

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: P242118

Luminaire Tested: **S121DR-S490D830-X4F0-XX-UDD-A-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242118
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-18)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-S490D830-X4F0-XX-UDD-A-W
Description: DEFINE 1 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1937.9 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.22 / 1.37
Luminous Opening: Rectangular (W 3.88' x L: 0.09' x H: 0')
CIE Type: Direct

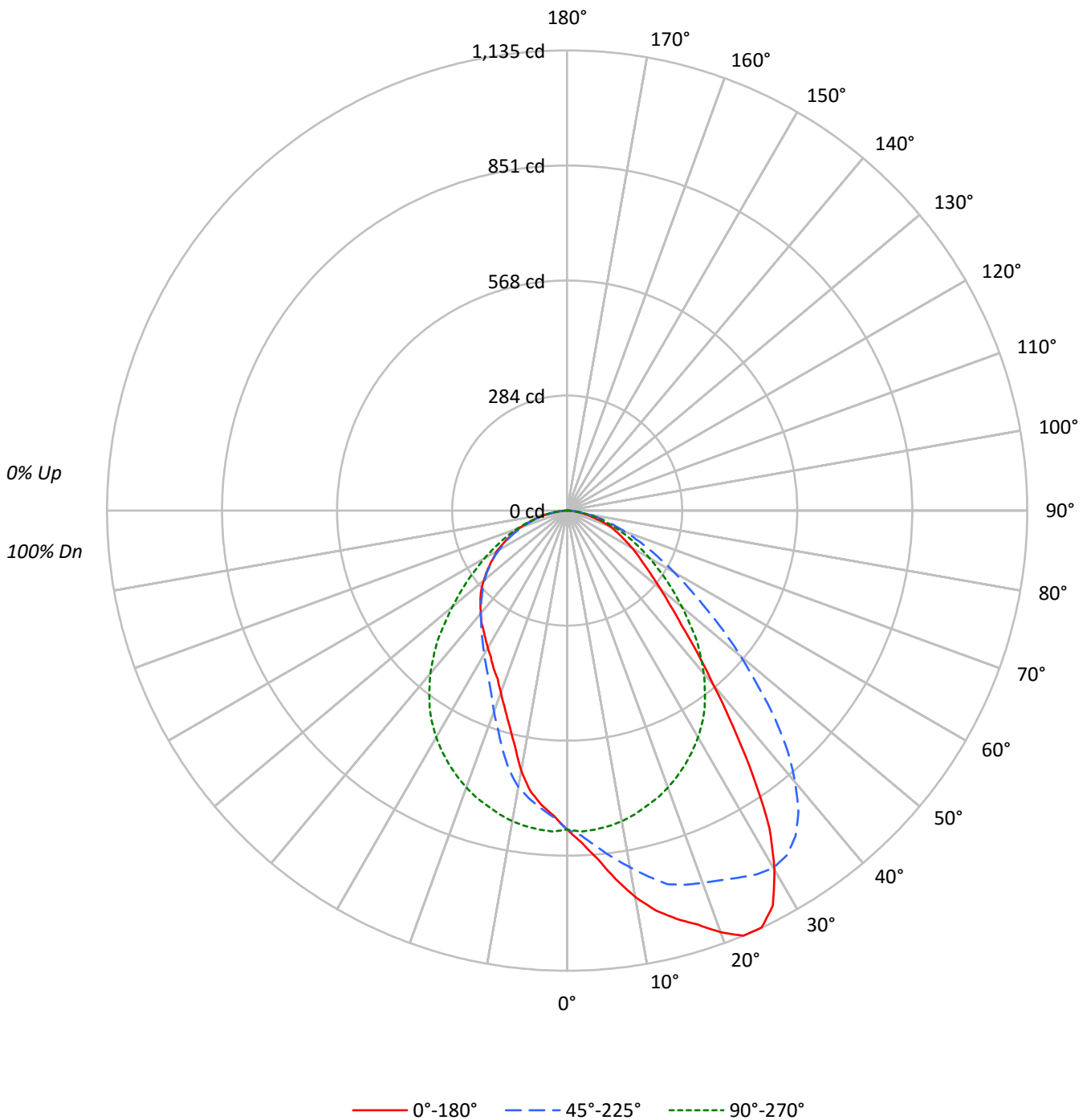
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242118

CATALOG NUMBER: S121DR-S490D830-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot





TEST NUMBER: P242118

CATALOG NUMBER: S121DR-S490D830-X4F0-XX-UDD-A-W

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 | 102 | 98 | 107 | 103 | 100 | 96 | 99 | 96 | 93 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 93 | 87 | 82 | 98 | 91 | 85 | 81 | 88 | 83 | 79 | 85 | 80 | 77 | 82 | 78 | 75 | 73 |
| 3 | 92 | 83 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | 75 | 70 | 66 | 73 | 69 | 65 | 63 |
| 4 | 85 | 74 | 66 | 59 | 83 | 73 | 65 | 59 | 70 | 63 | 58 | 68 | 62 | 57 | 66 | 61 | 57 | 54 |
| 5 | 79 | 66 | 58 | 52 | 77 | 65 | 57 | 51 | 63 | 56 | 51 | 61 | 55 | 50 | 60 | 54 | 50 | 48 |
| 6 | 73 | 60 | 52 | 46 | 71 | 59 | 51 | 45 | 57 | 50 | 45 | 56 | 49 | 45 | 54 | 49 | 44 | 42 |
| 7 | 68 | 55 | 46 | 41 | 66 | 54 | 46 | 40 | 52 | 45 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 38 |
| 8 | 63 | 50 | 42 | 36 | 62 | 50 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 9 | 59 | 46 | 38 | 33 | 58 | 46 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 42 | 37 | 32 | 31 |
| 10 | 56 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 30 | 39 | 34 | 30 | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 23301 | 23301 | 23301 |
| 5° | 25644 | 23491 | 21659 |
| 10° | 29118 | 23408 | 19590 |
| 15° | 31972 | 23147 | 16837 |
| 20° | 34893 | 22920 | 15066 |
| 25° | 37106 | 22558 | 14028 |
| 30° | 34987 | 22092 | 13384 |
| 35° | 28912 | 21395 | 13000 |
| 40° | 21676 | 20287 | 12826 |
| 45° | 16702 | 18915 | 12676 |
| 50° | 13852 | 17019 | 12386 |
| 55° | 11959 | 15451 | 12026 |
| 60° | 10987 | 13938 | 11870 |
| 65° | 10152 | 12599 | 11197 |
| 70° | 9616 | 11314 | 10734 |
| 75° | 7899 | 9994 | 9525 |
| 80° | 6228 | 8139 | 7849 |
| 85° | 4827 | 5983 | 5303 |



TEST NUMBER: P242118

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 75.6 | 3.9 |
| 10°-20° | 220.6 | 11.4 |
| 20°-30° | 337.8 | 17.4 |
| 30°-40° | 385.4 | 19.9 |
| 40°-50° | 345.8 | 17.8 |
| 50°-60° | 271.3 | 14.0 |
| 60°-70° | 184.5 | 9.5 |
| 70°-80° | 95.0 | 4.9 |
| 80°-90° | 21.9 | 1.1 |
| 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° | 634.0 | 32.7 |
| 0°-40° | 1019.4 | 52.6 |
| 0°-60° | 1636.4 | 84.4 |
| 0°-90° | 1937.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1937.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 786 | 786 | 786 | 786 | 786 | |
| 5° | 862 | 832 | 790 | 737 | 728 | 86 |
| 15° | 1042 | 954 | 755 | 613 | 549 | 297 |
| 25° | 1135 | 999 | 690 | 458 | 429 | 512 |
| 35° | 799 | 981 | 592 | 367 | 359 | 496 |
| 45° | 399 | 724 | 451 | 297 | 302 | 316 |
| 55° | 232 | 413 | 299 | 230 | 233 | 211 |
| 65° | 145 | 220 | 180 | 157 | 160 | 144 |
| 75° | 69 | 97 | 87 | 80 | 83 | 75 |
| 85° | 14 | 19 | 18 | 17 | 16 | 17 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P242118

