



UL LLC
1075 W Lambert Rd Suite B
Brea, CA 92821

Floodlight Distribution Test Report

Relevant Standards
IES LM-79-2008, IES LM-35-2002 (Withdrawn)
ANSI C82.77-2002

Prepared For
B-K LIGHTING INC

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Madera, CA 93636-9515
United States

Catalog Number
DE-LED-x66-WFL-9 SN-DE-LED-x66-WFL-9 ST-DE-LED-x66-WFL-9 SM-DE-LED-x66-WFL-9
UL-DE-LED-x66-WFL-9

Order Number
11353040
Test Number
11353040.28

Test Date

2016-09-12

Prepared By

Khang Nguyen, Technician

Approved By

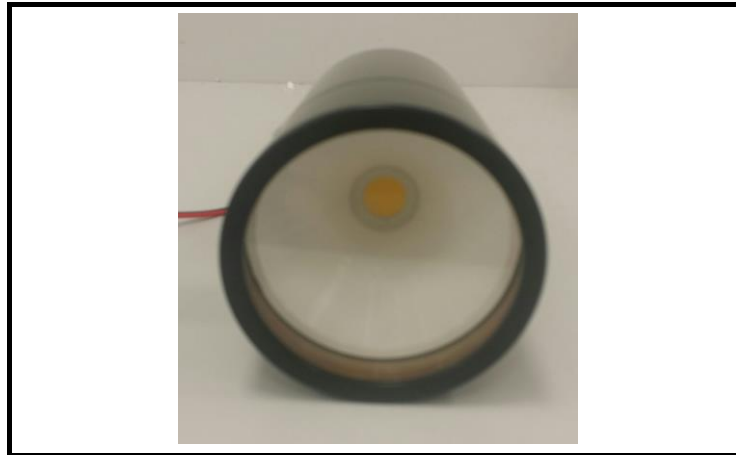
Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Circular black aluminum housing white stepped reflector and glass lens
Lamp: One (1) White LED
Mounting: VBU
Ballast/Driver: Thomas Research Products LED25W-36-C0700-LE

Luminaire



Luminaire Characteristics

Luminous Diameter: 2.75 in.

Summary of Results

| | |
|-------------------------|--------------|
| Total Luminaire Output: | 1506 Lumens |
| Luminaire Efficacy: | 54.4 lm/w |
| Maximum Candela: | 1649 Candela |

Test Conditions

| | |
|-------------------|-----------|
| Test Temperature: | 25.5 °C |
| Voltage: | 120.1 VAC |
| Current: | 0.2351 A |
| Power: | 27.68 W |
| Power Factor: | 0.981 |
| Frequency: | 60 Hz |
| Current THD: | 16.6 % |

