

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: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-23SL-LW-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

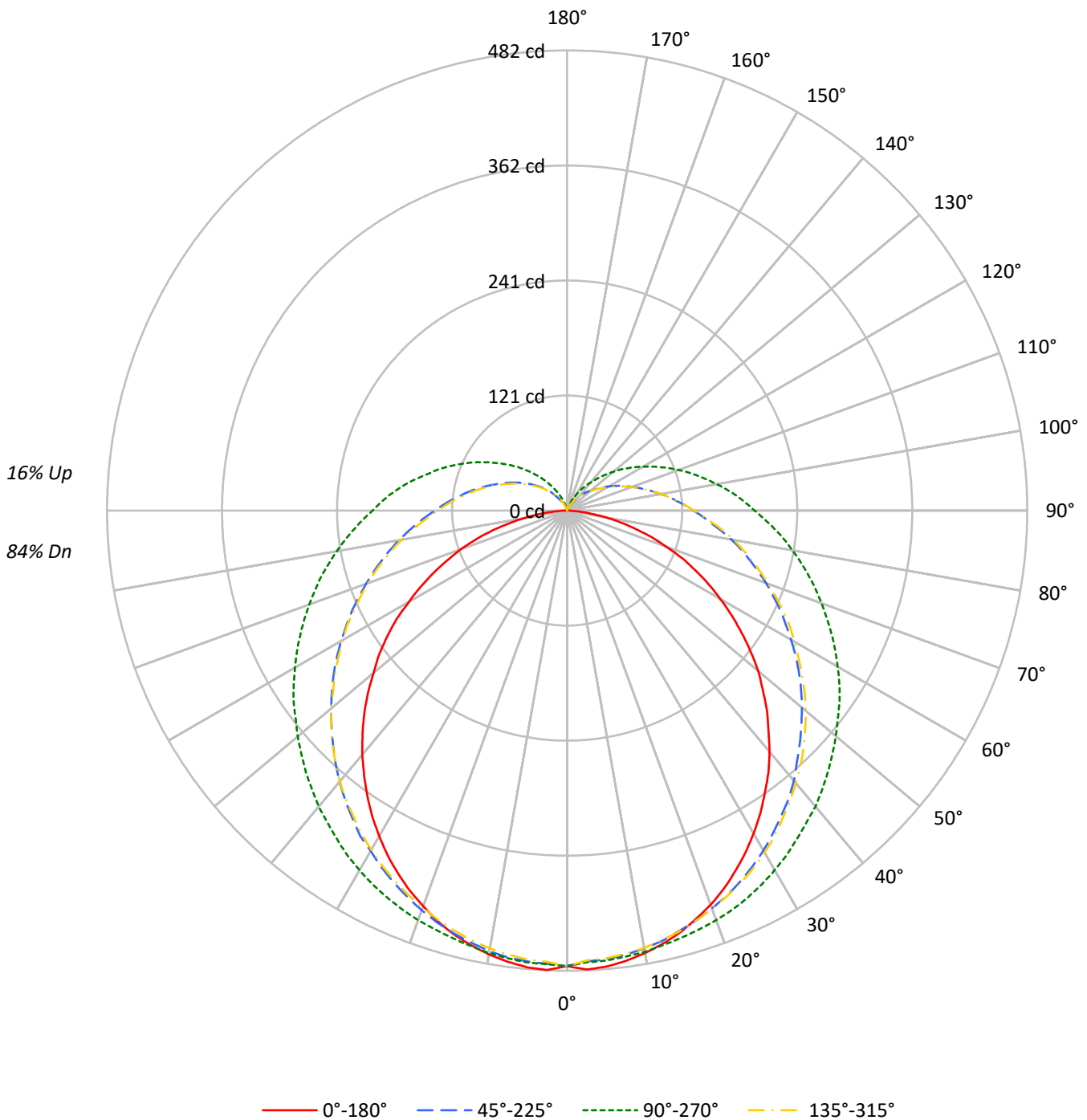
Lumens per Lamp: N/A  
Luminaire Lumens: 2073.0 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 18  
Input Voltage (V): NR  
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: P#  
CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**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   | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 102 | 102 | 102 | 94 | 94 | 94 | 87 | 87 | 87 | 84 |    |    |    |   |
| 1   | 102 | 96  | 91  | 86  | 98  | 92  | 87  | 83  | 85  | 81  | 77  | 78 | 75 | 72 | 72 | 70 | 67 | 64 |    |    |    |   |
| 2   | 92  | 82  | 74  | 68  | 87  | 79  | 72  | 66  | 73  | 67  | 62  | 67 | 62 | 58 | 62 | 58 | 54 | 51 |    |    |    |   |
| 3   | 83  | 71  | 62  | 55  | 79  | 69  | 60  | 54  | 63  | 56  | 51  | 58 | 52 | 48 | 54 | 49 | 45 | 42 |    |    |    |   |
| 4   | 76  | 63  | 53  | 46  | 72  | 60  | 52  | 45  | 56  | 48  | 42  | 51 | 45 | 40 | 47 | 42 | 38 | 35 |    |    |    |   |
| 5   | 69  | 56  | 46  | 39  | 66  | 54  | 45  | 38  | 50  | 42  | 36  | 46 | 39 | 34 | 42 | 37 | 33 | 30 |    |    |    |   |
| 6   | 64  | 50  | 41  | 34  | 61  | 48  | 39  | 33  | 45  | 37  | 31  | 41 | 35 | 30 | 38 | 33 | 28 | 26 |    |    |    |   |
| 7   | 59  | 45  | 36  | 30  | 56  | 43  | 35  | 29  | 40  | 33  | 28  | 38 | 31 | 26 | 35 | 29 | 25 | 23 |    |    |    |   |
| 8   | 55  | 41  | 32  | 26  | 52  | 40  | 31  | 26  | 37  | 30  | 24  | 34 | 28 | 23 | 32 | 26 | 22 | 20 |    |    |    |   |
| 9   | 51  | 37  | 29  | 23  | 49  | 36  | 28  | 23  | 34  | 27  | 22  | 32 | 25 | 21 | 30 | 24 | 20 | 18 |    |    |    |   |
| 10  | 48  | 34  | 26  | 21  | 46  | 33  | 26  | 21  | 31  | 24  | 20  | 29 | 23 | 19 | 27 | 22 | 18 | 16 |    |    |    |   |

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 3855 | 3855 | 3855 | 3855 |
| 5°  | 3877 | 3716 | 3885 | 3731 |
| 10° | 3840 | 3610 | 3853 | 3622 |
| 15° | 3796 | 3520 | 3812 | 3524 |
| 20° | 3736 | 3454 | 3749 | 3454 |
| 25° | 3662 | 3395 | 3685 | 3391 |
| 30° | 3580 | 3335 | 3608 | 3335 |
| 35° | 3484 | 3279 | 3523 | 3283 |
| 40° | 3389 | 3247 | 3430 | 3247 |
| 45° | 3279 | 3212 | 3330 | 3216 |
| 50° | 3166 | 3191 | 3208 | 3200 |
| 55° | 3008 | 3195 | 3102 | 3208 |
| 60° | 2840 | 3205 | 2933 | 3224 |
| 65° | 2652 | 3236 | 2769 | 3268 |
| 70° | 2387 | 3296 | 2574 | 3343 |
| 75° | 2083 | 3403 | 2279 | 3470 |
| 80° | 1613 | 3564 | 1830 | 3645 |
| 85° | 963  | 3819 | 1202 | 3926 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 45.2   | 2.2       |
| 10°-20°   | 129.9  | 6.3       |
| 20°-30°   | 199.2  | 9.6       |
| 30°-40°   | 245.7  | 11.9      |
| 40°-50°   | 266.6  | 12.9      |
| 50°-60°   | 262.7  | 12.7      |
| 60°-70°   | 237.6  | 11.5      |
| 70°-80°   | 197.9  | 9.5       |
| 80°-90°   | 153.3  | 7.4       |
| 90°-100°  | 116.3  | 5.6       |
| 100°-110° | 86.0   | 4.2       |
| 110°-120° | 59.8   | 2.9       |
| 120°-130° | 38.2   | 1.8       |
| 130°-140° | 21.4   | 1.0       |
| 140°-150° | 9.8    | 0.5       |
| 150°-160° | 3.0    | 0.1       |
| 160°-170° | 0.4    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 374.3  | 18.1      |
| 0°-40°    | 620.0  | 29.9      |
| 0°-60°    | 1149.3 | 55.4      |
| 0°-90°    | 1738.1 | 83.8      |
| 90°-120°  | 262.1  | 12.6      |
| 90°-150°  | 331.5  | 16.0      |
| 90°-180°  | 335.0  | 16.2      |
| 0°-180°   | 2073.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 90° | 180° | 270° | 360° | Flux |
|------|-----|-----|------|------|------|------|
| 0°   | 477 | 477 | 477  | 477  | 477  |      |
| 5°   | 479 | 473 | 480  | 475  | 479  | 45   |
| 15°  | 458 | 463 | 460  | 464  | 458  | 129  |
| 25°  | 417 | 447 | 419  | 447  | 417  | 192  |
| 35°  | 361 | 420 | 365  | 420  | 361  | 226  |
| 45°  | 296 | 386 | 300  | 387  | 296  | 228  |
| 55°  | 223 | 348 | 230  | 350  | 223  | 200  |
| 65°  | 148 | 306 | 154  | 308  | 148  | 147  |
| 75°  | 74  | 262 | 82   | 267  | 74   | 79   |
| 85°  | 14  | 218 | 18   | 224  | 14   | 17   |
| 90°  | 0   | 196 | 1    | 204  | 0    | 1    |
| 95°  | 0   | 178 | 0    | 187  | 0    | 0    |
| 105° | 0   | 141 | 0    | 150  | 0    | 1    |
| 115° | 0   | 108 | 0    | 117  | 0    | 0    |
| 125° | 0   | 78  | 0    | 86   | 0    | 0    |
| 135° | 0   | 50  | 0    | 59   | 0    | 0    |
| 145° | 0   | 29  | 0    | 36   | 0    | 0    |
| 155° | 0   | 12  | 0    | 17   | 0    | 0    |
| 165° | 0   | 2   | 0    | 3    | 0    | 0    |
| 175° | 0   | 0   | 0    | 0    | 0    | 0    |
| 180° | 0   | 0   | 0    | 0    | 0    | 0    |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5°   | 481.2 | 481.2 | 480.7 | 479.7 | 480.2 | 481.7 | 480.7 | 478.2 | 476.6 | 472.6 | 473.6 |
| 5°     | 479.2 | 479.2 | 478.7 | 477.6 | 478.2 | 480.2 | 479.2 | 477.1 | 475.1 | 471.6 | 473.1 |
| 7.5°   | 475.6 | 475.6 | 475.1 | 474.1 | 475.1 | 477.1 | 476.1 | 474.1 | 472.6 | 469.1 | 470.6 |
| 10°    | 470.6 | 471.1 | 470.6 | 469.1 | 471.1 | 473.1 | 472.6 | 470.1 | 468.6 | 465.6 | 467.1 |
| 12.5°  | 464.6 | 465.1 | 464.6 | 464.1 | 465.1 | 468.1 | 467.1 | 465.1 | 464.1 | 461.5 | 463.1 |
| 15°    | 457.5 | 458.0 | 457.0 | 457.0 | 458.0 | 461.0 | 461.0 | 459.0 | 458.0 | 455.5 | 458.5 |
| 17.5°  | 448.5 | 449.0 | 448.5 | 448.5 | 449.5 | 452.5 | 453.0 | 452.0 | 451.0 | 450.0 | 453.0 |
| 20°    | 439.4 | 438.9 | 438.9 | 438.4 | 440.4 | 444.9 | 444.4 | 444.4 | 443.4 | 443.4 | 446.9 |
| 22.5°  | 428.8 | 428.8 | 428.3 | 428.3 | 430.8 | 434.9 | 434.9 | 435.9 | 434.9 | 436.9 | 439.9 |
| 25°    | 416.7 | 417.2 | 416.7 | 417.8 | 419.8 | 424.3 | 424.8 | 426.3 | 426.8 | 428.8 | 432.3 |
| 27.5°  | 404.2 | 404.7 | 404.2 | 405.2 | 408.7 | 412.2 | 414.7 | 416.7 | 417.2 | 420.3 | 424.8 |
| 30°    | 390.6 | 390.6 | 391.1 | 392.1 | 396.1 | 401.6 | 403.7 | 406.2 | 406.2 | 411.2 | 415.7 |
| 32.5°  | 376.5 | 376.5 | 376.5 | 378.5 | 383.0 | 389.6 | 392.1 | 395.1 | 396.1 | 401.1 | 406.2 |
| 35°    | 360.9 | 361.4 | 361.4 | 362.9 | 368.9 | 375.5 | 379.0 | 382.5 | 384.5 | 390.6 | 395.6 |
| 37.5°  | 346.3 | 347.3 | 345.8 | 347.8 | 356.3 | 361.9 | 365.9 | 369.4 | 373.0 | 381.0 | 385.0 |
