



IES INDOOR REPORT
PHOTOMETRIC FILENAME : IPR5MS-2X28W.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TESTLAB]
 [ISSUE DATE] Nov 09 2012
 [TEST] IPR5MS-2x28w
 [TEST DATE] Fri Nov 09 15:18:45 2012
 [MANUFAC] Bartco Lighting
 [LUMINAIRE] IPR5MS-2-28w Frosted
 [LAMP] Fluor. 28W 4' Silhouette T5
 [LAMPCAT] F28/T5
 [OTHER] OPTIONS:

CHARACTERISTICS

| | |
|---------------------------------|---------------------|
| Lumens Per Lamp | 2900 (2 lamps) |
| Total Lamp Lumens | 5800 |
| Luminaire Lumens | 3694 |
| Total Luminaire Efficiency | 64 % |
| Luminaire Efficacy Rating (LER) | 60 |
| Total Luminaire Watts | 62 |
| Ballast Factor | 1.00 |
| CIE Type | Semi-Direct |
| Spacing Criterion (0-180) | 1.22 |
| Spacing Criterion (90-270) | 1.40 |
| Spacing Criterion (Diagonal) | 1.46 |
| Basic Luminous Shape | Rectangular w/Sides |
| Luminous Length (0-180) | 3.97 ft |
| Luminous Width (90-270) | 0.26 ft |
| Luminous Height | 0.26 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 6504 | 5039 | 4983 |
| 55 | 5846 | 4469 | 4447 |
| 65 | 5405 | 3877 | 4196 |
| 75 | 3901 | 3334 | 3645 |
| 85 | 2244 | 2782 | 3532 |

