Appendix for 15.247

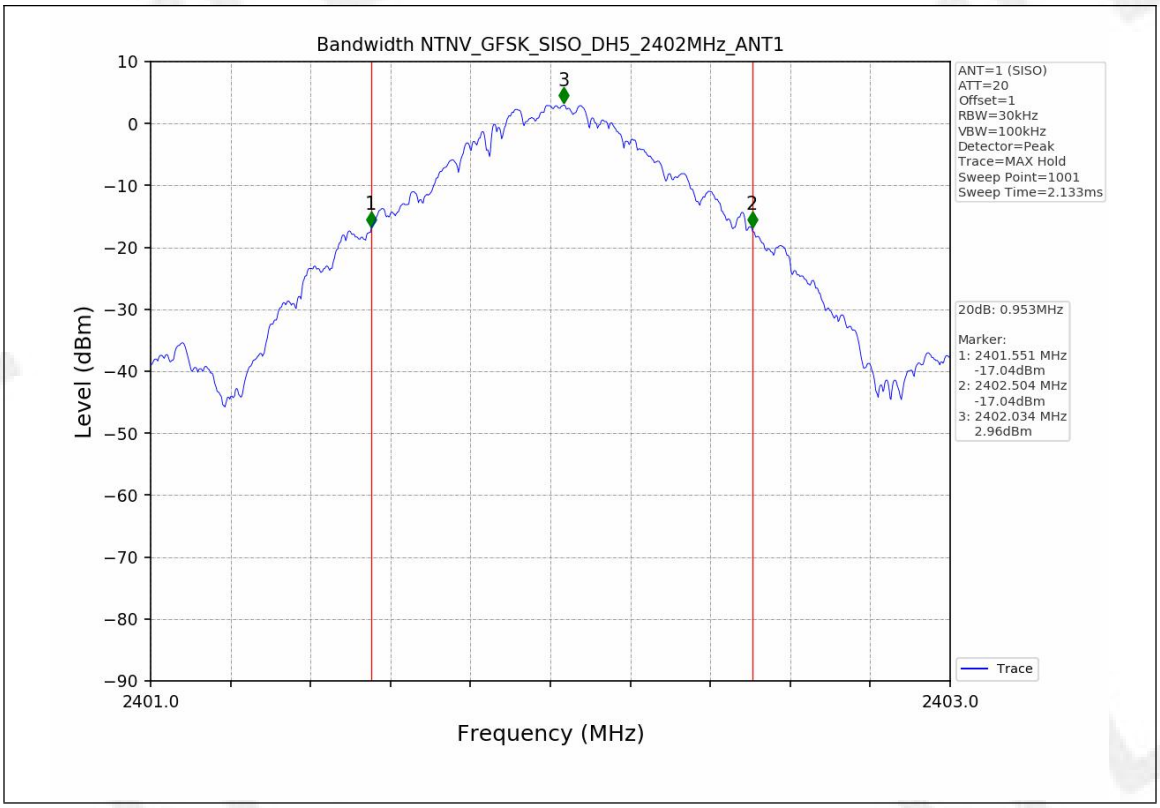
1. Bandwidth

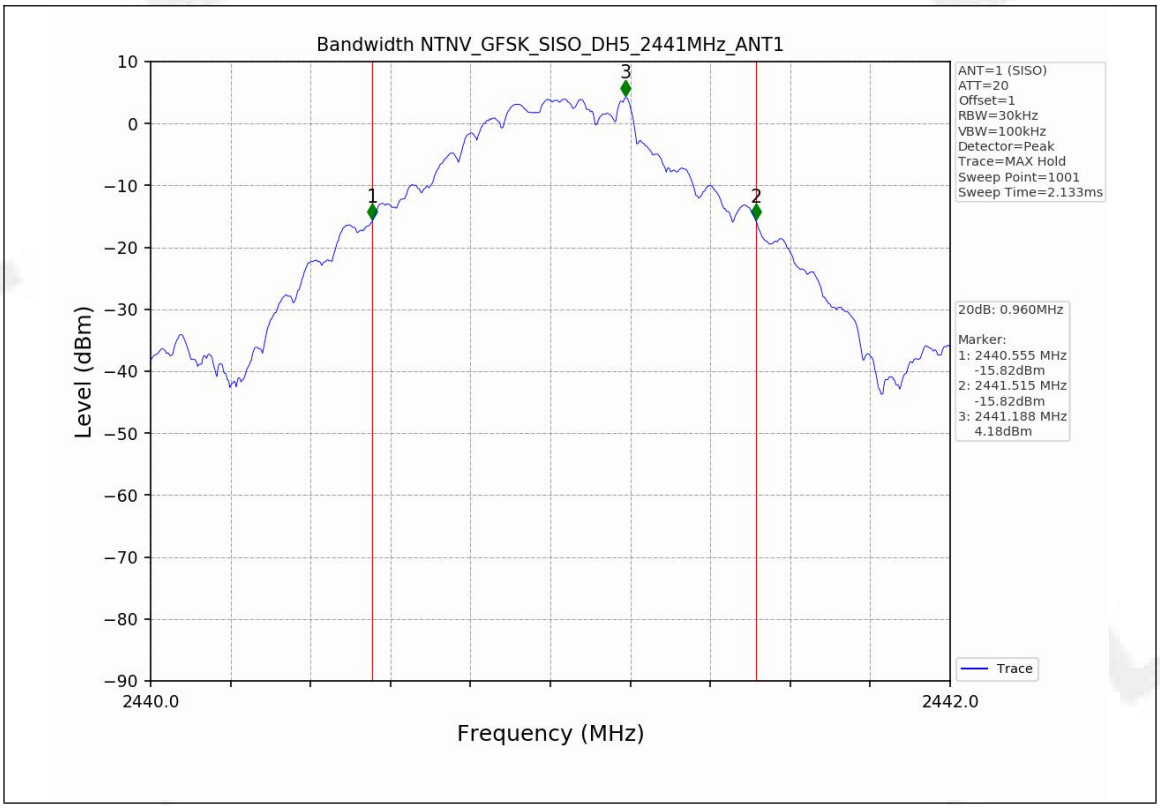
1.1 Test Result

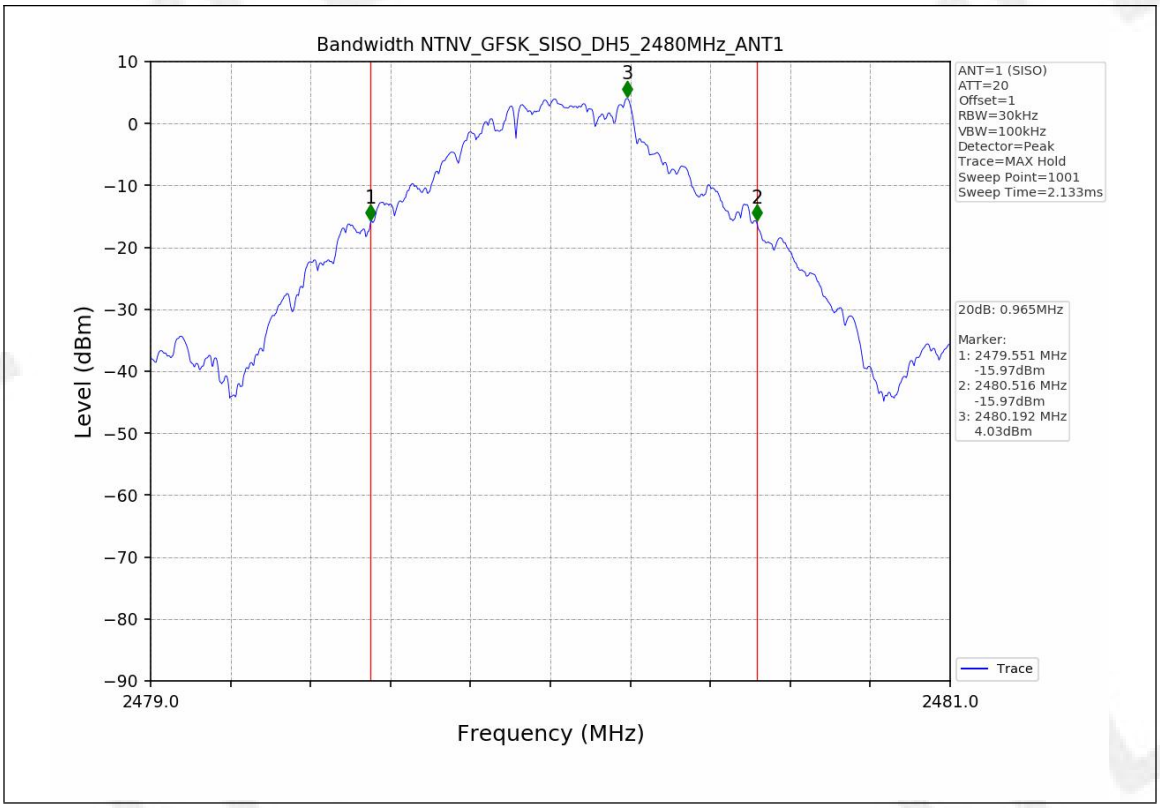
Test Mode	Frequency (MHz)	TX Type	ANT No.	20dB Bandwidth Test Result (MHz)	Verdict
GFSK	2402	SISO	1	0.953	PASS
	2441	SISO	1	0.960	PASS
	2480	SISO	1	0.965	PASS
Pi/4DQPSK	2402	SISO	1	1.351	PASS
	2441	SISO	1	1.334	PASS
	2480	SISO	1	1.350	PASS
8DPSK	2402	SISO	1	1.308	PASS
	2441	SISO	1	1.315	PASS
	2480	SISO	1	1.341	PASS

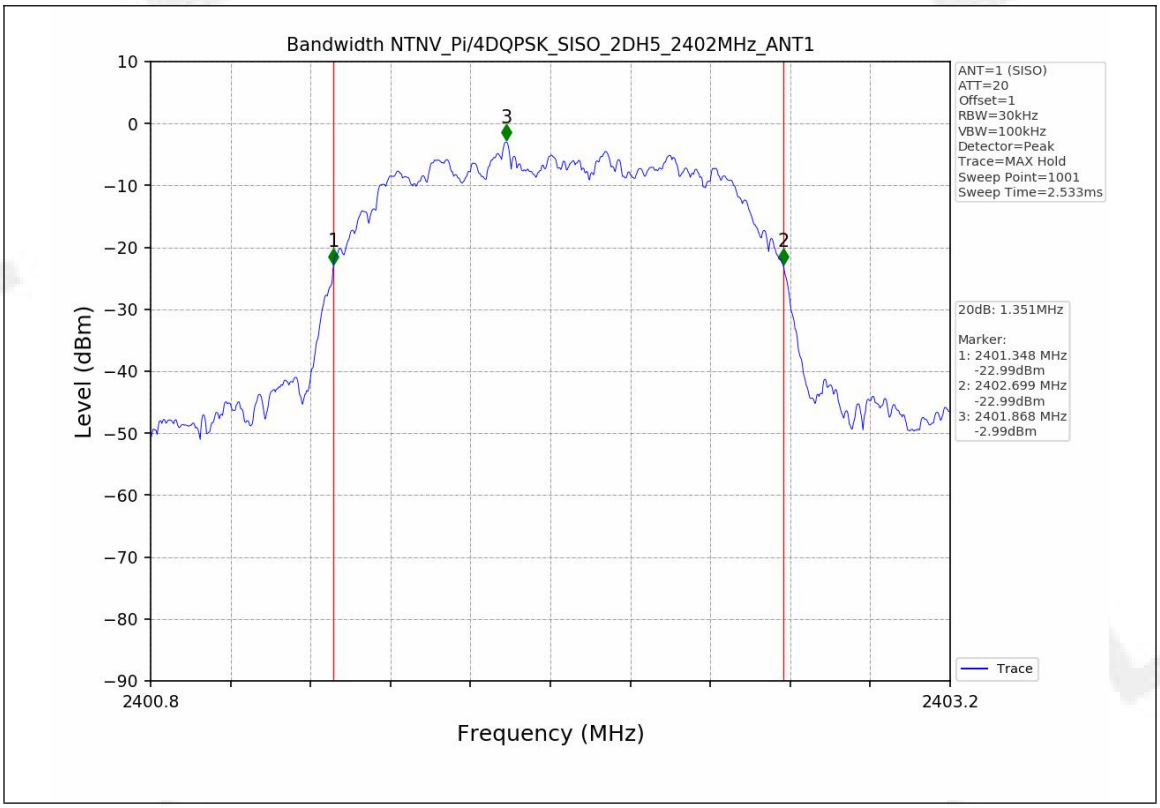
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth Test Result (MHz)	
GFSK	2402	SISO	1	0.882	Only for Report Use
	2441	SISO	1	0.875	Only for Report Use
	2480	SISO	1	0.875	Only for Report Use
Pi/4DQPSK	2402	SISO	1	1.192	Only for Report Use
	2441	SISO	1	1.191	Only for Report Use
	2480	SISO	1	1.198	Only for Report Use
8DPSK	2402	SISO	1	1.201	Only for Report Use
	2441	SISO	1	1.191	Only for Report Use
	2480	SISO	1	1.195	Only for Report Use

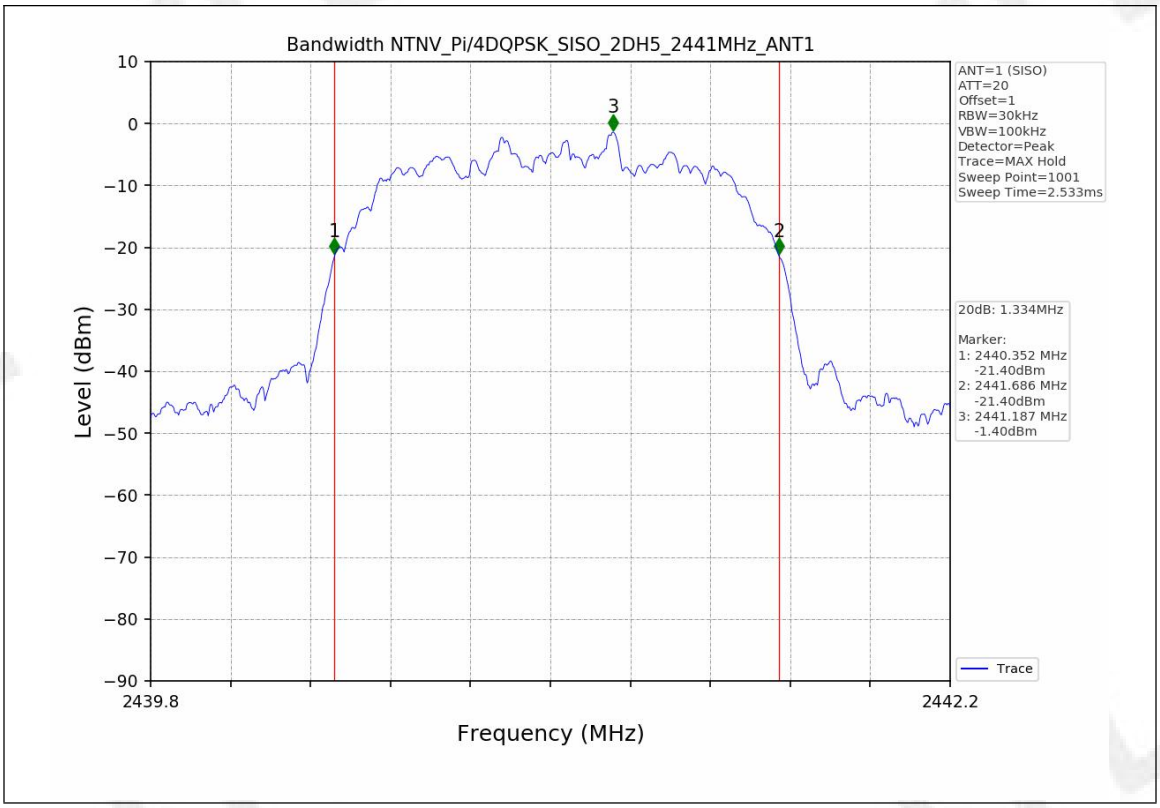
1.2 Test Graph - 20dB Bandwidth

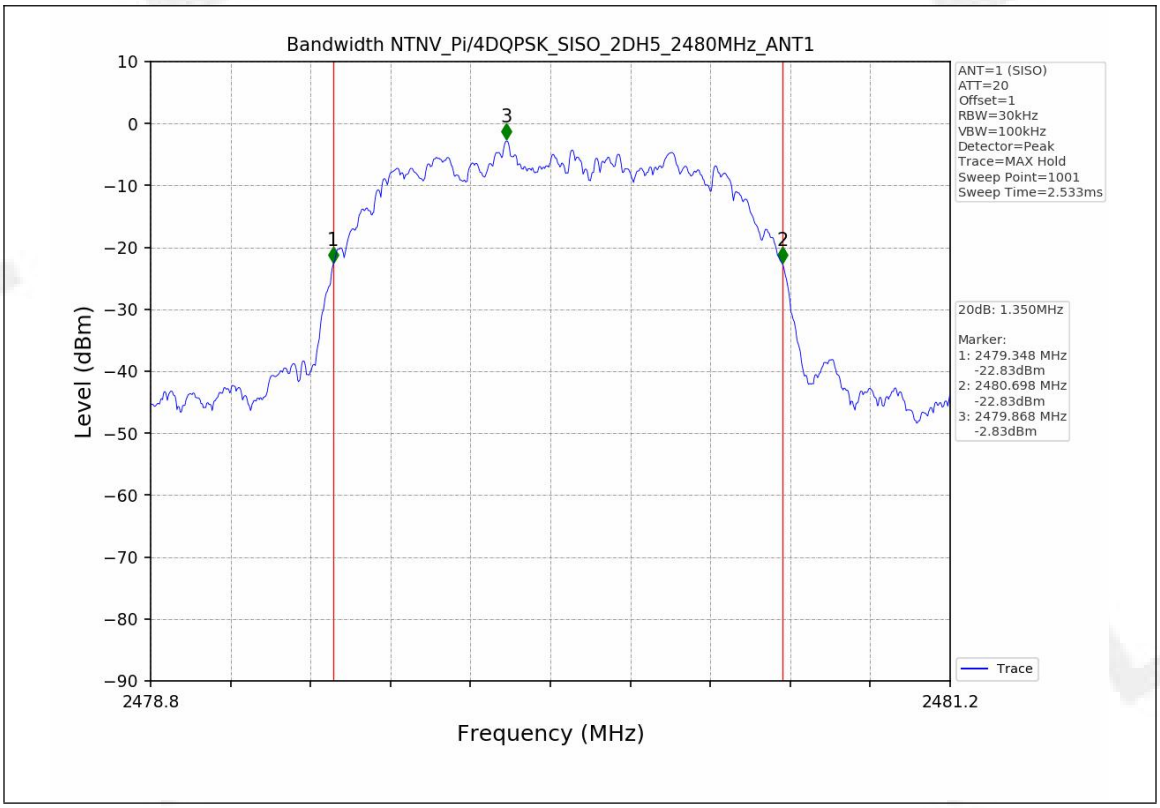

Bandwidth NTNV_GFSK_SISO_DH5_2402MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.133ms
20dB: 0.953MHz
Marker:
1: 2401.551 MHz
-17.04dBm
2: 2402.504 MHz
-17.04dBm
3: 2402.034 MHz
2.96dBm
Trace
Level (dBm)
Frequency (MHz)
2401.0
2403.0

