

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: P243327

Luminaire Tested: **S123DR-H560D835-X4F0-XX-UDD-A-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243327  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DR-H560D835-X4F0-XX-UDD-A-W  
Description: DEFINE 3 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2193.9 lumens  
Efficiency: N/A  
Efficacy: 127.6 lumens/watt  
Spacing Criteria (0/90/45): 1.39 / 1.21 / 1.5  
Luminous Opening: Rectangular (W 3.88' x L: 0.23' x H: 0')  
CIE Type: Direct

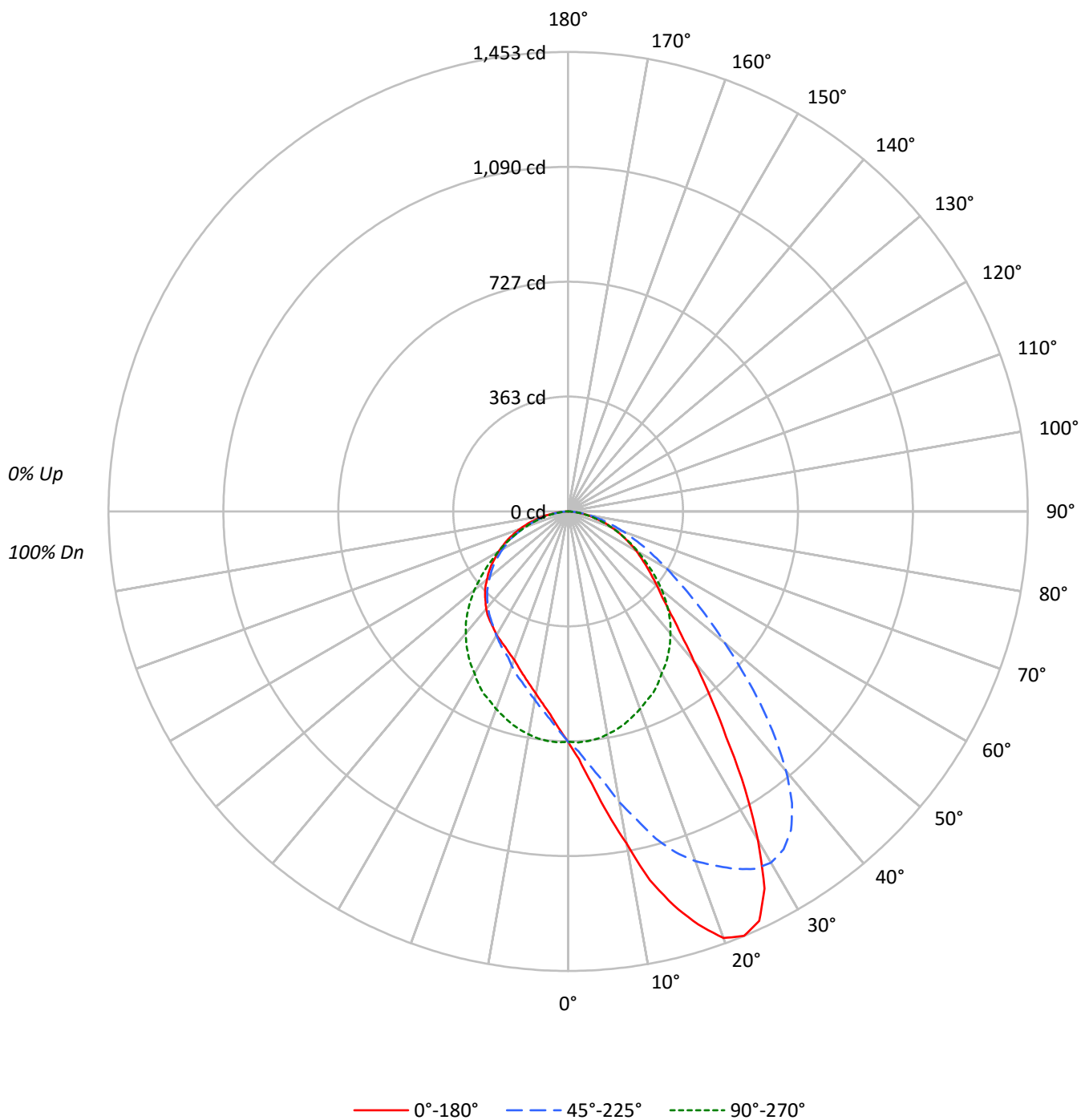
Input Watts (W): 17.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P243327

CATALOG NUMBER: S123DR-H560D835-X4F0-XX-UDD-A-W

### Luminous Intensity Polar Plot



TEST NUMBER: P243327

CATALOG NUMBER: S123DR-H560D835-X4F0-XX-UDD-A-W

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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |     |    | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     |     | 50  |     |     |     |     | 30  |     |     |     |    | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    | 100 |
| 1   | 110 | 105 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  | 95  | 92  | 90  | 91  | 89  | 87  | 85  |    | 85  |
| 2   | 100 | 92  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 77  | 74  | 72  |    | 72  |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  | 75  | 69  | 65  | 72  | 68  | 64  | 62  |    | 62  |
| 4   | 84  | 73  | 64  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 55  | 53  |    | 53  |
| 5   | 78  | 65  | 57  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 50  | 60  | 54  | 49  | 58  | 53  | 49  | 46  |    | 46  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 44  | 55  | 48  | 43  | 53  | 47  | 43  | 41  |    | 41  |
| 7   | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 39  | 49  | 43  | 38  | 36  |    | 36  |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 41  | 35  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 34  | 33  |    | 33  |
| 9   | 58  | 45  | 37  | 32  | 57  | 45  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 29  |    | 29  |
