

NCC

低功率射頻電機型式試驗報告

產品名稱: ACCESS POINT
型號: APIN0518
廠牌: aruba / Hewlett Packard Enterprise
商標:  
申請者: 慧與科技股份有限公司
申請者地址: 臺北市南港區經貿二路 66 號 10 樓之 1
測試標準: LP0002 (107 年版)
參考法規: ANSI C63.10-2013
測試結果: 符合
接收日期: 2019.12.23
測試日期: 2020 02 28 ~ 2020 05 17

測試工程師:



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本測試報告非經本公司同意不可局部複製使用

修訂紀錄

報告編號	版本	描述	發行日期
2003TW0003-T5	1.0	Original Report	2020-07-03

Note: The APIN0518 is based on original report no. 2003TW0002-T5 (APEX0575).

APIN0518 differs from the APEX0575 in the following ways:

1, Different shells;

2, APIN0518 use external antenna, APEX0575 use internal antenna;

Except for two above conditions, any other hardware and software are same.

According to FCC KDB905462 D02 table3, we use the worst case -64dBm as DFS Detection level, this is the level at the input of the receiver assuming a 0dBi receive antenna.

Conclusion: Reassess test item statistical performance, any others conducted items were same as APEX0575.

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1. 一般資訊

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申請者地址	臺北市南港區經貿二路 66 號 10 樓之 1
製造商	Hewlett Packard Enterprise Company
製造商地址	3333 Scott Blvd, Santa Clara, CA 94089, USA
實驗室	台灣曼瑞檢測科技有限公司
實驗室地址	33377 台灣桃園市龜山區復興二路 38 號
實驗室資訊	1. MRT facility is a FCC registered (Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm. 2. MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada. 3. MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC, Industry Taiwan, EU and TELEC Rules.
實驗室測試環境條件	溫度 (°C) : 20-35 / 濕度 (%RH) : 30-65
測試樣機序列號	APIN0518 S/N: CNK8KV101C (Used for the test of Statistical Performance Check)

2. 產品描述

2.1. 產品資訊

產品名稱	ACCESS POINT
產品型號	APIN0518
Wi-Fi 規格	802.11a/b/g/n/ac/ax
藍牙版本	v5.0 single mode
Zigbee 規格	802.15.4
軟件版本	ArubaOS_8.7.0.0_73451
工作溫度	-40 ~ 65 °C
待測物額定電壓	PoE input

Note:

1. 系列差異說明: 系列型號與主型號差異為廠牌不同,其硬體電路及軟體與主型號相同。該產品亦符合同系列產品技術規格及射頻性能相同。

2.The applicant provided one PoE adapter (Manufacturer: MICROSEMI & Model: PD-9001GR/AT/AC) for approval testing, it is not for sale.

2.2. 產品規格

頻率範圍	For 802.11a/n-HT20/ac-VHT20/ax-HE20: 5260~5320MHz, 5500~5720MHz For 802.11n-HT40/ac-VHT40/ax-HE40: 5270~5310MHz, 5510~5710MHz For 802.11ac-VHT80/ax-HE80: 5290MHz, 5530MHz, 5610MHz, 5690MHz For 802.11ac-VHT160/ax-HE160: 5250MHz, 5570MHz
調變模式	802.11a/n/ac: OFDM 802.11ax: OFDMA
Power-on cycle	Requires 80.4 seconds to complete its power-on cycle
Uniform Spreading (For DFS Frequency Band)	For the 5250-5350MHz, 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

Note: For other features of this EUT, test report will be issued separately.

2.3. 動態雷達操作通道清單

802.11a/n-HT20/ac-VHT20/ax-HE20

Channel	Frequency	Channel	Frequency	Channel	Frequency
52	5260 MHz	56	5280 MHz	60	5300 MHz
64	5320 MHz	100	5500 MHz	104	5520 MHz
108	5540 MHz	112	5560 MHz	116	5580 MHz
120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz
144	5720 MHz	--	--	--	--

802.11n-HT40/ac-VHT40/ax-HE40

Channel	Frequency	Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz	102	5510 MHz
110	5550 MHz	118	5590 MHz	126	5630 MHz
134	5670 MHz	142	5710 MHz	--	--

802.11ac-VHT80/ax-HE80

Channel	Frequency	Channel	Frequency	Channel	Frequency
58	5290 MHz	106	5530 MHz	122	5610 MHz
138	5690 MHz	--	--	--	--

802.11ac-VHT160/ax-HE160

Channel	Frequency	Channel	Frequency	Channel	Frequency
50	5250 MHz	114	5570 MHz	--	--

2.4. 天線規格

Antenna No.	Antenna Type	Frequency Band (GHz)	Model No.	Max Peak Gain (dBi)	BF Dir Gain (dBi)	CDD Dir Gain (dBi)	
						For Power	For PSD
Wi-Fi External Antenna List (2.4GHz 2*2 MIMO, 5GHz 4*4 MIMO)							
1	Omni	2.4	AP-ANT-40	4.0	7.01	4.0	7.01
		5		5.0	11.02	5.0	11.02
2	Omni	2.4	AP-ANT-19	3.0	6.01	3.0	6.01
		5		6.0	12.02	6.0	12.02
3	Omni	2.4	AP-ANT-1W	3.8	6.81	3.8	6.81
		5		5.8	11.82	5.8	11.82
4	Omni	2.4	AP-ANT-13B	2.3	5.31	2.3	5.31
		5		4.0	10.02	4.0	10.02
5	Omni	2.4	AP-ANT-20W	2.0	5.01	2.0	5.01
		5		2.0	8.02	2.0	8.02
6	Omni	2.4	AP-ANT-22	2.0	5.01	2.0	5.01
		5		4.0	10.02	4.0	10.02
7	Omni	2.4	AP-ANT-16	3.9	6.91	3.9	6.91
		5		4.7	10.72	4.7	10.72
8 (Note 3)	Directional	2.4	AP-ANT-45	4.5	4.5	4.5	4.5
		5		5.5	8.51	5.5	8.51
9 (Note 3)	Directional	2.4	AP-ANT-48	8.5	8.5	8.5	8.5
		5		8.5	11.51	8.5	11.51
10 (Note 3)	Directional	2.4	ANT-2x2-2314	14.0	14.0	14.0	14.0
11 (Note 3)	Directional	5	ANT-4x4-5314	14.0	17.01	14.0	17.01
12 (Note 3)	Directional	5	ANT-3x3-5712	11.5	14.51	11.5	14.51
13 (Note 3)	Directional	2.4	AP-ANT-25A	5.0	5.0	5.0	5.0
		5		5.0	8.01	5.0	8.01
14 (Note 3)	Directional	2.4	AP-ANT-28	7.5	7.5	7.5	7.5
		5		7.5	10.51	7.5	10.51
Bluetooth / ZigBee Internal Antenna(ANT-518)							
PCB		2.4		4.2			

Note:

1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

For CDD transmissions, directional gain is calculated as follows, $N_{ANT} = 2$, $N_{SS} = 1$.

If all antennas have the same gain, G_{ANT} , Directional gain = $G_{ANT} + \text{Array Gain}$, where Array Gain is as follows.

- For power spectral density (PSD) measurements on all devices,

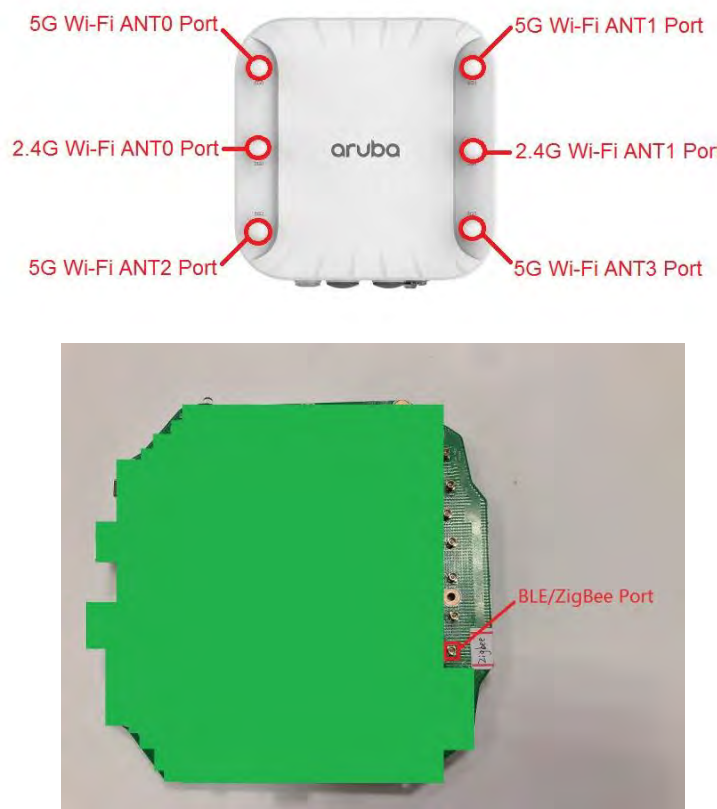
$$\text{Array Gain} = 10 \log (N_{ANT} / N_{SS}) \text{ dB} = 3.01;$$

- For power measurements on IEEE 802.11 devices,

$$\text{Array Gain} = 0 \text{ dB for } N_{ANT} \leq 4;$$

2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11n/ac/ax, not include 802.11a/b/g. Directional gain = $G_{ANT} + \text{BF Gain}$, BF Gain was declared by the applicant.
3. These antennas have Cross-Polarized design, only each two outputs driving a pair of antennas that are cross-polarized, the detail see the antenna specification.

2.5. Description of Antenna RF Port

Antenna RF Port						
--	2.4GHz RF Port		5GHz RF Port			
Software Control Port	Ant 0	Ant 1	Ant 0	Ant 1	Ant 2	Ant 3
						

2.6. 測試模式

Test Mode	Mode 1: Make the EUT communicate with client device at DFS channel (AP Mode) Mode 2: Make the EUT communicate with client device at DFS channel (Mesh Mode)
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2.7. 測試信道

Test Mode	Test Channel	Test Frequency
802.11ax-HE20	100	5500 MHz
802.11ax-HE40	102	5510 MHz
802.11ax-HE80	106	5530 MHz
802.11ax-HE160	50	5250 MHz
802.11ax-HE160	114	5570 MHz

3. 動態頻率選擇和測試雷達波

3.1. 動態頻率選擇偵測門檻及操作模式

(1) 最低動態頻率選擇的偵測門檻

A) 最大 EIRP 為200 mW~1 W之設備，其最低動態頻率選擇的偵測門檻值為-64 dBm。

B) 最大 EIRP 低於200 mW，且功率頻譜密度小於10 dBm/MHz 之設備，其最低動態頻率選擇的偵測門檻值為-62 dBm。

C) 最大EIRP 低於200 mW，且功率頻譜密度大於或等於10 dBm/MHz 之設備，其最低動態頻率選擇的偵測門檻值為-64 dBm。

D) 此偵測門檻值為1 微秒內之平均接收功率，並以0 dBi 天線為參考基準。頻道初始設定得由系統隨機選取或使用者手動選取。

(2) 操作模式：動態頻率選擇之規定適用於以下之操作模式：

(A) 頻道可用性檢查時間之規定，適用於主控運作模式。

(B) 頻道移動時間之規定，適用於主控及受控運作模式。

3.2. 雷達信號參數

This section provides the parameters for required test waveforms, 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.

Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 3-6	Roundup $\left\lceil \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\rceil$	60%	30

		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μ sec, with a minimum increment of 1 μ sec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Parameters for Short Pulse Radar Waveforms

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms.

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738

13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

Pulse Repetition Intervals Values for Test A

Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50 - 100	5 - 20	1000 - 2000	1 - 3	8 - 20	80%	30

Parameters for Long Pulse Radar Waveforms

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type waveforms, then each additional waveform must also be unique and not repeated from the previous waveforms.

Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses Per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

Parameters for Frequency Hopping Radar Waveforms

For the Frequency Hopping Radar Type, the same Burst parameters are used for each waveform.

The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.

3.3. 測試限值

參數	限值
不可佔用期間	30 分鐘
頻道可用性檢查時間	60 秒
頻率移動時間	10 秒
頻道關閉傳輸時間	200 毫秒 + 在 10 秒週期內的 60 毫秒
U-NII 偵測頻寬	最小為 UNII 99% 發射頻寬的全部

註一：頻道移動時間與頻道關閉傳輸時間開始的瞬間如下所述：

- 對短脈衝雷達信號，此瞬間為叢訊的結束時間點算起。
- 對跳頻雷達信號，此瞬間為最後一個產生的叢訊結束時間點算起。
- 對長脈衝雷達測試信號，此瞬間為雷達波型信號結束的 12 秒時間點算起。

註二：頻道關閉傳輸時間包含於頻道移動時間起始的 200 毫秒，加上在 10 秒週期內剩下為了促成頻道移動所需的任何額外間歇性的管理與控制信號〔合計時間為 60 毫秒〕。此控制信號的合計持續時間不包含傳輸間的 quiet 週期。

註三：在 U-NII 檢測帶寬檢測測試，雷達類型“0”應該被使用。對每個頻率步進的檢測的最小百分比是 90%。測試是被執行在沒有資料傳輸的狀態下。

3.4. 測試架設圖

The FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 describes a radiated test setup and a conducted test setup. The conducted test setup was used for this testing. Figure 3-1 shows the typical test setup.

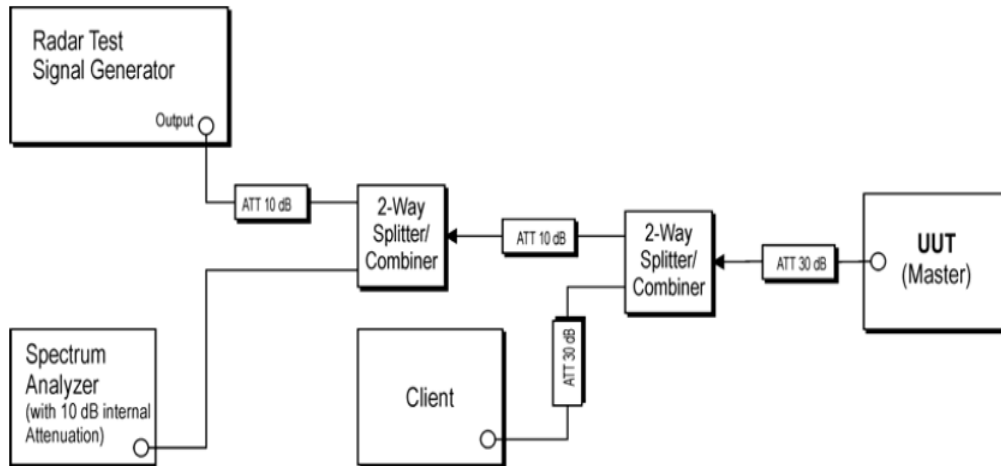


Figure A: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

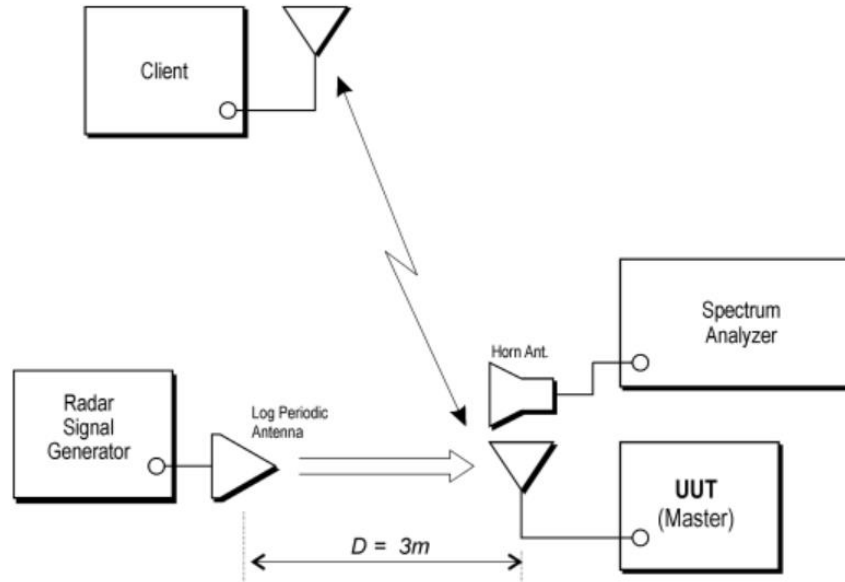


Figure B: Radiated Test Setup where UUT is a Master and Radar Test Waveforms are injected into the UUT

4. 測試設備明細

Dynamic Frequency Selection (DFS) - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2020/10/2
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2021/7/14
Vector Signal Generator	Keysight	N5182B	MRTTWA00010	1 year	2021/4/24
Combiner	WOKEN	0120A04208001S	MRTTWE00008	1 year	2021/6/18
Temperature/Humidity Meter	TFA	35.1078.10.IT	MRTTWA00032	1 year	2021/5/29
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTTWA00003	1 year	2021/4/24

Client Information

Instrument	Manufacturer	Type No.	FCC ID
Wireless Network Adapter	Intel	AX200NGW	PD9AX200NG

Software	Version	Manufacturer	Function
Pulse Building(N7607B)	V3.0.0	Keysight	Radar Signal Generation Software
DFS Tool	V6.7	Keysight	DFS Test Software

5. 測試結果

量測項目	限制值	測試結果	測試數據
UNII 偵測頻寬量測	參考 3.3 章節	符合	第 6 章節
頻道可用性檢查時間量測	參考 3.3 章節	符合	第 7 章節
頻率移動時間, 頻道關閉傳輸時間	參考 3.3 章節	符合	第 8 章節
30 分鐘不可佔用期間量測	參考 3.3 章節	符合	
動態頻率選擇偵測門檻值量測	參考 3.3 章節	符合	第 9 章節

6. 雷達系統波形校驗

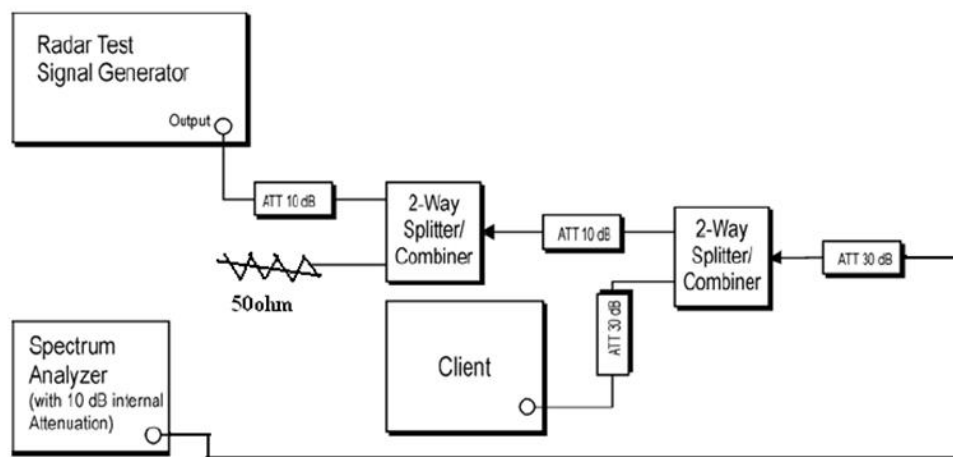
6.1. 量測方法

下圖之設備架構為用於校驗輻射測試之雷達波形，使用頻譜分析儀確認雷達測試信號之振幅位準。

將頻譜分析儀的中心頻率設為雷達波之頻率，頻率掃描範圍調整為零〔時域〕，解析頻寬與視訊頻寬分別為 3MHz 與 3MHz，並使用 peak detection 觀察雷達訊號產生器所创建的雷達波。

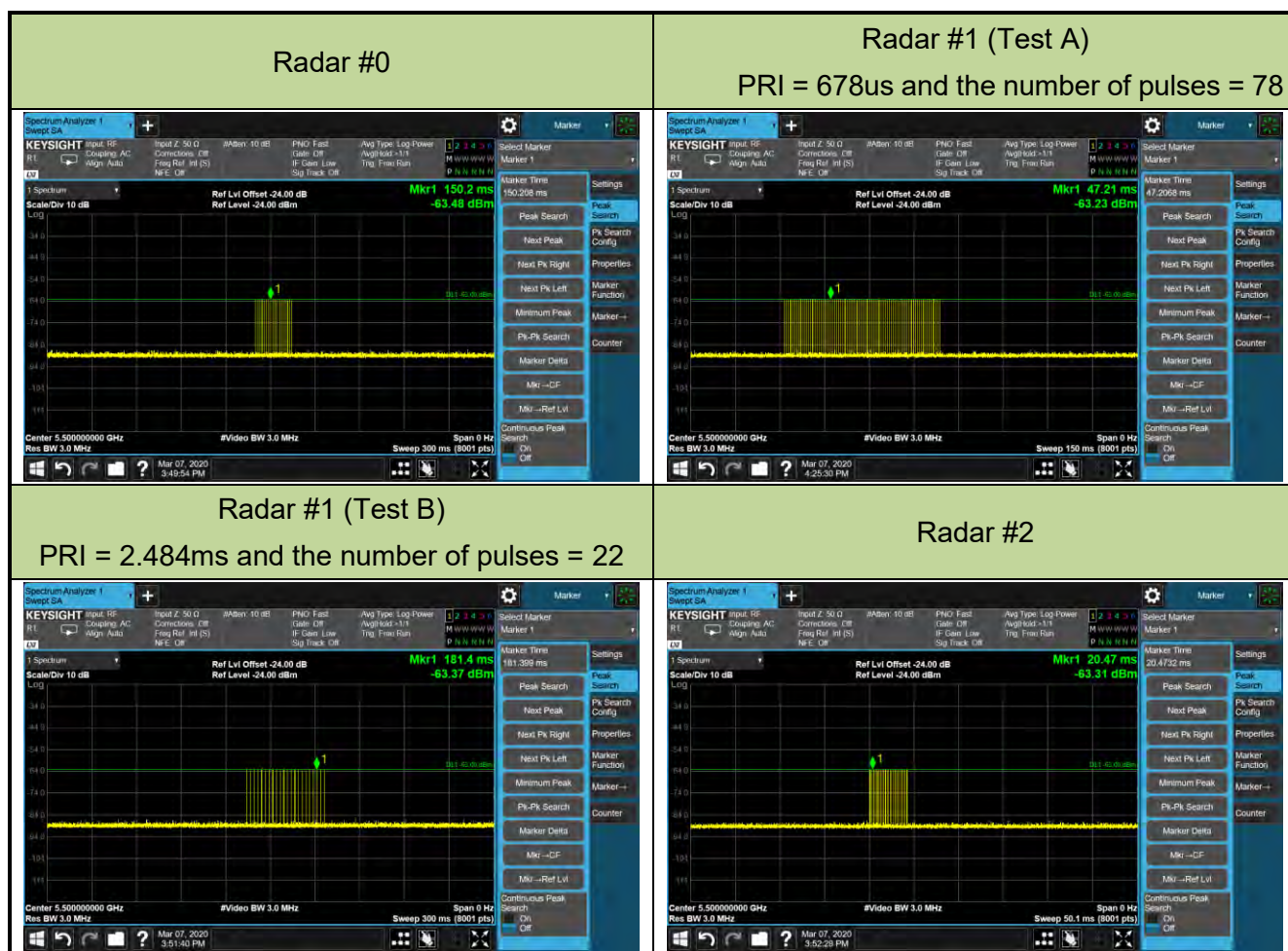
將雷達訊號產生器的振幅位準調整至頻譜分析儀上觀察到的位準為-63dBm，此位準為接收輸入端以 0dBi 的接收天線為參考基準。

6.2. 校驗架構圖

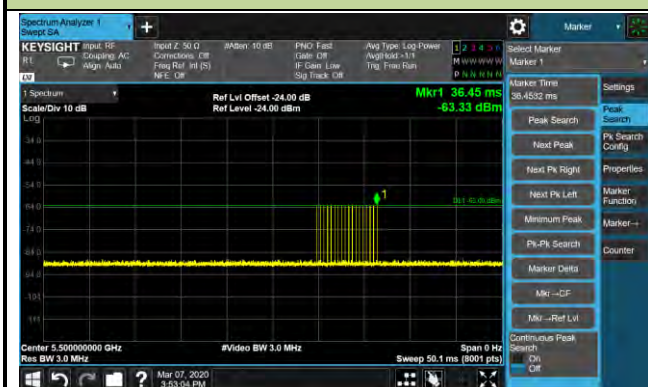


6.3. 校驗結果

待測物名稱	ACCESS POINT	溫度	27°C
測試工程師	Kevin Ker	濕度	65%
測試場地	AC1	測試日期	2020/03/07
測試項目	雷達測試信號校正		



Radar #3



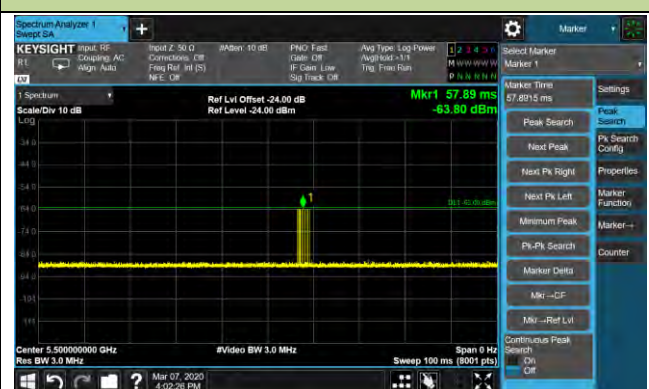
Radar #4



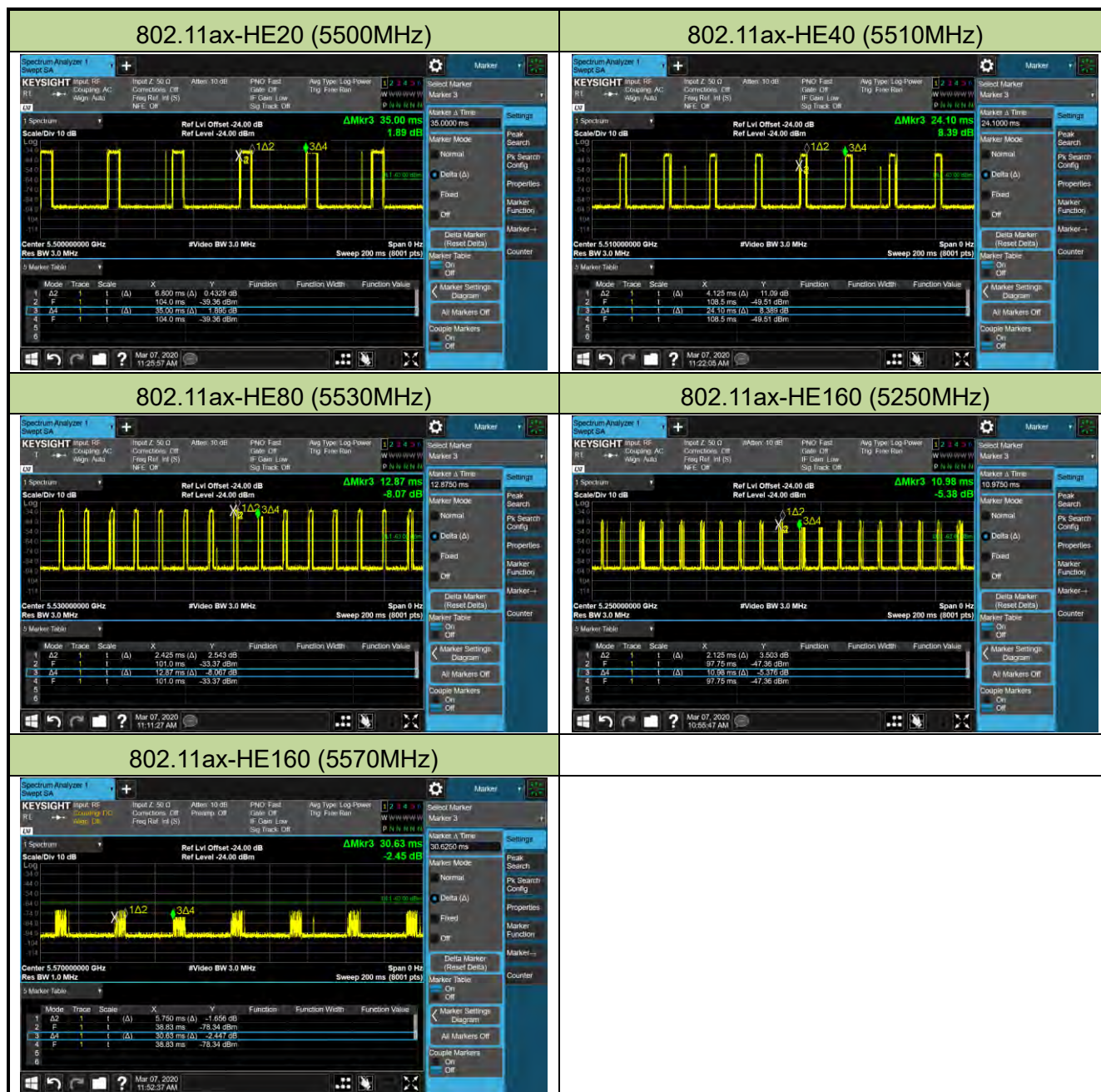
Radar #5



Radar #6



待測物名稱	ACCESS POINT	溫度	27°C
測試工程師	Kevin Ker	濕度	65%
測試場地	AC1	測試日期	2020/03/07
測試項目	占空比		



Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11ax-HE20	5500 MHz	19.43%	≥ 17%	Pass
802.11ax-HE40	5510 MHz	17.12%	≥ 17%	Pass
802.11ax-HE80	5530 MHz	18.84%	≥ 17%	Pass
802.11ax-HE160	5250 MHz	19.35%	≥ 17%	Pass
802.11ax-HE160	5570 MHz	18.77%	≥ 17%	Pass
Note: System testing was performed with the designated “Iperf” test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).				

