

## **Indoor Distribution Test Report**

# **Spectrum Lighting Inc.**

994 Jefferson Street  
Fall River, MA 02721  
+1.508.678.2303

## **Spectrum Lighting Photometric Lab**

### **Luminaire**

IF03RMx xx 835 007 DLFLGP MW  
Nominal 3" diam round recessed Infinium downlight

### **Test Number**

SP-00758\_2\_M-007L

### **Test Date**

The results contained in this report pertain only to this IES file.

### Summary of Results

#### Power

|             |       |
|-------------|-------|
| Input Watts | 7.4 W |
|-------------|-------|

#### Lumen Output

|               |            |
|---------------|------------|
| Output Lumens | 537        |
| Efficacy      | 72.51 lm/W |

#### Luminous Dimensions

|                 |      |
|-----------------|------|
| 0° - 180° Size  | -0.2 |
| 90° - 270° Size | -0.2 |
| Height          | 0    |

#### Spacing Criterion

|                           |      |
|---------------------------|------|
| Two luminaires, plane 0°  | 0.6  |
| Two luminaires, plane 90° | 0.61 |
| Four luminaires           | 0.64 |

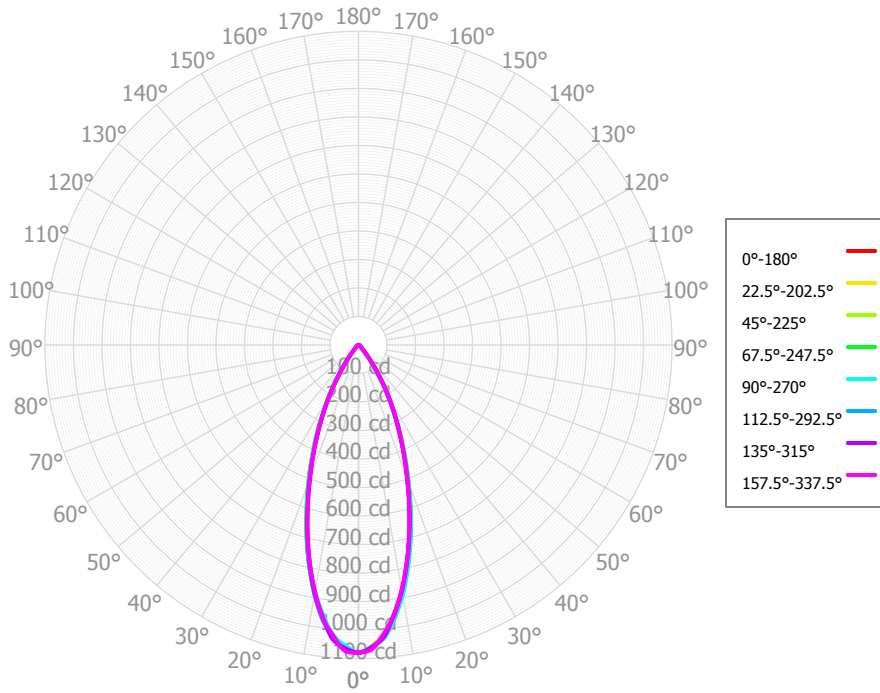
#### Full Beam Angle

|            |     |
|------------|-----|
| 0° - 180°  | 38° |
| 90° - 270° | 38° |

### IES File Header Contents

| Keyword   | Value                                                      |
|-----------|------------------------------------------------------------|
| TEST      | SP-00758_2_M-007L                                          |
| TESTLAB   | Spectrum Lighting Photometric lab, VLS-245-981             |
| MANUFAC   | Spectrum Lighting                                          |
| ISSUEDATE | 2/8/2019                                                   |
| UPDATE    | 2/27/2019                                                  |
| LUMCAT    | IF03RMx xx 835 007 DLFLGP MW                               |
| LUMINAIRE | Nominal 3" diam round recessed Infinium downlight          |
| OTHER     | Beam Angle: 38 degrees                                     |
| OTHER     | Flood optic, Solite lens                                   |
| OTHER     | Aluminum bezel contains lens                               |
| LAMPCAT   | N/A                                                        |
| LAMP      | N/A, CRI: 80, Philips                                      |
| OTHER     | CCT Multipliers: 40K x 1.03                                |
| OTHER     | Total luminaire wattages is approximate                    |
| OTHER     | This report prepared by Spectrum Lighting, scaled from 20L |

