



# HTM Series Horticulture Top Light

## Product Specifications



The TCP HTM Series Horticulture Top Light features a lightweight design that supports flowering and growth stages of plant development. A single unit of this durable, 55° C rated fixture efficiently delivers up to 612  $\mu\text{mol/s}$  of photosynthetic photon flux while maximizing energy savings due to an efficacy of up to 2.60  $\mu\text{mol/J}$ . The long 50,000 hour rated life significantly decreases maintenance, labor, and material costs over the life of the fixture.

## Reasons to choose the LED HTM Series Horticulture Top Light from TCP

- Industry-leading efficacy: up to 2.60  $\mu\text{mol/J}$
- Powerful 612  $\mu\text{mol/s}$  photosynthetic photon flux
- Instant on, no warm up time for full light
- Long life: 50,000 hours
- Durable, lightweight aluminum housing
- Power washer rated IP66 wet location rating

## Ideal Applications

- Greenhouses
- Indoor Grow Facilities
- Grow Tents
- High Pressure Sodium Replacements
- Metal Halide Replacements



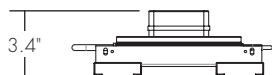
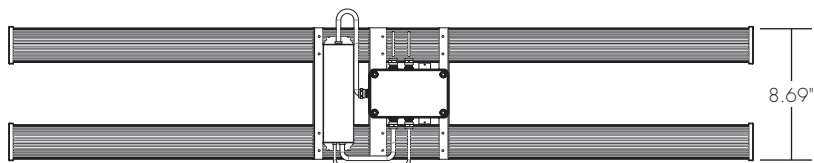
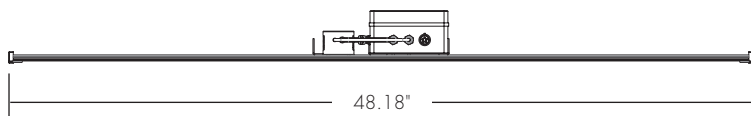
# HTM Series Horticulture Top Light

## Specifications

|  |  |
|--|--|
| Input Line Voltage .....                       | 120-277 VAC                                  |
| Input Line Frequency (Hz).....                 | 50/60Hz                                      |
| Wattage (W).....                               | 236W   |
| Photosynthetic Photon Flux (PPF) .....         | 612 $\mu\text{mol/s}$                        |
| Photosynthetic Photon Efficacy (PPE).....      | $\leq 2.60 \mu\text{mol/J}$                  |
| Fixture Heat Output* .....                     | 805 BTU/hr                                   |
| Rated Life .....                               | 50,000 hours                                 |
| Minimum Starting Temperature .....             | -40°C (-40°F)                                |
| Maximum Operating Temperature.....             | 55°C (131°F)                                 |
| Power Factor .....                             | >0.90  |
| THD .....                                      | <20%   |
| Ratings .....                                  | cETLus Rated, cULus wet location rated, IP66 |
| Controls.....                                  | 0-10V dimming (standard)                     |
| *Heat Output Calculation: Unit Wattage * 3.412 |  |

