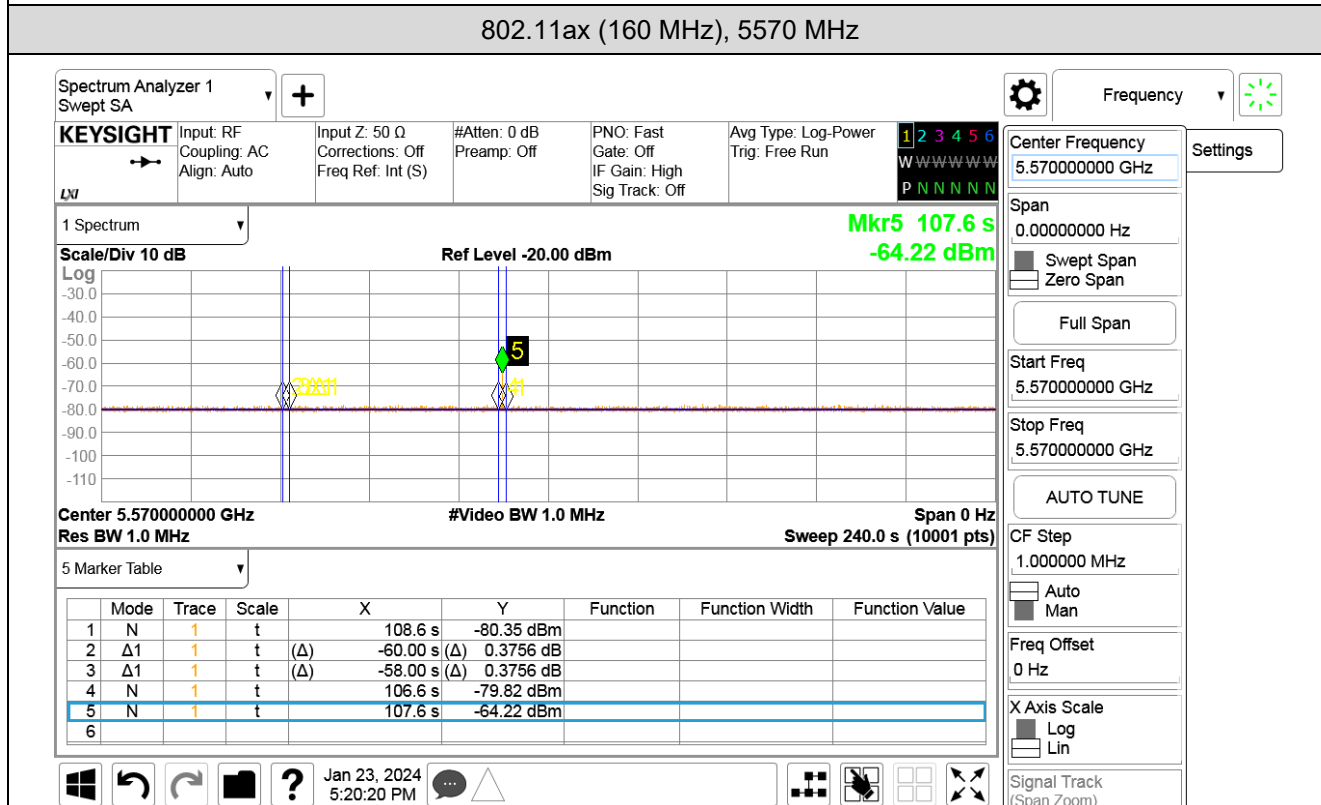
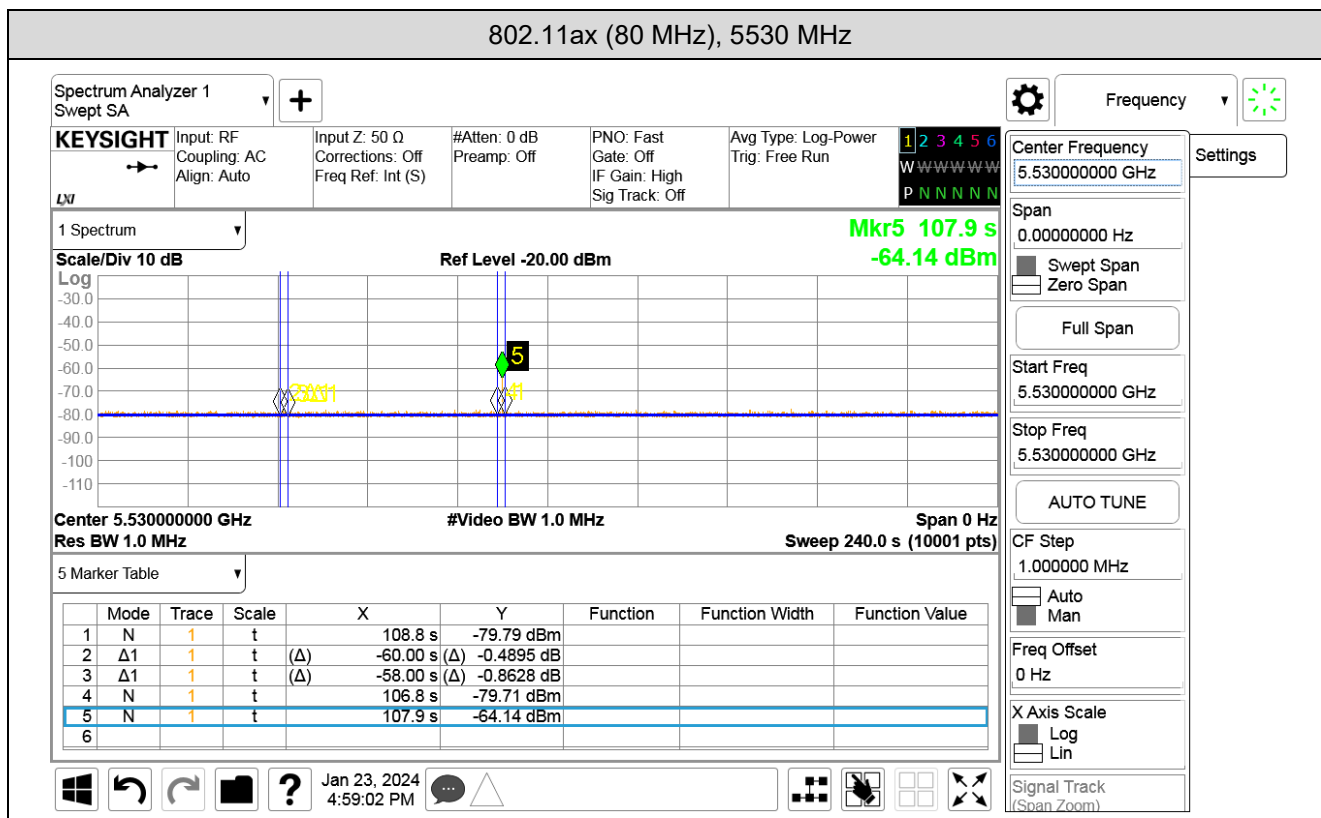




9. In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

9.1. Test Procedure

The EUT was tested according to U-NII test procedure of KDB905462 D02.

These tests define how the following DFS parameters are verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time, and Non-Occupancy Period. The steps below define the procedure to determine the above mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the UUT (Master) at test channel frequency. Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test.

At time T0 the Radar Waveform generator sends a Burst of pulses for each of the radar types.

Observe the transmissions of the UUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time results to the limit defined in the DFS Response requirement values table.

Measure the UUT for more than 30 minutes following the channel close/move time to verify that the UUT does not resume any transmissions on this Channel.

