

Dynamic Frequency Selection (DFS)

Test Report

Product Name	MOXA IEEE 802.11 a/b/g/n
Model No	WAPN008
FCC ID	SLE-WAPN008

Applicant	MOXA Inc.
Address	FL.4, NO. 135. LANE 235, BAOQIAO RD. XINDIAN DIST., NEW TAIPEI CITY, TAIWAN

Date of Receipt	May. 17, 2017
Issued Date	Mar 22, 2018
Report No.	1750446R-RFUSP52V00
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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DFS Test Report

Issued Date: Mar 22, 2018

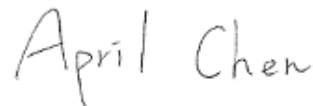
Report No.: 1750446R-RFUSP52V00



Product Name	MOXA IEEE 802.11 a/b/g/n
Applicant	MOXA Inc.
Address	FL.4, NO. 135. LANE 235, BAOQIAO RD. XINDIAN DIST., NEW TAIPEI CITY, TAIWAN
Manufacturer	MOXA Inc.
Model No.	WAPN008
FCC ID.	SLE-WAPN008
EUT Rated Voltage	110/220 VDC/VAC
EUT Test Voltage	DC 110V/230V, AC 110V/230V
Trade Name	MOXA
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E 15.407 (h): 2016 KDB 905462 D02 UNII DFS Compliance Procedures v02 KDB 905462 D04 Operational Modes for DFS Testing v01 KDB 905462 D06 802 11 Channel Plans New Rules v02 FCC 16-24
Test Result	Complied

Documented By

:



(Adm. Specialist / April Chen)

Tested By

:



(Engineer / Tom Chiu)

Approved By

:



(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. Standard Requirement

FCC Part 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 30dBm. A TPC mechanism is not required for systems with an E.I.R.P. of less than 500mW.

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.

1.2. EUT Description

Product Name	MOXA IEEE 802.11 a/b/g/n
Trade Name	MOXA
FCC ID.	SLE-WAPN008
Model No.	WAPN008
DFS Frequency Range	802.11a/n-20MHz: 5180-5320MHz, 5500-5700MHz, 5745-5825MHz 802.11n-40MHz: 5190-5310, 5510-5670MHz, 5755-5795MHz
Number of DFS Channels	802.11a/n-20MHz: 24, n-40MHz: 11
Data Rate	802.11a: 6-54Mbps, 802.11n: up to 300Mbps
Channel Control	Auto
Type of Modulation	802.11a/n: OFDM, BPSK, QPSK, 16QAM, 64QAM
Channel Bandwidth	20/40/80MHz
DFS Function	☒ Master ☐ Slave
TPC Function	☒ <500mW not required ☐ $\geq 500\text{mW}$ employ a TPC*
Communication Mode	☒ IP Based Systems ☐ Frame Based System ☐ Other System
Antenna Gain	Refer to the table "Antenna List"
Test Platform.	Brand Name: MOXA, M/N: TAP-323XXXXXXXXXXXXXXXXX (X=0-9,A-Z, blank or dash or any character ; for marketing purpose and no impact safety related critical components and constructions)

***Note: The TPC test by U-NII report.**

Antenna List

No.	Manufacturer	Model No.	Antenna Type	Peak Gain
1	KINSUN	ANT-WDB-O-2 BK	Dipole	2.34dBi for 5.25~5.35GHz 2.34dBi for 5.47~5.725GHz
2	KINSUN	ANT-WDB-ANM-0502	Dipole	1.41dBi for 5.25~5.35GHz 1.41dBi for 5.47~5.725GHz

Note: Select a low gain antenna for DFS test.

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 36:	5180 MHz	Channel 40:	5200 MHz	Channel 44:	5220 MHz	Channel 48:	5240 MHz
Channel 52:	5260 MHz	Channel 56:	5280 MHz	Channel 60:	5300 MHz	Channel 64:	5320 MHz
Channel 100:	5500 MHz	Channel 104:	5520 MHz	Channel 108:	5540 MHz	Channel 112:	5560 MHz
Channel 116:	5580 MHz	Channel 120:	5600 MHz	Channel 124:	5620 MHz	Channel 128:	5640 MHz
Channel 132:	5660 MHz	Channel 136:	5680 MHz	Channel 140:	5700 MHz	Channel 149:	5745 MHz
Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz	Channel 165:	5825 MHz

802.11n-40MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 38:	5190 MHz	Channel 46:	5230 MHz	Channel 54:	5270 MHz	Channel 62:	5310 MHz
Channel 102:	5510 MHz	Channel 110:	5550 MHz	Channel 118:	5590 MHz	Channel 126:	5630 MHz
Channel 134:	5670 MHz	Channel 151:	5755 MHz	Channel 159:	5795 MHz		

Test Mode	Mode 1: Transmit (802.11a)_Module 1 Mode 1: Transmit (802.11a)_Module 2 Mode 2: Transmit (802.11n-40BW)_Module 1 Mode 2: Transmit (802.11n-40BW)_Module 2
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***Note: Both Module 1 and Module 2 Models are called WAPN008.**

1.3. UNII Device Description

(1) The EUT operates in the following DFS band:

1. 5250-5350 MHz
2. 5470-5725 MHz

(2) The U-NII device maximum power is 25.92dBm(E.I.R.P).

Below are the available 50 ohm antenna assemblies and their corresponding gains. 0dBi gain was used to set the -63 dBm threshold level (-64dBm +1 dB) during calibration of the test setup.

No.	Manufacturer	Model No.	Antenna Type	Peak Gain
1	KINSUN	ANT-WDB-O-2 BK	Dipole	2.34dBi for 5.25~5.35GHz 2.34dBi for 5.47~5.725GHz
2	KINSUN	ANT-WDB-ANM-0502	Dipole	1.41dBi for 5.25~5.35GHz 1.41dBi for 5.47~5.725GHz

(3) WLAN traffic is generated by the test software “Iperf.exe” from the Master device to the Slave device in the transfer data rate >17%.

(4) For the 5250-5350 MHz and 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

(5) The client device is an Dell Inspiron 5459 Notebook pc contains Intel WLAN radio Module card (Model Model : 3165NGW). The Intel WLAN Module card FCC ID: PD93165NG

1.4. Test Equipment

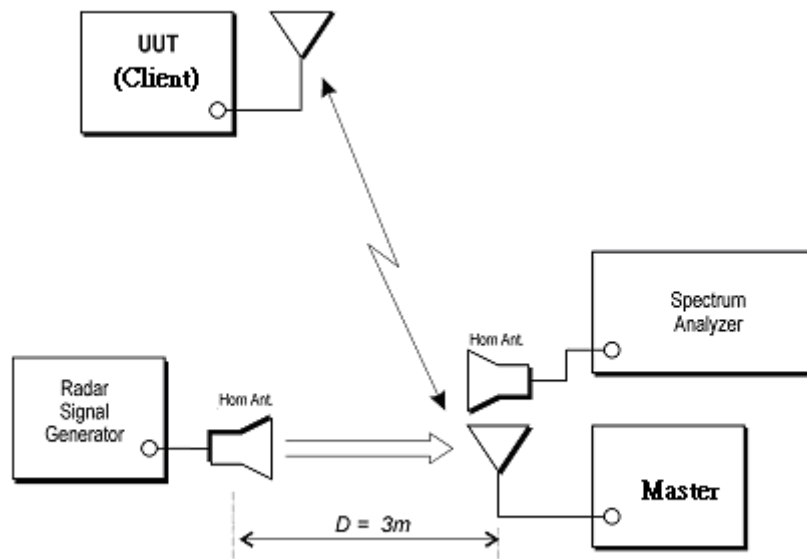
Dynamic Frequency Selection (DFS) / ASR6

Instrument	Manufacturer	Type No.	Serial No	Cal. Date	Cal. Date
Spectrum Analyzer	R&S	FSV30	103467	2016.12.14	2017.12.13
Vector Signal Generator	R&S	SMBV100	261871	2017.03.02	2018.03.01
Horn Antenna	ETS-Lindgren	3117	00201366	2017.09.01	2018.08.31
Horn Antenna	ETS-Lindgren	3117	00203799	2017.10.02	2018.10.01

Instrument	Manufacturer	Type No.	Serial No
Desktop Pc	Gigabyte	H170M-E D3	N/A
Notebook Pc	Dell	Inspiron 5459	24357736765
RF Cable	WOKEN	L1406-031C	S02-161028-072
RF Cable	SUHNER	SUCOFLEX 104	MY35103/4

Software	Manufacturer	Function
Agilent Signal Studio for Pulse Building V1.3.13.0	Agilent	Radar Signal Generation Software
Agilent DFS_TEST V6.9	Agilent	Radar Signal Generation Software
Media Player Classic v6.4.8.6	Gabest.org	Multimedia Player

1.5. Test Setup



1.6. DFS Detection Thresholds

(1) Interference Threshold value, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64dBm

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.

(2) 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 + approx. 60 milliseconds over remaining 10 seconds period (See Notes 1 and 2)
U-NII Detection Bandwidth	Minimum 100% of the 99% 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.

1.7. Radar Test Waveforms

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

(1) 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	Roundup $\left\{ \left(\frac{1}{360} \right), \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		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			
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.

(2) Long Pulse Radar Test Signal

Radar Waveform	Bursts	Number of Pulses Per Burst	Pulse Width (usec)	Chirp Width (MHz)	PRI (usec)	Minimum Percentage of Successful Detection	Minimum Trials
5	8-20	1-3	50-100	5-20	1000-2000	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.

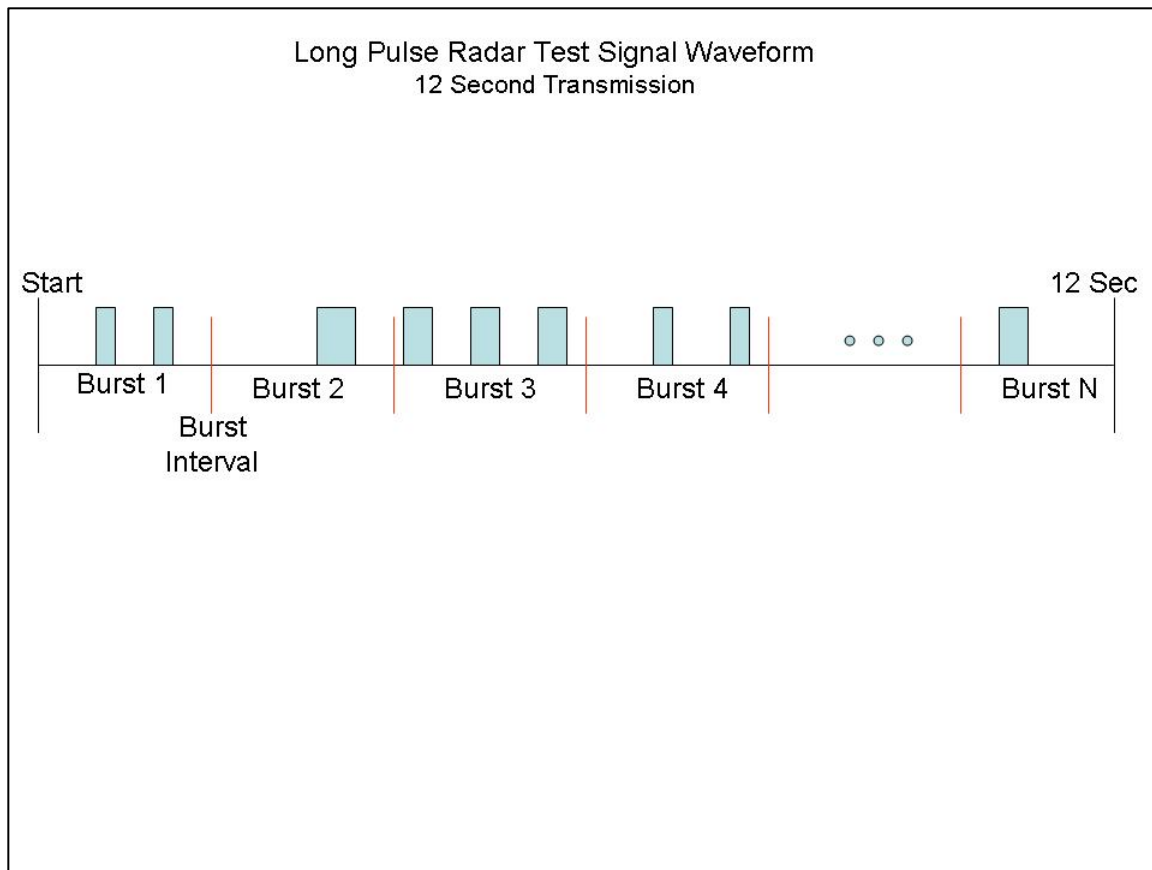
Each waveform is defined as follows:

- 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 frequency modulated chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a transmission period will have the same chirp width. 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).

Graphical Representation of a Long Pulse radar Test Waveform



(3) Frequency Hopping Radar Test Signal

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

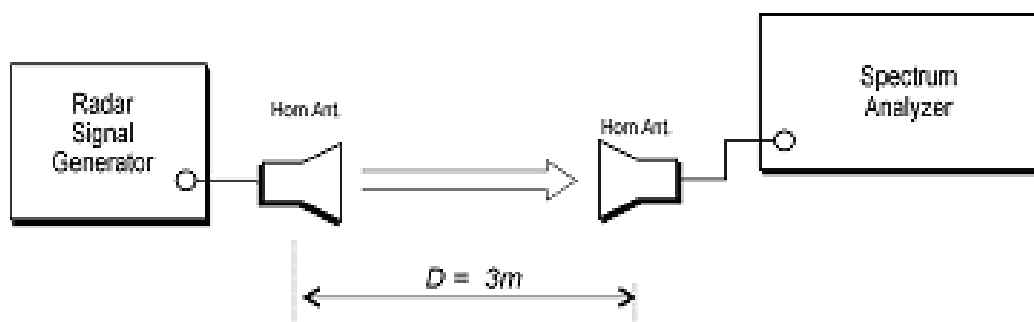
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724 MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues 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.

1.8. Radar Waveform Calibration

The following equipment setup was used to calibrate the conducted radar waveform. A spectrum analyzer was used to establish the test signal level for each radar type. During this process there were replace 50ohm terminal from 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 utilized. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3MHz and 3 MHz.

The signal generator amplitude was set so that the power level measured at the spectrum analyzer was -63dBm due to the interference threshold level is not required.

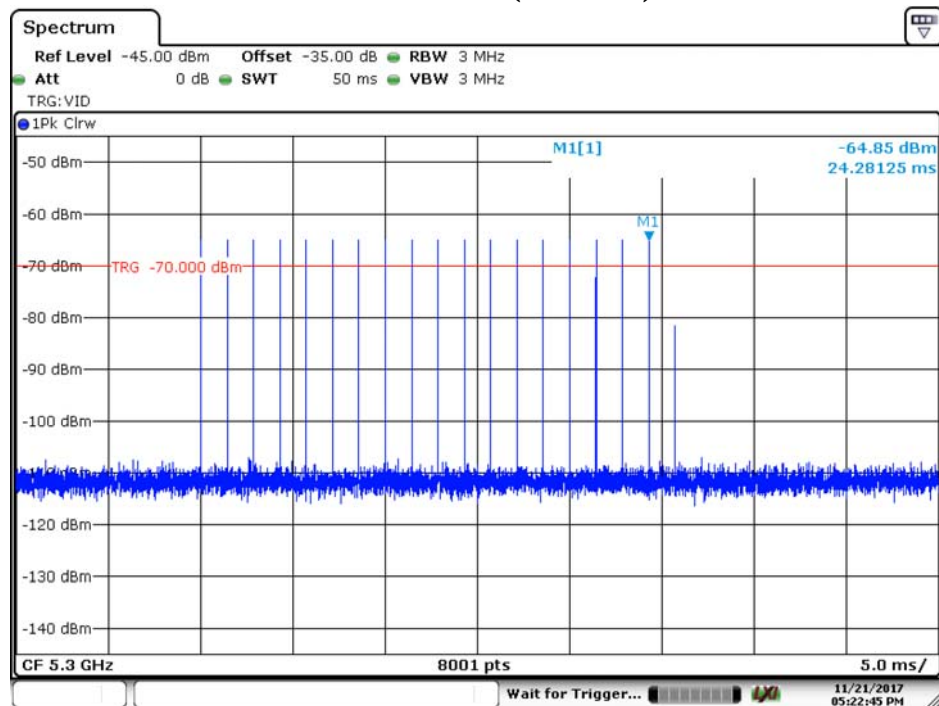
Radiated Calibration Setup



1.9. Radar Waveform Calibration Result

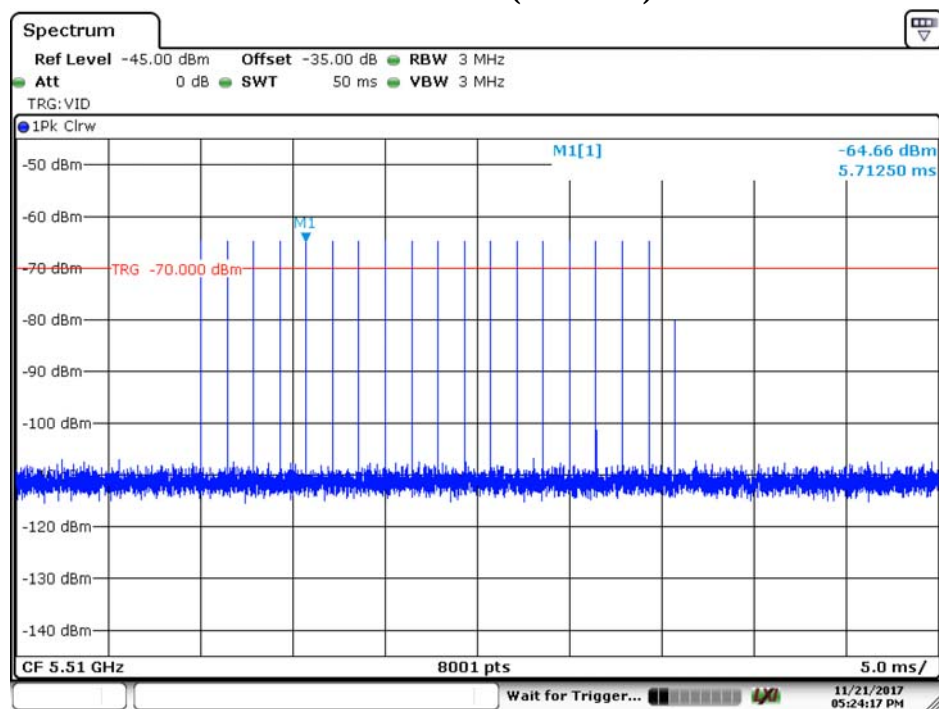
Radar Type 0

Calibration Plot (5300MHz)



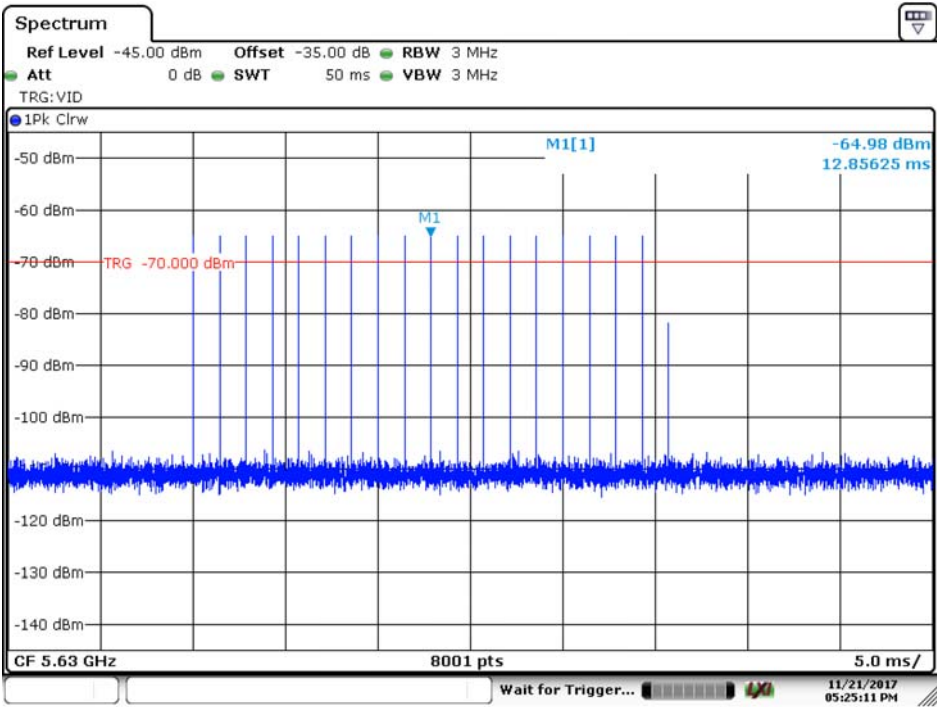
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Calibration Plot (5510MHz)



Date: 21.NOV.2017 17:24:18

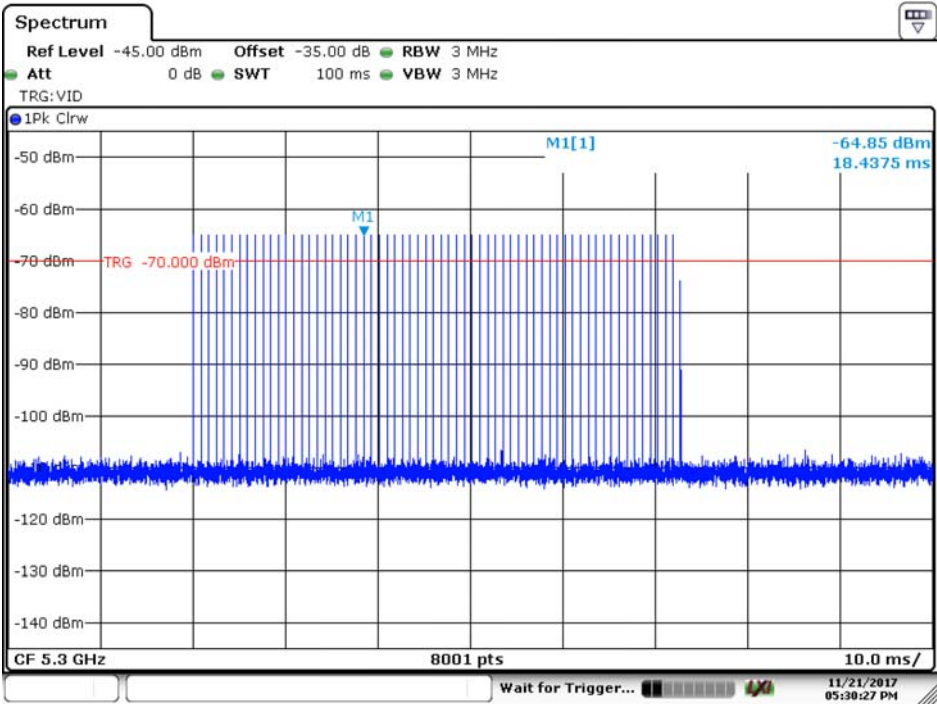
Calibration Plot (5630MHz)



Date: 21.NOV.2017 17:25:11

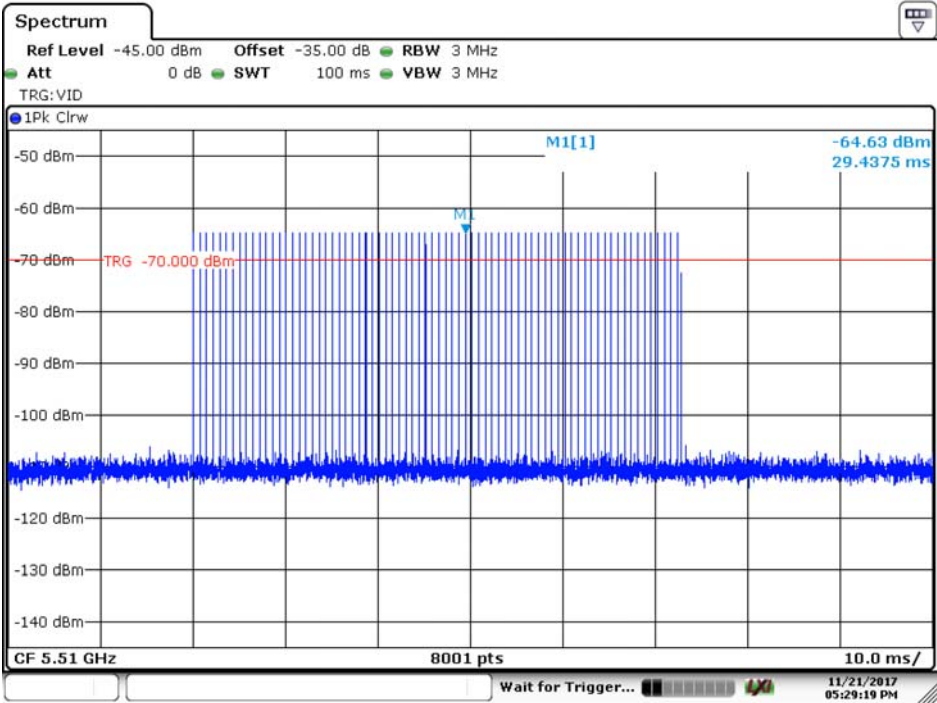
Radar Type 1-A

Calibration Plot (5300MHz)



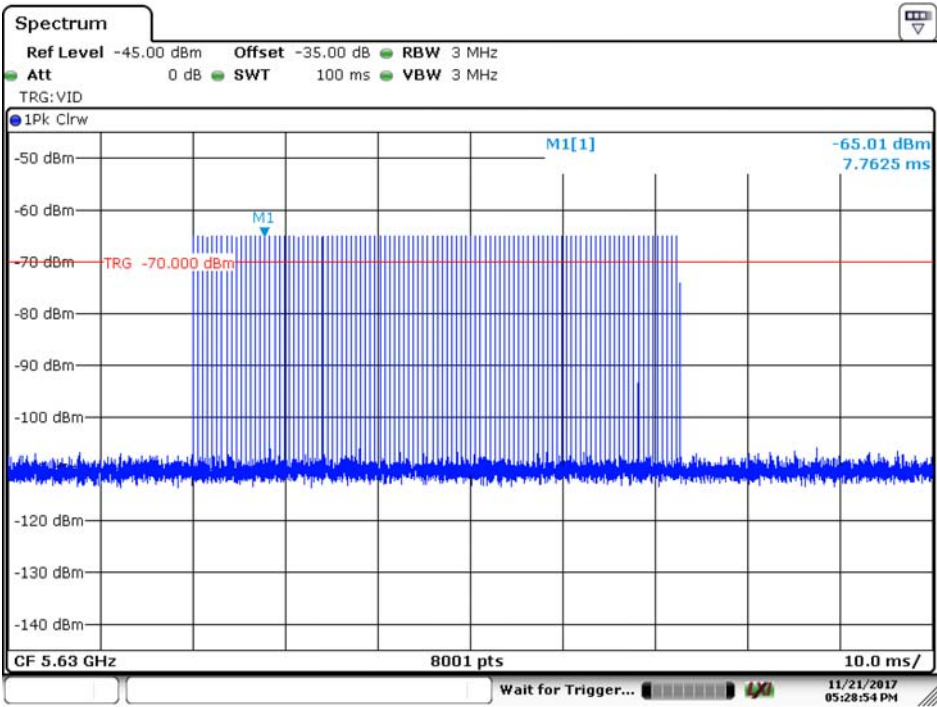
Date: 21.NOV.2017 17:30:27

Calibration Plot (5510MHz)