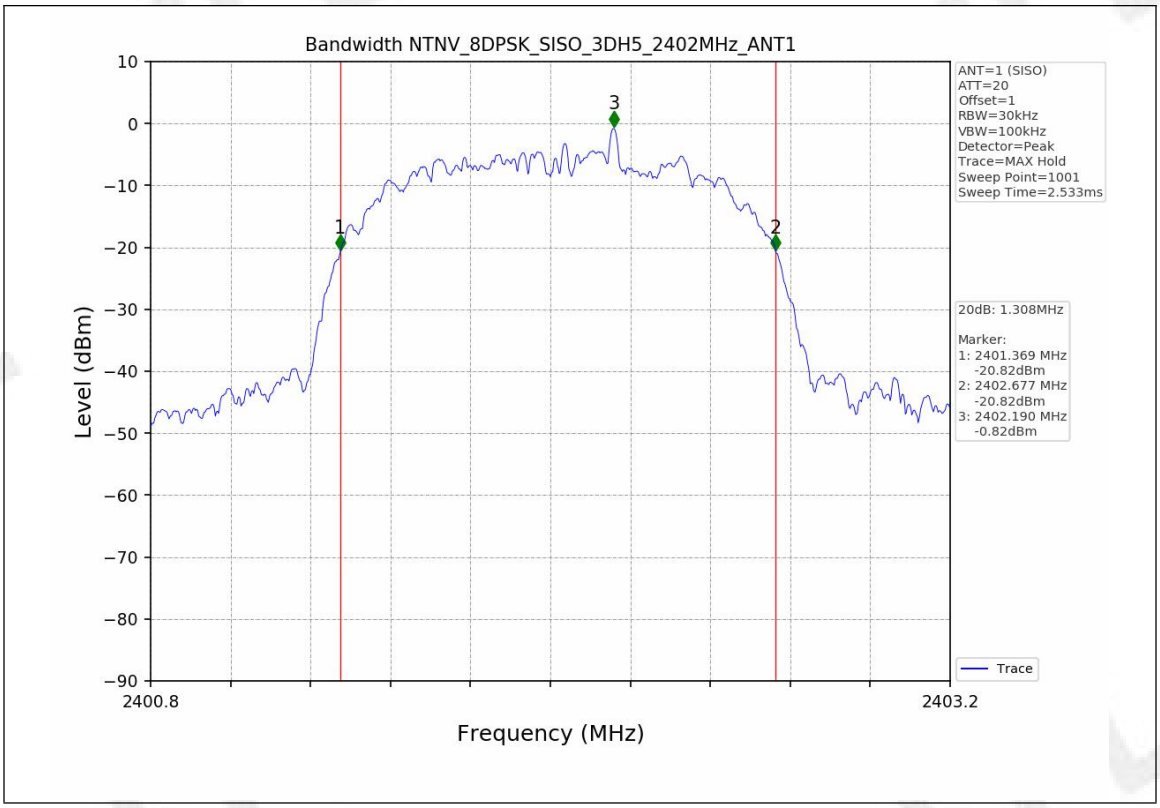

Bandwidth NTNV_GFSK_SISO_DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.133ms
20dB: 0.960MHz
Marker:
1: 2440.555 MHz
-15.82dBm
2: 2441.515 MHz
-15.82dBm
3: 2441.188 MHz
4.18dBm
Trace
Level (dBm)
Frequency (MHz)
2440.0
2442.0

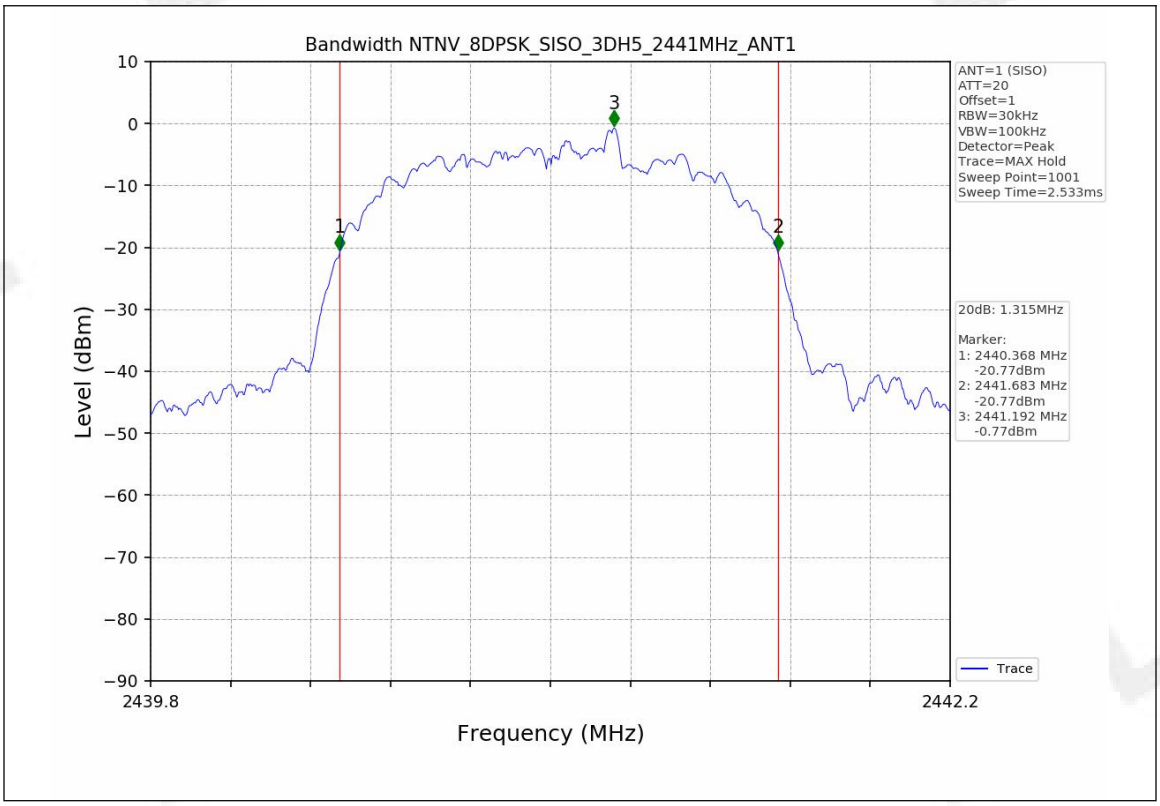

Bandwidth NTNV_GFSK_SISO_DH5_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.133ms
20dB: 0.965MHz
Marker:
1: 2479.551 MHz
-15.97dBm
2: 2480.516 MHz
-15.97dBm
3: 2480.192 MHz
4.03dBm
Trace
Level (dBm)
Frequency (MHz)
2479.0
2481.0

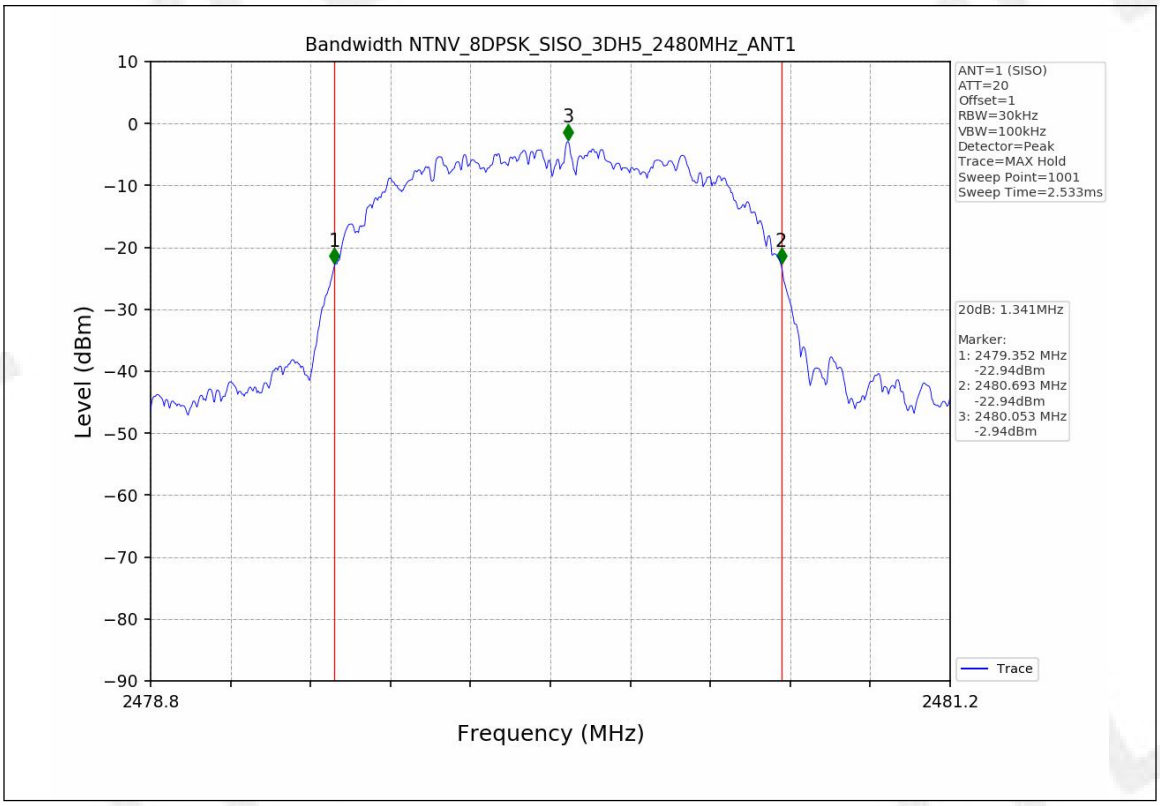

Bandwidth NTNV_Pi/4DQPSK_SISO_2DH5_2402MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
20dB: 1.351MHz
Marker:
1: 2401.348 MHz
-22.99dBm
2: 2402.699 MHz
-22.99dBm
3: 2401.868 MHz
-2.99dBm
Trace
Level (dBm)
Frequency (MHz)
2400.8
2403.2


Bandwidth NTNV_Pi/4DQPSK_SISO_2DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
20dB: 1.334MHz
Marker:
1: 2440.352 MHz
-21.40dBm
2: 2441.686 MHz
-21.40dBm
3: 2441.187 MHz
-1.40dBm
Trace
Level (dBm)
Frequency (MHz)
2439.8
2442.2

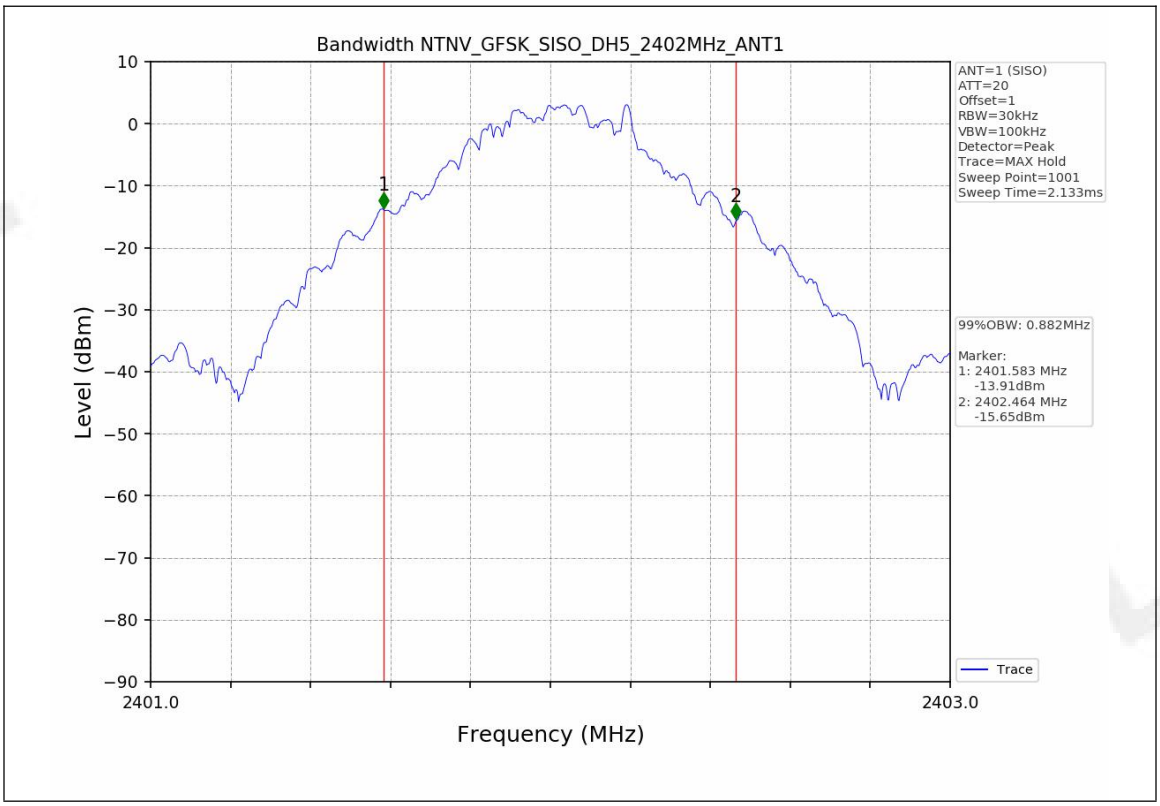

Bandwidth NTNV_Pi/4DQPSK_SISO_2DH5_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
20dB: 1.350MHz
Marker:
1: 2479.348 MHz
-22.83dBm
2: 2480.698 MHz
-22.83dBm
3: 2479.868 MHz
-2.83dBm
Trace
Level (dBm)
Frequency (MHz)
2478.8
2481.2

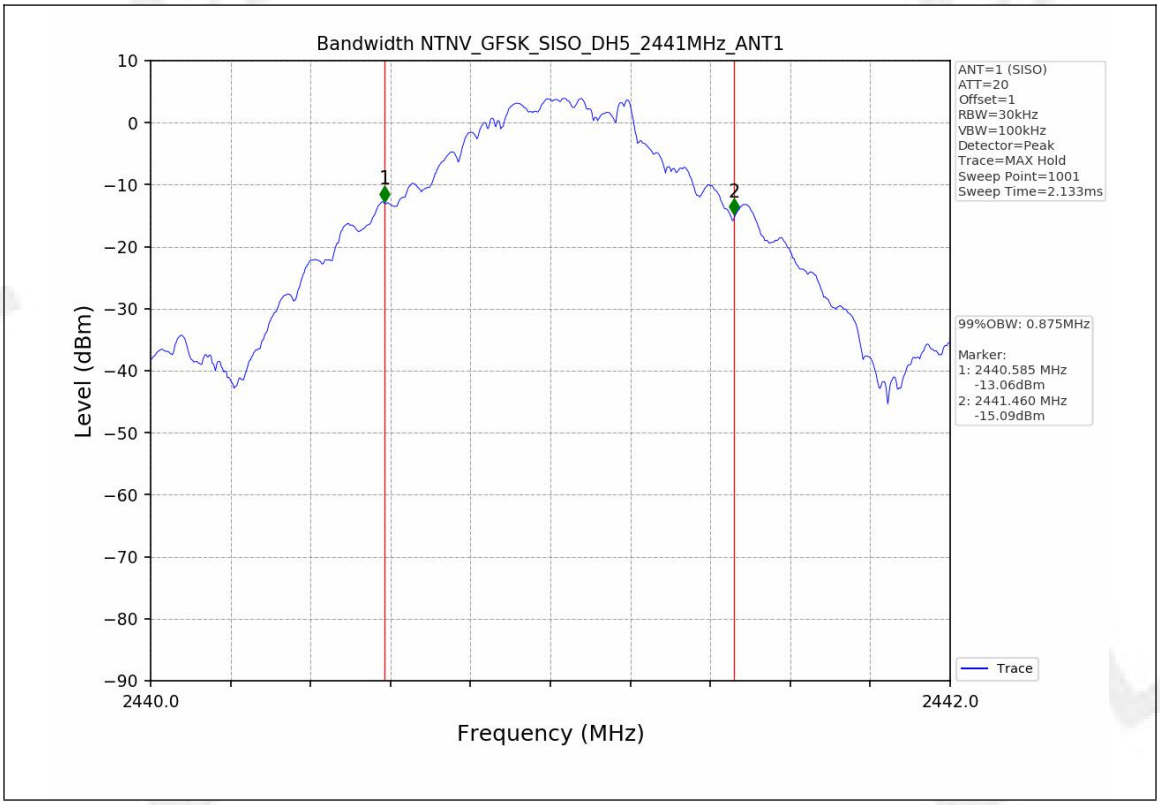

Bandwidth NTNV_8DPSK_SISO_3DH5_2402MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
20dB: 1.308MHz
Marker:
1: 2401.369 MHz
-20.82dBm
2: 2402.677 MHz
-20.82dBm
3: 2402.190 MHz
-0.82dBm
Trace
Level (dBm)
Frequency (MHz)
2400.8
2403.2

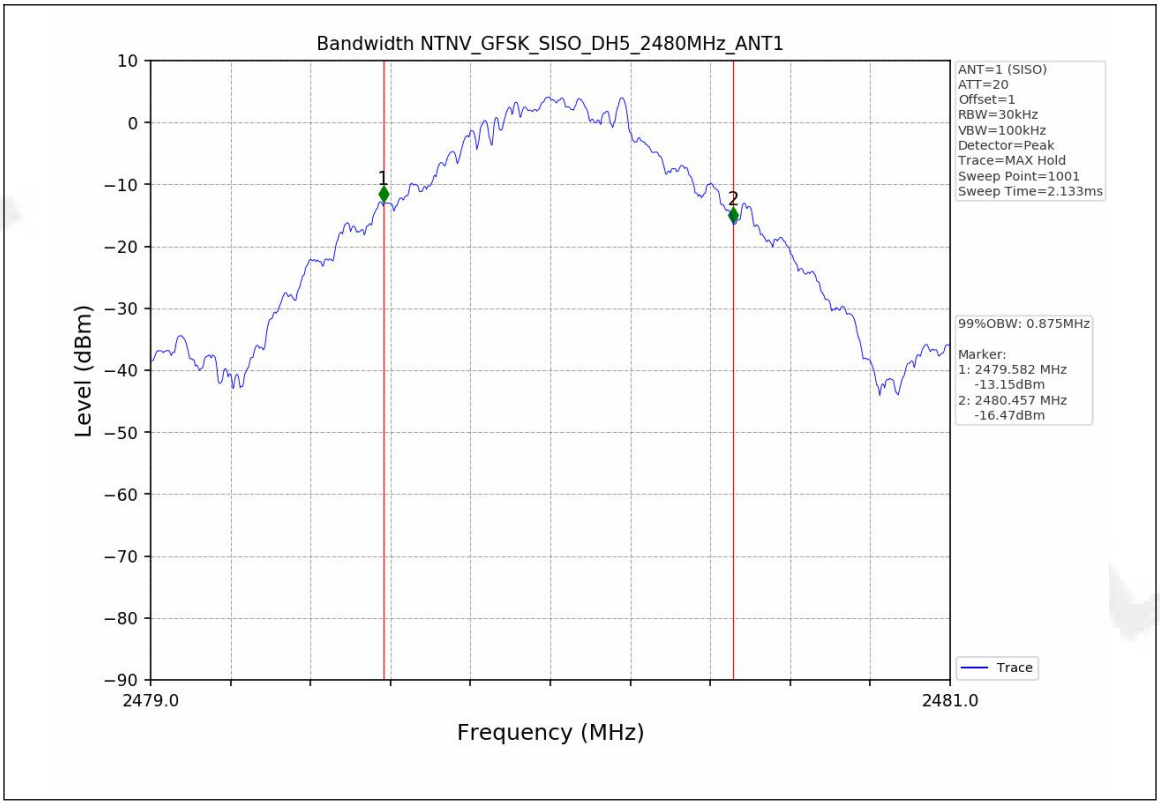

Bandwidth NTNV_8DPSK_SISO_3DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
20dB: 1.315MHz
Marker:
1: 2440.368 MHz
-20.77dBm
2: 2441.683 MHz
-20.77dBm
3: 2441.192 MHz
-0.77dBm
Trace
Level (dBm)
Frequency (MHz)
2439.8
2442.2

