

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: P775882

Luminaire Tested: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775882
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-HCD8TRMB-1000lm-3500K
Description: 8 INCH ROUND MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

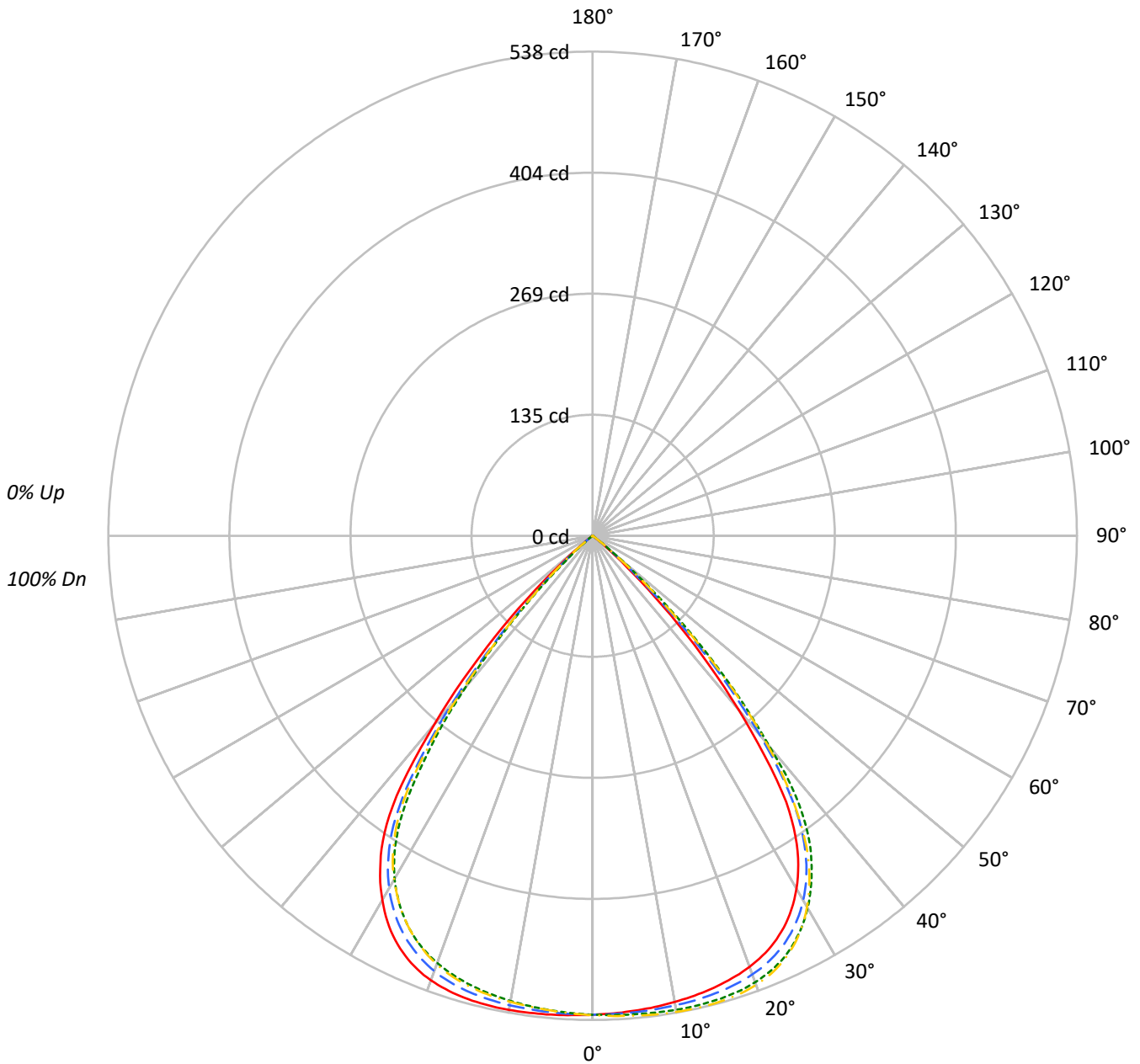
Lumens per Lamp: N/A
Luminaire Lumens: 764.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P775882
CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

