

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: HALO COMMERCIAL

Report Number: P776168

Luminaire Tested: HCDJBL51525CSD-HCD82TRMB-2500lm-4000K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776168  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B065-HCD82TRMB)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBLS1525CSD-HCD82TRMB-2500lm-4000K  
Description: 8 INCH ROUND NARROW MATTE BLACK TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

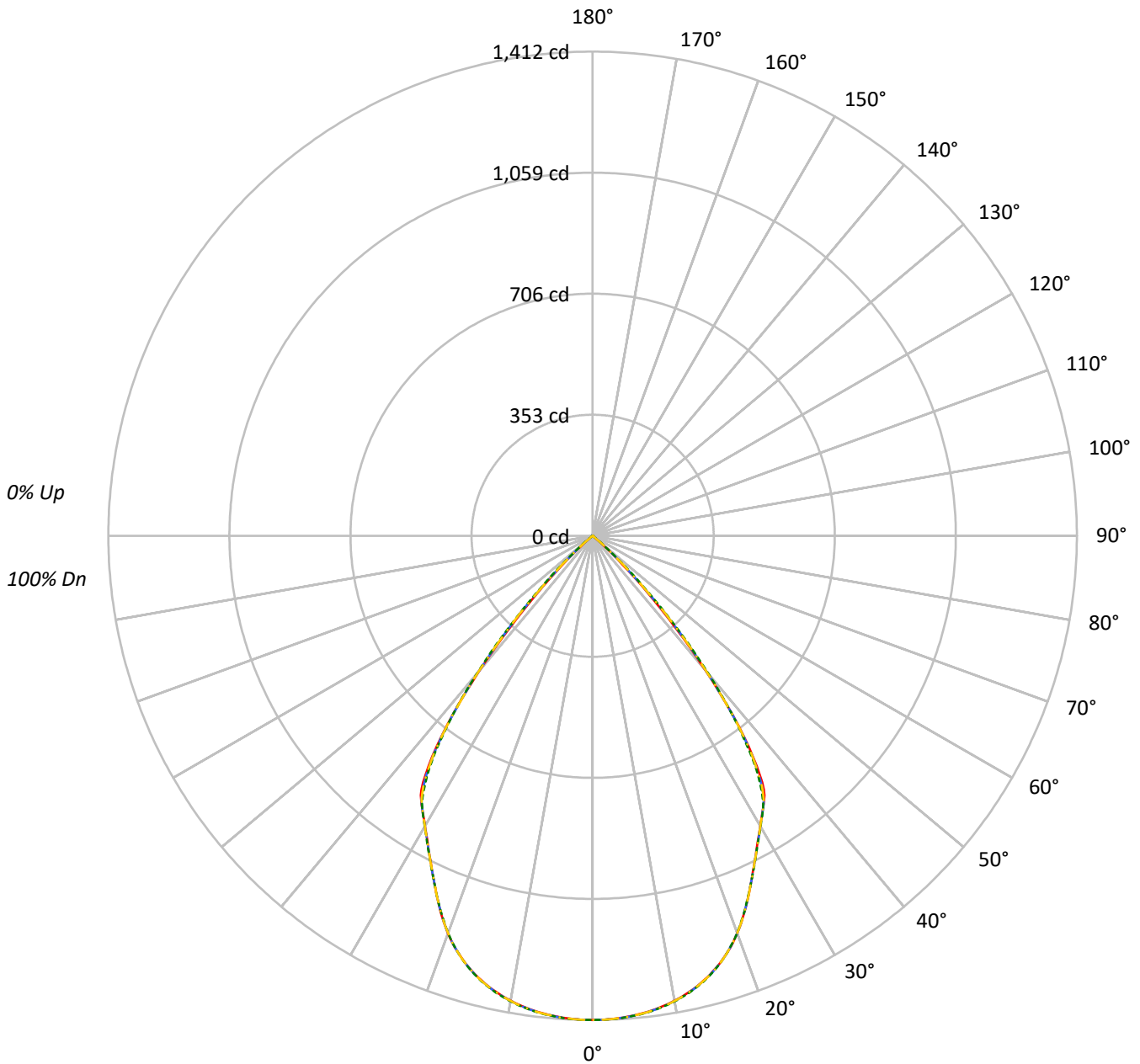
Lumens per Lamp: N/A  
Luminaire Lumens: 1679.7 lumens  
Efficiency: N/A  
Efficacy: 67.2 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.08  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P776168  
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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |     |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-----|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |    |    |    |     |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |     | 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   | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 95  | 93  |    |    |    |    |    | 93  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 107 | 102 | 98  | 94  | 105 | 100 | 97  | 93  | 97  | 94  | 91  | 94  | 92  | 89  | 91  | 89  | 87  | 86  |    |    |    |    |    | 86  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 101 | 95  | 89  | 85  | 99  | 93  | 88  | 85  | 91  | 86  | 83  | 88  | 85  | 82  | 86  | 83  | 81  | 79  |    |    |    |    |    | 79  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 96  | 88  | 82  | 77  | 94  | 87  | 81  | 77  | 84  | 80  | 76  | 82  | 78  | 75  | 81  | 77  | 74  | 73  |    |    |    |    |    | 73  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 90  | 82  | 75  | 71  | 89  | 81  | 75  | 70  | 79  | 74  | 70  | 77  | 73  | 69  | 75  | 72  | 69  | 67  |    |    |    |    |    | 67  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 85  | 76  | 70  | 65  | 84  | 75  | 69  | 65  | 74  | 68  | 64  | 72  | 67  | 64  | 71  | 67  | 63  | 62  |    |    |    |    |    | 62  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 81  | 71  | 64  | 60  | 79  | 70  | 64  | 60  | 69  | 63  | 59  | 68  | 63  | 59  | 66  | 62  | 59  | 57  |    |    |    |    |    | 57  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 76  | 66  | 60  | 55  | 75  | 66  | 60  | 55  | 64  | 59  | 55  | 63  | 58  | 55  | 62  | 58  | 55  | 53  |    |    |    |    |    | 53  