

# Bridgelux® Optic Lens Dark 5525

Product Data Sheet DS1343

# Introduction

The Bridgelux Optic Lens are following industry Zhaga Standard, which gives a wide selection of components in the eco-system, lower the cost of switching and better serve design needs.

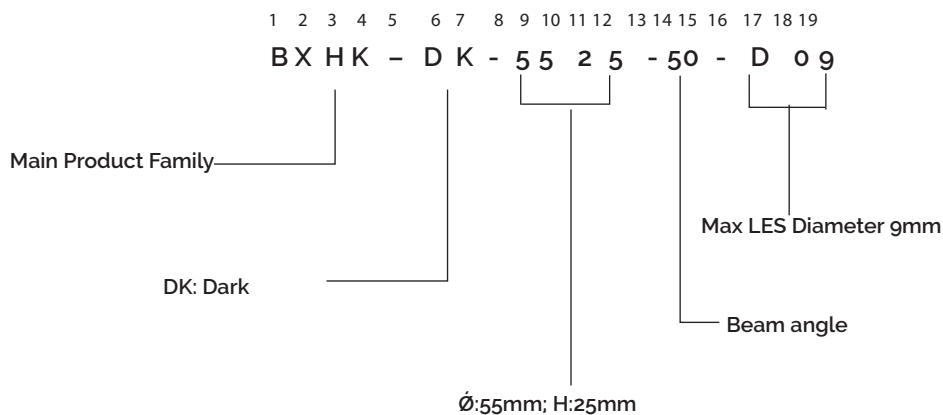
Our integrated solution including COB, non-soldering COB holder and Optic Lens as well as lens accessories, is allowing for seamless design in and decreasing time to market. Optic Lens series work seamlessly with our non-soldering Vero Holders. It covers a full range of Bridgelux COB sizes and offers beam angles of 15 degrees, 24 degrees, 36 degrees and 50 degrees. In addition, an optic's beam angles can be changed without changing the existing light fixture, which ultimately gives more design flexibilities.

**Table 1:** Selection Guide

Bridgelux Part Number	Part Description
BXHK-DK-5525-15-D09	HK Dark 55@25-15 degree lens
BXHK-DK-5525-24-D09	HK Dark 55@25-24 degree lens
BXHK-DK-5525-36-D09	HK Dark 55@25-36 degree lens
BXHK-DK-5525-50-D09	HK Dark 55@25-50 degree lens


Notes for Table 1:

1. Additional optic designs can be requested. Consult sales for more information.



# Basic Product Information

**Table 2:** Product Information

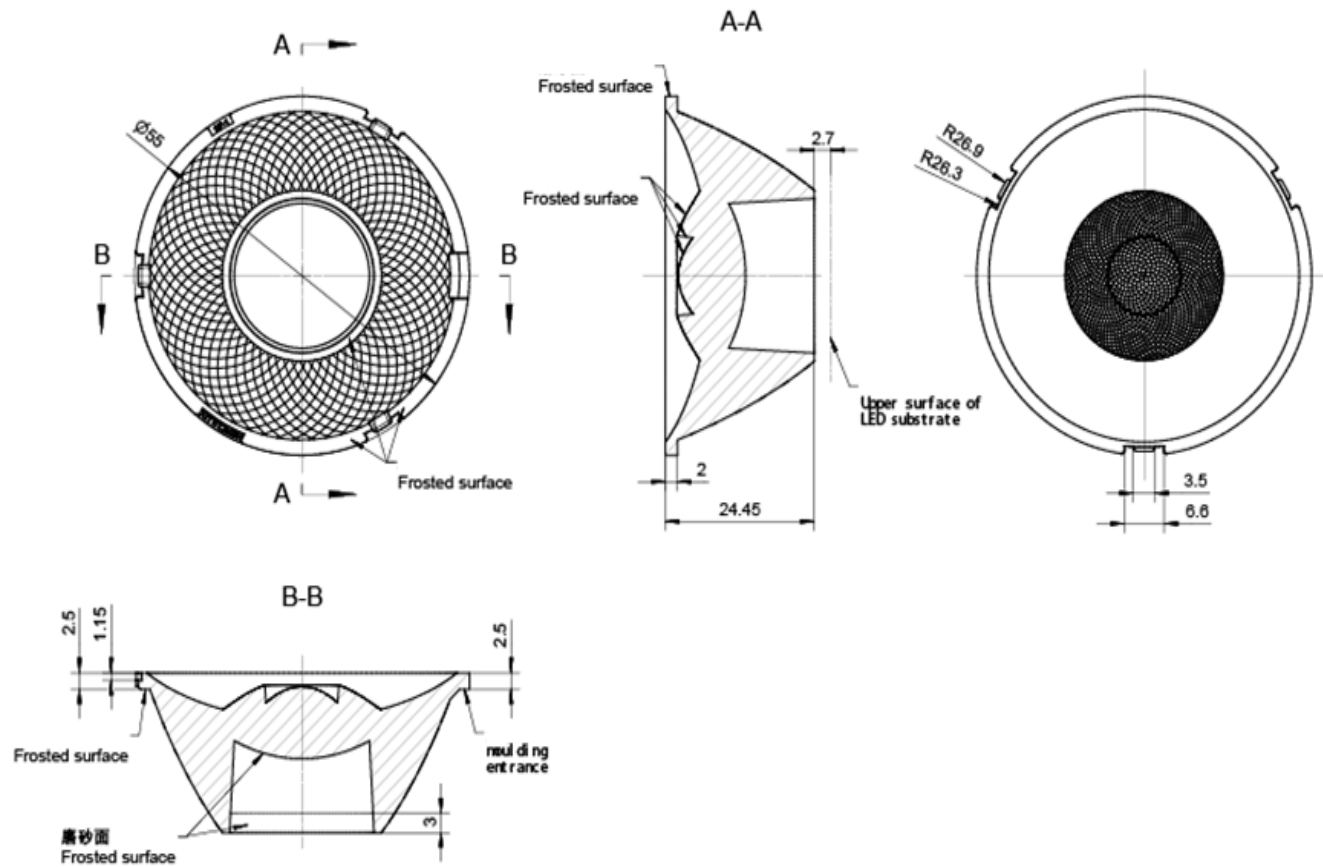
<p>Product Picture</p>	
<p>Size (L*W *H)</p>	<p>Ø:55mm; H:25mm</p>
<p>Material</p>	<p>PMMA</p>
<p>Operating Temperature(<math>T_{opr}</math>)<sup>1</sup></p>	<p>-40 to + 80°C</p>
<p>FWHM</p>	<p>15° , 24° , 36° , 50°</p>
<p>Matched LES</p>	<p>D9</p>
<p>Recommended MAX power</p>	<p>no more than 25 W</p>

Notes for Table 2:

1. The working temperature of the lens should be within the temperature resistance limit of the lens material. Exceeding the temperature resistance limit will cause the lens to crack or melt and affect the service life of the lens. It is recommended that the surface temperature of the light emitting surface (LES) should be less than 120°C .

