

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: P775788

Luminaire Tested: HCDJBL510CSD-HCD6TRMW-1000lm-4000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775788
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-HCD6TRMW-1000lm-4000K
Description: 6 INCH ROUND MEDIUM MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1135.8 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.18
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

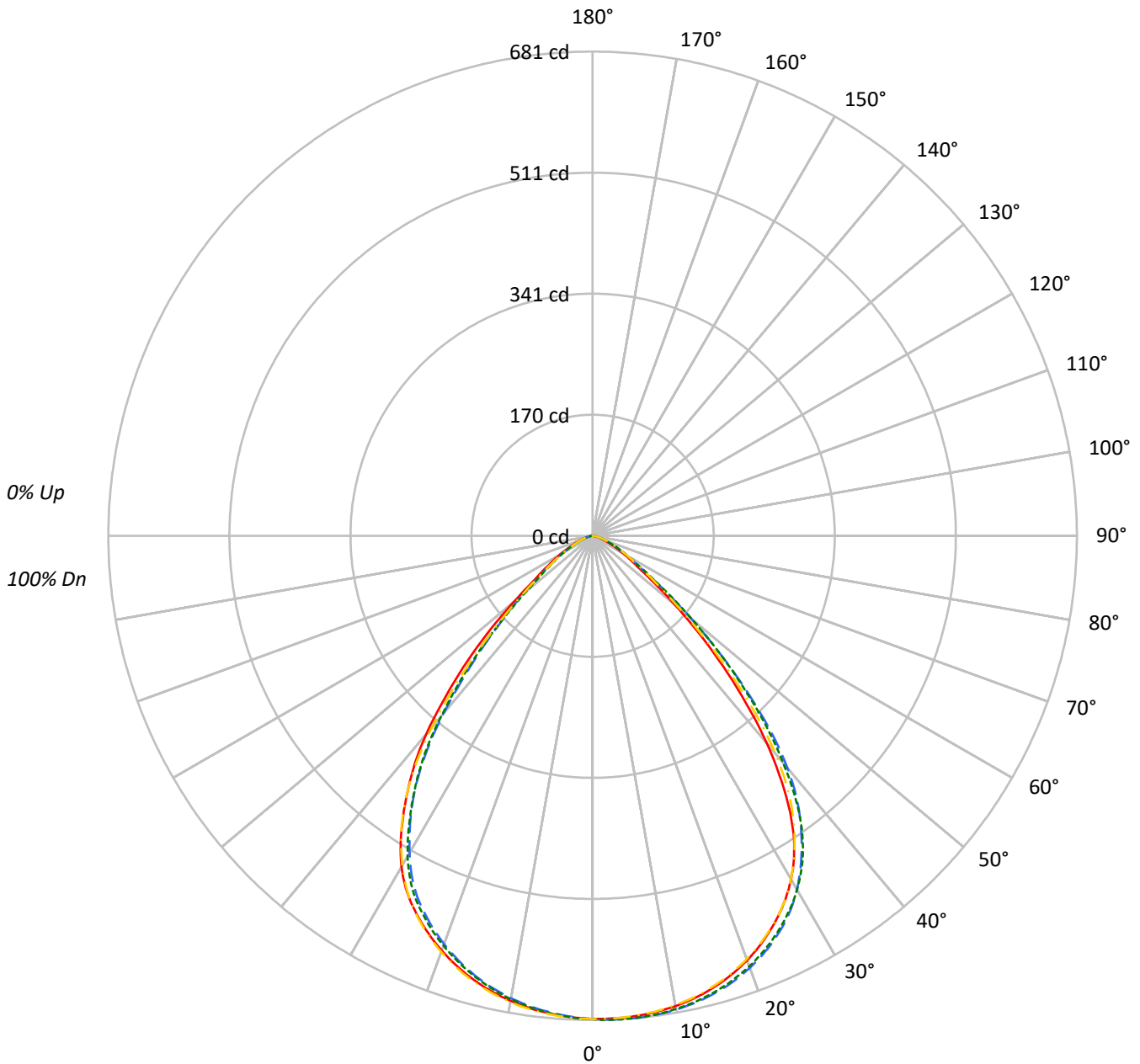
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	112	109	106	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90					90			
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	62	70	65	61	69	64	60	59					59			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48					48			
8	70	59	51	46	69	58	51	46	57	51	46	56	50	46	55	49	46	44					44			
9	66	54	47	43	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	37267	37267	37267	37267
5°	37332	37464	37134	37106
10°	37391	37619	36973	36834
15°	37327	37690	36691	36419
20°	37068	37587	36205	35791
25°	36474	37212	35470	34871
30°	35328	36379	34005	32948
35°	32625	34412	30744	29192
40°	27265	29820	26056	23687
45°	20080	22995	19242	16785
50°	12887	15496	12383	10354
55°	7703	9347	8095	7015
60°	5427	6359	5866	5098
65°	3710	4514	4125	3658
70°	2549	3270	2885	2645
75°	1758	2436	2055	1906
80°	1200	1863	1452	1357
85°	503	1447	881	818

