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Annex for 2.4G Wi-Fi

Test Report No.: CTL2408147031-WR02

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1. Duty Cycle - SA

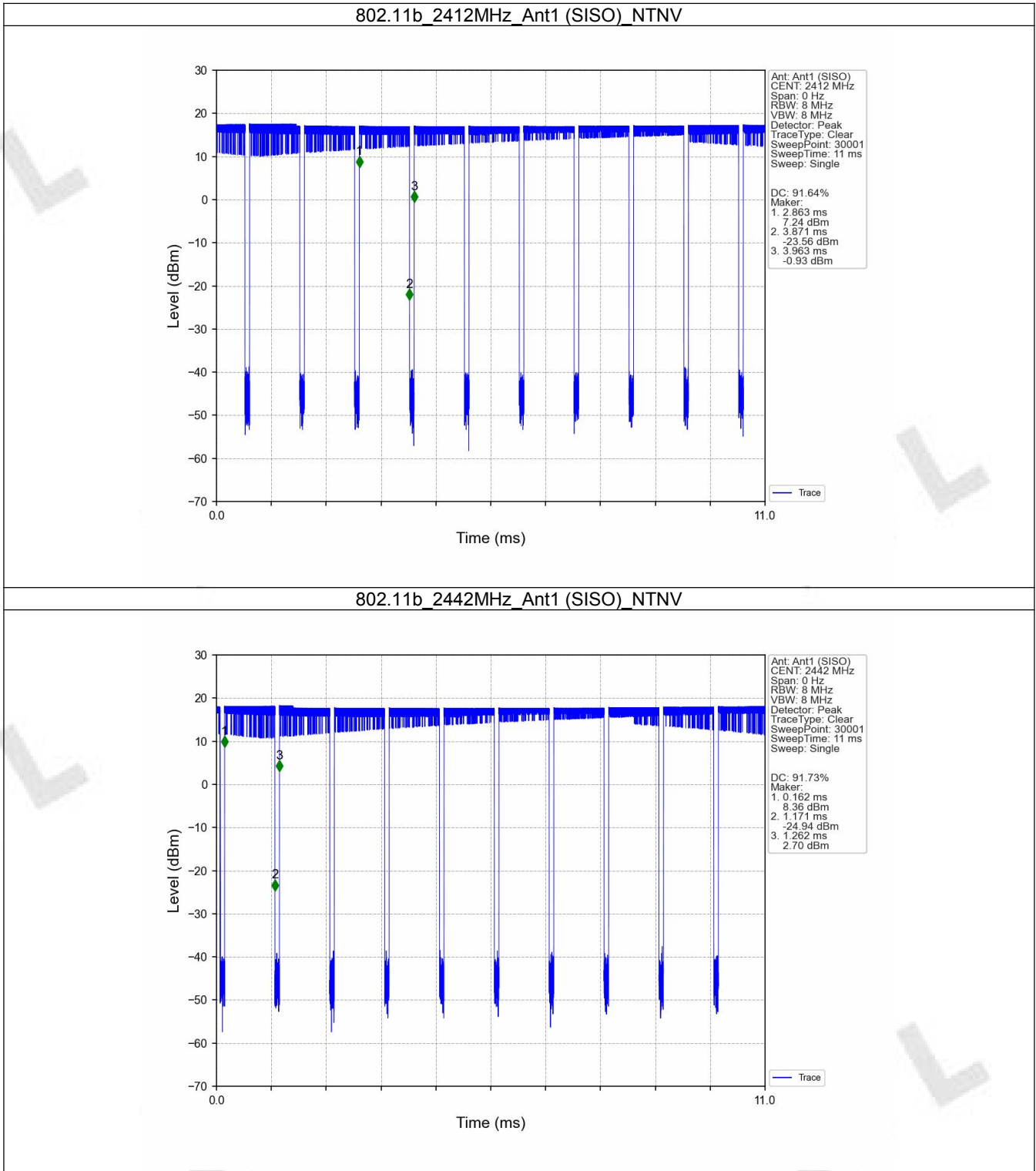
1.1 Test Result

1.1.1 Ant1

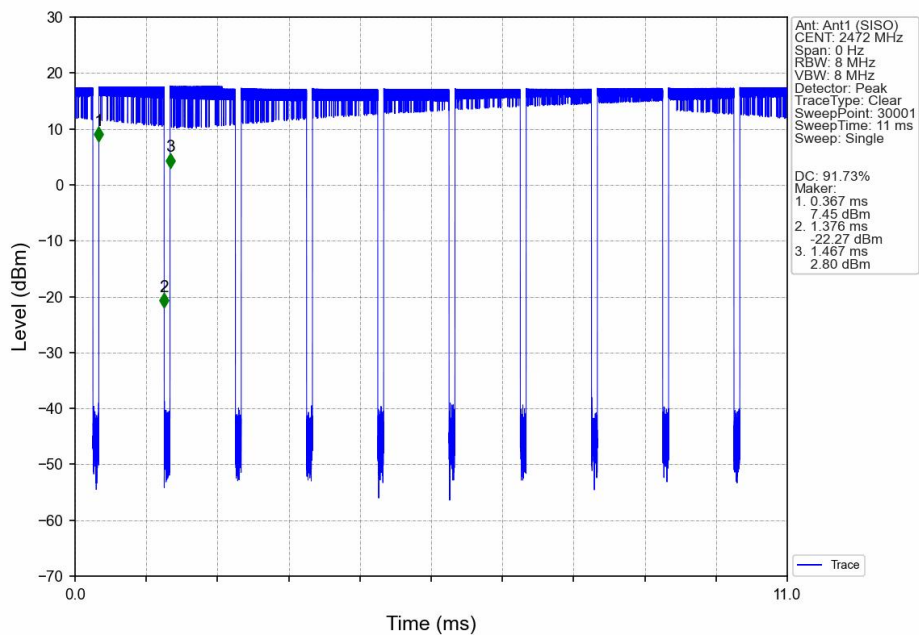
Ant1								
ENV	Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
NTNV	802.11b	SISO	2412	1.008	1.100	91.64	0.38	0.03
			2442	1.009	1.100	91.73	0.38	0.03
			2472	1.009	1.100	91.73	0.38	0.03
	802.11g	SISO	2412	0.617	0.669	92.23	0.35	0.03
			2442	0.617	0.669	92.23	0.35	0.03
			2472	0.617	0.669	92.23	0.35	0.03
	802.11n (HT20)	SISO	2412	0.613	0.665	92.18	0.35	0.04
			2442	0.613	0.665	92.18	0.35	0.04
			2472	0.613	0.665	92.18	0.35	0.04
	802.11n (HT40)	SISO	2422	0.614	0.665	92.33	0.35	0.00
			2442	0.613	0.665	92.18	0.35	0.04
			2462	0.613	0.665	92.18	0.35	0.00

1.2 Test Graph

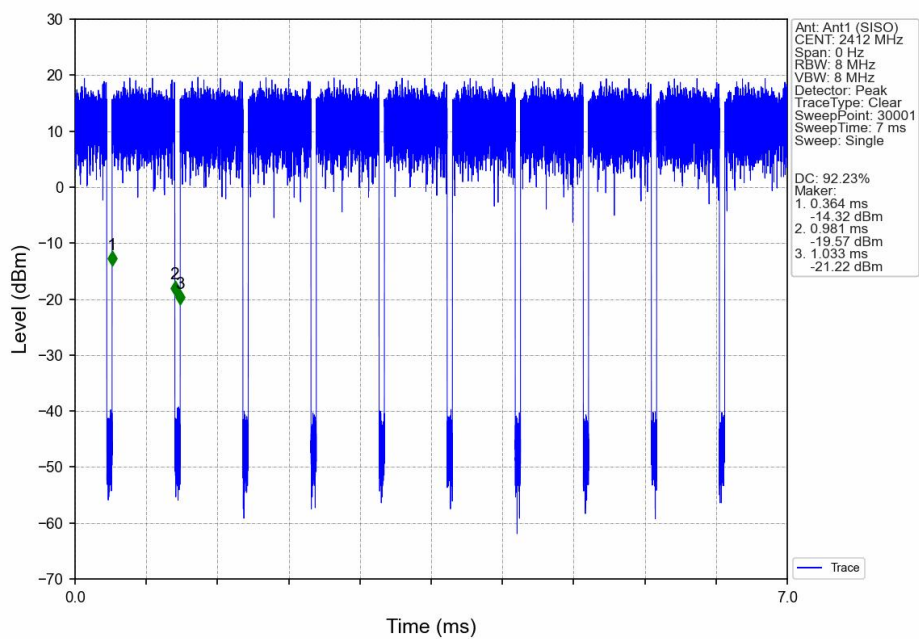
1.2.1 Ant1



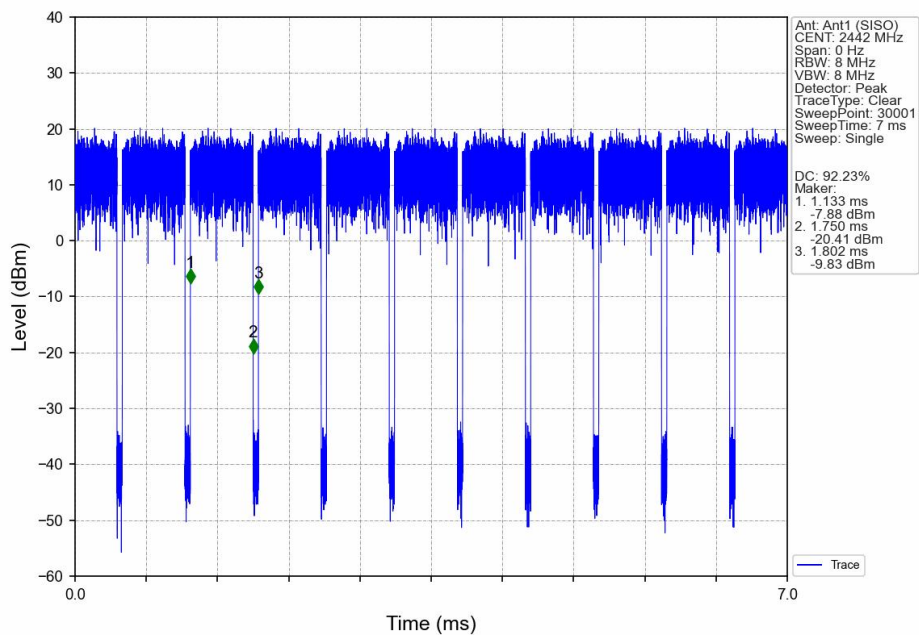
802.11b_2472MHz_Ant1 (SISO)_NTNV



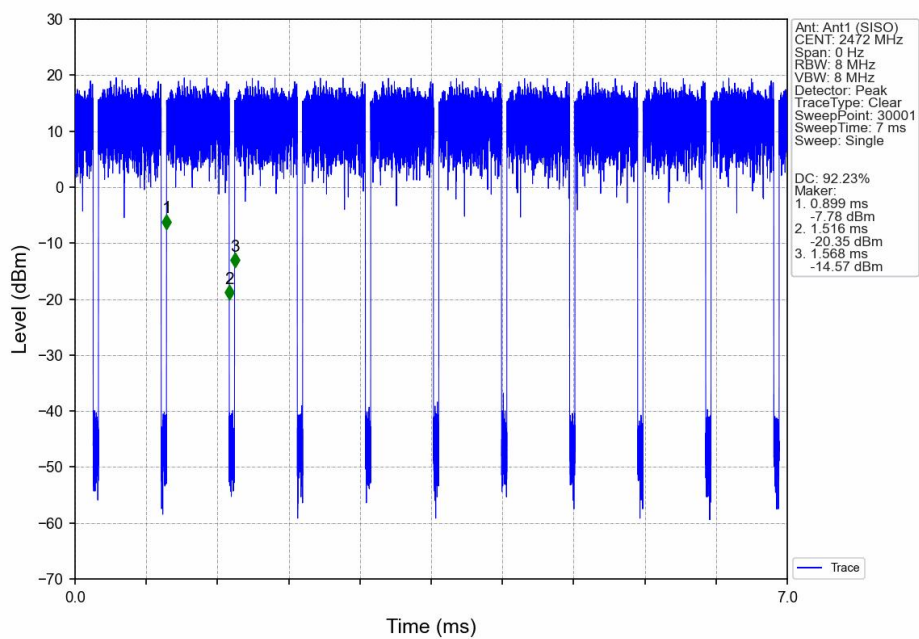
802.11g_2412MHz_Ant1 (SISO)_NTNV



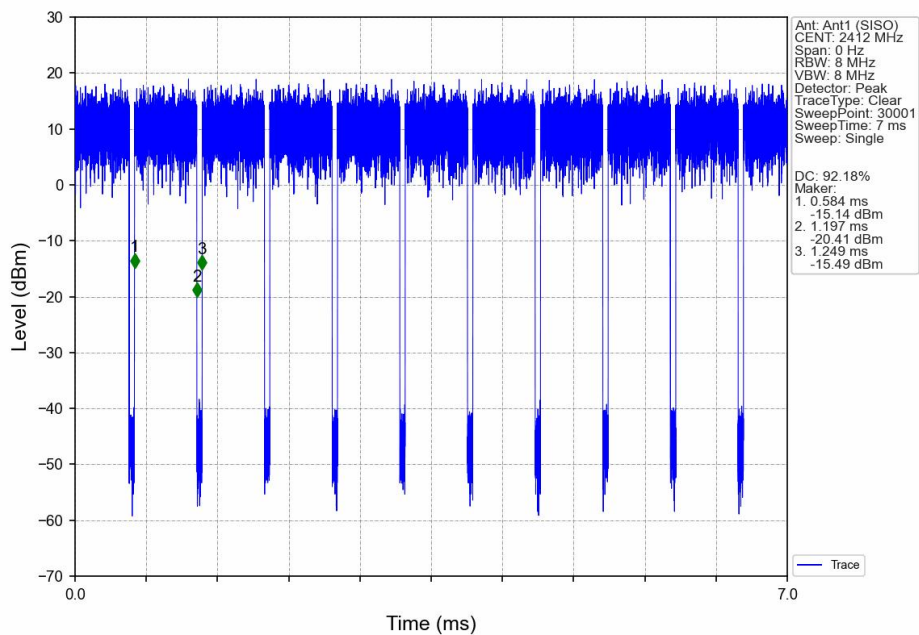
802.11g_2442MHz_Ant1 (SISO)_NTNV



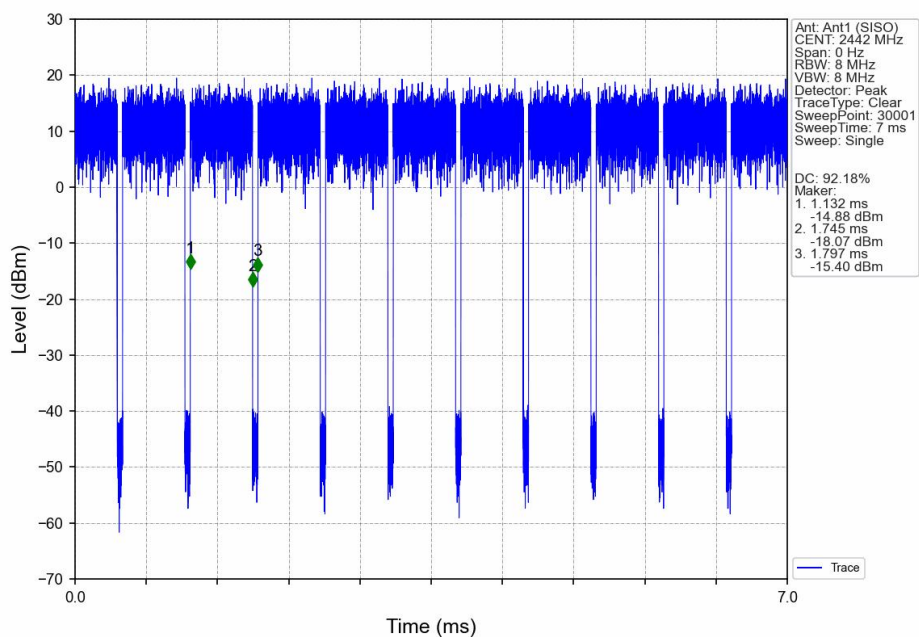
802.11g_2472MHz_Ant1 (SISO)_NTNV

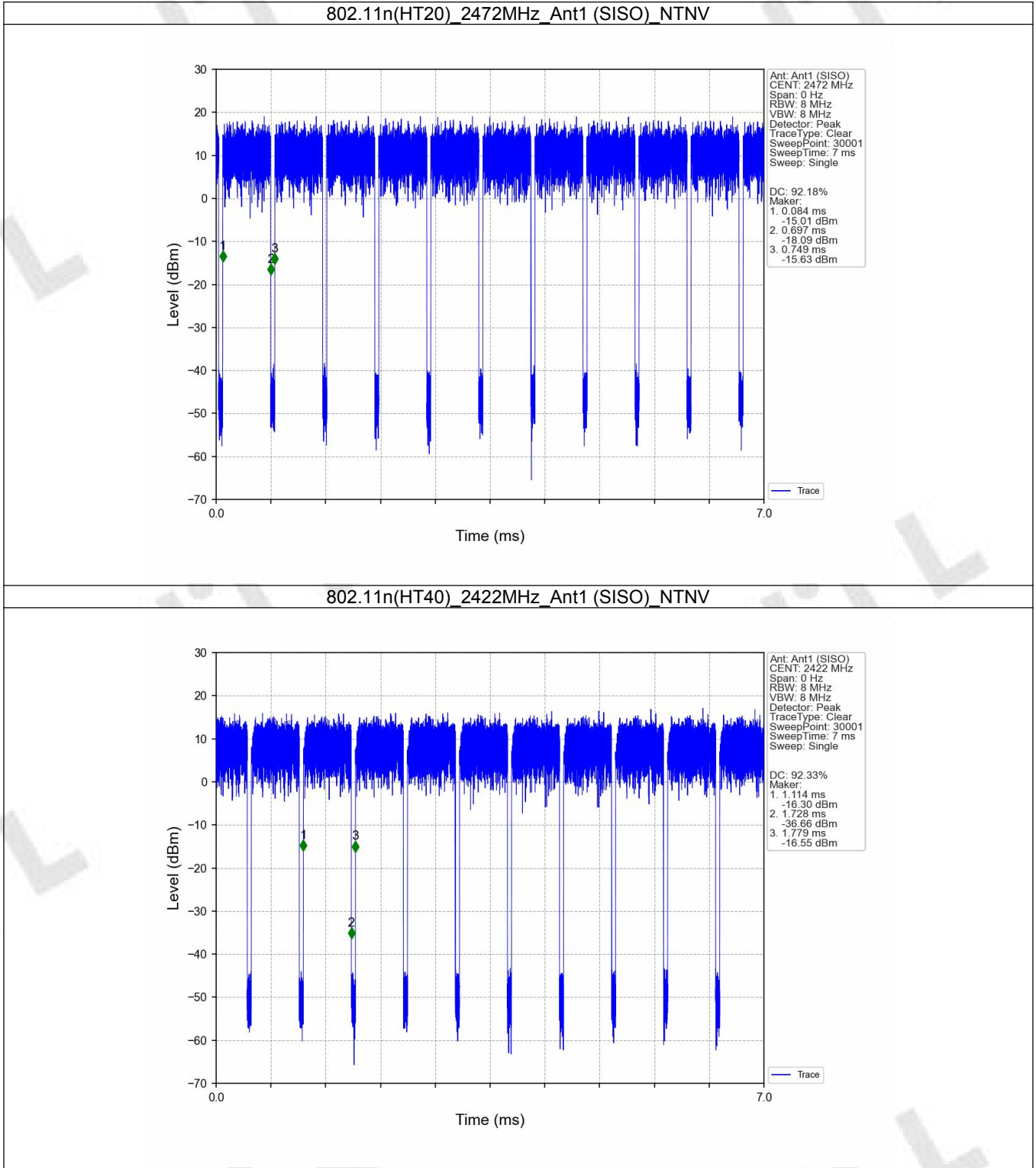


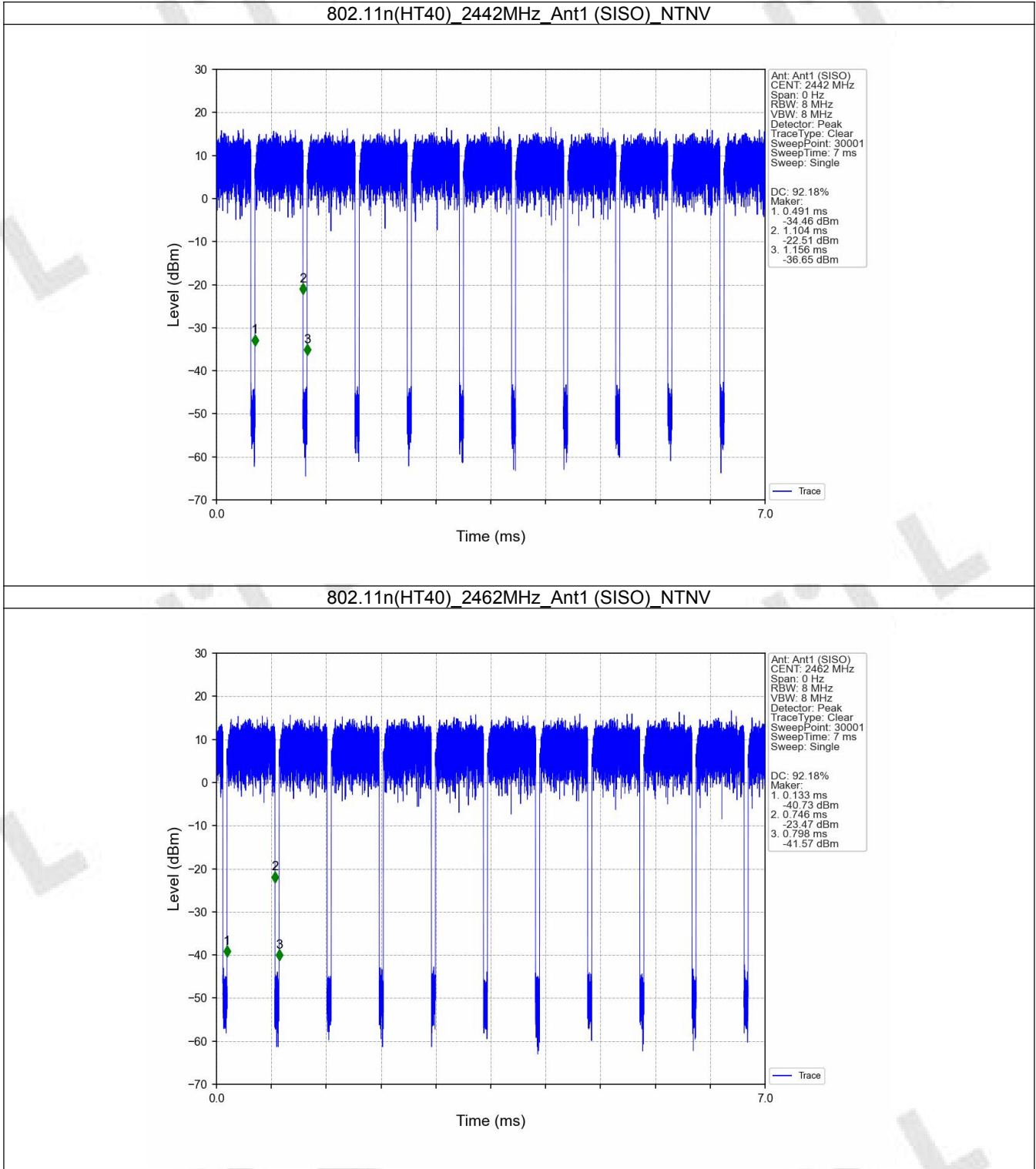
802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_2442MHz_Ant1 (SISO)_NTNV







