Greluma ZL779LUM

Greluma PIR Motion Sensor Light Switch (Model ZL779LUM) User Manual

AC220V-240V High Sensitivity Wall Switch for Indoor and Outdoor Use

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Greluma PIR Motion Sensor Light Switch, Model ZL779LUM. This device is designed to automatically control lighting based on detected motion and ambient light levels, suitable for both indoor and outdoor applications.

Image 1: Front view of the Greluma PIR Motion Sensor Light Switch.

2. Safety Information

- **Electrical Hazard:** Installation must be performed by a qualified electrician or knowledgeable individual. Ensure power is disconnected at the circuit breaker before installation.
- **Voltage:** This device operates on AC220V-240V. Do not connect to other voltage supplies.
- **Outdoor Use:** When installing outdoors, ensure the unit is protected from direct water exposure and extreme weather conditions to prevent damage and ensure safety.
- **Mounting:** Securely mount the sensor to a stable surface according to installation guidelines.

3. Product Features

- **Wide Detection Range:** Optimal motion detection with a 180° working range and up to 12m detection distance.
- **Energy Efficient:** Utilizes passive infrared technology to detect moving objects, minimizing heat generation and conserving energy.
- **Adjustable Light Sensor (LUX):** Configurable ambient light threshold (3-2000lux) for day and night operation.
- **Adjustable Time Delay:** Customizable delay time from 7 seconds to 7 minutes. Continuous induction resets the timer.
- **Versatile Applications:** Suitable for various locations including garages, hallways, basements, staircases, kitchens,

wardrobes, and lofts.

4. Specifications

Brand	Greluma
Model Number	ZL779LUM
Operating Voltage	AC220V-240V
Detection Range	Up to 12 meters
Detection Angle	180°
Ambient Light (LUX)	3-2000lux (Adjustable)
Time Delay	7 seconds ~ 7 minutes (Adjustable)
Mounting Type	Ceiling Mount
Product Dimensions	10.5 x 9.2 x 7.5 cm
Item Weight	150 g
Included Components	Infrared sensor switch

