

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: P775773

Luminaire Tested: HCDJBL510CSD-HCD6TRH-1000lm-4000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775773
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: HCDJBL510CSD-HCD6TRH-1000lm-4000K
Description: 6 INCH ROUND MEDIUM HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

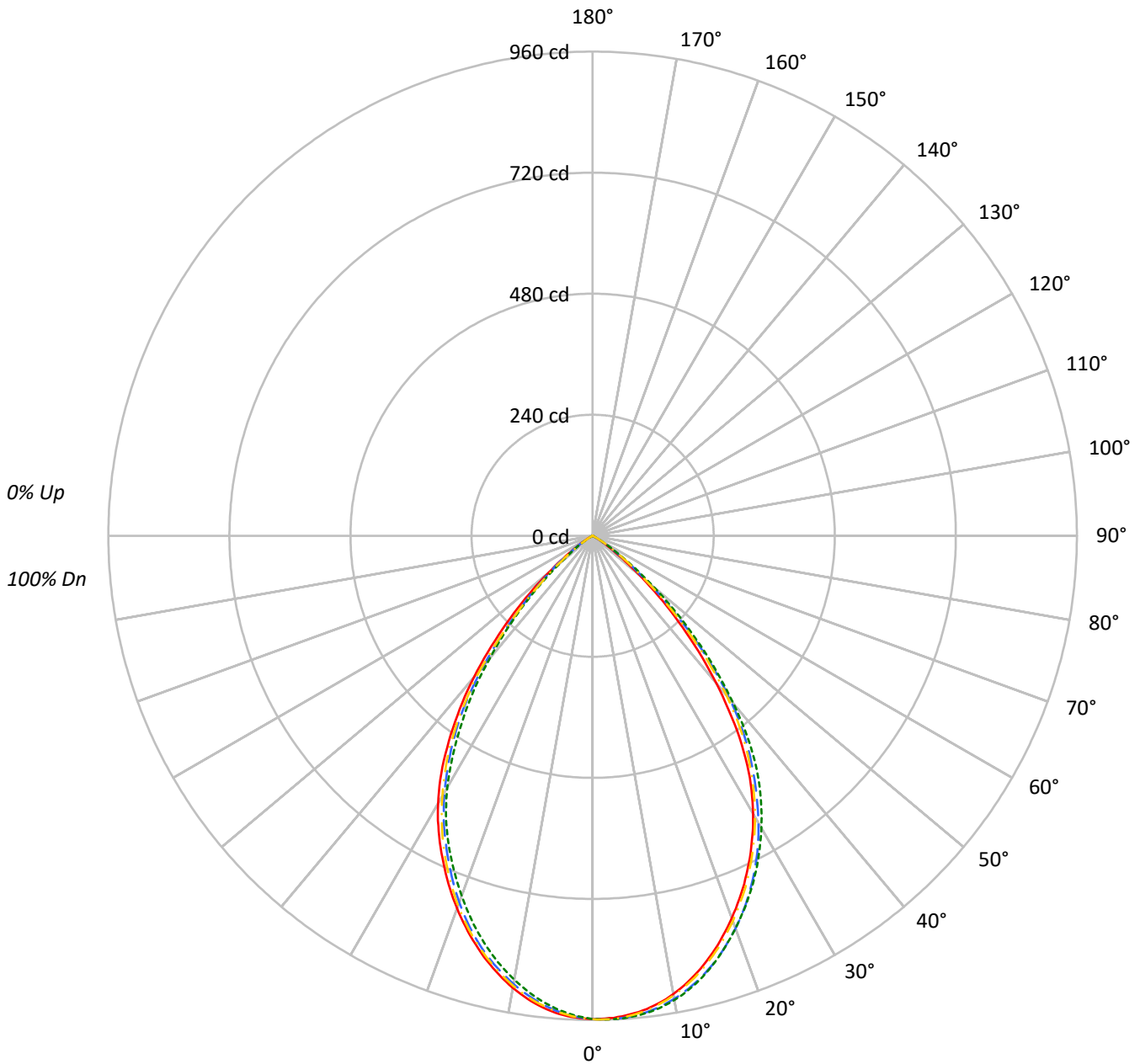
Lumens per Lamp: N/A
Luminaire Lumens: 1205.1 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1.06
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10
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: P775773
CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

