

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: P775909

Luminaire Tested: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P775909  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B024-HCD8TSQMB)  
Test Lab:  
Issue Date: 2/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K  
Description: 8 INCH SQUARE MEDIUM MATTE BLACK TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 781.9 lumens  
Efficiency: N/A  
Efficacy: 78.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.28  
Luminous Opening: Rectangular (W 0.67' x L: 0.67' x H: 0')  
CIE Type: Direct

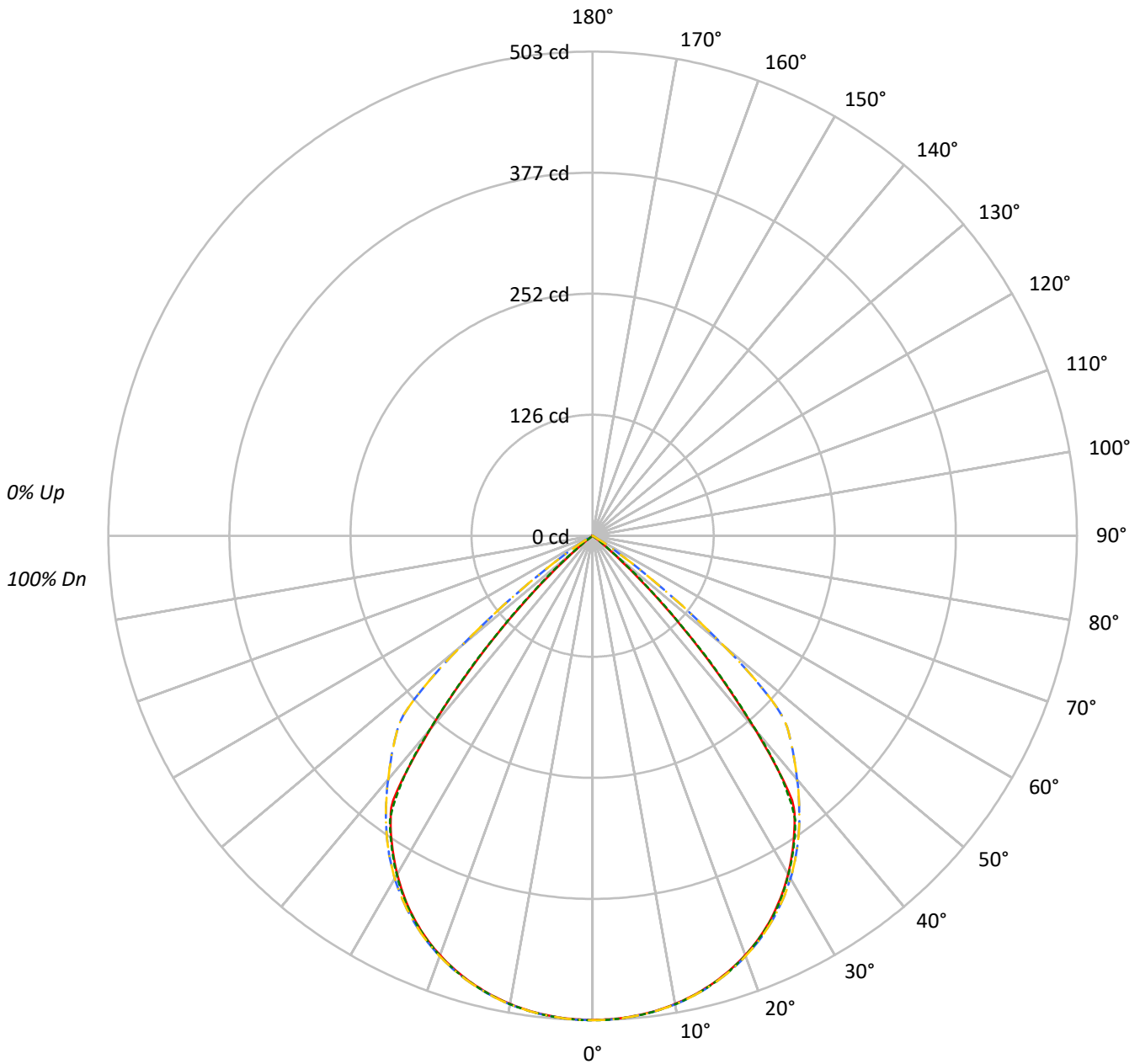
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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				
RW	70	50	30	10	70	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		
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92		
2	106	101	96	92	104	99	95	91	96	92	89	92	90	87	90	87	85	84		
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	77	76		
4	93	85	78	73	91	84	78	73	81	76	72	79	75	71	77	74	70	69		
5	88	78	71	66	86	77	71	66	75	70	65	73	68	65	72	67	64	62		
6	82	72	65	60	81	71	64	60	69	64	59	68	63	59	67	62	58	57		
7	77	66	59	55	76	66	59	54	64	58	54	63	58	54	62	57	53	52		
8	72	62	55	50	71	61	54	50	60	54	50	59	53	49	58	53	49	47		
9	68	57	50	46	67	57	50	46	56	50	45	55	49	45	54	49	45	44		
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	12066	12066	12066	12066
5°	12052	12059	12052	12059
10°	12023	12031	12023	12031
15°	11953	11965	11953	11965
20°	11830	11843	11830	11843
25°	11609	11623	11609	11623
30°	11239	11261	11239	11261
35°	10708	10740	10708	10740
40°	8207	8276	8207	8276
45°	4069	4174	4069	4174
50°	895	1089	895	1089
55°	13	17	13	17
60°	10	14	10	14
65°	11	11	11	11
70°	7	7	7	7
75°	9	9	9	9
80°	0	0	0	0
85°	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9749 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.6	6.1
