

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: P775893

Luminaire Tested: HCDJBL5510CSD-HCD8TSQC-1000lm-4000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775893
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-HCD8TSQC-1000lm-4000K
Description: 8 INCH SQUARE MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

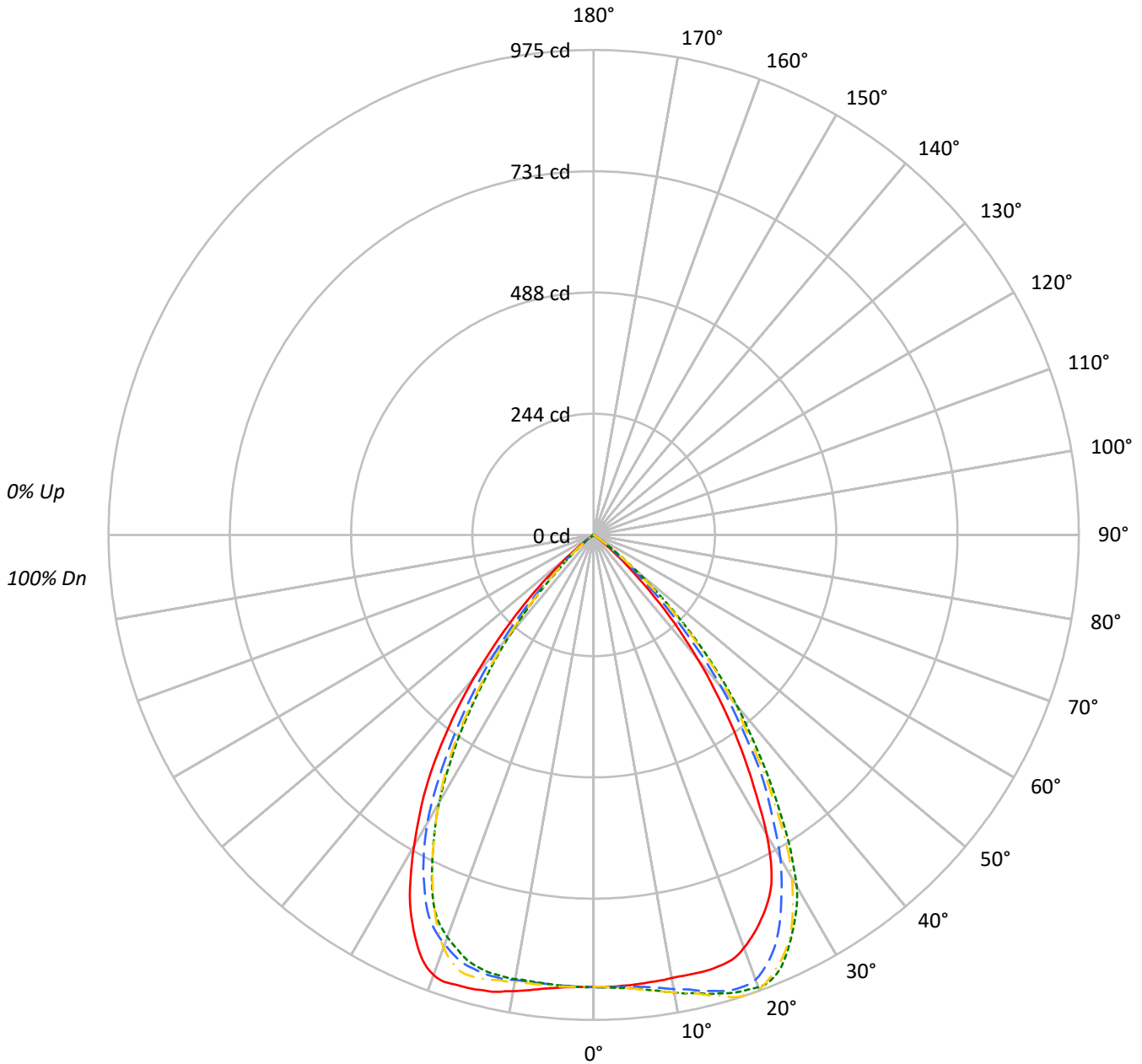
Lumens per Lamp: N/A
Luminaire Lumens: 1221.9 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.17 / 1.07
Luminous Opening: Rectangular (W 0.67' x L: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 10
Input Voltage (V): NR
Input Current (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									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				100															
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93				93															
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85				85															
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	82	80	78				78															
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	74	72				72															
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66				66															
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61				61															
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	66	61	58	56				56															
8	76	65	59	54	74	65	59	54	64	58	54	62	57	54	61	57	53	52				52															
9	71	61	55	50	70	61	54	50	60	54	50	59	54	50	58	53	50	48				48															
10	68	57	51	47	67	57	51	47	56	50	47	55	50	46	54	50	46	45				45															

