

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: P776798

Luminaire Tested: HCDJBL54050CSD-HCD8TRC-5000lm-4000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776798
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2310613A001)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD8TRC-5000lm-4000K
Description: 8 INCH ROUND MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

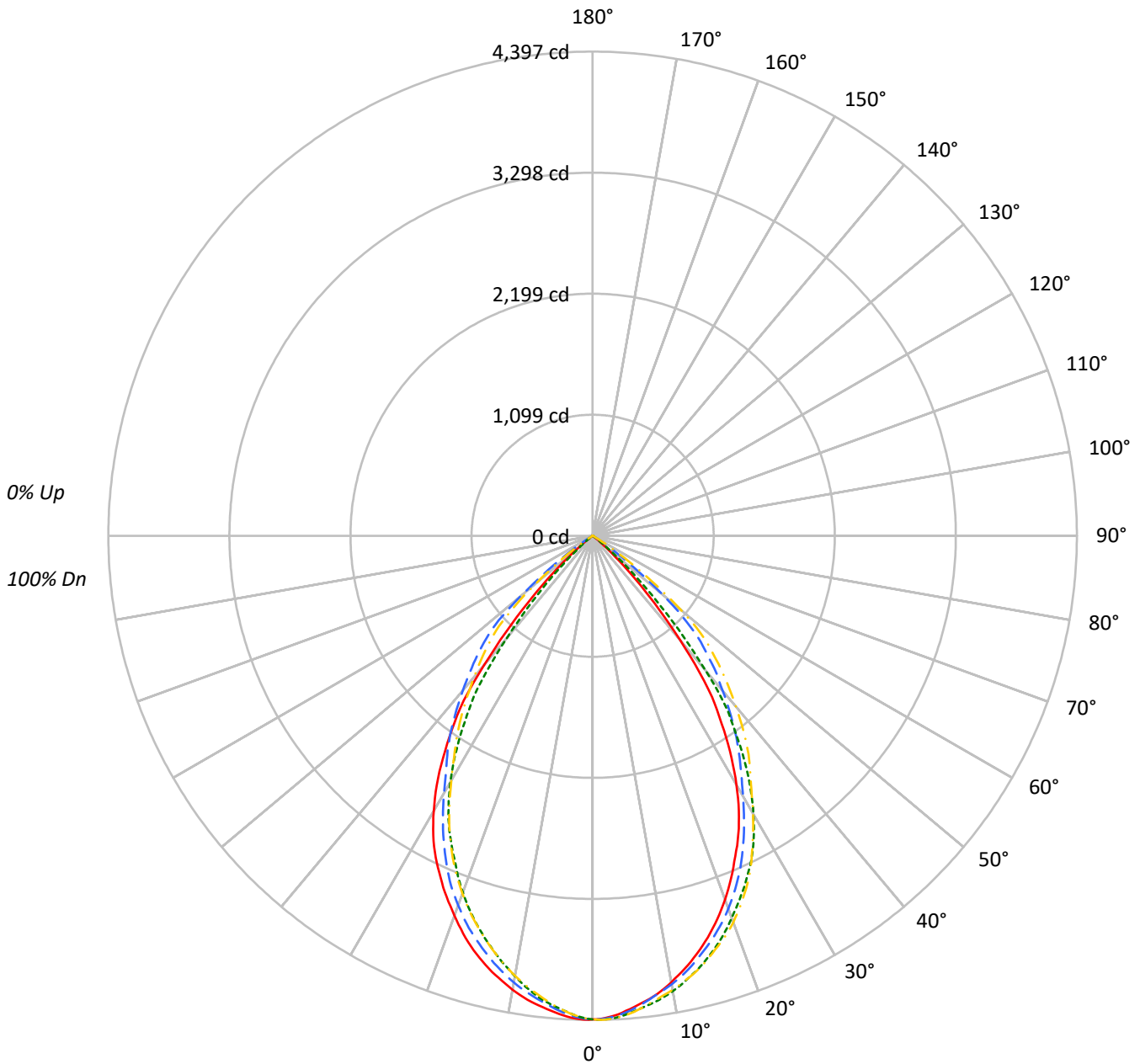
Lumens per Lamp: N/A
Luminaire Lumens: 5214.8 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.05
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92	92	92	92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85	85	85	85
3	101	94	88	84	99	92	87	83	89	85	82	87	83	80	85	82	79	78	78	78	78
4	95	86	80	76	93	85	80	75	83	78	74	81	77	74	79	76	73	71	71	71	71
5	89	80	74	69	88	79	73	69	77	72	68	76	71	67	74	70	67	65	65	65	65
6	84	74	68	63	83	73	67	63	72	66	62	70	66	62	69	65	61	60	60	60	60
7	79	69	62	58	78	68	62	58	67	61	57	66	61	57	65	60	57	55	55	55	55
8	75	64	58	53	74	64	58	53	63	57	53	62	56	53	61	56	52	51	51	51	51
9	71	60	54	49	70	60	54	49	59	53	49	58	53	49	57	52	49	47	47	47	47
10	67	56	50	46	66	56	50	46	55	50	46	54	49	45	54	49	45	44	44	44	44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	134107	134107	134107	134107
5°	131687	132814	132683	131040
10°	127617	130196	129753	125924
15°	121837	125952	125437	119510
20°	114201	119984	119208	111979
25°	104563	112978	111960	102723
30°	92085	102982	101716	91073
35°	74653	87135	85693	74098
40°	49029	63540	60965	48343
45°	21528	32641	30616	21053
50°	4702	9476	8454	4545
55°	612	916	841	586
60°	495	733	672	470
65°	412	621	556	383
70°	339	509	473	295
75°	283	448	389	283
80°	246	422	334	246
85°	175	350	350	175

