

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1313588

Luminaire Tested: P3SQAS17R409730DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1313588  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS17R409730DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 97CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

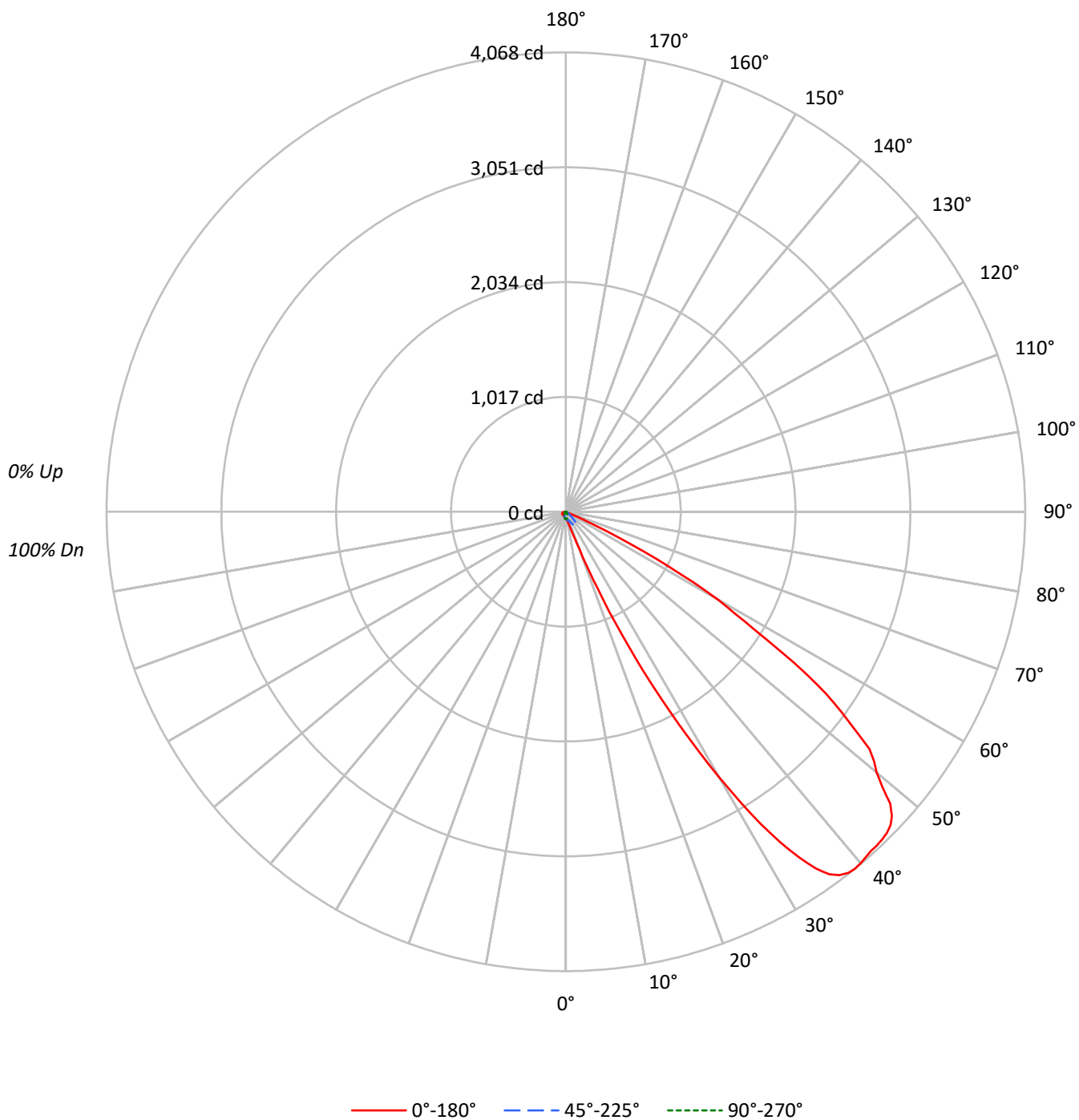
Lumens per Lamp: N/A  
Luminaire Lumens: 1257.0 lumens  
Efficiency: N/A  
Efficacy: 59.3 lumens/watt  
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.2  
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: 24 FT

