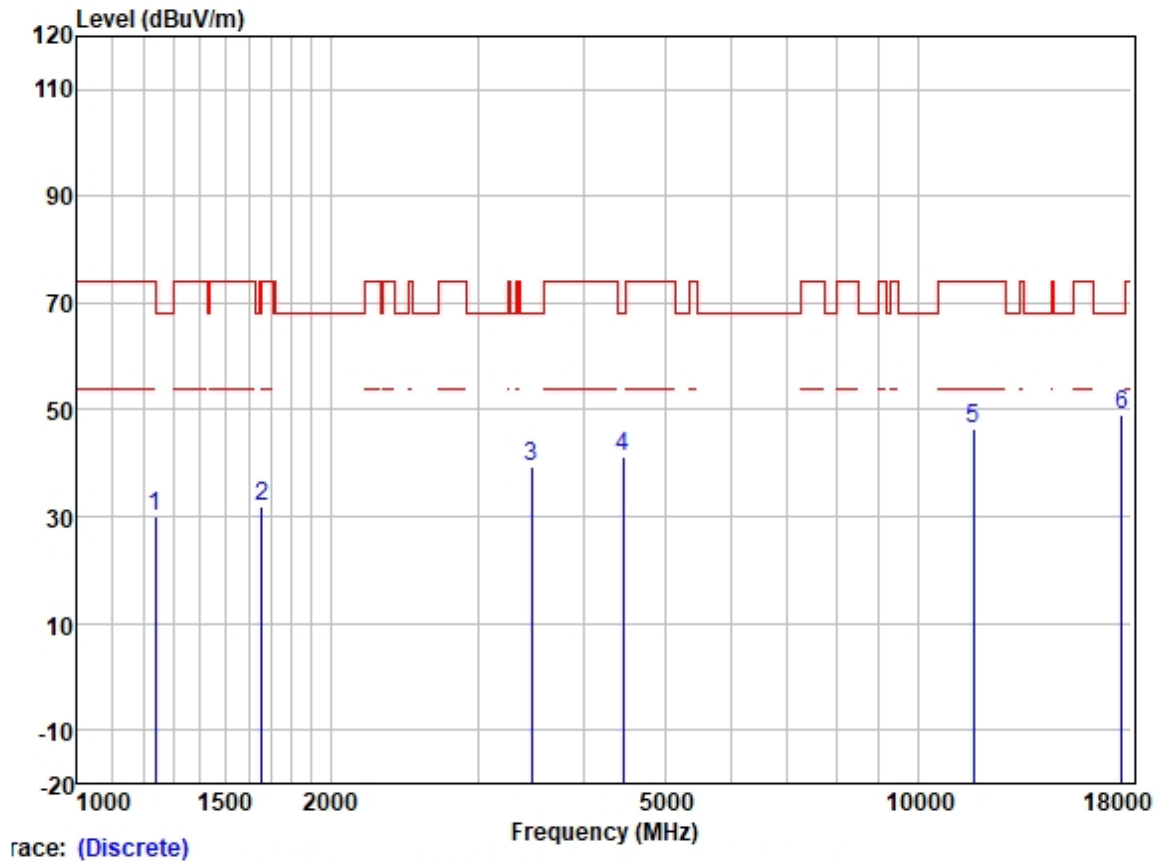
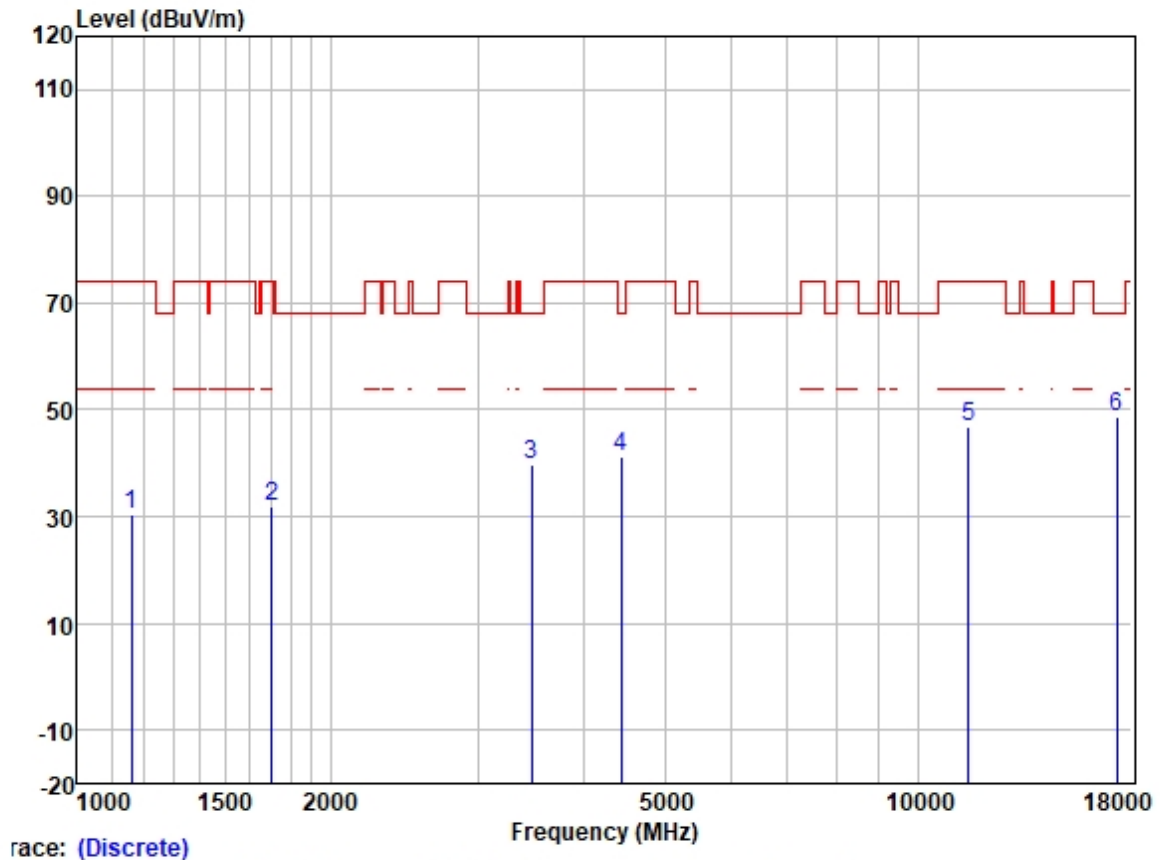


Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



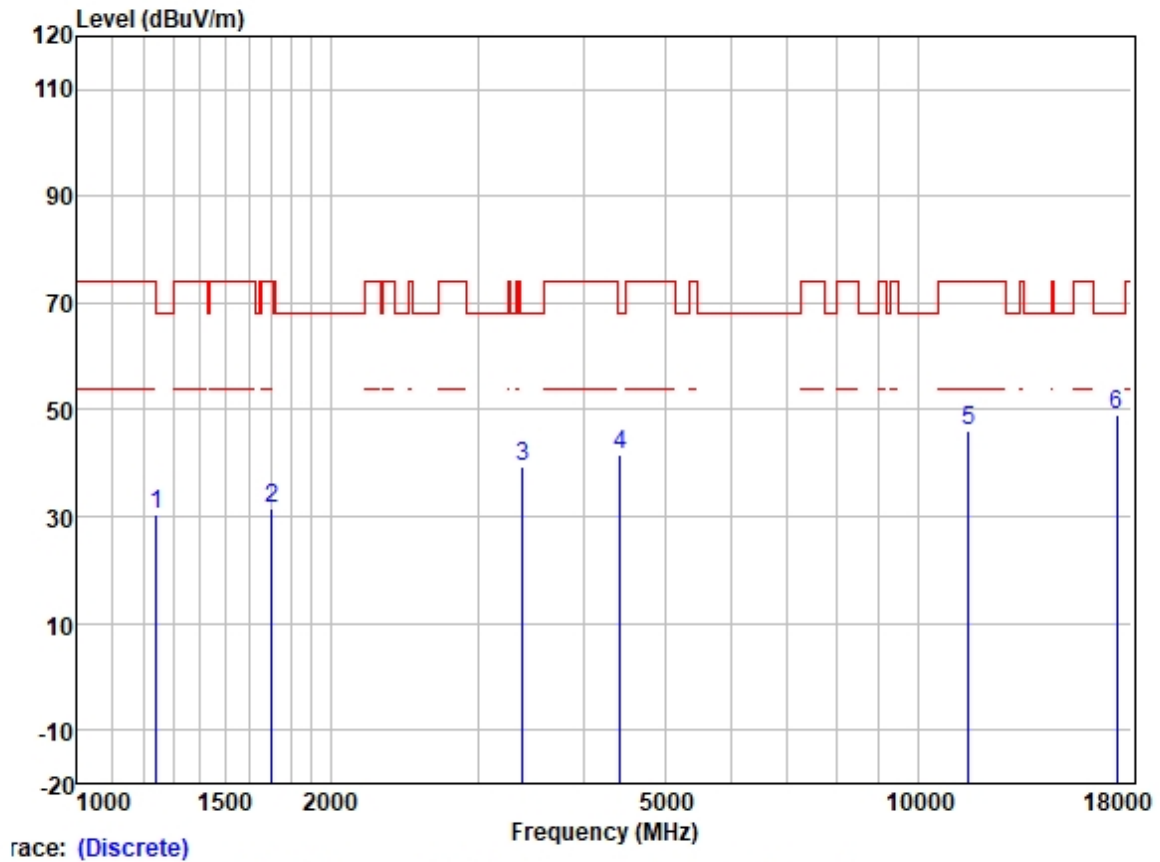
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1238.483	41.09	24.96	2.30	38.35	30.00	74.00	-44.00	VERTICAL	Peak
2	1658.337	41.34	25.65	2.80	37.93	31.86	68.20	-36.34	VERTICAL	Peak
3	3475.541	43.25	28.89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

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



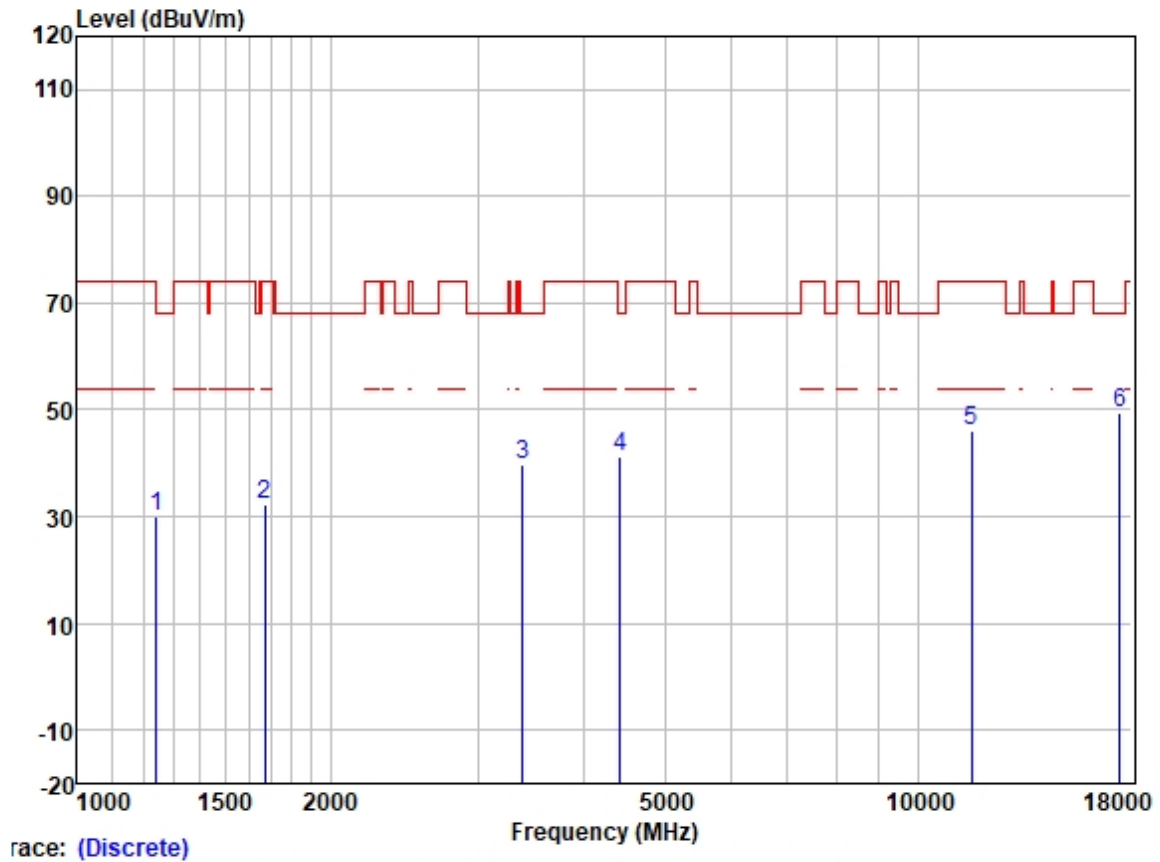
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1158.828	41.95	24.52	2.40	38.42	30.45	74.00	-43.55	HORIZONTAL	Peak
2	1702.042	41.11	25.72	2.80	37.89	31.74	74.00	-42.26	HORIZONTAL	Peak
3	3475.541	43.39	28.89	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

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



		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	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

