



**Green Electrical Supply**

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led troffer

Utilizing LED modules that emulate the look of linear fluorescent, the ETY LED troffers provide up to 40% energy savings and operate for 100,000 hours (L90). Available in 3 sizes and 8 lumen packages with 0-10 dimming standard, ETY LED troffers are cost effective solution for commercial, institutional and retail applications.

Project \_\_\_\_\_  
 Catalog Number \_\_\_\_\_  
 Type \_\_\_\_\_  
 Date \_\_\_\_\_

- Energy efficient - Up to 40% energy savings vs. fluorescent
- 100,000 hour operating life (L90)
- Three color temperatures; 3500K, 4000K, (standard), 5000K
- Excellent color rendition, >80CRI

- 120V - 277V, 0 - 10V dimming standard
- UL Rated Damp Location
- IC Rated

**CONSTRUCTION** Die-formed heavy gauge steel with high-gloss, baked white enamel finish over rust inhibiting phosphate coat. Flush steel door and light traps. Swing-action cam latches provide positive fit. Clear prismatic .095 lens standard. Hinged door for room-side access to replaceable LED Modules and power supplies.

**CONTROLS** Power supplies have continuous dimming to 5% with 0-10V DC. Supports most commercially available wired and wireless control systems. Requires control module. Consult factory.

**LEDS** Available in eight light levels delivered: 1x4 2,230 lm (19W), 4024 lm (37W), 2x2 2,140 lm (20W), 3,948 lm (37W), 4,354 lm (37W), 6,220 lm (56W), 8,554 lm (72W). 4000K 80 CRI. Also available in 3500K and 5000K CCT. LEDs are LM80 tested. Operating life is 100,000 hrs. (L90). LED light engines consist of 48, 96 or 192 mid power LEDs mounted to aluminum core PCB boards. LED boards and power supplies are replaceable.

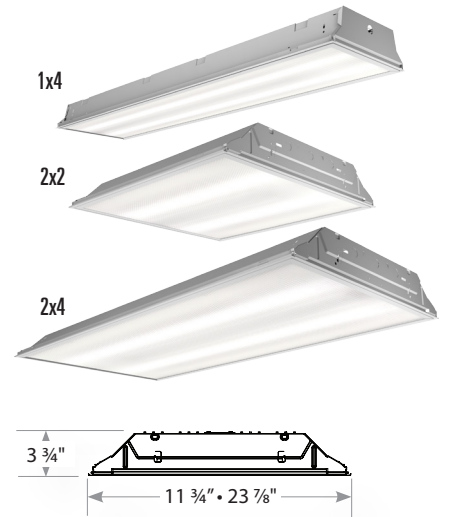
**CEILING COMPATIBILITY** Compatible with "G" type 9/16" wide & 15/16" tee lay-in grid styles. Also compatible with type "ST" screw slots tees. Integral grid lock in end cap secures fixture. For drywall ceiling applications, use FT114, FT122 or FT124 frame kits.

**ELECTRICAL** 120-277V LED power supplies, power factor greater than >0.90. 0-10 dimming standard. Power supplies are mounted in direct contact with steel housing for cooler operation and longer life. Drive current is 750 mA (1x4 19W and 2x2 20W); 1.4A (1x4 37W, 2x2 37W, 2x4 36W, 2x4 72W); 2.1A (2x4 56W). All fixtures contain one power supply except for the 2x4 72W, which contains two power supplies. Emergency lighting option **ELS** is available in all configurations. ETY LED troffers are designed to operate -13°F (-25°C) to 104°F (40°C).

**ACCESS / WIRING** Top of housing has access plate and provides (2) 7/8" KOs and ground screw. Hinged door for room-side access to replaceable LED modules. 3 7/8" KO each end of fixture. Replaceable Power supplies can be accessed from the room side.

**LISTINGS** C-UL-US listed damp location. IC Rated for direct contact with insulation. DesignLights Consortium® qualified; see DLC website for current listings.

**WARRANTY** 5 year limited warranty.



ETY LED Troffer Configuration

| SERIES                           | SIZE                             | DIFFUSER <sup>1</sup>   | INPUT POWER*  | COLOR TEMPERATURE                                 | VOLTAGE   |
|----------------------------------|----------------------------------|---|---|---|---|
| ETY = Recessed<br>SETY = Surface | 14 = 1x4<br>22 = 2x2<br>24 = 2x4 | P = Clear prismatic 0.095 lens (standard)<br>K = Clear prismatic 0.125 lens<br>U = Clear Prismatic 0.156 lens<br>W = White lens | 20 = 20W (1x4 and 2x2 only)<br>30 = 30W<br>50 = 50W (2x4 only)**<br>70 = 70W (2x4 only) | 35 = 3500K<br>40 = 4000K (standard)<br>50 = 5000K | U1 = Universal 120-277V, 0 - 10V dimmable<br>SD5 = Bi-level step dimming (50%)* |

<sup>1</sup> See DesignLights Consortium website for qualified products. Contact factory for performance on units not shown on DLC website or specifications.

