

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: P776676

Luminaire Tested: HCDJBS4050CSD-HCD62TRH-5000lm-3000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776676
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-3000K
Description: 6 INCH ROUND NARROW HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

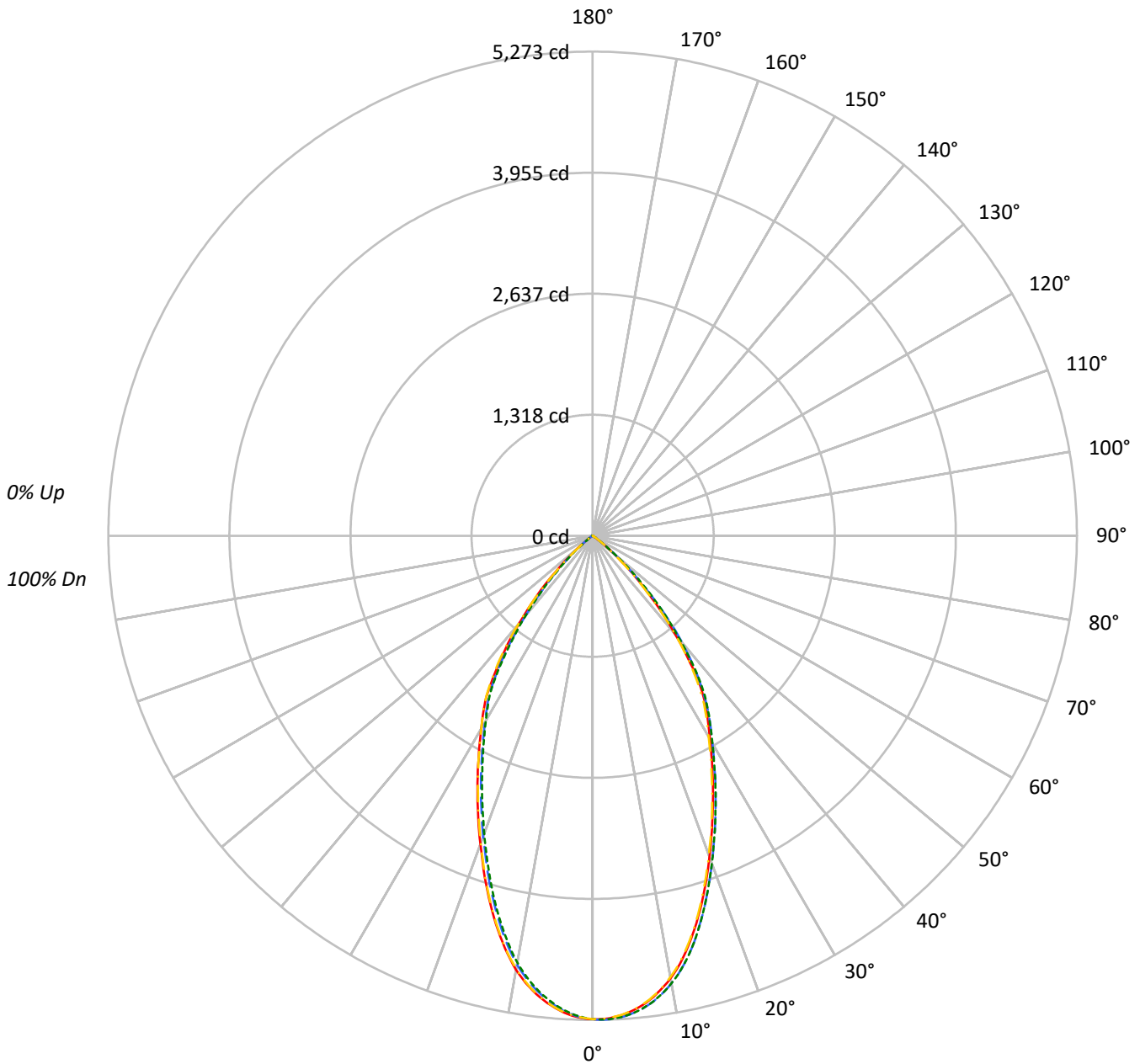
Lumens per Lamp: N/A
Luminaire Lumens: 4898.4 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.82 / 0.91
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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: P776676
CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