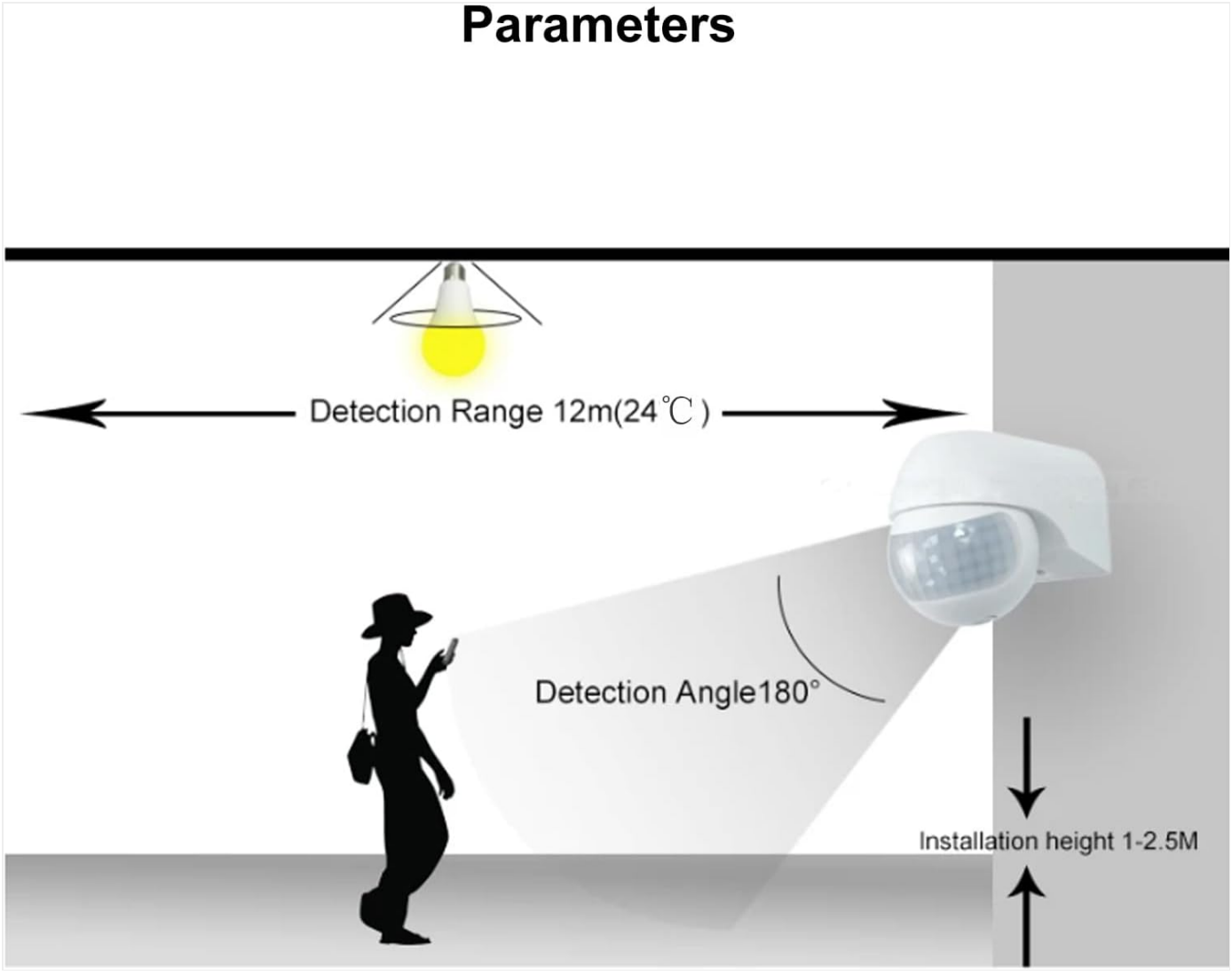

Image 2: Illustration of detection range (12m), angle (180°), and recommended installation height (1-2.5m).

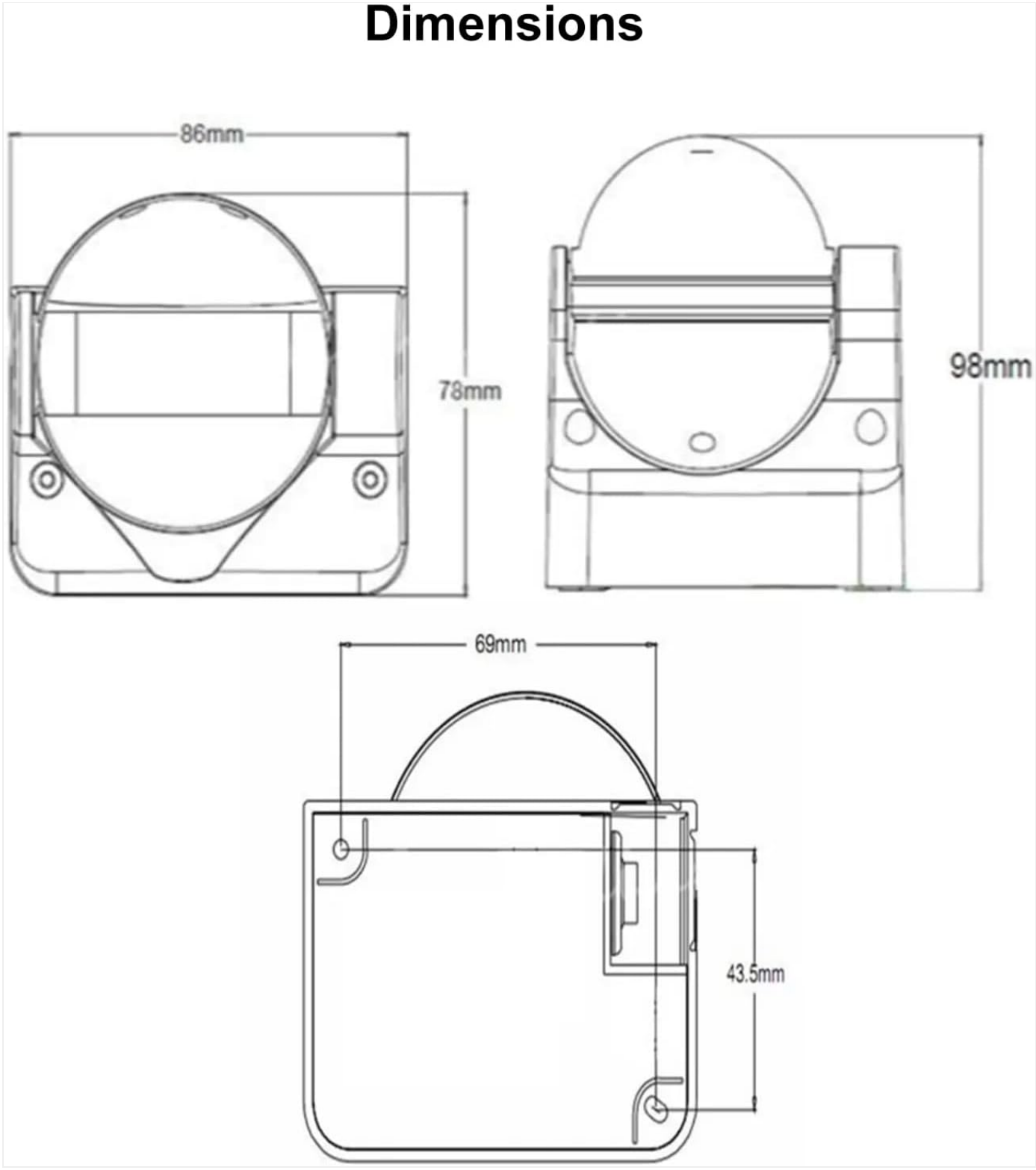

Image 3: Technical drawing showing the dimensions of the Greluma PIR Motion Sensor (86mm, 78mm, 98mm, 69mm, 43.5mm).

