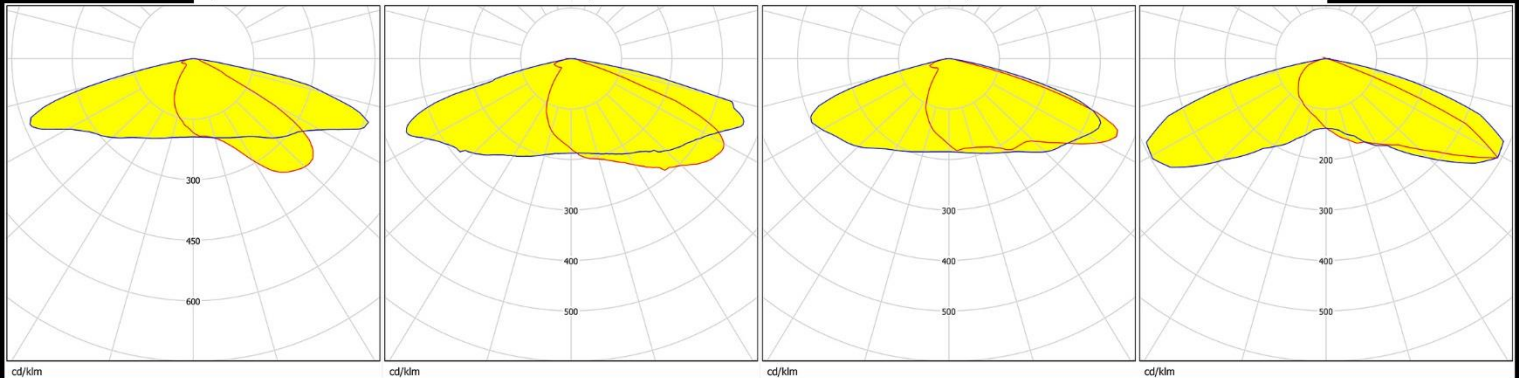
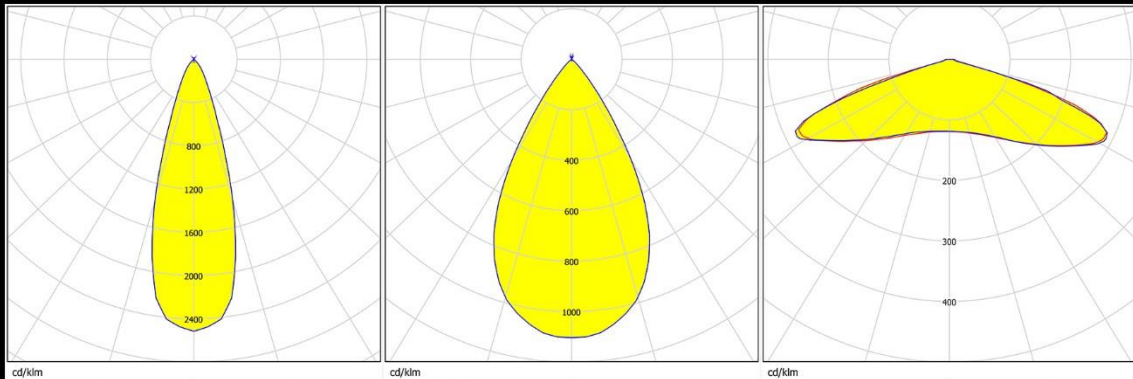
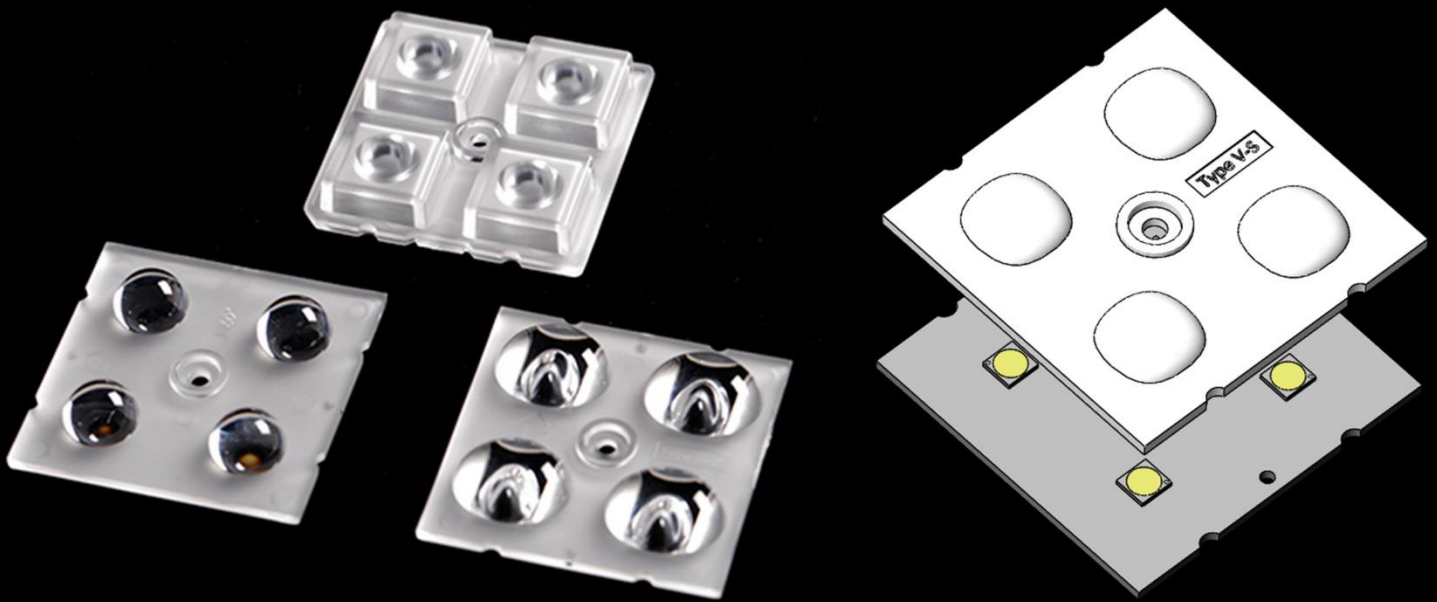