2. RF Output Power, Duty Cycle, Tx-sequence, Tx-gap, Medium Utilization

2.1 Test Result

2.1.1 Power

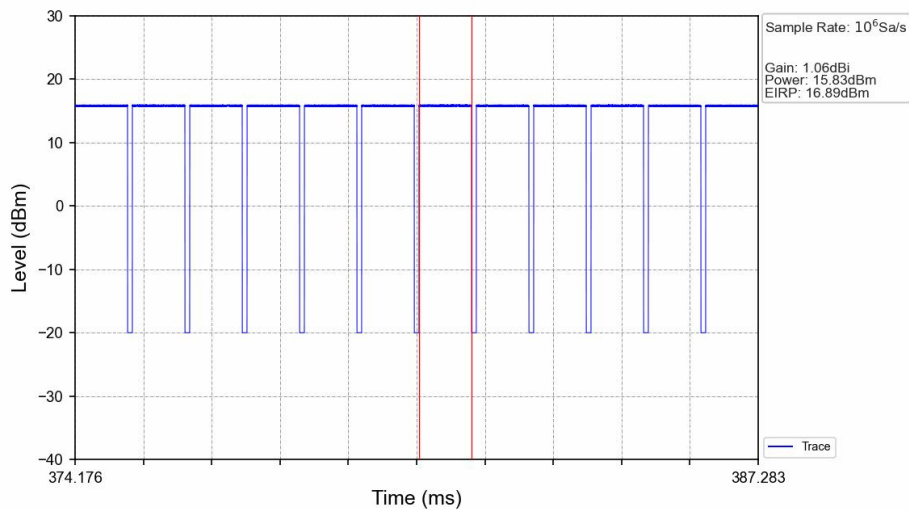
ENV	Mode	TX Type	Frequency (MHz)	ANT	Gain (dBi)	Power (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
NTNV	802.11b	SISO	2412	1	1.06	15.83	16.89	<=20	Pass
			2442	1	1.06	16.32	17.38	<=20	Pass
			2472	1	1.06	15.85	16.91	<=20	Pass
	802.11g	SISO	2412	1	1.06	15.33	16.39	<=20	Pass
			2442	1	1.06	15.99	17.05	<=20	Pass
			2472	1	1.06	15.44	16.50	<=20	Pass
	802.11n (HT20)	SISO	2412	1	1.06	14.48	15.54	<=20	Pass
			2442	1	1.06	14.91	15.97	<=20	Pass
			2472	1	1.06	14.60	15.66	<=20	Pass
	802.11n (HT40)	SISO	2422	1	1.06	13.86	14.92	<=20	Pass
			2442	1	1.06	14.66	15.72	<=20	Pass
			2462	1	1.06	14.32	15.38	<=20	Pass
HTNV	802.11b	SISO	2412	1	1.06	15.77	16.83	<=20	Pass
			2442	1	1.06	16.31	17.37	<=20	Pass
			2472	1	1.06	15.86	16.92	<=20	Pass
	802.11g	SISO	2412	1	1.06	15.29	16.35	<=20	Pass
			2442	1	1.06	15.99	17.05	<=20	Pass
			2472	1	1.06	15.44	16.50	<=20	Pass
	802.11n (HT20)	SISO	2412	1	1.06	14.46	15.52	<=20	Pass
			2442	1	1.06	15.09	16.15	<=20	Pass
			2472	1	1.06	14.61	15.67	<=20	Pass
	802.11n (HT40)	SISO	2422	1	1.06	14.10	15.16	<=20	Pass
			2442	1	1.06	14.64	15.70	<=20	Pass
			2462	1	1.06	14.32	15.38	<=20	Pass
LTVN	802.11b	SISO	2412	1	1.06	15.65	16.71	<=20	Pass
			2442	1	1.06	16.31	17.37	<=20	Pass
			2472	1	1.06	15.83	16.89	<=20	Pass
	802.11g	SISO	2412	1	1.06	15.24	16.30	<=20	Pass
			2442	1	1.06	15.98	17.04	<=20	Pass
			2472	1	1.06	15.42	16.48	<=20	Pass
	802.11n (HT20)	SISO	2412	1	1.06	14.45	15.51	<=20	Pass
			2442	1	1.06	15.09	16.15	<=20	Pass
			2472	1	1.06	14.59	15.65	<=20	Pass
	802.11n (HT40)	SISO	2422	1	1.06	14.09	15.15	<=20	Pass
			2442	1	1.06	14.63	15.69	<=20	Pass
			2462	1	1.06	14.32	15.38	<=20	Pass

Note1: E.I.R.P = Measured Power + Antenna Gain

2.2 Test Graph

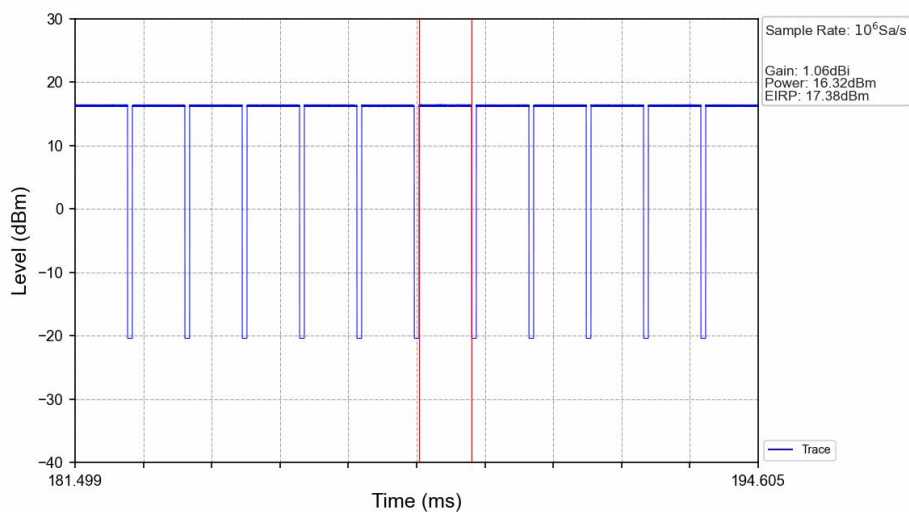
2.2.1 Power

802.11b_2412MHz_Ant1 (SISO)_NTNV

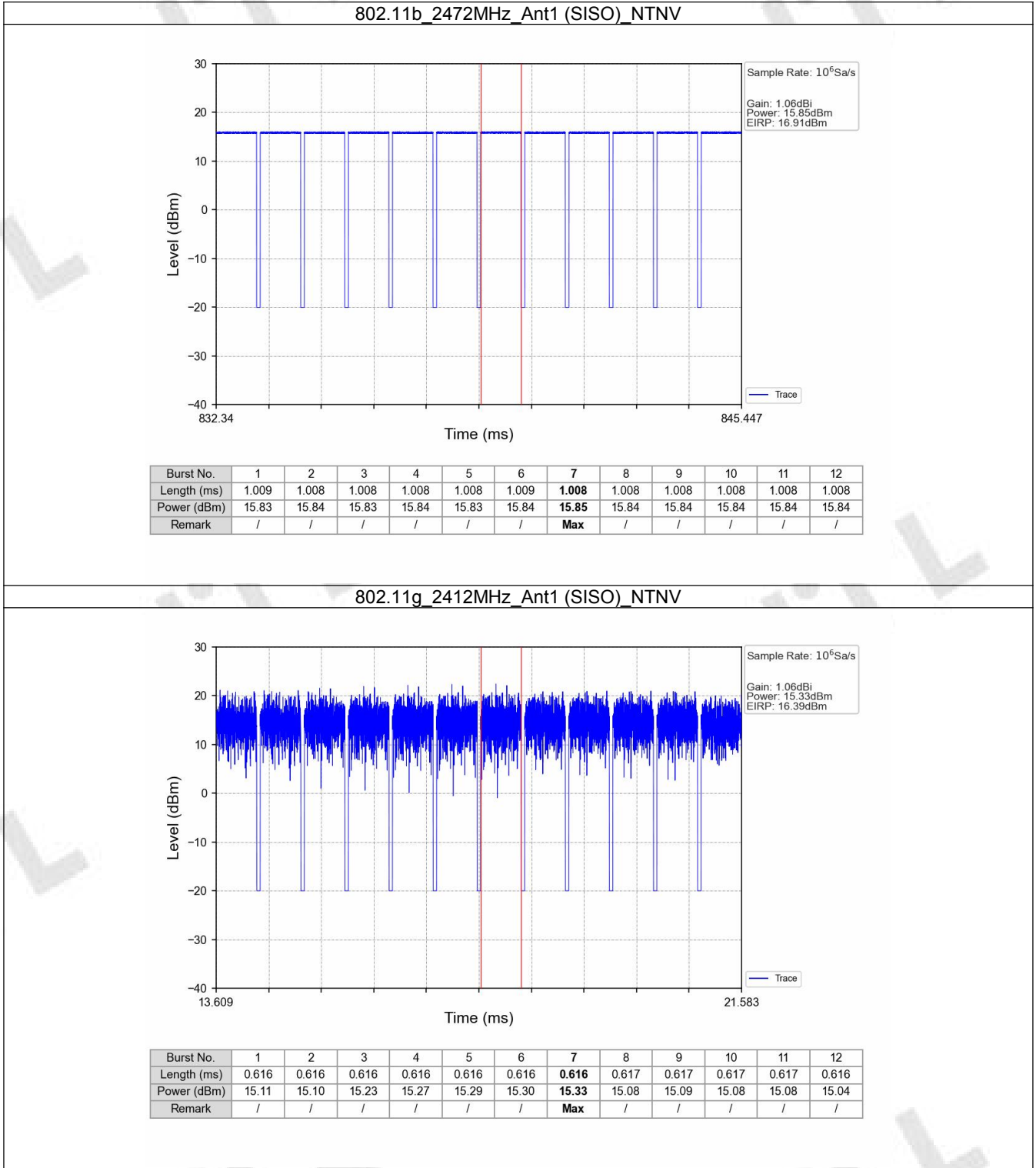


Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.008	1.008	1.008	1.008	1.009	1.008	1.008	1.008	1.008	1.008	1.008
Power (dBm)	15.81	15.82	15.81	15.81	15.81	15.81	15.83	15.81	15.81	15.82	15.81	15.80
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

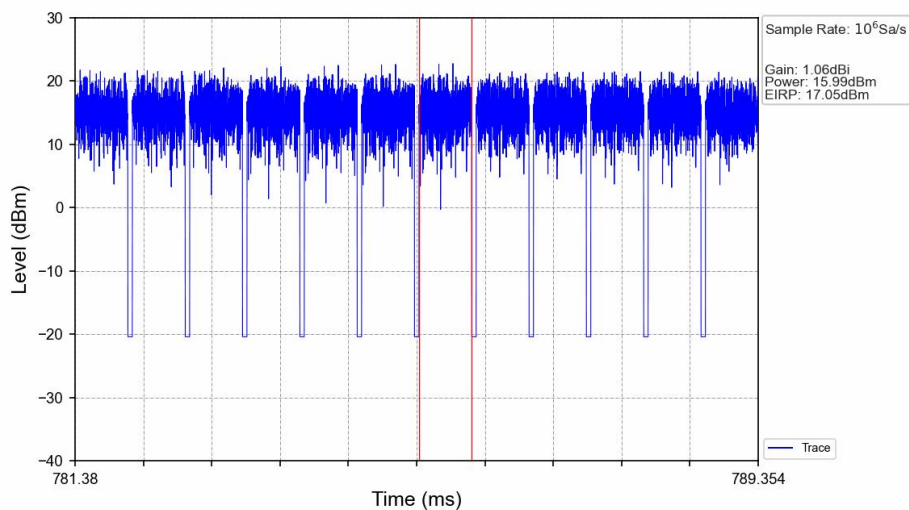
802.11b_2442MHz_Ant1 (SISO)_NTNV



Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.007	1.008	1.008	1.008	1.008	1.008	1.009	1.009	1.008	1.008	1.008
Power (dBm)	16.31	16.30	16.30	16.30	16.30	16.29	16.32	16.30	16.30	16.31	16.31	16.30
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

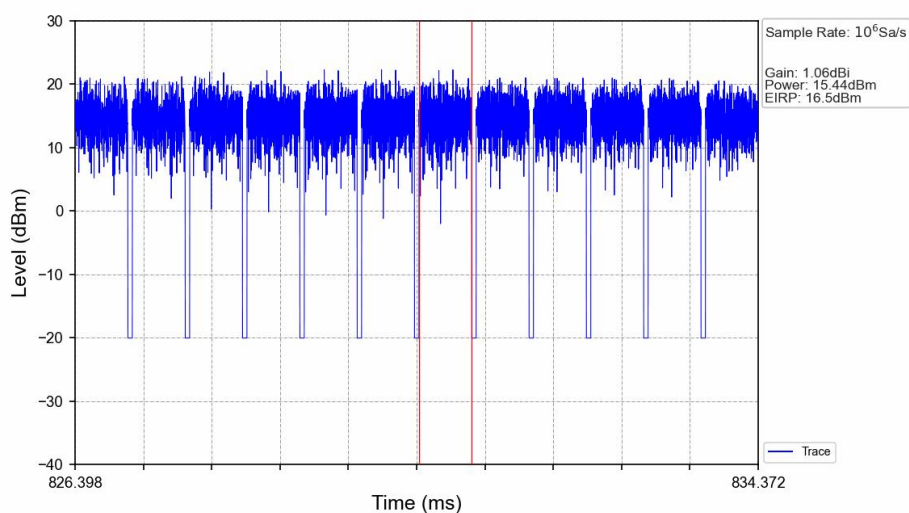


802.11g_2442MHz_Ant1 (SISO)_NTNV



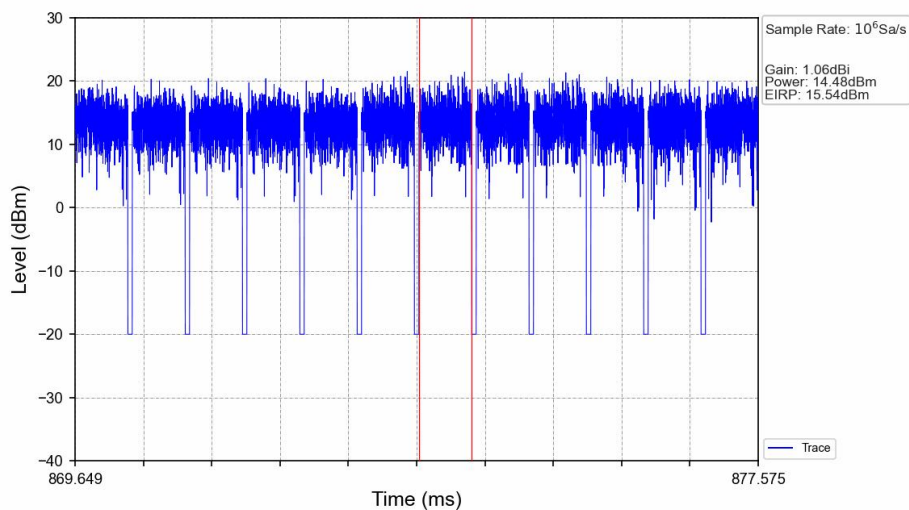
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	15.81	15.80	15.94	15.93	15.94	15.95	15.99	15.76	15.77	15.78	15.77	15.77
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2472MHz_Ant1 (SISO)_NTNV



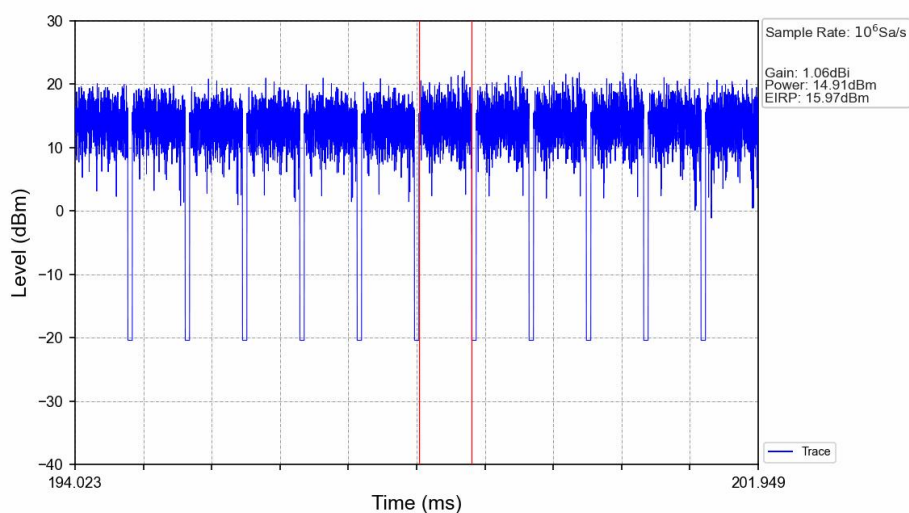
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	15.23	15.21	15.39	15.42	15.42	15.42	15.44	15.22	15.22	15.22	15.22	15.18
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



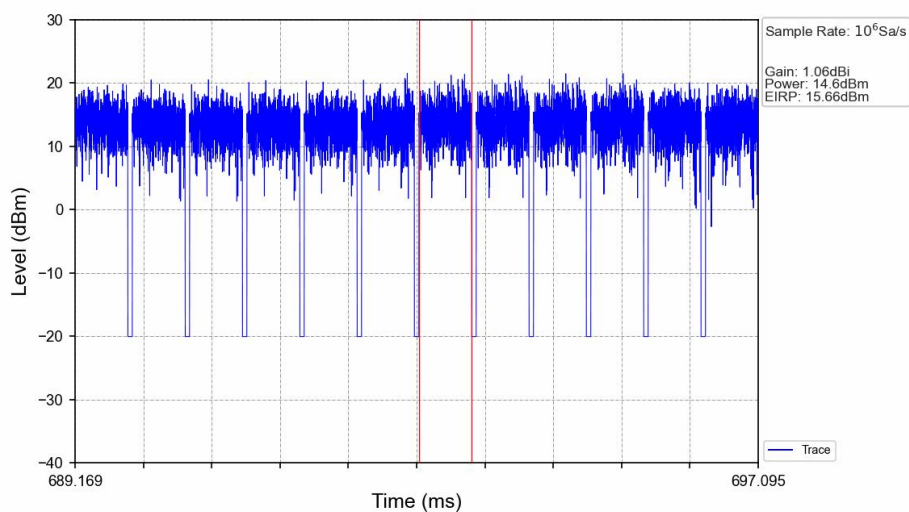
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.17	13.90	13.90	13.90	13.90	14.48	14.48	14.47	14.47	14.32	14.10	14.10
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2442MHz_Ant1 (SISO)_NTNV



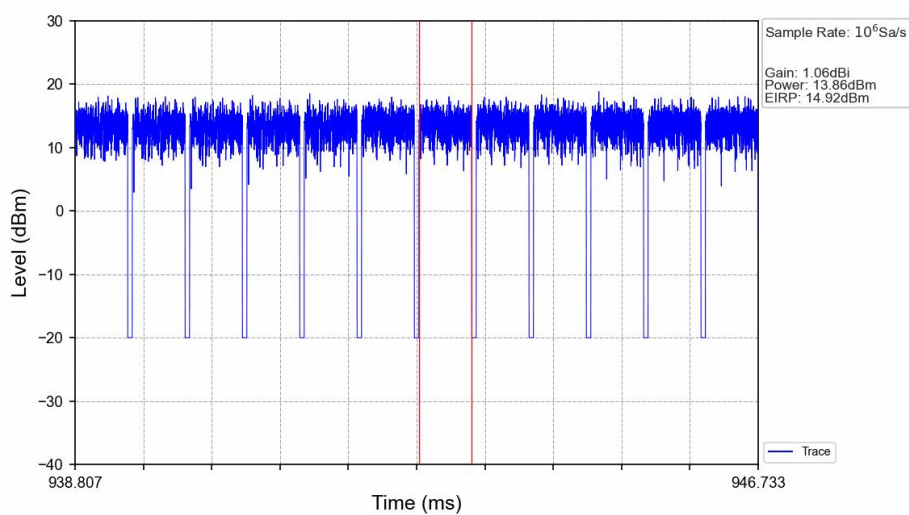
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.63	14.60	14.32	14.33	14.33	14.33	14.91	14.90	14.91	14.90	14.73	14.52
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV



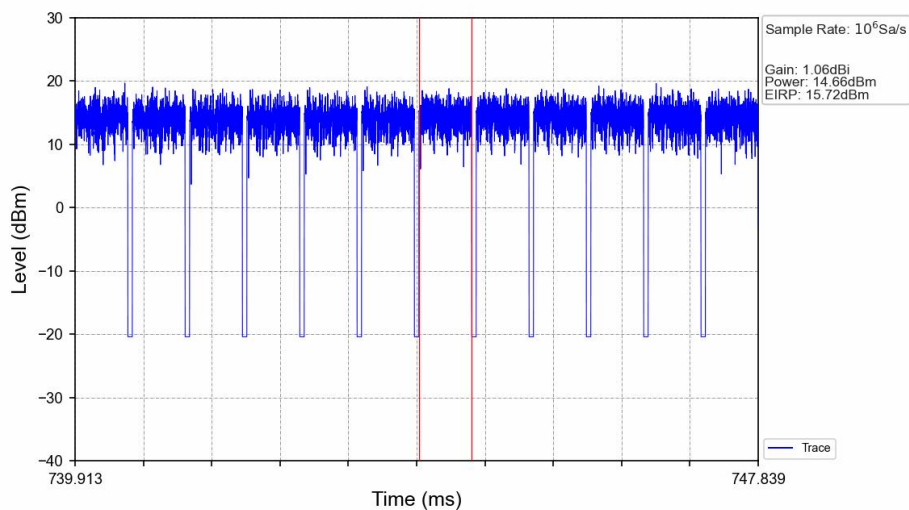
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.28	14.17	14.03	14.03	14.02	14.16	14.60	14.59	14.58	14.56	14.34	14.21
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV



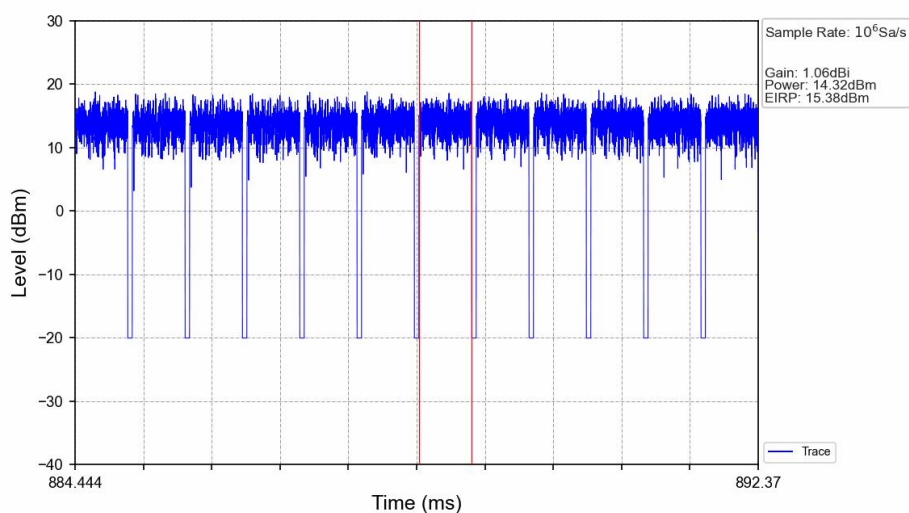
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613
Power (dBm)	13.67	13.65	13.65	13.64	13.69	13.85	13.86	13.86	13.84	13.77	13.72	13.75
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2442MHz_Ant1 (SISO)_NTNV



