

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: NEO-RAY

Report Number: P333916

Luminaire Tested: **S123DS-S560D830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333916  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DS-S560D830-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT LED LUMINAIRE, ASYMMETRIC DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 560 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2108.0 lumens  
Efficiency: N/A  
Efficacy: 112.1 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5  
Luminous Opening: Rectangular (W 4' x L: 0.5' x H: 0')  
CIE Type: Direct

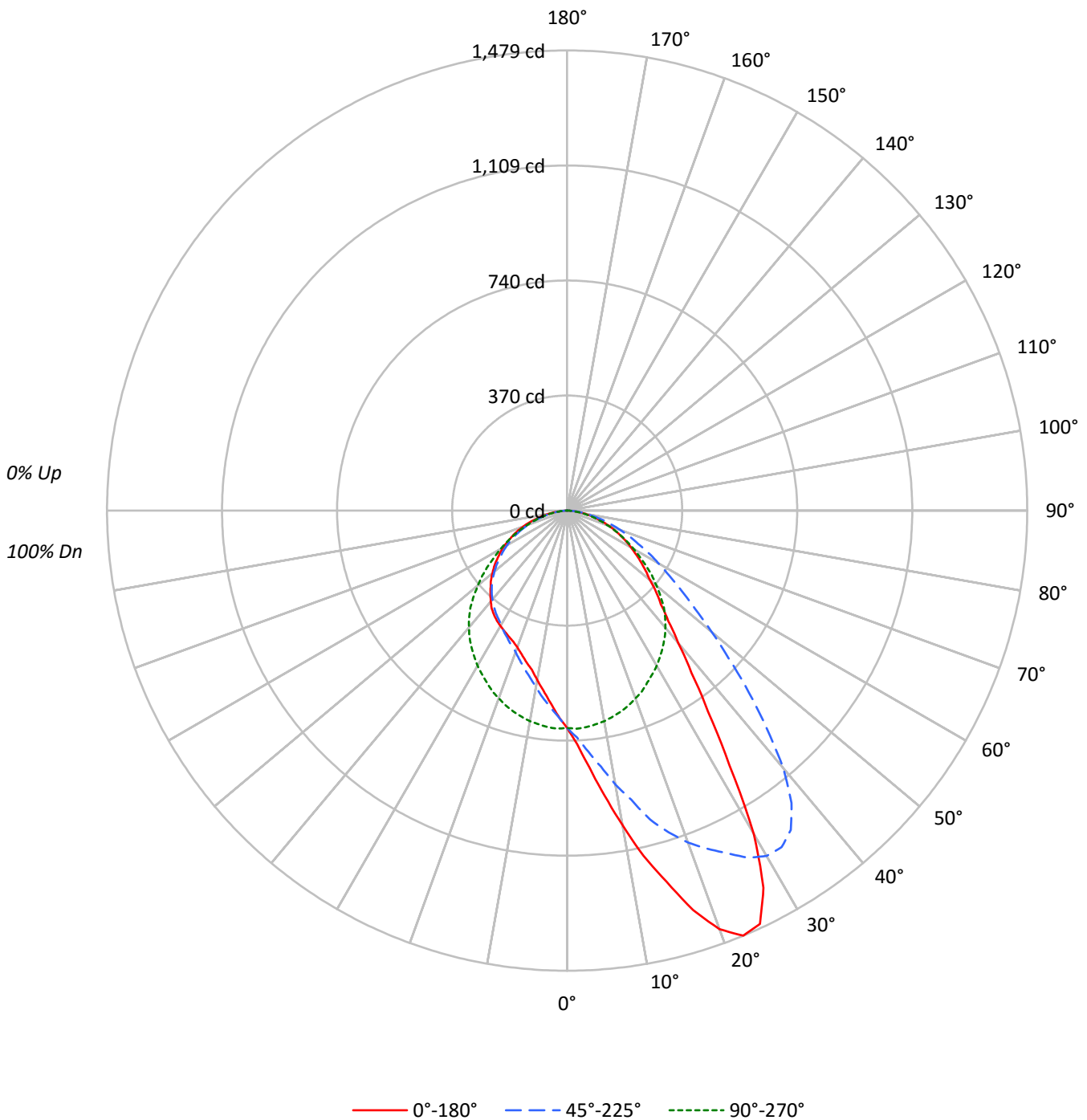
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333916