Data Sheet

HH-109-4×1-xx-PH5050



深圳市汉辉光电有限公司
shenzhen hanhui photoelectric co.,Ltd.

地址：深圳市宝安区石岩街道石龙仔社区恒昌荣高科技科技园3栋3楼
ADD: Area A No.3 Building 3th Floor,Hengchang Rong Industrial
park shiyan,shilong community,Bao'an District,shenzhen,china
TEL:86-755-29232420 FAX:86-755-83723765
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Data Sheet

catalogue

General Information	P.1
Optical Specifications	P.2-6
Mechanical Specifications	P.7
Package Specifications	P.8

*Product Nomenclature

HH-109-4 × 1-xx-PH3030

H1 H2 H3 H4 H5 H6 H7

H1: The company's initials in Pinyin (Han Hui)

H2: Mold number

H3: Lens quantity

H4: The number of lamp beads inside each optical surface

H5: Lens angle/type (ex: 60、90、T2M、T3M)

H6: LED type (ex: CREE-CR、SAMSUNG-SS、PHILIPS-PH.....)

H7: LED size (ex:2835、3030、3535、.....)



HH-109-4×1-xx-PH5050

General Information

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◆ Features & Typical Applications

- Available with 7 beam angles
- High efficiency
- optimized Uniformity
- Lens without Holder
- Roadway Lighting
- Park Lighting
- Commercial Lighting

◆ Material Information

Lens Material: PC 1225Z

Operating Temperature range $-40^{\circ}\text{C} \sim +110^{\circ}\text{C}$ (upper limit $+120^{\circ}\text{C}$).

Storage Temperature range $-40^{\circ}\text{C} \sim +110^{\circ}\text{C}$ (upper limit $+120^{\circ}\text{C}$).

*Average transmittance in visible spectrum $400\text{nm} \sim 700\text{nm} > 90\%$.