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 72  | 62  | 56  | 51  | 71  | 61  | 55  | 51  | 60  | 55  | 51  | 60  | 55  | 51  | 59  | 54  | 51  | 49  |    |    |    |    |    | 49  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 68  | 58  | 52  | 48  | 67  | 58  | 52  | 48  | 57  | 51  | 48  | 56  | 51  | 47  | 55  | 51  | 47  | 46  |    |    |    |    |    | 46  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°    | 90°   | 180°  | 270°  |
|-----|-------|-------|-------|-------|
| 0°  | 43118 | 43118 | 43118 | 43118 |
| 5°  | 43016 | 43056 | 43016 | 43056 |
| 10° | 42676 | 42741 | 42676 | 42741 |
| 15° | 41854 | 41895 | 41854 | 41895 |
| 20° | 40079 | 40040 | 40079 | 40040 |
| 25° | 37021 | 37055 | 37021 | 37055 |
| 30° | 34464 | 34520 | 34464 | 34520 |
| 35° | 31639 | 30994 | 31639 | 30994 |
| 40° | 20413 | 20983 | 20413 | 20983 |
| 45° | 7491  | 9011  | 7491  | 9011  |
| 50° | 860   | 1377  | 860   | 1377  |
| 55° | 133   | 133   | 133   | 133   |
| 60° | 79    | 79    | 79    | 79    |
| 65° | 58    | 58    | 58    | 58    |
| 70° | 45    | 45    | 45    | 45    |
| 75° | 35    | 35    | 35    | 35    |
| 80° | 0     | 0     | 0     | 0     |
| 85° | 0     | 0     | 0     | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9011 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 133.2  | 7.9       |
| 10°-20°   | 371.5  | 22.1      |
| 20°-30°   | 506.4  | 30.1      |
| 30°-40°   | 500.0  | 29.8      |
| 40°-50°   | 163.7  | 9.7       |
| 50°-60°   | 3.8    | 0.2       |
| 60°-70°   | 0.8    | 0.0       |
| 70°-80°   | 0.3    | 0.0       |
| 80°-90°   | 0.0    | 0.0       |
| 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°    | 1011.1 | 60.2      |
| 0°-40°    | 1511.1 | 90.0      |
| 0°-60°    | 1678.7 | 99.9      |
| 0°-90°    | 1679.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1679.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 90°  | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 1412 | 1412 | 1412 | 1412 | 1412 |      |
| 5°  | 1404 | 1405 | 1404 | 1405 | 1404 | 133  |
| 15° | 1324 | 1326 | 1324 | 1326 | 1324 | 371  |
| 25° | 1099 | 1100 | 1099 | 1100 | 1099 | 506  |
| 35° | 849  | 832  | 849  | 832  | 849  | 502  |
| 45° | 174  | 209  | 174  | 209  | 174  | 154  |
| 55° | 2    | 2    | 2    | 2    | 2    | 3    |
| 65° | 1    | 1    | 1    | 1    | 1    | 1    |
| 75° | 0    | 0    | 0    | 0    | 0    | 0    |
| 85° | 0    | 0    | 0    | 0    | 0    | 0    |
| 90° | 0    | 0    | 0    | 0    | 0    |      |