\* See performance data for actual input power.

\*\* Step dimming not available

\*\*\* Step dimming increases fixture wattage by 15%

| OPTIONS  | ACCESSORIES  |
|--|--|
| BP = Bulk Pack, palletized<br>ELS = Emergency Backup. Consult factory for lumens.<br>FL6 = 3/8" Flex with two connectors<br>FL7 = 3/8" Flex with two connectors; for dual switching or ELS<br>LG = Lens Gasketing<br>LDG = Lens and Door Gasketing<br>LDFG = Lens, Door, and Frame Gasketing | FT114 = Flange Trim Kit, 1x4<br>FT122 = Flange Trim Kit, 2x2<br>FT124 = Flange Trim Kit, 2x4 |

For information on incorporating industry-standard controls, please contact factory

**Performance Data**

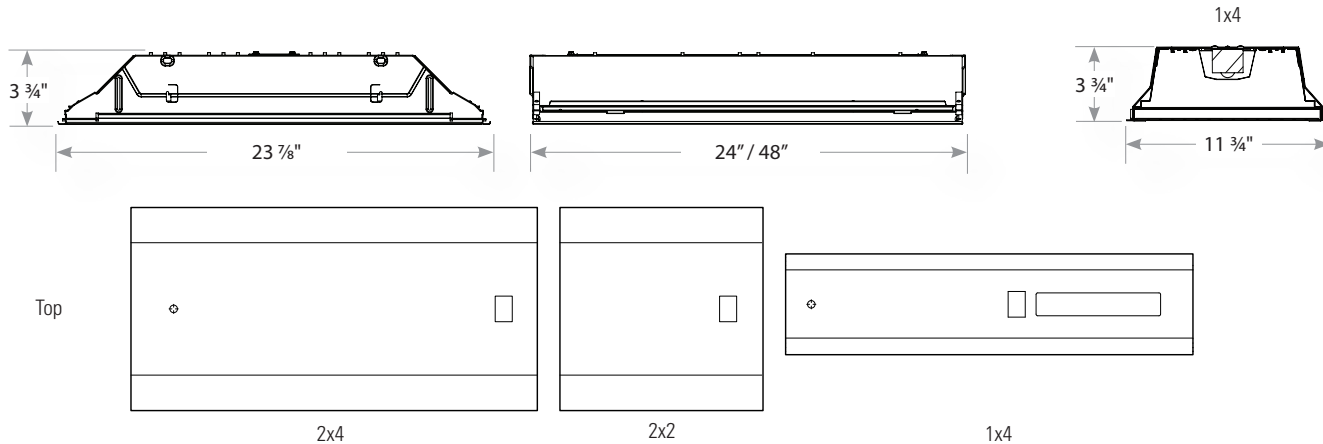
| Model        | Size  | Input Power | Drive Current | Light Output* | Efficacy   | Color Temperature  | Comparable Fluorescent     | Operating Temperature          |                                  |  |
|--------------|-------|-------------|---------------|---------------|------------|--------------------|----------------------------|--------------------------------|----------------------------------|--|
| ETY14P2035U1 | 1'x4' | 19.0W       | 750 mA        | 2,185 lm      | 115.0 lm/W | 3500K              | Up to 2-32WT8/U6, 2-17W T8 | -20°F (-30°C) to 104°F (4 0°C) |                                  |  |
| ETY14P2040U1 |       |             |               | 2,230 lm      | 117.6 lm/W | 4000K              |                            |                                |                                  |  |
| ETY14P2050U1 |       |             |               | 2,275 lm      | 119.0 lm/W | 5000K              |                            |                                |                                  |  |
| ETY14P3035U1 |       | 37.4W       | 1400 mA       | 3,940 lm      | 106.7 lm/W | 3500K              |                            |                                |                                  |  |
| ETY14P3040U1 |       |             |               | 4,024 lm      | 107.6 lm/W | 4000K              |                            |                                |                                  |  |
| ETY14P3050U1 |       |             |               | 4,100 lm      | 109.6 lm/W | 5000K              |                            |                                |                                  |  |
| ETY22P2035U1 | 2'x2' | 20.4W       | 750 mA        | 2,183 lm      | 107.1 lm/W | 3500K              |                            |                                | 3-32WT8, 2-17W T8,<br>2-32WT8/U6 |  |
| ETY22P2040U1 |       | 20.1W       |               | 2,130 lm      | 105.8 lm/W | 4000K              |                            |                                |                                  |  |
| ETY22P2050U1 |       | 20.4W       |               | 2,316 lm      | 113.0 lm/W | 5000K              |                            |                                |                                  |  |
| ETY22P3035U1 |       | 36.9W       | 1400 mA       | 3,996 lm      | 108.4 lm/W | 3500K              |                            |                                |                                  |  |
| ETY22P3040U1 |       |             |               | 3,948 lm      | 106.9 lm/W | 4000K              |                            |                                |                                  |  |
| ETY22P3050U1 |       |             |               | 4,239 lm      | 114.0 lm/W | 5000K              |                            |                                |                                  |  |
| ETY24P3035U1 | 2'x4' | 36.9W       | 1400 mA       | 3,967 lm      | 107.6 lm/W | 3500K              | 3-32WT8, 2-24WT5H0         |                                |                                  |  |
| ETY24P3040U1 |       | 36.5W       |               | 4,354 lm      | 119.5 lm/W | 4000K              |                            |                                |                                  |  |
| ETY24P3050U1 |       | 36.9W       |               | 4,208 lm      | 114.0 lm/W | 5000K              |                            |                                |                                  |  |
| ETY24P5035U1 |       | 56.0W       | 2100 mA       | 5,992 lm      | 107.0 lm/W | 3500K              |                            |                                |                                  |  |
| ETY24P5040U1 |       |             |               | 6,220 lm      | 111.7 lm/W | 4000K              |                            |                                |                                  |  |
| ETY24P5050U1 |       |             |               | 6,356 lm      | 113.3 lm/W | 5000K              |                            |                                |                                  |  |
| ETY24P7035U1 | 72.8W | 2x 1400 mA  | 7,825 lm      | 107.5 lm/W    | 3500K      | 4-32WT8, 3-54WT5H0 |                            |                                |                                  |  |
| ETY24P7040U1 |       |             | 8,544 lm      | 117.3 lm/W    | 4000K      |                    |                            |                                |                                  |  |
| ETY24P7050U1 |       |             | 8,301 lm      | 114.0 lm/W    | 5000K      |                    |                            |                                |                                  |  |