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 23685 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.4	5.7
10°-20°	184.0	16.2
20°-30°	273.2	24.0
30°-40°	293.1	25.8
40°-50°	196.4	17.3
50°-60°	80.0	7.0
60°-70°	31.9	2.8
70°-80°	10.9	1.0
80°-90°	2.0	0.2
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°	521.5	45.9
0°-40°	814.6	71.7
0°-60°	1091.0	96.1
0°-90°	1135.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1135.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	680	680	680	680	680	
5°	678	681	675	674	678	65
15°	658	664	646	642	658	185
25°	603	615	586	576	603	277
35°	488	514	459	436	488	300
45°	259	297	248	216	259	200
55°	81	98	85	73	81	78
65°	29	35	32	28	29	29
75°	8	12	10	9	8	9
85°	1	2	1	1	1	1
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°	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8	679.8
0.5°	679.5	679.8	680.2	680.5	680.6	680.5	679.7	679.1	679.2	679.2	679.5
1°	679.7	680.1	680.5	680.8	680.9	680.7	679.7	679.0	678.8	678.7	679.0
1.5°	679.7	680.3	680.8	681.2	681.1	680.7	679.7	678.7	678.6	678.2	678.4
2°	679.6	680.4	681.1	681.4	681.2	680.8	679.6	678.5	678.2	677.7	677.8
2.5°	679.5	680.5	681.2	681.5	681.3	680.8	679.5	678.2	677.8	677.2	677.2
3°	679.4	680.5	681.3	681.6	681.3	680.7	679.3	677.9	677.4	676.5	676.5
3.5°	679.3	680.5	681.4	681.6	681.3	680.6	679.0	677.5	676.7	675.8	675.7
4°	679.1	680.5	681.3	681.6	681.2	680.4	678.6	677.0	676.1	675.1	675.0
4.5°	678.7	680.3	681.3	681.6	681.1	680.2	678.3	676.5	675.5	674.2	674.1
5°	678.4	680.2	681.2	681.4	680.8	679.9	677.8	675.9	674.8	673.4	673.2
5.5°	678.1	679.9	680.9	681.3	680.6	679.5	677.4	675.3	674.0	672.4	672.1
6°	677.6	679.7	680.7	681.1	680.3	679.1	676.9	674.5	673.2	671.5	671.2
6.5°	677.1	679.3	680.4	680.7	679.9	678.6	676.2	673.8	672.3	670.4	670.0
7°	676.5	679.0	680.1	680.4	679.6	678.1	675.5	673.0	671.4	669.3	668.9
7.5°	675.9	678.4	679.7	680.0	679.1	677.5	674.9	672.1	670.3	668.1	667.6
8°	675.2	677.9	679.3	679.6	678.5	676.9	674.0	671.2	669.3	666.9	666.3
8.5°	674.4	677.4	678.7	679.1	678.0	676.2	673.2	670.1	668.0	665.6	665.0
9°	673.5	676.7	678.2	678.5	677.3	675.4	672.3	669.1	666.9	664.2	663.4
9.5°	672.7	676.0	677.5	677.9	676.5	674.6	671.3	667.9	665.6	662.8	661.9
10°	671.7	675.3	676.9	677.2	675.8	673.8	670.2	666.8	664.2	661.2	660.5
10.5°	670.7	674.3	676.0	676.4	674.9	672.8	669.2	665.4	662.9	659.6	658.8
11°	669.5	673.5	675.2	675.6	674.0	671.8	668.0	664.1	661.3	658.0	657.0
11.5°	668.3	672.4	674.2	674.8	673.0	670.7	666.8	662.7	659.7	656.3	655.2
12°	667.0	671.4	673.3	673.7	672.0	669.4	665.4	661.2	658.0	654.4	653.3
12.5°	665.6	670.1	672.2	672.7	670.9	668.2	664.0	659.6	656.4	652.5	651.3
13°	664.2	669.0	671.2	671.6	669.6	666.9	662.6	657.9	654.5	650.5	649.3
13.5°	662.8	667.7	669.9	670.3	668.3	665.5	661.0	656.3	652.6	648.4	647.1
14°	661.2	666.5	668.7	669.1	667.1	664.0	659.4	654.4	650.7	646.2	644.8
14.5°	659.5	664.9	667.3	667.8	665.6	662.5	657.6	652.5	648.6	644.0	642.5
15°	657.7	663.4	665.8	666.5	664.1	660.9	655.8	650.5	646.5	641.7	640.1
15.5°	655.9	661.7	664.2	665.0	662.5	659.2	654.1	648.6	644.2	639.1	637.6
16°	654.0	660.0	662.7	663.3	660.8	657.4	652.2	646.4	642.0	636.6	634.9
16.5°	652.0	658.3	661.0	661.6	659.1	655.5	650.2	644.2	639.6	634.1	632.3
17°	649.7	656.5	659.3	659.9	657.2	653.6	648.1	641.9	637.0	631.4	629.6
17.5°	647.6	654.5	657.4	658.0	655.3	651.5	645.9	639.6	634.5	628.5	626.6
18°	645.3	652.4	655.4	656.2	653.2	649.4	643.6	637.0	631.9	625.7	623.7
18.5°	642.9	650.3	653.4	654.1	651.1	647.2	641.1	634.5	629.3	622.8	620.6
19°	640.5	648.0	651.2	652.0	648.9	644.9	638.7	631.9	626.4	619.8	617.5
19.5°	638.0	645.7	649.0	649.7	646.7	642.5	636.2	629.3	623.6	616.7	614.2
20°	635.4	643.2	646.7	647.5	644.3	640.0	633.6	626.4	620.6	613.5	611.0
20.5°	632.6	640.7	644.2	645.1	641.9	637.5	630.8	623.6	617.6	610.0	607.6
21°	629.7	638.1	641.8	642.6	639.2	634.7	628.0	620.6	614.5	606.8	604.1