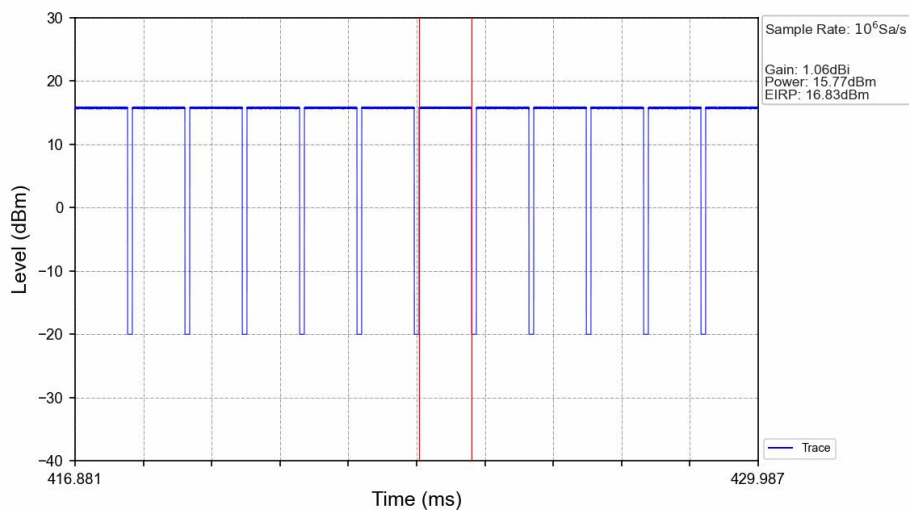
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613
Power (dBm)	14.51	14.39	14.43	14.43	14.43	14.42	14.66	14.64	14.63	14.62	14.55	14.50
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2462MHz_Ant1 (SISO)_NTNV



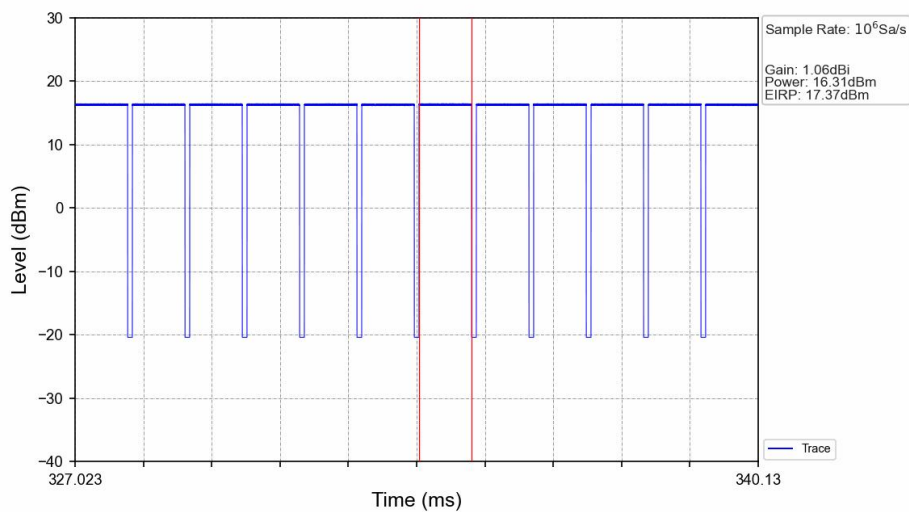
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613
Power (dBm)	14.11	14.11	14.11	14.10	14.10	14.23	14.32	14.31	14.30	14.30	14.17	14.18
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2412MHz_Ant1 (SISO)_HTNV



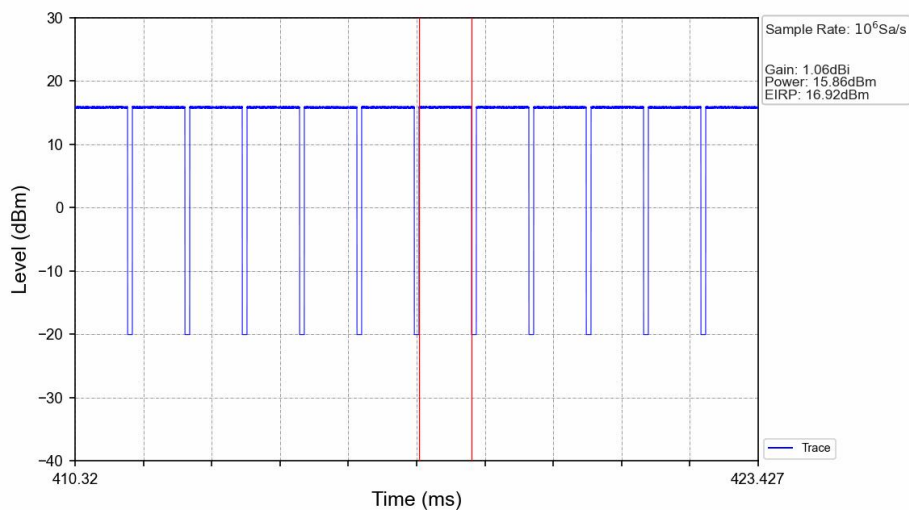
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.008	1.009	1.009	1.008
Power (dBm)	15.75	15.76	15.76	15.76	15.76	15.76	15.77	15.76	15.76	15.76	15.75	15.75
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2442MHz_Ant1 (SISO)_HTNV



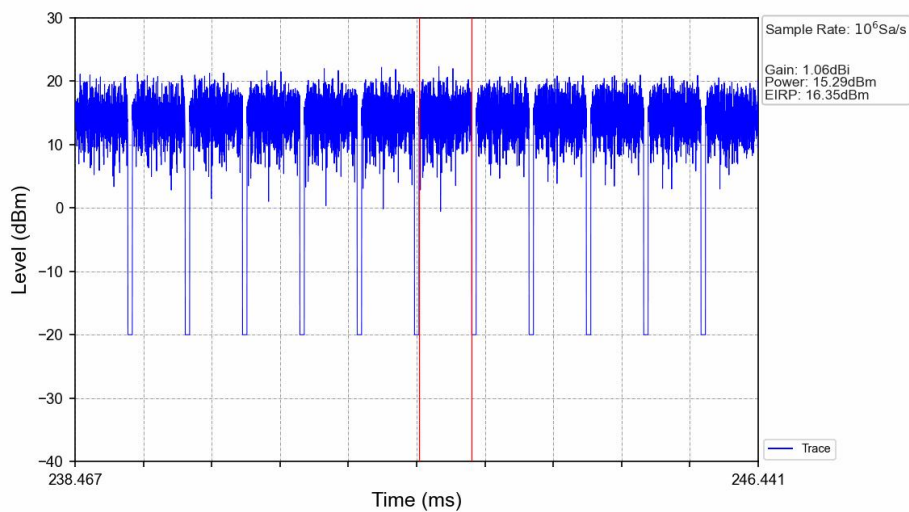
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.009	1.009	1.008	1.008	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.009
Power (dBm)	16.30	16.30	16.30	16.31	16.30	16.29	16.31	16.30	16.30	16.30	16.30	16.29
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2472MHz_Ant1 (SISO)_HTNV



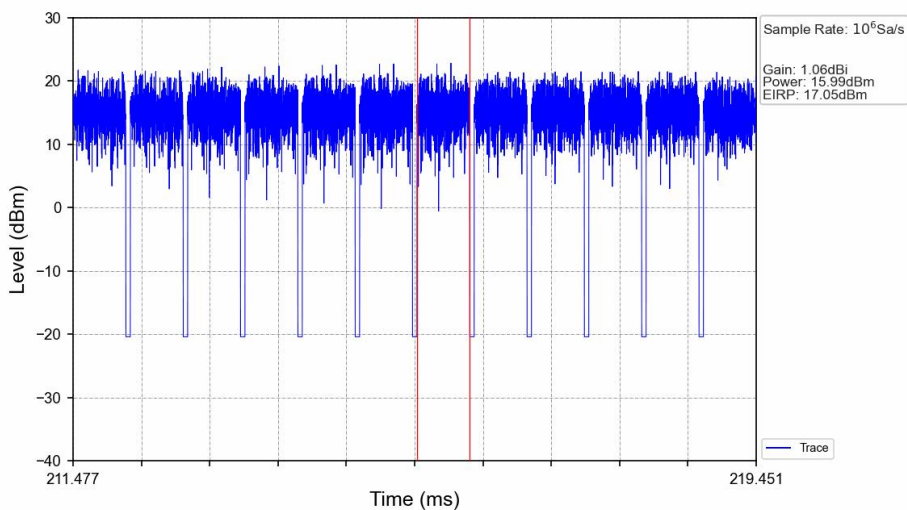
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Length (ms)	1.008	1.008	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008
Power (dBm)	15.85	15.84	15.85	15.85	15.84	15.84	15.86	15.85	15.84	15.85	15.84	15.84
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2412MHz_Ant1 (SISO)_HTNV



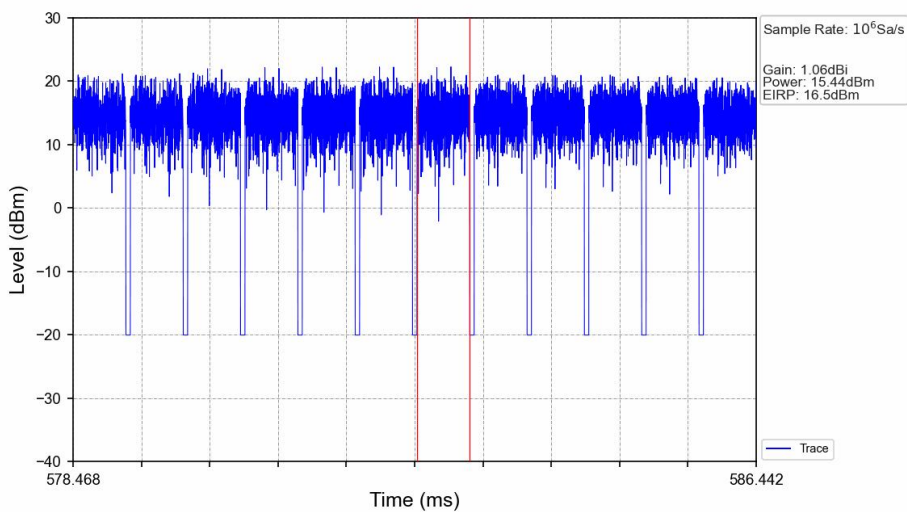
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	15.08	15.06	15.21	15.22	15.23	15.24	15.29	15.03	15.04	15.04	15.04	15.05
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2442MHz_Ant1 (SISO)_HTNV



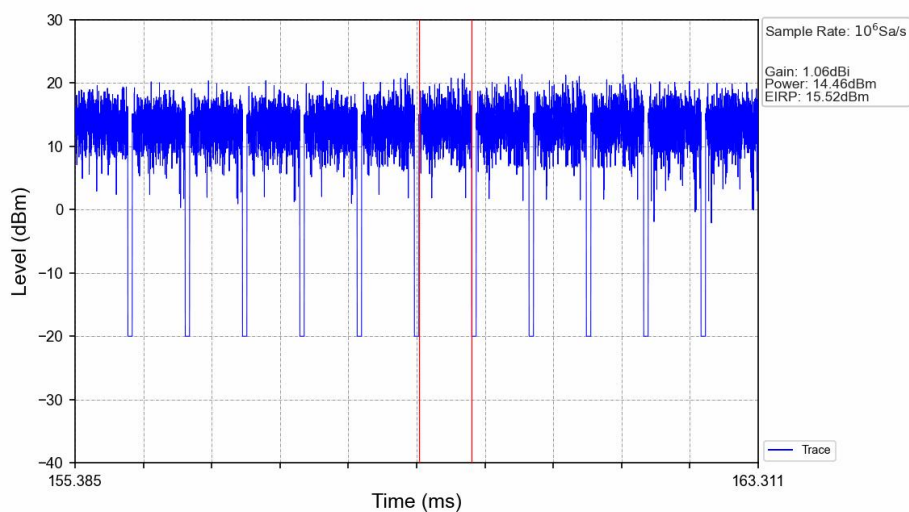
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	15.81	15.79	15.93	15.94	15.95	15.96	15.99	15.78	15.78	15.78	15.78	15.77
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2472MHz_Ant1 (SISO)_HTNV



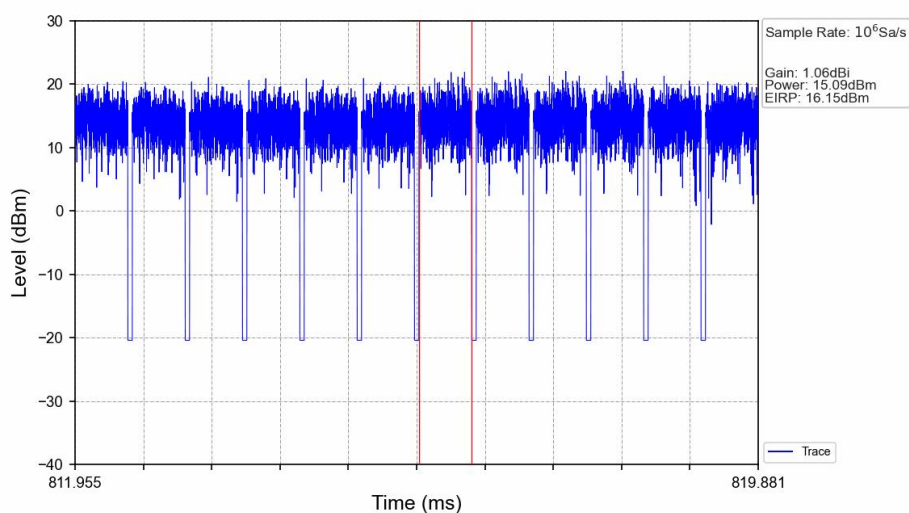
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	15.21	15.19	15.38	15.41	15.42	15.41	15.44	15.21	15.21	15.21	15.21	15.20
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2412MHz_Ant1 (SISO)_HTNV



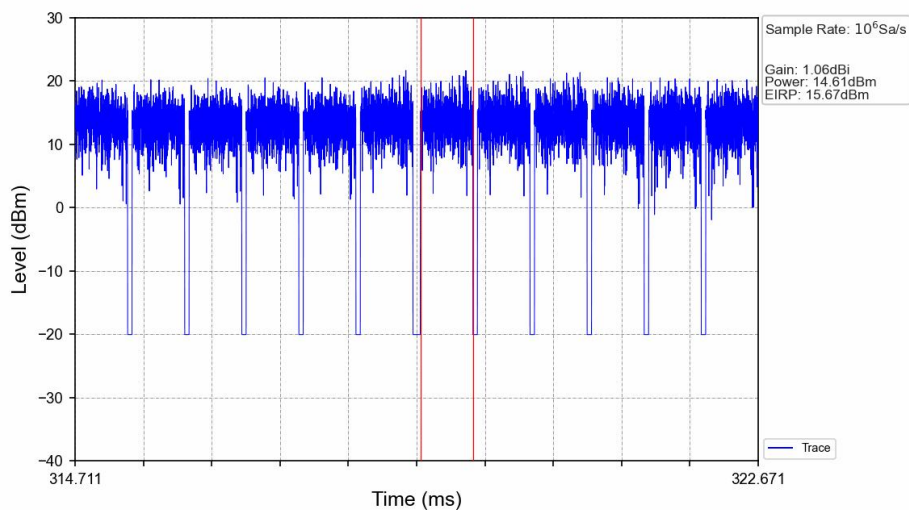
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.17	13.87	13.87	13.87	13.87	14.15	14.46	14.46	14.45	14.44	14.07	14.06
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2442MHz_Ant1 (SISO)_HTNV



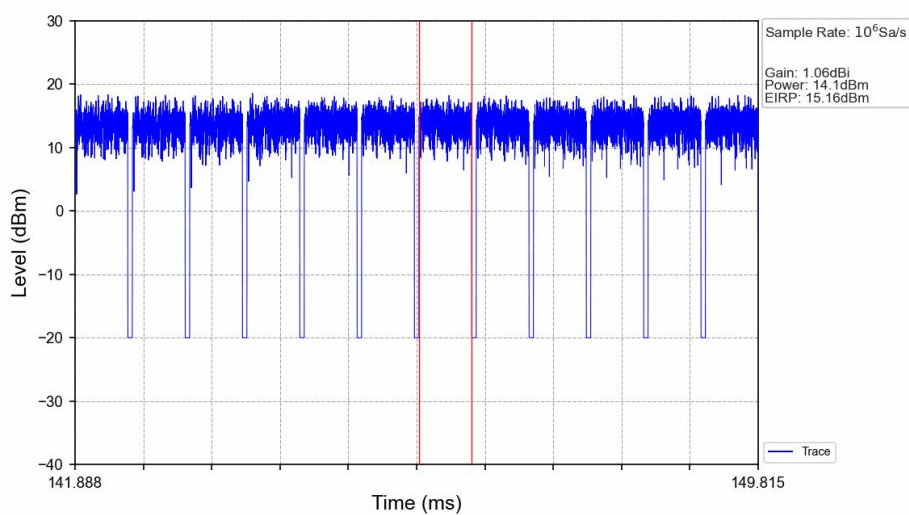
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.77	14.70	14.52	14.52	14.52	14.51	15.09	15.08	15.07	15.05	14.86	14.70
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2472MHz_Ant1 (SISO)_HTNV



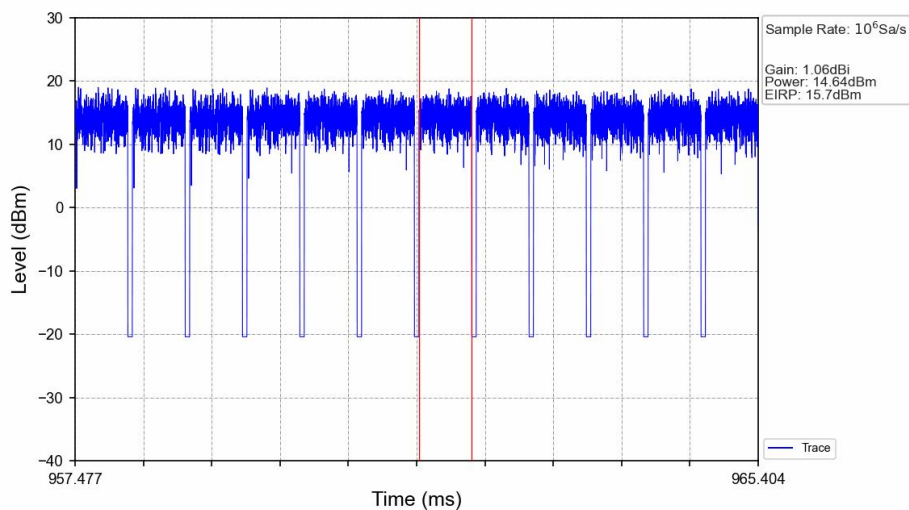
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.28	14.02	14.03	14.03	14.03	14.58	14.61	14.61	14.60	14.44	14.23	14.22
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2422MHz_Ant1 (SISO)_HTNV



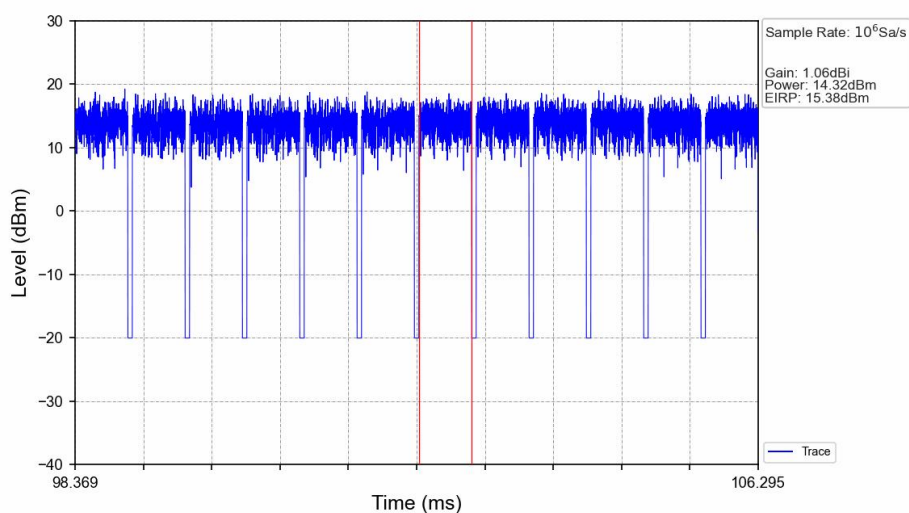
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613	0.613	0.613
Power (dBm)	13.91	13.90	13.89	14.01	14.08	14.09	14.10	14.09	13.94	13.94	13.96	13.98
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2442MHz_Ant1 (SISO)_HTNV



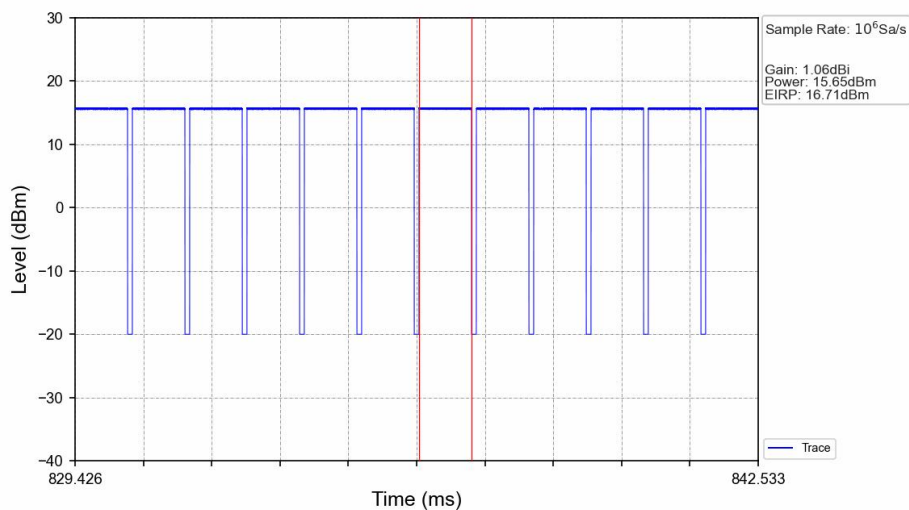
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613	0.613	0.613
Power (dBm)	14.45	14.44	14.43	14.55	14.61	14.64	14.64	14.63	14.50	14.48	14.48	14.49
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2462MHz_Ant1 (SISO)_HTNV



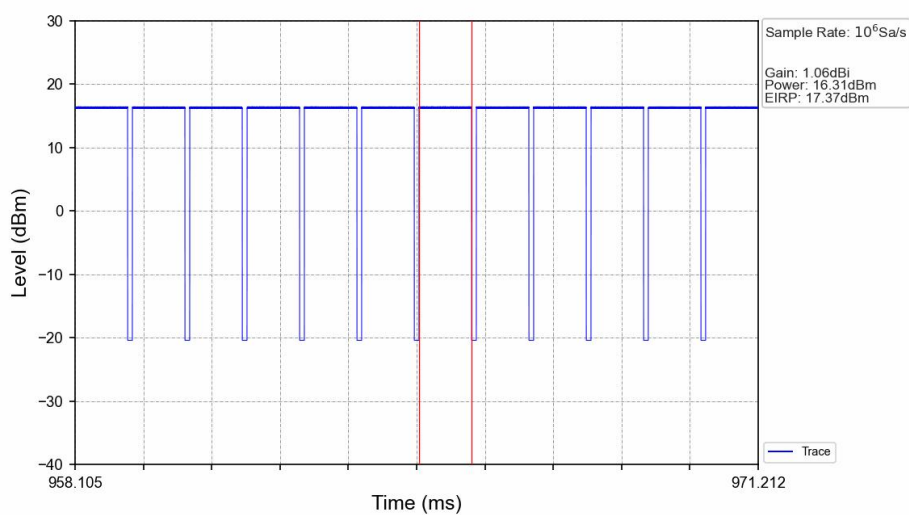
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613
Power (dBm)	14.17	14.10	14.11	14.10	14.10	14.14	14.32	14.30	14.29	14.27	14.17	14.18
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2412MHz_Ant1 (SISO)_LTV

