

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: P332808-830

Luminaire Tested: **S124DIW-S1020D470U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332808-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIW-S1020D470U830-4F0-1E-UDD-D1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5500.8 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

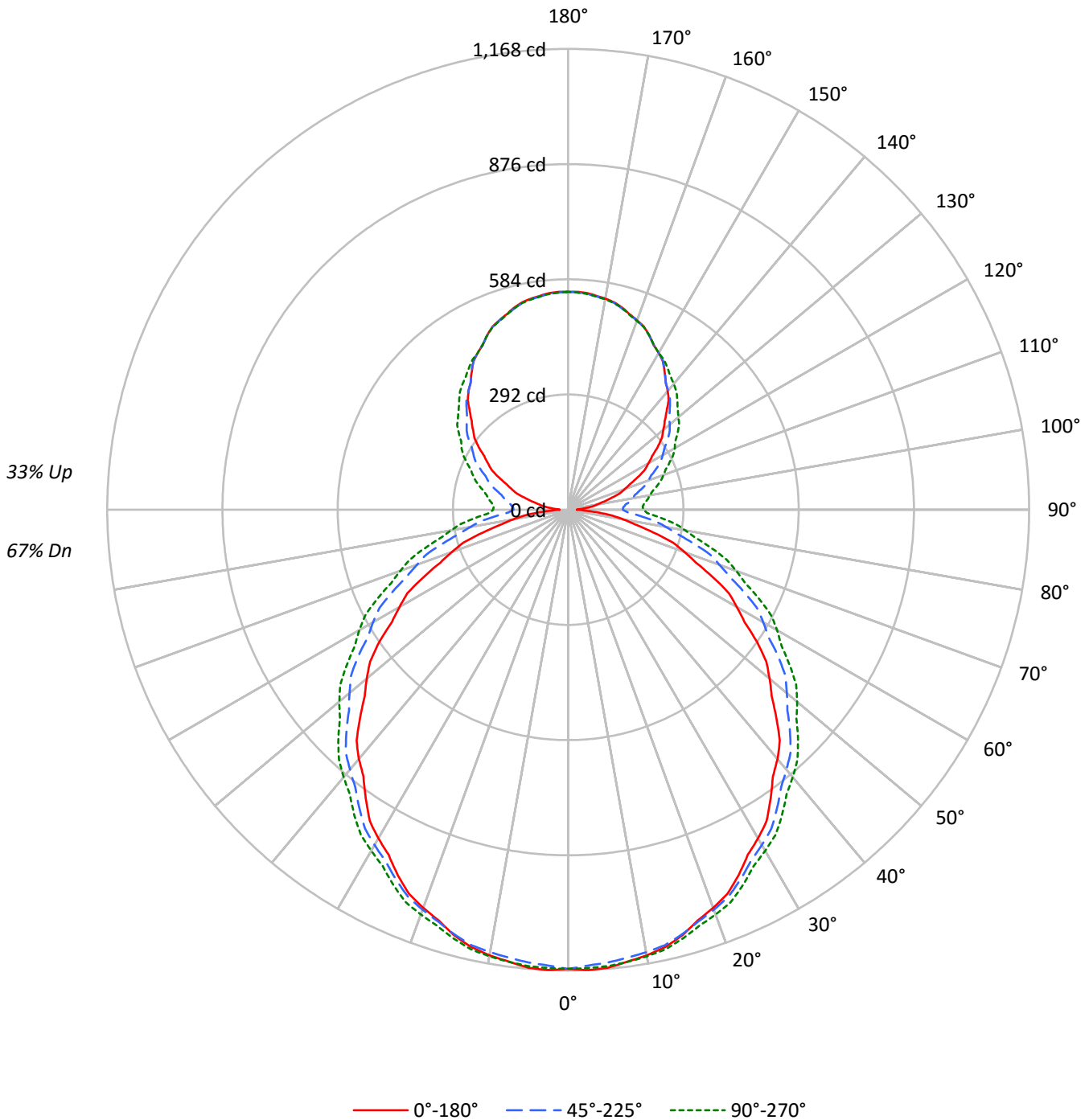
Input Watts (W): 46.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332808-830

CATALOG NUMBER: S124DIW-S1020D470U830-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P332808-830

