

Technical Brochure



REFLECTION
LEDKO™ P White 3200 K

Reflection Series



Reflection LEDko P White 3200 K

KEY FEATURES

- Ideal LED substitute for traditional profiles with 750 W halogen lamps
- CRI > 90
- Superior flat field optics with no need of HD lenses
- Soft profiling thanks to Fresnel and PC optics (Coemar patent)
- Smooth 16 bit dimmer
- Guaranteed Flicker-free operation (DMX controlled PWM frequency)
- PowerCon In/Out, up to 16 fixtures powered in series for easy installations
- Adjustable fan setting allowing low noise operations, auto-silent, DMX, maximum speed
- Instant gobos from standard printers



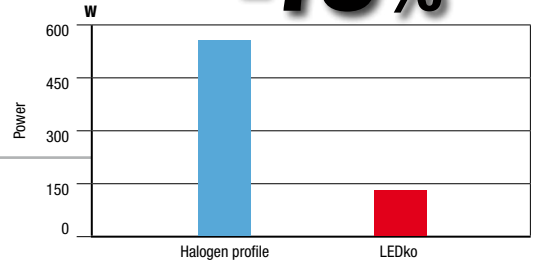
Reflection LEDko P W 3200 K - PC10011A809

*Reflection LEDko P White 3200 K equipped with Soft Profile PC

low power consumption

Reflection LEDko reduces power consumption levels by up to 75% and therefore recovers the financial investment within a few months.

-75%



Reflection LEDko White Body



Reflection LEDko without optic



Reflection LEDko Rear panel

Reflection LEDko P White 3200 K

SPECIFICATIONS

Fixed white color temperature 3200 K

Four blade framing system, each shutter blade is adjustable for radial position and angle

Electronic 16 bit dimming with 2 selectable curves, simulating halogen or discharge lamp based fixtures

Synchronized, random or pulse electronic strobe

Flicker-free operation with LEDs frequency controlled via DMX from 600 Hz to 19000 Hz

Fan setting with 4 different options (low-noise, auto-silent, DMX, maximum speed)

CE, ETL, UL approved

Weatherproof rating IP 20

PHYSICAL SIZE (With optic Soft Profile Fresnel)

Length: 601 mm (23.6 in)

Height: 189 mm (7.4 in)

Height with bracket: 372 mm (14.6 in)

Width: 212 mm (8.3 in)

Weight: 7 Kg (15.0 lbs)

PHYSICAL SIZE (Without optic)

Length: 362 mm (14.2 in)

Height: 189 mm (7.4 in)

Height with bracket: 372 mm (14.6 in)

Width: 212 mm (8.3 in)

Weight: 5 kg (11.0 lbs)

LIGHT SOURCE

Modular 150 W LED Array light source, CRI > 90

LEDs life: 50000 hours at 70% lumen intensity maintenance

CONTROL PROTOCOL AND PROGRAMMING

USITT DMX512A

DMX channels: 5/1

Setting, addressing, testing and measurements via LEDs display

RDM

ELECTRICAL SPECIFICATIONS/CONNECTIONS

AC power: 90-250 V, auto sensing, 50/60 Hz

In and Out PowerCon connectors to feed up to 16 (at 230 VAC) or 8 (90 VAC)

Power consumption: 0.81 A at 230 V, 2.07 A at 90 V - $\cos\phi$ 0,9

DMX data in/out: 5 pin locking XLR

ACCESSORIES

Gobo holder

Colour frame

Iris

4-leaf barndoor

Flight case

Optics: Profile/Soft Profile, various angles available

Reflection LEDko Optics

Picture	Code	Description
	BC10011A004	Profile 26°
	BC10011A017	Profile Zoom 15°-35°
	BC10011A019	Profile Zoom 25°-50°
	BC10011A003	Profile Zoom 28°-40°
	BC10011A002	Soft Profile Fresnel Zoom 15°- 43°
	BC10011A001	Soft Profile PC Zoom 14°- 39°


Reflection LEDko Optics

Picture	Code	Description
	ZETC012E	Front barrel for lens tube
	BC10011A012	Profile 19°, lens tube
	BC10011A013	Profile 26°, lens tube
	BC10011A015	Profile 36°, lens tube
	BC10011A016	Profile 50°, lens tube






Reflection LEDko Optics

Picture	Code	Description
	BC10011A023	Profile 14°, lens tube
	BC10011A024	Profile 70°, lens tube
	BC10011A025	Profile 90°, lens tube






Reflection LEDko P White 3200 K - Accessories

Picture	Code	Description
	<p>ACO4202</p>	<p>4 leaf barndoor</p>
	<p>BC10011A006</p>	<p>gobo frame holder</p>
	<p>BC10011A010</p>	<p>iris</p>






Reflection LEDko - Accessories for Optic Zoom 15° - 35° and 25° - 50°

Picture	Code	Description
	BC10011A028	Donut (190.5 mm)
	BC10011A027	Half Top Hat (190.5 mm)
	BC10011A029	Top Hat (190.5 mm)
	BC10011A030	(Gobo Slot) Glass template holder (93.6 mm)
	ACO4204	Colour Frame Holder (185 mm)

