

## **Indoor Distribution Test Report**

# **Spectrum Lighting Inc.**

994 Jefferson Street  
Fall River, MA 02721  
+1.508.678.2303

## **Spectrum Lighting Photometric Lab**

### **Luminaire**

IF03SMx xx 835 010 DLFLGP MW  
Nom 3" Square Infinium recessed downlight

### **Test Number**

SP-00762\_2\_M-010L

### **Test Date**

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

### Summary of Results

#### Power

|             |       |
|-------------|-------|
| Input Watts | 9.3 W |
|-------------|-------|

#### Lumen Output

|               |            |
|---------------|------------|
| Output Lumens | 503        |
| Efficacy      | 54.05 lm/W |

#### Luminous Dimensions

|                 |      |
|-----------------|------|
| 0° - 180° Size  | 0.16 |
| 90° - 270° Size | 0.16 |
| Height          | 0    |

#### Spacing Criterion

|                           |      |
|---------------------------|------|
| Two luminaires, plane 0°  | 0.65 |
| Two luminaires, plane 90° | 0.65 |
| Four luminaires           | 0.69 |

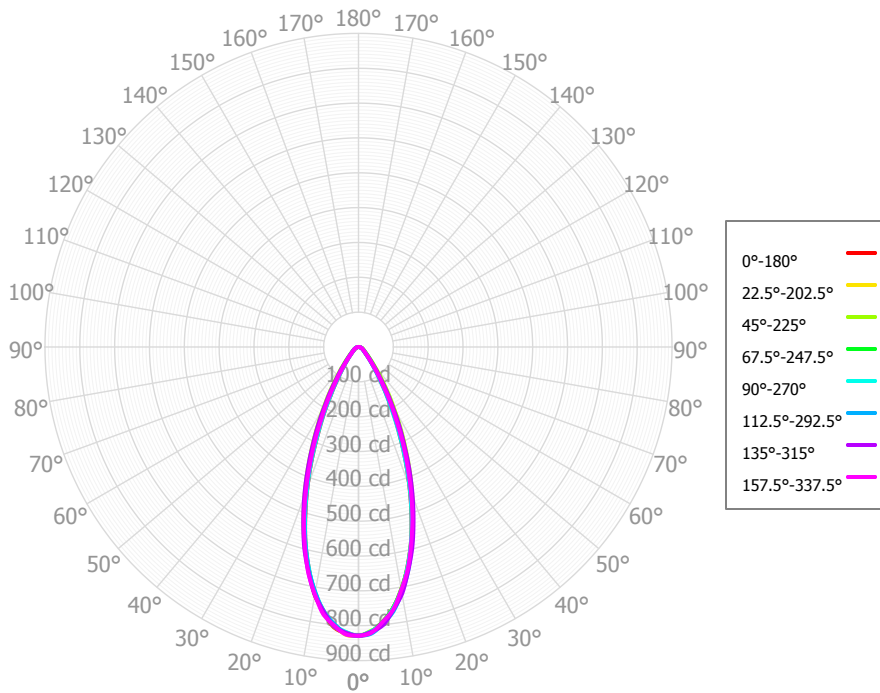
#### Full Beam Angle

|            |     |
|------------|-----|
| 0° - 180°  | 41° |
| 90° - 270° | 41° |