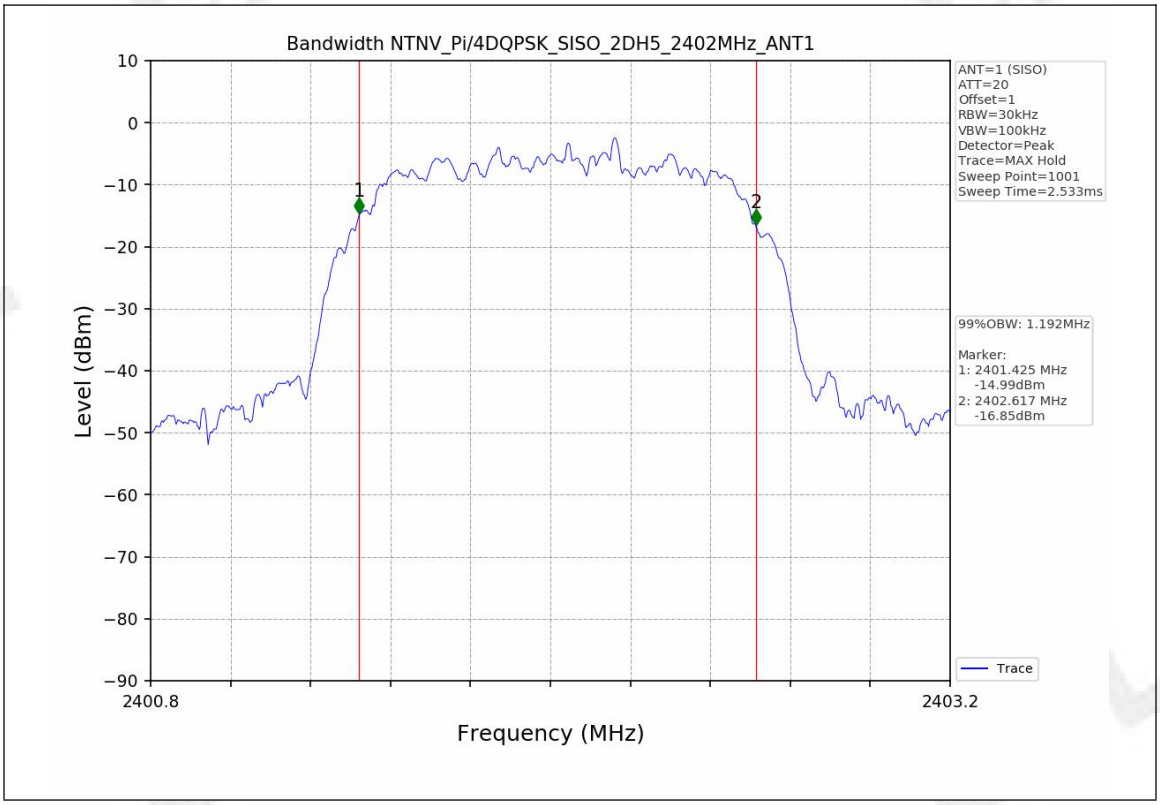


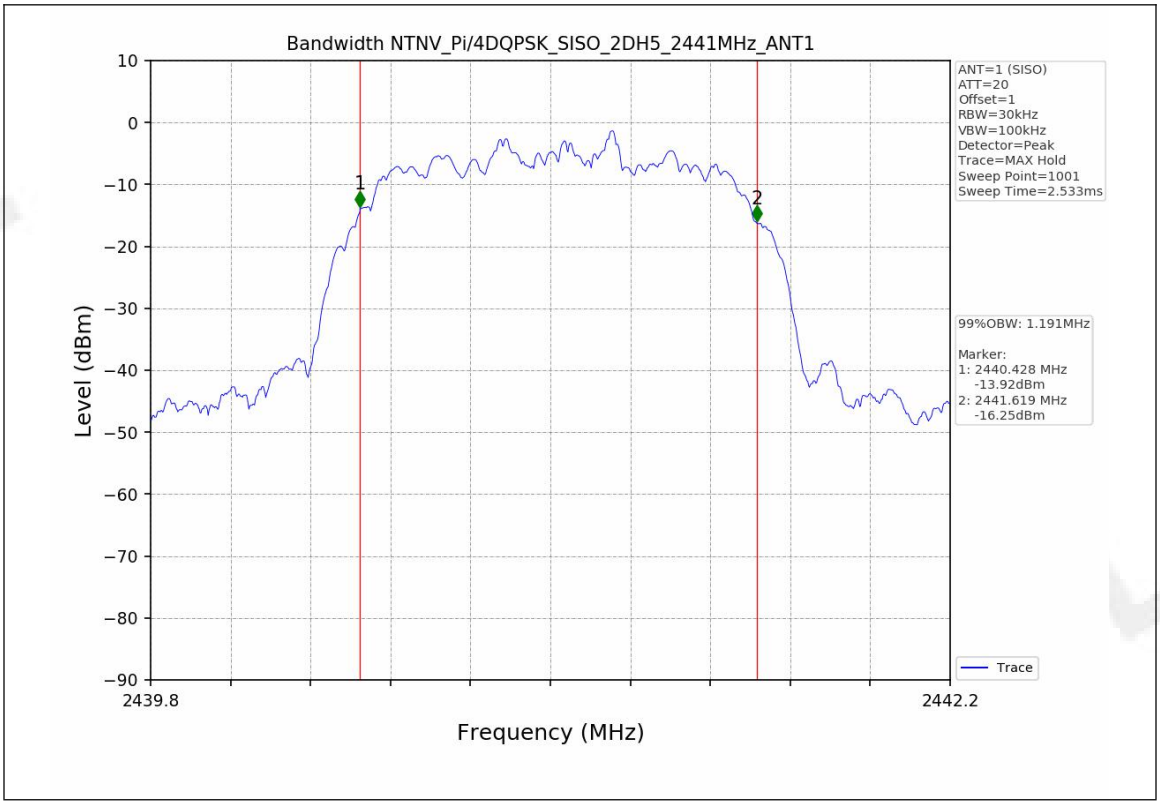
1.3 Test Graph - 99% Occupied Bandwidth

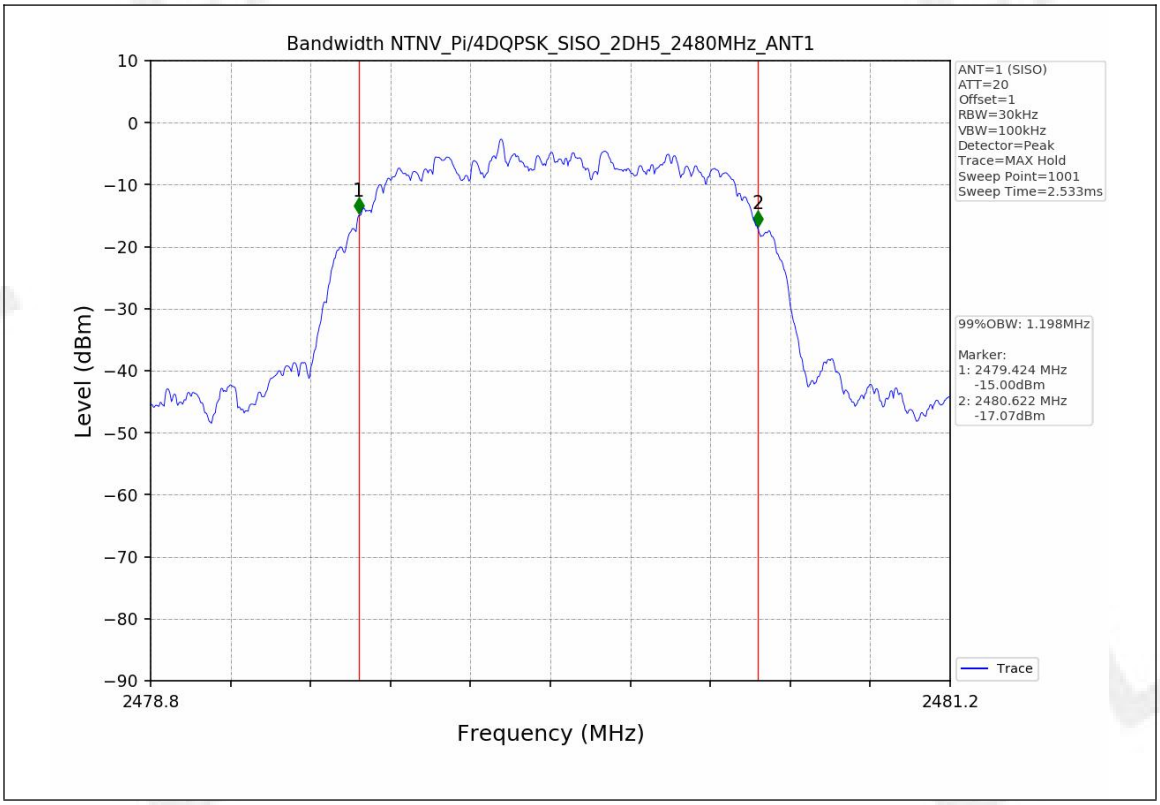


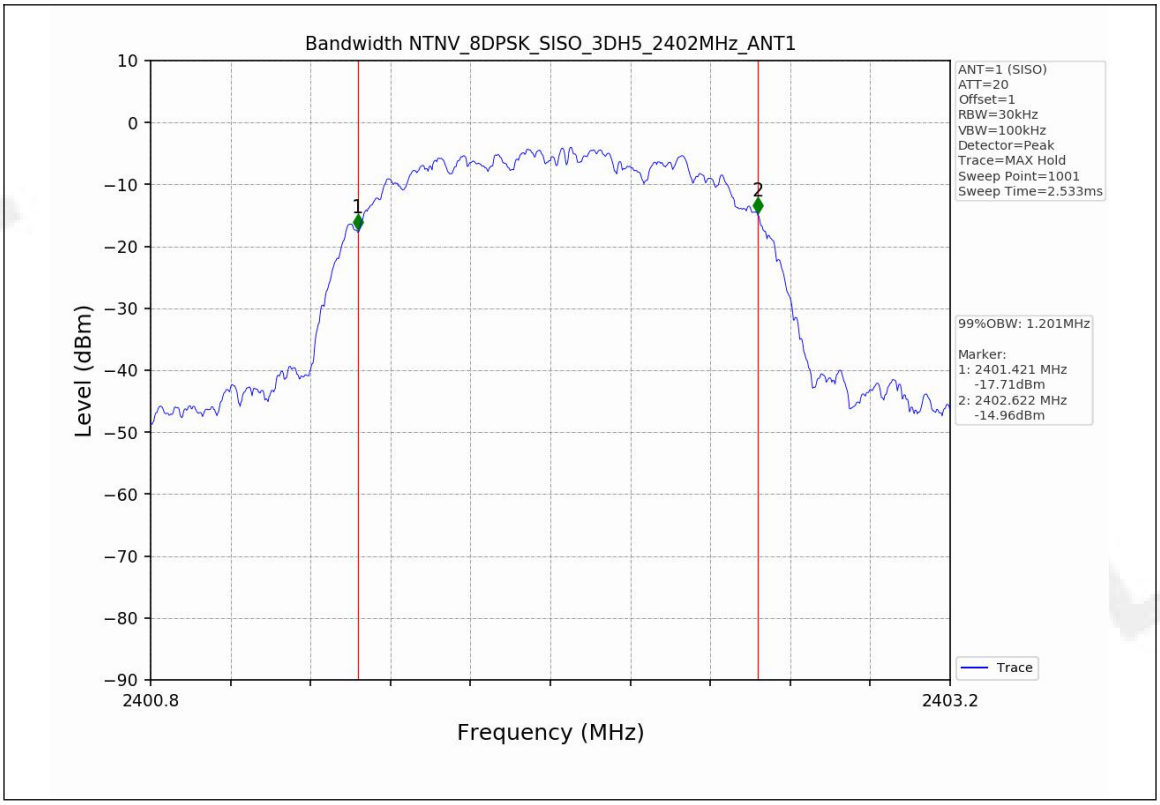

Bandwidth NTNV_GFSK_SISO_DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.133ms
99%OBW: 0.875MHz
Marker:
1: 2440.585 MHz
-13.06dBm
2: 2441.460 MHz
-15.09dBm
Trace
Level (dBm)
Frequency (MHz)
2440.0
2442.0

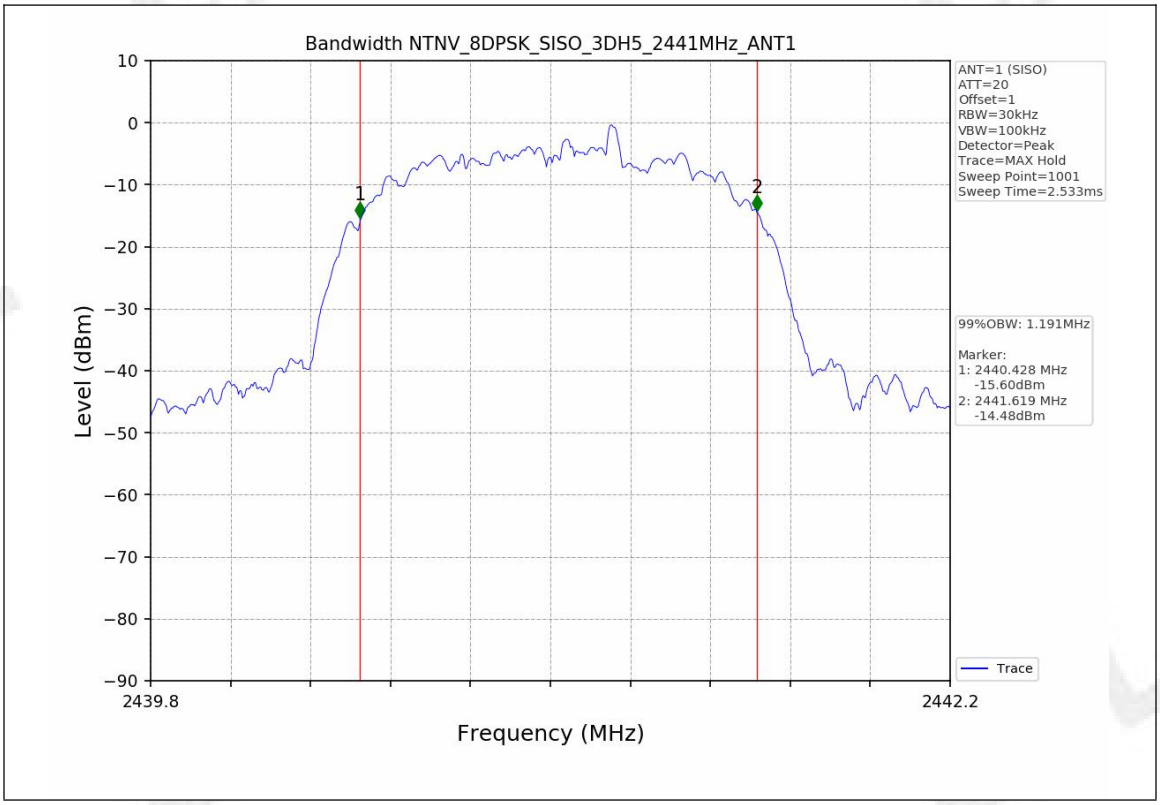

Bandwidth NTNV_GFSK_SISO_DH5_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.133ms
99%OBW: 0.875MHz
Marker:
1: 2479.582 MHz
-13.15dBm
2: 2480.457 MHz
-16.47dBm
Trace
Level (dBm)
Frequency (MHz)
2479.0
2481.0

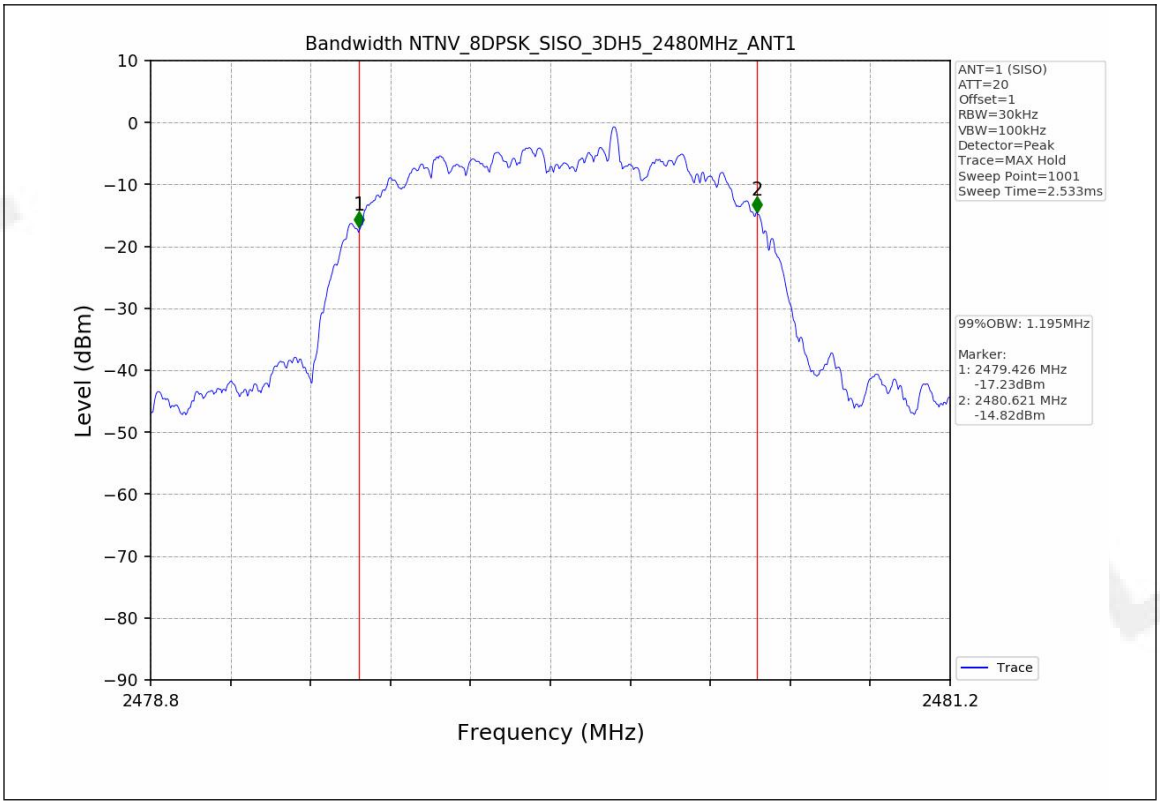

Bandwidth NTNV_Pi/4DQPSK_SISO_2DH5_2402MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
99%OBW: 1.192MHz
Marker:
1: 2401.425 MHz
-14.99dBm
2: 2402.617 MHz
-16.85dBm
Trace
Level (dBm)
Frequency (MHz)
2400.8
2403.2


Bandwidth NTNV_Pi/4DQPSK_SISO_2DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
99%OBW: 1.191MHz
Marker:
1: 2440.428 MHz
-13.92dBm
2: 2441.619 MHz
-16.25dBm
Trace
Level (dBm)
Frequency (MHz)
2439.8
2442.2


Bandwidth NTNV_Pi/4DQPSK_SISO_2DH5_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
99%OBW: 1.198MHz
Marker:
1: 2479.424 MHz
-15.00dBm
2: 2480.622 MHz
-17.07dBm
Trace
Level (dBm)
Frequency (MHz)
2478.8
2481.2


Bandwidth NTNV_8DPSK_SISO_3DH5_2402MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
99%OBW: 1.201MHz
Marker:
1: 2401.421 MHz
-17.71dBm
2: 2402.622 MHz
-14.96dBm
Trace
Level (dBm)
Frequency (MHz)
2400.8
2403.2


Bandwidth NTNV_8DPSK_SISO_3DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
99%OBW: 1.191MHz
Marker:
1: 2440.428 MHz
-15.60dBm
2: 2441.619 MHz
-14.48dBm
Trace
Level (dBm)
Frequency (MHz)
2439.8
2442.2

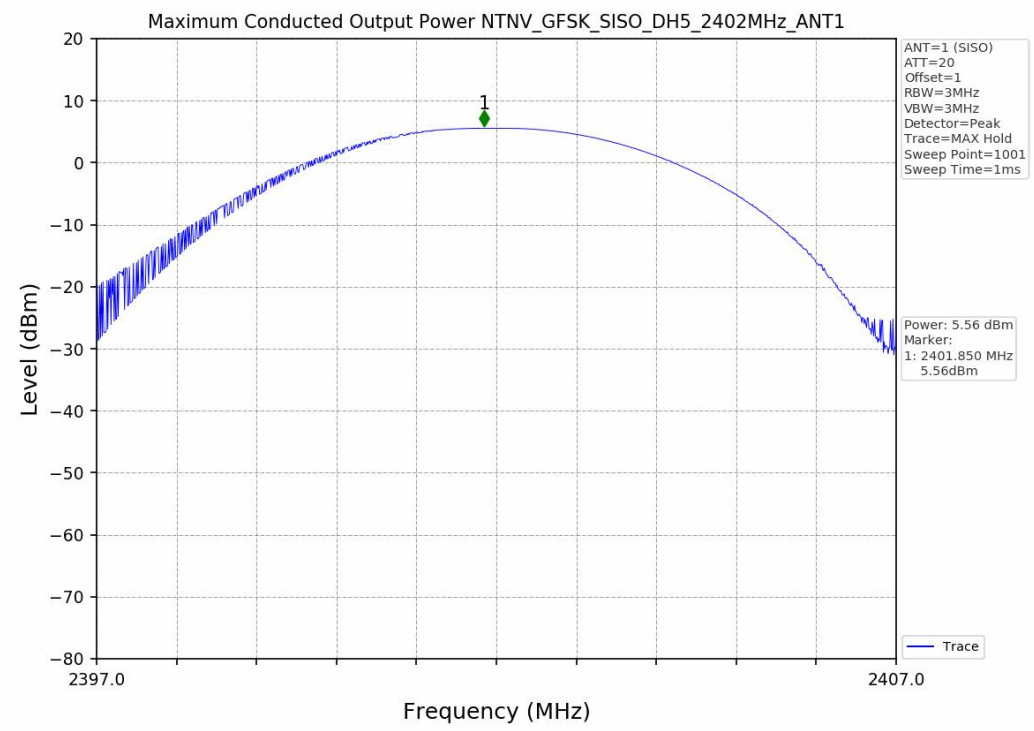

Bandwidth NTNV_8DPSK_SISO_3DH5_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=30kHz
VBW=100kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=2.533ms
99%OBW: 1.195MHz
Marker:
1: 2479.426 MHz
-17.23dBm
2: 2480.621 MHz
-14.82dBm
Trace
Level (dBm)
Frequency (MHz)
2478.8
2481.2

