



Subject: Change of Luminous Intensity and Radiant Flux Specifications  
Products Affected: 52 Lamp Type LEDs

November 4, 2008

Dear Customer

Nichia Corporation today announced that the luminous intensity/radiant flux specifications for 52 early models of its LED products were changed to new specifications traceable to current national measurement standards. With this revision, new product specifications are now available and inspection reports (available on a per request basis) will be revised on January 1st, 2009. For the new ranking values, please refer to the new product specifications which contain both new and old rankings.

There are significant differences in physical size and shape, spatial characteristics and spectral distribution between LEDs and conventional light sources. The differences increase the uncertainty of LED measurement and resulted in different measurement values across different countries as well as among companies within a country. For accurate measurement, in 2007 two measurement standards, one international (CIE 127-2007), the other national (JIS C 8152:2007) were published. The introduction of these standards reduced measurement errors and made it easier to maintain traceability to national/international standards.

Prior to the establishment of the new measurement standards, Nichia measuring systems have been calibrated with traceability to national standards using LED reference standards. As the new standards were being published, Nichia evaluated the new national standards, using newly-developed CIE 127:2007-compliant standard LEDs. As a result, it was found that there were some early LED models with a significant deviation. Although correlation coefficients between the measurement values of customers and Nichia have been used, the existence of such deviation is undesirable and may cause inconvenience to our customers for the future use of our products.

For this reason, Nichia decided to review the luminous intensity and radiant flux specifications for the affected products. This change affect the luminous intensity or radiant flux values indicated in specification documents (product specifications and inspection reports), but not the manufacturing process or actual characteristics of these products.

The cause of the deviation originated with variation in product spatial characteristics, measurement equipment accuracy and lack of standardized measurement method at the time when the affected products were developed. Currently, Nichia's measurement method, in accordance with CIE and JIS standards, have been improved in accuracy, reliability and traceability by replacement of standard LEDs with temperature stabilized high precision standard LEDs, which were jointly developed by National Institute of Advanced Industrial Science & Technology (AIST) and Nichia.

We will continue to focus efforts on improving measurement precision and accuracy through further study of LED measurement technology, in order to ensure adherence to national standards.

Thank you for your attention to the change. Please consult your Nichia sales representative for further information.