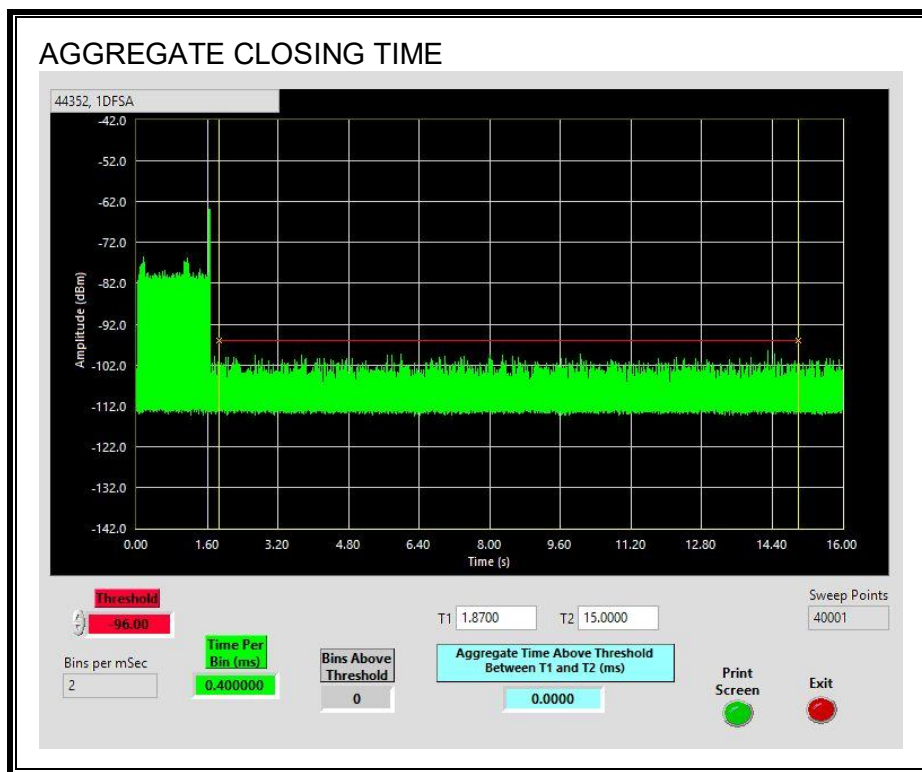


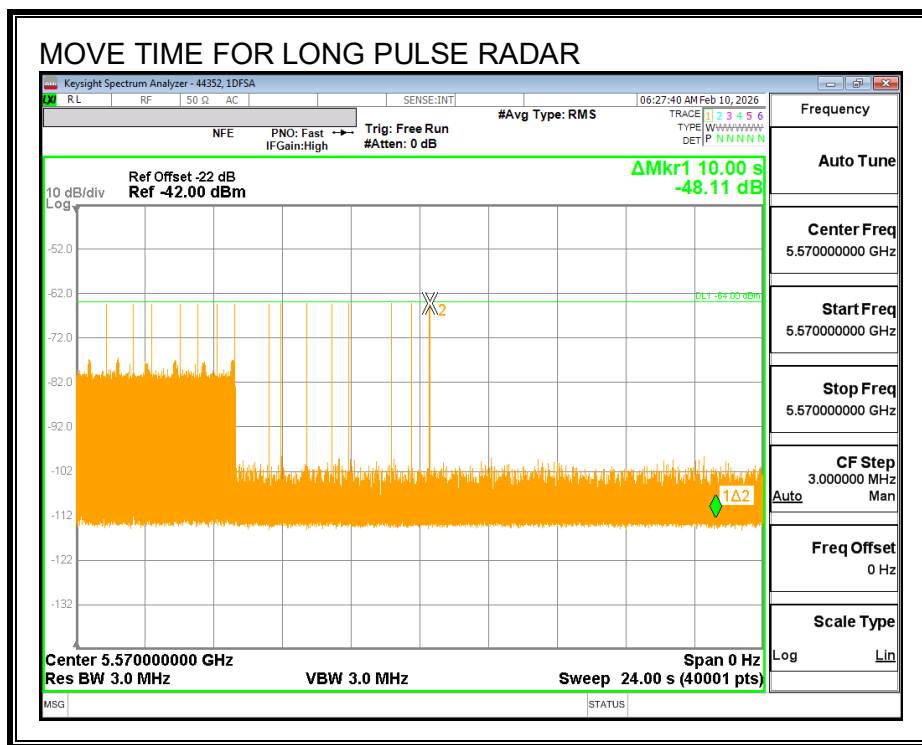
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



LONG PULSE CHANNEL MOVE TIME

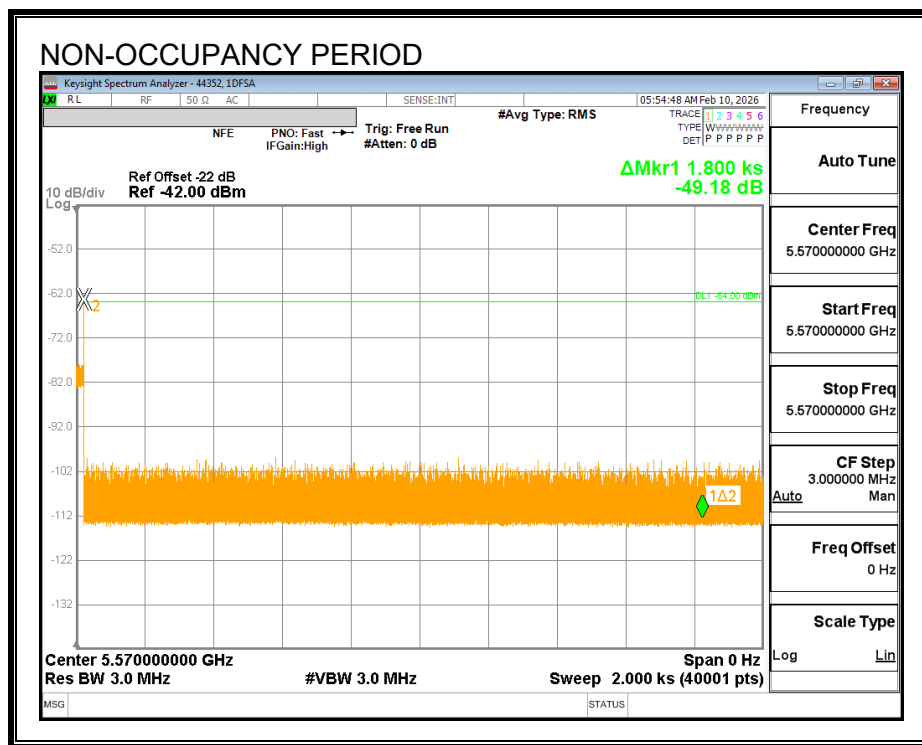
The traffic ceases prior to 10 seconds after the end of the radar waveform.



6.5.6. NON-OCCUPANCY PERIOD

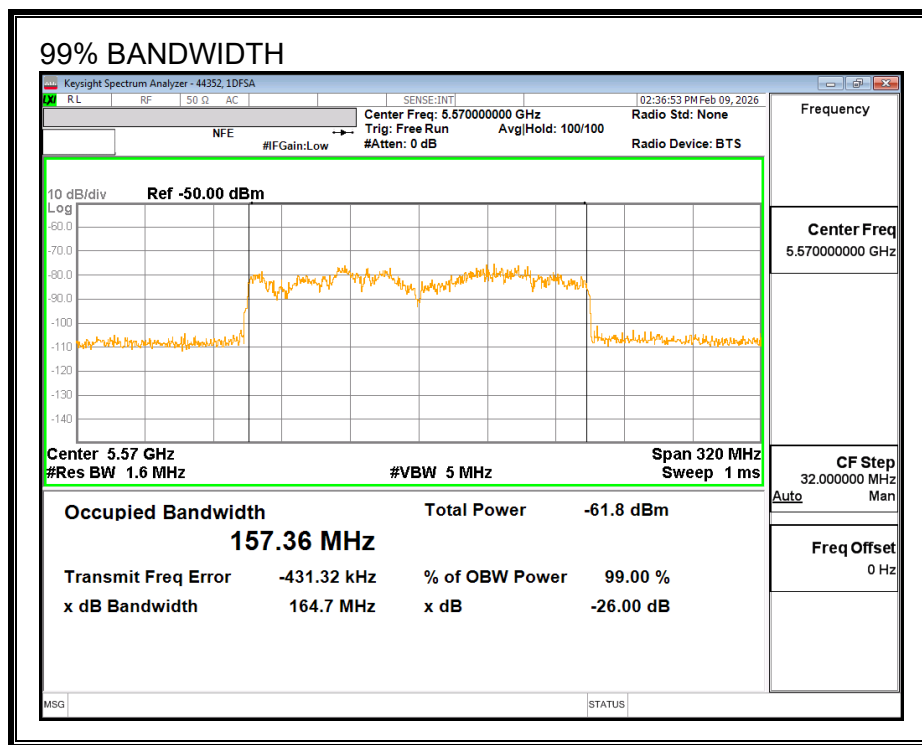
RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.



6.5.7. DETECTION BANDWIDTH

REFERENCE PLOT OF 99% POWER BANDWIDTH



RESULTS

F_L (MHz)	F_H (MHz)	Detection Bandwidth (MHz)	Applicable 99% Power Bandwidth (MHz)	Ratio of Detection BW to 99% Power BW (%)	Minimum Limit (%)
5490	5650	160	157.36	101.7	100

DETECTION BANDWIDTH PROBABILITY

DETECTION BANDWIDTH PROBABILITY RESULTS				
Detection Bandwidth Test Results				
FCC Type 0 Waveform: 1 us Pulse Width, 1428 us PRI, 18 Pulses per Burst				
Frequency (MHz)	Number of Trials	Number Detected	Detection (%)	Mark
5489	1	0	0	FL
5490	10	10	100	
5495	10	10	100	
5500	10	10	100	
5505	10	10	100	
5510	10	10	100	
5515	10	10	100	
5520	10	10	100	
5525	10	10	100	
5530	10	10	100	
5535	10	10	100	
5540	10	10	100	
5545	10	10	100	
5550	10	10	100	
5555	10	10	100	
5560	10	10	100	
5565	10	10	100	
5570	10	10	100	
5575	10	10	100	
5580	10	10	100	
5585	10	10	100	
5590	10	10	100	FH
5595	10	10	100	
5600	10	10	100	
5605	10	10	100	
5610	10	10	100	
5615	10	10	100	
5620	10	10	100	
5625	10	10	100	
5630	10	10	100	
5635	10	10	100	
5640	10	10	100	
5645	10	10	100	
5650	10	10	100	
5651	1	0	0	

6.5.8. IN-SERVICE MONITORING

RESULTS

FCC Radar Test Summary										
Signal Type	Number of Trials	Detection (%)	Limit (%)	Pass/Fail	Detection Bandwidth		OBW	Test Location	Employee Number	In-Service Monitoring Version
					FL	FH				
FCC Short Pulse Type 1	30	100.00	60	Pass	5490	5650	157.36	1DFS1	44352	v2023.11.3
FCC Short Pulse Type 2	30	96.67	60	Pass	5490	5650	157.36	1DFS1	44352	v2023.11.3
FCC Short Pulse Type 3	30	86.67	60	Pass	5490	5650	157.36	1DFS1	44352	v2023.11.3
FCC Short Pulse Type 4	30	100.00	60	Pass	5490	5650	157.36	1DFS1	44352	v2023.11.3
Aggregate		95.83	80	Pass						
FCC Long Pulse Type 5	30	100.00	80	Pass	5490	5650	157.36	1DFS1	44352	v2023.11.3
FCC Hopping Type 6	161	100.00	70	Pass	5490	5650		1DFS1	44352	v2023.11.3

TYPE 1 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 1						
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Test (A/B)	Frequency (MHz)	Successful Detection (Yes/No)
1001	1	3066	18	A	5642	Yes
1002	1	938	57	A	5505	Yes
1003	1	638	83	A	5553	Yes
1004	1	878	61	A	5533	Yes
1005	1	558	95	A	5517	Yes
1006	1	738	72	A	5601	Yes
1007	1	678	78	A	5594	Yes
1008	1	618	86	A	5568	Yes
1009	1	898	59	A	5537	Yes
1010	1	538	99	A	5585	Yes
1011	1	578	92	A	5599	Yes
1012	1	518	102	A	5518	Yes
1013	1	658	81	A	5539	Yes
1014	1	758	70	A	5636	Yes
1015	1	918	58	A	5618	Yes
1016	1	984	54	B	5519	Yes
1017	1	810	66	B	5644	Yes
1018	1	1637	33	B	5506	Yes
1019	1	1593	34	B	5520	Yes
1020	1	1355	39	B	5646	Yes
1021	1	1440	37	B	5639	Yes
1022	1	1331	40	B	5541	Yes
1023	1	2899	19	B	5564	Yes
1024	1	1725	31	B	5551	Yes
1025	1	875	61	B	5532	Yes
1026	1	2379	23	B	5645	Yes
1027	1	1658	32	B	5512	Yes
1028	1	2096	26	B	5582	Yes
1029	1	2858	19	B	5611	Yes
1030	1	2073	26	B	5559	Yes

TYPE 2 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 2					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
2001	3.4	177	24	5647	Yes
2002	3.4	158	26	5613	Yes
2003	1.1	150	27	5631	Yes
2004	3.5	173	29	5542	Yes
2005	1.5	212	23	5503	Yes
2006	4.1	202	29	5542	Yes
2007	4.4	164	24	5642	Yes
2008	1.2	158	23	5542	Yes
2009	3.7	205	29	5626	Yes
2010	2.9	164	28	5512	Yes
2011	1.5	178	27	5556	Yes
2012	4.9	223	24	5597	Yes
2013	1.8	159	27	5504	Yes
2014	3.6	208	24	5494	Yes
2015	4.8	191	28	5635	Yes
2016	2.6	207	25	5622	Yes
2017	2.1	194	29	5527	Yes
2018	4.3	214	24	5496	Yes
2019	4	205	25	5565	Yes
2020	2.2	191	26	5635	Yes
2021	4.3	187	28	5513	No
2022	5	176	27	5592	Yes
2023	3.1	219	28	5522	Yes
2024	4	213	28	5561	Yes
2025	2.4	222	26	5578	Yes
2026	1.6	220	26	5557	Yes
2027	4.3	152	25	5516	Yes
2028	3.6	197	29	5567	Yes
2029	2.7	214	25	5638	Yes
2030	2.3	225	29	5646	Yes

TYPE 3 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 3					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
3001	8.1	300	17	5607	Yes
3002	5.4	347	16	5573	Yes
3003	9.9	309	17	5560	Yes
3004	7.5	369	17	5604	Yes
3005	7.1	343	18	5523	Yes
3006	10	298	16	5528	Yes
3007	7.5	285	17	5528	Yes
3008	8.3	253	16	5565	Yes
3009	6.1	386	17	5617	Yes
3010	7.2	367	17	5504	Yes
3011	5.1	395	16	5643	No
3012	9.2	388	18	5560	Yes
3013	5.1	429	17	5633	No
3014	6.7	317	17	5504	Yes
3015	5.5	371	16	5623	Yes
3016	5	405	17	5589	No
3017	6.5	472	16	5493	Yes
3018	8.9	268	18	5547	Yes
3019	8.2	480	18	5646	Yes
3020	5.9	289	16	5530	Yes
3021	5.5	264	18	5549	Yes
3022	8.4	470	17	5527	Yes
3023	5.9	457	16	5640	Yes
3024	6.7	425	18	5626	Yes
3025	9.6	307	16	5521	Yes
3026	5.5	420	17	5520	No
3027	8.6	315	18	5567	Yes
3028	7.6	442	17	5544	Yes
3029	8.6	349	16	5522	Yes
3030	7.8	489	18	5566	Yes

TYPE 4 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 4					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
4001	17.9	291	15	5635	Yes
4002	16.9	326	13	5595	Yes
4003	15.1	392	16	5504	Yes
4004	14.6	440	16	5501	Yes
4005	13.3	401	14	5580	Yes
4006	18.6	461	15	5618	Yes
4007	17.9	435	13	5496	Yes
4008	19	390	12	5622	Yes
4009	18.7	377	16	5587	Yes
4010	10.3	345	15	5627	Yes
4011	15.9	478	14	5522	Yes
4012	18	341	13	5605	Yes
4013	19.4	487	15	5638	Yes
4014	12	363	12	5502	Yes
4015	13.9	270	16	5591	Yes
4016	12.3	409	14	5529	Yes
4017	14.8	345	14	5526	Yes
4018	13.7	498	16	5614	Yes
4019	11.9	313	14	5548	Yes
4020	11.4	360	15	5600	Yes
4021	10.1	322	13	5607	Yes
4022	15.4	382	14	5501	Yes
4023	14.7	356	12	5525	Yes
4024	15.8	311	16	5500	Yes
4025	15.5	431	12	5504	Yes
4026	17.2	399	13	5551	Yes
4027	12.7	399	12	5633	Yes
4028	14.8	262	12	5631	Yes
4029	16.2	407	13	5638	Yes
4030	18.9	283	15	5544	Yes

TYPE 5 DETECTION PROBABILITY

Data Sheet for FCC Long Pulse Radar Type 5		
Trial	Frequency (MHz)	Successful Detection (Yes/No)
1	5570	Yes
2	5570	Yes
3	5570	Yes
4	5570	Yes
5	5570	Yes
6	5570	Yes
7	5570	Yes
8	5570	Yes
9	5570	Yes
10	5570	Yes
11	5498	Yes
12	5494	Yes
13	5496	Yes
14	5500	Yes
15	5499	Yes
16	5497	Yes
17	5496	Yes
18	5494	Yes
19	5496	Yes
20	5494	Yes
21	5646	Yes
22	5645	Yes
23	5643	Yes
24	5646	Yes
25	5640	Yes
26	5644	Yes
27	5643	Yes
28	5646	Yes
29	5644	Yes
30	5646	Yes

Note: The Type 5 randomized parameters tested are located in Appendix A.