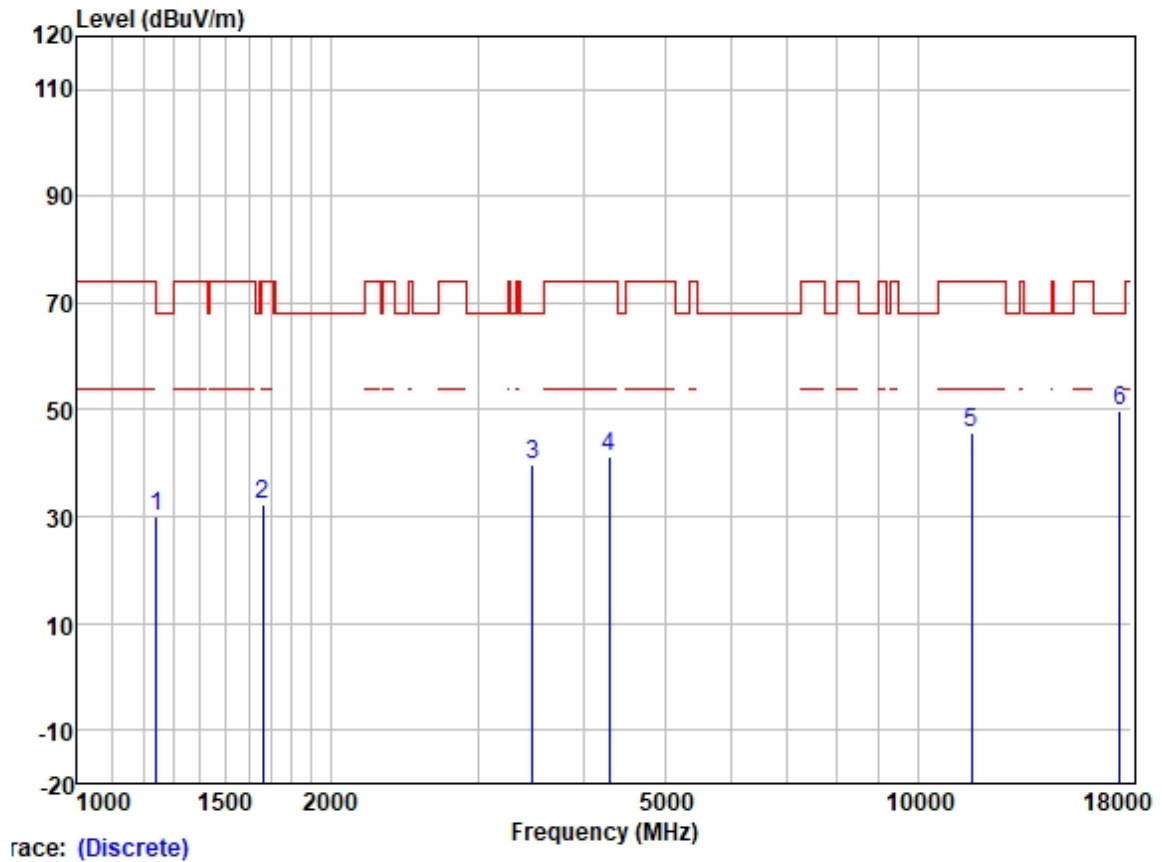
Test Mode: 04; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 40MHz; Channel: High



		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	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

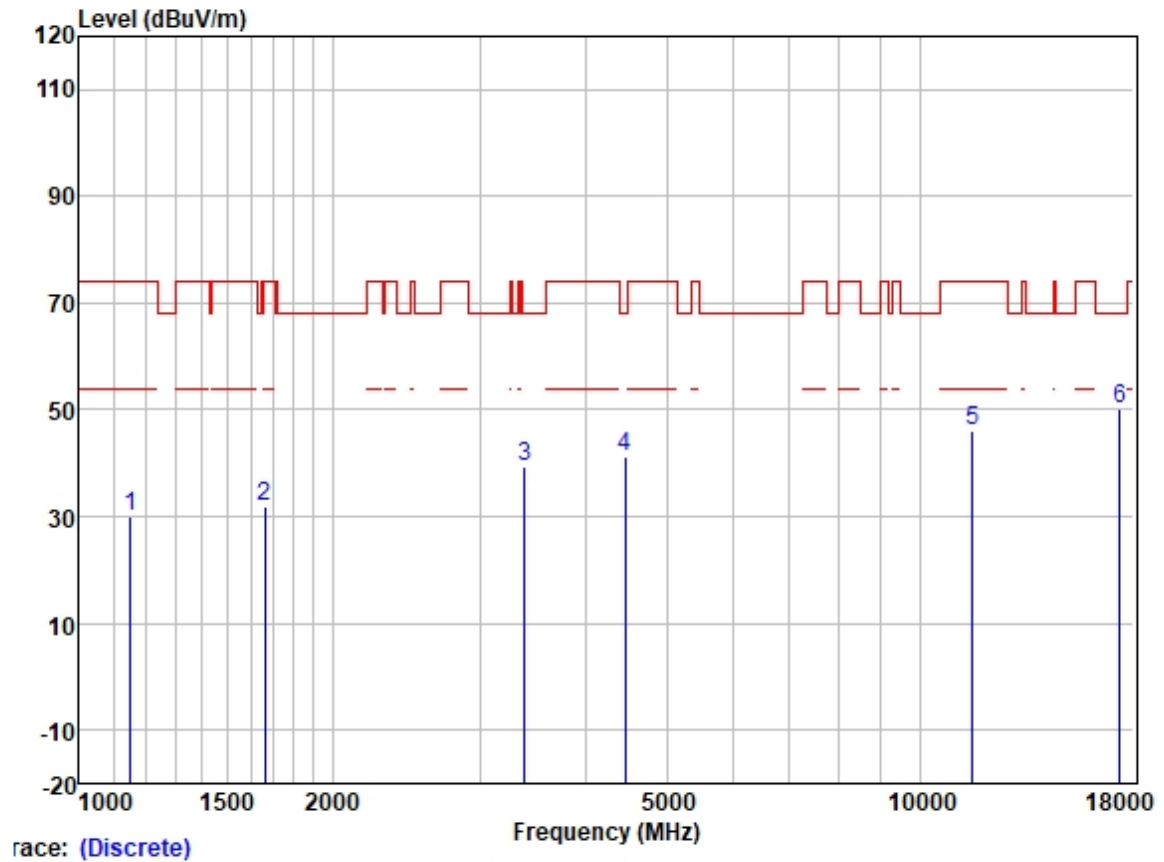


Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



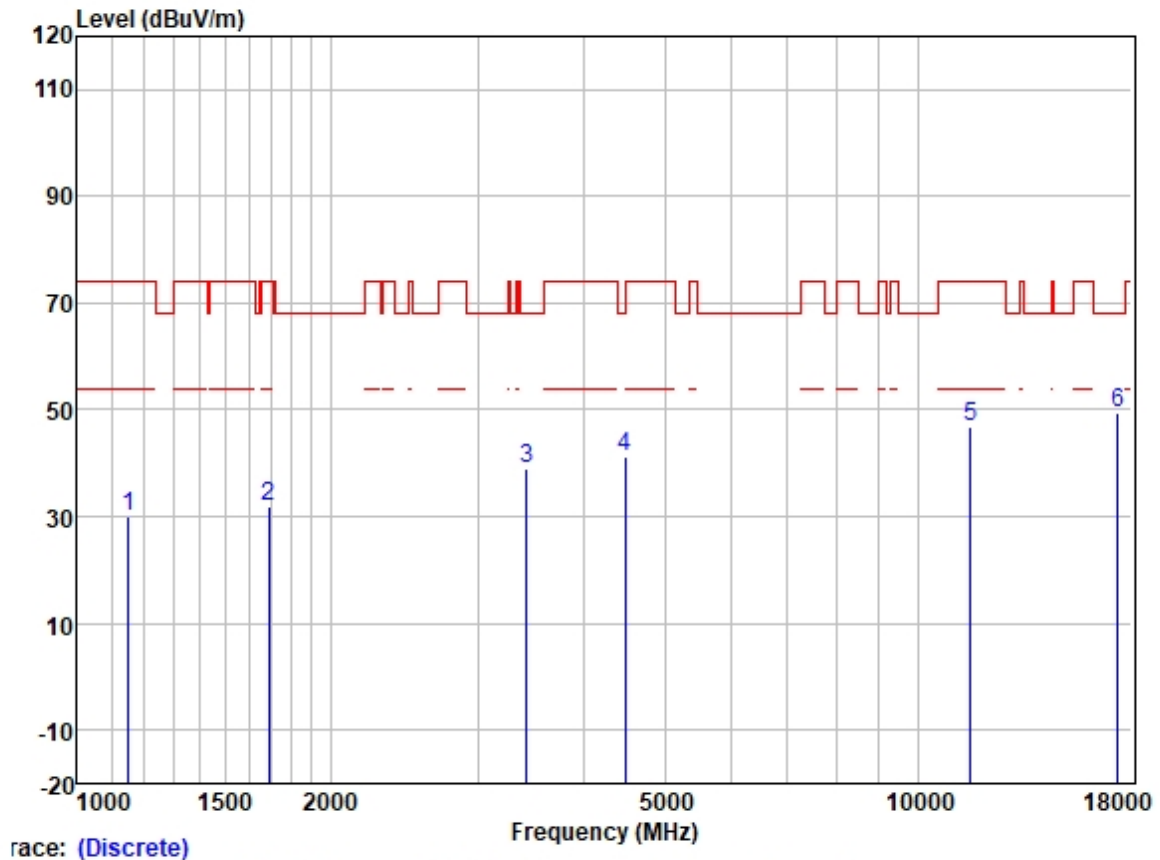
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1242.068	41.03	24.98	2.31	38.35	29.97	68.20	-38.23	VERTICAL	Peak
2	1663.137	41.74	25.65	2.80	37.91	32.28	74.00	-41.72	VERTICAL	Peak
3	3485.601	43.66	28.89	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

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

Test Mode: 04; Polarity: Vertical; 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	41.67	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

**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**

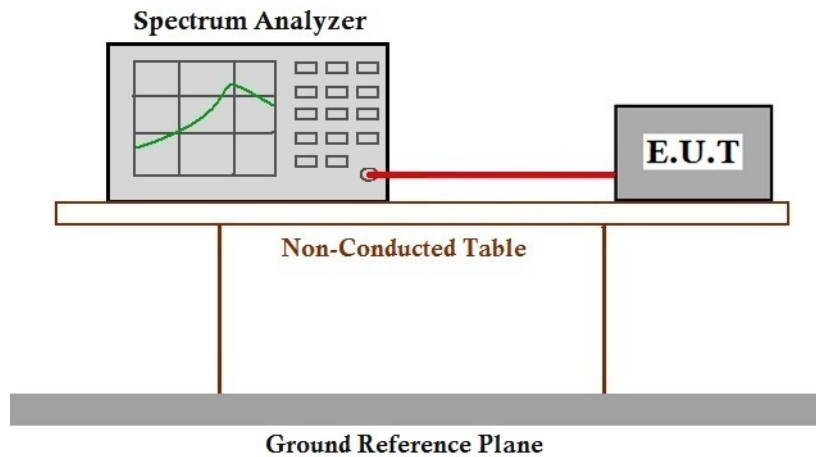
Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst 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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Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



### 7.10.3 Test Setup Diagram



### 7.10.4 Measurement Procedure and Data

Please Refer to Appendix for Details

## 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

## 10 Appendix

### 1. Duty Cycle

#### 1.1 Ant1

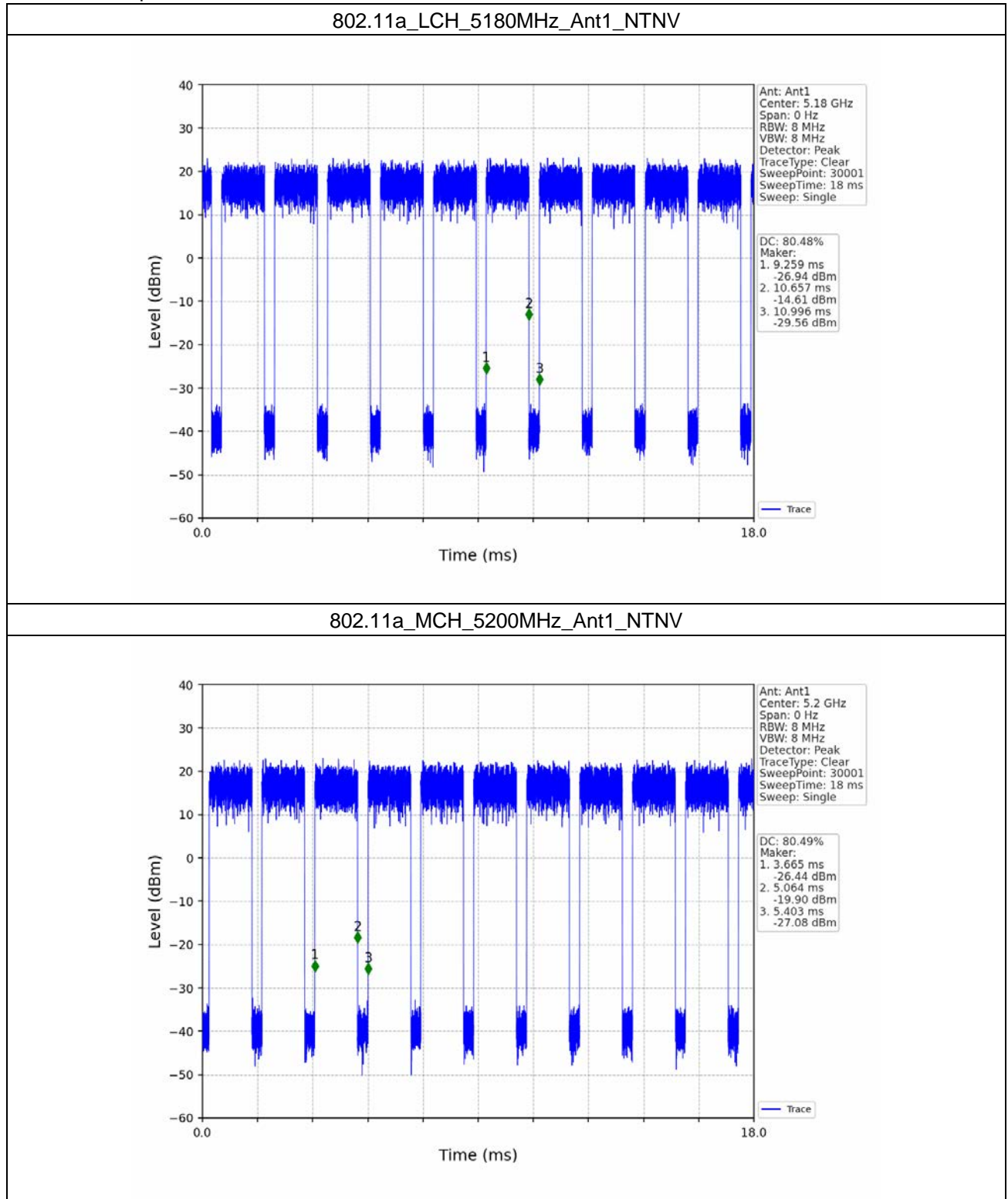
##### 1.1.1 Test Result

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
		5825	1.398	1.747	80.02	0.97	1.26
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