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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°	620.5	629.6	633.5	634.6	631.0	626.2	619.1	611.2	604.7	596.0	593.0
23°	617.2	626.5	630.6	631.7	628.0	623.1	615.8	607.9	601.1	592.2	589.1
23.5°	613.7	623.4	627.5	628.6	625.0	619.8	612.5	604.6	597.6	588.4	585.1
24°	610.2	620.1	624.4	625.6	621.8	616.6	609.1	601.0	594.0	584.5	581.0
24.5°	606.7	616.7	621.0	622.3	618.5	613.3	605.7	597.4	590.2	580.5	576.9
25°	603.0	613.2	617.7	619.1	615.2	609.8	602.2	593.8	586.4	576.4	572.7
25.5°	599.1	609.7	614.1	615.5	611.7	606.3	598.5	590.1	582.5	572.1	568.3
26°	595.2	606.0	610.6	612.0	608.1	602.7	594.8	586.2	578.4	567.6	563.6
26.5°	591.1	602.2	606.6	608.4	604.5	598.8	590.8	582.2	574.2	562.7	558.6
27°	587.0	598.1	602.8	604.5	600.6	594.9	586.7	577.9	569.8	557.5	553.2
27.5°	582.4	594.0	598.6	600.5	596.6	590.9	582.4	573.4	565.2	552.3	547.5
28°	578.1	589.6	594.2	596.3	592.5	586.7	577.9	568.6	560.1	546.7	541.5
28.5°	573.2	584.9	589.3	591.9	588.5	582.4	573.3	563.8	554.9	540.9	535.3
29°	568.4	580.1	584.7	587.2	584.0	578.0	568.3	558.6	549.4	534.5	528.6
29.5°	563.3	575.2	579.7	582.4	579.5	573.3	563.3	553.2	543.5	528.1	521.8
30°	558.1	570.0	574.5	577.5	574.7	568.5	557.8	547.4	537.2	521.5	514.8
30.5°	552.4	564.6	569.0	572.3	570.0	563.3	552.3	541.3	530.8	514.5	507.6
31°	546.8	558.9	563.5	567.0	564.9	558.0	546.6	535.1	523.9	507.2	500.0
31.5°	540.6	553.1	557.6	561.2	559.5	552.6	540.5	528.6	516.8	499.6	492.8
32°	534.2	546.9	551.4	555.5	554.0	546.7	534.4	521.6	509.3	492.0	485.1
32.5°	527.4	540.5	545.2	549.3	548.2	540.8	527.9	514.4	501.4	483.9	477.5
33°	520.5	533.9	538.8	543.1	542.1	534.6	521.3	507.0	493.4	475.7	469.4
33.5°	513.0	527.3	532.3	536.6	535.7	528.0	514.5	499.4	485.1	467.2	461.5
34°	504.9	520.2	525.8	529.9	529.0	521.5	507.6	491.4	476.7	458.2	452.8
34.5°	496.3	513.3	519.0	523.2	521.8	514.0	500.5	483.0	468.2	449.4	444.5
35°	487.5	505.6	511.9	515.9	514.2	506.8	492.9	474.7	459.4	440.4	435.4
35.5°	478.4	498.1	504.8	508.7	506.5	499.1	485.3	466.6	450.9	431.1	426.2
36°	468.5	490.1	497.6	501.2	498.2	491.4	477.4	457.8	442.1	421.7	416.3
36.5°	458.3	482.1	489.9	493.6	489.3	482.9	469.0	449.4	433.2	412.0	406.4
37°	448.0	473.4	482.1	485.7	480.1	474.2	460.0	440.5	424.0	402.2	395.8
37.5°	437.3	464.4	473.6	477.1	470.3	464.9	450.9	432.0	414.9	392.6	385.0
38°	426.4	454.9	465.2	468.5	460.0	455.6	441.4	422.6	405.5	381.9	374.1
38.5°	415.3	445.2	456.0	459.3	449.6	445.2	431.7	413.7	395.9	371.0	362.9
39°	404.1	434.9	446.5	449.8	439.1	434.7	421.5	403.8	386.0	359.9	350.8
39.5°	392.7	423.9	436.4	439.7	428.1	423.6	410.9	394.1	375.2	349.0	338.7
40°	381.0	412.2	426.1	429.0	416.7	411.9	399.8	383.1	364.1	336.8	326.2
40.5°	369.3	400.2	415.1	417.7	405.7	399.6	388.3	372.2	352.5	324.9	313.5
41°	357.2	388.0	403.4	405.8	394.3	387.3	376.4	360.4	340.5	313.3	301.0
41.5°	344.9	375.6	391.8	393.5	382.8	374.9	363.9	348.8	328.6	301.6	288.3
42°	332.3	363.0	379.6	380.8	370.8	362.2	350.9	336.1	316.4	289.4	276.4
42.5°	319.6	350.8	367.2	368.2	359.1	349.2	338.3	323.8	305.0	278.0	264.8
