



**DFS PORTION OF  
FCC CFR47 PART 15 SUBPART E  
CERTIFICATION TEST REPORT  
FOR**

**WIRELESS ACCESS POINT**

**MODEL NUMBER: AP-AG-AT-02**

**FCC ID: HZB-L49U24U50**

**REPORT NUMBER: 07U10859-1**

**ISSUE DATE: APRIL 19, 2007**

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**NVLAP LAB CODE 200065-0**

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
--	4/19/07	Initial Issue	M. Heckrotte

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# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** PROXIM WIRELESS CORPORATION  
2115 O'NEL DRIVE  
SAN JOSE, CA 95131, USA

**EUT DESCRIPTION:** WIRELESS ACCESS POINT

**MODEL:** AP-AG-AT-02

**SERIAL NUMBER:** O5UTS0700090

**DATE TESTED:** MARCH 21, 2007

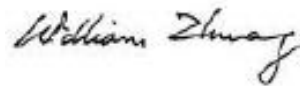
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
DFS PORTION OF FCC PART 15 SUBPART E	NO NON-COMPLIANCE NOTED

Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

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EMC ENGINEER  
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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 15 and FCC 06-96 APPENDIX "COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION".

## 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ccsemc.com>.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Power Line Conducted Emission	+/- 2.9 dB

Uncertainty figures are valid to a confidence level of 95%.

## 5. LIMITS AND RESULTS

### 5.1. DYNAMIC FREQUENCY SELECTION

#### 5.1.1. LIMITS

§15.407 (h) and FCC 06-96 APPENDIX “COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVCIES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION”.

**Table 1: Applicability of DFS requirements prior to use of a channel**

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client (with radar detection)
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>Uniform Spreading</i>	Yes	Not required	Not required

**Table 2: Applicability of DFS requirements during normal operation**

Requirement	Operational Mode		
	Master	Client (without DFS)	Client (with DFS)
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Closing Transmission Time</i>	Yes	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes	Yes

**Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring**

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.	

**Table 4: DFS Response requirement values**

Parameter	Value
<i>Non-occupancy period</i>	30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds
<i>Channel Closing Transmission Time</i>	200 milliseconds + approx. 60 milliseconds over remaining 10 second period
The instant that the <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> begins is as follows: <ul style="list-style-type: none"> <li>• For the Short pulse radar Test Signals this instant is the end of the <i>Burst</i>.</li> <li>• For the Frequency Hopping radar Test Signal, this instant is the end of the last radar burst generated.</li> <li>• For the Long Pulse radar Test Signal this instant is the end of the 12 second period defining the radar transmission.</li> </ul> The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate channel changes (an aggregate of approximately 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.	

**Table 5 – Short Pulse Radar Test Waveforms**

Radar Type	Pulse Width (Microseconds)	PRI (Microseconds)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
1	1	1428	18	60%	30
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

**Table 6 – Long Pulse Radar Test Signal**

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

**Table 7 – Frequency Hopping Radar Test Signal**

Radar Waveform	Pulse Width (µsec)	PRI (µsec)	Burst Length (ms)	Pulses per Hop	Hopping Rate (kHz)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	300	9	.333	70%	30



## 5.1.2. TEST AND MEASUREMENT SYSTEM

### SYSTEM OVERVIEW

The measurement system is based on a conducted test method.

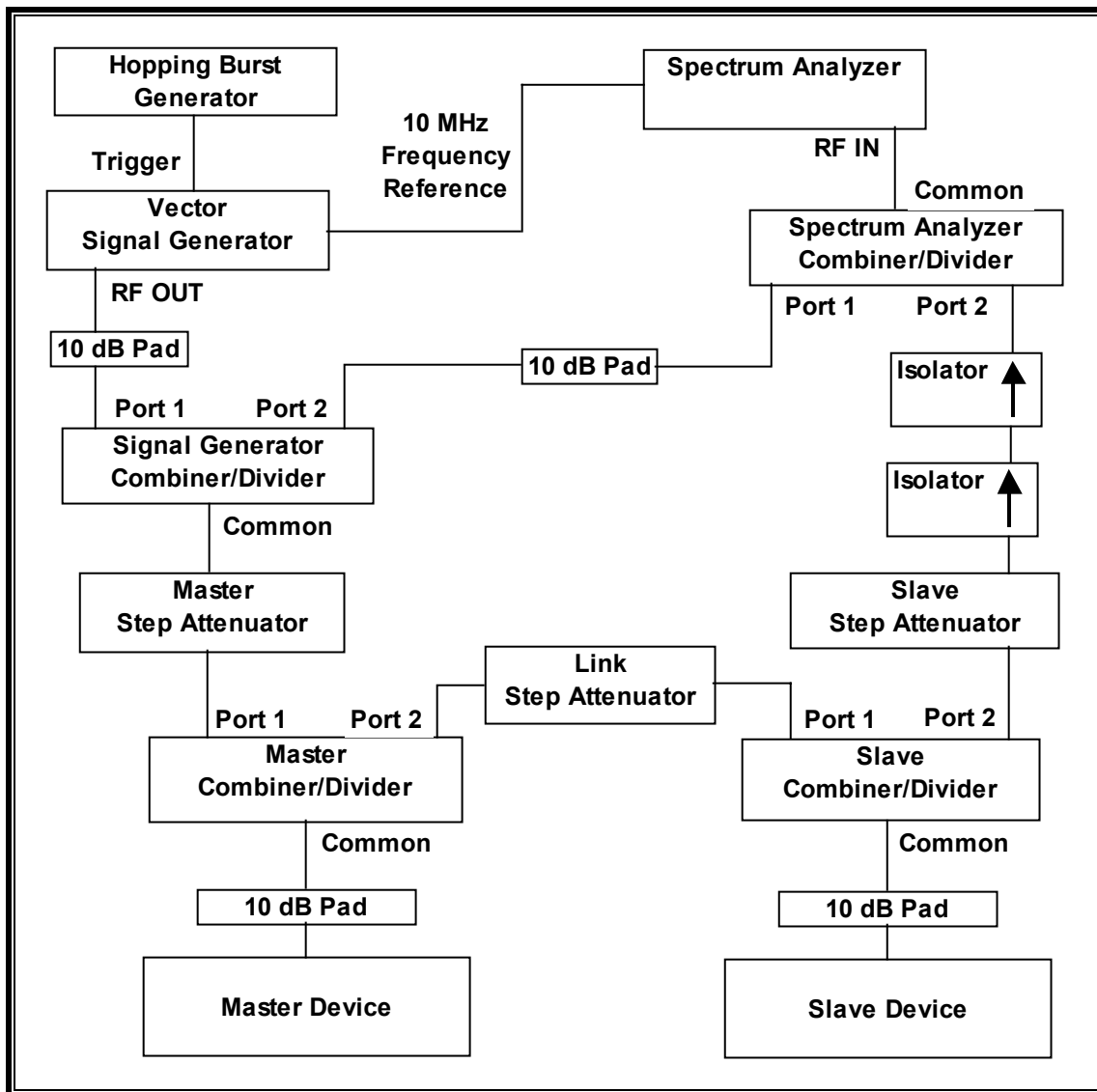
The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from  $F_L$  to  $F_H$  for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer set to display 8001 bins on the horizontal axis. The time-domain resolution is 2 msec / bin with a 16 second sweep time, meeting the 10 second short pulse reporting criteria. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold. The time-domain resolution is 3 msec / bin with a 24 second sweep time, meeting the 22 second long pulse reporting criteria and allowing a minimum of 10 seconds after the end of the long pulse waveform.

**CONDUCTED METHOD SYSTEM BLOCK DIAGRAM**



## **SYSTEM CALIBRATION**

Connect the spectrum analyzer to the test system in place of the master device. Set the signal generator to CW mode. Adjust the amplitude of the signal generator to yield a measured level of  $-64$  dBm on the spectrum analyzer.

Without changing any of the instrument settings, reconnect the spectrum analyzer to the Common port of the Spectrum Analyzer Combiner/Divider and connect a 50 ohm load to the Master Device port of the test system.

Measure the amplitude and calculate the difference from  $-64$  dBm. Adjust the Reference Level Offset of the spectrum analyzer to this difference. Confirm that the signal is displayed at  $-64$  dBm. Readjust the RBW and VBW to 3 MHz, set the span to 10 MHz, and confirm that the signal is still displayed at  $-64$  dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of  $-64$  dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

Set the signal generator to produce a radar waveform, trigger a burst manually and measure the level on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection threshold. Separate signal generator amplitude settings are determined as required for each radar type.

## **ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL**

Establish a link between the Master and Slave, adjusting the Link Step Attenuator as needed to provide a suitable received level at the Master and Slave devices. Stream the video test file to generate WLAN traffic. Confirm that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold. Confirm that the displayed traffic is from the Master Device. Confirm that the displayed traffic does not include Slave Device traffic.

If a different setting of the Master Step Attenuator is required to meet the above conditions, perform a new System Calibration for the new Master Step Attenuator setting.

### 5.1.3. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	Cal Due
Spectrum Analyzer 3 Hz ~ 44 GHz	Agilent / HP	E4446A	US42070220	7/26/2007
Vector Signal Generator 250kHz-20GHz	Agilent / HP	E8267C	US43320336	11/2/2007
High Speed Digital I/O Card	National Instruments	PCI-6534	HA1612845	1/16/2008

### 5.1.4. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

The EUT is a Master Device.

The highest conducted power level within these bands is 23 dBm in the 5250-5350 MHz band and 24 dBm in the 5470-5725 MHz band.

The highest gain antenna assembly utilized with the EUT has a gain of 33.4 dBi. The lowest gain antenna assembly utilized with the EUT has a gain of 0 dBi.

The highest radiated power level within these bands is 30 dBm EIRP.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is -64 dBm. After correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is  $-64 + 0 + 1 = -63$  dBm.

The calibrated conducted DFS Detection Threshold level is set to -64 dBm.

The EUT uses one transmitter connected to a 50-ohm coaxial antenna port to perform conducted tests.

The Slave device associated with the EUT during these tests does not have radar detection capability.

WLAN traffic is generated by streaming the video file TestFile.mp2 “6 ½ Magic Hours” from the Master to the Slave in full motion video mode using the media player with the V2.61 Codec package.

TPC is required since the maximum EIRP is greater than 500 mW (27 dBm).

The EUT utilizes the 802.11a architecture. One nominal channel bandwidth is implemented: 20 MHz.

The software installed in the access point is revision 3.6.0.

Test results show that the EUT requires 44.76 seconds to complete its initial power-up cycle.

#### **MANUFACTURER’S DESCRIPTION OF TPC FUNCTION**

This is in a separate document.

