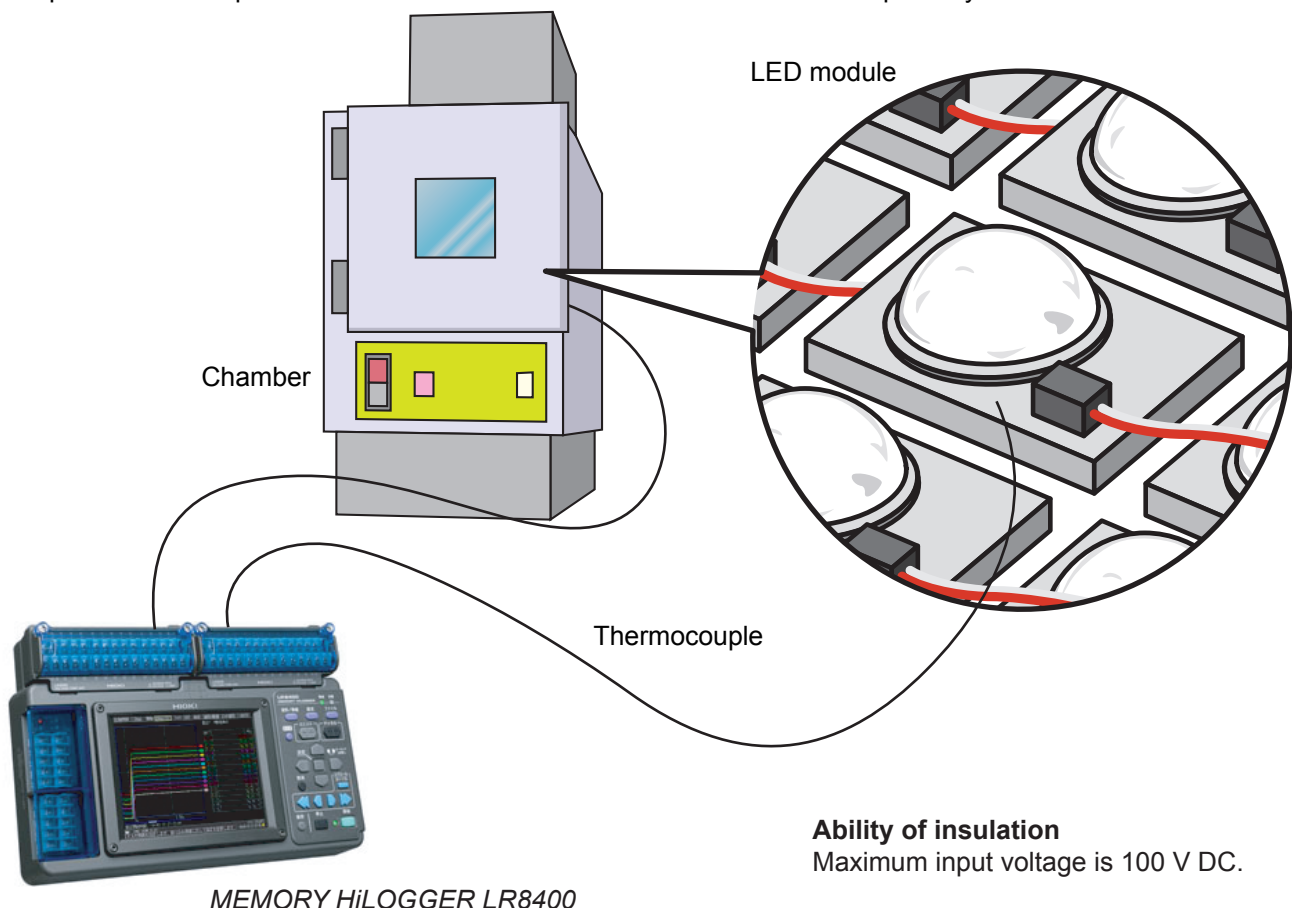


Test Lumen Maintenance Factor According to the IES LM-80 Standard

Temperature measurements required for testing the lumen maintenance factor of LED lighting are recorded over a long period.

■ Highlights

- Lumen maintenance factor testing based on the IES (Illumination Engineering Society) LM-80 standard can be performed with the MEMORY HiLOGGER LR8400 Series.
- The LM-80 standard is a test of lumen maintenance of LED lighting. Fluctuation in lumen maintenance factor can be measured for up to 6,000 hours. See the ENERGY STAR Manufacturer's Guide for Qualifying Solid-State Lighting Luminaires for details.
- Temperature and humidity within the chamber and temperature of the LED module are recorded at multiple points using thermocouples and the LR8400.
- Maximum LR8400 input voltage is 100 V DC, and maximum voltage between channels is 250 V DC. So, if by any chance a thermocouple contacts the electrically energized area of an LED module, the inputs of the LR8400 are not damaged by overvoltage. LED module voltage and current fluctuations can be measured simultaneously with temperature and humidity. A shunt resistance is used to measure current.
- Prepare thermocouples and shunt resistances for current measurement separately.



Products used

MEMORY HiLOGGER LR8400 Series (ANALOG /TEMPERATURE UNIT 15 ch x2)
HUMIDITY SENSOR Z2000

Please prepare the thermocouples and the shunt resistances for current measurement separately.