43°	307.0	338.5	354.0	355.8	347.0	336.9	325.6	311.1	293.5	266.2	253.5
43.5°	294.7	326.3	341.3	343.2	334.2	323.9	313.0	298.6	282.2	255.0	242.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	259.0	289.2	301.9	305.5	296.6	285.6	274.5	262.3	248.2	221.6	210.7
45.5°	247.5	276.8	288.5	293.1	284.1	273.2	262.0	250.4	237.0	211.2	201.0
46°	235.8	264.6	275.1	280.8	272.4	261.0	249.3	238.7	226.0	201.0	191.5
46.5°	224.2	252.5	262.4	268.6	260.6	249.2	237.2	226.9	214.9	191.3	182.2
47°	212.6	240.1	249.6	256.1	249.0	237.6	225.0	214.9	204.1	181.4	173.4
47.5°	201.7	228.4	237.2	243.8	237.1	226.4	213.6	203.6	193.7	172.5	165.0
48°	190.9	216.6	225.0	232.0	225.5	215.6	202.3	192.6	183.5	163.7	157.1
48.5°	180.3	205.2	213.6	220.2	214.3	205.2	191.8	181.8	173.7	155.3	149.1
49°	170.2	193.9	202.2	208.5	203.3	194.7	181.4	171.4	163.6	147.1	141.7
49.5°	160.6	182.8	191.3	197.5	192.4	184.4	171.7	161.6	154.1	139.3	134.6
50°	151.1	172.1	180.3	186.4	181.7	174.5	162.0	152.3	145.2	131.9	127.7
50.5°	142.0	161.7	170.1	175.5	171.3	164.8	153.2	143.5	136.4	125.0	121.2
51°	133.3	151.6	160.1	164.8	161.7	155.6	144.7	135.2	128.2	118.5	115.0
51.5°	125.0	141.9	150.5	155.1	152.1	146.8	136.8	127.5	120.6	112.2	109.0
52°	117.1	132.9	141.3	145.5	143.2	137.9	129.1	120.2	113.8	106.2	103.5
52.5°	109.7	124.5	132.6	136.3	134.2	129.6	122.0	113.5	107.4	100.6	98.2
53°	102.6	116.6	124.3	127.4	125.7	122.1	115.1	107.4	101.9	95.6	93.7
53.5°	96.3	109.3	116.4	119.4	117.8	114.8	108.8	101.7	96.9	91.2	89.1
54°	90.5	102.3	109.1	111.9	110.2	108.0	103.1	96.5	92.8	86.7	84.6
54.5°	85.3	96.1	102.0	104.8	103.2	101.7	97.6	92.3	88.7	82.3	80.0
55°	80.6	90.5	95.5	98.3	97.8	96.5	93.0	88.2	84.7	77.8	75.4
55.5°	76.2	85.3	89.6	92.4	92.6	91.5	88.5	84.0	80.6	74.1	71.8
56°	72.3	80.4	84.1	87.0	87.2	86.5	83.8	79.8	76.5	70.6	68.4
56.5°	68.8	75.8	79.3	81.9	81.8	81.4	79.2	75.6	73.0	67.3	65.4
57°	65.9	71.9	74.9	77.3	76.6	76.4	74.7	72.2	69.8	64.7	62.8
57.5°	63.0	68.4	70.9	73.1	72.7	72.6	71.0	68.8	66.7	62.0	60.2
58°	60.3	65.4	67.7	69.4	69.1	69.0	67.8	66.0	64.1	59.4	57.6
58.5°	57.6	62.6	64.8	66.4	66.3	66.2	65.0	63.3	61.4	56.7	54.8
59°	54.7	59.9	62.1	63.7	63.5	63.5	62.3	60.6	58.7	54.1	52.3
59.5°	52.1	57.0	59.2	60.9	60.7	60.7	59.7	57.9	56.0	51.6	49.9
60°	49.5	54.3	56.4	58.1	58.0	57.9	56.8	55.4	53.5	49.2	47.6
60.5°	46.9	51.6	53.7	55.4	55.2	55.2	54.2	52.7	51.1	46.9	45.3
61°	44.4	49.1	51.1	52.6	52.5	52.5	51.7	50.3	48.6	44.6	43.1
61.5°	42.1	46.5	48.5	50.0	49.8	50.0	49.2	47.9	46.2	42.5	41.1
62°	39.9	44.2	46.0	47.5	47.4	47.5	46.9	45.6	43.9	40.4	39.1
62.5°	37.7	42.0	43.7	45.1	45.0	45.2	44.5	43.4	41.7	38.4	37.2
63°	35.8	39.8	41.5	42.8	42.8	42.9	42.3	41.3	39.6	36.5	35.3
63.5°	34.0	37.5	39.4	40.7	40.6	40.8	40.2	39.3	37.5	34.6	33.6
64°	32.1	35.7	37.6	38.6	38.6	38.7	38.2	37.4	35.5	32.8	31.9
64.5°	30.4	33.9	35.7	36.8	36.7	36.8	36.3	35.4	33.6	31.1	30.4
65°	28.6	32.1	33.9	35.0	34.8	35.0	34.6	33.6	31.8	29.5	28.8
65.5°	26.9	30.4	32.1	33.2	33.0	33.2	32.8	31.9	30.2	27.9	27.4
66°	25.4	28.7	30.4	31.5	31.3	31.5	31.2	30.3	28.5	26.4	25.9



