	1.015	Only for Report Use
	2440	SISO	1	1.016	Only for Report Use
	2480	SISO	1	1.015	Only for Report Use

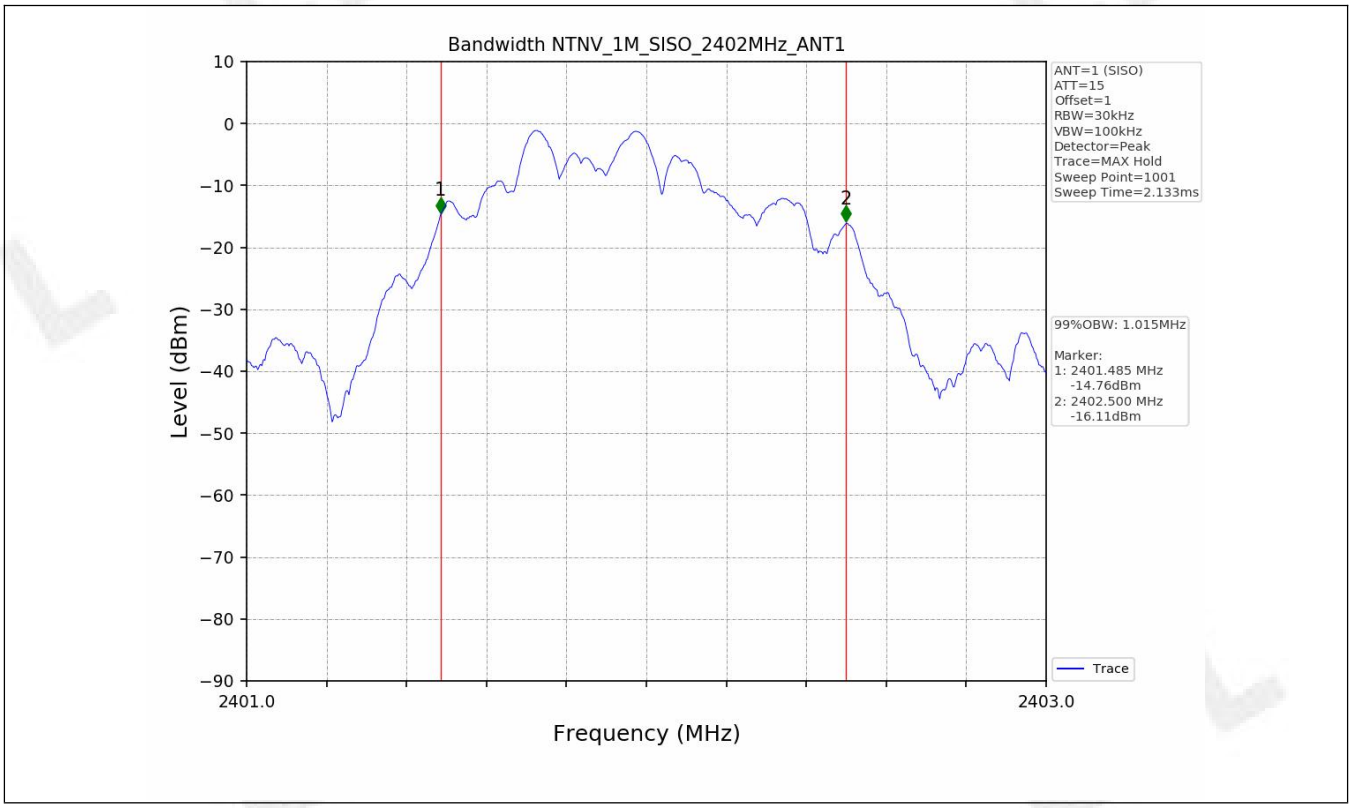
1.2 Test Graph - 6dB Bandwidth

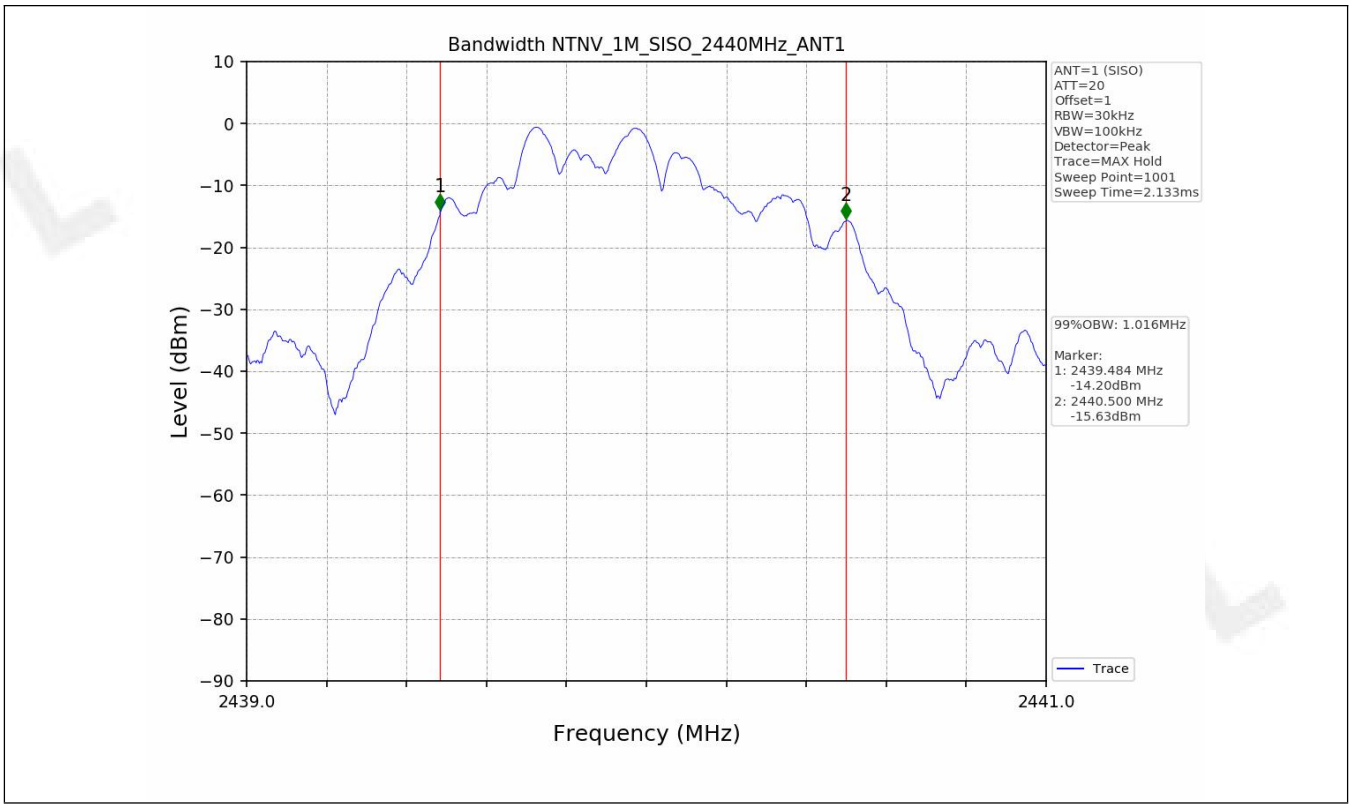


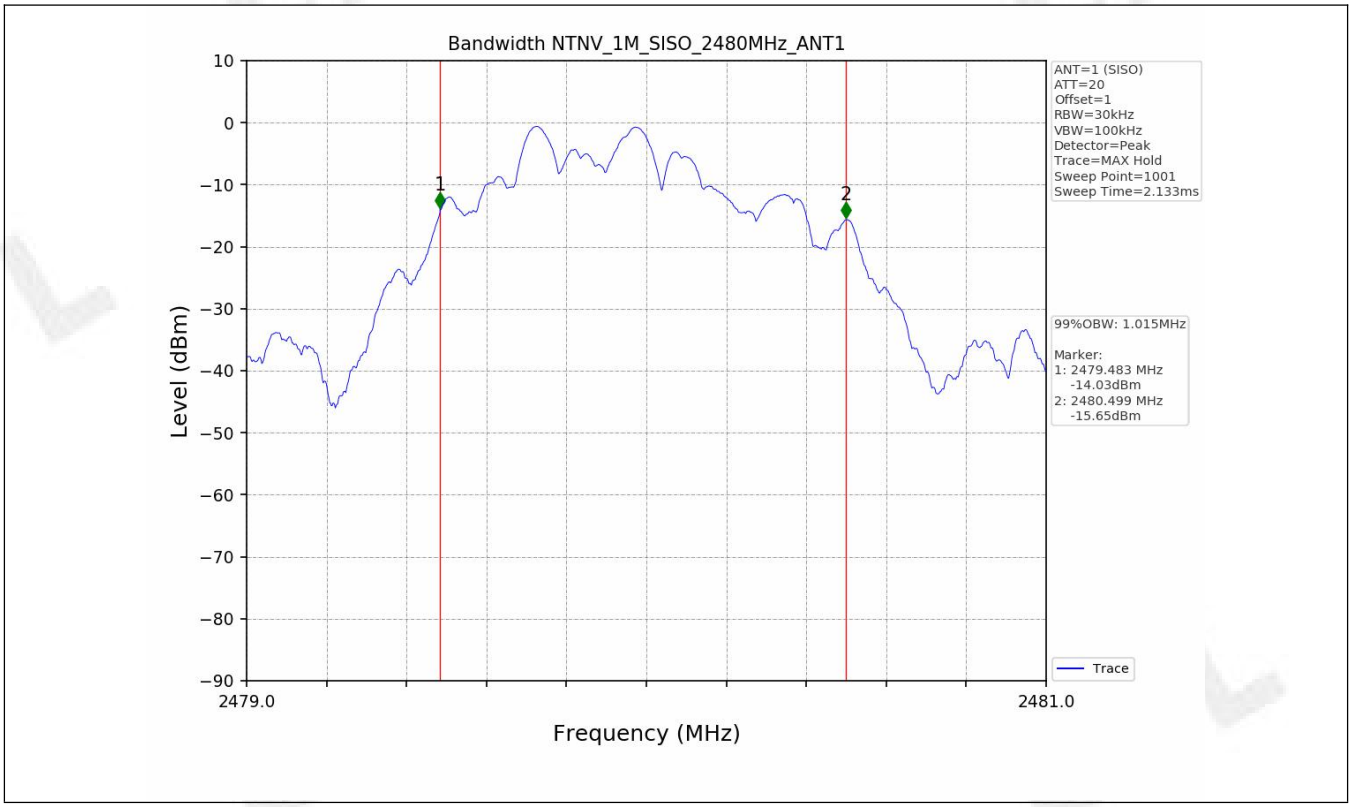

Bandwidth NTNV_1M_SISO_2440MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
6dB: 0.500MHz
Marker:
1: 2439.654 MHz
-2.87dBm
2: 2440.154 MHz
-2.87dBm
3: 2439.730 MHz
3.13dBm
Trace
Level (dBm)
Frequency (MHz)
2439.0
2441.0


