

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: P243086

Luminaire Tested: **S121RDR-H490D835-X4F0-XX-UDD-A-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243086
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-67)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121RDR-H490D835-X4F0-XX-UDD-A-W
Description: DEFINE 1 REGRESSED 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: 1558.6 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1.21 / 1.07
Luminous Opening: Rectangular (W 3.88' x L: 0.09' x H: 0')
CIE Type: Direct

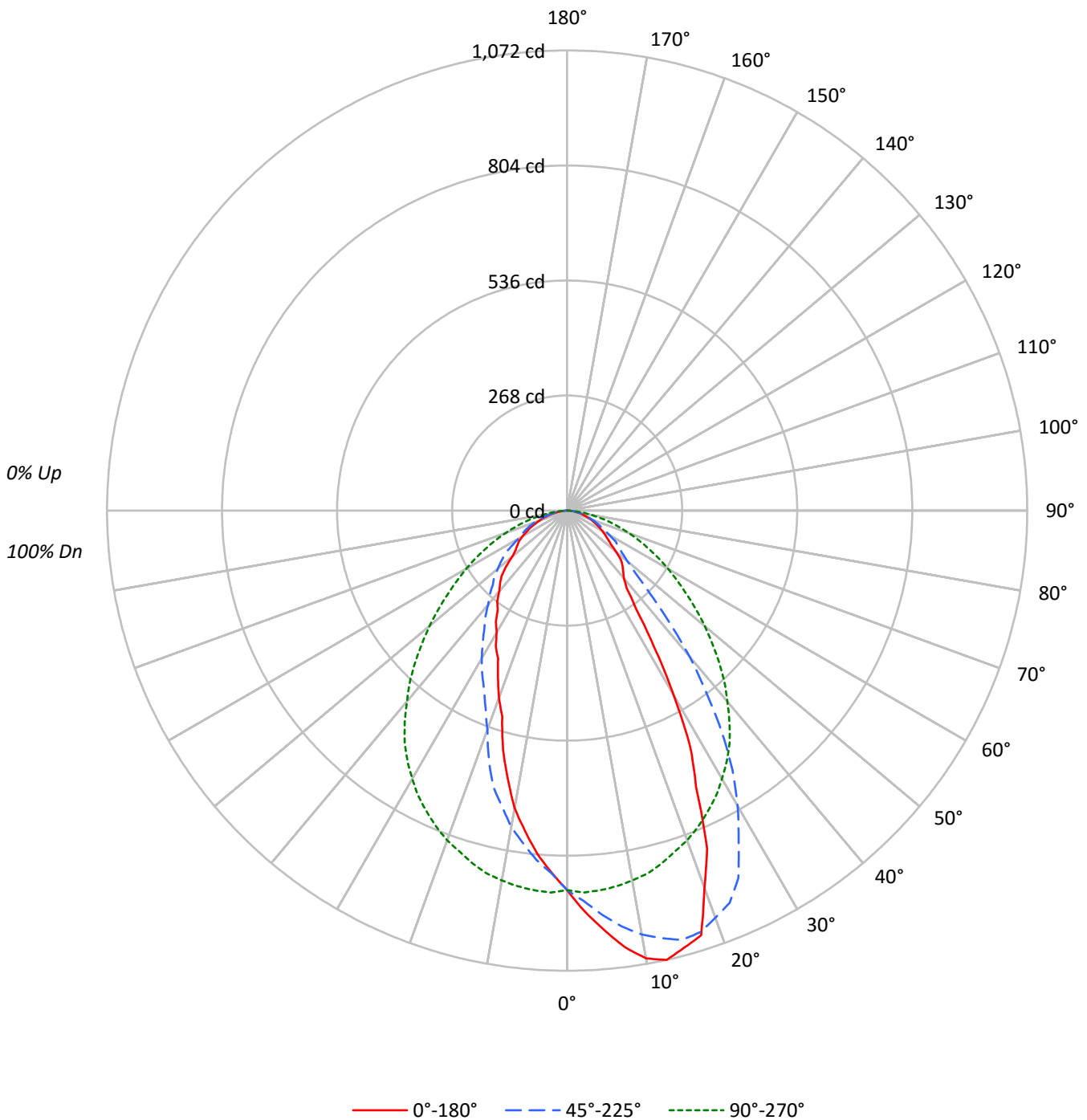
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243086

CATALOG NUMBER: S121RDR-H490D835-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot





TEST NUMBER: P243086

CATALOG NUMBER: S121RDR-H490D835-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 | 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 | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 93 | 91 | 89 | | | | 87 | |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 81 | 87 | 83 | 80 | 84 | 81 | 78 | | | | 76 | |
| 3 | 94 | 85 | 78 | 73 | 92 | 84 | 77 | 72 | 81 | 75 | 71 | 78 | 73 | 70 | 76 | 72 | 68 | | | | 66 | |
| 4 | 87 | 77 | 69 | 63 | 85 | 76 | 69 | 63 | 73 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 61 | | | | 59 | |
| 5 | 81 | 70 | 62 | 56 | 79 | 69 | 61 | 56 | 67 | 60 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | | | | 52 | |
| 6 | 76 | 64 | 56 | 50 | 74 | 63 | 55 | 50 | 61 | 55 | 50 | 60 | 54 | 49 | 58 | 53 | 49 | | | | 47 | |
| 7 | 71 | 59 | 51 | 45 | 69 | 58 | 50 | 45 | 56 | 50 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | | | | 42 | |
| 8 | 66 | 54 | 46 | 41 | 65 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 44 | 40 | | | | 39 | |
| 9 | 62 | 50 | 43 | 38 | 61 | 50 | 42 | 38 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | | | | 35 | |
| 10 | 59 | 47 | 39 | 35 | 58 | 46 | 39 | 35 | 45 | 39 | 34 | 44 | 38 | 34 | 44 | 38 | 34 | | | | 33 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 26196 | 26196 | 26196 |
| 5° | 29151 | 26403 | 23857 |
| 10° | 31874 | 26329 | 21184 |
| 15° | 32334 | 26107 | 17690 |
| 20° | 29472 | 25774 | 14631 |
| 25° | 23215 | 25307 | 12446 |