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

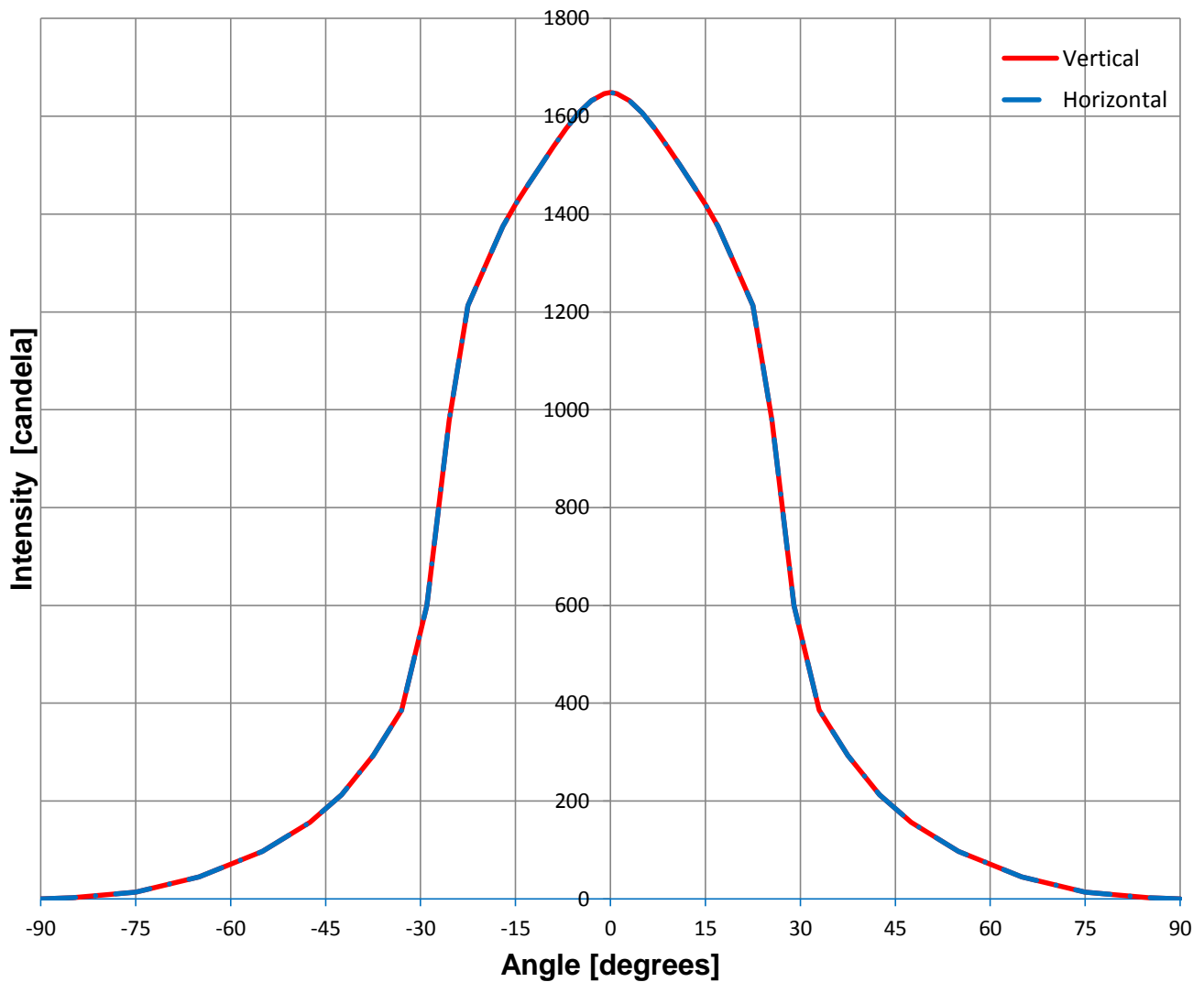
Distribution Test Conditions

| Temperature | Voltage | Current | Power | Power Factor | Frequency | Current THD |
|-------------|-----------|----------|---------|--------------|-----------|-------------|
| 25.5 °C | 120.1 VAC | 0.2351 A | 27.68 W | 0.981 | 60 Hz | 16.6 % |

Summary of Results

| | | | |
|---------------------|------------------|------------------|-----------------|
| Total Lumen Output: | 1505.8 Lumens | Maximum Candela: | 1648.6 Candela |
| Luminaire Efficacy: | 54.4 Lumens/Watt | Maximum Angle: | 0 H 0 V |
| Field Lumens: | 1308.6 Lumens | Field Angle : | 93.5 H X 93.5 V |
| Beam Lumens: | 890.5 Lumens | Beam Angle : | 53.8 H X 53.8 V |
| Spill Light Lumens: | 197.2 Lumens | IESNA Type: | 5 H X 5 V |

