

Luminaires shall be according to Section 821 of the Standard Specifications and as follows:

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
UNDERPASS LUMINAIRE PERFORMANCE TABLE**

**GIVEN CONDITIONS**

ROADWAY DATA:	Pavement Width	24 FT
	Number Of Lanes (In Direction of Travel)	2
	Median Width	0 FT
	IES Surface Classification	R3
	Q-Zero Value	.07
MOUNTING DATA:	Mounting Height	15 FT
	Mounting Type	Wall Mounted
	Set-Back From Edge Of Pavement	30 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	16,000
	IES Vertical Distribution	S
	IES Control Of Distribution	N
	IES Lateral Distribution	4
	Total Light Loss Factor	0.60
LAYOUT DATA:	Spacing	35 FT
	Configuration	Single Sided
	Luminaire Overhang Over Edge Of Pavement Lane	-15 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

**PERFORMANCE REQUIREMENTS**

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Average Horizontal Illumination, ( $E_{Ave}$ )	0.90 fc
	Uniformity Ratio, ( $E_{Ave}/E_{Min}$ )	3.0
LUMINANCE:	Average Luminance: ( $L_{Ave}$ )	0.60 Cd/m <sup>2</sup>
	Uniformity Ratios: ( $L_{Ave}/L_{Min}$ )	3.5
	( $L_{Max}/L_{Min}$ )	6.0
	Maximum Veiling Luminance Ratio: ( $L_v/L_{Ave}$ )	0.30

150W UNDERPASS LUMINAIRE PERFORMANCE TABLE  
IL ROUTE 6 UNDERPASS

Luminaires shall be according to Section 821 of the Standard Specifications and as follows:

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
LUMINAIRE PERFORMANCE TABLE - PROPOSED LIGHTING**

**GIVEN CONDITIONS**

ROADWAY DATA:	Pavement Width	16 FT
	Number Of Lanes (In Direction of Travel)	1
	Median Width	0 FT
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	45 FT
	Mast Arm Length	15 FT
	Pole Set-Back From Edge Of Pavement	20 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	28,500
	IES Vertical Distribution	M
	IES Control Of Distribution	C
	IES Lateral Distribution	3
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	170 FT
	Configuration	One Sided
	Luminaire Overhang Over Edge Of Pavement Lane	-5 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

**PERFORMANCE REQUIREMENTS**

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Average Horizontal Illumination, ( $E_{Ave}$ )	0.9 fc
	Uniformity Ratio, ( $E_{Ave}/E_{Min}$ )	3.0
LUMINANCE:	Average Luminance: ( $L_{Ave}$ )	0.60 Cd/m <sup>2</sup>
	Uniformity Ratios: ( $L_{Ave}/L_{Min}$ )	3.5
	( $L_{Max}/L_{Min}$ )	6.0
	Maximum Veiling Luminance Ratio: ( $L_v/L_{Ave}$ )	0.3

250W LUMINAIRE PERFORMANCE TABLE  
WITH ONE-SIDED CONFIGURATION  
IL ROUTE 6

Luminaires shall be according to Section 821 of the Standard Specifications and as follows:

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
LUMINAIRE PERFORMANCE TABLE - PROPOSED LIGHTING**

**GIVEN CONDITIONS**

ROADWAY DATA:	Pavement Width	24 FT
	Number Of Lanes (In Direction of Travel)	2
	Median Width	16 FT
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	50 FT
	Mast Arm Length	15 FT
	Pole Set-Back From Edge Of Pavement	15 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	50,000
	IES Vertical Distribution	M
	IES Control Of Distribution	C
	IES Lateral Distribution	3
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	380 FT
	Configuration	Staggered
	Luminaire Overhang Over Edge Of Pavement Lane	0 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

**PERFORMANCE REQUIREMENTS**

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Average Horizontal Illumination, ( $E_{Ave}$ )	0.9 fc
	Uniformity Ratio, ( $E_{Ave}/E_{Min}$ )	3.0
LUMINANCE:	Average Luminance: ( $L_{Ave}$ )	0.60 Cd/m <sup>2</sup>
	Uniformity Ratios: ( $L_{Ave}/L_{Min}$ )	3.5
	( $L_{Max}/L_{Min}$ )	6.0
	Maximum Veiling Luminance Ratio: ( $L_v/L_{Ave}$ )	0.3

400W LUMINAIRE PERFORMANCE TABLE  
WITH STAGGERED CONFIGURATION  
ALLEN ROAD