**IES INDOOR REPORT
PHOTOMETRIC FILENAME : IPR5MS-2X28W.IES**

CANDELA TABULATION

| | <u>0</u> | <u>10</u> | <u>20</u> | <u>30</u> | <u>40</u> | <u>50</u> | <u>60</u> | <u>70</u> | <u>80</u> | <u>90</u> |
|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 |
| 5 | 725.24 | 782.24 | 767.04 | 762.29 | 749.76 | 722.59 | 774.34 | 782.73 | 867.76 | 760.41 |
| 10 | 715.53 | 750.21 | 756.27 | 759.40 | 743.63 | 766.86 | 780.34 | 759.84 | 763.30 | 767.83 |
| 15 | 728.19 | 717.60 | 717.18 | 752.83 | 743.53 | 741.20 | 794.64 | 768.69 | 754.30 | 783.46 |
| 20 | 719.81 | 702.78 | 692.50 | 710.15 | 707.52 | 735.67 | 752.96 | 767.64 | 748.81 | 777.70 |
| 25 | 675.06 | 678.09 | 679.02 | 698.62 | 693.62 | 728.13 | 706.72 | 767.93 | 787.45 | 762.68 |
| 30 | 629.82 | 630.37 | 659.53 | 664.52 | 669.70 | 708.16 | 736.26 | 725.92 | 756.08 | 749.28 |
| 35 | 602.48 | 568.20 | 605.77 | 627.29 | 637.95 | 664.89 | 701.62 | 703.17 | 723.22 | 705.08 |
| 40 | 528.82 | 533.34 | 556.37 | 577.53 | 600.20 | 644.66 | 658.49 | 683.04 | 682.61 | 696.57 |
| 45 | 463.31 | 499.97 | 507.39 | 540.63 | 584.93 | 597.11 | 623.30 | 665.77 | 629.43 | 666.78 |
| 50 | 412.40 | 427.33 | 442.69 | 492.43 | 525.67 | 580.13 | 600.13 | 630.08 | 641.82 | 627.57 |
| 55 | 346.58 | 376.34 | 411.78 | 452.87 | 492.02 | 514.66 | 559.68 | 579.92 | 586.78 | 586.05 |
| 60 | 297.00 | 312.25 | 348.45 | 397.32 | 438.27 | 481.67 | 534.54 | 530.32 | 557.14 | 558.23 |
| 65 | 246.14 | 259.39 | 301.39 | 347.33 | 381.29 | 429.37 | 470.09 | 501.28 | 530.66 | 527.60 |
| 70 | 185.85 | 195.63 | 234.40 | 293.32 | 329.92 | 372.02 | 434.13 | 436.99 | 468.85 | 473.83 |
| 75 | 118.60 | 141.23 | 186.42 | 229.52 | 289.31 | 332.88 | 375.25 | 398.33 | 427.08 | 422.44 |
| 80 | 70.53 | 100.22 | 134.94 | 193.84 | 234.49 | 281.53 | 326.41 | 350.40 | 377.62 | 383.70 |
| 85 | 32.19 | 52.80 | 94.88 | 145.28 | 196.31 | 244.37 | 292.84 | 326.00 | 348.52 | 362.10 |
| 90 | 14.56 | 34.64 | 82.01 | 138.26 | 180.02 | 230.91 | 266.23 | 312.10 | 332.84 | 339.78 |
| 95 | 10.44 | 33.00 | 78.46 | 126.61 | 170.40 | 226.65 | 264.95 | 301.97 | 327.57 | 320.49 |
| 100 | 10.98 | 31.00 | 73.70 | 129.34 | 174.28 | 218.86 | 261.84 | 298.22 | 315.11 | 317.81 |
| 105 | 9.15 | 32.63 | 72.84 | 129.26 | 167.60 | 208.70 | 253.89 | 275.20 | 301.80 | 319.99 |
| 110 | 9.74 | 31.61 | 73.99 | 120.60 | 162.12 | 206.34 | 242.12 | 268.20 | 281.77 | 292.75 |
| 115 | 9.54 | 28.60 | 67.11 | 111.25 | 147.55 | 190.15 | 225.71 | 252.82 | 263.26 | 274.54 |
| 120 | 10.11 | 27.43 | 61.26 | 104.01 | 145.56 | 180.10 | 212.03 | 233.13 | 250.53 | 260.72 |
| 125 | 10.51 | 23.37 | 58.84 | 98.43 | 129.88 | 173.98 | 199.45 | 215.02 | 228.01 | 230.66 |
| 130 | 13.62 | 22.93 | 55.61 | 90.08 | 123.67 | 147.66 | 183.87 | 196.92 | 212.57 | 213.06 |
| 135 | 9.69 | 24.07 | 52.48 | 80.43 | 112.20 | 138.51 | 163.27 | 174.87 | 189.68 | 188.59 |
| 140 | 11.60 | 22.31 | 43.65 | 77.89 | 101.59 | 121.08 | 141.65 | 155.70 | 159.87 | 168.17 |
| 145 | 9.66 | 18.68 | 38.47 | 54.93 | 78.20 | 101.54 | 117.47 | 134.00 | 132.93 | 141.01 |
| 150 | 11.70 | 20.60 | 28.24 | 51.65 | 68.61 | 88.41 | 98.48 | 109.15 | 121.18 | 126.22 |
| 155 | 12.54 | 11.48 | 29.21 | 38.53 | 52.62 | 62.37 | 83.28 | 87.83 | 92.12 | 96.85 |
| 160 | 10.11 | 8.77 | 18.19 | 23.26 | 39.82 | 47.65 | 64.97 | 69.49 | 67.13 | 67.94 |
| 165 | 4.28 | 11.24 | 14.58 | 16.33 | 24.24 | 38.83 | 47.99 | 44.82 | 42.95 | 49.58 |
| 170 | 5.10 | 9.21 | 5.62 | 20.55 | 17.61 | 26.10 | 20.73 | 20.33 | 35.14 | 25.94 |
| 175 | 8.31 | 5.24 | 8.82 | 7.32 | 14.81 | 11.78 | 5.38 | 24.59 | 10.27 | 15.77 |
| 180 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 |

