



Report of Test

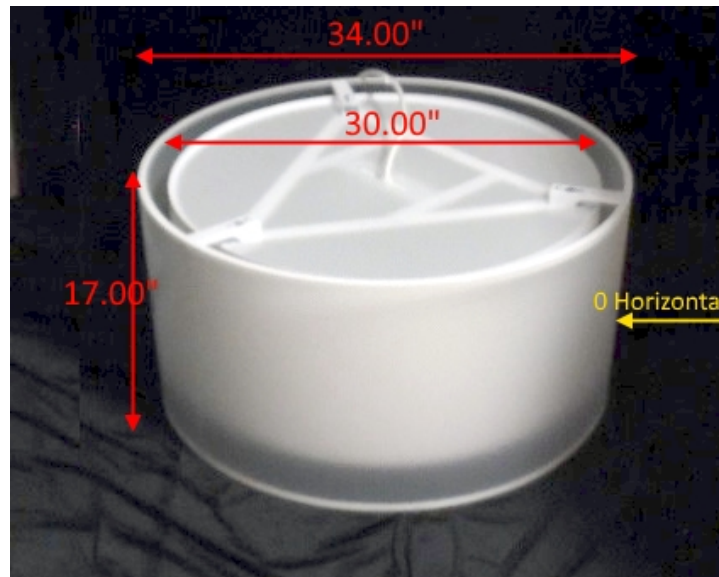
LLIA000901-046

Catalog Number: P2034/F11/D61/L413

Pendant mounted, formed steel and aluminum frame with white outer "trans lumenate" diffuser and white inner "lumenate" diffuser, translucent white plastic top and bottom enclosures.

Three white LED modules with clear patterned hemispherical lenses below.

One ERP ESP050W-1200-42 and one ESS030W-0620-42 LED drivers
120.0Vac, 60.00Hz, 0.5987A, 70.83W, 0.986PF, 11.1%THD(i)



Performance Summary

| | |
|--------------------|-----------|
| Total Light Output | 4837 lm |
| Luminaire Power | 70.8 W |
| Luminous Efficacy | 68.3 lm/W |

PREPARED FOR : Lumetta, Inc, 33 Minnesota Avenue, Warwick, RI 02888, USA



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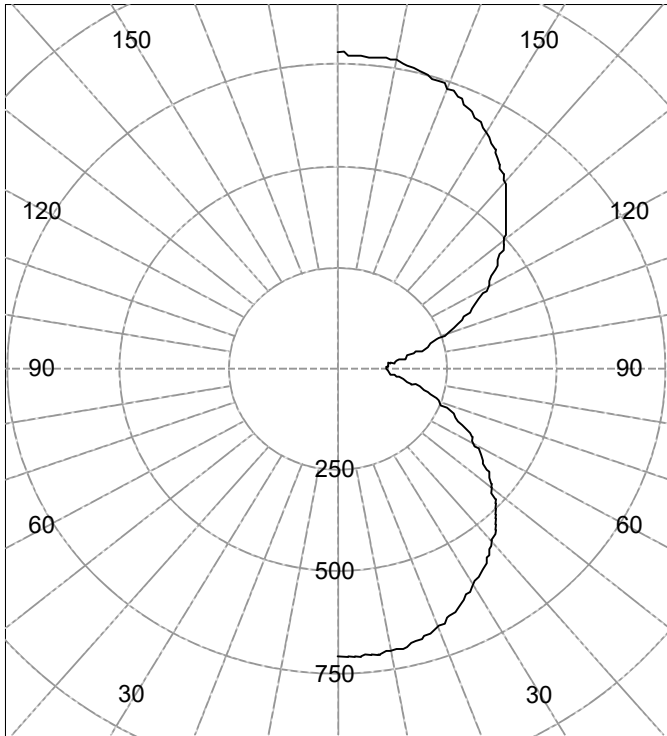
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Legend: All planes - Black (cd)



(Rotational symmetry)

AVERAGE LUMINANCE (cd / m²)

| Gamma | C0 |
|-------|------|
| 45.0 | 1221 |
| 55.0 | 1215 |
| 65.0 | 1232 |
| 75.0 | 1330 |
| 85.0 | 2325 |