| 10  | 55  | 42  | 34  | 29  | 53  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 28  | 38  | 33  | 28  | 27  |    | 27  |

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

|     | 0°    | 90°  | 180° |
|-----|-------|------|------|
| 0°  | 8824  | 8824 | 8824 |
| 5°  | 10513 | 8865 | 7836 |
| 10° | 13128 | 8813 | 7204 |
| 15° | 16179 | 8716 | 6759 |
| 20° | 18514 | 8578 | 6432 |
| 25° | 19107 | 8483 | 6313 |
| 30° | 16786 | 8280 | 6317 |
| 35° | 12883 | 8158 | 6323 |
| 40° | 9799  | 7959 | 6370 |
| 45° | 7885  | 7702 | 6365 |
| 50° | 6939  | 7290 | 6312 |
| 55° | 6397  | 6756 | 6270 |
| 60° | 6029  | 6182 | 6141 |
| 65° | 5601  | 5650 | 6023 |
| 70° | 5128  | 5068 | 5766 |
| 75° | 4557  | 4416 | 5372 |
| 80° | 3818  | 3651 | 4698 |
| 85° | 2684  | 2642 | 3519 |

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 71.6   | 3.3       |
| 10°-20°   | 229.9  | 10.5      |
| 20°-30°   | 379.8  | 17.3      |
| 30°-40°   | 434.7  | 19.8      |
| 40°-50°   | 393.9  | 18.0      |
| 50°-60°   | 318.3  | 14.5      |
| 60°-70°   | 221.8  | 10.1      |
| 70°-80°   | 116.3  | 5.3       |
| 80°-90°   | 27.7   | 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°    | 681.3  | 31.1      |
| 0°-40°    | 1116.0 | 50.9      |
| 0°-60°    | 1828.2 | 83.3      |
| 0°-90°    | 2193.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2193.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 728  | 728  | 728 | 728  | 728  |      |
| 5°  | 864  | 808  | 729 | 659  | 644  | 89   |
| 15° | 1289 | 1071 | 695 | 560  | 539  | 367  |
| 25° | 1429 | 1247 | 634 | 484  | 472  | 638  |
| 35° | 871  | 1229 | 551 | 423  | 427  | 552  |
| 45° | 460  | 859  | 449 | 362  | 371  | 363  |
| 55° | 303  | 482  | 320 | 284  | 297  | 272  |
| 65° | 195  | 263  | 197 | 194  | 210  | 194  |
| 75° | 97   | 120  | 94  | 98   | 115  | 104  |
| 85° | 19   | 25   | 19  | 21   | 25   | 25   |
| 90° | 0    | 0    | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 728.0  | 728.0  | 728.0  | 728.0  | 728.0  | 728.0  | 728.0  | 728.0  | 728.0  | 728.0  | 728.0  |
