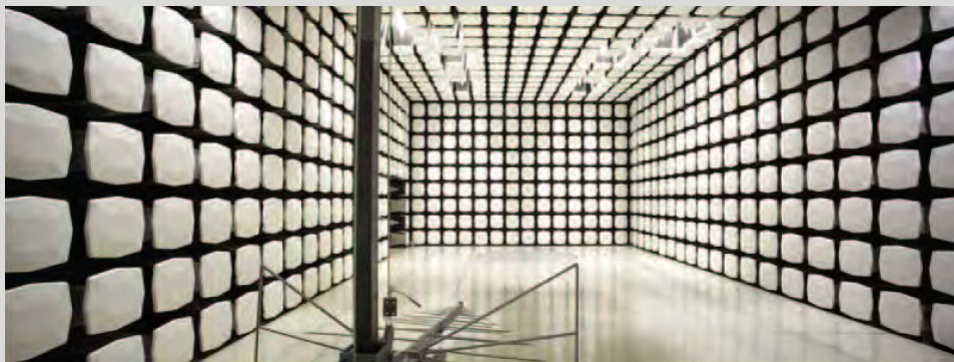




ProSoft Technology, Inc.
RLX2-IHNF

DFS Report #: PROS0152



Report Prepared By Northwest EMC Inc.

NORTHWEST EMC – (888) 364-2378 – www.nwemc.com

California – Minnesota – Oregon – New York – Washington

CERTIFICATE OF TEST

Last Date of Test: August 16, 2012
ProSoft Technology, Inc.
Model: RLX2-IHNF

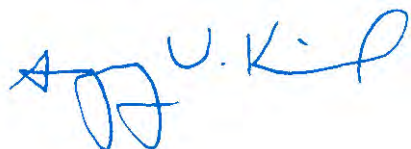
Emissions

Test Description	Specification	Test Method	Pass/Fail
Move Time	FCC 15.407:2012	ANSI C63.10:2009	Pass
Closing Time	FCC 15.407:2012	ANSI C63.10:2009	Pass
Channel Availability Check	FCC 15.407:2012	ANSI C63.10:2009	Pass
Detection Bandwidth	FCC 15.407:2012	ANSI C63.10:2009	Pass
Non Occupancy Period	FCC 15.407:2012	ANSI C63.10:2009	Pass
Statistical Performance Check	FCC 15.407:2012	ANSI C63.10:2009	Pass

Deviations From Test Standards

None

Approved By:



Greg Kiemel, Director of Engineering



NVLAP Lab Code: 200630-0

Test Facility

The measurement facility used to collect the data is located at:

Northwest EMC, Inc.
41 Tesla Ave.
Irvine, CA 92618

Phone: (503) 844-4066 Fax: 844-3826

This site has been fully described in a report filed with and accepted by the FCC (Federal Communications Commission) and Industry Canada (Site filing #2834D-1).

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America.

Product compliance is the responsibility of the client, therefore the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. This Report may only be duplicated in its entirety. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test.

REVISION HISTORY

Revision Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC Guide 65 as a product certifier. This allows Northwest EMC to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

IC - Recognized by Industry Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with IC.

European Union

European Commission – Validated by the European Commission as a Conformity Assessment Body (CAB) under the EMC directive and as a Notified Body under the R&TTE Directive.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

KCC / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Hong Kong

OFTA – Recognized by OFTA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

Russia

GOST – Accredited by Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC to perform EMC and Hygienic testing for Information Technology products to GOST standards.

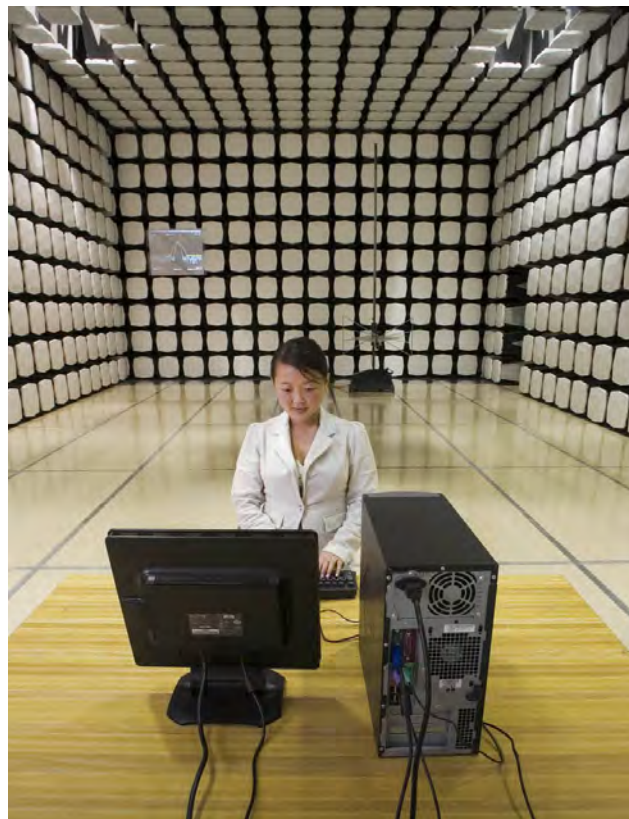
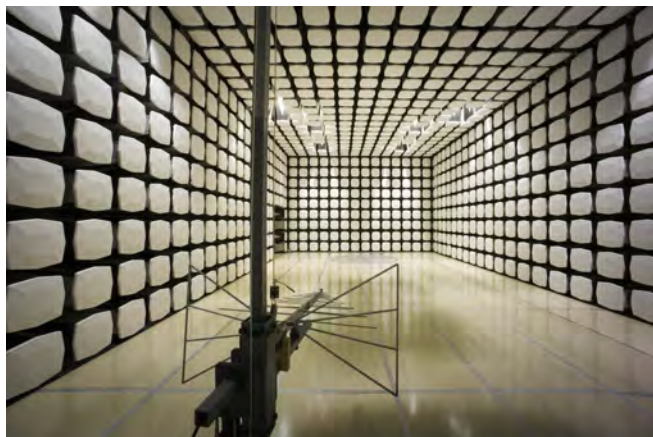
SCOPE

For details on the Scopes of our Accreditations, please visit:

<http://www.nwemc.com/accreditations/>



Oregon Labs EV01-EV12 22975 NW Evergreen Pkwy, #400 Hillsboro, OR 97124 (503) 844-4066	California Labs OC01-OC13 41 Tesla Irvine, CA 92618 (949) 861-8918	New York Labs WA01-WA04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	Minnesota Labs MN01-MN08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	Washington Labs SU01-SU07 14128 339 th Ave. SE Sultan, WA 98294 (360) 793-8675
VCCI				
A-0108	A-0029		A-0109	A-0110
Industry Canada				
2834D-1, 2834D-2	2834B-1, 2834B-2, 2834B-3		2834E-1	2834C-1



Client and Equipment Under Test (EUT) Information

Company Name:	ProSoft Technology, Inc.
Address:	5201 Truxtun Ave., 3rd Floor
City, State, Zip:	Bakersfield, CA 93309
Test Requested By:	Frank Hardy
Model:	RLX2-IHNF
First Date of Test:	July 24, 2012
Last Date of Test:	August 17, 2012
Receipt Date of Samples:	July 24, 2012
Equipment Design Stage:	Preproduction
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
802.11abgn Fast Industrial Hotspot containing 3x3 MIMO radio module operating in both 20 MHz and 40 MHz channel bandwidths.
Hardware, Firmware, and OS Versions:
Firmware version: 0550_0120_584f
The operating frequency band(s) of the equipment.
2400 - 2483.5 MHz
5150 - 5250 MHz
5250 - 5350 MHz (DFS Band)
5470 - 5600 MHz (DFS Band)
5650 - 5725 MHz (DFS Band)
5725 - 5825 MHz
The operating modes (Master and/or Client) of the U-NII device.
Master device
List the highest and the lowest possible power level (equivalent isotropic radiated power (EIRP) of the equipment.
The maximum EIRP of the 5 GHz equipment is 18.609 dBm, and the minimum possible EIRP is 13.069 dBm.

Test sequences or messages that should be used for communication between Master and Client Devices, which are used for loading the Channel.

1. Stream the test file from the Master Device to the Client Device for IP based systems or frame based systems which dynamically allocate the talk/listen ratio.
2. For frame based systems with fixed talk/listen ratio, set the ratio to 45%/55% and stream the test file from the Master to the Client.
3. For other system architectures, supply appropriate Channel loading methodology.

The specified NTIA MPEG file was used to exercise the channel as specified by the FCC.

Transmit Power Control description.

This device does implement transmit power control. It was used during the power measurements to calculate the EIRP.

System architectures, data rates, U-NII Channel bandwidths.

1. Indicate the type(s) of system architecture (e.g. IP based or Frame based) that the U-NII device employs. Each type of unique architecture must be tested.

The Master device (EUT) employs IP based system architecture.

The time required for the Master Device and/or Client Device to complete its power-on cycle.

The Master device used in the test system requires 1.5 minutes to complete its power-on cycle.

Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.

Any available information on the radar detection parameters is only known by a small group of Prosoft Technology, Inc. employees. All documentation is held by the company. None of this information is available to the end user via the manual or software configuration pages.

Uniform Channel Spreading requirement for Master Devices. For Master Devices, indicate how the master provides, on aggregate, uniform Channel loading of the spectrum across all Channels.

The Master Device does implement uniform spreading by selecting an operating channel among the available channels using a random algorithm.

List all antenna assemblies and their corresponding gains.

1. If radiated tests are to be performed, the U-NII Device should be tested with the lowest gain antenna assembly (regardless of antenna type). The report should indicate which antenna assembly was used for the tests. For devices with adjustable output power, list the output power range and the maximum EIRP for each antenna assembly.
2. If conducted tests are to be performed, indicate which antenna port/connection was used for the tests and the antenna assembly gain that was used to set the DFS Detection Threshold level during calibration of the test setup.
 - a. Indicate the calibrated conducted DFS Detection Threshold level.
 - b. For devices with adjustable output power, list the output power range and the maximum EIRP for each antenna assembly.
 - c. Indicate the antenna connector impedance. Ensure that the measurement instruments match (usually 50 Ohms) or use a minimum loss pad and take into account the conversion loss.
3. Antenna gain measurement verification for tested antenna.
 - a. Describe procedure
 - b. Describe the antenna configuration and how it is mounted
 - c. If an antenna cable is supplied with the device, cable loss needs to be taken into account. Indicate the maximum cable length and either measure the gain with this cable or adjust the measured gain accordingly. State the cable loss.

The Master device (EUT) has three 50 ohm antenna ports. All three ports are resistively combined which makes them relatively identical. A conducted DFS test was performed on one at both 20 MHz and 40 MHz channel bandwidths.

The antenna gain of the client device was measured by Nearson. The maximum gain in the 5 GHz bands is 2.0 dBi.

The calibrated conducted DFS detection threshold was set to -61 dBm at the antenna port of the Master. This is equal to the DFS Detection Threshold of the Master + 1 dB which corresponds to a device with a maximum transmit power of <200mW

Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client (without DFS)	Client (with DFS)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client (without DFS)	Client (with DFS)
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes

DFS Response Requirement Values

Parameter	Value
Non-occupancy	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds (See Note 1)
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. (See Notes 1 and 2).
U-NII Detection Bandwidth	Minimum 80% of the UNII 99% transmission power bandwidth. (See Note 3).

Note 1: The instant that the Channel Move Time and the Channel Closing Transmission Time begins is as follows:

- For the Short Pulse Radar Test Signals this instant is the end of the Burst.
- For the Frequency Hopping radar Test Signal, this instant is the end of the last radar Burst generated.
- For the Long Pulse Radar Test Signal this instant is the end of the 12 second period defining the Radar Waveform.

Note 2: 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 a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

DFS Detection Thresholds for Master or Client Devices Incorporating DFS

Maximum Transmit Power	Value (See Notes 1 and 2)
≥ 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.	

Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of 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

Long Pulse Radar Test Waveforms

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

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

Configuration PROS0152- 1

Software/Firmware Running during test	
Description	Version
VLC Streaming Player/Server	2.3

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
802.11abgn Fast Industrial Hotspot(NA)	Prosoft Technology, Inc	RLX2-IHNF	000D8DF05CD4

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Master PC	HP	DC5100S	RF362UC#ABA
USB Wireless Adapter	EnGenius	EUB-862 EXT2	08C234415
USB Wireless Adapter	Belkin	N750DB	141152UG312890
Monitor	Acer	S201HL	ETLNY08003136132FC4227
Monitor	Acer	S201HL	ETLNY08003136133244227
Keyboard	emachines	KB-0705	KBPS203169005039150e02
Mouse	JL	MO42KOB	K7950011A2

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
Ethernet	No	2m	No	EUT	Master PC
DB9 Cable	Yes	1.8m	No	EUT	Master PC
USB	No	1m	No	Client PC	USB Wireless Adapter
VGA Cable	Yes	1.8m	Yes	Client PC	Monitor
VGA Cable	Yes	1.8m	Yes	Master PC	Monitor
PS2 Cable	Yes	1.8m	No	Keyboard	Master PC
PS2 Cable	Yes	1.8m	No	Mouse	Master PC
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	7/24/2012	Move Time	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	7/24/2012	Closing Time	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
3	7/25/2012	Channel Availability Check	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	7/31/2012	Non Occupancy Period	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
5	8/16/2012	Detection Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
6	8/16/2012	Statistical Performance Check	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

Dynamic Frequency Selection

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AFA	6/15/2012	12
SMA Power Divider	S.M. Electronics	MP0208-2	None	NCR	0
SMA Power Divider	S.M. Electronics	MP0208-2	None	NCR	0
Step Attenuator	Aeroflex/Weinchel	3053	26834	NCR	0
Step Attenuator	Aeroflex/Weinchel	3053	26835	NCR	0
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0

TEST DESCRIPTION

FCC KDB 905462 describes the compliance measurement procedures including acceptable instrument system configurations for performing Dynamic Frequency Selection (DFS) tests under FCC Part 15 Subpart E Rules required for Unlicensed –National Information Infrastructure (U-NII) equipment that operates in the frequency bands 5.25 GHz to 5.35 GHz and/or 5.47 GHz to 5.725 GHz. The master and client were connected using the conducted method described in the procedure via a series of splitters and attenuators which allows the radar signals to be injected and monitored. Where required, the FCC approved MPEG video was streamed through the master and client. Configuration and status of the master and client devices were monitored and controlled through a serial/usb connection linked to a host pc. The detection level was set prior to testing by temporarily replacing the master device with the analyzer and setting the power level according to Table 3 and Section 7.5

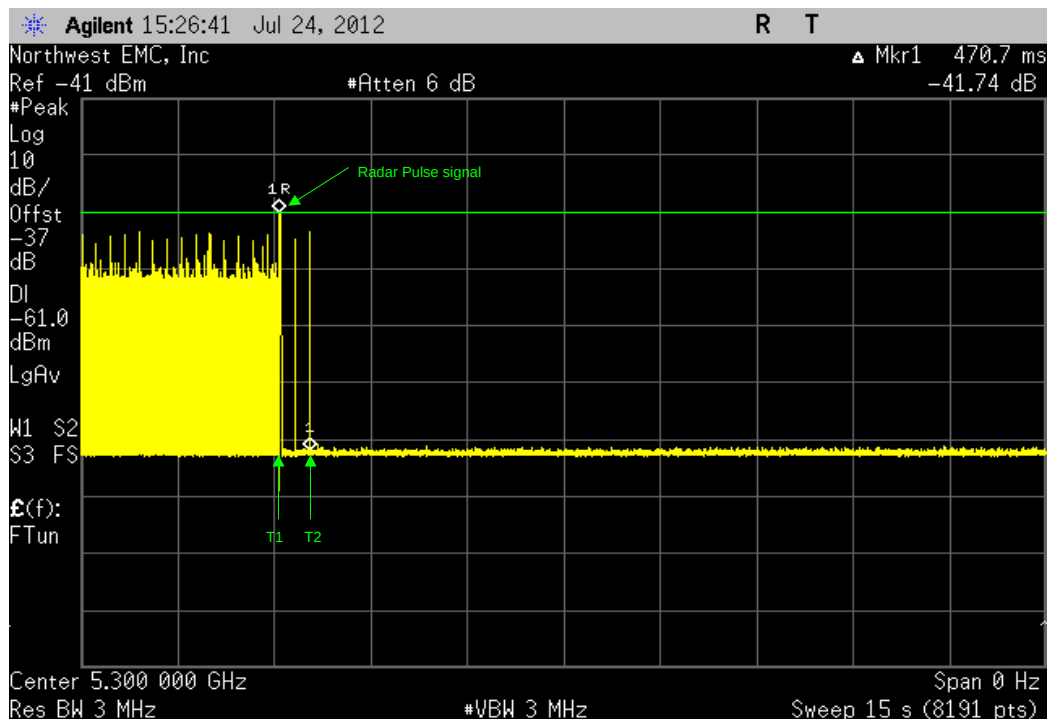


Move Time

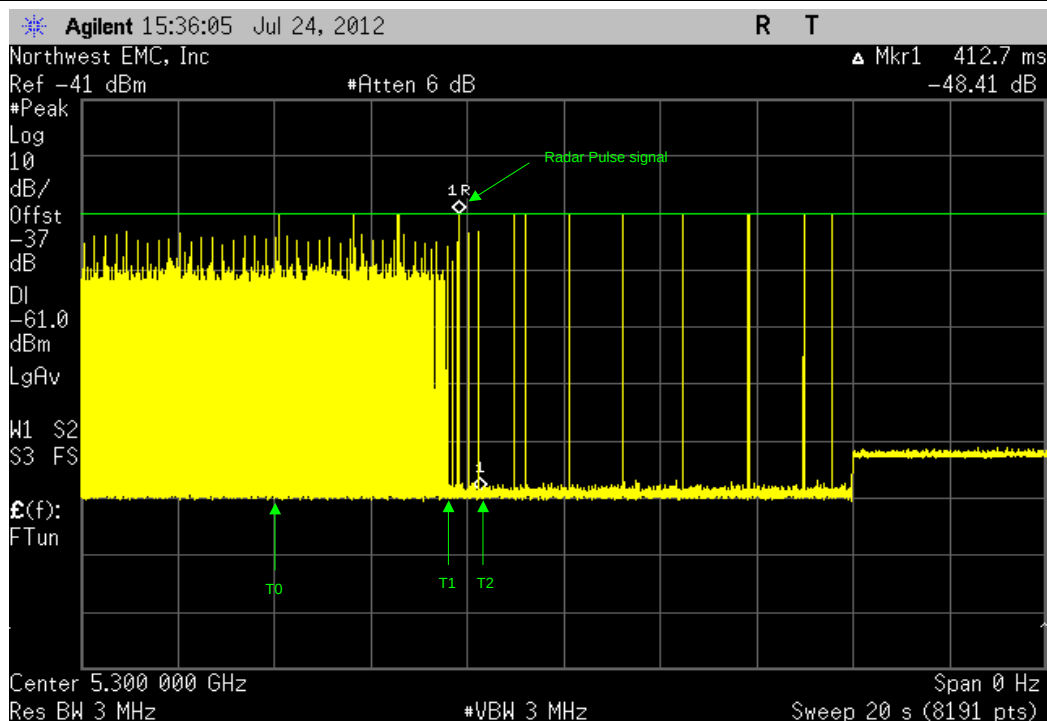
XMit 2012.07.31

EUT: RLX2-IHNF		Work Order: PROS0152
Serial Number: 000D8DF05CD4		Date: 07/24/12
Customer: ProSoft Technology, Inc.		Temperature: 23°C
Attendees: Tom Tsoulogiannis		Humidity: 49%
Project: None		Barometric Pres.: 1016 mb
Tested by: Jeremiah Darden		Power: 110V/60Hz
Job Site: OC11		
TEST SPECIFICATIONS		
FCC 15.407:2012		Test Method
ANSI C63.10:2009		
COMMENTS		
802.11a-20MHz, 802.11n-40MHz.		
DEVIATIONS FROM TEST STANDARD		
None		
Configuration #	1	Signature 
		Value Limit Result
40MHz		
5.3GHz		
Short Pulse Radar1		.471 Sec ≤ 10 Sec Pass
Long Pulse Radar5		.413 Sec ≤ 10 Sec Pass
5.56GHz		
Short Pulse Radar1		.277 Sec ≤ 10 Sec Pass
Long Pulse Radar5		.325 Sec ≤ 10 Sec Pass
20MHz		
5.3GHz		
Short Pulse Radar1		.491 Sec ≤ 10 Sec Pass
Long Pulse Radar5		.256 Sec ≤ 10 Sec Pass
5.56GHz		
Short Pulse Radar1		.497 Sec ≤ 10 Sec Pass
Long Pulse Radar5		.434 Sec ≤ 10 Sec Pass