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	21796	21796	21796	21796
5°	21853	22041	22005	21856
10°	22023	22749	22678	22077
15°	22466	23705	23459	22322
20°	22545	24688	24009	21945
25°	21766	24399	22804	20346
30°	19282	22610	19996	17202
35°	14797	18447	16354	12868
40°	10170	14020	11647	8104
45°	5348	9105	6667	3795
50°	1794	4115	2563	1231
55°	125	890	280	29
60°	19	24	19	14
65°	11	11	11	6
70°	7	7	7	7
75°	9	9	9	0
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°

Vertical Angle: 45°

Luminance: 9203 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	7.1
10°-20°	262.4	21.5
20°-30°	382.7	31.3
30°-40°	329.8	27.0
40°-50°	145.0	11.9
50°-60°	14.4	1.2
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°	732.4	59.9
0°-40°	1062.2	86.9
0°-60°	1221.6	100.0
0°-90°	1221.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1221.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	909	909	909	909	909	
5°	908	916	914	908	908	87
15°	905	955	945	899	905	255
25°	823	922	862	769	823	373
35°	506	630	559	440	506	314
45°	158	268	197	112	158	126
55°	3	21	7	1	3	10
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°	909.0	909.0	909.0	909.0	909.0	909.0	909.0	909.0	909.0	909.0	909.0
0.5°	909.2	909.6	909.8	909.1	909.4	908.9	908.5	908.7	909.0	909.3	909.3
1°	909.2	909.7	910.0	909.6	909.7	909.2	908.6	908.8	909.1	909.3	909.3
1.5°	909.2	909.6	909.8	910.0	910.4	909.7	908.9	909.1	909.1	909.2	909.1
2°	909.0	909.3	909.7	910.3	911.0	910.5	909.7	909.6	909.4	909.2	909.0
2.5°	909.0	909.3	909.8	910.3	911.5	911.5	910.5	910.3	910.1	909.3	908.7
3°	908.7	909.2	910.0	910.6	912.0	911.8	911.5	911.4	910.5	909.4	908.5
3.5°	908.5	909.0	910.3	911.2	912.5	912.6	912.4	912.3	911.1	909.7	908.3
4°	908.2	908.7	910.6	912.0	913.4	913.6	913.4	913.5	912.1	910.0	908.1
4.5°	908.1	908.7	911.1	912.9	914.5	914.9	914.7	914.6	913.1	910.4	907.6
5°	907.9	908.7	911.7	914.2	915.7	916.0	916.2	916.2	914.2	910.8	907.6
5.5°	907.6	909.1	912.6	915.6	917.0	917.4	917.5	917.9	915.5	911.3	907.5
6°	907.3	909.3	913.5	917.0	918.5	918.9	919.2	919.6	916.9	912.1	907.5
6.5°	906.9	909.6	914.8	918.7	920.1	920.4	921.0	921.4	918.6	913.1	907.6
7°	906.5	910.0	916.2	920.6	921.9	921.9	922.7	923.4	920.4	914.1	907.6
7.5°	906.2	910.4	917.7	922.8	923.7	923.7	924.2	925.2	922.1	915.2	907.6
8°	906.1	911.0	919.3	925.0	925.6	925.6	926.3	927.5	924.1	916.3	907.7
8.5°	905.9	912.1	921.1	927.3	927.6	927.8	928.3	929.6	926.1	917.3	908.0
9°	905.6	913.2	923.2	929.9	929.9	929.9	930.2	931.9	928.0	918.5	908.1
9.5°	905.1	914.2	925.5	932.3	931.9	932.1	932.1	934.0	929.8	919.5	908.1
10°	904.5	915.1	927.4	934.9	934.3	934.5	934.2	935.8	931.4	920.6	908.6
10.5°	904.1	915.8	929.1	937.3	936.6	936.8	936.2	937.5	933.0	922.0	909.8
11°	904.1	916.8	930.6	939.0	938.8	938.9	938.0	939.0	934.6	924.1	910.9
11.5°	904.5	918.1	932.3	940.7	940.5	940.7	939.7	940.8	937.2	926.0	911.2
12°	904.7	919.9	934.6	942.6	941.8	942.6	941.8	943.5	939.1	927.8	910.9
12.5°	904.7	921.7	937.5	944.7	943.5	944.6	944.3	946.0	940.7	928.1	910.4
13°	904.6	922.8	940.3	947.3	945.7	947.0	947.4	948.0	941.5	928.6	910.3
13.5°	904.8	923.4	942.9	949.8	948.5	949.8	950.9	949.1	942.0	929.7	910.0
14°	905.2	923.9	944.8	951.4	951.2	952.8	953.7	949.9	942.9	930.7	909.2
14.5°	905.3	924.7	946.9	952.4	953.3	955.1	956.1	951.0	944.1	931.5	908.0
15°	905.0	925.2	949.3	953.2	954.9	956.7	958.6	952.8	945.0	932.0	906.6
15.5°	904.2	925.2	951.8	954.9	956.6	957.8	961.9	954.3	945.2	932.1	905.0
16°	903.3	924.3	954.0	956.4	958.7	959.5	965.7	955.2	945.3	932.5	903.7
16.5°	902.4	923.1	955.4	957.0	960.9	961.5	969.1	955.5	945.6	932.8	902.1
17°	901.3	921.6	956.4	957.0	962.6	962.9	971.6	955.1	946.0	933.2	899.9
17.5°	900.2	920.4	956.9	956.7	963.6	963.5	973.2	954.7	946.4	932.7	897.0
18°	898.5	919.0	956.9	956.3	964.4	963.4	974.0	954.4	947.0	930.9	893.2
18.5°	895.7	917.6	956.5	955.7	965.1	963.4	974.5	953.9	947.2	927.8	888.8
19°	892.0	915.8	955.7	955.3	965.9	963.8	975.0	953.2	946.4	923.1	884.8
19.5°	887.9	913.5	954.4	954.8	966.7	964.6	974.3	951.5	944.2	918.0	880.4
20°	883.5	910.5	951.6	954.0	967.5	965.3	972.6	948.8	940.9	912.5	875.8
20.5°	878.7	907.1	947.6	952.4	967.8	965.5	969.3	945.7	937.4	906.4	871.0
21°	873.4	903.5	942.3	949.8	967.1	964.7	964.7	942.0	932.5	899.2	866.0



