

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: P231631

Luminaire Tested: **S124-DR-1-27-X-0048-1-U-DD-4-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231631
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-1-27-X-0048-1-U-DD-4-W
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH DROP LENS.
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

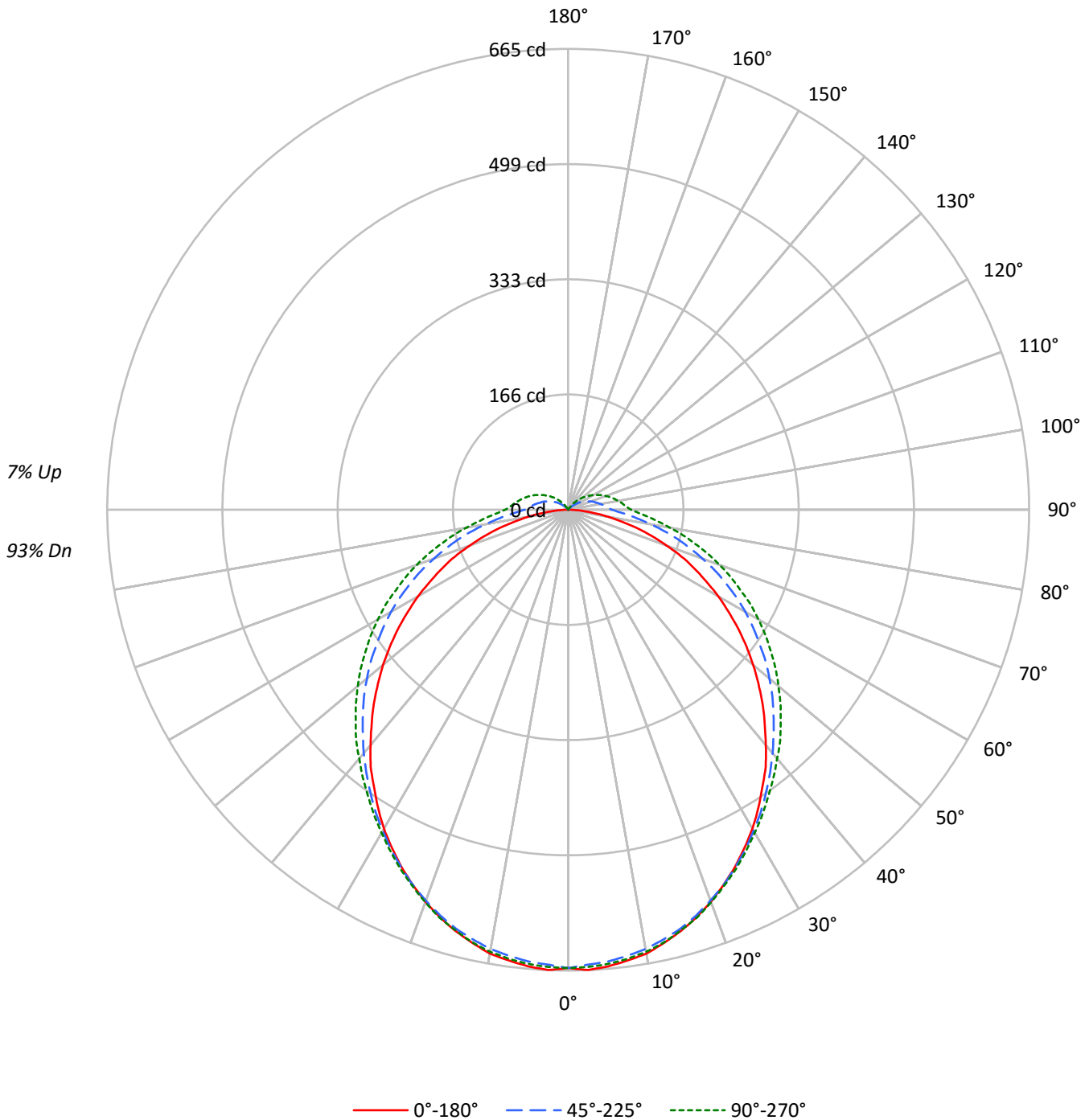
Lumens per Lamp: N/A
Luminaire Lumens: 2070.1 lumens
Efficiency: N/A
Efficacy: 74.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.92' x H: 0.08')
CIE Type: Direct