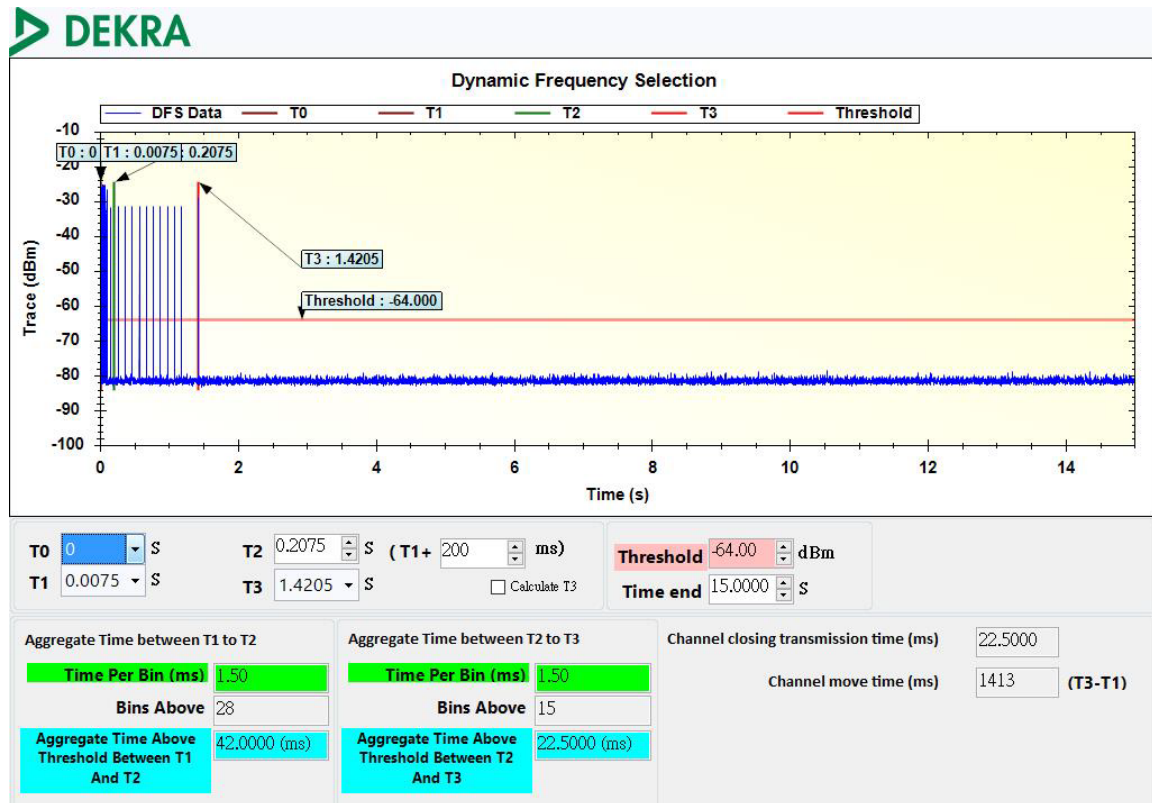
9.2. Test Requirement

Parameter	Value
Channel Move Time	10 Seconds
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period
Non-Occupancy Period	Minimum 30 minutes

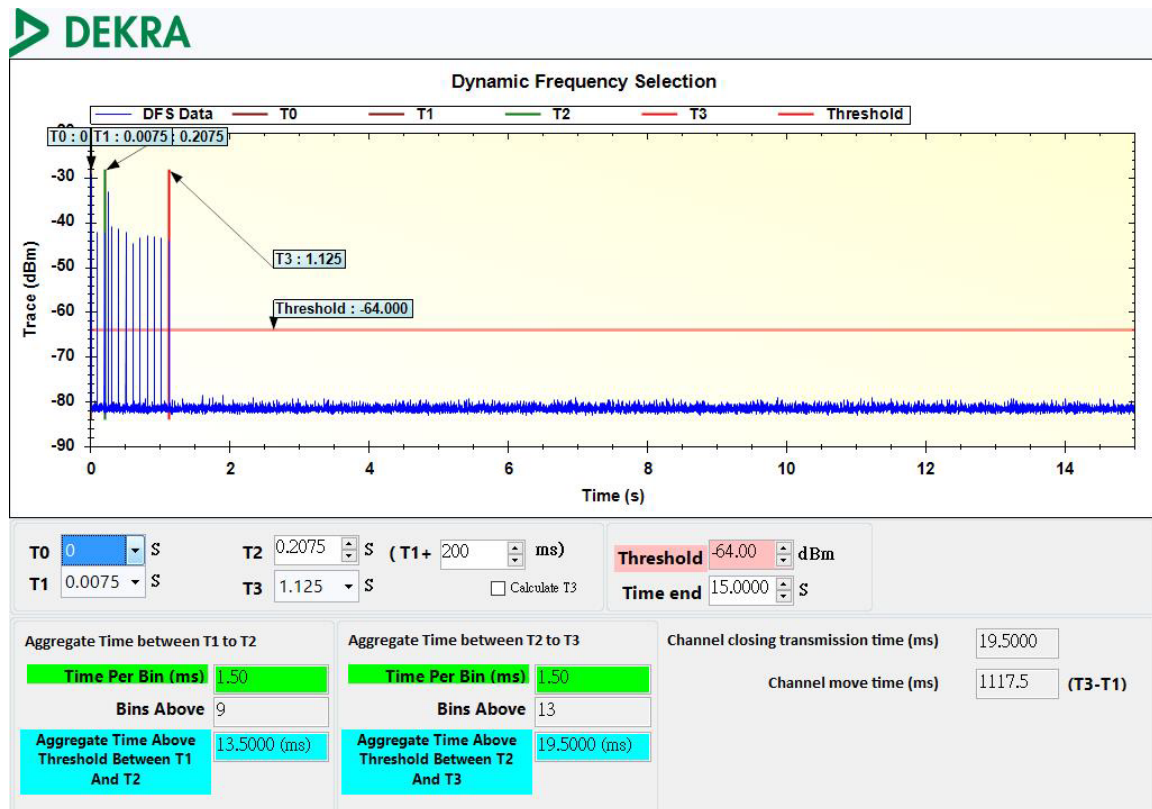
9.3. Test Result of Channel Move Time and Channel Closing Transmission Time

Modulation	Frequency (MHz)	Channel Closing Transmission (Sec.)	Channel Move Time (Sec.)	Limit (sec.)	
				Channel Closing Transmission	Channel Move Time
802.11ax (20 MHz)	5500	0.225	1.413	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period	10
802.11ax (40 MHz)	5510	0.195	1.117	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period	10
802.11ax (80 MHz)	5530	0.024	1.126	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period	10
802.11ax (160 MHz)	5570	0.027	1.203	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period	10
The results showed that after radar signal injected the channel move time was less than 10 seconds and channel transmission closing time less than 200 milliseconds and an aggregate of no more than 60 milliseconds.					

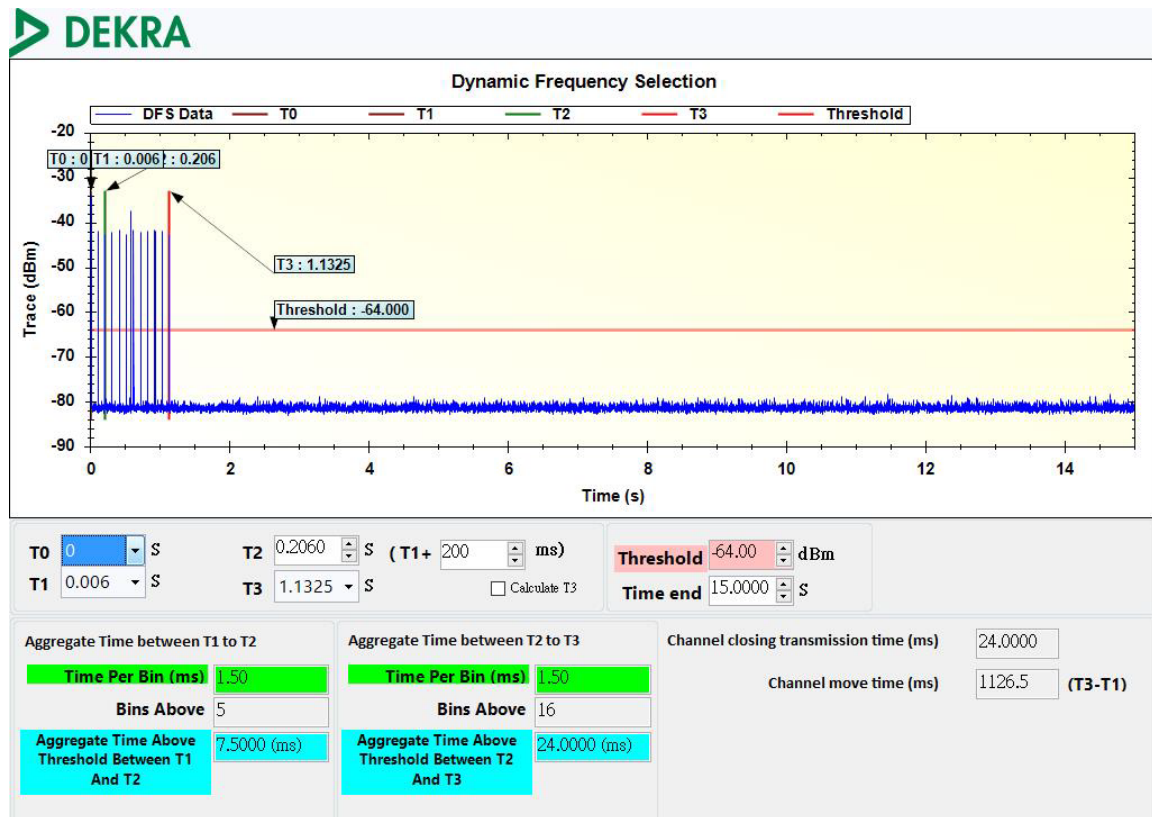
Channel Move Time and Channel Closing Transmission Time - 802.11ax (20 MHz), 5500 MHz