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	111	108	106	103	104	102	100	100	99	97	97	95	94	93					93			
2	107	102	97	94	105	100	96	92	97	93	90	94	91	89	91	89	87	85					85			
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78					78			
4	95	87	81	76	93	85	80	76	83	78	75	81	77	74	79	76	73	71					71			
5	89	80	74	69	88	79	73	69	77	72	68	76	71	67	74	70	67	65					65			
6	84	74	68	63	83	74	67	63	72	66	62	70	66	62	69	65	61	60					60			
7	79	69	62	58	78	68	62	58	67	61	57	66	61	57	65	60	57	55					55			
8	75	64	58	53	73	64	57	53	63	57	53	61	56	53	60	56	52	51					51			
9	71	60	53	49	69	59	53	49	58	53	49	57	52	49	57	52	48	47					47			
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	43					43			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16251	16251	16251	16251
5°	16237	16359	16369	16221
10°	16307	16579	16583	16273
15°	16436	16872	16850	16363
20°	16560	17155	17077	16411
25°	16506	17234	17045	16227
30°	15966	16837	16477	15511
35°	14360	15706	15024	13470
40°	10051	12207	10900	8748
45°	4788	6826	5574	3614
50°	974	1829	1040	461
55°	43	64	37	27
60°	12	12	12	12
65°	7	7	7	7
70°	9	9	9	9
75°	0	0	0	0
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6826 cd/sqm



TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	6.6
10°-20°	148.8	19.5
20°-30°	228.0	29.8
30°-40°	237.2	31.1
40°-50°	95.8	12.5
50°-60°	3.3	0.4
60°-70°	0.1	0.0
70°-80°	0.0	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°	427.6	56.0
0°-40°	664.8	87.0
0°-60°	763.9	100.0
0°-90°	764.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	764.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	532	532	532	532	532	
5°	530	534	534	529	530	50
15°	520	534	533	518	520	147
25°	490	512	506	482	490	225
35°	385	421	403	361	385	232
45°	111	158	129	84	111	89
55°	1	1	1	0	1	3
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3
0.5°	532.1	531.9	532.1	532.2	532.3	532.8	533.0	533.0	532.5	532.2	532.1
1°	531.9	531.9	532.1	532.3	532.5	533.1	533.4	533.2	532.7	532.3	532.0
1.5°	531.7	531.7	532.1	532.4	532.7	533.4	533.7	533.6	532.9	532.3	532.0
2°	531.5	531.6	532.0	532.5	532.9	533.6	533.9	533.8	533.0	532.4	532.0
2.5°	531.3	531.4	532.0	532.6	533.0	533.8	534.2	534.0	533.2	532.5	531.9
3°	531.0	531.3	531.9	532.6	533.1	534.1	534.4	534.3	533.5	532.6	531.8
3.5°	530.8	531.1	531.9	532.6	533.4	534.2	534.6	534.5	533.7	532.6	531.7
4°	530.4	530.9	531.7	532.7	533.5	534.4	534.9	534.7	533.9	532.6	531.7
4.5°	530.1	530.7	531.6	532.7	533.6	534.7	535.1	534.9	534.0	532.7	531.5
5°	529.8	530.4	531.5	532.7	533.8	534.9	535.3	535.2	534.1	532.7	531.4
5.5°	529.5	530.1	531.4	532.8	533.9	535.1	535.6	535.4	534.3	532.7	531.3
6°	529.2	529.9	531.3	532.8	534.0	535.3	535.8	535.5	534.4	532.8	531.2
6.5°	528.9	529.6	531.1	532.8	534.2	535.5	536.0	535.7	534.5	532.8	531.1
7°	528.6	529.3	531.0	532.8	534.3	535.6	536.3	535.9	534.6	532.7	530.9
7.5°	528.2	529.0	530.9	532.9	534.4	535.8	536.5	536.1	534.7	532.7	530.8
8°	527.8	528.7	530.7	532.8	534.5	536.0	536.7	536.3	534.8	532.8	530.6
8.5°	527.3	528.3	530.4	532.9	534.6	536.1	536.8	536.5	534.8	532.7	530.3
9°	526.9	528.0	530.2	532.8	534.7	536.3	537.0	536.6	534.9	532.6	530.2
9.5°	526.4	527.5	530.0	532.8	534.7	536.4	537.1	536.7	534.9	532.6	529.9
10°	526.0	527.1	529.8	532.7	534.8	536.5	537.2	536.8	534.9	532.5	529.7
10.5°	525.5	526.7	529.6	532.7	534.8	536.6	537.3	536.8	534.9	532.4	529.4
11°	525.0	526.3	529.3	532.6	534.8	536.7	537.4	536.9	534.8	532.2	529.1
11.5°	524.4	525.8	529.0	532.5	534.8	536.7	537.4	536.9	534.8	532.0	528.8
12°	523.9	525.3	528.8	532.4	534.8	536.7	537.5	536.9	534.7	531.8	528.4
12.5°	523.3	524.9	528.5	532.3	534.7	536.7	537.5	536.8	534.5	531.6	528.1
13°	522.7	524.2	528.1	532.1	534.6	536.7	537.4	536.8	534.4	531.3	527.5
13.5°	522.1	523.7	527.8	531.9	534.4	536.7	537.3	536.7	534.2	530.9	527.1
14°	521.3	523.2	527.3	531.7	534.2	536.5	537.2	536.6	533.9	530.6	526.5
14.5°	520.7	522.6	526.9	531.4	534.1	536.4	537.1	536.4	533.6	530.1	526.0
15°	520.0	522.0	526.4	531.1	533.8	536.1	536.9	536.1	533.1	529.6	525.4
15.5°	519.2	521.3	525.9	530.7	533.6	535.9	536.6	535.8	532.7	529.1	524.6
16°	518.3	520.6	525.4	530.2	533.1	535.6	536.3	535.4	532.2	528.5	523.9
16.5°	517.5	519.9	524.8	529.8	532.7	535.2	535.9	535.0	531.7	527.8	523.1
17°	516.6	519.1	524.1	529.2	532.3	534.8	535.4	534.4	531.1	527.0	522.2
17.5°	515.5	518.2	523.4	528.6	531.8	534.3	534.9	533.9	530.4	526.2	521.1
18°	514.5	517.4	522.6	527.9	531.2	533.7	534.4	533.1	529.6	525.3	520.0
18.5°	513.5	516.4	521.9	527.1	530.6	532.9	533.7	532.3	528.8	524.2	518.8
19°	512.2	515.4	520.9	526.3	529.7	532.1	532.9	531.5	527.8	523.1	517.6
19.5°	511.0	514.3	519.9	525.3	528.9	531.3	532.1	530.4	526.7	521.9	516.2
20°	509.7	513.1	518.8	524.2	528.0	530.3	531.1	529.4	525.6	520.5	514.6
20.5°	508.3	511.9	517.6	523.1	526.9	529.2	530.0	528.2	524.2	519.1	512.9
21°	506.7	510.6	516.4	521.9	525.7	528.0	528.8	526.9	522.9	517.4	511.3



TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	501.5	506.0	511.8	517.4	521.6	523.5	524.2	522.1	517.7	511.9	505.2
23°	499.6	504.2	510.0	515.6	520.0	521.7	522.5	520.2	515.7	509.7	502.9
23.5°	497.4	502.4	508.2	513.7	518.0	519.8	520.5	518.0	513.6	507.3	500.5
24°	495.1	500.3	506.1	511.7	516.3	517.7	518.4	515.8	511.3	505.0	497.9
24.5°	492.7	498.2	503.9	509.4	514.2	515.4	515.9	513.5	508.7	502.3	495.1
25°	490.0	495.8	501.6	507.0	511.6	513.0	513.6	510.9	506.0	499.5	492.2
25.5°	487.4	493.4	499.1	504.5	509.2	510.4	510.8	508.1	503.1	496.5	489.2
26°	484.3	490.6	496.4	501.9	506.6	507.6	507.9	505.1	500.0	493.3	485.9
26.5°	481.2	487.8	493.6	499.0	503.7	504.3	504.7	501.9	496.7	489.8	482.4
27°	477.8	484.6	490.5	495.9	500.4	501.1	501.2	498.4	493.2	486.3	478.8
27.5°	474.2	481.3	487.1	492.7	497.3	497.7	497.7	494.8	489.4	482.5	474.7
28°	470.4	477.7	483.6	489.2	493.8	493.9	494.0	490.9	485.5	478.4	470.7
28.5°	466.3	473.9	480.0	485.7	490.0	489.9	489.8	486.7	481.2	474.1	466.4
29°	462.0	469.8	476.1	481.9	486.1	485.8	485.7	482.4	476.9	469.7	461.9
29.5°	457.6	465.7	472.0	477.8	482.1	481.3	481.1	477.8	472.2	465.1	457.1
30°	452.9	461.1	467.7	473.7	477.6	476.7	476.4	473.1	467.4	460.3	452.1
30.5°	448.0	456.4	463.1	469.2	473.2	471.8	471.4	468.0	462.3	455.2	446.9
31°	442.6	451.2	458.3	464.5	468.3	466.5	466.0	462.6	457.0	449.8	441.4
31.5°	437.0	445.9	453.4	459.6	463.2	461.2	460.6	457.0	451.5	444.3	435.4
32°	431.1	440.1	447.9	454.6	458.0	455.6	454.5	451.1	445.6	438.4	429.1
32.5°	424.8	433.9	442.1	449.1	452.7	449.5	448.2	444.8	439.4	432.3	422.2
33°	417.8	427.4	436.0	443.5	446.8	443.2	441.7	438.0	433.0	425.8	415.1
33.5°	410.7	420.2	429.3	437.6	440.9	436.7	434.6	431.1	426.3	419.0	407.6
34°	402.7	413.0	422.7	431.4	434.7	429.9	427.3	423.6	419.2	411.6	399.5
34.5°	394.3	405.0	415.2	424.9	428.2	422.4	419.3	415.8	411.4	403.5	390.7
35°	385.3	396.3	407.6	417.7	421.4	414.4	410.7	407.3	403.1	394.5	380.5
35.5°	376.0	386.9	399.1	410.1	413.8	405.5	401.7	398.0	394.0	384.5	369.9
36°	365.7	376.8	390.3	401.7	405.8	396.4	392.1	388.2	384.1	373.9	358.5
36.5°	353.7	365.9	380.3	392.1	397.0	386.1	381.9	377.9	373.3	362.2	345.8
37°	339.9	353.3	369.4	382.3	387.1	376.0	371.5	367.2	361.6	349.6	332.6
37.5°	325.1	339.2	357.7	371.3	376.7	364.7	360.7	356.1	348.5	335.3	318.3
38°	310.4	324.9	345.3	360.4	365.7	353.1	349.9	344.4	334.2	320.0	304.0
38.5°	295.3	310.9	332.2	347.7	353.7	340.4	338.5	332.4	319.1	304.5	288.9
39°	280.8	297.7	318.4	335.1	339.2	327.6	326.5	319.6	303.7	288.2	273.3
39.5°	266.5	284.1	303.9	321.0	322.7	313.7	313.0	306.1	288.2	272.3	257.4
40°	252.2	270.8	288.9	306.7	306.3	299.3	299.7	291.9	273.5	256.5	241.5
40.5°	237.4	256.2	274.1	290.7	290.5	284.1	286.8	277.4	259.2	241.0	224.6
41°	222.3	241.0	259.2	274.5	276.1	269.2	272.5	262.7	244.7	225.9	208.2
41.5°	207.7	225.2	243.9	258.3	261.8	253.6	257.9	247.4	230.0	210.4	192.3
42°	193.0	210.3	228.8	241.7	247.2	239.1	242.8	232.2	214.8	195.2	177.7
42.5°	178.8	195.6	213.5	225.0	232.5	224.5	227.4	217.0	200.1	180.0	161.9
43°	165.1	181.0	198.1	209.2	216.6	210.0	211.4	201.4	184.9	164.6	147.6
43.5°	151.2	166.7	182.2	193.0	201.2	195.2	195.9	186.3	170.7	150.1	133.3



TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	110.9	123.5	135.0	148.6	158.1	151.0	148.7	142.6	129.1	112.0	96.0
45.5°	97.8	109.7	120.5	134.5	144.1	136.8	134.3	128.1	115.9	100.2	84.1
46°	85.9	96.6	106.9	121.6	130.3	122.9	119.6	114.3	103.5	88.5	72.2
46.5°	74.2	83.9	94.1	108.9	116.2	110.2	107.3	101.7	91.1	76.8	60.4
47°	63.1	72.0	82.0	96.7	104.2	97.5	95.1	89.3	78.6	65.0	51.2
47.5°	52.7	60.4	71.0	84.9	92.2	84.7	82.9	76.9	66.2	54.8	42.8
48°	43.6	50.0	60.6	73.2	80.2	72.0	70.7	64.3	55.5	45.5	35.3
48.5°	35.4	40.7	51.3	62.6	68.2	59.3	58.4	53.8	45.7	37.0	28.6
49°	30.5	33.2	43.0	52.8	57.8	48.4	48.9	43.7	36.7	29.3	22.9
49.5°	25.5	28.0	35.2	44.0	47.8	39.2	39.6	35.0	28.8	22.7	17.8
50°	20.5	22.8	30.0	36.0	38.5	31.1	31.1	27.4	21.9	18.9	14.7
50.5°	15.4	17.6	25.0	30.5	30.1	23.8	23.8	20.5	18.0	14.9	11.7
51°	10.6	12.5	19.9	25.1	22.8	19.7	19.6	16.9	14.2	11.1	8.6
51.5°	7.7	9.4	14.8	19.7	18.9	15.4	15.4	13.3	10.4	7.1	5.5
52°	5.3	6.7	9.7	14.3	14.9	11.3	11.2	9.6	6.5	3.2	2.5
52.5°	3.3	4.5	6.6	8.9	10.9	7.1	6.9	6.0	2.8	2.1	1.7
53°	2.8	3.8	4.1	5.7	6.9	3.1	2.8	2.3	1.9	1.6	1.3
53.5°	2.2	3.1	3.4	3.3	3.1	2.0	1.9	1.7	1.5	1.2	1.0
54°	1.6	2.4	2.6	2.7	2.0	1.6	1.5	1.3	1.1	0.9	0.8
54.5°	1.0	1.7	1.9	2.1	1.6	1.2	1.1	1.0	0.8	0.7	0.6
55°	0.8	0.9	1.1	1.6	1.2	0.9	0.9	0.8	0.7	0.6	0.5
55.5°	0.6	0.7	0.8	0.9	0.9	0.7	0.7	0.6	0.5	0.5	0.4
56°	0.5	0.6	0.7	0.7	0.7	0.5	0.5	0.5	0.4	0.4	0.4
56.5°	0.4	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3
57°	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
57.5°	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
58°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
58.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
59°	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
59.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
60°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
60.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
61°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
61.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
62°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
62.5°	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
63°	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
63.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
66°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
71.5°	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
72°	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	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	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: P775882
CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	532.3	532.3	532.3	532.3	532.3	532.3
0.5°	532.0	531.9	532.3	532.5	532.5	532.1
1°	531.9	531.7	532.0	532.2	532.2	531.9
1.5°	531.7	531.4	531.7	531.9	531.9	531.7
2°	531.5	531.2	531.4	531.6	531.6	531.5
2.5°	531.4	530.9	531.2	531.3	531.4	531.3
3°	531.2	530.7	530.9	531.0	531.0	531.0
3.5°	530.9	530.3	530.4	530.7	530.7	530.8
4°	530.8	530.0	530.1	530.3	530.3	530.4
4.5°	530.4	529.6	529.8	530.0	530.0	530.1
5°	530.2	529.3	529.4	529.6	529.8	529.8
5.5°	529.9	529.0	529.1	529.3	529.4	529.5
6°	529.7	528.6	528.7	529.0	529.1	529.2
6.5°	529.4	528.2	528.4	528.6	528.8	528.9
7°	529.0	527.8	528.0	528.3	528.5	528.6
7.5°	528.7	527.3	527.5	527.9	528.1	528.2
8°	528.4	526.9	527.1	527.5	527.8	527.8
8.5°	528.0	526.4	526.6	527.1	527.3	527.3
9°	527.5	525.9	526.2	526.7	526.9	526.9
9.5°	527.2	525.4	525.7	526.3	526.5	526.4
10°	526.7	524.9	525.2	525.9	526.1	526.0
10.5°	526.3	524.2	524.6	525.4	525.6	525.5
11°	525.8	523.7	524.1	525.0	525.2	525.0
11.5°	525.3	523.0	523.5	524.4	524.6	524.4
12°	524.8	522.4	522.9	523.9	524.1	523.9
12.5°	524.1	521.7	522.2	523.3	523.6	523.3
13°	523.5	521.0	521.4	522.7	523.0	522.7
13.5°	522.8	520.3	520.8	522.1	522.3	522.1
14°	522.2	519.5	520.0	521.3	521.6	521.3
14.5°	521.3	518.6	519.2	520.5	520.9	520.7
15°	520.6	517.7	518.3	519.7	520.1	520.0
15.5°	519.8	516.8	517.3	518.8	519.3	519.2
16°	518.7	515.7	516.4	517.8	518.3	518.3
16.5°	517.8	514.7	515.3	516.8	517.4	517.5
17°	516.8	513.6	514.1	515.6	516.4	516.6
17.5°	515.6	512.3	512.9	514.4	515.2	515.5
18°	514.4	511.0	511.6	513.0	514.0	514.5
18.5°	513.0	509.7	510.2	511.6	512.6	513.5
19°	511.7	508.3	508.8	510.0	511.3	512.2
19.5°	510.2	506.6	507.2	508.4	509.7	511.0
20°	508.6	505.1	505.6	506.6	508.1	509.7
20.5°	506.9	503.3	503.8	504.8	506.3	508.3
21°	505.1	501.4	502.0	502.7	504.5	506.7

TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	499.0	495.1	495.5	495.8	498.1	501.5
23°	496.7	492.7	493.2	493.3	495.7	499.6
23.5°	494.1	490.3	490.6	490.7	493.2	497.4
24°	491.5	487.6	488.0	487.9	490.5	495.1
24.5°	488.7	484.7	485.1	484.9	487.7	492.7
25°	485.7	481.7	482.1	481.7	484.7	490.0
25.5°	482.6	478.4	478.8	478.4	481.4	487.4
26°	479.2	475.1	475.3	474.9	478.2	484.3
26.5°	475.6	471.5	471.8	471.4	474.7	481.2
27°	471.9	467.6	468.1	467.6	471.1	477.8
27.5°	467.9	463.5	464.1	463.6	467.1	474.2
28°	463.6	459.3	460.0	459.3	463.1	470.4
28.5°	459.2	454.7	455.6	455.1	458.8	466.3
29°	454.6	450.1	451.1	450.5	454.3	462.0
29.5°	449.7	445.1	446.4	445.9	449.8	457.6
30°	444.6	440.0	441.4	440.9	445.1	452.9
30.5°	439.0	434.3	436.3	436.1	440.1	448.0
31°	432.9	428.5	430.7	430.6	434.8	442.6
31.5°	426.4	422.0	424.8	425.0	429.1	437.0
32°	419.6	415.2	418.2	418.6	422.9	431.1
32.5°	412.1	407.8	411.5	411.9	416.3	424.8
33°	404.6	400.0	404.1	404.7	409.2	417.8
33.5°	396.1	391.6	396.7	397.5	402.2	410.7
34°	387.4	382.3	388.7	389.8	394.5	402.7
34.5°	377.8	372.4	380.1	381.2	386.2	394.3
35°	367.4	361.4	370.8	371.7	377.1	385.3
35.5°	355.6	349.2	360.1	361.6	367.2	376.0
36°	343.1	335.8	348.2	350.1	356.3	365.7
36.5°	329.1	321.7	334.8	337.4	344.0	353.7
37°	315.1	308.0	320.2	323.7	330.3	339.9
37.5°	300.2	294.8	304.5	309.4	315.5	325.1
38°	286.3	281.1	288.5	294.0	300.4	310.4
38.5°	271.9	267.5	273.4	278.7	285.2	295.3
39°	258.0	251.7	258.8	262.3	269.8	280.8
39.5°	243.7	235.7	244.8	246.7	254.1	266.5
40°	229.0	219.5	230.2	230.9	238.1	252.2
40.5°	213.6	205.5	215.0	215.1	222.9	237.4
41°	197.9	191.7	200.0	199.3	208.0	222.3
41.5°	182.0	178.2	185.2	183.6	193.2	207.7
42°	166.8	164.0	170.9	168.8	178.5	193.0
42.5°	151.5	149.7	157.1	154.7	163.5	178.8
43°	136.4	135.6	143.6	141.0	149.2	165.1
43.5°	122.0	121.6	130.2	127.8	135.3	151.2



TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	84.9	83.7	92.1	91.8	97.8	110.9
45.5°	72.4	71.8	80.5	81.4	86.5	97.8
46°	60.0	60.0	69.8	71.7	76.1	85.9
46.5°	50.4	49.5	60.0	62.5	66.5	74.2
47°	42.0	39.9	50.8	54.0	57.4	63.1
47.5°	34.4	34.4	42.3	46.0	49.1	52.7
48°	28.0	29.0	34.7	39.1	41.5	43.6
48.5°	22.3	23.6	29.4	33.7	34.6	35.4
49°	17.6	18.2	24.2	28.4	29.4	30.5
49.5°	14.6	12.8	19.2	23.2	24.2	25.5
50°	11.7	9.7	14.0	17.9	19.0	20.5
50.5°	8.8	7.1	10.4	12.6	13.9	15.4
51°	5.9	5.0	7.6	9.2	10.2	10.6
51.5°	3.0	3.1	5.1	6.2	7.0	7.7
52°	2.0	2.5	3.2	3.8	4.6	5.3
52.5°	1.5	2.0	2.6	3.1	3.8	3.3
53°	1.2	1.6	2.1	2.4	3.1	2.8
53.5°	0.9	1.0	1.6	1.8	2.4	2.2
54°	0.7	0.8	1.0	1.0	1.7	1.6
54.5°	0.6	0.6	0.8	0.8	0.9	1.0
55°	0.5	0.5	0.6	0.6	0.7	0.8
55.5°	0.4	0.4	0.5	0.5	0.6	0.6
56°	0.4	0.4	0.4	0.4	0.5	0.5
56.5°	0.3	0.3	0.4	0.4	0.4	0.4
57°	0.3	0.3	0.3	0.3	0.3	0.4
57.5°	0.3	0.3	0.3	0.3	0.3	0.3
58°	0.2	0.2	0.3	0.3	0.3	0.3
58.5°	0.2	0.2	0.2	0.3	0.3	0.3
59°	0.2	0.2	0.2	0.2	0.2	0.2
59.5°	0.2	0.2	0.2	0.2	0.2	0.2
60°	0.2	0.2	0.2	0.2	0.2	0.2
60.5°	0.2	0.2	0.2	0.2	0.2	0.2
61°	0.2	0.2	0.2	0.2	0.2	0.2
61.5°	0.2	0.2	0.2	0.2	0.2	0.2
62°	0.1	0.2	0.2	0.2	0.2	0.2
62.5°	0.1	0.1	0.2	0.2	0.2	0.2
63°	0.1	0.1	0.1	0.1	0.1	0.1
63.5°	0.1	0.1	0.1	0.1	0.1	0.1
64°	0.1	0.1	0.1	0.1	0.1	0.1
64.5°	0.1	0.1	0.1	0.1	0.1	0.1
65°	0.1	0.1	0.1	0.1	0.1	0.1
65.5°	0.1	0.1	0.1	0.1	0.1	0.1
66°	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P775882