7. UNII 偵測頻寬

7.1. 適用標準

待測物在其宣告頻寬測試偵測頻寬,在中心頻率以1MHz遞增及遞減雷達訊號每個頻率測試10次確認偵測成功機率(至少90%)並紀錄,必須要符合UNII 99% occupied bandwidth之100%頻寬。

7.2. 量測方法

1. Adjust the equipment to produce a single Burst of any one of the Short Pulse Radar Types 0-4 in Table 3-5 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.
2. The generating equipment is configured as shown in the Conducted Test Setup above section 3.5.
3. The EUT is set up as a stand-alone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.
4. Generate a single radar Burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion shown in Table 3-5. In cases where the channel bandwidth may exceed past the DFS band edge on specific channels (i.e., 802.11ac or wideband frame based systems) select a channel that has the entire emission bandwidth within the DFS band. If this is not possible, test the detection BW to the DFS band edge.
5. Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in Table 3-3. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as FH) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance.
6. Starting at the center frequency of the EUT operating Channel, decrease the radar frequency in 1 MHz steps, repeating the above item 4 test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Record the lowest frequency (denote as FL) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below FL is not required to demonstrate compliance.
7. The U-NII Detection Bandwidth is calculated as follows: $\text{U-NII Detection Bandwidth} = \text{FH} - \text{FL}$
8. The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the EUT does not comply with DFS requirements.

7.3. 檢測頻寬概率測試結果

待測物名稱	ACCESS POINT	溫度	27°C
測試工程師	Kevin Ker	濕度	65%
測試場地	AC1	測試日期	2020/03/08
測試項目	Detection Bandwidth (802.11ax-HE20 mode - 5500MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490	0	0	0	0	0	0	0	0	0	0	0%
5490.4 FL	1	1	1	1	1	1	1	1	1	1	100%
5490	1	1	1	1	1	1	1	1	1	1	100%
5491	1	1	1	1	1	1	1	1	1	1	100%
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	1	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%
5509.6 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	0	0	0	0	0	0	0	0	0	0	0%

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 19.01MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5509.6MHz - 5490.4MHz = 19.20MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): 19.00MHz x 100% = 19.00MHz.

待測物名稱	ACCESS POINT	溫度	27°C
測試工程師	Kevin Ker	濕度	65%
測試場地	AC1	測試日期	2020/03/08
測試項目	Detection Bandwidth (802.11ax-HE40 mode - 5510MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
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 FH	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	0	0	0	0	0	0%

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 37.48MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5529MHz - 5491MHz = 38MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 37.54MHz x 100% = 37.54MHz.

待測物名稱	ACCESS POINT	溫度	27°C
測試工程師	Kevin Ker	濕度	65%
測試場地	AC1	測試日期	2020/03/08
測試項目	Detection Bandwidth (802.11ax-HE80 mode - 5530MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
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 FH	1	1	1	1	1	1	1	1	1	1	100%
5570	0	0	0	0	0	0	0	0	0	0	0%

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 76.79MHz. (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): 76.75MHz x 100% = 76.75MHz.

待測物名稱	ACCESS POINT	溫度	27°C
測試工程師	Kevin Ker	濕度	65%
測試場地	AC1	測試日期	2020/03/08
測試項目	Detection Bandwidth (802.11ax-HE160 mode - 5250MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5250 FL	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	1	1	100%
5330	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical channel bandwidths. Therefore, all DFS testing was done at 5250MHz. The 99% channel bandwidth fall within DFS band is 77.56MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5329MHz - 5250MHz = 79MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.53MHz x 100% = 77.63MHz.

待測物名稱	ACCESS POINT	溫度	27°C
測試工程師	Kevin Ker	濕度	65%
測試場地	AC1	測試日期	2020/03/08
測試項目	Detection Bandwidth (802.11ax-HE160 mode - 5570MHz)		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490	0	0	0	0	0	0	0	0	0	0	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
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%
5570	1	1	1	1	1	1	1	1	1	1	100%
5575	1	1	1	1	1	1	1	1	1	1	100%
5580	1	1	1	1	1	1	1	1	1	1	100%
5585	1	1	1	1	1	1	1	1	1	1	100%
5590	1	1	1	1	1	1	1	1	1	1	100%
5595	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	100%
5610	1	1	1	1	1	1	1	1	1	1	100%
5615	1	1	1	1	1	1	1	1	1	1	100%

5620	1	1	1	1	1	1	1	1	1	1	100%
5625	1	1	1	1	1	1	1	1	1	1	100%
5630	1	1	1	1	1	1	1	1	1	1	100%
5635	1	1	1	1	1	1	1	1	1	1	100%
5640	1	1	1	1	1	1	1	1	1	1	100%
5645	1	1	1	1	1	1	1	1	1	1	100%
5646	1	1	1	1	1	1	1	1	1	1	100%
5647	1	1	1	1	1	1	1	1	1	1	100%
5648	1	1	1	1	1	1	1	1	1	1	100%
5649 FH	1	1	1	1	1	1	1	1	1	1	100%
5650	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5570MHz. The 99% channel bandwidth is 154.16MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5649MHz - 5491MHz = 158MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 155.83MHz x 100% = 155.83MHz.

8. 頻道可用性檢查時間量測

8.1. 適用標準

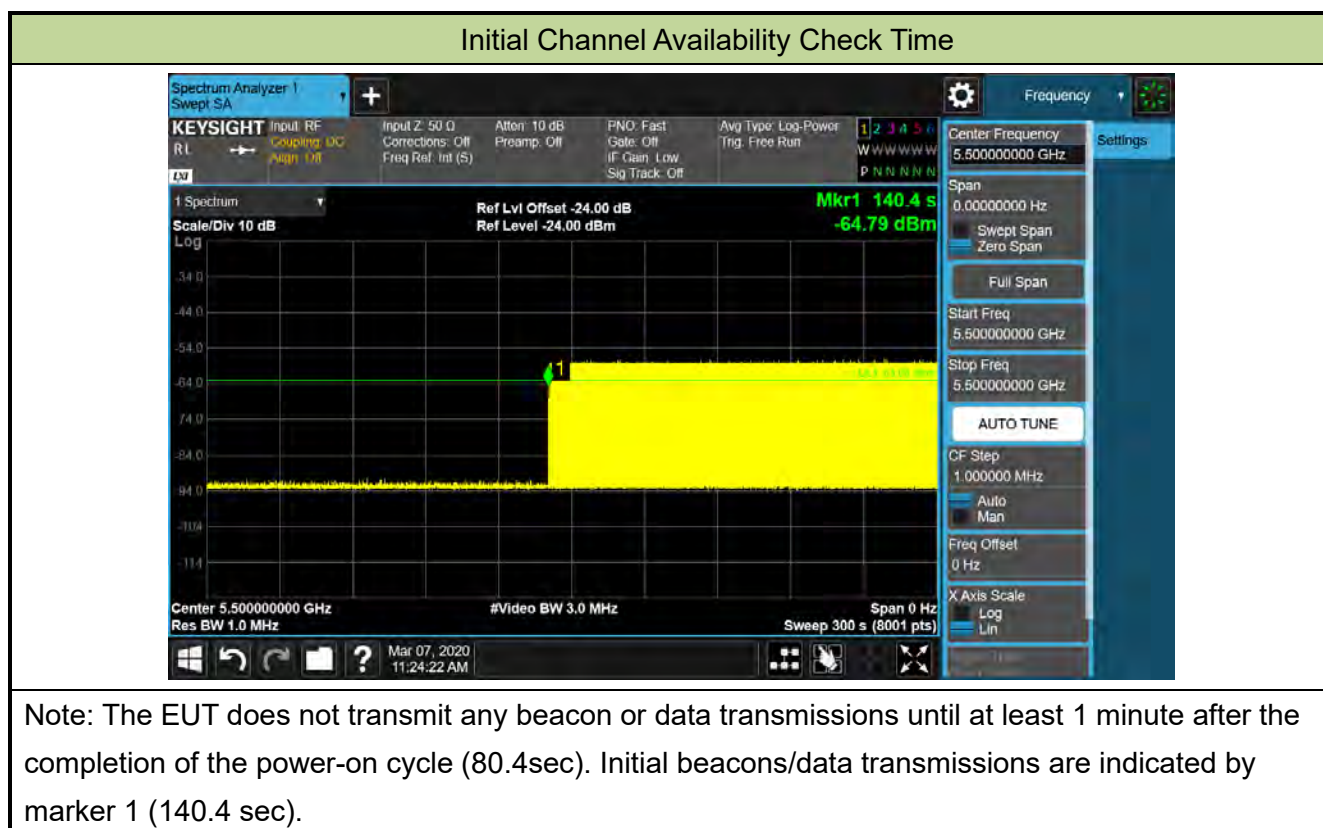
設備必須檢查其可在某一頻道上起始傳送之前是否有雷達系統已經操作在該頻道上，以及何時其必須移動到另一新的頻道，在60 秒內若沒有偵測到功率位準大過上述之,擾門檻值的雷達訊號時，設備才可開始使用該頻道。

8.2. 量測方法

1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time.
2. The EUT is in completion power-up cycle (from T0 to T1). T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner than T1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1.
3. The EUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner than T1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1+ 54 seconds.
4. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

8.3. 頻道可用性檢查時間量測測試結果

待測物名稱	ACCESS POINT	溫度	27°C
測試工程師	Kevin Ker	濕度	65%
測試場地	AC1	測試日期	2020/03/07
測試項目	頻道可用性檢查時間量測		



9. 頻道關閉傳輸時間及不可佔用期間

9.1. 適用標準

頻道移動時間：在偵測到雷達的存在後，所有在該操作頻道上的所有傳輸須在10秒內停止，在偵測到雷達訊號後，該期間內的傳輸應維持最多200 毫秒的正常通訊。另外，間歇性的管理與控制訊號可在剩餘的時間中傳送，以便撤離該操作頻道。

不可佔用期間：某一頻道已被頻道可用性檢查或”服務中”監視顯示含有雷達系統，至少須有30 分鐘的不可佔用期間。不可佔用期間起始於偵測到雷達系統的當時。

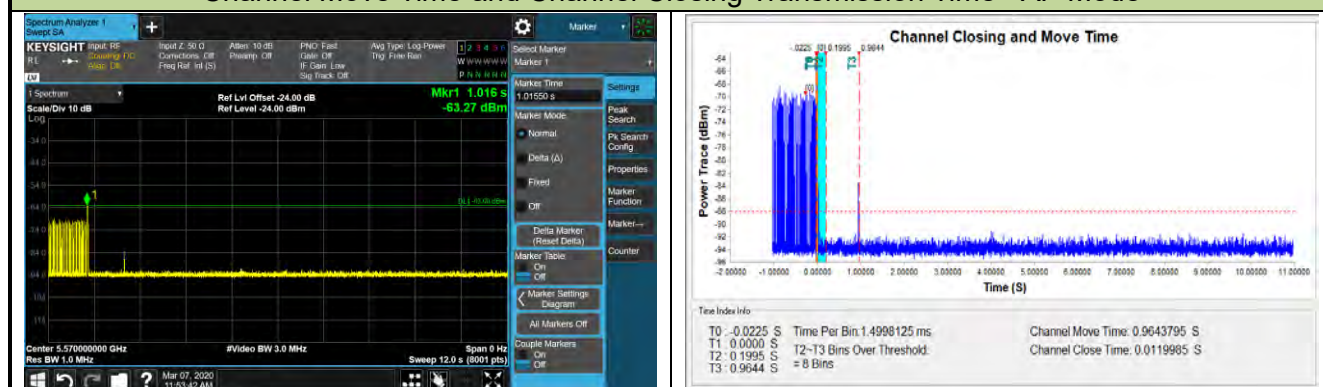
9.2. 量測方法

1. The test should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0.
2. When the radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device. A U-NII device operating as a Master Device will associate with the Client Device at Channel. 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 at Detection Threshold + 1dB.
3. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the EUT during the observation time (Channel Move Time).
4. Measurement of the aggregate duration of the Channel Closing Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (1.5ms) = S (12 \text{ sec}) / B (8000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is the sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C = N \times Dwell$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins showing a U-NII transmission and Dwell is the dwell time per bin.
5. Measure the EUT for more than 30 minutes following the channel close/move time to verify that the EUT does not resume any transmissions on this Channel.

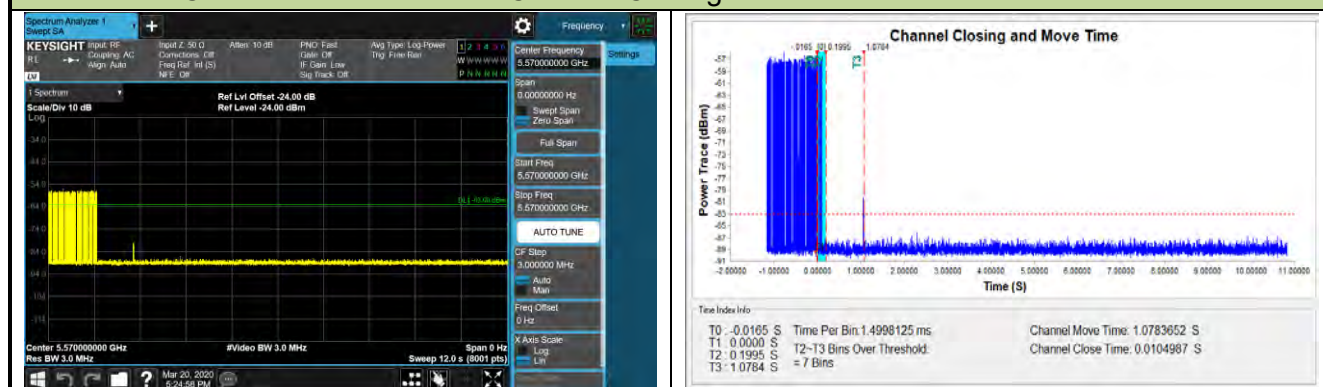
9.3. 頻道關閉傳輸時間及不可佔用期間測試結果

待測物名稱	ACCESS POINT	溫度	23 ~ 27°C
測試工程師	Kevin Ker	濕度	48 ~ 65%
測試場地	AC1	測試日期	2020/03/07 ~ 2020/03/20
測試項目	Channel Move Time and Channel Closing Transmission Time (802.11ax-HE160 - 5570MHz)		

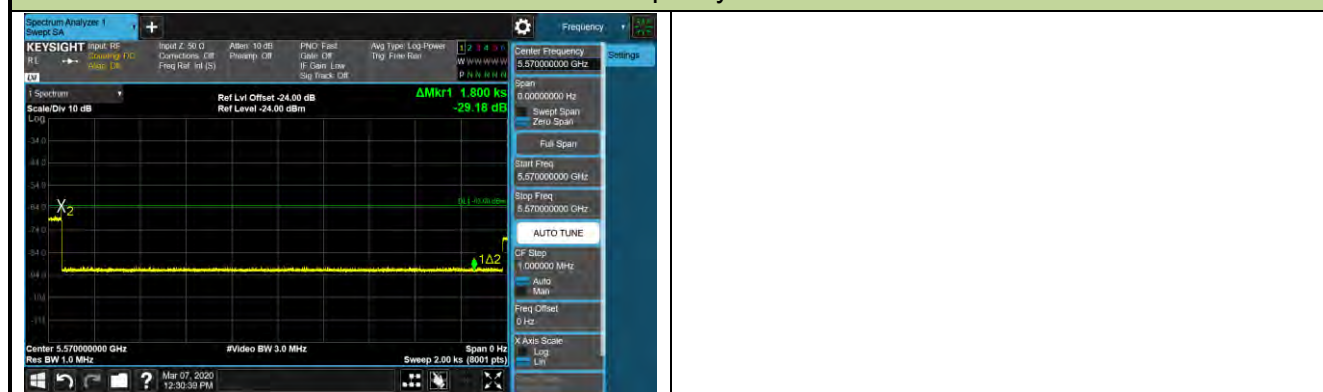
Channel Move Time and Channel Closing Transmission Time - AP Mode



Channel Move Time and Channel Closing Transmission Time – Mesh Mode



Non-Occupancy Period



項目	結果		限值
	Type 0		
	AP Mode	Mesh Mode	
頻率移動時間(s)	0.964s	1.078s	<10s
頻道關閉傳輸時間(ms)	12.0ms	10.5ms	< 60ms
不可佔用期間 (min)	≥ 30min		≥ 30 min

10.動態頻率選擇偵測門檻

10.1. 適用標準

The minimum percentage of successful detection requirements found in below table when a radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device (In- Service Monitoring).

Radar Type	Minimum Number of Trails	Detection Probability
0	30	Pd > 60%
1	30(15 of test A and 15 of test B)	Pd > 60%
2	30	Pd > 60%
3	30	Pd > 60%
4	30	Pd > 60%
Aggregate (Radar Types 1-4)	120	Pd > 80%
5	30	Pd > 80%
6	30	Pd > 70%

The percentage of successful detection is calculated by:

$(\text{Total Waveform Detections} / \text{Total Waveform Trails}) * 100 = \text{Probability of Detection Radar}$

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: $(Pd1 + Pd2 + Pd3 + Pd4) / 4$.

10.2. 量測方法

1. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period of the test.
2. At time T0 the Radar Waveform generator sends the individual waveform for each of the Radar Types 1-6, at levels equal to the DFS Detection Threshold + 1dB, on the Operating Channel.
3. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 0 to ensure detection occurs.
4. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.
5. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.
6. The Minimum number of trails, minimum percentage of successful detection and the average minimum percentage of successful detection are found in below table.

10.3. 動態頻率選擇偵測門檻測試結果

Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Amy Zhang	Relative Humidity	48 ~ 62%
Test Site	SR2	Test Date	2020/05/13 ~ 2020/05/15
Test Item	Radar Statistical Performance Check (802.11ax-HE20 - 5500MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5490.4	1	898	59	1
2	5490.4	1	538	98	1
3	5490.4	1	838	63	1
4	5490.4	1	718	74	1
5	5490.4	1	698	76	1
6	5490.4	1	938	57	1
7	5490.4	1	678	78	1
8	5490.4	1	618	86	1
9	5490.4	1	658	81	1
10	5490.4	1	918	58	1
11	5500.0	1	798	67	1
12	5500.0	1	578	92	1
13	5500.0	1	558	95	1
14	5500.0	1	638	83	1
15	5500.0	1	818	65	1
16	5500.0	1	2926	19	1
17	5500.0	1	2882	19	1
18	5500.0	1	1636	33	1
19	5500.0	1	2664	20	1
20	5500.0	1	1779	30	1
21	5509.6	1	642	83	1
22	5509.6	1	1412	38	1
23	5509.6	1	2696	20	1
24	5509.6	1	2260	24	1
25	5509.6	1	1904	28	1
26	5509.6	1	1378	39	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5509.6	1	1654	32	1
28	5509.6	1	2069	26	1
29	5509.6	1	2018	27	1
30	5509.6	1	2830	19	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5490.4	3.7	219	26	1
2	5490.4	1.5	203	29	1
3	5490.4	4.8	153	27	1
4	5490.4	3.4	218	26	1
5	5490.4	4.0	225	28	1
6	5490.4	4.0	193	23	1
7	5490.4	4.9	194	27	1
8	5490.4	4.0	174	29	1
9	5490.4	3.2	173	26	1
10	5490.4	2.8	216	29	1
11	5500.0	3.4	175	23	1
12	5500.0	3.4	189	28	1
13	5500.0	2.1	172	28	1
14	5500.0	3.4	216	28	1
15	5500.0	3.4	212	29	1
16	5500.0	4.5	155	29	1
17	5500.0	3.2	219	23	1
18	5500.0	4.1	209	27	0
19	5500.0	1.4	183	24	1
20	5500.0	4.4	194	25	0
21	5509.6	3.4	221	26	1
22	5509.6	4.7	226	27	1
23	5509.6	2.6	186	27	1
24	5509.6	3.7	210	26	1
25	5509.6	4.9	160	28	1
26	5509.6	1.8	224	23	1
27	5509.6	5.0	167	28	1
28	5509.6	1.6	168	25	1
29	5509.6	1.9	194	26	1
30	5509.6	4.3	227	24	1
Detection Percentage (%)					93.3%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5490.4	6.4	335	17	1
2	5490.4	7.1	398	16	1
3	5490.4	7.8	450	17	1
4	5490.4	9.8	218	17	1
5	5490.4	7.8	416	17	1
6	5490.4	6.2	383	16	1
7	5490.4	8.3	424	17	1
8	5490.4	6.8	386	18	1
9	5490.4	6.3	327	18	1
10	5490.4	7.8	372	17	1
11	5500.0	8.7	203	18	1
12	5500.0	9.2	346	16	1
13	5500.0	6.4	411	17	1
14	5500.0	7.4	288	18	1
15	5500.0	9.0	399	18	1
16	5500.0	6.0	346	17	1
17	5500.0	7.2	325	16	1
18	5500.0	6.9	421	18	1
19	5500.0	6.1	240	18	0
20	5500.0	9.4	461	18	1
21	5509.6	9.3	430	16	0
22	5509.6	6.4	254	18	1
23	5509.6	8.9	243	17	1
24	5509.6	6.0	356	18	0
25	5509.6	9.1	338	18	1
26	5509.6	9.2	284	17	1
27	5509.6	7.3	309	17	1
28	5509.6	6.3	203	16	1
29	5509.6	8.3	400	16	1
30	5509.6	8.6	206	16	1
Detection Percentage (%)					90%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5490.4	12.9	226	13	1
2	5490.4	19.8	340	14	1
3	5490.4	13.1	282	15	0
4	5490.4	16.0	414	13	1
5	5490.4	16.7	254	16	1
6	5490.4	17.5	452	13	1
7	5490.4	16.1	445	14	1
8	5490.4	13.1	378	14	1
9	5490.4	18.8	420	14	1
10	5490.4	14.6	248	14	1
11	5500.0	15.1	360	13	0
12	5500.0	15.5	478	16	1
13	5500.0	13.9	494	13	1
14	5500.0	17.5	248	12	1
15	5500.0	19.3	312	13	1
16	5500.0	17.7	236	13	1
17	5500.0	16.7	472	14	0
18	5500.0	18.6	293	14	1
19	5500.0	17.0	492	13	1
20	5500.0	16.4	429	15	1
21	5509.6	14.8	405	16	1
22	5509.6	18.3	376	13	1
23	5509.6	12.8	412	16	0
24	5509.6	18.5	210	16	1
25	5509.6	13.9	274	15	1
26	5509.6	11.1	241	15	1
27	5509.6	12.0	294	13	1
28	5509.6	11.7	474	13	1
29	5509.6	19.1	491	15	1
30	5509.6	19.3	468	15	1
Detection Percentage (%)					86.7%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test

waveforms is as follows: $\frac{P_d1 + P_d2 + P_d3 + P_d4}{4} = (100\% + 93.3\% + 90\% + 86.7\%) / 4 = 92.5\% (>80\%)$

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5500.0	1	16	5498.6	1
2	5500.0	1	17	5498.6	1
3	5500.0	1	18	5498.6	1
4	5500.0	1	19	5498.6	1
5	5500.0	1	20	5495.4	1
6	5500.0	1	21	5505.4	1
7	5500.0	1	22	5502.2	1
8	5500.0	1	23	5501.0	1
9	5500.0	1	24	5505.8	1
10	5500.0	1	25	5507.0	1
11	5494.2	1	26	5504.6	1
12	5493.0	1	27	5501.0	1
13	5499.0	1	28	5503.0	1
14	5499.0	1	29	5505.0	1
15	5497.4	1	30	5504.2	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_1						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	86.7	9			253.05
2	3	98.7	9	1672	1352	74.835
3	3	82.6	9	1931	1596	417.714
4	2	51.9	9	1949		190.091
5	1	78	9			657.209
6	3	75.5	9	1854	1010	146.746
7	2	98.6	9	1343		106.313
8	2	54.4	9	1366		145.9
9	2	83.1	9	1529		726.507
10	3	82.3	9	1641	1574	590.934
11	1	66.3	9			800.681
12	1	69.1	9			537.919
13	1	59	9			471.986
14	2	89.2	9	1405		647.943

Type 5 Radar Waveform_2

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	98.1	8	1653		271.605
2	1	98.4	8			483.851
3	3	95.9	8	1354	1384	375.492
4	2	90.2	8	1497		851.213
5	3	56.7	8	1214	1046	398.184
6	3	50.9	8	1277	1974	857.685
7	1	53.9	8			914.095
8	1	64.7	8			893.036
9	1	82.8	8			375.317
10	3	54.7	8	1732	1041	624.218
11	1	99.7	8			712.109

