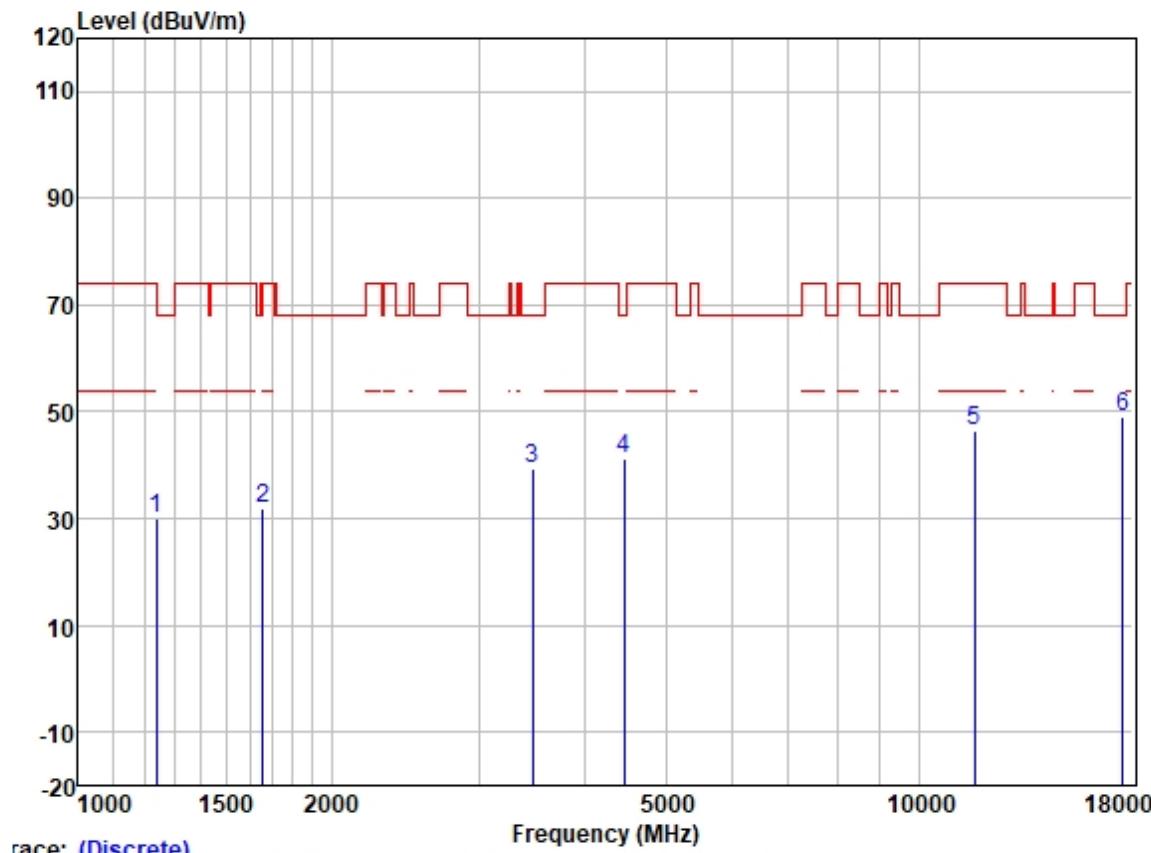


Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

Freq	ReadAntenna		Cable		Preamp		Limit	Over	Pol/Phase	Remark
	MHz	Level	Factor	Loss	Factor	Level	dBuV/m	dBuV/m	dB	
1 1238.483	41.09	24.96	2.30	38.35	30.00	74.00	74.00	-44.00	VERTICAL	Peak
2 1658.337	41.34	25.65	2.80	37.93	31.86	68.20	68.20	-36.34	VERTICAL	Peak
3 3475.541	43.25	28.89	4.25	36.95	39.44	68.20	68.20	-28.76	VERTICAL	Peak
4 4456.315	42.25	30.75	4.88	36.81	41.07	68.20	68.20	-27.13	VERTICAL	Peak
5 11650.000	35.58	39.65	8.35	37.13	46.45	74.00	74.00	-27.55	VERTICAL	Peak
6 17475.000	29.56	43.90	10.77	35.32	48.91	68.20	68.20	-19.29	VERTICAL	Peak

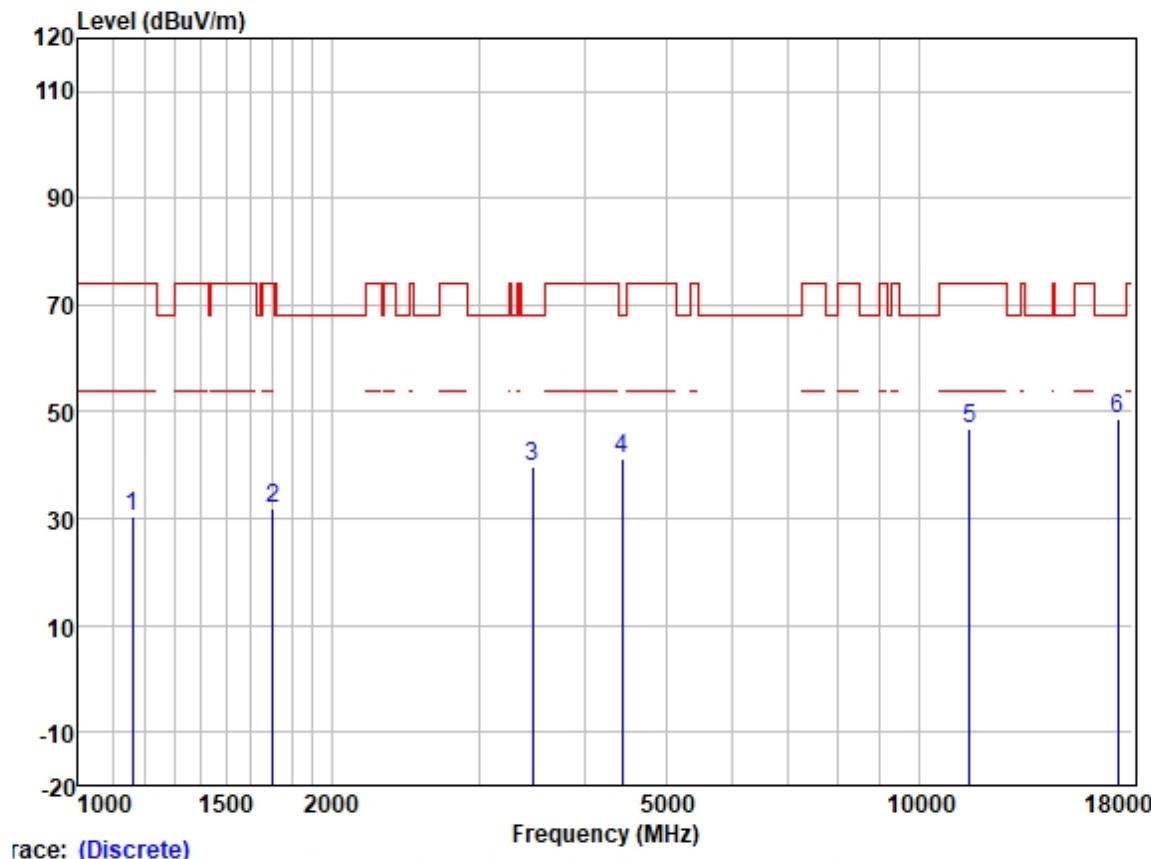
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Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



Trace: (Discrete)

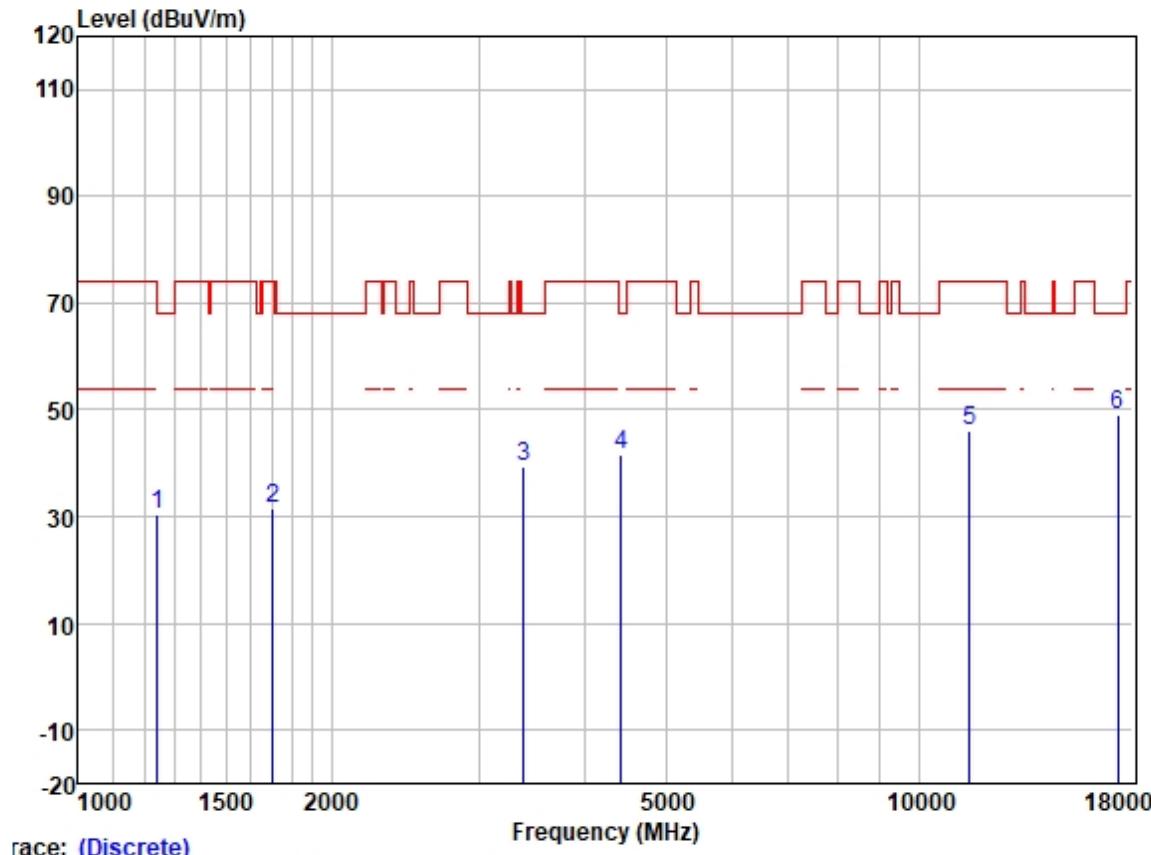
Freq MHz	ReadAntenna	Cable	Preamp	Limit Line dBuV/m	Over Line dB	Over Limit dB	Pol/Phase	Remark
	Freq MHz	Level dBuV	Factor					
1 1158.828	41.95	24.52	2.40	38.42	30.45	74.00	-43.55	HORIZONTAL Peak
2 1702.042	41.11	25.72	2.80	37.89	31.74	74.00	-42.26	HORIZONTAL Peak
3 3475.541	43.39	28.89	4.25	36.95	39.58	68.20	-28.62	HORIZONTAL Peak
4 4443.453	42.47	30.73	4.83	36.81	41.22	68.20	-26.98	HORIZONTAL Peak
5 11510.000	35.73	39.90	8.41	37.15	46.89	74.00	-27.11	HORIZONTAL Peak
6 17265.000	30.54	43.21	10.24	35.33	48.66	68.20	-19.54	HORIZONTAL Peak

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Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



Trace: (Discrete)

Freq	ReadAntenna		Cable		Preamp		Limit	Over	Pol/Phase	Remark
	MHz	Level	Factor	Loss	Factor	Level	dBuV/m	dBuV/m	dB	
1	1242.068	41.36	24.98	2.31	38.35	30.30	68.20	-37.90	VERTICAL	Peak
2	1702.042	40.87	25.72	2.80	37.89	31.50	74.00	-42.50	VERTICAL	Peak
3	3386.297	43.59	28.83	4.10	36.99	39.53	68.20	-28.67	VERTICAL	Peak
4	4430.628	42.98	30.72	4.78	36.81	41.67	68.20	-26.53	VERTICAL	Peak
5	11510.000	34.81	39.90	8.41	37.15	45.97	74.00	-28.03	VERTICAL	Peak
6	17265.000	31.13	43.21	10.24	35.33	49.25	68.20	-18.95	VERTICAL	Peak

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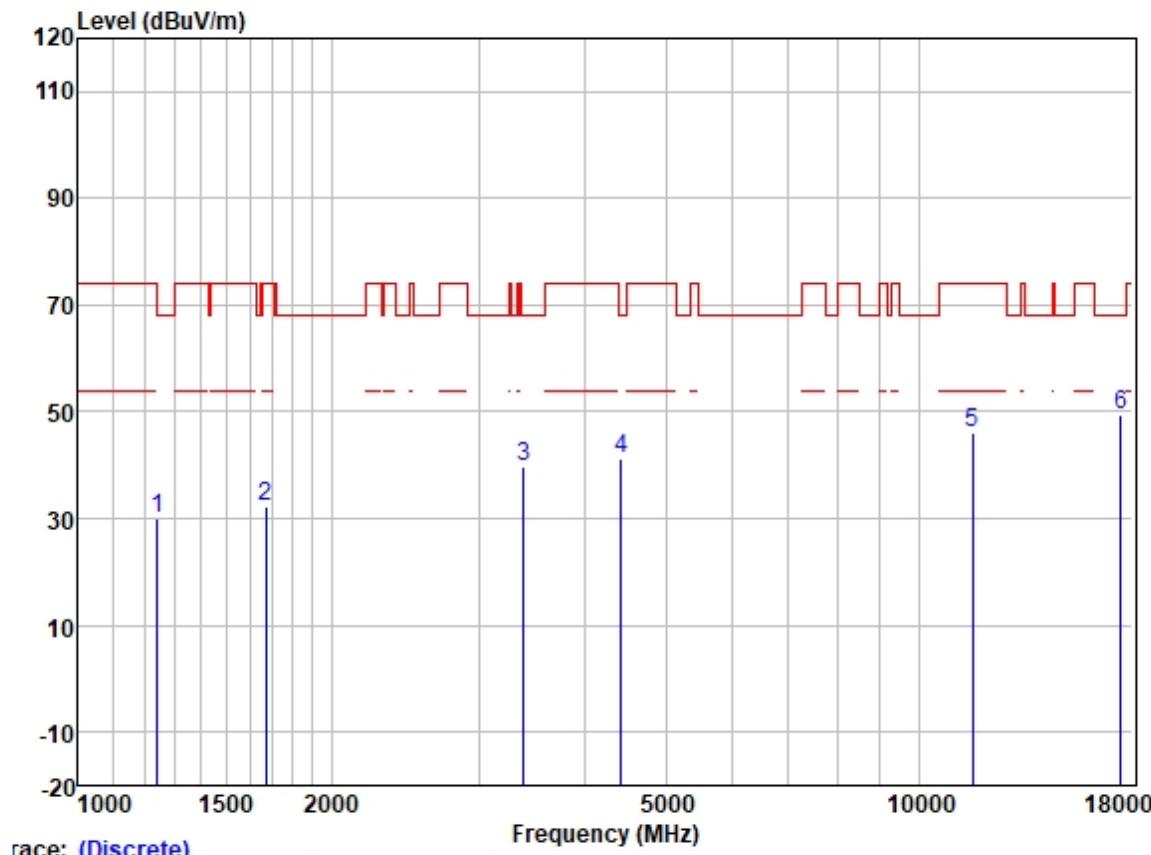
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Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



Trace: (Discrete)