CATALOG NUMBER: S124DIW-S1020D470U830-4F0-1E-UDD-D1

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 | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 | 82 | 82 | 82 | 71 | 71 | 71 | 67 |
| 1 | 100 | 95 | 91 | 87 | 94 | 90 | 86 | 82 | 79 | 76 | 73 | 70 | 67 | 65 | 61 | 59 | 58 | 53 |
| 2 | 91 | 82 | 75 | 70 | 85 | 78 | 71 | 66 | 69 | 64 | 60 | 61 | 57 | 53 | 53 | 50 | 48 | 44 |
| 3 | 82 | 72 | 64 | 57 | 77 | 68 | 61 | 55 | 60 | 54 | 50 | 53 | 48 | 45 | 46 | 43 | 40 | 36 |
| 4 | 75 | 63 | 55 | 48 | 70 | 60 | 52 | 46 | 53 | 47 | 42 | 47 | 42 | 38 | 41 | 37 | 34 | 31 |
| 5 | 69 | 56 | 48 | 41 | 65 | 53 | 45 | 39 | 47 | 41 | 36 | 42 | 37 | 33 | 37 | 33 | 29 | 26 |
| 6 | 63 | 51 | 42 | 36 | 59 | 48 | 40 | 34 | 43 | 36 | 31 | 38 | 33 | 28 | 33 | 29 | 26 | 23 |
| 7 | 59 | 46 | 37 | 31 | 55 | 43 | 35 | 30 | 39 | 32 | 27 | 34 | 29 | 25 | 30 | 26 | 23 | 20 |
| 8 | 55 | 41 | 33 | 28 | 51 | 39 | 32 | 26 | 35 | 29 | 24 | 32 | 26 | 22 | 28 | 24 | 20 | 18 |
| 9 | 51 | 38 | 30 | 25 | 48 | 36 | 29 | 24 | 32 | 26 | 22 | 29 | 24 | 20 | 26 | 21 | 18 | 16 |
| 10 | 47 | 35 | 27 | 22 | 45 | 33 | 26 | 21 | 30 | 24 | 20 | 27 | 22 | 18 | 24 | 20 | 17 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 9395 | 9395 | 9395 |
| 5° | 9424 | 9182 | 9208 |
| 10° | 9366 | 9032 | 9024 |
| 15° | 9282 | 8858 | 8809 |
| 20° | 9156 | 8666 | 8599 |
| 25° | 9013 | 8450 | 8368 |
| 30° | 8859 | 8237 | 8131 |
| 35° | 8684 | 8018 | 7924 |
| 40° | 8544 | 7809 | 7708 |
| 45° | 8336 | 7617 | 7522 |
| 50° | 8161 | 7395 | 7326 |
| 55° | 7979 | 7187 | 7096 |
| 60° | 7697 | 6921 | 6885 |
| 65° | 7387 | 6635 | 6628 |
| 70° | 7013 | 6309 | 6327 |
| 75° | 6486 | 5950 | 6056 |
| 80° | 5904 | 5605 | 5788 |
| 85° | 5170 | 5301 | 5633 |



