Detection Probability Test Report

2024-04-12-17:48:33

Test Setup Information
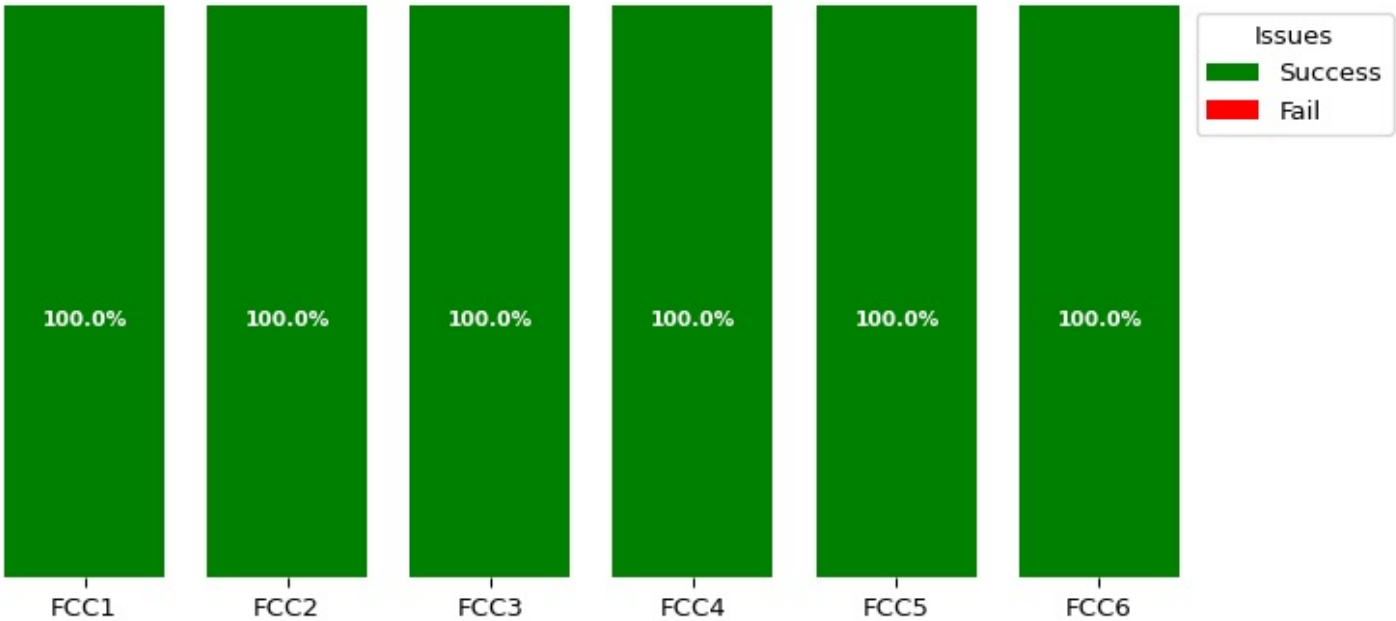
Device under test	DUT Name	Test_AP
	SSID	candelatest
	Test Duration	0:28:27

Objective

Detection Probability Test is compilance to the Dynamic Frequency Selection (DFS) Regulation, it creates regulatory specified radar pulses to the DUT repeatedly to measure the probability of detection.

Result Summary

The below graph provides information regarding detection probability percentage for various RADAR Types.

Summary Table

The below table provides detailed information regarding detection probability percentage for various RADAR Types.

WaveForm Name	Pd (%)	Required Detection Percentage (%)	Num Trials	Average Detect Time (secs)	Result
FCC1	100.0	60	30	0.7	PASSED
FCC2	100.0	60	30	0.6	PASSED
FCC3	100.0	60	30	0.6	PASSED
FCC4	100.0	60	30	0.6	PASSED
FCC5	100.0	60	30	5.0	PASSED
FCC6	100.0	60	30	0.7	PASSED

Aggregate of short pulse type 1-4

The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how the aggregate of percentage of successful detections is computed. For the current run aggregate is equal to 100.0 %

Achieved Aggregate % (FCC1 to FCC4)	Required Aggregate %	Status
100.0	80	PASS

Radar Type	No. of Trials	Number of Successful Detections %	Minimum Percentage of Successful Detection
FCC1	30	30	100.0
FCC2	30	30	100.0
FCC3	30	30	100.0
FCC4	30	30	100.0

Detailed Result Table

The below tables provides detailed information for per trials run for each RADAR Types

Detailed Result Table for FCC1

The below table provides detailed information for per trials run for FCC1 RADAR Type