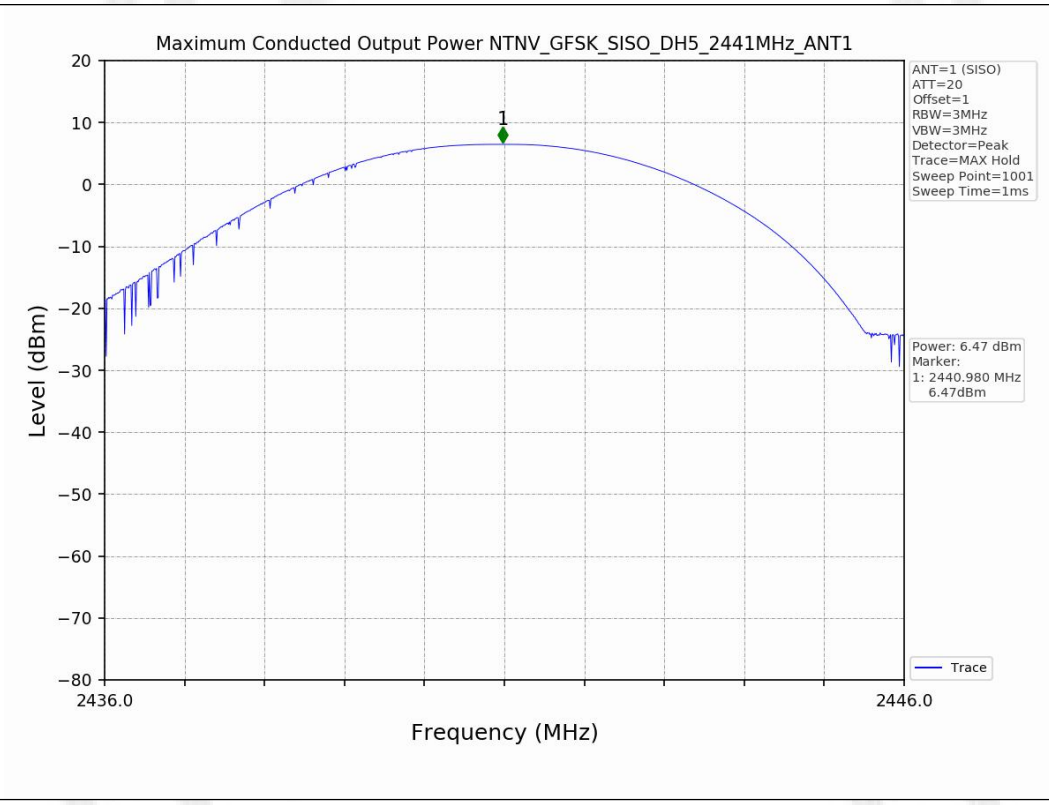
2. Maximum Conducted Output Power

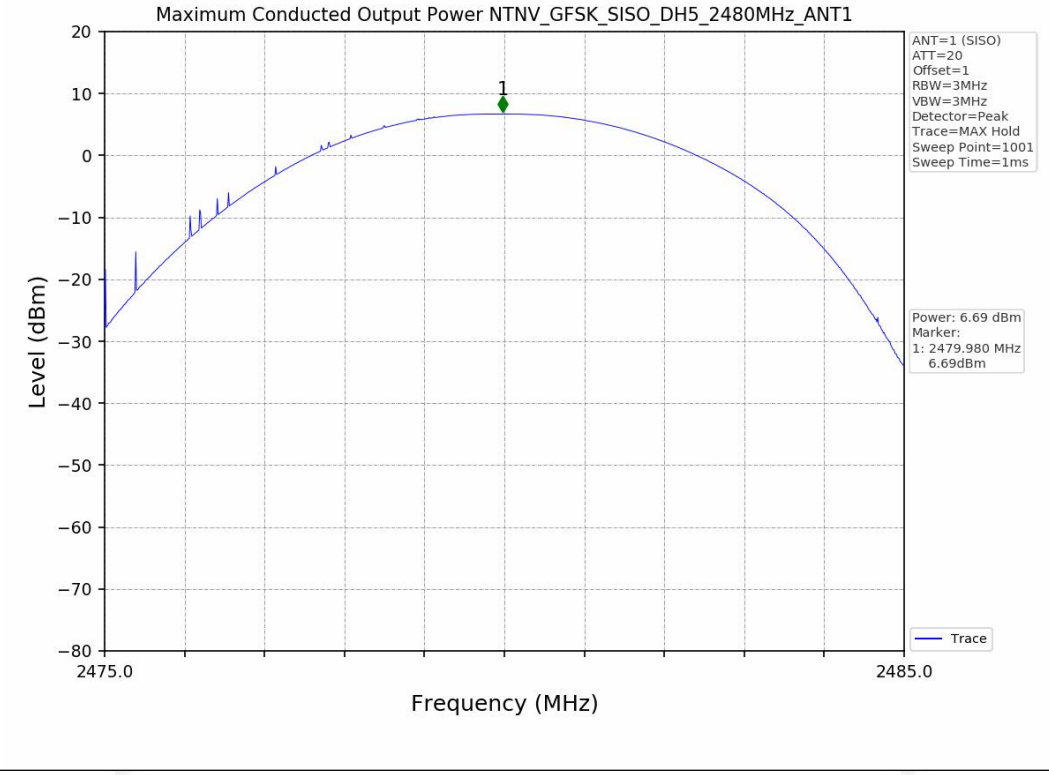
2.1 Test Result

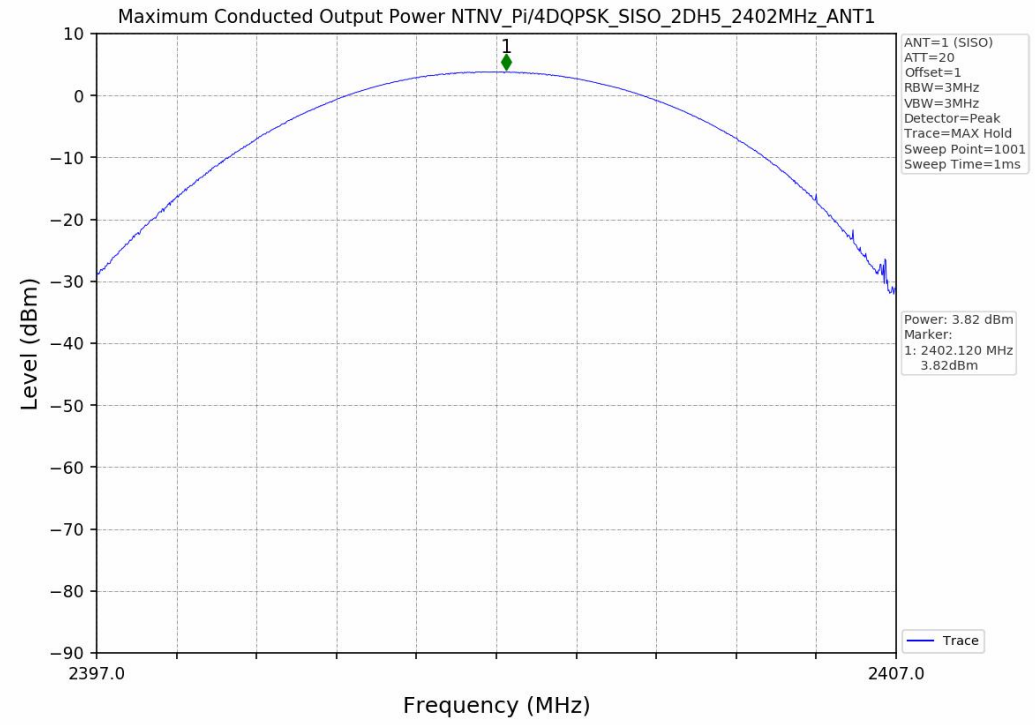
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
GFSK	2402	SISO	5.56	30	PASS
	2441	SISO	6.47	30	PASS
	2480	SISO	6.69	30	PASS
Pi/4DQPSK	2402	SISO	3.82	20.97	PASS
	2441	SISO	4.38	20.97	PASS
	2480	SISO	4.30	20.97	PASS
8DPSK	2402	SISO	4.33	20.97	PASS
	2441	SISO	4.95	20.97	PASS
	2480	SISO	4.93	20.97	PASS

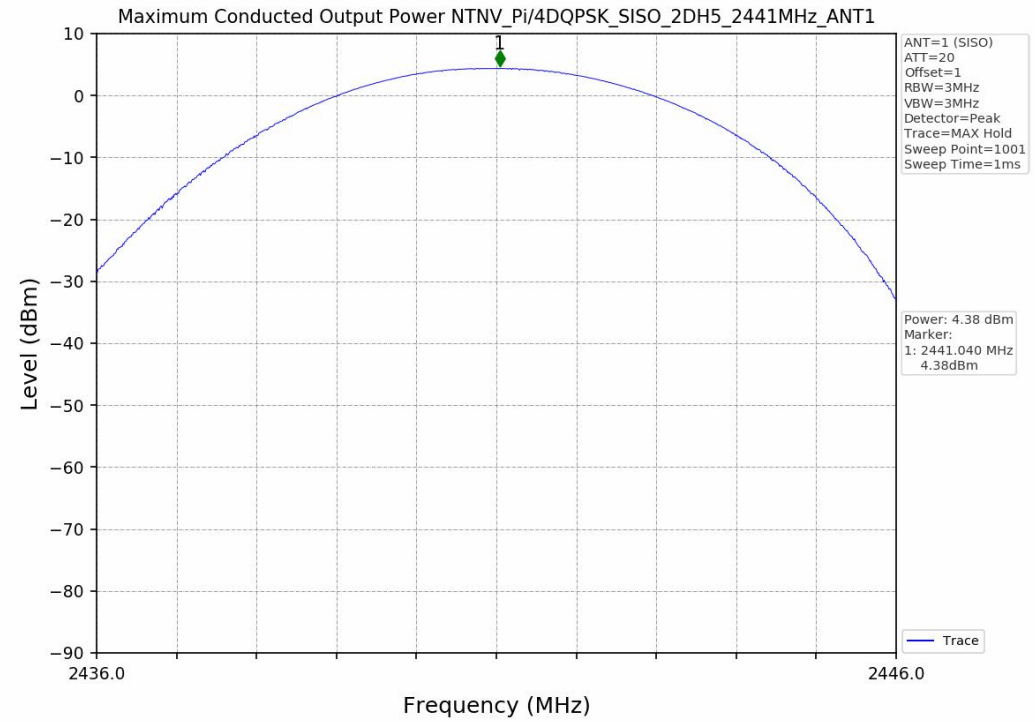
2.2 Test Graph

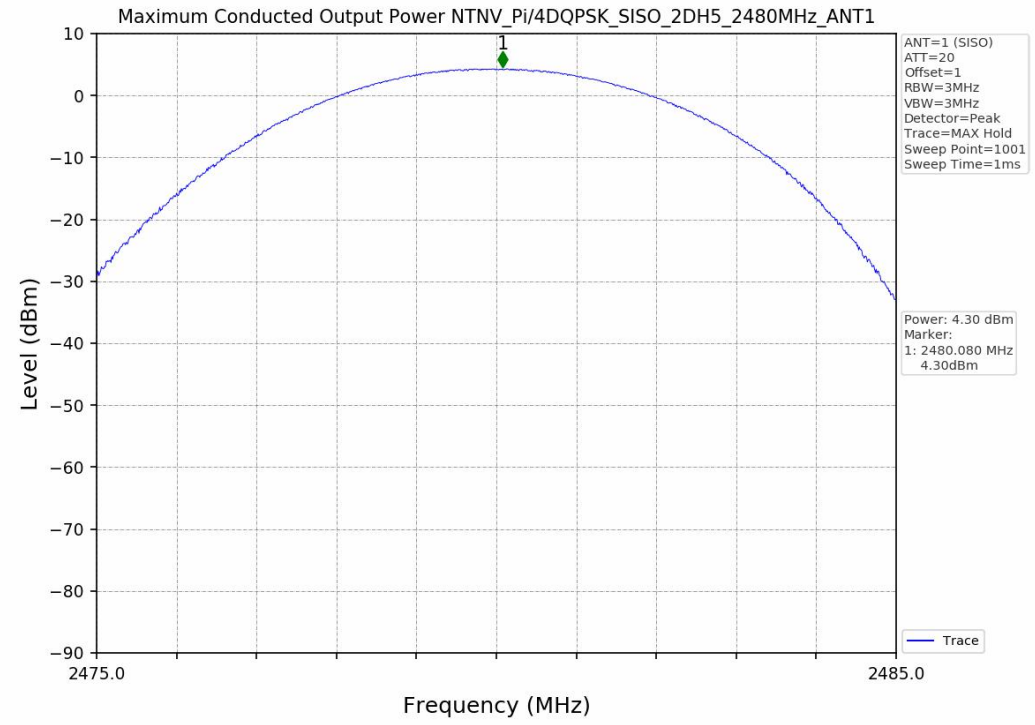


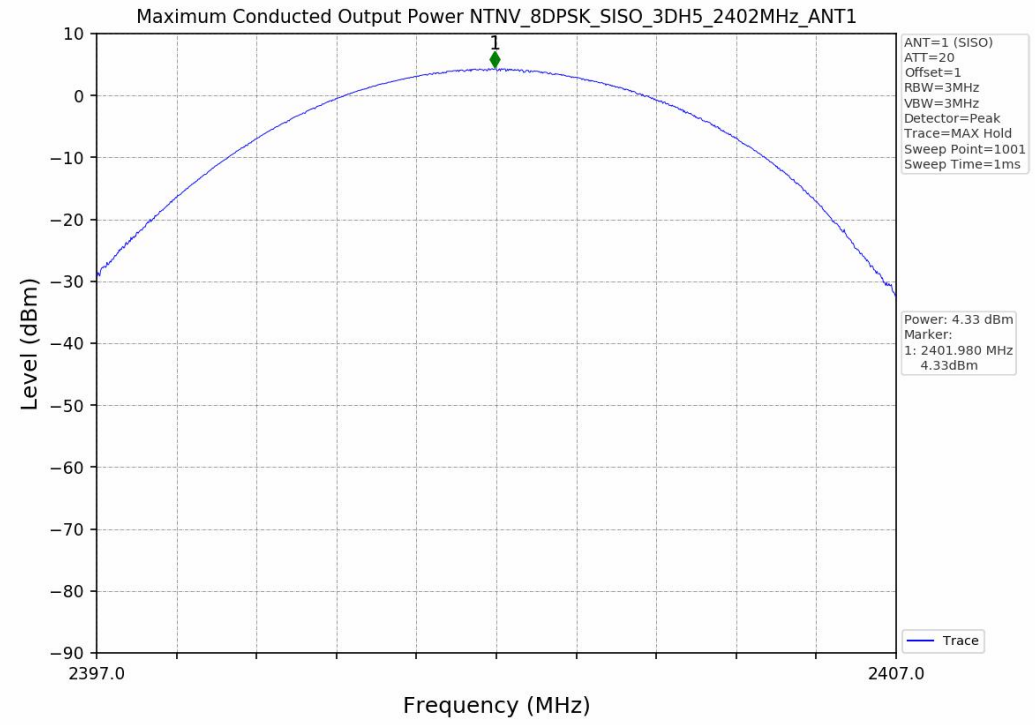

Maximum Conducted Output Power NTNV_GFSK_SISO_DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 6.47 dBm
Marker:
1: 2440.980 MHz
6.47dBm
Trace
Level (dBm)
Frequency (MHz)
2436.0
2446.0

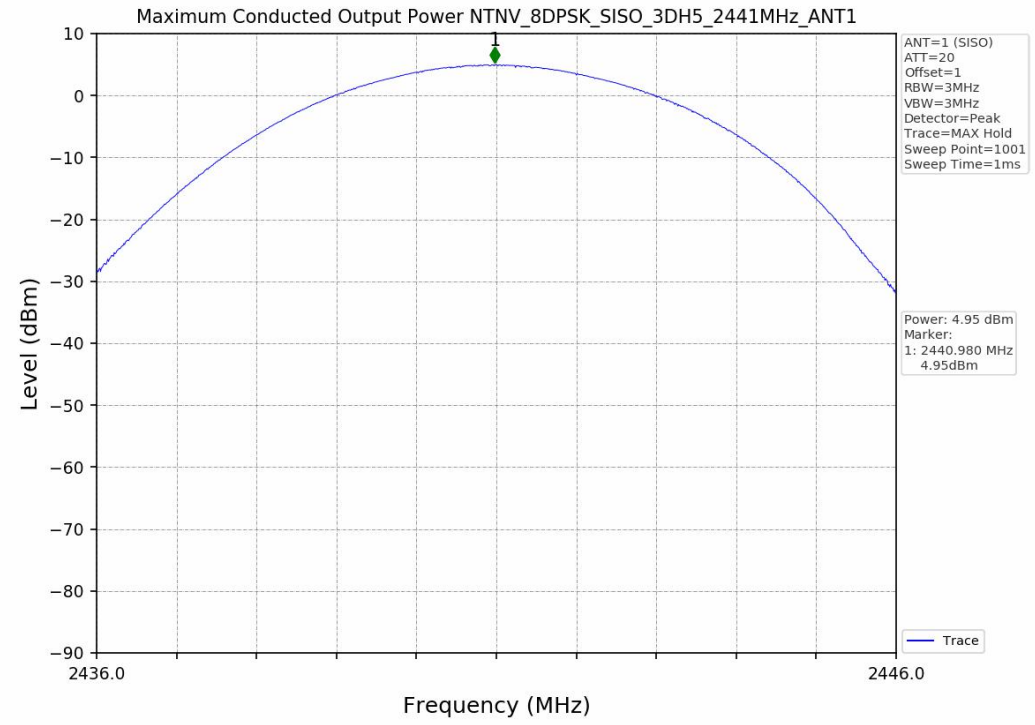

Maximum Conducted Output Power NTNV_GFSK_SISO_DH5_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 6.69 dBm
Marker:
1: 2479.980 MHz
6.69dBm
Trace
Level (dBm)
Frequency (MHz)
2475.0
2485.0

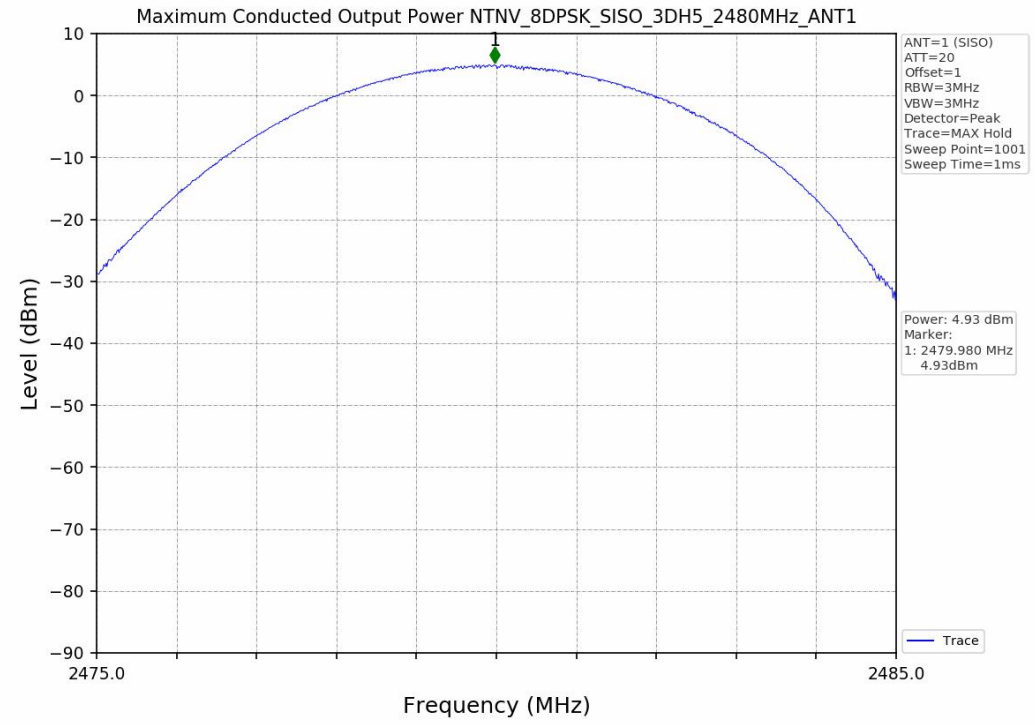

Maximum Conducted Output Power NTNV_Pi/4DQPSK_SISO_2DH5_2402MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 3.82 dBm
Marker:
1: 2402.120 MHz
3.82dBm
Trace
Level (dBm)
Frequency (MHz)
2397.0
2407.0


Maximum Conducted Output Power NTNV_Pi/4DQPSK_SISO_2DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 4.38 dBm
Marker:
1: 2441.040 MHz
4.38dBm
Trace
Level (dBm)
Frequency (MHz)
2436.0
2446.0


Maximum Conducted Output Power NTNV_Pi/4DQPSK_SISO_2DH5_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 4.30 dBm
Marker:
1: 2480.080 MHz
4.30dBm
Trace
Level (dBm)
Frequency (MHz)
2475.0
2485.0


