

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: P243434

Luminaire Tested: **S123RDR-H340D840-X4F0-XX-UDD-A-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243434  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-69)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDR-H340D840-X4F0-XX-UDD-A-W  
Description: DEFINE 3 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

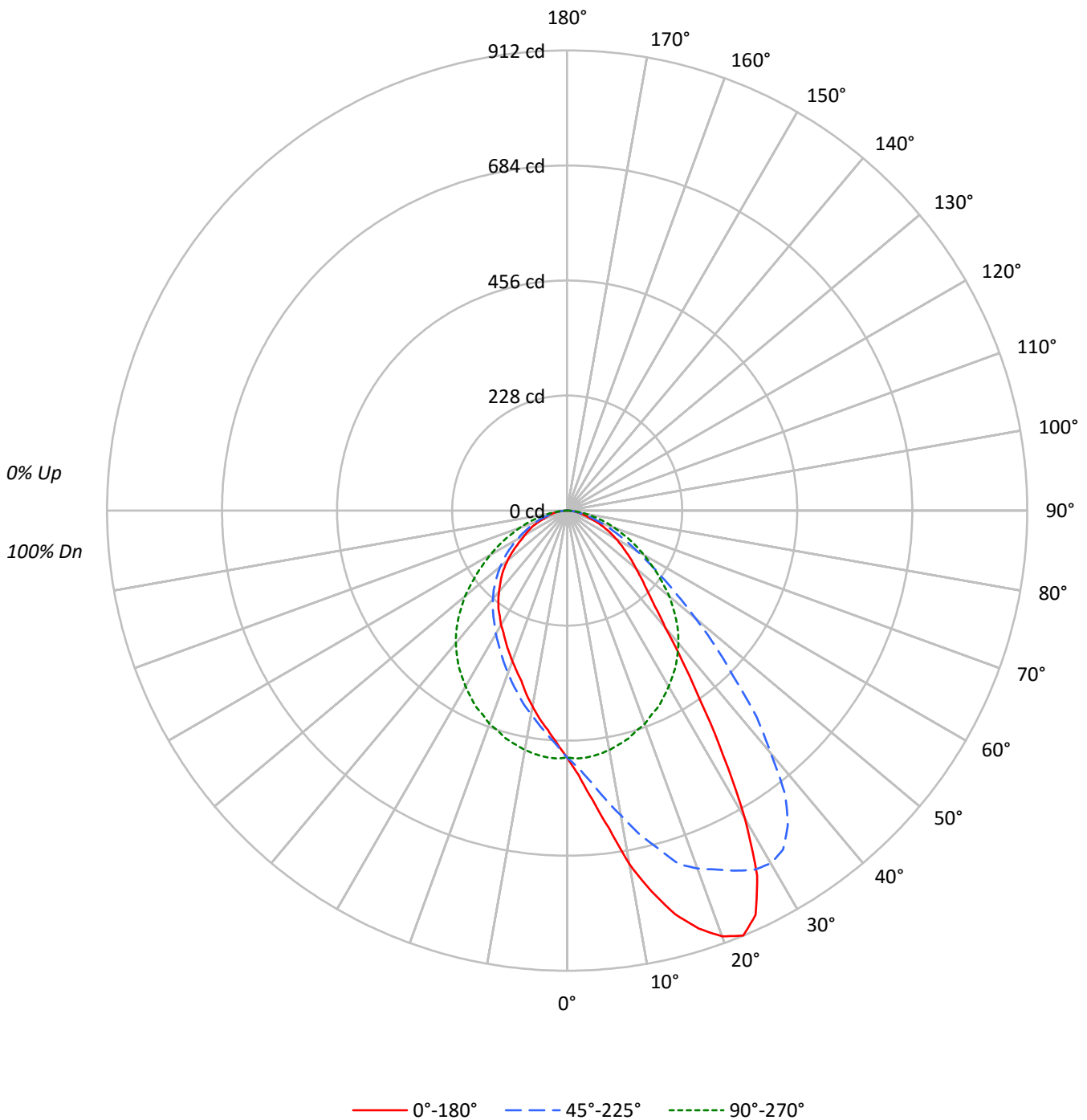
Lumens per Lamp: N/A  
Luminaire Lumens: 1275.6 lumens  
Efficiency: N/A  
Efficacy: 113.9 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.22 / 1.4  
Luminous Opening: Rectangular (W 3.88' x L: 0.23' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.2  
Input Voltage (V): 120  
Input Current (Ain): 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: P243434