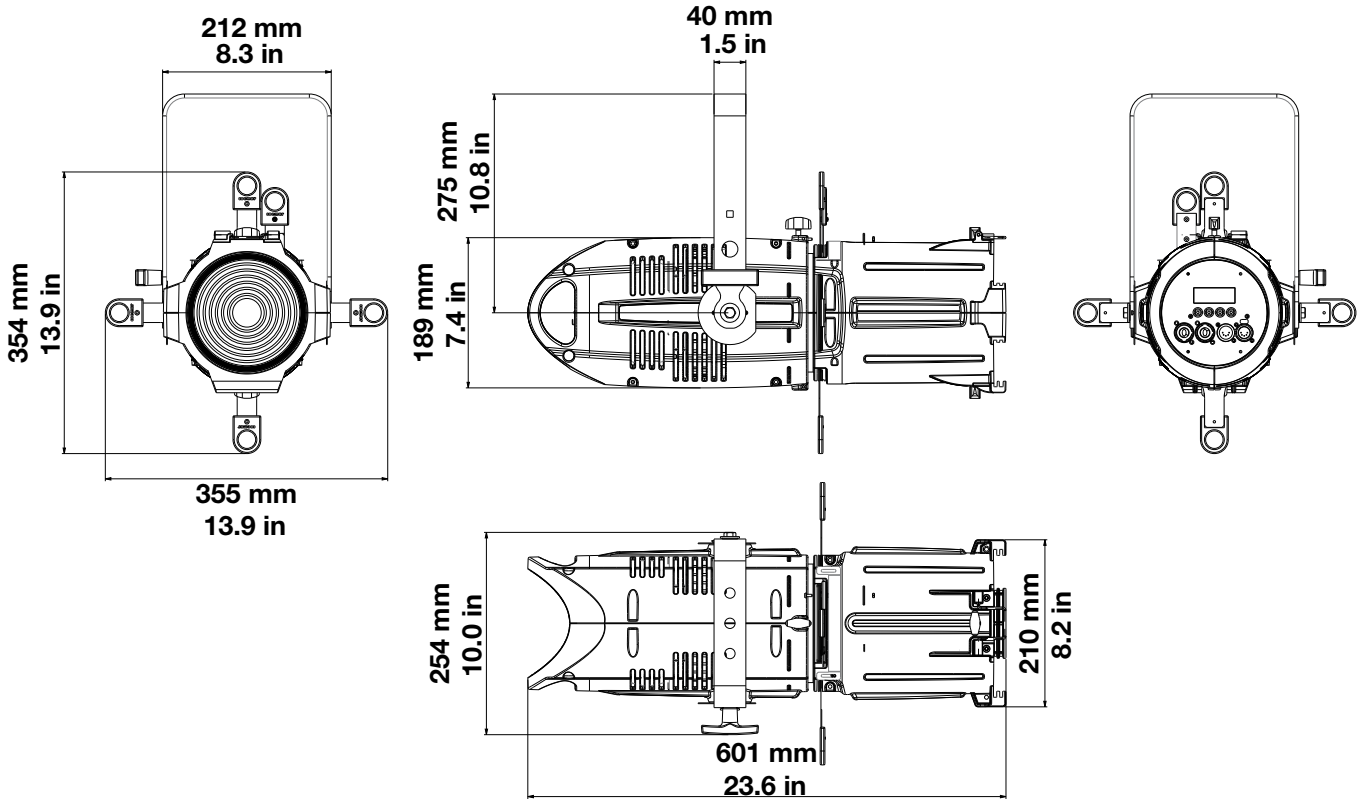
Reflection LEDko - Accessories for Optic Zoom 26° and 28° - 40°

Picture	Code	Description
	BC10011A036	Donut (185 mm)
	BC10011A035	Half Top Hat (185 mm)
	BC10011A037	Top Hat (185 mm)
	BC10011A030	(Gobo Slot) Glass template holder (93.6 mm)
	ACO4204	Colour Frame Holder (185 mm)