Maximum Conducted Output Power NTNV_8DPSK_SISO_3DH5_2402MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 4.33 dBm
Marker:
1: 2401.980 MHz
4.33dBm
Trace
Level (dBm)
Frequency (MHz)
2397.0
2407.0


Maximum Conducted Output Power NTNV_8DPSK_SISO_3DH5_2441MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 4.95 dBm
Marker:
1: 2440.980 MHz
4.95dBm
Trace
Level (dBm)
Frequency (MHz)
2436.0
2446.0

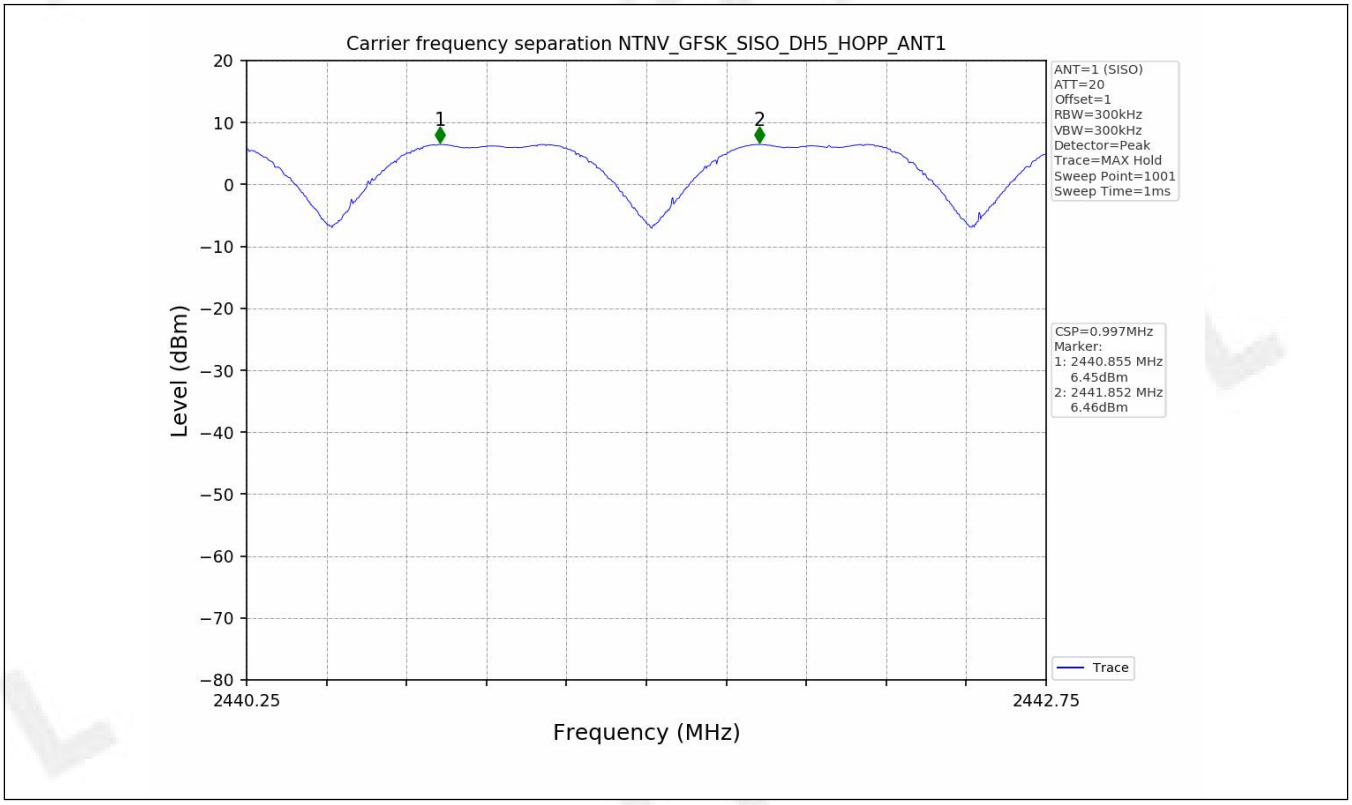

Maximum Conducted Output Power NTNV_8DPSK_SISO_3DH5_2480MHz_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=3MHz
VBW=3MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
Power: 4.93 dBm
Marker:
1: 2479.980 MHz
4.93dBm
Trace
Level (dBm)
Frequency (MHz)
2475.0
2485.0

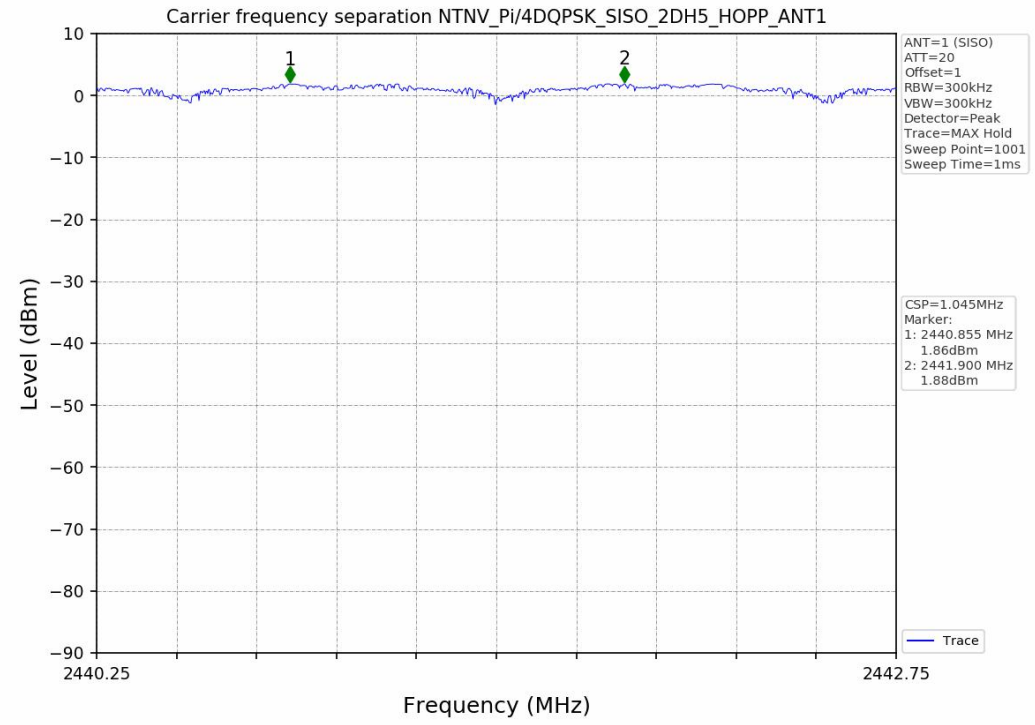
3. Carrier frequency separation

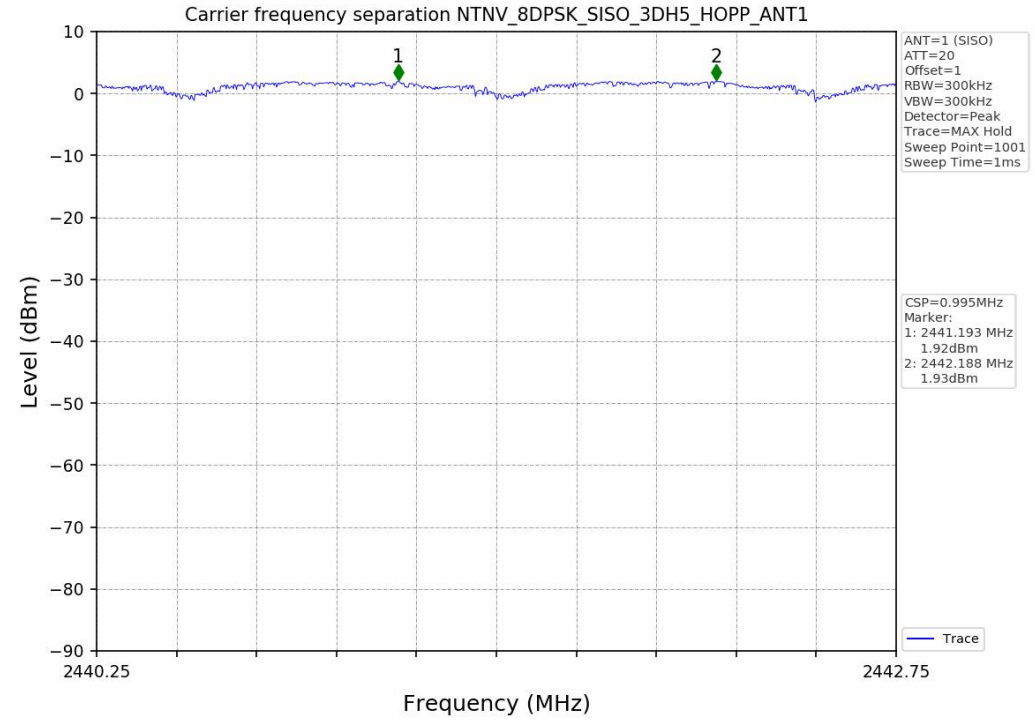
3.1 Test Result

Test Mode	TX Type	ANT No.	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limits (MHz)	Verdict
GFSK	SISO	1	0.997	0.965	≥0.965	PASS
Pi/4DQPSK	SISO	1	1.045	1.351	≥0.901	PASS
8DPSK	SISO	1	0.995	1.341	≥0.894	PASS

3.2 Test Graph




Carrier frequency separation NTNV_Pi/4DQPSK_SISO_2DH5_HOPP_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=300kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
CSP=1.045MHz
Marker:
1: 2440.855 MHz
1.86dBm
2: 2441.900 MHz
1.88dBm
Trace
Level (dBm)
Frequency (MHz)
2440.25
2442.75

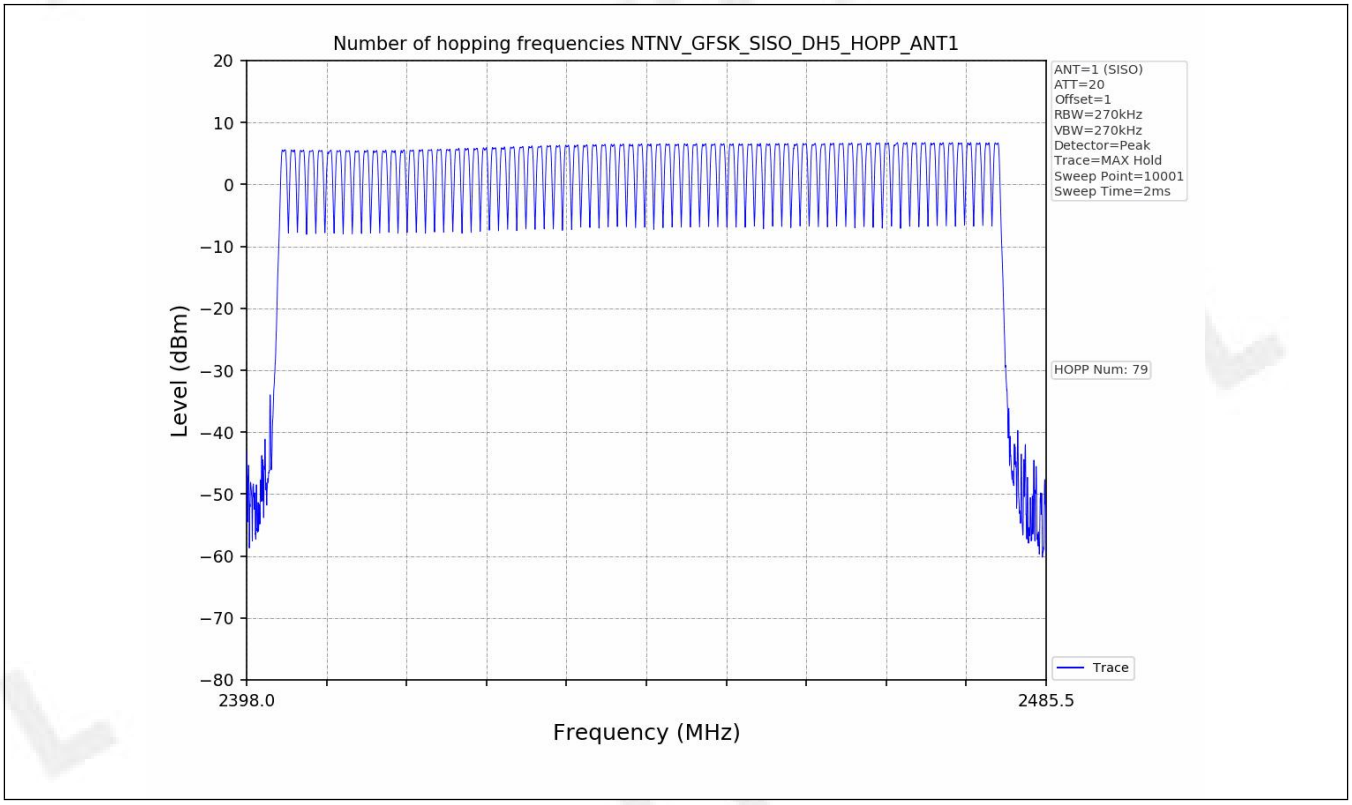

Carrier frequency separation NTNV_8DPSK_SISO_3DH5_HOPP_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=300kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=1001
Sweep Time=1ms
CSP=0.995MHz
Marker:
1: 2441.193 MHz
1.92dBm
2: 2442.188 MHz
1.93dBm
Trace
Level (dBm)
Frequency (MHz)
2440.25
2442.75

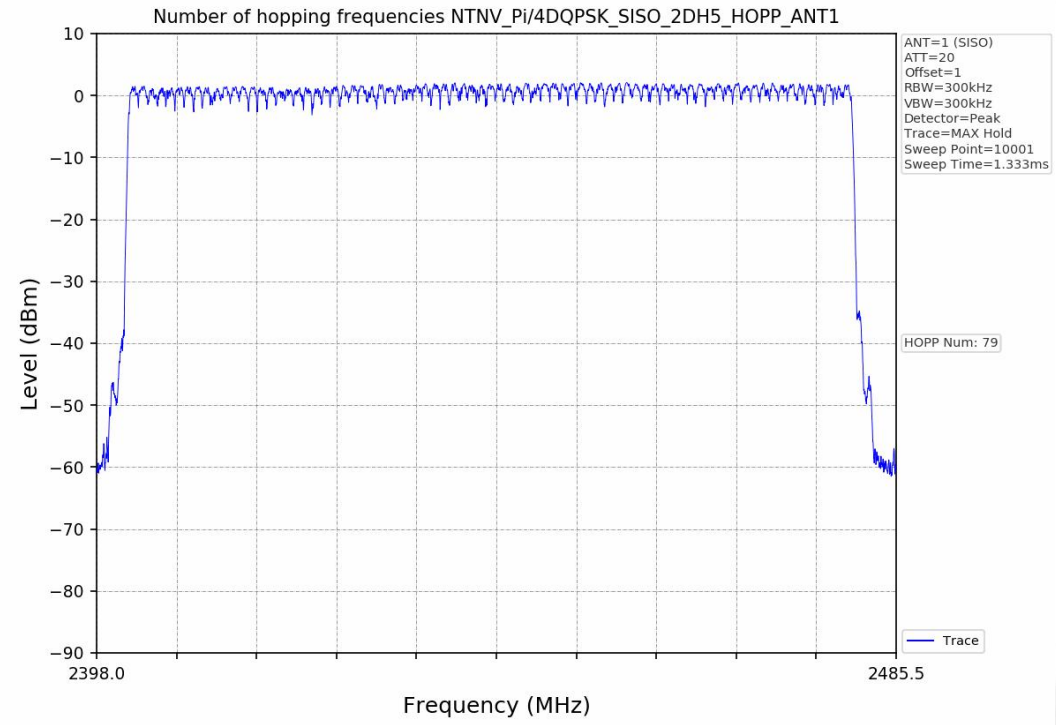
4. Number of hopping frequencies

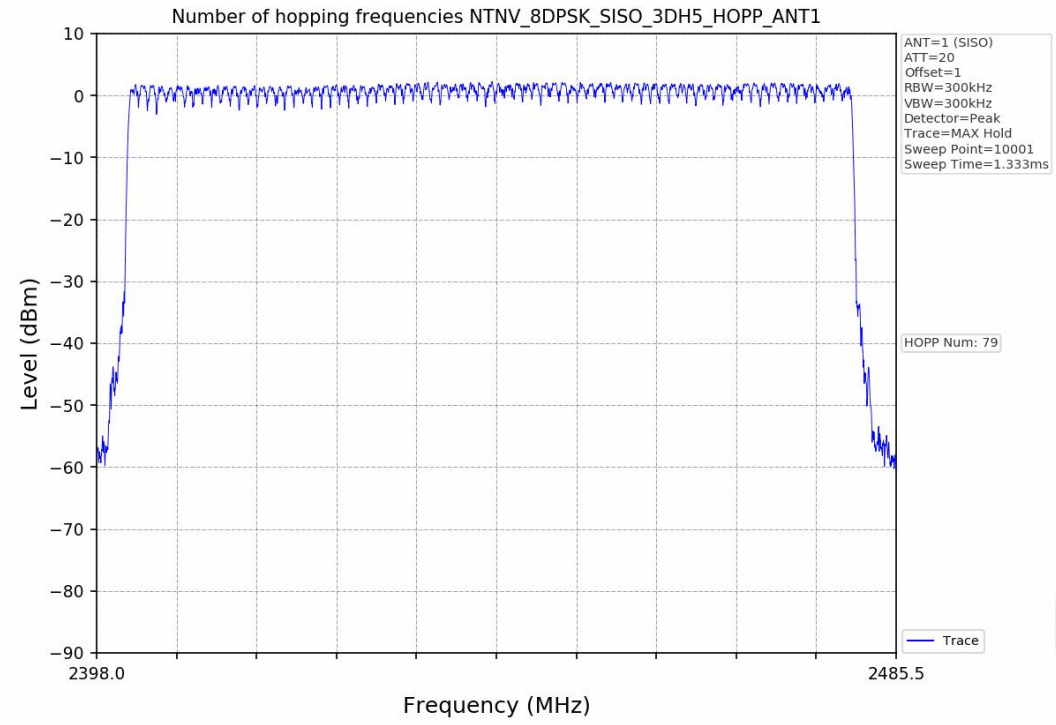
4.1 Test Result

Test Mode	TX Type	ANT No.	Num of Hopping Frequencies	Limits	Verdict
GFSK	SISO	1	79	≥15	PASS
Pi/4DQPSK	SISO	1	79	≥15	PASS
8DPSK	SISO	1	79	≥15	PASS

4.2 Test Graph




Number of hopping frequencies NTNV_Pi/4DQPSK_SISO_2DH5_HOPP_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=300kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=10001
Sweep Time=1.333ms
HOPP Num: 79
Trace
Level (dBm)
10
0
−10
−20
−30
−40
−50
−60
−70
−80
−90
2398.0
2485.5
Frequency (MHz)

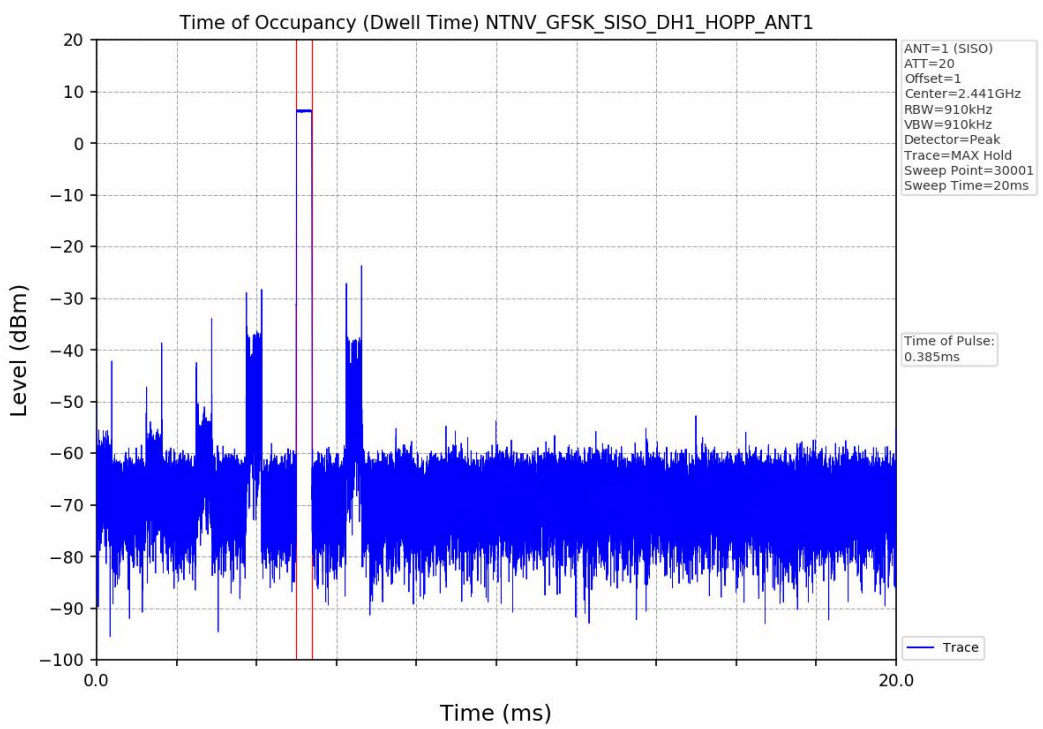

Number of hopping frequencies NTNV_8DPSK_SISO_3DH5_HOPP_ANT1
ANT=1 (SISO)
ATT=20
Offset=1
RBW=300kHz
VBW=300kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=10001
Sweep Time=1.333ms
HOPP Num: 79
Trace
Level (dBm)
10
0
−10
−20
−30
−40
−50
−60
−70
−80
−90
2398.0
2485.5
Frequency (MHz)

