

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: P775758

Luminaire Tested: HCDJBS510CSD-HCD62TRMB-1000lm-4000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775758
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B058)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD62TRMB-1000lm-4000K
Description: 6 INCH ROUND NARROW MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 732.7 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.11
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

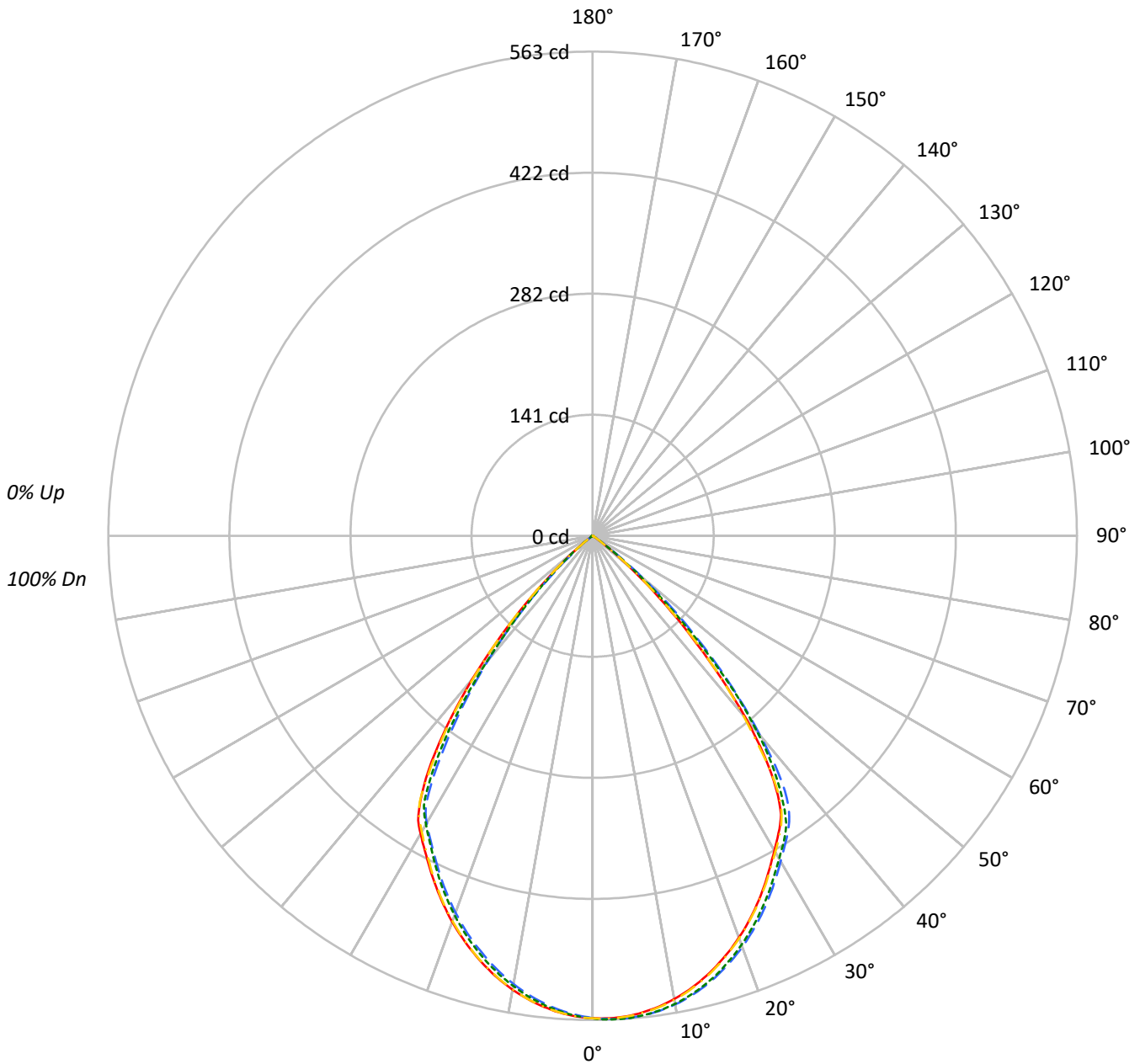
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	103	104	102	100	100	98	97	97	95	94	92					92			
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85					85			
3	101	94	88	84	98	92	87	83	89	85	82	87	83	80	85	82	79	77					77			
4	95	86	80	76	93	85	80	75	83	78	74	81	77	73	79	75	72	71					71			
5	89	80	73	69	87	79	73	68	77	72	68	75	71	67	74	70	66	65					65			
6	84	74	67	63	82	73	67	62	72	66	62	70	65	62	69	64	61	60					60			
7	79	69	62	57	78	68	62	57	67	61	57	65	60	57	64	60	56	55					55			
8	75	64	57	53	73	63	57	53	62	57	53	61	56	52	60	56	52	51					51			
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47					47			
10	67	56	50	45	66	55	49	45	55	49	45	54	49	45	53	48	45	44					44			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	30760	30760	30760	30760
5°	30756	30916	30442	30332
10°	30444	30761	29831	29598
15°	29853	30290	28950	28598
20°	29006	29531	27862	27390
25°	27939	28544	26572	25943
30°	26764	27447	25333	24535
35°	25324	26026	22232	20994
40°	19816	21326	15558	13790
45°	11652	13451	7854	6892
50°	4588	5552	2294	2303
55°	669	870	191	229
60°	153	164	143	121
65°	104	104	91	78
70°	80	80	64	64
75°	64	64	42	42
80°	32	32	32	32
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 14878 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	7.2
