

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



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P775824

Luminaire Tested: HCDJBL510CSD-HCD81TRH-1000lm-5000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775824
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B043-HCD81TRH)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD81TRH-1000lm-5000K
Description: 8 INCH ROUND SHALLOW-WIDE HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

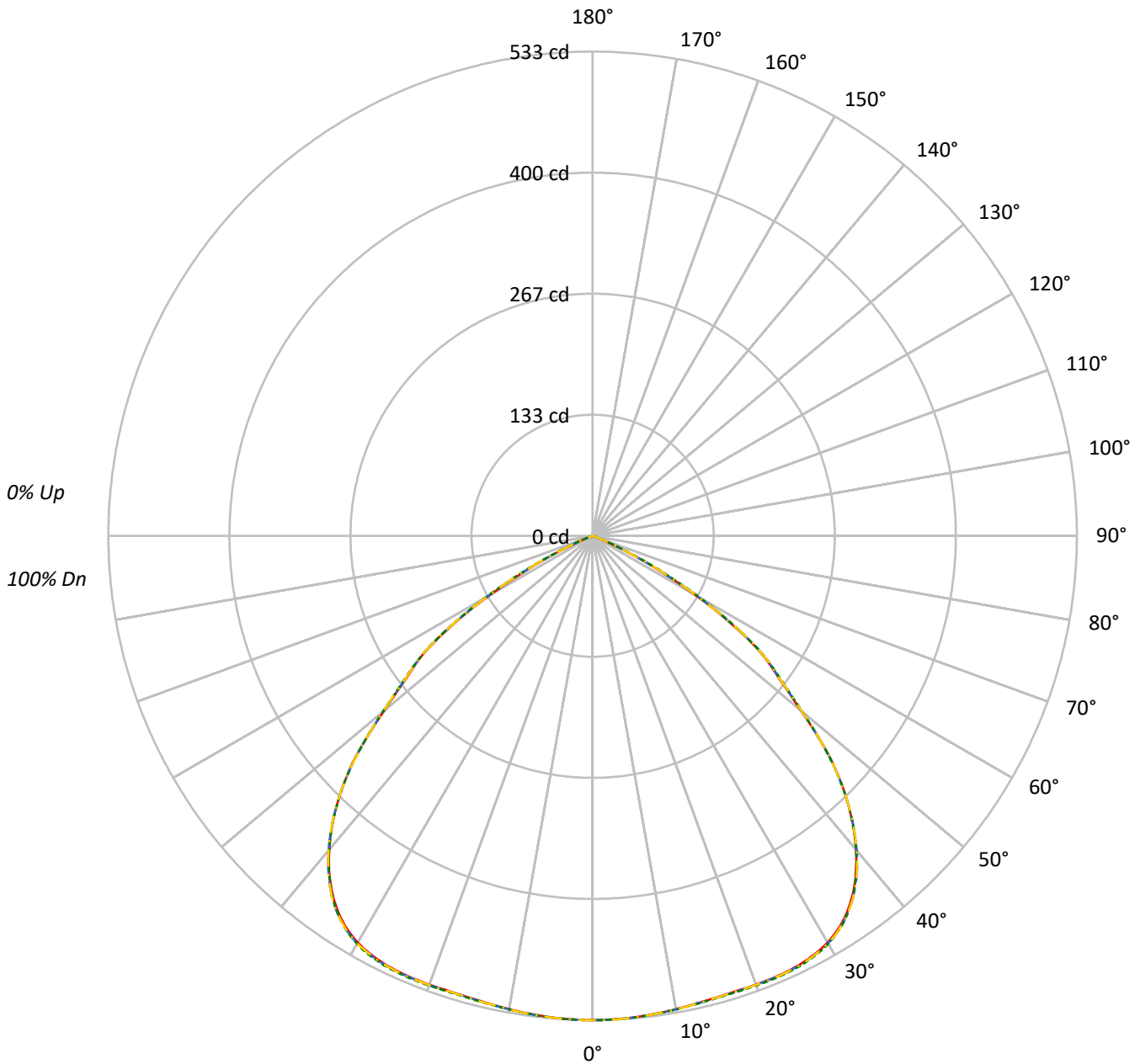
Lumens per Lamp: N/A
Luminaire Lumens: 1295.4 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.42 / 1.43
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	86	83	80	78								
3	96	87	80	75	93	85	79	74	82	77	73	80	75	72	77	74	70	68								
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	66	62	60								
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53								
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47								
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41								
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33								
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16282	16282	16282	16282
5°	16307	16313	16307	16313
10°	16403	16415	16403	16415
15°	16632	16654	16632	16654
20°	17080	17116	17080	17116
25°	17675	17726	17675	17726
30°	18226	18279	18226	18279
35°	18419	18460	18419	18460
40°	17970	17978	17970	17978
45°	16761	16739	16761	16739
50°	14225	14325	14225	14325
55°	12157	12226	12157	12226
60°	7999	8310	7999	8310
65°	2817	3395	2817	3395
70°	45	259	45	259
75°	12	12	12	12
80°	0	18	0	18
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16761 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	3.9
10°-20°	149.3	11.5
20°-30°	242.6	18.7
30°-40°	308.0	23.8
40°-50°	295.4	22.8
50°-60°	198.8	15.3