Maximum Candlepower Plot





Candela Tabulation

Lateral Angle (Degrees)

| Vertical Angle (Degrees) | Lateral Angle (Degrees) | | | | | | | | | | |
|--------------------------|-------------------------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19.5 |
| 85.0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 75.0 | 14 | 14 | 14 | 14 | 14 | 14 | 13 | 13 | 13 | 13 | 12 |
| 65.0 | 45 | 45 | 45 | 44 | 44 | 43 | 43 | 42 | 41 | 40 | 39 |
| 55.0 | 97 | 97 | 97 | 96 | 95 | 94 | 93 | 91 | 89 | 86 | 83 |
| 47.5 | 156 | 156 | 155 | 154 | 152 | 150 | 147 | 144 | 140 | 136 | 130 |
| 42.5 | 213 | 213 | 212 | 210 | 207 | 203 | 198 | 193 | 187 | 180 | 171 |
| 37.5 | 293 | 293 | 291 | 287 | 282 | 276 | 268 | 259 | 249 | 239 | 225 |
| 33.0 | 386 | 385 | 383 | 379 | 374 | 366 | 356 | 343 | 328 | 310 | 288 |
| 29.0 | 600 | 598 | 587 | 565 | 533 | 495 | 456 | 425 | 400 | 381 | 358 |
| 25.5 | 978 | 976 | 960 | 930 | 882 | 819 | 744 | 659 | 571 | 490 | 419 |
| 22.5 | 1213 | 1212 | 1205 | 1191 | 1157 | 1110 | 1038 | 944 | 832 | 710 | 561 |
| 19.5 | 1302 | 1301 | 1295 | 1284 | 1269 | 1250 | 1222 | 1172 | 1084 | 962 | 779 |
| 17.0 | 1375 | 1374 | 1368 | 1355 | 1336 | 1311 | 1283 | 1253 | 1212 | 1133 | 962 |
| 15.0 | 1420 | 1419 | 1414 | 1403 | 1386 | 1363 | 1331 | 1294 | 1258 | 1212 | 1084 |
| 13.0 | 1460 | 1459 | 1453 | 1441 | 1425 | 1404 | 1376 | 1338 | 1294 | 1253 | 1172 |
| 11.0 | 1500 | 1499 | 1492 | 1478 | 1459 | 1436 | 1409 | 1376 | 1331 | 1283 | 1222 |
| 9.0 | 1539 | 1537 | 1529 | 1514 | 1492 | 1466 | 1436 | 1404 | 1363 | 1311 | 1250 |
| 7.0 | 1575 | 1574 | 1564 | 1546 | 1521 | 1492 | 1459 | 1425 | 1386 | 1336 | 1269 |
| 5.0 | 1607 | 1605 | 1594 | 1574 | 1546 | 1514 | 1478 | 1441 | 1403 | 1355 | 1284 |
| 3.0 | 1632 | 1630 | 1617 | 1594 | 1564 | 1529 | 1492 | 1453 | 1414 | 1368 | 1295 |