◆ Usage and Maintenance

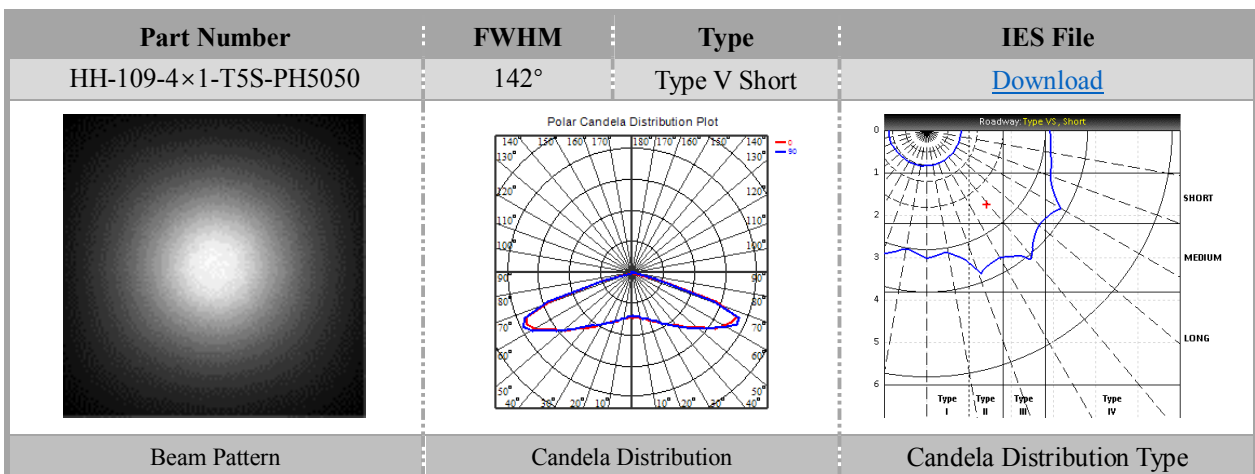
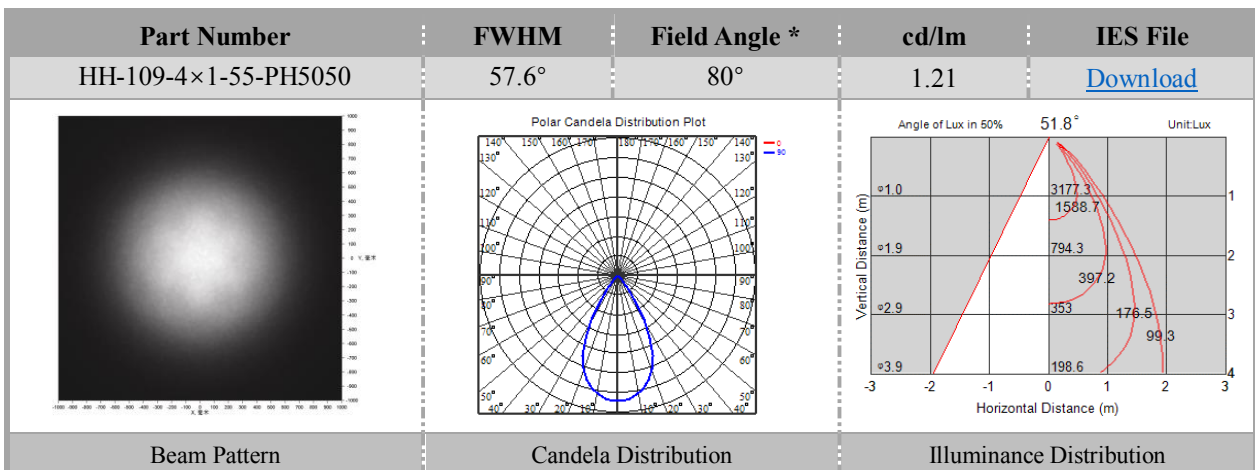
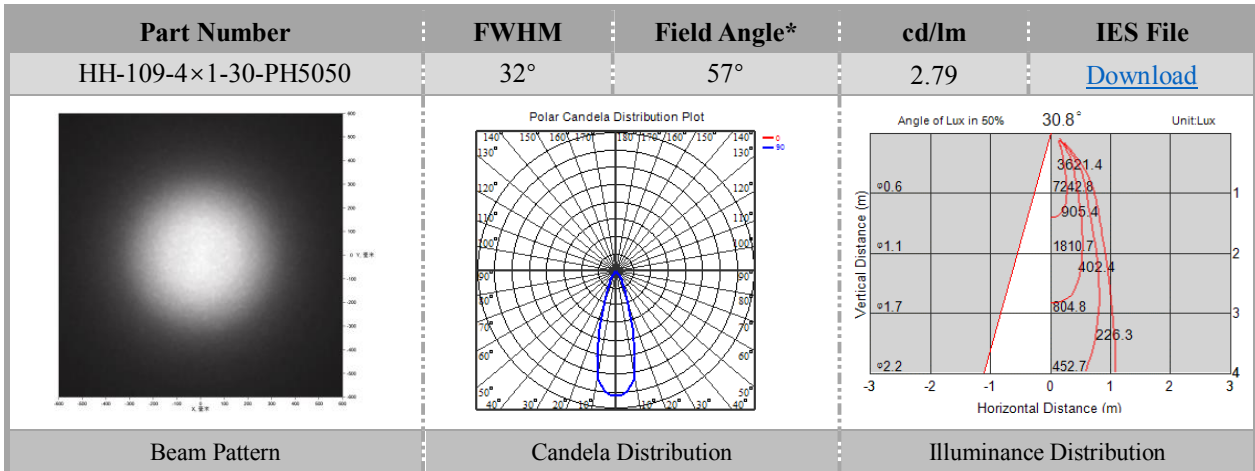
1. If necessary, clean lenses with mild soap, water and soft cloth.
2. Never use any commercial cleaning solvents on lenses, like alcohol.
3. Please handle or install lenses with wearing gloves, skin oils may damage lens or its optical characteristic.



