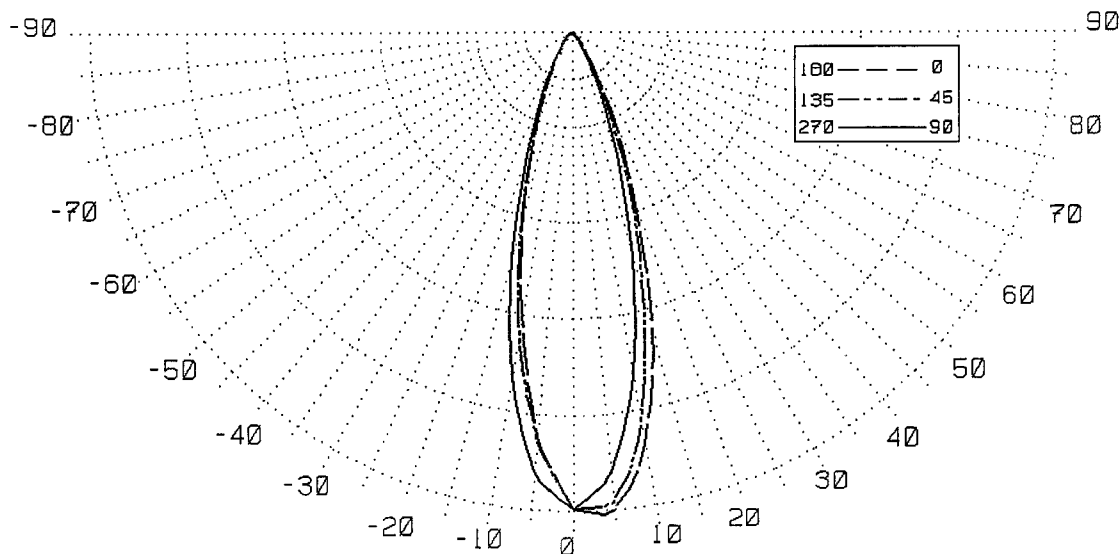


BALLABS CERTIFIED TEST REPORT NO.: 20440.0 DATE 05/24/18  
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO  
DESCRIPTION: GEN7 V18 LED 6" TALL HEATSINK 6" RND ADJ DOWNLIGHT @ 0 TILT  
ACRYLIC NARROW TIR OPTIC & 6" WHITE ASYM TRIM w/ANGLE SOLITE  
LENS ADVANCE # XI050C140V054DSM5 @ 1060mA  
CATALOG NBR: 6AR-L40/835-DIM-A-N-OF-WH (0 DEG TILT)  
LAMP TYPE : BXRE-35E4000

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             | 2890.  | NA.   | 88.4  | 90-120 | 0.     | NA.   | .0    |
| 0- 40             | 3115.  | NA.   | 95.3  | 90-130 | 0.     | NA.   | .0    |
| 0- 60             | 3242.  | NA.   | 99.2  | 90-150 | 0.     | NA.   | .0    |
| 0- 90             | 3269.  | NA.   | 100.0 | 90-180 | 0.     | NA.   | .0    |
| TOTAL LUMINAIRE = |        |       |       | 0-180  | 3269.  | 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 |       |        |
|------|------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|--------|
|      | .0         | 22.5  | 45.0  | 67.5  | 90.0  | 112.5 | 135.0 | 157.5 | 180.0 | FRONT  | BACK  | TOTAL  |
| 0    | 9488.      | 9488. | 9488. | 9488. | 9488. | 9488. | 9488. | 9488. | 9488. |        |       |        |
| 5    | 9530.      | 9466. | 9351. | 9094. | 8751. | 8342. | 8115. | 7990. | 8057. | 442.9  | 389.7 | 832.7  |
| 10   | 8279.      | 8127. | 7845. | 7398. | 6924. | 6653. | 6133. | 5817. | 5764. |        |       |        |
| 15   | 6157.      | 6112. | 5469. | 5067. | 4657. | 4344. | 3924. | 3784. | 3780. | 792.3  | 576.0 | 1368.3 |
| 20   | 3673.      | 3739. | 3402. | 3037. | 2620. | 2354. | 2162. | 2136. | 2151. |        |       |        |
| 25   | 2126.      | 1997. | 1765. | 1525. | 1325. | 1306. | 1110. | 1122. | 1170. | 407.6  | 281.0 | 688.6  |
| 30   | 1052.      | 989.  | 905.  | 718.  | 712.  | 596.  | 579.  | 590.  | 619.  |        |       |        |
| 35   | 472.       | 460.  | 411.  | 365.  | 326.  | 304.  | 314.  | 309.  | 333.  | 129.7  | 96.2  | 225.9  |
| 40   | 240.       | 224.  | 207.  | 196.  | 176.  | 172.  | 173.  | 183.  | 188.  |        |       |        |
| 45   | 126.       | 115.  | 112.  | 107.  | 103.  | 106.  | 107.  | 112.  | 118.  | 43.1   | 42.2  | 85.3   |
| 50   | 74.        | 72.   | 72.   | 73.   | 69.   | 69.   | 70.   | 73.   | 76.   |        |       |        |
| 55   | 46.        | 44.   | 47.   | 47.   | 46.   | 44.   | 46.   | 47.   | 52.   | 20.5   | 20.5  | 41.0   |
| 60   | 38.        | 38.   | 37.   | 37.   | 32.   | 29.   | 28.   | 26.   | 29.   |        |       |        |
| 65   | 32.        | 30.   | 29.   | 26.   | 21.   | 14.   | 11.   | 10.   | 8.    | 13.9   | 5.9   | 19.7   |
| 70   | 26.        | 26.   | 20.   | 16.   | 11.   | 6.    | 4.    | 3.    | 4.    |        |       |        |
| 75   | 19.        | 18.   | 13.   | 8.    | 3.    | 0.    | 0.    | 0.    | 0.    | 6.8    | .0    | 6.8    |
| 80   | 10.        | 9.    | 5.    | 3.    | 0.    | 0.    | 0.    | 0.    | 0.    |        |       |        |
| 85   | 3.         | 1.    | 0.    | 0.    | 0.    | 0.    | 0.    | 0.    | 0.    | .3     | .0    | .3     |
| 90   | 0.         | 0.    | 0.    | 0.    | 0.    | 0.    | 0.    | 0.    | 0.    |        |       |        |