TEST NUMBER: P332808-830

CATALOG NUMBER: S124DIW-S1020D470U830-4F0-1E-UDD-D1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 110.2 | 2.0 |
| 10°-20° | 315.7 | 5.7 |
| 20°-30° | 477.4 | 8.7 |
| 30°-40° | 577.6 | 10.5 |
| 40°-50° | 610.7 | 11.1 |
| 50°-60° | 574.7 | 10.4 |
| 60°-70° | 476.8 | 8.7 |
| 70°-80° | 334.9 | 6.1 |
| 80°-90° | 191.0 | 3.5 |
| 90°-100° | 148.9 | 2.7 |
| 100°-110° | 191.1 | 3.5 |
| 110°-120° | 239.0 | 4.3 |
| 120°-130° | 273.0 | 5.0 |
| 130°-140° | 284.8 | 5.2 |
| 140°-150° | 269.3 | 4.9 |
| 150°-160° | 224.2 | 4.1 |
| 160°-170° | 149.1 | 2.7 |
| 170°-180° | 52.2 | 0.9 |
| 0°-30° | 903.4 | 16.4 |
| 0°-40° | 1481.0 | 26.9 |
| 0°-60° | 2666.4 | 48.5 |
| 0°-90° | 3669.2 | 66.7 |
| 90°-120° | 579.0 | 10.5 |
| 90°-150° | 1406.1 | 25.6 |
| 90°-180° | 1832.0 | 33.3 |
| 0°-180° | 5500.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1164 | 1164 | 1164 | 1164 | 1164 | |
| 5° | 1165 | 1161 | 1152 | 1162 | 1161 | 111 |
| 15° | 1117 | 1118 | 1114 | 1125 | 1125 | 315 |
| 25° | 1022 | 1029 | 1033 | 1047 | 1049 | 470 |
| 35° | 894 | 910 | 923 | 940 | 945 | 560 |
| 45° | 745 | 770 | 795 | 816 | 824 | 576 |
| 55° | 584 | 612 | 650 | 675 | 684 | 520 |
| 65° | 404 | 446 | 490 | 521 | 533 | 400 |
| 75° | 224 | 273 | 327 | 362 | 375 | 238 |
| 85° | 69 | 124 | 182 | 220 | 235 | 73 |
| 90° | 22 | 79 | 138 | 177 | 190 | 15 |
| 95° | 43 | 90 | 146 | 181 | 194 | 42 |
| 105° | 111 | 139 | 188 | 220 | 233 | 119 |
| 115° | 194 | 207 | 247 | 274 | 284 | 192 |
| 125° | 276 | 277 | 307 | 330 | 338 | 247 |
| 135° | 352 | 355 | 364 | 383 | 391 | 273 |
| 145° | 426 | 427 | 427 | 434 | 438 | 267 |
| 155° | 487 | 487 | 486 | 488 | 486 | 224 |
| 165° | 530 | 529 | 528 | 530 | 529 | 149 |
| 175° | 551 | 549 | 549 | 552 | 549 | 52 |
| 180° | 552 | 552 | 552 | 552 | 552 | |