Vert. Angles Horizontal Angles

| | <u>100</u> | <u>110</u> | <u>120</u> | <u>130</u> | <u>140</u> | <u>150</u> | <u>160</u> | <u>170</u> | <u>180</u> | <u>190</u> |
|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 |
| 5 | 775.63 | 804.25 | 755.37 | 806.95 | 798.07 | 746.55 | 771.78 | 746.91 | 780.24 | 767.20 |
| 10 | 765.93 | 796.45 | 771.88 | 768.19 | 750.68 | 748.73 | 774.84 | 765.10 | 704.58 | 789.28 |
| 15 | 796.58 | 801.16 | 767.62 | 751.12 | 801.14 | 744.93 | 716.61 | 736.45 | 724.32 | 717.90 |
| 20 | 775.07 | 779.47 | 775.19 | 752.48 | 748.28 | 760.85 | 697.80 | 706.60 | 680.42 | 693.26 |
| 25 | 751.67 | 732.38 | 750.99 | 719.40 | 715.34 | 681.69 | 689.88 | 681.38 | 666.04 | 679.75 |
| 30 | 749.04 | 756.77 | 703.68 | 697.60 | 683.16 | 680.78 | 640.17 | 634.95 | 622.10 | 636.62 |
| 35 | 712.95 | 697.92 | 692.10 | 676.47 | 660.35 | 625.46 | 571.89 | 574.42 | 578.09 | 600.65 |
| 40 | 677.06 | 661.44 | 661.27 | 652.35 | 612.56 | 579.32 | 565.74 | 534.67 | 526.65 | 529.29 |
| 45 | 637.17 | 649.76 | 619.92 | 587.63 | 554.59 | 527.78 | 490.04 | 491.95 | 462.52 | 485.19 |
| 50 | 632.84 | 603.55 | 592.11 | 555.16 | 521.00 | 491.97 | 442.18 | 431.31 | 410.84 | 426.68 |
| 55 | 591.95 | 573.97 | 556.53 | 510.27 | 482.12 | 445.65 | 404.63 | 368.63 | 357.48 | 369.42 |
| 60 | 560.87 | 540.80 | 513.14 | 471.61 | 445.11 | 393.86 | 344.73 | 315.99 | 308.54 | 313.88 |

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 65 | 516.66 | 481.57 | 474.87 | 424.70 | 392.04 | 339.49 | 296.52 | 257.74 | 245.47 | 259.13 |
| 70 | 455.21 | 437.17 | 402.39 | 384.48 | 332.70 | 284.21 | 242.70 | 197.57 | 180.10 | 190.36 |
| 75 | 428.51 | 392.49 | 372.60 | 319.48 | 277.48 | 246.96 | 186.90 | 143.73 | 119.74 | 139.11 |
| 80 | 389.46 | 357.66 | 318.08 | 278.96 | 235.18 | 181.68 | 136.57 | 88.14 | 69.59 | 87.39 |
| 85 | 345.05 | 317.98 | 284.79 | 248.59 | 200.58 | 148.89 | 92.46 | 47.66 | 25.91 | 46.26 |
| 90 | 327.43 | 306.81 | 269.70 | 221.52 | 184.36 | 126.00 | 77.75 | 28.22 | 7.48 | 31.61 |
| 95 | 316.59 | 295.73 | 271.99 | 216.20 | 179.59 | 120.09 | 75.11 | 28.19 | 4.67 | 28.17 |
| 100 | 315.73 | 295.08 | 254.48 | 210.30 | 168.66 | 115.54 | 72.09 | 26.43 | 4.16 | 26.53 |
| 105 | 301.38 | 282.54 | 250.17 | 207.83 | 157.30 | 126.01 | 65.34 | 25.73 | 4.72 | 22.35 |
| 110 | 281.13 | 267.19 | 241.01 | 195.95 | 151.28 | 114.03 | 67.09 | 24.25 | 3.36 | 24.78 |
| 115 | 272.99 | 241.96 | 219.45 | 190.19 | 144.20 | 110.83 | 62.62 | 21.88 | 4.00 | 21.48 |
| 120 | 250.19 | 234.36 | 210.38 | 184.83 | 133.49 | 99.11 | 57.65 | 20.60 | 2.41 | 24.24 |
| 125 | 232.97 | 204.46 | 188.51 | 167.16 | 130.00 | 92.72 | 53.24 | 19.61 | 2.72 | 17.46 |
| 130 | 209.00 | 200.38 | 170.71 | 141.19 | 120.27 | 86.47 | 47.59 | 16.15 | 2.58 | 18.11 |
| 135 | 182.69 | 161.31 | 155.12 | 127.62 | 103.18 | 73.64 | 48.47 | 11.67 | 1.86 | 14.34 |
| 140 | 167.27 | 153.66 | 135.83 | 111.18 | 89.94 | 63.89 | 37.39 | 8.03 | 2.96 | 12.83 |
| 145 | 139.79 | 122.18 | 118.19 | 97.18 | 74.20 | 54.30 | 29.84 | 9.50 | 2.32 | 9.75 |
| 150 | 110.10 | 110.25 | 99.02 | 87.10 | 64.21 | 43.90 | 22.53 | 6.78 | 2.43 | 9.37 |
| 155 | 81.62 | 87.77 | 78.55 | 67.60 | 44.55 | 38.33 | 18.65 | 3.23 | 2.17 | 5.18 |
| 160 | 63.24 | 63.18 | 57.57 | 49.45 | 30.05 | 21.17 | 19.12 | 4.75 | 1.69 | 6.01 |
| 165 | 51.40 | 44.27 | 35.75 | 25.50 | 19.84 | 16.27 | 10.59 | 2.54 | 1.58 | 2.36 |
| 170 | 29.46 | 30.58 | 16.89 | 22.41 | 9.33 | 12.69 | 5.71 | 10.28 | 0.88 | 4.79 |
| 175 | 17.12 | 11.39 | 7.48 | 9.80 | 13.17 | 5.85 | 4.73 | 2.47 | 0.00 | 7.53 |
| 180 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 |

