



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## LED Module with Ultra Thin Lens

- Thin Lens Structure
- High Color Uniformity
- High Efficiency

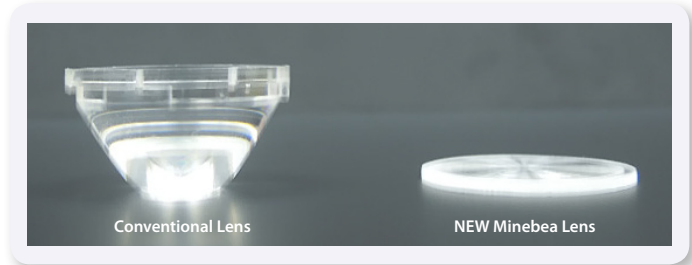
This exceptional LED module design incorporates Minebea's state-of-the-art ultra-thin lens technology with Nichia's NSMx286M LED chip. This unique pairing offers a superior LED module with quality optical and light characteristics, and the highest performance of uniformity and color quality.

Available in 12 models and offered in a 12, 25, and 55 degree beam, these models support four different color temperatures, achieve 93% efficiency and offer a rated lifetime of 40,000 hours.

The new ultra-thin Fresnel lens technology, with 1mm thickness, provides the platform for a low profile design, ideal for applications where downlight, trac and decorative lighting are at the center of the overall design.



### Lens Structure

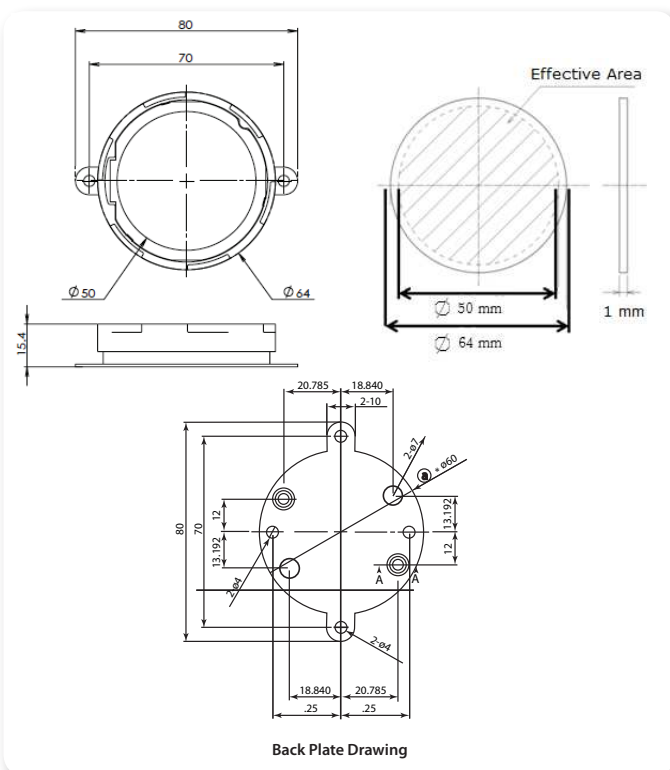


### Color Uniformity

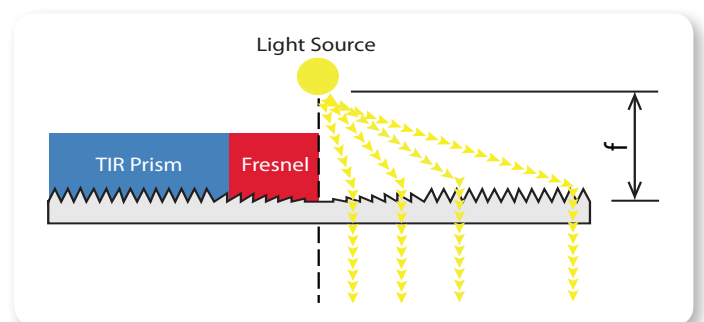


Our newly developed lens provides higher quality color uniformity and a significantly smaller structure when compared with conventional lenses.