10°-20°	145.7	19.9
20°-30°	207.2	28.3
30°-40°	214.0	29.2
40°-50°	102.2	14.0
50°-60°	9.9	1.3
60°-70°	0.8	0.1
70°-80°	0.3	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°	405.5	55.3
0°-40°	619.5	84.5
0°-60°	731.6	99.8
0°-90°	732.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	732.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	561	561	561	561	561	
5°	559	562	553	551	559	53
15°	526	534	510	504	526	148
25°	462	472	439	429	462	212
35°	378	389	332	314	378	229
45°	150	174	101	89	150	118
55°	7	9	2	2	7	13
65°	1	1	1	1	1	1
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°	561.1	561.1	561.1	561.1	561.1	561.1	561.1	561.1	561.1	561.1	561.1
0.5°	561.2	561.2	561.3	561.1	561.9	561.7	561.4	561.3	560.7	560.4	559.9
1°	561.4	561.5	561.7	561.6	562.4	561.9	561.6	561.2	560.3	559.7	559.3
1.5°	561.4	561.7	562.0	562.0	562.6	562.2	561.7	561.0	559.6	559.0	558.4
2°	561.4	561.9	562.4	562.5	562.9	562.4	561.6	560.6	559.1	558.2	557.4
2.5°	561.2	561.9	562.6	562.7	562.9	562.4	561.5	560.0	558.4	557.3	556.4
3°	560.9	561.9	562.6	562.8	562.9	562.3	561.2	559.6	557.5	556.3	555.2
3.5°	560.6	561.7	562.6	562.9	562.8	562.0	560.9	559.0	556.7	555.2	554.0
4°	560.2	561.4	562.4	562.8	562.6	561.8	560.5	558.2	555.6	554.0	552.6
4.5°	559.6	561.0	562.2	562.7	562.4	561.4	559.9	557.3	554.6	552.6	551.2
5°	558.9	560.5	561.8	562.4	561.8	560.9	559.3	556.4	553.2	551.2	549.7
5.5°	558.2	560.0	561.5	562.0	561.3	560.4	558.6	555.4	551.8	549.6	548.1
6°	557.3	559.4	561.0	561.5	560.8	559.7	557.7	554.5	550.5	548.2	546.3
6.5°	556.3	558.7	560.4	561.1	560.0	558.9	556.9	553.2	549.0	546.5	544.4
7°	555.2	557.7	559.6	560.5	559.3	558.1	555.8	552.0	547.4	544.6	542.5
7.5°	554.1	556.8	558.8	559.7	558.4	557.1	554.8	550.6	545.8	542.7	540.5
8°	552.9	555.7	557.9	559.0	557.5	556.1	553.5	549.1	543.9	540.8	538.5