Date: 21.NOV.2017 17:29:20

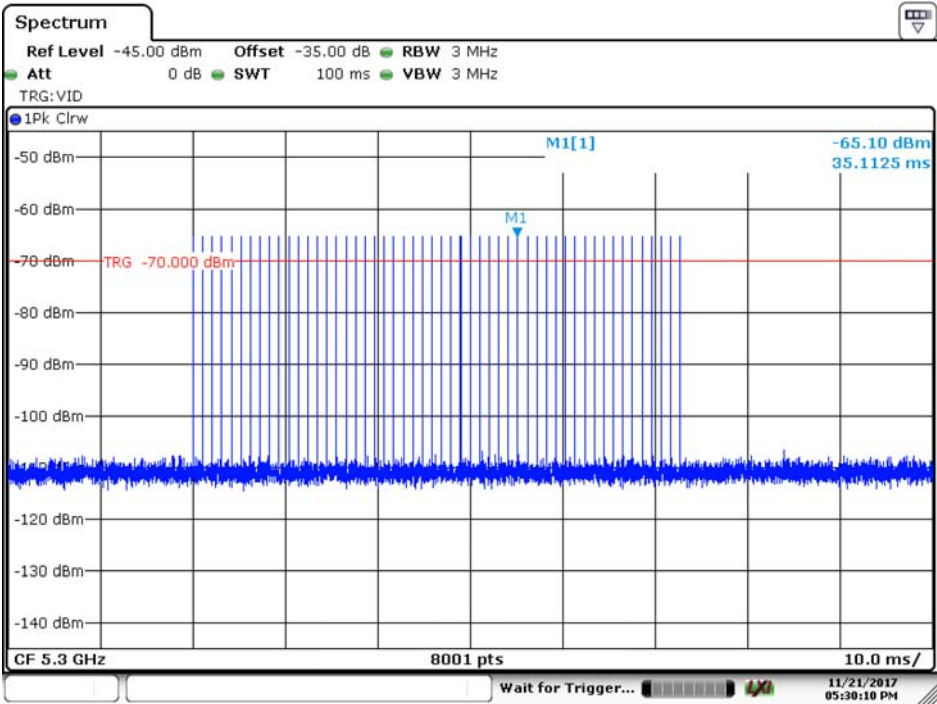
Calibration Plot (5630MHz)



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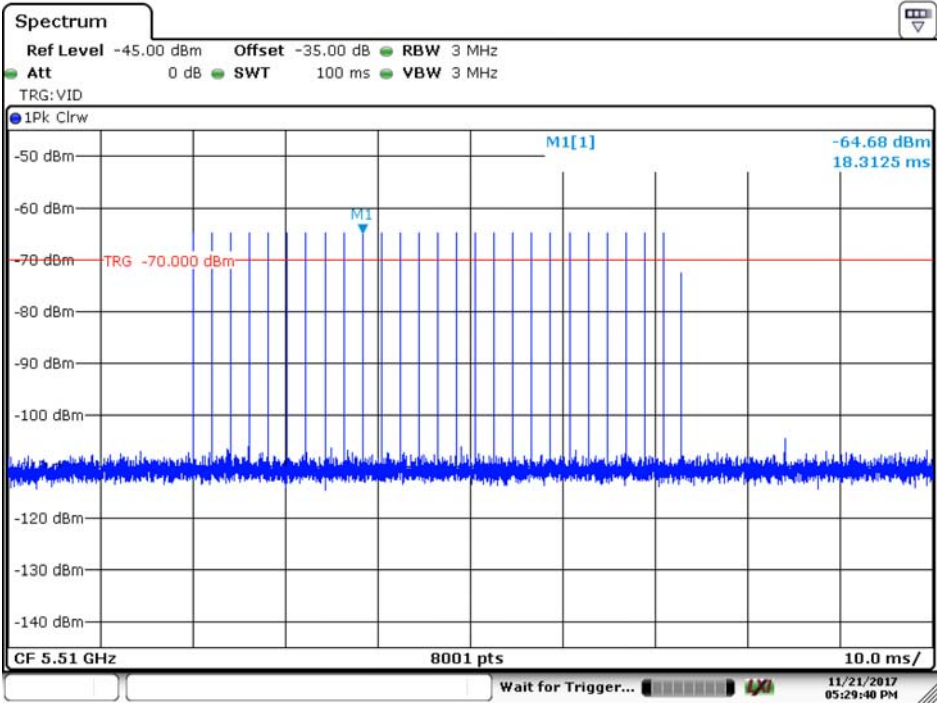
Radar Type 1-B

Calibration Plot (5300MHz)



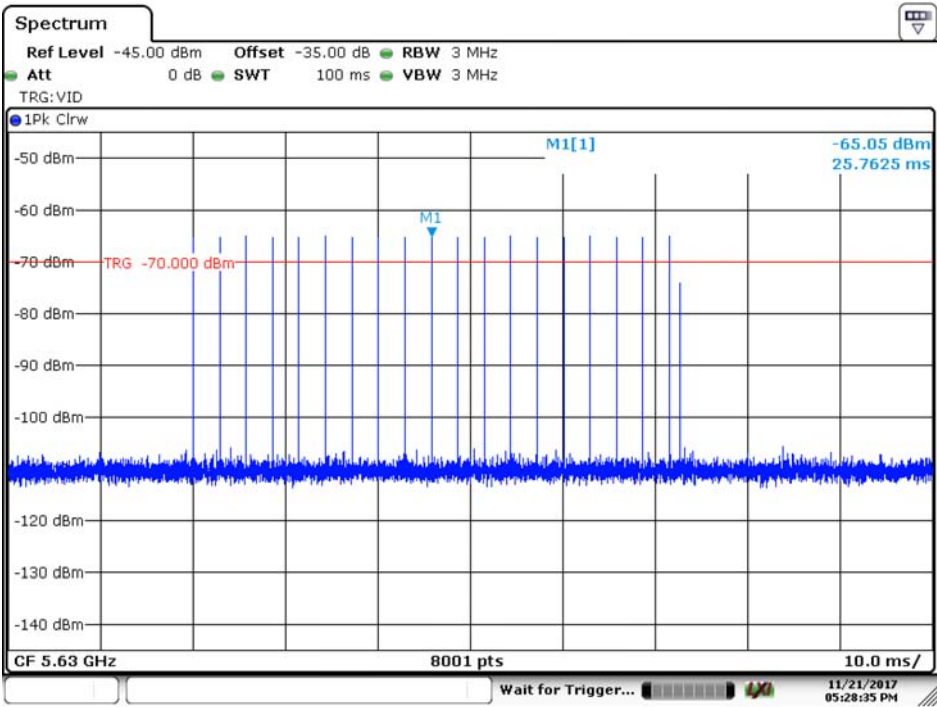
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Calibration Plot (5510MHz)



Date: 21.NOV.2017 17:29:40

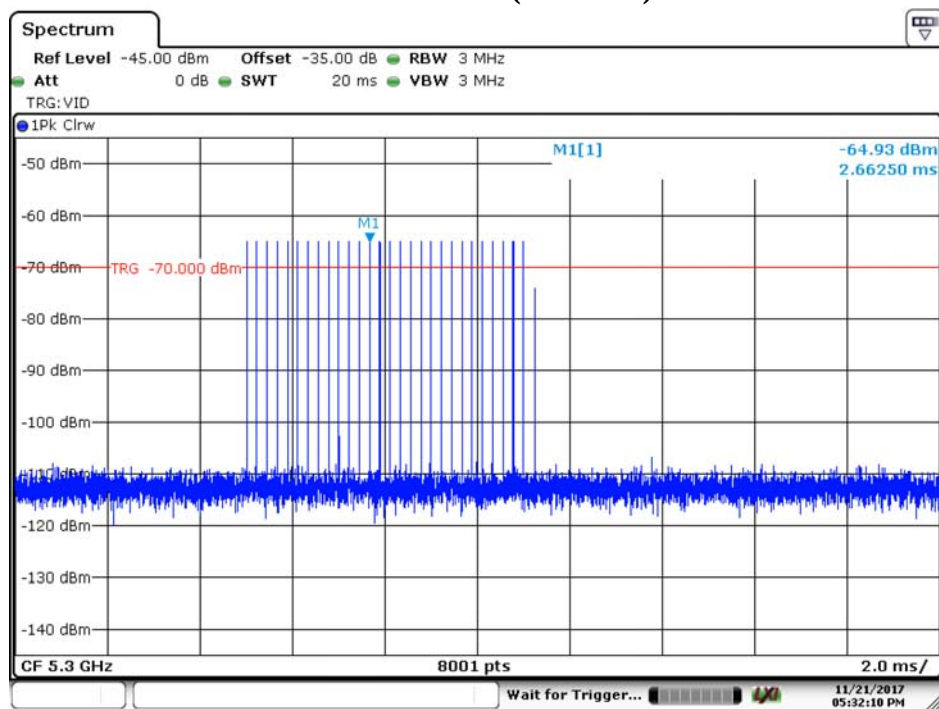
Calibration Plot (5630MHz)



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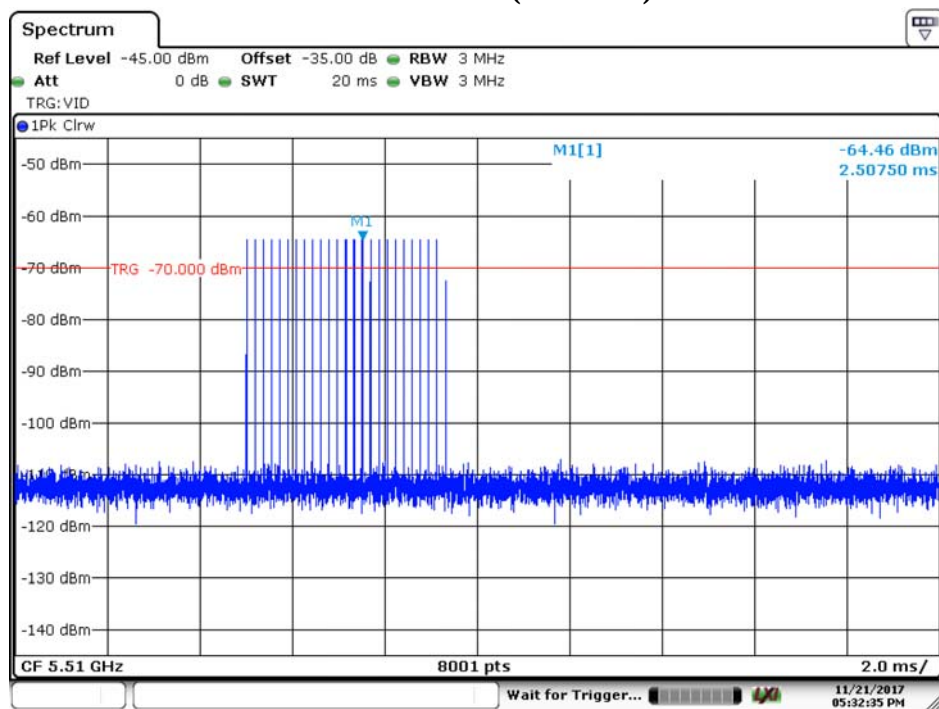
Radar Type 2

Calibration Plot (5300MHz)



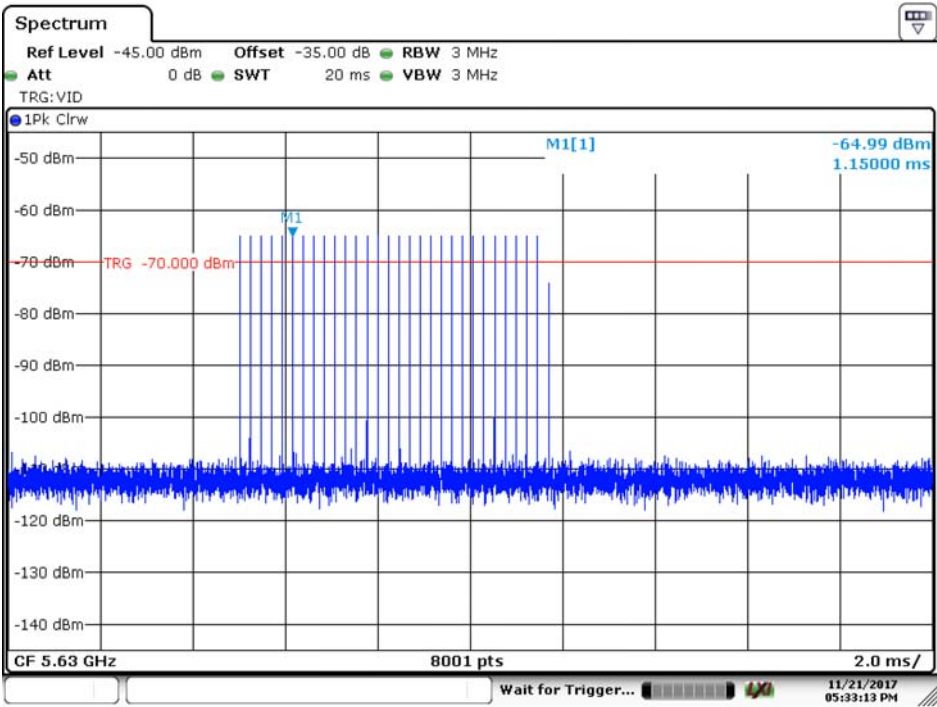
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Calibration Plot (5510MHz)



Date: 21.NOV.2017 17:32:36

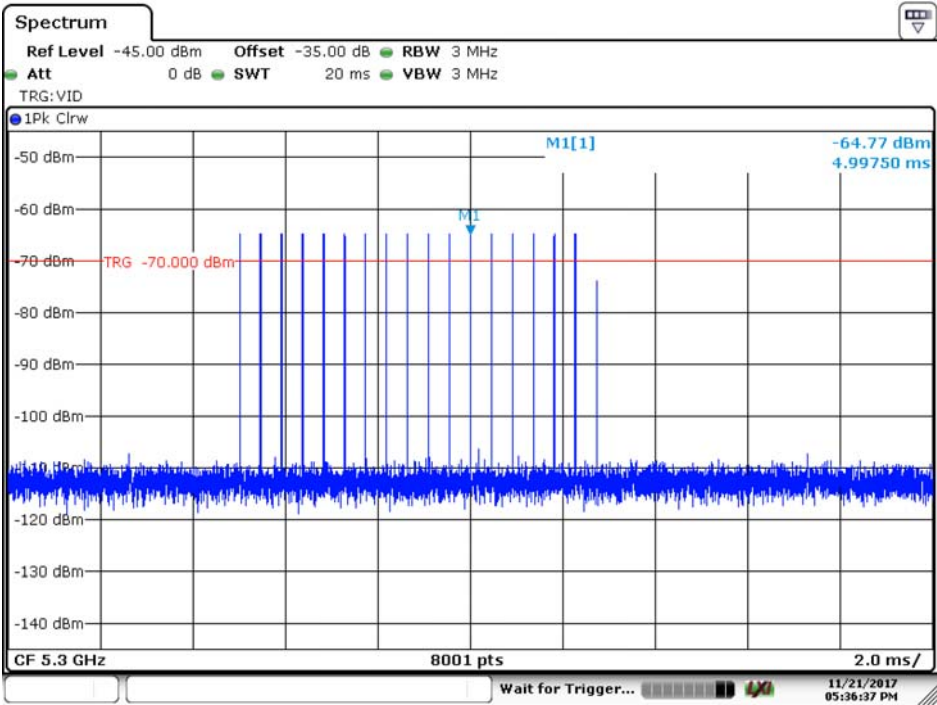
Calibration Plot (5630MHz)



Date: 21.NOV.2017 17:33:13

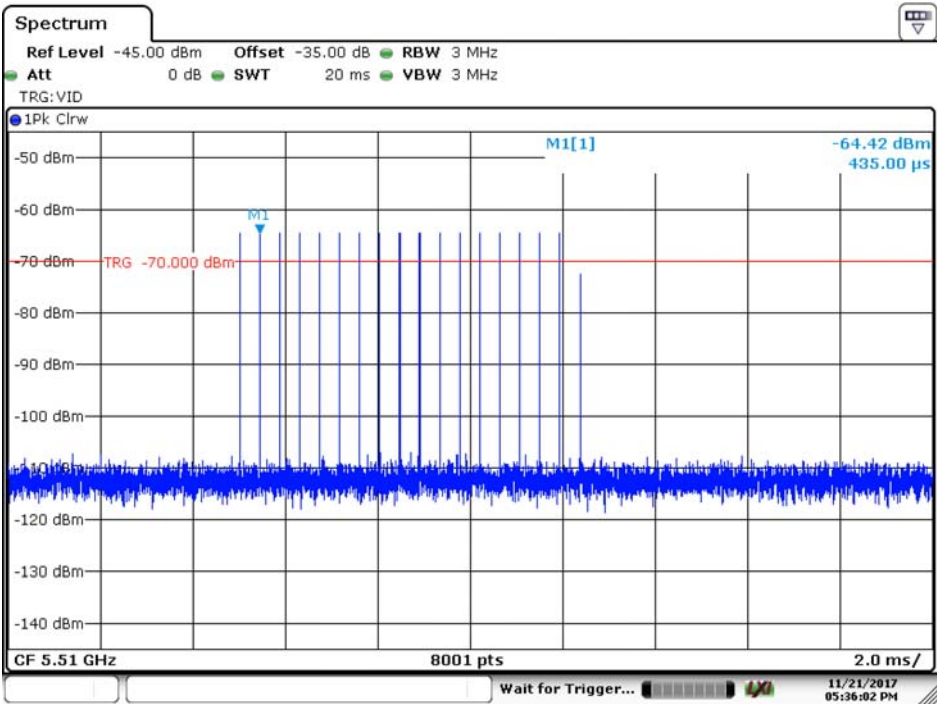
Radar Type 3

Calibration Plot (5300MHz)



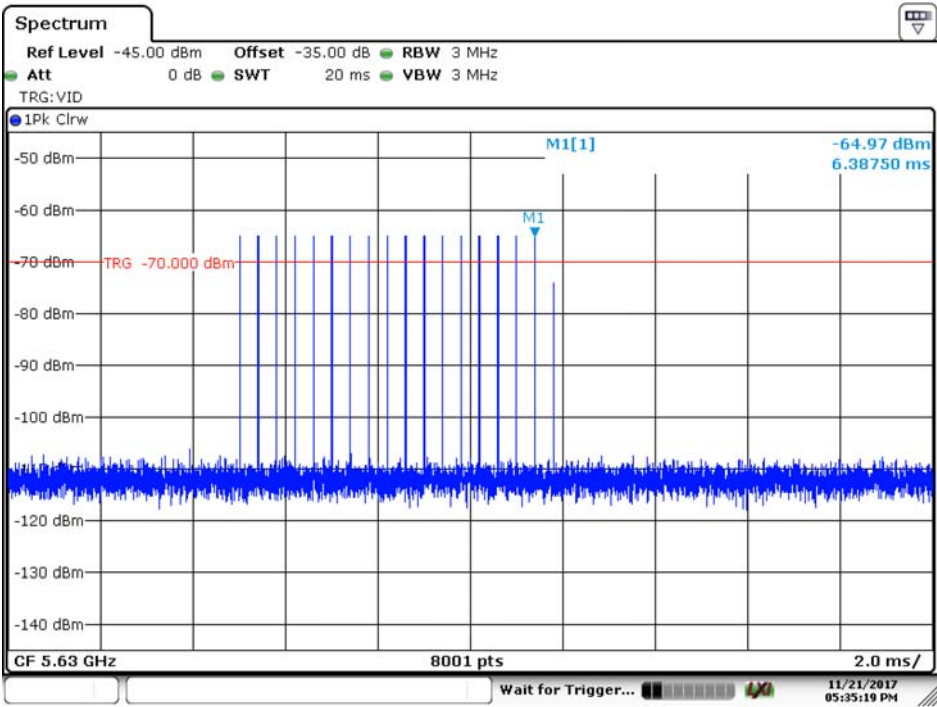
Date: 21.NOV.2017 17:36:38

Calibration Plot (5510MHz)



Date: 21.NOV.2017 17:36:02

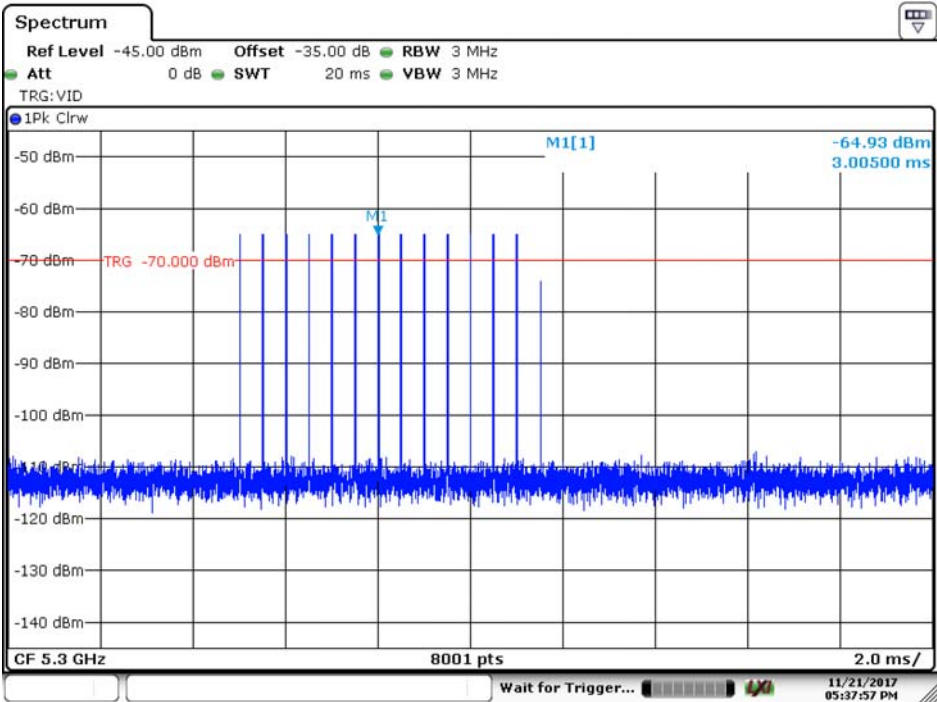
Calibration Plot (5630MHz)



Date: 21.NOV.2017 17:35:20

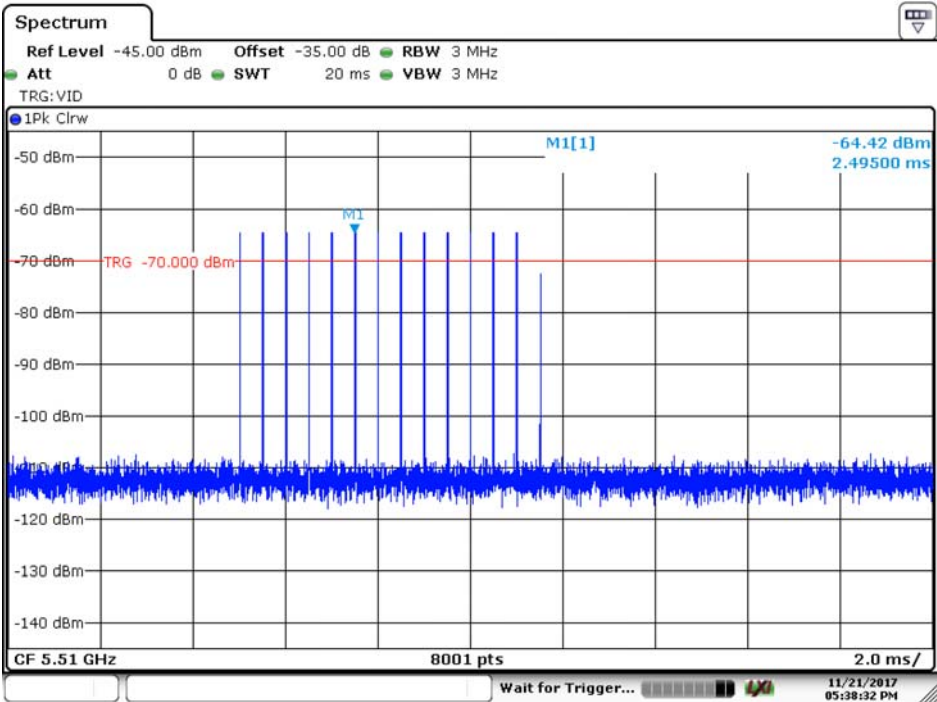
Radar Type 4

Calibration Plot (5300MHz)



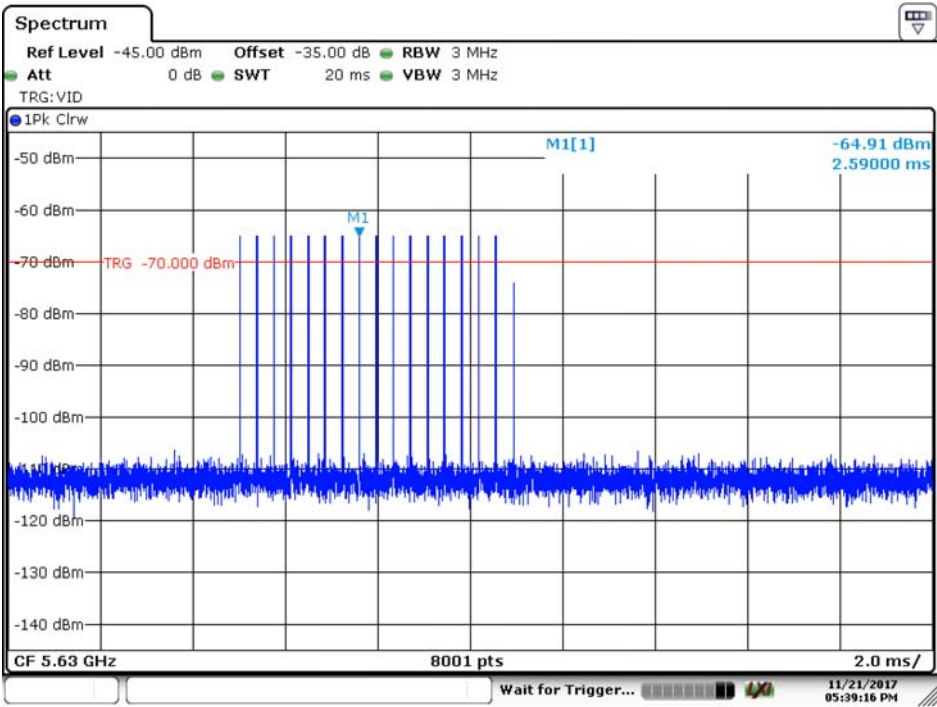
Date: 21.NOV.2017 17:37:57

Calibration Plot (5510MHz)



Date: 21.NOV.2017 17:38:33

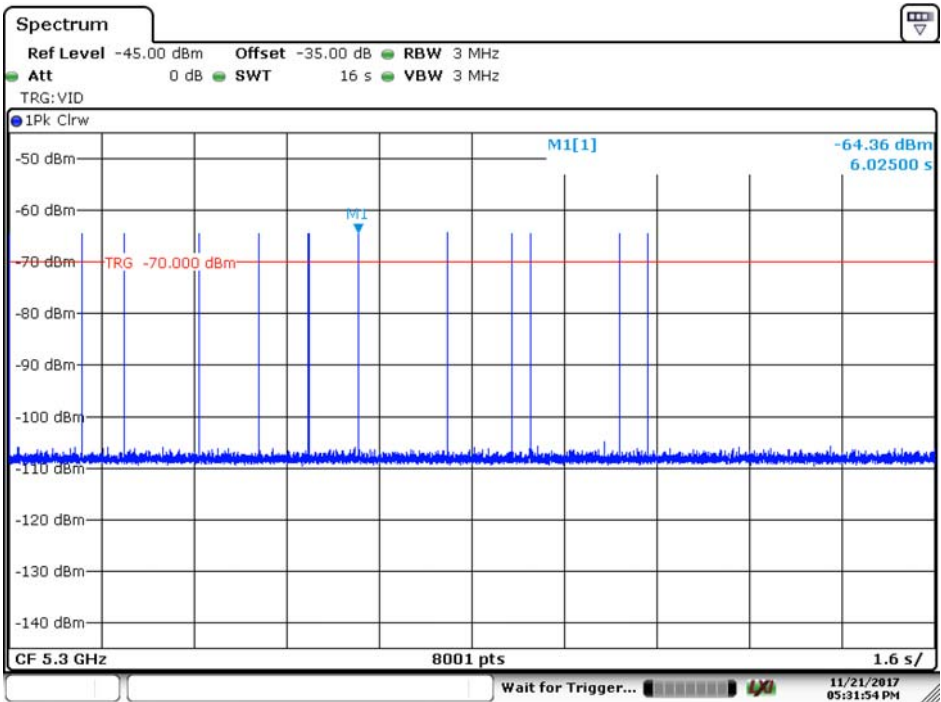
Calibration Plot (5630MHz)