TYPE 6 DETECTION PROBABILITY

Data Sheet for FCC Hopping Radar Type 6				
1 us Pulse Width, 333 us PRI, 9 Pulses per Burst, 1 Burst per Hop				
NTIA August 2005 Hopping Sequence				
Trial	Starting Index Within Sequence	Signal Generator Frequency (MHz)	Hops within Detection BW	Successful Detection (Yes/No)
1	832	5490	24	Yes
2	1307	5491	33	Yes
3	1782	5492	36	Yes
4	2257	5493	37	Yes
5	2732	5494	30	Yes
6	3207	5495	35	Yes
7	3682	5496	33	Yes
8	4157	5497	33	Yes
9	4632	5498	39	Yes
10	5107	5499	28	Yes
11	5582	5500	27	Yes
12	6057	5501	35	Yes
13	6532	5502	32	Yes
14	7007	5503	34	Yes
15	7482	5504	36	Yes
16	7957	5505	36	Yes
17	8432	5506	30	Yes
18	8907	5507	38	Yes
19	9382	5508	44	Yes
20	9857	5509	32	Yes
21	10332	5510	31	Yes
22	10807	5511	38	Yes
23	11282	5512	35	Yes
24	11757	5513	29	Yes
25	12232	5514	33	Yes
26	12707	5515	26	Yes
27	13182	5516	39	Yes
28	13657	5517	31	Yes
29	14132	5518	31	Yes
30	14607	5519	37	Yes
31	15082	5520	37	Yes
32	15557	5521	35	Yes
33	16032	5522	30	Yes
34	16507	5523	36	Yes
35	16982	5524	29	Yes
36	17457	5525	37	Yes
37	17932	5526	33	Yes
38	18407	5527	33	Yes
39	18882	5528	29	Yes
40	19357	5529	28	Yes

TYPE 6 DETECTION PROBABILITY (CONTINUED)

41	19832	5530	40	Yes
42	20307	5531	31	Yes
43	20782	5532	31	Yes
44	21257	5533	30	Yes
45	21732	5534	33	Yes
46	22207	5535	37	Yes
47	22682	5536	29	Yes
48	23157	5537	36	Yes
49	23632	5538	27	Yes
50	24107	5539	33	Yes
51	24582	5540	33	Yes
52	25057	5541	40	Yes
53	25532	5542	27	Yes
54	26007	5543	39	Yes
55	26482	5544	32	Yes
56	26957	5545	33	Yes
57	27432	5546	35	Yes
58	27907	5547	30	Yes
59	28382	5548	37	Yes
60	28857	5549	32	Yes
61	29332	5550	25	Yes
62	29807	5551	44	Yes
63	30282	5552	29	Yes
64	30757	5553	31	Yes
65	31232	5554	30	Yes
66	31707	5555	39	Yes
67	32182	5556	32	Yes
68	32657	5557	38	Yes
69	33132	5558	33	Yes
70	33607	5559	37	Yes
71	34082	5560	35	Yes
72	34557	5561	37	Yes
73	35032	5562	29	Yes
74	35507	5563	37	Yes
75	35982	5564	34	Yes
76	36457	5565	41	Yes
77	36932	5566	29	Yes
78	37407	5567	32	Yes
79	37882	5568	32	Yes
80	38357	5569	30	Yes

TYPE 6 DETECTION PROBABILITY (CONTINUED)

81	38832	5570	30	Yes
82	39307	5571	30	Yes
83	39782	5572	37	Yes
84	40257	5573	32	Yes
85	40732	5574	35	Yes
86	41207	5575	24	Yes
87	41682	5576	27	Yes
88	42157	5577	31	Yes
89	42632	5578	30	Yes
90	43107	5579	30	Yes
91	43582	5580	31	Yes
92	44057	5581	33	Yes
93	44532	5582	27	Yes
94	45007	5583	37	Yes
95	45482	5584	29	Yes
96	45957	5585	34	Yes
97	46432	5586	40	Yes
98	46907	5587	38	Yes
99	47382	5588	33	Yes
100	47857	5589	33	Yes
101	48332	5590	33	Yes
102	48807	5591	31	Yes
103	49282	5592	32	Yes
104	49757	5593	36	Yes
105	50232	5594	35	Yes
106	50707	5595	24	Yes
107	51182	5596	35	Yes
108	51657	5597	42	Yes
109	52132	5598	35	Yes
110	52607	5599	38	Yes
111	53082	5600	36	Yes
112	53557	5601	39	Yes
113	54032	5602	35	Yes
114	54507	5603	32	Yes
115	54982	5604	32	Yes
116	55457	5605	28	Yes
117	55932	5606	34	Yes
118	56407	5607	31	Yes
119	56882	5608	34	Yes
120	57357	5609	35	Yes

TYPE 6 DETECTION PROBABILITY (CONTINUED)

121	57832	5610	41	Yes
122	58307	5611	28	Yes
123	58782	5612	32	Yes
124	59257	5613	35	Yes
125	59732	5614	30	Yes
126	60207	5615	34	Yes
127	60682	5616	36	Yes
128	61157	5617	31	Yes
129	61632	5618	29	Yes
130	62107	5619	30	Yes
131	62582	5620	31	Yes
132	63057	5621	32	Yes
133	63532	5622	34	Yes
134	64007	5623	36	Yes
135	64482	5624	34	Yes
136	64957	5625	28	Yes
137	65432	5626	34	Yes
138	371	5627	33	Yes
139	846	5628	27	Yes
140	1321	5629	36	Yes
141	1796	5630	33	Yes
142	2271	5631	36	Yes
143	2746	5632	30	Yes
144	3221	5633	32	Yes
145	3696	5634	32	Yes
146	4171	5635	35	Yes
147	4646	5636	41	Yes
148	5121	5637	31	Yes
149	5596	5638	30	Yes
150	6071	5639	34	Yes
151	6546	5640	35	Yes
152	7021	5641	33	Yes
153	7496	5642	36	Yes
154	7971	5643	38	Yes
155	8446	5644	31	Yes
156	8921	5645	39	Yes
157	9396	5646	40	Yes
158	9871	5647	31	Yes
159	10346	5648	32	Yes
160	10821	5649	38	Yes
161	11296	5650	42	Yes

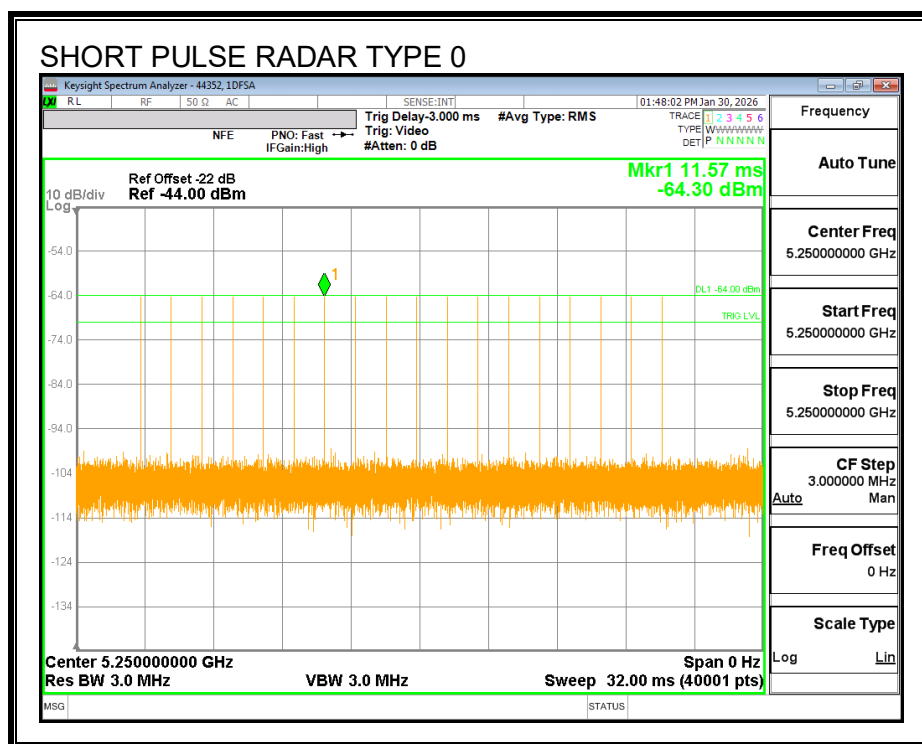
6.6. MASTER DEVICE CONFIGURATION RESULTS FOR 160 MHz BANDWIDTH ISED

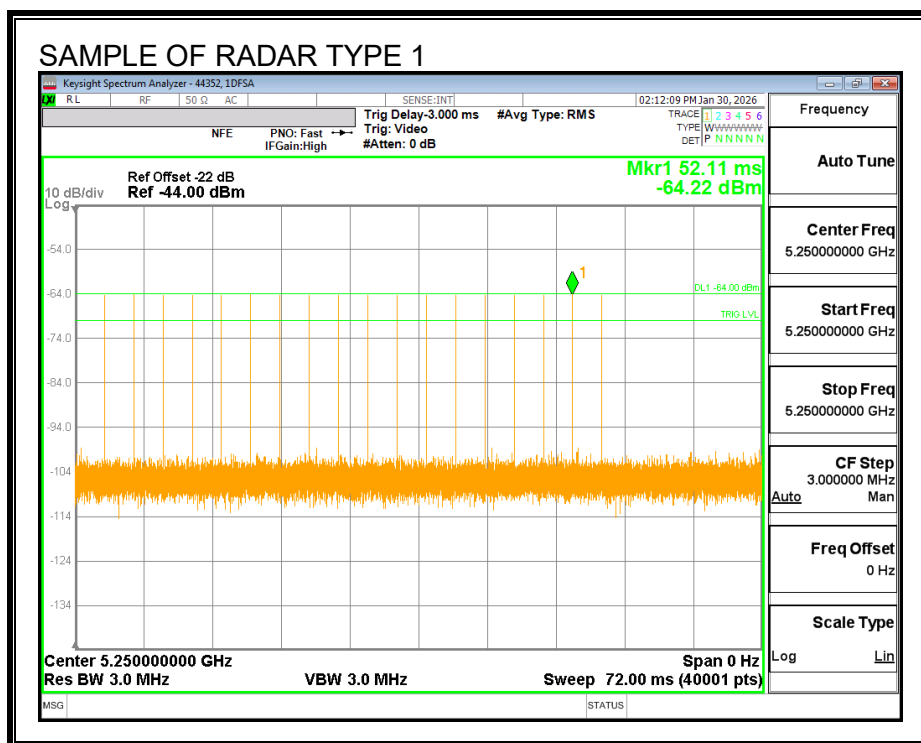
6.6.1. TEST CHANNEL

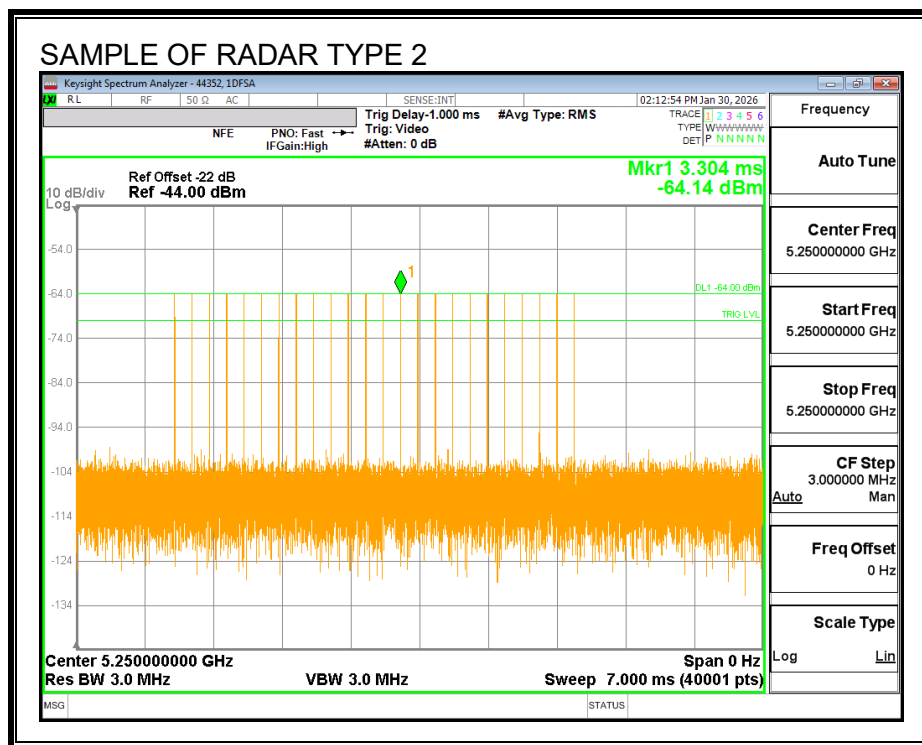
All tests were performed with the EUT set to a channel center frequency of 5250 MHz.

