

# TEST REPORT

**Product Name** : Smart Access Control Terminal  
**Model Number** : Horus E2, Horus E2-FP,  
Horus E2-QR, Horus E2-B  
**FCC ID** : 2AJ9T-21013

**Prepared for** : ZKTECO CO., LTD.  
**Address** : No.32, Pingshan Industrial Avenue, Tangxia Town,  
Dongguan City, Guangdong Province, China 523728

**Prepared by** : EMTEK (SHENZHEN) CO., LTD.  
**Address** : Building 69, Majialong Industry Zone, Nanshan District,  
Shenzhen, Guangdong, China

Tel: (0755) 26954280  
Fax: (0755) 26954282

**Report Number** : ENS2503070228W00405R  
**Date(s) of Tests** : March 14, 2025 to April 28, 2025  
**Date of issue** : April 29, 2025

## TABLE OF CONTENTS

|                                                          |           |
|----------------------------------------------------------|-----------|
| <b>1. TEST RESULT CERTIFICATION .....</b>                | <b>4</b>  |
| <b>2. EUT DESCRIPTION .....</b>                          | <b>5</b>  |
| <b>3. SUMMARY OF TEST RESULT .....</b>                   | <b>7</b>  |
| <b>4. TEST METHODOLOGY .....</b>                         | <b>8</b>  |
| 4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS .....       | 8         |
| 4.2 MEASUREMENT EQUIPMENT USED .....                     | 8         |
| 4.3 DESCRIPTION OF TEST MODES .....                      | 9         |
| 4.4 TEST SOFTWARE .....                                  | 10        |
| <b>5. FACILITIES AND ACCREDITATIONS .....</b>            | <b>11</b> |
| 5.1 EQUIPMENT .....                                      | 11        |
| 5.2 DESCRIPTION OF TEST FACILITY .....                   | 11        |
| <b>6. SETUP OF EQUIPMENT UNDER TEST .....</b>            | <b>12</b> |
| 6.1 SETUP CONFIGURATION OF EUT .....                     | 12        |
| 6.2 CALIBRATION OF DFS DETECTION THRESHOLD LEVEL .....   | 12        |
| 6.3 SUPPORT EQUIPMENT .....                              | 13        |
| <b>7. DYNAMIC FREQUENCY SELECTION REQUIREMENTS .....</b> | <b>14</b> |
| 7.1 APPLICABLE STANDARD .....                            | 14        |
| 7.2 CONFORMANCE LIMIT .....                              | 14        |
| 7.3 TEST CONFIGURATION .....                             | 14        |
| 7.4 TEST PARAMETERS OF DFS TEST SIGNAL .....             | 15        |
| 7.5 OPERATION MODES AND REQUIREMENT TEST ITEMS .....     | 16        |
| 7.6 TEST PROCEDURE .....                                 | 16        |
| <b>8. TEST RESULT .....</b>                              | <b>17</b> |
| 8.1 DETAILED TEST RESULTS .....                          | 17        |
| 8.2 RADAR WAVEFORM .....                                 | 18        |
| 8.3 CHANNEL MOVE TIME AND CHANNEL CLOSING .....          | 19        |
| 8.4 NON-OCCUPANCY PERIOD .....                           | 20        |
| 8.5 IN-SERVICE MONITORING .....                          | 21        |

## Modified Information

| Version | Report No.           | Revision Date | Summary         |
|---------|----------------------|---------------|-----------------|
| Ver.1.0 | ENS2503070228W00405R | /             | Original Report |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |
|         |                      |               |                 |

## 1. TEST RESULT CERTIFICATION

Applicant : ZKTECO CO., LTD.  
Address : No.32, Pingshan Industrial Avenue, Tangxia Town, Dongguan City, Guangdong Province, China 523728  
Manufacturer : ZKTECO CO., LTD.  
Address : No.32, Pingshan Industrial Avenue, Tangxia Town, Dongguan City, Guangdong Province, China 523728  
EUT : Smart Access Control Terminal  
Model Name : Horus E2, Horus E2-FP, Horus E2-QR, Horus E2-B  
Trademark : N/A

### Measurement Procedure Used:

| APPLICABLE STANDARDS          |             |
|-------------------------------|-------------|
| STANDARD                      | TEST RESULT |
| FCC 47 CFR Part 15, Subpart E | PASS        |

The above equipment was tested by EMTEK (SHENZHEN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the above table standards requirement.