TEST NUMBER: P332808-830

CATALOG NUMBER: S124DIW-S1020D470U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 |
| 2.5° | 1167.9 | 1167.2 | 1166.5 | 1165.8 | 1165.1 | 1163.9 | 1162.0 | 1160.2 | 1158.3 | 1156.4 | 1158.0 |
| 5° | 1165.0 | 1164.1 | 1163.3 | 1162.4 | 1161.6 | 1160.1 | 1158.1 | 1156.0 | 1154.0 | 1152.0 | 1154.3 |
| 7.5° | 1155.1 | 1154.6 | 1154.0 | 1153.6 | 1153.0 | 1152.0 | 1150.3 | 1148.6 | 1146.9 | 1145.2 | 1147.8 |
| 10° | 1146.8 | 1146.5 | 1146.2 | 1145.9 | 1145.7 | 1144.7 | 1143.3 | 1141.9 | 1140.4 | 1139.0 | 1141.6 |
| 12.5° | 1135.3 | 1135.3 | 1135.2 | 1135.1 | 1135.1 | 1134.5 | 1133.6 | 1132.6 | 1131.6 | 1130.6 | 1133.0 |
| 15° | 1116.8 | 1117.1 | 1117.4 | 1117.7 | 1117.9 | 1117.7 | 1116.8 | 1116.0 | 1115.0 | 1114.2 | 1116.8 |
| 17.5° | 1091.6 | 1092.4 | 1093.3 | 1094.1 | 1095.0 | 1095.3 | 1095.1 | 1095.0 | 1094.9 | 1094.7 | 1097.3 |
| 20° | 1073.8 | 1074.7 | 1075.5 | 1076.4 | 1077.3 | 1077.9 | 1078.2 | 1078.5 | 1078.7 | 1079.0 | 1081.9 |
| 22.5° | 1054.0 | 1055.1 | 1056.2 | 1057.3 | 1058.4 | 1059.2 | 1059.7 | 1060.3 | 1060.7 | 1061.3 | 1064.2 |
| 25° | 1021.7 | 1023.4 | 1025.1 | 1026.9 | 1028.6 | 1029.9 | 1030.8 | 1031.7 | 1032.6 | 1033.4 | 1036.6 |
| 27.5° | 985.7 | 988.3 | 990.8 | 993.3 | 995.9 | 997.9 | 999.2 | 1000.5 | 1001.8 | 1003.1 | 1006.2 |
| 30° | 961.8 | 964.0 | 966.4 | 968.7 | 971.0 | 973.2 | 975.2 | 977.2 | 979.2 | 981.3 | 984.5 |
| 32.5° | 935.7 | 938.5 | 941.2 | 944.1 | 946.8 | 949.3 | 951.6 | 953.9 | 956.1 | 958.4 | 962.0 |
| 35° | 894.0 | 897.5 | 900.9 | 904.4 | 907.9 | 911.1 | 914.0 | 916.8 | 919.7 | 922.7 | 926.7 |
| 37.5° | 852.0 | 856.0 | 860.0 | 864.0 | 868.0 | 871.8 | 875.3 | 878.9 | 882.6 | 886.2 | 890.2 |
| 40° | 824.9 | 828.7 | 832.5 | 836.2 | 840.0 | 843.9 | 847.9 | 852.0 | 856.0 | 860.1 | 864.4 |
| 42.5° | 793.6 | 797.9 | 802.1 | 806.3 | 810.5 | 815.0 | 819.7 | 824.5 | 829.2 | 834.1 | 838.9 |
| 45° | 745.4 | 750.9 | 756.4 | 762.0 | 767.4 | 772.9 | 778.4 | 783.9 | 789.4 | 794.9 | 799.8 |
| 47.5° | 699.3 | 704.9 | 710.6 | 716.3 | 722.0 | 728.0 | 734.3 | 740.7 | 747.2 | 753.5 | 758.6 |
| 50° | 665.9 | 672.3 | 678.6 | 685.0 | 691.4 | 697.8 | 704.2 | 710.5 | 716.9 | 723.2 | 729.1 |
| 52.5° | 632.5 | 638.9 | 645.3 | 651.7 | 658.1 | 664.9 | 672.1 | 679.5 | 686.7 | 694.1 | 699.8 |