# Mechanical Dimensions

Figure 1: Drawing for BXHK-DK-5525-15-D09



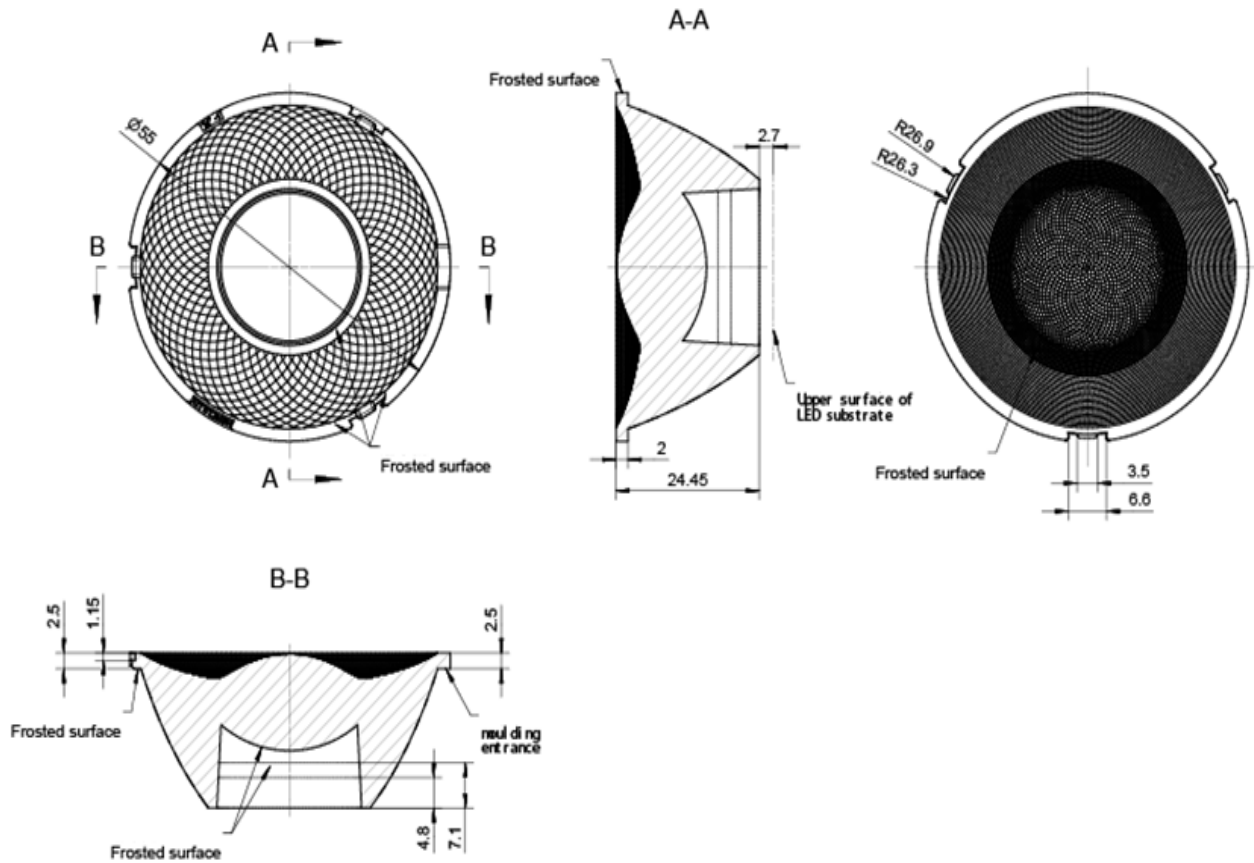
Notes for Figure 1:

1. The 3D map is not indicated for rounded corners and draft angle.
2. The surface has no flash, shrinkage, bubbles and other defects.
3. Tolerance table as below :

Dimension size (mm)	<3	3~10	10~24	24~65	65~140	140~250	250~450	>450
Tolerance value (mm)	±0.1	±0.15	±0.2	±0.35	±0.50	±0.80	±1.2	±2.0