5. Setup and Installation

5.1. Pre-Installation Checklist

- Ensure power is turned OFF at the main circuit breaker.
- Verify the supply voltage is AC220V-240V.
- Select a suitable mounting location, ideally between 1 to 2.5 meters high, to achieve the specified detection range and angle.

- Avoid mounting near heat sources, air conditioning vents, or in direct sunlight, as these can cause false triggers.

5.2. Wiring Instructions

1. Carefully open the sensor casing to access the wiring terminals.
2. Connect the Live (L) wire from the power supply to the 'L' terminal on the sensor.
3. Connect the Neutral (N) wire from the power supply to the 'N' terminal on the sensor.
4. Connect the load (e.g., light fixture) to the 'OUT' terminal on the sensor. The other side of the load should connect to the Neutral (N) wire.
5. Ensure all connections are secure and insulated.
6. Close the sensor casing securely.

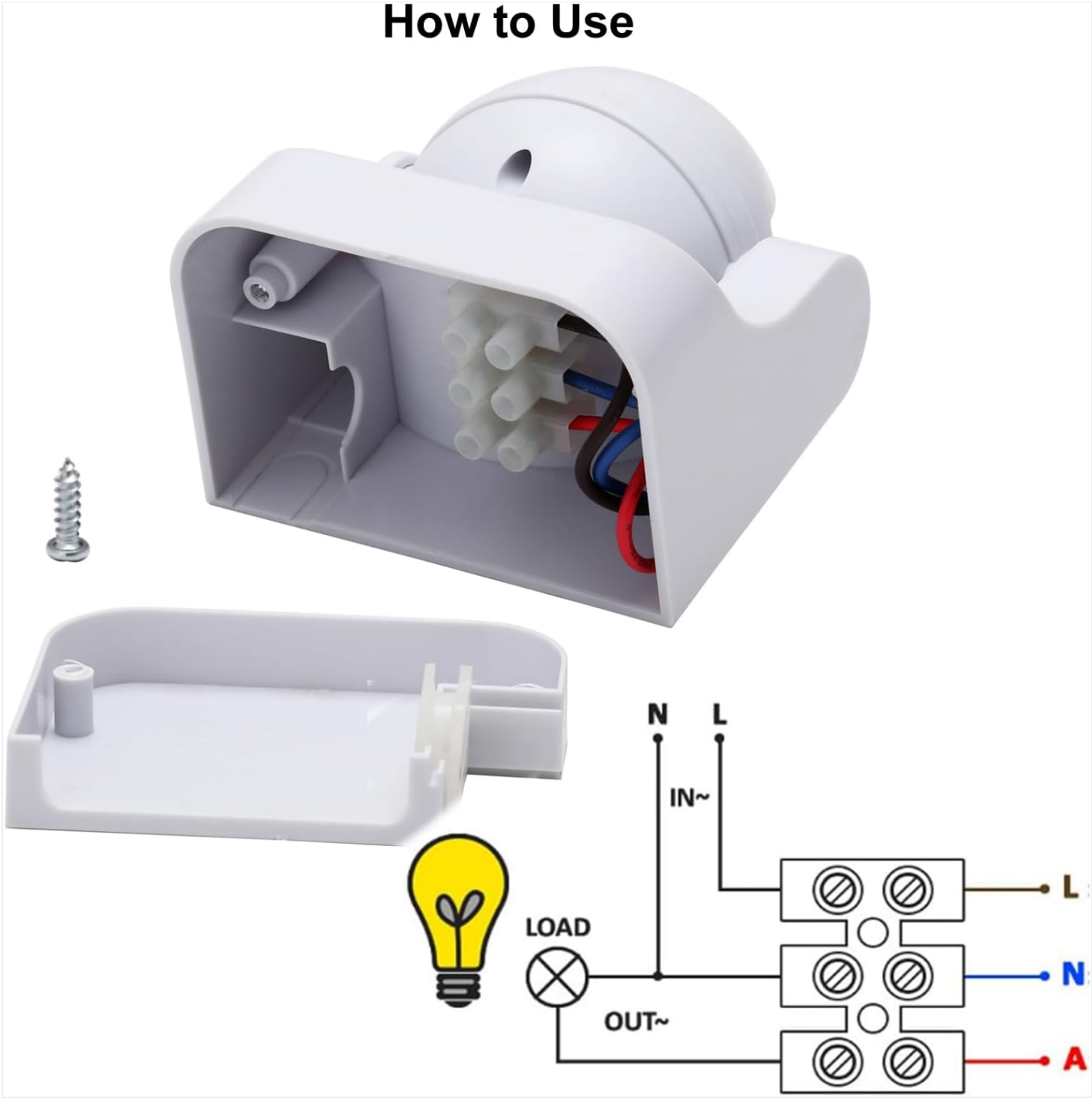

Image 4: Internal view of the sensor with wiring terminals and a schematic diagram for connecting to a light load. (N: Neutral, L: Live, OUT: Load Output).

5.3. Mounting

- Use the provided screws to securely attach the sensor to the chosen wall or ceiling surface.

- Adjust the sensor head to cover the desired detection area. The sensor offers a 180° detection angle.

6. Operating Instructions and Adjustments

After successful installation and power restoration, the sensor will enter a warm-up period (typically 30-60 seconds) during which it may cycle on and off. After this, it will be ready for adjustment.

Image 5: Close-up of the adjustment knobs for TIME and LUX settings.

6.1. TIME Adjustment

The "TIME" knob controls how long the connected light remains on after motion is detected and then ceases. It can be adjusted from approximately 7 seconds to 7 minutes.

- Turn the knob towards the '–' symbol for a shorter delay.
- Turn the knob towards the '+' symbol for a longer delay.
- If the sensor detects motion again before the set time delay expires, the timer will reset and restart the countdown.

6.2. LUX Adjustment

The "LUX" knob determines the ambient light level at which the sensor will activate the connected light. This allows the sensor to operate only when natural light is insufficient.

- **"Sun" Position (Max LUX):** The sensor will operate both during the day and at night, regardless of ambient light.
- **"Moon" Position (Min LUX):** The sensor will only activate when the ambient light level falls below approximately 3 Lux (i.e., in dark conditions).
- Adjust the knob to your desired operating condition. For testing during daylight, set it to the "Sun" position.

7. Applications