Input Watts (W): 27.9
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: P231631
CATALOG NUMBER: S124-DR-1-27-X-0048-1-U-DD-4-W

Luminous Intensity Polar Plot





TEST NUMBER: P231631

CATALOG NUMBER: S124-DR-1-27-X-0048-1-U-DD-4-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 | 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° | 5927 | 5927 | 5927 |
| 5° | 5938 | 5783 | 5781 |
| 10° | 5895 | 5650 | 5625 |
| 15° | 5803 | 5500 | 5433 |
| 20° | 5696 | 5323 | 5232 |
| 25° | 5569 | 5137 | 5022 |
| 30° | 5434 | 4944 | 4816 |
| 35° | 5264 | 4755 | 4629 |
| 40° | 5097 | 4571 | 4467 |
| 45° | 4924 | 4398 | 4318 |
| 50° | 4738 | 4238 | 4170 |
| 55° | 4538 | 4058 | 4018 |
| 60° | 4323 | 3892 | 3865 |
| 65° | 4076 | 3685 | 3670 |
| 70° | 3735 | 3440 | 3485 |
| 75° | 3291 | 3179 | 3251 |
| 80° | 2657 | 2857 | 3031 |
| 85° | 1820 | 2641 | 2888 |



TEST NUMBER: P231631

CATALOG NUMBER: S124-DR-1-27-X-0048-1-U-DD-4-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.5 | 3.0 |
| 10°-20° | 177.1 | 8.6 |
| 20°-30° | 263.2 | 12.7 |
| 30°-40° | 311.6 | 15.1 |
| 40°-50° | 322.5 | 15.6 |
| 50°-60° | 298.5 | 14.4 |
| 60°-70° | 242.9 | 11.7 |
| 70°-80° | 164.9 | 8.0 |
| 80°-90° | 88.6 | 4.3 |
| 90°-100° | 52.7 | 2.5 |
| 100°-110° | 38.8 | 1.9 |
| 110°-120° | 25.7 | 1.2 |
| 120°-130° | 14.4 | 0.7 |
| 130°-140° | 5.9 | 0.3 |
| 140°-150° | 0.9 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 502.8 | 24.3 |
| 0°-40° | 814.4 | 39.3 |
| 0°-60° | 1435.3 | 69.3 |
| 0°-90° | 1931.7 | 93.3 |
| 90°-120° | 117.3 | 5.7 |
| 90°-150° | 138.4 | 6.7 |
| 90°-180° | 138.0 | 6.7 |
| 0°-180° | 2070.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 661 | 661 | 661 | 661 | 661 | |
| 5° | 661 | 660 | 655 | 659 | 658 | 63 |
| 15° | 629 | 629 | 626 | 630 | 628 | 177 |
| 25° | 569 | 571 | 570 | 574 | 572 | 262 |
| 35° | 488 | 494 | 498 | 503 | 504 | 306 |
| 45° | 397 | 407 | 419 | 430 | 433 | 306 |
| 55° | 299 | 317 | 337 | 352 | 357 | 267 |
| 65° | 201 | 224 | 251 | 269 | 274 | 199 |
| 75° | 103 | 131 | 163 | 182 | 189 | 109 |
| 85° | 22 | 54 | 86 | 108 | 115 | 26 |
| 90° | 0 | 30 | 63 | 83 | 91 | 1 |
| 95° | 0 | 24 | 54 | 74 | 81 | 0 |
| 105° | 0 | 14 | 41 | 59 | 65 | 0 |
| 115° | 0 | 6 | 28 | 44 | 50 | 0 |
| 125° | 0 | 0 | 16 | 30 | 35 | 0 |
| 135° | 0 | 0 | 5 | 15 | 20 | 0 |
| 145° | 0 | 0 | 0 | 2 | 5 | 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: P231631