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			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92					92			
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84					84			
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78	77					77			
4	94	86	80	75	92	85	79	74	82	77	73	80	76	73	78	75	72	70					70			
5	89	79	73	68	87	78	72	68	76	71	67	75	70	66	73	69	66	64					64			
6	83	73	67	62	82	73	66	62	71	65	61	69	65	61	68	64	60	59					59			
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	64	59	55	54					54			
8	74	63	57	52	73	63	56	52	62	56	52	61	55	51	59	55	51	50					50			
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46					46			
10	66	55	49	45	65	55	49	45	54	48	44	53	48	44	52	48	44	43					43			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	52529	52529	52529	52529
5°	52300	52614	52063	51535
10°	51352	52031	50673	49765
15°	49552	50556	48553	47339
20°	47067	48328	45848	44285
25°	44023	45674	42613	40853
30°	40259	42355	38784	36480
35°	34961	37986	33227	30216
40°	27251	31051	26192	22700
45°	18684	22537	17971	14591
50°	10294	13620	9842	7164
55°	3938	5983	4253	3049
60°	515	1535	1020	406
65°	65	117	91	65
70°	16	32	32	32
75°	21	21	21	21
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 22537 cd/sqm



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.5	7.4
10°-20°	242.5	20.1
20°-30°	328.1	27.2
30°-40°	315.0	26.1
40°-50°	183.4	15.2
50°-60°	45.1	3.7
60°-70°	1.4	0.1
70°-80°	0.1	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	660.0	54.8
0°-40°	975.0	80.9
0°-60°	1203.6	99.9
0°-90°	1205.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1205.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	958	958	958	958	958	
5°	950	956	946	936	950	90
15°	873	891	856	834	873	245
25°	728	755	704	675	728	333
35°	522	568	496	452	522	321
45°	241	291	232	188	241	186
55°	41	63	44	32	41	42
65°	0	1	1	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	958.2	958.2	958.2	958.2	958.2	958.2	958.2	958.2	958.2	958.2	958.2
0.5°	958.0	958.1	958.9	959.5	958.6	959.0	959.2	958.8	957.8	957.4	957.5
1°	957.8	958.2	959.3	960.0	959.2	959.4	959.4	958.7	957.4	956.6	956.7
1.5°	957.5	958.2	959.4	960.3	959.5	959.7	959.3	958.4	957.0	955.7	955.5
2°	957.0	958.1	959.4	960.3	959.7	959.7	959.2	957.8	955.9	954.7	954.2
2.5°	957.0	957.7	959.1	960.1	959.5	959.4	958.7	957.1	955.1	953.3	952.5
3°	955.4	957.1	958.8	959.8	959.3	959.1	957.9	955.9	953.6	951.7	950.6
3.5°	954.5	956.4	958.1	959.3	958.8	958.2	957.0	954.8	952.2	950.0	948.8
4°	953.3	955.5	957.3	958.6	958.0	957.5	955.9	953.2	950.5	948.1	946.3
4.5°	951.8	954.5	956.3	957.6	957.2	956.5	954.5	951.5	948.6	945.6	943.9
5°	950.4	953.1	955.1	956.6	956.1	955.2	952.9	949.6	946.1	943.1	941.1
5.5°	949.0	951.5	953.8	955.2	955.0	953.8	951.0	947.4	943.4	940.4	938.1
6°	946.6	949.7	952.3	953.7	953.6	952.2	948.9	944.8	940.7	937.5	934.9
6.5°	944.5	948.0	950.5	952.2	951.9	950.3	946.9	942.0	937.7	934.3	931.4
7°	942.1	945.8	948.4	950.4	950.2	948.4	944.3	939.1	934.5	930.8	928.0
7.5°	939.3	943.3	946.2	948.2	948.1	946.2	941.7	935.8	930.8	927.1	924.0
8°	936.4	940.7	943.9	945.8	945.9	943.9	938.8	932.4	927.2	923.2	920.1
8.5°	933.4	937.9	941.2	943.2	943.4	941.1	935.7	928.8	923.3	919.2	915.8
9°	930.0	934.7	938.5	940.5	940.7	938.3	932.5	925.1	919.1	915.0	911.7
9.5°	926.3	931.6	935.4	937.6	937.9	935.4	928.8	921.0	915.0	910.5	907.1
10°	922.5	928.1	932.3	934.4	934.7	932.0	925.2	916.9	910.3	905.9	902.4
10.5°	918.4	924.3	928.8	931.0	931.3	928.5	921.3	912.4	905.6	901.2	897.5
11°	914.2	920.5	925.5	927.5	927.7	924.6	917.2	907.8	900.7	896.3	892.6
11.5°	909.8	916.4	921.5	923.6	923.8	920.8	913.0	903.1	895.4	891.2	887.5
12°	904.9	912.1	917.7	919.5	919.7	916.4	908.4	898.2	890.3	886.0	882.1
12.5°	900.1	907.6	913.3	915.4	915.4	912.0	903.6	893.1	884.9	880.5	876.7
13°	895.1	903.1	909.1	911.2	911.2	907.5	899.0	888.0	879.5	875.0	871.2
13.5°	889.8	898.1	904.5	906.4	906.2	902.5	893.8	882.5	873.6	869.3	865.4
14°	884.5	893.1	899.6	901.6	901.2	897.5	888.6	877.0	867.8	863.3	859.4
14.5°	878.9	887.8	894.6	896.7	895.9	892.1	883.3	871.1	861.8	857.0	853.3
15°	873.1	882.5	889.4	891.6	890.8	886.7	877.5	865.2	855.5	850.6	847.0
15.5°	867.1	876.9	884.0	886.4	885.2	881.2	871.6	859.1	849.1	844.4	840.5
16°	861.0	871.0	878.4	880.6	879.6	875.4	865.8	852.9	842.7	837.8	833.7
16.5°	854.7	865.1	872.5	875.0	873.7	869.3	859.6	846.5	836.1	830.9	826.8
17°	848.3	859.0	866.8	869.2	867.5	863.2	853.4	840.0	829.2	823.7	819.7
17.5°	841.6	852.8	860.7	863.3	861.4	856.9	846.9	833.1	822.3	816.6	812.3
18°	834.9	846.3	854.5	857.0	854.9	850.5	840.5	826.3	815.0	809.2	804.7
18.5°	828.1	839.7	848.0	850.7	848.4	844.0	833.7	819.2	807.9	801.7	797.2
19°	821.1	833.0	841.7	844.3	841.9	837.4	826.8	812.1	800.6	794.3	789.2
19.5°	813.9	826.0	834.8	837.7	835.3	830.4	819.7	804.7	793.5	786.3	781.1
20°	806.8	819.1	828.2	831.0	828.4	823.3	812.8	797.6	785.9	778.4	773.0
20.5°	799.3	811.7	821.3	823.7	821.2	816.4	805.4	790.0	778.2	770.5	764.9
21°	791.9	804.4	814.3	816.8	814.2	809.1	797.9	782.5	770.7	762.6	756.8