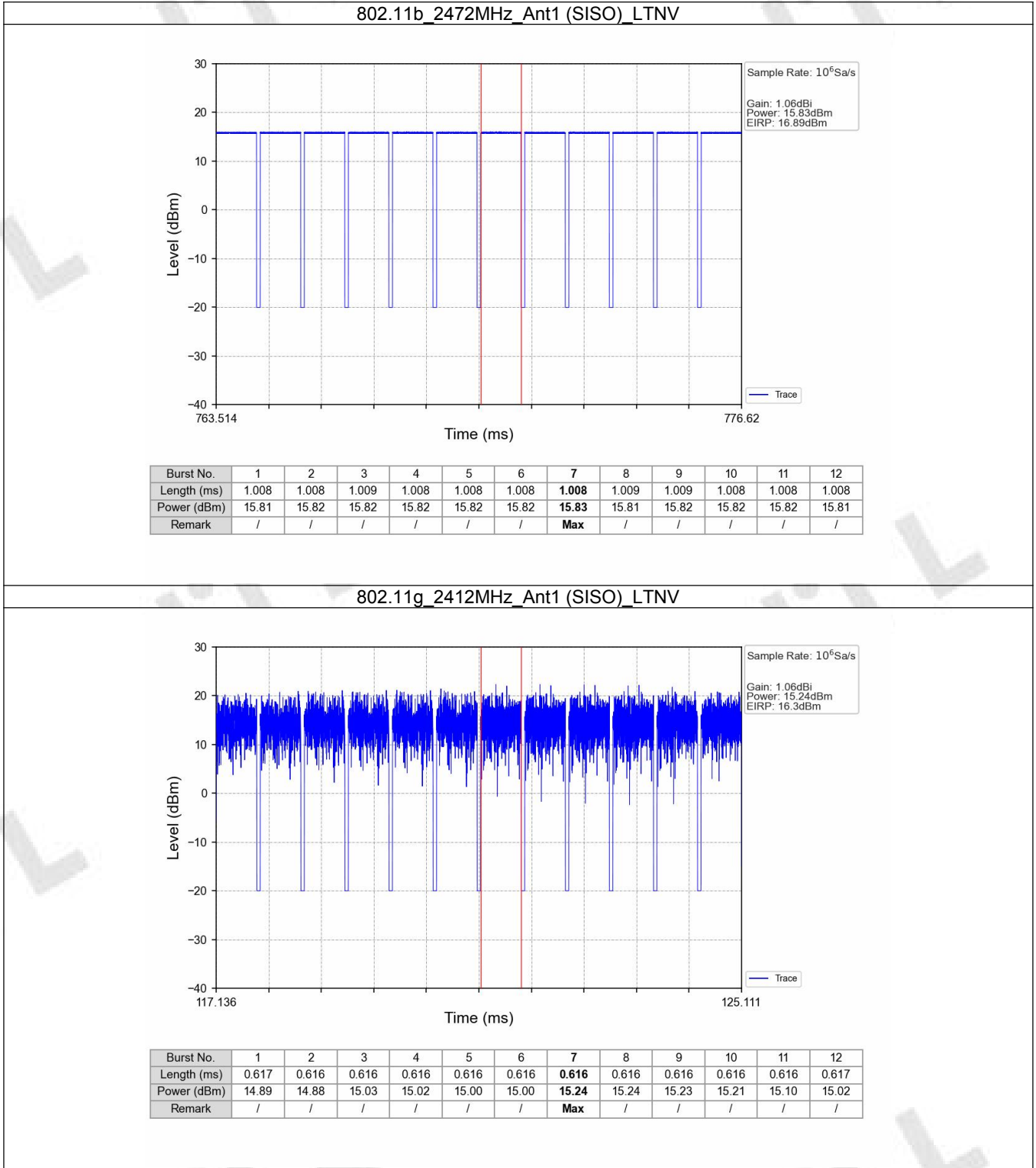


Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.009	1.009
Power (dBm)	15.63	15.63	15.63	15.64	15.64	15.63	15.65	15.63	15.63	15.62	15.63	15.63
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

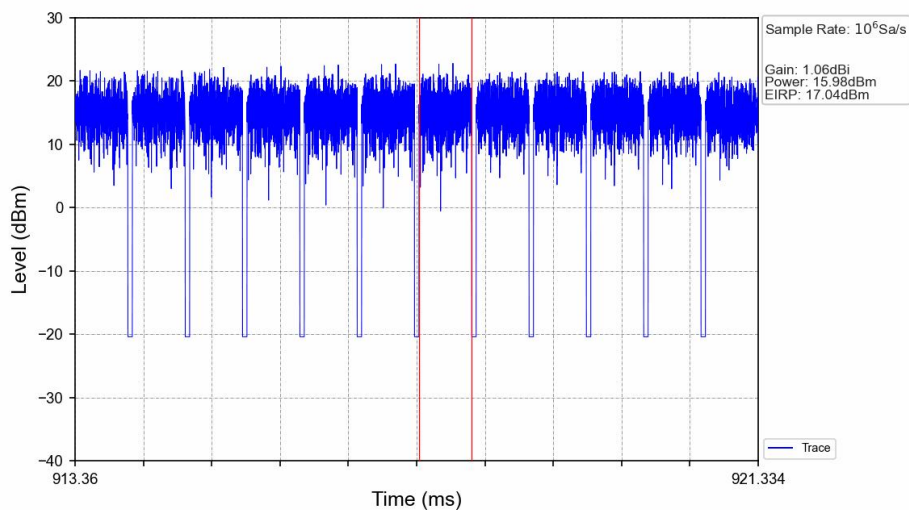
802.11b_2442MHz_Ant1 (SISO)_LTV



Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.009	1.008	1.008	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.009	1.009
Power (dBm)	16.30	16.30	16.29	16.31	16.31	16.30	16.31	16.30	16.30	16.30	16.30	16.30
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

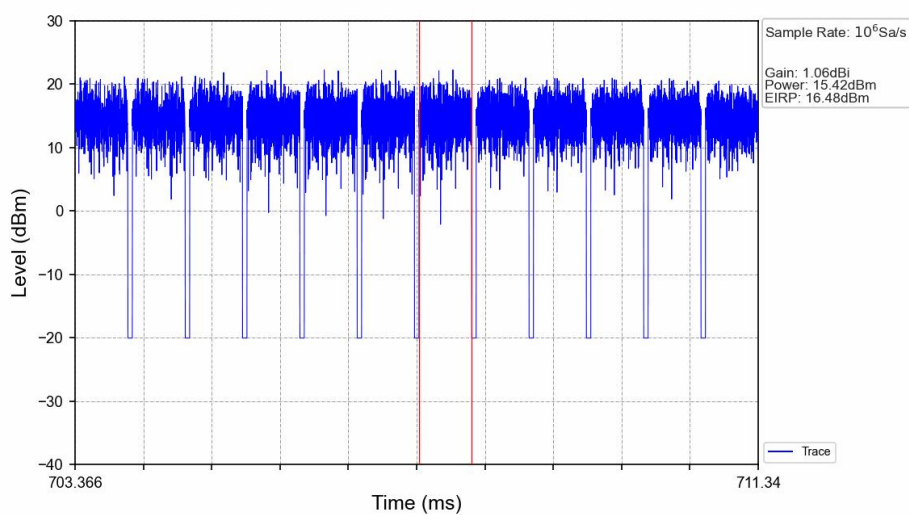


802.11g_2442MHz_Ant1 (SISO)_LTV



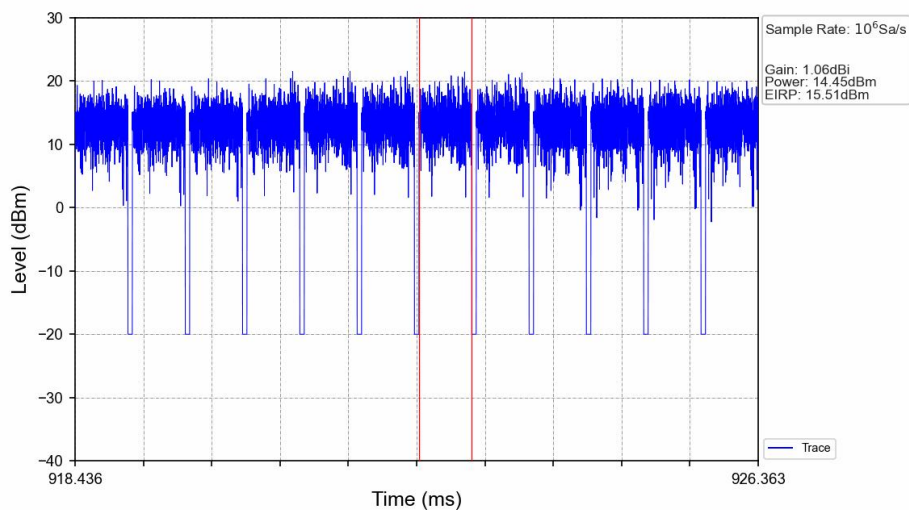
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	15.80	15.78	15.91	15.92	15.94	15.95	15.98	15.75	15.77	15.76	15.76	15.74
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2472MHz_Ant1 (SISO)_LTV



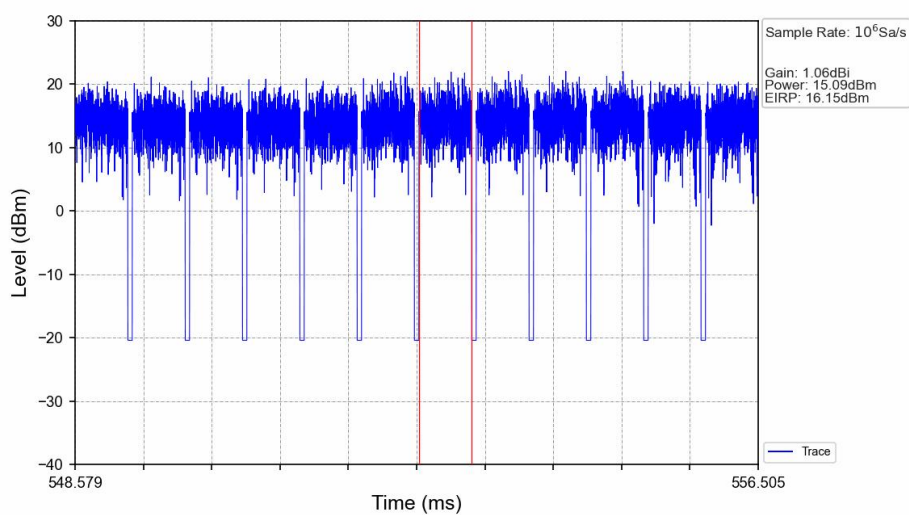
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	15.20	15.19	15.33	15.40	15.40	15.40	15.42	15.20	15.20	15.19	15.19	15.16
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2412MHz_Ant1 (SISO)_LTV



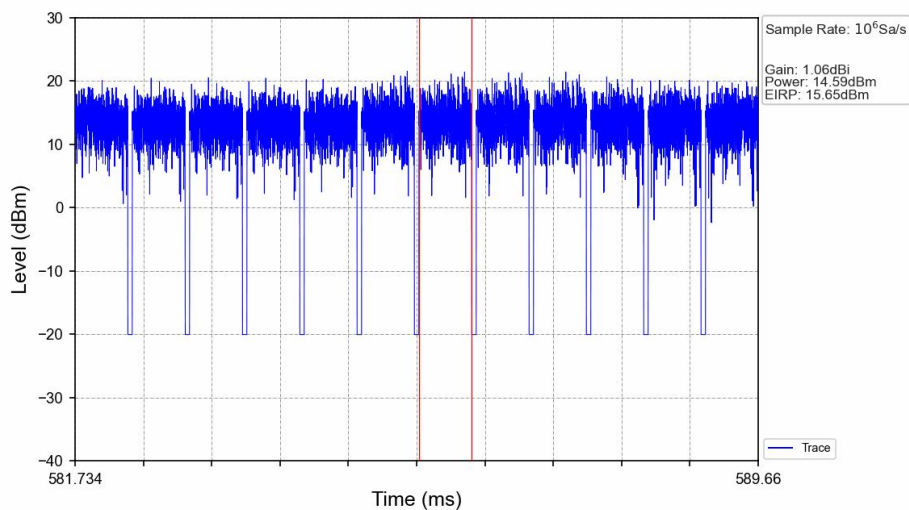
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	13.86	13.86	13.86	14.06	14.42	14.44	14.45	14.44	14.21	14.07	14.06	14.05
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2442MHz_Ant1 (SISO)_LTV



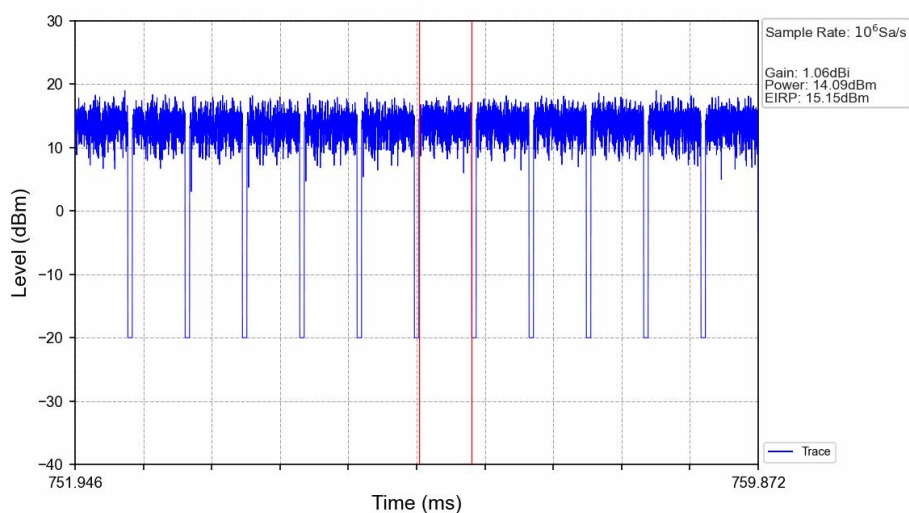
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.71	14.51	14.52	14.52	14.52	14.97	15.09	15.08	15.07	14.96	14.70	14.69
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2472MHz_Ant1 (SISO)_LTV



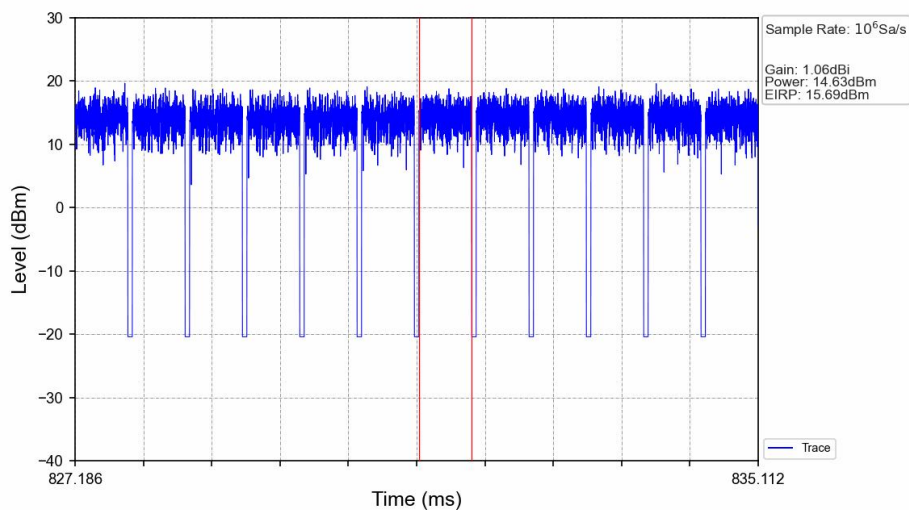
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.26	14.02	14.02	14.02	14.06	14.59	14.59	14.59	14.58	14.42	14.21	14.20
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2422MHz_Ant1 (SISO)_LTV



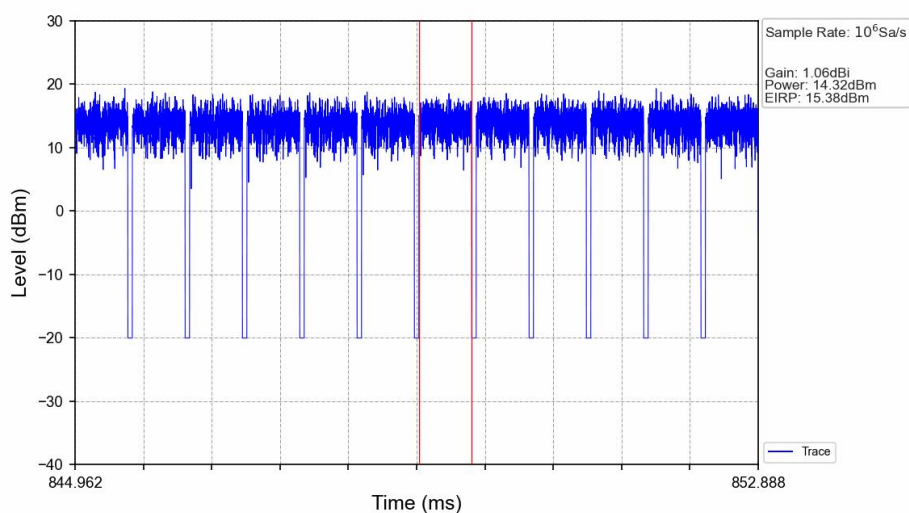
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613
Power (dBm)	13.96	13.85	13.88	13.87	13.87	13.86	14.09	14.07	14.07	14.06	14.00	13.94
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2442MHz_Ant1 (SISO)_LTV



Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613
Power (dBm)	14.50	14.41	14.42	14.42	14.42	14.45	14.63	14.63	14.62	14.61	14.53	14.48
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2462MHz_Ant1 (SISO)_LTV



Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613
Power (dBm)	14.16	14.12	14.10	14.10	14.10	14.09	14.32	14.31	14.29	14.27	14.21	14.17
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

3. Power Spectral Density

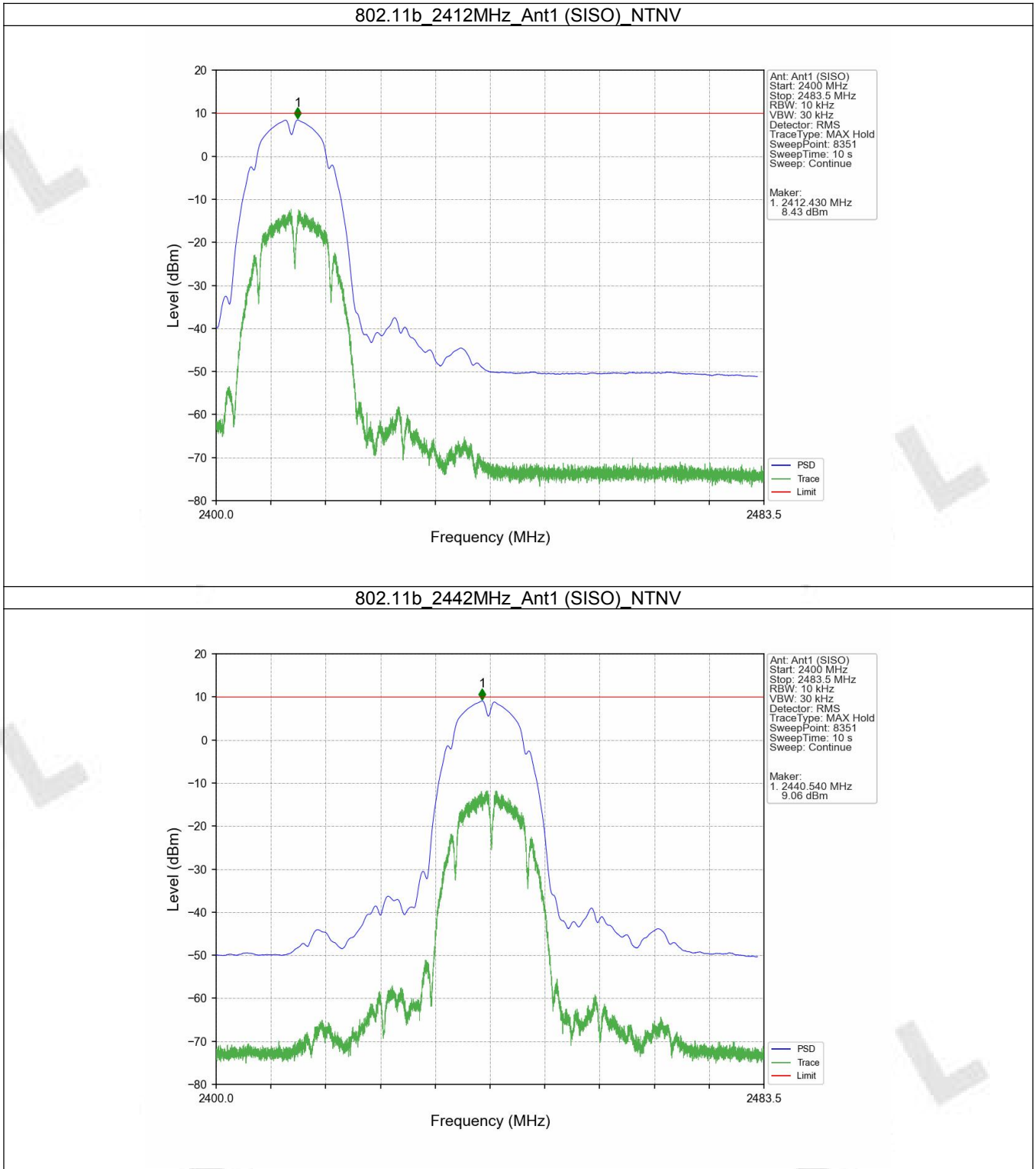
3.1 Test Result

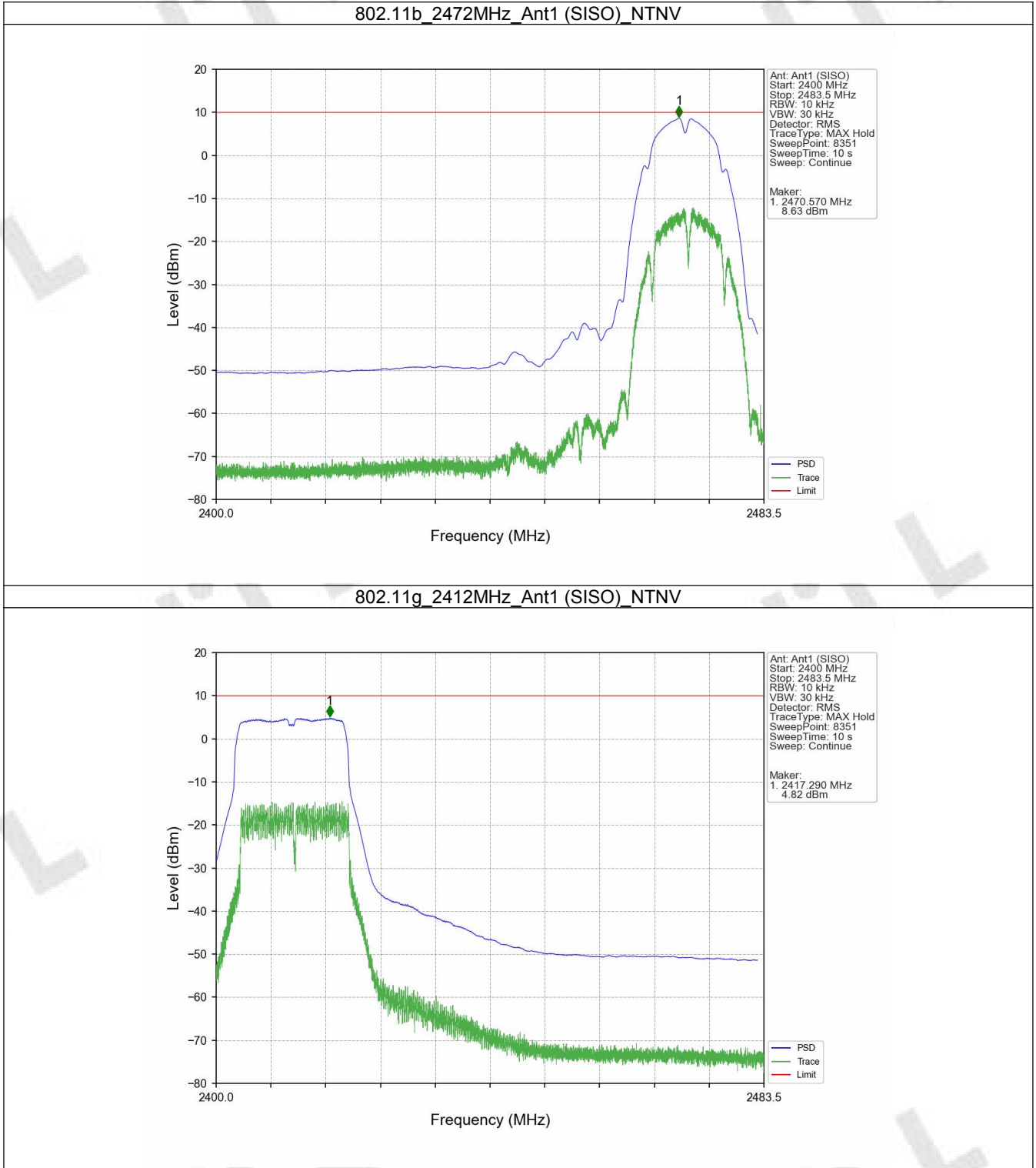
3.1.1 PSD

ENV	Mode	TX Type	Frequency (MHz)	ANT	E.I.R.PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NTNV	802.11b	SISO	2412	1	8.43	<=10	Pass
			2442	1	9.06	<=10	Pass
			2472	1	8.63	<=10	Pass
	802.11g	SISO	2412	1	4.82	<=10	Pass
			2442	1	5.85	<=10	Pass
			2472	1	5.34	<=10	Pass
	802.11n (HT20)	SISO	2412	1	3.74	<=10	Pass
			2442	1	4.63	<=10	Pass
			2472	1	4.20	<=10	Pass
	802.11n (HT40)	SISO	2422	1	0.86	<=10	Pass
			2442	1	1.66	<=10	Pass
			2462	1	1.33	<=10	Pass