### Candela Polar Plot



### Zonal Lumen Summary

| Zone            | Lumens | % Fixture | Zone              | Lumens | % Fixture |
|-----------------|--------|-----------|-------------------|--------|-----------|
| 0.00° - 10.00°  | 94.23  | 17.56%    | 90.00° - 100.00°  | 0.03   | 0.01%     |
| 10.00° - 20.00° | 190.39 | 35.48%    | 100.00° - 110.00° | 0.00   | 0.00%     |
| 20.00° - 30.00° | 155.99 | 29.07%    | 100.00° - 120.00° | 0.00   | 0.00%     |
| 30.00° - 40.00° | 66.37  | 12.37%    | 120.00° - 130.00° | 0.00   | 0.00%     |
| 40.00° - 50.00° | 14.72  | 2.74%     | 130.00° - 140.00° | 0.00   | 0.00%     |
| 50.00° - 60.00° | 6.64   | 1.24%     | 140.00° - 150.00° | 0.00   | 0.00%     |
| 60.00° - 70.00° | 4.72   | 0.88%     | 150.00° - 160.00° | 0.00   | 0.00%     |
| 70.00° - 80.00° | 2.75   | 0.51%     | 160.00° - 170.00° | 0.00   | 0.00%     |
| 80.00° - 90.00° | 0.70   | 0.13%     | 170.00° - 180.00° | 0.00   | 0.00%     |
| 0.00° - 90.00°  | 536.51 | 99.99%    | 0.00° - 180.00°   | 536.54 | 100.00%   |