Freq	ReadAntenna		Cable		Preamp		Limit	Over	Pol/Phase	Remark
	MHz	Level	Factor	Loss	Factor	Level	dBuV/m	dBuV/m	dB	
1	1242.068	41.18	24.98	2.31	38.35	30.12	68.20	-38.08	HORIZONTAL	Peak
2	1672.779	41.63	25.67	2.80	37.91	32.19	74.00	-41.81	HORIZONTAL	Peak
3	3386.297	43.90	28.83	4.10	36.99	39.84	68.20	-28.36	HORIZONTAL	Peak
4	4430.628	42.57	30.72	4.78	36.81	41.26	68.20	-26.94	HORIZONTAL	Peak
5	11590.000	35.21	39.72	8.37	37.14	46.16	74.00	-27.84	HORIZONTAL	Peak
6	17385.000	30.72	43.57	10.53	35.32	49.50	68.20	-18.70	HORIZONTAL	Peak

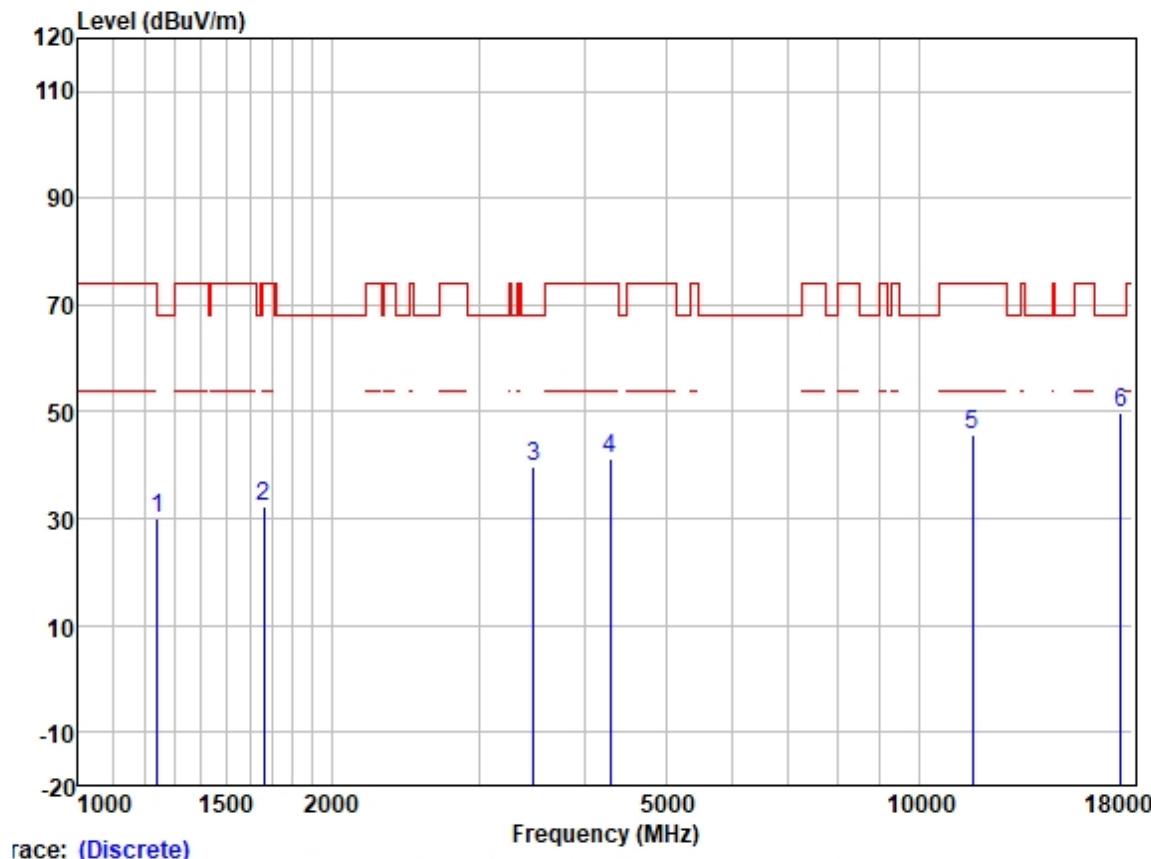
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Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



Freq	ReadAntenna		Cable		Preamp	Limit	Over	Pol/Phase	Remark
	MHz	Level	Factor	Loss					
1	1242.068	41.03	24.98	2.31	38.35	29.97	68.20	-38.23	VERTICAL Peak
2	1663.137	41.74	25.65	2.80	37.91	32.28	74.00	-41.72	VERTICAL Peak
3	3485.601	43.66	28.89	4.27	36.95	39.87	68.20	-28.33	VERTICAL Peak
4	4291.977	42.82	30.45	4.64	36.81	41.10	74.00	-32.90	VERTICAL Peak
5	11590.000	34.58	39.72	8.37	37.14	45.53	74.00	-28.47	VERTICAL Peak
6	17385.000	31.09	43.57	10.53	35.32	49.87	68.20	-18.33	VERTICAL Peak

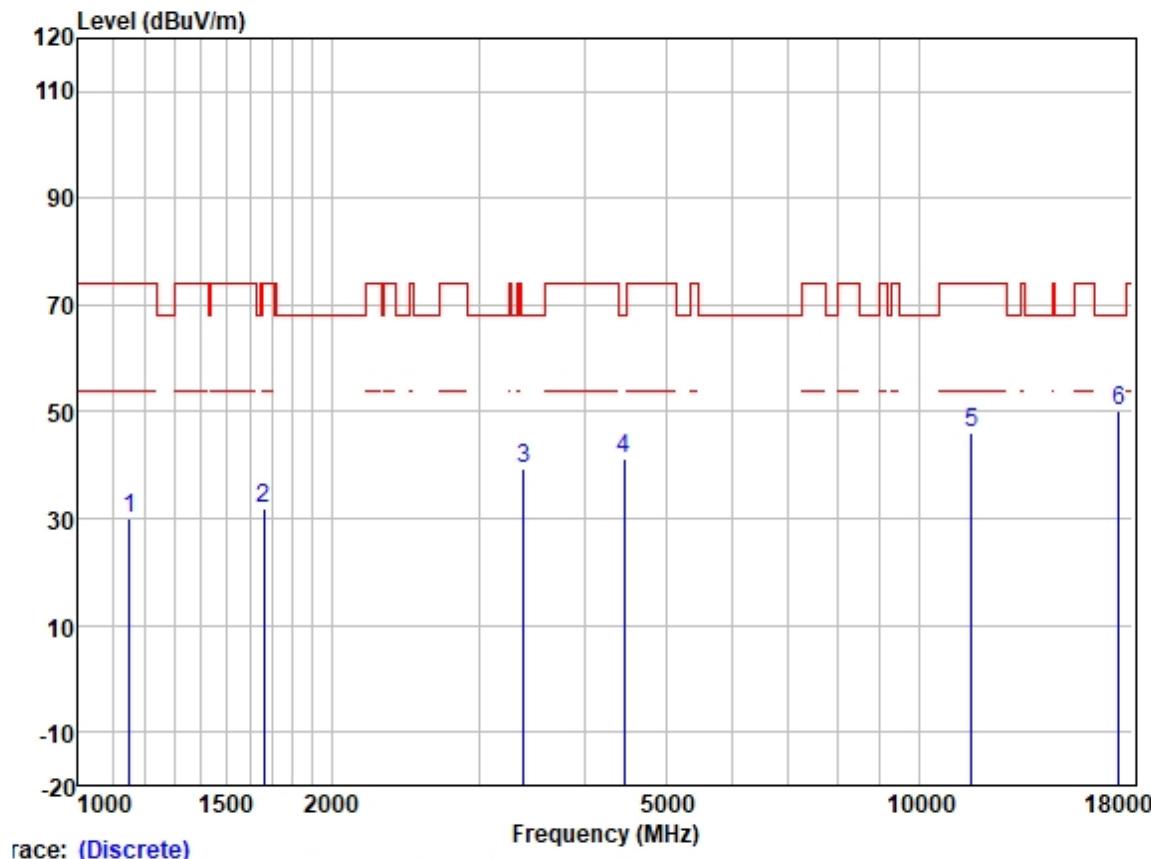
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Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



	ReadAntenna	Cable	Preamp	Limit	Over				
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1 1152.148	41.41	24.50	2.36	38.42	29.85	74.00	-44.15	HORIZONTAL	Peak
2 1663.137	41.24	25.65	2.80	37.91	31.78	74.00	-42.22	HORIZONTAL	Peak
3 3386.297	43.46	28.83	4.10	36.99	39.40	68.20	-28.80	HORIZONTAL	Peak
4 4456.315	42.38	30.75	4.88	36.81	41.20	68.20	-27.00	HORIZONTAL	Peak
5 11550.000	35.14	39.84	8.40	37.14	46.24	74.00	-27.76	HORIZONTAL	Peak
6 17325.000	31.65	43.40	10.39	35.32	50.12	68.20	-18.08	HORIZONTAL	Peak

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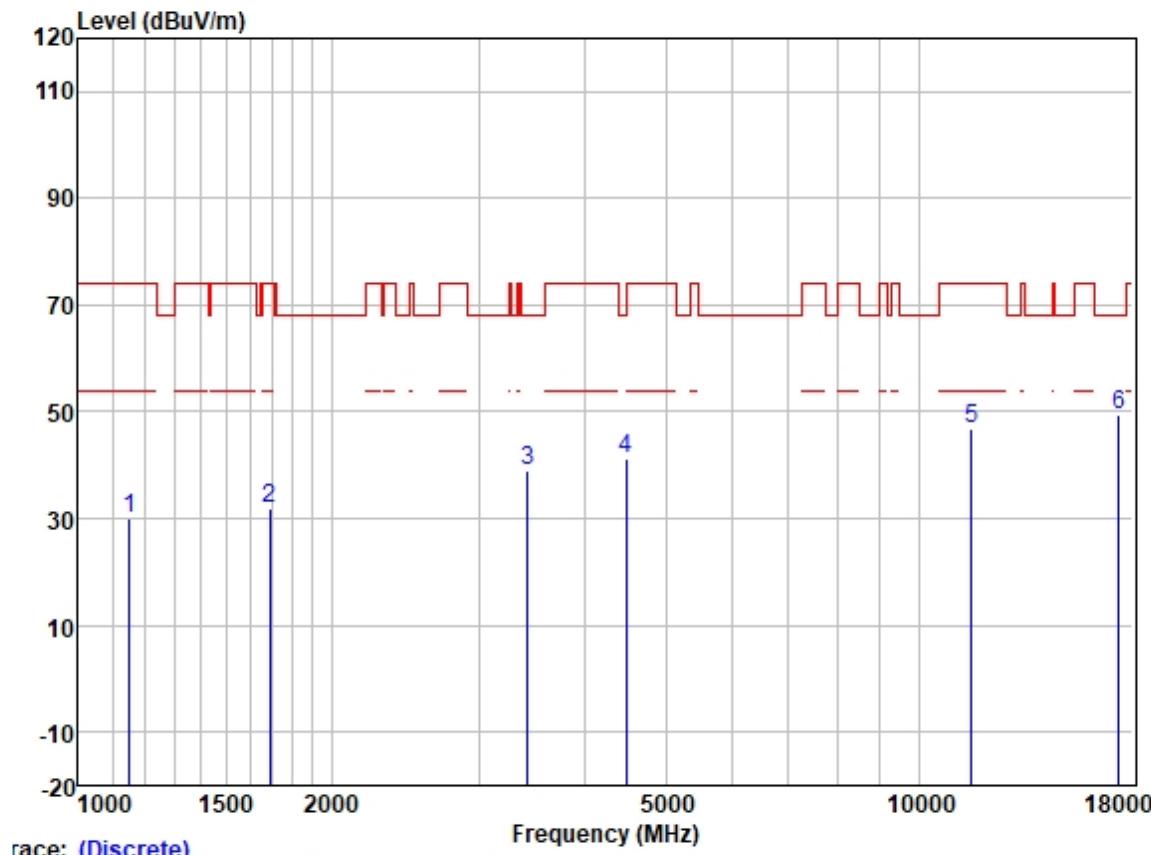
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Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



Mode: (Discrete)

Freq	ReadAntenna		Cable		Preamp	Limit	Over	Pol/Phase	Remark
	MHz	Level	Factor	Loss					
1	1152.148	41.67	24.50	2.36	38.42	30.11	74.00	-43.89	VERTICAL Peak
2	1692.231	41.19	25.70	2.80	37.89	31.80	74.00	-42.20	VERTICAL Peak
3	3425.675	43.01	28.86	4.15	36.97	39.05	68.20	-29.15	VERTICAL Peak
4	4482.150	42.36	30.78	4.99	36.81	41.32	68.20	-26.88	VERTICAL Peak
5	11550.000	35.61	39.84	8.40	37.14	46.71	74.00	-27.29	VERTICAL Peak
6	17325.000	30.89	43.40	10.39	35.32	49.36	68.20	-18.84	VERTICAL Peak

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7.10 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)
 Test Method: ANSI C63.10 (2013) Section 6.8

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C Humidity: 55.5 % RH Atmospheric Pressure: 1015 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-2C)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

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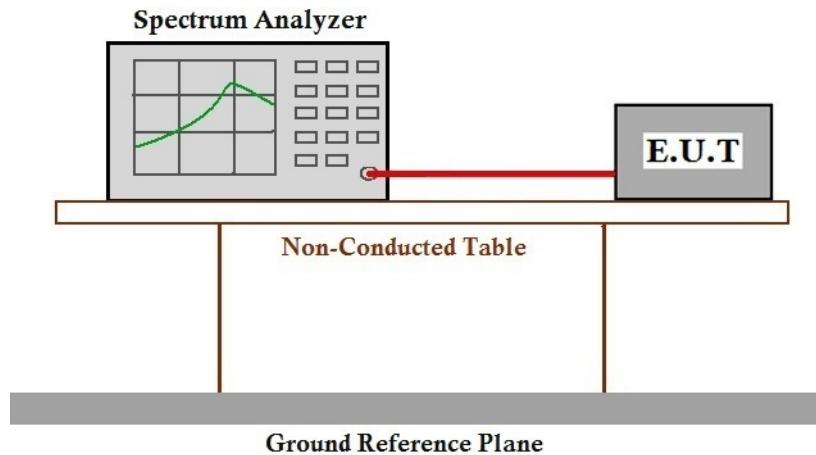
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7.10.3 Test Setup Diagram**7.10.4 Measurement Procedure and Data**

Please Refer to Appendix for Details

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8 Test Setup Photo

Refer to Test Setup Photos for GZCR2206000724AT

9 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for GZCR2206000724AT

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10 Appendix

1. Duty Cycle

1.1 Ant1

1.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.398	1.737	80.48	0.94	0.84
		5200	1.399	1.738	80.49	0.94	0.84
		5240	1.398	1.738	80.44	0.95	0.85
		5260	1.398	1.737	80.48	0.94	0.84
		5300	1.398	1.737	80.48	0.94	0.84
		5320	1.399	1.738	80.49	0.94	0.84
		5500	1.398	1.738	80.44	0.95	0.87
		5580	1.399	1.738	80.49	0.94	0.84
		5700	1.397	1.738	80.38	0.95	0.88
		5745	1.398	1.737	80.48	0.94	0.88
		5785	1.398	1.738	80.44	0.95	0.85
802.11n (HT20)	MIMO	5180	0.420	0.762	55.12	2.59	2.06
		5200	0.420	0.744	56.45	2.48	0.70
		5240	0.420	0.762	55.12	2.59	2.03
		5260	0.419	0.761	55.06	2.59	2.03
		5300	0.420	0.761	55.19	2.58	2.04
		5320	0.420	0.743	56.53	2.48	0.68
		5500	0.420	0.761	55.19	2.58	2.03
		5580	0.419	0.743	56.39	2.49	0.73
		5700	0.420	0.780	53.85	2.69	3.32
		5745	0.420	0.762	55.12	2.59	2.06
		5785	0.420	0.744	56.45	2.48	0.70
		5825	0.420	0.771	54.47	2.64	2.68
802.11n (HT40)	MIMO	5190	0.233	0.572	40.73	3.90	2.02
		5230	0.233	0.572	40.73	3.90	2.02
		5270	0.234	0.573	40.84	3.89	2.05
		5310	0.234	0.582	40.21	3.96	2.65
		5510	0.234	0.582	40.21	3.96	2.68
		5550	0.233	0.572	40.73	3.90	2.02

