

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: P775695

Luminaire Tested: HCDJBL5510CSD-HCD4TSQH-1000lm-2700K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775695
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-HCD4TSQH-1000lm-2700K
Description: 4 INCH SQUARE MEDIUM HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

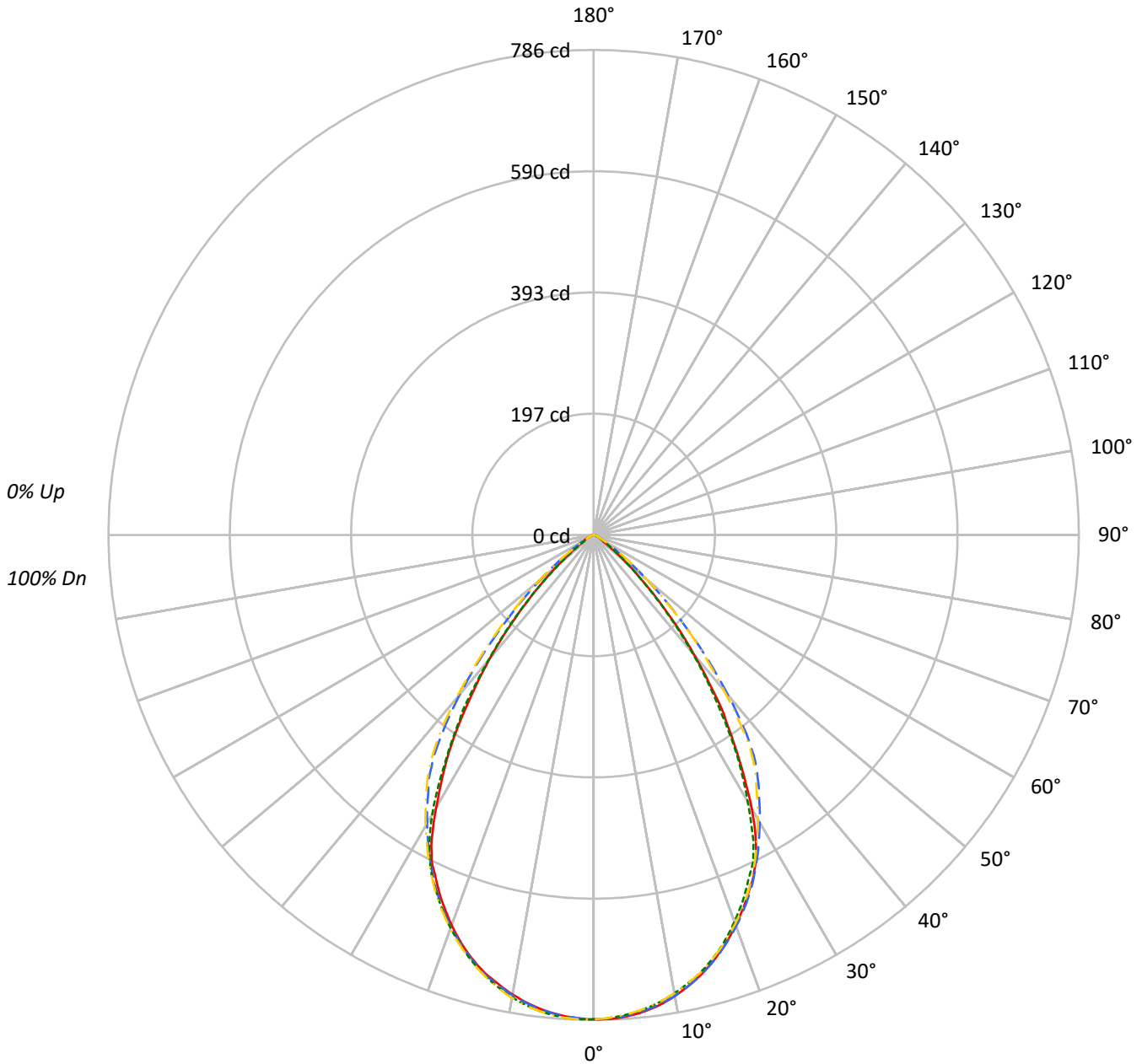
Lumens per Lamp: N/A
Luminaire Lumens: 1005.0 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.05 / 1.09
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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: P775695
CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

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	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	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	85	84					84			
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64					64			
6	83	73	66	61	82	72	66	61	71	65	61	69	64	60	68	63	60	58					58			
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55	54					54			
8	74	63	56	52	73	63	56	52	61	56	51	60	55	51	59	55	51	49					49			
9	70	59	52	48	69	58	52	48	57	52	48	57	51	47	56	51	47	46					46			
10	66	55	49	44	65	55	49	44	54	48	44	53	48	44	52	47	44	43					43			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	77591	77591	77591	77591
5°	77381	77044	77143	77451
10°	76148	75687	75898	76369
15°	73994	73595	73984	74322
20°	70800	70138	70758	71305
25°	66756	65643	66341	67323
30°	58470	56952	58231	59760
35°	45889	44911	46781	47409
40°	32644	31948	33896	34231
45°	19961	19458	21163	21289
50°	9795	10103	10902	10549
55°	3671	5066	5342	4101
60°	2669	3380	3420	2708
65°	2105	2666	2713	2175
70°	1676	2139	2167	1763
75°	1298	1680	1680	1451
80°	854	1309	1252	1138
85°	340	1021	567	794

