



# RF TEST REPORT

Product Name: WiFi6 Wireless Router Module

Model Name: HLK-RM65, HLK-RM65L, HLK-RM65A, HLK-RM65B,  
HLK-RM65C, HLK-RM65D

FCC ID: 2AD56HLK-RM65

Issued For : Shenzhen Hi-Link Electronic CO.,Ltd  
1705, 1706, 1709A, Building E, Xinghe WORLD, Minle  
Community, Minzhi Street, Longhua District, Shenzhen

Issued By : Shenzhen LGT Test Service Co., Ltd.  
Room 205, Building 13, Zone B, Zhenxiong Industrial Park,  
No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan  
District, Shenzhen, Guangdong, China

Report Number: LGT25C210RF07

Sample Received Date: Mar. 28, 2025

Date of Test: Mar. 28, 2025 ~ June 03, 2025

Date of Issue: June 03, 2025

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## TEST REPORT CERTIFICATION

**Applicant:** Shenzhen Hi-Link Electronic CO.,Ltd  
**Address:** 1705, 1706, 1709A, Building E, Xinghe WORLD, Minle Community,  
Minzhi Street, Longhua District, Shenzhen  
**Manufacturer:** Shenzhen Hi-Link Electronic CO.,Ltd  
**Address:** 1705, 1706, 1709A, Building E, Xinghe WORLD, Minle Community,  
Minzhi Street, Longhua District, Shenzhen  
**Product Name:** WiFi6 Wireless Router Module  
**Trademark:** Hi-Link  
**Model Name:** HLK-RM65, HLK-RM65L, HLK-RM65A, HLK-RM65B,  
HLK-RM65C, HLK-RM65D  
**Sample Status:** Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Part 15.407, KDB 789033 D02 ANSI C63.10-2013	PASS

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### **Revision History**

Rev.	Issue Date	Contents
00	June 03, 2025	Initial Issue



## 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 and 905462 D03 UNII Clients Without Radar Detection New Rules v01r02

Part 15.407			
Requirement	Operational Mode		RESULT
	Master	Client	
Non-Occupancy Period	Yes	Yes	Pass
DFS Detection Threshold	Yes	Not required	Pass
Channel Availability Check Time	Yes	Not required	Pass
Channel Closing Transmission Time	Yes	Yes	Pass
Channel Move Time	Yes	Yes	Pass
U-NII Detection Bandwidth	Yes	Not required	Pass

### 1.1 TEST FACTORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate:	A2LA Certificate No.: 6727.01
	FCC Registration No.: 746540
	CAB ID: CN0136

### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately **95** %.

No.	Item	Uncertainty
1	DFS Threshold (radiated)	$\pm 1.50\text{dB}$
2	DFS Threshold (conducted)	$\pm 1.45\text{dB}$
3	Temperature	$\pm 0.5^{\circ}\text{C}$
4	Humidity	$\pm 2\%$

Note: The measurement uncertainty is not included in the test result.



## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	WiFi6 Wireless Router Module									
Trademark:	Hi-Link									
Model Name:	HLK-RM65									
Series Model:	HLK-RM65L, HLK-RM65A, HLK-RM65B, HLK-RM65C, HLK-RM65D									
Model Difference:	Except for the different sizes of FLASH and memory capacity, everything else is the same.									
Product Description:	<table><tr><td>Operation Frequency:</td><td>802.11a/n/ac/ax (20):5260 MHz -5320 MHz 802.11a/n/ac/ax (40):5270 MHz -5310 MHz 802.11ac/ax (80):5290MHz 802.11ac/ax(160MHz):5250MHz  802.11a/n/ac/ax (20):5500 MHz -5700 MHz 802.11a/n/ac/ax (40):5510 MHz -5670 MHz 802.11ac/ax (80): 5530MHz-5610MHz 802.11ac/ax (160MHz):5570MHz</td></tr><tr><td>Modulation Type:</td><td>802.11a(OFDM): BPSK, QPSK, 16-QAM,64-QAM 802.11n(OFDM): BPSK, QPSK, 16-QAM,64-QAM 802.11ac(OFDM): BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM 802.11ax(OFDM, OFDMA): BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024QAM</td></tr><tr><td>Number Of Channel</td><td>Please see Note 2.</td></tr><tr><td>Antenna Gain (Peak)</td><td>ANT 1: 4.69dBi ANT 2: 4.69dBi ANT 3: 4.69dBi</td></tr></table> <p>Based on the application, features, or specification exhibited in User’s Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User’s Manual.</p>		Operation Frequency:	802.11a/n/ac/ax (20):5260 MHz -5320 MHz 802.11a/n/ac/ax (40):5270 MHz -5310 MHz 802.11ac/ax (80):5290MHz 802.11ac/ax(160MHz):5250MHz  802.11a/n/ac/ax (20):5500 MHz -5700 MHz 802.11a/n/ac/ax (40):5510 MHz -5670 MHz 802.11ac/ax (80): 5530MHz-5610MHz 802.11ac/ax (160MHz):5570MHz	Modulation Type:	802.11a(OFDM): BPSK, QPSK, 16-QAM,64-QAM 802.11n(OFDM): BPSK, QPSK, 16-QAM,64-QAM 802.11ac(OFDM): BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM 802.11ax(OFDM, OFDMA): BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024QAM	Number Of Channel	Please see Note 2.	Antenna Gain (Peak)	ANT 1: 4.69dBi ANT 2: 4.69dBi ANT 3: 4.69dBi
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Number Of Channel	Please see Note 2.									
Antenna Gain (Peak)	ANT 1: 4.69dBi ANT 2: 4.69dBi ANT 3: 4.69dBi									
Channel List:	Refer to below									
Rating:	Input: DC 3.3V 5A									
Hardware Version:	N/A									
Software Version:	N/A									

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual, the antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.



2.

Operation Frequency of channel			
5.260GHz-5.320GHz		5.500GHz-5.720GHz	
Channel	Frequency	Channel	Frequency
52	5260	100	5500
54	5270	102	5510
56	5280	104	5520
58	5290	106	5530
60	5300	108	5540
62	5310	110	5550
64	5320	112	5560
50	5250	116	5580
		118	5590
		120	5600
		122	5610
		124	5620
		126	5630
		128	5640
		132	5660
		134	5670
		136	5680
		140	5700
		114	5570



## 2.2 EQUIPMENT UNDER TEST (EUT) DETAILS

The manufacturer declared values for the EUT operational characteristics that affect DFS are as follows

Operating Modes (5250 – 5350 MHz, 5470 – 5725 MHz)

- ☒ Master Device  
☐ Client Device (no In Service Monitoring, no Ad-Hoc mode)  
☐ Client Device with In-Service Monitoring

Antenna Gains / EIRP (5250 – 5350 MHz, 5470 – 5725 MHz)

	5250 – 5350 MHz	5470 – 5725 MHz
Lowest Antenna Gain (dBi)	ANT 1: 4.69dBi ANT 2: 4.69dBi ANT 3: 4.69dBi	ANT 1: 4.69dBi ANT 2: 4.69dBi ANT 3: 4.69dBi
Highest Antenna Gain (dBi)	ANT 1: 4.69dBi ANT 2: 4.69dBi ANT 3: 4.69dBi	ANT 1: 4.69dBi ANT 2: 4.69dBi ANT 3: 4.69dBi
DFS Detection Threshold (dBm)	-64	

Channel Protocol

- ☒ IP Based  
☐ Frame Based  
☐ OTHER \_\_\_\_\_

The EUT did not require modifications during testing in order to comply with the requirements of the standard(s) referenced in this test report.

## 2.3 TEST CONDITIONS AND CHANNEL

	Normal Test Conditions
Temperature	0°C – 40°C
Relative Humidity	20% - 75%
Supply Voltage	DC 3.3V

Channel List		
Band Frequency	EUT Channel	Test Frequency (MHz)
U-NII-2A	CH50	5250
	CH60	5300

Channel List		
Band Frequency	EUT Channel	Test Frequency (MHz)
U-NII-2C	CH114	5570
	CH120	5600





## 2.4 DFS MEASUREMENT INSTRUMENTATION

### a. RADAR GENERATION SYSTEM

An Agilent PSG is used as the radar-generating source. The integral arbitrary waveform generators are programmed using Agilent's "Pulse Building" software and Elliott custom software to produce the required waveforms, with the capability to produce both unmodulated and modulated (FM Chirp) pulses. Where there are multiple values for a specific radar parameter then the software selects a value at random and, for FCC tests, the software verifies that the resulting waveform is truly unique.

With the exception of the hopping waveforms required by the FCC's rules (see below), the radar generator is set to a single frequency within the radar detection bandwidth of the EUT.

Frequency hopping radar waveforms are simulated using a time domain model. A randomly hopping sequence algorithm (which uses each channel in the hopping radar's range once in a hopping sequence) generates a hop sequence. A segment of the first 100 elements of the hop sequence are then examined to determine if it contains one or more frequencies within the radar detection bandwidth of the EUT. If it does not then the first element of the segment is discarded and the next frequency in the sequence is added. The process repeats until a valid segment is produced. The radar system is then programmed to produce bursts at time slots coincident with the frequencies within the segment that fall

in the detection bandwidth. The frequency of the generator is stepped in 1 MHz increments across the EUT's detection range.