40MHz, 5.3GHz, Radar1						
				Value	Limit	Result
				.471 Sec	≤ 10 Sec	Pass

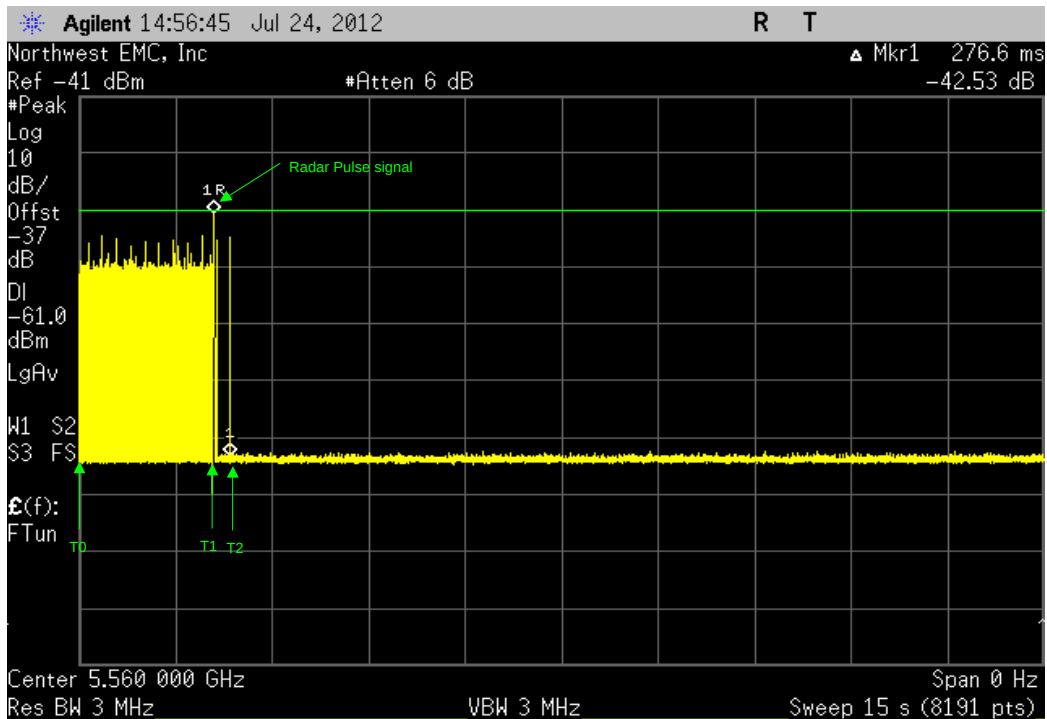


40MHz, 5.3GHz, Radar5						
				Value	Limit	Result
				.413 Sec	≤ 10 Sec	Pass



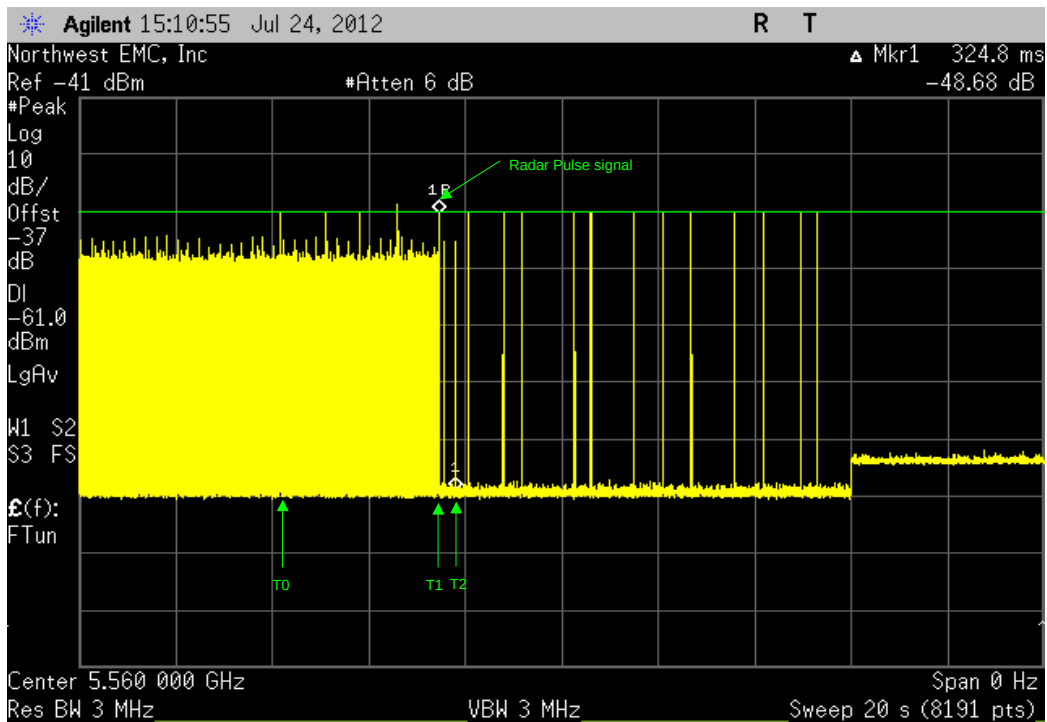
40MHz, 5.56GHz, Radar1

Value	Limit	Result
.277 Sec	≤ 10 Sec	Pass

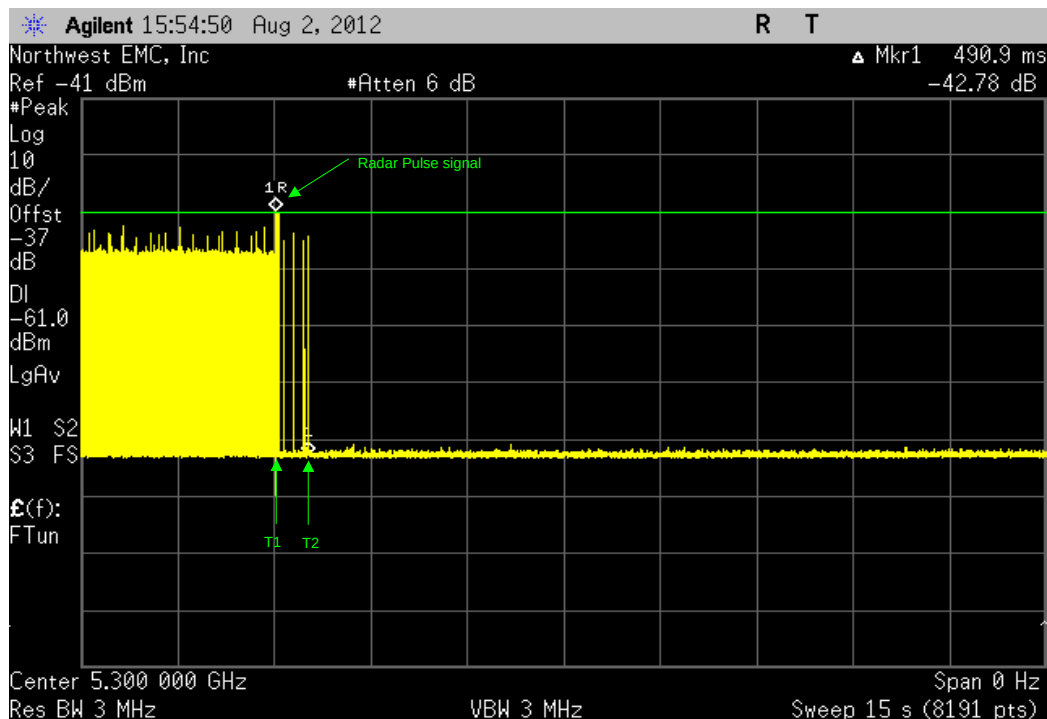


40MHz, 5.56GHz, Radar5

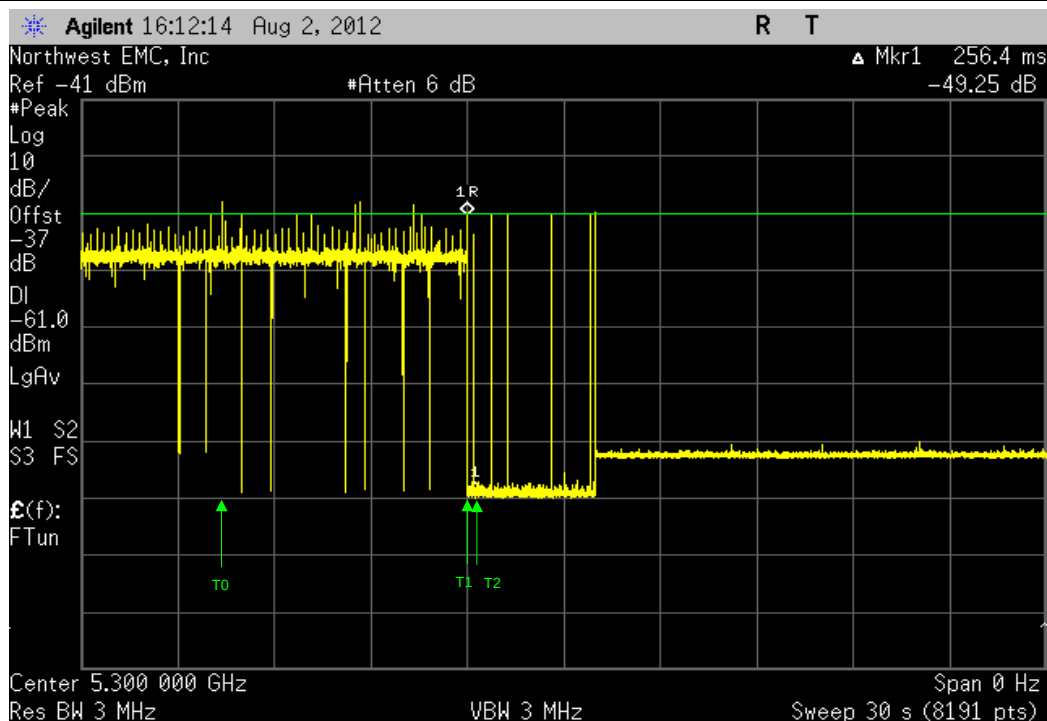
Value	Limit	Result
.325 Sec	≤ 10 Sec	Pass



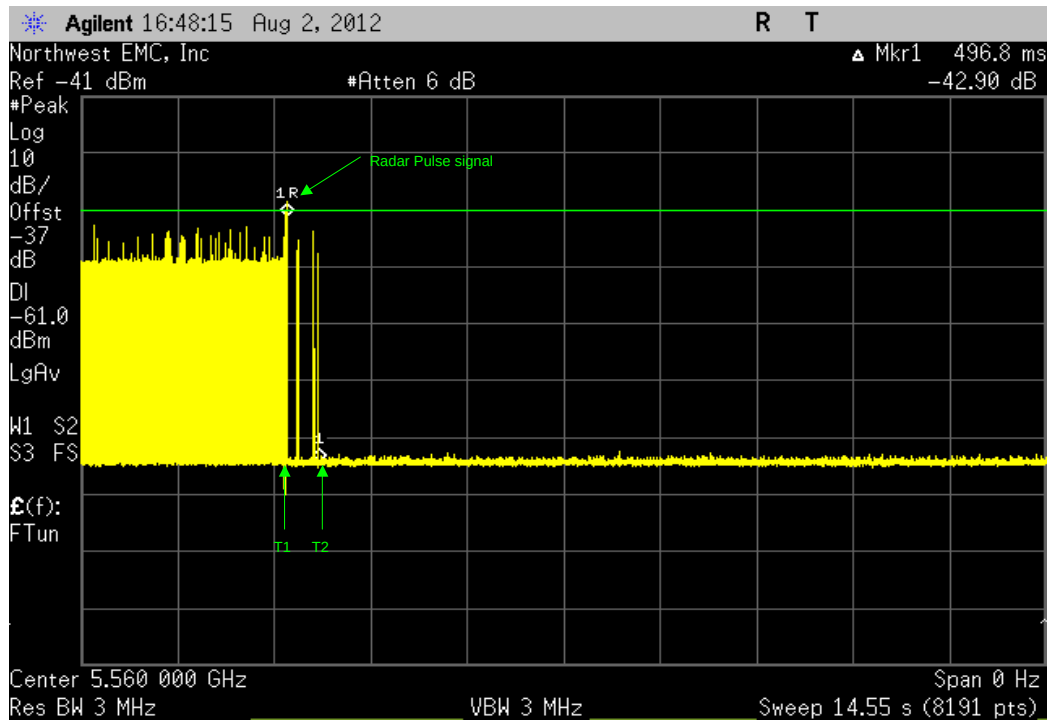
20MHz, 5.3GHz, Radar1						
				Value	Limit	Result
				.491 Sec	≤ 10 Sec	Pass



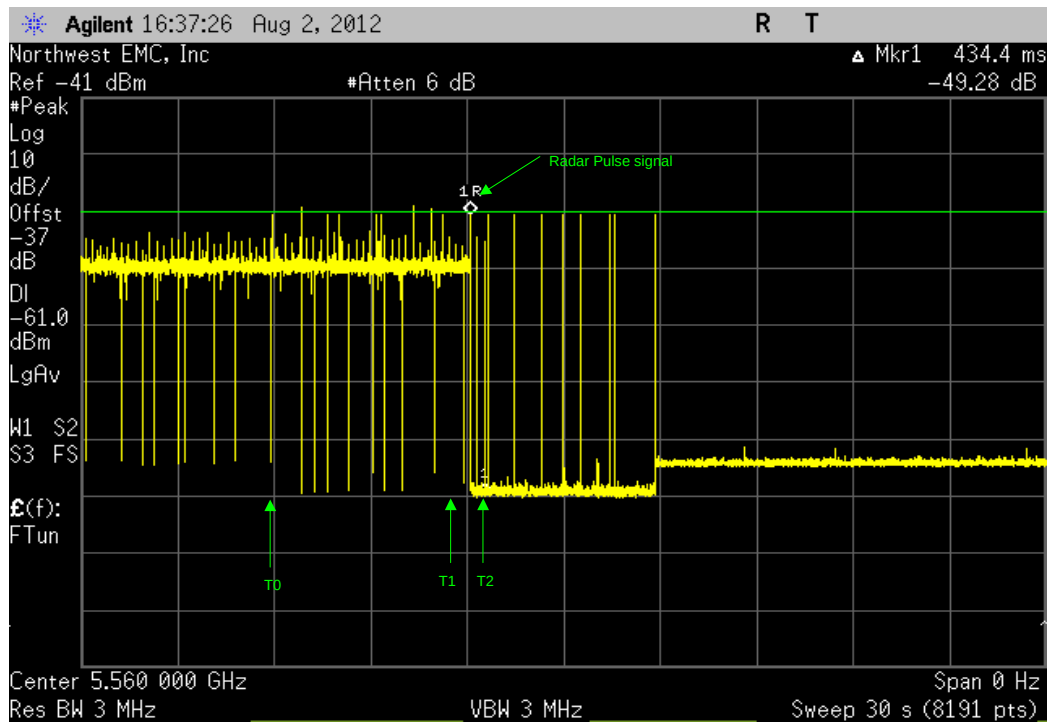
20MHz, 5.3GHz, Radar5						
				Value	Limit	Result
				.256 Sec	≤ 10 Sec	Pass



20MHz, 5.56GHz, Radar1						
				Value	Limit	Result
				.497 Sec	≤ 10 Sec	Pass



20MHz, 5.56GHz, Radar5						
				Value	Limit	Result
				.434 Sec	≤ 10 Sec	Pass





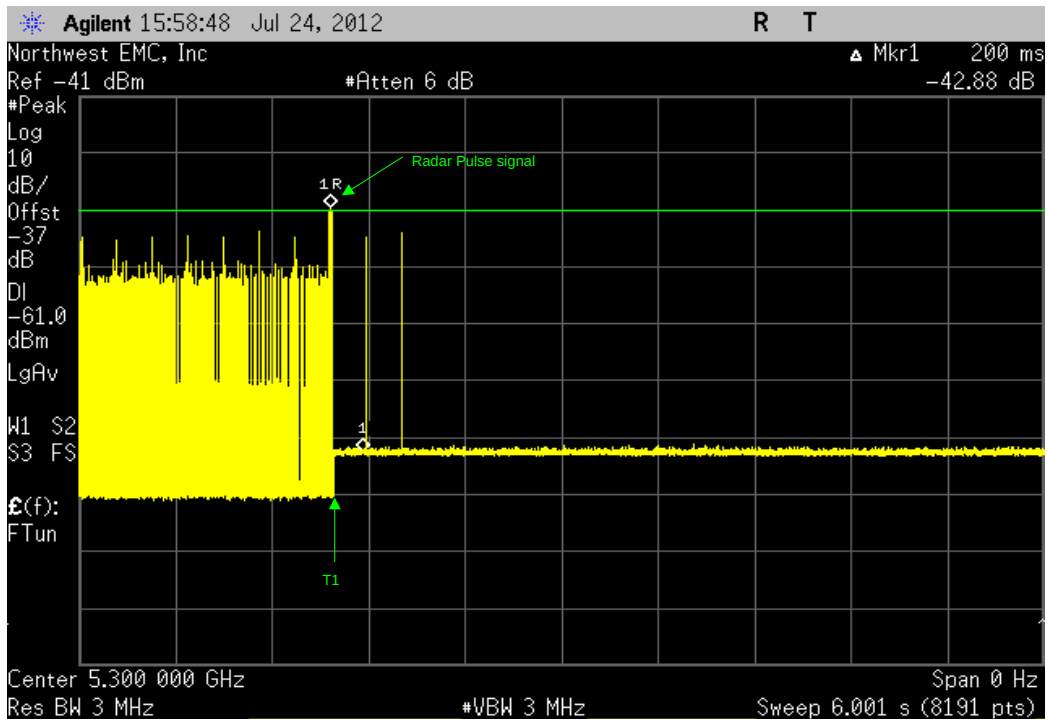
Closing Time

XMit 2012.05.09

EUT: RLX2-IHNF		Work Order: PROS0152				
Serial Number: 000D8DF05CD4		Date: 07/24/12				
Customer: ProSoft Technology, Inc.		Temperature: 23°C				
Attendees: Tom Tsoulogiannis		Humidity: 49%				
Project: None		Barometric Pres.: 1016 mb				
Tested by: Jeremiah Darden		Power: 110V/60Hz				
		Job Site: OC11				
TEST SPECIFICATIONS		Test Method				
FCC 15.407:2012		ANSI C63.10:2009				
COMMENTS						
802.11a-20MHz, 802.11n-40MHz.						
DEVIATIONS FROM TEST STANDARD						
None						
Configuration #	1	Signature 				
		# of Signals	Pulse Width	Value	Limit	Result
40MHz						
5.3GHz						
Radar1 200mS						
Radar1 Aggregate						
2						
0.4136						
200.00 mS						
200.83 mS						
200 mS						
Pass						
Radar5 200mS						
Radar5 Aggregate						
1						
0.4136						
200.00 mS						
200.41 mS						
200 mS						
260 mS						
Pass						
5.56GHz						
Radar1 200mS						
Radar1 Aggregate						
1						
0.4088						
200.00 mS						
200.41 mS						
200 mS						
260 mS						
Pass						
Radar5 200mS						
Radar5 Aggregate						
1						
0.4088						
200.00 mS						
200.41 mS						
200 mS						
260 mS						
Pass						
20MHz						
5.3GHz						
Radar1 200mS						
Radar1 Aggregate						
3						
0.3403						
200.00 mS						
201.02 mS						
260 mS						
Pass						
Radar5 200mS						
Radar5 Aggregate						
1						
0.3403						
200.00 mS						
200.34 mS						
200 mS						
260 mS						
Pass						
5.56GHz						
Radar1 200mS						
Radar1 Aggregate						
3						
0.3403						
200.00 mS						
201.02 mS						
260 mS						
Pass						
Radar5 200mS						
Radar5 Aggregate						
1						
0.3403						
200.00 mS						
200.34 mS						
200 mS						
260 mS						
Pass						