8.5°	551.5	554.6	556.9	557.9	556.4	554.9	552.3	547.5	542.0	538.7	536.3
9°	550.1	553.4	555.8	557.0	555.2	553.7	550.8	545.8	540.2	536.6	534.1
9.5°	548.6	552.1	554.7	555.8	554.0	552.3	549.3	544.1	538.1	534.4	531.7
10°	546.9	550.6	553.3	554.6	552.6	550.9	547.8	542.1	535.9	532.1	529.4
10.5°	545.2	549.0	552.0	553.3	551.1	549.4	546.1	540.2	533.7	529.6	526.8
11°	543.4	547.4	550.6	551.8	549.5	547.8	544.3	538.2	531.4	527.1	524.2
11.5°	541.7	545.8	548.9	550.4	547.9	546.0	542.5	536.1	529.0	524.6	521.5
12°	539.7	543.9	547.3	548.8	546.1	544.3	540.5	533.9	526.5	522.1	518.8
12.5°	537.4	542.0	545.5	547.1	544.3	542.4	538.4	531.6	524.0	519.4	515.9
13°	535.3	540.0	543.7	545.3	542.3	540.5	536.3	529.3	521.4	516.5	513.2
13.5°	533.1	538.0	541.7	543.5	540.3	538.3	534.2	526.6	518.5	513.8	510.2
14°	530.8	535.9	539.7	541.4	538.2	536.2	531.8	524.2	515.8	510.9	507.2
14.5°	528.4	533.7	537.4	539.4	535.9	533.8	529.4	521.6	513.0	507.9	504.0
15°	526.0	531.4	535.3	537.2	533.7	531.4	526.9	518.7	510.1	504.9	500.9
15.5°	523.5	528.8	533.1	534.9	531.4	528.8	524.3	516.0	507.2	501.7	497.8
16°	520.7	526.3	530.6	532.6	528.8	526.3	521.7	513.2	504.0	498.6	494.6
16.5°	518.0	523.8	528.1	530.2	526.3	523.8	519.1	510.2	501.0	495.2	491.3
17°	515.3	521.2	525.5	527.8	523.6	521.2	516.2	507.3	497.8	492.0	487.8
17.5°	512.4	518.4	522.9	525.2	520.8	518.3	513.4	504.3	494.6	488.8	484.4
18°	509.6	515.6	520.2	522.4	518.0	515.5	510.4	501.2	491.3	485.3	480.8
18.5°	506.7	512.6	517.4	519.7	515.2	512.4	507.3	498.0	487.9	481.8	477.3
19°	503.4	509.8	514.6	517.0	512.2	509.6	504.3	494.8	484.6	478.3	473.7
19.5°	500.3	506.9	511.7	514.0	509.3	506.4	501.3	491.5	481.1	474.8	470.0
20°	497.2	503.8	508.8	511.1	506.2	503.4	498.1	488.0	477.6	471.1	466.2
20.5°	493.9	500.7	505.7	508.0	503.1	500.1	494.9	484.8	474.0	467.3	462.4
21°	490.8	497.5	502.6	505.0	499.7	497.0	491.5	481.2	470.3	463.7	458.5



