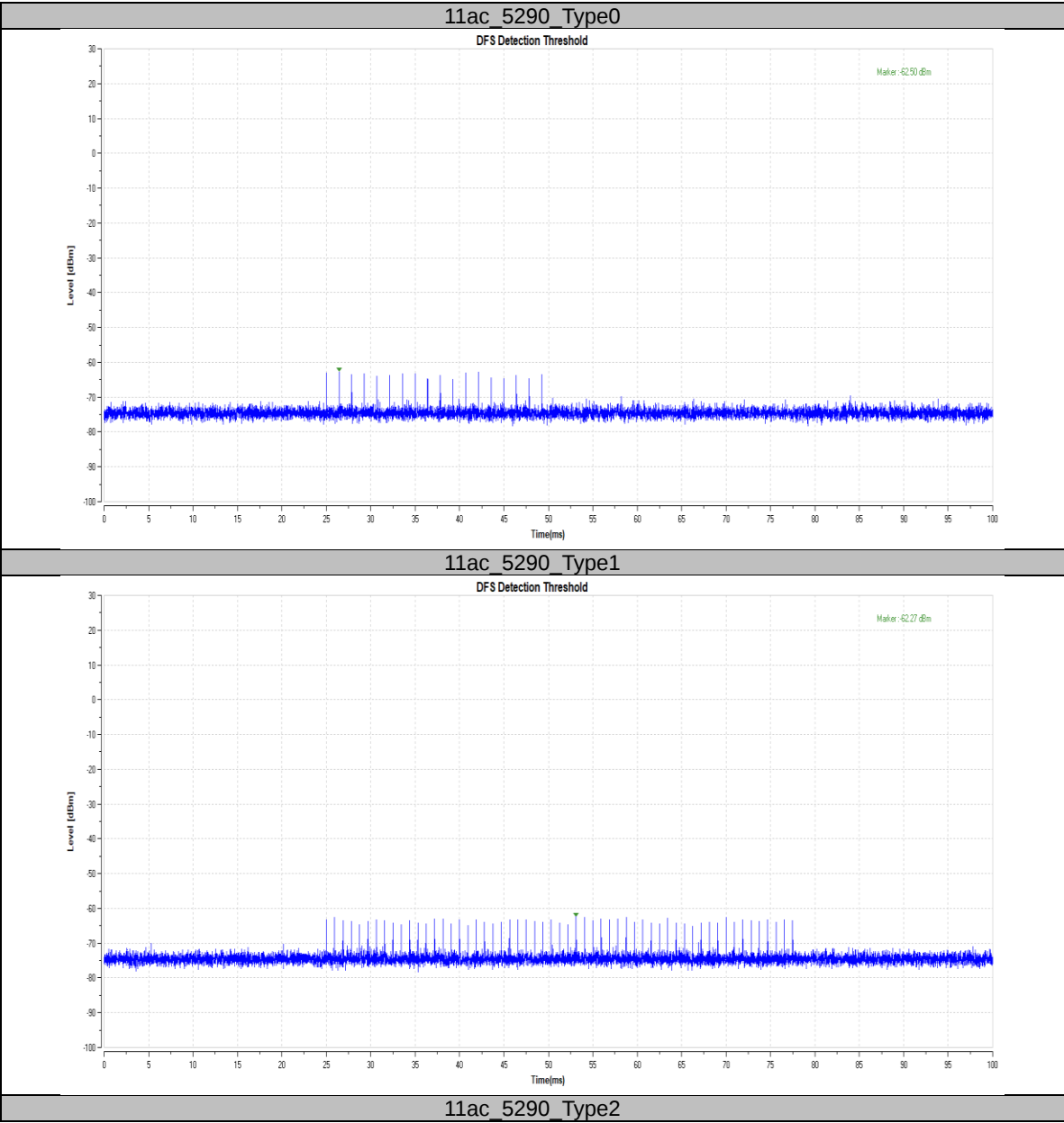


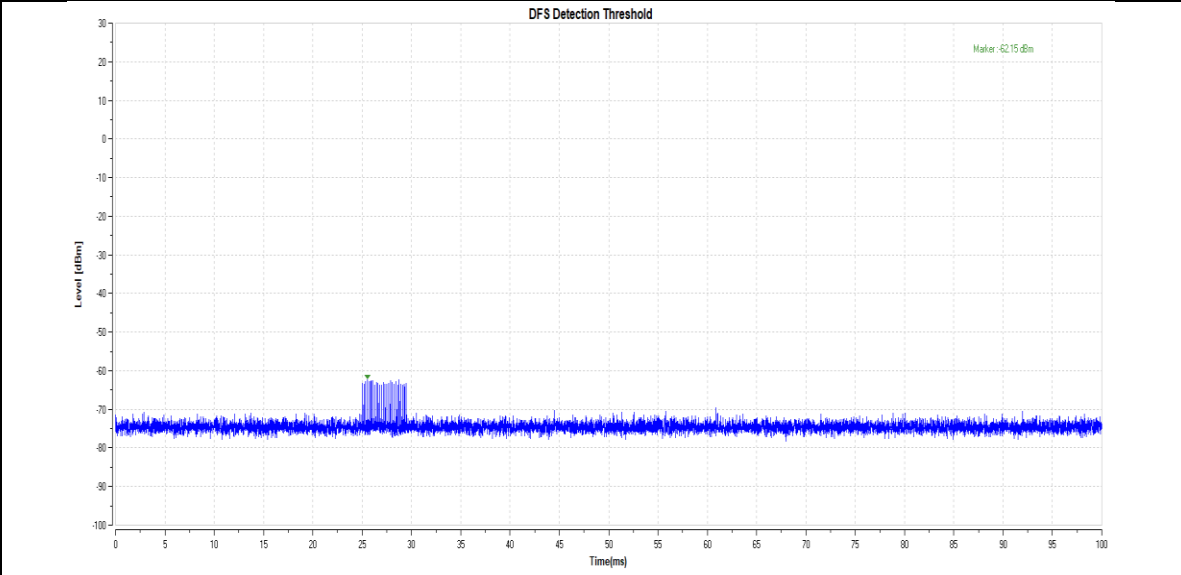
Appendix A: DFS Detection Thresholds
Test Result

TestMode	Frequency[dbm]	Radar Type	Result	Limit[dbm]	Verdict
11ac	5290	Type0	-62.50	-62.00	PASS
		Type1	-62.27	-62.00	PASS
		Type2	-62.15	-62.00	PASS
		Type3	-62.28	-62.00	PASS
		Type4	-62.10	-62.00	PASS
		Type5	-62.23	-62.00	PASS
		Type6	-62.09	-62.00	PASS