10°-20°	135.9	17.4
20°-30°	202.4	25.9
30°-40°	228.9	29.3
40°-50°	146.1	18.7
50°-60°	20.7	2.6
60°-70°	0.2	0.0
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°	385.9	49.4
0°-40°	614.8	78.6
0°-60°	781.6	100.0
0°-90°	781.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	781.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	503	503	503	503	503	
5°	501	501	501	501	501	48
15°	482	482	482	482	482	136
25°	439	439	439	439	439	202
35°	366	367	366	367	366	222
45°	120	123	120	123	120	96
55°	0	0	0	0	0	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°	503.2	503.2	503.2	503.2	503.2	503.2	503.2	503.2	503.2	503.2	503.2
0.5°	503.0	503.1	503.2	503.3	503.3	503.3	503.2	503.1	503.0	503.1	503.2
1°	502.9	503.0	503.1	503.2	503.2	503.2	503.1	503.0	502.9	503.0	503.1
1.5°	502.7	502.9	503.0	503.1	503.1	503.1	503.0	502.9	502.7	502.9	503.0
2°	502.6	502.6	502.9	503.0	502.9	503.0	502.9	502.6	502.6	502.6	502.9
2.5°	502.4	502.5	502.6	502.7	502.7	502.7	502.6	502.5	502.4	502.5	502.6
3°	502.2	502.2	502.4	502.5	502.4	502.5	502.4	502.2	502.2	502.2	502.4
3.5°	501.9	502.0	502.1	502.2	502.2	502.2	502.1	502.0	501.9	502.0	502.1
4°	501.6	501.7	501.8	501.9	501.8	501.9	501.8	501.7	501.6	501.7	501.8
4.5°	501.1	501.3	501.4	501.5	501.5	501.5	501.4	501.3	501.1	501.3	501.4
5°	500.7	500.8	501.0	501.0	501.0	501.0	501.0	500.8	500.7	500.8	501.0
5.5°	500.3	500.4	500.5	500.6	500.5	500.6	500.5	500.4	500.3	500.4	500.5
6°	499.8	499.9	500.0	500.1	500.1	500.1	500.0	499.9	499.8	499.9	500.0
6.5°	499.2	499.3	499.4	499.5	499.4	499.5	499.4	499.3	499.2	499.3	499.4
7°	498.6	498.7	498.9	498.9	498.9	498.9	498.9	498.7	498.6	498.7	498.9
7.5°	497.9	498.1	498.2	498.3	498.2	498.3	498.2	498.1	497.9	498.1	498.2
8°	497.2	497.3	497.5	497.5	497.5	497.5	497.5	497.3	497.2	497.3	497.5