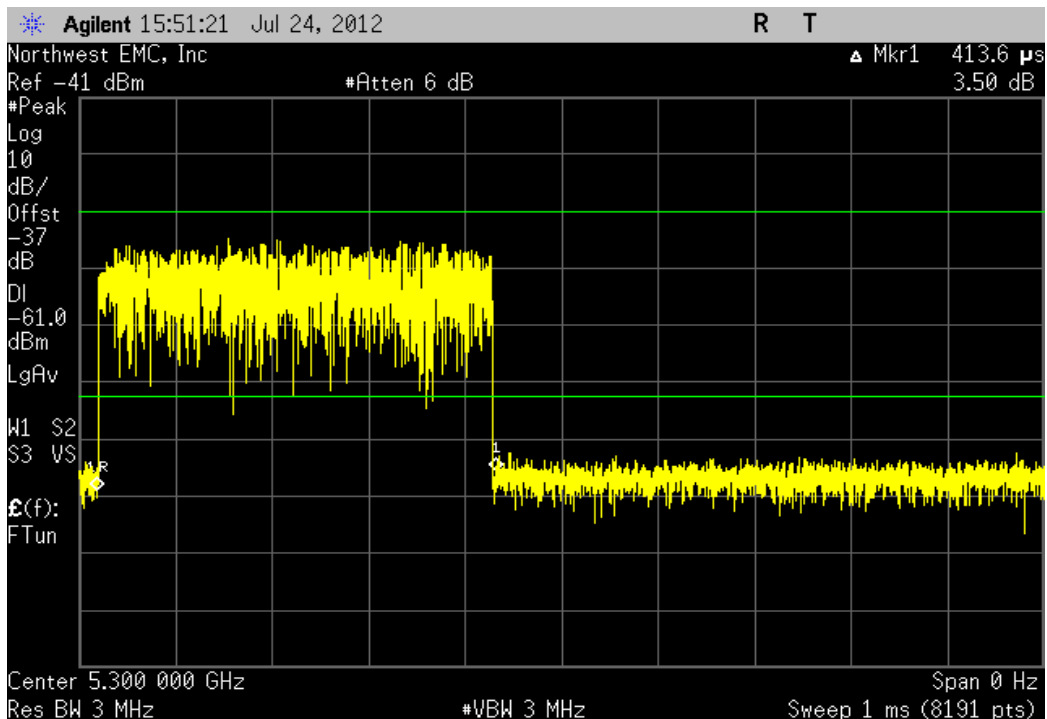
40MHz, 5.3GHz, Radar1 200mS

				Value	Limit	Result
				200.00 mS	200 mS	N/A



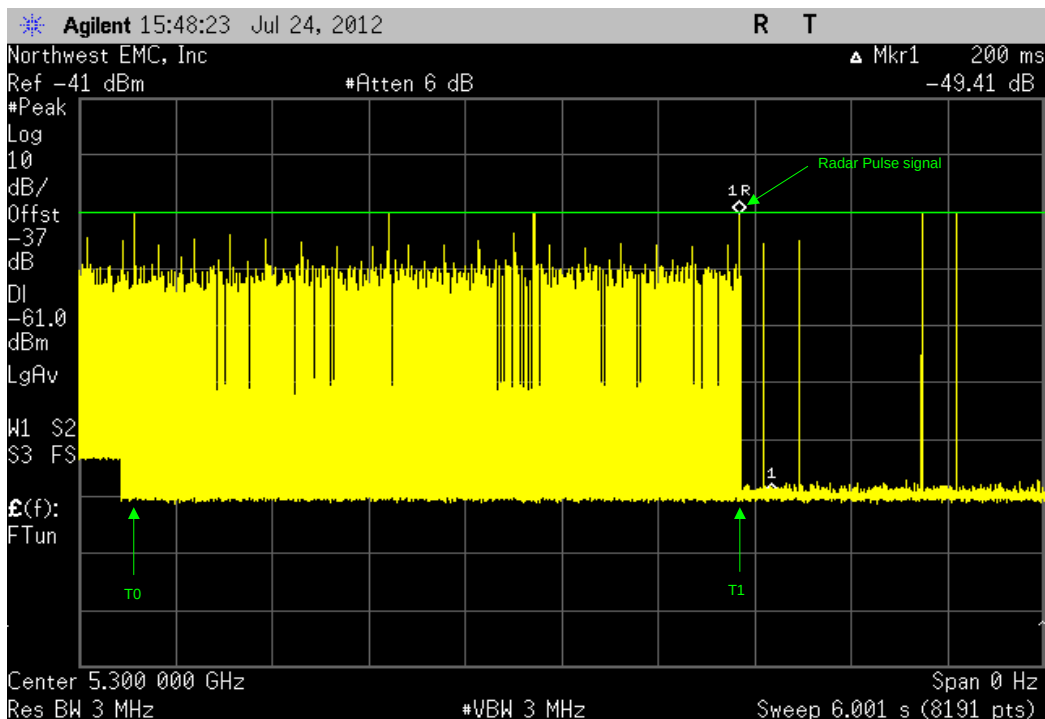
40MHz, 5.3GHz, Radar1 Aggregate

# of Signals	Pulse Width	Value	Limit	Result
2	0.4136	200.83 mS	260 mS	Pass



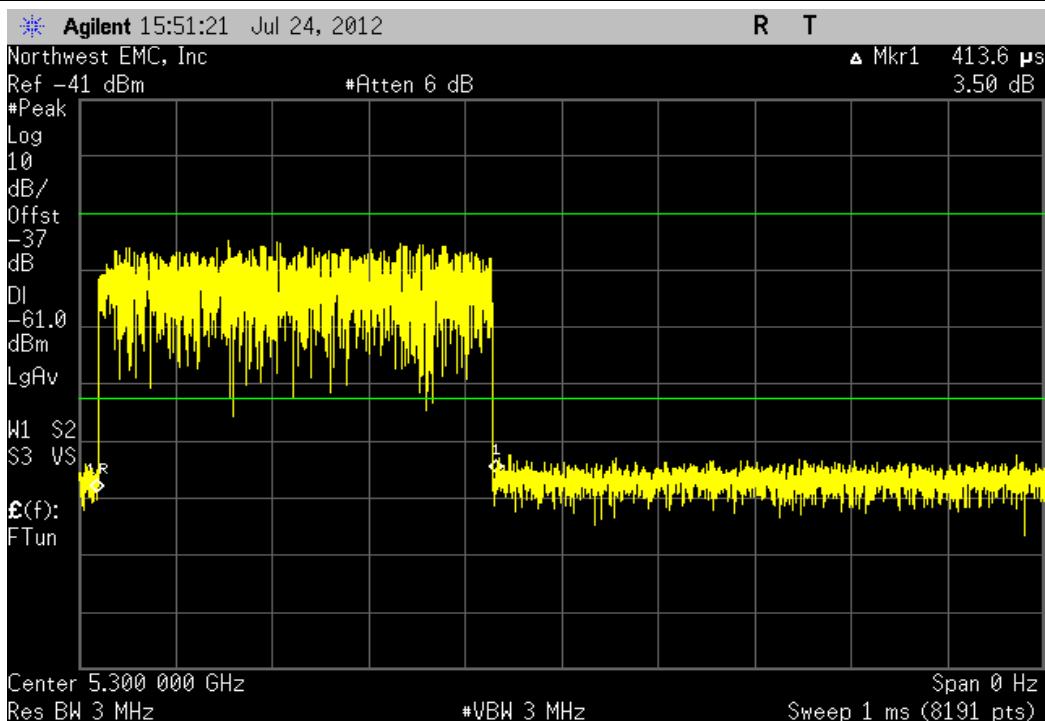
40MHz, 5.3GHz, Radar5 200mS

	Value	Limit	Result
	200.00 mS	200 mS	N/A



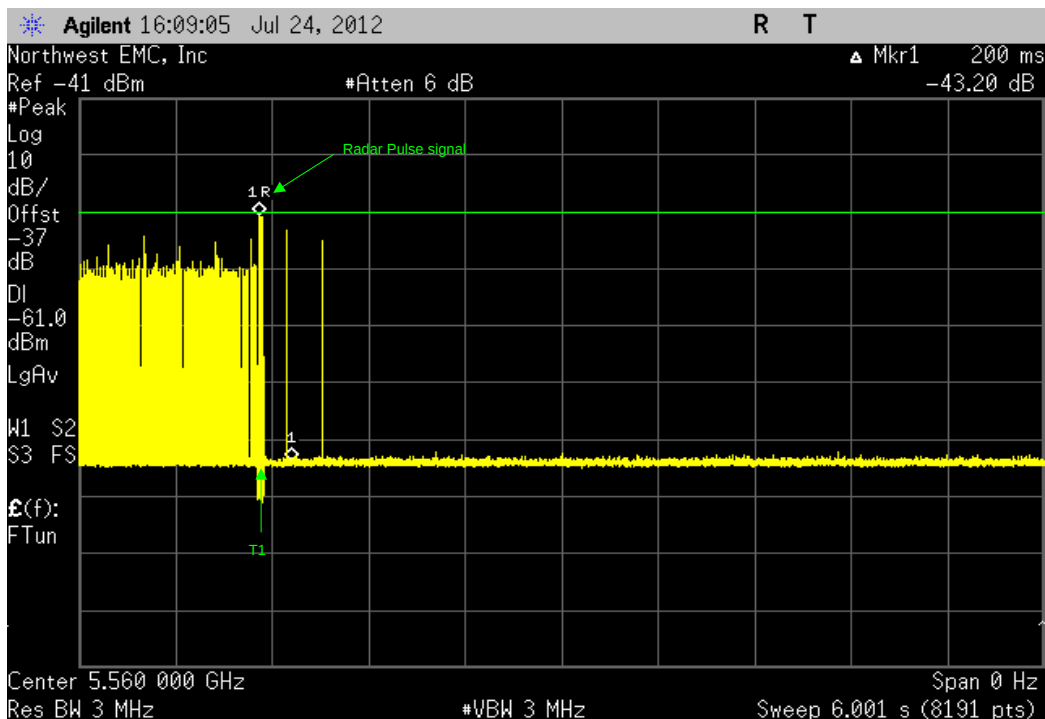
40MHz, 5.3GHz, Radar5 Aggregate

# of Signals	Pulse Width	Value	Limit	Result
1	0.4136	200.41 mS	260 mS	Pass



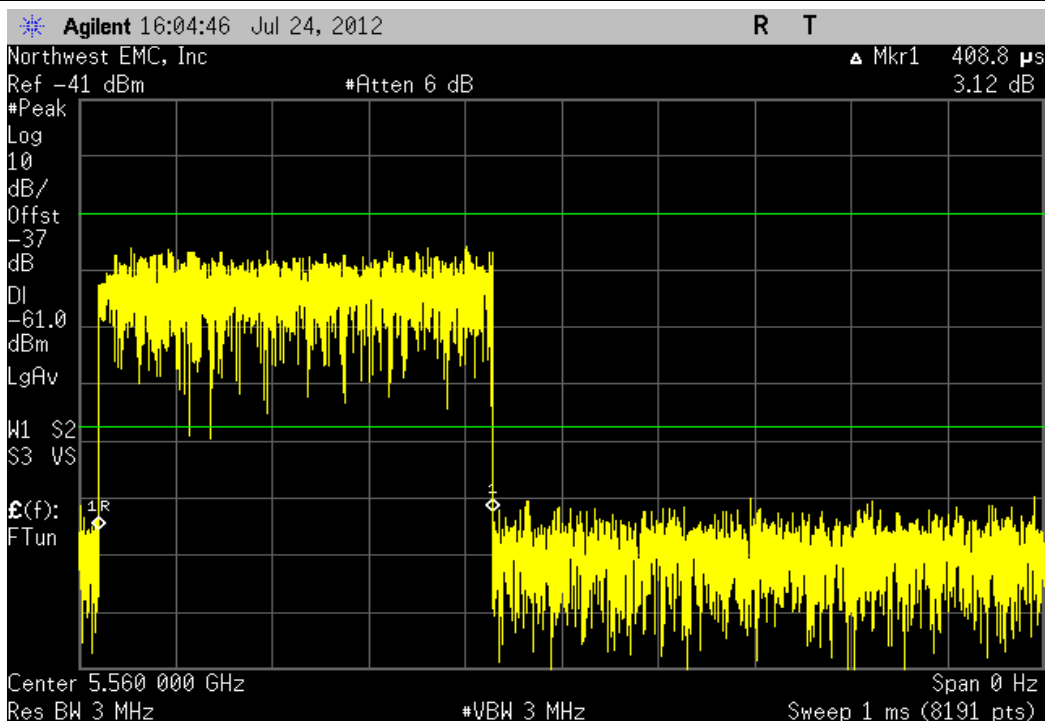
40MHz, 5.56GHz, Radar1 200mS

	Value	Limit	Result
	200.00 mS	200 mS	N/A



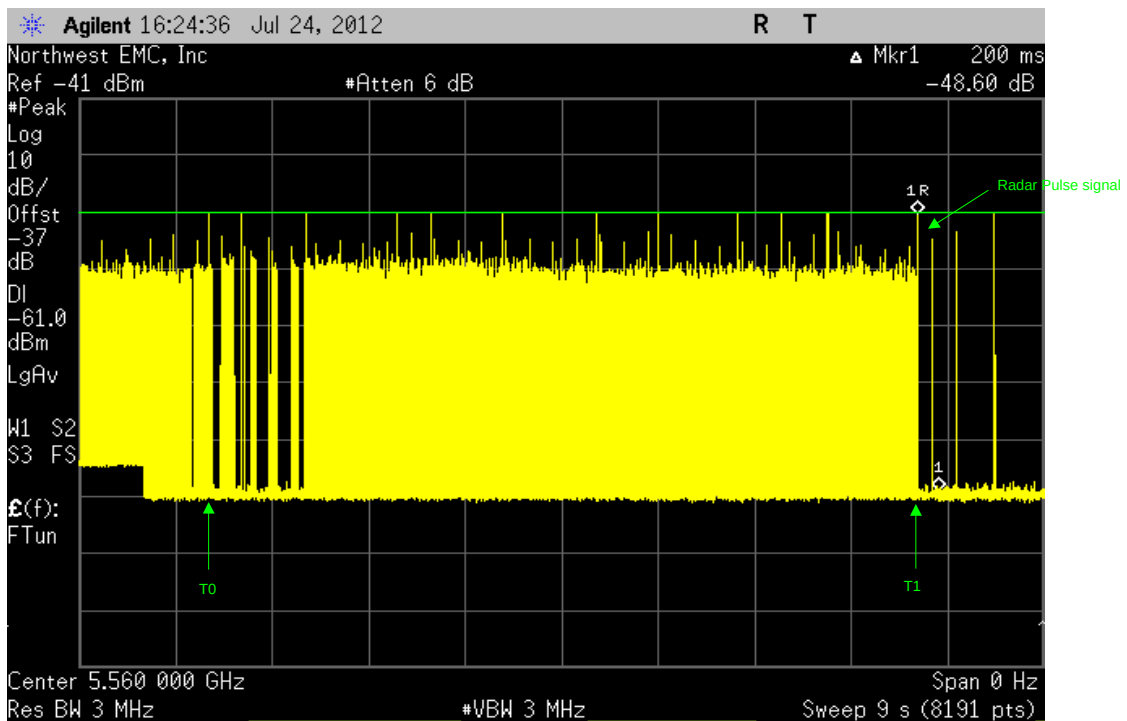
40MHz, 5.56GHz, Radar1 Aggregate

# of Signals	Pulse Width	Value	Limit	Result
1	0.4088	200.41 mS	260 mS	Pass



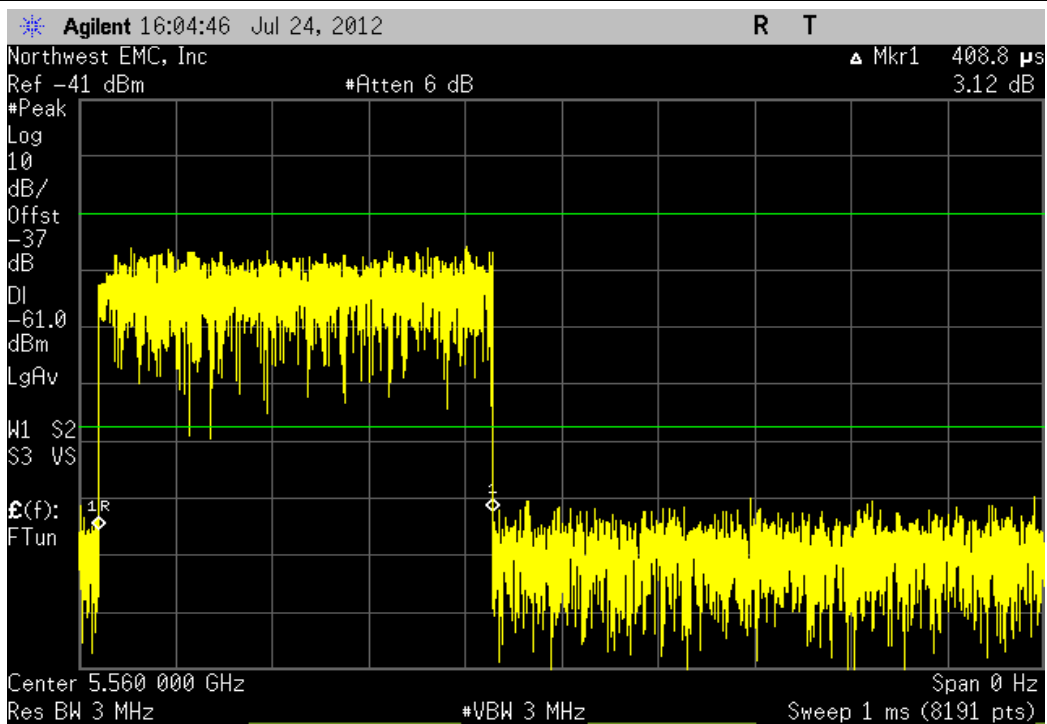
40MHz, 5.56GHz, Radar5 200mS

	Value	Limit	Result
	200.00 mS	200 mS	N/A



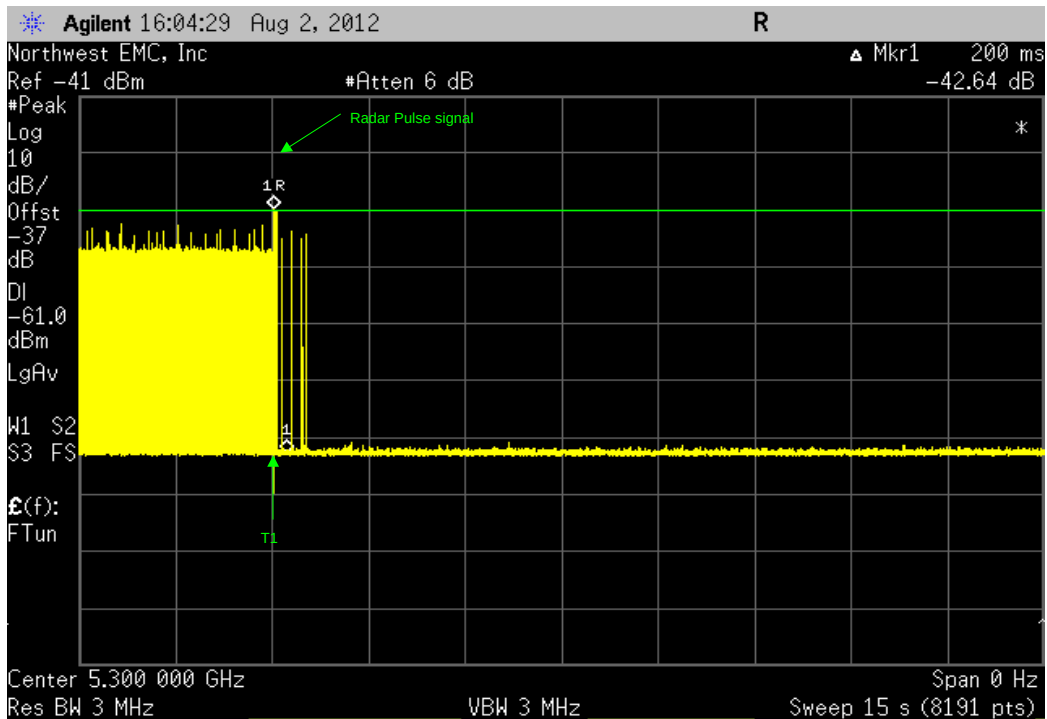
40MHz, 5.56GHz, Radar5 Aggregate

# of Signals	Pulse Width	Value	Limit	Result
1	0.4088	200.41 mS	260 mS	Pass



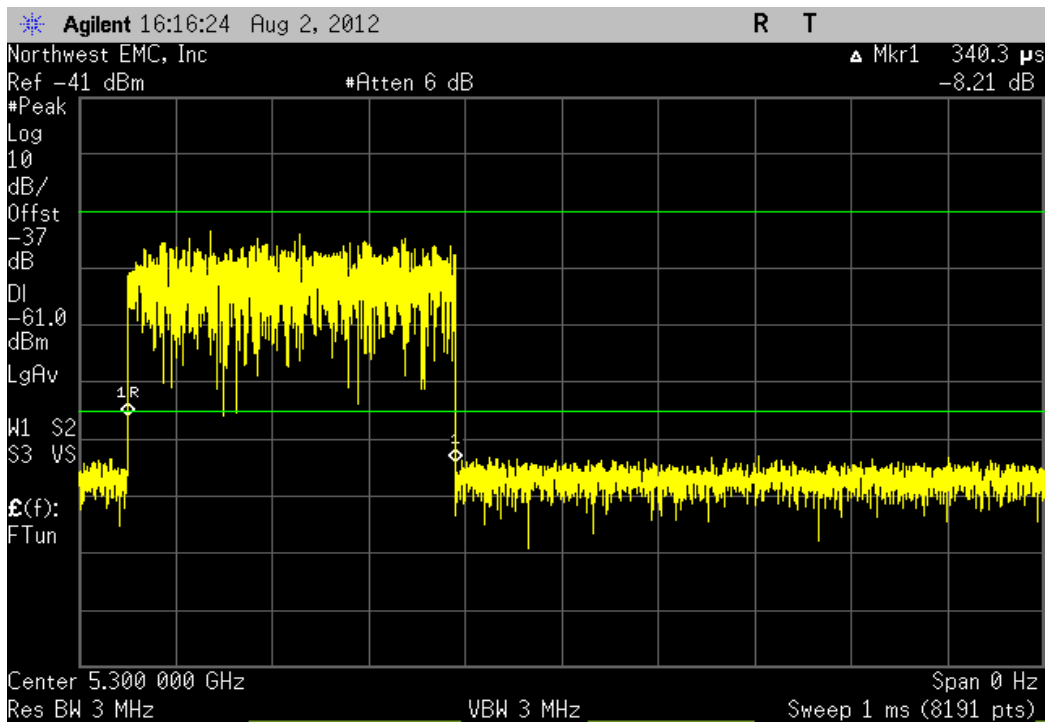
20MHz, 5.3GHz, Radar1 200mS

	Value	Limit	Result
	200.00 mS	200 mS	N/A



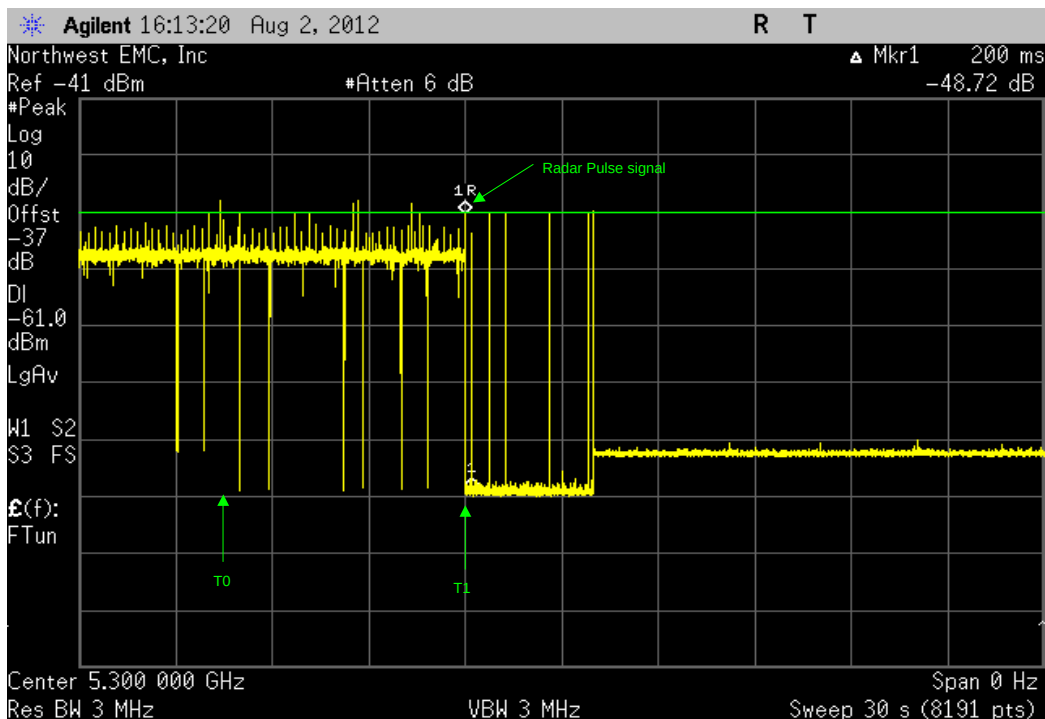
20MHz, 5.3GHz, Radar1 Aggregate

# of Signals	Pulse Width	Value	Limit	Result
3	0.3403	201.02 mS	260 mS	Pass



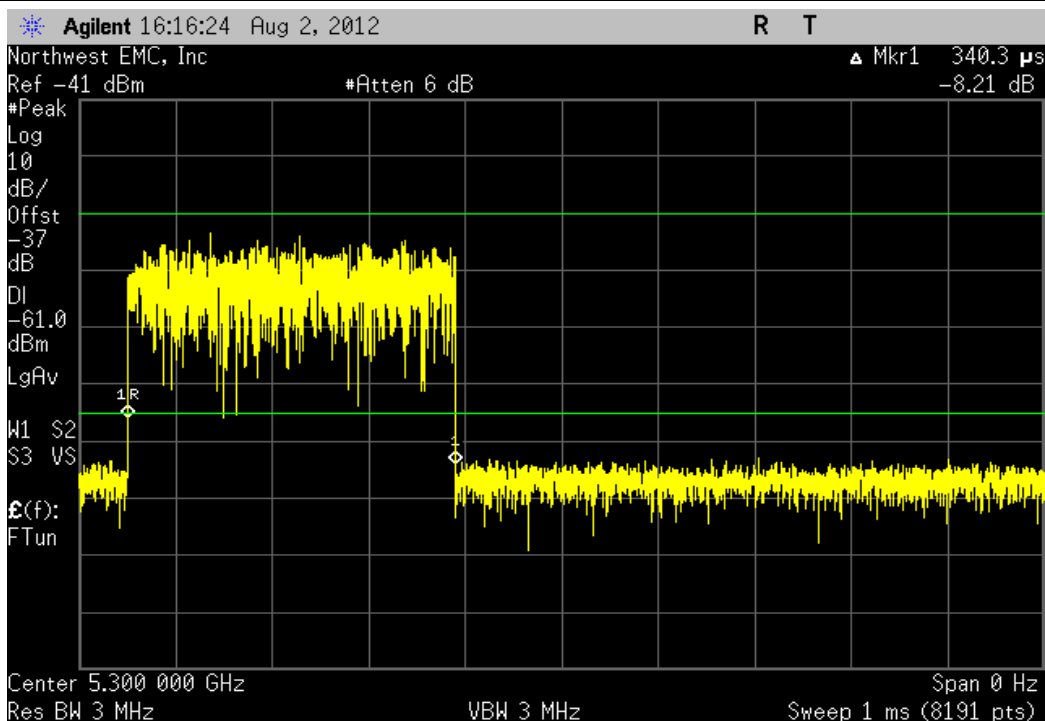
20MHz, 5.3GHz, Radar5 200mS

				Value	Limit	Result
				200.00 mS	200 mS	N/A



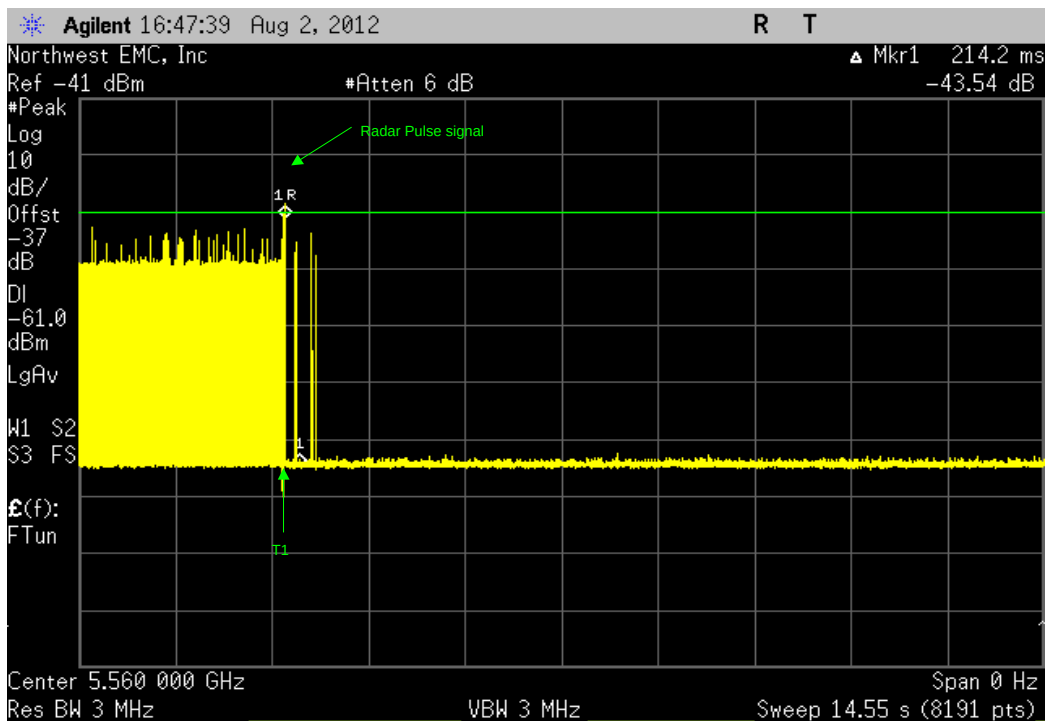
20MHz, 5.3GHz, Radar5 Aggregate

