



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
610-774-1300

## Photometric Indoor Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C82.77-2002

Prepared For  
Encapsulite International Inc  
Brian Pierson  
1220 Bamore Road  
Rosenberg, TX 77471-3027  
United States

Catalog Number  
WGP72LED  
Project Number  
10550359  
Test Number  
801219

Test Date

2014-11-04

Prepared By

*Derek Smarr*

Derek Smarr, Technician

Approved By

*Kyle Spaziani*

Kyle Spaziani, Project Handler

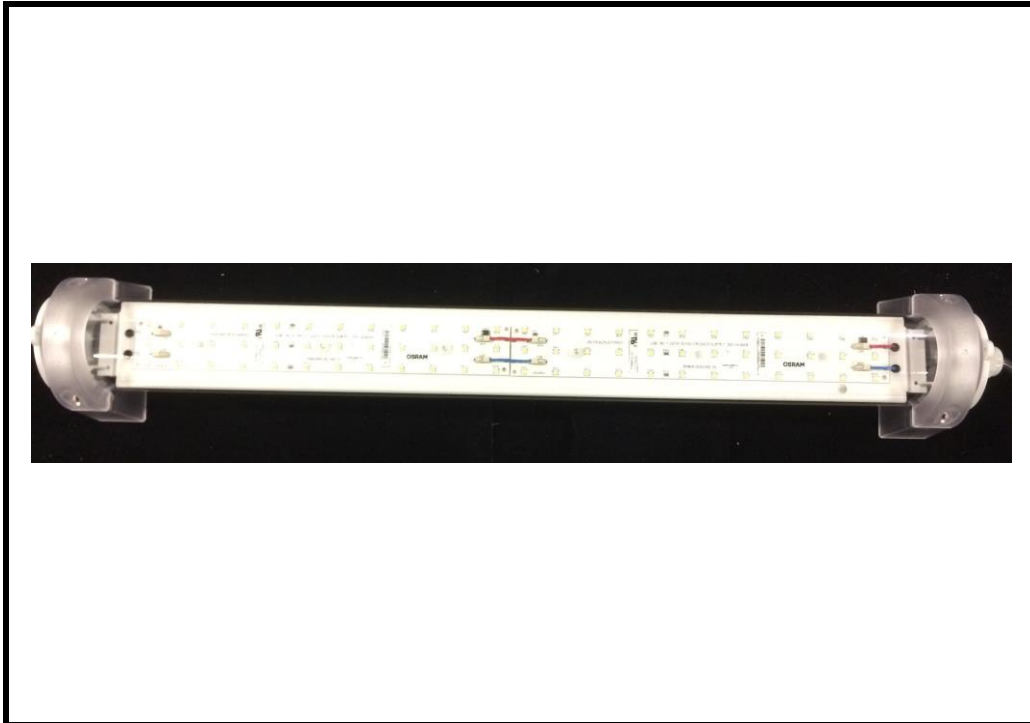
The results contained in this report pertain only to the tested sample.  
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Luminaire Description: Formed plastic housing, aluminum heatsink, clear plastic tube enclosure  
Catalog Number: WGP72LED  
Lamp: 72 white LEDs  
Mounting: Horizontal  
Ballast/Driver: One Universal D310CQ50UNVA-A10C

Luminaire

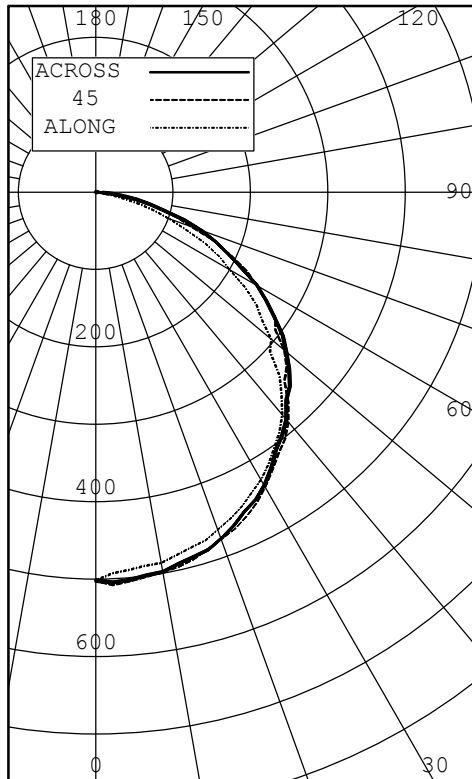


Test Conditions

|                   |           |
|-------------------|-----------|
| Test Temperature: | 24.7 °C   |
| Voltage:          | 120.0 VAC |
| Current:          | 0.1159 A  |
| Power:            | 13.68 W   |
| Power Factor:     | 0.984     |
| Frequency:        | 60 Hz     |
| Current THD:      | 12.0 %    |