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		5670	0.234	0.618	37.86	4.22	4.25
		5755	0.233	0.573	40.66	3.91	2.05
		5795	0.233	0.581	40.10	3.97	2.65
802.11ac (VHT20)	MIMO	5180	0.462	0.801	57.68	2.39	0.66
		5200	0.462	0.801	57.68	2.39	0.66
		5240	0.463	0.802	57.73	2.39	0.68
		5260	0.462	0.811	56.97	2.44	1.98
		5300	0.462	0.801	57.68	2.39	0.66
		5320	0.462	0.801	57.68	2.39	2.01
		5500	0.463	0.802	57.73	2.39	0.66
		5580	0.463	0.802	57.73	2.39	0.66
		5700	0.462	0.801	57.68	2.39	0.67
		5745	0.463	0.802	57.73	2.39	0.66
		5785	0.462	0.801	57.68	2.39	0.66
		5825	0.462	0.801	57.68	2.39	0.66
802.11ac (VHT40)	MIMO	5190	0.254	0.593	42.83	3.68	1.38
		5230	0.253	0.583	43.40	3.63	0.72
		5270	0.254	0.584	43.49	3.62	1.38
		5310	0.254	0.584	43.49	3.62	0.70
		5510	0.254	0.584	43.49	3.62	0.70
		5550	0.253	0.583	43.40	3.63	0.70
		5670	0.253	0.584	43.32	3.63	0.68
		5755	0.253	0.584	43.32	3.63	1.42
		5795	0.254	0.584	43.49	3.62	1.38
802.11ac (VHT80)	MIMO	5210	0.393	0.726	54.13	2.67	39.51
		5290	0.000	0.065	0.00	0.00	91.26
		5530	0.392	0.744	52.69	2.78	40.80
		5610	0.393	0.753	52.19	2.82	41.46
		5775	0.394	0.744	52.96	2.76	40.93

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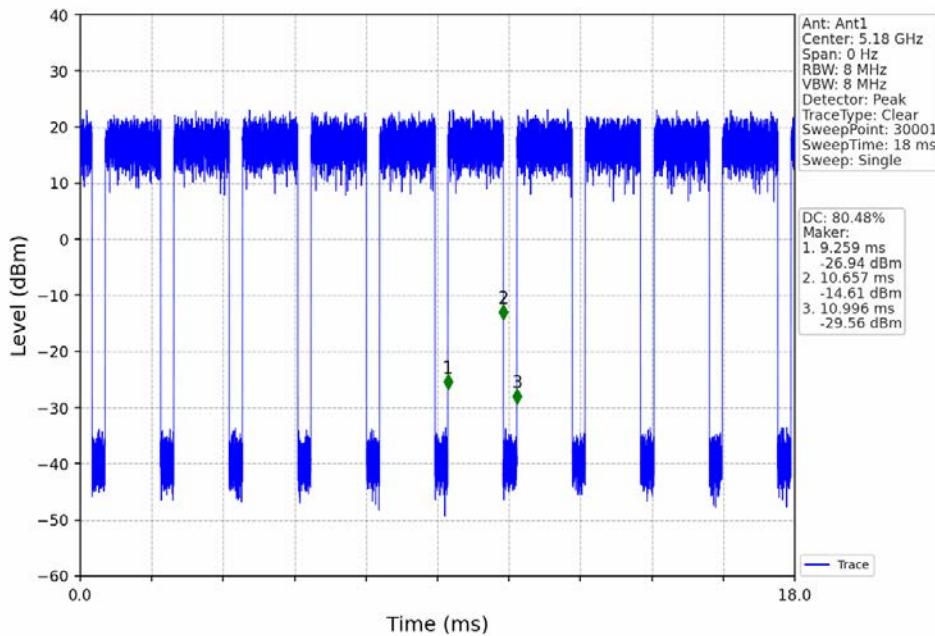


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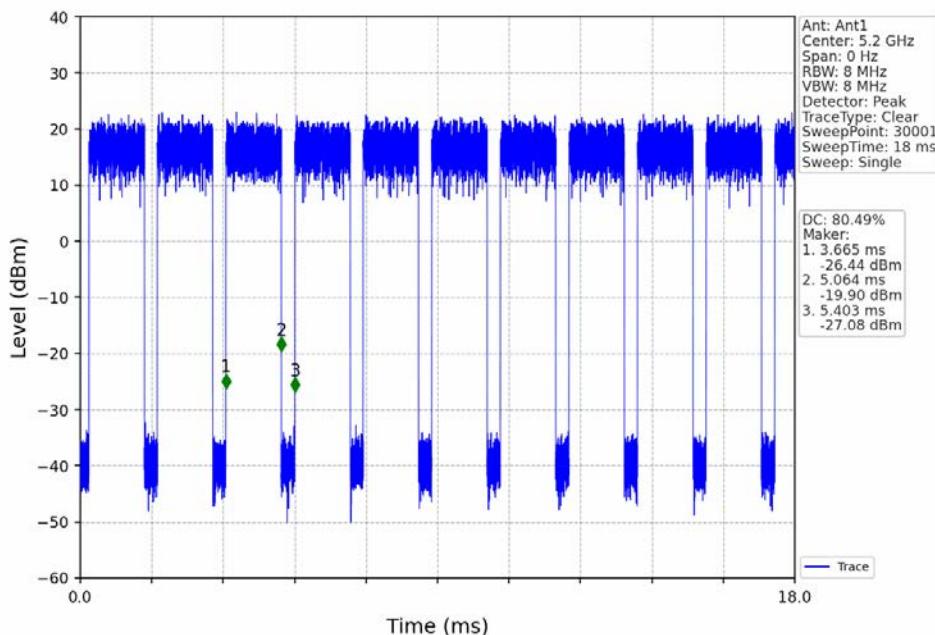
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1.1.2 Test Graph

802.11a_LCH_5180MHz_Ant1_NTNV



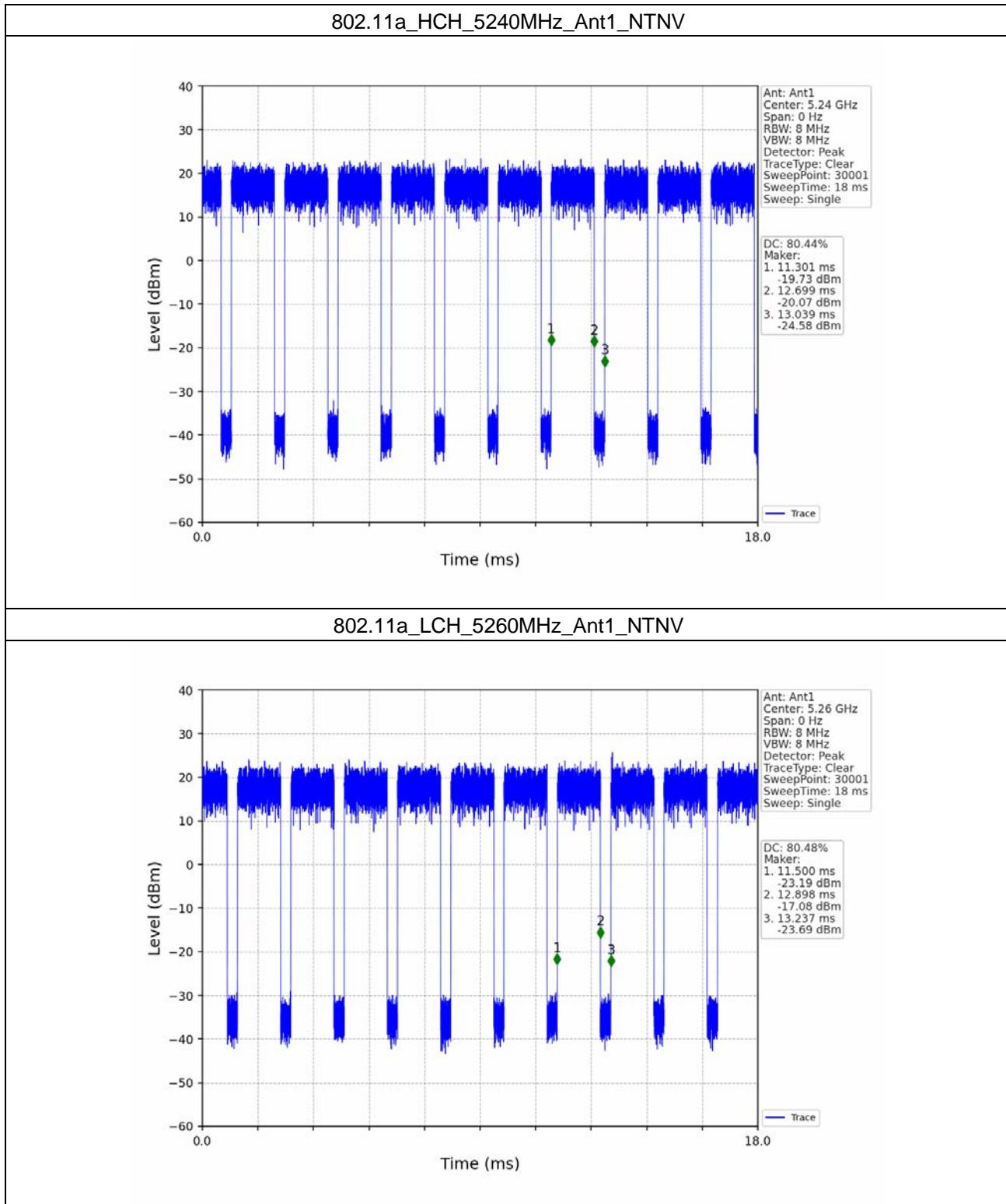
802.11a_MCH_5200MHz_Ant1_NTNV



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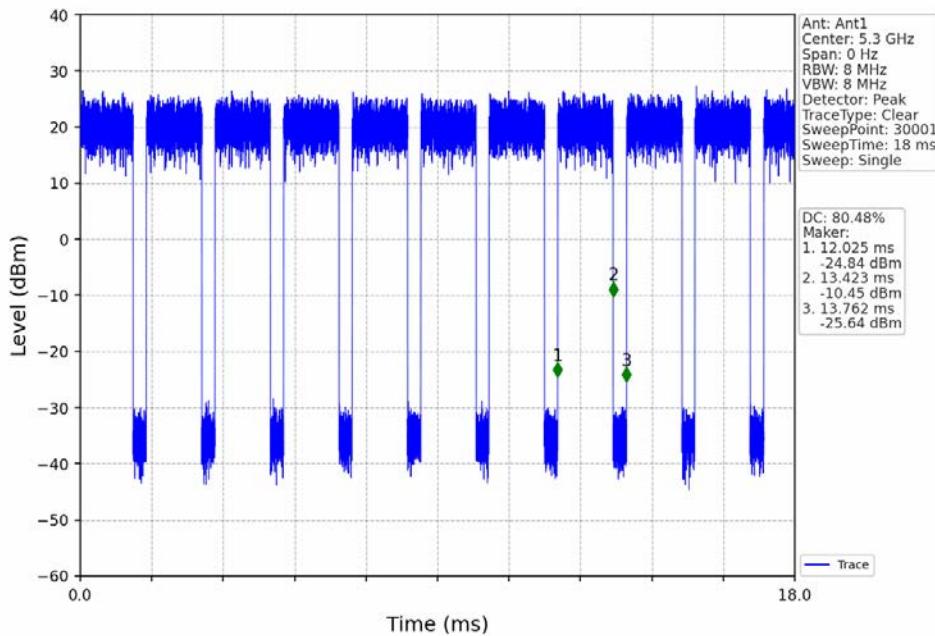
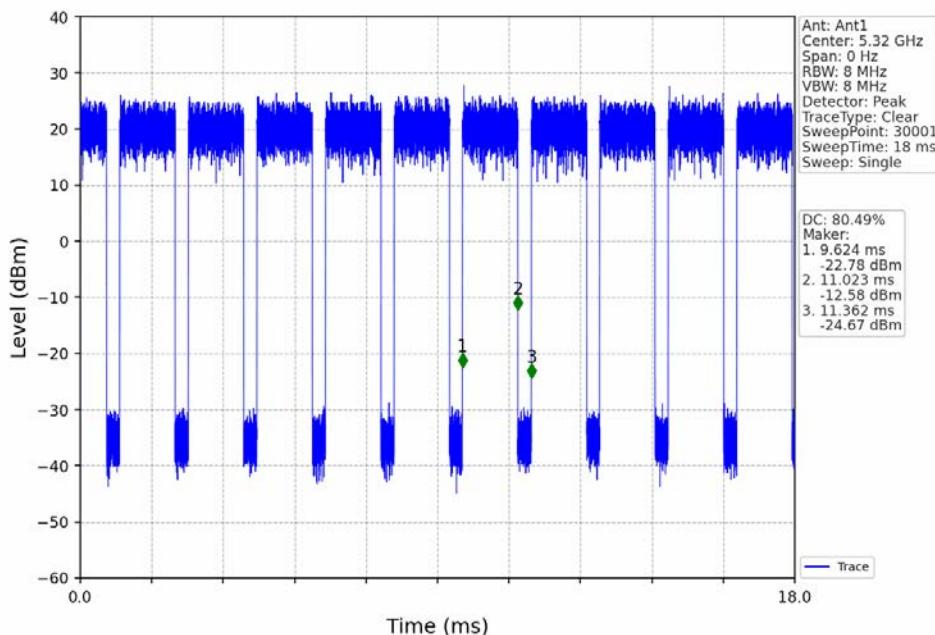
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802.11a_MCH_5300MHz_Ant1_NTNV**802.11a_HCH_5320MHz_Ant1_NTNV**