CATALOG NUMBER: S123RDR-H340D840-X4F0-XX-UDD-A-W

### Luminous Intensity Polar Plot





TEST NUMBER: P243434

CATALOG NUMBER: S123RDR-H340D840-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 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 87  |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 86  | 82  | 89  | 84  | 80  | 85  | 81  | 78  | 82  | 79  | 76  | 74  |
| 3   | 93  | 84  | 76  | 70  | 91  | 82  | 75  | 70  | 79  | 73  | 68  | 76  | 71  | 67  | 74  | 70  | 66  | 64  |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 60  | 71  | 65  | 59  | 69  | 63  | 59  | 67  | 62  | 58  | 56  |
| 5   | 79  | 68  | 59  | 53  | 77  | 66  | 59  | 53  | 64  | 57  | 52  | 62  | 56  | 52  | 61  | 55  | 51  | 49  |
| 6   | 74  | 61  | 53  | 47  | 72  | 60  | 52  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 55  | 50  | 46  | 44  |
| 7   | 69  | 56  | 48  | 42  | 67  | 55  | 47  | 42  | 54  | 47  | 41  | 52  | 46  | 41  | 51  | 45  | 41  | 39  |
| 8   | 64  | 51  | 43  | 38  | 62  | 51  | 43  | 37  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 35  |
| 9   | 60  | 47  | 39  | 34  | 59  | 47  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 43  | 38  | 33  | 32  |
| 10  | 56  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 40  | 35  | 31  | 29  |

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

|     | 0°    | 90°  | 180° |
|-----|-------|------|------|
| 0°  | 5933  | 5933 | 5933 |
| 5°  | 6995  | 5967 | 5314 |
| 10° | 8757  | 5931 | 4849 |
| 15° | 10393 | 5873 | 4392 |
| 20° | 11582 | 5802 | 4090 |
| 25° | 11823 | 5731 | 3850 |
| 30° | 9852  | 5634 | 3663 |
| 35° | 6805  | 5555 | 3510 |
| 40° | 4783  | 5429 | 3324 |
| 45° | 3842  | 5235 | 3146 |
| 50° | 3349  | 4986 | 2910 |
| 55° | 3001  | 4613 | 2591 |
| 60° | 2715  | 4264 | 2347 |
| 65° | 2378  | 3929 | 2194 |
| 70° | 1917  | 3537 | 1857 |
| 75° | 1663  | 3077 | 1822 |
| 80° | 1536  | 2625 | 1829 |
| 85° | 1349  | 2114 | 1585 |