Type 5 Radar Waveform_3

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	67.4	16	1764		1258.87
2	2	85.3	16	1348		1380.35
3	1	85	16			1322.91
4	1	65.4	16			369.58
5	1	91.5	16			92.17
6	3	98.3	16	1403	1287	59.75
7	3	87.5	16	1773	1645	1231.4
8	2	59.9	16	1705		312.3

Type 5 Radar Waveform_4

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	60.5	10	1406		741.806
2	2	51	10	1547		277.57
3	2	73.3	10	1633		612.21
4	1	90.3	10			102.73
5	1	51.3	10			410.38
6	1	72.8	10			437.81
7	1	54.8	10			45.5
8	2	58.2	10	1197		643.44
9	2	54.5	10	1100		205.94
10	3	83.9	10	1346	1541	402.81
11	3	83.9	10	1923	1430	102.35
12	2	93.5	10	1265		599.6
13	2	96.8	10	1362		302.97
14	3	81.5	10	1514	1621	545.7
15	2	96.8	10	1379		157
16	2	87.9	10	1567		511.2

Type 5 Radar Waveform_5

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	56.1	17	1171	1234	624.441
2	2	58.5	17	1362		111.831
3	1	94.5	17			673.554
4	2	64.4	17	1630		359.161
5	2	92.8	17	1520		814.099
6	3	56	17	1795	1247	396.486
7	3	53.6	17	1762	1151	185.463
8	1	91.8	17			746.31
9	2	95.5	17	1310		153.027
10	3	77.3	17	1563	1043	191.664
11	2	83.7	17	1040		19.021
12	2	93	17	1558		282.939
13	2	50.8	17	1913		488.886
14	2	73.6	17	1363		329.643

Type 5 Radar Waveform_6

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	94	8			590.904
2	2	89.1	8	1824		207.576
3	2	78.8	8	1343		43.56
4	2	96.1	8	1541		211.64
5	3	69.3	8	1762	1856	6.11
6	2	97.8	8	1337		496.73
7	2	73	8	1337		233.61
8	3	76.1	8	1134	1592	507.61
9	3	60.8	8	1197	1816	394.62
10	1	51.5	8			462.01
11	2	75.5	8	1718		478.35
12	2	54.6	8	1354		414.21
13	2	99.1	8	1684		337.37
14	2	61.1	8	1950		238.71
15	2	54.8	8	1902		103.03
16	1	66.6	8			323.89
17	1	93.6	8			174.05
18	1	51.2	8			380.7
19	3	92.6	8	1227	1415	89.3
20	2	65.7	8	1876		541.2

Type 5 Radar Waveform_7

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	57	15	1156		290.967
2	2	91.2	15	1638		588.55
3	2	52.6	15	1899		535.2
4	2	72.7	15	1057		471
5	2	55.2	15	1610		657.94
6	1	75.5	15			366.49
7	1	91.3	15			487.02
8	1	66.6	15			638.97
9	3	97.3	15	1399	1914	709.29
10	2	91.6	15	1495		732.32
11	2	74.1	15	1416		694.59
12	1	57.2	15			139.33
13	3	53.3	15	1693	1110	629.41
14	2	56.7	15	1222		287.6
15	2	54.1	15	1336		607.7
16	1	76.7	15			111.2

Type 5 Radar Waveform_8

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	85.3	5	1678		506.64
2	2	98.5	5	1483		249.983
3	1	96.7	5			693.025
4	2	70.7	5	1659		406.733
5	1	53.8	5			630.251
6	2	59	5	1583		301.688
7	3	53.2	5	1180	1270	213.016
8	1	92.9	5			27.074
9	3	92.3	5	1960	1413	352.431
10	3	76.4	5	1193	1517	314.459
11	1	83.8	5			3.426
12	2	53.7	5	1353		162.154
13	1	87.8	5			324.332
14	1	54.2	5			409.469
15	3	63.4	5	1598	1104	227.447
16	3	71.5	5	1267	1188	678.765
17	1	95.5	5			510.582

Type 5 Radar Waveform_9

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	83.5	15	1211		350.919
2	3	70.2	15	1905	1886	742.31
3	2	68.9	15	1180		195.7
4	2	57.8	15	1989		652.38
5	2	51.2	15	1419		644.1
6	1	94	15			299.11
7	2	76.6	15	1317		596.52
8	1	98.4	15			418.57
9	3	91.4	15	1786	1392	256.61
10	3	91.6	15	1529	1335	613.38
11	2	61.6	15	1136		200.19
12	3	70	15	1499	1809	516.77
13	3	61.1	15	1246	1519	727.95
14	3	75.9	15	1557	1135	147.35
15	3	66.4	15	1769	1138	590.9
16	3	96.1	15	1075	1136	500.2

Type 5 Radar Waveform_10

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	50.1	11			1192.22
2	1	80.4	11			1240.93
3	2	97.5	11	1025		1022.75
4	1	66.9	11			621.34
5	3	94.6	11	1012	1117	1102.39
6	2	65.5	11	1310		1337.36
7	1	89	11			1169.4
8	2	79.9	11	1300		666.2

Type 5 Radar Waveform_11

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	64	8			59.672
2	2	87.3	8	1080		615.58
3	2	95.4	8	1220		766.65
4	3	70.7	8	1453	1033	743.33
5	3	94.2	8	1231	1953	719.4
6	2	96.9	8	1114		38.6
7	3	89.3	8	1163	1172	379.75
8	2	91.9	8	1829		424.65
9	2	92.6	8	1216		436.88
10	2	66.2	8	1805		717.11
11	3	98.4	8	1223	1297	477.2
12	2	89.5	8	1586		772.41
13	3	75.6	8	1457	1067	398.29
14	3	74.4	8	1906	1987	36.6
15	1	97	8			772.1

Type 5 Radar Waveform_12

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	73.9	5	1962		632.31
2	2	66.9	5	1116		277.751
3	1	73	5			350.372
4	2	93.8	5	1153		525.123
5	2	55.7	5	1865		742.054
6	3	81.9	5	1649	1090	530.445
7	2	76.6	5	1641		769.955
8	2	95.1	5	1318		609.476
9	1	80.4	5			173.547
10	3	82.5	5	1859	1164	657.918
11	1	87	5			803.809

Type 5 Radar Waveform_13

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	87.9	20	1175	1322	366.918
2	1	95.6	20			54.118
3	2	92.7	20	1000		426.485
4	1	96.8	20			661.703
5	3	84.6	20	1049	1019	155.821
6	2	89.4	20	1435		70.268
7	3	59.6	20	1140	1871	364.476
8	1	70.5	20			540.784
9	1	84.4	20			316.081
10	3	83	20	1493	1416	62.779
11	1	93.4	20			164.846
12	2	51.7	20	1823		319.034
13	3	56.2	20	1827	1060	596.502
14	2	71.1	20	1733		214.459
15	2	61.2	20	1694		374.047
16	1	96.1	20			454.965
17	2	57.8	20	1699		84.782

Type 5 Radar Waveform_14

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	66.6	20	1079		689.786
2	2	98.2	20	1998		253.3
3	3	83.3	20	1828	1771	776.87
4	2	58.1	20	1787		536.38
5	2	64.6	20	1038		186.95
6	2	77.3	20	1468		305.61
7	2	58.8	20	1820		193.35
8	1	78.1	20			609.08
9	1	59	20			115.77
10	2	98.8	20	1987		288.4

Type 5 Radar Waveform_15

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	97.4	16	1197	1819	25.142
2	1	60.2	16			231.097
3	1	52.4	16			805.834
4	3	82	16	1353	1004	161.721
5	3	89.1	16	1291	1407	839.069
6	2	55.3	16	1661		398.056
7	3	88.1	16	1690	1930	688.993
8	2	74.5	16	1766		31.43
9	2	62.4	16	1356		245.527
10	3	70.5	16	1790	1774	166.414
11	1	75	16			703.901
12	3	63.2	16	1788	1892	414.389
13	2	78.4	16	1602		630.386
14	1	53.9	16			404.443

Type 5 Radar Waveform_16

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	59.6	19	1247		12.43
2	3	87.3	19	1444	1585	93.192
3	3	76.2	19	1565	1280	594.41
4	2	56.5	19	1678		362.76
5	1	75.6	19			138.71
6	2	74.2	19	1432		150.63
7	3	78	19	1918	1020	443.02
8	1	74.9	19			417.5
9	1	72.5	19			80.25
10	3	69.4	19	1157	1747	550.86
11	3	55.8	19	1619	1556	145.53
12	2	66.3	19	1147		48.99
13	2	97.1	19	1225		208.87
14	3	60.8	19	1158	1289	114.5
15	1	64.1	19			717.6

Type 5 Radar Waveform_17

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	92.8	19	1366	1744	196.055
2	2	63.9	19	1881		5.092
3	1	58.3	19			29.46
4	2	95.8	19	1934		696.74
5	2	94.8	19	1927		96.23
6	1	91.8	19			657.03
7	2	69.7	19	1968		487.69
8	1	96.8	19			724.9
9	2	81.7	19	1448		564.71
10	3	79.5	19	1213	1625	369.55
11	3	56.3	19	1489	1258	380.84
12	2	70	19	1868		478.6
13	2	99	19	1213		344.67
14	1	50.3	19			36.24
15	2	63.6	19	1345		301.9
16	2	70.7	19	1679		702.9

Type 5 Radar Waveform_18

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	93.3	19	1397		237.375
2	2	68.7	19	1063		64.228
3	2	88.1	19	1794		152.442
4	1	81	19			621.423
5	2	50.3	19	1422		266.244
6	1	79.7	19			355.925
7	3	84.7	19	1408	1073	162.766
8	1	52.1	19			224.027
9	2	87.2	19	1887		343.588
10	2	75.3	19	1356		438.079
11	1	89.1	19			303.791
12	3	88	19	1452	1154	447.122
13	1	82.3	19			123.253
14	2	94.3	19	1536		71.834
15	3	60.3	19	1728	1472	553.005
16	3	57.9	19	1299	1504	437.176
17	3	71.1	19	1155	1075	611.537
18	2	73.9	19	1834		383.758
19	3	71.7	19	1178	1001	74.879

Type 5 Radar Waveform_19

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	58.7	19	1620		738.329
2	1	76.8	19			327.067
3	2	64.5	19	1125		45.014
4	1	61.6	19			138.491
5	1	80.3	19			347.059
6	1	64.8	19			46.716
7	2	58.8	19	1271		775.263
8	2	66.4	19	1689		408.47
9	2	74.4	19	1524		179.997
10	2	90.5	19	1699		255.824
11	3	71.8	19	1452	1273	7.861
12	1	86.6	19			487.599
13	1	52.6	19			649.686
14	2	71.4	19	1264		268.643

Type 5 Radar Waveform_20

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	57.3	11	1531	1802	362.875
2	1	71.9	11			214.781
3	2	81.1	11	1991		522.072
4	2	57.8	11	1485		9.103
5	1	51.9	11			736.764
6	1	52.5	11			783.815
7	2	96.7	11	1629		161.305
8	1	78	11			480.606
9	3	66.3	11	1229	1627	446.987
10	2	68.4	11	1519		828.118
11	2	53.1	11	1876		1021.809

Type 5 Radar Waveform_21

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	84.8	9	1810		519.168
2	3	67.2	9	1627	1549	463.52
3	2	69.7	9	1997		685.07
4	1	92.5	9			220.78
5	2	80.6	9	1790		279.74
6	2	80.5	9	1431		184.92
7	1	57.9	9			295.36
8	3	72.6	9	1226	1510	228.82
9	3	91.6	9	1926	1068	398.54
10	3	83.8	9	1552	1623	56.14
11	2	98.2	9	1173		645.11
12	1	77.9	9			102.88
13	1	61.5	9			543.6
14	2	55	9	1984		481.1
15	1	63.9	9			314.2
16	2	52.7	9	1330		318.7

Type 5 Radar Waveform_22

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	93.7	17	1704		135.89
2	3	66.9	17	1798	1475	743.91
3	2	61.4	17	1124		504.94
4	3	65.9	17	1077	1698	132.67
5	2	78.9	17	1590		307.74
6	2	62.9	17	1184		556.28
7	3	59.2	17	1231	1839	317.49
8	2	59.9	17	1218		574.15
9	2	51.8	17	1378		439.53
10	1	68.2	17			623.06
11	3	92.4	17	1602	1286	0.67
12	3	69.5	17	1026	1464	718.58
13	2	91.8	17	1165		50.3
14	2	52.7	17	1643		7.36
15	2	67.8	17	1067		729.8
16	3	61.3	17	1292	1796	11

Type 5 Radar Waveform_23

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	58.5	20	1867		55.895
2	1	53.9	20			672.208
3	3	81.6	20	1496	1183	302.985
4	1	70.4	20			241.993
5	2	66.8	20	1993		134.361
6	2	52.5	20	1240		210.118
7	2	54.6	20	1236		358.496
8	2	99.8	20	1292		697.874
9	3	83.9	20	1206	1459	404.881
10	2	99.2	20	1129		512.509
11	2	51.7	20	1175		677.516
12	2	88.3	20	1997		189.764
13	1	99.6	20			271.922
14	2	73.5	20	1409		44.949
15	1	84.1	20			22.107
16	2	52.4	20	1388		676.565
17	3	90.2	20	1179	1892	220.782

Type 5 Radar Waveform_24

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	73.8	8			367.168
2	1	69.8	8			219.6
3	2	53.4	8	1458		462.85
4	2	85.2	8	1004		149.54
5	2	94.4	8	1899		985.69
6	3	54	8	1466	1508	323.45
7	1	93.8	8			527.07
8	3	54.5	8	1691	1256	571.29
9	2	82.9	8	1391		921.1
10	3	93.7	8	1553	1319	433.4

Type 5 Radar Waveform_25

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	93.4	5	1146		273.105
2	3	73	5	1309	1987	65.496
3	2	95.4	5	1530		361.094
4	2	52.8	5	1909		390.161
5	1	76.8	5			128.749
6	2	86.8	5	1964		93.136
7	2	99.3	5	1438		240.503
8	2	52.1	5	1051		583.02
9	3	76.3	5	1405	2000	86.787
10	3	67	5	1555	1615	377.564
11	1	73.6	5			191.231
12	1	80.9	5			328.109
13	2	80.8	5	1776		730.186
14	3	83.9	5	1593	1914	524.243

Type 5 Radar Waveform_26

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	73	11	1469		409.175
2	1	76.7	11			535.84
3	2	67.2	11	1509		741.76
4	3	56.2	11	1173	1693	371.29
5	3	70.6	11	1724	1171	378.99
6	1	72.1	11			256.36
7	3	72.9	11	1845	1992	125.93
8	2	68.3	11	1600		697.95
9	3	85.9	11	1185	1458	642.02
10	3	56	11	1122	1151	87.93
11	2	66.5	11	1470		724.19
12	3	89.1	11	1234	1161	664.57
13	2	62.4	11	1050		643.55
14	2	51.2	11	1431		408.1
15	3	84.8	11	1777	1091	47.8
16	2	96.3	11	1040		359

Type 5 Radar Waveform_27

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	69.1	20	1178		115.078
2	2	59.5	20	1377		243.014
3	3	76.3	20	1572	1492	385.017
4	1	94.4	20			325.65
5	2	77.6	20	1428		243.613
6	3	72.2	20	1100	1488	643.077
7	3	55.7	20	1048	1185	349.63
8	2	81.3	20	1348		145.833
9	3	59.7	20	1033	1285	114.717
10	3	77.5	20	1226	1209	307.17
11	3	81.5	20	1377	1727	317.053
12	2	89.1	20	1076		133.327
13	1	99.1	20			617.68
14	2	83.8	20	1193		442.343
15	3	95.1	20	1394	1293	644.657
16	2	64.5	20	1081		435.4
17	1	75.6	20			53.533
18	2	66.7	20	1432		84.867

Type 5 Radar Waveform_28

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	96.3	15	1907	1786	830.502
2	2	66.6	15	1482		892.28
3	2	77.1	15	1498		150.68
4	1	65.3	15			1336.19
5	2	94.8	15	1283		258.71
6	2	73.4	15	1054		345.51
7	3	91.8	15	1418	1298	684.58
8	2	59.1	15	1061		1316.2

Type 5 Radar Waveform_29

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	94.3	10	1497	1250	126.657
2	3	98.5	10	1016	1434	644.183
3	2	78.3	10	1278		455.226
4	2	99.9	10	1237		599.079
5	2	69.7	10	1926		550.862
6	3	51.8	10	1512	1949	217.075
7	2	98.3	10	1531		392.958
8	1	85.9	10			683.612
9	2	60.3	10	1153		654.705
10	2	81.9	10	1012		677.558
11	3	79.8	10	1987	1829	35.671
12	2	99.9	10	1942		6.754
13	2	57.9	10	1969		598.277

Type 5 Radar Waveform_30

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	82.7	12	1898		783.886
2	2	58	12	1280		304.83
3	2	94.6	12	1619		549.36
4	2	87	12	1526		786.97
5	3	60.3	12	1756	1057	483.28
6	2	55.4	12	1709		340.27
7	2	84.2	12	1274		64.46
8	1	52.6	12			726.61
9	2	80.2	12	1674		491.27
10	1	84.6	12			176.99
11	2	84.2	12	1837		638.38
12	3	80.9	12	1334	1728	192.09
13	3	73.4	12	1335	1198	563.1
14	1	96.3	12			627.2
15	1	80.4	12			581.7

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5490.4	1	16	5500.0	1
2	5490.4	1	17	5500.0	1
3	5490.4	1	18	5500.0	1
4	5490.4	1	19	5500.0	1
5	5490.4	1	20	5500.0	1
6	5490.4	1	21	5509.6	1
7	5490.4	1	22	5509.6	1
8	5490.4	1	23	5509.6	1
9	5490.4	1	24	5509.6	1
10	5490.4	1	25	5509.6	1
11	5500.0	1	26	5509.6	1
12	5500.0	1	27	5509.6	1
13	5500.0	1	28	5509.6	1
14	5500.0	1	29	5509.6	1
15	5500.0	1	30	5509.6	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5501	9	6	5500	18
18	5497	54	28	5491	84
23	5500	69	61	5507	183
38	5505	114	--	--	--
80	5499	240	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
66	5495	198	21	5500	63
123	5497	369	27	5491	81
264	5506	792	30	5510	90
276	5503	828	42	5496	126
--	--	--	53	5507	159
--	--	--	99	5498	297

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5496	30	13	5502	39
19	5490	57	22	5505	66
65	5493	195	25	5503	75
66	5507	198	37	5510	111
81	5500	243	41	5491	123
93	5506	279	47	5507	141
--	--	--	56	5501	168
--	--	--	98	5508	294

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
17	5506	51	6	5499	18
64	5494	192	12	5504	36
98	5507	294	36	5491	108

--	--	--	45	5509	135
--	--	--	76	5497	228

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
71	5506	213	19	5503	57
--	--	--	49	5491	147
--	--	--	82	5490	246
--	--	--	92	5502	276

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
27	5496	81	9	5506	27
41	5504	123	15	5497	45
54	5509	162	18	5500	54
83	5490	249	36	5508	108
--	--	--	38	5491	114

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
12	5504	36	27	5508	81
39	5495	117	66	5507	198
57	5506	171	73	5494	219
--	--	--	81	5506	243

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
17	5510	51	30	5491	90
43	5507	129	49	5493	147
57	5501	171	79	5496	237
--	--	--	88	5508	264

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
25	5500	75	14	5503	42
51	5504	153	30	5504	90
72	5510	216	52	5508	156
--	--	--	81	5500	243
--	--	--	88	5492	264

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5493	30	20	5498	60
12	5490	36	30	5490	90
16	5507	48	33	5494	99
69	5502	207	37	5496	111
--	--	--	69	5506	207
--	--	--	83	5491	249
--	--	--	85	5503	255

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
24	5497	72	70	5494	210
34	5509	102	95	5498	285
50	5500	150	--	--	--
75	5506	225	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
21	5509	63	26	5498	78
25	5497	75	38	5499	114
--	--	--	57	5506	171
--	--	--	97	5496	291

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5493	6	2	5508	6
16	5496	48	34	5494	102
21	5495	63	84	5506	252

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
77	5504	231	10	5500	30
--	--	--	23	5498	69
--	--	--	31	5495	93
--	--	--	32	5502	96
--	--	--	48	5491	144
--	--	--	56	5490	168
--	--	--	59	5494	177
--	--	--	83	5501	249

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
20	5498	60	10	5490	30
59	5510	177	49	5503	147
71	5509	213	50	5500	150
87	5493	261	67	5494	201
92	5490	276	96	5510	288
99	5491	297	--	--	--

Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Amy Zhang	Relative Humidity	48 ~ 62%
Test Site	SR2	Test Date	2020/05/13 ~ 2020/05/15
Test Item	Radar Statistical Performance Check (802.11ax-HE40 mode - 5510MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	938	57	1
2	5491	1	638	83	1
3	5491	1	778	68	1
4	5491	1	598	89	1
5	5491	1	878	61	1
6	5500	1	838	63	1
7	5500	1	858	62	1
8	5500	1	698	76	1
9	5500	1	558	95	1
10	5509	1	758	70	1
11	5509	1	518	102	1
12	5509	1	3066	18	1
13	5509	1	738	72	1
14	5510	1	918	58	1
15	5510	1	618	86	1
16	5510	1	2426	22	1
17	5510	1	1562	34	1
18	5511	1	1372	39	1
19	5511	1	1106	48	1
20	5511	1	2476	22	1
21	5511	1	2046	26	1
22	5520	1	2238	24	1
23	5520	1	1488	36	1
24	5520	1	2616	21	1
25	5520	1	913	58	1
26	5529	1	1389	38	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5529	1	2066	26	1
28	5529	1	2919	19	1
29	5529	1	2001	27	1
30	5529	1	2584	21	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1.9	192	29	1
2	5491	3.7	166	27	1
3	5491	1.6	199	24	1
4	5491	2.4	204	27	1
5	5491	2.4	189	27	1
6	5500	1.2	163	24	1
7	5500	1.6	154	24	1
8	5500	2.7	150	28	1
9	5500	1.7	189	27	0
10	5509	1.2	173	23	1
11	5509	2.9	181	23	1
12	5509	3.4	152	26	0
13	5509	3.6	155	29	1
14	5510	2.4	218	24	1
15	5510	1.1	198	24	0
16	5510	3.6	153	28	1
17	5510	3.6	220	29	1
18	5511	1.3	217	26	1
19	5511	2.9	173	28	1
20	5511	1.0	206	24	1
21	5511	4.8	201	26	1
22	5520	2.5	188	28	1
23	5520	1.2	174	25	1
24	5520	3.9	216	29	0
25	5520	4.8	210	25	1
26	5529	2.3	157	25	1
27	5529	1.0	152	23	1
28	5529	4.7	218	29	1
29	5529	1.4	189	24	1
30	5529	1.0	203	26	0
Detection Percentage (%)					86.7%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	9.2	340	17	1
2	5491	6.7	284	17	1
3	5491	8.5	271	16	1
4	5491	9.0	285	16	1
5	5491	7.0	464	16	1
6	5500	7.9	476	16	1
7	5500	6.8	498	16	1
8	5500	6.3	303	17	1
9	5500	9.1	341	17	1
10	5509	6.9	251	17	1
11	5509	9.8	477	18	1
12	5509	9.5	400	18	0
13	5509	6.7	412	17	1
14	5510	6.8	288	17	1
15	5510	6.2	499	17	1
16	5510	9.3	306	16	0
17	5510	8.7	317	16	1
18	5511	6.4	326	17	1
19	5511	6.2	492	17	0
20	5511	9.0	269	17	1
21	5511	6.8	378	18	0
22	5520	6.6	482	16	1
23	5520	6.4	273	16	1
24	5520	8.7	461	16	1
25	5520	6.1	483	17	1
26	5529	7.0	409	17	1
27	5529	8.9	389	17	0
28	5529	8.6	306	18	1
29	5529	6.5	303	18	1
30	5529	6.6	388	18	1
Detection Percentage (%)					83.3%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	13.6	250	14	1
2	5491	14.6	447	14	1
3	5491	11.1	281	12	1
4	5491	11.6	319	16	1
5	5491	16.2	282	16	0
6	5500	19.0	456	15	1
7	5500	18.4	382	12	1
8	5500	16.4	350	12	1
9	5500	16.2	350	12	1
10	5509	16.3	489	13	0
11	5509	18.8	394	13	1
12	5509	14.8	253	16	1
13	5509	16.4	306	15	1
14	5510	18.2	303	15	0
15	5510	19.3	427	15	1
16	5510	12.7	327	16	1
17	5510	19.9	305	16	1
18	5511	14.3	278	16	1
19	5511	11.8	364	13	0
20	5511	18.6	377	15	1
21	5511	15.4	423	13	1
22	5520	13.3	412	14	1
23	5520	19.1	295	14	1
24	5520	17.7	456	13	1
25	5520	19.1	305	12	1
26	5529	13.2	298	16	1
27	5529	18.0	383	13	1
28	5529	12.4	332	13	1
29	5529	16.4	429	15	1
30	5529	19.7	411	15	1
Detection Percentage (%)					86.7%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test

waveforms is as follows: $\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100\% + 86.7\% + 83.3\% + 86.7\%) / 4 = 89.17\% (>80\%)$

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5510.0	1	16	5496.6	1
2	5510.0	1	17	5493.4	0
3	5510.0	1	18	5496.2	1
4	5510.0	1	19	5498.6	1
5	5510.0	0	20	5495.0	1
6	5510.0	1	21	5523.8	1
7	5510.0	1	22	5526.6	1
8	5510.0	1	23	5522.2	1
9	5510.0	1	24	5523.8	1
10	5510.0	1	25	5523.8	1
11	5497.8	1	26	5526.2	1
12	5498.2	1	27	5524.6	1
13	5498.2	1	28	5525.8	1
14	5495.4	1	29	5525.8	1
15	5493.8	1	30	5527.0	1
Detection Percentage (%)					93.3%

Type 5 Radar Waveform_1						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	67.6	6			648.523
2	1	56.6	6			36.09
3	2	64.7	6	1891		7.447
4	3	93.7	6	1296	1360	267.4
5	2	60.5	6	1531		346.113
6	1	74.9	6			96.157
7	2	70.9	6	1128		468.95
8	2	74.5	6	1980		109.573
9	3	88.6	6	1428	1371	157.807
10	3	63.7	6	1634	1339	514.63
11	2	70.4	6	1286		190.123
12	2	66	6	1433		341.707
13	3	55.7	6	1482	1546	655.98
14	2	54.1	6	1290		107.963
15	2	98	6	1764		105.727
16	2	68.3	6	1182		330.3
17	2	65.2	6	1985		75.133
18	2	63.7	6	1427		237.767

Type 5 Radar Waveform_2

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	76.1	9	1342		658.082
2	2	74.9	9	1053		337.25
3	1	92.6	9			245.55
4	2	74.7	9	1439		65.37
5	1	89.2	9			325.17
6	2	64.9	9	1768		331.98
7	2	69.5	9	1099		105.59
8	1	84.4	9			345.45
9	3	86.9	9	1683	1765	355.9
10	2	75.7	9	1127		16.77
11	2	70.1	9	1737		483.55
12	2	99.4	9	1773		44.84
13	3	93.1	9	1135	1157	634.4
14	1	51.5	9			379.9
15	2	92.6	9	1801		276.3
16	3	64.9	9	1183	1429	421.7