| 40°    | 329.7 | 330.7 | 330.2 | 334.2 | 341.2 | 348.3 | 352.8 | 356.3 | 361.4 | 369.4 | 374.0 |
| 42.5°  | 312.1 | 313.1 | 314.1 | 318.6 | 326.1 | 333.2 | 338.7 | 343.3 | 349.3 | 356.3 | 363.9 |
| 45°    | 295.9 | 295.9 | 297.5 | 303.0 | 311.0 | 318.6 | 325.1 | 330.2 | 337.2 | 344.8 | 352.3 |
| 47.5°  | 277.8 | 278.3 | 280.3 | 286.9 | 295.4 | 304.5 | 310.5 | 317.1 | 324.6 | 332.7 | 341.2 |
| 50°    | 261.2 | 261.2 | 264.2 | 271.3 | 279.3 | 289.4 | 295.9 | 303.5 | 311.6 | 321.1 | 329.7 |
| 52.5°  | 242.1 | 243.1 | 247.6 | 254.2 | 264.7 | 273.8 | 281.4 | 289.4 | 299.0 | 309.0 | 318.6 |
| 55°    | 223.0 | 225.0 | 228.5 | 237.6 | 248.6 | 257.2 | 266.3 | 276.3 | 285.4 | 296.5 | 307.5 |
| 57.5°  | 204.3 | 205.9 | 211.4 | 220.5 | 232.0 | 242.6 | 252.2 | 261.7 | 272.8 | 283.9 | 295.4 |
| 60°    | 185.2 | 187.2 | 193.8 | 202.8 | 215.4 | 226.5 | 237.6 | 247.6 | 259.2 | 270.8 | 282.9 |
| 62.5°  | 167.1 | 168.6 | 176.2 | 186.7 | 199.3 | 211.4 | 222.5 | 234.5 | 247.1 | 258.2 | 270.3 |
| 65°    | 148.0 | 150.5 | 159.0 | 168.6 | 183.2 | 195.3 | 207.9 | 221.0 | 234.0 | 246.1 | 257.7 |
| 67.5°  | 130.4 | 131.9 | 140.9 | 152.0 | 166.6 | 180.2 | 193.3 | 207.4 | 221.0 | 233.5 | 245.1 |
| 70°    | 109.7 | 114.8 | 123.8 | 135.4 | 151.0 | 165.1 | 179.2 | 193.8 | 208.4 | 221.5 | 232.5 |
| 72.5°  | 92.6  | 96.6  | 106.7 | 119.3 | 134.4 | 151.0 | 165.6 | 181.2 | 195.8 | 209.4 | 221.0 |
| 75°    | 74.5  | 78.5  | 90.1  | 104.2 | 119.8 | 137.4 | 152.5 | 168.6 | 183.7 | 197.3 | 209.4 |
| 77.5°  | 56.9  | 61.9  | 74.5  | 89.1  | 106.2 | 124.3 | 139.9 | 156.0 | 171.6 | 186.2 | 198.3 |
| 80°    | 40.8  | 46.3  | 59.9  | 76.5  | 93.1  | 111.2 | 128.3 | 144.5 | 160.1 | 174.7 | 187.2 |
| 82.5°  | 26.2  | 32.2  | 46.8  | 63.4  | 81.0  | 99.2  | 116.8 | 132.9 | 148.5 | 163.1 | 176.2 |
| 85°    | 14.1  | 20.6  | 35.7  | 52.3  | 70.0  | 88.1  | 105.7 | 122.8 | 137.9 | 151.5 | 165.6 |
| 87.5°  | 4.0   | 12.1  | 26.7  | 43.3  | 61.4  | 78.0  | 95.1  | 112.2 | 127.3 | 141.9 | 154.5 |
| 90°    | 0.5   | 7.0   | 20.1  | 35.7  | 53.4  | 69.5  | 86.6  | 102.7 | 117.8 | 132.4 | 145.0 |
| 92.5°  | 0.5   | 4.5   | 15.6  | 29.7  | 45.8  | 62.4  | 79.5  | 95.1  | 109.2 | 123.8 | 136.4 |
| 95°    | 0.5   | 3.5   | 12.6  | 25.2  | 40.3  | 55.9  | 72.0  | 87.1  | 101.7 | 115.3 | 127.8 |
| 97.5°  | 0.5   | 2.5   | 10.1  | 21.6  | 35.2  | 49.8  | 65.4  | 80.5  | 94.6  | 107.7 | 119.3 |
| 100°   | 0.5   | 2.0   | 8.1   | 18.6  | 30.7  | 44.8  | 58.9  | 73.5  | 87.1  | 99.7  | 111.7 |
| 102.5° | 0.5   | 1.5   | 7.0   | 15.6  | 27.2  | 39.8  | 53.4  | 66.9  | 80.0  | 92.1  | 104.2 |
| 105°   | 0.5   | 1.5   | 6.0   | 13.6  | 24.2  | 35.7  | 48.3  | 61.4  | 73.5  | 85.1  | 96.1  |
| 107.5° | 0.5   | 1.0   | 5.0   | 11.6  | 21.1  | 32.2  | 43.8  | 56.4  | 67.4  | 78.5  | 89.1  |
| 110°   | 0.5   | 1.0   | 4.0   | 10.6  | 18.6  | 28.7  | 39.8  | 51.3  | 61.9  | 72.5  | 82.5  |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 5°  | 10° | 15° | 20°  | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  |
|--------|-----|-----|-----|-----|------|------|------|------|------|------|------|
| 112.5° | 0.5 | 1.0 | 3.5 | 9.1 | 16.1 | 25.7 | 35.7 | 46.3 | 56.4 | 66.9 | 76.0 |
| 115°   | 0.5 | 1.0 | 3.0 | 8.1 | 15.1 | 22.1 | 32.2 | 41.8 | 51.8 | 61.4 | 70.0 |
| 117.5° | 0.5 | 1.0 | 2.5 | 6.5 | 13.1 | 20.1 | 28.2 | 37.7 | 46.8 | 55.9 | 63.9 |
| 120°   | 0.5 | 1.0 | 2.0 | 6.0 | 11.6 | 18.1 | 25.2 | 33.7 | 42.3 | 50.8 | 59.4 |
| 122.5° | 0.5 | 0.5 | 2.0 | 5.0 | 10.1 | 16.1 | 23.2 | 29.7 | 37.7 | 45.8 | 53.4 |
| 125°   | 0.5 | 0.5 | 2.0 | 4.5 | 8.6  | 14.6 | 20.6 | 26.7 | 33.7 | 40.8 | 47.3 |
| 127.5° | 0.5 | 0.5 | 1.5 | 3.5 | 7.5  | 12.6 | 18.1 | 24.7 | 29.7 | 36.2 | 42.8 |
| 130°   | 0.5 | 0.5 | 1.5 | 3.0 | 6.5  | 10.6 | 16.1 | 21.6 | 27.7 | 32.2 | 37.7 |
| 132.5° | 0.5 | 0.5 | 1.5 | 2.5 | 5.0  | 8.6  | 13.6 | 18.6 | 24.2 | 29.2 | 33.7 |
| 135°   | 0.5 | 0.5 | 1.0 | 2.0 | 4.0  | 7.0  | 11.1 | 15.6 | 21.1 | 26.2 | 30.7 |
| 137.5° | 0.5 | 0.5 | 1.0 | 2.0 | 3.0  | 6.0  | 8.6  | 12.6 | 17.6 | 22.1 | 26.7 |
| 140°   | 0.5 | 0.5 | 1.0 | 1.5 | 2.5  | 4.5  | 7.0  | 10.1 | 14.1 | 18.1 | 23.2 |
| 142.5° | 0.5 | 0.5 | 0.5 | 1.5 | 2.0  | 3.5  | 5.5  | 8.1  | 11.1 | 14.6 | 18.6 |
| 145°   | 0.5 | 0.5 | 0.5 | 1.5 | 2.0  | 2.5  | 4.5  | 6.5  | 8.6  | 11.1 | 14.6 |
| 147.5° | 0.5 | 0.5 | 0.5 | 1.0 | 1.5  | 2.0  | 3.5  | 5.0  | 6.5  | 8.6  | 10.6 |
| 150°   | 0.5 | 0.5 | 0.5 | 1.0 | 1.5  | 2.0  | 2.5  | 3.5  | 5.0  | 7.0  | 8.6  |
| 152.5° | 0.5 | 0.5 | 0.5 | 1.0 | 1.0  | 1.5  | 2.0  | 2.5  | 3.5  | 5.0  | 6.0  |
| 155°   | 0.5 | 0.5 | 0.5 | 0.5 | 1.0  | 1.5  | 2.0  | 2.0  | 2.5  | 3.5  | 4.5  |
| 157.5° | 0.5 | 0.5 | 0.5 | 0.5 | 1.0  | 1.0  | 1.5  | 1.5  | 2.0  | 2.0  | 3.0  |
| 160°   | 0.5 | 0.5 | 0.5 | 0.5 | 0.5  | 1.0  | 1.0  | 1.5  | 1.5  | 1.5  | 1.5  |
| 162.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5  | 0.5  | 1.0  | 1.0  | 1.0  | 1.5  | 1.5  |
| 165°   | 0.5 | 0.5 | 0.5 | 0.5 | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 1.0  | 1.0  |
| 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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5°   | 473.6 | 474.1 | 475.6 | 475.6 | 474.6 | 474.6 | 474.1 | 473.6 | 474.1 | 475.1 | 475.1 |
| 5°     | 472.6 | 473.1 | 474.6 | 475.1 | 474.1 | 473.6 | 473.6 | 473.1 | 473.6 | 474.6 | 474.6 |
| 7.5°   | 470.6 | 471.1 | 472.6 | 473.1 | 472.1 | 472.1 | 471.6 | 471.1 | 472.1 | 472.6 | 472.6 |
| 10°    | 467.6 | 468.1 | 470.1 | 470.6 | 470.1 | 469.6 | 469.6 | 469.1 | 469.6 | 470.6 | 470.6 |
| 12.5°  | 463.6 | 464.6 | 467.1 | 467.1 | 467.1 | 466.6 | 466.6 | 466.1 | 466.6 | 467.6 | 467.1 |
| 15°    | 459.0 | 461.0 | 463.1 | 464.1 | 464.1 | 464.1 | 463.6 | 463.1 | 464.1 | 464.6 | 464.1 |
| 17.5°  | 454.0 | 456.5 | 459.5 | 460.5 | 460.5 | 461.0 | 460.5 | 460.0 | 461.0 | 461.0 | 460.5 |
| 20°    | 449.0 | 451.5 | 454.5 | 455.5 | 456.5 | 457.0 | 457.0 | 456.5 | 457.0 | 457.5 | 457.0 |
| 22.5°  | 442.4 | 445.4 | 449.0 | 450.5 | 451.5 | 452.5 | 452.5 | 452.5 | 453.0 | 453.5 | 452.5 |
| 25°    | 435.4 | 438.9 | 442.9 | 444.4 | 446.4 | 446.9 | 447.4 | 447.4 | 448.0 | 448.5 | 446.9 |
| 27.5°  | 427.8 | 431.8 | 435.9 | 438.4 | 439.9 | 440.9 | 440.9 | 441.4 | 441.9 | 442.4 | 440.9 |
| 30°    | 418.8 | 424.8 | 428.3 | 430.3 | 432.3 | 433.9 | 434.4 | 434.9 | 435.4 | 435.9 | 434.4 |