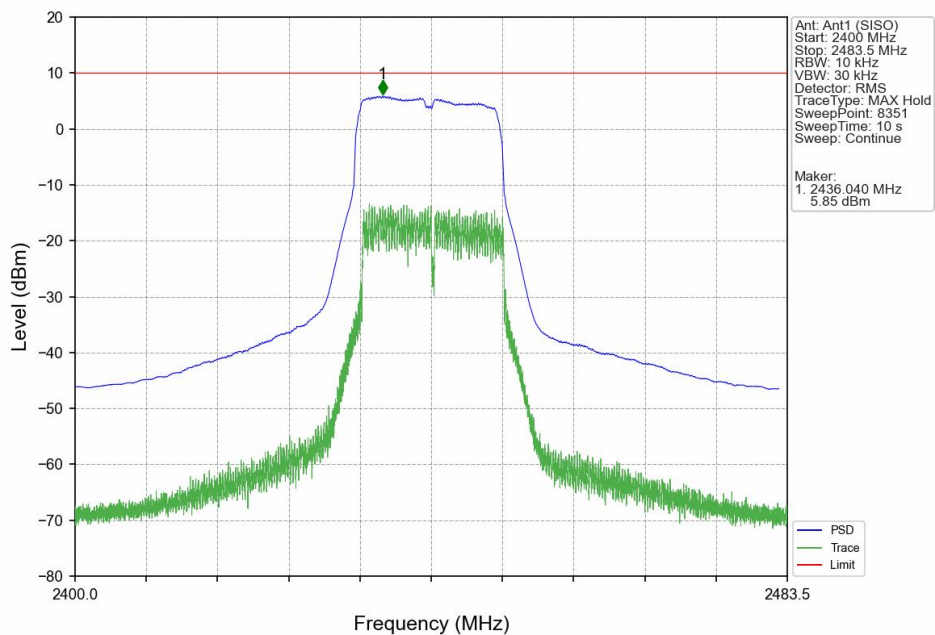
3.2 Test Graph

3.2.1 PSD

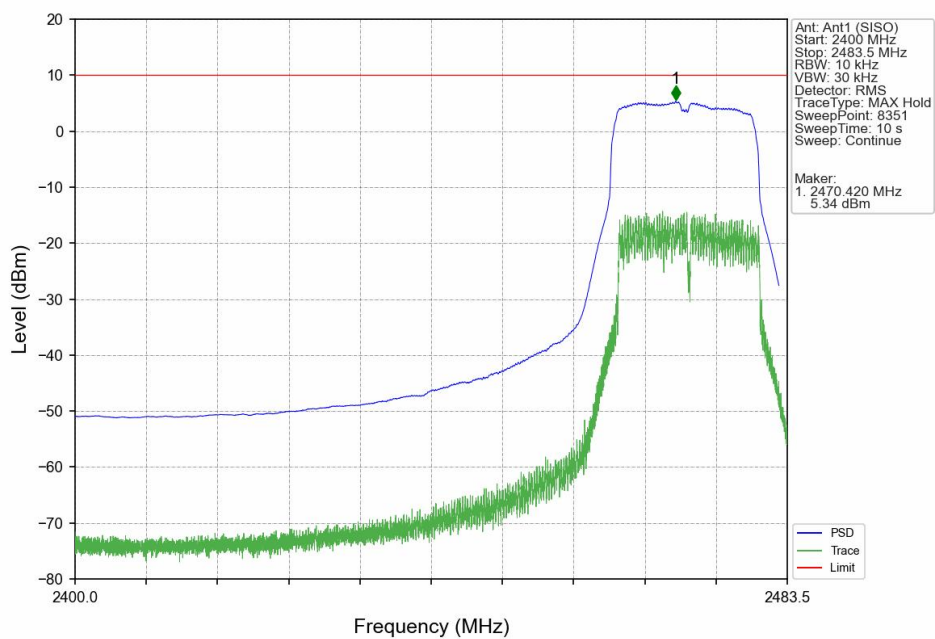




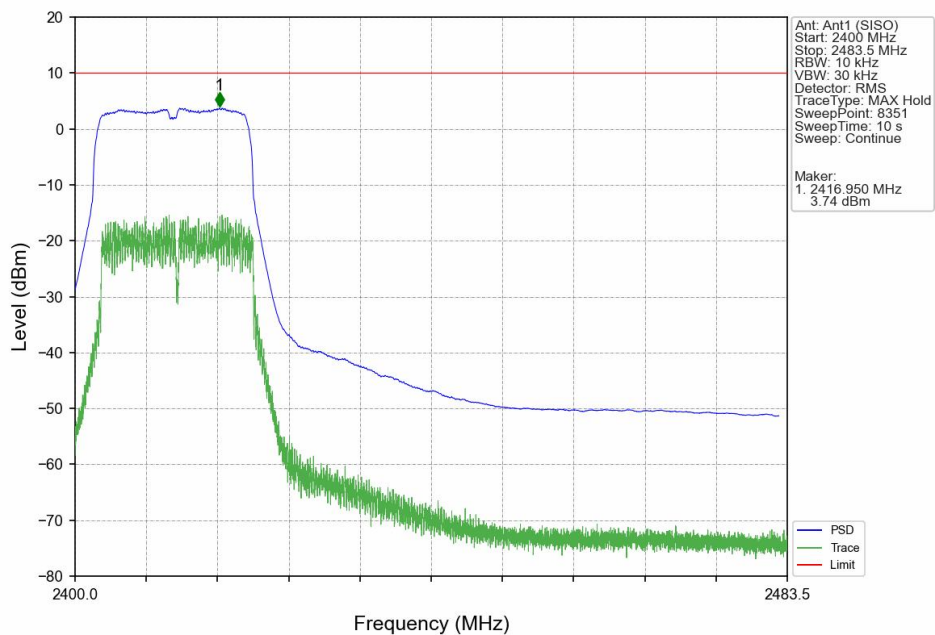
802.11g_2442MHz_Ant1 (SISO)_NTNV



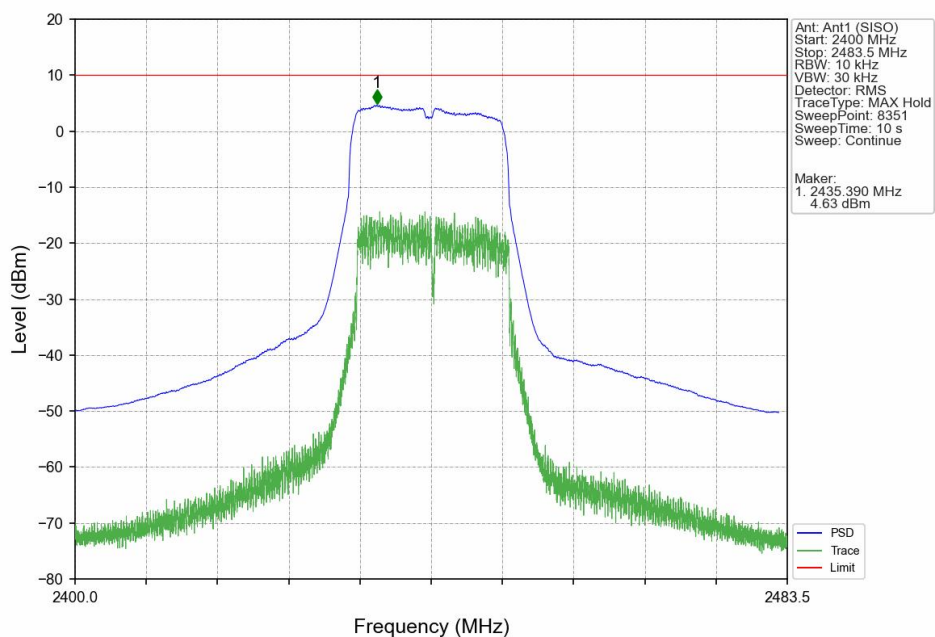
802.11g_2472MHz_Ant1 (SISO)_NTNV



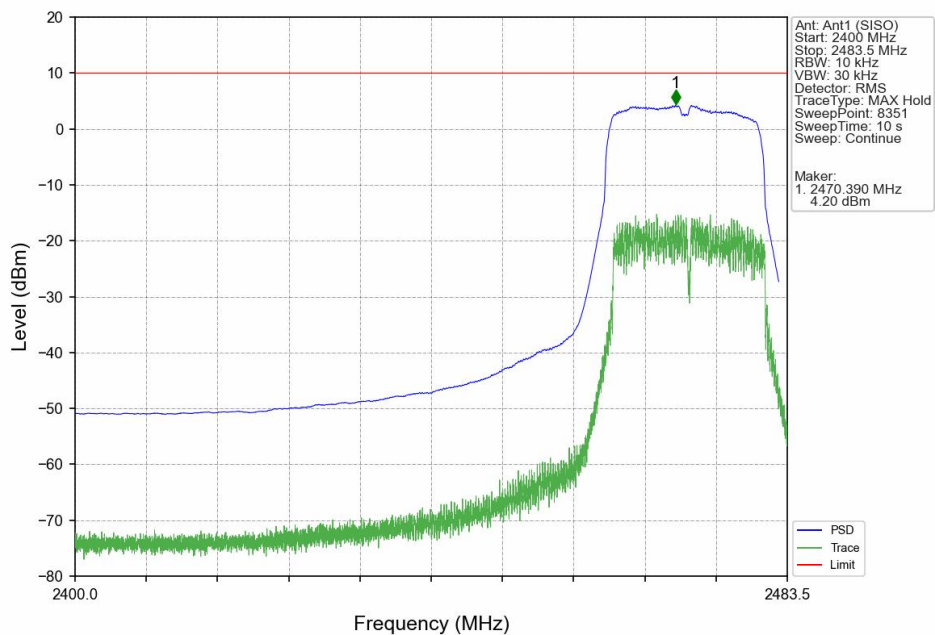
802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



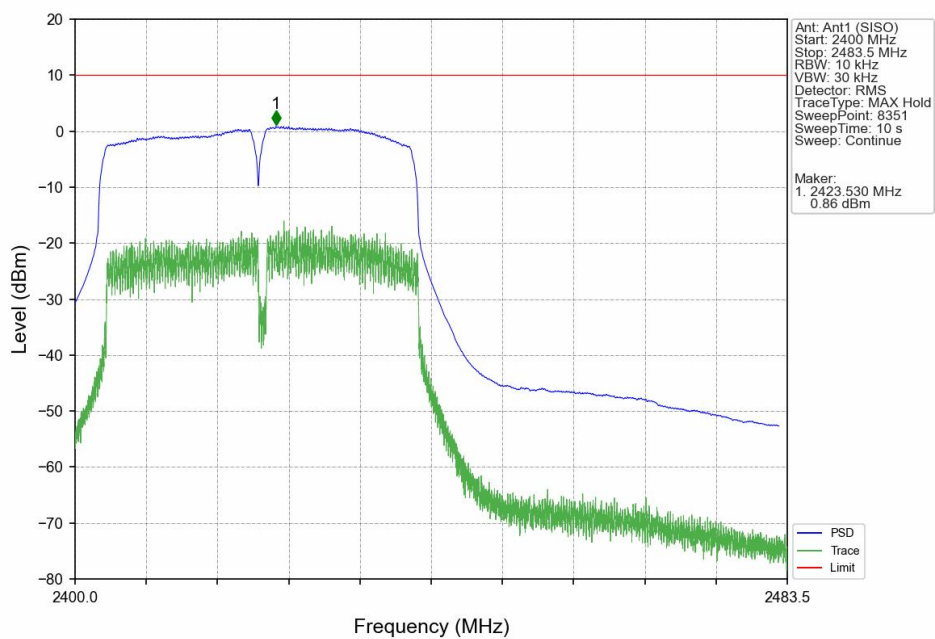
802.11n(HT20)_2442MHz_Ant1 (SISO)_NTNV

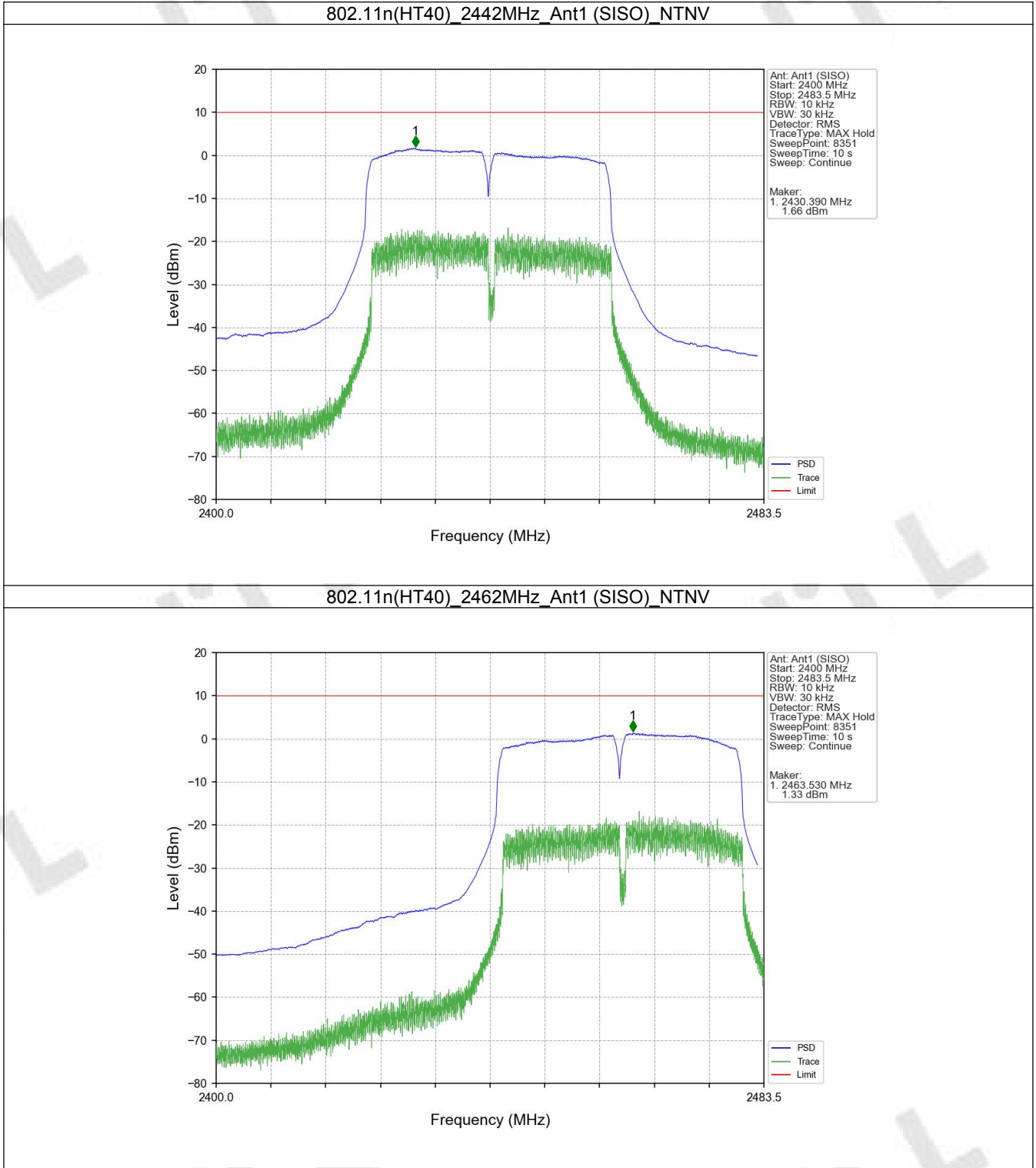


802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV





4. Adaptivity (Channel Access Mechanism)

4.1 Test Result

4.1.1 COT

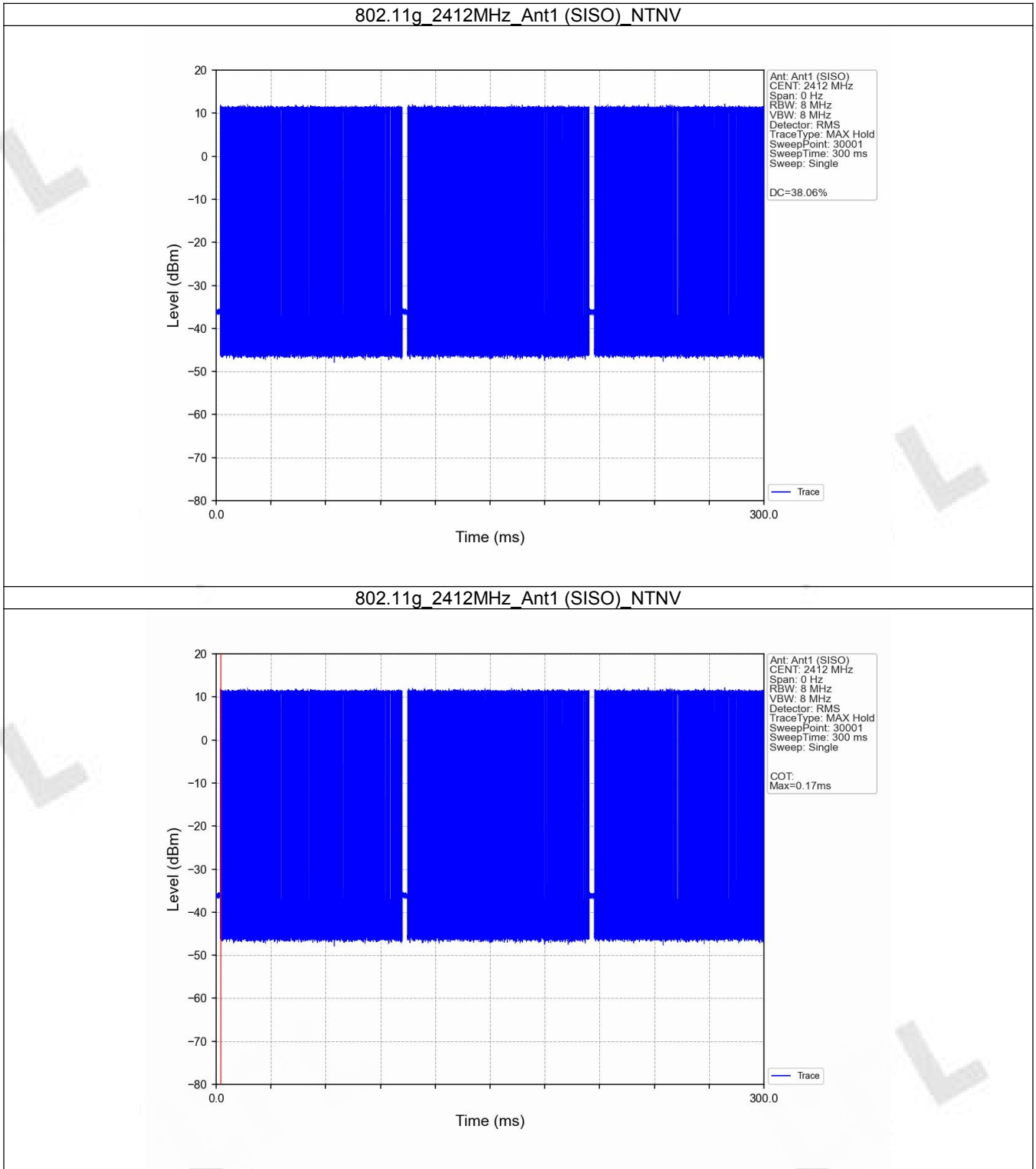
ENV	Mode	TX Type	Frequency (MHz)	ANT	Min Idle Time (ms)		Max COT (ms)		Verdict
					Result	Limit	Result	Limit	
NTNV	802.11g	SISO	2412	1	0.130	≥ 0.018	0.170	≤ 13	Pass
			2472	1	0.130	≥ 0.018	0.170	≤ 13	Pass

