

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P242011

Luminaire Tested: **PRS430D010-S4M24-41SWWH-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242011  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-62)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS430D010-S4M24-41SWWH-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WALL WASH DISTRIBUTION, WW TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1413.5 lumens  
Efficiency: N/A  
Efficacy: 56.5 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.96 / 1.05  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

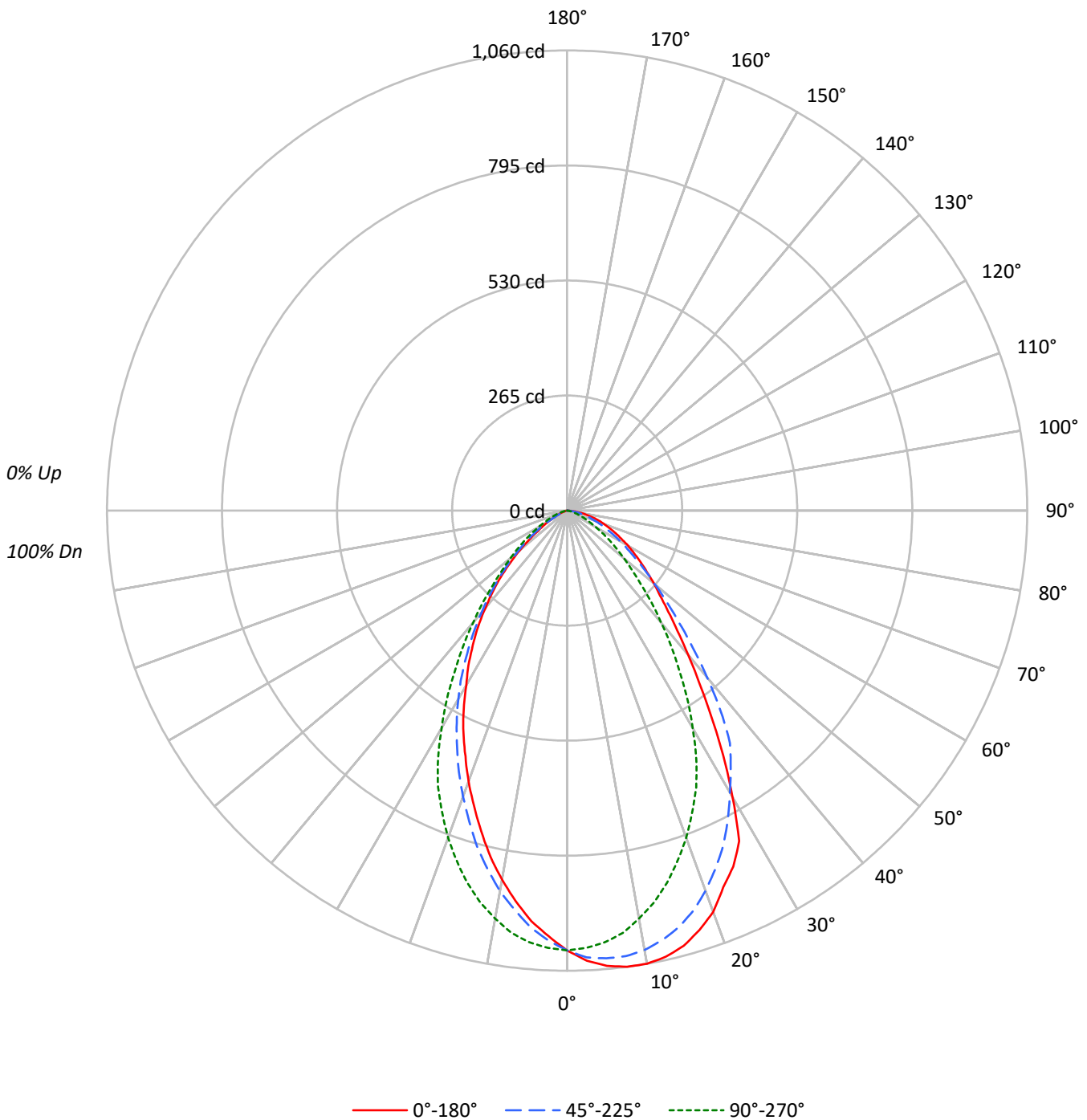
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |     |   |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF  | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |    |    | 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  | 50  | 30 | 10 | 50 | 30 | 10  | 0 |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |     |   |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |    | 100 |   |  |   |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |    |    |    |    | 90  |   |  |   |
| 2   | 104 | 98  | 93  | 88  | 102 | 96  | 91  | 87  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 84  | 82  | 80  |    |    |    |    | 80  |   |  |   |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  | 82  | 78  | 74  | 80  | 76  | 73  | 71  |    |    |    |    | 71  |   |  |   |
| 4   | 91  | 81  | 74  | 69  | 89  | 80  | 73  | 68  | 78  | 72  | 68  | 76  | 71  | 67  | 74  | 69  | 66  | 64  |    |    |    |    | 64  |   |  |   |
| 5   | 85  | 74  | 67  | 62  | 83  | 73  | 67  | 61  | 71  | 65  | 61  | 70  | 64  | 60  | 68  | 63  | 60  | 58  |    |    |    |    | 58  |   |  |   |
| 6   | 79  | 68  | 61  | 56  | 78  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 63  | 58  | 54  | 53  |    |    |    |    | 53  |   |  |   |
| 7   | 75  | 63  | 56  | 51  | 73  | 62  | 56  | 51  | 61  | 55  | 50  | 60  | 54  | 50  | 59  | 53  | 50  | 48  |    |    |    |    | 48  |   |  |   |
| 8   | 70  | 59  | 51  | 46  | 69  | 58  | 51  | 46  | 57  | 51  | 46  | 56  | 50  | 46  | 55  | 49  | 46  | 44  |    |    |    |    | 44  |   |  |   |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 47  | 43  | 53  | 47  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 41  |    |    |    |    | 41  |   |  |   |