### IES File Header Contents

| Keyword   | Value  |
|-----------|--|
| TEST      | SP-00762_2_M-010L  |
| TESTLAB   | Spectrum Lighting Photometric Lab, VLS-245-981             |
| MANUFAC   | Spectrum Lighting  |
| ISSUEDATE | 2/11/2019  |
| UPDATE    | 2/28/2019  |
| LUMCAT    | IF03SMx xx 835 010 DLFLGP MW                               |
| LUMINAIRE | Nom 3" Square Infinium recessed downlight                  |
| OTHER     | Beam Angle: 41 degrees                                     |
| OTHER     | Flood optic, Solite Lens                                   |
| OTHER     | Aluminum bezel contains lens                               |
| LAMPCAT   | N/A  |
| LAMP      | N/A, CRI: 80, Philips                                      |
| OTHER     | CCT Multiplier: 40K x 1.03                                 |
| OTHER     | Total luminaire wattage 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°  | 74.50  | 14.82%    | 90.00° - 100.00°  | 0.04   | 0.01%     |
| 10.00° - 20.00° | 160.88 | 32.00%    | 100.00° - 110.00° | 0.00   | 0.00%     |
| 20.00° - 30.00° | 134.92 | 26.84%    | 100.00° - 120.00° | 0.00   | 0.00%     |
| 30.00° - 40.00° | 66.14  | 13.16%    | 120.00° - 130.00° | 0.00   | 0.00%     |
| 40.00° - 50.00° | 29.49  | 5.87%     | 130.00° - 140.00° | 0.00   | 0.00%     |
| 50.00° - 60.00° | 17.07  | 3.40%     | 140.00° - 150.00° | 0.00   | 0.00%     |
| 60.00° - 70.00° | 11.73  | 2.33%     | 150.00° - 160.00° | 0.00   | 0.00%     |
| 70.00° - 80.00° | 6.59   | 1.31%     | 160.00° - 170.00° | 0.00   | 0.00%     |
| 80.00° - 90.00° | 1.34   | 0.27%     | 170.00° - 180.00° | 0.00   | 0.00%     |
| 0.00° - 90.00°  | 502.65 | 99.99%    | 0.00° - 180.00°   | 502.70 | 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°   | 828.80 | 828.80 | 828.80 | 828.80 | 828.80 | 828.80  | 828.80  | 828.80  | 828.80  | 828.80  | 828.80  | 828.80  | 828.80  | 828.80  | 828.80  | 828.80  | 828.80  |
| 2.50°   | 818.19 | 821.17 | 815.92 | 818.28 | 817.42 | 823.86  | 821.00  | 826.04  | 822.51  | 826.89  | 820.02  | 822.98  | 819.05  | 823.88  | 818.85  | 821.84  | 818.19  |
| 5.00°   | 798.66 | 792.07 | 799.25 | 792.02 | 796.60 | 798.11  | 805.49  | 802.32  | 807.77  | 800.42  | 806.53  | 800.20  | 801.64  | 798.23  | 801.96  | 792.62  | 798.66  |
| 7.50°   | 756.38 | 759.21 | 756.30 | 756.84 | 757.99 | 766.74  | 765.67  | 773.93  | 766.12  | 771.24  | 764.57  | 768.58  | 763.91  | 765.85  | 761.61  | 760.88  | 756.38  |
| 10.00°  | 710.93 | 706.07 | 712.64 | 706.58 | 710.04 | 714.45  | 722.62  | 721.23  | 722.99  | 716.92  | 720.75  | 717.50  | 716.73  | 715.07  | 719.72  | 707.78  | 710.93  |
| 12.50°  | 647.73 | 650.22 | 651.75 | 650.03 | 649.00 | 657.91  | 662.61  | 665.03  | 655.55  | 661.07  | 659.15  | 659.12  | 654.75  | 658.60  | 658.33  | 653.27  | 647.73  |
| 15.00°  | 581.96 | 582.69 | 590.22 | 584.16 | 581.40 | 588.18  | 600.14  | 593.83  | 587.38  | 588.21  | 596.24  | 589.77  | 586.74  | 588.87  | 596.36  | 584.05  | 581.96  |
| 17.50°  | 505.02 | 513.41 | 520.40 | 514.61 | 505.85 | 516.42  | 527.28  | 520.81  | 507.88  | 514.93  | 524.29  | 516.92  | 509.66  | 516.73  | 525.02  | 514.39  | 505.02  |
| 20.00°  | 428.30 | 437.93 | 450.80 | 440.34 | 429.10 | 439.79  | 454.36  | 441.52  | 428.48  | 438.30  | 452.49  | 441.15  | 429.48  | 439.73  | 453.67  | 439.89  | 428.30  |
| 22.50°  | 352.39 | 364.54 | 383.11 | 368.40 | 351.07 | 362.61  | 381.21  | 364.32  | 351.26  | 362.04  | 381.50  | 364.62  | 352.61  | 364.54  | 381.87  | 365.63  | 352.39  |
| 25.00°  | 280.62 | 297.28 | 316.74 | 299.08 | 279.90 | 293.59  | 310.82  | 293.05  | 275.34  | 294.20  | 312.70  | 296.66  | 276.66  | 292.48  | 310.90  | 297.49  | 280.62  |
| 27.50°  | 221.29 | 234.60 | 258.69 | 237.46 | 215.19 | 225.18  | 248.34  | 227.31  | 215.67  | 227.86  | 253.07  | 230.51  | 215.79  | 227.43  | 250.41  | 230.62  | 221.29  |
| 30.00°  | 167.54 | 183.52 | 203.26 | 183.48 | 163.69 | 175.51  | 190.95  | 175.28  | 158.57  | 179.32  | 197.05  | 179.73  | 158.49  | 172.97  | 191.68  | 180.03  | 167.54  |
| 32.50°  | 127.76 | 138.51 | 160.68 | 139.95 | 122.96 | 126.51  | 146.22  | 129.80  | 122.25  | 132.87  | 153.47  | 131.49  | 121.38  | 128.17  | 147.97  | 131.69  | 127.76  |