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	768.9	781.5	792.1	794.5	793.1	786.5	775.0	760.1	746.7	737.8	730.4
23°	761.0	773.5	784.3	786.8	785.7	778.6	767.4	752.0	738.2	729.2	721.6
23.5°	753.0	765.3	776.5	779.0	778.2	770.6	759.8	743.9	729.9	720.4	712.5
24°	744.7	757.2	768.2	770.9	770.8	762.6	751.6	735.7	721.4	711.7	703.5
24.5°	736.3	748.9	760.0	762.8	763.3	755.9	743.1	727.4	713.2	702.8	694.2
25°	727.8	740.5	751.6	754.5	755.1	747.6	734.4	719.1	704.5	694.0	685.3
25.5°	719.3	731.6	743.1	745.9	746.9	739.1	725.8	710.5	695.9	685.0	676.0
26°	710.8	723.1	734.2	737.5	738.9	730.8	717.1	702.1	687.3	676.0	666.9
26.5°	701.8	714.4	725.2	728.8	730.7	721.9	708.1	693.4	678.6	667.0	657.6
27°	693.0	705.1	716.3	719.9	722.4	713.4	699.3	684.8	669.4	658.0	648.3
27.5°	683.7	695.8	706.9	711.0	713.6	704.5	690.3	675.9	660.7	648.7	638.8
28°	674.6	686.4	697.3	701.8	704.9	695.7	681.3	666.9	651.6	639.0	628.9
28.5°	665.2	677.0	687.6	692.5	696.3	686.7	672.2	658.0	642.4	629.1	618.7
29°	655.7	667.3	677.7	683.1	687.5	677.6	662.7	648.6	632.9	619.3	608.5
29.5°	645.9	657.2	667.5	673.5	678.3	668.6	653.3	638.9	622.9	609.1	597.7
30°	636.0	647.1	657.4	663.8	669.1	659.3	643.6	629.1	612.7	598.9	587.0
30.5°	625.9	636.8	647.1	653.5	659.8	649.8	633.8	618.9	602.6	588.0	576.1
31°	615.7	626.3	636.1	643.6	650.6	640.2	623.7	608.7	591.8	577.2	564.9
31.5°	605.0	615.6	625.7	633.2	640.8	630.6	613.6	598.2	580.8	566.3	553.7
32°	594.0	604.4	614.7	622.6	631.0	620.7	603.4	587.5	569.4	555.1	542.1
32.5°	583.2	593.8	603.8	611.8	621.1	610.5	592.9	576.6	558.0	543.6	530.8
33°	571.9	582.6	593.0	601.2	611.0	600.2	582.3	565.1	546.2	531.7	519.5
33.5°	560.2	571.3	582.4	590.3	600.4	589.8	571.5	553.6	534.2	519.9	508.0
34°	547.9	559.8	571.1	579.4	590.0	579.1	560.6	541.9	522.0	508.1	496.3
34.5°	535.4	548.4	559.9	568.4	578.7	567.9	549.8	530.0	509.1	495.5	484.4
35°	522.4	536.6	548.4	556.8	567.6	556.7	538.7	517.7	496.5	482.9	472.5
35.5°	509.4	524.7	537.5	545.4	555.8	545.5	527.5	505.5	484.0	470.4	460.3
36°	495.4	512.7	525.5	533.9	544.0	534.1	516.1	493.2	471.4	457.7	447.7
36.5°	481.4	500.0	514.3	522.5	531.4	522.2	504.2	480.7	458.5	444.8	434.7
37°	467.0	487.1	502.3	510.4	518.6	509.9	492.0	468.3	445.3	431.8	421.0
37.5°	452.8	473.7	490.0	498.0	505.4	497.3	479.8	455.5	432.8	418.5	407.7
38°	438.0	459.9	477.2	484.7	491.7	484.1	466.9	442.8	419.7	405.0	393.6
38.5°	423.9	446.1	464.4	472.2	477.3	470.7	453.9	430.0	406.7	391.3	379.7
39°	409.2	431.9	450.9	458.5	463.2	457.0	440.4	417.1	393.3	377.6	365.7
39.5°	395.0	417.6	437.1	444.9	448.6	442.7	426.6	403.7	380.1	363.7	351.2
40°	380.8	402.5	422.7	430.7	433.9	427.7	412.5	390.1	366.0	349.4	336.7
40.5°	366.7	387.8	408.9	416.2	419.4	412.6	398.5	376.4	352.3	335.3	321.9
41°	352.5	373.9	394.7	401.4	404.9	397.3	383.3	362.7	338.2	321.4	307.2
41.5°	338.4	359.5	380.2	386.7	390.9	382.2	368.5	349.1	324.1	308.0	292.7
42°	324.2	345.0	365.3	378.0	376.6	367.0	353.5	334.7	309.9	294.1	278.4
42.5°	310.0	330.6	350.4	362.0	362.9	351.8	338.7	320.5	296.8	280.5	264.7
43°	295.6	316.1	335.5	345.7	348.9	336.9	324.0	306.0	283.3	267.1	251.4
43.5°	281.6	302.2	320.6	329.6	334.1	322.3	309.3	292.0	270.5	253.8	238.4