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 315°
 Vertical Angle: 45°
 Luminance: 30613 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.6	7.3
10°-20°	203.0	20.2
20°-30°	279.4	27.8
30°-40°	256.7	25.5
40°-50°	138.8	13.8
50°-60°	37.4	3.7
60°-70°	10.7	1.1
70°-80°	4.5	0.4
80°-90°	0.9	0.1
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°	556.1	55.3
0°-40°	812.8	80.9
0°-60°	989.0	98.4
0°-90°	1005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1005.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	785	785	785	785	785	
5°	780	776	778	781	780	74
15°	723	719	723	726	723	203
25°	612	602	608	617	612	278
35°	380	372	388	393	380	236
45°	143	139	151	152	143	113
55°	21	29	31	24	21	25
65°	9	11	12	9	9	9
75°	3	4	4	4	3	4
85°	0	1	0	1	0	1
90°	0	0	0	0	0	



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CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	785.0	785.0	785.0	785.0	785.0	785.0	785.0	785.0	785.0	785.0	785.0
0.5°	785.4	785.1	784.8	784.5	785.0	784.5	784.7	784.8	785.1	785.1	784.7
1°	785.4	784.9	784.5	784.3	784.6	784.1	784.2	784.3	784.7	784.9	784.5
1.5°	785.1	784.5	784.4	783.8	783.9	783.3	783.6	783.7	784.3	784.4	784.0
2°	784.9	784.2	783.8	783.3	783.1	782.7	782.8	783.0	783.5	783.9	783.5
2.5°	784.4	783.7	783.3	782.6	782.3	781.8	782.0	782.1	782.9	783.2	782.9
3°	783.8	782.8	782.6	781.9	781.5	780.8	781.0	781.2	782.1	782.6	782.1
3.5°	783.0	782.0	781.7	781.0	780.5	779.7	779.8	780.1	781.1	781.7	781.3
4°	782.1	781.0	781.0	780.0	779.3	778.6	778.6	779.0	779.9	780.8	780.3
4.5°	781.1	779.8	779.7	778.9	777.9	777.1	777.3	777.7	778.8	779.8	779.1
5°	779.9	778.5	778.5	777.5	776.5	775.7	775.8	776.3	777.5	778.4	777.8
5.5°	778.4	777.1	777.2	776.1	774.9	774.0	774.2	774.7	776.0	777.2	776.4
6°	777.0	775.4	775.6	774.5	773.2	772.2	772.5	773.1	774.3	775.6	774.8
6.5°	775.3	773.7	774.0	772.9	771.3	770.3	770.6	771.2	772.6	774.1	773.2
7°	773.4	771.7	772.1	770.9	769.3	768.2	768.7	769.4	770.7	772.3	771.4
7.5°	771.4	769.7	770.2	769.1	767.1	766.1	766.5	767.3	768.6	770.4	769.4
8°	769.3	767.5	768.3	766.7	764.8	763.6	764.2	764.9	766.5	768.3	767.3
8.5°	766.9	765.2	766.0	764.3	762.2	761.3	761.9	762.6	764.1	766.0	765.1
9°	764.4	762.8	763.6	761.9	759.7	758.6	759.3	760.1	761.6	763.6	762.8
9.5°	761.7	759.9	761.2	759.4	756.9	755.9	756.6	757.4	758.9	761.2	760.2
10°	758.7	757.1	758.4	756.5	754.1	753.1	753.9	754.7	756.2	758.6	757.6
10.5°	755.8	754.0	755.6	753.6	751.2	750.2	751.1	751.8	753.3	755.9	754.7
11°	752.7	750.9	752.9	750.6	748.2	747.2	748.1	748.8	750.4	753.0	751.8
11.5°	749.5	747.7	749.5	747.5	744.9	743.9	744.8	746.0	747.5	750.0	748.7
12°	746.0	744.2	746.3	744.1	741.6	740.7	741.6	742.7	744.2	747.1	746.6
12.5°	742.6	740.6	742.7	740.7	738.3	737.4	738.3	739.5	740.9	743.7	743.2
13°	739.0	737.0	739.3	737.1	735.1	734.1	735.0	736.2	737.6	740.4	739.8
13.5°	735.3	733.1	735.6	733.4	731.7	730.8	731.7	733.0	734.3	737.1	736.4
14°	731.4	729.3	731.6	729.6	727.7	726.7	727.9	729.0	731.0	733.8	733.1
14.5°	727.2	725.0	727.5	725.7	723.5	722.6	723.8	724.9	727.1	730.5	728.4
15°	723.1	720.8	723.5	721.7	719.2	718.5	719.5	720.9	723.0	726.5	724.3
15.5°	718.7	716.5	719.3	717.3	714.8	714.0	715.1	716.5	718.7	722.4	720.0
16°	714.3	712.0	714.7	712.8	710.3	709.6	710.6	712.2	714.3	718.1	715.7
16.5°	709.5	707.6	710.1	708.3	705.5	704.8	706.1	707.6	709.9	713.6	711.2
17°	704.8	702.6	705.6	703.7	700.6	700.1	701.4	703.0	705.3	709.1	706.5
17.5°	699.9	697.8	700.7	698.8	695.5	695.2	696.5	698.0	700.2	704.5	701.7
18°	694.8	692.7	695.9	693.7	689.9	690.0	691.6	693.1	694.9	699.7	696.9
18.5°	689.3	687.4	690.7	688.7	684.3	684.6	686.4	687.9	689.6	694.6	691.9
19°	684.1	682.0	685.7	683.4	678.5	679.0	681.2	682.5	684.1	689.3	686.7
19.5°	678.6	676.6	680.4	677.7	672.8	673.3	675.9	677.0	678.5	683.8	681.4
20°	673.1	671.0	675.1	671.9	666.8	667.3	670.5	671.3	672.7	678.2	676.1
20.5°	667.3	665.3	669.6	666.0	660.8	661.3	664.8	665.4	666.8	672.5	670.4
21°	661.4	659.3	663.7	659.9	654.6	655.2	659.1	659.4	660.8	666.5	664.8