| 1.0 | 1646 | 1644 | 1630 | 1605 | 1574 | 1537 | 1499 | 1459 | 1419 | 1374 | 1301 |
| 0.0 | 1649 | 1646 | 1632 | 1607 | 1575 | 1539 | 1500 | 1460 | 1420 | 1375 | 1302 |
| -1.0 | 1646 | 1644 | 1630 | 1605 | 1574 | 1537 | 1499 | 1459 | 1419 | 1374 | 1301 |
| -3.0 | 1632 | 1630 | 1617 | 1594 | 1564 | 1529 | 1492 | 1453 | 1414 | 1368 | 1295 |
| -5.0 | 1607 | 1605 | 1594 | 1574 | 1546 | 1514 | 1478 | 1441 | 1403 | 1355 | 1284 |
| -7.0 | 1575 | 1574 | 1564 | 1546 | 1521 | 1492 | 1459 | 1425 | 1386 | 1336 | 1269 |
| -9.0 | 1539 | 1537 | 1529 | 1514 | 1492 | 1466 | 1436 | 1404 | 1363 | 1311 | 1250 |
| -11.0 | 1500 | 1499 | 1492 | 1478 | 1459 | 1436 | 1409 | 1376 | 1331 | 1283 | 1222 |
| -13.0 | 1460 | 1459 | 1453 | 1441 | 1425 | 1404 | 1376 | 1338 | 1294 | 1253 | 1172 |
| -15.0 | 1420 | 1419 | 1414 | 1403 | 1386 | 1363 | 1331 | 1294 | 1258 | 1212 | 1084 |
| -17.0 | 1375 | 1374 | 1368 | 1355 | 1336 | 1311 | 1283 | 1253 | 1212 | 1133 | 962 |
| -19.5 | 1302 | 1301 | 1295 | 1284 | 1269 | 1250 | 1222 | 1172 | 1084 | 962 | 779 |
| -22.5 | 1213 | 1212 | 1205 | 1191 | 1157 | 1110 | 1038 | 944 | 832 | 710 | 561 |
| -25.5 | 978 | 976 | 960 | 930 | 882 | 819 | 744 | 659 | 571 | 490 | 419 |
| -29.0 | 600 | 598 | 587 | 565 | 533 | 495 | 456 | 425 | 400 | 381 | 358 |
| -33.0 | 386 | 385 | 383 | 379 | 374 | 366 | 356 | 343 | 328 | 310 | 288 |
| -37.5 | 293 | 293 | 291 | 287 | 282 | 276 | 268 | 259 | 249 | 239 | 225 |
| -42.5 | 213 | 213 | 212 | 210 | 207 | 203 | 198 | 193 | 187 | 180 | 171 |
| -47.5 | 156 | 156 | 155 | 154 | 152 | 150 | 147 | 144 | 140 | 136 | 130 |
| -55.0 | 97 | 97 | 97 | 96 | 95 | 94 | 93 | 91 | 89 | 86 | 83 |
| -65.0 | 45 | 45 | 45 | 44 | 44 | 43 | 43 | 42 | 41 | 40 | 39 |
| -75.0 | 14 | 14 | 14 | 14 | 14 | 14 | 13 | 13 | 13 | 13 | 12 |
| -85.0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |



Candela Tabulation

Lateral Angle (Degrees)

| | 22.5 | 25.5 | 29 | 33 | 37.5 | 42.5 | 47.5 | 55 | 65 | 75 | 85 |
|-------|------|------|-----|-----|------|------|------|----|----|----|----|
| 85.0 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 |
| 75.0 | 12 | 11 | 11 | 10 | 9 | 7 | 6 | 5 | 3 | 2 | 0 |
| 65.0 | 37 | 35 | 32 | 29 | 25 | 21 | 17 | 12 | 7 | 3 | 0 |
| 55.0 | 79 | 74 | 69 | 62 | 54 | 45 | 36 | 24 | 12 | 5 | 1 |
| 47.5 | 123 | 115 | 105 | 94 | 81 | 67 | 54 | 36 | 17 | 6 | 1 |
| 42.5 | 160 | 149 | 135 | 119 | 102 | 84 | 67 | 45 | 21 | 7 | 2 |
| 37.5 | 208 | 190 | 170 | 149 | 125 | 102 | 81 | 54 | 25 | 9 | 2 |
| 33.0 | 262 | 237 | 209 | 179 | 149 | 119 | 94 | 62 | 29 | 10 | 2 |
| 29.0 | 323 | 286 | 247 | 209 | 170 | 135 | 105 | 69 | 32 | 11 | 2 |
| 25.5 | 376 | 337 | 286 | 237 | 190 | 149 | 115 | 74 | 35 | 11 | 2 |
| 22.5 | 431 | 376 | 323 | 262 | 208 | 160 | 123 | 79 | 37 | 12 | 2 |
| 19.5 | 561 | 419 | 358 | 288 | 225 | 171 | 130 | 83 | 39 | 12 | 2 |
| 17.0 | 710 | 490 | 381 | 310 | 239 | 180 | 136 | 86 | 40 | 13 | 2 |
| 15.0 | 832 | 571 | 400 | 328 | 249 | 187 | 140 | 89 | 41 | 13 | 2 |
| 13.0 | 944 | 659 | 425 | 343 | 259 | 193 | 144 | 91 | 42 | 13 | 2 |
| 11.0 | 1038 | 744 | 456 | 356 | 268 | 198 | 147 | 93 | 43 | 13 | 2 |
| 9.0 | 1110 | 819 | 495 | 366 | 276 | 203 | 150 | 94 | 43 | 14 | 2 |
| 7.0 | 1157 | 882 | 533 | 374 | 282 | 207 | 152 | 95 | 44 | 14 | 2 |
| 5.0 | 1191 | 930 | 565 | 379 | 287 | 210 | 154 | 96 | 44 | 14 | 2 |
| 3.0 | 1205 | 960 | 587 | 383 | 291 | 212 | 155 | 97 | 45 | 14 | 2 |
| 1.0 | 1212 | 976 | 598 | 385 | 293 | 213 | 156 | 97 | 45 | 14 | 2 |
| 0.0 | 1213 | 978 | 600 | 386 | 293 | 213 | 156 | 97 | 45 | 14 | 2 |
| -1.0 | 1212 | 976 | 598 | 385 | 293 | 213 | 156 | 97 | 45 | 14 | 2 |
| -3.0 | 1205 | 960 | 587 | 383 | 291 | 212 | 155 | 97 | 45 | 14 | 2 |
| -5.0 | 1191 | 930 | 565 | 379 | 287 | 210 | 154 | 96 | 44 | 14 | 2 |
| -7.0 | 1157 | 882 | 533 | 374 | 282 | 207 | 152 | 95 | 44 | 14 | 2 |
| -9.0 | 1110 | 819 | 495 | 366 | 276 | 203 | 150 | 94 | 43 | 14 | 2 |
| -11.0 | 1038 | 744 | 456 | 356 | 268 | 198 | 147 | 93 | 43 | 13 | 2 |
| -13.0 | 944 | 659 | 425 | 343 | 259 | 193 | 144 | 91 | 42 | 13 | 2 |
| -15.0 | 832 | 571 | 400 | 328 | 249 | 187 | 140 | 89 | 41 | 13 | 2 |
| -17.0 | 710 | 490 | 381 | 310 | 239 | 180 | 136 | 86 | 40 | 13 | 2 |
| -19.5 | 561 | 419 | 358 | 288 | 225 | 171 | 130 | 83 | 39 | 12 | 2 |
| -22.5 | 431 | 376 | 323 | 262 | 208 | 160 | 123 | 79 | 37 | 12 | 2 |
| -25.5 | 376 | 337 | 286 | 237 | 190 | 149 | 115 | 74 | 35 | 11 | 2 |
| -29.0 | 323 | 286 | 247 | 209 | 170 | 135 | 105 | 69 | 32 | 11 | 2 |
| -33.0 | 262 | 237 | 209 | 179 | 149 | 119 | 94 | 62 | 29 | 10 | 2 |
| -37.5 | 208 | 190 | 170 | 149 | 125 | 102 | 81 | 54 | 25 | 9 | 2 |
| -42.5 | 160 | 149 | 135 | 119 | 102 | 84 | 67 | 45 | 21 | 7 | 2 |
| -47.5 | 123 | 115 | 105 | 94 | 81 | 67 | 54 | 36 | 17 | 6 | 1 |
| -55.0 | 79 | 74 | 69 | 62 | 54 | 45 | 36 | 24 | 12 | 5 | 1 |
| -65.0 | 37 | 35 | 32 | 29 | 25 | 21 | 17 | 12 | 7 | 3 | 0 |
| -75.0 | 12 | 11 | 11 | 10 | 9 | 7 | 6 | 5 | 3 | 2 | 0 |
| -85.0 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 |

Vertical Angle (Degrees)



Isocandela Diagram (Percent of Maximum Intensity)

