

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: P776677

Luminaire Tested: HCDJBS4050CSD-HCD62TRH-5000lm-3500K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776677  
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: HCDJBL54050CSD-HCD62TRH-5000lm-3500K  
Description: 6 INCH ROUND NARROW HAZE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4973.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 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

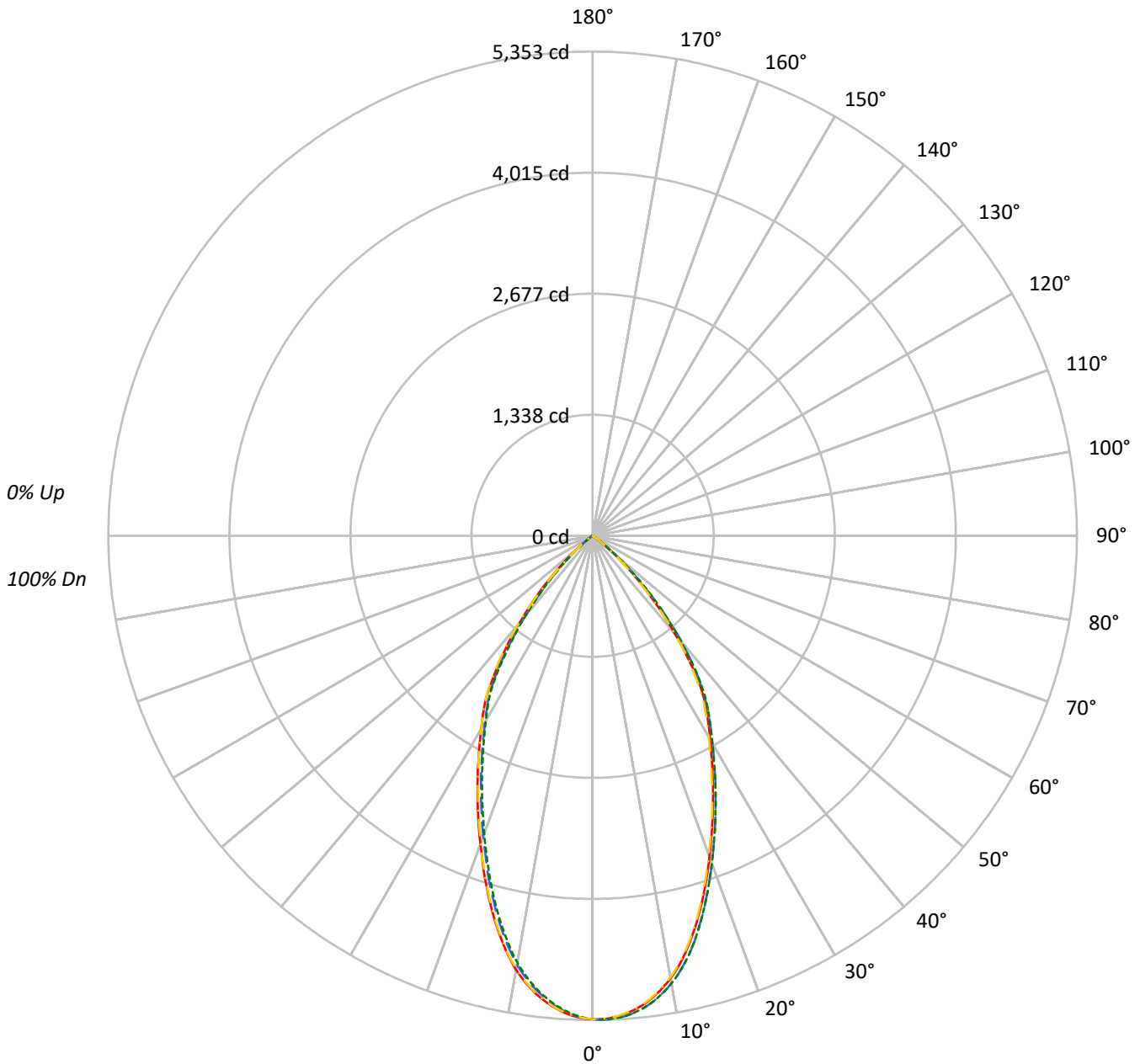
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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					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	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°	292981	292981	292981	292981
5°	289582	291222	287040	284910
10°	276520	279643	271187	266667
15°	251528	256057	243549	237203
20°	220402	224830	211617	204406
25°	190590	194612	182025	174724
30°	164418	167557	155999	149453
35°	141308	144621	128767	121947
40°	101805	107945	90355	82454
45°	60285	67340	51432	44664
50°	24989	29219	17663	14729
55°	4244	5591	4244	2800
60°	1754	1656	1710	1392
65°	1038	973	1038	856
70°	673	673	673	609
75°	508	402	508	402
80°	284	284	284	284
85°	0	314	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 71659 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	489.7	9.8
10°-20°	1210.3	24.3
20°-30°	1408.1	28.3
30°-40°	1224.6	24.6
40°-50°	563.3	11.3
50°-60°	66.5	1.3
60°-70°	8.0	0.2
70°-80°	2.4	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°	3108.0	62.5
0°-40°	4332.6	87.1
0°-60°	4962.4	99.8
0°-90°	4973.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4973.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5344	5344	5344	5344	5344	
5°	5262	5292	5216	5177	5262	493
15°	4432	4512	4291	4180	4432	1232
25°	3151	3217	3009	2889	3151	1447
35°	2112	2161	1924	1822	2112	1283
45°	778	869	663	576	778	611
55°	44	58	44	29	44	74
65°	8	8	8	7	8	9
75°	2	2	2	2	2	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	5344.4	5344.4	5344.4	5344.4	5344.4	5344.4	5344.4	5344.4	5344.4	5344.4	5344.4
0.5°	5346.8	5350.6	5351.1	5346.8	5347.7	5344.9	5343.0	5344.0	5343.0	5343.5	5342.6
1°	5345.9	5351.1	5352.9	5350.6	5349.2	5344.9	5342.6	5340.7	5337.8	5337.4	5335.5
1.5°	5341.6	5349.2	5352.9	5352.0	5349.2	5343.5	5339.3	5335.0	5330.3	5327.9	5325.1
2°	5336.9	5346.3	5350.6	5351.5	5346.8	5340.7	5334.5	5327.0	5320.9	5316.6	5311.9