The radar signal level is verified during testing using a CW signal with the AGC function switched on. Correction factors to account for the fact that pulses are generated with the AGC functions switched off are measured annually and an offset is used to account for this in the software. The generator output is connected to the coupling port of the conducted set-up or to the radar-generating antenna.

### b. CHANNEL MONITORING SYSTEM

Channel monitoring is achieved using a spectrum analyzer and digital storage oscilloscope. The analyzer is configured in a zero-span mode, center frequency set to the radar waveform's frequency or the center frequency of the EUT's operating channel.

The IF output of the analyzer is connected to one input of the oscilloscope and analyzer.

A signal generator output is set to send either the modulating signal directly or a pulse gate with an output pulse co-incident with each radar pulse. This output is connected to a second input on the oscilloscope and the oscilloscope displays both the channel traffic (via the if input) and the radar pulses on its display.

For in service monitoring tests the analyzer sweep time is set to > 20 seconds and the oscilloscope is configured with a data record length of 10 seconds for the short duration and frequency hopping waveforms, 20 seconds for the long duration waveforms. Both instruments are set for a single acquisition sequence. The analyzer is triggered 500ms before the start of the waveform and the oscilloscope is triggered directly by the modulating pulse train. Timing measurements for aggregate channel transmission time and channel move time are made from the oscilloscope data, with the end of the waveform clearly identified by the pulse train on one trace. The analyzer trace data is used to confirm that the last transmission occurred within the 10-second record of the oscilloscope. If necessary the record length of the oscilloscope is expanded to capture the last transmission on the channel prior to the channel move.

Channel availability check time timing plots are made using the analyzer. The analyzer is triggered at start of the EUT's channel availability check and used to verify that the EUT does not transmit when radar is applied during the check time.

The analyzer detector and oscilloscope sampling mode is set to peak detect for all plots.



## 2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
Signal Generator	keysight	N5182B	MY59100717	2025.03.05	2026.03.04
Signal Analyzer	keysight	N9010B	MY60242508	2025.03.05	2026.03.04
Attenuator	eastsheep	90db	N.A	2025.03.06	2026.03.05
Router	TP-LINK(FCC ID:Q87-WRT3200ACM)	TL-WR885N	1125074010745	N.C.R	N.C.R
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2025.03.10	2026.03.09
Testing Software	MTS8310_V2.0.0.0_MW				

## 2.6 DESCRIPTION OF necessary accessories AND support units

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

### Accessories Equipment

Description	Manufacturer	Model	S/N	Rating

### Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
phone	OBLUE Communication Technology Co.,Ltd.	Luna	CQDY4LAQ5X9DWOE6	N/A

Note:

(1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.



### 3. DFS PARAMETERS

#### 3.1 DFS PARAMETERS

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

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



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

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
<b>Note 1:</b> This is the level at the input of the receiver assuming a 0 dBi receive antenna. <b>Note 2:</b> 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. <b>Note 3:</b> EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Table 4: DFS Response Requirement Values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U- NII 99% transmission power bandwidth. See Note 3.
<b>Note 1:</b> <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. <b>Note 2:</b> The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> 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. <b>Note 3:</b> During the <i>U-NII Detection Bandwidth</i> 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.	



Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A	$\text{Roundup} \left\{ \left( \frac{1}{360} \right) \cdot \left( \frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
<b>Note 1:</b> Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 5a - Pulse Repetition Intervals Values for Test A

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066



The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how to compute the aggregate of percentage of successful detections.

Radar Type	Number of Trials	Number of Successful Detections	Minimum Percentage of Successful Detection
1	35	29	82.9%
2	30	18	60%
3	30	27	90%
4	50	44	88%
Aggregate $(82.9\% + 60\% + 90\% + 88\%)/4 = 80.2\%$			

#### Long Pulse Radar Test Waveform

Table 6 – Long Pulse Radar Test Waveform

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

Figure 1 provides a graphical representation of the Long Pulse Radar Test Waveform.

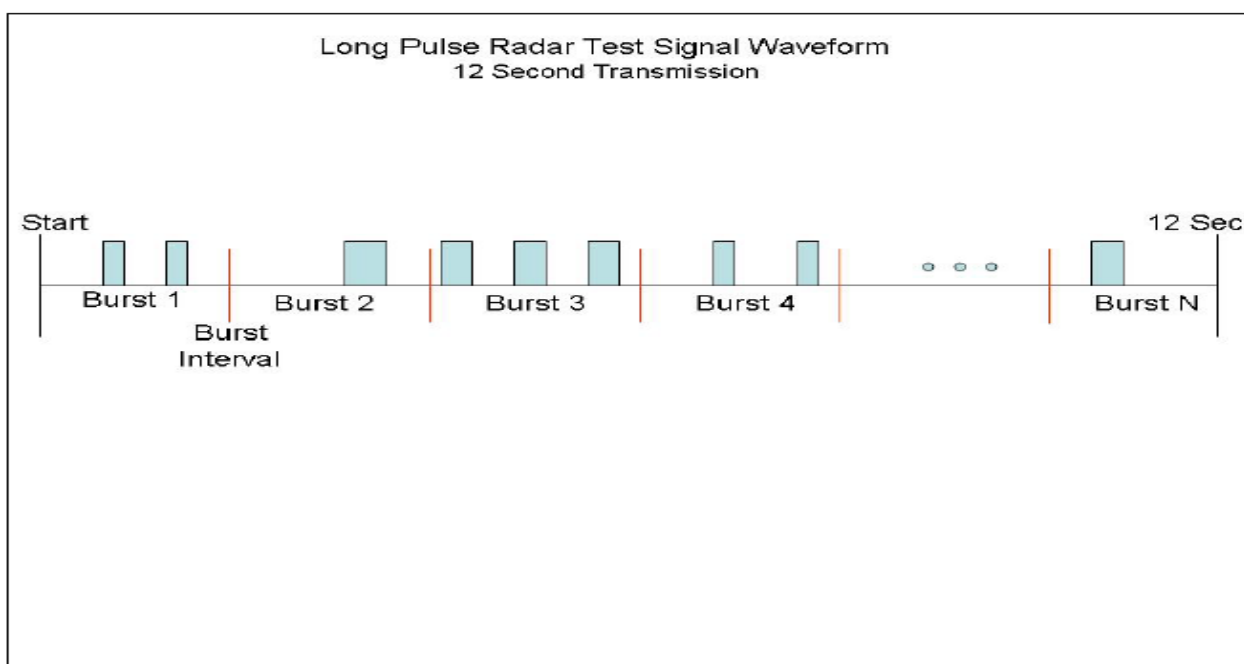


Table 7 – Frequency Hopping Radar Test Waveform

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





## 3.2 DFS–TEST

### 3.2.1 DFS MEASUREMENT METHODS

#### a. DFS – CHANNEL CLOSING TRANSMISSION TIME AND CHANNEL MOVE TIME

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.

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.

#### b. DFS – CHANNEL NON-OCCUPANCY AND VERIFICATION OF PASSIVE SCANNING

Non-occupancy Period. A channel that has been flagged as containing a radar system, either by a channel availability check or in-service monitoring, is subject to a non-occupancy period of at least 30 minutes. The non-occupancy period starts at the time when the radar system is detected.

#### c. CHANNEL AVAILABILITY CHECK TIME

Channel Availability Check Time. A U-NII device shall check if there is a radar system already operating on the channel before it can initiate a transmission on a channel and when it has to move to a new channel. The U-NII device may start using the channel if no radar signal with a power level greater than the interference threshold values listed in paragraph (h)(2) of this section, is detected within 60 seconds.

#### d. CONTROL (TPC)

Compliance with the transmit power control requirements for devices is demonstrated through measurements showing multiple power levels and manufacturer statements explaining how the power control is implemented.

#### e. DETECTION PROBABILITY / SUCCESS RATE

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. Minimum 100% of the U-NII 99% transmission power bandwidth.

#### f. NON- OCCUPANCY PERIOD

During the 30 minutes observation time, UUT did not make any transmissions on a channel after a radar signal was detected on that channel by either the Channel Availability Check or the In-Service Monitoring



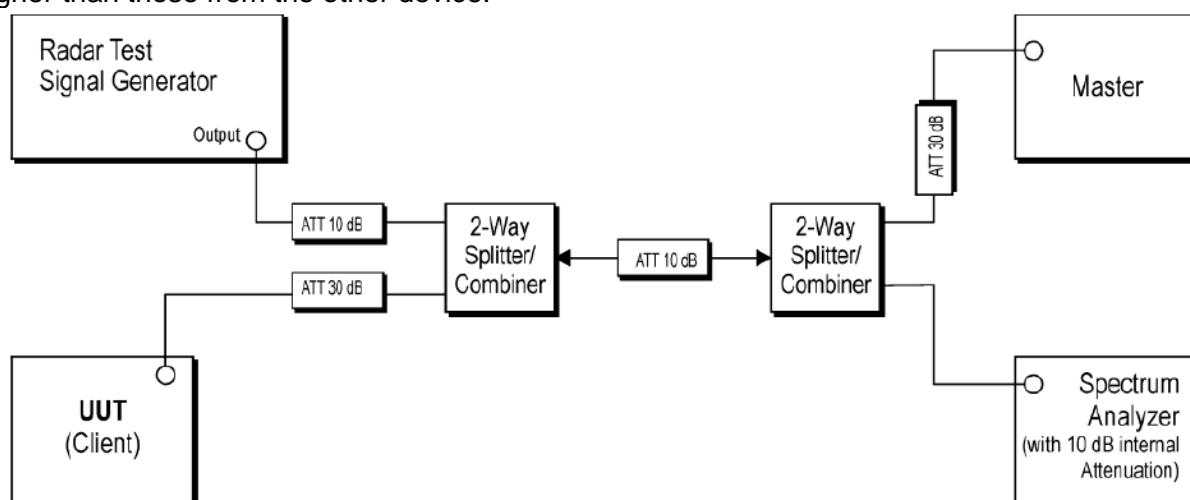
### 3.2.2 DFS CONDUCTION TEST METHOD

a. The signal level of the simulated waveform is set to a reference level equal to the threshold level (plus 1dB if testing against FCC requirements). Lower levels may also be applied on request of the manufacturer.