| 2.5°  | 784.0  | 785.6  | 783.0  | 784.6  | 780.6  | 778.3  | 774.6  | 773.0  | 765.0  | 759.3  | 757.3  |
| 5°    | 864.0  | 864.0  | 864.6  | 860.6  | 856.0  | 847.6  | 836.6  | 829.6  | 821.6  | 808.0  | 801.0  |
| 7.5°  | 964.6  | 959.6  | 956.3  | 949.0  | 942.6  | 929.0  | 917.0  | 902.6  | 884.0  | 861.3  | 849.3  |
| 10°   | 1066.6 | 1071.9 | 1068.6 | 1060.9 | 1044.6 | 1022.3 | 1004.6 | 984.0  | 955.0  | 933.0  | 901.6  |
| 12.5° | 1193.9 | 1186.9 | 1181.6 | 1169.9 | 1151.9 | 1128.3 | 1100.9 | 1070.3 | 1032.9 | 996.6  | 961.6  |
| 15°   | 1289.3 | 1290.3 | 1289.9 | 1274.6 | 1256.9 | 1224.9 | 1199.6 | 1148.6 | 1101.3 | 1070.6 | 1012.6 |
| 17.5° | 1369.9 | 1374.3 | 1369.3 | 1346.3 | 1330.6 | 1311.6 | 1279.3 | 1222.6 | 1179.6 | 1129.9 | 1065.9 |
| 20°   | 1435.3 | 1435.9 | 1427.9 | 1410.9 | 1392.9 | 1371.6 | 1328.9 | 1285.6 | 1243.6 | 1176.9 | 1115.9 |
| 22.5° | 1452.6 | 1454.3 | 1452.6 | 1445.3 | 1430.6 | 1407.9 | 1375.9 | 1335.9 | 1282.9 | 1211.9 | 1155.3 |
| 25°   | 1428.6 | 1427.6 | 1433.3 | 1428.9 | 1428.3 | 1420.9 | 1399.9 | 1367.6 | 1315.3 | 1246.9 | 1174.9 |
| 27.5° | 1344.6 | 1337.6 | 1351.9 | 1370.6 | 1373.3 | 1384.9 | 1385.3 | 1370.3 | 1332.6 | 1274.3 | 1195.9 |
| 30°   | 1199.3 | 1205.9 | 1212.9 | 1251.9 | 1273.6 | 1303.9 | 1330.3 | 1339.9 | 1325.6 | 1282.6 | 1209.3 |
| 32.5° | 1041.3 | 1062.6 | 1082.3 | 1109.3 | 1140.9 | 1192.3 | 1233.9 | 1270.6 | 1286.3 | 1267.3 | 1209.3 |
| 35°   | 870.6  | 882.0  | 913.0  | 947.3  | 993.0  | 1032.9 | 1115.6 | 1168.9 | 1216.6 | 1228.9 | 1193.9 |
| 37.5° | 737.3  | 747.6  | 758.3  | 785.0  | 836.3  | 903.0  | 971.3  | 1041.3 | 1111.9 | 1162.6 | 1160.6 |
| 40°   | 619.3  | 621.6  | 631.0  | 654.0  | 696.6  | 756.0  | 827.6  | 912.0  | 1003.6 | 1072.6 | 1101.6 |
| 42.5° | 528.6  | 528.6  | 540.3  | 567.0  | 591.6  | 635.0  | 704.3  | 778.6  | 879.0  | 967.6  | 1029.6 |
| 45°   | 460.0  | 460.6  | 470.0  | 489.0  | 508.3  | 542.3  | 593.6  | 663.6  | 767.0  | 858.6  | 945.0  |
| 47.5° | 404.0  | 410.3  | 415.6  | 425.6  | 445.0  | 475.0  | 512.3  | 572.0  | 645.6  | 745.6  | 846.3  |
| 50°   | 368.0  | 369.3  | 373.3  | 379.3  | 394.3  | 414.0  | 446.3  | 491.6  | 557.0  | 645.6  | 747.3  |