| 32.5°  | 410.7 | 415.7 | 420.3 | 422.8 | 425.3 | 427.3 | 427.8 | 427.8 | 428.8 | 428.8 | 427.3 |
| 35°    | 401.1 | 407.2 | 411.7 | 414.2 | 417.2 | 418.8 | 419.8 | 419.8 | 420.8 | 420.8 | 419.3 |
| 37.5°  | 391.6 | 397.6 | 402.7 | 405.7 | 409.2 | 411.2 | 411.7 | 411.7 | 412.7 | 412.7 | 410.7 |
| 40°    | 381.5 | 388.1 | 393.6 | 397.1 | 400.1 | 402.7 | 403.2 | 404.7 | 404.7 | 404.2 | 402.1 |
| 42.5°  | 371.4 | 377.5 | 383.5 | 387.6 | 391.6 | 394.1 | 395.1 | 395.6 | 395.6 | 395.1 | 393.6 |
| 45°    | 360.4 | 367.4 | 373.0 | 378.0 | 382.0 | 384.5 | 386.0 | 386.5 | 386.5 | 385.5 | 384.0 |
| 47.5°  | 349.8 | 356.9 | 362.4 | 367.9 | 372.0 | 375.0 | 376.5 | 377.0 | 376.5 | 376.0 | 374.5 |
| 50°    | 338.7 | 346.8 | 352.3 | 357.9 | 361.9 | 364.4 | 366.9 | 367.4 | 366.9 | 366.4 | 363.4 |
| 52.5°  | 327.2 | 335.7 | 341.8 | 347.3 | 351.8 | 354.8 | 356.9 | 357.4 | 357.4 | 356.3 | 354.3 |
| 55°    | 315.6 | 323.1 | 330.7 | 336.7 | 341.8 | 344.8 | 347.3 | 348.3 | 347.3 | 346.3 | 343.8 |
| 57.5°  | 305.0 | 312.1 | 319.6 | 326.1 | 331.2 | 335.2 | 337.2 | 338.2 | 337.2 | 335.7 | 333.2 |
| 60°    | 292.4 | 300.0 | 308.5 | 314.6 | 320.1 | 324.1 | 325.1 | 327.2 | 326.1 | 324.6 | 322.1 |
| 62.5°  | 280.3 | 289.4 | 297.0 | 304.5 | 309.0 | 313.6 | 315.6 | 316.6 | 315.6 | 314.1 | 311.6 |
| 65°    | 267.8 | 277.8 | 285.4 | 292.9 | 298.0 | 302.5 | 305.0 | 305.5 | 304.5 | 303.0 | 300.5 |
| 67.5°  | 256.2 | 265.8 | 273.8 | 281.9 | 286.4 | 290.9 | 293.4 | 294.4 | 293.4 | 291.4 | 288.9 |
| 70°    | 244.6 | 254.2 | 263.7 | 269.8 | 275.3 | 280.3 | 281.9 | 283.4 | 282.4 | 280.3 | 277.3 |
| 72.5°  | 233.0 | 243.1 | 252.7 | 258.7 | 264.7 | 269.3 | 271.3 | 272.8 | 271.8 | 269.8 | 266.3 |
| 75°    | 221.0 | 231.5 | 241.1 | 247.6 | 253.7 | 258.2 | 260.2 | 261.7 | 260.7 | 258.7 | 254.7 |
| 77.5°  | 209.9 | 220.5 | 229.5 | 236.6 | 242.6 | 246.6 | 250.1 | 250.7 | 249.6 | 247.6 | 243.6 |
| 80°    | 198.3 | 208.9 | 218.4 | 225.5 | 231.5 | 235.6 | 238.1 | 239.6 | 238.6 | 236.6 | 232.5 |
| 82.5°  | 188.2 | 197.8 | 207.4 | 214.4 | 220.5 | 225.5 | 227.5 | 229.0 | 228.5 | 225.5 | 222.5 |
| 85°    | 177.2 | 188.2 | 195.8 | 203.3 | 209.4 | 214.4 | 215.9 | 217.9 | 217.4 | 214.9 | 210.9 |
| 87.5°  | 166.1 | 177.2 | 186.2 | 193.8 | 199.3 | 203.3 | 205.9 | 206.9 | 206.4 | 203.8 | 199.3 |
| 90°    | 157.0 | 167.1 | 176.2 | 184.2 | 188.7 | 193.3 | 195.8 | 196.3 | 196.3 | 193.3 | 189.8 |
| 92.5°  | 148.5 | 158.0 | 167.1 | 174.7 | 180.2 | 184.2 | 186.2 | 187.2 | 186.7 | 184.2 | 180.2 |
| 95°    | 138.9 | 149.5 | 158.0 | 165.6 | 171.1 | 175.2 | 177.2 | 178.2 | 177.7 | 175.2 | 171.1 |
| 97.5°  | 130.9 | 140.4 | 149.0 | 156.0 | 161.6 | 165.6 | 167.6 | 168.6 | 168.6 | 166.1 | 162.1 |
| 100°   | 122.8 | 132.4 | 140.4 | 147.5 | 152.5 | 156.5 | 158.5 | 159.0 | 158.5 | 156.5 | 152.5 |
| 102.5° | 114.8 | 123.8 | 131.9 | 138.4 | 143.9 | 147.5 | 149.5 | 150.0 | 150.0 | 147.5 | 143.4 |
| 105°   | 106.7 | 115.8 | 123.3 | 130.4 | 134.9 | 138.4 | 139.9 | 141.4 | 140.9 | 138.9 | 134.9 |
| 107.5° | 99.2  | 108.2 | 115.3 | 121.8 | 126.3 | 129.9 | 131.4 | 132.9 | 132.4 | 130.4 | 126.3 |
| 110°   | 92.1  | 100.7 | 107.2 | 113.7 | 117.8 | 121.3 | 123.8 | 124.3 | 123.3 | 121.3 | 117.8 |





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 55°  | 60°  | 65°  | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|--------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 85.6 | 93.1 | 99.7 | 105.7 | 110.2 | 112.7 | 114.8 | 115.8 | 114.8 | 112.7 | 110.2 |
| 115°   | 78.5 | 86.1 | 92.6 | 98.1  | 102.2 | 105.2 | 106.7 | 107.7 | 106.7 | 104.7 | 102.2 |
| 117.5° | 72.0 | 79.0 | 85.6 | 91.1  | 94.6  | 97.1  | 98.6  | 99.7  | 98.6  | 97.1  | 94.6  |
| 120°   | 66.4 | 72.5 | 78.5 | 83.6  | 87.6  | 89.6  | 91.1  | 92.1  | 91.6  | 89.6  | 87.1  |
| 122.5° | 59.9 | 66.4 | 72.0 | 77.0  | 80.5  | 82.5  | 83.6  | 84.6  | 84.1  | 82.5  | 80.0  |
| 125°   | 54.4 | 59.9 | 65.4 | 70.0  | 73.5  | 75.5  | 76.5  | 77.5  | 77.0  | 75.5  | 72.5  |
| 127.5° | 48.3 | 54.4 | 58.9 | 63.4  | 65.9  | 69.0  | 69.5  | 70.5  | 70.0  | 68.5  | 65.9  |
| 130°   | 43.8 | 48.3 | 52.8 | 56.9  | 59.9  | 61.9  | 62.9  | 63.4  | 62.4  | 61.4  | 58.9  |
| 132.5° | 38.3 | 43.3 | 47.3 | 50.8  | 52.8  | 54.9  | 55.9  | 56.4  | 56.4  | 54.9  | 52.8  |
| 135°   | 34.2 | 37.7 | 41.3 | 44.8  | 46.8  | 48.8  | 49.8  | 50.3  | 49.8  | 48.8  | 46.8  |
| 137.5° | 30.7 | 33.7 | 36.2 | 39.3  | 41.8  | 42.8  | 43.8  | 43.8  | 43.3  | 42.8  | 41.3  |
| 140°   | 26.7 | 30.2 | 32.7 | 34.7  | 36.7  | 37.2  | 38.3  | 38.3  | 37.7  | 37.2  | 36.2  |
| 142.5° | 22.6 | 25.7 | 28.2 | 30.7  | 32.2  | 33.2  | 33.7  | 34.2  | 33.7  | 33.2  | 31.7  |
| 145°   | 18.1 | 21.6 | 24.2 | 25.7  | 27.7  | 28.2  | 28.7  | 29.2  | 28.7  | 28.2  | 26.7  |
| 147.5° | 14.1 | 17.1 | 19.6 | 21.6  | 23.2  | 23.7  | 24.2  | 24.7  | 24.2  | 23.2  | 22.6  |
| 150°   | 10.1 | 12.6 | 15.6 | 17.6  | 18.6  | 19.6  | 19.6  | 19.6  | 20.1  | 19.1  | 18.1  |
| 152.5° | 8.1  | 9.1  | 11.1 | 13.1  | 14.6  | 15.1  | 15.6  | 15.6  | 15.1  | 15.1  | 14.1  |
| 155°   | 5.5  | 6.5  | 8.1  | 9.6   | 11.1  | 11.6  | 12.1  | 12.1  | 11.6  | 11.6  | 11.1  |
| 157.5° | 3.5  | 4.5  | 5.5  | 6.5   | 8.1   | 8.6   | 9.1   | 9.1   | 9.1   | 8.6   | 8.1   |
| 160°   | 2.0  | 2.5  | 3.0  | 4.0   | 5.0   | 5.5   | 6.0   | 6.0   | 6.0   | 6.0   | 5.5   |
| 162.5° | 1.5  | 1.5  | 1.5  | 2.0   | 2.5   | 3.0   | 3.5   | 3.5   | 3.5   | 3.5   | 3.0   |
| 165°   | 1.0  | 1.0  | 1.0  | 1.0   | 1.0   | 1.5   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |
| 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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5°   | 474.6 | 474.6 | 475.1 | 474.1 | 471.1 | 471.6 | 471.6 | 473.6 | 474.6 | 475.1 | 477.6 |
| 5°     | 473.6 | 473.6 | 474.6 | 473.1 | 470.6 | 470.6 | 470.6 | 472.6 | 473.1 | 474.1 | 476.1 |
| 7.5°   | 472.1 | 472.1 | 472.6 | 471.1 | 468.1 | 468.1 | 467.6 | 469.6 | 470.6 | 471.1 | 473.1 |
| 10°    | 469.6 | 469.6 | 470.1 | 468.6 | 465.1 | 465.1 | 464.6 | 466.1 | 466.6 | 467.6 | 469.1 |
| 12.5°  | 466.1 | 466.1 | 466.1 | 464.6 | 461.0 | 460.5 | 460.0 | 461.5 | 461.5 | 462.0 | 463.6 |
| 15°    | 463.1 | 462.0 | 462.0 | 460.5 | 457.0 | 456.0 | 455.0 | 455.5 | 456.5 | 456.0 | 457.0 |
| 17.5°  | 459.5 | 458.5 | 457.5 | 456.0 | 451.5 | 450.0 | 449.0 | 449.5 | 449.0 | 448.5 | 449.5 |