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: 0.502MHz
Marker:
1: 2479.652 MHz
-2.85dBm
2: 2480.154 MHz
-2.85dBm
3: 2479.728 MHz
3.15dBm
Trace
Level (dBm)
Frequency (MHz)
2479.0
2481.0

1.3 Test Graph - 99% Occupied Bandwidth





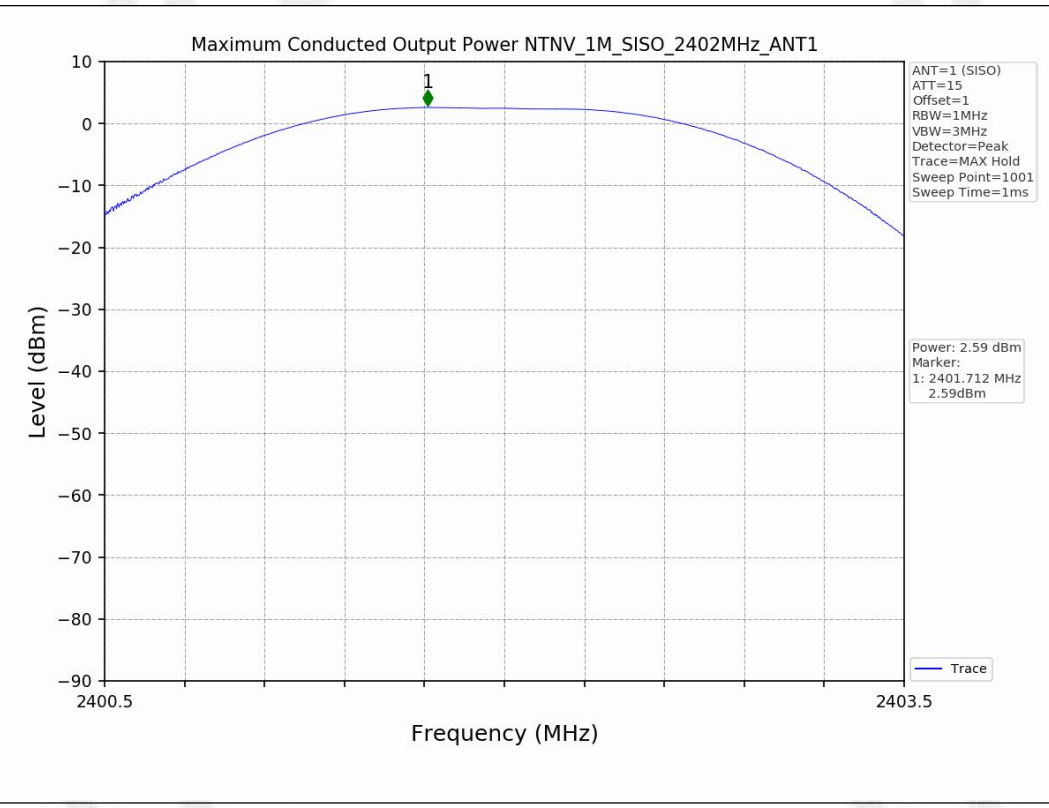


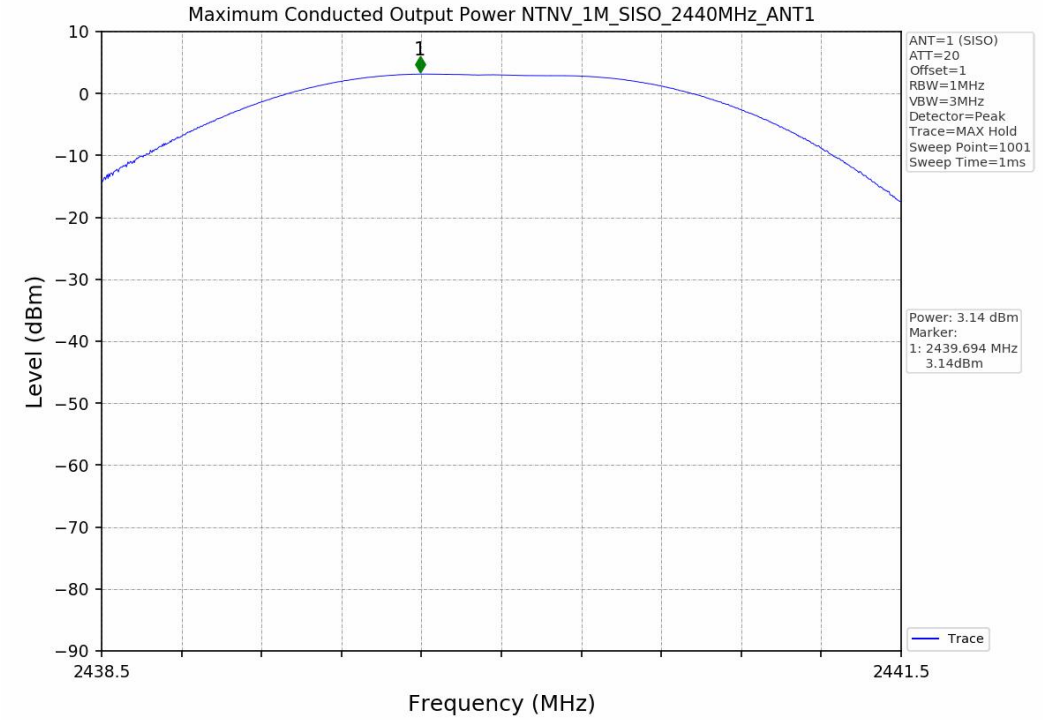
2. Maximum Conducted Output Power

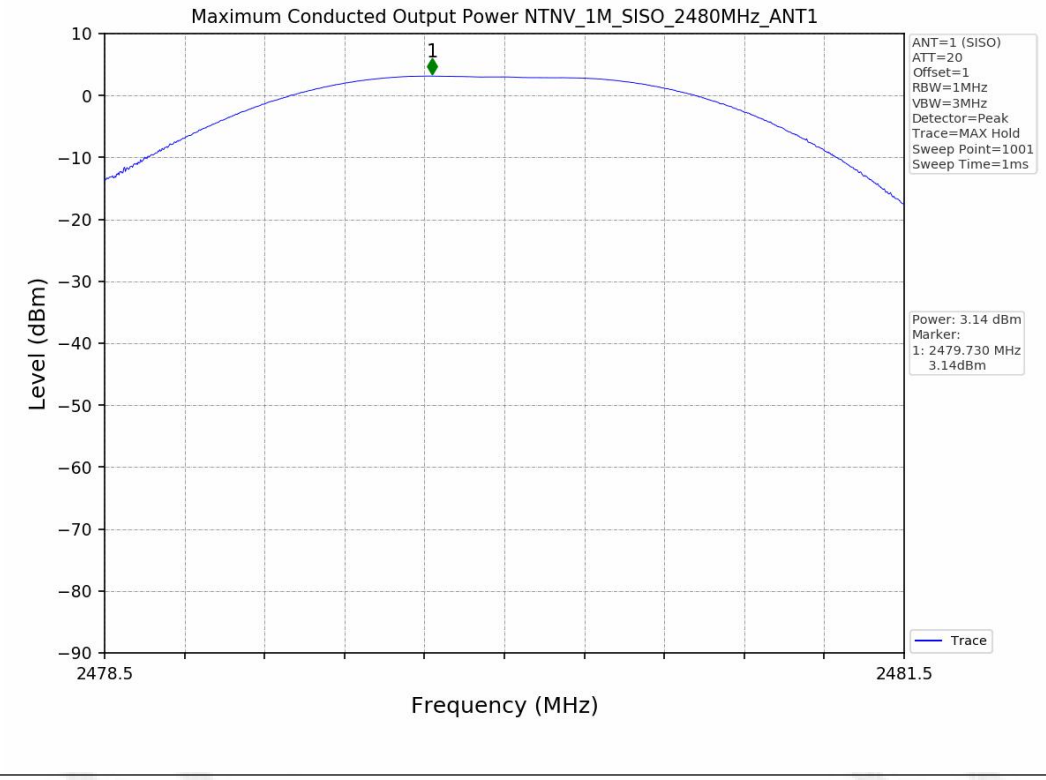
2.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
1M	2402	SISO	2.59	30	PASS
	2440	SISO	3.14	30	PASS
	2480	SISO	3.14	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: 2.59 dBm
Marker:
1: 2401.712 MHz
2.59dBm
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: 3.14 dBm
Marker:
1: 2439.694 MHz
3.14dBm
Trace
Level (dBm)
Frequency (MHz)
2438.5
2441.5