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	241.0	260.3	275.8	284.4	290.7	279.1	265.6	249.9	231.8	215.2	201.5
45.5°	228.2	246.3	261.1	270.4	276.4	264.6	251.3	236.7	219.1	202.9	190.0
46°	215.0	232.7	246.5	256.5	262.7	250.7	237.5	223.2	206.7	190.7	178.8
46.5°	202.0	219.3	232.0	242.6	249.3	237.0	223.5	210.1	194.1	179.5	167.9
47°	189.3	206.0	218.1	228.6	236.0	223.7	210.1	196.7	181.9	167.8	157.3
47.5°	176.9	192.8	204.8	215.1	222.8	210.7	196.9	184.1	170.1	157.1	147.4
48°	164.8	180.1	191.7	201.8	209.7	198.4	184.2	171.4	158.8	146.6	137.8
48.5°	153.2	167.8	178.8	188.8	196.9	186.5	172.0	159.3	147.7	136.8	128.8
49°	141.9	155.8	166.6	176.1	184.2	174.7	160.1	147.5	136.5	127.1	120.0
49.5°	131.0	144.0	154.6	163.8	171.6	163.2	149.0	136.2	125.8	117.8	111.4
50°	120.7	132.3	143.0	151.4	159.7	151.8	138.1	125.5	115.4	109.1	103.6
50.5°	110.5	121.0	131.7	139.7	148.1	140.9	127.8	115.3	105.7	101.5	96.3
51°	100.9	110.5	121.2	128.3	136.7	130.3	118.0	105.8	97.1	93.9	89.1
51.5°	91.5	100.5	110.9	117.6	126.1	120.3	108.7	97.7	88.7	86.2	81.9
52°	82.7	91.2	101.2	107.4	115.8	110.4	100.9	89.6	80.2	78.7	74.7
52.5°	74.3	82.1	91.8	97.5	105.9	102.0	93.1	81.4	71.8	71.1	68.0
53°	66.5	73.9	83.1	88.1	96.9	93.5	85.2	73.3	65.2	64.6	62.0
53.5°	59.1	66.4	74.6	79.4	88.0	85.1	77.3	66.5	59.2	58.7	56.1
54°	52.6	59.3	66.9	71.4	79.0	76.6	69.4	60.3	53.9	53.1	50.7
54.5°	46.6	52.7	59.3	63.9	70.2	68.2	63.0	54.6	49.0	47.8	45.3
55°	41.2	46.8	52.6	57.0	62.6	61.6	56.9	49.6	44.5	43.0	40.3
55.5°	35.9	41.1	46.2	50.6	55.8	54.9	51.1	44.5	40.1	38.1	35.5
56°	31.8	35.8	40.5	44.6	49.5	49.0	45.6	40.0	35.9	33.7	31.1
56.5°	27.6	31.6	35.6	39.0	43.7	43.4	40.3	35.7	31.9	29.5	26.9
57°	23.5	27.5	31.3	34.4	38.3	38.1	35.5	31.5	28.0	25.6	23.1
57.5°	19.4	23.3	26.9	30.0	33.2	33.1	30.9	27.5	24.5	22.1	19.5
58°	15.5	19.1	22.6	25.5	28.6	28.5	26.7	23.8	21.0	18.4	15.6
58.5°	11.8	15.0	18.3	21.1	24.4	24.3	22.8	20.3	17.3	15.6	13.3
59°	8.6	11.3	14.2	16.7	20.3	20.5	18.9	16.4	14.7	12.9	10.9
59.5°	6.3	8.3	10.4	12.5	17.1	17.6	16.0	13.9	12.1	10.1	8.6
60°	4.7	6.0	7.6	9.1	14.0	14.8	13.1	11.3	9.3	7.4	6.3
60.5°	3.5	4.5	5.5	6.5	10.8	12.0	10.2	8.8	6.7	4.6	3.9
61°	2.9	3.9	4.1	4.8	7.7	9.1	7.2	6.3	4.2	3.6	3.0
61.5°	2.4	3.3	3.5	3.6	4.5	6.3	4.4	3.8	3.2	2.8	2.4
62°	1.9	2.6	2.8	3.0	3.4	3.5	3.4	2.8	2.4	2.2	2.0
62.5°	1.4	2.0	2.2	2.5	2.6	2.6	2.5	2.3	1.9	1.8	1.6
63°	1.2	1.5	1.7	2.0	2.1	2.1	2.0	1.8	1.6	1.5	1.4
63.5°	0.9	1.2	1.4	1.5	1.7	1.7	1.6	1.5	1.3	1.3	1.2
64°	0.7	0.9	1.2	1.3	1.4	1.4	1.4	1.3	1.1	1.1	0.9
64.5°	0.6	0.8	0.9	1.1	1.2	1.2	1.1	1.1	0.8	0.8	0.8
65°	0.5	0.7	0.8	0.8	0.9	0.9	0.9	0.8	0.7	0.7	0.7
65.5°	0.5	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.6	0.6	0.6