| 20°    | 455.5 | 454.0 | 453.5 | 451.0 | 446.4 | 443.9 | 441.9 | 440.9 | 441.4 | 439.9 | 440.4 |
| 22.5°  | 451.0 | 449.0 | 448.0 | 444.9 | 440.4 | 437.4 | 434.9 | 432.9 | 432.3 | 430.3 | 430.8 |
| 25°    | 445.4 | 442.9 | 441.4 | 438.9 | 433.9 | 430.3 | 427.3 | 424.3 | 422.8 | 420.3 | 419.8 |
| 27.5°  | 438.9 | 436.4 | 434.4 | 431.8 | 426.8 | 422.3 | 418.8 | 414.7 | 412.7 | 409.7 | 408.2 |
| 30°    | 432.3 | 429.3 | 426.3 | 424.3 | 418.8 | 413.7 | 408.2 | 404.7 | 401.6 | 398.1 | 395.6 |
| 32.5°  | 424.3 | 421.3 | 418.3 | 415.2 | 410.2 | 404.2 | 399.6 | 394.1 | 390.6 | 386.5 | 383.5 |
| 35°    | 416.2 | 412.2 | 409.2 | 405.2 | 400.6 | 393.6 | 388.1 | 382.5 | 378.0 | 373.5 | 369.9 |
| 37.5°  | 407.2 | 404.2 | 399.6 | 396.1 | 390.6 | 383.5 | 377.5 | 370.4 | 366.4 | 360.4 | 355.8 |
| 40°    | 398.6 | 395.1 | 390.6 | 386.0 | 380.5 | 372.5 | 365.9 | 357.9 | 353.3 | 346.3 | 341.8 |
| 42.5°  | 390.1 | 385.0 | 380.5 | 375.5 | 369.4 | 361.9 | 353.8 | 345.8 | 339.7 | 333.2 | 326.7 |
| 45°    | 380.5 | 375.0 | 369.4 | 363.9 | 357.9 | 350.3 | 341.8 | 333.2 | 325.6 | 319.6 | 311.6 |
| 47.5°  | 370.4 | 364.9 | 358.4 | 352.3 | 345.8 | 338.2 | 329.2 | 320.1 | 312.1 | 305.0 | 296.5 |
| 50°    | 360.4 | 354.8 | 347.8 | 341.2 | 333.7 | 326.1 | 316.6 | 306.0 | 297.5 | 288.4 | 280.9 |
| 52.5°  | 349.8 | 344.3 | 337.7 | 329.2 | 321.1 | 313.6 | 303.5 | 292.4 | 282.9 | 275.3 | 265.8 |
| 55°    | 339.2 | 333.7 | 326.1 | 317.6 | 309.5 | 300.0 | 290.4 | 279.3 | 268.8 | 259.7 | 250.1 |
| 57.5°  | 328.2 | 323.1 | 314.6 | 307.5 | 297.5 | 287.4 | 277.3 | 266.8 | 255.2 | 244.6 | 233.5 |
| 60°    | 317.1 | 311.6 | 303.5 | 294.9 | 284.9 | 274.8 | 264.2 | 252.7 | 240.6 | 229.0 | 218.9 |
| 62.5°  | 307.0 | 300.0 | 292.4 | 283.4 | 272.8 | 263.2 | 251.2 | 238.6 | 226.5 | 214.4 | 202.3 |
| 65°    | 295.4 | 287.9 | 280.9 | 271.8 | 260.7 | 249.6 | 237.6 | 225.0 | 211.9 | 198.8 | 186.7 |
| 67.5°  | 283.9 | 276.3 | 268.8 | 259.7 | 248.1 | 236.6 | 224.0 | 211.4 | 196.8 | 184.2 | 170.1 |
| 70°    | 272.3 | 266.3 | 256.7 | 247.1 | 236.6 | 224.0 | 211.4 | 197.8 | 182.7 | 169.1 | 154.5 |
| 72.5°  | 260.7 | 254.7 | 245.1 | 235.0 | 225.0 | 211.9 | 198.3 | 184.7 | 170.6 | 155.0 | 139.4 |
| 75°    | 249.6 | 242.1 | 233.5 | 224.0 | 213.4 | 199.8 | 186.2 | 172.1 | 155.5 | 140.9 | 124.8 |
| 77.5°  | 239.1 | 232.0 | 223.5 | 212.9 | 201.3 | 188.2 | 174.1 | 159.6 | 142.9 | 127.3 | 109.7 |
| 80°    | 227.5 | 220.5 | 211.9 | 201.3 | 189.8 | 177.2 | 162.1 | 147.0 | 130.9 | 113.7 | 95.6  |
| 82.5°  | 216.4 | 209.9 | 200.3 | 190.8 | 178.2 | 165.6 | 150.5 | 135.4 | 118.3 | 101.7 | 84.1  |
| 85°    | 204.8 | 198.3 | 189.2 | 179.2 | 167.1 | 153.5 | 139.4 | 124.3 | 107.2 | 90.1  | 72.5  |
| 87.5°  | 194.8 | 187.2 | 178.2 | 168.1 | 156.0 | 142.9 | 129.4 | 113.2 | 96.6  | 80.0  | 61.9  |
| 90°    | 184.2 | 177.2 | 168.1 | 158.0 | 146.0 | 132.9 | 118.8 | 103.7 | 87.6  | 70.5  | 53.4  |
| 92.5°  | 175.2 | 167.6 | 159.0 | 149.0 | 136.9 | 124.3 | 110.2 | 95.1  | 79.5  | 62.9  | 46.3  |
| 95°    | 166.1 | 158.5 | 150.5 | 140.4 | 128.3 | 115.8 | 101.7 | 87.1  | 72.0  | 55.9  | 40.3  |
| 97.5°  | 156.0 | 149.5 | 141.4 | 131.9 | 119.8 | 107.7 | 94.1  | 80.0  | 65.4  | 49.8  | 35.2  |
| 100°   | 148.0 | 140.4 | 132.9 | 122.8 | 111.7 | 100.2 | 86.6  | 73.0  | 58.9  | 44.3  | 30.7  |
| 102.5° | 138.9 | 131.9 | 124.3 | 114.8 | 103.7 | 92.1  | 79.5  | 66.4  | 53.4  | 39.8  | 26.7  |
| 105°   | 130.4 | 123.8 | 115.8 | 106.7 | 96.1  | 85.1  | 73.0  | 60.9  | 48.3  | 35.2  | 23.7  |
| 107.5° | 121.8 | 115.3 | 107.7 | 99.2  | 89.1  | 78.0  | 66.9  | 54.9  | 43.3  | 31.7  | 21.1  |
| 110°   | 113.2 | 107.2 | 100.2 | 91.6  | 82.0  | 72.0  | 61.4  | 50.3  | 38.8  | 28.2  | 18.6  |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 110°  | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|-------|------|------|------|------|------|------|------|------|------|------|
| 112.5° | 105.7 | 99.7 | 92.6 | 84.6 | 75.5 | 65.9 | 55.9 | 45.3 | 34.7 | 25.2 | 16.1 |
| 115°   | 98.1  | 92.6 | 85.6 | 78.5 | 69.5 | 60.4 | 50.8 | 40.8 | 31.2 | 22.6 | 14.1 |
| 117.5° | 90.6  | 85.1 | 78.5 | 71.5 | 63.4 | 54.9 | 45.8 | 36.2 | 28.2 | 20.1 | 12.6 |
| 120°   | 83.0  | 78.0 | 72.0 | 65.4 | 58.4 | 49.8 | 40.8 | 32.7 | 25.2 | 17.6 | 11.1 |
| 122.5° | 76.0  | 71.5 | 65.9 | 59.9 | 52.3 | 44.3 | 36.7 | 29.7 | 22.6 | 15.6 | 9.1  |
| 125°   | 69.5  | 64.9 | 59.9 | 53.9 | 46.8 | 39.8 | 33.2 | 26.7 | 19.6 | 13.6 | 7.5  |
| 127.5° | 62.9  | 58.4 | 53.4 | 47.8 | 42.3 | 35.7 | 29.7 | 23.7 | 17.6 | 12.1 | 6.5  |
| 130°   | 56.4  | 52.3 | 47.8 | 43.3 | 37.7 | 31.7 | 26.7 | 20.6 | 15.1 | 9.6  | 5.5  |
| 132.5° | 49.8  | 46.8 | 42.8 | 38.3 | 33.2 | 28.7 | 23.2 | 18.1 | 13.1 | 8.6  | 5.0  |
| 135°   | 44.3  | 41.3 | 37.7 | 33.7 | 29.7 | 25.2 | 20.1 | 15.6 | 11.1 | 7.0  | 4.0  |
| 137.5° | 39.3  | 36.7 | 33.2 | 29.7 | 26.2 | 21.6 | 17.6 | 13.1 | 9.1  | 6.0  | 3.0  |
| 140°   | 34.7  | 32.2 | 29.2 | 25.7 | 22.6 | 18.6 | 14.6 | 10.6 | 8.1  | 5.0  | 2.5  |
| 142.5° | 30.2  | 27.7 | 25.2 | 22.1 | 19.1 | 15.6 | 12.1 | 9.1  | 6.5  | 4.0  | 2.5  |
| 145°   | 25.7  | 23.7 | 21.1 | 18.6 | 15.6 | 12.6 | 10.1 | 7.5  | 5.0  | 3.0  | 2.0  |
| 147.5° | 21.1  | 19.6 | 17.1 | 15.1 | 12.6 | 10.1 | 8.1  | 6.0  | 4.0  | 2.5  | 1.5  |
| 150°   | 17.1  | 15.6 | 13.6 | 11.6 | 10.1 | 8.1  | 6.5  | 4.5  | 3.0  | 2.5  | 1.5  |
| 152.5° | 13.1  | 12.1 | 10.6 | 9.6  | 8.1  | 6.0  | 4.5  | 3.5  | 2.5  | 2.0  | 1.0  |
| 155°   | 10.6  | 9.6  | 8.6  | 7.0  | 6.0  | 4.5  | 3.5  | 2.5  | 2.0  | 1.5  | 1.0  |
| 157.5° | 7.5   | 7.0  | 6.0  | 5.0  | 4.0  | 3.0  | 2.5  | 2.5  | 1.5  | 1.0  | 0.5  |
| 160°   | 5.0   | 4.5  | 4.0  | 3.0  | 2.5  | 2.5  | 2.0  | 1.5  | 1.0  | 1.0  | 0.5  |
| 162.5° | 3.0   | 2.5  | 2.5  | 2.5  | 2.0  | 2.0  | 1.5  | 1.0  | 1.0  | 0.5  | 0.5  |
| 165°   | 2.0   | 2.0  | 2.0  | 1.5  | 1.5  | 1.5  | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  |
| 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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 165°  | 170°  | 175°  | 180°  | 185°  | 190°  | 195°  | 200°  | 205°  | 210°  | 215°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5°   | 477.6 | 476.1 | 478.2 | 481.7 | 482.2 | 481.7 | 480.7 | 482.2 | 484.2 | 483.7 | 480.2 |
| 5°     | 476.6 | 474.6 | 476.6 | 480.2 | 480.2 | 479.7 | 479.2 | 480.7 | 482.7 | 482.2 | 479.2 |