CATALOG NUMBER: S124-DR-1-27-X-0048-1-U-DD-4-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 |
| 2.5° | 664.8 | 663.1 | 661.4 | 660.5 | 661.4 | 662.2 | 661.4 | 660.5 | 658.8 | 657.1 | 657.1 |
| 5° | 661.4 | 659.7 | 658.0 | 658.0 | 659.7 | 659.7 | 658.8 | 658.0 | 656.3 | 654.6 | 654.6 |
| 7.5° | 656.3 | 654.6 | 653.7 | 653.7 | 654.6 | 654.6 | 654.6 | 653.7 | 652.0 | 649.5 | 651.2 |
| 10° | 650.3 | 648.6 | 647.0 | 647.0 | 647.8 | 647.8 | 647.8 | 647.0 | 645.3 | 643.6 | 644.4 |
| 12.5° | 640.2 | 638.5 | 637.6 | 637.6 | 638.5 | 639.3 | 638.5 | 638.5 | 636.8 | 635.1 | 635.9 |
| 15° | 629.1 | 628.3 | 626.6 | 627.4 | 628.3 | 629.1 | 629.1 | 628.3 | 626.6 | 625.8 | 626.6 |
| 17.5° | 616.4 | 615.6 | 614.7 | 614.7 | 615.6 | 616.4 | 616.4 | 616.4 | 614.7 | 613.9 | 614.7 |
| 20° | 602.0 | 600.3 | 600.3 | 601.2 | 602.0 | 602.9 | 602.9 | 602.0 | 601.2 | 600.3 | 602.0 |
| 22.5° | 585.9 | 585.1 | 584.2 | 585.1 | 587.6 | 587.6 | 588.4 | 586.8 | 585.9 | 585.9 | 586.8 |
| 25° | 568.9 | 568.1 | 567.2 | 568.9 | 570.6 | 571.5 | 571.5 | 571.5 | 570.6 | 569.8 | 571.5 |
| 27.5° | 550.3 | 550.3 | 548.6 | 550.3 | 552.8 | 553.7 | 553.7 | 553.7 | 552.8 | 552.8 | 553.7 |
| 30° | 531.6 | 530.8 | 529.1 | 531.6 | 533.3 | 535.9 | 535.9 | 535.9 | 535.0 | 535.0 | 536.7 |
| 32.5° | 510.4 | 510.4 | 509.6 | 512.1 | 514.7 | 516.4 | 516.4 | 516.4 | 515.5 | 517.2 | 518.9 |
| 35° | 488.4 | 487.5 | 488.4 | 490.1 | 492.6 | 495.2 | 496.0 | 496.0 | 496.0 | 497.7 | 499.4 |
| 37.5° | 468.0 | 465.5 | 466.3 | 468.9 | 471.4 | 474.0 | 475.7 | 474.8 | 475.7 | 478.2 | 479.9 |
| 40° | 443.5 | 442.6 | 444.3 | 447.7 | 450.2 | 452.8 | 453.6 | 454.5 | 456.2 | 458.7 | 461.3 |
| 42.5° | 419.7 | 420.6 | 421.4 | 425.6 | 428.2 | 431.6 | 432.4 | 434.1 | 435.8 | 438.4 | 441.8 |
| 45° | 396.8 | 396.0 | 398.5 | 401.1 | 405.3 | 408.7 | 411.2 | 412.1 | 415.5 | 418.9 | 421.4 |
| 47.5° | 372.2 | 373.9 | 373.9 | 379.0 | 384.1 | 387.5 | 389.2 | 391.7 | 395.1 | 399.4 | 401.9 |
| 50° | 348.5 | 348.5 | 351.9 | 356.1 | 360.4 | 364.6 | 367.1 | 370.5 | 374.8 | 379.0 | 382.4 |
| 52.5° | 323.9 | 324.7 | 327.3 | 332.4 | 337.5 | 341.7 | 345.9 | 350.2 | 353.6 | 358.7 | 362.1 |