Type 5 Radar Waveform_3

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	84.8	15	1903	1964	67.719
2	2	51.3	15	1269		70.553
3	2	89.5	15	1864		213.002
4	2	58.7	15	1687		163.123
5	3	86.1	15	1727	1048	588.854
6	3	71.1	15	1189	1847	323.795
7	3	88.8	15	1410	1806	94.456
8	3	57.1	15	1824	1933	71.127
9	3	60.7	15	1332	1539	450.798
10	2	85.2	15	1474		75.479
11	2	74.5	15	1823		186.821
12	1	63.2	15			530.812
13	1	82	15			160.103
14	2	62.5	15	1886		478.014
15	2	84.3	15	1510		224.555
16	1	56.2	15			576.916
17	2	66.2	15	1512		552.337
18	2	92.8	15	1885		317.358
19	2	50.5	15	1640		64.179

Type 5 Radar Waveform_4

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	53.4	13	1893	1044	416.405
2	3	95.3	13	1547	1727	412.368
3	3	98.2	13	1958	1814	300.185
4	1	90.4	13			110.663
5	2	74.3	13	1846		641.261
6	1	76.3	13			530.098
7	1	60.3	13			350.646
8	1	50.1	13			252.674
9	3	66.7	13	1176	1147	187.961
10	1	94.2	13			541.389
11	3	65	13	1352	1284	667.506
12	1	51.3	13			278.774
13	3	74.3	13	1740	1282	474.522
14	1	73.1	13			588.019
15	2	71.1	13	1052		37.817
16	3	92.9	13	1124	1838	171.465
17	3	54.7	13	1517	1747	518.482

Type 5 Radar Waveform_5

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	58.2	7	1705	1503	264.27
2	2	79.1	7	1197		512.831
3	1	80.2	7			263.552
4	1	68.4	7			255.853
5	1	63.8	7			451.134
6	1	75.1	7			108.405
7	2	65.6	7	1958		498.626
8	2	66.2	7	1630		71.627
9	2	76	7	1917		461.878
10	3	74.6	7	1024	1029	616.579
11	1	57.4	7			454.011
12	2	62.6	7	1248		209.832
13	3	83	7	1119	1201	392.403
14	2	72	7	1145		607.774
15	3	59.8	7	1306	1547	382.855
16	2	91.7	7	1859		246.336
17	3	64.9	7	1308	1151	114.537
18	2	72.5	7	1237		558.758
19	1	97.5	7			572.679

Type 5 Radar Waveform_6

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	87.2	18	1311		86.368
2	2	56.8	18	1357		203.754
3	1	94.7	18			74.132
4	2	64.2	18	1576		65.963
5	2	87.4	18	1373		61.814
6	1	98.5	18			92.375
7	2	69	18	1718		13.256
8	2	93	18	1096		84.897
9	1	59.5	18			602.408
10	3	74	18	1005	1240	461.329
11	2	60.6	18	1367		243.531
12	2	90.8	18	1007		246.472
13	2	91.7	18	1077		216.233
14	2	51.9	18	1622		592.734
15	2	65.6	18	1417		439.815
16	1	60	18			483.226
17	3	78.5	18	1753	1290	339.837
18	2	83	18	1796		184.258
19	2	51.8	18	1283		87.779

Type 5 Radar Waveform_7

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	98.8	10	1679	1509	431.853
2	2	51	10	1723		185.235
3	3	92.7	10	1342	1680	119.63
4	2	82	10	1304		589.11
5	2	78.4	10	1459		88.75
6	2	82.2	10	1821		458.98
7	3	95.4	10	1984	1517	727.16
8	1	97.9	10			356.73
9	3	80	10	1335	1873	213.27
10	1	73.7	10			623.65
11	1	54.5	10			734.68
12	1	78.2	10			274.82
13	3	79.5	10	1972	1434	245.13
14	2	96.1	10	1433		100.62
15	3	52.6	10	1381	1460	421.2
16	2	66.4	10	1154		275.5

Type 5 Radar Waveform_8

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	68.2	5	1564	1767	358.168
2	2	89.7	5	1635		649.707
3	1	96.1	5			664.264
4	2	90.3	5	1734		144.061
5	1	94.2	5			204.269
6	2	76	5	1276		746.926
7	1	76.1	5			150.403
8	2	70.2	5	1565		679.22
9	2	59.3	5	1027		729.997
10	2	51	5	1681		408.714
11	1	98.4	5			520.991
12	2	78.5	5	1347		810.429
13	1	76.3	5			287.386
14	2	84.7	5	1633		673.043

Type 5 Radar Waveform_9

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	52.2	6	1495		625.195
2	1	92.9	6			107.076
3	1	95.2	6			356.337
4	3	53.5	6	1673	1552	54.09
5	3	90	6	1768	1350	176.183
6	1	70.2	6			313.947
7	2	60.3	6	1499		536.36
8	2	97.8	6	1040		396.113
9	3	72	6	1364	1631	516.007
10	2	89.2	6	1782		520.77
11	3	55.3	6	1655	1952	462.243
12	1	54.1	6			526.927
13	3	54	6	1067	1045	391.78
14	1	79.2	6			524.283
15	2	74.1	6	1862		70.537
16	3	50.3	6	1083	1137	175.8
17	2	66.2	6	1555		240.333
18	3	78.7	6	1778	1094	428.667

Type 5 Radar Waveform_10

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	60.2	15	1175	1079	564.838
2	1	73.4	15			459.19
3	1	63.6	15			630.35
4	2	94.9	15	1745		597.19
5	1	50.6	15			11.96
6	3	71.4	15	1172	1312	41.57
7	1	99	15			588.83
8	1	83	15			653.4
9	2	58.6	15	1000		380.32
10	2	70.6	15	1955		323.41
11	2	56.7	15	1579		653.76
12	2	60.8	15	1114		388.51
13	3	75.1	15	1776	1349	743.32
14	1	51.9	15			525.3
15	3	92.7	15	1008	1805	51.6
16	1	59.4	15			485

Type 5 Radar Waveform_11

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	68.5	17	1580		142.808
2	1	51	17			92.416
3	3	85	17	1893	1472	72.912
4	2	99.7	17	1158		190.833
5	1	76.9	17			334.284
6	2	78.4	17	1634		326.265
7	3	79.5	17	1322	1707	162.706
8	1	92.7	17			50.917
9	2	86.3	17	1289		546.108
10	2	64.2	17	1941		370.189
11	2	98.5	17	1475		101.991
12	1	58.1	17			241.512
13	2	94.1	17	1322		484.423
14	2	69.7	17	1195		625.184
15	1	51.4	17			127.965
16	3	97.5	17	1452	1921	619.516
17	3	88.5	17	1776	1063	189.337
18	3	64.9	17	1472	1139	172.358
19	3	91.9	17	1701	1393	60.479

Type 5 Radar Waveform_12

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	68.8	18			365.764
2	1	95.8	18			313.731
3	2	87.9	18	1838		604.872
4	3	97.2	18	1518	1193	458.343
5	2	76	18	1261		294.634
6	2	78.5	18	1810		512.305
7	3	67.4	18	1975	1621	340.635
8	3	67.5	18	1537	1884	486.056
9	1	83.6	18			76.467
10	2	54.2	18	1941		795.018
11	2	77.1	18	1012		1033.409

Type 5 Radar Waveform_13

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	62.7	18	1298	1285	647.598
2	1	56.5	18			394.271
3	2	67.4	18	1507		264.162
4	2	96.1	18	1891		976.813
5	3	71.9	18	1799	1735	338.674
6	2	51	18	1568		886.125
7	1	71.6	18			221.885
8	2	81.6	18	1608		872.476
9	3	63.2	18	1724	1178	40.027
10	2	58.4	18	1198		1033.418
11	3	52	18	1195	1054	786.409

Type 5 Radar Waveform_14

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	54.3	11	1980		181.801
2	2	59.6	11	1669		301.041
3	2	74.3	11	1584		545.627
4	1	61.5	11			430.29
5	3	87.8	11	1992	1570	381.743
6	3	68.4	11	1968	1135	535.657
7	2	60.8	11	1475		8.98
8	3	60.6	11	1234	1896	58.623
9	3	70.2	11	1736	1016	211.537
10	1	83.9	11			138.58
11	3	50	11	1805	1829	251.813
12	2	73.5	11	1009		186.987
13	1	78.4	11			358.35
14	3	73.5	11	1011	1909	159.323
15	1	66.8	11			654.757
16	2	73.6	11	1896		475.7
17	2	89.6	11	1221		434.733
18	3	51.8	11	1434	1246	171.167

Type 5 Radar Waveform_15

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	68.9	7			254.085
2	1	93.2	7			549.1
3	2	69.7	7	1095		270.08
4	2	89	7	1553		272.6
5	2	98.7	7	1002		578.13
6	3	87.8	7	1779	1923	38.26
7	3	85.9	7	1770	1063	506.26
8	1	82.8	7			579.03
9	2	93.3	7	1816		548.69
10	2	98.1	7	1211		128.05
11	2	93.9	7	1500		491.57
12	3	74.2	7	1145	1115	421.12
13	1	68.6	7			488.38
14	3	97	7	1443	1290	570.24
15	1	97	7			520.55
16	3	87.8	7	1447	1676	590.84
17	2	52.7	7	1339		313.51
18	2	55.9	7	1886		13.4
19	3	71.1	7	1179	1058	249.8
20	2	85	7	1963		587

Type 5 Radar Waveform_16

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	94.2	14	1799		63.726
2	2	74.6	14	1866		258.022
3	2	50.4	14	1271		81.63
4	2	96.1	14	1670		45.76
5	3	72.3	14	1787	1973	491.76
6	3	51.7	14	1271	1912	546.09
7	2	64.8	14	1778		495.57
8	2	83.1	14	1126		271.38
9	2	59.8	14	1269		102.09
10	3	93.9	14	1041	1590	294.71
11	2	99.8	14	1234		1.4
12	3	96.6	14	1504	1462	250.64
13	3	99.8	14	1408	1012	187.12
14	2	85.3	14	1170		428.54
15	1	61.6	14			519.01
16	2	52.4	14	1596		291.9
17	2	54.2	14	1907		56.67
18	1	58.4	14			160.9
19	1	53.5	14			562
20	1	92.4	14			181.2

Type 5 Radar Waveform_17

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	89.1	6	1591	1385	235.05
2	2	62.5	6	1066		596.62
3	2	73.9	6	1686		35.46
4	2	98.9	6	1093		703.07
5	2	93	6	1795		238.96
6	1	57.2	6			413.73
7	3	77.6	6	1524	1428	232.86
8	2	95.6	6	1997		66.42
9	2	74.2	6	1705		622.22
10	1	56.8	6			250.03
11	2	84.9	6	1567		434.65
12	2	95.5	6	1222		591.25
13	2	96.1	6	1481		23.18
14	1	98.7	6			169.84
15	1	52.6	6			698.2
16	1	92.1	6			8.3

Type 5 Radar Waveform_18

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	70.7	13	1268		831.8
2	1	85.6	13			523.391
3	2	94.3	13	1115		251.732
4	1	87.1	13			89.443
5	1	71.2	13			85.964
6	1	54.7	13			866.765
7	3	54.1	13	1455	1126	401.335
8	2	58.6	13	1553		174.536
9	3	98.2	13	1440	1111	463.507
10	2	88	13	1376		826.418
11	2	58.3	13	1192		198.009

Type 5 Radar Waveform_19

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	62.4	19	1177		243.316
2	2	87.7	19	1457		1110.097
3	1	93.7	19			559.523
4	2	73	19	1299		158.69
5	2	95	19	1579		463.257
6	3	97.2	19	1267	1476	1129.883
7	3	73.8	19	1417	1495	832.21
8	2	87.4	19	1950		1311.567
9	3	68.1	19	1316	1215	729.133

Type 5 Radar Waveform_20

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	73.7	10	1070		743.836
2	3	52.6	10	1355	1925	141.482
3	2	68.3	10	1231		396
4	1	71.8	10			114.49
5	1	99.5	10			86.98
6	2	57.5	10	1171		667.98
7	2	65.6	10	1766		544.79
8	2	86.3	10	1214		598.17
9	2	96.4	10	1276		201.37
10	2	61.8	10	1487		450.57
11	3	50.3	10	1429	1215	102.34
12	3	67	10	1920	1902	363.64
13	3	66.1	10	1872	1788	65.28
14	3	74	10	1963	1602	291.3
15	3	97.4	10	1730	1590	73.4
16	2	66.1	10	1876		287.2

Type 5 Radar Waveform_21

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	58.2	13	1046	1535	284.608
2	3	82.4	13	1142	1874	561.02
3	2	95.8	13	1460		506.17
4	1	93	13			27.97
5	2	69.9	13	1010		37.34
6	2	95.9	13	1079		380.88
7	2	88.7	13	1073		586.69
8	2	91.9	13	1486		398.41
9	3	93.9	13	1289	1245	38.95
10	3	64.3	13	1715	1038	239.57
11	2	99.2	13	1013		580.1
12	3	67.3	13	1224	1701	572.85
13	2	79.2	13	1300		508.7
14	1	82.1	13			439.84
15	3	84	13	1923	1066	295.19
16	3	53.6	13	1701	1240	366.11
17	1	83.2	13			14.4
18	1	96.9	13			475.8
19	1	94.6	13			317.7
20	1	62.1	13			31.4

Type 5 Radar Waveform_22

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	74.6	6	1769		122.087
2	2	97.6	6	1151		934.38
3	1	57.6	6			830.36
4	2	67.9	6	1720		649.47
5	2	56.1	6	1986		142.45
6	1	80.1	6			470.74
7	3	86.9	6	1856	1702	613.95
8	3	53.7	6	1699	1464	794.17
9	1	67	6			89.52
10	1	97.6	6			693.13
11	3	59	6	1118	1912	722.3
12	3	87.2	6	1632	1029	249.2

Type 5 Radar Waveform_23

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	78.5	17	1737		120.8
2	2	99.5	17	1636		487.92
3	2	87.1	17	1667		537.94
4	2	55.6	17	1034		322.26
5	2	54.1	17	1715		253.46
6	3	91.4	17	1953	1473	736.08
7	2	98.9	17	1140		304.03
8	1	85.4	17			500.35
9	2	76.5	17	1886		422.24
10	1	79.7	17			677.73
11	3	52.9	17	1877	1551	631.48
12	3	73.4	17	1584	1620	13.45
13	1	50.3	17			424.01
14	2	86.8	17	1525		21.46
15	3	78.6	17	1359	1367	697.6
16	2	79.4	17	1584		48.1

Type 5 Radar Waveform_24

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	76.5	13	1680		309.145
2	1	58.2	13			205.58
3	2	93	13	1486		573.52
4	1	85.6	13			689.26
5	2	99.2	13	1090		713.92
6	2	88.3	13	1988		641.27
7	3	72.9	13	1502	1726	102.57
8	3	93.6	13	1480	1949	204.28
9	2	65.5	13	1815		8.14
10	1	67.4	13			635.8
11	2	79.2	13	1268		147.48
12	3	57.1	13	1001	1349	91.87
13	2	60.8	13	1756		561.5
14	1	70.8	13			86.9
15	3	79.3	13	1656	1307	766.7

Type 5 Radar Waveform_25

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	50.1	13	1901		929.393
2	1	53.7	13			1098.63
3	3	68.4	13	1649	1886	1370.84
4	3	59.1	13	1630	1498	875.7
5	2	82.6	13	1366		874.84
6	3	98	13	1673	1270	695.43
7	2	58.8	13	1644		1039.8
8	2	54.5	13	1633		1266.9

Type 5 Radar Waveform_26

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	59.9	7	1827		489.07
2	2	63.3	7	1171		490.297
3	3	86.5	7	1558	1224	705.123
4	2	99.4	7	1057		219.65
5	1	80.2	7			132.127
6	2	87.9	7	1653		10.723
7	2	88.3	7	1291		1149.51
8	3	80	7	1138	1444	931.867
9	1	55.2	7			1161.833

Type 5 Radar Waveform_27

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	81.1	11	1056		462.983
2	2	63.2	11	1392		288.488
3	2	65.8	11	1114		242.282
4	2	88.9	11	1008		531.683
5	1	89.7	11			100.354
6	1	87.7	11			543.185
7	1	82.3	11			624.336
8	2	59.9	11	1106		406.407
9	2	88	11	1471		266.988
10	3	98.7	11	1895	1151	371.429
11	1	84.4	11			515.551
12	2	63.6	11	1431		34.392
13	2	66.9	11	1679		609.703
14	1	77.2	11			360.074
15	3	96.1	11	1763	1899	253.205
16	1	78.8	11			364.606
17	1	72.8	11			148.837
18	2	50.9	11	1143		292.458
19	2	81.3	11	1251		22.179

Type 5 Radar Waveform_28

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	75.6	8	1587	1549	559.5
2	3	81.4	8	1400	1267	589.63
3	1	82.7	8			296.75
4	3	54.9	8	1268	1508	180.16
5	2	67.7	8	1286		717.13
6	1	64.5	8			275.49
7	3	83.4	8	1630	1834	581.73
8	1	88.1	8			825

Type 5 Radar Waveform_29						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	56.9	8	1798		1261.79
2	1	96	8			68.667
3	3	62.5	8	1517	1032	324.043
4	3	52.2	8	1036	1501	395.8
5	2	96.3	8	1699		1182.957
6	2	70.8	8	1942		137.243
7	2	85.6	8	1764		77.03
8	3	57.8	8	1452	1208	1.377
9	2	70.4	8	1092		723.433
Type 5 Radar Waveform_30						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	93.6	5	1311		359.032
2	1	74.4	5			908.061
3	2	85.9	5	1144		1021.752
4	3	76.3	5	1857	1427	200.123
5	3	78	5	1126	1512	229.654
6	2	62.8	5	1544		452.475
7	2	92.2	5	1646		526.475
8	1	97.4	5			682.336
9	3	67.8	5	1278	1387	1048.497
10	1	67	5			642.718
11	2	50.4	5	1972		451.809

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5510	1
2	5491	1	17	5510	1
3	5491	1	18	5511	1
4	5491	1	19	5511	1
5	5491	1	20	5511	1
6	5500	1	21	5511	1
7	5500	1	22	5520	1
8	5500	1	23	5520	1
9	5500	1	24	5520	1
10	5509	1	25	5520	1
11	5509	1	26	5529	1
12	5509	1	27	5529	1
13	5509	1	28	5529	1
14	5510	1	29	5529	1
15	5510	1	30	5529	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
10	5506	30	12	5505	36
26	5491	78	33	5498	99
45	5520	135	42	5512	126
54	5518	162	69	5492	207
59	5496	177	102	5499	306
67	5521	201	120	5506	360
71	5529	213	192	5527	576
72	5509	216	225	5524	675
77	5513	231	282	5490	846
82	5515	246	285	5495	855
92	5503	276	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
8	5512	24	6	5516	18
9	5498	27	16	5495	48
18	5520	54	32	5491	96
33	5528	99	39	5502	117
37	5508	111	40	5513	120
44	5492	132	41	5517	123
48	5510	144	47	5504	141
50	5497	150	74	5525	222
72	5525	216	90	5511	270
79	5506	237	92	5501	276
89	5502	267	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5505	18	4	5511	12
12	5501	36	21	5507	63
15	5519	45	29	5491	87
20	5513	60	43	5527	129

32	5518	96	52	5526	156
35	5507	105	59	5523	177
52	5490	156	63	5498	189
54	5524	162	100	5528	300
55	5504	165	--	--	--
60	5526	180	--	--	--
73	5502	219	--	--	--
83	5515	249	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5516	9	4	5519	12
6	5520	18	20	5490	60
8	5500	24	22	5527	66
42	5528	126	23	5526	69
44	5523	132	65	5513	195
52	5518	156	83	5502	249
72	5513	216	98	5524	294

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5493	27	2	5490	6
19	5505	57	4	5512	12
26	5501	78	8	5525	24
33	5502	99	14	5511	42
53	5528	159	27	5509	81
61	5507	183	32	5508	96
74	5497	222	44	5495	132
86	5527	258	46	5501	138
97	5510	291	47	5492	141
--	--	--	54	5502	162
--	--	--	86	5504	258
--	--	--	89	5518	267
--	--	--	95	5507	285

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
18	5512	54	25	5500	75
24	5508	72	33	5510	99
38	5525	114	47	5528	141
71	5526	213	50	5495	150
75	5527	225	52	5502	156
93	5523	279	64	5506	192

96	5522	288	77	5494	231
--	--	--	84	5525	252
--	--	--	94	5524	282

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5511	15	11	5505	33
20	5496	60	22	5496	66
25	5521	75	25	5490	75
32	5501	96	30	5523	90
34	5514	102	36	5510	108
38	5525	114	90	5524	270
54	5506	162	--	--	--
58	5523	174	--	--	--
60	5494	180	--	--	--
63	5497	189	--	--	--
65	5520	195	--	--	--
74	5519	222	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5503	6	21	5496	63
7	5495	21	32	5520	96
10	5505	30	40	5492	120
40	5507	120	52	5497	156
66	5491	198	76	5502	228
71	5526	213	79	5490	237
90	5494	270	88	5514	264
Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
14	5527	42	4	5530	12
32	5512	96	12	5523	36
41	5506	123	33	5524	99
43	5518	129	63	5507	189

70	5515	210	74	5504	222
76	5498	228	75	5497	225
80	5526	240	77	5506	231
90	5504	270	95	5514	285

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
28	5500	84	14	5514	42
29	5519	87	24	5522	72
53	5520	159	48	5490	144
--	--	--	56	5525	168
--	--	--	69	5529	207
--	--	--	80	5499	240
--	--	--	81	5519	243
--	--	--	100	5501	300

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
17	5490	51	16	5505	48
47	5497	141	18	5530	54
55	5504	165	26	5491	78
63	5527	189	51	5497	153
86	5528	258	63	5513	189
94	5526	282	74	5506	222
100	5500	300	91	5504	273

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5521	21	32	5498	96
21	5509	63	33	5495	99
26	5493	78	34	5490	102
36	5526	108	35	5499	105
40	5517	120	41	5512	123
42	5512	126	45	5493	135

57	5530	171	63	5523	189
58	5502	174	65	5497	195
64	5506	192	73	5522	219
68	5508	204	90	5502	270
86	5513	258	--	--	--
87	5527	261	--	--	--
95	5500	285	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5508	27	6	5490	18
19	5500	57	17	5526	51
23	5498	69	30	5511	90
35	5509	105	49	5497	147
42	5519	126	63	5503	189
57	5514	171	66	5509	198
78	5527	234	68	5507	204
88	5524	264	71	5525	213
--	--	--	73	5520	219

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
20	5527	60	23	5519	69
27	5522	81	40	5498	120
91	5529	273	63	5526	189
92	5517	276	86	5503	258
93	5516	279	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5496	21	2	5522	6
35	5510	105	31	5504	93
37	5508	111	36	5502	108
45	5522	135	39	5499	117

48	5529	144	48	5494	144
56	5513	168	55	5525	165
63	5493	189	74	5493	222
74	5525	222	81	5490	243
87	5500	261	83	5491	249
88	5519	264	84	5492	252
97	5517	291	88	5510	264
--	--	--	97	5516	291

Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Amy Zhang	Relative Humidity	48 ~ 62%
Test Site	SR2	Test Date	2020/05/13 ~ 2020/05/15
Test Item	Radar Statistical Performance Check (802.11ax-HE80 mode - 5530MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1	578	92	1
2	5491	1	658	81	1
3	5500	1	718	74	1
4	5500	1	678	78	1
5	5509	1	818	65	1
6	5509	1	598	89	1
7	5510	1	838	63	1
8	5510	1	938	57	1
9	5511	1	558	95	1
10	5511	1	878	61	1
11	5520	1	518	102	1
12	5520	1	538	99	1
13	5529	1	898	59	1
14	5529	1	858	62	1
15	5530	1	738	72	1
16	5530	1	2390	23	1
17	5531	1	670	79	1
18	5531	1	1629	33	1
19	5540	1	2314	23	1
20	5540	1	2217	24	1
21	5549	1	1901	28	1
22	5549	1	1892	28	1
23	5550	1	2933	18	1
24	5550	1	779	68	1
25	5551	1	2746	20	1
26	5551	1	2098	26	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5560	1	2824	19	1
28	5560	1	850	63	1
29	5569	1	1614	33	1
30	5569	1	923	58	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	1.1	198	29	1
2	5491	3.6	193	27	1
3	5500	4.0	164	29	1
4	5500	1.8	227	25	1
5	5509	2.5	178	24	1
6	5509	4.4	207	27	1
7	5510	2.4	153	23	1
8	5510	1.8	227	24	1
9	5511	3.4	171	25	1
10	5511	4.9	165	25	1
11	5520	3.4	215	29	1
12	5520	5.0	189	27	1
13	5529	5.0	170	27	1
14	5529	3.2	157	26	1
15	5530	1.4	222	27	1
16	5530	4.2	193	29	1
17	5531	3.9	190	24	0
18	5531	1.6	222	28	1
19	5540	2.9	219	24	1
20	5540	3.9	230	27	1
21	5549	3.2	216	28	1
22	5549	2.7	166	25	1
23	5550	4.1	224	25	1
24	5550	1.1	222	26	1
25	5551	1.9	178	23	0
26	5551	3.1	226	29	1
27	5560	1.3	151	26	0
28	5560	4.9	176	26	1
29	5569	3.6	169	28	1
30	5569	2.6	222	23	0
Detection Percentage (%)					86.7%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	8.1	480	16	1
2	5491	9.3	298	16	1
3	5500	9.5	427	17	1
4	5500	9.1	393	16	1
5	5509	6.8	257	18	1
6	5509	8.9	441	17	0
7	5510	9.0	406	18	1
8	5510	9.9	368	18	1
9	5511	6.7	293	16	0
10	5511	8.2	346	16	1
11	5520	8.0	417	17	1
12	5520	8.6	292	17	1
13	5529	7.6	411	16	1
14	5529	6.5	354	16	1
15	5530	9.0	474	18	1
16	5530	8.1	489	18	1
17	5531	6.8	378	18	1
18	5531	8.9	395	17	1
19	5540	9.5	291	18	1
20	5540	9.1	472	18	1
21	5549	9.9	379	18	1
22	5549	9.5	476	16	1
23	5550	8.8	469	18	1
24	5550	9.0	257	18	1
25	5551	9.8	425	18	1
26	5551	6.4	443	17	0
27	5560	7.0	431	17	0
28	5560	6.6	478	17	1
29	5569	7.3	424	16	1
30	5569	8.5	337	16	1
Detection Percentage (%)					86.7%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5491	12.3	328	15	1
2	5491	13.8	271	16	1
3	5500	13.9	417	16	1
4	5500	11.7	290	16	1
5	5509	12.7	452	12	1
6	5509	15.6	254	13	1
7	5510	18.3	494	14	1
8	5510	16.1	437	15	1
9	5511	11.2	442	15	1
10	5511	19.3	265	12	1
11	5520	11.4	259	15	1
12	5520	18.4	269	13	1
13	5529	19.1	469	16	1
14	5529	18.1	263	12	1
15	5530	17.8	395	15	1
16	5530	17.2	399	12	1
17	5531	12.6	271	15	1
18	5531	14.5	350	13	1
19	5540	15.5	286	14	0
20	5540	16.3	399	15	1
21	5549	19.2	257	13	1
22	5549	12.4	405	16	1
23	5550	15.8	318	12	1
24	5550	17.2	383	12	1
25	5551	15.7	339	14	1
26	5551	16.1	416	15	1
27	5560	12.0	282	14	1
28	5560	19.5	465	14	1
29	5569	12.4	498	16	1
30	5569	19.8	385	14	1
Detection Percentage (%)					96.7%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test

waveforms is as follows: $\frac{P_d1 + P_d2 + P_d3 + P_d4}{4} = (100\% + 86.7\% + 86.7\% + 96.7\%) / 4 = 92.5\% (>80\%)$