| 10  | 62  | 51  | 44  | 40  | 61  | 51  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 38  |    |    |    |    | 38  |   |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 77554 | 77554 | 77554 |
| 5°  | 80870 | 76713 | 72933 |
| 10° | 82380 | 74164 | 67092 |
| 15° | 82239 | 70352 | 60605 |
| 20° | 80128 | 65303 | 54087 |
| 25° | 76433 | 59398 | 47768 |
| 30° | 67376 | 51078 | 41081 |
| 35° | 54000 | 42049 | 35387 |
| 40° | 43246 | 33663 | 29237 |
| 45° | 35668 | 26088 | 23425 |
| 50° | 31044 | 20208 | 16981 |
| 55° | 27571 | 15747 | 10836 |
| 60° | 24846 | 11665 | 7149  |
| 65° | 22277 | 8458  | 4455  |
| 70° | 20366 | 6065  | 2753  |
| 75° | 18188 | 3638  | 1449  |
| 80° | 15163 | 2160  | 1102  |
| 85° | 10802 | 0     | 0     |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 94.1   | 6.7       |
| 10°-20°   | 250.8  | 17.7      |
| 20°-30°   | 330.1  | 23.4      |
| 30°-40°   | 306.5  | 21.7      |
| 40°-50°   | 214.0  | 15.1      |
| 50°-60°   | 125.7  | 8.9       |
| 60°-70°   | 62.4   | 4.4       |
| 70°-80°   | 25.1   | 1.8       |
| 80°-90°   | 4.6    | 0.3       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 675.1  | 47.8      |
| 0°-40°    | 981.6  | 69.4      |
| 0°-60°    | 1321.3 | 93.5      |
| 0°-90°    | 1413.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1413.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 1013 | 1013 | 1013 | 1013 | 1013 |      |
| 5°  | 1052 | 1035 | 998  | 964  | 949  | 101  |
| 15° | 1038 | 994  | 888  | 802  | 765  | 291  |
| 25° | 905  | 851  | 703  | 600  | 566  | 411  |
| 35° | 578  | 654  | 450  | 401  | 379  | 364  |
| 45° | 330  | 364  | 241  | 224  | 216  | 258  |
| 55° | 207  | 192  | 118  | 96   | 81   | 186  |
| 65° | 123  | 98   | 47   | 20   | 25   | 123  |
| 75° | 62   | 42   | 12   | 5    | 5    | 65   |
| 85° | 12   | 7    | 0    | 0    | 0    | 15   |
| 90° | 0    | 0    | 0    | 0    | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 25°    | 30°    | 35°    | 40°    | 45°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 |
| 2.5°  | 1037.8 | 1035.3 | 1035.3 | 1035.3 | 1035.3 | 1032.8 | 1032.8 | 1032.8 | 1030.4 | 1030.4 | 1030.4 |
| 5°    | 1052.5 | 1052.5 | 1050.1 | 1050.1 | 1047.6 | 1047.6 | 1047.6 | 1045.1 | 1042.7 | 1040.2 | 1035.3 |