TEST NUMBER: P776168

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 |
| 0.5°  | 1412.0 | 1412.0 | 1412.3 | 1412.0 | 1412.3 | 1412.0 | 1412.3 | 1412.0 | 1412.0 | 1412.0 | 1412.3 |
| 1°    | 1411.8 | 1411.8 | 1412.0 | 1411.8 | 1412.3 | 1411.8 | 1412.0 | 1411.8 | 1411.8 | 1411.8 | 1412.0 |
| 1.5°  | 1411.3 | 1411.5 | 1411.5 | 1411.5 | 1411.8 | 1411.5 | 1411.5 | 1411.5 | 1411.3 | 1411.5 | 1411.5 |
| 2°    | 1410.7 | 1410.7 | 1411.0 | 1411.0 | 1411.3 | 1411.0 | 1411.0 | 1410.7 | 1410.7 | 1410.7 | 1411.0 |
| 2.5°  | 1410.0 | 1410.2 | 1410.2 | 1410.2 | 1410.5 | 1410.2 | 1410.2 | 1410.2 | 1410.0 | 1410.2 | 1410.2 |
| 3°    | 1409.2 | 1409.2 | 1409.5 | 1409.5 | 1409.7 | 1409.5 | 1409.5 | 1409.2 | 1409.2 | 1409.2 | 1409.5 |
| 3.5°  | 1408.2 | 1408.2 | 1408.5 | 1408.5 | 1408.7 | 1408.5 | 1408.5 | 1408.2 | 1408.2 | 1408.2 | 1408.5 |
| 4°    | 1406.9 | 1406.9 | 1407.2 | 1407.2 | 1407.7 | 1407.2 | 1407.2 | 1406.9 | 1406.9 | 1406.9 | 1407.2 |
| 4.5°  | 1405.4 | 1405.4 | 1405.7 | 1405.9 | 1406.2 | 1405.9 | 1405.7 | 1405.4 | 1405.4 | 1405.4 | 1405.7 |
| 5°    | 1403.6 | 1403.9 | 1404.1 | 1404.4 | 1404.9 | 1404.4 | 1404.1 | 1403.9 | 1403.6 | 1403.9 | 1404.1 |
| 5.5°  | 1402.1 | 1402.1 | 1402.3 | 1402.6 | 1403.1 | 1402.6 | 1402.3 | 1402.1 | 1402.1 | 1402.1 | 1402.3 |
| 6°    | 1400.1 | 1400.1 | 1400.6 | 1400.8 | 1401.3 | 1400.8 | 1400.6 | 1400.1 | 1400.1 | 1400.1 | 1400.6 |
| 6.5°  | 1397.8 | 1398.0 | 1398.5 | 1398.8 | 1399.3 | 1398.8 | 1398.5 | 1398.0 | 1397.8 | 1398.0 | 1398.5 |
| 7°    | 1395.5 | 1395.5 | 1396.2 | 1396.5 | 1397.0 | 1396.5 | 1396.2 | 1395.5 | 1395.5 | 1395.5 | 1396.2 |
| 7.5°  | 1392.9 | 1392.9 | 1393.7 | 1394.0 | 1394.5 | 1394.0 | 1393.7 | 1392.9 | 1392.9 | 1392.9 | 1393.7 |
| 8°    | 1390.1 | 1390.4 | 1390.9 | 1391.4 | 1391.9 | 1391.4 | 1390.9 | 1390.4 | 1390.1 | 1390.4 | 1390.9 |
| 8.5°  | 1387.1 | 1387.3 | 1387.8 | 1388.4 | 1388.9 | 1388.4 | 1387.8 | 1387.3 | 1387.1 | 1387.3 | 1387.8 |
| 9°    | 1383.8 | 1384.0 | 1384.8 | 1385.3 | 1385.8 | 1385.3 | 1384.8 | 1384.0 | 1383.8 | 1384.0 | 1384.8 |
| 9.5°  | 1380.2 | 1380.5 | 1381.2 | 1382.0 | 1382.5 | 1382.0 | 1381.2 | 1380.5 | 1380.2 | 1380.5 | 1381.2 |
| 10°   | 1376.6 | 1376.9 | 1377.4 | 1378.2 | 1378.7 | 1378.2 | 1377.4 | 1376.9 | 1376.6 | 1376.9 | 1377.4 |
| 10.5° | 1372.6 | 1372.8 | 1373.6 | 1374.4 | 1374.9 | 1374.4 | 1373.6 | 1372.8 | 1372.6 | 1372.8 | 1373.6 |
| 11°   | 1368.5 | 1368.8 | 1369.5 | 1370.0 | 1370.5 | 1370.0 | 1369.5 | 1368.8 | 1368.5 | 1368.8 | 1369.5 |
| 11.5° | 1363.9 | 1364.2 | 1364.9 | 1365.5 | 1366.2 | 1365.5 | 1364.9 | 1364.2 | 1363.9 | 1364.2 | 1364.9 |
| 12°   | 1359.3 | 1359.3 | 1360.1 | 1360.9 | 1361.4 | 1360.9 | 1360.1 | 1359.3 | 1359.3 | 1359.3 | 1360.1 |
| 12.5° | 1354.3 | 1354.3 | 1355.0 | 1355.8 | 1356.3 | 1355.8 | 1355.0 | 1354.3 | 1354.3 | 1354.3 | 1355.0 |
| 13°   | 1348.9 | 1349.2 | 1349.7 | 1350.4 | 1350.7 | 1350.4 | 1349.7 | 1349.2 | 1348.9 | 1349.2 | 1349.7 |
| 13.5° | 1343.1 | 1343.3 | 1344.1 | 1344.6 | 1345.1 | 1344.6 | 1344.1 | 1343.3 | 1343.1 | 1343.3 | 1344.1 |
| 14°   | 1337.2 | 1337.5 | 1338.0 | 1338.5 | 1339.0 | 1338.5 | 1338.0 | 1337.5 | 1337.2 | 1337.5 | 1338.0 |
| 14.5° | 1330.8 | 1331.1 | 1331.6 | 1332.1 | 1332.6 | 1332.1 | 1331.6 | 1331.1 | 1330.8 | 1331.1 | 1331.6 |
| 15°   | 1324.2 | 1324.2 | 1324.7 | 1325.2 | 1325.5 | 1325.2 | 1324.7 | 1324.2 | 1324.2 | 1324.2 | 1324.7 |
| 15.5° | 1317.1 | 1317.1 | 1317.6 | 1318.1 | 1318.4 | 1318.1 | 1317.6 | 1317.1 | 1317.1 | 1317.1 | 1317.6 |
| 16°   | 1309.5 | 1309.7 | 1310.0 | 1310.2 | 1310.7 | 1310.2 | 1310.0 | 1309.7 | 1309.5 | 1309.7 | 1310.0 |
| 16.5° | 1301.8 | 1301.8 | 1302.1 | 1302.3 | 1302.6 | 1302.3 | 1302.1 | 1301.8 | 1301.8 | 1301.8 | 1302.1 |
| 17°   | 1293.4 | 1293.4 | 1293.7 | 1293.9 | 1294.2 | 1293.9 | 1293.7 | 1293.4 | 1293.4 | 1293.4 | 1293.7 |
| 17.5° | 1284.5 | 1284.5 | 1284.8 | 1284.8 | 1285.0 | 1284.8 | 1284.8 | 1284.5 | 1284.5 | 1284.5 | 1284.8 |
| 18°   | 1275.6 | 1275.4 | 1275.4 | 1275.4 | 1275.6 | 1275.4 | 1275.4 | 1275.4 | 1275.6 | 1275.4 | 1275.4 |
| 18.5° | 1265.7 | 1265.7 | 1265.4 | 1265.4 | 1265.4 | 1265.4 | 1265.4 | 1265.7 | 1265.7 | 1265.7 | 1265.4 |
| 19°   | 1255.5 | 1255.5 | 1255.3 | 1255.0 | 1255.0 | 1255.0 | 1255.3 | 1255.5 | 1255.5 | 1255.5 | 1255.3 |
| 19.5° | 1244.8 | 1244.6 | 1244.3 | 1244.1 | 1244.1 | 1244.1 | 1244.3 | 1244.6 | 1244.8 | 1244.6 | 1244.3 |
| 20°   | 1233.6 | 1233.4 | 1233.1 | 1232.6 | 1232.4 | 1232.6 | 1233.1 | 1233.4 | 1233.6 | 1233.4 | 1233.1 |
| 20.5° | 1221.7 | 1221.4 | 1220.9 | 1220.4 | 1220.2 | 1220.4 | 1220.9 | 1221.4 | 1221.7 | 1221.4 | 1220.9 |
| 21°   | 1209.2 | 1209.2 | 1208.7 | 1207.7 | 1207.2 | 1207.7 | 1208.7 | 1209.2 | 1209.2 | 1209.2 | 1208.7 |