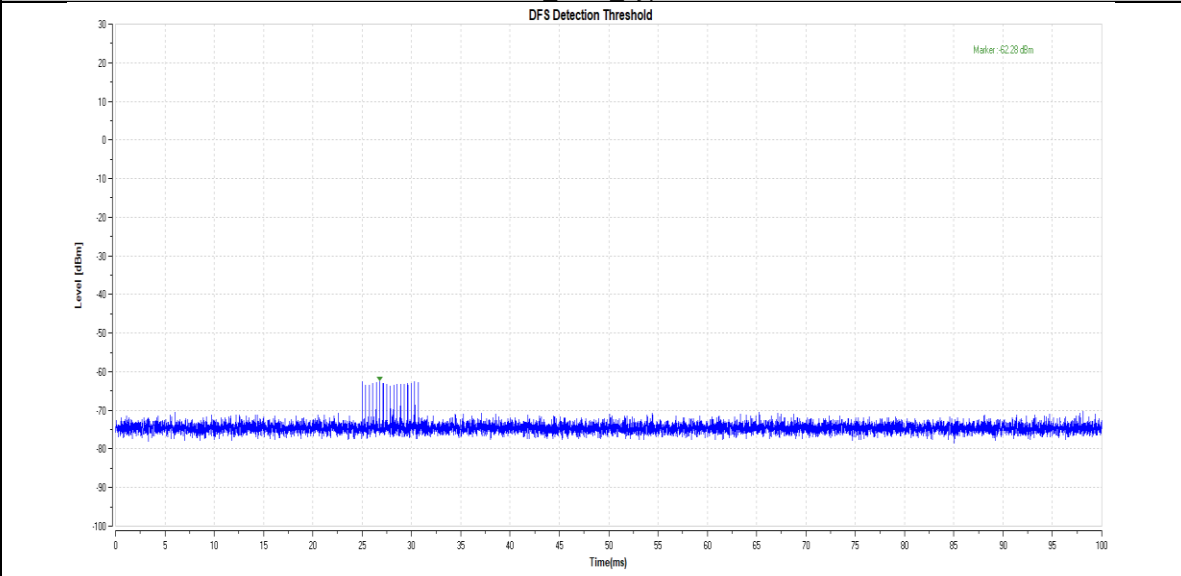
Only show the worst mode

Test Graphs

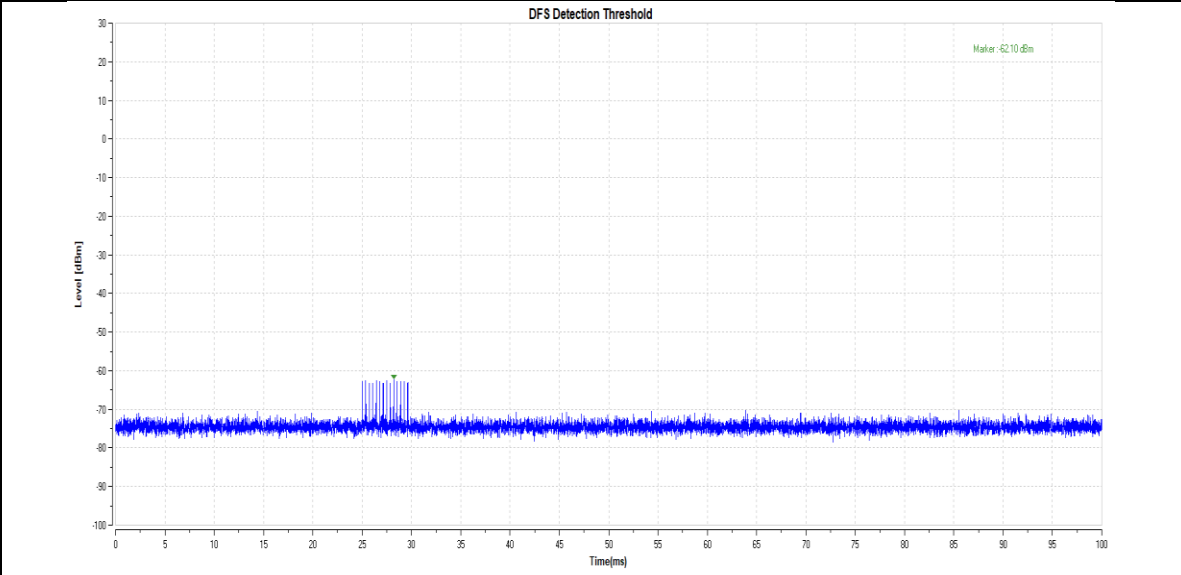




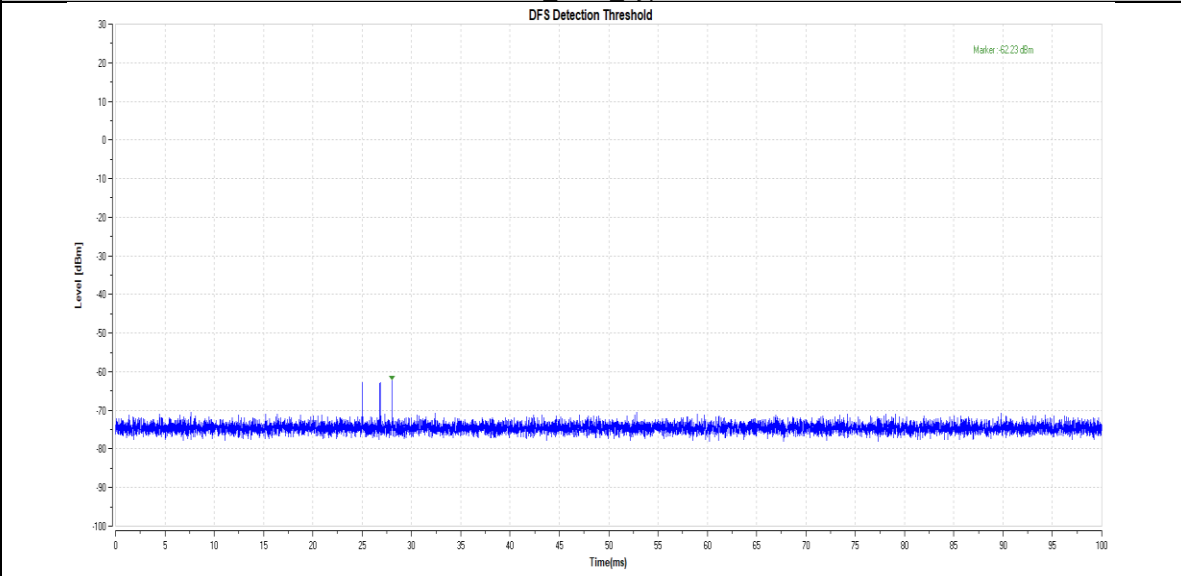
11ac_5290_Type3



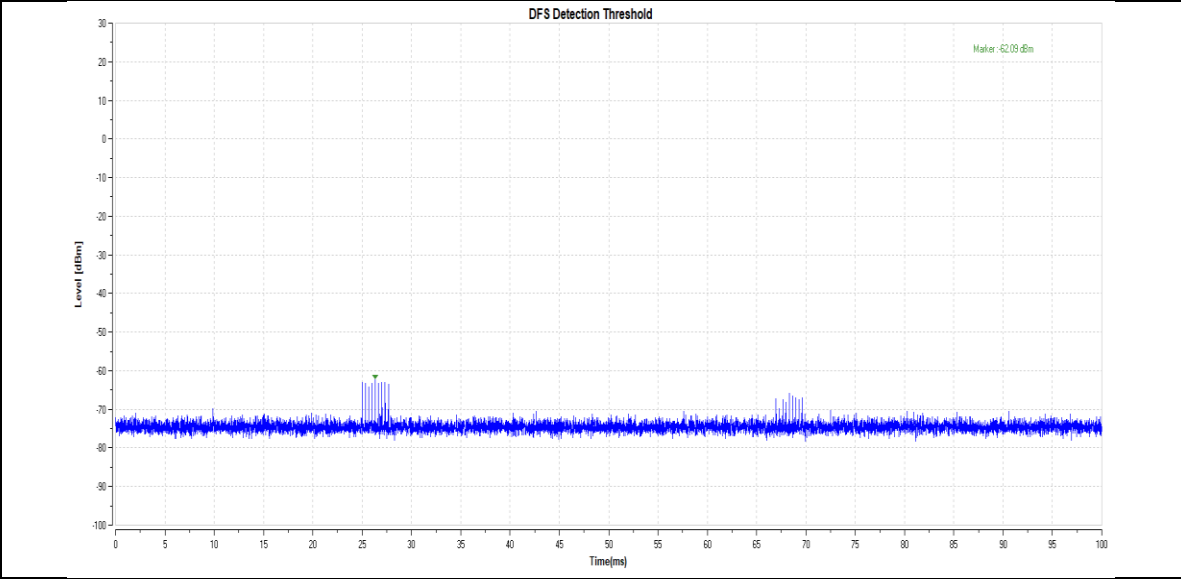