| 55° | 299.3 | 300.2 | 304.4 | 309.5 | 314.6 | 319.7 | 323.9 | 328.1 | 333.2 | 336.6 | 340.9 |
| 57.5° | 273.9 | 275.6 | 280.7 | 285.7 | 291.7 | 295.9 | 301.9 | 306.9 | 312.0 | 316.3 | 321.4 |
| 60° | 250.1 | 251.0 | 255.2 | 262.0 | 266.2 | 273.0 | 279.0 | 284.0 | 289.1 | 295.1 | 299.3 |
| 62.5° | 224.7 | 226.4 | 231.5 | 237.4 | 243.3 | 250.1 | 256.1 | 262.0 | 267.1 | 273.0 | 277.3 |
| 65° | 201.0 | 202.6 | 206.9 | 212.8 | 220.5 | 228.1 | 234.0 | 239.1 | 245.0 | 251.0 | 255.2 |
| 67.5° | 177.2 | 178.9 | 183.1 | 189.1 | 196.7 | 203.5 | 211.1 | 217.1 | 223.0 | 228.9 | 234.0 |
| 70° | 150.9 | 153.5 | 158.6 | 166.2 | 173.0 | 180.6 | 187.4 | 194.2 | 200.1 | 206.0 | 211.1 |
| 72.5° | 126.3 | 128.9 | 135.7 | 142.4 | 150.1 | 157.7 | 165.3 | 171.3 | 178.9 | 184.0 | 189.1 |
| 75° | 102.6 | 106.0 | 111.9 | 118.7 | 126.3 | 134.8 | 141.6 | 150.1 | 156.9 | 162.8 | 167.0 |
| 77.5° | 78.9 | 83.1 | 89.0 | 96.7 | 104.3 | 112.8 | 120.4 | 127.2 | 134.8 | 141.6 | 146.7 |
| 80° | 57.7 | 61.0 | 67.8 | 75.5 | 84.8 | 92.4 | 100.1 | 107.7 | 114.5 | 120.4 | 127.2 |
| 82.5° | 39.0 | 42.4 | 49.2 | 56.8 | 65.3 | 73.8 | 82.2 | 89.0 | 95.8 | 102.6 | 108.5 |
| 85° | 22.0 | 26.3 | 33.1 | 40.7 | 50.0 | 57.7 | 65.3 | 72.9 | 79.7 | 86.5 | 92.4 |
| 87.5° | 9.3 | 13.6 | 20.3 | 28.0 | 35.6 | 44.1 | 51.7 | 59.4 | 66.1 | 72.9 | 78.0 |
| 90° | 0.0 | 4.2 | 10.2 | 17.8 | 26.3 | 33.9 | 41.5 | 49.2 | 56.0 | 62.7 | 67.8 |
| 92.5° | 0.0 | 2.5 | 7.6 | 15.3 | 22.9 | 30.5 | 37.3 | 44.9 | 50.9 | 57.7 | 62.7 |
| 95° | 0.0 | 1.7 | 5.9 | 12.7 | 20.3 | 27.1 | 34.8 | 41.5 | 48.3 | 54.3 | 59.4 |
| 97.5° | 0.0 | 0.8 | 5.1 | 11.0 | 17.8 | 24.6 | 32.2 | 39.0 | 44.9 | 50.9 | 56.0 |
| 100° | 0.0 | 0.0 | 3.4 | 9.3 | 15.3 | 22.0 | 28.8 | 35.6 | 41.5 | 47.5 | 52.6 |
| 102.5° | 0.0 | 0.8 | 1.7 | 7.6 | 13.6 | 20.3 | 26.3 | 33.1 | 39.0 | 44.1 | 49.2 |
| 105° | 0.0 | 0.0 | 0.8 | 5.1 | 11.0 | 17.8 | 23.7 | 29.7 | 35.6 | 40.7 | 45.8 |
| 107.5° | 0.0 | 0.0 | 0.0 | 3.4 | 9.3 | 15.3 | 21.2 | 27.1 | 32.2 | 38.2 | 42.4 |
| 110° | 0.0 | 0.0 | 0.0 | 1.7 | 6.8 | 12.7 | 18.7 | 23.7 | 29.7 | 34.8 | 39.0 |