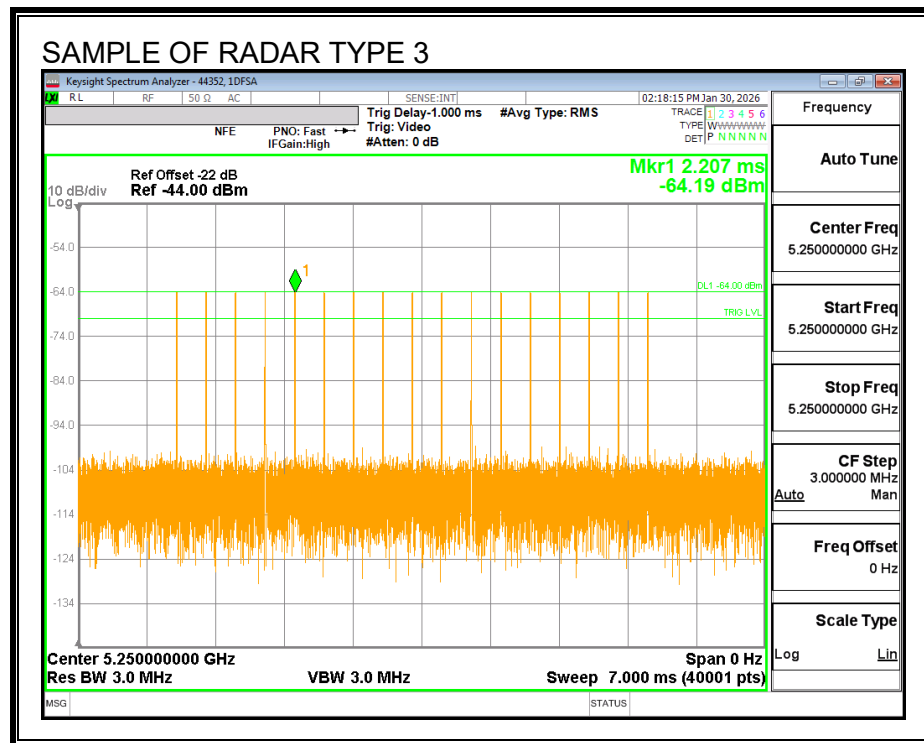
6.6.2. RADAR WAVEFORMS AND TRAFFIC

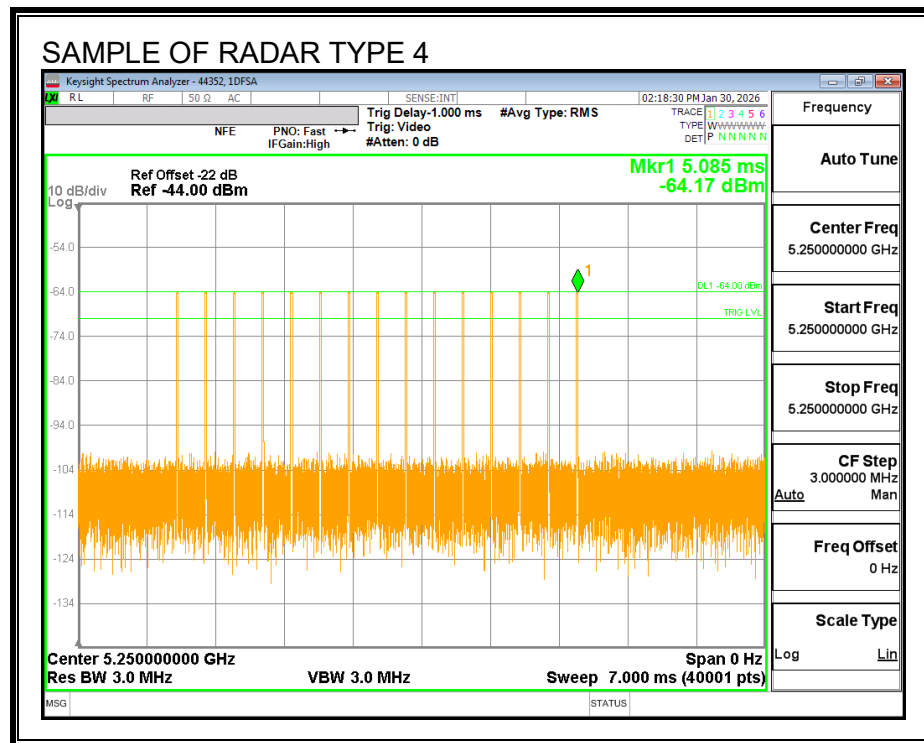
RADAR WAVEFORMS

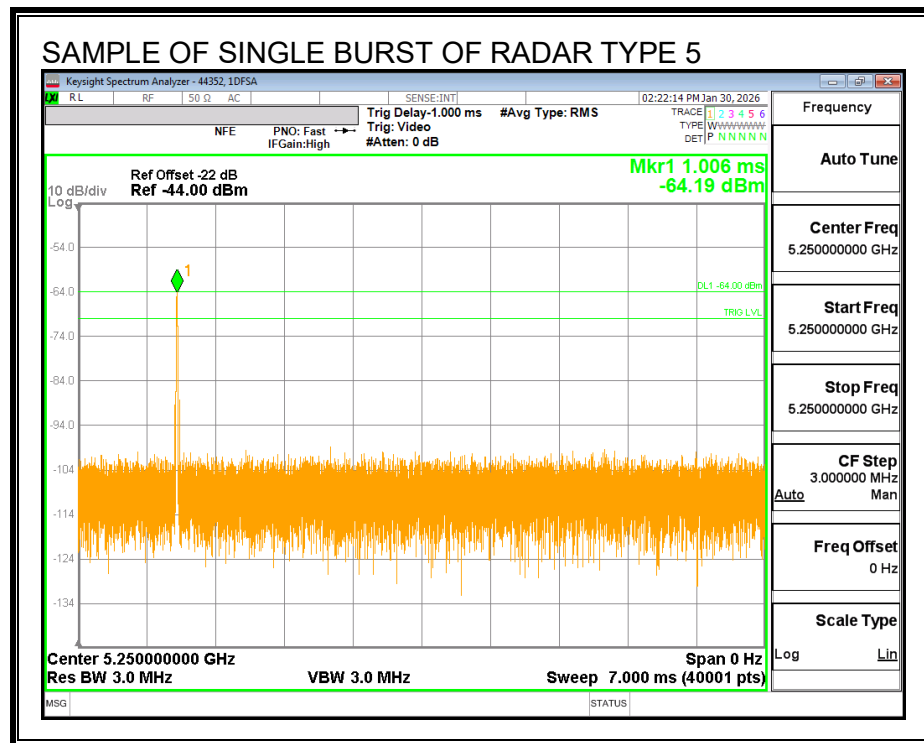


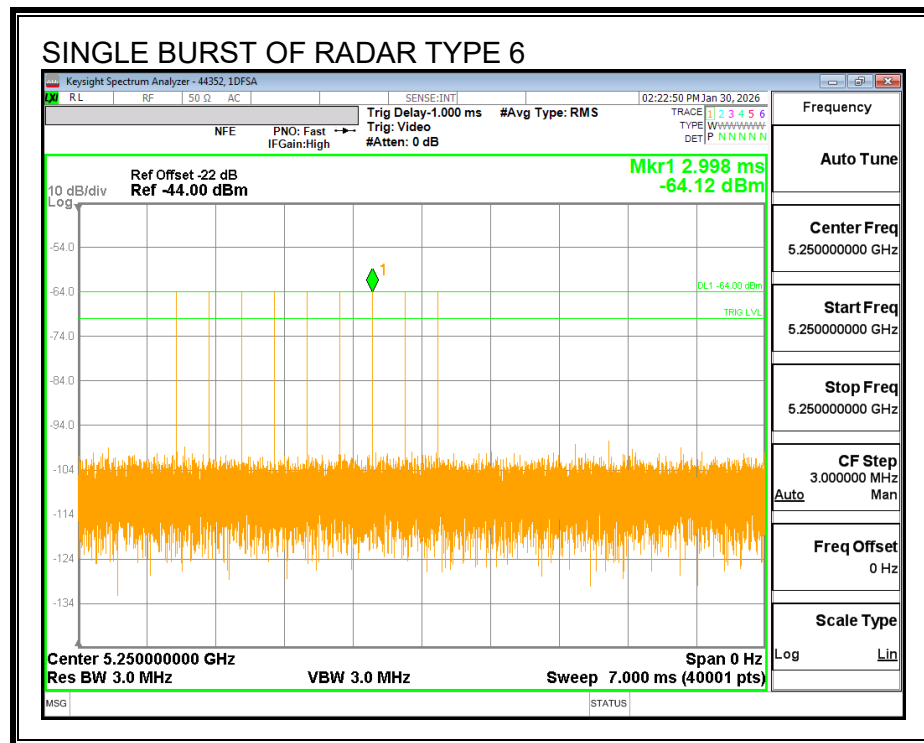




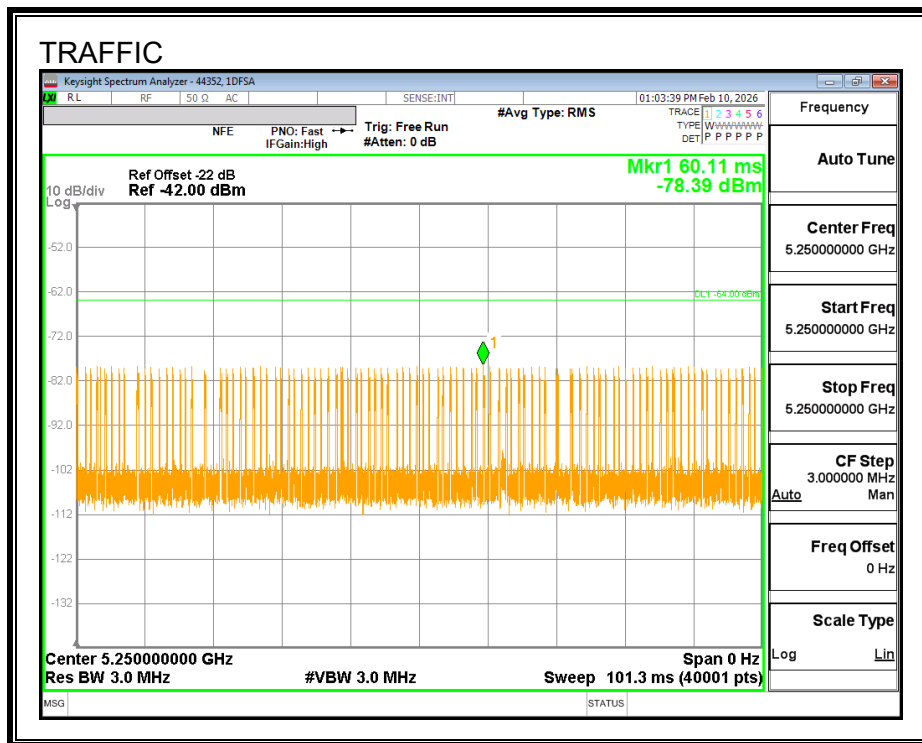




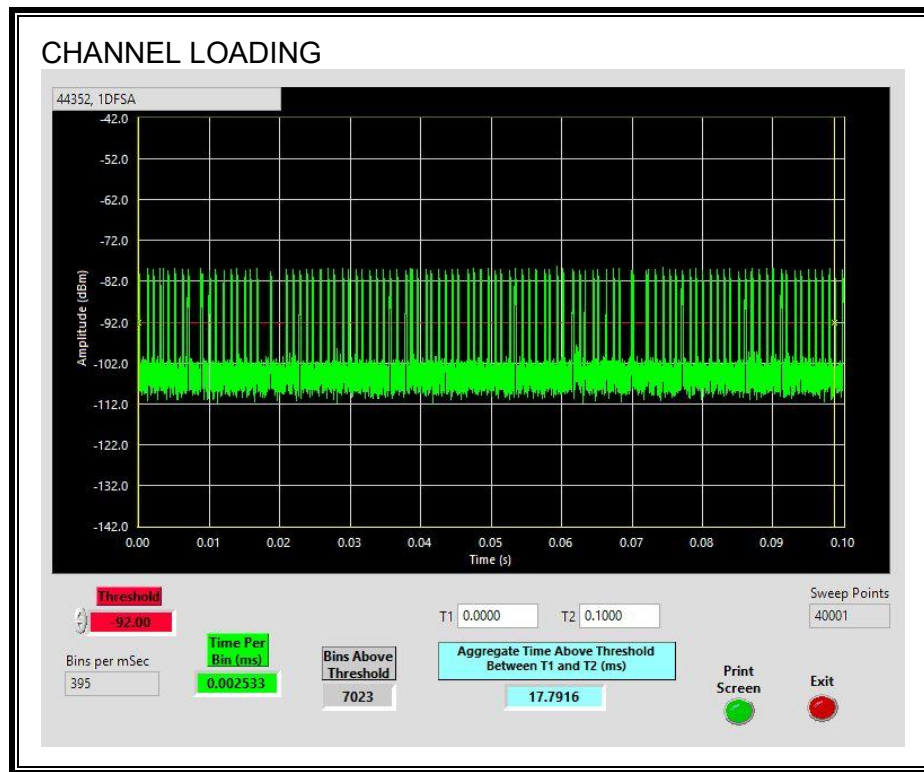




TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 17.7916%.

6.6.3. CHANNEL AVAILABILITY CHECK TIME

PROCEDURE TO DETERMINE INITIAL POWER-UP CYCLE TIME

A link was established on channel then a software command was issued to the EUT to restart radio. The time from the cessation of traffic to the re-initialization of traffic was measured as the time required for the EUT to complete the total power-up cycle. The time to complete the initial power-up period is 60 seconds less than this total power-up time.

PROCEDURE FOR TIMING OF RADAR BURST

A link was established on channel then a software command was issued to the EUT to restart radio. A radar signal was triggered within 0 to 6 seconds after the initial power-up period, and transmissions on the channel were monitored on the spectrum analyzer.

The Non-Occupancy list was cleared. A link was established on channel then a software command was issued to the EUT to restart radio. A radar signal was triggered within 54 to 60 seconds after the initial power-up period, and transmissions on the channel were monitored on the spectrum analyzer.

QUANTITATIVE RESULTS

No Radar Triggered

Timing of Reboot (sec)	Timing of Start of Traffic (sec)	Total Power-up Cycle Time (sec)	Initial Power-up Cycle Time (sec)
15.44	90.18	74.7	14.7

Radar Near Beginning of CAC

Timing of Reboot (sec)	Timing of Radar Burst (sec)	Radar Relative to Reboot (sec)	Radar Relative to Start of CAC (sec)
15.41	30.86	15.5	0.7

Radar Near End of CAC

Timing of Reboot (sec)	Timing of Radar Burst (sec)	Radar Relative to Reboot (sec)	Radar Relative to Start of CAC (sec)
15.43	88.85	73.4	58.7

QUALITATIVE RESULTS

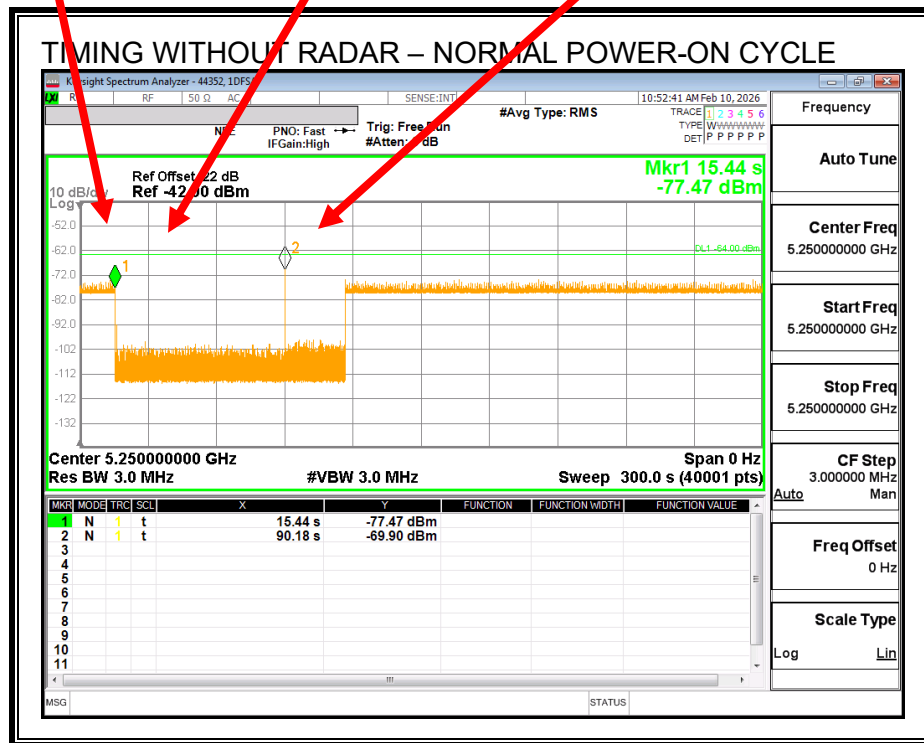
Timing of Radar Burst	Display on Control Computer	Spectrum Analyzer Display
No Radar Triggered	EUT marks Channel as active	Transmissions begin on channel after completion of the initial power-up cycle and the CAC
Within 0 to 6 second window	EUT indicates radar detected	No transmissions on channel
Within 54 to 60 second window	EUT indicates radar detected	No transmissions on channel

TIMING WITHOUT RADAR DURING CAC

AP is rebooted
Traffic ceases
Start of Initial Power-up cycle

End of Initial Power-up cycle
Start of CAC

End of CAC
Traffic is Initiated



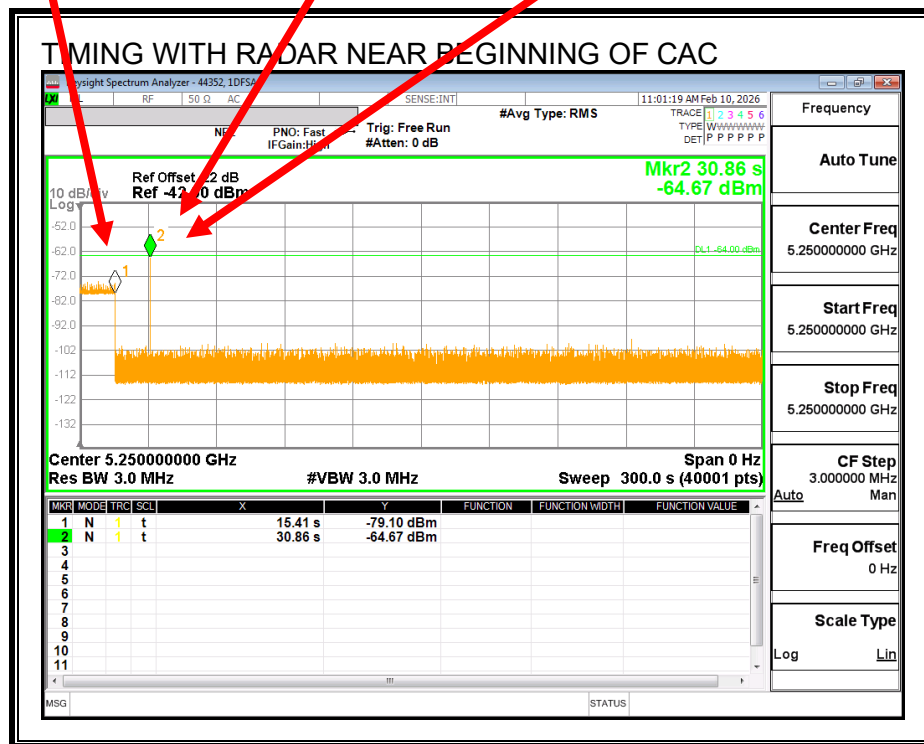
Transmissions begin on channel after completion of the initial power-up cycle and the CAC.

TIMING WITH RADAR NEAR BEGINNING OF CAC

AP is rebooted
Traffic ceases
Start of Initial Power-up cycle

End of Initial Power-up cycle
Start of CAC

Radar Signal Applied



No EUT transmissions were observed after the radar signal.

TIMING WITH RADAR NEAR END OF CAC

AP is rebooted

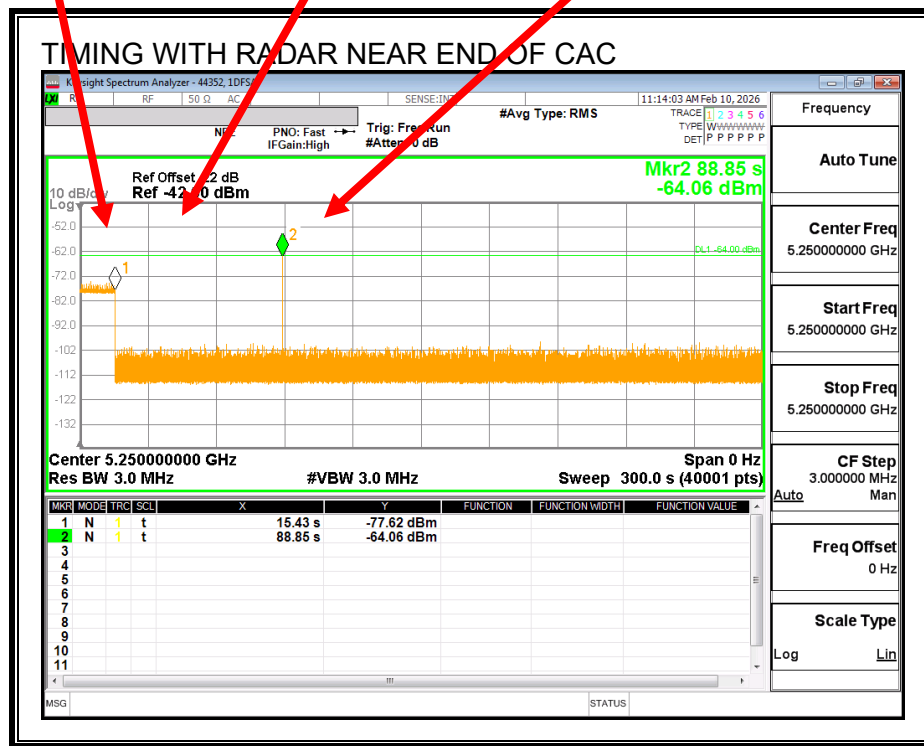
Traffic ceases

Start of Initial Power-up cycle

End of Initial Power-up cycle

Start of CAC

Radar Signal Applied



No EUT transmissions were observed after the radar signal.

6.6.4. OVERLAPPING CHANNEL TESTS

RESULTS

The channel spacing is not less than the channel bandwidth therefore the EUT does not have an overlapping channel plan.

These tests are not applicable.

6.6.5. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

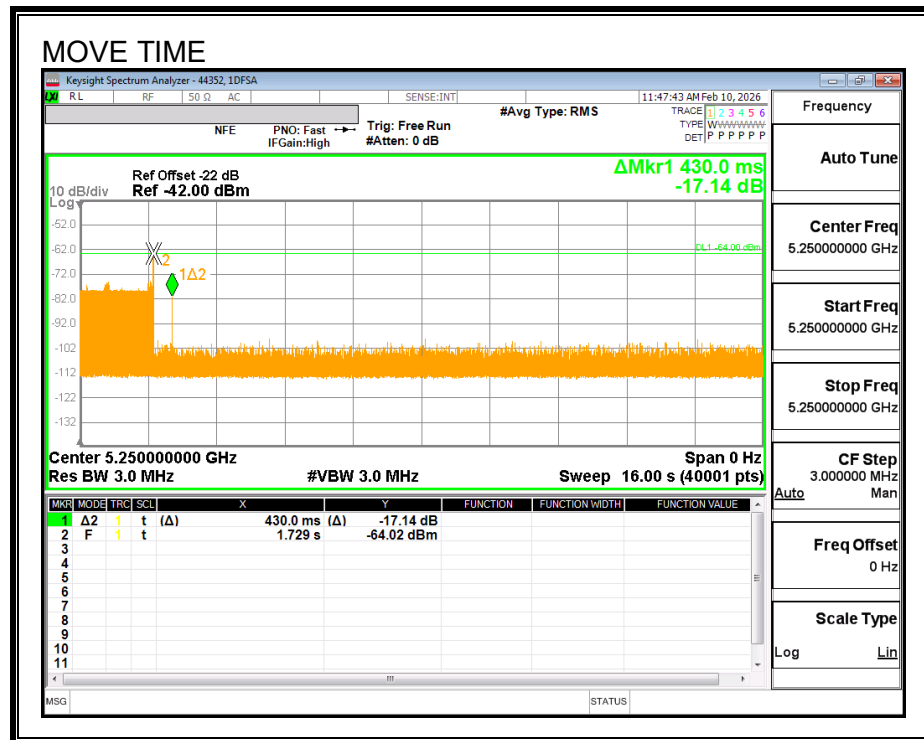
Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

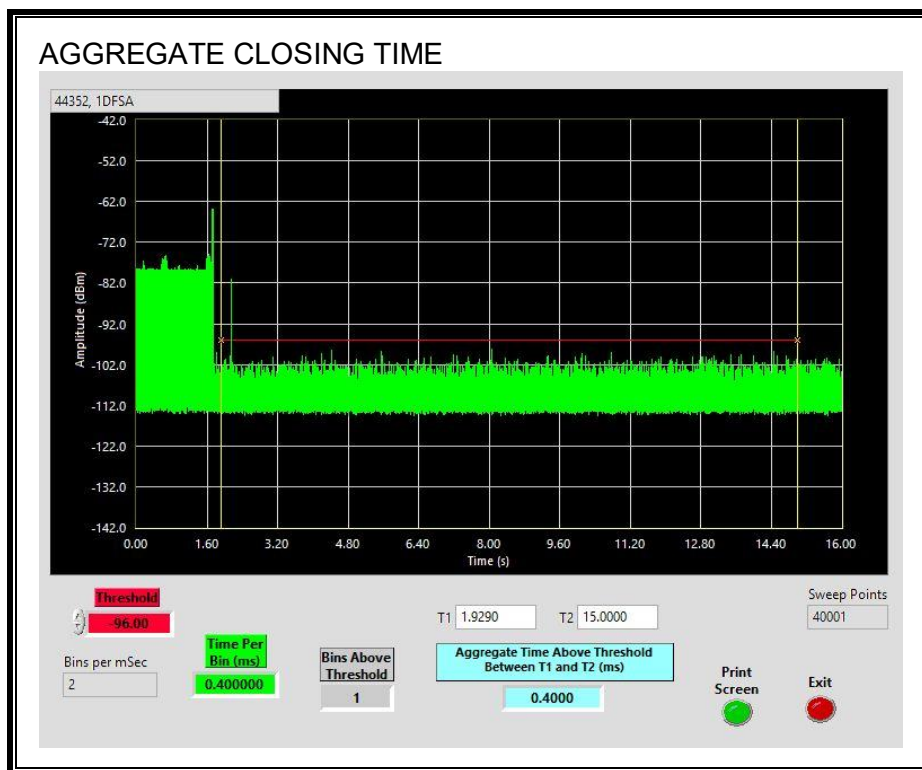
Channel Move Time (sec)	Limit (sec)
0.43	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.4	60