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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°	480.4	487.5	492.8	495.1	489.7	486.9	481.2	470.5	459.0	452.0	446.7
23°	476.8	483.8	489.4	491.8	486.3	483.4	477.6	466.8	455.0	448.0	442.5
23.5°	473.1	480.4	485.9	488.3	482.7	479.8	474.1	463.0	451.2	444.0	438.4
24°	469.3	476.7	482.5	485.0	479.1	476.3	470.4	459.2	447.2	440.0	434.2
24.5°	465.7	473.2	478.9	481.4	475.4	472.6	466.7	455.5	443.3	435.8	430.1
25°	461.9	469.4	475.3	477.7	471.9	468.9	462.9	451.6	439.3	431.8	425.8
25.5°	458.0	465.7	471.5	474.1	468.1	465.1	459.1	447.7	435.2	427.6	421.6
26°	454.2	462.1	467.9	470.4	464.4	461.3	455.4	443.7	431.2	423.5	417.4
26.5°	450.2	458.3	464.1	466.7	460.6	457.5	451.5	439.8	427.2	419.3	413.4
27°	446.3	454.5	460.3	462.9	456.8	453.7	447.6	435.8	423.0	415.3	409.2
27.5°	442.3	450.5	456.5	459.0	452.9	449.8	443.7	431.7	419.1	411.3	405.2
28°	438.4	446.6	452.6	455.2	448.9	446.0	439.7	427.8	415.2	407.5	401.2
28.5°	434.3	442.7	448.8	451.3	444.9	442.0	435.8	424.0	411.5	403.6	397.5
29°	430.3	438.9	444.9	447.5	441.2	438.1	432.0	420.1	407.7	399.7	393.5
29.5°	426.6	435.0	441.1	443.7	437.4	434.3	428.3	416.5	403.8	395.9	389.7
30°	422.8	431.2	437.3	439.8	433.6	430.7	424.6	412.7	400.2	392.1	385.8
30.5°	419.0	427.4	433.5	436.0	429.9	426.9	421.0	409.1	396.4	388.1	381.5
31°	415.3	423.8	429.9	432.3	426.4	423.3	417.3	405.4	392.4	383.9	377.0
31.5°	411.5	420.1	426.2	428.8	422.8	419.7	413.7	401.6	388.2	378.7	371.4
32°	407.8	416.5	422.6	425.1	419.2	416.1	410.1	397.6	382.1	371.8	363.7
32.5°	404.2	412.8	419.1	421.6	415.5	412.6	406.3	393.3	375.3	363.7	354.9
33°	400.3	409.1	415.4	417.8	411.7	408.5	402.2	388.2	367.6	354.4	344.8
33.5°	396.1	405.3	411.7	414.4	407.4	404.4	397.8	381.9	359.4	344.6	334.4
34°	391.6	401.1	407.6	410.4	402.4	399.5	392.8	374.8	351.0	334.1	323.2
34.5°	385.5	396.6	403.4	406.1	396.0	393.9	387.3	366.8	341.8	323.8	312.2
35°	378.4	391.2	398.5	400.7	388.9	387.1	381.0	358.5	332.2	313.3	300.8
35.5°	370.7	385.2	393.1	394.4	381.4	379.8	373.9	349.6	322.1	302.8	290.0
36°	362.2	378.0	386.6	387.2	373.8	371.8	365.6	340.1	311.0	292.6	278.4
36.5°	353.7	370.2	379.6	379.6	365.7	363.1	355.8	330.0	299.8	282.4	267.4
37°	344.4	361.2	371.4	371.5	357.5	353.9	344.7	319.4	288.1	271.4	256.3
37.5°	334.5	351.5	362.2	363.3	348.7	344.0	332.7	308.0	276.9	260.5	245.2
38°	323.9	340.6	351.5	354.6	339.7	333.8	319.8	296.0	265.1	248.8	233.8
38.5°	312.7	329.1	340.5	345.3	329.7	323.1	307.4	283.3	253.3	237.2	222.2
39°	301.0	316.6	328.4	335.6	319.7	311.7	295.0	270.9	241.3	225.2	210.9
39.5°	289.2	304.3	315.7	325.2	308.9	300.0	283.3	257.6	229.7	213.4	199.6
40°	276.9	291.5	303.1	314.6	298.0	287.5	271.5	244.5	217.4	201.5	188.2
40.5°	264.4	278.2	290.7	303.6	286.5	275.1	260.3	231.5	205.4	190.4	177.1
41°	251.1	265.0	278.6	291.8	275.3	262.9	248.6	218.6	193.2	178.8	166.2