| 52.5° | 332.7  | 332.7  | 336.7  | 344.0  | 352.6  | 368.6  | 392.0  | 429.6  | 478.6  | 559.0  | 650.3  |
| 55°   | 302.7  | 303.7  | 304.3  | 310.3  | 317.7  | 329.7  | 348.0  | 372.6  | 417.6  | 482.0  | 561.6  |
| 57.5° | 273.3  | 277.0  | 276.0  | 280.7  | 286.0  | 294.7  | 307.7  | 329.0  | 363.3  | 412.3  | 484.0  |
| 60°   | 248.7  | 248.0  | 249.7  | 251.7  | 255.3  | 261.3  | 273.3  | 289.0  | 317.7  | 358.6  | 417.3  |
| 62.5° | 220.7  | 220.0  | 222.0  | 224.3  | 227.7  | 232.7  | 241.3  | 253.3  | 276.0  | 306.7  | 357.6  |
| 65°   | 195.3  | 194.7  | 195.7  | 197.0  | 200.7  | 204.7  | 211.3  | 221.3  | 236.3  | 263.3  | 302.3  |
| 67.5° | 170.0  | 170.0  | 170.7  | 172.0  | 174.3  | 177.3  | 182.7  | 188.7  | 203.7  | 221.7  | 252.3  |
| 70°   | 144.7  | 145.0  | 145.0  | 146.3  | 148.3  | 150.7  | 155.0  | 160.3  | 169.7  | 185.7  | 210.3  |
| 72.5° | 122.7  | 122.7  | 122.0  | 122.7  | 124.0  | 125.0  | 127.7  | 132.7  | 139.7  | 151.3  | 170.0  |
| 75°   | 97.3   | 99.0   | 98.7   | 98.3   | 99.3   | 101.0  | 103.3  | 107.3  | 111.7  | 120.0  | 134.0  |
| 77.5° | 74.7   | 75.7   | 75.7   | 76.0   | 77.0   | 78.3   | 79.0   | 83.0   | 87.0   | 92.0   | 102.3  |
| 80°   | 54.7   | 55.3   | 54.7   | 55.0   | 55.7   | 57.0   | 58.3   | 59.0   | 62.0   | 66.3   | 71.3   |
| 82.5° | 36.7   | 35.7   | 37.0   | 36.7   | 37.3   | 37.7   | 38.3   | 38.7   | 40.7   | 43.3   | 46.7   |
| 85°   | 19.3   | 21.0   | 20.7   | 21.3   | 20.7   | 21.0   | 21.3   | 22.7   | 23.0   | 24.7   | 26.7   |
| 87.5° | 7.3    | 8.0    | 8.0    | 8.0    | 8.0    | 8.0    | 8.7    | 9.0    | 9.7    | 10.0   | 10.7   |
| 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):**

|       | 55°    | 60°    | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 728.0  | 728.0  | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 |
| 2.5°  | 758.6  | 755.6  | 751.3 | 746.6 | 741.6 | 736.6 | 734.3 | 731.3 | 725.3 | 719.3 | 714.6 |
| 5°    | 795.3  | 787.0  | 775.6 | 767.3 | 755.3 | 744.0 | 735.0 | 728.6 | 719.0 | 707.3 | 699.6 |
| 7.5°  | 836.3  | 821.3  | 803.3 | 785.0 | 767.0 | 750.0 | 736.0 | 724.0 | 709.0 | 694.6 | 683.0 |
