



Technical Bulletin

TB0224 - Conversion of High Pressure Sodium Luminaires to LED luminaires

Purpose

To set minimum lighting level requirement of LED luminaires used for conversion of High Pressure Sodium (HPS) luminaires as an addition to existing specification.

Parameters

Mounting height 10.5 m

Angle of inclination 5° upcast

LED luminaire replacing 400W HPS luminaire

Minimum illuminance: distance from luminaire at ground level				
Angle	6m	12m	18m	24m
c=0°	32 lux	20 lux	12 lux	6 lux
c=45°	32 lux	28 lux	12 lux	4 lux
c=90°	32 lux	19 lux	7 lux	2.8 lux
c=135°	32 lux	28 lux	12 lux	4 lux
c=180°	32 lux	20 lux	12 lux	6 lux
c=225°	24 lux	13 lux	3 lux	1.5 lux
c=270°	20 lux	6 lux	1.6 lux	0.5 lux
c=315°	24 lux	13 lux	3 lux	1.5 lux

LED luminaire replacing 250W HPS luminaire

Minimum illuminance: distance from luminaire at ground level				
Angle	6m	12m	18m	24m
c=0°	16 lux	13 lux	6 lux	3 lux
c=45°	16 lux	14 lux	6 lux	2 lux
c=90°	16 lux	11 lux	3 lux	1.5 lux
c=135°	16 lux	14 lux	6 lux	2 lux
c=180°	16 lux	13 lux	6 lux	3 lux
c=225°	15 lux	5 lux	2 lux	0.8 lux
c=270°	12 lux	3 lux	2 lux	0 lux
c=315°	15 lux	5 lux	2 lux	0.8 lux

LED luminaire replacing 150W HPS luminaire

Minimum illuminance: distance from luminaire at ground level				
Angle	6m	12m	18m	24m
c=0°	8 lux	6 lux	3 lux	1.6 lux
c=45°	8 lux	7 lux	3 lux	1.6 lux
c=90°	8 lux	6 lux	2 lux	0.5 lux
c=135°	8 lux	7 lux	3 lux	1.6 lux
c=180°	8 lux	6 lux	3 lux	1.6 lux
c=225°	6 lux	2.8 lux	0.8 lux	0 lux
c=270°	6 lux	1.6 lux	0.4 lux	0 lux
c=315°	6 lux	2.8 lux	0.8 lux	0 lux

LED luminaire replacing 100W High Pressure Sodium luminaire

Minimum illuminance: distance from luminaire at ground level				
Angle	6m	12m	18m	24m
c=0°	8 lux	3.5 lux	1.6 lux	0.8 lux
c=45°	9.6 lux	6 lux	2.4 lux	0.7 lux
c=90°	10 lux	5.6 lux	2 lux	0.5 lux
c=135°	9.6 lux	6 lux	2.4 lux	0.7 lux
c=180°	8 lux	3.5 lux	1.6 lux	0.8 lux
c=225°	6 lux	1.5 lux	0.6 lux	0 lux
c=270°	4 lux	1.2 lux	0 lux	0 lux
c=315°	6 lux	1.5 lux	0.6 lux	0 lux

Impacted Standard

The contents of this technical bulletin will be included in the next update of the following standard: ETS 0101.