| 7.5°  | 1059.9 | 1059.9 | 1057.4 | 1057.4 | 1055.0 | 1052.5 | 1052.5 | 1047.6 | 1045.1 | 1040.2 | 1035.3 |
| 10°   | 1059.9 | 1059.9 | 1057.4 | 1057.4 | 1052.5 | 1050.1 | 1050.1 | 1047.6 | 1040.2 | 1035.3 | 1027.9 |
| 12.5° | 1052.5 | 1052.5 | 1050.1 | 1047.6 | 1045.1 | 1042.7 | 1040.2 | 1035.3 | 1027.9 | 1020.6 | 1013.2 |
| 15°   | 1037.8 | 1037.8 | 1035.3 | 1032.8 | 1027.9 | 1025.5 | 1023.0 | 1018.1 | 1010.7 | 1000.9 | 993.5  |
| 17.5° | 1013.2 | 1013.2 | 1010.7 | 1008.3 | 1005.8 | 1000.9 | 998.4  | 991.0  | 983.7  | 976.3  | 966.5  |
| 20°   | 983.7  | 981.2  | 981.2  | 978.7  | 973.8  | 973.8  | 968.9  | 961.5  | 954.2  | 941.9  | 932.0  |
| 22.5° | 939.4  | 941.9  | 941.9  | 936.9  | 932.0  | 932.0  | 927.1  | 924.6  | 914.8  | 905.0  | 892.7  |
| 25°   | 905.0  | 902.5  | 902.5  | 897.6  | 890.2  | 890.2  | 887.8  | 880.4  | 870.5  | 860.7  | 850.9  |
| 27.5° | 858.2  | 855.8  | 855.8  | 855.8  | 848.4  | 848.4  | 843.5  | 833.7  | 823.8  | 816.4  | 801.7  |
| 30°   | 762.3  | 769.7  | 769.7  | 777.1  | 784.5  | 789.4  | 794.3  | 789.4  | 777.1  | 764.8  | 750.0  |
| 32.5° | 668.9  | 673.8  | 678.7  | 686.1  | 695.9  | 703.3  | 710.7  | 718.1  | 727.9  | 715.6  | 700.9  |
| 35°   | 577.9  | 582.8  | 585.3  | 595.1  | 607.4  | 609.9  | 619.7  | 636.9  | 646.8  | 656.6  | 654.1  |
| 37.5° | 499.2  | 501.7  | 506.6  | 514.0  | 523.8  | 531.2  | 538.6  | 550.9  | 568.1  | 582.8  | 580.4  |
| 40°   | 432.8  | 430.4  | 437.7  | 440.2  | 450.0  | 457.4  | 467.2  | 477.1  | 494.3  | 501.7  | 501.7  |
| 42.5° | 376.3  | 376.3  | 378.7  | 383.6  | 391.0  | 395.9  | 400.8  | 410.7  | 425.4  | 427.9  | 427.9  |
| 45°   | 329.5  | 329.5  | 332.0  | 336.9  | 341.8  | 341.8  | 349.2  | 359.0  | 361.5  | 364.0  | 364.0  |
| 47.5° | 290.2  | 292.6  | 292.6  | 295.1  | 297.6  | 302.5  | 304.9  | 309.9  | 309.9  | 309.9  | 309.9  |
| 50°   | 260.7  | 260.7  | 260.7  | 263.1  | 265.6  | 268.0  | 268.0  | 268.0  | 268.0  | 265.6  | 263.1  |
| 52.5° | 231.2  | 231.2  | 231.2  | 233.6  | 233.6  | 236.1  | 236.1  | 233.6  | 231.2  | 228.7  | 226.2  |
| 55°   | 206.6  | 204.1  | 206.6  | 206.6  | 209.0  | 209.0  | 206.6  | 204.1  | 201.7  | 196.7  | 191.8  |
| 57.5° | 182.0  | 182.0  | 182.0  | 182.0  | 184.4  | 182.0  | 182.0  | 179.5  | 174.6  | 169.7  | 164.8  |
| 60°   | 162.3  | 159.8  | 159.8  | 159.8  | 162.3  | 159.8  | 159.8  | 154.9  | 152.5  | 145.1  | 140.2  |