TEST NUMBER: P775788

CATALOG NUMBER: HCDJBL510CSD-HCD6TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	21.3	24.3	25.8	26.7	26.7	26.9	26.7	25.7	24.1	22.4	22.2
68°	20.2	23.0	24.5	25.3	25.3	25.5	25.3	24.4	22.7	21.1	21.0
68.5°	18.9	21.6	23.1	24.0	24.0	24.2	24.0	23.1	21.4	20.0	19.9
69°	17.9	20.5	22.0	22.7	22.7	22.9	22.8	21.9	20.3	18.8	18.8
69.5°	16.8	19.3	20.7	21.4	21.5	21.6	21.5	20.6	19.1	17.8	17.8
70°	15.9	18.2	19.6	20.4	20.4	20.6	20.4	19.5	18.0	16.8	16.8
70.5°	14.9	17.2	18.5	19.2	19.2	19.4	19.3	18.4	16.9	15.8	15.9
71°	14.0	16.2	17.5	18.2	18.3	18.4	18.3	17.4	16.0	14.9	15.0
71.5°	13.1	15.2	16.6	17.2	17.2	17.4	17.3	16.4	15.0	14.0	14.2
72°	12.3	14.4	15.7	16.3	16.3	16.5	16.4	15.4	14.2	13.1	13.3
72.5°	11.6	13.6	14.7	15.3	15.3	15.5	15.4	14.6	13.3	12.4	12.6
73°	10.8	12.7	13.9	14.5	14.5	14.7	14.6	13.7	12.5	11.7	11.9
73.5°	10.2	11.9	13.1	13.7	13.8	13.9	13.8	12.9	11.8	10.9	11.1
74°	9.6	11.1	12.3	12.9	12.9	13.1	12.9	12.1	11.0	10.2	10.5
74.5°	8.9	10.5	11.6	12.2	12.2	12.3	12.2	11.3	10.3	9.6	9.8
75°	8.3	9.9	10.9	11.5	11.5	11.7	11.5	10.7	9.7	9.0	9.1
75.5°	7.8	9.2	10.2	10.7	10.8	10.9	10.8	10.0	9.0	8.4	8.6
76°	7.2	8.6	9.6	10.1	10.2	10.3	10.1	9.3	8.5	7.9	8.1
76.5°	6.7	8.0	9.0	9.5	9.6	9.7	9.5	8.8	8.0	7.2	7.6
77°	6.2	7.5	8.4	8.9	8.9	9.0	8.9	8.3	7.4	6.7	7.0
77.5°	5.8	6.9	7.9	8.3	8.4	8.5	8.4	7.7	6.8	6.2	6.5
78°	5.4	6.4	7.4	7.8	7.9	8.0	7.9	7.1	6.3	5.8	6.0
78.5°	4.9	6.0	6.8	7.2	7.4	7.5	7.2	6.6	5.9	5.4	5.6
79°	4.5	5.6	6.3	6.8	6.8	6.9	6.7	6.1	5.5	4.9	5.1
79.5°	4.1	5.1	5.9	6.3	6.3	6.4	6.3	5.7	5.0	4.5	4.7
80°	3.8	4.7	5.5	5.9	5.9	6.0	5.8	5.1	4.6	4.1	4.3
80.5°	3.5	4.3	5.0	5.5	5.5	5.6	5.4	4.7	4.2	3.8	4.0
81°	3.2	3.9	4.6	5.0	5.0	5.1	4.9	4.4	3.9	3.4	3.6
81.5°	2.7	3.6	4.2	4.6	4.6	4.7	4.6	4.0	3.5	3.0	3.3
82°	2.5	3.3	3.9	4.3	4.3	4.3	4.2	3.6	3.2	2.7	2.9
82.5°	2.2	2.8	3.6	3.9	3.9	4.0	3.9	3.3	2.8	2.4	2.6
83°	1.9	2.5	3.3	3.6	3.6	3.7	3.5	2.9	2.5	2.1	2.3
83.5°	1.7	2.2	2.9	3.3	3.3	3.4	3.2	2.6	2.2	1.8	2.0
84°	1.4	2.0	2.5	2.9	2.9	3.0	2.8	2.3	1.9	1.5	1.8
84.5°	1.2	1.7	2.3	2.6	2.6	2.7	2.5	2.0	1.7	1.3	1.6
85°	0.8	1.4	2.0	2.3	2.3	2.4	2.2	1.7	1.4	0.9	1.3
85.5°	0.6	1.2	1.8	2.1	2.1	2.1	2.0	1.5	1.2	0.8	1.1
86°	0.5	0.9	1.5	1.8	1.8	1.9	1.7	1.3	0.8	0.6	0.8
86.5°	0.4	0.7	1.3	1.6	1.6	1.6	1.5	1.1	0.7	0.5	0.6
87°	0.3	0.6	1.1	1.3	1.3	1.4	1.3	0.8	0.5	0.4	0.4
87.5°	0.2	0.5	0.8	1.1	1.1	1.1	1.1	0.7	0.4	0.3	0.3
88°	0.1	0.3	0.6	0.8	0.8	0.8	0.7	0.5	0.3	0.1	0.1
88.5°	0.0	0.2	0.4	0.6	0.6	0.6	0.5	0.4	0.2	0.0	0.0



TEST NUMBER: P775788

CATALOG NUMBER: HCDJBL510CSD-HCD6TRMW-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: P775788

