

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: P231636

Luminaire Tested: **S124-DR-2-30-X-0048-1-U-DD-4-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231636  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33916)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124-DR-2-30-X-0048-1-U-DD-4-W  
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH DROP LENS.  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

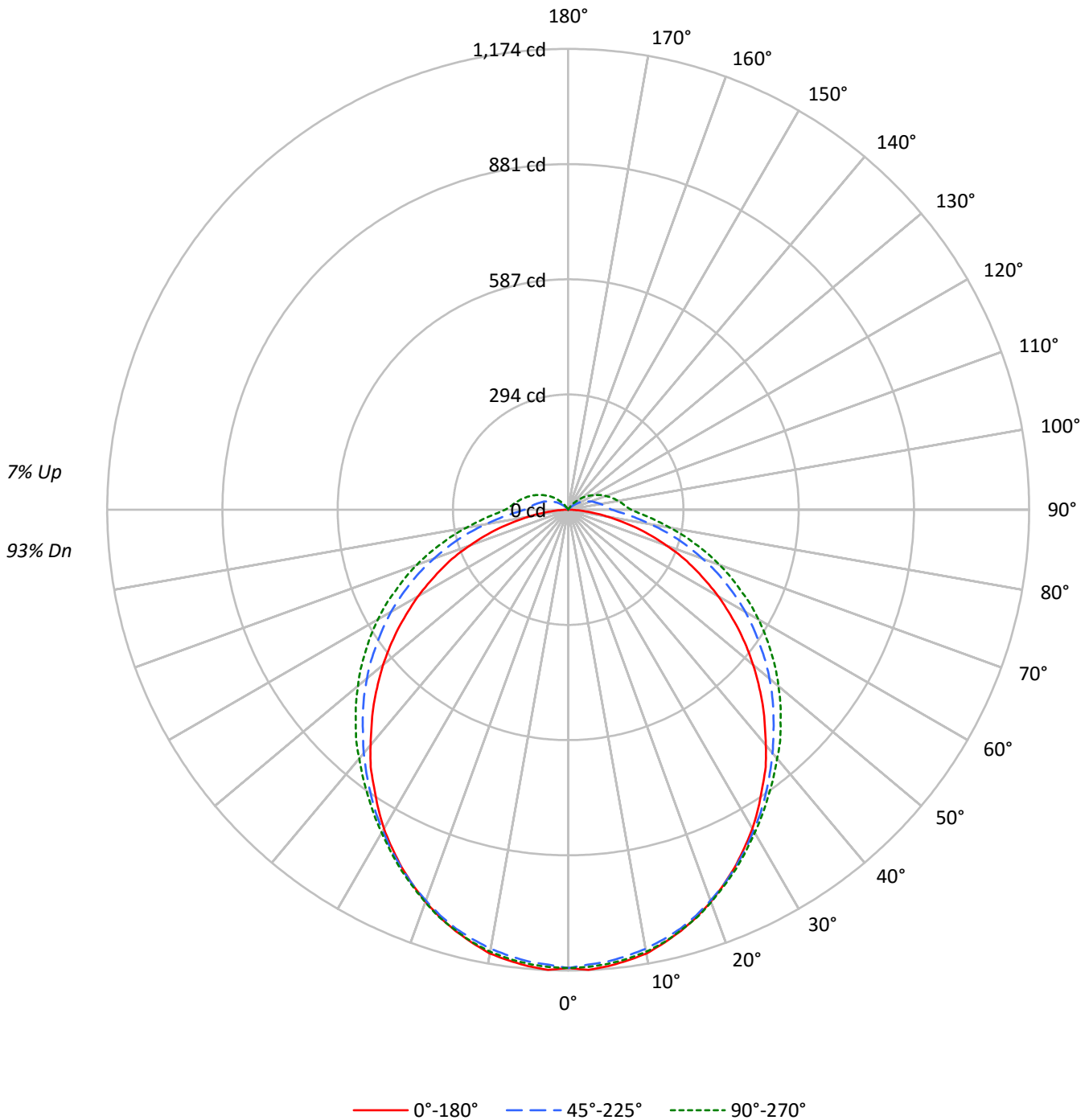
Lumens per Lamp: N/A  
Luminaire Lumens: 3654.3 lumens  
Efficiency: N/A  
Efficacy: 85.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.92' x H: 0.08')  
CIE Type: Direct