41.5°	238.0	252.7	266.7	279.8	263.2	250.8	236.8	205.8	180.9	167.9	155.5
42°	224.5	240.3	254.6	267.2	251.0	238.9	224.6	193.5	168.4	156.7	144.7
42.5°	211.6	227.9	242.9	254.9	238.1	227.2	212.1	181.5	156.2	145.7	134.0
43°	198.7	215.5	230.8	242.2	225.3	215.3	199.9	169.8	144.2	134.4	123.6
43.5°	186.4	203.3	219.0	229.8	212.0	203.5	188.0	158.1	132.8	123.7	113.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	150.3	166.9	182.6	191.9	173.5	167.8	153.7	125.9	101.3	93.4	85.2
45.5°	139.3	155.3	171.2	179.9	160.8	156.1	142.5	115.8	91.9	83.8	75.8
46°	128.0	144.0	159.7	167.7	148.7	144.6	131.6	106.6	82.4	74.0	66.3
46.5°	117.1	133.3	148.6	155.9	136.6	133.5	121.0	97.3	72.9	64.3	58.2
47°	106.6	123.0	137.6	144.2	125.1	122.4	110.2	88.1	65.0	56.2	50.5
47.5°	96.5	112.9	126.9	132.7	113.8	111.5	100.7	78.8	57.3	48.5	43.4
48°	86.9	103.1	116.4	121.3	104.1	101.3	91.2	69.6	50.1	41.1	37.0
48.5°	77.8	93.8	105.7	110.4	94.3	91.1	81.8	61.3	43.6	34.8	31.2
49°	69.2	84.6	95.7	99.5	84.5	80.9	72.4	53.6	37.5	29.1	26.1
49.5°	61.2	75.9	85.9	89.6	74.7	70.7	64.3	46.7	32.1	24.1	21.7
50°	53.8	67.5	76.4	79.8	65.1	61.5	56.0	39.9	26.9	19.9	17.8
50.5°	47.0	59.3	67.6	70.4	56.6	53.0	48.4	33.8	22.4	16.4	14.6
51°	40.5	51.5	58.8	61.8	48.8	44.9	41.1	28.5	18.3	14.1	12.5
51.5°	34.9	44.0	50.7	53.4	41.6	37.8	34.6	23.5	15.8	11.7	10.4
52°	30.2	37.3	43.3	45.8	34.8	31.3	28.1	19.1	13.2	9.4	8.3
52.5°	25.4	32.4	36.2	38.6	28.6	25.4	22.5	16.4	10.7	7.0	6.2
53°	20.7	27.3	31.1	33.3	22.9	20.4	17.7	13.7	8.2	4.7	4.1
53.5°	16.0	22.3	26.1	28.1	18.0	16.2	14.8	11.0	5.7	3.5	2.9
54°	12.6	17.2	21.0	22.9	15.0	13.5	12.0	8.4	3.2	2.5	2.2
54.5°	9.6	12.3	16.0	17.7	12.1	10.8	9.3	5.7	2.3	2.0	1.9
55°	7.0	8.9	10.9	12.5	9.1	8.2	6.4	3.0	2.0	1.8	1.8
55.5°	4.8	6.4	7.9	9.1	6.1	5.6	3.6	2.2	1.8	1.8	1.7
56°	3.3	4.3	5.4	6.4	3.2	2.9	2.5	1.9	1.8	1.7	1.6
56.5°	2.8	3.8	3.6	4.2	2.3	2.2	2.0	1.8	1.7	1.6	1.6
57°	2.4	3.3	3.2	3.6	2.0	1.9	1.9	1.8	1.6	1.6	1.5
57.5°	2.0	2.7	2.6	2.9	1.9	1.8	1.8	1.7	1.6	1.5	1.4
58°	1.7	2.2	2.2	2.4	1.8	1.8	1.7	1.6	1.5	1.4	1.4
58.5°	1.6	1.7	1.8	1.8	1.7	1.7	1.7	1.6	1.4	1.4	1.3
59°	1.5	1.6	1.7	1.7	1.6	1.6	1.6	1.5	1.4	1.3	1.3
59.5°	1.5	1.6	1.6	1.7	1.6	1.6	1.5	1.4	1.3	1.3	1.2
60°	1.4	1.5	1.6	1.6	1.5	1.5	1.5	1.4	1.3	1.2	1.2
60.5°	1.3	1.4	1.5	1.5	1.4	1.4	1.4	1.3	1.2	1.2	1.1
61°	1.3	1.4	1.4	1.5	1.4	1.4	1.3	1.2	1.1	1.1	1.1
61.5°	1.2	1.3	1.4	1.4	1.3	1.3	1.3	1.2	1.1	1.1	0.9
62°	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.1	0.9	0.9	0.9
62.5°	1.1	1.2	1.2	1.3	1.2	1.2	1.2	1.1	0.9	0.9	0.8
63°	1.1	1.1	1.2	1.2	1.1	1.1	1.1	0.9	0.9	0.8	0.8
63.5°	0.9	1.1	1.1	1.2	1.1	1.1	1.1	0.9	0.8	0.8	0.8
64°	0.9	0.9	1.1	1.1	0.9	0.9	0.9	0.8	0.8	0.8	0.7
64.5°	0.8	0.9	0.9	1.1	0.9	0.9	0.9	0.8	0.7	0.7	0.7
65°	0.8	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7
65.5°	0.7	0.8	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6
66°	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6



