

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



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: P776675

Luminaire Tested: HCDJBS4050CSD-HCD62TRH-5000lm-2700K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776675
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B056)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD62TRH-5000lm-2700K
Description: 6 INCH ROUND NARROW HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

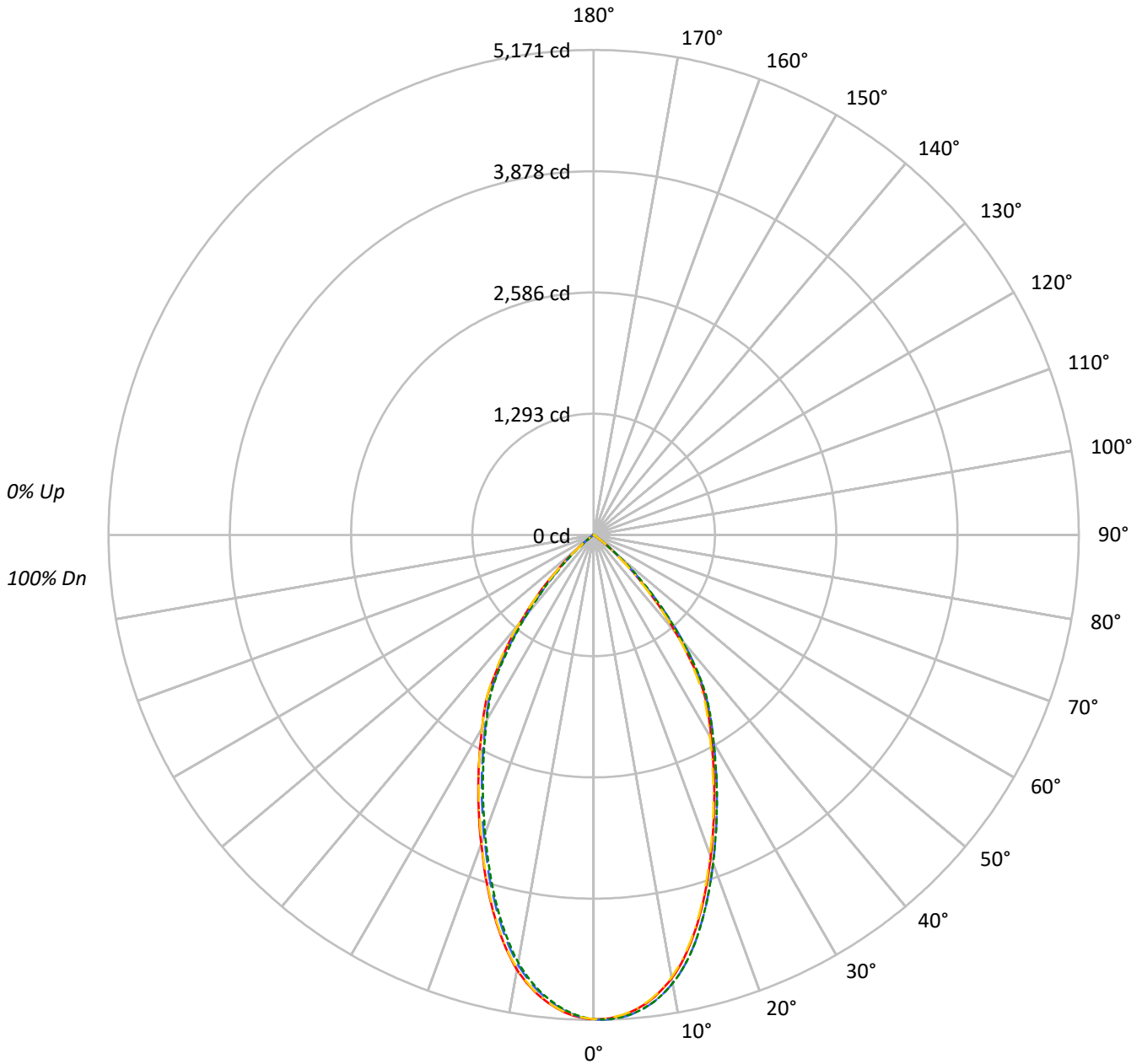
Lumens per Lamp: N/A
Luminaire Lumens: 4803.8 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.82 / 0.91
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 48
Input Voltage (V): NR
Input Current (A_{in}): 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: P776675
CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

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 | 0 | | | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 113 | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 | | | | | | | | | | | | | | | | | | | |
| 2 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 93 | 97 | 94 | 91 | 94 | 92 | 89 | 92 | 89 | 88 | 86 | | | | | | | | | | | | | | | | | | | |
| 3 | 102 | 95 | 90 | 85 | 100 | 93 | 89 | 85 | 91 | 87 | 83 | 88 | 85 | 82 | 86 | 83 | 81 | 79 | | | | | | | | | | | | | | | | | | | |
| 4 | 96 | 88 | 82 | 78 | 94 | 87 | 82 | 77 | 85 | 80 | 77 | 83 | 79 | 76 | 81 | 78 | 75 | 73 | | | | | | | | | | | | | | | | | | | |
| 5 | 91 | 82 | 76 | 71 | 89 | 81 | 75 | 71 | 79 | 74 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 68 | | | | | | | | | | | | | | | | | | | |
| 6 | 86 | 77 | 70 | 66 | 84 | 76 | 70 | 66 | 74 | 69 | 65 | 73 | 68 | 65 | 71 | 67 | 64 | 63 | | | | | | | | | | | | | | | | | | | |
| 7 | 81 | 72 | 65 | 61 | 80 | 71 | 65 | 61 | 70 | 64 | 60 | 68 | 64 | 60 | 67 | 63 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 8 | 77 | 67 | 61 | 57 | 76 | 67 | 61 | 56 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 56 | 54 | | | | | | | | | | | | | | | | | | | |
| 9 | 73 | 63 | 57 | 53 | 72 | 63 | 57 | 53 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 51 | | | | | | | | | | | | | | | | | | | |
| 10 | 70 | 59 | 53 | 49 | 69 | 59 | 53 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 57 | 52 | 49 | 47 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|--------|--------|--------|--------|
| 0° | 283015 | 283015 | 283015 | 283015 |
| 5° | 279726 | 281311 | 277272 | 275214 |
| 10° | 267107 | 270124 | 261958 | 257594 |
| 15° | 242970 | 247340 | 235262 | 229127 |
| 20° | 212900 | 217182 | 204418 | 197452 |
| 25° | 184105 | 187989 | 175831 | 168772 |
| 30° | 158822 | 161854 | 150688 | 144370 |
| 35° | 136496 | 139695 | 124383 | 117798 |
| 40° | 98341 | 104274 | 87285 | 79649 |
| 45° | 58231 | 65053 | 49680 | 43144 |
| 50° | 24136 | 28221 | 17066 | 14226 |
| 55° | 4091 | 5400 | 4091 | 2705 |
| 60° | 1699 | 1601 | 1645 | 1349 |
| 65° | 999 | 947 | 999 | 830 |
| 70° | 657 | 657 | 657 | 577 |
| 75° | 487 | 381 | 487 | 381 |
| 80° | 284 | 284 | 284 | 284 |
| 85° | 0 | 314 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 69224 cd/sqm



TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 473.0 | 9.8 |
| 10°-20° | 1169.1 | 24.3 |
| 20°-30° | 1360.1 | 28.3 |
| 30°-40° | 1182.9 | 24.6 |
| 40°-50° | 544.1 | 11.3 |
| 50°-60° | 64.2 | 1.3 |
| 60°-70° | 7.7 | 0.2 |
| 70°-80° | 2.3 | 0.0 |
| 80°-90° | 0.3 | 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° | 3002.3 | 62.5 |
| 0°-40° | 4185.1 | 87.1 |
| 0°-60° | 4793.5 | 99.8 |
| 0°-90° | 4803.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4803.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 5163 | 5163 | 5163 | 5163 | 5163 | |
| 5° | 5083 | 5112 | 5039 | 5001 | 5083 | 476 |
| 15° | 4281 | 4358 | 4145 | 4037 | 4281 | 1190 |
| 25° | 3044 | 3108 | 2907 | 2790 | 3044 | 1398 |
| 35° | 2040 | 2087 | 1859 | 1760 | 2040 | 1239 |
| 45° | 751 | 839 | 641 | 556 | 751 | 590 |
| 55° | 43 | 56 | 43 | 28 | 43 | 71 |
| 65° | 8 | 7 | 8 | 6 | 8 | 8 |
| 75° | 2 | 2 | 2 | 2 | 2 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 |
| 0.5° | 5164.8 | 5168.5 | 5168.9 | 5164.8 | 5165.7 | 5163.0 | 5161.2 | 5162.1 | 5161.2 | 5161.6 | 5160.7 |
| 1° | 5163.9 | 5168.9 | 5170.8 | 5168.5 | 5167.1 | 5163.0 | 5160.7 | 5158.9 | 5156.2 | 5155.7 | 5153.9 |
| 1.5° | 5159.8 | 5167.1 | 5170.8 | 5169.8 | 5167.1 | 5161.6 | 5157.5 | 5153.4 | 5148.9 | 5146.6 | 5143.9 |
| 2° | 5155.3 | 5164.4 | 5168.5 | 5169.4 | 5164.8 | 5158.9 | 5153.0 | 5145.7 | 5139.8 | 5135.7 | 5131.1 |
| 2.5° | 5148.0 | 5158.9 | 5163.9 | 5167.1 | 5161.2 | 5153.0 | 5145.2 | 5135.7 | 5128.4 | 5122.4 | 5116.5 |
| 3° | 5138.9 | 5151.6 | 5157.1 | 5163.5 | 5154.8 | 5146.1 | 5135.7 | 5124.7 | 5114.2 | 5106.9 | 5099.7 |
| 3.5° | 5128.4 | 5142.0 | 5149.3 | 5157.5 | 5147.5 | 5137.5 | 5124.3 | 5111.5 | 5098.7 | 5088.7 | 5081.4 |
| 4° | 5115.2 | 5130.6 | 5138.9 | 5149.3 | 5138.4 | 5126.1 | 5111.5 | 5095.1 | 5080.5 | 5069.1 | 5060.9 |
| 4.5° | 5100.1 | 5117.4 | 5127.5 | 5138.9 | 5126.5 | 5112.4 | 5096.0 | 5077.8 | 5060.5 | 5047.2 | 5038.1 |
| 5° | 5083.2 | 5102.4 | 5112.4 | 5127.5 | 5112.0 | 5097.4 | 5078.2 | 5058.2 | 5038.6 | 5023.1 | 5012.1 |
| 5.5° | 5065.0 | 5085.5 | 5096.9 | 5112.9 | 5096.5 | 5079.1 | 5058.6 | 5037.2 | 5015.3 | 4997.6 | 4985.7 |
| 6° | 5043.6 | 5065.9 | 5079.6 | 5097.4 | 5078.2 | 5059.5 | 5037.7 | 5011.7 | 4988.4 | 4969.3 | 4956.5 |
| 6.5° | 5021.3 | 5045.9 | 5059.5 | 5079.1 | 5057.7 | 5038.1 | 5014.0 | 4985.7 | 4961.1 | 4941.0 | 4926.0 |
| 7° | 4995.3 | 5021.7 | 5036.8 | 5059.5 | 5036.3 | 5014.9 | 4988.0 | 4958.4 | 4931.5 | 4910.1 | 4894.1 |
| 7.5° | 4967.5 | 4996.2 | 5012.1 | 5036.8 | 5011.2 | 4987.1 | 4959.7 | 4929.7 | 4898.7 | 4875.4 | 4859.0 |
| 8° | 4937.9 | 4967.5 | 4983.9 | 5012.1 | 4984.3 | 4957.9 | 4929.7 | 4896.4 | 4864.9 | 4839.9 | 4821.6 |
| 8.5° | 4906.4 | 4938.3 | 4955.2 | 4985.3 | 4954.3 | 4928.7 | 4897.3 | 4861.3 | 4828.5 | 4802.0 | 4782.9 |
| 9° | 4872.2 | 4906.0 | 4922.8 | 4954.7 | 4922.8 | 4895.9 | 4863.1 | 4824.8 | 4790.2 | 4761.5 | 4741.4 |
| 9.5° | 4836.2 | 4870.9 | 4890.0 | 4922.8 | 4889.1 | 4860.4 | 4825.7 | 4787.9 | 4749.2 | 4719.5 | 4697.7 |
| 10° | 4798.4 | 4833.5 | 4853.1 | 4888.6 | 4852.6 | 4823.0 | 4787.5 | 4744.6 | 4705.9 | 4674.9 | 4650.7 |
| 10.5° | 4756.9 | 4796.1 | 4815.3 | 4852.6 | 4815.7 | 4784.7 | 4745.1 | 4701.3 | 4658.9 | 4624.3 | 4599.7 |
| 11° | 4714.1 | 4754.2 | 4774.2 | 4814.8 | 4774.2 | 4741.9 | 4701.8 | 4653.9 | 4609.2 | 4570.0 | 4545.9 |
| 11.5° | 4667.6 | 4708.6 | 4730.0 | 4773.8 | 4730.9 | 4697.2 | 4654.8 | 4604.7 | 4556.4 | 4517.2 | 4491.7 |
| 12° | 4617.4 | 4661.7 | 4682.6 | 4729.1 | 4684.4 | 4648.9 | 4603.8 | 4550.9 | 4503.0 | 4462.9 | 4435.1 |
| 12.5° | 4565.9 | 4610.6 | 4633.9 | 4681.7 | 4636.1 | 4598.3 | 4551.4 | 4498.0 | 4446.1 | 4404.6 | 4376.3 |
| 13° | 4512.6 | 4558.7 | 4583.3 | 4632.5 | 4584.6 | 4546.3 | 4498.5 | 4442.4 | 4389.1 | 4345.4 | 4316.2 |
| 13.5° | 4457.5 | 4504.9 | 4530.4 | 4581.4 | 4531.3 | 4491.2 | 4442.4 | 4385.0 | 4329.9 | 4284.7 | 4253.7 |
| 14° | 4400.0 | 4449.3 | 4474.3 | 4529.5 | 4474.8 | 4435.6 | 4384.5 | 4325.3 | 4269.2 | 4225.0 | 4193.1 |
| 14.5° | 4341.7 | 4391.4 | 4417.8 | 4471.1 | 4416.9 | 4375.9 | 4324.4 | 4264.7 | 4208.6 | 4160.3 | 4129.8 |
| 15° | 4281.1 | 4332.6 | 4357.2 | 4416.0 | 4358.1 | 4315.7 | 4264.2 | 4203.6 | 4145.3 | 4098.3 | 4066.0 |
| 15.5° | 4219.6 | 4271.5 | 4296.1 | 4356.3 | 4298.4 | 4255.1 | 4203.6 | 4141.6 | 4082.4 | 4034.5 | 4001.2 |
| 16° | 4158.0 | 4210.4 | 4235.5 | 4295.2 | 4236.0 | 4193.1 | 4142.1 | 4077.8 | 4019.0 | 3971.2 | 3937.4 |
| 16.5° | 4096.5 | 4148.9 | 4174.9 | 4234.1 | 4173.5 | 4131.1 | 4079.6 | 4015.8 | 3956.6 | 3906.0 | 3873.2 |
| 17° | 4034.5 | 4086.0 | 4110.6 | 4172.2 | 4111.1 | 4067.8 | 4014.5 | 3951.6 | 3891.9 | 3840.8 | 3807.1 |
| 17.5° | 3969.8 | 4022.7 | 4046.8 | 4107.9 | 4046.4 | 4002.2 | 3950.6 | 3888.7 | 3826.7 | 3776.5 | 3740.1 |
| 18° | 3906.0 | 3957.9 | 3983.0 | 4044.1 | 3982.1 | 3937.9 | 3886.4 | 3823.9 | 3761.0 | 3710.0 | 3672.6 |
| 18.5° | 3842.2 | 3894.6 | 3918.3 | 3978.9 | 3916.9 | 3874.1 | 3822.1 | 3756.9 | 3696.3 | 3643.9 | 3606.5 |
| 19° | 3777.5 | 3830.8 | 3852.2 | 3913.3 | 3852.7 | 3809.8 | 3756.0 | 3692.2 | 3629.8 | 3577.4 | 3540.9 |
| 19.5° | 3714.1 | 3766.1 | 3788.4 | 3848.1 | 3787.5 | 3745.1 | 3690.4 | 3629.3 | 3564.6 | 3515.8 | 3479.4 |
| 20° | 3649.4 | 3700.9 | 3722.3 | 3783.4 | 3722.8 | 3679.5 | 3627.1 | 3563.2 | 3504.0 | 3454.3 | 3417.4 |
| 20.5° | 3585.1 | 3638.0 | 3659.0 | 3717.3 | 3657.1 | 3614.3 | 3562.3 | 3502.6 | 3443.4 | 3392.8 | 3355.4 |
| 21° | 3522.2 | 3574.6 | 3596.5 | 3654.9 | 3592.9 | 3550.9 | 3501.7 | 3442.0 | 3382.8 | 3331.3 | 3293.4 |



TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 22.5° | 3337.6 | 3387.3 | 3407.4 | 3462.1 | 3408.7 | 3368.2 | 3320.3 | 3260.2 | 3199.1 | 3147.6 | 3109.3 |
| 23° | 3277.5 | 3325.3 | 3346.3 | 3400.1 | 3347.7 | 3307.1 | 3259.7 | 3198.6 | 3139.8 | 3086.5 | 3050.5 |
| 23.5° | 3218.7 | 3265.2 | 3285.7 | 3338.5 | 3287.0 | 3246.0 | 3197.7 | 3139.4 | 3080.1 | 3028.2 | 2991.7 |
| 24° | 3158.5 | 3206.4 | 3225.1 | 3276.6 | 3226.0 | 3185.9 | 3137.5 | 3081.0 | 3021.8 | 2969.8 | 2932.5 |
| 24.5° | 3101.5 | 3147.6 | 3164.9 | 3215.9 | 3166.7 | 3123.9 | 3078.8 | 3022.7 | 2963.4 | 2912.9 | 2875.5 |
| 25° | 3043.7 | 3089.2 | 3106.6 | 3157.6 | 3107.9 | 3066.0 | 3019.5 | 2963.9 | 2906.9 | 2855.9 | 2819.0 |
| 25.5° | 2986.7 | 3031.4 | 3048.7 | 3099.3 | 3048.7 | 3009.5 | 2962.1 | 2907.8 | 2851.3 | 2799.4 | 2764.3 |
| 26° | 2930.6 | 2976.7 | 2991.7 | 3040.5 | 2991.2 | 2953.4 | 2906.0 | 2852.2 | 2795.7 | 2744.7 | 2709.6 |
| 26.5° | 2875.9 | 2918.3 | 2935.6 | 2981.2 | 2934.7 | 2895.5 | 2850.0 | 2796.2 | 2740.1 | 2690.0 | 2653.1 |
| 27° | 2820.3 | 2862.7 | 2878.7 | 2925.2 | 2878.2 | 2838.1 | 2793.9 | 2741.5 | 2685.9 | 2636.2 | 2599.7 |
| 27.5° | 2765.6 | 2808.0 | 2823.1 | 2869.6 | 2822.2 | 2785.7 | 2739.7 | 2686.8 | 2632.1 | 2583.3 | 2546.9 |
| 28° | 2712.3 | 2755.6 | 2768.4 | 2814.4 | 2766.5 | 2730.5 | 2685.0 | 2634.4 | 2579.7 | 2530.0 | 2495.4 |
| 28.5° | 2659.0 | 2702.3 | 2714.6 | 2759.7 | 2713.2 | 2675.8 | 2632.1 | 2581.0 | 2526.8 | 2478.5 | 2443.9 |
| 29° | 2608.4 | 2648.5 | 2661.7 | 2704.6 | 2659.9 | 2623.4 | 2581.5 | 2530.0 | 2477.6 | 2428.8 | 2393.7 |
| 29.5° | 2558.7 | 2597.9 | 2608.9 | 2652.1 | 2608.4 | 2572.4 | 2530.0 | 2480.3 | 2427.9 | 2380.5 | 2345.9 |
| 30° | 2509.0 | 2548.7 | 2559.6 | 2601.6 | 2556.9 | 2522.7 | 2480.3 | 2431.6 | 2380.5 | 2332.2 | 2298.9 |
| 30.5° | 2460.7 | 2499.5 | 2510.9 | 2551.4 | 2507.7 | 2473.0 | 2432.0 | 2382.8 | 2332.7 | 2285.3 | 2252.9 |
| 31° | 2413.8 | 2451.6 | 2462.5 | 2501.3 | 2460.3 | 2426.1 | 2384.2 | 2336.3 | 2285.7 | 2239.2 | 2206.4 |
| 31.5° | 2366.4 | 2403.8 | 2414.7 | 2453.4 | 2412.9 | 2379.6 | 2337.7 | 2290.7 | 2240.6 | 2194.6 | 2162.6 |
| 32° | 2322.2 | 2359.5 | 2369.1 | 2406.0 | 2367.3 | 2332.7 | 2293.5 | 2246.5 | 2195.9 | 2149.9 | 2117.5 |
| 32.5° | 2278.0 | 2314.0 | 2323.5 | 2359.5 | 2320.8 | 2287.5 | 2247.4 | 2200.0 | 2151.3 | 2104.8 | 2073.8 |
| 33° | 2233.7 | 2269.3 | 2278.9 | 2314.4 | 2277.5 | 2242.9 | 2202.3 | 2153.1 | 2102.9 | 2055.1 | 2022.7 |
| 33.5° | 2187.3 | 2222.8 | 2231.5 | 2268.8 | 2231.5 | 2198.2 | 2154.0 | 2099.8 | 2048.7 | 1997.7 | 1962.6 |
| 34° | 2141.2 | 2175.4 | 2180.4 | 2222.8 | 2186.3 | 2151.3 | 2102.9 | 2043.7 | 1989.9 | 1938.0 | 1903.3 |
| 34.5° | 2089.7 | 2123.9 | 2125.3 | 2173.1 | 2138.5 | 2102.0 | 2047.3 | 1985.4 | 1924.3 | 1876.4 | 1838.6 |
| 35° | 2039.6 | 2069.2 | 2070.1 | 2118.4 | 2087.4 | 2051.4 | 1991.7 | 1927.5 | 1858.6 | 1813.5 | 1775.7 |
| 35.5° | 1984.0 | 2012.7 | 2015.0 | 2064.7 | 2035.0 | 1999.0 | 1935.2 | 1866.4 | 1789.8 | 1743.8 | 1714.2 |
| 36° | 1924.7 | 1953.9 | 1958.9 | 2008.6 | 1980.3 | 1943.0 | 1878.7 | 1804.9 | 1725.6 | 1674.5 | 1652.2 |
| 36.5° | 1859.6 | 1893.3 | 1902.9 | 1953.9 | 1920.2 | 1881.9 | 1819.0 | 1741.5 | 1661.8 | 1606.6 | 1585.2 |
| 37° | 1788.9 | 1831.3 | 1846.3 | 1897.8 | 1858.6 | 1817.2 | 1757.9 | 1677.7 | 1600.7 | 1539.6 | 1520.5 |
| 37.5° | 1715.5 | 1767.5 | 1788.5 | 1840.4 | 1793.5 | 1752.0 | 1695.5 | 1611.2 | 1538.7 | 1473.5 | 1452.6 |
| 38° | 1644.4 | 1704.6 | 1727.8 | 1781.6 | 1726.5 | 1685.9 | 1632.1 | 1547.8 | 1477.6 | 1408.8 | 1386.0 |
| 38.5° | 1577.0 | 1638.5 | 1665.9 | 1722.8 | 1657.7 | 1615.3 | 1566.5 | 1484.0 | 1413.8 | 1346.8 | 1315.4 |
| 39° | 1509.5 | 1570.6 | 1603.4 | 1663.1 | 1589.3 | 1543.3 | 1501.3 | 1421.6 | 1350.9 | 1287.1 | 1251.1 |
| 39.5° | 1441.6 | 1502.7 | 1540.5 | 1599.3 | 1523.2 | 1474.4 | 1433.0 | 1358.7 | 1285.7 | 1223.3 | 1184.1 |
| 40° | 1374.2 | 1434.8 | 1477.6 | 1535.5 | 1457.1 | 1408.8 | 1364.1 | 1296.7 | 1219.7 | 1159.5 | 1120.7 |
| 40.5° | 1306.7 | 1367.3 | 1414.7 | 1471.7 | 1391.5 | 1342.7 | 1293.9 | 1234.7 | 1154.9 | 1098.4 | 1055.1 |
| 41° | 1242.4 | 1299.4 | 1352.3 | 1407.9 | 1328.6 | 1278.4 | 1224.2 | 1172.3 | 1094.8 | 1037.3 | 992.7 |
| 41.5° | 1176.4 | 1233.3 | 1286.2 | 1344.1 | 1265.7 | 1211.4 | 1155.8 | 1108.9 | 1035.1 | 977.2 | 929.3 |
| 42° | 1113.5 | 1171.3 | 1219.7 | 1277.1 | 1204.2 | 1148.6 | 1089.3 | 1044.6 | 977.2 | 917.5 | 868.2 |
| 42.5° | 1048.7 | 1110.3 | 1154.0 | 1211.0 | 1141.3 | 1086.6 | 1024.6 | 981.3 | 921.1 | 860.0 | 810.4 |
| 43° | 986.3 | 1048.3 | 1087.0 | 1146.7 | 1079.3 | 1024.6 | 962.1 | 919.3 | 864.6 | 806.7 | 755.7 |
| 43.5° | 923.4 | 984.0 | 1019.6 | 1082.0 | 1017.7 | 961.2 | 900.2 | 857.3 | 807.2 | 750.2 | 700.5 |



TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 45° | 751.1 | 805.8 | 829.1 | 892.9 | 839.1 | 783.5 | 727.4 | 679.6 | 640.8 | 592.5 | 552.4 |
| 45.5° | 695.5 | 748.4 | 767.5 | 832.7 | 782.1 | 727.4 | 671.8 | 624.4 | 587.9 | 541.9 | 506.4 |
| 46° | 643.6 | 692.3 | 709.2 | 772.5 | 728.3 | 672.3 | 619.4 | 571.1 | 537.4 | 494.5 | 463.5 |
| 46.5° | 591.6 | 637.6 | 651.8 | 714.2 | 671.8 | 618.9 | 567.9 | 519.1 | 488.1 | 453.5 | 425.7 |
| 47° | 541.5 | 585.2 | 595.2 | 656.3 | 616.7 | 570.6 | 518.2 | 474.9 | 443.0 | 412.9 | 388.3 |
| 47.5° | 492.7 | 534.2 | 542.4 | 601.6 | 564.7 | 522.3 | 471.3 | 431.2 | 398.3 | 371.9 | 350.5 |
| 48° | 447.1 | 484.0 | 491.8 | 546.9 | 515.5 | 474.9 | 429.3 | 387.4 | 353.2 | 331.3 | 312.7 |
| 48.5° | 403.4 | 434.4 | 443.9 | 494.5 | 469.4 | 432.5 | 387.4 | 343.7 | 308.1 | 290.3 | 280.3 |
| 49° | 361.9 | 388.3 | 398.3 | 447.1 | 423.0 | 390.1 | 345.9 | 299.9 | 269.4 | 257.1 | 249.8 |
| 49.5° | 322.2 | 343.7 | 354.1 | 398.8 | 376.9 | 347.8 | 304.0 | 264.3 | 232.9 | 224.7 | 221.5 |
| 50° | 283.0 | 301.3 | 312.7 | 354.6 | 330.9 | 305.8 | 268.5 | 231.5 | 200.1 | 196.4 | 195.1 |
| 50.5° | 247.0 | 261.6 | 273.9 | 311.7 | 284.9 | 268.5 | 234.3 | 201.5 | 171.4 | 169.5 | 170.0 |
| 51° | 212.8 | 225.6 | 237.9 | 273.0 | 246.6 | 232.4 | 203.7 | 173.6 | 146.3 | 146.3 | 147.2 |
| 51.5° | 180.9 | 192.3 | 204.2 | 234.7 | 212.4 | 200.1 | 176.4 | 149.5 | 125.8 | 125.3 | 127.2 |
| 52° | 151.3 | 163.2 | 172.7 | 201.0 | 180.0 | 169.1 | 150.9 | 126.7 | 107.6 | 106.7 | 108.5 |
| 52.5° | 130.4 | 142.2 | 150.4 | 170.0 | 149.9 | 141.7 | 127.6 | 106.7 | 91.6 | 89.8 | 90.7 |
| 53° | 109.4 | 121.2 | 128.1 | 148.1 | 124.0 | 117.1 | 106.2 | 89.3 | 77.9 | 75.2 | 75.2 |
| 53.5° | 88.4 | 100.7 | 105.7 | 126.2 | 101.2 | 95.3 | 88.0 | 74.3 | 65.6 | 62.4 | 61.5 |
| 54° | 67.9 | 79.8 | 83.4 | 104.4 | 81.6 | 77.0 | 72.0 | 61.1 | 54.7 | 55.1 | 54.2 |
| 54.5° | 53.8 | 59.3 | 61.1 | 82.5 | 65.2 | 61.5 | 62.4 | 53.8 | 48.8 | 47.9 | 46.5 |
| 55° | 42.8 | 46.5 | 47.9 | 60.6 | 56.5 | 53.8 | 52.9 | 46.5 | 42.8 | 40.1 | 38.7 |
| 55.5° | 34.2 | 36.5 | 36.9 | 47.4 | 48.3 | 46.0 | 43.8 | 39.2 | 36.9 | 32.8 | 31.4 |
| 56° | 28.7 | 29.6 | 29.2 | 36.5 | 39.7 | 38.3 | 34.6 | 32.4 | 31.0 | 25.5 | 23.7 |
| 56.5° | 25.5 | 26.0 | 25.5 | 28.7 | 31.0 | 30.5 | 25.5 | 25.1 | 25.1 | 23.2 | 21.9 |
| 57° | 23.7 | 23.7 | 23.2 | 24.6 | 22.8 | 22.8 | 23.2 | 23.2 | 23.2 | 21.9 | 20.5 |
| 57.5° | 22.3 | 22.3 | 21.4 | 22.3 | 21.0 | 21.0 | 21.4 | 21.9 | 21.4 | 20.5 | 19.1 |
| 58° | 20.5 | 20.5 | 20.1 | 20.5 | 19.6 | 19.6 | 20.1 | 20.5 | 20.1 | 19.1 | 17.8 |
| 58.5° | 19.1 | 19.1 | 18.2 | 19.1 | 18.2 | 18.2 | 18.7 | 19.1 | 18.7 | 17.8 | 16.4 |
| 59° | 17.8 | 17.8 | 17.3 | 17.8 | 16.9 | 16.9 | 17.3 | 17.8 | 17.3 | 16.4 | 15.5 |
| 59.5° | 16.9 | 16.4 | 16.0 | 16.4 | 15.5 | 15.5 | 16.0 | 16.4 | 16.4 | 15.5 | 14.1 |
| 60° | 15.5 | 15.5 | 15.0 | 15.5 | 14.6 | 14.6 | 15.0 | 15.0 | 15.0 | 14.1 | 13.2 |
| 60.5° | 14.6 | 14.1 | 13.7 | 14.1 | 13.7 | 13.7 | 13.7 | 14.1 | 14.1 | 13.2 | 12.3 |
| 61° | 13.2 | 13.2 | 12.8 | 13.2 | 12.3 | 12.8 | 12.8 | 13.2 | 13.2 | 12.3 | 11.4 |
| 61.5° | 12.3 | 12.3 | 11.9 | 12.3 | 11.9 | 11.9 | 11.9 | 12.3 | 12.3 | 11.4 | 10.9 |
| 62° | 11.4 | 11.4 | 10.9 | 11.4 | 10.9 | 10.9 | 11.4 | 11.4 | 11.4 | 10.9 | 10.0 |
| 62.5° | 10.9 | 10.9 | 10.0 | 10.5 | 10.0 | 10.0 | 10.5 | 10.9 | 10.9 | 10.0 | 9.6 |
| 63° | 10.0 | 10.0 | 9.6 | 10.0 | 9.6 | 9.6 | 9.6 | 10.0 | 10.0 | 9.6 | 8.7 |
| 63.5° | 9.6 | 9.6 | 9.1 | 9.1 | 8.7 | 9.1 | 9.1 | 9.6 | 9.6 | 9.1 | 8.2 |
| 64° | 9.1 | 8.7 | 8.2 | 8.7 | 8.2 | 8.2 | 8.7 | 9.1 | 9.1 | 8.7 | 7.7 |
| 64.5° | 8.2 | 8.2 | 7.7 | 8.2 | 7.7 | 7.7 | 8.2 | 8.2 | 8.2 | 7.7 | 7.3 |
| 65° | 7.7 | 7.7 | 7.3 | 7.7 | 7.3 | 7.3 | 7.7 | 7.7 | 7.7 | 7.3 | 6.8 |
| 65.5° | 7.3 | 7.3 | 6.8 | 7.3 | 6.8 | 6.8 | 7.3 | 7.3 | 7.3 | 6.8 | 6.4 |
| 66° | 6.8 | 6.8 | 6.4 | 6.8 | 6.4 | 6.4 | 6.8 | 6.8 | 6.8 | 6.4 | 5.9 |



TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 67.5° | 5.9 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.9 | 5.9 | 5.5 | 5.0 |
| 68° | 5.5 | 5.5 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.5 | 5.5 | 5.0 | 5.0 |
| 68.5° | 5.0 | 5.0 | 4.6 | 5.0 | 4.6 | 4.6 | 5.0 | 5.0 | 5.0 | 5.0 | 4.6 |
| 69° | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 5.0 | 5.0 | 4.6 | 4.1 |
| 69.5° | 4.6 | 4.6 | 4.1 | 4.1 | 4.1 | 4.1 | 4.6 | 4.6 | 4.6 | 4.1 | 4.1 |
| 70° | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 3.6 |
| 70.5° | 4.1 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 4.1 | 4.1 | 3.6 | 3.6 |
| 71° | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.2 |
| 71.5° | 3.6 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.6 | 3.6 | 3.2 | 3.2 |
| 72° | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 2.7 |
| 72.5° | 3.2 | 3.2 | 2.7 | 2.7 | 2.7 | 2.7 | 3.2 | 3.2 | 3.2 | 2.7 | 2.7 |
| 73° | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 73.5° | 2.7 | 2.7 | 2.7 | 2.7 | 2.3 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.3 |
| 74° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.7 | 2.7 | 2.3 | 2.3 |
| 74.5° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 75° | 2.3 | 2.3 | 1.8 | 2.3 | 1.8 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.8 |
| 75.5° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 2.3 | 2.3 | 1.8 | 1.8 |
| 76° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 76.5° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.4 |
| 77° | 1.8 | 1.4 | 1.4 | 1.8 | 1.4 | 1.4 | 1.8 | 1.8 | 1.8 | 1.4 | 1.4 |
| 77.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 78° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 78.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 79° | 1.4 | 0.9 | 0.9 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 0.9 | 0.9 |
| 79.5° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 80° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 80.5° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 81° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 81.5° | 0.9 | 0.5 | 0.5 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.5 | 0.5 |
| 82° | 0.5 | 0.5 | 0.5 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 82.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 83° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 83.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 84° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 84.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 | 0.5 |
| 85° | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85.5° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86° | 0.0 | 0.0 | 0.0 | 0.5 | 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: P776675
CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