Input Watts (W): 42.6  
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: P231636  
CATALOG NUMBER: S124-DR-2-30-X-0048-1-U-DD-4-W

### Luminous Intensity Polar Plot





TEST NUMBER: P231636

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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   | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 96 | 96 | 96 | 93 |
| 1   | 106 | 101 | 96  | 92  | 103 | 98  | 93  | 90  | 92  | 89  | 86  | 87  | 84  | 82  | 82 | 80 | 78 | 76 |
| 2   | 96  | 87  | 80  | 74  | 93  | 85  | 78  | 72  | 80  | 75  | 70  | 76  | 71  | 67  | 72 | 68 | 65 | 62 |
| 3   | 87  | 76  | 68  | 61  | 84  | 74  | 66  | 60  | 70  | 64  | 58  | 67  | 61  | 56  | 63 | 58 | 54 | 52 |
| 4   | 80  | 67  | 58  | 51  | 77  | 66  | 57  | 51  | 62  | 55  | 49  | 59  | 53  | 48  | 56 | 51 | 47 | 44 |
| 5   | 73  | 60  | 51  | 44  | 71  | 59  | 50  | 44  | 56  | 48  | 43  | 53  | 47  | 41  | 51 | 45 | 40 | 38 |
| 6   | 68  | 54  | 45  | 38  | 65  | 53  | 44  | 38  | 50  | 43  | 37  | 48  | 41  | 36  | 46 | 40 | 35 | 33 |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 34  | 46  | 38  | 33  | 44  | 37  | 32  | 42 | 36 | 31 | 29 |
| 8   | 58  | 45  | 36  | 30  | 56  | 44  | 36  | 30  | 42  | 35  | 29  | 40  | 34  | 29  | 38 | 33 | 28 | 26 |
| 9   | 55  | 41  | 33  | 27  | 53  | 40  | 32  | 27  | 39  | 31  | 26  | 37  | 31  | 26  | 35 | 30 | 25 | 24 |
| 10  | 51  | 38  | 30  | 25  | 50  | 37  | 30  | 24  | 36  | 29  | 24  | 34  | 28  | 24  | 33 | 27 | 23 | 21 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10461 | 10461 | 10461 |
| 5°  | 10482 | 10209 | 10205 |
| 10° | 10406 | 9972  | 9929  |
| 15° | 10244 | 9708  | 9591  |
| 20° | 10056 | 9397  | 9235  |
| 25° | 9832  | 9069  | 8866  |
| 30° | 9593  | 8728  | 8501  |
| 35° | 9292  | 8394  | 8172  |
| 40° | 8996  | 8069  | 7885  |
| 45° | 8692  | 7762  | 7622  |
| 50° | 8364  | 7480  | 7361  |
| 55° | 8011  | 7164  | 7093  |
| 60° | 7631  | 6871  | 6823  |
| 65° | 7192  | 6504  | 6478  |
| 70° | 6594  | 6073  | 6153  |
| 75° | 5809  | 5612  | 5739  |
| 80° | 4688  | 5043  | 5350  |
| 85° | 3217  | 4663  | 5100  |