HH-109-4×1-xx-PH5050

Optical Specifications

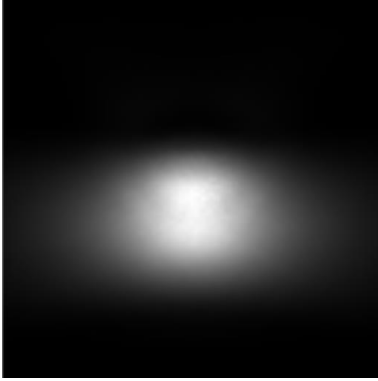
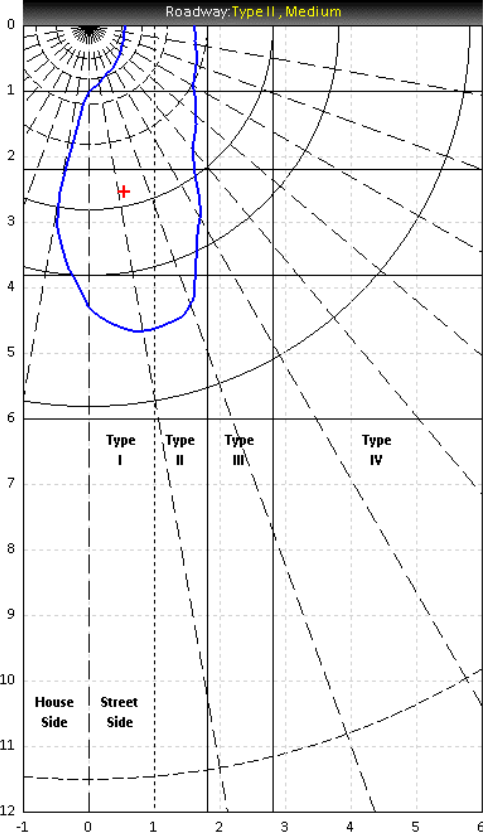
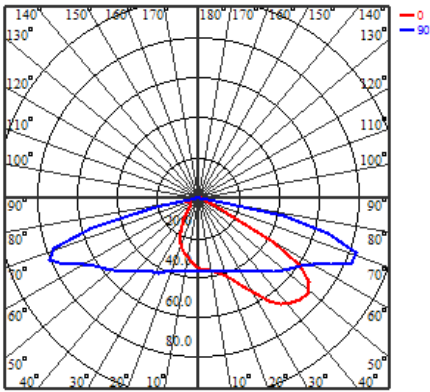
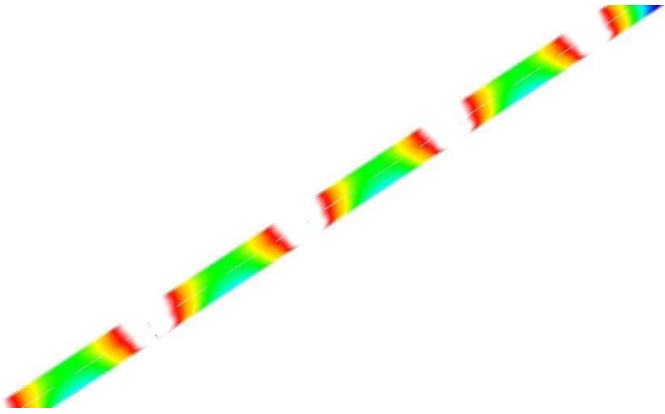
v1.0_20180813



HH-109-4×1-xx-PH5050

Optical Specifications

v1.0_20180813


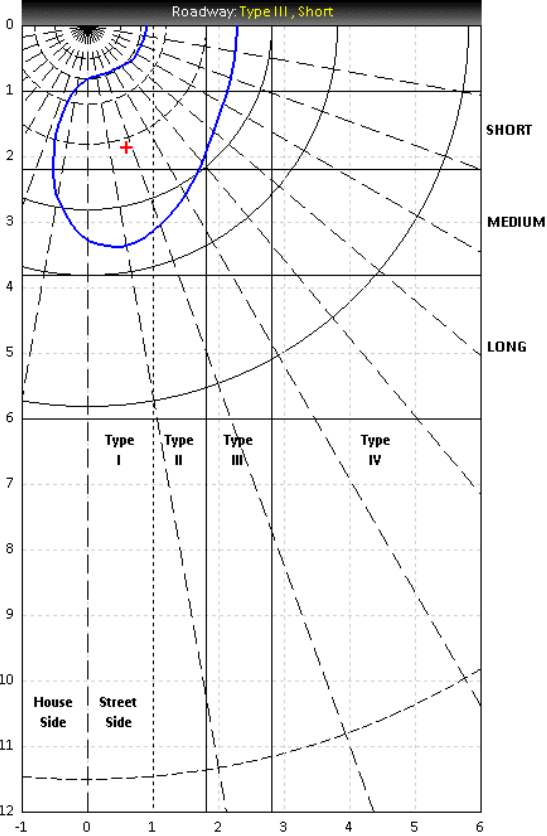
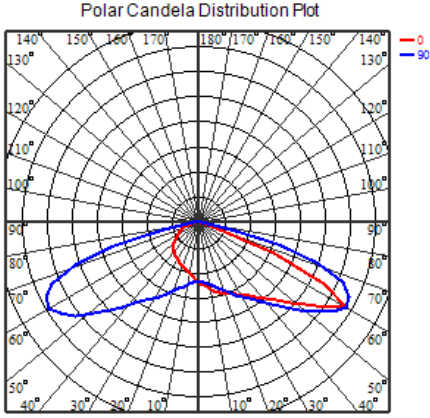
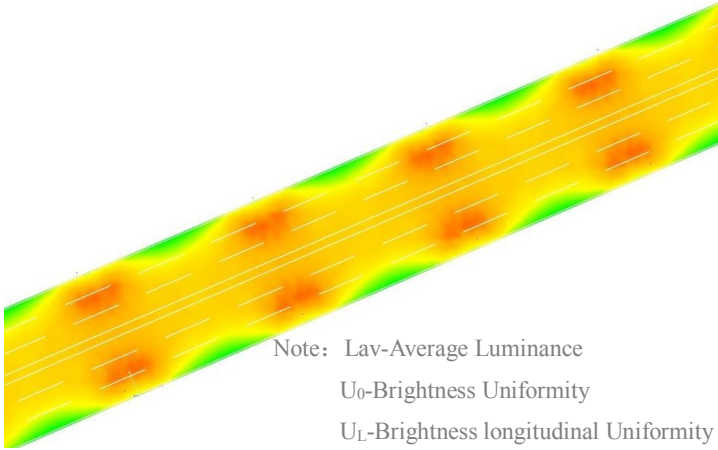
Part Number	FWHM	Candela Distribution Type	IES File																												
HH-109-4×1-T2M-PH5050	70×155	Type II Medium	Download																												
																															