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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°	856.4	890.4	923.5	938.8	957.4	960.6	949.5	930.5	911.6	875.4	848.1
23°	850.1	884.4	916.4	934.9	952.4	957.9	943.8	925.7	902.9	866.4	840.9
23.5°	843.6	877.5	908.3	930.0	946.3	954.6	937.6	920.4	893.6	856.9	832.8
24°	837.0	869.6	899.5	924.8	938.9	950.0	931.1	914.1	883.2	846.8	823.4
24.5°	830.0	860.6	889.5	918.8	930.6	944.4	924.2	906.8	872.8	836.1	813.1
25°	822.7	850.9	879.0	911.5	922.2	937.4	916.6	898.2	861.9	824.5	801.4
25.5°	814.8	840.6	867.4	903.2	913.3	929.3	908.3	888.6	851.0	812.9	789.7
26°	806.5	829.7	855.5	893.6	904.1	920.0	898.8	877.9	839.0	799.9	778.0
26.5°	797.1	818.3	842.9	882.9	894.2	909.5	888.8	866.1	826.6	786.8	766.2
27°	786.7	805.6	829.9	870.6	884.5	898.0	877.5	852.9	813.9	773.8	754.4
27.5°	774.4	792.2	817.2	856.8	874.8	886.1	865.7	839.4	798.8	760.7	740.5
28°	761.0	778.3	804.4	841.6	864.6	872.3	852.6	825.2	783.8	747.7	726.7
28.5°	746.4	763.9	791.9	825.5	854.1	858.0	838.8	811.8	768.8	733.8	712.7
29°	730.7	749.7	778.6	809.5	843.0	843.2	825.0	796.4	753.8	719.6	698.1
29.5°	713.8	735.0	764.9	793.4	830.6	827.7	811.3	781.0	738.7	705.2	683.4
30°	696.4	720.5	750.5	777.0	816.6	811.1	795.8	765.6	722.2	689.7	668.2
30.5°	677.1	706.2	734.8	761.0	799.1	794.5	780.3	750.2	706.0	674.3	652.4
31°	657.6	692.3	718.0	745.0	781.5	778.0	764.8	732.6	690.5	658.1	634.6
31.5°	637.5	677.5	700.9	729.1	764.0	761.4	749.3	714.7	674.4	641.9	615.9
32°	618.3	661.0	683.9	713.7	746.4	744.7	729.9	696.4	658.7	625.5	596.9
32.5°	598.7	643.5	667.3	697.6	727.4	728.8	709.9	678.4	643.2	609.3	578.3
33°	579.9	625.2	651.4	680.9	707.4	711.7	689.3	660.6	627.7	592.7	558.9
33.5°	561.1	605.6	635.8	664.0	687.6	694.6	669.1	642.0	611.1	575.5	540.3
34°	542.7	585.2	620.4	646.9	668.0	675.2	649.9	623.2	594.4	557.5	521.3
34.5°	524.2	565.9	604.0	628.9	648.9	654.8	630.7	604.7	577.1	538.3	503.1
35°	505.5	546.7	586.6	610.8	630.2	633.2	611.6	587.0	558.7	519.0	484.3
35.5°	487.8	528.0	568.2	592.7	611.5	612.0	591.5	568.8	539.5	499.7	466.5
36°	468.4	509.7	548.6	574.3	592.6	590.3	571.9	551.0	520.5	480.7	447.9
36.5°	448.9	491.2	527.9	555.6	573.2	569.2	551.5	532.6	501.9	462.9	429.6
37°	430.2	472.1	508.3	536.5	554.2	548.4	532.2	514.8	483.8	445.4	411.1
37.5°	412.0	454.0	489.6	518.7	535.5	529.5	513.8	497.4	466.4	427.6	393.0
38°	394.4	436.0	471.4	500.4	517.1	511.9	496.8	480.7	448.0	409.7	375.3
38.5°	378.2	417.7	454.0	482.8	499.2	495.3	480.5	462.7	429.2	391.7	358.1
39°	360.5	399.2	436.0	464.7	482.2	479.3	464.8	444.6	410.2	373.9	341.3
39.5°	342.8	380.9	417.6	445.2	465.3	463.3	448.7	425.3	390.9	355.2	324.2
40°	324.9	362.9	398.6	424.1	447.9	447.8	432.5	406.6	372.1	336.4	306.7
40.5°	307.2	345.1	379.9	403.7	430.1	431.2	415.5	387.8	352.6	317.1	289.0
41°	289.4	327.1	360.4	384.6	411.7	414.4	398.4	370.0	334.5	298.2	271.1
41.5°	272.4	309.2	340.9	366.5	393.3	397.8	381.2	352.2	316.6	279.9	253.3