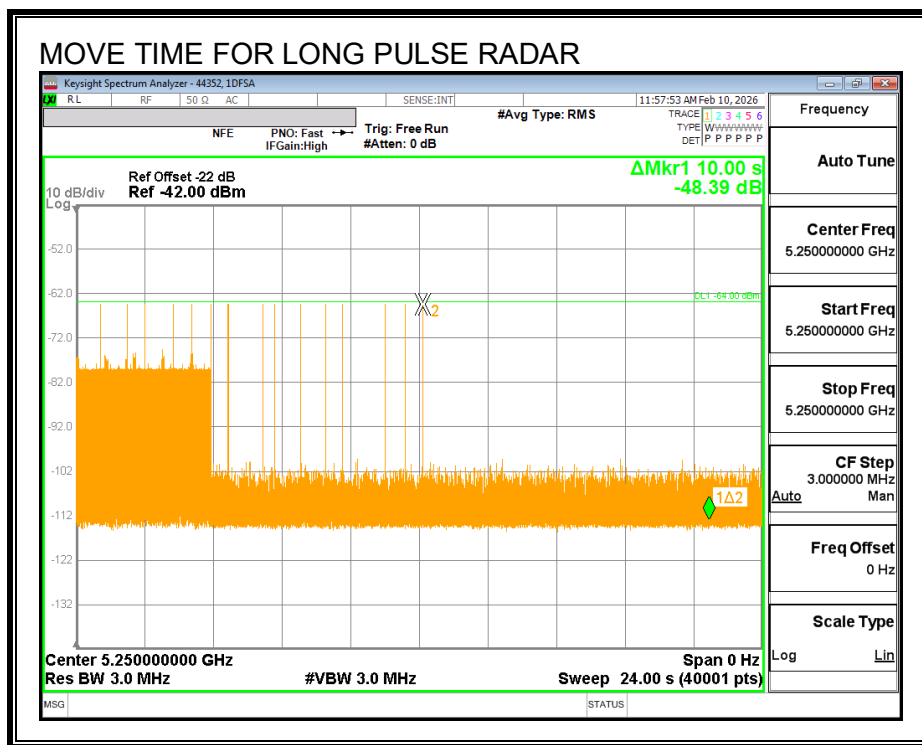
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



LONG PULSE CHANNEL MOVE TIME

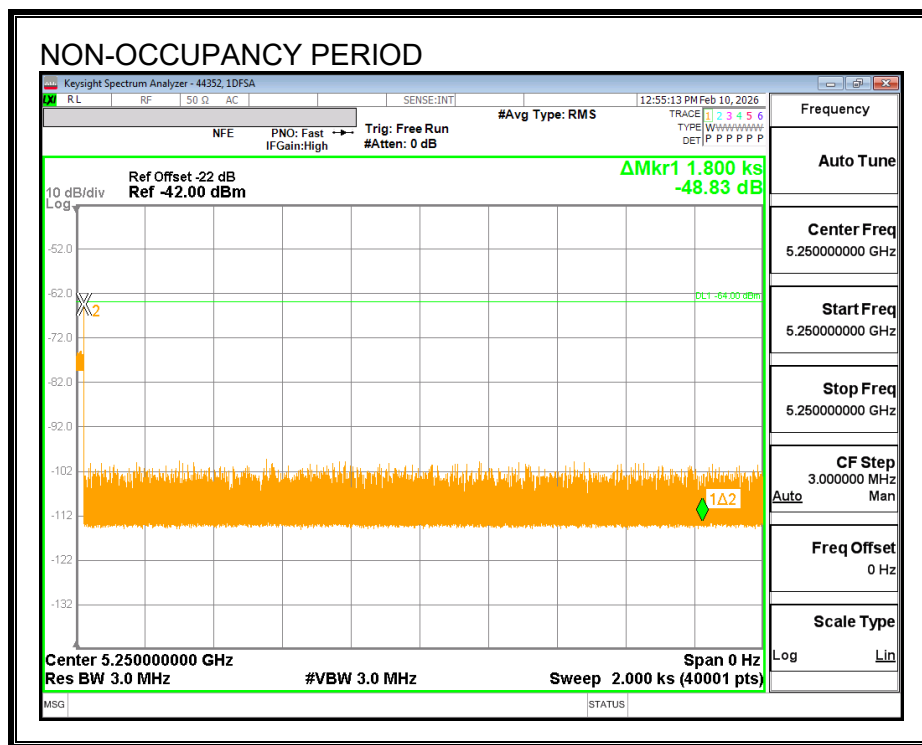
The traffic ceases prior to 10 seconds after the end of the radar waveform.



6.6.6. NON-OCCUPANCY PERIOD

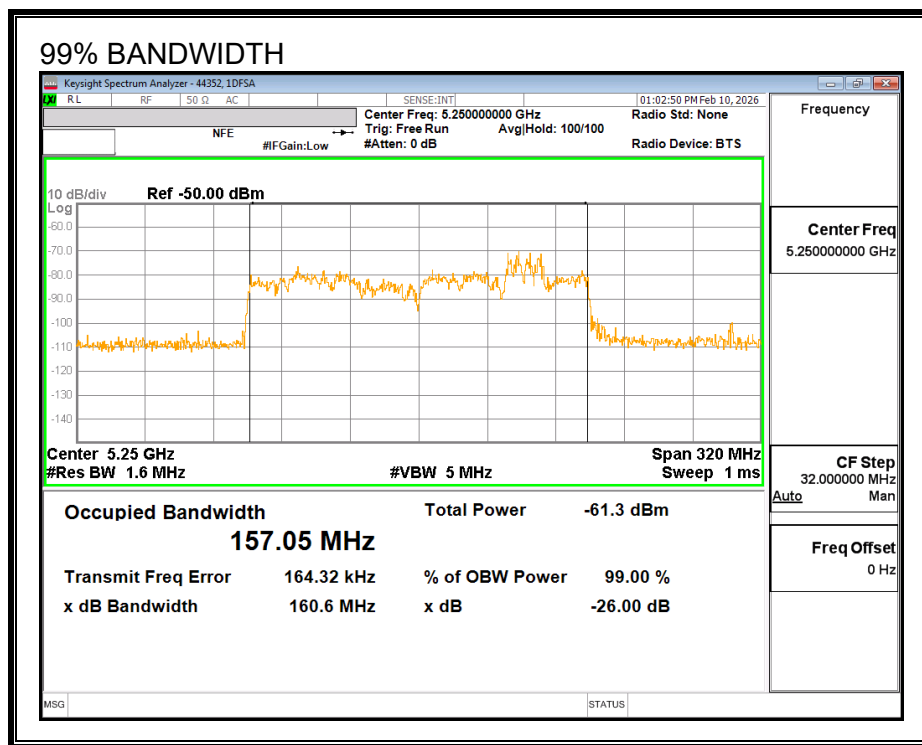
RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.



6.6.7. DETECTION BANDWIDTH

REFERENCE PLOT OF 99% POWER BANDWIDTH



RESULTS

F_L (MHz)	F_H (MHz)	Detection Bandwidth (MHz)	Applicable 99% Power Bandwidth (MHz)	Ratio of Detection BW to 99% Power BW (%)	Minimum Limit (%)
5250	5330	80	78.525	101.9	100

Note: Channels that occupy frequencies below the 5250 MHz to 5350 MHz band are not subject to the requirements related to DFS. Therefore, only the portion of the 99% power Bandwidth residing in the 5250 MHz to 5350 MHz band has been taken into consideration for the Detection Bandwidth requirement.

Applicable 99% Power Bandwidth = (Measured 99% Power Bandwidth)/2

DETECTION BANDWIDTH PROBABILITY

DETECTION BANDWIDTH PROBABILITY RESULTS				
Detection Bandwidth Test Results				
FCC Type 0 Waveform: 1 us Pulse Width, 1428 us PRI, 18 Pulses per Burst				
Frequency (MHz)	Number of Trials	Number Detected	Detection (%)	Mark
5249	1	0	0	FL
5250	10	10	100	
5255	10	10	100	
5260	10	10	100	
5265	10	10	100	
5270	10	10	100	
5275	10	10	100	
5280	10	10	100	
5285	10	10	100	
5290	10	10	100	
5295	10	10	100	
5300	10	10	100	
5305	10	10	100	
5310	10	10	100	
5315	10	10	100	
5320	10	10	100	FH
5325	10	10	100	
5330	10	10	100	
5331	1	0	0	

6.6.8. IN-SERVICE MONITORING

RESULTS

FCC Radar Test Summary										
Signal Type	Number of Trials	Detection (%)	Limit (%)	Pass/Fail	Detection Bandwidth		OBW	Test Location	Employee Number	In-Service Monitoring Version
					FL	FH				
FCC Short Pulse Type 1	30	100.00	60	Pass	5250	5330	157.05	1DFS1	44352	v2023.11.3
FCC Short Pulse Type 2	30	100.00	60	Pass	5250	5330	157.05	1DFS1	44352	v2023.11.3
FCC Short Pulse Type 3	30	83.33	60	Pass	5250	5330	157.05	1DFS1	44352	v2023.11.3
FCC Short Pulse Type 4	30	96.67	60	Pass	5250	5330	157.05	1DFS1	44352	v2023.11.3
Aggregate		95.00	80	Pass						
FCC Long Pulse Type 5	30	100.00	80	Pass	5250	5330	78.53	1DFS1	44352	v2023.11.3
FCC Hopping Type 6	81	100.00	70	Pass	5250	5330		1DFS1	44352	v2023.11.3

TYPE 1 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 1						
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Test (A/B)	Frequency (MHz)	Successful Detection (Yes/No)
1001	1	3066	18	A	5308	Yes
1002	1	938	57	A	5269	Yes
1003	1	638	83	A	5303	Yes
1004	1	878	61	A	5306	Yes
1005	1	558	95	A	5276	Yes
1006	1	738	72	A	5313	Yes
1007	1	678	78	A	5322	Yes
1008	1	618	86	A	5286	Yes
1009	1	898	59	A	5302	Yes
1010	1	538	99	A	5290	Yes
1011	1	578	92	A	5290	Yes
1012	1	518	102	A	5325	Yes
1013	1	658	81	A	5302	Yes
1014	1	758	70	A	5316	Yes
1015	1	918	58	A	5306	Yes
1016	1	984	54	B	5325	Yes
1017	1	810	66	B	5288	Yes
1018	1	1637	33	B	5320	Yes
1019	1	1593	34	B	5259	Yes
1020	1	1355	39	B	5266	Yes
1021	1	1440	37	B	5298	Yes
1022	1	1331	40	B	5294	Yes
1023	1	2899	19	B	5272	Yes
1024	1	1725	31	B	5316	Yes
1025	1	875	61	B	5293	Yes
1026	1	2379	23	B	5328	Yes
1027	1	1658	32	B	5280	Yes
1028	1	2096	26	B	5313	Yes
1029	1	2858	19	B	5265	Yes
1030	1	2073	26	B	5289	Yes

TYPE 2 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 2					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
2001	3.4	177	24	5288	Yes
2002	3.4	158	26	5275	Yes
2003	1.1	150	27	5297	Yes
2004	3.5	173	29	5277	Yes
2005	1.5	212	23	5262	Yes
2006	4.1	202	29	5281	Yes
2007	4.4	164	24	5295	Yes
2008	1.2	158	23	5296	Yes
2009	3.7	205	29	5324	Yes
2010	2.9	164	28	5271	Yes
2011	1.5	178	27	5321	Yes
2012	4.9	223	24	5277	Yes
2013	1.8	159	27	5299	Yes
2014	3.6	208	24	5300	Yes
2015	4.8	191	28	5256	Yes
2016	2.6	207	25	5281	Yes
2017	2.1	194	29	5273	Yes
2018	4.3	214	24	5280	Yes
2019	4	205	25	5293	Yes
2020	2.2	191	26	5315	Yes
2021	4.3	187	28	5267	Yes
2022	5	176	27	5290	Yes
2023	3.1	219	28	5301	Yes
2024	4	213	28	5282	Yes
2025	2.4	222	26	5256	Yes
2026	1.6	220	26	5259	Yes
2027	4.3	152	25	5263	Yes
2028	3.6	197	29	5267	Yes
2029	2.7	214	25	5261	Yes
2030	2.3	225	29	5323	Yes

TYPE 3 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 3					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
3001	8.1	300	17	5289	Yes
3002	5.4	347	16	5258	No
3003	9.9	309	17	5312	Yes
3004	7.5	369	17	5284	Yes
3005	7.1	343	18	5282	Yes
3006	10	298	16	5264	Yes
3007	7.5	285	17	5326	Yes
3008	8.3	253	16	5303	Yes
3009	6.1	386	17	5326	Yes
3010	7.2	367	17	5255	Yes
3011	5.1	395	16	5321	No
3012	9.2	388	18	5327	Yes
3013	5.1	429	17	5298	No
3014	6.7	317	17	5310	Yes
3015	5.5	371	16	5264	Yes
3016	5	405	17	5320	No
3017	6.5	472	16	5282	Yes
3018	8.9	268	18	5311	Yes
3019	8.2	480	18	5252	Yes
3020	5.9	289	16	5274	Yes
3021	5.5	264	18	5329	Yes
3022	8.4	470	17	5251	Yes
3023	5.9	457	16	5327	Yes
3024	6.7	425	18	5270	Yes
3025	9.6	307	16	5255	Yes
3026	5.5	420	17	5293	Yes
3027	8.6	315	18	5302	Yes
3028	7.6	442	17	5315	No
3029	8.6	349	16	5306	Yes
3030	7.8	489	18	5259	Yes

TYPE 4 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 4					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
4001	17.9	291	15	5282	Yes
4002	16.9	326	13	5313	Yes
4003	15.1	392	16	5261	Yes
4004	14.6	440	16	5294	Yes
4005	13.3	401	14	5260	Yes
4006	18.6	461	15	5313	Yes
4007	17.9	435	13	5304	Yes
4008	19	390	12	5288	Yes
4009	18.7	377	16	5286	Yes
4010	10.3	345	15	5264	Yes
4011	15.9	478	14	5292	Yes
4012	18	341	13	5251	Yes
4013	19.4	487	15	5301	Yes
4014	12	363	12	5326	Yes
4015	13.9	270	16	5296	Yes
4016	12.3	409	14	5314	Yes
4017	14.8	345	14	5300	Yes
4018	13.7	498	16	5291	Yes
4019	11.9	313	14	5255	Yes
4020	11.4	360	15	5281	No
4021	10.1	322	13	5274	Yes
4022	15.4	382	14	5285	Yes
4023	14.7	356	12	5308	Yes
4024	15.8	311	16	5315	Yes
4025	15.5	431	12	5256	Yes
4026	17.2	399	13	5271	Yes
4027	12.7	399	12	5260	Yes
4028	14.8	262	12	5291	Yes
4029	16.2	407	13	5276	Yes
4030	18.9	283	15	5260	Yes

TYPE 5 DETECTION PROBABILITY

Data Sheet for FCC Long Pulse Radar Type 5		
Trial	Frequency (MHz)	Successful Detection (Yes/No)
1	5290	Yes
2	5290	Yes
3	5290	Yes
4	5290	Yes
5	5290	Yes
6	5290	Yes
7	5290	Yes
8	5290	Yes
9	5290	Yes
10	5290	Yes
11	5257	Yes
12	5254	Yes
13	5256	Yes
14	5259	Yes
15	5259	Yes
16	5257	Yes
17	5255	Yes
18	5253	Yes
19	5255	Yes
20	5253	Yes
21	5327	Yes
22	5325	Yes
23	5324	Yes
24	5326	Yes
25	5321	Yes
26	5325	Yes
27	5324	Yes
28	5327	Yes
29	5325	Yes
30	5326	Yes

Note: The Type 5 randomized parameters tested are located in Appendix A.

TYPE 6 DETECTION PROBABILITY

Data Sheet for FCC Hopping Radar Type 6				
1 us Pulse Width, 333 us PRI, 9 Pulses per Burst, 1 Burst per Hop				
NTIA August 2005 Hopping Sequence				
Trial	Starting Index Within Sequence	Signal Generator Frequency (MHz)	Hops within Detection BW	Successful Detection (Yes/No)
1	558	5250	13	Yes
2	1033	5251	13	Yes
3	1508	5252	21	Yes
4	1983	5253	14	Yes
5	2458	5254	13	Yes
6	2933	5255	23	Yes
7	3408	5256	23	Yes
8	3883	5257	21	Yes
9	4358	5258	23	Yes
10	4833	5259	15	Yes
11	5308	5260	16	Yes
12	5783	5261	16	Yes
13	6258	5262	14	Yes
14	6733	5263	18	Yes
15	7208	5264	23	Yes
16	7683	5265	15	Yes
17	8158	5266	19	Yes
18	8633	5267	14	Yes
19	9108	5268	13	Yes
20	9583	5269	17	Yes
21	10058	5270	17	Yes
22	10533	5271	18	Yes
23	11008	5272	16	Yes
24	11483	5273	22	Yes
25	11958	5274	17	Yes
26	12433	5275	22	Yes
27	12908	5276	18	Yes
28	13383	5277	18	Yes
29	13858	5278	20	Yes
30	14333	5279	16	Yes
31	14808	5280	17	Yes
32	15283	5281	22	Yes
33	15758	5282	20	Yes
34	16233	5283	15	Yes
35	16708	5284	17	Yes
36	17183	5285	18	Yes
37	17658	5286	13	Yes
38	18133	5287	18	Yes
39	18608	5288	19	Yes
40	19083	5289	22	Yes

TYPE 6 DETECTION PROBABILITY (CONTINUED)

41	19558	5290	20	Yes
42	20033	5291	20	Yes
43	20508	5292	20	Yes
44	20983	5293	16	Yes
45	21458	5294	14	Yes
46	21933	5295	20	Yes
47	22408	5296	13	Yes
48	22883	5297	19	Yes
49	23358	5298	20	Yes
50	23833	5299	19	Yes
51	24308	5300	23	Yes
52	24783	5301	15	Yes
53	25258	5302	14	Yes
54	25733	5303	21	Yes
55	26208	5304	17	Yes
56	26683	5305	18	Yes
57	27158	5306	15	Yes
58	27633	5307	18	Yes
59	28108	5308	16	Yes
60	28583	5309	17	Yes
61	29058	5310	20	Yes
62	29533	5311	17	Yes
63	30008	5312	19	Yes
64	30483	5313	13	Yes
65	30958	5314	17	Yes
66	31433	5315	18	Yes
67	31908	5316	15	Yes
68	32383	5317	16	Yes
69	32858	5318	17	Yes
70	33333	5319	12	Yes
71	33808	5320	21	Yes
72	34283	5321	15	Yes
73	34758	5322	23	Yes
74	35233	5323	15	Yes
75	35708	5324	17	Yes
76	36183	5325	18	Yes
77	36658	5326	21	Yes
78	37133	5327	16	Yes
79	37608	5328	11	Yes
80	38083	5329	18	Yes
81	38558	5330	14	Yes

6.7. BRIDGE MODE RESULTS

Per KDB 905462 D02, Section 5.1 (footnote 2):

Networks Access Points with Bridge and/or MESH modes of operation are permitted to operate in the DFS bands but must employ a DFS function. The functionality of the Bridge mode as specified in §15.403(a) must be validated in the DFS test report. Devices operating as relays where they act as master and client must also employ DFS function for the master. The method used to validate the functionality must be documented and validation data must be documented. Bridge mode can be validated by performing a test statistical performance check (Section 7.8.4) on any one of the radar types. This is an abbreviated test to verify DFS functionality. MESH mode operational methodology must be submitted in the application for certification for evaluation by the FCC.

This device does not support Bridge Mode therefore this test was not performed.

6.8. APPLICABLE TESTS FOR CLIENT DEVICE CONFIGURATION

6.8.1. APPLICABILITY OF MASTER DEVICE CONFIGURATION TEST RESULTS

The EUT is identical for the two configurations: Master Device, and Client with Radar Detection. Therefore, the performance of the EUT in the Client Device configuration, when the Client detects a radar signal, is represented by the above tests of the Master Device Configuration.

6.8.2. ADDITIONAL APPLICABLE TESTS OF CLIENT DEVICE

Per KDB 905462 D02 section 5.1.2, clause c):

“If a Client Device is performing In-Service Monitoring and detects a Radar Waveform above the DFS Detection Threshold, it will inform the Master Device. This is equivalent to the Master Device detecting the Radar Waveform and d) through f) of section 5.1.1 apply”.