TEST NUMBER: P1313588

CATALOG NUMBER: P3SQAS17R409730DE010 E3SQCA451MB

### Luminous Intensity Polar Plot



TEST NUMBER: P1313588

CATALOG NUMBER: P3SQAS17R409730DE010 E3SQCA451MB

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  |  | 96  | 93  | 91  |  | 92  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  |  | 84  | 80  | 76  |  | 81  |
| 3   | 91  | 81  | 73  | 66  | 89  | 79  | 72  | 66  | 76  | 70  | 65  |  | 73  | 68  | 64  |  | 71  |
| 4   | 82  | 70  | 62  | 55  | 80  | 69  | 61  | 54  | 67  | 59  | 54  |  | 64  | 58  | 53  |  | 62  |
| 5   | 75  | 62  | 52  | 46  | 73  | 60  | 52  | 45  | 58  | 51  | 45  |  | 56  | 50  | 44  |  | 54  |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 38  |  | 50  | 43  | 37  |  | 48  |
| 7   | 62  | 48  | 39  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  |  | 44  | 37  | 31  |  | 42  |
| 8   | 57  | 42  | 33  | 27  | 55  | 42  | 33  | 27  | 40  | 32  | 27  |  | 39  | 32  | 27  |  | 38  |
| 9   | 52  | 38  | 29  | 23  | 51  | 37  | 29  | 23  | 36  | 28  | 23  |  | 35  | 28  | 23  |  | 34  |
| 10  | 48  | 34  | 25  | 20  | 47  | 33  | 25  | 20  | 32  | 25  | 20  |  | 31  | 24  | 20  |  | 30  |

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

|     | 0°     | 45°   | 90°   | 135°  | 180°  |
|-----|--------|-------|-------|-------|-------|
| 0°  | 11126  | 11126 | 11126 | 11126 | 11126 |
| 5°  | 12378  | 11981 | 10978 | 9975  | 9785  |
| 10° | 14935  | 12714 | 10091 | 9076  | 8884  |
| 15° | 24498  | 13782 | 8647  | 8023  | 8237  |
| 20° | 64733  | 16293 | 7184  | 7184  | 7826  |
| 25° | 249638 | 20181 | 5701  | 6575  | 7677  |
| 30° | 538568 | 26867 | 4594  | 6423  | 7577  |
| 35° | 810621 | 31789 | 3890  | 6307  | 7758  |
| 40° | 913289 | 31925 | 3372  | 6497  | 8296  |
| 45° | 979280 | 24746 | 3093  | 6747  | 8987  |
| 50° | 962515 | 15460 | 2786  | 7127  | 9887  |
| 55° | 846766 | 7627  | 2762  | 7987  | 11080 |
| 60° | 535991 | 1584  | 3169  | 8749  | 12331 |
| 65° | 109621 | 489   | 3301  | 9414  | 13652 |
| 70° | 2316   | 604   | 3474  | 10474 | 15711 |
| 75° | 2329   | 1530  | 3859  | 11512 | 17700 |
| 80° | 2281   | 1190  | 4562  | 12596 | 20629 |
| 85° | 2371   | 2371  | 9090  | 13635 | 22724 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 996975 cd/sqm