 <p>Polar Candela Distribution Plot</p>		<p>DIALux Simulation Result (two lanes、R3W3、ME4a)</p> 																													
<p>Note: Lav-Average Luminance U₀-Brightness Uniformity U_L-Brightness longitudinal Uniformity TI-Threshold increment SR-Surround ratio</p>		<table border="1"> <thead> <tr> <th colspan="2">Recommend configuration condition</th> </tr> </thead> <tbody> <tr> <td>Luminous Flux</td> <td>17500lm</td> </tr> <tr> <td>Lamp Collocation</td> <td>Unilateral</td> </tr> <tr> <td>Height</td> <td>10m</td> </tr> <tr> <td>Distance</td> <td>40m</td> </tr> <tr> <td>Roadwidth</td> <td>7.5m</td> </tr> <tr> <td>Elevation</td> <td>0°</td> </tr> <tr> <td>Overhang</td> <td>1m</td> </tr> <tr> <th colspan="2">Result</th> </tr> <tr> <td>Lav</td> <td>1.48</td> </tr> <tr> <td>U₀</td> <td>0.59</td> </tr> <tr> <td>U_L</td> <td>0.73</td> </tr> <tr> <td>TI(%)</td> <td>12</td> </tr> <tr> <td>SR</td> <td>0.78</td> </tr> </tbody> </table>		Recommend configuration condition		Luminous Flux	17500lm	Lamp Collocation	Unilateral	Height	10m	Distance	40m	Roadwidth	7.5m	Elevation	0°	Overhang	1m	Result		Lav	1.48	U ₀	0.59	U _L	0.73	TI(%)	12	SR	0.78
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HH-109-4×1-xx-PH5050

Optical Specifications

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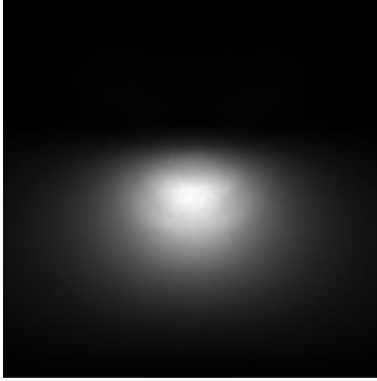
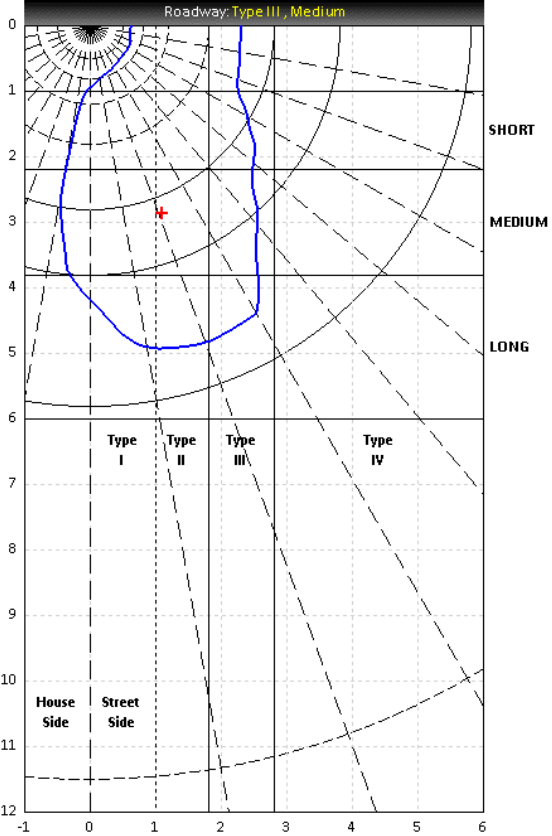
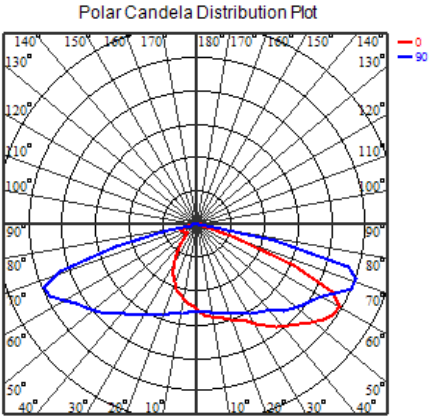
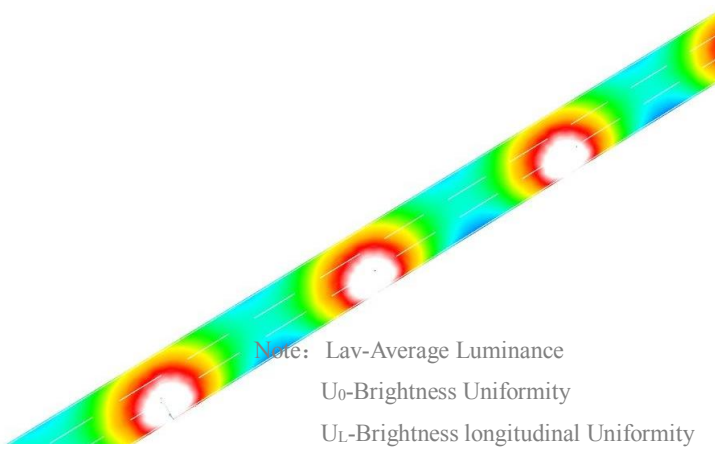
Part Number	FWHM	Candela Distribution Type	IES File																												
HH-109-4×1-T3S-PH5050	35×150	Type III Short	Download																												
																															