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CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 22.5° | 1169.3 | 1169.3 | 1168.8 | 1168.0 | 1168.0 | 1168.0 | 1168.8 | 1169.3 | 1169.3 | 1169.3 | 1168.8 |
| 23°   | 1155.3 | 1155.3 | 1155.0 | 1154.2 | 1154.2 | 1154.2 | 1155.0 | 1155.3 | 1155.3 | 1155.3 | 1155.0 |
| 23.5° | 1141.0 | 1141.3 | 1141.0 | 1140.5 | 1140.5 | 1140.5 | 1141.0 | 1141.3 | 1141.0 | 1141.3 | 1141.0 |
| 24°   | 1126.8 | 1127.0 | 1127.0 | 1126.8 | 1127.0 | 1126.8 | 1127.0 | 1127.0 | 1126.8 | 1127.0 | 1127.0 |
| 24.5° | 1113.0 | 1113.0 | 1113.3 | 1113.0 | 1113.5 | 1113.0 | 1113.3 | 1113.0 | 1113.0 | 1113.0 | 1113.3 |
| 25°   | 1099.0 | 1099.3 | 1099.5 | 1099.5 | 1100.0 | 1099.5 | 1099.5 | 1099.3 | 1099.0 | 1099.3 | 1099.5 |
| 25.5° | 1085.8 | 1085.8 | 1086.0 | 1086.3 | 1086.8 | 1086.3 | 1086.0 | 1085.8 | 1085.8 | 1085.8 | 1086.0 |
| 26°   | 1072.6 | 1072.8 | 1073.1 | 1073.3 | 1073.8 | 1073.3 | 1073.1 | 1072.8 | 1072.6 | 1072.8 | 1073.1 |
| 26.5° | 1059.6 | 1059.8 | 1060.1 | 1060.3 | 1061.1 | 1060.3 | 1060.1 | 1059.8 | 1059.6 | 1059.8 | 1060.1 |
| 27°   | 1047.1 | 1047.1 | 1047.6 | 1047.6 | 1048.4 | 1047.6 | 1047.6 | 1047.1 | 1047.1 | 1047.1 | 1047.6 |
| 27.5° | 1034.6 | 1034.9 | 1035.2 | 1035.7 | 1036.2 | 1035.7 | 1035.2 | 1034.9 | 1034.6 | 1034.9 | 1035.2 |
| 28°   | 1022.4 | 1022.7 | 1023.2 | 1023.5 | 1024.2 | 1023.5 | 1023.2 | 1022.7 | 1022.4 | 1022.7 | 1023.2 |
| 28.5° | 1010.7 | 1011.2 | 1011.5 | 1011.7 | 1012.5 | 1011.7 | 1011.5 | 1011.2 | 1010.7 | 1011.2 | 1011.5 |
| 29°   | 999.5  | 999.8  | 1000.0 | 1000.3 | 1001.1 | 1000.3 | 1000.0 | 999.8  | 999.5  | 999.8  | 1000.0 |
| 29.5° | 988.3  | 988.6  | 989.1  | 989.4  | 989.9  | 989.4  | 989.1  | 988.6  | 988.3  | 988.6  | 989.1  |
| 30°   | 977.6  | 977.6  | 978.2  | 978.4  | 979.2  | 978.4  | 978.2  | 977.6  | 977.6  | 977.6  | 978.2  |
| 30.5° | 967.0  | 967.2  | 967.5  | 968.0  | 968.5  | 968.0  | 967.5  | 967.2  | 967.0  | 967.2  | 967.5  |
| 31°   | 956.8  | 957.0  | 957.5  | 957.8  | 958.6  | 957.8  | 957.5  | 957.0  | 956.8  | 957.0  | 957.5  |
| 31.5° | 947.1  | 947.4  | 947.4  | 947.6  | 948.1  | 947.6  | 947.4  | 947.4  | 947.1  | 947.4  | 947.4  |
| 32°   | 937.7  | 937.7  | 937.7  | 937.4  | 938.0  | 937.4  | 937.7  | 937.7  | 937.7  | 937.7  | 937.7  |
| 32.5° | 928.5  | 928.3  | 927.8  | 926.8  | 925.7  | 926.8  | 927.8  | 928.3  | 928.5  | 928.3  | 927.8  |
| 33°   | 918.6  | 918.1  | 915.6  | 913.0  | 910.2  | 913.0  | 915.6  | 918.1  | 918.6  | 918.1  | 915.6  |
| 33.5° | 907.9  | 905.4  | 900.5  | 896.2  | 892.7  | 896.2  | 900.5  | 905.4  | 907.9  | 905.4  | 900.5  |
| 34°   | 892.7  | 889.3  | 882.7  | 877.1  | 873.3  | 877.1  | 882.7  | 889.3  | 892.7  | 889.3  | 882.7  |
| 34.5° | 872.6  | 869.8  | 862.4  | 857.0  | 853.2  | 857.0  | 862.4  | 869.8  | 872.6  | 869.8  | 862.4  |
| 35°   | 848.9  | 846.1  | 839.5  | 835.1  | 831.6  | 835.1  | 839.5  | 846.1  | 848.9  | 846.1  | 839.5  |
| 35.5° | 822.9  | 821.4  | 815.3  | 810.7  | 807.2  | 810.7  | 815.3  | 821.4  | 822.9  | 821.4  | 815.3  |
| 36°   | 795.2  | 793.9  | 788.8  | 784.3  | 780.4  | 784.3  | 788.8  | 793.9  | 795.2  | 793.9  | 788.8  |
| 36.5° | 765.7  | 764.7  | 760.3  | 755.5  | 751.4  | 755.5  | 760.3  | 764.7  | 765.7  | 764.7  | 760.3  |
| 37°   | 732.6  | 731.8  | 729.3  | 725.7  | 721.7  | 725.7  | 729.3  | 731.8  | 732.6  | 731.8  | 729.3  |
| 37.5° | 698.5  | 697.5  | 696.5  | 694.2  | 690.9  | 694.2  | 696.5  | 697.5  | 698.5  | 697.5  | 696.5  |
| 38°   | 662.4  | 660.8  | 661.4  | 661.1  | 659.6  | 661.1  | 661.4  | 660.8  | 662.4  | 660.8  | 661.4  |
| 38.5° | 627.3  | 625.0  | 625.5  | 626.7  | 628.0  | 626.7  | 625.5  | 625.0  | 627.3  | 625.0  | 625.5  |
| 39°   | 589.3  | 588.6  | 589.1  | 592.1  | 595.4  | 592.1  | 589.1  | 588.6  | 589.3  | 588.6  | 589.1  |
| 39.5° | 551.7  | 552.2  | 553.2  | 557.0  | 561.6  | 557.0  | 553.2  | 552.2  | 551.7  | 552.2  | 553.2  |
| 40°   | 512.2  | 514.8  | 517.1  | 522.2  | 526.5  | 522.2  | 517.1  | 514.8  | 512.2  | 514.8  | 517.1  |
| 40.5° | 474.3  | 477.9  | 482.2  | 487.8  | 491.6  | 487.8  | 482.2  | 477.9  | 474.3  | 477.9  | 482.2  |
| 41°   | 435.4  | 440.2  | 447.3  | 453.7  | 457.5  | 453.7  | 447.3  | 440.2  | 435.4  | 440.2  | 447.3  |
| 41.5° | 398.5  | 403.6  | 412.2  | 419.9  | 423.4  | 419.9  | 412.2  | 403.6  | 398.5  | 403.6  | 412.2  |
| 42°   | 362.4  | 366.9  | 377.1  | 386.3  | 389.6  | 386.3  | 377.1  | 366.9  | 362.4  | 366.9  | 377.1  |
| 42.5° | 327.2  | 332.8  | 344.3  | 353.4  | 356.5  | 353.4  | 344.3  | 332.8  | 327.2  | 332.8  | 344.3  |
| 43°   | 293.4  | 299.8  | 311.2  | 320.9  | 324.2  | 320.9  | 311.2  | 299.8  | 293.4  | 299.8  | 311.2  |
| 43.5° | 261.8  | 267.9  | 279.1  | 289.1  | 293.7  | 289.1  | 279.1  | 267.9  | 261.8  | 267.9  | 279.1  |