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.1	0.1	0.1	0.1	0.1	0.1
68°	0.1	0.1	0.1	0.1	0.1	0.1
68.5°	0.1	0.1	0.1	0.1	0.1	0.1
69°	0.1	0.1	0.1	0.1	0.1	0.1
69.5°	0.1	0.1	0.1	0.1	0.1	0.1
70°	0.1	0.1	0.1	0.1	0.1	0.1
70.5°	0.1	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°	0.0	0.1	0.1	0.1	0.1	0.1
72°	0.0	0.0	0.1	0.1	0.1	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0
73°	0.0	0.0	0.0	0.0	0.0	0.0
73.5°	0.0	0.0	0.0	0.0	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0
74.5°	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	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: P775882
CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

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



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°	505.2	509.2	515.0	520.5	524.4	526.6	527.4	525.4	521.3	515.7	509.4
22°	503.4	507.7	513.5	518.9	523.2	525.2	525.9	523.8	519.6	513.9	507.4



44°	137.4	152.5	166.1	177.8	186.3	180.4	179.5	171.8	156.8	136.4	119.8
44.5°	123.9	138.0	150.1	162.7	171.8	165.6	164.5	157.1	143.1	123.7	107.9



66.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
67°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



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



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

Scaled Data Report



21.5°	503.2	499.5	500.0	500.6	502.5	505.2
22°	501.1	497.4	497.8	498.3	500.4	503.4



44°	109.6	108.4	117.3	114.9	122.0	137.4
44.5°	97.3	95.9	104.3	103.0	109.6	123.9

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

Scaled Data Report



66.5°	0.1	0.1	0.1	0.1	0.1	0.1
67°	0.1	0.1	0.1	0.1	0.1	0.1

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)