| 30° | 16970 | 24692 | 11222 |
| 35° | 10128 | 23877 | 10200 |
| 40° | 7941 | 22461 | 9515 |
| 45° | 7656 | 20968 | 9051 |
| 50° | 6822 | 19286 | 7684 |
| 55° | 5956 | 17548 | 7335 |
| 60° | 5570 | 16059 | 7111 |
| 65° | 5188 | 14611 | 6590 |
| 70° | 4912 | 13168 | 6004 |
| 75° | 4499 | 11711 | 5346 |
| 80° | 4095 | 9504 | 4658 |
| 85° | 3842 | 7241 | 3400 |



TEST NUMBER: P243086

CATALOG NUMBER: S121RDR-H490D835-X4F0-XX-UDD-A-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 84.4 | 5.4 |
| 10°-20° | 235.4 | 15.1 |
| 20°-30° | 313.0 | 20.1 |
| 30°-40° | 298.6 | 19.2 |
| 40°-50° | 247.8 | 15.9 |
| 50°-60° | 184.3 | 11.8 |
| 60°-70° | 119.3 | 7.7 |
| 70°-80° | 60.7 | 3.9 |
| 80°-90° | 14.9 | 1.0 |
| 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° | 632.9 | 40.6 |
| 0°-40° | 931.5 | 59.8 |
| 0°-60° | 1363.6 | 87.5 |
| 0°-90° | 1558.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1558.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0° | 884 | 884 | 884 | 884 | 884 | |
| 5° | 980 | 946 | 888 | 817 | 802 | 96 |
| 15° | 1054 | 1035 | 851 | 665 | 577 | 293 |
| 25° | 710 | 944 | 774 | 458 | 381 | 329 |
| 35° | 280 | 627 | 660 | 336 | 282 | 191 |
| 45° | 183 | 270 | 500 | 245 | 216 | 139 |
| 55° | 115 | 146 | 340 | 177 | 142 | 105 |
| 65° | 74 | 84 | 208 | 107 | 94 | 74 |
| 75° | 39 | 43 | 102 | 53 | 47 | 42 |
| 85° | 11 | 11 | 21 | 11 | 10 | 12 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P243086

CATALOG NUMBER: S121RDR-H490D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 |
| 2.5° | 934.7 | 932.4 | 935.1 | 934.1 | 929.7 | 930.7 | 925.4 | 922.1 | 914.1 | 911.1 | 911.1 |
| 5° | 980.1 | 983.4 | 981.4 | 982.1 | 977.7 | 975.1 | 969.4 | 963.1 | 953.1 | 945.7 | 943.1 |
| 7.5° | 1025.4 | 1026.4 | 1027.4 | 1024.7 | 1019.7 | 1015.1 | 1007.1 | 997.7 | 986.7 | 977.4 | 970.1 |
| 10° | 1059.4 | 1061.8 | 1060.4 | 1056.4 | 1052.8 | 1045.8 | 1037.1 | 1027.1 | 1015.1 | 1002.7 | 993.7 |
| 12.5° | 1072.1 | 1074.1 | 1077.1 | 1074.8 | 1074.4 | 1071.1 | 1062.4 | 1050.1 | 1035.4 | 1020.1 | 1009.7 |
| 15° | 1054.1 | 1052.8 | 1060.8 | 1058.8 | 1058.1 | 1056.8 | 1059.1 | 1056.4 | 1048.8 | 1035.4 | 1022.7 |
| 17.5° | 1037.4 | 1036.8 | 1044.8 | 1046.8 | 1043.8 | 1039.4 | 1036.8 | 1033.4 | 1029.7 | 1030.1 | 1028.4 |