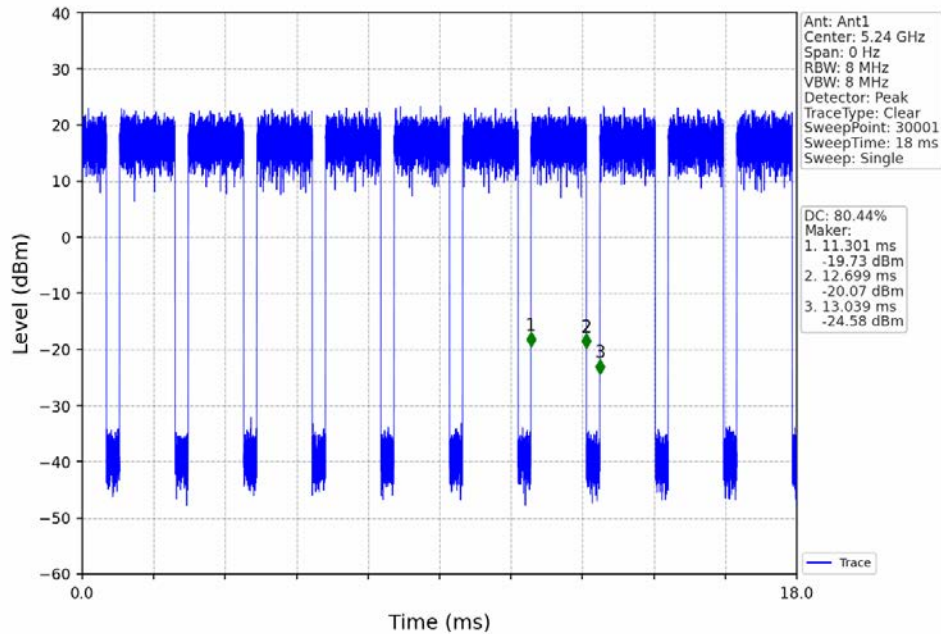
		5670	0.234	0.618	37.86	4.22	4.25
		5755	0.233	0.573	40.66	3.91	2.05
		5795	0.233	0.581	40.10	3.97	2.65
802.11ac (VHT20)	MIMO	5180	0.462	0.801	57.68	2.39	0.66
		5200	0.462	0.801	57.68	2.39	0.66
		5240	0.463	0.802	57.73	2.39	0.68
		5260	0.462	0.811	56.97	2.44	1.98
		5300	0.462	0.801	57.68	2.39	0.66
		5320	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



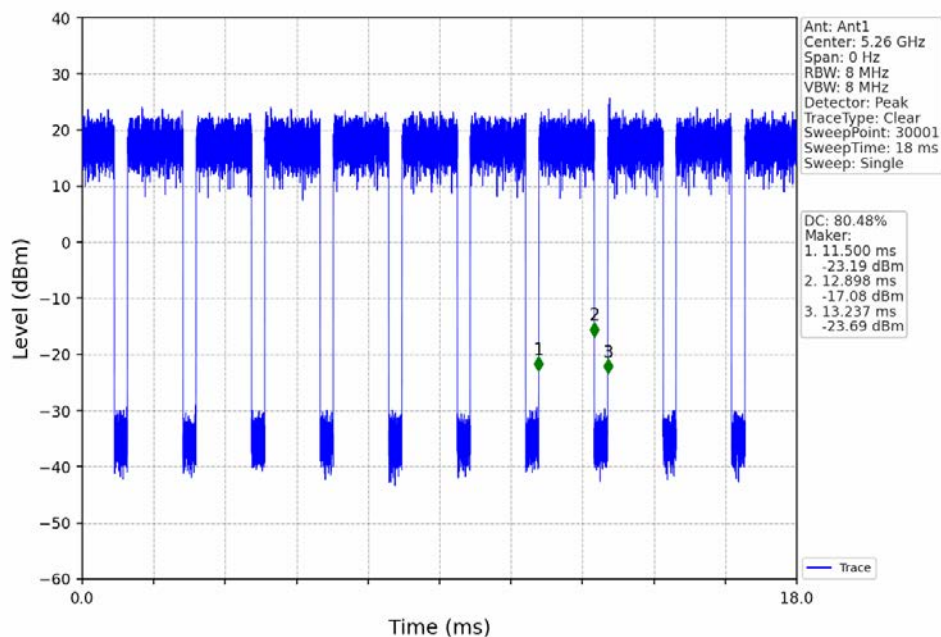
### 1.1.2 Test Graph



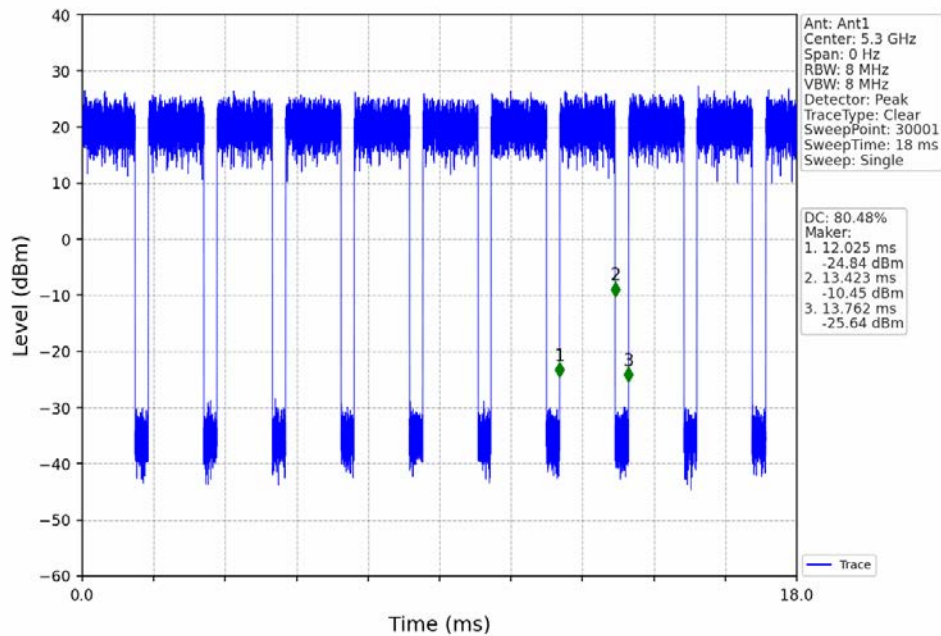
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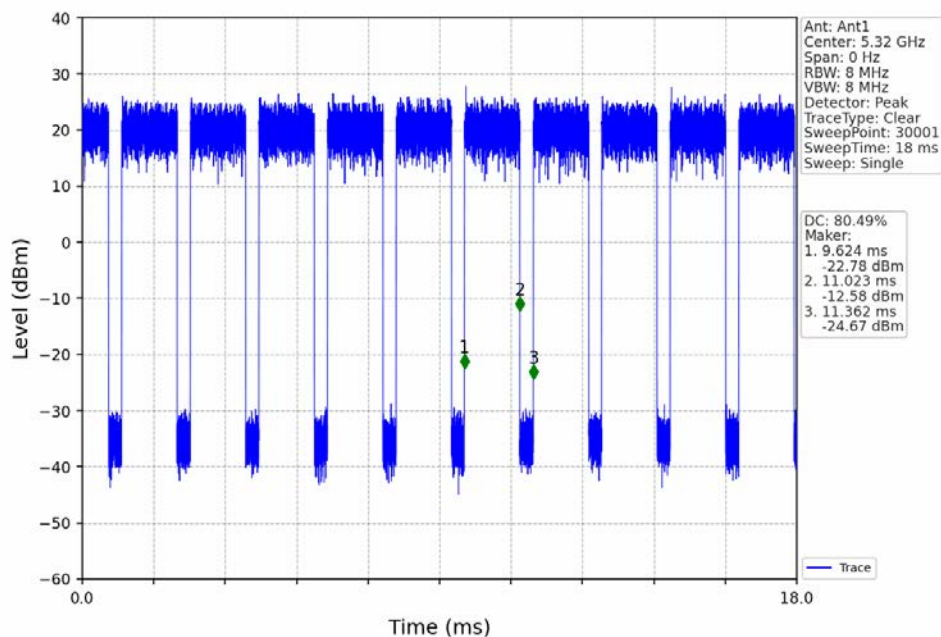
### 802.11a\_LCH\_5260MHz\_Ant1\_NTNV



