

PROJECT PHOTOMETRIC CRITERIA
(IDOT LUMINAIRE PERFORMANCE TABLE)

GIVEN CONDITIONS

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	33 FT
	MAST ARM LENGTH	6 FT
	POLE SET-BACK FROM EDGE OF PAVEMENT	4'-5"
LUMINAIRE DATA:	LAMP TYPE	HPS
	LAMP LUMENS	27,000
	IES VERTICAL DISTRIBUTION	M
	IES CONTROL OF DISTRIBUTION	FC
	IES LATERAL DISTRIBUTION	III
	TOTAL LIGHT LOSS FACTOR	0.684
LAYOUT DATA:	SPACING	218 FT
	CONFIGURATION	STAGRD
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LANE	1'-7"

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.

ROADWAY AREA		
IES ROADWAY CLASSIFICATION : MAJOR		
IES AREA CLASSIFICATION : LOW		
ILLUMINATION:	AVERAGE HORIZONTAL ILLUMINATION, (E _{AVE})	0.9 FC
	UNIFORMITY RATIO, (E _{AVE} /E _{MIN})	3.0
LUMINANCE:	AVERAGE LUMINANCE: (L _{AVE})	0.6 CD/M2
	UNIFORMITY RATIOS: (L _{AVE} /L _{MIN})	3.5
	(L _{MAX} /L _{MIN})	6.0
	MAXIMUM VEILING LUMINANCE RATIO: (L _V /L _{AVE})	0.3

BILL OF MATERIALS

ITEM NO.	PAY CODE	DESCRIPTION	UNIT	TOTAL QUANTITY
1	80400105	ELECTRIC SERVICE INSTALLATION, SPECIAL	EACH	1
2	81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	609
3	81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	137
4	81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	1,157
5	81300610	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 14" X 12" X 6"	EACH	1
6	81400100	HANDHOLE	EACH	1
7	81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	5,943
8	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	585
9	82500505	LIGHTING CONTROLLER, SPECIAL	EACH	1
10	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	6
11	84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	10
12	84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1
13	84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1

PREPARED BY: TJW - CHECKED BY: JLF

4/21/10

LIGHTING SCHEDULE

LOCATION	STATION	TO	STATION	81012600	81100600	81200230	81702120	81900200
				CONDUIT IN TRENCH PVC NONMETALLIC 2" DIA. (FOOT)	CONDUIT ATTACHED TO STRUCT GALV STEEL 2" DIA. (FOOT)	CONDUIT EMBEDDED TO STRUCT NONMETALLIC 2" DIA. (FOOT)	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8 (FOOT)	TRENCH AND BACKFILL FOR ELEC WORK 2" DIA (FOOT)
US 51 BUSINESS - LEFT								
	1231+53	TO	1233+12	165			510	161
	1233+12	TO	1233+20		8		24	
	1233+20	TO	1233+28			12	51	
	1233+28	TO	1234+10			87	276	
	1234+10	TO	1235+46			141	438	
	1235+46	TO	1237+64			224	702	
	1237+64	TO	1238+80			120	375	
	1238+80	TO	1238+90		10		30	
	1238+90	TO	1239+82	98			309	94
	1239+82	TO	1240+55	81				77
US 51 BUSINESS - RIGHT								
	1230+65	TO	1232+40	187			591	179
	1232+40	TO	1233+12	78			249	74
	1233+12	TO	1233+20		8		24	
	1233+20	TO	1234+10			93	279	
	1234+10	TO	1234+37			32	111	
	1234+37	TO	1236+55			224	702	
	1236+55	TO	1238+73			224	702	
PIER #2								
	CONT	TO	JB1		7		198	
	JB1	TO	LEFT DECK		11		48	
	JB1	TO	LEFT DECK		11		48	
	JB1	TO	RIGHT DECK		41		138	
	JB1	TO	RIGHT DECK		41		138	
TOTALS				609	137	1,157	5,943	585

PREPARED BY: TJW - CHECKED BY: JLF

4/21/10

FILE NAME = X:\CHIEF\2007\07\07\end\Plans\Lighting_01.dgn



USER NAME = msj	DESIGNED - JLF	REVISED -
PLOT SCALE = 1/8" = 1' IN.	DRAWN - JDK	REVISED -
PLOT DATE = 4/22/2010	CHECKED - DAR/TLO	REVISED -
	DATE - 04/21/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LUMINAIRE PERFORMANCE TABLE AND BILL OF MATERIAL			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
710	(502-VB) BR	MACON	79	20
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 74215	