\* Delivered lumens. 1x4 Values are estimated.

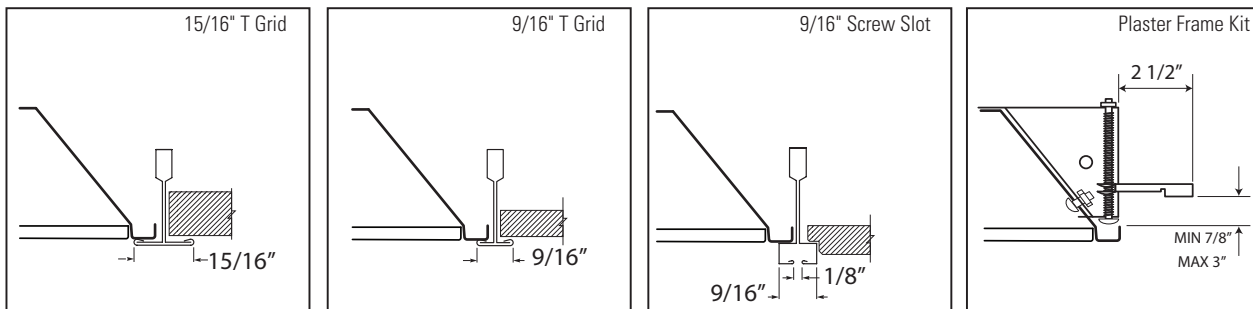
\*\* Consult a lighting engineer to meet specific requirements

**Dimensions**

Not to scale



**Ceiling Compatibility**



|     | Plaster Frame Kit Ceiling Opening |              |
|-----|-----------------------------------|--------------|
|     | Width                             | Length       |
| 1x4 | 12 - 12 1/2"                      | 48 - 49 1/2" |
| 2x2 | 24 - 25 1/2"                      | 24 - 25 1/2" |
| 2x4 | 24 - 25 1/2"                      | 48 - 49 1/2" |

Note: Surface model also available. Contact factory for more information.

**Photometric Data**

**Luminaire Data ETY 1x4 20W 4000K**

Formed steel housing, linear prismatic lens

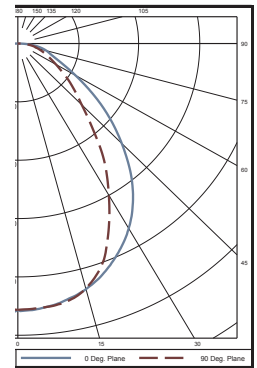
|                        |                            |
|------------------------|----------------------------|
| Catalog Number         | <b>ETY14P2040U1</b>        |
| Lab Test#              | 1259605                    |
| (#) Power Supply       | (1) Constant Current 750mA |
| # LED                  | (4) 24 white LEDs boards   |
| Color Temperature      | 4000K                      |
| Power                  | 18.97W                     |
| Delivered Light Output | 2230 lm                    |
| Operating Life         | 100,000 hrs. (L90)         |
| Fixture Efficacy       | 117.6 lm/W                 |