| 35.00°  | 94.00  | 106.54 | 121.30 | 105.44 | 92.75  | 99.29   | 107.55  | 98.04   | 88.48   | 103.46  | 114.62  | 101.92  | 87.99   | 96.15   | 106.74  | 102.06  | 94.00   |
| 37.50°  | 72.99  | 79.74  | 94.55  | 80.10  | 70.09  | 72.50   | 81.62   | 71.92   | 69.68   | 75.93   | 89.42   | 74.58   | 69.11   | 71.32   | 81.15   | 74.27   | 72.99   |
| 40.00°  | 55.42  | 62.41  | 70.70  | 61.81  | 54.11  | 57.82   | 60.23   | 55.91   | 52.45   | 59.89   | 67.47   | 59.65   | 52.21   | 54.77   | 57.89   | 58.16   | 55.42   |
| 42.50°  | 44.27  | 48.22  | 56.15  | 49.01  | 42.34  | 43.61   | 47.03   | 42.76   | 42.69   | 45.36   | 53.39   | 45.74   | 42.26   | 42.52   | 45.92   | 43.45   | 44.27   |
| 45.00°  | 34.93  | 39.13  | 43.56  | 39.84  | 34.18  | 36.32   | 36.46   | 34.15   | 33.83   | 37.90   | 41.48   | 37.06   | 33.02   | 34.64   | 35.09   | 35.44   | 34.93   |
| 47.50°  | 28.48  | 31.81  | 36.31  | 32.84  | 27.96  | 29.28   | 30.07   | 27.40   | 28.38   | 30.91   | 34.14   | 28.63   | 27.71   | 28.34   | 28.77   | 28.46   | 28.48   |
| 50.00°  | 23.70  | 26.97  | 29.89  | 27.09  | 23.69  | 24.63   | 25.05   | 23.20   | 23.32   | 25.69   | 27.79   | 25.14   | 22.64   | 23.45   | 23.37   | 25.43   | 23.70   |
| 52.50°  | 21.23  | 23.02  | 25.43  | 23.29  | 20.35  | 20.29   | 21.93   | 19.80   | 19.45   | 21.13   | 23.25   | 21.71   | 19.92   | 20.02   | 20.92   | 22.34   | 21.23   |
| 55.00°  | 19.07  | 20.14  | 21.60  | 20.48  | 17.75  | 18.11   | 19.16   | 17.38   | 16.10   | 18.66   | 19.49   | 18.73   | 17.25   | 17.73   | 18.55   | 19.05   | 19.07   |
| 57.50°  | 17.30  | 17.96  | 19.02  | 18.34  | 15.45  | 16.06   | 16.82   | 15.72   | 14.11   | 16.21   | 16.95   | 15.84   | 15.23   | 15.87   | 16.35   | 16.26   | 17.30   |
| 60.00°  | 15.46  | 16.51  | 16.95  | 16.49  | 13.71  | 14.68   | 14.68   | 14.86   | 12.52   | 13.81   | 14.91   | 14.58   | 13.26   | 14.31   | 14.40   | 14.83   | 15.46   |
| 62.50°  | 13.53  | 15.03  | 15.75  | 14.76  | 12.16  | 13.20   | 12.76   | 13.08   | 11.80   | 11.73   | 13.60   | 13.26   | 12.29   | 13.10   | 13.03   | 13.45   | 13.53   |
| 65.00°  | 12.27  | 13.52  | 14.41  | 13.08  | 11.33  | 11.29   | 10.92   | 10.46   | 10.65   | 10.38   | 12.14   | 11.39   | 11.31   | 12.09   | 11.53   | 12.20   | 12.27   |
| 67.50°  | 11.62  | 12.27  | 12.87  | 11.81  | 10.70  | 9.68    | 9.14    | 8.96    | 8.79    | 9.07    | 10.53   | 9.64    | 10.17   | 10.82   | 9.76    | 10.90   | 11.62   |
| 70.00°  | 10.42  | 11.21  | 11.45  | 10.66  | 9.25   | 8.76    | 7.78    | 8.17    | 7.47    | 7.81    | 8.67    | 8.34    | 8.93    | 9.42    | 8.49    | 9.51    | 10.42   |
| 72.50°  | 8.87   | 9.60   | 10.14  | 8.95   | 7.70   | 7.70    | 6.61    | 6.67    | 6.59    | 6.73    | 6.70    | 6.96    | 7.49    | 8.15    | 7.81    | 8.21    | 8.87    |
| 75.00°  | 6.94   | 7.79   | 8.43   | 7.26   | 6.24   | 6.51    | 5.98    | 5.00    | 4.78    | 5.61    | 5.85    | 5.51    | 5.85    | 6.67    | 7.09    | 6.99    | 6.94    |
| 77.50°  | 5.07   | 5.81   | 6.55   | 5.70   | 4.48   | 4.05    | 4.69    | 3.21    | 3.32    | 3.80    | 4.65    | 3.93    | 4.17    | 4.40    | 6.12    | 5.23    | 5.07    |
| 80.00°  | 3.42   | 4.23   | 4.45   | 3.46   | 2.61   | 2.62    | 2.95    | 2.29    | 2.27    | 2.44    | 3.10    | 2.56    | 2.57    | 3.05    | 4.26    | 3.64    | 3.42    |
| 82.50°  | 1.87   | 2.54   | 2.49   | 1.78   | 1.53   | 1.78    | 1.45    | 1.34    | 1.15    | 1.70    | 1.50    | 1.44    | 1.21    | 1.86    | 2.10    | 2.14    | 1.87    |
| 85.00°  | 0.70   | 0.96   | 1.16   | 0.83   | 0.69   | 0.96    | 0.78    | 0.65    | 0.62    | 0.86    | 0.80    | 0.69    | 0.66    | 0.92    | 1.01    | 0.81    | 0.70    |
| 87.50°  | 0.61   | 0.68   | 0.58   | 0.84   | 0.54   | 0.71    | 0.60    | 0.56    | 0.55    | 0.63    | 0.64    | 0.59    | 0.66    | 0.64    | 0.78    | 0.69    | 0.61    |
| 90.00°  | 0.50   | 0.55   | 0.61   | 0.72   | 0.65   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.58    | 0.74    | 0.56    | 0.50    |
| 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.