802.11a\_MCH\_5300MHz\_Ant1\_NTNV

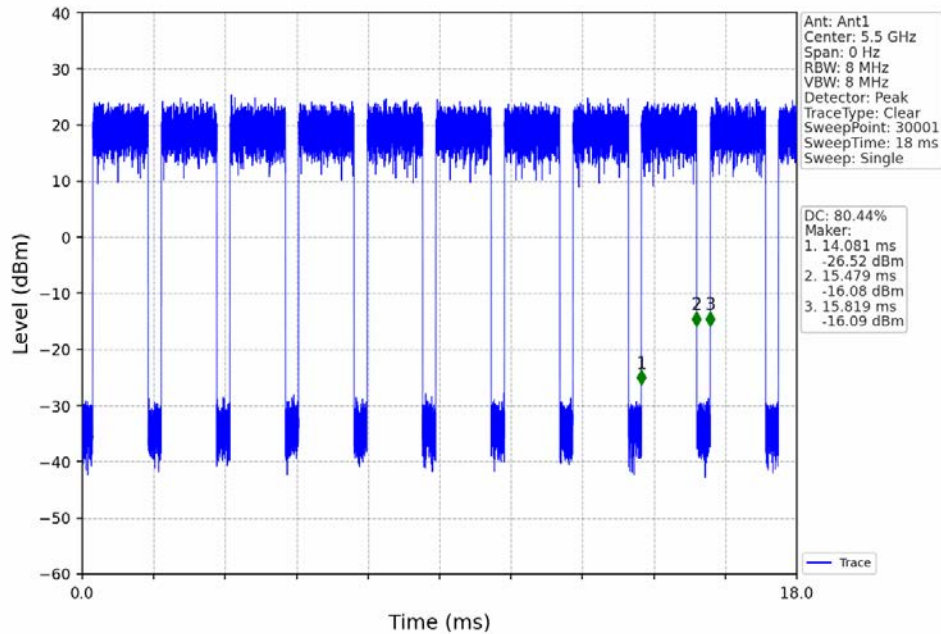


802.11a\_HCH\_5320MHz\_Ant1\_NTNV

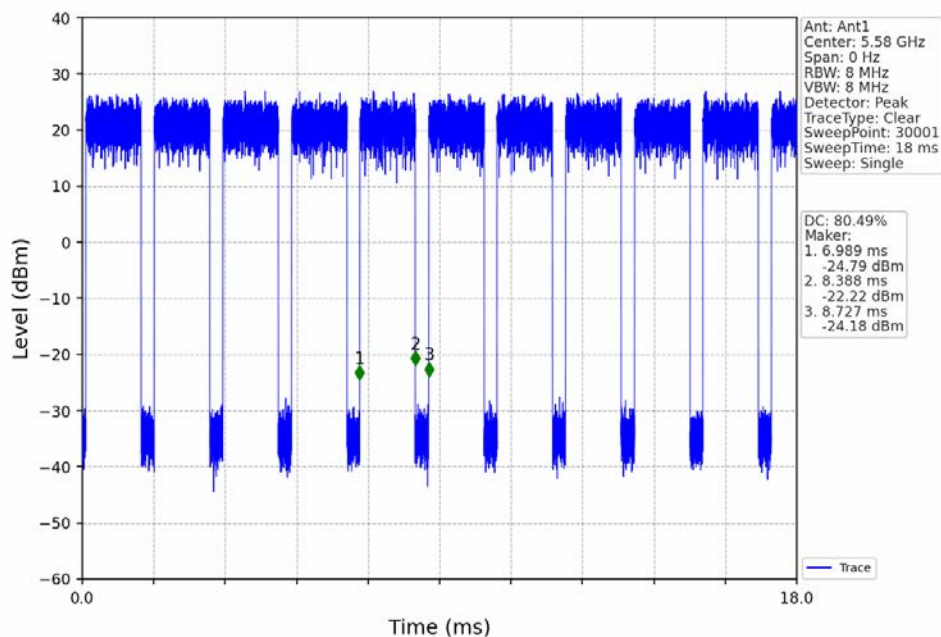




802.11a\_LCH\_5500MHz\_Ant1\_NTNV

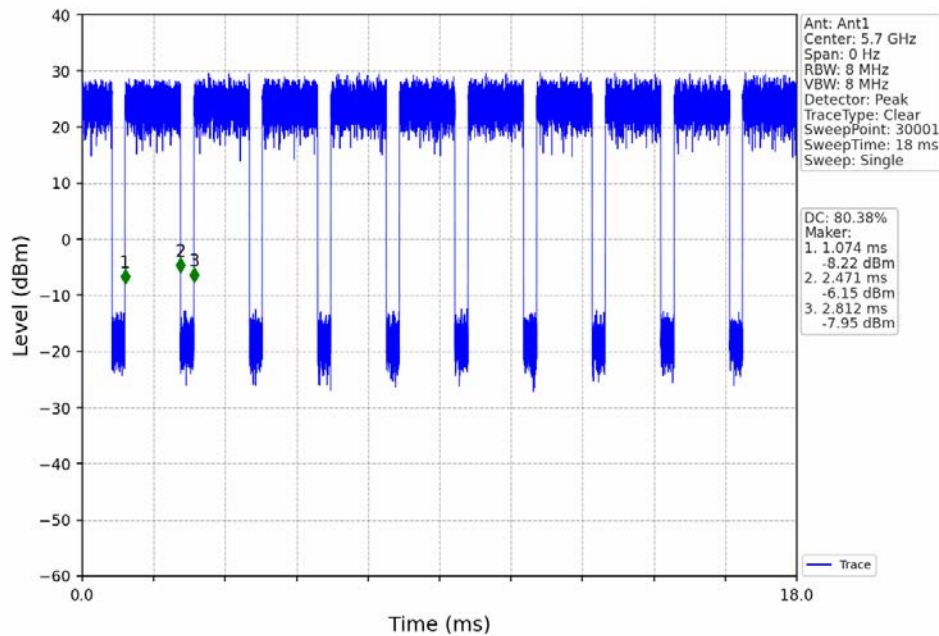


802.11a\_MCH\_5580MHz\_Ant1\_NTNV

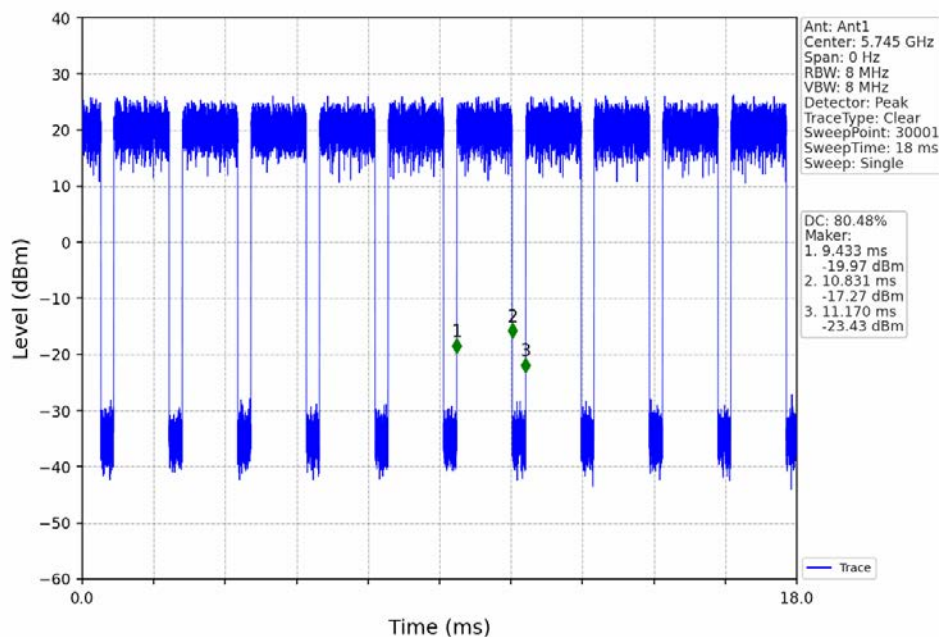




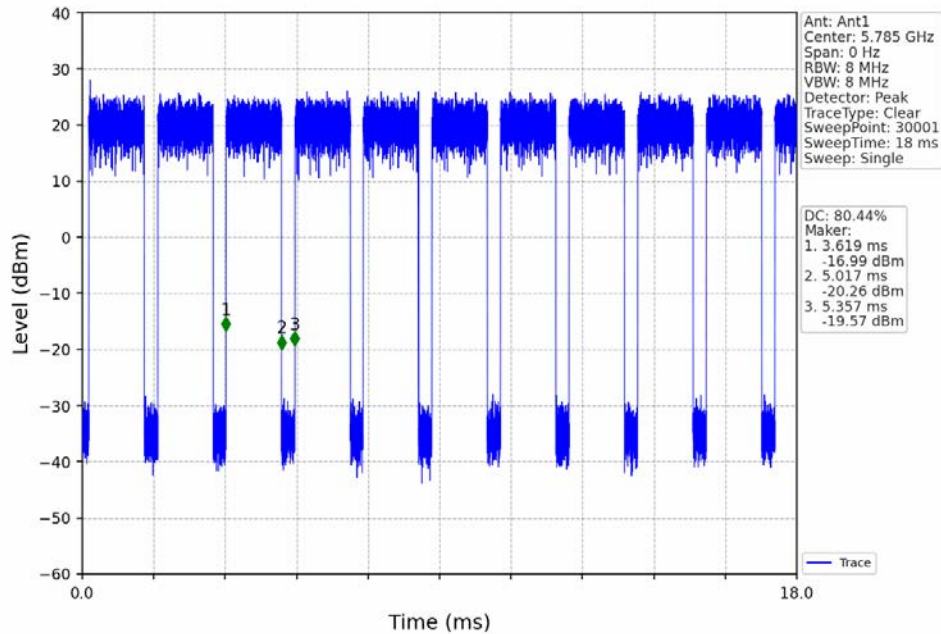
### 802.11a\_HCH\_5700MHz\_Ant1\_NTNV



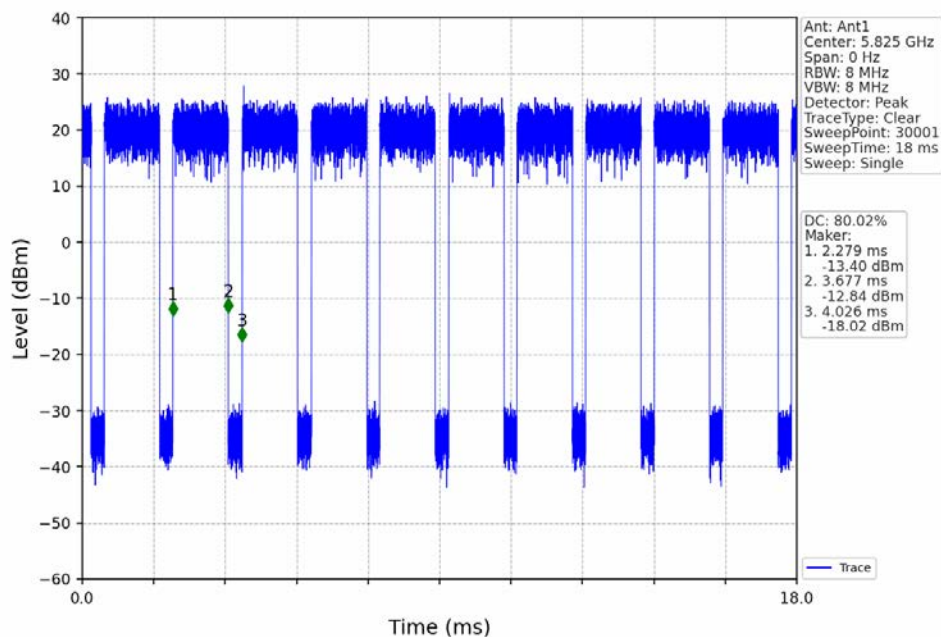
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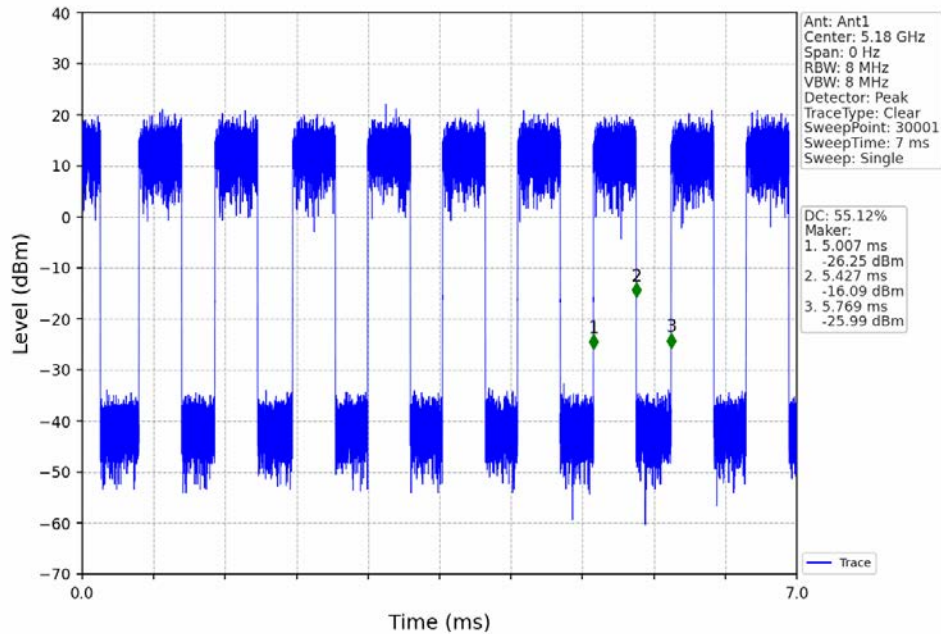
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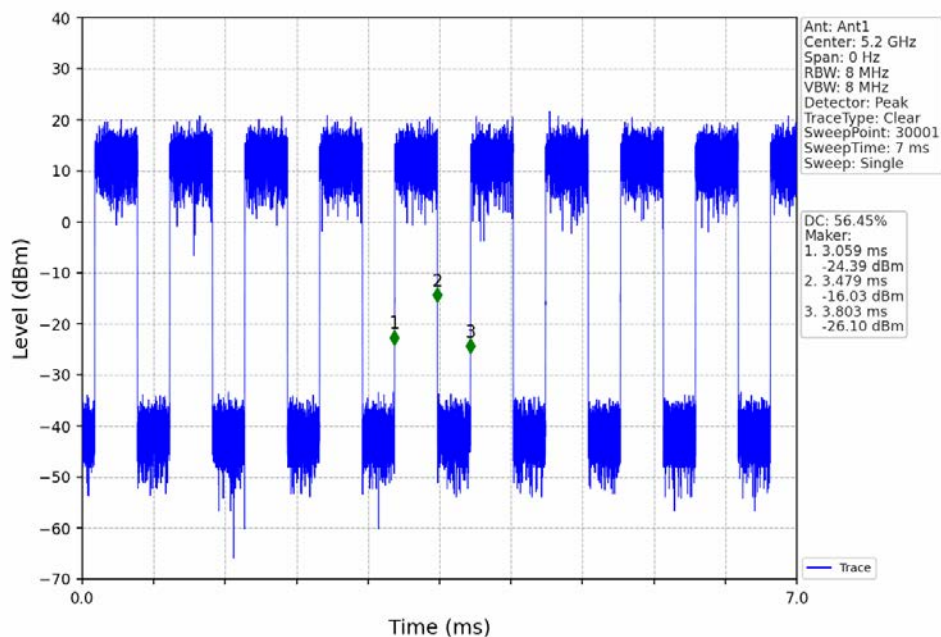
802.11a\_HCH\_5825MHz\_Ant1\_NTNV