| 7.5°   | 473.6 | 471.6 | 473.6 | 476.6 | 477.1 | 476.1 | 476.1 | 477.6 | 479.7 | 479.2 | 476.6 |
| 10°    | 469.6 | 467.6 | 468.6 | 472.1 | 473.1 | 472.1 | 472.1 | 473.6 | 476.1 | 475.6 | 472.6 |
| 12.5°  | 463.6 | 462.0 | 463.1 | 466.1 | 467.1 | 466.6 | 466.1 | 468.1 | 470.6 | 470.6 | 467.6 |
| 15°    | 457.0 | 455.0 | 456.0 | 459.5 | 460.0 | 459.0 | 459.5 | 461.0 | 464.1 | 464.1 | 461.5 |
| 17.5°  | 449.5 | 446.9 | 448.5 | 451.0 | 451.5 | 451.5 | 451.5 | 453.5 | 457.0 | 456.5 | 454.5 |
| 20°    | 440.9 | 437.4 | 438.4 | 440.9 | 441.9 | 441.9 | 441.9 | 445.4 | 448.0 | 448.0 | 445.9 |
| 22.5°  | 430.8 | 428.3 | 428.3 | 430.8 | 432.3 | 431.8 | 431.8 | 434.9 | 438.4 | 437.9 | 437.9 |
| 25°    | 419.3 | 417.2 | 416.2 | 419.3 | 419.8 | 420.3 | 421.3 | 424.3 | 428.3 | 428.3 | 428.8 |
| 27.5°  | 407.2 | 405.2 | 404.7 | 407.2 | 407.7 | 408.2 | 409.2 | 412.7 | 416.7 | 417.2 | 418.3 |
| 30°    | 395.6 | 392.6 | 391.6 | 393.6 | 394.6 | 395.1 | 395.1 | 400.6 | 404.2 | 405.7 | 407.7 |
| 32.5°  | 382.0 | 379.0 | 376.5 | 380.0 | 380.5 | 381.5 | 382.0 | 387.6 | 391.6 | 394.1 | 397.1 |
| 35°    | 368.4 | 363.4 | 362.4 | 364.9 | 365.9 | 366.4 | 367.4 | 373.5 | 379.0 | 381.0 | 385.0 |
| 37.5°  | 353.3 | 349.8 | 346.8 | 349.3 | 350.3 | 350.8 | 353.8 | 359.4 | 364.9 | 367.9 | 372.0 |
| 40°    | 339.2 | 334.7 | 332.2 | 333.7 | 334.7 | 335.2 | 338.7 | 344.8 | 351.3 | 354.8 | 359.9 |
| 42.5°  | 323.6 | 317.6 | 315.6 | 317.1 | 317.6 | 319.1 | 322.1 | 330.2 | 336.7 | 341.8 | 345.8 |
| 45°    | 308.0 | 303.5 | 299.0 | 300.5 | 301.0 | 302.0 | 306.5 | 315.1 | 322.1 | 328.2 | 332.7 |
| 47.5°  | 291.9 | 286.4 | 281.9 | 282.9 | 284.9 | 285.4 | 290.4 | 300.5 | 307.0 | 313.6 | 319.6 |
| 50°    | 275.8 | 268.3 | 264.7 | 264.7 | 265.8 | 268.3 | 274.8 | 284.9 | 291.9 | 299.5 | 306.0 |
| 52.5°  | 259.2 | 252.2 | 248.1 | 248.6 | 249.6 | 252.7 | 258.7 | 268.8 | 276.8 | 284.9 | 292.9 |
| 55°    | 242.6 | 235.0 | 231.0 | 230.0 | 231.0 | 235.0 | 242.1 | 252.7 | 260.7 | 270.3 | 278.8 |
| 57.5°  | 226.0 | 216.9 | 213.4 | 211.9 | 212.9 | 217.9 | 225.0 | 236.1 | 246.1 | 255.2 | 265.2 |
| 60°    | 207.9 | 200.8 | 194.8 | 191.3 | 193.8 | 200.3 | 207.9 | 219.4 | 230.0 | 240.1 | 251.2 |
| 62.5°  | 192.3 | 183.2 | 176.7 | 173.1 | 175.7 | 181.2 | 191.8 | 202.8 | 214.4 | 226.0 | 237.1 |
| 65°    | 174.7 | 165.6 | 158.0 | 154.5 | 157.0 | 163.6 | 174.1 | 186.2 | 198.8 | 210.4 | 223.5 |
| 67.5°  | 157.5 | 148.0 | 138.9 | 135.4 | 138.4 | 145.5 | 157.0 | 170.6 | 184.2 | 196.3 | 210.4 |
| 70°    | 140.9 | 130.4 | 120.8 | 118.3 | 120.3 | 129.9 | 140.9 | 154.5 | 168.6 | 182.7 | 197.3 |
| 72.5°  | 125.8 | 112.7 | 102.7 | 99.7  | 102.2 | 112.7 | 125.3 | 139.4 | 154.5 | 169.6 | 185.2 |
| 75°    | 108.2 | 96.1  | 85.1  | 81.5  | 84.6  | 94.1  | 109.7 | 124.8 | 140.9 | 157.0 | 171.6 |
| 77.5°  | 94.1  | 80.0  | 68.5  | 62.9  | 67.9  | 80.0  | 95.1  | 111.2 | 127.8 | 144.5 | 161.1 |
| 80°    | 79.5  | 64.9  | 52.3  | 46.3  | 51.8  | 64.9  | 80.0  | 97.6  | 116.3 | 132.9 | 148.0 |
| 82.5°  | 66.4  | 50.8  | 37.7  | 31.2  | 37.2  | 51.8  | 68.5  | 86.1  | 104.2 | 120.8 | 138.4 |
| 85°    | 54.4  | 38.3  | 24.7  | 17.6  | 26.2  | 39.3  | 56.9  | 75.0  | 93.6  | 110.7 | 127.8 |
| 87.5°  | 44.3  | 28.7  | 15.1  | 7.5   | 16.1  | 30.7  | 47.3  | 65.4  | 84.1  | 101.2 | 117.3 |
| 90°    | 36.2  | 20.6  | 8.1   | 1.0   | 9.6   | 23.2  | 39.3  | 56.9  | 74.5  | 92.1  | 108.2 |
| 92.5°  | 29.7  | 15.6  | 4.5   | 0.5   | 6.0   | 18.6  | 33.7  | 50.3  | 67.4  | 84.6  | 100.2 |
| 95°    | 24.7  | 12.1  | 3.0   | 0.5   | 4.5   | 14.6  | 28.7  | 44.8  | 60.9  | 77.5  | 93.1  |
| 97.5°  | 21.1  | 10.1  | 2.5   | 0.5   | 3.5   | 12.6  | 24.7  | 39.8  | 55.4  | 71.0  | 86.1  |
| 100°   | 18.1  | 8.1   | 2.0   | 0.5   | 3.0   | 10.6  | 21.6  | 35.2  | 49.8  | 64.9  | 79.5  |
| 102.5° | 15.6  | 6.5   | 1.5   | 0.5   | 2.5   | 9.1   | 19.1  | 31.7  | 44.8  | 59.4  | 73.5  |
| 105°   | 13.6  | 5.5   | 1.5   | 0.5   | 2.0   | 8.1   | 17.1  | 28.2  | 41.3  | 54.4  | 67.9  |
| 107.5° | 11.6  | 4.5   | 1.0   | 0.5   | 1.5   | 6.5   | 15.1  | 25.7  | 37.2  | 49.8  | 62.4  |
| 110°   | 10.1  | 4.0   | 1.0   | 0.5   | 1.5   | 6.0   | 13.1  | 23.2  | 33.7  | 45.3  | 57.4  |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 165° | 170° | 175° | 180° | 185° | 190° | 195° | 200° | 205° | 210° | 215° |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 112.5° | 8.6  | 3.0  | 1.0  | 0.5  | 1.0  | 5.0  | 11.6 | 20.6 | 30.7 | 41.3 | 52.8 |
| 115°   | 7.5  | 2.5  | 0.5  | 0.5  | 1.0  | 4.5  | 10.6 | 18.6 | 27.7 | 37.7 | 48.3 |
| 117.5° | 6.0  | 2.0  | 0.5  | 0.5  | 0.5  | 3.5  | 9.1  | 16.6 | 25.2 | 34.7 | 44.3 |
| 120°   | 5.0  | 2.0  | 0.5  | 0.5  | 0.5  | 3.0  | 8.1  | 14.6 | 22.6 | 31.2 | 40.3 |
| 122.5° | 4.5  | 1.5  | 0.5  | 0.5  | 0.5  | 2.5  | 7.0  | 13.1 | 20.1 | 28.2 | 36.7 |
| 125°   | 4.0  | 1.5  | 0.5  | 0.5  | 0.5  | 2.0  | 6.0  | 11.6 | 18.1 | 25.2 | 33.2 |
| 127.5° | 3.0  | 1.5  | 0.5  | 0.5  | 0.5  | 1.5  | 5.5  | 10.1 | 16.1 | 22.6 | 29.7 |
| 130°   | 2.5  | 1.0  | 0.5  | 0.5  | 0.5  | 1.5  | 4.5  | 9.1  | 14.1 | 20.1 | 26.7 |
| 132.5° | 2.0  | 1.0  | 0.5  | 0.5  | 0.5  | 1.0  | 3.5  | 7.0  | 12.1 | 17.6 | 23.7 |
| 135°   | 2.0  | 1.0  | 0.5  | 0.5  | 0.5  | 1.0  | 2.5  | 6.0  | 10.1 | 15.1 | 20.1 |
| 137.5° | 2.0  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 2.0  | 4.5  | 8.1  | 12.1 | 16.6 |
| 140°   | 1.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.5  | 3.5  | 6.5  | 10.1 | 14.1 |
| 142.5° | 1.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.5  | 2.5  | 5.0  | 8.1  | 11.1 |
| 145°   | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 2.0  | 4.0  | 6.0  | 9.1  |
| 147.5° | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 1.5  | 3.0  | 5.0  | 7.0  |
| 150°   | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 1.5  | 2.0  | 3.5  | 5.5  |
| 152.5° | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 1.0  | 1.5  | 2.5  | 3.5  |
| 155°   | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 1.5  | 2.0  | 2.5  |
| 157.5° | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 1.0  | 1.5  | 2.0  |
| 160°   | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 1.0  | 1.5  |
| 162.5° | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 1.0  | 1.0  |