2.5°	5329.3	5340.7	5345.9	5349.2	5343.0	5334.5	5326.5	5316.6	5309.1	5302.9	5296.8
3°	5319.9	5333.1	5338.8	5345.4	5336.4	5327.5	5316.6	5305.3	5294.4	5286.9	5279.3
3.5°	5309.1	5323.2	5330.8	5339.3	5328.9	5318.5	5304.8	5291.6	5278.4	5268.0	5260.5
4°	5295.4	5311.4	5319.9	5330.8	5319.4	5306.7	5291.6	5274.6	5259.5	5247.7	5239.2
4.5°	5279.8	5297.7	5308.1	5319.9	5307.2	5292.5	5275.6	5256.7	5238.8	5225.1	5215.6
5°	5262.3	5282.2	5292.5	5308.1	5292.1	5277.0	5257.2	5236.4	5216.1	5200.1	5188.7
5.5°	5243.5	5264.7	5276.5	5293.0	5276.0	5258.1	5236.9	5214.7	5192.0	5173.6	5161.4
6°	5221.3	5244.4	5258.6	5277.0	5257.2	5237.8	5215.2	5188.3	5164.2	5144.4	5131.2
6.5°	5198.2	5223.7	5237.8	5258.1	5235.9	5215.6	5190.6	5161.4	5135.9	5115.1	5099.6
7°	5171.3	5198.6	5214.2	5237.8	5213.7	5191.6	5163.7	5133.1	5105.2	5083.1	5066.5
7.5°	5142.5	5172.2	5188.7	5214.2	5187.8	5162.8	5134.5	5103.3	5071.3	5047.2	5030.2
8°	5111.8	5142.5	5159.5	5188.7	5160.0	5132.6	5103.3	5068.9	5036.3	5010.4	4991.5
8.5°	5079.3	5112.3	5129.8	5160.9	5128.8	5102.4	5069.8	5032.6	4998.6	4971.2	4951.4
9°	5043.9	5078.8	5096.3	5129.3	5096.3	5068.4	5034.5	4994.8	4959.0	4929.2	4908.5
9.5°	5006.6	5042.5	5062.3	5096.3	5061.3	5031.6	4995.8	4956.6	4916.5	4885.8	4863.2
10°	4967.5	5003.8	5024.1	5060.9	5023.6	4992.9	4956.1	4911.8	4871.7	4839.6	4814.6
10.5°	4924.5	4965.1	4984.9	5023.6	4985.4	4953.3	4912.2	4867.0	4823.1	4787.2	4761.7
11°	4880.2	4921.7	4942.4	4984.4	4942.4	4908.9	4867.4	4817.9	4771.6	4731.1	4706.1
11.5°	4832.0	4874.5	4896.7	4942.0	4897.6	4862.7	4818.8	4766.9	4716.9	4676.3	4649.9
12°	4780.1	4825.9	4847.6	4895.7	4849.5	4812.7	4766.0	4711.2	4661.7	4620.2	4591.4
12.5°	4726.8	4773.1	4797.1	4846.7	4799.5	4760.3	4711.7	4656.5	4602.7	4559.8	4530.5
13°	4671.6	4719.3	4744.7	4795.7	4746.2	4706.5	4657.0	4599.0	4543.7	4498.5	4468.3
13.5°	4614.5	4663.6	4690.0	4742.9	4691.0	4649.4	4599.0	4539.5	4482.4	4435.7	4403.6
14°	4555.1	4606.0	4632.0	4689.1	4632.5	4591.9	4539.0	4477.7	4419.7	4373.9	4340.9
14.5°	4494.7	4546.1	4573.5	4628.7	4572.5	4530.1	4476.7	4414.9	4356.9	4306.9	4275.3
15°	4431.9	4485.2	4510.7	4571.6	4511.7	4467.8	4414.5	4351.7	4291.3	4242.7	4209.2
15.5°	4368.2	4422.0	4447.5	4509.8	4449.9	4405.0	4351.7	4287.5	4226.2	4176.7	4142.2
16°	4304.5	4358.8	4384.7	4446.5	4385.2	4340.9	4288.0	4221.5	4160.6	4111.1	4076.2
16.5°	4240.8	4295.1	4322.0	4383.3	4320.6	4276.7	4223.4	4157.3	4096.0	4043.6	4009.6