| 62.5° | 140.2  | 140.2  | 140.2  | 142.6  | 140.2  | 140.2  | 137.7  | 132.8  | 130.3  | 125.4  | 120.5  |
| 65°   | 123.0  | 123.0  | 123.0  | 123.0  | 120.5  | 118.0  | 118.0  | 113.1  | 110.7  | 105.7  | 98.4   |
| 67.5° | 105.7  | 105.7  | 105.7  | 105.7  | 103.3  | 100.8  | 100.8  | 95.9   | 93.4   | 88.5   | 83.6   |
| 70°   | 91.0   | 88.5   | 91.0   | 88.5   | 86.1   | 83.6   | 83.6   | 81.2   | 76.2   | 71.3   | 66.4   |
| 72.5° | 76.2   | 76.2   | 76.2   | 73.8   | 71.3   | 68.9   | 68.9   | 63.9   | 61.5   | 59.0   | 54.1   |
| 75°   | 61.5   | 61.5   | 61.5   | 59.0   | 56.6   | 56.6   | 54.1   | 51.6   | 49.2   | 46.7   | 41.8   |
| 77.5° | 46.7   | 46.7   | 46.7   | 46.7   | 44.3   | 41.8   | 41.8   | 39.3   | 36.9   | 34.4   | 32.0   |
| 80°   | 34.4   | 34.4   | 34.4   | 32.0   | 32.0   | 32.0   | 29.5   | 29.5   | 27.1   | 24.6   | 22.1   |
| 82.5° | 22.1   | 22.1   | 22.1   | 22.1   | 19.7   | 19.7   | 19.7   | 17.2   | 17.2   | 14.8   | 12.3   |
| 85°   | 12.3   | 12.3   | 12.3   | 12.3   | 9.8    | 9.8    | 9.8    | 9.8    | 9.8    | 7.4    | 7.4    |
| 87.5° | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 50°    | 55°    | 60°    | 65°    | 67.5°  | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 |
| 2.5°  | 1027.9 | 1025.5 | 1023.0 | 1020.6 | 1020.6 | 1018.1 | 1015.6 | 1013.2 | 1010.7 | 1008.3 | 1008.3 |
| 5°    | 1032.8 | 1027.9 | 1025.5 | 1020.6 | 1018.1 | 1018.1 | 1013.2 | 1008.3 | 1003.3 | 998.4  | 993.5  |
| 7.5°  | 1030.4 | 1025.5 | 1018.1 | 1013.2 | 1010.7 | 1005.8 | 1000.9 | 993.5  | 986.1  | 981.2  | 973.8  |
| 10°   | 1020.6 | 1013.2 | 1005.8 | 996.0  | 993.5  | 988.6  | 981.2  | 971.4  | 964.0  | 954.2  | 946.8  |
| 12.5° | 1005.8 | 996.0  | 986.1  | 976.3  | 971.4  | 966.5  | 956.6  | 944.3  | 934.5  | 924.6  | 912.3  |
| 15°   | 981.2  | 973.8  | 959.1  | 949.2  | 941.9  | 936.9  | 924.6  | 912.3  | 900.1  | 887.8  | 877.9  |
| 17.5° | 951.7  | 941.9  | 929.6  | 914.8  | 907.4  | 902.5  | 887.8  | 870.5  | 858.2  | 846.0  | 836.1  |
| 20°   | 922.2  | 907.4  | 892.7  | 877.9  | 868.1  | 863.2  | 846.0  | 828.7  | 816.4  | 801.7  | 786.9  |
| 22.5° | 882.8  | 865.6  | 850.9  | 833.7  | 826.3  | 816.4  | 801.7  | 782.0  | 764.8  | 752.5  | 735.3  |
| 25°   | 836.1  | 823.8  | 804.1  | 786.9  | 777.1  | 769.7  | 750.0  | 735.3  | 718.1  | 703.3  | 686.1  |