42°	255.8	291.3	321.2	348.5	374.5	380.7	363.5	335.0	298.8	261.5	235.3
42.5°	239.5	273.1	301.7	330.6	356.1	363.5	345.7	317.4	281.1	243.9	217.8
43°	222.5	254.9	282.2	312.7	338.4	345.4	327.4	299.8	263.3	227.0	200.8
43.5°	205.8	236.2	264.1	294.7	320.3	327.0	309.1	282.1	245.6	210.5	184.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	157.7	183.6	212.4	242.6	268.5	271.4	255.7	231.2	196.6	163.0	137.9
45.5°	142.6	167.7	197.0	225.9	251.0	253.0	238.0	215.0	181.2	148.5	124.3
46°	128.1	152.9	181.5	209.5	233.3	234.8	220.6	198.8	166.9	134.8	111.7
46.5°	114.3	138.5	166.4	193.0	216.5	217.1	203.7	182.6	152.4	121.7	101.5
47°	101.2	125.0	152.0	177.3	199.9	199.4	187.0	167.0	138.8	110.1	91.4
47.5°	89.2	112.4	138.0	161.7	183.9	182.7	170.4	151.7	125.5	100.1	81.1
48°	78.3	100.8	124.3	147.2	168.0	166.9	155.1	137.4	113.0	90.0	70.9
48.5°	69.1	90.0	111.6	133.6	152.1	151.4	140.1	123.5	101.9	80.0	63.0
49°	61.1	80.0	100.0	120.5	136.8	136.5	125.8	111.7	90.8	70.0	55.9
49.5°	54.2	70.9	88.9	107.5	122.2	122.6	113.8	100.0	79.7	61.6	49.5
50°	48.1	62.6	78.7	94.8	110.3	110.7	101.8	88.2	68.7	54.2	43.5
50.5°	42.3	54.8	69.2	83.0	98.3	98.9	89.8	76.5	59.6	47.0	37.5
51°	36.9	47.6	60.3	71.9	86.4	87.1	77.8	64.7	51.6	40.4	31.9
51.5°	32.0	41.4	52.3	62.1	74.5	75.3	65.7	55.9	44.3	34.1	27.0
52°	27.2	35.3	44.8	53.3	62.7	63.4	56.5	47.7	37.5	28.4	22.1
52.5°	22.4	30.2	38.0	45.3	53.8	53.9	48.0	40.4	31.1	23.2	17.9
53°	17.5	25.2	32.6	38.1	45.6	45.6	40.4	33.7	25.4	18.8	13.8
53.5°	12.7	20.1	27.2	32.6	38.3	38.1	33.5	27.6	20.7	14.5	9.6
54°	7.5	15.0	21.8	27.1	31.5	31.2	27.4	22.5	16.1	10.2	5.5
54.5°	3.8	9.7	16.5	21.5	25.4	25.4	22.2	18.3	11.3	5.9	1.5
55°	3.0	5.1	11.1	16.1	21.3	20.7	18.0	14.0	6.7	1.7	1.1
55.5°	2.3	4.3	6.1	10.5	17.3	16.1	13.8	9.8	2.2	1.2	0.8
56°	1.6	3.4	2.7	5.5	13.2	11.4	9.7	5.6	1.3	0.9	0.7
56.5°	0.9	2.5	2.1	2.3	9.2	6.7	5.5	1.4	1.1	0.8	0.6
57°	0.8	1.7	1.7	1.8	5.1	2.1	1.4	1.1	0.8	0.7	0.5
57.5°	0.7	0.8	1.3	1.5	1.2	1.2	1.1	0.9	0.7	0.6	0.5
58°	0.6	0.7	0.7	1.1	0.9	0.9	0.8	0.8	0.6	0.5	0.4
58.5°	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4
59°	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4
59.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.3
60°	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3
60.5°	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.3	0.3
61°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
61.5°	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3
62°	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2
62.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
63°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
63.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
64°	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2
64.5°	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2
65°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
66°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1