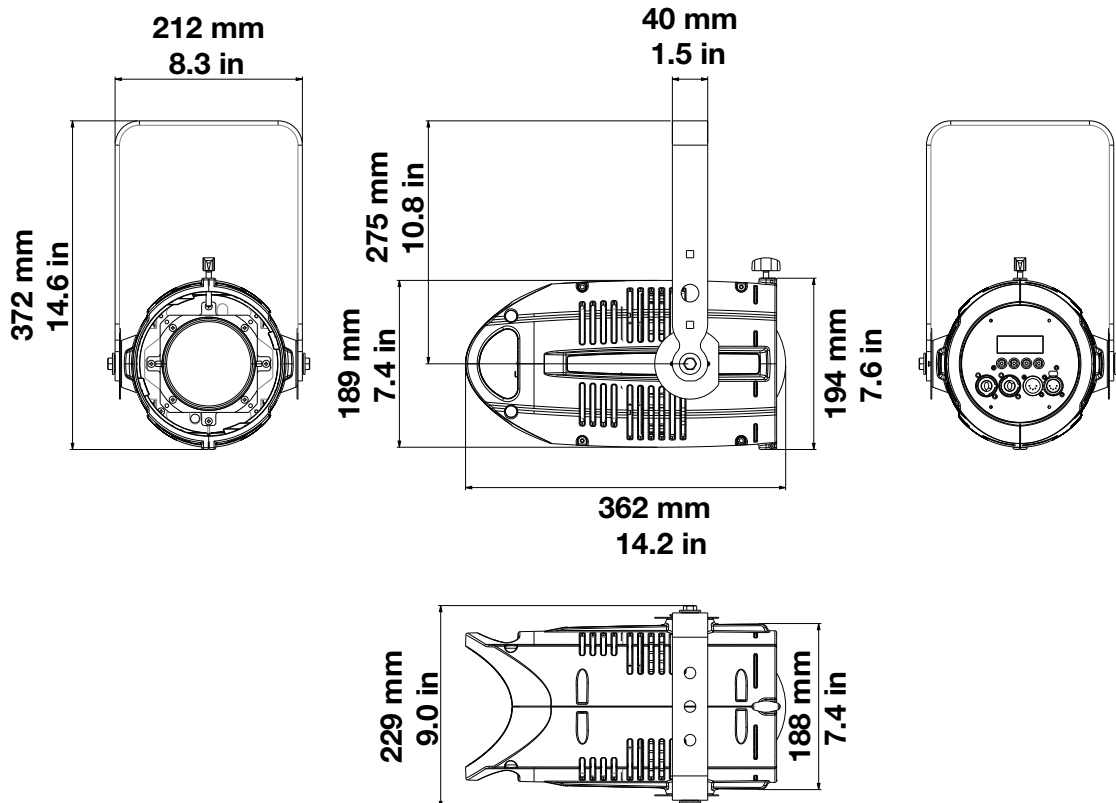
Reflection LEDko - Accessories for Lens Tube

Picture	Code	Description
	BC10011A032	Donut (158.7 mm)
	BC10011A031	Half Top Hat (158.7 mm)
	BC10011A033	Top Hat (158.7 mm)
	BC10011A034	(Gobo Slot) Glass template holder (93.6 mm)
	BC10011A021	Colour Frame Holder (159 mm)

Reflection LEDko P White 3200 K - Drawing Size



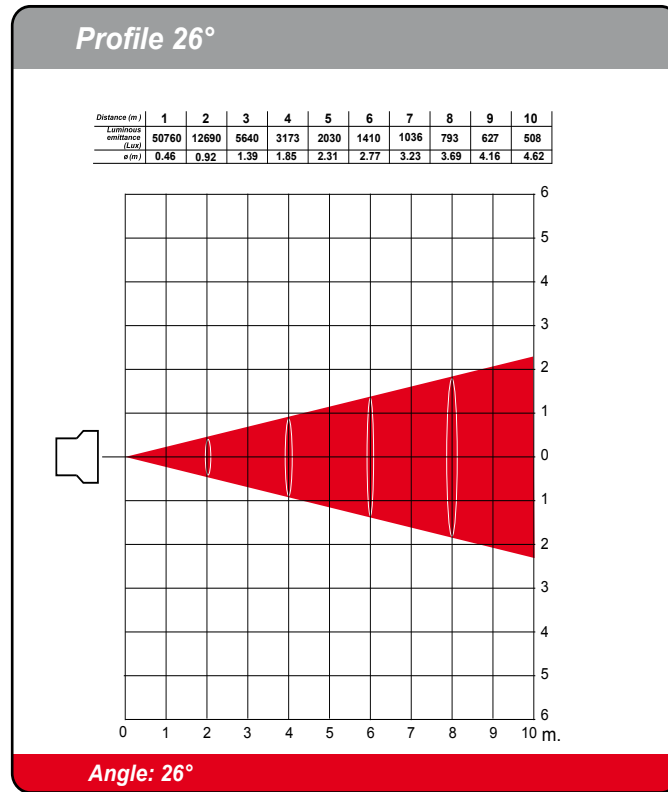
Reflection LEDko with optic Soft Profile Fresnel



Reflection LEDko P White 3200 K - DMX Chart

channel		function	type of control	effect	decimal	percentage
1	1	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0 - 255	0% - 100%
	2	spare channel	step	no effect	0 - 255	0% - 100%
	3	dimmer fine	proportional	fine dimmer control 16 bit	0 - 255	0% - 100%
4		strobe	step	no effect	0 - 9	0% - 4%
			proportional	variable speed strobing effect, from slow to fast	10 - 57	4% - 22%
			step	stop strobe	58 - 59	23% - 23%
			proportional	sequenced pulse effect, slow closing, fast opening (variable speed pulsing, from slow to fast)	60 - 108	24% - 42%
			step	stop strobe	109 - 110	43% - 43%
			proportional	sequenced pulse effect, fast closing, slow opening (variable speed pulsing, from slow to fast)	111 - 159	44% - 62%
			step	stop strobe	160 - 161	63% - 63%
			proportional	random strobe effect with variable speed from slow to fast, synchronized colors	162 - 207	64% - 81%
			step	stop strobe	208 - 209	82% - 82%
			proporzionale	random strobe effect with variable speed from slow to fast, not synchronized colors	210 - 255	82% - 100%
5		special functions	step	park, no effect	0 - 9	0% - 4%
				600Hz	10 - 84	4% - 33%
				fan at low-noise speed	85 - 96	33% - 38%
				fan at auto-silent speed	97 - 108	38% - 42%
			proportional	fan speed control from minimum to maximum	109 - 120	43% - 47%
			step	fan at maximum speed	121 - 133	47% - 52%
				LCD display off	134 - 185	53% - 73%
				LCD display on	186 - 199	73% - 78%
				LED control frequency tuning 1000Hz	200 - 205	78% - 80%
				LED control frequency tuning 3000Hz	206 - 211	81% - 83%
				LED control frequency tuning 6000Hz	212 - 217	83% - 85%
				LED control frequency tuning 8000Hz	218 - 223	85% - 87%
				LED control frequency tuning 10000Hz	224 - 229	88% - 90%
				LED control frequency tuning 12000Hz	230 - 235	90% - 92%
				LED control frequency tuning 14000Hz	236 - 241	93% - 95%
				LED control frequency tuning 16000Hz	242 - 247	95% - 97%
LED control frequency tuning 19000Hz	248 - 255	97% - 100%				

