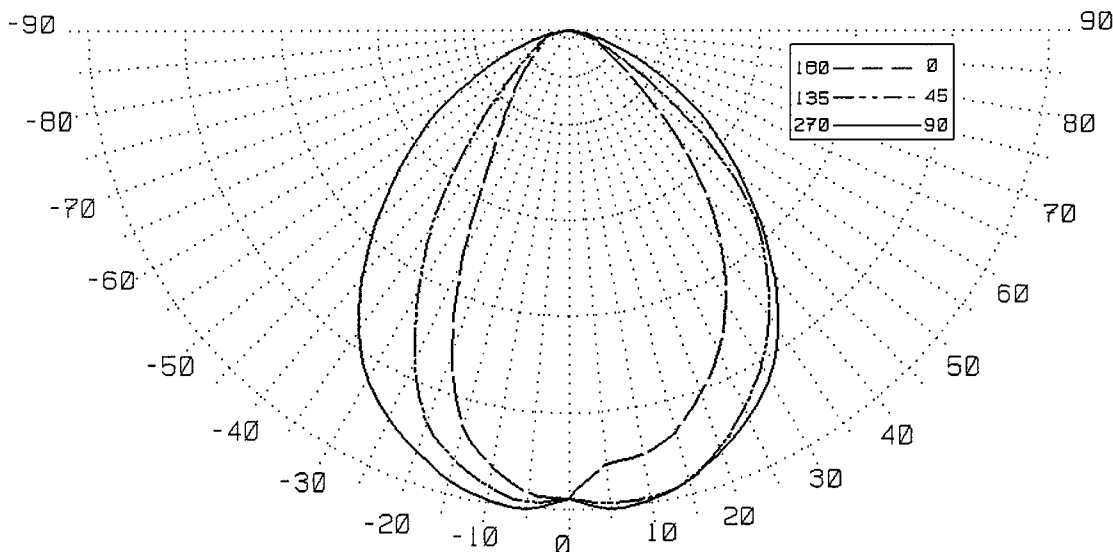


BALLABS CERTIFIED TEST REPORT NO.: 20128.0 DATE 11/29/17  
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO  
DESCRIPTION: 2-56LED 22" & 1-28LED 11"ARRAYS 4'PERIMETER CONTINUOUS PX  
WHITE REFL w/1"EXTENSION & FROSTED ACRYLIC LENS  
ADVANCE #XI040C110V054BST1 @ 1000mA  
CATALOG NBR: PXF-42-03'09-L10/840-W-D-LCAP/RCAP-DIM-UNV  
LAMP TYPE : HLM2256\_5630 RevA #10560228 & HLM1128\_5630 RevA #10560268

0 DEGREE PLANE CONTAINS MAXIMUM CANDLEPOWER



*[Handwritten signature]*

**NVLAP**<sup>®</sup>  
TESTING

NVLAP LAB CODE 200921-0

| LUMEN SUMMARY     |        |       |       |        |        |       |       |
|-------------------|--------|-------|-------|--------|--------|-------|-------|
| ZONE              | LUMENS | %LAMP | %FIXT | ZONE   | LUMENS | %LAMP | %FIXT |
| 0- 30             | 1718.  | NA.   | 41.0  | 90-120 | 0.     | NA.   | .0    |
| 0- 40             | 2624.  | NA.   | 62.5  | 90-130 | 0.     | NA.   | .0    |
| 0- 60             | 3816.  | NA.   | 91.0  | 90-150 | 0.     | NA.   | .0    |
| 0- 90             | 4195.  | NA.   | 100.0 | 90-180 | 0.     | NA.   | .0    |
| TOTAL LUMINAIRE = |        |       |       | 0-180  | 4195.  | NA.   | 100.0 |

THIS BALLABS REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THIS CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.

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CANDLEPOWER DISTRIBUTION  
 0 DEGREE PLANE CONTAINS MAXIMUM CANDLEPOWER