#### **MANUFACTURER’S DESCRIPTION OF UNIFORM CHANNEL SPREADING FUNCTION**

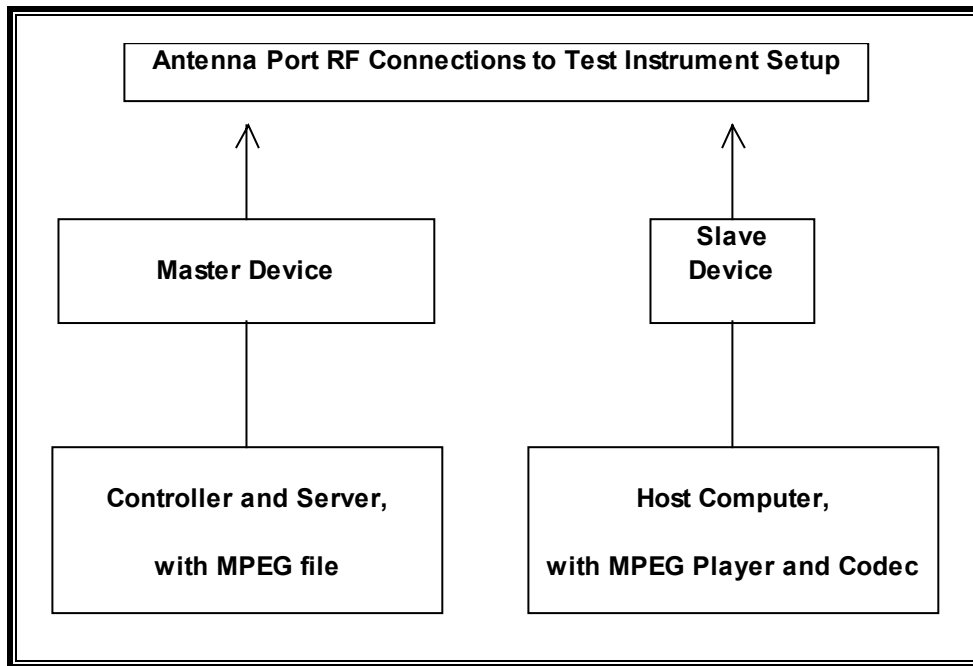
This is in a separate document.

### 5.1.5. SETUP OF EUT

#### SUPPORT EQUIPMENT

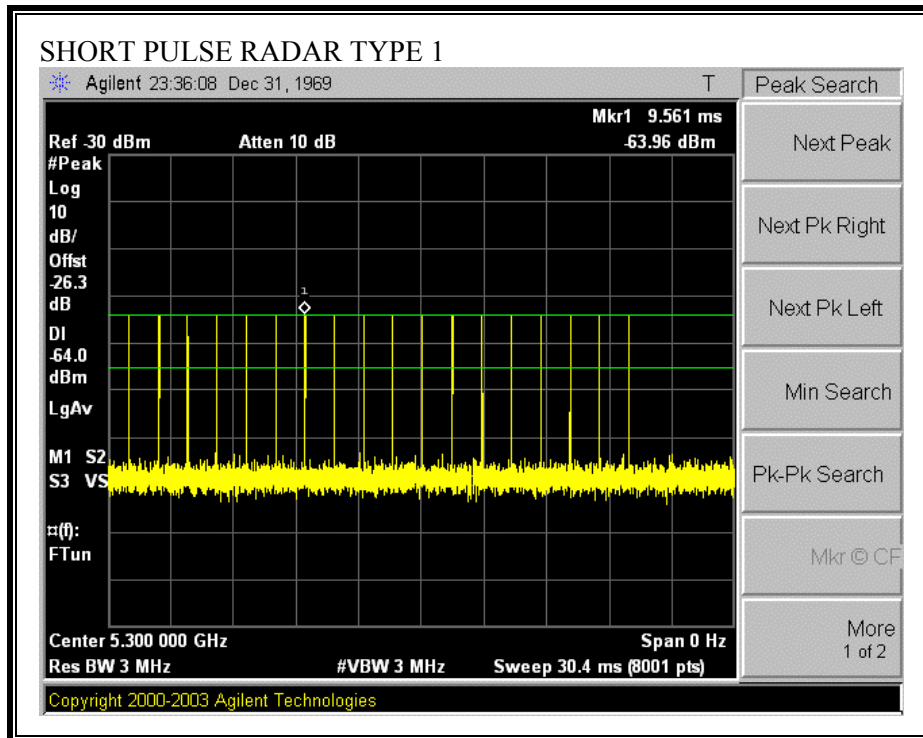
PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	DELL	N/A	N/A	DoC
Laptop	DELL	DELL	1YM4Q91	DoC
AC Adapter	HP	HP	N/A	DoC
Laptop	HP	HP	CNU533210L	DoC
Slave Device	Askey	Prototype	Prorotype	N/A

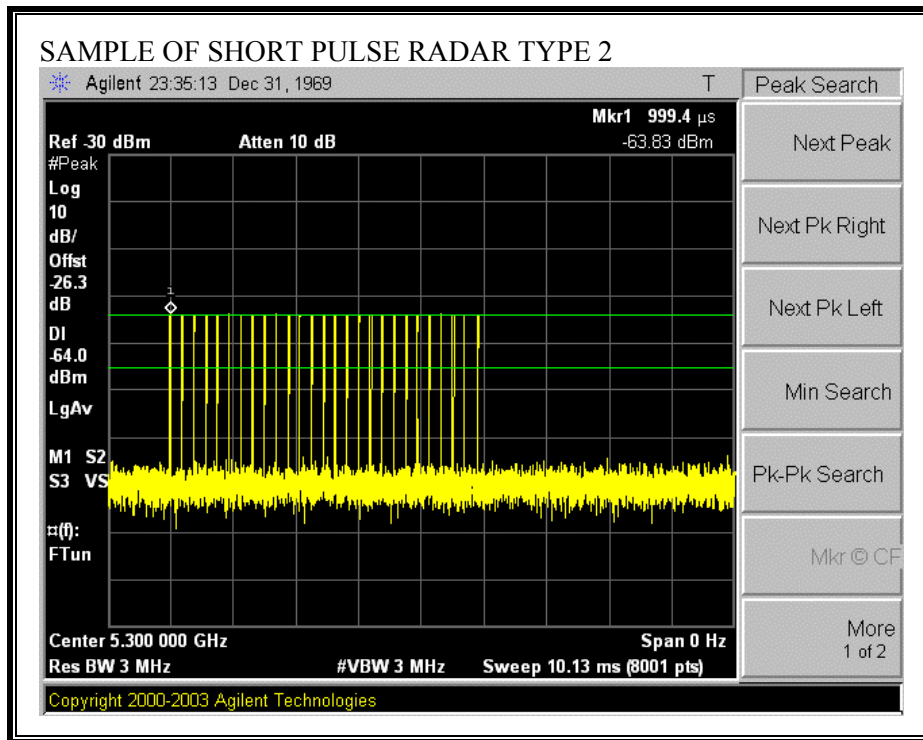
#### TEST SETUP



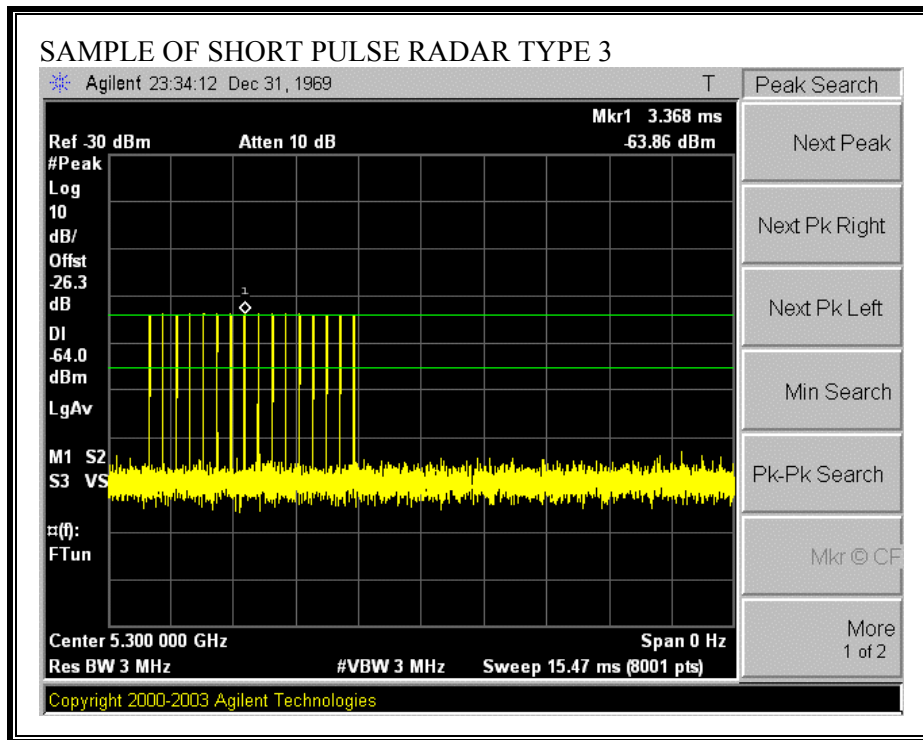
### 5.1.6. PLOTS OF RADAR WAVEFORM, AND WLAN TRAFFIC