TEST NUMBER: P775695

CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	643.4	641.0	646.0	640.9	635.8	636.3	641.2	640.6	642.1	648.0	647.2
23°	636.7	634.7	639.8	634.2	629.1	629.7	635.1	633.9	635.8	641.6	641.0
23.5°	630.5	628.4	633.3	627.9	622.1	623.3	628.6	627.4	629.1	635.1	634.5
24°	624.1	621.7	627.0	621.1	614.9	616.5	622.0	620.8	622.3	628.6	627.9
24.5°	618.3	615.1	620.3	614.5	608.2	609.5	615.0	614.1	615.2	621.9	621.1
25°	612.1	608.1	613.4	607.2	601.9	602.3	608.1	607.2	608.3	615.0	614.3
25.5°	604.0	601.6	606.3	600.0	595.6	595.0	600.9	600.1	601.8	607.8	607.3
26°	596.7	595.3	598.9	592.5	589.3	587.9	593.7	592.9	595.7	600.6	600.3
26.5°	588.8	589.1	591.8	585.4	580.1	581.2	586.2	585.5	588.2	593.3	592.9
27°	579.4	580.9	584.4	578.5	570.3	574.8	578.7	578.4	578.4	586.6	585.5
27.5°	569.5	573.0	576.9	572.0	561.2	568.1	571.0	571.4	569.7	580.3	578.0
28°	559.2	564.5	569.0	565.5	548.7	560.5	563.3	564.9	559.1	573.4	570.3
28.5°	548.4	555.7	561.5	558.3	536.0	550.2	555.6	557.4	547.0	563.5	562.8
29°	537.2	546.1	553.6	548.4	523.8	541.7	547.9	547.8	534.8	554.6	555.0
29.5°	524.9	536.1	546.1	539.2	511.3	531.2	539.8	539.0	522.3	545.6	547.4
30°	512.3	525.2	538.4	529.4	499.0	518.8	532.0	529.1	510.2	534.0	539.6
30.5°	499.0	514.7	530.5	517.4	487.0	506.4	523.9	517.2	497.8	521.6	531.8
31°	485.6	502.6	522.5	504.9	475.1	494.4	515.7	505.5	486.1	509.6	523.8
31.5°	472.0	490.8	514.5	492.7	463.1	482.1	507.4	493.2	474.4	497.3	515.6
32°	458.1	477.7	506.4	480.6	451.4	470.2	499.4	481.2	462.6	485.4	507.7
32.5°	444.7	465.2	498.9	468.4	439.0	458.6	491.2	469.2	450.6	473.5	499.6
33°	431.6	451.9	491.6	456.6	426.5	447.2	483.5	457.8	438.7	461.8	492.0
33.5°	418.6	438.4	483.8	444.9	413.0	435.5	476.0	446.0	426.6	450.0	485.3
34°	405.9	425.4	474.9	433.3	399.8	423.9	468.7	434.8	414.0	438.4	478.4
34.5°	393.1	412.3	467.2	421.5	385.8	411.8	461.0	423.2	400.8	426.7	468.3
35°	380.3	399.2	459.3	409.6	372.2	400.3	452.5	412.1	387.7	414.9	458.1
35.5°	367.8	386.8	450.8	397.4	358.5	387.5	443.1	400.3	374.6	402.7	449.3
36°	360.1	374.5	440.8	385.1	345.6	374.8	433.6	388.8	361.4	390.5	438.4
36.5°	346.1	362.5	429.3	372.4	332.4	361.9	421.5	376.6	348.3	378.0	426.3
37°	331.7	350.4	418.5	359.5	319.9	349.0	409.4	364.4	334.9	365.2	413.9
37.5°	317.4	338.1	406.9	347.0	307.6	335.7	396.4	352.1	322.4	352.2	401.4
38°	303.1	326.0	393.4	334.4	295.6	323.1	382.3	339.6	310.2	339.6	388.7
38.5°	290.3	313.9	379.4	322.0	283.5	310.9	368.3	327.0	298.1	326.7	376.0
39°	277.6	301.7	365.8	309.5	271.9	299.0	354.3	314.7	286.0	314.5	363.0
39.5°	265.2	289.3	352.3	297.0	259.7	287.8	340.8	302.6	274.2	302.4	350.1
40°	253.0	277.1	338.7	285.1	247.6	276.0	327.6	291.0	262.7	290.5	337.0
40.5°	241.3	264.7	325.2	273.6	235.4	264.7	314.9	279.1	250.7	278.7	324.2
41°	229.6	252.9	311.6	262.3	223.7	253.7	302.5	267.9	238.8	267.3	311.0
41.5°	218.0	241.3	298.1	251.1	211.7	242.8	290.3	256.9	226.7	256.2	298.2
42°	206.8	230.1	285.2	239.7	200.4	231.3	278.4	245.9	215.1	244.9	285.1
