

FCC Dynamic Frequency Selection Test Report

according to

47 CFR FCC Part 15 Subpart E § 15.407

Equipment Name : Cable Modem
Model Name : TC8717C
Filing Type : Class II Change
FCC ID : G95-TC8717C
Trade Name : technicolor
Applicant : Technicolor Connected Home USA LLC
101 West 103rd Street Indianapolis, IN 46290 United States
Operate Mode : Master

Statement

Test result included is for the IEEE 802.11n and IEEE 802.11a/ac (5250 ~ 5350MHz / 5470 ~ 5725MHz) of the product.

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in **47 CFR FCC Part 15 Subpart E,**

FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v01r02.

The test equipment used to perform the test is calibrated and traceable to NML/ROC.



SPORTON International Inc.

No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FZ422438-01	Rev.01	Initial issue of report	Aug. 28, 2015

VERIFICATION OF COMPLIANCE

according to

47 CFR FCC Part 15 Subpart E § 15.407

Equipment Name : Cable Modem
Model Name : TC8717C
Trade Name : technicolor
Applicant : Technicolor Connected Home USA LLC
101 West 103rd Street Indianapolis, IN 46290 United States

Sporton International as requested by the applicant to evaluate the EMC performance of the product sample received on Jan. 13, 2014 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested rule parts. The data recorded as well as the test configuration specified is true and accurate for showing the sample's EMC nature.



Sam Chen

SPORTON International Inc.

No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

1 SUMMARY OF THE TEST RESULT

Conformance Test Specifications			
Part	Appendix	Description of Test	Result
4.3	FCC KDB 905462 7.8.1	UNII Detection Bandwidth Measurement	Complies
4.4	FCC KDB 905462 7.8.2.1	Initial Channel Availability Check Time	Complies
4.4	FCC KDB 905462 7.8.2.2	Radar Burst at the Beginning of the Channel Availability Check Time	Complies
4.4	FCC KDB 905462 7.8.2.3	Radar Burst at the End of the Channel Availability Check Time	Complies
4.5	FCC KDB 905462 7.8.3	In-Service Monitoring for Channel Move Time (CMT)	Complies
4.5	FCC KDB 905462 7.8.3	In-Service Monitoring for Channel Closing Transmission Time (CCTT)	Complies
4.5	FCC KDB 905462 7.8.3	In-Service Monitoring for Non-Occupancy Period (NOP)	Complies
4.6	FCC KDB 905462 7.8.4	Statistical Performance Check	Complies
4.1.1	FCC KDB 905462 8.1	User Access Restrictions	Complies

2 INFORMATION PROVIDED BY THE MANUFACTURER

Equipment Name: Cable Modem

Model Name: TC8717C

Trade Name: technicolor

Power Supply: 1. Internal AC-DC power pack, 12Vdc, 3.5A, Manufacturer: AcBel, Model: JSSTD003-AD0G2
2. Battery, Manufacturer: Getac, Model: BP-TC-8-22 / 2250S, Rating: 7.2V 4300mAh

AC Power Cord: 2pin

Hardware Version: LAB2

Interface Availability

Interface Model Name	Internal AC-DC power pack Input: 120V Output : 12Vdc3.5A	Battery	Cable modem: DOCSIS 3.0 Cable Modem MoCA: MoCA 2.0 D Band 1125MHz and 1525MHz	Ethernet 10/100/1000 Mbps	USB 2. 0	Line	WLAN IEEE 802.11a/b/g/n/ac (2.4GHz/5GHz 3*3)	DECT
TC8717C	●	●	●	●(4 port)	●(2 port)	●(2 port)	●	●

Note : ● : Equipped ○ : Not Equipped

2.1 Application of harmonized standard

US Standard: 47 CFR FCC Part 15 Subpart E § 15.407

KDB662911 D01 Multiple Transmitter Output v02r01, 10/31/2013

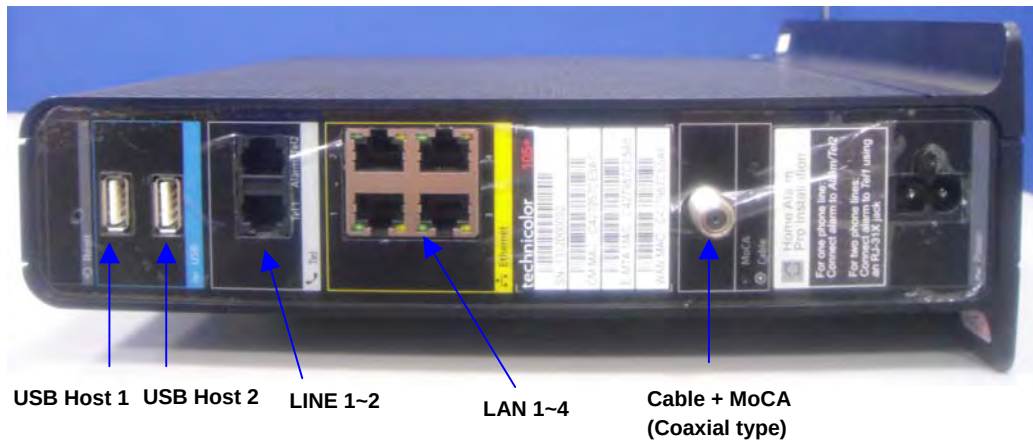
KDB905462 D02 UNII DFS Compliance Procedures New Rules v01r02, 05/15/2015

2.2 Cabling Attached to the Equipment

Table 1- Cable and Interconnection

Interface	Cable type	Cable length delivered with the modem	"Real life" Cable length that can be attached to this type of interface	Cable length to be used for testing	Internal / external connection
Cable & MoCA	coaxial	2 meter	> 10 meter	10 meter	External
Eth1	UTP Cat 5	2 meter	> 10 meter	10 meter	Internal
Line1/2	UTP Cat 3	2 meter	> 10 meter	1 meter flat cable	Internal
USB1/2	STP	1 meter	< 3 meter	1 meter	Internal
AC power					Internal
Battery					Internal

2.3 Panel Drawing



3 GENERAL INFORMATION

3.1 UUT Information

3.1.1 Information

Items	Description			
Product	Stand alone			
Model Name	TC8717C			
FCC ID	G95-TC8717C			
Power Type	Internal power supply and Battery			
EUT Stage	☒	Product Unit	☐	Pre-Sample
Antenna Type	Please see Section 3.3			
Operating Band, EIRP power	U-NII-2A 5250~5350MHz	☒	For Non-Beamforming	
			IEEE 802.11a: 20.86dBm	
			IEEE 802.11ac (20MHz): 20.89dBm	
			IEEE 802.11ac (40MHz): 20.85dBm	
			IEEE 802.11ac (80MHz): 19.72dBm	
		☒	For Beamforming	
			IEEE 802.11ac (20MHz): 19.47dBm	
			IEEE 802.11ac (40MHz): 19.57dBm	
			IEEE 802.11ac (80MHz): 19.72dBm	
			U-NII-2C 5470~ 5725 MHz	☒
	IEEE 802.11a: 20.85dBm			
	IEEE 802.11ac (20MHz): 20.89dBm			
	IEEE 802.11ac (40MHz): 21.07dBm			
	IEEE 802.11ac (80MHz): 19.64dBm			
	☒	For Beamforming		
		IEEE 802.11ac (20MHz): 19.46dBm		
		IEEE 802.11ac (40MHz): 19.79dBm		
IEEE 802.11ac (80MHz): 19.43dBm				
Product Type	For IEEE 802.11a: WLAN (1/3TX, 3RX) For IEEE 802.11n: WLAN (1/2/3TX, 3RX) For IEEE 802.11ac: WLAN (1/2/3TX, 3RX)			
Nominal Channel Bandwidth	20MHz / 40MHz/ 80MHz			
Modulation	802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11n: (BPSK / QPSK / 16QAM / 64QAM) See the below table. 802.11ac:(BPSK / OPSK / 16OAM / 64OAM / 256OAM) See the below table			

Data Rate (Mbps)	11a mode :OFDM (6/9/12/18/24/36/48/54) 11n(20MHz) mode (MCS0~MCS23) 11n(40MHz) mode (MCS0~MCS23) 11ac(20MHz) mode (MCS0~MCS9 for Nss1~Nss3) 11ac(40MHz) mode (MCS0~MCS9 for Nss1~Nss3) 11ac(80MHz) mode (MCS0~MCS9 for Nss1~Nss3)			
TPC Function	☐	With TPC	☒	Without TPC
Beam forming Function	☒	With Beam forming for IEEE 802.11n/ac	☐	Without Beam forming
DFS Operating Mode(s)	☒	Master	☐	Slave without radar detection
DFS Function	☒	5250~5350MHz		
	☒	5470~5725MHz		
	☐	5600~5650MHz		
Off Channel CAC Feature Implemented	☒	No		
Ad-hoc/Hotspot Mode	☒	No Ad-hoc/Hotspot operation in 5150 - 5350 MHz and 5470 - 5725 MHz.		
User Access Restrictions	☒	DFS controls (hardware or software) related to radar detection are NOT accessible to the user.		
I/O Ports	LAN Port x 4 USB Host Port x 2 LINE Port x 2 Cable + MoCA Port x 1(Coaxial type)			
Software Version	5.7.0mp1			
Associated Devices	single-range internal AC-DC power pack			

3.2 Accessories

1. AC Power Cord*1, Unshielded 1.8m

3.3 Table for Filed Antenna

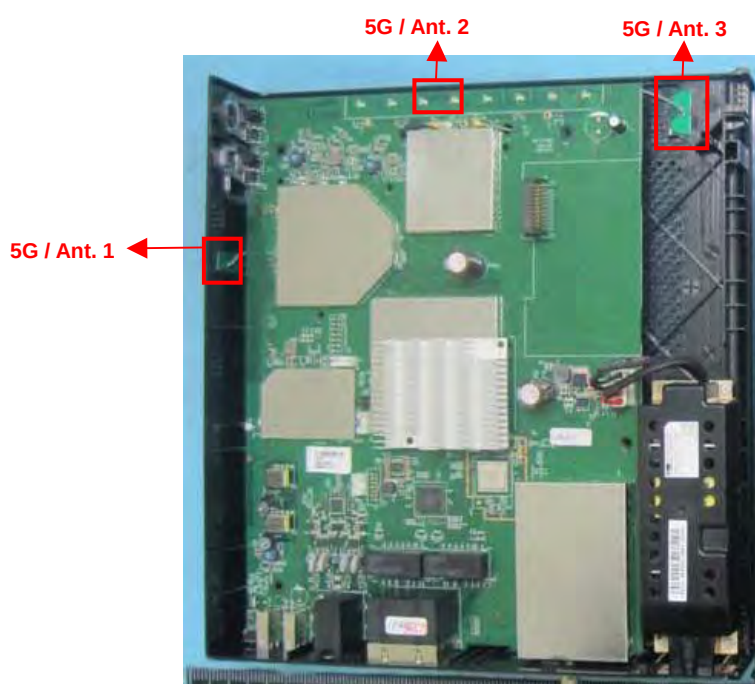
Ant.	Brand	Model Name	Antenna Type	Connector
1	WHAYU	C107-511031-A	PIFA Antenna	I-PEX
2	-	-	Printed Antenna	N/A
3	WHAYU	C107-511033-A	PIFA Antenna	I-PEX

Antenna & Bandwidth

Antenna	1st (TX)			2nd (TX)			3rd (TX)		
Bandwidth Mode	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80MHz
802.11a	V	X	X	X	X	X	V	X	X
802.11n	V	V	X	X	X	X	V	V	X
802.11ac	V	V	V	X	X	X	V	V	V

Frequency	Antenna Gain (dBi)								
	Ant. 1 (WJ1)			Ant. 2 (WJ2)			Ant. 3 (WJ3)		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5260 MHz	5.98	-	-	6.21	-	-	6.10	-	-
5270 MHz	-	5.91	-	-	6.10	-	-	5.82	-
5290 MHz	-	-	5.93	-	-	5.77	-	-	5.81
5300 MHz	6.06	-	-	6.22	-	-	5.87	-	-
5310 MHz	-	6.06	-	-	6.22	-	-	5.87	-
5320 MHz	6.00	-	-	5.85	-	-	5.89	-	-
5500 MHz	6.36	-	-	5.43	-	-	5.30	-	-
5510 MHz	-	6.29	-	-	5.66	-	-	5.33	-
5530 MHz	-	-	5.88	-	-	5.06	-	-	5.15
5550 MHz	-	5.91	-	-	5.08	-	-	5.22	-
5580 MHz	6.04	-	-	5.01	-	-	5.15	-	-
5670 MHz	-	5.95	-	-	4.55	-	-	5.12	-
5700 MHz	6.46	-	-	5.17	-	-	5.59	-	-

Frequency	Directional Gain (dBi) for Beamforming and CDD mode								
	1 Stream 3TX Ant. 1 + 2 + 3			2 Stream 3TX Ant. 1 + 2 + 3			3 Stream 3TX Ant. 1 + 2 + 3		
	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz	20 MHz	40 MHz	80MHz
5260 MHz	7.35	-	-	6.00	-	-	3.26	-	-
5270 MHz	-	7.24	-	-	5.84	-	-	3.14	-
5290 MHz	-	-	7.22	-	-	5.84	-	-	3.07
5300 MHz	7.61	-	-	6.31	-	-	3.52	-	-
5310 MHz	-	7.61	-	-	6.31	-	-	3.52	-
5320 MHz	7.52	-	-	6.24	-	-	3.42	-	-
5500 MHz	7.60	-	-	6.54	-	-	3.62	-	-
5510 MHz	-	7.73	-	-	6.63	-	-	3.72	-
5530 MHz	-	-	7.46	-	-	6.33	-	-	3.41
5550 MHz	-	7.42	-	-	6.28	-	-	3.36	-
5580 MHz	7.52	-	-	6.29	-	-	3.36	-	-
5670 MHz	-	7.01	-	-	6.07	-	-	3.36	-
5700 MHz	7.54	-	-	6.63	-	-	3.67	-	-



802.11n Data Rate spec

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11n 20MHz Nss=1	MCS0	6.5	7.2	11n 40MHz Nss=1	MCS0	13.5	15
	MCS1	13	14.4		MCS1	27	30
	MCS2	19.5	21.7		MCS2	40.5	45
	MCS3	26	28.9		MCS3	54	60
	MCS4	39	43.3		MCS4	81	90
	MCS5	52	57.8		MCS5	108	120
	MCS6	58.5	65		MCS6	121.5	135
	MCS7	65	72.2		MCS7	135	150
11n 20MHz Nss=2	MCS8	13	14.4	11n 40MHz Nss=2	MCS8	27	30
	MCS9	26	28.9		MCS9	54	60
	MCS10	39	43.3		MCS10	81	90
	MCS11	52	57.8		MCS11	108	120
	MCS12	78	86.7		MCS12	162	180
	MCS13	104	115.6		MCS13	216	240
	MCS14	117	130		MCS14	243	270
	MCS15	130	144.4		MCS15	270	300
11n 20MHz Nss=3	MCS16	19.5	21.7	11n 40MHz Nss=3	MCS16	40.5	45
	MCS17	39	43.3		MCS17	81	90
	MCS18	58.5	65		MCS18	121.5	135
	MCS19	78	86.7		MCS19	162	180
	MCS20	117	130		MCS20	243	270
	MCS21	156	173.3		MCS21	324	360
	MCS22	175.5	195		MCS22	364.5	405
	MCS23	195	216.7		MCS23	405	450

802.11ac Data Rate spec

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz N _{SS} = 1	MCS0	6.5	7.2	11ac 40MHz N _{SS} = 1	MCS0	13.5	15.0	11ac 80MHz N _{SS} = 1	MCS0	29.3	32.5
	MCS1	13.0	14.4		MCS1	27	30.0		MCS1	58.5	65.0
	MCS2	19.5	21.7		MCS2	40.5	45.0		MCS2	87.8	97.5
	MCS3	26	28.9		MCS3	54	60.0		MCS3	117.0	130.0
	MCS4	39	43.3		MCS4	81	90.0		MCS4	175.5	195.0
	MCS5	52	57.8		MCS5	108	120.0		MCS5	234.0	260.0
	MCS6	58.5	65		MCS6	121.5	135.0		MCS6	263.3	292.5
	MCS7	65	72.2		MCS7	135.0	150.0		MCS7	292.5	325.0
	MCS8	78	86.7		MCS8	162.0	180.0		MCS8	351.0	390.0
	MCS9	Note	Note		MCS9	180.0	200.0		MCS9	390.0	433.3

NOTE: MCS 9 is invalid due to mod(N_{CBPS}/N_{ES}, D_R) not being equal to 0.

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz N _{SS} = 2	MCS0	13.0	14.4	11ac 40MHz N _{SS} = 2	MCS0	27.0	30.0	11ac 80MHz N _{SS} = 2	MCS0	58.5	65.0
	MCS1	26.0	28.9		MCS1	54.0	60.0		MCS1	117.0	130.0
	MCS2	39.0	43.3		MCS2	81.0	90.0		MCS2	175.5	195.0
	MCS3	52.0	57.8		MCS3	108.0	120.0		MCS3	234.0	260.0
	MCS4	78.0	86.7		MCS4	162.0	180.0		MCS4	351.0	390.0
	MCS5	104.0	115.6		MCS5	216.0	240.0		MCS5	468.0	520.0
	MCS6	117.0	130.0		MCS6	243.0	270.0		MCS6	526.5	585.0
	MCS7	130.0	144.4		MCS7	270.0	300.0		MCS7	585.0	650.0
	MCS8	156.0	173.3		MCS8	324.0	360.0		MCS8	702.0	780.0
	MCS9	13.0	14.4		MCS9	360.0	400.0		MCS9	780.0	866.7

Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)		Standard	INDEX	Data Rate (Mbps)	
		LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)			LGI (800ns)	SGI (400ns)
11ac 20MHz N _{SS} = 3	MCS0	19.5	21.7	11ac 40MHz N _{SS} = 3	MCS0	40.5	45.0	11ac 80MHz N _{SS} = 3	MCS0	87.8	97.5
	MCS1	39.0	43.3		MCS1	81.0	90.0		MCS1	175.5	195.0
	MCS2	58.5	65.0		MCS2	121.5	135.0		MCS2	263.3	292.5
	MCS3	78.0	86.7		MCS3	162.0	180.0		MCS3	351.0	190.0
	MCS4	117.0	130		MCS4	243.0	270.0		MCS4	526.5	585.0
	MCS5	156.0	173.3		MCS5	324.0	360.0		MCS5	702.0	780.0
	MCS6	175.5	195.0		MCS6	364.5	405.0		MCS6	Note	Note
	MCS7	195.0	216.7		MCS7	405.0	450.0		MCS7	877.5	975.0
	MCS8	234.0	260.0		MCS8	486.0	540.0		MCS8	1053.0	1170.0
	MCS9	260.0	228.9		MCS9	540.0	600.0		MCS9	1170.0	1300.0

NOTE: MCS 6 is invalid due to mod(N_{CBPS}/N_{ES}, D_R) not being equal to 0.

3.4 Transmit Operating Modes

Transmit Operating Mode						Transmit Multiple Antennas			
☐	Operating mode 1 (single antenna)					☐	1TX		
☐	Operating mode 2 (multiple antenna, no beam forming)					☐	2TX	☐	3TX ☐ 4TX
☐	Operating mode 3 (multiple antenna, with beam forming)					☐	2TX	☐	3TX ☐ 4TX
☐	802.11a	Operating mode	☐	1TX	☐ 2TX	☐	3TX	☐	Cyclic shift
☐	802.11n(20MHz)	Operating mode	☐	1TX	☐ 2TX	☐	3TX	☐	Cyclic shift
☐	802.11n(40MHz)	Operating mode	☐	1TX	☐ 2TX	☐	3TX	☐	Cyclic shift
☐	802.11ac(20MHz)	Operating mode	☐	1TX	☐ 2TX	☐	3TX	☐	Cyclic shift
☐	802.11ac(40MHz)	Operating mode	☐	1TX	☐ 2TX	☐	3TX	☐	Cyclic shift
☐	802.11ac(80MHz)	Operating mode	☐	1TX	☐ 2TX	☐	3TX	☐	Cyclic shift

Note 1: For IEEE802.11n 20/40 MHz, MCS0~MCS7: 1TX; MCS8~MCS15: 2TX; MCS0~MCS23: 3TX

Note 2: For IEEE802.11ac 20/40/80 MHz, Nss1MCS0~Nss1MCS9: 1 Stream 3TX; Nss2MCS0~Nss2MCS9: 2 Stream 3TX; Nss3MCS0~Nss3MCS9: 3 Stream 3TX

3.5 Support Equipment

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC
2	Notebook	DELL	E4300	DoC
3	WLAN Dongle	LINKSYS	WUSB6300	Q87-WUSB6300

3.6 Testing Location Information

Testing Location				
☐	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-327-0973		
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085		
Test Condition		Test Site No.	Test Engineer	Test Environment
DFS Site		DF01-CB	Eric Fu	27.7°C / 65%
				18-Jun-15~25-Jun-15

3.7 Antenna Requirements

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

3.8 Table for Carrier Frequencies

12 channels are provided for 802.11a/ 802.11n / 802.11ac (20MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz Band 2	52	5260 MHz	60	5300 MHz
	56	5280 MHz	64	5320 MHz
5470~5725 MHz Band 3	100	5500 MHz	116	5580 MHz
	104	5520 MHz	132	5660 MHz
	108	5540 MHz	136	5680 MHz
	112	5560 MHz	140	5700 MHz

5 channels are provided for 802.11n, 802.11ac (40MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz Band 2	54	5270 MHz	62	5310 MHz
5470~5725 MHz Band 3	102	5510 MHz	134	5670 MHz
	110	5550 MHz	-	-

2 channels are provided for 802.11ac (80MHz):

Frequency Band	Channel No.	Frequency
5250~5350 MHz Band 2	58	5290 MHz
5470~5725 MHz Band 3	106	5530 MHz

3.9 Table for Test Modes

Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Note	Channel	Data Rate	Antenna
UNII Detection Bandwidth Measurement and Statistical Performance Check (Radiated)	11ac 20MHz	Band3/BPSK	100	Nss1MCS0	1+2+3
	11ac 40MHz		102	Nss1MCS0	1+2+3
	11ac 80MHz		106	Nss1MCS0	1+2+3
Channel Availability Check Time (Radiated)	11ac 20MHz	Band3/BPSK	100	Nss1MCS0	1+2+3
Channel Move Time and Channel Closing Transmission Time (Radiated)	11ac 80MHz	Band3/BPSK	106	Nss1MCS0	1+2+3
Non-Occupancy Period (Radiated)	11ac 80MHz	Band3/BPSK	106	Nss1MCS0	1+2+3

Note: Test mode refer to "KDB905462 D02 UNII DFS Compliance Procedures New Rules v01r02, 05/15/2015"

Statement from the Broadcom :

11a should support and be compliant on DFS channels but there is no mandatory requirement to test this mode as part of the approvals testing. As long as a 20MHz BW mode is tested (e.g. HT20, 20MHz) then that is sufficient.

3.10 List of measurements for Master mode

Nominal Channel Bandwidth 802.11ac 20MHz/ch100

Temperature	27.7°C	Humidity	65%
Test Engineer	Eric Fu	Configurations	802.11ac 20MHz/ch100
☒	EIRP $\geq$ 200mW, DFS Detection Threshold =-63dBm		
☐	EIRP < 200mW and PSD < 10 dBm/MHz, DFS Detection Threshold =-62dBm		
☐	EIRP < 200mW, that do not meet the PSD requirement, DFS Detection Threshold =-64dBm		
Parameter		Test Value	Test Result
U-NII Detection Bandwidth (Minimum 100% of the U-NII 99% transmission power bandwidth); (Type 5 radar within 80% of the Occupied Bandwidth.)		Type 0+5 Radar Detection >90%	Complies
Statistical Performance Check (In-Service Monitoring)		30 time Type1+4 & 5 Radar Detection >80% Type 6 Radar Detection >70%	Complies
Channel Availability Check Time		$\geq$ 60s Type 0 Radar Detection	Complies
Security features		country code, frequency range, modulation type, maximum output power can not be changed by unauthorized parties	

Nominal Channel Bandwidth 802.11ac 40MHz/ch102

Temperature	27.7°C	Humidity	65%
Test Engineer	Eric Fu	Configurations	802.11ac 40MHz/ch102
☒	EIRP $\geq$ 200mW, DFS Detection Threshold =-63dBm		
☐	EIRP < 200mW and PSD < 10 dBm/MHz, DFS Detection Threshold =-62dBm		
☐	EIRP < 200mW, that do not meet the PSD requirement, DFS Detection Threshold =-64dBm		
Parameter		Test Value	Test Result
U-NII Detection Bandwidth (Minimum 100% of the U-NII 99% transmission power bandwidth); (Type 5 radar within 80% of the Occupied Bandwidth.)		Type 0+5 Radar Detection >90%	Complies
Statistical Performance Check (In-Service Monitoring)		30 time Type1+4 & 5 Radar Detection >80% Type 6 Radar Detection >70%	Complies
Security features		country code, frequency range, modulation type, maximum output power can not be changed by unauthorized parties	

Nominal Channel Bandwidth 802.11ac 80MHz/ch106

Temperature	27.7°C	Humidity	65%
Test Engineer	Eric Fu	Configurations	802.11ac 80MHz/ch106
☒	EIRP $\geq$ 200mW, DFS Detection Threshold =-63dBm		
☐	EIRP < 200mW and PSD < 10 dBm/MHz, DFS Detection Threshold =-62dBm		
☐	EIRP < 200mW, that do not meet the PSD requirement, DFS Detection Threshold =-64dBm		
Parameter		Test Value	Test Result
U-NII Detection Bandwidth (Minimum 100% of the U-NII 99% transmission power bandwidth); (Type 5 radar within 80% of the Occupied Bandwidth.)		Type 0+5 Radar Detection >90%	Complies
Statistical Performance Check (In-Service Monitoring)		30 time Type1+4 & 5 Radar Detection >80% Type 6 Radar Detection >70%	Complies
Channel Move Time		Type 0 < 10s	Complies
Channel Closing Transmission Time		Type 0 < 260ms	Complies
Non-Occupancy Period		Type 0 $\geq$ 30 min	Complies
Security features		country code, frequency range, modulation type, maximum output power can not be changed by unauthorized parties	

4 DYNAMIC FREQUENCY SELECTION TEST RESULT

4.1 General DFS Information

47 CFR FCC Part 15 Subpart E § 15.407: U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

U-NII devices operating in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems.

Master Device Requirements:

- (1) Before initiating a network on a channel, which has not been identified as an Available Channel, the master device shall perform a Channel Availability Check to ensure that there is no radar operating on the channel.
- (2) During normal operation, the master device shall monitor the Operating Channel (In-Service Monitoring) to ensure that there is no radar operating on the channel. When the master device has detected a radar signal during In-Service Monitoring, the Operating Channel is made unavailable. The master device shall instruct all its associated slave devices to stop transmitting on this (to become unavailable) channel.
- (3) The master device shall not resume any transmissions on this Unavailable Channel during a period of time after a radar signal was detected. This period is referred as the Non-Occupancy Period.

