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Annex for 2.4G Wi-Fi

Test Report No.: CTL2411217041-WR02

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

1.1 Test Result

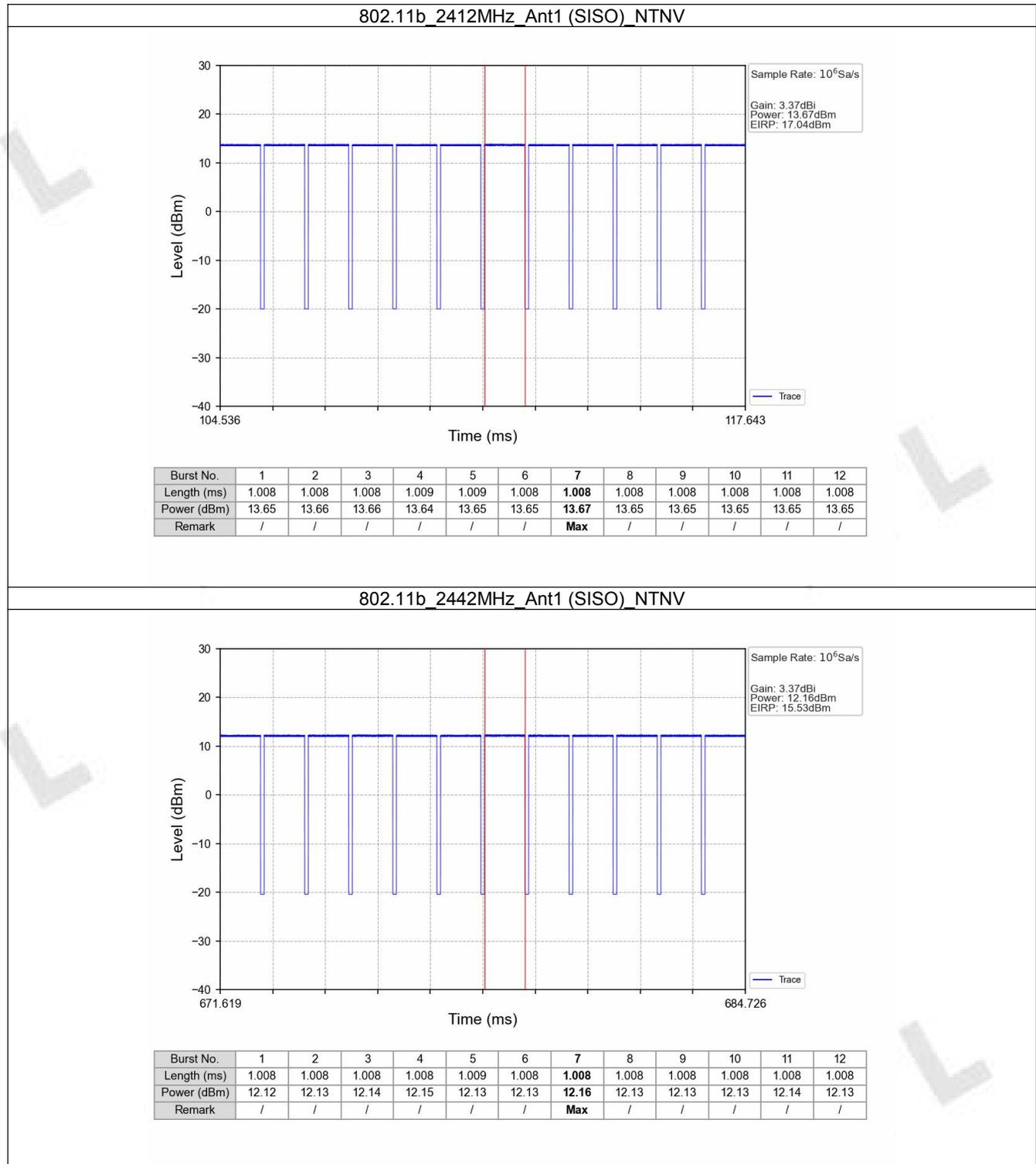
1.1.1 Power

ENV	Mode	TX Type	Frequency (MHz)	ANT	Gain (dBi)	Power (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
NTNV	802.11b	SISO	2412	1	3.37	13.67	17.04	<=20	Pass
			2442	1	3.37	12.16	15.53	<=20	Pass
			2472	1	3.37	11.32	14.69	<=20	Pass
	802.11g	SISO	2412	1	3.37	14.29	17.66	<=20	Pass
			2442	1	3.37	13.03	16.40	<=20	Pass
			2472	1	3.37	11.84	15.21	<=20	Pass
	802.11n (HT20)	SISO	2412	1	3.37	14.37	17.74	<=20	Pass
			2442	1	3.37	13.06	16.43	<=20	Pass
			2472	1	3.37	12.14	15.51	<=20	Pass
	802.11n (HT40)	SISO	2422	1	3.37	14.22	17.59	<=20	Pass
			2442	1	3.37	13.43	16.80	<=20	Pass
			2462	1	3.37	12.76	16.13	<=20	Pass
HTNV	802.11b	SISO	2412	1	3.37	13.66	17.03	<=20	Pass
			2442	1	3.37	12.18	15.55	<=20	Pass
			2472	1	3.37	11.33	14.70	<=20	Pass
	802.11g	SISO	2412	1	3.37	14.30	17.67	<=20	Pass
			2442	1	3.37	12.99	16.36	<=20	Pass
			2472	1	3.37	11.85	15.22	<=20	Pass
	802.11n (HT20)	SISO	2412	1	3.37	14.51	17.88	<=20	Pass
			2442	1	3.37	13.06	16.43	<=20	Pass
			2472	1	3.37	12.14	15.51	<=20	Pass
	802.11n (HT40)	SISO	2422	1	3.37	14.41	17.78	<=20	Pass
			2442	1	3.37	13.43	16.80	<=20	Pass
			2462	1	3.37	12.75	16.12	<=20	Pass
LTVN	802.11b	SISO	2412	1	3.37	13.66	17.03	<=20	Pass
			2442	1	3.37	12.16	15.53	<=20	Pass
			2472	1	3.37	11.32	14.69	<=20	Pass
	802.11g	SISO	2412	1	3.37	14.27	17.64	<=20	Pass
			2442	1	3.37	13.00	16.37	<=20	Pass
			2472	1	3.37	11.87	15.24	<=20	Pass
	802.11n (HT20)	SISO	2412	1	3.37	14.50	17.87	<=20	Pass
			2442	1	3.37	13.06	16.43	<=20	Pass
			2472	1	3.37	12.15	15.52	<=20	Pass
	802.11n (HT40)	SISO	2422	1	3.37	14.43	17.80	<=20	Pass
			2442	1	3.37	13.43	16.80	<=20	Pass
			2462	1	3.37	12.76	16.13	<=20	Pass

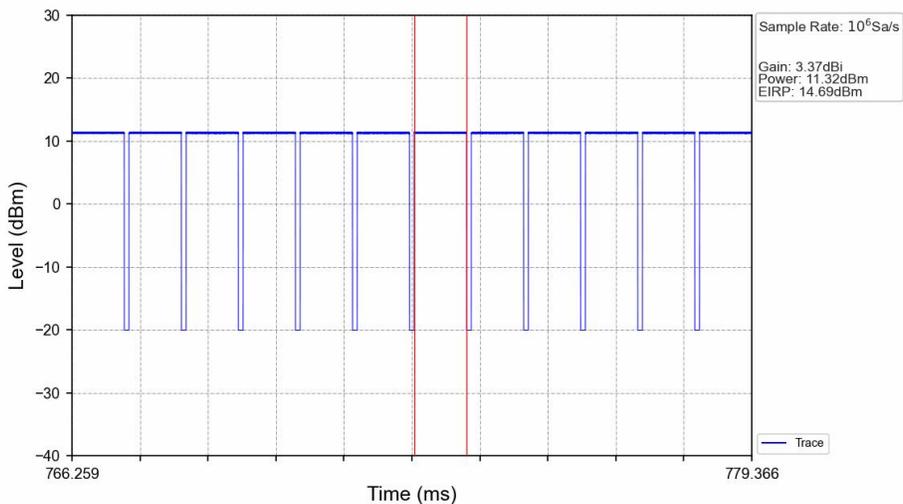
Note1: E.I.R.P = Measured Power + Antenna Gain

1.2 Test Graph

1.2.1 Power

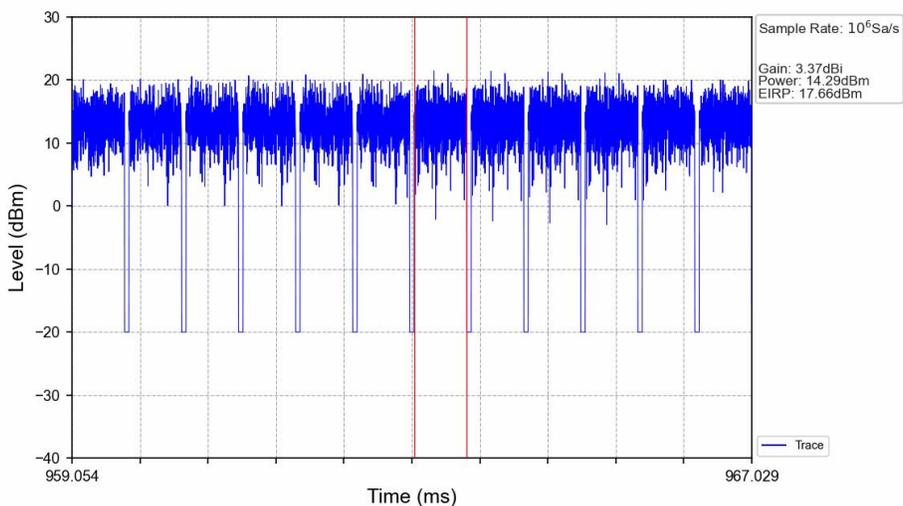


802.11b_2472MHz_Ant1 (SISO)_NTNV



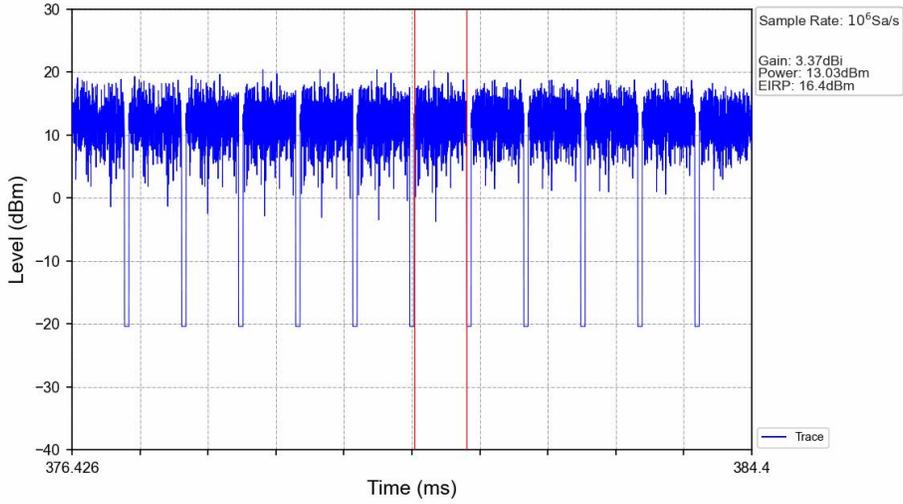
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Length (ms)	1.008	1.008	1.008	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.008	1.008
Power (dBm)	11.31	11.32	11.30	11.30	11.30	11.29	11.32	11.30	11.30	11.30	11.30	11.30
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2412MHz_Ant1 (SISO)_NTNV



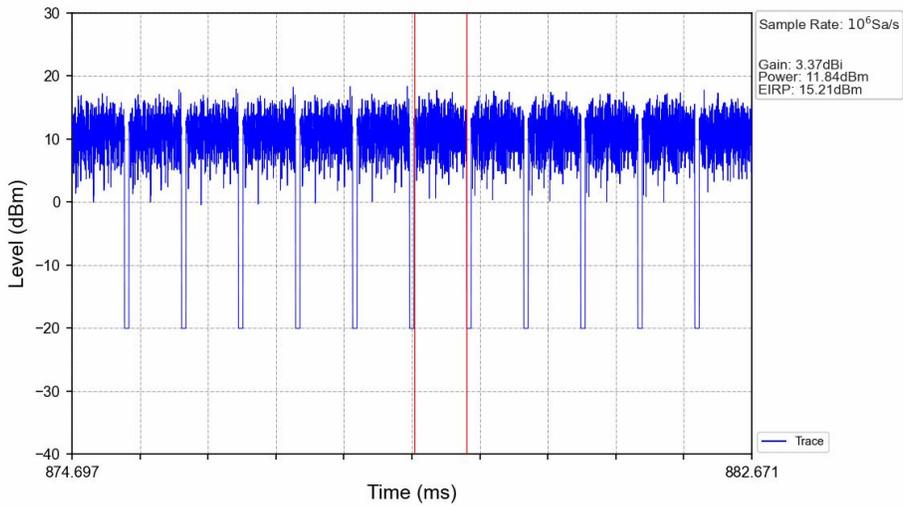
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.617	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617
Power (dBm)	13.93	13.98	14.03	14.03	14.02	14.05	14.29	14.29	14.28	14.27	14.08	14.07
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2442MHz_Ant1 (SISO)_NTNV



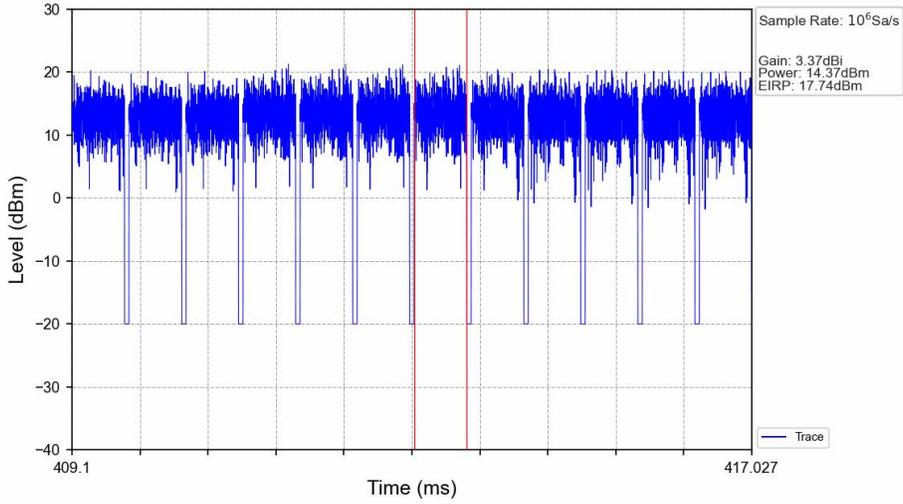
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.616	0.616
Power (dBm)	12.75	12.74	12.92	13.00	12.99	12.99	13.03	12.79	12.79	12.78	12.78	12.74
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2472MHz_Ant1 (SISO)_NTNV



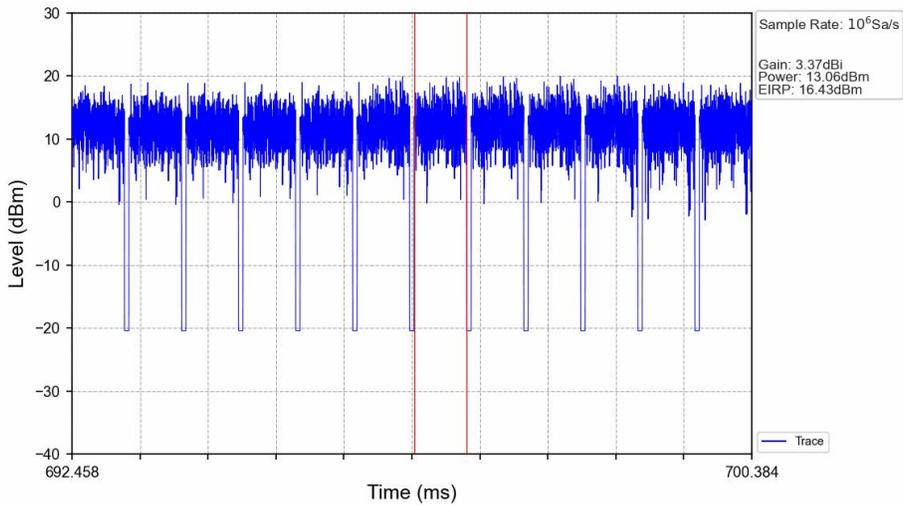
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Length (ms)	0.616	0.615	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617
Power (dBm)	11.57	11.64	11.71	11.70	11.70	11.70	11.84	11.78	11.79	11.79	11.76	11.53
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



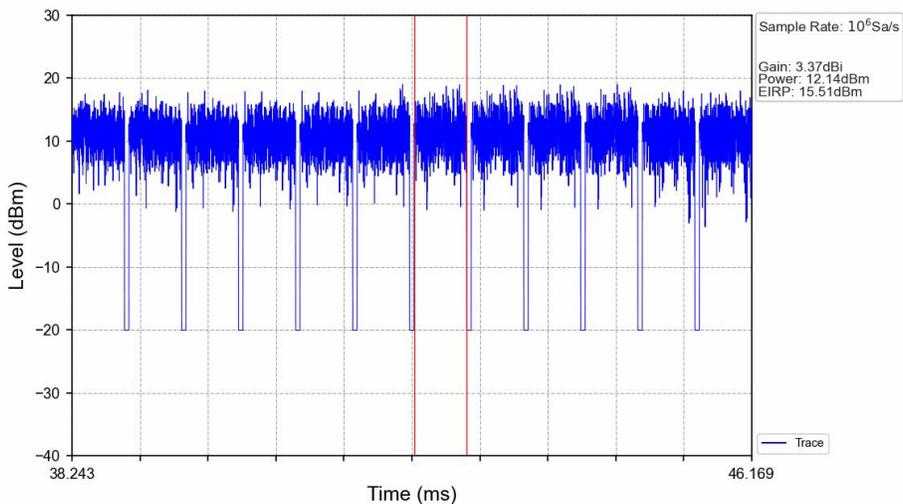
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Length (ms)	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	13.76	13.77	13.80	14.35	14.35	14.36	14.37	14.20	13.99	13.98	13.98	13.97
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2442MHz_Ant1 (SISO)_NTNV



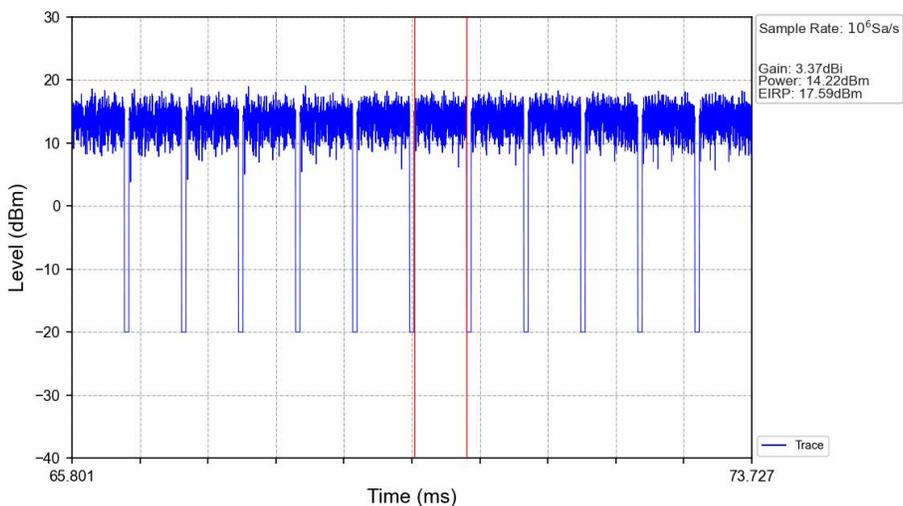
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Length (ms)	0.612	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	12.68	12.48	12.48	12.48	12.48	12.90	13.06	13.06	13.06	12.96	12.68	12.67
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV



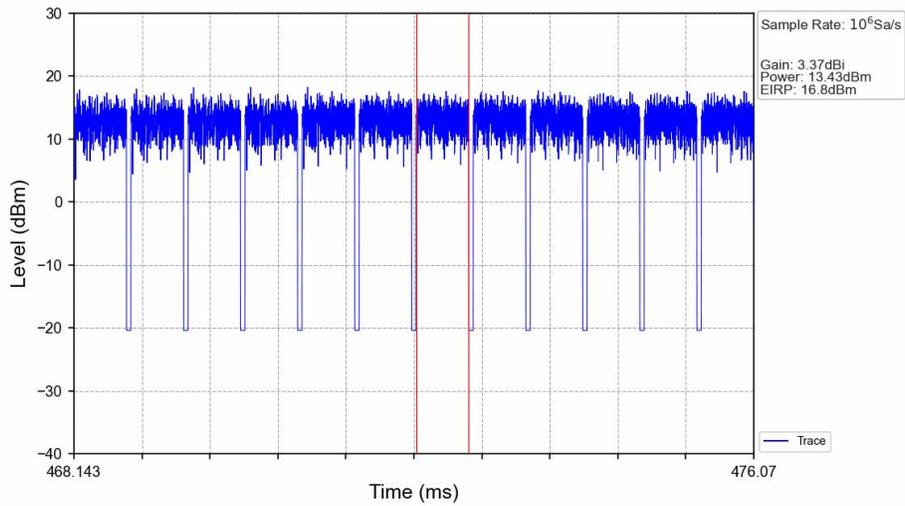
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	11.78	11.76	11.55	11.55	11.55	11.74	12.14	12.14	12.13	12.14	11.88	11.75
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV



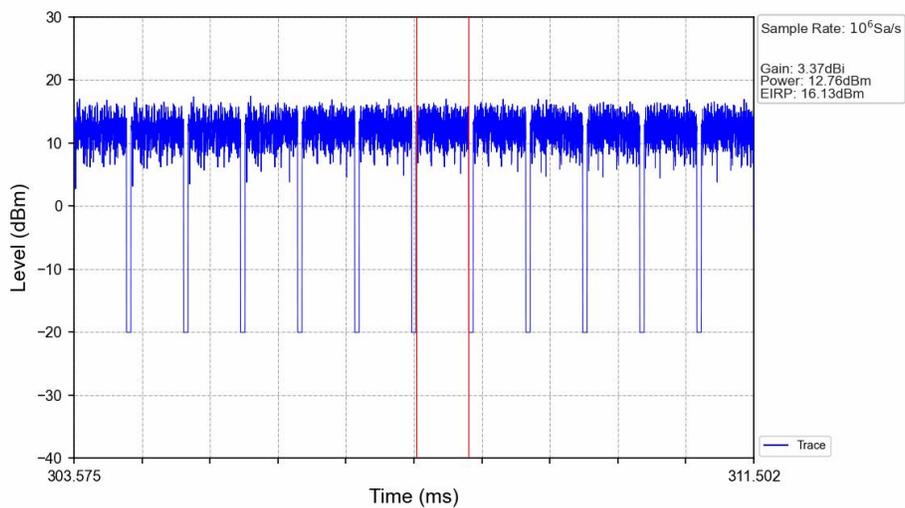
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Length (ms)	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613
Power (dBm)	14.05	14.03	14.02	14.02	14.02	14.22	14.22	14.22	14.22	14.17	14.08	14.07
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2442MHz_Ant1 (SISO)_NTNV