CATALOG NUMBER: S123DS-S560D830-4F0-1E-UDD-A

### 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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 110 | 105 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  | 95  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 74  | 72  |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  | 75  | 69  | 65  | 72  | 68  | 64  | 62  |
| 4   | 84  | 73  | 65  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 56  | 53  |
| 5   | 78  | 66  | 57  | 51  | 76  | 64  | 56  | 50  | 62  | 55  | 50  | 60  | 54  | 49  | 59  | 53  | 49  | 47  |
| 6   | 72  | 59  | 51  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 44  | 55  | 48  | 43  | 53  | 48  | 43  | 41  |
| 7   | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 52  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 38  | 36  |
| 8   | 62  | 49  | 41  | 35  | 61  | 49  | 41  | 35  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 35  | 33  |
| 9   | 58  | 45  | 37  | 32  | 57  | 45  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 31  | 41  | 36  | 31  | 29  |
| 10  | 55  | 42  | 34  | 29  | 53  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 29  | 38  | 33  | 28  | 27  |

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

|     | 0°   | 90°  | 180° |
|-----|------|------|------|
| 0°  | 3759 | 3759 | 3759 |
| 5°  | 4482 | 3775 | 3345 |
| 10° | 5610 | 3756 | 3022 |
| 15° | 6882 | 3725 | 2813 |
| 20° | 8198 | 3678 | 2678 |
| 25° | 8704 | 3621 | 2648 |
| 30° | 7461 | 3579 | 2662 |
| 35° | 5189 | 3519 | 2690 |
| 40° | 3908 | 3450 | 2682 |
| 45° | 3245 | 3345 | 2647 |
| 50° | 2907 | 3133 | 2623 |
| 55° | 2717 | 2905 | 2591 |
| 60° | 2550 | 2666 | 2564 |
| 65° | 2395 | 2430 | 2482 |
| 70° | 2247 | 2162 | 2364 |
| 75° | 2013 | 1892 | 2167 |
| 80° | 1760 | 1553 | 1866 |
| 85° | 1377 | 1130 | 1254 |



TEST NUMBER: P333916

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 68.7   | 3.3       |
| 10°-20°   | 220.6  | 10.5      |
| 20°-30°   | 371.2  | 17.6      |
| 30°-40°   | 419.5  | 19.9      |
| 40°-50°   | 375.8  | 17.8      |
| 50°-60°   | 303.3  | 14.4      |
| 60°-70°   | 211.3  | 10.0      |
| 70°-80°   | 110.9  | 5.3       |
| 80°-90°   | 26.6   | 1.3       |
| 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°    | 660.5  | 31.3      |
| 0°-40°    | 1080.0 | 51.2      |
| 0°-60°    | 1759.1 | 83.5      |
| 0°-90°    | 2108.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2108.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 698  | 698  | 698 | 698  | 698  |      |
| 5°  | 830  | 778  | 699 | 633  | 619  | 85   |
| 15° | 1235 | 1028 | 669 | 527  | 505  | 356  |
| 25° | 1466 | 1215 | 610 | 453  | 446  | 648  |
| 35° | 790  | 1253 | 536 | 400  | 409  | 510  |
| 45° | 426  | 826  | 440 | 342  | 348  | 336  |
| 55° | 290  | 448  | 310 | 265  | 276  | 260  |
| 65° | 188  | 251  | 191 | 180  | 195  | 187  |
| 75° | 97   | 119  | 91  | 90   | 104  | 103  |
| 85° | 22   | 26   | 18  | 18   | 20   | 27   |
| 90° | 0    | 0    | 0   | 0    | 0    |      |