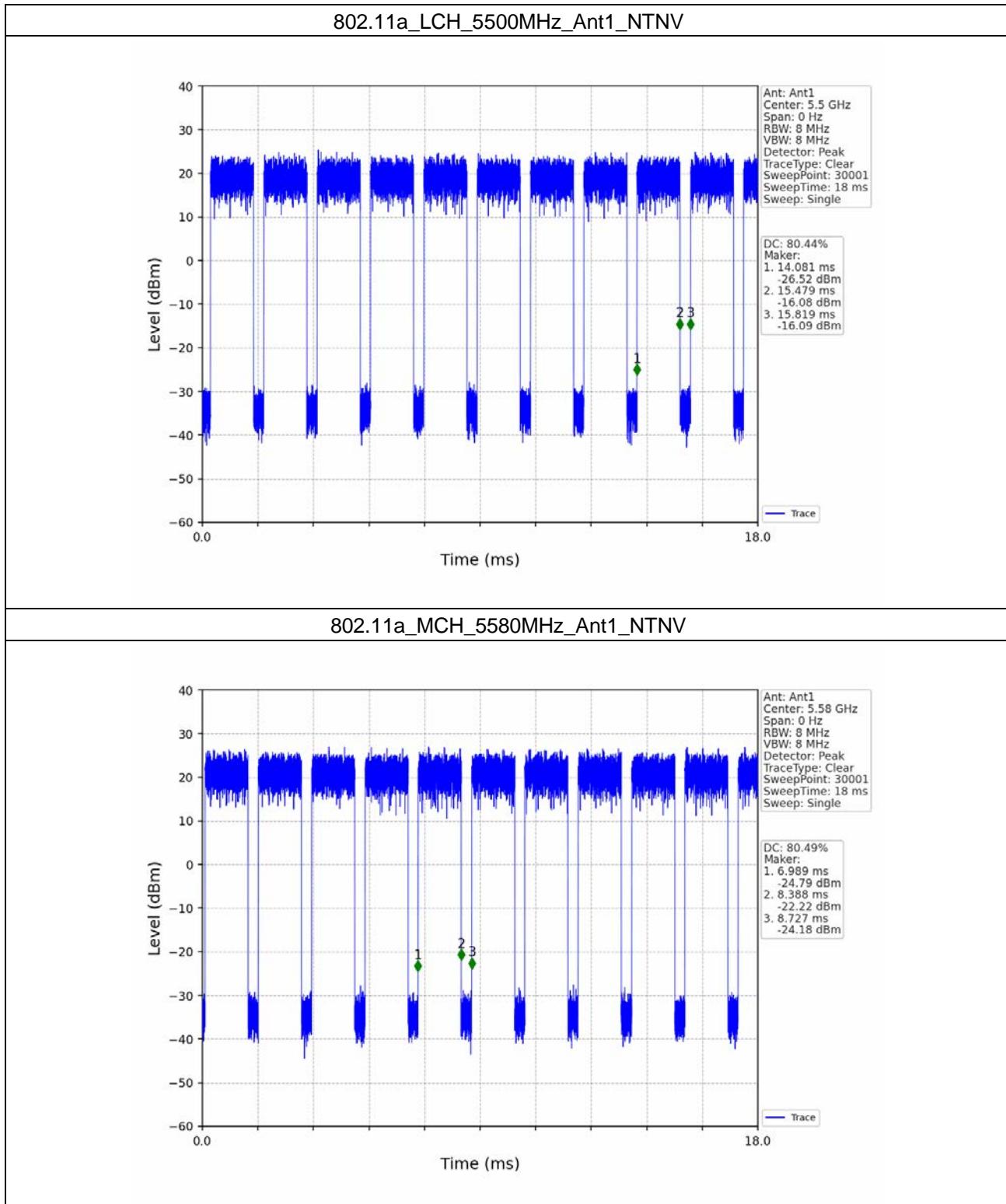
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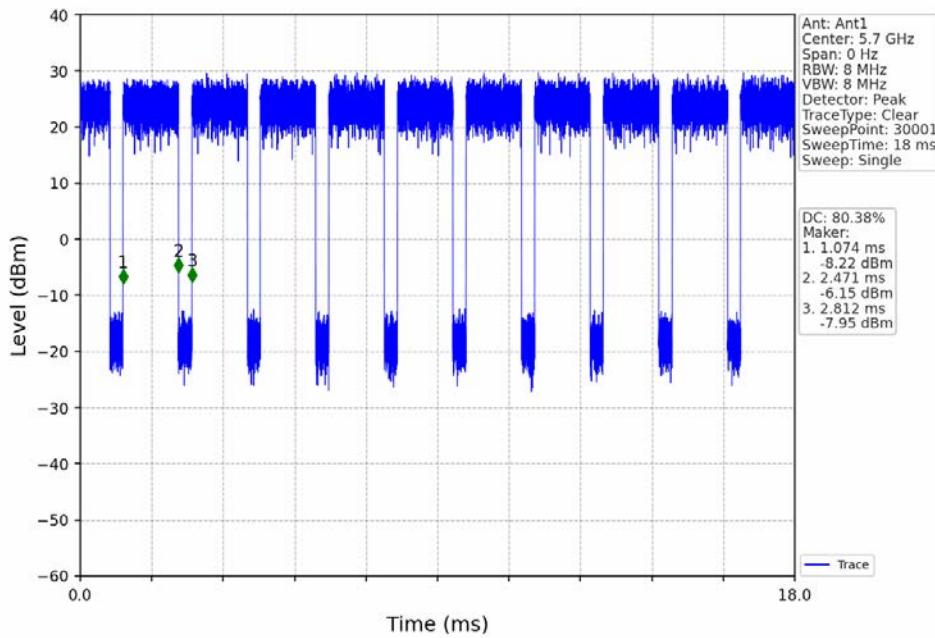
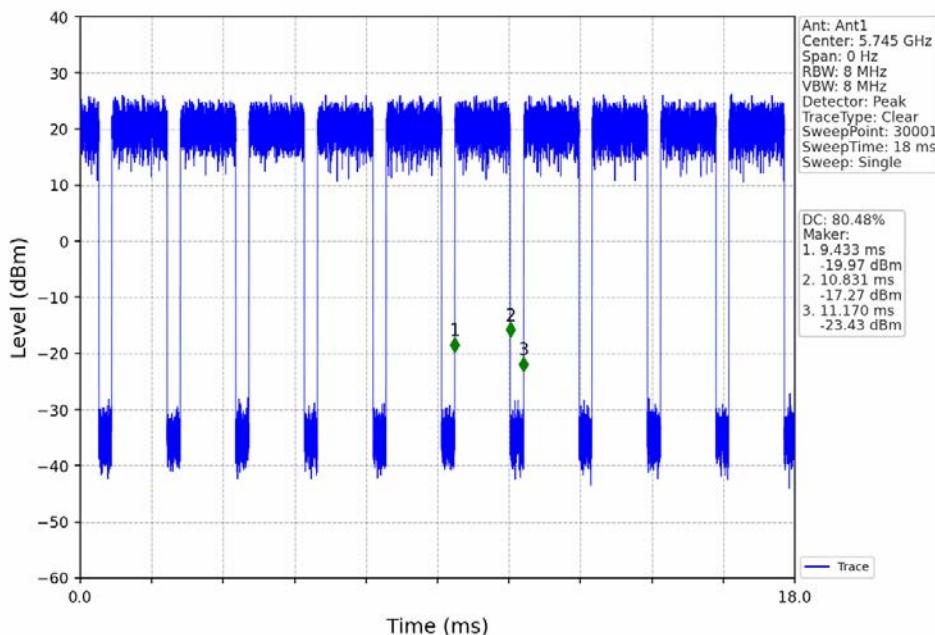
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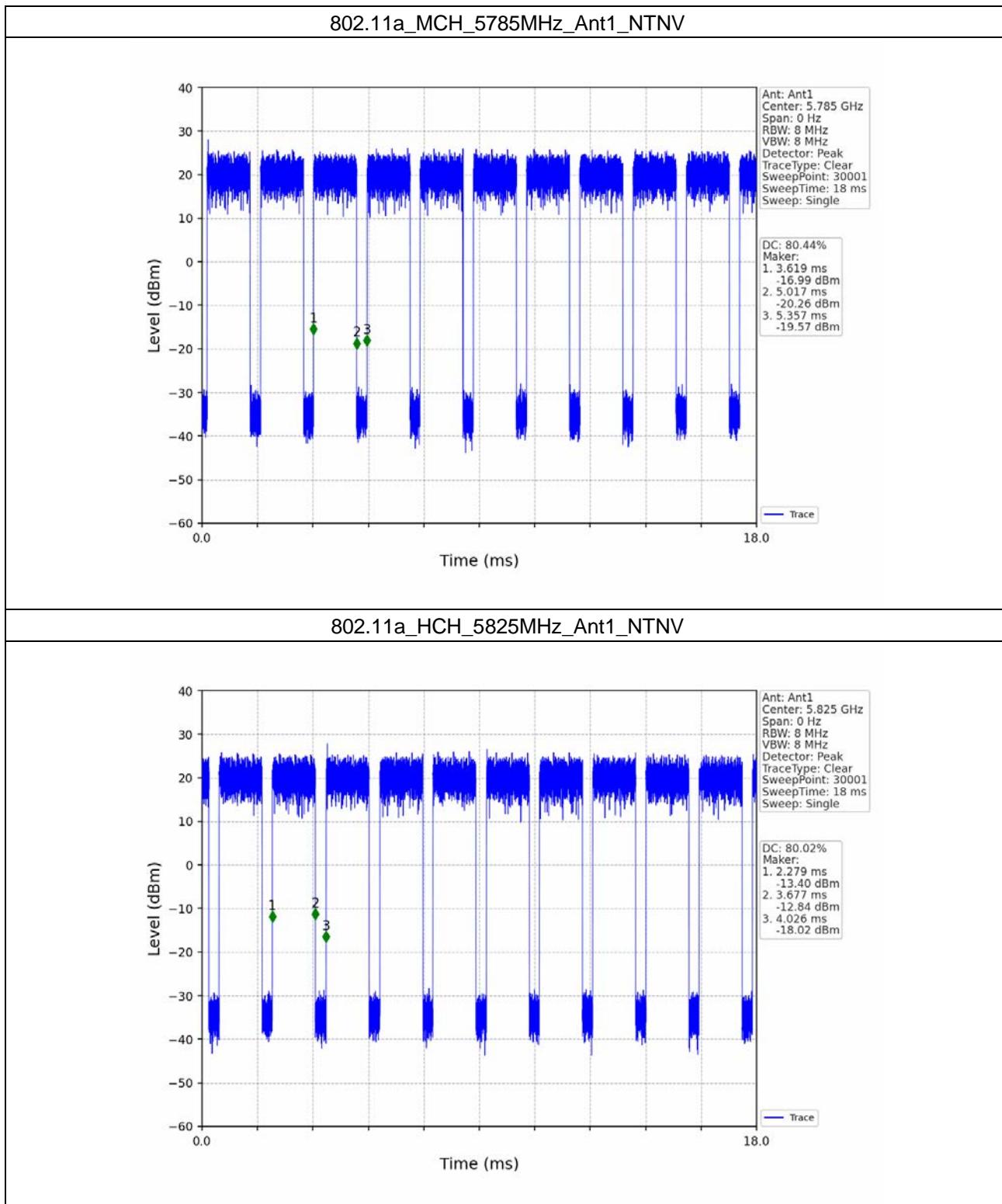
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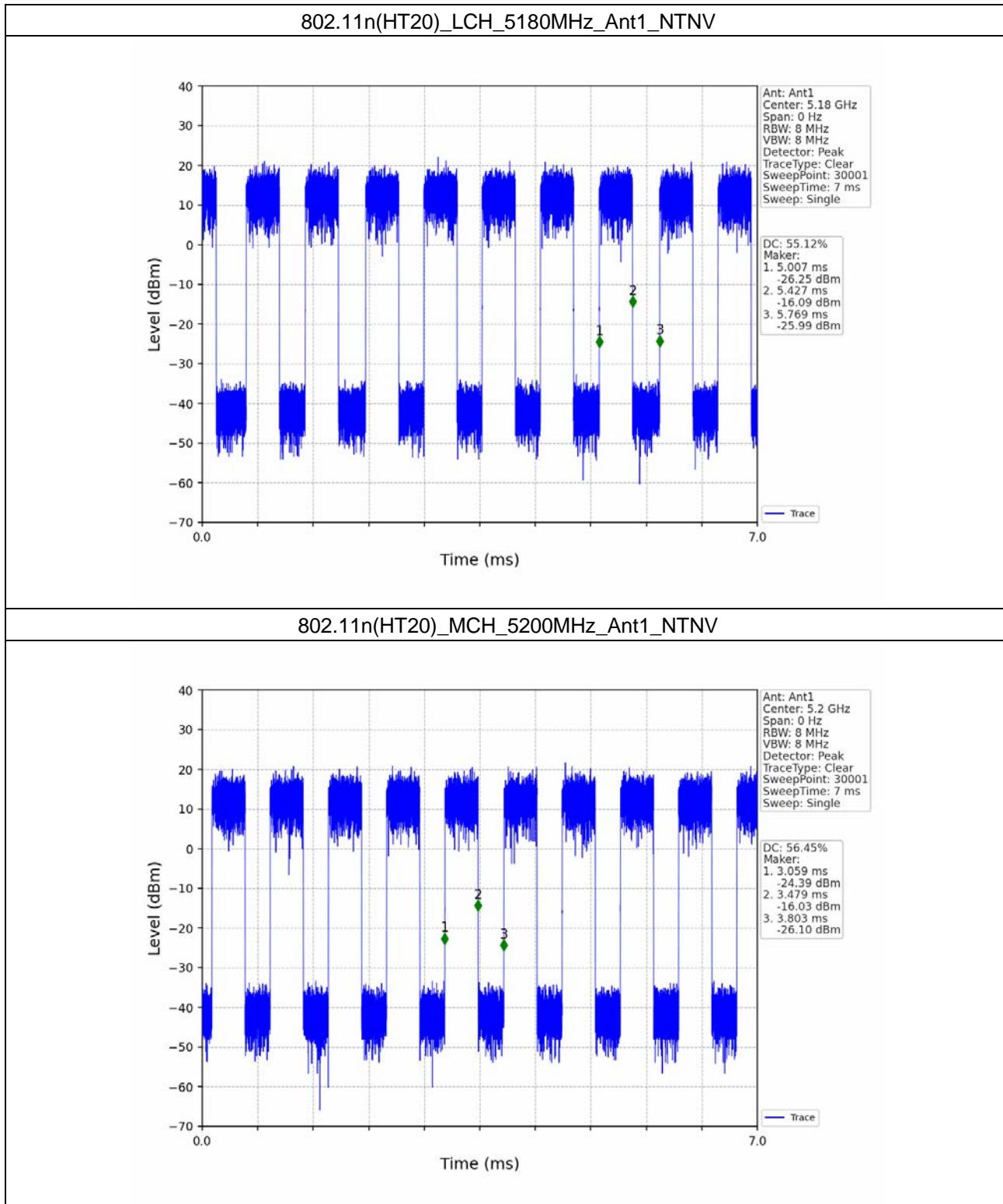
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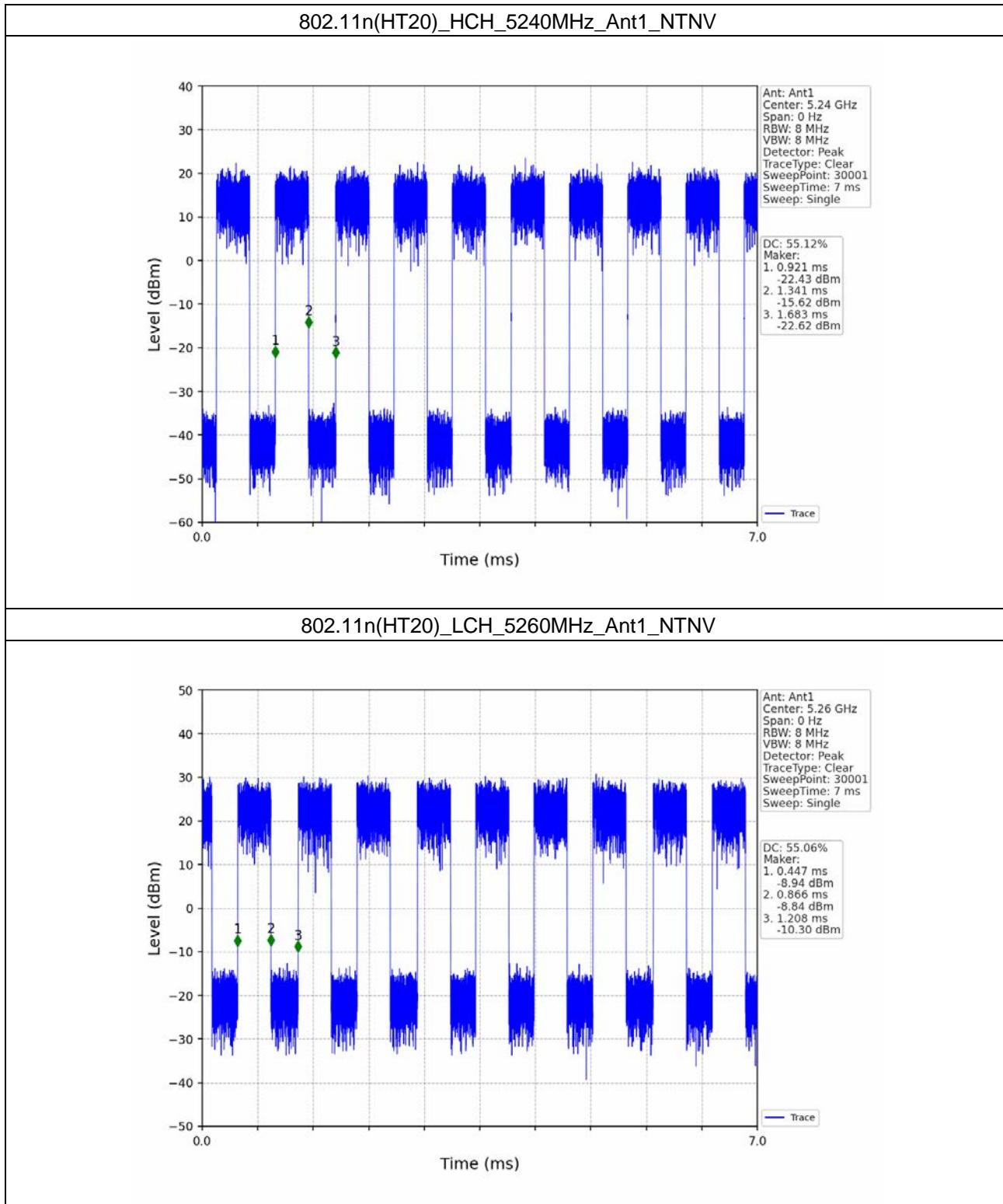
