

**C:** CALCULATING AWA is achieved by multiplying the ILLUMINATED HARDSCAPE AREA (column A) and the AWA (column B). The resultant is the allowed wattage in watts for that given area.

**D:** PERIMETER LENGTH is the measured length of the general hardscape area determined in accordance with §147(d)1B.

**E:** LINEAR WATTAGE ALLOWANCE (LWA) is the allowed wattage per linear feet listed in Standards Table 147-A.

**F:** CALCULATING LWA is achieved by multiplying the PERIMETER LENGTH (column D) and the LWA (column E). The resultant is the allowed wattage in watts.

**G:** INITIAL WATTAGE ALLOWANCE (IWA) is the default amount of watts allowed, dependant of the outdoor lighting zone, and listed in Standards Table 147-A.

**H:** TOTAL GENERAL HARDSCAPE is the total allowed watts for the general hardscape illumination and is calculated by the sum of the AWA (column C), LWA (column F) and the IWA (column G).

Add up all of the rows for Column H, and insert the total site General Hardscape Lighting Allowance into OLTG-1C (Page 4 of 4) Row A.

The “Yes” box shall be checked to declare that the AWA, LWA, and IWA from Table 147-A was used as appropriate for the Outdoor Lighting Zone for this particular site.

### ***Lighting Compliance Summary for Special Applications Per Unit Length***

Part B of the OLTG-2C, Page 1 of 3 is for specific application lighting wattage allowance per unit length, which is available only for projects with a sales frontage.

**A:** SPECIFIC LIGHTING APPLICATION shall only list “Outdoor Sales Frontage” in accordance with Standards Table 147-B. No other lighting applications qualify to use this allowance.

**B:** LINEAR FEET OF FRONTAGE is the measured value of the sales frontage measured in feet.

**C:** SALES FRONTAGE ALLOWANCE is the amount listed, dependant of outdoor lighting zone, and found in Standards Table 147-B.

**D:** WATTAGE ALLOWED is the product of the LINEAR FEET (column B) and the SALES FRONTAGE ALLOWANCE of column C.

**E:** NAME OF SYMBOL is the description corresponding to the plans.

**F:** LUMINAIRE TYPE is the description of the type of luminaire.

**G:** LUMINAIRE QUANTITY is the number of identical luminaires.

**H:** WATTS PER LUMINAIRE is the rated watts the luminaire as determined in accordance with §130(c or d) .It is not the wattage of the lamp (bulb) screwed into the luminaire.

**I:** DESIGN WATTS is the product of the number of luminaires of the same type (column G) and the watts per luminaire (column H).

**J: ALLOWED WATTS** is the smaller of the wattage allowed in column D or the DESIGN WATTS of column I.

Add up all of the rows for Column J and insert the Specific application lighting wattage allowance per unit length into OLTG-1C (Page 4 of 4) Row B.

### ***Lighting Compliance Summary for Ornamental Lighting***

Part C of the OLTG-2C, Page 1 of 3 is for specific application lighting wattage allowance for ornamental lighting, which is available only for projects with hardscape ornamental lighting.

**A: SPECIFIC LIGHTING APPLICATION** shall only be listed as “Hardscape Ornamental Lighting” in accordance with Table 147-B.

**B: SQUARE FEET OF HARDSCAPE** is the total hardscape area for the site, as defined in §101.

**C: ORNAMENTAL LIGHTING ALLOWANCE** is the amount listed, depending on the outdoor lighting zone, in accordance with Standards Table 147-B.

**D: WATTAGE ALLOWED** is the product of the SQUARE FEET (column B) and the ORNAMENTAL LIGHTING ALLOWANCE of column C.

**E: NAME OF SYMBOL** is the description corresponding to the plans.

**F: LUMINAIRE TYPE** is the description of the lighting type.

**G: LUMINAIRE QUANTITY** is the number of identical luminaires.

**H: WATTS PER LUMINAIRE** is the rated watts of the luminaire in accordance with §130(c and d). .

**I: DESIGN WATTS** is the product of the number of identical luminaires (column G) and the watts per luminaire (column H).

**J: ALLOWED WATTS** is the smaller of the wattage allowed in column D or the DESIGN WATTS of column I.

Add up all of the rows for Column J, and insert the Specific application wattage allowance for ornamental lighting into OLTG-1C (Page 4 of 4) Row C.

### ***Lighting Compliance Summary per Application***

Part D of the OLTG-2C, Page 2 of 3 is for specific application lighting wattage allowance per application in accordance with Table 147-B.

**A: SPECIFIC LIGHTING APPLICATION** is listed in accordance with Standards Table 147-B.

**B: NUMBER OF APPLICATIONS** is the number of identical luminaires used in the single specific application identified in Column A for this row.

**C: SPECIFIC APPLICATION ALLOWANCE** is the allowed watts for the specific application listed in this row, dependant of outdoor lighting zone, and found in Standards Table 147-B. Note: for this section this shall be listed as watts.