*Utilization of Lumens - Zonal Cavity Method*

| CC Wall | 80   |      |      |      | 50   |      |      |      | 30   |      |  |  |
|---------|------|------|------|------|------|------|------|------|------|------|--|--|
| RCR     | 70   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   |  |  |
| 0       | 2655 | 2655 | 2655 | 2655 | 2478 | 2478 | 2478 | 2372 | 2372 | 2372 |  |  |
| 1       | 2455 | 2361 | 2276 | 2200 | 2217 | 2154 | 2097 | 2131 | 2080 | 2033 |  |  |
| 2       | 2264 | 2102 | 1968 | 1855 | 1984 | 1881 | 1792 | 1913 | 1827 | 1752 |  |  |
| 3       | 2091 | 1883 | 1721 | 1593 | 1784 | 1657 | 1552 | 1725 | 1616 | 1525 |  |  |
| 4       | 1936 | 1697 | 1522 | 1388 | 1614 | 1473 | 1360 | 1564 | 1442 | 1343 |  |  |
| 5       | 1797 | 1538 | 1358 | 1224 | 1469 | 1320 | 1205 | 1427 | 1296 | 1193 |  |  |
| 6       | 1673 | 1403 | 1221 | 1091 | 1344 | 1191 | 1078 | 1308 | 1172 | 1069 |  |  |
| 7       | 1561 | 1285 | 1106 | 981  | 1235 | 1082 | 971  | 1204 | 1067 | 965  |  |  |
| 8       | 1462 | 1184 | 1009 | 889  | 1141 | 989  | 881  | 1114 | 977  | 877  |  |  |
| 9       | 1372 | 1095 | 925  | 810  | 1058 | 909  | 805  | 1035 | 899  | 801  |  |  |
| 10      | 1292 | 1017 | 853  | 743  | 985  | 839  | 739  | 965  | 831  | 736  |  |  |

Zonal cavity method Effective floor reflectance = 20%

*Polar Plot*



*Zonal Lumen Summary*

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-40   | 1303   | 58.4%       |
| 0-60   | 1936   | 86.8%       |
| 0-90   | 2230   | 100.0%      |
| 90-180 | 0      | 0.0%        |

*Average Luminance (cd/m2)*

| ANGLE | ALONG | 45   | ACROSS |
|-------|-------|------|--------|
| 0     | 3944  | 3944 | 3944   |
| 45    | 2996  | 2284 | 1826   |
| 55    | 2318  | 1591 | 1421   |
| 65    | 1658  | 1051 | 1181   |
| 75    | 1670  | 999  | 1176   |
| 85    | 1929  | 1381 | 1436   |

Spacing criteria: 0-180: 1.20; 90-270: 1.22

**Photometric Data**

**Luminaire Data ETY 1x4 30W 4000K**

Formed steel housing, linear prismatic lens

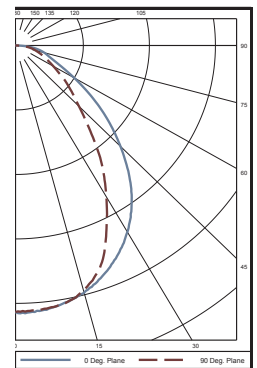
|                        |                             |
|------------------------|-----------------------------|
| Catalog Number         | <b>ETY14P3040U1</b>         |
| Lab Test#              | 1259606                     |
| (#) Power Supply       | (1) Constant Current 1400mA |
| # LED                  | (4) 24 white LEDs boards    |
| Color Temperature      | 4000K                       |
| Input Power            | 37.39W                      |
| Delivered Light Output | 4024 lm                     |
| Operating Life         | 100,000 hrs. (L90)          |
| Fixture Efficacy       | 107.6 lm/W                  |

*Utilization of Lumens - Zonal Cavity Method*

| CC Wall | 80   |      |      |      | 50   |      |      |      | 30   |      |  |  |
|---------|------|------|------|------|------|------|------|------|------|------|--|--|
| RCR     | 70   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   |  |  |
| 0       | 4791 | 4791 | 4791 | 4791 | 4471 | 4471 | 4471 | 4281 | 4281 | 4281 |  |  |
| 1       | 4430 | 4261 | 4109 | 3972 | 4002 | 3889 | 3785 | 3847 | 3755 | 3670 |  |  |
| 2       | 4087 | 3795 | 3554 | 3350 | 3582 | 3396 | 3235 | 3453 | 3299 | 3163 |  |  |
| 3       | 3775 | 3399 | 3108 | 2877 | 3222 | 2992 | 2803 | 3115 | 2919 | 2755 |  |  |
| 4       | 3495 | 3064 | 2748 | 2507 | 2916 | 2660 | 2458 | 2825 | 2605 | 2426 |  |  |
| 5       | 3245 | 2779 | 2453 | 2212 | 2654 | 2384 | 2178 | 2577 | 2341 | 2156 |  |  |
| 6       | 3021 | 2534 | 2207 | 1972 | 2428 | 2153 | 1948 | 2363 | 2119 | 1932 |  |  |
| 7       | 2820 | 2322 | 2000 | 1774 | 2232 | 1956 | 1756 | 2176 | 1929 | 1744 |  |  |
| 8       | 2640 | 2139 | 1823 | 1607 | 2061 | 1788 | 1594 | 2013 | 1766 | 1585 |  |  |
| 9       | 2479 | 1979 | 1672 | 1466 | 1911 | 1643 | 1455 | 1870 | 1625 | 1449 |  |  |
| 10      | 2333 | 1838 | 1542 | 1344 | 1780 | 1517 | 1336 | 1744 | 1502 | 1331 |  |  |

