

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: P775883

Luminaire Tested: HCDJBL510CSD-HCD8TRMB-1000lm-4000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P775883  
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-4000K  
Description: 8 INCH ROUND MEDIUM MATTE BLACK TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

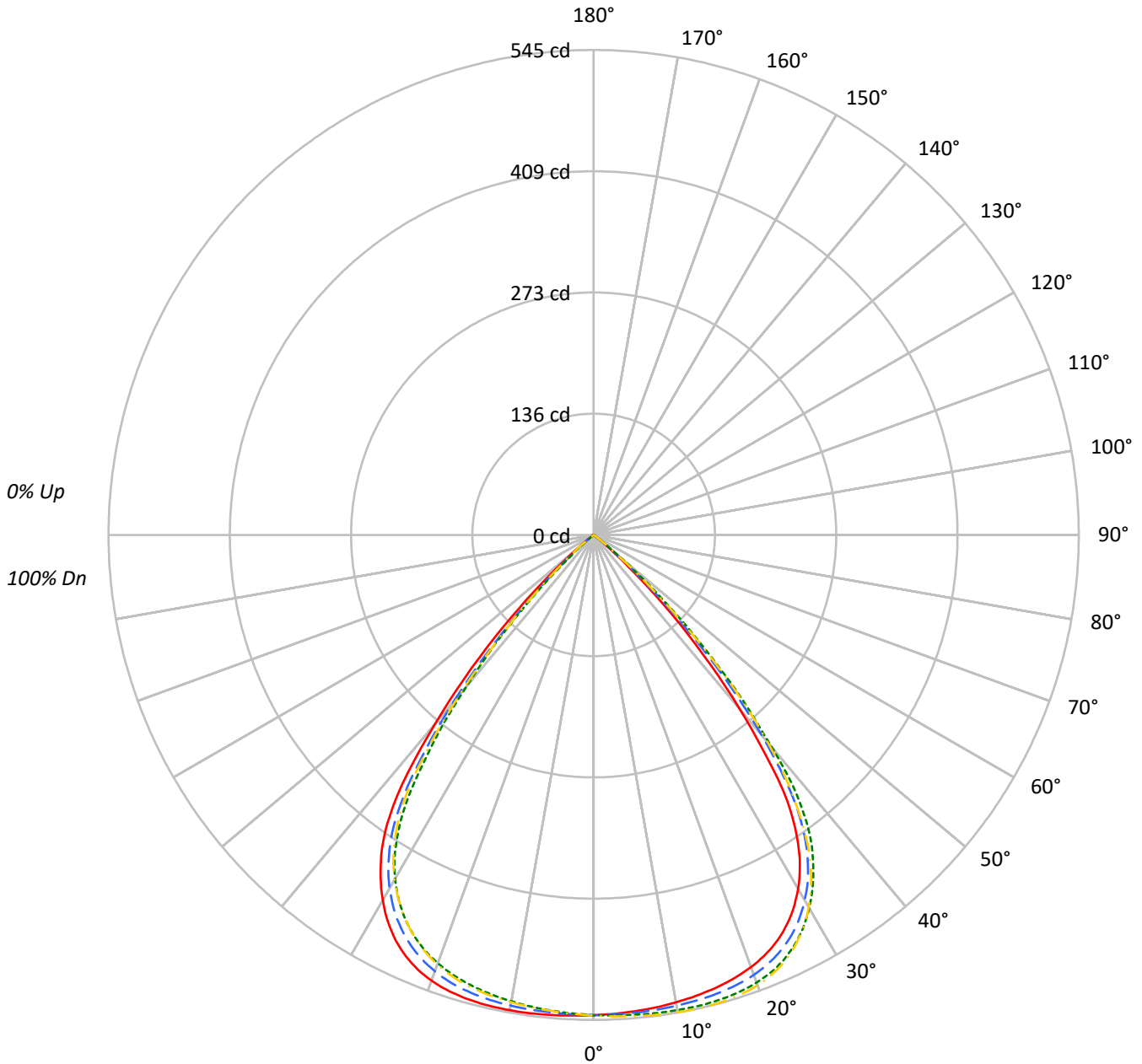
Lumens per Lamp: N/A  
Luminaire Lumens: 774.7 lumens  
Efficiency: N/A  
Efficacy: 77.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