TEST NUMBER: P776168

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  | 202.5° | 225°  |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 45°   | 173.5 | 178.9 | 190.6 | 202.3 | 208.7 | 202.3  | 190.6 | 178.9  | 173.5 | 178.9  | 190.6 |
| 45.5° | 146.8 | 153.2 | 165.1 | 177.4 | 183.2 | 177.4  | 165.1 | 153.2  | 146.8 | 153.2  | 165.1 |
| 46°   | 123.4 | 128.8 | 142.2 | 154.2 | 161.3 | 154.2  | 142.2 | 128.8  | 123.4 | 128.8  | 142.2 |
| 46.5° | 102.3 | 107.9 | 120.6 | 132.1 | 139.7 | 132.1  | 120.6 | 107.9  | 102.3 | 107.9  | 120.6 |
| 47°   | 85.8  | 89.1  | 99.7  | 111.2 | 117.8 | 111.2  | 99.7  | 89.1   | 85.8  | 89.1   | 99.7  |
| 47.5° | 70.0  | 72.0  | 81.7  | 91.6  | 95.9  | 91.6   | 81.7  | 72.0   | 70.0  | 72.0   | 81.7  |
| 48°   | 55.7  | 57.8  | 65.1  | 74.0  | 78.6  | 74.0   | 65.1  | 57.8   | 55.7  | 57.8   | 65.1  |
| 48.5° | 44.8  | 45.8  | 52.2  | 58.8  | 62.9  | 58.8   | 52.2  | 45.8   | 44.8  | 45.8   | 52.2  |
| 49°   | 33.6  | 34.9  | 40.2  | 46.6  | 48.9  | 46.6   | 40.2  | 34.9   | 33.6  | 34.9   | 40.2  |
| 49.5° | 25.4  | 26.0  | 29.5  | 35.1  | 38.2  | 35.1   | 29.5  | 26.0   | 25.4  | 26.0   | 29.5  |
| 50°   | 18.1  | 17.6  | 22.4  | 27.5  | 29.0  | 27.5   | 22.4  | 17.6   | 18.1  | 17.6   | 22.4  |
| 50.5° | 11.2  | 12.2  | 15.8  | 20.6  | 23.4  | 20.6   | 15.8  | 12.2   | 11.2  | 12.2   | 15.8  |
| 51°   | 6.1   | 8.1   | 10.9  | 13.7  | 17.8  | 13.7   | 10.9  | 8.1    | 6.1   | 8.1    | 10.9  |
| 51.5° | 4.8   | 5.1   | 7.1   | 8.9   | 13.2  | 8.9    | 7.1   | 5.1    | 4.8   | 5.1    | 7.1   |
| 52°   | 4.1   | 4.3   | 4.6   | 5.6   | 8.7   | 5.6    | 4.6   | 4.3    | 4.1   | 4.3    | 4.6   |
| 52.5° | 3.3   | 3.8   | 3.8   | 4.3   | 4.1   | 4.3    | 3.8   | 3.8    | 3.3   | 3.8    | 3.8   |
| 53°   | 3.3   | 3.3   | 3.6   | 3.6   | 3.3   | 3.6    | 3.6   | 3.3    | 3.3   | 3.3    | 3.6   |
| 53.5° | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   | 3.1    | 3.1   | 3.1    | 3.1   | 3.1    | 3.1   |
| 54°   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8    | 2.8   | 2.8    | 2.8   | 2.8    | 2.8   |
| 54.5° | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8    | 2.8   | 2.8    | 2.8   | 2.8    | 2.8   |
| 55°   | 2.5   | 2.5   | 2.5   | 2.5   | 2.5   | 2.5    | 2.5   | 2.5    | 2.5   | 2.5    | 2.5   |
| 55.5° | 2.5   | 2.5   | 2.5   | 2.5   | 2.5   | 2.5    | 2.5   | 2.5    | 2.5   | 2.5    | 2.5   |
| 56°   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3    | 2.3   | 2.3    | 2.3   | 2.3    | 2.3   |
| 56.5° | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0    | 2.0   | 2.0    | 2.0   | 2.0    | 2.0   |
| 57°   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0    | 2.0   | 2.0    | 2.0   | 2.0    | 2.0   |
| 57.5° | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8    | 1.8   | 1.8    | 1.8   | 1.8    | 1.8   |
| 58°   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8    | 1.8   | 1.8    | 1.8   | 1.8    | 1.8   |
| 58.5° | 1.5   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8    | 1.8   | 1.8    | 1.5   | 1.8    | 1.8   |
| 59°   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5    | 1.5   | 1.5    | 1.5   | 1.5    | 1.5   |
| 59.5° | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5    | 1.5   | 1.5    | 1.5   | 1.5    | 1.5   |
| 60°   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   |
| 60.5° | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   |
| 61°   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   |
| 61.5° | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   |
| 62°   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   |
| 62.5° | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   |
| 63°   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   |
| 63.5° | 0.8   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0    | 1.0   | 1.0    | 0.8   | 1.0    | 1.0   |
| 64°   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |
| 64.5° | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |
| 65°   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |
| 65.5° | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |
| 66°   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |





TEST NUMBER: P776168

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 67.5° | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 68°   | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 68.5° | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 69°   | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 69.5° | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 70°   | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 70.5° | 0.3 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.5    | 0.3  | 0.5    | 0.5  |
| 71°   | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 71.5° | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 72°   | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 72.5° | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 73°   | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 73.5° | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 74°   | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 74.5° | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 75°   | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 75.5° | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 76°   | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 76.5° | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 77°   | 0.3 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 77.5° | 0.0 | 0.3   | 0.3 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.0  | 0.3    | 0.3  |
| 78°   | 0.0 | 0.0   | 0.0 | 0.3   | 0.3 | 0.3    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 78.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 79°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 79.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 80°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 80.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 81°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 81.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 82°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 82.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 83°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 83.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 84°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 84.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 85°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 85.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 86°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 86.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 87°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 87.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 88°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 88.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |



TEST NUMBER: P776168  
CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-----|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 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: P776168

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|       | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|-------|--------|--------|--------|--------|--------|--------|
| 0°    | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 | 1412.3 |
| 0.5°  | 1412.0 | 1412.3 | 1412.0 | 1412.3 | 1412.0 | 1412.0 |
| 1°    | 1411.8 | 1412.3 | 1411.8 | 1412.0 | 1411.8 | 1411.8 |
| 1.5°  | 1411.5 | 1411.8 | 1411.5 | 1411.5 | 1411.5 | 1411.3 |
| 2°    | 1411.0 | 1411.3 | 1411.0 | 1411.0 | 1410.7 | 1410.7 |
| 2.5°  | 1410.2 | 1410.5 | 1410.2 | 1410.2 | 1410.2 | 1410.0 |
| 3°    | 1409.5 | 1409.7 | 1409.5 | 1409.5 | 1409.2 | 1409.2 |
| 3.5°  | 1408.5 | 1408.7 | 1408.5 | 1408.5 | 1408.2 | 1408.2 |
| 4°    | 1407.2 | 1407.7 | 1407.2 | 1407.2 | 1406.9 | 1406.9 |
| 4.5°  | 1405.9 | 1406.2 | 1405.9 | 1405.7 | 1405.4 | 1405.4 |
| 5°    | 1404.4 | 1404.9 | 1404.4 | 1404.1 | 1403.9 | 1403.6 |
| 5.5°  | 1402.6 | 1403.1 | 1402.6 | 1402.3 | 1402.1 | 1402.1 |
| 6°    | 1400.8 | 1401.3 | 1400.8 | 1400.6 | 1400.1 | 1400.1 |
| 6.5°  | 1398.8 | 1399.3 | 1398.8 | 1398.5 | 1398.0 | 1397.8 |
| 7°    | 1396.5 | 1397.0 | 1396.5 | 1396.2 | 1395.5 | 1395.5 |
| 7.5°  | 1394.0 | 1394.5 | 1394.0 | 1393.7 | 1392.9 | 1392.9 |
| 8°    | 1391.4 | 1391.9 | 1391.4 | 1390.9 | 1390.4 | 1390.1 |
| 8.5°  | 1388.4 | 1388.9 | 1388.4 | 1387.8 | 1387.3 | 1387.1 |
| 9°    | 1385.3 | 1385.8 | 1385.3 | 1384.8 | 1384.0 | 1383.8 |
| 9.5°  | 1382.0 | 1382.5 | 1382.0 | 1381.2 | 1380.5 | 1380.2 |
| 10°   | 1378.2 | 1378.7 | 1378.2 | 1377.4 | 1376.9 | 1376.6 |
| 10.5° | 1374.4 | 1374.9 | 1374.4 | 1373.6 | 1372.8 | 1372.6 |
| 11°   | 1370.0 | 1370.5 | 1370.0 | 1369.5 | 1368.8 | 1368.5 |
| 11.5° | 1365.5 | 1366.2 | 1365.5 | 1364.9 | 1364.2 | 1363.9 |
| 12°   | 1360.9 | 1361.4 | 1360.9 | 1360.1 | 1359.3 | 1359.3 |
| 12.5° | 1355.8 | 1356.3 | 1355.8 | 1355.0 | 1354.3 | 1354.3 |
| 13°   | 1350.4 | 1350.7 | 1350.4 | 1349.7 | 1349.2 | 1348.9 |
| 13.5° | 1344.6 | 1345.1 | 1344.6 | 1344.1 | 1343.3 | 1343.1 |
| 14°   | 1338.5 | 1339.0 | 1338.5 | 1338.0 | 1337.5 | 1337.2 |
| 14.5° | 1332.1 | 1332.6 | 1332.1 | 1331.6 | 1331.1 | 1330.8 |
| 15°   | 1325.2 | 1325.5 | 1325.2 | 1324.7 | 1324.2 | 1324.2 |
| 15.5° | 1318.1 | 1318.4 | 1318.1 | 1317.6 | 1317.1 | 1317.1 |
| 16°   | 1310.2 | 1310.7 | 1310.2 | 1310.0 | 1309.7 | 1309.5 |
| 16.5° | 1302.3 | 1302.6 | 1302.3 | 1302.1 | 1301.8 | 1301.8 |
| 17°   | 1293.9 | 1294.2 | 1293.9 | 1293.7 | 1293.4 | 1293.4 |
| 17.5° | 1284.8 | 1285.0 | 1284.8 | 1284.8 | 1284.5 | 1284.5 |
| 18°   | 1275.4 | 1275.6 | 1275.4 | 1275.4 | 1275.4 | 1275.6 |
| 18.5° | 1265.4 | 1265.4 | 1265.4 | 1265.4 | 1265.7 | 1265.7 |
| 19°   | 1255.0 | 1255.0 | 1255.0 | 1255.3 | 1255.5 | 1255.5 |
| 19.5° | 1244.1 | 1244.1 | 1244.1 | 1244.3 | 1244.6 | 1244.8 |
| 20°   | 1232.6 | 1232.4 | 1232.6 | 1233.1 | 1233.4 | 1233.6 |
| 20.5° | 1220.4 | 1220.2 | 1220.4 | 1220.9 | 1221.4 | 1221.7 |
| 21°   | 1207.7 | 1207.2 | 1207.7 | 1208.7 | 1209.2 | 1209.2 |