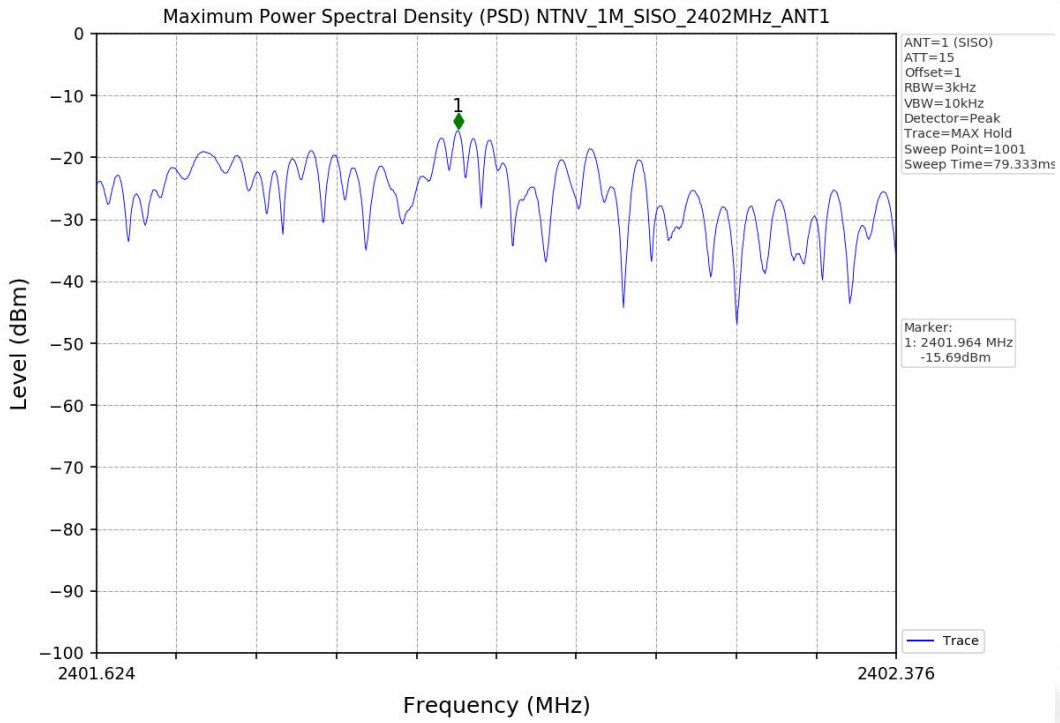


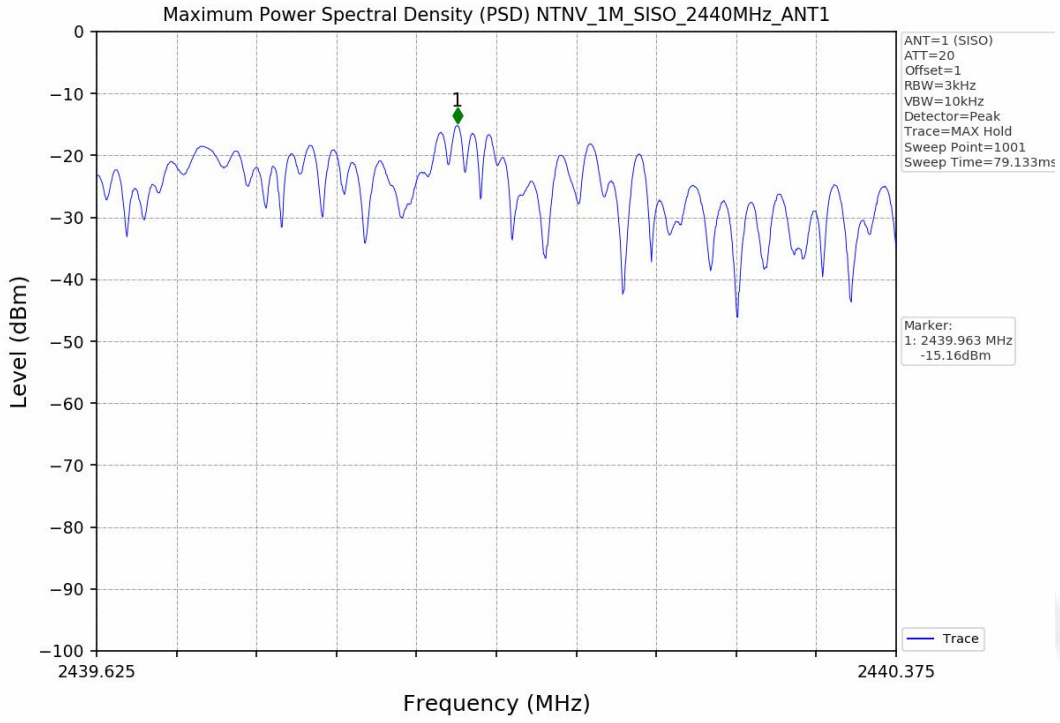
3. Maximum Power Spectral Density (PSD)

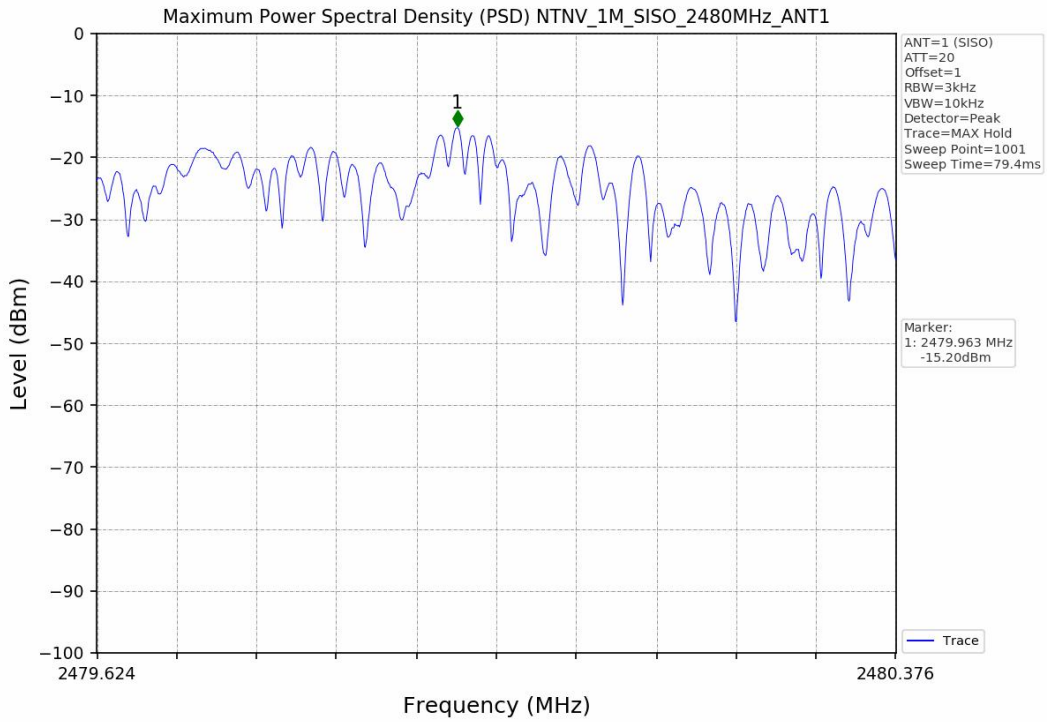
3.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
			Ant 1		
1M	2402	SISO	-15.69	≤8	PASS
	2440	SISO	-15.16	≤8	PASS
	2480	SISO	-15.20	≤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=79.333ms
Marker:
1: 2401.964 MHz
-15.69dBm
Trace
Level (dBm)
Frequency (MHz)
2401.624
2402.376