Trials	Num Bursts	Num Pulses	Pulse Width (µs)	PRI (µs)	Detected	Frequency (KHz)	Detection Time (secs)
Trial_1	1	61	1	878	YES	5500000	0.7
Trial_2	1	18	1	3066	YES	5500000	0.7
Trial_3	1	89	1	598	YES	5500000	0.7
Trial_4	1	63	1	838	YES	5500000	0.7
Trial_5	1	62	1	858	YES	5500000	0.7
Trial_6	1	102	1	518	YES	5500000	0.7
Trial_7	1	81	1	658	YES	5500000	0.7
Trial_8	1	83	1	638	YES	5500000	0.7
Trial_9	1	72	1	738	YES	5500000	0.7
Trial_10	1	70	1	758	YES	5500000	0.7
Trial_11	1	65	1	818	YES	5500000	0.7
Trial_12	1	99	1	538	YES	5500000	0.7
Trial_13	1	95	1	558	YES	5500000	0.7
Trial_14	1	76	1	698	YES	5500000	0.7
Trial_15	1	57	1	938	YES	5500000	0.7
Trial_16	1	79	1	672	YES	5500000	0.7
Trial_17	1	20	1	2659	YES	5500000	0.7
Trial_18	1	23	1	2349	YES	5500000	0.7
Trial_19	1	45	1	1186	YES	5500000	0.7
Trial_20	1	24	1	2234	YES	5500000	0.7
Trial_21	1	43	1	1228	YES	5500000	0.7
Trial_22	1	39	1	1367	YES	5500000	0.7
Trial_23	1	21	1	2558	YES	5500000	0.7
Trial_24	1	77	1	689	YES	5500000	0.7
Trial_25	1	25	1	2125	YES	5500000	0.7
Trial_26	1	39	1	1382	YES	5500000	0.7
Trial_27	1	34	1	1589	YES	5500000	0.7
Trial_28	1	23	1	2377	YES	5500000	0.7
Trial_29	1	63	1	842	YES	5500000	0.7
Trial_30	1	25	1	2183	YES	5500000	0.7

Detailed Result Table for FCC2

The below table provides detailed information for per trials run for FCC2 RADAR Type

Trials	Num Bursts	Num Pulses	Pulse Width (µs)	PRI (µs)	Detected	Frequency (KHz)	Detection Time (secs)
Trial_1	1	24	2.3	220	YES	5500000	0.6
Trial_2	1	24	2.8	222	YES	5500000	0.6
Trial_3	1	28	1.1	176	YES	5500000	0.6
Trial_4	1	25	1.7	224	YES	5500000	0.6
Trial_5	1	23	1.2	209	YES	5500000	0.6
Trial_6	1	28	1.3	203	YES	5500000	0.6
Trial_7	1	27	3.8	213	YES	5500000	0.6
Trial_8	1	23	4.7	224	YES	5500000	0.6
Trial_9	1	24	1.7	168	YES	5500000	0.6
Trial_10	1	28	4.5	176	YES	5500000	0.6
Trial_11	1	27	4.3	162	YES	5500000	0.6
Trial_12	1	24	4.5	195	YES	5500000	0.6
Trial_13	1	29	2.7	154	YES	5500000	0.6
Trial_14	1	25	1.0	216	YES	5500000	0.6
Trial_15	1	25	3.5	183	YES	5500000	0.6
Trial_16	1	27	2.5	179	YES	5500000	0.6
Trial_17	1	28	5.0	210	YES	5500000	0.6
Trial_18	1	26	1.1	154	YES	5500000	0.6
Trial_19	1	27	5.0	228	YES	5500000	0.6
Trial_20	1	28	4.8	172	YES	5500000	0.6
Trial_21	1	25	1.8	176	YES	5500000	0.6
Trial_22	1	28	1.2	201	YES	5500000	0.6
Trial_23	1	23	2.0	163	YES	5500000	0.6
Trial_24	1	29	3.0	211	YES	5500000	0.6
Trial_25	1	24	4.4	154	YES	5500000	0.6
Trial_26	1	27	3.2	152	YES	5500000	0.6
Trial_27	1	25	2.2	228	YES	5500000	0.6
Trial_28	1	25	2.2	228	YES	5500000	0.6
Trial_29	1	27	2.9	229	YES	5500000	0.6
Trial_30	1	29	3.8	169	YES	5500000	0.6

Detailed Result Table for FCC3

The below table provides detailed information for per trials run for FCC3 RADAR Type

Trials	Num Bursts	Num Pulses	Pulse Width (µs)	PRI (µs)	Detected	Frequency (KHz)	Detection Time (secs)
Trial_1	1	17	6.9	486	YES	5500000	0.6
Trial_2	1	17	7.6	252	YES	5500000	0.6
Trial_3	1	18	7.5	466	YES	5500000	0.6
Trial_4	1	16	7.2	489	YES	5500000	0.6
Trial_5	1	18	7.4	487	YES	5500000	0.6
Trial_6	1	16	7.6	230	YES	5500000	0.6
Trial_7	1	17	9.1	307	YES	5500000	0.6
Trial_8	1	18	6.9	310	YES	5500000	0.6

