

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P130121

Luminaire Tested: **HL618TAT - HLM6935 - HL6WFL - 456P**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130121  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33490)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL618TAT - HLM6935 - HL6WFL - 456P  
Description: HALO ALLSLOPE 6" 30W, Black Coilex Baffle, White Metal Trim Ring using 55 Degree Optic at a 6-12 Pitch  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2115.6 lumens  
Efficiency: N/A  
Efficacy: 76.7 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 0.77 / 1.12  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

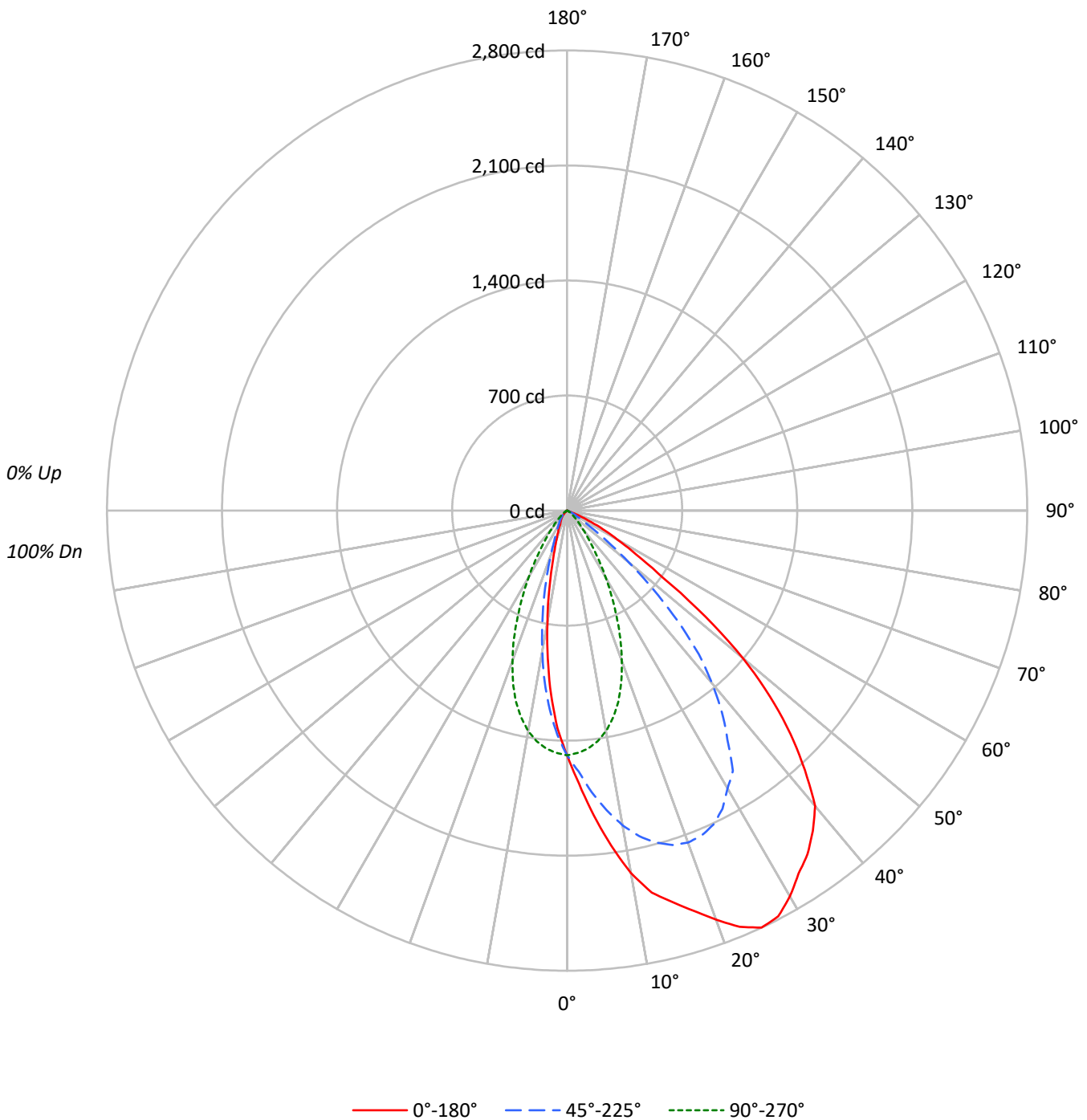
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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 | 50 | 30 | 10  | 0 |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |     |   |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |    | 100 |   |  |   |
| 1   | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 96  | 94  | 93  | 91  |    |    |    |    | 91  |   |  |   |
| 2   | 105 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 86  | 84  | 82  |    |    |    |    | 82  |   |  |   |
| 3   | 99  | 91  | 85  | 80  | 97  | 90  | 84  | 80  | 87  | 82  | 78  | 84  | 80  | 77  | 82  | 79  | 76  | 74  |    |    |    |    | 74  |   |  |   |
| 4   | 92  | 83  | 77  | 72  | 90  | 82  | 76  | 71  | 80  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 69  | 67  |    |    |    |    | 67  |   |  |   |
| 5   | 86  | 76  | 69  | 64  | 85  | 75  | 69  | 64  | 73  | 68  | 63  | 72  | 67  | 63  | 70  | 66  | 62  | 60  |    |    |    |    | 60  |   |  |   |
| 6   | 81  | 70  | 63  | 58  | 79  | 69  | 63  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 65  | 60  | 57  | 55  |    |    |    |    | 55  |   |  |   |
| 7   | 76  | 65  | 58  | 53  | 74  | 64  | 57  | 53  | 63  | 57  | 52  | 61  | 56  | 52  | 60  | 55  | 52  | 50  |    |    |    |    | 50  |   |  |   |
| 8   | 71  | 60  | 53  | 48  | 70  | 60  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 47  | 46  |    |    |    |    | 46  |   |  |   |
| 9   | 67  | 56  | 49  | 44  | 66  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 52  | 47  | 44  | 42  |    |    |    |    | 42  |   |  |   |
| 10  | 63  | 52  | 45  | 41  | 62  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 44  | 41  | 49  | 44  | 40  | 39  |    |    |    |    | 39  |   |  |   |