17°	4176.7	4230.0	4255.5	4319.2	4255.9	4211.1	4155.9	4090.8	4029.0	3976.1	3941.2
17.5°	4109.7	4164.4	4189.4	4252.6	4188.9	4143.2	4089.8	4025.7	3961.5	3909.6	3871.9
18°	4043.6	4097.4	4123.3	4186.6	4122.4	4076.6	4023.3	3958.7	3893.6	3840.7	3802.0
18.5°	3977.5	4031.8	4056.3	4119.1	4054.9	4010.6	3956.8	3889.3	3826.6	3772.3	3733.6
19°	3910.5	3965.8	3987.9	4051.2	3988.4	3944.0	3888.4	3822.3	3757.7	3703.4	3665.7
19.5°	3845.0	3898.8	3921.9	3983.7	3920.9	3877.0	3820.4	3757.2	3690.2	3639.7	3602.0
20°	3778.0	3831.3	3853.5	3916.7	3853.9	3809.1	3754.8	3688.8	3627.4	3576.0	3537.8
20.5°	3711.4	3766.2	3787.9	3848.3	3786.0	3741.6	3687.8	3626.0	3564.7	3512.3	3473.6
21°	3646.3	3700.6	3723.2	3783.6	3719.5	3676.0	3625.1	3563.3	3501.9	3448.6	3409.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	3455.2	3506.7	3527.4	3584.0	3528.8	3486.8	3437.3	3375.0	3311.8	3258.5	3218.8
23°	3392.9	3442.5	3464.2	3519.9	3465.6	3423.6	3374.5	3311.3	3250.5	3195.2	3158.0
23.5°	3332.1	3380.2	3401.4	3456.2	3402.9	3360.4	3310.4	3250.0	3188.6	3134.9	3097.1
24°	3269.8	3319.3	3338.7	3392.0	3339.6	3298.1	3248.1	3189.6	3128.2	3074.5	3035.8
24.5°	3210.8	3258.5	3276.4	3329.2	3278.3	3233.9	3187.2	3129.2	3067.9	3015.5	2976.8
25°	3150.9	3198.1	3216.0	3268.9	3217.4	3174.0	3125.9	3068.3	3009.3	2956.5	2918.3
25.5°	3091.9	3138.2	3156.1	3208.5	3156.1	3115.5	3066.4	3010.3	2951.8	2898.0	2861.7
26°	3033.9	3081.5	3097.1	3147.6	3096.6	3057.5	3008.4	2952.7	2894.2	2841.4	2805.0
26.5°	2977.3	3021.1	3039.1	3086.3	3038.1	2997.6	2950.4	2894.7	2836.7	2784.8	2746.5
27°	2919.7	2963.6	2980.1	3028.2	2979.6	2938.1	2892.3	2838.1	2780.5	2729.1	2691.3
27.5°	2863.1	2907.0	2922.5	2970.7	2921.6	2883.8	2836.2	2781.5	2724.8	2674.3	2636.6
28°	2807.9	2852.7	2865.9	2913.6	2864.0	2826.7	2779.6	2727.2	2670.6	2619.1	2583.3
28.5°	2752.7	2797.5	2810.2	2856.9	2808.8	2770.1	2724.8	2672.0	2615.8	2565.8	2530.0
29°	2700.3	2741.8	2755.5	2799.9	2753.6	2715.9	2672.5	2619.1	2564.9	2514.4	2478.1
29.5°	2648.9	2689.4	2700.8	2745.6	2700.3	2663.0	2619.1	2567.7	2513.5	2464.4	2428.5
30°	2597.4	2638.5	2649.8	2693.2	2647.0	2611.6	2567.7	2517.2	2464.4	2414.4	2379.9
30.5°	2547.4	2587.5	2599.3	2641.3	2596.0	2560.2	2517.7	2466.7	2414.8	2365.8	2332.3
31°	2498.8	2538.0	2549.3	2589.4	2547.0	2511.6	2468.2	2418.6	2366.2	2318.1	2284.1
31.5°	2449.8	2488.4	2499.8	2539.9	2497.9	2463.4	2420.0	2371.4	2319.5	2271.9	2238.8