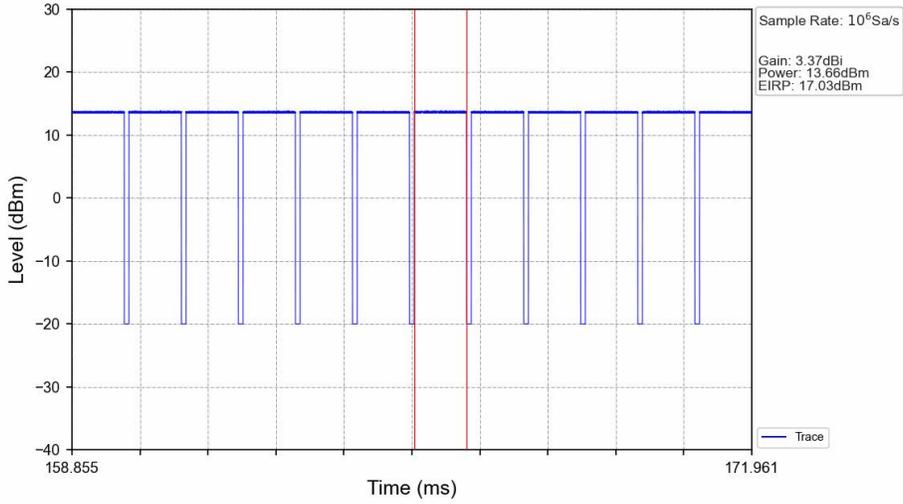
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613	0.613
Power (dBm)	13.24	13.23	13.23	13.22	13.36	13.43	13.43	13.43	13.42	13.28	13.29	13.30
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2462MHz_Ant1 (SISO)_NTNV



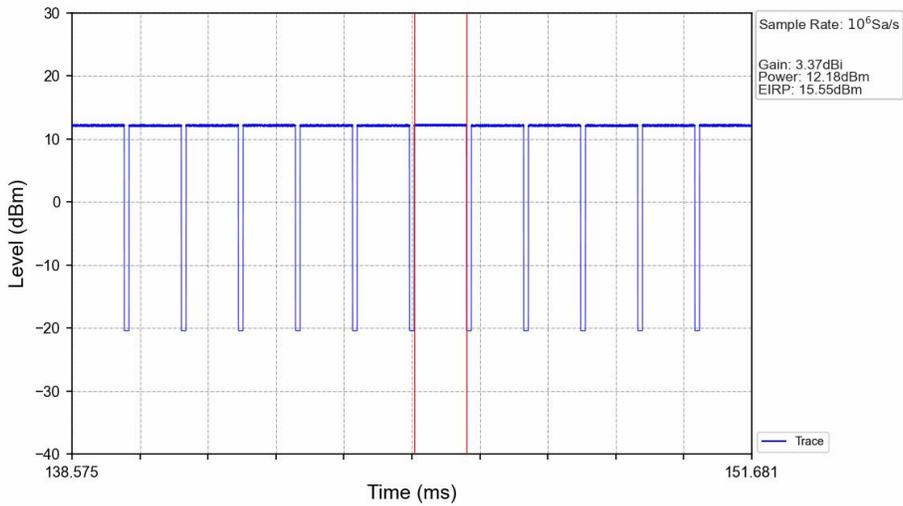
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613	0.613
Power (dBm)	12.55	12.54	12.54	12.59	12.75	12.76	12.76	12.75	12.68	12.60	12.59	12.60
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2412MHz_Ant1 (SISO)_HTNV



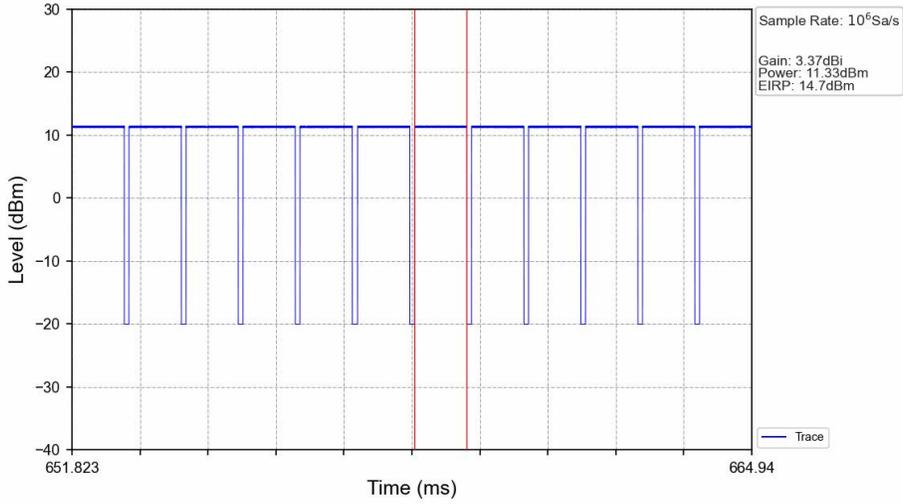
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.009	1.009	1.008
Power (dBm)	13.64	13.65	13.64	13.65	13.65	13.64	13.66	13.65	13.64	13.64	13.65	13.64
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2442MHz_Ant1 (SISO)_HTNV



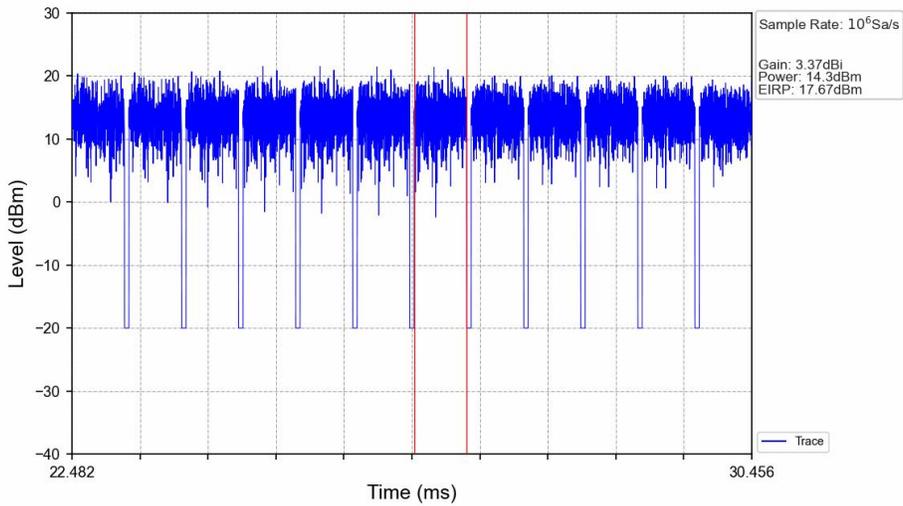
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.008
Power (dBm)	12.15	12.14	12.14	12.15	12.14	12.14	12.18	12.14	12.15	12.14	12.15	12.15
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2472MHz_Ant1 (SISO)_HTNV



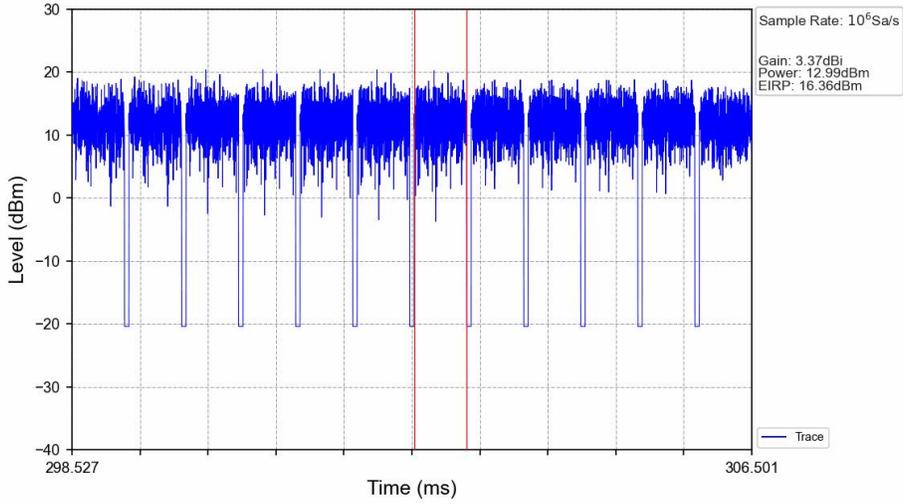
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Length (ms)	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.009	1.009	1.008	1.008
Power (dBm)	11.31	11.31	11.31	11.30	11.30	11.31	11.33	11.31	11.30	11.30	11.31	11.31
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2412MHz_Ant1 (SISO)_HTNV



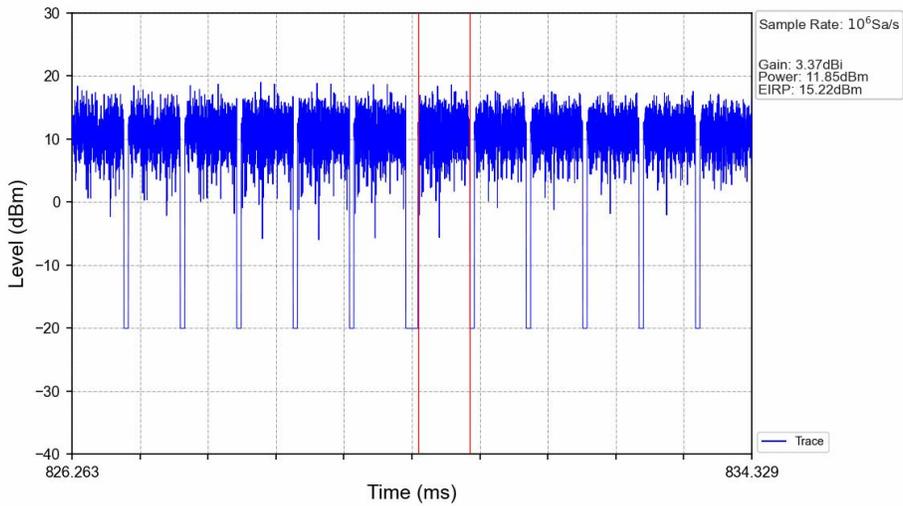
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	14.03	14.01	14.18	14.28	14.28	14.28	14.30	14.06	14.07	14.06	14.06	14.04
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2442MHz_Ant1 (SISO)_HTNV



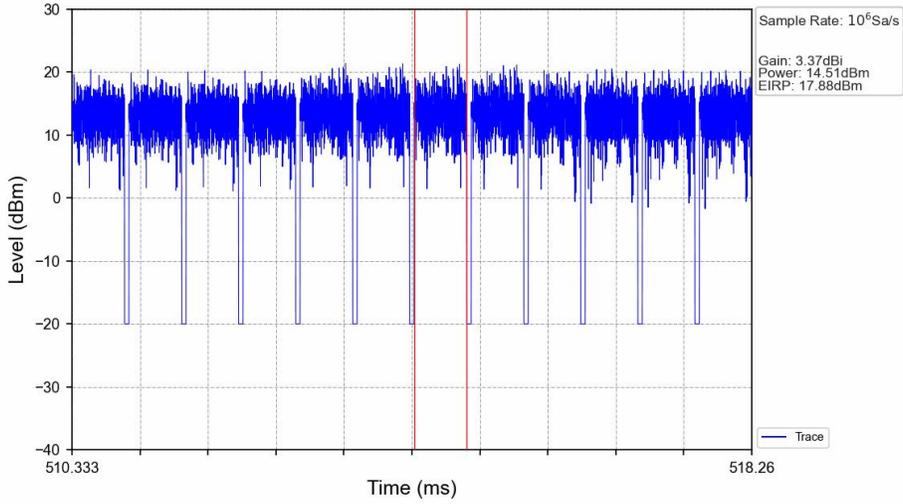
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.616	0.616
Power (dBm)	12.74	12.73	12.98	12.98	12.98	12.97	12.99	12.77	12.77	12.76	12.77	12.74
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2472MHz_Ant1 (SISO)_HTNV



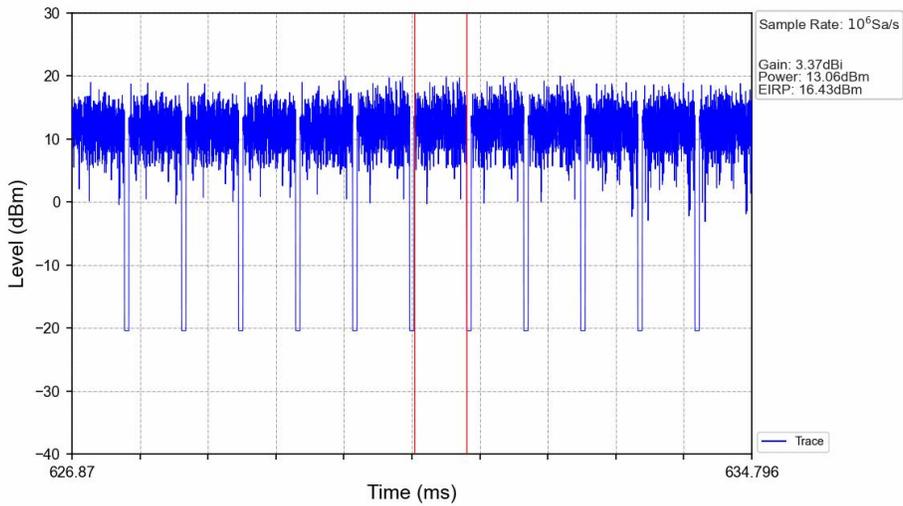
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.615	0.616	0.616	0.616	0.616	0.616
Power (dBm)	11.58	11.58	11.76	11.82	11.81	11.79	11.85	11.65	11.65	11.66	11.66	11.60
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2412MHz_Ant1 (SISO)_HTNV



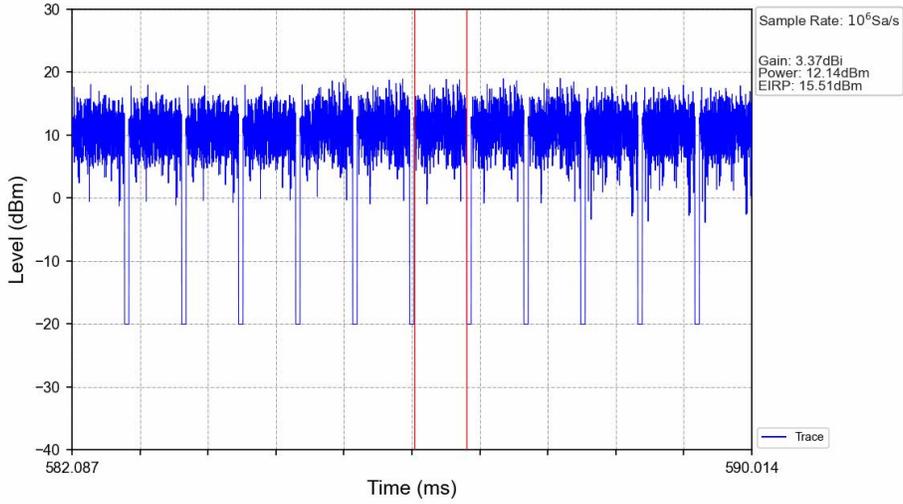
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	13.93	13.92	13.92	13.92	14.51	14.51	14.51	14.50	14.30	14.13	14.12	14.12
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2442MHz_Ant1 (SISO)_HTNV



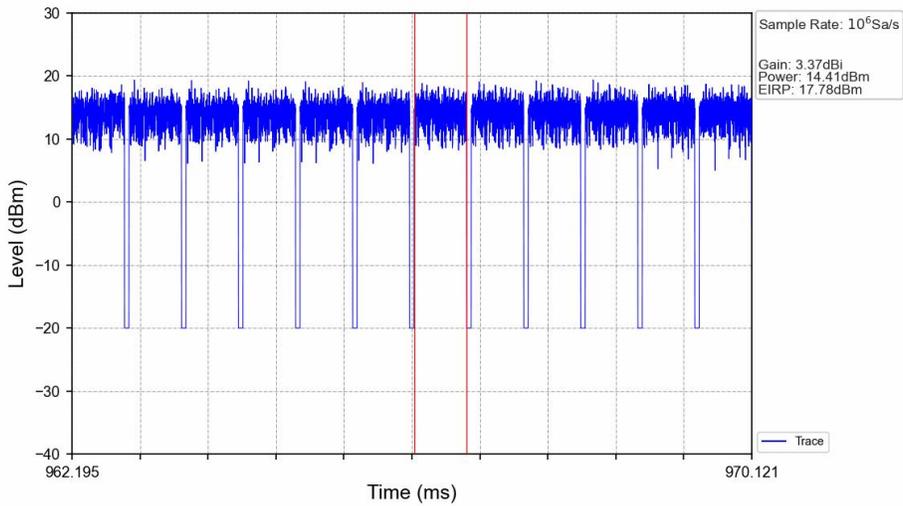
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	12.57	12.47	12.47	12.47	12.66	13.06	13.06	13.06	13.06	12.76	12.67	12.68
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2472MHz_Ant1 (SISO)_HTNV



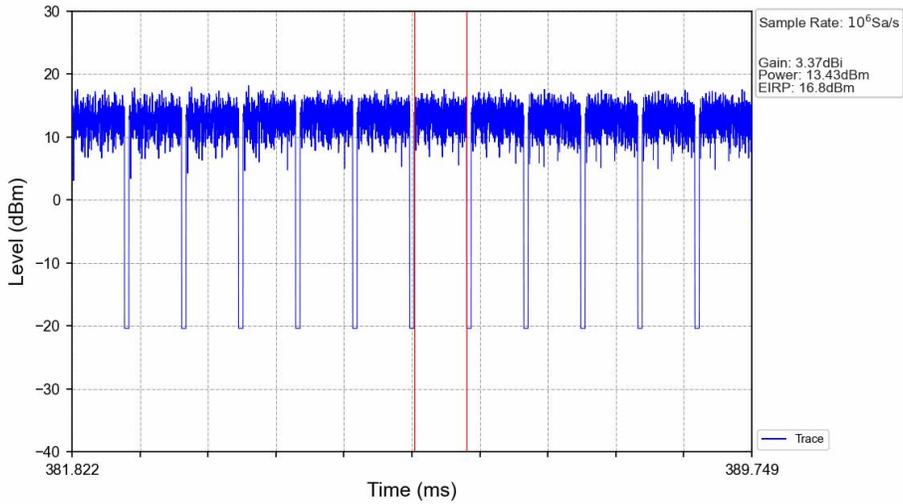
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	11.55	11.55	11.55	11.54	11.91	12.13	12.14	12.13	12.12	11.75	11.74	11.73
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2422MHz_Ant1 (SISO)_HTNV



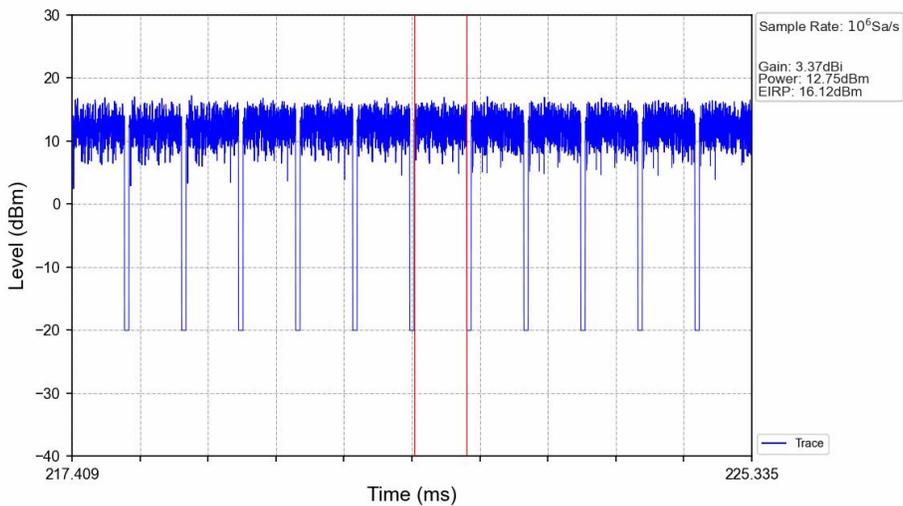
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613
Power (dBm)	14.26	14.21	14.22	14.22	14.22	14.27	14.41	14.41	14.40	14.39	14.33	14.35
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2442MHz_Ant1 (SISO)_HTNV



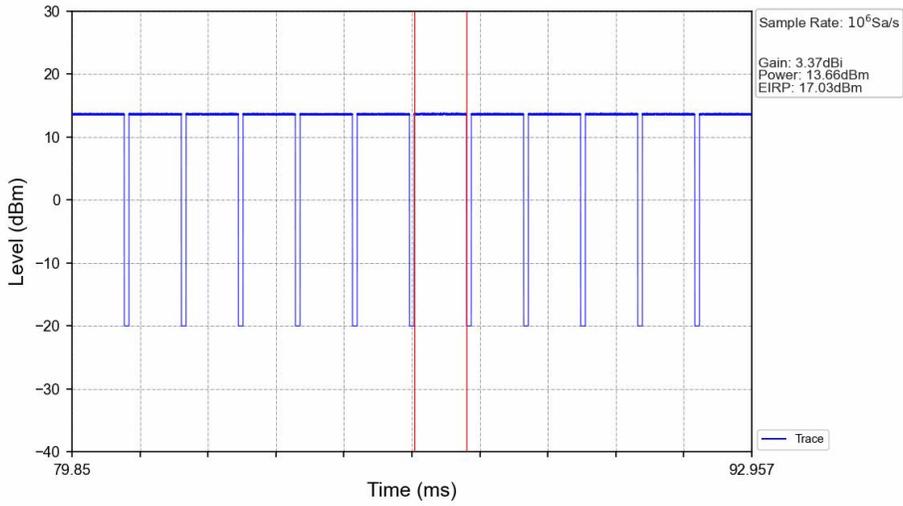
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613	0.613	0.613
Power (dBm)	13.24	13.24	13.23	13.35	13.42	13.42	13.43	13.41	13.30	13.29	13.28	13.28
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2462MHz_Ant1 (SISO)_HTNV



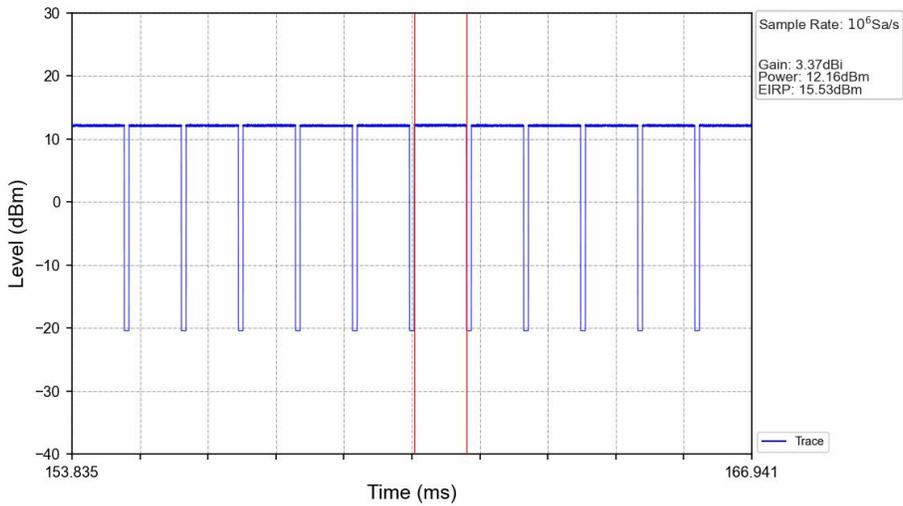
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613	0.613	0.613	0.612
Power (dBm)	12.54	12.54	12.57	12.72	12.74	12.74	12.75	12.62	12.61	12.60	12.59	12.59
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2412MHz_Ant1 (SISO)_LTNV