| 27.5° | 789.4  | 772.2  | 757.4  | 740.2  | 727.9  | 718.1  | 700.9  | 681.2  | 664.0  | 644.3  | 629.5  |
| 30°   | 737.7  | 725.5  | 705.8  | 678.7  | 666.4  | 656.6  | 634.5  | 612.3  | 595.1  | 577.9  | 565.6  |
| 32.5° | 686.1  | 661.5  | 639.4  | 614.8  | 602.5  | 592.7  | 568.1  | 550.9  | 531.2  | 516.4  | 504.1  |
| 35°   | 624.6  | 600.0  | 575.4  | 545.9  | 536.1  | 523.8  | 501.7  | 484.5  | 464.8  | 450.0  | 440.2  |
| 37.5° | 563.1  | 533.6  | 506.6  | 484.5  | 474.6  | 459.9  | 440.2  | 420.5  | 405.8  | 393.5  | 381.2  |
| 40°   | 496.8  | 472.2  | 447.6  | 420.5  | 410.7  | 400.8  | 381.2  | 366.4  | 346.7  | 336.9  | 327.1  |
| 42.5° | 423.0  | 413.1  | 388.5  | 366.4  | 354.1  | 344.3  | 324.6  | 309.9  | 297.6  | 287.7  | 277.9  |
| 45°   | 359.0  | 351.7  | 334.4  | 312.3  | 304.9  | 295.1  | 277.9  | 260.7  | 250.8  | 241.0  | 233.6  |
| 47.5° | 304.9  | 297.6  | 285.3  | 265.6  | 255.8  | 248.4  | 233.6  | 221.3  | 211.5  | 201.7  | 196.7  |
| 50°   | 258.2  | 250.8  | 238.5  | 226.2  | 218.9  | 209.0  | 196.7  | 186.9  | 177.1  | 169.7  | 164.8  |
| 52.5° | 218.9  | 211.5  | 199.2  | 189.4  | 184.4  | 177.1  | 164.8  | 157.4  | 147.5  | 142.6  | 137.7  |
| 55°   | 186.9  | 179.5  | 169.7  | 159.8  | 154.9  | 147.5  | 137.7  | 127.9  | 123.0  | 118.0  | 113.1  |
| 57.5° | 159.8  | 150.0  | 142.6  | 135.3  | 130.3  | 123.0  | 113.1  | 108.2  | 100.8  | 95.9   | 91.0   |
| 60°   | 135.3  | 127.9  | 120.5  | 110.7  | 105.7  | 103.3  | 93.4   | 86.1   | 81.2   | 76.2   | 71.3   |
| 62.5° | 113.1  | 105.7  | 98.4   | 91.0   | 88.5   | 83.6   | 76.2   | 68.9   | 63.9   | 59.0   | 56.6   |
| 65°   | 93.4   | 88.5   | 81.2   | 73.8   | 71.3   | 66.4   | 59.0   | 54.1   | 49.2   | 46.7   | 44.3   |
| 67.5° | 78.7   | 71.3   | 66.4   | 59.0   | 56.6   | 54.1   | 46.7   | 41.8   | 39.3   | 36.9   | 32.0   |
| 70°   | 61.5   | 56.6   | 51.6   | 46.7   | 44.3   | 41.8   | 36.9   | 32.0   | 29.5   | 27.1   | 24.6   |
| 72.5° | 49.2   | 44.3   | 39.3   | 34.4   | 32.0   | 32.0   | 27.1   | 24.6   | 22.1   | 19.7   | 17.2   |
| 75°   | 39.3   | 34.4   | 29.5   | 27.1   | 24.6   | 22.1   | 19.7   | 17.2   | 14.8   | 12.3   | 12.3   |
| 77.5° | 27.1   | 24.6   | 22.1   | 17.2   | 17.2   | 14.8   | 12.3   | 12.3   | 9.8    | 9.8    | 7.4    |
| 80°   | 19.7   | 17.2   | 14.8   | 12.3   | 9.8    | 9.8    | 7.4    | 7.4    | 4.9    | 4.9    | 4.9    |