Therefore, the following two test conditions must be performed to demonstrate compliance:

Channel shutdown tests to measure the performance of the Client Device configuration, in response to the detection of a radar signal by the Master Device, are applicable.

Channel shutdown tests to measure the performance of the Master Device configuration, in response to the detection of a radar signal by the Client Device, are applicable.

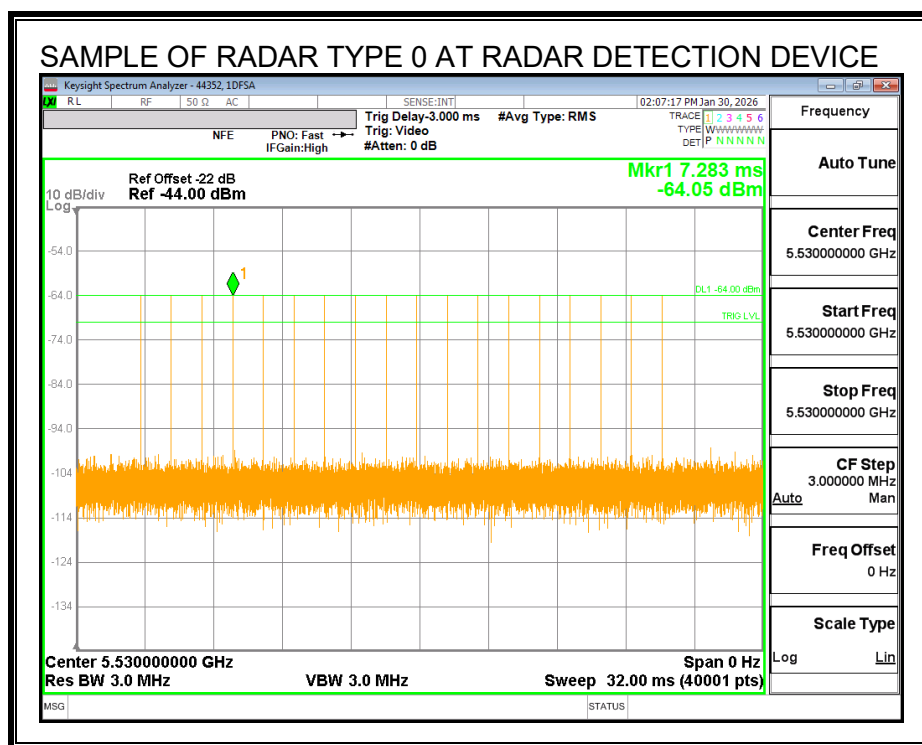
6.9. CLIENT DEVICE CONFIGURATION RESULTS FOR 80 MHz BANDWIDTH

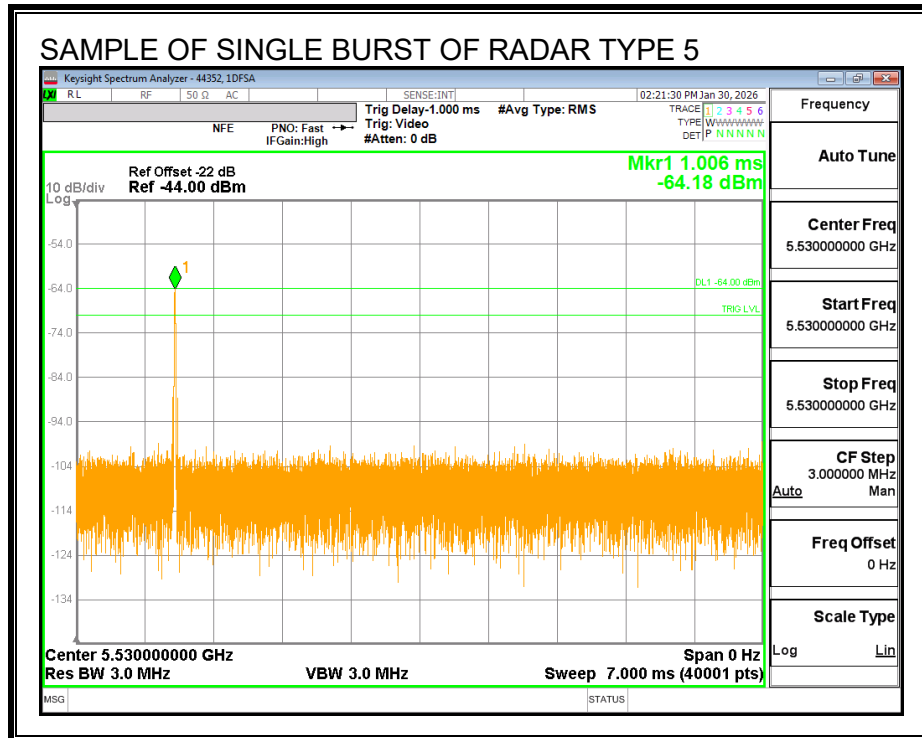
6.9.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5530 MHz.

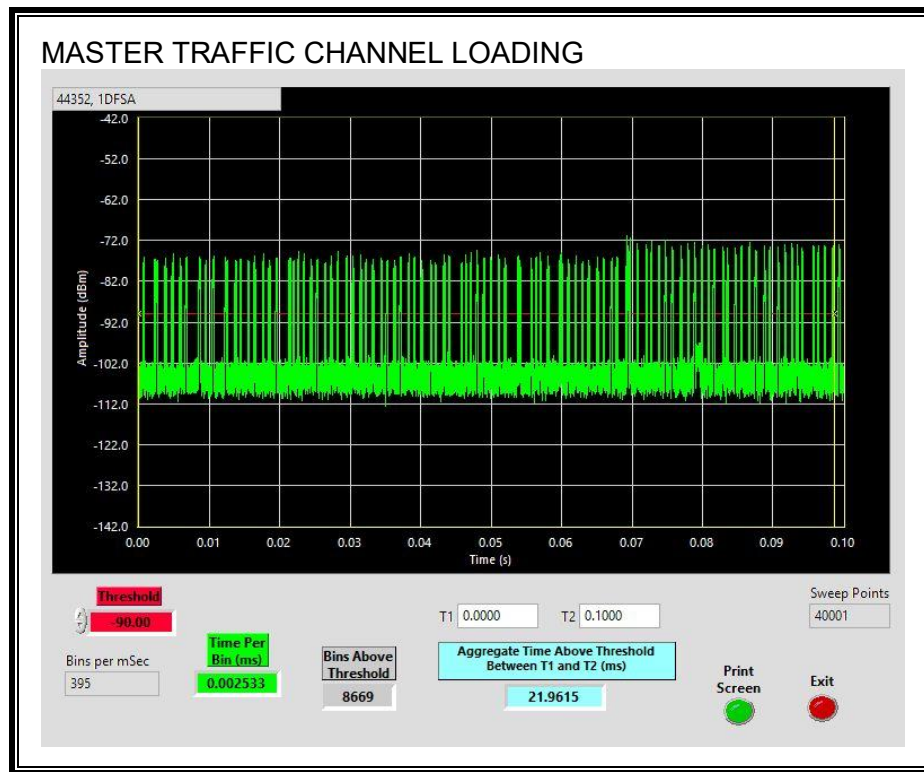
6.9.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



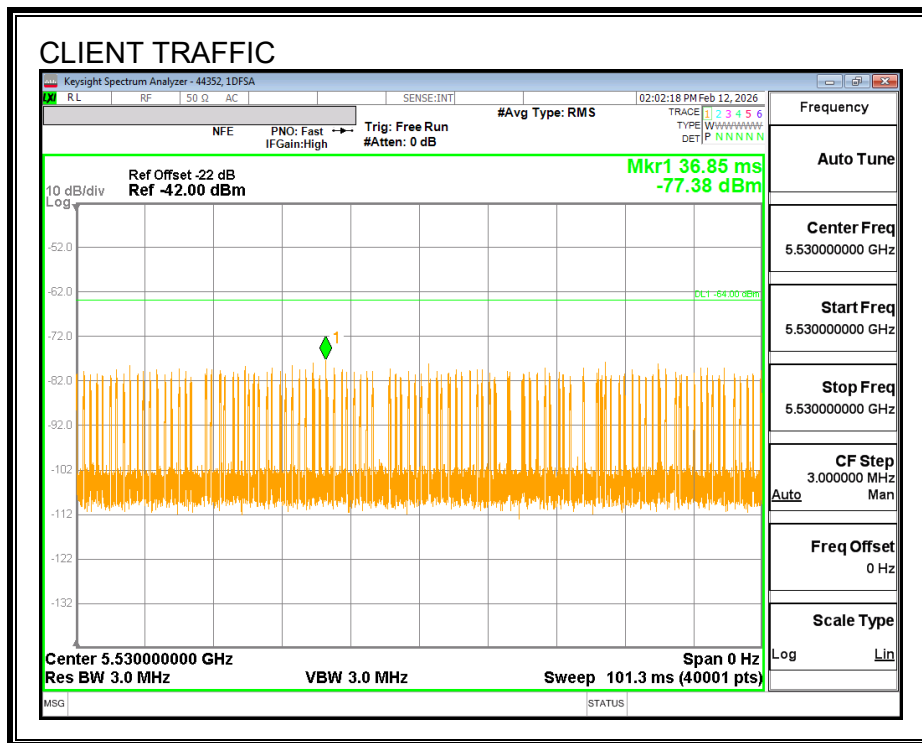


CHANNEL LOADING

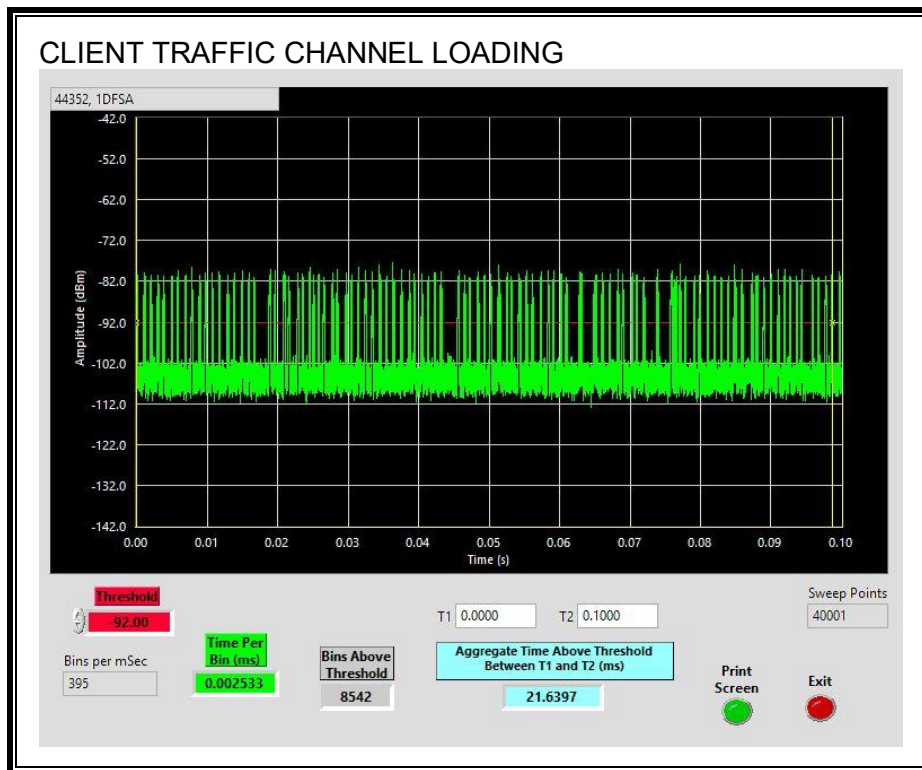


The level of traffic loading on the channel by the EUT is 21.9615%.

TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 21.6397%.

6.9.3. MOVE AND CLOSING TIME OF CLIENT DEVICE IN RESPONSE TO DETECTION BY MASTER DEVICE

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

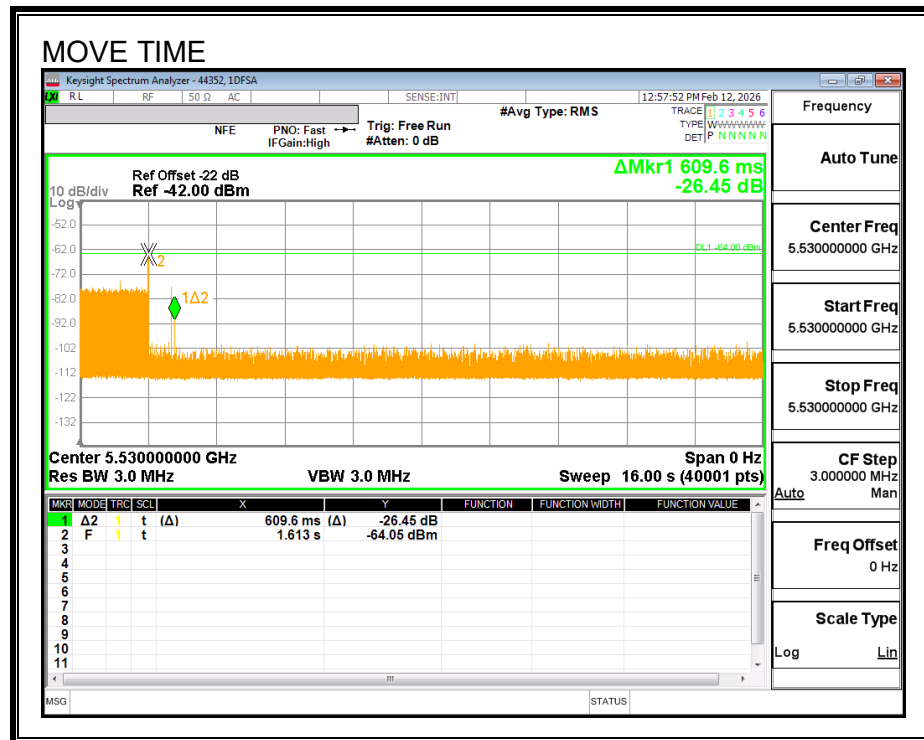
Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

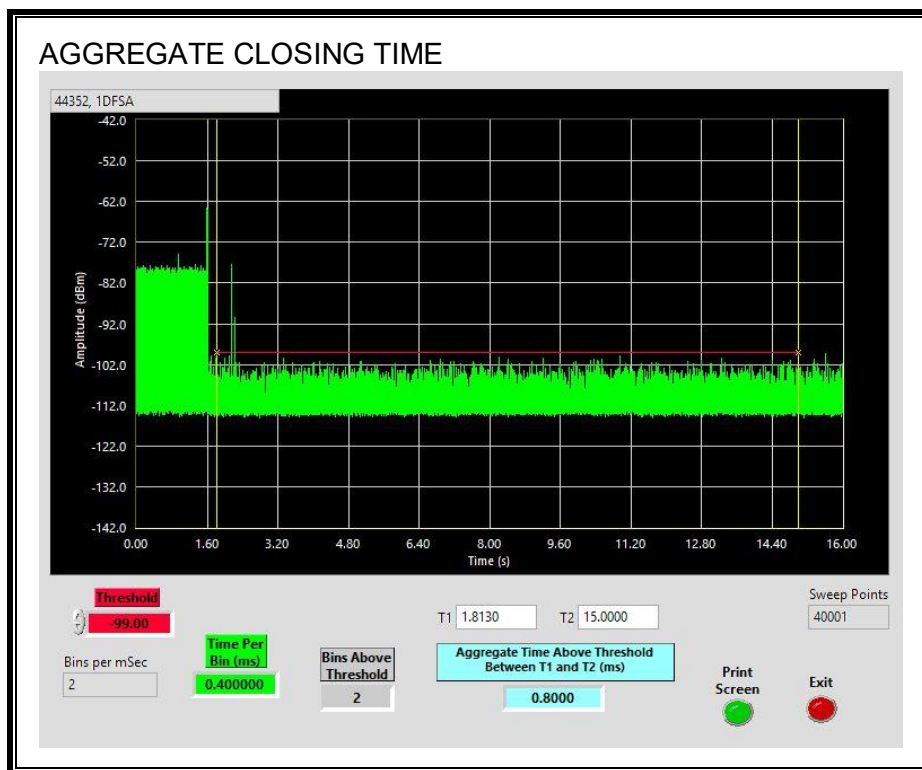
Channel Move Time (sec)	Limit (sec)
0.6096	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.8	60



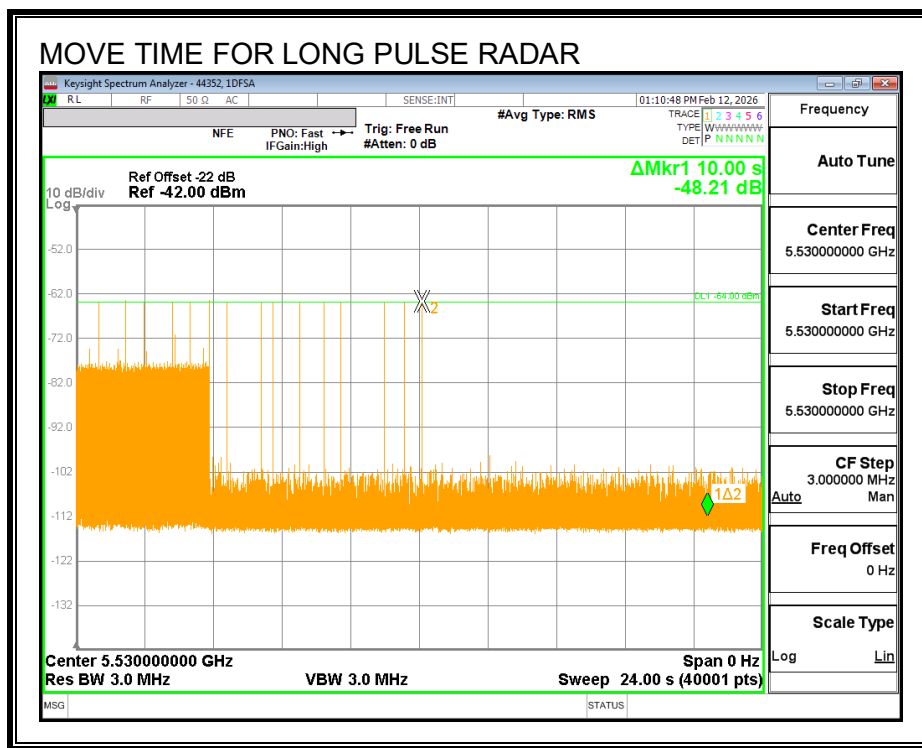
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



LONG PULSE CHANNEL MOVE TIME

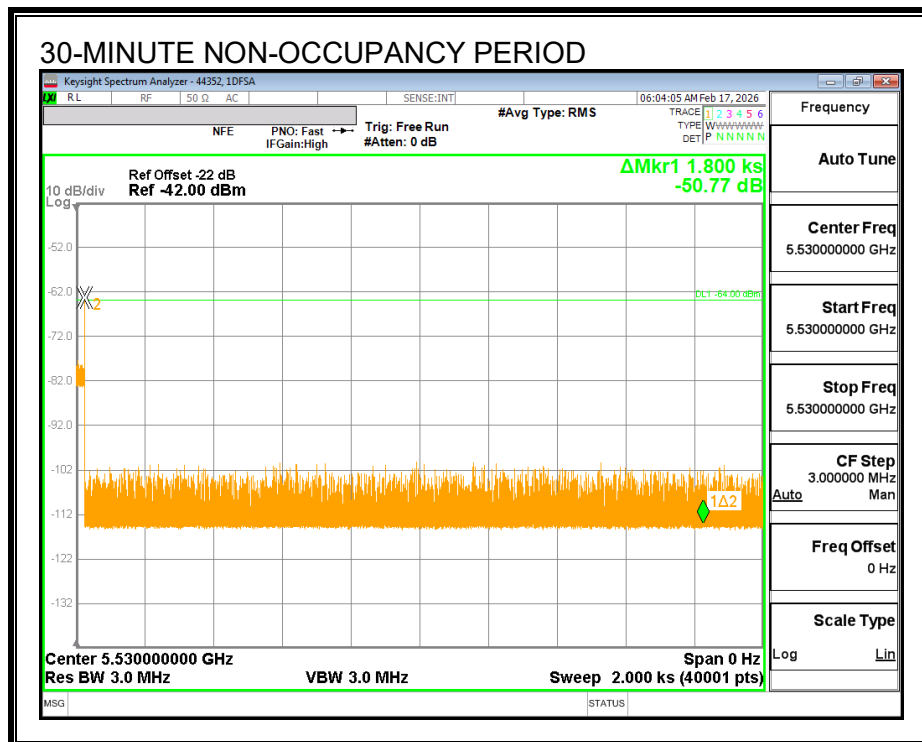
The traffic ceases prior to 10 seconds after the end of the radar waveform.



