

**P Category Lighting - AS/NZS 1158.3.1:2005**

\*\*\*\*\*

**ELC - Essential Lighting Consultancy Ltd**

I-table Filename: C:\Users\Steve Muir\Documents\Lighting Design\Long  
ford Bridge GDC\NXT Solar\2ES IES files\2ES IES fi  
les\24 - 350mA\NXT-24S-350mA-2ES-3000K.cie

Job Name: Longford Bridge PP5 Solar option shared Pathway

Luminaire Description: 24LED 2ES 350mA 3233 lms

Lamp Wattage & Type: 28W DC

Initial Lamp Flux: 3233 lms

Maintenance Factor: 0.8

Stores Code:

Upcast Angle: 0 degrees

Arrangement: Single Side

Offset Distance: -.3 m [ ie. away from Path edge ]

Upward Waste Light Ratio: .0 %

Light Source: LED - Light Emitting Diode

Luminaire Classification: Not specified

**Lighting Category: User Defined**

Illuminance Criteria: Average Illuminance (Eav)  $\geq 0.85$  lx  
(Maintained values) Minimum Illuminance (Eph)  $\geq 0.14$  lx  
Illuminance Uniformity (Up)  $\leq 5$  *max/ave.*  
Vertical Illuminance (E<sub>pv</sub>)  $\geq 0.02$  lx  
(E<sub>pv</sub> calculated on plane 1.5m above ground  
and contribution from luminaire in adjacent  
span used in calculations)

Calculation Grid: Dependant on Path width (refer Figure 3.8  
of AS/NZS 1158.2)

| Mounting<br>Height | Maximum Spacing for different<br>Path Widths |
|--------------------|----------------------------------------------|
|--------------------|----------------------------------------------|

|     |           |
|-----|-----------|
| 2.2 | 3.0       |
| 7.5 | 54.2 54.1 |

Value/s in above table are all in metres.

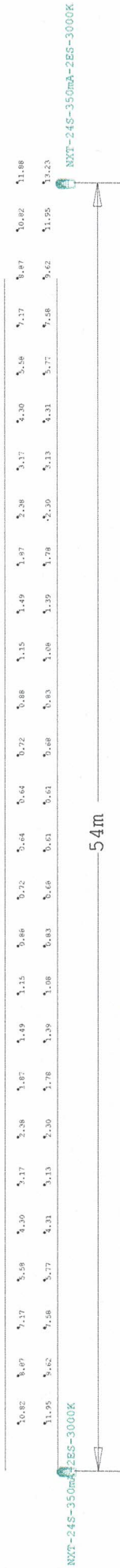
The table contains maximum spacings which, for the specified luminaire and lamp combination, provide compliance with the User Defined light technical parameters (LTPs) nominated above.

Refer next page for list of LTP's at compliant maximum spacings.

Refer following page/s for illuminance values at grid points.

| Luminaire Schedule                                                                  |     |                         |                       |            |            |
|-------------------------------------------------------------------------------------|-----|-------------------------|-----------------------|------------|------------|
| Symbol                                                                              | Qty | Label                   | Total Lamp Lumens LLF | Lum. Watts | BUG Rating |
|  | 2   | NXT-24S-350mA-2ES-3000K | N.A.                  | 28         | 0.00       |
|                                                                                     |     |                         | 0.800                 |            | B1-U0-G1   |

2.2m



| Luminaire Location Summary |                         |    |      |     |      |
|----------------------------|-------------------------|----|------|-----|------|
| LumNo                      | Label                   | X  | Y    | Z   | Tilt |
| 1                          | NXT-24S-350mA-2ES-3000K | 0  | -0.3 | 7.5 | 0    |
| 2                          | NXT-24S-350mA-2ES-3000K | 54 | -0.3 | 7.5 | 0    |

| Calculation Summary   |             |       |      |       |      |
|-----------------------|-------------|-------|------|-------|------|
| Label                 | CalcType    | Units | Avg  | Max   | Min  |
| Horizontal on pathway | Illuminance | Lux   | 4.17 | 13.23 | 0.61 |
|                       |             |       |      |       | N.A. |

| Luminaire Schedule                                                                  |     |                         |  |  |                   |       |            |      |            |
|-------------------------------------------------------------------------------------|-----|-------------------------|--|--|-------------------|-------|------------|------|------------|
| Symbol                                                                              | Qty | Label                   |  |  | Total Lamp Lumens | LLF   | Lum. Watts | UWLR | BUG Rating |
|  | 2   | NXT-24S-350mA-2ES-3000K |  |  | N.A.              | 0.800 | 28         | 0.00 | B1-U0-G1   |