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

Requirement	Operational Mode		
	Master	Client without radar detection	Client with radar detection
DFS Detection Threshold	✓	Not required	✓
Channel Availability Check Time	✓	Not required	Not required
Non-Occupancy Period	✓	Not required	✓
U-NII Detection Bandwidth	✓	Not required	✓

Table 2: Applicability of DFS requirements during normal operation.

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client without radar detection
DFS Detection Threshold	✓	Not required
Channel Closing Transmission Time	✓	✓
Channel Move Time	✓	✓
U-NII Detection Bandwidth	✓	Not required

Additional requirements for devices with multiple bandwidth modes	Operational Mode	
	Master Device or Client with Radar Detection	Client without radar detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in all 20 MHz channel blocks and a null frequencies between the bonded 20 MHz channel blocks.		

4.1.1 User Access Restrictions

User Access Restrictions
☒ DFS controls (hardware or software) related to radar detection are NOT accessible to the user. Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.

4.1.2 Table for Class II Change

This product is an extension of original one reported under Sporton project number: 422438

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Adding 5GHz Band 2 and Band 3 (5250~5350 MHz, 5470~5725 MHz) for this device.	It was performed for all tests.
2. Changing the applicant's name.	It is not necessary to perform for all tests.

Note: There is no change in hardware or in existing RF relevant portion.

4.2 TEST LIMITS AND RADAR SIGNAL PARAMETERS

4.2.1 DETECTION THRESHOLD VALUES

Table 3: DFS Detection Thresholds for Master and Client Devices With Radar Detection.

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt, that do not meet the power spectral density requirement	-64 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.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	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 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

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 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

4.2.2 Radar Test Waveforms Minimum Step

Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

4.2.3 Short Pulse Radar Test Waveforms (Type 1~4)

Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table 5: Short Pulse Radar Test Waveforms.

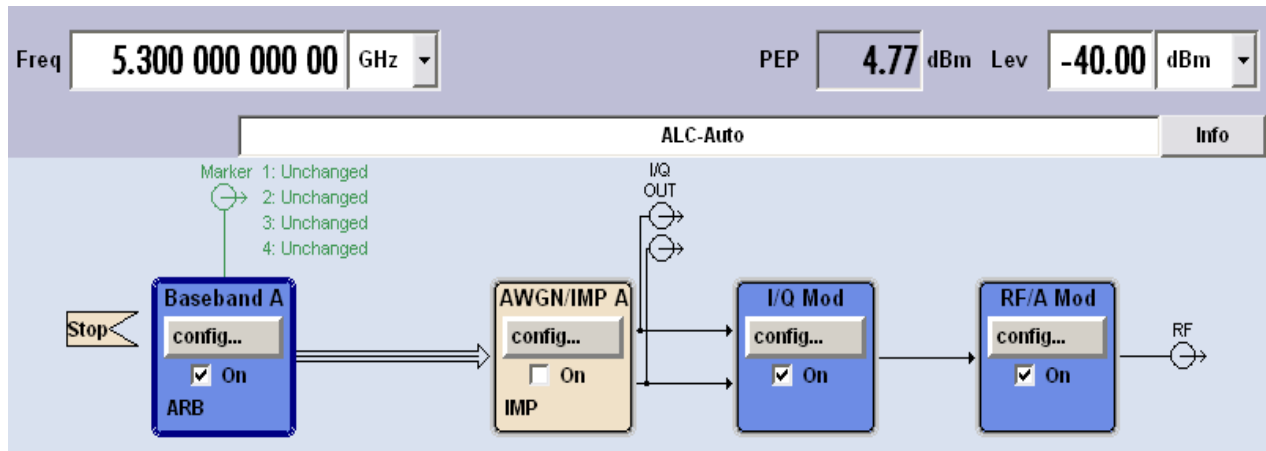
Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A	$\text{Roundup} \left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	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
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

For example if in Short Pulse Radar Type 1 Test B a PRI of 3066 usec is selected, the number of pulses

would be $\text{Roundup} \left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{3066} \right) \right\} = \text{Roundup}\{17.2\} = 18$

Radar Types (1~4) System Diagram



Used R&S SMU200A (Vector SG with one ARB) or SG + ARB

B11: Base-band Generator with ARB (16 M samples) and Digital Modulation

B13: Base-band Main Module

B106: frequency range (100 kHz to 6 GHz)

For selecting the waveform parameters from within the bounds of the signal type, system were random selection using uniform distribution.

4.2.4 Long Pulse Radar Test Waveform (Type 5)

Table 6: Long Pulse Radar Test Waveform

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

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse radar test signal. If more than 30 waveforms are used for the Long Pulse radar test signal, then each additional waveform must also be unique and not repeated from the previous waveforms. Each waveform is defined as follows:

- (1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
- (2) There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst_Count.
- (3) Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- (4) The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.
- (5) Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen.

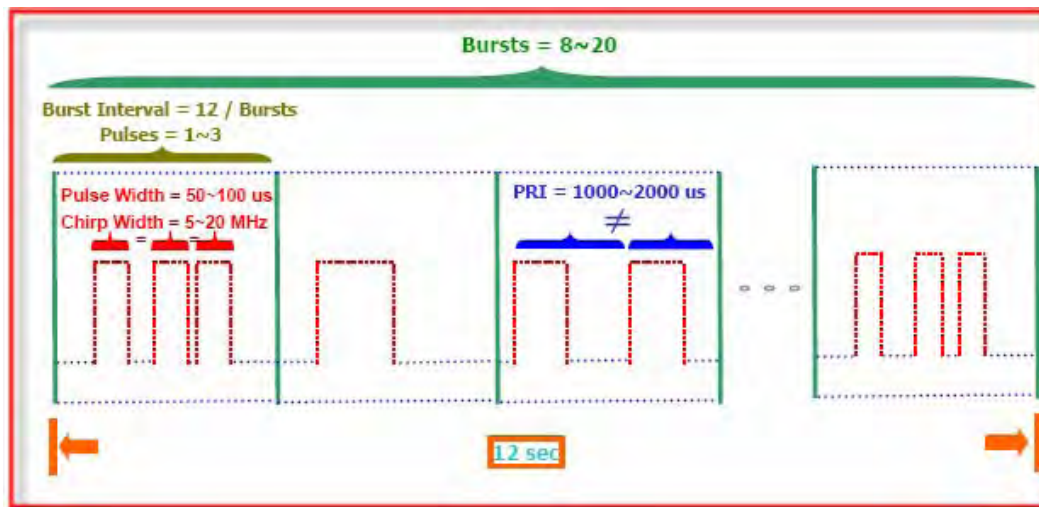
Each pulse within a Burst will have the same chirp width. Pulses in different Bursts may have different chirp widths. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz.

- (6) If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
- (7) The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst_Count. Each interval is of length $(12,000,000 / \text{Burst_Count})$ microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and $[(12,000,000 / \text{Burst_Count}) - (\text{Total Burst Length}) + (\text{One Random PRI Interval})]$ microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

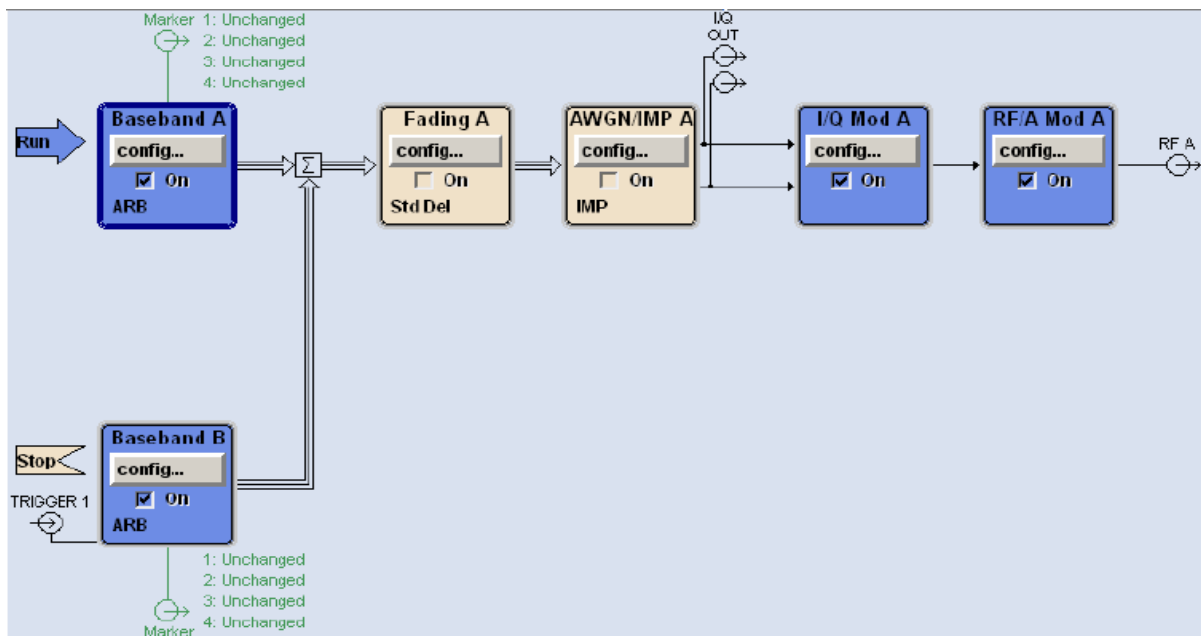
A representative example of a Long Pulse radar test waveform:

- (1) The total test signal length is 12 seconds.
- (2) 8 Bursts are randomly generated for the Burst_Count.
- (3) Burst 1 has 2 randomly generated pulses.
- (4) The pulse width (for both pulses) is randomly selected to be 75 microseconds.
- (5) The PRI is randomly selected to be at 1213 microseconds.
- (6) Bursts 2 through 8 are generated using steps 3 – 5.
- (7) Each Burst is contained in even intervals of 1,500,000 microseconds. The starting location for Pulse 1, Burst 1 is randomly generated (1 to 1,500,000 minus the total Burst 1 length + 1 random PRI interval) at the 325,001 microsecond step. Bursts 2 through 8 randomly fall in successive 1,500,000 microsecond intervals (i.e. Burst 2 falls in the 1,500,001 – 3,000,000 microsecond range).

Note: The center frequency for each of the 30 trials of the Bin 5 radar shall be randomly selected within 80% of the Occupied Bandwidth.



Radar Types (5) System Diagram



Used R&S SMU200A (Vector SG with two ARB)

Path A / Path B Two B11: Base-band Generator with ARB (16 M samples) and Digital Modulation

B13: Base-band Main Module

B106: frequency range (100 kHz to 6 GHz)

For selecting the waveform parameters from within the bounds of the signal type, system was random selection using uniform distribution.

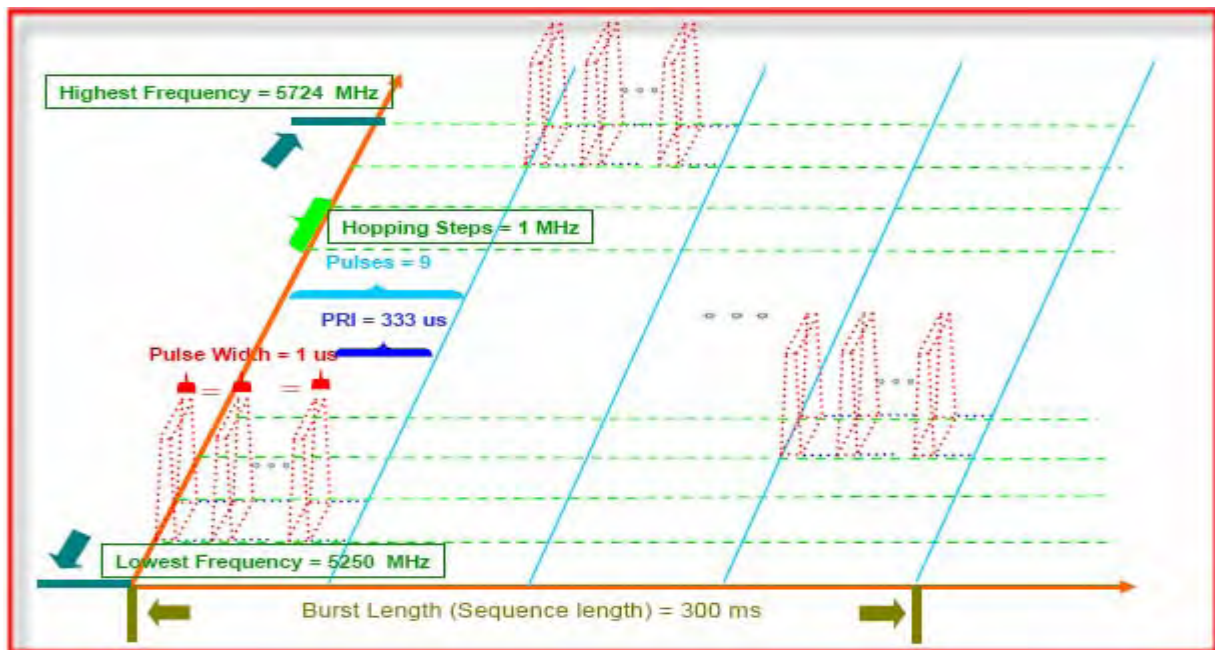
4.2.5 Frequency Hopping Radar Test Waveform (Type 6)

Table 7: Frequency Hopping Radar Test Waveform

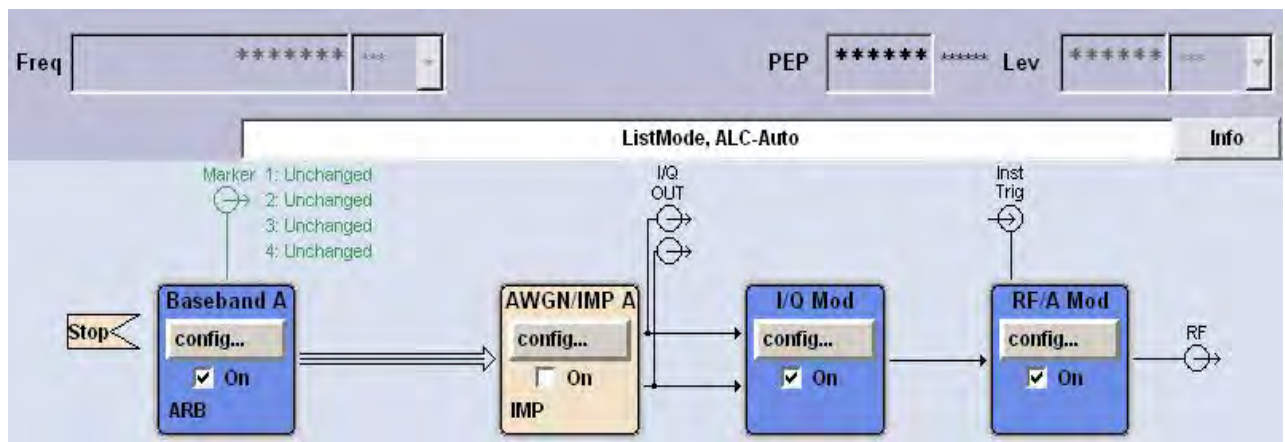
Rad ar Type	Pulse Width (μ sec)	PRI (μ sec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

For the Frequency Hopping Radar Type, the same Burst parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

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



Radar Types (6) System Diagram



Used R&S SMU200A (Vector SG with one ARB)

B11: Base-band Generator with ARB (16 M samples) and Digital Modulation

B13: Base-band Main Module

106: frequency range (100 kHz to 6 GHz)

For selecting the waveform parameters from within the bounds of the signal type, system were random selection using uniform distribution.

4.2.6 Measuring Instruments

Refer to a list of measuring equipment in section 5.

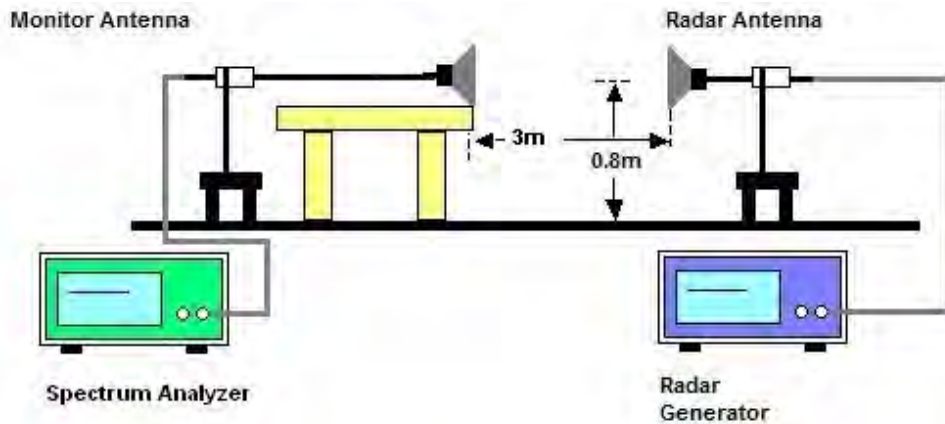
4.2.7 Measuring Instruments and Setting

The following table is the setting of the spectrum analyzer.

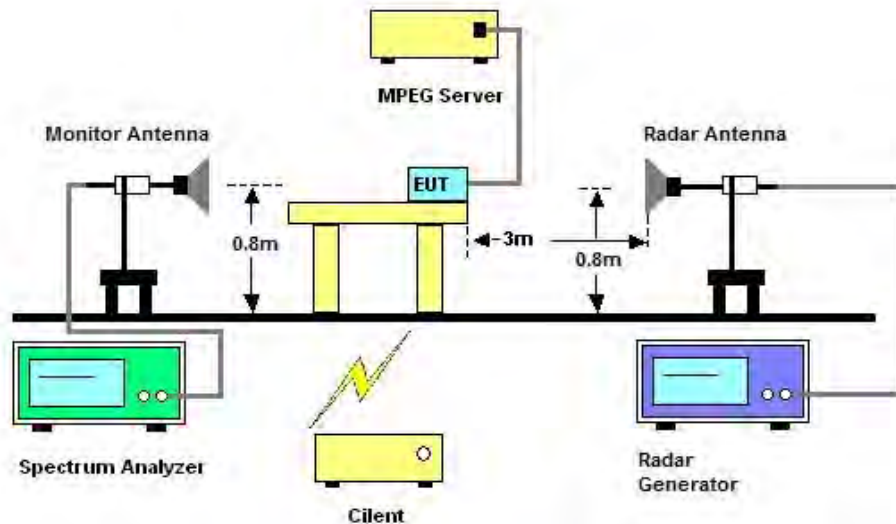
Spectrum Parameter	Setting
Attenuation	0 dB
Span Frequency	0 MHz
RBW / VBW	3 MHz
Sweep Time	More than DFS requirement values

4.2.8 DFS Radiated Test Setup Layout

(1) Calibration Setup



(2) DFS Radiated Test Setup for master mode

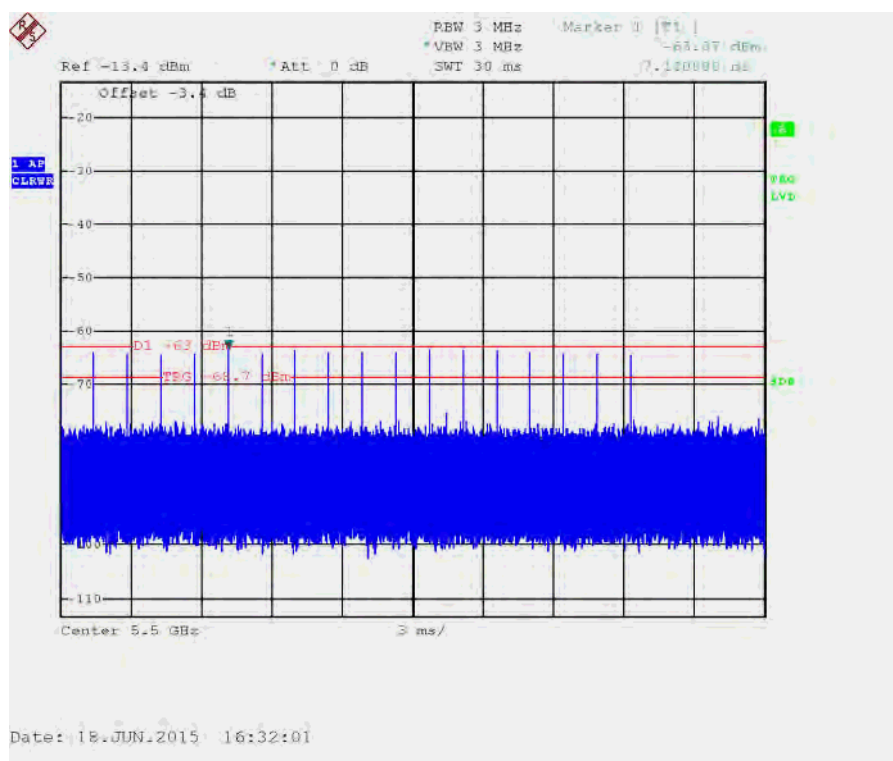


4.2.9 Radar Waveform Calibration Procedure

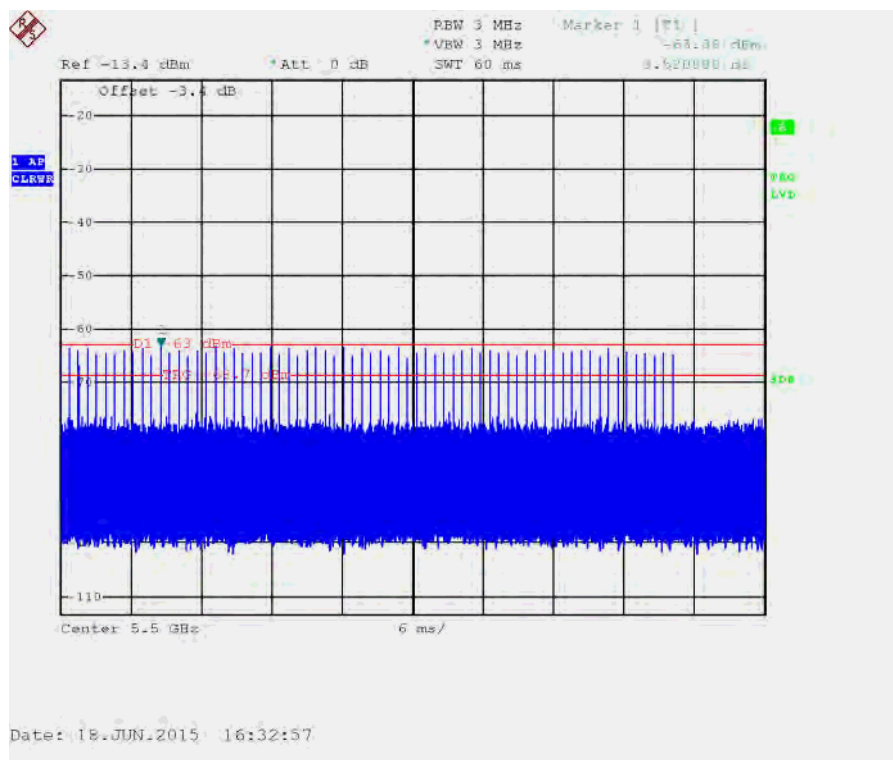
The Interference **Radar Detection Threshold Level** is (-63dBm), The above equipment setup was used to calibrate the radiated Radar Waveform. A vector signal generator was utilized to establish the test signal level for each radar type. During this process there were replace 50ohm terminal form Master and Client device and no transmissions by either the Master or Client Device. The spectrum analyzer was switched to the zero span (Time Domain) at the frequency of the Radar Waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to at least 3 MHz. The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was (-63dBm). Capture the spectrum analyzer plots on short pulse radar types, long pulse radar type and hopping radar waveform.

4.2.10 Calibration Deviation

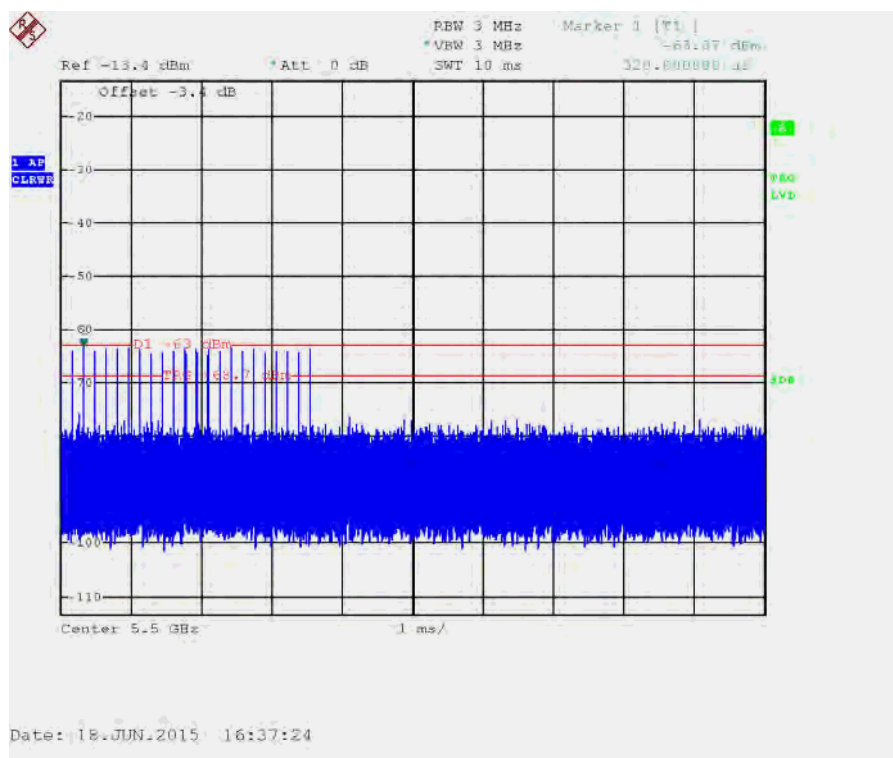
There is no deviation with the original standard.