USE .500 FT. AS LENGTH AND .500 FT. AS WIDTH

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 LENS ADVANCE # XI050C140V054DSM5 @ 1060mA  
 CATALOG NBR: 6AR-L40/835-DIM-A-N-OF-WH (0 DEG TILT)  
 LAMP TYPE : BXRE-35E4000

# 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       | 1.15 | 1.13 | 1.11 | 1.09 | 1.13 | 1.11 | 1.09 | 1.07 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | .99  | .98  | .97  |  |     |
| 2       | 1.10 | 1.06 | 1.03 | 1.00 | 1.08 | 1.05 | 1.02 | .99  | 1.02 | .99  | .97  | .99  | .97  | .95  | .96  | .95  | .93  | .92  |  |     |
| 3       | 1.06 | 1.01 | .97  | .94  | 1.05 | 1.00 | .96  | .94  | .98  | .95  | .92  | .95  | .93  | .91  | .93  | .91  | .89  | .88  |  |     |
| 4       | 1.02 | .96  | .92  | .89  | 1.01 | .95  | .91  | .88  | .93  | .90  | .87  | .91  | .89  | .86  | .90  | .87  | .85  | .84  |  |     |
| 5       | .99  | .92  | .87  | .84  | .97  | .91  | .87  | .84  | .89  | .86  | .83  | .88  | .85  | .82  | .86  | .84  | .81  | .80  |  |     |
| 6       | .95  | .88  | .84  | .80  | .94  | .88  | .83  | .80  | .86  | .83  | .80  | .85  | .82  | .79  | .84  | .81  | .79  | .78  |  |     |
| 7       | .92  | .85  | .80  | .77  | .91  | .84  | .80  | .77  | .83  | .79  | .76  | .82  | .79  | .76  | .81  | .78  | .76  | .75  |  |     |
| 8       | .89  | .81  | .77  | .74  | .88  | .81  | .77  | .73  | .80  | .76  | .73  | .79  | .75  | .73  | .78  | .75  | .73  | .71  |  |     |
| 9       | .86  | .78  | .73  | .70  | .85  | .77  | .73  | .70  | .77  | .73  | .70  | .76  | .72  | .70  | .75  | .72  | .69  | .68  |  |     |
| 10      | .82  | .74  | .70  | .67  | .81  | .74  | .70  | .67  | .73  | .69  | .66  | .73  | .69  | .66  | .72  | .69  | .66  | .65  |  |     |

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

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LAMP TYPE : BXRE-35E4000

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ELECTRICAL CHARACTERISTICS 120.06V .3469A 41.4820W

LUMINOUS EFFICACY (LUMENS / WATTS) = 78.8

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