6.9.4. NON-OCCUPANCY PERIOD OF CLIENT IN RESPONSE TO DETECTION BY MASTER DEVICE

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.



6.9.5. MOVE AND CLOSING TIME OF MASTER DEVICE IN RESPONSE TO DETECTION BY CLIENT DEVICE

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

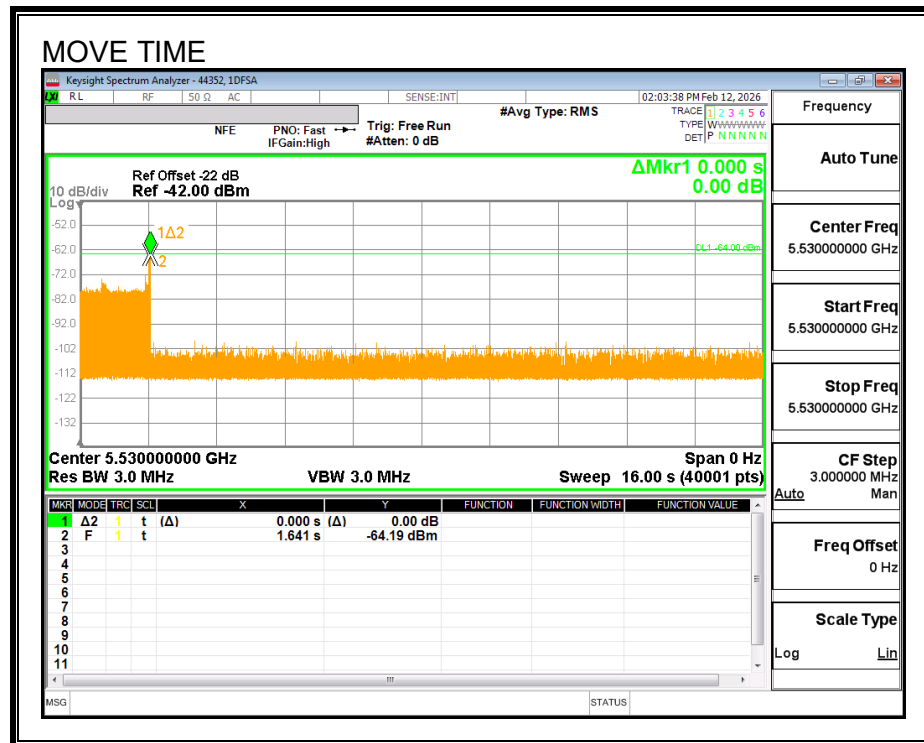
Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

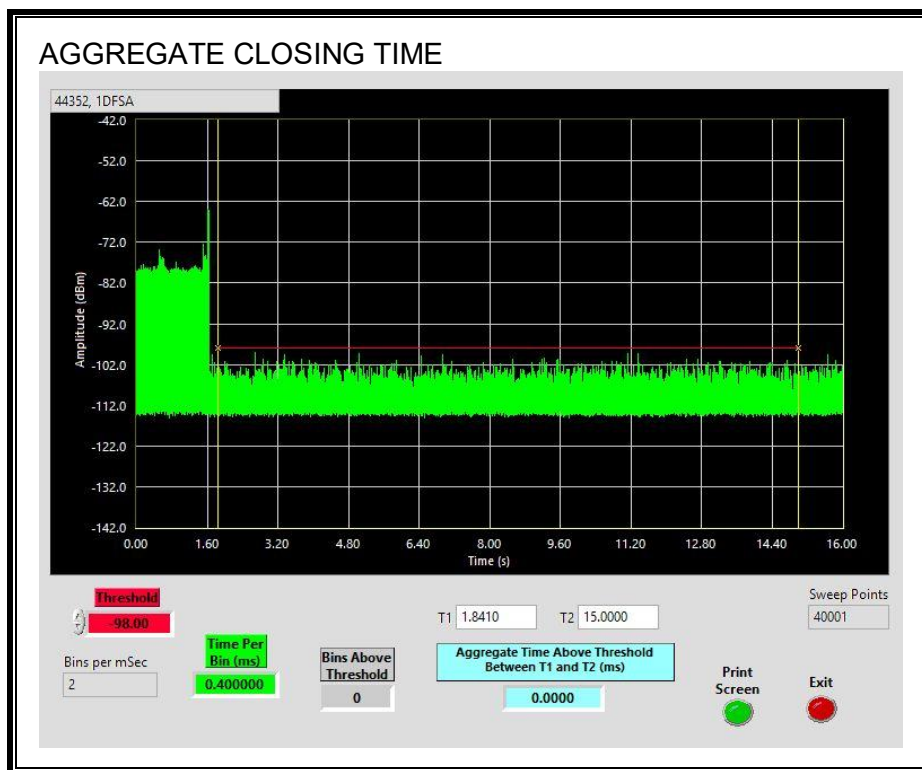
Channel Move Time (sec)	Limit (sec)
0.000	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60



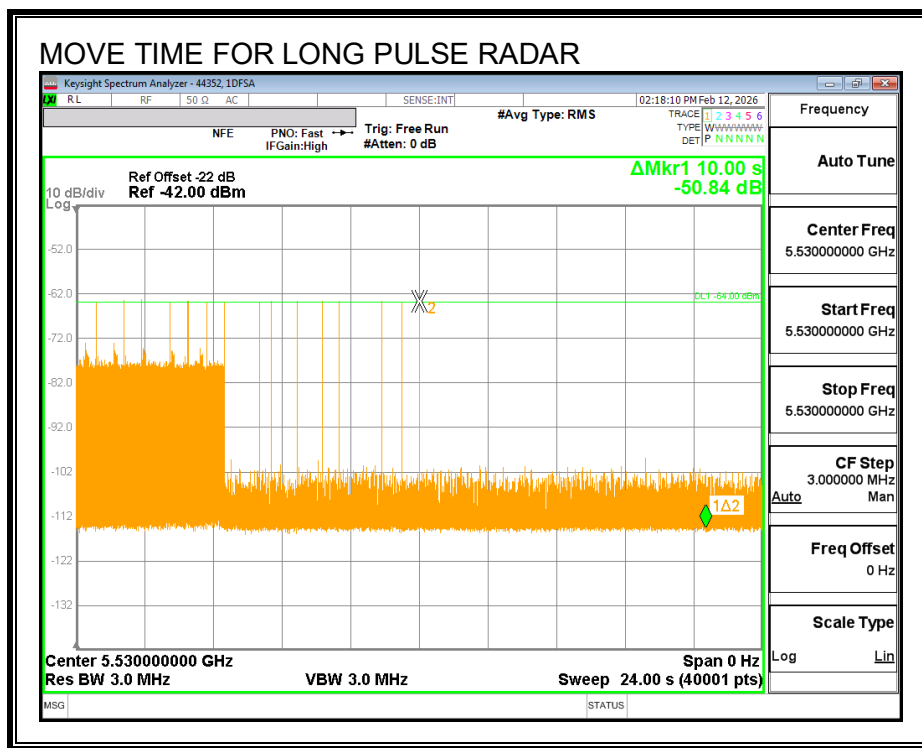
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



LONG PULSE CHANNEL MOVE TIME

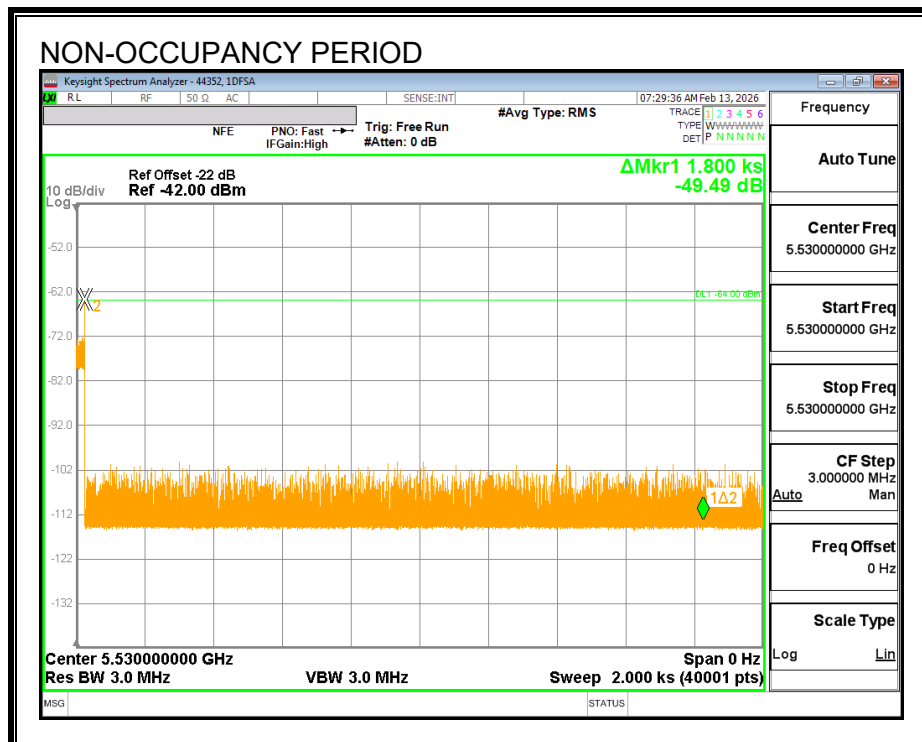
The traffic ceases prior to 10 seconds after the end of the radar waveform.

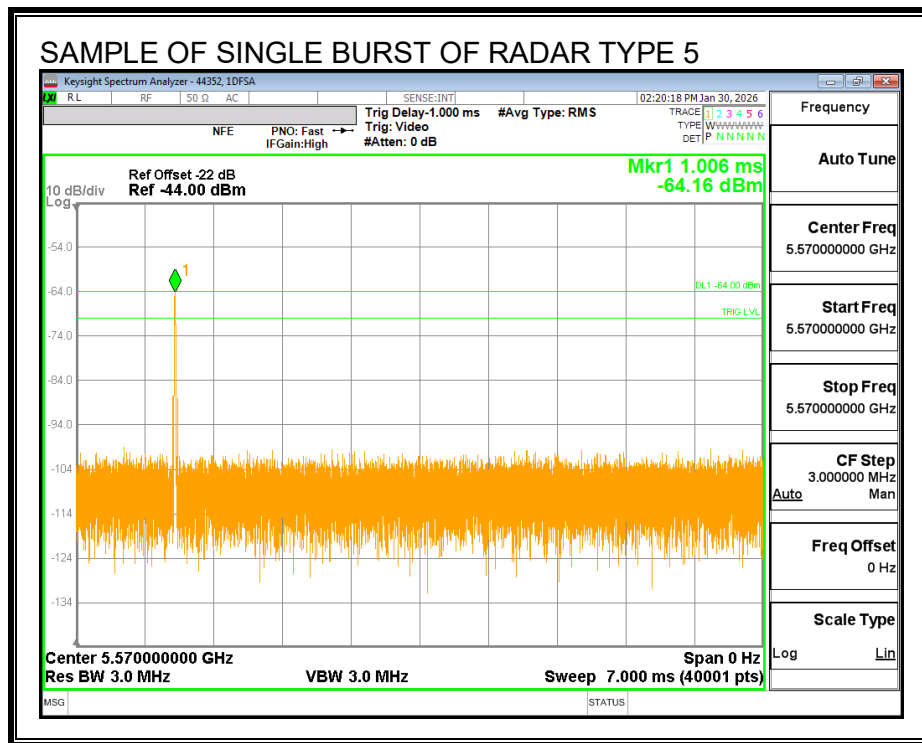


6.9.6. NON-OCCUPANCY PERIOD OF MASTER DEVICE IN RESPONSE TO DETECTION BY CLIENT DEVICE

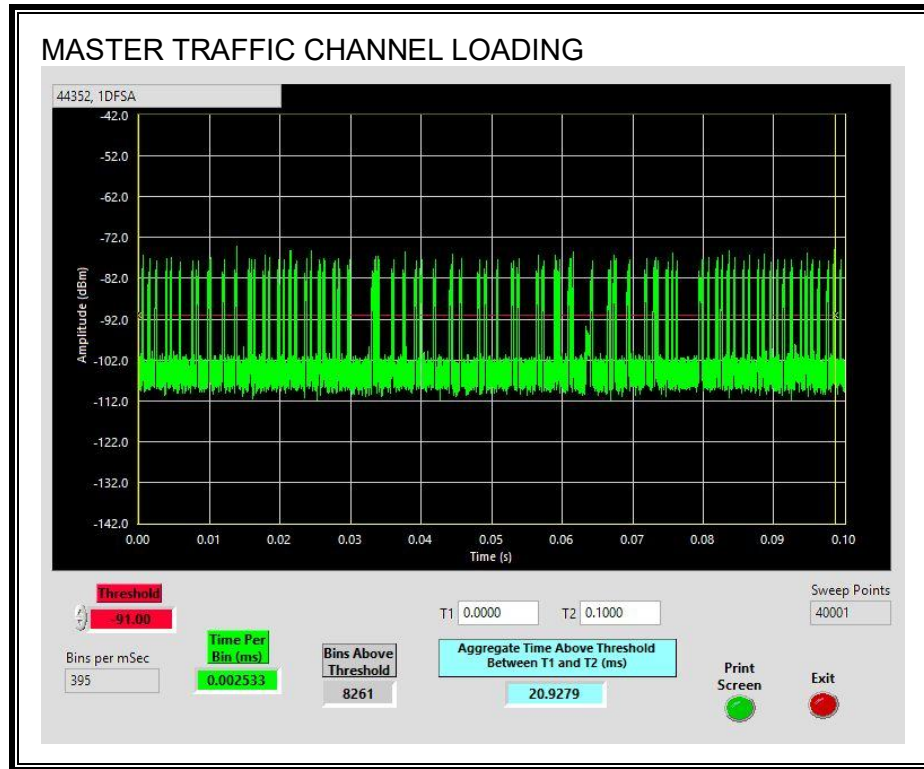
RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time. After the 30-minute non-occupancy period the Master & Client Device performed a new CAC, then resumed transmissions upon detecting no radar during this CAC period.



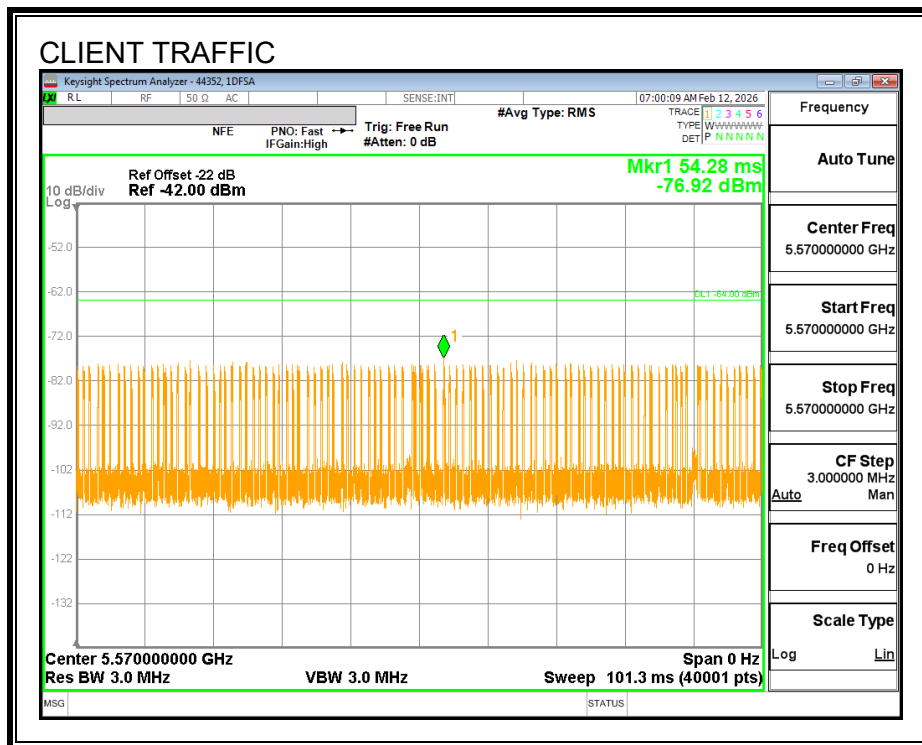


CHANNEL LOADING

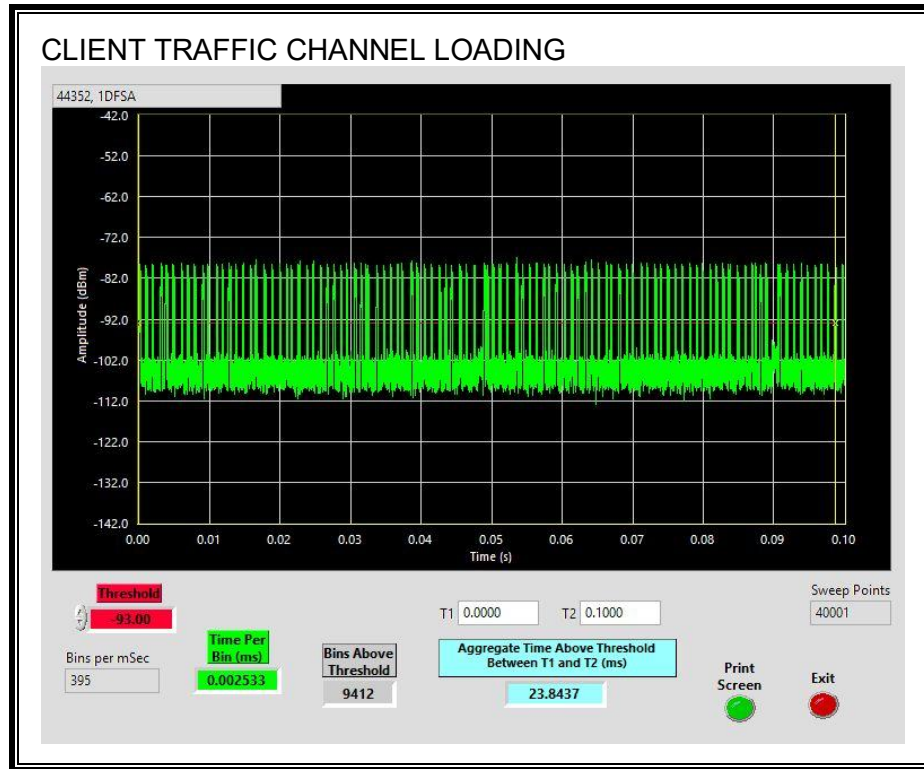


The level of traffic loading on the channel by the EUT is 20.9279%.

TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 23.8437%.

