

## DesignLights Consortium Listed LED Lamps

DLC 4.1 Qualified Lunera Products as of May 10, 2017

| GENERIC LAMP TYPE |  | WATTAGE | LUNERA EQUIVALENT LED LAMP |            |         |        | EFFICACY | DLC |
|-------------------|--|---------|----------------------------|------------|---------|--------|----------|-----|
|                   |  |         | FAMILY                     | GENERATION | WATTAGE | LUMENS |          |     |

| Ballast Driven (UL Type A) |            |                          |                                |       |         |         |           |         |
|----------------------------|------------|--------------------------|--------------------------------|-------|---------|---------|-----------|---------|
| T8                         | 2Ft Linear | 20W                      | Lunera T8 LED 2FT              | Gen 2 | 8W      | 1,200lm | 150       | DLC 4.1 |
|                            | 4Ft Linear | 32W                      | Lunera T8 LED 4FT              | Gen 2 | 11W     | 1,800lm | 164       | DLC 4.1 |
|                            |            |                          |                                | Gen 2 | 15W     | 2,200lm | 147       | DLC 4.1 |
| 22" U-Bend with 6" Gap     | 32W        | Lunera T8 LED U-Bend 6IN | Gen 1                          | 12W   | 1,800lm | 150     | DLC 4.1   |         |
|                            |            |                          | Gen 1                          | 15W   | 2,200lm | 147     | (pending) |         |
| T5HO                       | 4Ft Linear | 54W                      | Lunera T5HO LED 4FT            | Gen 2 | 25W     | 3,500lm | 140       | DLC 4.1 |
| T5*                        | 4Ft Linear | 28W                      | Lunera T5HO LED 4FT*           | Gen 2 | 11W     | 1,300lm | 118       | DLC 4.1 |
| CFL                        | 4-Pin G24Q | 26W                      | Lunera CFL LED G24Q Horizontal | Gen 4 | 11W     | 1,445lm | 131       | DLC 4.1 |
|                            |            |                          | Lunera CFL LED G24Q Vertical   | Gen 4 | 11W     | 1,350lm | 123       | DLC 4.1 |

| Ballast Bypassed (UL Type B) |                                   |                                            |                                  |       |          |          |         |         |
|------------------------------|-----------------------------------|--------------------------------------------|----------------------------------|-------|----------|----------|---------|---------|
| T8                           | 2Ft Linear                        | 20W                                        | Lunera T8 LED 2FT (Single Ended) | Gen 1 | 9W       | 1,150lm  | 128     | DLC 4.1 |
|                              |                                   |                                            | Lunera T8 LED 2FT (Double Ended) | Gen 1 | 9W       | 1,200lm  | 133     | DLC 4.1 |
|                              | 4Ft Linear                        | 32W                                        | Lunera T8 LED 4FT (Single Ended) | Gen 1 | 15W      | 1,800lm  | 120     | DLC 4.1 |
|                              |                                   |                                            | Lunera T8 LED 4FT (Double Ended) | Gen 1 | 14W      | 1,800lm  | 129     | DLC 4.1 |
|                              |                                   |                                            | Gen 1                            | 17W   | 2,200lm  | 129      | DLC 4.1 |         |
| 22" U-Bend with 6" Gap       | 32W                               | Lunera T8 LED U-Bend 6IN                   | Gen 1                            | 15W   | 1,800lm  | 120      | DLC 4.1 |         |
|                              |                                   |                                            | Gen 1                            | 18W   | 2,200lm  | 122      | DLC 4.1 |         |
| HID                          | Vertical, E39 Mogul Screw         | 400W<br>320W-250W<br>175W-150W<br>100W-70W | Lunera HID LED Vertical E39      | Gen 3 | 207W     | 21,300lm | 103     | DLC 4.1 |
|                              |                                   |                                            |                                  | Gen 3 | 164W     | 17,900lm | 109     |         |
|                              |                                   |                                            |                                  | Gen 3 | 95W      | 9,900lm  | 104     |         |
|                              | Post Top, E39 Mogul Screw         | 250W-150W<br>175W-70W                      | Lunera HID LED 360 E39           | Gen 3 | 90W      | 8,600lm  | 96      | DLC 4.1 |
|                              |                                   |                                            |                                  | Gen 3 | 53W      | 6,000lm  | 113     |         |
|                              | Hardwired with Clasp Retrofit Kit | 400W<br>320W-250W<br>175W-150W             | Lunera HID LED Vertical Kit      | Gen 3 | 207W     | 21,300lm | 103     | DLC 4.1 |
| Gen 3                        |                                   |                                            |                                  | 164W  | 17,900lm | 109      |         |         |
|                              |                                   |                                            | Gen 3                            | 95W   | 9,900lm  | 104      |         |         |