Zonal cavity method Effective floor reflectance = 20%

*Polar Plot*



*Zonal Lumen Summary*

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-40   | 2357   | 58.6%       |
| 0-60   | 3496   | 86.9%       |
| 0-90   | 4024   | 100.0%      |
| 90-180 | 0      | 0.0%        |

*Average Luminance (cd/m2)*

| ANGLE | ALONG | 45   | ACROSS |
|-------|-------|------|--------|
| 0     | 7142  | 7142 | 7142   |
| 45    | 5463  | 4131 | 3282   |
| 55    | 4245  | 2865 | 2571   |
| 65    | 3037  | 1901 | 2121   |
| 75    | 3050  | 1820 | 2112   |
| 85    | 3515  | 2563 | 2545   |

Spacing criteria: 0-180: 1.21; 90-270: 1.21

**Photometric Data**

**Luminaire Data ETY 2x2 20W 4000K**

Formed steel housing, linear prismatic lens

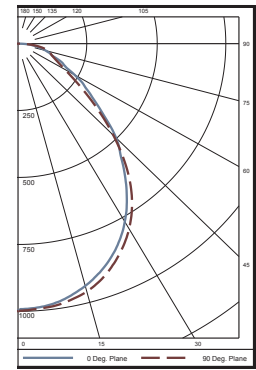
|                        |                            |
|------------------------|----------------------------|
| Catalog Number         | <b>ETY22P2040U1</b>        |
| Lab Test#              | 1244093                    |
| (#) Power Supply       | (1) Constant Current 750mA |
| # LED                  | (2) 24 white LEDs boards   |
| Color Temperature      | 4000K                      |
| Input Power            | 20.13W                     |
| Delivered Light Output | 2130 lm                    |
| Operating Life         | 100,000 hrs. (L90)         |
| Fixture Efficacy       | 105.8 lm/W                 |

*Utilization of Lumens - Zonal Cavity Method*

| CC Wall | 80   |      |      |      | 50   |      |      |      | 30   |      |    |
|---------|------|------|------|------|------|------|------|------|------|------|----|
|         | RCR  | 70   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10 |
| 0       | 2536 | 2536 | 2536 | 2536 | 2367 | 2367 | 2367 | 2266 | 2266 | 2266 |    |
| 1       | 2340 | 2247 | 2165 | 2090 | 2110 | 2048 | 1992 | 2027 | 1977 | 1931 |    |
| 2       | 2153 | 1995 | 1864 | 1753 | 1881 | 1780 | 1693 | 1813 | 1729 | 1655 |    |
| 3       | 1984 | 1781 | 1623 | 1498 | 1686 | 1561 | 1459 | 1629 | 1523 | 1434 |    |
| 4       | 1833 | 1600 | 1429 | 1299 | 1521 | 1382 | 1273 | 1473 | 1353 | 1256 |    |
| 5       | 1699 | 1446 | 1270 | 1140 | 1380 | 1234 | 1122 | 1339 | 1211 | 1111 |    |
| 6       | 1578 | 1315 | 1139 | 1012 | 1259 | 1110 | 999  | 1224 | 1092 | 991  |    |
| 7       | 1471 | 1202 | 1028 | 906  | 1154 | 1005 | 897  | 1124 | 990  | 891  |    |
| 8       | 1375 | 1104 | 934  | 818  | 1063 | 916  | 811  | 1037 | 904  | 806  |    |
| 9       | 1289 | 1019 | 854  | 743  | 983  | 839  | 738  | 961  | 829  | 734  |    |
| 10      | 1212 | 945  | 785  | 679  | 914  | 772  | 675  | 894  | 764  | 672  |    |

Zonal cavity method Effective floor reflectance = 20%

*Polar Plot*



*Zonal Lumen Summary*

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-40   | 1191   | 55.9%       |
| 0-60   | 1834   | 86.1%       |
| 0-90   | 2130   | 100.0%      |
| 90-180 | 0      | 0.0%        |

*Average Luminance (cd/m2)*

| ANGLE | ALONG | 45   | ACROSS |
|-------|-------|------|--------|
| 0     | 3202  | 3202 | 3202   |
| 45    | 2265  | 2272 | 2230   |
| 55    | 1717  | 1619 | 1510   |
| 65    | 1361  | 1026 | 1189   |
| 75    | 1304  | 979  | 1419   |
| 85    | 1636  | 1339 | 1861   |