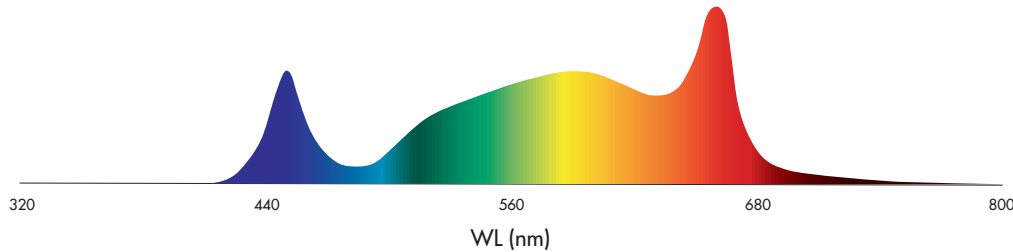


## Dimensions



Weight = 6.45 lbs

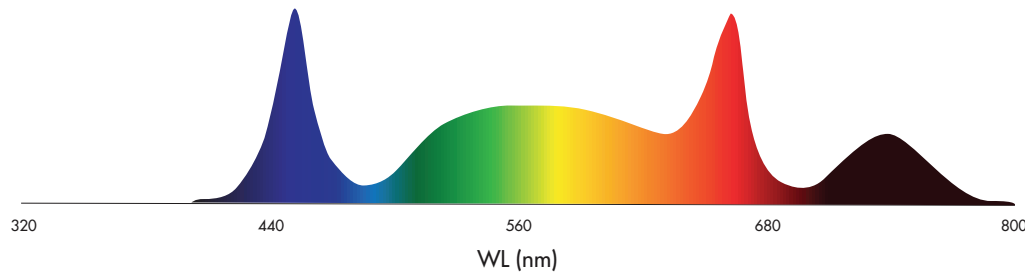
## TCP Full Spectrum Technology



TCP's full spectrum technology provides a balanced blend of blue, green, and red light to ensure plants grow healthy and strong. The substantial red peak at 660nm results in a robust photosynthesis contribution. A blue peak shown at 440nm reduces unwanted stem elongation and leads to strong, healthy, and compact plants. Lastly, TCP's full spectrum includes a stable amount of green light, removing any need for green supplemental lighting when checking plant health.

| ITEMS                   | MEASURED VALUE | UNIT   |
|-------------------------|----------------|--------|
| PPF (400-700nm)         | 611.92         | μmol/s |
| PPF (400-500nm)         | 110.29         | μmol/s |
| PPF (500-600nm)         | 236.96         | μmol/s |
| PPF (600-700nm)         | 268.04         | μmol/s |
| PPF (600-750nm)         | 278.25         | μmol/s |
| Photon Flux (380-780nm) | 624.65         | μmol/s |
| PPFR (700-800nm)        | 12.62          | μmol/s |
| PPE                     | 2.60           | μmol/J |

## TCP Far-Red Spectrum Technology



TCP's far-red full spectrum takes all the great qualities of our traditional full spectrum but adds far-red photons for some extra photosynthetic encouragement! Far-red photons have little to no effect on plants when they're used by themselves. However, when plants are grown underneath a full spectrum light that's paired with an additional, supplemental far-red spectrum, their photosynthetic rate is higher than when they are grown using just a full spectrum light.

| ITEMS                 | MEASURED VALUE | UNIT   |
|-----------------------|----------------|--------|
| PPF (400-700nm)       | 526.90         | μmol/s |
| PPF (400-500nm)       | 89.23          | μmol/s |
| PPF (600-700nm)       | 233.90         | μmol/s |
| PPF (600-750nm)       | 310.26         | μmol/s |
| Photon Flux (380-780) | 631.80         | μmol/s |
| PPFR (700-800)        | 104.93         | μmol/s |

## Photosynthetic Photon Flux Density

Test Conditions:

- 5.5' X 5' X 5.75' Grow Tent (L X W X H)
- Single HTMUZDA3S1 Unit hung at 4" and 6" above sensing surface