TEST NUMBER: P333916

CATALOG NUMBER: S123DS-S560D830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 698.4  | 698.4  | 698.4  | 698.4  | 698.4  | 698.4  | 698.4  | 698.4  | 698.4  | 698.4  | 698.4  |
| 2.5°  | 751.9  | 751.2  | 749.5  | 750.8  | 748.1  | 744.4  | 744.1  | 740.7  | 730.9  | 730.2  | 727.5  |
| 5°    | 829.7  | 827.0  | 826.6  | 826.3  | 821.6  | 815.1  | 803.0  | 801.9  | 785.7  | 777.6  | 767.8  |
| 7.5°  | 923.8  | 922.7  | 920.0  | 917.0  | 901.1  | 893.3  | 881.8  | 866.9  | 848.0  | 829.7  | 818.2  |
| 10°   | 1026.6 | 1037.8 | 1023.9 | 1014.4 | 1005.6 | 989.1  | 969.8  | 945.7  | 921.7  | 893.6  | 872.3  |
| 12.5° | 1136.9 | 1141.0 | 1141.0 | 1132.2 | 1117.3 | 1089.9 | 1052.0 | 1024.9 | 1003.3 | 951.8  | 933.6  |
| 15°   | 1235.1 | 1255.7 | 1242.5 | 1212.0 | 1212.7 | 1188.7 | 1144.0 | 1095.0 | 1068.9 | 1028.0 | 972.1  |
| 17.5° | 1346.0 | 1349.8 | 1345.7 | 1317.3 | 1303.4 | 1268.6 | 1228.3 | 1182.6 | 1133.5 | 1083.8 | 1025.9 |
| 20°   | 1431.3 | 1429.3 | 1417.4 | 1404.2 | 1375.1 | 1349.4 | 1304.4 | 1252.0 | 1184.3 | 1135.6 | 1070.9 |
| 22.5° | 1478.7 | 1475.0 | 1470.9 | 1460.4 | 1437.4 | 1409.3 | 1370.1 | 1311.5 | 1247.9 | 1176.2 | 1099.0 |
| 25°   | 1465.8 | 1470.2 | 1470.9 | 1467.9 | 1459.4 | 1442.8 | 1411.0 | 1365.3 | 1301.0 | 1214.8 | 1136.9 |
| 27.5° | 1366.3 | 1377.5 | 1391.7 | 1401.2 | 1416.4 | 1426.6 | 1416.4 | 1387.7 | 1334.9 | 1257.7 | 1162.0 |
| 30°   | 1200.5 | 1187.0 | 1220.5 | 1262.8 | 1291.6 | 1342.3 | 1370.7 | 1372.4 | 1345.7 | 1281.8 | 1189.0 |
| 32.5° | 970.4  | 992.4  | 1002.6 | 1057.1 | 1128.5 | 1187.0 | 1250.6 | 1307.1 | 1320.3 | 1283.1 | 1204.9 |
| 35°   | 789.8  | 808.4  | 835.4  | 862.5  | 930.2  | 988.4  | 1087.9 | 1174.5 | 1243.5 | 1252.7 | 1202.9 |
| 37.5° | 656.4  | 667.3  | 683.8  | 712.6  | 759.0  | 831.0  | 909.9  | 1022.6 | 1117.6 | 1184.6 | 1177.9 |
| 40°   | 556.3  | 559.0  | 578.3  | 598.9  | 634.8  | 691.6  | 761.0  | 857.8  | 977.6  | 1081.4 | 1124.7 |
| 42.5° | 481.2  | 487.9  | 493.3  | 513.0  | 539.7  | 579.0  | 642.2  | 718.0  | 825.3  | 948.8  | 1043.9 |