60°-70°	50.3	3.9
70°-80°	0.2	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°	442.6	34.2
0°-40°	750.7	57.9
0°-60°	1244.9	96.1
0°-90°	1295.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1295.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	533	533	533	533	533	
5°	532	532	532	532	532	51
15°	526	527	526	527	526	149
25°	525	526	525	526	525	242
35°	494	495	494	495	494	307
45°	388	388	388	388	388	295
55°	228	230	228	230	228	197
65°	39	47	39	47	39	47
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°	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3
0.5°	533.2	533.2	533.3	533.4	533.3	533.4	533.3	533.2	533.2	533.2	533.3
1°	533.2	533.2	533.3	533.4	533.2	533.4	533.3	533.2	533.2	533.2	533.3
1.5°	533.1	533.1	533.2	533.3	533.2	533.3	533.2	533.1	533.1	533.1	533.2
2°	533.0	533.0	533.2	533.2	533.1	533.2	533.2	533.0	533.0	533.0	533.2
2.5°	532.9	533.0	533.1	533.2	533.0	533.2	533.1	533.0	532.9	533.0	533.1
3°	532.8	532.8	533.0	533.0	532.9	533.0	533.0	532.8	532.8	532.8	533.0
3.5°	532.6	532.7	532.8	532.9	532.8	532.9	532.8	532.7	532.6	532.7	532.8
4°	532.5	532.5	532.6	532.8	532.6	532.8	532.6	532.5	532.5	532.5	532.6
4.5°	532.3	532.4	532.5	532.6	532.5	532.6	532.5	532.4	532.3	532.4	532.5
5°	532.1	532.2	532.3	532.4	532.3	532.4	532.3	532.2	532.1	532.2	532.3
5.5°	531.8	531.8	532.1	532.2	532.1	532.2	532.1	531.8	531.8	531.8	532.1
6°	531.5	531.6	531.7	532.0	531.8	532.0	531.7	531.6	531.5	531.6	531.7
6.5°	531.3	531.4	531.5	531.7	531.5	531.7	531.5	531.4	531.3	531.4	531.5
7°	531.0	531.1	531.3	531.4	531.3	531.4	531.3	531.1	531.0	531.1	531.3
7.5°	530.7	530.8	531.0	531.1	531.0	531.1	531.0	530.8	530.7	530.8	531.0
8°	530.5	530.5	530.7	530.9	530.8	530.9	530.7	530.5	530.5	530.5	530.7
8.5°	530.1	530.1	530.4	530.5	530.5	530.5	530.4	530.1	530.1	530.1	530.4