8.5°	496.5	496.6	496.8	496.8	496.7	496.8	496.8	496.6	496.5	496.6	496.8
9°	495.6	495.7	495.9	496.0	495.9	496.0	495.9	495.7	495.6	495.7	495.9
9.5°	494.8	494.9	495.1	495.2	495.0	495.2	495.1	494.9	494.8	494.9	495.1
10°	493.8	494.0	494.2	494.2	494.1	494.2	494.2	494.0	493.8	494.0	494.2
10.5°	492.8	493.0	493.3	493.3	493.2	493.3	493.3	493.0	492.8	493.0	493.3
11°	491.8	492.0	492.3	492.2	492.1	492.2	492.3	492.0	491.8	492.0	492.3
11.5°	490.7	490.9	491.2	491.1	491.0	491.1	491.2	490.9	490.7	490.9	491.2
12°	489.5	489.7	490.1	490.1	489.8	490.1	490.1	489.7	489.5	489.7	490.1
12.5°	488.4	488.6	488.9	488.9	488.7	488.9	488.9	488.6	488.4	488.6	488.9
13°	487.1	487.4	487.7	487.7	487.5	487.7	487.7	487.4	487.1	487.4	487.7
13.5°	485.8	486.1	486.4	486.4	486.2	486.4	486.4	486.1	485.8	486.1	486.4
14°	484.4	484.7	485.1	485.1	484.8	485.1	485.1	484.7	484.4	484.7	485.1
14.5°	483.0	483.3	483.7	483.7	483.5	483.7	483.7	483.3	483.0	483.3	483.7
15°	481.5	481.9	482.3	482.2	482.0	482.2	482.3	481.9	481.5	481.9	482.3
15.5°	480.0	480.4	480.8	480.7	480.5	480.7	480.8	480.4	480.0	480.4	480.8
16°	478.4	478.8	479.2	479.2	478.9	479.2	479.2	478.8	478.4	478.8	479.2
16.5°	476.8	477.2	477.6	477.6	477.3	477.6	477.6	477.2	476.8	477.2	477.6
17°	475.0	475.5	476.0	475.9	475.6	475.9	476.0	475.5	475.0	475.5	476.0
17.5°	473.3	473.8	474.2	474.2	473.9	474.2	474.2	473.8	473.3	473.8	474.2
18°	471.5	471.9	472.5	472.4	471.9	472.4	472.5	471.9	471.5	471.9	472.5
18.5°	469.6	470.1	470.6	470.5	470.0	470.5	470.6	470.1	469.6	470.1	470.6
19°	467.7	468.2	468.6	468.5	468.1	468.5	468.6	468.2	467.7	468.2	468.6
19.5°	465.7	466.2	466.7	466.6	466.2	466.6	466.7	466.2	465.7	466.2	466.7
20°	463.6	464.2	464.7	464.6	464.1	464.6	464.7	464.2	463.6	464.2	464.7
20.5°	461.4	462.0	462.7	462.5	461.9	462.5	462.7	462.0	461.4	462.0	462.7
21°	459.2	459.9	460.5	460.3	459.7	460.3	460.5	459.9	459.2	459.9	460.5