TEST NUMBER: P231636

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 110.3  | 3.0       |
| 10°-20°   | 312.6  | 8.6       |
| 20°-30°   | 464.6  | 12.7      |
| 30°-40°   | 550.0  | 15.1      |
| 40°-50°   | 569.2  | 15.6      |
| 50°-60°   | 526.9  | 14.4      |
| 60°-70°   | 428.8  | 11.7      |
| 70°-80°   | 291.0  | 8.0       |
| 80°-90°   | 156.5  | 4.3       |
| 90°-100°  | 93.1   | 2.5       |
| 100°-110° | 68.5   | 1.9       |
| 110°-120° | 45.4   | 1.2       |
| 120°-130° | 25.4   | 0.7       |
| 130°-140° | 10.3   | 0.3       |
| 140°-150° | 1.7    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 887.5  | 24.3      |
| 0°-40°    | 1437.6 | 39.3      |
| 0°-60°    | 2533.7 | 69.3      |
| 0°-90°    | 3409.9 | 93.3      |
| 90°-120°  | 207.0  | 5.7       |
| 90°-150°  | 244.4  | 6.7       |
| 90°-180°  | 244.0  | 6.7       |
| 0°-180°   | 3654.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1168 | 1168  | 1168 | 1168  | 1168 |      |
| 5°   | 1168 | 1164  | 1156 | 1163  | 1162 | 111  |
| 15°  | 1111 | 1110  | 1105 | 1112  | 1109 | 313  |
| 25°  | 1004 | 1008  | 1006 | 1013  | 1010 | 462  |
| 35°  | 862  | 872   | 879  | 888   | 889  | 540  |
| 45°  | 700  | 718   | 739  | 759   | 765  | 540  |
| 55°  | 528  | 560   | 594  | 622   | 630  | 472  |
| 65°  | 355  | 396   | 443  | 474   | 484  | 351  |
| 75°  | 181  | 230   | 287  | 322   | 334  | 192  |
| 85°  | 39   | 95    | 153  | 191   | 204  | 45   |
| 90°  | 0    | 53    | 111  | 147   | 160  | 2    |
| 95°  | 0    | 42    | 96   | 131   | 142  | 0    |
| 105° | 0    | 25    | 72   | 104   | 115  | 0    |
| 115° | 0    | 10    | 49   | 79    | 88   | 0    |
| 125° | 0    | 1     | 28   | 52    | 61   | 0    |
| 135° | 0    | 0     | 9    | 27    | 34   | 0    |
| 145° | 0    | 0     | 0    | 4     | 9    | 0    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 0     | 0    | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