# of Signals	Pulse Width	Value	Limit	Result
1	0.3403	200.34 mS	260 mS	Pass



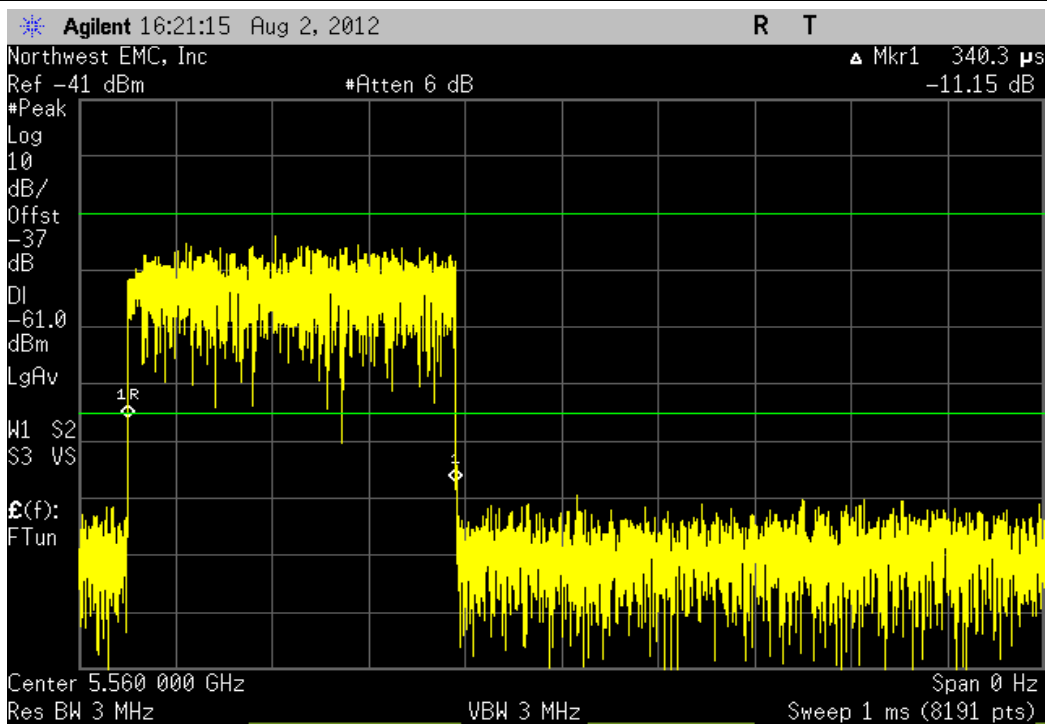
20MHz, 5.56GHz, Radar1 200mS

	Value	Limit	Result
	200.00 mS	200 mS	N/A



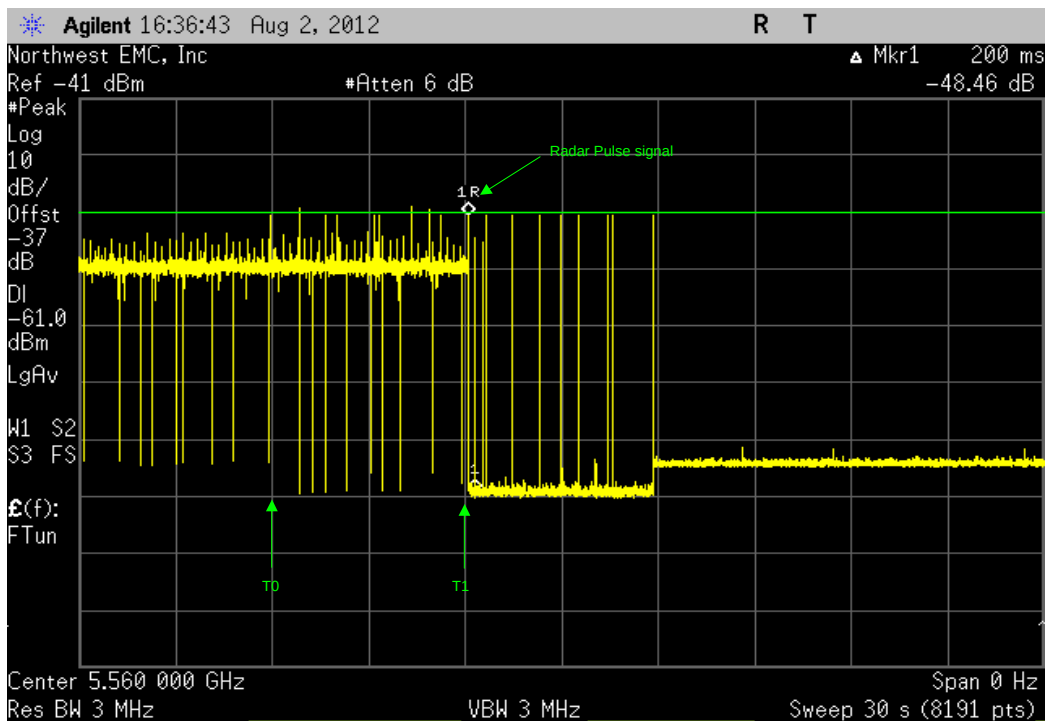
20MHz, 5.56GHz, Radar1 Aggregate

# of Signals	Pulse Width	Value	Limit	Result
3	0.3403	201.02 mS	260 mS	Pass



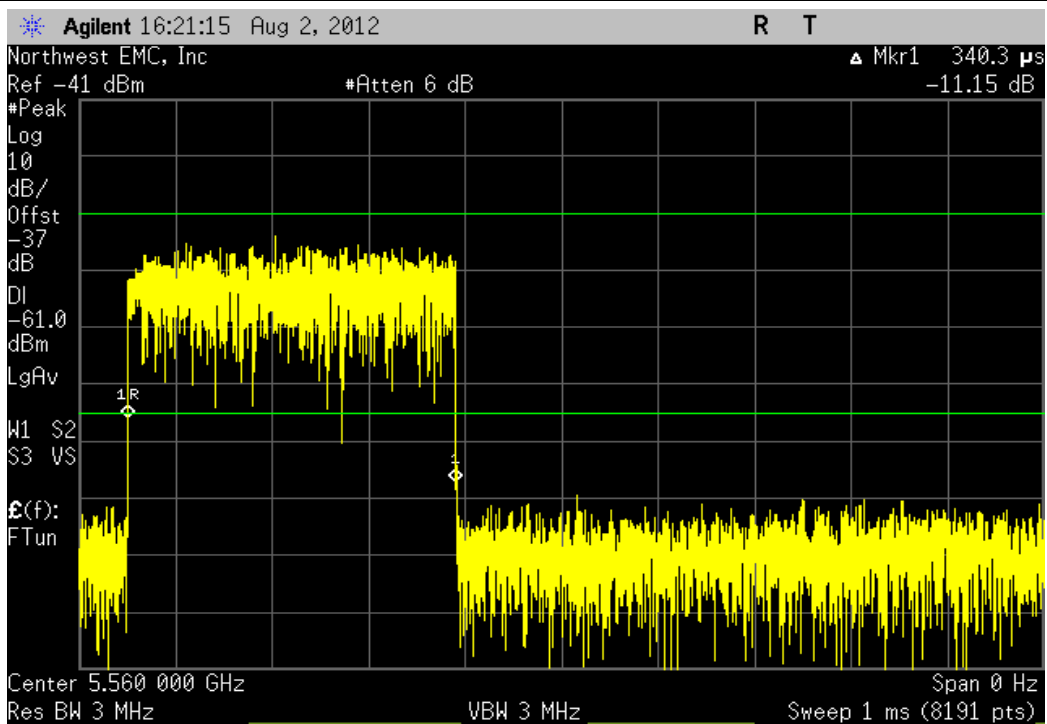
20MHz, 5.56GHz, Radar5 200mS

	Value	Limit	Result
	200.00 mS	200 mS	N/A



20MHz, 5.56GHz, Radar5 Aggregate

# of Signals	Pulse Width	Value	Limit	Result
1	0.3403	200.34 mS	260 mS	Pass





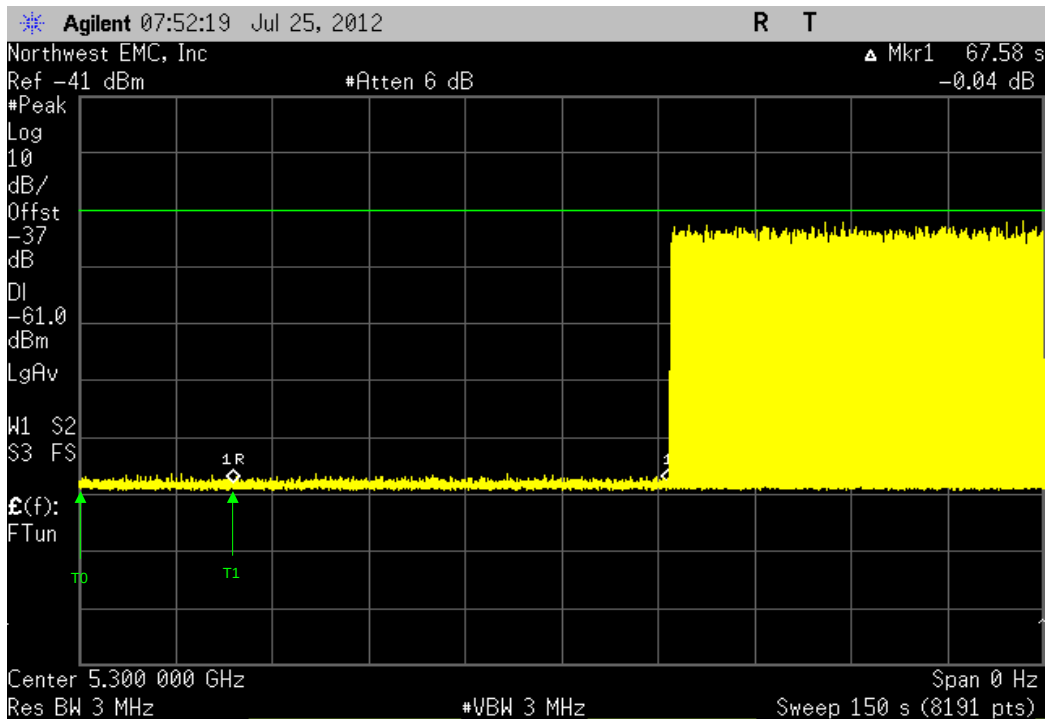
Channel Availability Check

XMit 2012.05.09

EUT: RLX2-IHNF		Work Order: PROS0152	
Serial Number: 000D8DF05CD4		Date: 07/25/12	
Customer: ProSoft Technology, Inc.		Temperature: 22°C	
Attendees: Tom Tsoulogiannis		Humidity: 48%	
Project: None		Barometric Pres.: 1015 mb	
Tested by: Jeremiah Darden		Power: 110V/60Hz	
		Job Site: OC11	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2012		ANSI C63.10:2009	
COMMENTS			
802.11a-20MHz, 802.11n-40MHz.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Value	Limit
		Result	
40MHz			
5.3GHz			
Initial CAC		67.58 Sec	≥ 60 Sec
Beginning CAC		>170 Sec	≥ 150 Sec
Ending CAC		>160 Sec	≥ 150 Sec
5.56GHz			
Initial CAC		67.22 Sec	≥ 60 Sec
Beginning CAC		>170 Sec	≥ 150 Sec
Ending CAC		>160 Sec	≥ 150 Sec
20MHz			
5.3GHz			
Initial CAC		65.1 Sec	≥ 60 Sec
Beginning CAC		>170 Sec	≥ 150 Sec
Ending CAC		>160 Sec	≥ 150 Sec
5.56GHz			
Initial CAC		65.1 Sec	≥ 60 Sec
Beginning CAC		>170 Sec	≥ 150 Sec
Ending CAC		>160 Sec	≥ 150 Sec