| 10°   | 884.6  | 855.6  | 830.6 | 804.0 | 777.3 | 753.3 | 733.3 | 716.0 | 696.6 | 679.3 | 665.0 |
| 12.5° | 927.3  | 893.6  | 859.0 | 821.3 | 785.3 | 754.3 | 728.6 | 706.0 | 682.6 | 662.6 | 648.0 |
| 15°   | 974.3  | 927.0  | 879.0 | 836.3 | 792.6 | 754.6 | 721.0 | 694.6 | 668.0 | 645.3 | 628.3 |
| 17.5° | 1028.3 | 965.0  | 904.6 | 843.3 | 804.6 | 755.6 | 714.3 | 679.6 | 652.3 | 629.6 | 607.6 |
| 20°   | 1060.3 | 997.3  | 923.3 | 860.3 | 796.3 | 746.0 | 700.0 | 665.0 | 633.0 | 607.0 | 589.0 |
| 22.5° | 1077.6 | 1011.3 | 934.0 | 869.3 | 794.6 | 738.3 | 689.3 | 648.0 | 613.6 | 587.6 | 567.3 |
| 25°   | 1101.9 | 1011.3 | 939.6 | 862.0 | 797.3 | 729.3 | 674.0 | 634.3 | 598.3 | 568.3 | 547.0 |
| 27.5° | 1112.9 | 1020.3 | 940.3 | 848.0 | 781.3 | 712.3 | 656.3 | 614.3 | 574.3 | 545.0 | 526.6 |
| 30°   | 1121.9 | 1021.9 | 927.0 | 837.0 | 762.6 | 693.3 | 638.6 | 591.6 | 554.3 | 526.3 | 507.0 |
| 32.5° | 1122.6 | 1017.6 | 909.0 | 816.3 | 737.6 | 671.0 | 617.6 | 573.3 | 534.3 | 504.6 | 485.6 |
| 35°   | 1116.6 | 1007.0 | 888.3 | 784.6 | 708.6 | 648.0 | 594.6 | 551.3 | 511.6 | 483.3 | 464.0 |
| 37.5° | 1101.3 | 995.0  | 869.0 | 755.0 | 674.3 | 615.3 | 570.0 | 528.6 | 489.3 | 461.0 | 445.0 |
| 40°   | 1068.6 | 975.6  | 843.6 | 723.3 | 639.6 | 580.6 | 541.0 | 503.0 | 468.0 | 438.6 | 422.6 |
| 42.5° | 1025.3 | 946.6  | 813.0 | 689.6 | 601.0 | 544.0 | 509.0 | 478.3 | 442.6 | 417.3 | 401.0 |
| 45°   | 964.0  | 907.3  | 782.3 | 654.3 | 562.6 | 506.6 | 474.6 | 449.3 | 418.6 | 393.3 | 379.0 |
| 47.5° | 894.6  | 860.0  | 742.6 | 614.6 | 522.3 | 469.6 | 439.3 | 419.0 | 393.0 | 371.3 | 357.0 |
| 50°   | 816.6  | 803.6  | 699.0 | 574.6 | 484.6 | 430.6 | 402.6 | 386.6 | 364.6 | 347.3 | 335.0 |
| 52.5° | 732.0  | 740.0  | 653.0 | 534.0 | 448.3 | 393.6 | 367.0 | 352.3 | 338.3 | 323.7 | 312.0 |
| 55°   | 646.0  | 665.0  | 597.3 | 489.6 | 406.6 | 359.0 | 333.0 | 319.7 | 309.3 | 297.0 | 288.7 |
| 57.5° | 565.3  | 595.0  | 539.6 | 442.3 | 368.3 | 322.7 | 298.0 | 286.3 | 278.7 | 272.0 | 264.3 |
| 60°   | 487.0  | 521.3  | 480.3 | 398.0 | 330.0 | 288.3 | 266.3 | 255.0 | 251.3 | 246.3 | 239.0 |