| 55° | 583.8 | 589.9 | 596.0 | 602.1 | 608.1 | 615.5 | 624.2 | 632.9 | 641.6 | 650.3 | 656.1 |
| 57.5° | 529.3 | 536.9 | 544.4 | 552.0 | 559.5 | 567.5 | 576.2 | 584.8 | 593.4 | 602.1 | 609.0 |
| 60° | 493.9 | 501.4 | 509.0 | 516.5 | 524.1 | 532.5 | 542.2 | 551.7 | 561.2 | 570.8 | 577.4 |
| 62.5° | 459.5 | 467.7 | 476.0 | 484.2 | 492.4 | 501.2 | 510.9 | 520.4 | 530.0 | 539.5 | 546.2 |
| 65° | 404.0 | 413.2 | 422.5 | 431.8 | 441.0 | 450.6 | 460.4 | 470.3 | 480.1 | 490.0 | 497.2 |
| 67.5° | 350.5 | 360.4 | 370.2 | 380.1 | 389.9 | 400.1 | 410.7 | 421.2 | 431.8 | 442.3 | 449.7 |
| 70° | 314.1 | 324.0 | 333.8 | 343.6 | 353.5 | 363.9 | 374.8 | 385.9 | 396.9 | 407.9 | 415.8 |
| 72.5° | 278.6 | 288.7 | 298.8 | 308.9 | 319.0 | 329.8 | 341.5 | 353.2 | 365.0 | 376.6 | 384.2 |
| 75° | 224.1 | 234.9 | 245.5 | 256.3 | 267.0 | 278.4 | 290.6 | 302.7 | 314.9 | 327.1 | 335.2 |
| 77.5° | 173.3 | 184.6 | 196.0 | 207.4 | 218.8 | 230.7 | 243.6 | 256.3 | 269.0 | 281.7 | 289.9 |
| 80° | 142.0 | 153.6 | 165.2 | 176.8 | 188.4 | 200.6 | 213.3 | 226.0 | 238.7 | 251.5 | 260.2 |
| 82.5° | 110.7 | 122.8 | 134.9 | 146.9 | 158.9 | 171.4 | 184.1 | 196.8 | 209.6 | 222.3 | 231.2 |
| 85° | 69.1 | 81.2 | 93.4 | 105.6 | 117.7 | 130.4 | 143.4 | 156.4 | 169.4 | 182.5 | 191.1 |
| 87.5° | 38.8 | 50.9 | 62.9 | 74.9 | 86.9 | 99.3 | 112.2 | 125.1 | 137.9 | 150.7 | 159.2 |
| 90° | 22.1 | 34.8 | 47.4 | 60.0 | 72.7 | 85.6 | 98.8 | 112.0 | 125.2 | 138.4 | 147.4 |
| 92.5° | 28.9 | 40.5 | 52.2 | 63.8 | 75.4 | 87.8 | 100.8 | 113.7 | 126.7 | 139.7 | 148.2 |
| 95° | 42.6 | 53.0 | 63.4 | 73.8 | 84.2 | 95.7 | 108.2 | 120.7 | 133.3 | 145.8 | 153.9 |
| 97.5° | 60.1 | 69.1 | 77.9 | 86.9 | 95.8 | 106.5 | 119.0 | 131.6 | 144.1 | 156.7 | 164.6 |
| 100° | 74.1 | 82.0 | 89.9 | 97.8 | 105.8 | 115.8 | 127.9 | 140.1 | 152.2 | 164.4 | 172.4 |
| 102.5° | 89.8 | 96.6 | 103.4 | 110.1 | 116.9 | 126.2 | 138.0 | 149.9 | 161.6 | 173.5 | 181.3 |
| 105° | 111.2 | 117.2 | 123.0 | 128.9 | 134.8 | 143.3 | 154.4 | 165.5 | 176.5 | 187.7 | 195.2 |
| 107.5° | 136.2 | 141.0 | 145.9 | 150.8 | 155.6 | 163.2 | 173.3 | 183.5 | 193.8 | 204.0 | 211.3 |
| 110° | 152.2 | 156.5 | 160.7 | 164.9 | 169.2 | 176.3 | 186.3 | 196.4 | 206.5 | 216.5 | 223.0 |