																															
DIALux Simulation Result (six traffic lanes、R3W3、ME4a)																															
 <p>Note: Lav-Average Luminance U₀-Brightness Uniformity U_L-Brightness longitudinal Uniformity TI-Threshold increment SR-Surround ratio</p>		<table border="1"> <thead> <tr> <th colspan="2">Recommend configuration condition</th> </tr> </thead> <tbody> <tr> <td>Luminous Flux</td> <td>17280lm</td> </tr> <tr> <td>Lamp Collocation</td> <td>Bilateral Symmetry</td> </tr> <tr> <td>Height</td> <td>10m</td> </tr> <tr> <td>Distance</td> <td>30m</td> </tr> <tr> <td>Roadwidth</td> <td>22m</td> </tr> <tr> <td>Elevation</td> <td>0°</td> </tr> <tr> <td>Overhang</td> <td>1m</td> </tr> <tr> <th colspan="2">Result</th> </tr> <tr> <td>Lav</td> <td>1.66</td> </tr> <tr> <td>U₀</td> <td>0.60</td> </tr> <tr> <td>U_L</td> <td>0.68</td> </tr> <tr> <td>TI(%)</td> <td>7</td> </tr> <tr> <td>SR</td> <td>0.80</td> </tr> </tbody> </table>		Recommend configuration condition		Luminous Flux	17280lm	Lamp Collocation	Bilateral Symmetry	Height	10m	Distance	30m	Roadwidth	22m	Elevation	0°	Overhang	1m	Result		Lav	1.66	U ₀	0.60	U _L	0.68	TI(%)	7	SR	0.80
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HH-109-4×1-xx-PH5050