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RCR | pfc | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 0%  |
|     | pcc | 80% | 80% | 80% | 80% | 70% | 70% | 70% | 70% | 50% | 50% | 50% | 30% | 30% | 30% | 10% | 10% | 0%  |
|     | pw  | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 30% |
|     | 0   | 598 | 598 | 598 | 598 | 585 | 585 | 585 | 585 | 559 | 559 | 559 | 535 | 535 | 535 | 513 | 513 | 503 |
|     | 1   | 569 | 554 | 541 | 529 | 556 | 543 | 532 | 521 | 523 | 514 | 505 | 504 | 497 | 490 | 487 | 481 | 476 |
|     | 2   | 540 | 515 | 494 | 476 | 529 | 506 | 487 | 471 | 490 | 474 | 460 | 474 | 462 | 450 | 460 | 450 | 441 |
|     | 3   | 513 | 480 | 454 | 434 | 503 | 473 | 449 | 430 | 459 | 440 | 423 | 447 | 431 | 417 | 436 | 422 | 410 |
|     | 4   | 487 | 449 | 421 | 400 | 478 | 443 | 417 | 397 | 433 | 410 | 393 | 422 | 403 | 388 | 413 | 397 | 383 |
|     | 5   | 464 | 422 | 393 | 371 | 456 | 417 | 390 | 369 | 408 | 384 | 366 | 400 | 379 | 363 | 392 | 374 | 360 |
|     | 6   | 442 | 398 | 368 | 347 | 435 | 394 | 366 | 346 | 387 | 362 | 343 | 379 | 358 | 341 | 373 | 354 | 339 |
|     | 7   | 422 | 376 | 347 | 326 | 416 | 373 | 345 | 325 | 367 | 342 | 323 | 361 | 338 | 321 | 355 | 335 | 320 |
|     | 8   | 404 | 357 | 328 | 307 | 398 | 354 | 326 | 307 | 349 | 323 | 305 | 344 | 321 | 304 | 339 | 318 | 303 |
|     | 9   | 386 | 339 | 310 | 291 | 381 | 337 | 309 | 290 | 332 | 307 | 289 | 328 | 305 | 288 | 324 | 303 | 287 |
|     | 10  | 370 | 323 | 295 | 276 | 365 | 321 | 294 | 276 | 317 | 292 | 275 | 313 | 290 | 274 | 310 | 289 | 274 |