9°	529.7	529.8	530.0	530.2	530.1	530.2	530.0	529.8	529.7	529.8	530.0
9.5°	529.4	529.5	529.7	529.9	529.8	529.9	529.7	529.5	529.4	529.5	529.7
10°	529.1	529.2	529.4	529.6	529.5	529.6	529.4	529.2	529.1	529.2	529.4
10.5°	528.8	528.9	529.0	529.3	529.2	529.3	529.0	528.9	528.8	528.9	529.0
11°	528.4	528.4	528.6	529.0	528.9	529.0	528.6	528.4	528.4	528.4	528.6
11.5°	528.1	528.1	528.3	528.6	528.5	528.6	528.3	528.1	528.1	528.1	528.3
12°	527.8	527.8	528.0	528.3	528.3	528.3	528.0	527.8	527.8	527.8	528.0
12.5°	527.5	527.5	527.8	528.0	528.0	528.0	527.8	527.5	527.5	527.5	527.8
13°	527.2	527.3	527.5	527.7	527.8	527.7	527.5	527.3	527.2	527.3	527.5
13.5°	526.8	526.9	527.3	527.5	527.5	527.5	527.3	526.9	526.8	526.9	527.3
14°	526.6	526.7	526.9	527.3	527.3	527.3	526.9	526.7	526.6	526.7	526.9
14.5°	526.4	526.5	526.7	527.0	527.2	527.0	526.7	526.5	526.4	526.5	526.7
15°	526.2	526.3	526.5	526.9	526.9	526.9	526.5	526.3	526.2	526.3	526.5
15.5°	526.0	526.1	526.4	526.7	526.8	526.7	526.4	526.1	526.0	526.1	526.4
16°	525.9	526.0	526.2	526.6	526.7	526.6	526.2	526.0	525.9	526.0	526.2
16.5°	525.8	525.9	526.1	526.5	526.6	526.5	526.1	525.9	525.8	525.9	526.1
17°	525.7	525.8	526.1	526.5	526.6	526.5	526.1	525.8	525.7	525.8	526.1
17.5°	525.7	525.8	526.0	526.5	526.6	526.5	526.0	525.8	525.7	525.8	526.0
18°	525.6	525.7	526.0	526.5	526.6	526.5	526.0	525.7	525.6	525.7	526.0
18.5°	525.6	525.7	526.0	526.5	526.6	526.5	526.0	525.7	525.6	525.7	526.0
19°	525.7	525.7	526.0	526.6	526.7	526.6	526.0	525.7	525.7	525.7	526.0
19.5°	525.7	525.8	526.1	526.6	526.8	526.6	526.1	525.8	525.7	525.8	526.1
20°	525.7	525.8	526.1	526.7	526.8	526.7	526.1	525.8	525.7	525.8	526.1
20.5°	525.8	525.8	526.2	526.7	526.9	526.7	526.2	525.8	525.8	525.8	526.2
21°	525.8	525.9	526.2	526.8	526.9	526.8	526.2	525.9	525.8	525.9	526.2