The signal level is verified by measuring the CW signal level at the coupling point to the RDD antenna port. The radar signal level is calculated from the measured level, R (dBm) and the lowest gain antenna assembly intended for use with the RDD

If both master and client devices have radar detection capability then the radar level at the non RDD is verified to be at least 20dB below the threshold level to ensure that any responses are due to the RDD detecting radar.

The antenna connected to the channel monitoring subsystem is positioned to allow both master and client transmissions to be observed, with the level of the EUT's transmissions between 6 and 10dB higher than those from the other device.



b. *Set-up B* is a set-up whereby the UUT is an RLAN device operating in slave mode, with or without Radar Interference Detection function. This set-up also contains an RLAN device operating in master mode. The radar test signals are injected into the master device. The UUT (slave device) is associated with the master device. Figure 5 shows an example for *Set-up B*. The set-up used shall be documented in the test report.

Channel loading mode:

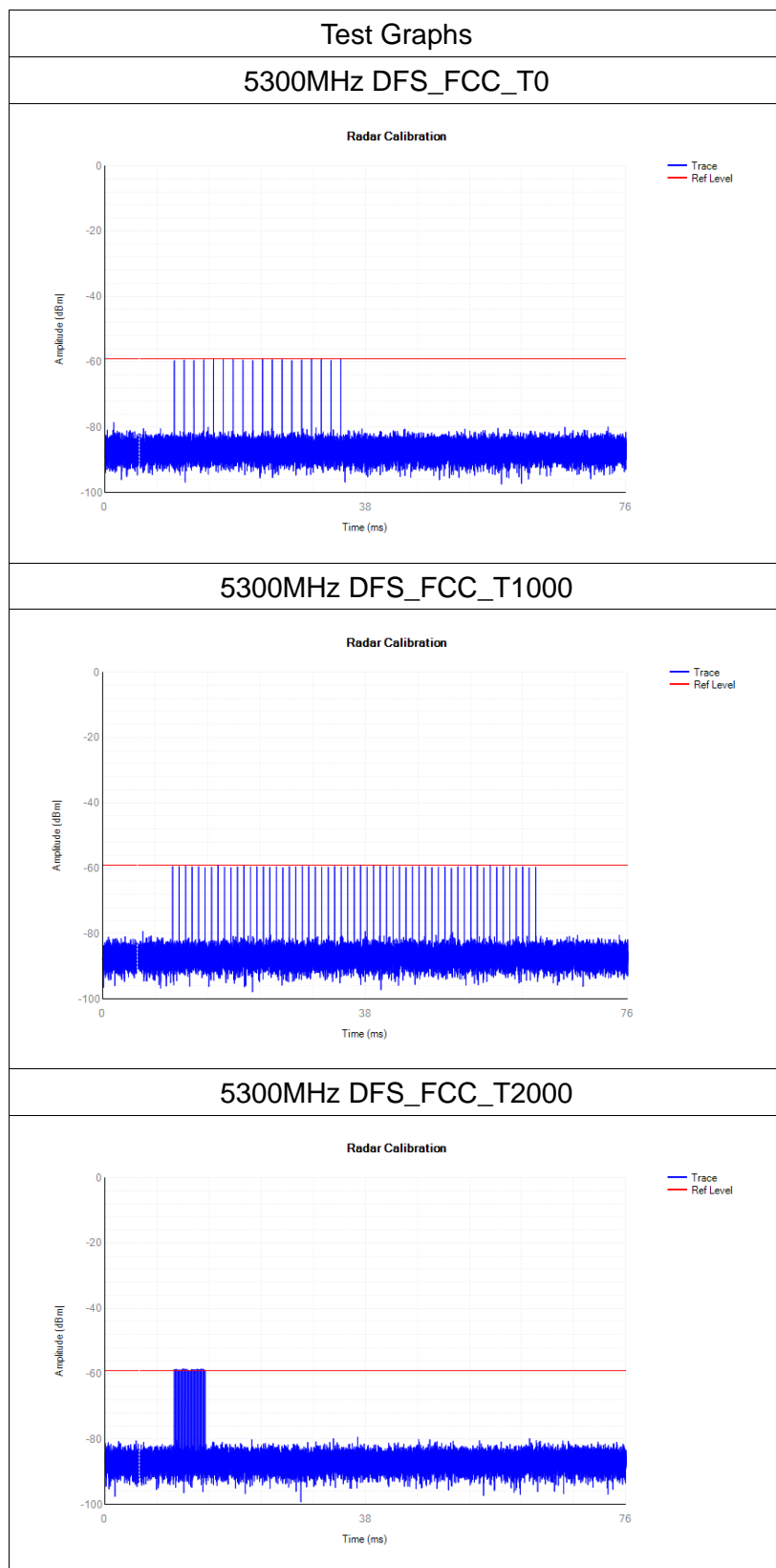
EUT connects to the router through DFS setup, then controls and switches the EUT channel on the router background page.