CATALOG NUMBER: HCDJBL510CSD-HCD6TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	679.8	679.8	679.8	679.8	679.8	679.8
0.5°	679.7	680.0	680.1	679.5	679.2	679.5
1°	679.3	679.6	679.8	679.4	679.2	679.7
1.5°	678.7	679.1	679.5	679.2	679.1	679.7
2°	678.1	678.6	679.0	678.8	678.8	679.6
2.5°	677.5	678.0	678.5	678.5	678.6	679.5
3°	676.7	677.4	678.0	678.1	678.4	679.4
3.5°	676.0	676.7	677.4	677.7	678.1	679.3
4°	675.3	675.9	676.7	677.2	677.8	679.1
4.5°	674.3	675.2	676.0	676.5	677.4	678.7
5°	673.4	674.3	675.2	675.9	676.9	678.4
5.5°	672.3	673.3	674.3	675.3	676.3	678.1
6°	671.3	672.3	673.4	674.4	675.7	677.6
6.5°	670.2	671.3	672.4	673.7	675.1	677.1
7°	668.9	670.0	671.4	672.8	674.2	676.5
7.5°	667.7	668.9	670.3	671.8	673.5	675.9
8°	666.3	667.5	669.2	670.8	672.7	675.2
8.5°	665.0	666.2	667.9	669.7	671.8	674.4
9°	663.5	664.8	666.6	668.6	670.8	673.5
9.5°	661.9	663.3	665.2	667.3	669.7	672.7
10°	660.4	661.7	663.7	666.0	668.6	671.7
10.5°	658.7	660.1	662.3	664.6	667.4	670.7
11°	656.8	658.4	660.6	663.1	666.1	669.5
11.5°	655.0	656.6	658.9	661.5	664.8	668.3
12°	653.0	654.7	657.0	659.9	663.3	667.0
12.5°	651.1	652.7	655.2	658.3	661.8	665.6
13°	648.9	650.7	653.2	656.5	660.3	664.2
13.5°	646.7	648.6	651.2	654.6	658.6	662.8
14°	644.4	646.4	649.1	652.6	656.8	661.2
14.5°	642.1	644.0	646.9	650.6	655.0	659.5
15°	639.7	641.7	644.7	648.5	653.1	657.7
15.5°	637.1	639.2	642.3	646.3	651.0	655.9
16°	634.5	636.6	639.8	644.0	649.0	654.0
16.5°	631.9	634.1	637.2	641.7	646.8	652.0
17°	629.1	631.4	634.7	639.1	644.5	649.7
17.5°	626.3	628.5	632.0	636.6	642.1	647.6
18°	623.2	625.7	629.3	634.1	639.7	645.3
18.5°	620.2	622.8	626.4	631.3	637.0	642.9
19°	617.1	619.7	623.5	628.4	634.4	640.5
19.5°	613.8	616.7	620.4	625.6	631.8	638.0
20°	610.5	613.5	617.4	622.6	628.9	635.4
20.5°	607.1	610.2	614.2	619.6	626.0	632.6
21°	603.6	606.9	610.9	616.3	623.0	629.7

TEST NUMBER: P775788

