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Leaders in diagnostic services for microelectronics and photonics

Nichia Jupiter LED Lamp Teardown and Technology Analysis

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1. Product Identification

The device subject to teardown for this work is a cool white Nichia Jupiter surface mount LED lamp assembled onto an LEDdynamics Io Moon 04020-CW-70 or 04020-CW-35.

The suffix “70” and “35” in the part name refers to a 70 degree or a 35 degree included angle of emission. Both parts have the same dimensions and similar construction and technology, except for the lens which is somewhat taller in the 35 degree part.

Manufacturers	LEDdynamics Part	Nichia Part
Nichia and LEDdynamics	Io Moon 04020-CW-70	Jupiter NCCW022
Nichia and LEDdynamics	Io Moon 04020-CW-35	Jupiter NCCW023

2. External Appearance and Principal Dimensions

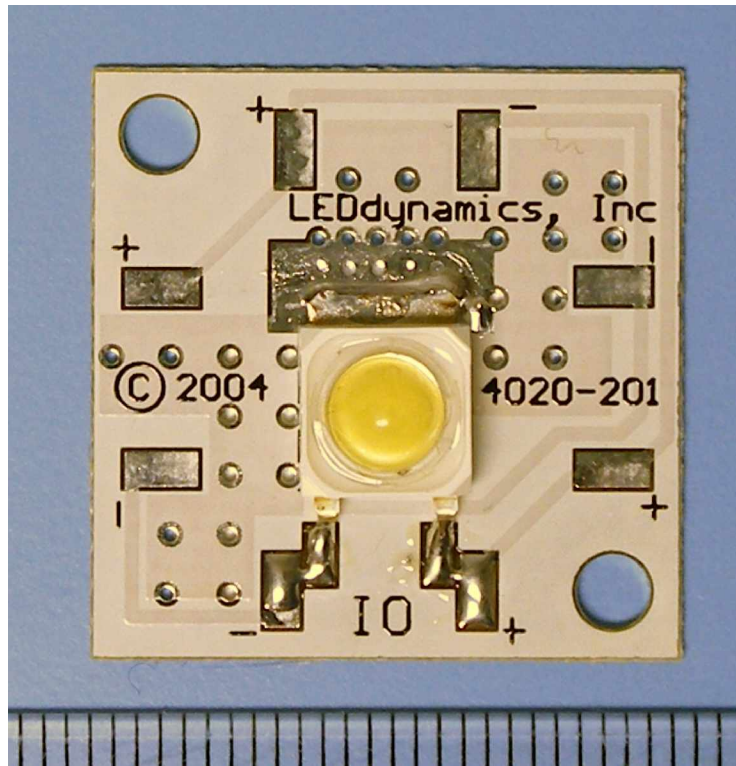


Figure 1.1: The Nichia Jupiter LED package (70 degree version) mounted on its LEDdynamics substrate. The units on the scale are 1.0 mm.

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Figure 1.2: Side view of the Jupiter 70-degree LED package.

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