CATALOG NUMBER: S121DR-S490D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0° | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 |
| 2.5° | 819.6 | 819.6 | 820.9 | 820.6 | 819.3 | 816.9 | 814.9 | 812.5 | 806.4 | 802.3 | 806.1 |
| 5° | 862.2 | 863.9 | 865.6 | 865.3 | 860.2 | 855.8 | 849.4 | 847.7 | 836.9 | 831.8 | 830.1 |
| 7.5° | 916.4 | 916.0 | 916.7 | 911.0 | 906.6 | 902.2 | 893.7 | 883.2 | 870.4 | 863.2 | 856.5 |
| 10° | 967.8 | 970.9 | 969.5 | 962.4 | 955.6 | 950.9 | 937.4 | 924.5 | 908.6 | 893.4 | 884.9 |
| 12.5° | 1009.8 | 1008.1 | 1013.8 | 1007.1 | 998.9 | 990.1 | 976.9 | 965.4 | 944.8 | 924.2 | 906.9 |
| 15° | 1042.3 | 1040.6 | 1041.2 | 1036.2 | 1027.7 | 1019.9 | 1006.4 | 994.2 | 974.6 | 953.9 | 935.7 |
| 17.5° | 1070.7 | 1072.4 | 1069.3 | 1063.2 | 1051.7 | 1042.6 | 1025.7 | 1009.1 | 988.5 | 967.8 | 949.9 |
| 20° | 1106.6 | 1108.2 | 1102.5 | 1093.7 | 1082.5 | 1067.0 | 1049.4 | 1025.7 | 1002.7 | 977.3 | 955.0 |
| 22.5° | 1135.0 | 1134.0 | 1131.9 | 1123.5 | 1111.6 | 1097.1 | 1071.7 | 1045.6 | 1018.2 | 986.8 | 958.0 |
| 25° | 1135.0 | 1136.3 | 1137.3 | 1132.9 | 1125.2 | 1113.0 | 1095.7 | 1068.3 | 1037.5 | 998.9 | 958.7 |
| 27.5° | 1098.4 | 1104.5 | 1108.9 | 1108.9 | 1107.2 | 1106.9 | 1096.7 | 1079.5 | 1050.7 | 1011.8 | 967.1 |
| 30° | 1022.6 | 1030.8 | 1037.5 | 1048.0 | 1060.5 | 1068.7 | 1071.7 | 1064.9 | 1050.0 | 1017.2 | 970.9 |
| 32.5° | 929.2 | 928.6 | 942.4 | 959.4 | 984.1 | 1001.3 | 1018.6 | 1028.7 | 1028.0 | 1008.4 | 969.8 |
| 35° | 799.3 | 808.8 | 825.3 | 849.0 | 880.8 | 909.3 | 946.8 | 966.5 | 982.0 | 981.3 | 956.6 |
| 37.5° | 672.7 | 674.1 | 692.7 | 725.2 | 753.3 | 797.3 | 846.3 | 887.3 | 924.8 | 937.0 | 928.9 |
| 40° | 560.4 | 569.9 | 582.4 | 609.5 | 637.5 | 676.1 | 738.4 | 793.2 | 839.6 | 875.4 | 885.2 |