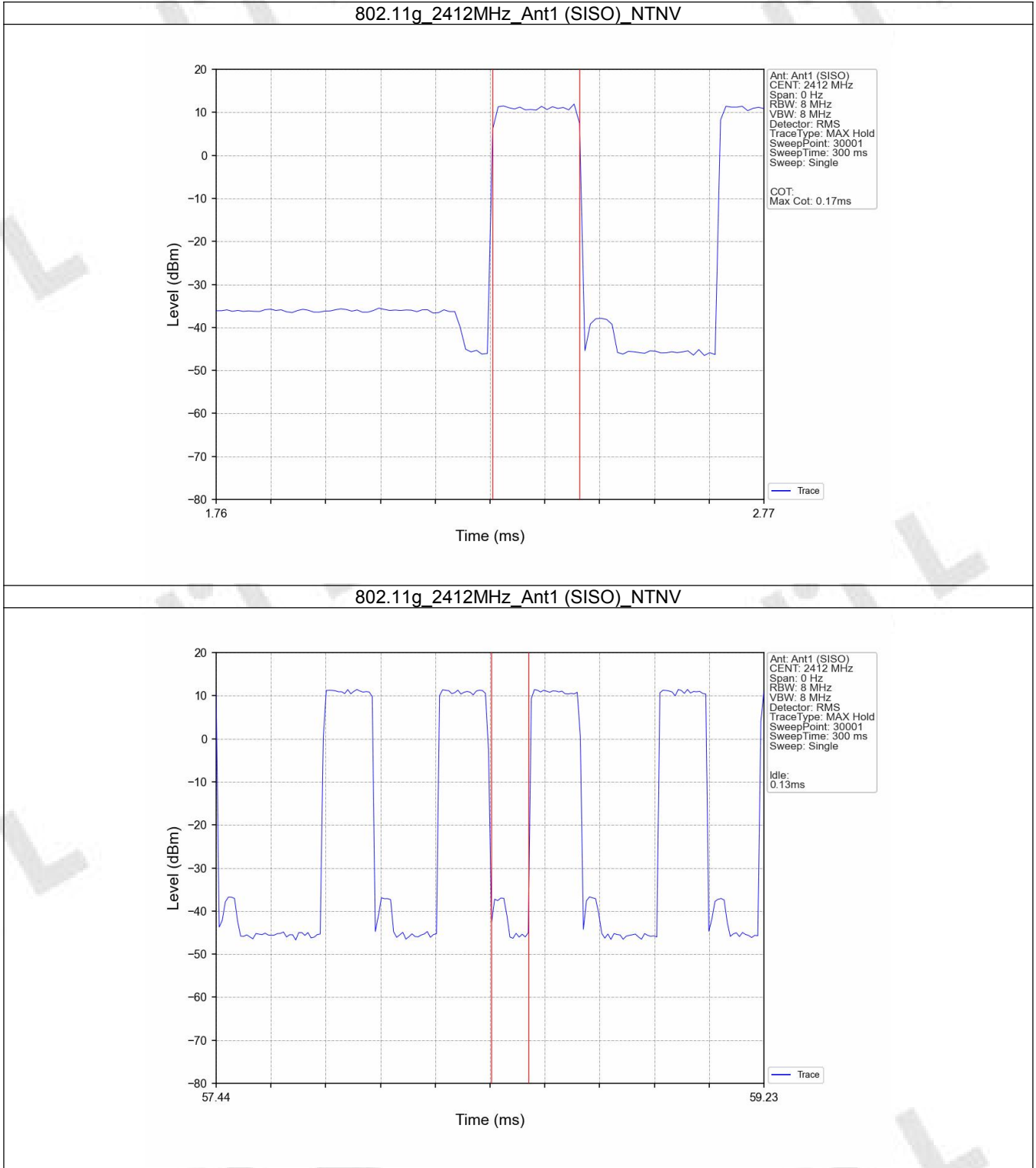
4.1.2 Adaptivity

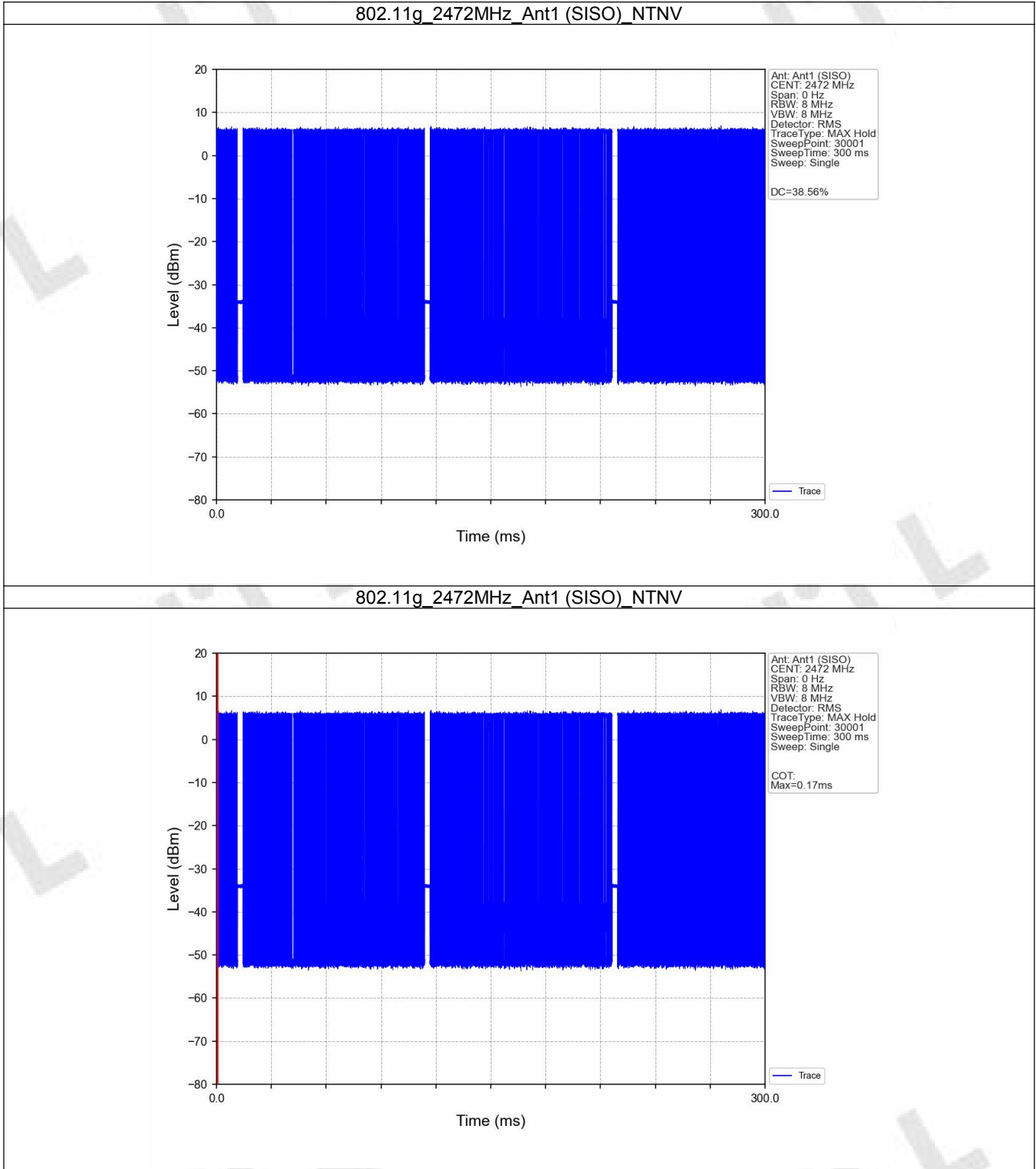
ENV	Mode	TX Type	Frequency (MHz)	ANT	Interference Signal			Max. Short Control Signal		Verdict
					Type	Add Time (s)	Level (dBm/MHz)	Duty Cycle (%)	Limit (%)	
NTNV	802.11g	SISO	2412	1	AWGN	1.15	-65.33	2.00	≤ 10	Pass
					AWGN+CW	61.15	-65.33	0.80	≤ 10	Pass
			2472	1	AWGN	1.15	-65.44	0.80	≤ 10	Pass
					AWGN+CW	61.15	-65.44	2.00	≤ 10	Pass