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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°	525.7	525.8	526.2	526.8	527.0	526.8	526.2	525.8	525.7	525.8	526.2
23°	525.6	525.7	526.1	526.7	526.9	526.7	526.1	525.7	525.6	525.7	526.1
23.5°	525.4	525.6	526.0	526.6	526.8	526.6	526.0	525.6	525.4	525.6	526.0
24°	525.3	525.3	525.8	526.5	526.7	526.5	525.8	525.3	525.3	525.3	525.8
24.5°	525.0	525.1	525.6	526.3	526.5	526.3	525.6	525.1	525.0	525.1	525.6
25°	524.7	524.8	525.3	526.1	526.2	526.1	525.3	524.8	524.7	524.8	525.3
25.5°	524.4	524.5	525.0	525.8	525.9	525.8	525.0	524.5	524.4	524.5	525.0
26°	524.0	524.1	524.6	525.3	525.6	525.3	524.6	524.1	524.0	524.1	524.6
26.5°	523.4	523.5	524.2	524.9	525.0	524.9	524.2	523.5	523.4	523.5	524.2
27°	522.9	523.0	523.5	524.3	524.4	524.3	523.5	523.0	522.9	523.0	523.5
27.5°	522.1	522.4	522.9	523.6	523.7	523.6	522.9	522.4	522.1	522.4	522.9
28°	521.4	521.5	522.1	522.9	523.0	522.9	522.1	521.5	521.4	521.5	522.1
28.5°	520.5	520.6	521.3	522.0	522.0	522.0	521.3	520.6	520.5	520.6	521.3
29°	519.5	519.7	520.3	521.0	521.1	521.0	520.3	519.7	519.5	519.7	520.3
29.5°	518.3	518.5	519.3	519.9	519.9	519.9	519.3	518.5	518.3	518.5	519.3
30°	517.0	517.2	518.0	518.6	518.5	518.6	518.0	517.2	517.0	517.2	518.0
30.5°	515.6	515.8	516.6	517.2	517.1	517.2	516.6	515.8	515.6	515.8	516.6
31°	514.0	514.2	515.1	515.6	515.4	515.6	515.1	514.2	514.0	514.2	515.1
31.5°	512.2	512.5	513.4	513.8	513.6	513.8	513.4	512.5	512.2	512.5	513.4
32°	510.2	510.6	511.5	511.9	511.7	511.9	511.5	510.6	510.2	510.6	511.5
32.5°	508.1	508.5	509.3	509.7	509.5	509.7	509.3	508.5	508.1	508.5	509.3
33°	505.7	506.1	507.1	507.3	507.0	507.3	507.1	506.1	505.7	506.1	507.1
33.5°	503.1	503.6	504.5	504.8	504.4	504.8	504.5	503.6	503.1	503.6	504.5
34°	500.4	500.9	501.9	502.0	501.6	502.0	501.9	500.9	500.4	500.9	501.9
34.5°	497.3	497.9	498.9	498.9	498.5	498.9	498.9	497.9	497.3	497.9	498.9
35°	494.2	494.7	495.8	495.7	495.3	495.7	495.8	494.7	494.2	494.7	495.8
35.5°	490.8	491.3	492.4	492.3	491.9	492.3	492.4	491.3	490.8	491.3	492.4
36°	487.2	487.8	488.9	488.7	488.1	488.7	488.9	487.8	487.2	487.8	488.9
36.5°	483.4	484.0	485.0	484.8	484.2	484.8	485.0	484.0	483.4	484.0	485.0
37°	479.3	479.9	480.9	480.8	480.1	480.8	480.9	479.9	479.3	479.9	480.9
37.5°	475.1	475.6	476.7	476.4	475.8	476.4	476.7	475.6	475.1	475.6	476.7
38°	470.6	471.3	472.2	471.9	471.2	471.9	472.2	471.3	470.6	471.3	472.2
38.5°	465.9	466.6	467.5	467.1	466.5	467.1	467.5	466.6	465.9	466.6	467.5
39°	461.2	461.8	462.6	462.3	461.6	462.3	462.6	461.8	461.2	461.8	462.6
39.5°	456.2	456.7	457.5	457.2	456.4	457.2	457.5	456.7	456.2	456.7	457.5
40°	450.9	451.3	452.2	451.9	451.1	451.9	452.2	451.3	450.9	451.3	452.2
40.5°	445.6	445.9	446.6	446.3	445.6	446.3	446.6	445.9	445.6	445.9	446.6
41°	439.9	440.2	440.9	440.7	439.9	440.7	440.9	440.2	439.9	440.2	440.9
41.5°	434.2	434.4	435.0	434.6	434.1	434.6	435.0	434.4	434.2	434.4	435.0
42°	428.2	428.4	428.8	428.6	428.1	428.6	428.8	428.4	428.2	428.4	428.8
42.5°	422.1	422.1	422.5	422.3	421.8	422.3	422.5	422.1	422.1	422.1	422.5
43°	415.7	415.7	416.0	415.8	415.3	415.8	416.0	415.7	415.7	415.7	416.0