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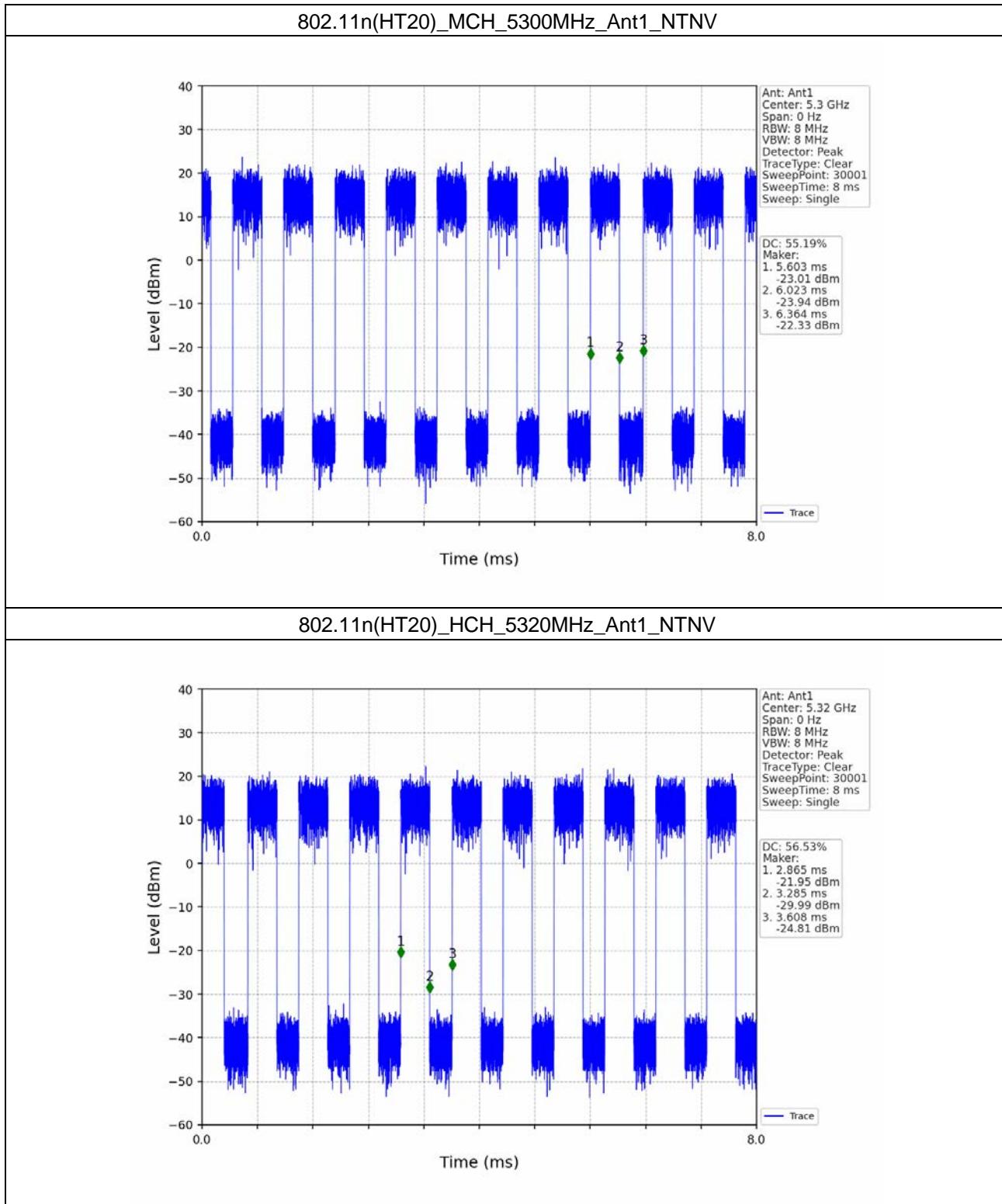
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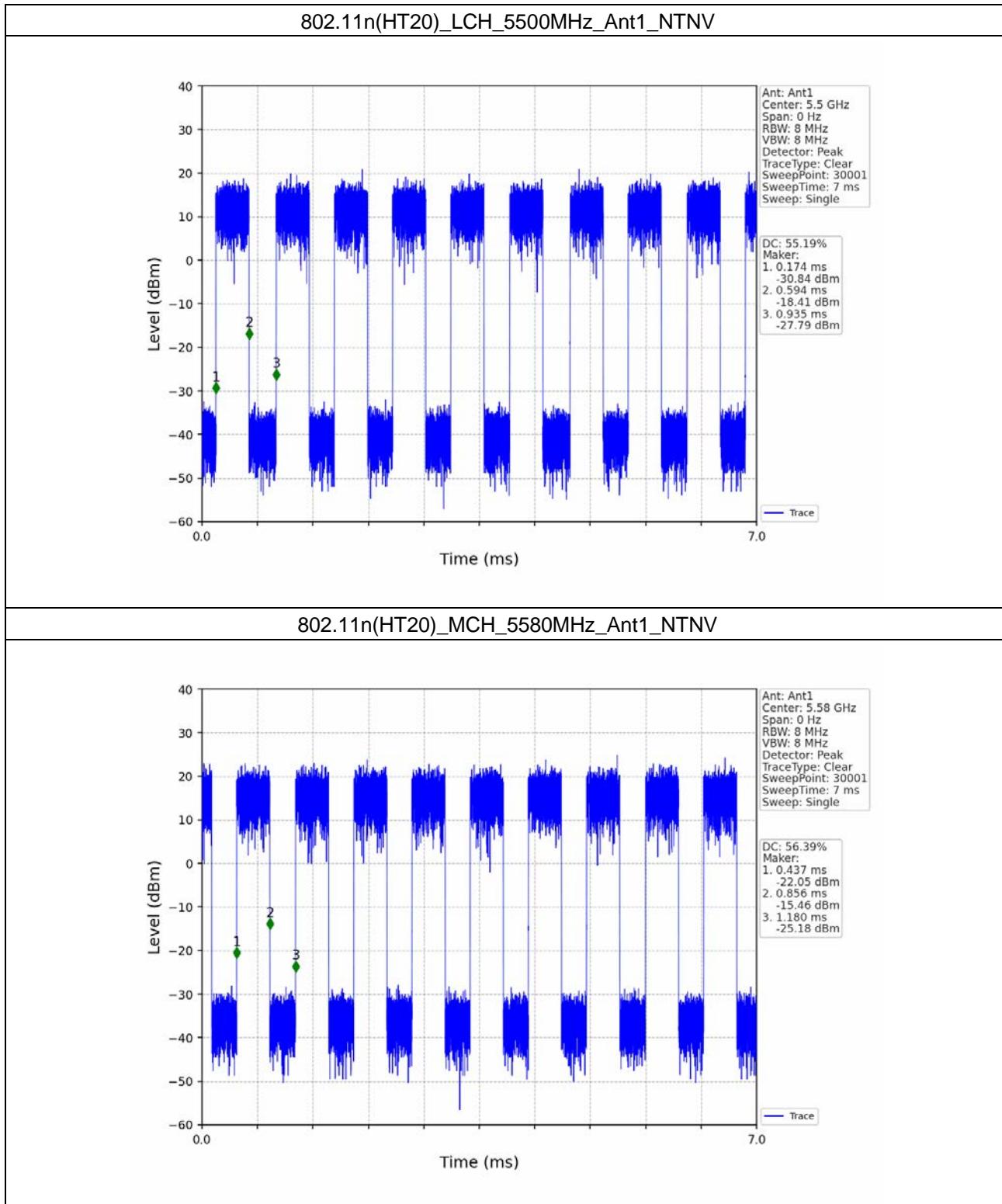
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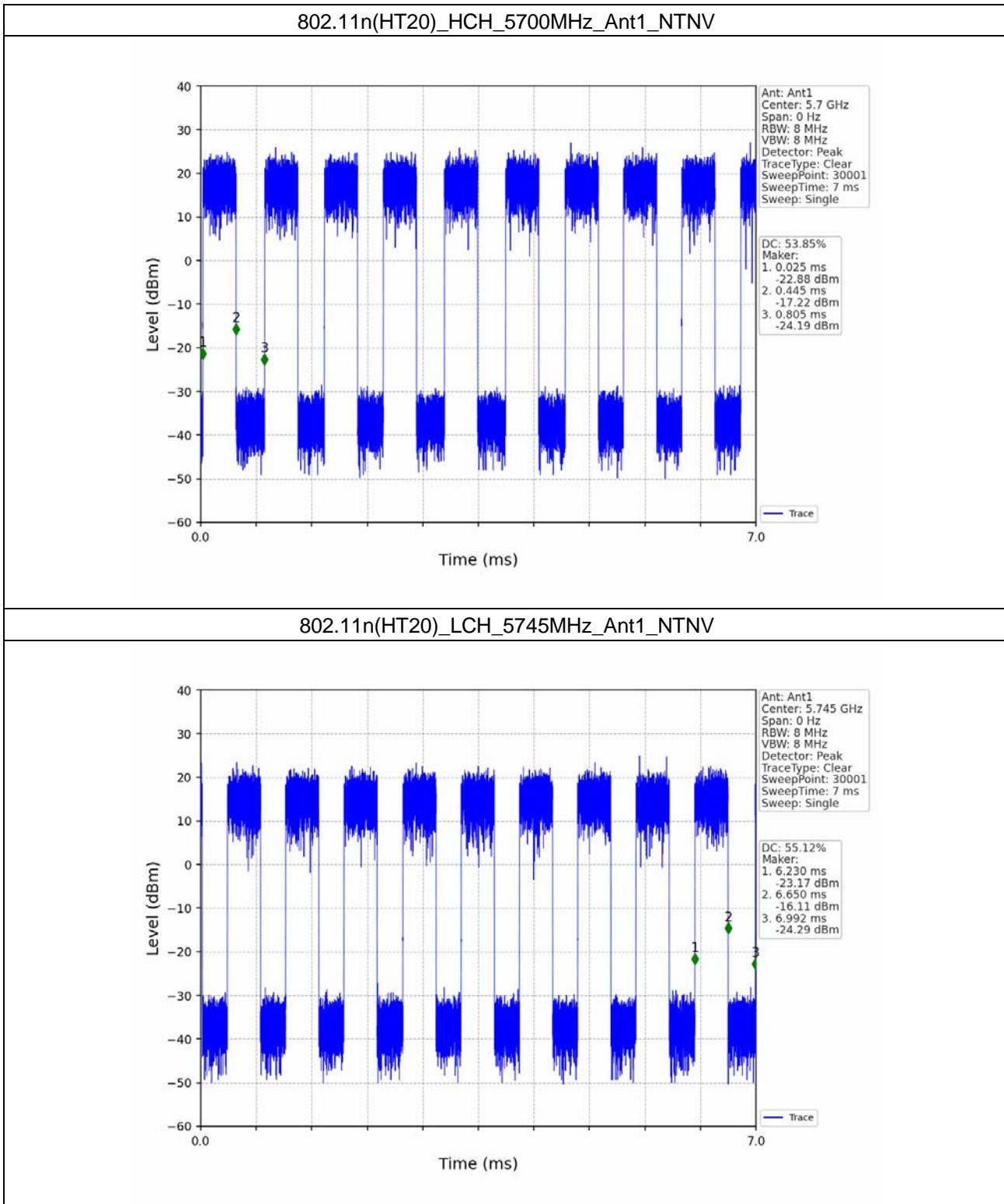
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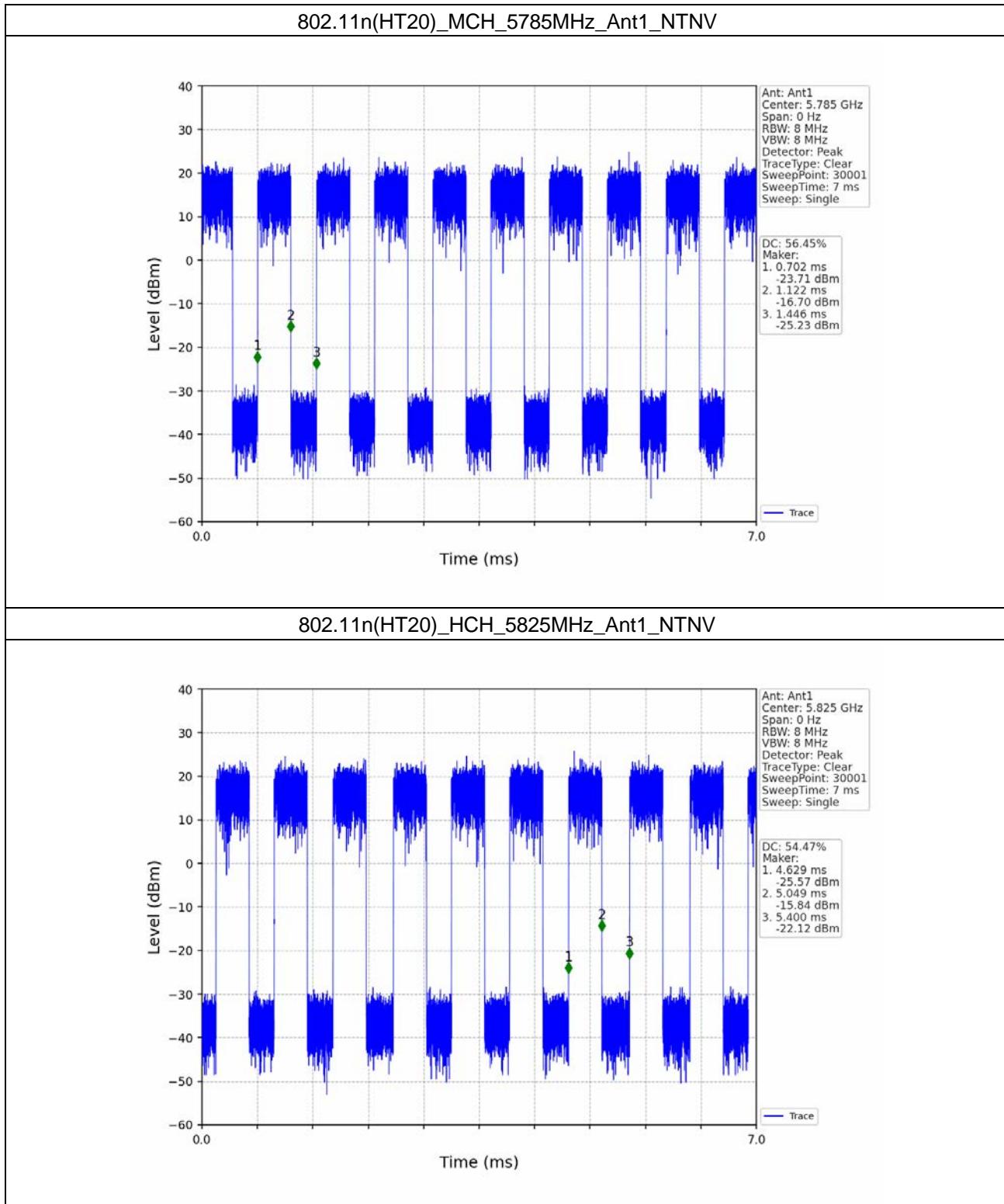
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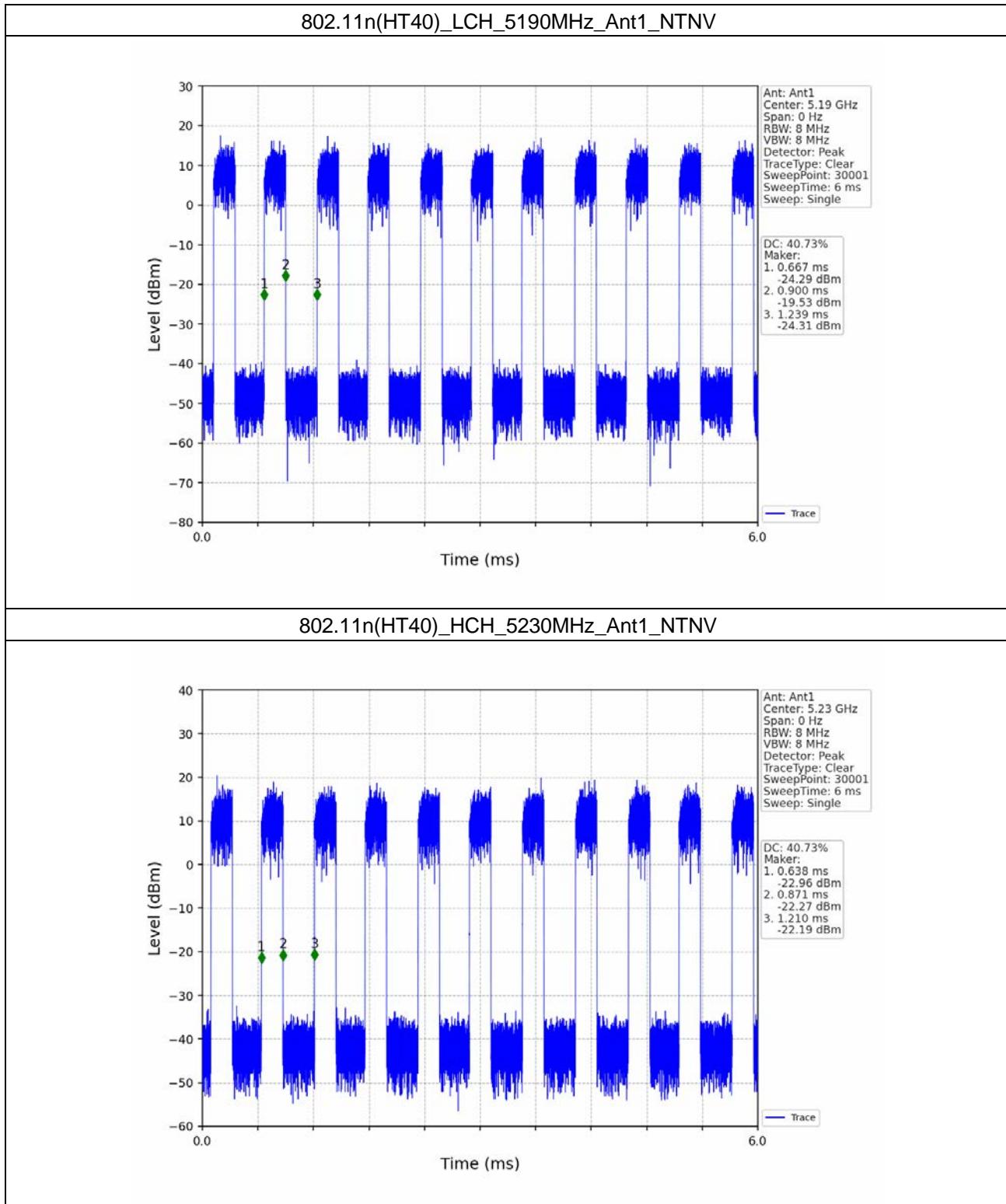