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5530.0	1	16	5495.0	1
2	5530.0	1	17	5497.0	1
3	5530.0	1	18	5495.8	1
4	5530.0	1	19	5497.0	1
5	5530.0	0	20	5494.6	1
6	5530.0	1	21	5561.0	1
7	5530.0	1	22	5561.0	1
8	5530.0	1	23	5562.6	1
9	5530.0	1	24	5561.8	1
10	5530.0	1	25	5566.2	1
11	5493.8	1	26	5563.0	0
12	5493.4	1	27	5567.0	1
13	5496.2	1	28	5562.6	1
14	5495.8	1	29	5565.4	1
15	5497.4	1	30	5563.8	1
Detection Percentage (%)					93.3%

Type 5 Radar Waveform_1						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	2	100	7	1489		286.468
2	3	74.1	7	1879	1578	109.382
3	1	70.8	7			315.89
4	1	96.4	7			40.25
5	2	50.9	7	1441		402.19
6	2	71.3	7	1651		393.06
7	1	53.4	7			78.43
8	2	78.5	7	1718		367.27
9	1	78	7			24.07
10	3	58.2	7	1471	1090	382.74
11	1	83.3	7			433.87
12	2	91.1	7	1119		92.45
13	3	70	7	1569	1503	122.6
14	2	53.8	7	1700		465.17
15	2	82.4	7	1900		514.42
16	2	62	7	1895		41.4
17	2	75.1	7	1945		563.7
18	3	89.3	7	1302	1587	166.1
19	2	69	7	1707		489.8
20	2	76.3	7	1725		315.3

Type 5 Radar Waveform_2

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	66.2	6	1379		290.295
2	3	88.4	6	1055	1404	567.241
3	2	65.3	6	1129		1.222
4	2	74	6	1458		166.423
5	3	64.2	6	1443	1166	341.684
6	2	70	6	1687		190.115
7	2	92.5	6	1297		239.526
8	1	56.9	6			404.027
9	3	60	6	1589	1108	356.518
10	2	66.3	6	1894		50.639
11	2	74.8	6	1384		352.861
12	2	67.6	6	1463		279.922
13	2	76.5	6	1153		598.753
14	2	78.5	6	1084		508.144
15	2	67.8	6	1360		479.545
16	3	97	6	1865	1641	518.086
17	2	93.3	6	1951		489.437
18	1	70	6			116.158
19	1	52.8	6			620.479

Type 5 Radar Waveform_3

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	77.1	15	1240		223.91
2	3	53.8	15	1072	1512	152.362
3	3	64	15	1855	1806	625.392
4	3	98.6	15	1876	1856	112.243
5	2	80.4	15	1384		621.244
6	2	53.2	15	1544		320.315
7	2	76	15	1063		65.636
8	3	70.6	15	1395	1112	137.057
9	2	79.6	15	1319		350.668
10	2	99.1	15	1413		616.259
11	2	81.3	15	1448		76.501
12	1	62.4	15			148.142
13	1	56.9	15			29.723
14	1	98.5	15			376.784
15	2	57.5	15	1516		283.575
16	2	81.3	15	1249		412.576
17	2	57.5	15	1048		567.437
18	1	100	15			352.258
19	2	54.9	15	1400		262.979

Type 5 Radar Waveform_4

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	76.6	13	1982		209.509
2	2	99.2	13	1226		397.123
3	2	80.1	13	1261		428.367
4	1	63.7	13			312.11
5	2	70.4	13	1880		316.393
6	2	61.1	13	1750		643.207
7	1	84.1	13			298.89
8	3	70.2	13	1742	1932	423.003
9	2	96.8	13	1316		8.717
10	2	54.9	13	1741		244.56
11	2	96	13	1416		101.583
12	2	52.9	13	1630		425.557
13	2	84.2	13	1347		655.09
14	2	59.1	13	1159		233.203
15	2	70.8	13	1478		141.057
16	1	66.1	13			387.3
17	2	74.2	13	1714		138.133
18	3	51.5	13	1687	1832	76.967

Type 5 Radar Waveform_5

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	97.5	14	1670	1951	242.771
2	1	99.5	14			311.567
3	1	76.3	14			641.223
4	2	98.9	14	1858		653.19
5	1	50.1	14			664.177
6	2	77.9	14	1965		1123.463
7	3	64.3	14	1946	1810	421.49
8	3	66.8	14	1259	1250	734.367
9	1	61.5	14			563.433

Type 5 Radar Waveform_6

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	57.9	8	1694		1035.52
2	1	58.9	8			826.45
3	3	56.3	8	1782	1421	43.9
4	3	54.3	8	1209	1536	854.36
5	3	81.4	8	1780	1518	691.45
6	2	99.4	8	1076		908.31
7	3	66.3	8	1598	1121	1065.78
8	2	79.2	8	1478		1192.47
9	1	69	8			526.4
10	2	55.7	8	1233		1154.4

Type 5 Radar Waveform_7

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	69.5	10	1747		149.444
2	2	53.2	10	1330		608.11
3	3	87.4	10	1740	1299	953.62
4	1	81.4	10			271.63
5	2	66.9	10	1757		28.41
6	1	62.8	10			717.5
7	2	72.9	10	1970		583.71
8	1	63.9	10			570.14
9	3	58.5	10	1364	1992	618.27
10	3	80.7	10	1245	1415	626.8
11	2	62.6	10	1409		386.9
12	1	61.6	10			239.6

Type 5 Radar Waveform_8

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	88.2	7	1338		187.29
2	3	66	7	1188	1619	364.3
3	3	51.8	7	1435	1874	562.29
4	3	58.7	7	1210	1958	563.88
5	2	79.2	7	1440		494.17
6	3	56.4	7	1627	1830	573.92
7	2	79.4	7	1002		392.3
8	2	54.4	7	1031		535.28
9	1	88.8	7			211.55
10	3	75.3	7	1191	1006	241.98
11	2	96.5	7	1314		535.39
12	2	50.2	7	1150		727.42
13	2	81.4	7	1979		410.89
14	3	72.6	7	1279	1332	188.81
15	1	53.9	7			173.6
16	2	97.7	7	1613		595.3

Type 5 Radar Waveform_9

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	90.5	5	1391		251.486
2	3	69.4	5	1392	1111	40.21
3	1	71	5			291.407
4	3	99.1	5	1416	1526	49.21
5	2	77.4	5	1311		420.293
6	1	71.8	5			110.487
7	2	76	5	1380		281.39
8	2	73.7	5	1138		42.233
9	1	86.3	5			79.567
10	2	59.2	5	1465		580.38
11	2	66.3	5	1023		474.233
12	3	57.8	5	1195	1824	632.897
13	2	88.1	5	1684		404.17
14	1	84.2	5			420.943
15	1	90.4	5			545.987
16	2	66.4	5	1935		68.7
17	1	90.8	5			632.133
18	1	81.3	5			156.467

Type 5 Radar Waveform_10

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	86.1	9	1750		625.632
2	2	74.4	9	1983		304.92
3	3	59.5	9	1051	1775	767.72
4	2	77.9	9	1331		895.23
5	3	57.6	9	1744	1941	893.43
6	3	62.9	9	1063	1463	351.99
7	2	56.2	9	1803		76.91
8	2	56	9	1515		223.36
9	3	74.2	9	1422	1756	610.32
10	2	58.4	9	1531		754.13
11	2	80.2	9	1216		554.3
12	3	65.1	9	1445	1206	780.8

Type 5 Radar Waveform_11

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	62.8	7	1217		36.823
2	2	74.7	7	1544		467.87
3	2	83.7	7	1844		301.25
4	2	75.2	7	1188		221.88
5	2	96	7	1448		112.84
6	2	96.3	7	1950		686.66
7	3	55.6	7	1913	1537	230.24
8	2	98.3	7	1985		282.7
9	2	55.9	7	1558		123.94
10	1	89.6	7			131.69
11	3	72.9	7	1481	1478	186.04
12	2	92.7	7	1361		514.85
13	2	67.8	7	1482		468.23
14	2	69.3	7	1119		45.75
15	2	54.7	7	1233		271.3
16	1	89.8	7			209.4

Type 5 Radar Waveform_12

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	73.2	6	1167	1355	134.569
2	2	65.9	6	1507		259.681
3	1	87.8	6			549.18
4	3	61.6	6	1074	1328	106.8
5	2	72.5	6	1808		230.27
6	3	70.5	6	1605	1205	507.69
7	2	68.5	6	1718		51.71
8	2	90.5	6	1396		106.48
9	3	85.1	6	1126	1173	111.73
10	1	52.3	6			80.29
11	2	85.2	6	1011		448.82
12	1	76.8	6			560.12
13	2	91	6	1584		496.37
14	3	77.1	6	1960	1130	558.9
15	3	96.3	6	1257	1473	129.75
16	2	50.1	6	1963		364.87
17	1	59	6			545.7
18	2	77	6	1741		271.8
19	3	57.5	6	1114	1127	141.7
20	3	67	6	1679	1506	279.2

Type 5 Radar Waveform_13

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	69.7	13	1764		1134.23
2	3	99.7	13	1534	1298	347.32
3	2	89	13	1779		85.49
4	3	92.4	13	1795	1852	702.73
5	2	93.4	13	1483		100.78
6	1	87.9	13			399.05
7	1	89.2	13			540.3
8	3	53.7	13	1030	1020	787
9	3	93.4	13	1731	1842	603.8
10	3	56.1	13	1914	1000	432.5

Type 5 Radar Waveform_14

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	59.3	12			265.567
2	1	84.8	12			99.921
3	2	72.4	12	1444		70.504
4	2	85.8	12	1372		143.161
5	3	62.1	12	1342	1814	723.999
6	2	53	12	1731		221.836
7	2	85.6	12	1471		522.083
8	2	66	12	1967		256.03
9	3	62.5	12	1508	1182	511.167
10	3	62.1	12	1389	1529	814.504
11	2	50.4	12	1797		90.711
12	2	55.7	12	1583		340.809
13	2	72	12	1684		847.486
14	1	66.2	12			213.643

Type 5 Radar Waveform_15

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	68.7	16	1067	1483	565.742
2	2	63.9	16	1742		1205.677
3	1	76.5	16			525.453
4	3	86.7	16	1592	1889	868.3
5	3	71.1	16	1017	1096	217.687
6	3	96.7	16	1951	1465	271.583
7	3	95.3	16	1358	1638	1235.21
8	1	57.4	16			672.767
9	2	76.3	16	1798		852.733

Type 5 Radar Waveform_16

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	75	10			329.624
2	1	65.3	10			513.24
3	1	82.5	10			569.57
4	1	72.5	10			32.77
5	2	97	10	1846		4.22
6	2	56.4	10	1003		170.87
7	3	73.6	10	1782	1976	369.83
8	2	74.2	10	1382		310.58
9	1	52.1	10			128.64
10	2	93.3	10	1849		26.27
11	3	94.5	10	1662	1164	19.35
12	1	56.6	10			69.62
13	1	85	10			104.43
14	2	53.5	10	1721		9.43
15	2	91.7	10	1490		484.44
16	3	59.3	10	1828	1133	455.32
17	3	67.5	10	1368	1378	229.23
18	1	96.7	10			532.8
19	3	97.4	10	1832	1441	172
20	2	94.5	10	1884		142.4

Type 5 Radar Waveform_17

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	93.8	15	1100		0.141
2	1	50.4	15			133.13
3	1	90.5	15			380.05
4	2	69.7	15	1271		441.65
5	2	91.7	15	1149		35.92
6	3	78.6	15	1430	1117	665.86
7	3	87.4	15	1358	1534	170.64
8	3	88	15	1199	1877	357.06
9	1	85	15			818.15
10	1	75.9	15			8.77
11	1	88	15			872.7
12	2	82.8	15	1338		239.8

Type 5 Radar Waveform_18

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	51.3	12	1292		109.413
2	2	99	12	1300		451.323
3	1	83.2	12			142.407
4	2	75.2	12	1349		508.26
5	3	85.4	12	1898	1745	384.783
6	3	67	12	1913	1613	169.277
7	3	68.8	12	1057	1741	575.29
8	1	74.8	12			305.033
9	2	94.4	12	1611		281.287
10	2	73.9	12	1596		355.82
11	3	65.8	12	1418	1368	363.863
12	2	58.1	12	1735		411.847
13	2	72.6	12	1119		102.52
14	2	84	12	1793		205.723
15	3	72.7	12	1299	1325	570.157
16	1	82.7	12			60.5
17	1	98.6	12			258.333
18	2	71.5	12	1962		427.667

Type 5 Radar Waveform_19

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	93.2	15	1646		221.009
2	2	68.4	15	1229		910.047
3	2	57.2	15	1564		1183.903
4	2	52.3	15	1764		681.05
5	2	53.2	15	1317		188.777
6	2	86.6	15	1591		625.953
7	2	57.6	15	1028		761.15
8	2	64.5	15	1150		79.217
9	2	78.7	15	1116		1056.133

Type 5 Radar Waveform_20

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	59.5	9	1999		150.681
2	1	51.9	9			199.423
3	2	63.3	9	1282		642.346
4	3	67.5	9	1124	1065	139.789
5	1	61.9	9			637.152
6	2	69.3	9	1538		150.315
7	3	82.9	9	1110	1492	757.068
8	1	88.9	9			265.282
9	2	70.9	9	1490		230.065
10	1	53.4	9			786.758
11	2	96.8	9	1175		225.041
12	3	59.4	9	1097	1939	451.254
13	3	75.4	9	1661	1363	127.977

Type 5 Radar Waveform_21

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	88.2	20	1307	1262	929.609
2	3	90.1	20	1001	1522	662.85
3	2	64.7	20	1876		590.51
4	1	82.4	20			1049.76
5	3	64.3	20	1523	1340	227.64
6	2	87.4	20	1956		160
7	2	61.6	20	1296		1477.9
8	2	94.9	20	1145		1216.8

Type 5 Radar Waveform_22

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	81.6	20			497.164
2	1	62.6	20			389.591
3	3	79.3	20	1034	1059	88.722
4	1	72.4	20			395.523
5	2	69.5	20	1476		26.294
6	2	96.7	20	1691		192.205
7	2	53.8	20	1847		67.456
8	3	95.2	20	1090	1488	318.237
9	1	91.3	20			300.798
10	2	95.7	20	1724		622.959
11	2	67.8	20	1155		345.051
12	2	81.6	20	1598		35.642
13	1	52	20			448.573
14	3	90.5	20	1338	1144	156.284
15	2	64.4	20	1235		588.035
16	3	83.8	20	1702	1723	97.176
17	2	90.6	20	1723		564.437
18	2	70.4	20	1822		484.358
19	2	71.9	20	1430		489.679

Type 5 Radar Waveform_23

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	84.6	16	1538		655.342
2	2	83.8	16	1367		392.41
3	2	57.2	16	1008		401.4
4	2	80.2	16	1056		238.18
5	2	74.3	16	1777		664.65
6	2	88.9	16	1423		340.33
7	3	67.8	16	1447	1284	539.19
8	2	89.1	16	1779		137.88
9	1	97.1	16			142.54
10	2	61	16	1767		49.4
11	3	91.3	16	1247	1572	378.84
12	1	90.3	16			287.13
13	2	80.9	16	1069		430.51
14	2	91.6	16	1145		79.95
15	2	86.5	16	1901		116.2
16	2	73.6	16	1577		138

Type 5 Radar Waveform_24

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	85.2	18	1991	1660	2.359
2	2	74.2	18	1273		123.34
3	3	57	18	1975	1193	564.642
4	2	53.4	18	1513		133.613
5	3	98.7	18	1540	1867	546.674
6	2	82.2	18	1272		9.665
7	3	89.4	18	1621	1379	620.576
8	3	70.9	18	1316	1835	200.957
9	1	86.6	18			592.698
10	2	66	18	1994		285.889
11	1	53.8	18			115.531
12	2	62.6	18	1706		432.602
13	1	99.5	18			511.273
14	2	92.4	18	1243		278.774
15	3	72.6	18	1380	1318	313.115
16	1	81.6	18			368.516
17	1	97.3	18			333.437
18	1	78.7	18			521.358
19	3	66.8	18	1924	1268	44.379

Type 5 Radar Waveform_25

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	93.2	7	1290		860.93
2	2	81.9	7	1427		527.613
3	3	97.2	7	1688	1632	884.086
4	2	84.3	7	1945		606.389
5	1	80.9	7			71.432
6	1	89.5	7			638.475
7	2	95.3	7	1563		472.258
8	2	78.4	7	1812		713.052
9	2	97.6	7	1112		791.545
10	1	50.9	7			163.478
11	1	73.3	7			650.561
12	3	80.9	7	1103	1564	470.254
13	1	83.9	7			558.177

Type 5 Radar Waveform_26

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	51	15			650.428
2	2	70.3	15	1941		805.571
3	2	65.4	15	1456		144.352
4	2	91.6	15	1026		826.913
5	2	90.2	15	1356		256.284
6	3	99.2	15	1685	1355	423.185
7	2	83.7	15	1598		647.815
8	2	72.7	15	1402		321.966
9	2	92.2	15	1579		724.977
10	3	95.2	15	1360	1940	154.668
11	1	88.6	15			20.609

Type 5 Radar Waveform_27

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	67.1	5	1707	1529	458.675
2	3	79	5	1038	1694	242.015
3	3	96.6	5	1718	1326	639.225
4	1	77.9	5			425.913
5	1	99.1	5			677.181
6	2	60	5	1760		673.478
7	2	71.7	5	1615		143.636
8	2	64.4	5	1999		491.344
9	3	67.2	5	1234	1708	475.581
10	2	66.9	5	1603		212.319
11	1	80.7	5			644.866
12	1	65.6	5			144.474
13	3	78	5	1773	1783	256.042
14	3	57.8	5	1015	1726	590.319
15	1	70.5	5			19.457
16	2	67.3	5	1871		307.365
17	3	86.8	5	1519	1319	76.982

Type 5 Radar Waveform_28

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	66.6	16			227.485
2	3	96.3	16	1529	1105	187.147
3	2	54.4	16	1857		350.024
4	1	93.3	16			240.781
5	2	52.7	16	1334		620.469
6	1	53.7	16			513.306
7	1	57.1	16			125.713
8	1	81.9	16			486.3
9	1	90.6	16			173.417
10	1	51	16			23.724
11	1	97.9	16			466.901
12	1	70	16			454.829
13	1	71.5	16			433.286
14	3	93.6	16	1906	1302	148.143

Type 5 Radar Waveform_29

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	85.7	9			730.649
2	2	80.3	9	1858		698.38
3	3	81	9	1709	1131	576.06
4	2	54.4	9	1758		410.76
5	3	57.5	9	1125	1635	156.57
6	2	52.2	9	1460		549.57
7	1	82.5	9			139.77
8	2	88.9	9	1496		436.93
9	3	54.5	9	1916	1633	283
10	3	99.2	9	1224	1776	708.6
11	3	67.2	9	1153	1659	646.93
12	2	93.2	9	1704		1.43
13	1	67	9			699.37
14	2	75.1	9	1619		129.91
15	1	82.3	9			259.2
16	3	62.5	9	1549	1337	242.7

Type 5 Radar Waveform_30

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	90.8	13	1872		167.105
2	3	73.1	13	1876	1309	484.06
3	1	57.3	13			430.55
4	2	74	13	1589		553.99
5	2	79.3	13	1106		482.52
6	3	88.6	13	1279	1072	579.81
7	2	91.1	13	1987		70.93
8	2	82	13	1662		592.58
9	2	50	13	1831		591.11
10	2	77	13	1635		440.48
11	2	67.3	13	1817		368.01
12	3	60.8	13	1759	1096	332.98
13	2	65	13	1379		325.03
14	2	96.5	13	1282		273.46
15	1	56.5	13			326.63
16	2	57.3	13	1514		583.5
17	1	95.3	13			529.4
18	2	84.9	13	1350		129.4
19	1	62.9	13			361
20	1	83.9	13			405.5

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	1	16	5530	1
2	5491	1	17	5531	1
3	5500	1	18	5531	1
4	5500	1	19	5540	1
5	5509	1	20	5540	1
6	5509	1	21	5549	1
7	5510	1	22	5549	1
8	5510	1	23	5550	1
9	5511	1	24	5550	1
10	5511	1	25	5551	1
11	5520	1	26	5551	1
12	5520	1	27	5560	1
13	5529	1	28	5560	1
14	5529	1	29	5569	1
15	5530	1	30	5569	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5510	6	6	5491	18
8	5509	24	9	5556	27
12	5506	36	16	5500	48
15	5548	45	20	5522	60
20	5547	60	26	5544	78
31	5567	93	45	5553	135
35	5504	105	50	5530	150
39	5532	117	62	5540	186
44	5550	132	73	5526	219
51	5507	153	76	5567	228
54	5546	162	77	5516	231
60	5549	180	87	5517	261
65	5570	195	90	5554	270
70	5495	210	91	5564	273
71	5497	213	95	5547	285
81	5521	243	97	5536	291

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5559	27	39	5543	117
12	5556	36	78	5525	234
17	5528	51	81	5510	243
22	5495	66	84	5554	252
28	5509	84	126	5490	378
29	5520	87	150	5552	450
31	5531	93	159	5527	477
35	5516	105	189	5555	567
38	5505	114	201	5564	603
41	5523	123	207	5505	621
57	5510	171	216	5566	648
58	5569	174	225	5569	675
78	5536	234	240	5542	720
81	5534	243	246	5544	738
90	5543	270	249	5530	747
92	5494	276	264	5549	792
96	5535	288	279	5568	837
--	--	--	285	5565	855

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5513	3	4	5490	12
2	5529	6	8	5531	24
4	5512	12	12	5541	36
10	5526	30	13	5529	39
12	5510	36	18	5535	54
14	5550	42	44	5526	132
15	5546	45	53	5558	159
18	5555	54	69	5564	207
20	5518	60	70	5539	210
35	5502	105	75	5548	225
46	5547	138	76	5537	228
51	5542	153	81	5544	243
55	5548	165	83	5494	249
58	5532	174	88	5513	264
62	5523	186	94	5521	282
67	5533	201	--	--	--
72	5560	216	--	--	--
75	5552	225	--	--	--
78	5549	234	--	--	--
84	5528	252	--	--	--
87	5536	261	--	--	--
94	5491	282	--	--	--
95	5515	285	--	--	--

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5490	12	3	5548	9
5	5566	15	4	5535	12
18	5532	54	5	5517	15
26	5500	78	24	5502	72
27	5498	81	30	5540	90
35	5543	105	49	5524	147
43	5550	129	52	5490	156
63	5558	189	54	5492	162
66	5556	198	55	5550	165
73	5527	219	57	5511	171
86	5536	258	65	5500	195
100	5560	300	67	5526	201
--	--	--	69	5547	207
--	--	--	70	5498	210
--	--	--	79	5533	237
--	--	--	89	5529	267
--	--	--	92	5554	276
--	--	--	93	5537	279
--	--	--	94	5546	282

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5515	6	8	5549	24
9	5549	27	10	5516	30
19	5514	57	12	5559	36
26	5499	78	26	5546	78
27	5555	81	27	5531	81
29	5490	87	33	5499	99
45	5508	135	37	5544	111
47	5516	141	43	5498	129
49	5567	147	53	5552	159
54	5531	162	58	5513	174
56	5568	168	62	5508	186
66	5529	198	64	5491	192
72	5547	216	72	5539	216
83	5535	249	76	5500	228
84	5522	252	77	5505	231
85	5500	255	81	5540	243
98	5569	294	82	5497	246
--	--	--	85	5503	255
--	--	--	88	5493	264
--	--	--	90	5515	270
--	--	--	92	5528	276

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
2	5564	6	5	5562	15
3	5528	9	7	5506	21
4	5495	12	10	5521	30
5	5544	15	15	5545	45
9	5548	27	22	5526	66
12	5555	36	23	5542	69
19	5507	57	26	5497	78
21	5554	63	27	5528	81
38	5567	114	37	5512	111
39	5549	117	39	5493	117
41	5513	123	67	5494	201
43	5509	129	69	5510	207
50	5518	150	71	5567	213
56	5522	168	74	5537	222
57	5542	171	75	5529	225
58	5516	174	80	5534	240
68	5535	204	--	--	--
71	5494	213	--	--	--
74	5524	222	--	--	--
78	5517	234	--	--	--
81	5531	243	--	--	--
88	5561	264	--	--	--
92	5515	276	--	--	--
94	5570	282	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5506	27	9	5520	27
11	5550	33	14	5540	42
13	5526	39	37	5543	111
32	5505	96	48	5535	144
33	5512	99	61	5502	183
34	5520	102	62	5490	186
41	5542	123	69	5501	207
42	5570	126	72	5547	216
44	5562	132	75	5551	225
46	5530	138	80	5541	240
52	5508	156	81	5538	243
59	5536	177	82	5519	246
61	5500	183	89	5528	267
69	5514	207	95	5562	285
76	5490	228	98	5559	294
82	5517	246	--	--	--
88	5498	264	--	--	--
91	5548	273	--	--	--
96	5547	288	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5548	6	13	5493	39
4	5570	12	16	5548	48
10	5525	30	17	5512	51
16	5497	48	20	5500	60
17	5546	51	36	5508	108
31	5559	93	40	5540	120
35	5565	105	42	5496	126
42	5496	126	43	5528	129
45	5499	135	48	5557	144
77	5568	231	59	5564	177
82	5533	246	72	5524	216
85	5506	255	77	5545	231
94	5529	282	79	5525	237
99	5532	297	82	5551	246
--	--	--	84	5494	252
--	--	--	92	5520	276
--	--	--	94	5555	282
--	--	--	95	5490	285
--	--	--	96	5529	288
--	--	--	97	5515	291

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
9	5548	27	11	5538	33
11	5506	33	18	5564	54
15	5569	45	19	5523	57
33	5502	99	25	5526	75
35	5521	105	34	5533	102
41	5527	123	52	5541	156
43	5553	129	54	5510	162
48	5511	144	61	5519	183
65	5497	195	68	5507	204
67	5539	201	79	5550	237
77	5490	231	81	5492	243
83	5568	249	85	5525	255
90	5529	270	89	5565	267
92	5520	276	--	--	--
94	5522	282	--	--	--
100	5558	300	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5536	6	2	5540	6
7	5562	21	3	5567	9
8	5508	24	4	5510	12
16	5530	48	8	5536	24
17	5531	51	9	5506	27
23	5552	69	11	5557	33
28	5544	84	13	5496	39
39	5561	117	25	5519	75
41	5546	123	30	5547	90
50	5556	150	38	5524	114
53	5492	159	39	5499	117
61	5524	183	68	5514	204
64	5529	192	79	5526	237
68	5532	204	83	5565	249
81	5540	243	95	5549	285
83	5510	249	96	5497	288
91	5553	273	99	5491	297