43.5°	409.1	409.1	409.2	409.0	408.7	409.0	409.2	409.1	409.1	409.1	409.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	388.2	387.9	387.9	387.8	387.7	387.8	387.9	387.9	388.2	387.9	387.9
45.5°	380.7	380.4	380.3	380.2	380.1	380.2	380.3	380.4	380.7	380.4	380.3
46°	373.0	372.6	372.5	372.5	372.4	372.5	372.5	372.6	373.0	372.6	372.5
46.5°	365.1	364.6	364.5	364.4	364.3	364.4	364.5	364.6	365.1	364.6	364.5
47°	356.5	356.1	355.8	355.6	355.3	355.6	355.8	356.1	356.5	356.1	355.8
47.5°	347.2	346.8	346.4	346.5	346.4	346.5	346.4	346.8	347.2	346.8	346.4
48°	337.4	337.3	337.5	337.6	337.7	337.6	337.5	337.3	337.4	337.3	337.5
48.5°	328.0	328.0	328.5	328.6	328.6	328.6	328.5	328.0	328.0	328.0	328.5
49°	319.0	318.9	319.2	319.3	319.4	319.3	319.2	318.9	319.0	318.9	319.2
49.5°	309.2	309.3	309.9	310.3	310.4	310.3	309.9	309.3	309.2	309.3	309.9
50°	299.5	299.9	300.7	301.3	301.6	301.3	300.7	299.9	299.5	299.9	300.7
50.5°	290.5	291.0	291.9	292.4	292.6	292.4	291.9	291.0	290.5	291.0	291.9
51°	282.3	282.6	283.5	283.9	284.1	283.9	283.5	282.6	282.3	282.6	283.5
51.5°	274.4	274.6	275.6	276.3	276.6	276.3	275.6	274.6	274.4	274.6	275.6
52°	266.6	267.0	268.0	269.0	269.4	269.0	268.0	267.0	266.6	267.0	268.0
52.5°	259.6	260.0	261.1	262.0	262.7	262.0	261.1	260.0	259.6	260.0	261.1
53°	253.1	253.5	254.7	255.6	256.1	255.6	254.7	253.5	253.1	253.5	254.7
53.5°	247.0	247.4	248.5	249.3	249.8	249.3	248.5	247.4	247.0	247.4	248.5
54°	241.2	241.6	242.5	243.0	243.3	243.0	242.5	241.6	241.2	241.6	242.5
54.5°	235.2	235.5	236.2	236.9	237.0	236.9	236.2	235.5	235.2	235.5	236.2
55°	228.4	228.8	229.5	229.9	229.7	229.9	229.5	228.8	228.4	228.8	229.5
55.5°	220.7	221.0	221.8	222.3	222.1	222.3	221.8	221.0	220.7	221.0	221.8
56°	212.0	212.4	213.5	214.0	213.9	214.0	213.5	212.4	212.0	212.4	213.5
56.5°	202.8	203.5	204.4	205.3	205.2	205.3	204.4	203.5	202.8	203.5	204.4
57°	193.2	193.8	195.2	195.7	195.8	195.7	195.2	193.8	193.2	193.8	195.2
57.5°	183.2	183.9	185.4	186.0	186.1	186.0	185.4	183.9	183.2	183.9	185.4
58°	173.1	173.7	175.2	176.2	176.4	176.2	175.2	173.7	173.1	173.7	175.2
58.5°	162.7	163.3	164.9	166.0	166.4	166.0	164.9	163.3	162.7	163.3	164.9
59°	152.3	152.8	154.3	155.9	156.3	155.9	154.3	152.8	152.3	152.8	154.3
59.5°	141.6	142.3	144.0	145.8	146.2	145.8	144.0	142.3	141.6	142.3	144.0
60°	131.0	131.9	133.6	135.9	136.1	135.9	133.6	131.9	131.0	131.9	133.6
60.5°	120.5	121.4	123.7	125.7	126.2	125.7	123.7	121.4	120.5	121.4	123.7
61°	110.3	111.3	113.9	115.8	116.4	115.8	113.9	111.3	110.3	111.3	113.9
61.5°	100.5	101.4	104.2	105.9	106.9	105.9	104.2	101.4	100.5	101.4	104.2
62°	90.8	91.7	94.6	96.3	97.4	96.3	94.6	91.7	90.8	91.7	94.6
62.5°	81.1	82.3	85.3	87.0	88.2	87.0	85.3	82.3	81.1	82.3	85.3
63°	71.6	73.2	76.3	78.1	79.5	78.1	76.3	73.2	71.6	73.2	76.3
63.5°	62.8	64.2	67.5	69.4	70.8	69.4	67.5	64.2	62.8	64.2	67.5
64°	54.5	56.0	59.0	61.2	62.5	61.2	59.0	56.0	54.5	56.0	59.0
64.5°	46.6	48.0	50.9	53.4	54.7	53.4	50.9	48.0	46.6	48.0	50.9
65°	39.0	41.0	43.4	45.9	47.0	45.9	43.4	41.0	39.0	41.0	43.4
65.5°	32.4	34.2	36.4	38.8	39.9	38.8	36.4	34.2	32.4	34.2	36.4
66°	26.1	27.9	30.1	32.4	33.0	32.4	30.1	27.9	26.1	27.9	30.1