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=79.133ms
Marker:
1: 2439.963 MHz
-15.16dBm
Trace
Level (dBm)
Frequency (MHz)
2439.625
2440.375

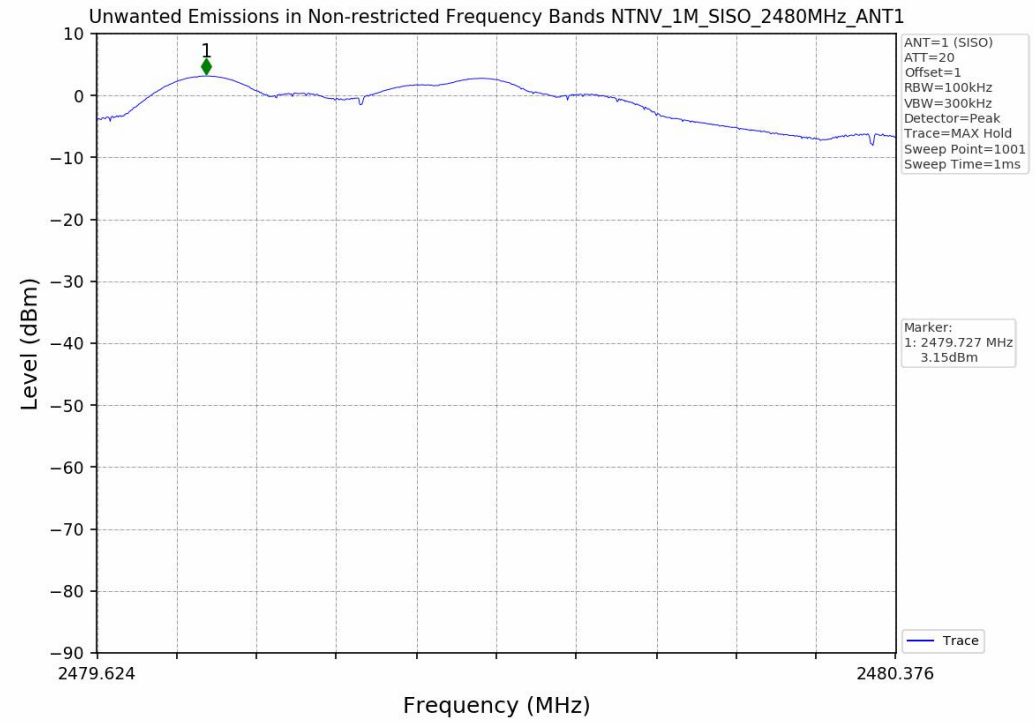


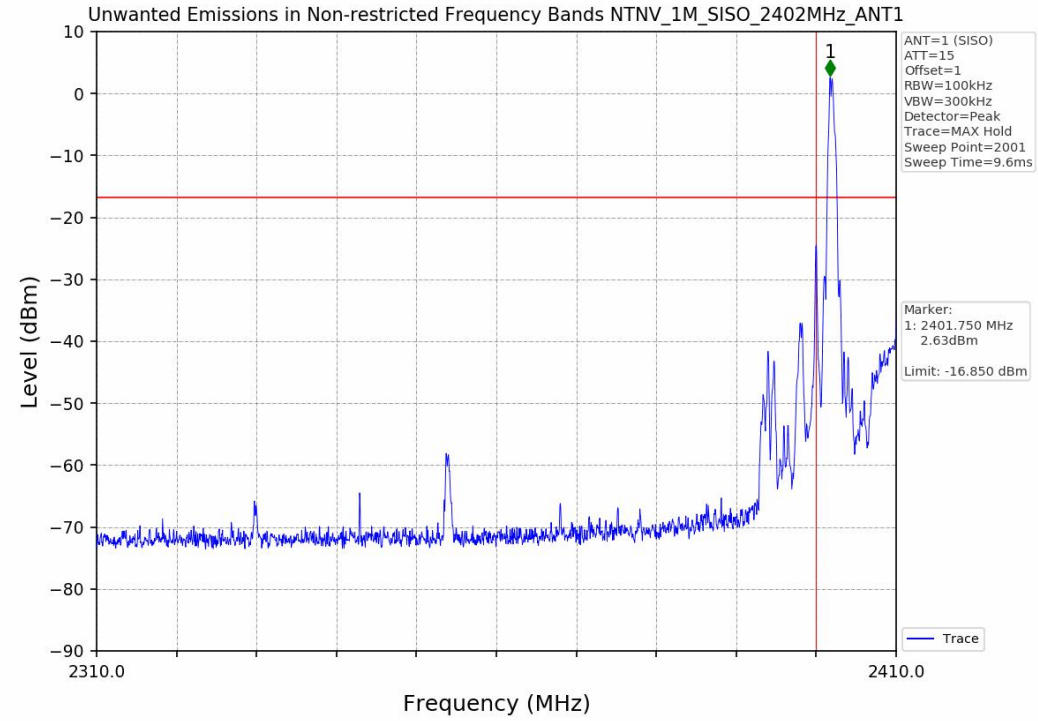
4. Unwanted Emissions in Non-restricted Frequency Bands