| 82.5° | 12.3   | 9.8    | 7.4    | 7.4    | 7.4    | 4.9    | 4.9    | 4.9    | 2.5    | 2.5    | 2.5    |
| 85°   | 4.9    | 4.9    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 0.0    | 0.0    | 0.0    |
| 87.5° | 2.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



TEST NUMBER: P242011

CATALOG NUMBER: PRS430D010-S4M24-41SWWH-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 100°   | 105°   | 110°   | 112.5° | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 |
| 2.5°  | 1005.8 | 1003.3 | 1000.9 | 998.4  | 998.4  | 998.4  | 993.5  | 993.5  | 991.0  | 988.6  | 988.6  |
| 5°    | 991.0  | 986.1  | 981.2  | 981.2  | 976.3  | 973.8  | 971.4  | 966.5  | 964.0  | 961.5  | 959.1  |
| 7.5°  | 966.5  | 961.5  | 954.2  | 951.7  | 949.2  | 944.3  | 936.9  | 934.5  | 927.1  | 924.6  | 922.2  |
| 10°   | 939.4  | 929.6  | 924.6  | 917.3  | 917.3  | 907.4  | 902.5  | 895.1  | 890.2  | 885.3  | 880.4  |
| 12.5° | 905.0  | 892.7  | 882.8  | 880.4  | 875.5  | 865.6  | 860.7  | 850.9  | 846.0  | 841.0  | 836.1  |
| 15°   | 865.6  | 855.8  | 843.5  | 838.6  | 833.7  | 823.8  | 816.4  | 809.1  | 801.7  | 794.3  | 789.4  |
| 17.5° | 821.4  | 811.5  | 796.8  | 791.9  | 789.4  | 777.1  | 767.3  | 757.4  | 750.0  | 745.1  | 737.7  |
| 20°   | 774.6  | 762.3  | 750.0  | 745.1  | 740.2  | 730.4  | 720.5  | 710.7  | 700.9  | 693.5  | 688.6  |
| 22.5° | 723.0  | 708.2  | 698.4  | 693.5  | 688.6  | 676.3  | 668.9  | 659.1  | 651.7  | 644.3  | 639.4  |
| 25°   | 673.8  | 659.1  | 646.8  | 641.8  | 634.5  | 624.6  | 617.2  | 609.9  | 600.0  | 592.7  | 587.7  |
| 27.5° | 617.2  | 602.5  | 592.7  | 590.2  | 582.8  | 575.4  | 565.6  | 555.8  | 550.9  | 543.5  | 538.6  |
| 30°   | 555.8  | 545.9  | 538.6  | 531.2  | 528.7  | 521.3  | 516.4  | 509.0  | 501.7  | 494.3  | 486.9  |
| 32.5° | 491.8  | 484.5  | 474.6  | 474.6  | 472.2  | 467.2  | 462.3  | 457.4  | 452.5  | 447.6  | 440.2  |
| 35°   | 432.8  | 423.0  | 418.1  | 418.1  | 413.1  | 410.7  | 410.7  | 405.8  | 400.8  | 398.4  | 395.9  |
| 37.5° | 373.8  | 368.9  | 361.5  | 361.5  | 359.0  | 359.0  | 356.6  | 354.1  | 354.1  | 354.1  | 351.7  |
| 40°   | 319.7  | 314.8  | 309.9  | 307.4  | 307.4  | 307.4  | 304.9  | 307.4  | 307.4  | 307.4  | 307.4  |
| 42.5° | 270.5  | 268.0  | 263.1  | 263.1  | 263.1  | 263.1  | 263.1  | 263.1  | 263.1  | 265.6  | 265.6  |