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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°	452.1	453.0	453.7	453.4	452.7	453.4	453.7	453.0	452.1	453.0	453.7
23°	449.6	450.5	451.4	450.9	450.1	450.9	451.4	450.5	449.6	450.5	451.4
23.5°	447.0	448.1	448.9	448.4	447.5	448.4	448.9	448.1	447.0	448.1	448.9
24°	444.4	445.4	446.4	445.8	444.9	445.8	446.4	445.4	444.4	445.4	446.4
24.5°	441.7	442.7	443.8	443.2	442.2	443.2	443.8	442.7	441.7	442.7	443.8
25°	438.8	440.1	441.1	440.4	439.3	440.4	441.1	440.1	438.8	440.1	441.1
25.5°	435.8	437.3	438.5	437.6	436.5	437.6	438.5	437.3	435.8	437.3	438.5
26°	432.9	434.4	435.7	434.7	433.6	434.7	435.7	434.4	432.9	434.4	435.7
26.5°	429.7	431.4	432.8	431.8	430.5	431.8	432.8	431.4	429.7	431.4	432.8
27°	426.6	428.4	429.9	428.7	427.3	428.7	429.9	428.4	426.6	428.4	429.9
27.5°	423.4	425.3	427.0	425.6	424.1	425.6	427.0	425.3	423.4	425.3	427.0
28°	420.0	422.1	423.9	422.4	420.8	422.4	423.9	422.1	420.0	422.1	423.9
28.5°	416.6	418.8	420.8	419.2	417.4	419.2	420.8	418.8	416.6	418.8	420.8
29°	413.1	415.3	417.6	415.8	414.0	415.8	417.6	415.3	413.1	415.3	417.6
29.5°	409.6	411.9	414.3	412.4	410.3	412.4	414.3	411.9	409.6	411.9	414.3
30°	405.9	408.4	411.0	409.0	406.7	409.0	411.0	408.4	405.9	408.4	411.0
30.5°	402.1	404.9	407.6	405.3	403.1	405.3	407.6	404.9	402.1	404.9	407.6
31°	398.4	401.2	404.1	401.7	399.4	401.7	404.1	401.2	398.4	401.2	404.1
31.5°	394.6	397.5	400.5	398.1	395.4	398.1	400.5	397.5	394.6	397.5	400.5
32°	390.7	393.8	396.9	394.4	391.6	394.4	396.9	393.8	390.7	393.8	396.9
32.5°	386.8	390.0	393.2	390.5	387.6	390.5	393.2	390.0	386.8	390.0	393.2
33°	382.7	386.1	389.4	386.7	383.7	386.7	389.4	386.1	382.7	386.1	389.4
33.5°	378.6	382.2	385.5	382.8	379.6	382.8	385.5	382.2	378.6	382.2	385.5
34°	374.3	378.4	381.6	378.9	375.5	378.9	381.6	378.4	374.3	378.4	381.6
34.5°	370.1	374.3	377.6	374.8	371.2	374.8	377.6	374.3	370.1	374.3	377.6
35°	365.8	370.3	373.5	370.8	366.9	370.8	373.5	370.3	365.8	370.3	373.5
35.5°	361.3	366.2	369.4	366.7	362.4	366.7	369.4	366.2	361.3	366.2	369.4
36°	356.8	362.1	365.3	362.6	355.2	362.6	365.3	362.1	356.8	362.1	365.3
36.5°	351.5	357.7	361.0	358.3	347.3	358.3	361.0	357.7	351.5	357.7	361.0
37°	344.2	353.3	356.7	354.1	338.1	354.1	356.7	353.3	344.2	353.3	356.7
37.5°	333.0	348.9	352.4	349.6	329.1	349.6	352.4	348.9	333.0	348.9	352.4
38°	320.8	344.6	348.0	344.6	318.9	344.6	348.0	344.6	320.8	344.6	348.0
38.5°	306.4	339.9	343.6	337.4	307.2	337.4	343.6	339.9	306.4	339.9	343.6
39°	291.8	333.7	339.4	329.1	294.1	329.1	339.4	333.7	291.8	333.7	339.4
39.5°	277.0	325.3	334.9	320.5	279.5	320.5	334.9	325.3	277.0	325.3	334.9
40°	262.2	314.4	330.4	311.1	264.4	311.1	330.4	314.4	262.2	314.4	330.4
40.5°	247.3	301.7	326.1	300.6	249.1	300.6	326.1	301.7	247.3	301.7	326.1
41°	232.1	288.0	321.8	288.8	234.4	288.8	321.8	288.0	232.1	288.0	321.8
41.5°	217.5	274.1	317.5	275.9	219.9	275.9	317.5	274.1	217.5	274.1	317.5