66°	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
68°	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3
68.5°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
69°	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
69.5°	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
70°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
70.5°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
71°	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
71.5°	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
72°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.5°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
77°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-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: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	958.2	958.2	958.2	958.2	958.2	958.2
0.5°	957.9	956.8	957.4	957.9	958.2	958.0
1°	956.9	955.5	956.3	957.1	957.6	957.8
1.5°	955.5	954.0	955.0	955.9	957.1	957.5
2°	953.8	952.3	953.3	954.7	955.9	957.0
2.5°	952.1	950.3	951.3	953.2	954.9	957.0
3°	950.0	948.0	949.3	951.3	953.8	955.4
3.5°	947.6	945.4	946.9	949.5	952.4	954.5
4°	945.2	942.8	944.4	947.4	950.9	953.3
4.5°	942.5	939.8	941.7	945.1	949.0	951.8
5°	939.4	936.5	938.6	942.5	947.0	950.4
5.5°	936.2	933.3	935.4	939.8	944.7	949.0
6°	932.7	929.7	932.1	936.9	942.4	946.6
6.5°	929.1	925.7	928.4	933.7	939.8	944.5
7°	925.3	921.9	924.6	930.3	937.0	942.1
7.5°	921.2	917.6	920.7	927.0	934.0	939.3
8°	917.1	913.1	916.6	923.2	930.7	936.4
8.5°	912.7	908.5	912.1	919.2	927.1	933.4
9°	908.3	903.8	907.5	915.1	923.4	930.0
9.5°	903.3	898.9	902.9	910.7	919.4	926.3
10°	898.5	894.0	898.0	906.3	915.3	922.5
10.5°	893.3	888.5	893.0	901.5	911.0	918.4
11°	888.1	883.1	887.8	896.5	906.5	914.2
11.5°	882.7	877.6	882.3	891.3	901.7	909.8
12°	877.1	871.7	876.7	886.1	896.7	904.9
12.5°	871.4	865.9	871.1	880.5	891.6	900.1
13°	865.4	859.8	865.1	875.0	886.4	895.1
13.5°	859.3	853.6	858.9	869.1	880.8	889.8
14°	852.9	847.3	852.6	863.3	875.3	884.5
14.5°	846.4	840.8	846.2	857.2	869.4	878.9
15°	839.7	834.1	839.6	850.9	863.7	873.1
15.5°	833.2	827.1	832.7	844.4	857.3	867.1
16°	826.1	820.2	825.9	838.0	851.1	861.0
16.5°	819.1	812.9	818.8	831.5	844.8	854.7
17°	811.7	805.8	811.6	824.7	838.3	848.3
17.5°	804.6	798.2	804.3	817.4	831.3	841.6
18°	797.2	790.5	796.9	810.3	824.3	834.9
18.5°	789.6	782.8	789.5	802.9	817.3	828.1
19°	782.0	775.2	781.6	795.4	810.0	821.1
19.5°	774.4	767.3	774.0	787.9	802.6	813.9
20°	766.7	759.1	766.4	780.0	795.0	806.8
20.5°	759.1	751.1	758.5	772.0	787.2	799.3
21°	750.9	743.1	750.5	764.1	779.3	791.9

TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	725.8	718.5	725.8	738.7	754.6	768.9
23°	717.2	710.0	717.2	730.1	746.1	761.0
23.5°	708.7	701.6	709.0	721.5	737.5	753.0
24°	699.9	693.0	700.2	712.7	728.7	744.7
24.5°	691.1	684.3	691.7	703.7	720.1	736.3
25°	682.2	675.4	682.8	694.6	711.2	727.8
25.5°	673.2	666.6	673.9	685.6	702.2	719.3
26°	664.4	657.7	664.6	676.0	693.3	710.8
26.5°	655.1	648.4	655.1	666.9	684.1	701.8
27°	645.7	639.0	645.6	656.9	674.9	693.0
27.5°	636.0	629.5	635.7	647.2	665.4	683.7
28°	626.2	619.1	625.3	637.2	655.8	674.6
28.5°	615.9	608.8	615.4	627.1	646.0	665.2
29°	605.6	598.2	604.8	616.9	636.1	655.7
29.5°	595.1	587.5	594.0	606.3	626.1	645.9
30°	584.1	576.3	583.0	595.8	616.0	636.0
30.5°	573.0	564.3	571.9	585.0	605.4	625.9
31°	561.7	552.3	560.1	574.2	594.8	615.7
31.5°	550.1	540.1	548.3	563.5	584.0	605.0
32°	538.5	527.6	536.0	551.9	573.2	594.0
32.5°	526.3	515.3	523.9	540.9	562.2	583.2
33°	513.9	502.3	511.4	529.5	550.6	571.9
33.5°	501.3	489.6	498.9	518.1	539.2	560.2
34°	488.6	476.9	486.5	506.2	527.3	547.9
34.5°	475.6	464.1	473.8	493.7	515.5	535.4
35°	462.7	451.5	460.9	481.2	502.9	522.4
35.5°	449.8	438.8	448.5	468.4	490.4	509.4
36°	436.6	426.3	435.9	455.4	476.8	495.4
36.5°	423.5	413.6	423.1	442.1	463.1	481.4
37°	410.1	400.7	410.2	427.3	448.9	467.0
37.5°	396.7	387.4	397.1	413.6	435.0	452.8
38°	383.1	374.4	383.6	399.0	419.9	438.0
38.5°	369.2	360.1	369.5	384.9	405.0	423.9
39°	355.6	345.8	355.4	376.8	389.5	409.2
39.5°	341.8	331.5	341.3	360.4	372.1	395.0
40°	327.8	317.2	327.2	344.0	357.6	380.8
40.5°	313.9	303.4	313.1	327.6	343.1	366.7
41°	300.2	290.2	298.4	311.2	328.7	352.5
41.5°	287.0	277.1	284.2	296.7	314.2	338.4
42°	273.2	264.3	270.3	282.1	299.6	324.2
42.5°	259.8	251.4	257.0	267.7	285.4	310.0
43°	246.7	238.7	243.8	253.4	270.8	295.6
43.5°	233.4	225.9	230.2	239.5	256.7	281.6