Vert. Angles **Horizontal Angles**

| | <u>200</u> | <u>210</u> | <u>220</u> | <u>230</u> | <u>240</u> | <u>250</u> | <u>260</u> | <u>270</u> | <u>280</u> | <u>290</u> |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 |
| 5 | 813.26 | 747.04 | 783.46 | 760.55 | 785.49 | 786.53 | 787.34 | 747.02 | 772.01 | 867.71 |
| 10 | 744.10 | 753.20 | 742.07 | 770.34 | 764.69 | 794.36 | 762.67 | 783.71 | 750.77 | 796.94 |
| 15 | 756.07 | 732.10 | 746.00 | 754.10 | 776.66 | 734.09 | 749.92 | 765.74 | 763.54 | 805.58 |
| 20 | 706.34 | 722.26 | 720.73 | 741.63 | 739.96 | 768.26 | 745.68 | 773.33 | 767.74 | 773.83 |
| 25 | 672.24 | 696.40 | 704.83 | 733.03 | 724.61 | 749.00 | 763.87 | 775.56 | 761.25 | 757.97 |
| 30 | 633.14 | 655.21 | 683.11 | 712.40 | 720.62 | 737.20 | 754.46 | 732.20 | 730.61 | 734.29 |
| 35 | 603.82 | 638.94 | 629.12 | 664.91 | 692.65 | 708.91 | 713.91 | 714.79 | 715.52 | 738.23 |
| 40 | 561.69 | 574.60 | 614.79 | 635.84 | 648.03 | 700.37 | 690.04 | 690.90 | 676.66 | 673.73 |
| 45 | 511.93 | 527.06 | 576.86 | 588.08 | 618.53 | 641.33 | 676.11 | 669.18 | 653.67 | 646.99 |
| 50 | 451.15 | 480.29 | 545.02 | 552.17 | 602.11 | 600.40 | 631.02 | 623.43 | 609.22 | 612.87 |
| 55 | 385.86 | 439.38 | 482.31 | 519.07 | 548.13 | 560.38 | 602.02 | 598.64 | 570.49 | 579.34 |
| 60 | 345.22 | 404.33 | 432.95 | 474.70 | 506.67 | 540.39 | 552.52 | 563.93 | 554.26 | 534.93 |
| 65 | 292.99 | 334.44 | 383.08 | 425.72 | 462.62 | 490.85 | 505.60 | 515.27 | 517.27 | 494.09 |
| 70 | 242.09 | 278.51 | 332.79 | 370.74 | 423.70 | 448.48 | 469.32 | 476.42 | 477.91 | 455.84 |
| 75 | 188.03 | 237.17 | 278.39 | 321.95 | 360.81 | 389.88 | 426.55 | 434.23 | 424.06 | 404.45 |
| 80 | 144.85 | 185.90 | 240.13 | 281.04 | 322.90 | 349.60 | 387.92 | 384.31 | 380.08 | 361.95 |
| 85 | 92.10 | 149.17 | 203.70 | 244.39 | 283.43 | 322.46 | 346.41 | 359.40 | 329.55 | 325.82 |
| 90 | 73.90 | 130.25 | 182.89 | 223.06 | 271.97 | 294.48 | 333.13 | 347.33 | 336.34 | 309.68 |
| 95 | 75.15 | 125.33 | 164.13 | 227.29 | 253.22 | 294.17 | 318.78 | 331.77 | 327.60 | 305.99 |
| 100 | 69.81 | 120.07 | 167.28 | 215.85 | 257.23 | 280.99 | 312.90 | 302.74 | 306.07 | 283.76 |
| 105 | 72.41 | 110.93 | 161.61 | 209.08 | 241.18 | 280.63 | 296.79 | 322.51 | 298.40 | 284.17 |
| 110 | 66.80 | 109.06 | 150.31 | 191.62 | 240.78 | 259.32 | 293.26 | 295.61 | 278.14 | 265.89 |
| 115 | 61.18 | 110.53 | 146.50 | 180.65 | 221.46 | 256.14 | 273.57 | 276.90 | 272.67 | 254.34 |
| 120 | 57.79 | 102.81 | 145.15 | 177.21 | 206.10 | 237.75 | 245.69 | 260.84 | 253.09 | 237.09 |
| 125 | 52.37 | 89.92 | 122.38 | 164.28 | 198.29 | 218.16 | 221.88 | 228.11 | 230.31 | 212.04 |
| 130 | 47.47 | 77.40 | 108.59 | 146.67 | 171.27 | 191.58 | 209.76 | 207.11 | 212.85 | 196.81 |
| 135 | 39.57 | 74.78 | 104.17 | 134.51 | 144.53 | 170.80 | 178.65 | 192.94 | 184.70 | 170.06 |