TEST NUMBER: P332808-830

CATALOG NUMBER: S124DIW-S1020D470U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 168.9 | 172.6 | 176.2 | 179.8 | 183.4 | 190.0 | 199.5 | 209.1 | 218.6 | 228.0 | 234.4 |
| 115° | 194.1 | 196.6 | 199.3 | 201.9 | 204.4 | 210.3 | 219.4 | 228.5 | 237.5 | 246.6 | 252.9 |
| 117.5° | 218.9 | 220.6 | 222.2 | 223.9 | 225.5 | 230.5 | 239.0 | 247.5 | 256.0 | 264.5 | 270.2 |
| 120° | 234.6 | 235.8 | 237.0 | 238.4 | 239.6 | 244.3 | 252.4 | 260.5 | 268.6 | 276.7 | 282.0 |
| 122.5° | 252.0 | 252.3 | 252.7 | 253.0 | 253.4 | 257.4 | 265.1 | 273.0 | 280.8 | 288.6 | 294.1 |
| 125° | 276.4 | 276.2 | 275.9 | 275.6 | 275.2 | 278.7 | 285.9 | 292.9 | 300.1 | 307.3 | 312.5 |
| 127.5° | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 302.2 | 307.6 | 313.0 | 318.4 | 323.8 | 328.9 |
| 130° | 314.8 | 314.8 | 314.8 | 314.8 | 314.8 | 317.2 | 321.8 | 326.4 | 331.0 | 335.6 | 340.7 |
| 132.5° | 331.6 | 331.5 | 331.4 | 331.3 | 331.3 | 333.0 | 336.7 | 340.3 | 343.9 | 347.5 | 352.3 |
| 135° | 352.4 | 353.0 | 353.5 | 354.1 | 354.7 | 356.0 | 358.0 | 360.1 | 362.0 | 364.1 | 368.5 |
| 137.5° | 376.5 | 376.5 | 376.5 | 376.5 | 376.4 | 376.9 | 378.1 | 379.2 | 380.4 | 381.5 | 385.5 |
| 140° | 392.6 | 392.5 | 392.4 | 392.3 | 392.2 | 392.3 | 392.6 | 392.9 | 393.1 | 393.4 | 397.1 |
| 142.5° | 406.2 | 406.3 | 406.4 | 406.6 | 406.7 | 406.7 | 406.4 | 406.1 | 406.0 | 405.7 | 409.0 |
| 145° | 426.3 | 426.4 | 426.4 | 426.5 | 426.6 | 426.7 | 426.8 | 426.9 | 427.0 | 427.1 | 428.8 |
| 147.5° | 446.4 | 446.6 | 446.8 | 447.0 | 447.1 | 447.1 | 447.0 | 447.0 | 447.0 | 446.9 | 447.0 |
| 150° | 458.7 | 458.8 | 458.9 | 459.0 | 459.1 | 459.1 | 459.1 | 459.1 | 459.1 | 459.1 | 459.1 |
| 152.5° | 469.3 | 469.5 | 469.7 | 469.9 | 470.0 | 470.1 | 470.1 | 470.2 | 470.3 | 470.4 | 470.6 |
| 155° | 486.9 | 486.9 | 486.9 | 486.9 | 486.9 | 486.8 | 486.7 | 486.6 | 486.5 | 486.4 | 486.8 |
| 157.5° | 501.9 | 501.7 | 501.6 | 501.4 | 501.2 | 501.1 | 501.1 | 501.1 | 501.1 | 501.1 | 501.3 |
| 160° | 510.9 | 510.8 | 510.7 | 510.6 | 510.5 | 510.4 | 510.3 | 510.2 | 510.1 | 510.0 | 510.3 |
| 162.5° | 519.1 | 518.8 | 518.5 | 518.3 | 518.0 | 517.8 | 517.7 | 517.6 | 517.6 | 517.5 | 518.0 |
| 165° | 530.0 | 529.7 | 529.4 | 529.1 | 528.9 | 528.7 | 528.5 | 528.3 | 528.1 | 527.9 | 528.5 |
| 167.5° | 538.5 | 538.1 | 537.7 | 537.3 | 536.9 | 536.7 | 536.7 | 536.8 | 536.8 | 536.8 | 537.3 |
| 170° | 543.3 | 542.8 | 542.3 | 541.9 | 541.4 | 541.2 | 541.3 | 541.4 | 541.5 | 541.6 | 542.2 |
| 172.5° | 546.7 | 546.3 | 545.9 | 545.5 | 545.1 | 544.9 | 544.9 | 545.0 | 545.0 | 545.0 | 545.6 |
| 175° | 551.4 | 550.9 | 550.4 | 550.0 | 549.5 | 549.2 | 549.1 | 549.0 | 548.9 | 548.8 | 549.5 |
| 177.5° | 552.9 | 552.5 | 552.1 | 551.8 | 551.4 | 551.2 | 551.2 | 551.2 | 551.2 | 551.2 | 551.8 |
| 180° | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 |