| 45°   | 426.3  | 433.1  | 438.2  | 451.4  | 471.7  | 500.5  | 545.5  | 618.5  | 702.1  | 825.6  | 939.7  |
| 47.5° | 388.5  | 387.8  | 392.2  | 402.7  | 417.2  | 440.2  | 473.4  | 522.1  | 602.3  | 705.5  | 824.9  |
| 50°   | 347.2  | 352.6  | 353.9  | 361.7  | 372.5  | 388.5  | 414.8  | 454.8  | 517.7  | 605.7  | 713.3  |
| 52.5° | 318.1  | 318.7  | 323.1  | 328.2  | 337.4  | 348.9  | 370.9  | 400.0  | 446.0  | 517.7  | 614.5  |
| 55°   | 289.6  | 289.6  | 293.4  | 297.8  | 303.2  | 314.3  | 329.6  | 352.6  | 390.1  | 448.3  | 530.2  |
| 57.5° | 263.3  | 264.6  | 268.0  | 269.0  | 273.7  | 281.5  | 294.7  | 313.0  | 341.8  | 388.8  | 456.5  |
| 60°   | 236.9  | 239.9  | 239.6  | 242.3  | 246.3  | 252.1  | 262.9  | 277.1  | 302.2  | 338.0  | 392.8  |
| 62.5° | 213.9  | 212.8  | 212.8  | 216.2  | 220.3  | 225.7  | 231.8  | 243.6  | 263.9  | 294.7  | 339.4  |
| 65°   | 188.1  | 187.5  | 189.8  | 191.9  | 193.2  | 197.3  | 202.7  | 213.5  | 227.7  | 251.4  | 287.6  |
| 67.5° | 165.8  | 163.8  | 165.5  | 166.1  | 168.5  | 171.9  | 177.3  | 184.1  | 195.6  | 215.5  | 244.6  |
| 70°   | 142.8  | 141.1  | 140.8  | 141.4  | 143.5  | 145.8  | 149.6  | 156.0  | 166.5  | 181.7  | 201.7  |
| 72.5° | 119.1  | 118.1  | 118.1  | 119.8  | 120.5  | 121.8  | 124.2  | 129.9  | 137.7  | 148.2  | 166.5  |
| 75°   | 96.8   | 96.8   | 96.8   | 97.1   | 98.1   | 99.5   | 101.5  | 104.6  | 111.0  | 119.1  | 131.6  |
| 77.5° | 76.5   | 76.8   | 76.1   | 75.8   | 77.5   | 78.2   | 78.5   | 81.9   | 85.6   | 91.7   | 101.5  |
| 80°   | 56.8   | 55.2   | 55.8   | 56.8   | 57.5   | 57.9   | 58.9   | 59.6   | 62.6   | 65.6   | 72.1   |
| 82.5° | 38.6   | 37.2   | 37.2   | 38.9   | 38.9   | 39.3   | 40.3   | 41.3   | 42.0   | 44.7   | 47.4   |
| 85°   | 22.3   | 22.3   | 22.7   | 22.7   | 23.0   | 22.7   | 23.7   | 24.0   | 24.0   | 25.7   | 27.7   |
| 87.5° | 10.2   | 9.5    | 9.8    | 10.2   | 9.8    | 10.2   | 10.5   | 10.8   | 11.2   | 11.5   | 11.8   |
| 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: P333916