42.5°	195.6	218.9	272.6	228.7	189.4	220.0	266.9	235.1	203.8	233.8	272.3
43°	184.7	208.1	260.1	217.6	178.7	209.0	255.5	224.1	192.8	222.5	259.3
43.5°	173.5	197.6	247.9	206.6	168.2	198.3	244.1	213.3	182.0	211.4	246.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	142.8	166.8	212.1	174.7	139.2	167.0	210.1	181.7	151.4	179.4	210.7
45.5°	133.2	156.7	200.4	164.8	129.9	157.6	199.2	171.4	141.8	169.3	199.5
46°	124.0	147.1	189.2	155.0	120.8	148.1	188.3	161.7	132.5	159.5	188.3
46.5°	115.0	137.7	178.3	145.8	112.2	139.0	177.9	152.1	123.5	150.1	177.6
47°	106.4	128.7	167.6	136.8	104.1	130.1	167.9	142.9	114.6	140.8	167.4
47.5°	98.5	119.9	157.3	127.9	96.5	121.5	158.2	133.7	106.2	131.6	157.4
48°	90.8	111.4	147.5	119.2	90.1	113.0	149.2	125.0	98.3	123.1	147.7
48.5°	83.6	103.5	138.1	110.8	83.7	105.0	140.2	116.7	91.4	114.6	138.3
49°	76.7	95.9	129.1	103.1	77.3	97.4	131.7	108.3	84.6	106.4	129.7
49.5°	70.0	88.6	120.6	95.5	71.0	90.8	123.6	100.5	77.7	98.6	120.6
50°	63.7	81.6	112.2	88.1	65.7	84.2	115.8	93.8	70.9	91.7	112.1
50.5°	57.9	74.8	104.0	81.0	60.8	77.6	108.3	87.1	65.4	84.7	104.3
51°	52.5	68.5	96.4	74.6	56.6	71.0	100.8	80.3	60.3	77.7	97.0
51.5°	47.5	62.6	89.1	68.6	52.6	65.6	94.3	73.6	55.7	70.8	90.2
52°	42.8	57.0	82.3	63.0	48.8	60.6	88.0	66.9	51.4	64.9	83.5
52.5°	38.5	51.6	75.6	58.0	45.2	56.0	81.6	61.3	47.6	59.6	76.8
53°	34.5	46.6	69.5	53.4	41.8	51.8	75.2	56.2	43.9	54.8	70.1
53.5°	31.2	42.1	63.7	49.3	38.7	48.0	68.8	51.6	40.5	50.4	64.0
54°	27.9	37.9	58.3	45.4	35.5	44.5	63.4	47.4	37.2	46.4	58.6
54.5°	24.6	33.9	53.1	41.8	32.4	41.1	58.3	43.5	34.0	42.6	53.6
55°	21.3	30.2	48.6	38.6	29.4	37.9	53.5	40.0	31.0	39.2	48.8
55.5°	19.1	27.5	44.2	35.4	26.7	34.9	49.0	36.7	28.0	36.0	44.4
56°	18.3	24.9	40.2	32.8	24.3	31.9	44.8	33.5	25.4	32.9	40.3
56.5°	17.6	22.2	36.5	30.1	22.6	29.0	40.9	30.6	23.3	30.0	36.6
57°	17.0	19.6	33.8	27.4	21.6	26.2	37.3	27.8	21.8	27.1	33.1
57.5°	16.3	16.9	31.0	24.7	20.8	23.7	34.0	25.1	21.0	24.4	30.0
58°	15.7	16.3	28.3	22.4	20.0	21.4	30.9	22.5	20.2	22.1	27.2
58.5°	15.1	15.7	25.6	20.4	19.3	19.7	28.2	20.4	19.4	20.3	24.6
59°	14.5	15.1	22.9	18.9	18.5	18.8	25.6	18.8	18.7	19.1	22.4
59.5°	14.0	14.5	20.9	18.1	17.8	18.0	23.4	17.9	18.0	18.4	20.5
60°	13.5	14.0	19.2	17.3	17.1	17.3	21.4	17.2	17.3	17.7	18.8
60.5°	12.9	13.5	17.6	16.7	16.4	16.7	19.6	16.5	16.6	17.0	17.2
61°	12.4	12.9	16.3	16.0	15.8	16.0	18.0	15.8	16.0	16.3	16.0
61.5°	12.0	12.5	15.1	15.4	15.2	15.4	16.6	15.2	15.4	15.7	14.8
62°	11.5	12.0	14.1	14.7	14.6	14.8	15.4	14.6	14.7	15.1	13.8
62.5°	11.0	11.5	13.1	14.2	14.0	14.2	14.4	14.0	14.2	14.5	12.9
63°	10.6	11.1	12.3	13.6	13.4	13.6	13.4	13.5	13.6	13.9	12.2
63.5°	10.2	10.6	11.6	13.0	12.9	13.1	12.6	12.9	13.1	13.4	11.5
64°	9.8	10.2	11.1	12.5	12.4	12.6	11.8	12.4	12.5	12.8	11.0
64.5°	9.4	9.8	10.7	12.0	11.9	12.1	11.2	11.9	12.0	12.3	10.5
65°	9.0	9.5	10.2	11.5	11.4	11.6	10.7	11.4	11.6	11.8	10.1
65.5°	8.7	9.1	9.8	11.1	10.9	11.1	10.3	10.9	11.1	11.3	9.7
66°	8.3	8.7	9.5	10.6	10.4	10.7	9.9	10.5	10.6	10.9	9.3