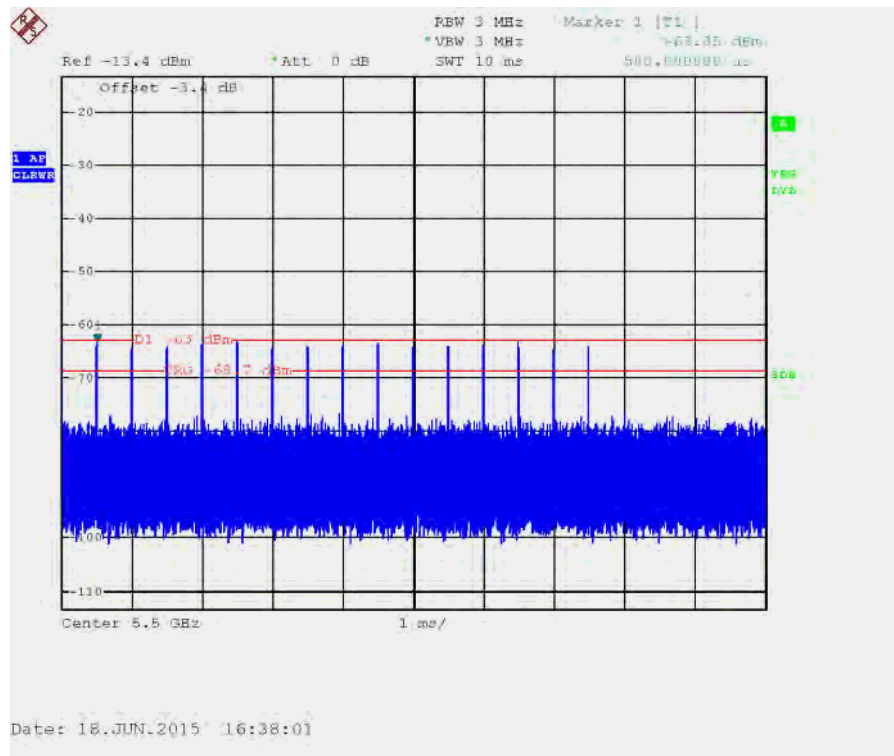
Radar #1 DFS detection threshold level



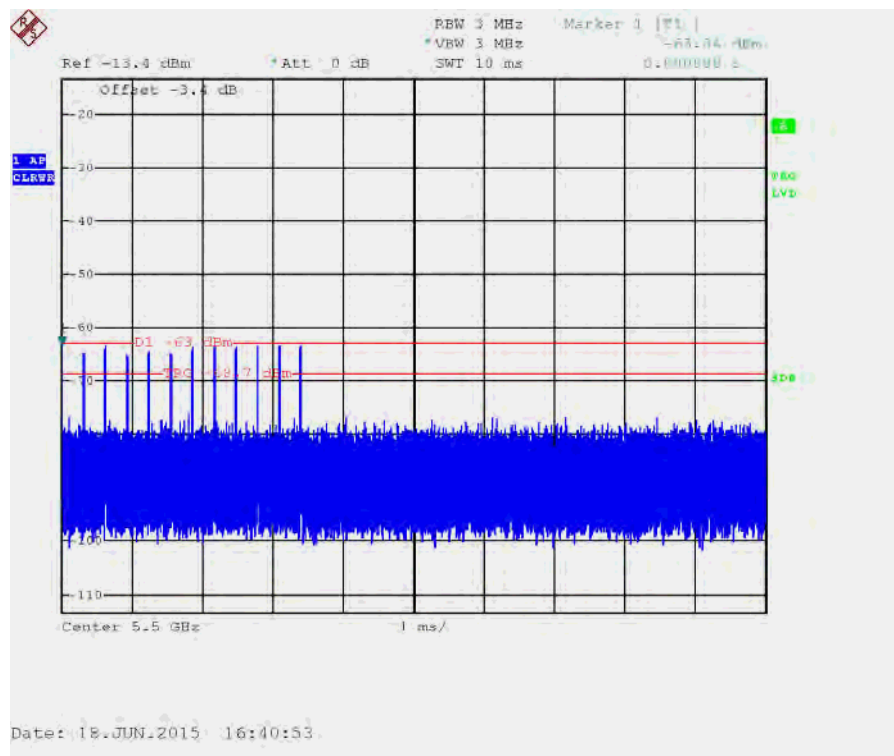
Radar #2 DFS detection threshold level



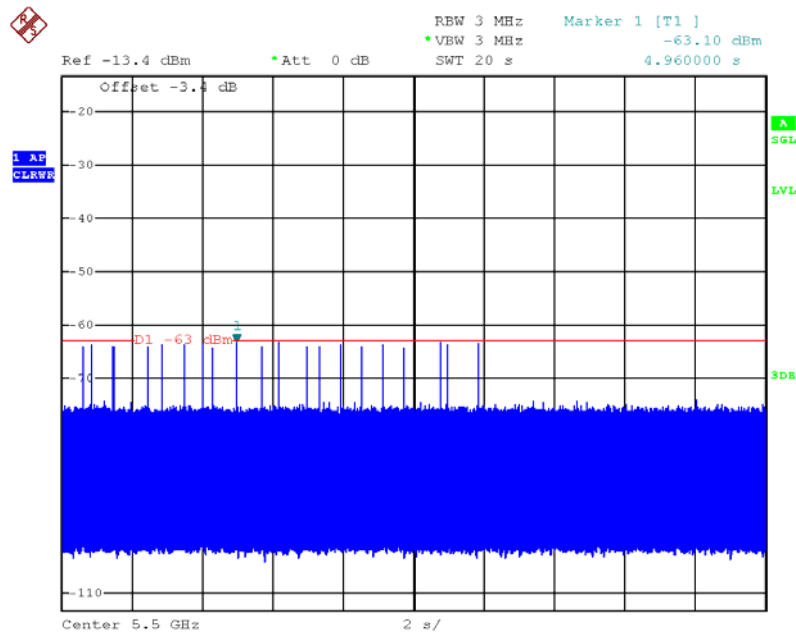
Radar #3 DFS detection threshold level



Radar #4 DFS detection threshold level

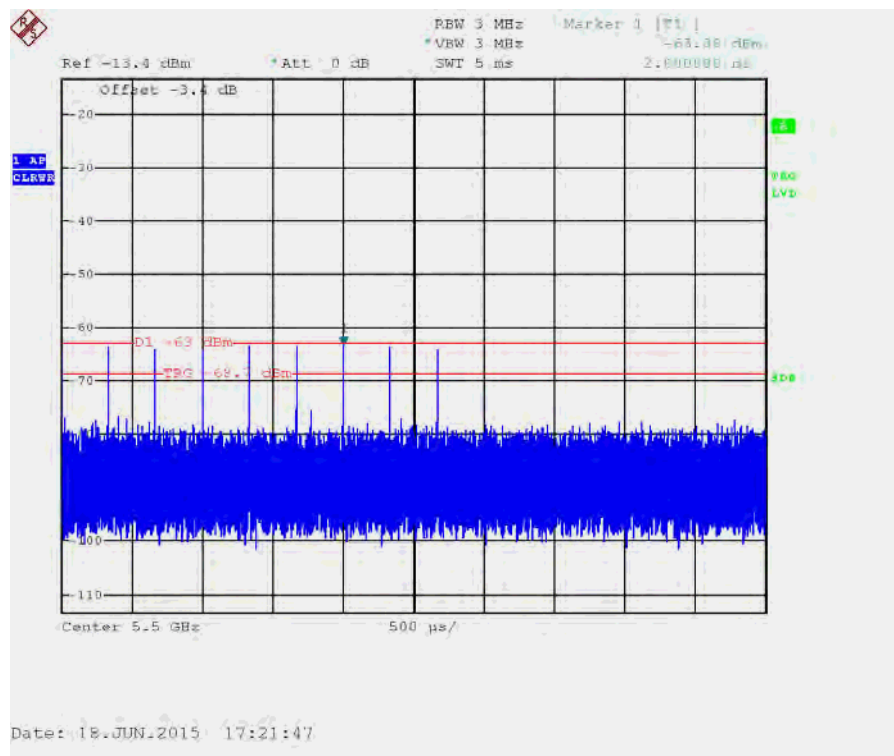


Radar #5 DFS detection threshold level



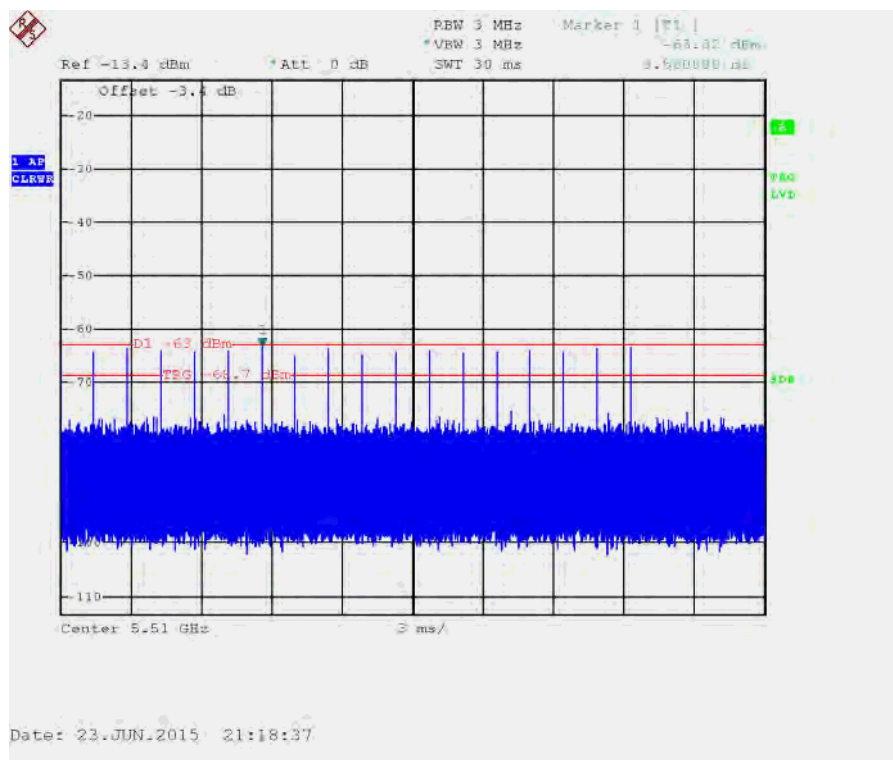
Date: 18.JUN.2015 16:52:49

Radar #6 DFS detection threshold level

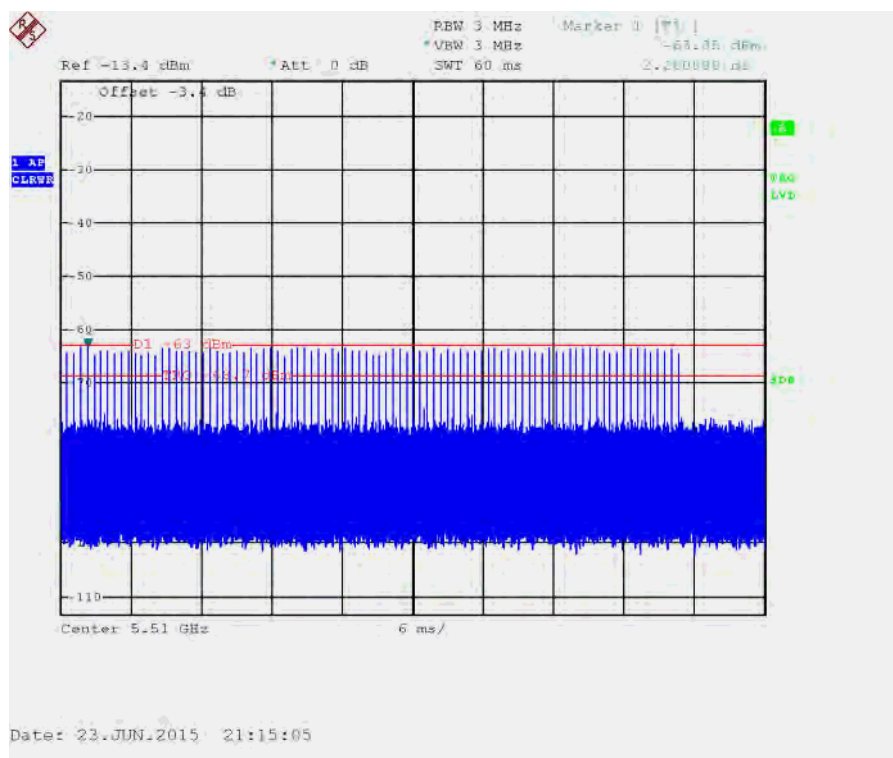


For 802.11ac 40MHz / 5510 MHz:

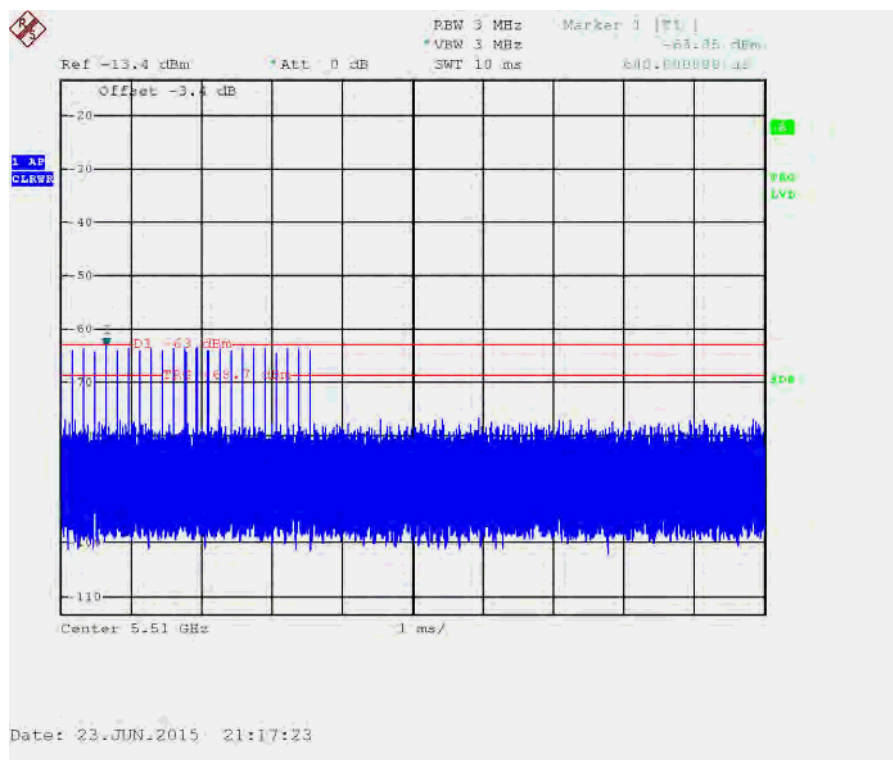
Radar #0 DFS detection threshold level



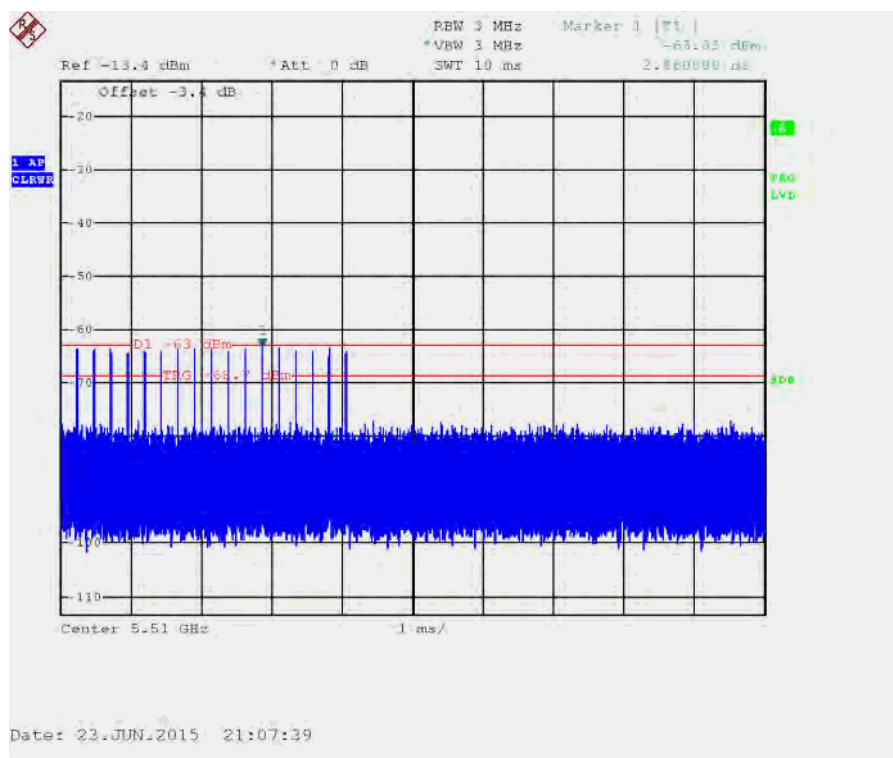
Radar #1 DFS detection threshold level



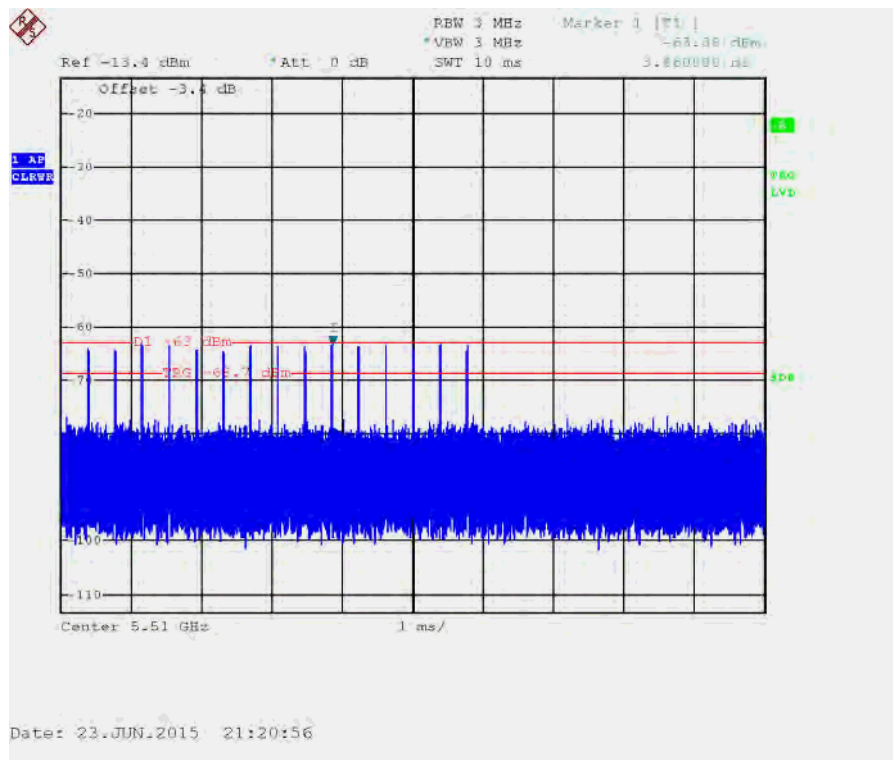
Radar #2 DFS detection threshold level



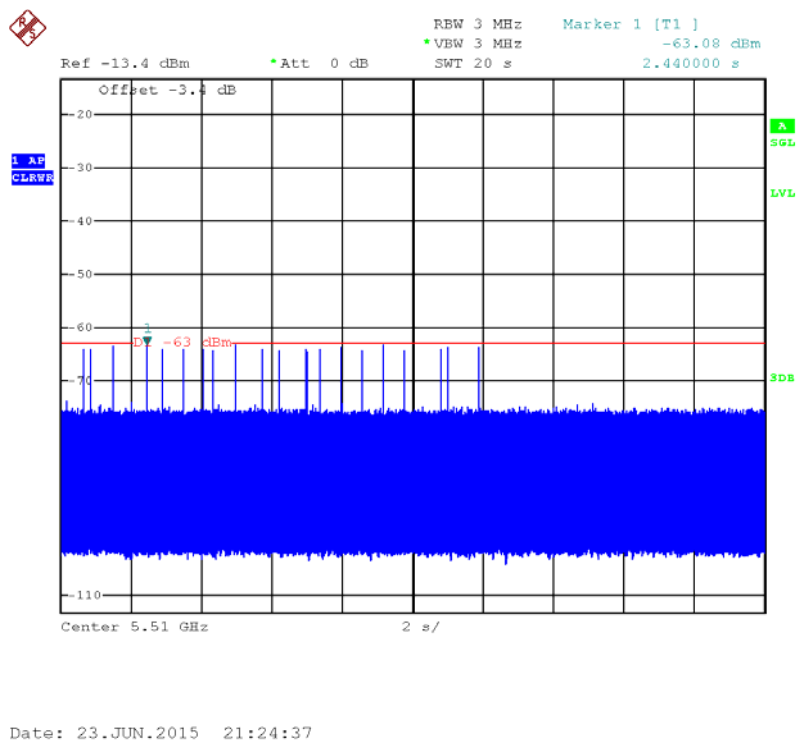
Radar #3 DFS detection threshold level



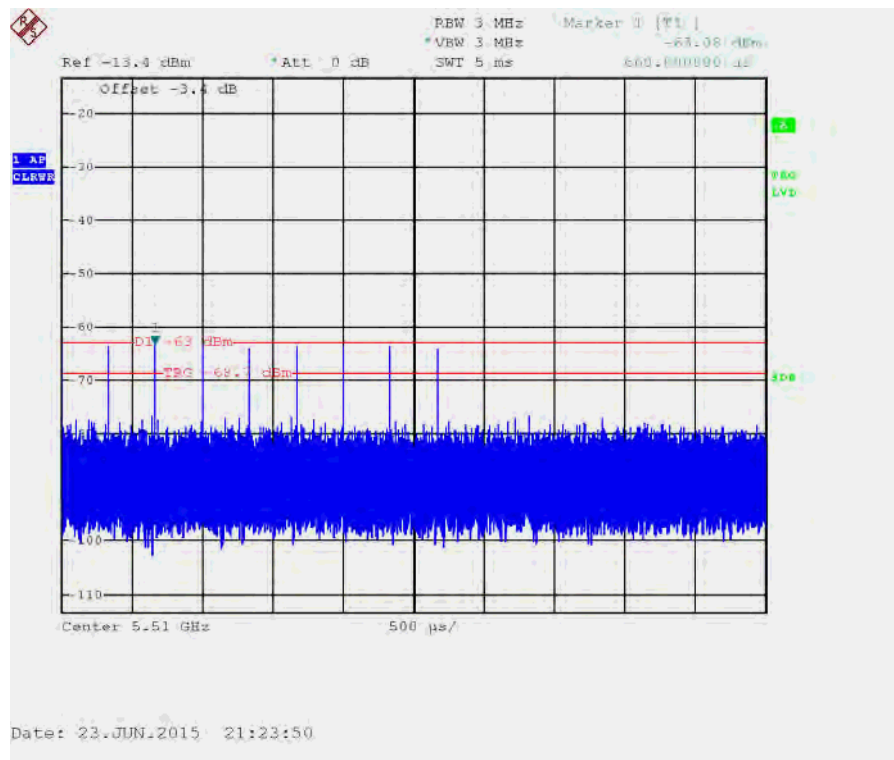
Radar #4 DFS detection threshold level



Radar #5 DFS detection threshold level

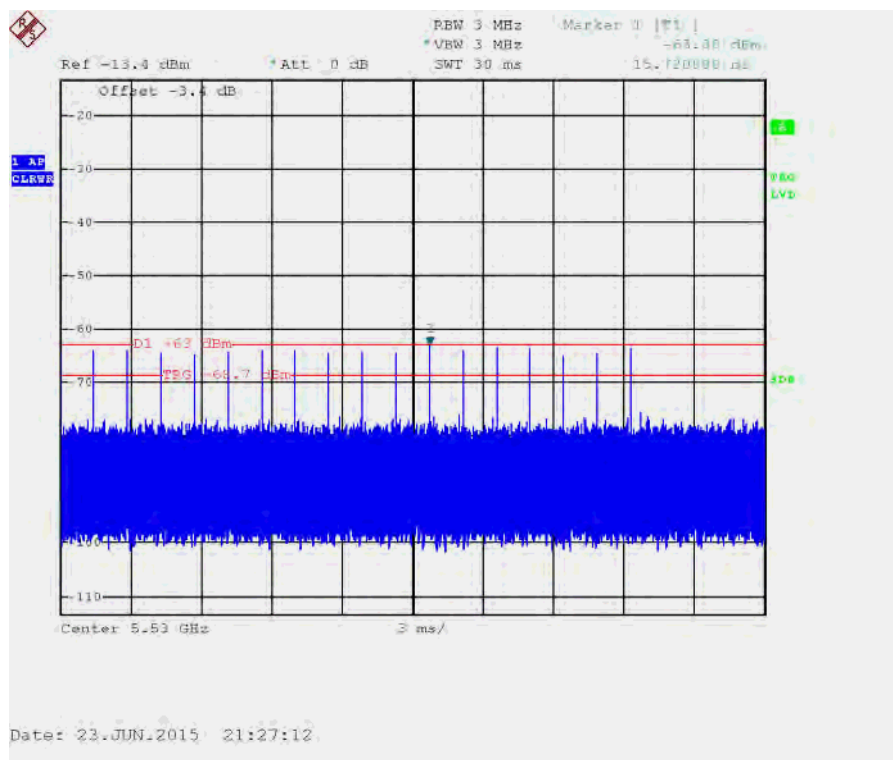


Radar #6 DFS detection threshold level

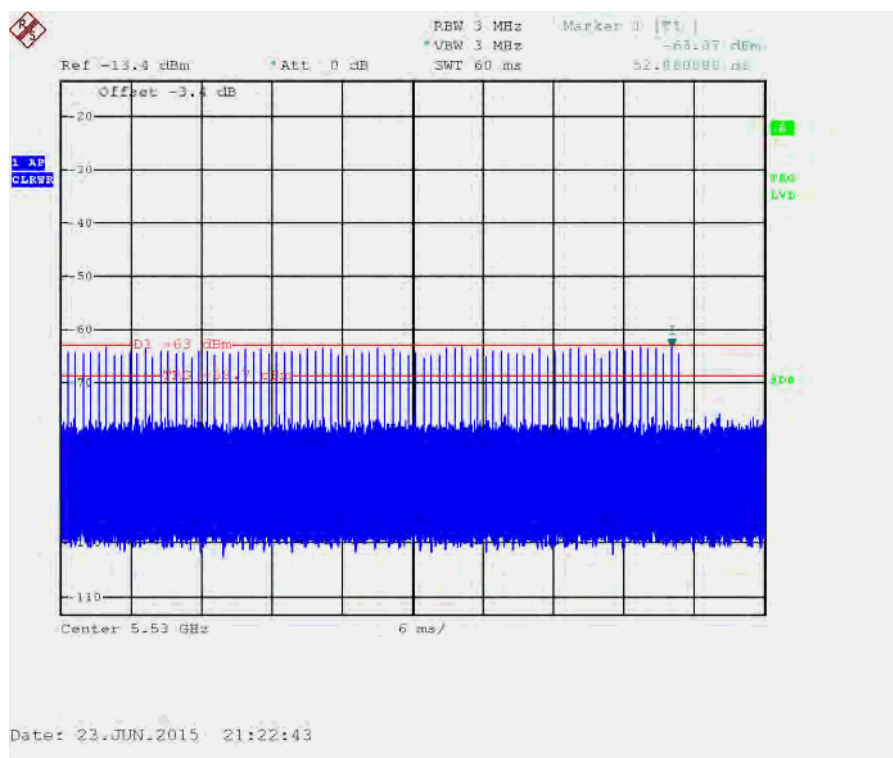


For 802.11ac 80MHz / 5530 MHz:

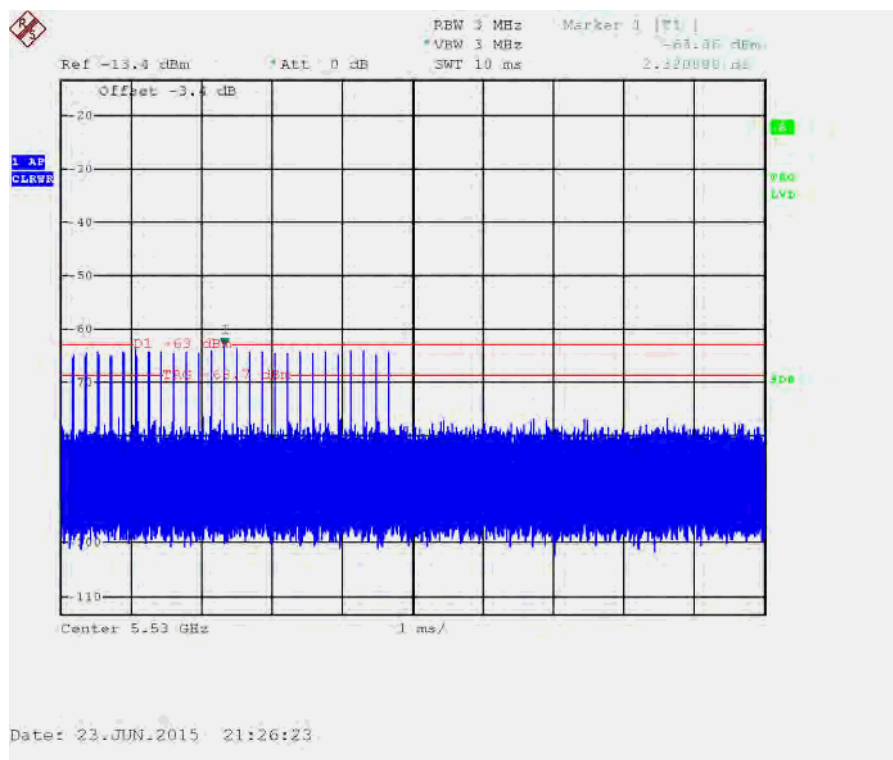
Radar #0 DFS detection threshold level



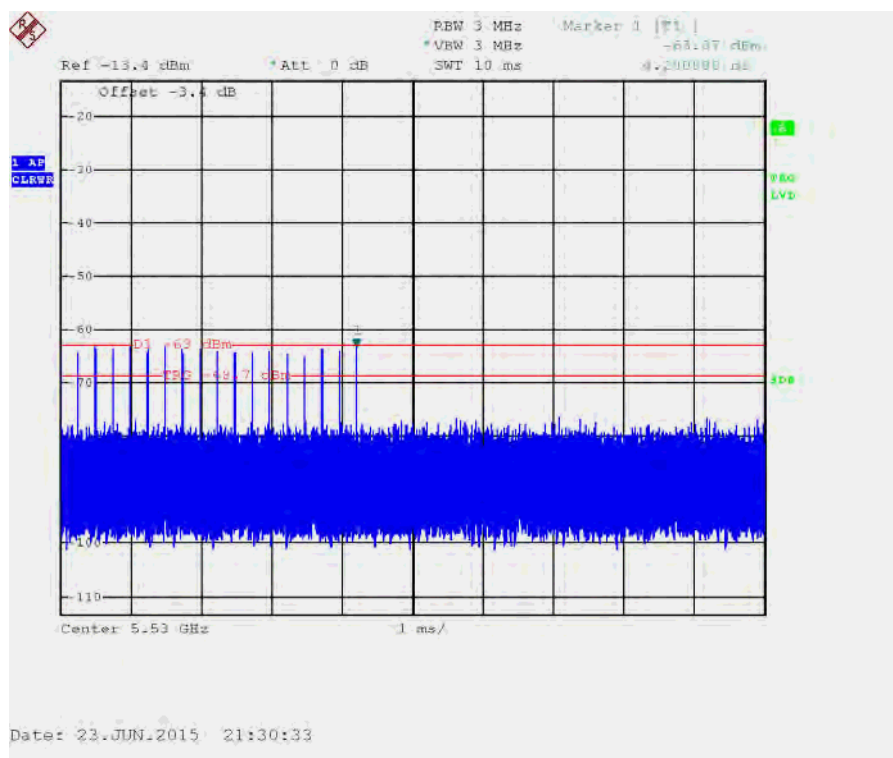
Radar #1 DFS detection threshold level



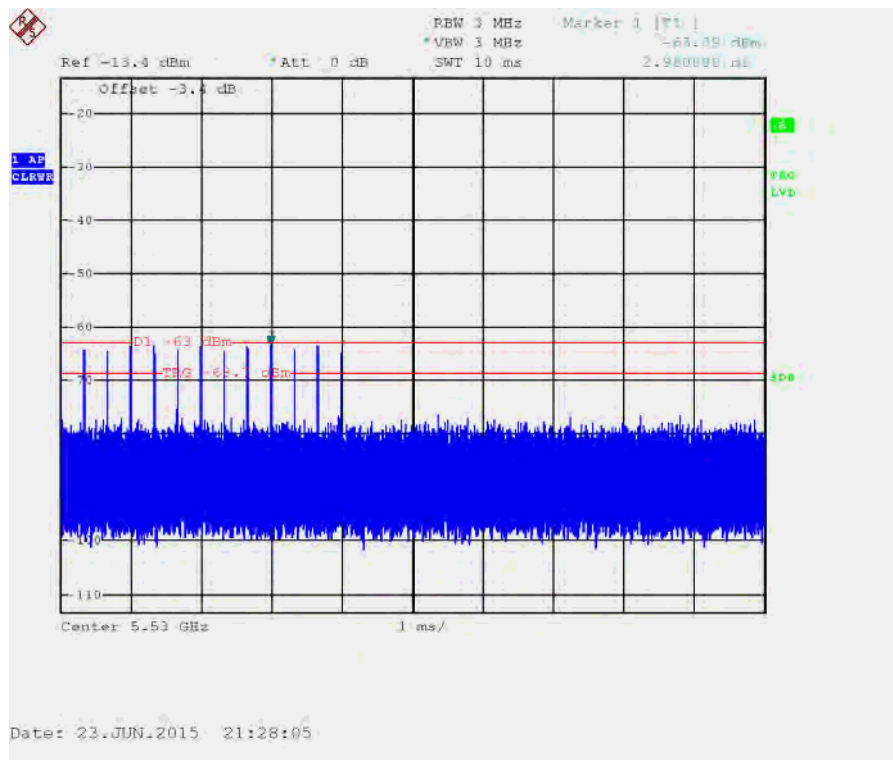
Radar #2 DFS detection threshold level



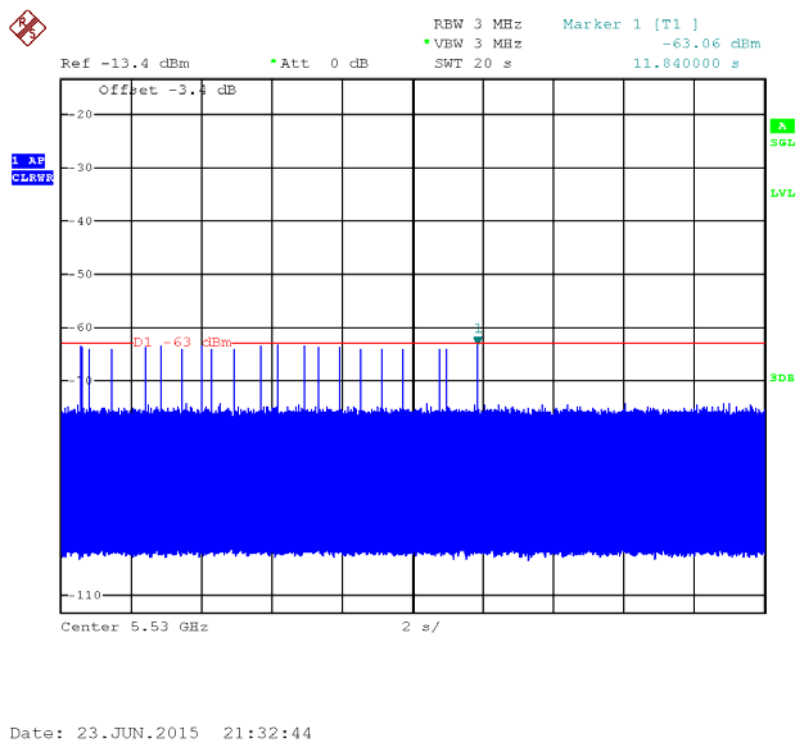
Radar #3 DFS detection threshold level



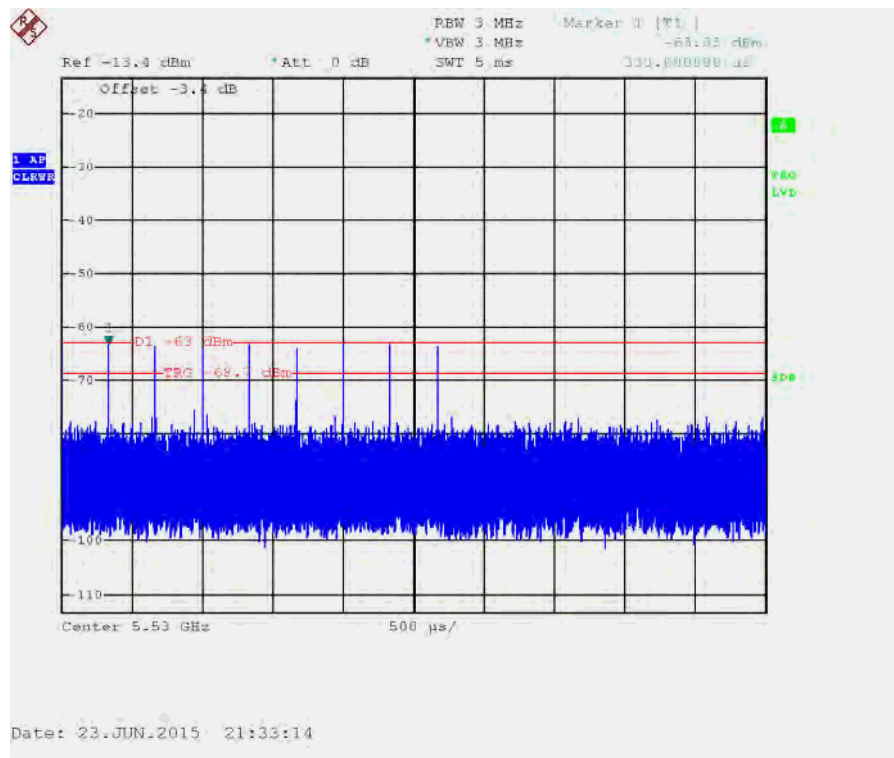
Radar #4 DFS detection threshold level



Radar #5 DFS detection threshold level



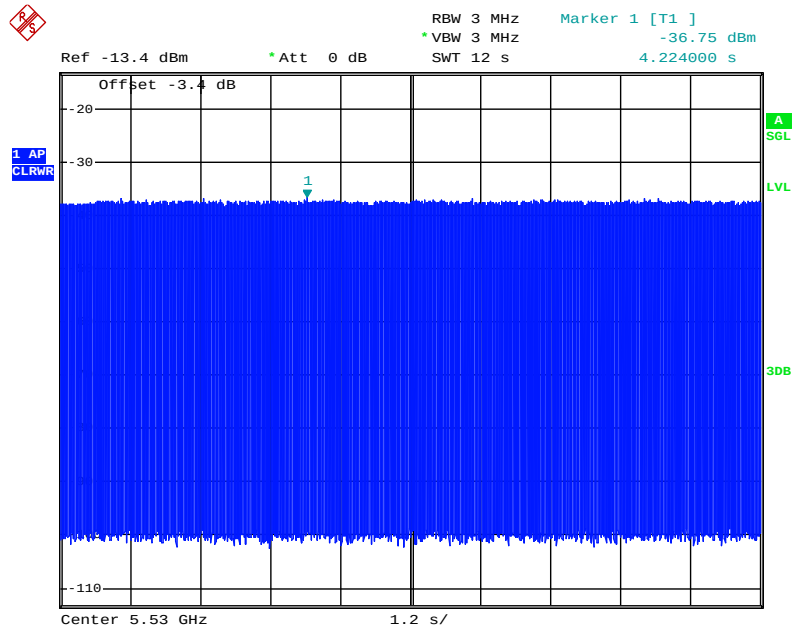
Radar #6 DFS detection threshold level



4.2.12 Data traffic Plot

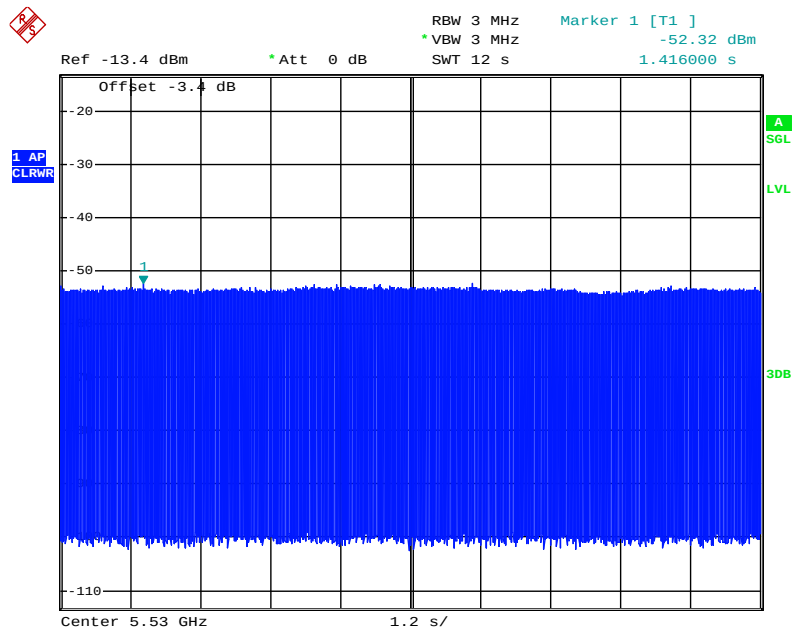
For 802.11ac 80MHz / 5530 MHz:

EUT (Master) Data Traffic Plot



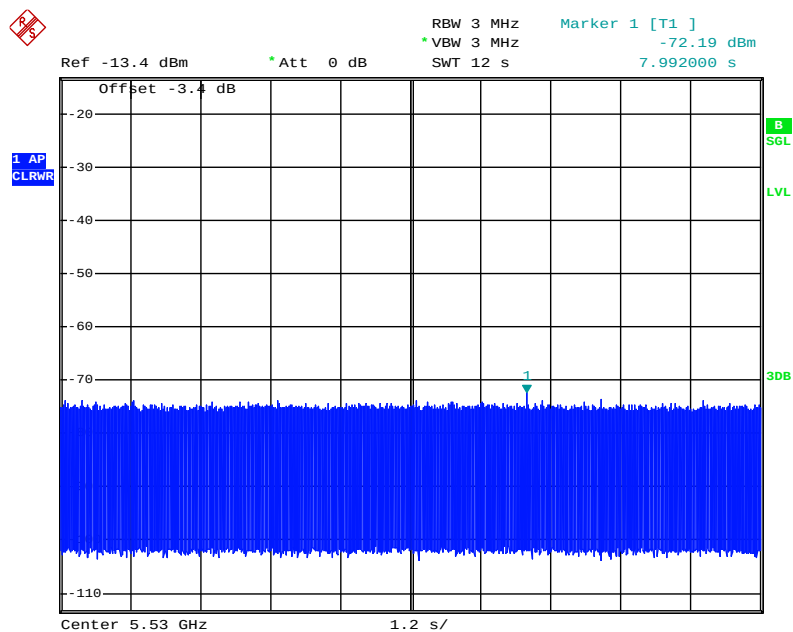
Date: 24.JUN.2015 14:53:46

Slave Data Traffic Plot



Date: 24.JUN.2015 14:57:09

Without Data Traffic Plot (Noise Plot)



Date: 24.JUN.2015 00:25:04

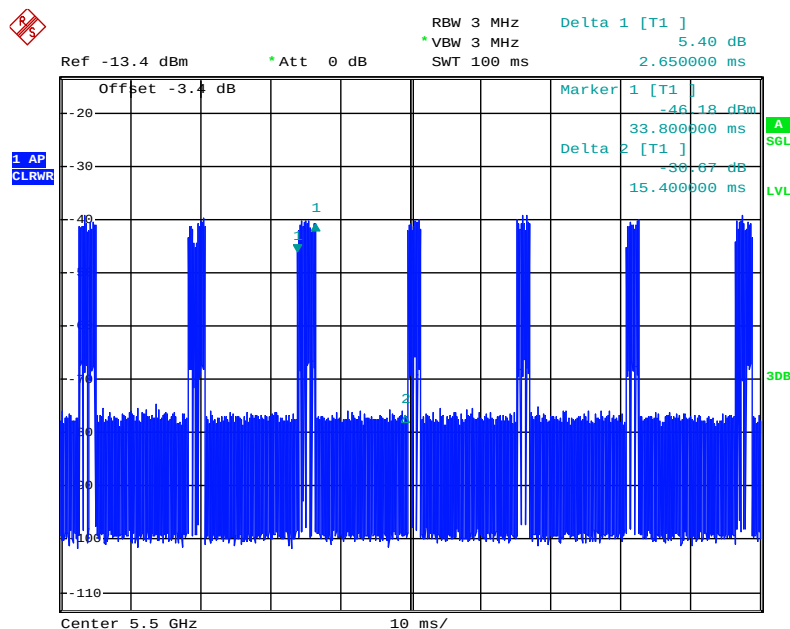
4.2.13 Channel Loading

System testing will be performed with channel-loading using means appropriate to the data types that are used by the unlicensed device. The following requirements apply:

1. The data file must be of a type that is typical for the device (i.e., MPEG-2, MPEG-4, WAV, MP3, MP4, AVI, etc.) and must generally be transmitting in a streaming mode.
2. Software to ping the client is permitted to simulate data transfer but must have random ping intervals.
3. Timing plots are required with calculations demonstrating a minimum channel loading of approximately 17% or greater. For example, you can zero span the spectrum analyzer and approximate the transmission time.
4. Unicast or Multicast protocols are preferable but other protocols may be used. The appropriate protocol used must be described in the test procedures.

☒	IP Based (Load Based) - stream the test file from the Master to the Client.
☐	The data file (MPEG-4) has been transmitting in a streaming mode.
☐	Software to ping the client is permitted to simulate data transfer with random ping intervals.
☒	Minimum channel loading of approximately 17%.
☐	Unicast protocol has been used.
☐	Frame Based - stream the test file from the Master to the Client.
☐	fixed talk/listen ratio, set the ratio to 45%/55%

Loading



Date: 24.JUN.2015 15:29:27

4.3 UNII Detection Bandwidth Measurement

4.3.1 Limit

Minimum 100% of the UNII 99% transmission power bandwidth. During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

4.3.2 Test Procedures

1. Adjust the equipment to produce a single Burst of the Short Pulse Radar Type 0 at the center frequency of the UUT Operating Channel at the specified DFS Detection Threshold level.
2. The generating equipment is configured as shown in the Radiated Test Setup above section 4.2.8 (2).
3. The UUT is set up as a stand-alone device (no associated Client and no traffic). Frame based systems will be set to a talk/listen ratio of 0%/100% during this test.
4. Generate single radar Burst, and note the response of the UUT. Repeat for a minimum of 10 trials. The UUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion.
5. Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 1 MHz steps, repeating the above item 4 test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Record the highest frequency (denote as FH) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance.
6. Starting at the center frequency of the UUT operating Channel, decrease the radar frequency in 1 MHz steps, repeating the above item 4 test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Record the lowest frequency (denote as FL) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below FL is not required to demonstrate compliance.
7. The U-NII Detection Bandwidth is calculated as follows: $\text{U-NII Detection Bandwidth} = \text{FH} - \text{FL}$
8. The U-NII Detection Bandwidth must be at least 100% of the UUT transmitter 99% power, otherwise, the UUT does not comply with DFS requirements.

4.3.3 Test Deviation

There is no deviation with the original standard.

4.3.4 Test Result for UNII Detection Bandwidth

For 802.11ac 20MHz / 5500 MHz: <CH100>

UUT Frequency=5500MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5489	0	0	0	0	0	0	0	0	0	0	0
5490	0	0	0	0	0	0	0	0	0	0	0
5491(FL)-Type 0	1	1	1	1	1	1	1	1	1	1	100
5492	1	1	1	1	1	1	1	1	1	1	100
5493	1	1	1	1	1	1	1	1	1	1	100
5494	1	1	1	1	1	1	1	1	1	1	100
5495	1	1	1	1	1	1	1	1	1	1	100
5496	1	1	1	1	1	1	1	1	1	1	100
5497	1	1	1	1	1	1	1	1	1	1	100
5498	1	1	1	1	1	1	1	1	1	1	100
5499	1	1	1	1	1	1	1	1	1	1	100
5500	1	1	1	1	1	1	1	1	1	1	100
5501	1	1	1	1	1	1	1	1	1	1	100
5502	1	1	1	1	1	1	1	1	1	1	100
5503	1	1	1	1	1	1	1	1	1	1	100
5504	1	1	1	1	1	1	1	1	1	1	100
5505	1	1	1	1	1	1	1	1	1	1	100
5506	1	1	1	1	1	1	1	1	1	1	100
5507	1	1	1	1	1	1	1	1	1	1	100
5508	1	1	1	1	1	1	1	1	1	1	100
5509(FH)-Type 0	1	1	1	1	1	1	1	1	1	1	100
5510	0	0	0	0	0	0	0	0	0	0	0
5511	0	0	0	0	0	0	0	0	0	0	0
UUT 99% Bandwidth = 18.00MHz											See note
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5509MHz-5491MHz)=											18.00
UNII Detection Bandwidth Min. Limit (MHz) =18.00MHz x 100%=											18.00
Test Result											Complied

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500 MHz. The 99% channel bandwidth is 18.00MHz. (See the 99% BW section of the RF report for further measurement details).

For 802.11ac 40MHz / 5510 MHz: <CH102>

UUT Frequency=5510MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490	0	0	0	0	0	0	0	0	0	0	0
5491(FL)-Type 0	1	1	1	1	1	1	1	1	1	1	100
5492	1	1	1	1	1	1	1	1	1	1	100
5493	1	1	1	1	1	1	1	1	1	1	100
5494	1	1	1	1	1	1	1	1	1	1	100
5495	1	1	1	1	1	1	1	1	1	1	100
5496	1	1	1	1	1	1	1	1	1	1	100
5497	1	1	1	1	1	1	1	1	1	1	100
5498	1	1	1	1	1	1	1	1	1	1	100
5499	1	1	1	1	1	1	1	1	1	1	100
5500	1	1	1	1	1	1	1	1	1	1	100
5505	1	1	1	1	1	1	1	1	1	1	100
5510	1	1	1	1	1	1	1	1	1	1	100
5515	1	1	1	1	1	1	1	1	1	1	100
5520	1	1	1	1	1	1	1	1	1	1	100
5525	1	1	1	1	1	1	1	1	1	1	100
5526	1	1	1	1	1	1	1	1	1	1	100
5527	1	1	1	1	1	1	1	1	1	1	100
5528	1	1	1	1	1	1	1	1	1	1	100
5529(FH)-Type 0	1	1	1	1	1	1	1	1	1	1	100
5530	0	0	0	0	0	0	0	0	0	0	0
UUT 99% Bandwidth = 36.80MHz											See note
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5529MHz-5491MHz)=											38.00
UNII Detection Bandwidth Min. Limit (MHz) = 36.80MHz x 100%=											36.80
Test Result											Complied

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510 MHz. The 99% channel bandwidth is 36.80MHz. (See the 99% BW section of the RF report for further measurement details).

For 802.11ac 80MHz / 5530 MHz: <CH106>

UUT Frequency=5530MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490	0	0	0	0	0	0	0	0	0	0	0
5491(FL)-Type 0	1	1	1	1	1	1	1	1	1	1	100
5492	1	1	1	1	1	1	1	1	1	1	100
5493	1	1	1	1	1	1	1	1	1	1	100
5494	1	1	1	1	1	1	1	1	1	1	100
5495	1	1	1	1	1	1	1	1	1	1	100
5496	1	1	1	1	1	1	1	1	1	1	100
5497	1	1	1	1	1	1	1	1	1	1	100
5498	1	1	1	1	1	1	1	1	1	1	100
5499	1	1	1	1	1	1	1	1	1	1	100
5500	1	1	1	1	1	1	1	1	1	1	100
5501	1	1	1	1	1	1	1	1	1	1	100
5505	1	1	1	1	1	1	1	1	1	1	100
5510	1	1	1	1	1	1	1	1	1	1	100
5515	1	1	1	1	1	1	1	1	1	1	100
5520	1	1	1	1	1	1	1	1	1	1	100
5525	1	1	1	1	1	1	1	1	1	1	100
5526	1	1	1	1	1	1	1	1	1	1	100
5527	1	1	1	1	1	1	1	1	1	1	100
5528	1	1	1	1	1	1	1	1	1	1	100
5529	1	1	1	1	1	1	1	1	1	1	100
5530	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5561	1	1	1	1	1	1	1	1	1	1	100
5562	1	1	1	1	1	1	1	1	1	1	100
5563	1	1	1	1	1	1	1	1	1	1	100

5564	1	1	1	1	1	1	1	1	1	1	100
5565	1	1	1	1	1	1	1	1	1	1	100
5568	1	1	1	1	1	1	1	1	1	1	100
5569(FH)-Type 0	1	1	1	1	1	1	1	1	1	1	100
5570	0	0	0	0	0	0	0	0	0	0	0
UUT 99% Bandwidth = 76.00MHz											See note
Radar Type 0-Detection Bandwidth (MHz) = (FH-FL) = (5569MHz-5491MHz)=											78.00
UNII Detection Bandwidth Min. Limit (MHz) = 76.00MHz x 100%=											76.00
Test Result											Complied

Note: All UNII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530 MHz. The 99% channel bandwidth is 76.00MHz. (See the 99% BW section of the RF report for further measurement details).

4.4 Initial Channel Availability Check Time Measurement

4.4.1 Channel Availability Check Limit

The UUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute on the intended operating frequency.