| 20° | 934.7 | 955.1 | 959.1 | 969.7 | 992.4 | 1007.4 | 1022.4 | 1021.7 | 1011.1 | 1009.4 | 1008.7 |
| 22.5° | 852.1 | 859.7 | 856.1 | 873.4 | 885.7 | 912.7 | 939.1 | 972.4 | 994.7 | 989.1 | 985.4 |
| 25° | 710.1 | 734.1 | 745.1 | 766.7 | 798.1 | 832.4 | 847.4 | 882.7 | 917.1 | 943.7 | 964.1 |
| 27.5° | 622.1 | 627.4 | 634.4 | 656.7 | 668.4 | 699.7 | 755.7 | 803.7 | 835.7 | 864.7 | 918.4 |
| 30° | 496.0 | 498.4 | 522.7 | 535.0 | 569.4 | 600.0 | 648.7 | 687.4 | 751.7 | 794.7 | 836.1 |
| 32.5° | 378.7 | 376.7 | 403.4 | 417.7 | 451.7 | 493.0 | 547.4 | 583.4 | 646.4 | 716.7 | 766.1 |
| 35° | 280.0 | 279.7 | 294.0 | 304.0 | 341.4 | 373.0 | 442.0 | 489.0 | 558.0 | 627.1 | 690.7 |
| 37.5° | 228.0 | 227.7 | 230.7 | 239.4 | 255.0 | 290.7 | 324.0 | 393.7 | 461.0 | 529.0 | 608.7 |
| 40° | 205.3 | 207.0 | 207.7 | 211.7 | 217.0 | 227.7 | 248.0 | 296.7 | 362.7 | 443.7 | 523.7 |
| 42.5° | 193.3 | 193.3 | 194.0 | 195.0 | 197.7 | 200.7 | 213.0 | 231.7 | 284.7 | 349.4 | 439.0 |
| 45° | 182.7 | 183.0 | 183.7 | 184.3 | 183.7 | 185.3 | 191.0 | 198.7 | 219.4 | 270.4 | 357.0 |
| 47.5° | 170.0 | 169.7 | 171.3 | 172.3 | 173.7 | 175.7 | 176.0 | 180.0 | 189.0 | 215.7 | 278.7 |
| 50° | 148.0 | 148.3 | 150.0 | 154.0 | 158.3 | 162.0 | 164.3 | 167.0 | 170.0 | 182.7 | 216.0 |
| 52.5° | 128.0 | 128.3 | 129.3 | 132.3 | 136.3 | 141.0 | 148.3 | 154.3 | 156.7 | 160.7 | 179.3 |
| 55° | 115.3 | 115.3 | 116.7 | 118.3 | 119.3 | 122.7 | 127.7 | 134.3 | 143.0 | 146.3 | 154.3 |
| 57.5° | 104.7 | 104.7 | 105.3 | 105.3 | 106.7 | 108.3 | 111.7 | 115.0 | 122.3 | 133.0 | 138.0 |
| 60° | 94.0 | 94.0 | 94.7 | 94.7 | 96.3 | 97.0 | 99.3 | 101.3 | 105.3 | 112.7 | 122.7 |
| 62.5° | 84.0 | 83.3 | 84.0 | 84.3 | 85.3 | 86.3 | 88.0 | 90.3 | 92.7 | 97.0 | 104.3 |
| 65° | 74.0 | 73.7 | 74.3 | 75.0 | 75.7 | 77.0 | 78.0 | 79.7 | 81.7 | 84.0 | 87.7 |
| 67.5° | 65.3 | 65.0 | 65.3 | 66.3 | 66.0 | 66.7 | 68.3 | 69.0 | 71.0 | 73.3 | 76.3 |
| 70° | 56.7 | 56.0 | 56.7 | 56.7 | 57.0 | 58.0 | 58.0 | 59.7 | 61.3 | 62.7 | 65.3 |
| 72.5° | 47.3 | 47.7 | 47.3 | 47.7 | 48.3 | 48.7 | 49.3 | 50.3 | 51.3 | 52.7 | 54.3 |
| 75° | 39.3 | 39.3 | 39.7 | 40.0 | 40.7 | 40.7 | 41.0 | 41.7 | 42.3 | 43.0 | 45.0 |
| 77.5° | 31.3 | 31.7 | 32.0 | 32.3 | 32.3 | 32.7 | 33.0 | 33.3 | 34.3 | 34.7 | 35.7 |