TEST NUMBER: P775824

CATALOG NUMBER: HCDJBL510CSD-HCD81TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	10.5	13.3	14.4	16.4	16.5	16.4	14.4	13.3	10.5	13.3	14.4
68°	6.4	9.4	10.5	12.5	12.3	12.5	10.5	9.4	6.4	9.4	10.5
68.5°	2.8	6.1	7.4	8.9	9.8	8.9	7.4	6.1	2.8	6.1	7.4
69°	1.5	3.7	4.8	5.8	7.6	5.8	4.8	3.7	1.5	3.7	4.8
69.5°	1.0	1.8	2.7	3.4	5.2	3.4	2.7	1.8	1.0	1.8	2.7
70°	0.5	1.1	1.3	1.5	2.9	1.5	1.3	1.1	0.5	1.1	1.3
70.5°	0.2	0.5	0.7	0.6	0.9	0.6	0.7	0.5	0.2	0.5	0.7
71°	0.2	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.4
71.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
72°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
72.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
73°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
73.5°	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
74°	0.1	0.1	0.1	0.2	0.2	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
77°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
77.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
78°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
78.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
79°	0.1	0.1	0.1	0.1	0.1	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	0.1	0.1	0.1	0.1	0.1
80°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
80.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
81°	0.0	0.0	0.0	0.0	0.1	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: P775824
CATALOG NUMBER: HCDJBL510CSD-HCD81TRH-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: P775824

CATALOG NUMBER: HCDJBL510CSD-HCD81TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	533.3	533.3	533.3	533.3	533.3	533.3
0.5°	533.4	533.3	533.4	533.3	533.2	533.2
1°	533.4	533.2	533.4	533.3	533.2	533.2
1.5°	533.3	533.2	533.3	533.2	533.1	533.1
2°	533.2	533.1	533.2	533.2	533.0	533.0
2.5°	533.2	533.0	533.2	533.1	533.0	532.9
3°	533.0	532.9	533.0	533.0	532.8	532.8
3.5°	532.9	532.8	532.9	532.8	532.7	532.6
4°	532.8	532.6	532.8	532.6	532.5	532.5
4.5°	532.6	532.5	532.6	532.5	532.4	532.3
5°	532.4	532.3	532.4	532.3	532.2	532.1
5.5°	532.2	532.1	532.2	532.1	531.8	531.8
6°	532.0	531.8	532.0	531.7	531.6	531.5
6.5°	531.7	531.5	531.7	531.5	531.4	531.3
7°	531.4	531.3	531.4	531.3	531.1	531.0
7.5°	531.1	531.0	531.1	531.0	530.8	530.7
8°	530.9	530.8	530.9	530.7	530.5	530.5
8.5°	530.5	530.5	530.5	530.4	530.1	530.1
9°	530.2	530.1	530.2	530.0	529.8	529.7
9.5°	529.9	529.8	529.9	529.7	529.5	529.4
10°	529.6	529.5	529.6	529.4	529.2	529.1
10.5°	529.3	529.2	529.3	529.0	528.9	528.8
11°	529.0	528.9	529.0	528.6	528.4	528.4
11.5°	528.6	528.5	528.6	528.3	528.1	528.1
12°	528.3	528.3	528.3	528.0	527.8	527.8
12.5°	528.0	528.0	528.0	527.8	527.5	527.5
13°	527.7	527.8	527.7	527.5	527.3	527.2
13.5°	527.5	527.5	527.5	527.3	526.9	526.8
14°	527.3	527.3	527.3	526.9	526.7	526.6
14.5°	527.0	527.2	527.0	526.7	526.5	526.4
15°	526.9	526.9	526.9	526.5	526.3	526.2
15.5°	526.7	526.8	526.7	526.4	526.1	526.0
16°	526.6	526.7	526.6	526.2	526.0	525.9
16.5°	526.5	526.6	526.5	526.1	525.9	525.8
17°	526.5	526.6	526.5	526.1	525.8	525.7
17.5°	526.5	526.6	526.5	526.0	525.8	525.7
18°	526.5	526.6	526.5	526.0	525.7	525.6
18.5°	526.5	526.6	526.5	526.0	525.7	525.6
19°	526.6	526.7	526.6	526.0	525.7	525.7
19.5°	526.6	526.8	526.6	526.1	525.8	525.7
20°	526.7	526.8	526.7	526.1	525.8	525.7
20.5°	526.7	526.9	526.7	526.2	525.8	525.8
21°	526.8	526.9	526.8	526.2	525.9	525.8