Trial_9	1	18	6.1	324	YES	5500000	0.6
Trial_10	1	17	6.1	220	YES	5500000	0.6
Trial_11	1	18	9.9	298	YES	5500000	0.6
Trial_12	1	18	7.5	268	YES	5500000	0.6
Trial_13	1	17	6.2	271	YES	5500000	0.6
Trial_14	1	18	8.0	474	YES	5500000	0.6
Trial_15	1	18	9.8	428	YES	5500000	0.6
Trial_16	1	16	6.9	283	YES	5500000	0.6
Trial_17	1	17	6.5	289	YES	5500000	0.6
Trial_18	1	17	6.9	474	YES	5500000	0.6
Trial_19	1	17	8.3	255	YES	5500000	0.6
Trial_20	1	16	8.9	338	YES	5500000	0.6
Trial_21	1	16	6.6	323	YES	5500000	0.6
Trial_22	1	18	8.4	461	YES	5500000	0.6
Trial_23	1	17	9.9	324	YES	5500000	0.6
Trial_24	1	17	10.0	455	YES	5500000	0.6
Trial_25	1	16	7.2	265	YES	5500000	0.6
Trial_26	1	16	7.3	263	YES	5500000	0.6
Trial_27	1	16	6.2	451	YES	5500000	0.6
Trial_28	1	18	7.5	398	YES	5500000	0.6
Trial_29	1	17	9.0	300	YES	5500000	0.6
Trial_30	1	16	8.1	325	YES	5500000	0.6

Detailed Result Table for FCC4

The below table provides detailed information for per trials run for FCC4 RADAR Type

Trials	Num Bursts	Num Pulses	Pulse Width (µs)	PRI (µs)	Detected	Frequency (KHz)	Detection Time (secs)
Trial_1	1	12	17.8	447	YES	5500000	0.6
Trial_2	1	12	13.3	358	YES	5500000	0.6
Trial_3	1	15	18.9	205	YES	5500000	0.6
Trial_4	1	14	19.2	361	YES	5500000	0.6
Trial_5	1	15	17.8	311	YES	5500000	0.6
Trial_6	1	13	15.9	287	YES	5500000	0.6
Trial_7	1	12	19.6	491	YES	5500000	0.6
Trial_8	1	13	18.5	486	YES	5500000	0.6
Trial_9	1	14	19.2	200	YES	5500000	0.6
Trial_10	1	15	14.0	396	YES	5500000	0.7
Trial_11	1	12	13.2	318	YES	5500000	0.6
Trial_12	1	14	15.1	390	YES	5500000	0.6
Trial_13	1	13	12.5	437	YES	5500000	0.6
Trial_14	1	12	19.0	387	YES	5500000	0.6
Trial_15	1	13	17.8	256	YES	5500000	0.6
Trial_16	1	13	15.0	456	YES	5500000	0.6
Trial_17	1	13	18.5	424	YES	5500000	0.6
Trial_18	1	13	18.1	320	YES	5500000	0.6
Trial_19	1	16	13.0	206	YES	5500000	0.6
Trial_20	1	16	13.8	247	YES	5500000	0.6

Trial_21	1	13	19.8	471	YES	5500000	0.6
Trial_22	1	16	12.8	476	YES	5500000	0.6
Trial_23	1	15	16.5	460	YES	5500000	0.6
Trial_24	1	15	14.7	289	YES	5500000	0.6
Trial_25	1	13	17.9	299	YES	5500000	0.6
Trial_26	1	15	17.2	233	YES	5500000	0.6
Trial_27	1	12	11.8	498	YES	5500000	0.6
Trial_28	1	16	14.1	500	YES	5500000	0.6
Trial_29	1	13	14.1	437	YES	5500000	0.6
Trial_30	1	13	12.3	223	YES	5500000	0.6

Detailed Result Table for FCC5

The below table provides detailed information for per trials run for FCC5 RADAR Type