| 165°   | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  |
| 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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 220°  | 225°  | 230°  | 235°  | 240°  | 245°  | 250°  | 255°  | 260°  | 265°  | 270°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5°   | 478.7 | 475.1 | 476.1 | 475.6 | 476.6 | 478.2 | 478.2 | 477.6 | 477.6 | 476.6 | 475.6 |
| 5°     | 477.6 | 474.1 | 475.6 | 475.1 | 476.1 | 477.6 | 477.6 | 477.1 | 477.1 | 475.6 | 475.1 |
| 7.5°   | 474.6 | 472.1 | 473.1 | 473.1 | 474.1 | 475.6 | 475.6 | 475.1 | 475.1 | 473.6 | 473.1 |
| 10°    | 471.6 | 468.6 | 470.1 | 470.1 | 471.1 | 473.1 | 473.1 | 472.6 | 472.6 | 471.1 | 470.6 |
| 12.5°  | 466.6 | 463.6 | 466.1 | 466.6 | 467.6 | 469.6 | 469.1 | 469.1 | 469.1 | 467.6 | 467.1 |
| 15°    | 460.5 | 458.5 | 461.0 | 461.5 | 463.1 | 465.6 | 465.6 | 465.6 | 465.6 | 464.1 | 463.6 |
| 17.5°  | 454.0 | 452.5 | 455.0 | 456.0 | 458.0 | 460.5 | 460.5 | 461.0 | 461.5 | 460.5 | 460.0 |
| 20°    | 446.4 | 445.4 | 448.0 | 450.0 | 453.0 | 455.5 | 456.5 | 457.0 | 458.0 | 457.0 | 456.5 |
| 22.5°  | 437.9 | 437.9 | 441.4 | 443.4 | 446.9 | 449.5 | 451.0 | 452.5 | 453.5 | 452.5 | 452.0 |
| 25°    | 428.3 | 429.8 | 433.4 | 436.9 | 440.9 | 443.4 | 444.9 | 446.9 | 448.0 | 447.4 | 446.9 |
| 27.5°  | 419.3 | 421.3 | 425.8 | 429.3 | 432.9 | 436.9 | 438.4 | 440.9 | 441.9 | 441.9 | 441.4 |
| 30°    | 408.7 | 411.7 | 416.7 | 420.8 | 425.3 | 429.3 | 431.3 | 433.9 | 435.4 | 434.4 | 434.9 |
| 32.5°  | 398.6 | 403.7 | 407.7 | 412.2 | 417.2 | 421.3 | 423.8 | 426.8 | 428.3 | 427.8 | 428.3 |
| 35°    | 387.6 | 392.6 | 398.1 | 402.7 | 408.7 | 412.7 | 416.2 | 418.8 | 420.8 | 420.3 | 420.3 |
| 37.5°  | 375.5 | 382.0 | 387.6 | 393.6 | 399.1 | 403.7 | 407.2 | 410.2 | 412.2 | 412.2 | 412.2 |
| 40°    | 363.9 | 370.9 | 376.5 | 383.5 | 390.6 | 394.6 | 398.6 | 401.6 | 403.7 | 404.2 | 404.7 |
| 42.5°  | 351.3 | 358.9 | 365.4 | 373.0 | 380.0 | 385.0 | 389.6 | 393.1 | 395.1 | 396.1 | 395.6 |
| 45°    | 339.7 | 346.8 | 354.3 | 362.9 | 369.4 | 374.5 | 380.0 | 384.0 | 386.0 | 386.5 | 387.1 |
| 47.5°  | 326.7 | 334.7 | 343.3 | 351.8 | 358.4 | 364.9 | 369.9 | 374.0 | 376.0 | 377.5 | 377.5 |
| 50°    | 314.1 | 322.6 | 332.2 | 341.2 | 348.3 | 354.8 | 359.9 | 364.4 | 366.9 | 367.9 | 368.4 |
| 52.5°  | 302.5 | 310.5 | 320.6 | 329.7 | 336.7 | 343.3 | 349.8 | 354.8 | 357.4 | 358.4 | 358.4 |
| 55°    | 288.4 | 298.5 | 309.5 | 318.1 | 325.6 | 333.2 | 339.7 | 344.8 | 347.3 | 348.8 | 349.8 |
| 57.5°  | 275.3 | 285.9 | 297.5 | 306.5 | 315.6 | 322.6 | 328.7 | 335.2 | 337.2 | 339.2 | 339.7 |
| 60°    | 262.7 | 273.3 | 284.4 | 294.4 | 303.5 | 311.0 | 318.1 | 323.6 | 327.2 | 328.2 | 329.2 |
| 62.5°  | 249.6 | 260.7 | 272.3 | 282.4 | 291.9 | 301.0 | 307.5 | 312.6 | 316.6 | 318.1 | 319.1 |
| 65°    | 237.1 | 248.6 | 260.2 | 270.8 | 280.9 | 289.9 | 296.5 | 301.5 | 305.5 | 308.0 | 308.5 |
| 67.5°  | 223.5 | 236.1 | 248.1 | 259.2 | 269.3 | 278.8 | 285.4 | 290.4 | 294.4 | 297.5 | 298.0 |
| 70°    | 210.9 | 224.0 | 236.1 | 248.1 | 258.2 | 267.8 | 274.8 | 279.8 | 284.4 | 286.4 | 287.4 |
| 72.5°  | 198.8 | 212.4 | 225.0 | 237.1 | 247.1 | 256.7 | 264.2 | 269.3 | 273.8 | 276.3 | 276.8 |
| 75°    | 187.2 | 200.8 | 214.4 | 226.0 | 236.6 | 246.1 | 253.7 | 259.2 | 263.2 | 265.8 | 266.8 |
| 77.5°  | 175.7 | 189.8 | 203.3 | 214.9 | 226.0 | 235.6 | 242.1 | 248.6 | 252.7 | 255.7 | 255.7 |
| 80°    | 164.1 | 178.7 | 192.8 | 204.3 | 215.4 | 224.0 | 231.5 | 238.1 | 242.1 | 245.1 | 245.1 |
| 82.5°  | 154.0 | 168.1 | 181.7 | 193.3 | 204.3 | 213.9 | 221.5 | 227.5 | 232.0 | 234.0 | 234.5 |
| 85°    | 142.4 | 158.0 | 170.6 | 183.2 | 193.8 | 202.8 | 210.4 | 216.9 | 221.0 | 223.0 | 224.0 |
| 87.5°  | 132.9 | 148.0 | 161.6 | 172.6 | 183.2 | 192.3 | 200.8 | 206.4 | 210.4 | 212.9 | 213.9 |
| 90°    | 123.8 | 138.4 | 152.0 | 163.1 | 174.1 | 182.7 | 190.8 | 196.3 | 200.8 | 202.8 | 203.8 |
| 92.5°  | 115.8 | 130.4 | 143.4 | 154.5 | 165.1 | 174.7 | 182.2 | 187.7 | 191.8 | 193.8 | 195.3 |
| 95°    | 108.2 | 122.3 | 134.9 | 147.0 | 157.0 | 165.6 | 173.6 | 179.2 | 183.7 | 185.2 | 186.7 |
| 97.5°  | 100.7 | 114.3 | 126.8 | 138.4 | 149.0 | 157.0 | 164.6 | 170.1 | 173.6 | 176.2 | 177.7 |
| 100°   | 94.1  | 107.2 | 119.3 | 130.4 | 140.4 | 148.0 | 156.0 | 161.1 | 164.6 | 166.6 | 168.6 |
| 102.5° | 87.1  | 100.2 | 111.7 | 122.3 | 132.9 | 139.9 | 147.5 | 152.5 | 155.5 | 159.0 | 159.0 |
| 105°   | 81.0  | 93.1  | 104.7 | 114.8 | 123.8 | 132.4 | 138.9 | 143.9 | 147.5 | 150.0 | 150.0 |
| 107.5° | 74.5  | 86.6  | 97.6  | 108.2 | 116.8 | 124.8 | 130.9 | 135.4 | 139.4 | 140.9 | 142.4 |
| 110°   | 69.5  | 80.0  | 91.1  | 101.2 | 109.2 | 116.8 | 122.8 | 127.8 | 131.4 | 132.9 | 133.9 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 220° | 225° | 230° | 235° | 240°  | 245°  | 250°  | 255°  | 260°  | 265°  | 270°  |
|--------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 63.4 | 74.5 | 84.6 | 94.1 | 102.2 | 109.2 | 115.3 | 119.3 | 122.8 | 124.8 | 125.3 |
| 115°   | 58.4 | 69.0 | 78.0 | 87.1 | 95.6  | 101.7 | 107.2 | 111.2 | 114.8 | 116.3 | 117.3 |
| 117.5° | 53.9 | 63.4 | 72.5 | 80.0 | 88.1  | 94.6  | 100.2 | 103.7 | 106.7 | 108.7 | 109.7 |
| 120°   | 49.3 | 58.4 | 66.4 | 74.0 | 81.5  | 87.6  | 92.6  | 96.1  | 99.7  | 101.2 | 101.2 |
| 122.5° | 44.8 | 53.4 | 60.9 | 67.9 | 75.0  | 80.5  | 86.1  | 89.1  | 92.1  | 93.6  | 93.6  |
| 125°   | 40.8 | 48.8 | 55.9 | 62.4 | 69.0  | 74.0  | 78.5  | 82.0  | 85.1  | 86.1  | 86.1  |
| 127.5° | 36.7 | 44.3 | 50.8 | 56.9 | 62.4  | 67.4  | 72.0  | 75.5  | 78.0  | 79.0  | 79.0  |
| 130°   | 33.2 | 39.8 | 45.8 | 51.8 | 57.4  | 61.4  | 65.9  | 69.0  | 70.5  | 72.0  | 72.5  |
| 132.5° | 29.7 | 35.7 | 41.3 | 46.3 | 51.8  | 55.9  | 59.4  | 62.4  | 63.9  | 65.4  | 65.9  |
| 135°   | 26.2 | 31.7 | 36.7 | 41.8 | 46.3  | 50.3  | 53.4  | 55.9  | 57.9  | 58.9  | 59.4  |
| 137.5° | 22.1 | 28.2 | 32.7 | 36.7 | 41.8  | 44.8  | 48.3  | 49.8  | 51.8  | 52.8  | 52.8  |
| 140°   | 18.6 | 23.2 | 28.2 | 32.2 | 36.2  | 39.3  | 42.3  | 44.8  | 46.3  | 46.8  | 46.8  |
| 142.5° | 15.1 | 19.1 | 23.2 | 28.2 | 31.7  | 34.2  | 37.2  | 39.3  | 40.3  | 40.8  | 41.3  |
| 145°   | 12.1 | 15.1 | 18.6 | 23.2 | 27.2  | 30.2  | 31.7  | 33.7  | 34.7  | 35.2  | 35.7  |
| 147.5° | 9.1  | 12.1 | 15.1 | 18.1 | 22.1  | 25.2  | 26.7  | 28.7  | 29.7  | 30.2  | 30.2  |