11ac_5290_Type4



11ac_5290_Type5



11ac_5290_Type6

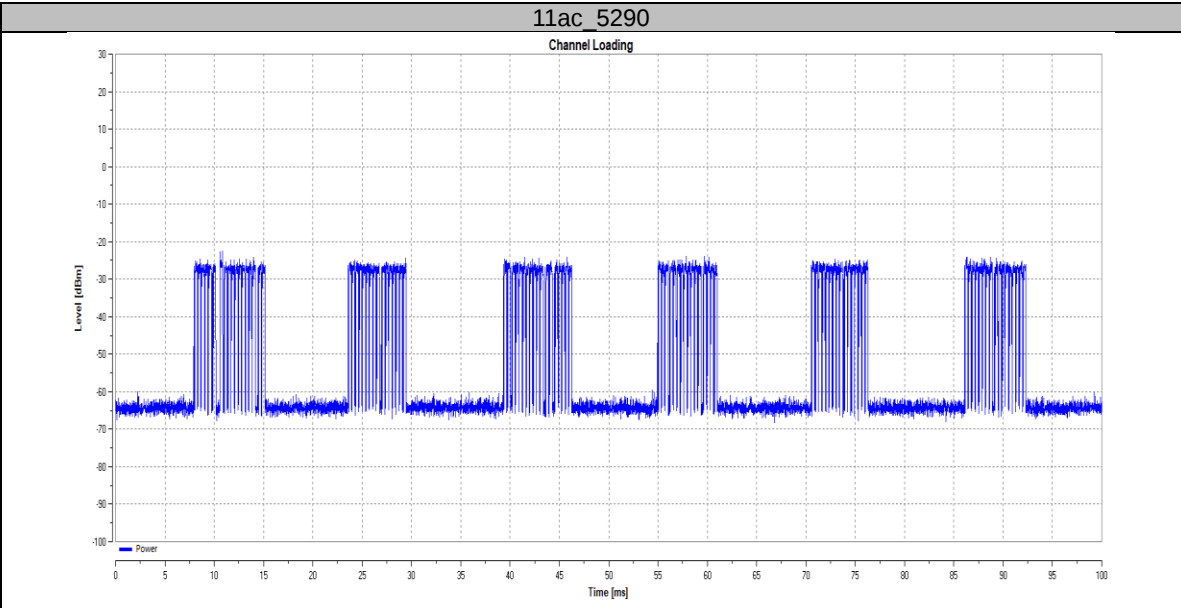


Appendix B: Channel Loading
Test Result

TestMode	Frequency[MHz]	Result	Limit [%]	Verdict
11ac	5290	30.25	17	PASS