TEST NUMBER: P243434

CATALOG NUMBER: S123RDR-H340D840-X4F0-XX-UDD-A-W

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 48.0   | 3.8       |
| 10°-20°   | 151.2  | 11.9      |
| 20°-30°   | 242.2  | 19.0      |
| 30°-40°   | 263.0  | 20.6      |
| 40°-50°   | 225.3  | 17.7      |
| 50°-60°   | 170.8  | 13.4      |
| 60°-70°   | 109.1  | 8.6       |
| 70°-80°   | 52.2   | 4.1       |
| 80°-90°   | 13.7   | 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°    | 441.4  | 34.6      |
| 0°-40°    | 704.4  | 55.2      |
| 0°-60°    | 1100.5 | 86.3      |
| 0°-90°    | 1275.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1275.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 490 | 490 | 490 | 490  | 490  |      |
| 5°  | 575 | 540 | 490 | 446  | 437  | 59   |
| 15° | 828 | 692 | 468 | 376  | 350  | 235  |
| 25° | 884 | 787 | 428 | 311  | 288  | 392  |
| 35° | 460 | 762 | 375 | 255  | 237  | 295  |
| 45° | 224 | 467 | 305 | 202  | 184  | 177  |
| 55° | 142 | 229 | 218 | 144  | 123  | 128  |
| 65° | 83  | 110 | 137 | 87   | 76   | 82   |
| 75° | 36  | 43  | 66  | 41   | 39   | 38   |
| 85° | 10  | 10  | 15  | 12   | 11   | 11   |
| 90° | 0   | 0   | 0   | 0    | 0    |      |