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



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20										
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°	16480	16480	16480	16480
5°	16467	16586	16598	16448
10°	16536	16812	16815	16499
15°	16667	17106	17087	16594
20°	16794	17395	17314	16638
25°	16739	17477	17285	16452
30°	16188	17073	16707	15730
35°	14562	15926	15236	13656
40°	10191	12375	11052	8872
45°	4853	6921	5652	3666
50°	988	1857	1054	470
55°	43	69	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: 6921 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.4	6.6
10°-20°	150.9	19.5
20°-30°	231.2	29.8
30°-40°	240.6	31.1
40°-50°	97.1	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°	433.6	56.0
0°-40°	674.1	87.0
0°-60°	774.6	100.0
0°-90°	774.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	774.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	540	540	540	540	540	
5°	537	541	542	537	537	51
15°	527	541	541	525	527	149
25°	497	519	513	488	497	228
35°	391	427	409	366	391	235
45°	112	160	131	85	112	90
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8	539.8
0.5°	539.6	539.4	539.6	539.7	539.8	540.3	540.5	540.5	540.0	539.7	539.6
1°	539.4	539.4	539.6	539.8	540.0	540.6	540.8	540.7	540.2	539.8	539.5
1.5°	539.1	539.1	539.6	539.9	540.2	540.8	541.1	541.0	540.4	539.8	539.5
2°	538.9	539.0	539.5	540.0	540.4	541.0	541.3	541.2	540.5	539.9	539.5
2.5°	538.7	538.8	539.5	540.1	540.5	541.2	541.7	541.5	540.7	540.0	539.4
3°	538.4	538.7	539.4	540.1	540.6	541.6	541.9	541.8	540.9	540.1	539.2
3.5°	538.2	538.5	539.4	540.1	540.8	541.7	542.1	542.0	541.1	540.1	539.1
4°	537.9	538.3	539.1	540.2	540.9	541.9	542.4	542.2	541.3	540.1	539.1
4.5°	537.6	538.1	539.0	540.2	541.0	542.2	542.6	542.4	541.5	540.2	538.9
5°	537.3	537.9	538.9	540.2	541.2	542.4	542.8	542.7	541.6	540.2	538.8
5.5°	536.9	537.6	538.8	540.3	541.3	542.6	543.1	542.9	541.8	540.2	538.7
6°	536.6	537.4	538.7	540.3	541.5	542.8	543.3	543.0	541.9	540.3	538.6
6.5°	536.3	537.0	538.5	540.3	541.7	543.0	543.6	543.2	542.0	540.3	538.5
7°	536.0	536.7	538.4	540.3	541.8	543.1	543.8	543.5	542.1	540.2	538.3
7.5°	535.6	536.4	538.3	540.4	541.9	543.3	544.0	543.7	542.2	540.2	538.2
8°	535.2	536.1	538.1	540.3	542.0	543.6	544.2	543.8	542.3	540.3	538.0
8.5°	534.7	535.7	537.9	540.4	542.1	543.7	544.3	544.0	542.3	540.2	537.8
9°	534.3	535.4	537.7	540.3	542.2	543.8	544.5	544.1	542.4	540.1	537.7
9.5°	533.8	534.9	537.5	540.3	542.2	543.9	544.6	544.2	542.4	540.1	537.4
10°	533.4	534.5	537.3	540.2	542.3	544.0	544.7	544.3	542.4	540.0	537.1
10.5°	532.8	534.1	537.0	540.2	542.3	544.1	544.8	544.3	542.4	539.9	536.8
11°	532.3	533.7	536.7	540.1	542.3	544.2	544.9	544.4	542.3	539.7	536.5
11.5°	531.8	533.2	536.4	540.0	542.3	544.2	544.9	544.4	542.3	539.5	536.2
12°	531.3	532.6	536.2	539.9	542.3	544.2	545.0	544.4	542.2	539.2	535.8
