

Shenzhen HUAK Testing Technology Co., Ltd. Report No.: HK2404081609-2EH

TEST REPORT EN IEC 62311:2020

Report Reference No. ..... : HK2404081609-2EH

Compiled by

( position+printed name+signature).: Testing engineer Len Liao

Supervised by

( position+printed name+signature) . : Technique principal Sliver Wan

Approved by

( position+printed name+signature) .: Manager Jason Zhou

Date of issue .....: 2024/04/11

Testing Laboratory Name .....: Shenzhen HUAK Testing Technology Co., Ltd.

Applicant's name ...... XonTel Technology Trd. Co. W.L.L

Address ...... : Kuwait City, Qibla, Aladel Tower, F21, state of Kuwait

Test specification .....:

Standard.....: EN IEC 62311:2020

TRF Originator .....: Shenzhen HUAK Testing Technology Co., Ltd.

Master TRF .....: Dated 2020-05

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Product Name....: Wireless Access Point

Trade Mark....: Xontel

Product Model .....: XT-5400AX

Serial Model .....: N/A

Hardware Version....: V2.0

Software Version .....: V2.0

Ratings .....: DC 48V From POE Power or DC 12V From DC Power

Result..... Pass

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Date of issue

Product Name : Wireless Access Point

Product Model : XT-5400AX

Serial Model : N/A

Applicant : XonTel Technology Trd. Co. W.L.L

Address : Kuwait City, Qibla, Aladel Tower, F21, state of Kuwait

Manufacturer : XonTel Technology Trd. Co. W.L.L

Address : Kuwait City, Qibla, Aladel Tower, F21, state of Kuwait

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TEL: +86-755 2302 9901 FAX: +86-755 2302 9901 E-mail: service@cer-mark.com



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# \*\* Modified History \*\*

| Revision    |          | Description                 | Issued Data | Remark     |
|-------------|----------|-----------------------------|-------------|------------|
| Revision 1. | 0        | Initial Test Report Release | 2024/04/11  | Jason Zhou |
| INTESTI     | JOK TEST | AKTES                       | JAKTESTI    | IN TESTIN  |
|             | D HO.    | O HO.                       | Mr. Walter  | A HO       |

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## 1. GENERAL INFORMATION

## 1.1 GENERAL REMARKS

| Date of receipt of test sample | :   | 2024/04/08 |
|--------------------------------|-----|------------|
| _0                             |     |            |
| Testing commenced on           | 168 | 2024/04/08 |
| Testing concluded on           | :   | 2024/04/11 |

## 1.2 GENERAL DESCRIPTION OF EUT

| Equipment             | Wireless Access F    | Point  |
|-----------------------|----------------------|--|
| Model Name            | XT-5400AX            | WANTEETH.  |
| Serial Model          | N/A                  | WTESTING WEST  |
| Difference descrption | N/A                  | HOW OHO  |
| •                     | The EUT is Wirele    | ess Access Point.  |
|                       | Operation Frequency: | E IEEE 802.11b/g/n20/AX HE20<br>2412-2472MHz<br>IEEE 802.11 n40/AX HE 40 2422-2462MHz  |
|                       | Modulation Type:     | DSSS, OFDM   |
|                       | Antenna Designation: | Internal Antenna   |
|                       | Antenna Gain(Peak)   | 4.0dBi   |
|                       | 50 5450 5050         |  |
|                       | 5G 5150-5250:        | IEEE 802.11a:5180MHz-5240MHz   |
|                       | Operation Frequency. | IEEE 802.11a.5180MHz-5240MHz IEEE 802.11n HT20/IEEE 802.11ac HT20/ IEEE 802.11ax HE20:5180MHz-5240MHz IEEE 802.11n HT40/IEEE 802.11ac HT40/IEEE 802.11ax HE40:5190MHz-5230MHz IEEE 802.11ac HT80/ IEEE 802.11ax HE80:5210MHz |
|                       | Modulation Type:     | IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK,   |
|                       | MAKTEL               | BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM,   |
| Product Description   | W TESTING            | QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)   |
|                       | JAN                  | IEEE 802.11ac HT20: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT40: OFDM (256QAM, 64QAM,  |
|                       | im <sub>G</sub>      | 16QAM, QPSK,BPSK)<br>IEEE 802.11ac HT80: OFDM (256QAM, 64QAM,<br>16QAM, QPSK,BPSK)   |
|                       | HUNKTESTING          | IEEE 802.11axHT20: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK)   |
|                       |                      | IEEE 802.11ax HE40: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HE80: OFDM (1024QAM, 256QAM,   |
|                       |                      | 64QAM, 16QAM, QPSK,BPSK)   |
|                       | Antenna Designation: |  |
|                       | Antenna Gain(Peak)   | 4.0dBi   |
|                       |                      |  |
|                       | NAKTESTING           |  |
|                       | 100                  |  |