| 80° | 24.0 | 24.3 | 24.3 | 24.3 | 25.0 | 24.3 | 25.0 | 25.7 | 25.7 | 26.0 | 26.7 |
| 82.5° | 17.3 | 17.7 | 17.3 | 17.7 | 18.0 | 18.0 | 17.7 | 18.0 | 18.0 | 18.7 | 18.7 |
| 85° | 11.3 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 11.0 | 11.3 | 11.0 | 11.0 | 11.3 |
| 87.5° | 4.7 | 4.7 | 4.7 | 4.7 | 5.0 | 4.7 | 5.0 | 5.0 | 5.0 | 4.7 | 5.0 |
| 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: P243086

CATALOG NUMBER: S121RDR-H490D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 |
| 2.5° | 912.7 | 910.1 | 907.7 | 903.7 | 898.7 | 891.4 | 890.4 | 890.7 | 881.7 | 873.1 | 871.7 |
| 5° | 937.4 | 933.1 | 925.7 | 917.1 | 909.1 | 896.7 | 891.4 | 887.7 | 874.1 | 862.4 | 857.7 |
| 7.5° | 963.7 | 953.4 | 943.4 | 929.7 | 916.4 | 900.4 | 890.4 | 882.7 | 864.7 | 849.4 | 841.4 |
| 10° | 984.4 | 971.7 | 957.4 | 940.1 | 921.7 | 902.1 | 887.1 | 875.1 | 853.4 | 834.4 | 824.4 |
| 12.5° | 999.1 | 984.7 | 967.7 | 947.1 | 926.1 | 900.1 | 881.7 | 865.7 | 839.4 | 816.7 | 804.7 |
| 15° | 1006.7 | 991.4 | 970.4 | 947.7 | 926.1 | 898.7 | 874.4 | 851.1 | 825.1 | 796.7 | 781.7 |
| 17.5° | 1013.7 | 993.7 | 970.1 | 944.1 | 922.1 | 893.4 | 863.4 | 833.1 | 803.7 | 777.1 | 752.7 |
| 20° | 1008.7 | 991.7 | 965.4 | 938.4 | 913.7 | 880.4 | 848.7 | 817.4 | 780.7 | 749.7 | 725.4 |
| 22.5° | 985.4 | 982.4 | 954.1 | 925.1 | 896.7 | 864.7 | 828.1 | 797.1 | 757.7 | 721.1 | 691.7 |
| 25° | 958.1 | 954.4 | 939.1 | 908.1 | 876.1 | 842.7 | 809.7 | 774.1 | 728.7 | 690.7 | 657.1 |
| 27.5° | 935.1 | 926.7 | 915.7 | 886.7 | 852.4 | 819.1 | 785.1 | 750.4 | 702.1 | 659.7 | 621.4 |
| 30° | 888.4 | 896.4 | 884.1 | 864.1 | 824.4 | 792.1 | 759.4 | 721.7 | 673.7 | 625.1 | 585.7 |
| 32.5° | 814.4 | 862.7 | 850.4 | 834.4 | 795.4 | 760.1 | 729.1 | 692.1 | 639.1 | 591.0 | 550.4 |
| 35° | 749.1 | 790.7 | 818.7 | 799.4 | 765.1 | 724.1 | 692.4 | 660.1 | 604.7 | 555.7 | 516.7 |
| 37.5° | 685.7 | 730.1 | 776.7 | 759.1 | 730.7 | 686.7 | 653.4 | 621.4 | 570.0 | 520.7 | 481.7 |
| 40° | 602.7 | 667.4 | 712.4 | 719.4 | 690.4 | 646.1 | 613.7 | 580.7 | 535.4 | 486.4 | 444.7 |
| 42.5° | 523.0 | 606.0 | 642.4 | 678.4 | 648.7 | 607.0 | 571.0 | 543.0 | 499.4 | 456.4 | 411.0 |
| 45° | 439.7 | 534.0 | 587.7 | 615.4 | 604.7 | 566.7 | 527.4 | 500.4 | 463.7 | 423.7 | 380.7 |