TEST NUMBER: P775893

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
68°	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1
68.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	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	0.0
74°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
74.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
75°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
75.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	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: P775893
CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-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: P775893

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	909.0	909.0	909.0	909.0	909.0	909.0
0.5°	908.8	909.4	908.8	908.5	908.7	909.2
1°	908.8	909.3	909.0	908.6	909.0	909.2
1.5°	908.7	909.3	909.1	908.8	909.0	909.2
2°	908.5	909.2	909.2	909.1	909.1	909.0
2.5°	908.1	909.0	909.4	909.4	909.2	909.0
3°	907.7	908.8	909.6	910.0	909.4	908.7
3.5°	907.3	908.7	910.0	910.1	909.4	908.5
4°	906.9	908.6	910.1	910.5	909.4	908.2
4.5°	906.4	908.2	910.3	910.6	909.3	908.1
5°	906.0	908.0	910.3	910.6	909.2	907.9
5.5°	905.6	907.6	910.1	910.6	908.8	907.6
6°	905.2	907.3	910.0	910.4	908.7	907.3
6.5°	904.5	907.0	910.0	910.4	908.5	906.9
7°	904.0	906.8	910.1	910.5	908.3	906.5
7.5°	903.2	906.5	910.5	910.9	908.2	906.2
8°	902.5	906.4	910.5	911.1	908.3	906.1
8.5°	901.7	906.1	910.4	911.1	908.2	905.9
9°	900.6	905.8	910.5	911.1	907.7	905.6
9.5°	899.8	906.1	911.3	911.3	907.4	905.1
10°	899.5	906.7	912.5	912.4	907.4	904.5
10.5°	899.7	907.1	913.5	913.6	908.0	904.1
11°	899.5	906.9	914.3	914.5	908.7	904.1
11.5°	898.8	906.3	914.6	915.0	908.8	904.5
12°	898.0	905.5	915.1	915.2	908.4	904.7
12.5°	897.9	905.2	916.4	916.5	908.0	904.7
13°	897.9	905.0	918.0	918.0	907.7	904.6
13.5°	897.7	904.5	919.5	919.2	907.7	904.8
14°	897.0	903.2	920.0	919.9	907.1	905.2
14.5°	895.9	901.2	920.4	920.1	905.9	905.3
15°	894.8	899.2	920.5	920.4	904.2	905.0
15.5°	893.6	897.2	920.5	920.5	902.7	904.2
16°	892.3	895.0	919.9	920.4	901.0	903.3
16.5°	891.1	892.3	918.3	919.4	899.3	902.4
17°	888.6	888.5	915.1	917.1	897.0	901.3
17.5°	885.2	884.0	910.5	913.5	893.9	900.2
18°	880.9	879.2	904.7	908.8	890.2	898.5
18.5°	875.8	874.7	898.3	903.4	886.0	895.7
19°	870.8	869.9	891.1	897.2	881.8	892.0
19.5°	865.4	865.1	883.0	890.3	877.7	887.9
20°	859.5	860.0	874.0	882.2	873.5	883.5
20.5°	853.6	854.8	864.3	873.5	869.1	878.7
21°	846.9	849.0	853.6	863.5	864.6	873.4