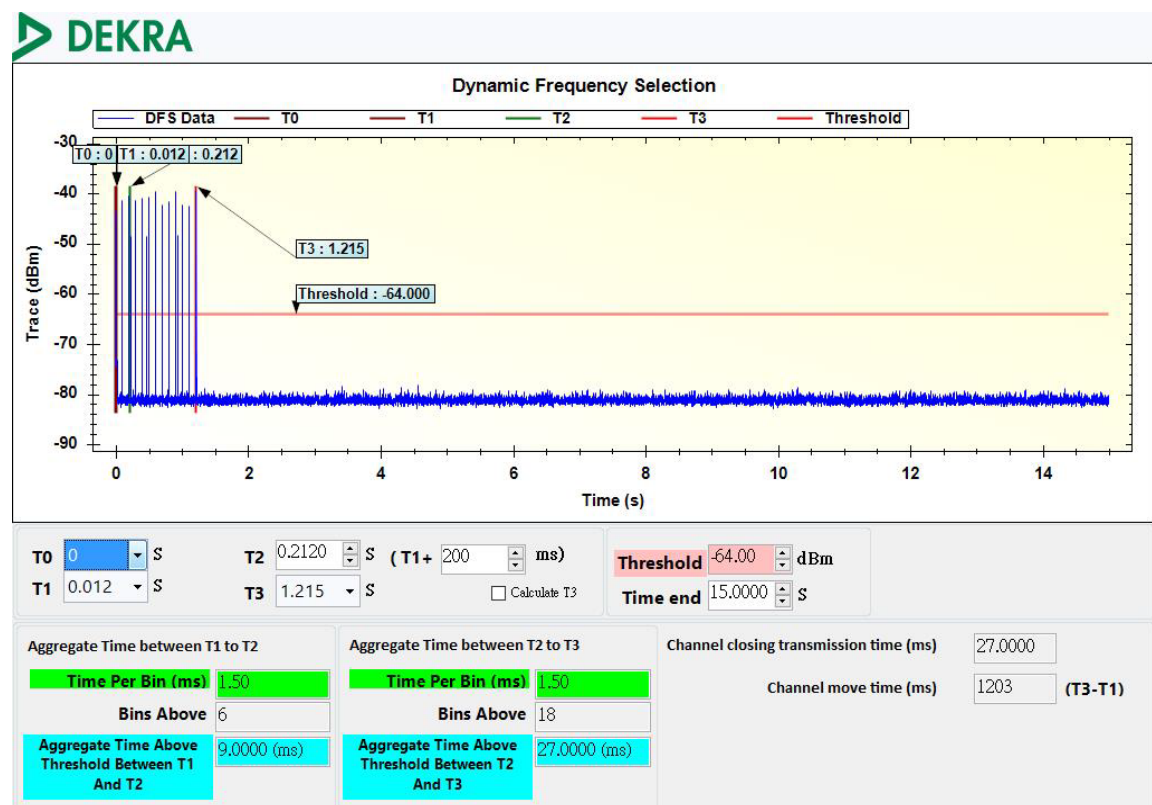
Channel Move Time and Channel Closing Transmission Time - 802.11ax (40 MHz), 5510 MHz



Channel Move Time and Channel Closing Transmission Time - 802.11ax (80 MHz), 5530 MHz



Channel Move Time and Channel Closing Transmission Time - 802.11ax (160 MHz), 5570 MHz



9.4. Test Result of Non-Occupancy Period

Non-Occupancy Period				
Modulation	Frequency (MHz)	Test Result (Minutes)	Limit (Minutes)	Result
802.11ax (20 MHz)	5500	> 30	> 30	Pass
802.11ax (40 MHz)	5510	> 30	> 30	Pass
802.11ax (80 MHz)	5530	> 30	> 30	Pass
802.11ax (160 MHz)	5570	> 30	> 30	Pass
No EUT transmissions were observed on the test channel during 30 minutes observation time.				





10. Statistical Performance Check

10.1. Test Procedure

The EUT was tested according to U-NII test procedure of KDB905462 D02.

The steps below define the procedure to determine the minimum percentage of detection when a radar burst with a level equal to the DFS Detection Threshold is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the UUT (Master) at test channel frequency.

Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test.

The Radar Waveform generator sends the individual waveform for each of the radar types 1-6. Statistical data will be gathered to determine the ability of the device to detect the radar test waveforms. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

10.2. Test Requirement

The minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Minimum percentage of successful detections

Radar Type	Minimum Percentage of Successful Detection	Minimum Number of Trials
1	60%	30
2	60%	30
3	60%	30
4	60%	30
Aggregate (Radar Types 1-4)	80%	120
5	80%	30
6	70%	30

The percentage of successful detection is calculated by:

$$\frac{\text{TotalWaveformDetections}}{\text{TotalWaveformTrials}} \times 100 = \text{Probability of Detection Radar Waveform}$$

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4}$$

10.3. Test Result of Statistical Performance Check

Radar Statistical Performance

802.11ax (20 MHz), 5500 MHz				
Radar Test Summary:				
Signal Type	Trial No.	Detection (%)	Limit (%)	Result
Type D.4.1	30	86.67	60	Pass
Type D.4.2	30	90.00	60	Pass
Type D.4.3	30	83.33	60	Pass
Type D.4.4	30	80.00	60	Pass
Type D.4.5	30	96.67	60	Pass
Type D.4.6	30	100.00	60	Pass
Note: The aggregate should be 80 percent that the average of the percentage of successful detections of Short Pulse Radar Types 1-4.				