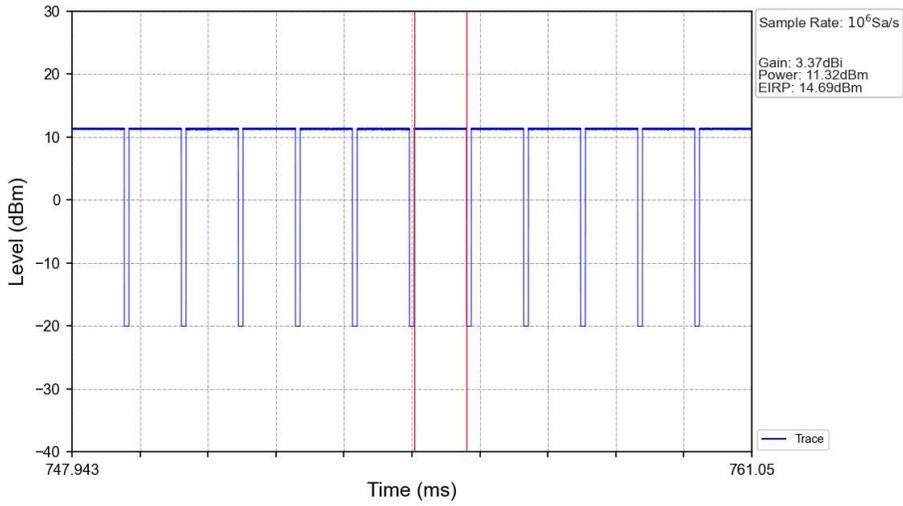
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.008	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.009	1.009
Power (dBm)	13.65	13.65	13.65	13.65	13.64	13.65	13.66	13.65	13.65	13.66	13.65	13.65
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2442MHz_Ant1 (SISO)_LTNV



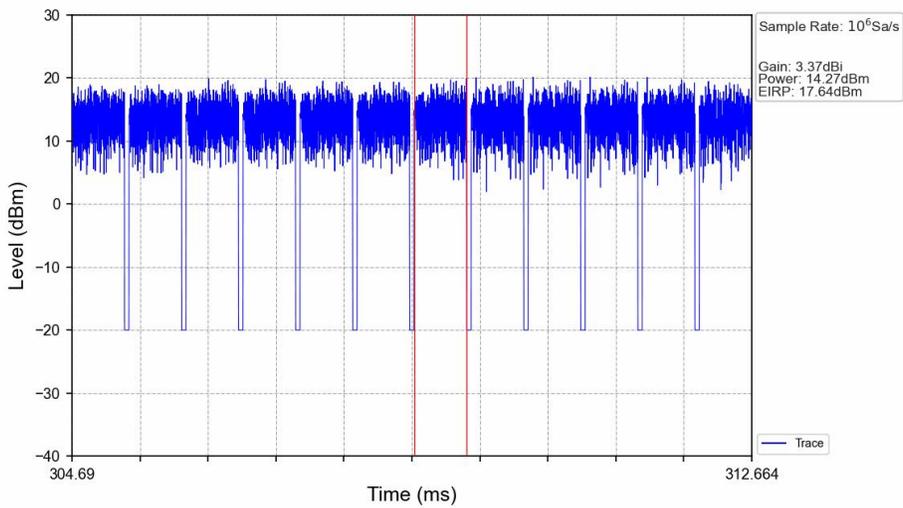
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.008	1.008	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.007	1.008
Power (dBm)	12.14	12.13	12.14	12.14	12.13	12.14	12.16	12.14	12.13	12.13	12.14	12.14
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11b_2472MHz_Ant1 (SISO)_LTNV



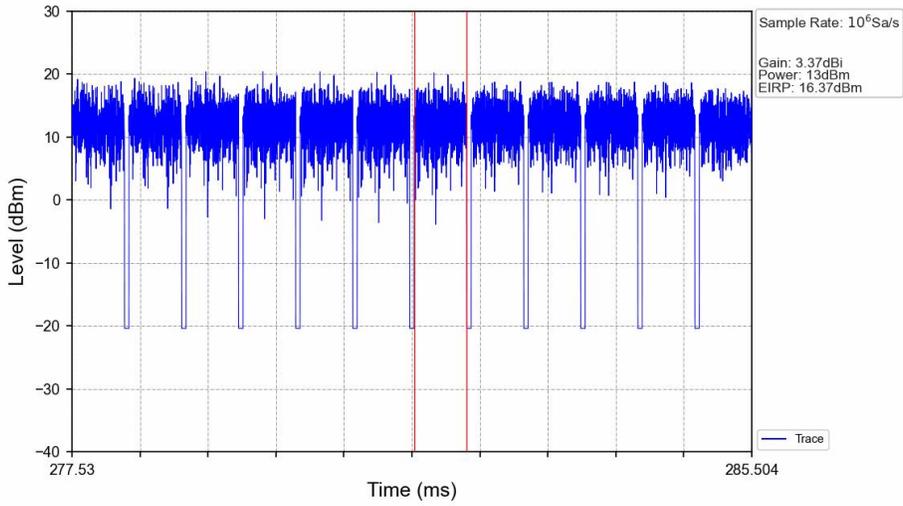
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.009
Power (dBm)	11.31	11.32	11.29	11.31	11.29	11.29	11.32	11.30	11.30	11.29	11.30	11.30
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2412MHz_Ant1 (SISO)_LTNV



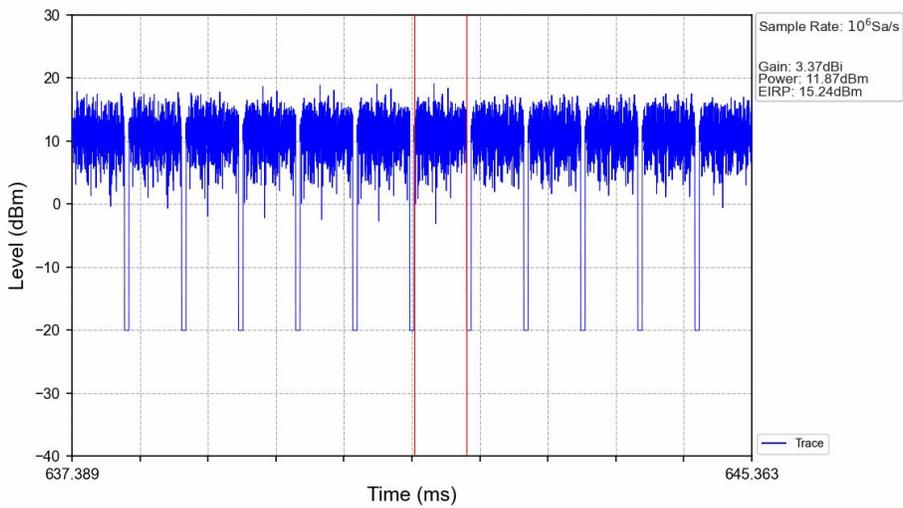
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.617	0.617	0.617	0.617	0.616	0.616	0.616	0.616	0.616	0.616
Power (dBm)	13.97	13.97	14.17	14.17	14.16	14.16	14.27	14.19	14.19	14.19	14.19	13.97
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2442MHz_Ant1 (SISO)_LTNV



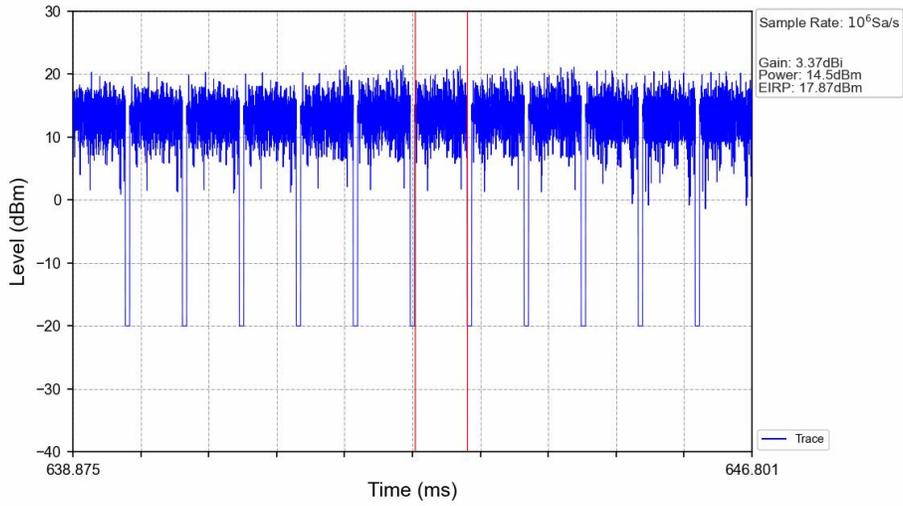
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.616	0.616	0.616
Power (dBm)	12.73	12.73	12.99	12.98	12.98	12.98	13.00	12.77	12.77	12.77	12.77	12.73
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11g_2472MHz_Ant1 (SISO)_LTNV



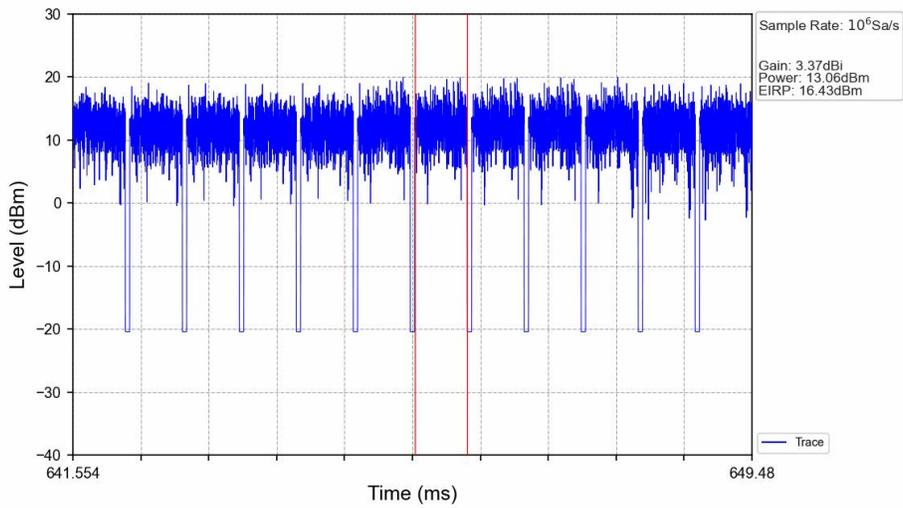
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.617	0.617	0.617	0.617	0.616
Power (dBm)	11.66	11.65	11.80	11.80	11.81	11.82	11.87	11.61	11.62	11.64	11.64	11.66
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2412MHz_Ant1 (SISO)_LTV



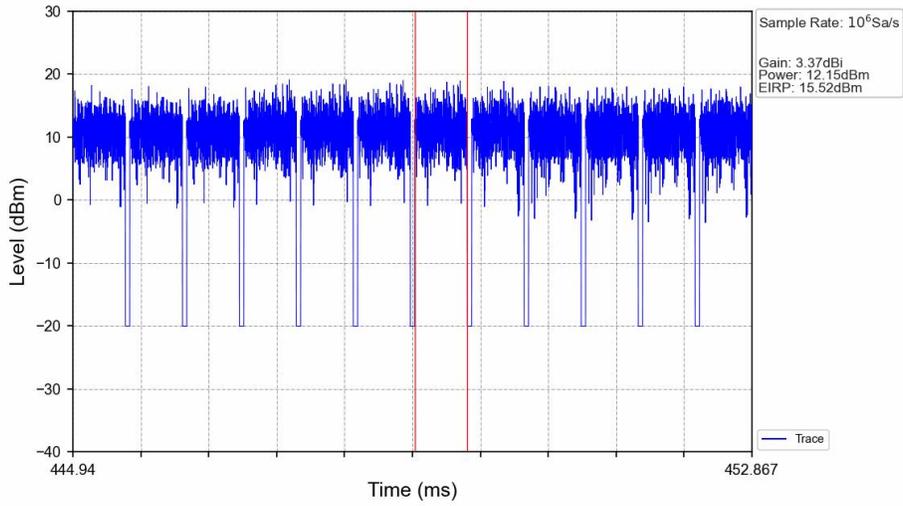
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	14.00	13.91	13.91	13.91	14.08	14.50	14.50	14.50	14.49	14.19	14.13	14.12
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2442MHz_Ant1 (SISO)_LTV



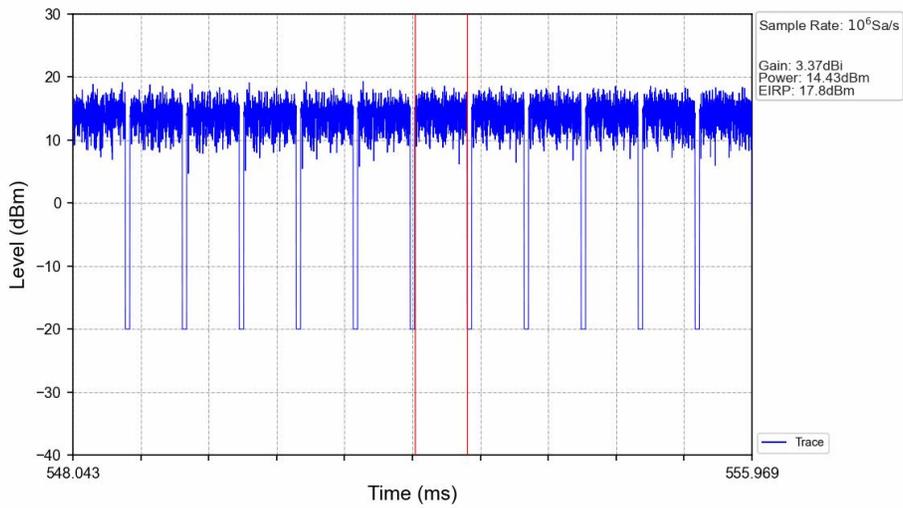
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.613	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	12.66	12.46	12.47	12.48	12.47	12.93	13.06	13.06	13.06	12.97	12.68	12.67
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT20)_2472MHz_Ant1 (SISO)_LTV



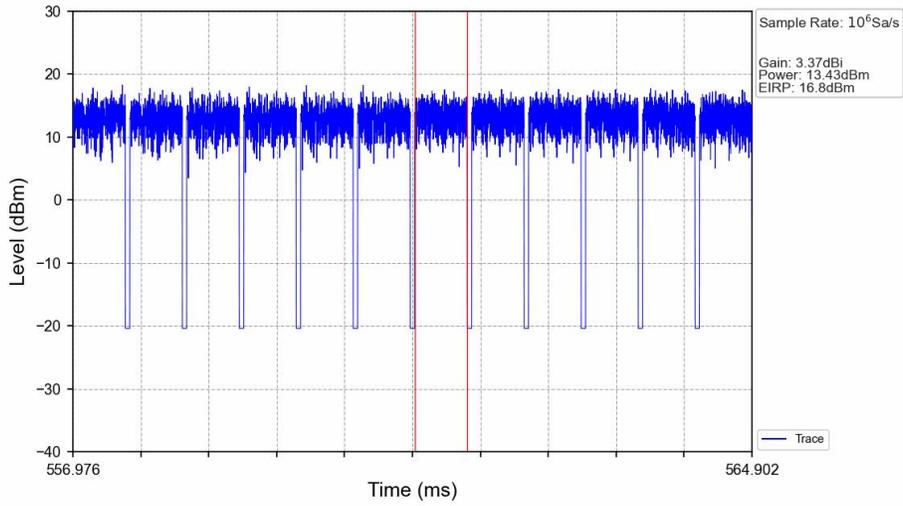
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.613	0.613	0.613	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612
Power (dBm)	11.56	11.55	11.56	12.06	12.13	12.14	12.15	12.02	11.77	11.76	11.75	11.75
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

802.11n(HT40)_2422MHz_Ant1 (SISO)_LTV



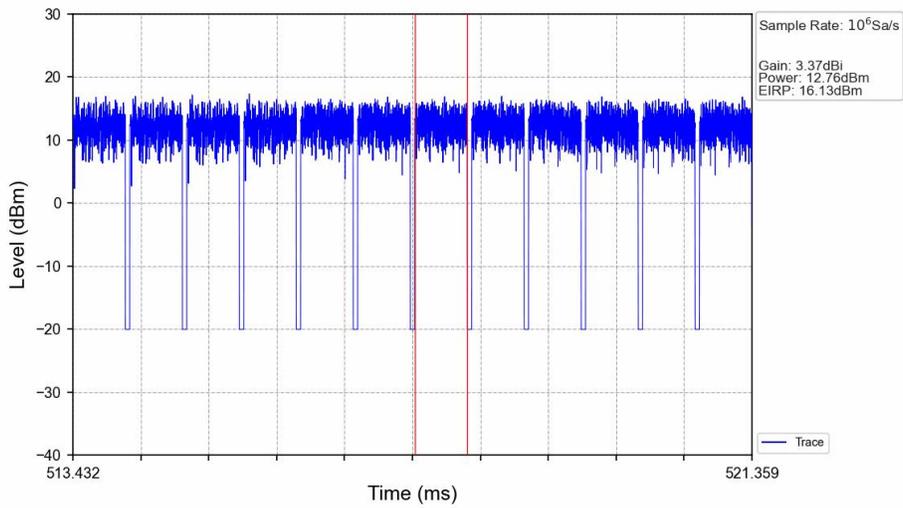
Burst No.	1	2	3	4	5	6	7	8	9	10	11	12
Length (ms)	0.612	0.611	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613
Power (dBm)	14.27	14.24	14.24	14.23	14.23	14.22	14.43	14.43	14.43	14.41	14.36	14.29
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

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)	13.27	13.18	13.22	13.22	13.21	13.20	13.43	13.42	13.42	13.42	13.36	13.27
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	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.612	0.613	0.613	0.613
Power (dBm)	12.55	12.55	12.54	12.59	12.74	12.75	12.76	12.75	12.70	12.61	12.59	12.59
Remark	/	/	/	/	/	/	Max	/	/	/	/	/

2. Power Spectral Density

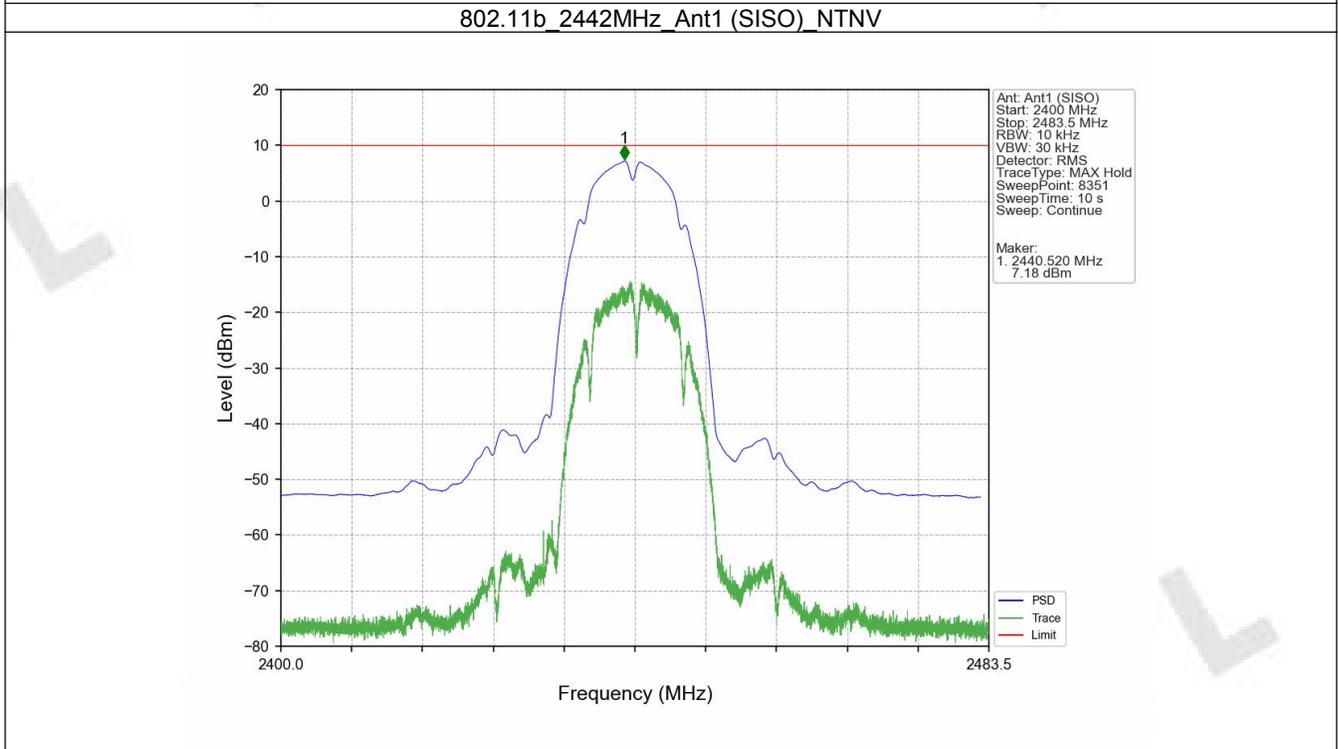
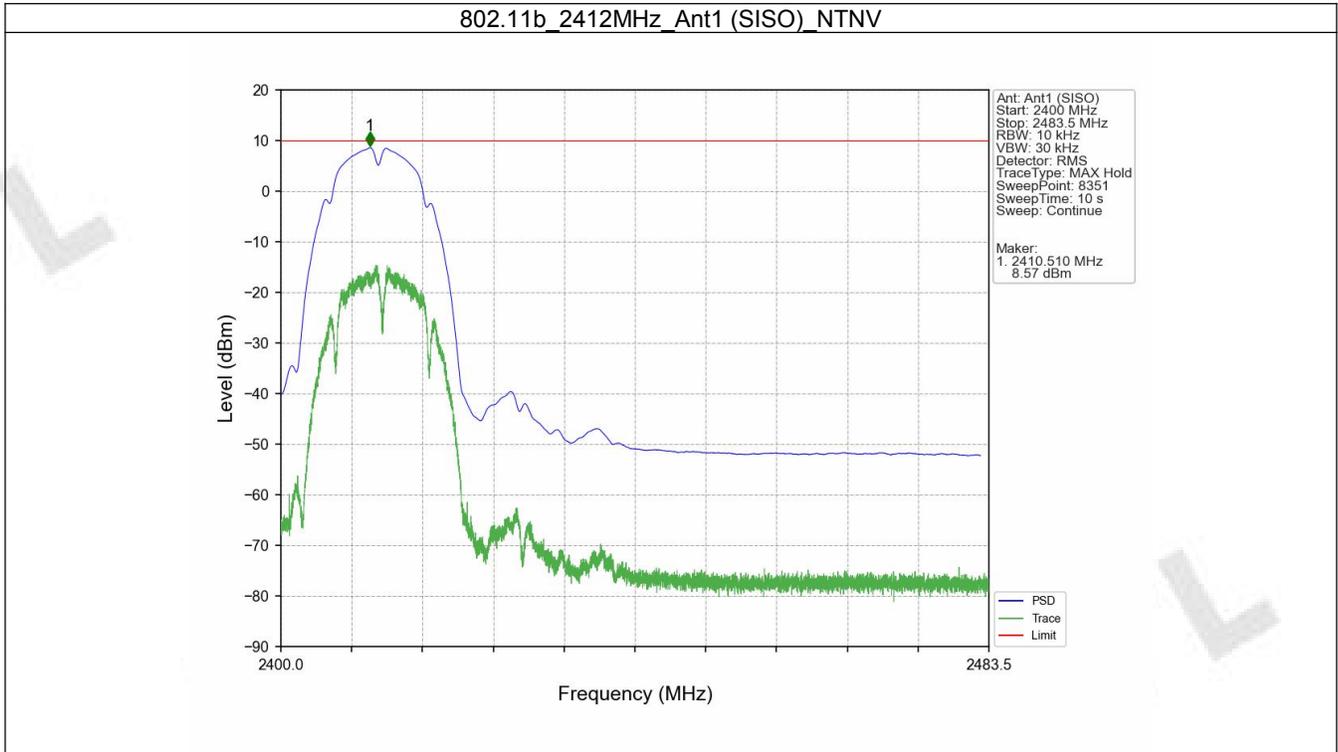
2.1 Test Result