Only show the worst mode

Test Graphs



Appendix C: Channel Availability Check Time
Test Result

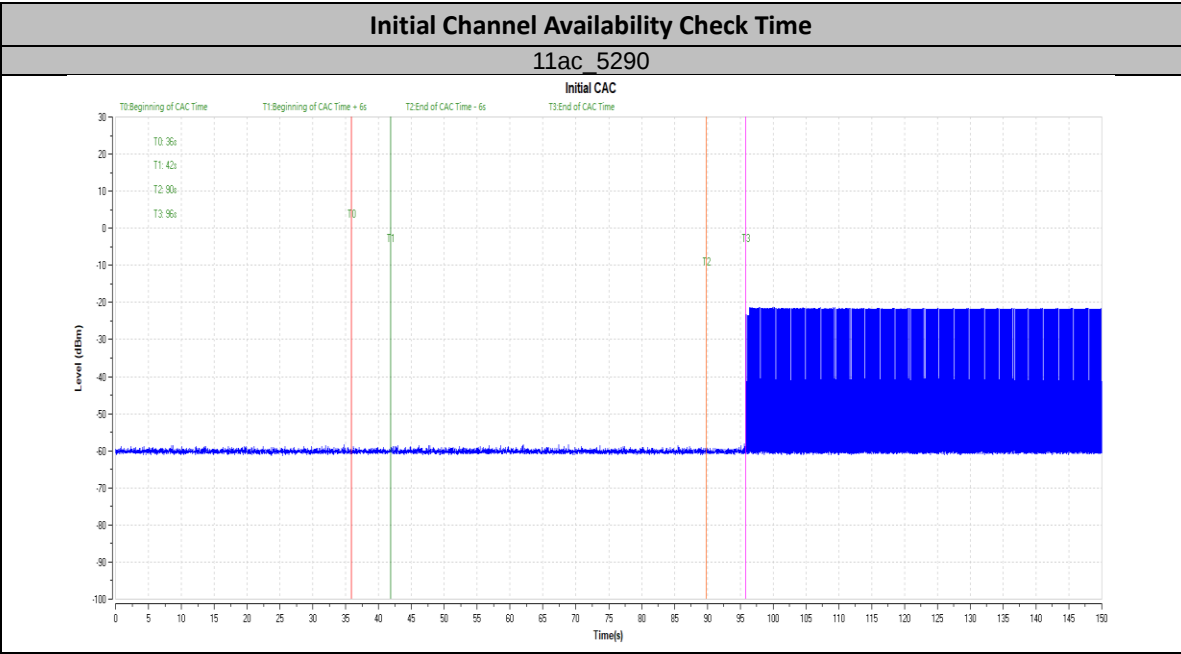
TestMode	Frequency[MHz]	Result	Verdict
11ac	5290	See test Graph	PASS