| VERT | HORIZONTAL |       |       |       |       |       |       |       |       | LUMENS |       | TOTAL |
|------|------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
|      | .0         | 22.5  | 45.0  | 67.5  | 90.0  | 112.5 | 135.0 | 157.5 | 180.0 | FRONT  | BACK  |       |
| 0    | 2285.      | 2285. | 2285. | 2285. | 2285. | 2285. | 2285. | 2285. | 2285. |        |       |       |
| 5    | 2124.      | 2310. | 2312. | 2310. | 2341. | 2343. | 2308. | 2278. | 2263. | 110.2  | 110.3 | 220.5 |
| 10   | 2098.      | 2300. | 2309. | 2311. | 2321. | 2319. | 2258. | 2201. | 2160. |        |       |       |
| 15   | 2026.      | 2249. | 2267. | 2271. | 2271. | 2256. | 2167. | 2077. | 2004. | 320.3  | 307.1 | 627.4 |
| 20   | 1892.      | 2150. | 2168. | 2201. | 2184. | 2154. | 2036. | 1800. | 1670. |        |       |       |
| 25   | 1741.      | 1980. | 2039. | 2085. | 2090. | 2026. | 1784. | 1430. | 1227. | 470.5  | 399.9 | 870.3 |
| 30   | 1544.      | 1789. | 1892. | 1958. | 1971. | 1870. | 1465. | 1048. | 800.  |        |       |       |
| 35   | 1316.      | 1576. | 1715. | 1786. | 1790. | 1695. | 1166. | 709.  | 564.  | 528.0  | 377.5 | 905.5 |
| 40   | 1055.      | 1256. | 1507. | 1588. | 1570. | 1475. | 828.  | 502.  | 430.  |        |       |       |
| 45   | 762.       | 888.  | 1287. | 1355. | 1328. | 1154. | 548.  | 377.  | 332.  | 434.4  | 296.3 | 730.6 |
| 50   | 512.       | 567.  | 976.  | 1115. | 1092. | 858.  | 379.  | 277.  | 248.  |        |       |       |
| 55   | 339.       | 372.  | 617.  | 895.  | 874.  | 602.  | 268.  | 191.  | 181.  | 284.2  | 177.9 | 462.1 |
| 60   | 225.       | 245.  | 359.  | 697.  | 670.  | 389.  | 181.  | 164.  | 171.  |        |       |       |
| 65   | 169.       | 184.  | 224.  | 489.  | 461.  | 242.  | 134.  | 153.  | 156.  | 167.0  | 98.0  | 265.0 |
| 70   | 120.       | 142.  | 148.  | 280.  | 309.  | 136.  | 118.  | 129.  | 124.  |        |       |       |
| 75   | 66.        | 90.   | 96.   | 126.  | 177.  | 72.   | 84.   | 88.   | 82.   | 57.2   | 42.4  | 99.6  |
| 80   | 31.        | 43.   | 50.   | 64.   | 82.   | 47.   | 45.   | 48.   | 42.   |        |       |       |
| 85   | 5.         | 9.    | 11.   | 16.   | 22.   | 11.   | 11.   | 14.   | 10.   | 6.9    | 6.9   | 13.7  |
| 90   | 0.         | 0.    | 1.    | 2.    | 3.    | 3.    | 2.    | 0.    | 0.    |        |       |       |

USE .323 FT. AS LENGTH AND 3.771 FT. AS WIDTH

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 LAMP TYPE : HLM2256\_5630 RevA #10560228 & HLM1128\_5630 RevA #10560268

# ZONAL CAVITY COEFFICIENTS OF UTILIZATION

EFFECTIVE FLOOR CAVITY REFLECTANCE=.20

| CEILING |      | .80  |      |      |      | .70  |      |      |      | .50  |      |      |      | .30  |      |      |      | .10  |  |  |  | .00 |
|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|-----|
| WALL    | .70  | .50  | .30  | .10  | .70  | .50  | .30  | .10  | .50  | .30  | .10  | .50  | .30  | .10  | .50  | .30  | .10  | .00  |  |  |  |     |
| RCR     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |     |
| 0       | 1.19 | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |  |  |  |     |
| 1       | 1.12 | 1.08 | 1.05 | 1.02 | 1.09 | 1.06 | 1.03 | 1.01 | 1.02 | 1.00 | .97  | .98  | .96  | .95  | .95  | .93  | .92  | .90  |  |  |  |     |
| 2       | 1.04 | .98  | .93  | .88  | 1.02 | .96  | .91  | .87  | .93  | .89  | .85  | .90  | .87  | .84  | .87  | .84  | .82  | .80  |  |  |  |     |
| 3       | .97  | .89  | .83  | .78  | .95  | .88  | .82  | .77  | .85  | .80  | .76  | .82  | .78  | .74  | .80  | .76  | .73  | .71  |  |  |  |     |
| 4       | .90  | .81  | .74  | .68  | .88  | .80  | .73  | .68  | .77  | .72  | .67  | .75  | .70  | .66  | .73  | .69  | .65  | .64  |  |  |  |     |
| 5       | .84  | .73  | .66  | .60  | .82  | .72  | .65  | .60  | .70  | .64  | .59  | .68  | .63  | .59  | .67  | .62  | .58  | .56  |  |  |  |     |
| 6       | .78  | .67  | .59  | .54  | .76  | .66  | .59  | .53  | .64  | .58  | .53  | .63  | .57  | .53  | .61  | .56  | .52  | .50  |  |  |  |     |
| 7       | .73  | .61  | .53  | .48  | .71  | .60  | .53  | .48  | .59  | .52  | .47  | .57  | .51  | .47  | .56  | .51  | .47  | .45  |  |  |  |     |
| 8       | .67  | .55  | .48  | .42  | .66  | .55  | .47  | .42  | .53  | .47  | .42  | .52  | .46  | .42  | .51  | .46  | .42  | .40  |  |  |  |     |
| 9       | .62  | .50  | .43  | .38  | .61  | .49  | .42  | .37  | .48  | .42  | .37  | .47  | .41  | .37  | .46  | .41  | .37  | .35  |  |  |  |     |
| 10      | .58  | .46  | .38  | .34  | .57  | .45  | .38  | .34  | .44  | .38  | .33  | .43  | .37  | .33  | .42  | .37  | .33  | .32  |  |  |  |     |

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

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ELECTRICAL CHARACTERISTICS 119.99V .3969A 47.4510W

LUMINOUS EFFICACY (LUMENS / WATTS) = 88.4

TESTED IN ACCORDANCE WITH CURRENT IES STANDARDS  
UTILIZING ABSOLUTE PHOTOMETRY PER LM-79-08