12.5°	530.6	532.2	535.9	539.8	542.2	544.2	545.0	544.3	542.0	539.0	535.5
13°	530.0	531.6	535.5	539.6	542.1	544.2	544.9	544.3	541.9	538.7	534.9
13.5°	529.4	531.1	535.2	539.4	541.9	544.2	544.8	544.2	541.7	538.3	534.5
14°	528.6	530.5	534.7	539.1	541.7	544.0	544.7	544.1	541.3	538.0	533.9
14.5°	528.0	529.9	534.3	538.8	541.6	543.9	544.6	543.9	541.0	537.6	533.4
15°	527.3	529.3	533.8	538.5	541.2	543.7	544.4	543.7	540.6	537.0	532.7
15.5°	526.4	528.6	533.3	538.1	541.0	543.5	544.1	543.3	540.2	536.5	532.0
16°	525.6	527.9	532.7	537.7	540.6	543.1	543.8	542.9	539.7	535.9	531.3
16.5°	524.8	527.2	532.1	537.3	540.2	542.7	543.5	542.5	539.1	535.2	530.4
17°	523.8	526.3	531.5	536.6	539.8	542.3	542.9	541.9	538.5	534.4	529.5
17.5°	522.8	525.5	530.7	536.0	539.2	541.8	542.4	541.3	537.9	533.6	528.4
18°	521.7	524.6	529.9	535.3	538.6	541.1	541.9	540.6	537.0	532.6	527.3
18.5°	520.7	523.6	529.2	534.5	538.0	540.4	541.1	539.8	536.2	531.6	526.1
19°	519.4	522.7	528.2	533.7	537.1	539.6	540.4	538.9	535.2	530.4	524.9
19.5°	518.1	521.5	527.2	532.6	536.3	538.7	539.6	537.9	534.1	529.2	523.4
20°	516.9	520.3	526.1	531.6	535.4	537.8	538.5	536.8	532.9	527.8	521.8
20.5°	515.4	519.1	524.9	530.4	534.3	536.6	537.5	535.6	531.6	526.3	520.1
21°	513.8	517.7	523.6	529.2	533.1	535.4	536.2	534.3	530.2	524.6	518.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	508.6	513.1	519.0	524.6	529.0	530.8	531.6	529.4	525.0	519.1	512.2
23°	506.6	511.3	517.2	522.9	527.3	529.1	529.8	527.5	523.0	516.9	509.9
23.5°	504.4	509.4	515.3	520.9	525.3	527.1	527.8	525.3	520.8	514.5	507.5
24°	502.1	507.3	513.2	518.9	523.5	525.0	525.7	523.1	518.4	512.0	504.9
24.5°	499.6	505.2	511.0	516.6	521.4	522.7	523.2	520.7	515.8	509.3	502.1
25°	496.9	502.8	508.7	514.1	518.8	520.2	520.8	518.0	513.1	506.5	499.1
25.5°	494.2	500.3	506.1	511.6	516.3	517.5	517.9	515.2	510.1	503.4	496.1
26°	491.1	497.4	503.3	508.9	513.7	514.7	515.0	512.1	507.0	500.2	492.7
26.5°	488.0	494.6	500.5	505.9	510.8	511.4	511.7	508.9	503.6	496.7	489.1
27°	484.5	491.3	497.3	502.9	507.4	508.2	508.3	505.4	500.1	493.1	485.5
27.5°	480.8	488.1	494.0	499.6	504.3	504.7	504.7	501.7	496.3	489.2	481.4
28°	477.0	484.4	490.4	496.1	500.7	500.8	500.9	497.8	492.3	485.1	477.3
28.5°	472.9	480.5	486.7	492.5	496.9	496.8	496.7	493.5	488.0	480.7	473.0
29°	468.4	476.4	482.7	488.6	492.9	492.6	492.5	489.1	483.6	476.3	468.3
29.5°	464.0	472.2	478.6	484.5	488.8	488.1	487.9	484.5	478.8	471.6	463.5
30°	459.2	467.6	474.2	480.3	484.3	483.4	483.0	479.7	473.9	466.8	458.5
30.5°	454.3	462.8	469.6	475.8	479.8	478.4	478.0	474.5	468.8	461.6	453.2
31°	448.8	457.5	464.8	471.0	474.8	473.1	472.5	469.1	463.4	456.2	447.5
31.5°	443.1	452.2	459.7	466.0	469.7	467.7	467.1	463.4	457.8	450.5	441.5
32°	437.1	446.3	454.2	461.0	464.4	462.0	460.9	457.4	451.8	444.6	435.1
32.5°	430.7	440.0	448.3	455.4	459.1	455.8	454.5	451.0	445.5	438.4	428.1
33°	423.7	433.4	442.1	449.7	453.1	449.4	447.9	444.2	439.0	431.8	421.0