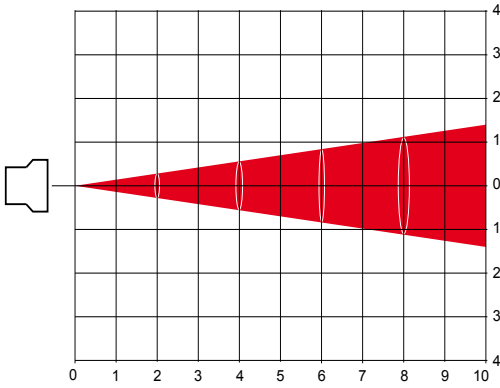
Reflection LEDko P White 3200 K - Photometric Data



Reflection LEDko P White 3200 K - Photometric Data

Profile 15/35° - Zoom min.

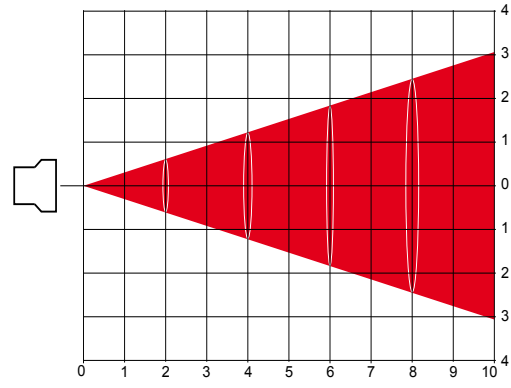
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (lm)	115020	28755	12780	7189	4601	3195	2347	1797	1420	1150
σ (m)	0.28	0.56	0.84	1.12	1.41	1.69	1.97	2.25	2.53	2.81



Angle: 15°

Profile 15/35° - Zoom max.

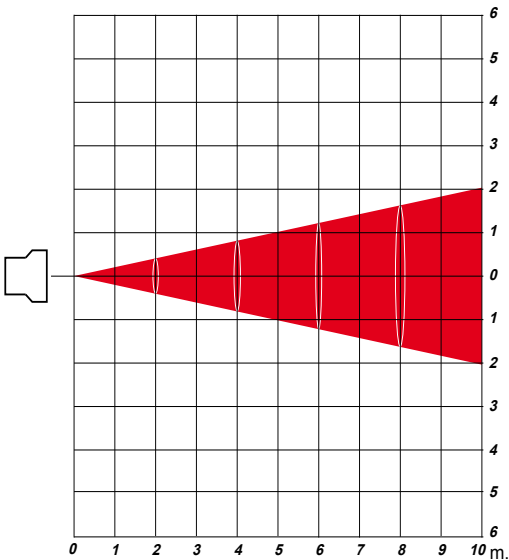
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (lm)	33759	8440	3751	2110	1350	938	689	527	417	338
σ (m)	0.63	1.26	1.89	2.52	3.15	3.78	4.41	5.04	5.68	6.31



Angle: 35°

Profile 25/50° - Zoom min.

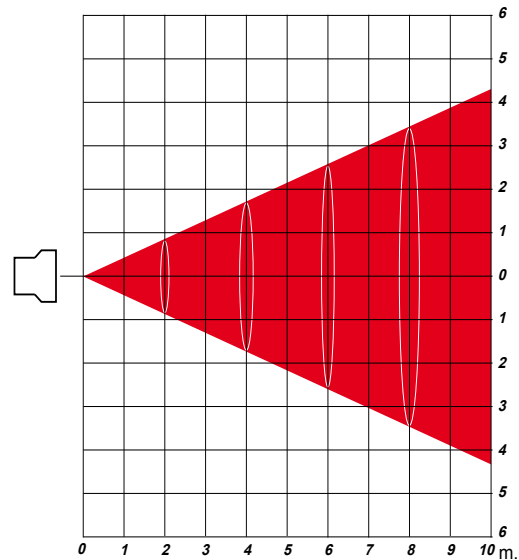
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (lm)	79650	19913	8850	4978	3186	2213	1626	1245	983	797
σ (m)	0,41	0,81	1,22	1,63	2,03	2,44	2,85	3,26	3,66	4,07



Angle: 23°

Profile 25/50° - Zoom max.

Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (lm)	17415	4354	1935	1088	697	484	355	272	215	174
σ (m)	0,87	1,74	2,61	3,48	4,35	5,22	6,09	6,96	7,83	8,70

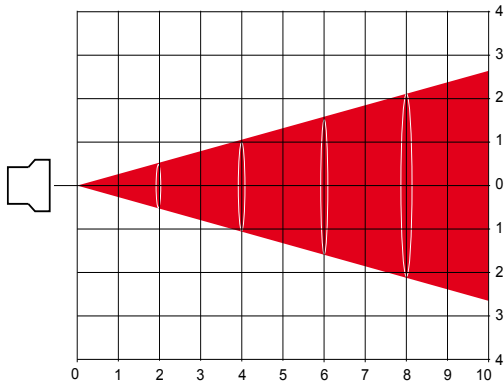


Angle: 47°

Reflection LEDko P White 3200 K - Photometric Data

Profile 28/40° - Zoom min.

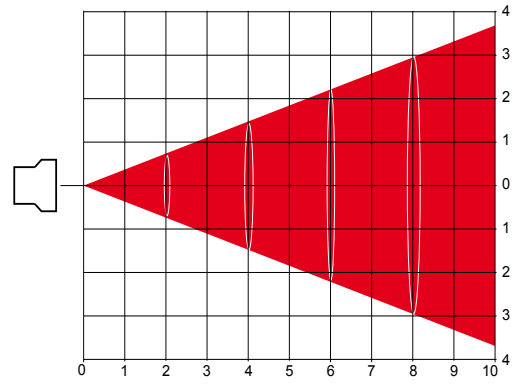
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous exitance (L/m²)	38745	9686	4305	2422	1550	1076	791	605	478	387
θ (m)	0.54	1.07	1.61	2.15	2.70	3.23	3.77	4.30	4.84	5.38



Angle: 28°

Profile 28/40° - Zoom max.

Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous exitance (L/m²)	23130	5783	2570	1446	925	643	472	361	286	231
θ (m)	0.74	1.48	2.32	2.97	3.72	4.46	5.20	5.95	6.69	7.44

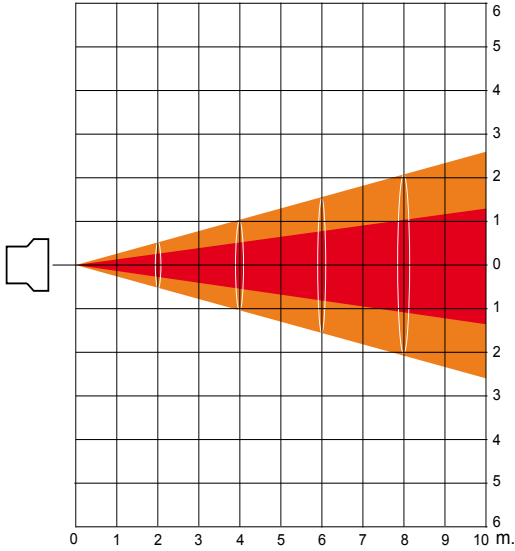


Angle: 40°

Reflection LEDko P White 3200 K - Photometric Data

Soft Profile Fresnel - Zoom min.

Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous exitance (Lx)	44550	11138	4950	2784	1782	1238	909	696	550	446
1/2 peak angle θ (m)	0.26	0.53	0.79	1.06	1.32	1.56	1.84	2.11	2.37	2.63
1/10 peak angle θ (m)	0.52	1.03	1.55	2.07	2.59	3.10	3.62	4.14	4.66	5.17

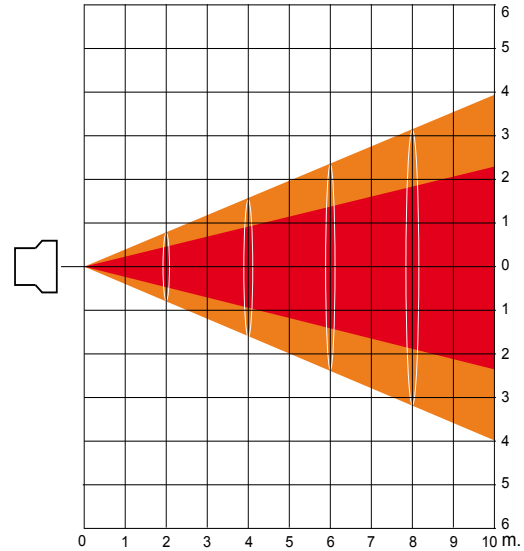


1/2 peak angle: 15°

1/10 peak angle: 29°

Soft Profile Fresnel - Zoom max.

Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous exitance (Lx)	16650	4163	1850	1041	666	463	340	260	206	167
1/2 peak angle θ (m)	0.46	0.92	1.39	1.85	2.31	2.77	3.23	3.69	4.16	4.62
1/10 peak angle θ (m)	0.79	1.58	2.36	3.15	3.94	4.73	5.51	6.30	7.09	7.88

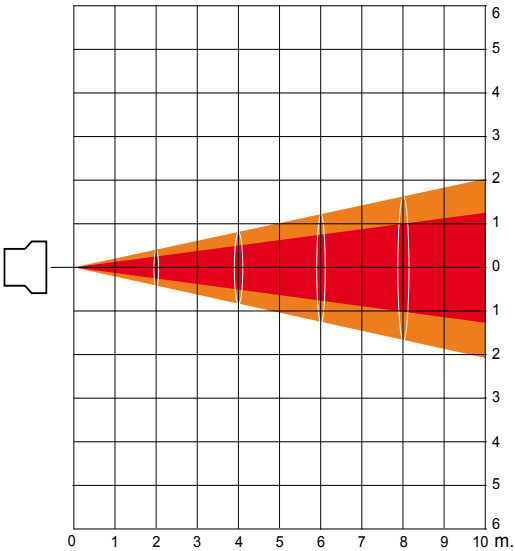


1/2 peak angle: 26°

1/10 peak angle: 43°

Soft Profile PC - Zoom min.

Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous exitance (Lx)	53100	13275	5900	3319	2124	1475	1084	830	656	531
1/2 peak angle θ (m)	0.25	0.49	0.74	0.98	1.23	1.47	1.72	1.96	2.21	2.46
1/10 peak angle θ (m)	0.41	0.81	1.22	1.63	2.03	2.44	2.85	3.26	3.66	4.07

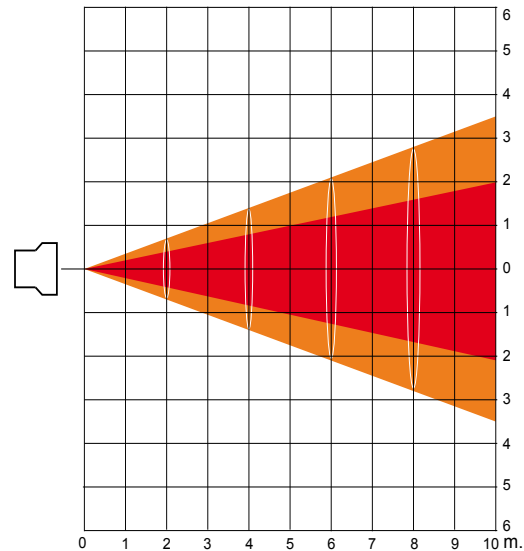


1/2 peak angle: 14°

1/10 peak angle: 23°

Soft Profile PC - Zoom max.

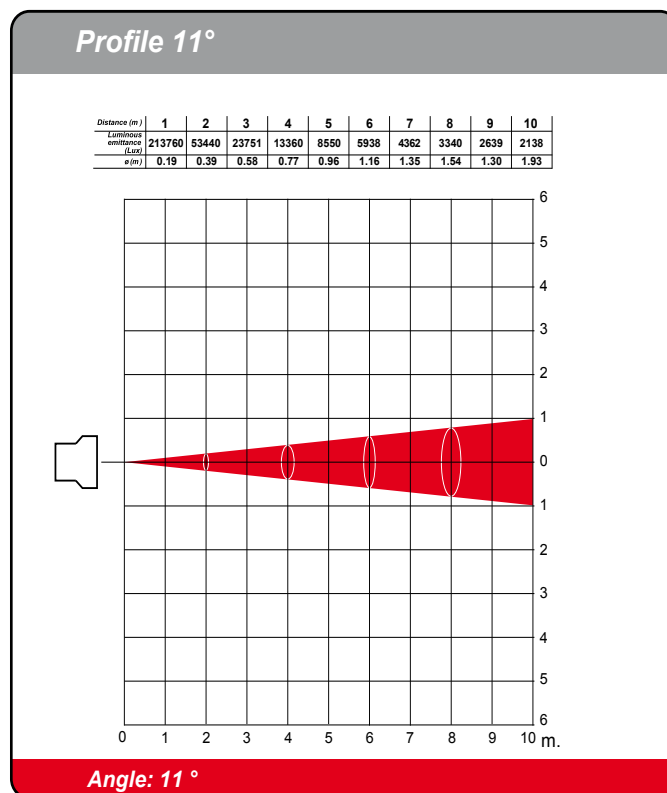
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous exitance (Lx)	22545	5636	2505	1408	902	626	460	352	278	225
1/2 peak angle θ (m)	0.41	0.81	1.22	1.63	2.03	2.44	2.85	3.26	3.66	4.07
1/10 peak angle θ (m)	0.71	1.42	2.12	2.83	3.54	4.25	4.96	5.67	6.37	7.08



1/2 peak angle: 23°

1/10 peak angle: 39°

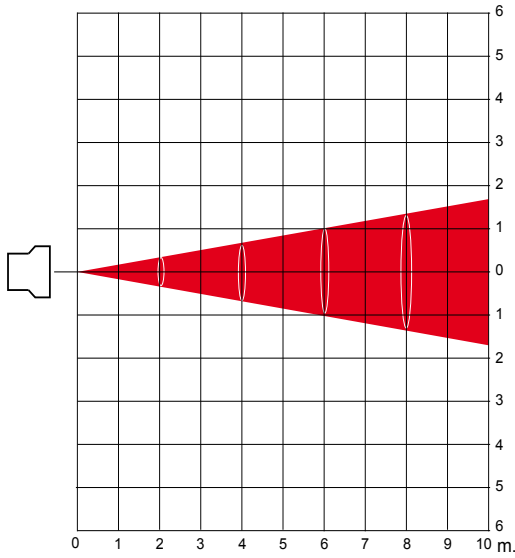
Reflection LEDko P White 3200 K - Photometric Data with third part optics