Date: 21.NOV.2017 17:39:16

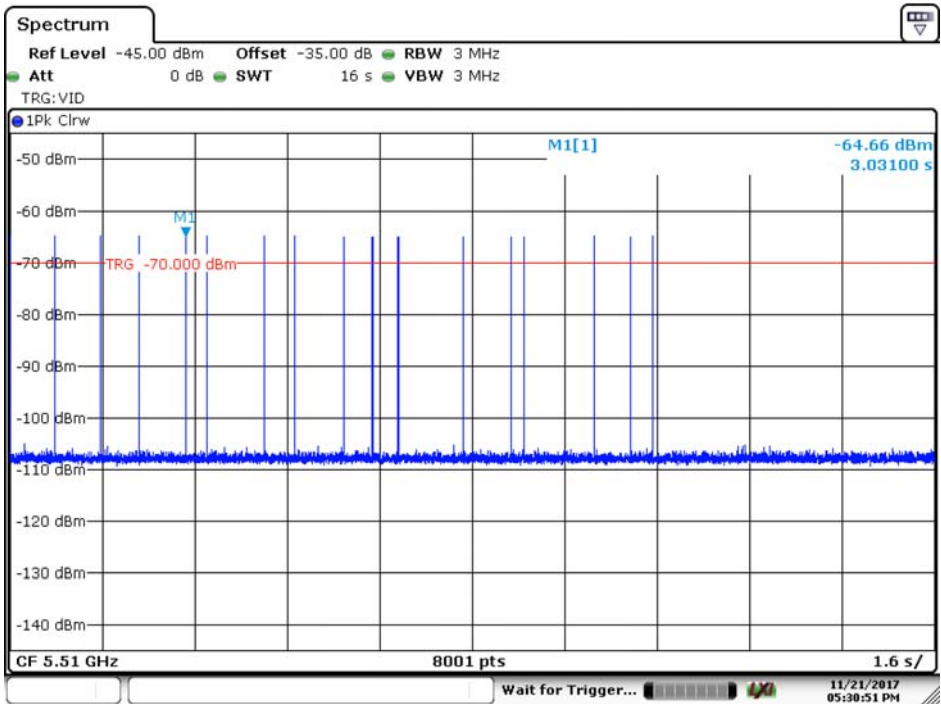
Radar Type 5

Calibration Plot (5300MHz)



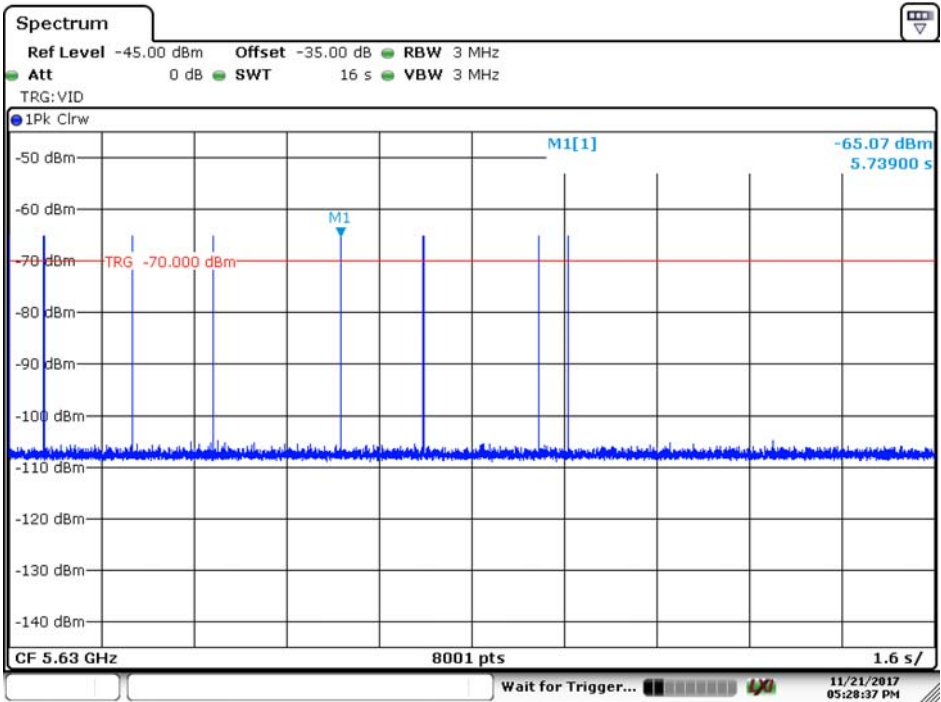
Date: 21.NOV.2017 17:31:54

Calibration Plot (5510MHz)



Date: 21.NOV.2017 17:30:52

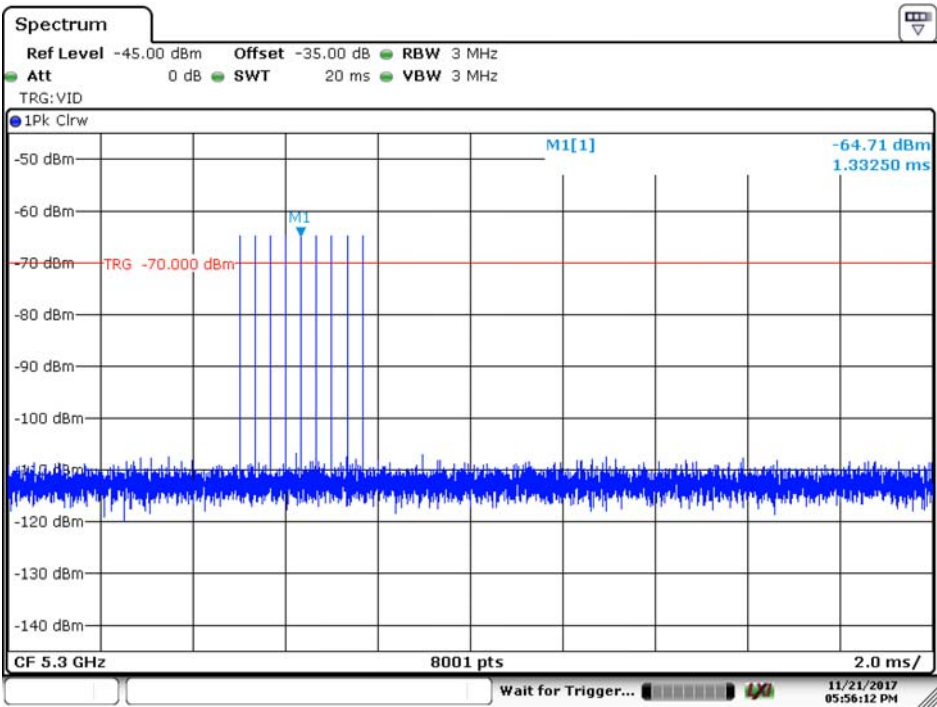
Calibration Plot (5630MHz)



Date: 21.NOV.2017 17:28:38

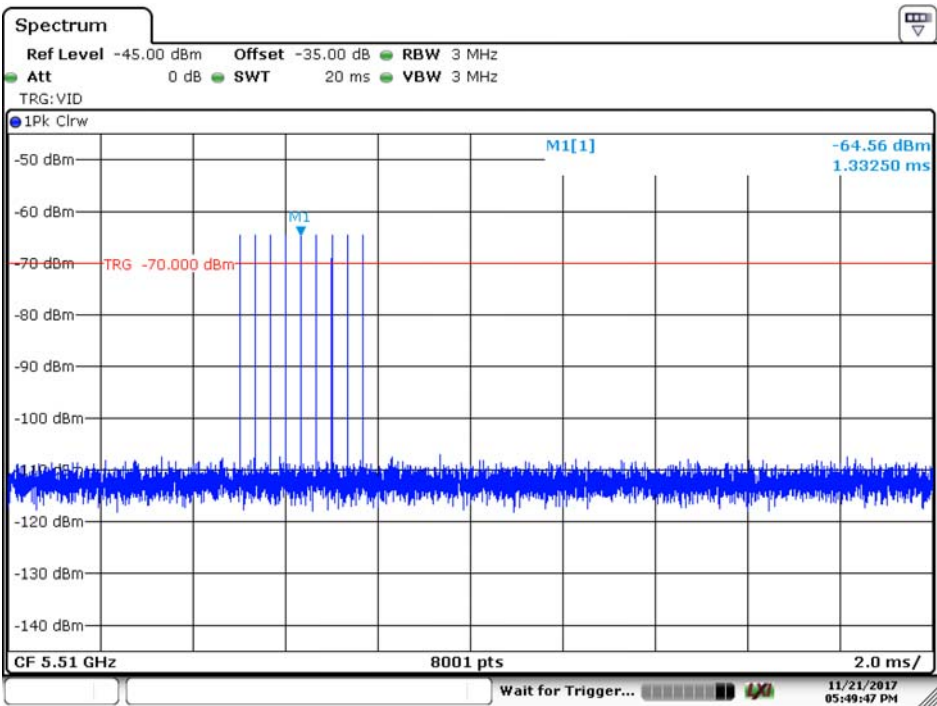
Radar Type 6

Calibration Plot (5300MHz)



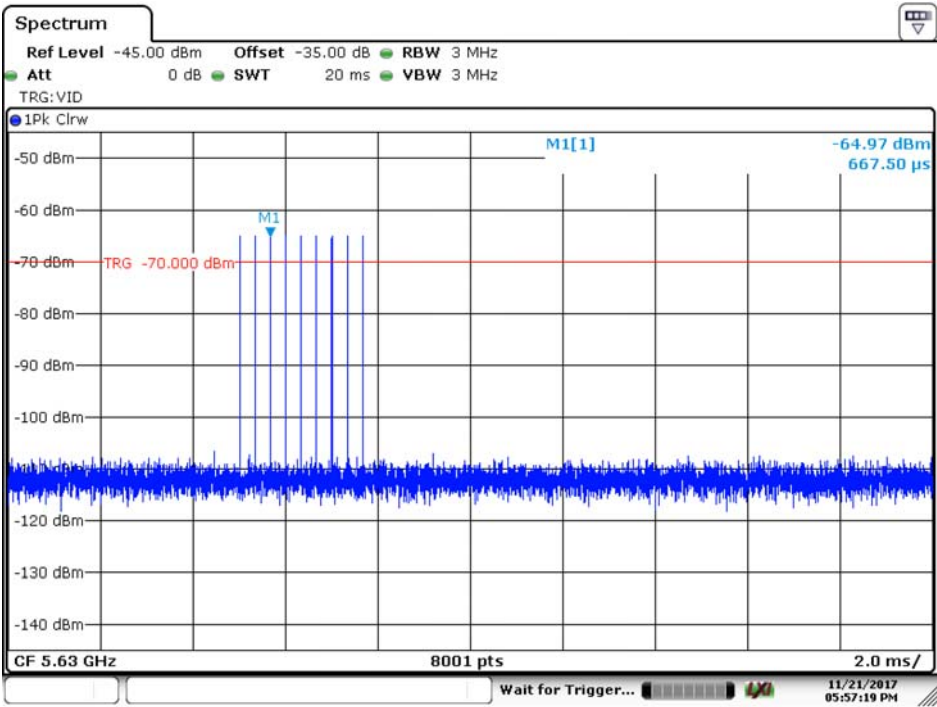
Date: 21.NOV.2017 17:56:12

Calibration Plot (5510MHz)



Date: 21.NOV.2017 17:49:47

Calibration Plot (5630MHz)

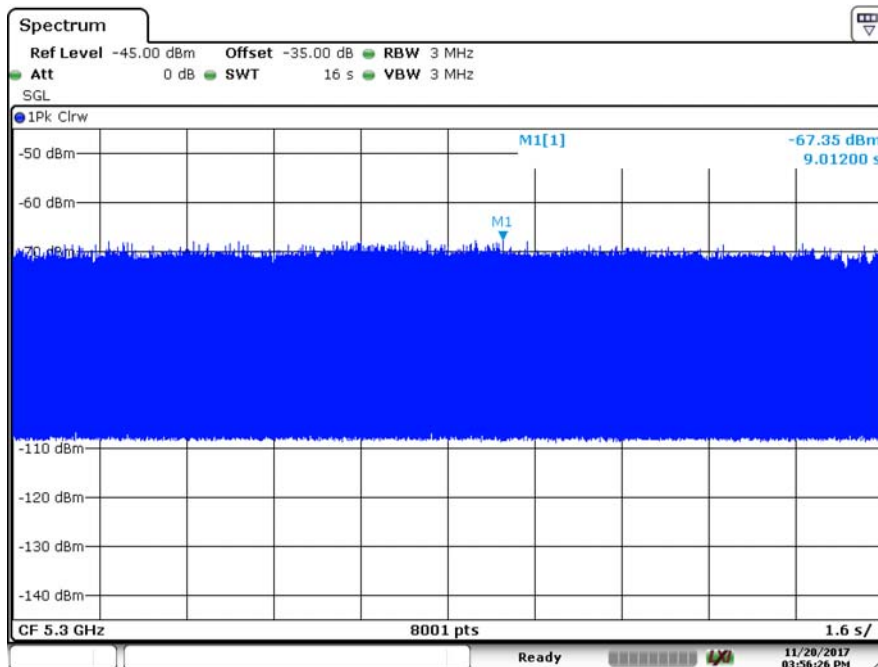


Date: 21.NOV.2017 17:57:19

1.10. Master Data Traffic Plot Result

Test Item : Module 1

Plot of WLAN Traffic at 5300MHz-20BW



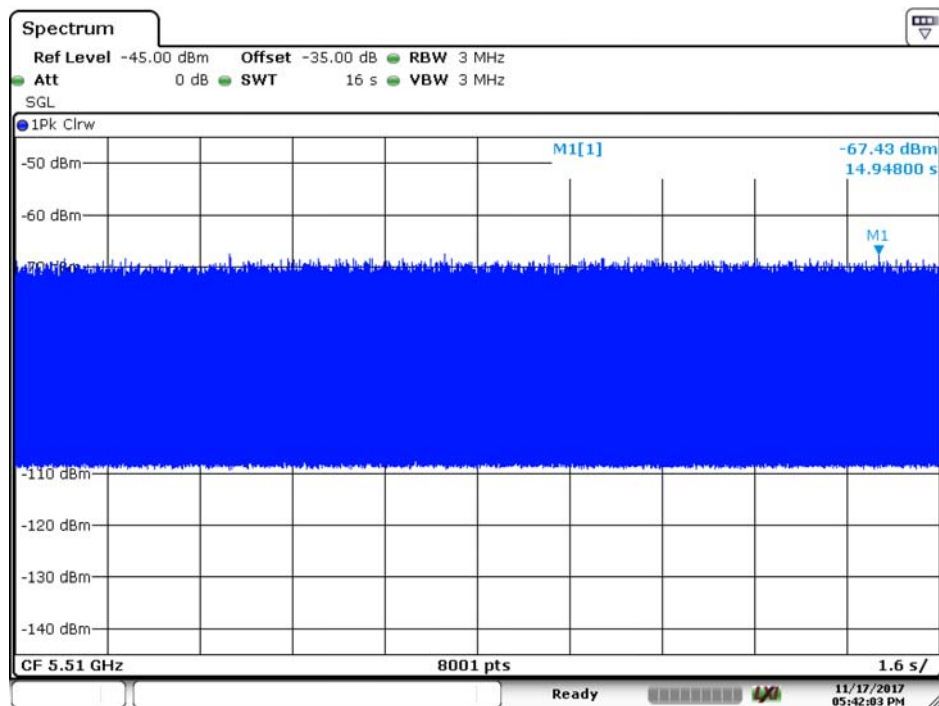
Date: 20.NOV.2017 15:56:26



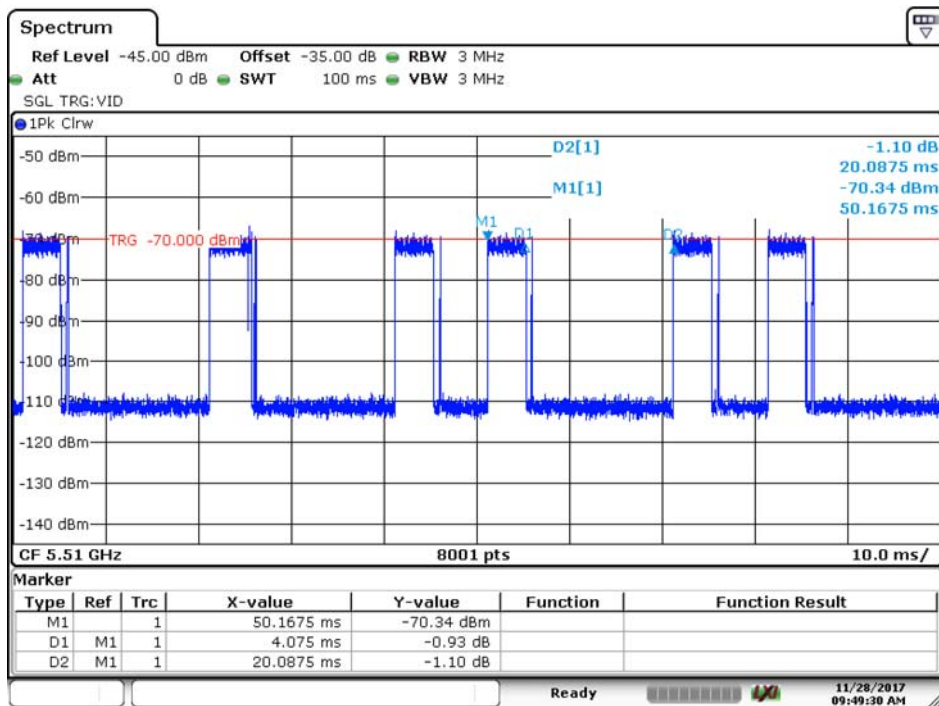
Date: 27.NOV.2017 16:40:34

Channel loading	Requirement loading
21.55%	>17%

Plot of WLAN Traffic at 5510MHz-40BW



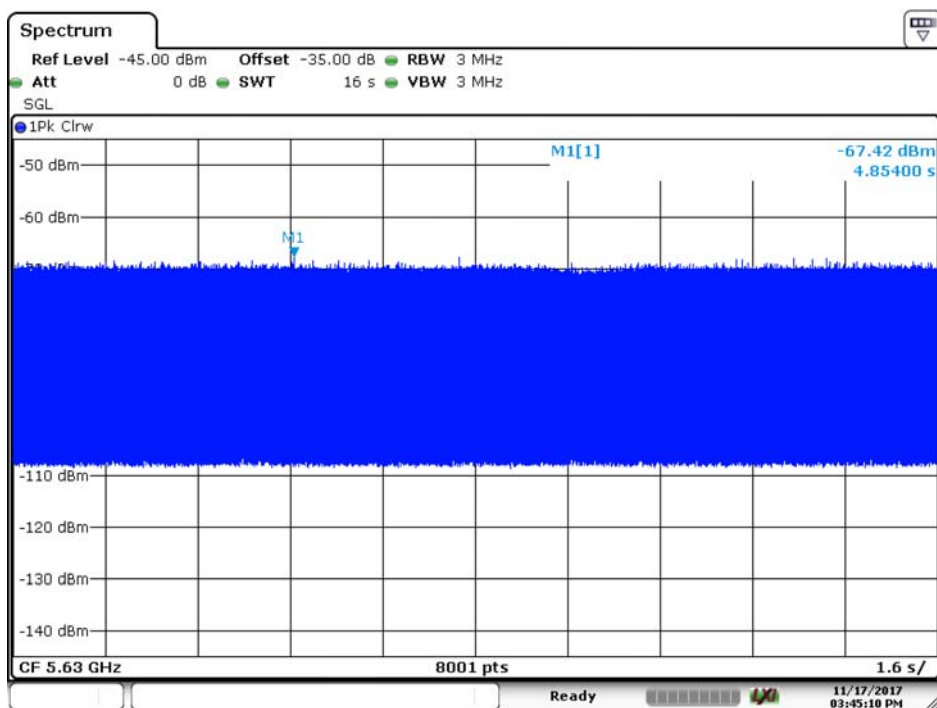
Date: 17.NOV.2017 17:42:03



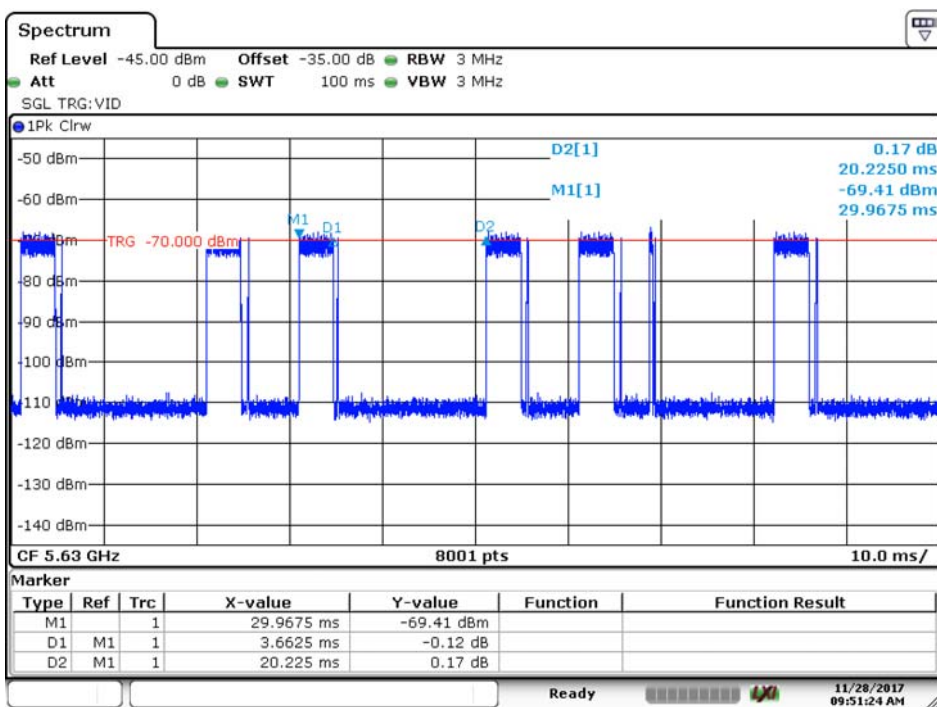
Date: 28.NOV.2017 09:49:30

Channel loading	Requirement loading
20.28%	>17%

Plot of WLAN Traffic at 5630MHz-40BW



Date: 17.NOV.2017 15:45:10

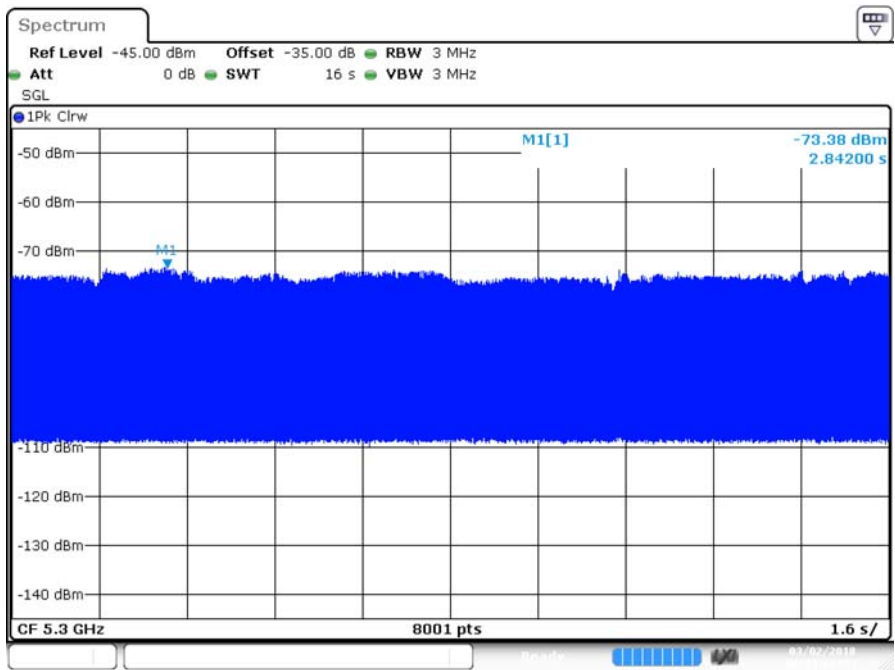


Date: 28.NOV.2017 09:51:24

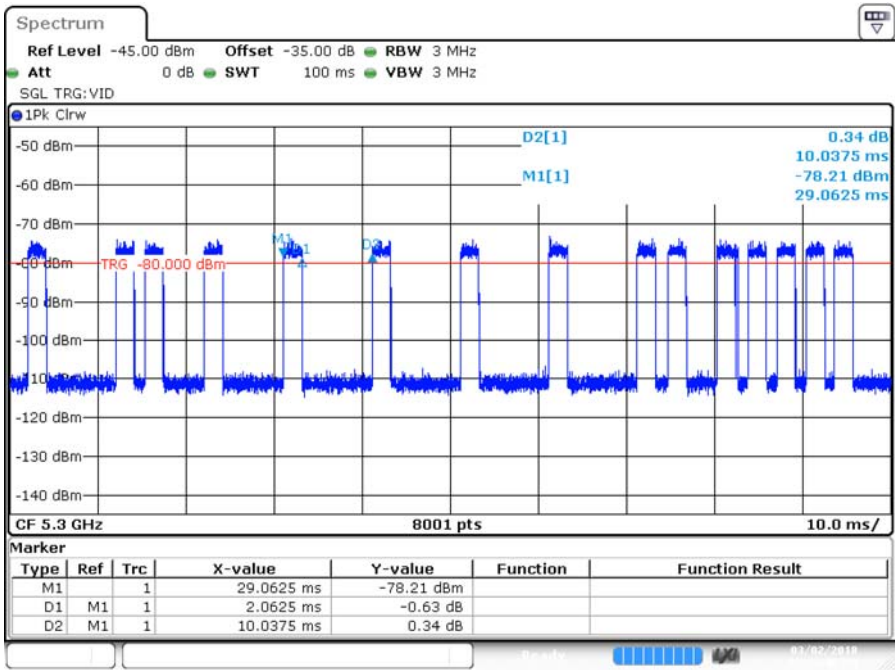
Channel loading	Requirement loading
18.10%	>17%