TEST NUMBER: P775758

CATALOG NUMBER: HCDJBL510CSD-HCD62TRMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5
68°	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5
68.5°	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
69°	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4
69.5°	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4
70°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
70.5°	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
71°	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
71.5°	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
72°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
72.5°	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
73°	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
73.5°	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
74°	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2
74.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
75°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
75.5°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
76°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
76.5°	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
78°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
78.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
79°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
79.5°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
80°	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
80.5°	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
81°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
81.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
83°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
83.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
84°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.1	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: P775758

CATALOG NUMBER: HCDJBL510CSD-HCD62TRMB-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: P775758

CATALOG NUMBER: HCDJBL510CSD-HCD62TRMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	561.1	561.1	561.1	561.1	561.1	561.1
0.5°	559.7	560.9	560.8	560.8	561.2	561.2
1°	558.9	560.2	560.2	560.4	561.0	561.4
1.5°	557.9	559.4	559.4	559.8	560.7	561.4
2°	556.9	558.6	558.7	559.2	560.4	561.4
2.5°	555.7	557.5	557.7	558.4	559.9	561.2
3°	554.6	556.5	556.8	557.5	559.3	560.9
3.5°	553.2	555.3	555.6	556.6	558.6	560.6
4°	551.7	554.1	554.5	555.5	557.8	560.2
4.5°	550.3	552.7	553.2	554.4	557.0	559.6
5°	548.8	551.2	551.8	553.1	556.1	558.9
5.5°	547.0	549.7	550.4	551.8	554.9	558.2
6°	545.2	548.1	548.7	550.4	553.7	557.3
6.5°	543.3	546.4	547.1	548.8	552.6	556.3
7°	541.4	544.6	545.4	547.2	551.2	555.2
7.5°	539.3	542.7	543.5	545.5	549.7	554.1
8°	537.1	540.7	541.7	543.7	548.2	552.9
8.5°	534.9	538.5	539.6	541.9	546.6	551.5
9°	532.5	536.3	537.4	539.9	544.9	550.1
9.5°	530.1	534.1	535.2	537.7	543.1	548.6
10°	527.8	531.7	532.9	535.6	541.1	546.9
10.5°	525.2	529.4	530.6	533.2	539.1	545.2
11°	522.5	526.7	528.1	531.0	536.9	543.4
11.5°	519.8	524.2	525.6	528.6	534.9	541.7
12°	517.0	521.6	522.9	526.1	532.7	539.7
12.5°	514.1	518.7	520.3	523.5	530.3	537.4
13°	511.2	516.0	517.6	520.8	527.8	535.3
13.5°	508.1	513.1	514.7	518.1	525.5	533.1
14°	505.1	510.1	511.9	515.4	522.8	530.8
14.5°	502.0	507.1	509.0	512.5	520.3	528.4
15°	498.8	503.9	505.8	509.6	517.5	526.0
15.5°	495.5	500.9	502.8	506.5	514.7	523.5
16°	492.2	497.6	499.5	503.5	511.9	520.7
16.5°	488.8	494.2	496.2	500.4	509.0	518.0
17°	485.4	491.0	493.0	497.3	505.9	515.3
17.5°	481.8	487.5	489.6	493.9	502.9	512.4
18°	478.3	484.1	486.3	490.7	499.8	509.6
18.5°	474.8	480.5	482.7	487.2	496.6	506.7
19°	471.0	476.9	479.1	483.7	493.3	503.4
19.5°	467.2	473.2	475.5	480.3	490.0	500.3
20°	463.3	469.5	471.8	476.7	486.6	497.2
20.5°	459.6	465.7	468.1	473.1	483.2	493.9
21°	455.7	461.8	464.2	469.3	479.6	490.8