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**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 698.4  | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 |
| 2.5°  | 725.5  | 722.8 | 720.1 | 715.3 | 711.3 | 705.5 | 703.8 | 701.8 | 695.7 | 690.3 | 686.2 |
| 5°    | 764.0  | 755.9 | 744.1 | 733.3 | 724.5 | 712.6 | 705.8 | 698.7 | 688.6 | 679.4 | 672.0 |
| 7.5°  | 800.9  | 786.7 | 770.1 | 752.2 | 734.9 | 718.4 | 705.2 | 693.3 | 680.1 | 667.3 | 657.5 |
| 10°   | 846.6  | 823.6 | 797.9 | 770.1 | 746.4 | 723.4 | 704.2 | 687.2 | 669.0 | 653.1 | 639.9 |
| 12.5° | 898.7  | 861.8 | 823.9 | 788.7 | 759.6 | 725.5 | 701.1 | 678.4 | 657.1 | 637.2 | 621.9 |
| 15°   | 937.6  | 894.3 | 852.4 | 806.0 | 763.4 | 723.4 | 695.7 | 668.6 | 644.6 | 625.0 | 606.0 |
| 17.5° | 976.2  | 928.8 | 875.4 | 819.5 | 769.5 | 723.4 | 685.5 | 656.4 | 627.0 | 603.3 | 585.0 |
| 20°   | 1008.0 | 952.2 | 889.6 | 831.0 | 774.2 | 721.4 | 678.8 | 642.2 | 609.7 | 584.4 | 563.0 |
| 22.5° | 1035.4 | 967.7 | 902.4 | 838.8 | 773.9 | 716.0 | 666.3 | 628.4 | 592.5 | 567.8 | 544.8 |
| 25°   | 1052.7 | 974.5 | 909.5 | 836.1 | 765.4 | 706.5 | 652.4 | 609.7 | 574.6 | 545.5 | 522.1 |
| 27.5° | 1068.9 | 973.5 | 900.1 | 820.9 | 755.2 | 696.7 | 638.5 | 592.8 | 555.9 | 524.5 | 500.5 |
| 30°   | 1085.2 | 975.2 | 883.5 | 805.3 | 739.0 | 678.1 | 621.9 | 575.9 | 536.7 | 504.5 | 482.2 |
| 32.5° | 1095.3 | 974.2 | 868.3 | 783.7 | 713.3 | 661.2 | 604.0 | 555.9 | 515.3 | 483.9 | 462.6 |
| 35°   | 1098.0 | 968.4 | 850.3 | 752.2 | 685.2 | 632.8 | 585.0 | 535.6 | 493.3 | 463.9 | 439.5 |
| 37.5° | 1092.3 | 957.9 | 830.7 | 723.8 | 651.4 | 599.3 | 557.6 | 515.3 | 474.7 | 441.9 | 420.6 |
| 40°   | 1073.7 | 947.8 | 807.0 | 693.3 | 616.2 | 566.4 | 532.3 | 491.0 | 451.0 | 420.3 | 400.6 |
| 42.5° | 1038.1 | 927.1 | 781.0 | 659.5 | 579.6 | 529.9 | 499.1 | 466.3 | 429.1 | 400.6 | 381.0 |
| 45°   | 975.9  | 895.3 | 754.9 | 625.6 | 543.8 | 492.3 | 464.6 | 439.5 | 405.4 | 377.3 | 360.4 |
| 47.5° | 896.3  | 852.4 | 717.3 | 590.1 | 506.2 | 456.5 | 427.4 | 406.7 | 380.0 | 357.3 | 340.7 |
| 50°   | 812.8  | 796.9 | 679.1 | 553.6 | 468.6 | 420.3 | 392.5 | 374.2 | 356.3 | 333.6 | 318.7 |
| 52.5° | 716.3  | 732.6 | 634.4 | 515.7 | 430.4 | 383.0 | 357.3 | 343.8 | 327.9 | 310.3 | 297.8 |
| 55°   | 627.0  | 662.5 | 581.7 | 472.4 | 392.5 | 347.2 | 322.5 | 309.6 | 300.1 | 286.3 | 275.1 |
| 57.5° | 540.4  | 585.7 | 526.8 | 428.7 | 355.3 | 315.7 | 291.3 | 276.8 | 270.7 | 262.9 | 253.8 |
| 60°   | 464.9  | 509.6 | 467.3 | 384.7 | 317.7 | 280.5 | 259.5 | 247.7 | 241.6 | 236.5 | 229.1 |
| 62.5° | 397.6  | 442.9 | 409.1 | 340.1 | 280.8 | 247.0 | 229.4 | 217.9 | 213.5 | 211.5 | 205.4 |
| 65°   | 337.0  | 375.9 | 352.2 | 293.4 | 246.0 | 215.5 | 199.0 | 190.8 | 186.4 | 185.4 | 181.4 |
| 67.5° | 284.6  | 314.7 | 296.4 | 252.1 | 213.5 | 185.8 | 171.2 | 164.1 | 160.4 | 160.0 | 156.7 |
| 70°   | 233.1  | 260.9 | 247.7 | 208.4 | 176.3 | 155.7 | 143.5 | 137.4 | 135.3 | 135.0 | 133.3 |
| 72.5° | 193.2  | 210.5 | 200.7 | 169.5 | 146.5 | 128.2 | 120.1 | 113.7 | 111.3 | 112.0 | 111.0 |
| 75°   | 148.9  | 163.4 | 157.3 | 134.7 | 114.7 | 102.5 | 95.1  | 91.0  | 89.0  | 90.0  | 88.7  |
| 77.5° | 113.7  | 123.8 | 117.8 | 100.5 | 87.6  | 78.5  | 72.7  | 70.0  | 68.0  | 68.0  | 67.3  |
| 80°   | 80.9   | 86.3  | 83.2  | 73.8  | 63.6  | 56.2  | 51.8  | 50.1  | 49.1  | 48.7  | 48.4  |
| 82.5° | 51.8   | 56.2  | 52.4  | 46.7  | 40.6  | 36.9  | 34.9  | 32.5  | 31.8  | 32.1  | 31.8  |
| 85°   | 29.1   | 30.8  | 29.4  | 25.4  | 22.7  | 20.6  | 19.3  | 18.3  | 17.6  | 17.9  | 17.3  |
| 87.5° | 12.5   | 12.9  | 11.8  | 10.5  | 9.8   | 8.8   | 8.8   | 8.1   | 7.4   | 7.4   | 7.1   |
| 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: P333916