TEST NUMBER: P776168

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|       | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|-------|--------|--------|--------|--------|--------|--------|
| 22.5° | 1168.0 | 1168.0 | 1168.0 | 1168.8 | 1169.3 | 1169.3 |
| 23°   | 1154.2 | 1154.2 | 1154.2 | 1155.0 | 1155.3 | 1155.3 |
| 23.5° | 1140.5 | 1140.5 | 1140.5 | 1141.0 | 1141.3 | 1141.0 |
| 24°   | 1126.8 | 1127.0 | 1126.8 | 1127.0 | 1127.0 | 1126.8 |
| 24.5° | 1113.0 | 1113.5 | 1113.0 | 1113.3 | 1113.0 | 1113.0 |
| 25°   | 1099.5 | 1100.0 | 1099.5 | 1099.5 | 1099.3 | 1099.0 |
| 25.5° | 1086.3 | 1086.8 | 1086.3 | 1086.0 | 1085.8 | 1085.8 |
| 26°   | 1073.3 | 1073.8 | 1073.3 | 1073.1 | 1072.8 | 1072.6 |
| 26.5° | 1060.3 | 1061.1 | 1060.3 | 1060.1 | 1059.8 | 1059.6 |
| 27°   | 1047.6 | 1048.4 | 1047.6 | 1047.6 | 1047.1 | 1047.1 |
| 27.5° | 1035.7 | 1036.2 | 1035.7 | 1035.2 | 1034.9 | 1034.6 |
| 28°   | 1023.5 | 1024.2 | 1023.5 | 1023.2 | 1022.7 | 1022.4 |
| 28.5° | 1011.7 | 1012.5 | 1011.7 | 1011.5 | 1011.2 | 1010.7 |
| 29°   | 1000.3 | 1001.1 | 1000.3 | 1000.0 | 999.8  | 999.5  |
| 29.5° | 989.4  | 989.9  | 989.4  | 989.1  | 988.6  | 988.3  |
| 30°   | 978.4  | 979.2  | 978.4  | 978.2  | 977.6  | 977.6  |
| 30.5° | 968.0  | 968.5  | 968.0  | 967.5  | 967.2  | 967.0  |
| 31°   | 957.8  | 958.6  | 957.8  | 957.5  | 957.0  | 956.8  |
| 31.5° | 947.6  | 948.1  | 947.6  | 947.4  | 947.4  | 947.1  |
| 32°   | 937.4  | 938.0  | 937.4  | 937.7  | 937.7  | 937.7  |
| 32.5° | 926.8  | 925.7  | 926.8  | 927.8  | 928.3  | 928.5  |
| 33°   | 913.0  | 910.2  | 913.0  | 915.6  | 918.1  | 918.6  |
| 33.5° | 896.2  | 892.7  | 896.2  | 900.5  | 905.4  | 907.9  |
| 34°   | 877.1  | 873.3  | 877.1  | 882.7  | 889.3  | 892.7  |
| 34.5° | 857.0  | 853.2  | 857.0  | 862.4  | 869.8  | 872.6  |
| 35°   | 835.1  | 831.6  | 835.1  | 839.5  | 846.1  | 848.9  |
| 35.5° | 810.7  | 807.2  | 810.7  | 815.3  | 821.4  | 822.9  |
| 36°   | 784.3  | 780.4  | 784.3  | 788.8  | 793.9  | 795.2  |
| 36.5° | 755.5  | 751.4  | 755.5  | 760.3  | 764.7  | 765.7  |
| 37°   | 725.7  | 721.7  | 725.7  | 729.3  | 731.8  | 732.6  |
| 37.5° | 694.2  | 690.9  | 694.2  | 696.5  | 697.5  | 698.5  |
| 38°   | 661.1  | 659.6  | 661.1  | 661.4  | 660.8  | 662.4  |
| 38.5° | 626.7  | 628.0  | 626.7  | 625.5  | 625.0  | 627.3  |
| 39°   | 592.1  | 595.4  | 592.1  | 589.1  | 588.6  | 589.3  |
| 39.5° | 557.0  | 561.6  | 557.0  | 553.2  | 552.2  | 551.7  |
| 40°   | 522.2  | 526.5  | 522.2  | 517.1  | 514.8  | 512.2  |
| 40.5° | 487.8  | 491.6  | 487.8  | 482.2  | 477.9  | 474.3  |
| 41°   | 453.7  | 457.5  | 453.7  | 447.3  | 440.2  | 435.4  |
| 41.5° | 419.9  | 423.4  | 419.9  | 412.2  | 403.6  | 398.5  |
| 42°   | 386.3  | 389.6  | 386.3  | 377.1  | 366.9  | 362.4  |
| 42.5° | 353.4  | 356.5  | 353.4  | 344.3  | 332.8  | 327.2  |
| 43°   | 320.9  | 324.2  | 320.9  | 311.2  | 299.8  | 293.4  |
| 43.5° | 289.1  | 293.7  | 289.1  | 279.1  | 267.9  | 261.8  |