### Cone of Light

| Mtg Height | Light Level | Beam Diameter |
|------------|-------------|---------------|
| 5.5 ft     | 27.4 fc     | 4.1 ft        |
| 6.5 ft     | 19.6 fc     | 4.9 ft        |
| 7.5 ft     | 14.7 fc     | 5.6 ft        |
| 8.0 ft     | 12.9 fc     | 6.0 ft        |
| 10.0 ft    | 8.3 fc      | 7.5 ft        |
| 12.0 ft    | 5.8 fc      | 9.0 ft        |
| 14.0 ft    | 4.2 fc      | 10.4 ft       |
| 16.0 ft    | 3.2 fc      | 11.9 ft       |
| 20.0 ft    | 2.1 fc      | 14.9 ft       |
| 24.0 ft    | 1.4 fc      | 17.9 ft       |
| 28.0 ft    | 1.1 fc      | 20.9 ft       |

### Average Luminaire Luminance [cd/m²]

|               | 0.00°   | 45.00°  | 90.00°  |
|---------------|---------|---------|---------|
| <b>0.00°</b>  | 348,481 | 348,481 | 348,481 |
| <b>45.00°</b> | 20,769  | 25,904  | 20,323  |
| <b>55.00°</b> | 13,981  | 15,833  | 13,012  |
| <b>65.00°</b> | 12,208  | 14,337  | 11,272  |
| <b>75.00°</b> | 11,272  | 13,695  | 10,142  |
| <b>85.00°</b> | 3,376   | 5,600   | 3,349   |

