imall

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





CARMEN-S-B

 ${\sim}14^{\circ}$ spot beam. Assembly with holder B compatible with Ø40 mm BJB connectors.

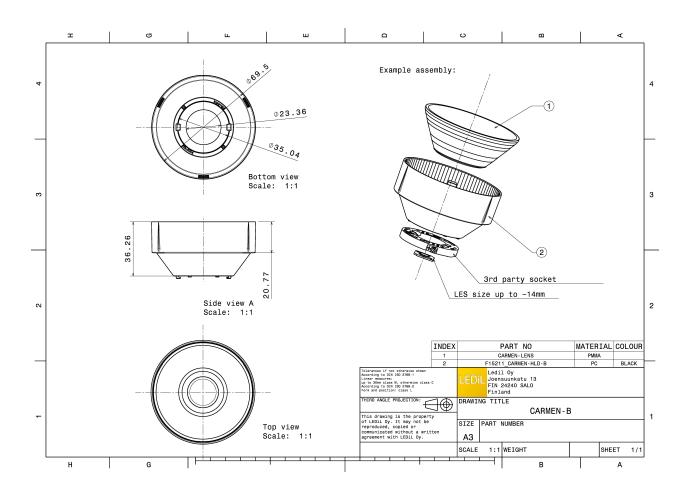
TECHNICAL SPECIFICATIONS:

Dimensions	Ø 69.5 mm
Height	36.3 mm
Fastening	socket
Colour	black
Box size	476 x 273 x 292 mm
Box weight	6.1 kg
Quantity in Box	150 pcs
ROHS compliant	yes 🛈



MATERIAL SPECIFICATIONS:

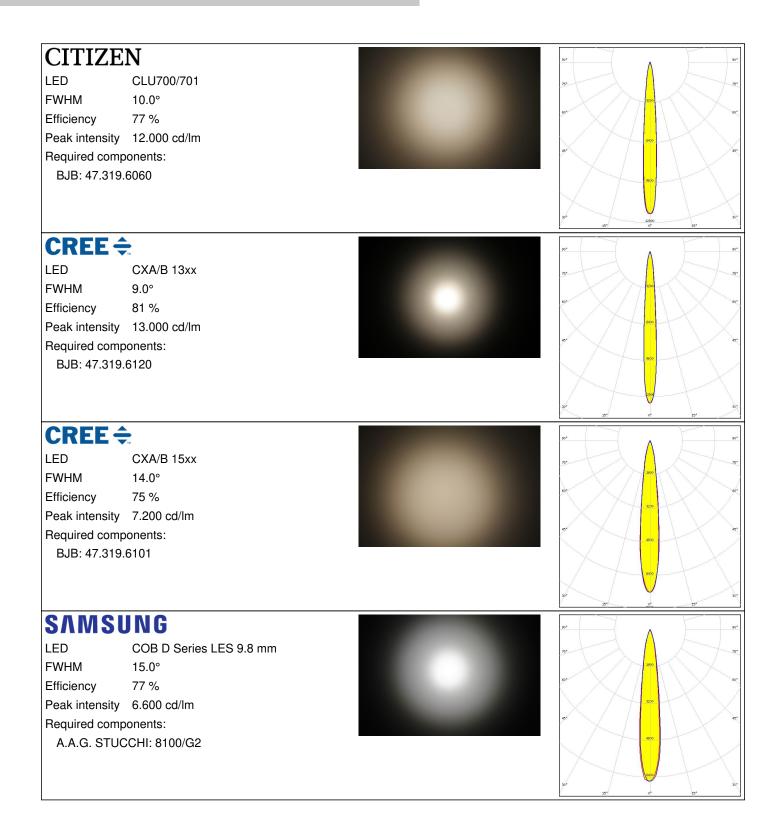
Component CARMEN-S CARMEN-HLD-B **Type** Lens Holder Material PMMA PC **Colour** clear black



R



PHOTOMETRIC DATA (MEASURED):





PHOTOMETRIC DATA (MEASURED):

SΛMSL	JNG	<u>90*</u>
LED FWHM Efficiency Peak intensity Required comp BJB: 47.319.	onents:	20 20 20 20 20 20 20 20 20 20
seoul semiconductor LED FWHM Efficiency Peak intensity Required comp BJB: 47.319.	onents:	



PHOTOMETRIC DATA (SIMULATED):

bridgelux. LED	V10 Gen6	99 ⁴
FWHM	14.0°	
Efficiency	76 %	60*
Peak intensity	8.000 cd/lm	
Required compor		5°
BJB: 47.319.62		
D0D: 17.010.02		6100
		30°
CITIZEN		90° 90°
LED	CLL02x/CLU02x (LES10)	75
FWHM	16.0°	
Efficiency	75 %	60* 60*
Peak intensity	6.900 cd/lm	320
Required compor	ients:	63* G2*
BJB: 47.319.60	60	
		30*
OTTIGEN	r	133 04 133
CITIZEN		
LED	CLU720/721	
		90
LED FWHM Efficiency	CLU720/721	27 27 60 160 60 60 60
LED FWHM	CLU720/721 17.0°	800 000 000 000 000 000 000 000 000 000
LED FWHM Efficiency	CLU720/721 17.0° 74 % 5.600 cd/lm	27 27 27 27 27 27 27 27 27 27 27 27 27 2
LED FWHM Efficiency Peak intensity	CLU720/721 17.0° 74 % 5.600 cd/lm	27 47 47 300 300 47 300 47 57 57 57 57 57 57 57 57 57 5
LED FWHM Efficiency Peak intensity	CLU720/721 17.0° 74 % 5.600 cd/lm	95 95 95 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM Efficiency Peak intensity	CLU720/721 17.0° 74 % 5.600 cd/lm	20 20 20 20 20 20 20 20 20 20
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm	30 30 60 60 30 60 60 60 30 60 60 60
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm hents:	<u>34</u> <u>34</u> <u>36</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u>
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm	31, 0, 32, 34, 31, 0, 32, 34, 0, 10, 10, 34,
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm hents: COB S-Type (LES 7) 12.0°	<u>34</u> <u>34</u> <u>36</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u>
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm nents: COB S-Type (LES 7) 12.0° 80 %	30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30,
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm nents: COB S-Type (LES 7) 12.0° 80 % 11.900 cd/lm	<u>34</u> <u>34</u> <u>36</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u>
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm hents: COB S-Type (LES 7) 12.0° 80 % 11.900 cd/lm hents:	<u>34</u> <u>34</u> <u>36</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u>
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm hents: COB S-Type (LES 7) 12.0° 80 % 11.900 cd/lm hents:	<u>34</u> <u>34</u> <u>36</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u>
LED FWHM Efficiency Peak intensity Required compor	CLU720/721 17.0° 74 % 5.600 cd/lm hents: COB S-Type (LES 7) 12.0° 80 % 11.900 cd/lm hents:	<u>34</u> <u>34</u> <u>36</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>36</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u> <u>37</u>





GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDIL Oy

Joensuunkatu 13 FI-24240 SALO Finland

LEDiL Inc.

228 West Page Street Suite D Sycamore IL 60178 USA

Local sales and technical support www.ledil.com/ where_to_buy

Shipping locations Salo, Finland Hong Kong, China

Distribution Partners www.ledil.com/

where to buy