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

|     | 0°     | 90°   | 180°  |
|-----|--------|-------|-------|
| 0°  | 88885  | 88885 | 88885 |
| 5°  | 109010 | 85119 | 65795 |
| 10° | 129699 | 78887 | 39991 |
| 15° | 142192 | 69394 | 20745 |
| 20° | 153383 | 56379 | 11028 |
| 25° | 164058 | 41653 | 6721  |
| 30° | 161996 | 27919 | 4733  |
| 35° | 156740 | 16637 | 3778  |
| 40° | 149583 | 9723  | 2791  |
| 45° | 128258 | 5756  | 1581  |
| 50° | 98598  | 3590  | 748   |
| 55° | 53803  | 2233  | 181   |
| 60° | 28819  | 1161  | 196   |
| 65° | 12875  | 423   | 216   |
| 70° | 2028   | 242   | 121   |
| 75° | 139    | 278   | 139   |
| 80° | 0      | 329   | 0     |
| 85° | 0      | 407   | 0     |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 139.1  | 6.6       |
| 10°-20°   | 370.0  | 17.5      |
| 20°-30°   | 507.9  | 24.0      |
| 30°-40°   | 529.4  | 25.0      |
| 40°-50°   | 390.9  | 18.5      |
| 50°-60°   | 146.5  | 6.9       |
| 60°-70°   | 28.6   | 1.4       |
| 70°-80°   | 2.2    | 0.1       |
| 80°-90°   | 1.1    | 0.1       |
| 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°    | 1017.0 | 48.1      |
| 0°-40°    | 1546.4 | 73.1      |
| 0°-60°    | 2083.7 | 98.5      |
| 0°-90°    | 2115.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2115.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 1489 | 1489 | 1489 | 1489 | 1489 |      |
| 5°  | 1862 | 1720 | 1454 | 1216 | 1124 | 189  |
| 15° | 2465 | 2091 | 1203 | 539  | 360  | 703  |
| 25° | 2800 | 2108 | 711  | 168  | 115  | 1274 |
| 35° | 2551 | 1700 | 271  | 79   | 62   | 1591 |
| 45° | 1923 | 953  | 86   | 37   | 24   | 1464 |
| 55° | 713  | 169  | 30   | 7    | 2    | 696  |
| 65° | 143  | 26   | 5    | 2    | 2    | 157  |
| 75° | 1    | 1    | 2    | 1    | 1    | 4    |
| 85° | 0    | 1    | 2    | 1    | 0    | 0    |
| 90° | 0    | 0    | 0    | 0    | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 |
| 2.5°  | 1664.1 | 1638.1 | 1627.5 | 1647.6 | 1647.6 | 1652.3 | 1642.8 | 1623.9 | 1631.0 | 1588.4 | 1605.0 |
| 5°    | 1861.6 | 1840.4 | 1840.4 | 1839.2 | 1828.5 | 1832.1 | 1815.5 | 1780.0 | 1771.8 | 1719.7 | 1723.3 |
| 7.5°  | 2056.8 | 2034.3 | 2032.0 | 2033.1 | 2004.8 | 2005.9 | 1978.7 | 1926.7 | 1909.0 | 1839.2 | 1826.2 |
| 10°   | 2240.1 | 2214.1 | 2212.9 | 2201.1 | 2176.3 | 2164.4 | 2125.4 | 2060.3 | 2035.5 | 1944.4 | 1910.1 |
| 12.5° | 2380.9 | 2360.8 | 2345.4 | 2351.3 | 2312.3 | 2302.8 | 2247.2 | 2175.1 | 2134.9 | 2029.6 | 1978.7 |
| 15°   | 2464.8 | 2437.6 | 2443.6 | 2436.5 | 2421.1 | 2409.3 | 2356.0 | 2267.3 | 2212.9 | 2091.1 | 2026.0 |
| 17.5° | 2552.4 | 2527.5 | 2512.2 | 2501.5 | 2475.5 | 2469.6 | 2428.2 | 2334.7 | 2268.5 | 2133.7 | 2052.1 |
| 20°   | 2648.2 | 2621.0 | 2605.6 | 2570.1 | 2532.3 | 2512.2 | 2469.6 | 2378.5 | 2299.3 | 2150.2 | 2049.7 |
| 22.5° | 2741.6 | 2703.8 | 2673.0 | 2622.1 | 2573.7 | 2541.7 | 2494.4 | 2398.6 | 2302.8 | 2139.6 | 2023.7 |
| 25°   | 2799.6 | 2759.3 | 2707.3 | 2645.8 | 2591.4 | 2555.9 | 2507.4 | 2396.2 | 2287.4 | 2107.7 | 1972.8 |
| 27.5° | 2783.0 | 2742.8 | 2695.5 | 2634.0 | 2585.5 | 2553.5 | 2494.4 | 2417.5 | 2243.7 | 2046.1 | 1892.4 |
| 30°   | 2710.9 | 2678.9 | 2643.4 | 2594.9 | 2554.7 | 2537.0 | 2447.1 | 2302.8 | 2158.5 | 1951.5 | 1756.4 |
| 32.5° | 2619.8 | 2598.5 | 2577.2 | 2541.7 | 2514.5 | 2488.5 | 2366.7 | 2209.4 | 2046.1 | 1877.0 | 1667.7 |
| 35°   | 2551.2 | 2507.4 | 2502.7 | 2486.1 | 2451.8 | 2379.7 | 2251.9 | 2091.1 | 1916.0 | 1699.6 | 1530.5 |
| 37.5° | 2455.4 | 2435.3 | 2425.8 | 2399.8 | 2327.6 | 2247.2 | 2105.3 | 1931.4 | 1764.7 | 1548.2 | 1370.8 |
| 40°   | 2347.7 | 2322.9 | 2301.6 | 2250.8 | 2170.3 | 2081.6 | 1923.1 | 1749.3 | 1583.7 | 1373.2 | 1195.8 |
| 42.5° | 2140.8 | 2131.3 | 2086.4 | 2047.3 | 1969.3 | 1871.1 | 1715.0 | 1543.5 | 1376.7 | 1185.1 | 990.0  |
| 45°   | 1923.1 | 1903.0 | 1858.1 | 1821.4 | 1730.4 | 1636.9 | 1496.2 | 1322.3 | 1149.6 | 953.3  | 765.2  |
| 47.5° | 1674.8 | 1662.9 | 1635.7 | 1576.6 | 1484.3 | 1389.7 | 1238.3 | 1066.8 | 893.0  | 710.8  | 563.0  |
| 50°   | 1398.0 | 1389.7 | 1353.1 | 1293.9 | 1204.0 | 1111.8 | 952.1  | 791.3  | 636.3  | 489.7  | 372.6  |
| 52.5° | 1060.9 | 1034.9 | 1008.9 | 946.2  | 871.7  | 781.8  | 643.4  | 518.0  | 408.0  | 306.3  | 215.3  |
| 55°   | 713.2  | 694.3  | 663.5  | 628.0  | 570.1  | 494.4  | 398.6  | 321.7  | 251.9  | 169.1  | 118.3  |
| 57.5° | 495.6  | 480.2  | 460.1  | 423.4  | 378.5  | 328.8  | 270.8  | 205.8  | 152.6  | 100.5  | 74.5   |
| 60°   | 352.5  | 347.7  | 333.5  | 305.1  | 268.5  | 225.9  | 170.3  | 125.4  | 87.5   | 62.7   | 50.9   |
| 62.5° | 246.0  | 240.1  | 224.7  | 201.1  | 167.9  | 131.3  | 95.8   | 67.4   | 52.0   | 41.4   | 34.3   |
| 65°   | 143.1  | 137.2  | 126.6  | 107.6  | 85.2   | 65.1   | 49.7   | 37.8   | 31.9   | 26.0   | 22.5   |
| 67.5° | 66.2   | 60.3   | 56.8   | 46.1   | 39.0   | 33.1   | 26.0   | 20.1   | 17.7   | 14.2   | 11.8   |
| 70°   | 20.1   | 18.9   | 18.9   | 16.6   | 15.4   | 13.0   | 10.6   | 8.3    | 8.3    | 7.1    | 5.9    |
| 72.5° | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 3.5    | 3.5    | 3.5    | 2.4    | 2.4    |
| 75°   | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 77.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 80°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°   | 105°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 |
| 2.5°  | 1564.8 | 1580.1 | 1561.2 | 1536.4 | 1538.8 | 1513.9 | 1493.8 | 1476.1 | 1471.3 | 1450.0 | 1438.2 |
| 5°    | 1683.0 | 1659.4 | 1625.1 | 1583.7 | 1566.0 | 1524.6 | 1489.1 | 1453.6 | 1432.3 | 1395.6 | 1369.6 |
| 7.5°  | 1770.6 | 1729.2 | 1673.6 | 1613.3 | 1577.8 | 1521.0 | 1469.0 | 1415.7 | 1380.3 | 1327.0 | 1288.0 |
| 10°   | 1838.0 | 1777.7 | 1704.3 | 1625.1 | 1573.1 | 1499.7 | 1451.2 | 1362.5 | 1309.3 | 1240.7 | 1187.5 |
| 12.5° | 1887.7 | 1808.4 | 1716.2 | 1620.4 | 1551.8 | 1461.9 | 1377.9 | 1290.4 | 1223.0 | 1142.5 | 1065.7 |
| 15°   | 1916.0 | 1819.1 | 1706.7 | 1594.3 | 1506.8 | 1407.5 | 1304.6 | 1202.9 | 1115.3 | 1019.5 | 936.7  |
| 17.5° | 1922.0 | 1803.7 | 1673.6 | 1550.6 | 1448.9 | 1331.8 | 1231.2 | 1096.4 | 991.1  | 885.9  | 788.9  |
| 20°   | 1903.0 | 1782.4 | 1625.1 | 1490.3 | 1373.2 | 1239.5 | 1128.3 | 973.4  | 859.9  | 749.9  | 657.6  |
| 22.5° | 1861.6 | 1710.2 | 1560.0 | 1411.0 | 1273.8 | 1123.6 | 979.3  | 846.8  | 729.8  | 618.6  | 526.3  |
| 25°   | 1789.5 | 1634.6 | 1472.5 | 1311.7 | 1163.8 | 994.7  | 843.3  | 710.8  | 596.1  | 495.6  | 405.7  |
| 27.5° | 1703.2 | 1535.2 | 1366.1 | 1226.5 | 1024.3 | 861.0  | 709.6  | 585.5  | 476.6  | 377.3  | 307.5  |
| 30°   | 1596.7 | 1425.2 | 1244.2 | 1049.1 | 877.6  | 726.2  | 589.0  | 467.2  | 369.0  | 292.1  | 235.4  |
| 32.5° | 1472.5 | 1283.3 | 1098.8 | 906.0  | 741.6  | 600.8  | 467.2  | 361.9  | 279.1  | 223.5  | 186.9  |
| 35°   | 1329.4 | 1134.3 | 939.1  | 758.1  | 609.1  | 470.7  | 359.6  | 270.8  | 217.6  | 178.6  | 151.4  |
| 37.5° | 1170.9 | 967.5  | 777.1  | 615.0  | 480.2  | 359.6  | 263.8  | 204.6  | 165.6  | 137.2  | 115.9  |
| 40°   | 985.2  | 792.4  | 624.5  | 474.3  | 343.0  | 251.9  | 190.4  | 152.6  | 126.6  | 108.8  | 94.6   |
| 42.5° | 781.8  | 616.2  | 469.5  | 334.7  | 233.0  | 177.4  | 140.7  | 115.9  | 99.4   | 85.2   | 75.7   |
| 45°   | 586.6  | 444.7  | 319.3  | 224.7  | 164.4  | 127.7  | 102.9  | 86.3   | 74.5   | 65.1   | 59.1   |
| 47.5° | 418.7  | 294.5  | 201.1  | 140.7  | 108.8  | 86.3   | 73.3   | 62.7   | 55.6   | 52.0   | 47.3   |
| 50°   | 261.4  | 176.2  | 117.1  | 88.7   | 73.3   | 61.5   | 55.6   | 50.9   | 44.9   | 40.2   | 36.7   |
| 52.5° | 139.6  | 97.0   | 73.3   | 62.7   | 55.6   | 49.7   | 43.8   | 39.0   | 34.3   | 31.9   | 27.2   |
| 55°   | 80.4   | 67.4   | 55.6   | 49.7   | 43.8   | 37.8   | 33.1   | 29.6   | 27.2   | 23.7   | 20.1   |
| 57.5° | 59.1   | 50.9   | 42.6   | 36.7   | 33.1   | 28.4   | 24.8   | 22.5   | 18.9   | 15.4   | 13.0   |
| 60°   | 41.4   | 35.5   | 31.9   | 28.4   | 23.7   | 20.1   | 17.7   | 14.2   | 11.8   | 9.5    | 8.3    |
| 62.5° | 29.6   | 24.8   | 21.3   | 17.7   | 15.4   | 13.0   | 10.6   | 8.3    | 7.1    | 5.9    | 4.7    |
| 65°   | 17.7   | 15.4   | 13.0   | 10.6   | 9.5    | 7.1    | 5.9    | 4.7    | 3.5    | 3.5    | 2.4    |
| 67.5° | 9.5    | 8.3    | 7.1    | 5.9    | 4.7    | 3.5    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 70°   | 4.7    | 3.5    | 3.5    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 72.5° | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 75°   | 1.2    | 1.2    | 1.2    | 1.2    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 77.5° | 1.2    | 1.2    | 1.2    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 80°   | 1.2    | 1.2    | 1.2    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 82.5° | 1.2    | 1.2    | 1.2    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 85°   | 1.2    | 1.2    | 1.2    | 1.2    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 87.5° | 1.2    | 1.2    | 1.2    | 1.2    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 1.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   | 160°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 | 1489.1 |
| 2.5°  | 1433.5 | 1416.9 | 1413.4 | 1398.0 | 1400.4 | 1364.9 | 1360.2 | 1344.8 | 1348.3 | 1346.0 | 1347.1 |
| 5°    | 1325.9 | 1322.3 | 1298.7 | 1271.5 | 1259.6 | 1215.9 | 1200.5 | 1179.2 | 1168.6 | 1157.9 | 1155.5 |
| 7.5°  | 1247.8 | 1208.8 | 1165.0 | 1129.5 | 1104.7 | 1050.3 | 1017.2 | 987.6  | 972.2  | 958.0  | 947.4  |
| 10°   | 1130.7 | 1076.3 | 1019.5 | 976.9  | 947.4  | 871.7  | 833.8  | 791.3  | 773.5  | 746.3  | 736.9  |
| 12.5° | 998.2  | 929.6  | 870.5  | 809.0  | 749.9  | 696.6  | 663.5  | 628.0  | 593.7  | 572.4  | 551.2  |
| 15°   | 849.2  | 775.9  | 710.8  | 649.3  | 602.0  | 539.3  | 502.7  | 462.5  | 430.5  | 406.9  | 386.8  |
| 17.5° | 706.1  | 629.2  | 567.7  | 508.6  | 447.1  | 401.0  | 361.9  | 324.1  | 305.1  | 283.9  | 273.2  |
| 20°   | 568.9  | 496.8  | 425.8  | 364.3  | 327.6  | 288.6  | 254.3  | 233.0  | 222.4  | 209.3  | 202.2  |
| 22.5° | 447.1  | 373.7  | 319.3  | 269.7  | 237.7  | 212.9  | 197.5  | 181.0  | 172.7  | 163.2  | 157.3  |
| 25°   | 335.9  | 277.9  | 236.5  | 210.5  | 190.4  | 167.9  | 154.9  | 141.9  | 133.7  | 127.7  | 123.0  |
| 27.5° | 253.1  | 215.3  | 185.7  | 165.6  | 150.2  | 133.7  | 123.0  | 113.5  | 107.6  | 102.9  | 98.2   |
| 30°   | 201.1  | 172.7  | 149.0  | 134.8  | 121.8  | 108.8  | 100.5  | 92.3   | 88.7   | 86.3   | 84.0   |
| 32.5° | 160.9  | 139.6  | 120.6  | 110.0  | 99.4   | 89.9   | 85.2   | 80.4   | 78.1   | 75.7   | 74.5   |
| 35°   | 128.9  | 112.4  | 98.2   | 89.9   | 85.2   | 79.2   | 74.5   | 71.0   | 68.6   | 67.4   | 65.1   |
| 37.5° | 102.9  | 91.1   | 84.0   | 78.1   | 74.5   | 68.6   | 65.1   | 61.5   | 59.1   | 58.0   | 56.8   |
| 40°   | 84.0   | 76.9   | 71.0   | 66.2   | 61.5   | 58.0   | 53.2   | 50.9   | 49.7   | 47.3   | 46.1   |
| 42.5° | 67.4   | 61.5   | 56.8   | 53.2   | 50.9   | 47.3   | 43.8   | 41.4   | 39.0   | 37.8   | 35.5   |
| 45°   | 54.4   | 49.7   | 44.9   | 42.6   | 40.2   | 36.7   | 33.1   | 29.6   | 29.6   | 27.2   | 26.0   |
| 47.5° | 43.8   | 39.0   | 35.5   | 33.1   | 29.6   | 27.2   | 24.8   | 22.5   | 21.3   | 20.1   | 18.9   |
| 50°   | 31.9   | 29.6   | 26.0   | 24.8   | 22.5   | 18.9   | 17.7   | 15.4   | 14.2   | 13.0   | 11.8   |
| 52.5° | 24.8   | 22.5   | 18.9   | 16.6   | 15.4   | 13.0   | 11.8   | 9.5    | 8.3    | 7.1    | 7.1    |
| 55°   | 17.7   | 15.4   | 13.0   | 10.6   | 9.5    | 7.1    | 5.9    | 4.7    | 4.7    | 3.5    | 3.5    |
| 57.5° | 11.8   | 9.5    | 8.3    | 5.9    | 4.7    | 4.7    | 3.5    | 2.4    | 2.4    | 2.4    | 1.2    |
| 60°   | 7.1    | 5.9    | 4.7    | 3.5    | 2.4    | 2.4    | 2.4    | 2.4    | 1.2    | 1.2    | 2.4    |
| 62.5° | 3.5    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 65°   | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    |
| 67.5° | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 1.2    | 1.2    | 2.4    | 1.2    |
| 70°   | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 72.5° | 2.4    | 2.4    | 2.4    | 2.4    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 75°   | 2.4    | 2.4    | 2.4    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 77.5° | 2.4    | 2.4    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 80°   | 2.4    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    |
| 82.5° | 2.4    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 0.0    |
| 85°   | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 0.0    | 0.0    |
| 87.5° | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 0.0    | 0.0    |
| 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: P130121

CATALOG NUMBER: HL618TAT - HLM6935 - HL6WFL - 456P

**CANDELA DISTRIBUTION (continued):**

|       | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|
| 0°    | 1489.1 | 1489.1 | 1489.1 | 1489.1 |
| 2.5°  | 1311.7 | 1306.9 | 1322.3 | 1327.0 |
| 5°    | 1146.1 | 1110.6 | 1126.0 | 1123.6 |
| 7.5°  | 911.9  | 890.6  | 909.5  | 904.8  |
| 10°   | 701.4  | 681.3  | 694.3  | 690.7  |
| 12.5° | 522.8  | 507.4  | 508.6  | 506.2  |
| 15°   | 366.7  | 358.4  | 353.6  | 359.6  |
| 17.5° | 254.3  | 248.4  | 247.2  | 251.9  |
| 20°   | 191.6  | 185.7  | 185.7  | 190.4  |
| 22.5° | 150.2  | 144.3  | 144.3  | 145.5  |
| 25°   | 115.9  | 114.7  | 112.4  | 114.7  |
| 27.5° | 94.6   | 91.1   | 92.3   | 91.1   |
| 30°   | 80.4   | 78.1   | 79.2   | 79.2   |
| 32.5° | 71.0   | 69.8   | 69.8   | 69.8   |
| 35°   | 62.7   | 61.5   | 61.5   | 61.5   |
| 37.5° | 54.4   | 53.2   | 53.2   | 53.2   |
| 40°   | 43.8   | 42.6   | 42.6   | 43.8   |
| 42.5° | 33.1   | 33.1   | 33.1   | 33.1   |
| 45°   | 24.8   | 23.7   | 23.7   | 23.7   |
| 47.5° | 17.7   | 16.6   | 16.6   | 16.6   |
| 50°   | 10.6   | 9.5    | 9.5    | 10.6   |
| 52.5° | 5.9    | 4.7    | 4.7    | 5.9    |
| 55°   | 2.4    | 2.4    | 2.4    | 2.4    |
| 57.5° | 1.2    | 1.2    | 1.2    | 1.2    |
| 60°   | 1.2    | 1.2    | 1.2    | 2.4    |
| 62.5° | 1.2    | 1.2    | 2.4    | 2.4    |
| 65°   | 1.2    | 1.2    | 2.4    | 2.4    |
| 67.5° | 2.4    | 1.2    | 1.2    | 1.2    |
| 70°   | 1.2    | 1.2    | 1.2    | 1.2    |
| 72.5° | 1.2    | 1.2    | 1.2    | 1.2    |
| 75°   | 1.2    | 1.2    | 1.2    | 1.2    |
| 77.5° | 0.0    | 0.0    | 0.0    | 1.2    |
| 80°   | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)