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5499	33	2	5556	6
13	5566	39	6	5544	18
17	5491	51	12	5495	36
19	5529	57	14	5527	42
30	5506	90	17	5513	51
50	5533	150	22	5531	66
52	5534	156	25	5511	75
54	5560	162	30	5562	90
60	5544	180	35	5519	105
79	5507	237	40	5514	120
81	5504	243	41	5554	123
85	5551	255	46	5516	138
86	5562	258	47	5499	141
94	5501	282	53	5491	159
95	5557	285	58	5503	174
99	5565	297	61	5502	183
--	--	--	64	5505	192
--	--	--	70	5512	210
--	--	--	83	5525	249
--	--	--	93	5565	279
--	--	--	96	5553	288

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5538	9	5	5526	15
6	5496	18	6	5521	18
11	5551	33	10	5530	30
12	5497	36	11	5506	33
13	5532	39	16	5563	48
14	5537	42	33	5547	99
25	5501	75	34	5541	102
27	5535	81	46	5540	138
28	5494	84	47	5523	141
37	5517	111	50	5531	150
42	5554	126	51	5562	153
56	5557	168	53	5493	159
62	5526	186	62	5520	186
63	5527	189	65	5504	195
64	5540	192	71	5512	213
67	5502	201	80	5569	240
79	5548	237	81	5498	243
91	5519	273	95	5560	285
97	5506	291	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5529	15	4	5512	12
6	5538	18	13	5529	39
10	5508	30	19	5524	57
13	5513	39	38	5509	114
23	5510	69	39	5556	117
55	5558	165	40	5568	120
62	5507	186	47	5514	141
64	5494	192	53	5549	159
84	5562	252	54	5531	162
97	5499	291	55	5526	165
--	--	--	62	5540	186
--	--	--	63	5500	189
--	--	--	67	5545	201
--	--	--	69	5569	207
--	--	--	71	5567	213
--	--	--	77	5548	231
--	--	--	82	5503	246
--	--	--	86	5533	258
--	--	--	91	5496	273
--	--	--	94	5543	282

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5566	12	2	5498	6
10	5555	30	11	5556	33
11	5570	33	26	5546	78
26	5499	78	65	5531	195
29	5563	87	66	5528	198
31	5492	93	67	5520	201
34	5515	102	72	5494	216
38	5494	114	80	5570	240
43	5548	129	81	5559	243
60	5503	180	84	5567	252
70	5569	210	96	5522	288
72	5556	216	99	5504	297
78	5560	234	--	--	--
80	5533	240	--	--	--
84	5493	252	--	--	--
86	5497	258	--	--	--
88	5544	264	--	--	--
90	5520	270	--	--	--
92	5549	276	--	--	--
100	5567	300	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5554	12	7	5509	21
11	5545	33	11	5516	33
17	5561	51	21	5555	63
32	5497	96	40	5538	120
38	5544	114	53	5497	159
47	5518	141	54	5527	162
53	5511	159	55	5565	165
60	5533	180	56	5494	168
74	5507	222	60	5526	180
75	5526	225	78	5552	234
79	5532	237	81	5510	243
82	5541	246	84	5524	252
83	5524	249	91	5558	273
100	5498	300	93	5522	279
--	--	--	94	5493	282
--	--	--	98	5539	294

Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Amy Zhang	Relative Humidity	48 ~ 62%
Test Site	SR2	Test Date	2020/05/13 ~ 2020/05/15
Test Item	Radar Statistical Performance Check (802.11ax-HE160 mode - 5250MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5250	1	538	99	1
2	5250	1	3066	18	1
3	5251	1	558	95	1
4	5260	1	778	68	1
5	5260	1	638	83	1
6	5269	1	578	92	1
7	5269	1	798	67	1
8	5270	1	658	81	1
9	5270	1	518	102	1
10	5271	1	678	78	1
11	5271	1	618	86	1
12	5280	1	878	61	1
13	5280	1	698	76	1
14	5289	1	818	65	1
15	5289	1	898	59	1
16	5290	1	2735	20	1
17	5290	1	2752	20	1
18	5291	1	815	65	1
19	5291	1	670	79	1
20	5300	1	1031	52	1
21	5300	1	1429	37	1
22	5309	1	1272	42	1
23	5310	1	1868	29	1
24	5310	1	2456	22	1
25	5311	1	1882	29	1
26	5250	1	538	99	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5320	1	2291	24	1
28	5320	1	544	98	1
29	5329	1	732	73	1
30	5329	1	960	55	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5250	3.9	182	25	1
2	5250	2.1	163	23	1
3	5251	3.0	202	28	1
4	5260	3.6	216	24	1
5	5260	2.8	214	24	1
6	5269	3.5	159	23	1
7	5269	1.3	152	28	1
8	5270	4.6	168	24	1
9	5270	1.3	227	23	1
10	5271	4.2	191	29	1
11	5271	4.4	216	29	1
12	5280	4.6	175	27	1
13	5280	1.6	225	26	0
14	5289	4.2	191	26	1
15	5289	2.2	154	25	1
16	5290	4.8	205	26	0
17	5290	4.6	188	25	0
18	5291	1.3	211	23	1
19	5291	3.3	183	26	1
20	5300	2.5	152	24	1
21	5300	1.6	205	24	1
22	5309	1.7	161	28	1
23	5310	2.5	179	24	0
24	5310	2.0	158	28	1
25	5311	4.5	207	27	1
26	5311	2.8	176	29	1
27	5320	3.4	171	27	1
28	5320	3.8	216	24	1
29	5329	4.9	155	24	1
30	5329	3.4	227	27	0
Detection Percentage (%)					83.3%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5250	6.7	468	17	0
2	5250	7.8	407	16	1
3	5251	7.3	431	18	1
4	5260	8.5	368	18	1
5	5260	8.1	387	16	0
6	5269	6.3	345	18	1
7	5269	7.1	364	18	1
8	5270	9.4	373	18	1
9	5270	8.4	494	17	1
10	5271	9.1	490	18	1
11	5271	7.5	450	17	1
12	5280	7.5	459	18	1
13	5280	7.4	442	18	1
14	5289	9.9	283	18	1
15	5289	9.5	490	18	1
16	5290	9.6	450	18	0
17	5290	7.5	452	16	1
18	5291	8.7	277	17	1
19	5291	7.4	392	18	1
20	5300	8.5	307	17	1
21	5300	6.3	338	16	1
22	5309	6.1	418	17	1
23	5310	8.7	407	16	1
24	5310	7.3	322	17	1
25	5311	9.5	477	17	1
26	5311	8.3	253	17	0
27	5320	9.5	421	18	1
28	5320	6.2	278	18	1
29	5329	8.4	310	18	0
30	5329	8.9	334	18	1
Detection Percentage (%)					83.3%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5250	16.1	493	14	1
2	5250	17.5	293	13	1
3	5251	12.6	273	12	1
4	5260	16.8	333	13	1
5	5260	15.2	395	14	0
6	5269	19.4	410	13	1
7	5269	14.9	364	13	1
8	5270	11.6	418	12	1
9	5270	12.4	322	15	0
10	5271	12.3	416	16	1
11	5271	19.8	266	15	1
12	5280	14.0	268	12	1
13	5280	12.0	386	14	1
14	5289	12.9	492	13	1
15	5289	17.0	251	14	0
16	5290	19.5	448	12	0
17	5290	16.4	265	15	1
18	5291	14.8	471	15	0
19	5291	14.1	267	15	1
20	5300	15.5	301	14	1
21	5300	18.1	430	16	1
22	5309	19.7	402	13	1
23	5310	17.2	303	15	1
24	5310	11.0	331	16	1
25	5311	13.6	372	14	1
26	5311	18.7	343	13	1
27	5320	18.0	410	12	1
28	5320	13.3	432	16	1
29	5329	14.6	441	14	1
30	5329	14.5	373	14	0
Detection Percentage (%)					80%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test

waveforms is as follows: $\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100\% + 83.3\% + 83.3\% + 80\%) / 4 = 86.7\% (>80\%)$

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5250.0	1	16	5257.6	1
2	5250.0	1	17	5255.2	1
3	5250.0	0	18	5258.0	1
4	5250.0	1	19	5254.0	1
5	5250.0	0	20	5256.4	1
6	5250.0	1	21	5325.8	1
7	5250.0	0	22	5326.6	1
8	5250.0	1	23	5326.2	1
9	5250.0	1	24	5323.4	0
10	5250.0	1	25	5322.6	0
11	5253.2	1	26	5324.2	0
12	5252.8	1	27	5321.0	1
13	5258.0	1	28	5327.0	1
14	5257.6	1	29	5324.6	1
15	5252.0	1	30	5323.0	1
Detection Percentage (%)					80%

Type 5 Radar Waveform_1						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μsec)	Pulse 2-to-3 PRI (μsec)	Start Location Within Interval (msec)
1	1	52.7	19			469.397
2	3	58.5	19	1483	1526	511.931
3	2	55.3	19	1893		511.412
4	1	65.8	19			516.353
5	1	89.9	19			291.464
6	1	90.7	19			331.215
7	3	54.8	19	1807	1334	471.826
8	2	65.3	19	1450		620.557
9	3	84.7	19	1281	1371	335.348
10	2	77.6	19	1738		144.689
11	2	96.9	19	1390		413.001
12	2	77	19	1368		234.342
13	2	63.8	19	1117		540.133
14	1	51.8	19			578.944
15	2	62.6	19	1896		431.745
16	3	94.1	19	1666	1484	69.966
17	3	93.5	19	1151	1741	99.337
18	3	88.7	19	1143	1166	112.958
19	2	91.4	19	1969		53.679

Type 5 Radar Waveform_2

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	71.4	5			268.083
2	1	72.1	5			1271.727
3	2	74.2	5	1822		68.253
4	1	98.8	5			452.45
5	1	95.1	5			287.547
6	3	59.4	5	1494	1803	174.703
7	2	58.7	5	1086		451.15
8	1	61.6	5			309.077
9	3	70.9	5	1443	1843	600.833

Type 5 Radar Waveform_3

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	52.6	19	1504		39.58
2	1	73.9	19			901.87
3	1	97.1	19			544.17
4	2	90.2	19	1073		254.55
5	3	94.5	19	1981	1537	429.56
6	2	85.1	19	1370		421.13
7	1	70.1	19			501.15
8	3	96.3	19	1041	1613	735.72
9	2	80.6	19	1938		986.63
10	1	98.3	19			389.33
11	3	95.5	19	1065	1836	756.9
12	2	96.4	19	1246		434.9

Type 5 Radar Waveform_4

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	79.7	19	1822	1809	53.368
2	1	59.5	19			801.857
3	2	56.2	19	1061		199.374
4	3	68.4	19	1090	1643	398.681
5	3	96.6	19	1312	1372	391.139
6	2	83.4	19	1678		392.816
7	1	96.6	19			782.233
8	2	95.6	19	1665		357.56
9	2	81.6	19	1401		406.547
10	1	52.2	19			528.034
11	3	65.7	19	1445	1404	97.401
12	3	69	19	1206	1568	179.609
13	2	85.1	19	1750		98.386
14	2	59.4	19	1916		187.843

Type 5 Radar Waveform_5

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	64.2	16	1355		725.266
2	3	86.6	16	1358	1528	22.494
3	2	85.2	16	1019		513.31
4	3	56.3	16	1285	1360	173.74
5	2	97.9	16	1423		41.64
6	2	86.7	16	1055		80.9
7	3	68.9	16	1146	1313	565.19
8	2	72.8	16	1982		545.45
9	3	73.7	16	1966	1579	42.52
10	2	68.4	16	1663		252.41
11	1	97.7	16			512.96
12	1	51.7	16			297.62
13	2	79.5	16	1904		236.93
14	2	67.4	16	1577		729.2
15	1	96.5	16			531.2
16	2	65.8	16	1529		412.1

Type 5 Radar Waveform_6

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	53.8	10	1269		705.605
2	2	88.2	10	1168		460.79
3	3	55.6	10	1950	1325	256.87
4	1	78.8	10			818.5
5	3	62.6	10	1488	1686	53.2
6	2	61.4	10	1361		617.61
7	2	56.4	10	1753		372.63
8	3	83.3	10	1494	1968	536.05
9	3	79	10	1472	1767	696.35
10	2	82.1	10	1861		536.16
11	3	71.3	10	1140	1126	508.3
12	1	94.7	10			848.8

Type 5 Radar Waveform_7

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	69.2	5	1500	1858	248.697
2	1	99.8	5			374.43
3	1	65.3	5			1441.63
4	2	85.9	5	1764		186.52
5	3	87.5	5	1482	1619	1426.64
6	2	88.9	5	1700		382.48
7	2	56.1	5	1246		701.04
8	2	85.7	5	1017		5.8

Type 5 Radar Waveform_8

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	73.5	19	1471	1413	592.355
2	2	67.1	19	1075		544.85
3	3	88.3	19	1773	1981	28.08
4	1	82	19			170.83
5	2	77.1	19	1965		192.95
6	2	88.3	19	1922		137.24
7	2	81.7	19	1396		579.54
8	2	91.5	19	1141		138.77
9	2	88.6	19	1402		548.1
10	2	57.3	19	1905		43.34
11	2	61.8	19	1371		576.22
12	2	52.3	19	1819		192.52
13	1	52.5	19			210.26
14	2	89.3	19	1583		303.86
15	3	68.2	19	1302	1259	408.54
16	1	99.7	19			316.09
17	2	62.7	19	1651		523.1
18	2	74.3	19	1673		140.8
19	2	87.8	19	1100		310.4
20	3	84.3	19	1128	1902	575.4

Type 5 Radar Waveform_9

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	81.2	9			470.444
2	2	86.2	9	1822		494.817
3	1	82.1	9			831.054
4	2	58.7	9	1901		626.571
5	2	77.6	9	1203		263.319
6	1	77.5	9			632.016
7	3	64	9	1231	1982	227.283
8	2	64	9	1154		651.92
9	2	94.9	9	1393		223.157
10	3	90.5	9	1721	1458	717.554
11	1	77.3	9			18.551
12	2	61.3	9	1561		558.699
13	2	96.4	9	1173		771.986
14	2	66.4	9	1425		137.943

Type 5 Radar Waveform_10

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	79	11	1286	1593	384.171
2	2	88.3	11	1705		306.198
3	2	68	11	1449		335.885
4	2	97.3	11	1462		601.093
5	3	99.6	11	1888	1049	531.251
6	1	90.1	11			679.608
7	1	87.3	11			287.206
8	2	78.1	11	1877		577.134
9	2	60	11	1132		244.121
10	1	56.9	11			673.459
11	1	59.6	11			609.276
12	1	58.6	11			590.694
13	2	82.5	11	1290		156.742
14	2	84	11	1198		250.049
15	2	96.5	11	1013		22.307
16	3	79.3	11	1492	1998	23.165
17	1	68.7	11			563.382

Type 5 Radar Waveform_11

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	53.2	8	1086		121.507
2	2	94.5	8	1280		675.093
3	2	73.9	8	1229		427.926
4	3	54.7	8	1018	1071	405.909
5	1	98.9	8			910.672
6	1	73	8			395.405
7	1	67.5	8			94.858
8	1	87.7	8			812.972
9	1	96.3	8			883.995
10	2	85	8	1623		616.768
11	3	77.5	8	1586	1987	714.601
12	1	98.7	8			838.054
13	1	73	8			464.977

Type 5 Radar Waveform_12

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	74.2	7	1342		1044.69
2	2	63.3	7	1297		351.371
3	2	79.3	7	1513		393.752
4	3	92.2	7	1118	1942	970.383
5	3	58.8	7	1554	1865	721.144
6	2	52.7	7	1086		496.265
7	2	60.6	7	1443		761.705
8	1	62.2	7			304.056
9	2	86.1	7	1075		259.257
10	3	95.8	7	1165	1647	175.388
11	2	93.9	7	1304		301.309

Type 5 Radar Waveform_13

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	70.1	20	1735	1190	400.005
2	3	83	20	1880	1805	1126.777
3	2	66.9	20	1369		1197.203
4	3	83.5	20	1045	1412	1188.63
5	2	91.1	20	1013		1079.007
6	3	72.6	20	1296	1496	423.653
7	3	97.8	20	1151	1563	1237.59
8	3	63.7	20	1339	1818	500.127
9	3	51.2	20	1432	1547	1094.833

Type 5 Radar Waveform_14

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	80.7	19			51.695
2	2	57.4	19	1890		105.721
3	2	62.2	19	1486		131.542
4	2	63.6	19	1869		142.373
5	1	97.8	19			44.614
6	2	55.1	19	1065		900.325
7	1	61	19			500.635
8	2	69.1	19	1819		97.116
9	3	91.9	19	1318	1810	148.727
10	1	78.4	19			666.718
11	3	65.9	19	1163	1405	1012.709

Type 5 Radar Waveform_15

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	67.7	5			181.524
2	1	72.7	5			553.07
3	2	75.4	5	1566		38.13
4	1	60.4	5			413.9
5	3	57.4	5	1480	1968	544.04
6	2	68.8	5	1350		128.43
7	2	96.3	5	1521		543.76
8	1	97.9	5			601.87
9	2	52.9	5	1462		40.15
10	1	62.4	5			468.76
11	1	53.8	5			509.38
12	2	78.7	5	1010		489.77
13	3	78.4	5	1856	1905	646.23
14	2	87.9	5	1752		189.77
15	3	76.7	5	1192	1787	236.7
16	3	51.5	5	1731	1699	229.5

Type 5 Radar Waveform_16

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	59.3	19	1476	1391	232.909
2	3	96.4	19	1877	1135	464.573
3	3	66.1	19	1375	1361	355.416
4	2	78.3	19	1075		817.639
5	3	53.1	19	1029	1582	444.062
6	2	65.3	19	1282		135.705
7	1	57.3	19			561.188
8	3	85.7	19	1898	1096	197.322
9	2	67.6	19	1385		772.195
10	2	57.6	19	1131		581.638
11	2	64.1	19	1569		585.041
12	3	92.1	19	1535	1785	7.654
13	2	71	19	1426		396.277

Type 5 Radar Waveform_17

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	99.1	13			590.308
2	2	67.8	13	1928		565.11
3	2	69.8	13	1333		175.67
4	1	53	13			8.37
5	1	74.6	13			538.48
6	3	73.7	13	1357	1169	90.49
7	2	84.5	13	1043		286.47
8	1	51.1	13			271.49
9	2	58.1	13	1398		247.68
10	2	76.2	13	1481		565.58
11	2	82.3	13	1074		429.07
12	2	96.4	13	1975		45.87
13	3	95.2	13	1589	1950	89.4
14	1	95.5	13			66.96
15	2	65.6	13	1362		316.28
16	1	62.4	13			480.34
17	2	85.1	13	1574		289.14
18	2	69.3	13	1652		1.4
19	2	87.4	13	1803		512.7
20	3	73.3	13	1356	1713	263.7

Type 5 Radar Waveform_18

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	74.2	20	1638	1641	114.212
2	1	76	20			645.06
3	2	57.4	20	1539		527.03
4	3	77.2	20	1166	1404	155.82
5	2	53.5	20	1361		503.76
6	2	57.2	20	1040		360.03
7	1	59.6	20			276.54
8	1	76.8	20			419.08
9	2	91.1	20	1404		7.69
10	3	68.5	20	1748	1810	277.58
11	2	79	20	1356		288.68
12	2	84.7	20	1580		732.88
13	1	90.7	20			382.37
14	2	78.6	20	1903		414.9
15	3	83.8	20	1055	1179	23.6
16	2	76.9	20	1090		313.5

Type 5 Radar Waveform_19

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	64.1	10	1887		761.195
2	2	86.8	10	1272		523.241
3	3	64.5	10	1953	1161	919.482
4	3	78.4	10	1260	1123	66.263
5	2	76.7	10	1456		329.574
6	2	72	10	1418		10.305
7	2	65.7	10	1168		478.685
8	3	87	10	1982	1260	336.366
9	2	80.1	10	1883		320.077
10	1	66.6	10			484.118
11	3	77.4	10	1709	1797	886.209

Type 5 Radar Waveform_20

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	84.2	16	1316		658.693
2	2	95.2	16	1135		833.9
3	2	78.1	16	1536		675.5
4	1	94.6	16			1063.86
5	3	73.9	16	1810	1457	1050.6
6	2	89.6	16	1513		1024.7
7	3	54.6	16	1161	1418	524.37
8	2	98.9	16	1305		388.57
9	1	76.1	16			855.1
10	3	70.5	16	1377	1696	980.9

Type 5 Radar Waveform_21

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	64.8	8	1092		193.978
2	1	72.4	8			615.301
3	3	77.1	8	1749	1670	342.642
4	1	52.5	8			397.643
5	2	63.2	8	1090		57.454
6	3	89.2	8	1995	1658	565.475
7	3	53.3	8	1916	1530	464.976
8	1	74.4	8			99.247
9	3	63	8	1693	1093	32.428
10	2	51.4	8	1824		299.839
11	2	72.7	8	1520		561.561
12	2	77.8	8	1324		235.362
13	2	75.3	8	1085		154.223
14	2	67	8	1780		19.224
15	2	70.2	8	1180		97.055
16	2	71.4	8	1580		535.016
17	2	66.1	8	1951		361.837
18	2	50.5	8	1578		517.958
19	2	95.7	8	1665		554.879

Type 5 Radar Waveform_22

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	83.8	6	1867		388.352
2	1	80	6			21.686
3	2	79.9	6	1205		360.87
4	1	64.3	6			211.36
5	2	86.8	6	1596		262.21
6	1	61.9	6			233.07
7	2	81.1	6	1735		229.4
8	2	87.7	6	1749		55.8
9	1	63.4	6			595.62
10	2	65.2	6	1596		67.42
11	1	50	6			514.87
12	3	58.7	6	1986	1009	136.24
13	3	80.7	6	1048	1247	489.47
14	3	69.4	6	1607	1429	407.5
15	1	63.6	6			614.6
16	1	89.9	6			231.2

Type 5 Radar Waveform_23

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	64	7	1924		270.076
2	3	76.5	7	1848	1482	144.687
3	1	61.4	7			225.404
4	3	66.7	7	1361	1852	120.631
5	2	77.7	7	1997		431.299
6	1	86.5	7			490.816
7	2	80.9	7	1561		130.263
8	2	88.8	7	1779		64.19
9	1	84.2	7			269.807
10	3	80.7	7	1211	1184	504.094
11	2	63.8	7	1227		568.521
12	1	88.6	7			550.099
13	2	59.8	7	1426		844.786
14	2	60.9	7	1457		568.243

Type 5 Radar Waveform_24

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	53.2	14	1735		486.966
2	1	89.3	14			587.178
3	1	61.3	14			373.515
4	1	63.5	14			137.893
5	2	64.7	14	1077		459.851
6	1	85.5	14			533.688
7	1	78.6	14			138.896
8	1	66.5	14			662.374
9	1	74.8	14			159.581
10	3	76.6	14	1115	1817	240.329
11	2	53	14	1640		589.686
12	3	57.5	14	1225	1774	135.634
13	1	98.3	14			71.352
14	1	92.1	14			231.019
15	2	91.7	14	1726		645.347
16	2	75.2	14	1418		309.365
17	1	64.6	14			172.082

Type 5 Radar Waveform_25

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	96.4	16			694.758
2	1	58.7	16			670.638
3	2	60.6	16	1122		279.425
4	3	74.5	16	1829	1935	502.363
5	2	85.3	16	1822		388.411
6	2	53.1	16	1561		524.978
7	2	91.3	16	1514		10.106
8	3	60	16	1831	1561	332.544
9	2	71.8	16	1988		136.021
10	2	56	16	1472		568.819
11	2	77.5	16	1988		348.646
12	1	89.4	16			560.624
13	2	73.4	16	1961		128.672
14	2	61.5	16	1057		24.549
15	2	57.1	16	1545		94.017
16	2	78.8	16	1441		31.865
17	3	75.5	16	1244	1594	336.282

Type 5 Radar Waveform_26

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	80.1	12			591.515
2	1	71.5	12			156.404
3	2	87.4	12	1728		499.842
4	2	70.7	12	1003		220.973
5	2	97	12	1798		620.644
6	2	96.3	12	1740		528.505
7	1	97.2	12			16.536
8	1	72.9	12			78.117
9	1	53.5	12			224.458
10	2	72.1	12	1437		463.669
11	1	78.9	12			437.821
12	1	52.4	12			448.562
13	2	82.2	12	1337		66.923
14	2	96.2	12	1567		25.934
15	2	99.4	12	1858		135.885
16	1	55.9	12			542.716
17	1	75.7	12			572.037
18	1	82.4	12			111.158
19	1	75.4	12			438.679

Type 5 Radar Waveform_27

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	98.1	20	1009		468.561
2	1	85.2	20			540.97
3	2	72.4	20	1345		720.24
4	2	56	20	1992		77.38
5	2	69.7	20	1626		147.15
6	1	73.2	20			400.68
7	1	90.5	20			98.77
8	2	82.5	20	1085		591.26
9	1	74.7	20			693.05
10	2	71.1	20	1489		485.21
11	3	96.6	20	1234	1534	314.45
12	2	62.1	20	1268		444.82
13	2	77.3	20	1106		93.04
14	2	74.9	20	1136		122.36
15	2	51.1	20	1500		328
16	2	99.7	20	1025		103

Type 5 Radar Waveform_28

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	65.7	5			889.829
2	1	73.1	5			545.02
3	1	60.8	5			701.82
4	2	93	5	1155		625.98
5	1	52.1	5			581.02
6	1	83.3	5			904.92
7	2	77.6	5	1447		143.17
8	2	60.3	5	1512		432.97
9	1	80.8	5			6.9
10	2	75	5	1081		499.61
11	3	94.7	5	1370	1258	374.4
12	2	51.7	5	1985		860.8

Type 5 Radar Waveform_29

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	84.5	11	1981		797.506
2	1	93.3	11			325.88
3	2	87.3	11	1021		53.42
4	1	90.1	11			810.06
5	2	86.6	11	1795		774.99
6	2	86.3	11	1019		550.98
7	2	56.8	11	1394		686.22
8	2	81.5	11	1516		4.21
9	3	66.2	11	1840	1096	935.78
10	2	75.4	11	1840		169.27
11	1	82.7	11			454
12	1	95.6	11			200.4

Type 5 Radar Waveform_30

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	76.9	15	1802		443.076
2	2	76.5	15	1357		635.478
3	2	68.9	15	1189		498.645
4	2	60.8	15	1794		692.393
5	2	86.4	15	1778		351.291
6	1	58.5	15			270.348
7	3	82	15	1242	1285	182.546
8	3	52.9	15	1656	1531	480.104
9	3	97.3	15	1626	1666	132.001
10	1	72.1	15			213.209
11	3	70.5	15	1793	1648	396.326
12	2	89.9	15	1702		153.004
13	2	55.5	15	1738		276.842
14	2	61	15	1525		527.549
15	1	76.7	15			448.347
16	3	90.2	15	1487	1025	76.365
17	3	88.5	15	1318	1270	429.782