42°	202.7	260.2	313.2	262.0	205.7	262.0	313.2	260.2	202.7	260.2	313.2
42.5°	188.4	246.3	309.0	247.8	191.6	247.8	309.0	246.3	188.4	246.3	309.0
43°	174.2	232.1	304.7	233.4	177.4	233.4	304.7	232.1	174.2	232.1	304.7
43.5°	160.2	218.0	300.3	219.6	163.2	219.6	300.3	218.0	160.2	218.0	300.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	120.0	176.4	287.5	179.1	123.1	179.1	287.5	176.4	120.0	176.4	287.5
45.5°	107.3	163.1	283.1	165.5	110.7	165.5	283.1	163.1	107.3	163.1	283.1
46°	95.4	150.0	277.4	152.4	98.9	152.4	277.4	150.0	95.4	150.0	277.4
46.5°	83.8	137.0	270.8	139.5	87.4	139.5	270.8	137.0	83.8	137.0	270.8
47°	72.3	124.2	261.6	126.8	77.3	126.8	261.6	124.2	72.3	124.2	261.6
47.5°	61.3	111.7	251.2	114.6	68.6	114.6	251.2	111.7	61.3	111.7	251.2
48°	51.7	100.0	238.7	102.7	60.1	102.7	238.7	100.0	51.7	100.0	238.7
48.5°	43.0	88.7	225.1	91.4	51.6	91.4	225.1	88.7	43.0	88.7	225.1
49°	36.2	77.5	209.6	80.7	43.1	80.7	209.6	77.5	36.2	77.5	209.6
49.5°	29.9	66.6	194.0	70.7	35.5	70.7	194.0	66.6	29.9	66.6	194.0
50°	24.0	56.4	177.8	61.9	29.2	61.9	177.8	56.4	24.0	56.4	177.8
50.5°	19.1	47.2	161.9	53.7	23.0	53.7	161.9	47.2	19.1	47.2	161.9
51°	14.3	39.4	146.4	45.8	17.5	45.8	146.4	39.4	14.3	39.4	146.4
51.5°	10.2	32.9	132.1	38.5	13.7	38.5	132.1	32.9	10.2	32.9	132.1
52°	6.2	26.8	118.0	31.8	11.0	31.8	118.0	26.8	6.2	26.8	118.0
52.5°	2.2	21.5	104.4	25.7	8.2	25.7	104.4	21.5	2.2	21.5	104.4
53°	1.3	16.7	91.6	20.5	5.5	20.5	91.6	16.7	1.3	16.7	91.6
53.5°	1.0	12.4	80.1	15.6	3.2	15.6	80.1	12.4	1.0	12.4	80.1
54°	0.6	8.5	69.4	11.4	0.9	11.4	69.4	8.5	0.6	8.5	69.4
54.5°	0.3	4.7	59.4	8.5	0.4	8.5	59.4	4.7	0.3	4.7	59.4
55°	0.3	1.6	50.3	5.8	0.4	5.8	50.3	1.6	0.3	1.6	50.3
55.5°	0.3	1.0	41.7	3.5	0.4	3.5	41.7	1.0	0.3	1.0	41.7
56°	0.3	0.7	34.1	2.1	0.3	2.1	34.1	0.7	0.3	0.7	34.1
56.5°	0.3	0.4	28.1	0.9	0.3	0.9	28.1	0.4	0.3	0.4	28.1
57°	0.3	0.3	22.5	0.5	0.3	0.5	22.5	0.3	0.3	0.3	22.5
57.5°	0.3	0.3	17.5	0.3	0.3	0.3	17.5	0.3	0.3	0.3	17.5
58°	0.3	0.3	13.0	0.3	0.3	0.3	13.0	0.3	0.3	0.3	13.0
58.5°	0.2	0.2	9.4	0.3	0.3	0.3	9.4	0.2	0.2	0.2	9.4
59°	0.2	0.2	7.1	0.2	0.3	0.2	7.1	0.2	0.2	0.2	7.1
59.5°	0.2	0.2	5.2	0.2	0.3	0.2	5.2	0.2	0.2	0.2	5.2
60°	0.2	0.2	3.4	0.2	0.3	0.2	3.4	0.2	0.2	0.2	3.4
60.5°	0.2	0.2	2.0	0.2	0.2	0.2	2.0	0.2	0.2	0.2	2.0
61°	0.2	0.2	1.3	0.2	0.2	0.2	1.3	0.2	0.2	0.2	1.3
61.5°	0.2	0.2	0.7	0.2	0.2	0.2	0.7	0.2	0.2	0.2	0.7
62°	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
62.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
63°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
63.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
64°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
64.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65°	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1
65.5°	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
66°	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1