### 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>  | 16.4                    | 17.5       | 16.8       | 17.8       | 18.1       | 15.9                  | 16.9       | 16.2       | 17.3       | 17.6       |
|                            | <b>3H</b>  | 18.3                    | 19.3       | 18.7       | 19.6       | 20.0       | 17.5                  | 18.5       | 17.9       | 18.8       | 19.2       |
|                            | <b>4H</b>  | 19.0                    | 19.9       | 19.4       | 20.2       | 20.6       | 18.1                  | 19.0       | 18.5       | 19.4       | 19.8       |
|                            | <b>6H</b>  | 19.3                    | 20.1       | 19.8       | 20.5       | 20.9       | 18.4                  | 19.2       | 18.8       | 19.6       | 20.0       |
|                            | <b>8H</b>  | 19.4                    | 20.2       | 19.8       | 20.5       | 21.0       | 18.4                  | 19.2       | 18.9       | 19.6       | 20.0       |
|                            | <b>12H</b> | 19.4                    | 20.1       | 19.8       | 20.5       | 20.9       | 18.4                  | 19.1       | 18.8       | 19.5       | 19.9       |
| <b>4H</b>                  | <b>2H</b>  | 17.0                    | 17.9       | 17.4       | 18.2       | 18.6       | 16.4                  | 17.3       | 16.8       | 17.6       | 18.0       |
|                            | <b>3H</b>  | 19.1                    | 19.8       | 19.5       | 20.2       | 20.6       | 18.2                  | 18.9       | 18.6       | 19.3       | 19.7       |
|                            | <b>4H</b>  | 19.9                    | 20.5       | 20.3       | 21.0       | 21.4       | 18.9                  | 19.6       | 19.4       | 20.0       | 20.4       |
|                            | <b>6H</b>  | 20.4                    | 20.9       | 20.8       | 21.4       | 21.8       | 19.3                  | 19.8       | 19.7       | 20.3       | 20.7       |
|                            | <b>8H</b>  | 20.4                    | 20.9       | 20.9       | 21.4       | 21.9       | 19.3                  | 19.8       | 19.8       | 20.3       | 20.7       |
|                            | <b>12H</b> | 20.4                    | 20.9       | 20.9       | 21.4       | 21.8       | 19.3                  | 19.7       | 19.8       | 20.2       | 20.7       |
| <b>8H</b>                  | <b>4H</b>  | 20.2                    | 20.7       | 20.7       | 21.1       | 21.6       | 19.1                  | 19.6       | 19.6       | 20.1       | 20.5       |
|                            | <b>6H</b>  | 20.8                    | 21.2       | 21.3       | 21.7       | 22.2       | 19.5                  | 19.9       | 20.0       | 20.4       | 20.9       |
|                            | <b>8H</b>  | 20.9                    | 21.2       | 21.4       | 21.8       | 22.3       | 19.6                  | 19.9       | 20.1       | 20.5       | 21.0       |
|                            | <b>12H</b> | 20.9                    | 21.2       | 21.4       | 21.7       | 22.3       | 19.6                  | 19.9       | 20.1       | 20.4       | 21.0       |
| <b>12H</b>                 | <b>4H</b>  | 20.2                    | 20.6       | 20.7       | 21.1       | 21.6       | 19.1                  | 19.5       | 19.6       | 20.0       | 20.5       |
|                            | <b>6H</b>  | 20.8                    | 21.1       | 21.3       | 21.6       | 22.2       | 19.5                  | 19.9       | 20.0       | 20.3       | 20.9       |
|                            | <b>8H</b>  | 20.9                    | 21.2       | 21.4       | 21.7       | 22.3       | 19.6                  | 19.9       | 20.1       | 20.4       | 21.0       |

Corrected UGR values based on total output lumens

SHR = 1.0