### Mechanical Drawings



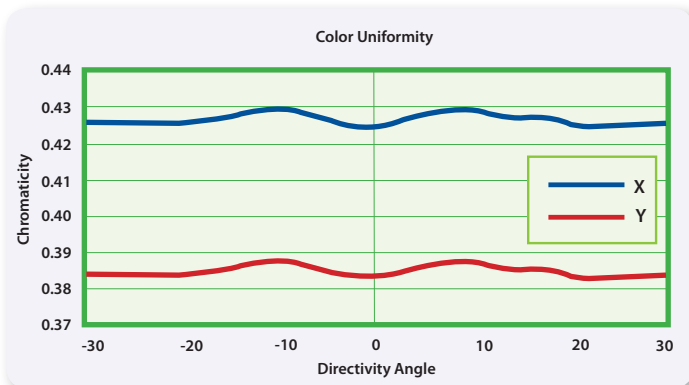
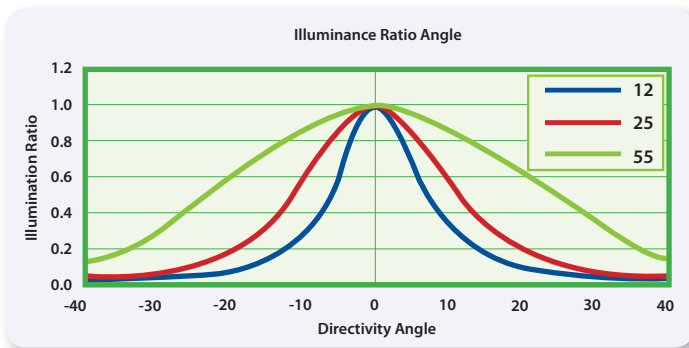
### Ultra Thin Lens Detail



# NEW Optical Lens Technology from Minebea

NMB Part Number	Beam Angle (Degree)	Center Beam Candlepower (CBCP)	Color Rendering Index (CRI)	Color Temperature (CCT)	Rated Lumens	Lumens Per Watt	Module Efficiency (K)
UL64064-L01	12	4730	80	5000	780	78	93
UL64064-L02	25	2840	80	5000	780	78	93
UL64064-L03	55	1120	80	5000	780	78	93
UL64064-L04	12	4680	80	4000	790	79	93
UL64064-L05	25	2830	80	4000	790	79	93
UL64064-L06	55	1110	80	4000	790	79	93
UL64064-L07	12	4480	80	3000	715	71.5	93
UL64064-L08	25	2500	80	3000	715	71.5	93
UL64064-L09	55	1010	80	3000	715	71.5	93
UL64064-L10	12	3980	80	2700	685	68.5	93
UL64064-L11	25	2430	80	2700	685	68.5	93
UL64064-L12	55	920	80	2700	685	68.5	93

## Directional Characteristics



**Minebea**  
*Passion to Exceed Precision*

### Japan Sales Headquarters

Minebea  
 3-9-6 Mita  
 Minato-ku  
 Tokyo 108-8330  
 Tel: 81-3-6758-6711  
 Fax: 81-3-6758-6700  
[www.minebea.co.jp](http://www.minebea.co.jp)

### European Sales Office

NMB-Minebea-GmbH  
 Siemens Str. 30, D-63225  
 Langen, Germany  
 Tel: 49-6103-913-0  
 Fax: 49-6103-913-220  
[info\\_de@nmb-minebea.com](mailto:info_de@nmb-minebea.com)  
[www.nmb-minebea.de](http://www.nmb-minebea.de)

### US Sales Office

NMB Technologies Corporation  
 9730 Independence Avenue  
 Chatsworth, California 91311  
 Tel: 818-341-3355  
 Fax: 818-341-8207  
[lighting@nmbtc.com](mailto:lighting@nmbtc.com)  
[www.nmbtc.com](http://www.nmbtc.com)