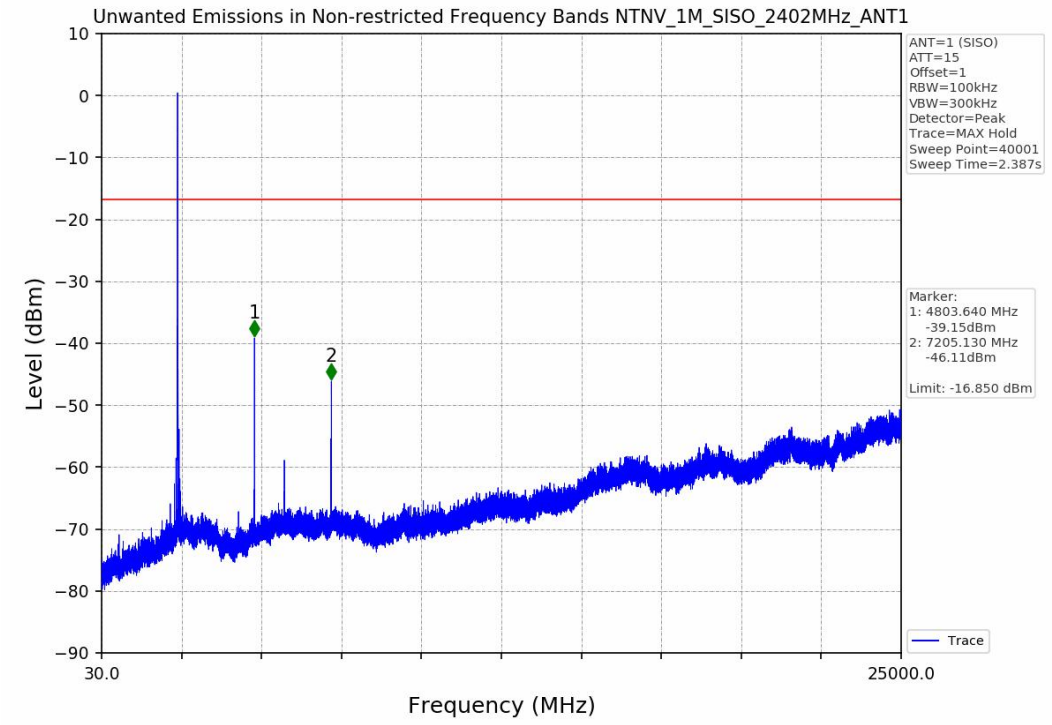
4.1 Test Result

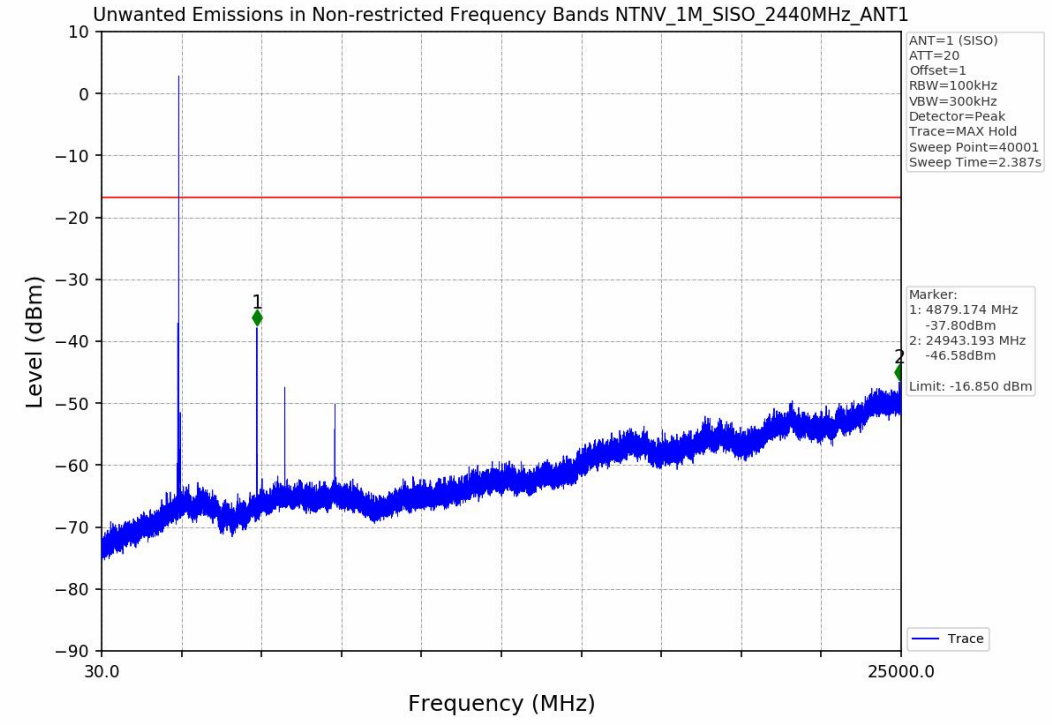
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
1M	2402	SISO	1	Refer to test graph	-16.85	PASS
	2440	SISO	1	Refer to test graph	-16.85	PASS
	2480	SISO	1	Refer to test graph	-16.85	PASS