| 45°   | 231.2  | 226.2  | 223.8  | 221.3  | 223.8  | 221.3  | 221.3  | 223.8  | 223.8  | 226.2  | 223.8  |
| 47.5° | 191.8  | 191.8  | 186.9  | 186.9  | 186.9  | 186.9  | 186.9  | 186.9  | 186.9  | 186.9  | 189.4  |
| 50°   | 162.3  | 157.4  | 157.4  | 154.9  | 154.9  | 154.9  | 154.9  | 154.9  | 152.5  | 154.9  | 154.9  |
| 52.5° | 135.3  | 130.3  | 130.3  | 127.9  | 127.9  | 125.4  | 125.4  | 123.0  | 123.0  | 123.0  | 123.0  |
| 55°   | 110.7  | 105.7  | 105.7  | 103.3  | 103.3  | 100.8  | 100.8  | 98.4   | 95.9   | 95.9   | 93.4   |
| 57.5° | 88.5   | 83.6   | 83.6   | 81.2   | 81.2   | 78.7   | 76.2   | 73.8   | 71.3   | 71.3   | 68.9   |
| 60°   | 68.9   | 66.4   | 63.9   | 63.9   | 61.5   | 59.0   | 56.6   | 51.6   | 49.2   | 49.2   | 46.7   |
| 62.5° | 54.1   | 51.6   | 49.2   | 46.7   | 46.7   | 41.8   | 39.3   | 34.4   | 32.0   | 29.5   | 32.0   |
| 65°   | 41.8   | 39.3   | 36.9   | 34.4   | 32.0   | 29.5   | 24.6   | 22.1   | 19.7   | 22.1   | 22.1   |
| 67.5° | 29.5   | 27.1   | 24.6   | 24.6   | 22.1   | 19.7   | 14.8   | 14.8   | 14.8   | 14.8   | 17.2   |
| 70°   | 22.1   | 19.7   | 17.2   | 14.8   | 12.3   | 9.8    | 9.8    | 9.8    | 9.8    | 9.8    | 12.3   |
| 72.5° | 14.8   | 12.3   | 9.8    | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    |
| 75°   | 9.8    | 7.4    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    |
| 77.5° | 7.4    | 4.9    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 4.9    | 4.9    | 2.5    | 4.9    |
| 80°   | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    |
| 82.5° | 0.0    | 0.0    | 0.0    | 2.5    | 2.5    | 0.0    | 2.5    | 2.5    | 0.0    | 2.5    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |





TEST NUMBER: P242011

CATALOG NUMBER: PRS430D010-S4M24-41SWWH-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 150°   | 155°   | 157.5° | 160°   | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 | 1013.2 |
| 2.5°  | 988.6  | 986.1  | 986.1  | 983.7  | 983.7  | 986.1  | 983.7  | 981.2  |
| 5°    | 954.2  | 954.2  | 954.2  | 951.7  | 949.2  | 949.2  | 949.2  | 949.2  |
| 7.5°  | 917.3  | 914.8  | 914.8  | 914.8  | 912.3  | 907.4  | 907.4  | 907.4  |
| 10°   | 875.5  | 870.5  | 870.5  | 868.1  | 868.1  | 865.6  | 865.6  | 863.2  |