802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV

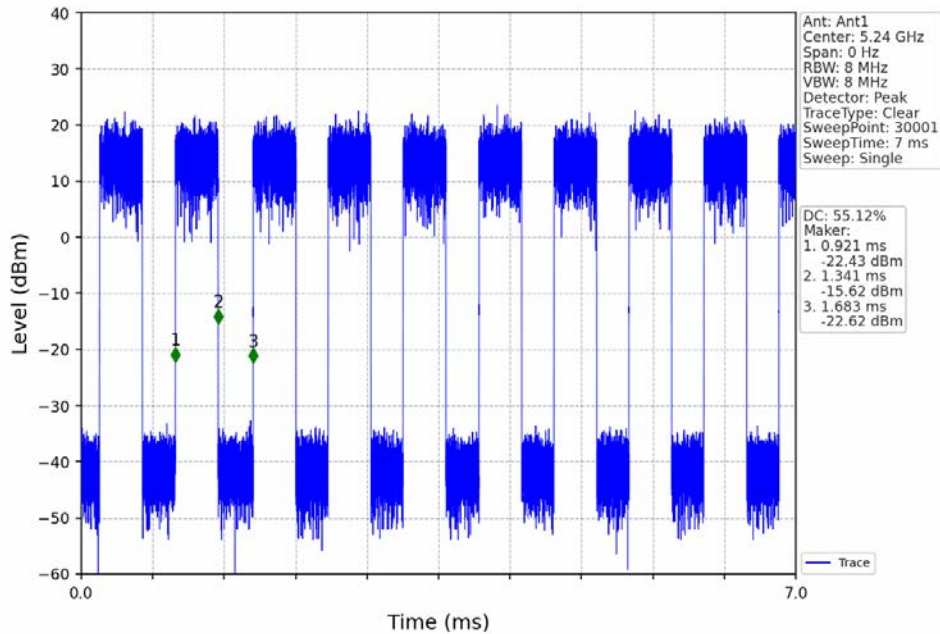


802.11n(HT20)\_MCH\_5200MHz\_Ant1\_NTNV

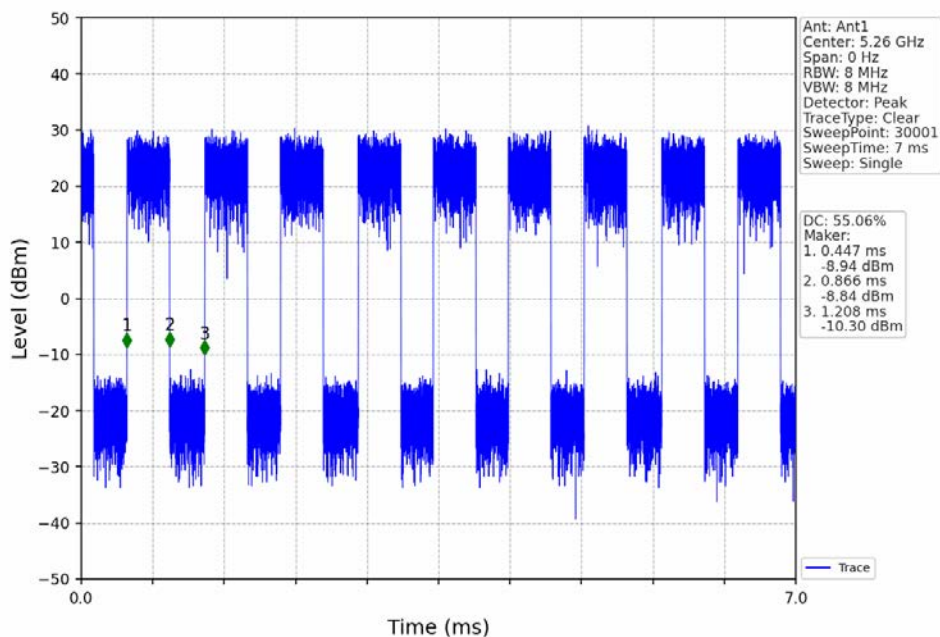




### 802.11n(HT20)\_HCH\_5240MHz\_Ant1\_NTNV

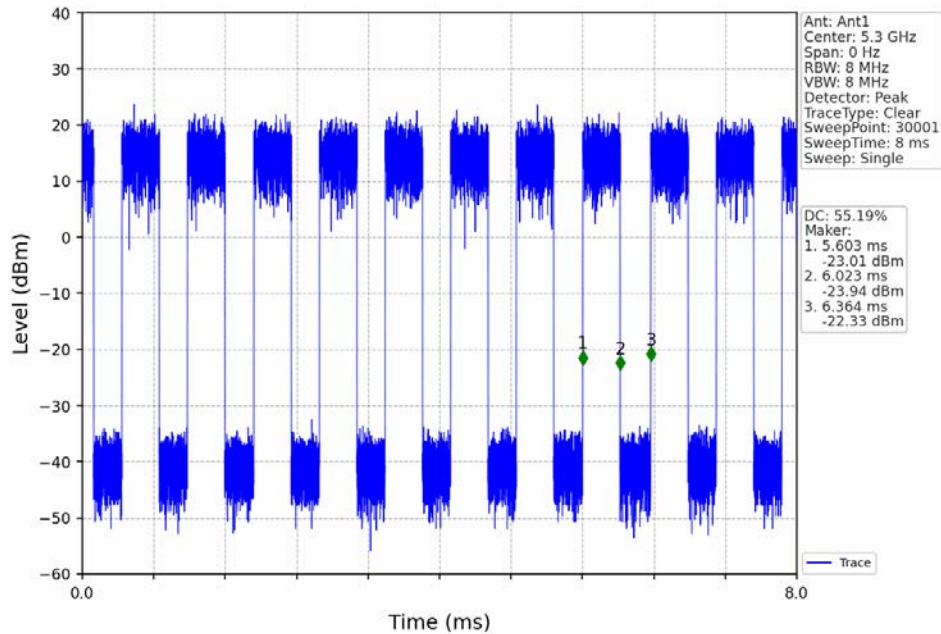


### 802.11n(HT20)\_LCH\_5260MHz\_Ant1\_NTNV

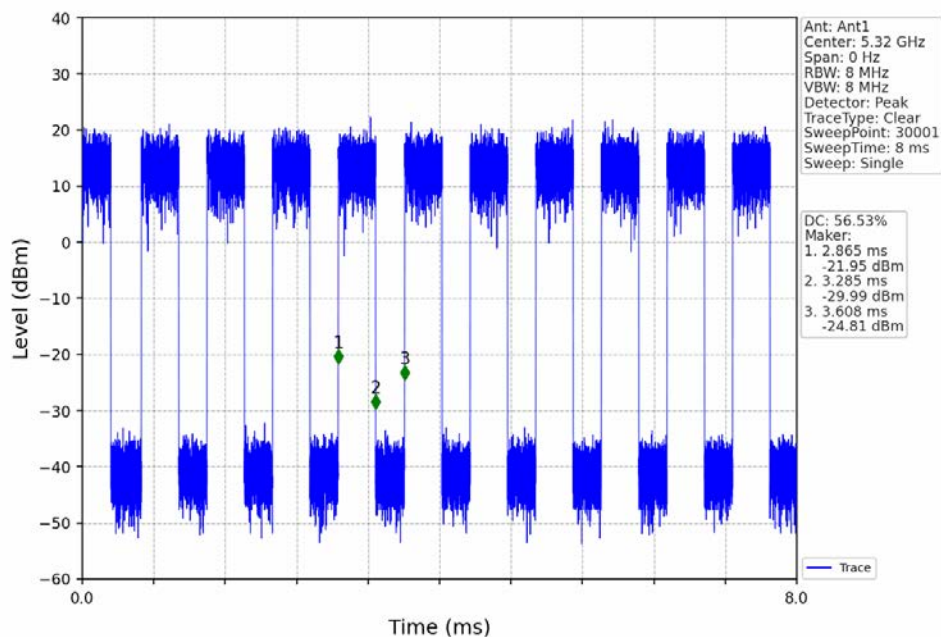




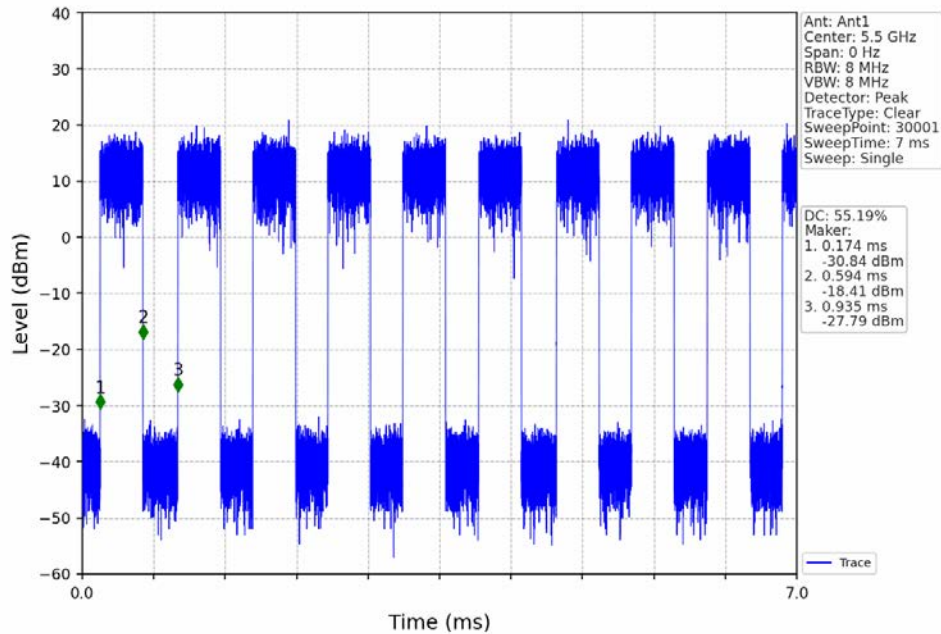
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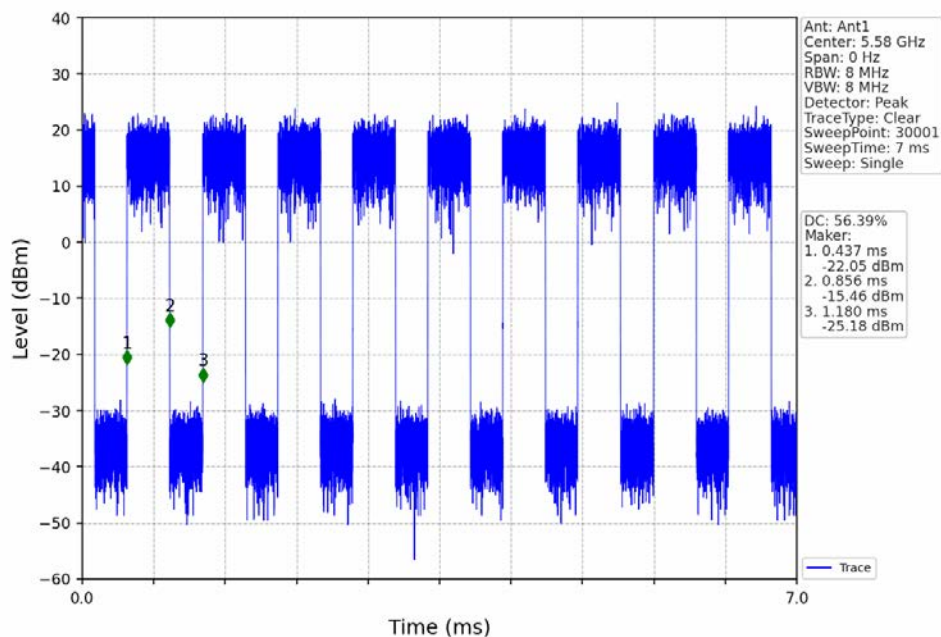
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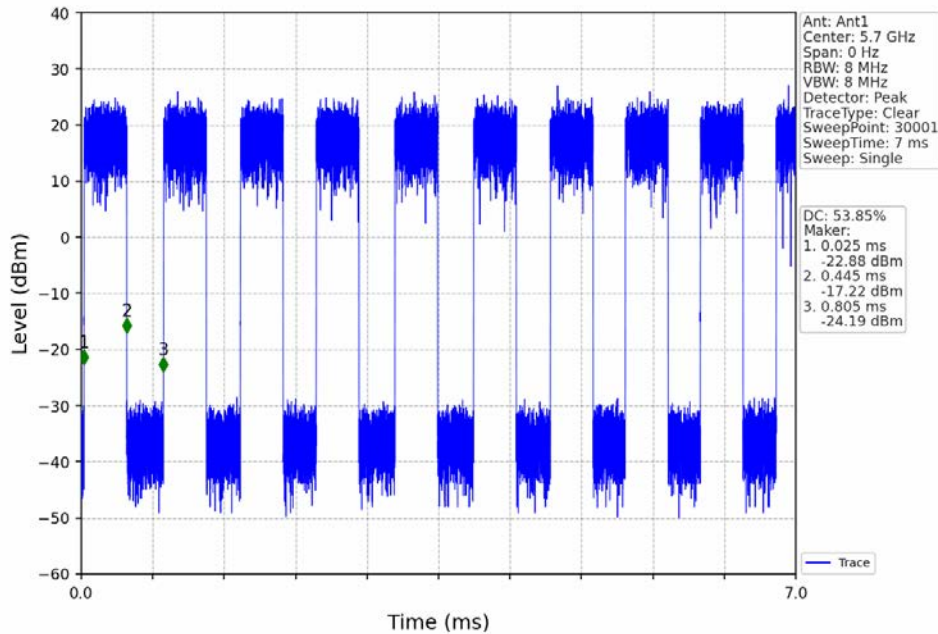
### 802.11n(HT20)\_LCH\_5500MHz\_Ant1\_NTNV



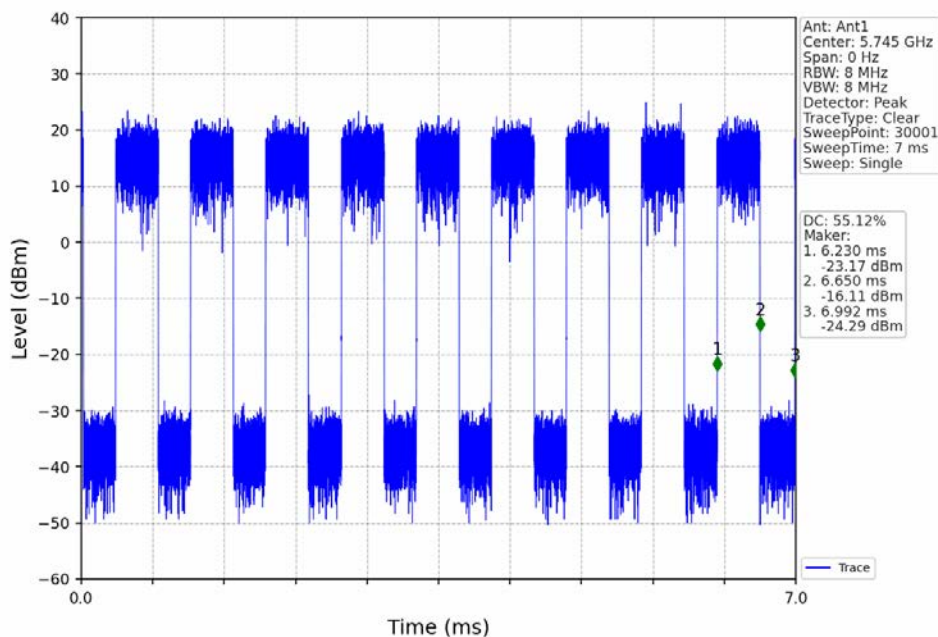
### 802.11n(HT20)\_MCH\_5580MHz\_Ant1\_NTNV