TEST NUMBER: P231631

CATALOG NUMBER: S124-DR-1-27-X-0048-1-U-DD-4-W

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 112.5° | 0.0 | 0.0 | 0.0 | 0.8 | 5.1 | 10.2 | 16.1 | 21.2 | 26.3 | 31.4 | 35.6 |
| 115° | 0.0 | 0.8 | 0.8 | 0.0 | 3.4 | 8.5 | 13.6 | 18.7 | 23.7 | 28.0 | 32.2 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 5.9 | 11.0 | 16.1 | 20.3 | 25.4 | 28.8 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 4.2 | 8.5 | 13.6 | 17.8 | 22.0 | 26.3 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 5.9 | 10.2 | 15.3 | 19.5 | 22.9 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 4.2 | 7.6 | 11.9 | 16.1 | 19.5 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 5.9 | 9.3 | 12.7 | 16.1 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 3.4 | 6.8 | 10.2 | 13.6 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 4.2 | 7.6 | 10.2 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 1.7 | 5.1 | 7.6 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 2.5 | 5.1 |
| 140° | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 2.5 |
| 142.5° | 0.8 | 0.8 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| 145° | 0.0 | 0.8 | 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: P231631

CATALOG NUMBER: S124-DR-1-27-X-0048-1-U-DD-4-W

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 |
| 2.5° | 658.8 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 661.4 | 660.5 |
| 5° | 657.1 | 658.8 | 658.8 | 658.8 | 658.8 | 658.8 | 658.8 | 658.0 |
| 7.5° | 652.9 | 654.6 | 655.4 | 655.4 | 655.4 | 655.4 | 654.6 | 653.7 |
| 10° | 647.0 | 647.8 | 648.6 | 648.6 | 648.6 | 648.6 | 647.8 | 647.8 |
| 12.5° | 638.5 | 639.3 | 640.2 | 640.2 | 640.2 | 640.2 | 639.3 | 639.3 |
| 15° | 628.3 | 629.1 | 630.0 | 630.0 | 630.0 | 630.0 | 629.1 | 628.3 |
| 17.5° | 617.3 | 618.1 | 618.1 | 618.1 | 618.1 | 617.3 | 616.4 | 617.3 |
| 20° | 602.9 | 603.7 | 604.6 | 604.6 | 604.6 | 604.6 | 602.9 | 602.9 |
| 22.5° | 589.3 | 590.1 | 590.1 | 589.3 | 590.1 | 589.3 | 588.4 | 587.6 |
| 25° | 572.3 | 573.2 | 574.0 | 574.0 | 574.9 | 574.0 | 572.3 | 572.3 |
| 27.5° | 555.4 | 557.1 | 556.2 | 556.2 | 557.1 | 556.2 | 555.4 | 555.4 |
| 30° | 538.4 | 539.3 | 539.3 | 539.3 | 540.1 | 540.1 | 538.4 | 538.4 |
| 32.5° | 519.8 | 520.6 | 521.5 | 522.3 | 522.3 | 522.3 | 521.5 | 521.5 |
| 35° | 501.1 | 502.0 | 502.8 | 502.8 | 504.5 | 505.4 | 504.5 | 503.7 |
| 37.5° | 481.6 | 483.3 | 485.0 | 485.8 | 485.8 | 486.7 | 486.7 | 486.7 |
| 40° | 463.8 | 464.7 | 466.3 | 468.0 | 468.0 | 469.7 | 468.9 | 468.9 |
| 42.5° | 443.5 | 446.8 | 447.7 | 451.1 | 451.1 | 451.1 | 451.1 | 452.8 |
| 45° | 424.8 | 426.5 | 429.0 | 430.7 | 432.4 | 432.4 | 432.4 | 433.3 |
| 47.5° | 406.1 | 408.7 | 409.5 | 412.1 | 413.8 | 414.6 | 414.6 | 415.5 |
| 50° | 385.8 | 388.3 | 391.7 | 393.4 | 394.3 | 395.1 | 396.0 | 396.0 |
| 52.5° | 365.4 | 368.8 | 371.4 | 373.9 | 374.8 | 375.6 | 375.6 | 377.3 |
| 55° | 345.1 | 348.5 | 351.0 | 353.6 | 356.1 | 357.0 | 357.0 | 357.0 |
| 57.5° | 325.6 | 328.1 | 330.7 | 334.1 | 334.9 | 335.8 | 337.5 | 337.5 |
| 60° | 303.6 | 306.9 | 311.2 | 312.9 | 315.4 | 316.3 | 316.3 | 317.1 |
| 62.5° | 282.4 | 286.6 | 289.1 | 291.7 | 294.2 | 295.9 | 295.9 | 296.8 |
| 65° | 259.5 | 263.7 | 267.9 | 269.6 | 272.2 | 273.9 | 274.7 | 273.9 |
| 67.5° | 238.3 | 243.3 | 245.9 | 249.3 | 251.0 | 251.8 | 253.5 | 253.5 |
| 70° | 217.1 | 220.5 | 224.7 | 226.4 | 228.9 | 229.8 | 231.5 | 232.3 |
| 72.5° | 195.0 | 198.4 | 201.8 | 205.2 | 207.7 | 208.6 | 211.1 | 211.1 |
| 75° | 173.0 | 178.1 | 180.6 | 184.0 | 186.5 | 188.2 | 189.1 | 189.1 |
| 77.5° | 151.8 | 156.9 | 160.3 | 163.6 | 166.2 | 167.9 | 168.7 | 169.6 |
| 80° | 131.4 | 136.5 | 140.8 | 144.1 | 145.8 | 147.5 | 148.4 | 149.2 |
| 82.5° | 114.5 | 117.9 | 122.1 | 126.3 | 128.0 | 129.7 | 130.6 | 130.6 |
| 85° | 97.5 | 102.6 | 106.8 | 109.4 | 111.9 | 113.6 | 114.5 | 115.3 |
| 87.5° | 83.1 | 88.2 | 91.6 | 95.0 | 97.5 | 100.1 | 100.9 | 100.9 |
| 90° | 72.9 | 78.0 | 81.4 | 84.8 | 87.3 | 89.0 | 89.9 | 90.7 |
| 92.5° | 67.8 | 72.1 | 76.3 | 79.7 | 81.4 | 83.1 | 84.8 | 84.8 |
| 95° | 64.4 | 68.7 | 72.9 | 75.5 | 78.0 | 79.7 | 80.6 | 80.6 |
| 97.5° | 61.0 | 65.3 | 68.7 | 72.1 | 74.6 | 75.5 | 76.3 | 77.2 |
| 100° | 57.7 | 61.0 | 65.3 | 67.8 | 70.4 | 72.1 | 72.9 | 72.9 |
| 102.5° | 54.3 | 57.7 | 61.9 | 64.4 | 66.1 | 67.8 | 68.7 | 69.5 |
| 105° | 50.0 | 54.3 | 57.7 | 60.2 | 62.7 | 64.4 | 65.3 | 65.3 |
| 107.5° | 46.6 | 50.9 | 54.3 | 56.8 | 59.4 | 60.2 | 61.0 | 61.9 |
| 110° | 43.2 | 46.6 | 50.9 | 53.4 | 55.1 | 56.8 | 57.7 | 57.7 |