CATALOG NUMBER: HCDJBL510CSD-HCD6TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	592.6	596.3	600.5	606.3	613.3	620.5
23°	588.7	592.5	596.8	602.7	609.7	617.2
23.5°	584.7	588.5	593.1	599.0	606.2	613.7
24°	580.7	584.6	589.1	595.1	602.5	610.2
24.5°	576.6	580.6	585.2	591.2	598.7	606.7
25°	572.4	576.5	581.2	587.2	594.8	603.0
25.5°	568.0	572.2	577.1	583.1	590.8	599.1
26°	563.2	567.8	572.4	578.7	586.7	595.2
26.5°	558.2	563.0	567.7	574.0	582.5	591.1
27°	552.9	558.0	562.6	569.2	578.1	587.0
27.5°	547.2	552.5	557.3	564.1	573.4	582.4
28°	541.3	546.9	551.7	558.6	568.6	578.1
28.5°	535.2	540.6	545.9	553.1	563.5	573.2
29°	528.7	534.3	539.8	547.4	558.2	568.4
29.5°	522.1	527.5	533.4	541.4	552.8	563.3
30°	515.0	520.5	526.6	535.0	547.0	558.1
30.5°	507.6	512.7	519.6	528.8	541.1	552.4
31°	499.9	505.2	512.0	522.1	534.7	546.8
31.5°	492.3	497.0	504.5	515.4	528.2	540.6
32°	484.0	488.5	496.6	508.1	521.5	534.2
32.5°	475.6	479.6	488.5	501.2	514.4	527.4
33°	466.9	471.5	480.2	493.9	507.0	520.5
33.5°	457.8	462.8	471.6	486.1	499.5	513.0
34°	448.9	453.9	463.1	477.7	491.8	504.9
34.5°	439.7	444.8	454.2	469.5	483.5	496.3
35°	430.3	436.2	445.5	460.8	474.8	487.5
35.5°	420.8	427.4	436.8	451.7	466.0	478.4
36°	411.1	418.3	427.6	441.6	456.6	468.5
36.5°	401.3	408.8	418.4	432.2	446.7	458.3
37°	391.1	399.0	408.8	421.9	436.0	448.0
37.5°	380.7	389.0	398.6	411.4	425.3	437.3
38°	370.0	378.4	388.1	400.2	413.4	426.4
38.5°	358.6	367.2	377.1	388.7	401.8	415.3
39°	347.1	355.4	365.9	376.5	388.9	404.1
39.5°	335.3	343.2	353.7	364.1	376.4	392.7
40°	323.4	331.0	341.6	351.3	363.3	381.0
40.5°	311.6	319.0	328.9	338.5	350.6	369.3
41°	299.6	307.3	316.4	325.5	337.7	357.2
41.5°	287.6	295.8	303.9	312.6	324.8	344.9
42°	276.0	284.5	291.5	299.8	311.8	332.3
42.5°	264.3	273.1	279.1	287.0	299.4	319.6
43°	252.8	262.0	267.1	274.0	286.8	307.0
43.5°	241.2	250.2	255.2	261.6	274.4	294.7