| 47.5° | 367.4 | 457.0 | 533.7 | 549.4 | 559.7 | 522.4 | 485.7 | 458.4 | 426.7 | 393.7 | 352.7 |
| 50° | 291.4 | 384.4 | 466.4 | 494.7 | 514.4 | 480.4 | 442.0 | 418.4 | 391.7 | 362.0 | 325.7 |
| 52.5° | 226.7 | 313.7 | 399.7 | 448.0 | 454.7 | 437.0 | 401.7 | 378.4 | 357.0 | 330.4 | 297.4 |
| 55° | 180.0 | 247.4 | 333.4 | 389.7 | 396.0 | 391.7 | 360.0 | 339.7 | 324.0 | 301.7 | 274.0 |
| 57.5° | 149.3 | 192.3 | 270.0 | 335.0 | 344.4 | 348.4 | 322.4 | 304.0 | 290.0 | 272.4 | 247.4 |
| 60° | 129.0 | 151.7 | 211.0 | 274.7 | 300.4 | 307.4 | 284.4 | 271.0 | 259.4 | 243.4 | 220.0 |
| 62.5° | 114.0 | 124.3 | 161.3 | 222.7 | 255.7 | 261.7 | 250.0 | 240.0 | 230.4 | 215.0 | 194.3 |
| 65° | 95.0 | 106.0 | 124.3 | 172.0 | 212.7 | 215.7 | 218.0 | 208.4 | 200.7 | 188.0 | 169.7 |
| 67.5° | 79.7 | 88.3 | 100.3 | 132.0 | 170.7 | 179.3 | 185.3 | 181.0 | 173.7 | 161.0 | 145.3 |
| 70° | 67.7 | 72.7 | 81.3 | 99.0 | 130.3 | 149.0 | 155.3 | 152.0 | 148.3 | 134.7 | 121.3 |
| 72.5° | 56.3 | 60.3 | 65.3 | 76.0 | 98.3 | 118.3 | 127.7 | 126.0 | 122.0 | 111.7 | 100.7 |
| 75° | 46.7 | 48.3 | 52.3 | 58.3 | 71.3 | 90.0 | 101.0 | 102.3 | 97.7 | 88.0 | 79.3 |
| 77.5° | 36.7 | 38.3 | 40.7 | 44.3 | 52.7 | 65.3 | 74.3 | 77.7 | 74.7 | 67.7 | 59.0 |
| 80° | 28.0 | 29.0 | 30.7 | 32.3 | 35.7 | 44.3 | 53.7 | 55.7 | 54.0 | 48.3 | 43.0 |
| 82.5° | 18.7 | 19.3 | 20.7 | 22.0 | 23.7 | 27.7 | 35.7 | 37.0 | 36.7 | 31.7 | 28.0 |
| 85° | 11.3 | 11.3 | 11.7 | 12.7 | 13.3 | 15.0 | 19.3 | 21.3 | 20.3 | 17.0 | 15.3 |
| 87.5° | 4.7 | 5.0 | 4.7 | 4.7 | 4.7 | 5.0 | 6.3 | 8.7 | 6.7 | 5.0 | 4.7 |
| 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: P243086

CATALOG NUMBER: S121RDR-H490D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 | 884.1 |
| 2.5° | 868.1 | 866.7 | 861.7 | 857.1 | 851.7 | 845.4 | 845.7 | 846.7 | 844.4 | 843.7 | 846.1 |
| 5° | 851.1 | 846.4 | 838.7 | 831.1 | 825.1 | 817.1 | 812.4 | 814.7 | 813.1 | 810.1 | 808.1 |
| 7.5° | 833.1 | 826.4 | 815.4 | 805.7 | 797.7 | 782.7 | 779.4 | 775.4 | 772.1 | 765.4 | 764.1 |
| 10° | 811.7 | 802.1 | 788.1 | 774.4 | 759.7 | 748.1 | 737.1 | 732.4 | 723.4 | 717.4 | 715.7 |
| 12.5° | 789.7 | 773.7 | 758.1 | 738.1 | 721.4 | 704.4 | 694.7 | 688.1 | 679.1 | 664.4 | 657.4 |