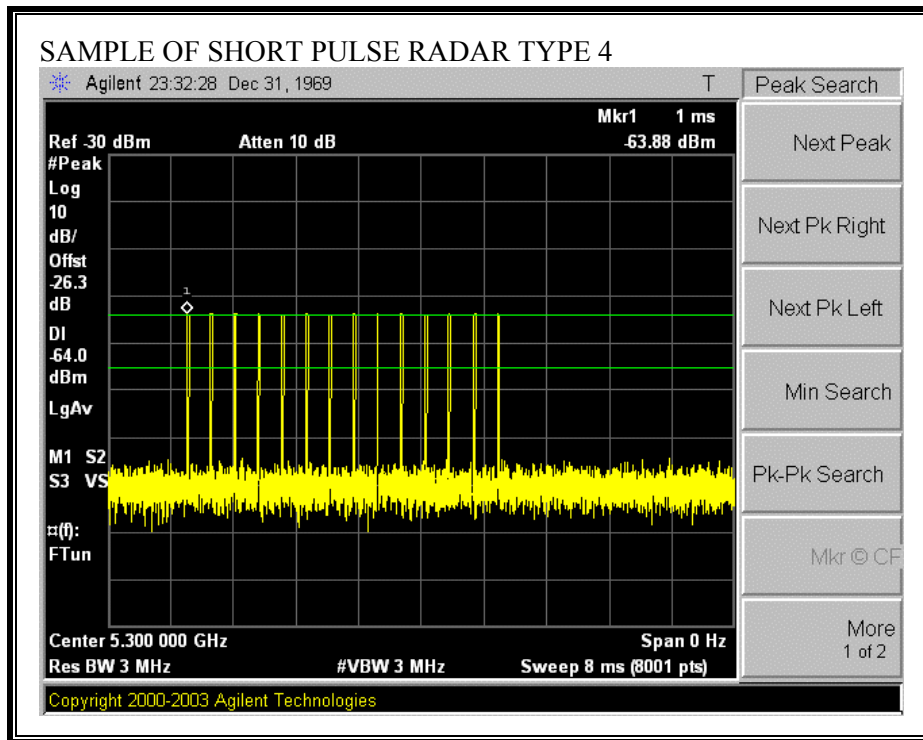
#### PLOTS OF RADAR WAVEFORMS



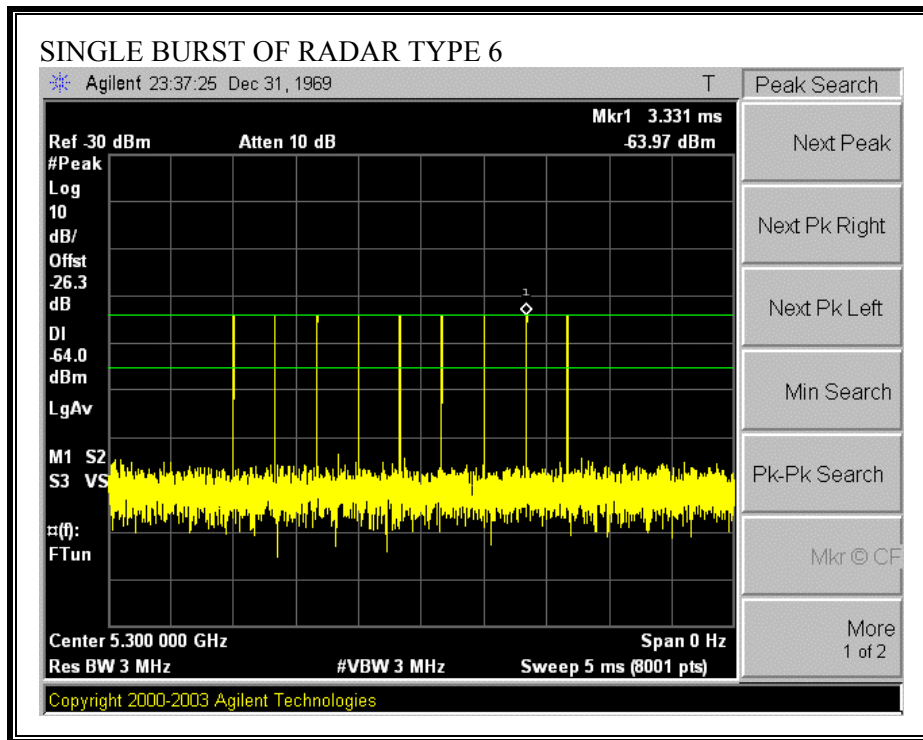




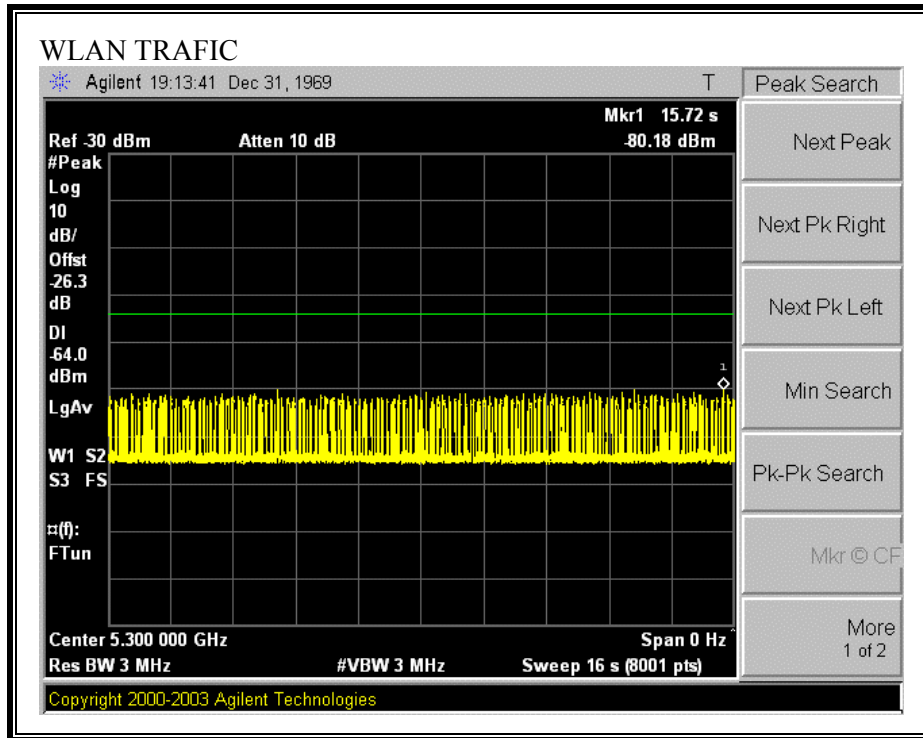








**PLOT OF WLAN TRAFFIC FROM MASTER**



### **5.1.7. TEST CHANNEL AND METHOD**

All tests were performed at a channel center frequency of 5300 MHz utilizing a conducted test method.

### **5.1.8. CHANNEL AVAILABILITY CHECK TIME**

#### **TEST PROCEDURE TO DETERMINE INITIAL POWER-UP CYCLE TIME**

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

#### **TEST PROCEDURE FOR TIMING OF RADAR BURST**

With a link established on channel, the EUT was rebooted. A radar signal was triggered within 0 to 6 seconds after the initial power-up period, and transmissions on the channel were monitored on the spectrum analyzer.

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

**CHANNEL AVAILABILITY CHECK TIME RESULTS**

No non-compliance noted:

<b>Time required for EUT to complete the initial power-up cycle (sec)</b>
44.76

If a radar signal is detected during the channel availability check then the PC controlling the EUT displays a message stating that radar was detected.

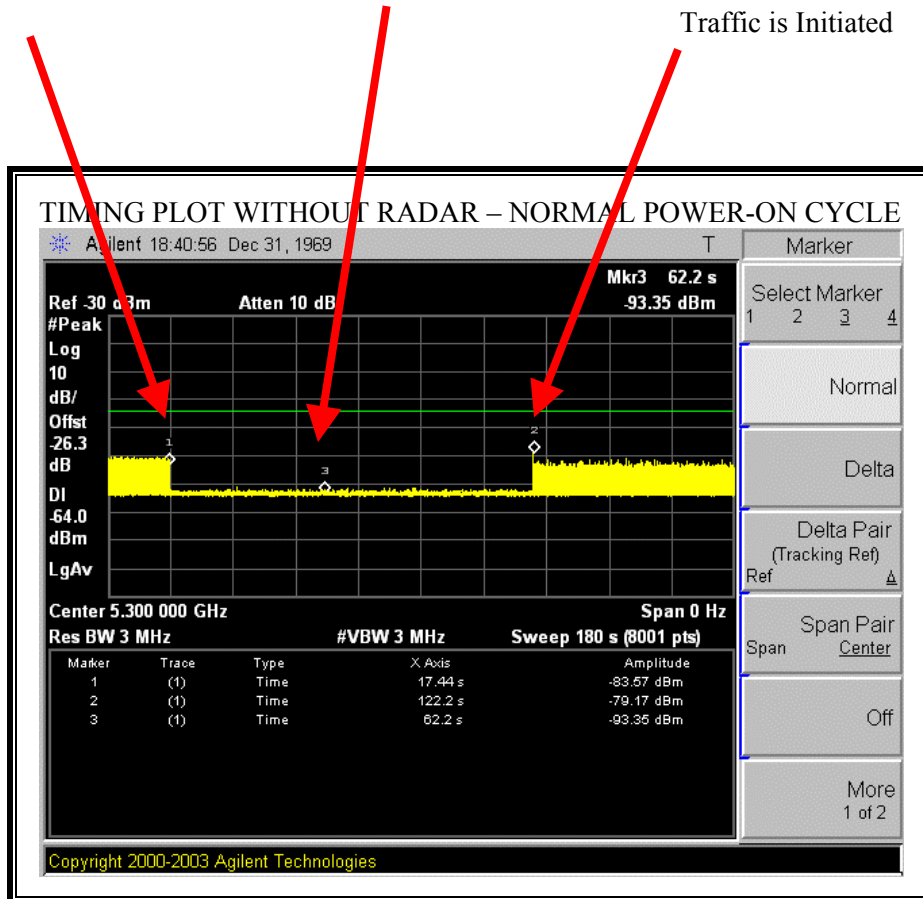
<b>Timing of Radar Burst</b>	<b>Display on EUT / PC Control Computer</b>	<b>Spectrum Analyzer Display</b>
No Radar Triggered	EUT Initiates Transmissions	Transmissions begin on channel after completion of the initial power-up cycle and the 60 second CAC
Within 0 to 6 second window	EUT indicates radar detected  EUT does not display any radar parameter values	No transmissions on channel
Within 54 to 60 second window	EUT indicates radar detected  EUT does not display any radar parameter values	No transmissions on channel

**TIMING PLOT WITHOUT RADAR DURING CAC**

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

End of Initial Power-up cycle  
 Start of CAC

End of CAC  
 Traffic is Initiated



Note: The initial power-up cycle requires  $(122.2 - 17.44 - 60) = 44.76$  seconds.

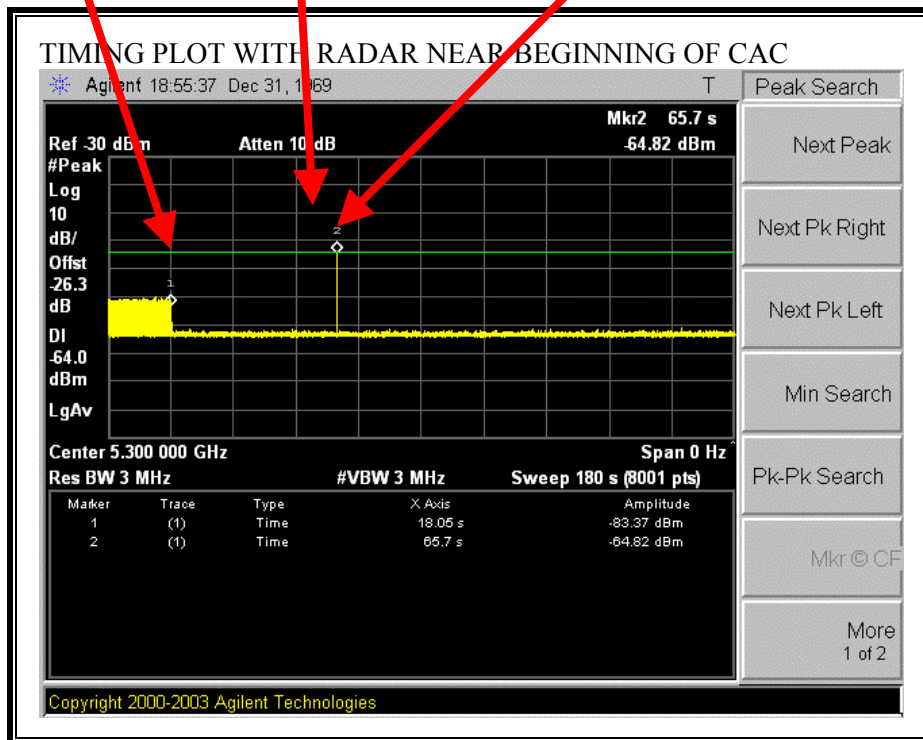


**TIMING PLOT WITH RADAR NEAR BEGINNING OF CAC**

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

End of Initial Power-up cycle  
Start of CAC

Radar Signal Applied



The radar signal is applied  $(65.7 - 18.05) = 47.65$  seconds after reboot, which is  $(47.65 - 44.76) = 2.89$  seconds after the completion of the initial power-up cycle / start of the CAC period.