**D: WATTAGE ALLOWED** is the product of the NUMBER OF APPLICATIONS (column B) and the SPECIFIC APPLICATION ALLOWANCE of column C.

**E: LUMINAIRE SYMBOL** is the description corresponding to the plans.

**F: LUMINAIRE TYPE** is the description of the type of luminaire used in this specific application.

**G: LUMINAIRE QUANTITY** is the number of identical luminaire types for this single specific application.

**H: WATTS PER LUMINAIRE** is the number of watts the luminaire is rated at as determined according to §130(c and d).

**I: DESIGN WATTS** is the product of the number of luminaires of the same type (column G) and the watts per luminaire (column H).

**J: ALLOWED WATTS** is the smaller of the wattage allowed in column D or the DESIGN WATTS of column I.

Add up all of the rows for Column J, and insert the Specific application wattage allowance per application into OLTG-1C (Page 4 of 4) Row D.

### ***Lighting Compliance Summary per Specific Application Area***

Part E of the OLTG-2C, Page 2 of 3 is for specific application lighting wattage allowance area.

**A: SPECIFIC LIGHTING APPLICATION** is listed in Standards Table 147-B.

**B: ILLUMINATED AREA** is the calculated area specific to the single application listed on this row.

**C: SPECIFIC APPLICATION ALLOWANCE** is the watts per square foot listed, dependant of outdoor lighting zone, and found in Standards Table 147-B.

**D: WATTAGE ALLOWED** is the product of the SQUARE FEET (column B) and the SPECIFIC APPLICATION ALLOWANCE of column C.

**E: CODE FOR LUMINAIRE TYPE** is the description corresponding to the plans.

**F: LUMINAIRE TYPE** is the description of the lighting type.

**G: LUMINAIRE QUANTITY** is the number identical luminaires for this single specific application.

**H: WATTS PER LUMINAIRE** is the number of watts the luminaire is rated as determined in accordance with §130(c and d).

**I: DESIGN WATTS** is the product of the number of identical luminaires (column G) and the watts per luminaire (column H).

**J: ALLOWED WATTS** is the smaller of the wattage allowed in column D or the DESIGN WATTS of column I.

Add up all of the rows for Column J, and insert the Specific application lighting wattage allowance per area into OLTG-1C (Page 4 of 4) Row E.

### ***Lighting Compliance Summary for Local Ordinance Requirements***

Part E of the OLTG-2-C Page 3 of 3 is to be used to calculate the additional lighting power allowance when specific light levels are required by law through a local ordinance and the lighting power densities specified in Standards Table 147-C are used. Note: Only outdoor lighting ordinances which have been officially adopted by the local jurisdiction having authority in accordance with §10-114(e and f) shall qualify for this additional lighting power allowance.

**A:** HARDSCAPE APPLICATIONS describes the area or task that qualifies for additional lighting power by the local ordinance.

**B:** ILLUMINATED HARDSCAPE AREA is the calculated area, in square feet, of the space described in column A.

**C:** AVERAGE OR MINIMUM ORDINANCE is an identifying description of which method is to be used in the calculation of additional lighting power. Either “average” or “minimum” shall be written in this column. Standards Table 147-C contains both minimum and average ordinance foot candles.

**D:** NUMBER OF HORIZONTAL FOOTCANDLES is the number taken from the first column of Standards Table 147-C indicating the required horizontal foot candles required by the local ordinance. Again, one must choose either the average or minimum foot candle amount as indicated in column C.

**E:** ALLOWANCE is the Watts per square feet as listed in Standards Table 147-C. Note that the allowance is dependant of outdoor lighting zone and minimum or average foot candle requirements.

**F:** WATTAGE ALLOWANCE is calculated by the product of the ILLUMINATED AREA (column B) and the ALLOWANCE (column E).

At the bottom of the form is three numerated rows where the calculated wattage and design wattage are compared. In row 1, the sum of column F is totaled. In row 2, the actual wattage used to meet the local ordinance is inputted. In row 3, the smaller of row 1 and row 2 is inputted. The value of row 3 is also entered into OLTG-1C, Page 4 of 4, row F, under additional lighting power allowance for ordinance requirements.

#### 6.9.4 Installation Certificate OTLG-INST

During the construction process, the general contractor or specialty subcontractors are required to complete various construction certificates. These certificates verify that the contractor is aware of the requirements of the Building Energy Efficiency Standards, and that the actual construction/installation meets the requirements.

Installation Certificates are required to be completed and submitted to certify compliance of regulated energy features such as luminaires and outdoor lighting controls. The licensed person responsible for the construction, or for the installation of a regulated energy feature must ensure their construction or installation work is done in accordance with the approved plans and specifications for the outdoor lighting system, and must complete and sign an Installation Certificate to certify that the installed features, materials, components or manufactured devices for which they are responsible, conform to the plans and specifications and the Certificate of Compliance documents approved by the