The Greluma PIR Motion Sensor Light Switch is versatile and can be used in various settings to enhance convenience and energy efficiency.

- **Indoor Use:** Ideal for garages, hallways, basements, staircases, kitchens, wardrobes, and lofts where automatic lighting is beneficial.
- **Outdoor Use:** Suitable for outdoor areas such as patios, entryways, or garden paths, provided it is installed in a protected location.

Image 6: Visual examples of the sensor installed in a parlor and an outdoor setting.

8. Maintenance

- **Cleaning:** Periodically wipe the sensor lens with a soft, dry cloth to remove dust or debris that might obstruct detection. Do not use abrasive cleaners or solvents.
- **Inspection:** Regularly check for any signs of damage to the casing or wiring. If damage is found, disconnect power and consult a qualified technician.
- **Environmental Factors:** Ensure the sensor remains free from obstructions and is not exposed to excessive moisture or extreme temperatures beyond its operating limits.

9. Troubleshooting

Problem	Possible Cause	Solution
Light does not turn on when motion is detected.	◦ No power supply. ◦ LUX setting is too low (set to "Moon" during daytime). ◦ Wiring error. ◦ Sensor lens obstructed.	◦ Check circuit breaker and power connections. ◦ Adjust LUX knob towards "Sun" position. ◦ Verify wiring according to diagram (Section 5.2). ◦ Clean sensor lens.
Light stays on continuously.	◦ Continuous motion in detection area. ◦ TIME setting is too long. ◦ Wiring error (e.g., load directly connected to live).	◦ Ensure no constant movement in the sensor's field of view. ◦ Adjust TIME knob towards '–' for a shorter delay. ◦ Re-check wiring (Section 5.2).
Light turns on randomly or too frequently.	◦ Sensor detecting heat sources (e.g., heater, direct sunlight). ◦ LUX setting is too high for desired operation. ◦ Small animals or moving objects in detection area.	◦ Relocate sensor away from heat sources or adjust its angle. ◦ Adjust LUX knob towards "Moon" position. ◦ Adjust sensor angle or sensitivity if possible (this model does not explicitly state sensitivity adjustment, so focus on angle).
Detection range is shorter than expected.	◦ Incorrect installation height. ◦ Obstructions in detection path. ◦ Extreme temperatures affecting sensor performance.	◦ Ensure installation height is within 1-2.5m. ◦ Clear any obstructions. ◦ Ensure sensor is within recommended operating temperature range.

10. Warranty and Support

For warranty information and technical support, please refer to the documentation provided with your purchase or contact Greluma customer service through their official channels. Keep your purchase receipt as proof of purchase.

Documents - Greluma – ZL779LUM

no relevant documents