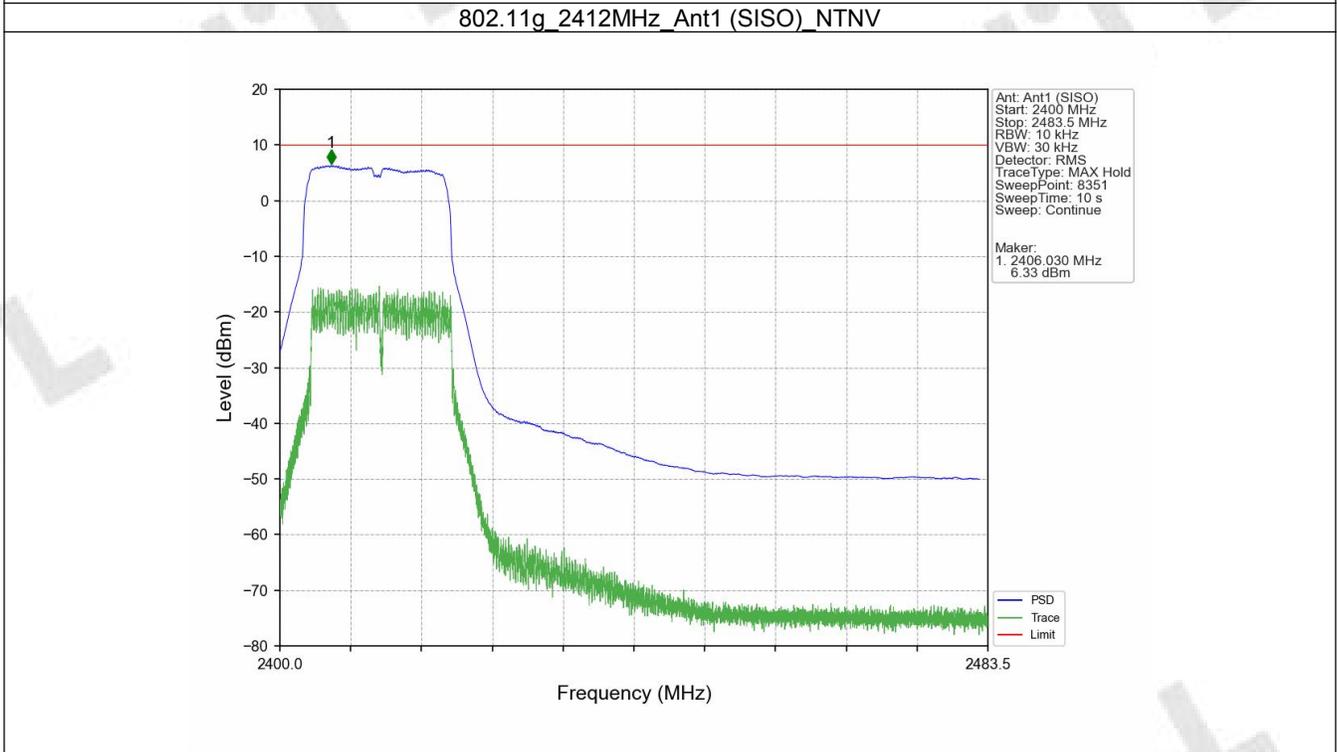
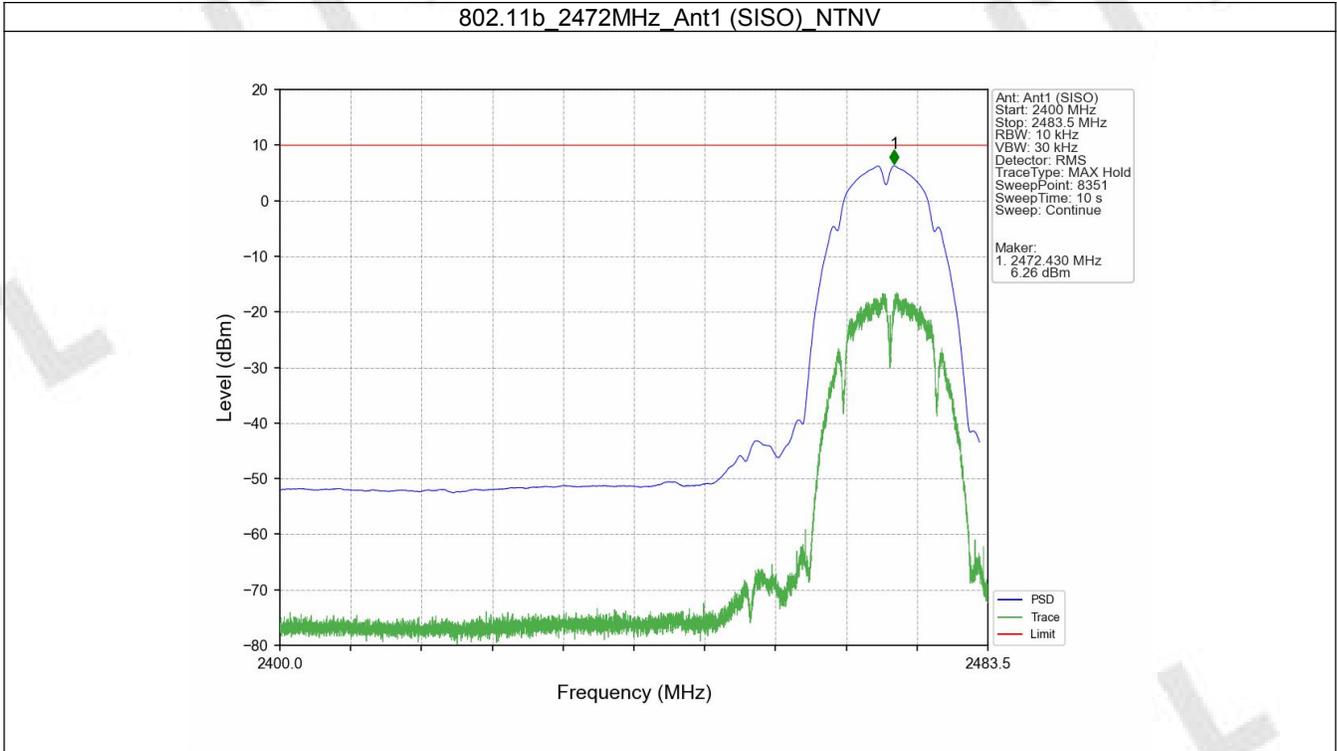
2.1.1 PSD

ENV	Mode	TX Type	Frequency (MHz)	ANT	E.I.R.PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NTNV	802.11b	SISO	2412	1	8.57	<=10	Pass
			2442	1	7.18	<=10	Pass
			2472	1	6.26	<=10	Pass
	802.11g	SISO	2412	1	6.33	<=10	Pass
			2442	1	5.08	<=10	Pass
			2472	1	3.75	<=10	Pass
	802.11n (HT20)	SISO	2412	1	6.27	<=10	Pass
			2442	1	4.90	<=10	Pass
			2472	1	3.89	<=10	Pass
	802.11n (HT40)	SISO	2422	1	2.98	<=10	Pass
			2442	1	2.82	<=10	Pass
			2462	1	1.49	<=10	Pass

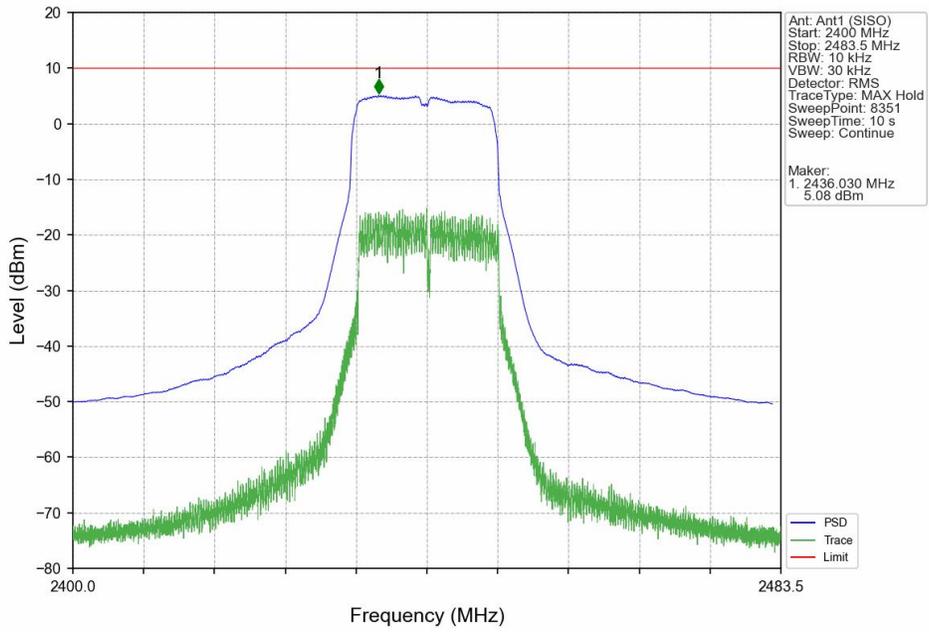
2.2 Test Graph

2.2.1 PSD

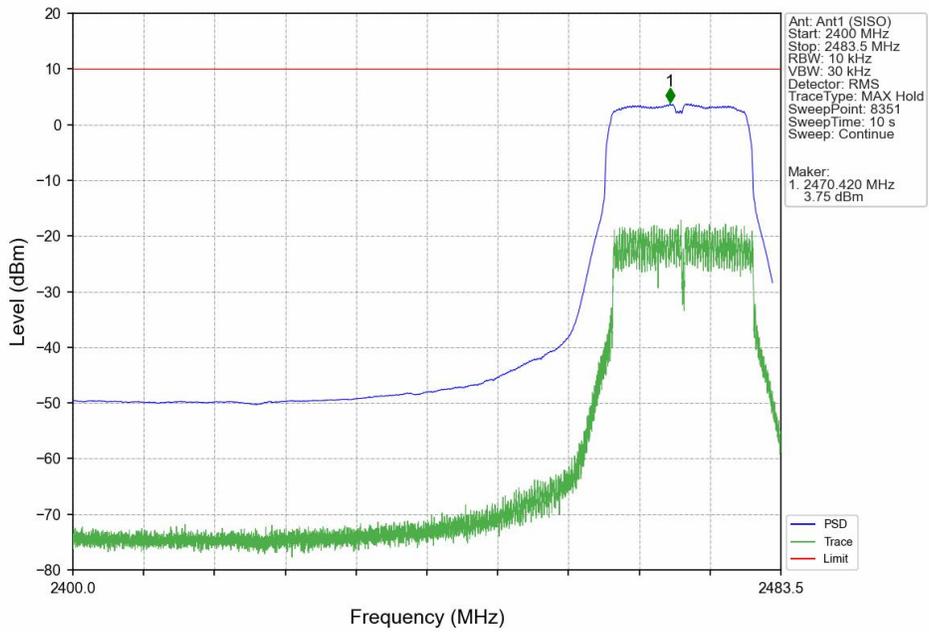




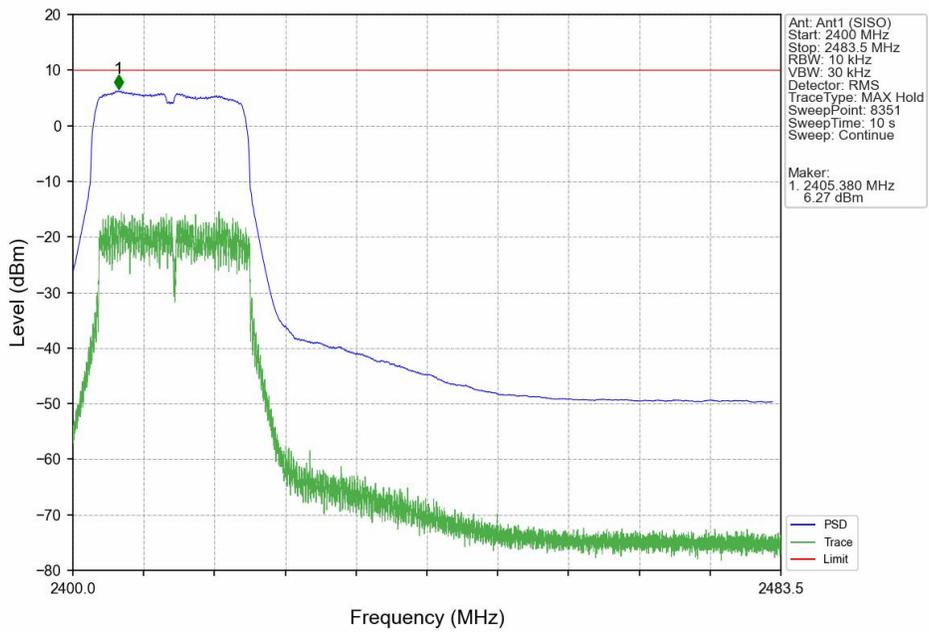
802.11g_2442MHz_Ant1 (SISO)_NTNV



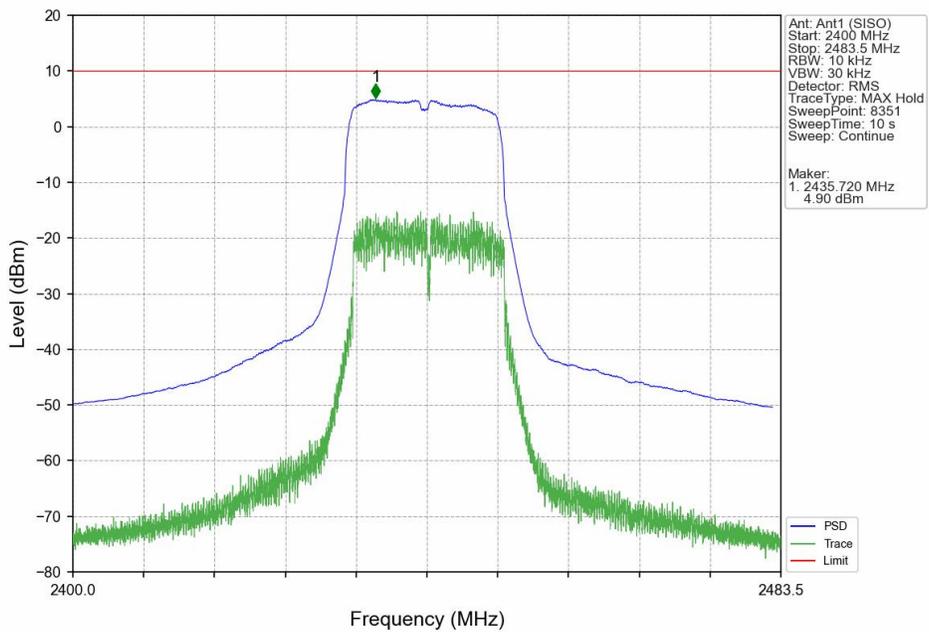
802.11g_2472MHz_Ant1 (SISO)_NTNV



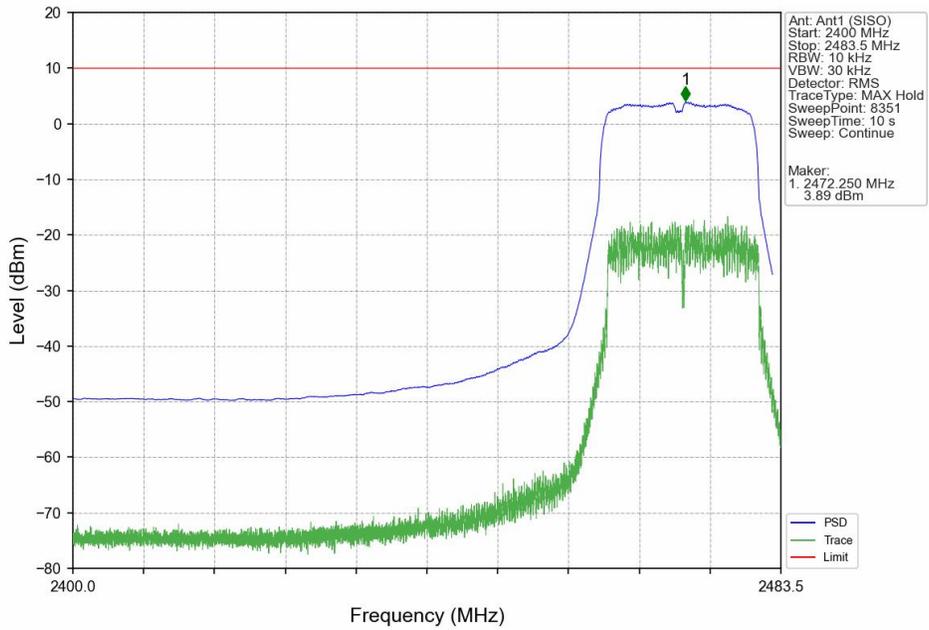
802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



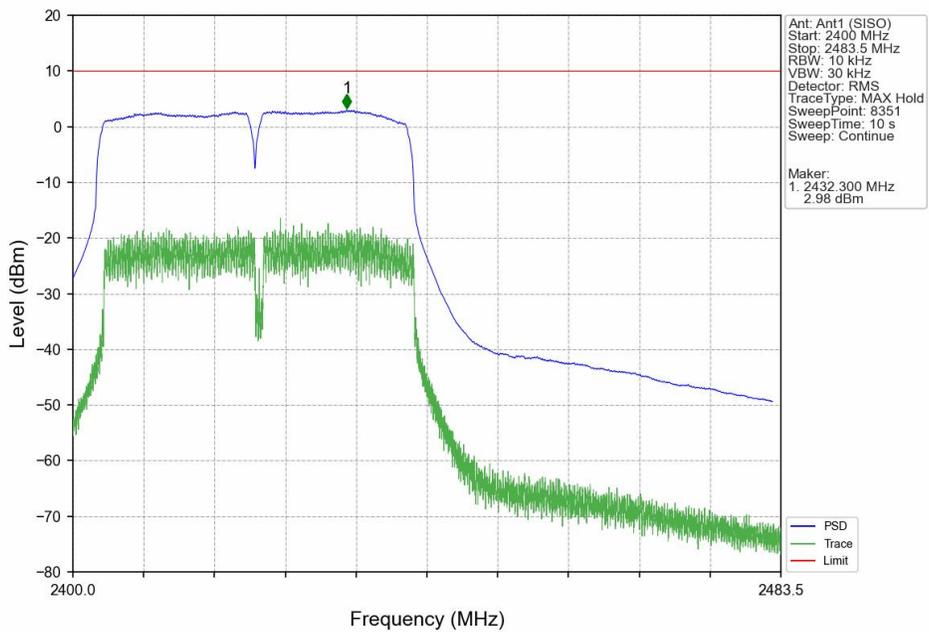
802.11n(HT20)_2442MHz_Ant1 (SISO)_NTNV



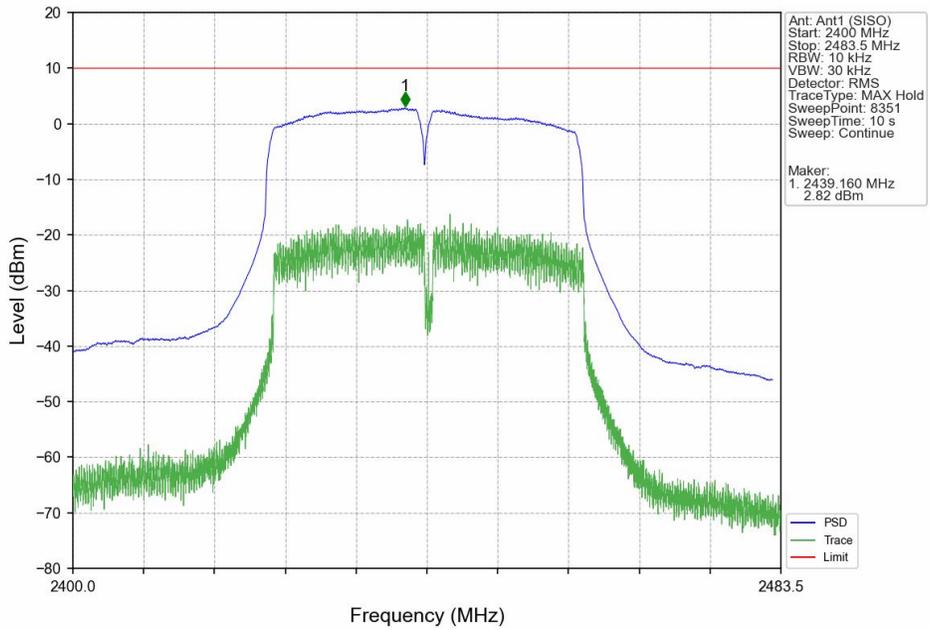
802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV



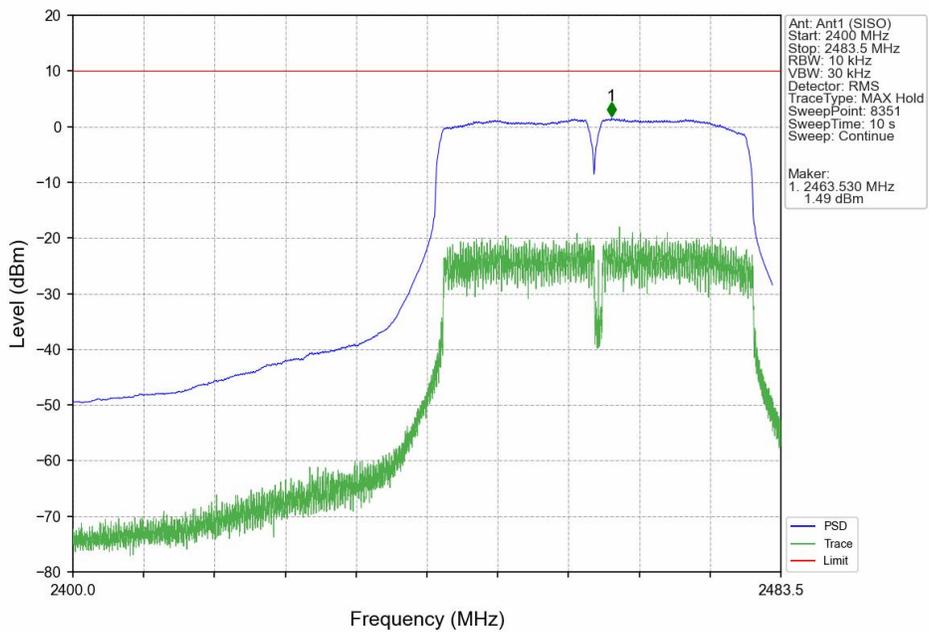
802.11n(HT40)_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2442MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_2462MHz_Ant1 (SISO)_NTNV