TEST NUMBER: P776168

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|       | 247.5° | 270°  | 292.5° | 315°  | 337.5° | 360°  |
|-------|--------|-------|--------|-------|--------|-------|
| 45°   | 202.3  | 208.7 | 202.3  | 190.6 | 178.9  | 173.5 |
| 45.5° | 177.4  | 183.2 | 177.4  | 165.1 | 153.2  | 146.8 |
| 46°   | 154.2  | 161.3 | 154.2  | 142.2 | 128.8  | 123.4 |
| 46.5° | 132.1  | 139.7 | 132.1  | 120.6 | 107.9  | 102.3 |
| 47°   | 111.2  | 117.8 | 111.2  | 99.7  | 89.1   | 85.8  |
| 47.5° | 91.6   | 95.9  | 91.6   | 81.7  | 72.0   | 70.0  |
| 48°   | 74.0   | 78.6  | 74.0   | 65.1  | 57.8   | 55.7  |
| 48.5° | 58.8   | 62.9  | 58.8   | 52.2  | 45.8   | 44.8  |
| 49°   | 46.6   | 48.9  | 46.6   | 40.2  | 34.9   | 33.6  |
| 49.5° | 35.1   | 38.2  | 35.1   | 29.5  | 26.0   | 25.4  |
| 50°   | 27.5   | 29.0  | 27.5   | 22.4  | 17.6   | 18.1  |
| 50.5° | 20.6   | 23.4  | 20.6   | 15.8  | 12.2   | 11.2  |
| 51°   | 13.7   | 17.8  | 13.7   | 10.9  | 8.1    | 6.1   |
| 51.5° | 8.9    | 13.2  | 8.9    | 7.1   | 5.1    | 4.8   |
| 52°   | 5.6    | 8.7   | 5.6    | 4.6   | 4.3    | 4.1   |
| 52.5° | 4.3    | 4.1   | 4.3    | 3.8   | 3.8    | 3.3   |
| 53°   | 3.6    | 3.3   | 3.6    | 3.6   | 3.3    | 3.3   |
| 53.5° | 3.1    | 3.1   | 3.1    | 3.1   | 3.1    | 3.1   |
| 54°   | 2.8    | 2.8   | 2.8    | 2.8   | 2.8    | 2.8   |
| 54.5° | 2.8    | 2.8   | 2.8    | 2.8   | 2.8    | 2.8   |
| 55°   | 2.5    | 2.5   | 2.5    | 2.5   | 2.5    | 2.5   |
| 55.5° | 2.5    | 2.5   | 2.5    | 2.5   | 2.5    | 2.5   |
| 56°   | 2.3    | 2.3   | 2.3    | 2.3   | 2.3    | 2.3   |
| 56.5° | 2.0    | 2.0   | 2.0    | 2.0   | 2.0    | 2.0   |
| 57°   | 2.0    | 2.0   | 2.0    | 2.0   | 2.0    | 2.0   |
| 57.5° | 1.8    | 1.8   | 1.8    | 1.8   | 1.8    | 1.8   |
| 58°   | 1.8    | 1.8   | 1.8    | 1.8   | 1.8    | 1.8   |
| 58.5° | 1.8    | 1.8   | 1.8    | 1.8   | 1.8    | 1.5   |
| 59°   | 1.5    | 1.5   | 1.5    | 1.5   | 1.5    | 1.5   |
| 59.5° | 1.5    | 1.5   | 1.5    | 1.5   | 1.5    | 1.5   |
| 60°   | 1.3    | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   |
| 60.5° | 1.3    | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   |
| 61°   | 1.3    | 1.3   | 1.3    | 1.3   | 1.3    | 1.3   |
| 61.5° | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   |
| 62°   | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   |
| 62.5° | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   |
| 63°   | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 1.0   |
| 63.5° | 1.0    | 1.0   | 1.0    | 1.0   | 1.0    | 0.8   |
| 64°   | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |
| 64.5° | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |
| 65°   | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |
| 65.5° | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |
| 66°   | 0.8    | 0.8   | 0.8    | 0.8   | 0.8    | 0.8   |



TEST NUMBER: P776168

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|       | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|------|--------|------|--------|------|
| 67.5° | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 68°   | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 68.5° | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 69°   | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 69.5° | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 70°   | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 70.5° | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.3  |
| 71°   | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 71.5° | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 72°   | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 72.5° | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 73°   | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 73.5° | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 74°   | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 74.5° | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 75°   | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 75.5° | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 76°   | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 76.5° | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 77°   | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 77.5° | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.0  |
| 78°   | 0.3    | 0.3  | 0.3    | 0.0  | 0.0    | 0.0  |
| 78.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 79°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 79.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 80°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 80.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 81°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 81.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 82°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 82.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 83°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 83.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 84°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 84.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 85°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 85.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 86°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 86.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 87°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 87.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 88°   | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 88.5° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |



TEST NUMBER: P776168

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMB-2500lm-4000K

**CANDELA DISTRIBUTION (continued):**

|     | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-----|--------|------|--------|------|--------|------|
| 90° | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |



Report Generated By 670245859 / DESKTOP-T8S5UU9



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - 135°-315°

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Peachtree City, GA 30269

Scaled Data Report



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1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





|       |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 21.5° | 1196.2 | 1196.0 | 1195.5 | 1194.7 | 1194.5 | 1194.7 | 1195.5 | 1196.0 | 1196.2 | 1196.0 | 1195.5 |
| 22°   | 1183.0 | 1182.7 | 1182.2 | 1181.5 | 1181.2 | 1181.5 | 1182.2 | 1182.7 | 1183.0 | 1182.7 | 1182.2 |



|       |       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 44°   | 231.3 | 236.1 | 247.8 | 258.3 | 264.4 | 258.3 | 247.8 | 236.1 | 231.3 | 236.1 | 247.8 |
| 44.5° | 202.0 | 206.6 | 218.3 | 229.8 | 235.9 | 229.8 | 218.3 | 206.6 | 202.0 | 206.6 | 218.3 |



|       |     |     |     |     |     |     |     |     |     |     |     |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 66.5° | 0.5 | 0.5 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 |
| 67°   | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |



|       |     |     |     |     |     |     |     |     |     |     |     |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 89°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 89.5° | 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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1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





|       |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|
| 21.5° | 1194.7 | 1194.5 | 1194.7 | 1195.5 | 1196.0 | 1196.2 |
| 22°   | 1181.5 | 1181.2 | 1181.5 | 1182.2 | 1182.7 | 1183.0 |



|       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| 44°   | 258.3 | 264.4 | 258.3 | 247.8 | 236.1 | 231.3 |
| 44.5° | 229.8 | 235.9 | 229.8 | 218.3 | 206.6 | 202.0 |

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Peachtree City, GA 30269

Scaled Data Report



|       |     |     |     |     |     |     |
|-------|-----|-----|-----|-----|-----|-----|
| 66.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 |
| 67°   | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |

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Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



|       |     |     |     |     |     |     |
|-------|-----|-----|-----|-----|-----|-----|
| 89°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 89.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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Scaled Data Report



(END OF REPORT)