



Report No: TW1011028

File reference No: 2010-11-18

Applicant: Qixiang Electron Science & Technology Co.,Ltd.

Product: Two-way radio

Model No: 289G、289

Brand Name: N/A

Test Standards: IEC 60529:1989+A1:1999

Test Conclusions: The safety testing has been performed on the submitted samples and found in compliance with the standard IEC 60529:1989+A1:1999

Approved By

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White Liu  
Manager

Dated: Nov.18, 2010

**Results appearing herein relate only to the sample tested**

**The technical reports is issued errors and omissions exempt and is subject to withdrawal at**

**SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD**

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## 1. General Details

### 1.1 Test Lab Details

Name	SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD
Address	East 5/Block 4, Anhua Industrial Zone, No.8,Tairan Rd. CheGongMiao, FuTian District, Shenzhen, CHINA.
Telephone	(755) 83448688
Fax	(755) 83442996

### 1.2 Applicant Details

Applicant	Qixiang Electron Science & Technology Co.,Ltd.
Address	Qixiang Building, Tangxi Industrial Zone, Luojiang District, Quanzhou 362011,Fujian,China
Telephone	+86-595-22652998
Fax	+86-595-22656927

### 1.3 Description of EUT

Product	Redline Dimmable Floodlight
Model No	289G、 289
Brand Name	N/A
Manufacturer	Qixiang Electron Science & Technology Co.,Ltd.
Address	Qixiang Building, Tangxi Industrial Zone, Luojiang District, Quanzhou 362011,Fujian,China

### 1.4 Rating of Products

Model NO.	Nameplate Specification							
	Input				Output			
	Voltage (V)	Current (A)	Power (W)	Frequency (MHz)	Voltage (V)	Current (A)	Power (W)	Frequency (MHz)
289G	--	--	--	--	7.4V	<1.5A	4-5W	400-480
289	--	--	--	--	7.4V	<1.5A	4-5W	400-480

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## 2. List of Measurement Equipment

Instrument Type	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
Dust proof tester	SC-010	201001012	Guangzhou handioriginal equipment manufacture	2010-4-23	One year
Waterproof tester	PS-300	201001013	Guangzhou handioriginal equipment manufacture	2010-5-14	One year
Temperature and Humidity Cabinet	EL-02AGP	0205082	GZ-ESPEC	2010-08-11	One year

## 3. Technical Details

### 3.1 Investigations Requested

Perform water or dust tests for Commission Regulation IEC 60529:1989+A1:1999.  
Degrees of protection provided by enclosures (IP Code): IP55

### 3.2 Test Standards

IEC 60529:1989+A1:1999

## 4. Test Engineer & Verify Engineer

<b>Test Engineer:</b> The sample(s) tested by _____ Print Name: Bruce Zhong / Engineer
<b>Verify Engineer:</b> The report verified by _____ Print Name: David guo / Engineer
This test report is not valid without personnel's signatures of TIMEWAY TECHNOLOGY CONSULTING CO LTD

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## Test and result

Description of IP Code — IP55

——Degree of protection against access to hazardous parts and against solid foreign objects is 5.

——Degree of protection against ingress of water is 4.

### 5.1 First characteristic numeral

IP5X	
<b>Test method</b>	<p>The test is made using a dust chamber incorporating the basic principles shown in figure 2 whereby the powder circulation pump may be replaced by other means suitable to maintain the talcum powder in suspension in a closed test chamber. The talcum powder used shall be able to pass through a square-mashed sieve the nominal wire diameter of which is 50um and the nominal width of a gap between wires 75um. The amount of talcum powder to be used is 2kg per cubic metre of the test chamber volume. It shall not have been used for more than 20 tests.</p> <p>The enclosure under test is supported in its normal operating position inside the test chamber, but is not connected to a vacuum pump. Any drain-hole normally open shall be left open for the duration of the test. The test shall be continued for a period of 8 h .</p>
<b>Acceptance conditions</b>	<p>The protection is satisfactory if, on inspection, talcum powder has not accumulated in a quantity or location such that, as with any other kind of dust, it could interfere with the correct operation of the equipment or impair safety. Except for special cases to be clearly specified in the relevant product standard, no dust shall deposit where it could lead to tracking along the creepage distances.</p>
<b>Result</b>	<p>No dust inside the enclosure. No dust deposit lead to tracking.</p>
<b>Conclusion</b>	<p>The product under the test pass the requirements of degree 5 of protection.</p>

Atmospheric conditions during the tests complys with the recommended as follows:

Temperature range: 15 °C to 35 °C

Relative humidity: 25 % to 75 %

Air pressure: 86 kPa to 106 kPa (860 mbar to 1 060 mbar).