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°
 Vertical Angle: 45°
 Luminance: 68404 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.5	7.8
10°-20°	1091.3	20.9
20°-30°	1467.9	28.1
30°-40°	1387.0	26.6
40°-50°	744.4	14.3
50°-60°	107.7	2.1
60°-70°	7.1	0.1
70°-80°	3.2	0.1
80°-90°	0.7	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°	2964.7	56.9
0°-40°	4351.7	83.4
0°-60°	5203.8	99.8
0°-90°	5214.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5214.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4393	4393	4393	4393	4393	
5°	4297	4334	4329	4276	4297	405
15°	3855	3985	3969	3781	3855	1080
25°	3104	3354	3324	3049	3104	1418
35°	2003	2338	2299	1988	2003	1227
45°	499	756	709	488	499	414
55°	12	17	16	11	12	19
65°	6	9	8	5	6	6
75°	2	4	3	2	2	3
85°	0	1	1	0	0	1
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°	4392.6	4392.6	4392.6	4392.6	4392.6	4392.6	4392.6	4392.6	4392.6	4392.6	4392.6
0.5°	4392.1	4392.6	4392.1	4393.1	4394.0	4395.0	4395.4	4396.9	4395.9	4393.5	4389.7
1°	4387.8	4389.2	4389.7	4392.6	4395.0	4395.9	4396.9	4396.9	4395.0	4390.7	4384.9
1.5°	4381.1	4384.4	4385.4	4389.2	4393.1	4395.0	4395.4	4395.4	4391.6	4386.4	4379.7
2°	4373.4	4378.2	4379.7	4384.4	4390.2	4391.6	4392.1	4392.1	4387.3	4380.1	4372.0
2.5°	4364.3	4370.1	4372.0	4378.2	4385.4	4386.8	4387.8	4387.3	4381.1	4372.0	4362.9
3°	4352.9	4359.6	4362.9	4369.6	4378.2	4380.6	4381.1	4380.1	4373.9	4363.4	4351.9
3.5°	4340.4	4347.6	4351.9	4359.6	4369.6	4372.5	4373.0	4371.5	4364.3	4352.4	4339.5
4°	4325.1	4333.7	4339.9	4348.6	4359.1	4362.4	4363.4	4361.9	4353.3	4339.9	4325.1
4.5°	4311.7	4320.3	4326.1	4334.2	4346.6	4350.9	4352.4	4350.0	4341.4	4326.5	4309.8
5°	4296.9	4307.4	4310.3	4319.8	4333.7	4337.5	4339.5	4337.5	4329.4	4312.2	4293.5
5.5°	4282.0	4292.1	4294.0	4303.6	4320.8	4324.1	4324.6	4324.1	4318.4	4297.8	4277.7
6°	4266.7	4276.3	4277.3	4289.2	4309.3	4311.2	4309.3	4312.7	4306.0	4284.0	4261.5
6.5°	4253.3	4261.5	4259.6	4273.9	4297.8	4298.8	4294.0	4299.3	4294.5	4269.1	4244.7
7°	4238.5	4247.1	4241.4	4258.6	4285.9	4285.9	4277.3	4286.3	4282.5	4254.8	4228.9
7.5°	4220.8	4230.8	4223.2	4244.2	4274.9	4273.4	4261.5	4272.0	4268.2	4239.0	4212.2
8°	4203.1	4213.6	4206.0	4229.4	4261.9	4260.5	4247.1	4256.7	4253.8	4222.7	4194.5
8.5°	4184.4	4195.0	4188.3	4213.6	4248.1	4247.1	4231.3	4240.4	4238.5	4205.0	4176.8
9°	4162.4	4174.9	4171.0	4195.4	4231.8	4231.3	4217.4	4224.1	4221.3	4187.8	4159.1
9.5°	4139.9	4153.3	4153.3	4177.7	4216.5	4215.5	4202.6	4205.5	4204.0	4170.1	4139.9
10°	4116.5	4130.8	4135.6	4159.1	4199.7	4199.3	4186.8	4186.3	4185.4	4150.9	4119.8
10.5°	4092.1	4106.9	4116.5	4140.4	4181.6	4182.0	4171.5	4166.7	4165.8	4131.8	4098.3
11°	4067.7	4080.6	4096.9	4119.4	4162.9	4162.9	4154.3	4146.6	4144.7	4110.3	4076.3
11.5°	4044.2	4054.8	4075.8	4098.3	4141.4	4143.3	4136.1	4124.6	4124.6	4088.7	4053.3
12°	4019.8	4029.4	4052.8	4075.3	4119.4	4121.7	4117.9	4102.6	4105.0	4066.7	4029.9
12.5°	3994.9	4004.0	4028.9	4052.4	4098.3	4098.8	4099.3	4080.6	4084.9	4046.1	4005.5
13°	3969.1	3977.7	4005.9	4028.4	4077.7	4075.8	4080.6	4060.5	4065.3	4025.1	3982.0
13.5°	3940.9	3951.9	3979.6	4005.9	4057.6	4054.8	4060.5	4039.9	4042.3	4005.0	3955.7
14°	3912.6	3924.6	3954.8	3983.5	4035.6	4033.7	4039.9	4020.3	4017.9	3983.5	3928.9
14.5°	3883.5	3895.9	3928.0	3961.0	4010.3	4011.7	4017.4	3998.3	3994.0	3959.5	3902.1
15°	3854.7	3866.2	3902.1	3937.0	3984.9	3988.7	3994.0	3974.8	3968.6	3934.2	3874.4
15.5°	3824.6	3837.5	3874.4	3910.7	3958.6	3963.4	3969.1	3950.4	3943.3	3908.3	3847.6
16°	3794.0	3807.4	3849.5	3883.9	3933.2	3938.0	3944.2	3927.5	3916.5	3881.5	3820.3
16.5°	3761.9	3777.7	3821.7	3856.7	3907.4	3911.2	3919.8	3901.6	3889.2	3854.7	3793.5
17°	3728.9	3746.6	3792.5	3828.4	3879.6	3885.8	3895.4	3876.3	3861.4	3826.0	3763.8
17.5°	3695.4	3716.5	3761.9	3799.7	3851.9	3858.6	3871.5	3850.0	3831.3	3796.8	3735.6
18°	3660.5	3683.9	3734.2	3770.5	3821.7	3831.3	3848.5	3823.2	3799.2	3765.7	3703.5
18.5°	3624.6	3650.4	3702.6	3740.9	3791.1	3802.1	3822.2	3794.9	3767.2	3733.7	3671.0
19°	3588.7	3616.9	3670.5	3709.3	3759.5	3772.0	3794.9	3764.8	3735.6	3700.7	3638.0
19.5°	3552.3	3583.0	3637.5	3675.8	3726.0	3741.3	3765.3	3733.7	3701.6	3667.7	3604.0
20°	3515.0	3547.1	3604.0	3642.3	3693.0	3709.3	3735.1	3702.1	3669.1	3633.7	3569.6
20.5°	3477.2	3511.2	3568.1	3607.4	3660.5	3676.7	3702.6	3669.6	3636.6	3598.3	3535.1
21°	3437.0	3474.8	3531.3	3572.0	3627.5	3643.3	3671.0	3637.0	3603.5	3562.9	3500.7



