STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

ILLINOIS CONTRACT NO. 76R88

INDEX OF SHEETS:

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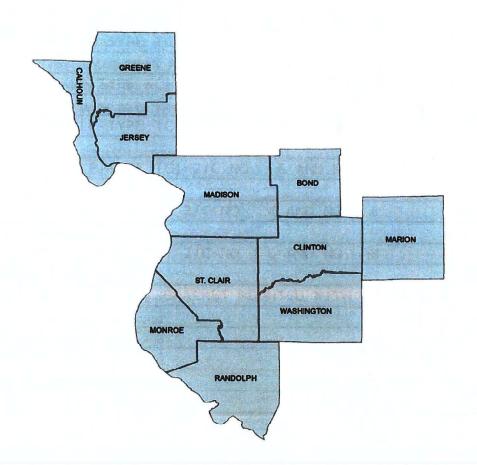
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- **COVER SHEET**
- 2. HIGHWAY STANDARDS AND GENERAL NOTES 3. 10. SUMMARY OF QUANTITIES
- **LUMINAIRE PERFORMANCE TABLES**

PROPOSED HIGHWAY PLANS

VARIOUS ROUTES SECTION DIST 8 L TS 2023-2 HIGHWAY LIGHTING, TRAFFIC SIGNAL **REPAIR & MAINTENANCE VARIOUS COUNTIES**

C-98-051-23



NOTE: WORK CAN BE LOCATED WITHIN ANY OF THE ABOVE NOTED COUNTIES WITHIN DISTRICT 8/REGION 5

CONTRACT NO. 76R88

1-800-892-0123

OR 811

ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

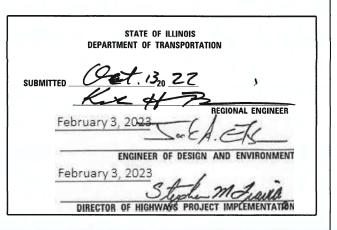
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

PROJECT ENGINEER: CHERYL KEPLAR

PROJECT MANAGER: MICHAEL PRESTON

LOCATION OF SECTION INDICATED THUS: - W//////

D-98-010-23



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

HIGHWAY STANDARDS

COMMITMENTS

NONE

·			
701001-02	701400-11	701456-05	880001-01
701006-05	701401-13	701601-09	880006-01
701101-05	701406-13	701606-10	886001-01
701106-02	701421-08	701701-10	886006-01
701201-05	701422-10	701901-08	
701206-05	701446-11	821100-02	
701301-04	701451-05	830001-03	
000001-08	001006	876001-04	

- 1. THE LOCATIONS OF THE REPAIR AREAS SHALL BE DETERMINED BY THE ENGINEER/DEPARTMENT.
- 2. NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.
- 3. ANY NECESSARY TRAFFIC CONTROL WILL BE PROVIDED BY THE CONTRACTOR APPROPRIATE STANDARDS ARE LISTED.
- 4. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. (PHONE 800 892-0123 OR 811) OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY.
- 5. A FLAGGER SHALL BE REQUIRED AT ALL TIMES WHEN WORKERS OR EQUIPMENT ARE ENCROACHING ON THE LANE OF TRAFFIC.
- 45 AND 55 MPH SIGNS ARE INCLUDED IN ALL INTERSTATE LANE CLOSURES. IF THE LANE CLOSURE DURATION IS LESS THAN 4 HOURS, THE 45 AND 55 MPH SIGNS ARE NOT REQUIRED.
- 7. ANY WORK ORDER MAY BE CANCELED AT THE ENGINEER'S/DEPARTMENT'S DISCRETION.
- 8. NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED.

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SHEET 01 OF 01 SHEETS STA. __+__

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				TRAFFIC SIGNALS
CODE			TOTAL	0021
NO.	ITEM	UNIT	QUANTITY	URBAN
80300100	LOCATING UNDERGROUND CABLE	FOOT	200,000	200,000
82110005	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION E	EACH	5	5
82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	20	20
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	30	30
82110032	LUMINAIRE, LED, SIGN LIGHTING, OUTPUT DESIGNATION E	EACH	5	5
0.7000010		FOOT	5.00	500
87000240	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 600V (XLP-TYPE TC) 2/C NO. 2 AND NO. 4	FOOT	500	500
87000405	ELECTRIC CABLE ASSEMBLY IN TRENCH, 600V (XLP-TYPE TC) 2/C NO. 2 AND NO. 4	FOOT	500	500
87000403	ELECTRIC CABLE ASSEMBLT IN TRENCH, 0000 (ALT-THE TC) 2/C NO. 2 AND NO. 4	1001	300	300
87000775	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 600V (XLP-TYPE TC) 2/C NO. 4 AND NO. 6	FOOT	500	500
87000885	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 600V (XLP-TYPE TC) 2/C NO. 6 AND NO. 8	FOOT	500	500
87005275	ELECTRIC CABLE ASSEMBLY IN TRENCH, 600V (XLP-TYPE TC) 2/C NO. 4 AND NO. 6	FOOT	500	500
0,003273	ELECTRIC CROLL RESEMBLY IN TREMENT, COOK (RET THE TOY 2/6 NO. 1 AND NO. 0	1001	300	300
87005385	ELECTRIC CABLE ASSEMBLY IN TRENCH, 600V (XLP-TYPE TC) 2/C NO. 6 AND NO. 8	FOOT	1000	1000
88102825	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	40	40
33132323	LESS THAT STATE TELEST TO FORTING WITE, LEST TIMES, STATES WITH COURT DOWN TIMEN	2,1011	. 0	
88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	30	30

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SUM	MARY	OF QU	ANT	ITIES		
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				CONSTR. CODE
				100% STATE
				TRAFFIC SIGNALS
CODE			TOTAL	0021
NO.	ITEM	UNIT	QUANTITY	URBAN
88800100	PEDESTRIAN PUSH-BUTTON	EACH	100	100
X0327495	JOURNEYMAN ELECTRICIAN	HOUR	3500	3500
X0327496	APPRENTICE ELECTRICIAN	HOUR	350	350
V0227407	DICK UP TRUCK	HOUD	700	700
X0327497	PICK-UP TRUCK	HOUR	700	700
X0327500	ARROWBOARD (TRAILER MOUNTED)	HOUR	20	20
X0327501	ATTENUATOR, CRASH (TRUCK MOUNTED)	HOUR	500	500
X0327734	TRUCK CRANE	HOUR	500	500
V1.400006	LED LAMB MODULE REPLACEMENT	E A GU	200	200
X1400096	LED LAMP MODULE REPLACEMENT	EACH	300	300
X7010218	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	29	29
V0760200	ACCECCADA E DEDECTRAMA CACMALO	5 A CI I	100	100
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	100	100
X8760201	PEDESTRIAN PUSH-BUTTON POST	EACH	50	50
V0000400	DETECTOR LOOP CRECIAL	FOOT	F000	F000
18860400	DETECTOR LOOP, SPECIAL	FOOT	5000	5000
XP000015	DIGGER DERRICK	HOUR	50	50
XP000028	LAROR	HOUR	100	100
AF 000020	LADON	HOUR	100	100

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SHEET 02	OF	08	SHEETS	STA	TO STA

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				TRAFFIC SIGNALS
CODE			TOTAL	0021
NO .	ITEM	UNIT	QUANTITY	URBAN
XP000029	BUCKET TRUCK-VAN FOR TRAFFIC SIGNALS	HOUR	700	700
XP000030	BUCKET TRUCK FOR HIGHWAY LIGHTING	HOUR	700	700
XP000031	POLE TRAILER	HOUR	20	20
XP000032	FLATBED TRAILER	HOUR	100	100
VD000101	ATO FA FUCE 200	E A CI I	300	200
XP000101	ATQ 5A FUSE 200	EACH	300	300
YP000102	FNQ 5A FUSE	EACH	300	300
XF000102	TNQ SA FUSE	EACH	300	300
XP000104	FNM 10A FUSE	EACH	10	10
XI 000104	10/1 10/1 032	LACIT	10	10
XP000105	FRNR 60A FUSE	EACH	10	10
XP000106	BUCHANAN FUSEHOLDER KIT	EACH	50	50
XP000115	150W HPS LAMP	EACH	100	100
XP000116	250W HPS LAMP	EACH	100	100
XP000118	400W HPS LAMP	EACH	350	350
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XP000119	150W 240-480V BALLAST KIT	EACH	25	25
VD000133	250W 240 400V PALLACT WIT	E A CL		F 0
XP000120	250W 240-480V BALLAST KIT	EACH	50	50

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SUMMARY OF QUANTITIES								
	SHEET 03	OF 08	SHEETS	STA+	TO STA+			

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHE	
VAR	DIST 8 L TS 202	DIST 8 L TS 2023-2 VARIOUS 1			5
		CONTRACT	NO. 76	₹88	
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				100% STATE
CODE NO .	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS 0021 URBAN
XP000122	400W 240-480V BALLAST KIT	EACH	150	150
	SD-100 BU STARTER	EACH	5	5
XP000124	SURGE ARRESTOR (EDCO MODEL SHA-XXX3) X=20-240-480 VOLT	EACH	5	5
XP000125	PHOTO CONTROL, 105V-285V (ALR-MODEL SSTPV-ON)	EACH	5	5
XP000126	12XLPE 1/C COPPER WIRE	FOOT	4615	4615
XP000127	8 XLP-TYPE 1/C C WIRE	FOOT	500	500
XP000128	6 XLP-TYPE 1/C C WIRE	FOOT	10282	10282
XP000129	60A LIGHTING CONTRACTOR	ΕΛCH	30	30
XP000130	100A LIGHTING CONTRACTOR	EACH	10	10
XP000132	50A CIRCUIT BREAKER, 1P	EACH	60	60
XP000135	50A CIRCUIT BREAKER, 2P	EACH	5	5
XP000137	150A CIRCUIT BREAKER, 2P	EACH	30_	30
XP000138	200A CIRCUIT BREAKER, 2P	EACH	30	30
XP000139	BREAKAWAY COUPLING, 1"	EACH	30	30

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							ROUTE	DIST 8 L TS 2023-2
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				TRAFFIC SIGNALS
CODE			TOTAL	0021
NO.	ITEM	UNIT	QUANTITY	URBAN
XP000140	1-4" X 1-4" STAINLESS STEEL MESH	SQFT	10	10
XP000141	ALUMINUM SIGNAL BASE, SQUARE (PELCO)	EACH	80	80
XP000142	ALUMINUM SIGNAL POST, 13', SCH 80 (PELCO)	EACH	25	25
XP000145	MAST ARM BRACKET, 3 SECTION (PELCO AB 116)	EACH	30	30
XP000146	MAST ARM BRACKET, 4 SECTION (PELCO AB 116)	EACH	30	30
VD000147	MAST ADM DDACKET E CECTION (DELCO AD 116)	E A CI I	40	40
XP000147	MAST ARM BRACKET, 5 SECTION (PELCO AB 116)	EACH	40	40
XP000161	LAMP, QUARTZ HALOGEN, 43W, 10.8V (GE OR EQUIVALENT)	EACH	80	80
XI 000101	CANT COARTS TIALOGEN, 45W, 10.0V (GE OR EQUIVALENT)	LACIT	00	00
XP000164	SIGNAL HEAD, POLYCARBONATE, LED, 1-SECTION, 12", R OR Y (ECONOLITE OR MCCAIN)	ΕΛCH	20	20
XP000165	SIGNAL HEAD, POLYCARBONATE, LED, 3-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	120	120
XP000166	SIGNAL HEAD, POLYCARBONATE, LED, 4-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	20	20
XP000167	SIGNAL HEAD, POLYCARBONATE, LED, 5-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	30	30
XP000168	PEDESTRIAN HEAD, POLYCARBONATE, LED, 2-SECTION, 12", (ECONOLITE OR MCCAIN)	EACH	40	40
XP000170	ELECTRIC CABLE, 2-C, #14, TW, SH	FEET	3,000	3,000
VD 0 0 0 1 7 1	SUFFERENCE CARLES OF MACHINE SU		1.0	1.0
XP0001/1	ELECTRIC CABLE, 3 PR, #18, TW, SH	FEET	10	10
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CODE NO.	ITEM	UNIT	TOTAL QUANT I TY	TRAFFIC SIGNALS 0021 URBAN
XP000172	ELECTRIC CABLE, 5 PR, #18, TW, SH	FEET	10	10
XP000173	ELECTRIC CABLE, 6 PR, #18, TW, SH	FEET	2,200	2,200
XP000174	ELECTRIC CABLE, 2-C, #14	FEET	1,500	1,500
XP000175	ELECTRIC CABLE, 3-C, #14	FEET	1,500	1,500
XP000176	ELECTRIC CABLE, 5-C, #14	FEET	5,000	5,000
XP000177	ELECTRIC CABLE, 7-C, #14	FEET	2,000	2,000
XP000179	GROUND ROD, 8', COPPER CLAD	EACH	20	20
XP000180	SPLICE KIT (3-M SCOTCHCAST #72-N1)	EACH	10	10
XP000181	LOOP SEALANT (BONDO P606)	GAL	10	10
XP000186	J BOX, NEMA, 4X, SS, 6"X8"X4", W-ALUMINUM BACKPLATE & LOCK KIT	EACH	10	10
XP000187	HANDHOLE, FRAME & COVER (NEENAH R-6660-JP)	EACH	5	5
XP000188	HANHOLE, COVER ONLY (NEENAH R-6660-JP)	EACH	5	5
XP000191	SIGN, ILLUMINATED, FIBEROPTIC-TYPE, 24"X30" "NO LEFT-RIGHT TURN" OR "LT TURN YIELD"	EACH	5	5
XP000192	SIGN, ILLUMINATED, FIBEROPTIC-TYPE, 24"X30" SYMBOLIC "NO LEFT/RIGHT TURN"	EACH	5	5

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

SUMMARY OF QUANTITIES

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ı				TRAFFIC SIGNALS
CODE			TOTAL	0021
NO.	ITEM	UNIT	QUANTITY	URBAN
XP000193	MONITOR, NEMA CONFLICT, 12 CHANNEL (EDI SSM-12E)	EACH	10	10
VB000101	DELAY FLACH TRANSFER (MIDTEY 126 C2T2A1)	F.A.G.I.I		
XP000194	RELAY, FLASH TRANSFER, (MIDTEX 136-62T3A1)	EACH	5	5
XP000195	DETECTOR, NEMA DIGITAL, 1-CH, SHELF MOUNT (DETECTOR SYSTEMS OR RENO)	EACH	5	5
XP000196	DETECTOR, NEMA DIGITAL, 2-CH, RACK MOUNT (DETECTOR SYSTEMS OR RENO)	EACH	5	5
XP000197	DETECTOR, POWER SUPPLY, RACK MOUNT (DETECTOR SYSTEMS OR RENO)	EACH	5	5
XP000198	CABINET, SIGNAL CONTROLLER, ALUM., TYPE IV, W-MONITOR & ALL PLUG-INS, COMPLETE (ECONOLITE)	EACH	5	5
XP000199	FLASHER, NEMA	EACH	5	5
		2,,,,,,		
XP000200	LOAD SWITCH, NEMA	EACH	20	20
XP000203	COLD GALVANIZING, SPRAY CAN	EACH	5	5
XP000205	ALUMINUM LIGHT POLE MAST ARM, 15', TRUSS STYLE	EACH	10	10
XP000207	ALUMINUM LIGHT POLE, 45'. COMPLETE, RD,W-TENON TOP, W-T BASE, 17" B.C., DK. BRONZE POWDER COAT	EACH	10	10
XP000209	UPPER AND LOWER ARM ASSEMBLY, UNPAINTED ALUMINUM	EACH	80	80
XP000210	FLASHER CONTROLLER CABINET ASSEMBLY, NEMA (PELCO SE-1005 OR EQUIVALENT)	EACH	10	10
XP000300	TRAFFIC SIGNAL RELAMPING	EACH	5	5

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				TRAFFIC SIGNALS
CODE			TOTAL	0021
NO.	ITEM	UNIT	QUANTITY	URBAN
XP000301	TRAFFIC SIGNAL LAMP REPLACEMENT	EACH	5	5
XP000302	FLASHING BEACON INSPECTION	EACH	5	5
XP000303	TOWER LIGHTING INSPECTION	EACH	5	5
XP000304	REPLACE SERVICE INSTALLATION, COMPLETE	EACH	5	5
VD000007	DEDA ID TRAFFIC CICNAL MAGCINDOWN	E A CI I	0.0	0.0
XP000307	REPAIR TRAFFIC SIGNAL KNOCKDOWN	EACH	80	80
XB000308	REPAIR TRAFFIC BEACON KNOCKDOWN	EACH	10	10
XF000308	REFAIR TRAITIC BEACON KNOCKDOWN	EACH	10	10
XPOO0309	REPAIR TRAFFIC LIGHT POLE KNOCKDOWN	EACH	50	50
XI 000303	- TOTAL TOTAL KNOCKDOWN	LACIT		30
XP000310	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, COUPLING	ΕΛCH	5	5
			_	
XP000311	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, TRANSFORMER BASE	EACH	5	5
XP000312	REPLACE TRAFFIC SIGNAL POST BASE ASSEMBLY	EACH	5	5

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ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

LUMINAIRE PERFORMANCE TABLE LED replacement for 400W HPS Horizontal Mount luminaire

Number of Lanes (in One direction Only)

Lane Width

Median Width

Q-Zero Value

Mounting Height

naire Type

BUG Rating

Configuration

I.E.S. Surface Classification

Luminaire Overhang From

I.E.S. Vertical Distribution

I.E.S. Lateral Distribution

Total Light Loss Factor

Edge of Pavement (White Line)

ILLINOIS DEPARTMENT OF TRANSPORTATION

GIVEN CONDITIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

Number of Lanes (One Direction Only)

Lane Width

Median Width

Mounting Height

Luminaire Type

BUG Rating

Spacing

Configuration

Q-Zero Value

I.E.S. Surface Classification

Luminaire Overhang From Edge of Pavement (White Line)

I.E.S. Vertical Distribution

I.E.S. Lateral Distribution

Average Illuminance, EAVE

Uniformity Ratio, Eave/FMIN

Total Light Loss Factor

ROADWAY DATA

LIGHT POLE DATA

LUMINAIRE DATA

LAYOUT DATA

ILLUMINANCE

LUMINANCE

LED Replacement for 250W HPS Multi-Mount Luminaire (replacement luminaire shall be mounted horizontally)

GIVEN CONDITIONS

12 ft

0 ft

R3

.07

45 ft

-30 ft

LED

Medium

U = 0

Type III or IV

0.684

145 ft

One Sided

0.9 fc to 1.4 fc

< 2 O.1

LED replacement for 250W HPS Horizontal Mount luminaire

GIVEN	CONDE	TIONS

ROADWAY DATA	Lane Width	12 ft		
	Number of Lanes (In One Direction Only)	3		
	Median Width	0 ft		
	I.E.S. Surface Classification	R3		
	Q-Zero Value	.07		
LIGHT POLE DATA	Mounting Height	45 ft		
	Luminaire Overhang From Edge of Pavement (White Line)	0 ft		
LUMINAIRE DATA	Luminaire Type	LED		
	I.E.S. Vertical Distribution	Medium		
	BUG Rating	U = 0		
	I.E.S. Lateral Distribution	Type II or III		
	Total Light Loss Factor	0.684		
LAYOUT DATA	Spacing	160 ft		
	Configuration	One Sided		

LAYOUT DATA

ROADWAY DATA

LIGHT POLE DATA

1. Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF) = 0.80, and "Equipment factors" (EF) = 0.95.

12 ft

0 ft

R3

.07

45 ft

0 ft

LED

Medium

U = 0

Type II or III

0.684

240 ft

One Sided

Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF) = 0.80, and "Equipment factors" (EF) = 0.95.

PERFORMANCE REQUIREMENTS

1. Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF)

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

= 0.80, and "Equipment factors" (EF) = 0.95.

ILLUMINANCE	Average Illuminance, EAVE	0.9 fc to 1.4 fc
	Uniformity Ratio, E _{AVE} /E _{MIN}	≤ 3.0:1
LUMINANCE	Average Luminance, Lave	0.6 cd/m² to 0.9 cd/m²
	Uniformity Ratio, Lave/Lmin	≤ 3.5:1
	Uniformity Ratio, L _{MAX} /L _{MIN}	≤ 6.0:1
	Max. Veiling Luminance Ratio, Lv/Lave	≤ 0.3:1

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PERFORMANCE REQUIREMENTS

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

ILLUMINANCE	Average Illuminance, EAVE	0.9 fc to 1.4 fc			
	Uniformity Ratio, EAVE/EMIN	≤ 3.0:1			
LUMINANCE	Average Luminance, L _{AVE}	0.6 cd/m ² to 0.9 cd/m ²			
	Uniformity Ratio, LAVE/LMIN	≤ 3.5:1			
	Uniformity Ratio, L _{MAX} /L _{MIN}	≤ 6.0:1			
	Max. Veiling Luminance Ratio, Lv/Lave	≤ 0.3:1			

PERFORMANCE REQUIREMENTS

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

And the same of th	23.0.1				
Average Luminance, L _{AVE}	0.6 cd/m ² to 0.9 cd/m ²				
Uniformity Ratio, LAVE/LMIN	≤ 3.5:1				
Uniformity Ratio, LMAX/LMIN	≤ 6.0:1				
Max. Veiling Luminance Ratio, Lv/Lave	≤ 0.3:1				

ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

LED Replacement for 400W HPS Multi-Mount Luminaire (replacement luminaire shall be mounted horizontally)

GIVEN CONDITIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

LED Replacement for 150W HPS Underpass Luminaire

GIVEN CONDITIONS

ROADWAY DATA	Lane Width	12 ft	ROADWAY DATA	Lane Width	12 ft
NOADWAT DATA	Number of Lanes (in One Direction Only)	7-0		Number of Lanes (in One Direction Only)	2
	Median Width	4		Median Width	0 ft
	I.E.S. Surface Classification	0 ft		I.E.S. Surface Classification	R3
		R3		Q-Zero Value	.07
	Q-Zero Value	.07			
LIGHT POLE DATA	Mounting Height	45 ft	LIGHT POLE DATA	Mounting Height	16 ft
	Luminaire Overhang From Edge of Pavement (White Line)	-30 ft		Luminaire Overhang From Edge of Pavement (White Line)	-20 ft
LUMINAIRE DATA	Luminaire Type	LED	LUMINAIRE DATA	Luminaire Type	LED
	I.E.S. Vertical Distribution	Medium		I.E.S. Vertical Distribution	Medium
	BUG Rating	U = 0		BUG Rating	U = 0
	I.E.S. Lateral Distribution	Type III or IV		I.E.S. Lateral Distribution	Type III or IV
	Total Light Loss Factor	0.684		Total Light Loss Factor	0.684
LAYOUT D ATA	Spacing	155 ft	LAYOUT DATA	Spacing	60 ft
	Configuration	One Sided		Configuration	One Sided

PERFORMANCE REQUIREMENTS

1. Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF)

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

= 0.80, and "Equipment factors" (EF) = 0.95.

Average Illuminance E...

ILLUMINANCE	Average murimance, EAVE	0.9 fc to 1.4 fc				
	Uniformity Ratio, EAVE/EMIN	≤ 3.0:1				
LUMINANCE	Average Luminance, L _{AVE}	0.6 cd/m ² to 0.9 cd/m ²				
	Uniformity Ratio, LAVE/LMIN	≤ 3.5:1				
	Uniformity Ratio, LMAX/LMIN	≤ 6.0:1				
	Max. Veiling Luminance Ratio, L _V /L _{AVE}	≤ 0.3:1				

PERFORMANCE REQUIREMENTS

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LUMINANCE	Average Luminance, Lave	0.6 cd/m ² to 0.9 cd/m ²
	Uniformity Ratio, LAVE/LMIN	≤ 3.5:1
	Uniformity Ratio, L _{MAX} /L _{MIN}	≤ 6.0:1
	Max. Veiling Luminance Ratio, L _V /L _{AVE}	≤ 0.3:1

	USER NAME = \$USER\$	DESIGNED	REVISED					SECTION	COUNTY TOTAL SHE	ĒΠ
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	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 76R88			
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