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**5.2 Second characteristic numeral**

<b>IPX5</b>	
<b>Test method</b>	<p>The test is made by spraying the enclosure from all practicable directions with a stream of water from a standard test nozzle as shown in figure 6.</p> <p>The conditions to be observed are as follows:</p> <ul style="list-style-type: none"> <li>— internal diameter of the nozzle: 6.3 mm;</li> <li>— delivery rate: 12.5 ±0.625 L/min;</li> <li>— water pressure: to be adjusted to achieve the specified delivery rate;</li> <li>— core of the substantial stream: circle of approximately 120 mm diameter at 2,5 m distance from nozzle;</li> <li>— test duration per square metre of enclosure surface area likely to be sprayed: 1 min;</li> <li>— minimum test duration: 3 min;</li> <li>— distance from nozzle to enclosure surface: between 2,5 m and 3 m.</li> </ul>
<b>Acceptance conditions</b>	<p>In general, if any water has entered, it shall not:</p> <ul style="list-style-type: none"> <li>— be sufficient to interfere with the correct operation of the equipment or impair safety;</li> <li>— deposit on insulation parts where it could lead to tracking along the creepage distances;</li> <li>— reach live parts or windings not designed to operate when wet;</li> <li>— accumulate near the cable end or enter the cable if any.</li> </ul> <p>If the enclosure is provided with drain-holes, it should be proved by inspection that any water which enters does not accumulate and that it drains away without doing any harm to the equipment.</p> <p>For enclosures without drain-holes, the relevant product standard shall specify the acceptance conditions if water can accumulate to reach live parts.</p>
<b>Result</b>	No water inside the enclosure.
<b>Conclusion</b>	The product under test pass the requirements of degree 5 of of protection against ingress of water.

Atmospheric conditions during the tests complys with the recommended as follows:

Temperature range: 15 °C to 35 °C

Relative humidity: 25 % to 75 %

Air pressure: 86 kPa to 106 kPa (860 mbar to 1 060 mbar).

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## 6. Photo of the product



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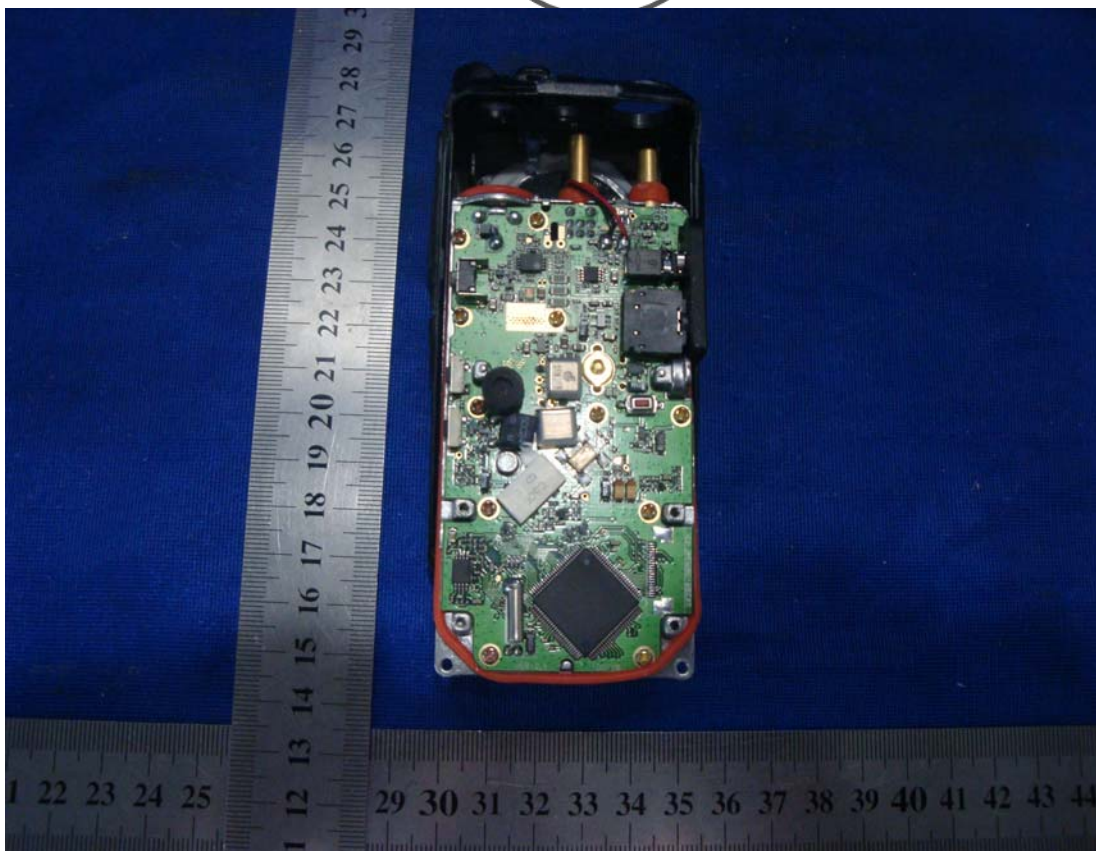




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■ **End of the Report –**

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