TEST NUMBER: P243434

CATALOG NUMBER: S123RDR-H340D840-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 |
| 2.5°  | 524.6 | 525.3 | 524.2 | 524.0 | 523.8 | 520.4 | 519.3 | 517.7 | 511.7 | 510.3 | 509.2 |
| 5°    | 574.9 | 573.2 | 575.1 | 571.6 | 567.5 | 565.2 | 561.4 | 553.0 | 545.6 | 539.6 | 535.8 |
| 7.5°  | 634.5 | 635.2 | 633.3 | 629.9 | 621.9 | 618.5 | 608.1 | 598.0 | 588.3 | 576.0 | 566.9 |
| 10°   | 711.5 | 706.4 | 707.5 | 696.9 | 688.4 | 678.3 | 664.1 | 647.9 | 630.7 | 613.4 | 600.5 |
| 12.5° | 772.8 | 776.4 | 773.8 | 768.8 | 752.5 | 742.6 | 729.7 | 706.0 | 678.9 | 655.7 | 636.0 |
| 15°   | 828.2 | 823.3 | 823.9 | 811.7 | 805.8 | 796.7 | 775.3 | 751.9 | 734.3 | 692.2 | 669.0 |
| 17.5° | 868.7 | 868.3 | 867.7 | 857.3 | 850.1 | 831.1 | 809.3 | 785.2 | 763.3 | 734.1 | 704.9 |
| 20°   | 897.9 | 901.1 | 900.2 | 891.8 | 879.1 | 860.7 | 847.6 | 817.6 | 781.4 | 754.8 | 719.1 |
| 22.5° | 911.9 | 912.1 | 912.5 | 908.5 | 900.0 | 888.2 | 869.6 | 845.5 | 813.4 | 769.8 | 730.1 |
| 25°   | 884.0 | 885.0 | 890.5 | 893.9 | 896.2 | 890.9 | 881.2 | 859.4 | 831.8 | 787.4 | 746.1 |
| 27.5° | 815.5 | 818.9 | 825.0 | 845.3 | 853.5 | 864.9 | 869.0 | 860.3 | 839.8 | 802.8 | 755.9 |
| 30°   | 703.9 | 713.4 | 719.3 | 742.3 | 774.7 | 805.1 | 819.5 | 833.7 | 831.8 | 807.2 | 759.7 |
| 32.5° | 576.2 | 582.3 | 599.5 | 624.2 | 649.8 | 694.4 | 744.2 | 778.5 | 797.7 | 796.5 | 762.8 |
| 35°   | 459.9 | 468.8 | 483.4 | 502.2 | 537.5 | 583.8 | 640.2 | 694.1 | 742.3 | 762.4 | 750.4 |
| 37.5° | 373.3 | 374.1 | 387.9 | 414.5 | 436.5 | 477.3 | 528.2 | 594.8 | 658.0 | 710.4 | 722.0 |
| 40°   | 302.3 | 308.2 | 315.4 | 332.1 | 358.1 | 397.2 | 431.0 | 496.5 | 562.0 | 627.8 | 674.7 |
| 42.5° | 257.5 | 257.5 | 265.5 | 276.1 | 293.4 | 316.8 | 357.2 | 416.6 | 475.6 | 556.3 | 609.2 |