33.5°	416.4	426.1	435.3	443.8	447.1	442.8	440.7	437.1	432.3	424.8	413.3
34°	408.3	418.8	428.6	437.5	440.8	435.9	433.2	429.6	425.1	417.4	405.1
34.5°	399.8	410.7	421.1	430.8	434.2	428.3	425.2	421.6	417.2	409.2	396.2
35°	390.7	401.8	413.3	423.6	427.3	420.2	416.4	413.0	408.8	400.1	385.9
35.5°	381.2	392.3	404.7	415.8	419.6	411.2	407.3	403.6	399.5	389.9	375.0
36°	370.8	382.1	395.7	407.3	411.5	401.9	397.6	393.6	389.4	379.1	363.5
36.5°	358.7	371.1	385.7	397.6	402.6	391.5	387.2	383.2	378.5	367.3	350.7
37°	344.7	358.2	374.6	387.7	392.5	381.2	376.7	372.3	366.6	354.5	337.2
37.5°	329.7	344.0	362.8	376.5	382.0	369.8	365.8	361.1	353.4	340.0	322.7
38°	314.7	329.5	350.1	365.5	370.8	358.0	354.8	349.2	338.9	324.5	308.2
38.5°	299.4	315.3	336.8	352.6	358.7	345.2	343.2	337.0	323.6	308.8	293.0
39°	284.7	301.8	322.8	339.7	344.0	332.2	331.0	324.1	307.9	292.3	277.1
39.5°	270.2	288.1	308.1	325.5	327.2	318.1	317.4	310.4	292.3	276.1	261.0
40°	255.7	274.6	293.0	311.0	310.5	303.5	303.9	295.9	277.3	260.1	244.9
40.5°	240.7	259.8	278.0	294.8	294.6	288.1	290.8	281.3	262.8	244.4	227.8
41°	225.4	244.4	262.8	278.4	280.0	272.9	276.3	266.4	248.1	229.0	211.2
41.5°	210.6	228.4	247.3	261.9	265.5	257.2	261.5	250.9	233.2	213.4	195.0
42°	195.7	213.3	232.0	245.1	250.7	242.5	246.2	235.4	217.8	197.9	180.2
42.5°	181.3	198.3	216.5	228.2	235.7	227.7	230.6	220.1	202.9	182.5	164.2
43°	167.5	183.5	200.9	212.1	219.7	212.9	214.3	204.2	187.5	166.9	149.7
43.5°	153.3	169.0	184.8	195.7	204.0	197.9	198.7	188.9	173.1	152.2	135.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	112.4	125.2	136.9	150.6	160.3	153.1	150.8	144.6	130.9	113.6	97.4
45.5°	99.2	111.3	122.2	136.4	146.1	138.7	136.2	129.8	117.6	101.6	85.3
46°	87.1	97.9	108.4	123.3	132.2	124.6	121.2	115.9	105.0	89.7	73.2
46.5°	75.2	85.1	95.4	110.4	117.9	111.8	108.8	103.2	92.3	77.8	61.2
47°	64.0	73.0	83.1	98.0	105.7	98.9	96.4	90.6	79.7	65.9	51.9
47.5°	53.5	61.2	72.0	86.0	93.5	85.9	84.0	78.0	67.1	55.6	43.4
48°	44.2	50.7	61.5	74.3	81.3	73.0	71.6	65.2	56.3	46.1	35.8
48.5°	35.9	41.3	52.0	63.5	69.1	60.1	59.3	54.5	46.3	37.5	29.0
49°	30.9	33.6	43.6	53.6	58.6	49.1	49.6	44.3	37.2	29.7	23.2
49.5°	25.8	28.4	35.7	44.6	48.4	39.7	40.1	35.5	29.2	23.0	18.1
50°	20.8	23.1	30.5	36.5	39.1	31.5	31.5	27.7	22.2	19.1	14.9
50.5°	15.7	17.9	25.3	30.9	30.6	24.2	24.2	20.8	18.3	15.1	11.9
51°	10.7	12.7	20.2	25.4	23.1	20.0	19.9	17.1	14.4	11.2	8.7
51.5°	7.8	9.6	15.0	20.0	19.1	15.7	15.7	13.4	10.5	7.2	5.6
52°	5.4	6.8	9.9	14.5	15.1	11.5	11.3	9.8	6.6	3.3	2.5
52.5°	3.4	4.5	6.7	9.0	11.0	7.2	7.0	6.1	2.8	2.1	1.7
53°	2.8	3.9	4.2	5.8	7.0	3.2	2.8	2.3	1.9	1.6	1.4
53.5°	2.2	3.2	3.5	3.4	3.2	2.0	1.9	1.7	1.5	1.3	1.1
54°	1.6	2.4	2.6	2.7	2.0	1.6	1.5	1.4	1.2	0.9	0.8
54.5°	1.1	1.7	1.9	2.1	1.6	1.3	1.2	1.1	0.8	0.7	0.6
55°	0.8	0.9	1.2	1.6	1.3	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: P775883