802.11ax (20 MHz), 5500 MHz						
	Type_1	Type_2	Type_3	Type_4	Type_5	Type_6
1	v	v	v	v	v	v
2	v	v	v	x	v	v
3	v	v	x	x	v	v
4	v	v	v	v	v	v
5	x	v	v	v	v	v
6	x	v	v	x	v	v
7	v	v	v	x	v	v
8	v	v	v	v	v	v
9	v	v	v	v	v	v
10	v	v	v	v	v	v
11	v	v	x	v	v	v
12	v	v	v	v	v	v
13	v	v	v	v	v	v
14	v	x	v	v	v	v
15	x	v	v	v	v	v
16	v	v	v	v	v	v
17	v	v	v	v	v	v
18	x	v	v	v	x	v
19	v	v	v	v	v	v
20	v	v	v	v	v	v
21	v	x	x	v	v	v
22	v	v	v	v	v	v
23	v	v	x	v	v	v
24	v	v	v	v	v	v
25	v	v	v	v	v	v
26	v	v	v	v	v	v
27	v	x	v	v	v	v
28	v	v	v	x	v	v
29	v	v	x	x	v	v
30	v	v	v	v	v	v
Number of Successful	26	27	25	24	29	30
% of Successful	86.67	90.00	83.33	80.00	96.67	100.00
	85.00					

802.11ax (20 MHz), 5500 MHz					
Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 1	1	658	81	53298
1	Type 1	1	798	67	53466
2	Type 1	1	738	72	53136
3	Type 1	1	938	57	53466
4	Type 1	1	558	95	53010
5	Type 1	1	518	102	52836
6	Type 1	1	3066	18	55188
7	Type 1	1	878	61	53558
8	Type 1	1	718	74	53132
9	Type 1	1	678	78	52884
10	Type 1	1	918	58	53244
11	Type 1	1	898	59	52982
12	Type 1	1	638	83	52954
13	Type 1	1	618	86	53148
14	Type 1	1	598	89	53222
15	Type 1	1	1182	45	53190
16	Type 1	1	909	59	53631
17	Type 1	1	530	100	53000
18	Type 1	1	1946	28	54488
19	Type 1	1	2259	24	54216
20	Type 1	1	2009	27	54243
21	Type 1	1	865	62	53630
22	Type 1	1	2218	24	53232
23	Type 1	1	1480	36	53280
24	Type 1	1	2523	21	52983
25	Type 1	1	2876	19	54644
26	Type 1	1	2496	22	54912
27	Type 1	1	3046	18	54828
28	Type 1	1	2057	26	53482
29	Type 1	1	2719	20	54380

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 2	4.8	218	29	6322
1	Type 2	2.1	206	24	4944
2	Type 2	1.9	201	24	4824
3	Type 2	3.4	226	27	6102
4	Type 2	4.1	192	28	5376
5	Type 2	4.4	221	28	6188
6	Type 2	4.1	172	28	4816
7	Type 2	3.5	150	27	4050
8	Type 2	3.6	186	27	5022
9	Type 2	4.7	154	29	4466
10	Type 2	1.3	194	23	4462
11	Type 2	1	166	23	3818
12	Type 2	3.6	212	27	5724
13	Type 2	3	228	26	5928
14	Type 2	4	211	28	5908
15	Type 2	4.7	151	29	4379
16	Type 2	1.1	179	23	4117
17	Type 2	2.7	175	25	4375
18	Type 2	1.5	165	24	3960
19	Type 2	1.6	167	24	4008
20	Type 2	4.8	173	29	5017
21	Type 2	3.7	189	27	5103
22	Type 2	5	185	29	5365
23	Type 2	4.7	215	29	6235
24	Type 2	3.8	159	27	4293
25	Type 2	2.3	170	25	4250
26	Type 2	4.8	168	29	4872
27	Type 2	1.9	213	24	5112
28	Type 2	1.3	190	23	4370
29	Type 2	1.5	205	23	4715

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 3	9.8	265	18	4770
1	Type 3	7.1	240	16	3840
2	Type 3	6.9	299	16	4784
3	Type 3	8.4	262	17	4454
4	Type 3	9.1	446	18	8028
5	Type 3	9.4	223	18	4014
6	Type 3	9.1	224	18	4032
7	Type 3	8.5	493	17	8381
8	Type 3	8.6	443	17	7531
9	Type 3	9.7	403	18	7254
10	Type 3	6.3	471	16	7536
11	Type 3	6	248	16	3968
12	Type 3	8.6	454	17	7718
13	Type 3	8	227	17	3859
14	Type 3	9	448	18	8064
15	Type 3	9.7	300	18	5400
16	Type 3	6.1	400	16	6400
17	Type 3	7.7	467	17	7939
18	Type 3	6.5	222	16	3552
19	Type 3	6.6	252	16	4032
20	Type 3	9.8	412	18	7416
21	Type 3	8.7	294	18	5292
22	Type 3	10	413	18	7434
23	Type 3	9.7	386	18	6948
24	Type 3	8.8	317	18	5706
25	Type 3	7.3	472	17	8024
26	Type 3	9.8	258	18	4644
27	Type 3	6.9	250	16	4000
28	Type 3	6.3	447	16	7152
29	Type 3	6.5	314	16	5024

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 4	19.4	265	16	4240
1	Type 4	13.4	240	13	3120
2	Type 4	13.1	299	13	3887
3	Type 4	16.4	262	15	3930
4	Type 4	18	446	15	6690
5	Type 4	18.5	223	16	3568
6	Type 4	17.9	224	15	3360
7	Type 4	16.5	493	15	7395
8	Type 4	16.8	443	15	6645
9	Type 4	19.2	403	16	6448
10	Type 4	11.7	471	12	5652
11	Type 4	11.1	248	12	2976
12	Type 4	16.9	454	15	6810
13	Type 4	15.4	227	14	3178
14	Type 4	17.7	448	15	6720
15	Type 4	19.3	300	16	4800
16	Type 4	11.3	400	12	4800
17	Type 4	14.8	467	14	6538
18	Type 4	12.3	222	12	2664
19	Type 4	12.3	252	12	3024
20	Type 4	19.4	412	16	6592
21	Type 4	17	294	15	4410
22	Type 4	19.9	413	16	6608
23	Type 4	19.2	386	16	6176
24	Type 4	17.4	317	15	4755
25	Type 4	14	472	13	6136
26	Type 4	19.4	258	16	4128
27	Type 4	13.2	250	13	3250
28	Type 4	11.7	447	12	5364
29	Type 4	12.2	314	12	3768

Trial Id	Radar Type	Number of Bursts	Burst Period(s)	Waveform Length(s)	Center Frequency (GHz)
0	Type 5	20	0.6	12	5.5
1	Type 5	11	1.090909	12	5.5
2	Type 5	11	1.090909	12	5.5
3	Type 5	15	0.8	12	5.5
4	Type 5	18	0.666667	12	5.5
5	Type 5	18	0.666667	12	5.5
6	Type 5	17	0.705882	12	5.5
7	Type 5	15	0.8	12	5.5
8	Type 5	16	0.75	12	5.5
9	Type 5	19	0.631579	12	5.5
10	Type 5	9	1.333333	12	5.492
11	Type 5	8	1.5	12	5.492
12	Type 5	16	0.75	12	5.496
13	Type 5	14	0.857143	12	5.495
14	Type 5	17	0.705882	12	5.496
15	Type 5	19	0.631579	12	5.498
16	Type 5	8	1.5	12	5.492
17	Type 5	13	0.923077	12	5.494
18	Type 5	9	1.333333	12	5.493
19	Type 5	9	1.333333	12	5.493
20	Type 5	20	0.6	12	5.502
21	Type 5	16	0.75	12	5.504
22	Type 5	20	0.6	12	5.502
23	Type 5	19	0.631579	12	5.502
24	Type 5	17	0.705882	12	5.504
25	Type 5	12	1	12	5.506
26	Type 5	20	0.6	12	5.502
27	Type 5	11	1.090909	12	5.507
28	Type 5	9	1.333333	12	5.508
29	Type 5	9	1.333333	12	5.507

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Pulses per Hop	Hopping Rate (KHz)	Hopping Sequence Length (ms)	Visible Frequency Number
0	Type 6	1	333.3	9	0.3333	300	3
1	Type 6	1	333.3	9	0.3333	300	5
2	Type 6	1	333.3	9	0.3333	300	1
3	Type 6	1	333.3	9	0.3333	300	5
4	Type 6	1	333.3	9	0.3333	300	1
5	Type 6	1	333.3	9	0.3333	300	6
6	Type 6	1	333.3	9	0.3333	300	3
7	Type 6	1	333.3	9	0.3333	300	2
8	Type 6	1	333.3	9	0.3333	300	3
9	Type 6	1	333.3	9	0.3333	300	6
10	Type 6	1	333.3	9	0.3333	300	2
11	Type 6	1	333.3	9	0.3333	300	7
12	Type 6	1	333.3	9	0.3333	300	7
13	Type 6	1	333.3	9	0.3333	300	8
14	Type 6	1	333.3	9	0.3333	300	7
15	Type 6	1	333.3	9	0.3333	300	4
16	Type 6	1	333.3	9	0.3333	300	5
17	Type 6	1	333.3	9	0.3333	300	7
18	Type 6	1	333.3	9	0.3333	300	5
19	Type 6	1	333.3	9	0.3333	300	7
20	Type 6	1	333.3	9	0.3333	300	4
21	Type 6	1	333.3	9	0.3333	300	3
22	Type 6	1	333.3	9	0.3333	300	7
23	Type 6	1	333.3	9	0.3333	300	2
24	Type 6	1	333.3	9	0.3333	300	3
25	Type 6	1	333.3	9	0.3333	300	3
26	Type 6	1	333.3	9	0.3333	300	5
27	Type 6	1	333.3	9	0.3333	300	3
28	Type 6	1	333.3	9	0.3333	300	3
29	Type 6	1	333.3	9	0.3333	300	2