| 45°   | 224.1 | 226.2 | 229.8 | 236.5 | 248.8 | 267.0 | 298.2 | 338.6 | 398.9 | 466.7 | 546.2 |
| 47.5° | 200.0 | 199.7 | 202.9 | 206.9 | 216.4 | 230.2 | 248.6 | 281.3 | 325.9 | 399.1 | 469.2 |
| 50°   | 177.6 | 178.4 | 180.7 | 184.1 | 190.4 | 200.2 | 211.8 | 236.5 | 274.2 | 332.1 | 405.6 |
| 52.5° | 160.2 | 160.0 | 161.9 | 164.0 | 168.9 | 174.4 | 184.7 | 203.1 | 229.1 | 275.2 | 336.3 |
| 55°   | 142.0 | 142.9 | 145.2 | 146.5 | 150.5 | 154.1 | 162.8 | 173.1 | 194.0 | 228.7 | 284.3 |
| 57.5° | 126.4 | 127.5 | 128.7 | 130.0 | 132.7 | 136.3 | 143.5 | 149.9 | 165.1 | 190.0 | 234.4 |
| 60°   | 112.0 | 111.6 | 113.1 | 115.2 | 116.7 | 119.8 | 123.9 | 130.4 | 141.0 | 158.7 | 191.3 |
| 62.5° | 97.7  | 97.9  | 98.1  | 99.3  | 102.1 | 104.8 | 108.4 | 113.3 | 119.6 | 132.7 | 155.8 |
| 65°   | 82.9  | 83.1  | 83.5  | 84.8  | 87.5  | 89.2  | 93.0  | 97.2  | 102.3 | 110.1 | 126.2 |
| 67.5° | 69.8  | 70.6  | 70.6  | 71.7  | 72.7  | 74.4  | 77.2  | 80.3  | 84.5  | 90.3  | 100.6 |
| 70°   | 54.1  | 53.9  | 55.0  | 57.1  | 58.1  | 61.1  | 63.0  | 65.1  | 68.9  | 72.5  | 81.4  |
| 72.5° | 43.5  | 43.5  | 43.5  | 44.4  | 44.6  | 45.2  | 46.5  | 50.9  | 53.9  | 57.5  | 62.4  |
| 75°   | 35.5  | 35.7  | 35.7  | 35.9  | 36.1  | 36.8  | 37.2  | 38.5  | 39.3  | 43.1  | 46.1  |
| 77.5° | 28.3  | 28.5  | 28.5  | 28.7  | 29.0  | 29.2  | 30.0  | 30.0  | 30.6  | 31.5  | 32.8  |
| 80°   | 22.0  | 21.8  | 21.8  | 22.0  | 22.0  | 22.6  | 22.6  | 23.0  | 23.3  | 23.7  | 24.3  |
| 82.5° | 15.6  | 15.4  | 15.6  | 15.4  | 15.6  | 15.9  | 16.3  | 16.1  | 16.5  | 16.9  | 17.1  |
| 85°   | 9.7   | 9.9   | 9.9   | 10.4  | 10.1  | 9.9   | 10.1  | 10.1  | 10.1  | 10.1  | 10.6  |
| 87.5° | 4.2   | 4.7   | 4.7   | 4.4   | 4.7   | 4.7   | 4.2   | 4.7   | 4.7   | 4.7   | 4.9   |
| 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: P243434