TEST NUMBER: P332808-830

CATALOG NUMBER: S124DIW-S1020D470U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 | 1163.8 |
| 2.5° | 1159.7 | 1161.3 | 1162.9 | 1163.6 | 1163.4 | 1163.1 | 1162.9 | 1162.7 |
| 5° | 1156.6 | 1159.0 | 1161.3 | 1162.2 | 1162.0 | 1161.7 | 1161.4 | 1161.1 |
| 7.5° | 1150.5 | 1153.0 | 1155.7 | 1156.8 | 1156.5 | 1156.2 | 1155.9 | 1155.7 |
| 10° | 1144.2 | 1146.8 | 1149.4 | 1150.6 | 1150.3 | 1150.0 | 1149.7 | 1149.4 |
| 12.5° | 1135.4 | 1137.7 | 1140.1 | 1141.3 | 1141.2 | 1141.1 | 1141.1 | 1141.0 |
| 15° | 1119.5 | 1122.0 | 1124.6 | 1125.8 | 1125.5 | 1125.2 | 1124.9 | 1124.6 |
| 17.5° | 1099.9 | 1102.7 | 1105.3 | 1106.5 | 1106.3 | 1106.1 | 1105.8 | 1105.6 |
| 20° | 1084.8 | 1087.7 | 1090.6 | 1092.0 | 1092.0 | 1092.0 | 1092.0 | 1092.0 |
| 22.5° | 1067.1 | 1070.0 | 1072.9 | 1074.6 | 1075.1 | 1075.4 | 1075.9 | 1076.4 |
| 25° | 1039.8 | 1042.9 | 1046.1 | 1047.9 | 1048.2 | 1048.5 | 1048.8 | 1049.0 |
| 27.5° | 1009.1 | 1012.0 | 1015.0 | 1016.6 | 1017.0 | 1017.4 | 1017.7 | 1018.0 |
| 30° | 987.7 | 990.8 | 994.0 | 995.9 | 996.5 | 997.0 | 997.7 | 998.2 |
| 32.5° | 965.6 | 969.3 | 973.0 | 975.1 | 975.6 | 976.2 | 976.8 | 977.4 |
| 35° | 930.8 | 934.8 | 938.9 | 941.3 | 942.2 | 943.0 | 944.0 | 944.8 |
| 37.5° | 894.4 | 898.5 | 902.6 | 905.1 | 906.1 | 907.0 | 907.9 | 908.8 |
| 40° | 868.7 | 873.1 | 877.5 | 880.2 | 881.4 | 882.5 | 883.7 | 884.9 |
| 42.5° | 843.7 | 848.5 | 853.3 | 856.1 | 857.1 | 858.0 | 858.9 | 859.8 |
| 45° | 804.7 | 809.7 | 814.6 | 817.8 | 819.3 | 820.7 | 822.2 | 823.6 |
| 47.5° | 763.6 | 768.7 | 773.9 | 777.3 | 779.0 | 780.8 | 782.5 | 784.3 |
| 50° | 734.8 | 740.6 | 746.4 | 750.2 | 752.0 | 753.7 | 755.4 | 757.1 |
| 52.5° | 705.7 | 711.4 | 717.3 | 721.0 | 722.7 | 724.4 | 726.2 | 727.9 |
| 55° | 661.9 | 667.7 | 673.4 | 677.2 | 678.9 | 680.7 | 682.4 | 684.2 |
| 57.5° | 615.9 | 622.7 | 629.6 | 633.9 | 635.5 | 637.2 | 638.8 | 640.4 |
| 60° | 584.1 | 590.8 | 597.4 | 601.9 | 604.3 | 606.5 | 608.9 | 611.1 |
| 62.5° | 552.8 | 559.5 | 566.2 | 570.6 | 573.0 | 575.2 | 577.6 | 579.9 |
| 65° | 504.4 | 511.7 | 519.0 | 523.8 | 526.0 | 528.4 | 530.7 | 533.0 |
| 67.5° | 457.0 | 464.4 | 471.7 | 476.5 | 478.8 | 481.1 | 483.3 | 485.6 |
| 70° | 423.5 | 431.3 | 439.1 | 444.1 | 446.1 | 448.2 | 450.2 | 452.2 |
| 72.5° | 391.8 | 399.4 | 407.0 | 411.9 | 414.2 | 416.4 | 418.7 | 420.9 |
| 75° | 343.3 | 351.4 | 359.5 | 364.9 | 367.5 | 370.1 | 372.7 | 375.3 |
| 77.5° | 298.2 | 306.4 | 314.6 | 320.2 | 322.9 | 325.7 | 328.5 | 331.3 |
| 80° | 268.9 | 277.6 | 286.3 | 291.7 | 294.1 | 296.4 | 298.7 | 301.0 |
| 82.5° | 240.2 | 249.1 | 258.0 | 263.7 | 266.3 | 268.8 | 271.4 | 273.9 |
| 85° | 199.8 | 208.5 | 217.2 | 223.0 | 225.9 | 228.8 | 231.7 | 234.6 |
| 87.5° | 167.7 | 176.3 | 184.7 | 190.3 | 192.8 | 195.5 | 198.0 | 200.7 |
| 90° | 156.4 | 165.3 | 174.3 | 180.0 | 182.6 | 185.0 | 187.6 | 190.0 |
| 92.5° | 156.7 | 165.2 | 173.7 | 179.2 | 181.6 | 184.1 | 186.4 | 188.9 |
| 95° | 162.0 | 170.1 | 178.2 | 183.6 | 186.2 | 188.8 | 191.4 | 194.1 |
| 97.5° | 172.5 | 180.4 | 188.3 | 193.6 | 196.0 | 198.5 | 201.0 | 203.5 |
| 100° | 180.4 | 188.4 | 196.4 | 201.4 | 203.5 | 205.5 | 207.5 | 209.5 |
| 102.5° | 189.3 | 197.1 | 204.9 | 210.0 | 212.4 | 214.7 | 217.1 | 219.3 |
| 105° | 202.7 | 210.2 | 217.7 | 222.8 | 225.5 | 228.0 | 230.6 | 233.2 |
| 107.5° | 218.7 | 226.1 | 233.5 | 238.2 | 240.3 | 242.3 | 244.4 | 246.5 |
| 110° | 229.4 | 235.9 | 242.4 | 246.9 | 249.5 | 252.1 | 254.8 | 257.3 |