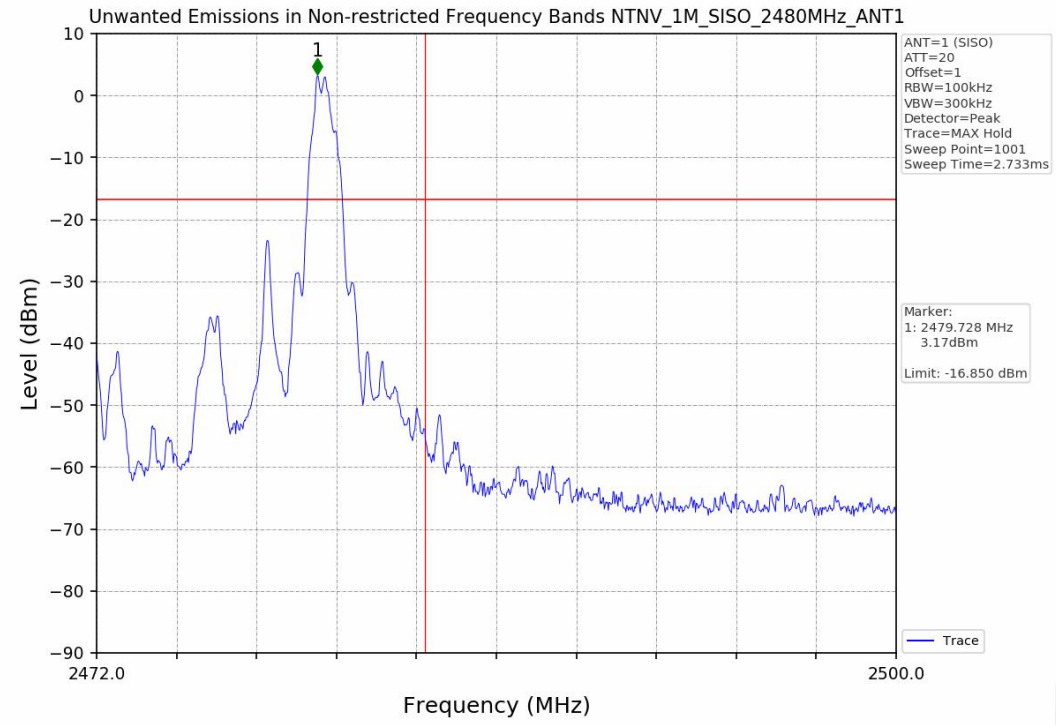
4.2 Test Graph

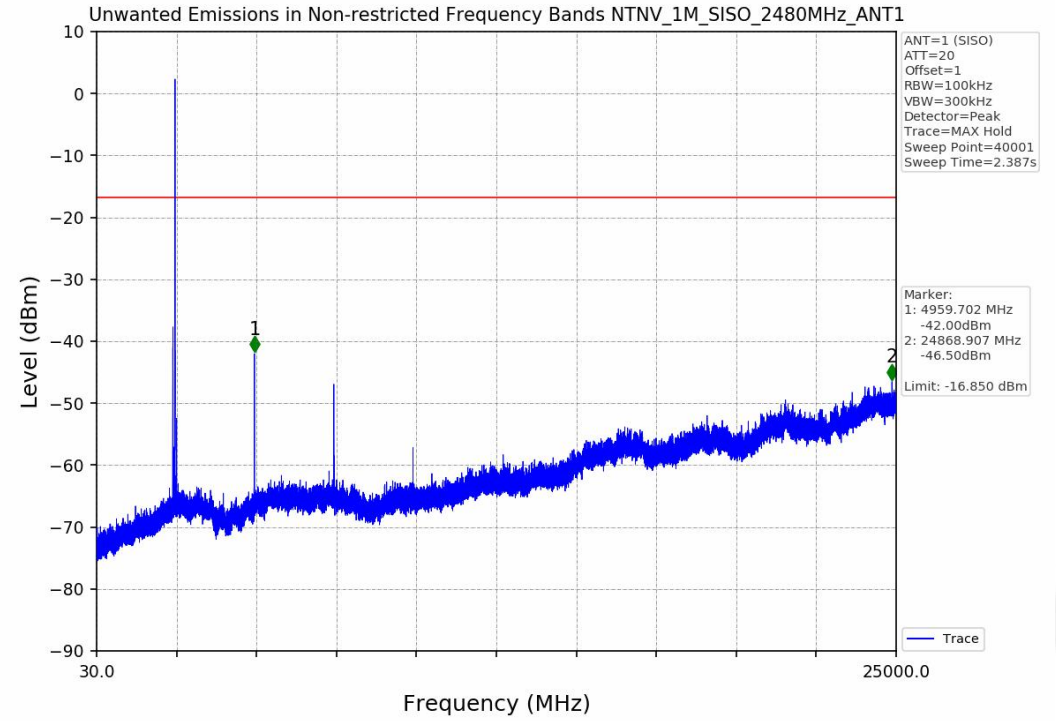

Unwanted Emissions in Non-restricted Frequency Bands NTNV_1M_SISO_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=100kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Marker:
1: 2479.727 MHz
3.15dBm
Trace
Level (dBm)
Frequency (MHz)
2479.624
2480.376


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: 2401.750 MHz
2.63dBm
Limit: -16.850 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: 4803.640 MHz
-39.15dBm
2: 7205.130 MHz
-46.11dBm
Limit: -16.850 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: 4879.174 MHz
-37.80dBm
2: 24943.193 MHz
-46.58dBm
Limit: -16.850 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: 2479.728 MHz
3.17dBm
Limit: -16.850 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: 4959.702 MHz
-42.00dBm
2: 24868.907 MHz
-46.50dBm
Limit: -16.850 dBm
Trace
Level (dBm)
Frequency (MHz)
30.0
25000.0