The test results of this report relate only to the tested sample identified in this report.

Date of Test : March 14, 2025 to April 28, 2025  
Prepared by :   
Guangjun Zhu/Editor  
Reviewer :   
Joe Xia/Supervisor  
Approved & Authorized Signer :   
Lisa Wang/Manager

## 2. EUT DESCRIPTION

| Characteristics  | Description                                                                                                                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product          | Smart Access Control Terminal                                                                                                                                                                                                |
| Model Number     | Horus E2, Horus E2-FP, Horus E2-QR, Horus E2-B                                                                                                                                                                               |
| Sample number    | 2#                                                                                                                                                                                                                           |
| Wifi Type        | UNII-1: 5150MHz-5250MHz Band<br>UNII-2A: 5250MHz-5350MHz Band<br>UNII-3: 5725MHz-5850MHz Band                                                                                                                                |
| WLAN Supported   | IEEE 802.11a<br>IEEE 802.11n(20MHz channel bandwidth)<br>IEEE 802.11n(40MHz channel bandwidth)<br>IEEE 802.11ac(20MHz channel bandwidth)<br>IEEE 802.11ac(40MHz channel bandwidth)<br>IEEE 802.11ac(80MHz channel bandwidth) |
| Modulation       | OFDM/OFDMA                                                                                                                                                                                                                   |
| Frequency Range: | 5150MHz-5250MHz Band:<br>5180-5240MHz for 802.11a<br>5180-5240MHz for 802.11n(20)<br>5190-5230MHz for 802.11n(40)<br>5180-5240MHz for 802.11ac(20)<br>5190-5230MHz for 802.11ac(40)<br>5210MHz for 802.11ac(80)              |
|                  | 5250MHz-5350MHz Band:<br>5260-5320MHz for 802.11a<br>5260-5320MHz for 802.11n(20)<br>5270-5310MHz for 802.11n(40)<br>5260-5320MHz for 802.11ac(20)<br>5270-5310MHz for 802.11ac(40)<br>5290MHz for 802.11ac(80)              |
|                  | 5725MHz-5850MHz Band:<br>5745-5825MHz for 802.11a<br>5745-5825MHz for 802.11n(20)<br>5755-5795MHz for 802.11n(40)<br>5745-5825MHz for 802.11ac(20)<br>5755-5795MHz for 802.11ac(40)<br>5775MHz for 802.11ac(80)              |
| TPC Function     | <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> Not Applicable                                                                                                                                       |
| Antenna Type     | FPC Antenna                                                                                                                                                                                                                  |
| Antenna Gain     | 0.91 dBi<br>Note: The antenna information provided by the manufacturer will have a certain impact on the test results.                                                                                                       |
| Power Supply     | DC 12V from adapter                                                                                                                                                                                                          |

|                          |                                                                                                 |
|--------------------------|-------------------------------------------------------------------------------------------------|
| <b>Adapter</b>           | MODEL:ADS-40SI-12-3 12036E<br>INPUT: AC100-240V, 50Hz/60Hz,Max.1.0A<br>OUTPUT:12.0V,3.0A,.36.0W |
| <b>Temperature Range</b> | 0°C ~ +45°C                                                                                     |

*Note: for more details, please refer to the user's manual of the EUT.*



### 3. Summary of test result

| FCC Part Clause | Test Parameter              | Verdict | Remarks |
|-----------------|-----------------------------|---------|---------|
| 15.407(h)       | Dynamic Frequency Selection | PASS    |         |

NOTE: The results of this report do not take into account the uncertainty.

#### RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is intended for FCC ID: 2AJ9T-21013 filing to comply with Section 15.407 of the FCC Part 15, Subpart E Rules.



## 4. TEST METHODOLOGY

### 4.1 General description of applied standards

According to its specifications, the EUT must comply with the requirements of the following standards:  
 FCC 06-96  
 FCC 47 CFR Parts 15, Subpart E  
 FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02  
 IC RSS-247 Issue 2(02-2017)

### 4.2 Measurement equipment used

| Equipment                           | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|-------------------------------------|--------------|-----------|------------|-----------|---------------|
| Wideband Radio Communication Tester | R&S          | CMW500    | 147366     | 2024/5/10 | 1Year         |
| Frequency Extender                  | R&S          | CMW-Z800A | 100430     | 2024/5/10 | 1Year         |
| Spectrum Analyzer                   | R&S          | FSV3044   | 101289     | 2024/5/10 | 1Year         |
| Analog Signal Generator             | R&S          | SMB100A   | 183237     | 2024/5/10 | 1Year         |
| Vector Signal Generator             | R&S          | SMM100A   | 101808     | 2024/5/10 | 1Year         |
| RF Control Unit(Power Meter)        | Tonscend     | JS0806-2  | 22C8060567 | 2024/5/10 | 1Year         |
| Temperature&Humidity Chamber        | ESPEC        | EL-02KA   | 12107166   | 2024/5/10 | 1Year         |

**Remark:** Each piece of equipment is scheduled for calibration once a year.

### 4.3 Description of test modes

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

#### WIFI 5G with 5250-5350MHz

Frequency and Channels list for 802.11a/n(20)/ac(20):

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|
| 52      | 5260            | 60      | 5300            | -       | -               |
| 56      | 5280            | 64      | 5320            | -       | -               |

Frequency and Channels list for 802.11n (40)/ac(40):

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|
| 54      | 5270            | -       | -               | -       | -               |
| 62      | 5310            | -       | -               | -       | -               |

Frequency and Channels list for 802.11ac(80):

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|
| 58      | 5290            | -       | -               | -       | -               |

**Test Frequency and Channels** for 802.11a/n(20)/ac(20):

| Lowest Frequency |                 | Middle Frequency |                 | Highest Frequency |                 |
|------------------|-----------------|------------------|-----------------|-------------------|-----------------|
| Channel          | Frequency (MHz) | Channel          | Frequency (MHz) | Channel           | Frequency (MHz) |
| 52               | 5260            | 56               | 5280            | 64                | 5320            |

**Test Frequency and channels** for 802.11n (40)/ac(40):

| Lowest Frequency |                 | Middle Frequency |                 | Highest Frequency |                 |
|------------------|-----------------|------------------|-----------------|-------------------|-----------------|
| Channel          | Frequency (MHz) | Channel          | Frequency (MHz) | Channel           | Frequency (MHz) |
| 54               | 5270            | -                | -               | 62                | 5310            |

**Test Frequency and channels** for 802.11ac(80):

| Lowest Frequency |                 | Middle Frequency |                 | Highest Frequency |                 |
|------------------|-----------------|------------------|-----------------|-------------------|-----------------|
| Channel          | Frequency (MHz) | Channel          | Frequency (MHz) | Channel           | Frequency (MHz) |
| 58               | 5290            | -                | -               | -                 | -               |

#### 4.4 TEST SOFTWARE

| Item         | Software                                                  |
|--------------|-----------------------------------------------------------|
| RF Conducted | ETSI Certification of Regulations Test Solution(V1.04.01) |
|              | N7607B Signal Studio for DFS Radar Profiles               |



## 5. FACILITIES AND ACCREDITATIONS

### 5.1 Equipment

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with preselectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

### 5.2 Description of Test Facility

#### Site Description

EMC Lab. : **Accredited by CNAS**  
The Certificate Registration Number is L2291  
The Laboratory has been assessed and proved to be in compliance with  
CNAS-CL01 (identical to ISO/IEC 17025:2017)