TEST NUMBER: P775758

CATALOG NUMBER: HCDJBL510CSD-HCD62TRMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	443.5	449.9	452.4	457.9	468.9	480.4
23°	439.3	445.8	448.4	454.0	465.0	476.8
23.5°	435.2	441.6	444.3	450.0	461.2	473.1
24°	430.9	437.4	440.2	446.0	457.4	469.3
24.5°	426.8	433.2	436.1	441.9	453.6	465.7
25°	422.5	428.9	431.8	437.7	449.6	461.9
25.5°	418.1	424.7	427.7	433.6	445.6	458.0
26°	413.9	420.4	423.4	429.5	441.6	454.2
26.5°	409.7	416.1	419.2	425.3	437.5	450.2
27°	405.5	411.8	415.0	421.1	433.5	446.3
27.5°	401.5	407.6	410.8	417.1	429.4	442.3
28°	397.5	403.4	406.6	413.0	425.4	438.4
28.5°	393.5	399.4	402.6	409.0	421.3	434.3
29°	389.7	395.5	398.7	405.1	417.4	430.3
29.5°	385.7	391.6	394.7	401.3	413.6	426.6
30°	381.7	387.6	390.8	397.5	409.7	422.8
30.5°	377.4	383.5	386.8	393.5	406.1	419.0
31°	372.8	379.5	382.8	389.6	402.4	415.3
31.5°	366.2	375.2	378.5	385.6	398.6	411.5
32°	358.4	370.1	373.6	381.1	394.6	407.8
32.5°	349.7	362.7	366.6	375.7	390.5	404.2
33°	339.6	353.8	358.6	368.7	386.0	400.3
33.5°	329.1	344.0	349.8	359.8	379.6	396.1
34°	318.3	334.4	339.9	349.1	372.2	391.6
34.5°	307.5	324.2	329.2	338.3	363.8	385.5
35°	296.3	313.7	317.4	327.2	354.4	378.4
35.5°	284.5	303.0	305.6	316.4	345.0	370.7
36°	272.6	291.4	293.9	305.8	335.0	362.2
36.5°	260.3	279.6	281.9	295.2	324.3	353.7
37°	248.2	267.2	270.2	284.5	313.3	344.4
37.5°	236.0	255.0	258.8	273.4	302.0	334.5
38°	224.3	242.3	247.0	261.4	290.7	323.9
38.5°	212.6	230.1	235.6	249.4	279.2	312.7
39°	201.1	217.8	224.0	237.2	268.3	301.0
39.5°	189.6	205.4	212.2	225.0	256.9	289.2
40°	178.1	192.7	200.5	212.9	245.5	276.9
40.5°	166.5	180.6	188.8	201.6	233.4	264.4
41°	155.1	168.9	177.2	190.3	221.5	251.1
41.5°	144.2	157.6	166.0	179.3	208.9	238.0
42°	133.1	146.7	155.0	168.6	196.4	224.5
42.5°	122.9	135.8	144.2	157.7	183.9	211.6
43°	113.1	125.8	133.7	146.4	171.8	198.7
43.5°	104.5	115.8	123.4	135.4	159.7	186.4



TEST NUMBER: P775758

CATALOG NUMBER: HCDJBL510CSD-HCD62TRMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	78.8	88.9	93.8	104.0	124.9	150.3
45.5°	70.3	80.8	84.8	94.3	113.8	139.3
46°	62.3	73.1	76.4	84.9	103.2	128.0
46.5°	55.5	65.7	68.2	75.6	92.9	117.1
47°	49.1	59.0	60.7	66.7	82.9	106.6
47.5°	43.2	52.5	53.4	58.2	73.8	96.5
48°	37.5	46.4	46.8	49.9	65.2	86.9
48.5°	32.3	40.7	40.6	42.5	57.3	77.8
49°	27.5	35.7	35.4	35.5	49.9	69.2
49.5°	23.2	31.3	30.9	30.8	43.2	61.2
50°	19.3	27.0	26.3	26.2	36.9	53.8
50.5°	15.9	22.6	21.8	21.4	32.4	47.0
51°	13.5	18.3	17.1	16.8	27.9	40.5
51.5°	11.0	14.9	13.9	13.8	23.3	34.9
52°	8.7	12.0	11.1	11.1	18.7	30.2
52.5°	6.3	9.3	8.6	8.9	14.3	25.4
53°	3.9	6.8	6.5	6.9	11.4	20.7
53.5°	2.6	4.8	4.7	5.2	8.8	16.0
54°	2.0	3.3	3.3	3.7	6.6	12.6
54.5°	1.8	2.8	2.8	3.2	4.8	9.6
55°	1.7	2.4	2.4	2.6	3.4	7.0
55.5°	1.6	2.0	2.0	2.1	2.9	4.8
56°	1.6	1.6	1.6	1.7	2.5	3.3
56.5°	1.5	1.6	1.5	1.6	2.0	2.8
57°	1.4	1.5	1.5	1.5	1.6	2.4
57.5°	1.4	1.4	1.4	1.5	1.6	2.0
58°	1.3	1.4	1.4	1.4	1.5	1.7
58.5°	1.3	1.3	1.3	1.3	1.5	1.6
59°	1.2	1.3	1.2	1.3	1.4	1.5
59.5°	1.2	1.2	1.2	1.2	1.3	1.5
60°	1.1	1.1	1.1	1.1	1.3	1.4
60.5°	1.1	1.1	1.1	1.1	1.2	1.3
61°	0.9	0.9	0.9	0.9	1.1	1.3
61.5°	0.9	0.9	0.9	0.9	1.1	1.2
62°	0.8	0.9	0.8	0.9	0.9	1.2
62.5°	0.8	0.8	0.8	0.8	0.9	1.1
63°	0.7	0.8	0.8	0.8	0.8	1.1
63.5°	0.7	0.7	0.7	0.7	0.8	0.9
64°	0.7	0.7	0.7	0.7	0.8	0.9
64.5°	0.6	0.7	0.6	0.7	0.7	0.8
65°	0.6	0.6	0.6	0.6	0.7	0.8
65.5°	0.6	0.6	0.6	0.6	0.7	0.7
66°	0.6	0.6	0.6	0.6	0.6	0.7