# Mechanical Dimensions

Figure 2: Drawing for BXHK-DK-5525-24-D09



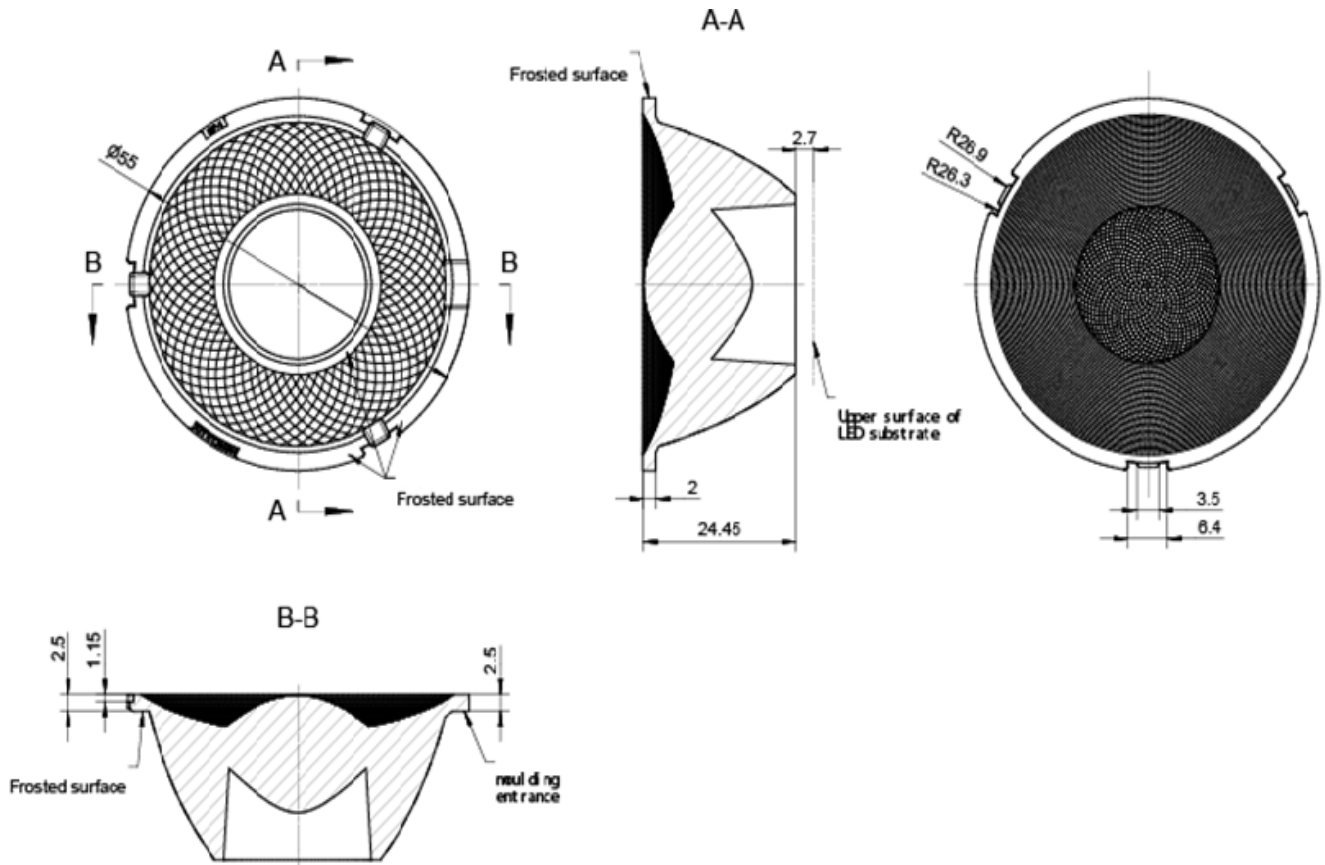
Notes for Figure 2:

1. The 3D map is not indicated for rounded corners and draft angle.
2. The surface has no flash, shrinkage, bubbles and other defects.
3. Tolerance table as below :

Dimension size (mm)	<3	3~10	10~24	24~65	65~140	140~250	250~450	>450
Tolerance value (mm)	±0.1	±0.15	±0.2	±0.35	±0.50	±0.80	±1.2	±2.0