802.11ax (40 MHz), 5510 MHz				
Radar Test Summary:				
Signal Type	Trial No.	Detection (%)	Limit (%)	Result
Type D.4.1	30	100.00	60	Pass
Type D.4.2	30	93.33	60	Pass
Type D.4.3	30	96.67	60	Pass
Type D.4.4	30	90.00	60	Pass
Type D.4.5	30	100.00	60	Pass
Type D.4.6	30	100.00	60	Pass
Note: The aggregate should be 80 percent that the average of the percentage of successful detections of Short Pulse Radar Types 1-4.				

802.11ax (40 MHz), 5510 MHz						
	Type_1	Type_2	Type_3	Type_4	Type_5	Type_6
1	v	v	v	v	v	v
2	v	v	x	x	v	v
3	v	v	v	v	v	v
4	v	x	v	v	v	v
5	v	v	v	v	v	v
6	v	v	v	v	v	v
7	v	v	v	v	v	v
8	v	v	v	v	v	v
9	v	v	v	v	v	v
10	v	x	v	v	v	v
11	v	v	v	v	v	v
12	v	v	v	v	v	v
13	v	v	v	v	v	v
14	v	v	v	v	v	v
15	v	v	v	v	v	v
16	v	v	v	v	v	v
17	v	v	v	v	v	v
18	v	v	v	v	v	v
19	v	v	v	x	v	v
20	v	v	v	v	v	v
21	v	v	v	v	v	v
22	v	v	v	v	v	v
23	v	v	v	v	v	v
24	v	v	v	v	v	v
25	v	v	v	v	v	v
26	v	v	v	x	v	v
27	v	v	v	v	v	v
28	v	v	v	v	v	v
29	v	v	v	v	v	v
30	v	v	v	v	v	v
Number of Successful	30	28	29	27	30	30
% of Successful	100.00	93.33	96.67	90.00	100.00	100.00
	95.00					

802.11ax (40 MHz), 5510 MHz					
Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 1	1	658	81	53298
1	Type 1	1	798	67	53466
2	Type 1	1	738	72	53136
3	Type 1	1	938	57	53466
4	Type 1	1	558	95	53010
5	Type 1	1	518	102	52836
6	Type 1	1	3066	18	55188
7	Type 1	1	878	61	53558
8	Type 1	1	718	74	53132
9	Type 1	1	678	78	52884
10	Type 1	1	918	58	53244
11	Type 1	1	898	59	52982
12	Type 1	1	638	83	52954
13	Type 1	1	618	86	53148
14	Type 1	1	598	89	53222
15	Type 1	1	1182	45	53190
16	Type 1	1	909	59	53631
17	Type 1	1	530	100	53000
18	Type 1	1	1946	28	54488
19	Type 1	1	2259	24	54216
20	Type 1	1	2009	27	54243
21	Type 1	1	865	62	53630
22	Type 1	1	2218	24	53232
23	Type 1	1	1480	36	53280
24	Type 1	1	2523	21	52983
25	Type 1	1	2876	19	54644
26	Type 1	1	2496	22	54912
27	Type 1	1	3046	18	54828
28	Type 1	1	2057	26	53482
29	Type 1	1	2719	20	54380

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 2	4.8	218	29	6322
1	Type 2	2.1	206	24	4944
2	Type 2	1.9	201	24	4824
3	Type 2	3.4	226	27	6102
4	Type 2	4.1	192	28	5376
5	Type 2	4.4	221	28	6188
6	Type 2	4.1	172	28	4816
7	Type 2	3.5	150	27	4050
8	Type 2	3.6	186	27	5022
9	Type 2	4.7	154	29	4466
10	Type 2	1.3	194	23	4462
11	Type 2	1	166	23	3818
12	Type 2	3.6	212	27	5724
13	Type 2	3	228	26	5928
14	Type 2	4	211	28	5908
15	Type 2	4.7	151	29	4379
16	Type 2	1.1	179	23	4117
17	Type 2	2.7	175	25	4375
18	Type 2	1.5	165	24	3960
19	Type 2	1.6	167	24	4008
20	Type 2	4.8	173	29	5017
21	Type 2	3.7	189	27	5103
22	Type 2	5	185	29	5365
23	Type 2	4.7	215	29	6235
24	Type 2	3.8	159	27	4293
25	Type 2	2.3	170	25	4250
26	Type 2	4.8	168	29	4872
27	Type 2	1.9	213	24	5112
28	Type 2	1.3	190	23	4370
29	Type 2	1.5	205	23	4715

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 3	9.8	265	18	4770
1	Type 3	7.1	240	16	3840
2	Type 3	6.9	299	16	4784
3	Type 3	8.4	262	17	4454
4	Type 3	9.1	446	18	8028
5	Type 3	9.4	223	18	4014
6	Type 3	9.1	224	18	4032
7	Type 3	8.5	493	17	8381
8	Type 3	8.6	443	17	7531
9	Type 3	9.7	403	18	7254
10	Type 3	6.3	471	16	7536
11	Type 3	6	248	16	3968
12	Type 3	8.6	454	17	7718
13	Type 3	8	227	17	3859
14	Type 3	9	448	18	8064
15	Type 3	9.7	300	18	5400
16	Type 3	6.1	400	16	6400
17	Type 3	7.7	467	17	7939
18	Type 3	6.5	222	16	3552
19	Type 3	6.6	252	16	4032
20	Type 3	9.8	412	18	7416
21	Type 3	8.7	294	18	5292
22	Type 3	10	413	18	7434
23	Type 3	9.7	386	18	6948
24	Type 3	8.8	317	18	5706
25	Type 3	7.3	472	17	8024
26	Type 3	9.8	258	18	4644
27	Type 3	6.9	250	16	4000
28	Type 3	6.3	447	16	7152
29	Type 3	6.5	314	16	5024

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 4	19.4	265	16	4240
1	Type 4	13.4	240	13	3120
2	Type 4	13.1	299	13	3887
3	Type 4	16.4	262	15	3930
4	Type 4	18	446	15	6690
5	Type 4	18.5	223	16	3568
6	Type 4	17.9	224	15	3360
7	Type 4	16.5	493	15	7395
8	Type 4	16.8	443	15	6645
9	Type 4	19.2	403	16	6448
10	Type 4	11.7	471	12	5652
11	Type 4	11.1	248	12	2976
12	Type 4	16.9	454	15	6810
13	Type 4	15.4	227	14	3178
14	Type 4	17.7	448	15	6720
15	Type 4	19.3	300	16	4800
16	Type 4	11.3	400	12	4800
17	Type 4	14.8	467	14	6538
18	Type 4	12.3	222	12	2664
19	Type 4	12.3	252	12	3024
20	Type 4	19.4	412	16	6592
21	Type 4	17	294	15	4410
22	Type 4	19.9	413	16	6608
23	Type 4	19.2	386	16	6176
24	Type 4	17.4	317	15	4755
25	Type 4	14	472	13	6136
26	Type 4	19.4	258	16	4128
27	Type 4	13.2	250	13	3250
28	Type 4	11.7	447	12	5364
29	Type 4	12.2	314	12	3768