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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°	3313.6	3358.5	3419.8	3461.9	3528.4	3544.7	3566.7	3537.5	3504.5	3457.1	3388.7
23°	3269.1	3316.4	3379.1	3424.1	3494.9	3511.7	3530.8	3504.0	3471.5	3419.3	3348.0
23.5°	3226.0	3275.3	3339.4	3388.2	3461.9	3478.6	3494.9	3470.5	3432.2	3381.5	3306.4
24°	3183.9	3230.8	3297.3	3350.9	3424.6	3441.8	3459.0	3432.7	3394.9	3343.2	3263.3
24.5°	3143.7	3188.7	3253.8	3314.0	3388.7	3406.4	3417.9	3394.9	3358.5	3304.5	3219.8
25°	3104.0	3147.5	3210.2	3275.8	3353.8	3369.1	3375.8	3356.6	3323.6	3265.2	3174.3
25.5°	3061.4	3107.3	3165.2	3237.0	3320.3	3330.8	3331.8	3316.4	3288.2	3227.9	3129.3
26°	3017.4	3070.0	3119.8	3198.3	3283.4	3294.0	3287.7	3277.7	3250.9	3192.0	3083.4
26.5°	2972.4	3031.3	3073.8	3160.0	3243.2	3258.5	3240.4	3239.9	3210.7	3156.1	3037.0
27°	2925.0	2990.6	3025.5	3123.6	3202.1	3225.0	3192.5	3204.5	3168.6	3119.8	2990.6
27.5°	2876.7	2948.0	2977.7	3087.7	3159.5	3189.2	3146.1	3168.6	3125.5	3081.5	2943.2
28°	2825.5	2902.5	2927.4	3049.0	3115.0	3151.4	3099.7	3131.3	3080.5	3040.8	2895.4
28.5°	2774.8	2858.0	2878.6	3009.2	3069.1	3112.1	3052.8	3090.1	3034.6	2999.2	2847.5
29°	2721.2	2812.1	2828.9	2965.7	3020.7	3070.5	3007.8	3050.4	2986.3	2955.7	2798.7
29.5°	2667.6	2764.7	2779.1	2922.2	2971.4	3027.9	2959.0	3006.4	2935.6	2910.2	2747.5
30°	2612.1	2715.0	2730.8	2876.7	2921.2	2983.4	2912.6	2961.4	2885.3	2863.3	2695.8
30.5°	2555.6	2662.8	2682.9	2829.3	2868.6	2936.5	2863.8	2915.0	2832.2	2813.5	2646.5
31°	2494.4	2610.7	2635.5	2780.5	2815.5	2888.7	2815.5	2867.6	2780.0	2763.8	2599.2
31.5°	2439.8	2559.0	2591.5	2730.3	2760.0	2838.9	2766.2	2816.9	2724.5	2712.1	2553.7
32°	2379.1	2505.9	2547.5	2679.6	2704.4	2788.2	2720.2	2767.1	2669.5	2660.4	2511.6
32.5°	2319.7	2450.8	2504.0	2628.8	2647.5	2736.5	2675.3	2715.0	2609.7	2607.8	2470.5
33°	2256.1	2396.3	2460.4	2577.6	2589.6	2683.9	2633.6	2662.3	2551.3	2554.7	2432.2
33.5°	2196.8	2340.3	2416.4	2525.0	2529.3	2630.3	2593.4	2608.3	2489.1	2498.2	2392.9
34°	2131.7	2283.4	2374.3	2471.4	2467.1	2577.2	2554.7	2553.2	2426.4	2443.2	2353.7
34.5°	2068.5	2225.0	2332.2	2416.4	2402.0	2520.2	2515.4	2498.2	2361.8	2384.3	2312.1
35°	2003.0	2165.7	2289.6	2362.8	2337.9	2462.3	2476.7	2441.8	2299.2	2326.4	2271.9
35.5°	1943.2	2105.9	2246.5	2306.8	2274.3	2404.0	2435.5	2385.3	2233.6	2267.1	2228.3
36°	1881.9	2046.0	2200.6	2249.4	2209.7	2345.6	2392.9	2326.4	2170.0	2207.3	2185.8
36.5°	1823.1	1984.8	2155.1	2191.5	2146.5	2283.4	2349.4	2266.6	2108.7	2146.0	2141.3
37°	1746.5	1925.9	2109.2	2132.2	2085.3	2221.2	2304.4	2206.8	2047.0	2086.2	2096.8
37.5°	1660.9	1868.0	2063.7	2073.3	2026.9	2159.0	2257.5	2147.0	1974.7	2025.0	2051.3
38°	1575.2	1811.1	2016.9	2014.0	1952.7	2097.7	2210.6	2087.7	1899.1	1966.1	2007.3
38.5°	1490.0	1753.2	1970.4	1956.1	1872.3	2038.4	2164.2	2027.9	1813.0	1908.2	1963.3
39°	1404.4	1674.7	1926.4	1902.0	1786.7	1981.0	2117.8	1972.4	1722.6	1851.3	1919.7
39.5°	1318.7	1595.3	1881.4	1846.0	1690.0	1926.9	2070.0	1915.9	1625.0	1785.7	1875.2
40°	1230.2	1515.9	1838.4	1793.9	1594.3	1858.5	2023.6	1858.0	1529.7	1712.5	1832.2
40.5°	1142.2	1436.4	1793.4	1732.1	1499.6	1784.8	1978.1	1796.7	1437.4	1633.6	1789.6
41°	1061.3	1357.0	1750.8	1654.6	1408.7	1705.4	1932.6	1725.0	1348.4	1550.3	1747.5
