



Report No.: PTC25061011401E-FC03

FCC TEST REPORT

FCC ID: QOBZWN3020

| | | |
|------------|---|-----------------------|
| Product | : | In-Wall Smart Dimmer |
| Model Name | : | ZWN3020, 76602, 76607 |
| Brand | : | UltraPro |
| Report No. | : | PTC25061011401E-FC03 |

Prepared for

Jasco Products Company LLC

10 e memorial road Office oklahoma city OK 73114

Prepared by

Precise Testing & Certification Co., Ltd.

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TEST RESULT CERTIFICATION

Applicant's name : Jasco Products Company LLC
Address : 10 e memorial road Office oklahoma city OK 73114

Manufacture's name : Ultra Tech Industries Co., Ltd.
Address : Industrial cluster Non Sao, Tan Dinh commune, Lang Giang district,Bac Giang , VIETNAM

Product name : In-Wall Smart Dimmer

Model name : ZWN3020, 76602, 76607

Test procedure : FCC CFR47 Part 1.1307(b)(1)

Test Date : Jun. 16, 2025 to Jun. 30, 2025

Date of Issue : Jun. 30, 2025

Test Result : PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink, appearing to read "Jack Zhou".

Jack Zhou / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read "Simon Pu".

Simon Pu / Manager



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2 Test Summary

| Test Items | Test Requirement | Result |
|---|------------------|--------|
| Maximum Permissible Exposure (Exposure of Humans to RF Fields) | 15.247 (i) | PASS |
| Remark: | | |
| N/A: Not Applicable | | |



3 General Information

3.1 General Description of E.U.T.

| | |
|----------------------|--|
| Product Name | : In-Wall Smart Dimmer |
| Model Name | : ZWN3020, 76602, 76607 |
| Operation Frequency | : 908.40MHz 908.42MHz 916.00MHz 912 MHz 920 MHz |
| Type of Modulation | : 2FSK for 908.40MHz 2FSK for 908.42MHz 2GFSK for 916.00MHz DSSS OQPSK LR for 912 MHz and 920 MHz |
| Antenna installation | : Spring Antenna |
| Antenna Gain | : 3.55 dBi |
| Power supply | : Input:125v 60Hz Output: 125V 60Hz 600W |
| Hardware Version | : 1.4 |
| Software Version | : V8.0 |



4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v06

4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

| Frequency Range | Electric Field | Magnetic Field | Power Density (S) | Averaging Time |
|-----------------|----------------|----------------|-------------------|----------------|
| 0.3-3.0 | 614 | 1.63 | (100)* | 6 |
| 3.0-30 | 1842 / f | 4.89 / f | (900 / f)* | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | | | F/300 | 6 |
| 1500-100,000 | | | 5 | 6 |

(B) Limits for General Population / Uncontrolled Exposure

| Frequency Range | Electric Field | Magnetic Field | Power Density (S) | Averaging Time |
|-----------------|----------------|----------------|-------------------|----------------|
| 0.3-1.34 | 614 | 1.63 | (100)* | 30 |
| 1.34-30 | 824/f | 2.19/f | (180/f)* | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | | | F/1500 | 30 |
| 1500-100,000 | | | 1.0 | 30 |

Note: f = frequency in MHz ; *Plane-wave equivalent power density



4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$P_d = \frac{30 \times P \times G}{377 \times d^2} \theta \varphi$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Manufacturing tolerance

| Freq. (MHz) | Field strength(max)(dB μ V/m) | EIRP (max) (dBm) |
|----------------|-----------------------------------|---------------------|
| 908.40 | 90.17 | -5.03 |
| 908.42 | 89.82 | -5.38 |
| 916.00 | 89.87 | -5.33 |

Note: EIRP = E - 104.8 + 20logD,
Where
E is the electric field strength in dB μ V/m
EIRP is the equivalent isotropically radiated power in dBm
d is the specified measurement distance in m
where D=3, EIRP = E - 95.2.



4.5 Test Result

| Mode | Antenna Gain (numeric) | Max. Peak Output Power (dBm) | Tune up tolerance (dBm) | Max Tune Up Power (mW) | Power Density (mW/cm ²) | Limit of Power Density (mW/cm ²) | Result |
|-----------|------------------------|------------------------------|-------------------------|------------------------|-------------------------------------|--|--------|
| 912MHz | 2.26 | 0.301 | 0.50±1 | 1.412538 | 0.006351 | 0.608000 | Pass |
| 920MHz | 2.26 | 1.708 | 2.00±1 | 1.778279 | 0.007995 | 0.613333 | Pass |
| 908.40MHz | 2.26 | -5.03 | -5.00±1 | 0.398107 | 0.00179 | 0.605600 | Pass |
| 908.42MHz | 2.26 | -5.38 | -5.00±1 | 0.398107 | 0.00179 | 0.605613 | Pass |
| 916.00MHz | 2.26 | -5.33 | -5.00±1 | 0.398107 | 0.00179 | 0.610667 | Pass |

Simultaneous SAR Evaluation:

The device can't support simultaneous transmitter.

*****THE END REPORT*****