# Mechanical Dimensions

Figure 3: Drawing for BXHK-DK-5525-36-D09



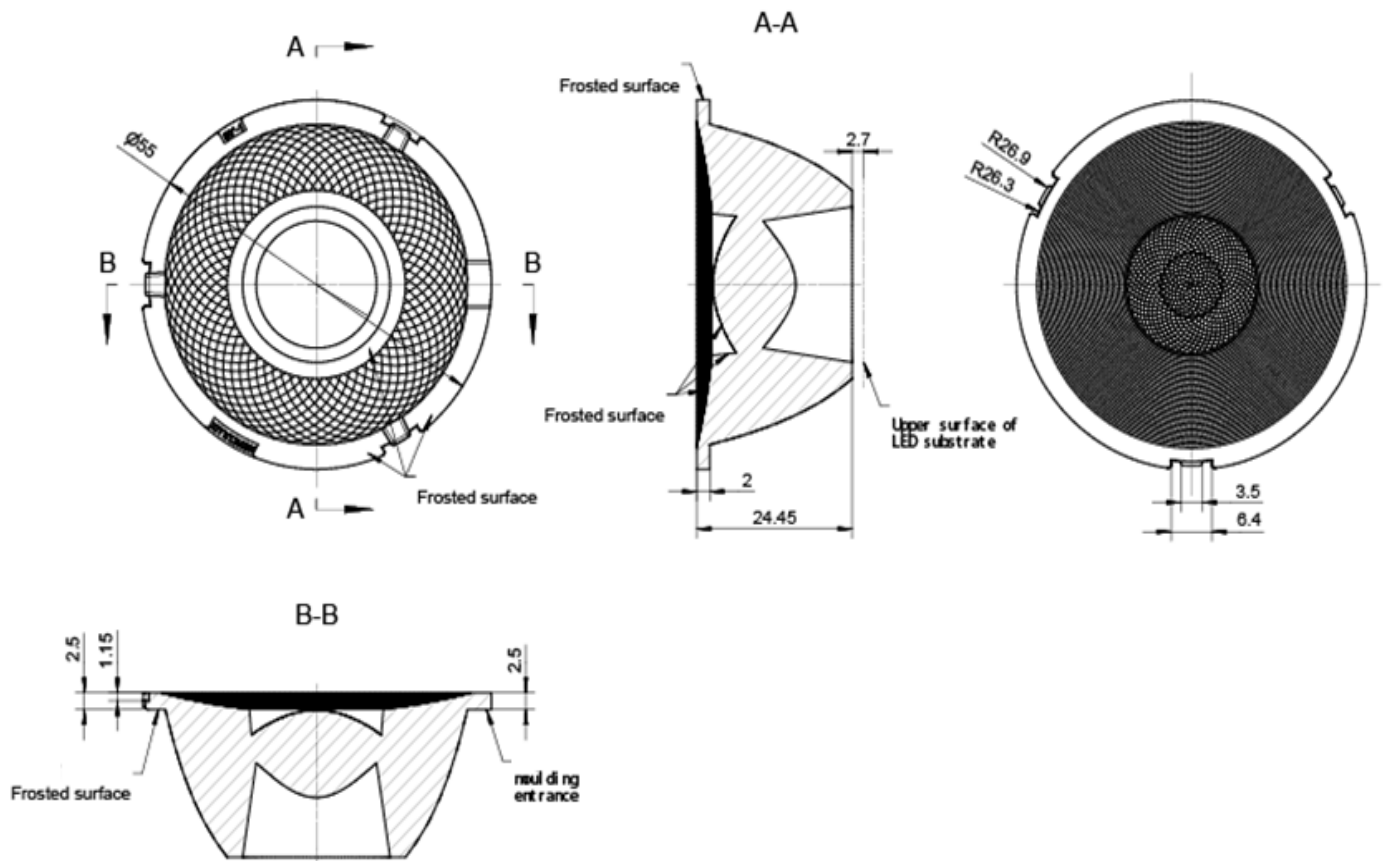
Notes for Figure 3:

1. The 3D map is not indicated for rounded corners and draft angle.
2. The surface has no flash, shrinkage, bubbles and other defects.
3. Tolerance table as below :

Dimension size (mm)	<3	3~10	10~24	24~65	65~140	140~250	250~450	>450
Tolerance value (mm)	±0.1	±0.15	±0.2	±0.35	±0.50	±0.80	±1.2	±2.0

# Mechanical Dimensions

Figure 4: Drawing for BXHK-DK-5525-50-D09



Notes for Figure 3:

1. The 3D map is not indicated for rounded corners and draft angle.
2. The surface has no flash, shrinkage, bubbles and other defects.
3. Tolerance table as below :

Dimension size (mm)	<3	3~10	10~24	24~65	65~140	140~250	250~450	>450
Tolerance value (mm)	±0.1	±0.15	±0.2	±0.35	±0.50	±0.80	±1.2	±2.0