| 42.5° | 473.8 | 478.8 | 491.0 | 514.7 | 539.7 | 585.8 | 631.4 | 690.0 | 748.5 | 805.7 | 835.2 |
| 45° | 398.6 | 403.4 | 414.5 | 431.1 | 454.5 | 490.7 | 537.7 | 594.6 | 657.2 | 724.2 | 766.1 |
| 47.5° | 343.8 | 345.5 | 354.0 | 366.5 | 388.5 | 414.9 | 452.8 | 507.9 | 571.2 | 636.5 | 698.1 |
| 50° | 300.5 | 303.2 | 309.0 | 318.8 | 335.0 | 359.7 | 389.8 | 431.5 | 490.0 | 557.7 | 620.3 |
| 52.5° | 262.6 | 264.6 | 271.4 | 276.8 | 289.3 | 310.3 | 336.4 | 374.3 | 423.7 | 484.6 | 549.2 |
| 55° | 231.5 | 233.5 | 236.9 | 243.0 | 252.8 | 267.0 | 289.3 | 319.4 | 361.7 | 413.2 | 473.8 |
| 57.5° | 207.8 | 208.8 | 209.5 | 213.5 | 221.3 | 232.8 | 251.8 | 275.5 | 308.3 | 355.3 | 409.1 |
| 60° | 185.4 | 185.1 | 187.8 | 190.9 | 195.6 | 202.7 | 216.6 | 237.9 | 267.3 | 305.6 | 355.7 |
| 62.5° | 163.1 | 164.8 | 166.5 | 168.9 | 171.9 | 176.0 | 187.1 | 203.0 | 226.4 | 259.2 | 300.5 |
| 65° | 144.8 | 145.2 | 146.5 | 146.9 | 150.6 | 154.6 | 163.1 | 173.9 | 193.2 | 220.0 | 254.1 |
| 67.5° | 127.2 | 127.6 | 127.2 | 128.3 | 129.9 | 133.3 | 137.7 | 146.5 | 161.4 | 183.1 | 212.9 |
| 70° | 111.0 | 110.0 | 108.6 | 110.3 | 112.0 | 113.7 | 116.7 | 123.5 | 134.7 | 150.9 | 175.6 |
| 72.5° | 89.3 | 90.0 | 90.7 | 91.4 | 91.7 | 94.1 | 96.8 | 101.5 | 110.3 | 122.8 | 141.8 |
| 75° | 69.0 | 69.0 | 70.0 | 70.7 | 73.8 | 74.4 | 77.5 | 80.9 | 88.0 | 96.8 | 111.7 |
| 77.5° | 50.8 | 50.4 | 52.1 | 52.5 | 54.1 | 56.2 | 57.9 | 61.2 | 66.7 | 74.1 | 83.9 |
| 80° | 36.5 | 36.9 | 36.5 | 36.5 | 37.6 | 38.9 | 41.3 | 43.0 | 46.7 | 51.4 | 58.5 |
| 82.5° | 24.4 | 24.4 | 24.7 | 24.7 | 25.7 | 25.7 | 27.1 | 28.4 | 30.8 | 33.8 | 38.9 |
| 85° | 14.2 | 14.2 | 13.9 | 13.9 | 14.2 | 14.2 | 15.6 | 16.6 | 16.9 | 19.0 | 20.6 |
| 87.5° | 6.1 | 6.1 | 5.8 | 6.1 | 5.8 | 6.1 | 5.8 | 6.4 | 6.8 | 7.1 | 7.8 |
| 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: P242118