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	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	99	98	97	96	95	93
	1	113	110	108	106	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	92	91	90	89	88	86
	2	107	102	98	95	105	101	97	93	97	94	91	94	92	89	92	89	88	86	86	85	84	83	82	81	79
	3	102	95	90	85	100	93	89	85	91	87	83	88	85	82	86	83	81	79	79	78	77	76	75	73	73
	4	96	88	82	78	94	87	82	77	85	80	77	83	79	76	81	78	75	73	73	72	71	70	69	68	68
	5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69	68	68	67	66	65	64	63	63
	6	86	77	70	66	84	76	70	66	74	69	65	73	68	65	71	67	64	63	63	62	61	60	59	58	58
	7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	57	56	55	54	53	53
	8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	53	52	51	50	49	49
	9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	50	49	48	47	46	46
	10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	47	47	46	45	44	43	42	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	288584	288584	288584	288584
5°	285235	286847	282731	280634
10°	272367	275446	267113	262665
15°	247754	252209	239894	233639
20°	217089	221458	208443	201338
25°	187729	191691	179297	172099
30°	161949	165038	153657	147213
35°	139180	142446	126833	120120
40°	100274	106328	89002	81216
45°	59378	66332	50656	43997
50°	24613	28775	17398	14507
55°	4177	5505	4177	2753
60°	1732	1634	1677	1371
65°	1025	960	1025	843
70°	673	673	673	593
75°	487	402	487	402
80°	284	284	284	284
85°	0	314	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 70581 cd/sqm



TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	482.3	9.8
10°-20°	1192.1	24.3
20°-30°	1386.9	28.3
30°-40°	1206.2	24.6
40°-50°	554.9	11.3
50°-60°	65.5	1.3
60°-70°	7.9	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°	3061.4	62.5
0°-40°	4267.5	87.1
0°-60°	4887.9	99.8
0°-90°	4898.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4898.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5264	5264	5264	5264	5264	
5°	5183	5213	5138	5100	5183	486
15°	4365	4444	4227	4117	4365	1214
25°	3104	3169	2964	2845	3104	1425
35°	2080	2128	1895	1795	2080	1264
45°	766	856	653	568	766	601
55°	44	58	44	29	44	73
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	0



TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	5264.2	5264.2	5264.2	5264.2	5264.2	5264.2	5264.2	5264.2	5264.2	5264.2	5264.2
0.5°	5266.5	5270.2	5270.7	5266.5	5267.5	5264.7	5262.8	5263.7	5262.8	5263.3	5262.3
1°	5265.6	5270.7	5272.6	5270.2	5268.8	5264.7	5262.3	5260.5	5257.7	5257.2	5255.4
1.5°	5261.4	5268.8	5272.6	5271.6	5268.8	5263.3	5259.1	5254.9	5250.3	5247.9	5245.1
2°	5256.8	5266.1	5270.2	5271.2	5266.5	5260.5	5254.4	5247.0	5241.0	5236.8	5232.1
2.5°	5249.3	5260.5	5265.6	5268.8	5262.8	5254.4	5246.5	5236.8	5229.3	5223.3	5217.3
3°	5240.0	5253.0	5258.6	5265.1	5256.3	5247.5	5236.8	5225.6	5214.9	5207.5	5200.1
3.5°	5229.3	5243.3	5250.7	5259.1	5248.9	5238.6	5225.2	5212.1	5199.1	5188.9	5181.5
4°	5215.9	5231.7	5240.0	5250.7	5239.6	5227.0	5212.1	5195.4	5180.5	5168.9	5160.6
4.5°	5200.5	5218.2	5228.4	5240.0	5227.5	5213.1	5196.3	5177.8	5160.1	5146.6	5137.3
5°	5183.3	5202.9	5213.1	5228.4	5212.6	5197.7	5178.2	5157.8	5137.8	5122.0	5110.8
5.5°	5164.7	5185.7	5197.3	5213.5	5196.8	5179.2	5158.2	5136.4	5114.1	5096.0	5083.9
6°	5142.9	5165.7	5179.6	5197.7	5178.2	5159.2	5136.9	5110.4	5086.7	5067.1	5054.1
6.5°	5120.1	5145.2	5159.2	5179.2	5157.3	5137.3	5112.7	5083.9	5058.8	5038.3	5023.0
7°	5093.6	5120.6	5135.9	5159.2	5135.5	5113.6	5086.2	5056.0	5028.6	5006.7	4990.5
7.5°	5065.3	5094.6	5110.8	5135.9	5109.9	5085.3	5057.4	5026.7	4995.1	4971.4	4954.7
8°	5035.1	5065.3	5082.0	5110.8	5082.5	5055.5	5026.7	4992.8	4960.7	4935.2	4916.6
8.5°	5003.0	5035.5	5052.7	5083.4	5051.8	5025.8	4993.7	4957.0	4923.5	4896.6	4877.1
9°	4968.2	5002.5	5019.7	5052.3	5019.7	4992.3	4958.9	4919.8	4884.5	4855.2	4834.8
9.5°	4931.4	4966.8	4986.3	5019.7	4985.4	4956.1	4920.8	4882.2	4842.7	4812.5	4790.2
10°	4892.9	4928.7	4948.6	4984.9	4948.2	4918.0	4881.7	4838.0	4798.5	4766.9	4742.3
10.5°	4850.6	4890.5	4910.1	4948.2	4910.5	4878.9	4838.5	4793.9	4750.7	4715.3	4690.2
11°	4806.9	4847.8	4868.2	4909.6	4868.2	4835.2	4794.3	4745.5	4700.0	4660.0	4635.4
11.5°	4759.5	4801.3	4823.2	4867.8	4824.1	4789.7	4746.5	4695.3	4646.1	4606.1	4580.1
12°	4708.4	4753.4	4774.8	4822.2	4776.7	4740.4	4694.4	4640.5	4591.7	4550.8	4522.5
12.5°	4655.8	4701.4	4725.1	4773.9	4727.4	4688.8	4641.0	4586.6	4533.6	4491.3	4462.5
13°	4601.5	4648.4	4673.5	4723.7	4674.9	4635.9	4587.1	4529.9	4475.5	4430.9	4401.2
13.5°	4545.2	4593.6	4619.6	4671.6	4620.5	4579.6	4529.9	4471.3	4415.1	4369.1	4337.5
14°	4486.7	4536.9	4562.4	4618.7	4562.9	4522.9	4470.9	4410.5	4353.3	4308.2	4275.7
14.5°	4427.2	4477.8	4504.8	4559.2	4503.9	4462.0	4409.5	4348.6	4291.5	4242.2	4211.1
15°	4365.4	4417.9	4443.0	4502.9	4443.9	4400.7	4348.2	4286.4	4226.9	4179.0	4146.0
15.5°	4302.6	4355.6	4380.7	4442.1	4383.0	4338.9	4286.4	4223.2	4162.7	4113.9	4080.0
16°	4239.9	4293.3	4318.9	4379.8	4319.4	4275.7	4223.6	4158.1	4098.1	4049.3	4015.0
16.5°	4177.2	4230.6	4257.1	4317.5	4255.7	4212.5	4160.0	4094.9	4034.5	3982.9	3949.4
17°	4113.9	4166.5	4191.6	4254.3	4192.0	4147.9	4093.5	4029.4	3968.5	3916.4	3882.0
17.5°	4048.0	4101.9	4126.5	4188.8	4126.0	4081.0	4028.4	3965.2	3902.0	3850.9	3813.7
18°	3982.9	4035.9	4061.4	4123.7	4060.5	4015.4	3962.9	3899.2	3835.1	3783.0	3744.9
18.5°	3917.8	3971.3	3995.4	4057.2	3994.0	3950.4	3897.4	3830.9	3769.1	3715.7	3677.5
19°	3851.8	3906.2	3928.0	3990.3	3928.5	3884.8	3830.0	3764.9	3701.3	3647.8	3610.6
19.5°	3787.2	3840.2	3863.0	3923.9	3862.1	3818.8	3763.1	3700.8	3634.8	3585.1	3547.9
20°	3721.2	3773.8	3795.6	3857.9	3796.1	3751.9	3698.5	3633.4	3573.0	3522.3	3484.7
20.5°	3655.7	3709.6	3731.0	3790.5	3729.1	3685.5	3632.5	3571.6	3511.2	3459.6	3421.5
21°	3591.6	3645.0	3667.3	3726.8	3663.6	3620.9	3570.7	3509.8	3449.4	3396.8	3358.3

TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	3403.3	3454.0	3474.5	3530.2	3475.8	3434.5	3385.7	3324.3	3262.1	3209.5	3170.5
23°	3342.0	3390.8	3412.2	3467.0	3413.6	3372.2	3323.9	3261.6	3201.6	3147.3	3110.6
23.5°	3282.0	3329.5	3350.4	3404.3	3351.8	3309.9	3260.7	3201.2	3140.8	3087.8	3050.6
24°	3220.7	3269.5	3288.6	3341.1	3289.5	3248.6	3199.3	3141.7	3081.3	3028.3	2990.2
24.5°	3162.6	3209.5	3227.2	3279.3	3229.1	3185.4	3139.4	3082.2	3021.8	2970.2	2932.1
25°	3103.6	3150.1	3167.7	3219.8	3169.1	3126.4	3079.0	3022.3	2964.2	2912.1	2874.5
25.5°	3045.5	3091.0	3108.7	3160.3	3108.7	3068.7	3020.4	2965.1	2907.5	2854.5	2818.7
26°	2988.3	3035.3	3050.6	3100.3	3050.1	3011.6	2963.2	2908.4	2850.8	2798.7	2762.9
26.5°	2932.6	2975.8	2993.4	3039.9	2992.5	2952.5	2906.1	2851.2	2794.1	2742.9	2705.3
27°	2875.9	2919.1	2935.3	2982.8	2934.9	2894.0	2848.9	2795.5	2738.8	2688.1	2650.9
27.5°	2820.1	2863.3	2878.6	2926.1	2877.7	2840.5	2793.6	2739.7	2683.9	2634.2	2597.0
28°	2765.7	2809.9	2822.9	2869.8	2821.0	2784.3	2737.8	2686.2	2630.5	2579.8	2544.5
28.5°	2711.3	2755.5	2768.0	2814.0	2766.6	2728.5	2683.9	2631.9	2576.6	2527.3	2492.0
29°	2659.8	2700.6	2714.1	2757.8	2712.3	2675.1	2632.3	2579.8	2526.4	2476.6	2440.9
29.5°	2609.1	2649.1	2660.2	2704.4	2659.8	2623.0	2579.8	2529.2	2475.7	2427.4	2392.1
30°	2558.4	2598.9	2610.0	2652.8	2607.2	2572.4	2529.2	2479.4	2427.4	2378.1	2344.2
30.5°	2509.2	2548.7	2560.3	2601.7	2557.0	2521.7	2479.9	2429.7	2378.6	2330.2	2297.2
31°	2461.3	2499.9	2511.0	2550.5	2508.7	2473.9	2431.1	2382.3	2330.7	2283.3	2249.8
31.5°	2413.0	2451.1	2462.2	2501.7	2460.4	2426.4	2383.7	2335.8	2284.7	2237.8	2205.2
32°	2367.9	2406.0	2415.8	2453.4	2413.9	2378.6	2338.6	2290.7	2239.2	2192.2	2159.2
32.5°	2322.8	2359.5	2369.3	2406.0	2366.5	2332.6	2291.7	2243.3	2193.6	2146.2	2114.6
33°	2277.7	2314.0	2323.7	2360.0	2322.3	2287.0	2245.7	2195.5	2144.3	2095.5	2062.6
33.5°	2230.3	2266.6	2275.4	2313.5	2275.4	2241.5	2196.4	2141.1	2089.0	2037.0	2001.2
34°	2183.4	2218.2	2223.4	2266.6	2229.4	2193.6	2144.3	2083.9	2029.1	1976.1	1940.8
34.5°	2130.9	2165.7	2167.1	2215.9	2180.6	2143.4	2087.6	2024.4	1962.2	1913.4	1874.8
35°	2079.7	2110.0	2110.9	2160.1	2128.5	2091.8	2030.9	1965.4	1895.2	1849.2	1810.7
35.5°	2023.0	2052.3	2054.7	2105.3	2075.1	2038.4	1973.3	1903.1	1825.1	1778.1	1747.9
36°	1962.6	1992.4	1997.5	2048.1	2019.3	1981.2	1915.7	1840.4	1759.5	1707.5	1684.7
36.5°	1896.2	1930.6	1940.3	1992.4	1958.0	1918.9	1854.8	1775.8	1694.5	1638.2	1616.4
37°	1824.1	1867.4	1882.7	1935.2	1895.2	1852.9	1792.5	1710.7	1632.2	1569.9	1550.4
37.5°	1749.3	1802.3	1823.7	1876.7	1828.8	1786.5	1728.9	1642.9	1569.0	1502.5	1481.2
38°	1676.8	1738.2	1761.9	1816.7	1760.5	1719.1	1664.3	1578.3	1506.7	1436.5	1413.3
38.5°	1608.0	1670.8	1698.7	1756.7	1690.3	1647.1	1597.3	1513.2	1441.6	1373.3	1341.3
39°	1539.2	1601.5	1635.0	1695.9	1620.6	1573.6	1530.9	1449.5	1377.5	1312.4	1275.7
39.5°	1470.0	1532.3	1570.8	1630.8	1553.2	1503.5	1461.2	1385.4	1311.1	1247.4	1207.4
40°	1401.2	1463.0	1506.7	1565.7	1485.8	1436.5	1391.0	1322.2	1243.7	1182.3	1142.8
40.5°	1332.4	1394.2	1442.6	1500.7	1418.9	1369.1	1319.4	1259.0	1177.7	1120.0	1075.9
41°	1266.9	1325.0	1378.9	1435.6	1354.7	1303.6	1248.3	1195.3	1116.3	1057.8	1012.2
41.5°	1199.5	1257.6	1311.5	1370.5	1290.6	1235.3	1178.6	1130.7	1055.4	996.4	947.6
42°	1135.4	1194.4	1243.7	1302.2	1227.9	1171.2	1110.7	1065.2	996.4	935.5	885.3
42.5°	1069.4	1132.1	1176.7	1234.8	1163.7	1108.0	1044.8	1000.6	939.3	877.0	826.3
43°	1005.7	1068.9	1108.4	1169.3	1100.5	1044.8	981.1	937.4	881.6	822.6	770.6
43.5°	941.6	1003.4	1039.6	1103.3	1037.8	980.2	917.9	874.2	823.1	765.0	714.3



TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	765.9	821.7	845.4	910.4	855.6	798.9	741.7	692.9	653.4	604.2	563.3
45.5°	709.2	763.1	782.6	849.1	797.5	741.7	685.0	636.7	599.5	552.6	516.3
46°	656.2	706.0	723.1	787.7	742.7	685.5	631.6	582.3	547.9	504.3	472.6
46.5°	603.2	650.2	664.6	728.3	685.0	631.1	579.1	529.3	497.7	462.4	434.1
47°	552.1	596.7	607.0	669.2	628.8	581.9	528.4	484.3	451.7	421.1	396.0
47.5°	502.4	544.7	553.0	613.5	575.8	532.6	480.5	439.7	406.2	379.2	357.4
48°	455.9	493.6	501.5	557.7	525.6	484.3	437.8	395.0	360.2	337.9	318.8
48.5°	411.3	442.9	452.7	504.3	478.7	441.0	395.0	350.4	314.2	296.0	285.8
49°	369.0	396.0	406.2	455.9	431.3	397.8	352.7	305.8	274.7	262.1	254.7
49.5°	328.6	350.4	361.1	406.7	384.3	354.6	310.0	269.6	237.5	229.1	225.9
50°	288.6	307.2	318.8	361.6	337.4	311.8	273.7	236.1	204.0	200.3	198.9
50.5°	251.9	266.8	279.3	317.9	290.5	273.7	238.9	205.4	174.7	172.9	173.4
51°	217.0	230.1	242.6	278.4	251.4	237.0	207.7	177.1	149.2	149.2	150.1
51.5°	184.5	196.1	208.2	239.3	216.6	204.0	179.9	152.4	128.3	127.8	129.7
52°	154.3	166.4	176.1	205.0	183.6	172.4	153.8	129.2	109.7	108.8	110.6
52.5°	132.9	145.0	153.4	173.4	152.9	144.5	130.1	108.8	93.4	91.6	92.5
53°	111.5	123.6	130.6	151.0	126.4	119.4	108.3	91.1	79.5	76.7	76.7
53.5°	90.2	102.7	107.8	128.7	103.2	97.1	89.7	75.8	66.9	63.7	62.7
54°	69.2	81.3	85.0	106.4	83.2	78.5	73.4	62.3	55.8	56.2	55.3
54.5°	54.8	60.4	62.3	84.1	66.5	62.7	63.7	54.8	49.7	48.8	47.4
55°	43.7	47.4	48.8	61.8	57.6	54.8	53.9	47.4	43.7	40.9	39.5
55.5°	34.9	37.2	37.6	48.3	49.3	46.9	44.6	40.0	37.6	33.5	32.1
56°	29.3	30.2	29.7	37.2	40.4	39.0	35.3	33.0	31.6	26.0	24.2
56.5°	26.0	26.5	26.0	29.3	31.6	31.1	26.0	25.6	25.6	23.7	22.3
57°	24.2	24.2	23.7	25.1	23.2	23.2	23.7	23.7	23.7	22.3	20.9
57.5°	22.8	22.8	21.8	22.8	21.4	21.4	21.8	22.3	21.8	20.9	19.5
58°	20.9	20.9	20.4	20.9	20.0	20.0	20.4	20.9	20.4	19.5	18.1
58.5°	19.5	19.5	18.6	19.5	18.6	18.6	19.1	19.5	19.1	18.1	16.7
59°	18.1	18.1	17.7	18.1	17.2	17.2	17.7	18.1	17.7	16.7	15.8
59.5°	17.2	16.7	16.3	16.7	15.8	15.8	16.3	16.7	16.7	15.8	14.4
60°	15.8	15.8	15.3	15.8	14.9	14.9	15.3	15.3	15.3	14.4	13.5
60.5°	14.9	14.4	13.9	14.4	13.9	13.9	13.9	14.4	14.4	13.5	12.5
61°	13.5	13.5	13.0	13.5	12.5	13.0	13.0	13.5	13.5	12.5	11.6
61.5°	12.5	12.5	12.1	12.5	12.1	12.1	12.1	12.5	12.5	11.6	11.2
62°	11.6	11.6	11.2	11.6	11.2	11.2	11.6	11.6	11.6	11.2	10.2
62.5°	11.2	11.2	10.2	10.7	10.2	10.2	10.7	11.2	11.2	10.2	9.8
63°	10.2	10.2	9.8	10.2	9.8	9.8	9.8	10.2	10.2	9.8	8.8
63.5°	9.8	9.8	9.3	9.3	8.8	9.3	9.3	9.8	9.8	9.3	8.4
64°	9.3	8.8	8.4	8.8	8.4	8.4	8.8	9.3	9.3	8.8	7.9
64.5°	8.4	8.4	7.9	8.4	7.9	7.9	8.4	8.4	8.4	7.9	7.4
65°	7.9	7.9	7.4	7.9	7.4	7.4	7.9	7.9	7.9	7.4	7.0
65.5°	7.4	7.4	7.0	7.4	7.0	7.0	7.4	7.4	7.4	7.0	6.5
66°	7.0	7.0	6.5	7.0	6.5	6.5	7.0	7.0	7.0	6.5	6.0



TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	6.0	5.6	5.6	5.6	5.6	5.6	5.6	6.0	6.0	5.6	5.1
68°	5.6	5.6	5.1	5.1	5.1	5.1	5.1	5.6	5.6	5.1	5.1
68.5°	5.1	5.1	4.6	5.1	4.6	4.6	5.1	5.1	5.1	5.1	4.6
69°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	5.1	5.1	4.6	4.2
69.5°	4.6	4.6	4.2	4.2	4.2	4.2	4.6	4.6	4.6	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	3.7
70.5°	4.2	3.7	3.7	3.7	3.7	3.7	3.7	4.2	4.2	3.7	3.7
71°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.3
71.5°	3.7	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	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	2.3	2.8	2.8	2.8	2.8	2.8	2.3
74°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.8	2.8	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	1.9	2.3	1.9	2.3	2.3	2.3	2.3	2.3	1.9
75.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.3	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: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

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: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	5264.2	5264.2	5264.2	5264.2	5264.2	5264.2
0.5°	5253.0	5256.8	5256.8	5259.1	5262.8	5266.5
1°	5243.3	5248.9	5249.8	5254.0	5259.1	5265.6
1.5°	5230.7	5237.2	5239.6	5245.6	5254.0	5261.4
2°	5215.4	5224.7	5228.4	5236.3	5246.5	5256.8
2.5°	5198.2	5208.9	5213.5	5224.7	5237.7	5249.3
3°	5178.7	5191.2	5197.7	5210.3	5226.1	5240.0
3.5°	5156.8	5172.6	5179.6	5194.5	5212.1	5229.3
4°	5133.6	5149.4	5159.6	5175.9	5196.3	5215.9
4.5°	5107.6	5126.2	5136.9	5155.4	5178.7	5200.5
5°	5080.2	5099.7	5112.2	5132.7	5159.2	5183.3
5.5°	5049.5	5072.3	5085.3	5108.0	5137.8	5164.7
6°	5018.3	5043.0	5057.4	5081.6	5114.6	5142.9
6.5°	4984.4	5010.0	5027.2	5053.7	5088.5	5120.1
7°	4949.1	4976.1	4994.6	5023.5	5060.2	5093.6
7.5°	4911.9	4939.3	4959.3	4990.0	5029.5	5065.3
8°	4870.6	4900.8	4921.7	4955.1	4996.5	5035.1
8.5°	4827.3	4859.9	4883.1	4917.0	4962.1	5003.0
9°	4782.3	4815.3	4839.9	4877.1	4924.0	4968.2
9.5°	4733.9	4769.7	4795.3	4835.2	4885.0	4931.4
10°	4682.3	4718.6	4745.5	4790.6	4844.5	4892.9
10.5°	4626.6	4667.0	4695.8	4742.8	4799.9	4850.6
11°	4568.9	4613.1	4642.8	4690.7	4752.5	4806.9
11.5°	4511.8	4554.1	4589.4	4637.7	4701.4	4759.5
12°	4451.8	4496.0	4529.0	4583.8	4648.4	4708.4
12.5°	4390.5	4434.6	4469.5	4526.2	4594.0	4655.8
13°	4328.2	4373.3	4411.4	4468.6	4538.7	4601.5
13.5°	4264.5	4310.1	4350.0	4406.7	4479.2	4545.2
14°	4200.4	4247.8	4285.4	4344.5	4419.8	4486.7
14.5°	4133.9	4183.2	4221.3	4284.0	4357.9	4427.2
15°	4070.3	4116.7	4156.7	4219.4	4296.1	4365.4
15.5°	4003.3	4050.7	4092.6	4155.3	4232.9	4302.6
16°	3935.9	3984.3	4026.1	4087.9	4168.8	4239.9
16.5°	3869.5	3918.3	3960.6	4024.7	4104.7	4177.2
17°	3801.6	3851.8	3893.7	3959.2	4041.0	4113.9
17.5°	3735.2	3784.0	3826.7	3892.7	3975.5	4048.0
18°	3664.5	3715.7	3758.0	3824.4	3909.5	3982.9
18.5°	3599.0	3646.9	3690.6	3757.0	3843.5	3917.8
19°	3533.9	3580.9	3623.2	3693.4	3777.0	3851.8
19.5°	3468.9	3516.3	3559.0	3629.2	3712.9	3787.2
20°	3403.8	3451.2	3496.3	3563.7	3647.8	3721.2
20.5°	3339.2	3388.0	3432.6	3499.6	3584.1	3655.7
21°	3282.0	3322.5	3367.6	3435.0	3518.6	3591.6



TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	3098.5	3138.0	3183.5	3251.8	3332.2	3403.3
23°	3038.5	3078.0	3122.2	3189.6	3270.9	3342.0
23.5°	2979.5	3018.5	3064.1	3131.5	3211.4	3282.0
24°	2922.8	2960.9	3006.0	3071.1	3152.4	3220.7
24.5°	2863.8	2903.3	2947.4	3014.4	3092.4	3162.6
25°	2808.5	2845.2	2890.3	2954.4	3034.8	3103.6
25.5°	2751.3	2789.9	2835.0	2899.1	2977.6	3045.5
26°	2696.0	2734.6	2779.7	2843.3	2921.4	2988.3
26.5°	2642.1	2680.7	2725.3	2788.5	2865.2	2932.6
27°	2587.7	2626.3	2670.4	2734.1	2809.9	2875.9
27.5°	2534.3	2573.8	2616.5	2679.7	2755.0	2820.1
28°	2483.1	2520.8	2564.0	2624.9	2701.1	2765.7
28.5°	2433.4	2469.7	2513.4	2573.8	2648.1	2711.3
29°	2385.1	2420.9	2464.1	2524.5	2597.0	2659.8
29.5°	2335.4	2372.5	2413.9	2474.3	2545.9	2609.1
30°	2288.0	2325.6	2367.0	2426.0	2497.6	2558.4
30.5°	2242.4	2279.1	2320.0	2377.7	2449.2	2509.2
31°	2197.8	2233.6	2275.4	2332.6	2401.8	2461.3
31.5°	2152.2	2188.5	2230.8	2287.5	2354.4	2413.0
32°	2106.2	2143.9	2184.8	2241.9	2309.3	2367.9
32.5°	2056.0	2099.3	2140.2	2197.8	2265.2	2322.8
33°	1999.8	2046.7	2090.0	2148.1	2220.6	2277.7
33.5°	1938.5	1988.7	2034.2	2093.7	2171.3	2230.3
34°	1872.0	1927.3	1974.2	2036.1	2117.4	2183.4
34.5°	1806.0	1861.3	1908.7	1979.8	2062.6	2130.9
35°	1741.4	1794.9	1842.3	1918.5	2004.9	2079.7
35.5°	1676.3	1724.7	1775.8	1858.5	1945.4	2023.0
36°	1609.9	1648.0	1711.2	1795.8	1883.6	1962.6
36.5°	1540.6	1582.9	1670.3	1731.7	1820.9	1896.2
37°	1471.9	1518.8	1602.0	1668.0	1756.7	1824.1
37.5°	1404.5	1454.7	1533.2	1601.1	1689.4	1749.3
38°	1334.3	1390.1	1464.4	1534.1	1618.7	1676.8
38.5°	1266.4	1327.3	1395.6	1467.2	1548.1	1608.0
39°	1201.4	1263.2	1331.0	1400.3	1477.4	1539.2
39.5°	1137.7	1199.0	1263.6	1333.4	1406.8	1470.0
40°	1073.6	1134.9	1196.7	1267.4	1335.7	1401.2
40.5°	1012.2	1072.2	1130.7	1202.3	1264.6	1332.4
41°	950.9	1010.4	1065.7	1137.2	1193.5	1266.9
41.5°	888.6	948.6	1003.4	1070.3	1122.4	1199.5
42°	827.7	891.9	943.0	1007.6	1056.4	1135.4
42.5°	771.9	832.8	885.3	942.0	990.4	1069.4
43°	714.8	780.3	827.7	877.9	929.5	1005.7
43.5°	661.3	725.0	769.6	812.4	866.8	941.6



TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	514.9	567.5	601.8	633.0	696.2	765.9
45.5°	471.3	518.2	548.9	579.1	641.8	709.2
46°	432.2	469.4	497.7	527.0	590.7	656.2
46.5°	393.2	422.5	448.0	478.2	541.0	603.2
47°	354.1	379.2	401.5	432.2	493.1	552.1
47.5°	315.1	338.3	357.4	388.1	446.6	502.4
48°	282.1	298.8	316.0	346.7	402.5	455.9
48.5°	251.0	262.6	277.0	308.1	360.2	411.3
49°	220.8	229.6	240.3	272.8	319.7	369.0
49.5°	193.8	198.9	206.8	240.3	282.6	328.6
50°	169.2	170.1	177.1	209.1	247.2	288.6
50.5°	145.9	151.5	157.5	181.3	215.2	251.9
51°	125.0	132.5	138.0	155.7	185.9	217.0
51.5°	105.5	113.9	118.5	136.2	158.5	184.5
52°	88.8	95.3	99.0	117.1	138.0	154.3
52.5°	73.4	76.2	79.5	97.6	117.6	132.9
53°	60.0	63.7	66.9	78.5	97.6	111.5
53.5°	52.5	52.1	55.3	64.6	77.6	90.2
54°	45.5	42.8	45.5	52.1	62.3	69.2
54.5°	38.1	34.9	37.2	41.8	49.7	54.8
55°	30.7	28.8	30.2	33.5	39.5	43.7
55.5°	23.2	24.6	25.6	27.9	31.6	34.9
56°	21.4	22.3	23.2	24.6	27.4	29.3
56.5°	20.0	20.9	21.4	22.8	24.6	26.0
57°	18.6	19.5	20.0	21.4	22.8	24.2
57.5°	17.7	18.1	18.6	19.5	21.4	22.8
58°	16.3	17.2	17.7	18.1	20.0	20.9
58.5°	14.9	15.8	16.3	17.2	18.6	19.5
59°	13.9	14.9	15.3	15.8	17.2	18.1
59.5°	13.0	13.5	13.9	14.9	16.3	17.2
60°	12.1	12.5	13.0	13.5	14.9	15.8
60.5°	11.2	11.6	12.1	12.5	13.9	14.9
61°	10.7	11.2	11.2	11.6	12.5	13.5
61.5°	9.8	10.2	10.7	11.2	12.1	12.5
62°	9.3	9.8	9.8	10.2	11.2	11.6
62.5°	8.8	8.8	9.3	9.8	10.2	11.2
63°	8.4	8.4	8.8	8.8	9.8	10.2
63.5°	7.9	7.9	7.9	8.4	9.3	9.8
64°	7.4	7.4	7.4	7.9	8.8	9.3
64.5°	7.0	7.0	7.0	7.4	7.9	8.4
65°	6.5	6.5	6.5	7.0	7.4	7.9
65.5°	6.0	6.0	6.5	6.5	7.0	7.4
66°	5.6	6.0	6.0	6.0	6.5	7.0



TEST NUMBER: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	4.6	4.6	5.1	5.1	5.6	6.0
68°	4.6	4.6	4.6	4.6	5.1	5.6
68.5°	4.2	4.2	4.2	4.6	5.1	5.1
69°	3.7	4.2	4.2	4.2	4.6	4.6
69.5°	3.7	3.7	3.7	4.2	4.2	4.6
70°	3.3	3.7	3.7	3.7	4.2	4.2
70.5°	3.3	3.3	3.3	3.7	3.7	4.2
71°	3.3	3.3	3.3	3.3	3.7	3.7
71.5°	2.8	2.8	2.8	3.3	3.3	3.7
72°	2.8	2.8	2.8	2.8	3.3	3.3
72.5°	2.3	2.8	2.8	2.8	2.8	3.3
73°	2.3	2.3	2.3	2.8	2.8	2.8
73.5°	2.3	2.3	2.3	2.3	2.8	2.8
74°	2.3	2.3	2.3	2.3	2.3	2.3
74.5°	1.9	1.9	1.9	2.3	2.3	2.3
75°	1.9	1.9	1.9	1.9	1.9	2.3
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: P776676

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-5000lm-3000K

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°

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°	3528.8	3578.6	3602.7	3662.7	3599.9	3558.6	3508.8	3448.0	3387.1	3334.1	3295.5
22°	3464.7	3514.9	3536.7	3596.2	3538.1	3496.8	3447.5	3386.2	3325.3	3270.4	3232.8



44°	882.1	941.6	975.0	1037.8	975.5	915.6	857.0	811.9	765.0	710.1	661.8
44.5°	824.5	881.2	909.5	972.7	914.6	856.5	798.9	750.6	708.3	655.3	611.1



66.5°	6.5	6.5	6.0	6.5	6.0	6.0	6.5	6.5	6.5	6.5	6.0
67°	6.0	6.0	6.0	6.0	5.6	6.0	6.0	6.0	6.5	6.0	5.6



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

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

Scaled Data Report





21.5°	3221.2	3260.7	3306.7	3374.1	3456.3	3528.8
22°	3158.9	3198.4	3243.0	3310.9	3394.5	3464.7



44°	609.3	671.1	712.5	751.0	807.3	882.1
44.5°	561.4	618.1	656.7	689.2	750.6	824.5

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

Scaled Data Report



66.5°	5.1	5.6	5.6	6.0	6.5	6.5
67°	5.1	5.1	5.1	5.6	6.0	6.0

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
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)