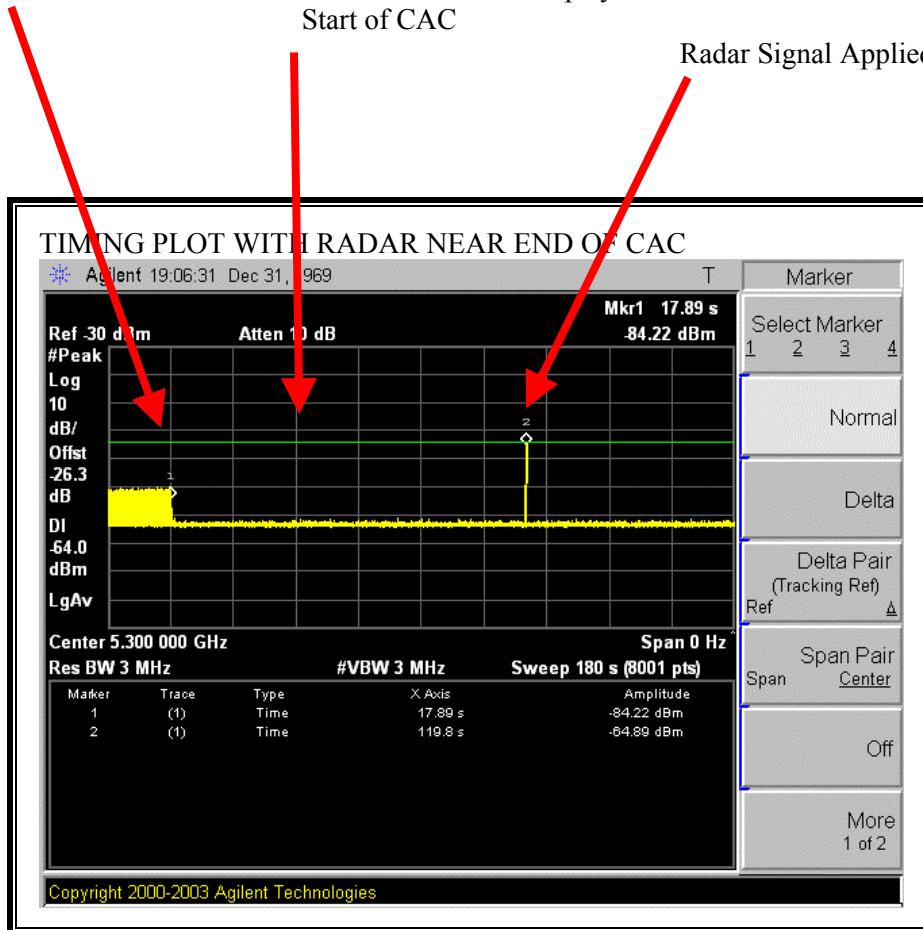
No EUT transmissions were observed after the radar signal.

**TIMING PLOT WITH RADAR NEAR END OF CAC**

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

End of Initial Power-up cycle  
Start of CAC

Radar Signal Applied



The radar signal is applied  $(119.8 - 17.89) = 101.91$  seconds after reboot, which is  $(101.91 - 44.76) = 57.15$  seconds after the completion of the initial power-up cycle / start of the CAC period.

No EUT transmissions were observed after the radar signal.

### **5.1.9. CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME**

#### **GENERAL REPORTING NOTES**

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

#### **SHORT PULSE RADAR REPORTING NOTES**

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

The aggregate channel closing transmission time is calculated as follows:

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

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

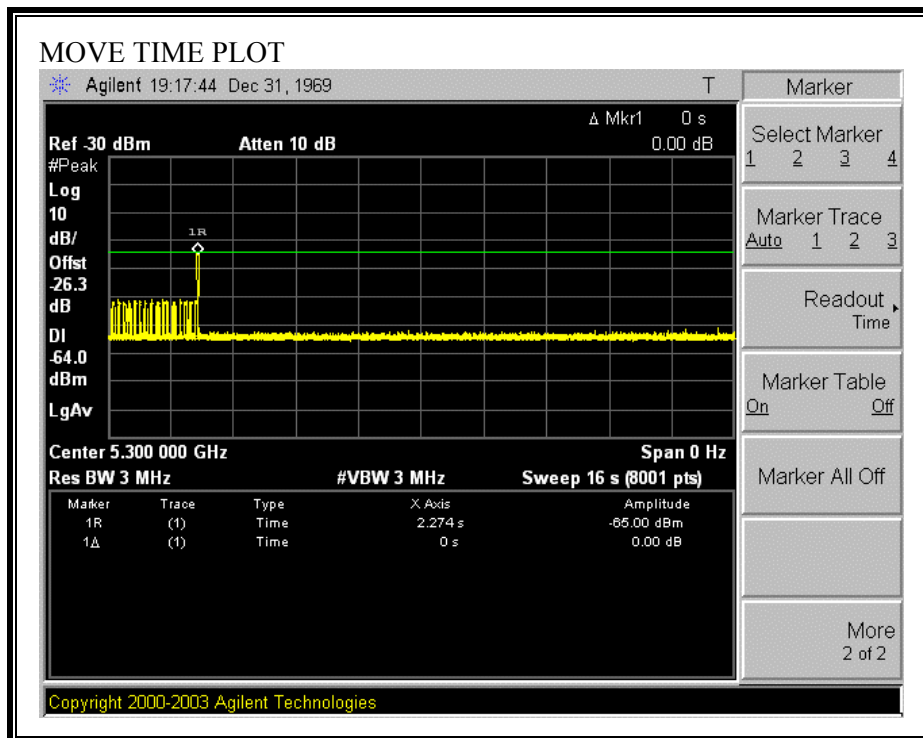
#### **LONG PULSE RADAR REPORTING NOTES**

The delta marker is set to 10 seconds after the end of the radar pulse.

**CHANNEL MOVE TIME RESULTS**

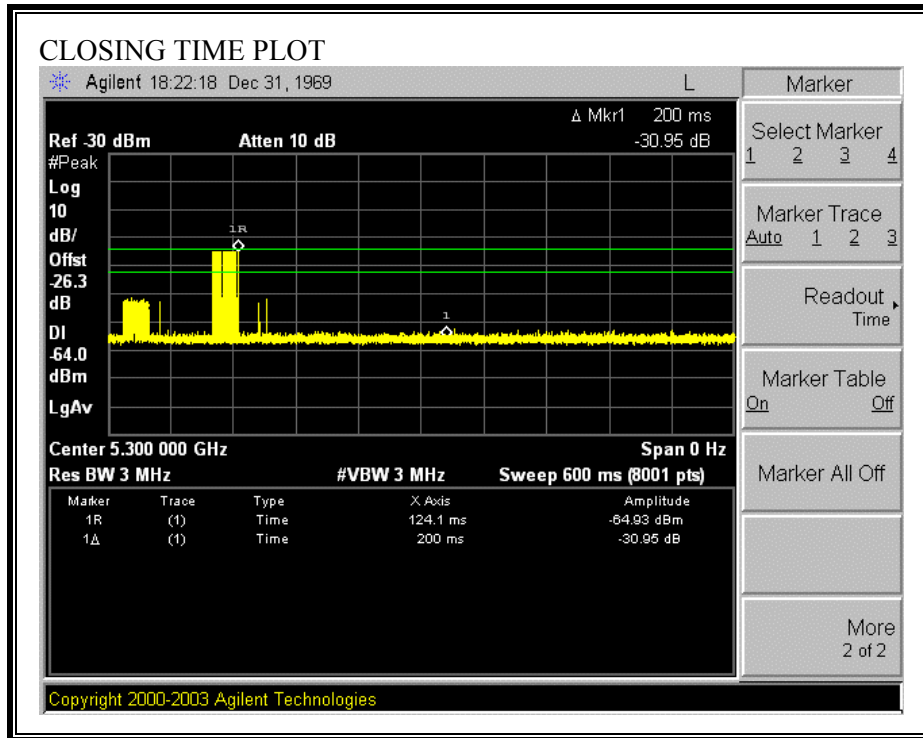
No non-compliance noted:

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



**CHANNEL CLOSING TIME RESULTS**

No non-compliance noted:

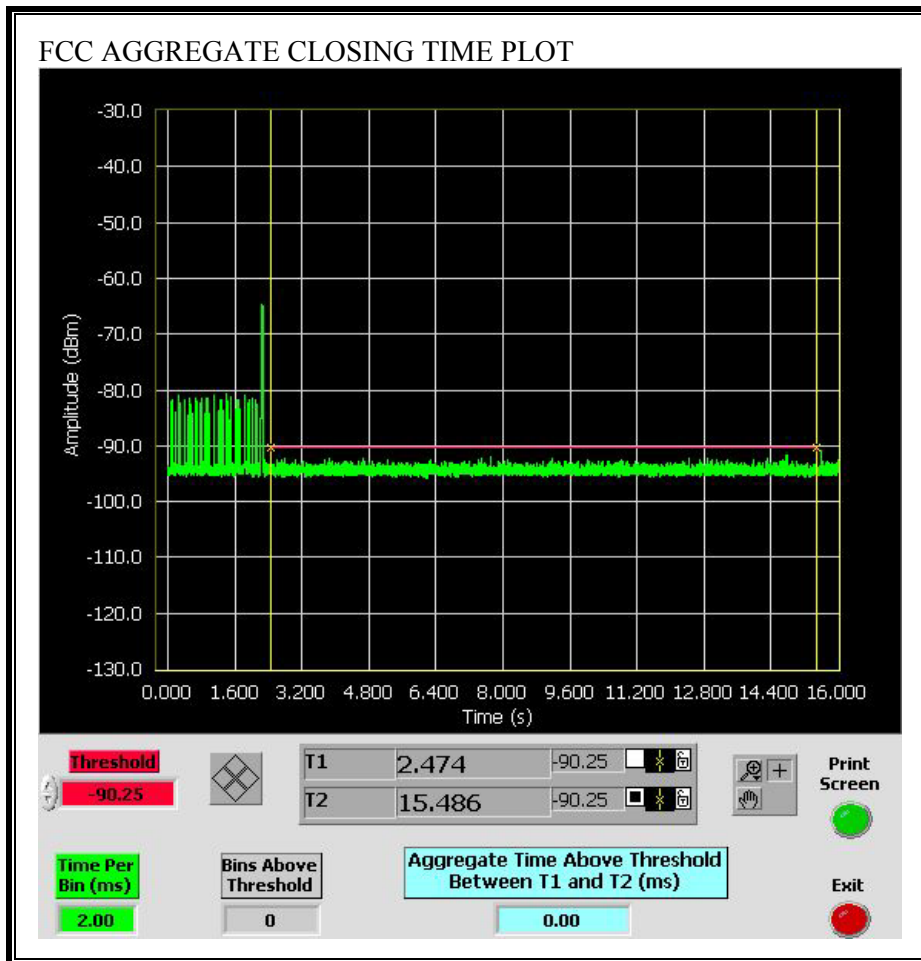


**FCC AGGREGATE CHANNEL CLOSING TIME RESULTS**

No non-compliance noted:

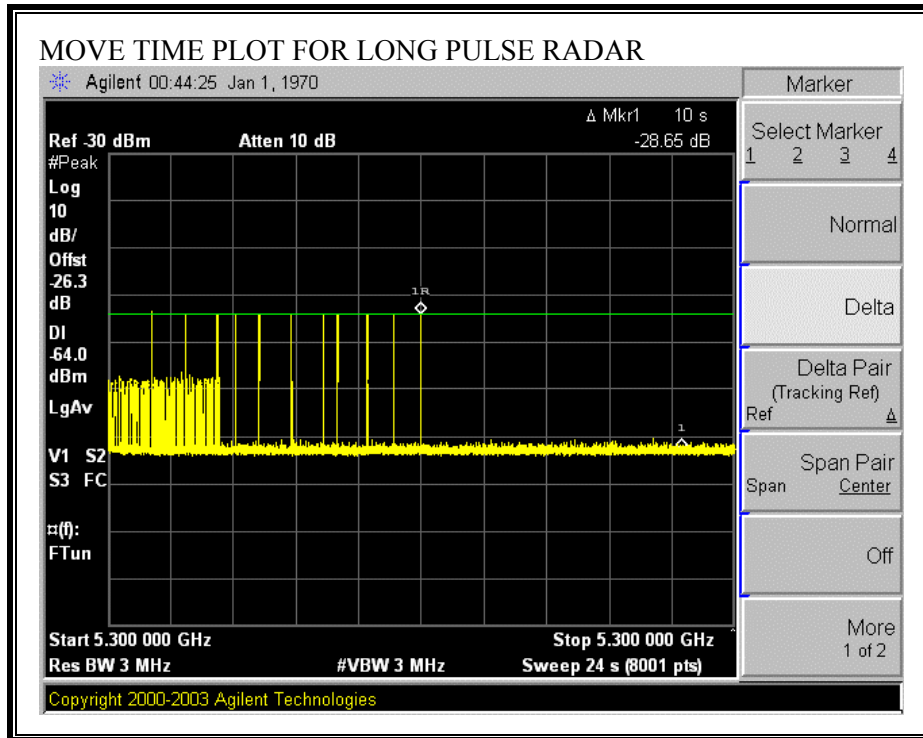
Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
0.00	60	60.00

No transmissions are observed during the aggregate monitoring period.



**LONG PULSE CHANNEL MOVE TIME RESULTS**

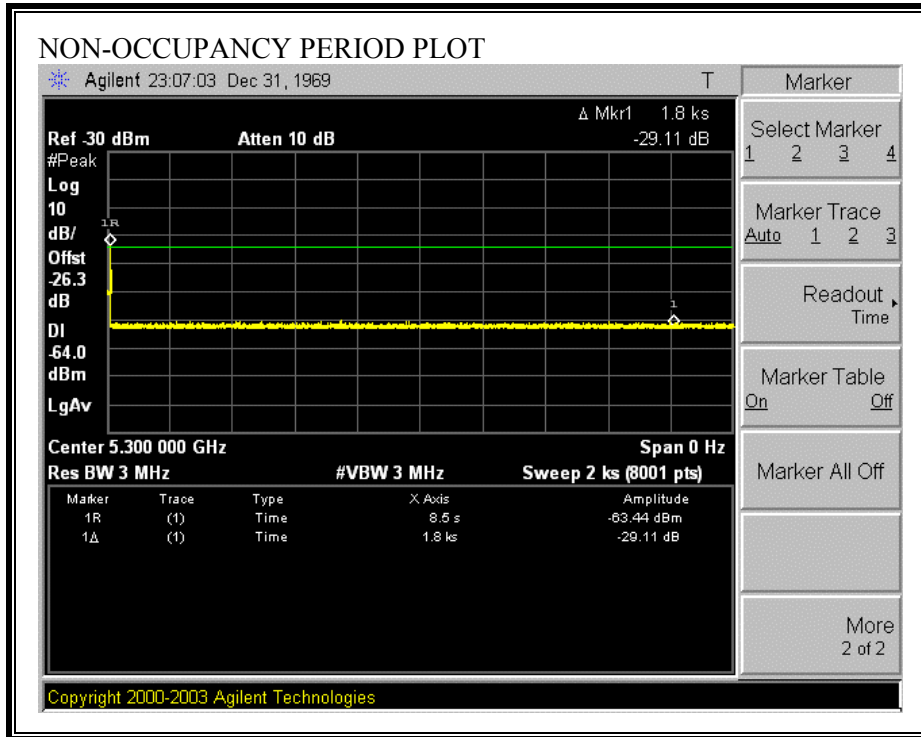
No non-compliance noted: The traffic ceases prior to the end of the radar waveform, therefore it also ceases prior to 10 seconds after the end of the radar waveform.



### 5.1.10. NON-OCCUPANCY PERIOD

#### RESULTS

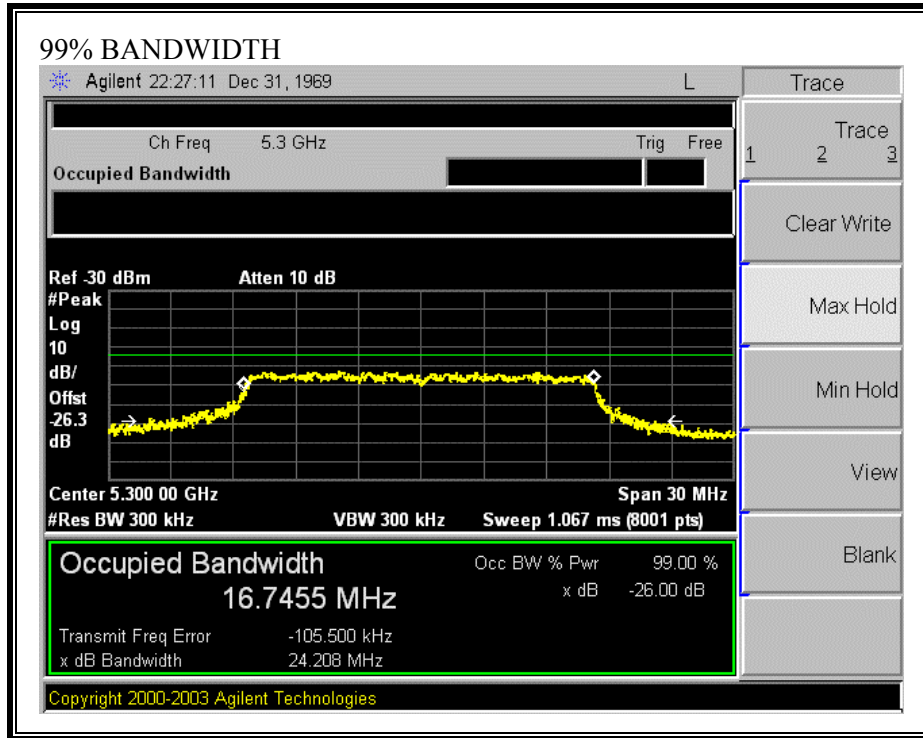
No non-compliance noted: No EUT transmissions were observed on the test channel during the 30 minute observation time.





### 5.1.11. DETECTION BANDWIDTH

#### REFERENCE PLOT OF 99% POWER BANDWIDTH



#### RESULTS

No non-compliance noted:

FL	FH	Detection Bandwidth	99% Power Bandwidth	Ratio of Detection BW to 99% Power BW	Minimum Limit
(MHz)	(MHz)	(MHz)	(MHz)	(%)	(%)
5291	5309	18	16.746	107.5	80

**DETECTION BANDWIDTH PROBABILITY**

DETECTION BANDWIDTH PROBABILITY RESULTS				
Detection Bandwidth Test Results:			Waveform: TYPE 1	
Frequency (MHz)	Number of Trials	Number Detected	Detection (%)	Mark
5290	10	7	70.00	
5291	20	18	90.00	FL
5292	10	9	90.00	
5293	10	10	100.00	
5294	10	10	100.00	
5295	10	9	90.00	
5296	10	10	100.00	
5297	10	10	100.00	
5298	10	10	100.00	
5299	10	10	100.00	
5300	10	10	100.00	
5301	10	10	100.00	
5302	30	27	90.00	
5303	10	9	90.00	
5304	10	10	100.00	
5305	10	10	100.00	
5306	10	9	90.00	
5307	10	9	90.00	
5308	10	10	100.00	
5309	10	9	90.00	FH
5310	10	5	50.00	

### 5.1.12. IN-SERVICE MONITORING

#### RESULTS

No non-compliance noted:

<b>Radars Test Summary:</b>				
<b>Signal Type</b>	<b>Waveform/Trial No.</b>	<b>Detection (%)</b>	<b>Limit (%)</b>	<b>Pas/Fail</b>
FCC TYPE 1	30	90.00	60.00	Pass
FCC TYPE 2	30	90.00	60.00	Pass
FCC TYPE 3	30	80.00	60.00	Pass
FCC TYPE 4	30	76.67	60.00	Pass
<b>Aggregate</b>	<b>4</b>	<b>84.17</b>	<b>80.00</b>	<b>Pass</b>
FCC TYPE 5	30	80.00	80.00	Pass
FCC TYPE 6	38	100.00	70.00	Pass