TEST NUMBER: P775824

CATALOG NUMBER: HCDJBL510CSD-HCD81TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	526.8	527.0	526.8	526.2	525.8	525.7
23°	526.7	526.9	526.7	526.1	525.7	525.6
23.5°	526.6	526.8	526.6	526.0	525.6	525.4
24°	526.5	526.7	526.5	525.8	525.3	525.3
24.5°	526.3	526.5	526.3	525.6	525.1	525.0
25°	526.1	526.2	526.1	525.3	524.8	524.7
25.5°	525.8	525.9	525.8	525.0	524.5	524.4
26°	525.3	525.6	525.3	524.6	524.1	524.0
26.5°	524.9	525.0	524.9	524.2	523.5	523.4
27°	524.3	524.4	524.3	523.5	523.0	522.9
27.5°	523.6	523.7	523.6	522.9	522.4	522.1
28°	522.9	523.0	522.9	522.1	521.5	521.4
28.5°	522.0	522.0	522.0	521.3	520.6	520.5
29°	521.0	521.1	521.0	520.3	519.7	519.5
29.5°	519.9	519.9	519.9	519.3	518.5	518.3
30°	518.6	518.5	518.6	518.0	517.2	517.0
30.5°	517.2	517.1	517.2	516.6	515.8	515.6
31°	515.6	515.4	515.6	515.1	514.2	514.0
31.5°	513.8	513.6	513.8	513.4	512.5	512.2
32°	511.9	511.7	511.9	511.5	510.6	510.2
32.5°	509.7	509.5	509.7	509.3	508.5	508.1
33°	507.3	507.0	507.3	507.1	506.1	505.7
33.5°	504.8	504.4	504.8	504.5	503.6	503.1
34°	502.0	501.6	502.0	501.9	500.9	500.4
34.5°	498.9	498.5	498.9	498.9	497.9	497.3
35°	495.7	495.3	495.7	495.8	494.7	494.2
35.5°	492.3	491.9	492.3	492.4	491.3	490.8
36°	488.7	488.1	488.7	488.9	487.8	487.2
36.5°	484.8	484.2	484.8	485.0	484.0	483.4
37°	480.8	480.1	480.8	480.9	479.9	479.3
37.5°	476.4	475.8	476.4	476.7	475.6	475.1
38°	471.9	471.2	471.9	472.2	471.3	470.6
38.5°	467.1	466.5	467.1	467.5	466.6	465.9
39°	462.3	461.6	462.3	462.6	461.8	461.2
39.5°	457.2	456.4	457.2	457.5	456.7	456.2
40°	451.9	451.1	451.9	452.2	451.3	450.9
40.5°	446.3	445.6	446.3	446.6	445.9	445.6
41°	440.7	439.9	440.7	440.9	440.2	439.9
41.5°	434.6	434.1	434.6	435.0	434.4	434.2
42°	428.6	428.1	428.6	428.8	428.4	428.2
42.5°	422.3	421.8	422.3	422.5	422.1	422.1
43°	415.8	415.3	415.8	416.0	415.7	415.7
43.5°	409.0	408.7	409.0	409.2	409.1	409.1