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



| ANGLE | ALONG | 22.5 | 45  | 67.5 | ACROSS | OUTPUT LUMENS |
|-------|-------|------|-----|------|--------|---------------|
| 0     | 502   | 502  | 502 | 502  | 502    |               |
| 5     | 490   | 507  | 505 | 505  | 503    | 49            |
| 10    | 487   | 502  | 499 | 495  | 499    |               |
| 15    | 476   | 494  | 491 | 485  | 488    | 138           |
| 20    | 463   | 479  | 477 | 474  | 476    |               |
| 25    | 448   | 464  | 462 | 458  | 455    | 211           |
| 30    | 428   | 442  | 439 | 437  | 437    |               |
| 35    | 403   | 417  | 412 | 408  | 406    | 257           |
| 40    | 375   | 387  | 387 | 382  | 383    |               |
| 45    | 336   | 352  | 345 | 348  | 355    | 269           |
| 50    | 296   | 305  | 318 | 321  | 322    |               |
| 55    | 254   | 270  | 283 | 285  | 282    | 244           |
| 60    | 199   | 219  | 241 | 242  | 240    |               |
| 65    | 156   | 174  | 193 | 188  | 189    | 180           |
| 70    | 103   | 133  | 133 | 144  | 147    |               |
| 75    | 57    | 93   | 90  | 94   | 92     | 93            |
| 80    | 21    | 40   | 49  | 57   | 54     |               |
| 85    | 4     | 15   | 19  | 21   | 21     | 21            |
| 90    | 0     | 0    | 0   | 0    | 0      |               |

ZONAL LUMENS AND PERCENTAGES

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-30   | 397    | 27.17       |
| 0-40   | 654    | 44.77       |
| 0-60   | 1167   | 79.87       |
| 0-90   | 1461   | 100.00      |
| 40-90  | 807    | 55.23       |
| 60-90  | 294    | 20.13       |
| 90-180 | 0      | 0.00        |
| 0-180  | 1461   | 100.00      |

EFFICACY (LUMENS PER WATT): 106.7

\*\*\* THIS IS AN ABSOLUTE TEST \*\*\*

LUMINOUS LENGTH: 24.000 INS  
 WIDTH: 1.500 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3  
 SC: 1.3

| ANGLE | ALONG | 45    | ACROSS |
|-------|-------|-------|--------|
| 45    | 20434 | 21071 | 21670  |
| 55    | 19062 | 21335 | 21237  |
| 65    | 15842 | 19690 | 19318  |
| 75    | 9498  | 15064 | 15379  |
| 85    | 1926  | 9583  | 10538  |

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA  
 IN 2.5 DEGREE STEPS

| ANGLE | PLANE |      |     |      |        |         | OUTPUT LUMENS |
|-------|-------|------|-----|------|--------|---------|---------------|
|       | ALONG | 22.5 | 45  | 67.5 | ACROSS | AVERAGE |               |
| 0.0   | 502   | 502  | 502 | 502  | 502    | 502     |               |
| 2.5   | 493   | 509  | 509 | 505  | 505    | 505     |               |
| 5.0   | 490   | 507  | 505 | 505  | 503    | 503     | 49            |
| 7.5   | 487   | 503  | 502 | 501  | 500    | 500     |               |
| 10.0  | 487   | 502  | 499 | 495  | 499    | 497     |               |
| 12.5  | 481   | 498  | 496 | 488  | 492    | 492     |               |
| 15.0  | 476   | 494  | 491 | 485  | 488    | 488     | 138           |
| 17.5  | 472   | 489  | 483 | 481  | 484    | 483     |               |
| 20.0  | 463   | 479  | 477 | 474  | 476    | 475     |               |
| 22.5  | 456   | 471  | 471 | 468  | 466    | 468     |               |
| 25.0  | 448   | 464  | 462 | 458  | 455    | 459     | 211           |
| 27.5  | 437   | 450  | 452 | 445  | 448    | 447     |               |
| 30.0  | 428   | 442  | 439 | 437  | 437    | 438     |               |
| 32.5  | 416   | 429  | 425 | 423  | 422    | 424     |               |
| 35.0  | 403   | 417  | 412 | 408  | 406    | 410     | 257           |
| 37.5  | 390   | 408  | 402 | 392  | 396    | 399     |               |
| 40.0  | 375   | 387  | 387 | 382  | 383    | 384     |               |
| 42.5  | 355   | 374  | 368 | 368  | 364    | 368     |               |
| 45.0  | 336   | 352  | 345 | 348  | 355    | 348     | 269           |
| 47.5  | 305   | 330  | 335 | 338  | 339    | 331     |               |
| 50.0  | 296   | 305  | 318 | 321  | 322    | 313     |               |
| 52.5  | 270   | 284  | 293 | 303  | 305    | 292     |               |
| 55.0  | 254   | 270  | 283 | 285  | 282    | 276     | 244           |
| 57.5  | 229   | 245  | 261 | 261  | 262    | 253     |               |
| 60.0  | 199   | 219  | 241 | 242  | 240    | 231     |               |
| 62.5  | 180   | 193  | 220 | 218  | 212    | 207     |               |
| 65.0  | 156   | 174  | 193 | 188  | 189    | 182     | 180           |
| 67.5  | 125   | 146  | 168 | 167  | 169    | 157     |               |
| 70.0  | 103   | 133  | 133 | 144  | 147    | 134     |               |
| 72.5  | 80    | 115  | 112 | 122  | 121    | 112     |               |
| 75.0  | 57    | 93   | 90  | 94   | 92     | 88      | 93            |
| 77.5  | 37    | 64   | 70  | 71   | 72     | 65      |               |
| 80.0  | 21    | 40   | 49  | 57   | 54     | 46      |               |
| 82.5  | 10    | 27   | 33  | 35   | 35     | 29      |               |
| 85.0  | 4     | 15   | 19  | 21   | 21     | 17      | 21            |
| 87.5  | 2     | 8    | 10  | 11   | 11     | 9       |               |
| 90.0  | 0     | 0    | 0   | 0    | 0      | 0       |               |



COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

| CC<br>WALL | 90    |      |      |      | 80    |      |      |      | 70    |      |      |      | 50    |      |      |       | 30   |      |       |      | 10   |      |    |    | 0 |
|------------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|------|------|-------|------|------|-------|------|------|------|----|----|---|
|            | 70    | 50   | 30   | 10   | 70    | 50   | 30   | 10   | 70    | 50   | 30   | 10   | 50    | 30   | 10   | 50    | 30   | 10   | 50    | 30   | 10   | 50   | 30 | 10 | 0 |
| RCR        |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |       |      |      |       |      |      |      |    |    |   |
| 0          | 1.221 | .221 | .221 | .221 | 1.191 | .191 | .191 | .191 | 1.161 | .161 | .161 | .161 | 1.111 | .111 | .111 | 1.061 | .061 | .061 | 1.021 | .021 | .021 | 1.00 |    |    |   |
| 1          | 1.121 | .071 | .031 | 1.00 | 1.101 | .051 | .010 | .98  | 1.071 | .031 | .000 | .96  | 0.990 | .960 | .93  | 0.950 | .930 | .90  | 0.910 | .890 | .88  | 0.86 |    |    |   |
| 2          | 1.030 | .950 | .890 | .83  | 1.010 | .930 | .870 | .82  | 0.980 | .910 | .860 | .81  | 0.880 | .830 | .79  | 0.850 | .810 | .77  | 0.820 | .780 | .75  | 0.73 |    |    |   |
| 3          | 0.940 | .840 | .760 | .69  | 0.920 | .820 | .750 | .69  | 0.900 | .810 | .740 | .68  | 0.780 | .720 | .67  | 0.750 | .700 | .66  | 0.730 | .690 | .65  | 0.63 |    |    |   |
| 4          | 0.870 | .750 | .660 | .60  | 0.850 | .740 | .660 | .59  | 0.830 | .730 | .650 | .59  | 0.700 | .630 | .58  | 0.680 | .620 | .57  | 0.660 | .610 | .57  | 0.55 |    |    |   |
| 5          | 0.800 | .670 | .580 | .51  | 0.780 | .660 | .570 | .51  | 0.760 | .650 | .570 | .51  | 0.630 | .560 | .50  | 0.610 | .540 | .50  | 0.590 | .540 | .49  | 0.47 |    |    |   |
| 6          | 0.740 | .600 | .510 | .45  | 0.720 | .590 | .500 | .44  | 0.700 | .580 | .500 | .44  | 0.560 | .490 | .44  | 0.550 | .480 | .43  | 0.530 | .470 | .43  | 0.41 |    |    |   |
| 7          | 0.670 | .540 | .450 | .39  | 0.660 | .530 | .440 | .38  | 0.640 | .520 | .440 | .38  | 0.500 | .430 | .38  | 0.490 | .420 | .37  | 0.480 | .420 | .37  | 0.35 |    |    |   |
| 8          | 0.630 | .490 | .400 | .34  | 0.610 | .480 | .400 | .34  | 0.600 | .470 | .390 | .33  | 0.460 | .380 | .33  | 0.450 | .380 | .33  | 0.430 | .370 | .33  | 0.31 |    |    |   |
| 9          | 0.580 | .440 | .350 | .30  | 0.570 | .440 | .350 | .30  | 0.550 | .430 | .350 | .30  | 0.420 | .340 | .29  | 0.410 | .340 | .29  | 0.390 | .330 | .29  | 0.27 |    |    |   |
| 10         | 0.540 | .400 | .310 | .26  | 0.530 | .400 | .310 | .26  | 0.510 | .390 | .310 | .26  | 0.380 | .310 | .26  | 0.370 | .300 | .26  | 0.360 | .300 | .26  | 0.24 |    |    |   |

THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS  
 BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.  
 LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD  
 THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST  
 LUMINOUS OPENING OF LUMINAIRE.