6.10.3. MOVE AND CLOSING TIME OF CLIENT DEVICE IN RESPONSE TO DETECTION BY MASTER DEVICE

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

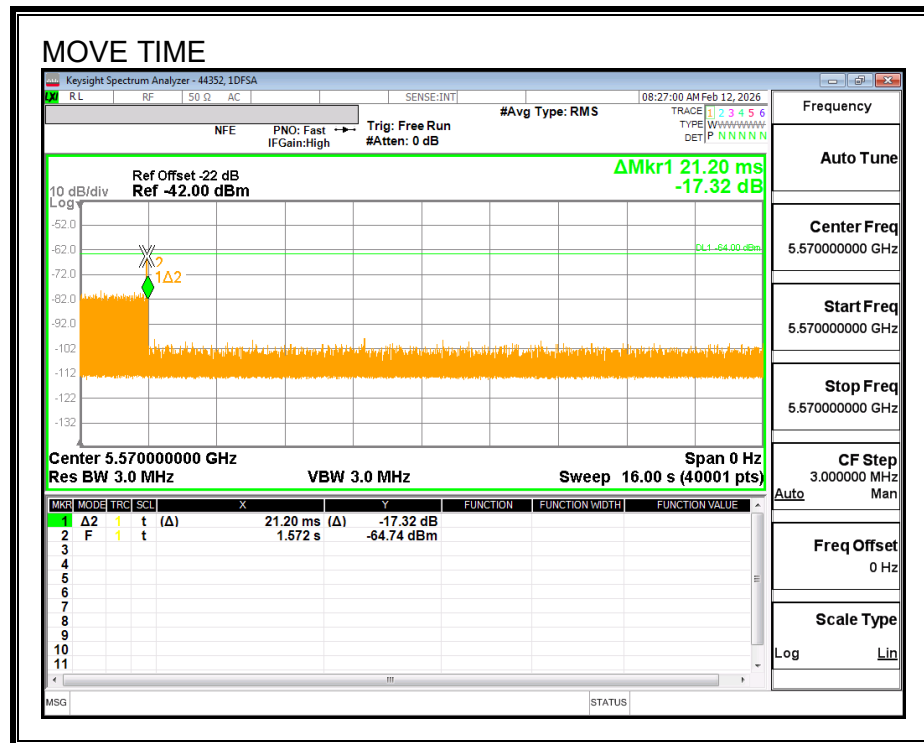
Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

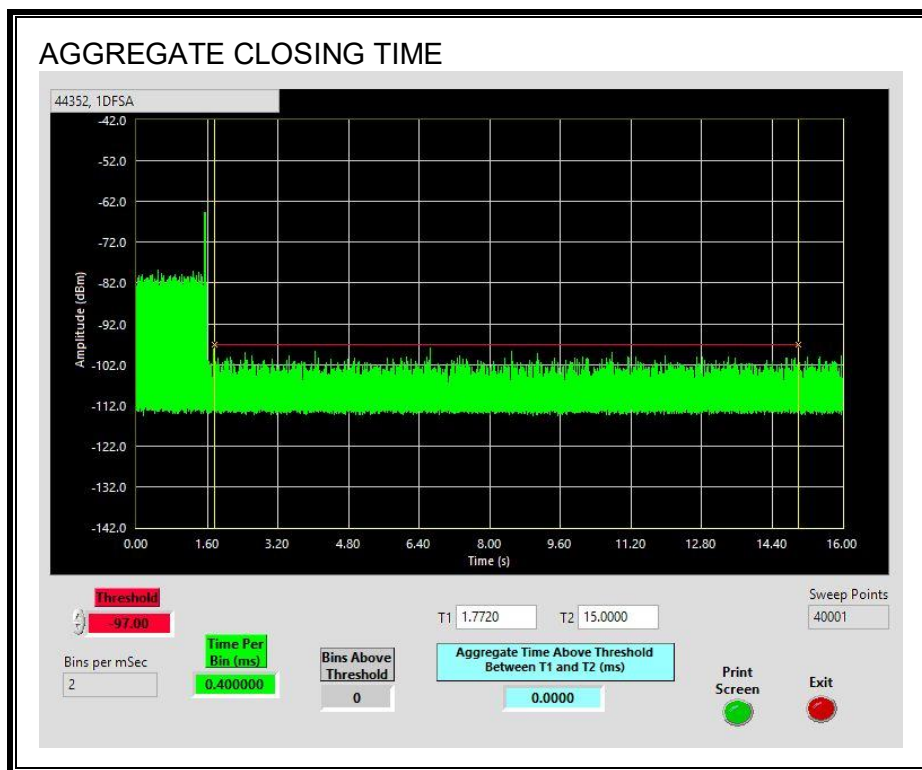
Channel Move Time (sec)	Limit (sec)
0.0212	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0	60



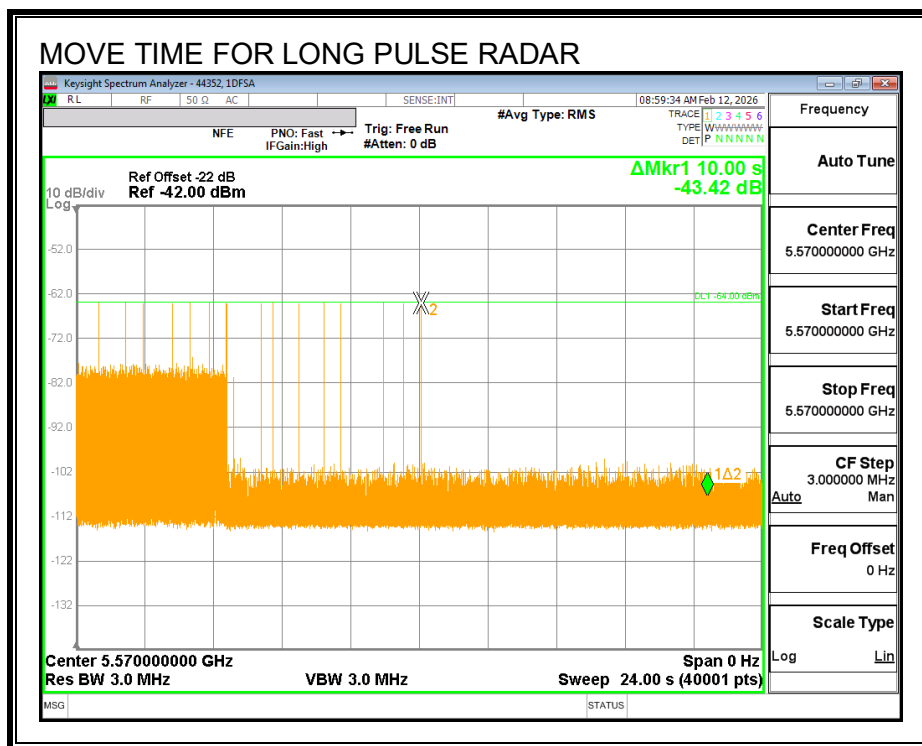
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



LONG PULSE CHANNEL MOVE TIME

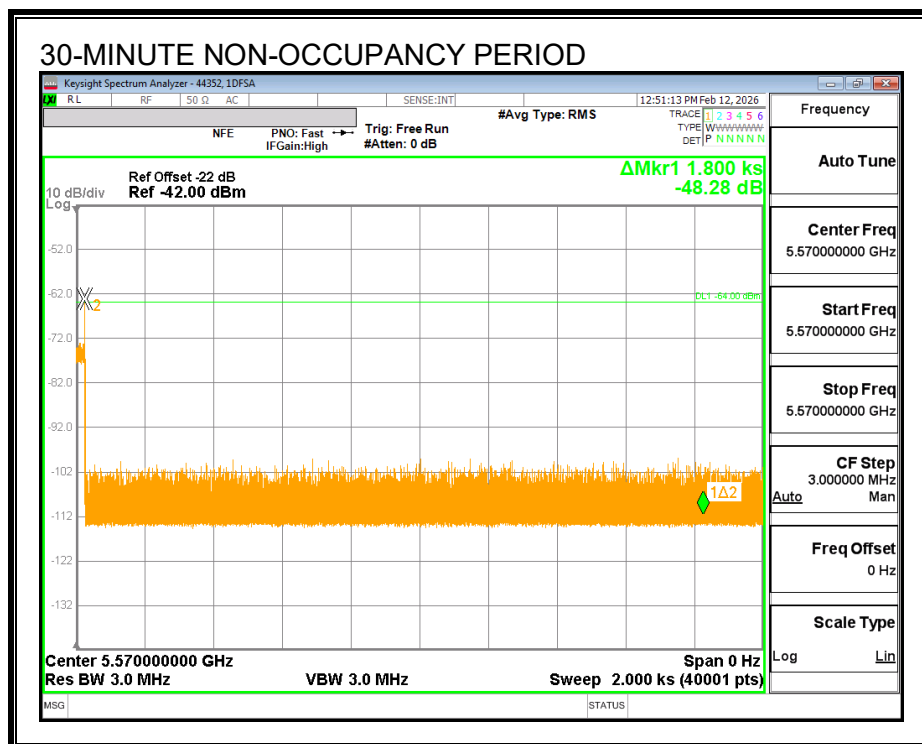
The traffic ceases prior to 10 seconds after the end of the radar waveform.



6.10.4. NON-OCCUPANCY PERIOD OF CLIENT IN RESPONSE TO DETECTION BY MASTER DEVICE

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.



6.10.5. MOVE AND CLOSING TIME OF MASTER DEVICE IN RESPONSE TO DETECTION BY CLIENT DEVICE

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

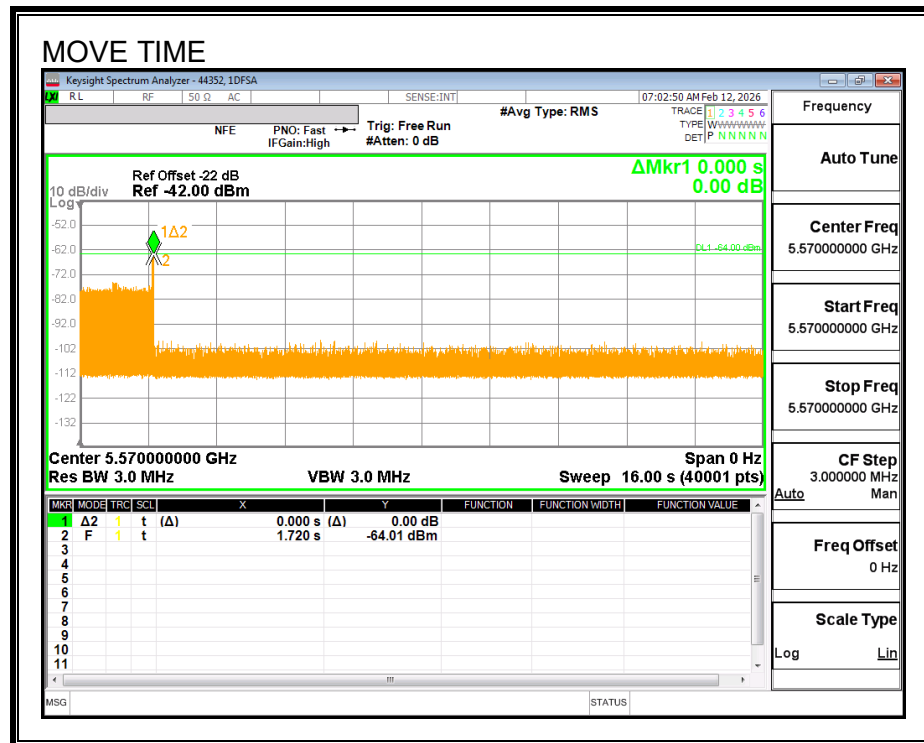
Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

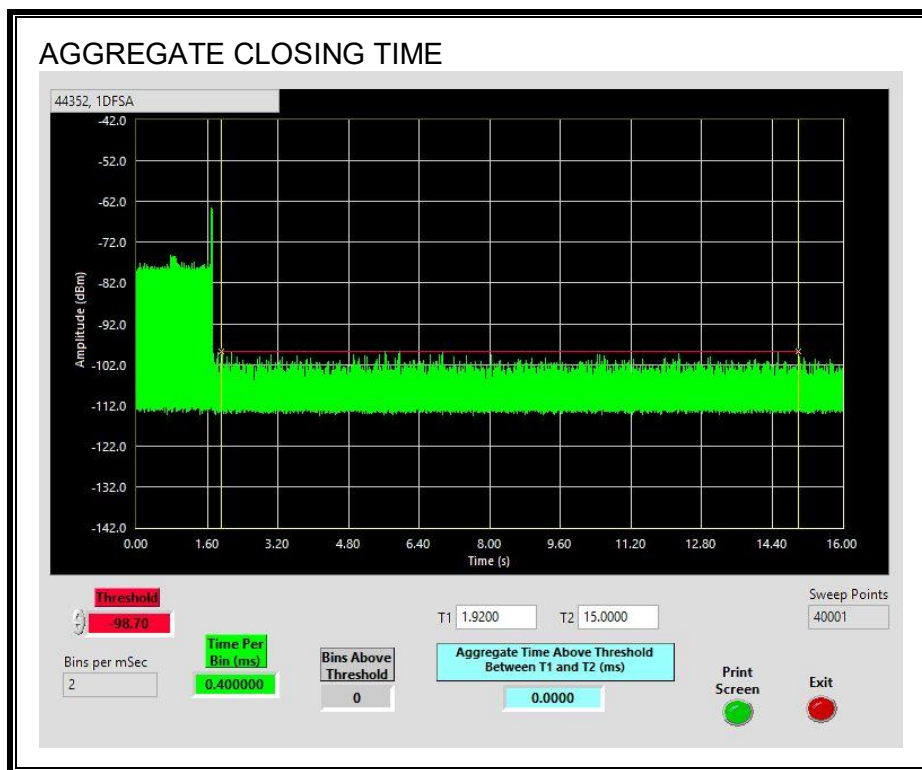
Channel Move Time (sec)	Limit (sec)
0	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0	60



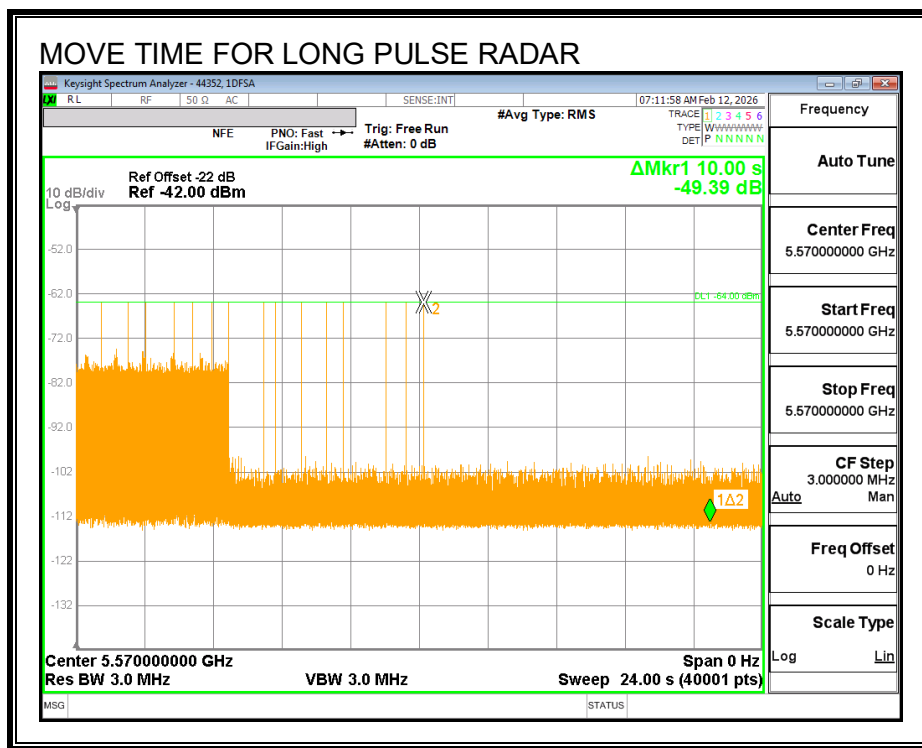
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



LONG PULSE CHANNEL MOVE TIME

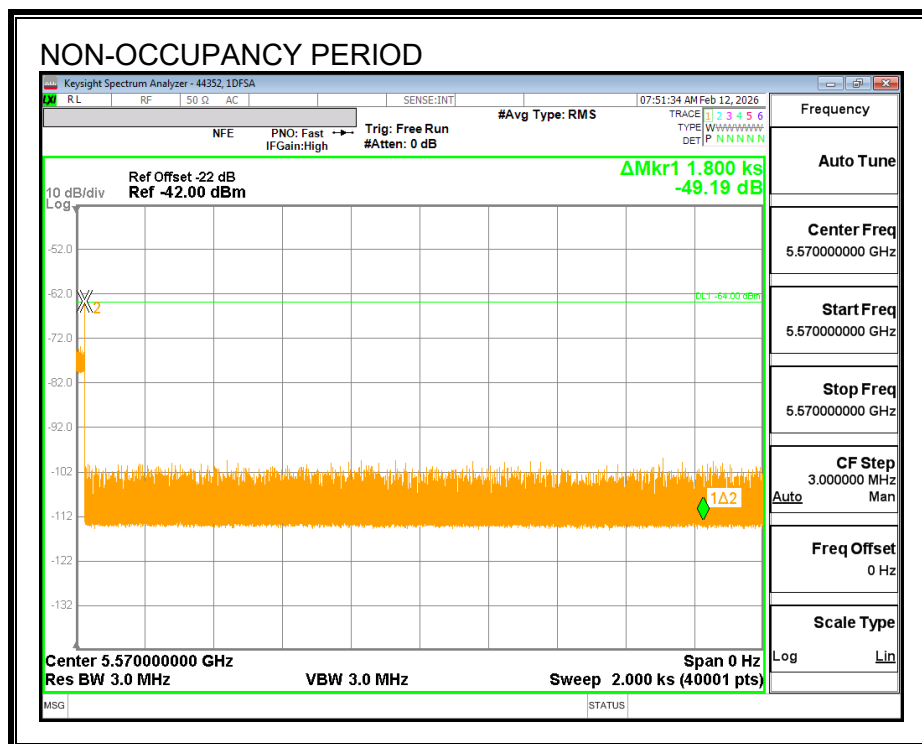
The traffic ceases prior to 10 seconds after the end of the radar waveform.



6.10.6. NON-OCCUPANCY PERIOD OF MASTER DEVICE IN RESPONSE TO DETECTION BY CLIENT DEVICE

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.