TEST NUMBER: P775758

CATALOG NUMBER: HCDJBL510CSD-HCD62TRMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.5	0.5	0.5	0.5	0.5	0.6
68°	0.5	0.5	0.4	0.5	0.5	0.6
68.5°	0.4	0.4	0.4	0.4	0.5	0.5
69°	0.4	0.4	0.4	0.4	0.5	0.5
69.5°	0.4	0.4	0.4	0.4	0.4	0.5
70°	0.4	0.4	0.4	0.4	0.4	0.5
70.5°	0.3	0.4	0.3	0.3	0.4	0.4
71°	0.3	0.3	0.3	0.3	0.4	0.4
71.5°	0.3	0.3	0.3	0.3	0.3	0.4
72°	0.3	0.3	0.3	0.3	0.3	0.4
72.5°	0.3	0.3	0.3	0.3	0.3	0.3
73°	0.3	0.3	0.3	0.3	0.3	0.3
73.5°	0.2	0.2	0.2	0.2	0.3	0.3
74°	0.2	0.2	0.2	0.2	0.3	0.3
74.5°	0.2	0.2	0.2	0.2	0.2	0.3
75°	0.2	0.2	0.2	0.2	0.2	0.3
75.5°	0.2	0.2	0.2	0.2	0.2	0.2
76°	0.2	0.2	0.2	0.2	0.2	0.2
76.5°	0.2	0.2	0.2	0.2	0.2	0.2
77°	0.2	0.2	0.1	0.1	0.2	0.2
77.5°	0.1	0.1	0.1	0.1	0.2	0.2
78°	0.1	0.1	0.1	0.1	0.1	0.2
78.5°	0.1	0.1	0.1	0.1	0.1	0.2
79°	0.1	0.1	0.1	0.1	0.1	0.1
79.5°	0.1	0.1	0.1	0.1	0.1	0.1
80°	0.1	0.1	0.1	0.1	0.1	0.1
80.5°	0.1	0.1	0.1	0.1	0.1	0.1
81°	0.1	0.1	0.1	0.1	0.1	0.1
81.5°	0.1	0.1	0.1	0.1	0.1	0.1
82°	0.1	0.1	0.1	0.1	0.1	0.1
82.5°	0.0	0.1	0.1	0.0	0.1	0.1
83°	0.0	0.0	0.0	0.0	0.0	0.1
83.5°	0.0	0.0	0.0	0.0	0.0	0.1
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: P775758

CATALOG NUMBER: HCDJBL510CSD-HCD62TRMB-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°	487.3	494.0	499.2	501.7	496.5	493.7	488.2	477.6	466.5	459.9	454.6
22°	483.7	490.8	496.1	498.5	493.1	490.3	484.7	474.1	462.8	456.0	450.6



44°	174.1	191.0	206.8	217.1	199.3	191.6	176.4	147.1	121.7	112.9	104.2
44.5°	162.2	178.8	194.8	204.4	186.3	179.7	165.0	136.4	110.9	103.2	94.7



66.5°	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6
67°	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5



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°	451.7	457.8	460.4	465.6	476.2	487.3
22°	447.5	453.7	456.4	461.8	472.5	483.7



44°	96.0	106.5	113.1	124.6	148.0	174.1
44.5°	87.3	97.4	103.4	114.3	136.2	162.2

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66.5°	0.5	0.5	0.5	0.5	0.6	0.7
67°	0.5	0.5	0.5	0.5	0.6	0.6

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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)