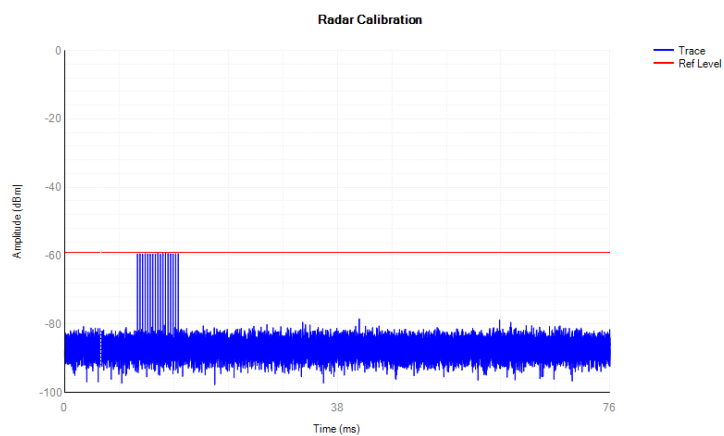
### 3.2.3 DFS Test Data

#### Radar Waveform Calibration Test Result

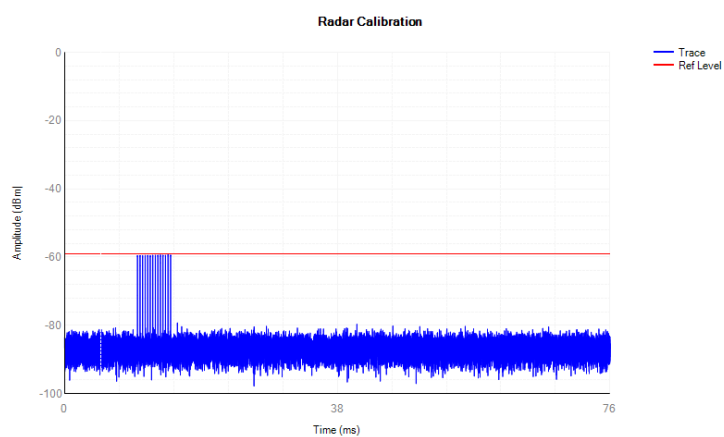




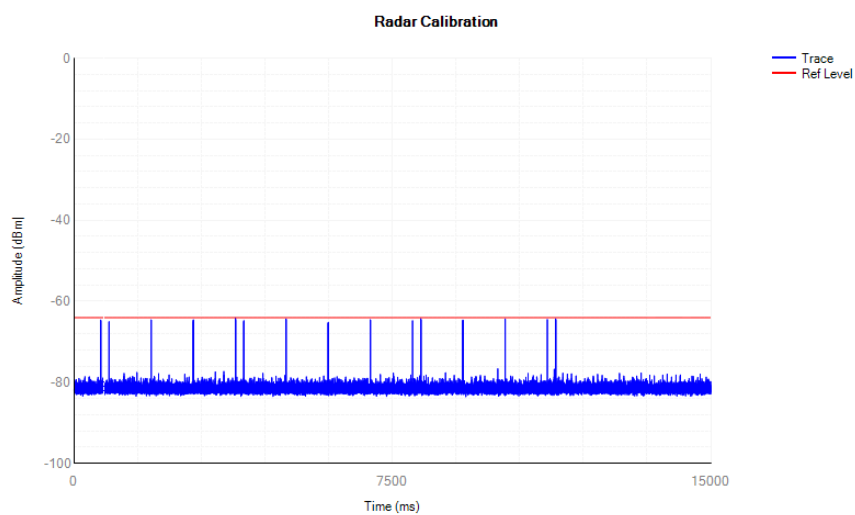
### 5300MHz DFS\_FCC\_T3000



### 5300MHz DFS\_FCC\_T4000

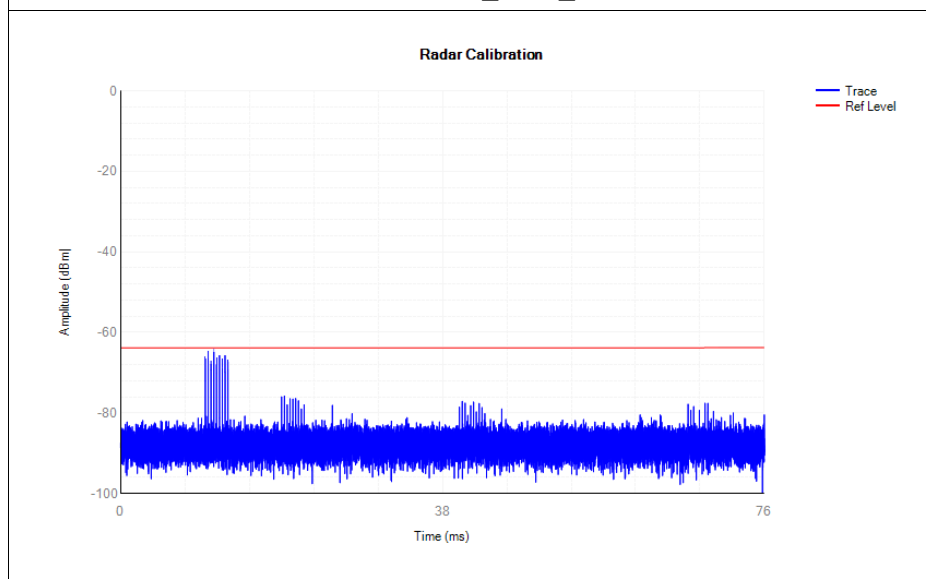


### 5300MHz DFS\_FCC\_T5000





## 5300MHz DFS\_FCC\_T6000





## UNII Detection Bandwidth Test Result

Detection Bandwidth Test Transmission												
EUT Frequency:			802.11ax-HE20 mode - 5500 MHz									
Test Radar Type:			Type 0									
Detection Bandwidth:			19.1 MHz									
Detection Bandwidth Min. Limit:			18.98 MHz									
Test Result:			Pass									
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0 = No Detection)											
	1	2	3	4	5	6	7	8	9	10	Detection Rate(%)	
5490	0	0	0	0	0	0	0	0	0	0	0%	
5490.45 FL	1	1	1	1	1	1	1	1	1	1	100%	
5491	1	1	1	1	1	1	1	1	1	1	100%	
5492	1	1	1	1	1	1	1	1	1	1	100%	
5493	1	1	1	1	1	1	1	1	1	1	100%	
5494	1	1	1	1	1	1	1	1	1	1	100%	
5495	1	1	1	1	1	1	1	1	1	1	100%	
5496	1	1	1	1	1	1	1	1	1	1	100%	
5500	1	1	1	1	1	1	1	1	1	1	100%	
5505	1	1	1	1	1	1	1	1	1	1	100%	
5506	1	1	1	1	1	1	1	1	1	1	100%	
5507	1	1	1	1	1	1	1	1	1	1	100%	
5508	1	1	1	1	1	1	1	1	1	1	100%	
5509	1	1	1	1	1	1	1	1	1	1	100%	
5509.55 FH	1	1	1	1	1	1	1	1	1	1	100%	
5510	0	0	0	0	0	0	0	0	0	0	0%	
Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz.												
Note 2: Detection Bandwidth = FH - FL												
Note 3: Detection Bandwidth Min. Limit = 100% of the U-NII 99% power bandwidth												



Detection Bandwidth Test Transmission												
EUT Frequency:			802.11ax-HE40 mode - 5510 MHz									
Test Radar Type:			Type 0									
Detection Bandwidth:			38 MHz									
Detection Bandwidth Min. Limit:			37.655 MHz									
Test Result:			Pass									
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	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	1	100%
5529 FH	1	1	1	1	1	1	1	1	1	1	1	100%
5530	0	0	0	0	0	0	0	0	0	0	0	0%
Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz.												
Note 2: Detection Bandwidth = FH - FL												
Note 3: Detection Bandwidth Min. Limit = 100% of the U-NII 99% power bandwidth												



Detection Bandwidth Test Transmission												
EUT Frequency:			802.11ax-HE80 mode - 5530 MHz									
Test Radar Type:			Type 0									
Detection Bandwidth:			78 MHz									
Detection Bandwidth Min. Limit:			77.029 MHz									
Test Result:			Pass									
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	0%
5491 FL	1	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	1	100%
5566	1	1	1	1	1	1	1	1	1	1	1	100%
5567	1	1	1	1	1	1	1	1	1	1	1	100%
5568	1	1	1	1	1	1	1	1	1	1	1	100%
5569 FH	1	1	1	1	1	1	1	1	1	1	1	100%
5570	0	0	0	0	0	0	0	0	0	0	0	0%
Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz.												
Note 2: Detection Bandwidth = FH - FL												
Note 3: Detection Bandwidth Min. Limit = 100% of the U-NII 99% power bandwidth												



Detection Bandwidth Test Transmission												
EUT Frequency:			802.11ax-HE160 mode - 5570 MHz									
Test Radar Type:			Type 0									
Detection Bandwidth:			158 MHz									
Detection Bandwidth Min. Limit:			155.424 MHz									
Test Result:			Pass									
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	0%
5491 FL	1	1	1	1	1	0	1	1	1	1	1	90%
5492	1	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	1	100%
5570	1	1	1	1	1	1	1	1	1	1	1	100%
5575	1	1	1	1	1	1	1	1	1	1	1	100%
5580	1	1	1	1	1	1	1	1	1	1	1	100%
5585	1	1	1	1	1	1	1	1	1	1	1	100%
5590	1	1	1	1	1	1	1	1	1	1	1	100%
5595	1	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	1	100%
5605	1	1	1	1	1	1	1	1	1	1	1	100%
5610	1	1	1	1	1	1	1	1	1	1	1	100%
5615	1	1	1	1	1	1	1	1	1	1	1	100%



5620	1	1	1	1	1	1	1	1	1	1	100%
5625	1	1	1	1	1	1	1	1	1	1	100%
5630	1	1	1	1	1	1	1	1	1	1	100%
5635	1	1	1	1	1	1	1	1	1	1	100%
5640	1	1	1	1	1	1	1	1	1	1	100%
5645	1	1	1	1	1	1	1	1	1	1	100%
5646	1	1	1	1	1	1	1	1	1	1	100%
5647	1	1	1	1	1	1	1	1	1	1	100%
5648	1	1	1	1	1	1	1	1	1	1	100%
5649 FH	1	0	1	1	1	1	1	1	1	1	90%
5650	0	0	0	0	0	0	0	0	0	0	0%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5570MHz.

Note 2: Detection Bandwidth = FH - FL

Note 3: Detection Bandwidth Min. Limit = 100% of the U-NII 99% power bandwidth





Detection Bandwidth Test Transmission												
EUT Frequency:			802.11ax-HE160 mode - 5250 MHz									
Test Radar Type:			Type 0									
Detection Bandwidth:			79 MHz									
Detection Bandwidth Min. Limit:			77.6375 MHz									
Test Result:			Pass									
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0 = No Detection)											Detection Rate(%)
	1	2	3	4	5	6	7	8	9	10		
5249	0	0	0	0	0	0	0	0	0	0	0	0%
5250 FL	1	1	1	1	1	1	1	1	1	1	1	100%
5251	1	1	1	1	1	1	1	1	1	1	1	100%
5252	1	1	1	1	1	1	1	1	1	1	1	100%
5253	1	1	1	1	1	1	1	1	1	1	1	100%
5254	1	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	1	100%
5329 FH	1	1	1	1	1	1	1	1	0	1	1	90%
5330	0	0	0	0	0	0	0	0	0	0	0	0%