4.2 Test Graph

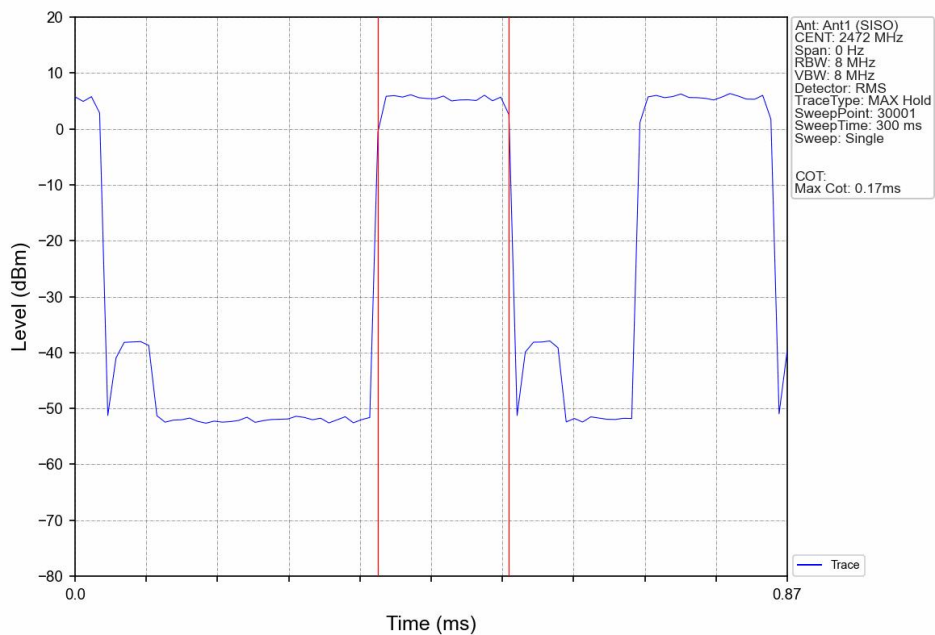
4.2.1 COT



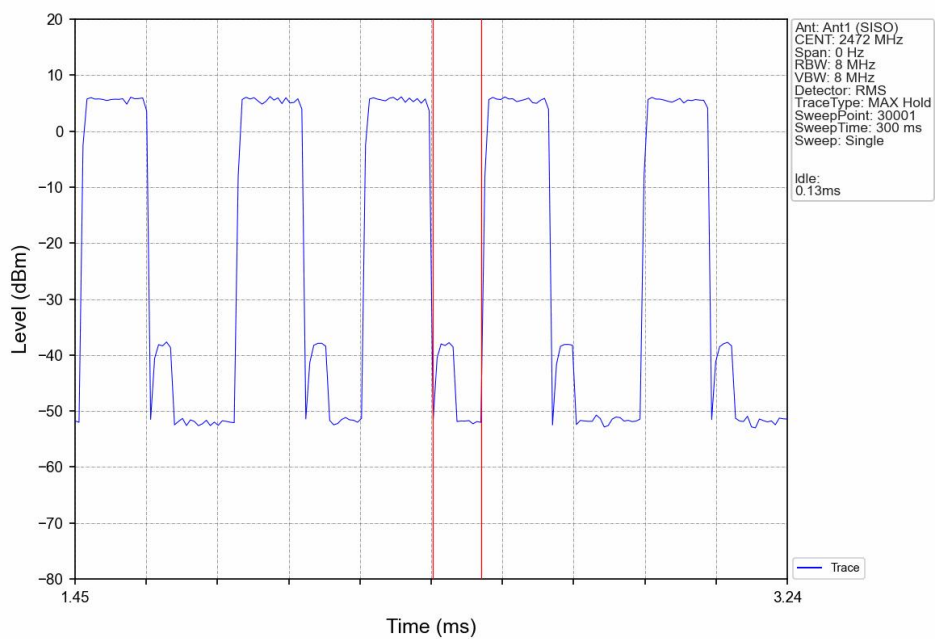




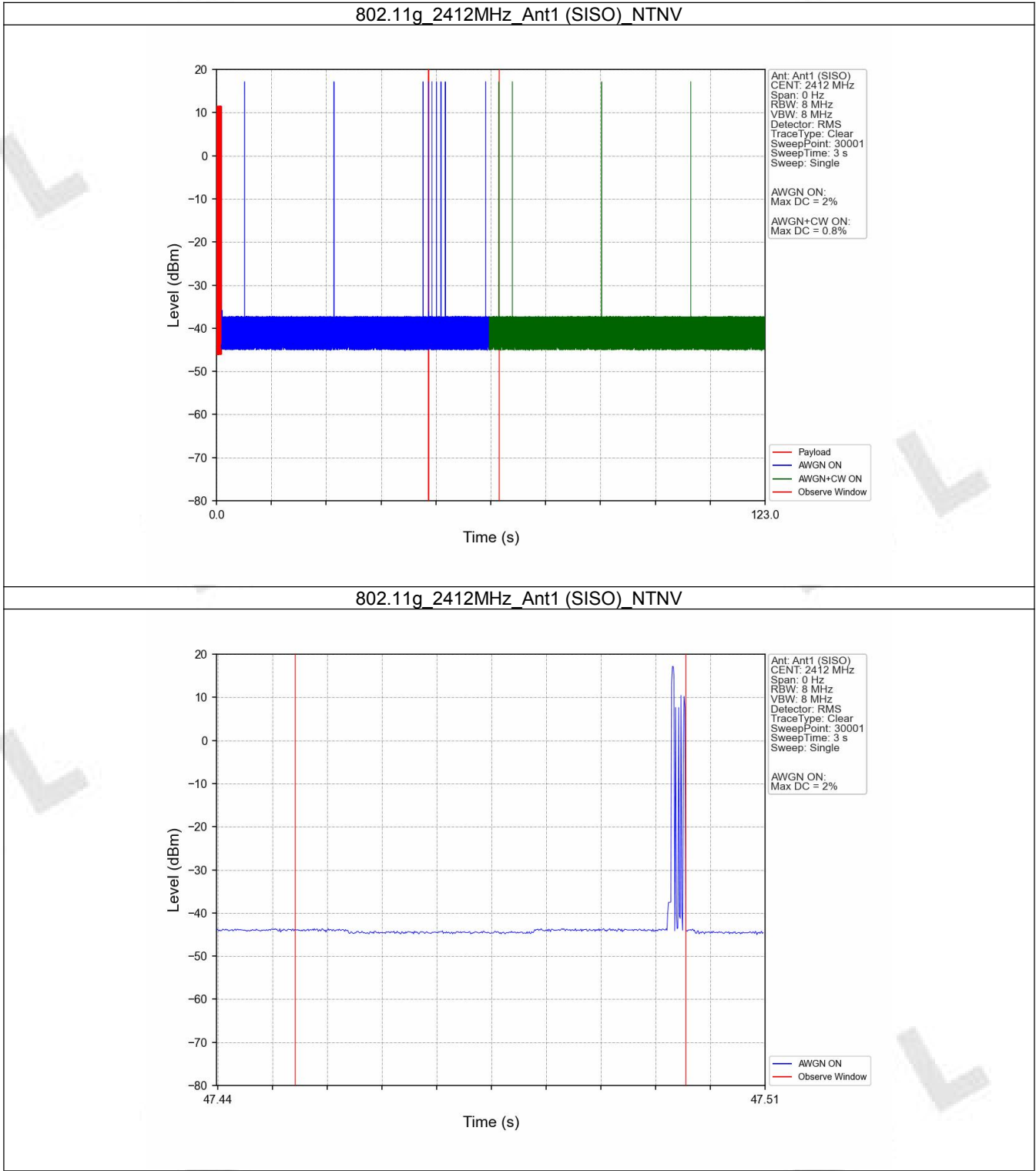
802.11g_2472MHz_Ant1 (SISO)_NTNV

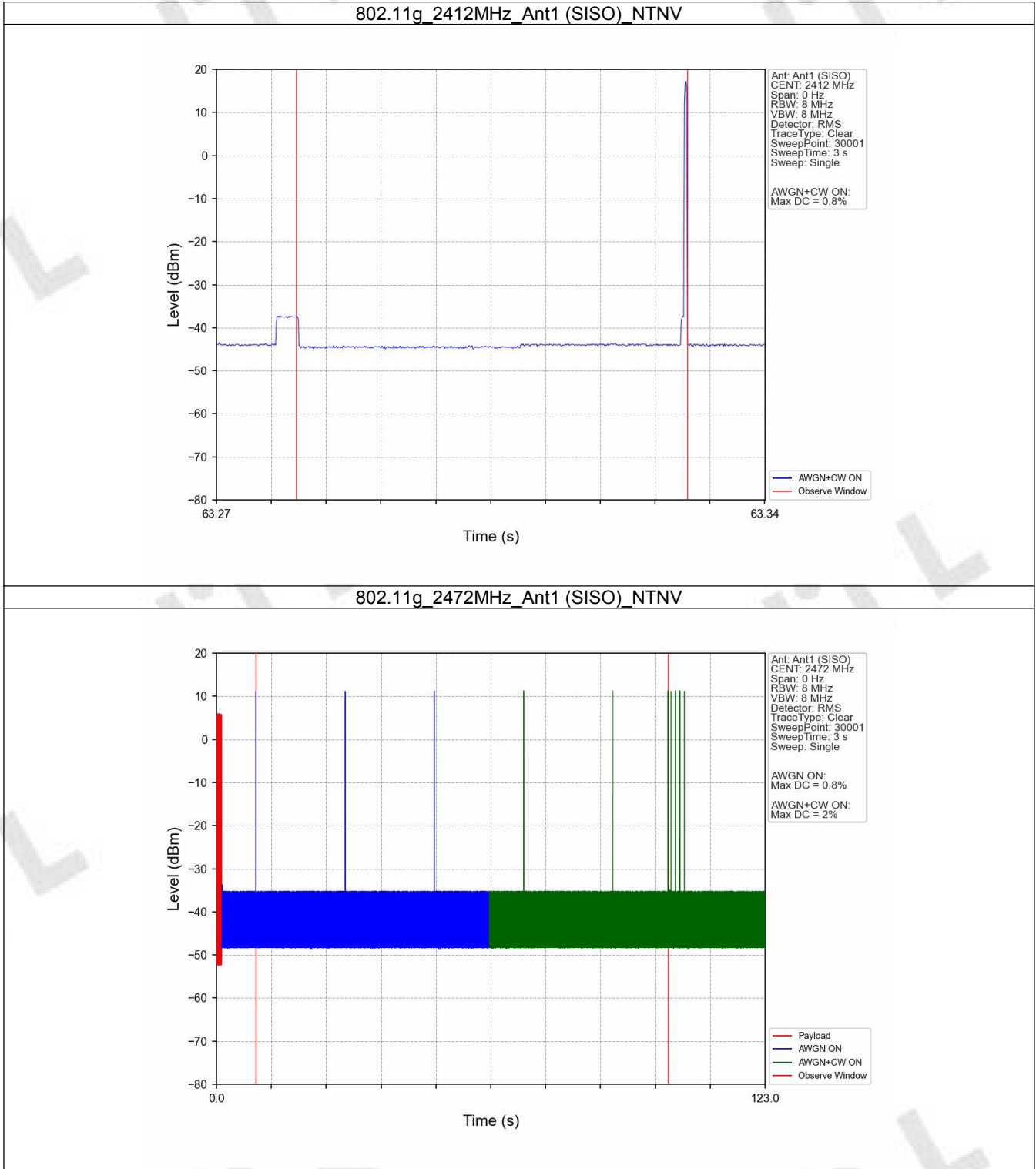


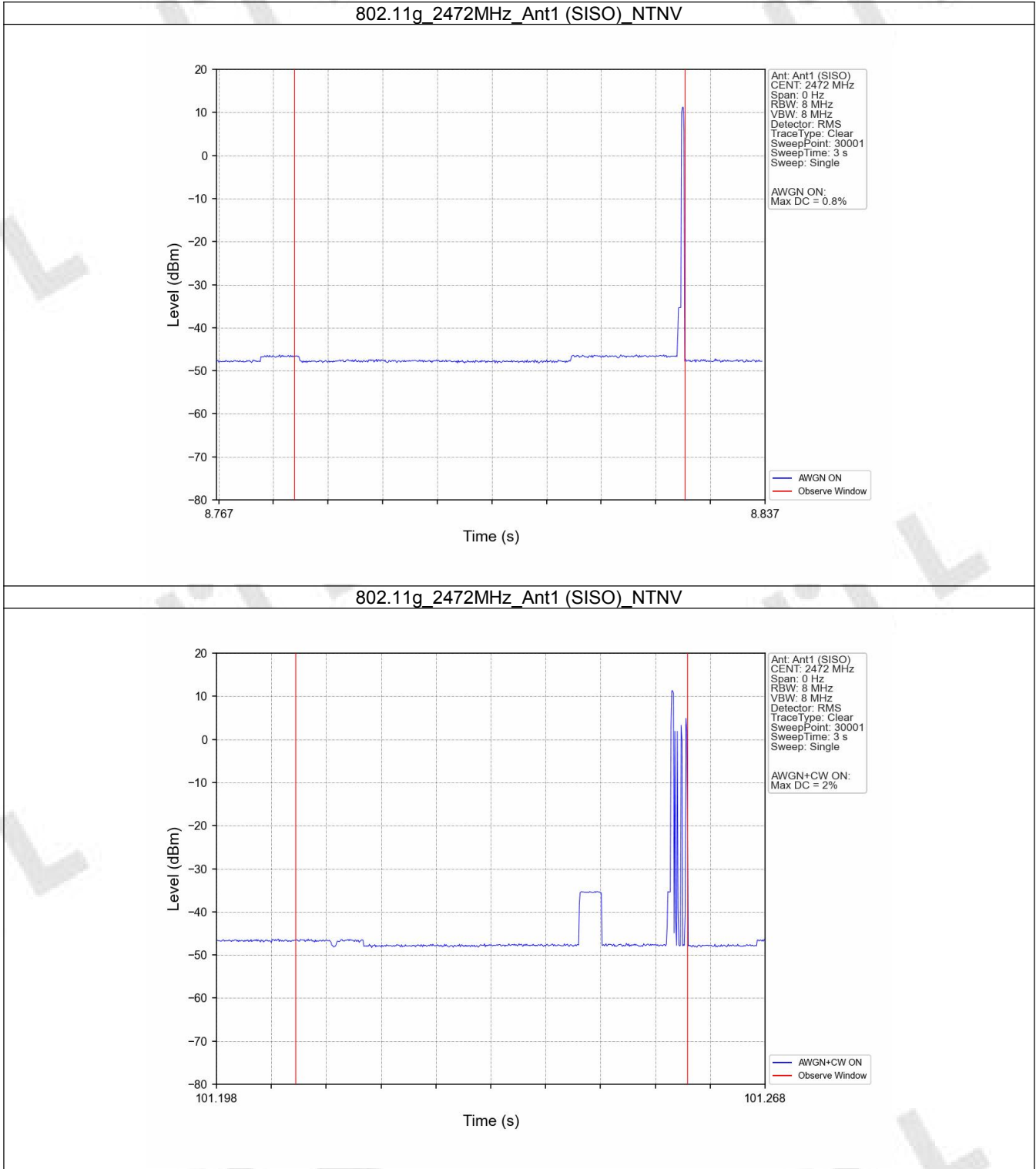
802.11g_2472MHz_Ant1 (SISO)_NTNV



4.2.2 Adaptivity







5. Occupied Channel Bandwidth

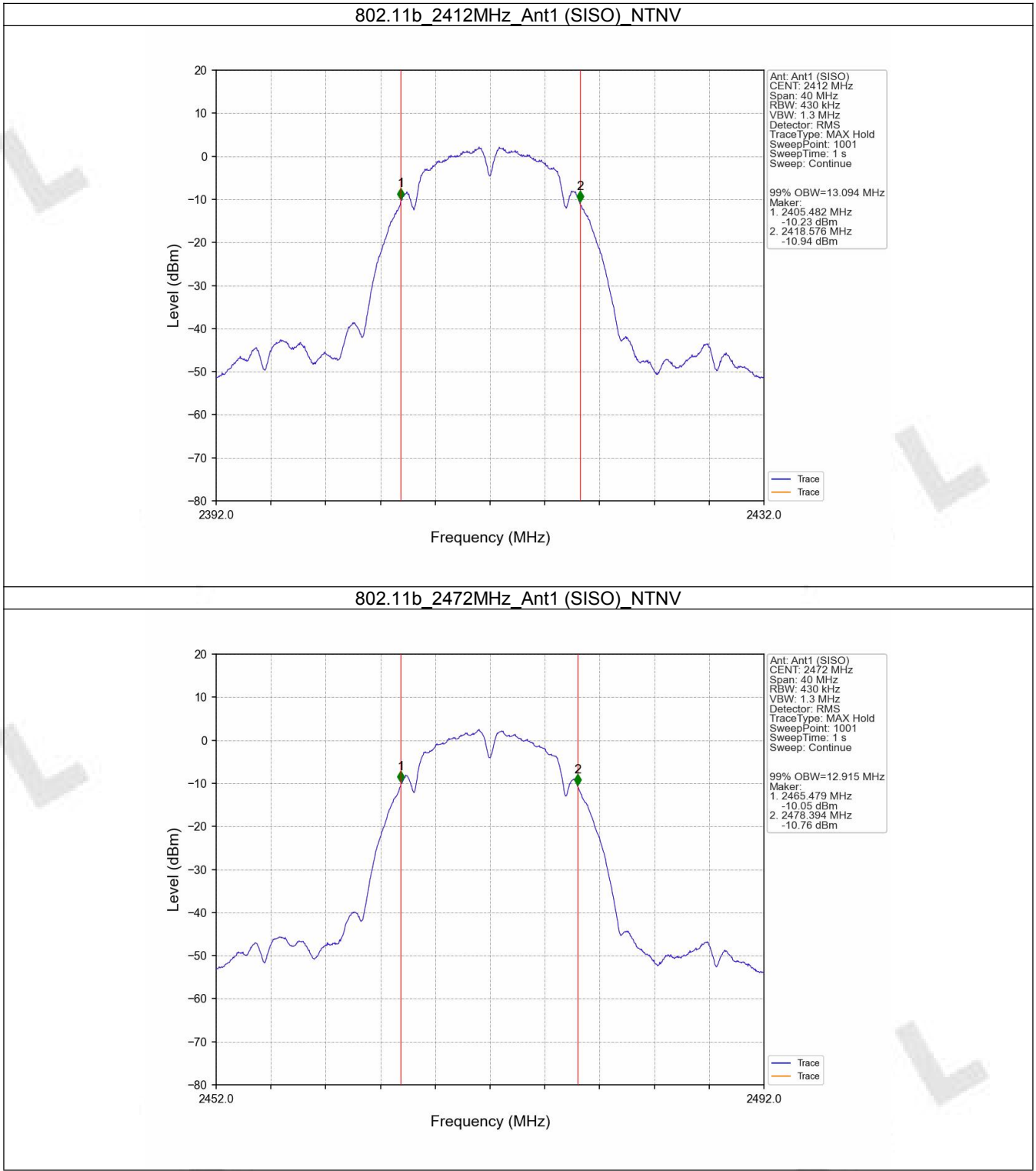
5.1 Test Result

5.1.1 OBW_Ant1

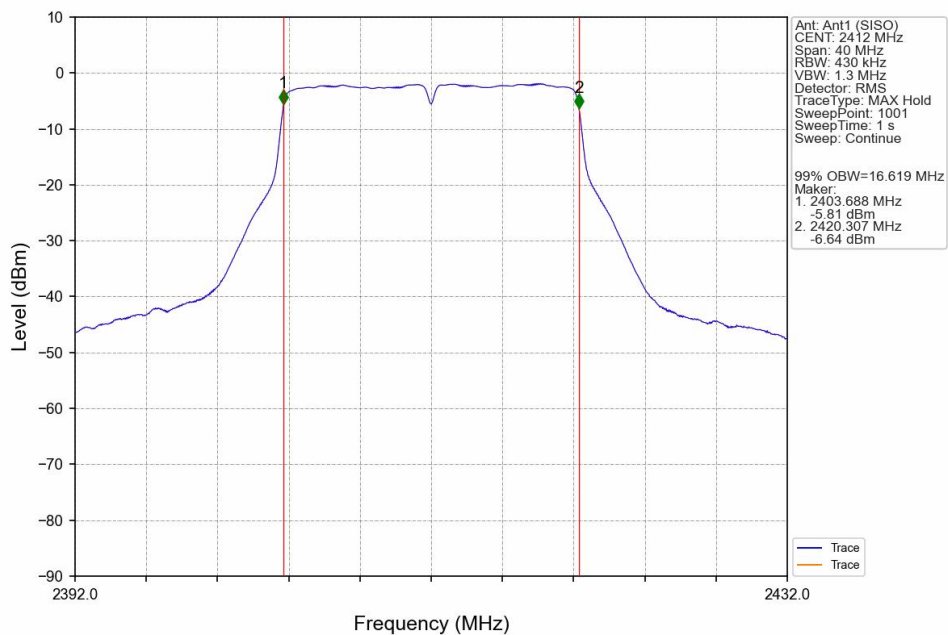
Ant1								
ENV	Mode	TX Type	Frequency (MHz)	OBW (MHz)	Frequency Range (MHz)			Verdict
				Result	FL	FH	Limit	
NTNV	802.11b	SISO	2412	13.094	2405.482	/	>=2400	Pass
			2472	12.915	/	2478.394	<=2483.5	Pass
	802.11g	SISO	2412	16.619	2403.688	/	>=2400	Pass
			2472	16.537	/	2480.231	<=2483.5	Pass
	802.11n (HT20)	SISO	2412	17.822	2403.084	/	>=2400	Pass
			2472	17.734	/	2480.829	<=2483.5	Pass
	802.11n (HT40)	SISO	2422	36.106	2403.912	/	>=2400	Pass
			2462	36.105	/	2480.015	<=2483.5	Pass

5.2 Test Graph

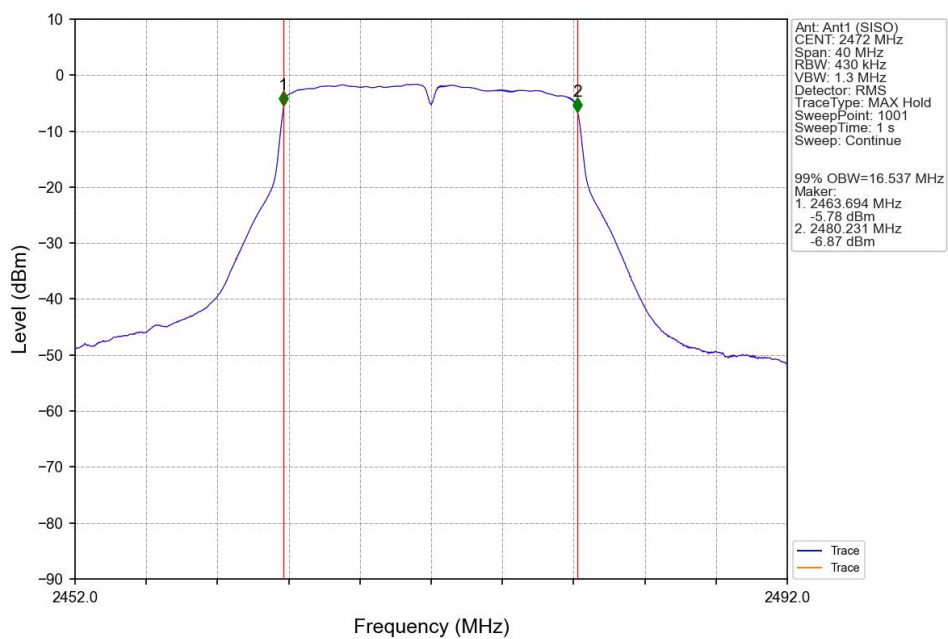
5.2.1 OBW_Ant1

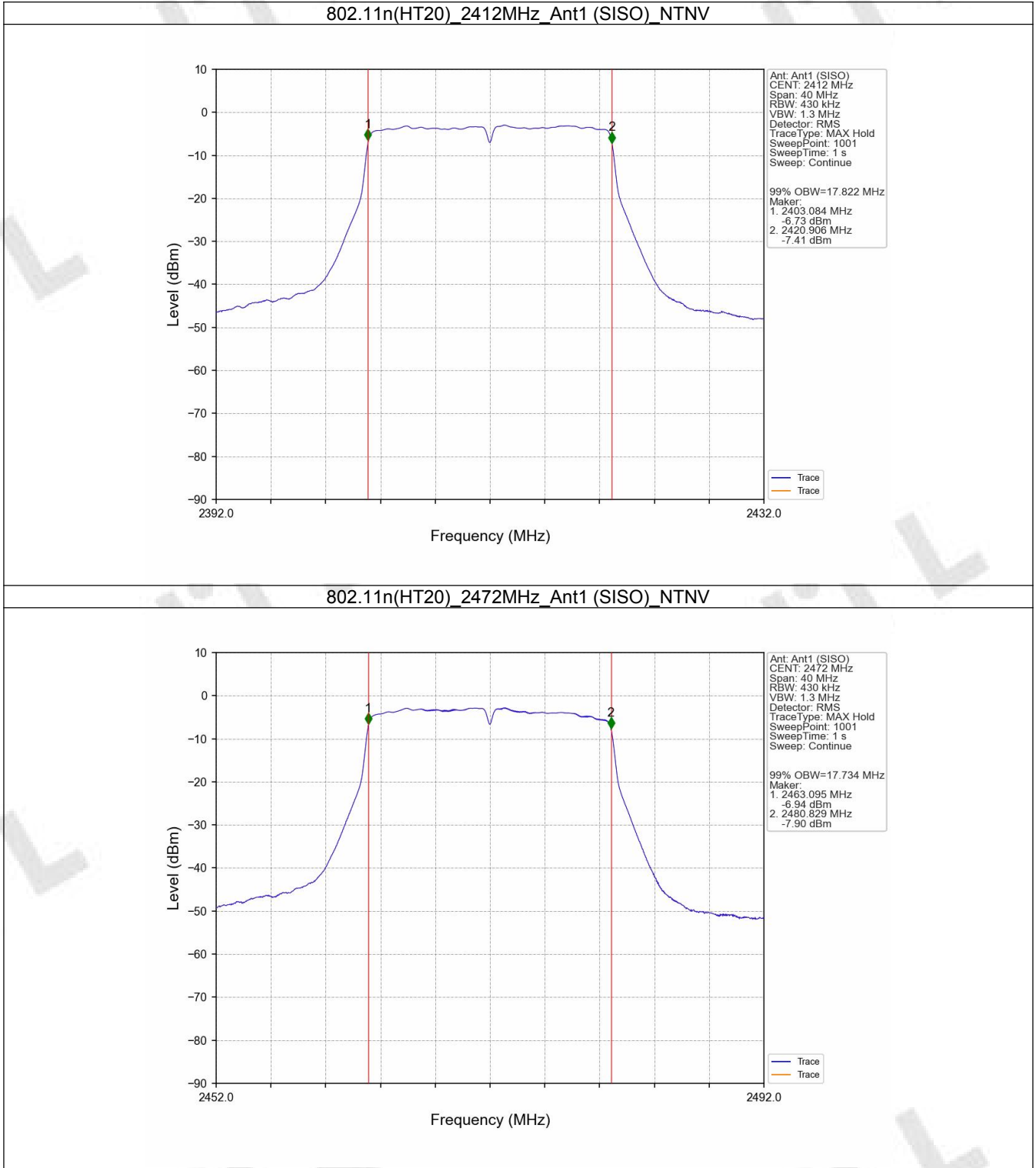


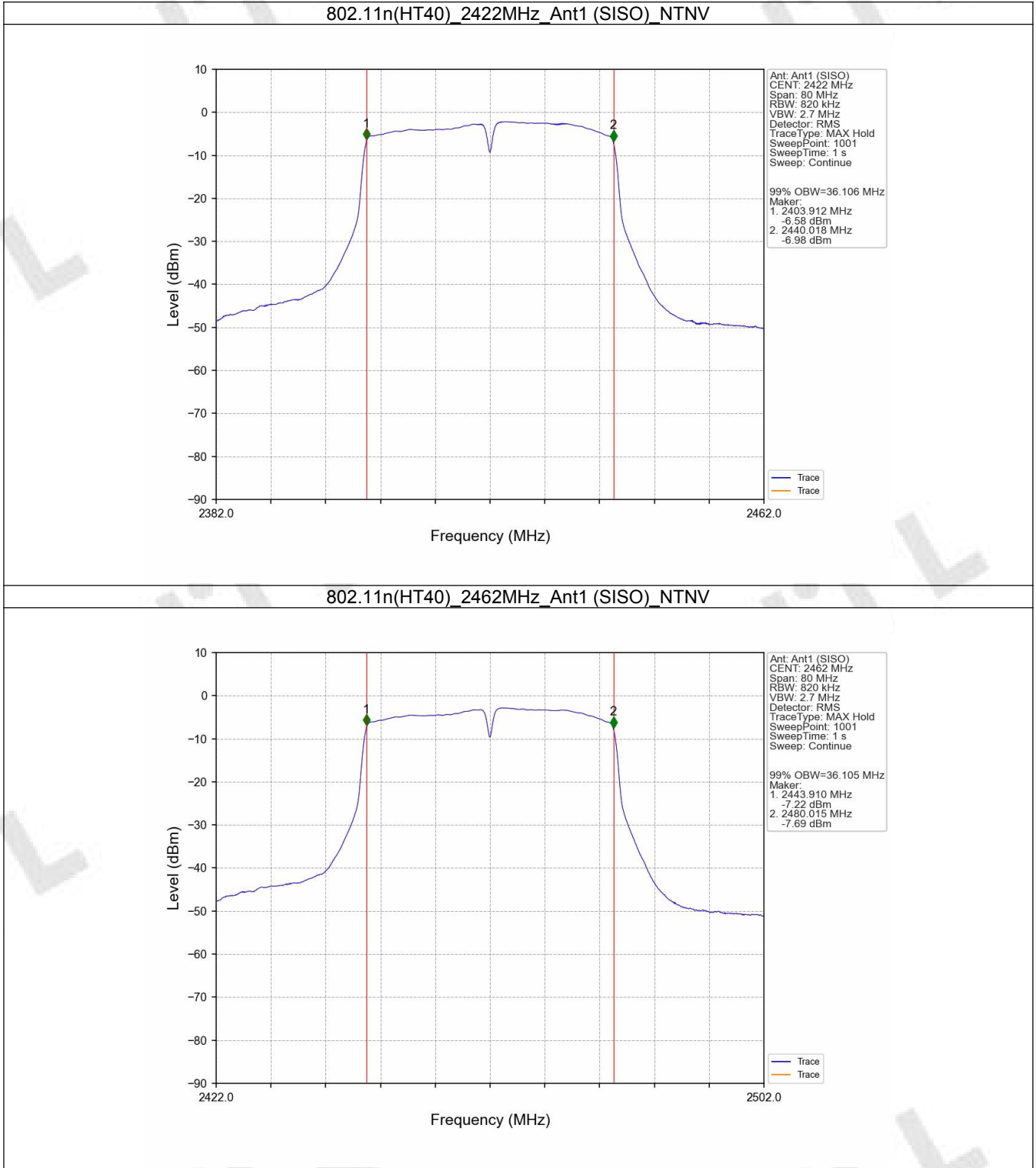
802.11g_2412MHz_Ant1 (SISO)_NTNV



802.11g_2472MHz_Ant1 (SISO)_NTNV







6. Transmitter Unwanted Emissions In The Out-Of-Band Domain

6.1 Test Result

6.1.1 802.11b-Ant1_NTNV

Ant1_NTNV							
Mode	TX Type	Frequency (MHz)	ANT	Test Freq. (MHz)	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11b	SISO	2412	1	2374.312	-53.48	<=-20	Pass
				2374.406	-53.34	<=-20	Pass
				2375.406	-53.26	<=-20	Pass
				2376.406	-53.39	<=-20	Pass
				2377.406	-53.43	<=-20	Pass
				2378.406	-53.33	<=-20	Pass
				2379.406	-53.18	<=-20	Pass
				2380.406	-53.00	<=-20	Pass
				2381.406	-52.82	<=-20	Pass
				2382.406	-52.01	<=-20	Pass
				2383.406	-51.01	<=-20	Pass
				2384.406	-50.77	<=-20	Pass
				2385.406	-48.64	<=-20	Pass
				2386.406	-47.38	<=-20	Pass
				2387.406	-48.14	<=-10	Pass
				2387.500	-48.85	<=-10	Pass
				2388.500	-50.03	<=-10	Pass
				2389.500	-51.14	<=-10	Pass
				2390.500	-49.54	<=-10	Pass
				2391.500	-48.28	<=-10	Pass
				2392.500	-46.40	<=-10	Pass
				2393.500	-43.34	<=-10	Pass
				2394.500	-42.38	<=-10	Pass
				2395.500	-42.08	<=-10	Pass
				2396.500	-38.90	<=-10	Pass
				2397.500	-38.82	<=-10	Pass
				2398.500	-40.59	<=-10	Pass
				2399.500	-42.05	<=-10	Pass
		2472	1	2484.000	-46.71	<=-10	Pass
				2485.000	-45.82	<=-10	Pass
				2486.000	-45.44	<=-10	Pass
				2487.000	-43.93	<=-10	Pass
				2488.000	-43.82	<=-10	Pass
				2489.000	-45.31	<=-10	Pass
				2490.000	-47.15	<=-10	Pass
				2491.000	-48.28	<=-10	Pass
				2492.000	-49.21	<=-10	Pass
				2493.000	-50.12	<=-10	Pass
				2494.000	-51.36	<=-10	Pass
				2495.000	-51.45	<=-10	Pass
				2495.915	-50.55	<=-10	Pass
				2496.915	-49.24	<=-20	Pass
				2497.915	-49.27	<=-20	Pass
				2498.915	-49.66	<=-20	Pass
				2499.915	-50.85	<=-20	Pass
				2500.915	-51.28	<=-20	Pass

				2501.915	-51.79	<=-20	Pass
				2502.915	-51.84	<=-20	Pass
				2503.915	-51.84	<=-20	Pass
				2504.915	-51.94	<=-20	Pass
				2505.915	-51.96	<=-20	Pass
				2506.915	-51.97	<=-20	Pass
				2507.915	-51.82	<=-20	Pass
				2508.830	-51.77	<=-20	Pass

6.1.2 802.11g-Ant1_NTNV

Ant1_NTNV							
Mode	TX Type	Frequency (MHz)	ANT	Test Freq. (MHz)	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11g	SISO	2412	1	2367.262	-53.78	<=-20	Pass
				2367.881	-53.71	<=-20	Pass
				2368.881	-53.54	<=-20	Pass
				2369.881	-53.44	<=-20	Pass
				2370.881	-53.41	<=-20	Pass
				2371.881	-53.17	<=-20	Pass
				2372.881	-53.09	<=-20	Pass
				2373.881	-53.07	<=-20	Pass
				2374.881	-52.70	<=-20	Pass
				2375.881	-52.46	<=-20	Pass
				2376.881	-52.04	<=-20	Pass
				2377.881	-51.44	<=-20	Pass
				2378.881	-50.77	<=-20	Pass
				2379.881	-50.44	<=-20	Pass
				2380.881	-50.17	<=-20	Pass
				2381.881	-49.24	<=-20	Pass
				2382.881	-48.50	<=-20	Pass
				2383.881	-47.59	<=-10	Pass
				2384.500	-47.10	<=-10	Pass
				2385.500	-46.38	<=-10	Pass
				2386.500	-45.91	<=-10	Pass
				2387.500	-45.17	<=-10	Pass
				2388.500	-44.49	<=-10	Pass
				2389.500	-43.71	<=-10	Pass
				2390.500	-43.03	<=-10	Pass
				2391.500	-42.12	<=-10	Pass
				2392.500	-41.27	<=-10	Pass
				2393.500	-40.44	<=-10	Pass
				2394.500	-39.52	<=-10	Pass
				2395.500	-38.87	<=-10	Pass
				2396.500	-38.04	<=-10	Pass
				2397.500	-37.36	<=-10	Pass
				2398.500	-36.47	<=-10	Pass
				2399.500	-35.28	<=-10	Pass
		2472	1	2484.000	-35.75	<=-10	Pass
				2485.000	-41.66	<=-10	Pass
				2486.000	-43.49	<=-10	Pass
				2487.000	-44.21	<=-10	Pass
				2488.000	-45.01	<=-10	Pass
				2489.000	-45.49	<=-10	Pass
				2490.000	-45.56	<=-10	Pass
				2491.000	-45.99	<=-10	Pass
				2492.000	-46.84	<=-10	Pass
				2493.000	-47.07	<=-10	Pass

				2494.000	-47.42	<=-10	Pass
				2495.000	-47.83	<=-10	Pass
				2496.000	-48.08	<=-10	Pass
				2497.000	-48.62	<=-10	Pass
				2498.000	-48.84	<=-10	Pass
				2499.000	-49.01	<=-10	Pass
				2499.537	-49.32	<=-10	Pass
				2500.537	-49.70	<=-20	Pass
				2501.537	-49.98	<=-20	Pass
				2502.537	-50.10	<=-20	Pass
				2503.537	-50.45	<=-20	Pass
				2504.537	-50.71	<=-20	Pass
				2505.537	-51.12	<=-20	Pass
				2506.537	-51.15	<=-20	Pass
				2507.537	-51.59	<=-20	Pass
				2508.537	-51.72	<=-20	Pass
				2509.537	-51.79	<=-20	Pass
				2510.537	-52.16	<=-20	Pass
				2511.537	-52.20	<=-20	Pass
				2512.537	-52.18	<=-20	Pass
				2513.537	-52.47	<=-20	Pass
				2514.537	-52.54	<=-20	Pass
				2515.537	-52.64	<=-20	Pass
				2516.074	-52.72	<=-20	Pass

6.1.3 802.11n(HT20)-Ant1_NTNV

Ant1_NTNV							
Mode	Tx Type	Frequency (MHz)	ANT	Test Freq. (MHz)	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11n (HT20)	SISO	2412	1	2364.856	-53.77	<=-20	Pass
				2365.678	-53.75	<=-20	Pass
				2366.678	-53.74	<=-20	Pass
				2367.678	-53.90	<=-20	Pass
				2368.678	-53.61	<=-20	Pass
				2369.678	-53.64	<=-20	Pass
				2370.678	-53.62	<=-20	Pass
				2371.678	-53.46	<=-20	Pass
				2372.678	-53.28	<=-20	Pass
				2373.678	-52.85	<=-20	Pass
				2374.678	-52.75	<=-20	Pass
				2375.678	-52.58	<=-20	Pass
				2376.678	-52.05	<=-20	Pass
				2377.678	-51.70	<=-20	Pass
				2378.678	-51.42	<=-20	Pass
				2379.678	-50.91	<=-20	Pass
				2380.678	-50.36	<=-20	Pass
				2381.678	-49.83	<=-20	Pass
				2382.678	-49.33	<=-10	Pass
				2383.500	-48.67	<=-10	Pass
				2384.500	-48.27	<=-10	Pass
				2385.500	-47.63	<=-10	Pass
				2386.500	-47.10	<=-10	Pass
				2387.500	-46.25	<=-10	Pass
				2388.500	-45.45	<=-10	Pass
				2389.500	-44.39	<=-10	Pass
				2390.500	-43.45	<=-10	Pass
				2391.500	-42.70	<=-10	Pass

				2392.500	-41.66	<=-10	Pass
				2393.500	-40.85	<=-10	Pass
				2394.500	-40.17	<=-10	Pass
				2395.500	-39.32	<=-10	Pass
				2396.500	-39.15	<=-10	Pass
				2397.500	-38.29	<=-10	Pass
				2398.500	-37.27	<=-10	Pass
				2399.500	-35.84	<=-10	Pass
	2472		1	2484.000	-37.78	<=-10	Pass
				2485.000	-42.27	<=-10	Pass
				2486.000	-43.85	<=-10	Pass
				2487.000	-45.53	<=-10	Pass
				2488.000	-45.85	<=-10	Pass
				2489.000	-46.26	<=-10	Pass
				2490.000	-46.71	<=-10	Pass
				2491.000	-47.03	<=-10	Pass
				2492.000	-46.98	<=-10	Pass
				2493.000	-47.59	<=-10	Pass
				2494.000	-47.93	<=-10	Pass
				2495.000	-48.49	<=-10	Pass
				2496.000	-48.96	<=-10	Pass
				2497.000	-49.10	<=-10	Pass
				2498.000	-49.37	<=-10	Pass
				2499.000	-49.75	<=-10	Pass
				2500.000	-49.97	<=-10	Pass
				2500.734	-50.15	<=-10	Pass
				2501.734	-50.27	<=-20	Pass
				2502.734	-50.47	<=-20	Pass
				2503.734	-50.81	<=-20	Pass
				2504.734	-51.03	<=-20	Pass
				2505.734	-51.33	<=-20	Pass
				2506.734	-51.38	<=-20	Pass
				2507.734	-51.53	<=-20	Pass
				2508.734	-51.86	<=-20	Pass
				2509.734	-52.01	<=-20	Pass
				2510.734	-52.12	<=-20	Pass
				2511.734	-52.32	<=-20	Pass
				2512.734	-52.31	<=-20	Pass
				2513.734	-52.55	<=-20	Pass
				2514.734	-52.60	<=-20	Pass
				2515.734	-52.73	<=-20	Pass
				2516.734	-52.79	<=-20	Pass
				2517.734	-52.79	<=-20	Pass
				2518.468	-52.88	<=-20	Pass