CATALOG NUMBER: S121DR-S490D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 |
| 2.5° | 805.0 | 804.0 | 803.7 | 800.0 | 796.2 | 791.8 | 791.2 | 792.5 | 786.8 | 779.7 | 779.3 |
| 5° | 826.0 | 822.3 | 816.9 | 809.8 | 803.7 | 795.6 | 791.5 | 789.8 | 781.0 | 770.9 | 768.8 |
| 7.5° | 849.4 | 840.2 | 830.4 | 819.6 | 808.8 | 796.9 | 789.5 | 785.1 | 772.9 | 760.4 | 755.3 |
| 10° | 871.7 | 859.9 | 845.0 | 828.4 | 813.2 | 796.9 | 785.8 | 778.0 | 763.1 | 747.5 | 739.7 |
| 12.5° | 897.4 | 877.8 | 856.8 | 836.2 | 817.6 | 796.6 | 779.7 | 767.8 | 750.6 | 734.0 | 722.5 |
| 15° | 916.0 | 887.6 | 871.4 | 841.9 | 818.6 | 793.2 | 772.6 | 754.6 | 735.7 | 717.4 | 705.9 |
| 17.5° | 930.6 | 908.3 | 879.8 | 847.3 | 815.9 | 788.5 | 762.7 | 742.8 | 717.7 | 697.8 | 685.3 |
| 20° | 935.3 | 912.7 | 883.6 | 848.0 | 816.5 | 781.4 | 750.9 | 726.9 | 700.1 | 675.8 | 658.5 |
| 22.5° | 933.6 | 907.9 | 878.1 | 843.3 | 811.5 | 769.8 | 738.0 | 709.3 | 679.5 | 653.4 | 629.8 |
| 25° | 929.9 | 900.1 | 867.3 | 834.5 | 799.0 | 758.0 | 721.5 | 690.0 | 654.1 | 625.7 | 597.3 |
| 27.5° | 927.9 | 889.0 | 852.1 | 816.5 | 782.7 | 743.1 | 703.9 | 668.7 | 629.1 | 594.6 | 558.0 |
| 30° | 927.2 | 880.8 | 834.5 | 793.2 | 762.1 | 721.8 | 682.9 | 645.7 | 599.3 | 560.4 | 523.2 |
| 32.5° | 925.9 | 874.1 | 819.6 | 770.2 | 734.7 | 698.4 | 657.2 | 620.3 | 567.8 | 527.2 | 487.3 |
| 35° | 916.7 | 862.2 | 802.3 | 746.2 | 704.5 | 667.0 | 630.1 | 591.5 | 537.0 | 493.4 | 455.1 |
| 37.5° | 897.1 | 849.4 | 785.4 | 722.1 | 672.4 | 634.2 | 600.0 | 558.0 | 505.2 | 457.5 | 422.0 |
| 40° | 868.0 | 829.1 | 767.1 | 698.4 | 639.9 | 597.9 | 561.7 | 524.5 | 470.0 | 424.3 | 392.2 |
| 42.5° | 830.1 | 800.0 | 741.8 | 670.7 | 608.4 | 561.4 | 524.5 | 487.6 | 437.5 | 393.6 | 364.8 |
| 45° | 780.3 | 761.7 | 710.6 | 640.6 | 578.0 | 523.5 | 483.6 | 451.4 | 405.1 | 364.8 | 338.4 |
| 47.5° | 725.2 | 717.1 | 674.4 | 607.1 | 541.1 | 488.3 | 441.6 | 407.8 | 371.6 | 337.4 | 314.0 |
| 50° | 658.5 | 664.9 | 631.4 | 569.5 | 505.6 | 451.4 | 405.7 | 369.2 | 337.7 | 311.3 | 290.7 |
| 52.5° | 596.3 | 611.5 | 584.4 | 525.5 | 468.3 | 412.2 | 366.1 | 332.6 | 307.9 | 286.3 | 268.3 |
| 55° | 526.9 | 548.9 | 532.6 | 481.9 | 425.0 | 375.3 | 329.3 | 299.1 | 277.8 | 261.2 | 246.0 |
| 57.5° | 460.2 | 491.4 | 479.5 | 433.8 | 385.4 | 337.0 | 293.7 | 263.9 | 248.7 | 236.5 | 223.7 |
| 60° | 401.0 | 429.4 | 427.7 | 388.8 | 340.4 | 297.4 | 261.9 | 235.2 | 221.6 | 213.5 | 202.4 |
| 62.5° | 347.9 | 376.6 | 373.9 | 338.7 | 300.5 | 260.6 | 230.4 | 206.1 | 196.3 | 187.5 | 180.4 |
| 65° | 293.7 | 318.4 | 319.8 | 293.7 | 256.8 | 224.7 | 199.0 | 179.7 | 170.9 | 165.5 | 160.4 |
| 67.5° | 244.7 | 268.7 | 271.1 | 250.4 | 217.9 | 190.2 | 170.9 | 154.6 | 146.9 | 142.1 | 138.4 |
| 70° | 201.7 | 221.3 | 225.7 | 208.5 | 181.0 | 159.4 | 143.1 | 130.6 | 125.5 | 120.8 | 119.5 |
| 72.5° | 163.4 | 179.3 | 182.4 | 166.5 | 146.2 | 129.9 | 117.4 | 107.9 | 104.2 | 99.5 | 98.5 |
| 75° | 129.9 | 141.1 | 141.4 | 131.0 | 115.7 | 103.2 | 93.1 | 87.3 | 83.2 | 79.9 | 79.2 |
| 77.5° | 94.4 | 104.2 | 107.3 | 99.5 | 87.0 | 76.5 | 70.7 | 66.3 | 63.6 | 61.9 | 61.6 |
| 80° | 68.4 | 74.8 | 76.1 | 69.4 | 61.9 | 55.5 | 51.4 | 47.7 | 46.0 | 44.3 | 43.7 |
| 82.5° | 42.6 | 48.4 | 48.7 | 44.0 | 40.3 | 35.9 | 32.5 | 31.1 | 30.1 | 29.1 | 29.1 |
| 85° | 23.0 | 26.1 | 25.7 | 23.7 | 22.0 | 19.6 | 18.3 | 17.6 | 16.9 | 16.2 | 16.2 |
| 87.5° | 8.8 | 9.8 | 9.8 | 10.2 | 8.8 | 7.8 | 7.1 | 7.4 | 7.1 | 7.1 | 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: P242118

