

# **// BALZERS OPTICS**

# **Mini Light Funnel**

#### Mini Light Funnel For Smart Head Light

Unlike competitor products, the Materion Balzers Optics hollow integrator Light Funnel creates enhancement of light uniformity by outstanding reflection. Using the step structure Light Funnel light integration technology, its compact design stablished a new standard for portable lighting systems or portable projection display system. We apply our patented 400 Deflex<sup>TM</sup> 75 dielectric coating to the internal surfaces of the Light Funnel which giving it unique advantages to provide the best light uniformity and reliability performance for automotive application.



## **Benefits**

- Enhanced light uniformity by high reflection
- High spotlight effect
- High structural strength
- Exhibits less sensitivity to dust
- Ultra compact design
- Environmental stability
- Long lifetime
- Flexibility in customized design

## **Applications**

- The light integration in Smart Head Light system
- Portable lighting system
- LED high beam system
- Portable projection display

Light Funnel Exit

Light Funnel Entrance





## **Technical Data**

## Dimensions

Any customized size in rectangular or tapered versions

#### Substrate

Floatglass, 1.1  $\pm$  0.1 mm, other substrates on request

#### Coating

Materion Balzers Optics 400 Deflex<sup>™</sup> 75 (customized design is optional)

## Reflectivity

400 Deflex<sup>™</sup> 75: R avg.  $\geq$  97% at 420 – 680 nm Optimized for random pol., AOI = 75°

## Operating temperature

400 Deflex<sup>™</sup> 75: up to 400°C depending on design

## Storage temperature

− 20°C to +85°C

## Scratches and digs (for coating only)

Depending on specification. Typically  $50/2 \times 0.4$ ; R0.2 (chips on input and output edges)

## Mechanical strength

Depending on the design, mechanical structure bonding or mechanical/glue combination bonding

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