Spacing criteria: 0-180: 1.15; 90-270: 1.15

**Luminaire Data ETY 2x2 30W 4000K**

Formed steel housing, linear prismatic lens

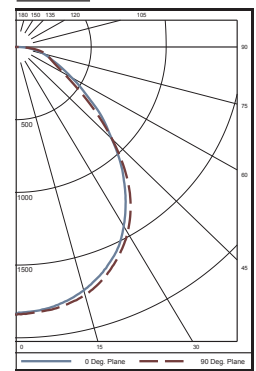
|                        |                             |
|------------------------|-----------------------------|
| Catalog Number         | <b>ETY22P3040U1</b>         |
| Lab Test#              | 1244094                     |
| (#) Power Supply       | (1) Constant Current 1400mA |
| # LED                  | (2) 48 white LEDs boards    |
| Color Temperature      | 4000K                       |
| Input Power            | 36.95W                      |
| Delivered Light Output | 3948 lm                     |
| Operating Life         | 100,000 hrs. (L90)          |
| Fixture Efficacy       | 106.8 lm/W                  |

*Utilization of Lumens - Zonal Cavity Method*

| CC Wall | 80   |      |      |      | 50   |      |      |      | 30   |      |    |
|---------|------|------|------|------|------|------|------|------|------|------|----|
|         | RCR  | 70   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10 |
| 0       | 4701 | 4701 | 4701 | 4701 | 4387 | 4387 | 4387 | 4200 | 4200 | 4200 |    |
| 1       | 4337 | 4166 | 4013 | 3875 | 3911 | 3797 | 3692 | 3758 | 3666 | 3580 |    |
| 2       | 3991 | 3698 | 3454 | 3250 | 3487 | 3300 | 3138 | 3360 | 3205 | 3068 |    |
| 3       | 3678 | 3300 | 3008 | 2776 | 3125 | 2894 | 2703 | 3019 | 2823 | 2658 |    |
| 4       | 3398 | 2965 | 2648 | 2406 | 2818 | 2562 | 2358 | 2729 | 2507 | 2327 |    |
| 5       | 3148 | 2680 | 2354 | 2113 | 2557 | 2287 | 2080 | 2481 | 2244 | 2058 |    |
| 6       | 2925 | 2437 | 2109 | 1874 | 2332 | 2056 | 1851 | 2268 | 2023 | 1836 |    |
| 7       | 2725 | 2227 | 1904 | 1678 | 2137 | 1862 | 1661 | 2082 | 1834 | 1650 |    |
| 8       | 2547 | 2046 | 1731 | 1514 | 1969 | 1696 | 1501 | 1921 | 1674 | 1493 |    |
| 9       | 2387 | 1888 | 1582 | 1375 | 1821 | 1553 | 1365 | 1780 | 1535 | 1359 |    |
| 10      | 2244 | 1750 | 1454 | 1257 | 1692 | 1430 | 1249 | 1656 | 1415 | 1244 |    |

Zonal cavity method Effective floor reflectance = 20%

*Polar Plot*



*Zonal Lumen Summary*

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-40   | 2207   | 55.9%       |
| 0-60   | 3399   | 86.1%       |
| 0-90   | 3949   | 100.0%      |
| 90-180 | 0      | 0.0%        |

*Average Luminance (cd/m2)*

| ANGLE | ALONG | 45   | ACROSS |
|-------|-------|------|--------|
| 0     | 5896  | 5896 | 5896   |
| 45    | 4110  | 4221 | 4132   |
| 55    | 3180  | 3014 | 2793   |
| 65    | 2505  | 1908 | 2203   |
| 75    | 2418  | 1812 | 2622   |
| 85    | 2957  | 2467 | 3436   |

Spacing criteria: 0-180: 1.16; 90-270: 1.16

**Photometric Data**

**Luminaire Data ETY 2x4 30W 4000K**

Formed steel housing, linear prismatic lens

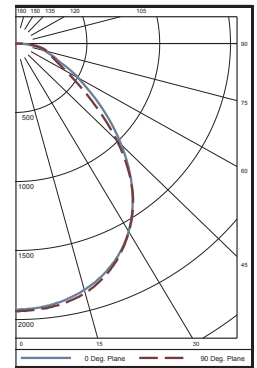
|                        |                             |
|------------------------|-----------------------------|
| Catalog Number         | <b>ETY24P3040U1</b>         |
| Lab Test#              | 1244091                     |
| (#) Power Supply       | (1) Constant Current 1400mA |
| # LED                  | (4) 24 white LEDs boards    |
| Color Temperature      | 4000K                       |
| Input Power            | 36.45W                      |
| Delivered Light Output | 4354 lm                     |
| Operating Life         | 100,000 hrs. (L90)          |
| Fixture Efficacy       | 119.5 lm/W                  |