TEST NUMBER: P775695
 CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	7.3	7.7	8.4	9.3	9.2	9.4	8.8	9.2	9.3	9.6	8.2
68°	7.0	7.4	8.0	8.9	8.8	9.0	8.4	8.8	8.9	9.2	7.9
68.5°	6.7	7.0	7.7	8.6	8.4	8.6	8.1	8.4	8.5	8.8	7.6
69°	6.4	6.7	7.4	8.2	8.1	8.3	7.7	8.1	8.2	8.4	7.3
69.5°	6.1	6.4	7.1	7.9	7.7	7.9	7.4	7.7	7.8	8.0	7.0
70°	5.8	6.1	6.8	7.5	7.4	7.6	7.1	7.4	7.5	7.7	6.6
70.5°	5.5	5.9	6.5	7.2	7.0	7.3	6.7	7.0	7.1	7.3	6.4
71°	5.3	5.6	6.2	6.9	6.7	6.9	6.4	6.7	6.8	7.0	6.1
71.5°	5.0	5.3	5.9	6.5	6.4	6.6	6.1	6.4	6.4	6.6	5.8
72°	4.8	5.1	5.6	6.3	6.1	6.3	5.9	6.1	6.1	6.3	5.5
72.5°	4.5	4.8	5.4	6.0	5.8	6.0	5.6	5.8	5.8	6.0	5.3
73°	4.3	4.6	5.1	5.7	5.5	5.7	5.3	5.5	5.5	5.7	5.0
73.5°	4.0	4.3	4.8	5.4	5.2	5.4	5.1	5.2	5.2	5.4	4.8
74°	3.8	4.1	4.6	5.1	5.0	5.2	4.8	4.9	5.0	5.2	4.6
74.5°	3.6	3.9	4.4	4.9	4.7	4.9	4.6	4.7	4.7	4.9	4.3
75°	3.4	3.6	4.1	4.6	4.4	4.7	4.3	4.4	4.4	4.6	4.1
75.5°	3.2	3.4	3.9	4.4	4.2	4.4	4.1	4.2	4.2	4.4	3.9
76°	2.9	3.2	3.7	4.2	4.0	4.2	3.9	3.9	3.9	4.1	3.7
76.5°	2.7	3.0	3.5	3.9	3.7	4.0	3.7	3.7	3.7	3.9	3.4
77°	2.6	2.8	3.3	3.7	3.5	3.7	3.5	3.4	3.4	3.6	3.2
77.5°	2.4	2.6	3.1	3.5	3.3	3.5	3.3	3.2	3.2	3.4	3.0
78°	2.2	2.4	2.9	3.3	3.1	3.3	3.1	3.0	3.0	3.2	2.8
78.5°	2.0	2.2	2.7	3.1	2.9	3.1	2.9	2.8	2.8	2.9	2.7
79°	1.9	2.0	2.5	2.9	2.7	2.9	2.7	2.6	2.6	2.7	2.5
79.5°	1.7	1.8	2.4	2.7	2.5	2.7	2.5	2.4	2.4	2.5	2.3
80°	1.5	1.7	2.2	2.5	2.3	2.5	2.4	2.2	2.2	2.3	2.1
80.5°	1.4	1.5	2.0	2.3	2.2	2.3	2.2	2.0	2.0	2.1	2.0
81°	1.2	1.3	1.9	2.1	2.0	2.1	2.0	1.8	1.8	1.9	1.8
81.5°	1.1	1.2	1.7	1.9	1.8	2.0	1.9	1.6	1.6	1.7	1.7
82°	1.0	1.0	1.6	1.8	1.7	1.8	1.7	1.5	1.5	1.5	1.5
82.5°	0.8	0.9	1.4	1.6	1.5	1.7	1.6	1.3	1.3	1.3	1.4
83°	0.7	0.8	1.3	1.5	1.4	1.5	1.4	1.2	1.1	1.2	1.2
83.5°	0.5	0.6	1.1	1.3	1.3	1.4	1.3	1.0	1.0	1.0	1.1
84°	0.4	0.5	1.0	1.2	1.1	1.2	1.2	0.9	0.8	0.9	1.0
84.5°	0.4	0.4	0.9	1.0	1.0	1.1	1.0	0.8	0.7	0.7	0.9
85°	0.3	0.4	0.8	0.9	0.9	1.0	0.9	0.6	0.5	0.6	0.8
85.5°	0.2	0.3	0.7	0.8	0.7	0.8	0.8	0.5	0.4	0.5	0.6
86°	0.2	0.2	0.5	0.6	0.6	0.7	0.7	0.4	0.4	0.4	0.5
86.5°	0.2	0.2	0.4	0.5	0.5	0.6	0.6	0.4	0.3	0.3	0.4
87°	0.1	0.1	0.3	0.4	0.4	0.4	0.5	0.3	0.3	0.3	0.3
87.5°	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.2	0.2
88°	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1
88.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1