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-4000K

**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: P775883

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-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: P775883

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	539.8	539.8	539.8	539.8	539.8	539.8
0.5°	539.5	539.4	539.8	540.0	540.0	539.6
1°	539.4	539.1	539.5	539.7	539.7	539.4
1.5°	539.1	538.8	539.1	539.4	539.4	539.1
2°	538.9	538.6	538.8	539.0	539.0	538.9
2.5°	538.8	538.3	538.6	538.7	538.8	538.7
3°	538.6	538.1	538.3	538.4	538.4	538.4
3.5°	538.3	537.8	537.9	538.1	538.1	538.2
4°	538.2	537.5	537.6	537.8	537.8	537.9
4.5°	537.9	537.0	537.3	537.5	537.5	537.6
5°	537.7	536.7	536.8	537.0	537.3	537.3
5.5°	537.4	536.4	536.5	536.7	536.8	536.9
6°	537.1	536.0	536.1	536.4	536.5	536.6
6.5°	536.8	535.6	535.8	536.0	536.2	536.3
7°	536.4	535.2	535.4	535.7	535.9	536.0
7.5°	536.1	534.7	534.9	535.3	535.5	535.6
8°	535.8	534.3	534.5	534.9	535.2	535.2
8.5°	535.4	533.8	534.0	534.5	534.7	534.7
9°	534.9	533.3	533.6	534.1	534.3	534.3
9.5°	534.6	532.7	533.1	533.7	533.9	533.8
10°	534.1	532.2	532.5	533.3	533.5	533.4
10.5°	533.7	531.6	532.0	532.7	532.9	532.8
11°	533.2	531.1	531.5	532.3	532.5	532.3
11.5°	532.6	530.3	530.8	531.8	532.0	531.8
12°	532.1	529.7	530.2	531.3	531.5	531.3
12.5°	531.5	529.1	529.5	530.6	530.9	530.6
13°	530.8	528.3	528.7	530.0	530.3	530.0
13.5°	530.1	527.6	528.1	529.4	529.6	529.4
14°	529.5	526.7	527.3	528.6	529.0	528.6
14.5°	528.6	525.9	526.4	527.8	528.2	528.0
15°	527.9	525.0	525.6	527.0	527.4	527.3
15.5°	527.1	524.0	524.5	526.1	526.5	526.4
16°	526.0	523.0	523.6	525.1	525.6	525.6
16.5°	525.1	521.9	522.5	524.0	524.6	524.8
17°	524.0	520.8	521.3	522.9	523.6	523.8
17.5°	522.9	519.5	520.1	521.6	522.4	522.8
18°	521.6	518.1	518.8	520.2	521.2	521.7
18.5°	520.2	516.9	517.4	518.8	519.8	520.7
19°	518.9	515.4	515.9	517.2	518.4	519.4
19.5°	517.4	513.7	514.4	515.5	516.9	518.1
20°	515.7	512.1	512.7	513.7	515.2	516.9
20.5°	514.0	510.4	510.9	511.8	513.4	515.4
21°	512.1	508.5	509.0	509.7	511.6	513.8