4" Mounting Height from Sensing Surface

6" Mounting Height from Sensing Surface

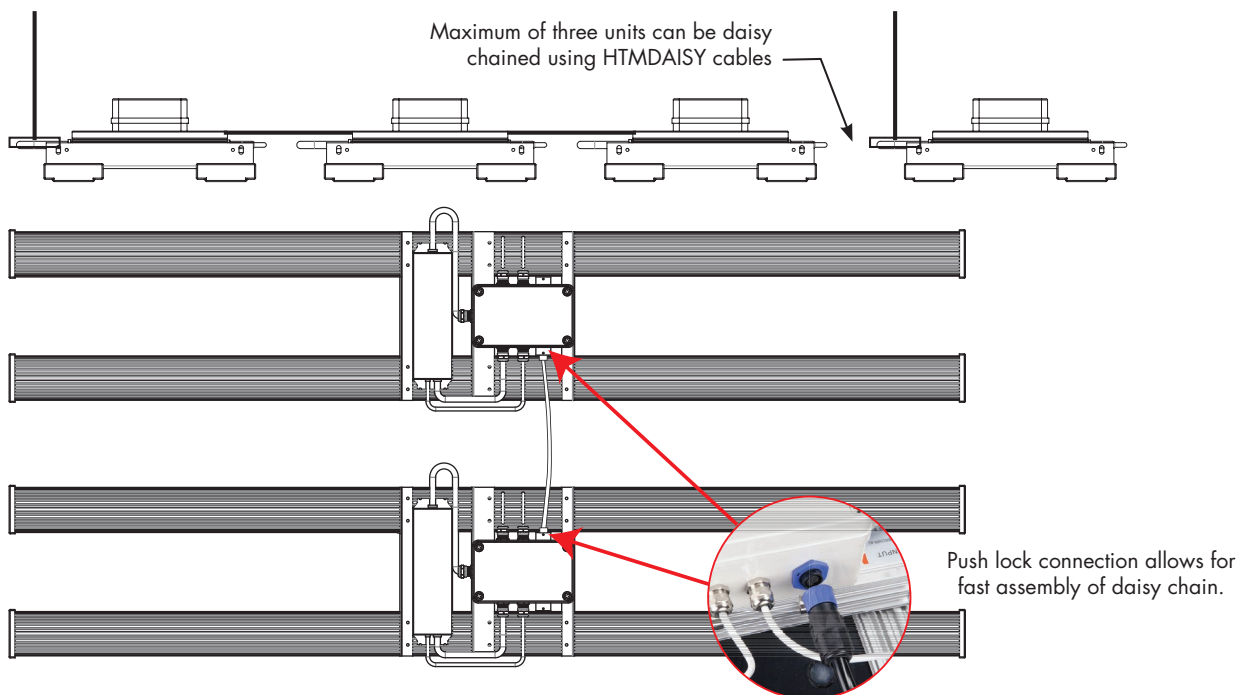
|     |     |     |     |      |      |      |     |     |     |     |
|-----|-----|-----|-----|------|------|------|-----|-----|-----|-----|
| 113 | 109 | 108 | 109 | 163  | 163  | 223  | 108 | 113 | 111 | 114 |
| 116 | 114 | 118 | 142 | 343  | 343  | 364  | 140 | 124 | 125 | 121 |
| 109 | 109 | 110 | 109 | 717  | 858  | 1230 | 118 | 114 | 115 | 115 |
| 115 | 119 | 117 | 180 | 755  | 1029 | 920  | 190 | 122 | 127 | 122 |
| 112 | 114 | 112 | 114 | 1305 | 1287 | 700  | 116 | 119 | 118 | 118 |
| 118 | 118 | 116 | 209 | 969  | 1207 | 757  | 220 | 121 | 122 | 121 |
| 118 | 114 | 114 | 114 | 1305 | 1287 | 700  | 116 | 128 | 119 | 118 |
| 122 | 122 | 125 | 269 | 1060 | 1348 | 766  | 193 | 259 | 124 | 127 |
| 112 | 112 | 110 | 114 | 993  | 1419 | 810  | 128 | 118 | 116 | 120 |
| 119 | 121 | 126 | 250 | 945  | 1446 | 1158 | 259 | 124 | 127 | 133 |
| 115 | 112 | 111 | 132 | 1214 | 1413 | 938  | 143 | 117 | 114 | 121 |
| 121 | 121 | 123 | 267 | 1143 | 1506 | 1039 | 245 | 124 | 124 | 130 |
| 114 | 116 | 113 | 143 | 1589 | 1496 | 1330 | 125 | 120 | 123 | 126 |
| 116 | 117 | 119 | 258 | 1417 | 1550 | 1271 | 237 | 123 | 123 | 123 |
| 113 | 114 | 112 | 114 | 1082 | 1445 | 1187 | 135 | 114 | 112 | 117 |
| 115 | 115 | 128 | 248 | 1037 | 1426 | 1144 | 207 | 222 | 119 | 116 |
| 115 | 116 | 116 | 116 | 309  | 471  | 976  | 130 | 118 | 122 | 120 |
| 114 | 113 | 123 | 194 | 438  | 522  | 1032 | 159 | 120 | 119 | 114 |
| 107 | 114 | 113 | 109 | 108  | 113  | 112  | 109 | 109 | 109 | 114 |
| 106 | 113 | 113 | 118 | 166  | 206  | 167  | 136 | 114 | 115 | 120 |