| 62.5° | 417.6  | 452.6  | 422.0 | 352.3 | 291.3 | 255.7 | 235.7 | 226.3 | 221.0 | 219.3 | 215.0 |
| 65°   | 352.6  | 385.3  | 362.0 | 304.7 | 254.7 | 223.0 | 205.3 | 197.0 | 194.0 | 193.7 | 190.3 |
| 67.5° | 296.3  | 328.0  | 306.7 | 258.3 | 216.0 | 190.3 | 177.0 | 170.3 | 167.3 | 167.7 | 165.3 |
| 70°   | 244.3  | 266.7  | 254.0 | 216.0 | 183.3 | 160.7 | 150.3 | 143.0 | 140.7 | 140.7 | 140.0 |
| 72.5° | 196.0  | 213.7  | 204.0 | 175.0 | 149.3 | 132.0 | 123.0 | 118.7 | 116.7 | 116.3 | 116.7 |
| 75°   | 153.3  | 168.7  | 160.0 | 137.3 | 118.0 | 105.0 | 97.3  | 94.3  | 93.3  | 92.7  | 93.0  |
| 77.5° | 114.7  | 124.3  | 119.0 | 104.3 | 88.3  | 79.3  | 75.7  | 72.7  | 71.7  | 72.0  | 72.7  |
| 80°   | 81.0   | 86.3   | 83.3  | 74.0  | 63.3  | 57.3  | 54.7  | 52.3  | 51.3  | 52.3  | 52.3  |
| 82.5° | 51.3   | 55.3   | 52.7  | 46.7  | 41.3  | 37.3  | 34.7  | 34.0  | 33.7  | 33.0  | 34.0  |
| 85°   | 28.0   | 30.0   | 28.7  | 26.7  | 23.0  | 21.3  | 19.3  | 19.0  | 19.0  | 19.0  | 19.0  |
| 87.5° | 11.0   | 12.3   | 10.7  | 10.7  | 10.0  | 8.3   | 8.3   | 8.0   | 7.7   | 8.0   | 8.0   |
| 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):**

|       | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 |
| 2.5°  | 712.6 | 708.3 | 705.6 | 702.0 | 697.6 | 692.0 | 689.6 | 692.0 | 690.6 | 688.3 | 689.3 |
| 5°    | 693.0 | 687.3 | 680.0 | 674.0 | 667.3 | 659.0 | 656.3 | 655.0 | 653.0 | 652.0 | 650.3 |
| 7.5°  | 673.6 | 665.3 | 656.3 | 648.0 | 638.3 | 631.0 | 627.6 | 625.3 | 624.6 | 619.6 | 617.6 |
| 10°   | 653.6 | 643.3 | 634.3 | 623.0 | 614.6 | 605.0 | 601.0 | 598.3 | 595.3 | 592.0 | 589.6 |
| 12.5° | 632.6 | 622.3 | 611.0 | 600.3 | 592.0 | 581.3 | 576.0 | 573.0 | 570.6 | 568.3 | 565.6 |
| 15°   | 614.3 | 604.0 | 588.3 | 580.3 | 570.3 | 559.6 | 556.3 | 549.6 | 550.3 | 546.3 | 543.6 |
| 17.5° | 595.0 | 579.6 | 568.6 | 556.6 | 549.3 | 541.6 | 535.3 | 528.3 | 527.3 | 524.3 | 523.3 |
| 20°   | 573.3 | 557.3 | 549.6 | 537.3 | 527.3 | 519.6 | 514.0 | 513.3 | 511.3 | 507.0 | 505.3 |
| 22.5° | 552.0 | 539.0 | 528.3 | 517.0 | 508.0 | 498.0 | 495.3 | 496.3 | 492.6 | 491.6 | 488.0 |