TEST NUMBER: P775695
CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775695

CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	785.0	785.0	785.0	785.0	785.0	785.0
0.5°	784.8	785.5	785.1	785.3	785.1	785.4
1°	784.7	785.4	785.1	785.3	785.1	785.4
1.5°	784.4	785.4	785.1	785.2	785.1	785.1
2°	784.0	785.1	785.0	785.0	784.9	784.9
2.5°	783.5	784.9	784.6	784.9	784.5	784.4
3°	782.8	784.4	784.1	784.3	784.0	783.8
3.5°	782.0	783.6	783.5	783.7	783.3	783.0
4°	781.0	782.7	782.7	782.9	782.6	782.1
4.5°	779.9	781.7	781.8	782.0	781.6	781.1
5°	778.7	780.6	780.7	780.9	780.5	779.9
5.5°	777.3	779.4	779.5	779.6	779.2	778.4
6°	775.8	777.9	778.1	778.3	777.8	777.0
6.5°	774.1	776.3	776.6	776.7	776.2	775.3
7°	772.3	774.6	774.9	775.1	774.5	773.4
7.5°	770.3	772.8	773.2	773.2	772.6	771.4
8°	768.1	770.6	771.1	771.3	770.5	769.3
8.5°	765.9	768.5	769.0	769.1	768.3	766.9
9°	763.6	766.0	766.8	766.9	765.8	764.4
9.5°	761.0	763.4	764.2	764.4	763.5	761.7
10°	758.3	760.9	761.5	761.9	760.7	758.7
10.5°	755.4	758.1	758.8	759.1	757.9	755.8
11°	752.6	755.0	755.8	756.1	754.9	752.7
11.5°	749.5	752.0	752.7	753.1	751.8	749.5
12°	746.3	748.6	749.5	749.9	748.3	746.0
12.5°	742.7	745.3	746.1	746.4	745.0	742.6
13°	739.2	741.8	742.7	743.1	741.5	739.0
13.5°	735.7	738.2	739.1	739.3	737.7	735.3
14°	732.1	734.5	735.4	735.3	733.9	731.4
14.5°	729.3	730.5	731.5	731.2	729.9	727.2
15°	725.2	726.3	727.5	727.1	725.8	723.1
15.5°	720.9	722.2	723.0	722.9	721.5	718.7
16°	716.5	717.8	718.8	718.7	717.1	714.3
16.5°	712.0	713.3	714.4	714.1	712.7	709.5
17°	707.3	708.5	709.8	709.4	708.1	704.8
17.5°	702.5	703.8	705.0	704.7	703.2	699.9
18°	697.5	698.7	700.1	699.8	698.3	694.8
18.5°	692.4	693.7	695.1	694.6	693.0	689.3
19°	687.3	688.5	689.9	689.6	687.7	684.1
19.5°	681.8	683.3	684.5	684.3	682.4	678.6
20°	676.3	677.9	679.2	679.0	676.9	673.1
20.5°	670.7	672.2	673.6	673.4	671.2	667.3
21°	664.9	666.5	667.7	667.8	665.2	661.4