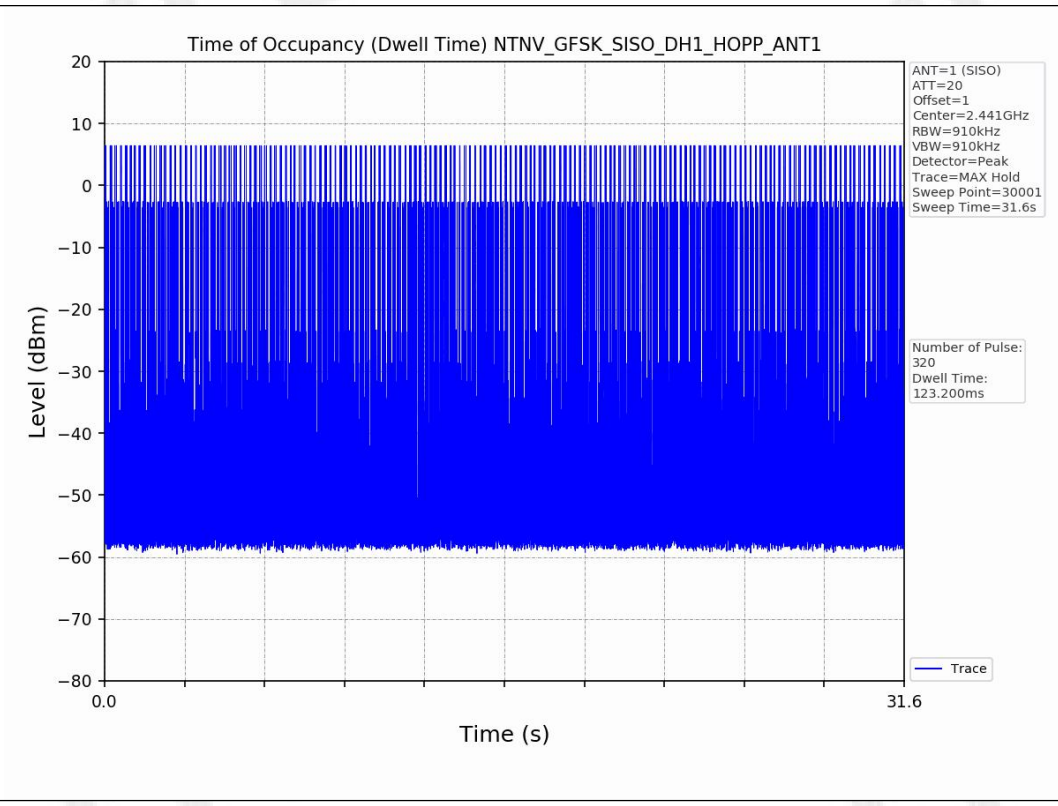
5. Time of Occupancy (Dwell Time)

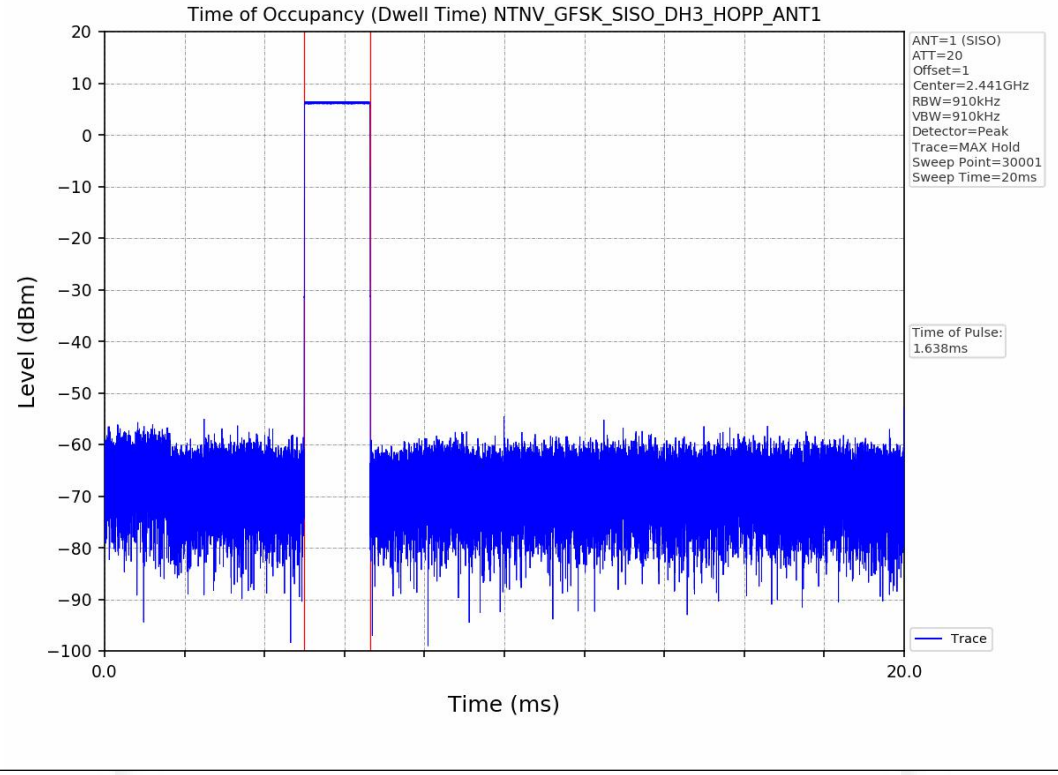
5.1 Test Result

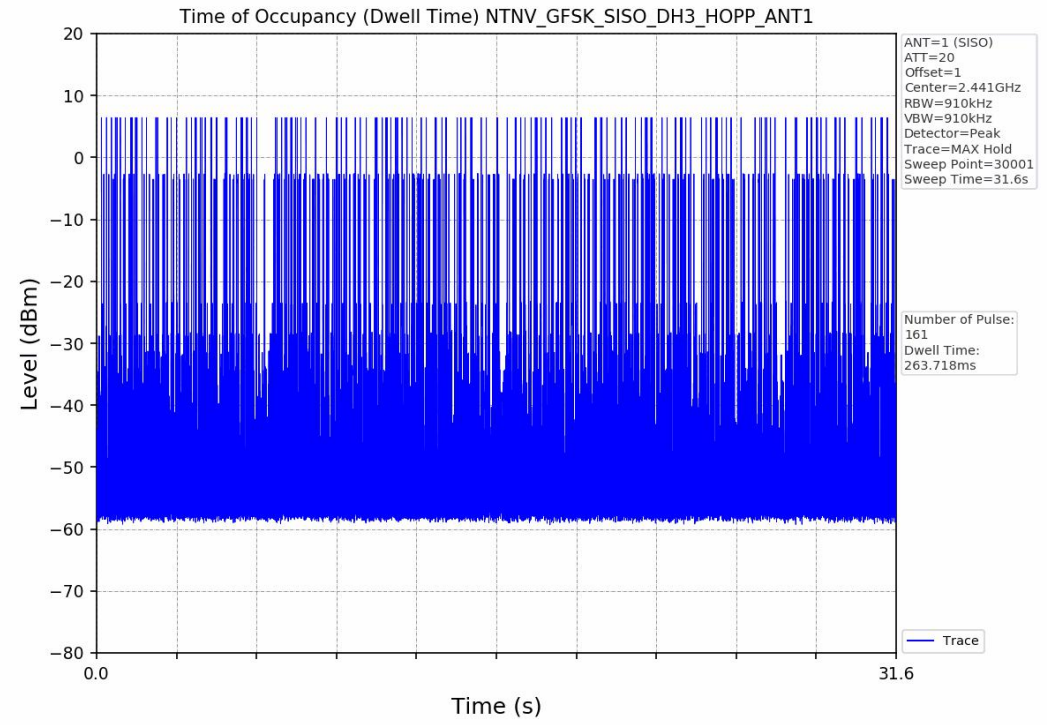
Test Mode	Packet Type	TX Type	ANT No.	Duration of Single Pulse (ms)	Obeservation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limits (ms)	Verdict
GFSK	DH1	SISO	1	0.385	31.6	320	123.200	≤400	PASS
	DH3	SISO	1	1.638	31.6	161	263.718	≤400	PASS
	DH5	SISO	1	2.882	31.6	106	305.492	≤400	PASS
Pi/4DQPSK	2DH1	SISO	1	0.385	31.6	320	123.200	≤400	PASS
	2DH3	SISO	1	1.587	31.6	153	242.811	≤400	PASS
	2DH5	SISO	1	2.885	31.6	96	276.960	≤400	PASS
8DPSK	3DH1	SISO	1	0.389	31.6	320	124.480	≤400	PASS
	3DH3	SISO	1	1.639	31.6	166	272.074	≤400	PASS
	3DH5	SISO	1	2.892	31.6	111	321.012	≤400	PASS

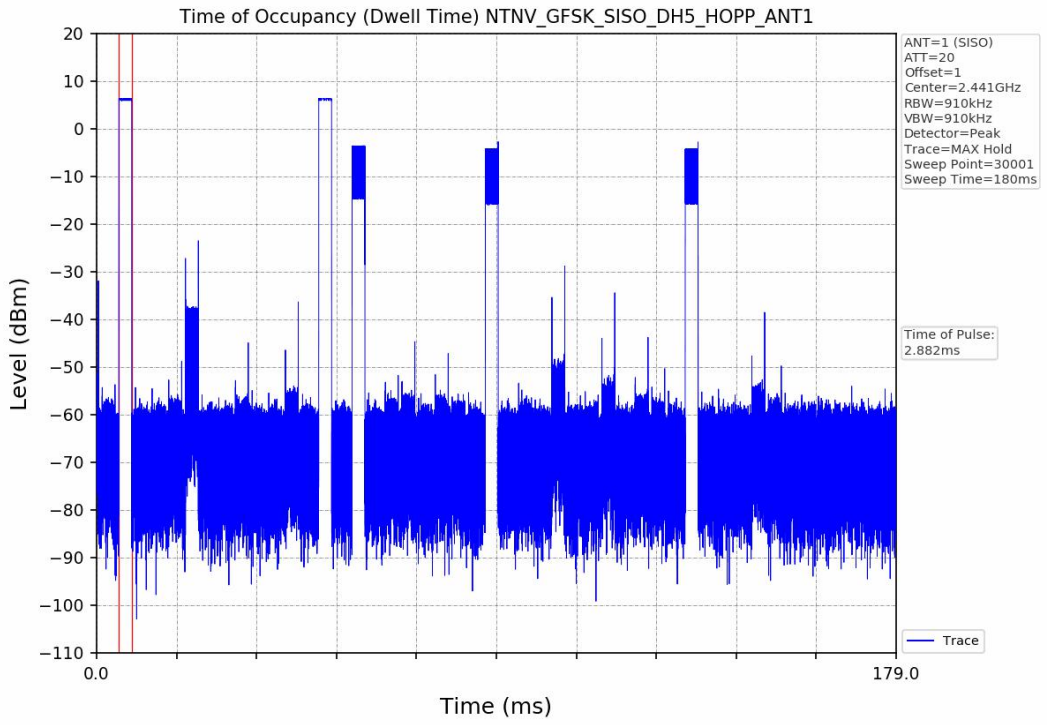
5.2 Test Graph

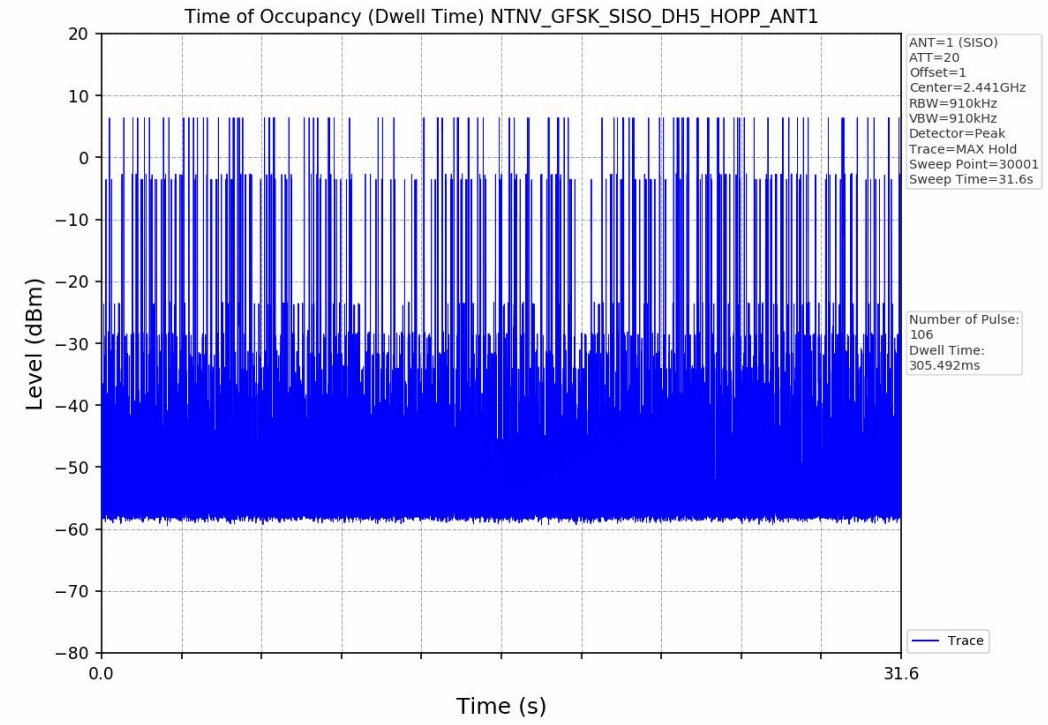


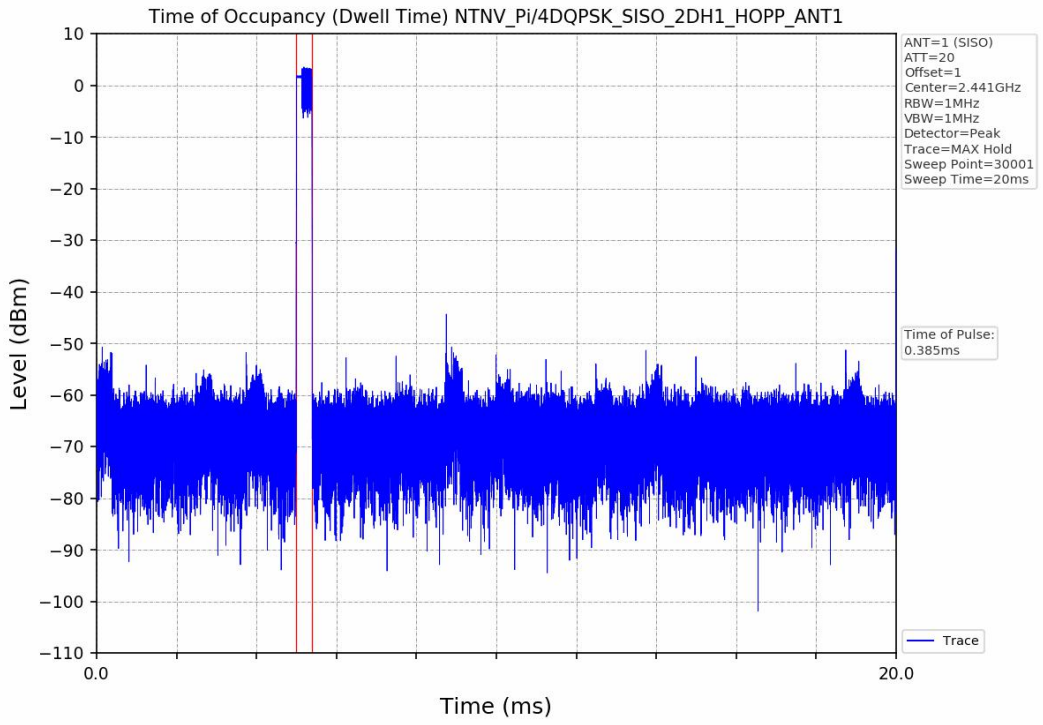

Time of Occupancy (Dwell Time) NTNV_GFSK_SISO_DH1_HOPP_ANT1
Level (dBm)
Time (s)
0.0
31.6
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=31.6s
Number of Pulse:
320
Dwell Time:
123.200ms
Trace

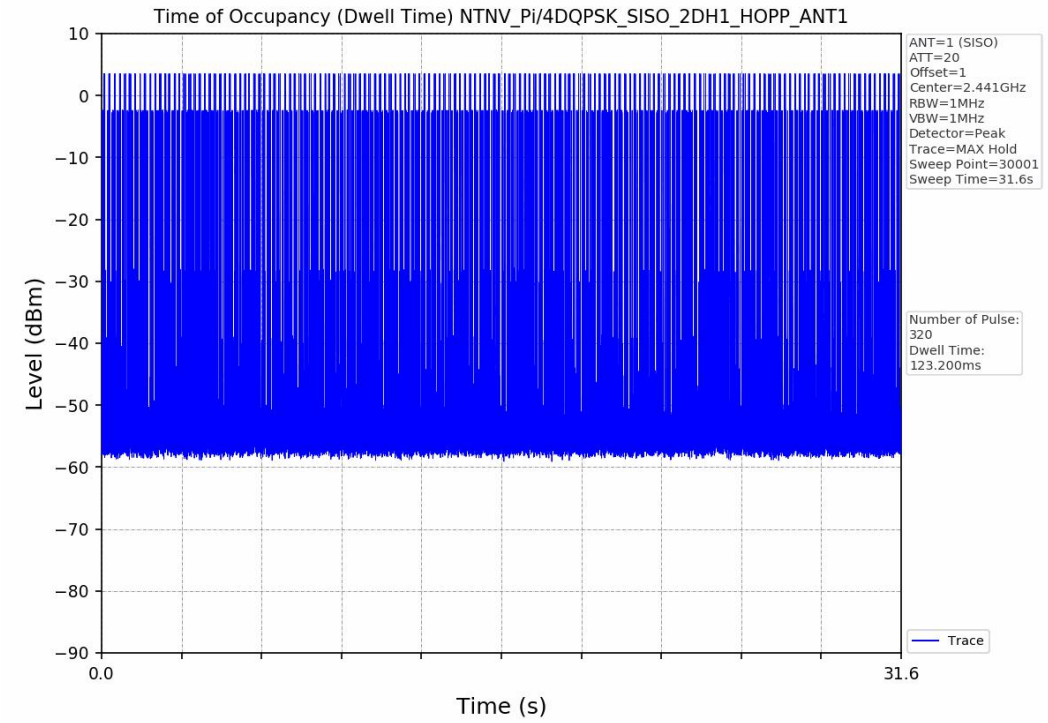

Time of Occupancy (Dwell Time) NTNV_GFSK_SISO_DH3_HOPP_ANT1
Level (dBm)
Time (ms)
0.0
20.0
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=20ms
Time of Pulse:
1.638ms
Trace