| 15° | 767.1 | 742.7 | 721.7 | 699.7 | 688.4 | 665.4 | 647.1 | 626.4 | 615.4 | 590.7 | 576.4 |
| 17.5° | 736.7 | 708.7 | 680.4 | 662.4 | 638.7 | 606.7 | 576.0 | 565.4 | 548.7 | 532.7 | 516.7 |
| 20° | 695.7 | 670.1 | 643.1 | 616.0 | 580.0 | 543.0 | 531.4 | 513.0 | 494.7 | 485.0 | 476.7 |
| 22.5° | 658.1 | 630.4 | 598.4 | 562.7 | 525.7 | 496.7 | 481.4 | 468.0 | 456.7 | 448.0 | 438.4 |
| 25° | 622.4 | 593.7 | 548.0 | 511.7 | 479.4 | 458.0 | 450.4 | 433.0 | 421.0 | 414.7 | 406.4 |
| 27.5° | 583.0 | 543.7 | 507.0 | 469.4 | 440.7 | 428.7 | 411.0 | 397.4 | 384.7 | 372.4 | 369.4 |
| 30° | 545.7 | 502.0 | 465.7 | 435.0 | 414.0 | 397.4 | 379.4 | 363.4 | 355.0 | 350.4 | 342.7 |
| 32.5° | 508.7 | 464.4 | 430.4 | 406.4 | 383.7 | 366.0 | 349.0 | 340.7 | 328.0 | 317.7 | 311.0 |
| 35° | 469.0 | 430.4 | 403.4 | 375.4 | 353.7 | 336.4 | 327.7 | 308.7 | 301.7 | 298.7 | 291.7 |
| 37.5° | 434.0 | 399.7 | 372.4 | 351.0 | 327.4 | 313.4 | 296.4 | 292.0 | 282.7 | 274.7 | 272.4 |
| 40° | 405.0 | 372.7 | 347.0 | 319.4 | 304.7 | 286.4 | 278.0 | 266.4 | 263.0 | 260.0 | 254.7 |
| 42.5° | 373.4 | 345.7 | 316.4 | 297.7 | 276.0 | 267.7 | 254.7 | 251.4 | 243.4 | 240.4 | 238.4 |
| 45° | 346.4 | 320.7 | 292.7 | 270.0 | 257.7 | 245.4 | 240.4 | 232.0 | 228.4 | 224.7 | 221.0 |
| 47.5° | 320.0 | 293.4 | 271.0 | 249.7 | 236.0 | 230.4 | 221.4 | 215.4 | 211.4 | 207.7 | 204.0 |
| 50° | 295.7 | 268.7 | 243.7 | 228.4 | 218.7 | 210.7 | 205.0 | 200.0 | 194.3 | 186.3 | 178.0 |
| 52.5° | 269.4 | 245.0 | 224.7 | 209.7 | 201.0 | 193.3 | 188.3 | 179.7 | 168.7 | 160.0 | 156.0 |
| 55° | 243.0 | 220.0 | 202.3 | 190.3 | 184.3 | 177.0 | 165.7 | 153.0 | 146.0 | 144.7 | 143.7 |
| 57.5° | 220.7 | 199.0 | 182.7 | 173.3 | 166.3 | 153.3 | 141.3 | 136.7 | 134.7 | 134.0 | 133.3 |
| 60° | 195.7 | 176.3 | 164.7 | 154.7 | 143.0 | 130.7 | 127.0 | 126.3 | 124.3 | 123.3 | 122.7 |
| 62.5° | 172.7 | 156.0 | 145.3 | 133.3 | 121.0 | 118.7 | 116.0 | 114.3 | 113.3 | 111.0 | 110.0 |
| 65° | 150.3 | 137.0 | 125.3 | 112.7 | 108.3 | 106.7 | 104.3 | 102.0 | 99.3 | 97.7 | 96.3 |
| 67.5° | 129.0 | 116.0 | 103.7 | 99.0 | 96.7 | 94.0 | 91.0 | 87.7 | 86.3 | 84.0 | 83.7 |
| 70° | 108.0 | 96.0 | 89.3 | 86.3 | 82.0 | 79.7 | 76.3 | 75.0 | 72.7 | 71.7 | 70.7 |
