

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: P1309916

Luminaire Tested: P3SQAS05R309040DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1309916  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS05R309040DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 90CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

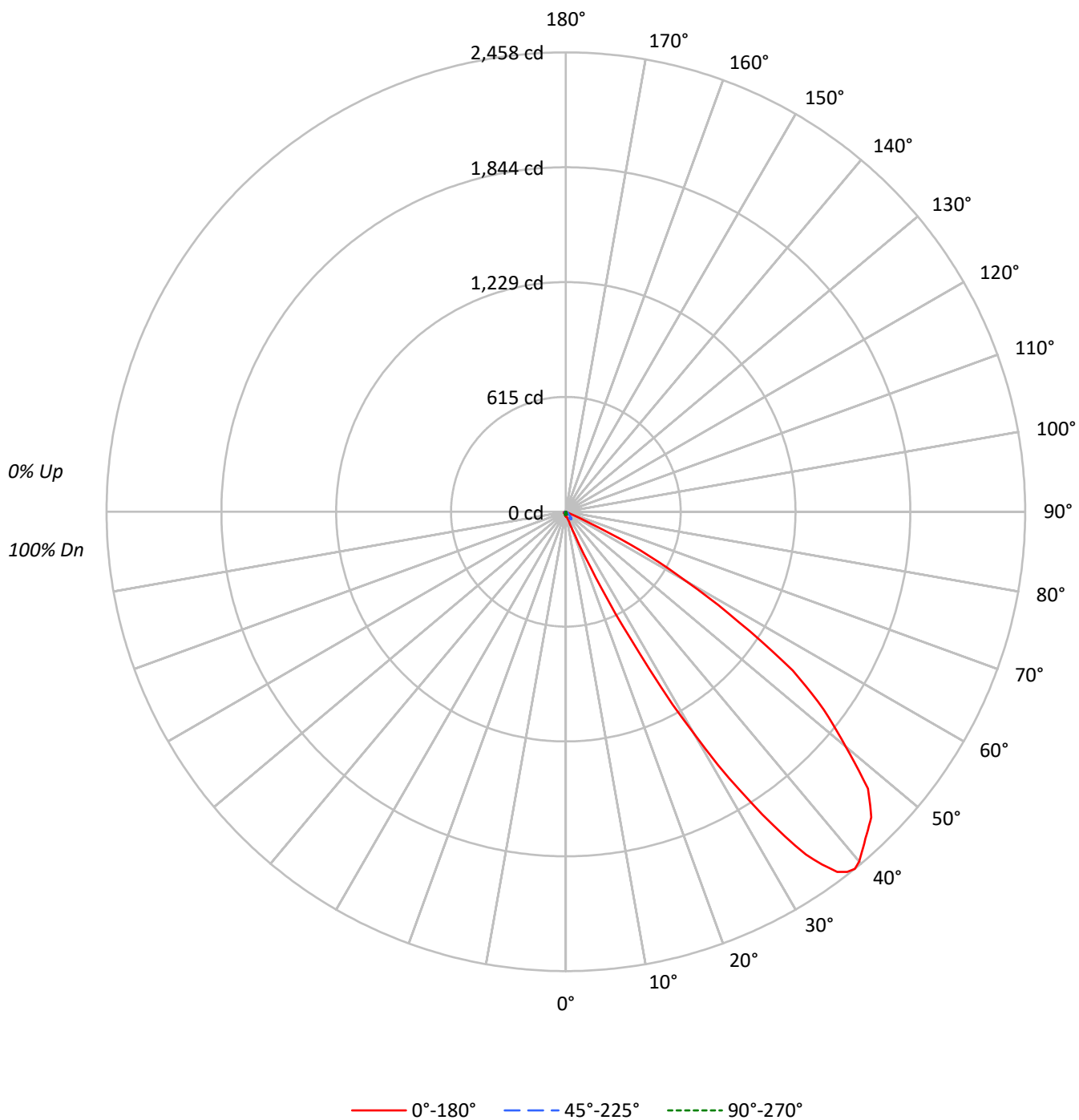
Lumens per Lamp: N/A  
Luminaire Lumens: 639.0 lumens  
Efficiency: N/A  
Efficacy: 88.8 lumens/watt  
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.2  
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: P1309916

CATALOG NUMBER: P3SQAS05R309040DE010 E3SQCA451MB

### Luminous Intensity Polar Plot



TEST NUMBER: P1309916

CATALOG NUMBER: P3SQAS05R309040DE010 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  | 108 | 104 | 100 | 97  | 100 | 97  | 94  |  | 96  | 93  | 91  |  | 92  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  |  | 84  | 80  | 77  |  | 81  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  |  | 74  | 68  | 64  |  | 71  |
| 4   | 83  | 71  | 62  | 55  | 80  | 69  | 61  | 55  | 67  | 60  | 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  | 37  |  | 49  | 42  | 37  |  | 48  |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 31  |  | 44  | 36  | 31  |  | 42  |
| 8   | 56  | 42  | 33  | 27  | 55  | 41  | 33  | 27  | 40  | 32  | 26  |  | 39  | 32  | 26  |  | 37  |
| 9   | 52  | 37  | 29  | 23  | 50  | 37  | 28  | 23  | 36  | 28  | 22  |  | 34  | 27  | 22  |  | 33  |
| 10  | 48  | 33  | 25  | 19  | 46  | 33  | 25  | 19  | 32  | 24  | 19  |  | 31  | 24  | 19  |  | 30  |

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 4271   | 4271  | 4271 | 4271 | 4271 |
| 5°  | 4564   | 4460  | 4184 | 3821 | 3717 |
| 10° | 4984   | 4424  | 3672 | 3288 | 3200 |
| 15° | 7292   | 4422  | 3067 | 2781 | 2871 |
| 20° | 18346  | 4838  | 2364 | 2364 | 2657 |
| 25° | 85208  | 6043  | 1843 | 2147 | 2451 |
| 30° | 271253 | 8352  | 1392 | 2028 | 2466 |
| 35° | 470676 | 10176 | 1135 | 1934 | 2481 |
| 40° | 548922 | 10162 | 854  | 1933 | 2540 |
| 45° | 562939 | 7209  | 926  | 2095 | 2752 |
| 50° | 523510 | 4046  | 723  | 2170 | 3162 |
| 55° | 444927 | 2102  | 811  | 2432 | 3543 |
| 60° | 256956 | 551   | 930  | 2583 | 3892 |
| 65° | 52406  | 0     | 1100 | 3056 | 4401 |
| 70° | 806    | 252   | 1360 | 3525 | 5136 |
| 75° | 732    | 333   | 1464 | 3593 | 6122 |
| 80° | 496    | 496   | 2182 | 4265 | 6943 |
| 85° | 0      | 988   | 4347 | 4347 | 8497 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 562939 cd/sqm

TEST NUMBER: P1309916

CATALOG NUMBER: P3SQAS05R309040DE010 E3SQCA451MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.2    | 0.4       |
| 10°-20°   | 6.4    | 1.0       |
| 20°-30°   | 36.9   | 5.8       |
| 30°-40°   | 172.1  | 26.9      |
| 40°-50°   | 243.4  | 38.1      |
| 50°-60°   | 149.7  | 23.4      |
| 60°-70°   | 22.8   | 3.6       |
| 70°-80°   | 3.6    | 0.6       |
| 80°-90°   | 1.8    | 0.3       |
| 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°    | 45.5   | 7.1       |
| 0°-40°    | 217.6  | 34.1      |
| 0°-60°    | 610.8  | 95.6      |
| 0°-90°    | 639.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 639.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 25   | 25  | 25  | 25   | 25   |      |
| 5°  | 26   | 26  | 24  | 22   | 22   | 3    |
| 15° | 41   | 25  | 17  | 16   | 16   | 15   |
| 25° | 448  | 32  | 10  | 11   | 13   | 276  |
| 35° | 2239 | 48  | 5   | 9    | 12   | 1344 |
| 45° | 2311 | 30  | 4   | 9    | 11   | 1752 |
| 55° | 1482 | 7   | 3   | 8    | 12   | 1261 |
| 65° | 129  | 0   | 3   | 8    | 11   | 233  |
| 75° | 1    | 0   | 2   | 5    | 9    | 1    |
| 85° | 0    | 0   | 2   | 2    | 4    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1309916

CATALOG NUMBER: P3SQAS05R309040DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°  | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|--------|--------|--------|------|-------|------|--------|------|
| 0°    | 24.8   | 24.8   | 24.8   | 24.8   | 24.8   | 24.8   | 24.8 | 24.8  | 24.8 | 24.8   | 24.8 |
| 2.5°  | 25.3   | 25.3   | 25.8   | 25.8   | 25.3   | 25.8   | 25.8 | 25.8  | 24.8 | 24.2   | 23.1 |
| 5°    | 26.4   | 26.4   | 26.4   | 26.9   | 26.4   | 26.4   | 25.8 | 25.3  | 24.2 | 22.6   | 22.1 |
| 7.5°  | 27.5   | 27.5   | 26.9   | 27.5   | 26.9   | 26.9   | 25.8 | 24.8  | 23.1 | 21.5   | 20.5 |
| 10°   | 28.5   | 28.5   | 28.0   | 28.0   | 27.5   | 27.5   | 25.3 | 23.7  | 21.0 | 19.4   | 18.8 |
| 12.5° | 31.8   | 31.8   | 31.2   | 30.7   | 29.6   | 29.1   | 24.8 | 22.1  | 18.8 | 17.2   | 16.7 |
| 15°   | 40.9   | 40.4   | 39.3   | 37.7   | 35.0   | 34.4   | 24.8 | 20.5  | 17.2 | 15.6   | 15.6 |
| 17.5° | 56.0   | 55.4   | 53.8   | 49.5   | 44.7   | 43.1   | 24.8 | 18.3  | 15.1 | 14.0   | 14.0 |
| 20°   | 100.1  | 95.8   | 87.7   | 77.0   | 65.7   | 59.7   | 26.4 | 16.1  | 12.9 | 12.4   | 12.9 |
| 21°   | 130.8  | 126.5  | 116.3  | 98.5   | 78.6   | 72.1   | 27.5 | 15.6  | 12.4 | 11.8   | 12.9 |
| 22°   | 178.2  | 173.3  | 152.3  | 128.1  | 99.6   | 88.3   | 28.0 | 14.5  | 11.3 | 11.3   | 12.4 |
| 23°   | 248.7  | 240.6  | 205.1  | 166.3  | 124.3  | 108.2  | 29.1 | 14.0  | 10.8 | 11.3   | 11.8 |
| 24°   | 325.7  | 318.7  | 278.3  | 220.2  | 158.8  | 135.6  | 30.1 | 13.5  | 10.2 | 10.2   | 11.3 |
| 25°   | 448.4  | 440.3  | 368.7  | 277.7  | 201.3  | 163.1  | 31.8 | 12.4  | 9.7  | 9.7    | 11.3 |
| 26°   | 607.2  | 570.0  | 474.8  | 357.9  | 248.1  | 204.5  | 33.4 | 11.8  | 9.2  | 9.7    | 10.8 |
| 27°   | 757.9  | 727.2  | 620.1  | 459.1  | 306.8  | 251.4  | 35.5 | 11.3  | 8.6  | 9.2    | 10.8 |
| 28°   | 956.0  | 912.9  | 777.8  | 580.8  | 386.5  | 304.1  | 37.7 | 10.8  | 8.1  | 9.2    | 10.2 |
| 29°   | 1177.7 | 1117.4 | 954.3  | 717.5  | 476.4  | 363.3  | 39.8 | 10.2  | 7.5  | 8.6    | 10.2 |
| 30°   | 1364.0 | 1307.4 | 1144.4 | 879.5  | 579.7  | 441.4  | 42.0 | 9.7   | 7.0  | 8.6    | 10.2 |
| 31°   | 1582.5 | 1496.9 | 1299.4 | 1016.8 | 668.5  | 519.4  | 44.1 | 8.6   | 6.5  | 8.1    | 9.7  |
| 32°   | 1759.6 | 1699.8 | 1489.9 | 1171.8 | 785.3  | 605.5  | 45.8 | 8.1   | 6.5  | 8.1    | 9.7  |
| 33°   | 1930.8 | 1850.6 | 1647.6 | 1320.4 | 890.8  | 693.8  | 47.4 | 7.5   | 5.9  | 7.5    | 9.7  |
| 34°   | 2094.4 | 2020.7 | 1796.7 | 1440.4 | 990.4  | 777.8  | 48.4 | 6.5   | 5.9  | 7.5    | 9.2  |
| 35°   | 2238.7 | 2153.1 | 1928.1 | 1557.7 | 1092.7 | 854.2  | 48.4 | 5.9   | 5.4  | 7.0    | 9.2  |
| 36°   | 2332.3 | 2270.9 | 2042.2 | 1673.5 | 1185.3 | 926.9  | 48.4 | 5.4   | 4.8  | 7.0    | 8.6  |
| 37°   | 2412.5 | 2340.9 | 2133.7 | 1762.3 | 1253.6 | 985.0  | 48.4 | 4.8   | 4.8  | 7.0    | 8.6  |
| 38°   | 2445.3 | 2384.0 | 2196.7 | 1840.9 | 1317.7 | 1044.2 | 47.9 | 4.3   | 4.3  | 6.5    | 8.6  |
| 39°   | 2458.3 | 2403.4 | 2244.0 | 1897.4 | 1365.0 | 1084.1 | 46.8 | 3.8   | 4.3  | 6.5    | 8.6  |
| 40°   | 2441.6 | 2400.1 | 2268.3 | 1934.0 | 1402.7 | 1113.1 | 45.2 | 3.2   | 3.8  | 6.5    | 8.6  |
| 42.5° | 2372.7 | 2345.2 | 2262.9 | 1970.6 | 1435.0 | 1134.7 | 39.3 | 2.2   | 3.8  | 5.9    | 8.6  |
| 45°   | 2311.3 | 2281.2 | 2208.5 | 1932.4 | 1393.0 | 1092.1 | 29.6 | 1.1   | 3.8  | 5.9    | 8.6  |
| 47.5° | 2192.4 | 2173.5 | 2116.5 | 1835.0 | 1301.0 | 996.3  | 21.0 | 0.5   | 3.2  | 5.4    | 8.1  |
| 50°   | 1953.9 | 1936.1 | 1860.8 | 1593.3 | 1119.1 | 842.4  | 15.1 | 0.5   | 2.7  | 5.4    | 8.1  |
| 52.5° | 1740.2 | 1721.4 | 1613.2 | 1324.7 | 859.6  | 617.4  | 9.7  | 0.5   | 2.7  | 5.4    | 8.1  |
| 55°   | 1481.8 | 1449.0 | 1306.9 | 1005.5 | 609.3  | 413.9  | 7.0  | 0.5   | 2.7  | 4.8    | 8.1  |
| 57.5° | 1097.0 | 1049.1 | 922.1  | 685.8  | 350.9  | 224.5  | 3.8  | 0.5   | 2.7  | 4.8    | 8.1  |
| 60°   | 746.0  | 717.5  | 577.0  | 361.7  | 149.6  | 94.7   | 1.6  | 0.5   | 2.7  | 4.8    | 7.5  |
| 62.5° | 452.1  | 416.1  | 290.1  | 153.9  | 64.6   | 43.1   | 0.0  | 1.1   | 2.7  | 4.8    | 7.5  |
| 65°   | 128.6  | 114.1  | 75.9   | 35.0   | 18.3   | 14.0   | 0.0  | 1.1   | 2.7  | 4.8    | 7.5  |
| 67.5° | 4.3    | 4.3    | 4.3    | 3.8    | 2.7    | 2.7    | 0.5  | 1.1   | 2.7  | 4.8    | 7.0  |
| 70°   | 1.6    | 1.6    | 1.6    | 1.1    | 1.1    | 0.5    | 0.5  | 1.1   | 2.7  | 4.3    | 7.0  |
| 72.5° | 1.1    | 1.1    | 1.1    | 1.1    | 0.5    | 0.5    | 0.5  | 1.1   | 2.2  | 3.8    | 6.5  |
| 75°   | 1.1    | 1.1    | 1.1    | 0.5    | 0.5    | 0.5    | 0.5  | 1.6   | 2.2  | 3.8    | 5.4  |
| 77.5° | 1.1    | 1.1    | 1.1    | 0.5    | 0.5    | 0.5    | 0.5  | 1.6   | 2.2  | 3.2    | 5.4  |
| 80°   | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5  | 1.6   | 2.2  | 3.2    | 4.3  |



TEST NUMBER: P1309916

CATALOG NUMBER: P3SQAS05R309040DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° |
|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|--------|------|
| 82.5° | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0   | 0.5 | 1.6   | 2.2 | 2.2    | 3.2  |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.5 | 1.6   | 2.2 | 1.6    | 2.2  |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.5 | 1.6   | 1.6 | 1.6    | 1.1  |
| 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: P1309916

CATALOG NUMBER: P3SQAS05R309040DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 24.8   | 24.8 |
| 2.5°  | 23.1   | 23.1 |
| 5°    | 21.5   | 21.5 |
| 7.5°  | 19.9   | 19.9 |
| 10°   | 18.3   | 18.3 |
| 12.5° | 17.2   | 17.2 |
| 15°   | 15.6   | 16.1 |
| 17.5° | 14.5   | 15.1 |
| 20°   | 14.0   | 14.5 |
| 21°   | 14.0   | 14.5 |
| 22°   | 13.5   | 14.0 |
| 23°   | 13.5   | 14.0 |
| 24°   | 12.9   | 13.5 |
| 25°   | 12.4   | 12.9 |
| 26°   | 12.4   | 12.9 |
| 27°   | 12.4   | 12.9 |
| 28°   | 11.8   | 12.9 |
| 29°   | 11.8   | 12.4 |
| 30°   | 11.8   | 12.4 |
| 31°   | 11.3   | 12.4 |
| 32°   | 11.3   | 12.4 |
| 33°   | 11.3   | 11.8 |
| 34°   | 10.8   | 11.8 |
| 35°   | 10.8   | 11.8 |
| 36°   | 10.8   | 11.8 |
| 37°   | 10.8   | 11.3 |
| 38°   | 10.8   | 11.8 |
| 39°   | 10.8   | 11.3 |
| 40°   | 10.8   | 11.3 |
| 42.5° | 10.8   | 11.3 |
| 45°   | 10.8   | 11.3 |
| 47.5° | 10.8   | 11.8 |
| 50°   | 10.8   | 11.8 |
| 52.5° | 10.8   | 11.8 |
| 55°   | 10.8   | 11.8 |
| 57.5° | 10.8   | 11.3 |
| 60°   | 10.8   | 11.3 |
| 62.5° | 10.2   | 11.3 |
| 65°   | 10.2   | 10.8 |
| 67.5° | 10.2   | 10.8 |
| 70°   | 9.7    | 10.2 |
| 72.5° | 9.2    | 9.7  |
| 75°   | 8.1    | 9.2  |
| 77.5° | 7.5    | 8.1  |
| 80°   | 6.5    | 7.0  |



TEST NUMBER: P1309916

CATALOG NUMBER: P3SQAS05R309040DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 82.5° | 5.4    | 5.4  |
| 85°   | 3.8    | 4.3  |
| 87.5° | 2.2    | 2.2  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)