Reflection LEDko P White 3200 K - Photometric Data with third part optics

19° Lenses

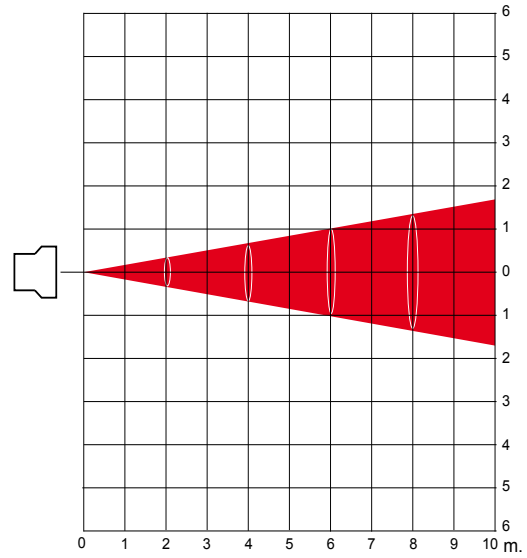
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (Lux)	69840	17460	7760	4365	2794	1940	1425	1091	862	698
ϕ (m)	0.33	0.67	1.00	1.34	1.67	2.01	2.34	2.68	3.01	3.35



Angle: 19°

19° Lenses HD

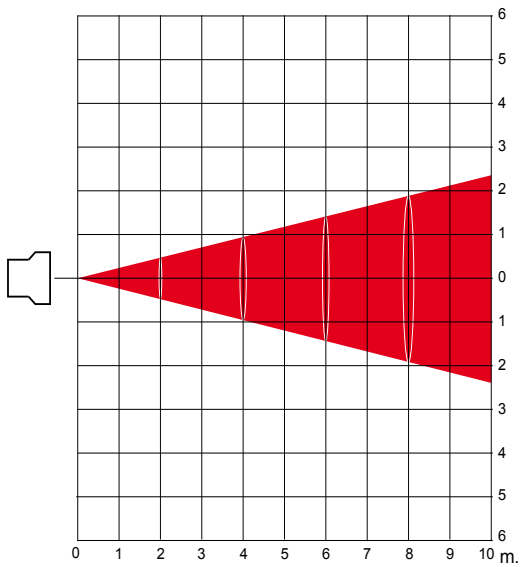
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (Lux)	77616	19404	8624	4851	3105	2156	1584	1213	958	776
ϕ (m)	0.33	0.67	1.00	1.34	1.67	2.01	2.34	2.68	3.01	3.35



Angle: 19°

26° Lenses

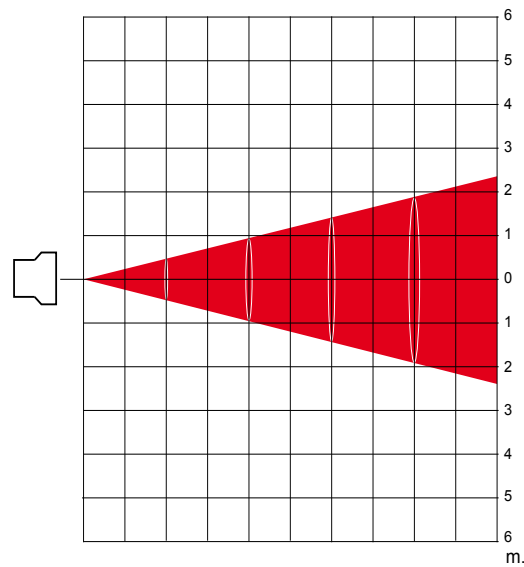
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (Lux)	49005	12251	5445	3063	1960	1361	1000	766	605	490
ϕ (m)	0.46	0.92	1.39	1.85	2.31	2.77	3.23	3.69	4.16	4.62



Angle: 26°

26° Lenses HD

Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (Lux)	54450	13613	6050	3403	2178	1513	1111	851	672	545
ϕ (m)	0.46	0.92	1.39	1.85	2.31	2.77	3.23	3.69	4.16	4.62