**Accredited by FCC**  
Designation Number: CN1204  
Test Firm Registration Number: 882943

**Accredited by A2LA**  
The Certificate Number is 4321.01

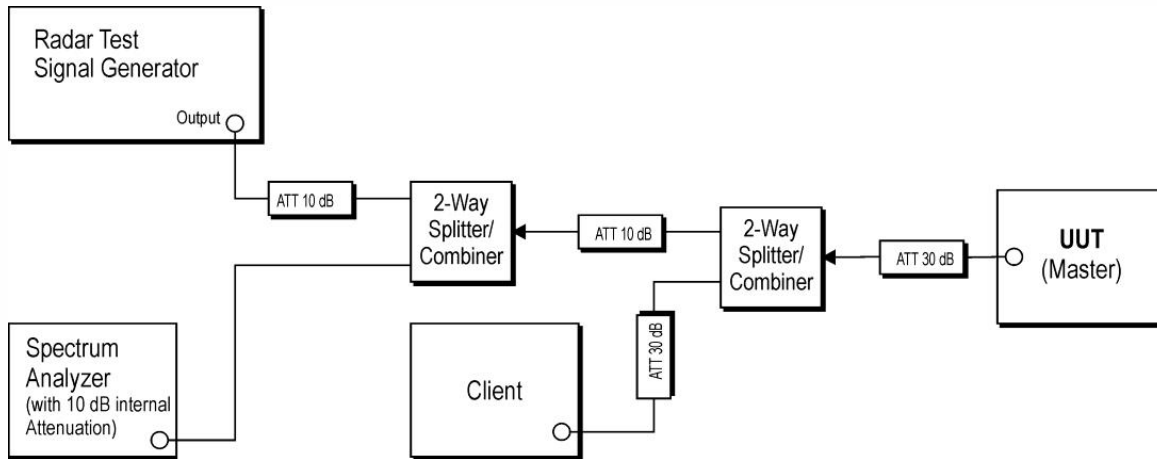
**Accredited by Industry Canada**  
The Conformity Assessment Body Identifier is CN0008

Name of Firm : EMTEK (SHENZHEN) CO., LTD.  
Site Location : Building 69, Majialong Industry Zone, Nanshan District, Shenzhen,  
Guangdong, China