3. Adaptivity (Channel Access Mechanism)

3.1 Test Result

3.1.1 COT

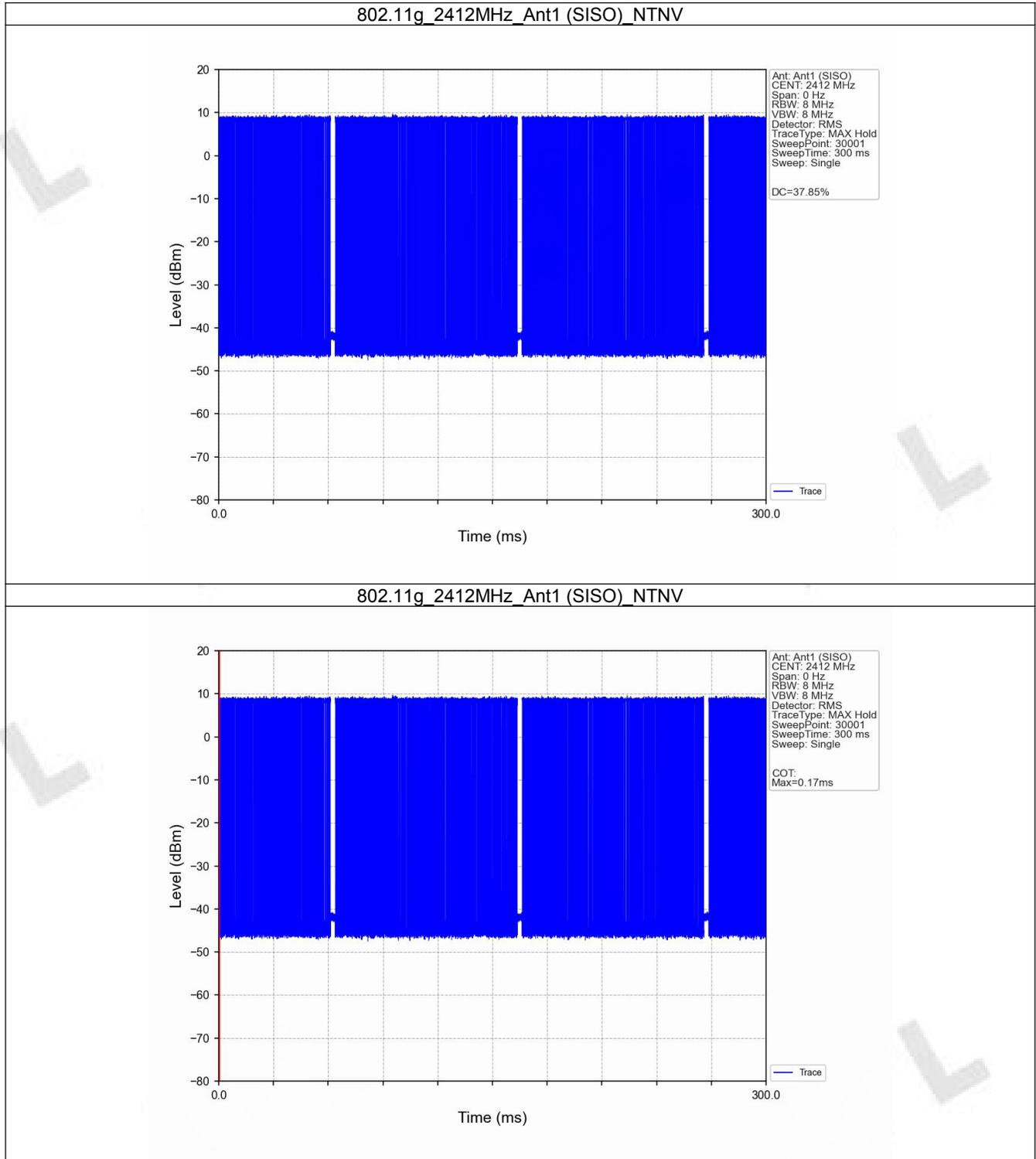
ENV	Mode	TX Type	Frequency (MHz)	ANT	Min Idle Time (ms)		Max COT (ms)		Verdict
					Result	Limit	Result	Limit	
NTNV	802.11g	SISO	2412	1	0.120	≥ 0.018	0.170	≤ 13	Pass
			2472	1	0.050	≥ 0.018	0.170	≤ 13	Pass

3.1.2 Adaptivity

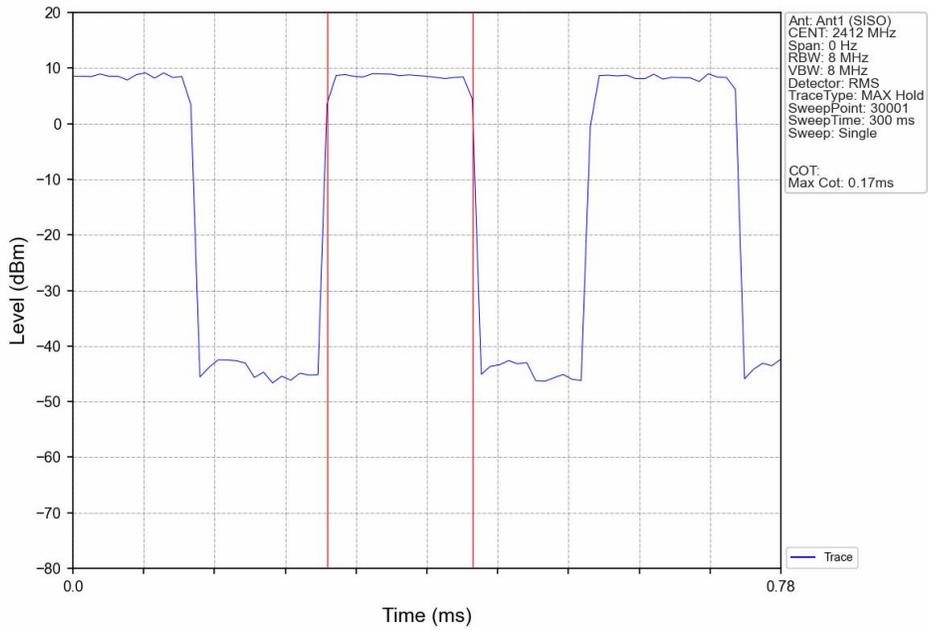
ENV	Mode	TX Type	Frequency (MHz)	ANT	Interference Signal			Max. Short Control Signal		Verdict
					Type	Add Time (s)	Level (dBm/MHz)	Duty Cycle (%)	Limit (%)	
NTNV	802.11g	SISO	2412	1	AWGN	1.15	-64.29	0.80	≤ 10	Pass
					AWGN+CW	61.15	-64.29	4.00	≤ 10	Pass
			2472	1	AWGN	1.15	-61.84	2.60	≤ 10	Pass
					AWGN+CW	61.15	-61.84	0.80	≤ 10	Pass