32°	2404.0	2442.7	2452.6	2490.8	2450.7	2414.8	2374.3	2325.7	2273.3	2225.6	2192.1
32.5°	2358.2	2395.5	2405.4	2442.7	2402.6	2368.1	2326.6	2277.5	2227.0	2178.9	2146.8
33°	2312.5	2349.3	2359.2	2396.0	2357.7	2321.9	2279.9	2228.9	2177.0	2127.5	2094.0
33.5°	2264.3	2301.1	2310.1	2348.8	2310.1	2275.6	2229.9	2173.7	2120.9	2068.0	2031.7
34°	2216.7	2252.1	2257.2	2301.1	2263.4	2227.0	2177.0	2115.7	2060.0	2006.2	1970.4
34.5°	2163.4	2198.7	2200.2	2249.7	2213.8	2176.1	2119.5	2055.3	1992.1	1942.5	1903.4
35°	2111.5	2142.1	2143.1	2193.1	2161.0	2123.7	2061.9	1995.4	1924.1	1877.4	1838.3
35.5°	2053.9	2083.6	2086.0	2137.4	2106.7	2069.5	2003.4	1932.2	1852.9	1805.2	1774.6
36°	1992.5	2022.7	2027.9	2079.4	2050.1	2011.4	1944.9	1868.5	1786.4	1733.5	1710.4
36.5°	1925.1	1960.0	1969.9	2022.7	1987.8	1948.2	1883.1	1802.9	1720.3	1663.2	1641.0
37°	1851.9	1895.8	1911.4	1964.7	1924.1	1881.2	1819.9	1736.8	1657.1	1593.9	1574.0
37.5°	1776.0	1829.8	1851.5	1905.3	1856.7	1813.7	1755.2	1667.9	1592.9	1525.4	1503.7
38°	1702.4	1764.7	1788.7	1844.4	1787.3	1745.3	1689.6	1602.3	1529.7	1458.4	1434.8
38.5°	1632.5	1696.2	1724.5	1783.5	1716.1	1672.2	1621.7	1536.3	1463.6	1394.3	1361.7
39°	1562.7	1625.9	1659.9	1721.7	1645.3	1597.6	1554.2	1471.6	1398.5	1332.5	1295.2
39.5°	1492.4	1555.6	1594.8	1655.7	1576.9	1526.4	1483.4	1406.5	1331.0	1266.4	1225.8
40°	1422.6	1485.3	1529.7	1589.6	1508.4	1458.4	1412.2	1342.4	1262.6	1200.3	1160.2
40.5°	1352.7	1415.5	1464.6	1523.5	1440.5	1390.0	1339.5	1278.2	1195.6	1137.1	1092.3
41°	1286.2	1345.2	1399.9	1457.5	1375.4	1323.5	1267.3	1213.6	1133.3	1073.9	1027.7
41.5°	1217.8	1276.8	1331.5	1391.4	1310.3	1254.1	1196.6	1148.0	1071.5	1011.6	962.1
42°	1152.7	1212.6	1262.6	1322.1	1246.6	1189.0	1127.7	1081.4	1011.6	949.8	898.8
42.5°	1085.7	1149.4	1194.7	1253.7	1181.5	1124.8	1060.7	1015.9	953.6	890.3	838.9
43°	1021.0	1085.2	1125.3	1187.1	1117.3	1060.7	996.0	951.7	895.1	835.1	782.3
43.5°	955.9	1018.7	1055.5	1120.1	1053.6	995.1	931.9	887.5	835.6	776.6	725.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	777.6	834.2	858.3	924.3	868.6	811.1	753.0	703.5	663.4	613.4	571.9
45.5°	720.0	774.7	794.6	862.0	809.7	753.0	695.5	646.4	608.7	561.0	524.2
46°	666.2	716.7	734.2	799.8	754.0	696.0	641.2	591.2	556.3	511.9	479.9
46.5°	612.4	660.1	674.7	739.4	695.5	640.7	587.9	537.4	505.3	469.5	440.7
47°	560.5	605.8	616.2	679.4	638.4	590.7	536.5	491.6	458.6	427.5	402.0