4.4.2 Initial Channel Availability Check Time

Test Procedures

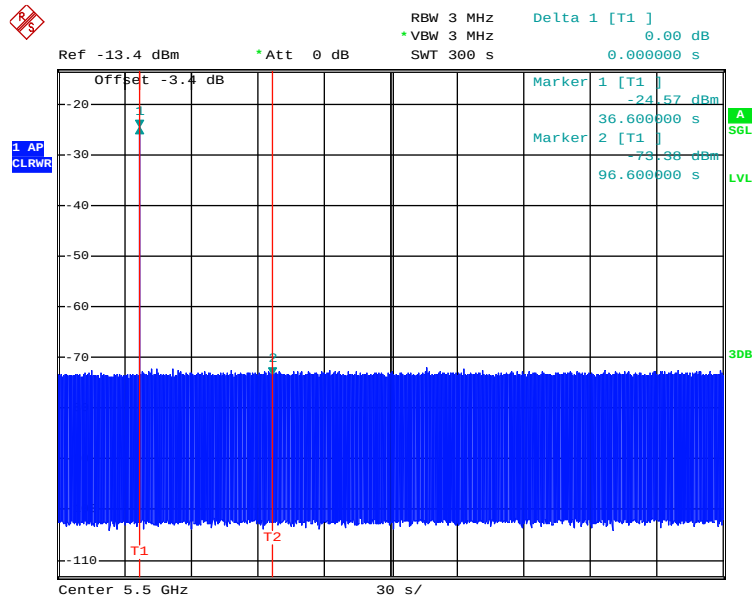
1. Set configuration as section 4.2.8 (2) and set spectrum analyzer as section 4.2.7
2. Power on the UUT and observe the information from console. T1 is the timing showing 'start CAC message' from power on. T2 is the timing showing 'end CAC message' from power on and start to link on DFS channel.
3. Use spectrum analyzer to monitor T1 & T2
4. Channel Availability Check time (T2 – T1) should not less than 60 seconds.
5. T1 and T2 shall be recorded in the report

Console Information:

Illustration for confirming cac duration:

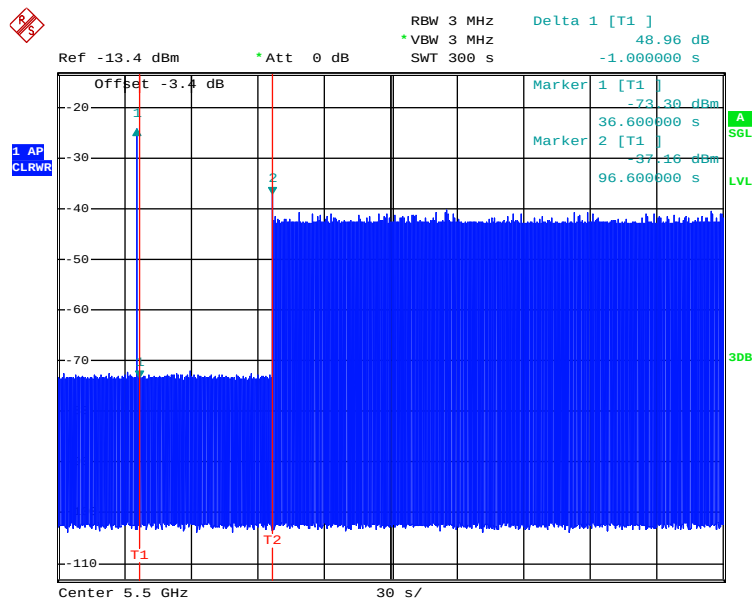
For 802.11ac 20MHz / 5500 MHz:

Step 1: We will inject radar at T2-60s to see if there is any transmission after T2, if it will stop transmission after T2, it can prove CAC= or > 60s



Date: 13.AUG.2015 21:08:05

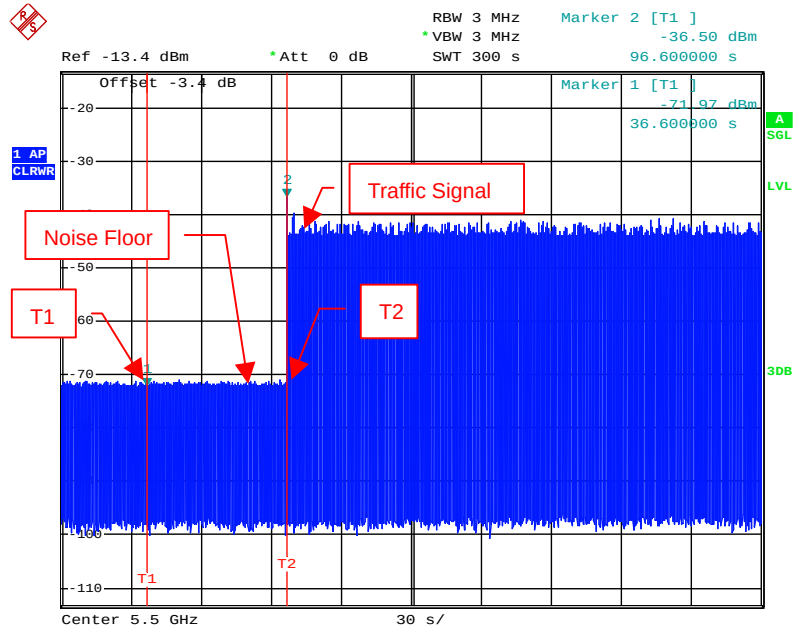
Step 2: We will inject radar at T2-61s to see if there is any transmission after T2, if it will not stop transmission after T2, it can prove CAC < 61s



Date: 13.AUG.2015 21:00:31

4.4.3 Initial Channel Availability Check Time

For 802.11ac 20MHz / 5500 MHz:



Date: 24.JUN.2015 21:57:54

NOTE: T1 denotes the end of power-up time period is 36.6_{th} second. T2 denotes the end of Channel Availability Check time is 96.6_{th} second. Channel Availability Check time is (T2 – T1) 60 seconds

4.4.4 Beginning and End of the Channel Availability Check Time

Test Procedures

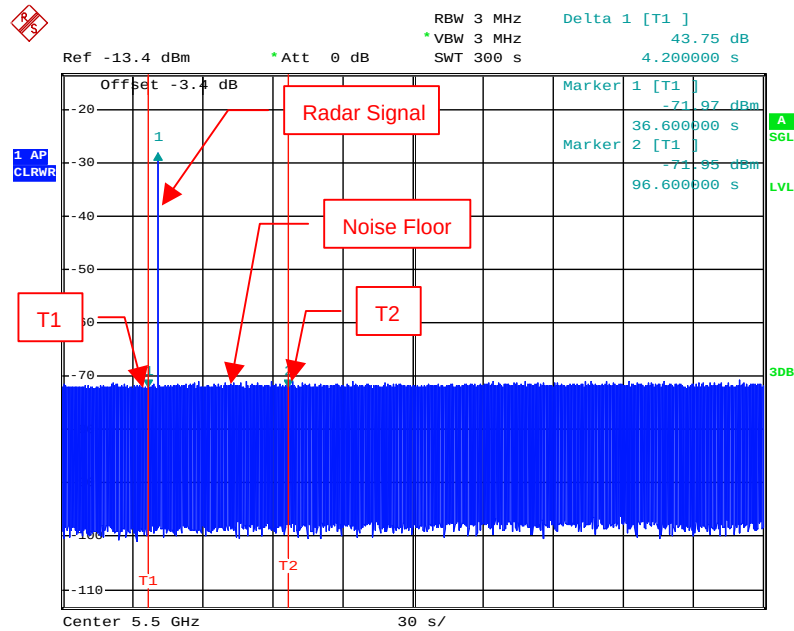
1. Set configuration as section 4.2.8 (1) and do DFS calibration, and then adjust attenuator to make sure that the threshold value of the reference test signal defined in table 3 is (-63dBm) at the UUT's antenna port.
2. Set configuration as section 4.2.8 (2) and set spectrum analyzer as section 4.2.7
3. A single Burst of one of the Short Pulse Radar Types 1-4 will commence within a 6 second window starting at T1(for beginning).
4. A single Burst of one of the Short Pulse Radar Types 1-4 will commence within a 6 second window starting at T1 + 54 seconds. (for end).
5. Verify that during the 2.5 minute measurement window no UUT transmissions occurred on Chr. The Channel Availability Check results will be recorded.

Test Result of Channel Availability Check Time

Beginning & End of the Channel Availability Check Result					
Detection Threshold Level (dBm)		-63 (DFS Detection Threshold + 1 dB)			
Modulation Mode	Freq. (MHz)	Radar Test Signal	Beginning CAC of Timing of radar burst (sec)	End CAC of Timing of radar burst (sec)	DFS Triggered (Yes/No)
802.11ac 20MHz	5500 (F3)	Type 0	0-6	54-60	Yes

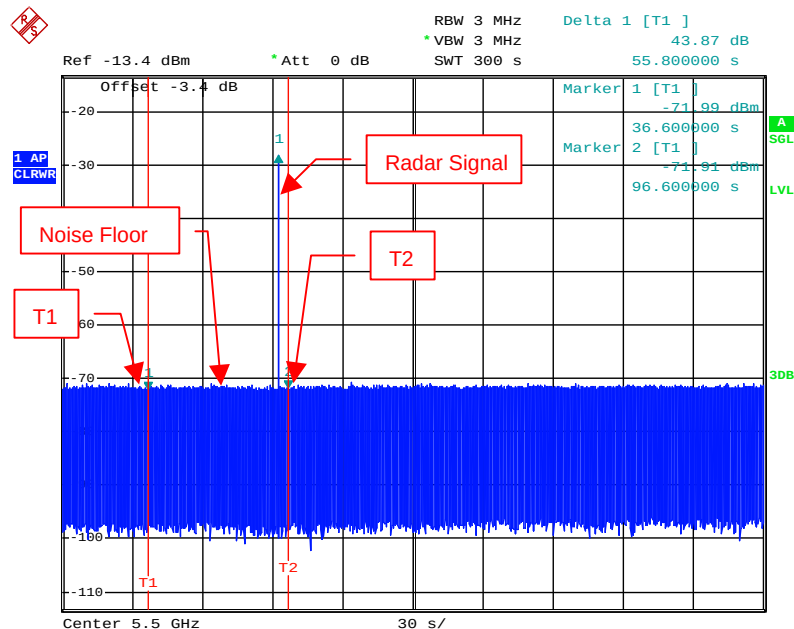
4.4.5 Test Result of Channel Availability Check Time Plots

For 802.11ac 20MHz / 5500 MHz:



Date: 25.JUN.2015 16:40:03

NOTE: T1 denotes the end of power-up time period is 36.6th second. T2 denotes the 96.6th second. The radar burst was commenced within 6 s after time T1



Date: 25.JUN.2015 16:47:03

NOTE: T1 denotes the end of power-up time period is 36.6th second. T2 denotes the 96.6th second. The radar burst was commenced within 6 s before time T2.

4.5 Channel Shutdown and Non-Occupancy Period for Master mode

4.5.1 Channel Shutdown and Non-Occupancy Period Limit

The UUT has In-Service Monitoring function to continuously monitor the radar signals, If radar is detected, must leave the channel (Shutdown).

Channel Shutdown Limit

The Channel Move Time to cease all transmissions on the current Channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec.

The total duration of Channel Closing Transmission Time is 260ms, consisting of data signals and the aggregate of control signals, by a U-NII device during the Channel Move Time.

Non-Occupancy Period Limit

The Non-Occupancy Period time is 30 minute during which a Channel will not be utilized after a Radar Waveform is detected on that Channel.

4.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

4.5.3 Test Setup

Refer a clause 4.2.8 in this test report.

4.5.4 Test Procedures

Channel Shutdown

1. Set configuration as section 4.2.8 (1) and do DFS calibration, and then adjust attenuator to make sure that the threshold value of the reference test signal is -61dBm or -63dBm at the UUT's antenna port and traffic signal is lower than radar burst signal.
2. Set configuration as section 4.2.8 (2) and set spectrum analyzer as section 4.2.7
3. Use Chariot software to reach duty cycle 30 % traffic from Slave to UUT
4. The frequency of a radar is as same as transmitting frequency of UUT.
5. The Channel Closing Transmission Time and the Channel Move Time are illustrated in figure 17. T1 denotes the end of the radar burst
6. The transmissions of the UUT following instant T1 shall be observed for a period greater than 10 s. The aggregate duration (*Channel Closing Transmission Time*) of all transmissions from the UUT on Chr during the *Channel Move Time* shall be compared to the limit (260ms).
NOTE: The aggregate duration of all transmissions of the UUT does not include quiet periods in between transmissions of the UUT.
7. T2 denotes the instant when the UUT has ceased all transmissions on the channel Chr. The time difference between T1 and T2 shall be measured. This value (*Channel Move Time*) shall be noted and compared with the limit (10 s).
8. A timing trace or description of the observed timing and behaviour of the UUT shall be recorded in the report

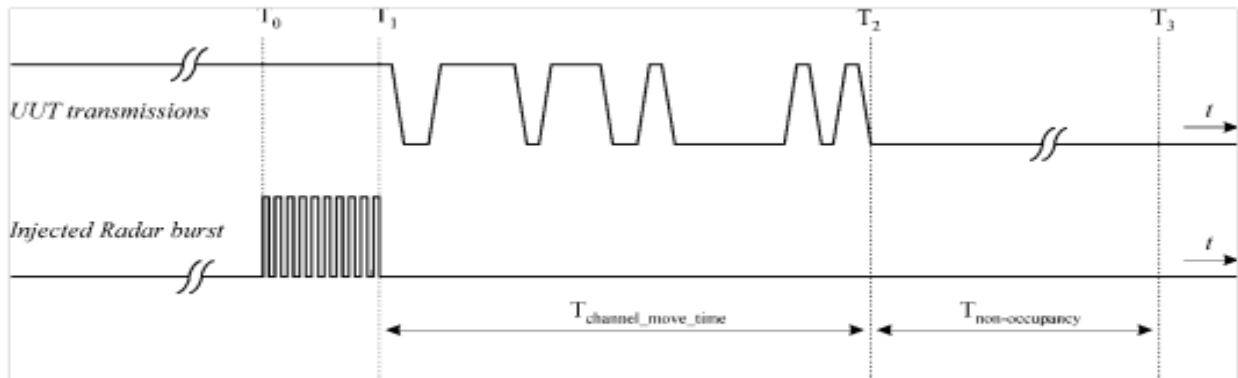


Figure 17: Example of Channel Closing Transmission Time & Channel Closing Time

Non-Occupancy Period

1. Following instant T_2 of channel shutdown, the selected channel Chr shall be observed for a period equal to the Non-Occupancy Period ($T_3 - T_2$) to verify that the UUT does not resume any transmissions on this channel.
2. A timing trace or description of the observed timing and behaviour of the UUT shall be recorded in the report.

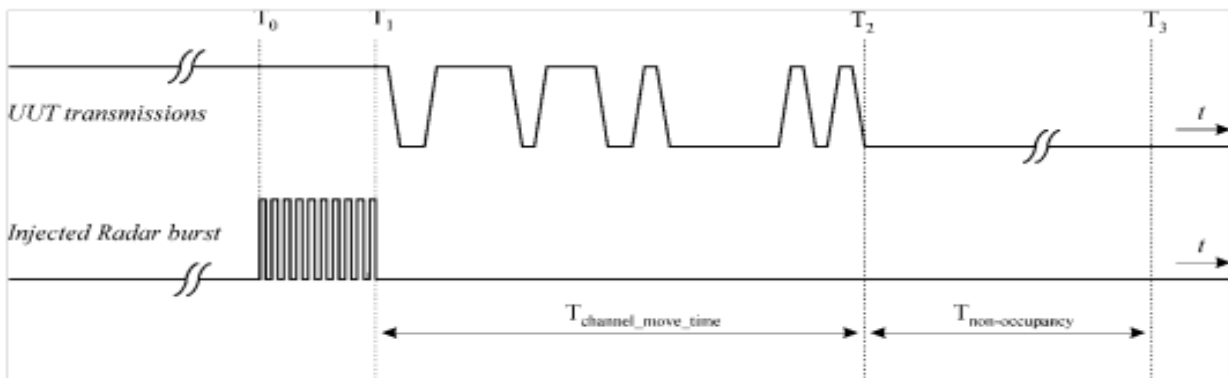
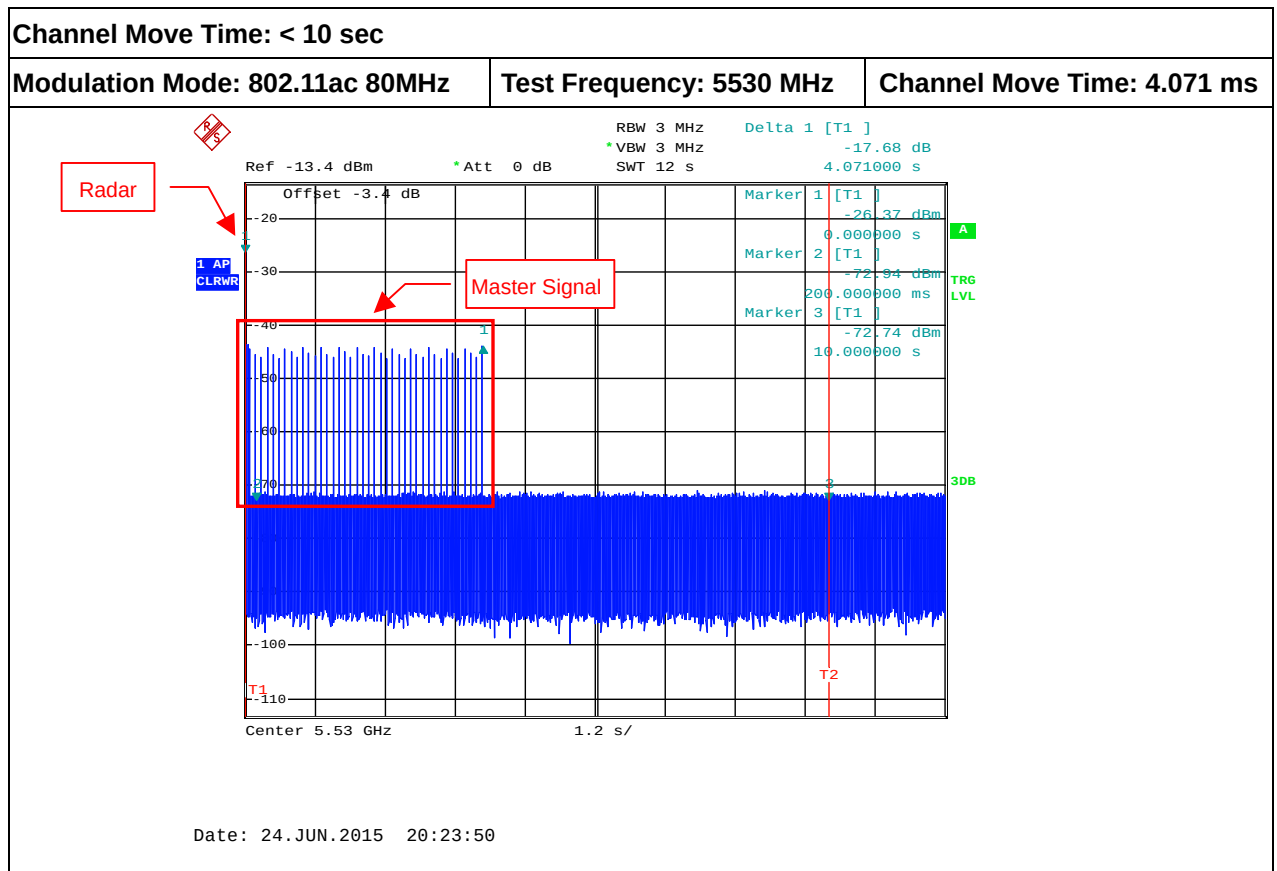


Figure 17: Example of Channel Closing Transmission Time & Channel Closing Time

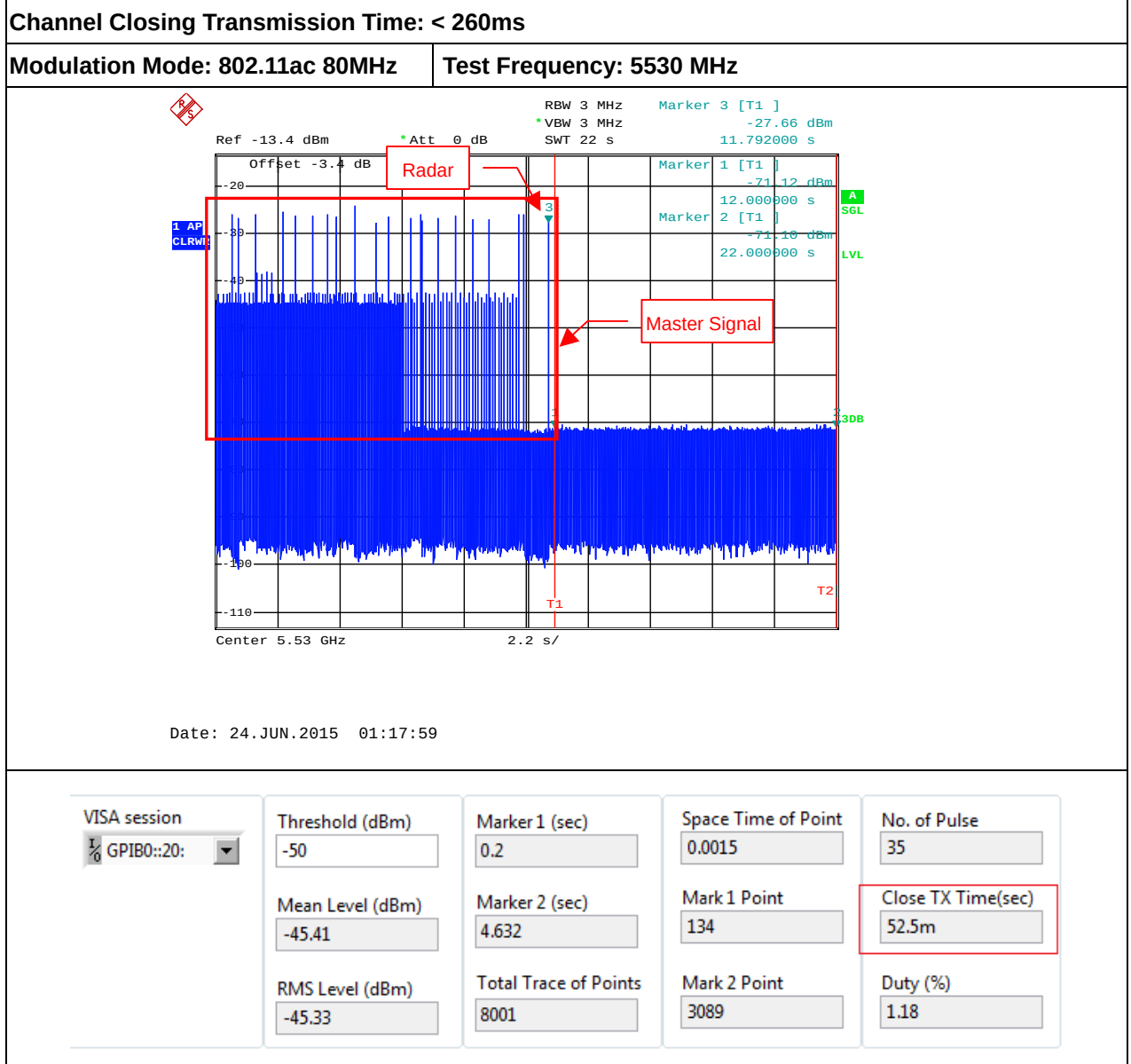
4.5.5 Test Result of Channel Shutdown and Non-Occupancy Period

Channel Shutdown and Non-Occupancy Period Result					
Detection Threshold Level (dBm)		-63 (DFS Detection Threshold + 1 dB)			
Modulation Mode	Freq. (MHz)	Radar Test Signal	Channel Move Time (s)	Channel Closing Transmission Time (ms)	Non-Occupancy Period (min) (note 1)
802.11ac 80MHz	5530 (F3')	Type 0	4.071	52.500	Complies
Limit			10 sec	260 ms	≥ 30 min
Result					
Note: Test using widest BW mode available					

4.5.6 Test Plot of In-Service Monitoring for Channel Move Time



4.5.7 Test Plot of In-Service Monitoring for Channel Closing Transmission Time



Dwell (1.5 ms) = S (12 sec) / B (8000)

C (52.500 ms) = N (35) X Dwell (1.5 ms)

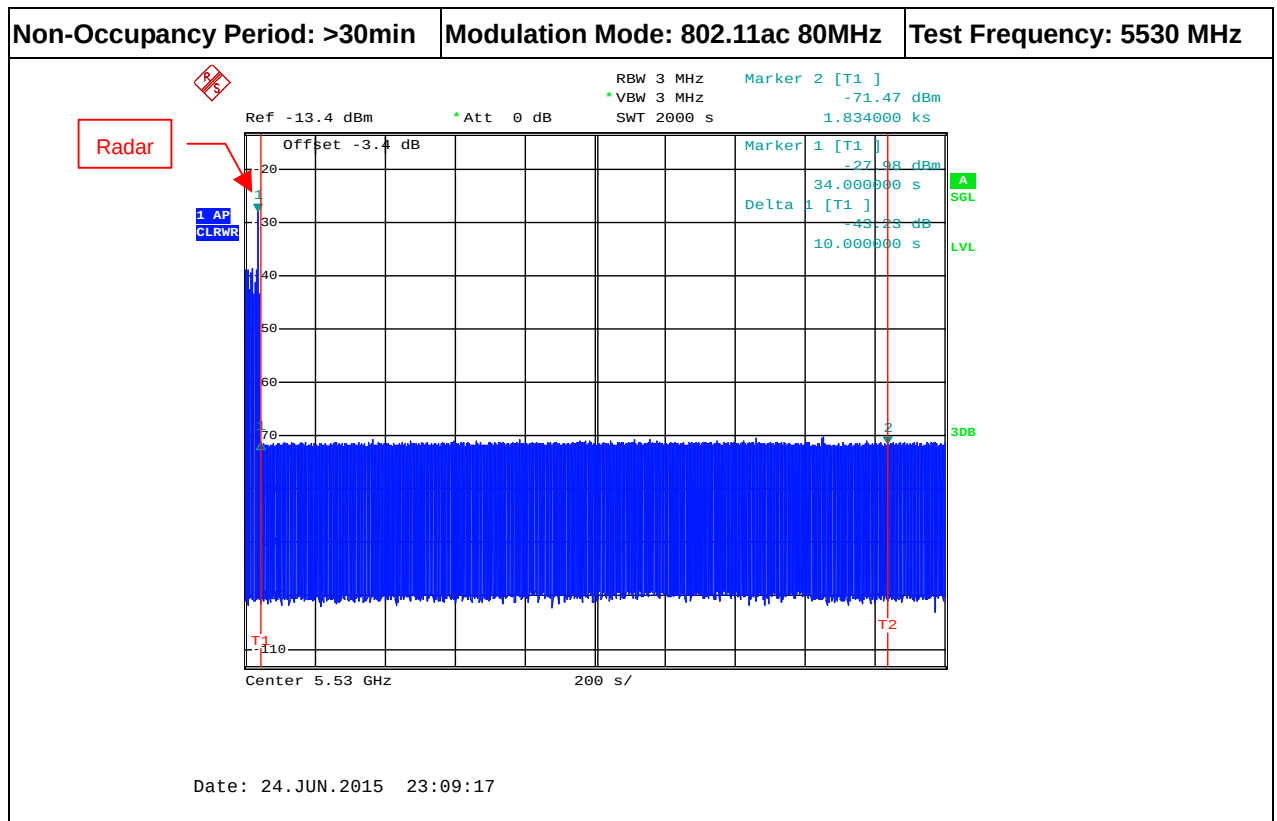
S= Sweep Time

B= Sampling Bins

C= Closing Transmission Time

N= Number of sampling bins in 10sec

4.5.8 Test Plot of In-Service Monitoring for Non-Occupancy Period



4.6 Statistical Performance Check Measurement

4.6.1 Limit

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

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

The percentage of successful detection is calculated by:

$$\frac{\text{TotalWaveformDetections}}{\text{TotalWaveformTrails}} \times 100 = \text{Probability of Detection Radar Waveform}$$

In addition an aggregate

minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is

calculated as follows:
$$\frac{Pd1 + Pd2 + Pd3 + Pd4}{4}$$

4.6.2 Test Procedures

1. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period of the test.
2. Set configuration as section 4.2.8 (1) and do DFS calibration, and then adjust attenuator to make sure that the threshold value of the radar test signals defined in table 5-7 (Type1~6) is -61dBm or -63dBm at the UUT's antenna port and traffic signal is higher than radar burst signal.
3. Set configuration as section 4.2.8 (2) and set spectrum analyzer as section 4.2.7
4. Use Chariot software to reach duty cycle 30 % traffic from Slave to UUT
5. Enter "debug command" from console.
6. The frequency of a radar is as same as transmitting frequency of UUT. If the UUT successfully detects the radar burst, it will appear "detected DFS message" from console.
7. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs.
8. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.
9. The Minimum number of trails, minimum percentage of successful detection and the average minimum percentage of successful detection are found in below table.