Test Item : Module 2

Plot of WLAN Traffic at 5300MHz-20BW



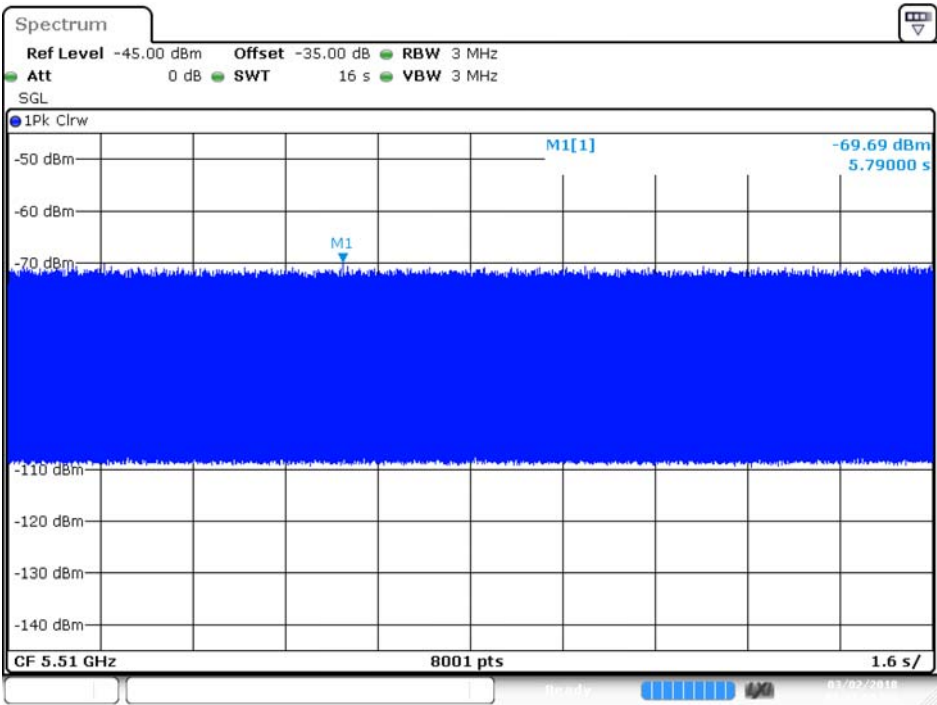
Date: 2 MAR 2018 19:33:26



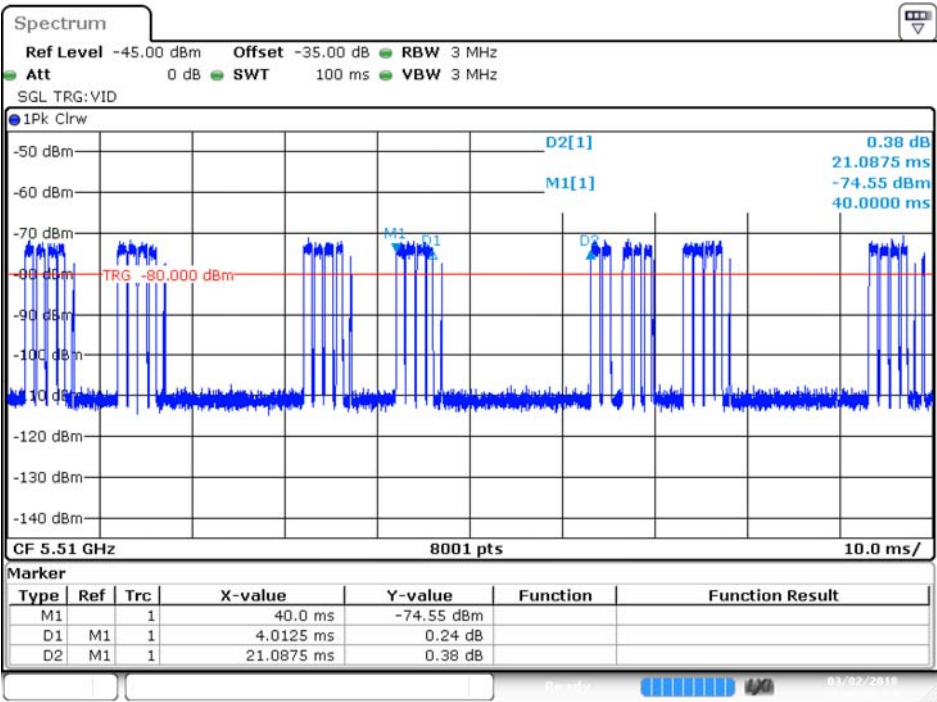
Date: 2 MAR 2018 19:32:41

Channel loading	Requirement loading
20.55%	>17%

Plot of WLAN Traffic at 5510MHz-40BW



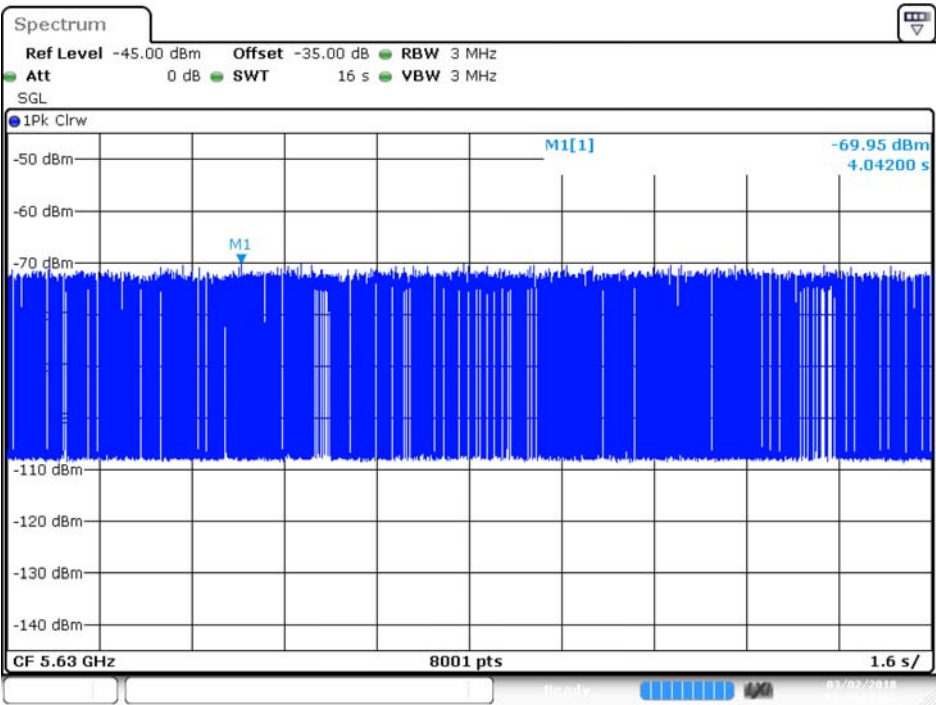
Date: 2.MAR.2018 19:41:57



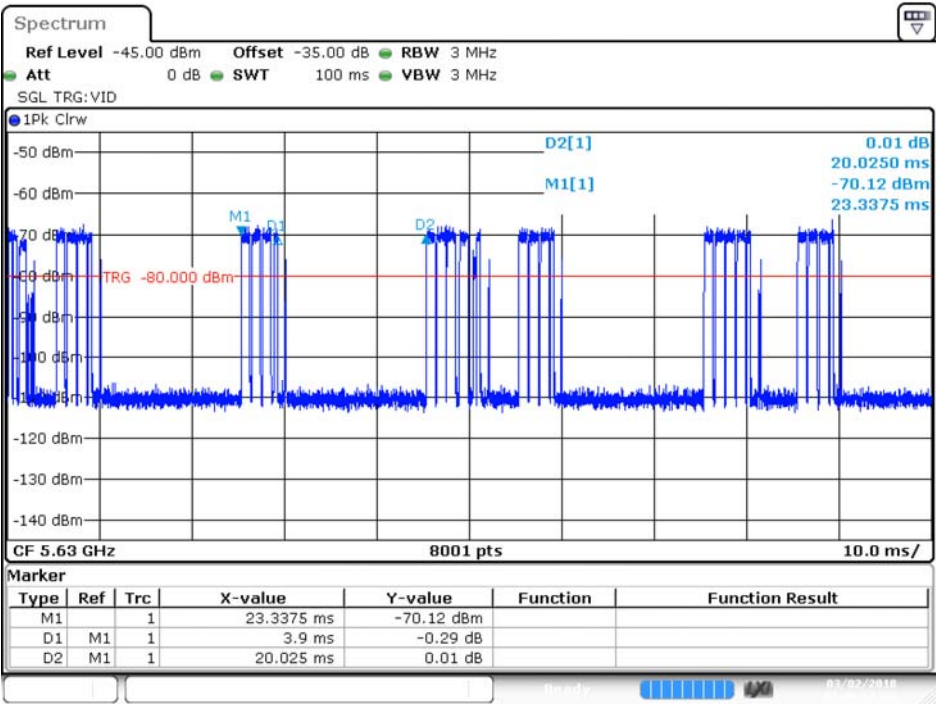
Date: 2.MAR.2018 19:40:08

Channel loading	Requirement loading
19.03%	>17%

Plot of WLAN Traffic at 5630MHz-40BW



Date: 2.MAR.2018 19:20:23



Date: 2.MAR.2018 19:16:57

Channel loading	Requirement loading
19.48%	>17%

2. UNII Detection Bandwidth

2.1. Test Procedure

The EUT was tested according to U-NII test procedure of KDB905462 D02 for compliance to FCC 47CFR 15.407 requirements.

The generating equipment is configured as shown in the radiated Test Setup above. A single *Burst* of the short pulse radar type 0 is produced at 5300MHz and 5510 at a -63dBm level. The EUT is set up as a standalone device (no associated Client and no traffic).

A single radar Burst is generated for a minimum of 10 trials, and the response of the EUT is noted.

The EUT must detect the Radar Waveform 90% or more of the time. The radar frequency is increased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The highest frequency at which detection is greater than or equal to 90% is denoted as F_H .

The radar frequency is decreased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The lowest frequency at which detection is greater than or equal to 90% is denoted as F_L .

The U-NII Detection Bandwidth is calculated as follows:

$$\text{U-NII Detection Bandwidth} = F_H - F_L$$

The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the EUT does not comply with DFS requirements.

2.2. Test Requirement

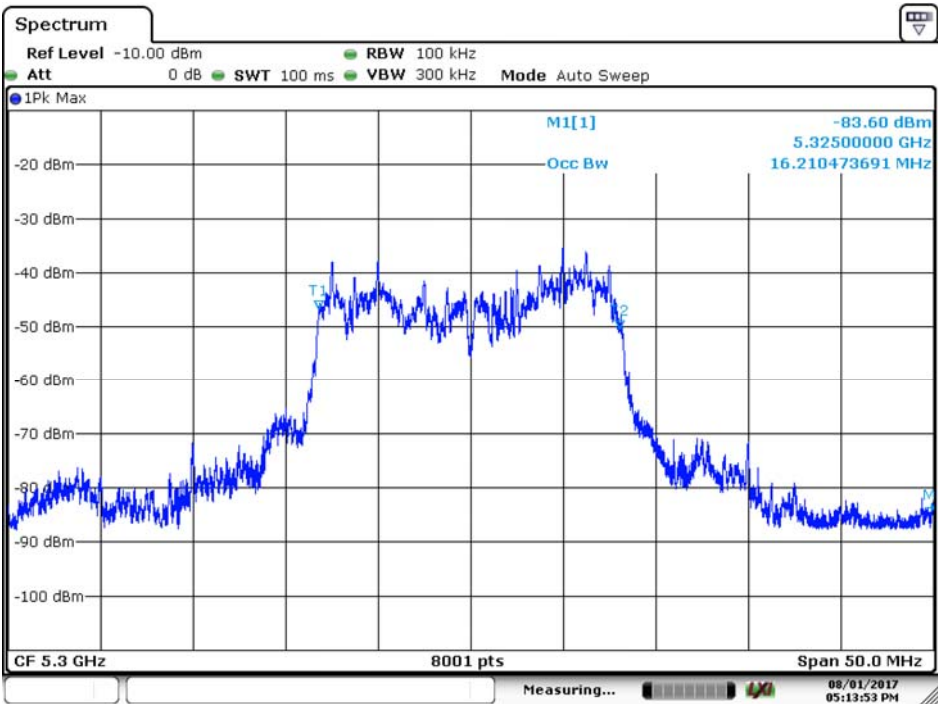
All UNII 20/40MHz and 80MHz channels for this device have identical Channel bandwidths. All UNII 20/40/80MHz channels for this device also have identical Channel bandwidths. Therefore, all DFS testing was done at 5300MHz, 5510MHz, 5630MHz and 5690MHz. The 99% channel bandwidth for 20MHz signals is 16.21 MHz, and the 99% channel bandwidth for 40MHz signals is 36.38 MHz and 40MHz signals is 34.68MHz.

2.3. Uncertainty

$\pm 1\text{ms}$.

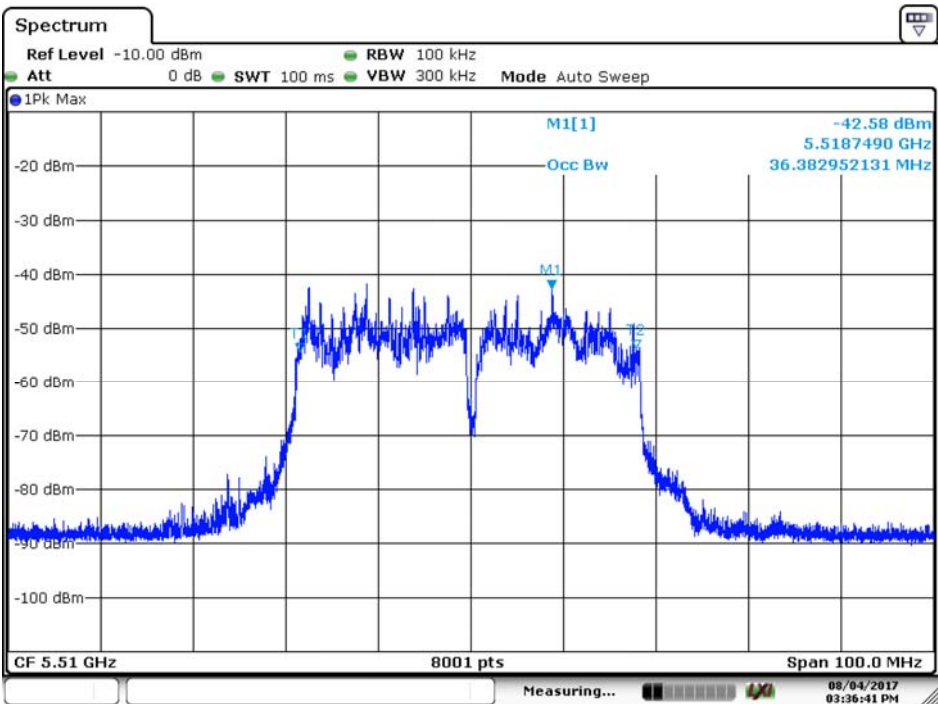
Test Item : Module 1

802.11a



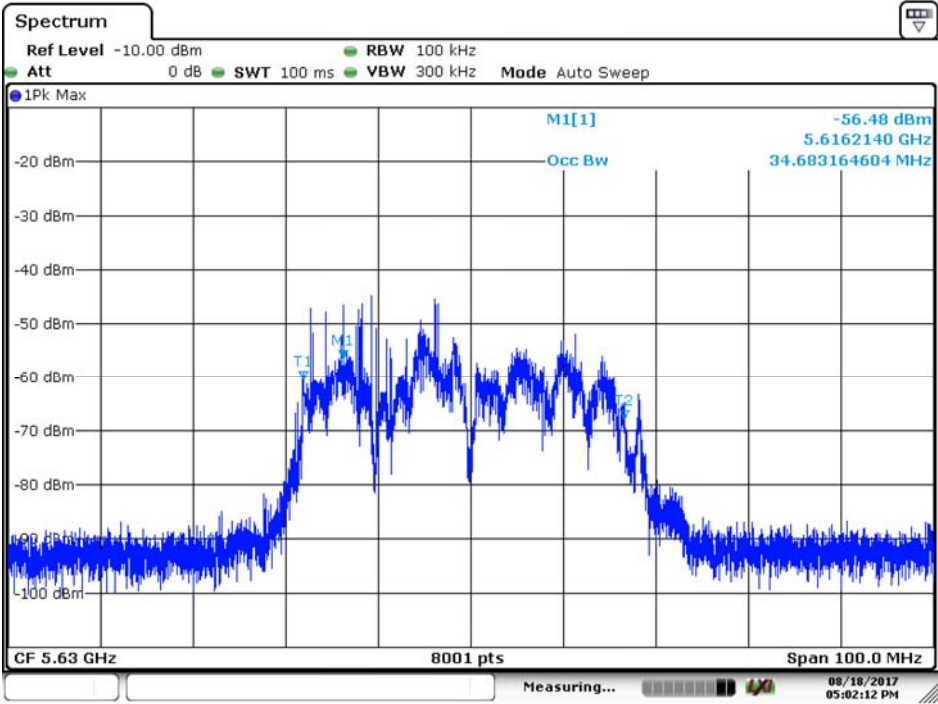
Date: 1.AUG.2017 17:13:53

802.11n-40 BW



Date: 4.AUG.2017 15:36:42

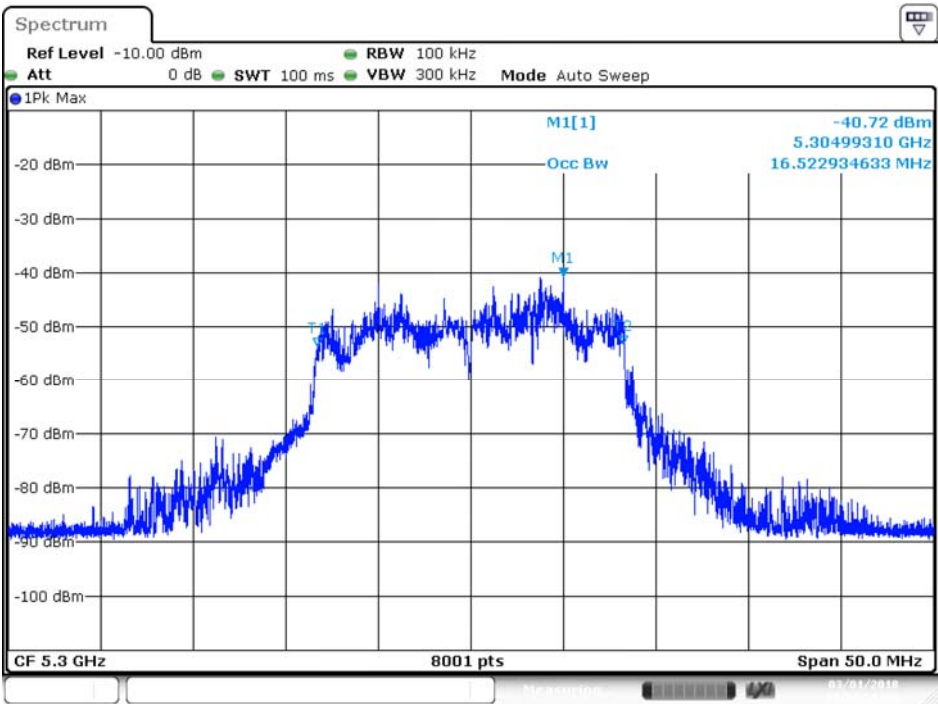
802.11n-40 BW



Date: 18.AUG.2017 17:02:13

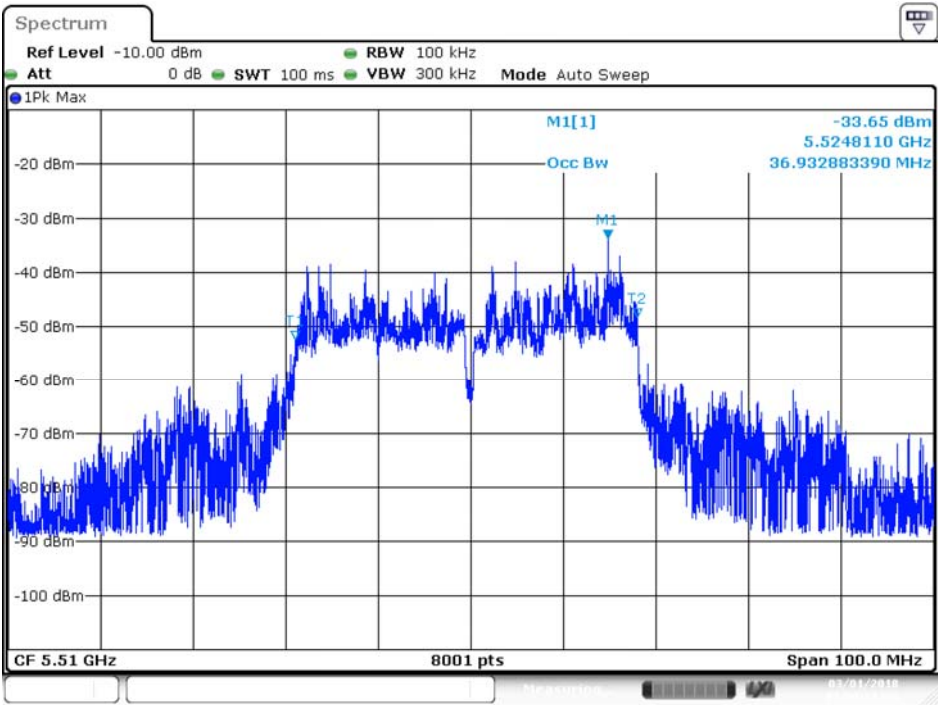
Test Item : Module 2

802.11a



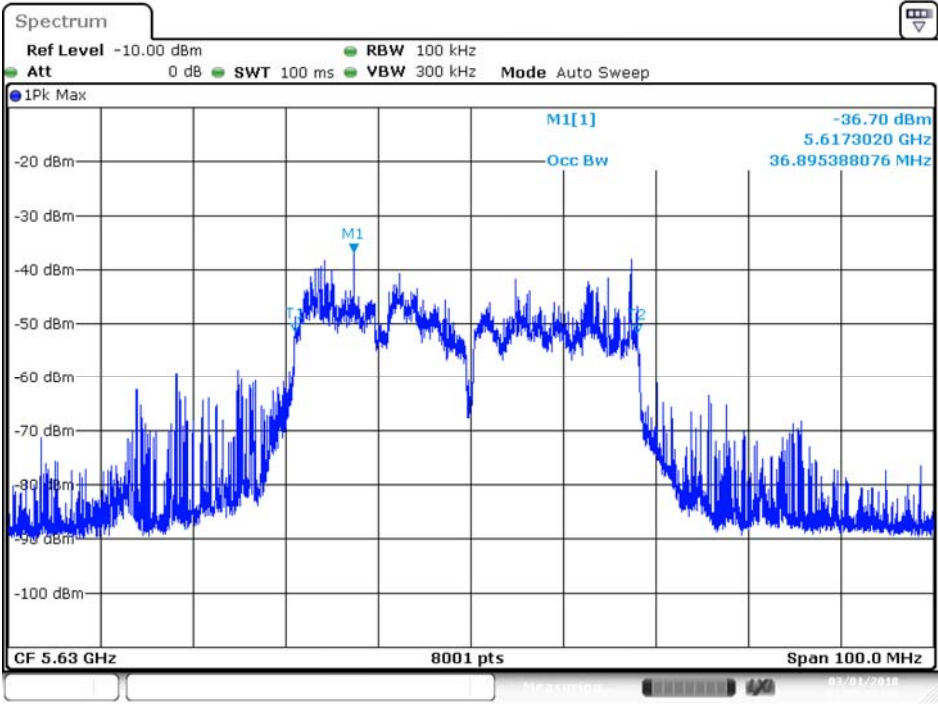
Date: 1.MAR.2018 15:58:58

802.11n-40 BW



Date: 1.MAR.2018 15:50:27

802.11n-40 BW



2.4. Test Result of UNII Detection Bandwidth

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : UNII Detection Bandwidth
 Radar Type : Type 1
 Test Date : 2017/11/10
 Test Mode : Mode 1: Transmit (802.11a)_Module 1

Test Channel: 5300MHz (20BW)											
Radar Frequency (MHz)	DFS Detection Trials (1= Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5290	0	0	0	0	0	0	0	0	0	0	0.00
5291 (FL)	1	1	1	1	1	1	1	1	1	0	90.00
5292	1	1	1	1	0	1	1	1	1	1	90.00
5293	1	1	1	0	1	1	1	1	1	1	90.00
5294	1	1	1	1	1	1	0	1	1	1	90.00
5295	1	1	1	1	1	1	1	1	1	1	100.00
5296	1	1	1	1	1	1	1	1	1	1	100.00
5297	1	1	1	1	1	1	1	1	1	1	100.00
5298	1	1	1	1	1	1	1	1	1	1	100.00
5299	1	1	1	1	1	1	1	1	1	1	100.00
5300	1	1	1	1	1	1	1	1	1	1	100.00
5301	1	1	1	1	1	1	1	1	1	1	100.00
5302	1	1	1	1	1	1	1	1	1	1	100.00
5303	1	1	1	1	1	1	1	1	1	1	100.00
5304	1	1	1	1	1	1	1	1	1	1	100.00
5305	1	1	1	1	1	1	1	1	1	1	100.00
5306	1	1	1	1	1	1	1	1	1	1	100.00
5307	1	1	1	1	1	1	1	1	1	1	100.00
5308 (FH)	1	1	1	1	1	1	1	1	1	1	100.00
5309	1	1	1	1	1	1	0	1	0	1	80.00
5310	0	0	0	0	0	0	0	0	0	0	0.00
Detection Bandwidth = FH - FL = 5308MHz - 5291MHz = 17MHz											
EUT 99% Bandwidth = 16.2100MHz											
UNII Detection Bandwidth Min. Limit = 16.21MHz * 100% = 16.21MHz											

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : UNII Detection Bandwidth
 Radar Type : Type 1
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Test Channel: 5510MHz (n-40BW)											
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	0.00
5491	0	0	0	0	0	0	0	0	0	0	0.00
5492 (FL)	1	1	1	1	1	1	1	1	1	1	100.00
5493	1	1	1	1	1	1	1	1	1	1	100.00
5494	1	1	1	1	1	1	1	1	1	1	100.00
5495	1	1	1	1	1	1	1	1	1	1	100.00
5496	1	1	1	1	1	1	1	1	1	1	100.00
5497	1	1	1	1	1	1	1	1	1	1	100.00
5498	1	1	1	1	1	1	1	1	1	1	100.00
5499	1	1	1	1	1	1	1	1	1	1	100.00
5500	1	1	1	1	1	1	0	1	1	1	90.00
5501	1	1	1	1	1	1	1	1	1	0	90.00
5502	1	1	1	1	1	1	1	1	1	1	100.00
5503	1	1	1	1	1	1	1	1	1	0	90.00
5504	1	1	1	1	1	1	1	1	1	1	100.00
5505	1	1	1	1	1	1	1	1	1	1	100.00
5506	1	1	1	1	1	1	1	0	1	1	90.00
5507	1	1	1	1	1	1	1	1	1	1	100.00
5508	1	1	1	1	1	1	1	1	0	1	90.00
5509	1	1	1	1	1	1	1	1	1	0	90.00
5510	1	1	1	1	1	1	1	1	1	0	90.00
5511	1	1	1	1	1	1	1	0	1	1	90.00
5512	1	1	1	1	1	1	1	1	1	1	100.00
5513	1	1	1	1	1	1	1	1	1	1	100.00
5514	1	1	1	1	1	1	1	1	1	1	100.00
5515	1	1	1	1	1	1	1	1	1	1	100.00
5516	1	1	1	1	1	1	1	1	1	1	100.00
5517 (FH)	1	1	1	1	1	1	1	1	1	1	100.00
5518	1	1	1	1	1	1	1	0	1	1	90.00
5519	1	1	1	1	1	1	1	1	1	1	100.00
5520	1	1	1	1	1	1	1	1	1	1	100.00
5521	1	1	1	1	1	1	1	1	1	1	100.00
5522	1	1	1	1	1	1	1	0	1	1	90.00
5523	1	1	1	1	1	1	1	1	1	1	100.00
5524	1	1	1	1	1	1	1	1	1	1	100.00
5525	1	1	1	1	1	1	1	1	1	1	100.00
5526	1	1	1	1	1	1	1	1	1	1	100.00
5527	1	1	1	1	1	1	1	1	0	1	90.00
5528	1	1	1	1	1	1	1	1	1	0	90.00
5529	1	1	1	1	1	1	1	1	0	1	90.00
5530	0	0	0	0	0	0	0	0	0	0	0.00
Detection Bandwidth = FH - FL = 5529MHz - 5492MHz = 37MHz											
EUT 99% Bandwidth = 36.3820MHz											
UNII Detection Bandwidth Min. Limit = 36.382MHz * 100% = 36.382MHz											