41.5°	980.4	1272.8	1727.4	1576.6	1321.6	1617.8	1888.6	1648.9	1262.7	1464.2	1706.8
42°	906.3	1191.9	1680.9	1498.6	1234.0	1528.8	1843.2	1567.5	1175.2	1379.5	1665.2
42.5°	834.0	1111.1	1634.1	1421.1	1152.7	1441.2	1800.6	1484.8	1092.9	1299.6	1625.4
43°	764.2	1030.2	1587.6	1343.1	1064.6	1357.5	1758.0	1402.9	1008.2	1220.6	1585.7
43.5°	691.9	953.2	1540.7	1264.2	983.8	1276.6	1714.4	1322.6	927.3	1145.5	1545.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	498.6	744.5	1417.8	1044.1	756.0	1038.3	1584.3	1095.8	709.1	918.2	1422.1
45.5°	439.7	676.6	1377.1	970.4	689.0	960.3	1540.3	1019.7	642.6	847.4	1382.4
46°	385.7	612.0	1332.6	901.5	619.6	885.7	1497.2	944.5	578.0	776.6	1342.2
46.5°	332.1	548.8	1280.0	830.2	557.9	814.9	1455.1	872.3	516.8	714.4	1295.8
47°	282.8	490.0	1219.2	763.7	502.4	746.0	1415.9	802.0	463.2	648.4	1250.8
47.5°	236.9	433.0	1157.0	697.6	447.4	678.0	1365.6	735.0	409.6	588.1	1198.1
48°	198.6	379.0	1095.3	637.4	392.4	613.4	1315.9	669.4	355.5	526.8	1146.5
48.5°	165.1	327.8	1035.9	575.1	336.9	551.2	1258.9	606.7	302.4	473.7	1077.1
49°	142.6	279.9	967.0	517.3	282.3	496.2	1190.5	545.0	257.4	420.1	1002.9
49.5°	121.1	235.4	897.2	459.8	238.8	442.1	1119.7	491.9	216.8	367.0	923.5
50°	99.0	195.2	821.1	405.8	199.5	387.6	1042.2	438.3	178.0	313.9	846.0
50.5°	77.5	159.8	744.5	352.6	163.6	333.5	965.6	385.2	144.0	268.9	772.3
51°	60.3	138.3	669.9	305.8	131.6	279.0	888.1	332.1	113.9	227.8	701.0
51.5°	43.5	116.8	600.0	260.8	104.8	236.4	813.0	279.0	94.7	190.4	632.1
52°	27.3	94.7	534.0	219.6	87.6	197.1	736.9	235.4	75.1	154.1	564.1
52.5°	16.7	73.2	471.8	182.3	70.3	160.3	666.5	195.2	56.0	122.0	507.7
53°	14.8	56.5	412.0	155.0	52.6	128.7	596.2	159.3	36.4	94.3	450.7
53.5°	13.9	40.7	356.0	128.2	35.4	101.9	530.2	126.3	17.7	78.0	394.3
54°	12.9	24.9	304.8	101.0	18.7	84.2	472.3	97.6	16.7	61.7	337.3
54.5°	12.0	13.9	258.4	73.7	17.7	67.0	414.4	80.9	16.3	45.5	280.9
55°	11.5	12.9	216.3	46.9	17.2	49.8	357.0	64.1	15.8	29.2	237.8
55.5°	11.0	12.0	179.0	27.3	16.3	32.5	299.1	46.9	15.3	13.4	198.6
56°	10.5	11.5	153.6	14.8	15.8	15.3	251.7	30.1	14.8	12.9	162.7
56.5°	10.5	10.5	128.7	13.9	15.3	14.4	208.1	13.9	14.4	12.4	131.6
57°	10.0	10.0	103.4	13.4	14.8	13.9	169.4	13.4	13.9	12.0	104.3
57.5°	9.6	10.0	78.5	12.9	14.4	13.4	134.9	12.9	13.4	12.0	82.3
58°	9.1	9.6	53.6	12.4	13.9	12.9	105.3	12.9	12.9	11.5	69.4
58.5°	9.1	9.1	41.2	12.0	13.4	12.4	80.9	12.4	12.4	11.0	56.9
59°	8.6	9.1	31.6	11.5	12.9	12.4	67.9	12.0	12.0	10.5	44.0
59.5°	8.6	8.6	24.4	11.0	12.4	12.0	55.5	11.5	11.5	10.5	31.6
60°	8.1	8.6	18.7	11.0	12.0	11.5	43.5	11.0	11.0	10.0	19.1
60.5°	7.7	8.1	15.8	10.5	11.5	11.0	31.1	11.0	11.0	9.6	14.4
61°	7.7	8.1	13.4	10.0	11.5	10.5	18.7	10.5	10.5	9.6	10.5
61.5°	7.2	7.7	11.0	10.0	11.0	10.5	13.9	10.0	10.0	9.1	8.6
62°	7.2	7.7	8.1	9.6	10.5	10.0	11.0	10.0	9.6	8.6	7.7
62.5°	6.7	7.2	8.1	9.1	10.0	9.6	9.1	9.6	9.6	8.6	7.7
63°	6.7	7.2	7.7	9.1	10.0	9.6	8.6	9.1	9.1	8.1	7.2
63.5°	6.2	6.7	7.7	8.6	9.6	9.1	8.6	9.1	8.6	8.1	7.2
64°	6.2	6.7	7.2	8.6	9.1	9.1	8.1	8.6	8.6	7.7	6.7
64.5°	5.7	6.2	7.2	8.1	9.1	8.6	8.1	8.1	8.1	7.7	6.7
65°	5.7	6.2	6.7	7.7	8.6	8.1	7.7	8.1	7.7	7.2	6.2
65.5°	5.3	6.2	6.7	7.7	8.1	8.1	7.7	7.7	7.7	7.2	6.2
66°	5.3	5.7	6.2	7.2	8.1	7.7	7.2	7.7	7.2	6.7	5.7