3.2 Test Graph

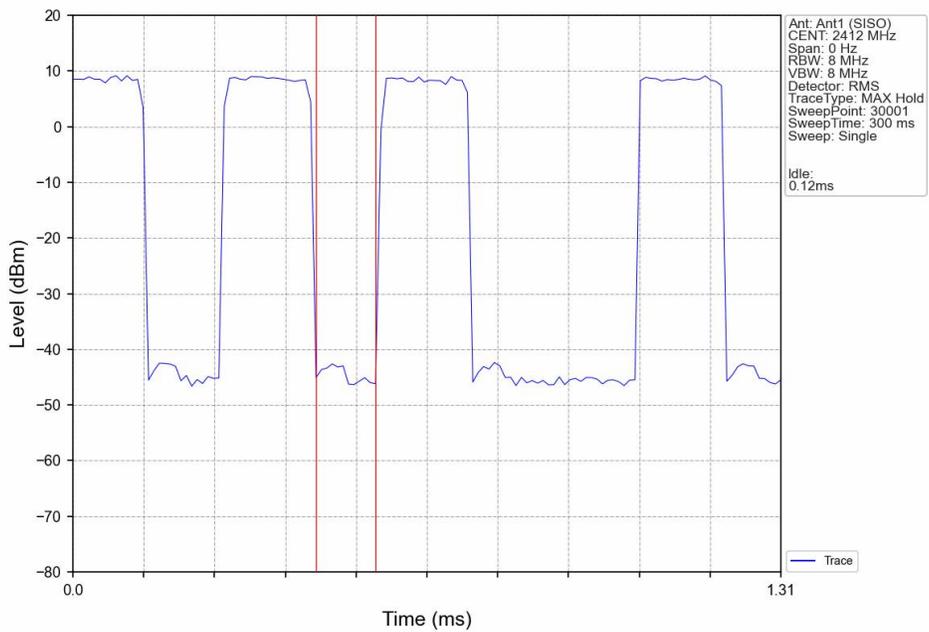
3.2.1 COT



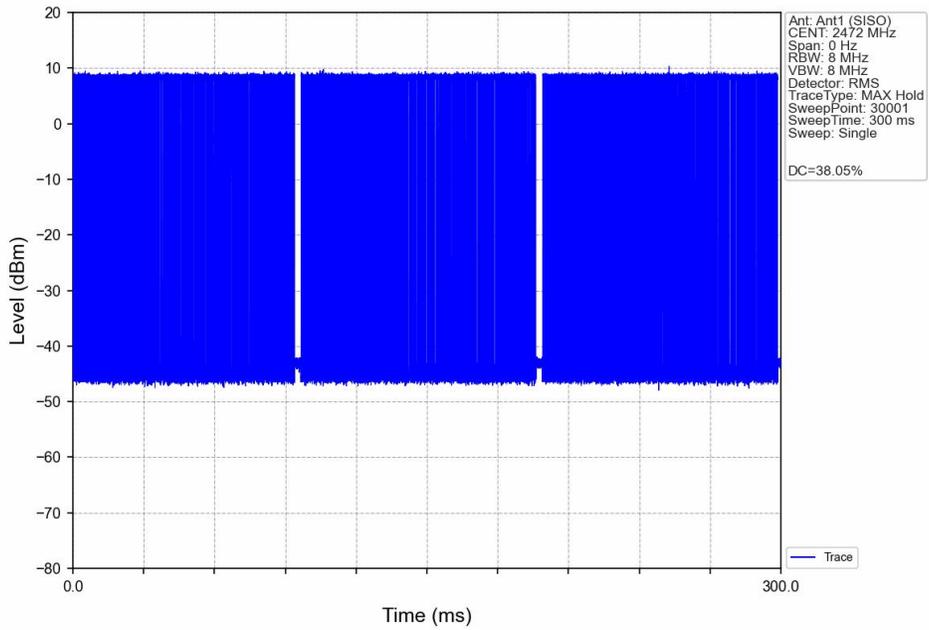
802.11g_2412MHz_Ant1 (SISO)_NTNV



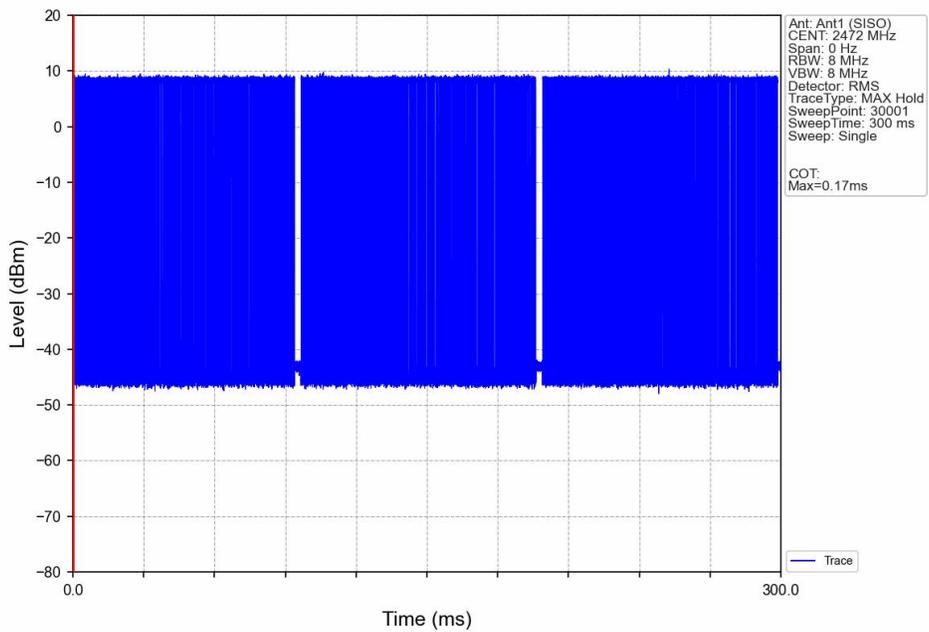
802.11g_2412MHz_Ant1 (SISO)_NTNV



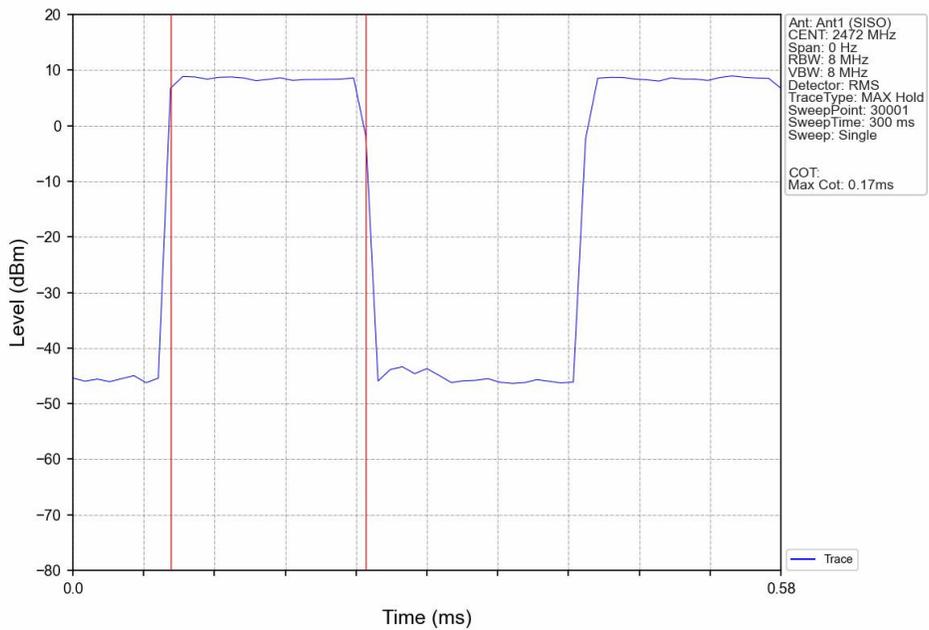
802.11g_2472MHz_Ant1 (SISO)_NTNV



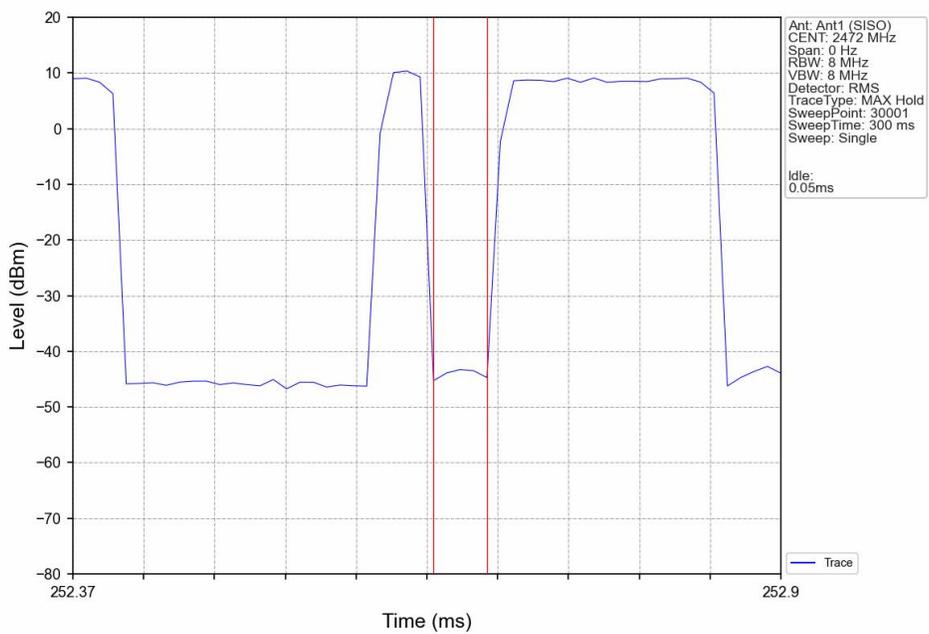
802.11g_2472MHz_Ant1 (SISO)_NTNV



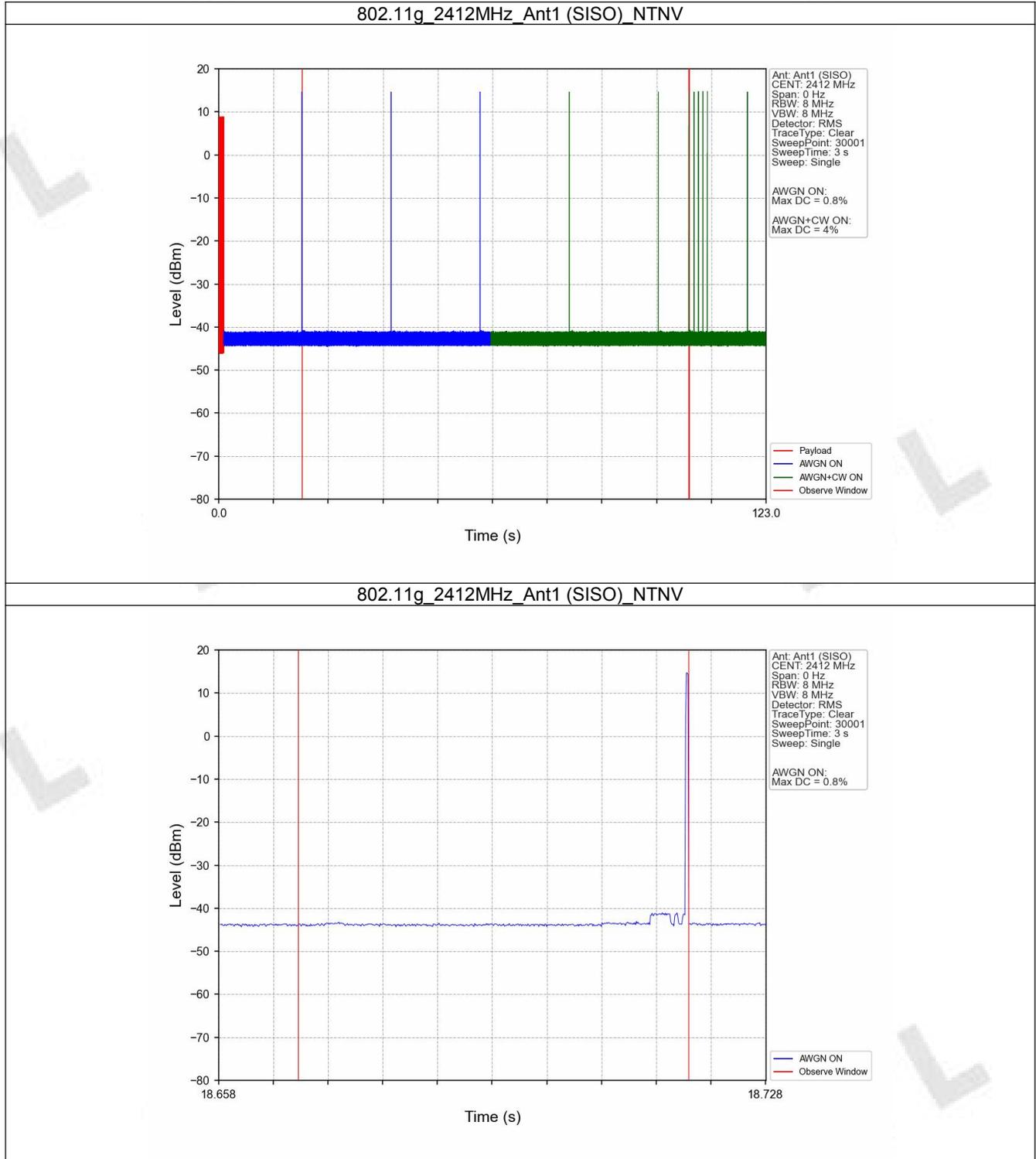
802.11g_2472MHz_Ant1 (SISO)_NTNV

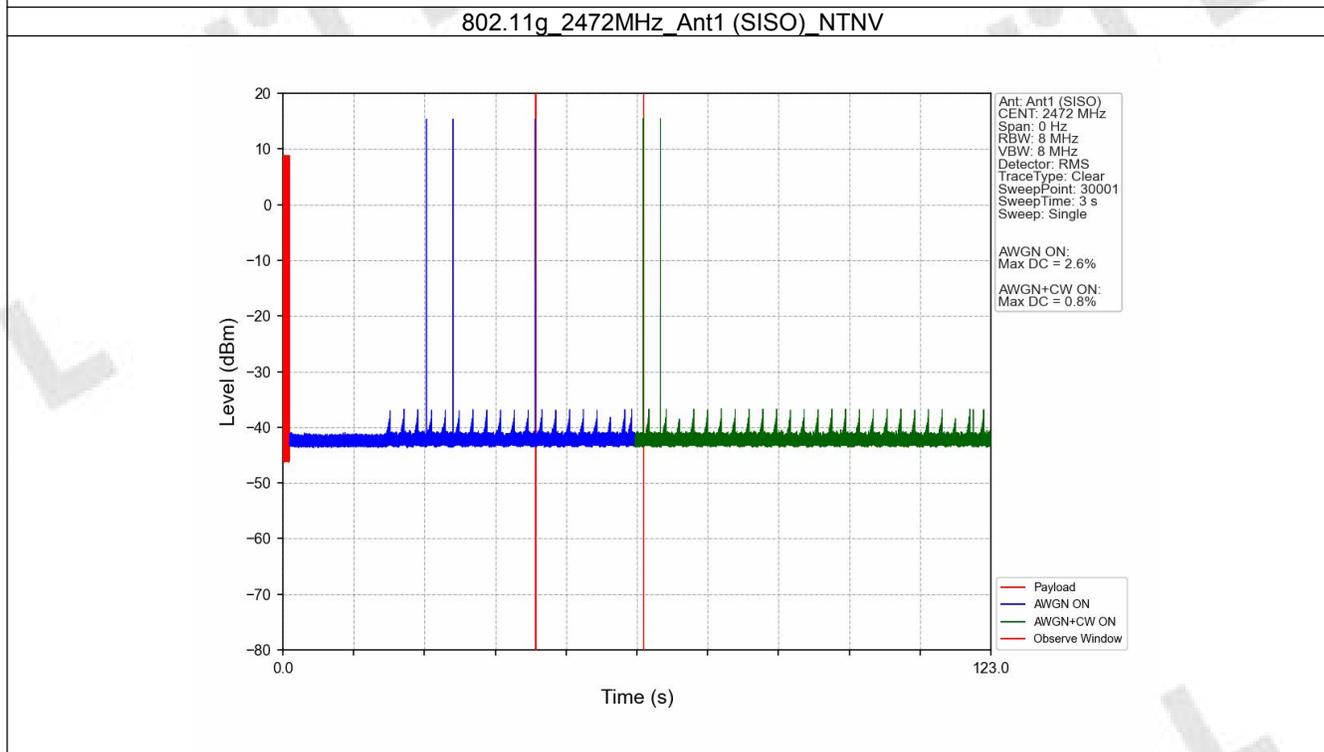
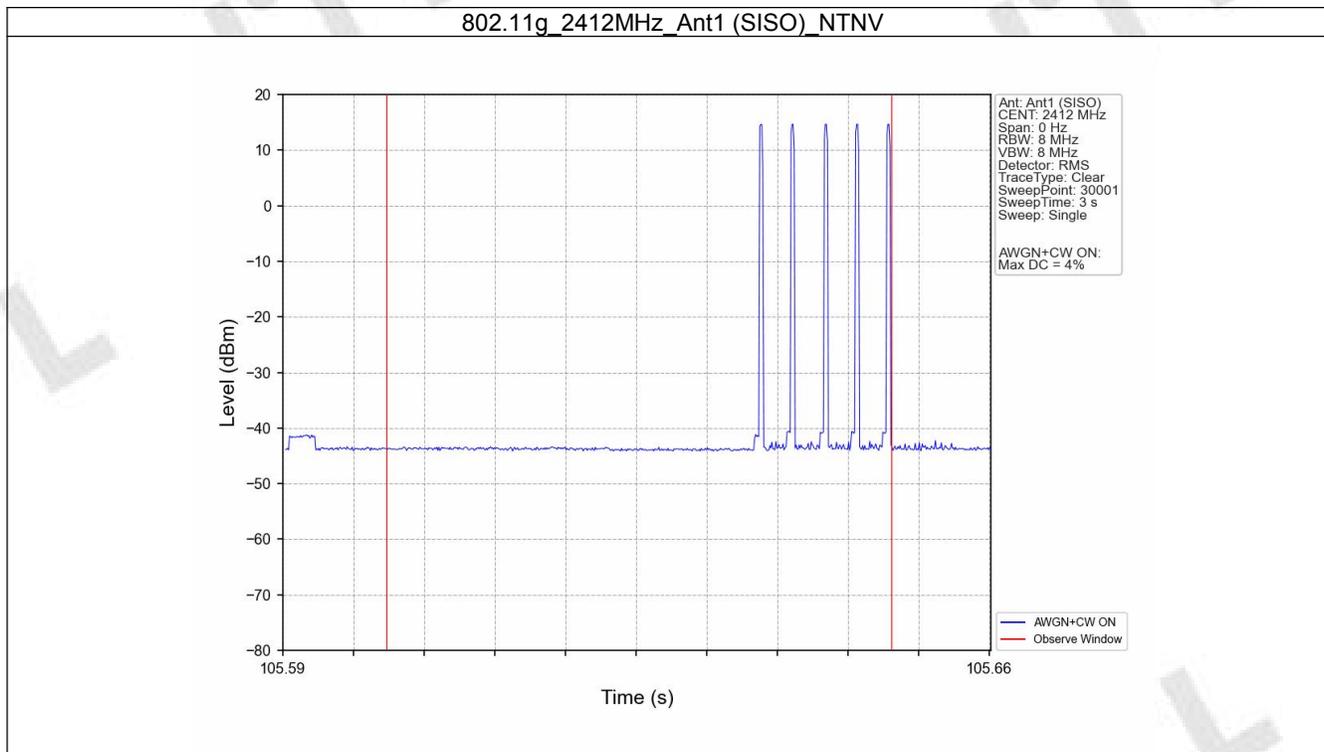


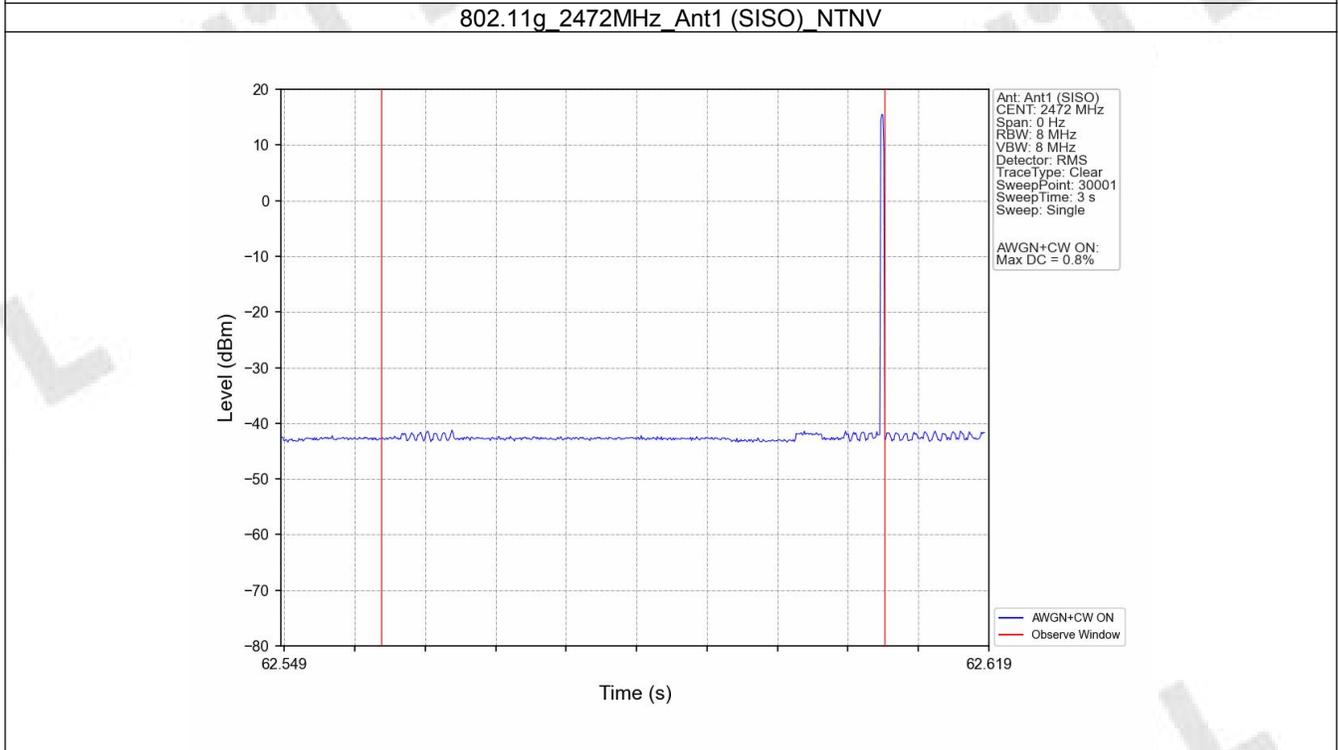
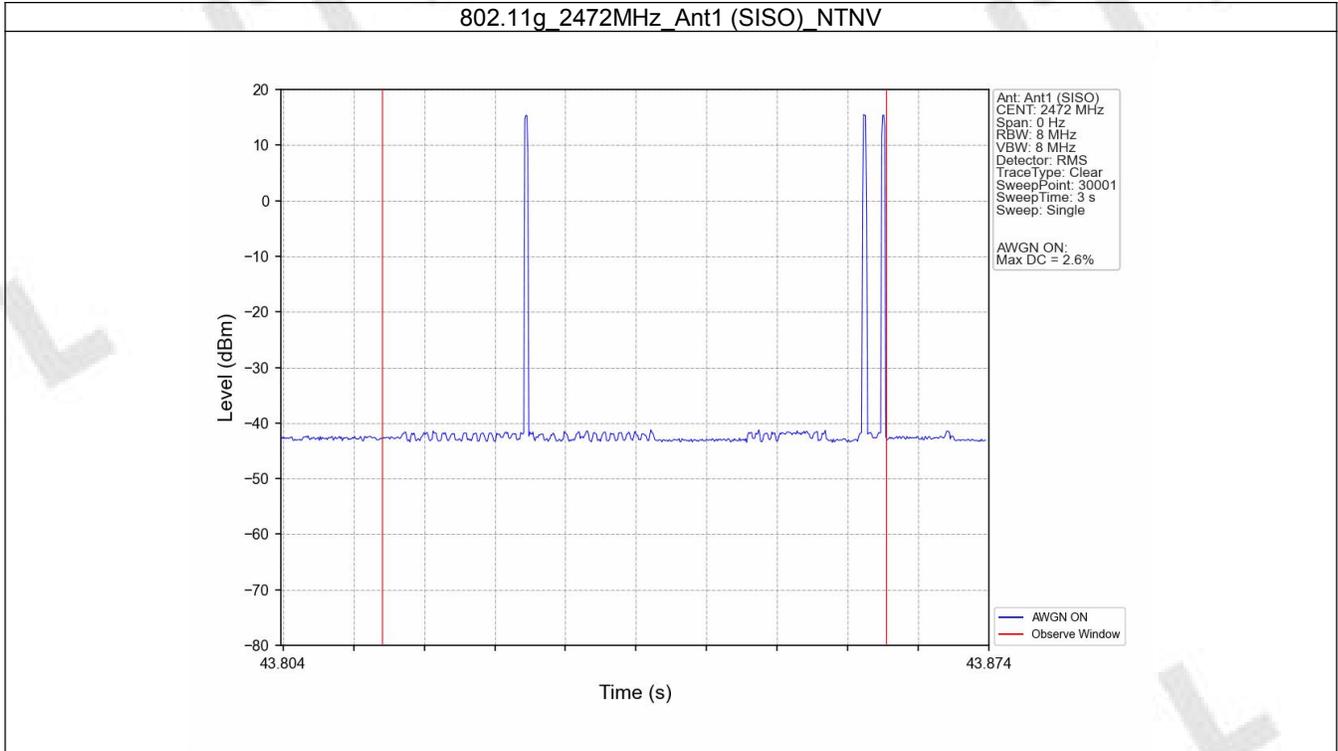
802.11g_2472MHz_Ant1 (SISO)_NTNV



3.2.2 Adaptivity







4. Occupied Channel Bandwidth

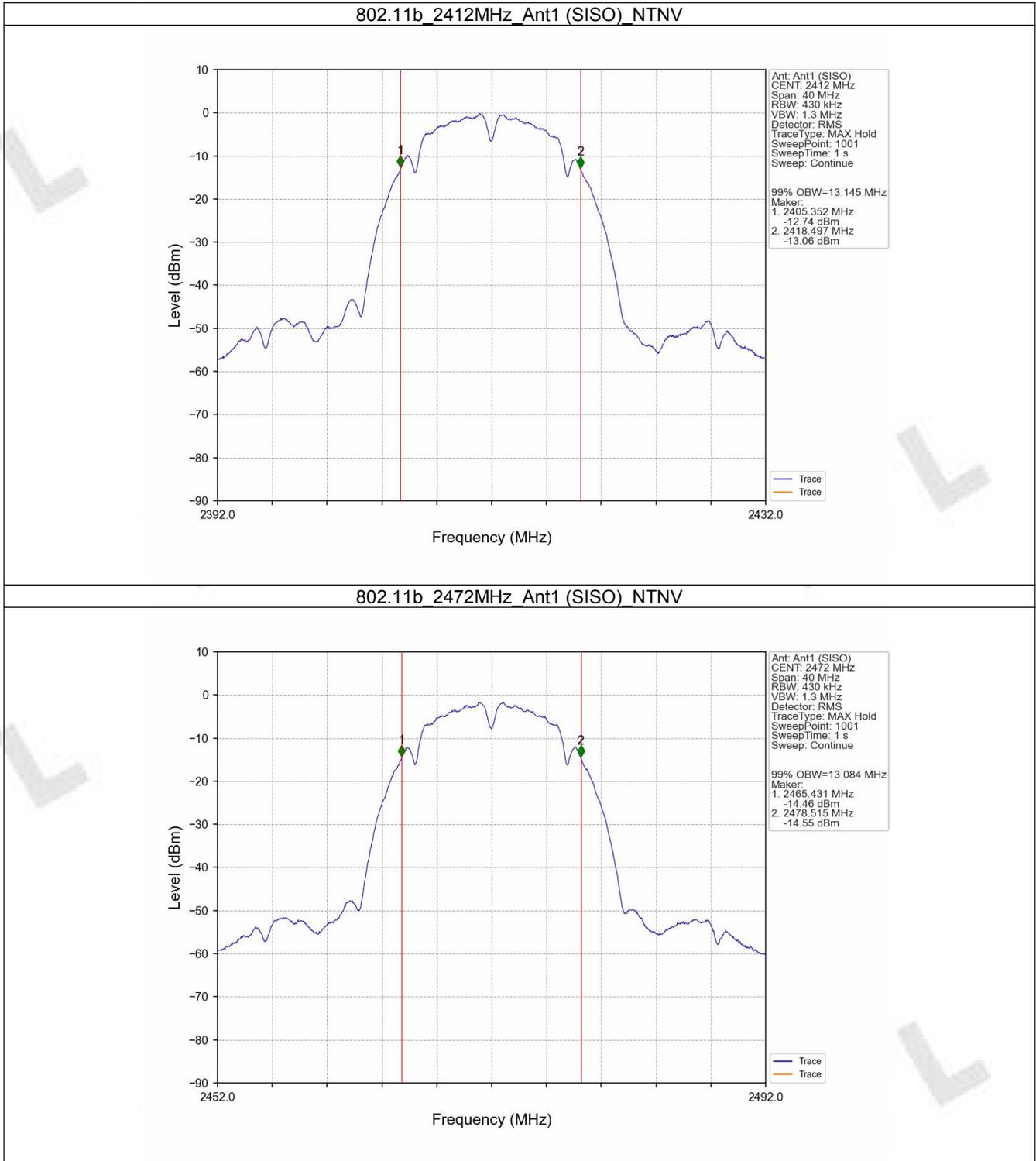
4.1 Test Result

4.1.1 OBW_Ant1

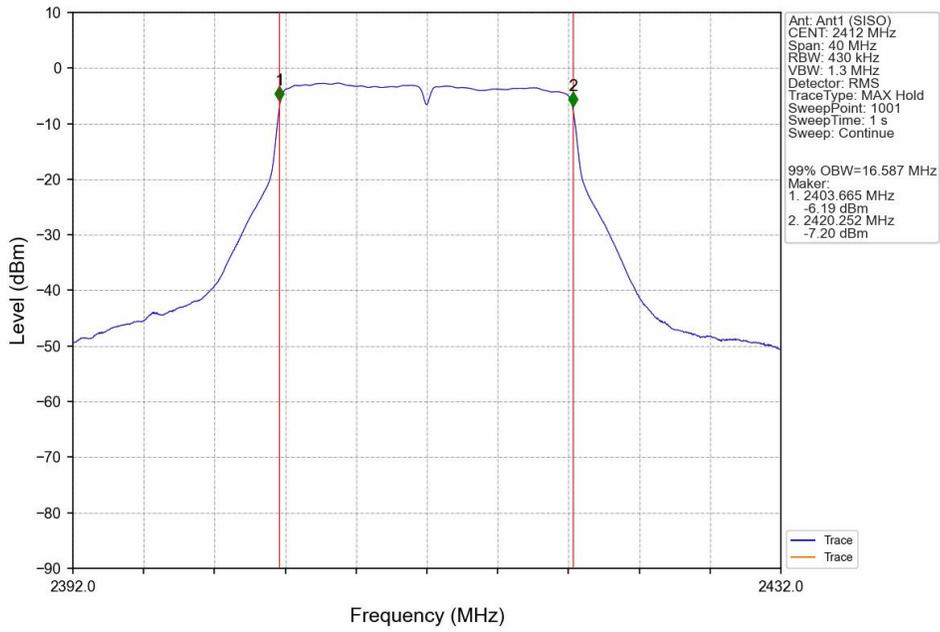
ENV	Mode	TX Type	Frequency (MHz)	Ant1				Verdict
				OBW (MHz) Result	Frequency Range (MHz)		Limit	
				FL	FH			
NTNV	802.11b	SISO	2412	13.145	2405.352	/	>=2400	Pass
			2472	13.084	/	2478.515	<=2483.5	Pass
	802.11g	SISO	2412	16.587	2403.665	/	>=2400	Pass
			2472	16.547	/	2480.252	<=2483.5	Pass
	802.11n (HT20)	SISO	2412	17.778	2403.062	/	>=2400	Pass
			2472	17.734	/	2480.841	<=2483.5	Pass
	802.11n (HT40)	SISO	2422	36.238	2403.832	/	>=2400	Pass
			2462	36.210	/	2480.022	<=2483.5	Pass