CATALOG NUMBER: S121DR-S490D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 | 786.4 |
| 2.5° | 777.0 | 775.6 | 772.2 | 766.8 | 763.8 | 757.0 | 757.3 | 758.7 | 759.0 | 758.0 | 757.7 |
| 5° | 763.1 | 759.0 | 753.6 | 746.8 | 742.1 | 737.0 | 733.6 | 735.7 | 734.7 | 734.3 | 732.6 |
| 7.5° | 747.9 | 742.4 | 735.7 | 728.9 | 723.5 | 716.7 | 714.0 | 711.6 | 708.9 | 708.6 | 707.2 |
| 10° | 732.6 | 725.9 | 718.1 | 708.3 | 700.8 | 692.4 | 684.2 | 679.8 | 674.8 | 671.0 | 663.3 |
| 12.5° | 714.7 | 703.2 | 694.4 | 684.2 | 670.7 | 657.2 | 648.0 | 635.5 | 628.7 | 622.0 | 612.8 |
| 15° | 694.0 | 679.2 | 663.9 | 643.6 | 631.8 | 612.8 | 599.3 | 590.2 | 579.7 | 572.9 | 565.1 |
| 17.5° | 664.6 | 649.0 | 629.8 | 606.7 | 585.8 | 566.5 | 556.7 | 544.8 | 540.4 | 525.5 | 524.2 |
| 20° | 635.5 | 612.2 | 588.1 | 564.8 | 541.4 | 527.6 | 515.0 | 507.3 | 499.1 | 489.7 | 486.6 |
| 22.5° | 602.7 | 572.2 | 546.8 | 525.2 | 503.9 | 488.6 | 482.6 | 473.8 | 466.0 | 460.6 | 455.5 |
| 25° | 562.8 | 534.7 | 508.9 | 488.6 | 469.4 | 457.8 | 450.1 | 443.6 | 440.3 | 434.2 | 432.1 |
| 27.5° | 525.9 | 497.8 | 477.1 | 458.2 | 442.6 | 432.5 | 425.7 | 419.9 | 415.5 | 414.5 | 412.2 |
| 30° | 488.3 | 464.3 | 444.7 | 428.4 | 414.5 | 409.1 | 402.7 | 400.0 | 397.3 | 395.9 | 393.2 |
| 32.5° | 454.5 | 433.1 | 415.9 | 400.3 | 392.2 | 387.1 | 383.7 | 381.0 | 379.0 | 378.3 | 377.6 |
| 35° | 423.7 | 404.0 | 389.8 | 378.7 | 372.6 | 367.2 | 365.5 | 363.1 | 362.1 | 361.7 | 361.4 |
| 37.5° | 396.6 | 378.3 | 367.5 | 357.7 | 353.3 | 348.2 | 348.5 | 347.5 | 346.9 | 344.8 | 346.2 |
| 40° | 369.2 | 355.0 | 343.8 | 336.0 | 333.0 | 331.3 | 330.6 | 329.9 | 330.3 | 330.3 | 329.9 |
| 42.5° | 344.1 | 331.6 | 324.5 | 317.1 | 315.7 | 314.4 | 314.4 | 313.4 | 313.7 | 315.4 | 316.1 |
| 45° | 321.5 | 311.7 | 305.2 | 299.1 | 299.1 | 297.4 | 298.8 | 298.5 | 299.5 | 300.5 | 301.2 |
| 47.5° | 298.8 | 290.0 | 285.3 | 282.2 | 280.9 | 280.9 | 281.9 | 283.6 | 284.3 | 284.6 | 285.3 |
| 50° | 276.1 | 269.7 | 265.6 | 263.9 | 263.6 | 265.3 | 266.3 | 266.0 | 267.0 | 268.3 | 269.4 |
| 52.5° | 256.2 | 250.4 | 247.7 | 247.0 | 247.0 | 248.4 | 248.7 | 249.7 | 250.4 | 250.4 | 251.8 |
| 55° | 235.5 | 231.5 | 229.4 | 229.1 | 229.4 | 230.1 | 231.5 | 232.1 | 231.8 | 232.5 | 232.5 |
| 57.5° | 214.9 | 211.8 | 210.8 | 211.8 | 211.8 | 213.2 | 213.2 | 213.2 | 212.9 | 214.2 | 213.9 |
| 60° | 195.6 | 192.2 | 193.2 | 192.9 | 193.9 | 193.9 | 194.9 | 194.9 | 193.9 | 195.3 | 195.9 |
| 62.5° | 176.3 | 175.6 | 174.3 | 174.3 | 175.3 | 175.6 | 174.6 | 175.6 | 176.0 | 177.0 | 177.7 |
| 65° | 156.0 | 153.6 | 154.6 | 154.3 | 155.3 | 157.0 | 155.7 | 155.7 | 156.7 | 158.0 | 158.7 |
| 67.5° | 136.7 | 134.7 | 135.7 | 136.0 | 136.0 | 136.7 | 135.7 | 136.4 | 137.7 | 139.4 | 140.4 |
| 70° | 117.1 | 116.4 | 116.7 | 116.4 | 116.4 | 118.1 | 118.4 | 118.1 | 119.5 | 121.1 | 121.5 |
| 72.5° | 97.1 | 97.8 | 97.1 | 97.8 | 98.5 | 97.5 | 97.8 | 98.8 | 100.2 | 101.2 | 102.9 |
| 75° | 78.8 | 77.8 | 78.2 | 79.9 | 79.5 | 80.2 | 79.9 | 80.9 | 83.2 | 82.6 | 82.9 |
| 77.5° | 60.9 | 60.6 | 60.9 | 61.2 | 61.6 | 62.6 | 62.3 | 64.0 | 64.3 | 64.6 | 65.3 |
| 80° | 43.3 | 43.7 | 44.0 | 44.7 | 45.7 | 45.3 | 46.0 | 46.4 | 47.7 | 46.4 | 47.4 |
| 82.5° | 29.4 | 29.1 | 29.8 | 29.8 | 30.8 | 31.5 | 30.5 | 30.5 | 30.5 | 30.1 | 30.1 |
| 85° | 16.2 | 17.3 | 17.3 | 17.3 | 16.6 | 16.6 | 16.9 | 16.6 | 16.6 | 16.6 | 16.2 |
| 87.5° | 7.1 | 7.1 | 6.8 | 6.4 | 6.8 | 6.4 | 6.4 | 6.1 | 5.8 | 5.8 | 5.4 |
| 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: P242118