47.5°	510.1	553.0	561.5	622.8	584.6	540.7	487.9	446.4	412.4	385.0	362.8
48°	462.9	501.1	509.1	566.2	533.6	491.6	444.5	401.1	365.7	343.0	323.7
48.5°	417.6	449.7	459.6	511.9	486.0	447.8	401.1	355.8	319.0	300.6	290.2
49°	374.6	402.0	412.4	462.9	437.9	403.9	358.1	310.5	278.9	266.1	258.6
49.5°	333.6	355.8	366.6	412.9	390.2	360.0	314.7	273.7	241.1	232.6	229.3
50°	293.0	311.9	323.7	367.1	342.6	316.6	277.9	239.7	207.1	203.4	201.9
50.5°	255.7	270.8	283.6	322.7	294.9	277.9	242.5	208.5	177.4	175.5	176.0
51°	220.3	233.6	246.3	282.6	255.3	240.6	210.9	179.8	151.5	151.5	152.4
51.5°	187.3	199.1	211.4	243.0	219.9	207.1	182.6	154.8	130.2	129.8	131.6
52°	156.6	168.9	178.8	208.1	186.4	175.0	156.2	131.2	111.4	110.4	112.3
52.5°	134.9	147.2	155.7	176.0	155.2	146.7	132.1	110.4	94.8	93.0	93.9
53°	113.2	125.5	132.6	153.3	128.3	121.3	109.9	92.5	80.7	77.9	77.9
53.5°	91.5	104.3	109.5	130.7	104.7	98.6	91.1	76.9	67.9	64.6	63.7
54°	70.3	82.6	86.3	108.0	84.5	79.7	74.5	63.2	56.6	57.1	56.1
54.5°	55.7	61.3	63.2	85.4	67.5	63.7	64.6	55.7	50.5	49.5	48.1
55°	44.4	48.1	49.5	62.8	58.5	55.7	54.7	48.1	44.4	41.5	40.1
55.5°	35.4	37.7	38.2	49.1	50.0	47.7	45.3	40.6	38.2	34.0	32.6
56°	29.7	30.7	30.2	37.7	41.0	39.6	35.9	33.5	32.1	26.4	24.5
56.5°	26.4	26.9	26.4	29.7	32.1	31.6	26.4	26.0	26.0	24.1	22.6
57°	24.5	24.5	24.1	25.5	23.6	23.6	24.1	24.1	24.1	22.6	21.2
57.5°	23.1	23.1	22.2	23.1	21.7	21.7	22.2	22.6	22.2	21.2	19.8
58°	21.2	21.2	20.8	21.2	20.3	20.3	20.8	21.2	20.8	19.8	18.4
58.5°	19.8	19.8	18.9	19.8	18.9	18.9	19.3	19.8	19.3	18.4	17.0
59°	18.4	18.4	17.9	18.4	17.5	17.5	17.9	18.4	17.9	17.0	16.0
59.5°	17.5	17.0	16.5	17.0	16.0	16.0	16.5	17.0	17.0	16.0	14.6
60°	16.0	16.0	15.6	16.0	15.1	15.1	15.6	15.6	15.6	14.6	13.7
60.5°	15.1	14.6	14.2	14.6	14.2	14.2	14.2	14.6	14.6	13.7	12.7
61°	13.7	13.7	13.2	13.7	12.7	13.2	13.2	13.7	13.7	12.7	11.8
61.5°	12.7	12.7	12.3	12.7	12.3	12.3	12.3	12.7	12.7	11.8	11.3
62°	11.8	11.8	11.3	11.8	11.3	11.3	11.8	11.8	11.8	11.3	10.4
62.5°	11.3	11.3	10.4	10.9	10.4	10.4	10.9	11.3	11.3	10.4	9.9
63°	10.4	10.4	9.9	10.4	9.9	9.9	9.9	10.4	10.4	9.9	9.0
63.5°	9.9	9.9	9.4	9.4	9.0	9.4	9.4	9.9	9.9	9.4	8.5
64°	9.4	9.0	8.5	9.0	8.5	8.5	9.0	9.4	9.4	9.0	8.0
64.5°	8.5	8.5	8.0	8.5	8.0	8.0	8.5	8.5	8.5	8.0	7.5
65°	8.0	8.0	7.5	8.0	7.5	7.5	8.0	8.0	8.0	7.5	7.1
65.5°	7.5	7.5	7.1	7.5	7.1	7.1	7.5	7.5	7.5	7.1	6.6
66°	7.1	7.1	6.6	7.1	6.6	6.6	7.1	7.1	7.1	6.6	6.1