TEST NUMBER: P231636

CATALOG NUMBER: S124-DR-2-30-X-0048-1-U-DD-4-W

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 |
| 2.5°   | 1173.5 | 1170.5 | 1167.5 | 1166.0 | 1167.5 | 1169.0 | 1167.5 | 1166.0 | 1163.0 | 1160.0 | 1160.0 |
| 5°     | 1167.5 | 1164.5 | 1161.5 | 1161.5 | 1164.5 | 1164.5 | 1163.0 | 1161.5 | 1158.5 | 1155.5 | 1155.5 |
| 7.5°   | 1158.5 | 1155.5 | 1154.0 | 1154.0 | 1155.5 | 1155.5 | 1155.5 | 1154.0 | 1151.0 | 1146.5 | 1149.5 |
| 10°    | 1148.0 | 1145.0 | 1142.0 | 1142.0 | 1143.5 | 1143.5 | 1143.5 | 1142.0 | 1139.0 | 1136.0 | 1137.5 |
| 12.5°  | 1130.0 | 1127.1 | 1125.6 | 1125.6 | 1127.1 | 1128.5 | 1127.1 | 1127.1 | 1124.1 | 1121.1 | 1122.6 |
| 15°    | 1110.6 | 1109.1 | 1106.1 | 1107.6 | 1109.1 | 1110.6 | 1110.6 | 1109.1 | 1106.1 | 1104.6 | 1106.1 |
| 17.5°  | 1088.1 | 1086.6 | 1085.1 | 1085.1 | 1086.6 | 1088.1 | 1088.1 | 1088.1 | 1085.1 | 1083.6 | 1085.1 |
| 20°    | 1062.7 | 1059.7 | 1059.7 | 1061.2 | 1062.7 | 1064.2 | 1064.2 | 1062.7 | 1061.2 | 1059.7 | 1062.7 |
| 22.5°  | 1034.3 | 1032.8 | 1031.3 | 1032.8 | 1037.2 | 1037.2 | 1038.7 | 1035.8 | 1034.3 | 1034.3 | 1035.8 |
| 25°    | 1004.3 | 1002.8 | 1001.3 | 1004.3 | 1007.3 | 1008.8 | 1008.8 | 1008.8 | 1007.3 | 1005.8 | 1008.8 |
| 27.5°  | 971.4  | 971.4  | 968.4  | 971.4  | 975.9  | 977.4  | 977.4  | 977.4  | 975.9  | 975.9  | 977.4  |
| 30°    | 938.5  | 937.0  | 934.0  | 938.5  | 941.5  | 945.9  | 945.9  | 945.9  | 944.4  | 944.4  | 947.4  |
| 32.5°  | 901.0  | 901.0  | 899.5  | 904.0  | 908.5  | 911.5  | 911.5  | 911.5  | 910.0  | 913.0  | 916.0  |
| 35°    | 862.1  | 860.6  | 862.1  | 865.1  | 869.6  | 874.1  | 875.6  | 875.6  | 875.6  | 878.6  | 881.6  |
| 37.5°  | 826.2  | 821.7  | 823.2  | 827.7  | 832.2  | 836.7  | 839.7  | 838.2  | 839.7  | 844.2  | 847.2  |
| 40°    | 782.8  | 781.3  | 784.3  | 790.3  | 794.8  | 799.3  | 800.8  | 802.3  | 805.3  | 809.7  | 814.2  |
| 42.5°  | 740.9  | 742.4  | 743.9  | 751.4  | 755.9  | 761.8  | 763.3  | 766.3  | 769.3  | 773.8  | 779.8  |
| 45°    | 700.5  | 699.0  | 703.5  | 708.0  | 715.4  | 721.4  | 725.9  | 727.4  | 733.4  | 739.4  | 743.9  |
| 47.5°  | 657.1  | 660.1  | 660.1  | 669.0  | 678.0  | 684.0  | 687.0  | 691.5  | 697.5  | 705.0  | 709.5  |
| 50°    | 615.2  | 615.2  | 621.2  | 628.6  | 636.1  | 643.6  | 648.1  | 654.1  | 661.6  | 669.0  | 675.0  |
| 52.5°  | 571.8  | 573.3  | 577.7  | 586.7  | 595.7  | 603.2  | 610.7  | 618.2  | 624.1  | 633.1  | 639.1  |
| 55°    | 528.4  | 529.8  | 537.3  | 546.3  | 555.3  | 564.3  | 571.8  | 579.2  | 588.2  | 594.2  | 601.7  |
| 57.5°  | 483.5  | 486.4  | 495.4  | 504.4  | 514.9  | 522.4  | 532.8  | 541.8  | 550.8  | 558.3  | 567.3  |
| 60°    | 441.5  | 443.0  | 450.5  | 462.5  | 470.0  | 482.0  | 492.4  | 501.4  | 510.4  | 520.9  | 528.4  |
| 62.5°  | 396.6  | 399.6  | 408.6  | 419.1  | 429.6  | 441.5  | 452.0  | 462.5  | 471.5  | 482.0  | 489.4  |
| 65°    | 354.7  | 357.7  | 365.2  | 375.7  | 389.2  | 402.6  | 413.1  | 422.1  | 432.6  | 443.0  | 450.5  |
| 67.5°  | 312.8  | 315.8  | 323.3  | 333.8  | 347.2  | 359.2  | 372.7  | 383.2  | 393.6  | 404.1  | 413.1  |
| 70°    | 266.4  | 270.9  | 279.9  | 293.4  | 305.3  | 318.8  | 330.8  | 342.8  | 353.2  | 363.7  | 372.7  |
| 72.5°  | 223.0  | 227.5  | 239.5  | 251.5  | 264.9  | 278.4  | 291.9  | 302.3  | 315.8  | 324.8  | 333.8  |
| 75°    | 181.1  | 187.1  | 197.6  | 209.5  | 223.0  | 238.0  | 250.0  | 264.9  | 276.9  | 287.4  | 294.9  |