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	196.3	188.2	191.3	199.0	216.9	241.0
45.5°	184.4	176.4	178.4	186.4	204.6	228.2
46°	172.9	164.9	166.3	174.3	192.4	215.0
46.5°	162.2	153.2	154.3	162.7	180.9	202.0
47°	151.0	142.2	142.9	151.3	169.1	189.3
47.5°	140.8	131.4	132.1	140.6	158.2	176.9
48°	131.1	121.0	121.6	130.3	147.0	164.8
48.5°	121.6	110.8	111.9	120.6	136.4	153.2
49°	112.7	101.5	102.5	111.3	125.9	141.9
49.5°	104.2	92.4	93.7	102.4	116.2	131.0
50°	96.6	84.0	85.7	94.1	106.4	120.7
50.5°	89.2	76.5	78.0	86.1	97.4	110.5
51°	81.6	69.6	71.2	78.8	88.9	100.9
51.5°	74.1	63.4	64.8	71.6	80.8	91.5
52°	67.7	57.9	59.0	65.2	73.2	82.7
52.5°	61.5	52.8	53.6	59.1	66.1	74.3
53°	55.7	48.0	48.7	53.2	59.2	66.5
53.5°	50.4	43.6	44.0	47.7	52.9	59.1
54°	45.4	39.4	39.6	42.6	47.2	52.6
54.5°	40.5	35.6	35.8	37.8	41.8	46.6
55°	36.1	31.9	32.0	33.8	36.4	41.2
55.5°	31.7	28.3	28.4	29.8	32.3	35.9
56°	27.7	24.6	24.6	25.8	28.3	31.8
56.5°	24.1	20.9	20.8	22.0	24.2	27.6
57°	20.6	17.1	17.0	18.0	20.1	23.5
57.5°	16.8	13.3	13.3	14.1	16.2	19.4
58°	14.3	10.2	10.1	10.7	12.4	15.5
58.5°	11.8	7.7	7.5	7.9	9.2	11.8
59°	9.2	5.7	5.6	5.9	6.8	8.6
59.5°	6.7	4.3	4.2	4.4	5.0	6.3
60°	4.2	3.7	3.6	3.8	3.8	4.7
60.5°	3.3	2.9	2.9	3.2	3.3	3.5
61°	2.6	2.3	2.2	2.6	2.6	2.9
61.5°	2.1	1.7	1.6	2.0	2.1	2.4
62°	1.7	1.4	1.4	1.4	1.6	1.9
62.5°	1.4	1.2	1.1	1.2	1.3	1.4
63°	1.2	0.9	0.9	0.9	1.1	1.2
63.5°	0.9	0.8	0.7	0.7	0.8	0.9
64°	0.8	0.7	0.6	0.6	0.7	0.7
64.5°	0.7	0.6	0.5	0.5	0.6	0.6
65°	0.6	0.5	0.4	0.5	0.5	0.5
65.5°	0.5	0.4	0.4	0.4	0.4	0.5
66°	0.4	0.4	0.3	0.3	0.4	0.4