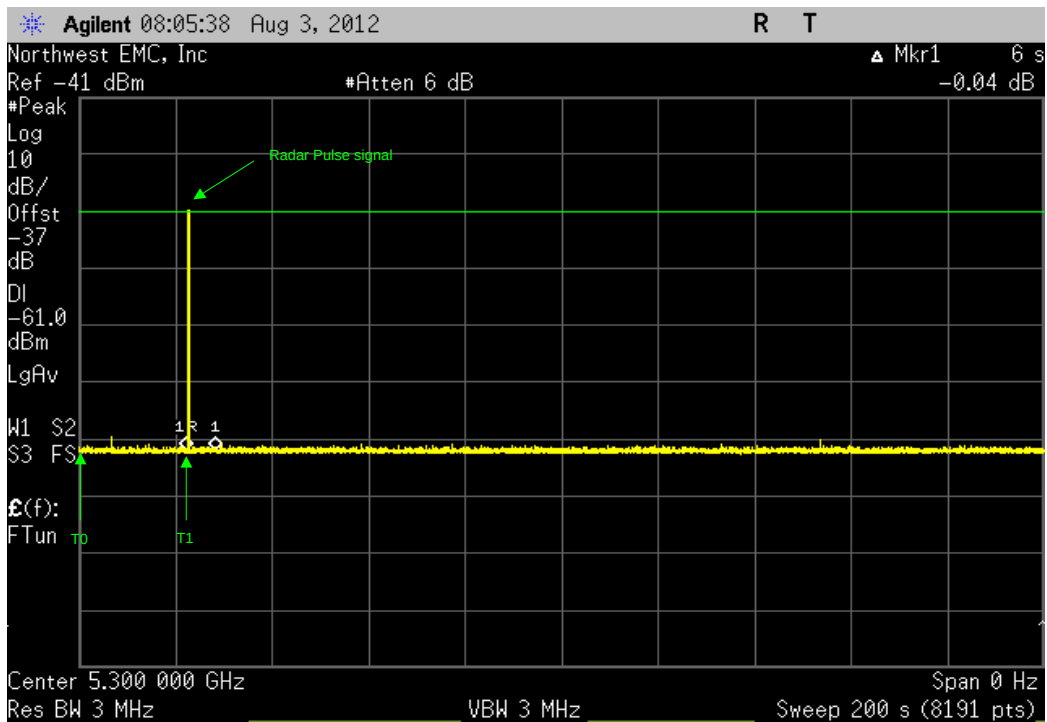
40MHz, 5.3GHz, Initial CAC

Value	Limit	Result
67.58 Sec	≥ 60 Sec	Pass



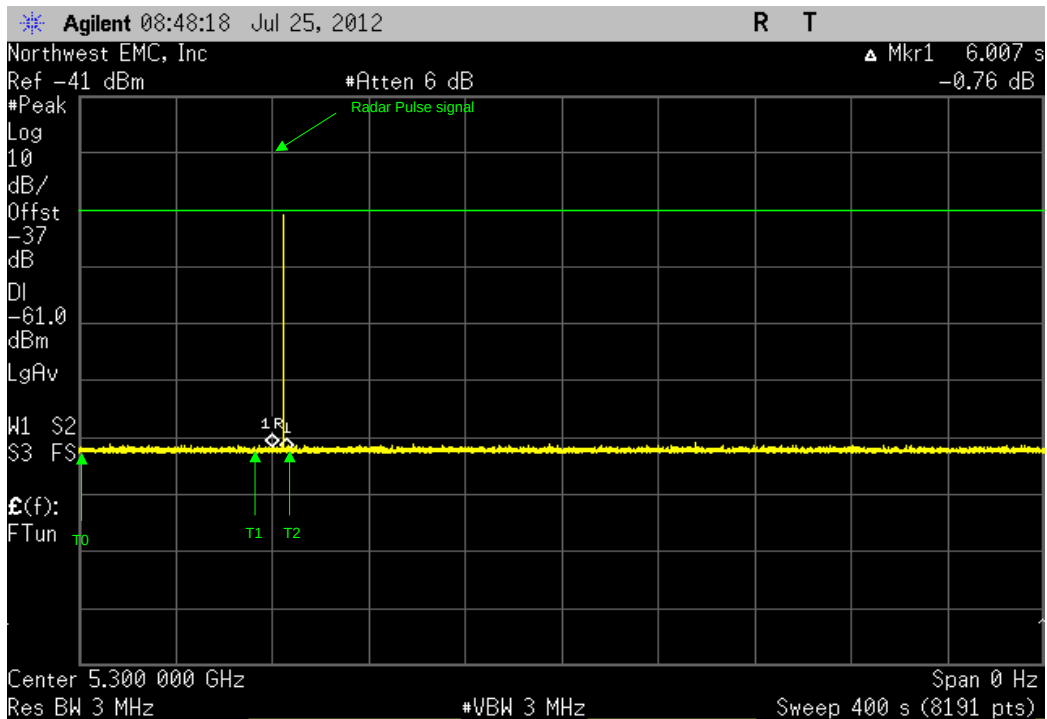
40MHz, 5.3GHz, Beginning CAC

Value	Limit	Result
>170 Sec	≥ 150 Sec	Pass



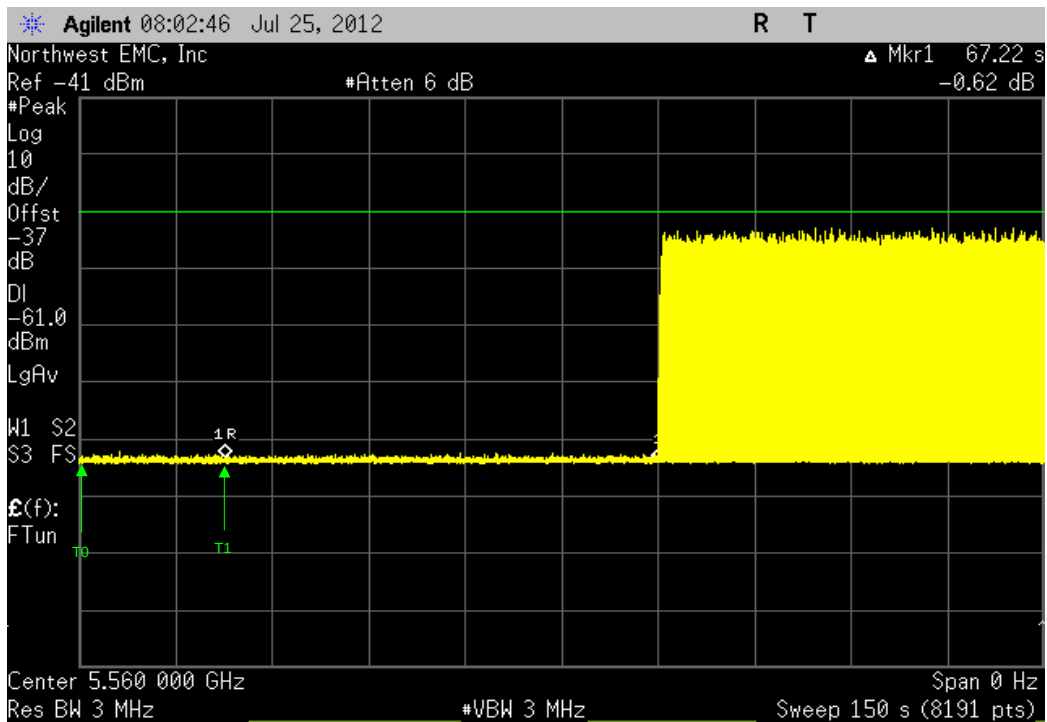
40MHz, 5.3GHz, Ending CAC

Value	Limit	Result
>160 Sec	≥ 150 Sec	Pass



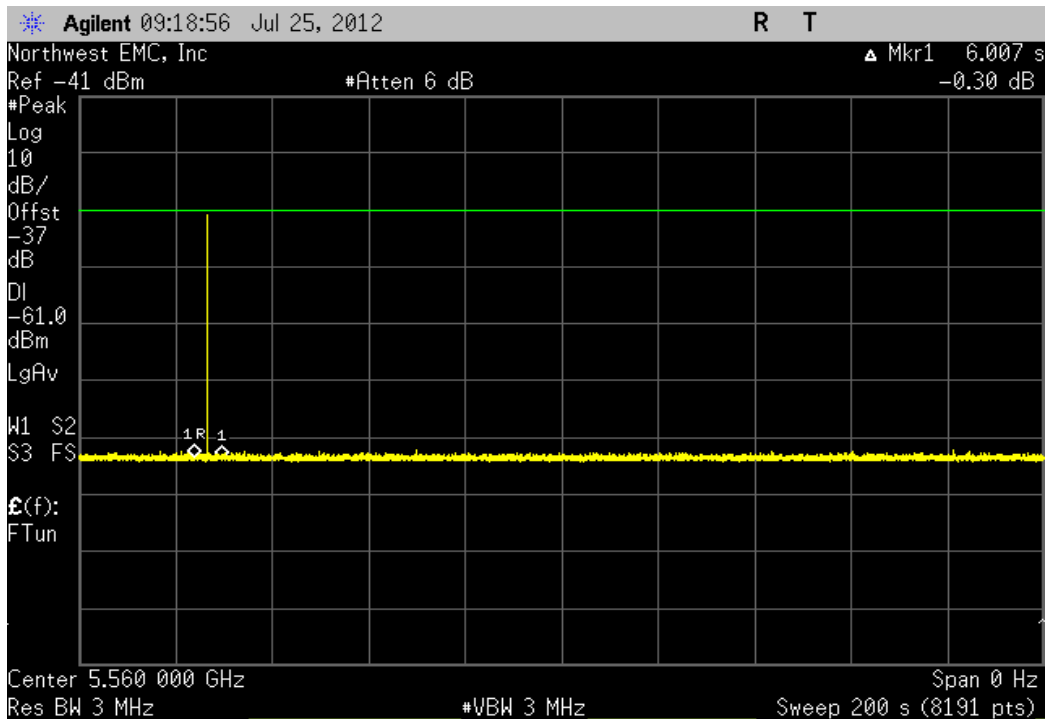
40MHz, 5.56GHz, Initial CAC

Value	Limit	Result
67.22 Sec	≥ 60 Sec	Pass



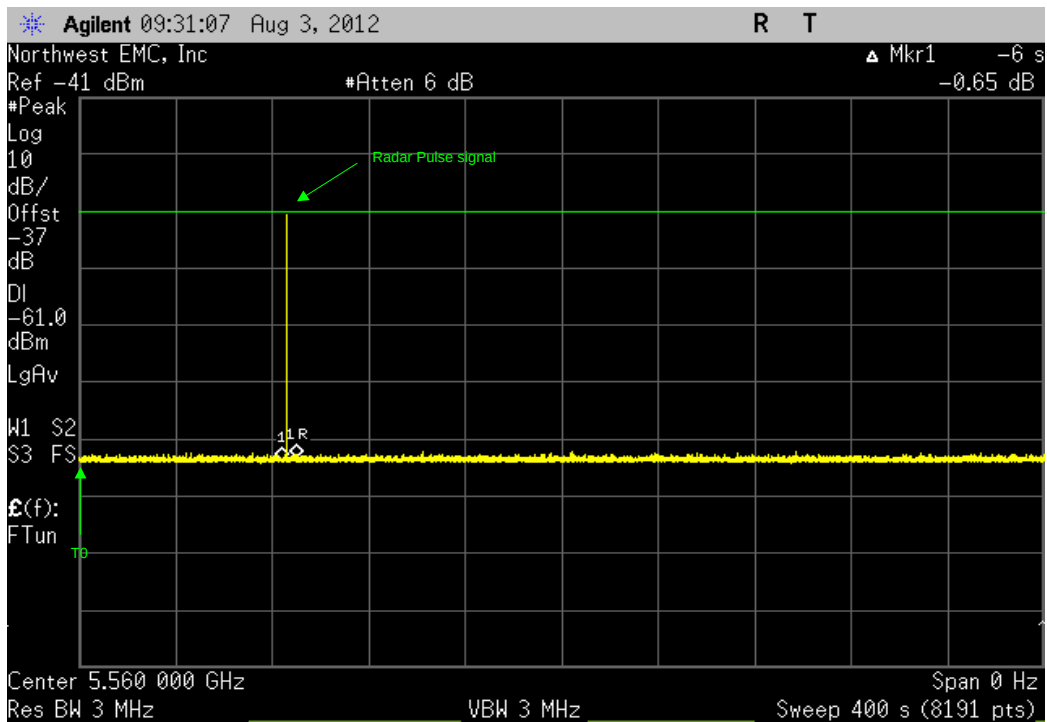
40MHz, 5.56GHz, Beginning CAC

Value	Limit	Result
>170 Sec	≥ 150 Sec	Pass



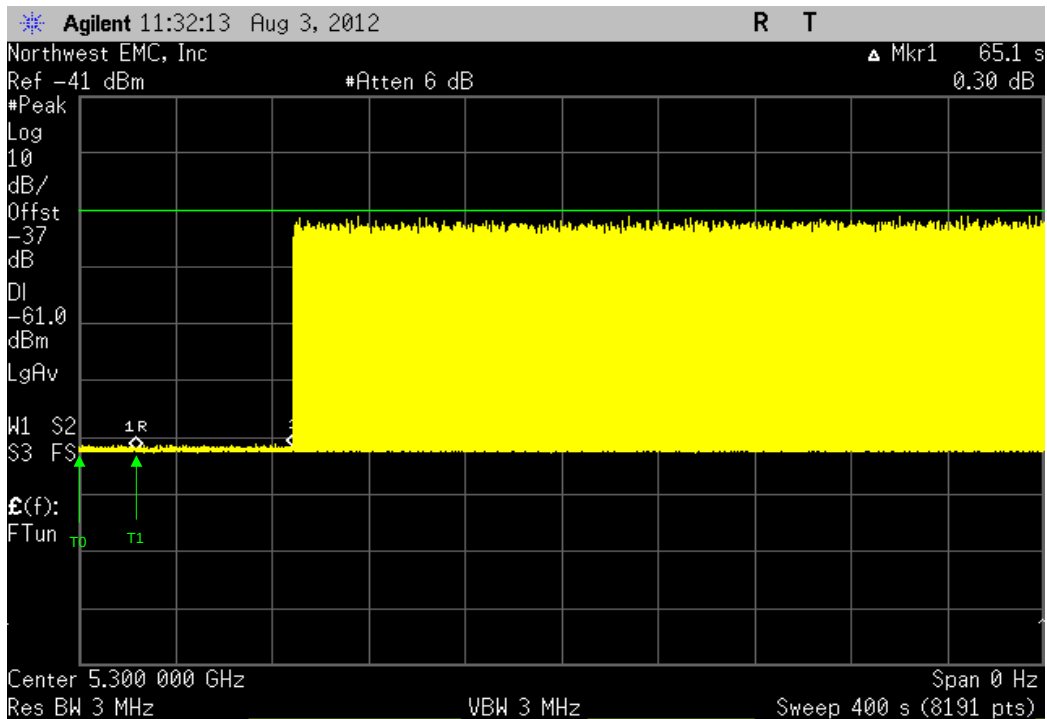
40MHz, 5.56GHz, Ending CAC

Value	Limit	Result
>160 Sec	≥ 150 Sec	Pass



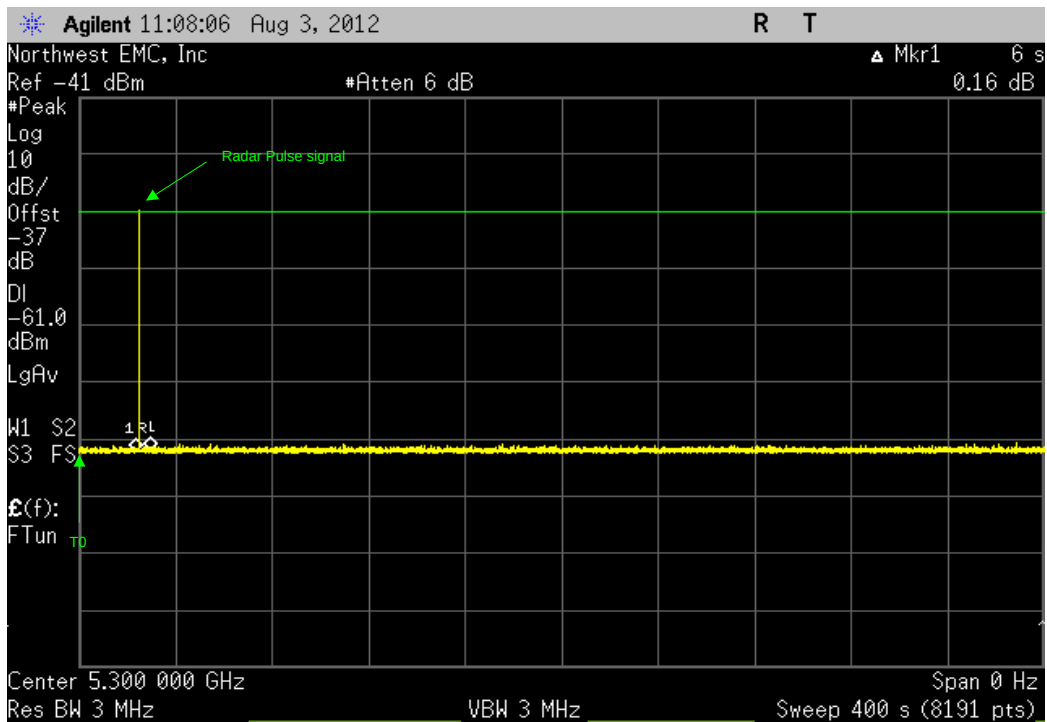
20MHz, 5.3GHz, Initial CAC

Value	Limit	Result
65.1 Sec	≥ 60 Sec	Pass



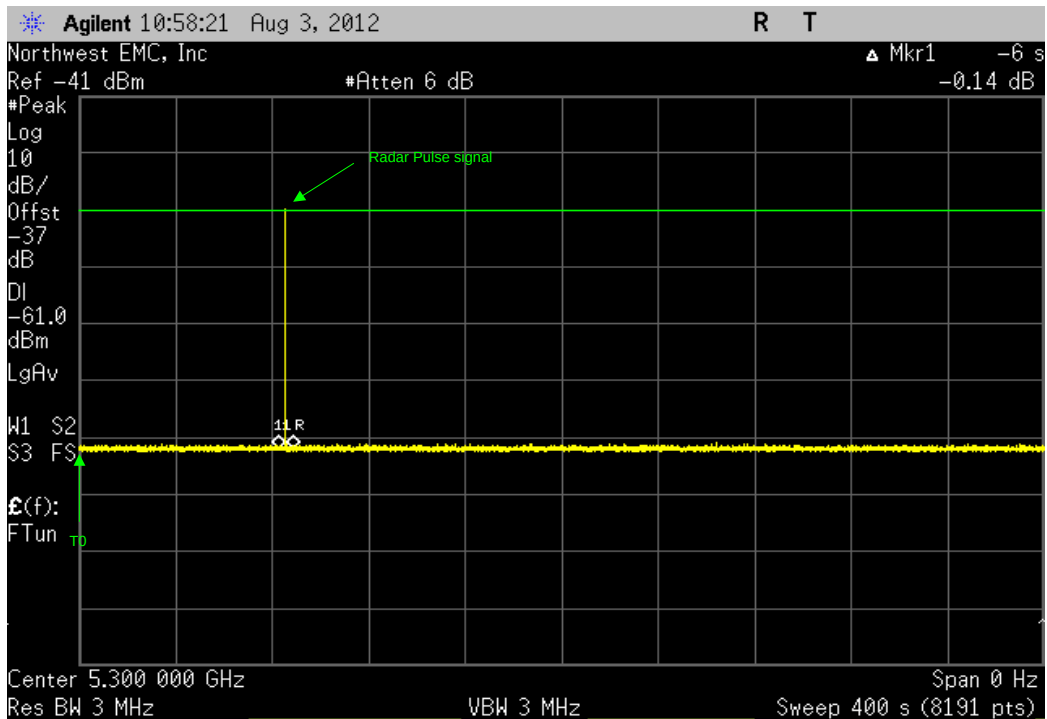
20MHz, 5.3GHz, Beginning CAC

Value	Limit	Result
>170 Sec	≥ 150 Sec	Pass



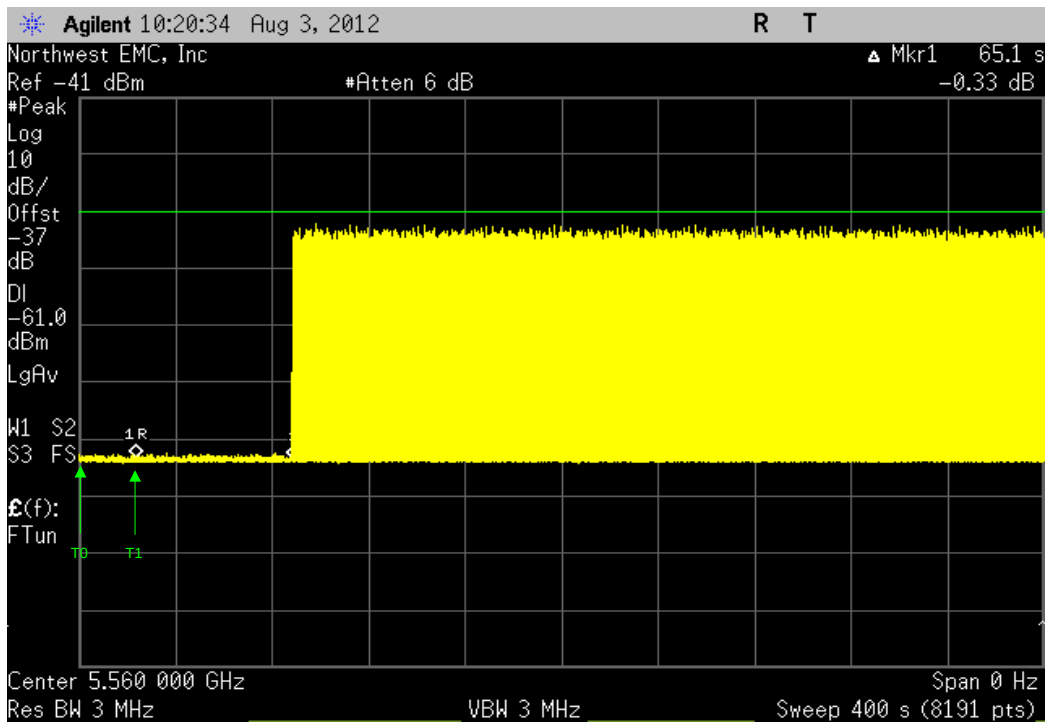
20MHz, 5.3GHz, Ending CAC

Value	Limit	Result
>160 Sec	≥ 150 Sec	Pass



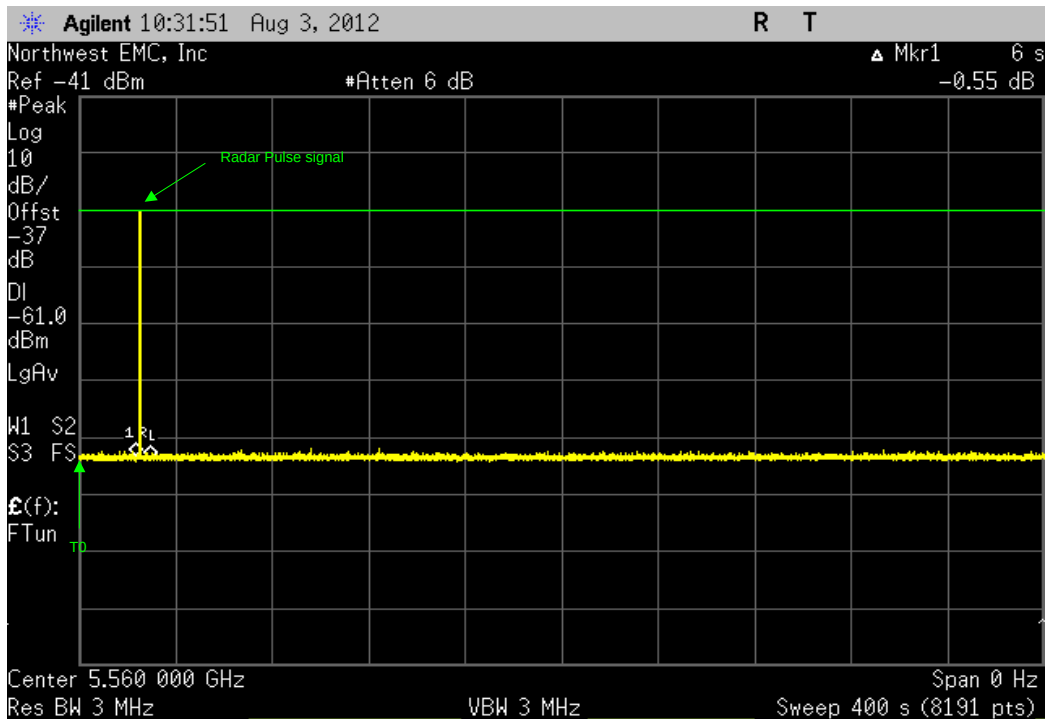
20MHz, 5.56GHz, Initial CAC

Value	Limit	Result
65.1 Sec	≥ 60 Sec	Pass



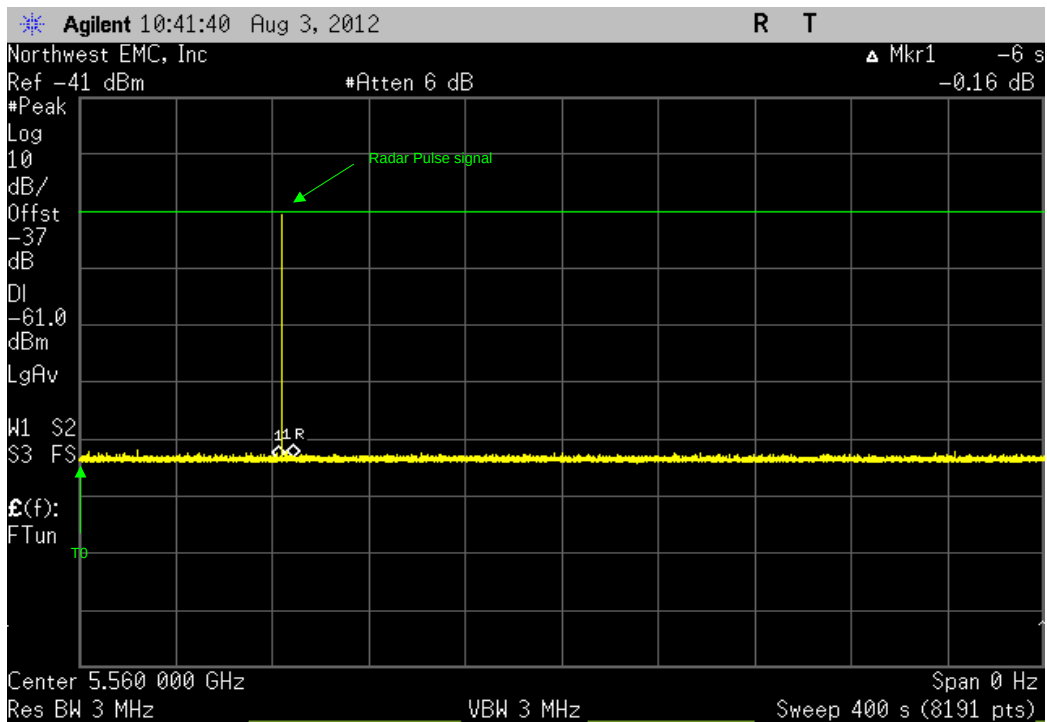
20MHz, 5.56GHz, Beginning CAC

Value	Limit	Result
>170 Sec	≥ 150 Sec	Pass



20MHz, 5.56GHz, Ending CAC

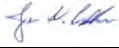
Value	Limit	Result
>160 Sec	≥ 150 Sec	Pass





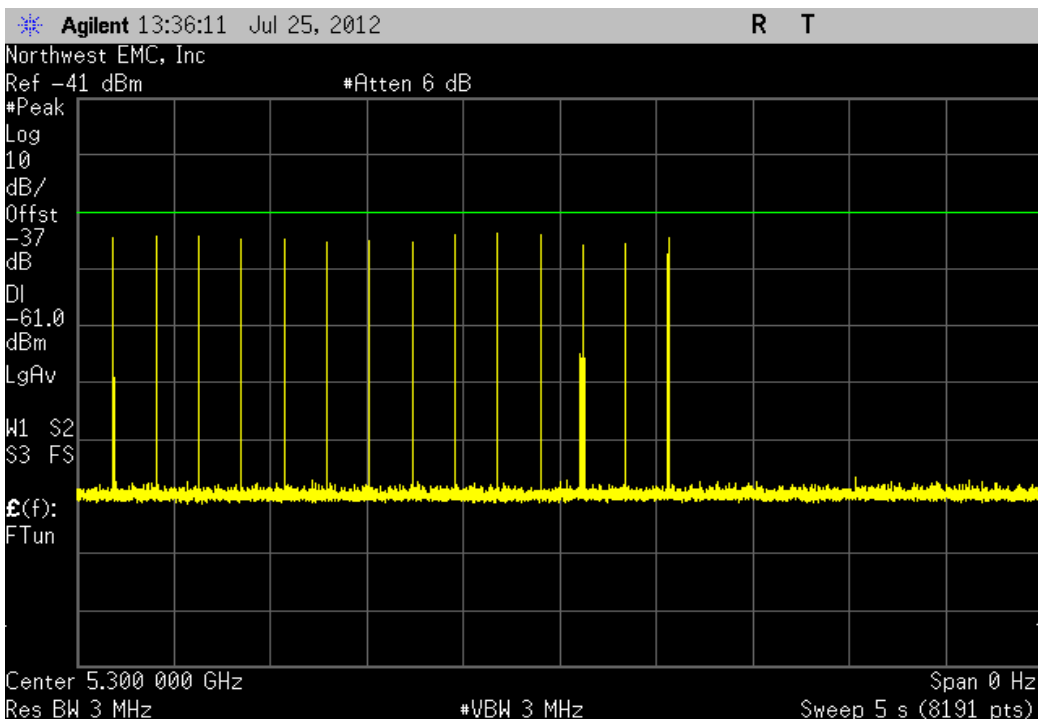
Detection Bandwidth

XMit 2012.07.31

EUT: RLX2-IHNF				Work Order: PROS0152			
Serial Number: 000D8DF05CD4				Date: 08/16/12			
Customer: ProSoft Technology, Inc.				Temperature: 23°C			
Attendees: Tom Tsoulogiannis				Humidity: 49%			
Project: None				Barometric Pres.: 1016 mb			
Tested by: Jeremiah Darden, Johnny Candelas				Power: 110V/60Hz			
				Job Site: OC11			
TEST SPECIFICATIONS				Test Method			
FCC 15.407:2012				ANSI C63.10:2009			
COMMENTS							
802.11a-20MHz, 802.11n-40MHz.							
DEVIATIONS FROM TEST STANDARD							
None							
Configuration #	1	<i>Signature</i>  					
		Detected	Not Detected	% Detected	Value	Limit	Result
40MHz							
	5.3GHz						
	Frequency Low	10	0	100%	5290MHz	N/A	N/A
	Frequency High	10	0	100%	5330MHz	N/A	N/A
	U-NII Detection Bandwidth				40MHz	≥32MHz	Pass
	5.56GHz						
	Frequency Low	10	0	100%	5530MHz	N/A	N/A
	Frequency High	10	0	100%	5570MHz	N/A	N/A
	U-NII Detection Bandwidth				40MHz	≥32MHz	Pass
20MHz							
	5.3GHz						
	Frequency Low	10	0	100%	5290.5MHz	N/A	N/A
	Frequency High	10	0	100%	5309.5MHz	N/A	N/A
	U-NII Detection Bandwidth				19MHz	≥18MHz	Pass
	5.56GHz						
	Frequency Low	10	0	100%	5550MHz	N/A	N/A
	Frequency High	10	0	100%	5570MHz	N/A	N/A
	U-NII Detection Bandwidth				20MHz	≥18MHz	Pass

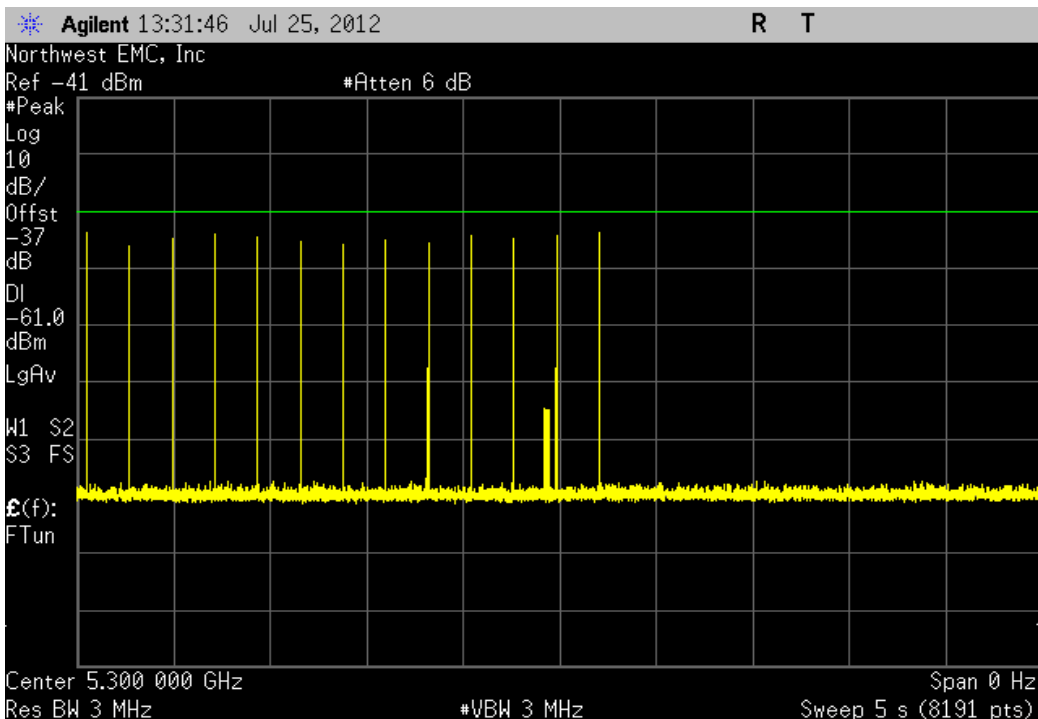
40MHz, 5.3GHz, Frequency Low (5290MHz Radar)