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|-----|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| 140 | 39.29 | 62.92 | 95.92 | 109.91 | 141.12 | 157.59 | 161.04 | 166.34 | 160.53 | 149.00 |
| 145 | 32.06 | 49.62 | 71.88 | 89.91 | 113.00 | 131.46 | 139.36 | 142.02 | 138.33 | 134.16 |
| 150 | 27.81 | 38.21 | 60.83 | 75.69 | 98.12 | 106.40 | 120.77 | 113.62 | 108.56 | 117.56 |
| 155 | 19.78 | 35.74 | 46.43 | 59.75 | 71.77 | 92.39 | 102.45 | 100.76 | 100.75 | 90.11 |
| 160 | 11.86 | 24.13 | 35.59 | 48.33 | 59.51 | 63.16 | 71.29 | 69.30 | 74.26 | 76.38 |
| 165 | 10.78 | 15.92 | 23.79 | 28.13 | 25.75 | 42.41 | 53.81 | 49.25 | 44.10 | 39.69 |
| 170 | 9.39 | 6.18 | 16.23 | 21.75 | 26.49 | 23.71 | 26.07 | 23.85 | 25.54 | 30.55 |
| 175 | 6.99 | 6.64 | 7.98 | 11.93 | 2.93 | 1.43 | 17.80 | 11.24 | 18.14 | 23.64 |
| 180 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 |