TEST NUMBER: P775824

CATALOG NUMBER: HCDJBL510CSD-HCD81TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	387.8	387.7	387.8	387.9	387.9	388.2
45.5°	380.2	380.1	380.2	380.3	380.4	380.7
46°	372.5	372.4	372.5	372.5	372.6	373.0
46.5°	364.4	364.3	364.4	364.5	364.6	365.1
47°	355.6	355.3	355.6	355.8	356.1	356.5
47.5°	346.5	346.4	346.5	346.4	346.8	347.2
48°	337.6	337.7	337.6	337.5	337.3	337.4
48.5°	328.6	328.6	328.6	328.5	328.0	328.0
49°	319.3	319.4	319.3	319.2	318.9	319.0
49.5°	310.3	310.4	310.3	309.9	309.3	309.2
50°	301.3	301.6	301.3	300.7	299.9	299.5
50.5°	292.4	292.6	292.4	291.9	291.0	290.5
51°	283.9	284.1	283.9	283.5	282.6	282.3
51.5°	276.3	276.6	276.3	275.6	274.6	274.4
52°	269.0	269.4	269.0	268.0	267.0	266.6
52.5°	262.0	262.7	262.0	261.1	260.0	259.6
53°	255.6	256.1	255.6	254.7	253.5	253.1
53.5°	249.3	249.8	249.3	248.5	247.4	247.0
54°	243.0	243.3	243.0	242.5	241.6	241.2
54.5°	236.9	237.0	236.9	236.2	235.5	235.2
55°	229.9	229.7	229.9	229.5	228.8	228.4
55.5°	222.3	222.1	222.3	221.8	221.0	220.7
56°	214.0	213.9	214.0	213.5	212.4	212.0
56.5°	205.3	205.2	205.3	204.4	203.5	202.8
57°	195.7	195.8	195.7	195.2	193.8	193.2
57.5°	186.0	186.1	186.0	185.4	183.9	183.2
58°	176.2	176.4	176.2	175.2	173.7	173.1
58.5°	166.0	166.4	166.0	164.9	163.3	162.7
59°	155.9	156.3	155.9	154.3	152.8	152.3
59.5°	145.8	146.2	145.8	144.0	142.3	141.6
60°	135.9	136.1	135.9	133.6	131.9	131.0
60.5°	125.7	126.2	125.7	123.7	121.4	120.5
61°	115.8	116.4	115.8	113.9	111.3	110.3
61.5°	105.9	106.9	105.9	104.2	101.4	100.5
62°	96.3	97.4	96.3	94.6	91.7	90.8
62.5°	87.0	88.2	87.0	85.3	82.3	81.1
63°	78.1	79.5	78.1	76.3	73.2	71.6
63.5°	69.4	70.8	69.4	67.5	64.2	62.8
64°	61.2	62.5	61.2	59.0	56.0	54.5
64.5°	53.4	54.7	53.4	50.9	48.0	46.6
65°	45.9	47.0	45.9	43.4	41.0	39.0
65.5°	38.8	39.9	38.8	36.4	34.2	32.4
66°	32.4	33.0	32.4	30.1	27.9	26.1



TEST NUMBER: P775824

CATALOG NUMBER: HCDJBL510CSD-HCD81TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	16.4	16.5	16.4	14.4	13.3	10.5
68°	12.5	12.3	12.5	10.5	9.4	6.4
68.5°	8.9	9.8	8.9	7.4	6.1	2.8
69°	5.8	7.6	5.8	4.8	3.7	1.5
69.5°	3.4	5.2	3.4	2.7	1.8	1.0
70°	1.5	2.9	1.5	1.3	1.1	0.5
70.5°	0.6	0.9	0.6	0.7	0.5	0.2
71°	0.3	0.3	0.3	0.4	0.3	0.2
71.5°	0.2	0.2	0.2	0.2	0.2	0.2
72°	0.2	0.2	0.2	0.2	0.2	0.2
72.5°	0.2	0.2	0.2	0.2	0.2	0.2
73°	0.2	0.2	0.2	0.2	0.2	0.1
73.5°	0.2	0.2	0.2	0.2	0.1	0.1
74°	0.2	0.2	0.2	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	0.1	0.1	0.1
77°	0.1	0.1	0.1	0.1	0.1	0.1
77.5°	0.1	0.1	0.1	0.1	0.1	0.1
78°	0.1	0.1	0.1	0.1	0.1	0.1
78.5°	0.1	0.1	0.1	0.1	0.1	0.1
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	0.0	0.0
80.5°	0.1	0.1	0.1	0.1	0.0	0.0
81°	0.0	0.1	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: P775824

CATALOG NUMBER: HCDJBL510CSD-HCD81TRH-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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Cooper Lighting Solutions Photometric Lab
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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°	525.8	525.9	526.2	526.8	527.0	526.8	526.2	525.9	525.8	525.9	526.2
22°	525.8	525.8	526.2	526.8	527.0	526.8	526.2	525.8	525.8	525.8	526.2



44°	402.4	402.2	402.3	402.1	401.8	402.1	402.3	402.2	402.4	402.2	402.3
44.5°	395.4	395.1	395.2	395.1	394.8	395.1	395.2	395.1	395.4	395.1	395.2



66.5°	20.9	22.6	24.1	26.3	27.0	26.3	24.1	22.6	20.9	22.6	24.1
67°	15.7	17.5	19.1	21.2	21.4	21.2	19.1	17.5	15.7	17.5	19.1



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°	526.8	527.0	526.8	526.2	525.9	525.8
22°	526.8	527.0	526.8	526.2	525.8	525.8



44°	402.1	401.8	402.1	402.3	402.2	402.4
44.5°	395.1	394.8	395.1	395.2	395.1	395.4



66.5°	26.3	27.0	26.3	24.1	22.6	20.9
67°	21.2	21.4	21.2	19.1	17.5	15.7

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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)