2.2m

|       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 3.85  | 3.51 | 3.15 | 2.91 | 2.60 | 2.30 | 2.07 | 1.81 | 1.54 | 1.27 | 1.01 | 0.85 | 0.77 | 0.85 | 1.01 | 1.27 | 1.54 | 1.81 | 2.07 | 2.30 | 2.60 | 2.91 | 3.15 | 3.51 | 3.85  | 3.99  |
| 5.37  | 4.65 | 4.10 | 3.67 | 3.21 | 2.73 | 2.27 | 1.96 | 1.65 | 1.31 | 1.03 | 0.85 | 0.76 | 0.85 | 1.03 | 1.31 | 1.65 | 1.96 | 2.27 | 2.73 | 3.21 | 3.67 | 4.10 | 4.65 | 5.37  | 5.65  |
| 7.52  | 6.18 | 5.15 | 4.43 | 3.85 | 2.99 | 2.43 | 2.01 | 1.65 | 1.29 | 1.00 | 0.82 | 0.73 | 0.82 | 1.00 | 1.29 | 1.65 | 2.01 | 2.43 | 2.99 | 3.85 | 4.43 | 5.15 | 6.18 | 7.52  | 8.21  |
| 9.62  | 7.67 | 6.17 | 5.08 | 4.19 | 3.15 | 2.44 | 1.97 | 1.59 | 1.24 | 0.96 | 0.79 | 0.70 | 0.79 | 0.96 | 1.24 | 1.59 | 1.97 | 2.44 | 3.15 | 4.19 | 5.08 | 6.17 | 7.67 | 9.62  | 10.66 |
| 10.22 | 8.45 | 6.89 | 5.46 | 4.27 | 3.17 | 2.41 | 1.91 | 1.53 | 1.18 | 0.91 | 0.74 | 0.66 | 0.74 | 0.91 | 1.18 | 1.53 | 1.91 | 2.41 | 3.17 | 4.27 | 5.46 | 6.89 | 8.45 | 10.22 | 11.24 |
| 11.59 | 9.37 | 7.41 | 5.69 | 4.31 | 3.15 | 2.35 | 1.83 | 1.44 | 1.11 | 0.86 | 0.70 | 0.63 | 0.70 | 0.86 | 1.11 | 1.44 | 1.83 | 2.35 | 3.15 | 4.31 | 5.69 | 7.41 | 9.37 | 11.59 | 12.83 |
| 11.70 | 9.60 | 7.62 | 5.80 | 4.30 | 3.10 | 2.25 | 1.72 | 1.34 | 1.04 | 0.80 | 0.66 | 0.58 | 0.66 | 0.80 | 1.04 | 1.34 | 1.72 | 2.25 | 3.10 | 4.30 | 5.80 | 7.62 | 9.60 | 11.70 | 12.93 |
| 9.89  | 8.42 | 6.93 | 5.33 | 3.96 | 2.86 | 2.04 | 1.53 | 1.19 | 0.93 | 0.72 | 0.60 | 0.53 | 0.60 | 0.72 | 0.93 | 1.19 | 1.53 | 2.04 | 2.86 | 3.96 | 5.33 | 6.93 | 8.42 | 9.89  | 11.00 |
| 7.51  | 6.47 | 5.53 | 4.38 | 3.26 | 2.33 | 1.68 | 1.27 | 1.00 | 0.80 | 0.63 | 0.53 | 0.47 | 0.53 | 0.63 | 0.80 | 1.00 | 1.27 | 1.68 | 2.33 | 3.26 | 4.38 | 5.53 | 6.47 | 7.51  | 8.25  |
| 4.71  | 4.14 | 3.74 | 3.04 | 2.40 | 1.77 | 1.28 | 0.97 | 0.76 | 0.62 | 0.50 | 0.43 | 0.39 | 0.43 | 0.50 | 0.62 | 0.76 | 0.97 | 1.28 | 1.77 | 2.40 | 3.04 | 3.74 | 4.14 | 4.71  | 5.09  |
| 2.65  | 2.29 | 1.96 | 1.77 | 1.35 | 1.10 | 0.88 | 0.67 | 0.53 | 0.44 | 0.37 | 0.32 | 0.30 | 0.32 | 0.37 | 0.44 | 0.53 | 0.67 | 0.88 | 1.10 | 1.35 | 1.77 | 1.96 | 2.29 | 2.65  | 2.87  |

NXT-24S-350mA-2ES-3000K

5.4m

NXT-24S-350mA-2ES-3000K

| Calculation Summary            |             |  |  |       |      |       |      |         |  |
|--------------------------------|-------------|--|--|-------|------|-------|------|---------|--|
| Label                          | CalcType    |  |  | Units | Avg  | Max   | Min  | Max/Avg |  |
| Horizontal on pathway          | Illuminance |  |  | Lux   | 4.17 | 13.23 | 0.61 | N.A.    |  |
| Horizontal surround on pathway | Illuminance |  |  | Lux   | 3.11 | 12.93 | 0.30 | N.A.    |  |

| Luminaire Location Summary |                         |    |      |     |        |      |  |  |  |
|----------------------------|-------------------------|----|------|-----|--------|------|--|--|--|
| LumNo                      | Label                   | X  | Y    | Z   | Orient | Tilt |  |  |  |
| 1                          | NXT-24S-350mA-2ES-3000K | 0  | -0.3 | 7.5 | 90     | 0    |  |  |  |
| 2                          | NXT-24S-350mA-2ES-3000K | 54 | -0.3 | 7.5 | 90     | 0    |  |  |  |