TEST NUMBER: P775695

CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	646.9	648.5	649.8	650.1	647.1	643.4
23°	640.8	642.3	643.5	643.9	640.8	636.7
23.5°	634.4	635.9	637.2	637.5	634.4	630.5
24°	627.7	629.3	630.7	631.0	628.0	624.1
24.5°	621.2	623.0	624.1	624.3	621.4	618.3
25°	614.6	617.3	617.2	617.6	614.6	612.1
25.5°	607.6	609.5	610.3	610.7	607.6	604.0
26°	600.5	602.0	603.8	603.5	601.0	596.7
26.5°	594.4	594.4	597.7	596.5	594.8	588.8
27°	587.6	585.5	589.5	589.4	588.5	579.4
27.5°	579.1	576.7	581.9	582.0	580.4	569.5
28°	571.5	567.1	574.0	574.4	572.3	559.2
28.5°	563.2	557.1	565.2	567.0	564.3	548.4
29°	554.6	546.3	556.4	559.6	555.4	537.2
29.5°	545.2	535.4	546.8	552.0	546.1	524.9
30°	535.7	523.6	536.9	544.4	536.2	512.3
30.5°	525.5	511.1	526.7	536.7	525.5	499.0
31°	515.0	497.8	515.5	528.9	514.6	485.6
31.5°	503.9	485.2	504.0	521.0	503.0	472.0
32°	492.6	471.6	492.2	513.2	491.2	458.1
32.5°	480.4	457.8	479.7	506.2	478.8	444.7
33°	467.8	444.7	466.6	498.5	465.8	431.6
33.5°	454.9	431.5	453.5	490.3	452.7	418.6
34°	442.1	418.6	440.4	483.0	439.6	405.9
34.5°	428.8	405.4	427.5	474.4	426.5	393.1
35°	416.0	392.9	414.4	464.7	413.4	380.3
35.5°	403.4	380.4	401.5	455.2	400.9	367.8
36°	390.9	368.0	389.2	445.6	388.6	360.1
36.5°	378.3	360.8	377.0	434.9	376.3	346.1
37°	366.2	346.7	364.8	423.8	364.3	331.7
37.5°	354.2	332.1	352.6	412.3	352.2	317.4
38°	342.2	317.6	340.3	400.2	340.1	303.1
38.5°	330.1	303.1	328.1	387.9	328.0	290.3
39°	318.0	290.6	315.9	374.9	315.9	277.6
39.5°	305.9	277.8	303.7	362.1	303.9	265.2
40°	293.7	265.3	291.2	348.4	291.3	253.0
40.5°	281.5	253.2	278.7	334.5	279.1	241.3
41°	269.3	241.6	266.6	320.8	267.2	229.6
41.5°	257.5	229.6	254.6	307.1	255.4	218.0
42°	246.0	218.3	243.1	293.4	244.0	206.8
42.5°	234.6	207.2	231.6	280.2	232.6	195.6
43°	223.5	195.5	220.6	267.3	221.6	184.7
43.5°	212.6	184.3	209.6	254.7	210.6	173.5

TEST NUMBER: P775695

CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	181.6	152.3	177.6	219.0	179.4	142.8
45.5°	171.6	142.3	167.2	207.9	169.3	133.2
46°	161.7	132.6	157.2	196.9	159.5	124.0
46.5°	151.8	123.3	147.0	185.8	149.7	115.0
47°	142.4	114.3	137.6	175.1	140.5	106.4
47.5°	133.2	105.6	128.3	164.6	131.3	98.5
48°	124.3	97.3	119.3	154.7	122.5	90.8
48.5°	115.8	89.6	110.7	144.6	113.7	83.6
49°	107.4	82.2	102.5	135.1	105.8	76.7
49.5°	99.7	75.3	94.4	125.9	97.9	70.0
50°	92.6	68.6	87.0	116.9	90.1	63.7
50.5°	85.5	62.2	79.9	108.4	82.9	57.9
51°	78.4	56.4	72.9	100.3	76.1	52.5
51.5°	71.4	51.1	66.6	92.5	69.6	47.5
52°	65.0	46.2	60.7	85.2	63.5	42.8
52.5°	59.1	41.5	54.9	78.2	57.6	38.5
53°	53.5	37.2	49.7	71.6	52.0	34.5
53.5°	48.2	33.9	44.7	65.5	46.9	31.2
54°	43.2	30.5	40.2	59.3	42.2	27.9
54.5°	38.8	27.1	36.1	53.9	37.9	24.6
55°	34.7	23.8	32.7	48.8	34.4	21.3
55.5°	31.0	20.4	29.4	43.9	31.0	19.1
56°	27.3	18.8	26.0	39.4	27.6	18.3
56.5°	24.0	18.0	22.7	35.2	24.2	17.6
57°	21.1	17.3	19.3	32.3	20.8	17.0
57.5°	18.6	16.6	17.4	29.5	18.3	16.3
58°	16.7	16.0	16.7	26.6	16.7	15.7
58.5°	16.0	15.4	16.1	23.7	16.0	15.1
59°	15.3	14.8	15.5	20.9	15.4	14.5
59.5°	14.8	14.3	14.9	19.0	14.8	14.0
60°	14.2	13.7	14.3	17.4	14.3	13.5
60.5°	13.7	13.2	13.8	16.0	13.7	12.9
61°	13.2	12.7	13.3	14.8	13.2	12.4
61.5°	12.7	12.2	12.8	13.7	12.7	12.0
62°	12.2	11.8	12.3	12.8	12.2	11.5
62.5°	11.7	11.3	11.8	12.0	11.8	11.0
63°	11.3	10.9	11.4	11.3	11.3	10.6
63.5°	10.9	10.5	10.9	10.8	10.8	10.2
64°	10.4	10.1	10.5	10.4	10.4	9.8
64.5°	10.1	9.7	10.1	10.0	10.0	9.4
65°	9.7	9.3	9.7	9.6	9.6	9.0
65.5°	9.3	8.9	9.4	9.2	9.2	8.7
66°	8.9	8.6	9.0	8.9	8.9	8.3