Vert. Horizontal Angles

| | <u>300</u> | <u>310</u> | <u>320</u> | <u>330</u> | <u>340</u> | <u>350</u> | <u>360</u> |
|-----|------------|------------|------------|------------|------------|------------|------------|
| 0 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 | 784.20 |
| 5 | 783.20 | 750.13 | 712.62 | 745.10 | 783.32 | 779.02 | 725.24 |
| 10 | 759.08 | 783.27 | 706.84 | 741.14 | 711.70 | 771.07 | 715.53 |
| 15 | 759.25 | 762.24 | 778.71 | 778.78 | 747.65 | 696.05 | 728.19 |
| 20 | 768.79 | 729.30 | 742.97 | 736.38 | 701.77 | 714.94 | 719.81 |
| 25 | 736.56 | 727.25 | 717.93 | 696.61 | 664.93 | 677.74 | 675.06 |
| 30 | 726.62 | 677.01 | 704.81 | 664.47 | 629.12 | 619.85 | 629.82 |
| 35 | 677.23 | 674.06 | 645.42 | 629.33 | 608.63 | 580.19 | 602.48 |
| 40 | 646.45 | 629.16 | 621.73 | 584.71 | 567.18 | 523.96 | 528.82 |
| 45 | 619.04 | 597.61 | 575.91 | 545.91 | 519.10 | 473.82 | 463.31 |
| 50 | 585.97 | 570.18 | 543.19 | 493.57 | 456.68 | 428.38 | 412.40 |
| 55 | 572.64 | 530.88 | 478.52 | 467.70 | 415.72 | 360.28 | 346.58 |
| 60 | 514.40 | 474.64 | 434.63 | 392.82 | 361.98 | 312.28 | 297.00 |
| 65 | 471.45 | 422.68 | 394.41 | 342.41 | 298.41 | 257.70 | 246.14 |
| 70 | 430.43 | 390.15 | 341.18 | 298.38 | 245.32 | 209.01 | 185.85 |
| 75 | 371.22 | 336.61 | 288.77 | 235.03 | 190.56 | 137.15 | 118.60 |
| 80 | 332.13 | 280.42 | 239.74 | 187.84 | 134.58 | 87.52 | 70.53 |
| 85 | 290.91 | 243.61 | 203.69 | 146.76 | 99.70 | 50.91 | 32.19 |
| 90 | 282.07 | 226.50 | 174.97 | 132.21 | 77.35 | 36.19 | 14.56 |
| 95 | 266.77 | 216.24 | 179.07 | 130.15 | 73.67 | 28.32 | 10.44 |
| 100 | 267.05 | 221.29 | 171.27 | 126.12 | 77.09 | 36.25 | 10.98 |
| 105 | 254.98 | 217.87 | 173.98 | 120.83 | 70.78 | 30.32 | 9.15 |
| 110 | 229.92 | 209.22 | 162.80 | 122.28 | 72.10 | 31.62 | 9.74 |
| 115 | 230.50 | 204.23 | 151.10 | 113.81 | 65.92 | 28.80 | 9.54 |
| 120 | 214.64 | 176.10 | 147.07 | 102.34 | 64.43 | 28.32 | 10.11 |
| 125 | 195.37 | 168.81 | 136.81 | 93.42 | 63.57 | 28.75 | 10.51 |
| 130 | 178.38 | 140.38 | 123.35 | 93.71 | 54.81 | 22.70 | 13.62 |
| 135 | 155.26 | 135.89 | 103.36 | 80.73 | 43.91 | 25.60 | 9.69 |
| 140 | 142.71 | 113.43 | 100.13 | 76.41 | 41.65 | 25.49 | 11.60 |
| 145 | 125.24 | 109.28 | 81.68 | 56.11 | 33.21 | 18.86 | 9.66 |
| 150 | 100.30 | 82.30 | 64.29 | 53.28 | 33.74 | 17.46 | 11.70 |
| 155 | 81.12 | 66.63 | 46.93 | 38.48 | 26.81 | 12.62 | 12.54 |
| 160 | 66.88 | 55.98 | 43.50 | 25.41 | 24.08 | 14.06 | 10.11 |
| 165 | 42.05 | 34.87 | 29.53 | 23.78 | 14.58 | 10.85 | 4.28 |
| 170 | 32.92 | 16.53 | 17.96 | 13.13 | 17.04 | 8.91 | 5.10 |
| 175 | 11.60 | 6.27 | 10.00 | 12.02 | 3.50 | 13.69 | 8.31 |
| 180 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 | 5.48 |