**TYPE 1 DETECTION PROBABILITY**

<b>Data Sheet for Short Pulse Radar Type 1</b>	
<b>Trial No.</b>	<b>Successful Detection (Yes/No)</b>
1	Yes
2	Yes
3	Yes
4	Yes
5	No
6	Yes
7	Yes
8	Yes
9	Yes
10	Yes
11	Yes
12	Yes
13	Yes
14	Yes
15	Yes
16	Yes
17	Yes
18	Yes
19	Yes
20	Yes
21	Yes
22	Yes
23	Yes
24	No
25	Yes
26	No
27	Yes
28	Yes
29	Yes
30	Yes

**TYPE 2 DETECTION PROBABILITY**

<b>Data Sheet for Short Pulse Radar Type 2</b>				
<b>Waveform No.</b>	<b># Pulses per burst</b>	<b>Pulse Width (us)</b>	<b>Pulse repetition Interval (us)</b>	<b>Successful Detection (Yes/No)</b>
2001	27	2.70	191	Yes
2002	27	2.50	150	Yes
2003	28	3.10	198	Yes
2004	25	5.00	166	Yes
2005	29	4.00	203	Yes
2006	29	4.80	156	Yes
2007	29	3.10	169	Yes
2008	29	3.00	223	Yes
2009	26	3.30	215	Yes
2010	29	1.50	200	Yes
2011	24	1.50	163	No
2012	27	4.60	170	Yes
2013	23	4.20	170	No
2014	24	4.20	195	Yes
2015	28	4.90	156	Yes
2016	28	3.80	201	No
2017	28	3.00	223	Yes
2018	29	1.00	187	Yes
2019	26	2.60	220	Yes
2020	27	3.50	203	Yes
2021	26	4.40	212	Yes
2022	29	1.60	200	Yes
2023	26	4.00	209	Yes
2024	24	1.60	228	Yes
2025	27	3.00	206	Yes
2026	23	4.60	171	Yes
2027	26	3.90	171	Yes
2028	25	3.30	156	Yes
2029	23	1.30	210	Yes
2030	26	1.00	206	Yes

**TYPE 3 DETECTION PROBABILITY**

<b>Data Sheet for Short Pulse Radar Type 3</b>				
<b>Waveform No.</b>	<b># Pulses per burst</b>	<b>Pulse Width (us)</b>	<b>Pulse repetition Interval (us)</b>	<b>Successful Detection (Yes/No)</b>
3001	16	7.10	338	Yes
3002	16	5.20	339	No
3003	17	10.00	312	Yes
3004	17	6.00	275	Yes
3005	16	8.00	290	No
3006	17	7.00	261	Yes
3007	16	5.70	252	Yes
3008	16	5.40	342	Yes
3009	18	9.40	317	Yes
3010	16	9.40	406	Yes
3011	17	6.20	476	Yes
3012	18	5.40	304	No
3013	17	7.80	316	Yes
3014	18	5.30	334	Yes
3015	16	7.80	453	Yes
3016	16	8.90	282	Yes
3017	17	7.50	266	Yes
3018	16	6.40	446	Yes
3019	18	5.00	489	Yes
3020	18	7.60	461	Yes
3021	17	6.70	385	Yes
3022	17	8.90	394	Yes
3023	17	8.50	454	No
3024	18	7.70	254	Yes
3025	16	7.10	432	Yes
3026	18	6.40	353	Yes
3027	17	7.30	499	No
3028	17	7.80	258	Yes
3029	16	7.80	300	No
3030	17	5.10	420	Yes

**TYPE 4 DETECTION PROBABILITY**

<b>Data Sheet for Short Pulse Radar Type 4</b>				
<b>Waveform No.</b>	<b># Pulses per burst</b>	<b>Pulse Width (us)</b>	<b>Pulse repetition Interval (us)</b>	<b>Successful Detection (Yes/No)</b>
4001	14	16.40	305	Yes
4002	12	10.50	343	Yes
4003	16	17.60	300	No
4004	13	16.00	478	Yes
4005	16	11.30	433	Yes
4006	14	18.80	408	Yes
4007	14	17.20	267	Yes
4008	15	19.90	461	Yes
4009	14	11.50	309	Yes
4010	13	16.40	402	Yes
4011	14	15.40	436	Yes
4012	13	12.10	350	Yes
4013	15	19.40	338	No
4014	13	19.80	463	No
4015	14	11.60	400	Yes
4016	14	13.80	320	No
4017	12	17.60	410	Yes
4018	12	18.20	465	Yes
4019	16	11.60	326	No
4020	15	16.10	492	Yes
4021	15	15.10	342	No
4022	12	17.50	312	Yes
4023	13	18.70	323	Yes
4024	14	14.00	393	Yes
4025	14	12.10	257	No
4026	12	12.20	337	Yes
4027	13	10.20	399	Yes
4028	13	11.60	405	Yes
4029	15	19.00	317	Yes
4030	12	16.50	429	Yes

**TYPE 5 DETECTION PROBABILITY**

<b>Data Sheet for Long Pulse Radar Type 5</b>	
<b>Waveform No.</b>	<b>Successful Detection (Yes/No)</b>
5001	Yes
5002	Yes
5003	Yes
5004	Yes
5005	Yes
5006	Yes
5007	Yes
5008	Yes
5009	Yes
5010	Yes
5011	No
5012	Yes
5013	No
5014	No
5015	Yes
5016	Yes
5017	Yes
5018	Yes
5019	Yes
5020	Yes
5021	No
5022	Yes
5023	No
5024	Yes
5025	Yes
5026	No
5027	Yes
5028	Yes
5029	Yes
5030	Yes



**TYPE 5 WAVEFORM PARAMETERS**

Waveform Parameters for Long Pulse Radar Test Signal 5						
Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 1; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total number of pulses in waveform = 27</b>						
1	3	50	16	1399	1711	731826
2	1	50	11	1549	---	2031376
3	3	85	6	1624	1321	3240892
4	3	50	19	1793	1684	3949501
5	3	95	5	1612	1360	4814676
6	2	75	10	1143	1998	6104742
7	1	85	10	1428	---	7314559
8	3	80	16	1359	1202	7860357
9	3	70	15	1312	1743	8972737
10	3	90	20	1386	1635	10017895
11	2	100	9	1001	1594	11051946
<b>Waveform Num = 2; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total number of pulses in waveform = 24</b>						
1	1	65	5	---	---	422850
2	2	75	11	1502	---	1070425
3	2	95	19	1786	---	1132007
4	2	75	5	1928	---	1398906
5	2	70	12	1497	---	663575
6	3	50	6	1138	1101	1671330
7	3	70	14	1519	1450	495741
8	2	50	20	1925	---	1023609
9	3	60	6	1005	1054	1260450
10	2	75	5	1931	---	1237655
11	2	55	18	1734	---	615837
<b>Waveform Num = 3; Num of Bursts = 15; Burst Interval (us) = 800000.0; Total number of pulses in waveform = 28</b>						
1	3	90	19	1949	1431	698694
2	2	100	17	1123	---	523901
3	2	100	13	1637	---	623979
4	2	50	14	1672	---	1207739
5	2	65	12	1684	---	346092
6	1	85	10	---	---	790158
7	2	75	9	1346	---	755416
8	2	70	10	1176	---	851654
9	3	85	9	1614	1572	621292
10	3	95	10	1224	1018	1300936
11	1	90	16	---	---	650793
12	1	65	7	---	---	921593
13	1	55	11	---	---	473199
14	2	75	13	1335	---	728646
15	1	55	10	---	---	1165777

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 4; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total number of pulses in waveform = 35</b>						
1	3	95	5	1137	1648	1996
2	3	85	12	1816	1276	829104
3	2	90	18	1343	---	1363743
4	1	60	12	---	---	434351
5	2	55	14	1696	---	998456
6	3	75	12	1488	1751	516156
7	3	85	9	1174	1621	725061
8	3	85	20	1954	1614	930579
9	1	80	9	---	---	244009
10	1	70	20	---	---	916127
11	2	60	20	1625	---	806374
12	3	85	10	1814	1713	865558
13	2	75	19	1949	---	997183
14	3	75	15	1836	1042	443821
15	1	80	20	---	---	794489
16	2	95	8	1418	---	817410
<b>Waveform Num = 5; Num of Bursts = 14; Burst Interval (us) = 857143.0; Total number of pulses in waveform = 28</b>						
1	2	100	16	1441	---	601937
2	3	95	16	1674	1376	406590
3	2	75	11	1324	---	1343002
4	1	65	10	---	---	581672
5	2	100	15	1016	---	649959
6	3	65	16	1538	1621	1039347
7	1	80	17	---	---	932755
8	2	75	20	1739	---	756045
9	3	75	6	1769	1474	776312
10	1	50	6	---	---	1107694
11	2	85	6	1420	---	672498
12	2	65	8	1992	---	1034542
13	2	55	11	1691	---	1165636
14	2	70	20	1375	---	774240
<b>Waveform Num = 6; Num of Bursts = 14; Burst Interval (us) = 857143.0; Total number of pulses in waveform = 30</b>						
1	3	70	7	1136	1462	293787
2	2	75	18	1184	---	1048576
3	3	90	18	1227	1610	399834
4	1	100	5	---	---	1482453
5	2	55	17	1613	---	724439
6	3	80	5	1516	1361	928156
7	1	70	14	---	---	347731
8	3	80	9	1795	1190	1307431
9	2	70	6	1855	---	878415
10	3	70	13	1151	1186	433577
11	1	95	13	---	---	842419
12	1	95	15	---	---	1337549
13	3	100	16	1060	1157	903778
14	2	50	13	1841	---	879742

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 7; Num of Bursts = 14; Burst Interval (us) = 857143.0; Total number of pulses in waveform = 28</b>						
1	2	50	9	1759	---	637265
2	1	85	13	---	---	1055695
3	1	90	18	---	---	410786
4	3	90	12	1071	1330	1038465
5	2	50	17	1261	---	795890
6	1	55	16	---	---	881639
7	2	60	18	1164	---	517553
8	1	80	9	---	---	1056605
9	2	70	16	1315	---	986425
10	2	50	6	1562	---	858847
11	3	80	19	1925	1382	413080
12	3	80	19	1429	1347	963842
13	2	85	15	1916	---	1137881
14	3	75	7	1410	1800	1012454
<b>Waveform Num = 8; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total number of pulses in waveform = 27</b>						
1	1	75	6	---	---	597360
2	1	100	10	---	---	396581
3	1	90	17	---	---	1172137
4	1	55	13	---	---	483004
5	2	100	6	1200	---	882294
6	3	95	11	1593	1848	891757
7	2	75	9	1173	---	66736
8	3	60	8	1731	1029	1158016
9	2	55	13	1525	---	486686
10	1	55	14	---	---	1195965
11	2	80	19	1258	---	607802
12	1	100	18	---	---	988291
13	1	80	8	---	---	739820
14	3	50	5	1748	1594	474483
15	2	75	6	1725	---	840675
16	1	70	15	---	---	249109
<b>Waveform Num = 9; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total number of pulses in waveform = 37</b>						
1	1	75	13	---	---	373073
2	1	100	17	---	---	388441
3	1	100	6	---	---	504750
4	2	75	13	1181	---	1049226
5	3	95	12	1457	1750	300908
6	3	85	16	1144	1677	1055612
7	2	75	8	1986	---	235830
8	3	85	9	1038	1592	913259
9	1	55	7	---	---	752551
10	3	95	7	1234	1962	153281
11	1	90	17	---	---	577212
12	2	65	17	1336	---	640923
13	1	100	9	---	---	1143692
14	3	75	20	1803	1644	325061
15	3	55	12	1121	1607	962609
16	2	80	17	1537	---	479583
17	2	50	7	1102	---	559989
18	2	50	14	1316	---	670192
19	1	60	14	---	---	540230