Optical Specifications

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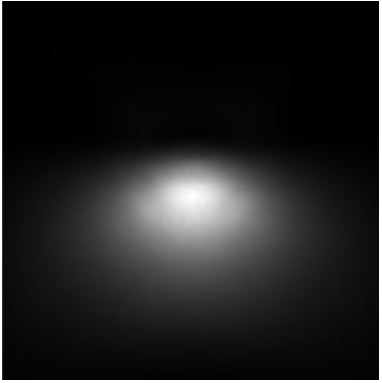
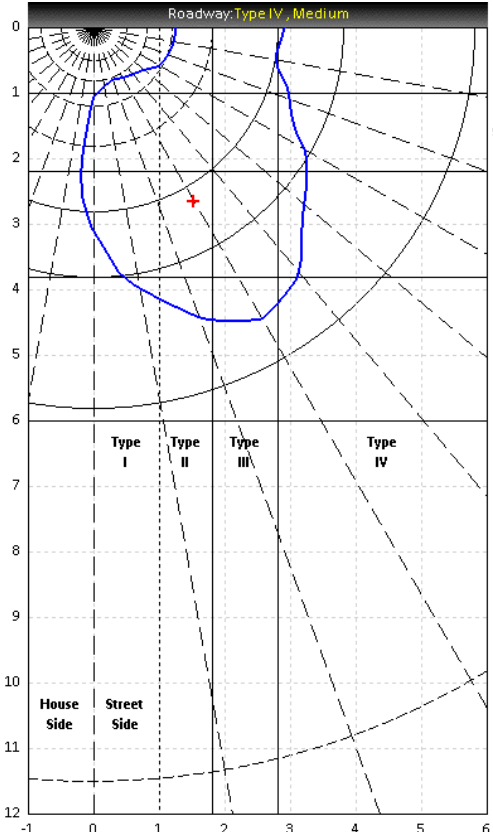
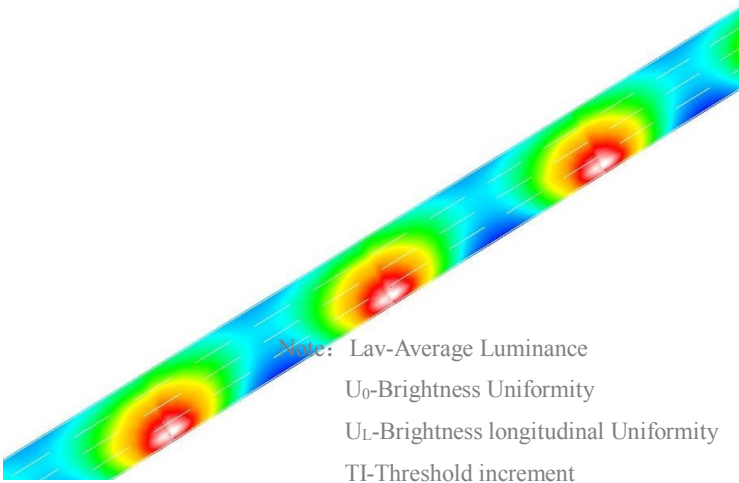
Part Number	FWHM	Candela Distribution Type	IES File																												
HH-109-4×1-T3M-PH5050	70×155	Type III Medium	Download																												
																															
																															
DIALux Simulation Result (three lanes、R3W3、ME4a)																															
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TI(%)	13																														
SR	0.65																														



HH-109-4×1-xx-PH5050

Optical Specifications

v1.0_20180813

Part Number	FWHM	Candela Distribution Type	IES File
HH-109-4×1-T4M-PH5050	50×155	Type IV Medium	Download
 <p>Polar Candela Distribution Plot</p>			
DIALux Simulation Result (four lanes、R3W3、ME4a)			
 <p>Note: Lav-Average Luminance U₀-Brightness Uniformity U_L-Brightness longitudinal Uniformity TI-Threshold increment SR-Surround ratio</p>		Recommend configuration condition	
		Luminous Flux	23000lm
		Lamp Collocation	Unilateral
		Height	12m
		Distance	48m
		Roadwidth	15m
		Elevation	0°
		Overhang	1m
		Result	
		Lav	0.82
U ₀	0.42		
U _L	0.67		
TI(%)	12		
SR	0.70		



HH-109-4×1-xx-PH5050

Mechanical Specification

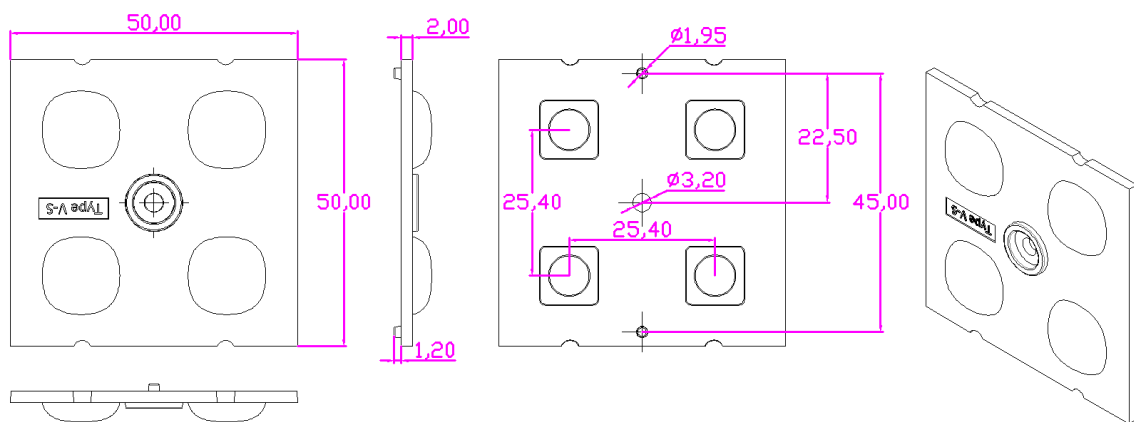
v1.0_20180813

1. Fixing method

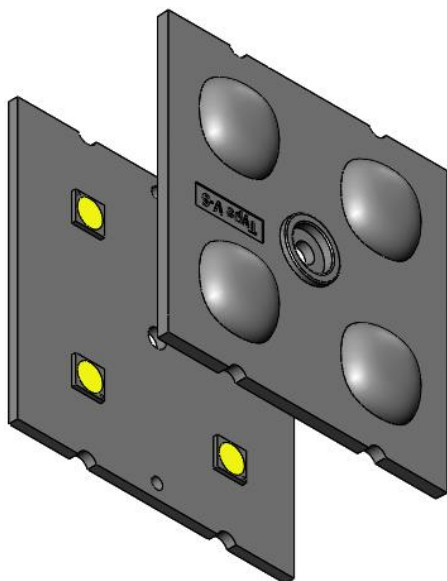
Note: (1) All dimensions are in mm.
(2) All measurements are $\pm 0.15\text{mm}$ unless otherwise indicated.