TEST NUMBER: P776798

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	4.8	5.3	5.7	6.7	7.2	7.2	6.7	6.7	6.2	6.2	5.3
68°	4.3	4.8	5.7	6.2	6.7	6.7	6.2	6.2	6.2	5.7	5.3
68.5°	4.3	4.8	5.3	6.2	6.7	6.7	6.2	6.2	5.7	5.7	4.8
69°	4.3	4.3	5.3	5.7	6.2	6.2	5.7	5.7	5.7	5.3	4.8
69.5°	3.8	4.3	4.8	5.7	6.2	6.2	5.7	5.7	5.3	5.3	4.8
70°	3.8	4.3	4.8	5.3	5.7	5.7	5.3	5.3	5.3	4.8	4.3
70.5°	3.8	3.8	4.3	5.3	5.7	5.7	5.3	5.3	5.3	4.8	4.3
71°	3.3	3.8	4.3	4.8	5.7	5.3	4.8	4.8	4.8	4.8	3.8
71.5°	3.3	3.8	4.3	4.8	5.3	5.3	4.8	4.8	4.8	4.3	3.8
72°	3.3	3.3	3.8	4.8	5.3	4.8	4.3	4.8	4.3	4.3	3.8
72.5°	3.3	3.3	3.8	4.3	4.8	4.8	4.3	4.3	4.3	3.8	3.3
73°	2.9	3.3	3.3	4.3	4.8	4.8	3.8	4.3	4.3	3.8	3.3
73.5°	2.9	3.3	3.3	3.8	4.3	4.3	3.8	3.8	3.8	3.8	2.9
74°	2.9	2.9	3.3	3.8	4.3	4.3	3.8	3.8	3.8	3.3	2.9
74.5°	2.9	2.9	2.9	3.8	4.3	4.3	3.3	3.8	3.8	3.3	2.9
75°	2.4	2.9	2.9	3.3	3.8	3.8	3.3	3.3	3.3	3.3	2.4
75.5°	2.4	2.4	2.9	3.3	3.8	3.8	2.9	3.3	3.3	2.9	2.4
76°	2.4	2.4	2.4	3.3	3.8	3.3	2.9	3.3	3.3	2.9	2.4
76.5°	2.4	2.4	2.4	2.9	3.3	3.3	2.9	2.9	2.9	2.9	2.4
77°	1.9	2.4	2.4	2.9	3.3	3.3	2.4	2.9	2.9	2.4	1.9
77.5°	1.9	1.9	1.9	2.9	3.3	2.9	2.4	2.9	2.9	2.4	1.9
78°	1.9	1.9	1.9	2.4	2.9	2.9	2.4	2.4	2.4	2.4	1.9
78.5°	1.9	1.9	1.9	2.4	2.9	2.9	1.9	2.4	2.4	2.4	1.9
79°	1.9	1.9	1.9	2.4	2.9	2.4	1.9	2.4	2.4	1.9	1.4
79.5°	1.4	1.4	1.4	2.4	2.4	2.4	1.9	1.9	2.4	1.9	1.4
80°	1.4	1.4	1.4	1.9	2.4	2.4	1.9	1.9	1.9	1.9	1.4
80.5°	1.4	1.4	1.4	1.9	2.4	1.9	1.4	1.9	1.9	1.4	1.4
81°	1.4	1.4	1.4	1.9	1.9	1.9	1.4	1.4	1.9	1.4	1.0
81.5°	1.0	1.4	1.0	1.4	1.9	1.9	1.4	1.4	1.9	1.4	1.0
82°	1.0	1.0	1.0	1.4	1.9	1.9	1.4	1.4	1.4	1.4	1.0
82.5°	1.0	1.0	1.0	1.4	1.9	1.4	1.0	1.4	1.4	1.0	1.0
83°	1.0	1.0	1.0	1.0	1.4	1.4	1.0	1.0	1.4	1.0	1.0
83.5°	1.0	1.0	1.0	1.0	1.4	1.4	1.0	1.0	1.4	1.0	0.5
84°	0.5	0.5	0.5	1.0	1.4	1.0	1.0	1.0	1.0	1.0	0.5
84.5°	0.5	0.5	0.5	1.0	1.4	1.0	1.0	1.0	1.0	0.5	0.5
85°	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	1.0	0.5	0.5
85.5°	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	1.0	0.5	0.5
86°	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5
86.5°	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
87°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.5	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: P776798
CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-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: P776798