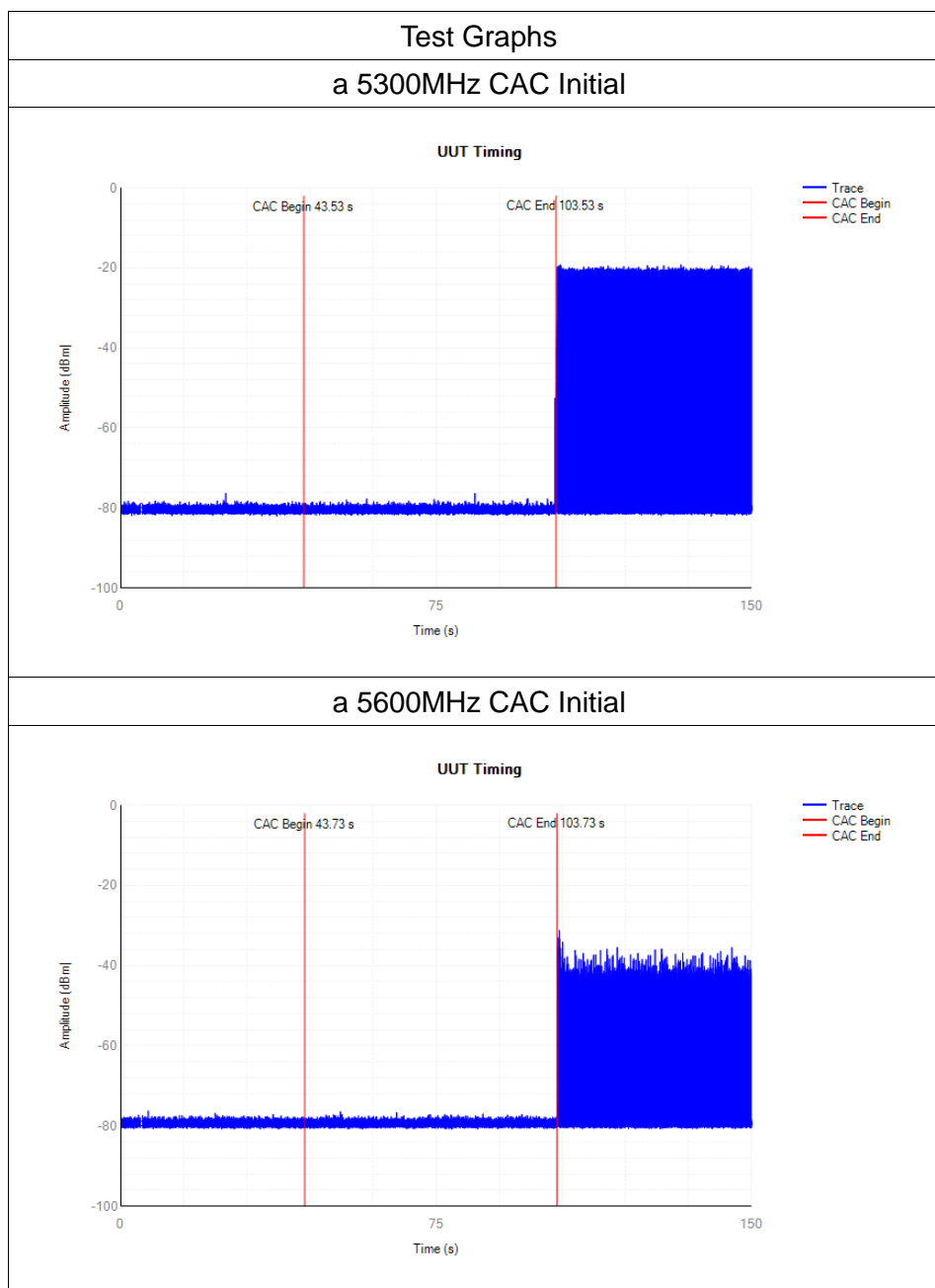
Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5250MHz.