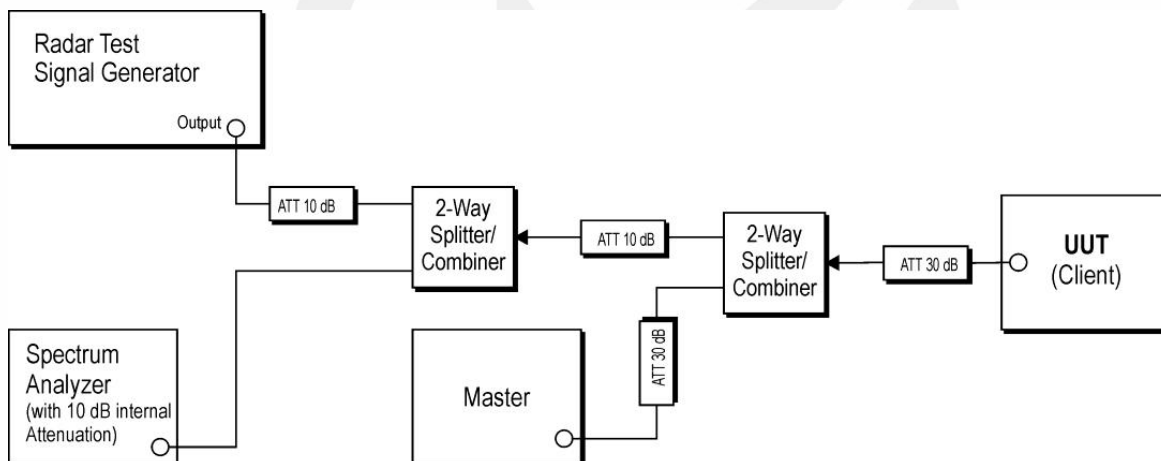
## 6. SETUP OF EQUIPMENT UNDER TEST

### 6.1 Setup configuration of EUT

#### Master Modes



#### Slave Mode



### 6.2 CALIBRATION OF DFS DETECTION THRESHOLD LEVEL

A 50 ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected in place of the master device and the signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of  $-62$  dBm as measured on the spectrum analyzer. Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. Measure the amplitude and calculate the difference from  $-62$  dBm. Adjust the Reference Level Offset of the spectrum analyzer to this difference. The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of  $-62$  dBm and the spectrum analyzer will still indicate the level as received by the Master Device. Set the signal generator to produce a radar waveform, trigger a burst manually and measure the level on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection threshold. Separate signal generator amplitude settings are determined as required for each radar type.

### 6.3 Support equipment

| Item                                                                                                        | Equipment             | Mfr/Brand | Model/Type No.    | Series No.  | FCC ID/IC                            |
|-------------------------------------------------------------------------------------------------------------|-----------------------|-----------|-------------------|-------------|--------------------------------------|
| 1                                                                                                           | Wireless Access Point | Cisco     | AIR-CAP3702E-A-K9 | FTX182276QD | FCC ID: LDK102087<br>IC:2461B-102087 |
| Note: Software for transferring data between master and slave devices is TFGEN-1.00 (transmission rate>80%) |                       |           |                   |             |                                      |

Notes:

- 1.All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2.Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

## 7. Dynamic Frequency Selection requirements

### 7.1 Applicable standard

According to 15.407(h) and RSS-247 6.3.

### 7.2 Conformance Limit

The dynamic frequency selection requirement.

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Value                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Non-occupancy period                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Minimum 30 minutes                                                                                         |
| Channel Availability Check Time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 60 seconds                                                                                                 |
| Channel Move Time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10 seconds<br>See Note 1.                                                                                  |
| Channel Closing Transmission Time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second periods.<br>See Notes 1 and 2. |
| U-NII Detection Bandwidth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.                                    |
| <p><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.</p> <p><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.</p> <p><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.</p> |                                                                                                            |

The following table lists the DFS The detection threshold values.

| Maximum Transmit Power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Value<br>(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                          |
| <p><b>Note 1:</b> This is the level at the input of the receiver assuming a 0 dBi receive antenna.</p> <p><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.</p> <p><b>Note3:</b> EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.</p> |                                  |

### 7.3 Test Configuration

Conducted measurements shall be used for DFS test.

## 7.4 Test parameters of DFS test signal

The following table lists the parameters of radar test signals.

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 $\left\{ \left( \frac{1}{360} \right) \cdot \left( \frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$ | 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                      |
| <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. |                    |                                                                                                                                                               |                                                                                                                               |                                            |                          |

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                       |

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                       |

## 7.5 Operation modes and requirement test items

The manufacture shall state whether the EUT is capable of operating as a Master or a Slave modes, if the EUT is capable of operating in more than one operational mode then every operating mode shall be assessed separately.

Applicability of DFS Requirements Prior to Use of a Channel.

| Requirement                     | Operational Mode |                                |                             |
|---------------------------------|------------------|--------------------------------|-----------------------------|
|                                 | Master           | Client Without Radar Detection | Client With Radar Detection |
| Non-Occupancy Period            | Yes              | Not required                   | Yes                         |
| DFS Detection Threshold         | Yes              | Not required                   | Yes                         |
| Channel Availability Check Time | Yes              | Not required                   | Not required                |
| Uniform Spreading               | Yes              | Not required                   | Not required                |
| U-NII Detection Bandwidth       | Yes              | Not required                   | Yes                         |

Applicability of DFS requirements during normal operation.

| Requirement                       | Operational Mode |                                |                             |
|-----------------------------------|------------------|--------------------------------|-----------------------------|
|                                   | Master           | Client Without Radar Detection | Client With Radar Detection |
| DFS Detection Threshold           | Yes              | Not required                   | Yes                         |
| Channel Closing Transmission Time | Yes              | Yes                            | Yes                         |
| Channel Move Time                 | Yes              | Yes                            | Yes                         |
| U-NII Detection Bandwidth         | Yes              | Not required                   | Yes                         |

## 7.6 Test procedure

According to KDB 905462 D02v02 Section 7.