| 25°   | 532.6 | 521.3 | 508.0 | 497.3 | 490.0 | 483.6 | 480.0 | 478.6 | 477.3 | 476.3 | 474.6 |
| 27.5° | 512.0 | 500.0 | 488.6 | 480.0 | 473.0 | 468.6 | 466.3 | 463.3 | 463.0 | 463.0 | 462.3 |
| 30°   | 491.3 | 480.6 | 473.0 | 462.0 | 455.6 | 453.0 | 451.0 | 450.0 | 451.0 | 451.0 | 451.3 |
| 32.5° | 472.3 | 462.0 | 453.0 | 445.3 | 439.0 | 437.0 | 436.6 | 436.6 | 438.0 | 438.0 | 439.0 |
| 35°   | 452.6 | 442.3 | 434.0 | 428.6 | 423.3 | 423.0 | 423.3 | 424.0 | 425.6 | 426.0 | 427.3 |
| 37.5° | 431.3 | 423.3 | 417.0 | 410.3 | 409.0 | 409.6 | 410.3 | 411.0 | 411.6 | 414.3 | 414.3 |
| 40°   | 411.6 | 405.6 | 399.3 | 395.0 | 392.6 | 394.3 | 395.3 | 395.6 | 397.6 | 399.3 | 400.6 |
| 42.5° | 392.3 | 386.6 | 381.6 | 378.0 | 377.0 | 378.3 | 379.3 | 380.3 | 382.3 | 383.6 | 386.0 |
| 45°   | 370.6 | 367.0 | 362.6 | 359.6 | 360.0 | 362.0 | 362.0 | 365.3 | 366.6 | 367.3 | 369.0 |
| 47.5° | 350.6 | 346.6 | 343.6 | 342.3 | 342.0 | 343.6 | 344.6 | 347.3 | 348.0 | 350.3 | 351.6 |
| 50°   | 329.3 | 326.3 | 324.0 | 322.3 | 322.7 | 323.3 | 325.7 | 328.3 | 329.0 | 331.7 | 334.0 |
| 52.5° | 307.0 | 304.3 | 302.3 | 303.0 | 304.0 | 304.0 | 306.3 | 308.0 | 309.7 | 311.7 | 314.0 |
| 55°   | 285.0 | 281.3 | 281.7 | 280.7 | 281.7 | 284.0 | 285.0 | 287.7 | 289.0 | 290.0 | 293.3 |
| 57.5° | 261.0 | 260.3 | 259.3 | 258.3 | 260.3 | 261.3 | 263.0 | 264.7 | 267.0 | 268.3 | 270.7 |
| 60°   | 236.3 | 235.3 | 235.3 | 236.7 | 237.3 | 239.3 | 242.0 | 243.0 | 243.7 | 246.3 | 249.3 |
| 62.5° | 213.7 | 212.7 | 212.3 | 214.3 | 214.3 | 216.3 | 217.3 | 219.0 | 221.7 | 222.7 | 226.7 |
| 65°   | 189.3 | 188.7 | 188.7 | 190.3 | 190.7 | 194.3 | 194.3 | 194.3 | 196.0 | 199.7 | 201.7 |
| 67.5° | 164.0 | 164.3 | 165.3 | 166.3 | 167.7 | 168.7 | 169.0 | 171.0 | 173.7 | 176.0 | 180.0 |
| 70°   | 138.7 | 140.3 | 142.3 | 142.0 | 143.0 | 144.7 | 145.0 | 147.0 | 149.3 | 152.3 | 157.0 |
| 72.5° | 116.0 | 117.0 | 119.0 | 119.0 | 120.3 | 121.3 | 123.0 | 124.3 | 127.3 | 130.0 | 132.0 |
| 75°   | 93.3  | 93.7  | 95.3  | 96.3  | 97.3  | 98.0  | 99.7  | 102.0 | 103.7 | 106.0 | 109.0 |
| 77.5° | 73.3  | 72.7  | 74.0  | 74.3  | 75.0  | 76.3  | 77.7  | 80.0  | 81.3  | 84.0  | 85.0  |