4.2 Test Graph

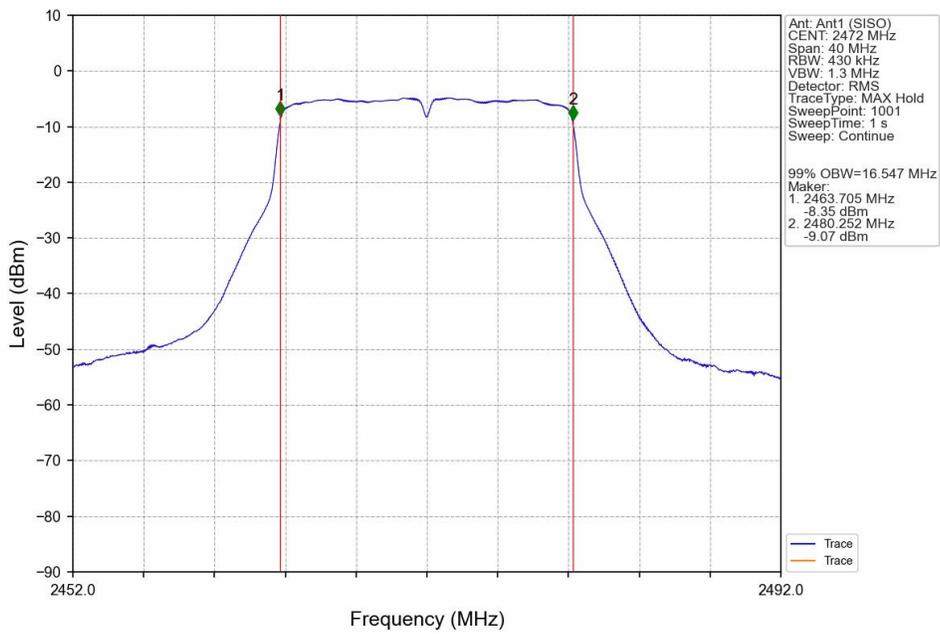
4.2.1 OBW_Ant1



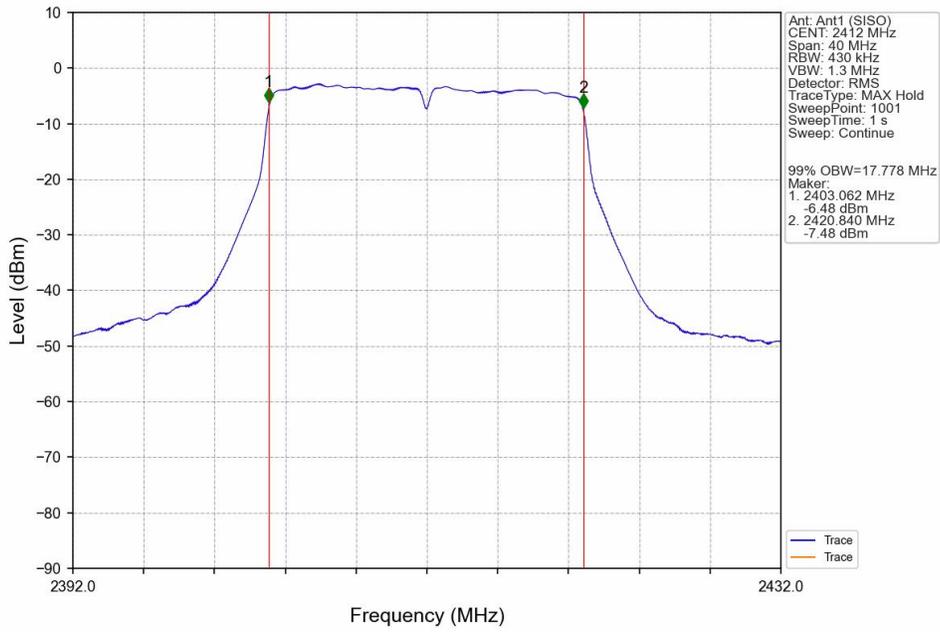
802.11g_2412MHz_Ant1 (SISO)_NTNV



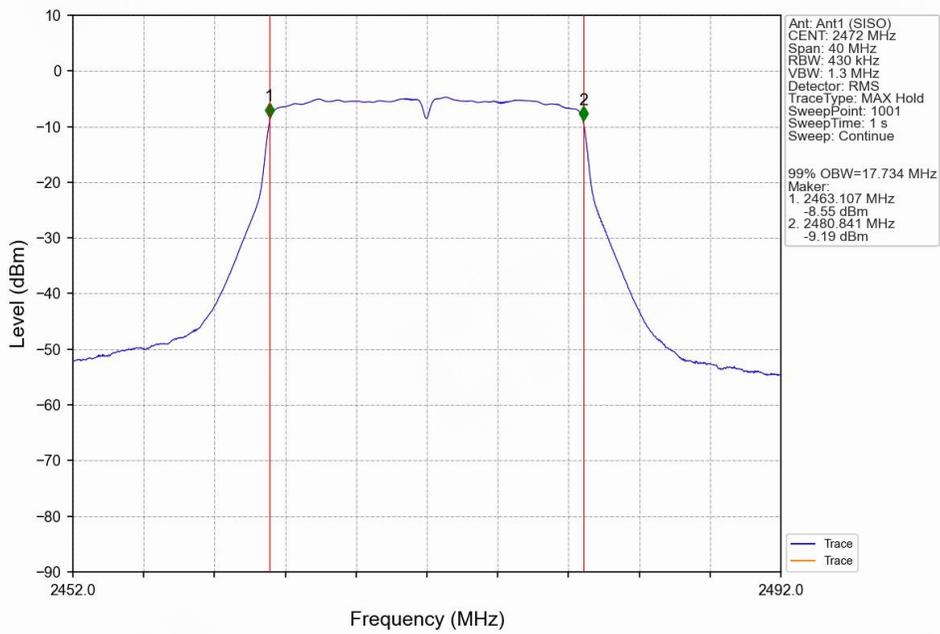
802.11g_2472MHz_Ant1 (SISO)_NTNV

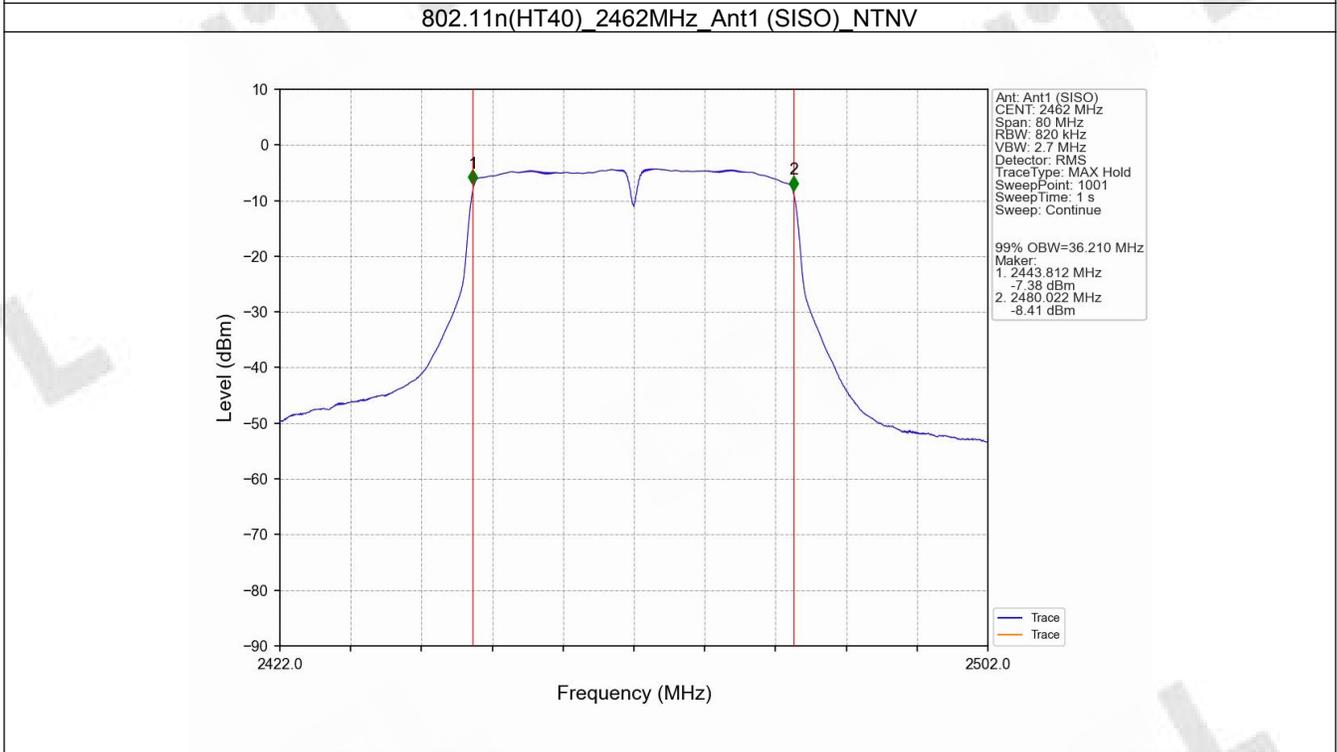
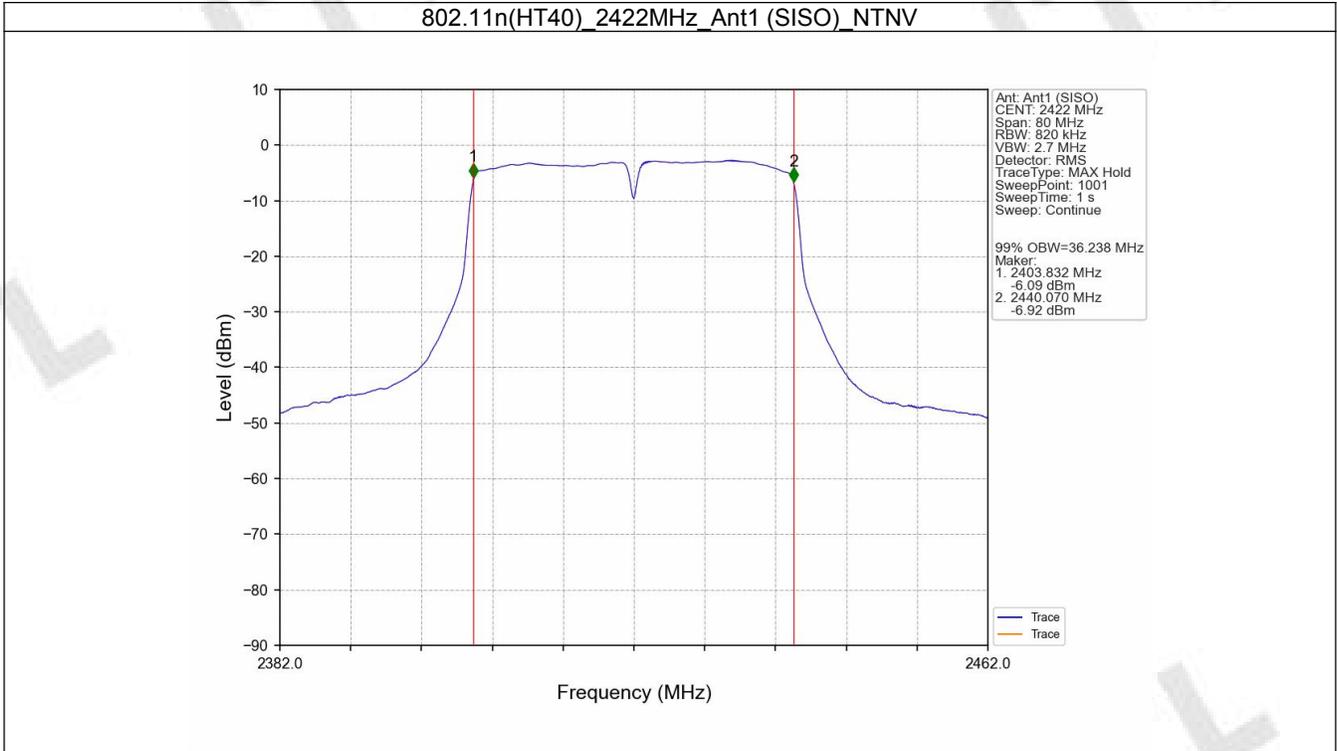


802.11n(HT20)_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_2472MHz_Ant1 (SISO)_NTNV





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

5.1 Test Result

5.1.1 802.11b-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	2374.210	-55.14	<=-20	Pass
				2374.355	-55.18	<=-20	Pass
				2375.355	-55.10	<=-20	Pass
				2376.355	-55.33	<=-20	Pass
				2377.355	-55.26	<=-20	Pass
				2378.355	-55.17	<=-20	Pass
				2379.355	-55.17	<=-20	Pass
				2380.355	-55.01	<=-20	Pass
				2381.355	-54.99	<=-20	Pass
				2382.355	-54.60	<=-20	Pass
				2383.355	-53.74	<=-20	Pass
				2384.355	-54.05	<=-20	Pass
				2385.355	-51.97	<=-20	Pass
				2386.355	-51.39	<=-20	Pass
				2387.355	-51.69	<=-10	Pass
				2387.500	-52.22	<=-10	Pass
				2388.500	-53.12	<=-10	Pass
				2389.500	-53.66	<=-10	Pass
				2390.500	-52.34	<=-10	Pass
				2391.500	-51.96	<=-10	Pass
		2392.500	-49.18	<=-10	Pass		
		2393.500	-47.23	<=-10	Pass		
		2394.500	-44.14	<=-10	Pass		
		2395.500	-44.84	<=-10	Pass		
		2396.500	-41.05	<=-10	Pass		
		2397.500	-42.89	<=-10	Pass		
		2398.500	-42.64	<=-10	Pass		
		2399.500	-45.09	<=-10	Pass		
		2484.000	-48.29	<=-10	Pass		
		2485.000	-46.88	<=-10	Pass		
		2486.000	-46.26	<=-10	Pass		
		2487.000	-44.75	<=-10	Pass		
		2488.000	-46.95	<=-10	Pass		
		2489.000	-48.90	<=-10	Pass		
2490.000	-50.05	<=-10	Pass				
2491.000	-52.22	<=-10	Pass				
2492.000	-53.44	<=-10	Pass				
2493.000	-53.23	<=-10	Pass				
2494.000	-53.93	<=-10	Pass				
2495.000	-54.06	<=-10	Pass				
2496.000	-53.87	<=-10	Pass				
2496.084	-53.96	<=-10	Pass				
2497.084	-53.69	<=-20	Pass				
2498.084	-53.63	<=-20	Pass				
2499.084	-54.20	<=-20	Pass				
2500.084	-54.25	<=-20	Pass				
		2472	1				

				2501.084	-54.32	<=-20	Pass
				2502.084	-54.45	<=-20	Pass
				2503.084	-54.50	<=-20	Pass
				2504.084	-54.43	<=-20	Pass
				2505.084	-54.33	<=-20	Pass
				2506.084	-54.35	<=-20	Pass
				2507.084	-54.53	<=-20	Pass
				2508.084	-54.33	<=-20	Pass
				2509.084	-54.37	<=-20	Pass
				2509.168	-54.30	<=-20	Pass

5.1.2 802.11g-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	2367.326	-52.14	<=-20	Pass		
				2367.913	-52.23	<=-20	Pass		
				2368.913	-52.10	<=-20	Pass		
				2369.913	-52.07	<=-20	Pass		
				2370.913	-51.97	<=-20	Pass		
				2371.913	-52.04	<=-20	Pass		
				2372.913	-51.80	<=-20	Pass		
				2373.913	-51.90	<=-20	Pass		
				2374.913	-51.72	<=-20	Pass		
				2375.913	-51.51	<=-20	Pass		
				2376.913	-51.21	<=-20	Pass		
				2377.913	-50.88	<=-20	Pass		
				2378.913	-50.48	<=-20	Pass		
				2379.913	-50.15	<=-20	Pass		
				2380.913	-49.88	<=-20	Pass		
				2381.913	-49.26	<=-20	Pass		
				2382.913	-48.91	<=-20	Pass		
				2383.913	-48.20	<=-10	Pass		
				2384.500	-47.67	<=-10	Pass		
				2385.500	-47.06	<=-10	Pass		
		2386.500	-46.82	<=-10	Pass				
		2387.500	-46.26	<=-10	Pass				
		2388.500	-45.48	<=-10	Pass				
		2389.500	-44.64	<=-10	Pass				
		2390.500	-43.89	<=-10	Pass				
		2391.500	-42.88	<=-10	Pass				
		2392.500	-41.92	<=-10	Pass				
		2393.500	-40.84	<=-10	Pass				
		2394.500	-39.72	<=-10	Pass				
		2395.500	-38.73	<=-10	Pass				
		2396.500	-37.59	<=-10	Pass				
		2397.500	-37.08	<=-10	Pass				
		2398.500	-35.70	<=-10	Pass				
		2399.500	-34.23	<=-10	Pass				
		2472	1	2484.000	-35.86	<=-10	Pass		
						2485.000	-41.01	<=-10	Pass
						2486.000	-43.83	<=-10	Pass
						2487.000	-45.14	<=-10	Pass
						2488.000	-46.08	<=-10	Pass
						2489.000	-46.91	<=-10	Pass
						2490.000	-47.09	<=-10	Pass
				2491.000	-47.52	<=-10	Pass		

				2492.000	-48.24	<=-10	Pass
				2493.000	-48.57	<=-10	Pass
				2494.000	-48.81	<=-10	Pass
				2495.000	-49.35	<=-10	Pass
				2496.000	-49.63	<=-10	Pass
				2497.000	-49.95	<=-10	Pass
				2498.000	-50.32	<=-10	Pass
				2499.000	-50.50	<=-10	Pass
				2499.547	-50.73	<=-10	Pass
				2500.547	-50.92	<=-20	Pass
				2501.547	-50.98	<=-20	Pass
				2502.547	-51.05	<=-20	Pass
				2503.547	-51.24	<=-20	Pass
				2504.547	-51.33	<=-20	Pass
				2505.547	-51.44	<=-20	Pass
				2506.547	-51.51	<=-20	Pass
				2507.547	-51.77	<=-20	Pass
				2508.547	-51.69	<=-20	Pass
				2509.547	-51.69	<=-20	Pass
				2510.547	-51.75	<=-20	Pass
				2511.547	-51.68	<=-20	Pass
				2512.547	-51.82	<=-20	Pass
				2513.547	-51.88	<=-20	Pass
				2514.547	-51.91	<=-20	Pass
				2515.547	-51.85	<=-20	Pass
				2516.094	-51.80	<=-20	Pass

5.1.3 802.11n(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	2364.944	-51.96	<=-20	Pass
				2365.722	-51.95	<=-20	Pass
				2366.722	-51.92	<=-20	Pass
				2367.722	-51.74	<=-20	Pass
				2368.722	-51.84	<=-20	Pass
				2369.722	-51.90	<=-20	Pass
				2370.722	-51.75	<=-20	Pass
				2371.722	-51.76	<=-20	Pass
				2372.722	-51.62	<=-20	Pass
				2373.722	-51.42	<=-20	Pass
				2374.722	-51.24	<=-20	Pass
				2375.722	-50.97	<=-20	Pass
				2376.722	-50.60	<=-20	Pass
				2377.722	-50.28	<=-20	Pass
				2378.722	-50.01	<=-20	Pass
				2379.722	-49.60	<=-20	Pass
				2380.722	-49.12	<=-20	Pass
				2381.722	-48.73	<=-20	Pass
				2382.722	-48.26	<=-10	Pass
				2383.500	-47.85	<=-10	Pass
2384.500	-47.36	<=-10	Pass				
2385.500	-46.92	<=-10	Pass				
2386.500	-46.27	<=-10	Pass				
2387.500	-45.46	<=-10	Pass				
2388.500	-44.70	<=-10	Pass				
2389.500	-43.63	<=-10	Pass				

	2472	1	2390.500	-42.70	<=-10	Pass
			2391.500	-41.89	<=-10	Pass
			2392.500	-40.97	<=-10	Pass
			2393.500	-40.11	<=-10	Pass
			2394.500	-39.30	<=-10	Pass
			2395.500	-38.39	<=-10	Pass
			2396.500	-37.83	<=-10	Pass
			2397.500	-36.76	<=-10	Pass
			2398.500	-35.68	<=-10	Pass
			2399.500	-32.97	<=-10	Pass
			2484.000	-35.92	<=-10	Pass
			2485.000	-41.58	<=-10	Pass
			2486.000	-43.92	<=-10	Pass
			2487.000	-45.43	<=-10	Pass
			2488.000	-45.89	<=-10	Pass
			2489.000	-46.48	<=-10	Pass
			2490.000	-46.86	<=-10	Pass
			2491.000	-47.35	<=-10	Pass
	2492.000	-47.65	<=-10	Pass		
	2493.000	-48.27	<=-10	Pass		
	2494.000	-48.56	<=-10	Pass		
	2495.000	-48.83	<=-10	Pass		
	2496.000	-49.56	<=-10	Pass		
	2497.000	-49.54	<=-10	Pass		
	2498.000	-49.87	<=-10	Pass		
	2499.000	-50.15	<=-10	Pass		
	2500.000	-50.36	<=-10	Pass		
	2500.734	-50.49	<=-10	Pass		
	2501.734	-50.62	<=-20	Pass		
	2502.734	-50.74	<=-20	Pass		
	2503.734	-51.05	<=-20	Pass		
	2504.734	-51.05	<=-20	Pass		
	2505.734	-51.14	<=-20	Pass		
	2506.734	-51.20	<=-20	Pass		
	2507.734	-51.40	<=-20	Pass		
	2508.734	-51.55	<=-20	Pass		
2509.734	-51.54	<=-20	Pass			
2510.734	-51.70	<=-20	Pass			
2511.734	-51.70	<=-20	Pass			
2512.734	-51.75	<=-20	Pass			
2513.734	-51.78	<=-20	Pass			
2514.734	-51.76	<=-20	Pass			
2515.734	-51.75	<=-20	Pass			
2516.734	-51.77	<=-20	Pass			
2517.734	-51.79	<=-20	Pass			
2518.468	-51.81	<=-20	Pass			

5.1.4 802.11n(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	2328.024	-55.30	<=-20	Pass
				2328.262	-55.10	<=-20	Pass
				2329.262	-55.30	<=-20	Pass
				2330.262	-55.25	<=-20	Pass
				2331.262	-55.25	<=-20	Pass
				2332.262	-55.38	<=-20	Pass

			2333.262	-55.16	<=-20	Pass
			2334.262	-55.25	<=-20	Pass
			2335.262	-55.26	<=-20	Pass
			2336.262	-55.32	<=-20	Pass
			2337.262	-55.22	<=-20	Pass
			2338.262	-55.11	<=-20	Pass
			2339.262	-55.23	<=-20	Pass
			2340.262	-55.01	<=-20	Pass
			2341.262	-55.00	<=-20	Pass
			2342.262	-55.05	<=-20	Pass
			2343.262	-55.05	<=-20	Pass
			2344.262	-54.65	<=-20	Pass
			2345.262	-54.62	<=-20	Pass
			2346.262	-54.32	<=-20	Pass
			2347.262	-54.30	<=-20	Pass
			2348.262	-53.82	<=-20	Pass
			2349.262	-53.67	<=-20	Pass
			2350.262	-53.37	<=-20	Pass
			2351.262	-53.12	<=-20	Pass
			2352.262	-52.88	<=-20	Pass
			2353.262	-52.34	<=-20	Pass
			2354.262	-52.14	<=-20	Pass
			2355.262	-51.86	<=-20	Pass
			2356.262	-51.23	<=-20	Pass
			2357.262	-50.84	<=-20	Pass
			2358.262	-50.32	<=-20	Pass
			2359.262	-49.99	<=-20	Pass
			2360.262	-49.52	<=-20	Pass
			2361.262	-49.33	<=-20	Pass
			2362.262	-49.06	<=-20	Pass
			2363.262	-48.63	<=-20	Pass
			2364.262	-48.53	<=-10	Pass
			2364.500	-48.46	<=-10	Pass
			2365.500	-48.16	<=-10	Pass
			2366.500	-47.98	<=-10	Pass
			2367.500	-47.78	<=-10	Pass
			2368.500	-47.50	<=-10	Pass
			2369.500	-47.49	<=-10	Pass
			2370.500	-47.44	<=-10	Pass
			2371.500	-47.31	<=-10	Pass
			2372.500	-47.46	<=-10	Pass
			2373.500	-46.75	<=-10	Pass
			2374.500	-46.59	<=-10	Pass
			2375.500	-46.08	<=-10	Pass
			2376.500	-45.98	<=-10	Pass
			2377.500	-45.59	<=-10	Pass
			2378.500	-45.31	<=-10	Pass
			2379.500	-44.78	<=-10	Pass
			2380.500	-44.43	<=-10	Pass
			2381.500	-44.30	<=-10	Pass
			2382.500	-43.94	<=-10	Pass
			2383.500	-43.25	<=-10	Pass
			2384.500	-42.92	<=-10	Pass
			2385.500	-42.46	<=-10	Pass
			2386.500	-42.23	<=-10	Pass
			2387.500	-42.14	<=-10	Pass
			2388.500	-41.30	<=-10	Pass
			2389.500	-41.01	<=-10	Pass
			2390.500	-40.86	<=-10	Pass

				2391.500	-40.55	<=-10	Pass
				2392.500	-40.15	<=-10	Pass
				2393.500	-39.70	<=-10	Pass
				2394.500	-39.26	<=-10	Pass
				2395.500	-38.31	<=-10	Pass
				2396.500	-37.39	<=-10	Pass
				2397.500	-36.26	<=-10	Pass
				2398.500	-34.73	<=-10	Pass
				2399.500	-31.21	<=-10	Pass
				2484.000	-33.78	<=-10	Pass
				2485.000	-37.77	<=-10	Pass
				2486.000	-39.19	<=-10	Pass
				2487.000	-42.51	<=-10	Pass
				2488.000	-43.55	<=-10	Pass
				2489.000	-45.09	<=-10	Pass
				2490.000	-46.01	<=-10	Pass
				2491.000	-46.48	<=-10	Pass
				2492.000	-47.01	<=-10	Pass
				2493.000	-47.30	<=-10	Pass
				2494.000	-47.58	<=-10	Pass
				2495.000	-47.74	<=-10	Pass
				2496.000	-48.09	<=-10	Pass
				2497.000	-48.20	<=-10	Pass
				2498.000	-48.48	<=-10	Pass
				2499.000	-48.67	<=-10	Pass
				2500.000	-48.64	<=-10	Pass
				2501.000	-48.74	<=-10	Pass
				2502.000	-49.22	<=-10	Pass
				2503.000	-49.39	<=-10	Pass
				2504.000	-49.67	<=-10	Pass
				2505.000	-49.71	<=-10	Pass
				2506.000	-49.77	<=-10	Pass
				2507.000	-49.80	<=-10	Pass
				2508.000	-50.15	<=-10	Pass
				2509.000	-50.48	<=-10	Pass
				2510.000	-50.72	<=-10	Pass
				2511.000	-50.82	<=-10	Pass
				2512.000	-51.16	<=-10	Pass
				2513.000	-51.00	<=-10	Pass
				2514.000	-51.12	<=-10	Pass
				2515.000	-51.33	<=-10	Pass
				2516.000	-51.52	<=-10	Pass
				2517.000	-51.68	<=-10	Pass
				2518.000	-52.01	<=-10	Pass
				2519.000	-52.24	<=-10	Pass
				2519.210	-52.11	<=-10	Pass
				2520.210	-52.11	<=-20	Pass
				2521.210	-52.39	<=-20	Pass
				2522.210	-52.55	<=-20	Pass
				2523.210	-52.74	<=-20	Pass
				2524.210	-52.92	<=-20	Pass
				2525.210	-52.87	<=-20	Pass
				2526.210	-52.89	<=-20	Pass
				2527.210	-53.10	<=-20	Pass
				2528.210	-53.33	<=-20	Pass
				2529.210	-53.43	<=-20	Pass
				2530.210	-53.57	<=-20	Pass
				2531.210	-53.64	<=-20	Pass
				2532.210	-53.67	<=-20	Pass