# IES Report

Figure 5: IES for BXHK-DK-5525-15-D09

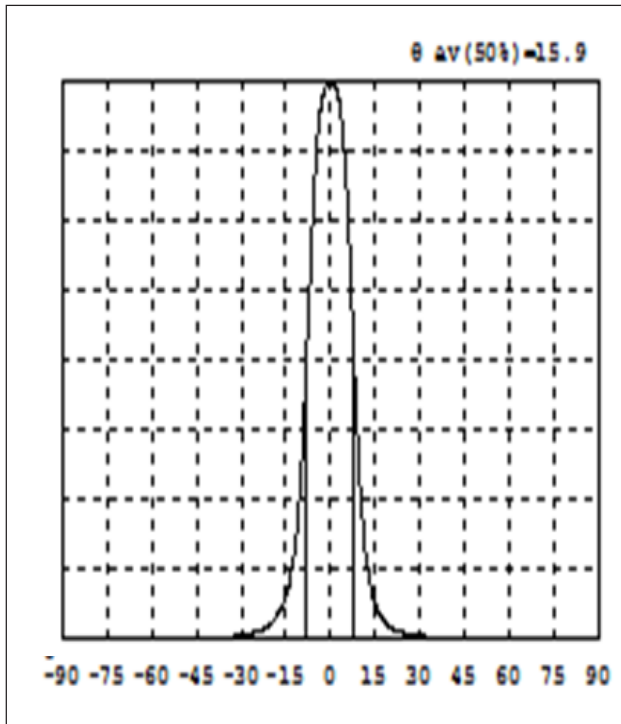


Figure 6: IES for BXHK-DK-5525-24-D09

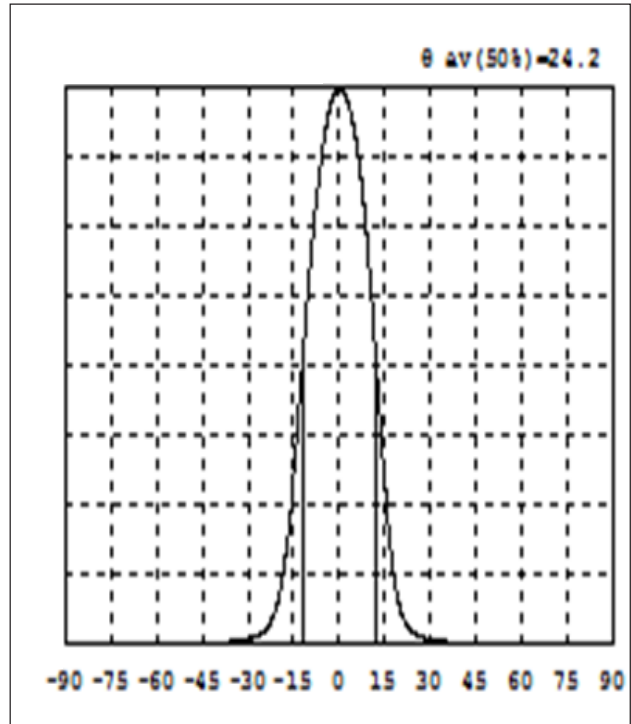


Figure 7: IES for BXHK-DK-5525-36-D09

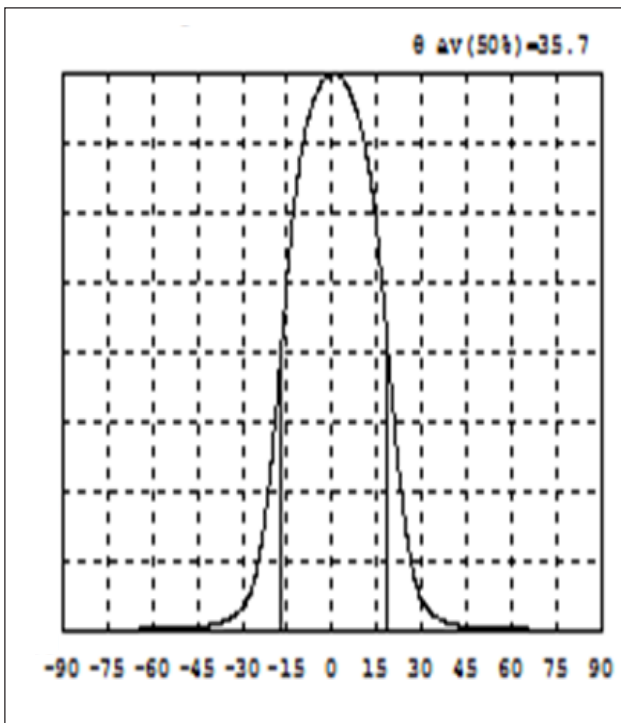
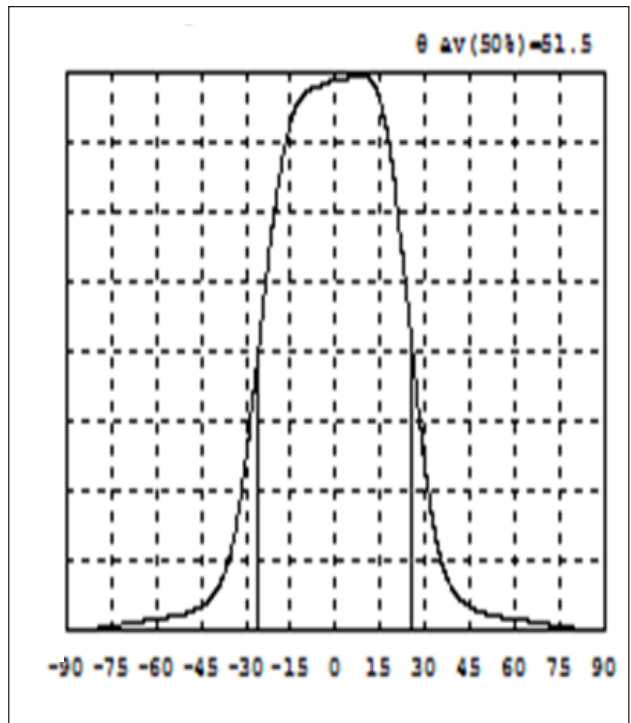