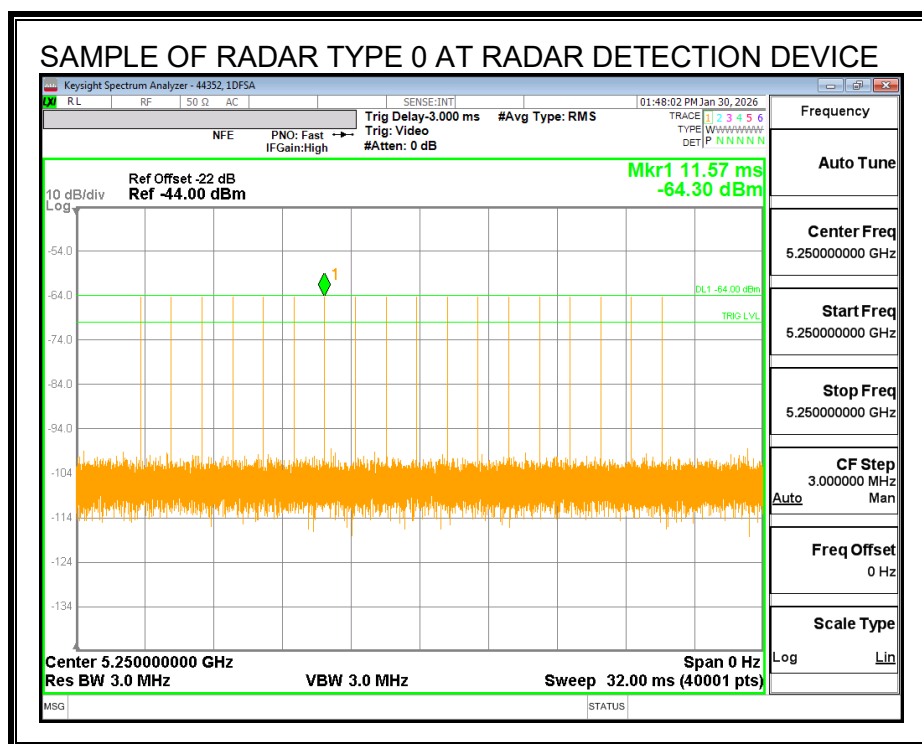
6.11. CLIENT DEVICE CONFIGURATION RESULTS FOR 160 MHz BANDWIDTH

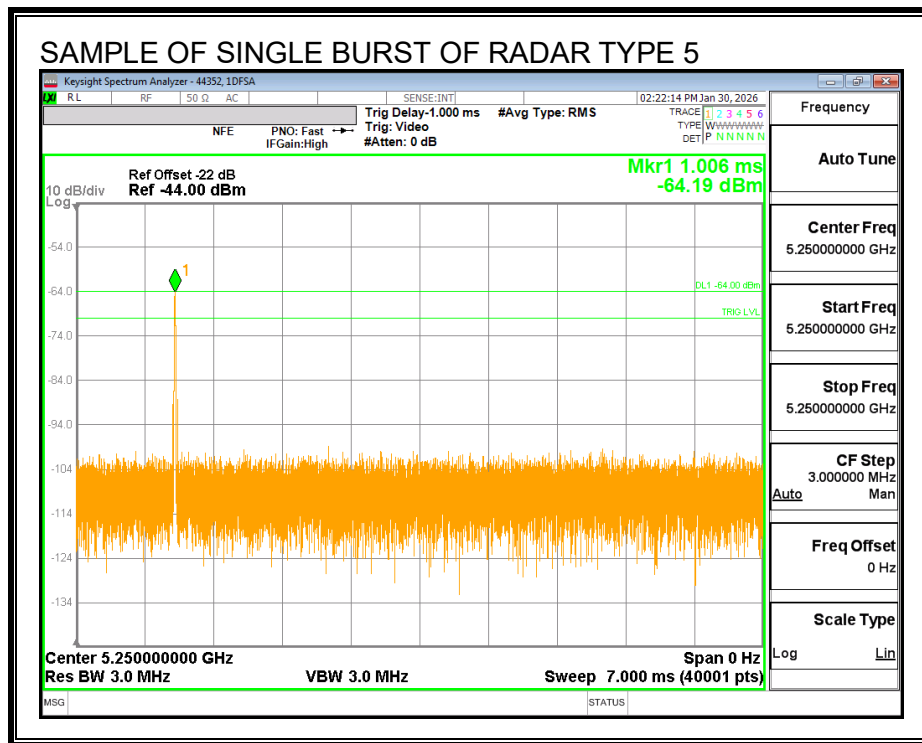
6.11.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5250 MHz.

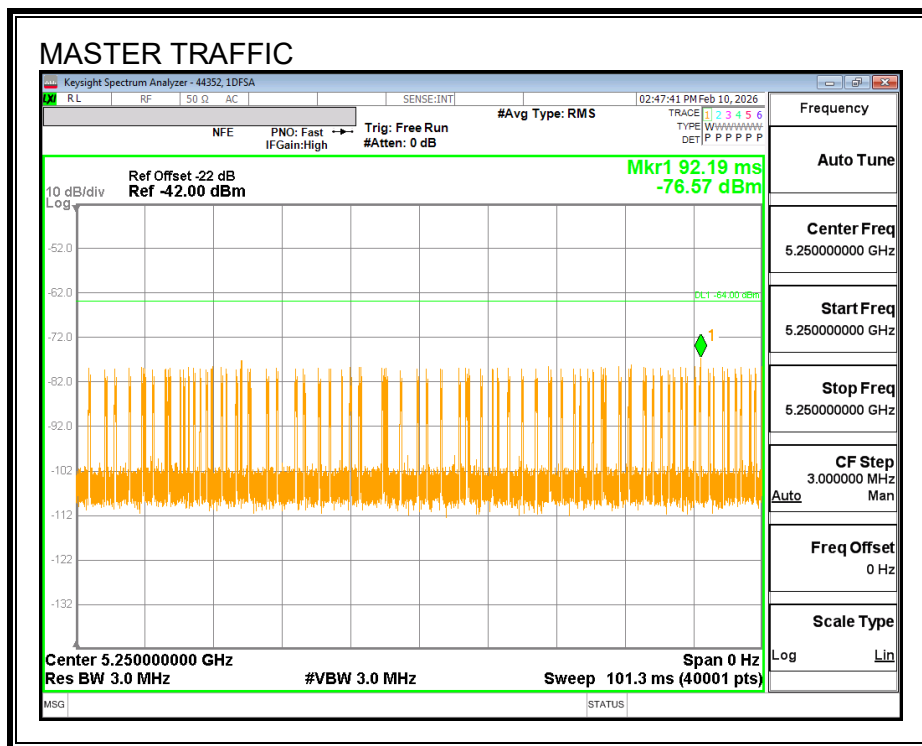
6.11.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM

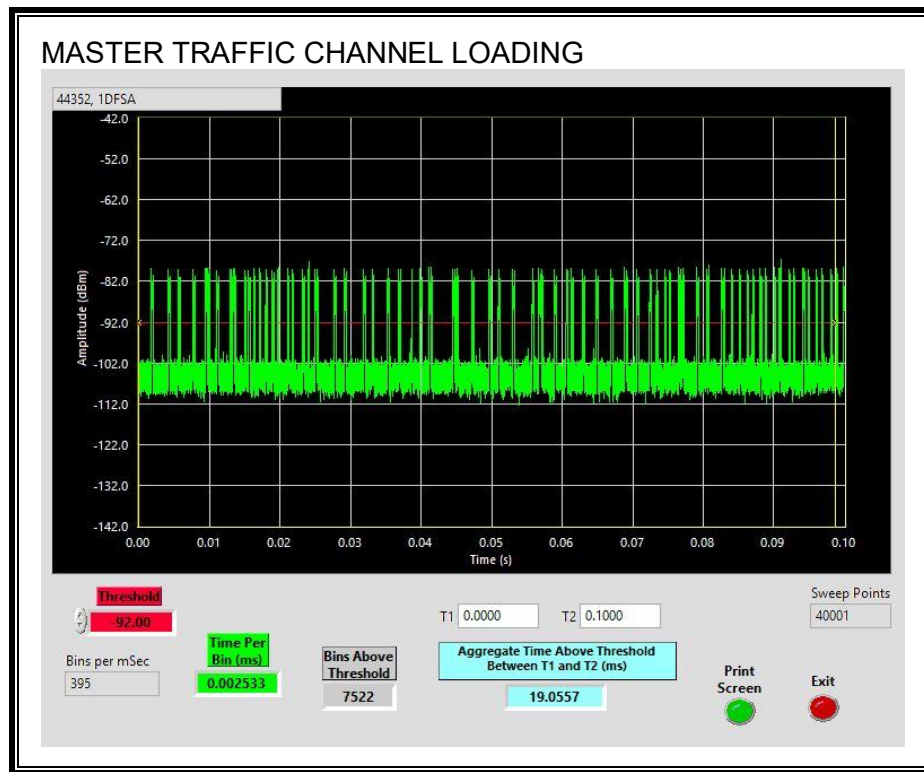




TRAFFIC

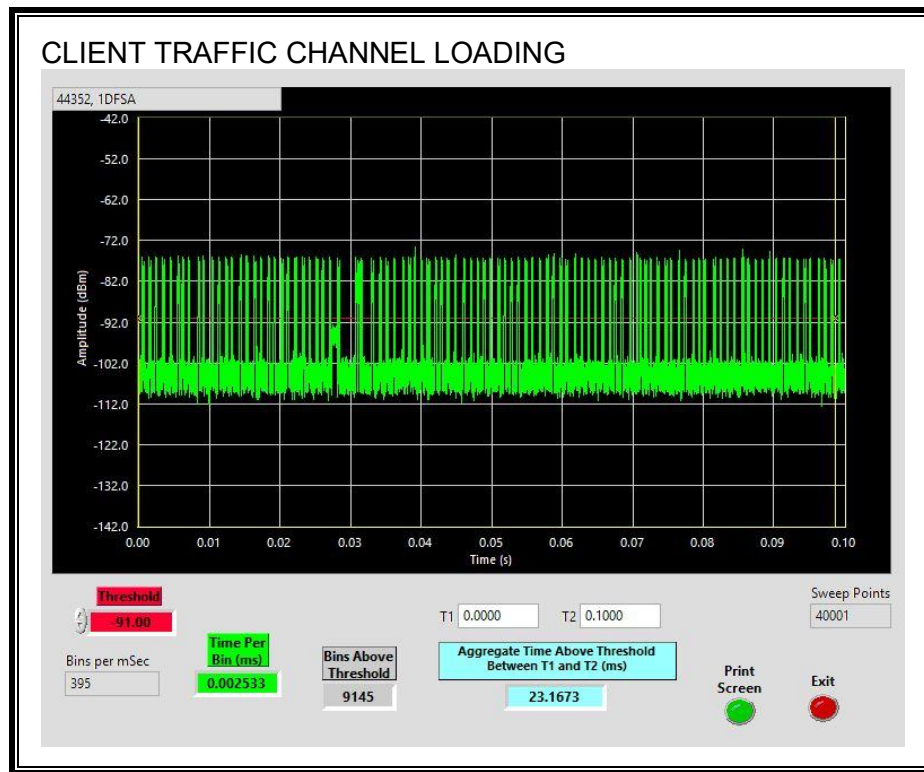


CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 19.0557%.

CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 23.1673%.

6.11.3. MOVE AND CLOSING TIME OF CLIENT DEVICE IN RESPONSE TO DETECTION BY MASTER DEVICE

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

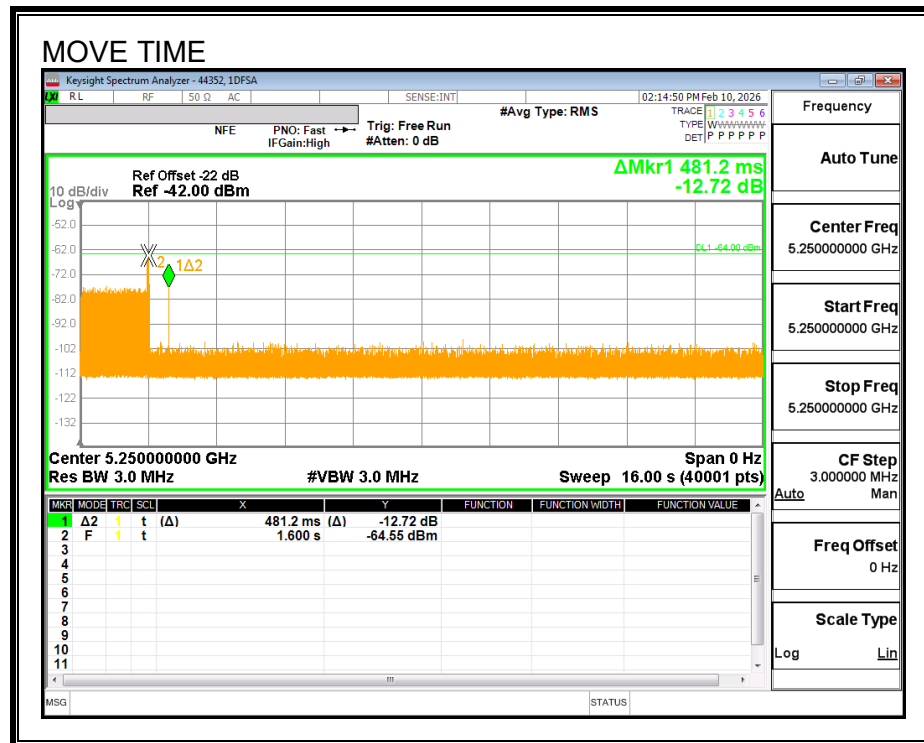
Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

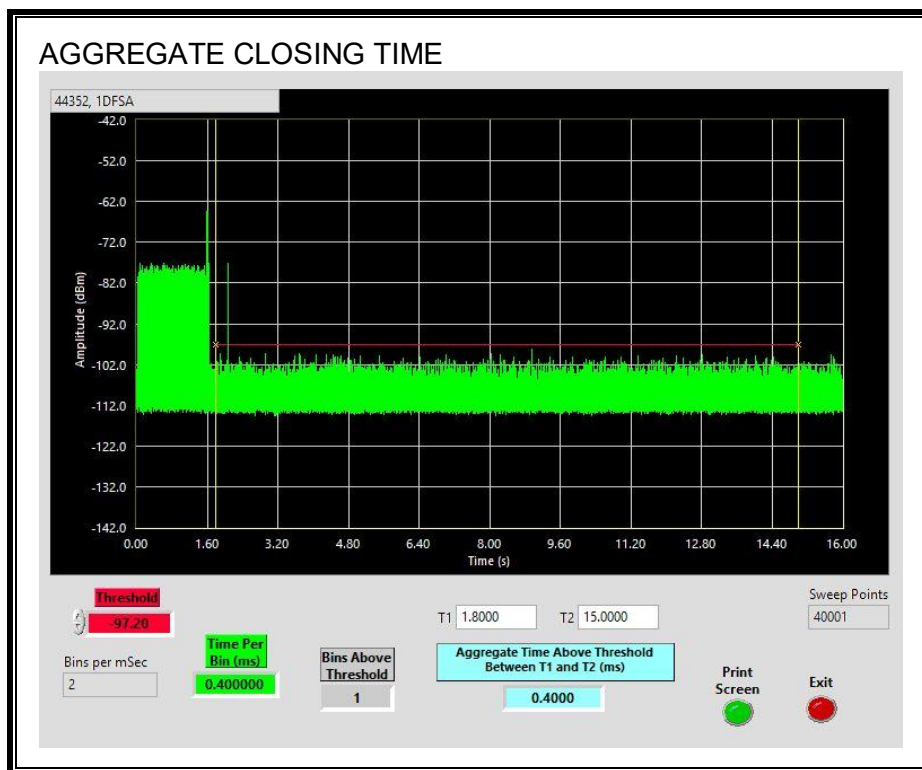
Channel Move Time (sec)	Limit (sec)
0.4812	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.4	60



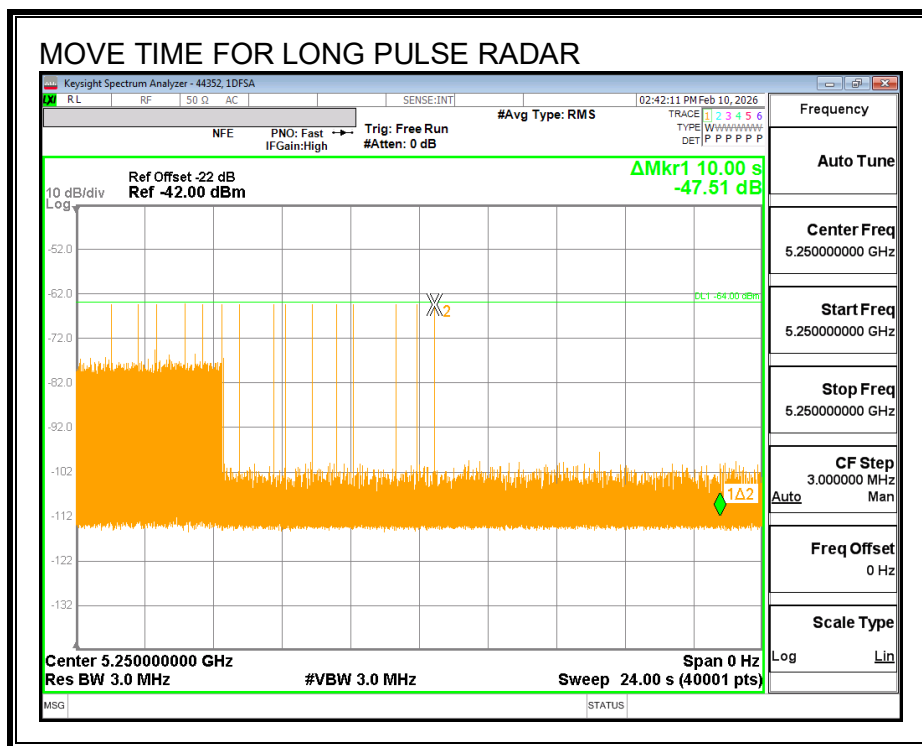
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



LONG PULSE CHANNEL MOVE TIME

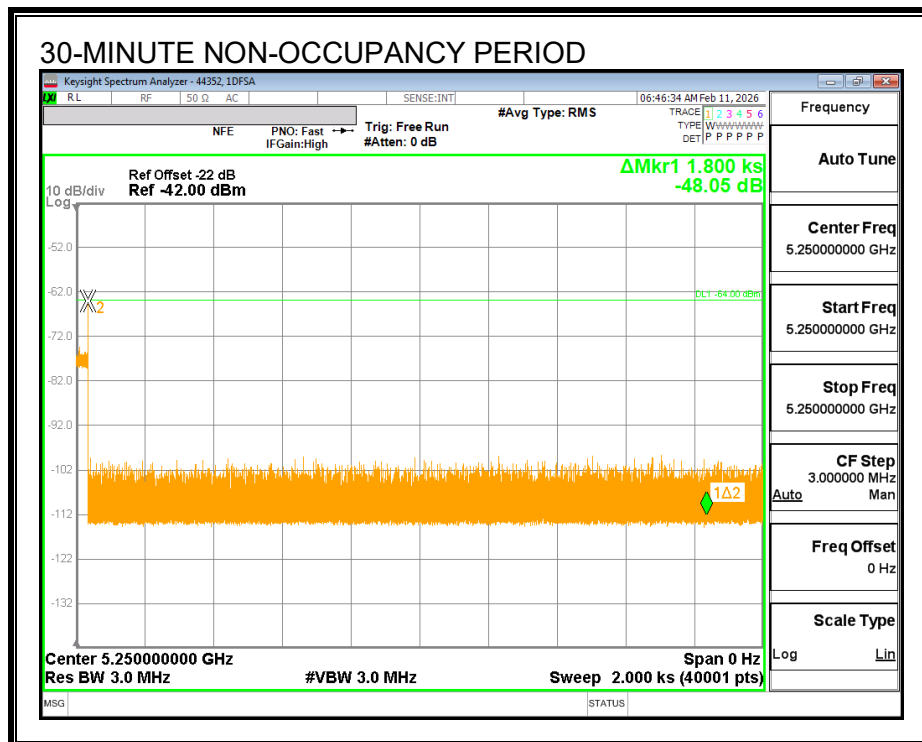
The traffic ceases prior to 10 seconds after the end of the radar waveform.



6.11.4. NON-OCCUPANCY PERIOD OF CLIENT IN RESPONSE TO DETECTION BY MASTER DEVICE

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.



6.11.5. MOVE AND CLOSING TIME OF MASTER DEVICE IN RESPONSE TO DETECTION BY CLIENT DEVICE

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

Channel Move Time (sec)	Limit (sec)
0.474	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
4.8	60

