



Type: NSO-01XRE-09L-19x9.9

Diameter: Φ 19mm

Height: 9.9mm

Fov: 09°

Material: Optical grade Acrylic plastic

Up to 93% efficiency

LED Series: CREE XRE

Applications:

Reading lights(car, bus, aircraft)

Portable (flashlight, bicycle)

Mini-accent/Decorative/Fiber Optics Alternative

Undershelf / Task Lighting

Indoor and Outdoor Commercial and Residential Architectural lighting

• Operating Temperature range $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$ (upper limit $+80^{\circ}\text{C}$)

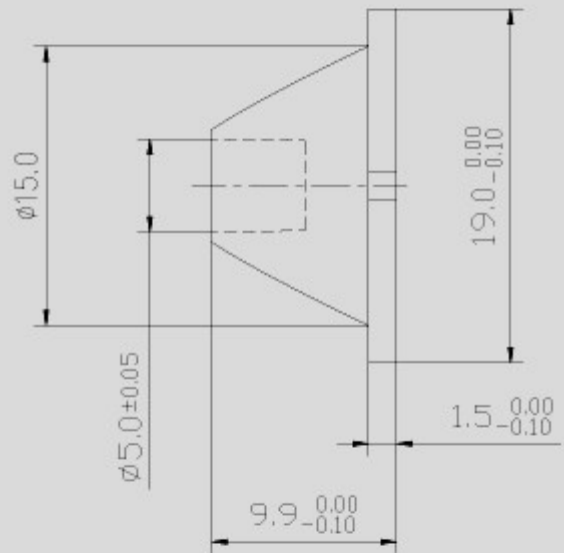
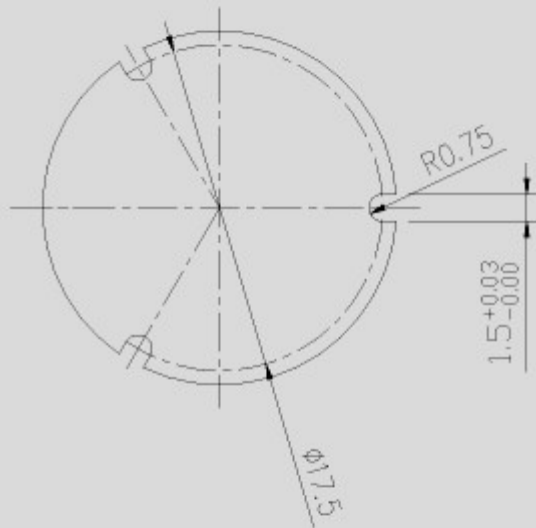
• Storage Temperature range $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$ (upper limit $+80^{\circ}\text{C}$)

• Usage and Maintenance :

1. If necessary, clean lenses with mild soap, water and soft cloth

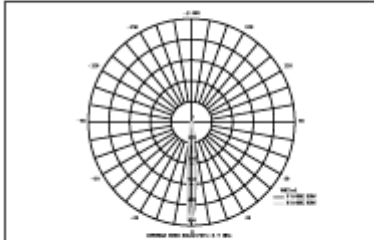
2. Never use any commercial cleaning solvents on lenses, like alcohol

Lens dimensions and Top Views



Light Distribution Curve

NAME :	TYPE :	WEIGHT :
DIMENSION :	SPECIFICATION :	SERIAL No. :
MANUFACTURER :	SURFACE :	PROTECTION ANGLE :



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	Cree-XRE	I _{max} (cd)	816.7
NOMINAL POWER(W)	4	AVAILABILITY(%)	32.8
RATED VOLTAGE (V)	3.4	Avai. FLUX(lm)	23.06
NOMINAL FLUX(lm)	70.200	EFFICIENCY(%)	88.9
LAMPS INSIDE	1	TOTAL FLUX(lm)	62.40
TEST VOLTAGE (V)	3.4	• @50% (H,V)	9.9DEG

AREA FLUX DIAGRAM																	UNIT:lm			
VERTICAL (DEG)	HORIZONTAL (DEG)																• t	• a		
	-90	-80	-70	-60	-50	-40	-30	-20	20	30	40	50	60	70	80	90				
90	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.00	0.40	0.00
80	0.00	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.02	0.02	0.01	0.00	0.54	0.00
70	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.70	0.00
60	0.00	0.01	0.02	0.03	0.05	0.06	0.07	0.09	0.09	0.09	0.09	0.08	0.07	0.05	0.03	0.02	0.01	0.00	0.88	0.00
50	0.00	0.01	0.03	0.04	0.06	0.08	0.10	0.13	0.14	0.14	0.13	0.11	0.08	0.06	0.04	0.02	0.01	0.00	1.18	0.00
40	0.00	0.01	0.03	0.04	0.07	0.10	0.16	0.24	0.26	0.26	0.24	0.17	0.11	0.07	0.05	0.03	0.01	0.00	1.87	0.00
30	0.00	0.02	0.03	0.05	0.08	0.15	0.27	0.36	0.48	0.47	0.35	0.28	0.17	0.09	0.05	0.03	0.01	0.00	2.90	0.00
20	0.00	0.02	0.03	0.05	0.10	0.19	0.33	0.82	1.36	1.32	0.76	0.35	0.25	0.11	0.06	0.03	0.01	0.00	5.79	0.00
10	0.00	0.02	0.03	0.06	0.11	0.20	0.42	1.32	3.32	3.70	1.35	0.46	0.28	0.13	0.06	0.03	0.01	0.00	15.5	10.1
0	0.00	0.02	0.03	0.06	0.11	0.20	0.40	1.25	5.63	7.23	1.29	0.45	0.28	0.13	0.06	0.03	0.01	0.00	18.2	12.9
-10	0.00	0.02	0.03	0.05	0.10	0.20	0.32	0.68	1.32	1.30	0.65	0.34	0.25	0.11	0.06	0.03	0.01	0.00	5.47	0.05
-20	0.00	0.02	0.03	0.05	0.08	0.17	0.26	0.36	0.47	0.47	0.35	0.29	0.18	0.09	0.05	0.03	0.01	0.00	2.91	0.00
-30	0.00	0.01	0.03	0.05	0.07	0.11	0.19	0.27	0.31	0.31	0.28	0.20	0.12	0.07	0.05	0.03	0.01	0.00	2.12	0.00
-40	0.00	0.01	0.03	0.04	0.06	0.08	0.11	0.15	0.18	0.18	0.15	0.12	0.09	0.06	0.04	0.02	0.01	0.00	1.34	0.00
-50	0.00	0.01	0.02	0.04	0.05	0.06	0.08	0.09	0.10	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.01	0.00	0.93	0.00
-60	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.01	0.00	0.73	0.00
-70	0.00	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.00	0.56	0.00
-80	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.00	0.39	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	23
• t	0.07	0.24	0.45	0.71	1.12	1.85	3.01	6.05	17.0	17.9	6.05	3.20	2.20	1.24	0.73	0.41	0.19	0.04	62	---
• a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.0	12.0	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	23

H(•) Range:-90 - 90DEG
 H(•) Interval: 0.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2009-10-07

V(B) Range:-90 - 90DEG
 V(B) Interval: 0.5DEG
 Test System:EVERFINE GO-SPEC316 SYSTEM V1.0.254
 Humidity:65.0%
 Test Distance:3.160m [K=1.0000]
 Remarks: