



ECO Spot™ B90PCE

ECO Spot™ B90PCE LED Gobo Projector

Weather and Dustproof Projector for Rugged Environments

- **Passive cooling** - no moving parts such as fans or motors
- **Applications** - dusty and wet industrial environments
- **UL/cUL Certified** - international industry standard certifications
- **Interchangeable Projection Lenses** - for a wide range of projection distances and sizes



SPECIFICATIONS

Item Code:	ES-B90PCE
Power Supply:	100-277V, 50/60Hz
Power Draw:	90W, 0.8A/115V, 0.33A/277V
Driver:	Mean Well HLG-120H-15B (integrated) OR MOSO X6-150M041 (integrated, full dimming)
Inrush Current:	COLD START 60A (t width=375µs at 50% I peak) at 230VAC per NEMA 410
Breakers:	We recommend lighting specific breakers at 70% of specified load
Units per Breaker:	16A Type C: 9 units, 16A Type B: 5 units
Power Cord:	Length: 8.5' (2.6m), Plug: Standard plug: NEMA 5-15 (other plug options available)

Environmental Rating:	IP65
Safety Standards:	UL 48 Standard for Electric Signs, CSA C22.2 No. 207-15 Standard for Portable and Stationary Electric Signs and Displays.
Temperature Range:	-22°F to 122°F (-30°C to 50°C)
LED Life:	35,000h until 30% brightness loss is reached (L70*) (*L70= the time to 30% brightness loss)
Driver Life:	MTBF: 200,000h, lifetime: 100,000h at tc=75°C and 80% load (driver and LED are field serviceable)

Lamp Type:	LED - 150 W operated at 90 W		
LED Color Temp:	8,000k ± 500k		
Projection Lenses:	Narrow: f=220 mm/12°	Semi-Narrow: f=210 mm/13°	Medium: f=140 mm/20°
	Semi-Wide: f=115 mm/25°	Wide: f=92 mm/30°†	Extra-Wide: f=56mm/40°†

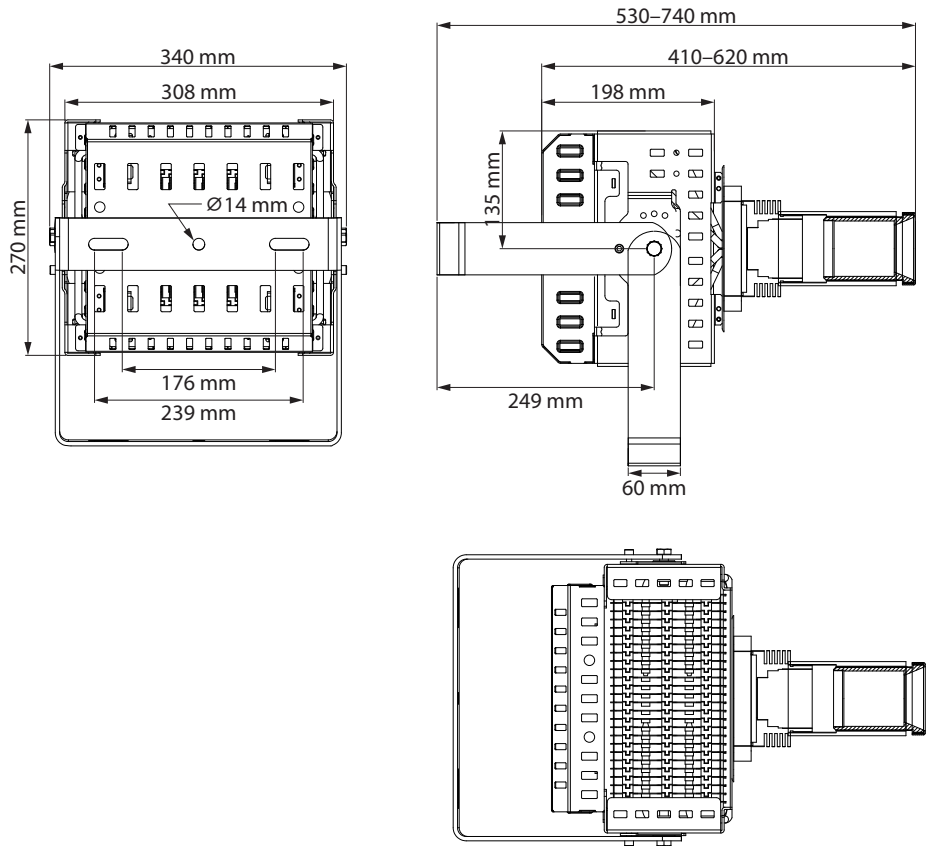
Gobo Size:	M-Size - Outside Diameter: 66 mm, Image Diameter: 48 mm (†ID: 42 mm for Wide and Ultra-Wide)
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Typ. Projection Range / Size	Bright Environment	Average Env.	Dim Env.
Max. Image Size:	9' (2.7 m)	12' (3.7 m)	15' (4.6 m)
At Distance:	40'	52'	80'