### 802.11n(HT20)\_HCH\_5700MHz\_Ant1\_NTNV

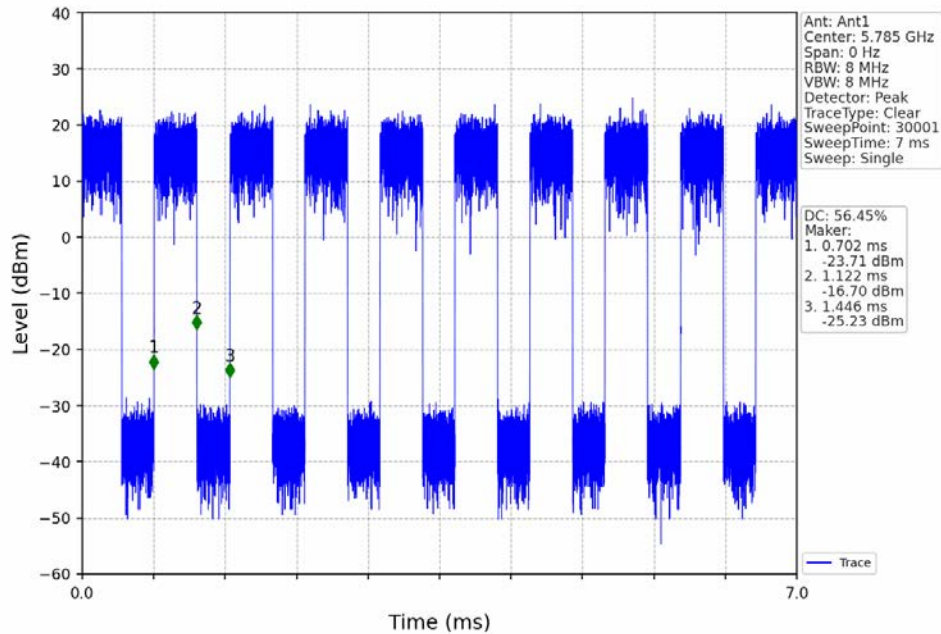


### 802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV

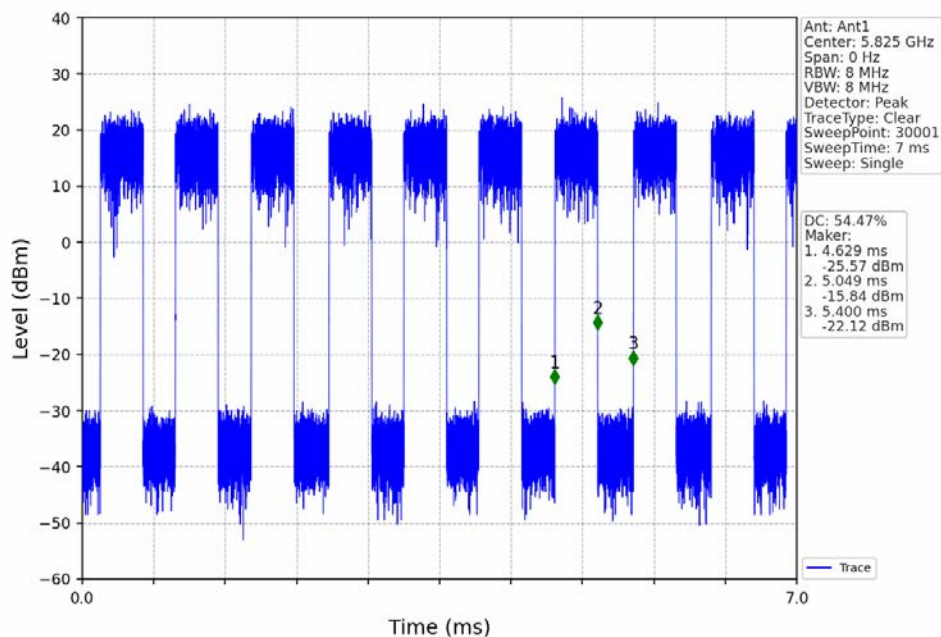




802.11n(HT20)\_MCH\_5785MHz\_Ant1\_NTNV

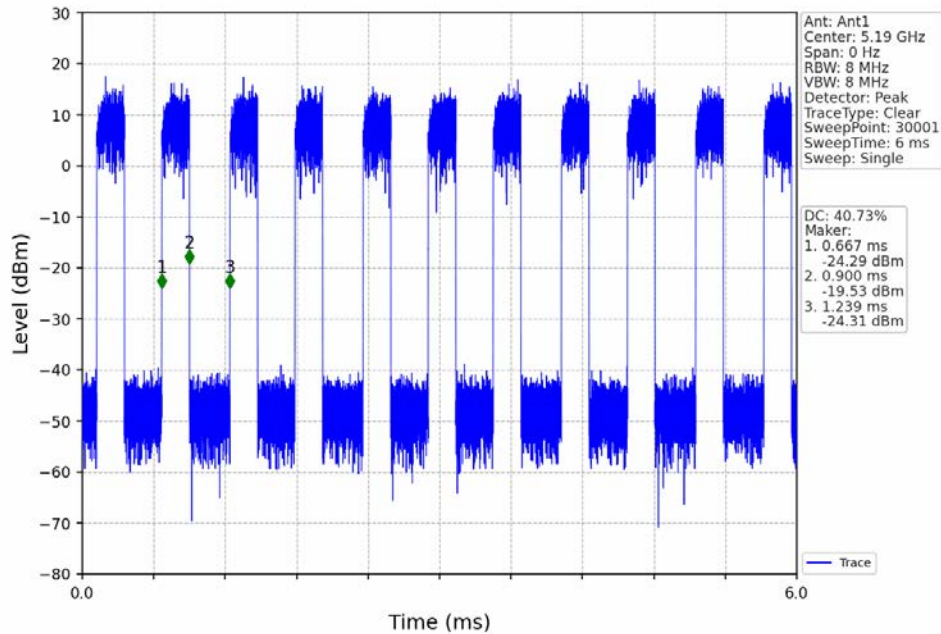


802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV

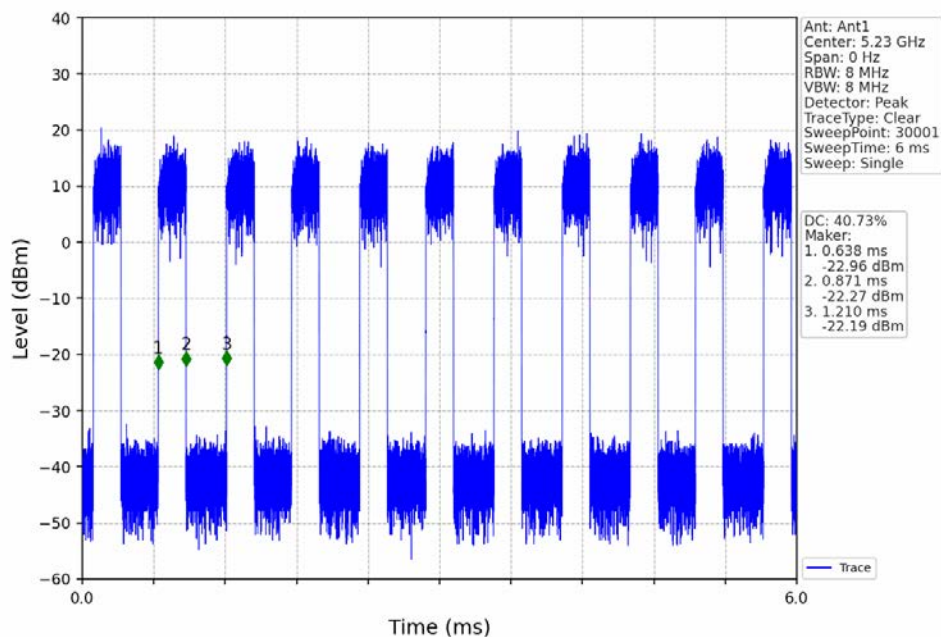




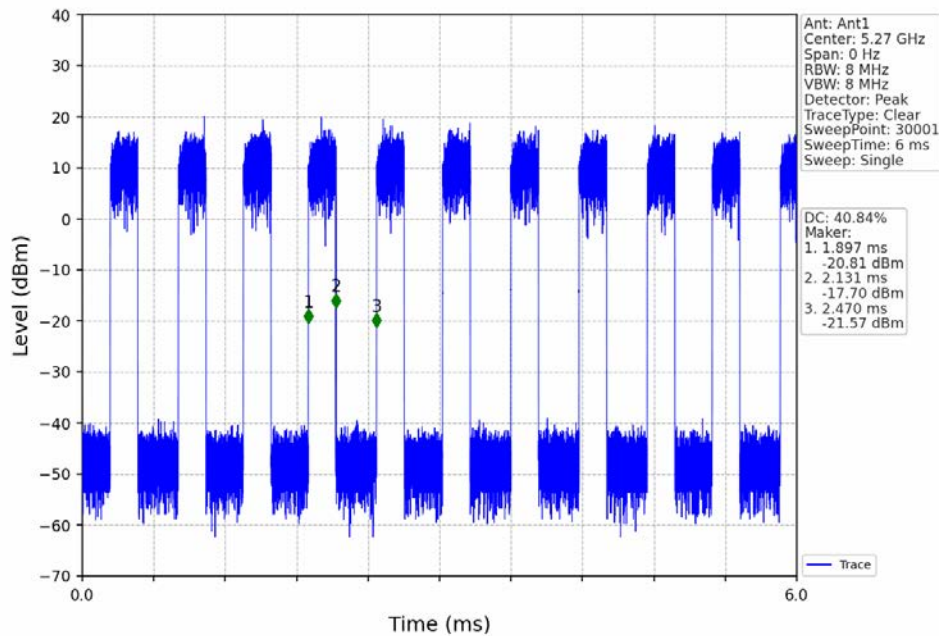
### 802.11n(HT40)\_LCH\_5190MHz\_Ant1\_NTNV



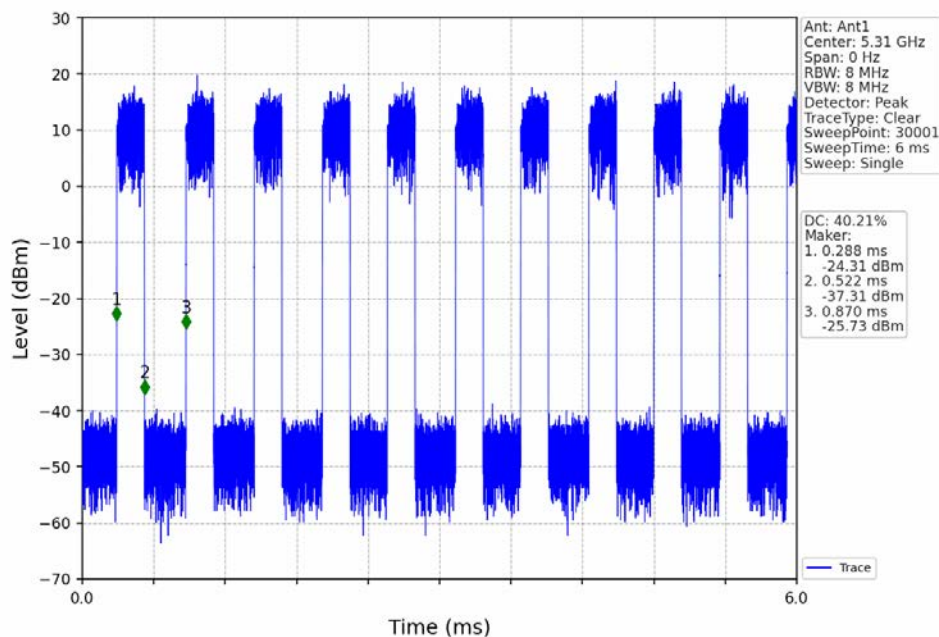
### 802.11n(HT40)\_HCH\_5230MHz\_Ant1\_NTNV



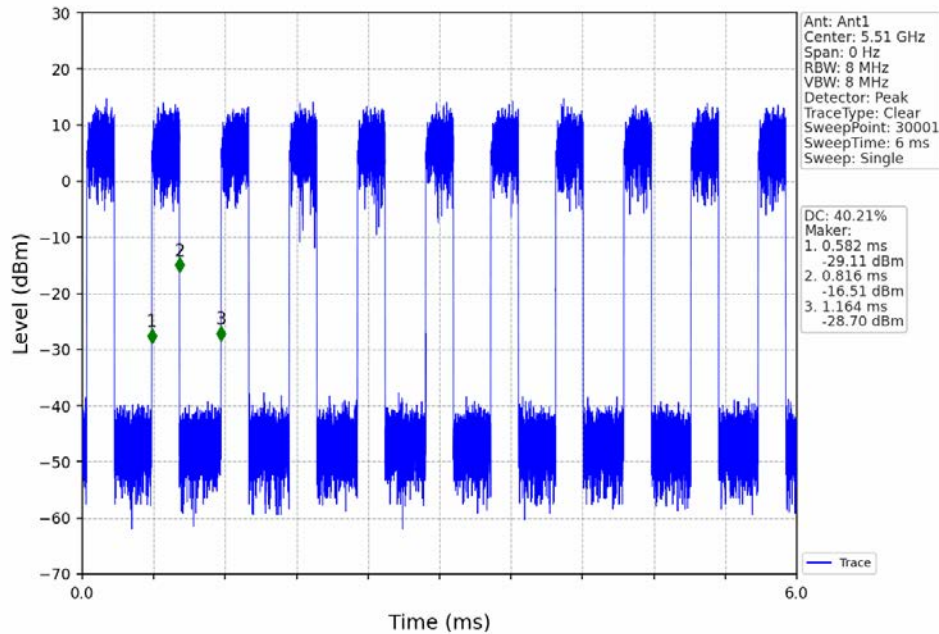
### 802.11n(HT40)\_LCH\_5270MHz\_Ant1\_NTNV



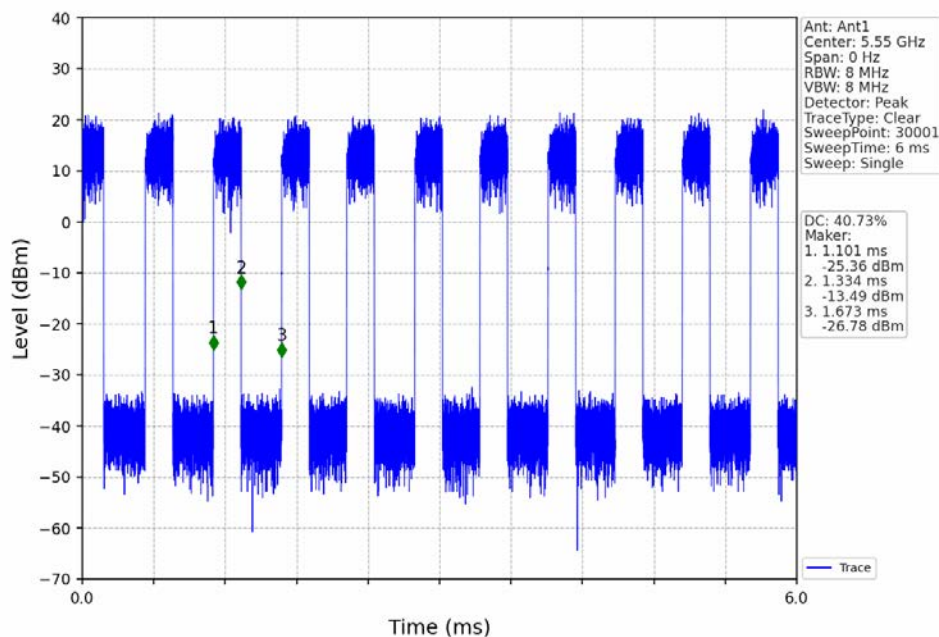
### 802.11n(HT40)\_HCH\_5310MHz\_Ant1\_NTNV



### 802.11n(HT40)\_LCH\_5510MHz\_Ant1\_NTNV

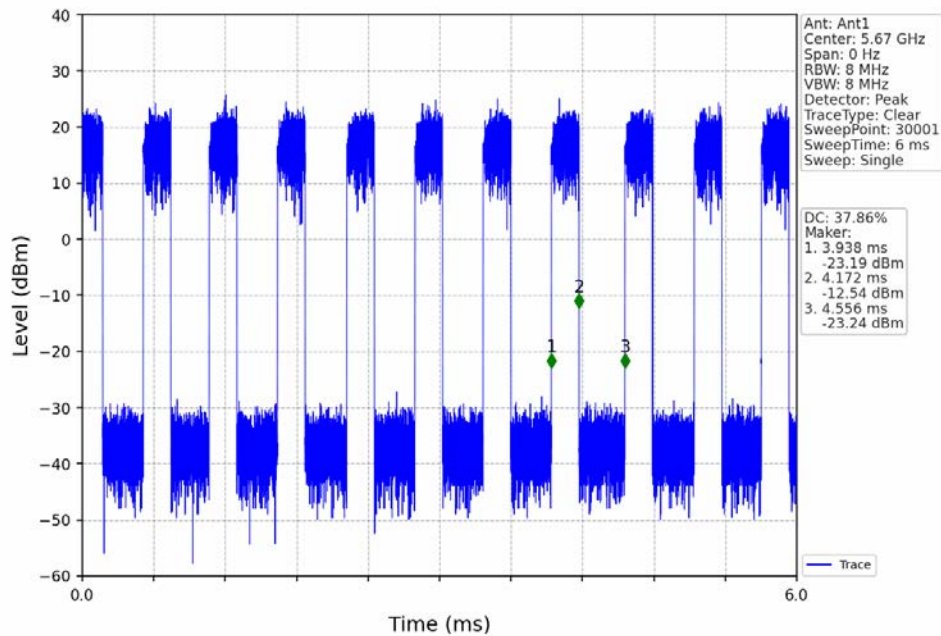


### 802.11n(HT40)\_MCH\_5550MHz\_Ant1\_NTNV

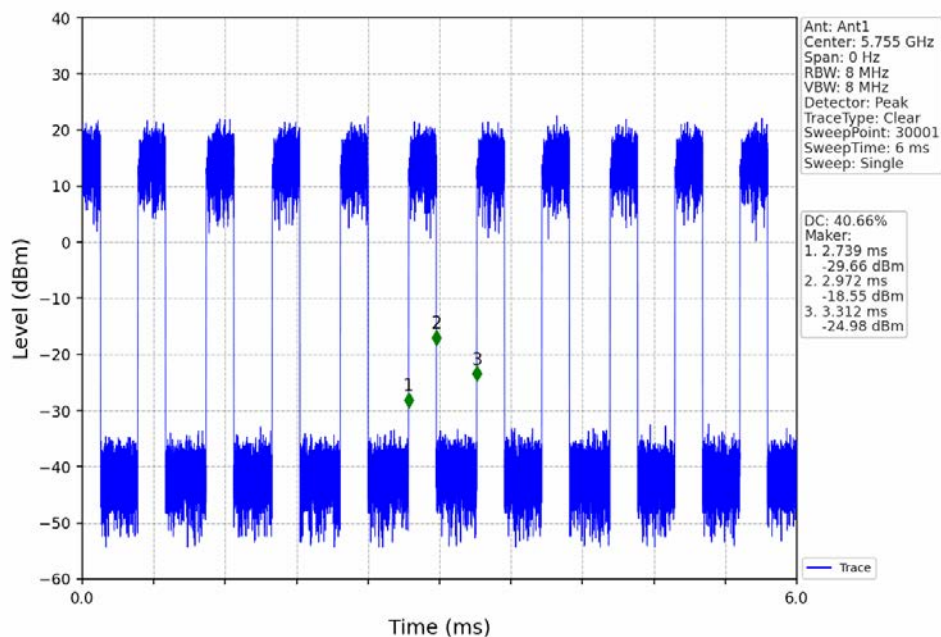




802.11n(HT40)\_HCH\_5670MHz\_Ant1\_NTNV

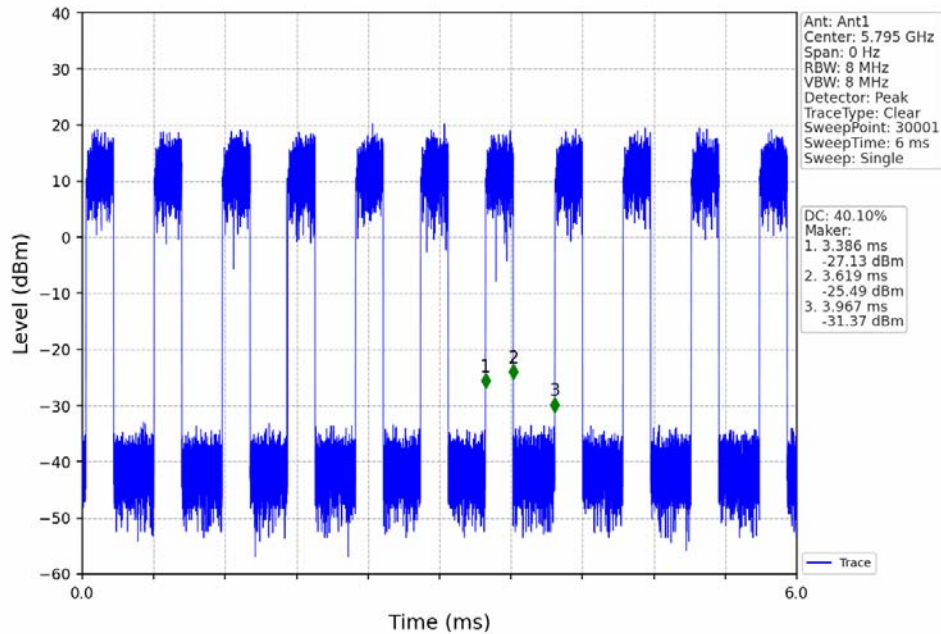


802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV

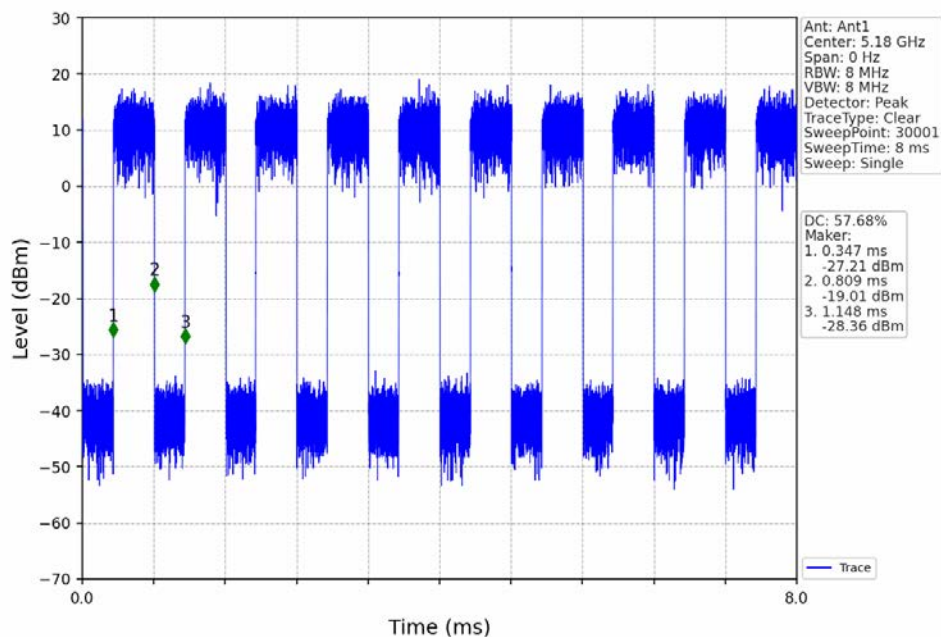




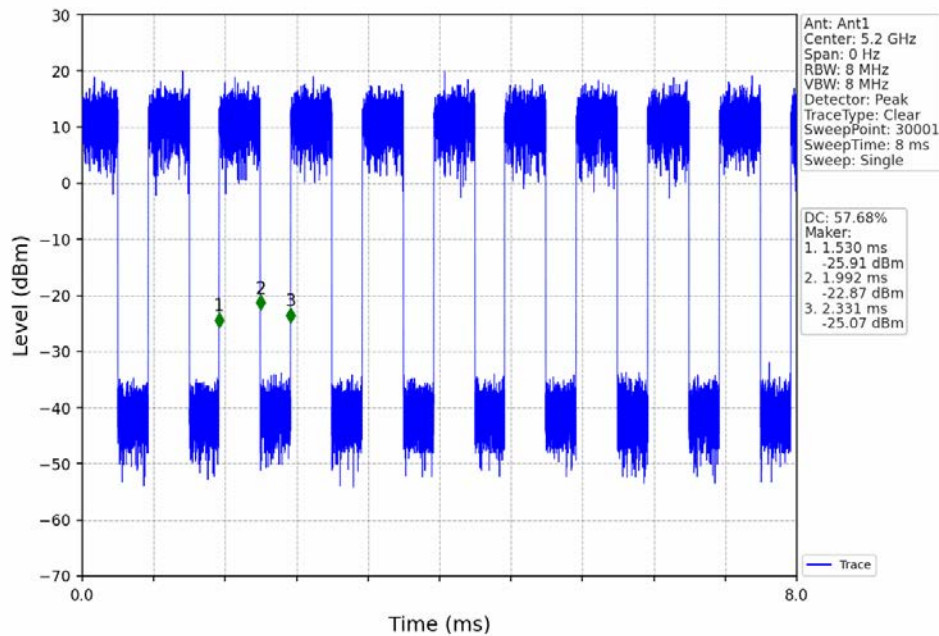
### 802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



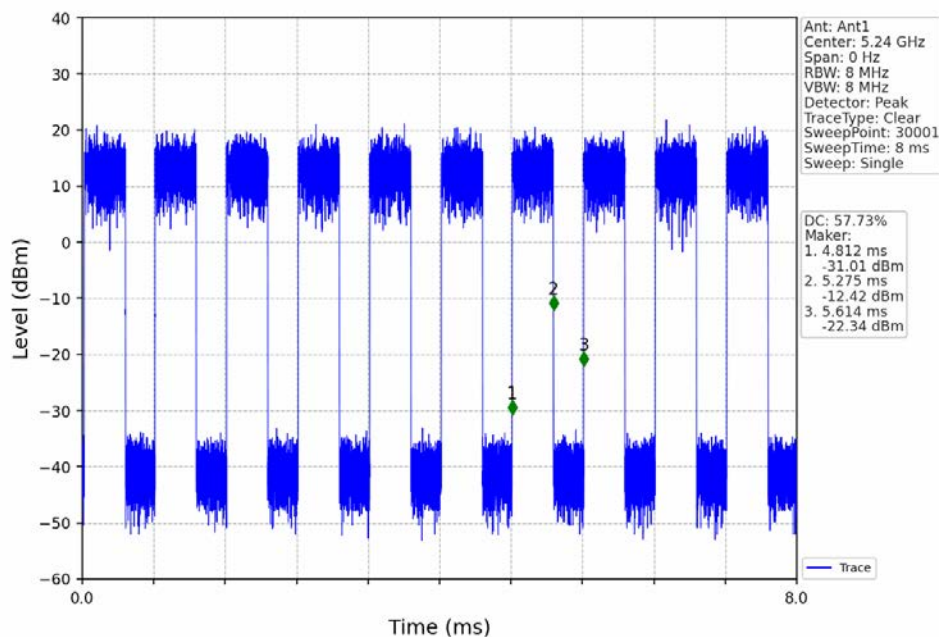
### 802.11ac(VHT20)\_LCH\_5180MHz\_Ant1\_NTNV



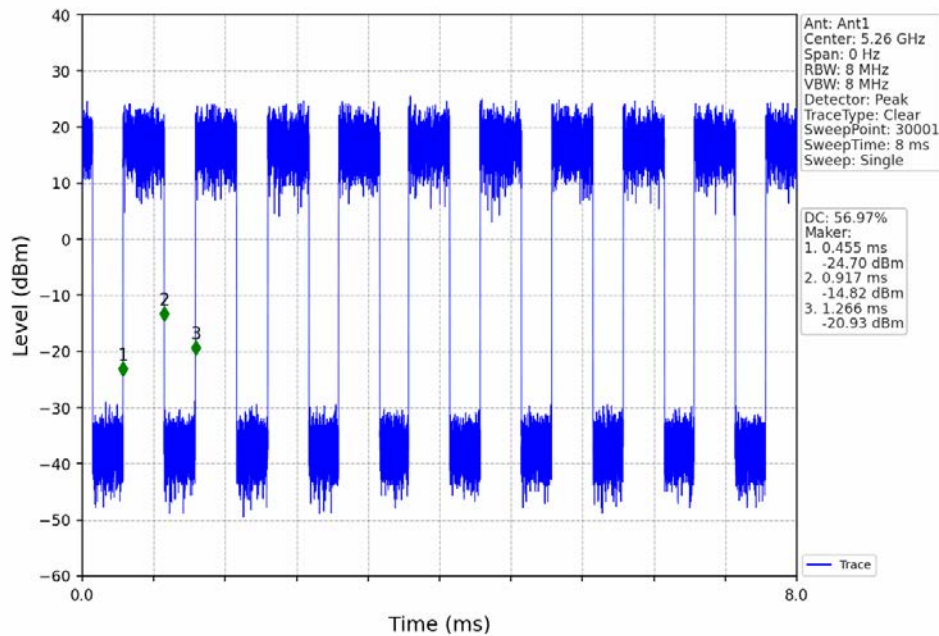
802.11ac(VHT20)\_MCH\_5200MHz\_Ant1\_NTNV



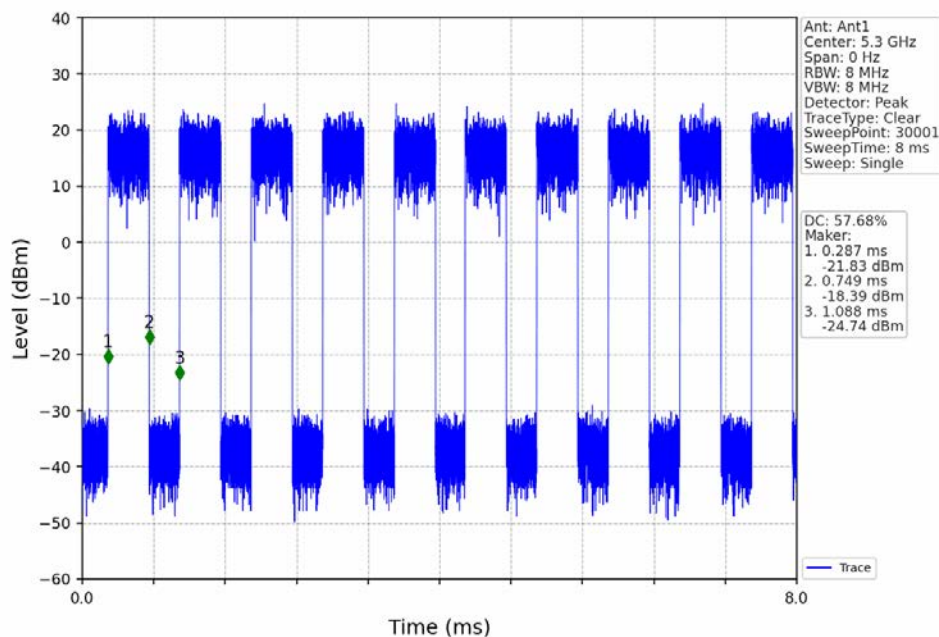
802.11ac(VHT20)\_HCH\_5240MHz\_Ant1\_NTNV