TEST NUMBER: P775909

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K

**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	0.1	0.1	0.1	0.1
71.5°	0.1	0.1	0.1	0.1	0.1	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	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°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76.5°	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
77°	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
77.5°	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0
78°	0.0	0.0	0.0	0.0	0.1	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: P775909

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K

**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: P775909

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	503.2	503.2	503.2	503.2	503.2	503.2
0.5°	503.3	503.3	503.3	503.2	503.1	503.0
1°	503.2	503.2	503.2	503.1	503.0	502.9
1.5°	503.1	503.1	503.1	503.0	502.9	502.7
2°	503.0	502.9	503.0	502.9	502.6	502.6
2.5°	502.7	502.7	502.7	502.6	502.5	502.4
3°	502.5	502.4	502.5	502.4	502.2	502.2
3.5°	502.2	502.2	502.2	502.1	502.0	501.9
4°	501.9	501.8	501.9	501.8	501.7	501.6
4.5°	501.5	501.5	501.5	501.4	501.3	501.1
5°	501.0	501.0	501.0	501.0	500.8	500.7
5.5°	500.6	500.5	500.6	500.5	500.4	500.3
6°	500.1	500.1	500.1	500.0	499.9	499.8
6.5°	499.5	499.4	499.5	499.4	499.3	499.2
7°	498.9	498.9	498.9	498.9	498.7	498.6
7.5°	498.3	498.2	498.3	498.2	498.1	497.9
8°	497.5	497.5	497.5	497.5	497.3	497.2
8.5°	496.8	496.7	496.8	496.8	496.6	496.5
9°	496.0	495.9	496.0	495.9	495.7	495.6
9.5°	495.2	495.0	495.2	495.1	494.9	494.8
10°	494.2	494.1	494.2	494.2	494.0	493.8
10.5°	493.3	493.2	493.3	493.3	493.0	492.8
11°	492.2	492.1	492.2	492.3	492.0	491.8
11.5°	491.1	491.0	491.1	491.2	490.9	490.7
12°	490.1	489.8	490.1	490.1	489.7	489.5
12.5°	488.9	488.7	488.9	488.9	488.6	488.4
13°	487.7	487.5	487.7	487.7	487.4	487.1
13.5°	486.4	486.2	486.4	486.4	486.1	485.8
14°	485.1	484.8	485.1	485.1	484.7	484.4
14.5°	483.7	483.5	483.7	483.7	483.3	483.0
15°	482.2	482.0	482.2	482.3	481.9	481.5
15.5°	480.7	480.5	480.7	480.8	480.4	480.0
16°	479.2	478.9	479.2	479.2	478.8	478.4
16.5°	477.6	477.3	477.6	477.6	477.2	476.8
17°	475.9	475.6	475.9	476.0	475.5	475.0
17.5°	474.2	473.9	474.2	474.2	473.8	473.3
18°	472.4	471.9	472.4	472.5	471.9	471.5
18.5°	470.5	470.0	470.5	470.6	470.1	469.6
19°	468.5	468.1	468.5	468.6	468.2	467.7
19.5°	466.6	466.2	466.6	466.7	466.2	465.7
20°	464.6	464.1	464.6	464.7	464.2	463.6
20.5°	462.5	461.9	462.5	462.7	462.0	461.4
21°	460.3	459.7	460.3	460.5	459.9	459.2