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : UNII Detection Bandwidth
 Radar Type : Type 1
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Test Channel: 5630MHz (n-40BW)											
Radar Frequency (MHz)	DFS Detection Trials (1= Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5610	1	1	1	1	1	1	1	0	0	1	80.00
5611 (FL)	1	1	1	1	1	1	0	1	1	1	90.00
5612	1	1	1	1	1	1	1	1	1	1	100.00
5613	1	1	1	1	1	1	0	1	1	1	90.00
5614	1	1	1	1	1	1	1	1	1	1	100.00
5615	1	1	1	1	1	1	1	1	0	1	90.00
5616	1	1	1	1	1	1	1	1	1	1	100.00
5617	1	1	1	1	1	1	1	1	0	1	90.00
5618	1	1	1	1	1	0	1	1	1	1	90.00
5619	1	1	1	1	1	1	1	1	1	1	100.00
5620	1	1	1	1	1	0	1	1	1	1	90.00
5621	1	1	1	1	1	1	1	1	1	1	100.00
5622	1	1	1	1	1	1	0	1	1	1	90.00
5623	1	1	1	1	1	1	1	1	1	1	100.00
5624	1	1	1	1	1	1	1	1	0	1	90.00
5625	1	1	1	1	1	1	1	1	1	1	100.00
5626	1	1	1	1	1	1	1	0	1	1	90.00
5627	1	1	1	1	1	1	1	1	1	1	100.00
5628	1	1	1	1	1	0	1	1	1	1	90.00
5629	1	1	1	1	1	1	1	1	1	1	100.00
5630	1	1	1	1	1	0	1	1	1	1	90.00
5631	1	1	1	1	1	1	1	0	1	1	90.00
5632	1	1	1	1	1	1	0	1	1	1	90.00
5633	1	1	1	1	1	1	1	1	1	1	100.00
5634	1	1	1	1	1	1	1	1	1	1	100.00
5635	1	1	1	1	0	1	1	1	1	1	90.00
5636	1	1	1	1	1	1	1	1	1	1	100.00
5637	1	1	1	1	1	1	1	1	1	1	100.00
5638	1	1	1	0	1	1	1	1	1	1	90.00
5639	1	1	1	1	1	1	1	1	1	1	100.00
5640	1	1	1	1	1	1	0	1	1	1	90.00
5641	1	1	1	1	1	1	1	0	1	1	90.00
5642	1	1	1	1	1	1	1	1	1	1	100.00
5643	1	1	1	1	1	1	1	1	1	1	100.00
5644	1	1	1	1	1	1	1	0	1	1	90.00
5645	1	1	1	1	1	1	1	1	1	1	100.00
5646	1	1	1	1	1	1	1	0	1	1	90.00
5647	1	1	1	1	1	1	1	1	0	1	90.00
5648 (FH)	1	1	1	1	1	1	1	1	1	1	100.00
5649	1	1	1	1	1	0	1	1	0	1	80.00
5650	0	0	0	0	0	0	0	0	0	0	0.00
Detection Bandwidth = FH - FL = 5648MHz - 5611MHz = 37MHz											
EUT 99% Bandwidth = 34.683 MHz											
UNII Detection Bandwidth Min. Limit = 34.683MHz * 100% = 34.683MHz											

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : UNII Detection Bandwidth
 Radar Type : Type 1
 Test Date : 2018/03/01
 Test Mode : Mode 1: Transmit (802.11a)_Module 2

Test Channel: 5300MHz (20BW)											
Radar Frequency (MHz)	DFS Detection Trials (1= Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5290 (FL)	1	1	1	0	1	1	1	1	1	1	90.00
5291	1	1	1	1	1	1	1	1	1	0	90.00
5292	1	1	1	1	1	1	1	1	1	1	100.00
5293	1	1	0	1	1	1	1	1	1	1	90.00
5294	1	1	1	1	1	0	1	1	1	1	90.00
5295	1	1	1	1	1	1	1	1	1	1	100.00
5296	1	1	1	1	1	1	1	1	1	1	100.00
5297	1	1	1	1	1	1	1	1	1	1	100.00
5298	1	1	1	1	1	1	1	1	1	1	100.00
5299	1	1	1	1	1	1	1	1	1	1	100.00
5300	1	1	1	1	1	0	1	1	1	1	90.00
5301	1	1	1	1	1	1	1	1	1	1	100.00
5302	1	1	1	1	1	1	1	1	1	1	100.00
5303	1	1	1	1	1	1	1	1	1	1	100.00
5304	1	1	1	1	1	1	1	1	1	1	100.00
5305	1	1	1	1	1	1	1	1	1	1	100.00
5306	1	1	1	1	1	1	1	1	1	1	100.00
5307	1	1	1	0	1	1	1	1	1	1	90.00
5308	1	1	1	1	1	1	1	1	1	1	100.00
5309	1	1	1	1	1	0	1	1	1	1	90.00
5310 (FH)	1	1	1	1	1	1	1	1	1	0	90.00
Detection Bandwidth = FH - FL = 5310MHz - 5290MHz = 20MHz											
EUT 99% Bandwidth = 16.5200MHz											
UNII Detection Bandwidth Min. Limit = 16.52MHz X 100% = 16.52MHz											

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : UNII Detection Bandwidth
 Radar Type : Type 1
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Test Channel: 5510MHz (n-40BW)											
Radar Frequency (MHz)	DFS Detection Trials (1= Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5490 (FL)	1	1	1	1	1	1	1	0	1	1	90.00
5491	1	1	1	1	1	1	1	1	1	1	100.00
5492	1	1	1	1	1	1	1	1	1	1	100.00
5493	1	1	1	1	1	1	1	1	1	1	100.00
5494	1	1	1	1	1	1	1	1	1	1	100.00
5495	1	1	1	1	1	1	1	1	1	1	100.00
5496	1	1	1	1	1	1	1	1	1	1	100.00
5497	1	1	1	1	1	1	1	1	1	1	100.00
5498	1	1	1	1	1	1	1	1	1	1	100.00
5499	1	1	1	1	1	1	1	1	1	1	100.00
5500	1	1	1	1	1	1	1	1	1	1	100.00
5501	1	1	1	1	1	1	1	1	1	1	100.00
5502	1	1	1	1	1	1	1	1	1	1	100.00
5503	1	1	1	1	1	1	1	1	1	1	100.00
5504	1	1	1	1	1	1	1	1	1	1	100.00
5505	1	1	1	1	1	1	1	1	1	1	100.00
5506	1	1	1	1	1	1	1	1	1	1	100.00
5507	1	1	1	1	1	1	1	1	1	1	100.00
5508	1	1	1	1	1	1	1	1	1	1	100.00
5509	1	1	1	1	1	1	1	1	1	1	100.00
5510	1	1	1	1	1	1	1	1	1	0	90.00
5511	1	1	1	1	1	1	1	1	1	1	100.00
5512	1	1	1	1	1	1	1	1	1	1	100.00
5513	1	1	1	1	1	1	1	1	1	1	100.00
5514	1	1	1	1	1	1	1	1	1	1	100.00
5515	1	1	1	1	1	1	1	1	1	1	100.00
5516	1	1	1	1	1	1	1	1	1	1	100.00
5517	1	1	1	1	1	1	1	1	1	1	100.00
5518	1	1	1	1	1	1	1	1	1	1	100.00
5519	1	1	1	1	1	1	1	1	1	1	100.00
5520	1	1	1	1	1	1	1	1	1	1	100.00
5521	1	1	1	1	1	1	1	1	1	1	100.00
5522	1	1	1	1	1	1	1	1	1	1	100.00
5523	1	1	1	1	1	1	1	1	1	1	100.00
5524	1	1	1	1	1	1	1	1	1	1	100.00
5525	1	1	1	1	1	1	1	1	1	0	90.00
5526	1	1	1	1	1	1	1	1	1	1	100.00
5527	1	1	1	1	1	1	1	1	1	1	100.00
5528	1	1	1	1	1	1	1	1	1	1	100.00
5529 (FH)	1	1	1	1	1	1	1	1	1	0	90.00
5530	1	1	0	0	0	0	0	0	0	0	20.00
Detection Bandwidth = FH - FL =5529MHZ - 5490MHZ = 39MHZ											
EUT 99% Bandwidth = 36.9300MHz											
UNII Detection Bandwidth Min. Limit = 36.93MHz X 100% = 36.93MHz											

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : UNII Detection Bandwidth
 Radar Type : Type 1
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Test Channel: 5630MHz (n-40BW)											
Radar Frequency (MHz)	DFS Detection Trials (1= Detection, 0= No Detection)										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5610 (FL)	1	1	1	1	1	1	1	1	1	1	100.00
5611	1	1	1	1	1	1	1	1	1	1	100.00
5612	1	1	1	1	1	1	1	1	1	1	100.00
5613	1	1	1	1	1	1	1	1	1	1	100.00
5614	1	1	1	1	1	1	1	1	1	1	100.00
5615	1	1	1	1	1	1	1	1	1	1	100.00
5616	1	1	1	1	1	1	1	1	1	1	100.00
5617	1	1	1	1	1	1	1	1	1	1	100.00
5618	1	1	1	1	1	1	1	1	1	1	100.00
5619	1	1	1	1	1	1	1	1	1	1	100.00
5620	1	1	1	1	1	1	1	1	1	1	100.00
5621	1	1	1	1	1	1	1	1	1	1	100.00
5622	1	1	1	1	1	1	1	1	1	1	100.00
5623	1	1	1	1	1	1	1	1	1	1	100.00
5624	1	1	1	1	1	1	1	1	1	1	100.00
5625	1	1	1	1	1	1	1	1	1	1	100.00
5626	1	1	1	1	1	1	1	1	1	1	100.00
5627	1	1	1	1	1	1	1	1	1	1	100.00
5628	1	1	1	1	1	1	1	1	1	1	100.00
5629	1	1	1	1	1	1	1	1	1	1	100.00
5630	1	1	1	1	1	1	1	1	1	1	100.00
5631	1	1	1	1	1	1	1	1	1	1	100.00
5632	1	1	1	1	1	1	1	1	1	1	100.00
5633	1	1	1	1	1	1	1	1	1	1	100.00
5634	1	1	1	1	1	1	1	1	1	1	100.00
5635	1	1	1	1	1	1	1	1	1	1	100.00
5636	1	1	1	1	1	1	1	1	1	1	100.00
5637	1	1	1	1	1	1	1	1	1	1	100.00
5638	1	1	1	1	1	1	1	1	1	1	100.00
5639	1	1	1	1	1	0	1	1	1	1	90.00
5640	1	1	1	1	1	1	1	1	1	1	100.00
5641	1	1	1	1	1	1	1	1	1	1	100.00
5642	1	1	1	1	1	1	1	1	1	1	100.00
5643	1	1	1	1	1	1	1	1	1	1	100.00
5644	1	1	1	1	1	0	1	1	1	1	90.00
5645	1	1	1	1	1	1	1	1	1	1	100.00
5646	1	1	1	1	1	1	1	1	1	1	100.00
5647	1	1	1	1	1	1	1	1	1	1	100.00
5648 (FH)	1	1	1	1	1	0	1	1	1	1	90.00
5649	1	1	1	0	1	1	1	1	0	1	80.00
5650	0	0	0	0	0	0	0	0	0	0	0.00
Detection Bandwidth = FH - FL =5648MHz - 5610MHz = 38MHz											
EUT 99% Bandwidth = 36.8900 MHz											
UNII Detection Bandwidth Min. Limit = 36.89MHz X 100% = 36.89MHz											

3. Initial Channel Availability Check Time

3.1. Test Procedure

The EUT was tested according to U-NII test procedure of KDB905462 D02 for compliance to FCC 47CFR 15.407 requirements.

The U-NII device is powered on and instructed to operate at 5300/5510 MHz and 5530MHz. At the same time the UUT is powered on, the spectrum analyzer is set to zero span mode with a 3 MHz resolution bandwidth at 5300/5510 MHz and 5530MHz with a 2.5minute sweep time. The analyzer's sweep will be started the same time power is applied to the U-NII device.

The EUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.

The initial power up time of the EUT is indicated by marker1 in the plot, Initial beacons/data transmissions are indicated by marker 1R.

3.2. Test Requirement

The EUT shall perform a channel availability check to ensure that there is no radar operation on the channel, after power-up sequence, receiver at least 1 minute on the intended operation frequency.

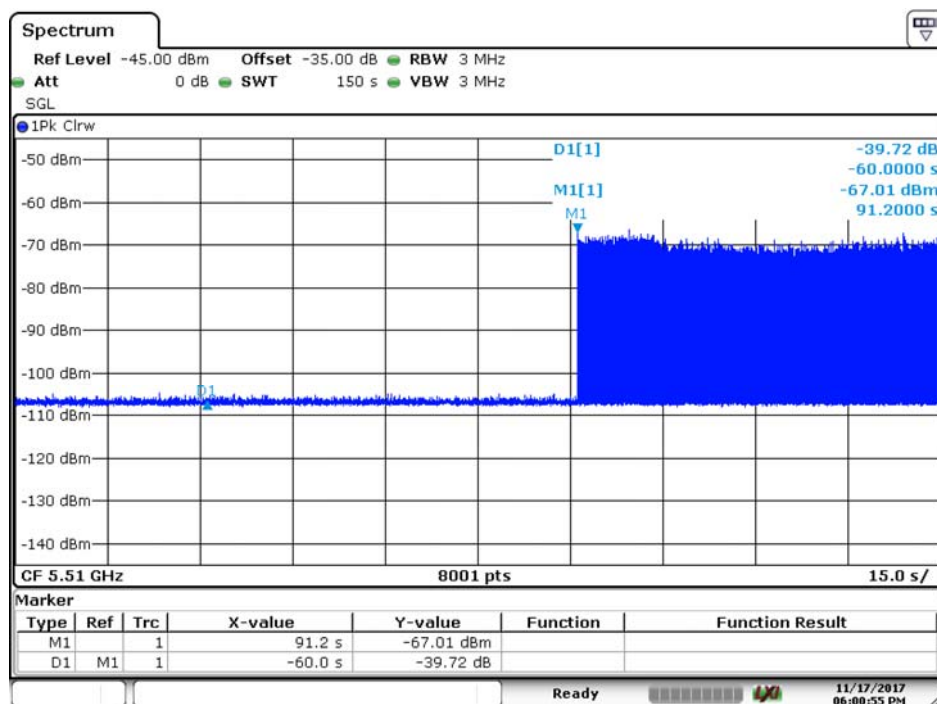
3.3. Uncertainty

$\pm 1\text{ms}$.

3.4. Test Result of Initial Channel Availability Check Time

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Initial Channel Availability Check Time
 Radar Type : Type 1
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

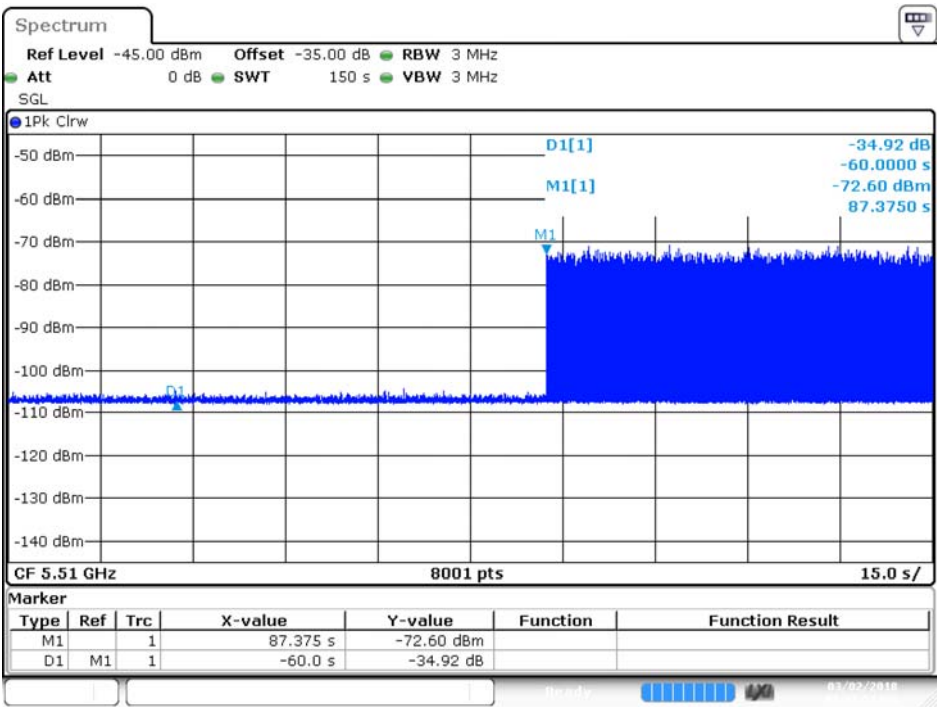
The EUT does not transmit any beacon or data transmission until at least 1 minute after the completion of the power-on cycle (31.2sec). The initial power up time of the EUT is indicated by Marker 1R (91.2 sec) – CAC (60 sec). Initial beacons/data transmission is indicated by Marker 1R (91.2 sec)



Date: 17.NOV.2017 18:00:56

Product : MOXA IEEE 802.11 a/b/g/n
Test Item : Initial Channel Availability Check Time
Radar Type : Type 1
Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

The EUT does not transmit any beacon or data transmission until at least 1 minute after the completion of the power-on cycle (23.4sec). The initial power up time of the EUT is indicated by Marker 1R (83.4 sec) – CAC (60 sec). Initial beacons/data transmission is indicated by Marker 1R (83.4 sec)



Date: 2.MAR.2018 20:11:51

4. Radar Burst at the Beginning of the Channel Availability Check Time

4.1. Test Procedure

The EUT was tested according to U-NII test procedure of KDB905462 D02 for compliance to FCC 47CFR 15.407 requirements.

The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB (-63dBm) occurs at the beginning of the Channel Availability Check Time.

The EUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner than T1 + 60 seconds.

A single Burst of short pulse of radar type 1 at -63dBm will commence within a 6 second window starting at T1.

Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions at 5300MHz/5510MHz and 5630MHz will continue for 2.5 minutes after the radar Burst, Verify that during the 2.5 minute measurement window no EUT transmissions occurred at 5300MHz/5510MHz and 5630MHz.

4.2. Test Requirement

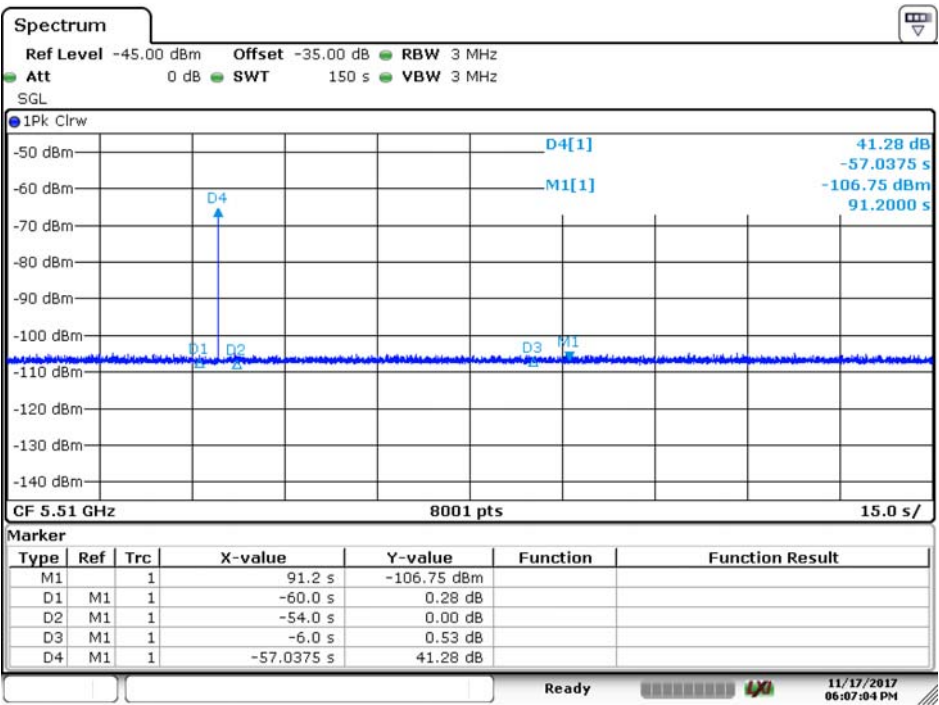
In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC that channel.

4.3. Uncertainty

$\pm 1\text{ms}$.

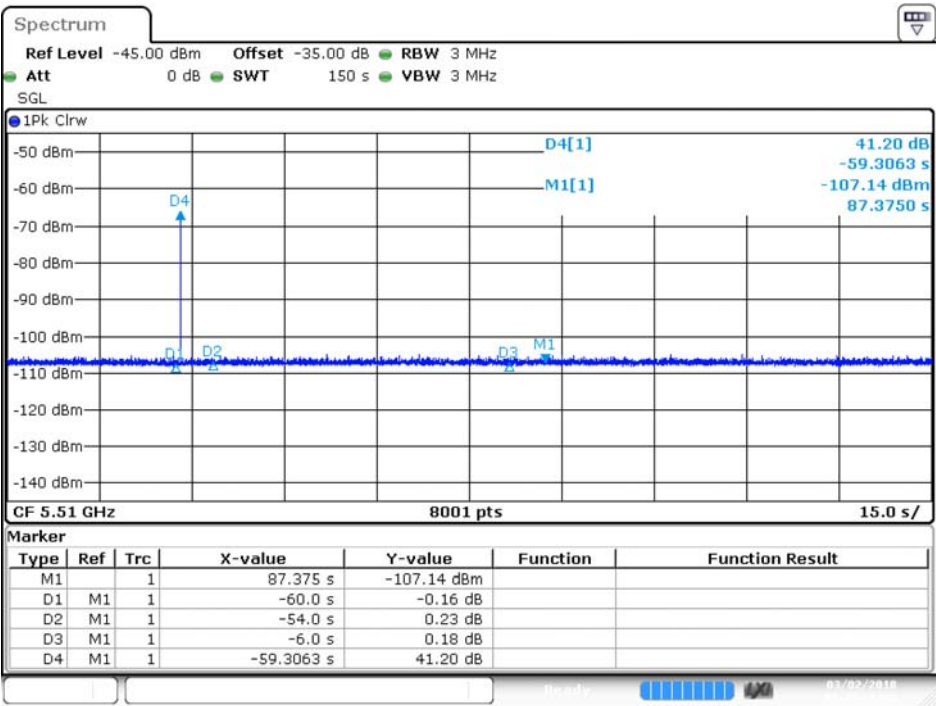
4.4. Test Result of Radar Burst at the Beginning of the Channel Availability Check Time

Product : MOXA IEEE 802.11 a/b/g/n
Test Item : Radar Burst at the Beginning of the Channel Availability Check Time
Radar Type : Type 0
Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1



Date: 17.NOV.2017 18:07:04

Product : MOXA IEEE 802.11 a/b/g/n
Test Item : Radar Burst at the Beginning of the Channel Availability Check Time
Radar Type : Type 0
Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2



Date: 2.MAR.2018 20:15:24

5. Radar Burst at the End of the Channel Availability Check Time

5.1. Test Procedure

The EUT was tested according to U-NII test procedure of KDB905462 D02 for compliance to FCC 47CFR 15.407 requirements.

The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB (-63dBm) occurs at the end of the Channel Availability Check Time.

The UUT is powered on at T_0 . T_1 denotes the instant when the UUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T_1 and will end no sooner than $T_1 + 60$ seconds. A single Burst of short pulse of radar type 1 at -63 dBm will commence within a 6 second window starting at $T_1 + 54$ seconds.

Visual indication on the UUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions at 5300MHz/5510MHz and 5630MHz will continue for 2.5 minutes after the radar Burst

has been generated.

Verify that during the 2.5 minute measurement window no UUT transmissions occurred at 5300MHz /5510MHz and 5630MHz.

5.2. Test Requirement

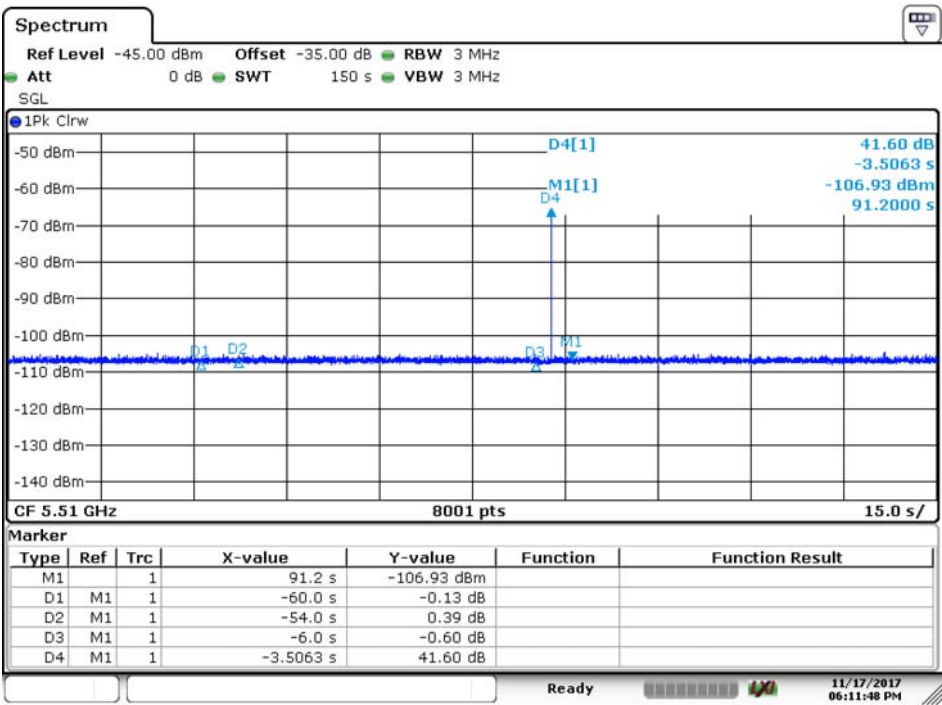
In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC that channel.

5.3. Uncertainty

$\pm 1\text{ms}$.

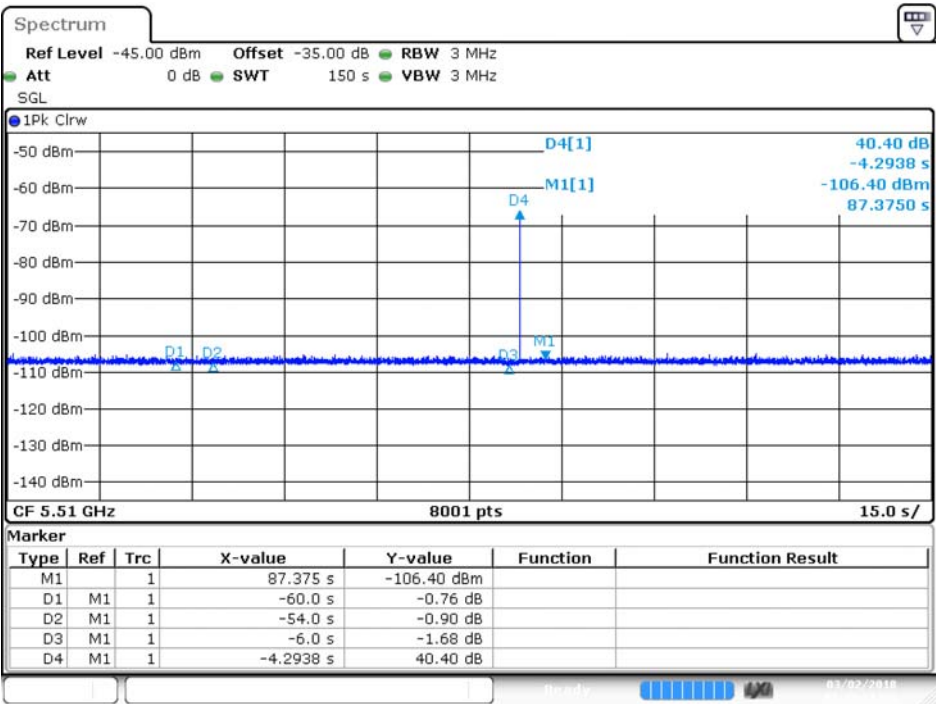
5.4. Test Result of Radar Burst at the End of the Channel Availability Check Time

Product : MOXA IEEE 802.11 a/b/g/n
Test Item : Radar Burst at the End of the Channel Availability Check Time
Radar Type : Type 0
Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1



Date: 17.NOV.2017 18:11:49

Product : MOXA IEEE 802.11 a/b/g/n
Test Item : Radar Burst at the End of the Channel Availability Check Time
Radar Type : Type 0
Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2



Date: 2.MAR.2018 20:18:18

6. In-Service Monitoring for Channel Move Time and Channel Closing Transmission Time and Non-Occupancy Period

6.1. Test Procedure

The EUT was tested according to U-NII test procedure of KDB905462 D02 for compliance to FCC 47CFR 15.407 requirements.