*Utilization of Lumens - Zonal Cavity Method*

| CC Wall | 80   |      |      |      | 50   |      |      | 30   |      |      |
|---------|------|------|------|------|------|------|------|------|------|------|
| RCR     | 70   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   |
| 0       | 5183 | 5183 | 5183 | 5183 | 4838 | 4838 | 4838 | 4632 | 4632 | 4632 |
| 1       | 4776 | 4585 | 4414 | 4260 | 4304 | 4176 | 4059 | 4135 | 4031 | 3935 |
| 2       | 4391 | 4063 | 3792 | 3564 | 3831 | 3622 | 3441 | 3691 | 3517 | 3364 |
| 3       | 4042 | 3621 | 3296 | 3036 | 3427 | 3170 | 2957 | 3310 | 3091 | 2907 |
| 4       | 3730 | 3249 | 2896 | 2626 | 3086 | 2800 | 2574 | 2987 | 2740 | 2540 |
| 5       | 3453 | 2933 | 2569 | 2301 | 2796 | 2495 | 2265 | 2712 | 2448 | 2241 |
| 6       | 3206 | 2663 | 2299 | 2037 | 2547 | 2240 | 2011 | 2475 | 2203 | 1995 |
| 7       | 2985 | 2431 | 2072 | 1821 | 2332 | 2025 | 1802 | 2271 | 1995 | 1789 |
| 8       | 2788 | 2231 | 1880 | 1640 | 2145 | 1842 | 1626 | 2093 | 1817 | 1616 |
| 9       | 2612 | 2057 | 1717 | 1487 | 1983 | 1685 | 1476 | 1937 | 1665 | 1469 |
| 10      | 2454 | 1905 | 1576 | 1358 | 1841 | 1550 | 1349 | 1801 | 1533 | 1343 |

Zonal cavity method Effective floor reflectance = 20%

*Polar Plot*



*Zonal Lumen Summary*

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-40   | 2381   | 54.7%       |
| 0-60   | 3729   | 85.6%       |
| 0-90   | 4354   | 100.0%      |
| 90-180 | 0      | 0.0%        |

*Average Luminance (cd/m2)*

| ANGLE | ALONG | 45   | ACROSS |
|-------|-------|------|--------|
| 0     | 2985  | 2985 | 2985   |
| 45    | 2285  | 2266 | 2193   |
| 55    | 1778  | 1668 | 1505   |
| 65    | 1365  | 1047 | 1163   |
| 75    | 1285  | 984  | 1370   |
| 85    | 1547  | 1418 | 1958   |

Spacing criteria: 0-180: 1.21; 90-270: 1.21

**Photometric Data**

**Luminaire Data ETY 2x4 50W 4000K**

Formed steel housing, linear prismatic lens

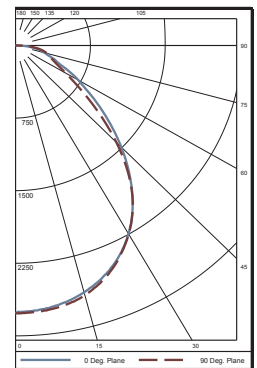
|                        |                             |
|------------------------|-----------------------------|
| Catalog Number         | <b>ETY24P5040U1</b>         |
| Lab Test#              | 1244090                     |
| (#) Power Supply       | (1) Constant Current 2100mA |
| # LED                  | (4) 24 white LEDs boards    |
| Color Temperature      | 4000K                       |
| Input Power            | 55.67W                      |
| Delivered Light Output | 6220 lm                     |
| Operating Life         | 100,000 hrs. (L90)          |
| Fixture Efficacy       | 111.7 lm/W                  |

*Utilization of Lumens - Zonal Cavity Method*

| CC Wall | 80   |      |      |      | 50   |      |      | 30   |      |      |
|---------|------|------|------|------|------|------|------|------|------|------|
| RCR     | 70   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   |
| 0       | 7404 | 7404 | 7404 | 7404 | 6911 | 6911 | 6911 | 6617 | 6617 | 6617 |
| 1       | 6823 | 6550 | 6305 | 6085 | 6148 | 5965 | 5798 | 5907 | 5758 | 5621 |
| 2       | 6273 | 5804 | 5417 | 5091 | 5472 | 5173 | 4915 | 5272 | 5023 | 4805 |
| 3       | 5774 | 5173 | 4708 | 4337 | 4896 | 4528 | 4224 | 4729 | 4415 | 4152 |
| 4       | 5329 | 4641 | 4137 | 3752 | 4409 | 4000 | 3676 | 4268 | 3914 | 3628 |
| 5       | 4933 | 4189 | 3670 | 3287 | 3994 | 3564 | 3235 | 3874 | 3497 | 3201 |
| 6       | 4579 | 3804 | 3284 | 2910 | 3638 | 3200 | 2873 | 3536 | 3147 | 2849 |
| 7       | 4264 | 3473 | 2960 | 2601 | 3331 | 2893 | 2573 | 3244 | 2850 | 2556 |
| 8       | 3983 | 3187 | 2686 | 2342 | 3065 | 2631 | 2322 | 2990 | 2596 | 2309 |
| 9       | 3731 | 2938 | 2452 | 2125 | 2833 | 2407 | 2109 | 2767 | 2378 | 2099 |
| 10      | 3505 | 2721 | 2251 | 1939 | 2629 | 2214 | 1927 | 2573 | 2189 | 1919 |