CATALOG NUMBER: S123RDR-H340D840-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 |
| 2.5°  | 508.6 | 507.7 | 504.5 | 501.6 | 497.1 | 495.2 | 492.7 | 491.7 | 488.3 | 483.6 | 481.5 |
| 5°    | 532.2 | 525.9 | 519.8 | 512.4 | 506.2 | 499.1 | 495.0 | 490.4 | 483.2 | 476.6 | 472.0 |
| 7.5°  | 557.4 | 548.1 | 536.7 | 524.4 | 513.4 | 503.1 | 494.2 | 486.8 | 477.5 | 468.4 | 461.2 |
| 10°   | 585.1 | 569.2 | 550.8 | 535.2 | 519.3 | 504.3 | 493.1 | 481.9 | 469.9 | 458.5 | 449.8 |
| 12.5° | 614.9 | 592.5 | 570.3 | 546.8 | 523.1 | 505.8 | 489.1 | 474.7 | 461.2 | 449.2 | 438.8 |
| 15°   | 645.7 | 615.1 | 586.8 | 560.3 | 527.4 | 504.1 | 485.7 | 468.0 | 451.1 | 436.3 | 426.1 |
| 17.5° | 667.7 | 632.6 | 596.9 | 559.5 | 531.2 | 502.4 | 479.6 | 457.2 | 441.6 | 426.3 | 412.6 |
| 20°   | 688.0 | 648.3 | 605.8 | 570.9 | 531.4 | 496.3 | 471.4 | 449.8 | 428.0 | 411.8 | 400.1 |
| 22.5° | 696.7 | 660.8 | 617.8 | 569.4 | 529.9 | 494.0 | 461.8 | 437.5 | 418.1 | 400.3 | 385.1 |
| 25°   | 698.4 | 658.2 | 614.2 | 567.5 | 524.2 | 485.3 | 452.8 | 428.5 | 403.1 | 384.7 | 372.9 |
| 27.5° | 705.8 | 650.8 | 607.7 | 561.2 | 517.2 | 476.6 | 442.4 | 415.3 | 391.7 | 372.0 | 356.8 |
| 30°   | 707.7 | 647.6 | 593.7 | 549.4 | 504.1 | 464.4 | 429.7 | 402.5 | 376.7 | 356.6 | 342.8 |
| 32.5° | 708.5 | 643.4 | 579.2 | 530.5 | 487.4 | 450.0 | 418.3 | 388.7 | 364.2 | 343.1 | 328.9 |
| 35°   | 705.6 | 637.5 | 561.6 | 509.2 | 467.8 | 431.0 | 401.6 | 375.4 | 348.1 | 328.3 | 313.3 |
| 37.5° | 693.9 | 628.2 | 551.7 | 484.3 | 444.7 | 410.1 | 385.1 | 359.3 | 334.2 | 312.6 | 297.2 |
| 40°   | 672.0 | 614.7 | 533.1 | 463.3 | 418.5 | 387.4 | 364.2 | 343.1 | 317.7 | 297.0 | 281.8 |
| 42.5° | 636.9 | 596.3 | 516.0 | 439.7 | 392.5 | 363.1 | 343.7 | 325.5 | 302.7 | 283.0 | 266.3 |
| 45°   | 584.9 | 570.5 | 493.1 | 415.6 | 364.2 | 336.5 | 319.6 | 305.4 | 284.7 | 266.8 | 251.3 |
| 47.5° | 528.6 | 531.8 | 470.1 | 391.0 | 338.4 | 312.0 | 297.2 | 284.7 | 269.1 | 249.8 | 235.7 |
| 50°   | 463.8 | 481.1 | 437.8 | 366.3 | 312.6 | 286.6 | 272.0 | 264.4 | 249.8 | 233.8 | 220.5 |
| 52.5° | 404.4 | 431.8 | 405.0 | 339.3 | 287.3 | 261.7 | 248.2 | 240.5 | 230.8 | 217.5 | 204.0 |
| 55°   | 342.8 | 377.7 | 358.3 | 310.1 | 261.5 | 235.7 | 224.3 | 218.3 | 210.3 | 200.0 | 187.7 |
| 57.5° | 291.9 | 329.1 | 316.8 | 279.4 | 236.3 | 213.1 | 202.9 | 196.2 | 191.3 | 181.8 | 171.8 |
| 60°   | 242.0 | 276.5 | 271.6 | 244.1 | 211.4 | 189.2 | 181.4 | 175.9 | 171.8 | 164.9 | 155.1 |
| 62.5° | 195.3 | 228.7 | 231.7 | 210.1 | 187.1 | 167.0 | 159.8 | 156.0 | 152.8 | 147.3 | 138.4 |
| 65°   | 154.9 | 184.3 | 190.4 | 174.0 | 161.5 | 146.3 | 139.3 | 137.0 | 134.6 | 128.3 | 121.5 |
| 67.5° | 121.3 | 144.4 | 152.4 | 143.1 | 134.2 | 125.3 | 119.8 | 116.7 | 115.0 | 111.2 | 106.5 |
| 70°   | 92.8  | 112.7 | 119.4 | 115.4 | 109.5 | 106.1 | 101.9 | 99.8  | 98.1  | 93.2  | 90.7  |
| 72.5° | 69.5  | 83.1  | 91.5  | 90.3  | 89.0  | 86.7  | 84.1  | 83.5  | 81.0  | 77.8  | 75.5  |
| 75°   | 50.9  | 58.8  | 66.4  | 69.1  | 68.7  | 69.5  | 66.8  | 65.7  | 64.3  | 61.9  | 60.0  |
| 77.5° | 36.6  | 41.2  | 46.5  | 49.9  | 51.6  | 51.8  | 51.8  | 51.2  | 50.1  | 48.4  | 46.9  |
| 80°   | 25.4  | 26.4  | 31.3  | 34.5  | 36.1  | 37.4  | 37.4  | 37.6  | 36.6  | 35.9  | 34.9  |
| 82.5° | 17.5  | 18.2  | 19.2  | 21.8  | 23.9  | 25.4  | 25.6  | 25.4  | 24.9  | 24.7  | 23.3  |
| 85°   | 11.0  | 10.8  | 10.8  | 11.4  | 13.1  | 14.6  | 14.8  | 15.2  | 15.0  | 14.8  | 13.3  |
| 87.5° | 4.7   | 4.7   | 4.9   | 4.7   | 5.3   | 5.5   | 5.9   | 7.0   | 6.8   | 5.7   | 5.3   |
| 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: P243434