802.11ac(VHT20)\_LCH\_5260MHz\_Ant1\_NTNV

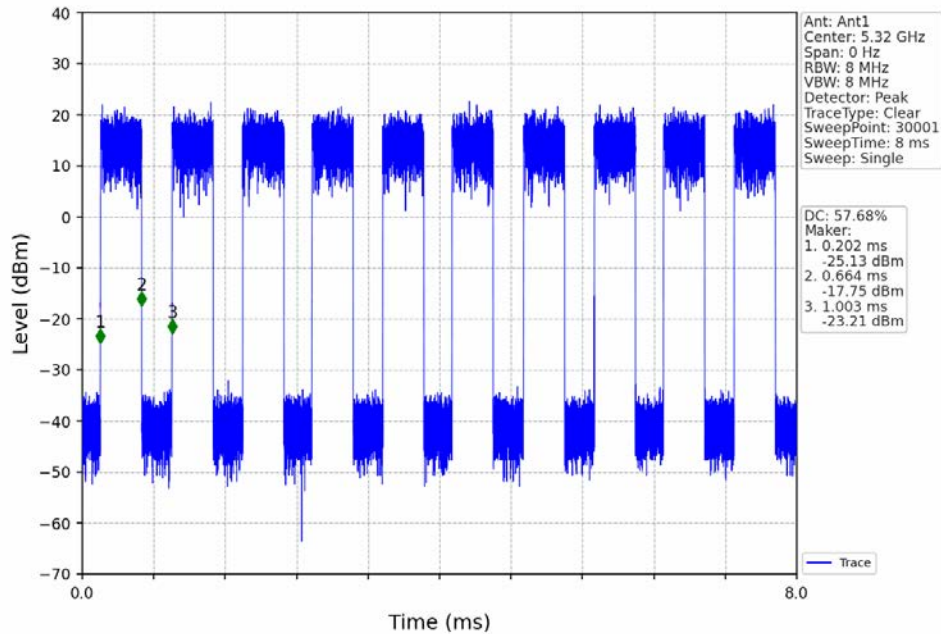


802.11ac(VHT20)\_MCH\_5300MHz\_Ant1\_NTNV

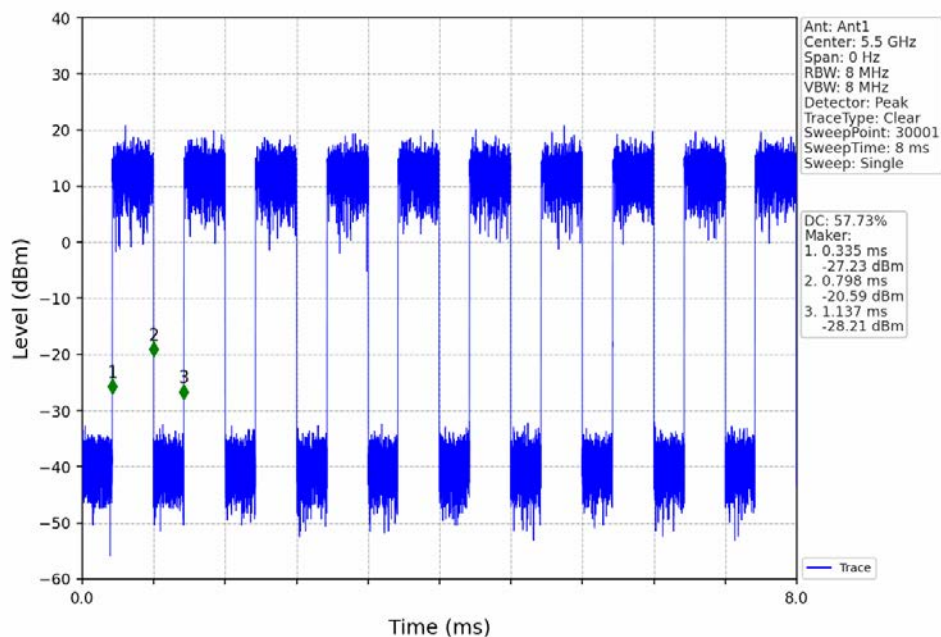




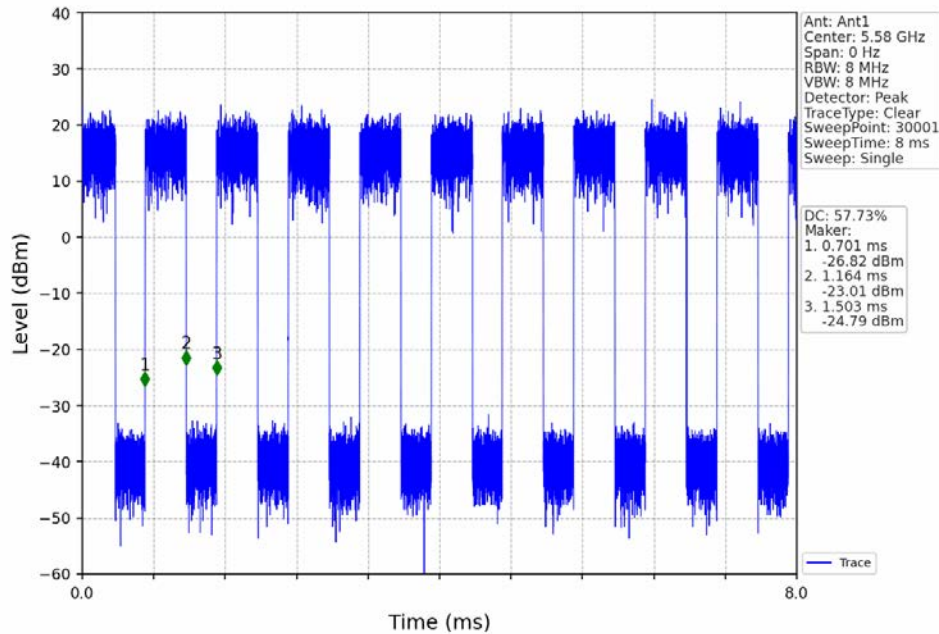
802.11ac(VHT20)\_HCH\_5320MHz\_Ant1\_NTNV



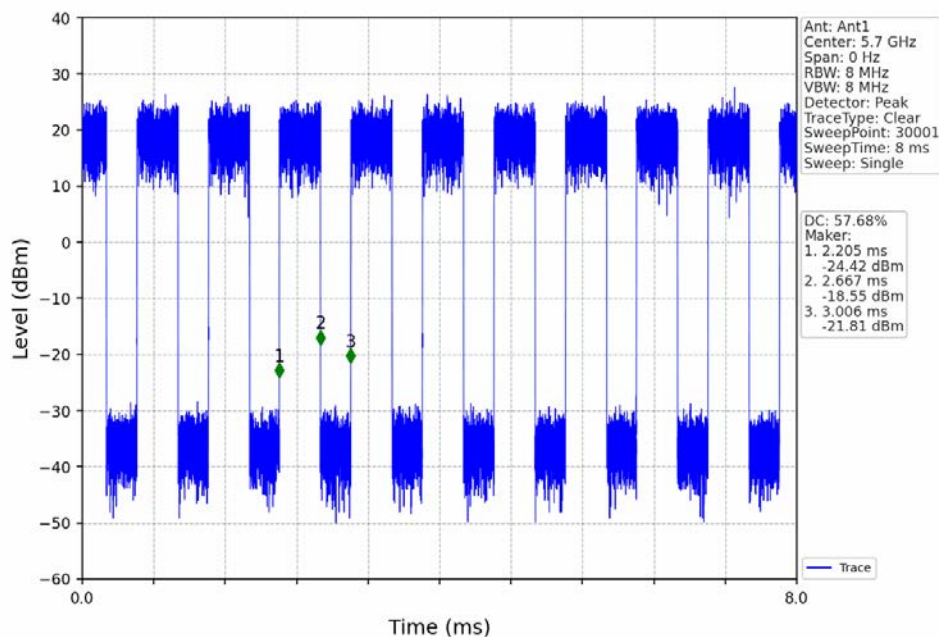
802.11ac(VHT20)\_LCH\_5500MHz\_Ant1\_NTNV



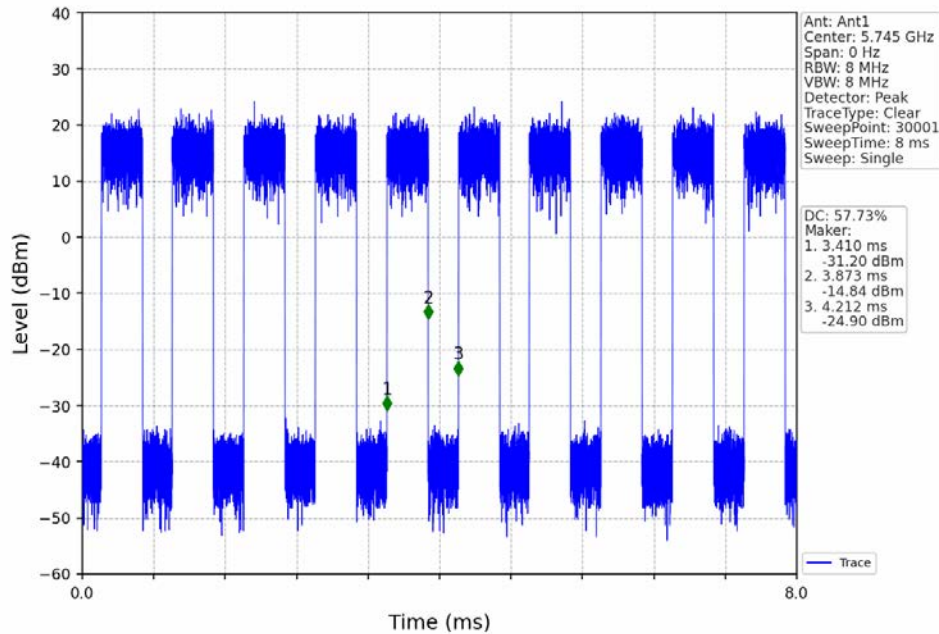
### 802.11ac(VHT20)\_MCH\_5580MHz\_Ant1\_NTNV



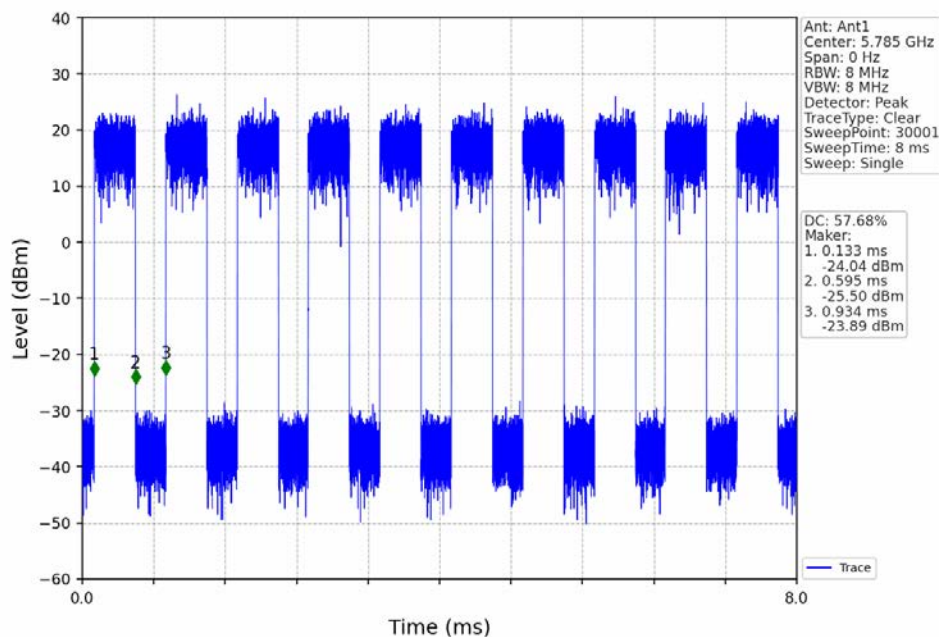
### 802.11ac(VHT20)\_HCH\_5700MHz\_Ant1\_NTNV



### 802.11ac(VHT20)\_LCH\_5745MHz\_Ant1\_NTNV

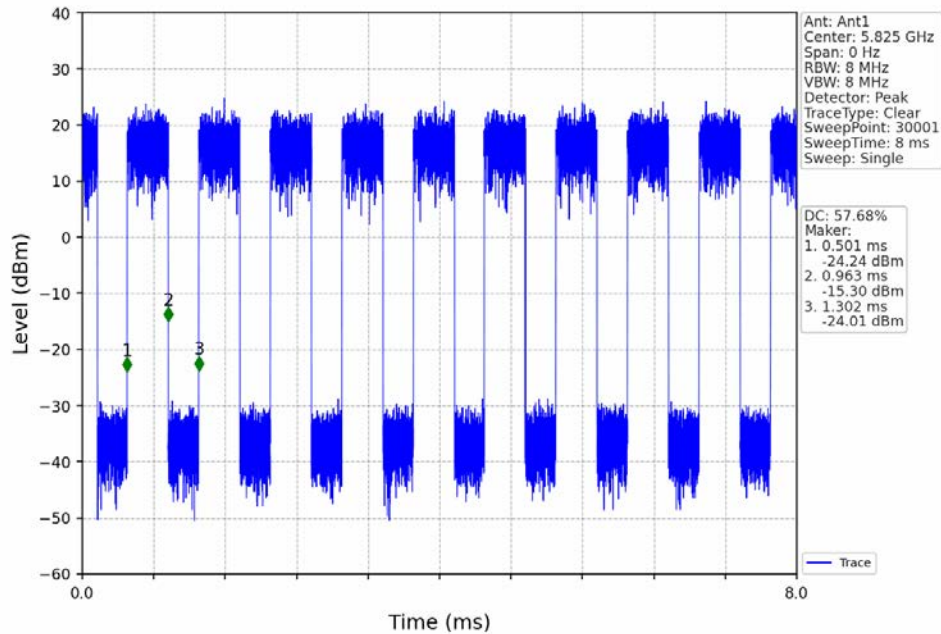


### 802.11ac(VHT20)\_MCH\_5785MHz\_Ant1\_NTNV

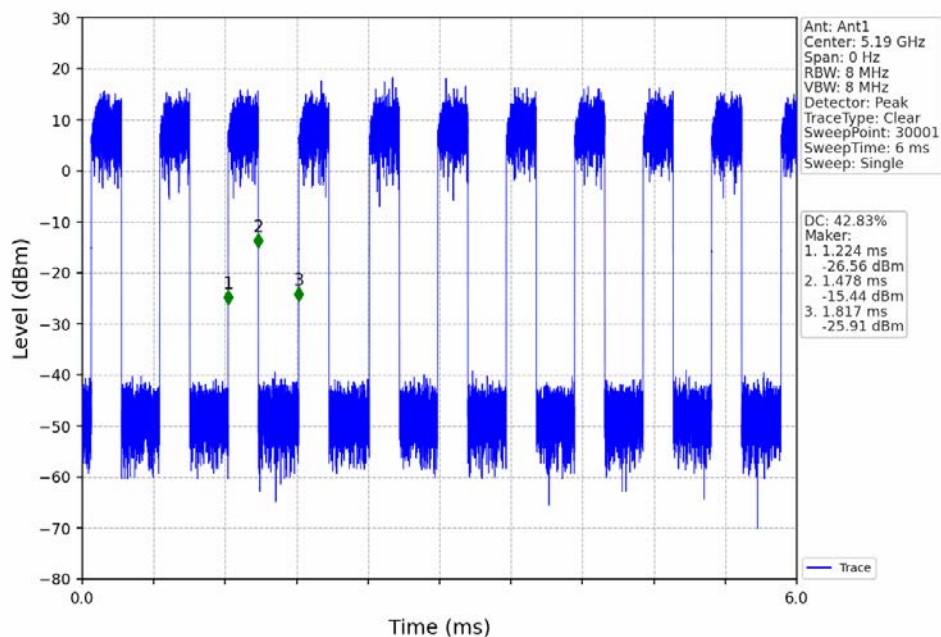




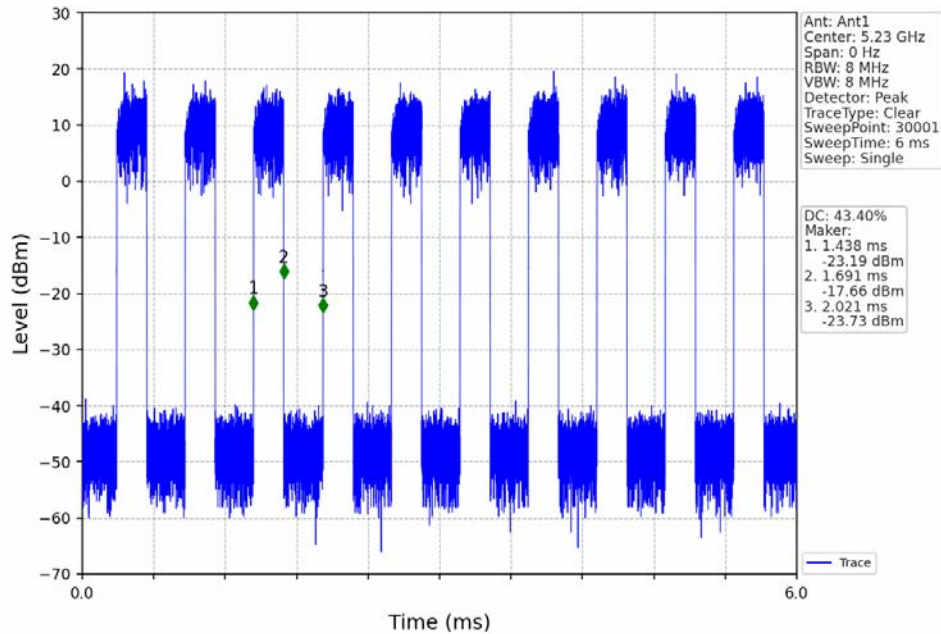
### 802.11ac(VHT20)\_HCH\_5825MHz\_Ant1\_NTNV



### 802.11ac(VHT40)\_LCH\_5190MHz\_Ant1\_NTNV



802.11ac(VHT40)\_HCH\_5230MHz\_Ant1\_NTNV



802.11ac(VHT40)\_LCH\_5270MHz\_Ant1\_NTNV