### Candela Distribution

|         | 0.00°    | 22.50°   | 45.00°   | 67.50°   | 90.00°   | 112.50°  | 135.00°  | 157.50°  | 180.00°  | 202.50°  | 225.00°  | 247.50°  | 270.00°  | 292.50°  | 315.00°  | 337.50°  | 360.00°  |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.00°   | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 | 1,079.15 |
| 2.50°   | 1,059.02 | 1,064.55 | 1,059.49 | 1,066.02 | 1,060.66 | 1,071.52 | 1,064.99 | 1,075.03 | 1,063.45 | 1,068.70 | 1,060.46 | 1,065.78 | 1,056.13 | 1,065.52 | 1,061.51 | 1,069.05 | 1,059.02 |
| 5.00°   | 1,020.15 | 1,017.39 | 1,028.45 | 1,023.10 | 1,033.18 | 1,030.78 | 1,036.86 | 1,023.59 | 1,028.06 | 1,024.00 | 1,029.10 | 1,020.67 | 1,023.03 | 1,019.95 | 1,028.17 | 1,016.83 | 1,020.15 |
| 7.50°   | 952.85   | 958.42   | 960.33   | 968.07   | 965.30   | 971.60   | 961.55   | 965.97   | 960.73   | 966.83   | 961.91   | 965.04   | 953.60   | 957.86   | 953.89   | 957.67   | 952.85   |
| 10.00°  | 874.52   | 876.98   | 886.92   | 886.63   | 892.60   | 889.63   | 884.79   | 878.21   | 882.49   | 884.28   | 888.11   | 883.40   | 878.66   | 875.92   | 876.33   | 871.54   | 874.52   |
| 12.50°  | 783.68   | 790.38   | 795.87   | 800.30   | 798.32   | 797.57   | 787.61   | 788.60   | 789.57   | 795.47   | 796.59   | 796.52   | 787.46   | 787.15   | 781.98   | 782.95   | 783.68   |
| 15.00°  | 689.13   | 695.69   | 703.43   | 705.34   | 702.78   | 698.36   | 690.33   | 689.77   | 694.08   | 697.89   | 703.43   | 701.84   | 695.13   | 691.71   | 687.21   | 687.24   | 689.13   |
| 17.50°  | 594.66   | 601.41   | 606.96   | 610.00   | 603.17   | 596.66   | 591.90   | 591.22   | 595.80   | 598.82   | 606.70   | 606.10   | 600.24   | 596.65   | 590.90   | 592.63   | 594.66   |
| 20.00°  | 500.21   | 507.65   | 510.68   | 514.11   | 504.16   | 503.60   | 495.49   | 501.53   | 504.41   | 509.48   | 513.96   | 515.59   | 508.56   | 501.91   | 498.27   | 500.55   | 500.21   |
| 22.50°  | 419.48   | 422.72   | 427.45   | 426.59   | 420.43   | 412.85   | 412.68   | 413.18   | 419.34   | 421.17   | 428.09   | 425.47   | 422.85   | 417.47   | 416.01   | 415.71   | 419.48   |
| 25.00°  | 340.85   | 346.91   | 345.59   | 348.85   | 338.13   | 336.48   | 332.37   | 338.49   | 340.58   | 343.27   | 346.47   | 347.47   | 343.02   | 339.89   | 338.93   | 344.23   | 340.85   |
| 27.50°  | 278.00   | 278.79   | 281.03   | 277.88   | 270.04   | 262.85   | 263.63   | 265.28   | 266.52   | 265.94   | 270.76   | 270.09   | 272.01   | 271.84   | 273.39   | 276.60   | 278.00   |
| 30.00°  | 216.54   | 217.32   | 217.50   | 213.43   | 203.90   | 202.29   | 198.23   | 201.09   | 199.79   | 200.12   | 201.75   | 205.58   | 207.55   | 208.87   | 211.61   | 214.69   | 216.54   |
| 32.50°  | 160.25   | 160.89   | 161.49   | 156.48   | 150.13   | 143.39   | 144.04   | 140.62   | 137.47   | 135.46   | 140.51   | 142.68   | 151.05   | 155.06   | 156.59   | 158.01   | 160.25   |
| 35.00°  | 104.48   | 107.99   | 108.64   | 105.41   | 100.19   | 101.53   | 95.88    | 96.53    | 91.91    | 91.93    | 92.36    | 98.67    | 104.09   | 105.23   | 108.69   | 107.79   | 104.48   |
| 37.50°  | 69.92    | 69.85    | 71.35    | 68.63    | 66.92    | 60.84    | 63.47    | 58.29    | 54.64    | 51.06    | 56.59    | 57.66    | 66.82    | 71.52    | 71.05    | 69.18    | 69.92    |
| 40.00°  | 36.88    | 40.05    | 39.34    | 41.05    | 38.55    | 41.92    | 37.73    | 38.97    | 35.00    | 35.12    | 34.13    | 38.07    | 41.74    | 43.25    | 43.62    | 42.22    | 36.88    |
| 42.50°  | 25.54    | 24.67    | 26.04    | 25.13    | 25.85    | 23.72    | 25.81    | 23.46    | 22.21    | 20.84    | 21.90    | 21.02    | 26.74    | 28.88    | 28.47    | 25.51    | 25.54    |
| 45.00°  | 15.07    | 15.98    | 15.37    | 15.34    | 15.72    | 17.51    | 16.99    | 17.40    | 16.46    | 16.10    | 15.00    | 16.04    | 17.65    | 18.01    | 18.34    | 17.17    | 15.07    |