TEST NUMBER: P231631

CATALOG NUMBER: S124-DR-1-27-X-0048-1-U-DD-4-W

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|------|------|------|------|------|------|------|------|
| 112.5° | 39.9 | 43.2 | 46.6 | 49.2 | 50.9 | 52.6 | 53.4 | 54.3 |
| 115° | 36.5 | 39.9 | 43.2 | 45.8 | 47.5 | 49.2 | 50.0 | 50.0 |
| 117.5° | 33.1 | 36.5 | 39.9 | 41.5 | 43.2 | 44.9 | 45.8 | 45.8 |
| 120° | 29.7 | 33.1 | 35.6 | 38.2 | 39.9 | 41.5 | 41.5 | 42.4 |
| 122.5° | 26.3 | 29.7 | 32.2 | 34.8 | 36.5 | 37.3 | 38.2 | 38.2 |
| 125° | 22.9 | 26.3 | 28.8 | 30.5 | 32.2 | 33.9 | 33.9 | 34.8 |
| 127.5° | 19.5 | 22.0 | 24.6 | 27.1 | 28.8 | 29.7 | 30.5 | 30.5 |
| 130° | 16.1 | 18.7 | 21.2 | 23.7 | 24.6 | 25.4 | 26.3 | 27.1 |
| 132.5° | 12.7 | 15.3 | 17.8 | 19.5 | 21.2 | 22.0 | 22.9 | 22.9 |
| 135° | 10.2 | 12.7 | 14.4 | 16.1 | 17.8 | 18.7 | 18.7 | 19.5 |
| 137.5° | 7.6 | 9.3 | 11.0 | 12.7 | 13.6 | 14.4 | 15.3 | 15.3 |
| 140° | 4.2 | 5.9 | 7.6 | 9.3 | 10.2 | 11.0 | 11.9 | 11.9 |
| 142.5° | 1.7 | 3.4 | 4.2 | 5.9 | 6.8 | 7.6 | 8.5 | 8.5 |
| 145° | 0.0 | 0.8 | 1.7 | 2.5 | 3.4 | 4.2 | 5.1 | 5.1 |
| 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)