Product Warranty:	Two years from date of purchase
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DIMENSIONS AND WEIGHT

Dimensions in mm
Weight: 9.5 kg [21 lbs]



PHOTOMETRICS (see our website for metric version and details)

ECO Spot™ Photometrics																							
Model Gobo Size	Gobo max ID	Lens	Beam Mult.	Effective lm	Efficiency lm/W	CD	Value	PROJECTION DISTANCE in (ft)															
								3	6	9	12	15	20	24	30	36	42	64	88	112	136	200	300
ES-B90 ES-B90E ES-B90C ES-B90CE ES-B90PCE	52mm	220mm (12°)	0.21	5177	58	144,000	Size (ft) Brightn. (fc)			1.9	2.6	3.2	4.3	5.1	6.4	7.7	9.0	13.7	18.8	24.0	29.1	42.8	
		210mm (13°)	0.23	5099	57	126,720	Size (ft) Brightn. (fc)			1778	1000	640	360	250	160	111	82	35	19	11	8	4	
		140mm (20°)	0.35	6301	70	65,520	Size (ft) Brightn. (fc)			2.0	2.7	3.4	4.5	5.4	6.8	8.2	9.5	14.5	19.9	25.4	30.8	45.3	
		115mm (25°)	0.42	5700	63	41,760	Size (ft) Brightn. (fc)	2.1	3.2	4.2	5.3	7.0	8.4	10.5	12.6	14.7	22.4	30.8	39.2	47.6			
		92mm (30°)	0.55	4445	49	18,720	Size (ft) Brightn. (fc)	1820	809	455	291	164	114	73	51	37	16	8	5	4			
M-Size OD=66mm ID=48mm	48mm	92mm (30°)	0.55	4445	49	18,720	Size (ft) Brightn. (fc)	2.5	3.8	5.0	6.3	8.3	10.0	12.5	15.0	17.5	26.7	36.7	46.7				
		56mm (40°)	0.82	3572	40	6,768	Size (ft) Brightn. (fc)	1160	516	290	186	104	73	46	32	24	10	5	3				
		44mm recom.	0.82	3572	40	6,768	Size (ft) Brightn. (fc)	3.3	5.0	6.6	8.3	11.0	13.2	16.5	19.8	23.1	35.2	48.4					
		44mm recom.	0.82	3572	40	6,768	Size (ft) Brightn. (fc)	4.9	7.4	9.8	12.3	16.4	19.7	24.6	29.5	34.4	52.5	**For even brightness, max. ID=42mm					
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Metric Conversions: For Meters multiply feet by .305. For Lux multiply footcandles by 10.76																							
Projection Size Calculation		For the resulting Projection Size at any given Distance, Multiply the number in the "Beam Mult." column with your Projection Distance.																Projection Size = Distance x Beam Mult.					
		For the Distance needed to achieve a desired Projection Size, Divide the Projection size by the Beam Multiplier.																Distance = Projection Size / Beam Mult.					
How to Read the Illumination Values													700+		180-700		90-180		60-90		40-60		
Lighting environment description													Extreme bright		Very bright		Standard		Moderate		Dim		