| 72.5° | 88.0 | 79.3 | 76.7 | 72.3 | 69.3 | 65.7 | 64.0 | 62.7 | 61.3 | 59.7 | 59.7 |
| 75° | 68.7 | 66.3 | 61.3 | 58.0 | 55.0 | 53.0 | 52.3 | 50.0 | 49.7 | 48.7 | 48.0 |
| 77.5° | 54.7 | 50.0 | 48.3 | 44.7 | 42.7 | 41.7 | 41.0 | 39.7 | 38.3 | 38.0 | 37.7 |
| 80° | 38.7 | 36.3 | 34.3 | 32.7 | 31.0 | 30.3 | 29.7 | 29.3 | 28.7 | 28.0 | 27.7 |
| 82.5° | 25.3 | 24.0 | 22.7 | 21.7 | 21.3 | 20.3 | 19.7 | 19.3 | 18.7 | 18.7 | 18.7 |
| 85° | 13.7 | 13.3 | 12.7 | 12.0 | 11.3 | 11.3 | 11.0 | 10.7 | 10.7 | 9.7 | 9.7 |
| 87.5° | 4.3 | 4.3 | 4.0 | 4.0 | 3.3 | 3.7 | 3.3 | 3.3 | 3.0 | 3.3 | 3.3 |
| 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: P243086

CATALOG NUMBER: S121RDR-H490D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|-------|-------|-------|-------|
| 0° | 884.1 | 884.1 | 884.1 | 884.1 |
| 2.5° | 843.4 | 843.4 | 842.1 | 843.4 |
| 5° | 806.7 | 803.7 | 802.7 | 802.1 |
| 7.5° | 760.1 | 757.4 | 754.7 | 752.1 |
| 10° | 712.4 | 708.4 | 706.1 | 704.1 |
| 12.5° | 650.4 | 645.4 | 636.1 | 638.7 |
| 15° | 574.0 | 574.4 | 552.7 | 576.7 |
| 17.5° | 511.7 | 513.4 | 504.7 | 503.4 |
| 20° | 472.0 | 471.4 | 468.0 | 464.0 |
| 22.5° | 431.4 | 428.4 | 427.0 | 420.7 |
| 25° | 393.4 | 388.0 | 389.7 | 380.7 |
| 27.5° | 365.7 | 361.4 | 360.0 | 359.4 |
| 30° | 338.0 | 329.0 | 326.0 | 328.0 |
| 32.5° | 310.0 | 309.4 | 308.4 | 308.7 |
| 35° | 286.4 | 285.0 | 282.0 | 282.0 |
| 37.5° | 270.0 | 270.4 | 268.7 | 267.4 |
| 40° | 250.0 | 248.4 | 248.0 | 246.0 |
| 42.5° | 235.7 | 232.4 | 231.0 | 231.4 |
| 45° | 219.0 | 217.0 | 215.4 | 216.0 |
| 47.5° | 199.3 | 197.3 | 193.7 | 192.7 |
| 50° | 172.7 | 170.0 | 168.3 | 166.7 |
| 52.5° | 152.7 | 152.3 | 151.7 | 151.3 |
| 55° | 143.0 | 142.0 | 142.0 | 142.0 |
| 57.5° | 133.0 | 132.3 | 132.0 | 132.7 |
| 60° | 122.0 | 121.3 | 120.0 | 120.0 |
| 62.5° | 108.3 | 107.7 | 107.3 | 106.0 |
| 65° | 94.7 | 94.3 | 93.7 | 94.0 |
| 67.5° | 82.0 | 81.7 | 81.7 | 80.7 |
| 70° | 69.7 | 69.7 | 68.7 | 69.3 |
| 72.5° | 58.3 | 58.0 | 58.0 | 58.0 |
| 75° | 47.3 | 47.0 | 46.7 | 46.7 |
| 77.5° | 37.3 | 37.3 | 36.7 | 36.7 |
| 80° | 27.0 | 27.0 | 26.7 | 27.3 |
| 82.5° | 18.0 | 18.7 | 18.0 | 18.0 |
| 85° | 9.7 | 10.0 | 10.0 | 10.0 |
| 87.5° | 3.0 | 2.7 | 2.7 | 2.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)