TEST NUMBER: P775909

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	453.4	452.7	453.4	453.7	453.0	452.1
23°	450.9	450.1	450.9	451.4	450.5	449.6
23.5°	448.4	447.5	448.4	448.9	448.1	447.0
24°	445.8	444.9	445.8	446.4	445.4	444.4
24.5°	443.2	442.2	443.2	443.8	442.7	441.7
25°	440.4	439.3	440.4	441.1	440.1	438.8
25.5°	437.6	436.5	437.6	438.5	437.3	435.8
26°	434.7	433.6	434.7	435.7	434.4	432.9
26.5°	431.8	430.5	431.8	432.8	431.4	429.7
27°	428.7	427.3	428.7	429.9	428.4	426.6
27.5°	425.6	424.1	425.6	427.0	425.3	423.4
28°	422.4	420.8	422.4	423.9	422.1	420.0
28.5°	419.2	417.4	419.2	420.8	418.8	416.6
29°	415.8	414.0	415.8	417.6	415.3	413.1
29.5°	412.4	410.3	412.4	414.3	411.9	409.6
30°	409.0	406.7	409.0	411.0	408.4	405.9
30.5°	405.3	403.1	405.3	407.6	404.9	402.1
31°	401.7	399.4	401.7	404.1	401.2	398.4
31.5°	398.1	395.4	398.1	400.5	397.5	394.6
32°	394.4	391.6	394.4	396.9	393.8	390.7
32.5°	390.5	387.6	390.5	393.2	390.0	386.8
33°	386.7	383.7	386.7	389.4	386.1	382.7
33.5°	382.8	379.6	382.8	385.5	382.2	378.6
34°	378.9	375.5	378.9	381.6	378.4	374.3
34.5°	374.8	371.2	374.8	377.6	374.3	370.1
35°	370.8	366.9	370.8	373.5	370.3	365.8
35.5°	366.7	362.4	366.7	369.4	366.2	361.3
36°	362.6	355.2	362.6	365.3	362.1	356.8
36.5°	358.3	347.3	358.3	361.0	357.7	351.5
37°	354.1	338.1	354.1	356.7	353.3	344.2
37.5°	349.6	329.1	349.6	352.4	348.9	333.0
38°	344.6	318.9	344.6	348.0	344.6	320.8
38.5°	337.4	307.2	337.4	343.6	339.9	306.4
39°	329.1	294.1	329.1	339.4	333.7	291.8
39.5°	320.5	279.5	320.5	334.9	325.3	277.0
40°	311.1	264.4	311.1	330.4	314.4	262.2
40.5°	300.6	249.1	300.6	326.1	301.7	247.3
41°	288.8	234.4	288.8	321.8	288.0	232.1
41.5°	275.9	219.9	275.9	317.5	274.1	217.5
42°	262.0	205.7	262.0	313.2	260.2	202.7
42.5°	247.8	191.6	247.8	309.0	246.3	188.4
43°	233.4	177.4	233.4	304.7	232.1	174.2
43.5°	219.6	163.2	219.6	300.3	218.0	160.2