TEST NUMBER: P332808-830

CATALOG NUMBER: S124DIW-S1020D470U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 240.8 | 247.2 | 253.6 | 258.0 | 260.3 | 262.7 | 265.1 | 267.5 |
| 115° | 259.2 | 265.4 | 271.7 | 275.8 | 277.8 | 279.7 | 281.6 | 283.5 |
| 117.5° | 275.9 | 281.6 | 287.3 | 291.2 | 293.3 | 295.5 | 297.6 | 299.7 |
| 120° | 287.4 | 292.7 | 298.0 | 301.9 | 304.4 | 306.9 | 309.4 | 311.9 |
| 122.5° | 299.5 | 305.0 | 310.5 | 314.1 | 315.8 | 317.5 | 319.3 | 321.0 |
| 125° | 317.9 | 323.2 | 328.5 | 332.0 | 333.5 | 335.1 | 336.6 | 338.2 |
| 127.5° | 333.8 | 338.8 | 343.9 | 347.3 | 349.1 | 350.9 | 352.8 | 354.6 |
| 130° | 345.7 | 350.7 | 355.7 | 358.9 | 360.3 | 361.7 | 363.1 | 364.4 |
| 132.5° | 357.1 | 361.9 | 366.7 | 369.9 | 371.5 | 373.1 | 374.7 | 376.3 |
| 135° | 373.0 | 377.4 | 381.8 | 384.8 | 386.3 | 387.8 | 389.2 | 390.6 |
| 137.5° | 389.5 | 393.4 | 397.5 | 400.2 | 401.7 | 403.2 | 404.7 | 406.1 |
| 140° | 400.8 | 404.4 | 408.1 | 410.6 | 412.0 | 413.3 | 414.6 | 416.0 |
| 142.5° | 412.3 | 415.5 | 418.8 | 421.0 | 422.3 | 423.4 | 424.6 | 425.8 |
| 145° | 430.4 | 432.1 | 433.7 | 434.9 | 435.8 | 436.7 | 437.5 | 438.5 |
| 147.5° | 447.1 | 447.3 | 447.4 | 448.0 | 448.7 | 449.6 | 450.4 | 451.3 |
| 150° | 459.1 | 459.1 | 459.1 | 459.1 | 459.0 | 458.9 | 458.8 | 458.7 |
| 152.5° | 470.9 | 471.1 | 471.4 | 471.3 | 471.1 | 470.8 | 470.6 | 470.3 |
| 155° | 487.2 | 487.6 | 488.0 | 488.0 | 487.6 | 487.2 | 486.8 | 486.4 |
| 157.5° | 501.6 | 501.9 | 502.2 | 502.2 | 501.9 | 501.5 | 501.2 | 500.9 |
| 160° | 510.6 | 510.9 | 511.1 | 511.0 | 510.6 | 510.1 | 509.5 | 509.1 |
| 162.5° | 518.5 | 519.1 | 519.5 | 519.5 | 519.1 | 518.6 | 518.1 | 517.6 |
| 165° | 529.0 | 529.6 | 530.2 | 530.3 | 529.9 | 529.5 | 529.1 | 528.8 |
| 167.5° | 537.9 | 538.5 | 539.0 | 539.0 | 538.5 | 537.9 | 537.2 | 536.7 |
| 170° | 542.7 | 543.3 | 543.8 | 543.8 | 543.1 | 542.4 | 541.8 | 541.1 |
| 172.5° | 546.3 | 547.0 | 547.5 | 547.5 | 546.9 | 546.2 | 545.5 | 544.9 |
| 175° | 550.2 | 550.8 | 551.5 | 551.5 | 550.8 | 550.2 | 549.5 | 548.8 |
| 177.5° | 552.3 | 552.8 | 553.4 | 553.3 | 552.7 | 552.1 | 551.5 | 550.9 |
| 180° | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 | 552.2 |

(END OF REPORT)