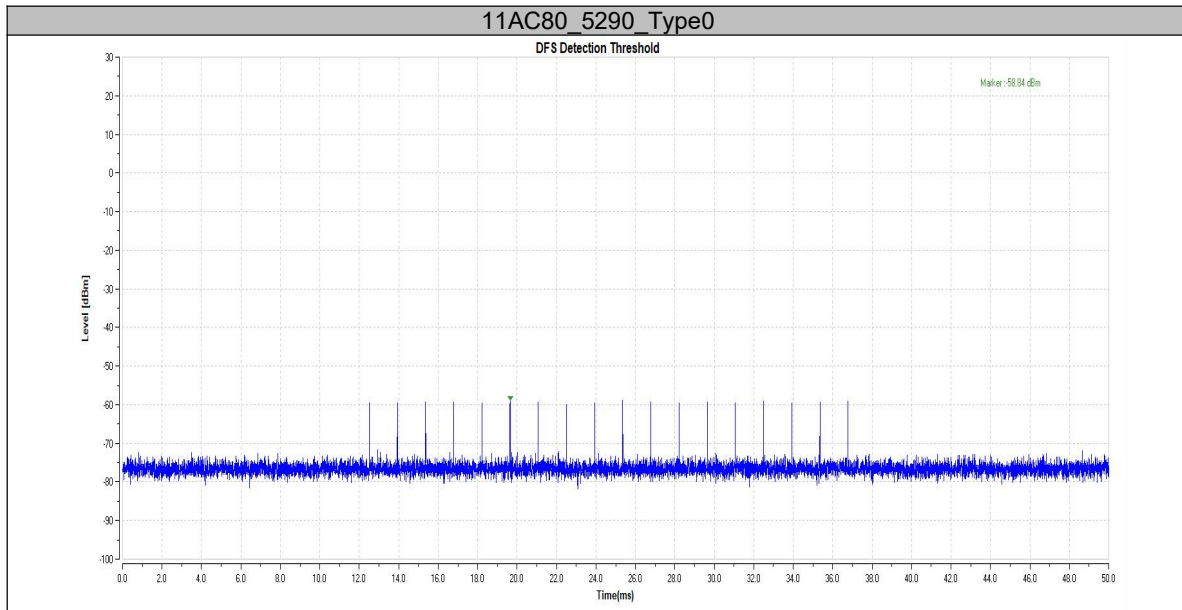
## 8. Test result

### 8.1 DETAILED TEST RESULTS

| MODES                                     | Test Parameter                    | Remark     | Verdict |
|-------------------------------------------|-----------------------------------|------------|---------|
| <input type="checkbox"/> Master           | DFS Detection Threshold           | N/A        | N/A     |
|                                           | Channel Availability Check Time   | N/A        | N/A     |
|                                           | Channel Move Time                 | N/A        | N/A     |
|                                           | Channel Closing Transmission Time | N/A        | N/A     |
|                                           | Non-Occupancy Period              | N/A        | N/A     |
|                                           | Uniform Spreading                 | N/A        | N/A     |
|                                           | U-NII Detection Bandwidth         | N/A        | N/A     |
| <input checked="" type="checkbox"/> Slave | Radar Detection Threshold         | Applicable | PASS    |
|                                           | Channel Move Time                 | Applicable | PASS    |
|                                           | Channel Closing Transmission Time | Applicable | PASS    |
|                                           | Non-Occupancy Period              | Applicable | PASS    |
|                                           | U-NII Detection Bandwidth         | N/A        | N/A     |