Note 2: Detection Bandwidth = FH - FL

Note 3: Detection Bandwidth Min. Limit=(100% of the U-NII 99% power bandwidth)/2

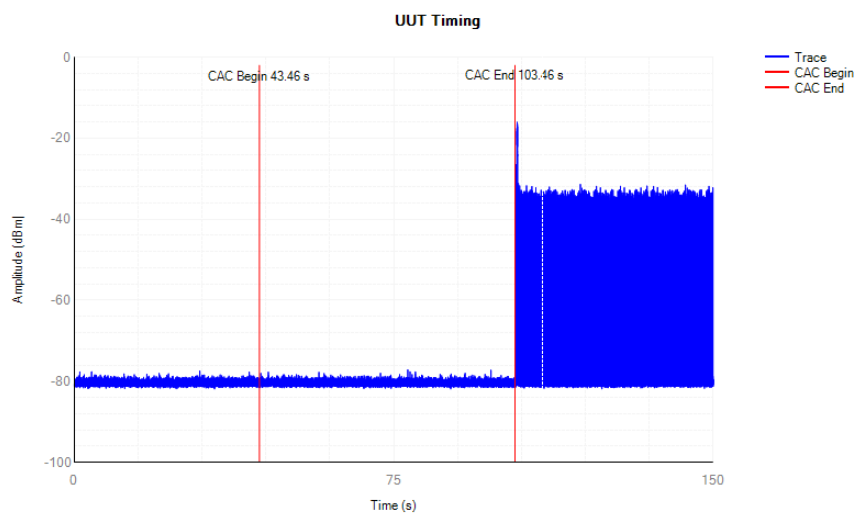


## Initial Channel Availability Check Time Test Result

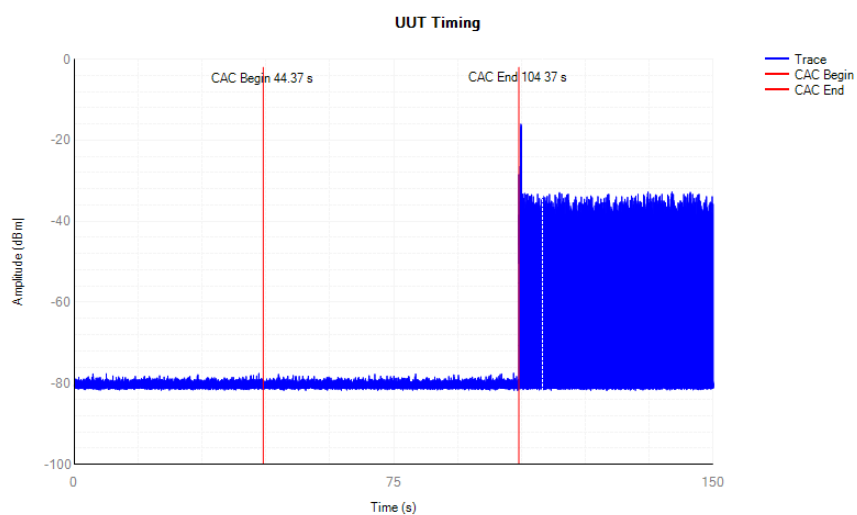




### ac 160 5250MHz CAC Initial

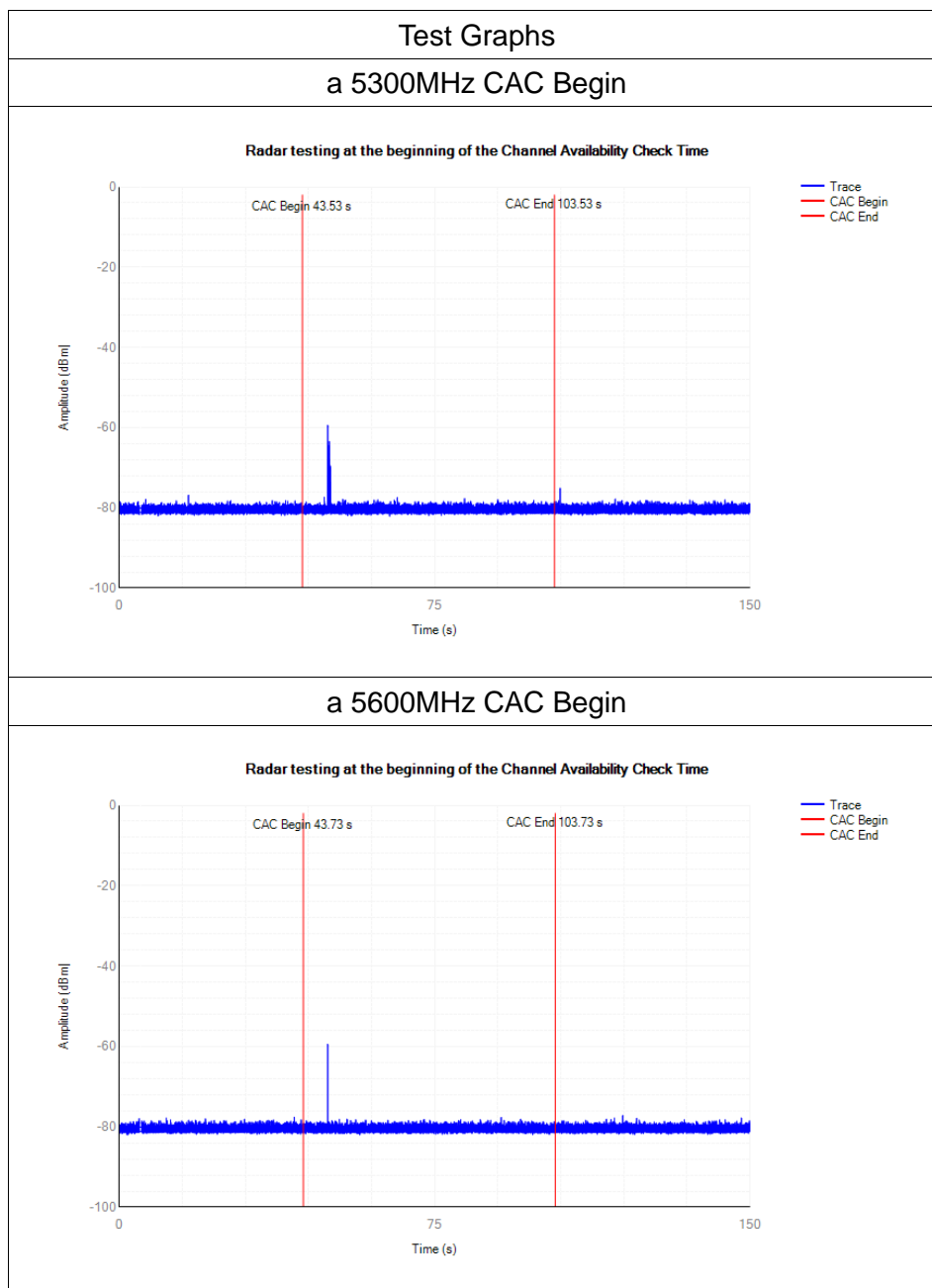


### ac 160 5570MHz CAC Initial



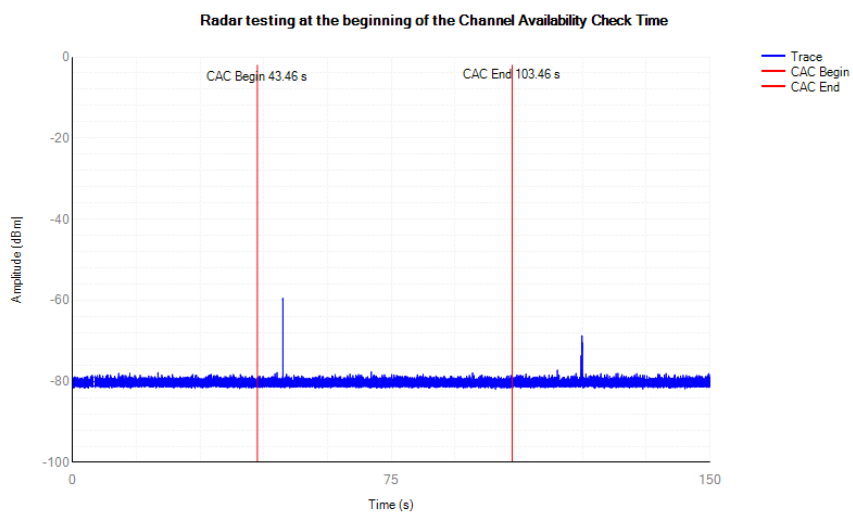


## Radar Burst at the Beginning of the Channel Availability Check Time Test Result

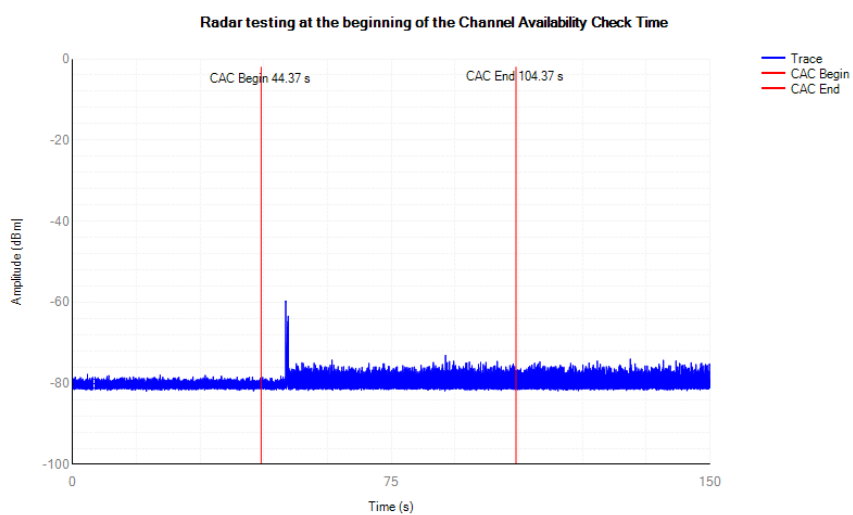




### ac 160 5250MHz CAC Begin

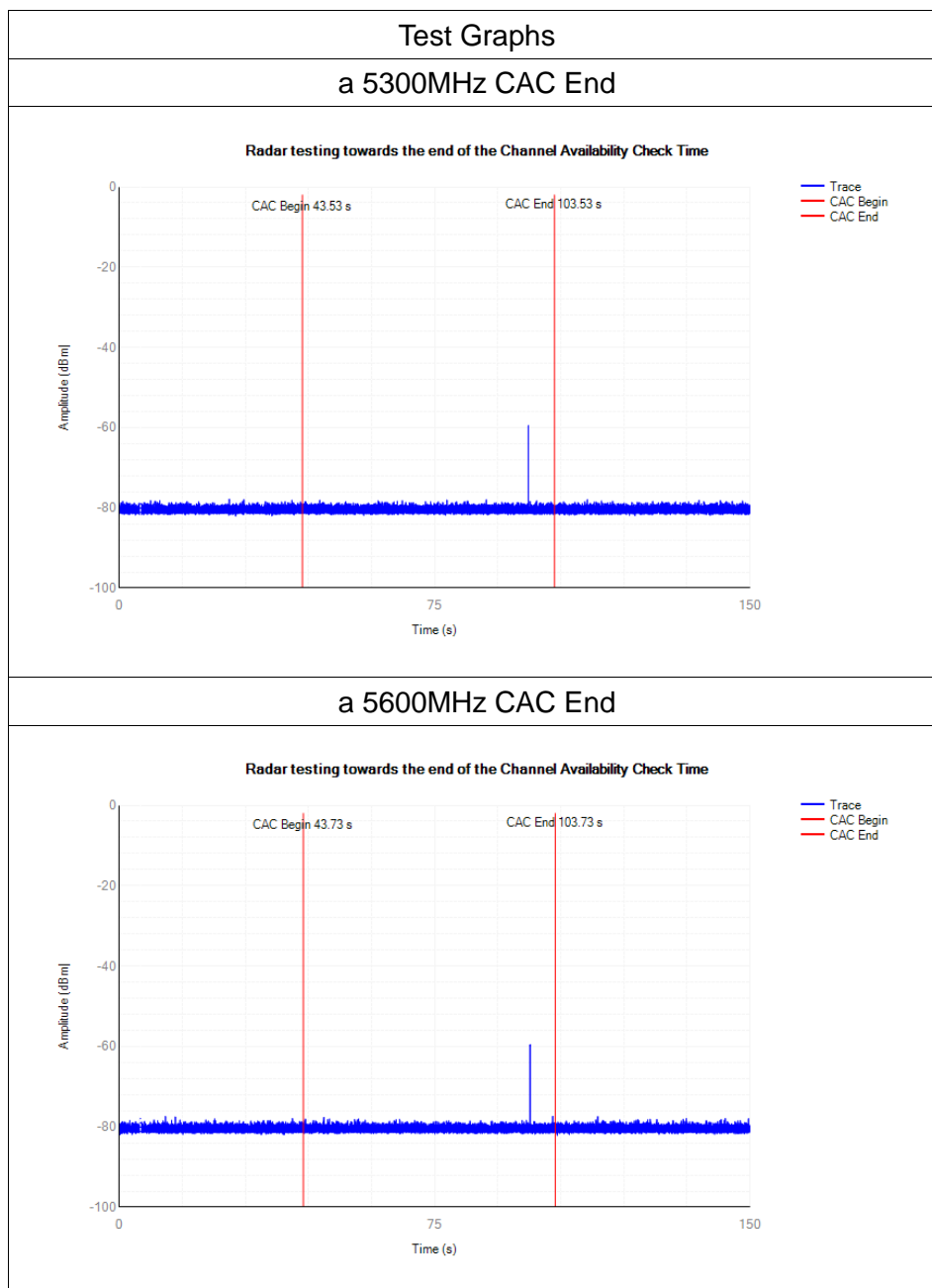


### ac 160 5570MHz CAC Begin



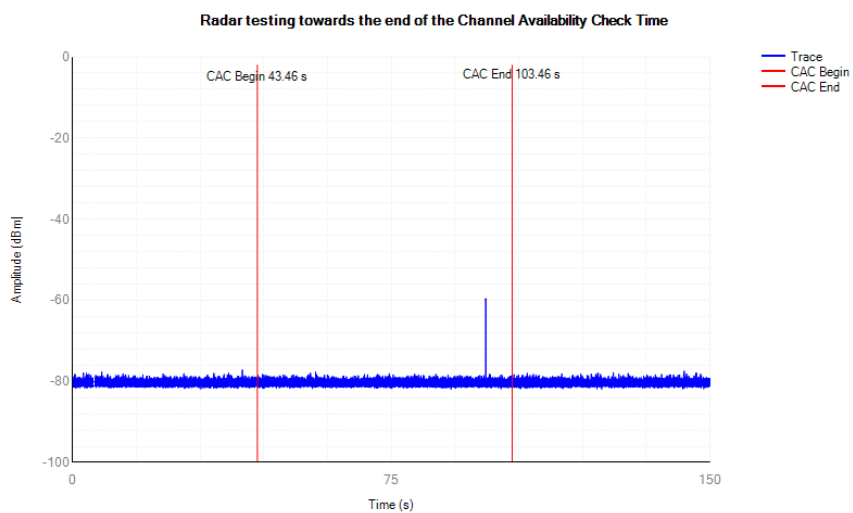


## Radar Burst at the End of the Channel Availability Check Time Test Result

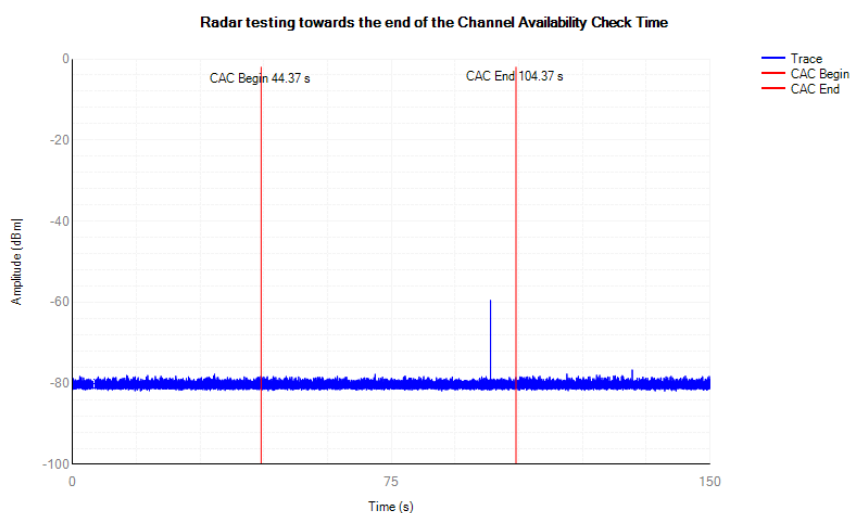




