

ILLINOIS DEPARTMENT OF TRANSPORTATION
LUMINAIRE PERFORMANCE TABLE - PROPOSED LIGHTING

04/06/11

GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	24 FT
	Number Of Lanes	2
	Median Width	14 FT
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	45 FT
	Mast Arm Length	NA FT
	Pole Set-Back From Edge Of Pavement	30 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	29000
	IES Vertical Distribution	M
	IES Control Of Distribution	NC
	IES Lateral Distribution	3
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	220 FT
	Configuration	Opposite
	Luminaire Overhang Over Edge Of Pavement Lane	-30 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})	4.0
LUMINANCE:	Average Luminance: (L _{Ave})	0.60 Cd/m ²
	Uniformity Ratios: (L _{Ave} /L _{Min})	3.5
	(L _{Max} /L _{Min})	6.0
	Maximum Veiling Luminance Ratio: (L _v /L _{Ave})	0.4

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ILLINOIS DEPARTMENT OF TRANSPORTATION
LUMINAIRE PERFORMANCE TABLE - UNDERPASS LIGHTING

04/08/11

GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	24 FT
	Number Of Lanes	2
	Median Width	NA FT
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	16 FT
	Mast Arm Length	NA FT
	Pole Set-Back From Edge Of Pavement	25 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	16000
	IES Vertical Distribution	M
	IES Control Of Distribution	NC
	IES Lateral Distribution	4
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	45 FT
	Configuration	Opposite
	Luminaire Overhang Over Edge Of Pavement Lane	-25 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})	4.0
LUMINANCE:	Average Luminance: (L _{Ave})	0.60 Cd/m ²
	Uniformity Ratios: (L _{Ave} /L _{Min})	3.5
	(L _{Max} /L _{Min})	6.0
	Maximum Veiling Luminance Ratio: (L _v /L _{Ave})	0.4

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GENERAL LIGHTING NOTES:

- EXISTING LIGHT POLES, LUMINAIRES AND FOUNDATIONS TO BE REMOVED, AND ALL ASSOCIATED HARDWARE AND APPURTENANCES, SHALL NOT BE SALVAGED BUT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ELECTRICAL WORK WITH OTHER TRADES.
- CONTRACTOR SHALL INSTALL LIGHT POLES AT THE LOCATIONS INDICATED ON THE PLANS, MAINTAINING ADEQUATE CLEARANCE FROM OVERHEAD UTILITY LINES. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY CLEARANCES PER THE NATIONAL ELECTRICAL SAFETY CODE AND/OR THE REQUIREMENTS OF THE UTILITY COMPANIES. THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION ONLY. REROUTING, DISCONNECTION, RELOCATION, PROTECTION ETC., OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED WITH THE "UNDERGROUND CONDUIT" PAY ITEM.
- NO LIGHTING CIRCUIT OR PORTION THEREOF SHALL BE REMOVED FROM NIGHTTIME OPERATION WITHOUT APPROVAL OF THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE LIGHTING SYSTEM UNTIL IDOT HAS TAKEN ACCEPTANCE OF THE SYSTEM. ALL EXISTING CIRCUITS AND CABLES TO THE LIGHT POLES SHALL BE MAINTAINED AS NEEDED AND THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
- BREAKAWAY DEVICES SHALL NOT BE INSTALLED FOR POLES LOCATED BEHIND RETAINING WALL OR MOUNTED ON BRIDGE PARAPET WALLS.

BILL OF MATERIAL

PAY ITEM	DESCRIPTION	UNIT	QUANTITY
80400100	ELECTRIC SERVICE INSTALLATION	EACH	3
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	450
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	80
81100605	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	60
81300560	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 18" X 6"	EACH	4
81603000	UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	1,034
81603010	UNIT DUCT, 600V, 2-1C NO. 10, 1/C NO. 10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	1,200
	UNIT DUCT, 600V, 4-1C NO. 10, 1/C NO. 10 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	550
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	4,521
82103900	LUMINAIRE, SODIUM VAPOR, MULTI MOUNT, 250 WATT	EACH	29
82107300	UNDERPASS LUMINAIRE, 150 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	8
82500330	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240 VOLT, 60 AMP	EACH	3
83062730	LIGHT POLE, WEATHERING STEEL, 45 FT. M.H., TENON MOUNT	EACH	18
83062735	LIGHT POLE, WEATHERING STEEL, 45 FT. M.H., TENON MOUNT-TWIN	EACH	1
83600357	LIGHT POLE FOUNDATION METAL, 15" BOLT CIRCLE, 8" X 8"	EACH	19
83800650	BREAKAWAY DEVICE, COUPLING, WITH STAINLESS STEEL SCREEN	EACH	68
84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	4
84200804	REMOVAL OF POLE FOUNDATION	EACH	4
X8410102	TEMPORARY LIGHTING SYSTEM	L SUM	1
	LUMINAIRE, METAL HALIDE, SURFACE MOUNT, ACCENT TO WATT	EACH	8

FILE NAME =	USER NAME = Gary Davis	DESIGNED - IDOT CENTRAL OFFICE	REVISED -
L:\IDOT\9986603\Draw\CA00_Sheets\09986603-shr-Light004-Rte13.dgn		DRAWN - GLD (CMT)	REVISED -
PLOT SCALE = 3/8"=1'-0"		CHECKED -	REVISED -
PLOT DATE = 1/26/2012		DATE - 12/9/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL LIGHTING NOTES & BILL OF MATERIAL
SKYLINE DR. - MARATHON DR. - SINCLAIR DR. - IL RT 13 INTERSECTIONS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(IX-1) VB-1, B-1, N-4, R-3	WILLIAMSON	367	159
			CONTRACT NO. 98859	
ILLINOIS FED. AID PROJECT				