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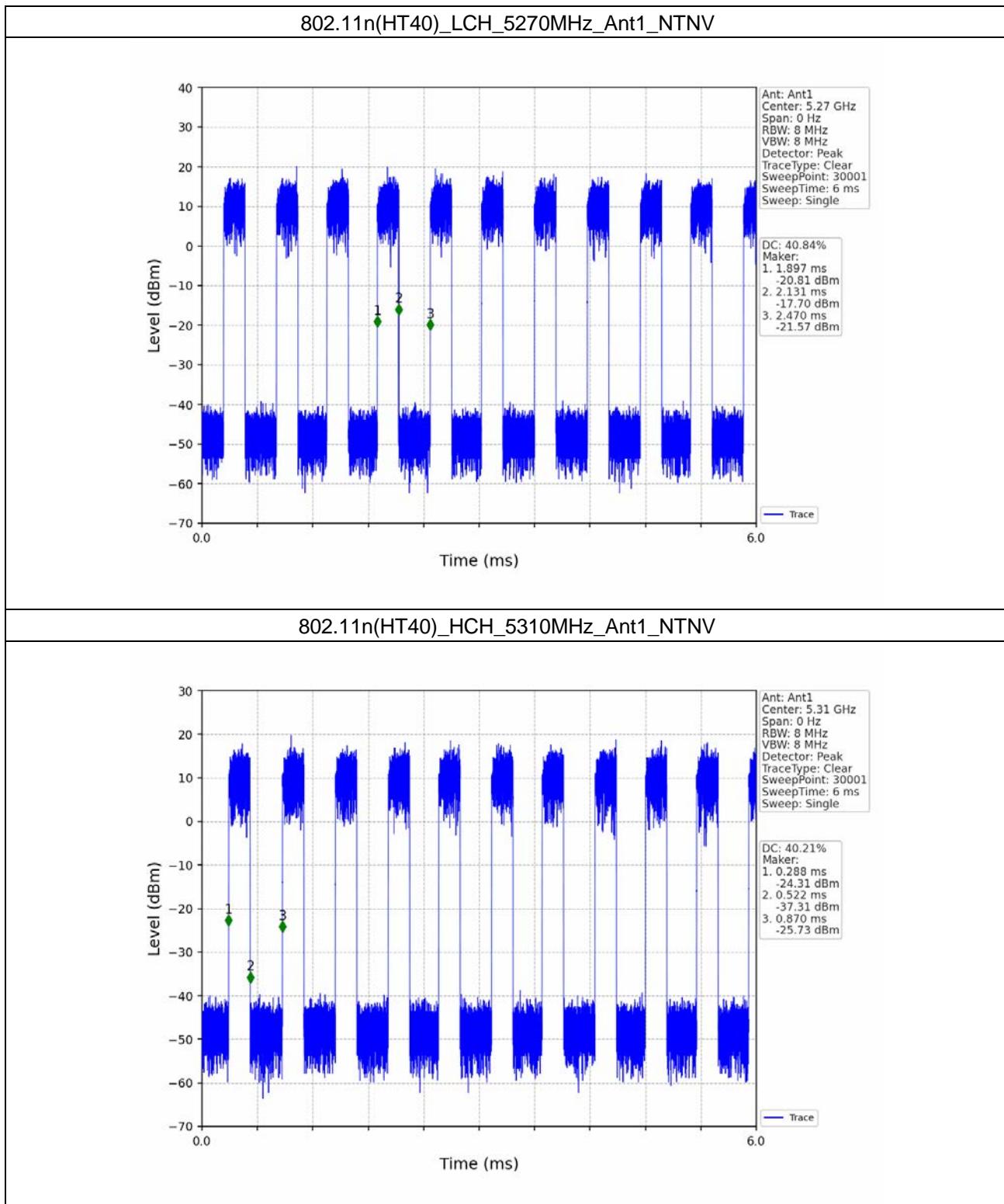
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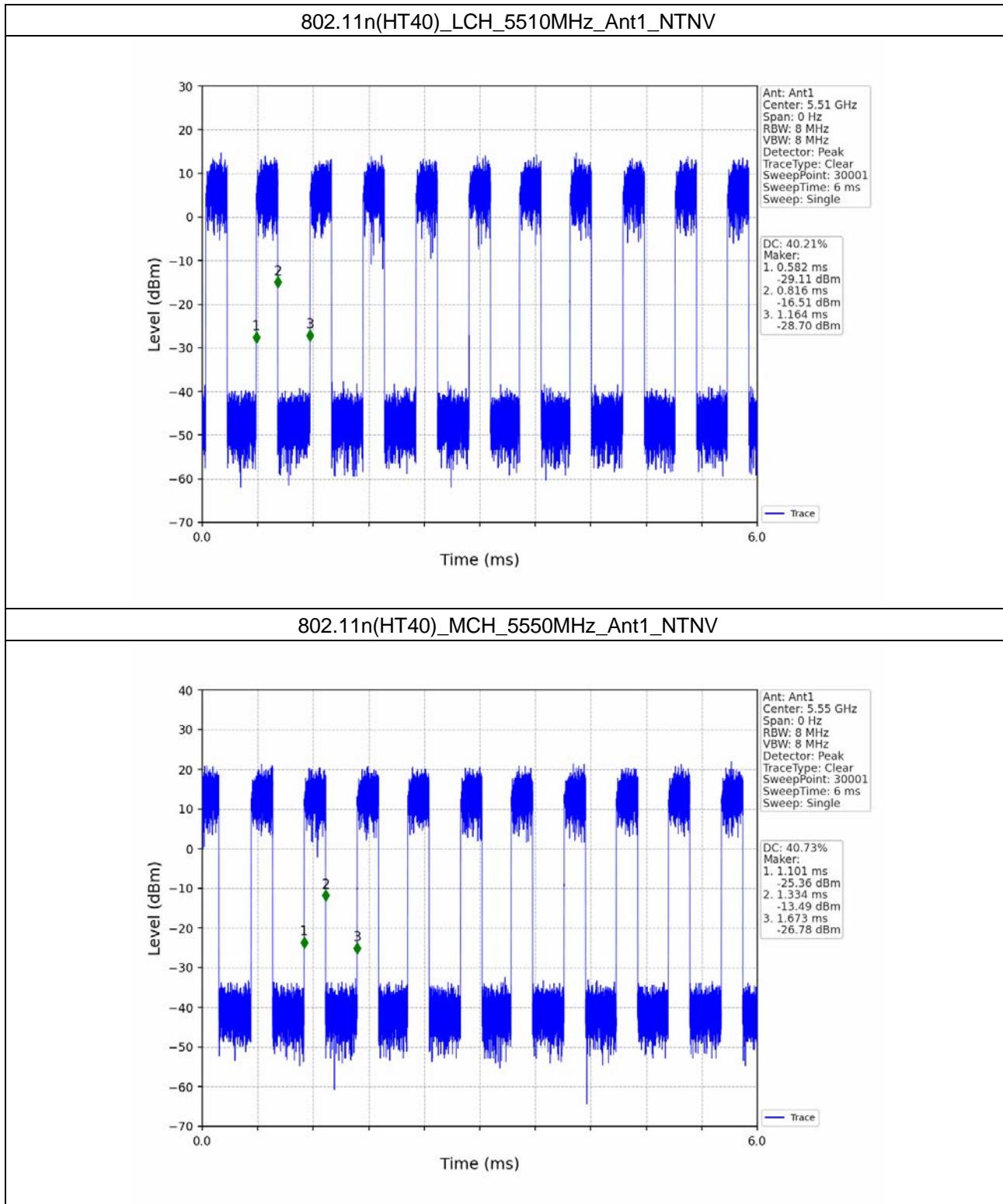
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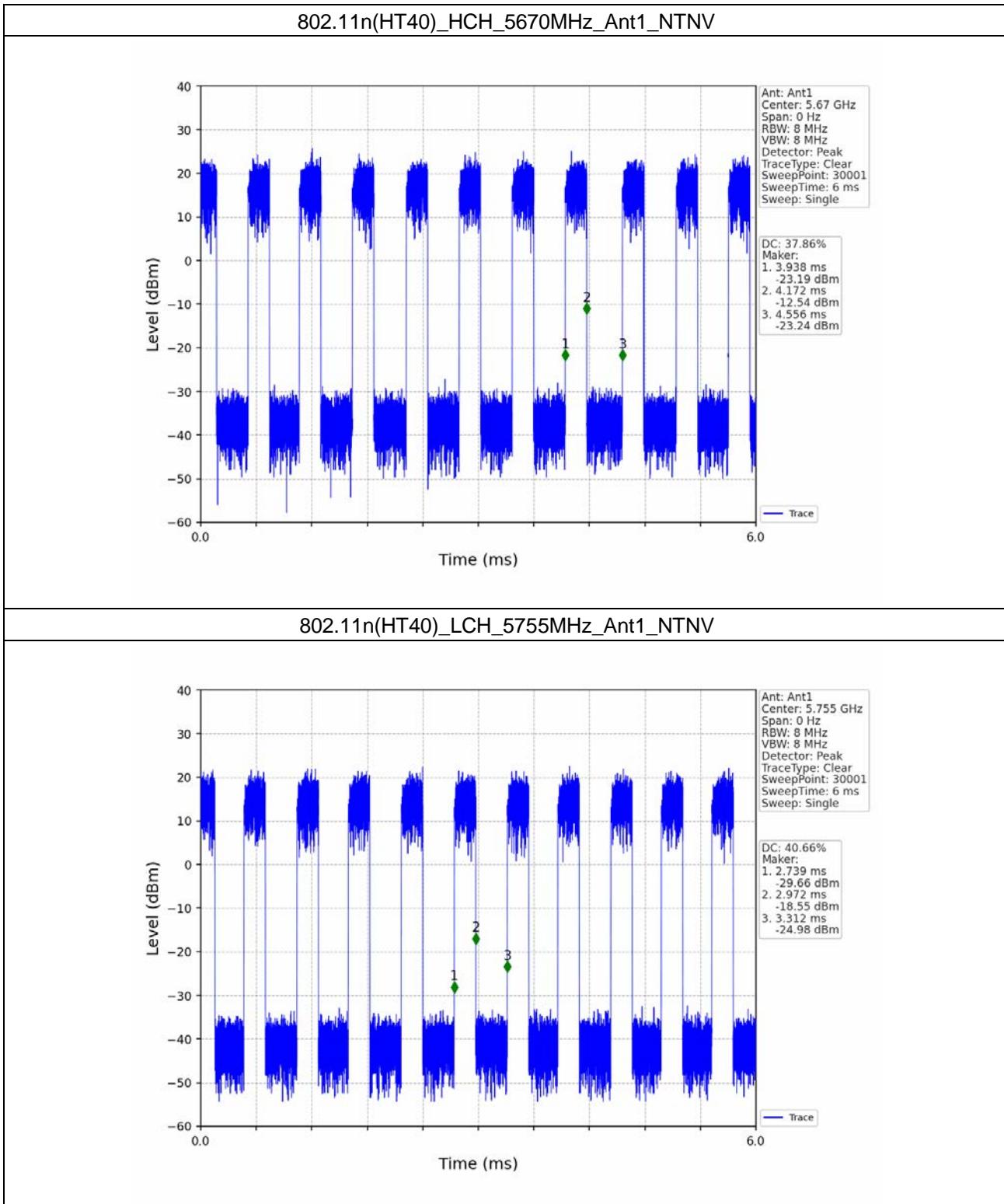
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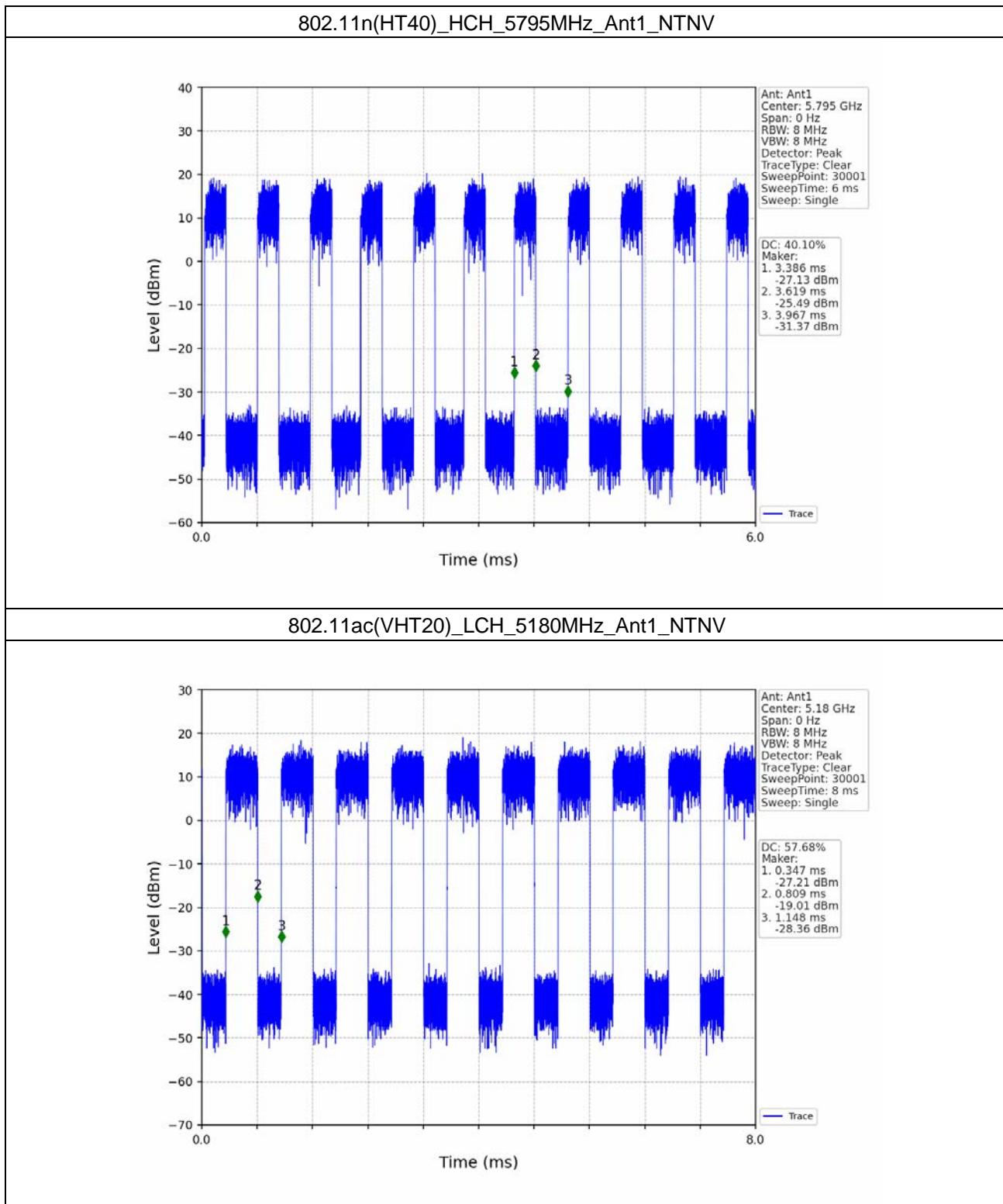