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	4392.6	4392.6	4392.6	4392.6	4392.6	4392.6
0.5°	4388.7	4385.9	4386.8	4387.8	4390.2	4392.1
1°	4383.5	4379.7	4378.7	4381.1	4384.9	4387.8
1.5°	4375.8	4370.1	4369.6	4372.0	4377.3	4381.1
2°	4366.7	4359.6	4357.6	4361.0	4367.2	4373.4
2.5°	4356.2	4346.6	4344.7	4348.6	4356.2	4364.3
3°	4343.3	4332.8	4331.3	4334.7	4343.8	4352.9
3.5°	4329.4	4318.9	4315.1	4319.8	4328.9	4340.4
4°	4315.5	4305.0	4301.2	4302.1	4313.1	4325.1
4.5°	4302.1	4291.1	4285.4	4284.4	4295.9	4311.7
5°	4287.8	4275.8	4269.1	4267.2	4279.2	4296.9
5.5°	4272.5	4259.1	4251.4	4248.1	4261.5	4282.0
6°	4255.7	4243.3	4233.7	4228.4	4242.3	4266.7
6.5°	4239.0	4224.6	4215.5	4209.3	4224.1	4253.3
7°	4221.8	4206.0	4194.5	4189.2	4206.9	4238.5
7.5°	4202.1	4183.9	4172.9	4168.2	4187.8	4220.8
8°	4181.1	4161.9	4150.5	4148.1	4168.2	4203.1
8.5°	4158.1	4138.0	4125.6	4125.1	4147.6	4184.4
9°	4134.7	4113.1	4100.7	4103.1	4126.1	4162.4
9.5°	4109.8	4088.3	4073.9	4080.6	4103.6	4139.9
10°	4084.4	4061.9	4048.1	4057.1	4079.6	4116.5
10.5°	4059.1	4035.1	4019.8	4033.2	4054.8	4092.1
11°	4032.3	4008.8	3991.6	4008.3	4029.4	4067.7
11.5°	4005.5	3983.0	3963.4	3982.5	4004.0	4044.2
12°	3979.2	3956.2	3937.0	3955.7	3977.7	4019.8
12.5°	3953.8	3927.5	3909.3	3928.4	3952.4	3994.9
13°	3928.0	3898.8	3882.5	3900.7	3926.5	3969.1
13.5°	3899.7	3869.6	3851.9	3872.0	3901.2	3940.9
14°	3872.9	3839.9	3821.7	3841.8	3874.8	3912.6
14.5°	3843.7	3810.7	3791.1	3812.6	3847.1	3883.5
15°	3815.5	3781.1	3761.9	3783.5	3817.9	3854.7
15.5°	3785.8	3750.4	3730.8	3753.8	3787.8	3824.6
16°	3757.1	3718.9	3700.2	3723.6	3757.6	3794.0
16.5°	3727.5	3688.2	3668.6	3692.5	3727.0	3761.9
17°	3697.3	3655.7	3637.5	3662.4	3695.4	3728.9
17.5°	3666.2	3622.2	3605.5	3629.9	3663.3	3695.4
18°	3635.1	3587.7	3572.0	3597.3	3629.9	3660.5
18.5°	3601.6	3554.3	3538.9	3564.3	3595.4	3624.6
19°	3568.1	3518.8	3504.0	3528.9	3560.5	3588.7
19.5°	3534.6	3483.0	3469.1	3494.4	3524.1	3552.3
20°	3501.1	3446.6	3432.7	3458.6	3485.8	3515.0
20.5°	3467.2	3408.3	3397.3	3421.7	3448.0	3477.2
21°	3430.8	3369.6	3360.9	3383.9	3409.3	3437.0