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 10; Num of Bursts = 17; Burst Interval (us) = 705882.0; Total number of pulses in waveform = 28</b>						
1	1	55	20	---	---	254535
2	1	95	16	---	---	830091
3	1	95	11	---	---	729702
4	2	55	16	1183	---	657001
5	1	65	11	---	---	747909
6	1	50	10	---	---	339520
7	1	75	10	---	---	1023496
8	1	100	15	---	---	360198
9	3	75	13	1198	1772	1214305
10	1	65	8	---	---	444386
11	2	65	8	1198	---	569237
12	2	70	8	1725	---	951261
13	3	70	16	1891	1028	526982
14	3	95	9	1817	1662	996822
15	1	100	7	---	---	290558
16	1	60	7	---	---	669181
17	3	70	19	1464	1213	944673
<b>Waveform Num = 11; Num of Bursts = 8; Burst Interval (us) = 1500000.0; Total number of pulses in waveform = 19</b>						
1	2	75	20	1798	---	320022
2	3	80	17	1065	1200	2504065
3	2	85	17	1581	---	1483855
4	3	95	14	1534	1708	869979
5	2	80	11	1795	---	2045713
6	2	50	7	1390	---	759861
7	2	50	12	1141	---	1757508
8	3	55	14	1886	1662	1804190
<b>Waveform Num = 12; Num of Bursts = 18; Burst Interval (us) = 666667.0; Total number of pulses in waveform = 33</b>						
1	3	80	12	1978	1715	174763
2	1	70	15	---	---	1089991
3	2	60	18	1887	---	570256
4	1	100	15	---	---	345608
5	1	55	18	---	---	701335
6	1	100	9	---	---	1056349
7	2	60	8	1734	---	704617
8	3	50	10	1696	1200	288730
9	3	70	11	1350	1566	678260
10	3	90	11	1942	1577	948378
11	2	50	8	1379	---	443801
12	2	95	12	1369	---	590354
13	1	80	11	---	---	419439
14	2	50	11	1056	---	1201161
15	3	70	8	1117	1671	296267
16	1	55	19	---	---	939549
17	1	85	17	---	---	357153
18	1	50	16	---	---	1002134

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 13; Num of Bursts = 9; Burst Interval (us) = 1333333.0; Total number of pulses in waveform = 14</b>						
1	1	80	7	---	---	829306
2	1	75	5	---	---	1272424
3	1	85	5	---	---	906481
4	1	60	20	---	---	1214939
5	1	80	6	---	---	1507501
6	2	100	11	1376	---	1945258
7	2	50	20	1742	---	1369455
8	2	85	11	1412	---	1189325
9	3	95	8	1750	1450	1054793
<b>Waveform Num = 14; Num of Bursts = 10; Burst Interval (us) = 1200000.0; Total number of pulses in waveform = 20</b>						
1	2	85	6	1518	---	856570
2	2	80	12	1709	---	1168911
3	2	95	8	1140	---	859431
4	1	85	19	---	---	1311325
5	2	95	14	1252	---	1700385
6	3	70	7	1854	1199	1075934
7	1	80	10	---	---	1129994
8	3	70	19	1904	1104	1373024
9	1	70	11	---	---	735134
10	3	85	11	1678	1845	588147
<b>Waveform Num = 15; Num of Bursts = 20; Burst Interval (us) = 600000.0; Total number of pulses in waveform = 40</b>						
1	1	80	17	---	---	403123
2	1	50	6	---	---	698543
3	3	60	19	1879	1837	604357
4	3	80	8	1701	1187	619896
5	2	90	17	1968	---	98843
6	3	90	20	1077	1727	611337
7	2	80	18	1858	---	1115497
8	1	75	16	---	---	250229
9	3	100	20	1791	1667	950775
10	1	55	9	---	---	494501
11	3	90	11	1891	1821	545156
12	2	95	7	1351	---	478903
13	1	90	18	---	---	731675
14	2	80	16	1103	---	660417
15	3	85	16	1965	1405	534988
16	1	50	15	---	---	576162
17	3	100	13	1727	1132	279218
18	1	80	7	---	---	517071
19	2	100	15	1366	---	708793
20	2	65	15	1736	---	602066

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 16; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total number of pulses in waveform = 27</b>						
1	1	75	12	---	---	315115
2	1	75	19	---	---	713028
3	1	100	6	---	---	657958
4	1	55	10	---	---	658988
5	1	80	20	---	---	1211717
6	1	95	18	---	---	634954
7	2	80	13	1879	---	797673
8	3	85	8	1479	1898	552779
9	2	100	14	1199	---	481533
10	2	65	11	1295	---	931398
11	2	60	14	1287	---	614682
12	1	75	13	---	---	687477
13	1	65	15	---	---	738292
14	3	50	11	1462	1657	1442506
15	3	80	9	1304	1836	204488
16	2	80	18	1539	---	1105009
<b>Waveform Num = 17; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total number of pulses in waveform = 36</b>						
1	3	95	11	1924	1335	398758
2	2	70	19	1816	---	275324
3	2	95	13	1515	---	1164739
4	1	90	18	---	---	406850
5	1	95	7	---	---	577940
6	3	95	7	1431	1684	896745
7	2	65	10	1582	---	332101
8	2	75	20	1567	---	348367
9	1	85	10	---	---	717633
10	3	85	12	1367	1846	980415
11	3	100	18	1501	1964	432523
12	1	55	8	---	---	613702
13	2	90	18	1734	---	536866
14	3	80	14	1902	1269	576098
15	1	55	11	---	---	681387
16	3	90	6	1850	1239	854781
17	1	75	5	---	---	397494
18	1	70	15	---	---	756588
19	1	90	6	---	---	410954
<b>Waveform Num = 18; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total number of pulses in waveform = 38</b>						
1	3	100	13	1249	1106	414645
2	3	95	18	1097	1561	645719
3	3	55	15	1805	1206	459531
4	2	85	5	1806	---	396225
5	1	80	6	---	---	984818
6	1	65	19	---	---	323991
7	1	55	11	---	---	560480
8	3	85	14	1538	1788	1081138
9	1	70	14	---	---	687767
10	3	95	12	1968	1243	655192
11	3	65	17	1310	1804	540656
12	2	80	17	1824	---	258833
13	2	95	13	1587	---	662957
14	2	70	18	1017	---	897151
15	3	80	13	1772	1203	320247
16	1	65	9	---	---	835224
17	1	80	5	---	---	791176
18	1	100	12	---	---	521617
19	2	60	5	1862	---	619018

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 19; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total number of pulses in waveform = 34</b>						
1	1	65	12	---	---	528090
2	1	95	15	---	---	357108
3	1	65	17	---	---	786019
4	1	95	7	---	---	358569
5	2	60	10	1863	---	522448
6	1	95	6	---	---	862750
7	3	80	5	1500	1946	745836
8	3	50	13	1198	1235	509544
9	1	80	6	---	---	543669
10	1	90	6	---	---	522772
11	2	90	6	1409	---	961750
12	1	100	12	---	---	240109
13	2	80	13	1821	---	705395
14	3	100	6	1142	1770	742094
15	3	85	17	1619	1103	987973
16	1	75	9	---	---	331908
17	2	60	14	1405	---	650654
18	2	90	16	1699	---	445466
19	3	100	6	1880	1384	863433
<b>Waveform Num = 20; Num of Bursts = 14; Burst Interval (us) = 857143.0; Total number of pulses in waveform = 23</b>						
1	2	90	13	1994	---	550809
2	2	65	6	1767	---	762137
3	1	90	17	---	---	577788
4	2	100	10	1210	---	848707
5	1	90	11	---	---	1158819
6	1	60	18	---	---	1219110
7	1	80	6	---	---	188627
8	2	60	12	1015	---	1408433
9	1	85	17	---	---	222689
10	3	50	7	1693	1966	924985
11	1	95	12	---	---	1285171
12	3	60	7	1478	1832	1096098
13	1	60	8	---	---	684090
14	2	50	10	1280	---	869796
<b>Waveform Num = 21; Num of Bursts = 9; Burst Interval (us) = 1333333.0; Total number of pulses in waveform = 16</b>						
1	1	50	16	---	---	801577
2	2	60	10	1838	---	1557652
3	3	90	19	1304	1720	910611
4	1	70	7	---	---	1583433
5	2	80	9	1079	---	1266731
6	1	85	7	---	---	1166764
7	2	65	20	1027	---	2003706
8	2	70	5	1205	---	204388
9	2	85	14	1419	---	2246138

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 22; Num of Bursts = 9; Burst Interval (us) = 1333333.0; Total number of pulses in waveform = 20</b>						
1	3	100	16	1117	1794	1182537
2	2	55	13	1165	---	1380750
3	3	50	14	1353	1523	545035
4	2	70	17	1795	---	1422015
5	3	95	5	1854	1383	2075401
6	2	50	5	1566	---	417613
7	1	75	15	---	---	1693028
8	1	100	11	---	---	647185
9	3	85	20	1336	1724	1830213
<b>Waveform Num = 23; Num of Bursts = 9; Burst Interval (us) = 1333333.0; Total number of pulses in waveform = 18</b>						
1	3	90	12	1301	1689	1159000
2	1	80	12	---	---	1128064
3	3	95	20	1553	1778	1553597
4	2	70	18	1348	---	634703
5	1	100	20	---	---	854186
6	3	55	17	1423	1163	1814234
7	3	65	14	1509	1246	2159672
8	1	75	11	---	---	124029
9	1	50	5	---	---	1820065
<b>Waveform Num = 24; Num of Bursts = 17; Burst Interval (us) = 705882.0; Total number of pulses in waveform = 33</b>						
1	2	95	8	1501	---	617140
2	2	75	9	1815	---	413925
3	3	50	16	1105	1557	915096
4	3	95	14	1472	1281	791794
5	1	70	13	---	---	623075
6	3	70	18	1864	1784	286071
7	1	75	6	---	---	1190464
8	2	80	9	1467	---	353139
9	3	60	14	1957	1672	902533
10	2	70	6	1424	---	832252
11	1	95	12	---	---	783245
12	2	80	15	1024	---	242761
13	1	50	15	---	---	498163
14	3	90	15	1980	1086	812922
15	1	50	17	---	---	1009861
16	1	80	20	---	---	937227
17	2	50	20	1848	---	431130



Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 25; Num of Bursts = 15; Burst Interval (us) = 800000.0; Total number of pulses in waveform = 29</b>						
1	1	95	13	---	---	34043
2	3	50	16	1652	1501	1107653
3	2	75	15	1013	---	459464
4	1	75	12	---	---	1112837
5	3	90	6	1831	1909	870284
6	1	85	10	---	---	662120
7	1	55	11	---	---	1016802
8	3	50	12	1116	1935	377739
9	2	75	9	1965	---	746747
10	2	95	6	1329	---	1552812
11	1	65	12	---	---	276212
12	2	55	7	1639	---	1245936
13	3	70	20	1163	1534	111011
14	2	80	7	1158	---	1398472
15	2	70	19	1373	---	775056
<b>Waveform Num = 26; Num of Bursts = 8; Burst Interval (us) = 1500000.0; Total number of pulses in waveform = 19</b>						
1	3	50	5	1678	1094	1093641
2	3	65	15	1710	1384	462160
3	1	60	16	---	---	1444151
4	3	95	8	1114	1080	1925367
5	2	60	17	1300	---	2002341
6	2	55	13	1267	---	1814734
7	3	55	8	1058	1900	247594
8	2	70	10	1799	---	2978076
<b>Waveform Num = 27; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total number of pulses in waveform = 21</b>						
1	3	50	15	1349	1838	362063
2	2	75	19	1291	---	773260
3	2	55	13	1452	---	1847340
4	2	55	19	1037	---	620869
5	1	65	17	---	---	1645539
6	3	60	9	1947	1180	888618
7	2	75	14	1695	---	688323
8	2	85	12	1274	---	1654875
9	2	90	13	1969	---	794270
10	1	55	16	---	---	933050
11	1	60	15	---	---	1438522

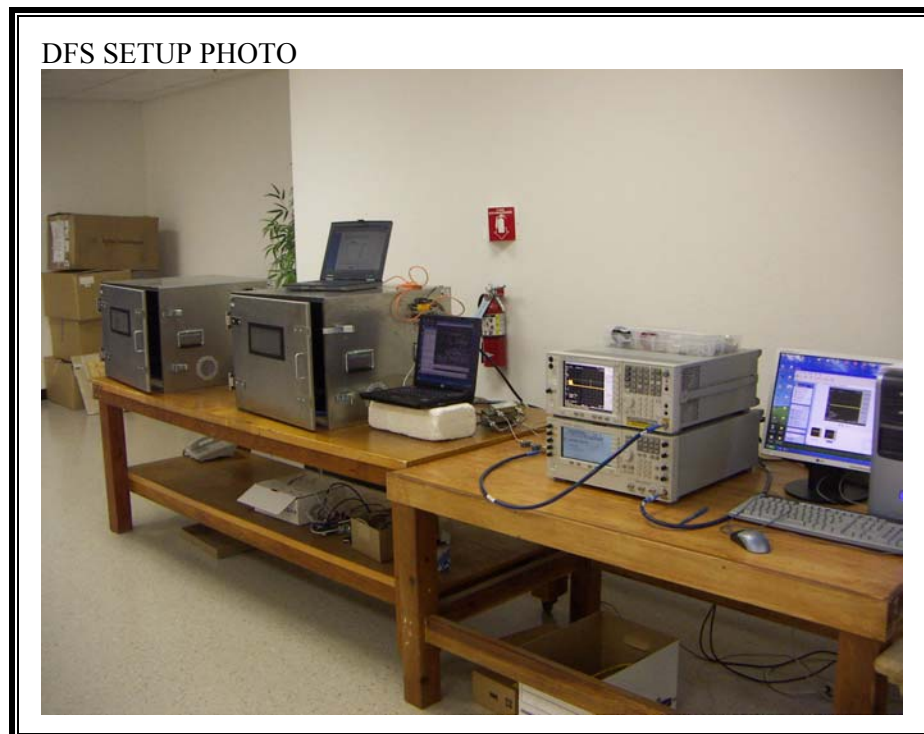
Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 28; Num of Bursts = 20; Burst Interval (us) = 600000.0; Total number of pulses in waveform = 42</b>						
1	3	85	10	1672	1331	259174
2	1	55	19	---	---	583128
3	2	55	17	1501	---	539019
4	1	60	18	---	---	681422
5	1	90	18	---	---	561356
6	1	65	19	---	---	486313
7	3	80	12	1470	1866	1020325
8	2	100	16	1207	---	240138
9	2	75	11	1386	---	806235
10	3	65	7	1020	1667	525598
11	1	55	16	---	---	500123
12	3	80	16	1754	1364	715228
13	2	95	17	1333	---	493022
14	3	100	18	1151	1228	533317
15	2	55	5	1033	---	594593
16	2	60	5	1260	---	820709
17	1	90	11	---	---	417773
18	3	100	14	1343	1703	877347
19	3	100	16	1760	1338	352508
20	3	55	8	1136	1383	519583
<b>Waveform Num = 29; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total number of pulses in waveform = 42</b>						
1	2	90	19	1585	---	120822
2	3	50	19	1588	1229	988323
3	2	75	8	1961	---	256735
4	3	100	16	1022	1366	1119996
5	3	50	8	1890	1229	501700
6	1	70	20	---	---	733995
7	3	90	9	1522	1192	72293
8	3	95	16	1757	1518	1027519
9	3	50	6	1915	1313	678467
10	1	55	19	---	---	327605
11	2	80	12	1952	---	742675
12	1	85	18	---	---	453821
13	3	70	16	1681	1074	776910
14	2	70	13	1662	---	758879
15	2	65	17	1666	---	630379
16	3	75	5	1268	1229	362673
17	1	50	18	---	---	951411
18	2	65	9	1739	---	475381
19	2	50	7	1489	---	864981
<b>Waveform Num = 30; Num of Bursts = 15; Burst Interval (us) = 800000.0; Total number of pulses in waveform = 32</b>						
1	2	55	13	1358	---	156329
2	3	75	11	1826	1920	1386445
3	2	85	19	1111	---	644671
4	3	95	16	1906	1181	244427
5	3	75	18	1049	1087	1311939
6	3	100	12	1472	1236	1017237
7	3	55	11	1459	1282	264490
8	1	65	13	---	---	1042220
9	2	85	11	1062	---	502039
10	1	50	12	---	---	682670
11	1	55	11	---	---	956359
12	3	95	5	1107	1762	1189761
13	2	60	8	1099	---	422726
14	2	95	19	1799	---	885426
15	1	50	9	---	---	769858

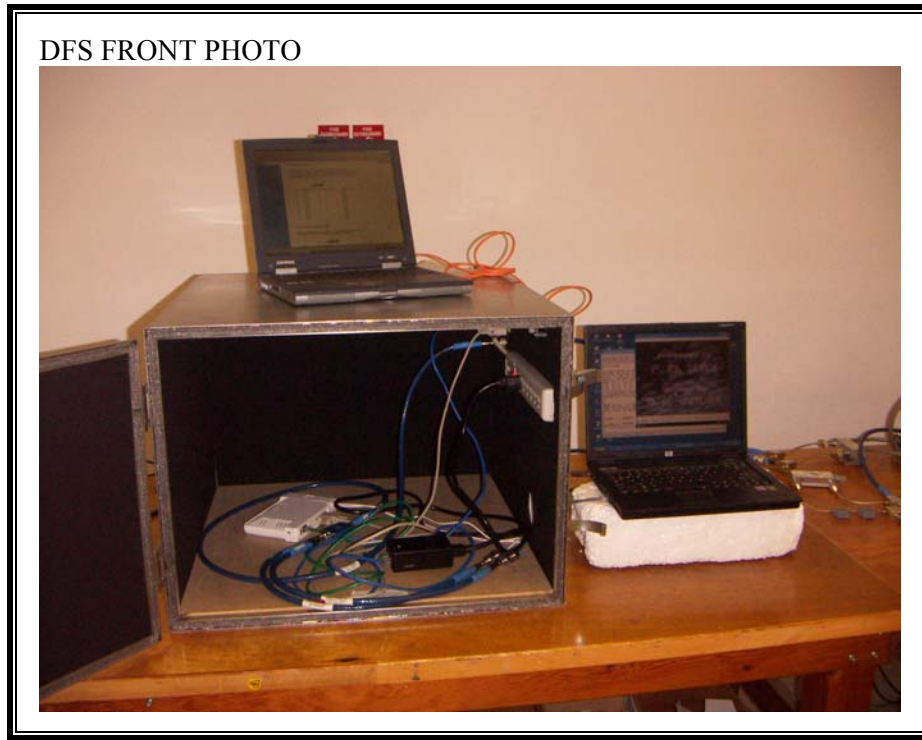
**TYPE 6 DETECTION PROBABILITY**

<b>Data Sheet for Hopping Signal</b>				
<b>Trial No.</b>	<b>Starting Index within NTIA August 2005 Sequence</b>	<b>Signal Generator Frequency (MHz)</b>	<b>Hops within Detection BW</b>	<b>Successful Detection (Yes/No)</b>
1	348	5291	6	Yes
2	823	5292	6	Yes
3	1298	5293	4	Yes
4	1773	5294	5	Yes
5	2248	5295	5	Yes
6	2723	5296	3	Yes
7	3198	5297	3	Yes
8	3673	5298	6	Yes
9	4148	5299	4	Yes
10	4623	5300	5	Yes
11	5098	5301	6	Yes
12	5573	5302	9	Yes
13	6048	5303	5	Yes
14	6523	5304	8	Yes
15	6998	5305	6	Yes
16	7473	5306	3	Yes
17	7948	5307	7	Yes
18	8423	5308	5	Yes
19	8898	5309	3	Yes
20	9373	5291	3	Yes
21	9848	5292	7	Yes
22	10323	5293	7	Yes
23	10798	5294	6	Yes
24	11273	5295	1	Yes
25	11748	5296	5	Yes
26	12223	5297	5	Yes
27	12698	5298	3	Yes
28	13173	5299	1	Yes
29	13648	5300	3	Yes
30	14123	5301	2	Yes
31	14598	5302	2	Yes
32	15073	5303	5	Yes
33	15548	5304	4	Yes
34	16023	5305	4	Yes
35	16498	5306	5	Yes
36	16973	5307	3	Yes
37	17448	5308	3	Yes
38	17923	5309	2	Yes

## 6. SETUP PHOTOS

### DFS MEASUREMENT SETUP





**END OF REPORT**