Detected	Not Detected	%	Value	Limit	Result
10	0	100%	5290MHz	N/A	N/A



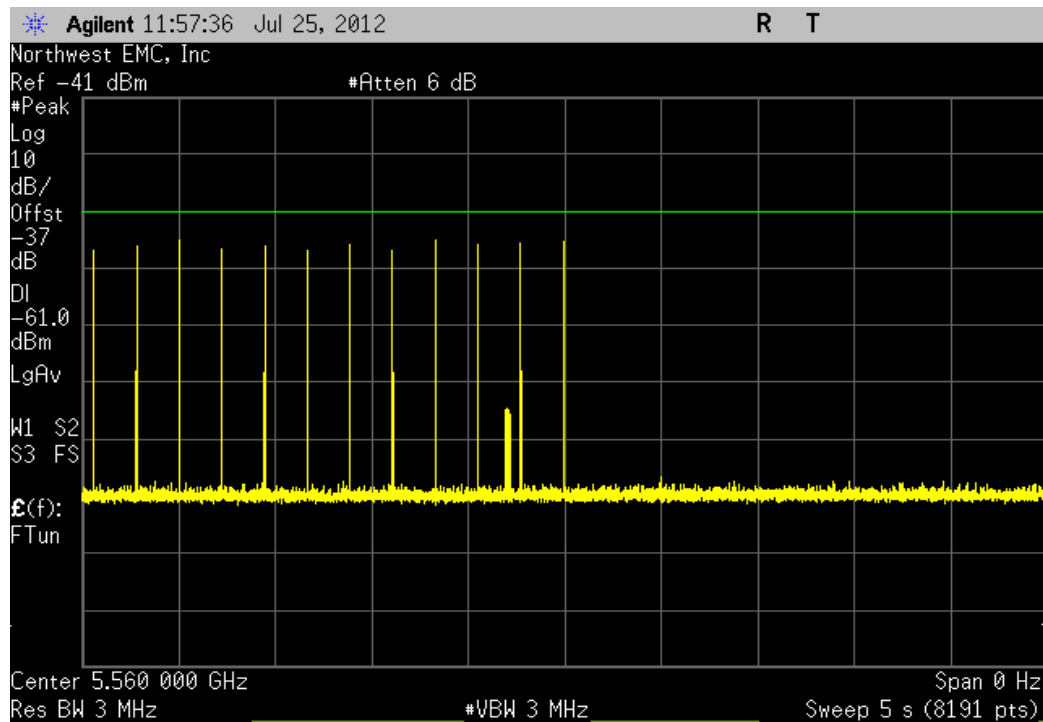
40MHz, 5.3GHz, Frequency High (5330MHz Radar)

Detected	Not Detected	% Detected	Value	Limit	Result
10	0	100%	5330MHz	N/A	N/A



40MHz, 5.3GHz, U-NII Detection Bandwidth						
Fh	Fl	Value		Limit	Result	
5330	5290	40MHz		≥32MHz	Pass	

40MHz, 5.56GHz, Frequency Low (5530MHz Radar)						
Detected	Not Detected	% Detected	Value	Limit	Result	
10	0	100%	5530MHz	N/A	N/A	

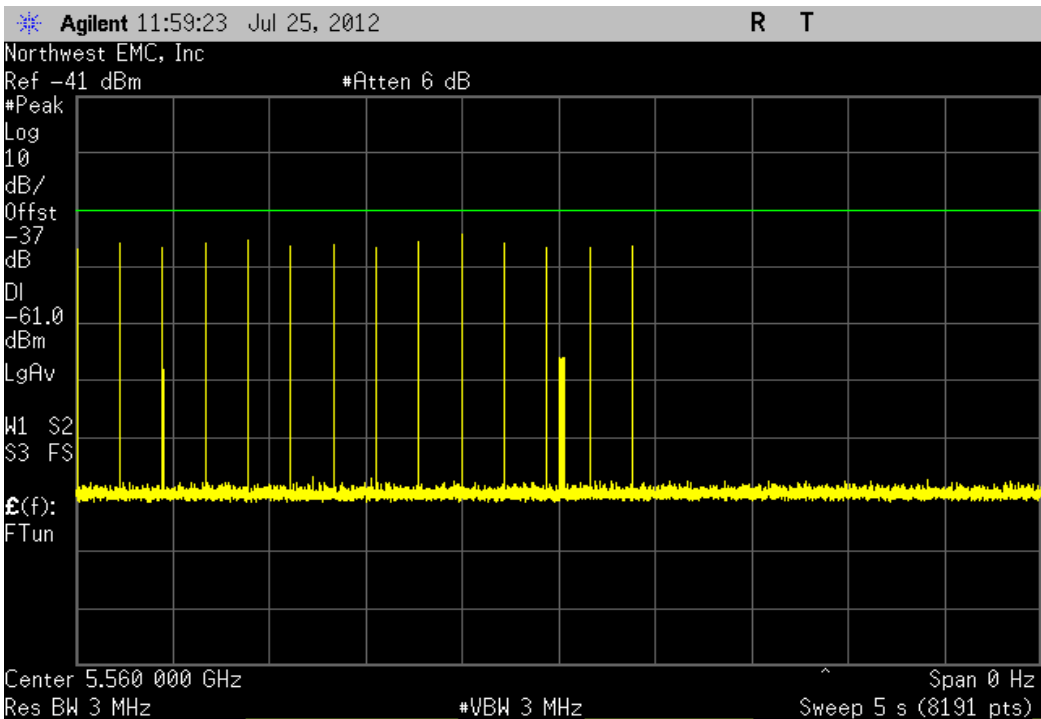




Detection Bandwidth

XMIT 2012.07.31

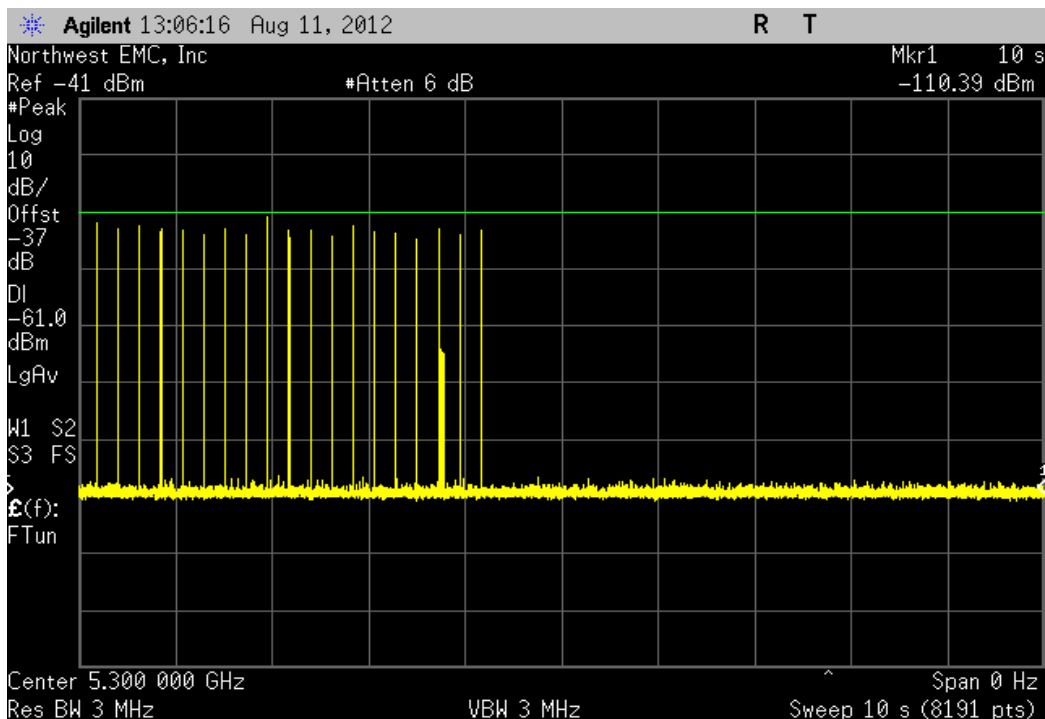
40MHz, 5.56GHz, Frequency High (5570MHz Radar)						
Detected	Not Detected	% Detected		Value	Limit	Result
10	0	100%		5570MHz	N/A	N/A



40MHz, 5.56GHz, U-NII Detection Bandwidth						
Fh	Fl			Value	Limit	Result
5570	5530			40MHz	≥32MHz	Pass

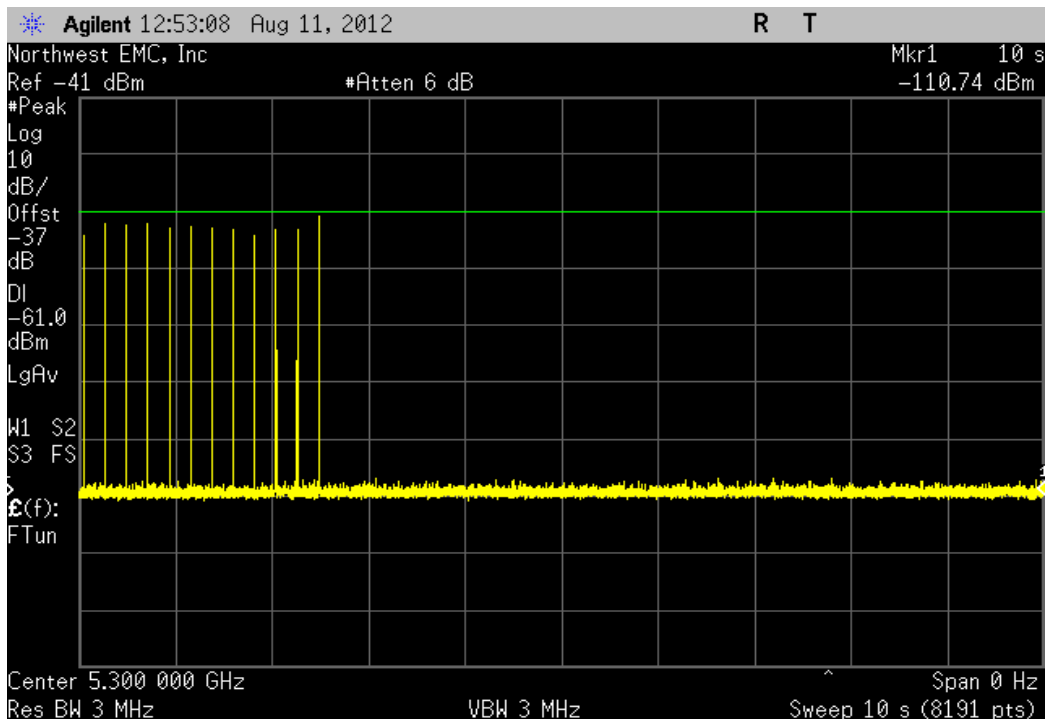
20MHz, 5.3GHz, Frequency Low (5291MHz Radar)

Detected	Not Detected	% Detected	Value	Limit	Result
10	0	100%	5290.5MHz	N/A	N/A



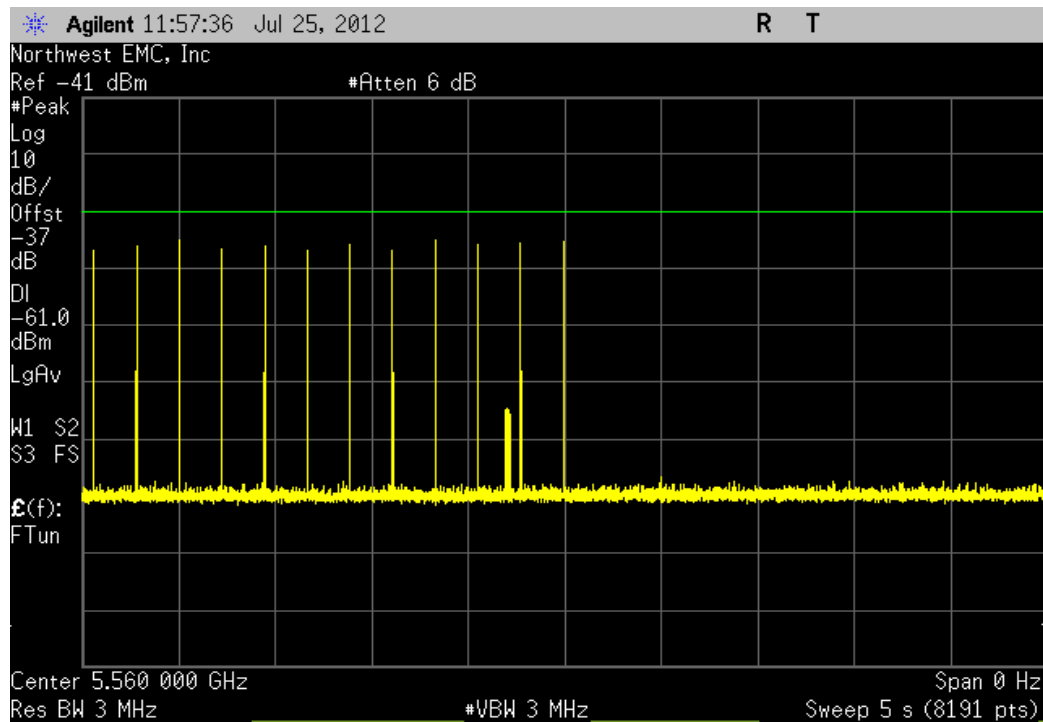
20MHz, 5.3GHz, Frequency High (5309MHz Radar)

Detected	Not Detected	% Detected	Value	Limit	Result
10	0	100%	5309.5MHz	N/A	N/A



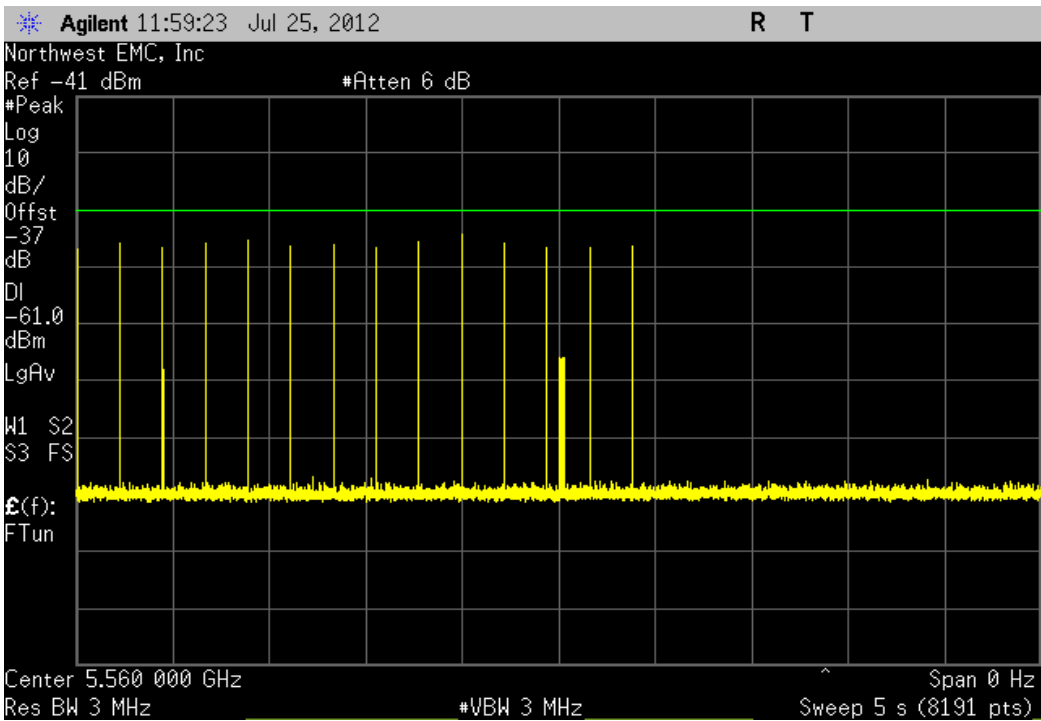
20MHz, 5.3GHz, U-NII Detection Bandwidth						
Fh	Fl	Value		Limit	Result	
5309.5	5290.5	19MHz	≥18MHz	Pass		

20MHz, 5.56GHz, Frequency Low (5550MHz Radar)						
Detected	Not Detected	% Detected	Value	Limit	Result	
10	0	100%	5550MHz	N/A	N/A	



Detection Bandwidth

20MHz, 5.56GHz, Frequency High (5570MHz Radar)						
Detected	Not Detected	% Detected		Value	Limit	Result
10	0	100%		5570MHz	N/A	N/A



20MHz, 5.56GHz, U-NII Detection Bandwidth						
Fh	Fl			Value	Limit	Result
5570	5550			20MHz	≥18MHz	Pass

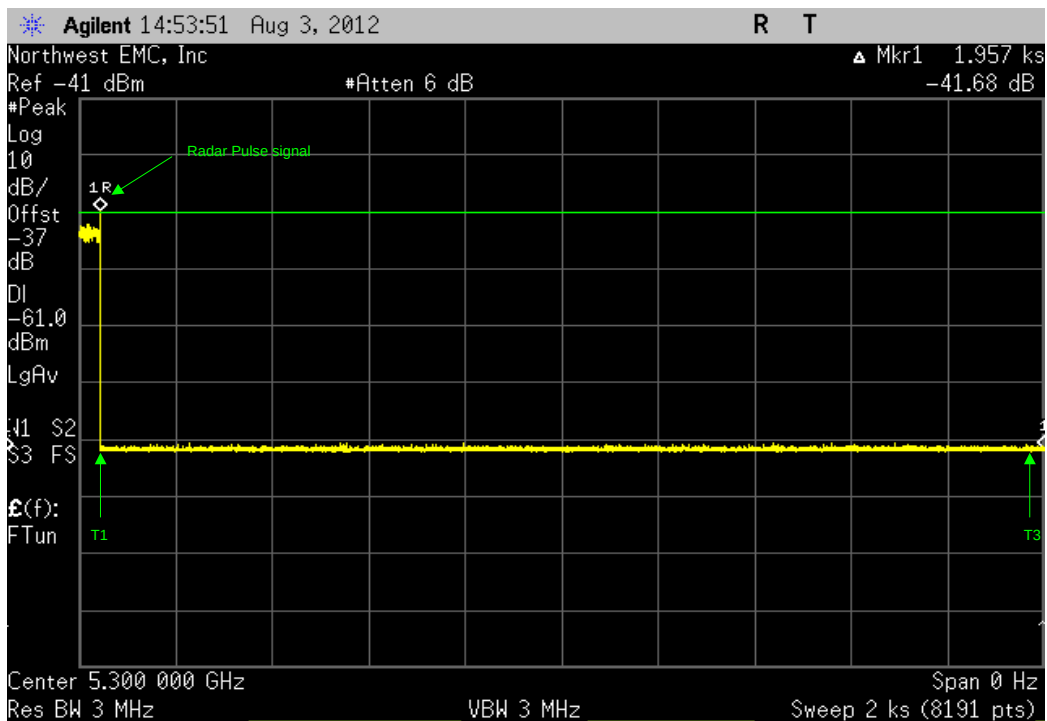


Non Occupancy Period

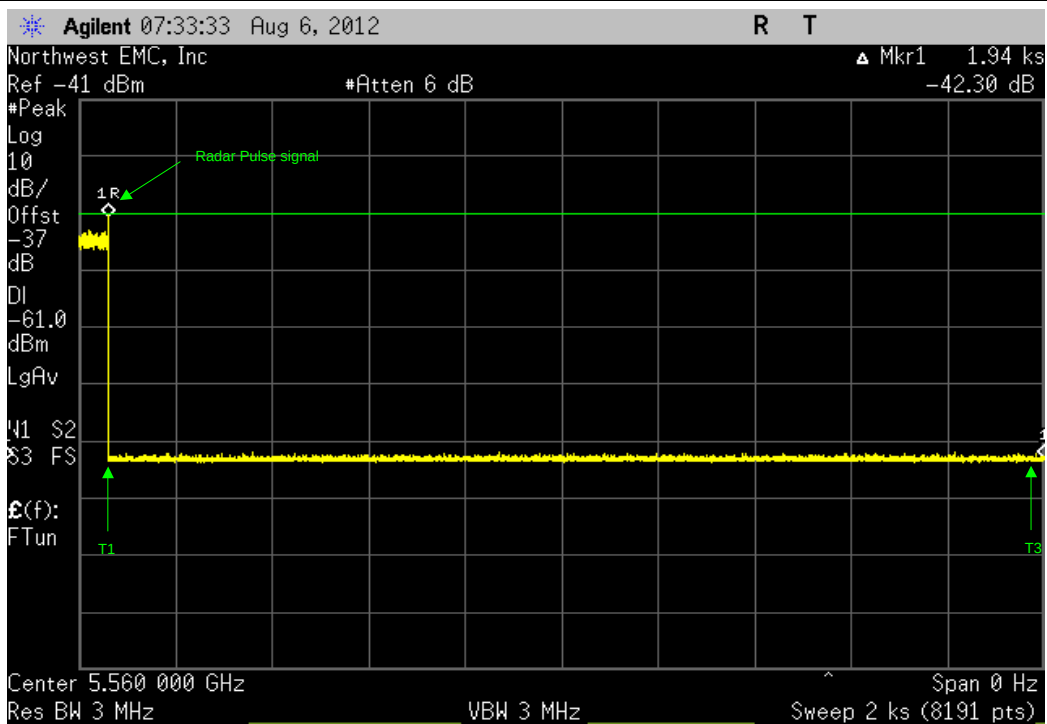
XMit 2012.07.31

EUT: RLX2-IHNF		Work Order: PROS0152	
Serial Number: 000D8DF05CD4		Date: 07/31/12	
Customer: ProSoft Technology, Inc.		Temperature: 23°C	
Attendees: Tom Tsoulogiannis		Humidity: 49%	
Project: None		Barometric Pres.: 1016 mb	
Tested by: Jeremiah Darden		Power: 110V/60Hz	
		Job Site: OC11	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2012		ANSI C63.10:2009	
COMMENTS			
802.11a-20MHz, 802.11n-40MHz			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Value	Limit
		Result	
40MHz			
5.3GHz		30min Non Occupancy Period	>30min
5.56GHz		30min Non Occupancy Period	30min
			Pass
20MHz			
5.3GHz		30min Non Occupancy Period	>30min
5.56GHz		30min Non Occupancy Period	30min
			Pass