Trial Id	Radar Type	Number of Bursts	Burst Period(s)	Waveform Length(s)	Center Frequency (GHz)
0	Type 5	20	0.6	12	5.51
1	Type 5	11	1.090909	12	5.51
2	Type 5	11	1.090909	12	5.51
3	Type 5	15	0.8	12	5.51
4	Type 5	18	0.666667	12	5.51
5	Type 5	18	0.666667	12	5.51
6	Type 5	17	0.705882	12	5.51
7	Type 5	15	0.8	12	5.51
8	Type 5	16	0.75	12	5.51
9	Type 5	19	0.631579	12	5.51
10	Type 5	9	1.333333	12	5.493
11	Type 5	8	1.5	12	5.493
12	Type 5	16	0.75	12	5.497
13	Type 5	14	0.857143	12	5.496
14	Type 5	17	0.705882	12	5.497
15	Type 5	19	0.631579	12	5.499
16	Type 5	8	1.5	12	5.493
17	Type 5	13	0.923077	12	5.495
18	Type 5	9	1.333333	12	5.494
19	Type 5	9	1.333333	12	5.494
20	Type 5	20	0.6	12	5.521
21	Type 5	16	0.75	12	5.523
22	Type 5	20	0.6	12	5.521
23	Type 5	19	0.631579	12	5.521
24	Type 5	17	0.705882	12	5.523
25	Type 5	12	1	12	5.525
26	Type 5	20	0.6	12	5.521
27	Type 5	11	1.090909	12	5.526
28	Type 5	9	1.333333	12	5.527
29	Type 5	9	1.333333	12	5.526

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Pulses per Hop	Hopping Rate (KHz)	Hopping Sequence Length (ms)	Visible Frequency Number
0	Type 6	1	333.3	9	0.3333	300	6
1	Type 6	1	333.3	9	0.3333	300	9
2	Type 6	1	333.3	9	0.3333	300	1
3	Type 6	1	333.3	9	0.3333	300	12
4	Type 6	1	333.3	9	0.3333	300	7
5	Type 6	1	333.3	9	0.3333	300	11
6	Type 6	1	333.3	9	0.3333	300	8
7	Type 6	1	333.3	9	0.3333	300	9
8	Type 6	1	333.3	9	0.3333	300	6
9	Type 6	1	333.3	9	0.3333	300	13
10	Type 6	1	333.3	9	0.3333	300	7
11	Type 6	1	333.3	9	0.3333	300	11
12	Type 6	1	333.3	9	0.3333	300	14
13	Type 6	1	333.3	9	0.3333	300	11
14	Type 6	1	333.3	9	0.3333	300	9
15	Type 6	1	333.3	9	0.3333	300	8
16	Type 6	1	333.3	9	0.3333	300	7
17	Type 6	1	333.3	9	0.3333	300	12
18	Type 6	1	333.3	9	0.3333	300	13
19	Type 6	1	333.3	9	0.3333	300	9
20	Type 6	1	333.3	9	0.3333	300	7
21	Type 6	1	333.3	9	0.3333	300	7
22	Type 6	1	333.3	9	0.3333	300	13
23	Type 6	1	333.3	9	0.3333	300	9
24	Type 6	1	333.3	9	0.3333	300	8
25	Type 6	1	333.3	9	0.3333	300	10
26	Type 6	1	333.3	9	0.3333	300	10
27	Type 6	1	333.3	9	0.3333	300	10
28	Type 6	1	333.3	9	0.3333	300	5
29	Type 6	1	333.3	9	0.3333	300	2

802.11ax (80 MHz), 5530 MHz				
Radar Test Summary:				
Signal Type	Trial No.	Detection (%)	Limit (%)	Result
Type D.4.1	30	100.00	60	Pass
Type D.4.2	30	93.33	60	Pass
Type D.4.3	30	100.00	60	Pass
Type D.4.4	30	100.00	60	Pass
Type D.4.5	30	100.00	60	Pass
Type D.4.6	30	100.00	60	Pass
Note: The aggregate should be 80 percent that the average of the percentage of successful detections of Short Pulse Radar Types 1-4.				

802.11ax (80 MHz), 5530 MHz						
	Type_1	Type_2	Type_3	Type_4	Type_5	Type_6
1	v	v	v	v	v	v
2	v	v	v	v	v	v
3	v	v	v	v	v	v
4	v	v	v	v	v	v
5	v	v	v	v	v	v
6	v	v	v	v	v	v
7	v	v	v	v	v	v
8	v	v	v	v	v	v
9	v	v	v	v	v	v
10	v	x	v	v	v	v
11	v	v	v	v	v	v
12	v	v	v	v	v	v
13	v	v	v	v	v	v
14	v	v	v	v	v	v
15	v	v	v	v	v	v
16	v	v	v	v	v	v
17	v	v	v	v	v	v
18	v	v	v	v	v	v
19	v	v	v	v	v	v
20	v	v	v	v	v	v
21	v	v	v	v	v	v
22	v	v	v	v	v	v
23	v	v	v	v	v	v
24	v	x	v	v	v	v
25	v	v	v	v	v	v
26	v	v	v	v	v	v
27	v	v	v	v	v	v
28	v	v	v	v	v	v
29	v	v	v	v	v	v
30	v	v	v	v	v	v
Number of Successful	30	28	30	30	30	30
% of Successful	100.00	93.33	100.00	100.00	100.00	100.00
	98.33					

802.11ax (80 MHz), 5530 MHz					
Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 1	1	658	81	53298
1	Type 1	1	798	67	53466
2	Type 1	1	738	72	53136
3	Type 1	1	938	57	53466
4	Type 1	1	558	95	53010
5	Type 1	1	518	102	52836
6	Type 1	1	3066	18	55188
7	Type 1	1	878	61	53558
8	Type 1	1	718	74	53132
9	Type 1	1	678	78	52884
10	Type 1	1	918	58	53244
11	Type 1	1	898	59	52982
12	Type 1	1	638	83	52954
13	Type 1	1	618	86	53148
14	Type 1	1	598	89	53222
15	Type 1	1	1182	45	53190
16	Type 1	1	909	59	53631
17	Type 1	1	530	100	53000
18	Type 1	1	1946	28	54488
19	Type 1	1	2259	24	54216
20	Type 1	1	2009	27	54243
21	Type 1	1	865	62	53630
22	Type 1	1	2218	24	53232
23	Type 1	1	1480	36	53280
24	Type 1	1	2523	21	52983
25	Type 1	1	2876	19	54644
26	Type 1	1	2496	22	54912
27	Type 1	1	3046	18	54828
28	Type 1	1	2057	26	53482
29	Type 1	1	2719	20	54380

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 2	4.8	218	29	6322
1	Type 2	2.1	206	24	4944
2	Type 2	1.9	201	24	4824
3	Type 2	3.4	226	27	6102
4	Type 2	4.1	192	28	5376
5	Type 2	4.4	221	28	6188
6	Type 2	4.1	172	28	4816
7	Type 2	3.5	150	27	4050
8	Type 2	3.6	186	27	5022
9	Type 2	4.7	154	29	4466
10	Type 2	1.3	194	23	4462
11	Type 2	1	166	23	3818
12	Type 2	3.6	212	27	5724
13	Type 2	3	228	26	5928
14	Type 2	4	211	28	5908
15	Type 2	4.7	151	29	4379
16	Type 2	1.1	179	23	4117
17	Type 2	2.7	175	25	4375
18	Type 2	1.5	165	24	3960
19	Type 2	1.6	167	24	4008
20	Type 2	4.8	173	29	5017
21	Type 2	3.7	189	27	5103
22	Type 2	5	185	29	5365
23	Type 2	4.7	215	29	6235
24	Type 2	3.8	159	27	4293
25	Type 2	2.3	170	25	4250
26	Type 2	4.8	168	29	4872
27	Type 2	1.9	213	24	5112
28	Type 2	1.3	190	23	4370
29	Type 2	1.5	205	23	4715