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 286.21 | 4.90 | 7.70 |
| 0-30 | 616.78 | 10.60 | 16.70 |
| 0-40 | 1026.93 | 17.70 | 27.80 |
| 0-60 | 1912.08 | 33.00 | 51.80 |
| 0-80 | 2616.63 | 45.10 | 70.80 |
| 0-90 | 2850.95 | 49.20 | 77.20 |
| 10-90 | 2777.49 | 47.90 | 75.20 |
| 20-40 | 740.72 | 12.80 | 20.10 |
| 20-50 | 1186.03 | 20.40 | 32.10 |
| 40-70 | 1278.03 | 22.00 | 34.60 |
| 60-80 | 704.55 | 12.10 | 19.10 |
| 70-80 | 311.67 | 5.40 | 8.40 |
| 80-90 | 234.32 | 4.00 | 6.30 |
| 90-110 | 389.78 | 6.70 | 10.60 |
| 90-120 | 547.13 | 9.40 | 14.80 |
| 90-130 | 669.52 | 11.50 | 18.10 |
| 90-150 | 807.53 | 13.90 | 21.90 |
| 90-180 | 843.04 | 14.50 | 22.80 |
| 110-180 | 453.26 | 7.80 | 12.30 |
| 0-180 | 3693.98 | 63.70 | 100.00 |

Total Luminaire Efficiency = 63.70%

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 73.46 |
| 10-20 | 212.75 |
| 20-30 | 330.57 |
| 30-40 | 410.15 |
| 40-50 | 445.31 |
| 50-60 | 439.84 |
| 60-70 | 392.88 |
| 70-80 | 311.67 |
| 80-90 | 234.32 |
| 90-100 | 203.90 |
| 100-110 | 185.88 |
| 110-120 | 157.35 |
| 120-130 | 122.39 |
| 130-140 | 85.68 |
| 140-150 | 52.32 |
| 150-160 | 25.92 |
| 160-170 | 8.41 |
| 170-180 | 1.18 |