TestMode	Frequency[MHz]	Result	Verdict
11ac	5290	See test Graph	PASS

TestMode	Frequency[MHz]	Result	Verdict
11ac	5290	See test Graph	PASS

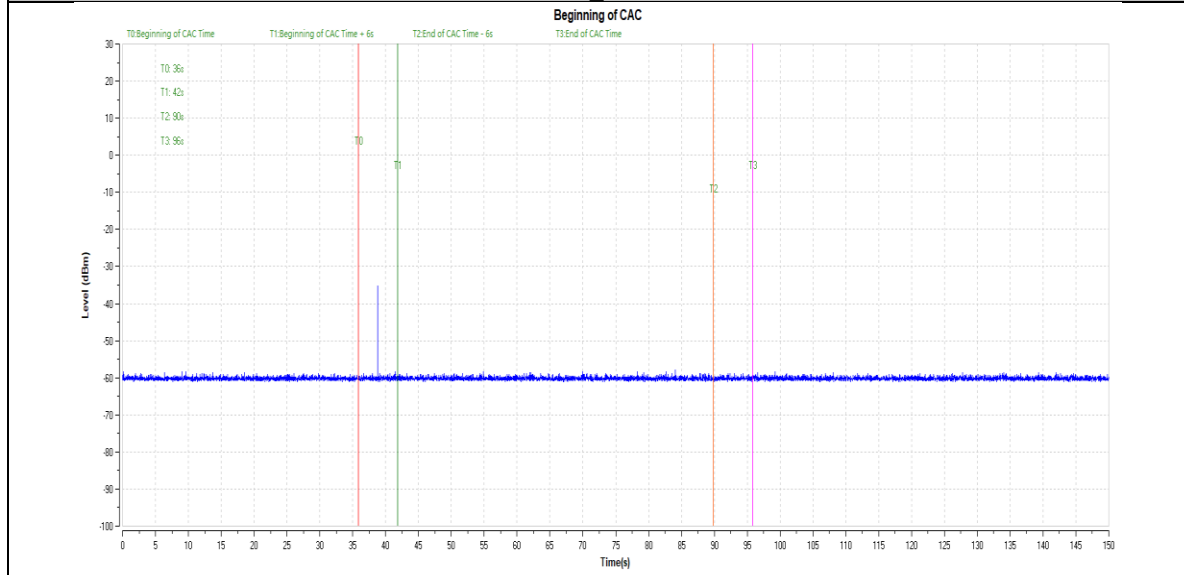
Only show the worst mode

Test Graphs



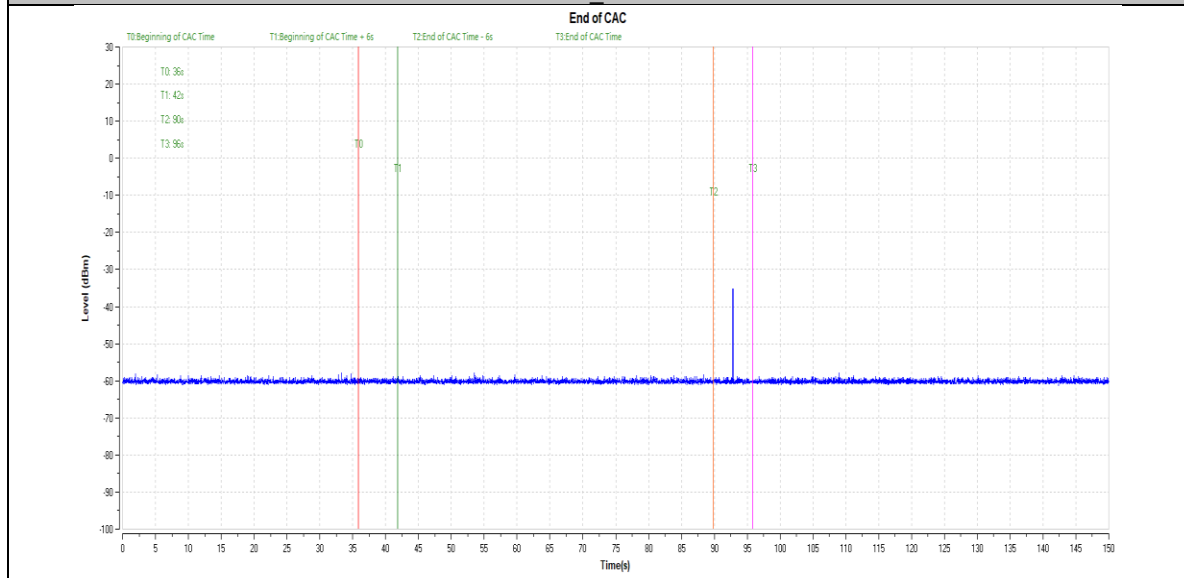
Beginning of Channel Availability Check Time