| 80°   | 52.0  | 53.3  | 53.7  | 54.0  | 54.7  | 56.3  | 57.3  | 58.3  | 59.7  | 62.0  | 63.0  |
| 82.5° | 34.3  | 35.0  | 36.0  | 36.3  | 37.0  | 37.3  | 37.7  | 39.3  | 40.3  | 41.0  | 44.3  |
| 85°   | 20.0  | 21.0  | 20.3  | 20.3  | 21.0  | 21.3  | 22.7  | 22.7  | 24.0  | 23.3  | 25.0  |
| 87.5° | 8.7   | 8.3   | 8.3   | 8.7   | 8.3   | 8.0   | 9.0   | 9.0   | 8.7   | 9.0   | 9.0   |
| 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: P243327

CATALOG NUMBER: S123DR-H560D835-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 728.0 | 728.0 | 728.0 | 728.0 |
| 2.5°  | 687.6 | 687.6 | 685.0 | 686.0 |
| 5°    | 647.0 | 648.3 | 645.0 | 644.0 |
| 7.5°  | 617.0 | 615.6 | 613.3 | 613.3 |
| 10°   | 587.6 | 586.3 | 585.3 | 585.3 |
| 12.5° | 562.3 | 561.0 | 559.0 | 560.6 |
| 15°   | 539.6 | 540.0 | 538.6 | 538.6 |
| 17.5° | 522.3 | 519.3 | 518.3 | 518.0 |
| 20°   | 501.6 | 502.3 | 501.0 | 498.6 |
| 22.5° | 488.6 | 487.0 | 485.6 | 485.3 |
| 25°   | 475.3 | 473.6 | 473.3 | 472.0 |
| 27.5° | 462.0 | 462.3 | 461.3 | 461.3 |
| 30°   | 451.0 | 452.0 | 451.0 | 451.3 |
| 32.5° | 440.0 | 440.0 | 440.0 | 438.6 |
| 35°   | 428.0 | 428.3 | 428.0 | 427.3 |
| 37.5° | 415.6 | 415.6 | 416.0 | 416.6 |
| 40°   | 402.0 | 402.0 | 402.6 | 402.6 |
| 42.5° | 385.6 | 387.3 | 388.3 | 386.6 |
| 45°   | 371.0 | 371.3 | 371.6 | 371.3 |
| 47.5° | 354.6 | 353.6 | 354.0 | 354.6 |
| 50°   | 334.3 | 336.7 | 336.7 | 334.7 |
| 52.5° | 314.7 | 315.3 | 316.7 | 316.7 |
| 55°   | 295.3 | 295.7 | 296.0 | 296.7 |
| 57.5° | 273.3 | 273.7 | 273.7 | 273.3 |
| 60°   | 251.3 | 253.3 | 253.0 | 253.3 |
| 62.5° | 227.7 | 230.7 | 231.7 | 231.3 |
| 65°   | 205.3 | 206.0 | 207.7 | 210.0 |
| 67.5° | 181.7 | 183.3 | 186.0 | 185.3 |
| 70°   | 158.3 | 160.7 | 161.3 | 162.7 |
| 72.5° | 135.0 | 138.0 | 138.7 | 139.3 |
| 75°   | 112.3 | 113.7 | 115.0 | 114.7 |
| 77.5° | 87.7  | 89.7  | 92.0  | 90.7  |
| 80°   | 65.7  | 66.0  | 68.0  | 67.3  |
| 82.5° | 43.3  | 46.0  | 46.0  | 44.7  |
| 85°   | 25.3  | 25.3  | 25.3  | 25.3  |
| 87.5° | 8.7   | 8.3   | 9.0   | 8.7   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)