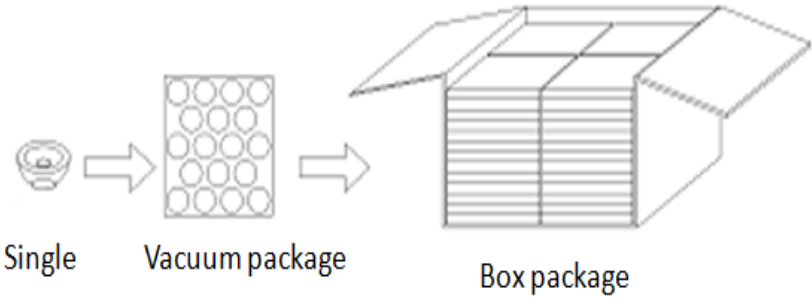
Figure 8: IES for BXHK-DK-5525-50-D09





# Packaging

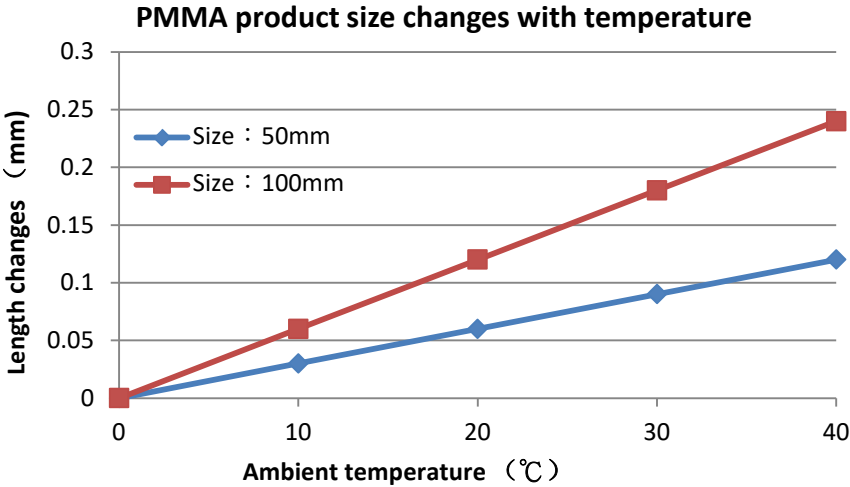
Figure 9: Packaging of BXHK-DK-5525-XX-D09



Product packing	10	pcs/ Tray	4	Trays/Layer
	11	Layers/Box	440	pcs/Box

# PMMA product size changes with temperature table

Figure 10: Size changes for BXHK-DK-XXXX-XX-DXX



Notes for Figure 10:

- 1. Please wear clean gloves during the lens assembly process to prevent the lens surface from being contaminated.
- 2. Try to avoid touching the total reflection surface when holding the lens.

# About Bridgelux: Bridging Light and Life™

At Bridgelux, we help companies, industries and people experience the power and possibility of light. Since 2002, we've designed LED solutions that are high performing, energy efficient, cost effective and easy to integrate. Our focus is on light's impact on human behavior, delivering products that create better environments, experiences and returns—both experiential and financial. And our patented technology drives new platforms for commercial and industrial luminaires.

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