11ac_5290



End of Channel Availability Check Time

11ac_5290

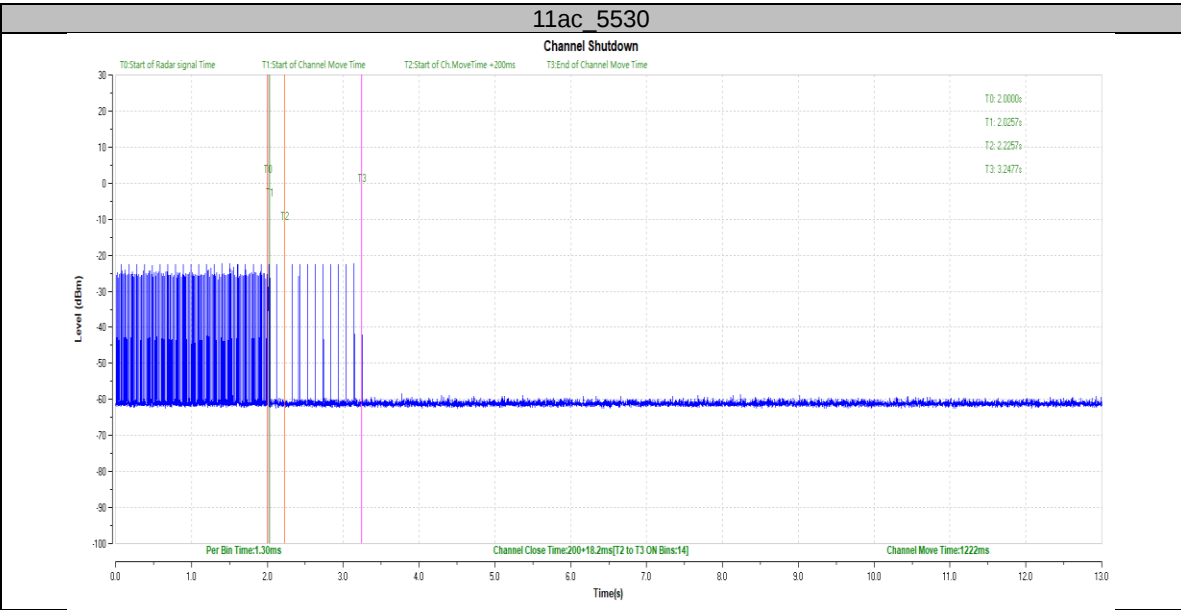


Appendix D: Channel Move Time and Channel Closing
Transmission Time
Test Result

TestMode	Frequency[MHz]	CCTT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11ac	5290	200+18.2	200+60	1222	10000	PASS