TEST NUMBER: P775883

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	505.9	502.1	502.5	502.8	505.1	508.6
23°	503.6	499.6	500.1	500.2	502.7	506.6
23.5°	501.0	497.1	497.4	497.5	500.1	504.4
24°	498.4	494.4	494.8	494.7	497.3	502.1
24.5°	495.5	491.4	491.9	491.7	494.5	499.6
25°	492.5	488.4	488.8	488.4	491.4	496.9
25.5°	489.3	485.1	485.5	485.1	488.2	494.2
26°	485.9	481.8	482.0	481.6	484.9	491.1
26.5°	482.3	478.1	478.4	478.0	481.4	488.0
27°	478.5	474.1	474.6	474.1	477.7	484.5
27.5°	474.4	470.0	470.6	470.1	473.7	480.8
28°	470.1	465.7	466.4	465.7	469.6	477.0
28.5°	465.6	461.1	462.0	461.5	465.2	472.9
29°	461.0	456.4	457.4	456.8	460.7	468.4
29.5°	456.0	451.3	452.7	452.2	456.2	464.0
30°	450.8	446.2	447.5	447.1	451.3	459.2
30.5°	445.1	440.4	442.4	442.2	446.3	454.3
31°	438.9	434.5	436.7	436.6	440.9	448.8
31.5°	432.4	427.9	430.7	430.9	435.1	443.1
32°	425.5	421.1	424.1	424.4	428.8	437.1
32.5°	417.9	413.5	417.3	417.7	422.1	430.7
33°	410.2	405.6	409.7	410.3	415.0	423.7
33.5°	401.6	397.1	402.3	403.1	407.8	416.4
34°	392.8	387.7	394.2	395.2	400.1	408.3
34.5°	383.1	377.6	385.4	386.5	391.6	399.8
35°	372.5	366.4	376.0	376.9	382.4	390.7
35.5°	360.5	354.1	365.2	366.6	372.3	381.2
36°	347.9	340.5	353.1	355.0	361.3	370.8
36.5°	333.8	326.2	339.5	342.2	348.8	358.7
37°	319.5	312.3	324.7	328.2	334.9	344.7
37.5°	304.5	298.9	308.8	313.7	319.9	329.7
38°	290.3	285.0	292.6	298.1	304.7	314.7
38.5°	275.7	271.3	277.2	282.6	289.2	299.4
39°	261.6	255.2	262.4	266.0	273.6	284.7
39.5°	247.1	239.0	248.2	250.1	257.7	270.2
40°	232.2	222.6	233.4	234.2	241.4	255.7
40.5°	216.6	208.4	218.0	218.1	226.0	240.7
41°	200.7	194.4	202.8	202.1	211.0	225.4
41.5°	184.6	180.7	187.8	186.2	195.9	210.6
42°	169.1	166.3	173.3	171.1	181.0	195.7
42.5°	153.6	151.8	159.3	156.8	165.8	181.3
43°	138.4	137.5	145.6	143.0	151.3	167.5
43.5°	123.8	123.3	132.1	129.6	137.2	153.3



TEST NUMBER: P775883

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	86.0	84.9	93.4	93.1	99.2	112.4
45.5°	73.4	72.8	81.6	82.6	87.7	99.2
46°	60.8	60.8	70.8	72.7	77.2	87.1
46.5°	51.1	50.2	60.8	63.3	67.4	75.2
47°	42.5	40.4	51.5	54.7	58.2	64.0
47.5°	34.9	34.9	42.9	46.6	49.8	53.5
48°	28.4	29.4	35.2	39.6	42.1	44.2
48.5°	22.6	24.0	29.8	34.1	35.1	35.9
49°	17.9	18.5	24.6	28.8	29.8	30.9
49.5°	14.8	13.0	19.4	23.5	24.6	25.8
50°	11.9	9.9	14.2	18.2	19.2	20.8
50.5°	8.9	7.2	10.5	12.8	14.1	15.7
51°	6.0	5.0	7.7	9.3	10.3	10.7
51.5°	3.0	3.2	5.1	6.3	7.1	7.8
52°	2.0	2.5	3.3	3.9	4.6	5.4
52.5°	1.5	2.0	2.6	3.2	3.9	3.4
53°	1.3	1.6	2.1	2.4	3.2	2.8
53.5°	0.9	1.1	1.6	1.8	2.4	2.2
54°	0.7	0.8	1.1	1.1	1.7	1.6
54.5°	0.6	0.6	0.8	0.8	0.9	1.1
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: P775883

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-1000lm-4000K

**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: P775883  
CATALOG NUMBER: HCDJBL510CSD-HCD8TRMB-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

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Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9



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

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21.5°	512.2	516.3	522.2	527.8	531.8	534.0	534.8	532.7	528.6	523.0	516.6
22°	510.5	514.8	520.7	526.2	530.5	532.5	533.3	531.2	526.9	521.1	514.6



44°	139.3	154.6	168.4	180.3	188.9	182.9	182.1	174.2	158.9	138.4	121.4
44.5°	125.6	139.9	152.2	164.9	174.2	167.9	166.8	159.3	145.1	125.4	109.4



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



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21.5°	510.3	506.5	507.0	507.6	509.5	512.2
22°	508.2	504.4	504.8	505.3	507.4	510.5



44°	111.1	109.9	118.9	116.5	123.8	139.3
44.5°	98.6	97.3	105.8	104.4	111.1	125.6

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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

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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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(END OF REPORT)