| 77.5°  | 139.2  | 146.7  | 157.2  | 170.6  | 184.1  | 199.1  | 212.5  | 224.5  | 238.0  | 250.0  | 258.9  |
| 80°    | 101.8  | 107.8  | 119.7  | 133.2  | 149.7  | 163.1  | 176.6  | 190.1  | 202.1  | 212.5  | 224.5  |
| 82.5°  | 68.9   | 74.8   | 86.8   | 100.3  | 115.2  | 130.2  | 145.2  | 157.2  | 169.1  | 181.1  | 191.6  |
| 85°    | 38.9   | 46.4   | 58.4   | 71.8   | 88.3   | 101.8  | 115.2  | 128.7  | 140.7  | 152.7  | 163.1  |
| 87.5°  | 16.5   | 23.9   | 35.9   | 49.4   | 62.9   | 77.8   | 91.3   | 104.8  | 116.7  | 128.7  | 137.7  |
| 90°    | 0.0    | 7.5    | 18.0   | 31.4   | 46.4   | 59.9   | 73.3   | 86.8   | 98.8   | 110.8  | 119.7  |
| 92.5°  | 0.0    | 4.5    | 13.5   | 26.9   | 40.4   | 53.9   | 65.9   | 79.3   | 89.8   | 101.8  | 110.8  |
| 95°    | 0.0    | 3.0    | 10.5   | 22.5   | 35.9   | 47.9   | 61.4   | 73.3   | 85.3   | 95.8   | 104.8  |
| 97.5°  | 0.0    | 1.5    | 9.0    | 19.5   | 31.4   | 43.4   | 56.9   | 68.9   | 79.3   | 89.8   | 98.8   |
| 100°   | 0.0    | 0.0    | 6.0    | 16.5   | 26.9   | 38.9   | 50.9   | 62.9   | 73.3   | 83.8   | 92.8   |
| 102.5° | 0.0    | 1.5    | 3.0    | 13.5   | 23.9   | 35.9   | 46.4   | 58.4   | 68.9   | 77.8   | 86.8   |
| 105°   | 0.0    | 0.0    | 1.5    | 9.0    | 19.5   | 31.4   | 41.9   | 52.4   | 62.9   | 71.8   | 80.8   |
| 107.5° | 0.0    | 0.0    | 0.0    | 6.0    | 16.5   | 26.9   | 37.4   | 47.9   | 56.9   | 67.4   | 74.8   |
| 110°   | 0.0    | 0.0    | 0.0    | 3.0    | 12.0   | 22.5   | 32.9   | 41.9   | 52.4   | 61.4   | 68.9   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 5°  | 10° | 15° | 20° | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  |
|--------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 112.5° | 0.0 | 0.0 | 0.0 | 1.5 | 9.0 | 18.0 | 28.4 | 37.4 | 46.4 | 55.4 | 62.9 |
| 115°   | 0.0 | 1.5 | 1.5 | 0.0 | 6.0 | 15.0 | 23.9 | 32.9 | 41.9 | 49.4 | 56.9 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 | 10.5 | 19.5 | 28.4 | 35.9 | 44.9 | 50.9 |
| 120°   | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 7.5  | 15.0 | 23.9 | 31.4 | 38.9 | 46.4 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5  | 10.5 | 18.0 | 26.9 | 34.4 | 40.4 |
| 125°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5  | 7.5  | 13.5 | 21.0 | 28.4 | 34.4 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 3.0  | 10.5 | 16.5 | 22.5 | 28.4 |
| 130°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 1.5  | 6.0  | 12.0 | 18.0 | 23.9 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 3.0  | 7.5  | 13.5 | 18.0 |
| 135°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 1.5  | 3.0  | 9.0  | 13.5 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 1.5  | 4.5  | 9.0  |
| 140°   | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 1.5  | 4.5  |
| 142.5° | 1.5 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.5  |
| 145°   | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 150°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 155°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 160°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 165°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 170°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 175°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 180°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |



TEST NUMBER: P231636

CATALOG NUMBER: S124-DR-2-30-X-0048-1-U-DD-4-W

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 |
| 2.5°   | 1163.0 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1167.5 | 1166.0 |
| 5°     | 1160.0 | 1163.0 | 1163.0 | 1163.0 | 1163.0 | 1163.0 | 1163.0 | 1161.5 |
| 7.5°   | 1152.5 | 1155.5 | 1157.0 | 1157.0 | 1157.0 | 1157.0 | 1155.5 | 1154.0 |
| 10°    | 1142.0 | 1143.5 | 1145.0 | 1145.0 | 1145.0 | 1145.0 | 1143.5 | 1143.5 |
| 12.5°  | 1127.1 | 1128.5 | 1130.0 | 1130.0 | 1130.0 | 1130.0 | 1128.5 | 1128.5 |
| 15°    | 1109.1 | 1110.6 | 1112.1 | 1112.1 | 1112.1 | 1112.1 | 1110.6 | 1109.1 |
| 17.5°  | 1089.6 | 1091.1 | 1091.1 | 1091.1 | 1091.1 | 1089.6 | 1088.1 | 1089.6 |
| 20°    | 1064.2 | 1065.7 | 1067.2 | 1067.2 | 1067.2 | 1067.2 | 1064.2 | 1064.2 |
| 22.5°  | 1040.2 | 1041.7 | 1041.7 | 1040.2 | 1041.7 | 1040.2 | 1038.7 | 1037.2 |
| 25°    | 1010.3 | 1011.8 | 1013.3 | 1013.3 | 1014.8 | 1013.3 | 1010.3 | 1010.3 |
| 27.5°  | 980.4  | 983.4  | 981.9  | 981.9  | 983.4  | 981.9  | 980.4  | 980.4  |
| 30°    | 950.4  | 951.9  | 951.9  | 951.9  | 953.4  | 953.4  | 950.4  | 950.4  |
| 32.5°  | 917.5  | 919.0  | 920.5  | 922.0  | 922.0  | 922.0  | 920.5  | 920.5  |
| 35°    | 884.6  | 886.1  | 887.6  | 887.6  | 890.6  | 892.1  | 890.6  | 889.1  |
| 37.5°  | 850.2  | 853.1  | 856.1  | 857.6  | 857.6  | 859.1  | 859.1  | 859.1  |
| 40°    | 818.7  | 820.2  | 823.2  | 826.2  | 826.2  | 829.2  | 827.7  | 827.7  |
| 42.5°  | 782.8  | 788.8  | 790.3  | 796.3  | 796.3  | 796.3  | 796.3  | 799.3  |
| 45°    | 749.9  | 752.9  | 757.4  | 760.3  | 763.3  | 763.3  | 763.3  | 764.8  |
| 47.5°  | 716.9  | 721.4  | 722.9  | 727.4  | 730.4  | 731.9  | 731.9  | 733.4  |
| 50°    | 681.0  | 685.5  | 691.5  | 694.5  | 696.0  | 697.5  | 699.0  | 699.0  |
| 52.5°  | 645.1  | 651.1  | 655.6  | 660.1  | 661.6  | 663.1  | 663.1  | 666.1  |
| 55°    | 609.2  | 615.2  | 619.7  | 624.1  | 628.6  | 630.1  | 630.1  | 630.1  |
| 57.5°  | 574.8  | 579.2  | 583.7  | 589.7  | 591.2  | 592.7  | 595.7  | 595.7  |
| 60°    | 535.8  | 541.8  | 549.3  | 552.3  | 556.8  | 558.3  | 558.3  | 559.8  |
| 62.5°  | 498.4  | 505.9  | 510.4  | 514.9  | 519.4  | 522.4  | 522.4  | 523.9  |
| 65°    | 458.0  | 465.5  | 473.0  | 476.0  | 480.5  | 483.5  | 484.9  | 483.5  |
| 67.5°  | 420.6  | 429.6  | 434.1  | 440.0  | 443.0  | 444.5  | 447.5  | 447.5  |
| 70°    | 383.2  | 389.2  | 396.6  | 399.6  | 404.1  | 405.6  | 408.6  | 410.1  |
| 72.5°  | 344.3  | 350.2  | 356.2  | 362.2  | 366.7  | 368.2  | 372.7  | 372.7  |
| 75°    | 305.3  | 314.3  | 318.8  | 324.8  | 329.3  | 332.3  | 333.8  | 333.8  |
| 77.5°  | 267.9  | 276.9  | 282.9  | 288.9  | 293.4  | 296.4  | 297.9  | 299.3  |
| 80°    | 232.0  | 241.0  | 248.5  | 254.4  | 257.4  | 260.4  | 261.9  | 263.4  |
| 82.5°  | 202.1  | 208.0  | 215.5  | 223.0  | 226.0  | 229.0  | 230.5  | 230.5  |
| 85°    | 172.1  | 181.1  | 188.6  | 193.1  | 197.6  | 200.6  | 202.1  | 203.6  |
| 87.5°  | 146.7  | 155.7  | 161.6  | 167.6  | 172.1  | 176.6  | 178.1  | 178.1  |
| 90°    | 128.7  | 137.7  | 143.7  | 149.7  | 154.2  | 157.2  | 158.7  | 160.2  |
| 92.5°  | 119.7  | 127.2  | 134.7  | 140.7  | 143.7  | 146.7  | 149.7  | 149.7  |
| 95°    | 113.8  | 121.2  | 128.7  | 133.2  | 137.7  | 140.7  | 142.2  | 142.2  |
| 97.5°  | 107.8  | 115.2  | 121.2  | 127.2  | 131.7  | 133.2  | 134.7  | 136.2  |
| 100°   | 101.8  | 107.8  | 115.2  | 119.7  | 124.2  | 127.2  | 128.7  | 128.7  |
| 102.5° | 95.8   | 101.8  | 109.3  | 113.8  | 116.7  | 119.7  | 121.2  | 122.7  |
| 105°   | 88.3   | 95.8   | 101.8  | 106.3  | 110.8  | 113.8  | 115.2  | 115.2  |
| 107.5° | 82.3   | 89.8   | 95.8   | 100.3  | 104.8  | 106.3  | 107.8  | 109.3  |
| 110°   | 76.3   | 82.3   | 89.8   | 94.3   | 97.3   | 100.3  | 101.8  | 101.8  |