4.6.3 Test Deviation

There is no deviation with the original standard.

4.6.4 Test Result of Statistical Performance Check

For 802.11ac 20MHz / 5500 MHz:

Type 1 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5493	1	1930.5	518	1
2	5491	23	326.2	3066	1
3	5495	19	1139.0	878	1
4	5496	12	1355.0	738	1
5	5497	4	1730.1	578	1
6	5498	8	1519.8	658	0
7	5499	15	1253.1	798	1
8	5500	6	1618.1	618	1
9	5501	14	1285.3	778	1
10	5502	3	1792.1	558	0
11	5503	13	1319.3	758	1
12	5504	9	1474.9	678	0
13	5505	7	1567.4	638	1
14	5506	17	1193.3	838	1
15	5507	10	1432.7	698	0
16	5506	-	1692.0	591	1
17	5505	-	328.1	3048	1
18	5504	-	373.4	2678	1
19	5503	-	574.4	1741	1
20	5509	-	1216.5	822	1
21	5501	-	801.3	1248	1
22	5500	-	488.5	2047	1
23	5499	-	956.0	1046	0
24	5498	-	517.6	1932	1
25	5497	-	1422.5	703	1
26	5496	-	542.0	1845	1
27	5495	-	741.3	1349	1
28	5494	-	881.8	1134	1
29	5493	-	427.4	2340	1
30	5494	-	628.9	1590	1
Detection Percentage (%)					83.33

Note: Test A Trail #1~15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a ;
 Test B Trail #16~30 unique PRI values randomly selected within the range of 518-3066 μ sec, with a minimum increment of 1 μ sec, excluding PRI values selected in Test A

Type 2 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5493	2.6	221	23	1
2	5491	4.6	198	27	1
3	5495	1.1	184	29	1
4	5496	4.8	203	24	1
5	5497	2.4	162	25	1
6	5498	3.4	204	28	1
7	5499	2.3	170	27	1
8	5500	3.5	184	23	1
9	5501	4.9	150	27	0
10	5502	4.6	211	29	1
11	5503	2.9	158	23	0
12	5504	2.6	226	27	1
13	5505	1.6	204	26	1
14	5506	3.9	181	25	1
15	5507	4.6	202	24	1
16	5506	4.1	194	27	1
17	5505	2.3	193	28	1
18	5504	3.9	173	29	1
19	5503	4.3	188	23	0
20	5509	1.5	215	26	1
21	5501	4.9	227	27	1
22	5500	1.1	199	23	1
23	5499	4.5	155	29	0
24	5498	4.0	190	27	1
25	5497	2.4	151	23	1
26	5496	2.5	180	28	1
27	5495	2.5	228	23	0
28	5494	2.5	203	25	1
29	5493	1.5	188	25	1
30	5494	1.9	217	24	1
Detection Percentage (%)					83.33

Type 3 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5493	8.0	205	16	1
2	5491	6.7	382	18	0
3	5495	8.6	418	16	1
4	5496	9.4	351	17	1
5	5497	7.4	383	18	1
6	5498	9.8	232	16	1
7	5499	9.1	377	17	0
8	5500	9.6	457	16	1
9	5501	8.0	471	18	1
10	5502	9.0	304	18	1
11	5503	8.0	316	17	1
12	5504	9.8	325	16	1
13	5505	8.0	409	17	1
14	5506	9.9	200	17	1
15	5507	8.8	458	16	1
16	5506	8.0	232	18	0
17	5505	8.3	250	16	1
18	5504	8.7	270	16	0
19	5503	7.7	350	17	1
20	5509	7.1	230	16	1
21	5501	7.3	416	18	1
22	5500	7.6	498	18	1
23	5499	7.3	286	17	1
24	5498	7.3	287	16	1
25	5497	7.5	462	17	1
26	5496	6.2	300	17	1
27	5495	6.4	323	18	1
28	5494	7.1	420	16	1
29	5493	7.2	395	18	1
30	5494	8.4	377	16	0
Detection Percentage (%)					83.33

Type 4 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5493	18.0	242	15	1
2	5491	19.9	279	12	1
3	5495	12.9	487	14	0
4	5496	15.0	452	13	1
5	5497	16.3	230	12	1
6	5498	19.8	238	13	0
7	5499	18.2	420	16	1
8	5500	16.3	452	15	1
9	5501	14.2	495	12	1
10	5502	17.8	228	16	1
11	5503	19.1	211	16	1
12	5504	18.4	283	15	1
13	5505	11.8	411	12	1
14	5506	14.2	284	13	1
15	5507	13.9	202	12	1
16	5506	17.8	340	14	1
17	5505	15.6	290	16	1
18	5504	14.6	250	16	1
19	5503	14.4	484	15	1
20	5509	18.9	387	13	1
21	5501	11.1	348	15	1
22	5500	13.8	291	16	1
23	5499	14.3	295	12	0
24	5498	12.5	300	12	1
25	5497	12.5	322	14	1
26	5496	12.5	383	13	1
27	5495	15.7	322	16	1
28	5494	19.8	469	13	0
29	5493	18.6	406	15	1
30	5494	15.9	238	14	1
Detection Percentage (%)					86.67

Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	83.33
2	83.33
3	83.33
4	86.67
Aggregate (Radar Types 1-4)	84.17
Limit	80%
Test Result	Complied

Type 5 Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5491	0	11	5502	1	21	5499	1
2	5492	0	12	5503	1	22	5495	1
3	5493	1	13	5504	0	23	5504	1
4	5494	1	14	5505	1	24	5503	0
5	5496	1	15	5506	1	25	5502	1
6	5497	1	16	5502	1	26	5501	1
7	5498	1	17	5501	1	27	5500	1
8	5499	0	18	5498	1	28	5499	1
9	5500	1	19	5497	1	29	5498	1
10	5501	1	20	5496	1	30	5497	1
Detection Percentage (%)								83.33%
Limit								80%
Test Result								Complied

Trail Number			1			
Number of Bursts in Trial			8			
Chirp Center Frequency			5491			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	62.3	8	-	-	346
2	2	51.2	15	1745	-	1205
3	3	93.6	5	957	1634	674
4	3	68.2	12	1668	1573	384
5	3	83.1	8	1188	1888	876
6	1	56.7	18	-	-	376
7	2	60.6	18	1874	-	1409
8	3	75.5	13	1263	1683	1378
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			2			
Number of Bursts in Trial			9			
Chirp Center Frequency			5492			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	99.6	13	-	-	217
2	2	54.8	15	1727	-	982
3	3	91.1	15	1120	1826	941
4	2	76.2	7	1638	-	477
5	1	88.9	13	-	-	259
6	1	83	9	-	-	892
7	1	83.9	12	-	-	320
8	2	55.9	15	1613	-	445
9	1	96.1	13	-	-	779
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			3			
Number of Bursts in Trial			10			
Chirp Center Frequency			5493			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	82	6	1246	-	1017
2	1	93.2	13	-	-	760
3	2	61.3	13	1175	-	327
4	1	52.8	8	-	-	824
5	3	70.6	19	929	1076	115
6	1	80.3	17	-	-	325
7	1	83.2	15	-	-	679
8	2	94	9	1805	-	888
9	2	67	8	1486	-	849
10	1	56.4	20	-	-	813
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			4			
Number of Bursts in Trial			11			
Chirp Center Frequency			5494			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	90.5	8	1149	1612	35
2	3	54.5	8	1094	1525	1014
3	1	57.1	18	-	-	827
4	2	98.6	20	1292	-	83
5	2	62.9	12	1433	-	676
6	1	71.1	15	-	-	708
7	1	96.7	5	-	-	711
8	1	64.3	5	-	-	484
9	3	61.2	8	1075	1524	444
10	2	79.2	13	1877	-	797
11	2	79.3	20	1313	-	288
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			5			
Number of Bursts in Trial			12			
Chirp Center Frequency			5496			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	89.5	13	-	-	20
2	3	71.8	11	1446	1549	117
3	3	53.7	15	1100	1517	485
4	2	99.3	11	1571	-	334
5	3	56.8	6	1594	1280	468
6	1	97.4	11	-	-	213
7	2	67.6	13	1831	-	14
8	3	77.1	8	1683	1337	267
9	1	98.5	17	-	-	544
10	3	58.3	13	1924	1829	159
11	1	98.4	14	-	-	380
12	1	79.3	11	-	-	257
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			6			
Number of Bursts in Trial			13			
Chirp Center Frequency			5497			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	53.8	14	1631	-	768
2	1	90	17	-	-	530
3	3	87.2	18	1115	1297	157
4	2	82	11	1728	-	892
5	3	69.8	7	1641	1779	196
6	2	63.1	20	1836	-	331
7	1	59.8	6	-	-	495
8	3	78.5	19	941	1921	546
9	1	85.7	6	-	-	219
10	3	67.7	9	1834	1450	534
11	2	84.5	15	1376	-	282
12	2	99.3	13	1570	-	486
13	2	80.2	8	1088	-	67
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			7			
Number of Bursts in Trial			14			
Chirp Center Frequency			5498			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	80.8	10	1061	1124	389
2	2	81	9	1479	-	234
3	2	87.6	17	1247	-	577
4	2	94.7	18	1041	-	572
5	2	78	18	1267	-	313
6	1	95.5	14	-	-	52
7	2	97.6	15	1215	-	57
8	3	88	9	1349	1598	171
9	2	69.7	17	1711	-	769
10	2	96.5	17	1431	-	168
11	2	96.9	6	1871	-	124
12	3	66.4	10	1824	1468	766
13	1	78.8	10	-	-	537
14	3	87.6	6	1080	1159	714
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			8			
Number of Bursts in Trial			15			
Chirp Center Frequency			5499			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	71.8	14	1432	-	573
2	2	65.9	19	1762	-	314
3	2	74.7	6	1754	-	377
4	3	81.7	5	1133	974	216
5	3	57.8	14	1176	1712	129
6	1	80.6	6	-	-	341
7	3	99.3	17	1268	1876	165
8	1	79.8	12	-	-	618
9	3	83	11	990	1738	589
10	3	71.5	11	1473	1255	6
11	1	77.4	11	-	-	127
12	2	84.8	12	1390	-	515
13	2	64.6	12	1653	-	148
14	2	92.9	12	1881	-	519
15	1	71.3	6	-	-	301
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			9			
Number of Bursts in Trial			16			
Chirp Center Frequency			5500			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	55.4	9	1318	-	383
2	2	80.8	18	1710	-	534
3	1	88.8	9	-	-	495
4	2	78	12	1818	-	92
5	1	78.5	12	-	-	108
6	2	55	13	1219	-	123
7	2	75.9	20	1004	-	123
8	2	70.9	7	1820	-	546
9	2	71.7	18	1559	-	476
10	2	73.9	19	1232	-	235
11	1	59.2	20	-	-	424
12	1	55.7	9	-	-	391
13	3	60.9	12	1144	1370	198
14	2	60.8	14	990	-	16
15	3	60.6	19	1526	1326	695
16	2	89	5	1029	-	131
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			10			
Number of Bursts in Trial			17			
Chirp Center Frequency			5501			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	72.1	14	1119	-	488
2	3	81.4	13	1142	961	451
3	3	92.9	18	991	1147	565
4	3	81.3	18	1793	1369	285
5	3	76.4	20	1005	1793	79
6	1	61.6	18	-	-	503
7	1	66.6	19	-	-	181
8	1	53.7	12	-	-	416
9	2	58	8	1477	-	107
10	2	64	18	1791	-	141
11	2	80.3	12	1304	-	516
12	3	77.3	5	1039	1668	372
13	2	97.6	11	1593	-	163
14	1	73	6	-	-	147
15	3	65.1	8	1097	1927	102
16	2	59.5	13	1569	-	182
17	1	88.2	19	-	-	653
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			11			
Number of Bursts in Trial			18			
Chirp Center Frequency			5502			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	56.1	12	1219	-	273
2	1	83.3	7	-	-	298
3	3	79.6	17	1218	1897	159
4	2	95.8	7	1672	-	480
5	2	79.6	8	920	-	387
6	2	88.9	11	1779	-	5
7	2	81.4	8	1645	-	201
8	2	92	6	1454	-	80
9	3	96	13	1518	1121	192
10	2	65.6	11	1798	-	349
11	2	98.7	5	1360	-	416
12	2	52.9	15	1140	-	652
13	2	76.5	8	1032	-	92
14	3	73.8	18	1719	1383	502
15	3	83.7	10	1270	1216	343
16	2	89.6	10	1141	-	108
17	2	67.2	20	1455	-	272
18	3	55.7	14	1444	1475	566
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			12			
Number of Bursts in Trial			19			
Chirp Center Frequency			5503			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	70.6	15	1040	-	575
2	2	72.9	13	1460	-	178
3	3	88.9	5	1250	1629	191
4	3	60.3	20	1757	1822	468
5	3	92.1	19	1845	1198	476
6	1	73	5	-	-	532
7	1	50.4	15	-	-	69
8	1	66.4	10	-	-	333
9	1	79.1	18	-	-	437
10	1	71.6	20	-	-	424
11	2	95.6	13	1229	-	498
12	1	74.4	9	-	-	363
13	3	55.6	17	1263	1724	123
14	2	78.3	13	1507	-	37
15	3	54.1	13	1325	1249	192
16	2	67.1	18	1584	-	311
17	2	65.8	9	1195	-	243
18	2	50.1	12	1755	-	48
19	2	87.7	18	1359	-	180
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			13			
Number of Bursts in Trial			20			
Chirp Center Frequency			5504			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	79.5	7	1808	1550	274
2	2	76.7	20	1632	-	573
3	3	85.9	12	1305	1496	18
4	3	86.6	14	968	1172	133
5	2	74.9	14	1348	-	48
6	3	82.2	20	1692	1310	156
7	2	53.9	13	1342	-	45
8	3	62.7	15	1839	1651	76
9	2	86.2	6	1165	-	91
10	1	63.1	11	-	-	391
11	2	82.4	6	1416	-	107
12	1	95.8	18	-	-	248
13	2	75.7	9	993	-	482
14	3	70.1	18	1563	1020	354
15	3	85.8	13	1420	1084	446
16	1	63.2	7	-	-	265
17	1	75.1	11	-	--	147
18	2	69.5	5	1802	-	256
19	1	51.8	19	-	-	422
20	2	62.3	5	1449	-	304
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			14			
Number of Bursts in Trial			8			
Chirp Center Frequency			5505			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	74.9	5	1314	1466	1289
2	2	83.9	19	1442	-	1436
3	2	55.8	6	1147	-	240
4	2	59.4	6	1490	-	1455
5	2	78.2	15	1665	-	1312
6	2	57.3	15	1357	-	264
7	2	76.2	11	1651	-	255
8	3	59	7	1460	1109	1410
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			15			
Number of Bursts in Trial			9			
Chirp Center Frequency			5506			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	77.7	19	1046	1568	17
2	2	98.2	20	1628	-	877
3	2	95.3	8	1540	-	1066
4	2	78.8	15	1341	-	822
5	2	52.8	20	988	-	1020
6	2	65.2	9	1480	-	602
7	2	99.5	10	1867	-	884
8	2	79.5	13	1148	-	342
9	3	50.6	13	1030	1525	1321
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			16			
Number of Bursts in Trial			10			
Chirp Center Frequency			5502			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	97.5	11	1357	-	764
2	2	91.8	13	1896	-	298
3	1	78.5	5	-	-	1117
4	1	60.1	11	-	-	1069
5	2	96.2	10	975	-	1157
6	2	56.6	18	1626	-	701
7	1	77.1	20	-	-	323
8	2	96.3	8	1682	-	307
9	2	52.2	13	1017	-	217
10	1	92.8	15	-	-	316
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			17			
Number of Bursts in Trial			11			
Chirp Center Frequency			5501			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	57.3	8	1220	-	792
2	3	73.1	5	1717	1679	845
3	2	54.1	14	967	-	112
4	2	98.8	19	1137	-	715
5	3	85.5	8	1068	960	301
6	2	78.5	7	1387	-	827
7	2	77.9	12	1869	-	506
8	1	81.9	10	-	-	549
9	1	50.4	9	-	-	464
10	1	75.2	8	-	-	790
11	2	92.7	7	1770	-	967
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			18			
Number of Bursts in Trial			12			
Chirp Center Frequency			5498			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	79.1	6	1042	-	793
2	3	55.7	9	1327	1744	159
3	1	95	20	-	-	734
4	1	88.4	5	-	-	523
5	1	92.3	15	-	-	546
6	1	93.6	6	-	-	208
7	2	95.1	12	1044	-	894
8	1	59.5	17	-	-	666
9	2	98.7	17	1422	-	640
10	2	65.1	5	1104	-	320
11	1	60.2	5	-	-	60
12	1	88.7	8	-	-	823
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			19			
Number of Bursts in Trial			13			
Chirp Center Frequency			5497			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	53.9	10	-	-	226
2	2	82.6	13	992	-	854
3	1	87.7	8	-	-	303
4	3	69	12	1696	1606	528
5	1	68.6	12	-	-	220
6	3	76.5	13	1333	1468	389
7	2	95.8	17	1380	-	57
8	2	55.6	19	1147	-	334
9	2	78.6	14	1268	-	128
10	2	65.4	17	1231	-	913
11	2	76.6	18	1883	-	518
12	1	93.2	6	-	-	596
13	2	50.2	13	1836	-	61
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			20			
Number of Bursts in Trial			14			
Chirp Center Frequency			5496			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	60.9	13	-	-	142
2	2	81.7	15	1831	-	522
3	2	78.5	5	1396	-	790
4	2	98.2	6	1652	-	3
5	1	64.1	12	-	-	414
6	3	53	18	1862	1902	157
7	2	62.3	15	1490	-	248
8	2	87	11	1411	-	576
9	2	78.4	8	1090	-	737
10	2	87.2	7	967	-	343
11	3	71	13	1662	1841	105
12	2	77.2	5	1557	-	601
13	1	94.4	15	-	-	108
14	1	90.6	13	-	-	506
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			21			
Number of Bursts in Trial			15			
Chirp Center Frequency			5499			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	76.5	8	1870	1326	385
2	2	95.3	13	1162	-	73
3	3	58.9	9	1586	1909	742
4	2	73.1	13	1460	-	330
5	2	73.1	12	1488	-	25
6	2	75.1	5	1331	-	418
7	3	98.5	11	936	1532	214
8	3	72.5	13	1110	1903	387
9	3	67.4	12	1567	1513	80
10	2	76.1	12	1005	-	277
11	2	94.3	17	1413	-	314
12	2	72.8	12	1778	-	66
13	2	90.9	14	1793	-	147
14	3	94.8	11	1012	1742	441
15	3	95	12	912	1641	609
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			22			
Number of Bursts in Trial			16			
Chirp Center Frequency			5495			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	96.7	9	-	-	308
2	2	78.3	13	1045	-	27
3	1	56.5	12	-	-	74
4	3	88.5	14	1119	1020	629
5	2	62.4	9	1436	-	548
6	2	78.2	5	1147	-	341
7	3	76.8	14	1069	1575	360
8	2	91.6	18	978	-	602
9	2	93.7	5	1130	-	623
10	2	97.4	8	1100	-	256
11	3	90.1	6	1629	1375	108
12	2	79.9	18	1809	-	183
13	2	83	10	1370	-	477
14	2	89.1	13	1239	-	484
15	2	58.3	8	1321	-	276
16	1	85.2	13	-	-	22
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			23			
Number of Bursts in Trial			17			
Chirp Center Frequency			5504			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	60	10	1097	1748	56
2	3	66.3	13	1391	1430	421
3	2	88.5	15	1040	-	583
4	2	72.1	8	1526	-	161
5	1	72.3	8	-	-	450
6	2	67.3	7	1022	-	48
7	2	56.1	12	1325	-	661
8	1	83.5	11	-	-	695
9	3	99.4	13	1490	938	405
10	1	54.2	12	-	-	126
11	3	92.7	17	1251	1631	365
12	3	95.1	17	1741	1162	57
13	2	84	9	1597	-	167
14	1	68.5	18	-	-	512
15	1	76.5	20	-	-	185
16	3	86.6	11	1774	1875	457
17	2	62.2	9	1563	-	492
Detection Check (1=Detection; 0=No Detection)						1

Trail Number				24		
Number of Bursts in Trial				18		
Chirp Center Frequency				5503		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	86.6	19	-	-	621
2	2	95.3	17	926	-	128
3	1	76.2	12	-	-	251
4	3	71.4	19	1287	1404	269
5	3	51.7	12	1564	1339	633
6	2	77	5	1899	-	615
7	1	87.5	12	-	-	375
8	3	59	17	1327	1615	610
9	2	78.3	15	1551	-	548
10	2	89.7	5	1718	-	456
11	2	92.1	7	1403	-	12
12	2	97.3	14	1338	-	596
13	3	80.3	20	1354	1563	484
14	1	98.2	8	-	-	428
15	3	94.4	13	1795	1829	512
16	2	90.4	13	1105	-	342
17	2	73.6	19	1787	-	292
18	1	82.9	7	-	-	618
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			25			
Number of Bursts in Trial			19			
Chirp Center Frequency			5502			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	90	18	-	-	173
2	1	65.3	19	-	-	245
3	2	82.6	10	1756	-	127
4	2	93.9	18	1557	-	287
5	2	50.5	13	1479	-	282
6	1	68	7	-	-	176
7	3	88.4	11	1244	1076	568
8	3	66.8	11	1288	1909	448
9	2	88	12	1450	-	527
10	3	51.1	6	1797	1935	195
11	2	93.8	13	1073	-	184
12	1	83.5	10	-	-	506
13	2	96.9	12	1047	-	267
14	3	87.2	18	1521	1450	243
15	2	60.1	8	1545	-	291
16	3	98	10	1842	1402	554
17	3	57	19	1665	1732	143
18	1	74.3	14	-	-	31
19	2	57.8	10	1576	-	609
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			26			
Number of Bursts in Trial			20			
Chirp Center Frequency			5501			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	92.8	9	1222	-	531
2	2	52.4	8	1547	-	168
3	3	56.8	7	1158	1184	193
4	1	91.2	7	-	-	565
5	3	61.2	10	1558	1664	387
6	3	62	7	1518	1656	391
7	2	69	5	1531	-	327
8	2	67.3	18	1064	-	25
9	1	94.1	5	-	-	78
10	2	76	17	1190	-	222
11	2	81.9	12	1815	-	96
12	2	57.9	8	1594	-	277
13	3	68.3	19	1427	1540	41
14	2	53.3	7	1713	-	48
15	2	85.3	15	1136	-	48
16	1	65.3	20	-	-	57
17	3	79.8	20	923	1259	48
18	2	56.9	20	1357	-	483
19	2	93	9	1686	-	73
20	2	82.8	10	944	-	352
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			27			
Number of Bursts in Trial			8			
Chirp Center Frequency			5500			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	50.9	11	1106	1077	1293
2	2	77.8	18	1836	-	1235
3	3	60.7	5	1069	1635	1092
4	2	77.2	13	1916	-	1343
5	2	91.6	13	1465	-	1466
6	2	56.8	17	1783	-	376
7	1	59.5	20	-	-	131
8	1	66.5	12	-	-	1024
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			28			
Number of Bursts in Trial			9			
Chirp Center Frequency			5499			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	72	9	1092	-	965
2	2	89.2	6	1550	-	1226
3	1	81.2	12	-	-	277
4	2	80.6	15	1616	-	458
5	2	62.8	10	1812	-	748
6	1	71	8	-	-	434
7	2	69.3	6	1027	-	1111
8	2	77.2	13	1076	-	638
9	2	65.4	5	1582	-	278
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			29			
Number of Bursts in Trial			10			
Chirp Center Frequency			5498			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	51.5	19	-	-	151
2	1	82.3	13	-	-	1071
3	3	78.3	8	1115	1740	646
4	2	99	14	1101	-	709
5	3	98.8	7	1819	945	556
6	2	80.9	19	922	-	567
7	2	64	12	953	-	581
8	1	79	20	-	-	798
9	1	68	8	-	-	112
10	2	50.4	13	1587	-	26
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			30			
Number of Bursts in Trial			11			
Chirp Center Frequency			5497			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	57.8	5	1324	1716	82
2	2	70.1	20	1733	-	587
3	2	95.2	13	1188	-	789
4	3	84.6	20	1042	1259	1021
5	3	96.5	7	1329	1596	16
6	2	84.3	15	1606	-	708
7	3	53.5	19	1783	1458	738
8	3	74.9	5	1599	1891	466
9	3	53.8	7	1494	1467	252
10	2	60.5	14	1319	-	464
11	1	73.3	10	-	-	845
Detection Check (1=Detection; 0=No Detection)						1