6.1.4 802.11n(HT40)-Ant1_NTNV

Ant1_NTNV							
Mode	Tx Type	Frequency (MHz)	ANT	Test Freq. (MHz)	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11n (HT40)	SISO	2422	1	2328.288	-57.81	<=-20	Pass
				2328.394	-57.84	<=-20	Pass
				2329.394	-57.75	<=-20	Pass
				2330.394	-57.89	<=-20	Pass
				2331.394	-57.81	<=-20	Pass
				2332.394	-57.91	<=-20	Pass
				2333.394	-57.81	<=-20	Pass
				2334.394	-57.78	<=-20	Pass

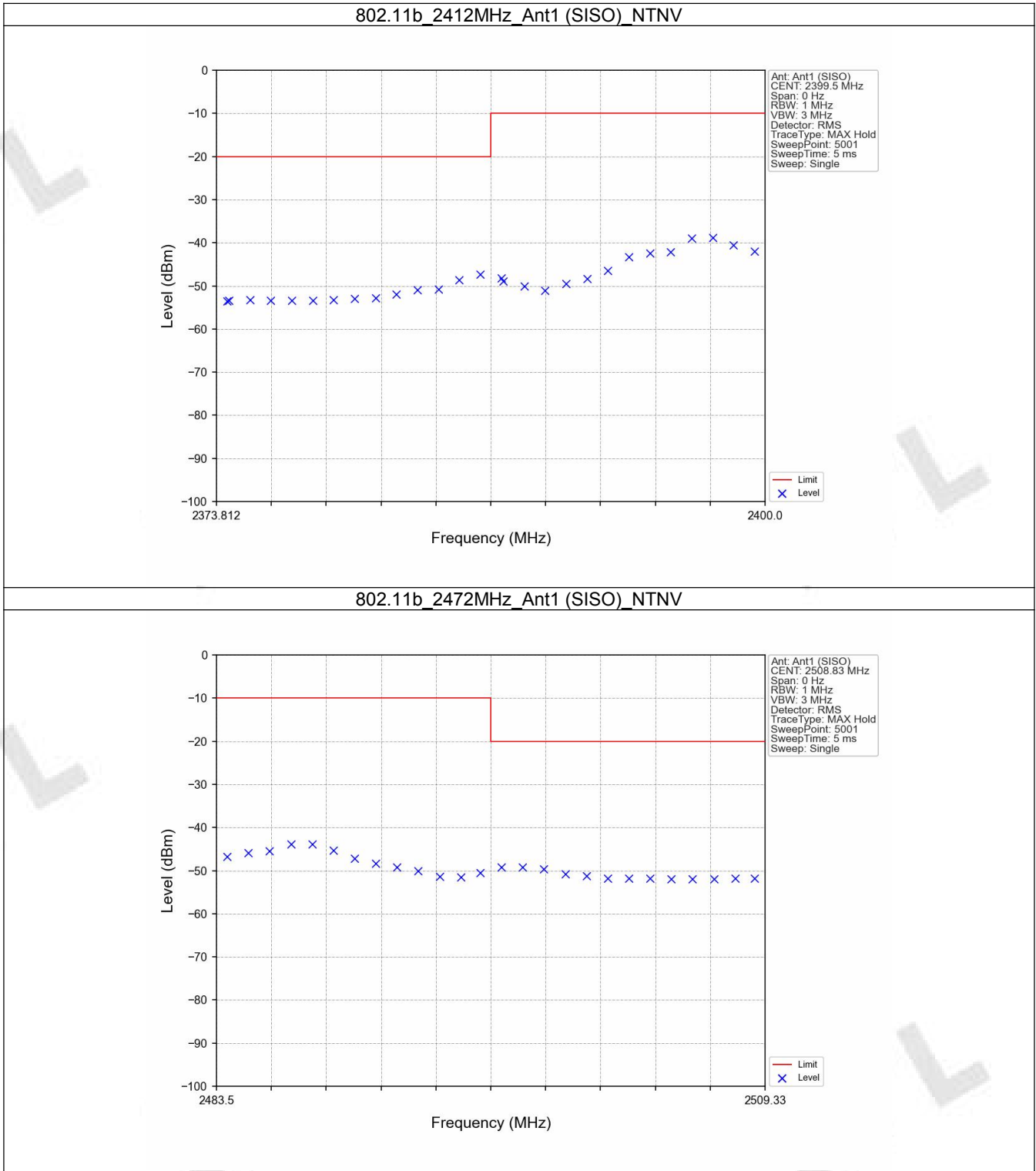
			2335.394	-57.81	<=-20	Pass
			2336.394	-57.72	<=-20	Pass
			2337.394	-57.62	<=-20	Pass
			2338.394	-57.60	<=-20	Pass
			2339.394	-57.44	<=-20	Pass
			2340.394	-57.38	<=-20	Pass
			2341.394	-57.21	<=-20	Pass
			2342.394	-57.16	<=-20	Pass
			2343.394	-56.98	<=-20	Pass
			2344.394	-56.70	<=-20	Pass
			2345.394	-56.43	<=-20	Pass
			2346.394	-56.32	<=-20	Pass
			2347.394	-56.03	<=-20	Pass
			2348.394	-55.70	<=-20	Pass
			2349.394	-55.30	<=-20	Pass
			2350.394	-54.95	<=-20	Pass
			2351.394	-54.85	<=-20	Pass
			2352.394	-54.70	<=-20	Pass
			2353.394	-54.30	<=-20	Pass
			2354.394	-54.09	<=-20	Pass
			2355.394	-53.92	<=-20	Pass
			2356.394	-53.49	<=-20	Pass
			2357.394	-53.27	<=-20	Pass
			2358.394	-52.88	<=-20	Pass
			2359.394	-52.75	<=-20	Pass
			2360.394	-52.52	<=-20	Pass
			2361.394	-52.59	<=-20	Pass
			2362.394	-52.32	<=-20	Pass
			2363.394	-52.13	<=-20	Pass
			2364.394	-52.20	<=-10	Pass
			2364.500	-52.11	<=-10	Pass
			2365.500	-51.81	<=-10	Pass
			2366.500	-51.69	<=-10	Pass
			2367.500	-51.65	<=-10	Pass
			2368.500	-51.26	<=-10	Pass
			2369.500	-51.16	<=-10	Pass
			2370.500	-51.16	<=-10	Pass
			2371.500	-50.93	<=-10	Pass
			2372.500	-50.86	<=-10	Pass
			2373.500	-50.34	<=-10	Pass
			2374.500	-49.96	<=-10	Pass
			2375.500	-49.36	<=-10	Pass
			2376.500	-49.12	<=-10	Pass
			2377.500	-48.78	<=-10	Pass
			2378.500	-48.30	<=-10	Pass
			2379.500	-47.53	<=-10	Pass
			2380.500	-47.06	<=-10	Pass
			2381.500	-46.94	<=-10	Pass
			2382.500	-46.44	<=-10	Pass
			2383.500	-45.33	<=-10	Pass
			2384.500	-45.12	<=-10	Pass
			2385.500	-44.67	<=-10	Pass
			2386.500	-44.29	<=-10	Pass
			2387.500	-44.19	<=-10	Pass
			2388.500	-43.31	<=-10	Pass
			2389.500	-42.98	<=-10	Pass
			2390.500	-42.76	<=-10	Pass
			2391.500	-42.50	<=-10	Pass
			2392.500	-41.98	<=-10	Pass

			1	2393.500	-41.76	<=-10	Pass	
				2394.500	-41.52	<=-10	Pass	
				2395.500	-40.55	<=-10	Pass	
				2396.500	-40.18	<=-10	Pass	
				2397.500	-39.26	<=-10	Pass	
				2398.500	-37.03	<=-10	Pass	
				2399.500	-34.89	<=-10	Pass	
		2462		2484.000	-36.27	<=-10	Pass	
				2485.000	-39.61	<=-10	Pass	
				2486.000	-41.04	<=-10	Pass	
				2487.000	-44.46	<=-10	Pass	
				2488.000	-45.66	<=-10	Pass	
				2489.000	-46.03	<=-10	Pass	
				2490.000	-47.23	<=-10	Pass	
				2491.000	-47.63	<=-10	Pass	
				2492.000	-48.02	<=-10	Pass	
				2493.000	-48.00	<=-10	Pass	
				2494.000	-48.44	<=-10	Pass	
				2495.000	-48.45	<=-10	Pass	
				2496.000	-48.63	<=-10	Pass	
				2497.000	-48.66	<=-10	Pass	
				2498.000	-48.86	<=-10	Pass	
				2499.000	-48.90	<=-10	Pass	
				2500.000	-49.08	<=-10	Pass	
				2501.000	-49.12	<=-10	Pass	
				2502.000	-49.24	<=-10	Pass	
				2503.000	-49.37	<=-10	Pass	
				2504.000	-49.69	<=-10	Pass	
				2505.000	-49.69	<=-10	Pass	
				2506.000	-49.70	<=-10	Pass	
				2507.000	-49.93	<=-10	Pass	
				2508.000	-50.17	<=-10	Pass	
				2509.000	-50.64	<=-10	Pass	
				2510.000	-50.98	<=-10	Pass	
				2511.000	-51.23	<=-10	Pass	
				2512.000	-51.69	<=-10	Pass	
				2513.000	-51.62	<=-10	Pass	
				2514.000	-51.82	<=-10	Pass	
				2515.000	-52.00	<=-10	Pass	
				2516.000	-52.24	<=-10	Pass	
				2517.000	-52.82	<=-10	Pass	
				2518.000	-53.03	<=-10	Pass	
				2519.000	-53.11	<=-10	Pass	
				2519.105	-53.14	<=-10	Pass	
				2520.105	-53.46	<=-20	Pass	
				2521.105	-53.57	<=-20	Pass	
				2522.105	-53.84	<=-20	Pass	
				2523.105	-54.05	<=-20	Pass	
				2524.105	-54.06	<=-20	Pass	
				2525.105	-54.12	<=-20	Pass	
				2526.105	-54.35	<=-20	Pass	
				2527.105	-54.43	<=-20	Pass	
				2528.105	-54.58	<=-20	Pass	
				2529.105	-54.69	<=-20	Pass	
				2530.105	-54.79	<=-20	Pass	
				2531.105	-54.84	<=-20	Pass	
				2532.105	-55.07	<=-20	Pass	
				2533.105	-54.98	<=-20	Pass	
				2534.105	-55.00	<=-20	Pass	

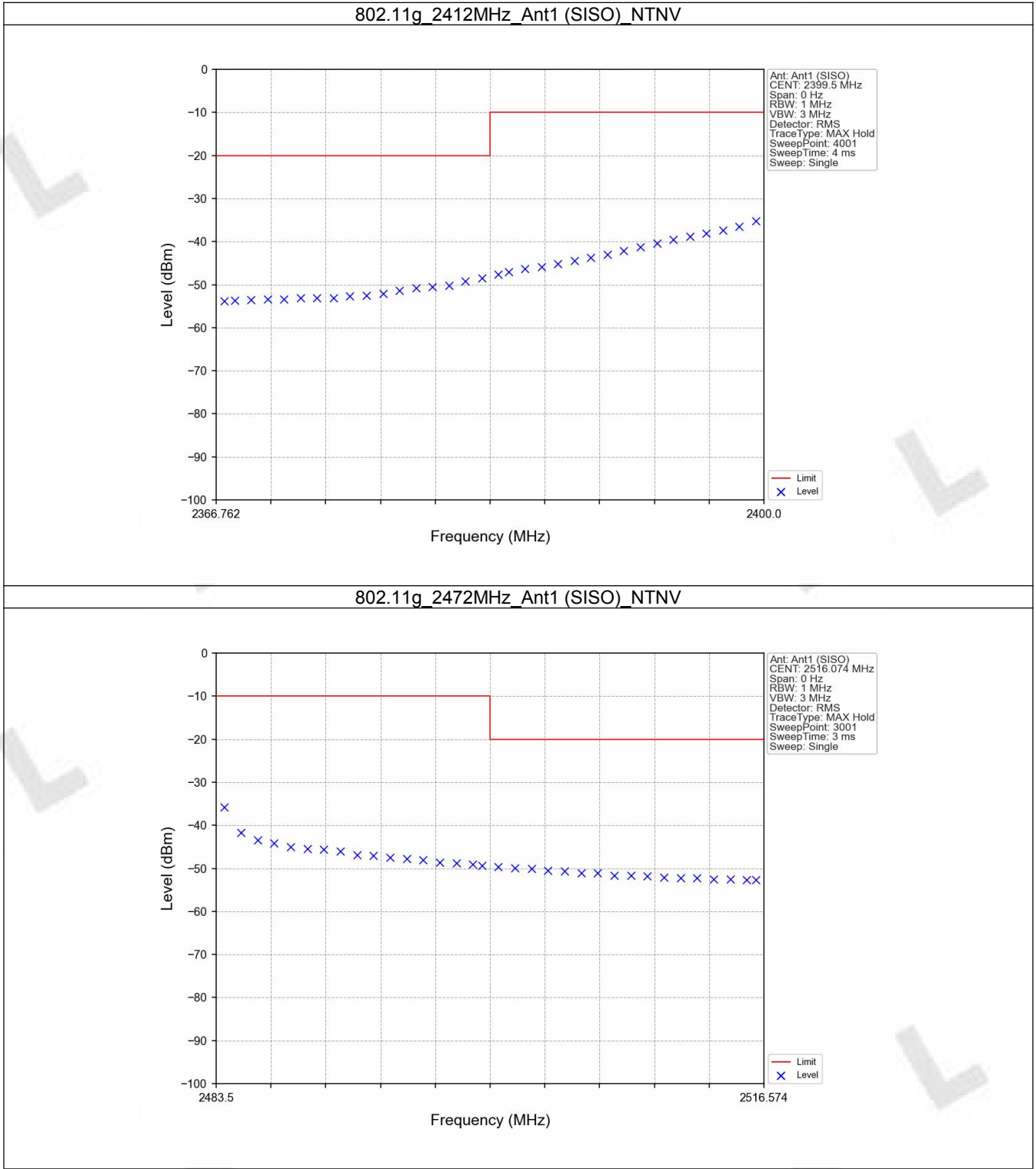
			2535.105	-54.99	<=-20	Pass
			2536.105	-55.10	<=-20	Pass
			2537.105	-55.14	<=-20	Pass
			2538.105	-54.96	<=-20	Pass
			2539.105	-55.16	<=-20	Pass
			2540.105	-55.26	<=-20	Pass
			2541.105	-55.18	<=-20	Pass
			2542.105	-55.42	<=-20	Pass
			2543.105	-55.19	<=-20	Pass
			2544.105	-55.27	<=-20	Pass
			2545.105	-55.21	<=-20	Pass
			2546.105	-55.39	<=-20	Pass
			2547.105	-55.27	<=-20	Pass
			2548.105	-55.52	<=-20	Pass
			2549.105	-55.36	<=-20	Pass
			2550.105	-55.57	<=-20	Pass
			2551.105	-55.65	<=-20	Pass
			2552.105	-55.69	<=-20	Pass
			2553.105	-55.77	<=-20	Pass
			2554.105	-55.86	<=-20	Pass
			2555.105	-55.81	<=-20	Pass
			2555.210	-55.90	<=-20	Pass

6.2 Test Graph

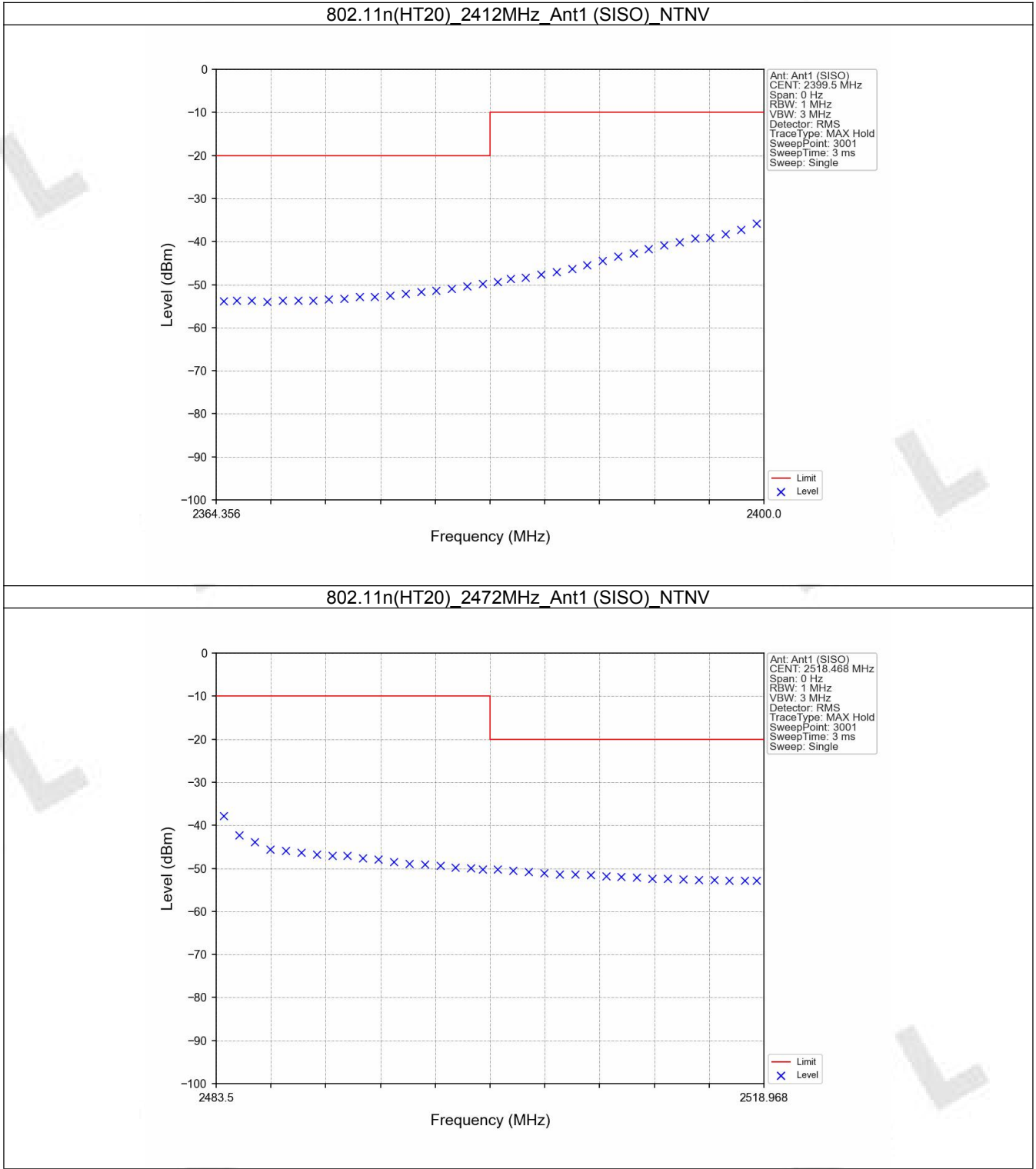
6.2.1 802.11b-Ant1_NTNV



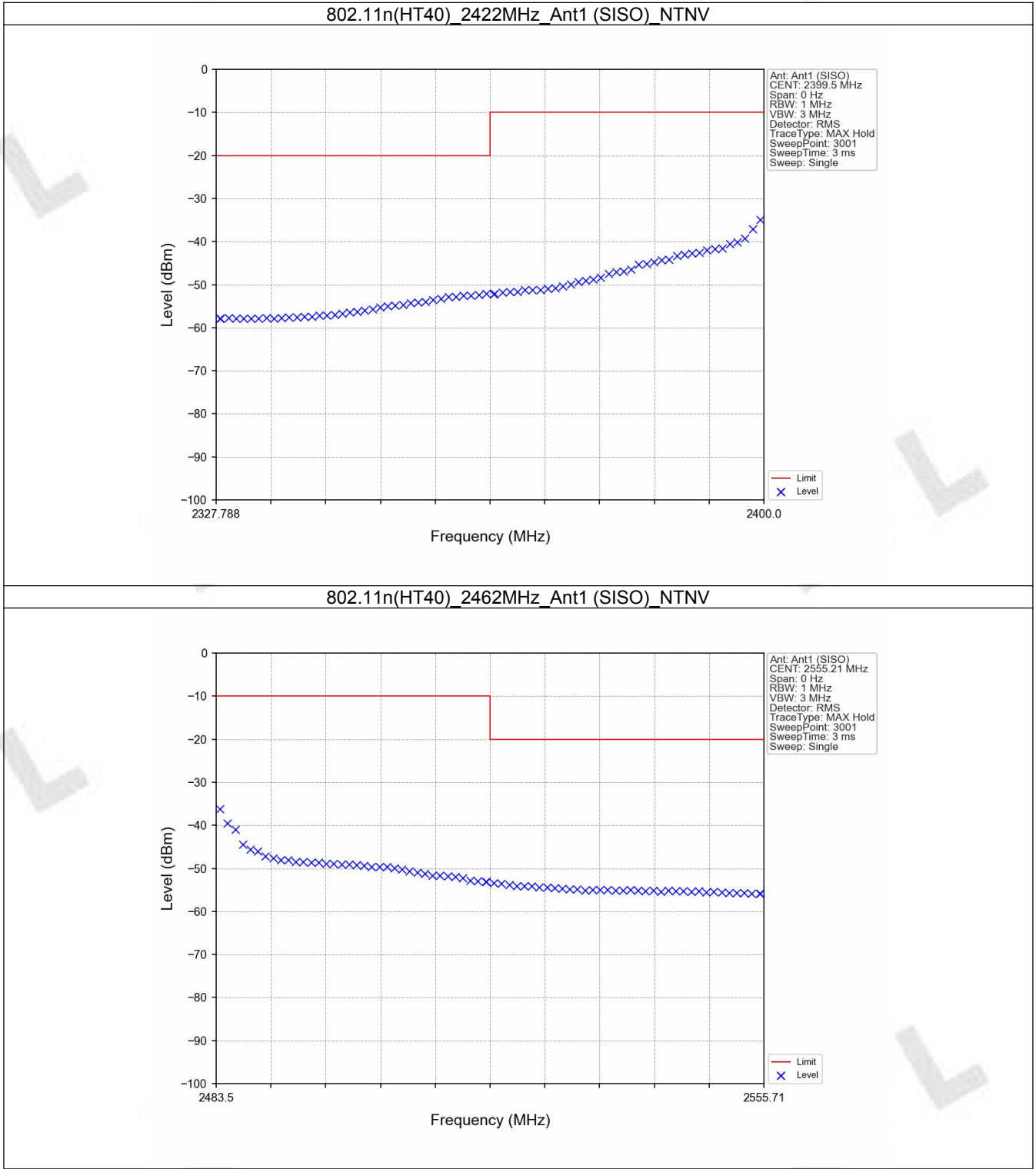
6.2.2 802.11g-Ant1_NTNV



6.2.3 802.11n(HT20)-Ant1_NTNV



6.2.4 802.11n(HT40)-Ant1_NTNV



7. Receiver Blocking

7.1 Test Result

7.1.1 Ant1

Ant1									
ENV	Mode	TX Type	Frequency (MHz)	Wanted signal level (dBm)	Blocking Signal		PER (%)	Limit (%)	Verdict
					Frequency (MHz)	Power (dBm)			
NTNV	802.11b	SISO	2412	-72.94	2300	-32.94	0.00	<=10	Pass
					2330	-32.94	0.00	<=10	Pass
					2360	-32.94	0.00	<=10	Pass
				-66.94	2380	-32.94	0.00	<=10	Pass
			2472	-66.94	2504	-32.94	0.00	<=10	Pass
				-72.94	2524	-32.94	0.00	<=10	Pass
					2584	-32.94	0.00	<=10	Pass
					2674	-32.94	0.00	<=10	Pass
Note1: Receiver Category=1									