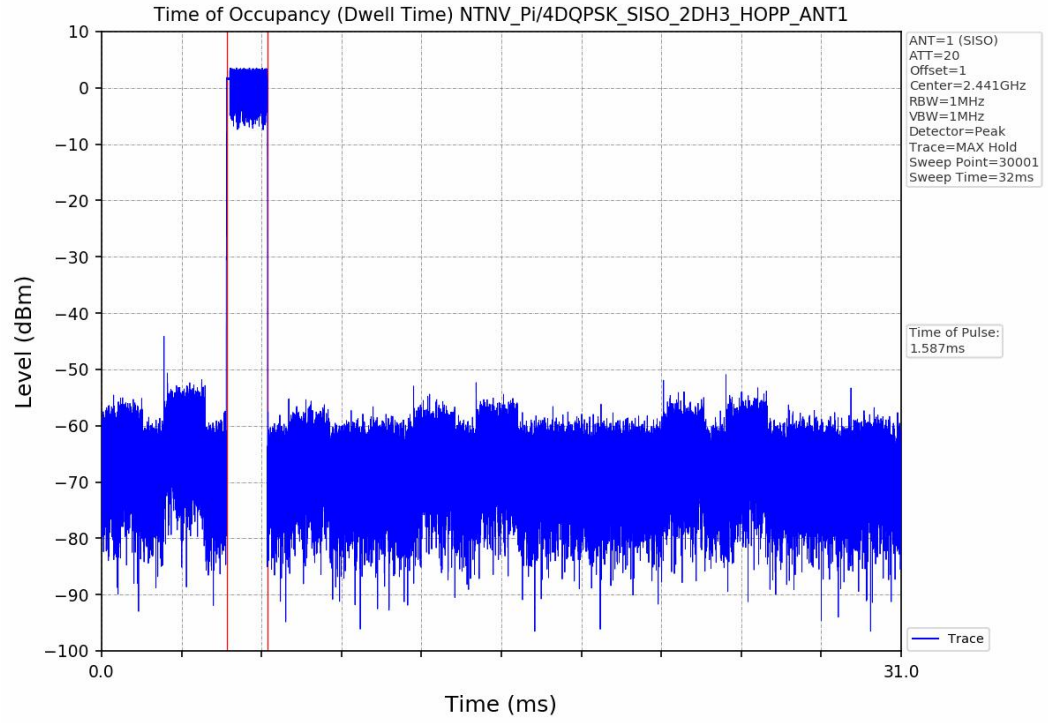

Time of Occupancy (Dwell Time) NTNV_GFSK_SISO_DH3_HOPP_ANT1
Level (dBm)
Time (s)
0.0
31.6
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=31.6s
Number of Pulse:
161
Dwell Time:
263.718ms
Trace

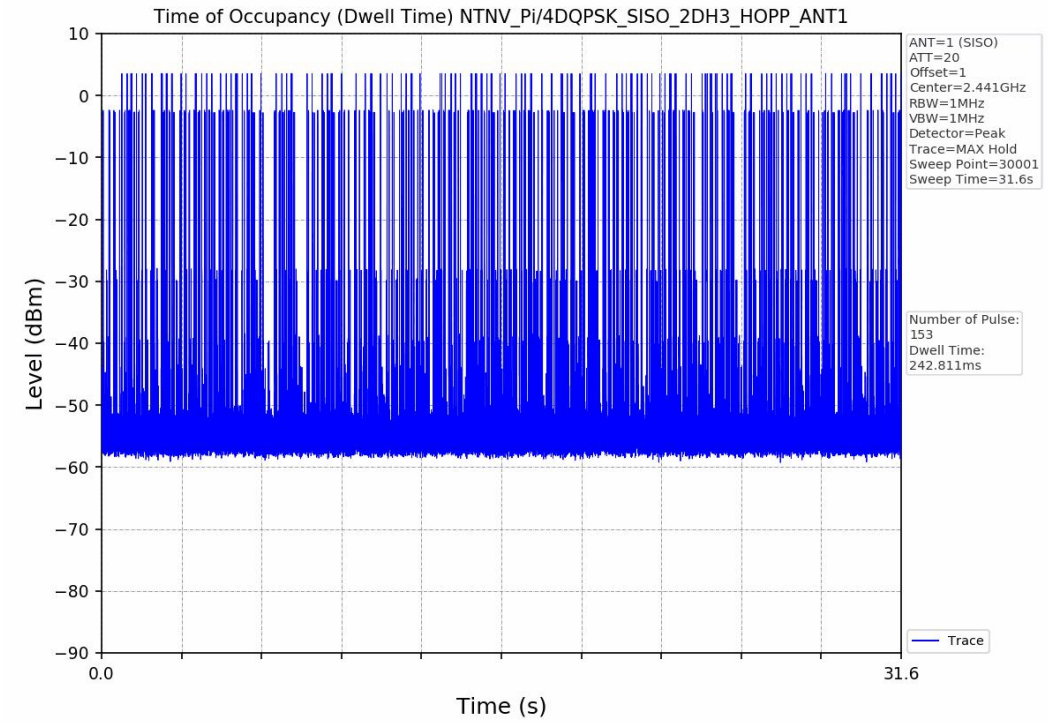

Time of Occupancy (Dwell Time) NTNV_GFSK_SISO_DH5_HOPP_ANT1
Level (dBm)
Time (ms)
0.0
179.0
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=180ms
Time of Pulse:
2.882ms
Trace

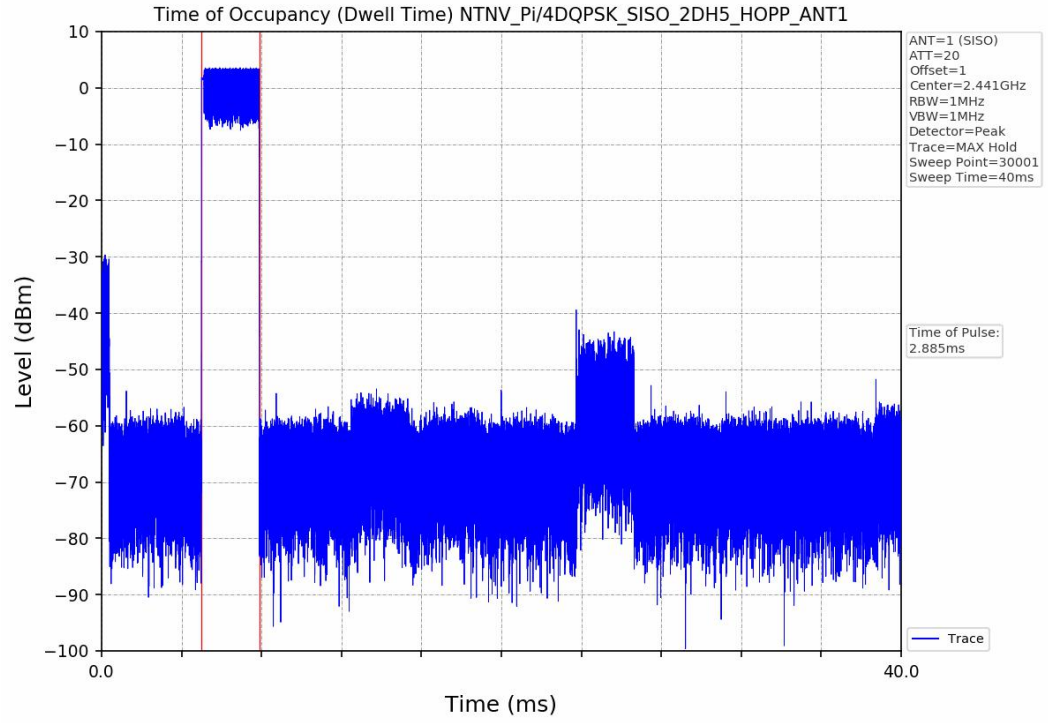

Time of Occupancy (Dwell Time) NTNV_GFSK_SISO_DH5_HOPP_ANT1
Level (dBm)
Time (s)
0.0
31.6
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=31.6s
Number of Pulse:
106
Dwell Time:
305.492ms
Trace

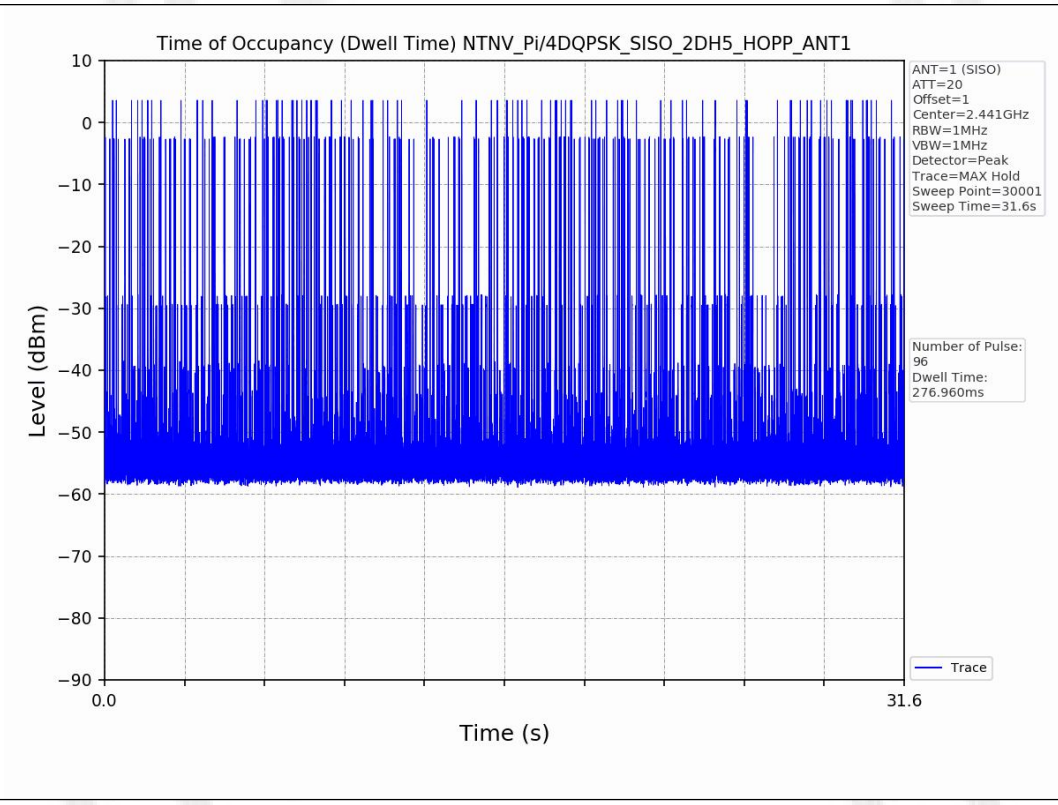

Time of Occupancy (Dwell Time) NTNV_Pi/4DQPSK_SISO_2DH1_HOPP_ANT1
Level (dBm)
Time (ms)
0.0
20.0
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=1MHz
VBW=1MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=20ms
Time of Pulse:
0.385ms
Trace

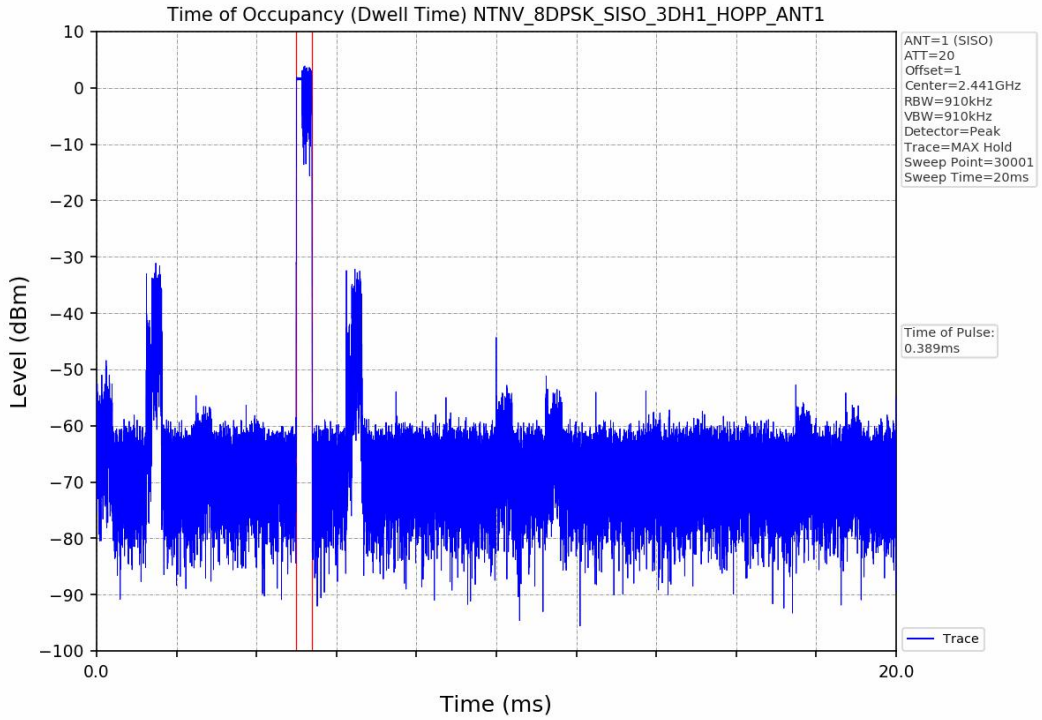

Time of Occupancy (Dwell Time) NTNV_Pi/4DQPSK_SISO_2DH1_HOPP_ANT1
Level (dBm)
Time (s)
0.0
31.6
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=1MHz
VBW=1MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=31.6s
Number of Pulse:
320
Dwell Time:
123.200ms
Trace

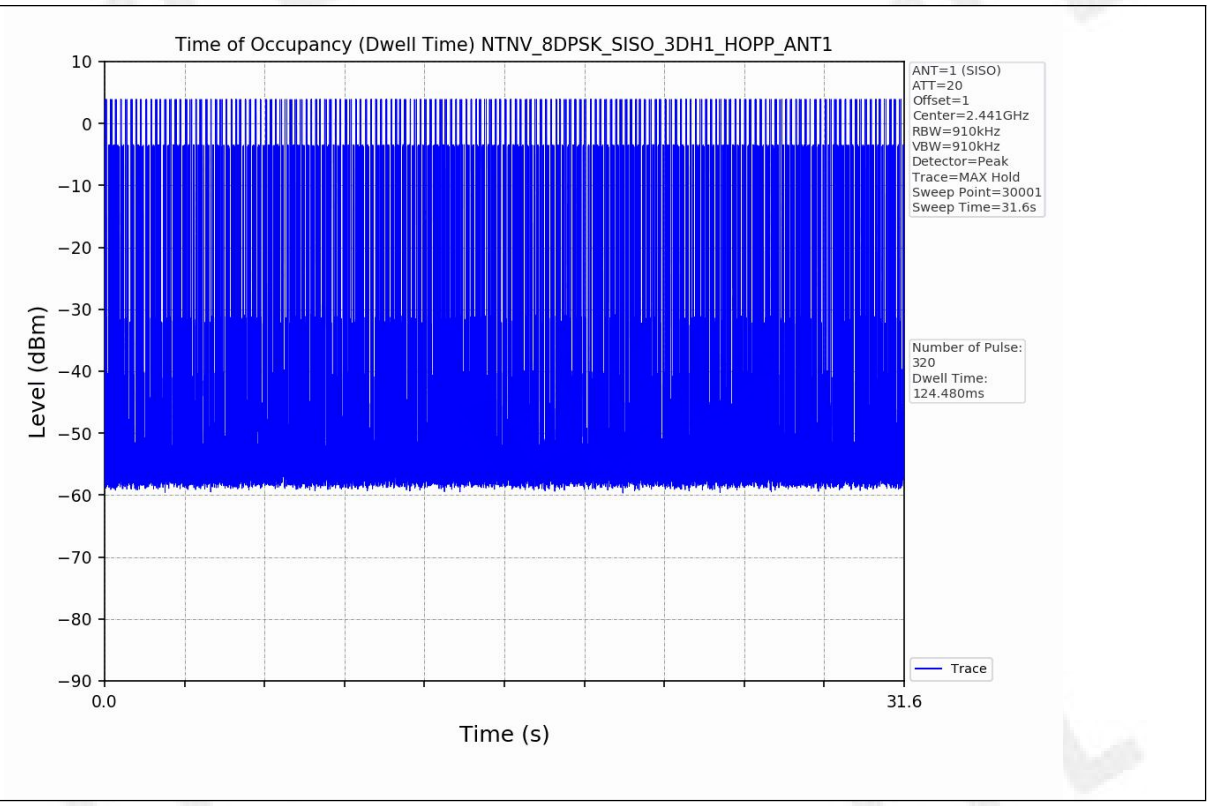

Time of Occupancy (Dwell Time) NTNV_Pi/4DQPSK_SISO_2DH3_HOPP_ANT1
Level (dBm)
Time (ms)
0.0
31.0
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=1MHz
VBW=1MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=32ms
Time of Pulse:
1.587ms
Trace

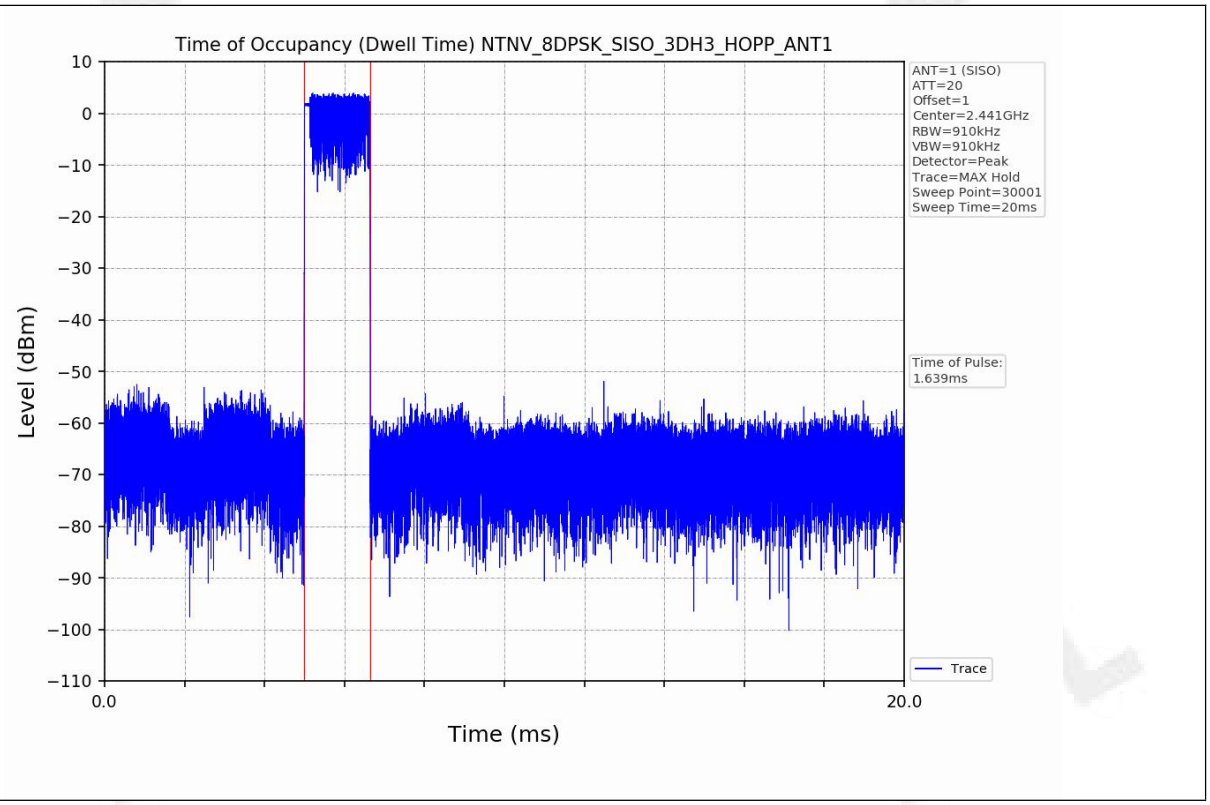

Time of Occupancy (Dwell Time) NTNV_Pi/4DQPSK_SISO_2DH3_HOPP_ANT1
Level (dBm)
Time (s)
0.0
31.6
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=1MHz
VBW=1MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=31.6s
Number of Pulse:
153
Dwell Time:
242.811ms
Trace

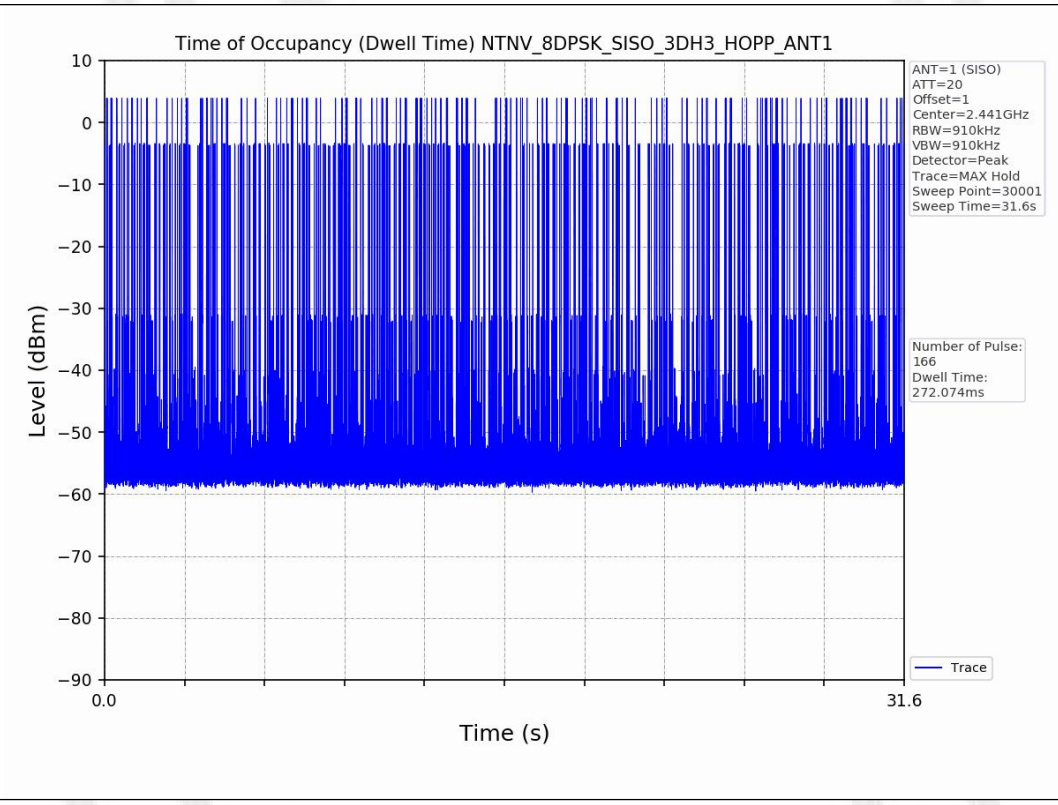

Time of Occupancy (Dwell Time) NTNV_Pi/4DQPSK_SISO_2DH5_HOPP_ANT1
Level (dBm)
Time (ms)
0.0
40.0
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=1MHz
VBW=1MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=40ms
Time of Pulse:
2.885ms
Trace