| External Driver (UL Type C) |            |     |                                  |       |     |         |     |                   |
|-----------------------------|------------|-----|----------------------------------|-------|-----|---------|-----|-------------------|
| T8                          | 2Ft Linear | 17W | Lunera T8 LED 2FT Two-Lamp Kit   | Gen 1 | 16W | 2,400lm | 150 | DLC 4.1           |
|                             |            |     | Lunera T8 LED 2FT Four-Lamp Kit  | Gen 1 | 24W | 4,800lm | 200 | DLC 4.1 (Pending) |
|                             | 4Ft Linear | 32W | Lunera T8 LED 4FT Two-Lamp Kit   | Gen 1 | 24W | 3,600lm | 150 | DLC 4.1           |
|                             |            |     |                                  | Gen 1 | 30W | 4,400lm | 147 | DLC 4.1           |
|                             |            |     | Lunera T8 LED 4FT Four-Lamp Kit  | Gen 1 | 48W | 7,200lm | 150 | DLC 4.1 (Pending) |
|                             |            |     |                                  | Gen 1 | 60W | 8,800lm | 147 | DLC 4.1 (Pending) |
| T5HO                        | 4Ft Linear | 54W | Lunera T5HO LED 4FT Two-Lamp Kit | Gen 1 | 50W | 7,000lm | 140 | DLC 4.1           |

\* The T5HO LED 4FT can replace a T5 lamp if a T5 ballast is used.

All Lunera LED lamps have applicable UL/CUL, RoHS and FCC certification.

## Lighting Design Labs Listed LED Lamps

LDL Qualified Lunera Products as of May 10, 2017

| GENERIC LAMP                      |            | LUNERA EQUIVALENT LED LAMP |                              |         |        |          | LDL |         |
|-----------------------------------|------------|----------------------------|------------------------------|---------|--------|----------|-----|---------|
| TYPE                              | WATTAGE    | FAMILY                     | GENERATION                   | WATTAGE | LUMENS | EFFICACY |     |         |
| <b>Ballast Driven (UL Type A)</b> |            |                            |                              |         |        |          |     |         |
| T8                                | 3Ft Linear | 30W                        | Lunera T8 LED 3FT            | Gen 1   | 11W    | 1,400lm  | 127 | Pending |
|                                   | 8Ft Linear | 60W                        | Lunera T8 LED 8Ft Bi-pin     | Gen 1   | 42W    | 5,500lm  | 131 | Pending |
|                                   |            |                            | Lunera T8 LED 8Ft Single-Pin | Gen 1   | 22W    | 4,400lm  | 133 | Pending |
|                                   |            |                            | Lunera T8 LED 8Ft Single-Pin | Gen 1   | 24W    | 3,500lm  | 146 | Pending |
| CFL                               | 2-Pin G24D | 26W                        | Lunera CFL LED G24D          | Gen 4   | 13W    | 1,000lm  | 77  | LDL     |
|                                   | 2-Pin GX23 | 26W                        | Lunera CFL LED GX23          | Gen 4   | 5W     | 580 lm   | 116 | LDL     |
| PL-L                              | 4-Pin G11  | 55W                        | Lunera PLL LED G11           | Gen 1   | 22W    | 2,600lm  | 118 | LDL     |

|                                     |                  |           |                                           |       |     |         |     |         |
|-------------------------------------|------------------|-----------|-------------------------------------------|-------|-----|---------|-----|---------|
| <b>Ballast Bypassed (UL Type B)</b> |                  |           |                                           |       |     |         |     |         |
| T8                                  | 3Ft Linear       | 30W       | Lunera T8 LED 3FT (Single Ended)          | Gen 1 | 12W | 1,400lm | 117 | Pending |
|                                     |                  |           | Lunera T8 LED 3Ft (Double Ended)          | Gen 1 | 12W | 1,400lm | 117 | Pending |
|                                     | 8Ft Linear       | 60W       | Lunera T8 LED 8Ft Bi-pin (Double Ended)   | Gen 1 | 43W | 5,500lm | 128 | Pending |
|                                     |                  |           | Lunera T8 LED 8Ft Single-pin (Double End) | Gen 1 | 43W | 5,500lm | 128 | Pending |
| CFL                                 | 2-Pin GX23       | 26W       | Lunera CFL LED GX23                       | Gen 4 | 5W  | 580 lm  | 116 | LDL     |
| PL-L                                | 4-Pin G11        | 55W       | Lunera PLL LED G11                        | Gen 1 | 23W | 2,600lm | 113 | LDL     |
| HID                                 | E26 Medium Screw | 250W-175W | Lunera HID LED Vertical E26               | Gen 3 | 95W | 9,900lm | 104 | LDL     |
|                                     |                  |           | Lunera HID LED Vertical Uplight E26       | Gen 3 |     |         |     |         |
|                                     |                  |           | Lunera HID LED Vertical Short E26         | Gen 3 |     |         |     |         |
|                                     |                  |           | Lunera HID LED Vertical Short Uplight E26 | Gen 3 |     |         |     |         |
|                                     |                  | 150W-70W  | Lunera HID LED Vertical E26               | Gen 3 | 54W | 5,700lm | 106 | LDL     |
|                                     |                  |           | Lunera HID LED Vertical Uplight E26       | Gen 3 |     |         |     |         |
|                                     |                  |           | Lunera HID LED Vertical Short E26         | Gen 3 |     |         |     |         |
|                                     |                  |           | Lunera HID LED Vertical Short Uplight E26 | Gen 3 |     |         |     |         |

All Lunera LED lamps have applicable UL/cUL, RoHS FCC certification and are DLC Listed when a category exists.