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 3	9.8	265	18	4770
1	Type 3	7.1	240	16	3840
2	Type 3	6.9	299	16	4784
3	Type 3	8.4	262	17	4454
4	Type 3	9.1	446	18	8028
5	Type 3	9.4	223	18	4014
6	Type 3	9.1	224	18	4032
7	Type 3	8.5	493	17	8381
8	Type 3	8.6	443	17	7531
9	Type 3	9.7	403	18	7254
10	Type 3	6.3	471	16	7536
11	Type 3	6	248	16	3968
12	Type 3	8.6	454	17	7718
13	Type 3	8	227	17	3859
14	Type 3	9	448	18	8064
15	Type 3	9.7	300	18	5400
16	Type 3	6.1	400	16	6400
17	Type 3	7.7	467	17	7939
18	Type 3	6.5	222	16	3552
19	Type 3	6.6	252	16	4032
20	Type 3	9.8	412	18	7416
21	Type 3	8.7	294	18	5292
22	Type 3	10	413	18	7434
23	Type 3	9.7	386	18	6948
24	Type 3	8.8	317	18	5706
25	Type 3	7.3	472	17	8024
26	Type 3	9.8	258	18	4644
27	Type 3	6.9	250	16	4000
28	Type 3	6.3	447	16	7152
29	Type 3	6.5	314	16	5024

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 4	19.4	265	16	4240
1	Type 4	13.4	240	13	3120
2	Type 4	13.1	299	13	3887
3	Type 4	16.4	262	15	3930
4	Type 4	18	446	15	6690
5	Type 4	18.5	223	16	3568
6	Type 4	17.9	224	15	3360
7	Type 4	16.5	493	15	7395
8	Type 4	16.8	443	15	6645
9	Type 4	19.2	403	16	6448
10	Type 4	11.7	471	12	5652
11	Type 4	11.1	248	12	2976
12	Type 4	16.9	454	15	6810
13	Type 4	15.4	227	14	3178
14	Type 4	17.7	448	15	6720
15	Type 4	19.3	300	16	4800
16	Type 4	11.3	400	12	4800
17	Type 4	14.8	467	14	6538
18	Type 4	12.3	222	12	2664
19	Type 4	12.3	252	12	3024
20	Type 4	19.4	412	16	6592
21	Type 4	17	294	15	4410
22	Type 4	19.9	413	16	6608
23	Type 4	19.2	386	16	6176
24	Type 4	17.4	317	15	4755
25	Type 4	14	472	13	6136
26	Type 4	19.4	258	16	4128
27	Type 4	13.2	250	13	3250
28	Type 4	11.7	447	12	5364
29	Type 4	12.2	314	12	3768

Trial Id	Radar Type	Number of Bursts	Burst Period(s)	Waveform Length(s)	Center Frequency (GHz)
0	Type 5	20	0.6	12	5.53
1	Type 5	11	1.090909	12	5.53
2	Type 5	11	1.090909	12	5.53
3	Type 5	15	0.8	12	5.53
4	Type 5	18	0.666667	12	5.53
5	Type 5	18	0.666667	12	5.53
6	Type 5	17	0.705882	12	5.53
7	Type 5	15	0.8	12	5.53
8	Type 5	16	0.75	12	5.53
9	Type 5	19	0.631579	12	5.53
10	Type 5	9	1.333333	12	5.493
11	Type 5	8	1.5	12	5.493
12	Type 5	16	0.75	12	5.497
13	Type 5	14	0.857143	12	5.496
14	Type 5	17	0.705882	12	5.497
15	Type 5	19	0.631579	12	5.499
16	Type 5	8	1.5	12	5.493
17	Type 5	13	0.923077	12	5.495
18	Type 5	9	1.333333	12	5.494
19	Type 5	9	1.333333	12	5.494
20	Type 5	20	0.6	12	5.561
21	Type 5	16	0.75	12	5.563
22	Type 5	20	0.6	12	5.561
23	Type 5	19	0.631579	12	5.561
24	Type 5	17	0.705882	12	5.563
25	Type 5	12	1	12	5.565
26	Type 5	20	0.6	12	5.561
27	Type 5	11	1.090909	12	5.566
28	Type 5	9	1.333333	12	5.567
29	Type 5	9	1.333333	12	5.566

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Pulses per Hop	Hopping Rate (KHz)	Hopping Sequence Length (ms)	Visible Frequency Number
0	Type 6	1	333.3	9	0.3333	300	11
1	Type 6	1	333.3	9	0.3333	300	16
2	Type 6	1	333.3	9	0.3333	300	12
3	Type 6	1	333.3	9	0.3333	300	18
4	Type 6	1	333.3	9	0.3333	300	19
5	Type 6	1	333.3	9	0.3333	300	21
6	Type 6	1	333.3	9	0.3333	300	18
7	Type 6	1	333.3	9	0.3333	300	19
8	Type 6	1	333.3	9	0.3333	300	16
9	Type 6	1	333.3	9	0.3333	300	20
10	Type 6	1	333.3	9	0.3333	300	15
11	Type 6	1	333.3	9	0.3333	300	19
12	Type 6	1	333.3	9	0.3333	300	27
13	Type 6	1	333.3	9	0.3333	300	22
14	Type 6	1	333.3	9	0.3333	300	14
15	Type 6	1	333.3	9	0.3333	300	17
16	Type 6	1	333.3	9	0.3333	300	14
17	Type 6	1	333.3	9	0.3333	300	21
18	Type 6	1	333.3	9	0.3333	300	22
19	Type 6	1	333.3	9	0.3333	300	12
20	Type 6	1	333.3	9	0.3333	300	18
21	Type 6	1	333.3	9	0.3333	300	15
22	Type 6	1	333.3	9	0.3333	300	21
23	Type 6	1	333.3	9	0.3333	300	16
24	Type 6	1	333.3	9	0.3333	300	19
25	Type 6	1	333.3	9	0.3333	300	20
26	Type 6	1	333.3	9	0.3333	300	16
27	Type 6	1	333.3	9	0.3333	300	14
28	Type 6	1	333.3	9	0.3333	300	17
29	Type 6	1	333.3	9	0.3333	300	9

802.11ax (160 MHz), 5570 MHz				
Radar Test Summary:				
Signal Type	Trial No.	Detection (%)	Limit (%)	Result
Type D.4.1	30	100.00	60	Pass
Type D.4.2	30	100.00	60	Pass
Type D.4.3	30	100.00	60	Pass
Type D.4.4	30	100.00	60	Pass
Type D.4.5	30	86.67	60	Pass
Type D.4.6	30	100.00	60	Pass
Note: The aggregate should be 80 percent that the average of the percentage of successful detections of Short Pulse Radar Types 1-4.				

802.11ax (160 MHz), 5570 MHz						
	Type_1	Type_2	Type_3	Type_4	Type_5	Type_6
1	v	v	v	v	v	v
2	v	v	v	v	v	v
3	v	v	v	v	v	v
4	v	v	v	v	v	v
5	v	v	v	v	v	v
6	v	v	v	v	v	v
7	v	v	v	v	v	v
8	v	v	v	v	v	v
9	v	v	v	v	v	v
10	v	v	v	v	v	v
11	v	v	v	v	x	v
12	v	v	v	v	v	v
13	v	v	v	v	v	v
14	v	v	v	v	v	v
15	v	v	v	v	v	v
16	v	v	v	v	v	v
17	v	v	v	v	v	v
18	v	v	v	v	v	v
19	v	v	v	v	v	v
20	v	v	v	v	v	v
21	v	v	v	v	v	v
22	v	v	v	v	v	v
23	v	v	v	v	v	v
24	v	v	v	v	v	v
25	v	v	v	v	v	v
26	v	v	v	v	v	v
27	v	v	v	v	v	v
28	v	v	v	v	x	v
29	v	v	v	v	x	v
30	v	v	v	v	x	v
Number of Successful	30	30	30	30	26	30
% of Successful	100.00	100.00	100.00	100.00	86.67	100.00
	100.00					