TEST NUMBER: P776798

CATALOG NUMBER: HCDJBLS4050CSD-HCD8TRC-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	3314.5	3246.6	3244.2	3268.1	3289.2	3313.6
23°	3274.8	3204.0	3204.0	3226.5	3247.1	3269.1
23.5°	3232.2	3165.7	3160.9	3186.3	3205.0	3226.0
24°	3189.6	3127.0	3118.3	3142.3	3161.9	3183.9
24.5°	3145.1	3088.2	3078.6	3099.2	3116.4	3143.7
25°	3103.5	3049.4	3039.4	3054.2	3070.0	3104.0
25.5°	3062.8	3010.2	3003.0	3010.7	3027.0	3061.4
26°	3025.0	2969.5	2964.3	2963.3	2984.4	3017.4
26.5°	2988.2	2926.9	2926.0	2916.4	2944.7	2972.4
27°	2951.3	2882.4	2887.7	2868.1	2904.0	2925.0
27.5°	2912.6	2835.6	2847.0	2818.3	2861.4	2876.7
28°	2872.9	2786.7	2805.9	2767.6	2818.3	2825.5
28.5°	2830.8	2737.9	2762.3	2717.8	2773.8	2774.8
29°	2787.7	2688.2	2717.4	2666.6	2727.4	2721.2
29.5°	2742.2	2635.5	2671.4	2616.4	2679.1	2667.6
30°	2696.8	2583.4	2623.1	2565.7	2629.8	2612.1
30.5°	2648.9	2528.8	2573.8	2517.8	2579.6	2555.6
31°	2601.6	2472.9	2522.6	2470.0	2527.9	2494.4
31.5°	2550.9	2415.9	2471.4	2423.6	2475.2	2439.8
32°	2502.0	2359.0	2419.3	2376.7	2421.7	2379.1
32.5°	2450.8	2298.7	2367.1	2333.1	2367.6	2319.7
33°	2398.7	2238.9	2312.1	2289.6	2313.5	2256.1
33.5°	2346.5	2177.1	2255.1	2248.0	2259.0	2196.8
34°	2293.4	2114.0	2199.2	2206.3	2204.4	2131.7
34.5°	2237.4	2050.8	2138.9	2162.8	2147.0	2068.5
35°	2182.9	1988.1	2079.5	2118.8	2090.5	2003.0
35.5°	2127.4	1928.8	2019.7	2074.7	2034.1	1943.2
36°	2071.4	1871.4	1959.9	2028.3	1976.7	1881.9
36.5°	2013.5	1812.5	1899.1	1982.9	1919.7	1823.1
37°	1956.1	1737.9	1841.2	1938.4	1861.8	1746.5
37.5°	1899.1	1650.3	1783.8	1893.4	1804.4	1660.9
38°	1843.2	1562.8	1733.6	1848.4	1747.5	1575.2
38.5°	1790.5	1475.7	1655.6	1803.0	1686.2	1490.0
39°	1741.7	1388.1	1577.1	1760.4	1625.0	1404.4
39.5°	1688.6	1300.5	1498.6	1711.1	1563.2	1318.7
40°	1621.1	1213.0	1420.6	1671.9	1502.0	1230.2
40.5°	1543.6	1126.4	1342.7	1632.1	1440.3	1142.2
41°	1465.1	1043.6	1264.2	1592.4	1367.1	1061.3
41.5°	1387.2	963.2	1183.8	1552.7	1294.3	980.4
42°	1311.6	889.5	1103.4	1512.5	1222.6	906.3
42.5°	1235.0	819.2	1024.0	1471.8	1147.4	834.0
43°	1157.5	748.4	948.4	1432.1	1072.8	764.2
43.5°	1078.5	678.0	876.6	1391.5	999.1	691.9



TEST NUMBER: P776798

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	860.8	487.6	677.5	1276.1	796.7	498.6
45.5°	793.8	431.1	613.4	1230.7	733.5	439.7
46°	727.3	376.6	553.6	1180.9	671.3	385.7
46.5°	662.7	324.4	494.8	1118.2	607.2	332.1
47°	600.0	275.1	439.7	1057.9	548.8	282.8
47.5°	538.8	231.6	384.7	1000.1	490.5	236.9
48°	485.7	193.8	333.5	939.8	435.9	198.6
48.5°	432.6	161.7	285.7	875.2	381.8	165.1
49°	379.9	139.2	241.6	800.5	333.0	142.6
49.5°	326.8	117.2	202.4	726.4	283.7	121.1
50°	273.7	95.7	167.5	658.9	239.7	99.0
50.5°	230.2	74.2	145.5	593.3	199.5	77.5
51°	191.4	56.9	123.9	533.0	165.6	60.3
51.5°	157.9	40.2	101.9	474.7	144.0	43.5
52°	130.2	24.4	80.4	419.6	122.5	27.3
52.5°	106.7	14.4	58.4	368.0	101.0	16.7
53°	87.1	13.4	41.6	319.6	79.4	14.8
53.5°	72.3	12.9	25.8	273.7	58.4	13.9
54°	57.4	12.0	14.4	233.5	41.6	12.9
54.5°	42.1	11.5	13.4	196.7	26.3	12.0
55°	27.3	11.0	12.0	163.2	14.8	11.5
55.5°	12.4	10.5	11.0	138.8	13.4	11.0
56°	10.0	10.0	10.0	114.4	12.0	10.5
56.5°	10.0	10.0	9.6	90.0	10.5	10.5
57°	9.6	9.6	9.1	65.6	9.6	10.0
57.5°	9.1	9.1	9.1	49.8	9.1	9.6
58°	9.1	9.1	8.6	37.8	8.6	9.1
58.5°	8.6	8.6	8.6	27.8	8.6	9.1
59°	8.6	8.1	8.1	20.6	8.1	8.6
59.5°	8.1	8.1	8.1	18.2	8.1	8.6
60°	8.1	7.7	7.7	15.3	7.7	8.1
60.5°	7.7	7.7	7.7	12.4	7.7	7.7
61°	7.7	7.2	7.2	9.6	7.2	7.7
61.5°	7.2	7.2	7.2	7.2	7.2	7.2
62°	7.2	6.7	6.7	6.7	6.7	7.2
62.5°	6.7	6.7	6.7	6.7	6.7	6.7
63°	6.7	6.2	6.2	6.2	6.7	6.7
63.5°	6.2	5.7	6.2	6.2	6.2	6.2
64°	6.2	5.7	5.7	6.2	6.2	6.2
64.5°	5.7	5.3	5.7	5.7	5.7	5.7
65°	5.7	5.3	5.7	5.7	5.7	5.7
65.5°	5.7	5.3	5.3	5.3	5.7	5.3
66°	5.3	4.8	5.3	5.3	5.3	5.3