TEST NUMBER: P776677

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	6.1	5.7	5.7	5.7	5.7	5.7	5.7	6.1	6.1	5.7	5.2
68°	5.7	5.7	5.2	5.2	5.2	5.2	5.2	5.7	5.7	5.2	5.2
68.5°	5.2	5.2	4.7	5.2	4.7	4.7	5.2	5.2	5.2	5.2	4.7
69°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	5.2	5.2	4.7	4.2
69.5°	4.7	4.7	4.2	4.2	4.2	4.2	4.7	4.7	4.7	4.2	4.2
70°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.8
70.5°	4.2	3.8	3.8	3.8	3.8	3.8	3.8	4.2	4.2	3.8	3.8
71°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.3
71.5°	3.8	3.3	3.3	3.3	3.3	3.3	3.3	3.8	3.8	3.3	3.3
72°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.8
72.5°	3.3	3.3	2.8	2.8	2.8	2.8	3.3	3.3	3.3	2.8	2.8
73°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
73.5°	2.8	2.8	2.8	2.8	2.4	2.8	2.8	2.8	2.8	2.8	2.4
74°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.8	2.8	2.4	2.4
74.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
75°	2.4	2.4	1.9	2.4	1.9	2.4	2.4	2.4	2.4	2.4	1.9
75.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	2.4	1.9	1.9
76°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
76.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.4
77°	1.9	1.4	1.4	1.9	1.4	1.4	1.9	1.9	1.9	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: P776677

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3500K

**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: P776677

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	5344.4	5344.4	5344.4	5344.4	5344.4	5344.4
0.5°	5333.1	5336.9	5336.9	5339.3	5343.0	5346.8
1°	5323.2	5328.9	5329.8	5334.1	5339.3	5345.9
1.5°	5310.5	5317.1	5319.4	5325.6	5334.1	5341.6
2°	5294.9	5304.3	5308.1	5316.1	5326.5	5336.9
2.5°	5277.4	5288.3	5293.0	5304.3	5317.6	5329.3
3°	5257.6	5270.4	5277.0	5289.7	5305.8	5319.9
3.5°	5235.5	5251.5	5258.6	5273.7	5291.6	5309.1
4°	5211.9	5227.9	5238.3	5254.8	5275.6	5295.4
4.5°	5185.4	5204.3	5215.2	5234.0	5257.6	5279.8
5°	5157.6	5177.4	5190.2	5210.9	5237.8	5262.3
5.5°	5126.5	5149.6	5162.8	5185.9	5216.1	5243.5
6°	5094.8	5119.9	5134.5	5159.0	5192.5	5221.3
6.5°	5060.4	5086.4	5103.8	5130.7	5166.1	5198.2
7°	5024.5	5051.9	5070.8	5100.0	5137.3	5171.3
7.5°	4986.8	5014.6	5034.9	5066.1	5106.2	5142.5
8°	4944.8	4975.5	4996.7	5030.7	5072.7	5111.8
8.5°	4900.9	4934.0	4957.5	4992.0	5037.8	5079.3
9°	4855.2	4888.7	4913.7	4951.4	4999.1	5043.9
9.5°	4806.1	4842.4	4868.4	4908.9	4959.4	5006.6
10°	4753.7	4790.5	4817.9	4863.6	4918.4	4967.5
10.5°	4697.1	4738.1	4767.4	4815.1	4873.1	4924.5
11°	4638.6	4683.4	4713.6	4762.2	4825.0	4880.2
11.5°	4580.5	4623.5	4659.3	4708.4	4773.1	4832.0
12°	4519.7	4564.5	4598.0	4653.7	4719.3	4780.1
12.5°	4457.4	4502.2	4537.6	4595.2	4664.1	4726.8
13°	4394.2	4439.9	4478.6	4536.7	4607.9	4671.6
13.5°	4329.5	4375.8	4416.4	4473.9	4547.5	4614.5
14°	4264.4	4312.5	4350.8	4410.7	4487.1	4555.1
14.5°	4196.9	4247.0	4285.7	4349.4	4424.4	4494.7
15°	4132.3	4179.5	4220.1	4283.8	4361.6	4431.9
15.5°	4064.4	4112.5	4155.0	4218.7	4297.4	4368.2
16°	3995.9	4045.0	4087.5	4150.2	4232.3	4304.5
16.5°	3928.5	3978.0	4021.0	4086.1	4167.2	4240.8
17°	3859.6	3910.5	3953.0	4019.5	4102.6	4176.7
17.5°	3792.1	3841.7	3885.1	3952.1	4036.1	4109.7
18°	3720.4	3772.3	3815.2	3882.7	3969.1	4043.6
18.5°	3653.9	3702.5	3746.8	3814.3	3902.1	3977.5
19°	3587.8	3635.5	3678.4	3749.7	3834.6	3910.5
19.5°	3521.8	3569.9	3613.3	3684.5	3769.5	3845.0
20°	3455.7	3503.8	3549.6	3618.0	3703.4	3778.0
20.5°	3390.1	3439.7	3485.0	3552.9	3638.8	3711.4
21°	3332.1	3373.1	3418.9	3487.3	3572.2	3646.3