These tests define how the following DFS parameters are verified during In-Service Monitoring;

Channel Closing Transmission Time, Channel Move Time, and Non-Occupancy Period.. The steps below define the procedure to determine the above mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold + 1dB (-63dBm) is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the UUT (Master) at 5300MHz/ 5510MHz and 5630MHz..

Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test.

At time T0 the Radar Waveform generator sends a Burst of pulses for each of the radar types at -63dBm.

Observe the transmissions of the UUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing

Transmission Time results to the limits defined in the DFS Response requirement values table.

Measure the UUT for more than 30 minutes following the channel close/move time to verify that the UUT does not resume any transmissions on this Channel.

6.2. Test Requirement

Parameter	Value
Channel Move Time	10 Seconds
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period
Non-Occupancy Period	Minimum 30 minutes

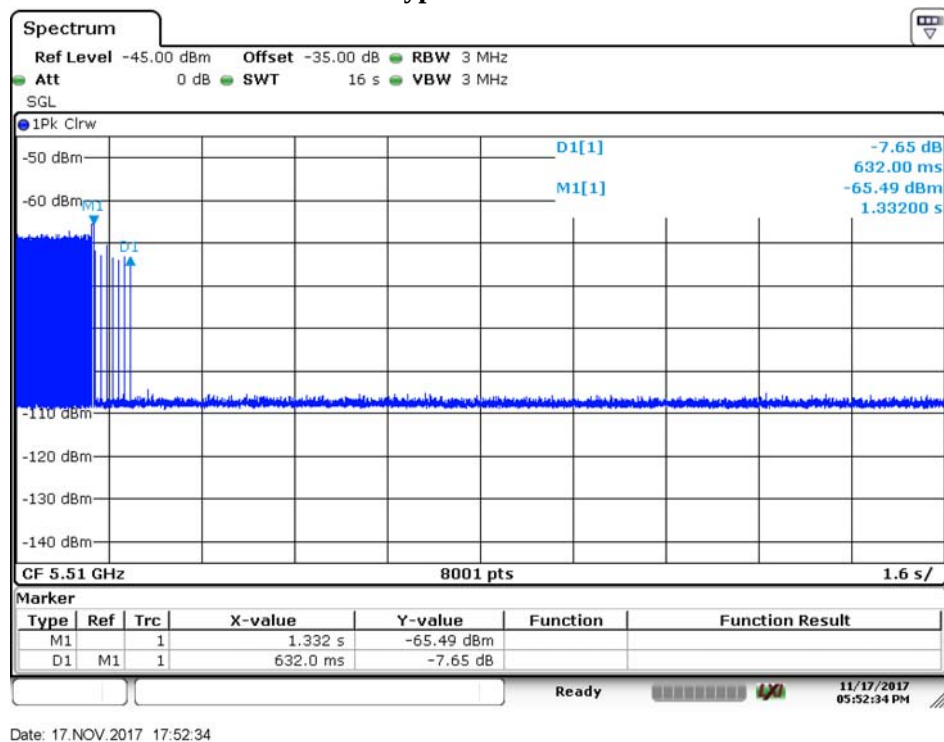
6.3. Uncertainty

± 1ms.

6.4. Test Result of Channel Move Time and Channel Closing Transmission Time and Non-Occupancy Period

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Channel Move Time
 Radar Type : Type 0
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Channel Move Time for Radar Test Type 0 at 5510MHz

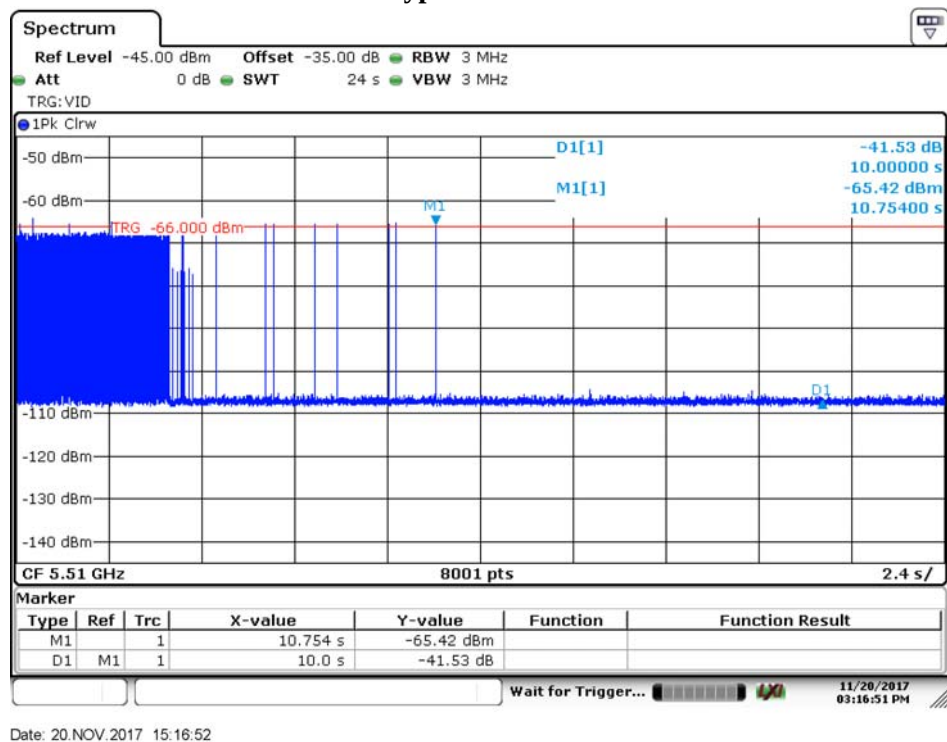


Test Item	Test Result (Sec)	Limit (Sec)
Channel Move Time	0.632	10

The results showed that after radar signal injected the channel move time was less than 10 seconds.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Channel Move Time
 Radar Type : Type 5
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Channel Move Time for Radar Test Type 5 at 5510MHz

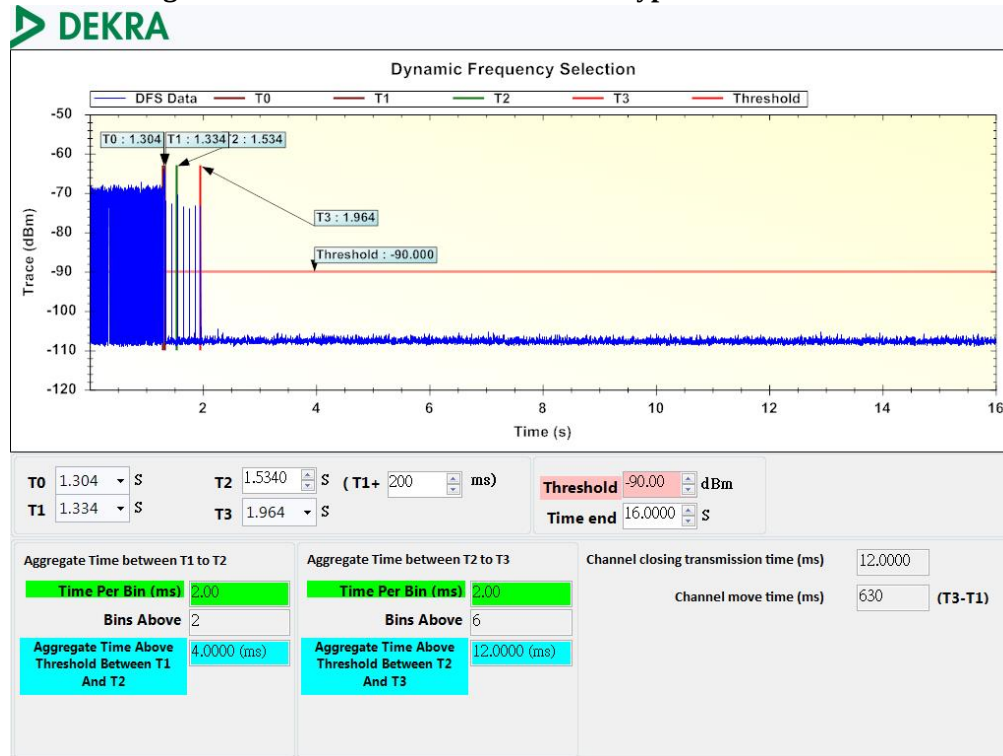


Test Item	Test Result (Sec)	Limit (Sec)
Channel Move Time	0	10

The results showed that after radar signal injected the channel move time was less than 10 seconds.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Channel Closing Transmission Time Test
 Radar Type : Type 0
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Channel Closing Transmission Time for Radar Test Type 0 at 5510 MHz

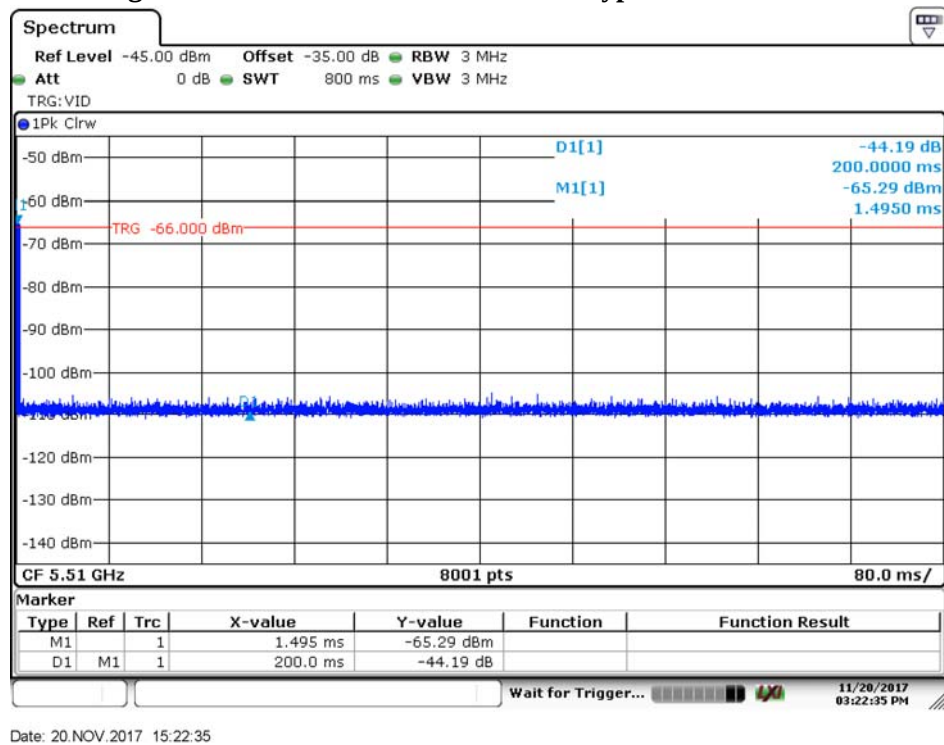


Test Item	Test Result (ms)	Limit (ms)
Channel Closing Transmission	12	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period

The results showed that after radar signal injected the channel transmission closing time less than 200 milliseconds and an aggregate of no more than 60 milliseconds.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Channel Closing Transmission Time Test
 Radar Type : Type 5
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Channel Closing Transmission Time for Radar Test Type 5 at 5510 MHz

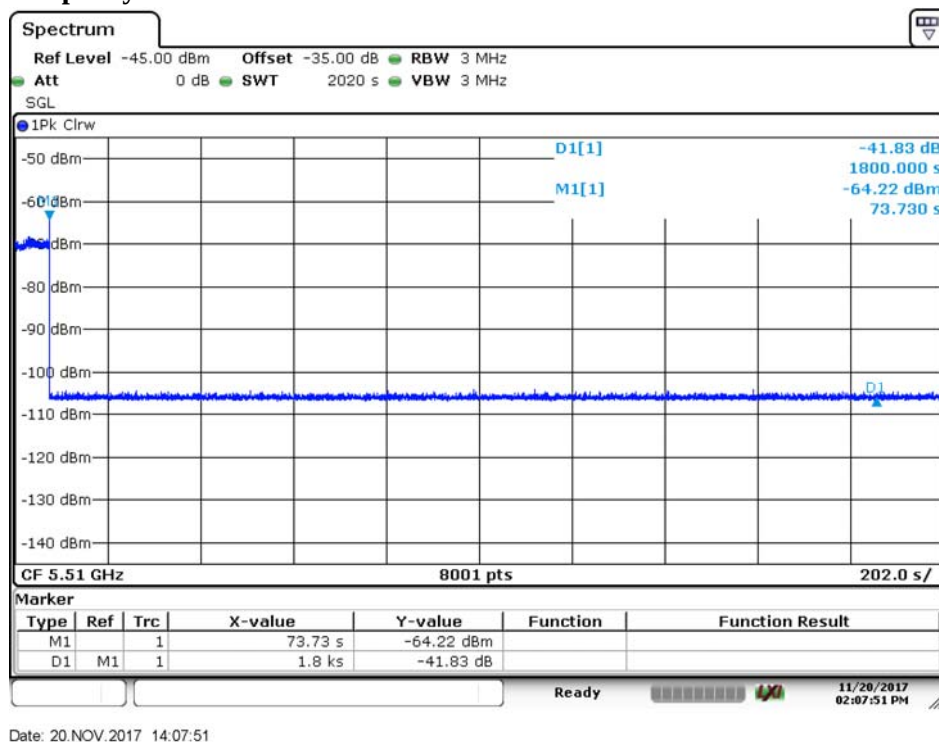


Test Item	Test Result (ms)	Limit (ms)
Channel Closing Transmission	0	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period

The results showed that after radar signal injected the channel transmission closing time less than 200 milliseconds and an aggregate of no more than 60 milliseconds.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Non-Occupancy Period
 Radar Type : Type 0
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Non-Occupancy Period at 5510 MHz

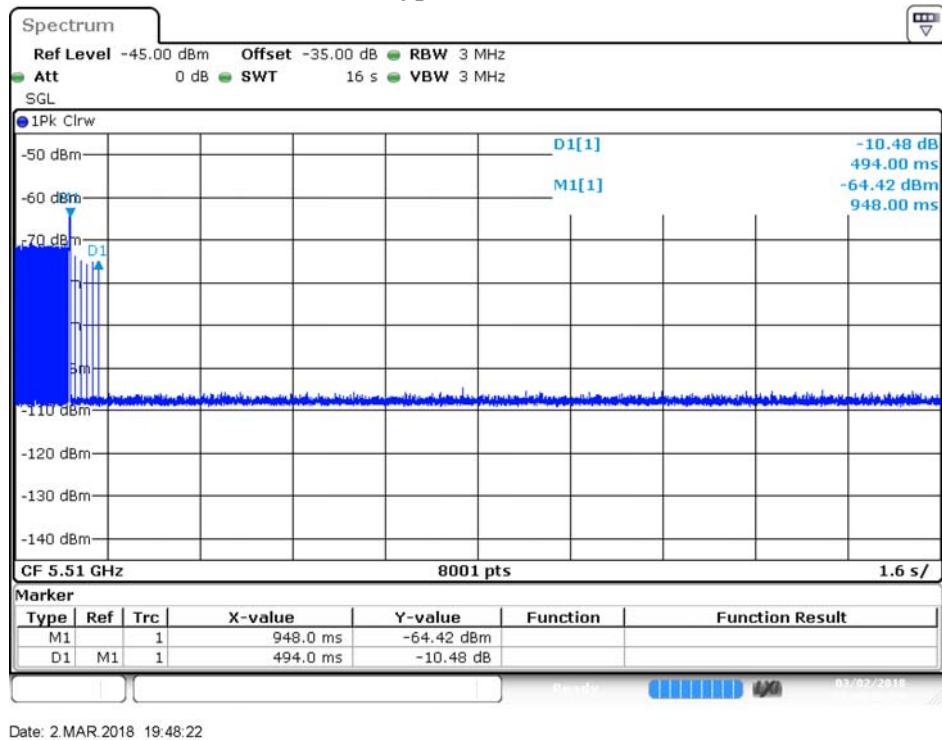


Test Item	Test Result (Minutes)	Limit (Minutes)
Non-Occupancy Period	>30	>30

*No EUT transmissions were observed on the test channel during 30 minutes observation time.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Channel Move Time
 Radar Type : Type 0
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Channel Move Time for Radar Test Type 0 at 5510MHz

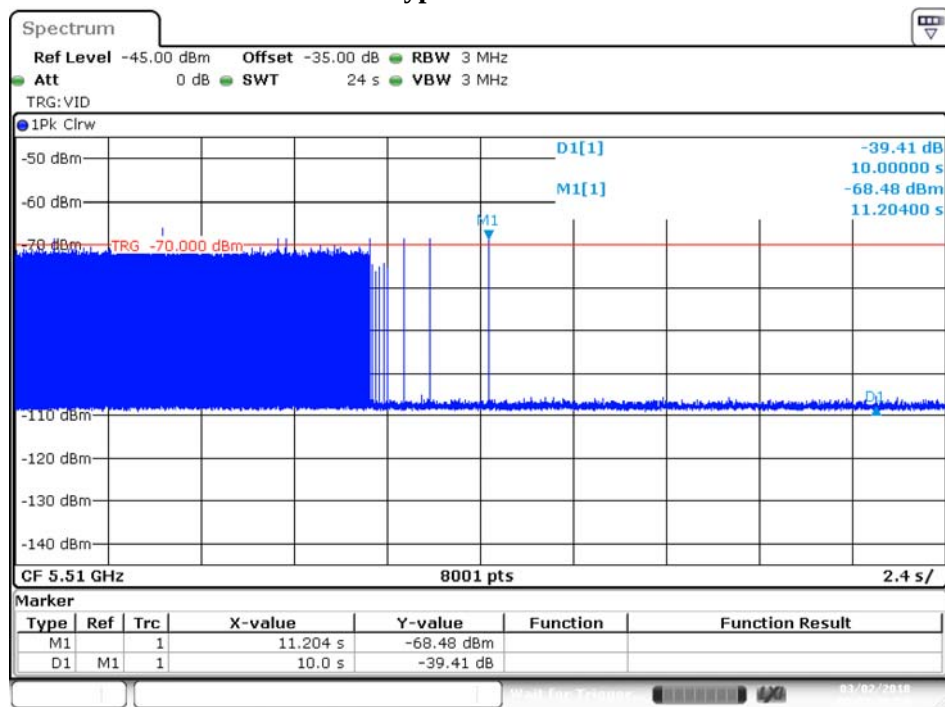


Test Item	Test Result (Sec)	Limit (Sec)
Channel Move Time	0.494	10

The results showed that after radar signal injected the channel move time was less than 10 seconds.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Channel Move Time
 Radar Type : Type 5
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Channel Move Time for Radar Test Type 5 at 5510MHz



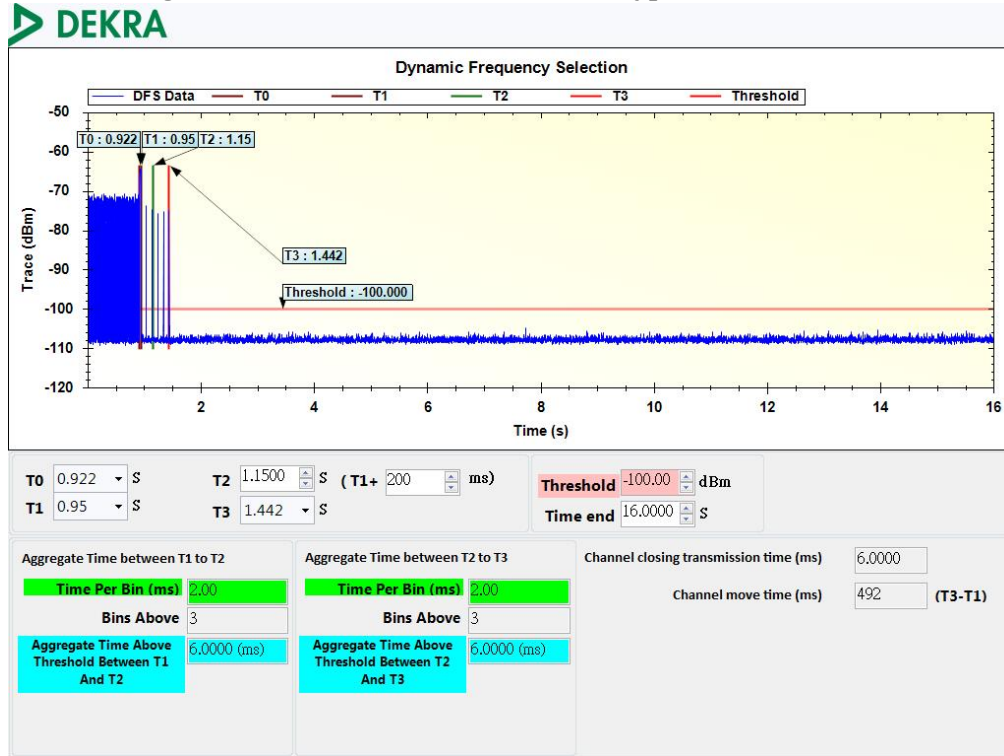
Date: 2.MAR.2018 20:01:30

Test Item	Test Result (Sec)	Limit (Sec)
Channel Move Time	0	10

The results showed that after radar signal injected the channel move time was less than 10 seconds.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Channel Closing Transmission Time Test
 Radar Type : Type 0
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Channel Closing Transmission Time for Radar Test Type 0 at 5510 MHz

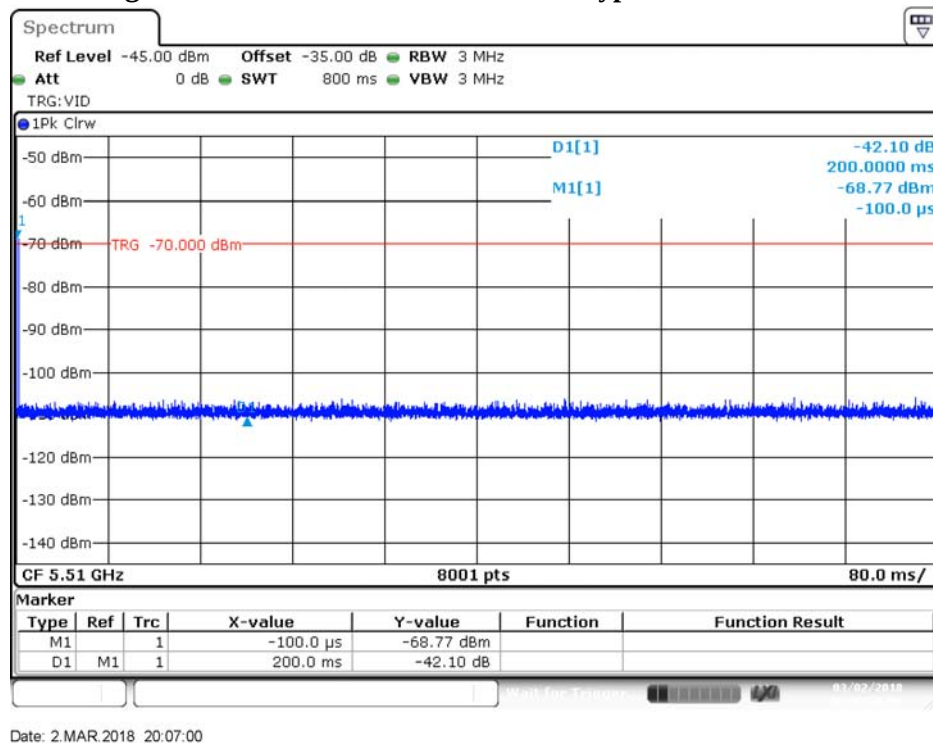


Test Item	Test Result (ms)	Limit (ms)
Channel Closing Transmission	6	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period

The results showed that after radar signal injected the channel transmission closing time less than 200 milliseconds and an aggregate of no more than 60 milliseconds.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Channel Closing Transmission Time Test
 Radar Type : Type 5
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Channel Closing Transmission Time for Radar Test Type 5 at 5510 MHz

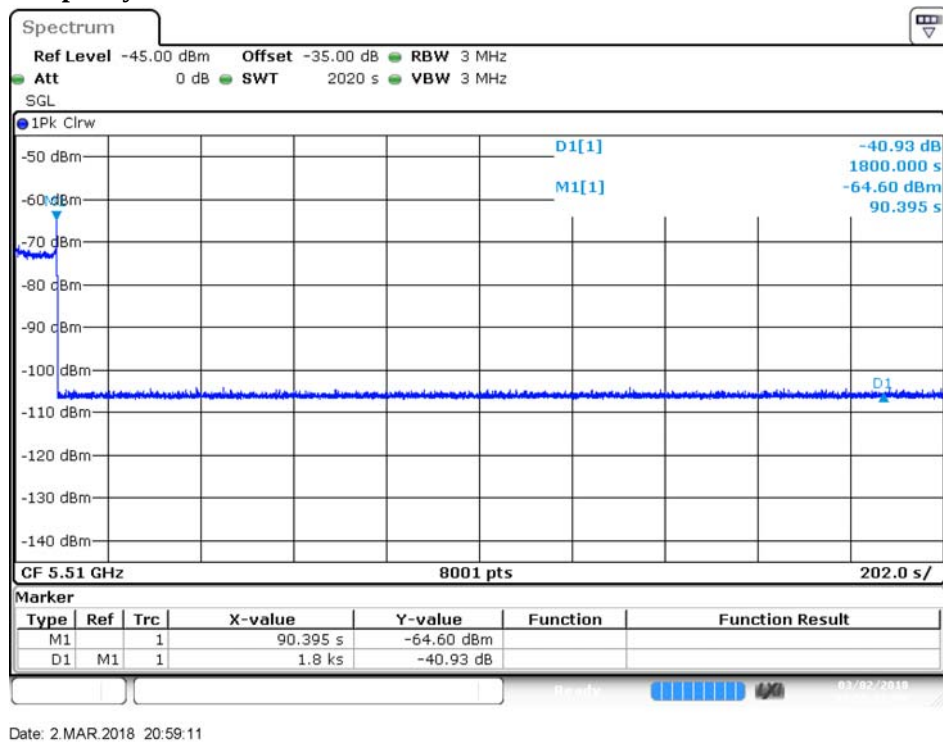


Test Item	Test Result (ms)	Limit (ms)
Channel Closing Transmission	0	200 milliseconds + approx. 60 milliseconds over remaining 10 seconds period

The results showed that after radar signal injected the channel transmission closing time less than 200 milliseconds and an aggregate of no more than 60 milliseconds.

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Non-Occupancy Period
 Radar Type : Type 0
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Non-Occupancy Period at 5510 MHz



Test Item	Test Result (Minutes)	Limit (Minutes)
Non-Occupancy Period	>30	>30

*No EUT transmissions were observed on the test channel during 30 minutes observation time.

7. Statistical Performance Check

7.1. Test Procedure

The EUT was tested according to U-NII test procedure of KDB905462 D02 for compliance to FCC 47CFR 15.407 requirements.

The steps below define the procedure to determine the minimum percentage of detection when a radar burst with a level equal to the DFS Detection Threshold + 1dB (-63dBm) is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the UUT (Master) at 5300MHz, 5510MHz and 5630MHz..

Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test.

The Radar Waveform generator sends the individual waveform for each of the radar types 1-6 at -63dbm. Statistical data will be gathered to determine the ability of the device to detect the radar test waveforms. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

7.2. Test Requirement

The minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Minimum percentage of successful detections

Radar Type	Minimum Percentage of Successful Detection	Minimum Number of Trials
1	60%	30
2	60%	30
3	60%	30
4	60%	30
Aggregate (Radar Types 1-4)	80%	120
5	80%	30
6	70%	30

The percentage of successful detection is calculated by:

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

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4}$$

7.3. Uncertainty

± 1ms.