CATALOG NUMBER: S123DS-S560D830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

|       | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 | 698.4 |
| 2.5°  | 683.8 | 681.5 | 678.1 | 673.0 | 669.0 | 662.5 | 662.5 | 663.5 | 663.5 | 663.2 | 662.5 |
| 5°    | 665.9 | 660.8 | 654.7 | 647.6 | 640.2 | 632.8 | 631.4 | 628.7 | 626.7 | 625.3 | 623.6 |
| 7.5°  | 647.6 | 639.2 | 630.7 | 620.9 | 612.5 | 605.3 | 600.3 | 595.9 | 593.2 | 590.1 | 587.8 |
| 10°   | 629.0 | 617.9 | 607.4 | 596.9 | 585.4 | 576.2 | 570.5 | 566.4 | 563.4 | 560.7 | 559.3 |
| 12.5° | 607.0 | 593.8 | 582.0 | 572.2 | 559.3 | 549.9 | 544.4 | 543.1 | 539.4 | 532.9 | 529.6 |
| 15°   | 585.7 | 573.9 | 560.0 | 544.8 | 538.7 | 527.2 | 520.8 | 517.7 | 515.7 | 511.3 | 509.9 |
| 17.5° | 568.1 | 552.2 | 536.3 | 525.2 | 514.0 | 504.8 | 501.1 | 497.1 | 494.4 | 490.3 | 489.3 |
| 20°   | 546.1 | 532.3 | 518.0 | 505.9 | 494.0 | 483.9 | 480.8 | 478.1 | 475.4 | 473.7 | 472.4 |
| 22.5° | 523.8 | 509.9 | 498.8 | 487.6 | 474.7 | 469.0 | 465.6 | 462.6 | 460.9 | 459.8 | 458.5 |
| 25°   | 503.2 | 491.0 | 477.8 | 467.6 | 457.5 | 453.1 | 451.0 | 449.4 | 448.0 | 446.3 | 446.0 |
| 27.5° | 484.9 | 471.4 | 460.2 | 450.4 | 442.9 | 439.2 | 436.8 | 435.8 | 435.8 | 436.5 | 436.8 |
| 30°   | 463.9 | 451.7 | 442.9 | 434.8 | 428.0 | 424.7 | 424.3 | 424.3 | 425.7 | 426.0 | 426.7 |
| 32.5° | 444.6 | 435.1 | 426.3 | 418.6 | 413.8 | 411.8 | 413.5 | 413.5 | 414.5 | 415.5 | 416.9 |
| 35°   | 426.0 | 417.2 | 410.4 | 403.7 | 399.3 | 400.3 | 401.0 | 401.6 | 403.3 | 405.4 | 406.7 |
| 37.5° | 408.4 | 400.3 | 393.2 | 387.8 | 385.1 | 387.1 | 388.8 | 390.1 | 392.2 | 393.9 | 395.2 |
| 40°   | 389.1 | 383.4 | 376.6 | 371.9 | 372.5 | 373.6 | 374.9 | 376.6 | 378.3 | 379.3 | 380.7 |
| 42.5° | 371.2 | 365.1 | 360.4 | 356.6 | 357.7 | 359.0 | 359.7 | 360.4 | 362.4 | 364.4 | 365.1 |