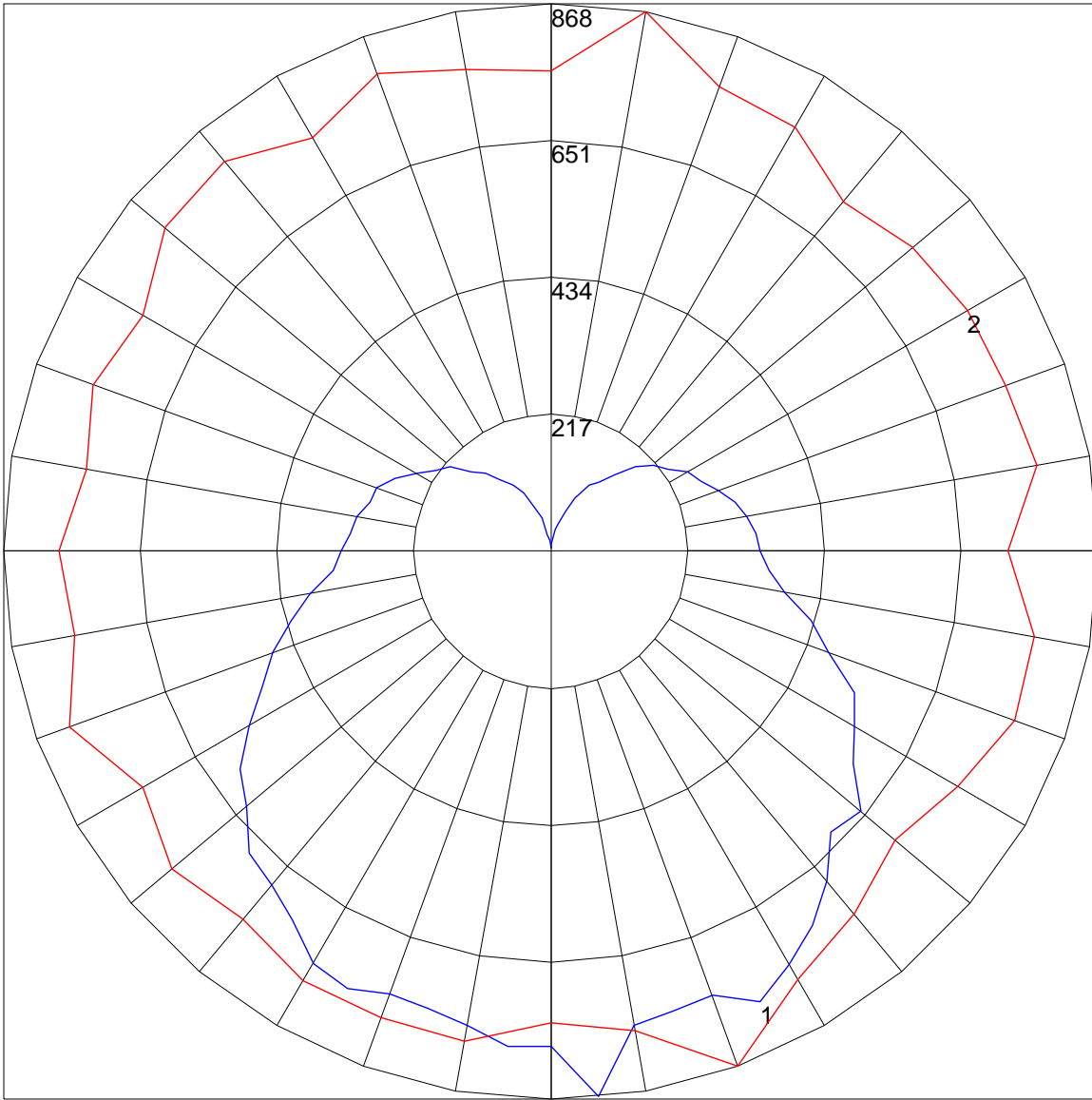
IES INDOOR REPORT
PHOTOMETRIC FILENAME : IPR5MS-2X28W.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| | RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 72 | 72 | 72 | 72 | 69 | 69 | 69 | 69 | 63 | 63 | 63 | 57 | 57 | 57 | 52 | 52 | 52 | 49 | |
| 1 | 64 | 61 | 57 | 55 | 61 | 58 | 55 | 52 | 52 | 50 | 48 | 47 | 46 | 44 | 43 | 41 | 40 | 38 | |
| 2 | 58 | 52 | 47 | 43 | 55 | 50 | 45 | 42 | 45 | 41 | 38 | 41 | 38 | 35 | 37 | 34 | 32 | 30 | |
| 3 | 52 | 45 | 40 | 35 | 50 | 43 | 38 | 34 | 39 | 35 | 32 | 35 | 32 | 29 | 32 | 29 | 27 | 25 | |
| 4 | 48 | 40 | 34 | 29 | 45 | 38 | 33 | 28 | 34 | 30 | 26 | 31 | 28 | 25 | 28 | 25 | 23 | 21 | |
| 5 | 44 | 35 | 29 | 25 | 41 | 34 | 28 | 24 | 31 | 26 | 23 | 28 | 24 | 21 | 25 | 22 | 20 | 18 | |
| 6 | 40 | 32 | 26 | 22 | 38 | 30 | 25 | 21 | 28 | 23 | 20 | 25 | 21 | 18 | 23 | 20 | 17 | 15 | |
| 7 | 37 | 28 | 23 | 19 | 35 | 27 | 22 | 18 | 25 | 20 | 17 | 23 | 19 | 16 | 21 | 17 | 15 | 13 | |
| 8 | 35 | 26 | 20 | 17 | 33 | 25 | 20 | 16 | 23 | 18 | 15 | 21 | 17 | 14 | 19 | 16 | 13 | 12 | |
| 9 | 32 | 24 | 18 | 15 | 31 | 23 | 18 | 14 | 21 | 17 | 14 | 19 | 15 | 13 | 18 | 14 | 12 | 11 | |
| 10 | 30 | 22 | 17 | 13 | 29 | 21 | 16 | 13 | 19 | 15 | 12 | 18 | 14 | 12 | 16 | 13 | 11 | 10 | |

POLAR GRAPH



Maximum Candela = 867.76 Located At Horizontal Angle = 80, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)