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5250	1	16	5290	1
2	5250	1	17	5290	1
3	5251	1	18	5291	1
4	5260	1	19	5291	1
5	5260	1	20	5300	1
6	5269	1	21	5300	1
7	5269	1	22	5309	1
8	5270	1	23	5310	1
9	5270	1	24	5310	1
10	5271	1	25	5311	1
11	5271	1	26	5311	1
12	5280	1	27	5320	1
13	5280	1	28	5320	1
14	5289	1	29	5329	1
15	5289	1	30	5329	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5308	6	3	5299	9
19	5268	57	4	5284	12
25	5275	75	5	5259	15
28	5294	84	21	5322	63
29	5257	87	27	5323	81
30	5280	90	32	5279	96
42	5311	126	46	5302	138
44	5285	132	47	5276	141
46	5322	138	58	5260	174
50	5310	150	74	5291	222
53	5293	159	76	5271	228
58	5276	174	81	5310	243
67	5329	201	85	5262	255
73	5272	219	91	5315	273
85	5252	255	93	5298	279
95	5315	285	97	5327	291

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5295	3	3	5272	9
6	5324	18	9	5310	27
10	5318	30	33	5313	99
16	5276	48	46	5329	138
20	5251	60	52	5258	156
32	5330	96	56	5304	168
43	5294	129	65	5259	195
44	5311	132	75	5325	225
47	5319	141	76	5293	228
48	5321	144	82	5260	246
59	5308	177	88	5250	264
63	5266	189	99	5320	297
69	5286	207	--	--	--
73	5313	219	--	--	--
76	5272	228	--	--	--
84	5314	252	--	--	--
95	5250	285	--	--	--

Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5302	9	7	5265	21
7	5313	21	9	5310	27
15	5283	45	17	5302	51
17	5250	51	22	5287	66
20	5262	60	33	5290	99
22	5279	66	35	5292	105
34	5268	102	36	5264	108
44	5301	132	41	5267	123
58	5285	174	42	5270	126
73	5299	219	46	5329	138
75	5289	225	47	5269	141
82	5261	246	54	5311	162
--	--	--	62	5260	186
--	--	--	65	5305	195
--	--	--	67	5325	201
--	--	--	71	5271	213
--	--	--	72	5314	216
--	--	--	78	5294	234
--	--	--	79	5324	237
--	--	--	86	5286	258
--	--	--	87	5323	261

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5279	6	3	5253	9
13	5310	39	5	5322	15
16	5306	48	7	5274	21
25	5294	75	16	5306	48
36	5259	108	18	5298	54
40	5288	120	20	5297	60
43	5271	129	21	5279	63
56	5312	168	36	5295	108
72	5317	216	48	5293	144
73	5293	219	59	5328	177
76	5297	228	61	5305	183
77	5303	231	63	5265	189
83	5260	249	67	5310	201
91	5309	273	70	5280	210
93	5264	279	87	5281	261
99	5251	297	94	5307	282
--	--	--	98	5329	294
--	--	--	99	5314	297

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5278	15	11	5302	33
11	5322	33	16	5280	48
12	5287	36	20	5257	60
14	5281	42	23	5329	69
19	5294	57	26	5283	78
24	5277	72	27	5266	81
26	5330	78	34	5270	102
27	5297	81	35	5285	105
30	5258	90	36	5264	108
32	5273	96	43	5298	129
34	5320	102	56	5324	168
35	5282	105	58	5284	174
39	5285	117	69	5311	207
63	5302	189	72	5256	216
75	5324	225	81	5274	243
87	5321	261	86	5287	258
94	5290	282	89	5314	267
100	5319	300	99	5293	297

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
7	5285	21	4	5324	12
11	5273	33	5	5278	15
16	5266	48	18	5307	54
20	5327	60	21	5327	63
25	5328	75	41	5250	123
26	5302	78	44	5270	132
32	5297	96	45	5297	135
42	5269	126	49	5318	147
50	5312	150	57	5309	171
53	5254	159	60	5256	180
58	5277	174	61	5268	183
65	5299	195	65	5255	195
68	5255	204	66	5289	198
70	5317	210	69	5291	207
73	5314	219	74	5303	222
79	5294	237	76	5290	228
91	5289	273	84	5273	252
100	5263	300	86	5305	258
--	--	--	94	5301	282

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5330	3	2	5320	6
28	5273	84	5	5290	15
50	5291	150	12	5267	36
55	5261	165	29	5252	87
57	5311	171	41	5257	123
70	5310	210	42	5311	126
76	5303	228	54	5330	162
85	5250	255	58	5301	174
87	5252	261	76	5306	228
95	5270	285	78	5263	234
--	--	--	79	5296	237
--	--	--	80	5253	240
--	--	--	82	5264	246
--	--	--	85	5287	255
--	--	--	87	5255	261

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
11	5281	33	4	5253	12
17	5254	51	5	5268	15
26	5287	78	6	5280	18
27	5323	81	7	5330	21
34	5255	102	9	5313	27
45	5307	135	13	5271	39
68	5256	204	14	5290	42
71	5292	213	17	5251	51
78	5286	234	20	5310	60
82	5291	246	21	5325	63
85	5304	255	22	5281	66
87	5279	261	33	5294	99
96	5265	288	34	5293	102
97	5306	291	48	5275	144
99	5284	297	50	5282	150
--	--	--	57	5278	171
--	--	--	70	5279	210
--	--	--	85	5250	255
--	--	--	90	5288	270
--	--	--	92	5296	276
--	--	--	94	5299	282
--	--	--	97	5305	291

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5330	3	4	5261	12
8	5328	24	5	5270	15
33	5301	99	9	5291	27
34	5289	102	11	5285	33
46	5303	138	14	5323	42
52	5258	156	17	5309	51
54	5268	162	20	5313	60
57	5255	171	25	5294	75
63	5277	189	27	5296	81
73	5320	219	36	5321	108
78	5265	234	46	5274	138
80	5274	240	49	5262	147
81	5252	243	78	5271	234
83	5329	249	81	5314	243
84	5286	252	86	5253	258
98	5262	294	87	5307	261
99	5256	297	89	5330	267
--	--	--	94	5320	282

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5255	21	15	5268	45
23	5274	69	27	5305	81
24	5309	72	29	5279	87
26	5299	78	33	5324	99
28	5327	84	35	5283	105
34	5271	102	37	5320	111
44	5297	132	39	5298	117
48	5268	144	42	5303	126
49	5306	147	45	5291	135
54	5284	162	51	5278	153
59	5252	177	57	5290	171
62	5261	186	63	5293	189
70	5321	210	75	5250	225
71	5311	213	80	5288	240
74	5329	222	83	5269	249
76	5288	228	87	5272	261
--	--	--	89	5274	267
--	--	--	96	5258	288

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
15	5293	45	22	5303	66
17	5251	51	26	5292	78
25	5288	75	27	5252	81
30	5279	90	34	5289	102
39	5256	117	46	5267	138
40	5318	120	48	5299	144
44	5310	132	50	5298	150
45	5297	135	55	5263	165
49	5285	147	65	5258	195
52	5264	156	66	5264	198
53	5273	159	69	5327	207
64	5296	192	70	5283	210
66	5291	198	84	5270	252
67	5278	201	85	5297	255
82	5300	246	92	5274	276
87	5265	261	93	5319	279
95	5266	285	97	5311	291

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5323	9	3	5316	9
7	5322	21	5	5314	15
10	5257	30	14	5321	42
19	5255	57	16	5324	48
22	5258	66	20	5329	60
26	5314	78	22	5299	66
33	5274	99	34	5274	102
38	5271	114	44	5275	132
43	5328	129	50	5309	150
50	5292	150	52	5310	156
76	5294	228	81	5288	243
79	5283	237	86	5308	258
80	5287	240	96	5303	288
81	5302	243	--	--	--
85	5304	255	--	--	--
87	5310	261	--	--	--
89	5318	267	--	--	--
93	5293	279	--	--	--

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5258	12	7	5274	21
7	5309	21	10	5299	30
8	5296	24	12	5280	36
16	5284	48	18	5321	54
21	5288	63	21	5307	63
31	5256	93	39	5285	117
34	5282	102	42	5323	126
37	5306	111	58	5279	174
38	5266	114	62	5291	186
47	5292	141	80	5294	240
48	5279	144	84	5275	252
52	5300	156	85	5322	255
57	5261	171	93	5265	279
60	5321	180	--	--	--
61	5301	183	--	--	--
63	5291	189	--	--	--
71	5295	213	--	--	--
72	5290	216	--	--	--
76	5297	228	--	--	--
83	5315	249	--	--	--
85	5269	255	--	--	--
89	5328	267	--	--	--
94	5274	282	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5287	3	4	5264	12
5	5326	15	14	5268	42
6	5251	18	42	5290	126
7	5288	21	48	5263	144
16	5270	48	52	5283	156
25	5275	75	55	5302	165
26	5272	78	60	5315	180
28	5284	84	61	5253	183
36	5276	108	62	5297	186
52	5286	156	64	5328	192
56	5290	168	66	5291	198
64	5271	192	67	5295	201
66	5289	198	76	5262	228
69	5264	207	93	5316	279
70	5283	210	--	--	--
79	5255	237	--	--	--
81	5321	243	--	--	--
85	5266	255	--	--	--
97	5306	291	--	--	--

Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
17	5320	51	1	5285	3
30	5262	90	3	5252	9
33	5293	99	6	5326	18
38	5323	114	7	5327	21
40	5254	120	12	5300	36
41	5292	123	16	5262	48
42	5324	126	23	5275	69
54	5256	162	31	5303	93
57	5300	171	50	5255	150
58	5315	174	56	5287	168
62	5275	186	80	5286	240
79	5322	237	88	5298	264
82	5316	246	90	5283	270
94	5327	282	91	5271	273
98	5287	294	92	5254	276
--	--	--	95	5293	285

Product	ACCESS POINT	Temperature	23 ~ 25°C
Test Engineer	Amy Zhang	Relative Humidity	48 ~ 62%
Test Site	SR2	Test Date	2020/05/13 ~ 2020/05/15
Test Item	Radar Statistical Performance Check (802.11ax-HE160 mode - 5570MHz)		

Radar Type 1 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492	1	618	86	1
2	5500	1	778	68	1
3	5509	1	718	74	1
4	5510	1	638	83	1
5	5511	1	798	67	1
6	5520	1	578	92	1
7	5529	1	818	65	1
8	5530	1	658	81	1
9	5531	1	938	57	1
10	5540	1	678	78	1
11	5550	1	598	89	1
12	5551	1	878	61	1
13	5560	1	898	59	1
14	5569	1	918	58	1
15	5570	1	838	63	1
16	5571	1	2694	20	1
17	5580	1	636	83	1
18	5589	1	1651	32	1
19	5590	1	2214	24	1
20	5591	1	2336	23	1
21	5600	1	646	82	1
22	5609	1	893	60	1
23	5610	1	1048	51	1
24	5611	1	1981	27	1
25	5620	1	1087	49	1
26	5629	1	1034	52	1

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
27	5630	1	1134	47	1
28	5631	1	2525	21	1
29	5640	1	733	73	1
30	5648	1	2451	22	1
Detection Percentage (%)					100%

Radar Type 2 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492	3.6	223	26	1
2	5500	4.3	159	29	1
3	5509	1.0	210	23	1
4	5510	2.8	188	25	1
5	5511	3.2	176	26	1
6	5520	2.9	181	23	1
7	5529	2.4	191	23	1
8	5530	1.1	193	27	1
9	5531	1.9	215	24	1
10	5540	3.0	183	26	1
11	5550	4.3	172	23	1
12	5551	3.8	167	25	1
13	5560	3.9	228	28	1
14	5569	1.9	181	28	1
15	5570	1.6	209	23	1
16	5571	4.5	163	29	0
17	5580	4.8	221	29	1
18	5589	1.2	224	29	1
19	5590	1.8	176	28	1
20	5591	3.3	173	26	1
21	5600	1.3	201	29	1
22	5609	2.9	184	29	0
23	5610	2.4	230	24	1
24	5611	1.7	152	25	1
25	5620	2.8	169	27	1
26	5629	2.4	183	28	1
27	5630	4.0	230	26	1
28	5631	4.2	176	28	1
29	5640	4.1	218	28	1
30	5648	4.8	201	23	1
Detection Percentage (%)					93.3%

Radar Type 3 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492	9.6	371	18	0
2	5500	7.7	407	16	1
3	5509	8.9	418	16	1
4	5510	7.8	440	16	0
5	5511	7.9	385	16	0
6	5520	6.7	476	17	1
7	5529	6.2	316	16	1
8	5530	9.4	291	16	1
9	5531	7.1	291	18	1
10	5540	7.4	481	16	0
11	5550	8.5	279	18	1
12	5551	10.0	463	17	0
13	5560	7.2	314	18	1
14	5569	8.1	264	18	1
15	5570	8.6	282	17	1
16	5571	8.4	300	18	1
17	5580	7.2	442	17	0
18	5589	9.8	255	16	1
19	5590	8.9	315	18	1
20	5591	6.7	276	18	1
21	5600	7.6	437	17	1
22	5609	7.7	266	16	1
23	5610	8.3	420	16	1
24	5611	9.5	290	16	1
25	5620	9.4	494	18	1
26	5629	6.0	280	16	1
27	5630	8.1	259	16	0
28	5631	7.2	476	16	1
29	5640	7.2	437	18	1
30	5648	10.0	338	18	1
Detection Percentage (%)					76.7%

Radar Type 4 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5492	12.1	449	12	1
2	5500	18.5	251	15	1
3	5509	15.3	312	12	0
4	5510	19.2	266	12	0
5	5511	13.2	257	13	1
6	5520	17.1	295	16	1
7	5529	19.9	415	15	1
8	5530	13.7	404	12	1
9	5531	11.7	426	14	1
10	5540	14.1	435	13	1
11	5550	19.6	417	15	1
12	5551	16.4	327	16	1
13	5560	15.5	292	15	1
14	5569	16.7	372	16	1
15	5570	14.0	290	12	0
16	5571	15.3	376	14	1
17	5580	11.8	364	13	0
18	5589	14.0	387	16	1
19	5590	18.1	446	12	1
20	5591	11.1	462	13	0
21	5600	18.7	333	12	1
22	5609	11.5	343	13	0
23	5610	17.6	300	15	1
24	5611	17.5	318	13	1
25	5620	14.4	425	16	1
26	5629	17.6	276	14	1
27	5630	12.1	276	14	1
28	5631	15.7	491	15	1
29	5640	14.6	264	13	1
30	5648	17.4	452	13	1
Detection Percentage (%)					80%

Note: In addition an average minimum percentage of successful detection across all four Short pulse radar test

waveforms is as follows: $\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4} = (100\% + 93.3\% + 76.7\% + 80\%) / 4 = 87.5\% (>80\%)$

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5570.0	0	16	5495.6	1
2	5570.0	1	17	5499.6	1
3	5570.0	1	18	5494.8	1
4	5570.0	1	19	5495.6	1
5	5570.0	1	20	5498.0	1
6	5570.0	1	21	5644.8	0
7	5570.0	1	22	5643.6	1
8	5570.0	1	23	5646.0	1
9	5570.0	1	24	5643.2	1
10	5570.0	1	25	5645.6	0
11	5497.2	1	26	5640.0	1
12	5494.4	1	27	5641.6	1
13	5498.4	1	28	5645.6	1
14	5498.4	1	29	5644.4	0
15	5497.6	1	30	5642.8	1
Detection Percentage (%)					86.7%

Type 5 Radar Waveform_1						
Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	80.3	16			862.881
2	2	56.4	16	1090		765.873
3	1	87.3	16			41.646
4	3	87.5	16	1059	1419	357.479
5	2	72.9	16	1847		806.912
6	2	70.5	16	1141		50.485
7	2	77.9	16	1272		591.968
8	1	92.7	16			293.542
9	2	96	16	1548		822.135
10	2	73.9	16	1849		101.008
11	3	70.3	16	1837	1519	473.881
12	1	82.2	16			355.154
13	2	93.9	16	1595		469.177

Type 5 Radar Waveform_2

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	85.9	10	1158		855.581
2	2	66.3	10	1996		582.741
3	1	90.2	10			664.442
4	3	98	10	1089	1758	615.153
5	2	72.2	10	1633		769.754
6	2	73.1	10	1142		152.545
7	2	75.5	10	1340		400.685
8	3	89.8	10	1013	1020	593.136
9	1	97.9	10			866.617
10	2	73.8	10	1539		1009.818
11	2	61.5	10	1497		489.509

Type 5 Radar Waveform_3

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	79.7	7	1154		428.993
2	1	57.8	7			356.513
3	1	60.5	7			221.047
4	2	63	7	1148		128.61
5	2	55	7	1354		424.933
6	2	84.4	7	1697		572.607
7	2	60.5	7	1608		13.26
8	2	70.8	7	1422		39.033
9	2	95.6	7	1928		84.267
10	2	59.4	7	1623		418.6
11	1	89.8	7			541.633
12	3	67.5	7	1283	1948	105.557
13	2	61.4	7	1639		87.42
14	2	72.1	7	1949		19.803
15	2	82.1	7	1112		124.977
16	1	63.9	7			48.1
17	2	89.4	7	1707		423.333
18	2	65.3	7	1119		597.367

Type 5 Radar Waveform_4

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	52	7	1943		661.856
2	1	78.7	7			454.118
3	2	81.2	7	1207		549.585
4	2	67.9	7	1344		504.333
5	2	85	7	1784		142.961
6	2	78.2	7	1553		215.908
7	2	80.7	7	1999		653.176
8	2	66.3	7	1237		660.434
9	2	81.3	7	1773		465.051
10	3	65.6	7	1108	1127	460.479
11	2	69.9	7	1222		651.406
12	2	81.1	7	1960		374.104
13	2	75.4	7	1190		402.212
14	3	77.6	7	1041	1446	173.359
15	1	69.6	7			411.547
16	1	81.4	7			288.365
17	1	60	7			637.282

Type 5 Radar Waveform_5

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	100	5	1309		910.249
2	2	60.6	5	1191		915.913
3	2	54.9	5	1388		409.136
4	1	87	5			44.529
5	3	56.2	5	1693	1211	335.112
6	3	93.6	5	1610	1132	889.545
7	3	89.8	5	1685	1739	531.448
8	1	71.9	5			254.482
9	3	80.6	5	1058	1997	183.485
10	1	98.1	5			611.628
11	2	70.6	5	1470		59.381
12	3	77.2	5	1883	1425	345.954
13	2	100	5	1359		5.477

Type 5 Radar Waveform_6

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	77.7	14			1157.86
2	2	72.7	14	1522		1199.007
3	1	85.5	14			280.763
4	2	63.8	14	1124		801.17
5	2	60.9	14	1986		487.767
6	3	57.4	14	1199	1448	301.593
7	3	54.9	14	1945	1482	41.39
8	2	95	14	1275		1244.867
9	2	91.8	14	1570		413.633

Type 5 Radar Waveform_7

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	84.9	10	1403		7.561
2	2	55	10	1244		70.121
3	3	69.2	10	1290	1900	78.232
4	3	74.6	10	1981	1642	326.293
5	1	92.8	10			370.274
6	2	59.2	10	1194		76.165
7	2	73.4	10	1944		77.856
8	2	64.1	10	1006		222.257
9	3	80.2	10	1273	1386	200.258
10	2	72.5	10	1659		285.069
11	2	91.5	10	1820		432.741
12	3	68.9	10	1930	1795	352.542
13	2	71.9	10	1121		383.693
14	1	64.8	10			52.174
15	2	52.3	10	1745		532.915
16	1	96.7	10			487.206
17	1	69.5	10			510.537
18	1	70.5	10			594.958
19	1	55.7	10			247.879

Type 5 Radar Waveform_8

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	92.2	10			539.163
2	1	77.4	10			578.611
3	2	92.7	10	1225		335.242
4	2	88.1	10	1735		160.033
5	1	73.2	10			320.274
6	2	79.8	10	1773		148.935
7	1	80.7	10			516.426
8	1	75.7	10			95.927
9	3	62	10	1533	1318	280.868
10	3	82.8	10	1364	1221	92.879
11	3	52.9	10	1964	1416	342.151
12	2	74.2	10	1005		463.582
13	1	71.5	10			571.773
14	1	98.9	10			612.834
15	2	90.5	10	1222		215.425
16	2	82	10	1139		295.826
17	1	89.3	10			486.337
18	1	66.3	10			452.258
19	2	56.5	10	1272		454.179

Type 5 Radar Waveform_9

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	95.2	14			831.426
2	2	83	14	1617		987.58
3	1	70.9	14			820.78
4	1	96.5	14			462.82
5	3	78.7	14	1118	1083	651.51
6	2	82.8	14	1031		366.25
7	1	57.1	14			935.12
8	2	61.3	14	1069		827.05
9	3	97.5	14	1934	1887	767.3
10	2	73.4	14	1759		985

Type 5 Radar Waveform_10

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	95.6	6	1554		690.472
2	2	80.4	6	1166		251.427
3	1	71.5	6			289.384
4	2	62.4	6	1056		809.781
5	3	78.8	6	1333	1739	449.699
6	2	95.4	6	1504		237.936
7	3	56.5	6	1538	1872	482.433
8	2	76.1	6	1133		801.96
9	3	85.4	6	1236	1924	741.127
10	1	51.9	6			687.374
11	2	70.9	6	1091		152.131
12	2	97.3	6	1081		53.209
13	1	51	6			212.486
14	2	62.7	6	1177		60.943

Type 5 Radar Waveform_11

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	73.3	13	1770		595.547
2	2	51.9	13	1526		202.172
3	2	87.3	13	1953		133.987
4	3	89.8	13	1580	1785	634.31
5	2	78.3	13	1368		89.953
6	2	62.8	13	1388		569.627
7	2	65.1	13	1223		267.4
8	3	63.1	13	1482	1745	397.523
9	2	87.2	13	1342		319.627
10	1	61.9	13			508.76
11	2	83.1	13	1368		318.463
12	2	54.5	13	1973		548.677
13	2	89.7	13	1452		413.79
14	2	73.8	13	1283		435.113
15	3	79.4	13	1261	1605	240.337
16	2	98.4	13	1938		291.6
17	2	67	13	1764		259.633
18	3	61.4	13	1478	1574	190.367

Type 5 Radar Waveform_12

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	62.6	6	1739		137.406
2	2	80	6	1460		512.44
3	2	99.4	6	1743		166.28
4	1	78.1	6			85.82
5	1	99	6			556.48
6	3	94.4	6	1199	1698	531.31
7	3	95.7	6	1953	1309	470.52
8	2	74.3	6	1752		567.36
9	3	82.9	6	1464	1381	212.56
10	3	90.3	6	1764	1199	464.21
11	1	66	6			589.13
12	1	73	6			475.55
13	2	87.8	6	1946		263.08
14	3	83.6	6	1058	1900	367.64
15	1	85	6			231.61
16	1	84.1	6			243.5
17	3	80.3	6	1734	1588	1.19
18	3	97.7	6	1219	1921	130.9
19	3	64.4	6	1264	1453	530.2
20	2	67.9	6	1252		143.8

Type 5 Radar Waveform_13

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	88.2	16	1535	1058	921.934
2	2	85.9	16	1116		105.961
3	2	89	16	1467		509.342
4	1	51.6	16			766.293
5	1	67.9	16			519.274
6	2	95.2	16	1477		1033.405
7	2	60.3	16	1946		509.035
8	3	93.7	16	1648	1792	569.226
9	2	92.9	16	1451		172.517
10	1	89.5	16			216.318
11	2	72.8	16	1223		1011.009

Type 5 Radar Waveform_14

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	87.8	16	1651	1251	273.415
2	2	72.4	16	1320		462.41
3	1	59.2	16			664.23
4	3	69	16	1096	1956	376.91
5	2	58.7	16	1502		256.09
6	2	87.3	16	1337		596.11
7	3	50.1	16	1980	1604	295.85
8	2	82.3	16	1692		739.04
9	3	60.6	16	1795	1165	19.47
10	3	85.9	16	1505	1620	733.32
11	2	95.7	16	1032		192.42
12	3	68.8	16	1539	1700	83.68
13	2	84.1	16	1881		143.75
14	3	53.5	16	1034	1734	275.7
15	2	92	16	1629		8.3
16	2	62.4	16	1847		693.3

Type 5 Radar Waveform_15

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	95.4	14	1013		495.942
2	1	80.7	14			538.687
3	2	54.9	14	1681		1273.063
4	3	87.4	14	1048	1522	1229.72
5	2	59.6	14	1496		791.257
6	3	55.6	14	1586	1774	185.313
7	3	87.6	14	1592	1405	225.48
8	2	56.5	14	1283		1280.567
9	3	83.7	14	1873	1136	783.533

Type 5 Radar Waveform_16

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	67.4	9	1210	1131	72.669
2	2	82.5	9	1364		240.867
3	3	84.8	9	1276	1015	795.624
4	1	89.1	9			800.001
5	2	98.3	9	1818		686.719
6	2	82.6	9	1243		410.396
7	2	96.5	9	1782		407.993
8	2	66.3	9	1592		7.76
9	2	77.5	9	1322		512.797
10	1	59.8	9			743.964
11	3	58.1	9	1496	1348	360.301
12	2	54.1	9	1452		167.539
13	2	65.5	9	1870		367.686
14	1	62.7	9			517.443

Type 5 Radar Waveform_17

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	50.3	19	1440		98.894
2	2	78.6	19	1435		599.258
3	3	83.4	19	1261	1608	13.405
4	2	84.4	19	1048		154.333
5	3	76	19	1601	1251	342.551
6	1	61.1	19			505.128
7	2	62.1	19	1228		526.286
8	2	52.7	19	1870		190.824
9	2	63.8	19	1273		532.641
10	2	81.5	19	1190		246.949
11	3	58.2	19	1961	1968	678.766
12	3	69.5	19	1416	1508	143.594
13	1	74	19			478.762
14	1	66.9	19			572.549
15	2	50.7	19	1941		127.547
16	3	76.6	19	1451	1683	646.665
17	1	88.3	19			160.082

Type 5 Radar Waveform_18

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	52.2	7	1949	1060	579.085
2	2	58.8	7	1786		975.15
3	2	92.3	7	1814		879.89
4	2	90.9	7	1784		265.93
5	2	97.6	7	1840		234.75
6	1	87	7			992.47
7	3	75.6	7	1806	1341	133.72
8	2	60.6	7	1556		220.96
9	3	77.9	7	1841	1397	512.7
10	3	91.5	7	1771	1145	129.1

Type 5 Radar Waveform_19

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	90.2	9	1716	1223	194.798
2	3	70.5	9	1947	1726	470.221
3	1	50.5	9			80.162
4	2	55.1	9	1540		250.673
5	3	53.2	9	1683	1985	542.644
6	1	87.2	9			589.845
7	2	59.4	9	1512		303.836
8	3	94.5	9	1684	1185	368.277
9	1	82.2	9			426.538
10	1	86.3	9			562.929
11	2	99.1	9	1104		146.871
12	2	57.7	9	1986		459.892
13	2	87.8	9	1371		473.953
14	3	90.1	9	1218	1614	491.404
15	2	51.8	9	1490		506.455
16	2	71.9	9	1522		65.786
17	3	51.1	9	1064	1795	349.037
18	2	96.6	9	1407		122.258
19	2	67.4	9	1948		272.179