INTENSITY SUMMARY (cd)

| Gamma | All Planes | Flux (lm) | Gamma | C0 | Flux (lm) |
|-------|------------|-----------|-------|-----|-----------|
| 0 | 709 | | 90 | 108 | |
| 5 | 707 | 67 | 95 | 117 | 133 |
| 10 | 705 | | 100 | 153 | |
| 15 | 692 | 195 | 105 | 208 | 221 |
| 20 | 673 | | 110 | 269 | |
| 25 | 647 | 299 | 115 | 329 | 326 |
| 30 | 618 | | 120 | 387 | |
| 35 | 585 | 366 | 125 | 442 | 395 |
| 40 | 549 | | 130 | 495 | |
| 45 | 506 | 391 | 135 | 545 | 420 |
| 50 | 459 | | 140 | 590 | |
| 55 | 409 | 365 | 145 | 634 | 397 |
| 60 | 357 | | 150 | 673 | |
| 65 | 305 | 302 | 155 | 706 | 326 |
| 70 | 254 | | 160 | 734 | |
| 75 | 202 | 213 | 165 | 755 | 213 |
| 80 | 152 | | 170 | 768 | |
| 85 | 119 | 133 | 175 | 771 | 74 |
| 90 | 108 | | 180 | 777 | |

ZONAL FLUX AND PERCENTAGES

| Zone | Flux (lm) | %Lamp | %Luminaire |
|--------|-----------|-------|------------|
| 0-30 | 561 | N / A | 11.6 |
| 0-40 | 928 | N / A | 19.2 |
| 0-60 | 1684 | N / A | 34.8 |
| 0-90 | 2333 | N / A | 48.2 |
| 40-90 | 1405 | N / A | 29.1 |
| 60-90 | 649 | N / A | 13.4 |
| 90-180 | 2503 | N / A | 51.8 |
| 0-180 | 4837 | N / A | 100.0 |

Total Light Output = 4,837 lm

Spacing Criterion: 0-180 1.3
Spacing Criterion: 90-270 1.3

Signed:

Authorized Signatory

Date of test 19-Feb-2018
Date of report 2-Mar-2018



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Intensity (cd) and Flux (lm) data

| Gamma | Intensity | Flux | Gamma | Intensity | Flux |
|-------|-----------|------|-------|-----------|------|
| 0.0 | 709 | | 90.0 | 108 | |
| 2.5 | 707 | | 92.5 | 109 | |
| 5.0 | 707 | 67 | 95.0 | 117 | 133 |
| 7.5 | 708 | | 97.5 | 132 | |
| 10.0 | 705 | | 100.0 | 153 | |
| 12.5 | 700 | | 102.5 | 180 | |
| 15.0 | 692 | 195 | 105.0 | 208 | 221 |
| 17.5 | 683 | | 107.5 | 238 | |
| 20.0 | 673 | | 110.0 | 269 | |
| 22.5 | 661 | | 112.5 | 299 | |
| 25.0 | 647 | 299 | 115.0 | 329 | 326 |
| 27.5 | 633 | | 117.5 | 358 | |
| 30.0 | 618 | | 120.0 | 387 | |
| 32.5 | 602 | | 122.5 | 415 | |
| 35.0 | 585 | 366 | 125.0 | 442 | 395 |
| 37.5 | 568 | | 127.5 | 469 | |
| 40.0 | 549 | | 130.0 | 495 | |
| 42.5 | 528 | | 132.5 | 520 | |
| 45.0 | 506 | 391 | 135.0 | 545 | 420 |
| 47.5 | 483 | | 137.5 | 568 | |
| 50.0 | 459 | | 140.0 | 590 | |
| 52.5 | 434 | | 142.5 | 613 | |
| 55.0 | 409 | 365 | 145.0 | 634 | 397 |
| 57.5 | 383 | | 147.5 | 654 | |
| 60.0 | 357 | | 150.0 | 673 | |
| 62.5 | 331 | | 152.5 | 690 | |
| 65.0 | 305 | 302 | 155.0 | 706 | 326 |
| 67.5 | 279 | | 157.5 | 721 | |
| 70.0 | 254 | | 160.0 | 734 | |
| 72.5 | 228 | | 162.5 | 746 | |
| 75.0 | 202 | 213 | 165.0 | 755 | 213 |
| 77.5 | 177 | | 167.5 | 763 | |
| 80.0 | 152 | | 170.0 | 768 | |
| 82.5 | 129 | | 172.5 | 770 | |
| 85.0 | 119 | 133 | 175.0 | 771 | 74 |
| 87.5 | 114 | | 177.5 | 774 | |
| 90.0 | 108 | | 180.0 | 777 | |