### ac 160 5250MHz CAC End



### ac 160 5570MHz CAC End

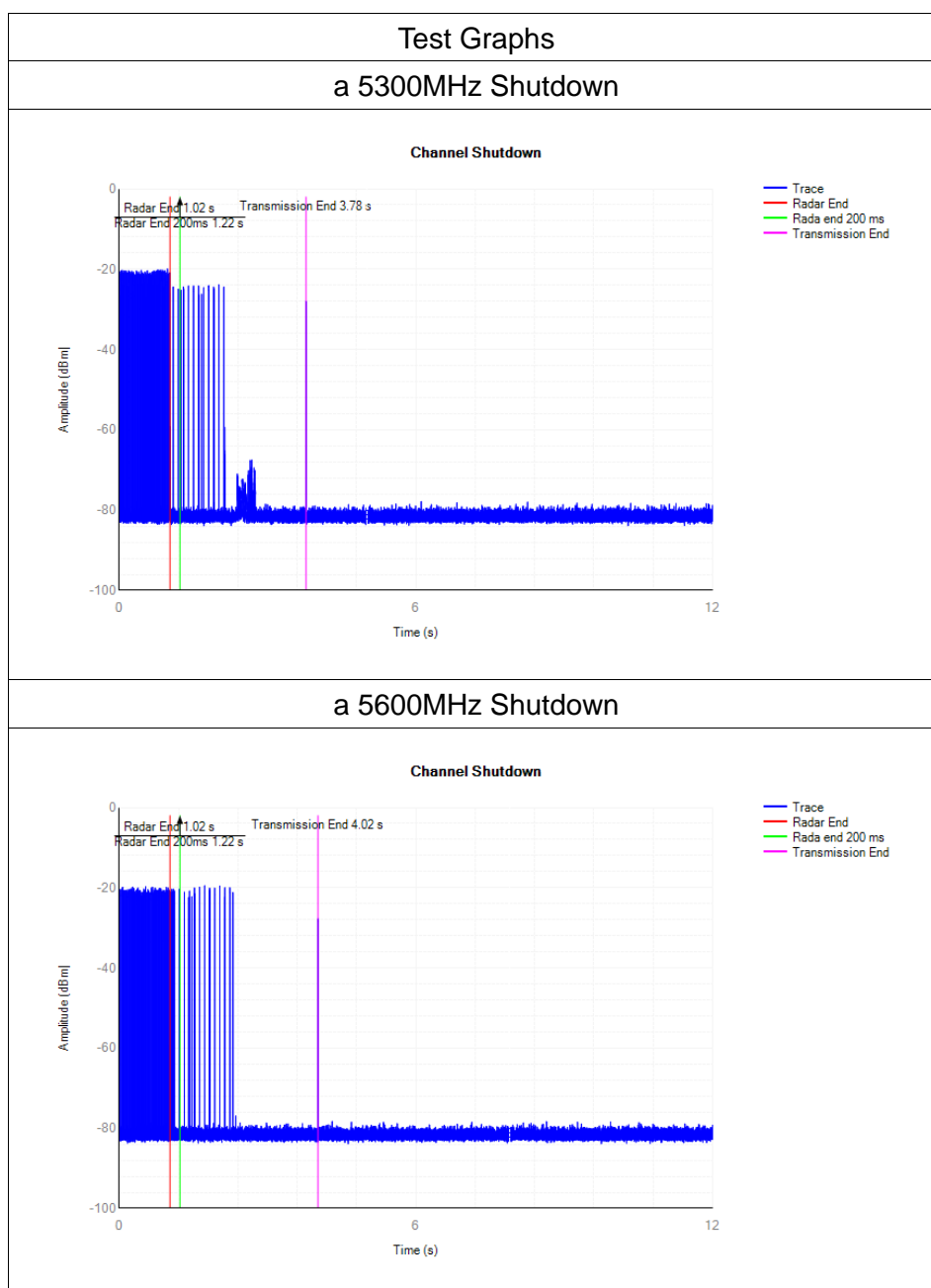




## In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time Test Result

Mode	Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmission Time (s)	Limit Close Transmission Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
a	5300	2.7529	10	0.014	0.26	0.0124	0.06	Pass
a	5600	2.9953	10	0.0232	0.26	0.0144	0.06	Pass
ac160	5250	8.3589	10	0.0144	0.26	0.0128	0.06	Pass
ac160	5570	1.6933	10	0.0152	0.26	0.0132	0.06	Pass

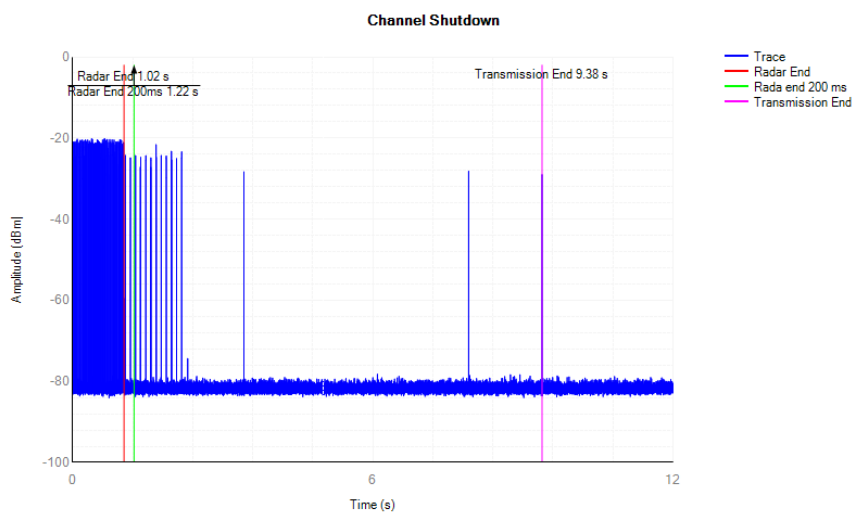
Note: The channel closing transmission time is comprised of 200 milliseconds starting at the beginning of the channel move time plus any additional intermittent control signals required to facilitate a channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.