Trials	Num Bursts	Trial centre	Trial Low	Trial High	UUT Channel	Freq Modulating	TX Sample Rate	Detected	Frequency (KHz)	Detection Time (secs)
Trial_1	9	1	0	0	20	10	20	YES	5500000	5.3
Trial_2	11	1	0	0	20	20	20	YES	5500000	4.8
Trial_3	14	1	0	0	20	12	20	YES	5500000	4.0
Trial_4	16	1	0	0	20	5	20	YES	5500000	4.2
Trial_5	17	1	0	0	20	13	20	YES	5500000	4.5
Trial_6	15	1	0	0	20	16	20	YES	5500000	4.5
Trial_7	13	1	0	0	20	19	20	YES	5500000	5.5
Trial_8	17	1	0	0	20	13	20	YES	5500000	4.3
Trial_9	17	1	0	0	20	11	20	YES	5500000	4.0
Trial_10	19	1	0	0	20	19	20	YES	5500000	4.2
Trial_11	8	0	1	0	20	6	20	YES	5500000	6.0
Trial_12	11	0	1	0	20	7	20	YES	5500000	5.2
Trial_13	17	0	1	0	20	8	20	YES	5500000	4.4
Trial_14	8	0	1	0	20	10	20	YES	5500000	6.4
Trial_15	11	0	1	0	20	13	20	YES	5500000	4.4
Trial_16	19	0	1	0	20	13	20	YES	5500000	4.3
Trial_17	16	0	1	0	20	8	20	YES	5500000	4.1
Trial_18	13	0	1	0	20	18	20	YES	5500000	8.0
Trial_19	19	0	1	0	20	15	20	YES	5500000	4.7
Trial_20	11	0	1	0	20	5	20	YES	5500000	4.3
Trial_21	16	0	0	1	20	19	20	YES	5500000	4.3
Trial_22	12	0	0	1	20	8	20	YES	5500000	4.7
Trial_23	13	0	0	1	20	14	20	YES	5500000	6.0
Trial_24	11	0	0	1	20	5	20	YES	5500000	4.7
Trial_25	16	0	0	1	20	15	20	YES	5500000	7.8
Trial_26	9	0	0	1	20	19	20	YES	5500000	7.9
Trial_27	19	0	0	1	20	10	20	YES	5500000	4.1
Trial_28	20	0	0	1	20	12	20	YES	5500000	3.8
Trial_29	18	0	0	1	20	5	20	YES	5500000	4.4
Trial_30	20	0	0	1	20	19	20	YES	5500000	4.4

Detailed Result Table for FCC6

The below table provides detailed information for per trials run for FCC6 RADAR Type

Trials	Num Bursts	Num Pulses	Pulse Width (μs)	PRF (Hz)	Detected	Frequency (KHz)	Detection Time (secs)
Trial_1	100	9	1	333	YES	5500000	0.9
Trial_2	100	9	1	333	YES	5500000	0.6
Trial_3	100	9	1	333	YES	5500000	0.6
Trial_4	100	9	1	333	YES	5500000	0.6
Trial_5	100	9	1	333	YES	5500000	0.6
Trial_6	100	9	1	333	YES	5500000	0.7
Trial_7	100	9	1	333	YES	5500000	0.6
Trial_8	100	9	1	333	YES	5500000	0.8
Trial_9	100	9	1	333	YES	5500000	0.7
Trial_10	100	9	1	333	YES	5500000	0.7
Trial_11	100	9	1	333	YES	5500000	0.7
Trial_12	100	9	1	333	YES	5500000	0.6
Trial_13	100	9	1	333	YES	5500000	0.7
Trial_14	100	9	1	333	YES	5500000	0.7
Trial_15	100	9	1	333	YES	5500000	0.6
Trial_16	100	9	1	333	YES	5500000	0.7
Trial_17	100	9	1	333	YES	5500000	0.8
Trial_18	100	9	1	333	YES	5500000	0.7
Trial_19	100	9	1	333	YES	5500000	0.7
Trial_20	100	9	1	333	YES	5500000	0.9
Trial_21	100	9	1	333	YES	5500000	0.7
Trial_22	100	9	1	333	YES	5500000	0.7
Trial_23	100	9	1	333	YES	5500000	1.1
Trial_24	100	9	1	333	YES	5500000	0.6
Trial_25	100	9	1	333	YES	5500000	0.9
Trial_26	100	9	1	333	YES	5500000	0.6
Trial_27	100	9	1	333	YES	5500000	0.6
Trial_28	100	9	1	333	YES	5500000	0.8
Trial_29	100	9	1	333	YES	5500000	0.8
Trial_30	100	9	1	333	YES	5500000	0.7

Test basic Information

	Parameters	Values
Information	LANforge ip	192.168.200.122
	LANforge port	8080
	Radar Types	['FCC1', 'FCC2', 'FCC3', 'FCC4', 'FCC5', 'FCC6']
	Radar Hardware	ct712
	Freq Channel Number	100
	Bandwidth	20 (MHz)
	Tx Power of radar in dbm	-38.61
	Desired Pass Percentage	60%
	Max Number of extra trials	0
	Time interval between Trials (secs)	0
	Run Traffic	False

	Frequency step option	Stay at centre freq for all Trials
	Contact	support@candelatech.com