CATALOG NUMBER: S123RDR-H340D840-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 | 489.5 |
| 2.5°  | 480.2 | 477.5 | 475.0 | 472.2 | 468.8 | 465.7 | 465.2 | 464.8 | 465.9 | 463.8 | 462.9 |
| 5°    | 468.4 | 463.1 | 459.1 | 454.0 | 450.4 | 445.8 | 443.2 | 442.6 | 442.4 | 441.1 | 439.4 |
| 7.5°  | 455.5 | 449.8 | 444.1 | 438.4 | 432.5 | 427.6 | 424.9 | 423.4 | 422.1 | 420.0 | 418.3 |
| 10°   | 443.5 | 436.3 | 430.1 | 422.3 | 416.0 | 409.6 | 407.1 | 405.0 | 403.7 | 400.8 | 398.4 |
| 12.5° | 429.9 | 420.8 | 414.1 | 405.6 | 399.9 | 394.4 | 390.4 | 386.4 | 383.4 | 379.0 | 377.1 |
| 15°   | 418.1 | 408.6 | 397.2 | 392.1 | 384.1 | 375.8 | 371.4 | 371.4 | 365.3 | 361.7 | 359.3 |
| 17.5° | 402.2 | 394.0 | 386.0 | 375.6 | 364.2 | 359.3 | 354.3 | 349.8 | 345.6 | 344.5 | 340.3 |
| 20°   | 388.3 | 378.6 | 370.3 | 359.1 | 348.8 | 343.1 | 337.1 | 332.3 | 329.1 | 326.1 | 323.8 |
| 22.5° | 374.6 | 364.8 | 352.1 | 341.2 | 334.2 | 326.6 | 320.2 | 316.0 | 313.3 | 308.8 | 306.7 |
| 25°   | 360.2 | 348.6 | 337.1 | 326.4 | 317.7 | 311.1 | 304.6 | 302.3 | 297.4 | 295.1 | 292.1 |
| 27.5° | 345.8 | 331.9 | 321.1 | 311.8 | 302.1 | 295.7 | 291.3 | 287.0 | 282.8 | 281.5 | 279.9 |
| 30°   | 329.7 | 316.8 | 306.5 | 297.4 | 288.1 | 282.6 | 277.3 | 273.5 | 269.9 | 267.2 | 265.3 |
| 32.5° | 313.7 | 302.9 | 293.0 | 282.4 | 273.9 | 268.0 | 263.6 | 260.2 | 258.5 | 253.9 | 252.2 |
| 35°   | 298.9 | 287.9 | 277.3 | 267.4 | 260.6 | 254.9 | 250.9 | 247.7 | 244.1 | 241.2 | 239.5 |
| 37.5° | 283.7 | 273.7 | 262.9 | 254.5 | 246.9 | 242.2 | 237.8 | 233.6 | 230.8 | 229.1 | 227.0 |
| 40°   | 268.9 | 258.3 | 250.1 | 240.8 | 234.0 | 228.7 | 224.1 | 220.9 | 217.5 | 216.0 | 213.3 |
| 42.5° | 254.9 | 244.8 | 235.3 | 226.8 | 220.7 | 215.6 | 211.2 | 207.6 | 204.8 | 202.1 | 200.6 |
| 45°   | 238.9 | 230.0 | 221.3 | 212.9 | 207.1 | 201.6 | 196.8 | 193.6 | 189.8 | 187.5 | 186.6 |
| 47.5° | 225.3 | 216.0 | 206.7 | 198.9 | 193.0 | 187.1 | 183.0 | 179.2 | 176.1 | 173.7 | 172.5 |
| 50°   | 209.3 | 200.6 | 193.0 | 185.2 | 179.5 | 173.1 | 168.3 | 164.7 | 161.1 | 159.4 | 157.3 |
| 52.5° | 195.5 | 187.1 | 177.8 | 170.8 | 164.2 | 158.7 | 154.3 | 151.3 | 148.2 | 145.6 | 144.2 |
| 55°   | 178.4 | 170.2 | 162.8 | 155.4 | 148.8 | 144.4 | 140.8 | 135.7 | 133.0 | 130.4 | 126.4 |
| 57.5° | 163.4 | 155.6 | 147.7 | 140.6 | 134.4 | 129.1 | 124.7 | 121.3 | 117.7 | 115.8 | 113.1 |
| 60°   | 147.5 | 139.3 | 132.1 | 126.6 | 119.8 | 114.1 | 111.2 | 107.2 | 104.2 | 101.2 | 100.4 |
| 62.5° | 131.9 | 124.3 | 117.1 | 111.4 | 105.3 | 100.8 | 97.0  | 95.1  | 92.2  | 89.8  | 89.0  |
| 65°   | 115.6 | 109.3 | 102.5 | 96.2  | 92.4  | 87.3  | 85.2  | 82.0  | 80.3  | 79.3  | 79.1  |
| 67.5° | 99.6  | 93.8  | 87.7  | 82.9  | 79.3  | 75.9  | 73.3  | 72.1  | 70.4  | 69.1  | 68.1  |
| 70°   | 85.0  | 79.5  | 74.2  | 70.2  | 67.4  | 64.9  | 63.2  | 60.9  | 59.2  | 57.5  | 55.2  |
| 72.5° | 70.6  | 66.2  | 61.7  | 58.6  | 55.8  | 54.3  | 52.0  | 48.4  | 46.7  | 46.3  | 46.1  |
| 75°   | 57.3  | 52.4  | 49.2  | 47.6  | 45.0  | 41.4  | 39.9  | 39.5  | 39.3  | 38.9  | 38.9  |
| 77.5° | 44.2  | 41.2  | 39.1  | 35.5  | 34.2  | 34.0  | 33.0  | 32.8  | 32.3  | 32.6  | 32.6  |
| 80°   | 32.1  | 30.4  | 27.9  | 26.8  | 26.4  | 26.6  | 26.2  | 26.4  | 26.0  | 26.2  | 25.8  |
| 82.5° | 21.3  | 19.9  | 20.3  | 19.7  | 19.7  | 20.1  | 19.9  | 19.2  | 19.2  | 19.0  | 19.0  |
| 85°   | 12.7  | 12.5  | 12.9  | 12.9  | 12.7  | 12.0  | 12.5  | 12.3  | 11.6  | 11.8  | 11.8  |
| 87.5° | 5.5   | 5.5   | 5.5   | 5.3   | 5.5   | 5.3   | 5.3   | 5.3   | 4.7   | 4.7   | 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: P243434