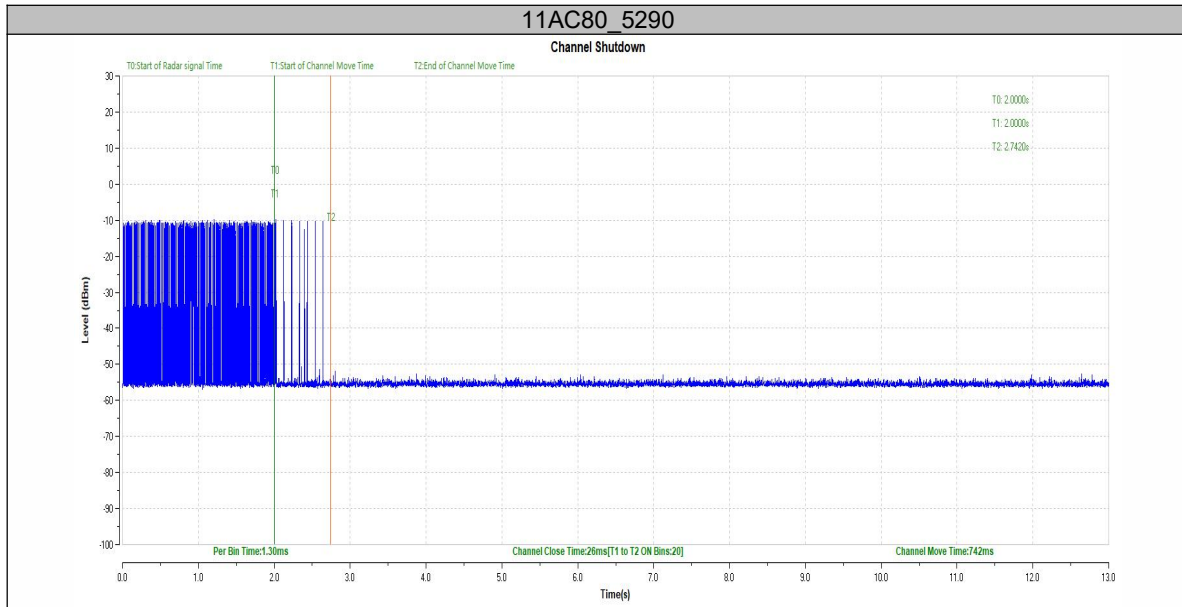
## 8.2 Radar Waveform

| TestMode | Frequency[MHz] | Radar Type | Result | Limit[dbm] | Verdict |
|----------|----------------|------------|--------|------------|---------|
| 11AC80   | 5290           | Type0      | -58.84 | -58.73     | PASS    |