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.3	0.3	0.2	0.2	0.3	0.3
68°	0.3	0.2	0.2	0.2	0.2	0.2
68.5°	0.2	0.2	0.2	0.2	0.2	0.2
69°	0.2	0.2	0.2	0.2	0.2	0.2
69.5°	0.2	0.2	0.2	0.2	0.2	0.2
70°	0.2	0.2	0.1	0.1	0.1	0.1
70.5°	0.2	0.1	0.1	0.1	0.1	0.1
71°	0.1	0.1	0.1	0.1	0.1	0.1
71.5°	0.1	0.1	0.1	0.1	0.1	0.1
72°	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.1	0.1	0.1	0.1	0.1	0.1
73°	0.1	0.1	0.1	0.1	0.1	0.1
73.5°	0.1	0.1	0.1	0.1	0.1	0.1
74°	0.1	0.1	0.1	0.1	0.1	0.1
74.5°	0.1	0.1	0.1	0.1	0.1	0.1
75°	0.1	0.1	0.1	0.0	0.0	0.1
75.5°	0.1	0.0	0.0	0.0	0.0	0.0
76°	0.1	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775773

CATALOG NUMBER: HCDJBL510CSD-HCD6TRH-1000lm-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

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°	784.2	796.8	807.1	809.5	807.2	801.8	790.3	775.1	763.1	754.7	748.1
22°	776.7	789.3	799.6	802.1	800.1	794.5	782.6	767.5	754.8	746.3	739.5



44°	267.6	288.1	305.7	313.2	319.5	307.9	294.4	277.5	257.1	240.5	225.8
44.5°	254.2	274.2	290.7	298.8	305.0	293.5	280.2	263.6	244.8	228.0	213.8



66.5°	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
67°	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4



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°	742.5	735.0	742.3	755.7	771.1	784.2
22°	734.2	726.7	734.1	747.4	762.9	776.7



44°	220.8	213.0	217.0	225.7	243.2	267.6
44.5°	208.6	200.4	204.2	212.3	230.0	254.2

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

Scaled Data Report



66.5°	0.4	0.3	0.3	0.3	0.3	0.3
67°	0.3	0.3	0.3	0.3	0.3	0.3

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)