TEST NUMBER: P775695

CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	8.0	7.6	8.0	7.9	7.8	7.3
68°	7.6	7.3	7.6	7.5	7.5	7.0
68.5°	7.3	7.0	7.3	7.2	7.2	6.7
69°	7.0	6.7	7.0	6.9	6.9	6.4
69.5°	6.7	6.4	6.7	6.6	6.6	6.1
70°	6.4	6.1	6.5	6.3	6.3	5.8
70.5°	6.2	5.9	6.2	6.1	6.0	5.5
71°	5.9	5.6	5.9	5.8	5.7	5.3
71.5°	5.6	5.4	5.6	5.5	5.4	5.0
72°	5.4	5.1	5.4	5.3	5.2	4.8
72.5°	5.2	4.9	5.1	5.0	4.9	4.5
73°	4.9	4.6	4.9	4.8	4.6	4.3
73.5°	4.7	4.4	4.7	4.6	4.4	4.0
74°	4.5	4.2	4.4	4.3	4.2	3.8
74.5°	4.3	4.0	4.2	4.1	3.9	3.6
75°	4.0	3.8	4.0	3.9	3.7	3.4
75.5°	3.8	3.6	3.8	3.7	3.5	3.2
76°	3.6	3.4	3.6	3.5	3.3	2.9
76.5°	3.4	3.2	3.4	3.3	3.1	2.7
77°	3.2	3.0	3.2	3.0	2.9	2.6
77.5°	3.0	2.8	3.0	2.9	2.6	2.4
78°	2.8	2.6	2.8	2.7	2.4	2.2
78.5°	2.7	2.5	2.6	2.5	2.3	2.0
79°	2.5	2.3	2.4	2.3	2.1	1.9
79.5°	2.3	2.1	2.3	2.1	1.9	1.7
80°	2.1	2.0	2.1	2.0	1.7	1.5
80.5°	2.0	1.9	2.0	1.8	1.5	1.4
81°	1.8	1.7	1.8	1.7	1.4	1.2
81.5°	1.7	1.6	1.6	1.5	1.2	1.1
82°	1.5	1.4	1.5	1.4	1.0	1.0
82.5°	1.4	1.3	1.4	1.2	0.9	0.8
83°	1.3	1.2	1.2	1.1	0.8	0.7
83.5°	1.1	1.1	1.1	1.0	0.7	0.5
84°	1.0	1.0	1.0	0.9	0.5	0.4
84.5°	0.9	0.9	0.8	0.8	0.4	0.4
85°	0.8	0.7	0.7	0.6	0.4	0.3
85.5°	0.6	0.6	0.6	0.5	0.3	0.2
86°	0.5	0.5	0.5	0.4	0.2	0.2
86.5°	0.4	0.4	0.4	0.3	0.2	0.2
87°	0.3	0.3	0.3	0.2	0.1	0.1
87.5°	0.2	0.2	0.2	0.1	0.1	0.0
88°	0.1	0.1	0.1	0.1	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775695
CATALOG NUMBER: HCDJBL510CSD-HCD4TSQH-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





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

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21.5°	655.5	653.2	657.9	653.6	648.5	648.9	653.3	653.2	654.6	660.4	659.0
22°	649.5	647.2	652.0	647.3	642.3	642.7	647.2	646.9	648.4	654.2	653.3



44°	162.9	187.2	235.8	195.6	158.3	187.3	232.5	202.6	171.2	200.6	234.5
44.5°	152.7	176.9	223.9	184.8	148.5	177.2	221.2	192.0	161.2	189.9	222.4



66.5°	8.0	8.4	9.1	10.2	10.0	10.2	9.5	10.0	10.2	10.4	8.9
67°	7.6	8.0	8.7	9.7	9.6	9.8	9.1	9.6	9.7	10.0	8.6



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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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21.5°	658.9	660.5	661.9	662.0	659.3	655.5
22°	653.0	654.6	655.9	656.1	653.3	649.5



44°	202.1	173.6	198.7	242.5	200.1	162.9
44.5°	191.9	162.8	188.1	230.5	189.6	152.7



66.5°	8.6	8.2	8.6	8.5	8.5	8.0
67°	8.3	7.9	8.3	8.2	8.1	7.6



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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Scaled Data Report



(END OF REPORT)