TEST NUMBER: P775893

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	826.9	827.6	819.3	830.7	848.6	856.4
23°	819.6	818.1	806.7	818.5	841.9	850.1
23.5°	812.2	807.4	794.2	805.9	834.3	843.6
24°	804.4	795.4	781.2	793.1	825.2	837.0
24.5°	796.9	782.8	767.9	779.8	814.7	830.0
25°	787.1	769.0	754.0	766.5	802.7	822.7
25.5°	777.3	755.0	741.0	753.1	790.0	814.8
26°	767.7	740.8	727.9	739.1	776.5	806.5
26.5°	757.8	726.4	713.4	725.2	762.5	797.1
27°	744.0	711.6	699.2	711.1	748.0	786.7
27.5°	729.1	697.0	685.1	696.5	733.4	774.4
28°	712.0	682.6	670.5	681.5	718.7	761.0
28.5°	695.0	668.2	655.4	667.2	704.0	746.4
29°	677.7	653.2	639.9	652.6	689.0	730.7
29.5°	660.4	638.2	624.4	637.4	672.9	713.8
30°	642.3	621.3	609.5	622.4	656.7	696.4
30.5°	623.7	603.8	594.5	606.8	639.5	677.1
31°	605.0	586.0	579.4	591.9	621.9	657.6
31.5°	586.2	568.1	564.2	576.8	603.3	637.5
32°	567.5	549.0	548.6	561.3	584.7	618.3
32.5°	548.7	530.9	533.0	544.7	565.8	598.7
33°	529.9	513.0	516.0	527.4	546.9	579.9
33.5°	512.1	495.5	497.4	509.5	527.9	561.1
34°	494.0	477.6	477.7	490.8	510.9	542.7
34.5°	475.7	459.3	457.4	471.5	492.9	524.2
35°	456.7	439.6	438.6	452.0	474.8	505.5
35.5°	437.6	420.2	419.6	432.7	455.8	487.8
36°	419.1	400.9	401.6	413.9	437.0	468.4
36.5°	400.9	381.4	382.8	395.5	416.6	448.9
37°	383.8	364.0	364.3	377.6	398.0	430.2
37.5°	367.2	346.5	345.9	359.3	379.8	412.0
38°	350.0	329.0	327.4	340.9	362.5	394.4
38.5°	332.1	311.6	309.1	322.5	345.1	378.2
39°	313.4	294.1	290.6	304.1	327.6	360.5
39.5°	295.7	276.5	273.0	285.7	310.2	342.8
40°	278.3	258.9	255.5	268.6	292.8	324.9
40.5°	262.1	242.6	238.0	251.5	275.1	307.2
41°	245.8	226.6	222.0	234.6	258.8	289.4
41.5°	230.0	210.7	205.3	218.0	241.8	272.4
42°	213.4	195.3	190.5	202.0	225.8	255.8
42.5°	197.2	180.3	175.8	186.6	209.8	239.5
43°	181.3	165.4	162.0	172.0	194.6	222.5
43.5°	165.9	150.7	148.9	158.2	179.2	205.8