TEST NUMBER: P776677

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	3145.7	3185.8	3232.1	3301.4	3383.0	3455.2
23°	3084.8	3124.9	3169.8	3238.2	3320.8	3392.9
23.5°	3024.9	3064.6	3110.8	3179.2	3260.4	3332.1
24°	2967.4	3006.0	3051.8	3117.9	3200.4	3269.8
24.5°	2907.4	2947.5	2992.4	3060.3	3139.6	3210.8
25°	2851.3	2888.6	2934.3	2999.4	3081.1	3150.9
25.5°	2793.2	2832.4	2878.2	2943.3	3023.0	3091.9
26°	2737.1	2776.3	2822.0	2886.7	2965.9	3033.9
26.5°	2682.4	2721.5	2766.8	2831.0	2908.8	2977.3
27°	2627.2	2666.3	2711.1	2775.8	2852.7	2919.7
27.5°	2572.9	2613.0	2656.4	2720.6	2797.0	2863.1
28°	2521.0	2559.2	2603.1	2664.9	2742.3	2807.9
28.5°	2470.5	2507.3	2551.7	2613.0	2688.5	2752.7
29°	2421.4	2457.8	2501.7	2563.0	2636.6	2700.3
29.5°	2371.0	2408.7	2450.7	2512.0	2584.7	2648.9
30°	2322.8	2361.0	2403.0	2463.0	2535.6	2597.4
30.5°	2276.6	2313.9	2355.4	2413.9	2486.6	2547.4
31°	2231.3	2267.6	2310.1	2368.1	2438.4	2498.8
31.5°	2185.1	2221.9	2264.8	2322.4	2390.3	2449.8
32°	2138.3	2176.6	2218.1	2276.1	2344.5	2404.0
32.5°	2087.4	2131.3	2172.8	2231.3	2299.7	2358.2
33°	2030.3	2078.0	2121.8	2180.8	2254.4	2312.5
33.5°	1968.0	2019.0	2065.2	2125.6	2204.4	2264.3
34°	1900.5	1956.7	2004.3	2067.1	2149.7	2216.7
34.5°	1833.5	1889.7	1937.8	2010.0	2094.0	2163.4
35°	1768.0	1822.2	1870.3	1947.7	2035.5	2111.5
35.5°	1701.9	1751.0	1802.9	1886.9	1975.1	2053.9
36°	1634.4	1673.1	1737.3	1823.2	1912.3	1992.5
36.5°	1564.1	1607.1	1695.8	1758.0	1848.6	1925.1
37°	1494.3	1541.9	1626.4	1693.4	1783.5	1851.9
37.5°	1425.9	1476.8	1556.6	1625.5	1715.1	1776.0
38°	1354.6	1411.3	1486.7	1557.5	1643.4	1702.4
38.5°	1285.7	1347.6	1416.9	1489.6	1571.7	1632.5
39°	1219.7	1282.4	1351.3	1421.6	1500.0	1562.7
39.5°	1155.0	1217.3	1282.9	1353.7	1428.2	1492.4
40°	1089.9	1152.2	1215.0	1286.7	1356.0	1422.6
40.5°	1027.7	1088.5	1148.0	1220.6	1283.9	1352.7
41°	965.4	1025.8	1081.9	1154.6	1211.7	1286.2
41.5°	902.1	963.0	1018.7	1086.6	1139.5	1217.8
42°	840.3	905.4	957.3	1022.9	1072.5	1152.7
42.5°	783.7	845.5	898.8	956.4	1005.5	1085.7
43°	725.7	792.2	840.3	891.3	943.7	1021.0
43.5°	671.4	736.1	781.4	824.8	880.0	955.9