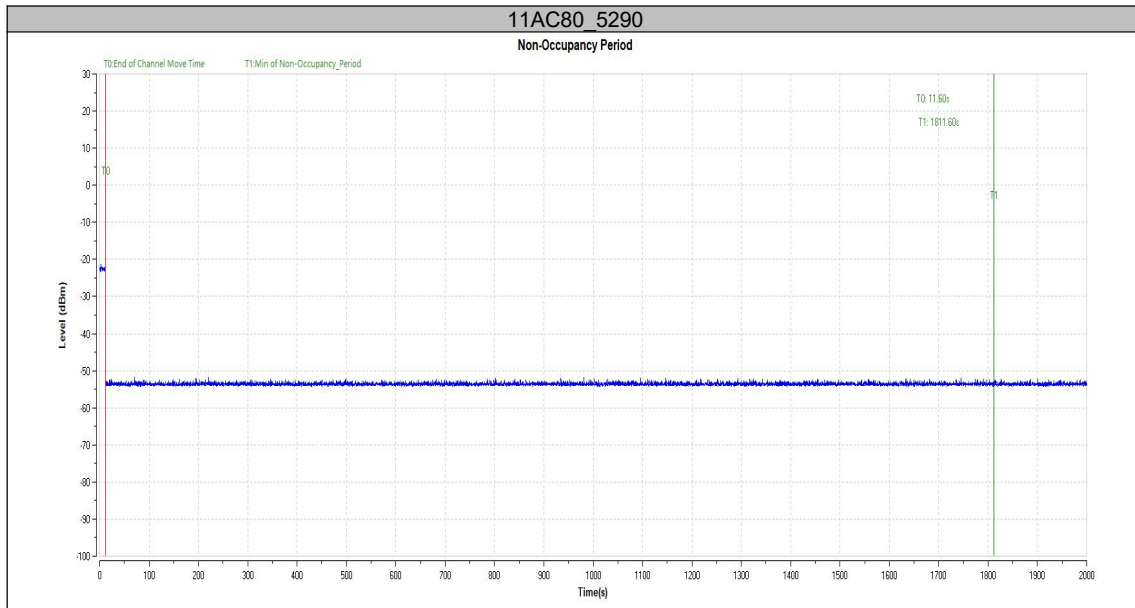
### 8.3 Channel Move Time and Channel Closing

| TestMode | Frequency[MHz] | CCTT[ms] | Limit[ms] | CMT[ms] | Limit[ms] | Verdict |
|----------|----------------|----------|-----------|---------|-----------|---------|
| 11AC80   | 5290           | 200+26   | 200+60    | 742     | 10000     | PASS    |



## 8.4 Non-Occupancy Period

| TestMode | Frequency[MHz] | Result         | Limit[s] | Verdict |
|----------|----------------|----------------|----------|---------|
| 11AC80   | 5290           | see test graph | ≥1800    | PASS    |



## 8.5 In-Service Monitoring

### U-NII-Band II-A

| Radar test singal type 0 |                 |         |                  |                     | Detection(Y/N) |
|--------------------------|-----------------|---------|------------------|---------------------|----------------|
| Trial ID                 | Pulse Width(us) | PRI(us) | Number of Pulses | Waveform Length(us) |                |
| 0                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 1                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 2                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 3                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 4                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 5                        | 1.0             | 1428.0  | 18               | 25704.0             | N              |
| 6                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 7                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 8                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 9                        | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 10                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 11                       | 1.0             | 1428.0  | 18               | 25704.0             | N              |
| 12                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 13                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 14                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 15                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 16                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 17                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 18                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 19                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 20                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 21                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 22                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 23                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 24                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 25                       | 1.0             | 1428.0  | 18               | 25704.0             | N              |
| 26                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 27                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 28                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| 29                       | 1.0             | 1428.0  | 18               | 25704.0             | Y              |
| Detection Rate           |                 |         |                  |                     | 90%            |

--- End of Report ---

# 声 明 Statement

1. 本报告无授权批准人签字及“检验检测专用章”无效。  
1. This report is invalid without the signature of the authorized approver and "special seal for testing".
2. 未经许可本报告不得部分复制。  
2. This report shall not be copied partly without authorization.
3. 本报告的检测结果仅对送测样品有效，委托方对样品的代表性和资料的真实性负责。  
3. The test results or observations are applicable only to tested sample. Client shall be responsible for representativeness of the sample and authenticity of the material.
4. 本检测报告中检测项目标注有特殊符号则该项目不在资质认定范围内，仅作为客户委托、科研、教学或内部质量控制等目的使用。  
4. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
5. 本检测报告以实测值进行符合性判定，未考虑不确定度所带来的风险，本实验室不承担相关责任，特别约定、标准或规范中有明确规定的除外。  
5. The test results or observations are provided in accordance with measured value, without taking risks caused by uncertainty into account. Without explicit stipulation in special agreements, standards or regulations, EMTEK shall not assume any responsibility.
6. 对本检验报告若有异议，请于收到报告之日起 20 日内提出。  
6. Objections shall be raised within 20 days from the date receiving the report.