



Lighting an ice hockey rink

The visibility of moving objects is dependent upon the angular size, speed and luminance of its background and the luminance of the surroundings. A high standard of lighting is required as the small, black and fast-moving puck has to be made to contrast against the ice rink so that the spectators and players can see it. This is especially true where there is a large distance between the ice and the spectators, such as in arenas or halls.

As ice acts as a good diffuse reflector there should be no strong patterns of light that could distract from the game. Good lighting uniformity is important for seeing the puck.

Source: Society of Light and Lighting UK

Non-televised ice hockey lighting recommendations

	Class		
	I	II	III
Horizontal Illuminance (Lux)	500	200	75
Uniformity (Min/Ave)	0.7	0.7	0.5
Ra	60	60	20

Recommendations for televised events

Major events

	Horizontal illuminance	Uniformity Min/Ave	Uniformity Min/Max	Vertical Illuminance	Uniformity Min/Ave	Uniformity Min/Max	Colour Rendering	Glare Rating
HDTV	1500-3000	0.8	0.7	2200	0.7	0.6	>90	<50
Slow-motion Camera	1500-3000	0.8	0.6	1800	0.7	0.5	>80	<50
Fixed Camera	1500-3000	0.8	0.6	1400	0.7	0.5	>80	<50
Mobile Camera	1500-3000	0.8	0.6	1200	0.5	0.3	>80	<50

Average horizontal and vertical illuminance ratios: It is recommended that the ratio for horizontal illuminance (Field of Play) is between 0.75 and 1.5 of the vertical illuminance for cameras. Where there is HDTV all horizontal values for other cameras are as for HDTV

National events

	Horizontal illuminance	Uniformity Min/Ave	Uniformity Min/Max	Vertical Illuminance	Uniformity Min/Ave	Uniformity Min/Max	Colour Rendering	Glare Rating
Camera	1000-2000	0.7	0.5	1000	0.6	0.4	>80	<50

Measurements should be taken 1.5 m above the track surface.

Luxtronik offers Ice Hockey LED lighting that emits bright, uniform illumination. Our high-quality LED luminaires are lighting Ice Hockey rinks around the world.

Recommended Products



PANDORA (MFL)
50-600w



APOLLO (FL)
60-800w



NEPTUNE (HB)
80-400w

For more information or project and lighting design support, please contact our team sales@luxtronik-tech.com