4" Average PPFD: 329  $\mu\text{mol}/\text{s}/\text{m}^2$

6" Average PPFD: 355  $\mu\text{mol}/\text{s}/\text{m}^2$

\*data at other heights available upon request

## TCP Quick Connect Daisy Chain System





# HTM Series Horticulture Top Light

## Applications

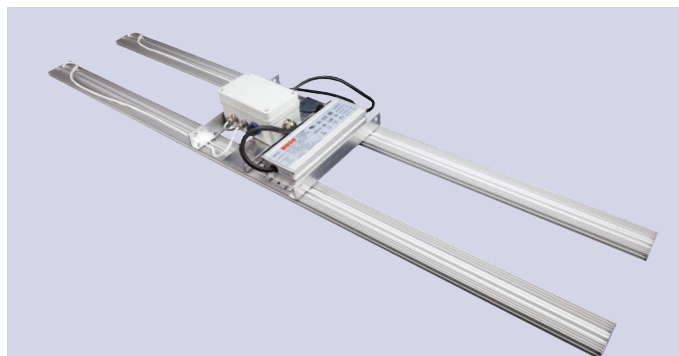
The TCP LED HTM Series Horticulture Top Light is ideal for replacing traditional metal halide high bay systems in commercial horticulture applications. Benefits include high efficiency, up to 612  $\mu\text{mol/s}$  of photosynthetic photon flux, long life, instant on, and a quick connect daisy chain ready design that will satisfy the most complex of horticulture lighting applications.

## Construction

- Durable, lightweight aluminum body
- Corrosion-resistant material composition
- Quick connect daisy chain ready
- Lightweight, low-profile design
- 6FT 5-wire power cord comes standard

## Electrical

- cULus wet location rated
- 0-10V dimming driver (standard)
- Easy-to-access wiring compartment
- System rated for long 50,000 hour life
- Efficiently delivers  $\leq 2.60 \mu\text{mol/J}$



### Listings

cETLus Listed  
RoHS Compliant  
DLC Hort 2.1

Wet Location Rated – IP66

### Warranty

Five year limited warranty against defects in manufacturing.



Power washer rated TCP  
IP66 clear coat allows for fast  
cleaning of LEDs.

## Catalog Ordering Matrix

Example: HTMUZDA3S1

| HTM                          | U            | ZD                 | A3   | S1                 |
|------------------------------|--------------|--------------------|--|--------------------|
| FAMILY                       | VOLTAGE      | CONTROLS           | PHOTOSYNTHETIC FLUX (POWER) <sup>1,2</sup> | SPECTRUM           |
| HTM – Horticulture Top Light | U – 120-277V | ZD – 0-10V Dimming | A3 – 612 $\mu\text{mol/s}$ (236W)          | S1 – Full Spectrum |

<sup>1</sup> Approximate lumen output. Actual performance may vary based on CCT, options selected and end user application.

<sup>2</sup> Actual wattage may differ by +/- 10%

### Field Installed Accessories:

| Item Number | Description                        |
|-------------|------------------------------------|
| HTMDAISY2FT | 2FT daisy chain 5-wire power cord. |
| HTMDAISY6FT | 6FT daisy chain 5-wire power cord. |

For the most up-to-date specs and warranty information, please visit [www.tcp.com](http://www.tcp.com)

# TECHNOLOGY CAST IN A BEAUTIFUL LIGHT

For over 20 years, TCP has been designing, developing and delivering energy-efficient lighting into the market. Thanks to our cutting-edge technology and manufacturing expertise, we have shipped billions of high quality lighting products. With TCP, you can count on a lighting product that is designed to meet the needs of the market - that transforms your surroundings and envelopes you in warmth - lighting that generates beauty with every flip of the switch.

For more information on the quality and care TCP can deliver, call us at **800.324.1496** or visit [tcpi.com](http://tcpi.com)

325 Campus Dr. | Aurora, Ohio 44202 | P: 800.324.1496 | F: 877.487.0516