Only show the widest BW mode

Test Graphs



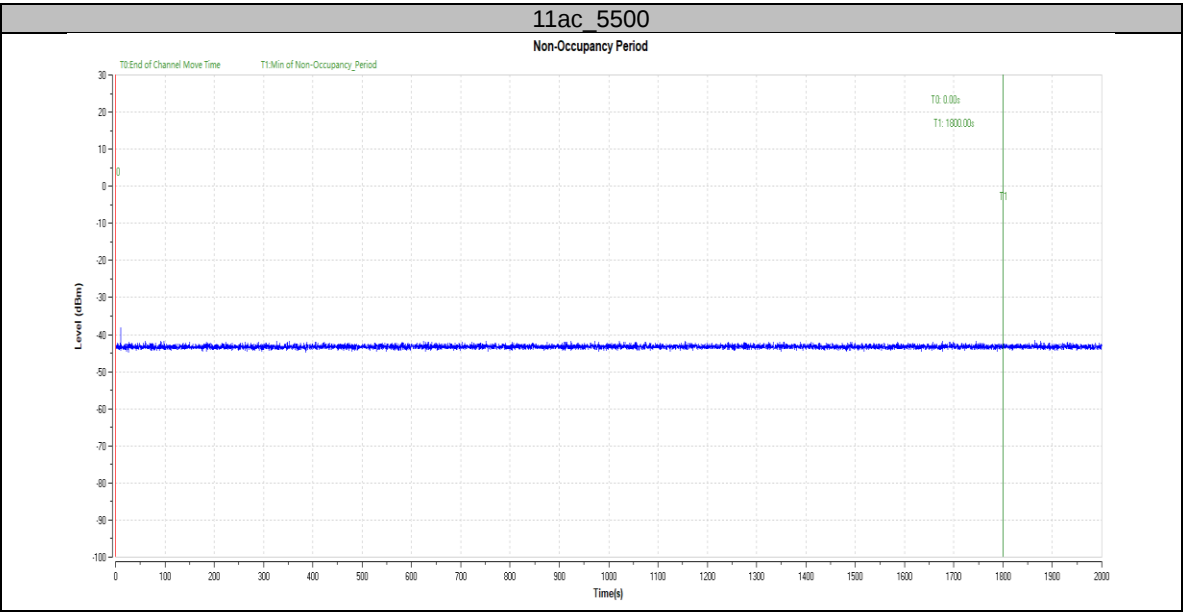
Appendix E: Non-Occupancy Period

Test Result

TestMode	Frequency[MHz]	Result	Limit[s]	Verdict
11ac	5290	see test graph	≥1800	PASS

Only show the worst mode

Test Graphs



Appendix F: U-NII Detection Bandwidth

Detection Bandwidth test transmission 20M(802.11ac20 mode)											
Frequency(MHz)				5500							
Result				Pass							
Radar F(MHz)	DFS Detection Trials(1=Detection, 0= No Detection)										Detection Rate(%)
	1	2	3	4	5	6	7	8	9	10	
5490	1	1	1	1	1	1	1	1	1	1	100
5490.5(L)	1	1	1	0	1	1	1	1	1	1	90
5491	1	1	1	1	0	1	1	1	1	1	90
5492	1	1	1	1	1	1	1	1	1	1	100
5493	1	1	1	1	1	1	1	1	1	1	100
5494	1	1	1	1	1	1	1	1	1	1	100
5495	1	1	1	1	1	1	1	1	1	1	100
5500	1	1	1	1	1	1	1	1	1	1	100
5505	1	1	1	1	1	1	1	1	1	1	100
5506	1	1	1	1	1	1	1	1	1	1	100
5507	5	1	1	1	1	1	1	1	1	1	100
5508	1	1	1	1	1	1	1	1	1	1	100
5509	1	1	1	1	1	1	1	1	1	1	100
5509.5(H)	1	1	1	1	1	1	1	1	1	1	100
5510	1	1	1	1	1	1	1	1	1	1	100

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 18.899 MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth=FH-FL=5509.5MHz-5490.5MHz= 19MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): 18.899 MHz x 100% = 18.899 MHz.

Detection Bandwidth test transmission 40M(802.11ac40 mode)											
Frequency(MHz)						5510					
Result						Pass					
Radar F(MHz)	DFS Detection Trials(1=Detection, 0= No Detection)										Detection Rate(%)
	1	2	3	4	5	6	7	8	9	10	
5490	1	1	1	0	1	1	1	1	1	1	90
5490.5(L)	1	1	1	0	1	1	1	1	1	1	90
5491	1	1	1	1	0	1	1	1	1	1	90
5492	1	1	1	1	1	1	1	1	1	1	100
5493	1	1	1	1	1	1	1	1	1	1	100
5494	1	1	1	1	1	1	1	1	1	1	100
5495	1	1	1	1	1	1	1	1	1	1	100
5500	1	1	1	1	1	1	1	1	1	1	100
5505	1	1	1	1	1	1	1	1	1	1	100
5510	1	1	1	1	1	1	1	1	1	1	100
5515	1	1	1	1	1	1	1	1	1	1	100
5520	1	1	1	1	1	1	1	1	1	1	100
5525	1	1	1	1	1	1	1	1	1	1	100
5526	1	1	1	1	1	1	1	1	1	1	100
5527	1	1	1	1	1	1	1	1	1	1	100
5528	1	1	1	1	1	1	1	1	1	1	100
5529	1	1	1	1	1	1	1	1	1	1	100
5529.5(H)	1	1	1	1	1	1	1	1	1	1	100
5530	1	1	1	1	1	1	1	1	1	1	100

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 38.041 MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH-FL=5529.5MHz-5490.5MHz= 39MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 38.041 MHz x 100%= 38.041 MHz.