TEST NUMBER: P776677

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	522.8	576.1	611.0	642.6	706.8	777.6
45.5°	478.4	526.1	557.2	587.9	651.6	720.0
46°	438.8	476.6	505.3	535.1	599.7	666.2
46.5°	399.2	428.9	454.8	485.5	549.2	612.4
47°	359.5	385.0	407.7	438.8	500.6	560.5
47.5°	319.9	343.5	362.8	394.0	453.4	510.1
48°	286.4	303.4	320.8	352.0	408.6	462.9
48.5°	254.8	266.6	281.2	312.8	365.7	417.6
49°	224.1	233.1	243.9	277.0	324.6	374.6
49.5°	196.8	201.9	210.0	243.9	286.9	333.6
50°	171.7	172.7	179.8	212.3	251.0	293.0
50.5°	148.2	153.8	160.0	184.0	218.5	255.7
51°	126.9	134.5	140.1	158.1	188.7	220.3
51.5°	107.1	115.6	120.3	138.2	160.9	187.3
52°	90.1	96.7	100.5	118.9	140.1	156.6
52.5°	74.5	77.4	80.7	99.1	119.4	134.9
53°	60.9	64.6	67.9	79.7	99.1	113.2
53.5°	53.3	52.8	56.1	65.6	78.8	91.5
54°	46.2	43.4	46.2	52.8	63.2	70.3
54.5°	38.7	35.4	37.7	42.5	50.5	55.7
55°	31.1	29.3	30.7	34.0	40.1	44.4
55.5°	23.6	25.0	26.0	28.3	32.1	35.4
56°	21.7	22.6	23.6	25.0	27.8	29.7
56.5°	20.3	21.2	21.7	23.1	25.0	26.4
57°	18.9	19.8	20.3	21.7	23.1	24.5
57.5°	17.9	18.4	18.9	19.8	21.7	23.1
58°	16.5	17.5	17.9	18.4	20.3	21.2
58.5°	15.1	16.0	16.5	17.5	18.9	19.8
59°	14.2	15.1	15.6	16.0	17.5	18.4
59.5°	13.2	13.7	14.2	15.1	16.5	17.5
60°	12.3	12.7	13.2	13.7	15.1	16.0
60.5°	11.3	11.8	12.3	12.7	14.2	15.1
61°	10.9	11.3	11.3	11.8	12.7	13.7
61.5°	9.9	10.4	10.9	11.3	12.3	12.7
62°	9.4	9.9	9.9	10.4	11.3	11.8
62.5°	9.0	9.0	9.4	9.9	10.4	11.3
63°	8.5	8.5	9.0	9.0	9.9	10.4
63.5°	8.0	8.0	8.0	8.5	9.4	9.9
64°	7.5	7.5	7.5	8.0	9.0	9.4
64.5°	7.1	7.1	7.1	7.5	8.0	8.5
65°	6.6	6.6	6.6	7.1	7.5	8.0
65.5°	6.1	6.1	6.6	6.6	7.1	7.5
66°	5.7	6.1	6.1	6.1	6.6	7.1



TEST NUMBER: P776677

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	4.7	4.7	5.2	5.2	5.7	6.1
68°	4.7	4.7	4.7	4.7	5.2	5.7
68.5°	4.2	4.2	4.2	4.7	5.2	5.2
69°	3.8	4.2	4.2	4.2	4.7	4.7
69.5°	3.8	3.8	3.8	4.2	4.2	4.7
70°	3.3	3.8	3.8	3.8	4.2	4.2
70.5°	3.3	3.3	3.3	3.8	3.8	4.2
71°	3.3	3.3	3.3	3.3	3.8	3.8
71.5°	2.8	2.8	2.8	3.3	3.3	3.8
72°	2.8	2.8	2.8	2.8	3.3	3.3
72.5°	2.4	2.8	2.8	2.8	2.8	3.3
73°	2.4	2.4	2.4	2.8	2.8	2.8
73.5°	2.4	2.4	2.4	2.4	2.8	2.8
74°	2.4	2.4	2.4	2.4	2.4	2.4
74.5°	1.9	1.9	1.9	2.4	2.4	2.4
75°	1.9	1.9	1.9	1.9	1.9	2.4
75.5°	1.9	1.9	1.9	1.9	1.9	1.9
76°	1.4	1.9	1.9	1.9	1.9	1.9
76.5°	1.4	1.4	1.4	1.4	1.9	1.9
77°	1.4	1.4	1.4	1.4	1.4	1.9
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: P776677

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3500K

**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



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Cooper Lighting Solutions Photometric Lab  
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Peachtree City, GA 30269

Scaled Data Report





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

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

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	3582.6	3633.1	3657.6	3718.5	3654.8	3612.8	3562.3	3500.5	3438.7	3384.9	3345.8
22°	3517.5	3568.5	3590.6	3651.0	3592.1	3550.1	3500.1	3437.8	3376.0	3320.3	3282.1



44°	895.5	955.9	989.9	1053.6	990.4	929.5	870.1	824.3	776.6	721.0	671.9
44.5°	837.0	894.6	923.4	987.5	928.6	869.6	811.1	762.0	719.1	665.3	620.5



66.5°	6.6	6.6	6.1	6.6	6.1	6.1	6.6	6.6	6.6	6.6	6.1
67°	6.1	6.1	6.1	6.1	5.7	6.1	6.1	6.1	6.6	6.1	5.7



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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Scaled Data Report





21.5°	3270.3	3310.4	3357.1	3425.5	3509.0	3582.6
22°	3207.0	3247.2	3292.4	3361.3	3446.3	3517.5



44°	618.6	681.3	723.3	762.5	819.6	895.5
44.5°	570.0	627.5	666.7	699.7	762.0	837.0

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Scaled Data Report



66.5°	5.2	5.7	5.7	6.1	6.6	6.6
67°	5.2	5.2	5.2	5.7	6.1	6.1

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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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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)