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|------------------|--|
|                  | 5745-5825  |
|                  | Operation Frequency: IEEE 802.11a/ IEEE 802.11n HT20/ IEEE 802.11ac HT20/ IEEE 802.11ax HE20:5745MHz-5825MHz IEEE 802.11n HT40/ IEEE 802.11ac HT40/ IEEE 802.11ax HE40:5755-5795MHz IEEE 802.11ac HT80/ IEEE 802.11ax HE80:5775MHz |
|                  | Modulation Type: IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM,   |
|                  | QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT20: OFDM (256QAM, 64QAM,  |
|                  | 16QAM, QPSK,BPSK) IEEE 802.11ac HT40: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT80: OFDM (256QAM, 64QAM,  |
|                  | 16QAM, QPSK,BPSK) IEEE 802.11axHT20: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HE40: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HE80: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK)       |
| 5                | Antenna Designation: Internal Antenna  |
|                  | Antenna Gain(Peak) 4.0dBi  |
|                  | 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.                 |
| Channel List     | Refer to below   |
| Hardware Version | V2.0   |
| Software Version | V2.0   |
| Note:            | For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.  |

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## 2.EN IEC 62311 REQUIREMENT

#### 2.1 GENERAL INFORMATION

According to its specifications, the EUT must comply with the requirements of the following standards:

EN IEC 62311:2020[Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz)]

#### 2.2 LIMIT

A. Typical usage, installation and the physical characteristics of equipment make it inherently compliant with the applicable EMF exposure levels such as those listed in the bibliography. This low-power equipment includes unintentional (or non-intentional) radiators, for example incandescent light bulbs and audio/visual (A/V) equipment, information technology equipment (ITE) and multimedia equipment (MME) that does not contain radio transmitters.

NOTE Equipment is described as A/V equipment, ITE or MME if its main use is playback/recording of music, voice or images, or processing of digital information.

- B. The input power level to electrical or electronic components that are capable of radiating electromagnetic energy in the relevant frequency range is so low that the available antenna power and/or the average total radiated power cannot exceed the low-power exclusion level defined in 4.2.
- C. The available antenna power and/or the average total radiated power are limited by product standards for transmitters to levels below the low-power exclusion level defined in 4.2.
- D. Measurements or calculations show that the available antenna power and/or the average total radiated power are below the low-power exclusion level defined in 4.2.

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### 3. RESULT

## 3.1 Summary of Results

| Limit (W/ m²) | Result (W/ m²) | Verdict |
|---------------|----------------|---------|
| 10            | 0.107          | passed  |

### 3.2 MPE Evaluation

 $S = PG / 4\pi R^2$ 

P = Power input to antenna

G = Antenna Gain

R = distance to the center of radiation of antenna (in meter) = 0.2 m

 $\pi$ =3.142

The maximum power density at a distance of 0.2 m for EUT is shown as below:

|   | Operation<br>Mode | Max.<br>EIRP<br>(W) | R<br>(m) | S<br>(W/m2) | Limit<br>(W/m2) | Conclusion |
|---|-------------------|---------------------|----------|-------------|-----------------|------------|
| 3 | 2.4G WIFI         | 0.054               | 0.2      | 0.107       | 10              | PASS       |
|   | 5150-5250         | 0.028               | 0.2      | 0.056       | 10              | PASS       |
|   | 5745-5825         | 0.019               | 0.2      | 0.038       | 10              | PASS       |

### 3.3 Measurement Uncertainty

Extended Uncertainty (k=2) 95% 0.5dB

.....End of Report.....

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