CATALOG NUMBER: S123RDR-H340D840-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 489.5 | 489.5 | 489.5 | 489.5 |
| 2.5°  | 463.3 | 462.9 | 462.3 | 461.6 |
| 5°    | 439.4 | 437.5 | 437.3 | 436.7 |
| 7.5°  | 417.0 | 416.2 | 414.7 | 416.4 |
| 10°   | 396.5 | 397.2 | 395.7 | 394.0 |
| 12.5° | 375.2 | 373.9 | 371.6 | 372.9 |
| 15°   | 356.4 | 354.3 | 353.0 | 350.0 |
| 17.5° | 336.7 | 335.0 | 335.0 | 333.1 |
| 20°   | 319.6 | 317.9 | 318.3 | 317.1 |
| 22.5° | 305.2 | 304.0 | 302.1 | 302.3 |
| 25°   | 291.7 | 289.8 | 287.7 | 287.9 |
| 27.5° | 276.7 | 275.0 | 274.6 | 273.1 |
| 30°   | 263.4 | 261.9 | 261.7 | 261.7 |
| 32.5° | 250.5 | 249.8 | 248.8 | 248.2 |
| 35°   | 239.3 | 238.4 | 236.7 | 237.2 |
| 37.5° | 225.3 | 224.5 | 224.3 | 224.1 |
| 40°   | 212.2 | 211.6 | 209.9 | 210.1 |
| 42.5° | 199.1 | 198.1 | 197.0 | 196.6 |
| 45°   | 185.0 | 184.7 | 183.0 | 183.5 |
| 47.5° | 171.4 | 171.0 | 170.2 | 169.1 |
| 50°   | 156.4 | 156.2 | 155.6 | 154.3 |
| 52.5° | 141.8 | 141.2 | 139.9 | 138.7 |
| 55°   | 125.3 | 123.4 | 123.7 | 122.6 |
| 57.5° | 111.8 | 111.0 | 109.3 | 108.6 |
| 60°   | 98.7  | 97.9  | 97.7  | 96.8  |
| 62.5° | 87.7  | 86.9  | 86.2  | 86.2  |
| 65°   | 77.8  | 76.7  | 76.5  | 76.5  |
| 67.5° | 66.8  | 65.7  | 65.5  | 65.1  |
| 70°   | 53.1  | 52.8  | 52.4  | 52.4  |
| 72.5° | 45.7  | 45.4  | 45.7  | 44.8  |
| 75°   | 38.9  | 38.7  | 38.7  | 38.9  |
| 77.5° | 32.3  | 32.3  | 32.1  | 32.1  |
| 80°   | 25.6  | 25.8  | 25.6  | 26.2  |
| 82.5° | 19.2  | 18.8  | 19.0  | 18.6  |
| 85°   | 11.8  | 11.8  | 11.4  | 11.4  |
| 87.5° | 4.7   | 4.7   | 4.7   | 4.7   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)