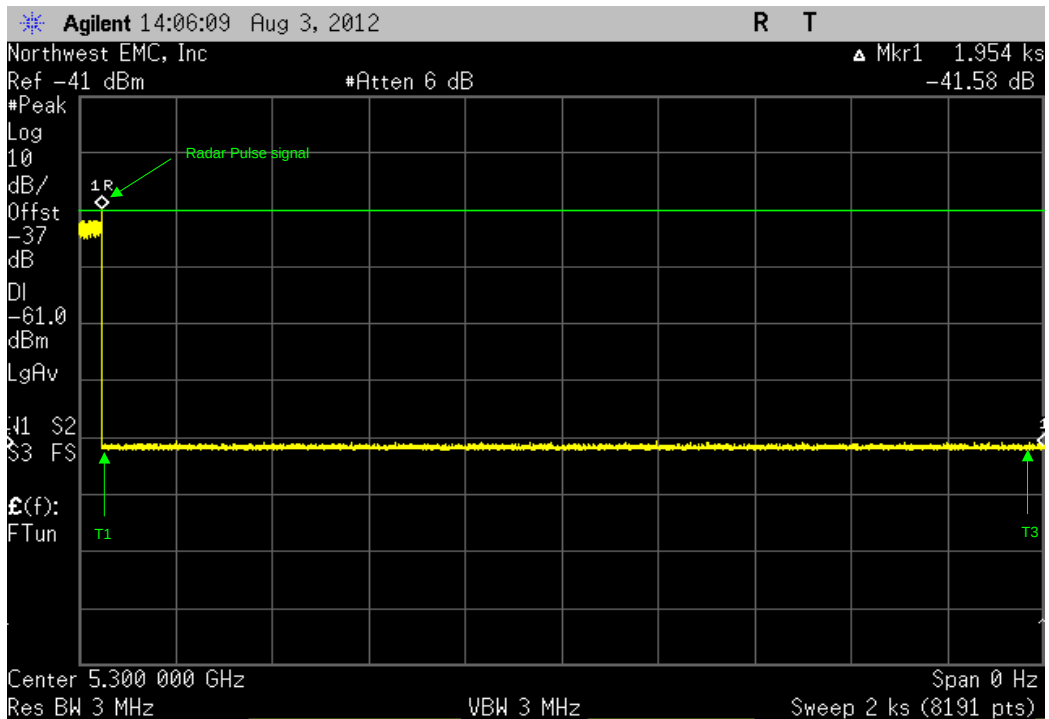
40MHz, 5.3GHz, 30min Non Occupancy Period						
				Value	Limit	Result
				>30min	30min	Pass



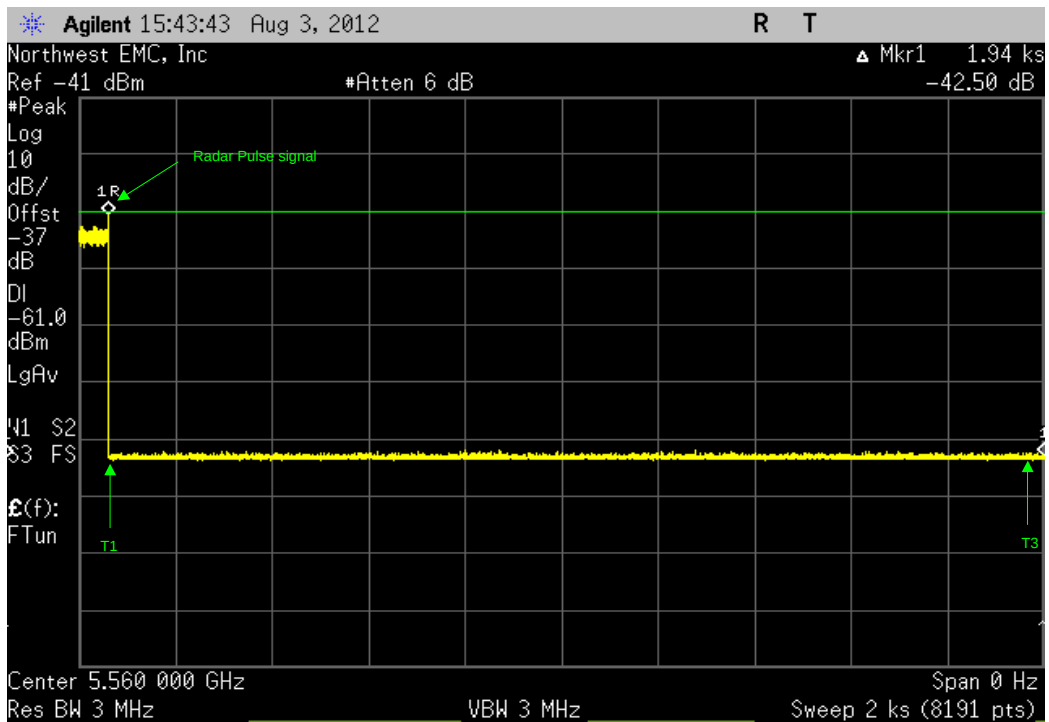
40MHz, 5.56GHz, 30min Non Occupancy Period						
				Value	Limit	Result
				>30min	30min	Pass



20MHz, 5.3GHz, 30min Non Occupancy Period						
				Value	Limit	Result
				>30min	30min	Pass



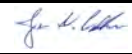
20MHz, 5.56GHz, 30min Non Occupancy Period						
				Value	Limit	Result
				>30min	30min	Pass





Statistical Performance Check

XMit 2012.07.31

EUT: RLX2-IHNF				Work Order: PROS0152			
Serial Number: 000D8DF05CD4				Date: 08/16/12			
Customer: ProSoft Technology, Inc.				Temperature: 23°C			
Attendees: Tom Tsoulogiannis				Humidity: 39%			
Project: None				Barometric Pres.: 1017 mb			
Tested by: Johnny Candelas, Jeremiah Darden				Power: 110V/60Hz			
Job Site: OC11							
TEST SPECIFICATIONS				Test Method			
FCC 15.407:2012				ANSI C63.10:2009			
COMMENTS							
802.11a-20MHz, 802.11n-40MHz							
DEVIATIONS FROM TEST STANDARD							
None							
Configuration #	1	Signature  					
				Value	Limit	Result	
40MHz							
5.3GHz							
	Radar1				100.00%	60%	Pass
	Radar2				100.00%	60%	Pass
	Radar3				100.00%	60%	Pass
	Radar4				100.00%	60%	Pass
	Radar1-4 Summary	100.00%	100.00%	100.00%	100.00%	80%	Pass
	Radar5				93.33%	80%	Pass
	Radar6				100.00%	70%	Pass
5.56GHz							
	Radar1				100.00%	60%	Pass
	Radar2				100.00%	60%	Pass
	Radar3				100.00%	60%	Pass
	Radar4				100.00%	60%	Pass
	Radar1-4 Summary	100.00%	100.00%	100.00%	100.00%	80%	Pass
	Radar5				96.67%	80%	Pass
	Radar6				100.00%	70%	Pass
20MHz							
5.3GHz							
	Radar1				100.00%	60%	Pass
	Radar2				60.00%	60%	Pass
	Radar3				93.33%	60%	Pass
	Radar4				86.67%	60%	Pass
	Radar1-4 Summary	100.00%	60.00%	93.33%	86.67%	80%	Pass
	Radar5				86.67%	80%	Pass
	Radar6				96.67%	70%	Pass
5.56GHz							
	Radar1				100.00%	60%	Pass
	Radar2				60.00%	60%	Pass
	Radar3				100.00%	60%	Pass
	Radar4				83.33%	60%	Pass
	Radar1-4 Summary	100.00%	60.00%	100.00%	83.33%	80%	Pass
	Radar5				96.67%	80%	Pass
	Radar6				93.33%	70%	Pass

Statistical Performance Check

40MHz, 5.3GHz, Radar1						
				Value	Limit	Result
				100%	60%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #1	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	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	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
	100%	30	0

40MHz, 5.3GHz, Radar2						
				Value	Limit	Result
				100%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #2	1	Yes		25	1.1	179
	2	Yes		29	3.2	184
	3	Yes		28	2.8	169
	4	Yes		29	1.3	204
	5	Yes		23	4.1	151
	6	Yes		24	1.1	202
	7	Yes		23	4.6	198
	8	Yes		23	2.8	212
	9	Yes		23	2.6	228
	10	Yes		28	2.5	195
	11	Yes		28	1.5	195
	12	Yes		27	1.1	190
	13	Yes		2	1.1	209
	14	Yes		28	1	210
	15	Yes		27	1.2	184
	16	Yes		24	3.7	212
	17	Yes		24	1.6	207
	18	Yes		23	2.8	217
	19	Yes		24	4	154
	20	Yes		29	4	192
	21	Yes		24	4.3	206
	22	Yes		27	4.4	217
	23	Yes		27	2.5	181
	24	Yes		28	3.1	204
	25	Yes		25	4.2	224
	26	Yes		26	1	226
	27	Yes		27	1.3	166
	28	Yes		28	2.6	186
	29	Yes		26	2.1	157
	30	Yes		28	2.1	180
	100%	30	0			

40MHz, 5.3GHz, Radar3

				Value	Limit	Result
				100%	60%	Pass
Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #3	1	Yes		17	9.8	252
	2	Yes		16	9	392
	3	Yes		17	8.4	353
	4	Yes		17	7.9	214
	5	Yes		18	6.5	437
	6	Yes		17	8.5	233
	7	Yes		17	6.3	460
	8	Yes		17	7.4	394
	9	Yes		17	8.8	454
	10	Yes		17	8.6	357
	11	Yes		18	9.2	424
	12	Yes		17	8	395
	13	Yes		17	9.6	386
	14	Yes		17	9.6	300
	15	Yes		17	6.7	483
	16	Yes		17	8.8	207
	17	Yes		17	7.6	377
	18	Yes		16	9.2	456
	19	Yes		17	8.4	426
	20	Yes		17	6.8	381
	21	Yes		17	6.1	294
	22	Yes		17	6.9	372
	23	Yes		16	6.1	210
	24	Yes		18	9.7	469
	25	Yes		18	6	493
	26	Yes		17	10	335
	27	Yes		17	8.3	458
	28	Yes		17	9	347
	29	Yes		18	8.3	404
	30	Yes		18	9.9	375
100%		30	0			

40MHz, 5.3GHz, Radar4

				Value	Limit	Result
				100%	60%	Pass
Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #4	1	Yes		15	14.5	303
	2	Yes		15	12.4	267
	3	Yes		15	16.4	404
	4	Yes		14	12.5	335
	5	Yes		15	18.9	451
	6	Yes		16	13.6	352
	7	Yes		14	16.8	414
	8	Yes		15	18	208
	9	Yes		16	13.6	269
	10	Yes		15	14.3	420
	11	Yes		13	19.2	223
	12	Yes		14	11.3	277
	13	Yes		12	14.7	419
	14	Yes		16	19.3	233
	15	Yes		16	14	275
	16	Yes		12	13.8	419
	17	Yes		13	12.7	474
	18	Yes		15	19.8	233
	19	Yes		13	13.9	393
	20	Yes		13	14.5	301
	21	Yes		14	17.3	303
	22	Yes		12	15.3	214
	23	Yes		14	12.5	267
	24	Yes		14	14	442
	25	Yes		14	17.5	446
	26	Yes		13	13.8	461
	27	Yes		14	13.6	413
	28	Yes		15	16.6	265
	29	Yes		14	19.7	431
	30	Yes		14	19.7	272
100%		30	0			

40MHz, 5.3GHz, Radar1-4 Summary						
Radar1	Radar2	Radar3	Radar4	Value	Limit	Result
100%	100%	100%	100%	100.00%	80%	Pass

40MHz, 5.3GHz, Radar5						
				Value	Limit	Result
				93%	80%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #5	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	6		No
	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	Yes	
	25	Yes	
	26		No
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	

93%

28

2

Due to the large amount of waveform parameter data for each Radar 5 trial, it has been omitted from this report. This information can be provided upon request.

Statistical Performance Check

40MHz, 5.3GHz, Radar6						
				Value	Limit	Result
				100%	70%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #6	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	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	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
100%	30	0	

40MHz, 5.56GHz, Radar1						
				Value	Limit	Result
				100%	60%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #1	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	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	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
100%	30	0	

40MHz, 5.56GHz, Radar2

Value	Limit	Result
100%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #2	1	Yes		26	2.8	195
	2	Yes		29	2	197
	3	Yes		27	2.7	202
	4	Yes		28	2.3	182
	5	Yes		23	3	200
	6	Yes		26	2.8	202
	7	Yes		27	4.5	213
	8	Yes		27	1.3	210
	9	Yes		25	3.7	206
	10	Yes		26	2.1	166
	11	Yes		26	2.9	199
	12	Yes		25	1.1	174
	13	Yes		28	3.9	222
	14	Yes		25	4.9	194
	15	Yes		28	4.5	159
	16	Yes		27	3.9	219
	17	Yes		27	3.1	224
	18	Yes		27	3.7	161
	19	Yes		28	4	201
	20	Yes		26	3.9	223
	21	Yes		29	4.7	161
	22	Yes		25	4.2	206
	23	Yes		24	5	205
	24	Yes		26	4.4	154
	25	Yes		25	4.4	196
	26	Yes		26	3.7	178
	27	Yes		26	4.3	210
	28	Yes		26	4.7	190
	29	Yes		26	2	169
	30	Yes		23	4.8	161
100%		30	0			

40MHz, 5.56GHz, Radar3

Value	Limit	Result
100%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #3	1	Yes		16	7.2	455
	2	Yes		16	7.8	282
	3	Yes		17	7.1	463
	4	Yes		17	8.1	464
	5	Yes		17	8.8	234
	6	Yes		16	8.2	478
	7	Yes		18	6.9	381
	8	Yes		16	9.8	391
	9	Yes		17	8.4	448
	10	Yes		16	7.4	394
	11	Yes		17	8.1	262
	12	Yes		17	6.6	332
	13	Yes		17	8.6	288
	14	Yes		17	9.2	262
	15	Yes		16	7.1	478
	16	Yes		17	8.7	410
	17	Yes		16	7.5	235
	18	Yes		17	8.4	232
	19	Yes		16	8.4	245
	20	Yes		16	7.8	320
	21	Yes		18	6.1	204
	22	Yes		17	8.4	406
	23	Yes		17	9.4	323
	24	Yes		18	7.4	242
	25	Yes		16	9.8	381
	26	Yes		16	8.7	403
	27	Yes		17	6.6	442
	28	Yes		18	7.3	262
	29	Yes		17	9.7	411
	30	Yes		18	7	210
100%		30	0			

Statistical Performance Check

40MHz, 5.56GHz, Radar4							
				Value	Limit	Result	
				100%	60%	Pass	

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #4	1	Yes		14	19.5	432
	2	Yes		15	19.6	485
	3	Yes		13	16.3	314
	4	Yes		13	15	481
	5	Yes		16	14.7	478
	6	Yes		13	17.5	242
	7	Yes		16	13.6	282
	8	Yes		16	18.1	342
	9	Yes		13	13.9	222
	10	Yes		12	17.5	305
	11	Yes		14	17.7	242
	12	Yes		13	11.4	312
	13	Yes		13	17.4	337
	14	Yes		15	19.7	309
	15	Yes		12	18.6	431
	16	Yes		13	16.9	225
	17	Yes		13	12.7	425
	18	Yes		14	17.6	410
	19	Yes		15	19.7	232
	20	Yes		15	18.7	409
	21	Yes		14	13.9	202
	22	Yes		15	13.7	278
	23	Yes		13	18.3	202
	24	Yes		15	14.8	498
	25	Yes		15	19.8	357
	26	Yes		15	18.6	460
	27	Yes		14	13.7	489
	28	Yes		13	11.6	437
	29	Yes		14	13.6	278
	30	Yes		13	18.4	262
100%		30	0			

40MHz, 5.56GHz, Radar1-4 Summary							
Radar1	Radar2	Radar3	Radar4	Value	Limit	Result	
100%	100%	100%	100%	100.00%	80%	Pass	

Statistical Performance Check

40MHz, 5.56GHz, Radar5						
				Value	Limit	Result
				97%	80%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #5	1	Yes	
	2		No
	3	Yes	
	4	Yes	
	5	Yes	
	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	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
97%		29	1

Due to the large amount of waveform parameter data for each Radar 5 trial, it has been omitted from this report
This information can be provided upon request.

40MHz, 5.56GHz, Radar6						
				Value	Limit	Result
				100%	70%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #6	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	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	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
100%		30	0

20MHz, 5.3GHz, Radar1						
				Value	Limit	Result
				100%	60%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #1	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	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	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
	100%	30	0

20MHz, 5.3GHz, Radar2						
				Value	Limit	Result
				60%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #2	1	Yes		29	1.7	223
	2		No	24	1.2	157
	3		No	23	1.8	195
	4	Yes		26	3.8	224
	5		No	28	1.1	160
	6	Yes		23	1.3	179
	7	Yes		28	3.6	208
	8	Yes		29	3.5	192
	9	Yes		28	4.6	188
	10		No	27	3.6	172
	11		No	26	4	171
	12		No	28	2.1	189
	13		No	23	5	186
	14		No	28	1.2	165
	15		No	28	1.4	194
	16		No	25	3.7	152
	17	Yes		26	4.2	217
	18	Yes		23	1.2	218
	19	Yes		25	4.9	189
	20		No	25	2.5	196
	21	Yes		28	4.6	223
	22	Yes		23	3.8	189
	23		No	25	3.2	169
	24	Yes		26	4.5	174
	25	Yes		25	4.1	223
	26	Yes		24	1.5	217
	27	Yes		24	4.1	204
	28	Yes		25	3.7	202
	29	Yes		24	3.5	203
	30	Yes		23	3.9	174
	60%	18	12			

20MHz, 5.3GHz, Radar3						
				Value	Limit	Result
				93%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #3	1	Yes		18	6.9	369
	2	Yes		16	7.6	464
	3	Yes		17	9.6	218
	4	Yes		16	8.8	364
	5	Yes		18	6.1	466
	6	Yes		17	7.3	203
	7	Yes		18	7.8	373
	8	Yes		17	7.4	466
	9	Yes		17	6.6	400
	10	Yes		17	7.6	393
	11	Yes		17	6.2	358
	12	Yes		17	9	347
	13	Yes		17	8.7	395
	14	Yes		17	8.6	245
	15	Yes		18	6	244
	16	Yes		16	6.5	292
	17	Yes		381	7.3	381
	18	Yes		16	7.9	211
	19	Yes		17	6.1	434
	20	Yes		17	6.8	364
	21	Yes		16	428	8.7
	22	Yes		18	7.1	296
	23	Yes		16	9.3	312
	24		No	18	9.6	467
	25	Yes		16	8.2	318
	26		No	17	9.4	374
	27	Yes		16	6.3	323
	28	Yes		17	7.4	419
	29	Yes		18	8.7	356
	30	Yes		17	7	440
93%		28	2			

20MHz, 5.3GHz, Radar4						
				Value	Limit	Result
				87%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #4	1	Yes		15	19.6	327
	2		No	13	17.7	407
	3	Yes		13	15.5	490
	4	Yes		14	19.1	429
	5	Yes		14	12.8	337
	6		No	14	18.3	409
	7	Yes		15	13.3	376
	8	Yes		13	15.6	495
	9		No	12	18.6	206
	10	Yes		12	16.8	401
	11	Yes		15	15.6	407
	12	Yes		15	11.1	368
	13	Yes		13	13.1	486
	14	Yes		15	15.6	205
	15	Yes		15	13.8	368
	16	Yes		14	13.2	338
	17	Yes		13	15.7	484
	18		No	14	19.9	427
	19	Yes		13	14.7	287
	20	Yes		13	12	254
	21	Yes		15	16.1	245
	22	Yes		12	16.6	263
	23	Yes		14	15.2	420
	24	Yes		15	12.2	226
	25	Yes		13	11.9	241
	26	Yes		16	13.5	496
	27	Yes		15	15	294
	28	Yes		15	11.3	481
	29	Yes		15	11.4	388
	30	Yes		12	14.8	240
87%		26	4			

20MHz, 5.3GHz, Radar1-4 Summary							
					Value	Limit	Result
	100%	60%	93%	87%	85.00%	80%	Pass

20MHz, 5.3GHz, Radar5							
					Value	Limit	Result
					87%	80%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #5	1	Yes	
	2	Yes	
	3	Yes	
	4		No
	5		No
	6	Yes	
	7	Yes	
	8	Yes	
	9	Yes	
	10	Yes	
	11	Yes	
	12		No
	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	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	

87%

26

4

Due to the large amount of waveform parameter data for each Radar 5 trial, it has been omitted from this report. This information can be provided upon request.

Statistical Performance Check

20MHz, 5.3GHz, Radar6						
				Value	Limit	Result
				97%	70%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #6	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	6	Yes	
	7	Yes	
	8	Yes	
	9	Yes	
	10	Yes	
	11	Yes	
	12	Yes	
	13		No
	14	Yes	
	15	Yes	
	16	Yes	
	17	Yes	
	18	Yes	
	19	Yes	
	20	Yes	
	21	Yes	
	22	Yes	
	23	Yes	
	24	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
97%		29	1

20MHz, 5.56GHz, Radar1						
				Value	Limit	Result
				100%	60%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #1	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	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	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
100%		30	0

20MHz, 5.56GHz, Radar2

Value	Limit	Result
60%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #2	1	Yes		26	3.5	191
	2	Yes		25	4.3	177
	3	Yes		26	4.8	184
	4		No	29	1.6	175
	5	Yes		26	4.6	217
	6		No	26	3.7	152
	7	Yes		23	4.8	222
	8	Yes		27	4.6	223
	9	Yes		28	4.7	215
	10		No	28	2.9	172
	11		No	27	2.5	154
	12		No	26	2.8	189
	13		No	29	2.3	161
	14	Yes		23	4	192
	15	Yes		29	3.5	205
	16	Yes		28	1.3	176
	17	Yes		27	4.4	184
	18		No	27	3.1	221
	19	Yes		28	3.6	194
	20	Yes		27	1.6	187
	21	Yes		26	1	208
	22	Yes		28	4.6	207
	23	Yes		24	4.4	185
	24		No	24	2.8	154
	25		No	24	2.1	190
	26		No	27	2.7	156
	27		No	28	1.7	207
	28		No	25	2.4	180
	29	Yes		28	4.6	194
	30	Yes		26	4.7	152
60%		18	12			

20MHz, 5.56GHz, Radar3

Value	Limit	Result
100%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #3	1	Yes		17	8.6	497
	2	Yes		17	9.4	439
	3	Yes		18	7	315
	4	Yes		16	9.7	454
	5	Yes		17	6	307
	6	Yes		16	9.9	212
	7	Yes		17	8.9	357
	8	Yes		17	7.4	421
	9	Yes		17	8.5	394
	10	Yes		16	6.4	439
	11	Yes		16	9.2	302
	12	Yes		18	9.7	479
	13	Yes		17	7.1	239
	14	Yes		18	7	261
	15	Yes		17	8.4	332
	16	Yes		17	6.5	424
	17	Yes		16	8.2	493
	18	Yes		17	7.6	479
	19	Yes		16	6.3	487
	20	Yes		18	7.1	212
	21	Yes		17	8.8	415
	22	Yes		16	8.7	404
	23	Yes		18	9.3	319
	24	Yes		18	8.4	422
	25	Yes		18	7.2	444
	26	Yes		18	8	252
	27	Yes		18	7	285
	28	Yes		18	8.6	252
	29	Yes		16	9.7	397
	30	Yes		17	7	472
100%		30	0			

Statistical Performance Check

20MHz, 5.56GHz, Radar4

Value	Limit	Result
83%	60%	Pass

Radar Signal # Table	Trial #	Detection		Number of Pulses Per burst	Pulse width (us)	PRI (us)
		Yes	No			
Test Signal #4	1	Yes		13	16.1	274
	2		No	13	19.4	415
	3	Yes		12	16.6	477
	4	Yes		14	16.1	325
	5	Yes		15	15.6	362
	6	Yes		13	14.4	354
	7		No	14	18.3	439
	8		No	16	18.7	411
	9	Yes		14	12.5	260
	10	Yes		15	16.6	419
	11	Yes		14	13.6	239
	12	Yes		13	11.8	330
	13	Yes		15	16.2	344
	14	Yes		14	11.4	491
	15	Yes		12	11.1	253
	16	Yes		15	19.2	269
	17		No	13	20	418
	18	Yes		12	11.2	203
	19	Yes		12	12	439
	20	Yes		13	18.5	364
	21		No	12	20	226
	22	Yes		12	19.2	367
	23	Yes		15	14	356
	24	Yes		15	16.8	261
	25	Yes		13	12.9	377
	26	Yes		15	14.4	344
	27	Yes		13	16.1	398
	28	Yes		15	16.3	285
	29	Yes		14	16.1	373
	30	Yes		14	17.2	248