Detection Bandwidth test transmission 80M(802.11ac80 mode)											
Frequency(MHz)						5530					
Result						Pass					
Radar F(MHz)	DFS Detection Trials(1=Detection, 0= No Detection)										Detection Rate(%)
	1	2	3	4	5	6	7	8	9	10	
5490	1	1	1	1	1	1	1	1	1	1	100
5491(L)	1	1	1	0	1	1	1	1	1	1	90
5492	1	1	1	1	1	1	1	1	1	1	100
5493	1	1	1	1	1	1	1	1	1	1	100
5494	1	1	1	1	1	1	1	1	1	1	100
5495	1	1	1	1	1	1	1	1	1	1	100
5500	1	1	1	1	1	1	1	1	1	1	100
5505	1	1	1	1	1	1	1	1	1	1	100
5510	1	1	1	1	1	1	1	1	1	1	100
5515	1	1	1	1	1	1	1	1	1	1	100
5520	1	1	1	1	1	1	1	1	1	1	100
5525	1	1	1	1	1	1	1	1	1	1	100
5530	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5565	1	1	1	1	1	1	1	1	1	1	100
5566	1	1	1	1	1	1	1	1	1	1	100
5567	1	1	1	1	1	1	1	1	1	1	100
5568	1	1	1	1	1	1	1	1	1	1	100
5569(H)	1	1	1	1	1	1	1	1	1	1	100
5570	1	1	1	1	1	1	1	1	1	1	100

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 77.69 MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth=FH-FL= 5569MHz-5491MHz = 78MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.69 MHz x 100% = 77.69 MHz

Appendix F: Statistical Performance check

TX (IEEE 802.1ac(VHT20) Mode)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Pass times	Fail times	Percentage of Successful Detection (%)
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 µsec, with a minimum increment of 1 µsec, excluding PRI values selected in Test A	$\text{Roundup} \left(\left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\text{max}}} \right) \right)$	28	2	93%
2	1-5	150-230	23-29	29	1	97%
3	6-10	200-500	16-18	28	2	93%
4	11-20	200-500	12-16	28	2	93%
Aggregate (Radar Types 1-4)				113	7	94%

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses Per Burst	Number of Bursts	Pass times	Fail times	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	28	2	93%

Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Pass times	Fail times	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	28	2	93%

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type1	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	NO	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	NO
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type2	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	NO	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type3	1	YES	16	YES
	2	NO	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	NO
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type4	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	NO
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	NO	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type5	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	NO	20	YES
	6	YES	21	YES
	7	YES	22	NO
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type6	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	NO	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	NO
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

TX (IEEE 802.1ac(VHT40) Mode)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Pass times	Fail times	Percentage of Successful Detection (%)
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a. Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A.	$\text{Roundup} \left(\frac{1}{360} \cdot \frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right)$	28	2	93%
2	1-5	150-230	23-29	27	3	90%
3	6-10	200-500	16-18	27	3	90%
4	11-20	200-500	12-16	28	2	93%
Aggregate (Radar Types 1-4)				110	10	92%

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses Per Burst	Number of Bursts	Pass times	Fail times	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	28	2	93%

Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Pass times	Fail times	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	27	3	90%

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type1	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	NO	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	NO
	14	YES	29	YES
	15	YES	30	YES
Type2	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	NO
	8	NO	23	YES
	9	YES	24	YES
	10	YES	25	NO
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type3	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	NO
	5	YES	20	YES
	6	YES	21	YES
	7	NO	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	NO
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type4	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	NO	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	NO
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type5	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	NO
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	NO	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type6	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	NO	19	YES
	5	YES	20	YES
	6	YES	21	NO
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	NO
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Pass times	Fail times	Percentage of Successful Detection (%)
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A	$\text{Roundup}\left(\frac{1}{360} \cdot \frac{19 \cdot 10^9}{\text{PRI}_{\mu\text{sec}}}\right)$	28	2	93%
2	1-5	150-230	23-29	28	2	93%
3	6-10	200-500	16-18	28	2	93%
4	11-20	200-500	12-16	28	2	93%
Aggregate (Radar Types 1-4)				112	8	93%

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses Per Burst	Number of Bursts	Pass times	Fail times	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	28	2	93%

Table 3: Frequency Hopping Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Pass times	Fail times	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	27	3	90%

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type1	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	NO	23	YES
	9	YES	24	NO
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type2	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	NO	19	YES
	5	YES	20	YES
	6	YES	21	NO
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type3	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	NO
	8	YES	23	YES
	9	NO	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type4	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	NO	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	NO
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar Type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type5	1	YES	16	YES
	2	YES	17	YES
	3	NO	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	NO
	14	YES	29	YES
	15	YES	30	YES
Type6	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	NO
	7	NO	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	NO	29	YES
	15	YES	30	YES