| 150°   | 7.0  | 9.1  | 11.1 | 14.1 | 17.1  | 20.6  | 22.6  | 24.2  | 24.7  | 25.2  | 25.2  |
| 152.5° | 5.0  | 7.0  | 8.6  | 10.6 | 12.6  | 15.6  | 18.6  | 19.6  | 20.1  | 20.6  | 20.6  |
| 155°   | 3.5  | 5.0  | 6.0  | 7.5  | 9.1   | 11.6  | 14.1  | 15.6  | 16.1  | 16.6  | 16.6  |
| 157.5° | 2.5  | 3.5  | 4.0  | 5.5  | 6.5   | 7.5   | 9.6   | 12.1  | 12.6  | 12.6  | 12.6  |
| 160°   | 1.5  | 2.0  | 2.5  | 3.5  | 4.0   | 5.0   | 6.0   | 7.5   | 9.1   | 9.1   | 9.1   |
| 162.5° | 1.0  | 1.5  | 1.5  | 2.0  | 2.0   | 3.0   | 3.5   | 4.0   | 5.5   | 6.0   | 6.0   |
| 165°   | 0.5  | 1.0  | 1.0  | 1.0  | 1.0   | 1.0   | 1.5   | 1.5   | 2.5   | 3.0   | 3.0   |
| 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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 275°  | 280°  | 285°  | 290°  | 295°  | 300°  | 305°  | 310°  | 315°  | 320°  | 325°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5°   | 476.1 | 477.1 | 476.6 | 476.6 | 476.6 | 477.6 | 476.6 | 472.1 | 473.1 | 474.1 | 475.1 |
| 5°     | 475.6 | 476.1 | 476.1 | 475.6 | 475.6 | 476.6 | 475.6 | 471.1 | 472.1 | 473.1 | 473.6 |
| 7.5°   | 473.6 | 474.1 | 474.1 | 474.1 | 473.6 | 474.6 | 473.1 | 469.1 | 469.1 | 470.1 | 470.6 |
| 10°    | 471.1 | 472.1 | 471.6 | 471.1 | 471.1 | 471.1 | 470.1 | 465.6 | 465.6 | 466.1 | 466.6 |
| 12.5°  | 468.1 | 468.1 | 468.1 | 467.6 | 467.1 | 467.1 | 466.1 | 461.5 | 461.0 | 462.0 | 461.5 |
| 15°    | 464.1 | 465.1 | 464.1 | 463.6 | 462.5 | 462.5 | 461.0 | 456.5 | 455.5 | 456.0 | 455.5 |
| 17.5°  | 460.5 | 461.0 | 460.0 | 459.0 | 458.0 | 457.5 | 456.0 | 451.0 | 449.5 | 450.0 | 449.0 |
| 20°    | 457.0 | 457.0 | 456.0 | 455.0 | 453.5 | 452.0 | 450.0 | 444.9 | 442.4 | 442.4 | 440.4 |
| 22.5°  | 452.5 | 452.5 | 451.5 | 450.0 | 448.5 | 446.4 | 444.4 | 439.4 | 435.4 | 434.4 | 432.9 |
| 25°    | 447.4 | 446.9 | 446.4 | 444.9 | 441.9 | 439.9 | 437.9 | 432.3 | 427.8 | 425.8 | 423.3 |
| 27.5°  | 441.4 | 441.4 | 439.9 | 438.4 | 435.4 | 432.9 | 430.3 | 425.3 | 419.3 | 416.7 | 413.2 |
| 30°    | 434.9 | 434.9 | 433.4 | 431.3 | 428.3 | 425.3 | 422.3 | 416.2 | 410.2 | 406.7 | 402.7 |
| 32.5°  | 428.3 | 427.8 | 426.3 | 424.3 | 421.3 | 416.7 | 414.2 | 408.2 | 401.1 | 397.1 | 391.6 |
| 35°    | 420.3 | 419.8 | 418.3 | 415.7 | 411.7 | 408.2 | 404.2 | 398.6 | 390.6 | 385.5 | 379.5 |
| 37.5°  | 412.2 | 411.7 | 410.7 | 407.2 | 403.2 | 399.1 | 394.1 | 388.6 | 381.0 | 374.5 | 368.4 |
| 40°    | 404.2 | 403.7 | 401.6 | 399.1 | 394.1 | 389.1 | 384.0 | 378.5 | 370.4 | 362.9 | 356.3 |
| 42.5°  | 395.6 | 395.1 | 392.6 | 389.6 | 384.0 | 379.0 | 373.0 | 366.9 | 358.9 | 349.8 | 343.3 |
| 45°    | 387.1 | 386.0 | 383.5 | 380.0 | 374.0 | 368.4 | 362.4 | 355.3 | 347.3 | 338.7 | 330.2 |
| 47.5°  | 378.0 | 376.5 | 374.0 | 368.9 | 363.9 | 357.9 | 350.8 | 343.3 | 335.2 | 325.6 | 316.6 |
| 50°    | 367.9 | 366.9 | 363.9 | 359.4 | 353.3 | 347.3 | 339.2 | 331.7 | 322.1 | 313.1 | 302.0 |
| 52.5°  | 358.4 | 356.3 | 353.8 | 348.8 | 342.8 | 336.2 | 327.7 | 318.6 | 309.0 | 300.5 | 288.9 |
| 55°    | 348.3 | 347.3 | 343.8 | 339.7 | 332.2 | 324.6 | 316.6 | 307.0 | 296.5 | 286.4 | 275.3 |
| 57.5°  | 338.7 | 336.7 | 333.7 | 328.2 | 321.6 | 314.1 | 305.5 | 295.4 | 283.9 | 273.3 | 261.2 |
| 60°    | 329.2 | 326.1 | 322.6 | 317.6 | 310.5 | 302.5 | 293.4 | 282.9 | 271.3 | 259.7 | 247.1 |
| 62.5°  | 318.6 | 316.1 | 312.1 | 307.0 | 300.0 | 291.4 | 281.9 | 270.8 | 259.7 | 247.6 | 234.0 |
| 65°    | 308.0 | 305.5 | 301.5 | 296.5 | 289.4 | 279.8 | 269.8 | 258.7 | 246.1 | 234.5 | 219.9 |
| 67.5°  | 297.5 | 294.9 | 290.4 | 284.9 | 277.8 | 268.8 | 258.2 | 246.6 | 234.0 | 221.5 | 206.4 |
| 70°    | 286.9 | 283.9 | 279.8 | 273.8 | 266.8 | 257.2 | 246.6 | 234.5 | 222.0 | 208.4 | 193.3 |
| 72.5°  | 276.3 | 273.8 | 268.8 | 263.2 | 255.7 | 246.1 | 235.6 | 223.5 | 210.4 | 196.3 | 181.2 |
| 75°    | 265.8 | 262.7 | 259.2 | 252.7 | 244.6 | 235.6 | 224.5 | 212.4 | 198.3 | 184.7 | 169.1 |
| 77.5°  | 255.2 | 252.7 | 248.1 | 241.6 | 234.0 | 224.5 | 213.4 | 201.3 | 187.2 | 173.1 | 156.5 |
| 80°    | 244.6 | 241.6 | 238.1 | 232.0 | 223.5 | 213.9 | 202.3 | 190.3 | 176.2 | 161.6 | 145.0 |
| 82.5°  | 234.0 | 231.0 | 227.0 | 221.0 | 212.9 | 203.3 | 192.3 | 179.2 | 165.1 | 150.0 | 134.4 |
| 85°    | 223.5 | 221.0 | 216.4 | 210.4 | 201.8 | 192.3 | 181.2 | 169.6 | 154.5 | 139.4 | 123.8 |
| 87.5°  | 212.9 | 210.4 | 205.9 | 199.8 | 191.8 | 182.2 | 171.1 | 159.0 | 144.5 | 130.4 | 113.2 |
| 90°    | 202.8 | 200.8 | 196.3 | 190.3 | 182.2 | 172.6 | 162.6 | 149.5 | 135.4 | 121.3 | 105.2 |
| 92.5°  | 193.8 | 191.8 | 187.7 | 181.7 | 174.7 | 164.1 | 154.0 | 141.4 | 127.3 | 112.7 | 97.1  |
| 95°    | 185.7 | 183.2 | 179.2 | 173.6 | 165.1 | 156.0 | 146.0 | 133.4 | 119.8 | 105.2 | 90.1  |
| 97.5°  | 176.7 | 174.1 | 170.1 | 164.1 | 157.0 | 147.5 | 137.4 | 125.3 | 111.7 | 98.1  | 83.0  |
| 100°   | 167.6 | 165.1 | 160.6 | 155.5 | 148.5 | 138.9 | 129.4 | 117.3 | 104.7 | 91.6  | 77.0  |
| 102.5° | 158.5 | 156.0 | 152.0 | 147.0 | 139.9 | 131.4 | 121.8 | 110.2 | 97.6  | 84.6  | 71.0  |
| 105°   | 150.0 | 147.5 | 143.4 | 138.4 | 131.9 | 123.3 | 113.2 | 103.2 | 91.1  | 78.5  | 65.4  |
| 107.5° | 141.4 | 138.9 | 135.4 | 130.4 | 123.8 | 115.8 | 106.2 | 95.6  | 84.6  | 72.5  | 59.9  |
| 110°   | 132.9 | 130.9 | 126.8 | 122.3 | 115.8 | 107.7 | 99.2  | 89.1  | 78.0  | 66.9  | 54.9  |





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 275°  | 280°  | 285°  | 290°  | 295°  | 300°  | 305° | 310° | 315° | 320° | 325° |
|--------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 112.5° | 124.8 | 122.8 | 118.8 | 113.7 | 108.2 | 100.7 | 92.1 | 82.5 | 72.0 | 61.4 | 49.8 |
| 115°   | 116.8 | 114.3 | 110.7 | 106.2 | 100.7 | 93.6  | 85.6 | 77.0 | 66.4 | 56.4 | 45.8 |
| 117.5° | 108.7 | 106.7 | 103.2 | 98.6  | 93.6  | 86.6  | 79.0 | 71.0 | 60.9 | 51.3 | 41.8 |
| 120°   | 100.7 | 99.2  | 95.6  | 91.6  | 86.6  | 80.0  | 73.0 | 64.9 | 55.9 | 46.8 | 37.7 |
| 122.5° | 93.1  | 91.6  | 88.1  | 84.6  | 79.5  | 73.5  | 66.9 | 59.4 | 51.3 | 42.8 | 34.7 |
| 125°   | 86.1  | 84.1  | 81.0  | 77.5  | 73.0  | 67.4  | 60.9 | 53.9 | 46.3 | 38.8 | 31.2 |
| 127.5° | 78.5  | 77.0  | 75.0  | 71.0  | 66.4  | 61.4  | 55.4 | 49.3 | 42.3 | 35.2 | 28.2 |
| 130°   | 72.5  | 70.5  | 67.9  | 64.9  | 60.9  | 55.9  | 50.3 | 44.3 | 38.3 | 31.7 | 24.7 |