Zonal cavity method Effective floor reflectance = 20%

*Polar Plot*



*Zonal Lumen Summary*

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-40   | 3402   | 54.7%       |
| 0-60   | 5327   | 85.6%       |
| 0-90   | 6220   | 100.0%      |
| 90-180 | 0      | 0.0%        |

*Average Luminance (cd/m2)*

| ANGLE | ALONG | 45   | ACROSS |
|-------|-------|------|--------|
| 0     | 4260  | 4260 | 4260   |
| 45    | 3272  | 3239 | 3126   |
| 55    | 2555  | 2380 | 2149   |
| 65    | 1946  | 1493 | 1658   |
| 75    | 1836  | 1403 | 1955   |
| 85    | 2222  | 2036 | 2807   |

Spacing criteria: 0-180: 1.21; 90-270: 1.21

**Photometric Data**

**Luminaire Data ETY 2x4 70W 4000K**

Formed steel housing, linear prismatic lens

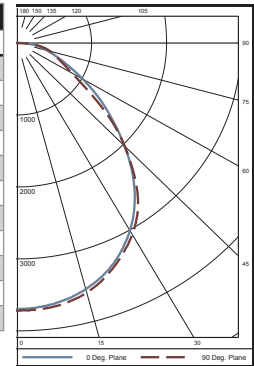
|                        |                             |
|------------------------|-----------------------------|
| Catalog Number         | <b>ETY24P7040U1</b>         |
| Lab Test#              | 1244092                     |
| (#) Power Supply       | (2) Constant Current 1400mA |
| # LED                  | (4) 48 white LEDs boards    |
| Color Temperature      | 4000K                       |
| Input Power            | 72.21W                      |
| Delivered Light Output | 8544 lm                     |
| Operating Life         | 100,000 hrs. (L90)          |
| Fixture Efficacy       | 118.3 lm/W                  |

*Utilization of Lumens - Zonal Cavity Method*

| CC Wall | 80    |       |       |       | 50   |      |      |      | 30   |      |  |  |
|---------|-------|-------|-------|-------|------|------|------|------|------|------|--|--|
|         | 70    | 50    | 30    | 10    | 50   | 30   | 10   | 50   | 30   | 10   |  |  |
| 0       | 10171 | 10171 | 10171 | 10171 | 9493 | 9493 | 9493 | 9089 | 9089 | 9089 |  |  |
| 1       | 9369  | 8993  | 8656  | 8353  | 8440 | 8189 | 7958 | 8109 | 7905 | 7716 |  |  |
| 2       | 8607  | 7961  | 7426  | 6976  | 7504 | 7091 | 6735 | 7229 | 6885 | 6583 |  |  |
| 3       | 7917  | 7086  | 6443  | 5931  | 6705 | 6196 | 5776 | 6475 | 6042 | 5678 |  |  |
| 4       | 7301  | 6350  | 5653  | 5121  | 6030 | 5465 | 5018 | 5836 | 5347 | 4951 |  |  |
| 5       | 6753  | 5726  | 5008  | 4478  | 5456 | 4862 | 4407 | 5292 | 4770 | 4361 |  |  |
| 6       | 6265  | 5194  | 4475  | 3959  | 4965 | 4360 | 3908 | 4825 | 4287 | 3876 |  |  |
| 7       | 5831  | 4738  | 4029  | 3533  | 4542 | 3937 | 3496 | 4422 | 3878 | 3472 |  |  |
| 8       | 5444  | 4344  | 3653  | 3178  | 4176 | 3578 | 3150 | 4073 | 3529 | 3132 |  |  |
| 9       | 5098  | 4003  | 3332  | 2880  | 3858 | 3270 | 2858 | 3768 | 3230 | 2845 |  |  |
| 10      | 4788  | 3705  | 3057  | 2626  | 3579 | 3005 | 2609 | 3501 | 2972 | 2599 |  |  |

Zonal cavity method Effective floor reflectance = 20%

*Polar Plot*



*Zonal Lumen Summary*

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-40   | 4593   | 53.8%       |
| 0-60   | 7302   | 85.5%       |
| 0-90   | 8544   | 100.0%      |
| 90-180 | 0      | 0.0%        |

*Average Luminance (cd/m<sup>2</sup>)*

| ANGLE | ALONG | 45   | ACROSS |
|-------|-------|------|--------|
| 0     | 5725  | 5725 | 5725   |
| 45    | 4460  | 4467 | 4454   |
| 55    | 3614  | 3451 | 3128   |
| 65    | 2786  | 2126 | 2461   |
| 75    | 2529  | 1867 | 2762   |
| 85    | 3044  | 2743 | 3501   |

Spacing criteria: 0-180: 1.21; 90-270: 1.21