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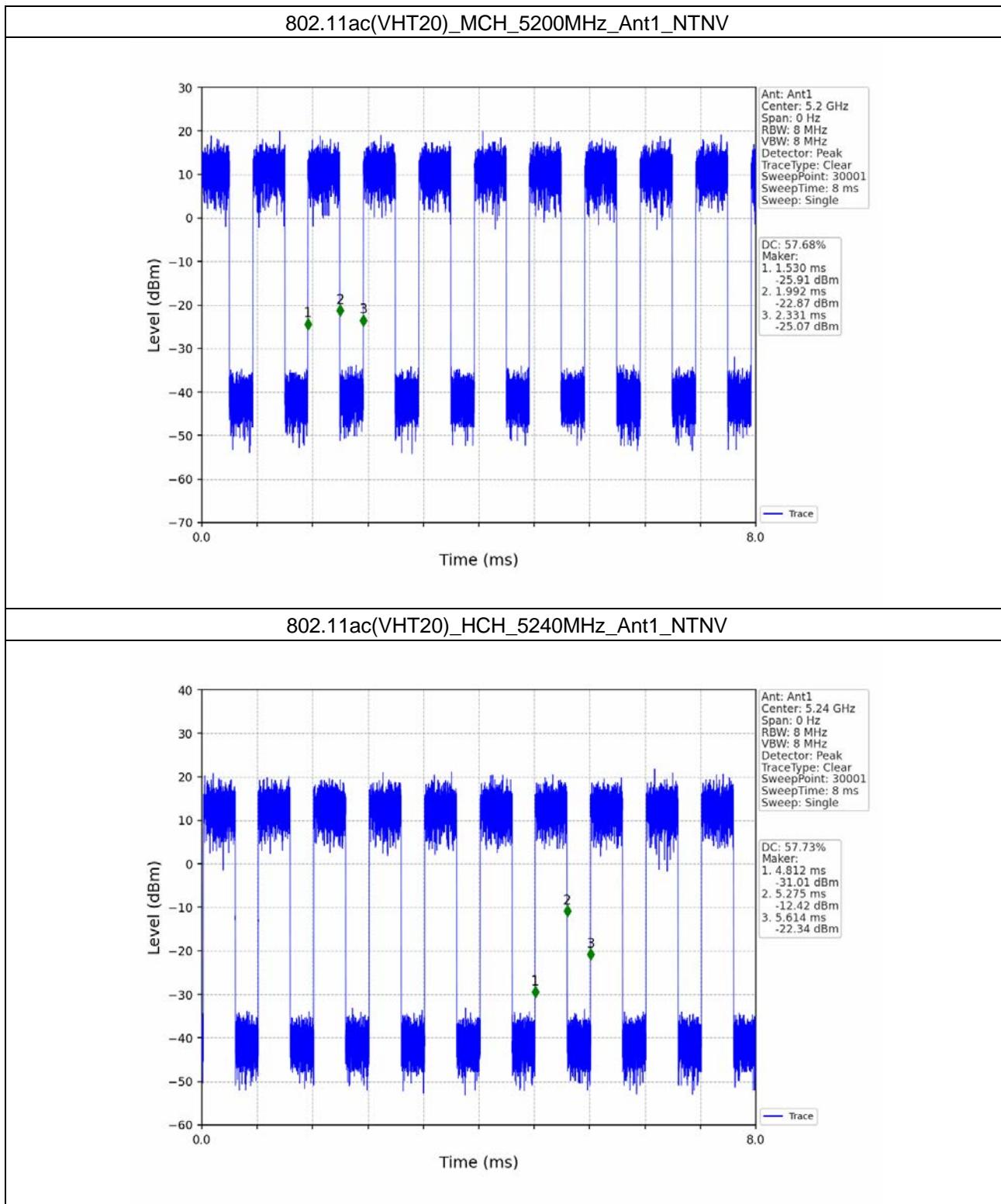
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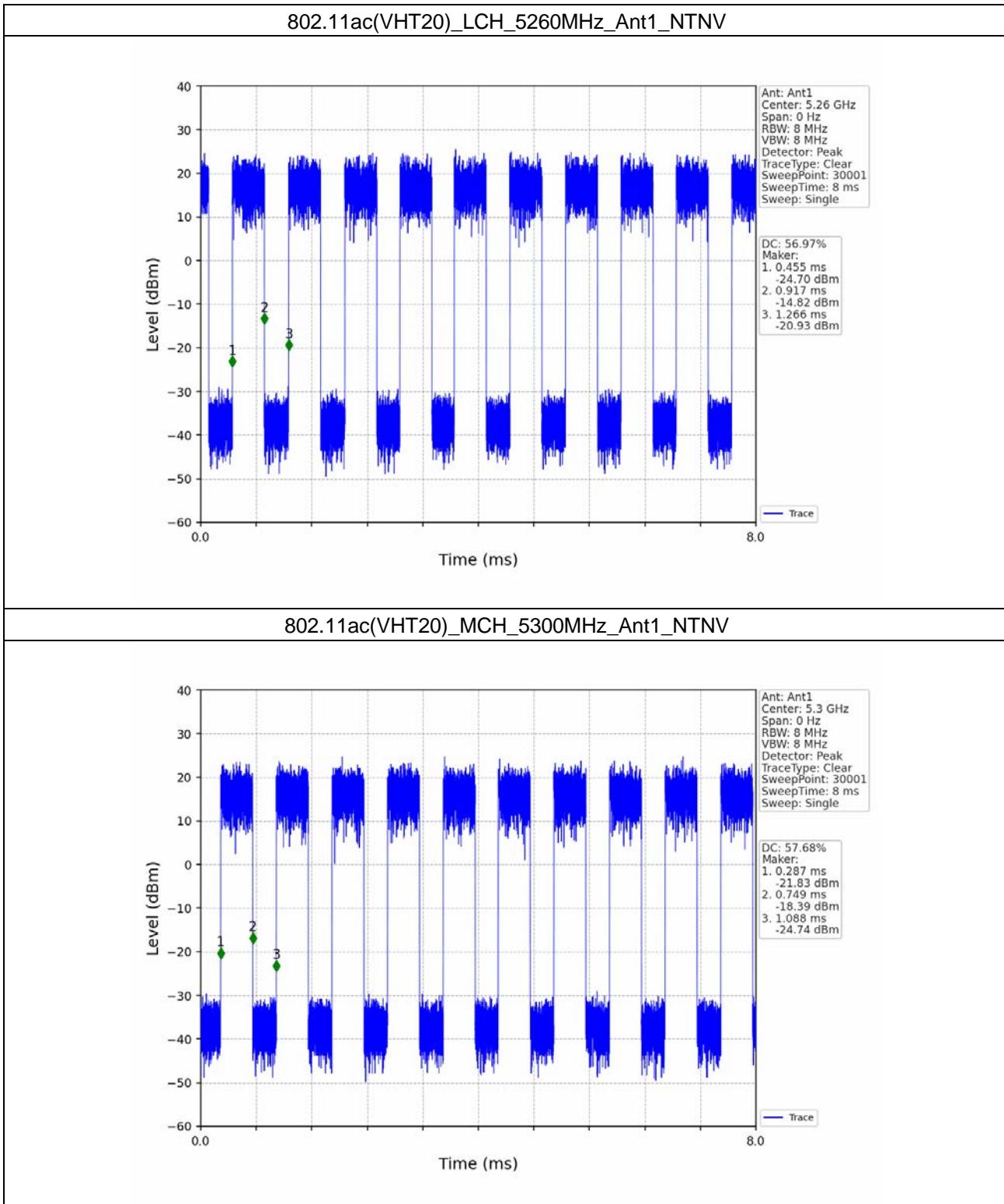
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RESULTS: The results of this test are based on the sample(s) submitted. The results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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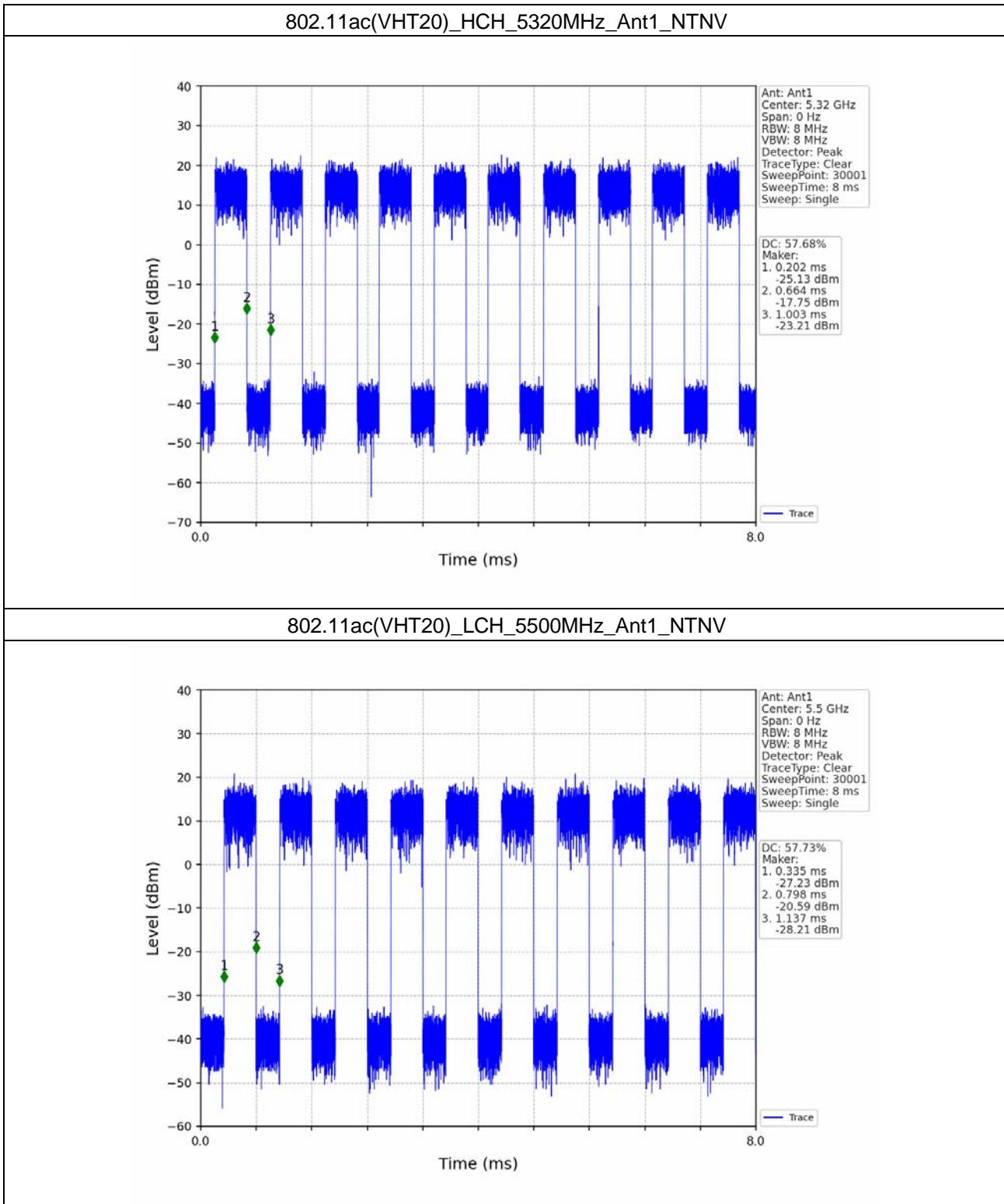