Type 5 Radar Waveform_20

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	69.5	15	1495		39.827
2	1	51.7	15			15.971
3	1	62.1	15			124.886
4	2	64.8	15	1720		530.489
5	2	59.1	15	1923		394.182
6	1	91.4	15			9.195
7	2	68.6	15	1041		298.908
8	3	98.2	15	1362	1834	435.432
9	1	81	15			860.895
10	2	94.1	15	1268		359.888
11	2	72.9	15	1071		454.611
12	1	58.9	15			751.354
13	2	65	15	1549		55.877

Type 5 Radar Waveform_21

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	94	8	1237	1635	351.826
2	2	68.4	8	1887		611.803
3	2	86.6	8	1324		806.166
4	2	78	8	1894		252.039
5	3	60.5	8	1054	1002	444.052
6	1	53.1	8			261.985
7	2	70.7	8	1998		743.658
8	1	63.3	8			179.552
9	2	74.3	8	1221		887.805
10	3	91.6	8	1036	1272	127.098
11	3	93.8	8	1430	1357	668.651
12	1	85.1	8			614.454
13	3	59.8	8	1371	1989	435.077

Type 5 Radar Waveform_22

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	54	11	1172		509.632
2	1	69.1	11			124.141
3	1	72.7	11			261.385
4	2	90.9	11	1966		7.453
5	1	76.8	11			183.001
6	2	90.6	11	1678		509.538
7	2	71.9	11	1561		382.406
8	2	87.3	11	1308		669.474
9	2	53.6	11	1487		23.171
10	1	54.3	11			0.219
11	2	74.1	11	1261		145.796
12	3	93.3	11	1097	1778	172.044
13	1	84	11			203.762
14	2	94	11	1243		152.089
15	1	74.4	11			480.847
16	2	78.5	11	1947		243.465
17	2	91.1	11	1306		148.082

Type 5 Radar Waveform_23

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	70.2	5	1087		100.396
2	2	56.8	5	1635		54.414
3	2	97.1	5	1545		138.127
4	3	67	5	1641	1455	378.46
5	2	66	5	1490		146.033
6	2	57.9	5	1050		52.727
7	2	79.7	5	1846		414.61
8	3	77.9	5	1837	1093	602.853
9	1	58.9	5			50.267
10	2	90.8	5	1516		593.15
11	1	78.9	5			237.603
12	2	88.8	5	1427		22.307
13	2	82.3	5	1393		308.89
14	3	62.4	5	1970	1777	25.513
15	2	56.8	5	1546		86.287
16	3	96.1	5	1425	1702	559.3
17	2	65.2	5	1016		176.433
18	2	98.8	5	1054		349.767

Type 5 Radar Waveform_24

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	55.1	12	1865	1683	287.478
2	2	57.8	12	1956		310.06
3	2	69.1	12	1702		195.22
4	3	80.7	12	1750	1164	552.36
5	2	99.7	12	1379		325.63
6	2	65.6	12	1680		425.51
7	2	59.3	12	1599		31.55
8	3	90.6	12	1621	1010	658.56
9	1	54.2	12			370.98
10	3	88.4	12	1084	1936	421.29
11	2	91.7	12	1144		173.27
12	1	98.3	12			177.84
13	2	83.4	12	1203		316.97
14	2	77	12	1833		78.2
15	2	58.5	12	1425		577.9

Type 5 Radar Waveform_25

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	69.7	6	1525		176.375
2	2	92.2	6	1365		766.137
3	3	62.3	6	1405	1777	527.654
4	2	96.8	6	1291		637.641
5	2	58.7	6	1944		623.659
6	2	90.3	6	1549		304.096
7	2	71.4	6	1199		400.683
8	3	65.8	6	1652	1449	166.37
9	1	92.9	6			573.817
10	2	79	6	1642		609.834
11	2	50.8	6	1839		517.101
12	2	50.2	6	1351		87.539
13	3	64.7	6	1065	1713	116.886
14	3	76.5	6	1774	1286	90.243

Type 5 Radar Waveform_26

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	51.3	20	1498		50.15
2	2	80.2	20	1111		584.468
3	1	56.2	20			459.095
4	2	82.6	20	1443		245.053
5	3	51.7	20	1229	1933	569.601
6	1	50.1	20			567.288
7	1	82.5	20			484.246
8	2	89.7	20	1963		63.574
9	3	64.7	20	1449	1856	239.061
10	3	63	20	1896	1594	291.279
11	2	90.8	20	1313		12.736
12	2	52.9	20	1307		210.874
13	1	62	20			167.352
14	3	82.7	20	1243	1520	132.229
15	2	66.6	20	1927		85.517
16	1	61	20			582.965
17	2	99.2	20	1849		402.282

Type 5 Radar Waveform_27

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	3	88.8	16	1799	1700	98.579
2	2	75.3	16	1071		850.64
3	3	64.8	16	1543	1630	795.57
4	1	89.9	16			940.5
5	2	86.9	16	1714		427.34
6	1	93.9	16			768.17
7	1	92.3	16			931.56
8	1	97.7	16			259.62
9	1	58.1	16			938.99
10	2	79.5	16	1277		243
11	2	69.6	16	1461		128.6
12	2	60.9	16	1737		190.4

Type 5 Radar Waveform_28

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	75.3	6			115.486
2	2	75.7	6	1983		596.561
3	2	81.7	6	1966		307.242
4	2	73.5	6	1491		490.273
5	2	75.5	6	1955		605.214
6	2	69.7	6	1513		610.885
7	1	72.8	6			314.776
8	2	80.2	6	1123		75.887
9	2	90.1	6	1861		397.938
10	2	59.5	6	1270		411.439
11	2	75.5	6	1104		298.841
12	3	98	6	1608	1581	173.212
13	2	95.5	6	1017		25.093
14	1	64.4	6			522.614
15	2	59.1	6	1081		499.165
16	2	86.6	6	1810		51.846
17	1	79.9	6			449.337
18	2	84.7	6	1155		409.658
19	2	92.8	6	1193		486.079

Type 5 Radar Waveform_29

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	2	52.2	9	1789		299.051
2	2	89.4	9	1687		402.198
3	2	78.4	9	1528		349.385
4	1	66	9			151.023
5	3	61.9	9	1403	1932	474.911
6	3	96.1	9	1079	1502	143.238
7	3	85.7	9	1497	1027	15.386
8	2	96.4	9	1700		368.794
9	2	65.7	9	1516		171.831
10	2	66.9	9	1329		67.249
11	3	97.1	9	1158	1558	303.506
12	1	98.6	9			196.514
13	2	67.9	9	1986		5.872
14	1	70.2	9			430.139
15	2	87	9	1639		417.947
16	1	76.2	9			64.965
17	3	66.8	9	1123	1268	510.582

Type 5 Radar Waveform_30

Burst	Number of Pulses	Pulse Width (μ sec)	Chirp Width (MHz)	Pulse 1-to-2 PRI (μ sec)	Pulse 2-to-3 PRI (μ sec)	Start Location Within Interval (msec)
1	1	94.1	13			613.238
2	1	84	13			32.964
3	2	59.1	13	1228		356.25
4	2	58.5	13	1020		130.38
5	2	93.6	13	1775		185.11
6	2	56.2	13	1002		301.93
7	3	96.3	13	1857	1014	690.63
8	2	71.5	13	1941		62.62
9	1	62.2	13			454.01
10	2	89.1	13	1860		187.61
11	1	95.3	13			674.1
12	2	65.8	13	1658		120.4
13	3	68.1	13	1729	1112	401.92
14	3	59.4	13	1110	1983	543.1
15	2	75.8	13	1029		35
16	1	65	13			707.3

Radar Type 6 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5492	1	16	5571	1
2	5500	1	17	5580	1
3	5509	1	18	5589	1
4	5510	1	19	5590	1
5	5511	1	20	5591	1
6	5520	1	21	5600	1
7	5529	1	22	5609	1
8	5530	1	23	5610	1
9	5531	1	24	5611	1
10	5540	1	25	5620	1
11	5550	1	26	5629	1
12	5551	1	27	5630	1
13	5560	1	28	5631	1
14	5569	1	29	5640	1
15	5570	1	30	5648	1
Detection Percentage (%)					100%

Radar waveform #1			Radar waveform #2		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5494	12	2	5644	6
7	5601	21	3	5637	9
9	5529	27	5	5526	15
12	5643	36	10	5619	30
14	5588	42	11	5590	33
15	5556	45	12	5612	36
19	5639	57	13	5559	39
20	5599	60	16	5522	48
21	5511	63	17	5552	51
23	5613	69	23	5586	69
27	5490	81	26	5540	78
29	5552	87	27	5506	81
30	5614	90	28	5632	84
35	5589	105	40	5643	120
39	5637	117	41	5635	123
42	5638	126	47	5631	141
43	5642	129	48	5510	144
47	5571	141	49	5503	147
48	5551	144	50	5515	150
49	5603	147	52	5490	156
50	5547	150	54	5497	162
57	5605	171	55	5549	165
60	5633	180	56	5531	168
62	5565	186	58	5516	174
65	5530	195	59	5511	177
70	5594	210	61	5548	183
72	5533	216	70	5571	210
74	5505	222	75	5593	225
75	5509	225	79	5532	237
76	5620	228	80	5520	240
77	5503	231	81	5517	243
78	5524	234	88	5614	264
80	5581	240	89	5618	267
83	5555	249	92	5534	276

90	5520	270	96	5533	288
95	5491	285	97	5636	291
98	5532	294	100	5494	300
99	5541	297	--	--	--

Radar waveform #3			Radar waveform #4		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
2	5536	6	1	5640	3
3	5611	9	7	5493	21
9	5591	27	11	5598	33
11	5581	33	26	5502	78
15	5649	45	27	5569	81
20	5499	60	28	5641	84
21	5545	63	30	5642	90
22	5574	66	32	5546	96
25	5646	75	34	5626	102
27	5563	81	35	5492	105
30	5541	90	37	5510	111
31	5572	93	40	5601	120
34	5495	102	41	5508	123
35	5520	105	45	5613	135
36	5621	108	46	5610	138
40	5493	120	50	5507	150
42	5589	126	52	5579	156
45	5490	135	55	5552	165
46	5639	138	59	5497	177
52	5637	156	60	5495	180
53	5593	159	71	5498	213
55	5550	165	73	5516	219
56	5548	168	75	5544	225
58	5610	174	77	5620	231
62	5507	186	80	5533	240
63	5518	189	82	5539	246
66	5512	198	83	5628	249
77	5558	231	95	5581	285
81	5594	243	96	5567	288
82	5568	246	97	5572	291
86	5620	258	99	5568	297
88	5642	264	--	--	--
92	5523	276	--	--	--
95	5618	285	--	--	--

97	5650	291	--	--	--
Radar waveform #5			Radar waveform #6		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5618	3	1	5544	3
5	5515	15	5	5644	15
6	5586	18	6	5562	18
8	5584	24	10	5502	30
10	5599	30	11	5643	33
15	5583	45	12	5580	36
16	5587	48	14	5581	42
19	5574	57	15	5577	45
22	5506	66	17	5567	51
26	5645	78	23	5519	69
29	5490	87	24	5576	72
36	5600	108	28	5529	84
41	5519	123	29	5516	87
47	5557	141	30	5647	90
50	5558	150	35	5505	105
59	5533	177	37	5552	111
62	5624	186	43	5571	129
63	5498	189	45	5534	135
65	5502	195	52	5560	156
67	5551	201	56	5508	168
71	5611	213	62	5533	186
72	5505	216	63	5547	189
77	5544	231	64	5555	192
80	5492	240	66	5588	198
83	5650	249	67	5518	201
86	5616	258	71	5526	213
92	5497	276	73	5506	219
93	5601	279	74	5549	222
97	5606	291	78	5542	234
--	--	--	79	5558	237
--	--	--	83	5646	249
--	--	--	90	5517	270
--	--	--	91	5513	273

--	--	--	95	5593	285
--	--	--	100	5598	300

Radar waveform #7			Radar waveform #8		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
7	5609	21	2	5574	6
8	5578	24	4	5492	12
14	5505	42	7	5587	21
15	5612	45	13	5599	39
19	5629	57	15	5504	45
21	5622	63	19	5580	57
24	5490	72	23	5556	69
34	5639	102	24	5555	72
37	5649	111	27	5553	81
38	5491	114	30	5571	90
46	5576	138	35	5588	105
50	5502	150	36	5621	108
52	5614	156	38	5613	114
53	5563	159	39	5622	117
55	5596	165	40	5619	120
56	5623	168	42	5505	126
58	5608	174	43	5632	129
60	5574	180	44	5636	132
63	5626	189	46	5493	138
67	5557	201	48	5618	144
69	5624	207	50	5515	150
70	5575	210	55	5603	165
73	5616	219	57	5501	171
77	5545	231	59	5590	177
78	5588	234	61	5628	183
81	5607	243	67	5527	201
86	5514	258	69	5516	207
87	5495	261	70	5584	210
90	5577	270	78	5625	234
93	5523	279	82	5514	246
94	5635	282	83	5562	249
96	5636	288	88	5609	264
97	5547	291	95	5499	285
--	--	--	100	5568	300

Radar waveform #9			Radar waveform #10		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
5	5508	15	1	5609	3
7	5527	21	3	5557	9
9	5621	27	4	5539	12
16	5570	48	5	5490	15
20	5603	60	11	5524	33
23	5576	69	13	5605	39
26	5507	78	16	5556	48
29	5641	87	18	5508	54
31	5627	93	21	5580	63
32	5534	96	23	5576	69
34	5515	102	28	5596	84
35	5553	105	32	5553	96
39	5573	117	33	5523	99
44	5612	132	35	5644	105
49	5619	147	38	5499	114
54	5622	162	42	5522	126
55	5528	165	43	5518	129
60	5581	180	47	5569	141
62	5614	186	48	5516	144
63	5557	189	51	5610	153
64	5638	192	53	5594	159
67	5560	201	54	5562	162
71	5509	213	55	5646	165
72	5543	216	57	5525	171
77	5617	231	58	5507	174
78	5616	234	61	5630	183
80	5499	240	62	5640	186
81	5591	243	64	5603	192
82	5630	246	65	5528	195
85	5623	255	66	5606	198
91	5640	273	69	5648	207
94	5559	282	71	5600	213
98	5546	294	73	5588	219
100	5583	300	75	5642	225

--	--	--	83	5537	249
--	--	--	88	5543	264
--	--	--	89	5604	267
--	--	--	91	5563	273
--	--	--	94	5577	282
--	--	--	99	5547	297

Radar waveform #11			Radar waveform #12		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Frequency (MHz)	Hopping Number	Pulse Start (ms)
2	5624	6	2	5574	6
6	5597	18	4	5558	12
7	5618	21	11	5584	33
8	5622	24	12	5645	36
10	5525	30	14	5604	42
12	5549	36	16	5531	48
14	5574	42	17	5536	51
18	5566	54	19	5624	57
20	5611	60	20	5605	60
22	5589	66	23	5589	69
30	5617	90	26	5544	78
32	5557	96	28	5622	84
34	5645	102	32	5630	96
35	5571	105	38	5581	114
40	5605	120	45	5637	135
43	5561	129	49	5551	147
46	5539	138	54	5560	162
49	5587	147	56	5557	168
51	5588	153	57	5526	171
53	5649	159	66	5518	198
61	5586	183	73	5564	219
62	5555	186	76	5639	228
63	5530	189	80	5532	240
65	5616	195	87	5565	261
66	5590	198	89	5616	267
67	5523	201	91	5520	273
69	5564	207	94	5625	282
70	5558	210	95	5582	285
77	5637	231	97	5555	291
80	5638	240	--	--	--
82	5573	246	--	--	--
85	5537	255	--	--	--
89	5625	267	--	--	--
92	5545	276	--	--	--

94	5599	282	--	--	--
95	5608	285	--	--	--
96	5552	288	--	--	--
98	5491	294	--	--	--
100	5533	300	--	--	--

Radar waveform #13			Radar waveform #14		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
4	5503	12	1	5528	3
6	5535	18	2	5565	6
8	5498	24	4	5575	12
9	5600	27	6	5596	18
10	5544	30	8	5585	24
12	5571	36	12	5537	36
16	5601	48	16	5502	48
19	5604	57	18	5532	54
23	5551	69	22	5578	66
24	5515	72	26	5597	78
25	5547	75	27	5594	81
29	5637	87	38	5591	114
30	5607	90	39	5504	117
33	5620	99	45	5521	135
35	5622	105	51	5525	153
41	5502	123	58	5560	174
43	5491	129	59	5646	177
45	5553	135	65	5631	195
50	5522	150	66	5500	198
51	5538	153	74	5498	222
52	5630	156	77	5647	231
55	5558	165	80	5520	240
57	5628	171	82	5609	246
59	5579	177	89	5551	267
61	5584	183	91	5553	273
62	5594	186	--	--	--
63	5643	189	--	--	--
64	5508	192	--	--	--
70	5524	210	--	--	--
75	5580	225	--	--	--
79	5513	237	--	--	--
83	5597	249	--	--	--
86	5586	258	--	--	--
87	5633	261	--	--	--

88	5619	264	--	--	--
91	5529	273	--	--	--
96	5641	288	--	--	--
97	5567	291	--	--	--

Radar waveform #15			Radar waveform #16		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5575	3	1	5573	3
2	5614	6	4	5494	12
5	5545	15	5	5572	15
7	5499	21	8	5602	24
13	5599	39	9	5594	27
16	5522	48	11	5609	33
23	5565	69	13	5536	39
33	5514	99	14	5561	42
36	5544	108	15	5517	45
37	5650	111	21	5549	63
42	5541	126	22	5558	66
51	5598	153	24	5516	72
55	5498	165	25	5565	75
56	5625	168	27	5508	81
57	5580	171	29	5511	87
58	5532	174	32	5648	96
59	5622	177	34	5588	102
63	5642	189	37	5617	111
66	5548	198	44	5507	132
68	5601	204	50	5559	150
71	5602	213	53	5604	159
72	5526	216	58	5597	174
75	5530	225	60	5552	180
76	5495	228	63	5550	189
77	5527	231	64	5624	192
81	5627	243	65	5548	195
82	5567	246	67	5532	201
83	5633	249	69	5647	207
85	5517	255	71	5556	213
90	5584	270	78	5540	234
92	5588	276	83	5492	249
93	5585	279	87	5569	261
100	5508	300	89	5506	267
--	--	--	90	5575	270

--	--	--	91	5543	273
--	--	--	97	5607	291
--	--	--	98	5649	294

Radar waveform #17			Radar waveform #18		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
6	5518	18	3	5522	9
7	5494	21	4	5611	12
8	5578	24	9	5534	27
12	5562	36	12	5619	36
18	5551	54	14	5519	42
19	5506	57	15	5513	45
23	5545	69	19	5589	57
25	5512	75	20	5627	60
29	5650	87	23	5517	69
37	5491	111	25	5520	75
38	5511	114	26	5518	78
41	5492	123	38	5598	114
42	5549	126	40	5495	120
43	5500	129	43	5633	129
45	5605	135	52	5532	156
46	5611	138	53	5563	159
47	5632	141	58	5628	174
51	5558	153	59	5603	177
53	5569	159	67	5622	201
55	5623	165	74	5526	222
56	5498	168	76	5632	228
58	5645	174	81	5647	243
66	5540	198	82	5643	246
67	5608	201	85	5610	255
72	5530	216	86	5496	258
74	5634	222	89	5550	267
75	5599	225	91	5542	273
76	5602	228	95	5594	285
79	5532	237	98	5567	294
85	5509	255	99	5511	297
88	5559	264	--	--	--
91	5624	273	--	--	--
95	5542	285	--	--	--

Radar waveform #19			Radar waveform #20		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5553	9	1	5568	3
8	5547	24	2	5535	6
9	5504	27	4	5566	12
10	5638	30	5	5560	15
12	5525	36	7	5548	21
14	5612	42	9	5571	27
22	5585	66	12	5646	36
23	5494	69	13	5626	39
31	5560	93	14	5594	42
38	5647	114	16	5552	48
41	5567	123	21	5617	63
45	5559	135	24	5619	72
46	5516	138	26	5490	78
49	5592	147	33	5521	99
55	5646	165	36	5517	108
61	5511	183	37	5503	111
64	5557	192	46	5514	138
68	5518	204	47	5618	141
72	5532	216	57	5518	171
75	5619	225	58	5492	174
76	5617	228	59	5537	177
77	5639	231	63	5498	189
83	5577	249	64	5513	192
84	5520	252	65	5604	195
93	5501	279	67	5593	201
99	5507	297	68	5496	204
--	--	--	72	5557	216
--	--	--	81	5572	243
--	--	--	86	5579	258
--	--	--	92	5527	276
--	--	--	94	5512	282
--	--	--	97	5567	291
--	--	--	99	5532	297

Radar waveform #21			Radar waveform #22		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5553	3	2	5523	6
3	5571	9	10	5502	30
5	5649	15	13	5608	39
17	5589	51	14	5602	42
21	5577	63	16	5585	48
23	5567	69	19	5504	57
29	5608	87	31	5575	93
30	5612	90	35	5623	105
36	5588	108	38	5530	114
37	5637	111	42	5529	126
40	5602	120	45	5509	135
45	5525	135	46	5515	138
46	5611	138	52	5554	156
48	5524	144	55	5581	165
49	5548	147	56	5490	168
50	5621	150	57	5622	171
51	5532	153	61	5551	183
53	5569	159	67	5557	201
54	5529	162	78	5596	234
58	5507	174	80	5572	240
62	5628	186	82	5552	246
66	5552	198	83	5498	249
73	5492	219	84	5511	252
78	5619	234	87	5592	261
79	5630	237	88	5603	264
80	5650	240	89	5526	267
82	5615	246	91	5583	273
86	5645	258	93	5605	279
87	5636	261	94	5558	282
89	5504	267	100	5568	300
90	5505	270	--	--	--
92	5543	276	--	--	--
95	5648	285	--	--	--
99	5512	297	--	--	--

Radar waveform #23			Radar waveform #24		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5512	9	6	5621	18
8	5583	24	7	5555	21
9	5523	27	9	5531	27
12	5600	36	13	5578	39
15	5541	45	17	5537	51
18	5623	54	21	5635	63
20	5497	60	25	5522	75
23	5577	69	26	5538	78
24	5595	72	31	5510	93
25	5603	75	36	5582	108
28	5602	84	37	5521	111
33	5503	99	38	5532	114
34	5649	102	41	5639	123
43	5500	129	42	5520	126
45	5565	135	44	5626	132
46	5644	138	45	5530	135
47	5596	141	46	5561	138
55	5642	165	55	5515	165
56	5559	168	56	5641	168
57	5562	171	57	5604	171
60	5490	180	58	5549	174
62	5635	186	59	5564	177
65	5545	195	61	5577	183
69	5495	207	62	5602	186
72	5584	216	64	5567	192
83	5627	249	66	5603	198
84	5610	252	67	5636	201
85	5496	255	69	5629	207
89	5499	267	70	5601	210
92	5493	276	72	5648	216
93	5560	279	78	5502	234
94	5556	282	80	5616	240
97	5508	291	83	5650	249
99	5516	297	89	5586	267

100	5517	300	90	5599	270
--	--	--	93	5504	279
--	--	--	96	5525	288
--	--	--	100	5508	300

Radar waveform #25			Radar waveform #26		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
3	5543	9	2	5632	6
4	5617	12	3	5519	9
9	5601	27	4	5594	12
13	5588	39	6	5492	18
15	5615	45	10	5548	30
16	5636	48	14	5577	42
18	5536	54	16	5507	48
22	5549	66	22	5557	66
23	5503	69	26	5539	78
25	5643	75	40	5541	120
28	5604	84	44	5497	132
32	5493	96	47	5575	141
39	5590	117	48	5615	144
41	5631	123	52	5527	156
43	5640	129	60	5598	180
44	5598	132	62	5592	186
48	5491	144	64	5614	192
49	5630	147	65	5570	195
50	5619	150	73	5533	219
53	5608	159	77	5520	231
54	5525	162	81	5636	243
61	5507	183	86	5608	258
62	5613	186	88	5623	264
63	5632	189	89	5568	267
66	5586	198	91	5631	273
68	5505	204	93	5530	279
72	5649	216	94	5516	282
74	5571	222	95	5550	285
77	5524	231	97	5526	291
83	5496	249	98	5593	294
89	5577	267	100	5490	300
91	5584	273	--	--	--
96	5603	288	--	--	--

Radar waveform #27			Radar waveform #28		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5535	3	3	5622	9
3	5588	9	4	5504	12
5	5519	15	9	5635	27
10	5595	30	13	5597	39
14	5553	42	16	5537	48
16	5528	48	20	5577	60
19	5492	57	24	5506	72
22	5521	66	26	5621	78
23	5584	69	27	5513	81
25	5504	75	34	5553	102
30	5490	90	35	5557	105
35	5552	105	36	5610	108
39	5498	117	40	5532	120
42	5604	126	44	5503	132
43	5571	129	47	5505	141
46	5609	138	56	5588	168
51	5558	153	59	5566	177
53	5648	159	63	5514	189
54	5580	162	64	5580	192
55	5618	165	65	5498	195
61	5568	183	71	5624	213
63	5565	189	72	5636	216
68	5512	204	73	5619	219
71	5610	213	74	5611	222
72	5574	216	75	5558	225
74	5516	222	77	5649	231
75	5601	225	78	5616	234
79	5613	237	83	5617	249
83	5612	249	84	5644	252
86	5496	258	87	5570	261
87	5515	261	89	5539	267
88	5620	264	98	5520	294
90	5555	270	99	5641	297
93	5531	279	100	5640	300

99	5636	297	--	--	--
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Radar waveform #29			Radar waveform #30		
Hopping Number	Frequency (MHz)	Pulse Start (ms)	Hopping Number	Frequency (MHz)	Pulse Start (ms)
1	5537	3	5	5514	15
2	5512	6	8	5536	24
4	5528	12	14	5540	42
6	5532	18	16	5499	48
12	5507	36	18	5620	54
15	5545	45	22	5525	66
23	5570	69	23	5550	69
25	5549	75	28	5591	84
27	5613	81	31	5644	93
33	5524	99	37	5528	111
35	5558	105	38	5609	114
36	5607	108	41	5602	123
40	5544	120	42	5519	126
41	5499	123	45	5562	135
48	5604	144	48	5543	144
50	5490	150	50	5570	150
51	5546	153	51	5498	153
54	5636	162	57	5595	171
55	5585	165	59	5537	177
58	5643	174	65	5637	195
62	5498	186	66	5604	198
64	5632	192	68	5545	204
65	5562	195	71	5526	213
70	5508	210	73	5491	219
77	5642	231	74	5649	222
78	5541	234	79	5599	237
79	5614	237	81	5529	243
82	5522	246	87	5554	261
84	5497	252	89	5538	267
85	5618	255	90	5642	270
89	5513	267	91	5636	273
92	5552	276	94	5546	282
96	5554	288	95	5611	285
99	5517	297	96	5530	288

100	5565	300	97	5615	291
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