83%

25

5

20MHz, 5.56GHz, Radar1-4 Summary

Value	Limit	Result
100%	60%	100%
83%	85.83%	80%
		Pass

Statistical Performance Check

20MHz, 5.56GHz, Radar5						
				Value	Limit	Result
				97%	80%	Pass

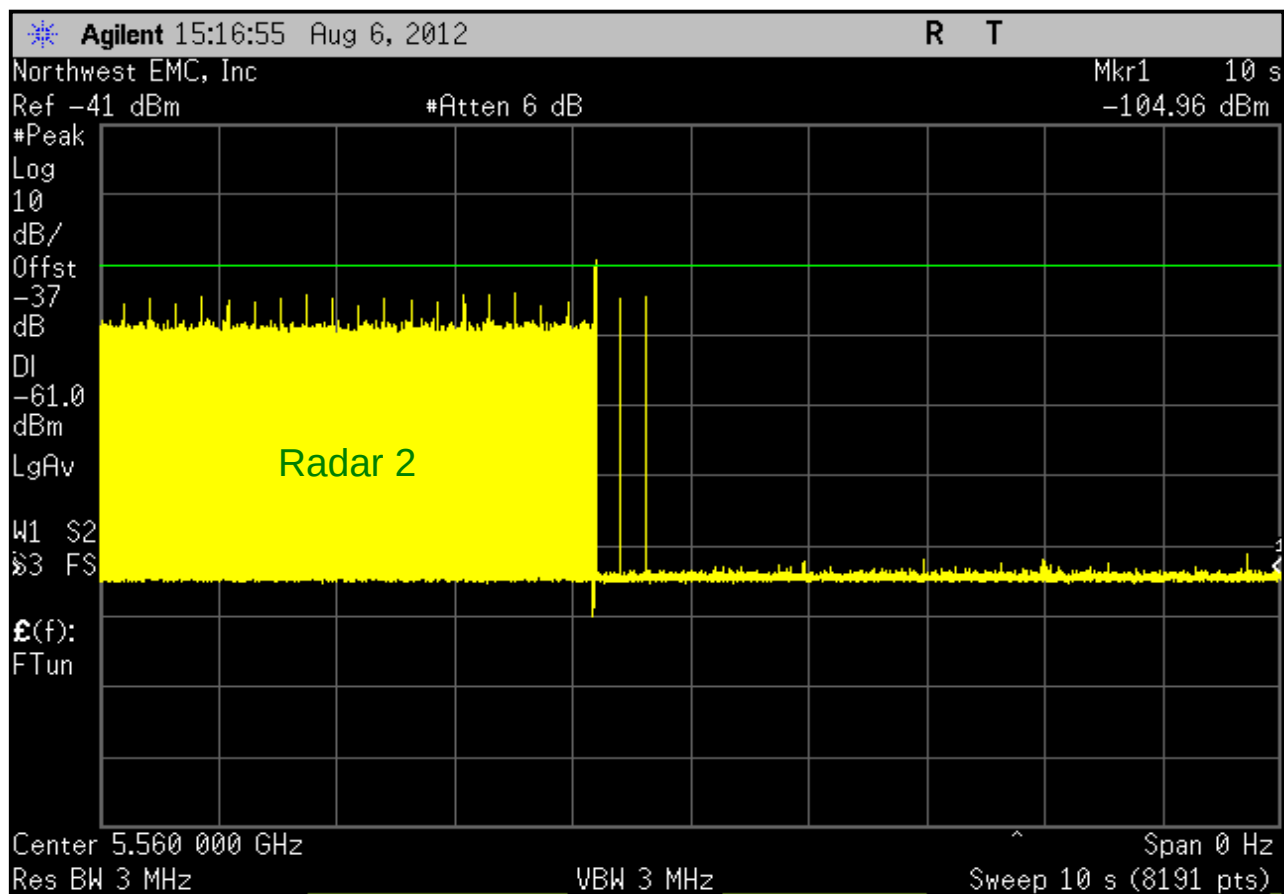
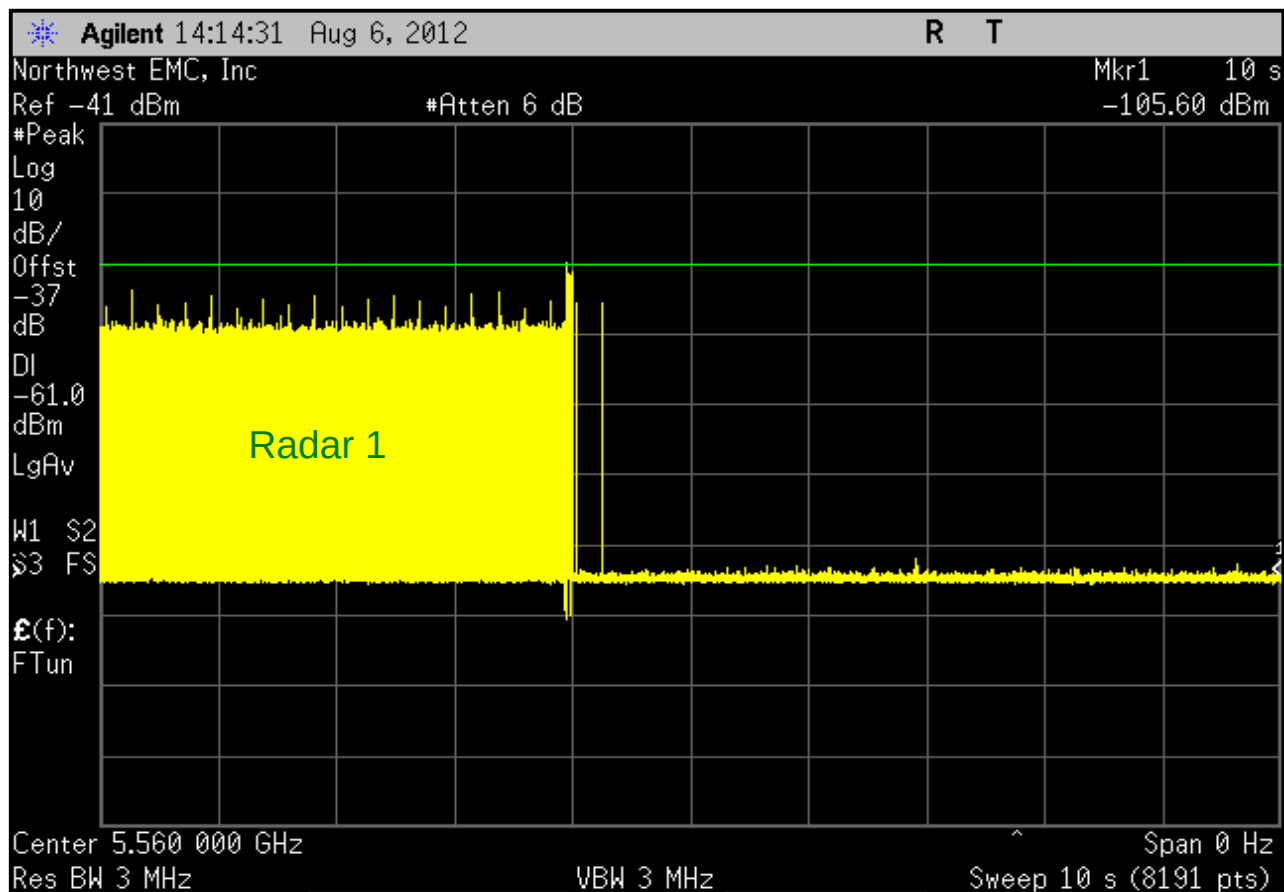
Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #5	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5		No
	6	Yes	
	7	Yes	
	8	Yes	
	9	Yes	
	10	Yes	
	11	Yes	
	12	Yes	
	13	Yes	
	14	Yes	
	15	Yes	
	16	Yes	
	17	Yes	
	18	Yes	
	19	Yes	
	20	Yes	
	21	Yes	
	22	Yes	
	23	Yes	
	24	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30	Yes	
97%		29	1

Due to the large amount of waveform parameter data for each Radar 5 trial, it has been omitted from this report
This information can be provided upon request.

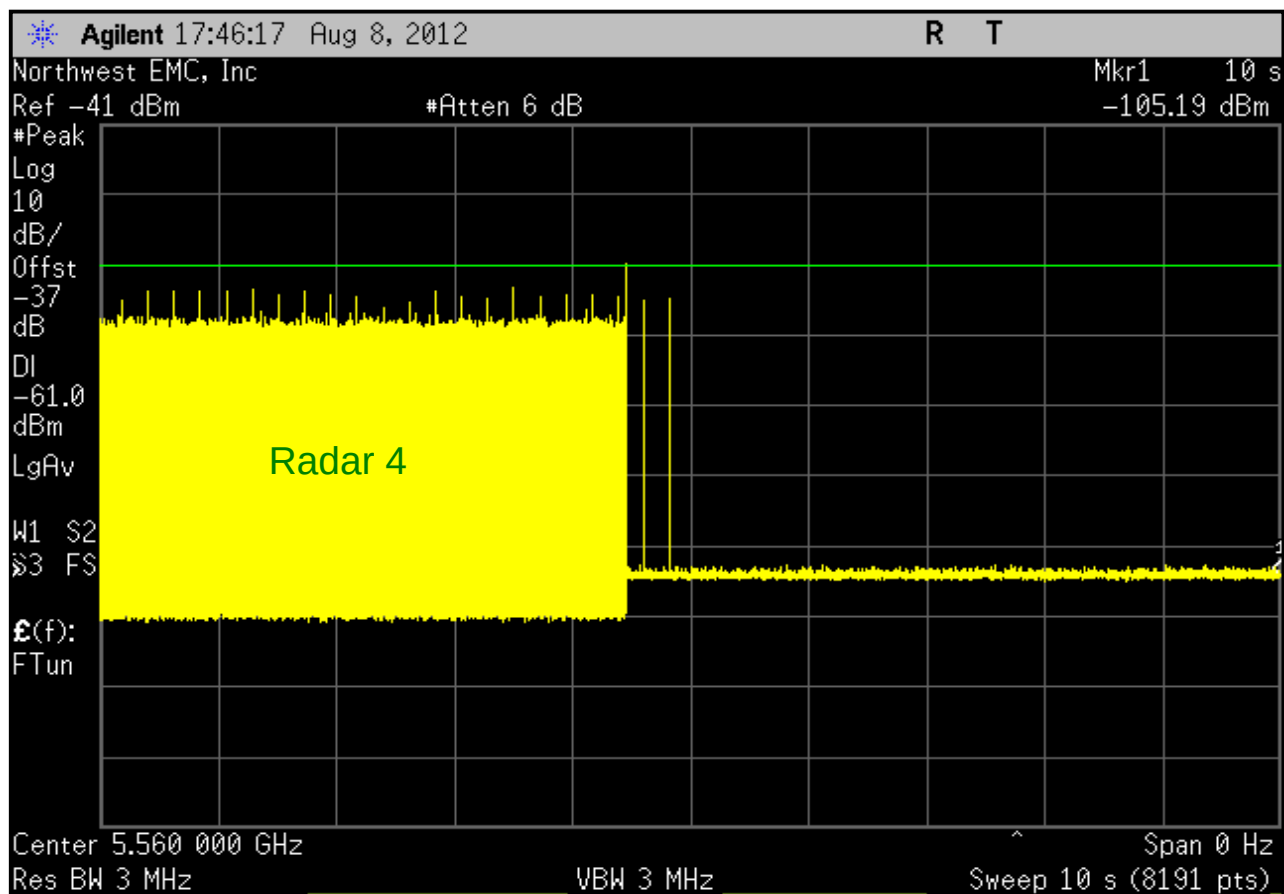
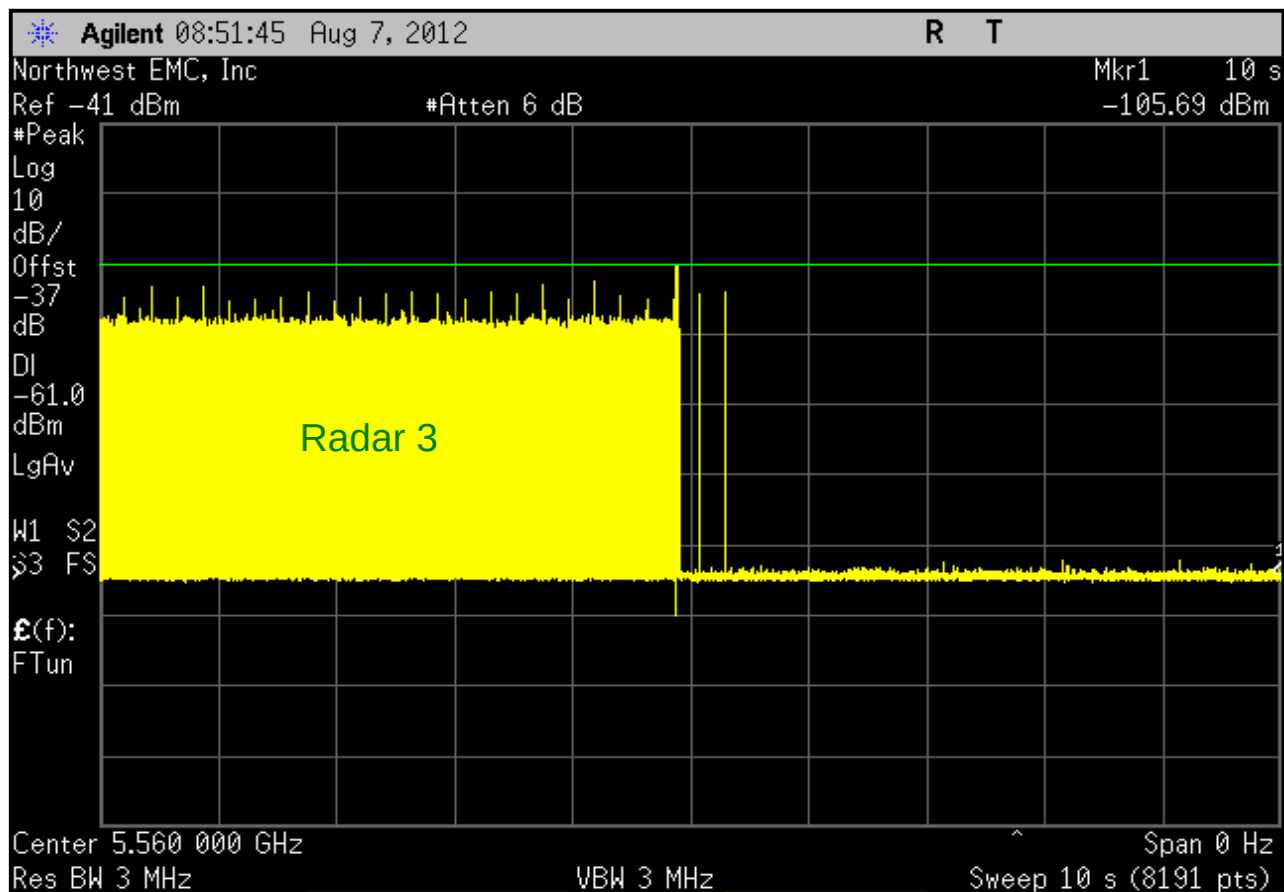
20MHz, 5.56GHz, Radar6						
				Value	Limit	Result
				93%	70%	Pass

Radar Test Signal # Table	Trial #	Detection	
		Yes	No
Test Signal #6	1	Yes	
	2	Yes	
	3	Yes	
	4	Yes	
	5	Yes	
	6	Yes	
	7	Yes	
	8	Yes	
	9	Yes	
	10	Yes	
	11	Yes	
	12	Yes	
	13	Yes	
	14	Yes	
	15	Yes	
	16	Yes	
	17		No
	18	Yes	
	19	Yes	
	20	Yes	
	21	Yes	
	22	Yes	
	23	Yes	
	24	Yes	
	25	Yes	
	26	Yes	
	27	Yes	
	28	Yes	
	29	Yes	
	30		No
93%		28	2

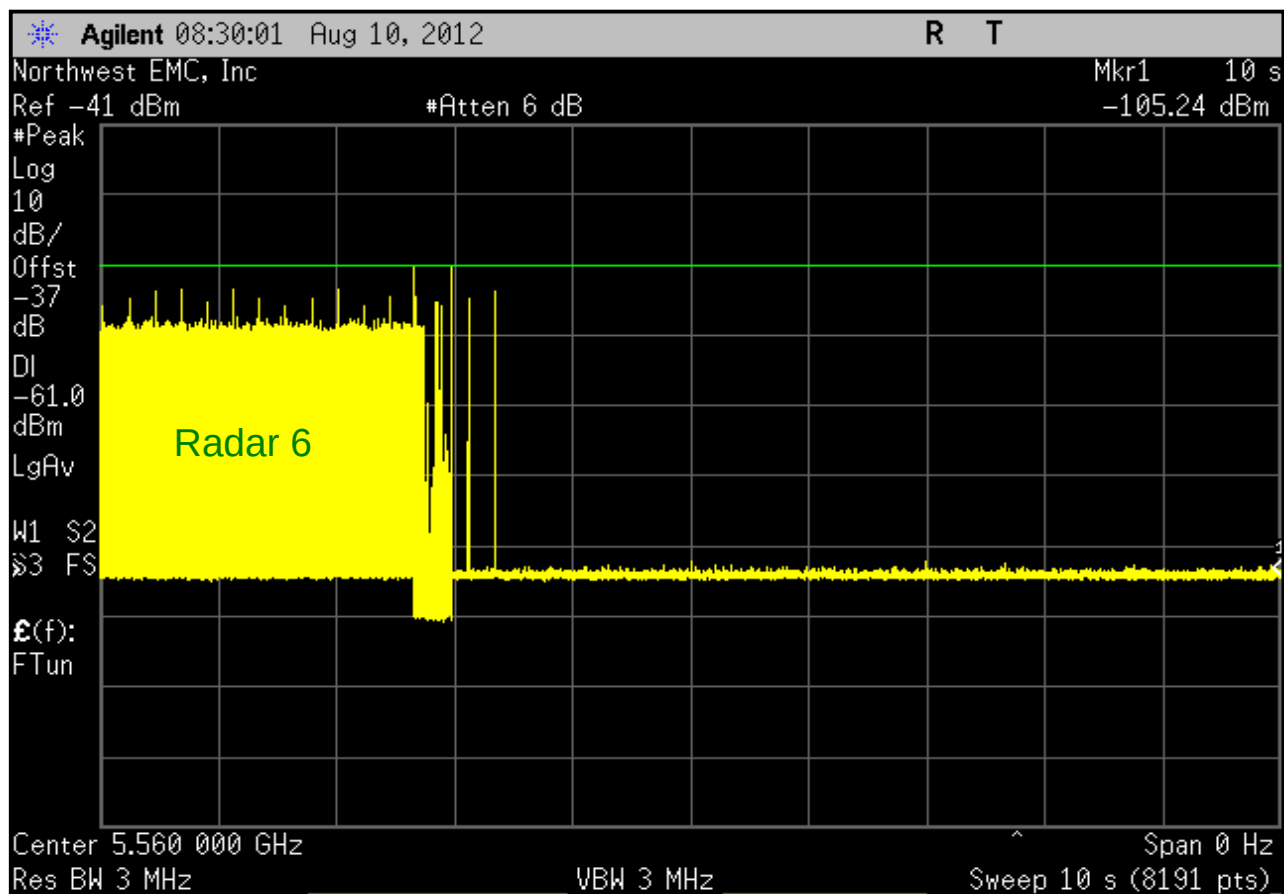
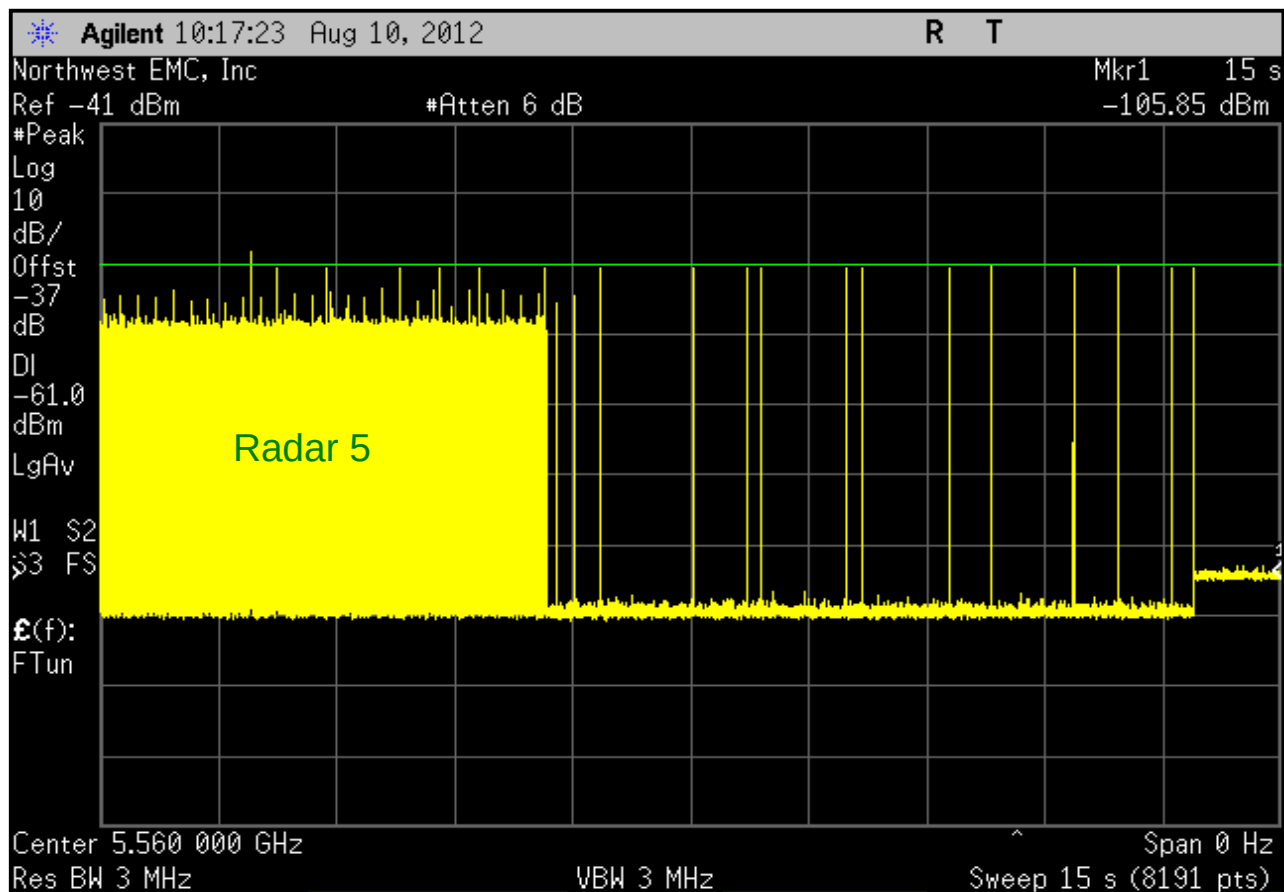
Statistical Performance Check



Statistical Performance Check



Statistical Performance Check



System Block Diagram