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Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| 0 | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 68 | 68 | 68 | 55 | 55 | 55 | 48 |
| 1 | 96 | 92 | 87 | 83 | 88 | 84 | 81 | 77 | 71 | 68 | 65 | 58 | 56 | 54 | 46 | 45 | 44 | 38 |
| 2 | 87 | 79 | 73 | 67 | 80 | 73 | 67 | 62 | 61 | 57 | 53 | 50 | 47 | 44 | 40 | 38 | 36 | 31 |
| 3 | 79 | 69 | 62 | 55 | 73 | 64 | 57 | 52 | 54 | 48 | 44 | 44 | 40 | 37 | 35 | 33 | 30 | 26 |
| 4 | 72 | 61 | 53 | 47 | 66 | 56 | 49 | 43 | 47 | 42 | 37 | 39 | 35 | 31 | 31 | 28 | 26 | 22 |
| 5 | 66 | 54 | 46 | 40 | 61 | 50 | 43 | 37 | 42 | 36 | 32 | 35 | 31 | 27 | 28 | 25 | 22 | 19 |
| 6 | 61 | 49 | 40 | 34 | 56 | 45 | 37 | 32 | 38 | 32 | 28 | 31 | 27 | 24 | 25 | 22 | 19 | 16 |
| 7 | 56 | 44 | 36 | 30 | 52 | 40 | 33 | 28 | 34 | 28 | 24 | 29 | 24 | 21 | 23 | 20 | 17 | 14 |
| 8 | 52 | 40 | 32 | 26 | 48 | 37 | 30 | 25 | 31 | 25 | 21 | 26 | 22 | 18 | 21 | 18 | 15 | 13 |
| 9 | 49 | 36 | 28 | 23 | 45 | 33 | 27 | 22 | 29 | 23 | 19 | 24 | 20 | 16 | 19 | 16 | 14 | 11 |
| 10 | 45 | 33 | 26 | 21 | 42 | 31 | 24 | 20 | 26 | 21 | 17 | 22 | 18 | 15 | 18 | 15 | 12 | 10 |

For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 3) The room is spectrally neutral. When luminaires are not evenly distributed throughout the room, or do not exhibit lateral symmetry, CU values may differ from actual performance.

Circle of Light Plot

| Height(ft) | Illuminance at Nadir (fc) | Beam Width (across 50% Nadir Illum) | |
|------------|---------------------------|--|--------|
| | | 0-180 | 90-270 |
| 6.0 | 19.7 | 7.77 | 7.77 |
| 8.0 | 11.1 | 10.36 | 10.36 |
| 10.0 | 7.1 | 12.95 | 12.95 |
| 12.0 | 4.9 | 15.54 | 15.54 |
| 14.0 | 3.6 | 18.13 | 18.13 |
| 16.0 | 2.8 | 20.71 | 20.71 |



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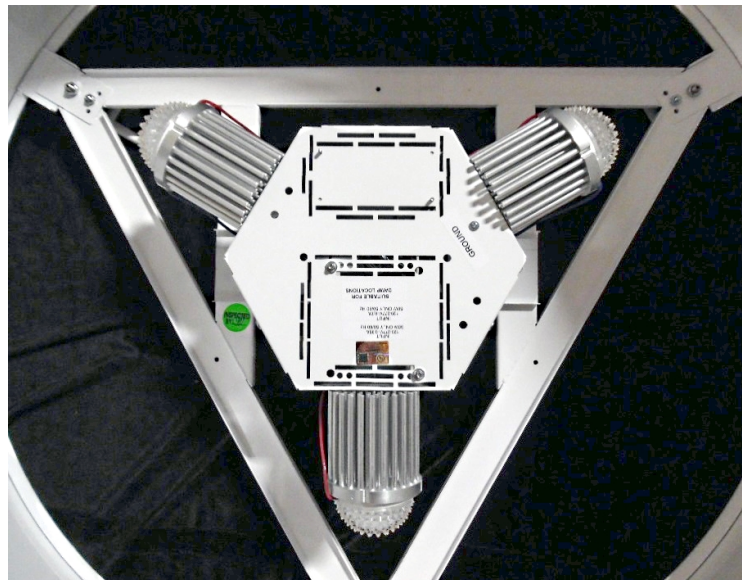
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Test Distance 9.5 m
Test Temperature 25.1 °C

Notes

The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Tested in accordance with the applicable sections of publications: IES LM-79-08 (Sec. 12), IES LM-16-93, IES LM-58-13, CIE 13.3:1995, CIE 15:2004, ANSI C78.377:2015, ANSI C82.77-10:2014.

The luminous intensity values, and other derived quantities, contained in this report are based on the absolute data, as measured.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the CIE Gamma coordinate system as defined in CIE publication number 121.

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