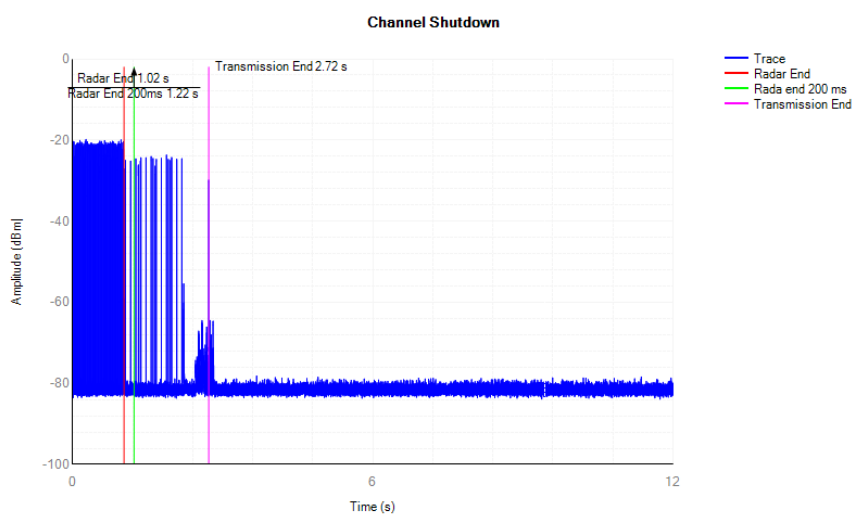




### ac160 5250MHz Shutdown

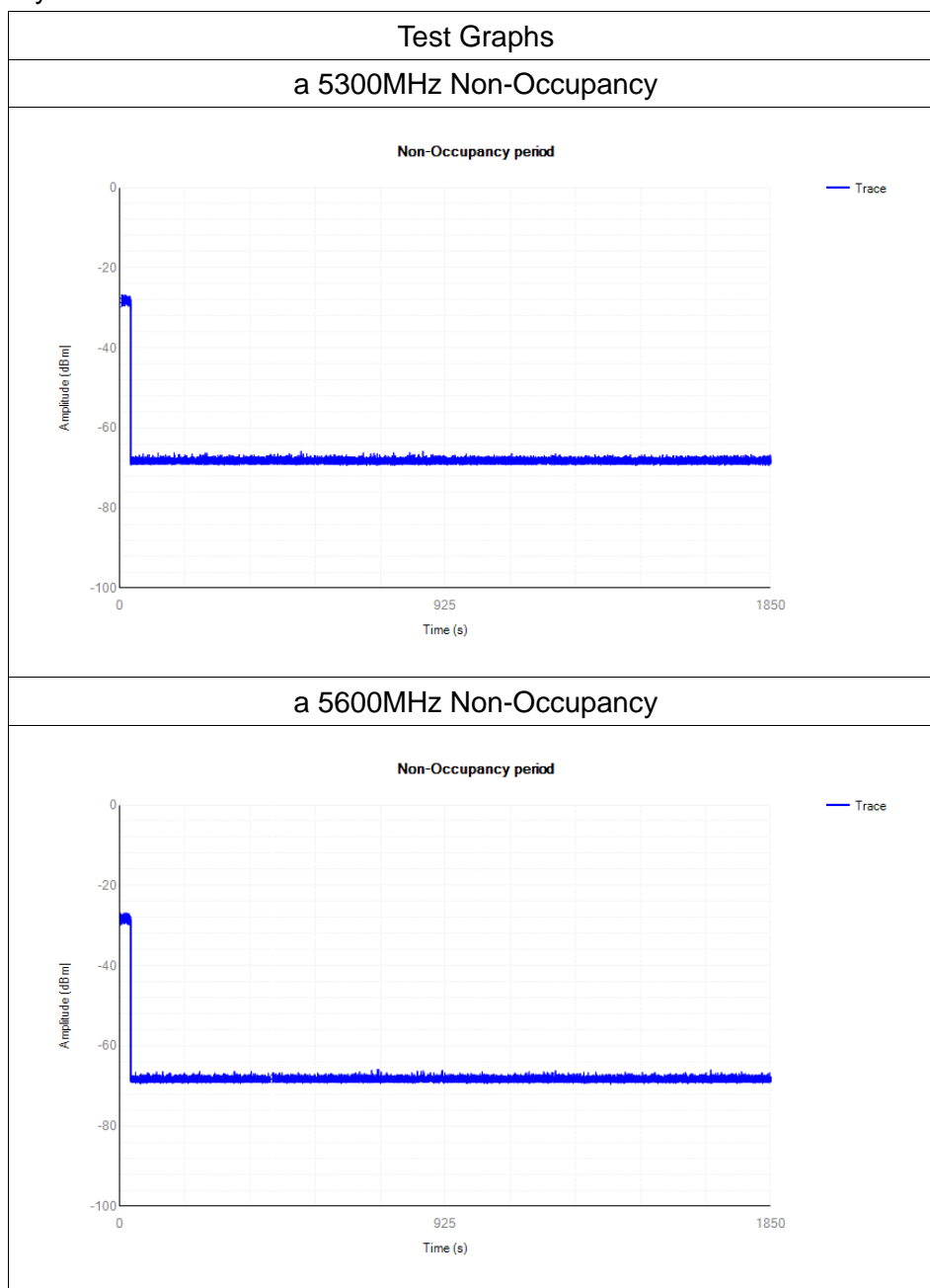


### ac160 5570MHz Shutdown



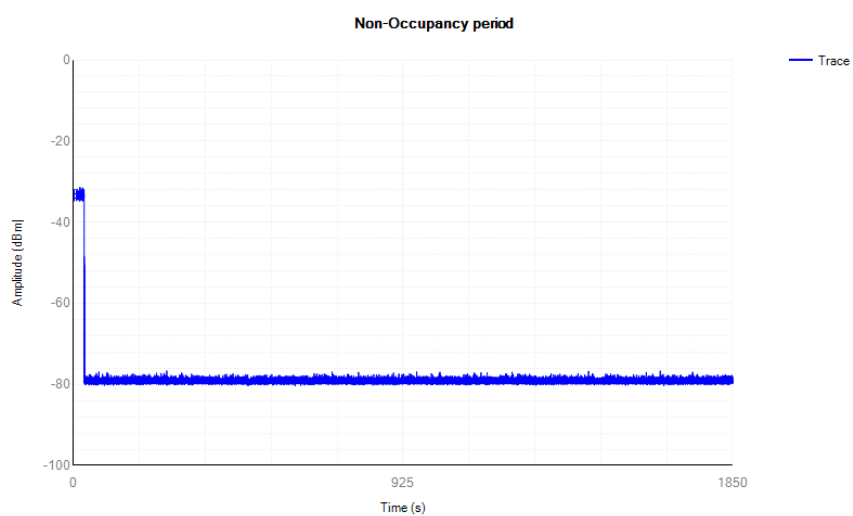


## Non-Occupancy Period Test Result

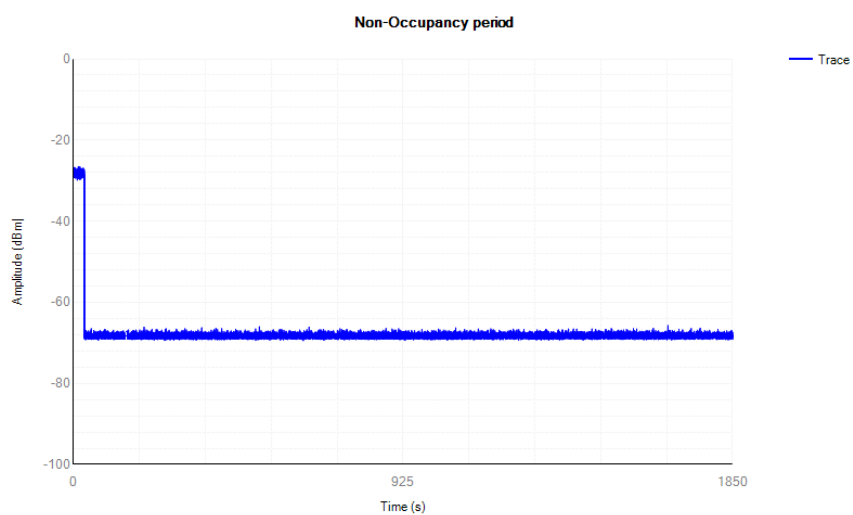




### ac160 5250MHz Non-Occupancy



### ac160 5570MHz Non-Occupancy





### Statistical Performance Check Test Result

Mode	Frequency (MHz)	Radar Type	Detection Threshold (dBm)	Total No.	Detected No.	Detection Rate (%)	Limit (%)	Verdict
a	5300	Type1	-58.31	30	28	93.33	60	Pass
a	5300	Type2	-58.31	30	30	100.00	60	Pass
a	5300	Type3	-58.31	30	29	96.67	60	Pass
a	5300	Type4	-58.31	30	30	100.00	60	Pass
a	5300	Type5	-58.31	30	30	100.00	60	Pass
a	5300	Type6	-58.31	30	27	90.00	60	Pass
a	5600	Type1	-58.31	30	30	100.00	60	Pass
a	5600	Type2	-58.31	30	29	96.67	60	Pass
a	5600	Type3	-58.31	30	30	100.00	60	Pass
a	5600	Type4	-58.31	30	26	86.67	60	Pass
a	5600	Type5	-58.31	30	27	90.00	60	Pass
a	5600	Type6	-58.31	30	30	100.00	60	Pass
ac160	5250	Type1	-58.31	30	30	100.00	60	Pass
ac160	5250	Type2	-58.31	30	29	96.67	60	Pass
ac160	5250	Type3	-58.31	30	30	100.00	60	Pass
ac160	5250	Type4	-58.31	30	30	100.00	60	Pass
ac160	5250	Type5	-58.31	30	28	93.33	60	Pass
ac160	5250	Type6	-58.31	30	30	100.00	60	Pass
ac160	5570	Type1	-58.31	30	30	100.00	60	Pass
ac160	5570	Type2	-58.31	30	29	96.67	60	Pass
ac160	5570	Type3	-58.31	30	30	100.00	60	Pass
ac160	5570	Type4	-58.31	30	29	96.67	60	Pass
ac160	5570	Type5	-58.31	30	30	100.00	60	Pass
ac160	5570	Type6	-58.31	30	30	100.00	60	Pass

Note: Aggregate (Radar Types 1-4) = (Pd1+Pd2+Pd3+Pd4)/4



### 3.2.5 DFS Test photo



\*\*\*\*\*END OF THE REPORT\*\*\*\*\*