

ILLINOIS DEPARTMENT OF TRANSPORTATION  
LUMINAIRE PERFORMANCE TABLE

I-270 Pole Mounted Luminaires

GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	14-42 FT
	Number of Lanes	2-3
	Median Width	6 FT
	IES Surface Classification	R3
	Q-Zero Value	0.07
LIGHT POLE DATA:	Mounting Height	45 FT
	Pole Set-Back from Edge of Pavement	11-30 FT
	Aiming Angle	N/A
	Mast Arm	12-15 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	27500
	IES Vertical Distribution	M
	IES Control Distribution	C
	IES Lateral Distribution	3 (III)
	Total Light Loss Factor	0.7
LAYOUT DATA:	Spacing	105 - 210 FT
	Configuration	STG
	Luminaire Overhang Over Edge of Pavement Lane	0 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and accepted 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 <sub>Ave</sub> )	0.9 FC
	Uniformity Ratio, (E <sub>Ave</sub> /E <sub>Min</sub> )	3.0
LUMINANCE:	Average Luminance: (L <sub>Ave</sub> )	0.6
	Uniformity Ratios: (L <sub>Ave</sub> /L <sub>Min</sub> )	3.5
	(L <sub>Max</sub> /L <sub>Min</sub> )	6.0
	Maximum Veiling Luminance Ratio: (L <sub>V</sub> /L <sub>Ave</sub> )	0.3

ILLINOIS DEPARTMENT OF TRANSPORTATION  
LUMINAIRE PERFORMANCE TABLE

I-270 Canal Bridge Luminaires

GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	36 FT
	Number of Lanes	3
	Median Width	4 FT
	IES Surface Classification	R3
	Q-Zero Value	0.07
LIGHT POLE DATA:	Mounting Height	48.5 FT
	Pole Set-Back from Edge of Pavement	MEDIAN
	Aiming Angle	0 DEGREES
	Mast Arm	6 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	27500
	IES Vertical Distribution	M
	IES Control Distribution	C
	IES Lateral Distribution	3 (III)
	Total Light Loss Factor	0.7
LAYOUT DATA:	Spacing	195 FT
	Configuration	DUAL CTR
	Luminaire Overhang Over Edge of Pavement Lane	2 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and accepted 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 <sub>Ave</sub> )	0.9 FC
	Uniformity Ratio, (E <sub>Ave</sub> /E <sub>Min</sub> )	3.0
LUMINANCE:	Average Luminance: (L <sub>Ave</sub> )	0.6
	Uniformity Ratios: (L <sub>Ave</sub> /L <sub>Min</sub> )	3.5
	(L <sub>Max</sub> /L <sub>Min</sub> )	6.0
	Maximum Veiling Luminance Ratio: (L <sub>V</sub> /L <sub>Ave</sub> )	0.3

ILLINOIS DEPARTMENT OF TRANSPORTATION  
LUMINAIRE PERFORMANCE TABLE

I-270 Canal Navigation Luminaires

GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	N/A
	Number of Lanes	N/A
	Median Width	N/A
	IES Surface Classification	N/A
	Q-Zero Value	N/A
LIGHT POLE DATA:	Mounting Height	BELOW PARAPET
	Pole Set-Back from Edge of Pavement	N/A
	Aiming Angle	N/A
LUMINAIRE DATA:	Lamp Type	LED
	Lamp Lumens	USCG CRITERIA
	IES Vertical Distribution	N/A
	IES Control Distribution	FRESNAL LENS
	IES Lateral Distribution	RED 180 DEG. GREEN 360 DEG.
	Total Light Loss Factor	0.7
LAYOUT DATA:	Spacing	CHANNEL LIMITS
	Configuration	N/A
	Luminaire Overhang Over Edge of Pavement Lane	N/A

NOTE: Variations from the above specified IES distribution pattern may be requested and accepted 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 <sub>Ave</sub> )	USCG CRITERIA
	Uniformity Ratio, (E <sub>Ave</sub> /E <sub>Min</sub> )	N/A
LUMINANCE:	Average Luminance: (L <sub>Ave</sub> )	N/A
	Uniformity Ratios: (L <sub>Ave</sub> /L <sub>Min</sub> )	N/A
	(L <sub>Max</sub> /L <sub>Min</sub> )	N/A
	Maximum Veiling Luminance Ratio: (L <sub>V</sub> /L <sub>Ave</sub> )	N/A