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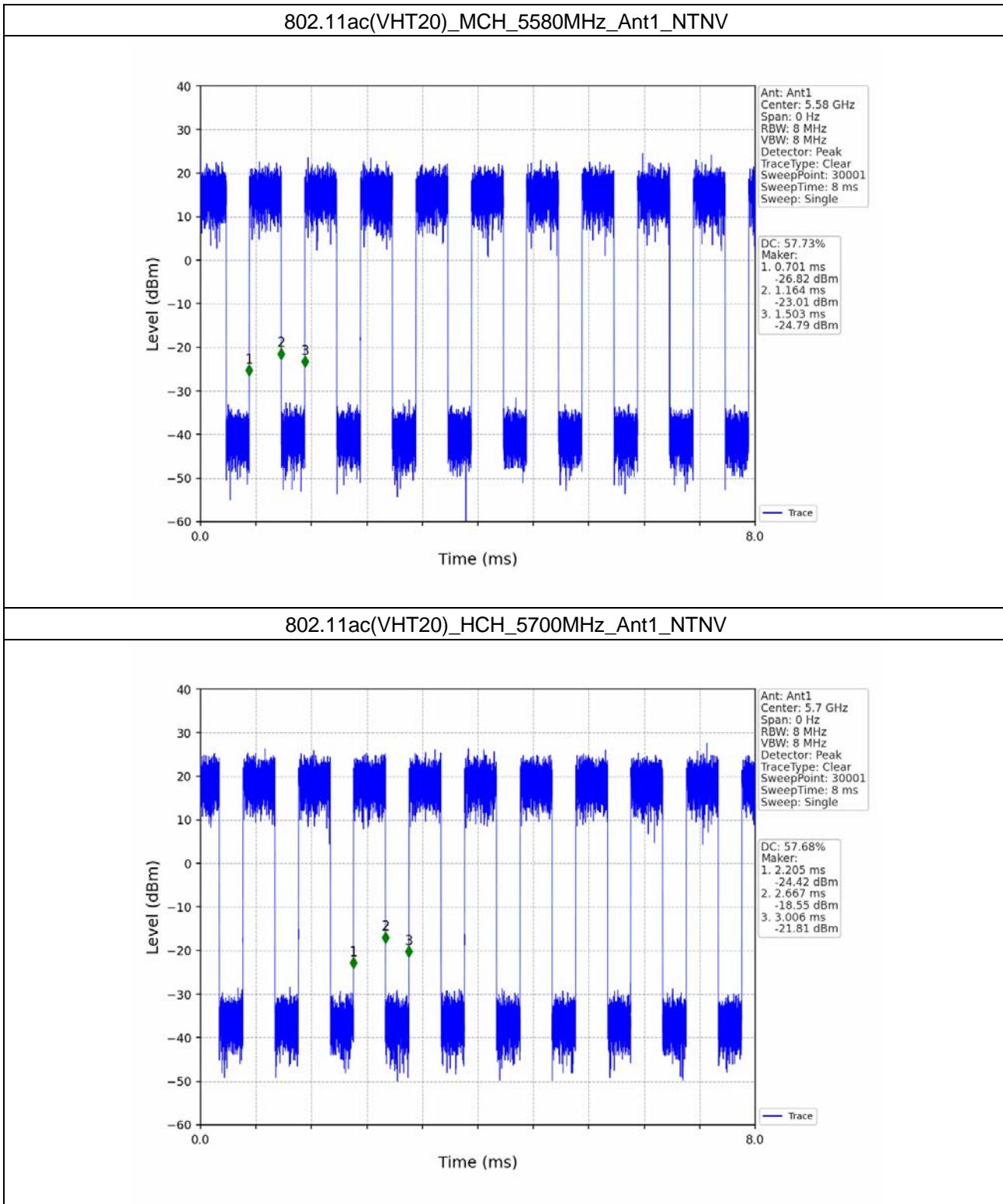
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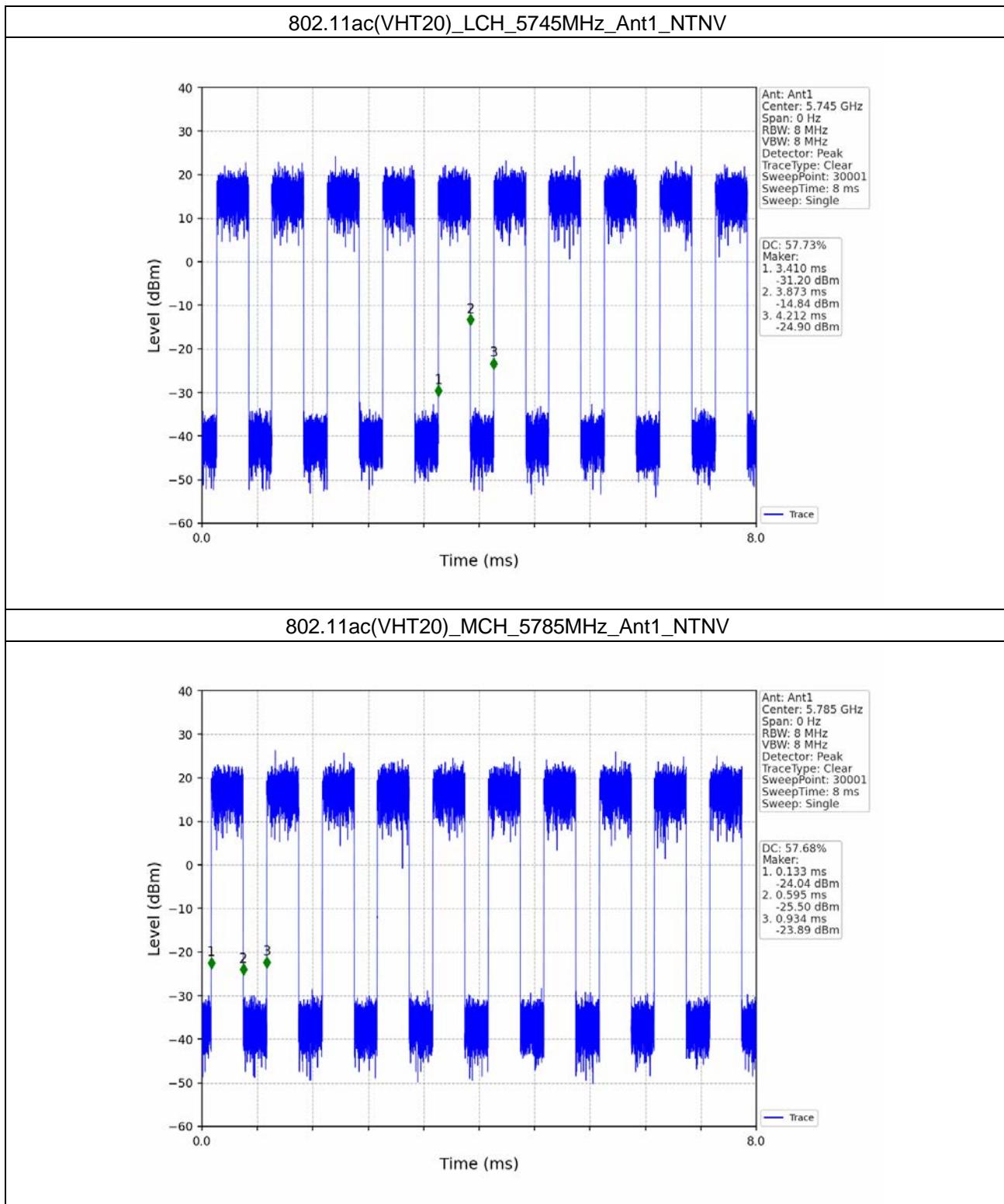
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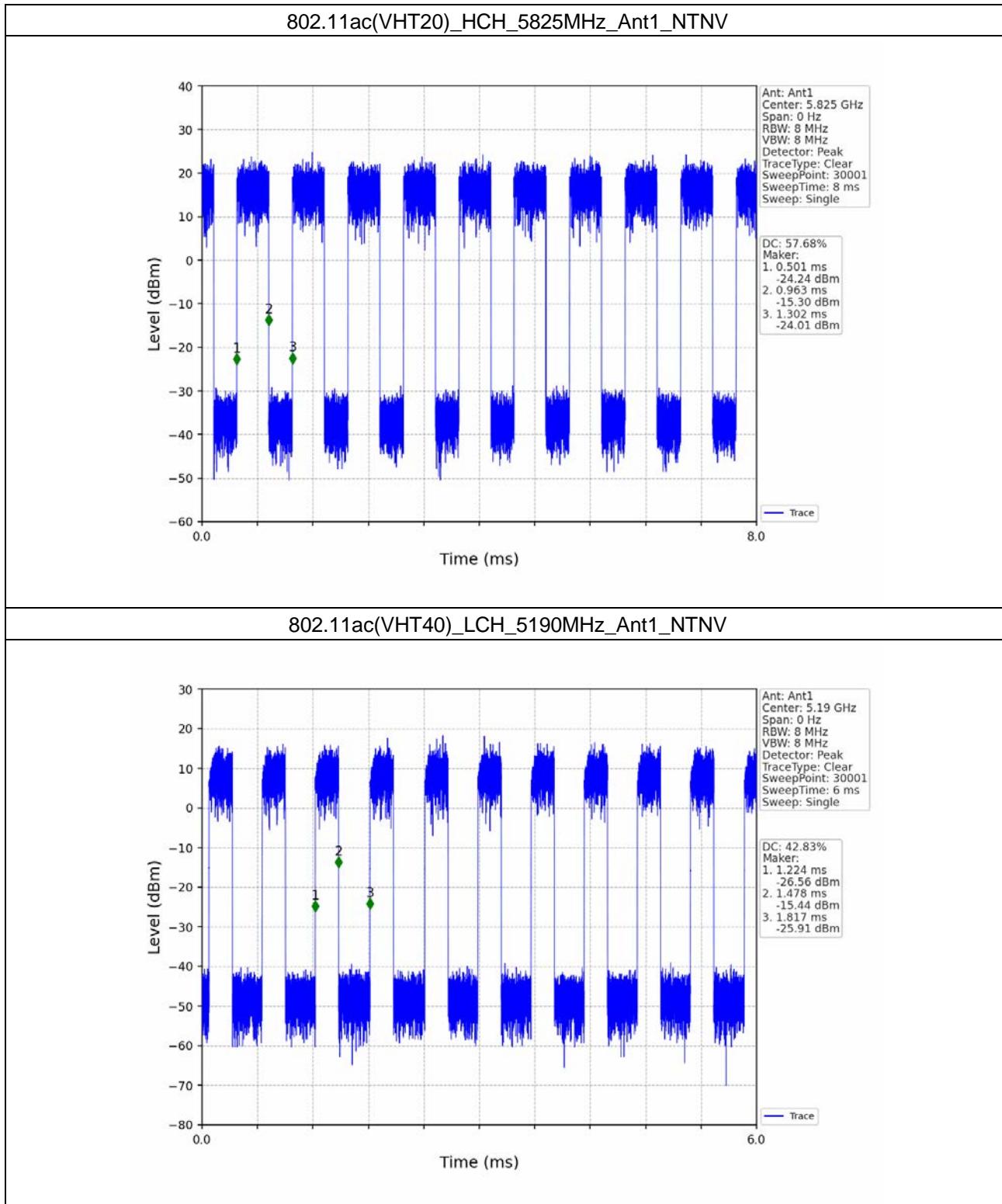
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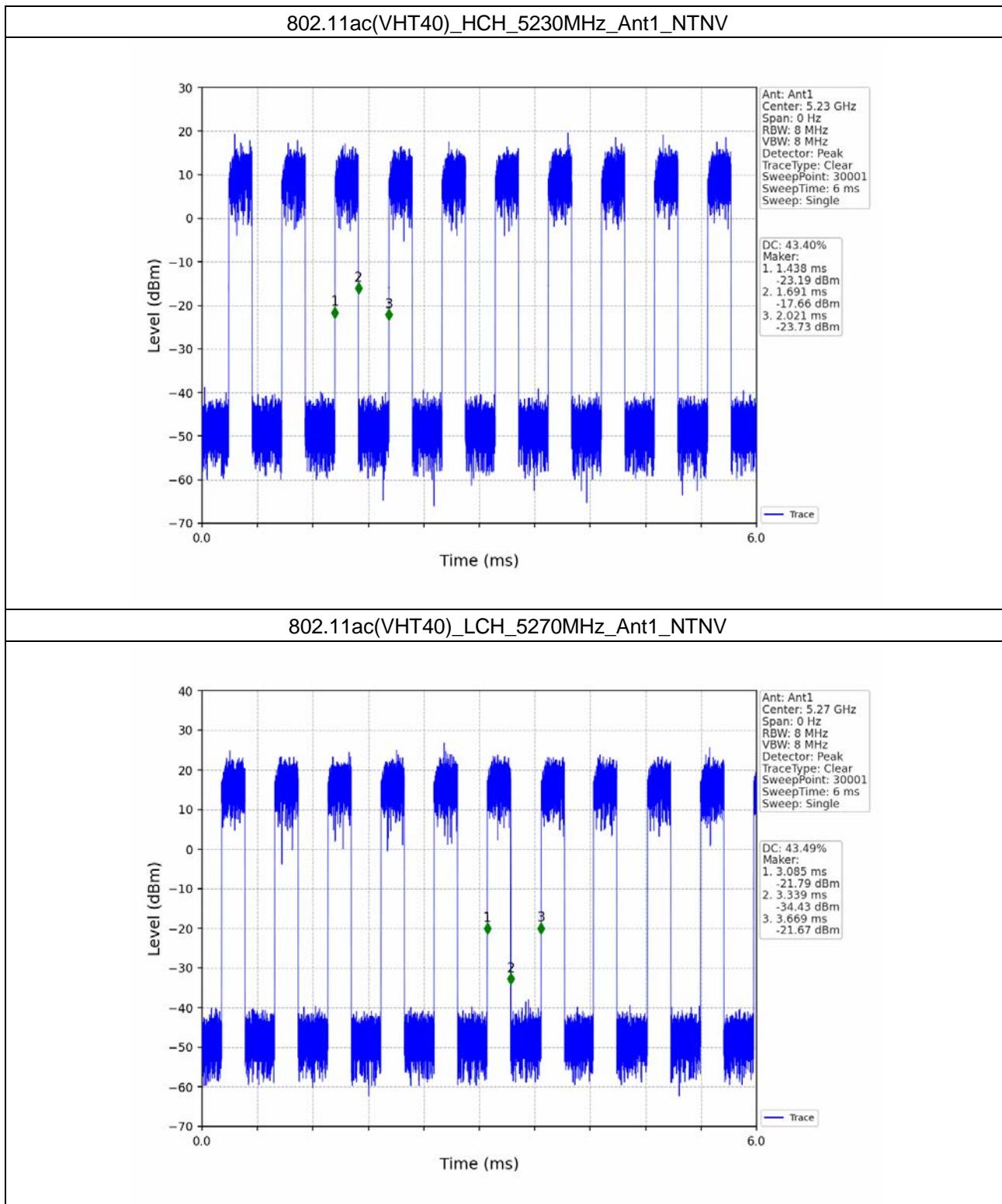
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