TEST NUMBER: P775893

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	123.3	111.9	113.5	120.6	134.8	157.7
45.5°	111.7	100.5	103.1	109.6	121.6	142.6
46°	100.3	89.8	93.4	99.2	109.0	128.1
46.5°	88.8	80.0	83.9	89.5	96.9	114.3
47°	77.4	71.2	75.4	80.4	86.0	101.2
47.5°	65.9	63.1	67.2	71.6	76.1	89.2
48°	58.8	55.9	59.6	63.6	67.3	78.3
48.5°	52.6	49.5	52.5	56.2	59.5	69.1
49°	47.0	43.7	45.7	49.3	52.7	61.1
49.5°	41.7	38.1	39.4	42.8	46.4	54.2
50°	36.7	33.0	34.1	36.5	40.7	48.1
50.5°	31.5	27.9	28.9	31.4	35.4	42.3
51°	26.6	22.8	23.5	26.3	30.7	36.9
51.5°	22.1	17.7	18.3	21.1	25.8	32.0
52°	17.9	12.6	13.0	16.1	21.1	27.2
52.5°	13.8	7.2	7.8	10.9	16.3	22.4
53°	9.7	3.5	3.8	6.0	10.8	17.5
53.5°	5.5	2.7	3.0	2.6	6.1	12.7
54°	1.5	2.0	2.2	2.2	2.8	7.5
54.5°	1.1	1.4	1.5	1.7	2.3	3.8
55°	0.8	0.7	0.7	1.3	1.8	3.0
55.5°	0.7	0.6	0.6	0.7	1.4	2.3
56°	0.6	0.5	0.6	0.7	0.8	1.6
56.5°	0.5	0.5	0.5	0.6	0.7	0.9
57°	0.5	0.4	0.5	0.5	0.6	0.8
57.5°	0.4	0.4	0.4	0.5	0.6	0.7
58°	0.4	0.4	0.4	0.5	0.5	0.6
58.5°	0.4	0.3	0.4	0.4	0.5	0.6
59°	0.3	0.3	0.3	0.4	0.5	0.5
59.5°	0.3	0.3	0.3	0.4	0.4	0.5
60°	0.3	0.3	0.3	0.3	0.4	0.4
60.5°	0.3	0.3	0.3	0.3	0.4	0.4
61°	0.3	0.2	0.3	0.3	0.3	0.4
61.5°	0.2	0.2	0.2	0.3	0.3	0.3
62°	0.2	0.2	0.2	0.3	0.3	0.3
62.5°	0.2	0.2	0.2	0.2	0.3	0.3
63°	0.2	0.2	0.2	0.2	0.3	0.3
63.5°	0.2	0.2	0.2	0.2	0.2	0.3
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	0.1	0.2	0.2	0.2	0.2
65.5°	0.1	0.1	0.1	0.2	0.2	0.2
66°	0.1	0.1	0.1	0.2	0.2	0.2



TEST NUMBER: P775893

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-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	0.2
68°	0.1	0.1	0.1	0.1	0.1	0.2
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°	0.0	0.0	0.1	0.1	0.1	0.1
74°	0.0	0.0	0.0	0.1	0.1	0.1
74.5°	0.0	0.0	0.0	0.1	0.1	0.1
75°	0.0	0.0	0.0	0.0	0.1	0.1
75.5°	0.0	0.0	0.0	0.0	0.0	0.1
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: P775893
CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-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°	867.9	899.9	936.4	946.1	964.9	963.5	959.9	938.6	926.8	891.7	860.5
22°	862.4	895.6	930.2	942.5	961.5	962.1	954.9	934.8	919.6	883.8	854.7



44°	189.3	218.0	246.3	276.6	303.1	308.6	291.0	264.7	228.8	194.1	167.9
44.5°	173.4	200.3	229.1	259.2	286.0	290.1	273.0	247.4	212.4	178.0	152.5



66.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
67°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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°	840.5	842.6	842.9	852.9	859.7	867.9
22°	833.6	835.6	831.1	842.0	854.4	862.4



44°	151.4	136.9	136.4	145.0	163.6	189.3
44.5°	137.3	124.2	124.7	132.4	149.0	173.4

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

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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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Scaled Data Report



(END OF REPORT)