

**I-57 MAIN LINE HIGHMAST LIGHTING
IDOT LUMINAIRE PERFORMANCE TABLE
I-57/IL-50 INTERCHANGE RECONSTRUCTION**

ROADWAY DATA	PAVEMENT WIDTH	24 FT
	NUMBER OF LANES	2
	MEDIAN WIDTH	28 FT
	IES SURFACE CLASSIFICATION	R3
	Q ZERO VALUE	0.07
LIGHT POLE DATA	MOUNTING HEIGHT	100 FT
	MAST ARM LENGTH	4 FT
	POLE SET-BACK FROM EDGE OF PAVEMENT	77 FT
LUMINAIRE DATA	LAMP TYPE	(6) 400 HPS
	LAMP LUMENS	51000
	IES VERTICAL DISTRIBUTION	MEDIUM
	IES CONTROL OF DISTRIBUTION	SEMI CUTOFF
	IES LATERAL DISTRIBUTION	TYPE III
	TOTAL LIGHT LOSS FACTOR	0.7
LAYOUT DATA	SPACING	700 FT
	CONFIGURATION	STAGGERED
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LANE	N/A

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 PERFORMANCES REQUIREMENTS SHALL BE THE MINIMUM ACCEPTANCE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED.

ILLUMINATION	AVERAGE HORIZONTAL ILLUMINATION - E_{avg}	0.6FC
	UNIFORMITY RATIO - E_{avg}/E_{min}	3.00
LUMINANCE	AVERAGE LUMINANCE - L_{avg}	0.4 Cd/m ²
	UNIFORMITY RATIOS - L_{avg}/L_{min}	3.5
	UNIFORMITY RATIOS - L_{max}/L_{min}	6.0
	MAXIMUM VEILING LUMINANCE RATIO - L_{vmax}/L_{avg}	0.3

**IL-50 LIGHTING
IDOT LUMINAIRE PERFORMANCE TABLE
I-57/IL-50 INTERCHANGE RECONSTRUCTION**

ROADWAY DATA	PAVEMENT WIDTH	36 FT
	NUMBER OF LANES	3
	MEDIAN WIDTH	20 FT
	IES SURFACE CLASSIFICATION	R3
	Q ZERO VALUE	0.07
LIGHT POLE DATA	MOUNTING HEIGHT	50 FT
	MAST ARM LENGTH	15 FT
	POLE SET-BACK FROM EDGE OF PAVEMENT	8 FT
LUMINAIRE DATA	LAMP TYPE	HPS
	LAMP LUMENS	51000
	IES VERTICAL DISTRIBUTION	MEDIUM
	IES CONTROL OF DISTRIBUTION	FULL CUTOFF
	IES LATERAL DISTRIBUTION	TYPE III
	TOTAL LIGHT LOSS FACTOR	0.7
LAYOUT DATA	SPACING	245 FT
	CONFIGURATION	STAGGERED
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LANE	7 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 PERFORMANCES REQUIREMENTS SHALL BE THE MINIMUM ACCEPTANCE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED.

ILLUMINATION	AVERAGE HORIZONTAL ILLUMINATION - E_{avg}	1.3FC
	UNIFORMITY RATIO - E_{avg}/E_{min}	3.0
LUMINANCE	AVERAGE LUMINANCE - L_{avg}	0.9 Cd/m ²
	UNIFORMITY RATIOS - L_{avg}/L_{min}	3.0
	UNIFORMITY RATIOS - L_{max}/L_{min}	5.0
	MAXIMUM VEILING LUMINANCE RATIO - L_{vmax}/L_{avg}	0.3

**UNDERPASS LIGHTING
IDOT LUMINAIRE PERFORMANCE TABLE
I-57/IL-50 INTERCHANGE RECONSTRUCTION**

ROADWAY DATA	PAVEMENT WIDTH	36 FT
	NUMBER OF LANES	3
	MEDIAN WIDTH	N/A
	IES SURFACE CLASSIFICATION	R3
	Q ZERO VALUE	0.07
LIGHT POLE DATA	MOUNTING HEIGHT	17.5 FT
	MAST ARM LENGTH	N/A
	POLE SET-BACK FROM EDGE OF PAVEMENT	4 FT
LUMINAIRE DATA	LAMP TYPE	HPS
	LAMP LUMENS	16000
	IES VERTICAL DISTRIBUTION	N/A
	IES CONTROL OF DISTRIBUTION	NON-CUT OFF
	IES LATERAL DISTRIBUTION	TYPE IV
	TOTAL LIGHT LOSS FACTOR	0.7
LAYOUT DATA	SPACING	65 FT
	CONFIGURATION	OPPOSITE
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LANE	N/A

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 PERFORMANCES REQUIREMENTS SHALL BE THE MINIMUM ACCEPTANCE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED.

ILLUMINATION	AVERAGE HORIZONTAL ILLUMINATION - E_{avg}	1.9FC
	UNIFORMITY RATIO - E_{avg}/E_{min}	3.0
LUMINANCE	AVERAGE LUMINANCE - L_{avg}	1.4 Cd/m ²
	UNIFORMITY RATIOS - L_{avg}/L_{min}	3.0
	UNIFORMITY RATIOS - L_{max}/L_{min}	5.0
	MAXIMUM VEILING LUMINANCE RATIO - L_{vmax}/L_{avg}	0.3

**I-57 RAMPS LIGHTING
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TOWER NO. 27 WITH SHIELDED LUMINAIRES, NOTE 1

ROADWAY DATA	PAVEMENT WIDTH	16 FT
	NUMBER OF LANES	1
	MEDIAN WIDTH	N/A
	IES SURFACE CLASSIFICATION	R3
	Q ZERO VALUE	0.07
LIGHT POLE DATA	MOUNTING HEIGHT	100 FT
	MAST ARM LENGTH	4 FT
	POLE SET-BACK FROM EDGE OF PAVEMENT	65 FT
LUMINAIRE DATA	LAMP TYPE	(4) 400W HPS
	LAMP LUMENS	51000
	IES VERTICAL DISTRIBUTION	SHORT
	IES CONTROL OF DISTRIBUTION	CUT OFF
	IES LATERAL DISTRIBUTION	TYPE III
	TOTAL LIGHT LOSS FACTOR	0.7
LAYOUT DATA	SPACING	500 FT
	CONFIGURATION	ONE SIDE
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LANE	N/A

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 PERFORMANCES REQUIREMENTS SHALL BE THE MINIMUM ACCEPTANCE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED.

ILLUMINATION	AVERAGE HORIZONTAL ILLUMINATION - E_{avg}	0.6FC
	UNIFORMITY RATIO - E_{avg}/E_{min}	3.00
LUMINANCE	AVERAGE LUMINANCE - L_{avg}	0.4 Cd/m ²
	UNIFORMITY RATIOS - L_{avg}/L_{min}	3.5
	UNIFORMITY RATIOS - L_{max}/L_{min}	6.0
	MAXIMUM VEILING LUMINANCE RATIO - L_{vmax}/L_{avg}	0.3

NOTE:

- HIGH MAST LUMINAIRES ARE TO BE INSTALLED WITH THE HOUSE SIDE SHIELD TO LIMIT LIGHT TRESPASS. SEE CONTRACT SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS FOR LUMINAIRE SHIELD.

**I-57 RAMPS LIGHTING
IDOT LUMINAIRE PERFORMANCE TABLE
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TOWER NO. 29 WITH SHIELDED LUMINAIRES, NOTE 1

ROADWAY DATA	PAVEMENT WIDTH	16 FT
	NUMBER OF LANES	1
	MEDIAN WIDTH	N/A
	IES SURFACE CLASSIFICATION	R3
	Q ZERO VALUE	0.07
LIGHT POLE DATA	MOUNTING HEIGHT	100 FT
	MAST ARM LENGTH	4 FT
	POLE SET-BACK FROM EDGE OF PAVEMENT	45 FT
LUMINAIRE DATA	LAMP TYPE	(4) 400W HPS
	LAMP LUMENS	51000
	IES VERTICAL DISTRIBUTION	MEDIUM
	IES CONTROL OF DISTRIBUTION	CUT OFF
	IES LATERAL DISTRIBUTION	TYPE II
	TOTAL LIGHT LOSS FACTOR	0.7
LAYOUT DATA	SPACING	250 FT
	CONFIGURATION	ONE SIDE
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LANE	N/A

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 PERFORMANCES REQUIREMENTS SHALL BE THE MINIMUM ACCEPTANCE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED.

ILLUMINATION	AVERAGE HORIZONTAL ILLUMINATION - E_{avg}	0.6FC
	UNIFORMITY RATIO - E_{avg}/E_{min}	3.00
LUMINANCE	AVERAGE LUMINANCE - L_{avg}	0.4 Cd/m ²
	UNIFORMITY RATIOS - L_{avg}/L_{min}	3.5
	UNIFORMITY RATIOS - L_{max}/L_{min}	6.0
	MAXIMUM VEILING LUMINANCE RATIO - L_{vmax}/L_{avg}	0.3

**I-57 RAMPS LIGHTING
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TOWER 31

ROADWAY DATA	PAVEMENT WIDTH	16 FT
	NUMBER OF LANES	1
	MEDIAN WIDTH	N/A
	IES SURFACE CLASSIFICATION	R3
	Q ZERO VALUE	0.07
LIGHT POLE DATA	MOUNTING HEIGHT	100 FT
	MAST ARM LENGTH	4 FT
	POLE SET-BACK FROM EDGE OF PAVEMENT	65 FT
LUMINAIRE DATA	LAMP TYPE	(4) 400W HPS
	LAMP LUMENS	51000
	IES VERTICAL DISTRIBUTION	MEDIUM
	IES CONTROL OF DISTRIBUTION	CUT OFF
	IES LATERAL DISTRIBUTION	TYPE II
	TOTAL LIGHT LOSS FACTOR	0.7
LAYOUT DATA	SPACING	560 FT
	CONFIGURATION	ONE SIDE
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LANE	N/A

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 PERFORMANCES REQUIREMENTS SHALL BE THE MINIMUM ACCEPTANCE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED.

ILLUMINATION	AVERAGE HORIZONTAL ILLUMINATION - E_{avg}	0.6FC
	UNIFORMITY RATIO - E_{avg}/E_{min}	3.00
LUMINANCE	AVERAGE LUMINANCE - L_{avg}	0.4 Cd/m ²
	UNIFORMITY RATIOS - L_{avg}/L_{min}	3.5
	UNIFORMITY RATIOS - L_{max}/L_{min}	6.0
	MAXIMUM VEILING LUMINANCE RATIO - L_{vmax}/L_{avg}	0.3

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	PLOT SCALE = NONE	CHECKED - HS	REVISED -
	PLOT DATE = 12/17/2010	DATE - 12-17-2010	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

IDOT LUMINAIRE PERFORMANCE TABLE

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
					57	(46-2) I, HBR, VBR	KANKAKEE	558	266
					CONTRACT NO. 66409				
FED. ROAD DIST. NO. 3 ILLINOIS FED. AID PROJECT									