TEST NUMBER: P775909

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	179.1	123.1	179.1	287.5	176.4	120.0
45.5°	165.5	110.7	165.5	283.1	163.1	107.3
46°	152.4	98.9	152.4	277.4	150.0	95.4
46.5°	139.5	87.4	139.5	270.8	137.0	83.8
47°	126.8	77.3	126.8	261.6	124.2	72.3
47.5°	114.6	68.6	114.6	251.2	111.7	61.3
48°	102.7	60.1	102.7	238.7	100.0	51.7
48.5°	91.4	51.6	91.4	225.1	88.7	43.0
49°	80.7	43.1	80.7	209.6	77.5	36.2
49.5°	70.7	35.5	70.7	194.0	66.6	29.9
50°	61.9	29.2	61.9	177.8	56.4	24.0
50.5°	53.7	23.0	53.7	161.9	47.2	19.1
51°	45.8	17.5	45.8	146.4	39.4	14.3
51.5°	38.5	13.7	38.5	132.1	32.9	10.2
52°	31.8	11.0	31.8	118.0	26.8	6.2
52.5°	25.7	8.2	25.7	104.4	21.5	2.2
53°	20.5	5.5	20.5	91.6	16.7	1.3
53.5°	15.6	3.2	15.6	80.1	12.4	1.0
54°	11.4	0.9	11.4	69.4	8.5	0.6
54.5°	8.5	0.4	8.5	59.4	4.7	0.3
55°	5.8	0.4	5.8	50.3	1.6	0.3
55.5°	3.5	0.4	3.5	41.7	1.0	0.3
56°	2.1	0.3	2.1	34.1	0.7	0.3
56.5°	0.9	0.3	0.9	28.1	0.4	0.3
57°	0.5	0.3	0.5	22.5	0.3	0.3
57.5°	0.3	0.3	0.3	17.5	0.3	0.3
58°	0.3	0.3	0.3	13.0	0.3	0.3
58.5°	0.3	0.3	0.3	9.4	0.2	0.2
59°	0.2	0.3	0.2	7.1	0.2	0.2
59.5°	0.2	0.3	0.2	5.2	0.2	0.2
60°	0.2	0.3	0.2	3.4	0.2	0.2
60.5°	0.2	0.2	0.2	2.0	0.2	0.2
61°	0.2	0.2	0.2	1.3	0.2	0.2
61.5°	0.2	0.2	0.2	0.7	0.2	0.2
62°	0.2	0.2	0.2	0.3	0.2	0.2
62.5°	0.2	0.2	0.2	0.2	0.2	0.2
63°	0.2	0.2	0.2	0.2	0.2	0.2
63.5°	0.2	0.2	0.2	0.2	0.2	0.2
64°	0.2	0.2	0.2	0.2	0.2	0.2
64.5°	0.2	0.2	0.2	0.2	0.2	0.2
65°	0.2	0.2	0.2	0.1	0.2	0.2
65.5°	0.1	0.2	0.1	0.1	0.1	0.1
66°	0.1	0.2	0.1	0.1	0.1	0.1



TEST NUMBER: P775909

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K

**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°	0.1	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	0.1	0.1	0.1
75.5°	0.1	0.1	0.1	0.1	0.1	0.1
76°	0.1	0.1	0.1	0.1	0.1	0.1
76.5°	0.1	0.1	0.1	0.0	0.1	0.1
77°	0.1	0.1	0.1	0.0	0.1	0.1
77.5°	0.1	0.1	0.1	0.0	0.1	0.0
78°	0.0	0.1	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: P775909

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMB-1000lm-5000K

**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°	456.9	457.7	458.3	458.1	457.4	458.1	458.3	457.7	456.9	457.7	458.3
22°	454.6	455.3	456.1	455.7	455.1	455.7	456.1	455.3	454.6	455.3	456.1



44°	146.3	204.0	296.1	205.9	149.4	205.9	296.1	204.0	146.3	204.0	296.1
44.5°	133.0	190.1	291.8	192.4	136.1	192.4	291.8	190.1	133.0	190.1	291.8



66.5°	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
67°	0.1	0.1	0.1	0.1	0.2	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°	458.1	457.4	458.1	458.3	457.7	456.9
22°	455.7	455.1	455.7	456.1	455.3	454.6



44°	205.9	149.4	205.9	296.1	204.0	146.3
44.5°	192.4	136.1	192.4	291.8	190.1	133.0

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66.5°	0.1	0.2	0.1	0.1	0.1	0.1
67°	0.1	0.2	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)