| 47.50°  | 11.68    | 11.63    | 11.84    | 10.92    | 12.10    | 11.70    | 13.33    | 12.79    | 12.79    | 12.00    | 11.51    | 11.77    | 12.53    | 13.24    | 13.14    | 12.14    | 11.68    |
| 50.00°  | 8.65     | 8.84     | 8.90     | 8.74     | 9.23     | 10.26    | 10.48    | 11.11    | 10.60    | 10.49    | 9.32     | 9.97     | 9.77     | 9.60     | 9.85     | 9.36     | 8.65     |
| 52.50°  | 7.45     | 7.72     | 7.24     | 7.58     | 7.83     | 8.89     | 8.73     | 9.57     | 8.73     | 9.04     | 7.80     | 8.40     | 8.32     | 8.29     | 8.09     | 7.85     | 7.45     |
| 55.00°  | 6.39     | 7.04     | 6.09     | 6.75     | 6.90     | 7.88     | 7.47     | 8.26     | 8.00     | 7.79     | 7.17     | 7.44     | 7.23     | 7.25     | 7.07     | 7.04     | 6.39     |
| 57.50°  | 5.87     | 6.35     | 5.85     | 6.14     | 6.70     | 6.92     | 6.79     | 7.17     | 7.45     | 6.70     | 6.91     | 6.44     | 6.30     | 6.42     | 6.56     | 6.37     | 5.87     |
| 60.00°  | 5.36     | 5.66     | 5.42     | 5.57     | 6.24     | 6.21     | 6.10     | 6.39     | 6.68     | 5.97     | 6.02     | 5.32     | 5.66     | 5.60     | 6.02     | 5.75     | 5.36     |
| 62.50°  | 4.89     | 5.21     | 4.72     | 5.28     | 5.46     | 5.53     | 5.42     | 5.59     | 5.89     | 5.30     | 4.91     | 4.51     | 5.12     | 5.39     | 5.47     | 5.48     | 4.89     |
| 65.00°  | 4.44     | 4.80     | 4.30     | 5.04     | 4.96     | 4.92     | 4.68     | 4.80     | 4.75     | 4.75     | 4.52     | 4.21     | 4.66     | 5.17     | 4.91     | 5.34     | 4.44     |
| 67.50°  | 4.02     | 4.28     | 4.22     | 4.36     | 4.77     | 4.33     | 3.90     | 4.07     | 3.72     | 4.11     | 4.29     | 3.87     | 4.24     | 4.63     | 4.34     | 4.87     | 4.02     |
| 70.00°  | 3.65     | 3.75     | 3.93     | 3.64     | 4.13     | 3.80     | 3.29     | 3.41     | 3.50     | 3.36     | 3.35     | 3.48     | 3.90     | 4.06     | 4.19     | 4.32     | 3.65     |
| 72.50°  | 3.34     | 3.07     | 3.49     | 3.14     | 3.19     | 3.21     | 2.73     | 2.86     | 2.99     | 3.01     | 2.53     | 3.14     | 3.48     | 3.39     | 4.12     | 3.43     | 3.34     |
| 75.00°  | 2.74     | 2.59     | 3.16     | 2.64     | 2.55     | 2.61     | 2.10     | 2.33     | 2.12     | 2.66     | 1.99     | 2.69     | 2.84     | 2.88     | 3.46     | 2.62     | 2.74     |
| 77.50°  | 2.01     | 2.41     | 2.66     | 2.15     | 1.89     | 2.25     | 1.49     | 1.76     | 1.71     | 1.90     | 1.60     | 1.71     | 2.26     | 2.51     | 2.69     | 2.01     | 2.01     |
| 80.00°  | 1.32     | 1.81     | 1.63     | 1.55     | 1.11     | 1.38     | 1.00     | 1.13     | 1.19     | 1.08     | 1.19     | 1.12     | 1.45     | 1.91     | 1.78     | 1.45     | 1.32     |
| 82.50°  | 0.79     | 1.08     | 1.05     | 0.93     | 0.56     | 0.63     | 0.68     | 0.71     | 0.68     | 0.57     | 0.71     | 0.61     | 0.67     | 0.99     | 0.86     | 0.85     | 0.79     |
| 85.00°  | 0.51     | 0.57     | 0.71     | 0.57     | 0.42     | 0.52     | 0.47     | 0.47     | 0.40     | 0.45     | 0.61     | 0.43     | 0.51     | 0.55     | 0.55     | 0.47     | 0.51     |
| 87.50°  | 0.43     | 0.61     | 0.52     | 0.53     | 0.38     | 0.44     | 0.40     | 0.38     | 0.47     | 0.41     | 0.52     | 0.50     | 0.43     | 0.59     | 0.51     | 0.44     | 0.43     |
| 90.00°  | 0.42     | 0.49     | 0.48     | 0.53     | 0.43     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.61     | 0.41     | 0.58     | 0.42     |
| 92.50°  | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 95.00°  | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 97.50°  | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 100.00° | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 102.50° | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 105.00° | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 107.50° | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 110.00° | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 112.50° | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |

### Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

|            |            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>RCR</b> | <b>pfc</b> | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 0%  |
|            | <b>pcc</b> | 80% | 80% | 80% | 80% | 70% | 70% | 70% | 70% | 50% | 50% | 50% | 30% | 30% | 30% | 10% | 10% | 0%  |
|            | <b>pw</b>  | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 30% |
|            | <b>0</b>   | 639 | 639 | 639 | 639 | 624 | 624 | 624 | 624 | 596 | 596 | 596 | 571 | 571 | 571 | 547 | 547 | 537 |
|            | <b>1</b>   | 611 | 597 | 585 | 573 | 598 | 585 | 574 | 564 | 564 | 555 | 547 | 544 | 537 | 531 | 526 | 520 | 515 |
|            | <b>2</b>   | 584 | 560 | 540 | 523 | 572 | 551 | 532 | 517 | 533 | 519 | 506 | 518 | 506 | 495 | 503 | 493 | 485 |
|            | <b>3</b>   | 558 | 527 | 502 | 483 | 548 | 519 | 497 | 479 | 505 | 487 | 471 | 493 | 477 | 464 | 481 | 468 | 459 |
|            | <b>4</b>   | 534 | 497 | 470 | 450 | 525 | 491 | 466 | 447 | 480 | 459 | 442 | 469 | 451 | 437 | 460 | 444 | 436 |
|            | <b>5</b>   | 511 | 470 | 442 | 421 | 503 | 466 | 439 | 420 | 456 | 433 | 416 | 448 | 428 | 412 | 440 | 422 | 415 |
|            | <b>6</b>   | 489 | 446 | 418 | 397 | 482 | 442 | 415 | 396 | 435 | 411 | 393 | 427 | 406 | 390 | 421 | 402 | 395 |
|            | <b>7</b>   | 469 | 425 | 396 | 375 | 463 | 421 | 394 | 374 | 415 | 390 | 372 | 409 | 387 | 371 | 403 | 384 | 377 |
|            | <b>8</b>   | 450 | 405 | 376 | 356 | 444 | 402 | 374 | 355 | 396 | 372 | 354 | 391 | 369 | 353 | 386 | 366 | 360 |
|            | <b>9</b>   | 433 | 386 | 358 | 339 | 427 | 384 | 357 | 338 | 379 | 355 | 337 | 375 | 352 | 336 | 370 | 350 | 345 |
|            | <b>10</b>  | 416 | 370 | 342 | 323 | 411 | 367 | 341 | 323 | 363 | 339 | 322 | 359 | 337 | 321 | 356 | 335 | 330 |

### Cone of Light

| Mtg Height | Light Level | Beam Diameter |
|------------|-------------|---------------|
| 5.5 ft     | 35.7 fc     | 3.8 ft        |
| 6.5 ft     | 25.5 fc     | 4.5 ft        |
| 7.5 ft     | 19.2 fc     | 5.2 ft        |
| 8.0 ft     | 16.9 fc     | 5.5 ft        |
| 10.0 ft    | 10.8 fc     | 6.9 ft        |
| 12.0 ft    | 7.5 fc      | 8.3 ft        |
| 14.0 ft    | 5.5 fc      | 9.7 ft        |
| 16.0 ft    | 4.2 fc      | 11.0 ft       |
| 20.0 ft    | 2.7 fc      | 13.8 ft       |
| 24.0 ft    | 1.9 fc      | 16.6 ft       |
| 28.0 ft    | 1.4 fc      | 19.3 ft       |

### Average Luminaire Luminance [cd/m²]

|               | 0.00°   | 45.00°  | 90.00°  |
|---------------|---------|---------|---------|
| <b>0.00°</b>  | 369,744 | 369,744 | 369,744 |
| <b>45.00°</b> | 7,304   | 7,447   | 7,616   |
| <b>55.00°</b> | 3,817   | 3,639   | 4,120   |
| <b>65.00°</b> | 3,600   | 3,489   | 4,023   |
| <b>75.00°</b> | 3,630   | 4,181   | 3,376   |
| <b>85.00°</b> | 2,019   | 2,803   | 1,632   |