- Glue Screw Tape Fixing-ring Frame

2. Lens dimension



3. Assembly instruction



4. View assembly lens with MCPCB



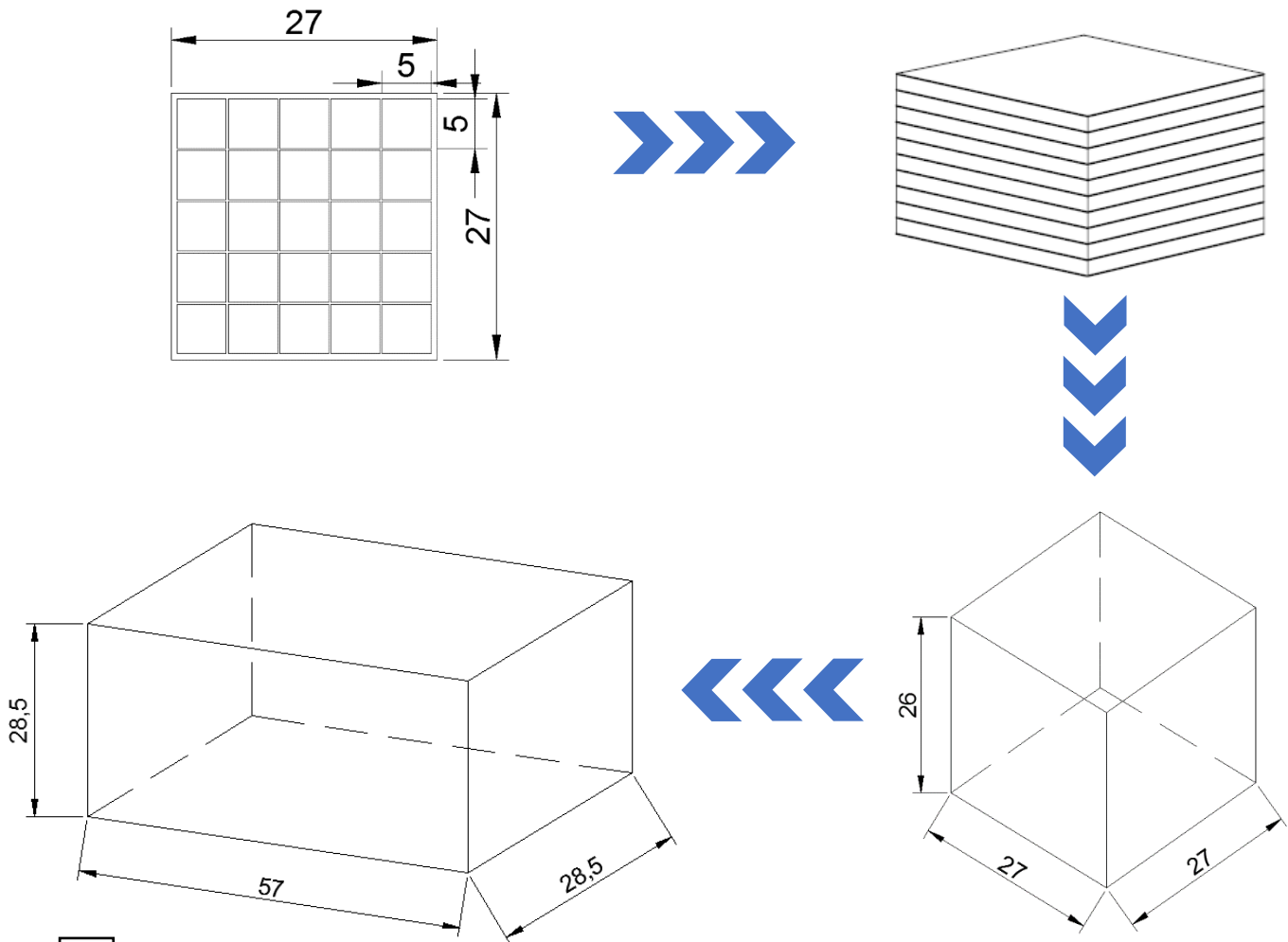
HH-109-4×1-xx-PH5050

Package Specifications

v1.0_20180813

Item	Quantity	Total	Size(L*W*H)	G.W
plastic box	25 PCS/tier	1000 PCS	27*27*26cm	
outer box	2 plastic box/outer box	2000 PCS	57*28.5*28.5cm	

Note: The total number of packages shown in the table is only Type III Short lenses. Because the lens height is different, the total number is different, there is no detailed list.



Note:

