ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE – UNDERPASS

GIVEN CONDITIONS

| ROADWAY DATA: | Pavement Width | 36 FT |
|------------------|-------------------------------------|-------------|
| | Number Of Lanes | 3 |
| | Median Width | N/A |
| | IES Surface Classification | R3 |
| | Q-Zero Value | .07 |
| LIGHT POLE DATA: | Mounting Height | 16 FT |
| | Mast Arm Length | |
| | Pole Set-Back From Edge Of Pavement | 16 FT |
| LUMINAIRE DATA: | Lamp Type | HPS |
| | Lamp Lumens | 16.000 |
| | IES Vertical Distribution | Very Short |
| | IES Control Of Distribution | Non-Cutoff |
| | IES Lateral Distribution | 4 |
| | Total Light Loss Factor | 0.684 |
| LAYOUT DATA: | Spacing | 50 FT |
| | Configuration | Single Side |
| | Luminaire Overhang Over Edge | |
| | Of Pavement Lane | -16 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}) Uniformity Ratio, (E _{Ave} /E _{Min}) | | 0.9 3.0 | |
|---------------|--|---------------------------------------|------------|-------------|
| LUMINANCE: | Average Luminance | e: (L _{Ave}) | 0.6 | Cd/m² |
| | Uniformity Ratios: | (LAve/LMin) | 3.5 | |
| | 1990 - J. Magneter (1991) - Reg. (1992) 2-40, Americans | (L _{Max} /L _{Min}) | 6.0 | |
| | Maximum Veiling | | | |
| | Luminance Ratio: | (L _V /L _{Ave}) | 0.3 | |

ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE – PROPOSED LIGHTING

GIVEN CONDITIONS

| ROADWAY DATA: | Pavement Width | 16 | FT |
|--|-------------------------------------|-------|--------|
| | Number Of Lanes | 1 | |
| | Median Width | | FT |
| | IES Surface Classification | | R3 |
| | Q-Zero Value | | .07 |
| LIGHT POLE DATA: | Mounting Height | 45 | FT |
| | Mast Arm Length | N/A | FT |
| | Pole Set-Back From Edge Of Pavement | 30 | FT |
| LUMINAIRE DATA: | Lamp Type | HPS | |
| | Lamp Lumens | 2800 |) |
| | IES Vertical Distribution | M | |
| | IES Control Of Distribution | NC | |
| | IES Lateral Distribution | 3 | |
| | Total Light Loss Factor | 0.684 | |
| LAYOUT DATA: | Spacing | 170 | FT |
| The second of th | Configuration | Sing | e Side |
| | 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}) _ | 0.9 | <u>tc</u> |
|---------------|--|---------------------------------------|-----|-------------------|
| | Uniformity Ratio, (E _{Ave} /E _{Min}) | | 3.0 | |
| LUMINANCE: | Average Luminance | e: (L _{Ave}) | 0.6 | Cd/m ² |
| | Uniformity Ratios: | (LAve/LMin) | 3.5 | |
| | 546 () 1966 () 19 66 () 1966 () 19 | (L _{Max} /L _{Min}) | 6.0 | |
| | Maximum Veiling | | | |
| | Luminance Ratio | (L./L) | 0.3 | |

ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE – PROPOSED BRIDGE LIGHTING

GIVEN CONDITIONS

| | | FT |
|---|-------|------|
| Number Of Lanes | 1 | |
| Median Width | - | FT |
| IES Surface Classification | | R3 |
| Q-Zero Value | | .07 |
| LIGHT POLE DATA: Mounting Height | 12 | FT |
| Mast Arm Length | | FT |
| Pole Set-Back From Edge Of Pavement | 0.5 | FT |
| LUMINAIRE DATA: Lamp Type | HPS | |
| Lamp Lumens | 4000 | : |
| IES Vertical Distribution | M | |
| IES Control Of Distribution | С | |
| IES Lateral Distribution | 4 | |
| Total Light Loss Factor | 0.684 | |
| LAYOUT DATA: Spacing | 52 | FT |
| Configuration | Oppo | site |
| Luminaire Overhang Over Edge Of Pavement Lane | -0.5 | 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}) Uniformity Ratio, (E _{Ave} /E _{Min}) | | 0.5 10 | fc |
|---------------|---|--|-----------|-------|
| LUMINANCE: | Average Luminance Uniformity Ratios: | e: (L _{Ave}) (L _{Ave} /L _{Min}) (L _{Max} /L _{Min}) | | Cd/m² |
| | Maximum Veiling Luminance Ratio: | (L _V /L _{Ave}) | | |

 COUNTY
 TOTAL SHEET NO.

 EFFINGHAM
 1098
 329

 CONTRACT
 NO.
 74299

| FILE NAME = | USER NAME = paul | DESIGNED | - | VG | REVISED - | |
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| | PLOT DATE = 3/18/2011 | DATE | _ | 8-5-10 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

| | | F.A.I RTE. | SECTION |
|-------------------------------------|---------|---------------|------------------------------|
| LIGHTING DETAILS PERFORMANCE TABLES | | | (25-3,4)R |
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