

**Twiddle-N83 lenses for Nichia 183 / 083 LEDs**

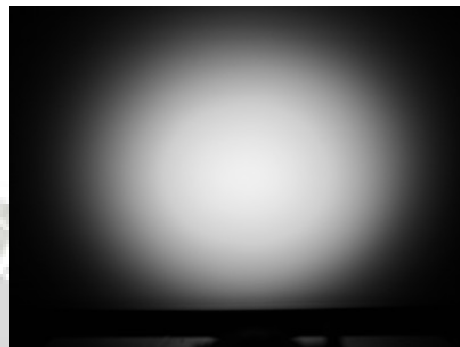
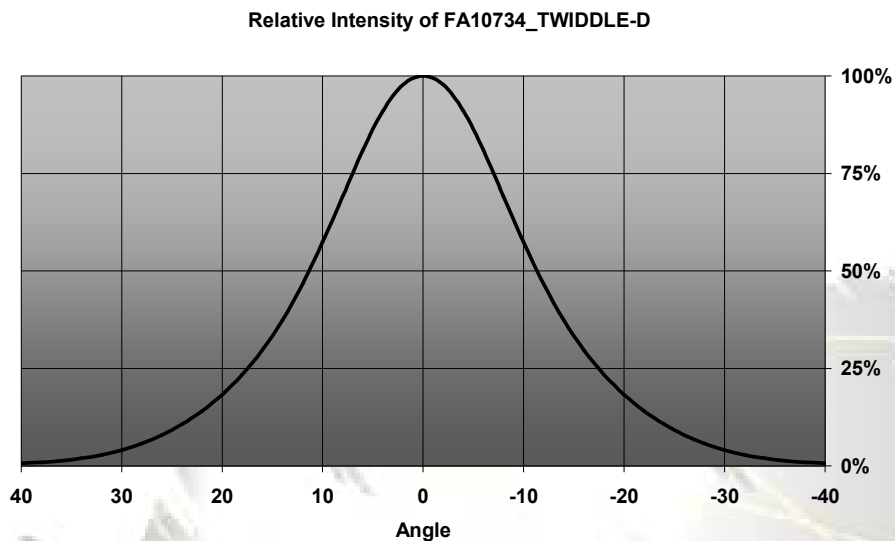
- Specially designed for Nichia 183 and NS6x083 series of LEDs
- Special care taken to make a uniform white or warm white illumination.
- Lens material optical grade PMMA with high UV and temperature resistance (105°C/220°F). Allows use of high current and temperature conditions
- Integrated holder. Fastening to heat sink with a PU foam adhesive tape of automotive grade
- We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the tape.
- Please check fastening details from this link:  
([http://www.ledil.com/datasheets/DataSheet\\_TAPE.pdf](http://www.ledil.com/datasheets/DataSheet_TAPE.pdf))
- Compact dimensions 21.6 x 14.4 mm. Square form enables easy build of matrix without any gaps between lenses.
- New PATENT PENDING "Omni-directional" technique, allows freely swivel the lens and its light distribution in any angle within +/- 15 degrees from the nominal position

**LENS TYPES**

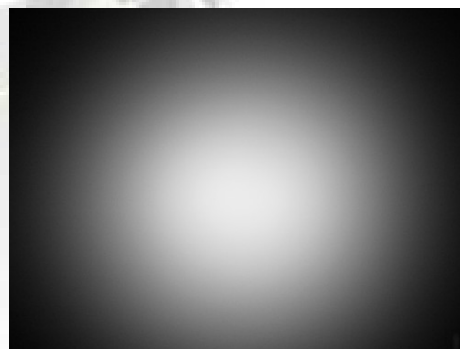
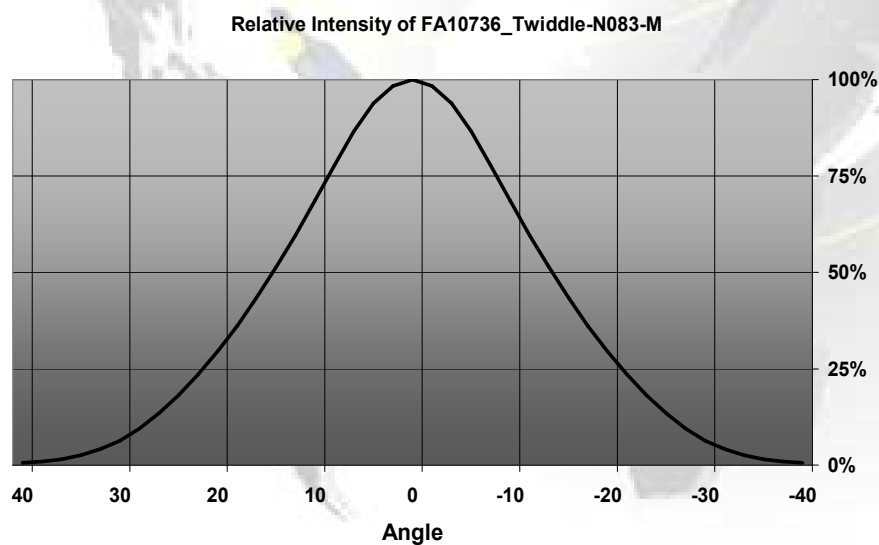
NAME	ORDERING CODE	FWHM Angle
Twiddle Diffuser	FA10734_Twiddle-N83-D	±11.5°
Twiddle Medium	FA10736_Twiddle-N83-M	±14°