| 132.5° | 65.4  | 63.4  | 61.4  | 58.4  | 54.9  | 50.3  | 45.3 | 39.8 | 34.2 | 28.2 | 22.1 |
| 135°   | 58.9  | 57.4  | 55.4  | 52.3  | 48.8  | 45.3  | 40.3 | 35.2 | 30.2 | 24.7 | 19.6 |
| 137.5° | 52.8  | 51.3  | 49.3  | 47.3  | 43.8  | 40.3  | 35.7 | 31.2 | 26.7 | 21.6 | 17.1 |
| 140°   | 46.8  | 45.8  | 43.8  | 41.8  | 38.8  | 35.2  | 31.2 | 27.2 | 23.2 | 18.6 | 14.6 |
| 142.5° | 40.8  | 39.8  | 38.3  | 36.2  | 33.7  | 30.7  | 27.2 | 23.7 | 19.6 | 16.1 | 12.6 |
| 145°   | 35.2  | 34.7  | 33.2  | 31.2  | 29.2  | 26.2  | 23.2 | 20.1 | 16.6 | 13.6 | 10.1 |
| 147.5° | 29.7  | 29.2  | 28.2  | 26.7  | 24.7  | 22.1  | 19.6 | 16.6 | 14.1 | 11.1 | 8.1  |
| 150°   | 24.7  | 24.2  | 23.7  | 21.6  | 20.6  | 18.1  | 16.1 | 13.6 | 11.6 | 8.6  | 6.5  |
| 152.5° | 20.1  | 20.1  | 19.1  | 17.6  | 16.6  | 14.6  | 13.1 | 11.1 | 9.1  | 7.0  | 5.0  |
| 155°   | 16.1  | 15.6  | 15.1  | 14.1  | 13.1  | 11.6  | 10.1 | 8.6  | 7.0  | 5.0  | 3.5  |
| 157.5° | 12.6  | 12.1  | 11.6  | 10.6  | 9.6   | 9.1   | 7.5  | 6.0  | 4.5  | 3.5  | 2.5  |
| 160°   | 9.1   | 8.6   | 8.1   | 7.5   | 7.0   | 6.0   | 5.0  | 4.0  | 3.0  | 2.0  | 1.5  |
| 162.5° | 6.0   | 5.5   | 5.5   | 5.0   | 4.5   | 3.5   | 3.0  | 2.5  | 2.0  | 1.5  | 1.0  |
| 165°   | 3.0   | 3.0   | 2.5   | 2.5   | 2.0   | 1.5   | 1.5  | 1.5  | 1.0  | 1.0  | 0.5  |
| 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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 330°  | 335°  | 340°  | 345°  | 350°  | 355°  | 360°  |
|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5°   | 474.6 | 474.6 | 476.6 | 476.1 | 474.6 | 477.6 | 481.2 |
| 5°     | 473.1 | 473.1 | 474.6 | 474.6 | 473.1 | 476.1 | 479.2 |
| 7.5°   | 470.6 | 470.1 | 471.6 | 471.6 | 469.6 | 472.1 | 475.6 |
| 10°    | 466.1 | 465.6 | 467.1 | 467.1 | 465.1 | 467.6 | 470.6 |
| 12.5°  | 461.0 | 460.0 | 461.5 | 461.0 | 459.0 | 461.5 | 464.6 |
| 15°    | 454.5 | 454.0 | 455.0 | 454.0 | 452.0 | 454.5 | 457.5 |
| 17.5°  | 448.0 | 446.4 | 446.9 | 446.9 | 443.4 | 445.9 | 448.5 |
| 20°    | 439.4 | 437.4 | 437.9 | 437.4 | 434.9 | 436.4 | 439.4 |
| 22.5°  | 430.8 | 427.8 | 427.8 | 427.3 | 424.3 | 426.3 | 428.8 |
| 25°    | 420.3 | 416.7 | 416.7 | 416.2 | 412.7 | 414.2 | 416.7 |
| 27.5°  | 409.7 | 406.2 | 404.7 | 404.2 | 400.6 | 400.6 | 404.2 |
| 30°    | 398.6 | 393.6 | 392.6 | 391.1 | 387.6 | 387.6 | 390.6 |
| 32.5°  | 388.1 | 381.0 | 379.0 | 377.0 | 373.5 | 373.0 | 376.5 |
| 35°    | 374.0 | 368.4 | 364.9 | 362.9 | 358.9 | 357.9 | 360.9 |
| 37.5°  | 362.4 | 355.3 | 350.3 | 347.8 | 343.8 | 342.3 | 346.3 |
| 40°    | 349.8 | 342.3 | 335.7 | 334.2 | 328.2 | 326.1 | 329.7 |
| 42.5°  | 335.7 | 327.7 | 321.1 | 318.1 | 313.6 | 311.6 | 312.1 |
| 45°    | 321.6 | 313.1 | 306.0 | 302.0 | 297.5 | 293.9 | 295.9 |
| 47.5°  | 307.0 | 299.5 | 290.9 | 284.9 | 279.3 | 276.8 | 277.8 |
| 50°    | 292.4 | 283.4 | 275.3 | 268.8 | 262.2 | 259.2 | 261.2 |
| 52.5°  | 277.8 | 268.3 | 259.2 | 252.2 | 244.6 | 241.6 | 242.1 |
| 55°    | 263.7 | 253.7 | 243.1 | 235.6 | 228.5 | 224.0 | 223.0 |
| 57.5°  | 249.6 | 238.6 | 227.5 | 218.9 | 209.9 | 205.9 | 204.3 |
| 60°    | 234.5 | 223.0 | 211.4 | 201.3 | 191.8 | 187.2 | 185.2 |
| 62.5°  | 220.5 | 207.9 | 194.8 | 184.2 | 174.7 | 168.6 | 167.1 |
| 65°    | 206.9 | 192.3 | 179.2 | 167.1 | 156.5 | 150.0 | 148.0 |
| 67.5°  | 192.3 | 177.2 | 163.1 | 150.0 | 139.9 | 131.4 | 130.4 |
| 70°    | 178.7 | 162.6 | 147.0 | 133.4 | 122.3 | 113.7 | 109.7 |
| 72.5°  | 165.1 | 148.5 | 132.4 | 117.8 | 103.7 | 95.6  | 92.6  |
| 75°    | 152.0 | 134.9 | 117.8 | 102.7 | 87.1  | 77.5  | 74.5  |
| 77.5°  | 139.9 | 122.3 | 104.2 | 87.6  | 73.0  | 60.9  | 56.9  |
| 80°    | 128.3 | 110.2 | 91.1  | 74.0  | 58.4  | 45.3  | 40.8  |
| 82.5°  | 116.3 | 99.2  | 79.5  | 61.4  | 45.3  | 31.7  | 26.2  |
| 85°    | 105.7 | 88.6  | 69.0  | 50.8  | 34.7  | 20.1  | 14.1  |
| 87.5°  | 97.1  | 78.5  | 60.9  | 42.8  | 26.2  | 11.6  | 4.0   |
| 90°    | 88.6  | 70.5  | 52.8  | 35.2  | 19.6  | 6.5   | 0.5   |
| 92.5°  | 81.0  | 63.9  | 46.3  | 30.2  | 15.1  | 4.5   | 0.5   |
| 95°    | 74.0  | 57.4  | 40.8  | 25.2  | 12.1  | 3.0   | 0.5   |
| 97.5°  | 67.4  | 51.8  | 36.2  | 21.6  | 10.1  | 2.5   | 0.5   |
| 100°   | 61.9  | 46.8  | 32.2  | 19.1  | 8.6   | 2.0   | 0.5   |
| 102.5° | 56.4  | 42.3  | 28.7  | 16.6  | 7.5   | 1.5   | 0.5   |
| 105°   | 51.8  | 38.3  | 25.7  | 15.1  | 6.5   | 1.5   | 0.5   |
| 107.5° | 47.3  | 34.7  | 23.2  | 13.1  | 5.5   | 1.0   | 0.5   |
| 110°   | 42.8  | 31.7  | 20.6  | 11.6  | 5.0   | 1.0   | 0.5   |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 330° | 335° | 340° | 345° | 350° | 355° | 360° |
|--------|------|------|------|------|------|------|------|
| 112.5° | 39.3 | 28.7 | 18.6 | 10.6 | 4.0  | 1.0  | 0.5  |
| 115°   | 35.7 | 25.7 | 16.6 | 9.1  | 3.5  | 0.5  | 0.5  |
| 117.5° | 32.2 | 23.2 | 14.6 | 8.1  | 3.0  | 0.5  | 0.5  |
| 120°   | 29.2 | 20.6 | 13.1 | 7.0  | 2.5  | 0.5  | 0.5  |
| 122.5° | 26.2 | 18.6 | 11.6 | 6.0  | 2.0  | 0.5  | 0.5  |
| 125°   | 23.7 | 16.6 | 10.1 | 5.0  | 1.5  | 0.5  | 0.5  |
| 127.5° | 21.1 | 14.6 | 9.1  | 4.5  | 1.5  | 0.5  | 0.5  |
| 130°   | 18.6 | 13.1 | 7.5  | 3.5  | 1.0  | 0.5  | 0.5  |
| 132.5° | 16.6 | 11.1 | 6.5  | 3.0  | 1.0  | 0.5  | 0.5  |
| 135°   | 14.6 | 9.6  | 5.5  | 2.0  | 1.0  | 0.5  | 0.5  |
| 137.5° | 12.6 | 8.1  | 4.5  | 1.5  | 0.5  | 0.5  | 0.5  |
| 140°   | 10.6 | 7.0  | 3.5  | 1.5  | 0.5  | 0.5  | 0.5  |
| 142.5° | 9.1  | 5.5  | 2.5  | 1.0  | 0.5  | 0.5  | 0.5  |
| 145°   | 7.0  | 4.5  | 2.0  | 1.0  | 0.5  | 0.5  | 0.5  |
| 147.5° | 5.5  | 3.5  | 1.5  | 1.0  | 0.5  | 0.5  | 0.5  |
| 150°   | 4.0  | 2.5  | 1.5  | 0.5  | 0.5  | 0.5  | 0.5  |
| 152.5° | 3.0  | 2.0  | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  |
| 155°   | 2.0  | 1.5  | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  |
| 157.5° | 1.5  | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  |
| 160°   | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  |
| 162.5° | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  |
| 165°   | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  |
| 167.5° | 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  |
| 172.5° | 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  |
| 177.5° | 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  |

(END OF REPORT)