| 12.5° | 831.2  | 826.3  | 823.8  | 821.4  | 818.9  | 816.4  | 818.9  | 816.4  |
| 15°   | 784.5  | 779.6  | 774.6  | 774.6  | 772.2  | 767.3  | 767.3  | 764.8  |
| 17.5° | 732.8  | 725.5  | 725.5  | 723.0  | 718.1  | 718.1  | 715.6  | 713.2  |
| 20°   | 681.2  | 676.3  | 673.8  | 671.4  | 668.9  | 664.0  | 664.0  | 664.0  |
| 22.5° | 629.5  | 624.6  | 622.2  | 622.2  | 619.7  | 614.8  | 614.8  | 612.3  |
| 25°   | 580.4  | 575.4  | 573.0  | 570.5  | 568.1  | 568.1  | 565.6  | 565.6  |
| 27.5° | 533.6  | 526.3  | 526.3  | 521.3  | 518.9  | 516.4  | 516.4  | 516.4  |
| 30°   | 482.0  | 479.5  | 474.6  | 477.1  | 469.7  | 469.7  | 469.7  | 464.8  |
| 32.5° | 435.3  | 432.8  | 430.4  | 430.4  | 425.4  | 423.0  | 425.4  | 423.0  |
| 35°   | 391.0  | 388.5  | 386.1  | 383.6  | 381.2  | 381.2  | 378.7  | 378.7  |
| 37.5° | 349.2  | 344.3  | 341.8  | 341.8  | 339.4  | 339.4  | 336.9  | 336.9  |
| 40°   | 304.9  | 304.9  | 302.5  | 300.0  | 297.6  | 295.1  | 292.6  | 292.6  |
| 42.5° | 265.6  | 263.1  | 260.7  | 260.7  | 258.2  | 253.3  | 253.3  | 253.3  |
| 45°   | 226.2  | 223.8  | 221.3  | 221.3  | 218.9  | 216.4  | 213.9  | 216.4  |
| 47.5° | 186.9  | 186.9  | 186.9  | 184.4  | 182.0  | 179.5  | 177.1  | 177.1  |
| 50°   | 154.9  | 152.5  | 152.5  | 152.5  | 147.5  | 145.1  | 142.6  | 142.6  |
| 52.5° | 123.0  | 120.5  | 120.5  | 120.5  | 118.0  | 113.1  | 110.7  | 110.7  |
| 55°   | 93.4   | 93.4   | 93.4   | 91.0   | 88.5   | 86.1   | 83.6   | 81.2   |
| 57.5° | 66.4   | 66.4   | 66.4   | 66.4   | 66.4   | 66.4   | 63.9   | 63.9   |
| 60°   | 46.7   | 49.2   | 49.2   | 51.6   | 51.6   | 49.2   | 46.7   | 46.7   |
| 62.5° | 34.4   | 36.9   | 36.9   | 36.9   | 36.9   | 34.4   | 34.4   | 34.4   |
| 65°   | 24.6   | 24.6   | 24.6   | 24.6   | 24.6   | 24.6   | 24.6   | 24.6   |
| 67.5° | 17.2   | 17.2   | 17.2   | 17.2   | 17.2   | 17.2   | 17.2   | 17.2   |
| 70°   | 12.3   | 12.3   | 12.3   | 12.3   | 12.3   | 12.3   | 9.8    | 12.3   |
| 72.5° | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    |
| 75°   | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    |
| 77.5° | 2.5    | 4.9    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    |
| 80°   | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    |
| 82.5° | 2.5    | 2.5    | 2.5    | 0.0    | 0.0    | 0.0    | 0.0    | 2.5    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)