## MEASUREMENTS (using warm white LED)

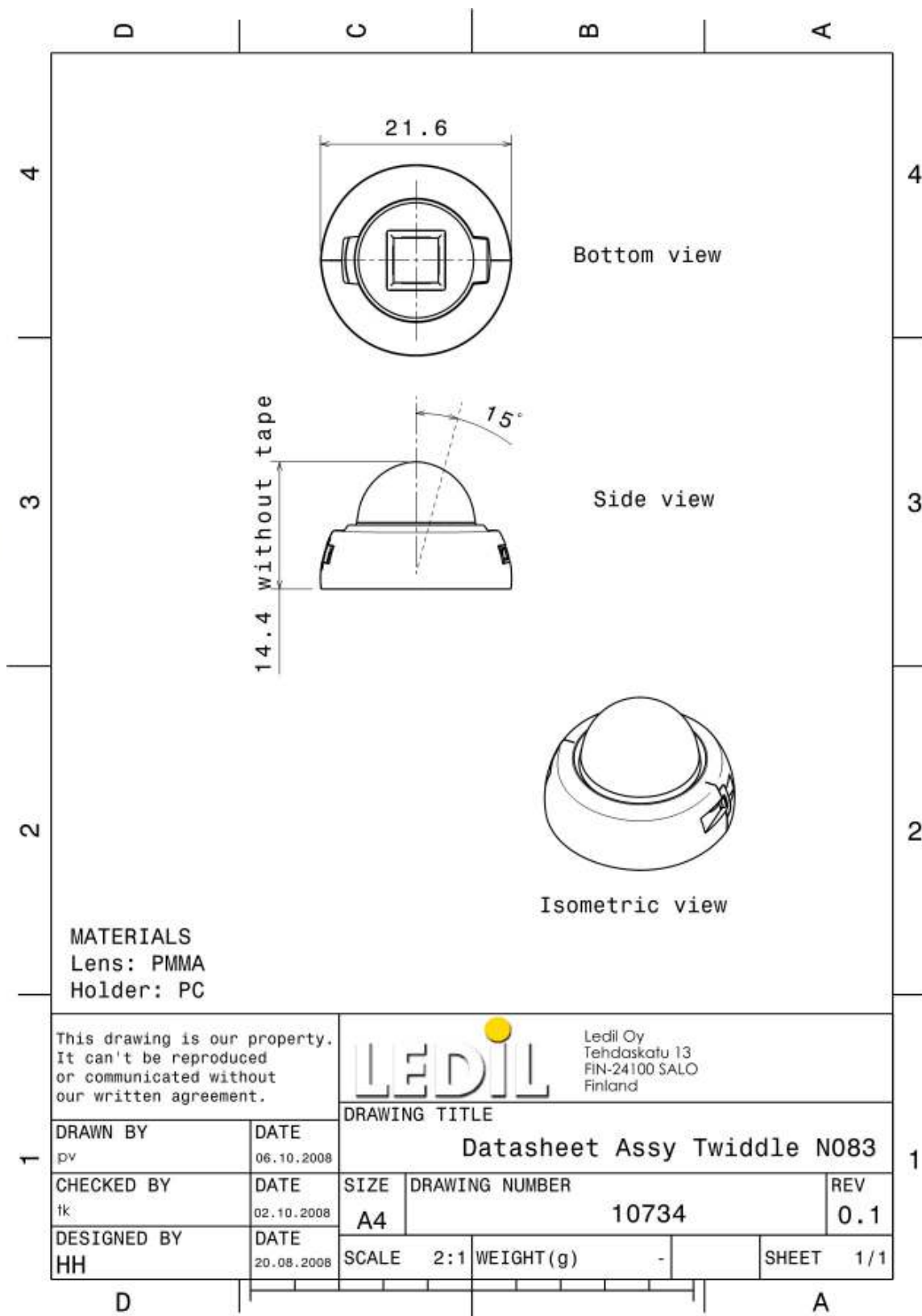
### Twiddle-N83-D



### Twiddle-N83-M



## DIMENSIONS



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