| 45°   | 352.9 | 348.2 | 343.4 | 341.1 | 341.8 | 342.4 | 343.1 | 344.1 | 345.8 | 347.2 | 347.5 |
| 47.5° | 332.3 | 328.9 | 325.9 | 323.1 | 324.5 | 324.2 | 325.2 | 327.2 | 327.9 | 328.6 | 330.6 |
| 50°   | 312.7 | 309.6 | 305.9 | 305.2 | 305.2 | 305.2 | 305.5 | 308.3 | 308.3 | 309.6 | 311.0 |
| 52.5° | 291.0 | 289.3 | 287.3 | 285.9 | 285.2 | 285.2 | 286.9 | 288.0 | 288.6 | 290.7 | 292.0 |
| 55°   | 269.7 | 267.7 | 265.6 | 264.6 | 263.9 | 264.6 | 267.3 | 268.0 | 269.7 | 270.7 | 271.7 |
| 57.5° | 247.3 | 246.0 | 244.3 | 243.6 | 243.6 | 244.0 | 246.0 | 247.7 | 248.0 | 251.4 | 252.8 |
| 60°   | 225.4 | 223.0 | 221.6 | 221.6 | 221.0 | 224.0 | 223.3 | 226.7 | 227.4 | 229.4 | 231.8 |
| 62.5° | 202.7 | 199.3 | 199.0 | 199.0 | 200.3 | 200.7 | 202.0 | 203.0 | 205.1 | 207.8 | 209.5 |
| 65°   | 178.0 | 176.3 | 178.7 | 178.3 | 177.6 | 179.7 | 179.7 | 181.4 | 183.4 | 185.8 | 189.5 |
| 67.5° | 155.0 | 153.6 | 154.3 | 154.0 | 155.0 | 156.3 | 157.3 | 158.7 | 161.1 | 163.8 | 166.1 |
| 70°   | 131.6 | 132.6 | 130.9 | 132.3 | 133.3 | 133.7 | 134.3 | 136.4 | 139.1 | 140.8 | 143.5 |
| 72.5° | 109.0 | 108.6 | 109.3 | 109.6 | 110.6 | 111.3 | 112.0 | 114.4 | 117.4 | 118.8 | 120.8 |
| 75°   | 87.3  | 87.0  | 88.0  | 88.0  | 89.7  | 90.3  | 91.0  | 92.0  | 94.7  | 96.8  | 98.5  |
| 77.5° | 67.7  | 68.0  | 67.7  | 69.0  | 68.4  | 68.7  | 70.7  | 71.7  | 72.1  | 76.5  | 77.1  |
| 80°   | 48.0  | 48.7  | 49.1  | 49.4  | 49.7  | 49.1  | 51.4  | 52.4  | 52.4  | 54.8  | 56.5  |
| 82.5° | 31.1  | 31.5  | 32.5  | 32.8  | 32.8  | 33.8  | 33.5  | 34.2  | 35.2  | 35.9  | 38.2  |
| 85°   | 17.3  | 18.3  | 18.6  | 18.3  | 18.6  | 17.9  | 18.9  | 19.3  | 19.6  | 19.6  | 19.6  |
| 87.5° | 6.8   | 7.1   | 6.8   | 7.1   | 6.8   | 7.1   | 7.1   | 6.4   | 6.4   | 7.4   | 6.1   |
| 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: P333916