802.11ax (160 MHz), 5570 MHz					
Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 1	1	658	81	53298
1	Type 1	1	798	67	53466
2	Type 1	1	738	72	53136
3	Type 1	1	938	57	53466
4	Type 1	1	558	95	53010
5	Type 1	1	518	102	52836
6	Type 1	1	3066	18	55188
7	Type 1	1	878	61	53558
8	Type 1	1	718	74	53132
9	Type 1	1	678	78	52884
10	Type 1	1	918	58	53244
11	Type 1	1	898	59	52982
12	Type 1	1	638	83	52954
13	Type 1	1	618	86	53148
14	Type 1	1	598	89	53222
15	Type 1	1	1182	45	53190
16	Type 1	1	909	59	53631
17	Type 1	1	530	100	53000
18	Type 1	1	1946	28	54488
19	Type 1	1	2259	24	54216
20	Type 1	1	2009	27	54243
21	Type 1	1	865	62	53630
22	Type 1	1	2218	24	53232
23	Type 1	1	1480	36	53280
24	Type 1	1	2523	21	52983
25	Type 1	1	2876	19	54644
26	Type 1	1	2496	22	54912
27	Type 1	1	3046	18	54828
28	Type 1	1	2057	26	53482
29	Type 1	1	2719	20	54380

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 2	4.8	218	29	6322
1	Type 2	2.1	206	24	4944
2	Type 2	1.9	201	24	4824
3	Type 2	3.4	226	27	6102
4	Type 2	4.1	192	28	5376
5	Type 2	4.4	221	28	6188
6	Type 2	4.1	172	28	4816
7	Type 2	3.5	150	27	4050
8	Type 2	3.6	186	27	5022
9	Type 2	4.7	154	29	4466
10	Type 2	1.3	194	23	4462
11	Type 2	1	166	23	3818
12	Type 2	3.6	212	27	5724
13	Type 2	3	228	26	5928
14	Type 2	4	211	28	5908
15	Type 2	4.7	151	29	4379
16	Type 2	1.1	179	23	4117
17	Type 2	2.7	175	25	4375
18	Type 2	1.5	165	24	3960
19	Type 2	1.6	167	24	4008
20	Type 2	4.8	173	29	5017
21	Type 2	3.7	189	27	5103
22	Type 2	5	185	29	5365
23	Type 2	4.7	215	29	6235
24	Type 2	3.8	159	27	4293
25	Type 2	2.3	170	25	4250
26	Type 2	4.8	168	29	4872
27	Type 2	1.9	213	24	5112
28	Type 2	1.3	190	23	4370
29	Type 2	1.5	205	23	4715

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 3	9.8	265	18	4770
1	Type 3	7.1	240	16	3840
2	Type 3	6.9	299	16	4784
3	Type 3	8.4	262	17	4454
4	Type 3	9.1	446	18	8028
5	Type 3	9.4	223	18	4014
6	Type 3	9.1	224	18	4032
7	Type 3	8.5	493	17	8381
8	Type 3	8.6	443	17	7531
9	Type 3	9.7	403	18	7254
10	Type 3	6.3	471	16	7536
11	Type 3	6	248	16	3968
12	Type 3	8.6	454	17	7718
13	Type 3	8	227	17	3859
14	Type 3	9	448	18	8064
15	Type 3	9.7	300	18	5400
16	Type 3	6.1	400	16	6400
17	Type 3	7.7	467	17	7939
18	Type 3	6.5	222	16	3552
19	Type 3	6.6	252	16	4032
20	Type 3	9.8	412	18	7416
21	Type 3	8.7	294	18	5292
22	Type 3	10	413	18	7434
23	Type 3	9.7	386	18	6948
24	Type 3	8.8	317	18	5706
25	Type 3	7.3	472	17	8024
26	Type 3	9.8	258	18	4644
27	Type 3	6.9	250	16	4000
28	Type 3	6.3	447	16	7152
29	Type 3	6.5	314	16	5024

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)
0	Type 4	19.4	265	16	4240
1	Type 4	13.4	240	13	3120
2	Type 4	13.1	299	13	3887
3	Type 4	16.4	262	15	3930
4	Type 4	18	446	15	6690
5	Type 4	18.5	223	16	3568
6	Type 4	17.9	224	15	3360
7	Type 4	16.5	493	15	7395
8	Type 4	16.8	443	15	6645
9	Type 4	19.2	403	16	6448
10	Type 4	11.7	471	12	5652
11	Type 4	11.1	248	12	2976
12	Type 4	16.9	454	15	6810
13	Type 4	15.4	227	14	3178
14	Type 4	17.7	448	15	6720
15	Type 4	19.3	300	16	4800
16	Type 4	11.3	400	12	4800
17	Type 4	14.8	467	14	6538
18	Type 4	12.3	222	12	2664
19	Type 4	12.3	252	12	3024
20	Type 4	19.4	412	16	6592
21	Type 4	17	294	15	4410
22	Type 4	19.9	413	16	6608
23	Type 4	19.2	386	16	6176
24	Type 4	17.4	317	15	4755
25	Type 4	14	472	13	6136
26	Type 4	19.4	258	16	4128
27	Type 4	13.2	250	13	3250
28	Type 4	11.7	447	12	5364
29	Type 4	12.2	314	12	3768

Trial Id	Radar Type	Number of Bursts	Burst Period(s)	Waveform Length(s)	Center Frequency (GHz)
0	Type 5	20	0.6	12	5.57
1	Type 5	11	1.090909	12	5.57
2	Type 5	11	1.090909	12	5.57
3	Type 5	15	0.8	12	5.57
4	Type 5	18	0.666667	12	5.57
5	Type 5	18	0.666667	12	5.57
6	Type 5	17	0.705882	12	5.57
7	Type 5	15	0.8	12	5.57
8	Type 5	16	0.75	12	5.57
9	Type 5	19	0.631579	12	5.57
10	Type 5	9	1.333333	12	5.495
11	Type 5	8	1.5	12	5.494
12	Type 5	16	0.75	12	5.498
13	Type 5	14	0.857143	12	5.497
14	Type 5	17	0.705882	12	5.499
15	Type 5	19	0.631579	12	5.5
16	Type 5	8	1.5	12	5.494
17	Type 5	13	0.923077	12	5.497
18	Type 5	9	1.333333	12	5.495
19	Type 5	9	1.333333	12	5.495
20	Type 5	20	0.6	12	5.64
21	Type 5	16	0.75	12	5.642
22	Type 5	20	0.6	12	5.64
23	Type 5	19	0.631579	12	5.64
24	Type 5	17	0.705882	12	5.641
25	Type 5	12	1	12	5.644
26	Type 5	20	0.6	12	5.64
27	Type 5	11	1.090909	12	5.644
28	Type 5	9	1.333333	12	5.645
29	Type 5	9	1.333333	12	5.645

Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Pulses per Hop	Hopping Rate (KHz)	Hopping Sequence Length (ms)	Visible Frequency Number
0	Type 6	1	333.3	9	0.3333	300	27
1	Type 6	1	333.3	9	0.3333	300	35
2	Type 6	1	333.3	9	0.3333	300	30
3	Type 6	1	333.3	9	0.3333	300	38
4	Type 6	1	333.3	9	0.3333	300	33
5	Type 6	1	333.3	9	0.3333	300	44
6	Type 6	1	333.3	9	0.3333	300	37
7	Type 6	1	333.3	9	0.3333	300	32
8	Type 6	1	333.3	9	0.3333	300	27
9	Type 6	1	333.3	9	0.3333	300	33
10	Type 6	1	333.3	9	0.3333	300	32
11	Type 6	1	333.3	9	0.3333	300	36
12	Type 6	1	333.3	9	0.3333	300	36
13	Type 6	1	333.3	9	0.3333	300	39
14	Type 6	1	333.3	9	0.3333	300	32
15	Type 6	1	333.3	9	0.3333	300	33
16	Type 6	1	333.3	9	0.3333	300	30
17	Type 6	1	333.3	9	0.3333	300	34
18	Type 6	1	333.3	9	0.3333	300	37
19	Type 6	1	333.3	9	0.3333	300	26
20	Type 6	1	333.3	9	0.3333	300	33
21	Type 6	1	333.3	9	0.3333	300	30
22	Type 6	1	333.3	9	0.3333	300	37
23	Type 6	1	333.3	9	0.3333	300	38
24	Type 6	1	333.3	9	0.3333	300	35
25	Type 6	1	333.3	9	0.3333	300	33
26	Type 6	1	333.3	9	0.3333	300	32
27	Type 6	1	333.3	9	0.3333	300	33
28	Type 6	1	333.3	9	0.3333	300	34
29	Type 6	1	333.3	9	0.3333	300	31