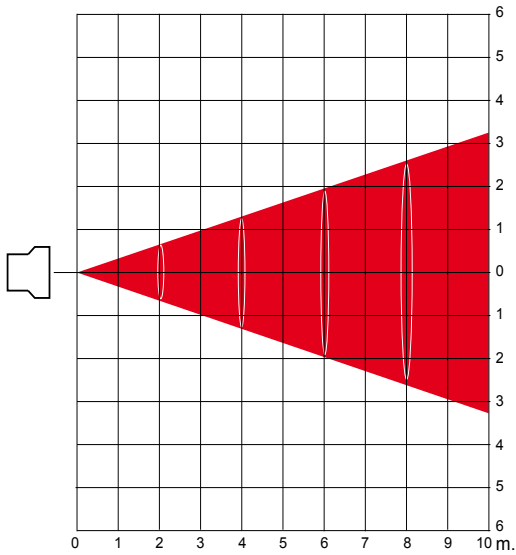


Angle: 26°

Reflection LEDko P White 3200 K - Photometric Data with third part optics

36° Lenses

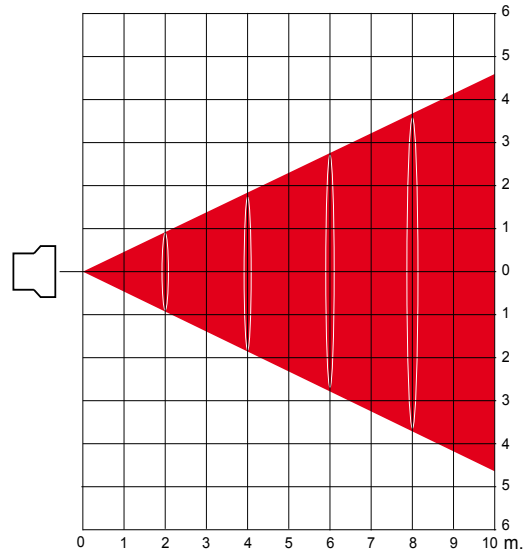
Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (Lm)	28350	7088	3150	1772	1134	788	579	443	350	284
θ (m)	0.65	1.30	1.95	2.60	3.25	3.90	4.55	5.20	5.85	6.50



Angle: 36°

50° Lenses

Distance (m)	1	2	3	4	5	6	7	8	9	10
Luminous emittance (Lm)	11790	2948	1310	737	472	328	241	184	146	118
θ (m)	0.93	1.87	2.80	3.73	4.66	5.60	6.53	7.46	8.39	9.33



Angle: 50°

References TV studios



El Djazairia TV Studio
Algérie



ESPN Studio
USA



NTV
Turkey



TV Atzeca
Mexico



Al Jazeera TV Studios



BBC Studios
Scotland

References Theatres



**Accademia Nazionale di Santa Cecilia - Rome
Italy**



**MSC Cruise
Italy**



**Auditorium G. Arvedi - Cremona
Italy**



**Auditorium G. Arvedi - Cremona
Italy**



**Cincinnati Shakespeare Company - Grapes of Wrath
USA**



**Concert Hall
Vietnam**

References Architectural



**Blue Planet Aquarium - Copenhagen
Denmark**



**Cathedral's Museum - Monza
Italy**



**Museum of Natural History - Wien
Austria**



**"Cupid & Psyche" Exhibition - Milan
Italy**



**Church of Gl. Holte - Copenhagen
Denmark**



**Show Room of Italian Fashion House - Milan
Italy**

References Fashion Show



Lacoste Fashion Show - Viareggio
Italy



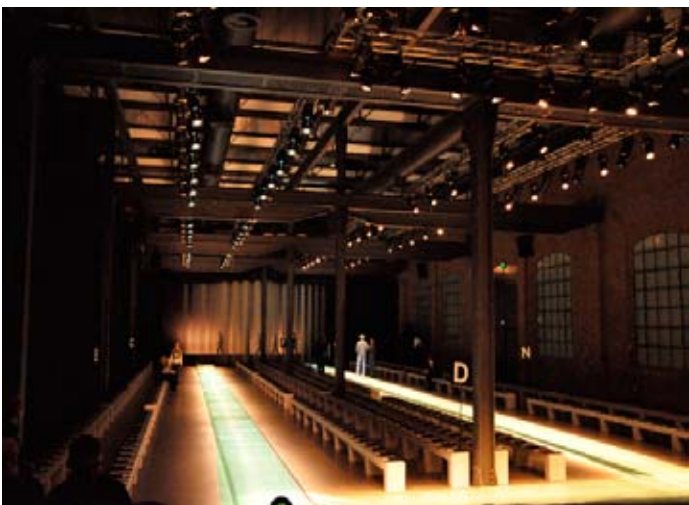
Lacoste Fashion Show - Viareggio
Italy



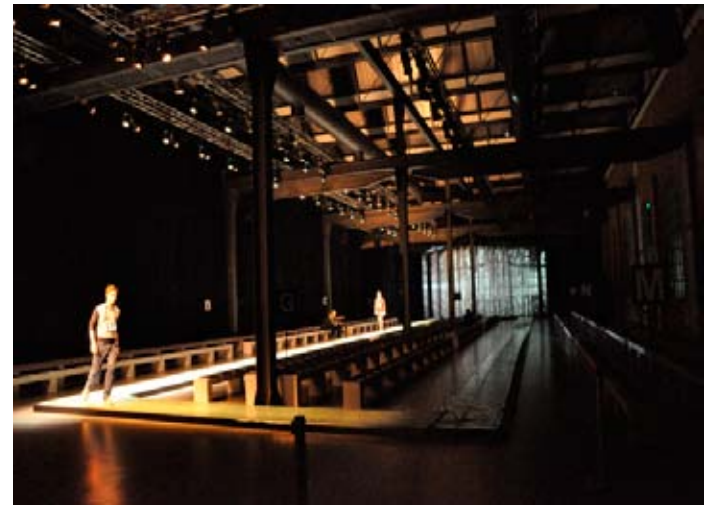
S.Ferragamo Fashion Show - Milan
Italy



S.Ferragamo Fashion Show - Milan
Italy



Canali Fashion Show - Milan
Italy



Canali Fashion Show - Milan
Italy



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