### UGR CIE 190:2010

|                            |            |                         |            |            |            |            |                       |            |            |            |            |
|----------------------------|------------|-------------------------|------------|------------|------------|------------|-----------------------|------------|------------|------------|------------|
| <b>Ceiling reflectance</b> |            | <b>0.7</b>              | <b>0.7</b> | <b>0.5</b> | <b>0.5</b> | <b>0.3</b> | <b>0.7</b>            | <b>0.7</b> | <b>0.5</b> | <b>0.5</b> | <b>0.3</b> |
| <b>Wall reflectance</b>    |            | <b>0.5</b>              | <b>0.3</b> | <b>0.5</b> | <b>0.3</b> | <b>0.3</b> | <b>0.5</b>            | <b>0.3</b> | <b>0.5</b> | <b>0.3</b> | <b>0.3</b> |
| <b>Plane reflectance</b>   |            | <b>0.2</b>              | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> | <b>0.2</b>            | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> |
| <b>Room dimensions</b>     |            | <b>Viewed crosswise</b> |            |            |            |            | <b>Viewed endwise</b> |            |            |            |            |
| <b>2H</b>                  | <b>2H</b>  | 7.8                     | 8.8        | 8.2        | 9.1        | 9.4        | 8.2                   | 9.1        | 8.6        | 9.5        | 9.8        |
|                            | <b>3H</b>  | 9.7                     | 10.5       | 10.1       | 10.9       | 11.2       | 9.9                   | 10.8       | 10.3       | 11.1       | 11.5       |
|                            | <b>4H</b>  | 10.4                    | 11.2       | 10.8       | 11.5       | 11.9       | 10.6                  | 11.4       | 11.0       | 11.7       | 12.1       |
|                            | <b>6H</b>  | 10.8                    | 11.5       | 11.2       | 11.9       | 12.3       | 10.9                  | 11.6       | 11.4       | 12.0       | 12.4       |
|                            | <b>8H</b>  | 10.9                    | 11.6       | 11.3       | 11.9       | 12.4       | 11.0                  | 11.6       | 11.4       | 12.0       | 12.4       |
|                            | <b>12H</b> | 10.9                    | 11.5       | 11.3       | 11.9       | 12.4       | 10.9                  | 11.6       | 11.4       | 12.0       | 12.4       |
| <b>4H</b>                  | <b>2H</b>  | 8.3                     | 9.1        | 8.7        | 9.4        | 9.8        | 8.6                   | 9.4        | 9.0        | 9.7        | 10.1       |
|                            | <b>3H</b>  | 10.5                    | 11.1       | 10.9       | 11.5       | 12.0       | 10.5                  | 11.1       | 10.9       | 11.6       | 12.0       |
|                            | <b>4H</b>  | 11.3                    | 11.9       | 11.7       | 12.3       | 12.7       | 11.3                  | 11.9       | 11.7       | 12.3       | 12.7       |
|                            | <b>6H</b>  | 11.8                    | 12.3       | 12.3       | 12.8       | 13.3       | 11.7                  | 12.2       | 12.2       | 12.7       | 13.2       |
|                            | <b>8H</b>  | 11.9                    | 12.4       | 12.4       | 12.8       | 13.3       | 11.8                  | 12.2       | 12.3       | 12.7       | 13.2       |
|                            | <b>12H</b> | 12.0                    | 12.4       | 12.5       | 12.8       | 13.3       | 11.8                  | 12.2       | 12.3       | 12.7       | 13.1       |
| <b>8H</b>                  | <b>4H</b>  | 11.7                    | 12.1       | 12.1       | 12.6       | 13.0       | 11.4                  | 11.8       | 11.9       | 12.3       | 12.8       |
|                            | <b>6H</b>  | 12.3                    | 12.7       | 12.8       | 13.2       | 13.7       | 11.9                  | 12.3       | 12.4       | 12.8       | 13.3       |
|                            | <b>8H</b>  | 12.5                    | 12.8       | 13.0       | 13.3       | 13.8       | 12.0                  | 12.3       | 12.5       | 12.8       | 13.3       |
|                            | <b>12H</b> | 12.6                    | 12.8       | 13.1       | 13.3       | 13.9       | 12.1                  | 12.3       | 12.6       | 12.8       | 13.4       |
| <b>12H</b>                 | <b>4H</b>  | 11.7                    | 12.1       | 12.2       | 12.5       | 13.0       | 11.4                  | 11.7       | 11.8       | 12.2       | 12.7       |
|                            | <b>6H</b>  | 12.4                    | 12.7       | 12.9       | 13.1       | 13.7       | 11.9                  | 12.2       | 12.4       | 12.7       | 13.2       |
|                            | <b>8H</b>  | 12.5                    | 12.8       | 13.1       | 13.3       | 13.9       | 12.0                  | 12.3       | 12.5       | 12.8       | 13.4       |

Corrected UGR values based on total output lumens

SHR = 1.0