TEST NUMBER: P1313588

CATALOG NUMBER: P3SQAS17R409730DE010 E3SQCA451MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 6.0    | 0.5       |
| 10°-20°   | 19.9   | 1.6       |
| 20°-30°   | 97.6   | 7.8       |
| 30°-40°   | 317.6  | 25.3      |
| 40°-50°   | 437.8  | 34.8      |
| 50°-60°   | 304.9  | 24.3      |
| 60°-70°   | 57.8   | 4.6       |
| 70°-80°   | 10.5   | 0.8       |
| 80°-90°   | 4.8    | 0.4       |
| 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°    | 123.6  | 9.8       |
| 0°-40°    | 441.2  | 35.1      |
| 0°-60°    | 1183.9 | 94.2      |
| 0°-90°    | 1257.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1257.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 65   | 65  | 65  | 65   | 65   |      |
| 5°  | 72   | 69  | 64  | 58   | 57   | 7    |
| 15° | 137  | 77  | 48  | 45   | 46   | 50   |
| 25° | 1314 | 106 | 30  | 35   | 40   | 676  |
| 35° | 3856 | 151 | 18  | 30   | 37   | 2330 |
| 45° | 4021 | 102 | 13  | 28   | 37   | 3058 |
| 55° | 2820 | 25  | 9   | 27   | 37   | 2410 |
| 65° | 269  | 1   | 8   | 23   | 34   | 476  |
| 75° | 4    | 2   | 6   | 17   | 27   | 3    |
| 85° | 1    | 1   | 5   | 7    | 12   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1313588

CATALOG NUMBER: P3SQAS17R409730DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°   | 45°   | 67.5° | 90°  |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|------|
| 0°    | 64.6   | 64.6   | 64.6   | 64.6   | 64.6   | 64.6   | 64.6   | 64.6  | 64.6  | 64.6  | 64.6 |
| 2.5°  | 67.0   | 67.0   | 67.0   | 67.0   | 67.0   | 67.0   | 67.0   | 67.0  | 67.0  | 65.8  | 64.6 |
| 5°    | 71.6   | 71.6   | 71.6   | 71.6   | 70.4   | 70.4   | 70.4   | 69.3  | 69.3  | 67.0  | 63.5 |
| 7.5°  | 76.2   | 76.2   | 76.2   | 76.2   | 75.0   | 73.9   | 72.7   | 72.7  | 71.6  | 65.8  | 61.2 |
| 10°   | 85.4   | 85.4   | 84.3   | 83.1   | 82.0   | 79.7   | 78.5   | 76.2  | 72.7  | 64.6  | 57.7 |
| 12.5° | 103.9  | 101.6  | 100.4  | 98.1   | 94.7   | 90.0   | 85.4   | 82.0  | 73.9  | 62.3  | 54.3 |
| 15°   | 137.4  | 135.1  | 130.4  | 123.5  | 116.6  | 107.4  | 99.3   | 91.2  | 77.3  | 58.9  | 48.5 |
| 17.5° | 196.2  | 189.3  | 182.4  | 170.8  | 153.5  | 137.4  | 120.1  | 105.0 | 82.0  | 55.4  | 43.9 |
| 20°   | 353.2  | 348.6  | 307.1  | 274.7  | 222.8  | 185.9  | 151.2  | 125.8 | 88.9  | 51.9  | 39.2 |
| 22.5° | 728.4  | 679.9  | 611.8  | 501.0  | 390.2  | 287.4  | 208.9  | 158.2 | 95.8  | 47.3  | 34.6 |
| 25°   | 1313.7 | 1237.5 | 1090.9 | 877.3  | 647.6  | 458.3  | 302.4  | 206.6 | 106.2 | 42.7  | 30.0 |
| 27.5° | 1989.0 | 1911.7 | 1684.2 | 1389.9 | 1014.7 | 691.5  | 431.7  | 273.6 | 120.1 | 38.1  | 26.6 |
| 30°   | 2708.2 | 2642.4 | 2353.8 | 1946.3 | 1430.3 | 968.5  | 578.3  | 341.7 | 135.1 | 33.5  | 23.1 |
| 31°   | 2997.9 | 2913.7 | 2602.0 | 2167.9 | 1625.4 | 1082.8 | 637.2  | 370.6 | 140.8 | 32.3  | 21.9 |
| 32°   | 3264.6 | 3168.8 | 2845.5 | 2380.3 | 1783.5 | 1206.3 | 701.9  | 396.0 | 145.5 | 30.0  | 20.8 |
| 33°   | 3494.3 | 3382.3 | 3070.7 | 2581.2 | 1957.8 | 1321.8 | 768.8  | 420.2 | 148.9 | 27.7  | 19.6 |
| 34°   | 3689.4 | 3592.4 | 3257.7 | 2783.2 | 2112.5 | 1432.6 | 834.6  | 444.4 | 151.2 | 26.6  | 18.5 |
| 35°   | 3855.6 | 3767.9 | 3436.6 | 2936.7 | 2263.7 | 1539.9 | 894.6  | 467.5 | 151.2 | 24.2  | 18.5 |
| 36°   | 3967.6 | 3891.4 | 3591.3 | 3093.7 | 2390.7 | 1631.1 | 945.4  | 488.3 | 151.2 | 21.9  | 17.3 |
| 37°   | 4028.8 | 3954.9 | 3692.9 | 3223.0 | 2515.4 | 1721.2 | 991.6  | 504.5 | 150.1 | 20.8  | 16.2 |
| 38°   | 4060.0 | 3995.3 | 3767.9 | 3328.1 | 2602.0 | 1785.8 | 1032.0 | 517.2 | 148.9 | 18.5  | 16.2 |
| 39°   | 4068.0 | 4013.8 | 3815.2 | 3404.3 | 2686.2 | 1850.5 | 1060.9 | 524.1 | 145.5 | 17.3  | 15.0 |
| 40°   | 4062.3 | 4014.9 | 3840.6 | 3472.4 | 2750.9 | 1901.3 | 1081.7 | 526.4 | 142.0 | 15.0  | 15.0 |
| 41°   | 4050.7 | 4013.8 | 3859.1 | 3519.7 | 2802.8 | 1933.6 | 1089.7 | 521.8 | 137.4 | 12.7  | 13.9 |
| 42°   | 4040.3 | 3999.9 | 3867.2 | 3552.0 | 2838.6 | 1949.7 | 1088.6 | 512.5 | 130.4 | 11.5  | 13.9 |
| 43°   | 4040.3 | 3994.2 | 3868.3 | 3572.8 | 2855.9 | 1950.9 | 1074.7 | 495.2 | 121.2 | 10.4  | 12.7 |
| 44°   | 4033.4 | 3990.7 | 3874.1 | 3586.7 | 2860.6 | 1940.5 | 1052.8 | 476.8 | 110.8 | 9.2   | 12.7 |
| 45°   | 4020.7 | 3975.7 | 3872.9 | 3587.8 | 2852.5 | 1915.1 | 1017.0 | 452.5 | 101.6 | 6.9   | 12.7 |
| 46°   | 3996.5 | 3956.1 | 3862.6 | 3579.7 | 2828.2 | 1878.2 | 974.3  | 428.3 | 91.2  | 5.8   | 11.5 |
| 47°   | 3948.0 | 3916.8 | 3834.8 | 3552.0 | 2791.3 | 1823.9 | 923.5  | 400.6 | 83.1  | 4.6   | 11.5 |
| 48°   | 3864.9 | 3842.9 | 3787.5 | 3490.8 | 2720.9 | 1757.0 | 869.2  | 370.6 | 75.0  | 4.6   | 11.5 |
| 49°   | 3712.5 | 3695.2 | 3662.8 | 3392.7 | 2630.8 | 1675.0 | 810.4  | 337.1 | 67.0  | 3.5   | 11.5 |
| 50°   | 3592.4 | 3574.0 | 3508.2 | 3227.6 | 2501.5 | 1571.1 | 745.7  | 303.6 | 57.7  | 2.3   | 10.4 |
| 51°   | 3512.8 | 3482.8 | 3378.9 | 3036.0 | 2313.4 | 1432.6 | 675.3  | 270.1 | 48.5  | 2.3   | 10.4 |
| 52°   | 3412.3 | 3367.3 | 3238.0 | 2864.0 | 2141.4 | 1294.1 | 599.1  | 236.6 | 42.7  | 2.3   | 10.4 |
| 53°   | 3202.2 | 3186.1 | 3058.0 | 2679.3 | 1969.4 | 1161.3 | 520.6  | 208.9 | 36.9  | 2.3   | 10.4 |
| 54°   | 3018.7 | 2994.5 | 2820.1 | 2423.0 | 1782.4 | 1013.5 | 439.8  | 184.7 | 31.2  | 2.3   | 10.4 |
| 55°   | 2820.1 | 2772.8 | 2618.1 | 2207.2 | 1563.0 | 877.3  | 362.5  | 159.3 | 25.4  | 2.3   | 9.2  |
| 56°   | 2569.6 | 2528.1 | 2361.9 | 1976.3 | 1361.0 | 738.8  | 303.6  | 130.4 | 19.6  | 2.3   | 9.2  |
| 57°   | 2264.9 | 2226.8 | 2098.7 | 1692.3 | 1150.9 | 603.7  | 247.0  | 105.0 | 15.0  | 2.3   | 9.2  |
| 58°   | 1970.5 | 1927.8 | 1781.2 | 1419.9 | 929.3  | 479.1  | 206.6  | 85.4  | 11.5  | 2.3   | 9.2  |
| 59°   | 1744.3 | 1686.5 | 1497.2 | 1192.5 | 727.3  | 363.6  | 163.9  | 68.1  | 8.1   | 2.3   | 9.2  |
| 60°   | 1556.1 | 1508.8 | 1312.5 | 992.8  | 570.3  | 267.8  | 121.2  | 51.9  | 4.6   | 2.3   | 9.2  |
| 62.5° | 901.6  | 888.9  | 712.3  | 511.4  | 269.0  | 124.7  | 60.0   | 24.2  | 2.3   | 3.5   | 9.2  |
| 65°   | 269.0  | 234.3  | 182.4  | 108.5  | 69.3   | 41.6   | 21.9   | 8.1   | 1.2   | 3.5   | 8.1  |



TEST NUMBER: P1313588

CATALOG NUMBER: P3SQAS17R409730DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 67.5° | 8.1 | 8.1 | 8.1 | 8.1 | 8.1 | 8.1 | 4.6 | 2.3 | 1.2 | 3.5   | 8.1 |
| 70°   | 4.6 | 3.5 | 3.5 | 3.5 | 3.5 | 2.3 | 2.3 | 1.2 | 1.2 | 3.5   | 6.9 |
| 72.5° | 3.5 | 3.5 | 3.5 | 3.5 | 2.3 | 2.3 | 2.3 | 1.2 | 2.3 | 3.5   | 5.8 |
| 75°   | 3.5 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5   | 5.8 |
| 77.5° | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5   | 5.8 |
| 80°   | 2.3 | 2.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 3.5   | 4.6 |
| 82.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 3.5   | 4.6 |
| 85°   | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 3.5   | 4.6 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 1.2 | 3.5   | 3.5 |
| 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: P1313588

CATALOG NUMBER: P3SQAS17R409730DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 64.6   | 64.6 | 64.6   | 64.6 |
| 2.5°  | 62.3   | 61.2 | 60.0   | 60.0 |
| 5°    | 60.0   | 57.7 | 57.7   | 56.6 |
| 7.5°  | 56.6   | 54.3 | 54.3   | 54.3 |
| 10°   | 53.1   | 51.9 | 51.9   | 50.8 |
| 12.5° | 48.5   | 48.5 | 48.5   | 48.5 |
| 15°   | 45.0   | 45.0 | 46.2   | 46.2 |
| 17.5° | 40.4   | 41.6 | 43.9   | 45.0 |
| 20°   | 36.9   | 39.2 | 41.6   | 42.7 |
| 22.5° | 34.6   | 36.9 | 40.4   | 41.6 |
| 25°   | 31.2   | 34.6 | 39.2   | 40.4 |
| 27.5° | 28.9   | 33.5 | 36.9   | 39.2 |
| 30°   | 26.6   | 32.3 | 35.8   | 38.1 |
| 31°   | 26.6   | 31.2 | 35.8   | 38.1 |
| 32°   | 25.4   | 30.0 | 35.8   | 36.9 |
| 33°   | 25.4   | 30.0 | 35.8   | 36.9 |
| 34°   | 24.2   | 30.0 | 34.6   | 36.9 |
| 35°   | 24.2   | 30.0 | 34.6   | 36.9 |
| 36°   | 23.1   | 28.9 | 34.6   | 36.9 |
| 37°   | 23.1   | 28.9 | 34.6   | 36.9 |
| 38°   | 21.9   | 28.9 | 34.6   | 36.9 |
| 39°   | 21.9   | 28.9 | 34.6   | 36.9 |
| 40°   | 21.9   | 28.9 | 34.6   | 36.9 |
| 41°   | 20.8   | 28.9 | 34.6   | 36.9 |
| 42°   | 20.8   | 28.9 | 34.6   | 36.9 |
| 43°   | 20.8   | 27.7 | 34.6   | 36.9 |
| 44°   | 20.8   | 27.7 | 34.6   | 36.9 |
| 45°   | 19.6   | 27.7 | 34.6   | 36.9 |
| 46°   | 19.6   | 27.7 | 34.6   | 36.9 |
| 47°   | 19.6   | 27.7 | 34.6   | 36.9 |
| 48°   | 19.6   | 27.7 | 34.6   | 36.9 |
| 49°   | 19.6   | 27.7 | 34.6   | 36.9 |
| 50°   | 18.5   | 26.6 | 34.6   | 36.9 |
| 51°   | 18.5   | 26.6 | 34.6   | 36.9 |
| 52°   | 18.5   | 26.6 | 34.6   | 36.9 |
| 53°   | 18.5   | 26.6 | 34.6   | 36.9 |
| 54°   | 17.3   | 26.6 | 34.6   | 36.9 |
| 55°   | 17.3   | 26.6 | 34.6   | 36.9 |
| 56°   | 17.3   | 26.6 | 34.6   | 35.8 |
| 57°   | 17.3   | 26.6 | 33.5   | 35.8 |
| 58°   | 17.3   | 25.4 | 33.5   | 35.8 |
| 59°   | 17.3   | 25.4 | 33.5   | 35.8 |
| 60°   | 17.3   | 25.4 | 33.5   | 35.8 |
| 62.5° | 16.2   | 25.4 | 32.3   | 34.6 |
| 65°   | 15.0   | 23.1 | 32.3   | 33.5 |



TEST NUMBER: P1313588

CATALOG NUMBER: P3SQAS17R409730DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 67.5° | 15.0   | 21.9 | 30.0   | 32.3 |
| 70°   | 13.9   | 20.8 | 28.9   | 31.2 |
| 72.5° | 11.5   | 19.6 | 26.6   | 28.9 |
| 75°   | 10.4   | 17.3 | 24.2   | 26.6 |
| 77.5° | 9.2    | 15.0 | 21.9   | 23.1 |
| 80°   | 8.1    | 12.7 | 18.5   | 20.8 |
| 82.5° | 5.8    | 9.2  | 15.0   | 16.2 |
| 85°   | 4.6    | 6.9  | 10.4   | 11.5 |
| 87.5° | 3.5    | 3.5  | 5.8    | 5.8  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)