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: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 0° | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 | 5162.6 |
| 0.5° | 5151.6 | 5155.3 | 5155.3 | 5157.5 | 5161.2 | 5164.8 |
| 1° | 5142.0 | 5147.5 | 5148.4 | 5152.5 | 5157.5 | 5163.9 |
| 1.5° | 5129.7 | 5136.1 | 5138.4 | 5144.3 | 5152.5 | 5159.8 |
| 2° | 5114.7 | 5123.8 | 5127.5 | 5135.2 | 5145.2 | 5155.3 |
| 2.5° | 5097.8 | 5108.3 | 5112.9 | 5123.8 | 5136.6 | 5148.0 |
| 3° | 5078.7 | 5091.0 | 5097.4 | 5109.7 | 5125.2 | 5138.9 |
| 3.5° | 5057.3 | 5072.8 | 5079.6 | 5094.2 | 5111.5 | 5128.4 |
| 4° | 5034.5 | 5050.0 | 5060.0 | 5076.0 | 5096.0 | 5115.2 |
| 4.5° | 5009.0 | 5027.2 | 5037.7 | 5055.9 | 5078.7 | 5100.1 |
| 5° | 4982.1 | 5001.2 | 5013.5 | 5033.6 | 5059.5 | 5083.2 |
| 5.5° | 4952.0 | 4974.3 | 4987.1 | 5009.4 | 5038.6 | 5065.0 |
| 6° | 4921.4 | 4945.6 | 4959.7 | 4983.4 | 5015.8 | 5043.6 |
| 6.5° | 4888.2 | 4913.2 | 4930.1 | 4956.1 | 4990.3 | 5021.3 |
| 7° | 4853.5 | 4880.0 | 4898.2 | 4926.5 | 4962.5 | 4995.3 |
| 7.5° | 4817.1 | 4844.0 | 4863.6 | 4893.6 | 4932.4 | 4967.5 |
| 8° | 4776.5 | 4806.1 | 4826.6 | 4859.5 | 4900.0 | 4937.9 |
| 8.5° | 4734.1 | 4766.0 | 4788.8 | 4822.1 | 4866.3 | 4906.4 |
| 9° | 4689.9 | 4722.3 | 4746.4 | 4782.9 | 4828.9 | 4872.2 |
| 9.5° | 4642.5 | 4677.6 | 4702.7 | 4741.9 | 4790.6 | 4836.2 |
| 10° | 4591.9 | 4627.5 | 4653.9 | 4698.1 | 4751.0 | 4798.4 |
| 10.5° | 4537.2 | 4576.9 | 4605.1 | 4651.2 | 4707.2 | 4756.9 |
| 11° | 4480.7 | 4524.0 | 4553.2 | 4600.1 | 4660.7 | 4714.1 |
| 11.5° | 4424.7 | 4466.1 | 4500.8 | 4548.2 | 4610.6 | 4667.6 |
| 12° | 4365.9 | 4409.2 | 4441.5 | 4495.3 | 4558.7 | 4617.4 |
| 12.5° | 4305.7 | 4349.0 | 4383.2 | 4438.8 | 4505.3 | 4565.9 |
| 13° | 4244.6 | 4288.8 | 4326.2 | 4382.3 | 4451.1 | 4512.6 |
| 13.5° | 4182.2 | 4226.8 | 4266.0 | 4321.6 | 4392.8 | 4457.5 |
| 14° | 4119.3 | 4165.8 | 4202.7 | 4260.6 | 4334.4 | 4400.0 |
| 14.5° | 4054.1 | 4102.4 | 4139.8 | 4201.3 | 4273.8 | 4341.7 |
| 15° | 3991.7 | 4037.2 | 4076.4 | 4138.0 | 4213.2 | 4281.1 |
| 15.5° | 3926.0 | 3972.5 | 4013.5 | 4075.1 | 4151.2 | 4219.6 |
| 16° | 3860.0 | 3907.4 | 3948.4 | 4009.0 | 4088.3 | 4158.0 |
| 16.5° | 3794.8 | 3842.6 | 3884.1 | 3947.0 | 4025.4 | 4096.5 |
| 17° | 3728.2 | 3777.5 | 3818.5 | 3882.7 | 3963.0 | 4034.5 |
| 17.5° | 3663.1 | 3710.9 | 3752.8 | 3817.6 | 3898.7 | 3969.8 |
| 18° | 3593.8 | 3643.9 | 3685.4 | 3750.6 | 3834.0 | 3906.0 |
| 18.5° | 3529.5 | 3576.5 | 3619.3 | 3684.5 | 3769.3 | 3842.2 |
| 19° | 3465.7 | 3511.7 | 3553.2 | 3622.0 | 3704.1 | 3777.5 |
| 19.5° | 3401.9 | 3448.4 | 3490.3 | 3559.1 | 3641.2 | 3714.1 |
| 20° | 3338.1 | 3384.6 | 3428.8 | 3494.9 | 3577.4 | 3649.4 |
| 20.5° | 3274.7 | 3322.6 | 3366.3 | 3432.0 | 3514.9 | 3585.1 |
| 21° | 3218.7 | 3258.3 | 3302.5 | 3368.6 | 3450.7 | 3522.2 |

TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 22.5° | 3038.6 | 3077.4 | 3122.1 | 3189.1 | 3267.9 | 3337.6 |
| 23° | 2979.9 | 3018.6 | 3061.9 | 3128.0 | 3207.7 | 3277.5 |
| 23.5° | 2922.0 | 2960.3 | 3004.9 | 3071.0 | 3149.4 | 3218.7 |
| 24° | 2866.4 | 2903.7 | 2947.9 | 3011.8 | 3091.5 | 3158.5 |
| 24.5° | 2808.5 | 2847.2 | 2890.5 | 2956.2 | 3032.7 | 3101.5 |
| 25° | 2754.2 | 2790.2 | 2834.5 | 2897.4 | 2976.2 | 3043.7 |
| 25.5° | 2698.2 | 2736.0 | 2780.2 | 2843.1 | 2920.1 | 2986.7 |
| 26° | 2643.9 | 2681.8 | 2726.0 | 2788.4 | 2865.0 | 2930.6 |
| 26.5° | 2591.1 | 2628.9 | 2672.7 | 2734.6 | 2809.8 | 2875.9 |
| 27° | 2537.8 | 2575.6 | 2618.9 | 2681.3 | 2755.6 | 2820.3 |
| 27.5° | 2485.3 | 2524.1 | 2566.0 | 2628.0 | 2701.8 | 2765.6 |
| 28° | 2435.2 | 2472.1 | 2514.5 | 2574.2 | 2649.0 | 2712.3 |
| 28.5° | 2386.4 | 2422.0 | 2464.8 | 2524.1 | 2597.0 | 2659.0 |
| 29° | 2339.0 | 2374.1 | 2416.5 | 2475.8 | 2546.9 | 2608.4 |
| 29.5° | 2290.3 | 2326.7 | 2367.3 | 2426.5 | 2496.7 | 2558.7 |
| 30° | 2243.8 | 2280.7 | 2321.3 | 2379.1 | 2449.3 | 2509.0 |
| 30.5° | 2199.1 | 2235.1 | 2275.2 | 2331.7 | 2401.9 | 2460.7 |
| 31° | 2155.4 | 2190.5 | 2231.5 | 2287.5 | 2355.4 | 2413.8 |
| 31.5° | 2110.7 | 2146.2 | 2187.7 | 2243.3 | 2309.0 | 2366.4 |
| 32° | 2065.6 | 2102.5 | 2142.6 | 2198.7 | 2264.7 | 2322.2 |
| 32.5° | 2016.3 | 2058.7 | 2098.8 | 2155.4 | 2221.4 | 2278.0 |
| 33° | 1961.2 | 2007.2 | 2049.6 | 2106.6 | 2177.7 | 2233.7 |
| 33.5° | 1901.0 | 1950.3 | 1994.9 | 2053.3 | 2129.4 | 2187.3 |
| 34° | 1835.9 | 1890.1 | 1936.1 | 1996.7 | 2076.5 | 2141.2 |
| 34.5° | 1771.1 | 1825.4 | 1871.9 | 1941.6 | 2022.7 | 2089.7 |
| 35° | 1707.8 | 1760.2 | 1806.7 | 1881.4 | 1966.2 | 2039.6 |
| 35.5° | 1644.0 | 1691.4 | 1741.5 | 1822.6 | 1907.9 | 1984.0 |
| 36° | 1578.8 | 1616.2 | 1678.2 | 1761.1 | 1847.3 | 1924.7 |
| 36.5° | 1510.9 | 1552.4 | 1638.1 | 1698.2 | 1785.7 | 1859.6 |
| 37° | 1443.4 | 1489.5 | 1571.1 | 1635.8 | 1722.8 | 1788.9 |
| 37.5° | 1377.3 | 1426.6 | 1503.6 | 1570.1 | 1656.7 | 1715.5 |
| 38° | 1308.5 | 1363.2 | 1436.1 | 1504.5 | 1587.5 | 1644.4 |
| 38.5° | 1242.0 | 1301.7 | 1368.7 | 1438.9 | 1518.2 | 1577.0 |
| 39° | 1178.2 | 1238.8 | 1305.3 | 1373.2 | 1448.9 | 1509.5 |
| 39.5° | 1115.7 | 1175.9 | 1239.2 | 1307.6 | 1379.6 | 1441.6 |
| 40° | 1052.8 | 1113.0 | 1173.6 | 1242.9 | 1309.9 | 1374.2 |
| 40.5° | 992.7 | 1051.5 | 1108.9 | 1179.1 | 1240.2 | 1306.7 |
| 41° | 932.5 | 990.9 | 1045.1 | 1115.3 | 1170.4 | 1242.4 |
| 41.5° | 871.4 | 930.2 | 984.0 | 1049.6 | 1100.7 | 1176.4 |
| 42° | 811.7 | 874.6 | 924.8 | 988.1 | 1036.0 | 1113.5 |
| 42.5° | 757.0 | 816.7 | 868.2 | 923.9 | 971.3 | 1048.7 |
| 43° | 701.0 | 765.2 | 811.7 | 861.0 | 911.5 | 986.3 |
| 43.5° | 648.6 | 711.0 | 754.8 | 796.7 | 850.0 | 923.4 |



TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 45° | 505.0 | 556.5 | 590.2 | 620.8 | 682.7 | 751.1 |
| 45.5° | 462.2 | 508.2 | 538.3 | 567.9 | 629.4 | 695.5 |
| 46° | 423.9 | 460.3 | 488.1 | 516.8 | 579.3 | 643.6 |
| 46.5° | 385.6 | 414.3 | 439.4 | 469.0 | 530.5 | 591.6 |
| 47° | 347.3 | 371.9 | 393.8 | 423.9 | 483.6 | 541.5 |
| 47.5° | 309.0 | 331.8 | 350.5 | 380.6 | 438.0 | 492.7 |
| 48° | 276.7 | 293.1 | 309.9 | 340.0 | 394.7 | 447.1 |
| 48.5° | 246.1 | 257.5 | 271.6 | 302.2 | 353.2 | 403.4 |
| 49° | 216.5 | 225.2 | 235.6 | 267.5 | 313.6 | 361.9 |
| 49.5° | 190.1 | 195.1 | 202.8 | 235.6 | 277.1 | 322.2 |
| 50° | 165.9 | 166.8 | 173.6 | 205.1 | 242.5 | 283.0 |
| 50.5° | 143.1 | 148.6 | 154.5 | 177.8 | 211.0 | 247.0 |
| 51° | 122.6 | 129.9 | 135.4 | 152.7 | 182.3 | 212.8 |
| 51.5° | 103.5 | 111.7 | 116.2 | 133.5 | 155.4 | 180.9 |
| 52° | 87.1 | 93.4 | 97.1 | 114.9 | 135.4 | 151.3 |
| 52.5° | 72.0 | 74.7 | 77.9 | 95.7 | 115.3 | 130.4 |
| 53° | 58.8 | 62.4 | 65.6 | 77.0 | 95.7 | 109.4 |
| 53.5° | 51.5 | 51.0 | 54.2 | 63.4 | 76.1 | 88.4 |
| 54° | 44.7 | 41.9 | 44.7 | 51.0 | 61.1 | 67.9 |
| 54.5° | 37.4 | 34.2 | 36.5 | 41.0 | 48.8 | 53.8 |
| 55° | 30.1 | 28.3 | 29.6 | 32.8 | 38.7 | 42.8 |
| 55.5° | 22.8 | 24.2 | 25.1 | 27.3 | 31.0 | 34.2 |
| 56° | 21.0 | 21.9 | 22.8 | 24.2 | 26.9 | 28.7 |
| 56.5° | 19.6 | 20.5 | 21.0 | 22.3 | 24.2 | 25.5 |
| 57° | 18.2 | 19.1 | 19.6 | 21.0 | 22.3 | 23.7 |
| 57.5° | 17.3 | 17.8 | 18.2 | 19.1 | 21.0 | 22.3 |
| 58° | 16.0 | 16.9 | 17.3 | 17.8 | 19.6 | 20.5 |
| 58.5° | 14.6 | 15.5 | 16.0 | 16.9 | 18.2 | 19.1 |
| 59° | 13.7 | 14.6 | 15.0 | 15.5 | 16.9 | 17.8 |
| 59.5° | 12.8 | 13.2 | 13.7 | 14.6 | 16.0 | 16.9 |
| 60° | 11.9 | 12.3 | 12.8 | 13.2 | 14.6 | 15.5 |
| 60.5° | 10.9 | 11.4 | 11.9 | 12.3 | 13.7 | 14.6 |
| 61° | 10.5 | 10.9 | 10.9 | 11.4 | 12.3 | 13.2 |
| 61.5° | 9.6 | 10.0 | 10.5 | 10.9 | 11.9 | 12.3 |
| 62° | 9.1 | 9.6 | 9.6 | 10.0 | 10.9 | 11.4 |
| 62.5° | 8.7 | 8.7 | 9.1 | 9.6 | 10.0 | 10.9 |
| 63° | 8.2 | 8.2 | 8.7 | 8.7 | 9.6 | 10.0 |
| 63.5° | 7.7 | 7.7 | 7.7 | 8.2 | 9.1 | 9.6 |
| 64° | 7.3 | 7.3 | 7.3 | 7.7 | 8.7 | 9.1 |
| 64.5° | 6.8 | 6.8 | 6.8 | 7.3 | 7.7 | 8.2 |
| 65° | 6.4 | 6.4 | 6.4 | 6.8 | 7.3 | 7.7 |
| 65.5° | 5.9 | 5.9 | 6.4 | 6.4 | 6.8 | 7.3 |
| 66° | 5.5 | 5.9 | 5.9 | 5.9 | 6.4 | 6.8 |



TEST NUMBER: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|------|--------|------|--------|------|
| 67.5° | 4.6 | 4.6 | 5.0 | 5.0 | 5.5 | 5.9 |
| 68° | 4.6 | 4.6 | 4.6 | 4.6 | 5.0 | 5.5 |
| 68.5° | 4.1 | 4.1 | 4.1 | 4.6 | 5.0 | 5.0 |
| 69° | 3.6 | 4.1 | 4.1 | 4.1 | 4.6 | 4.6 |
| 69.5° | 3.6 | 3.6 | 3.6 | 4.1 | 4.1 | 4.6 |
| 70° | 3.2 | 3.6 | 3.6 | 3.6 | 4.1 | 4.1 |
| 70.5° | 3.2 | 3.2 | 3.2 | 3.6 | 3.6 | 4.1 |
| 71° | 3.2 | 3.2 | 3.2 | 3.2 | 3.6 | 3.6 |
| 71.5° | 2.7 | 2.7 | 2.7 | 3.2 | 3.2 | 3.6 |
| 72° | 2.7 | 2.7 | 2.7 | 2.7 | 3.2 | 3.2 |
| 72.5° | 2.3 | 2.7 | 2.7 | 2.7 | 2.7 | 3.2 |
| 73° | 2.3 | 2.3 | 2.3 | 2.7 | 2.7 | 2.7 |
| 73.5° | 2.3 | 2.3 | 2.3 | 2.3 | 2.7 | 2.7 |
| 74° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 74.5° | 1.8 | 1.8 | 1.8 | 2.3 | 2.3 | 2.3 |
| 75° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 2.3 |
| 75.5° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 76° | 1.4 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 76.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.8 | 1.8 |
| 77° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.8 |
| 77.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 78° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 78.5° | 0.9 | 0.9 | 0.9 | 0.9 | 1.4 | 1.4 |
| 79° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.4 |
| 79.5° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 80° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 80.5° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 81° | 0.5 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 81.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.9 |
| 82° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 82.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 83° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 83.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 84° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 84.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 | 0.5 |
| 85° | 0.0 | 0.0 | 0.5 | 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: P776675

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-2700K

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 |

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

Scaled Data Report



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°

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

Scaled Data Report



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

Scaled Data Report





| | | | | | | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 21.5° | 3460.7 | 3509.5 | 3533.2 | 3592.0 | 3530.4 | 3489.9 | 3441.1 | 3381.4 | 3321.7 | 3269.7 | 3231.9 |
| 22° | 3397.8 | 3447.0 | 3468.4 | 3526.8 | 3469.8 | 3429.2 | 3380.9 | 3320.8 | 3261.1 | 3207.3 | 3170.4 |



| | | | | | | | | | | | |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 44° | 865.1 | 923.4 | 956.2 | 1017.7 | 956.7 | 897.9 | 840.4 | 796.2 | 750.2 | 696.4 | 649.0 |
| 44.5° | 808.5 | 864.1 | 891.9 | 953.9 | 897.0 | 840.0 | 783.5 | 736.1 | 694.6 | 642.6 | 599.3 |



| | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 66.5° | 6.4 | 6.4 | 5.9 | 6.4 | 5.9 | 5.9 | 6.4 | 6.4 | 6.4 | 6.4 | 5.9 |
| 67° | 5.9 | 5.9 | 5.9 | 5.9 | 5.5 | 5.9 | 5.9 | 5.9 | 6.4 | 5.9 | 5.5 |



| | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 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° | 3159.0 | 3197.7 | 3242.8 | 3308.9 | 3389.6 | 3460.7 |
| 22° | 3097.9 | 3136.6 | 3180.4 | 3246.9 | 3329.0 | 3397.8 |



| | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|
| 44° | 597.5 | 658.1 | 698.7 | 736.5 | 791.7 | 865.1 |
| 44.5° | 550.6 | 606.2 | 644.0 | 675.9 | 736.1 | 808.5 |

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|
| 66.5° | 5.0 | 5.5 | 5.5 | 5.9 | 6.4 | 6.4 |
| 67° | 5.0 | 5.0 | 5.0 | 5.5 | 5.9 | 5.9 |

Signify Classified - Internal
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 |

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)