7.4. Test Result of Statistical Performance Check

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 1
 Test Date : 2017/11/10
 Test Mode : Mode 1: Transmit (802.11a)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5300	102	1	518	1
2	5300	67	1	798	1
3	5300	70	1	758	1
4	5300	63	1	838	1
5	5300	78	1	678	1
6	5300	72	1	738	0
7	5300	95	1	558	1
8	5300	74	1	718	1
9	5300	57	1	938	1
10	5300	81	1	658	1
11	5300	92	1	578	1
12	5300	98	1	538	1
13	5300	18	1	3066	1
14	5300	65	1	818	1
15	5300	61	1	878	1
16	5300	19	1	2792	1
17	5300	29	1	1876	1
18	5300	27	1	1995	0
19	5300	52	1	1025	1
20	5300	69	1	768	1
21	5300	25	1	2164	1
22	5300	48	1	1110	1
23	5300	61	1	873	1
24	5300	19	1	2827	1
25	5300	29	1	1861	0
26	5300	49	1	1084	1
27	5300	23	1	2355	1
28	5300	70	1	761	1
29	5300	39	1	1377	1
30	5300	52	1	1019	1
Detection Percentage(%)					90.00%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 1
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5510	98	1	538	1
2	5510	83	1	638	1
3	5510	70	1	758	1
4	5510	72	1	738	1
5	5510	102	1	518	1
6	5510	59	1	898	1
7	5510	67	1	798	1
8	5510	92	1	578	1
9	5510	58	1	918	1
10	5510	18	1	3066	1
11	5510	65	1	818	1
12	5510	76	1	698	1
13	5510	74	1	718	1
14	5510	62	1	858	1
15	5510	68	1	778	1
16	5510	35	1	1508	1
17	5510	47	1	1139	1
18	5510	18	1	3029	0
19	5510	28	1	1922	1
20	5510	27	1	1969	1
21	5510	19	1	2914	1
22	5510	22	1	2425	1
23	5510	29	1	1859	0
24	5510	87	1	607	1
25	5510	30	1	1814	1
26	5510	63	1	839	1
27	5510	86	1	617	1
28	5510	39	1	1361	0
29	5510	44	1	1224	1
30	5510	22	1	2434	1
Detection Percentage(%)					90.00%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 1
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5630	86	1	618	1
2	5630	78	1	678	1
3	5630	72	1	738	1
4	5630	65	1	818	1
5	5630	59	1	898	1
6	5630	62	1	858	1
7	5630	95	1	558	1
8	5630	98	1	538	1
9	5630	92	1	578	1
10	5630	76	1	698	1
11	5630	89	1	598	1
12	5630	74	1	718	1
13	5630	57	1	938	1
14	5630	102	1	518	1
15	5630	61	1	878	1
16	5630	21	1	2590	1
17	5630	22	1	2496	1
18	5630	32	1	1697	1
19	5630	19	1	2837	0
20	5630	19	1	2865	1
21	5630	24	1	2249	1
22	5630	45	1	1178	1
23	5630	57	1	929	1
24	5630	57	1	941	1
25	5630	21	1	2597	1
26	5630	26	1	2072	0
27	5630	61	1	868	1
28	5630	21	1	2632	1
29	5630	46	1	1158	1
30	5630	29	1	1857	1
Detection Percentage(%)					93.33%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 2
 Test Date : 2017/11/10
 Test Mode : Mode 1: Transmit (802.11a)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5300	26	1.90	191	1
2	5300	27	2.30	187	1
3	5300	25	3.20	152	0
4	5300	29	1.80	205	1
5	5300	28	2.40	187	1
6	5300	27	3.70	198	0
7	5300	28	2.80	229	1
8	5300	29	2.30	158	1
9	5300	26	3.10	226	0
10	5300	24	4.30	158	1
11	5300	26	3.30	157	0
12	5300	25	1.90	173	1
13	5300	24	1.90	208	1
14	5300	29	4.70	184	1
15	5300	24	1.30	191	0
16	5300	29	4.30	177	1
17	5300	24	1.10	185	1
18	5300	23	3.90	218	1
19	5300	25	5.00	199	1
20	5300	25	3.80	222	1
21	5300	26	1.80	162	1
22	5300	23	1.80	200	1
23	5300	27	2.40	171	1
24	5300	26	1.00	188	1
25	5300	25	1.20	194	1
26	5300	28	2.30	226	1
27	5300	27	3.70	195	1
28	5300	25	1.90	178	0
29	5300	28	1.80	201	1
30	5300	24	1.10	167	1
Detection Percentage(%)					80.00%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 2
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5510	24	2.3	185	1
2	5510	24	2.1	187	0
3	5510	26	1.7	188	0
4	5510	28	5	176	1
5	5510	29	4.7	169	1
6	5510	23	1.3	214	1
7	5510	28	1.2	163	0
8	5510	27	4.8	188	1
9	5510	25	1.6	160	1
10	5510	24	2.4	222	1
11	5510	27	2.5	186	1
12	5510	28	2.3	201	1
13	5510	25	2.7	159	1
14	5510	25	4.8	177	1
15	5510	29	4.5	217	1
16	5510	24	4.5	165	1
17	5510	25	3.9	219	0
18	5510	24	1.4	213	1
19	5510	28	5	182	1
20	5510	27	4.2	158	1
21	5510	24	3.9	180	1
22	5510	23	4	180	1
23	5510	27	1.9	182	0
24	5510	24	1.6	200	1
25	5510	25	1.5	160	1
26	5510	25	4.7	166	1
27	5510	28	4.4	179	1
28	5510	24	2	170	1
29	5510	28	4	214	1
30	5510	26	4.4	183	1
Detection Percentage(%)					83.33%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 2
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5630	26	2.2	218	1
2	5630	26	1.1	204	1
3	5630	24	3.1	163	0
4	5630	25	1.1	171	0
5	5630	28	1.6	191	1
6	5630	28	2.8	203	1
7	5630	23	2.8	215	0
8	5630	26	3.6	190	1
9	5630	23	3.8	173	1
10	5630	26	2.6	163	1
11	5630	26	3.6	207	1
12	5630	28	4.1	202	1
13	5630	27	4.2	190	1
14	5630	28	4.2	161	1
15	5630	26	3.5	179	0
16	5630	26	2.3	224	1
17	5630	28	1.1	191	1
18	5630	28	3.1	154	1
19	5630	26	4	158	1
20	5630	27	2.9	164	1
21	5630	24	1.5	192	0
22	5630	25	1.8	212	0
23	5630	26	2.9	225	1
24	5630	29	3.8	201	1
25	5630	27	4.3	155	1
26	5630	28	1.6	154	0
27	5630	29	2.9	159	1
28	5630	25	4.9	208	1
29	5630	23	2.6	205	1
30	5630	27	2.1	157	0
Detection Percentage(%)					73.33%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 3
 Test Date : 2017/11/10
 Test Mode : Mode 1: Transmit (802.11a)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5300	16	8.40	336	1
2	5300	17	9.30	300	1
3	5300	17	8.90	495	1
4	5300	17	8.80	426	0
5	5300	17	8.50	225	1
6	5300	17	6.30	350	1
7	5300	17	7.20	221	0
8	5300	17	7.80	325	1
9	5300	17	8.80	490	1
10	5300	16	6.00	376	1
11	5300	17	6.10	379	1
12	5300	17	8.90	333	1
13	5300	17	6.90	229	0
14	5300	17	7.80	408	1
15	5300	18	9.00	449	1
16	5300	18	9.50	334	1
17	5300	17	9.30	307	1
18	5300	17	7.70	369	1
19	5300	18	8.40	244	0
20	5300	17	8.80	265	1
21	5300	18	9.80	357	1
22	5300	16	6.40	377	1
23	5300	17	6.40	488	0
24	5300	18	7.10	240	1
25	5300	16	6.00	443	1
26	5300	16	7.40	243	1
27	5300	16	6.30	244	0
28	5300	17	7.10	425	1
29	5300	16	6.50	444	1
30	5300	17	9.00	330	1
Detection Percentage(%)					80.00%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 3
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5510	18	8.8	435	1
2	5510	17	8.9	359	1
3	5510	16	8.2	302	1
4	5510	17	9.3	316	1
5	5510	17	6.5	280	1
6	5510	17	8.9	391	1
7	5510	17	6.1	285	1
8	5510	17	6.1	350	1
9	5510	18	7.7	353	1
10	5510	16	7.5	488	1
11	5510	16	7.7	216	1
12	5510	16	6.3	320	1
13	5510	16	9.8	360	1
14	5510	16	6.7	395	0
15	5510	17	8.1	490	1
16	5510	18	8.5	301	1
17	5510	16	8	306	0
18	5510	17	9.7	238	1
19	5510	18	6.8	222	0
20	5510	18	9.6	276	1
21	5510	16	9.9	459	1
22	5510	16	6.1	305	0
23	5510	17	7.3	253	1
24	5510	17	8.4	336	1
25	5510	17	6.8	397	0
26	5510	18	7.7	375	1
27	5510	17	6.7	350	0
28	5510	17	6.5	415	1
29	5510	16	7.6	403	0
30	5510	18	7.7	471	1
Detection Percentage(%)					76.67%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 3
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5630	17	6.6	448	1
2	5630	17	6.8	355	1
3	5630	16	7.9	209	1
4	5630	16	7.9	336	1
5	5630	18	6.5	374	0
6	5630	16	6.9	470	1
7	5630	18	7.1	420	0
8	5630	18	9.4	441	1
9	5630	18	8.6	281	1
10	5630	18	9.3	410	1
11	5630	18	7.3	368	0
12	5630	17	9.8	374	1
13	5630	18	7	424	1
14	5630	16	6.9	282	1
15	5630	16	10	328	1
16	5630	18	8.6	203	1
17	5630	18	6.3	299	0
18	5630	16	7	343	1
19	5630	17	8	376	0
20	5630	18	9.4	347	1
21	5630	16	7	278	0
22	5630	17	9.1	419	1
23	5630	18	9.6	396	1
24	5630	17	6	449	1
25	5630	17	9	355	1
26	5630	18	9.4	278	1
27	5630	17	8.2	443	0
28	5630	17	6.8	386	1
29	5630	18	9.1	337	1
30	5630	17	8	456	1
Detection Percentage(%)					76.67%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 4
 Test Date : 2017/11/10
 Test Mode : Mode 1: Transmit (802.11a)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5300	16	14.80	316	1
2	5300	13	16.90	296	1
3	5300	14	11.40	210	1
4	5300	15	11.70	492	0
5	5300	16	18.20	396	1
6	5300	15	15.10	236	1
7	5300	14	16.30	347	1
8	5300	16	15.50	210	1
9	5300	13	17.30	228	0
10	5300	14	19.60	234	1
11	5300	13	19.50	342	1
12	5300	15	13.70	321	1
13	5300	15	13.20	420	1
14	5300	12	16.50	500	0
15	5300	14	15.70	216	1
16	5300	13	16.80	444	1
17	5300	14	11.80	233	1
18	5300	13	11.50	353	0
19	5300	15	19.10	316	1
20	5300	13	19.40	456	1
21	5300	12	15.60	440	1
22	5300	14	17.10	496	1
23	5300	13	14.30	496	1
24	5300	16	19.80	463	1
25	5300	13	19.50	308	0
26	5300	15	14.40	364	1
27	5300	12	15.60	297	1
28	5300	12	16.40	234	0
29	5300	12	18.60	205	0
30	5300	15	12.40	428	1
Detection Percentage(%)					76.67%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 4
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5510	12	18	205	1
2	5510	15	19.3	430	1
3	5510	16	16.6	280	0
4	5510	16	17.1	243	1
5	5510	15	12.6	226	1
6	5510	14	19.1	417	1
7	5510	13	20	228	1
8	5510	12	12.2	309	0
9	5510	14	19.1	233	1
10	5510	15	12.2	445	1
11	5510	14	12.9	221	1
12	5510	15	19.4	355	1
13	5510	13	18	367	1
14	5510	15	12.1	301	1
15	5510	13	17	435	0
16	5510	13	16.8	416	1
17	5510	12	13.6	413	1
18	5510	13	11.6	341	0
19	5510	14	15.5	351	1
20	5510	14	11.1	340	1
21	5510	13	18.7	429	1
22	5510	12	16.9	209	1
23	5510	12	11.2	352	0
24	5510	15	17.8	363	1
25	5510	13	19.2	354	0
26	5510	12	14.6	223	1
27	5510	14	15.3	368	1
28	5510	13	11.8	267	0
29	5510	14	14.1	377	1
30	5510	14	16	458	0
Detection Percentage (%)					73.33%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 4
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5630	16	19.7	479	1
2	5630	14	12.9	218	0
3	5630	13	19.1	327	1
4	5630	15	16.2	369	1
5	5630	14	17.6	215	1
6	5630	14	17.8	279	0
7	5630	15	16.8	430	1
8	5630	13	19.3	402	0
9	5630	14	17.5	479	1
10	5630	14	17.1	372	1
11	5630	15	19	405	1
12	5630	13	17.9	446	1
13	5630	13	11.7	205	1
14	5630	15	17	286	1
15	5630	14	16.5	362	1
16	5630	13	19	415	1
17	5630	13	19.5	230	1
18	5630	14	14.4	208	0
19	5630	12	12.4	478	1
20	5630	14	14.5	257	0
21	5630	13	12.6	357	1
22	5630	13	11.6	349	1
23	5630	16	16.7	486	1
24	5630	13	19.9	277	1
25	5630	13	13.1	210	0
26	5630	16	12.8	223	1
27	5630	12	14.4	249	1
28	5630	13	19.9	428	1
29	5630	12	11.6	225	1
30	5630	15	19.1	229	1
Detection Percentage (%)					80.00%

Mode1 –802.11a

Total Type 1~4 Radar Statistical Performance			
Radar Type	Detection Percentage (%)	Limit (%)	Result
1	90.00	>60%	Pass
2	80.00	>60%	Pass
3	80.00	>60%	Pass
4	76.67	>60%	Pass
Total Type 1~4	81.67	>80%	Pass

Mode2 –802.11n40

Total Type 1~4 Radar Statistical Performance			
Radar Type	Detection Percentage (%)	Limit (%)	Result
1	90.00	>60%	Pass
2	83.33	>60%	Pass
3	76.67	>60%	Pass
4	73.33	>60%	Pass
Total Type 1~4	80.83	>80%	Pass

Mode3 –802.11n40

Total Type 1~4 Radar Statistical Performance			
Radar Type	Detection Percentage (%)	Limit (%)	Result
1	93.33	>60%	Pass
2	73.33	>60%	Pass
3	76.67	>60%	Pass
4	80.00	>60%	Pass
Total Type 1~4	80.83	>80%	Pass

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 5
 Test Date : 2017/11/10
 Test Mode : Mode 1: Transmit (802.11a)_Module 1

Center Freq: 5300MHz			Low Edge: 5291MHz		High Edge: 5308MHz	
Trial #	Chirp	Offset	VSG Frequency (MHz)	*Filename	1= Detection 0= No Detection	
1	14	5.6	5300	Statistical_Check_RandParm_For_Radar_Type_5_1_trail	1	
2	15	6	5300	Statistical_Check_RandParm_For_Radar_Type_5_2_trail	1	
3	20	8	5300	Statistical_Check_RandParm_For_Radar_Type_5_3_trail	1	
4	9	3.6	5300	Statistical_Check_RandParm_For_Radar_Type_5_4_trail	1	
5	17	6.8	5300	Statistical_Check_RandParm_For_Radar_Type_5_5_trail	1	
6	5	2	5300	Statistical_Check_RandParm_For_Radar_Type_5_6_trail	1	
7	5	2	5300	Statistical_Check_RandParm_For_Radar_Type_5_7_trail	1	
8	7	2.8	5300	Statistical_Check_RandParm_For_Radar_Type_5_8_trail	1	
9	10	4	5300	Statistical_Check_RandParm_For_Radar_Type_5_9_trail	1	
10	7	2.8	5300	Statistical_Check_RandParm_For_Radar_Type_5_10_trail	1	
11	20	8	5299	Statistical_Check_RandParm_For_Radar_Type_5_11_trail	1	
12	12	4.8	5295.8	Statistical_Check_RandParm_For_Radar_Type_5_12_trail	0	
13	18	7.2	5298.2	Statistical_Check_RandParm_For_Radar_Type_5_13_trail	0	
14	5	2	5293	Statistical_Check_RandParm_For_Radar_Type_5_14_trail	1	
15	10	4	5295	Statistical_Check_RandParm_For_Radar_Type_5_15_trail	0	
16	16	6.4	5297.4	Statistical_Check_RandParm_For_Radar_Type_5_16_trail	0	
17	15	6	5297	Statistical_Check_RandParm_For_Radar_Type_5_17_trail	1	
18	19	7.6	5298.6	Statistical_Check_RandParm_For_Radar_Type_5_18_trail	1	
19	5	2	5293	Statistical_Check_RandParm_For_Radar_Type_5_19_trail	0	
20	5	2	5293	Statistical_Check_RandParm_For_Radar_Type_5_20_trail	1	
21	18	7.2	5300.8	Statistical_Check_RandParm_For_Radar_Type_5_21_trail	1	
22	11	4.4	5303.6	Statistical_Check_RandParm_For_Radar_Type_5_22_trail	1	
23	15	6	5302	Statistical_Check_RandParm_For_Radar_Type_5_23_trail	1	
24	18	7.2	5300.8	Statistical_Check_RandParm_For_Radar_Type_5_24_trail	1	
25	13	5.2	5302.8	Statistical_Check_RandParm_For_Radar_Type_5_25_trail	1	
26	10	4	5304	Statistical_Check_RandParm_For_Radar_Type_5_26_trail	1	
27	12	4.8	5303.2	Statistical_Check_RandParm_For_Radar_Type_5_27_trail	1	
28	10	4	5304	Statistical_Check_RandParm_For_Radar_Type_5_28_trail	1	
29	10	4	5304	Statistical_Check_RandParm_For_Radar_Type_5_29_trail	1	
30	10	4	5304	Statistical_Check_RandParm_For_Radar_Type_5_30_trail	1	
Detection Percentage (%)					83.3	
Limit					≥ 80	

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 5
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Center Freq: 5510MHz			Low Edge: 5492MHz		High Edge: 5517MHz	
Trial #	Chirp	Offset	VSG Frequency (MHz)	*Filename	1= Detection 0= No Detection	
1	10	4	5510	Statistical_Check_RandParm_For_Radar_Type_5_1_trail	1	
2	16	6.4	5510	Statistical_Check_RandParm_For_Radar_Type_5_2_trail	1	
3	15	6	5510	Statistical_Check_RandParm_For_Radar_Type_5_3_trail	1	
4	6	2.4	5510	Statistical_Check_RandParm_For_Radar_Type_5_4_trail	1	
5	19	7.6	5510	Statistical_Check_RandParm_For_Radar_Type_5_5_trail	1	
6	18	7.2	5510	Statistical_Check_RandParm_For_Radar_Type_5_6_trail	1	
7	6	2.4	5510	Statistical_Check_RandParm_For_Radar_Type_5_7_trail	1	
8	17	6.8	5510	Statistical_Check_RandParm_For_Radar_Type_5_8_trail	1	
9	10	4	5510	Statistical_Check_RandParm_For_Radar_Type_5_9_trail	1	
10	15	6	5510	Statistical_Check_RandParm_For_Radar_Type_5_10_trail	1	
11	11	4.4	5496.4	Statistical_Check_RandParm_For_Radar_Type_5_11_trail	1	
12	15	6	5498	Statistical_Check_RandParm_For_Radar_Type_5_12_trail	1	
13	19	7.6	5499.6	Statistical_Check_RandParm_For_Radar_Type_5_13_trail	1	
14	16	6.4	5498.4	Statistical_Check_RandParm_For_Radar_Type_5_14_trail	0	
15	14	5.6	5497.6	Statistical_Check_RandParm_For_Radar_Type_5_15_trail	1	
16	11	4.4	5496.4	Statistical_Check_RandParm_For_Radar_Type_5_16_trail	0	
17	15	6	5498	Statistical_Check_RandParm_For_Radar_Type_5_17_trail	1	
18	15	6	5498	Statistical_Check_RandParm_For_Radar_Type_5_18_trail	1	
19	18	7.2	5499.2	Statistical_Check_RandParm_For_Radar_Type_5_19_trail	0	
20	19	7.6	5499.6	Statistical_Check_RandParm_For_Radar_Type_5_20_trail	1	
21	17	6.8	5510.2	Statistical_Check_RandParm_For_Radar_Type_5_21_trail	1	
22	18	7.2	5509.8	Statistical_Check_RandParm_For_Radar_Type_5_22_trail	1	
23	18	7.2	5509.8	Statistical_Check_RandParm_For_Radar_Type_5_23_trail	1	
24	10	4	5513	Statistical_Check_RandParm_For_Radar_Type_5_24_trail	1	
25	8	3.2	5513.8	Statistical_Check_RandParm_For_Radar_Type_5_25_trail	1	
26	12	4.8	5512.2	Statistical_Check_RandParm_For_Radar_Type_5_26_trail	0	
27	20	8	5509	Statistical_Check_RandParm_For_Radar_Type_5_27_trail	1	
28	17	6.8	5510.2	Statistical_Check_RandParm_For_Radar_Type_5_28_trail	1	
29	20	8	5509	Statistical_Check_RandParm_For_Radar_Type_5_29_trail	1	
30	6	2.4	5514.6	Statistical_Check_RandParm_For_Radar_Type_5_30_trail	0	
Detection Percentage (%)					83.3	
Limit					≥ 80	

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 5
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Center Freq: 5630MHz			Low Edge: 5611MHz		High Edge: 5648MHz	
Trial #	Chirp	Offset	VSG Frequency (MHz)	*Filename	1= Detection 0= No Detection	
1	17	6.8	5630	Statistical_Check_RandParm_For_Radar_Type_5_1_trail	1	
2	15	6	5630	Statistical_Check_RandParm_For_Radar_Type_5_2_trail	1	
3	11	4.4	5630	Statistical_Check_RandParm_For_Radar_Type_5_3_trail	1	
4	8	3.2	5630	Statistical_Check_RandParm_For_Radar_Type_5_4_trail	1	
5	12	4.8	5630	Statistical_Check_RandParm_For_Radar_Type_5_5_trail	0	
6	16	6.4	5630	Statistical_Check_RandParm_For_Radar_Type_5_6_trail	1	
7	8	3.2	5630	Statistical_Check_RandParm_For_Radar_Type_5_7_trail	1	
8	8	3.2	5630	Statistical_Check_RandParm_For_Radar_Type_5_8_trail	1	
9	18	7.2	5630	Statistical_Check_RandParm_For_Radar_Type_5_9_trail	1	
10	12	4.8	5630	Statistical_Check_RandParm_For_Radar_Type_5_10_trail	1	
11	12	4.8	5615.8	Statistical_Check_RandParm_For_Radar_Type_5_11_trail	1	
12	13	5.2	5616.2	Statistical_Check_RandParm_For_Radar_Type_5_12_trail	0	
13	19	7.6	5618.6	Statistical_Check_RandParm_For_Radar_Type_5_13_trail	1	
14	5	2	5613	Statistical_Check_RandParm_For_Radar_Type_5_14_trail	1	
15	5	2	5613	Statistical_Check_RandParm_For_Radar_Type_5_15_trail	1	
16	17	6.8	5617.8	Statistical_Check_RandParm_For_Radar_Type_5_16_trail	0	
17	16	6.4	5617.4	Statistical_Check_RandParm_For_Radar_Type_5_17_trail	1	
18	10	4	5615	Statistical_Check_RandParm_For_Radar_Type_5_18_trail	0	
19	9	3.6	5614.6	Statistical_Check_RandParm_For_Radar_Type_5_19_trail	1	
20	10	4	5615	Statistical_Check_RandParm_For_Radar_Type_5_20_trail	0	
21	9	3.6	5644.4	Statistical_Check_RandParm_For_Radar_Type_5_21_trail	1	
22	14	5.6	5642.4	Statistical_Check_RandParm_For_Radar_Type_5_22_trail	1	
23	18	7.2	5640.8	Statistical_Check_RandParm_For_Radar_Type_5_23_trail	1	
24	16	6.4	5641.6	Statistical_Check_RandParm_For_Radar_Type_5_24_trail	1	
25	18	7.2	5640.8	Statistical_Check_RandParm_For_Radar_Type_5_25_trail	1	
26	11	4.4	5643.6	Statistical_Check_RandParm_For_Radar_Type_5_26_trail	1	
27	8	3.2	5644.8	Statistical_Check_RandParm_For_Radar_Type_5_27_trail	0	
28	11	4.4	5643.6	Statistical_Check_RandParm_For_Radar_Type_5_28_trail	1	
29	11	4.4	5643.6	Statistical_Check_RandParm_For_Radar_Type_5_29_trail	1	
30	18	7.2	5640.8	Statistical_Check_RandParm_For_Radar_Type_5_30_trail	1	
Detection Percentage (%)					80.0	
Limit					≥ 80	

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 6
 Test Date : 2017/11/10
 Test Mode : Mode 1: Transmit (802.11a)_Module 1

Trial #	Frequency (MHz)	*Filename	1= Detection 0= No Detection
1	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_1_trail	1
2	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_2_trail	1
3	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_3_trail	1
4	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_4_trail	1
5	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_5_trail	1
6	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_6_trail	1
7	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_7_trail	0
8	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_8_trail	1
9	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_9_trail	1
10	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_10_trail	0
11	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_11_trail	1
12	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_12_trail	1
13	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_13_trail	1
14	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_14_trail	1
15	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_15_trail	1
16	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_16_trail	0
17	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_17_trail	1
18	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_18_trail	1
19	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_19_trail	1
20	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_20_trail	1
21	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_21_trail	1
22	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_22_trail	0
23	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_23_trail	1
24	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_24_trail	1
25	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_25_trail	1
26	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_26_trail	0
27	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_27_trail	1
28	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_28_trail	1
29	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_29_trail	1
30	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_30_trail	1
Detection Percentage (%)			83.3
Limit			>70

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 6
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	*Filename	1= Detection 0= No Detection
1	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_1_trail	1
2	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_2_trail	1
3	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_3_trail	1
4	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_4_trail	1
5	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_5_trail	1
6	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_6_trail	1
7	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_7_trail	0
8	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_8_trail	1
9	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_9_trail	1
10	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_10_trail	1
11	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_11_trail	1
12	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_12_trail	1
13	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_13_trail	1
14	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_14_trail	0
15	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_15_trail	1
16	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_16_trail	1
17	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_17_trail	1
18	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_18_trail	1
19	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_19_trail	1
20	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_20_trail	1
21	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_21_trail	0
22	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_22_trail	1
23	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_23_trail	1
24	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_24_trail	1
25	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_25_trail	1
26	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_26_trail	0
27	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_27_trail	1
28	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_28_trail	1
29	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_29_trail	1
30	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_30_trail	1
Detection Percentage (%)			86.67
Limit			>70

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 6
 Test Date : 2017/11/10
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 1

Trial #	Frequency (MHz)	*Filename	1= Detection 0= No Detection
1	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_1_trail	1
2	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_2_trail	1
3	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_3_trail	0
4	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_4_trail	1
5	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_5_trail	1
6	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_6_trail	0
7	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_7_trail	1
8	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_8_trail	1
9	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_9_trail	0
10	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_10_trail	1
11	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_11_trail	1
12	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_12_trail	1
13	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_13_trail	1
14	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_14_trail	0
15	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_15_trail	1
16	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_16_trail	1
17	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_17_trail	0
18	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_18_trail	1
19	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_19_trail	1
20	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_20_trail	1
21	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_21_trail	1
22	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_22_trail	1
23	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_23_trail	0
24	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_24_trail	1
25	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_25_trail	1
26	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_26_trail	1
27	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_27_trail	0
28	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_28_trail	1
29	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_29_trail	1
30	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_30_trail	1
Detection Percentage (%)			76.67
Limit			>70