CATALOG NUMBER: S123DS-S560D830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

|       | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 698.4 | 698.4 | 698.4 | 698.4 |
| 2.5°  | 660.2 | 659.8 | 662.2 | 660.5 |
| 5°    | 621.6 | 622.6 | 619.2 | 619.2 |
| 7.5°  | 586.7 | 585.4 | 585.7 | 583.4 |
| 10°   | 555.3 | 553.2 | 552.6 | 552.9 |
| 12.5° | 529.2 | 529.2 | 523.8 | 523.8 |
| 15°   | 509.9 | 503.5 | 502.8 | 504.8 |
| 17.5° | 488.6 | 484.9 | 485.2 | 484.5 |
| 20°   | 472.4 | 470.3 | 470.0 | 467.6 |
| 22.5° | 457.5 | 457.1 | 457.5 | 454.8 |
| 25°   | 445.6 | 447.3 | 446.0 | 446.0 |
| 27.5° | 437.5 | 437.5 | 436.5 | 436.5 |
| 30°   | 428.0 | 427.7 | 428.4 | 428.4 |
| 32.5° | 418.6 | 419.2 | 419.2 | 419.6 |
| 35°   | 408.8 | 409.1 | 410.1 | 409.4 |
| 37.5° | 395.9 | 397.6 | 397.2 | 397.9 |
| 40°   | 381.0 | 382.0 | 381.7 | 381.7 |
| 42.5° | 365.8 | 366.5 | 365.4 | 364.8 |
| 45°   | 348.9 | 348.2 | 349.2 | 347.8 |
| 47.5° | 330.3 | 330.6 | 330.9 | 332.3 |
| 50°   | 311.6 | 313.7 | 313.7 | 313.3 |
| 52.5° | 293.4 | 294.0 | 295.7 | 295.7 |
| 55°   | 274.4 | 275.1 | 275.8 | 276.1 |
| 57.5° | 255.1 | 254.8 | 256.1 | 256.5 |
| 60°   | 234.5 | 234.5 | 237.2 | 238.2 |
| 62.5° | 212.5 | 213.9 | 216.6 | 214.5 |
| 65°   | 191.2 | 193.9 | 193.5 | 194.9 |
| 67.5° | 168.8 | 170.5 | 173.2 | 173.2 |
| 70°   | 146.2 | 147.9 | 149.2 | 150.2 |
| 72.5° | 124.2 | 124.9 | 128.6 | 126.6 |
| 75°   | 100.8 | 103.2 | 105.2 | 104.2 |
| 77.5° | 78.5  | 81.5  | 82.2  | 81.2  |
| 80°   | 58.9  | 58.5  | 60.6  | 60.2  |
| 82.5° | 39.3  | 38.9  | 39.6  | 39.9  |
| 85°   | 21.0  | 22.0  | 20.6  | 20.3  |
| 87.5° | 6.1   | 6.1   | 5.8   | 5.4   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)