TEST NUMBER: P776798

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	4.8	4.3	4.8	4.8	4.8	4.8
68°	4.3	4.3	4.3	4.8	4.8	4.3
68.5°	4.3	3.8	4.3	4.3	4.3	4.3
69°	4.3	3.8	4.3	4.3	4.3	4.3
69.5°	3.8	3.8	3.8	4.3	4.3	3.8
70°	3.8	3.3	3.8	3.8	3.8	3.8
70.5°	3.8	3.3	3.8	3.8	3.8	3.8
71°	3.3	3.3	3.3	3.3	3.8	3.3
71.5°	3.3	3.3	3.3	3.3	3.3	3.3
72°	3.3	2.9	3.3	3.3	3.3	3.3
72.5°	3.3	2.9	2.9	2.9	3.3	3.3
73°	2.9	2.9	2.9	2.9	3.3	2.9
73.5°	2.9	2.9	2.9	2.9	2.9	2.9
74°	2.9	2.4	2.9	2.4	2.9	2.9
74.5°	2.4	2.4	2.4	2.4	2.9	2.9
75°	2.4	2.4	2.4	2.4	2.4	2.4
75.5°	2.4	2.4	2.4	2.4	2.4	2.4
76°	2.4	1.9	2.4	1.9	2.4	2.4
76.5°	2.4	1.9	1.9	1.9	2.4	2.4
77°	1.9	1.9	1.9	1.9	1.9	1.9
77.5°	1.9	1.9	1.9	1.9	1.9	1.9
78°	1.9	1.9	1.9	1.4	1.9	1.9
78.5°	1.9	1.9	1.9	1.4	1.9	1.9
79°	1.4	1.4	1.4	1.4	1.9	1.9
79.5°	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4
80.5°	1.4	1.4	1.4	1.0	1.4	1.4
81°	1.4	1.4	1.4	1.0	1.4	1.4
81.5°	1.0	1.0	1.0	1.0	1.0	1.0
82°	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0
83°	1.0	1.0	1.0	0.5	1.0	1.0
83.5°	1.0	1.0	1.0	0.5	0.5	1.0
84°	0.5	1.0	0.5	0.5	0.5	0.5
84.5°	0.5	0.5	0.5	0.5	0.5	0.5
85°	0.5	0.5	0.5	0.5	0.5	0.5
85.5°	0.5	0.5	0.5	0.5	0.5	0.5
86°	0.5	0.5	0.5	0.5	0.5	0.5
86.5°	0.5	0.5	0.5	0.0	0.0	0.5
87°	0.0	0.5	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: P776798

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-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

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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Scaled Data Report



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Scaled Data Report





21.5°	3397.3	3436.5	3494.9	3535.1	3594.4	3610.2	3638.5	3604.0	3570.5	3527.5	3466.2
22°	3356.6	3398.3	3457.6	3497.8	3561.4	3577.2	3603.1	3570.5	3537.5	3492.5	3428.4



44°	624.0	882.3	1499.1	1190.5	901.5	1197.2	1671.4	1245.0	849.3	1067.5	1504.4
44.5°	558.9	812.5	1457.0	1116.3	829.7	1119.2	1627.4	1170.9	777.1	993.4	1463.2



66.5°	4.8	5.7	6.2	7.2	7.7	7.7	6.7	7.2	6.7	6.7	5.7
67°	4.8	5.3	6.2	6.7	7.2	7.2	6.7	6.7	6.7	6.2	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°	3393.5	3330.3	3321.7	3347.1	3370.5	3397.3
22°	3354.2	3288.2	3282.5	3307.8	3330.3	3356.6



44°	1002.0	612.5	810.1	1351.3	927.3	624.0
44.5°	930.2	547.4	743.1	1311.1	860.8	558.9

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66.5°	5.3	4.8	4.8	5.3	5.3	4.8
67°	4.8	4.3	4.8	4.8	4.8	4.8

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

Scaled Data Report



(END OF REPORT)