CATALOG NUMBER: S121DR-S490D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|-------|-------|-------|-------|
| 0° | 786.4 | 786.4 | 786.4 | 786.4 |
| 2.5° | 755.6 | 757.3 | 755.3 | 753.9 |
| 5° | 730.9 | 730.9 | 728.9 | 728.2 |
| 7.5° | 703.2 | 703.5 | 699.8 | 697.1 |
| 10° | 661.6 | 659.5 | 654.1 | 651.1 |
| 12.5° | 606.1 | 609.1 | 601.0 | 594.9 |
| 15° | 557.7 | 549.2 | 552.6 | 548.9 |
| 17.5° | 517.1 | 514.4 | 510.6 | 511.0 |
| 20° | 481.5 | 479.5 | 477.5 | 477.8 |
| 22.5° | 453.4 | 451.8 | 451.1 | 448.7 |
| 25° | 430.1 | 430.8 | 429.1 | 429.1 |
| 27.5° | 410.8 | 409.8 | 408.8 | 407.4 |
| 30° | 392.5 | 392.9 | 391.9 | 391.2 |
| 32.5° | 376.3 | 376.6 | 376.0 | 374.9 |
| 35° | 360.4 | 360.1 | 360.4 | 359.4 |
| 37.5° | 345.8 | 345.5 | 345.8 | 347.2 |
| 40° | 331.0 | 331.3 | 330.3 | 331.6 |
| 42.5° | 316.4 | 316.7 | 316.7 | 316.1 |
| 45° | 300.5 | 301.5 | 301.8 | 302.5 |
| 47.5° | 284.9 | 286.6 | 285.9 | 286.3 |
| 50° | 269.4 | 269.0 | 269.0 | 268.7 |
| 52.5° | 252.1 | 251.1 | 250.8 | 251.1 |
| 55° | 231.5 | 232.8 | 232.8 | 232.8 |
| 57.5° | 214.5 | 214.9 | 215.9 | 214.5 |
| 60° | 197.3 | 197.3 | 197.6 | 200.3 |
| 62.5° | 178.0 | 178.3 | 179.0 | 179.3 |
| 65° | 159.4 | 160.4 | 160.1 | 159.7 |
| 67.5° | 141.1 | 141.1 | 141.4 | 140.8 |
| 70° | 122.2 | 122.2 | 122.2 | 123.9 |
| 72.5° | 102.5 | 102.5 | 102.9 | 103.5 |
| 75° | 84.3 | 84.3 | 84.3 | 83.2 |
| 77.5° | 64.3 | 64.6 | 64.6 | 65.0 |
| 80° | 46.7 | 46.4 | 46.4 | 46.0 |
| 82.5° | 29.4 | 29.8 | 29.4 | 29.1 |
| 85° | 16.2 | 16.6 | 15.6 | 15.6 |
| 87.5° | 5.8 | 5.8 | 5.4 | 6.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)