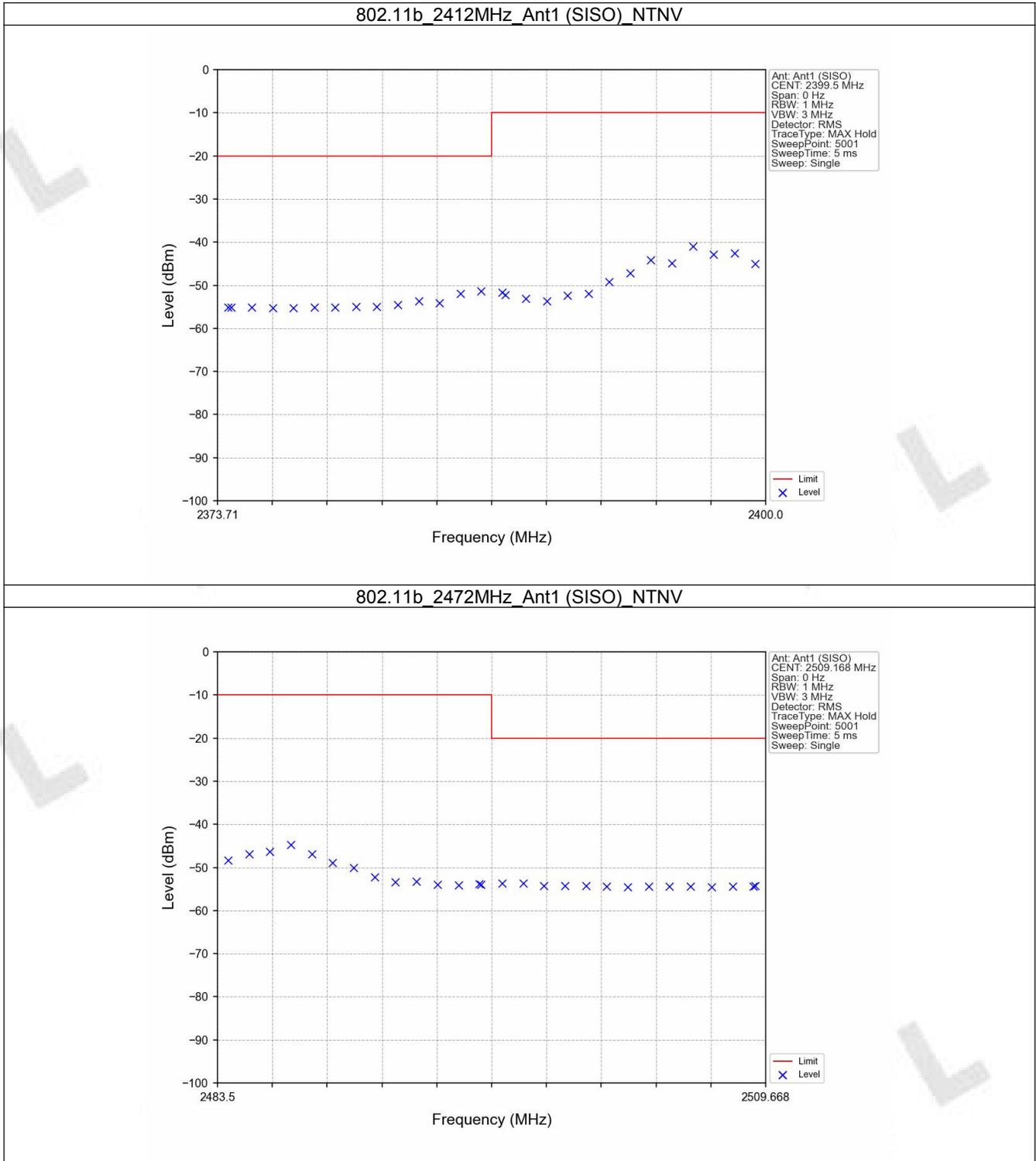
2462

1

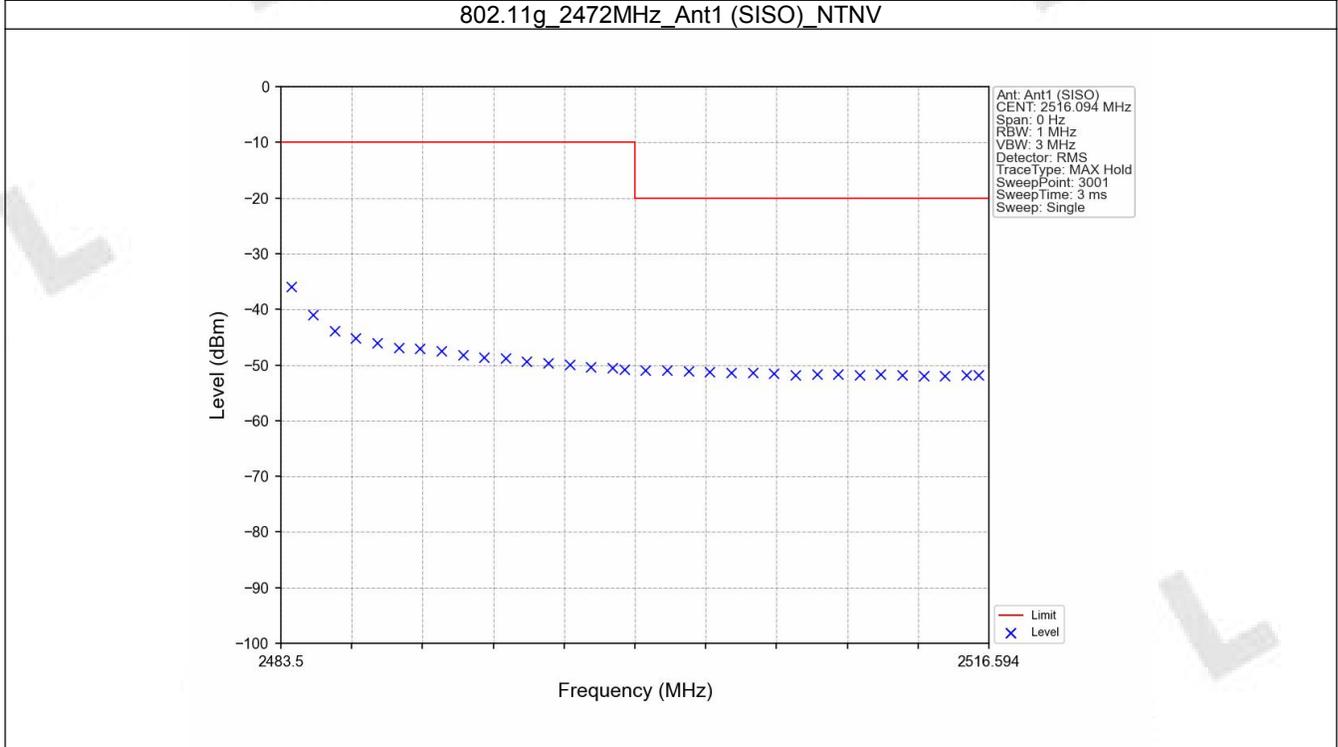
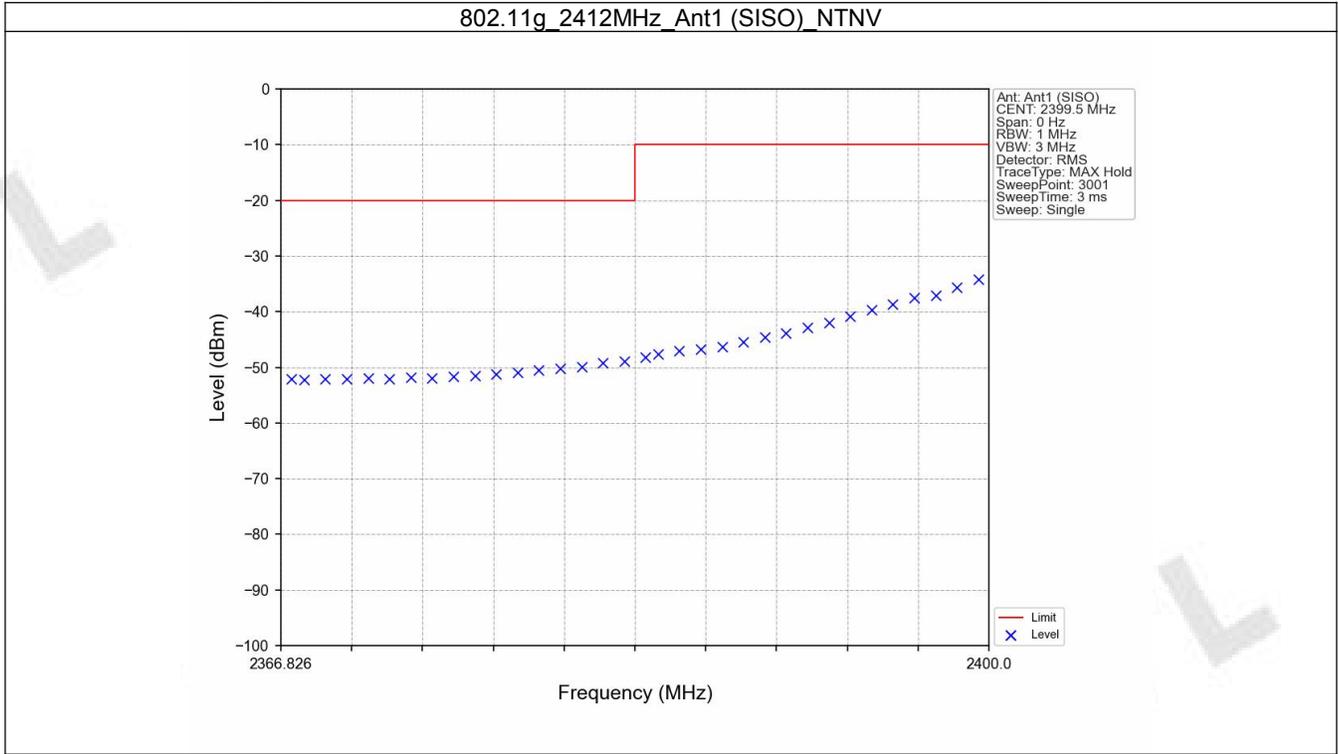
			2533.210	-53.84	<=-20	Pass
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			2537.210	-53.88	<=-20	Pass
			2538.210	-54.01	<=-20	Pass
			2539.210	-54.10	<=-20	Pass
			2540.210	-54.27	<=-20	Pass
			2541.210	-54.11	<=-20	Pass
			2542.210	-54.18	<=-20	Pass
			2543.210	-54.13	<=-20	Pass
			2544.210	-54.14	<=-20	Pass
			2545.210	-54.13	<=-20	Pass
			2546.210	-54.19	<=-20	Pass
			2547.210	-54.08	<=-20	Pass
			2548.210	-54.22	<=-20	Pass
			2549.210	-54.15	<=-20	Pass
			2550.210	-54.25	<=-20	Pass
			2551.210	-54.33	<=-20	Pass
			2552.210	-54.08	<=-20	Pass
			2553.210	-54.27	<=-20	Pass
			2554.210	-54.17	<=-20	Pass
			2555.210	-54.32	<=-20	Pass
			2555.420	-54.28	<=-20	Pass

5.2 Test Graph

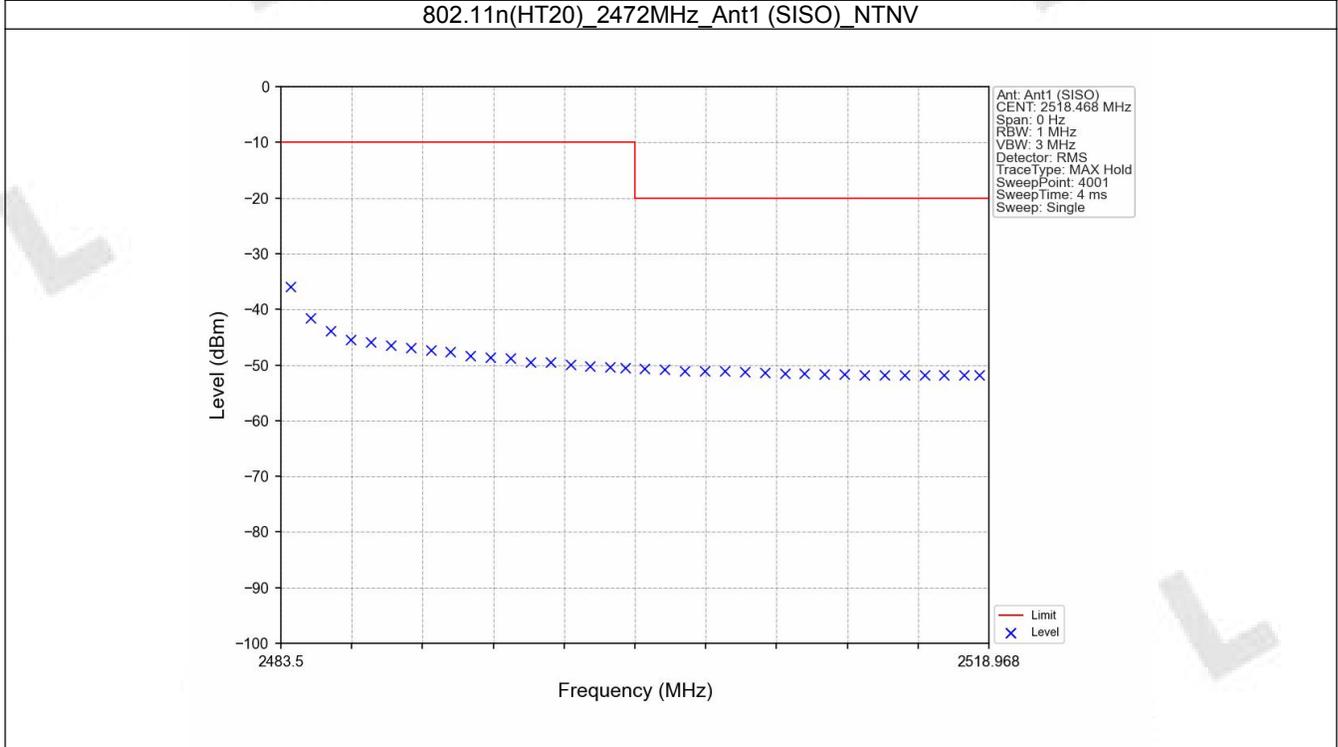
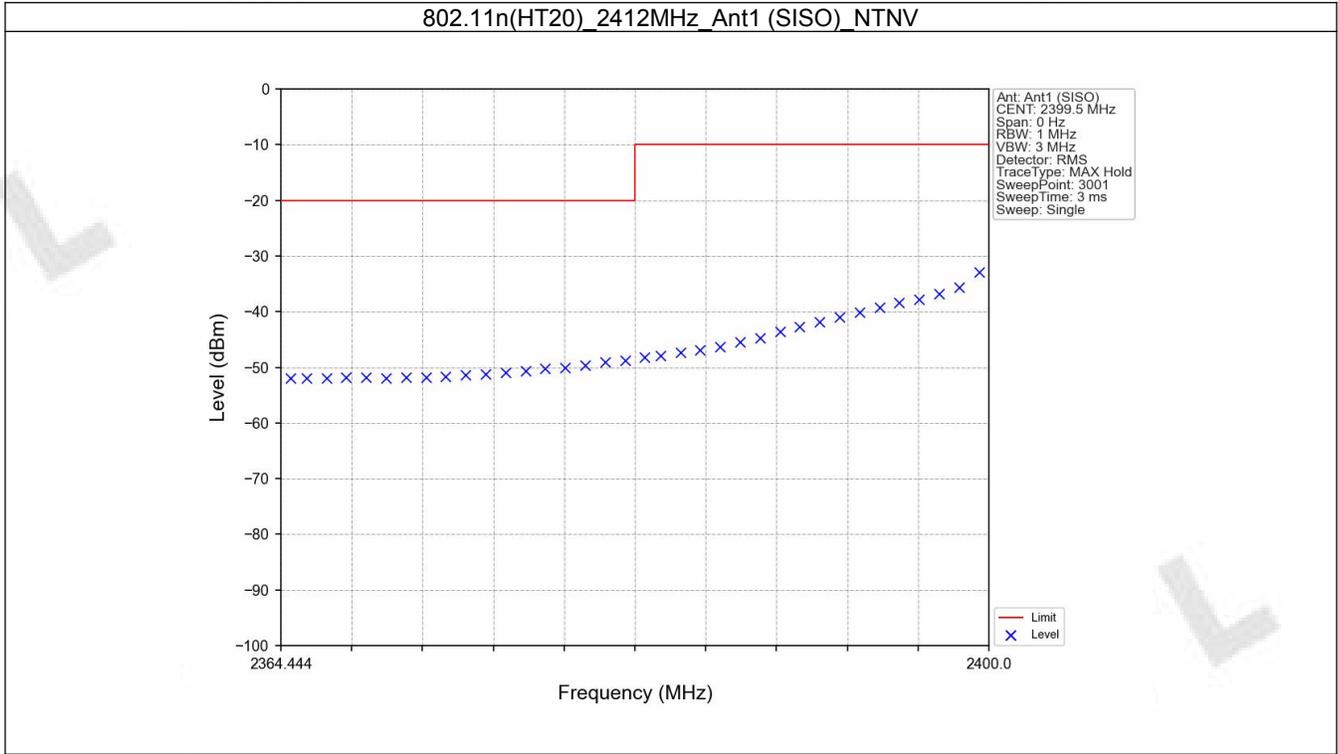
5.2.1 802.11b-Ant1_NTNV



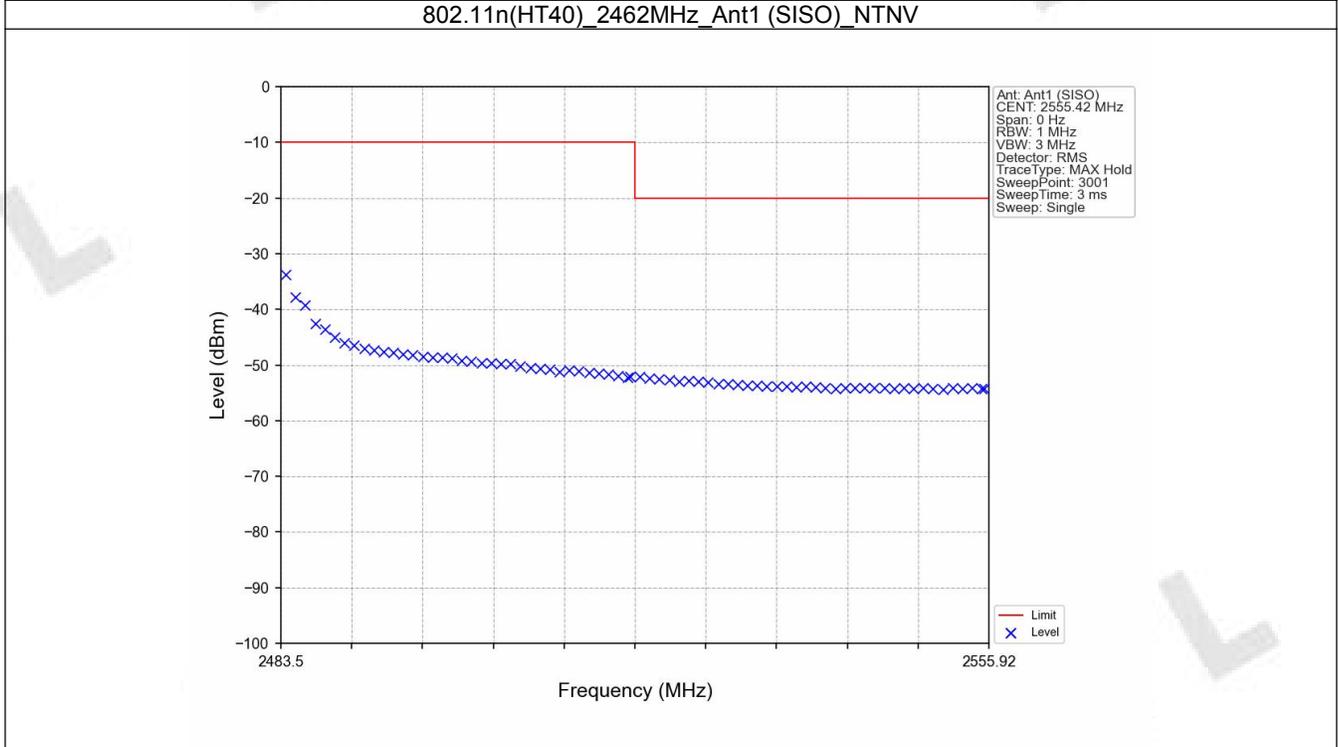
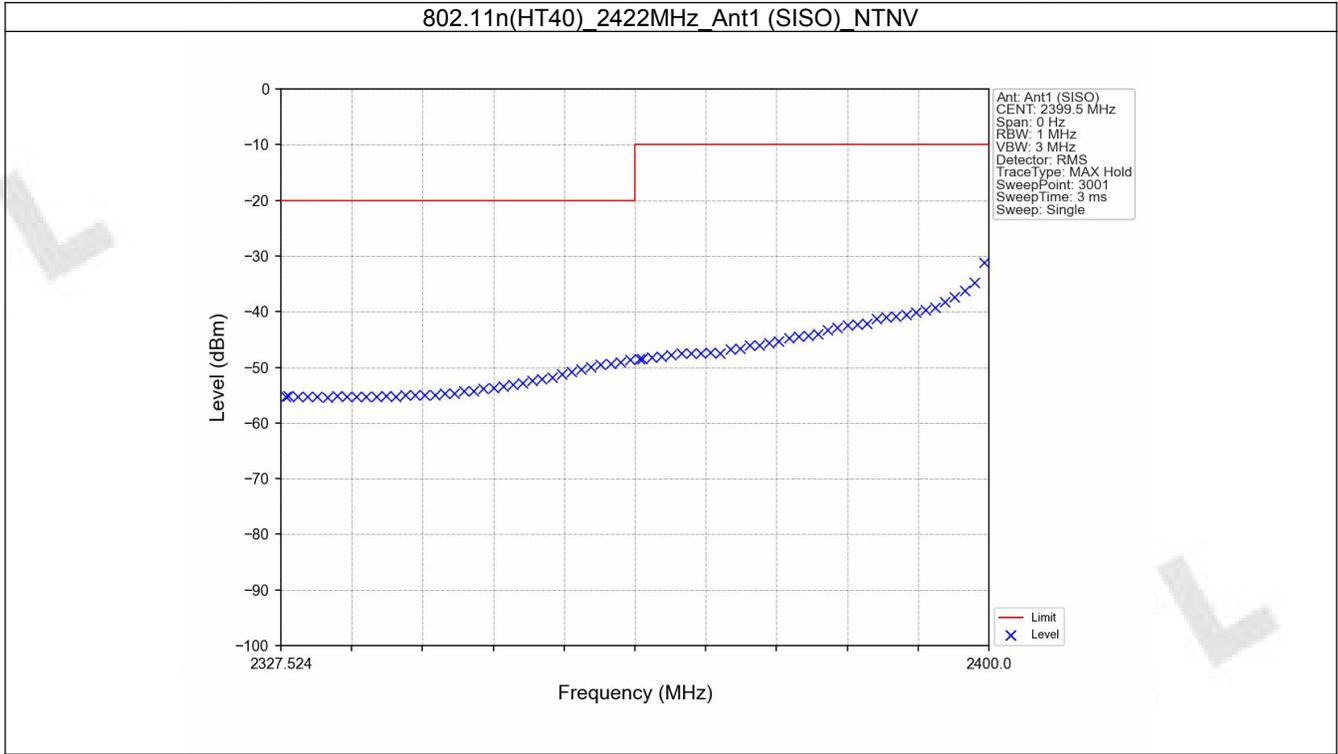
5.2.2 802.11g-Ant1_NTNV



5.2.3 802.11n(HT20)-Ant1_NTNV



5.2.4 802.11n(HT40)-Ant1_NTNV



6. Receiver Blocking

6.1 Test Result

6.1.1 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	-70.63	2300	-30.63	0.00	<=10	Pass
					2330	-30.63	0.00	<=10	Pass
					2360	-30.63	0.00	<=10	Pass
			2472	-70.63	2380	-30.63	0.00	<=10	Pass
					2504	-30.63	0.00	<=10	Pass
					2524	-30.63	0.10	<=10	Pass
					2584	-30.63	0.00	<=10	Pass
					2674	-30.63	0.00	<=10	Pass

Note1: Receiver Category=1