Type 6 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5500	9	1	333	1
2	5500	9	1	333	1
3	5500	9	1	333	1
4	5500	9	1	333	1
5	5500	9	1	333	1
6	5500	9	1	333	1
7	5500	9	1	333	1
8	5500	9	1	333	1
9	5500	9	1	333	1
10	5500	9	1	333	1
11	5500	9	1	333	1
12	5500	9	1	333	1
13	5500	9	1	333	1
14	5500	9	1	333	1
15	5500	9	1	333	1
16	5500	9	1	333	1
17	5500	9	1	333	1
18	5500	9	1	333	1
19	5500	9	1	333	1
20	5500	9	1	333	1
21	5500	9	1	333	1
22	5500	9	1	333	1
23	5500	9	1	333	1
24	5500	9	1	333	1
25	5500	9	1	333	1
26	5500	9	1	333	1
27	5500	9	1	333	1
28	5500	9	1	333	1
29	5500	9	1	333	1
30	5500	9	1	333	1
Detection Percentage (%)					100.00
Limit					70%
Test Result					Complied

For 802.11ac 40MHz / 5510 MHz:

Type 1 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5496	1	1930.5	518	1
2	5497	23	326.2	3066	1
3	5498	19	1139.0	878	1
4	5499	12	1355.0	738	1
5	5500	4	1730.1	578	1
6	5501	8	1519.8	658	1
7	5502	15	1253.1	798	1
8	5503	6	1618.1	618	1
9	5504	14	1285.3	778	0
10	5505	3	1792.1	558	1
11	5506	13	1319.3	758	1
12	5507	9	1474.9	678	1
13	5508	7	1567.4	638	0
14	5509	17	1193.3	838	1
15	5510	10	1432.7	698	1
16	5511	-	1692.0	591	0
17	5512	-	328.1	3048	1
18	5513	-	373.4	2678	1
19	5514	-	574.4	1741	1
20	5515	-	1216.5	822	1
21	5516	-	801.3	1248	1
22	5517	-	488.5	2047	0
23	5518	-	956.0	1046	1
24	5519	-	517.6	1932	1
25	5520	-	1422.5	703	1
26	5521	-	542.0	1845	0
27	5522	-	741.3	1349	1
28	5523	-	881.8	1134	1
29	5524	-	427.4	2340	1
30	5525	-	628.9	1590	1
Detection Percentage (%)					83.33

Note: Test A Trail #1~15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a ;
 Test B Trail #16~30 unique PRI values randomly selected within the range of 518-3066 μ sec, with a minimum increment of 1 μ sec, excluding PRI values selected in Test A

Type 2 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5496	2.6	221	23	1
2	5497	4.6	198	27	1
3	5498	1.1	184	29	1
4	5499	4.8	203	24	1
5	5500	2.4	162	25	1
6	5501	3.4	204	28	1
7	5502	2.3	170	27	1
8	5503	3.5	184	23	1
9	5504	4.9	150	27	1
10	5505	4.6	211	29	1
11	5506	2.9	158	23	0
12	5507	2.6	226	27	1
13	5508	1.6	204	26	1
14	5509	3.9	181	25	1
15	5510	4.6	202	24	1
16	5511	4.1	194	27	1
17	5512	2.3	193	28	1
18	5513	3.9	173	29	1
19	5514	4.3	188	23	1
20	5515	1.5	215	26	1
21	5516	4.9	227	27	1
22	5517	1.1	199	23	1
23	5518	4.5	155	29	1
24	5519	4.0	190	27	0
25	5520	2.4	151	23	1
26	5521	2.5	180	28	1
27	5522	2.5	228	23	1
28	5523	2.5	203	25	1
29	5524	1.5	188	25	0
30	5525	1.9	217	24	1
Detection Percentage (%)					90.00

Type 3 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5496	8.0	205	16	0
2	5497	6.7	382	18	1
3	5498	8.6	418	16	1
4	5499	9.4	351	17	0
5	5500	7.4	383	18	1
6	5501	9.8	232	16	0
7	5502	9.1	377	17	1
8	5503	9.6	457	16	1
9	5504	8.0	471	18	1
10	5505	9.0	304	18	1
11	5506	8.0	316	17	1
12	5507	9.8	325	16	1
13	5508	8.0	409	17	0
14	5509	9.9	200	17	1
15	5510	8.8	458	16	1
16	5511	8.0	232	18	1
17	5512	8.3	250	16	1
18	5529	8.7	270	16	1
19	5514	7.7	350	17	1
20	5515	7.1	230	16	1
21	5516	7.3	416	18	1
22	5517	7.6	498	18	1
23	5492	7.3	286	17	1
24	5519	7.3	287	16	1
25	5520	7.5	462	17	1
26	5521	6.2	300	17	1
27	5522	6.4	323	18	1
28	5523	7.1	420	16	0
29	5524	7.2	395	18	0
30	5525	8.4	377	16	1
Detection Percentage (%)					80.00

Type 4 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5496	18.0	242	15	0
2	5497	19.9	279	12	1
3	5498	12.9	487	14	1
4	5499	15.0	452	13	1
5	5500	16.3	230	12	1
6	5501	19.8	238	13	1
7	5502	18.2	420	16	1
8	5529	16.3	452	15	1
9	5504	14.2	495	12	1
10	5505	17.8	228	16	1
11	5506	19.1	211	16	1
12	5507	18.4	283	15	1
13	5508	11.8	411	12	1
14	5509	14.2	284	13	1
15	5510	13.9	202	12	0
16	5511	17.8	340	14	1
17	5512	15.6	290	16	1
18	5513	14.6	250	16	0
19	5514	14.4	484	15	1
20	5515	18.9	387	13	1
21	5516	11.1	348	15	1
22	5517	13.8	291	16	1
23	5518	14.3	295	12	1
24	5519	12.5	300	12	0
25	5520	12.5	322	14	1
26	5521	12.5	383	13	1
27	5522	15.7	322	16	1
28	5523	19.8	469	13	1
29	5524	18.6	406	15	1
30	5492	15.9	238	14	1
Detection Percentage (%)					86.67

Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	83.33
2	90.00
3	80.00
4	86.67
Aggregate (Radar Types 1-4)	85.00
Limit	80%
Test Result	Complied

Type 5 Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5496	0	11	5506	1	21	5516	1
2	5497	1	12	5507	1	22	5517	1
3	5498	0	13	5508	1	23	5518	1
4	5499	1	14	5509	0	24	5519	1
5	5500	1	15	5510	0	25	5520	1
6	5501	1	16	5511	1	26	5521	1
7	5502	1	17	5512	1	27	5522	0
8	5503	1	18	5513	1	28	5523	1
9	5504	1	19	5514	1	29	5525	1
10	5505	1	20	5515	1	30	5510	1
Detection Percentage (%)								83.33%
Limit								80%
Test Result								Complied

Trail Number				1		
Number of Bursts in Trial				8		
Chirp Center Frequency				5496		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	62.3	8	-	-	346
2	2	51.2	15	1745	-	1205
3	3	93.6	5	957	1634	674
4	3	68.2	12	1668	1573	384
5	3	83.1	8	1188	1888	876
6	1	56.7	18	-	-	376
7	2	60.6	18	1874	-	1409
8	3	75.5	13	1263	1683	1378
Detection Check (1=Detection; 0=No Detection)						0

Trail Number				2		
Number of Bursts in Trial				9		
Chirp Center Frequency				5497		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	99.6	13	-	-	217
2	2	54.8	15	1727	-	982
3	3	91.1	15	1120	1826	941
4	2	76.2	7	1638	-	477
5	1	88.9	13	-	-	259
6	1	83	9	-	-	892
7	1	83.9	12	-	-	320
8	2	55.9	15	1613	-	445
9	1	96.1	13	-	-	779
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			3			
Number of Bursts in Trial			10			
Chirp Center Frequency			5498			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	82	6	1246	-	1017
2	1	93.2	13	-	-	760
3	2	61.3	13	1175	-	327
4	1	52.8	8	-	-	824
5	3	70.6	19	929	1076	115
6	1	80.3	17	-	-	325
7	1	83.2	15	-	-	679
8	2	94	9	1805	-	888
9	2	67	8	1486	-	849
10	1	56.4	20	-	-	813
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			4			
Number of Bursts in Trial			11			
Chirp Center Frequency			5499			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	90.5	8	1149	1612	35
2	3	54.5	8	1094	1525	1014
3	1	57.1	18	-	-	827
4	2	98.6	20	1292	-	83
5	2	62.9	12	1433	-	676
6	1	71.1	15	-	-	708
7	1	96.7	5	-	-	711
8	1	64.3	5	-	-	484
9	3	61.2	8	1075	1524	444
10	2	79.2	13	1877	-	797
11	2	79.3	20	1313	-	288
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			5			
Number of Bursts in Trial			12			
Chirp Center Frequency			5500			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	89.5	13	-	-	20
2	3	71.8	11	1446	1549	117
3	3	53.7	15	1100	1517	485
4	2	99.3	11	1571	-	334
5	3	56.8	6	1594	1280	468
6	1	97.4	11	-	-	213
7	2	67.6	13	1831	-	14
8	3	77.1	8	1683	1337	267
9	1	98.5	17	-	-	544
10	3	58.3	13	1924	1829	159
11	1	98.4	14	-	-	380
12	1	79.3	11	-	-	257
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			6			
Number of Bursts in Trial			13			
Chirp Center Frequency			5501			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	53.8	14	1631	-	768
2	1	90	17	-	-	530
3	3	87.2	18	1115	1297	157
4	2	82	11	1728	-	892
5	3	69.8	7	1641	1779	196
6	2	63.1	20	1836	-	331
7	1	59.8	6	-	-	495
8	3	78.5	19	941	1921	546
9	1	85.7	6	-	-	219
10	3	67.7	9	1834	1450	534
11	2	84.5	15	1376	-	282
12	2	99.3	13	1570	-	486
13	2	80.2	8	1088	-	67
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			7			
Number of Bursts in Trial			14			
Chirp Center Frequency			5502			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	80.8	10	1061	1124	389
2	2	81	9	1479	-	234
3	2	87.6	17	1247	-	577
4	2	94.7	18	1041	-	572
5	2	78	18	1267	-	313
6	1	95.5	14	-	-	52
7	2	97.6	15	1215	-	57
8	3	88	9	1349	1598	171
9	2	69.7	17	1711	-	769
10	2	96.5	17	1431	-	168
11	2	96.9	6	1871	-	124
12	3	66.4	10	1824	1468	766
13	1	78.8	10	-	-	537
14	3	87.6	6	1080	1159	714
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			8			
Number of Bursts in Trial			15			
Chirp Center Frequency			5503			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	71.8	14	1432	-	573
2	2	65.9	19	1762	-	314
3	2	74.7	6	1754	-	377
4	3	81.7	5	1133	974	216
5	3	57.8	14	1176	1712	129
6	1	80.6	6	-	-	341
7	3	99.3	17	1268	1876	165
8	1	79.8	12	-	-	618
9	3	83	11	990	1738	589
10	3	71.5	11	1473	1255	6
11	1	77.4	11	-	-	127
12	2	84.8	12	1390	-	515
13	2	64.6	12	1653	-	148
14	2	92.9	12	1881	-	519
15	1	71.3	6	-	-	301
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			9			
Number of Bursts in Trial			16			
Chirp Center Frequency			5504			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	55.4	9	1318	-	383
2	2	80.8	18	1710	-	534
3	1	88.8	9	-	-	495
4	2	78	12	1818	-	92
5	1	78.5	12	-	-	108
6	2	55	13	1219	-	123
7	2	75.9	20	1004	-	123
8	2	70.9	7	1820	-	546
9	2	71.7	18	1559	-	476
10	2	73.9	19	1232	-	235
11	1	59.2	20	-	-	424
12	1	55.7	9	-	-	391
13	3	60.9	12	1144	1370	198
14	2	60.8	14	990	-	16
15	3	60.6	19	1526	1326	695
16	2	89	5	1029	-	131
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			10			
Number of Bursts in Trial			17			
Chirp Center Frequency			5505			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	72.1	14	1119	-	488
2	3	81.4	13	1142	961	451
3	3	92.9	18	991	1147	565
4	3	81.3	18	1793	1369	285
5	3	76.4	20	1005	1793	79
6	1	61.6	18	-	-	503
7	1	66.6	19	-	-	181
8	1	53.7	12	-	-	416
9	2	58	8	1477	-	107
10	2	64	18	1791	-	141
11	2	80.3	12	1304	-	516
12	3	77.3	5	1039	1668	372
13	2	97.6	11	1593	-	163
14	1	73	6	-	-	147
15	3	65.1	8	1097	1927	102
16	2	59.5	13	1569	-	182
17	1	88.2	19	-	-	653
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			11			
Number of Bursts in Trial			18			
Chirp Center Frequency			5506			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	56.1	12	1219	-	273
2	1	83.3	7	-	-	298
3	3	79.6	17	1218	1897	159
4	2	95.8	7	1672	-	480
5	2	79.6	8	920	-	387
6	2	88.9	11	1779	-	5
7	2	81.4	8	1645	-	201
8	2	92	6	1454	-	80
9	3	96	13	1518	1121	192
10	2	65.6	11	1798	-	349
11	2	98.7	5	1360	-	416
12	2	52.9	15	1140	-	652
13	2	76.5	8	1032	-	92
14	3	73.8	18	1719	1383	502
15	3	83.7	10	1270	1216	343
16	2	89.6	10	1141	-	108
17	2	67.2	20	1455	-	272
18	3	55.7	14	1444	1475	566
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			12			
Number of Bursts in Trial			19			
Chirp Center Frequency			5507			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	70.6	15	1040	-	575
2	2	72.9	13	1460	-	178
3	3	88.9	5	1250	1629	191
4	3	60.3	20	1757	1822	468
5	3	92.1	19	1845	1198	476
6	1	73	5	-	-	532
7	1	50.4	15	-	-	69
8	1	66.4	10	-	-	333
9	1	79.1	18	-	-	437
10	1	71.6	20	-	-	424
11	2	95.6	13	1229	-	498
12	1	74.4	9	-	-	363
13	3	55.6	17	1263	1724	123
14	2	78.3	13	1507	-	37
15	3	54.1	13	1325	1249	192
16	2	67.1	18	1584	-	311
17	2	65.8	9	1195	-	243
18	2	50.1	12	1755	-	48
19	2	87.7	18	1359	-	180
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			13			
Number of Bursts in Trial			20			
Chirp Center Frequency			5508			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	79.5	7	1808	1550	274
2	2	76.7	20	1632	-	573
3	3	85.9	12	1305	1496	18
4	3	86.6	14	968	1172	133
5	2	74.9	14	1348	-	48
6	3	82.2	20	1692	1310	156
7	2	53.9	13	1342	-	45
8	3	62.7	15	1839	1651	76
9	2	86.2	6	1165	-	91
10	1	63.1	11	-	-	391
11	2	82.4	6	1416	-	107
12	1	95.8	18	-	-	248
13	2	75.7	9	993	-	482
14	3	70.1	18	1563	1020	354
15	3	85.8	13	1420	1084	446
16	1	63.2	7	-	-	265
17	1	75.1	11	-	--	147
18	2	69.5	5	1802	-	256
19	1	51.8	19	-	-	422
20	2	62.3	5	1449	-	304
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			14			
Number of Bursts in Trial			8			
Chirp Center Frequency			5509			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	74.9	5	1314	1466	1289
2	2	83.9	19	1442	-	1436
3	2	55.8	6	1147	-	240
4	2	59.4	6	1490	-	1455
5	2	78.2	15	1665	-	1312
6	2	57.3	15	1357	-	264
7	2	76.2	11	1651	-	255
8	3	59	7	1460	1109	1410
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			15			
Number of Bursts in Trial			9			
Chirp Center Frequency			5510			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	77.7	19	1046	1568	17
2	2	98.2	20	1628	-	877
3	2	95.3	8	1540	-	1066
4	2	78.8	15	1341	-	822
5	2	52.8	20	988	-	1020
6	2	65.2	9	1480	-	602
7	2	99.5	10	1867	-	884
8	2	79.5	13	1148	-	342
9	3	50.6	13	1030	1525	1321
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			16			
Number of Bursts in Trial			10			
Chirp Center Frequency			5511			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	97.5	11	1357	-	764
2	2	91.8	13	1896	-	298
3	1	78.5	5	-	-	1117
4	1	60.1	11	-	-	1069
5	2	96.2	10	975	-	1157
6	2	56.6	18	1626	-	701
7	1	77.1	20	-	-	323
8	2	96.3	8	1682	-	307
9	2	52.2	13	1017	-	217
10	1	92.8	15	-	-	316
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			17			
Number of Bursts in Trial			11			
Chirp Center Frequency			5512			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	57.3	8	1220	-	792
2	3	73.1	5	1717	1679	845
3	2	54.1	14	967	-	112
4	2	98.8	19	1137	-	715
5	3	85.5	8	1068	960	301
6	2	78.5	7	1387	-	827
7	2	77.9	12	1869	-	506
8	1	81.9	10	-	-	549
9	1	50.4	9	-	-	464
10	1	75.2	8	-	-	790
11	2	92.7	7	1770	-	967
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			18			
Number of Bursts in Trial			12			
Chirp Center Frequency			5513			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	79.1	6	1042	-	793
2	3	55.7	9	1327	1744	159
3	1	95	20	-	-	734
4	1	88.4	5	-	-	523
5	1	92.3	15	-	-	546
6	1	93.6	6	-	-	208
7	2	95.1	12	1044	-	894
8	1	59.5	17	-	-	666
9	2	98.7	17	1422	-	640
10	2	65.1	5	1104	-	320
11	1	60.2	5	-	-	60
12	1	88.7	8	-	-	823
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			19			
Number of Bursts in Trial			13			
Chirp Center Frequency			5514			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	53.9	10	-	-	226
2	2	82.6	13	992	-	854
3	1	87.7	8	-	-	303
4	3	69	12	1696	1606	528
5	1	68.6	12	-	-	220
6	3	76.5	13	1333	1468	389
7	2	95.8	17	1380	-	57
8	2	55.6	19	1147	-	334
9	2	78.6	14	1268	-	128
10	2	65.4	17	1231	-	913
11	2	76.6	18	1883	-	518
12	1	93.2	6	-	-	596
13	2	50.2	13	1836	-	61
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			20			
Number of Bursts in Trial			14			
Chirp Center Frequency			5515			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	60.9	13	-	-	142
2	2	81.7	15	1831	-	522
3	2	78.5	5	1396	-	790
4	2	98.2	6	1652	-	3
5	1	64.1	12	-	-	414
6	3	53	18	1862	1902	157
7	2	62.3	15	1490	-	248
8	2	87	11	1411	-	576
9	2	78.4	8	1090	-	737
10	2	87.2	7	967	-	343
11	3	71	13	1662	1841	105
12	2	77.2	5	1557	-	601
13	1	94.4	15	-	-	108
14	1	90.6	13	-	-	506
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			21			
Number of Bursts in Trial			15			
Chirp Center Frequency			5516			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	76.5	8	1870	1326	385
2	2	95.3	13	1162	-	73
3	3	58.9	9	1586	1909	742
4	2	73.1	13	1460	-	330
5	2	73.1	12	1488	-	25
6	2	75.1	5	1331	-	418
7	3	98.5	11	936	1532	214
8	3	72.5	13	1110	1903	387
9	3	67.4	12	1567	1513	80
10	2	76.1	12	1005	-	277
11	2	94.3	17	1413	-	314
12	2	72.8	12	1778	-	66
13	2	90.9	14	1793	-	147
14	3	94.8	11	1012	1742	441
15	3	95	12	912	1641	609
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			22			
Number of Bursts in Trial			16			
Chirp Center Frequency			5517			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	96.7	9	-	-	308
2	2	78.3	13	1045	-	27
3	1	56.5	12	-	-	74
4	3	88.5	14	1119	1020	629
5	2	62.4	9	1436	-	548
6	2	78.2	5	1147	-	341
7	3	76.8	14	1069	1575	360
8	2	91.6	18	978	-	602
9	2	93.7	5	1130	-	623
10	2	97.4	8	1100	-	256
11	3	90.1	6	1629	1375	108
12	2	79.9	18	1809	-	183
13	2	83	10	1370	-	477
14	2	89.1	13	1239	-	484
15	2	58.3	8	1321	-	276
16	1	85.2	13	-	-	22
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			23			
Number of Bursts in Trial			17			
Chirp Center Frequency			5518			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	60	10	1097	1748	56
2	3	66.3	13	1391	1430	421
3	2	88.5	15	1040	-	583
4	2	72.1	8	1526	-	161
5	1	72.3	8	-	-	450
6	2	67.3	7	1022	-	48
7	2	56.1	12	1325	-	661
8	1	83.5	11	-	-	695
9	3	99.4	13	1490	938	405
10	1	54.2	12	-	-	126
11	3	92.7	17	1251	1631	365
12	3	95.1	17	1741	1162	57
13	2	84	9	1597	-	167
14	1	68.5	18	-	-	512
15	1	76.5	20	-	-	185
16	3	86.6	11	1774	1875	457
17	2	62.2	9	1563	-	492
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			24			
Number of Bursts in Trial			18			
Chirp Center Frequency			5519			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	86.6	19	-	-	621
2	2	95.3	17	926	-	128
3	1	76.2	12	-	-	251
4	3	71.4	19	1287	1404	269
5	3	51.7	12	1564	1339	633
6	2	77	5	1899	-	615
7	1	87.5	12	-	-	375
8	3	59	17	1327	1615	610
9	2	78.3	15	1551	-	548
10	2	89.7	5	1718	-	456
11	2	92.1	7	1403	-	12
12	2	97.3	14	1338	-	596
13	3	80.3	20	1354	1563	484
14	1	98.2	8	-	-	428
15	3	94.4	13	1795	1829	512
16	2	90.4	13	1105	-	342
17	2	73.6	19	1787	-	292
18	1	82.9	7	-	-	618
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			25			
Number of Bursts in Trial			19			
Chirp Center Frequency			5520			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	90	18	-	-	173
2	1	65.3	19	-	-	245
3	2	82.6	10	1756	-	127
4	2	93.9	18	1557	-	287
5	2	50.5	13	1479	-	282
6	1	68	7	-	-	176
7	3	88.4	11	1244	1076	568
8	3	66.8	11	1288	1909	448
9	2	88	12	1450	-	527
10	3	51.1	6	1797	1935	195
11	2	93.8	13	1073	-	184
12	1	83.5	10	-	-	506
13	2	96.9	12	1047	-	267
14	3	87.2	18	1521	1450	243
15	2	60.1	8	1545	-	291
16	3	98	10	1842	1402	554
17	3	57	19	1665	1732	143
18	1	74.3	14	-	-	31
19	2	57.8	10	1576	-	609
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			26			
Number of Bursts in Trial			20			
Chirp Center Frequency			5521			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	92.8	9	1222	-	531
2	2	52.4	8	1547	-	168
3	3	56.8	7	1158	1184	193
4	1	91.2	7	-	-	565
5	3	61.2	10	1558	1664	387
6	3	62	7	1518	1656	391
7	2	69	5	1531	-	327
8	2	67.3	18	1064	-	25
9	1	94.1	5	-	-	78
10	2	76	17	1190	-	222
11	2	81.9	12	1815	-	96
12	2	57.9	8	1594	-	277
13	3	68.3	19	1427	1540	41
14	2	53.3	7	1713	-	48
15	2	85.3	15	1136	-	48
16	1	65.3	20	-	-	57
17	3	79.8	20	923	1259	48
18	2	56.9	20	1357	-	483
19	2	93	9	1686	-	73
20	2	82.8	10	944	-	352
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			27			
Number of Bursts in Trial			8			
Chirp Center Frequency			5522			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	50.9	11	1106	1077	1293
2	2	77.8	18	1836	-	1235
3	3	60.7	5	1069	1635	1092
4	2	77.2	13	1916	-	1343
5	2	91.6	13	1465	-	1466
6	2	56.8	17	1783	-	376
7	1	59.5	20	-	-	131
8	1	66.5	12	-	-	1024
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			28			
Number of Bursts in Trial			9			
Chirp Center Frequency			5523			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	72	9	1092	-	965
2	2	89.2	6	1550	-	1226
3	1	81.2	12	-	-	277
4	2	80.6	15	1616	-	458
5	2	62.8	10	1812	-	748
6	1	71	8	-	-	434
7	2	69.3	6	1027	-	1111
8	2	77.2	13	1076	-	638
9	2	65.4	5	1582	-	278
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			29			
Number of Bursts in Trial			10			
Chirp Center Frequency			5525			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	51.5	19	-	-	151
2	1	82.3	13	-	-	1071
3	3	78.3	8	1115	1740	646
4	2	99	14	1101	-	709
5	3	98.8	7	1819	945	556
6	2	80.9	19	922	-	567
7	2	64	12	953	-	581
8	1	79	20	-	-	798
9	1	68	8	-	-	112
10	2	50.4	13	1587	-	26
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			30			
Number of Bursts in Trial			11			
Chirp Center Frequency			5526			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	57.8	5	1324	1716	82
2	2	70.1	20	1733	-	587
3	2	95.2	13	1188	-	789
4	3	84.6	20	1042	1259	1021
5	3	96.5	7	1329	1596	16
6	2	84.3	15	1606	-	708
7	3	53.5	19	1783	1458	738
8	3	74.9	5	1599	1891	466
9	3	53.8	7	1494	1467	252
10	2	60.5	14	1319	-	464
11	1	73.3	10	-	-	845
Detection Check (1=Detection; 0=No Detection)						1

Type 6 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5510	9	1	333	1
2	5510	9	1	333	1
3	5510	9	1	333	1
4	5510	9	1	333	1
5	5510	9	1	333	1
6	5510	9	1	333	1
7	5510	9	1	333	1
8	5510	9	1	333	1
9	5510	9	1	333	1
10	5510	9	1	333	1
11	5510	9	1	333	1
12	5510	9	1	333	1
13	5510	9	1	333	1
14	5510	9	1	333	1
15	5510	9	1	333	1
16	5510	9	1	333	1
17	5510	9	1	333	1
18	5510	9	1	333	1
19	5510	9	1	333	1
20	5510	9	1	333	1
21	5510	9	1	333	1
22	5510	9	1	333	1
23	5510	9	1	333	1
24	5510	9	1	333	1
25	5510	9	1	333	1
26	5510	9	1	333	1
27	5510	9	1	333	1
28	5510	9	1	333	1
29	5510	9	1	333	1
30	5510	9	1	333	1
Detection Percentage (%)					100.00
Limit					70%
Test Result					Complied

For 802.11ac 80MHz / 5530 MHz:

Type 1 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5516	1	1930.5	518	1
2	5517	23	326.2	3066	1
3	5518	19	1139.0	878	1
4	5519	12	1355.0	738	1
5	5520	4	1730.1	578	1
6	5521	8	1519.8	658	1
7	5522	15	1253.1	798	1
8	5523	6	1618.1	618	1
9	5524	14	1285.3	778	1
10	5525	3	1792.1	558	1
11	5526	13	1319.3	758	0
12	5527	9	1474.9	678	1
13	5528	7	1567.4	638	1
14	5529	17	1193.3	838	1
15	5530	10	1432.7	698	1
16	5531	-	1692.0	591	0
17	5532	-	328.1	3048	1
18	5533	-	373.4	2678	1
19	5534	-	574.4	1741	1
20	5535	-	1216.5	822	1
21	5536	-	801.3	1248	1
22	5537	-	488.5	2047	1
23	5538	-	956.0	1046	0
24	5539	-	517.6	1932	1
25	5540	-	1422.5	703	1
26	5541	-	542.0	1845	1
27	5542	-	741.3	1349	1
28	5543	-	881.8	1134	1
29	5544	-	427.4	2340	1
30	5545	-	628.9	1590	1
Detection Percentage (%)					90.00

Note: Test A Trail #1~15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a ;
 Test B Trail #16~30 unique PRI values randomly selected within the range of 518-3066 μ sec, with a minimum increment of 1 μ sec, excluding PRI values selected in Test A

Type 2 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5516	2.6	221	23	1
2	5517	4.6	198	27	1
3	5518	1.1	184	29	1
4	5519	4.8	203	24	1
5	5520	2.4	162	25	1
6	5521	3.4	204	28	1
7	5522	2.3	170	27	0
8	5523	3.5	184	23	1
9	5524	4.9	150	27	1
10	5525	4.6	211	29	1
11	5526	2.9	158	23	1
12	5527	2.6	226	27	0
13	5528	1.6	204	26	1
14	5529	3.9	181	25	1
15	5530	4.6	202	24	1
16	5531	4.1	194	27	1
17	5532	2.3	193	28	1
18	5533	3.9	173	29	0
19	5534	4.3	188	23	1
20	5535	1.5	215	26	1
21	5536	4.9	227	27	1
22	5537	1.1	199	23	1
23	5538	4.5	155	29	1
24	5539	4.0	190	27	1
25	5540	2.4	151	23	1
26	5541	2.5	180	28	1
27	5542	2.5	228	23	0
28	5543	2.5	203	25	1
29	5544	1.5	188	25	1
30	5545	1.9	217	24	1
Detection Percentage (%)					86.67

Type 3 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5516	8.0	205	16	0
2	5517	6.7	382	18	1
3	5518	8.6	418	16	1
4	5519	9.4	351	17	0
5	5520	7.4	383	18	1
6	5521	9.8	232	16	1
7	5522	9.1	377	17	1
8	5523	9.6	457	16	1
9	5524	8.0	471	18	1
10	5525	9.0	304	18	1
11	5526	8.0	316	17	1
12	5527	9.8	325	16	1
13	5528	8.0	409	17	1
14	5529	9.9	200	17	1
15	5530	8.8	458	16	1
16	5531	8.0	232	18	1
17	5532	8.3	250	16	1
18	5533	8.7	270	16	1
19	5534	7.7	350	17	1
20	5535	7.1	230	16	0
21	5536	7.3	416	18	1
22	5537	7.6	498	18	1
23	5538	7.3	286	17	0
24	5539	7.3	287	16	1
25	5540	7.5	462	17	1
26	5541	6.2	300	17	1
27	5542	6.4	323	18	1
28	5543	7.1	420	16	0
29	5544	7.2	395	18	1
30	5545	8.4	377	16	1
Detection Percentage (%)					83.33

Type 4 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulse Width (us)	PRI (us)	Pulses / Burst	1=Detection 0=No Detection
1	5516	18.0	242	15	1
2	5517	19.9	279	12	1
3	5518	12.9	487	14	1
4	5519	15.0	452	13	0
5	5520	16.3	230	12	1
6	5521	19.8	238	13	1
7	5522	18.2	420	16	1
8	5523	16.3	452	15	1
9	5524	14.2	495	12	1
10	5525	17.8	228	16	1
11	5526	19.1	211	16	0
12	5527	18.4	283	15	1
13	5528	11.8	411	12	1
14	5529	14.2	284	13	1
15	5530	13.9	202	12	1
16	5531	17.8	340	14	1
17	5532	15.6	290	16	1
18	5533	14.6	250	16	1
19	5534	14.4	484	15	0
20	5535	18.9	387	13	1
21	5536	11.1	348	15	1
22	5537	13.8	291	16	1
23	5538	14.3	295	12	0
24	5539	12.5	300	12	1
25	5540	12.5	322	14	1
26	5541	12.5	383	13	1
27	5542	15.7	322	16	1
28	5543	19.8	469	13	0
29	5544	18.6	406	15	1
30	5545	15.9	238	14	1
Detection Percentage (%)					83.33

Total Type 1~4 Radar Statistical Performance

Radar Type #	Detection Percentage (%)
1	90.00
2	86.67
3	83.33
4	83.33
Aggregate (Radar Types 1-4)	85.83
Limit	80%
Test Result	Complied

Type 5 Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
1	5501	1	11	5520	1	21	5550	1
2	5560	0	12	5525	1	22	5553	1
3	5503	0	13	5528	1	23	5555	1
4	5505	1	14	5529	1	24	5524	0
5	5507	1	15	5514	1	25	5541	1
6	5508	1	16	5529	1	26	5530	1
7	5509	1	17	5532	0	27	5531	1
8	5505	1	18	5535	1	28	5527	1
9	5510	1	19	5540	1	29	5560	1
10	5515	1	20	5545	1	30	5548	1
Detection Percentage (%)								86.67%
Limit								80%
Test Result								Complied

Trail Number				1		
Number of Bursts in Trial				8		
Chirp Center Frequency				5501		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	62.3	8	-	-	346
2	2	51.2	15	1745	-	1205
3	3	93.6	5	957	1634	674
4	3	68.2	12	1668	1573	384
5	3	83.1	8	1188	1888	876
6	1	56.7	18	-	-	376
7	2	60.6	18	1874	-	1409
8	3	75.5	13	1263	1683	1378
Detection Check (1=Detection; 0=No Detection)						1

Trail Number				2		
Number of Bursts in Trial				9		
Chirp Center Frequency				5560		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	99.6	13	-	-	217
2	2	54.8	15	1727	-	982
3	3	91.1	15	1120	1826	941
4	2	76.2	7	1638	-	477
5	1	88.9	13	-	-	259
6	1	83	9	-	-	892
7	1	83.9	12	-	-	320
8	2	55.9	15	1613	-	445
9	1	96.1	13	-	-	779
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			3			
Number of Bursts in Trial			10			
Chirp Center Frequency			5503			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	82	6	1246	-	1017
2	1	93.2	13	-	-	760
3	2	61.3	13	1175	-	327
4	1	52.8	8	-	-	824
5	3	70.6	19	929	1076	115
6	1	80.3	17	-	-	325
7	1	83.2	15	-	-	679
8	2	94	9	1805	-	888
9	2	67	8	1486	-	849
10	1	56.4	20	-	-	813
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			4			
Number of Bursts in Trial			11			
Chirp Center Frequency			5505			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	90.5	8	1149	1612	35
2	3	54.5	8	1094	1525	1014
3	1	57.1	18	-	-	827
4	2	98.6	20	1292	-	83
5	2	62.9	12	1433	-	676
6	1	71.1	15	-	-	708
7	1	96.7	5	-	-	711
8	1	64.3	5	-	-	484
9	3	61.2	8	1075	1524	444
10	2	79.2	13	1877	-	797
11	2	79.3	20	1313	-	288
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			5			
Number of Bursts in Trial			12			
Chirp Center Frequency			5507			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	89.5	13	-	-	20
2	3	71.8	11	1446	1549	117
3	3	53.7	15	1100	1517	485
4	2	99.3	11	1571	-	334
5	3	56.8	6	1594	1280	468
6	1	97.4	11	-	-	213
7	2	67.6	13	1831	-	14
8	3	77.1	8	1683	1337	267
9	1	98.5	17	-	-	544
10	3	58.3	13	1924	1829	159
11	1	98.4	14	-	-	380
12	1	79.3	11	-	-	257
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			6			
Number of Bursts in Trial			13			
Chirp Center Frequency			5508			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	53.8	14	1631	-	768
2	1	90	17	-	-	530
3	3	87.2	18	1115	1297	157
4	2	82	11	1728	-	892
5	3	69.8	7	1641	1779	196
6	2	63.1	20	1836	-	331
7	1	59.8	6	-	-	495
8	3	78.5	19	941	1921	546
9	1	85.7	6	-	-	219
10	3	67.7	9	1834	1450	534
11	2	84.5	15	1376	-	282
12	2	99.3	13	1570	-	486
13	2	80.2	8	1088	-	67
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			7			
Number of Bursts in Trial			14			
Chirp Center Frequency			5509			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	80.8	10	1061	1124	389
2	2	81	9	1479	-	234
3	2	87.6	17	1247	-	577
4	2	94.7	18	1041	-	572
5	2	78	18	1267	-	313
6	1	95.5	14	-	-	52
7	2	97.6	15	1215	-	57
8	3	88	9	1349	1598	171
9	2	69.7	17	1711	-	769
10	2	96.5	17	1431	-	168
11	2	96.9	6	1871	-	124
12	3	66.4	10	1824	1468	766
13	1	78.8	10	-	-	537
14	3	87.6	6	1080	1159	714
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			8			
Number of Bursts in Trial			15			
Chirp Center Frequency			5505			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	71.8	14	1432	-	573
2	2	65.9	19	1762	-	314
3	2	74.7	6	1754	-	377
4	3	81.7	5	1133	974	216
5	3	57.8	14	1176	1712	129
6	1	80.6	6	-	-	341
7	3	99.3	17	1268	1876	165
8	1	79.8	12	-	-	618
9	3	83	11	990	1738	589
10	3	71.5	11	1473	1255	6
11	1	77.4	11	-	-	127
12	2	84.8	12	1390	-	515
13	2	64.6	12	1653	-	148
14	2	92.9	12	1881	-	519
15	1	71.3	6	-	-	301
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			9			
Number of Bursts in Trial			16			
Chirp Center Frequency			5510			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	55.4	9	1318	-	383
2	2	80.8	18	1710	-	534
3	1	88.8	9	-	-	495
4	2	78	12	1818	-	92
5	1	78.5	12	-	-	108
6	2	55	13	1219	-	123
7	2	75.9	20	1004	-	123
8	2	70.9	7	1820	-	546
9	2	71.7	18	1559	-	476
10	2	73.9	19	1232	-	235
11	1	59.2	20	-	-	424
12	1	55.7	9	-	-	391
13	3	60.9	12	1144	1370	198
14	2	60.8	14	990	-	16
15	3	60.6	19	1526	1326	695
16	2	89	5	1029	-	131
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			10			
Number of Bursts in Trial			17			
Chirp Center Frequency			5515			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	72.1	14	1119	-	488
2	3	81.4	13	1142	961	451
3	3	92.9	18	991	1147	565
4	3	81.3	18	1793	1369	285
5	3	76.4	20	1005	1793	79
6	1	61.6	18	-	-	503
7	1	66.6	19	-	-	181
8	1	53.7	12	-	-	416
9	2	58	8	1477	-	107
10	2	64	18	1791	-	141
11	2	80.3	12	1304	-	516
12	3	77.3	5	1039	1668	372
13	2	97.6	11	1593	-	163
14	1	73	6	-	-	147
15	3	65.1	8	1097	1927	102
16	2	59.5	13	1569	-	182
17	1	88.2	19	-	-	653
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			11			
Number of Bursts in Trial			18			
Chirp Center Frequency			5520			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	56.1	12	1219	-	273
2	1	83.3	7	-	-	298
3	3	79.6	17	1218	1897	159
4	2	95.8	7	1672	-	480
5	2	79.6	8	920	-	387
6	2	88.9	11	1779	-	5
7	2	81.4	8	1645	-	201
8	2	92	6	1454	-	80
9	3	96	13	1518	1121	192
10	2	65.6	11	1798	-	349
11	2	98.7	5	1360	-	416
12	2	52.9	15	1140	-	652
13	2	76.5	8	1032	-	92
14	3	73.8	18	1719	1383	502
15	3	83.7	10	1270	1216	343
16	2	89.6	10	1141	-	108
17	2	67.2	20	1455	-	272
18	3	55.7	14	1444	1475	566
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			12			
Number of Bursts in Trial			19			
Chirp Center Frequency			5525			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	70.6	15	1040	-	575
2	2	72.9	13	1460	-	178
3	3	88.9	5	1250	1629	191
4	3	60.3	20	1757	1822	468
5	3	92.1	19	1845	1198	476
6	1	73	5	-	-	532
7	1	50.4	15	-	-	69
8	1	66.4	10	-	-	333
9	1	79.1	18	-	-	437
10	1	71.6	20	-	-	424
11	2	95.6	13	1229	-	498
12	1	74.4	9	-	-	363
13	3	55.6	17	1263	1724	123
14	2	78.3	13	1507	-	37
15	3	54.1	13	1325	1249	192
16	2	67.1	18	1584	-	311
17	2	65.8	9	1195	-	243
18	2	50.1	12	1755	-	48
19	2	87.7	18	1359	-	180
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			13			
Number of Bursts in Trial			20			
Chirp Center Frequency			5528			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	79.5	7	1808	1550	274
2	2	76.7	20	1632	-	573
3	3	85.9	12	1305	1496	18
4	3	86.6	14	968	1172	133
5	2	74.9	14	1348	-	48
6	3	82.2	20	1692	1310	156
7	2	53.9	13	1342	-	45
8	3	62.7	15	1839	1651	76
9	2	86.2	6	1165	-	91
10	1	63.1	11	-	-	391
11	2	82.4	6	1416	-	107
12	1	95.8	18	-	-	248
13	2	75.7	9	993	-	482
14	3	70.1	18	1563	1020	354
15	3	85.8	13	1420	1084	446
16	1	63.2	7	-	-	265
17	1	75.1	11	-	--	147
18	2	69.5	5	1802	-	256
19	1	51.8	19	-	-	422
20	2	62.3	5	1449	-	304
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			14			
Number of Bursts in Trial			8			
Chirp Center Frequency			5529			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	74.9	5	1314	1466	1289
2	2	83.9	19	1442	-	1436
3	2	55.8	6	1147	-	240
4	2	59.4	6	1490	-	1455
5	2	78.2	15	1665	-	1312
6	2	57.3	15	1357	-	264
7	2	76.2	11	1651	-	255
8	3	59	7	1460	1109	1410
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			15			
Number of Bursts in Trial			9			
Chirp Center Frequency			5514			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	77.7	19	1046	1568	17
2	2	98.2	20	1628	-	877
3	2	95.3	8	1540	-	1066
4	2	78.8	15	1341	-	822
5	2	52.8	20	988	-	1020
6	2	65.2	9	1480	-	602
7	2	99.5	10	1867	-	884
8	2	79.5	13	1148	-	342
9	3	50.6	13	1030	1525	1321
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			16			
Number of Bursts in Trial			10			
Chirp Center Frequency			5529			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	97.5	11	1357	-	764
2	2	91.8	13	1896	-	298
3	1	78.5	5	-	-	1117
4	1	60.1	11	-	-	1069
5	2	96.2	10	975	-	1157
6	2	56.6	18	1626	-	701
7	1	77.1	20	-	-	323
8	2	96.3	8	1682	-	307
9	2	52.2	13	1017	-	217
10	1	92.8	15	-	-	316
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			17			
Number of Bursts in Trial			11			
Chirp Center Frequency			5532			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	57.3	8	1220	-	792
2	3	73.1	5	1717	1679	845
3	2	54.1	14	967	-	112
4	2	98.8	19	1137	-	715
5	3	85.5	8	1068	960	301
6	2	78.5	7	1387	-	827
7	2	77.9	12	1869	-	506
8	1	81.9	10	-	-	549
9	1	50.4	9	-	-	464
10	1	75.2	8	-	-	790
11	2	92.7	7	1770	-	967
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			18			
Number of Bursts in Trial			12			
Chirp Center Frequency			5535			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	79.1	6	1042	-	793
2	3	55.7	9	1327	1744	159
3	1	95	20	-	-	734
4	1	88.4	5	-	-	523
5	1	92.3	15	-	-	546
6	1	93.6	6	-	-	208
7	2	95.1	12	1044	-	894
8	1	59.5	17	-	-	666
9	2	98.7	17	1422	-	640
10	2	65.1	5	1104	-	320
11	1	60.2	5	-	-	60
12	1	88.7	8	-	-	823
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			19			
Number of Bursts in Trial			13			
Chirp Center Frequency			5540			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	53.9	10	-	-	226
2	2	82.6	13	992	-	854
3	1	87.7	8	-	-	303
4	3	69	12	1696	1606	528
5	1	68.6	12	-	-	220
6	3	76.5	13	1333	1468	389
7	2	95.8	17	1380	-	57
8	2	55.6	19	1147	-	334
9	2	78.6	14	1268	-	128
10	2	65.4	17	1231	-	913
11	2	76.6	18	1883	-	518
12	1	93.2	6	-	-	596
13	2	50.2	13	1836	-	61
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			20			
Number of Bursts in Trial			14			
Chirp Center Frequency			5545			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	60.9	13	-	-	142
2	2	81.7	15	1831	-	522
3	2	78.5	5	1396	-	790
4	2	98.2	6	1652	-	3
5	1	64.1	12	-	-	414
6	3	53	18	1862	1902	157
7	2	62.3	15	1490	-	248
8	2	87	11	1411	-	576
9	2	78.4	8	1090	-	737
10	2	87.2	7	967	-	343
11	3	71	13	1662	1841	105
12	2	77.2	5	1557	-	601
13	1	94.4	15	-	-	108
14	1	90.6	13	-	-	506
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			21			
Number of Bursts in Trial			15			
Chirp Center Frequency			5550			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	76.5	8	1870	1326	385
2	2	95.3	13	1162	-	73
3	3	58.9	9	1586	1909	742
4	2	73.1	13	1460	-	330
5	2	73.1	12	1488	-	25
6	2	75.1	5	1331	-	418
7	3	98.5	11	936	1532	214
8	3	72.5	13	1110	1903	387
9	3	67.4	12	1567	1513	80
10	2	76.1	12	1005	-	277
11	2	94.3	17	1413	-	314
12	2	72.8	12	1778	-	66
13	2	90.9	14	1793	-	147
14	3	94.8	11	1012	1742	441
15	3	95	12	912	1641	609
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			22			
Number of Bursts in Trial			16			
Chirp Center Frequency			5553			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	96.7	9	-	-	308
2	2	78.3	13	1045	-	27
3	1	56.5	12	-	-	74
4	3	88.5	14	1119	1020	629
5	2	62.4	9	1436	-	548
6	2	78.2	5	1147	-	341
7	3	76.8	14	1069	1575	360
8	2	91.6	18	978	-	602
9	2	93.7	5	1130	-	623
10	2	97.4	8	1100	-	256
11	3	90.1	6	1629	1375	108
12	2	79.9	18	1809	-	183
13	2	83	10	1370	-	477
14	2	89.1	13	1239	-	484
15	2	58.3	8	1321	-	276
16	1	85.2	13	-	-	22
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			23			
Number of Bursts in Trial			17			
Chirp Center Frequency			5555			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	60	10	1097	1748	56
2	3	66.3	13	1391	1430	421
3	2	88.5	15	1040	-	583
4	2	72.1	8	1526	-	161
5	1	72.3	8	-	-	450
6	2	67.3	7	1022	-	48
7	2	56.1	12	1325	-	661
8	1	83.5	11	-	-	695
9	3	99.4	13	1490	938	405
10	1	54.2	12	-	-	126
11	3	92.7	17	1251	1631	365
12	3	95.1	17	1741	1162	57
13	2	84	9	1597	-	167
14	1	68.5	18	-	-	512
15	1	76.5	20	-	-	185
16	3	86.6	11	1774	1875	457
17	2	62.2	9	1563	-	492
Detection Check (1=Detection; 0=No Detection)						1

Trail Number				24		
Number of Bursts in Trial				18		
Chirp Center Frequency				5524		
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	86.6	19	-	-	621
2	2	95.3	17	926	-	128
3	1	76.2	12	-	-	251
4	3	71.4	19	1287	1404	269
5	3	51.7	12	1564	1339	633
6	2	77	5	1899	-	615
7	1	87.5	12	-	-	375
8	3	59	17	1327	1615	610
9	2	78.3	15	1551	-	548
10	2	89.7	5	1718	-	456
11	2	92.1	7	1403	-	12
12	2	97.3	14	1338	-	596
13	3	80.3	20	1354	1563	484
14	1	98.2	8	-	-	428
15	3	94.4	13	1795	1829	512
16	2	90.4	13	1105	-	342
17	2	73.6	19	1787	-	292
18	1	82.9	7	-	-	618
Detection Check (1=Detection; 0=No Detection)						0

Trail Number			25			
Number of Bursts in Trial			19			
Chirp Center Frequency			5541			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	90	18	-	-	173
2	1	65.3	19	-	-	245
3	2	82.6	10	1756	-	127
4	2	93.9	18	1557	-	287
5	2	50.5	13	1479	-	282
6	1	68	7	-	-	176
7	3	88.4	11	1244	1076	568
8	3	66.8	11	1288	1909	448
9	2	88	12	1450	-	527
10	3	51.1	6	1797	1935	195
11	2	93.8	13	1073	-	184
12	1	83.5	10	-	-	506
13	2	96.9	12	1047	-	267
14	3	87.2	18	1521	1450	243
15	2	60.1	8	1545	-	291
16	3	98	10	1842	1402	554
17	3	57	19	1665	1732	143
18	1	74.3	14	-	-	31
19	2	57.8	10	1576	-	609
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			26			
Number of Bursts in Trial			20			
Chirp Center Frequency			5530			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	92.8	9	1222	-	531
2	2	52.4	8	1547	-	168
3	3	56.8	7	1158	1184	193
4	1	91.2	7	-	-	565
5	3	61.2	10	1558	1664	387
6	3	62	7	1518	1656	391
7	2	69	5	1531	-	327
8	2	67.3	18	1064	-	25
9	1	94.1	5	-	-	78
10	2	76	17	1190	-	222
11	2	81.9	12	1815	-	96
12	2	57.9	8	1594	-	277
13	3	68.3	19	1427	1540	41
14	2	53.3	7	1713	-	48
15	2	85.3	15	1136	-	48
16	1	65.3	20	-	-	57
17	3	79.8	20	923	1259	48
18	2	56.9	20	1357	-	483
19	2	93	9	1686	-	73
20	2	82.8	10	944	-	352
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			27			
Number of Bursts in Trial			8			
Chirp Center Frequency			5531			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	50.9	11	1106	1077	1293
2	2	77.8	18	1836	-	1235
3	3	60.7	5	1069	1635	1092
4	2	77.2	13	1916	-	1343
5	2	91.6	13	1465	-	1466
6	2	56.8	17	1783	-	376
7	1	59.5	20	-	-	131
8	1	66.5	12	-	-	1024
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			28			
Number of Bursts in Trial			9			
Chirp Center Frequency			5527			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	2	72	9	1092	-	965
2	2	89.2	6	1550	-	1226
3	1	81.2	12	-	-	277
4	2	80.6	15	1616	-	458
5	2	62.8	10	1812	-	748
6	1	71	8	-	-	434
7	2	69.3	6	1027	-	1111
8	2	77.2	13	1076	-	638
9	2	65.4	5	1582	-	278
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			29			
Number of Bursts in Trial			10			
Chirp Center Frequency			5560			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	1	51.5	19	-	-	151
2	1	82.3	13	-	-	1071
3	3	78.3	8	1115	1740	646
4	2	99	14	1101	-	709
5	3	98.8	7	1819	945	556
6	2	80.9	19	922	-	567
7	2	64	12	953	-	581
8	1	79	20	-	-	798
9	1	68	8	-	-	112
10	2	50.4	13	1587	-	26
Detection Check (1=Detection; 0=No Detection)						1

Trail Number			30			
Number of Bursts in Trial			11			
Chirp Center Frequency			5548			
Burst	No. of Pulses	Pulse Width (us)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (us)	Pulse 2-to-3 Spacing (us)	Starting Location Within Interval (ms)
1	3	57.8	5	1324	1716	82
2	2	70.1	20	1733	-	587
3	2	95.2	13	1188	-	789
4	3	84.6	20	1042	1259	1021
5	3	96.5	7	1329	1596	16
6	2	84.3	15	1606	-	708
7	3	53.5	19	1783	1458	738
8	3	74.9	5	1599	1891	466
9	3	53.8	7	1494	1467	252
10	2	60.5	14	1319	-	464
11	1	73.3	10	-	-	845
Detection Check (1=Detection; 0=No Detection)						1

Type 6 Radar Statistical Performance

Trail #	Test Freq. (MHz)	Pulses / Hop	Pulse Width (us)	PRI (us)	1=Detection 0=No Detection
1	5530	9	1	333	1
2	5530	9	1	333	1
3	5530	9	1	333	1
4	5530	9	1	333	1
5	5530	9	1	333	1
6	5530	9	1	333	1
7	5530	9	1	333	1
8	5530	9	1	333	1
9	5530	9	1	333	1
10	5530	9	1	333	1
11	5530	9	1	333	1
12	5530	9	1	333	1
13	5530	9	1	333	1
14	5530	9	1	333	1
15	5530	9	1	333	1
16	5530	9	1	333	1
17	5530	9	1	333	1
18	5530	9	1	333	1
19	5530	9	1	333	1
20	5530	9	1	333	1
21	5530	9	1	333	1
22	5530	9	1	333	1
23	5530	9	1	333	1
24	5530	9	1	333	1
25	5530	9	1	333	1
26	5530	9	1	333	1
27	5530	9	1	333	1
28	5530	9	1	333	1
29	5530	9	1	333	1
30	5530	9	1	333	1
Detection Percentage (%)					100.00
Limit					70%
Test Result					Complied

5 LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum analyzer	R&S	FSP40	100142	9kHz~40GHz	Oct. 15, 2014	DF01-CB
Signal generator	R&S	SMU200A	102782	25MHz-6GHz	Nov. 29, 2014	DF01-CB
RF Power Divider	ANAREN	2 Way	DFS-01-DV-02	1GHz ~ 6GHz	Jan. 10, 2015	DF01-CB
RF Power Divider	MTJ	2Way	DFS-01-DV-03	1GHz ~ 6GHz	Jan. 10, 2015	DF01-CB
RF Power Divider	ANAREN	4 Way	DFS-01-DV-01	1GHz ~ 6GHz	Jan. 10, 2015	DF01-CB
Horn Antenna	COM-POWER	AH-118	071187	1GHz – 18GHz	Aug. 26, 2014	DF01-CB
Horn Antenna	COM-POWER	AH-118	071042	1GHz – 18GHz	Dec. 03, 2014	DF01-CB
RF Cable-high	Woken	RG402	High Cable-57	1 GHz –18 GHz	Nov. 15, 2014	DF01-CB
RF Cable-high	Woken	RG402	High Cable-58	1 GHz –18 GHz	Nov. 15, 2014	DF01-CB

Note: Calibration Interval of instruments listed above is one year.

6 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty	Remark
Radiated Emission	2.9 dB	Confidence levels of 95%