TEST NUMBER: P231636

CATALOG NUMBER: S124-DR-2-30-X-0048-1-U-DD-4-W

**CANDELA DISTRIBUTION (continued):**

|        | 55°  | 60°  | 65°  | 70°  | 75°  | 80°  | 85°  | 90°  |
|--------|------|------|------|------|------|------|------|------|
| 112.5° | 70.3 | 76.3 | 82.3 | 86.8 | 89.8 | 92.8 | 94.3 | 95.8 |
| 115°   | 64.4 | 70.3 | 76.3 | 80.8 | 83.8 | 86.8 | 88.3 | 88.3 |
| 117.5° | 58.4 | 64.4 | 70.3 | 73.3 | 76.3 | 79.3 | 80.8 | 80.8 |
| 120°   | 52.4 | 58.4 | 62.9 | 67.4 | 70.3 | 73.3 | 73.3 | 74.8 |
| 122.5° | 46.4 | 52.4 | 56.9 | 61.4 | 64.4 | 65.9 | 67.4 | 67.4 |
| 125°   | 40.4 | 46.4 | 50.9 | 53.9 | 56.9 | 59.9 | 59.9 | 61.4 |
| 127.5° | 34.4 | 38.9 | 43.4 | 47.9 | 50.9 | 52.4 | 53.9 | 53.9 |
| 130°   | 28.4 | 32.9 | 37.4 | 41.9 | 43.4 | 44.9 | 46.4 | 47.9 |
| 132.5° | 22.5 | 26.9 | 31.4 | 34.4 | 37.4 | 38.9 | 40.4 | 40.4 |
| 135°   | 18.0 | 22.5 | 25.4 | 28.4 | 31.4 | 32.9 | 32.9 | 34.4 |
| 137.5° | 13.5 | 16.5 | 19.5 | 22.5 | 23.9 | 25.4 | 26.9 | 26.9 |
| 140°   | 7.5  | 10.5 | 13.5 | 16.5 | 18.0 | 19.5 | 21.0 | 21.0 |
| 142.5° | 3.0  | 6.0  | 7.5  | 10.5 | 12.0 | 13.5 | 15.0 | 15.0 |
| 145°   | 0.0  | 1.5  | 3.0  | 4.5  | 6.0  | 7.5  | 9.0  | 9.0  |
| 147.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 150°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 152.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 155°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 157.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 160°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 162.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 165°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 167.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 170°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 172.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 175°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 177.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 180°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

(END OF REPORT)