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 1
 Test Date : 2018/03/01
 Test Mode : Mode 1: Transmit (802.11a)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5300	67	1	798	0
2	5300	83	1	638	1
3	5300	78	1	678	1
4	5300	59	1	898	0
5	5300	92	1	578	1
6	5300	18	1	3066	1
7	5300	68	1	778	1
8	5300	61	1	878	1
9	5300	62	1	858	1
10	5300	102	1	518	1
11	5300	74	1	718	1
12	5300	98	1	538	1
13	5300	72	1	738	1
14	5300	58	1	918	1
15	5300	89	1	598	1
16	5300	24	1	2230	1
17	5300	25	1	2160	1
18	5300	22	1	2404	0
19	5300	87	1	606	1
20	5300	24	1	2215	0
21	5300	80	1	660	1
22	5300	24	1	2283	1
23	5300	28	1	1922	1
24	5300	41	1	1306	1
25	5300	66	1	809	1
26	5300	29	1	1848	1
27	5300	20	1	2729	0
28	5300	92	1	579	1
29	5300	34	1	1587	1
30	5300	19	1	2832	0
Detection Percentage(%)					80.00%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 1
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5510	95	1	558	1
2	5510	98	1	538	1
3	5510	86	1	618	1
4	5510	76	1	698	0
5	5510	74	1	718	1
6	5510	68	1	778	1
7	5510	92	1	578	1
8	5510	70	1	758	1
9	5510	65	1	818	1
10	5510	62	1	858	1
11	5510	78	1	678	1
12	5510	57	1	938	1
13	5510	63	1	838	1
14	5510	81	1	658	1
15	5510	58	1	918	1
16	5510	32	1	1653	1
17	5510	20	1	2644	1
18	5510	91	1	584	1
19	5510	34	1	1582	0
20	5510	20	1	2685	1
21	5510	36	1	1471	1
22	5510	20	1	2648	1
23	5510	46	1	1165	1
24	5510	18	1	3043	1
25	5510	41	1	1287	1
26	5510	55	1	965	1
27	5510	37	1	1454	1
28	5510	20	1	2663	0
29	5510	38	1	1420	1
30	5510	21	1	2521	1
Detection Percentage(%)					90.00%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 1
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5630	78	1	678	1
2	5630	81	1	658	0
3	5630	65	1	818	1
4	5630	61	1	878	1
5	5630	76	1	698	1
6	5630	89	1	598	1
7	5630	83	1	638	1
8	5630	95	1	558	1
9	5630	57	1	938	1
10	5630	86	1	618	1
11	5630	68	1	778	1
12	5630	102	1	518	1
13	5630	58	1	918	1
14	5630	92	1	578	1
15	5630	59	1	898	1
16	5630	33	1	1620	1
17	5630	20	1	2715	1
18	5630	33	1	1626	0
19	5630	19	1	2878	0
20	5630	25	1	2133	1
21	5630	26	1	2094	1
22	5630	59	1	902	1
23	5630	25	1	2125	1
24	5630	42	1	1259	0
25	5630	21	1	2620	1
26	5630	21	1	2605	1
27	5630	41	1	1316	1
28	5630	55	1	971	1
29	5630	45	1	1175	1
30	5630	26	1	2028	1
Detection Percentage(%)					86.67%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 2
 Test Date : 2018/03/01
 Test Mode : Mode 1: Transmit (802.11a)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5300	23	1.90	154	1
2	5300	23	3.40	188	1
3	5300	27	2.90	165	0
4	5300	26	4.20	186	1
5	5300	26	1.80	200	1
6	5300	24	1.00	203	1
7	5300	24	1.50	186	1
8	5300	27	3.50	228	1
9	5300	24	1.60	165	1
10	5300	28	4.90	163	1
11	5300	24	4.00	189	1
12	5300	25	1.40	157	0
13	5300	27	4.10	217	1
14	5300	28	1.30	178	1
15	5300	24	3.50	204	0
16	5300	27	1.80	163	1
17	5300	27	3.80	156	1
18	5300	25	3.00	202	1
19	5300	28	1.90	215	1
20	5300	27	4.50	183	1
21	5300	24	3.00	224	1
22	5300	23	4.30	164	1
23	5300	23	3.60	196	1
24	5300	28	3.90	160	1
25	5300	29	2.40	175	1
26	5300	25	3.70	163	1
27	5300	28	2.80	213	0
28	5300	23	1.50	162	0
29	5300	27	3.50	224	1
30	5300	28	3.50	151	1
Detection Percentage(%)					83.33%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 2
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5510	28	3.7	225	1
2	5510	29	4.5	181	0
3	5510	25	4.9	171	1
4	5510	24	4.1	165	1
5	5510	27	1.9	219	0
6	5510	28	4.3	166	1
7	5510	27	2.4	170	1
8	5510	23	3	203	0
9	5510	24	3	228	1
10	5510	26	4.5	170	1
11	5510	25	3.4	207	1
12	5510	24	3.3	208	0
13	5510	24	4.7	215	1
14	5510	25	2	165	1
15	5510	26	1.5	204	1
16	5510	27	4.6	174	1
17	5510	28	4.3	150	1
18	5510	27	5	171	0
19	5510	26	4.7	183	1
20	5510	27	3.4	166	0
21	5510	29	3	173	1
22	5510	29	3.9	223	1
23	5510	26	2.4	220	1
24	5510	25	3.3	165	1
25	5510	28	3.5	214	1
26	5510	28	3.7	191	1
27	5510	26	4.9	174	1
28	5510	27	2.9	165	1
29	5510	26	5	213	0
30	5510	25	3.5	177	1
Detection Percentage(%)					76.67%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 2
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5630	24	4.6	180	1
2	5630	25	4.2	230	1
3	5630	28	4	194	1
4	5630	28	2.1	190	1
5	5630	25	1.1	187	1
6	5630	28	4.7	178	1
7	5630	28	2.5	209	1
8	5630	28	1.5	201	1
9	5630	27	3.1	161	1
10	5630	29	3.4	200	1
11	5630	29	3.3	168	0
12	5630	28	2	211	1
13	5630	26	4.3	190	1
14	5630	27	1.5	230	0
15	5630	25	4	168	1
16	5630	23	4.9	190	0
17	5630	25	2.4	184	1
18	5630	28	1.6	203	1
19	5630	26	4.1	166	1
20	5630	25	1.9	192	0
21	5630	26	4.8	182	1
22	5630	28	1.8	220	1
23	5630	24	2.5	164	1
24	5630	28	1.2	171	0
25	5630	25	2.7	189	1
26	5630	25	1.7	175	1
27	5630	23	1.1	219	1
28	5630	28	2.7	161	0
29	5630	28	3.7	193	1
30	5630	26	2.9	175	0
Detection Percentage(%)					76.67%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 3
 Test Date : 2018/03/01
 Test Mode : Mode 1: Transmit (802.11a)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5300	17	9.00	386	1
2	5300	17	8.90	316	1
3	5300	17	8.30	233	1
4	5300	17	7.50	478	0
5	5300	16	8.80	344	1
6	5300	17	7.50	240	1
7	5300	17	9.10	263	0
8	5300	17	8.30	386	1
9	5300	18	6.40	303	1
10	5300	17	7.40	449	1
11	5300	16	8.00	443	1
12	5300	17	8.20	462	1
13	5300	17	8.10	258	1
14	5300	18	7.10	427	1
15	5300	17	6.00	435	1
16	5300	18	9.20	328	1
17	5300	17	7.80	348	0
18	5300	16	6.30	480	1
19	5300	16	9.90	329	1
20	5300	18	8.90	497	1
21	5300	17	8.30	337	0
22	5300	17	9.50	236	1
23	5300	18	9.70	467	1
24	5300	18	9.70	382	1
25	5300	17	7.30	490	1
26	5300	16	9.40	353	1
27	5300	16	6.10	356	0
28	5300	17	6.60	380	1
29	5300	17	8.70	469	1
30	5300	16	8.20	252	1
Detection Percentage(%)					83.33%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 3
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5510	18	6.9	355	1
2	5510	16	8.2	295	1
3	5510	17	9.1	465	1
4	5510	17	9.4	433	1
5	5510	18	6.6	249	1
6	5510	17	7.8	321	0
7	5510	18	6.9	249	1
8	5510	17	6	460	1
9	5510	16	6.9	351	1
10	5510	17	9.4	356	1
11	5510	16	7.4	389	1
12	5510	17	9.1	284	1
13	5510	16	7	301	1
14	5510	17	8.6	292	1
15	5510	17	6.2	346	1
16	5510	18	6.1	477	1
17	5510	16	9.3	250	1
18	5510	17	9.4	281	1
19	5510	18	9.2	289	0
20	5510	17	8.2	374	1
21	5510	18	9.6	483	1
22	5510	17	9.7	201	1
23	5510	18	9.7	452	1
24	5510	16	9.9	313	0
25	5510	16	8.3	361	1
26	5510	16	6.6	336	1
27	5510	17	9.5	221	0
28	5510	17	9.3	384	1
29	5510	16	7.1	208	1
30	5510	18	10	250	0
Detection Percentage(%)					83.33%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 3
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5630	17	6.8	233	1
2	5630	17	7.4	229	1
3	5630	18	7.4	228	1
4	5630	17	8.7	493	1
5	5630	18	9	234	1
6	5630	17	7.9	447	1
7	5630	16	9.2	294	1
8	5630	17	8.1	253	0
9	5630	16	6.1	268	1
10	5630	17	8.8	260	0
11	5630	17	8.3	462	1
12	5630	16	9.6	423	1
13	5630	16	7.1	427	1
14	5630	16	8	353	1
15	5630	18	9.3	335	0
16	5630	17	6.9	415	1
17	5630	17	9.7	264	1
18	5630	18	6.1	479	1
19	5630	16	7.3	299	1
20	5630	17	9.5	432	0
21	5630	16	6.1	355	1
22	5630	18	6.5	322	1
23	5630	16	8.9	389	0
24	5630	18	7.4	442	1
25	5630	16	9.3	431	1
26	5630	17	7.3	487	1
27	5630	17	6.1	226	1
28	5630	17	7.9	458	1
29	5630	17	8.2	396	1
30	5630	16	8.3	493	0
Detection Percentage(%)					80.00%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 4
 Test Date : 2018/03/01
 Test Mode : Mode 1: Transmit (802.11a)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5300	15	17.90	411	1
2	5300	13	17.00	323	1
3	5300	14	17.30	464	0
4	5300	15	17.30	444	1
5	5300	14	17.80	442	1
6	5300	13	17.00	466	1
7	5300	14	15.10	326	1
8	5300	14	14.50	400	1
9	5300	12	14.40	437	0
10	5300	16	15.40	284	1
11	5300	14	14.00	445	1
12	5300	13	13.50	316	1
13	5300	16	12.60	325	1
14	5300	13	17.00	355	0
15	5300	14	12.60	220	1
16	5300	16	17.80	360	1
17	5300	13	11.70	475	1
18	5300	14	19.30	360	0
19	5300	12	15.40	245	0
20	5300	15	18.00	379	1
21	5300	15	18.40	345	1
22	5300	14	11.90	381	0
23	5300	13	17.70	202	1
24	5300	14	15.60	373	1
25	5300	12	19.80	319	1
26	5300	16	18.60	338	1
27	5300	15	12.90	383	1
28	5300	15	13.60	396	1
29	5300	12	12.40	322	0
30	5300	15	11.50	308	1
Detection Percentage(%)					76.67%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 4
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5510	13	17.3	249	1
2	5510	16	12.5	289	1
3	5510	16	16.5	417	1
4	5510	14	18.7	284	1
5	5510	15	11.3	414	0
6	5510	13	13.4	420	1
7	5510	12	11.6	269	1
8	5510	13	11.7	307	1
9	5510	15	13.3	349	1
10	5510	13	17.3	465	1
11	5510	13	16.3	354	0
12	5510	13	14	258	1
13	5510	13	16.6	364	1
14	5510	14	18	289	1
15	5510	15	19.5	482	1
16	5510	14	13.1	439	1
17	5510	15	12.4	347	1
18	5510	15	17	255	1
19	5510	14	20	252	1
20	5510	14	13.4	219	1
21	5510	12	19	305	0
22	5510	14	11.3	350	1
23	5510	15	12.2	491	1
24	5510	14	11.7	282	1
25	5510	15	13.5	467	1
26	5510	13	12.6	320	1
27	5510	13	15.3	328	1
28	5510	14	12.7	321	0
29	5510	13	14.9	280	1
30	5510	14	14.7	379	1
Detection Percentage (%)					86.67%

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 4
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	Pulses/Burs	Pulse Width (us)	PRI (us)	1= Detection 0= No Detection
1	5630	13	18.9	291	1
2	5630	14	15.5	333	1
3	5630	15	16.5	331	0
4	5630	13	14.6	363	0
5	5630	14	14.1	332	1
6	5630	13	11.3	303	1
7	5630	13	12.9	381	1
8	5630	13	14.2	365	0
9	5630	13	19.7	325	1
10	5630	13	14.6	443	1
11	5630	14	12.5	308	1
12	5630	15	15.8	440	1
13	5630	15	14.1	465	1
14	5630	12	19.1	446	1
15	5630	12	11.8	200	1
16	5630	15	12	354	1
17	5630	13	18.7	268	1
18	5630	15	13.8	235	1
19	5630	15	11.1	218	1
20	5630	13	16	224	1
21	5630	15	14.1	419	1
22	5630	13	12.6	412	1
23	5630	13	15.8	275	1
24	5630	15	19.4	370	1
25	5630	13	17.9	317	0
26	5630	15	17	433	1
27	5630	12	18.8	333	0
28	5630	15	14.3	454	1
29	5630	15	14.8	294	1
30	5630	13	13	465	0
Detection Percentage (%)					80.00%

Mode1 –802.11a

Total Type 1~4 Radar Statistical Performance			
Radar Type	Detection Percentage (%)	Limit (%)	Result
1	80.00	>60%	Pass
2	83.33	>60%	Pass
3	83.33	>60%	Pass
4	76.67	>60%	Pass
Total Type 1~4	80.83	>80%	Pass
5	83.33	>80%	Pass
6	76.67	>70%	Pass

Mode2 –802.11n40

Total Type 1~4 Radar Statistical Performance			
Radar Type	Detection Percentage (%)	Limit (%)	Result
1	90.00	>60%	Pass
2	76.67	>60%	Pass
3	83.33	>60%	Pass
4	86.67	>60%	Pass
Total Type 1~4	84.17	>80%	Pass
5	83.33	>80%	Pass
6	76.67	>70%	Pass

Mode3 –802.11n40

Total Type 1~4 Radar Statistical Performance			
Radar Type	Detection Percentage (%)	Limit (%)	Result
1	86.67	>60%	Pass
2	76.67	>60%	Pass
3	80.00	>60%	Pass
4	80.00	>60%	Pass
Total Type 1~4	80.83	>80%	Pass
5	83.33	>80%	Pass
6	76.67	>70%	Pass

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 5
 Test Date : 2018/03/01
 Test Mode : Mode 1: Transmit (802.11a)_Module 2

Center Freq: 5300MHz			Low Edge: 5292MHz		High Edge: 5308MHz	
Trial #	Chirp	Offset	VSG Frequency (MHz)	*Filename	1= Detection 0= No Detection	
1	16	6.4	5300	Statistical_Check_RandParm_For_Radar_Type_5_1_trail	1	
2	11	4.4	5300	Statistical_Check_RandParm_For_Radar_Type_5_2_trail	1	
3	6	2.4	5300	Statistical_Check_RandParm_For_Radar_Type_5_3_trail	1	
4	13	5.2	5300	Statistical_Check_RandParm_For_Radar_Type_5_4_trail	1	
5	16	6.4	5300	Statistical_Check_RandParm_For_Radar_Type_5_5_trail	1	
6	20	8	5300	Statistical_Check_RandParm_For_Radar_Type_5_6_trail	1	
7	11	4.4	5300	Statistical_Check_RandParm_For_Radar_Type_5_7_trail	1	
8	20	8	5300	Statistical_Check_RandParm_For_Radar_Type_5_8_trail	0	
9	17	6.8	5300	Statistical_Check_RandParm_For_Radar_Type_5_9_trail	1	
10	19	7.6	5300	Statistical_Check_RandParm_For_Radar_Type_5_10_trail	0	
11	19	7.6	5299.34	Statistical_Check_RandParm_For_Radar_Type_5_11_trail	1	
12	14	5.6	5297.34	Statistical_Check_RandParm_For_Radar_Type_5_12_trail	0	
13	13	5.2	5296.94	Statistical_Check_RandParm_For_Radar_Type_5_13_trail	1	
14	17	6.8	5298.54	Statistical_Check_RandParm_For_Radar_Type_5_14_trail	0	
15	20	8	5299.74	Statistical_Check_RandParm_For_Radar_Type_5_15_trail	1	
16	19	7.6	5299.34	Statistical_Check_RandParm_For_Radar_Type_5_16_trail	1	
17	7	2.8	5294.54	Statistical_Check_RandParm_For_Radar_Type_5_17_trail	1	
18	12	4.8	5296.54	Statistical_Check_RandParm_For_Radar_Type_5_18_trail	0	
19	7	2.8	5294.54	Statistical_Check_RandParm_For_Radar_Type_5_19_trail	1	
20	13	5.2	5296.94	Statistical_Check_RandParm_For_Radar_Type_5_20_trail	1	
21	7	2.8	5305.46	Statistical_Check_RandParm_For_Radar_Type_5_21_trail	1	
22	11	4.4	5303.86	Statistical_Check_RandParm_For_Radar_Type_5_22_trail	1	
23	17	6.8	5301.46	Statistical_Check_RandParm_For_Radar_Type_5_23_trail	1	
24	12	4.8	5303.46	Statistical_Check_RandParm_For_Radar_Type_5_24_trail	1	
25	10	4	5304.26	Statistical_Check_RandParm_For_Radar_Type_5_25_trail	1	
26	16	6.4	5301.86	Statistical_Check_RandParm_For_Radar_Type_5_26_trail	1	
27	16	6.4	5301.86	Statistical_Check_RandParm_For_Radar_Type_5_27_trail	1	
28	9	3.6	5304.66	Statistical_Check_RandParm_For_Radar_Type_5_28_trail	1	
29	13	5.2	5303.06	Statistical_Check_RandParm_For_Radar_Type_5_29_trail	1	
30	10	4	5304.26	Statistical_Check_RandParm_For_Radar_Type_5_30_trail	1	
Detection Percentage (%)					83.33	
Limit					≥ 80	

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 5
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Center Freq: 5510MHz			Low Edge: 5492MHz		High Edge: 5528MHz	
Trial #	Chirp	Offset	VSG Frequency (MHz)	*Filename	1= Detection 0= No Detection	
1	5	2	5510	Statistical_Check_RandParm_For_Radar_Type_5_1_trail	1	
2	11	4.4	5510	Statistical_Check_RandParm_For_Radar_Type_5_2_trail	1	
3	16	6.4	5510	Statistical_Check_RandParm_For_Radar_Type_5_3_trail	1	
4	14	5.6	5510	Statistical_Check_RandParm_For_Radar_Type_5_4_trail	1	
5	10	4	5510	Statistical_Check_RandParm_For_Radar_Type_5_5_trail	1	
6	10	4	5510	Statistical_Check_RandParm_For_Radar_Type_5_6_trail	1	
7	5	2	5510	Statistical_Check_RandParm_For_Radar_Type_5_7_trail	1	
8	7	2.8	5510	Statistical_Check_RandParm_For_Radar_Type_5_8_trail	1	
9	5	2	5510	Statistical_Check_RandParm_For_Radar_Type_5_9_trail	1	
10	7	2.8	5510	Statistical_Check_RandParm_For_Radar_Type_5_10_trail	1	
11	20	8	5499.535	Statistical_Check_RandParm_For_Radar_Type_5_11_trail	1	
12	19	7.6	5499.135	Statistical_Check_RandParm_For_Radar_Type_5_12_trail	0	
13	19	7.6	5499.135	Statistical_Check_RandParm_For_Radar_Type_5_13_trail	1	
14	10	4	5495.535	Statistical_Check_RandParm_For_Radar_Type_5_14_trail	1	
15	20	8	5499.535	Statistical_Check_RandParm_For_Radar_Type_5_15_trail	1	
16	14	5.6	5497.135	Statistical_Check_RandParm_For_Radar_Type_5_16_trail	1	
17	18	7.2	5498.735	Statistical_Check_RandParm_For_Radar_Type_5_17_trail	0	
18	6	2.4	5493.935	Statistical_Check_RandParm_For_Radar_Type_5_18_trail	0	
19	11	4.4	5495.935	Statistical_Check_RandParm_For_Radar_Type_5_19_trail	1	
20	18	7.2	5498.735	Statistical_Check_RandParm_For_Radar_Type_5_20_trail	1	
21	7	2.8	5525.665	Statistical_Check_RandParm_For_Radar_Type_5_21_trail	0	
22	20	8	5520.465	Statistical_Check_RandParm_For_Radar_Type_5_22_trail	1	
23	11	4.4	5524.065	Statistical_Check_RandParm_For_Radar_Type_5_23_trail	1	
24	16	6.4	5522.065	Statistical_Check_RandParm_For_Radar_Type_5_24_trail	1	
25	19	7.6	5520.865	Statistical_Check_RandParm_For_Radar_Type_5_25_trail	0	
26	10	4	5524.465	Statistical_Check_RandParm_For_Radar_Type_5_26_trail	1	
27	11	4.4	5524.065	Statistical_Check_RandParm_For_Radar_Type_5_27_trail	1	
28	16	6.4	5522.065	Statistical_Check_RandParm_For_Radar_Type_5_28_trail	1	
29	14	5.6	5522.865	Statistical_Check_RandParm_For_Radar_Type_5_29_trail	1	
30	7	2.8	5525.665	Statistical_Check_RandParm_For_Radar_Type_5_30_trail	1	
Detection Percentage (%)					83.33	
Limit					≥ 80	

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 5
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Center Freq: 5630MHz			Low Edge: 5612MHz		High Edge: 5648MHz	
Trial #	Chirp	Offset	VSG Frequency (MHz)	*Filename	1= Detection 0= No Detection	
1	6	2.4	5630	Statistical_Check_RandParm_For_Radar_Type_5_1_trail	1	
2	14	5.6	5630	Statistical_Check_RandParm_For_Radar_Type_5_2_trail	1	
3	6	2.4	5630	Statistical_Check_RandParm_For_Radar_Type_5_3_trail	1	
4	15	6	5630	Statistical_Check_RandParm_For_Radar_Type_5_4_trail	1	
5	8	3.2	5630	Statistical_Check_RandParm_For_Radar_Type_5_5_trail	1	
6	18	7.2	5630	Statistical_Check_RandParm_For_Radar_Type_5_6_trail	1	
7	5	2	5630	Statistical_Check_RandParm_For_Radar_Type_5_7_trail	1	
8	16	6.4	5630	Statistical_Check_RandParm_For_Radar_Type_5_8_trail	1	
9	12	4.8	5630	Statistical_Check_RandParm_For_Radar_Type_5_9_trail	1	
10	11	4.4	5630	Statistical_Check_RandParm_For_Radar_Type_5_10_trail	1	
11	6	2.4	5613.955	Statistical_Check_RandParm_For_Radar_Type_5_11_trail	0	
12	9	3.6	5615.155	Statistical_Check_RandParm_For_Radar_Type_5_12_trail	1	
13	15	6	5617.555	Statistical_Check_RandParm_For_Radar_Type_5_13_trail	0	
14	6	2.4	5613.955	Statistical_Check_RandParm_For_Radar_Type_5_14_trail	1	
15	8	3.2	5614.755	Statistical_Check_RandParm_For_Radar_Type_5_15_trail	1	
16	19	7.6	5619.155	Statistical_Check_RandParm_For_Radar_Type_5_16_trail	1	
17	10	4	5615.555	Statistical_Check_RandParm_For_Radar_Type_5_17_trail	0	
18	19	7.6	5619.155	Statistical_Check_RandParm_For_Radar_Type_5_18_trail	1	
19	10	4	5615.555	Statistical_Check_RandParm_For_Radar_Type_5_19_trail	0	
20	11	4.4	5615.955	Statistical_Check_RandParm_For_Radar_Type_5_20_trail	1	
21	11	4.4	5644.045	Statistical_Check_RandParm_For_Radar_Type_5_21_trail	1	
22	7	2.8	5645.645	Statistical_Check_RandParm_For_Radar_Type_5_22_trail	1	
23	15	6	5642.445	Statistical_Check_RandParm_For_Radar_Type_5_23_trail	1	
24	11	4.4	5644.045	Statistical_Check_RandParm_For_Radar_Type_5_24_trail	1	
25	14	5.6	5642.845	Statistical_Check_RandParm_For_Radar_Type_5_25_trail	1	
26	7	2.8	5645.645	Statistical_Check_RandParm_For_Radar_Type_5_26_trail	1	
27	16	6.4	5642.045	Statistical_Check_RandParm_For_Radar_Type_5_27_trail	0	
28	12	4.8	5643.645	Statistical_Check_RandParm_For_Radar_Type_5_28_trail	1	
29	5	2	5646.445	Statistical_Check_RandParm_For_Radar_Type_5_29_trail	1	
30	11	4.4	5644.045	Statistical_Check_RandParm_For_Radar_Type_5_30_trail	1	
Detection Percentage (%)					83.33	
Limit					≥ 80	

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 6
 Test Date : 2018/03/01
 Test Mode : Mode 1: Transmit (802.11a)_Module 2

Trial #	Frequency (MHz)	*Filename	1= Detection 0= No Detection
1	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_1_trail	1
2	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_2_trail	1
3	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_3_trail	0
4	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_4_trail	1
5	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_5_trail	1
6	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_6_trail	1
7	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_7_trail	1
8	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_8_trail	0
9	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_9_trail	1
10	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_10_trail	1
11	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_11_trail	0
12	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_12_trail	1
13	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_13_trail	1
14	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_14_trail	0
15	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_15_trail	1
16	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_16_trail	1
17	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_17_trail	1
18	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_18_trail	0
19	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_19_trail	1
20	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_20_trail	1
21	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_21_trail	0
22	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_22_trail	1
23	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_23_trail	1
24	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_24_trail	1
25	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_25_trail	1
26	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_26_trail	1
27	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_27_trail	1
28	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_28_trail	0
29	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_29_trail	1
30	5300	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_30_trail	1
Detection Percentage (%)			76.67
Limit			>70

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 6
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	*Filename	1= Detection 0= No Detection
1	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_1_trail	1
2	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_2_trail	1
3	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_3_trail	1
4	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_4_trail	1
5	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_5_trail	0
6	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_6_trail	1
7	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_7_trail	1
8	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_8_trail	1
9	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_9_trail	0
10	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_10_trail	1
11	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_11_trail	1
12	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_12_trail	1
13	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_13_trail	0
14	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_14_trail	1
15	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_15_trail	1
16	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_16_trail	1
17	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_17_trail	1
18	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_18_trail	0
19	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_19_trail	1
20	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_20_trail	0
21	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_21_trail	1
22	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_22_trail	1
23	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_23_trail	0
24	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_24_trail	1
25	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_25_trail	1
26	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_26_trail	1
27	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_27_trail	0
28	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_28_trail	1
29	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_29_trail	1
30	5510	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_30_trail	1
Detection Percentage (%)			76.67
Limit			>70

Product : MOXA IEEE 802.11 a/b/g/n
 Test Item : Statistical Performance Check
 Radar Type : Type 6
 Test Date : 2018/03/01
 Test Mode : Mode 2: Transmit (802.11n-40BW)_Module 2

Trial #	Frequency (MHz)	*Filename	1= Detection 0= No Detection
1	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_1_trail	1
2	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_2_trail	0
3	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_3_trail	1
4	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_4_trail	0
5	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_5_trail	1
6	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_6_trail	1
7	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_7_trail	1
8	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_8_trail	0
9	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_9_trail	1
10	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_10_trail	1
11	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_11_trail	1
12	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_12_trail	0
13	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_13_trail	1
14	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_14_trail	1
15	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_15_trail	0
16	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_16_trail	1
17	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_17_trail	1
18	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_18_trail	1
19	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_19_trail	1
20	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_20_trail	1
21	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_21_trail	1
22	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_22_trail	0
23	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_23_trail	1
24	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_24_trail	1
25	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_25_trail	1
26	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_26_trail	0
27	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_27_trail	1
28	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_28_trail	1
29	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_29_trail	1
30	5630	Statistical_Check_Hopping Frequency List_For_Radar_Type_6_30_trail	1
Detection Percentage (%)			76.67
Limit			>70