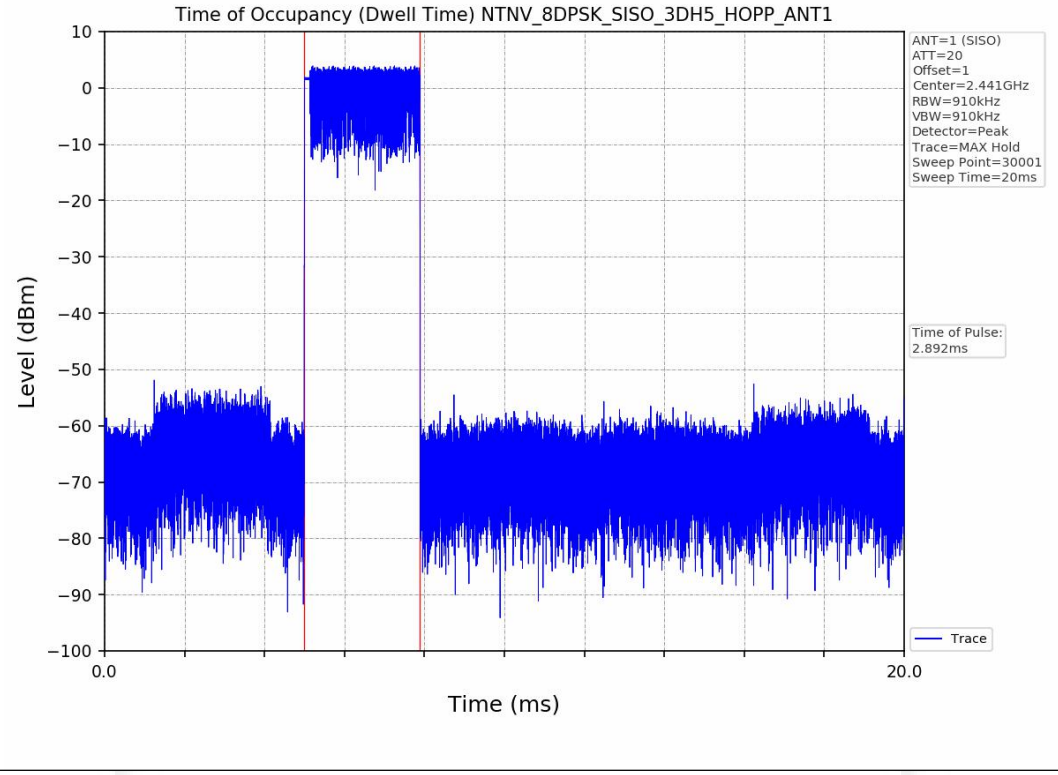

Time of Occupancy (Dwell Time) NTNV_Pi/4DQPSK_SISO_2DH5_HOPP_ANT1
Level (dBm)
Time (s)
0.0
31.6
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=1MHz
VBW=1MHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=31.6s
Number of Pulse:
96
Dwell Time:
276.960ms
Trace

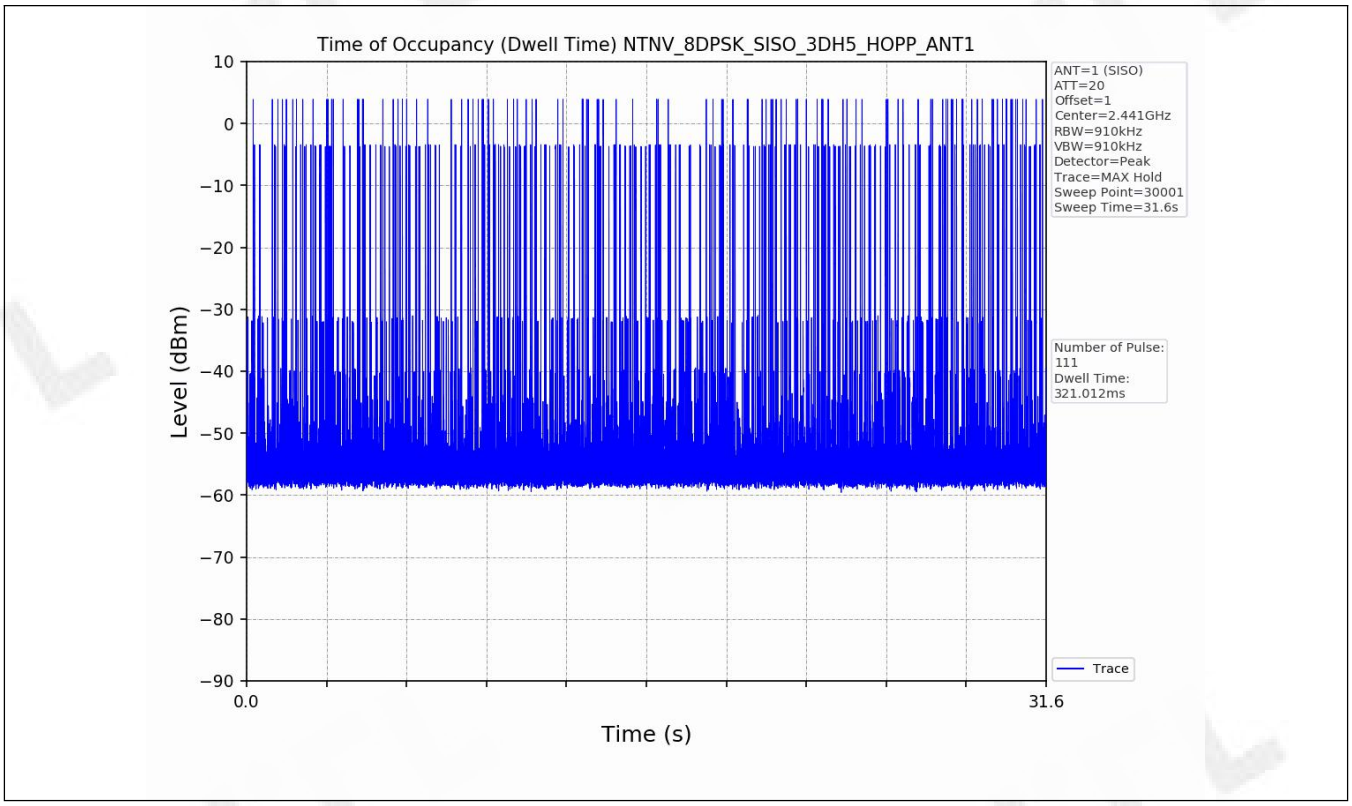

Time of Occupancy (Dwell Time) NTNV_8DPSK_SISO_3DH1_HOPP_ANT1
Level (dBm)
Time (ms)
0.0
20.0
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=20ms
Time of Pulse:
0.389ms
Trace


Time of Occupancy (Dwell Time) NTNV_8DPSK_SISO_3DH1_HOPP_ANT1
Level (dBm)
Time (s)
0.0
31.6
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=31.6s
Number of Pulse:
320
Dwell Time:
124.480ms
Trace


Time of Occupancy (Dwell Time) NTNV_8DPSK_SISO_3DH3_HOPP_ANT1
Level (dBm)
Time (ms)
0.0
20.0
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=20ms
Time of Pulse:
1.639ms
Trace


Time of Occupancy (Dwell Time) NTNV_8DPSK_SISO_3DH3_HOPP_ANT1
Level (dBm)
Time (s)
0.0
31.6
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=31.6s
Number of Pulse:
166
Dwell Time:
272.074ms
Trace


Time of Occupancy (Dwell Time) NTNV_8DPSK_SISO_3DH5_HOPP_ANT1
Level (dBm)
Time (ms)
0.0
20.0
ANT=1 (SISO)
ATT=20
Offset=1
Center=2.441GHz
RBW=910kHz
VBW=910kHz
Detector=Peak
Trace=MAX Hold
Sweep Point=30001
Sweep Time=20ms
Time of Pulse:
2.892ms
Trace

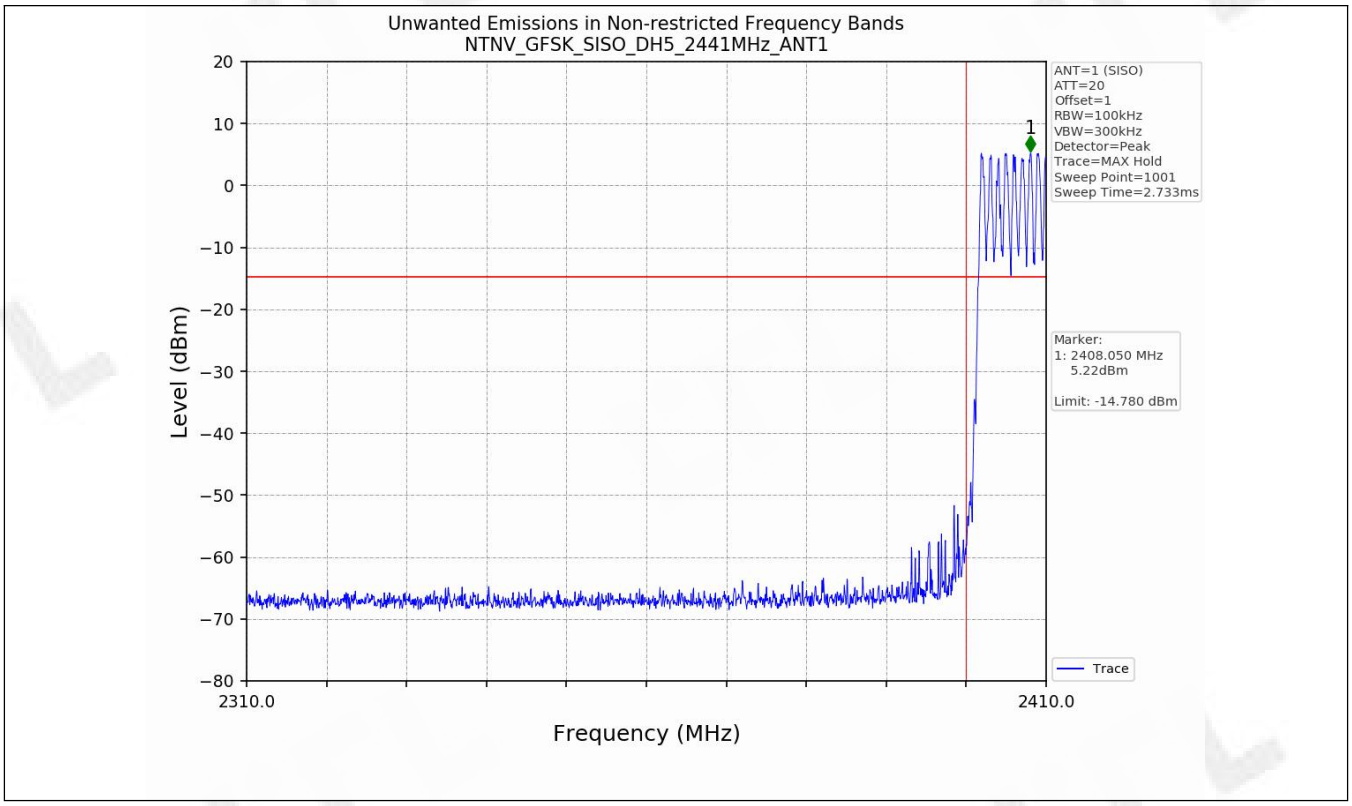


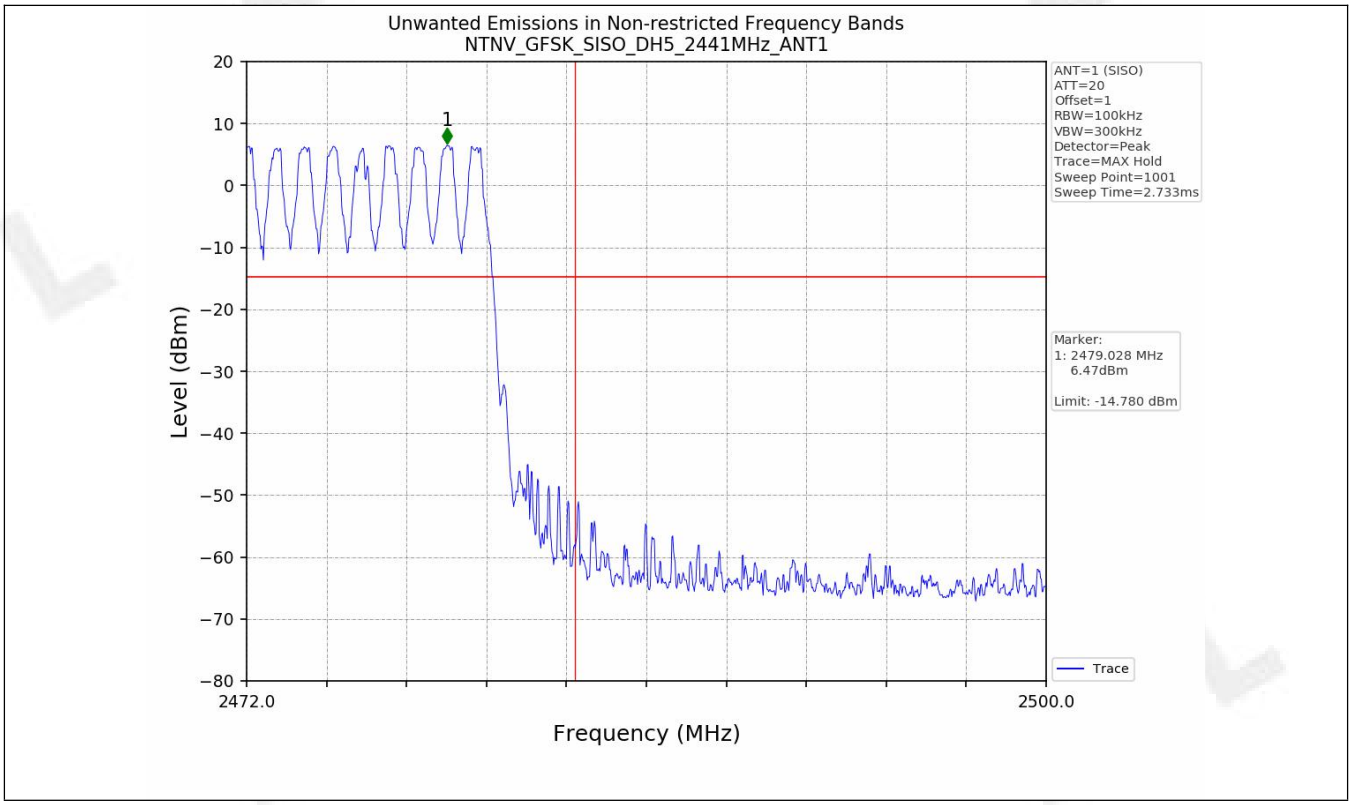
6. Unwanted Emissions in Non-restricted Frequency Bands

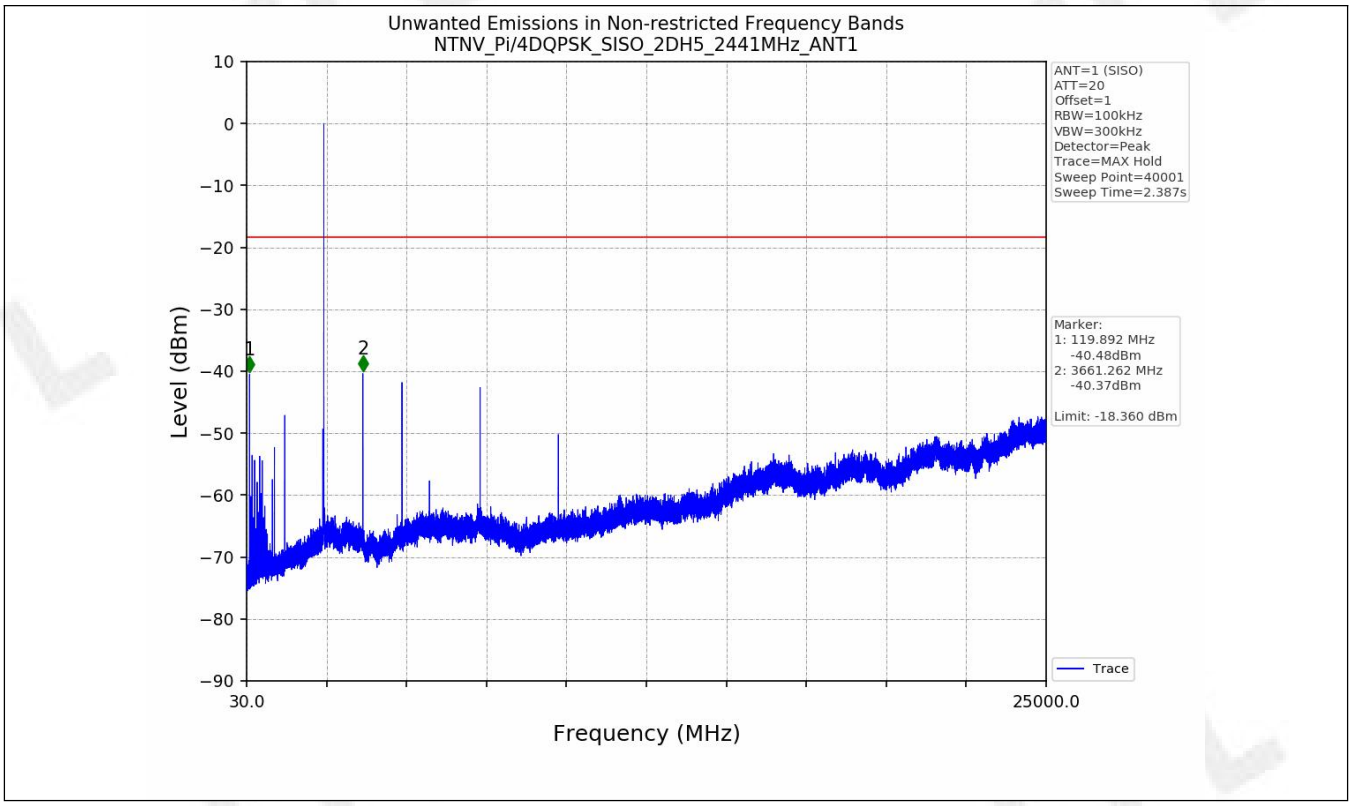
6.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
GFSK	Hopping	SISO	1	Refer to test graph	-14.78	PASS
Pi/4DQPSK	2441	SISO	1	Refer to test graph	-18.36	PASS

6.2 Test Graph


Unwanted Emissions in Non-restricted Frequency Bands
NTNV_GFSK_SISO_DH5_2441MHz_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: 2408.050 MHz
5.22dBm
Limit: -14.780 dBm
Trace
Level (dBm)
Frequency (MHz)
2310.0
2410.0


Unwanted Emissions in Non-restricted Frequency Bands
NTNV_GFSK_SISO_DH5_2441MHz_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: 2479.028 MHz
6.47dBm
Limit: -14.780 dBm
Trace
Level (dBm)
Frequency (MHz)
2472.0
2500.0


Unwanted Emissions in Non-restricted Frequency Bands
NTNV_Pi/4DQPSK_SISO_2DH5_2441MHz_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: 119.892 MHz
-40.48dBm
2: 3661.262 MHz
-40.37dBm
Limit: -18.360 dBm
Trace
Level (dBm)
Frequency (MHz)
30.0
25000.0
10
0
−10
−20
−30
−40
−50
−60
−70
−80
−90
1
2