TEST NUMBER: P775788

CATALOG NUMBER: HCDJBL510CSD-HCD6TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	208.9	216.5	219.8	225.2	238.9	259.0
45.5°	198.9	205.5	208.4	213.9	228.0	247.5
46°	189.1	195.0	197.2	203.0	217.2	235.8
46.5°	179.1	184.7	186.3	192.6	206.6	224.2
47°	170.0	174.6	175.9	182.1	196.2	212.6
47.5°	161.3	164.5	166.0	172.5	186.0	201.7
48°	153.1	155.0	156.4	163.1	176.1	190.9
48.5°	144.7	145.8	147.5	154.2	166.7	180.3
49°	137.1	137.2	139.0	145.8	157.3	170.2
49.5°	129.8	129.0	131.0	137.8	148.3	160.6
50°	123.0	121.4	123.5	130.1	139.5	151.1
50.5°	116.3	114.3	116.5	122.7	131.4	142.0
51°	110.4	108.1	110.0	116.0	123.5	133.3
51.5°	104.6	102.5	104.2	109.7	116.3	125.0
52°	99.2	97.5	98.9	103.7	109.6	117.1
52.5°	94.7	92.9	93.8	98.0	103.2	109.7
53°	90.2	88.6	89.3	92.8	97.2	102.6
53.5°	85.8	84.5	84.9	87.8	91.5	96.3
54°	81.3	80.7	80.9	83.2	86.4	90.5
54.5°	76.9	77.0	77.1	78.9	81.6	85.3
55°	73.1	73.4	73.4	74.9	77.3	80.6
55.5°	69.8	70.1	70.1	71.1	73.2	76.2
56°	66.7	67.0	67.0	67.9	69.5	72.3
56.5°	64.0	64.4	64.3	65.0	66.5	68.8
57°	61.4	61.7	61.7	62.3	63.8	65.9
57.5°	58.7	59.0	58.9	59.6	61.0	63.0
58°	56.1	56.4	56.3	56.8	58.3	60.3
58.5°	53.5	53.8	53.6	54.2	55.5	57.6
59°	51.1	51.3	51.2	51.6	52.7	54.7
59.5°	48.6	49.0	48.7	49.1	50.2	52.1
60°	46.2	46.5	46.3	46.7	47.8	49.5
60.5°	44.1	44.3	44.1	44.4	45.4	46.9
61°	42.0	42.2	41.9	42.2	43.1	44.4
61.5°	39.9	40.1	39.9	40.2	41.0	42.1
62°	38.0	38.2	37.9	38.2	39.0	39.9
62.5°	36.1	36.6	36.1	36.5	37.1	37.7
63°	34.4	34.9	34.5	34.8	35.3	35.8
63.5°	32.7	33.1	32.8	33.0	33.5	34.0
64°	31.1	31.4	31.1	31.3	31.7	32.1
64.5°	29.5	29.6	29.4	29.5	29.9	30.4
65°	28.0	28.2	27.9	28.0	28.4	28.6
65.5°	26.6	26.7	26.5	26.6	26.8	26.9
66°	25.2	25.3	25.1	25.2	25.3	25.4



TEST NUMBER: P775788

CATALOG NUMBER: HCDJBL510CSD-HCD6TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	21.5	21.6	21.4	21.4	21.4	21.3
68°	20.4	20.5	20.3	20.4	20.2	20.2
68.5°	19.3	19.4	19.2	19.2	19.1	18.9
69°	18.3	18.4	18.2	18.3	18.0	17.9
69.5°	17.3	17.4	17.2	17.2	17.0	16.8
70°	16.4	16.5	16.3	16.3	16.0	15.9
70.5°	15.4	15.5	15.3	15.3	15.0	14.9
71°	14.6	14.7	14.5	14.5	14.2	14.0
71.5°	13.8	13.9	13.7	13.7	13.3	13.1
72°	13.0	13.0	12.9	12.9	12.5	12.3
72.5°	12.3	12.3	12.2	12.2	11.8	11.6
73°	11.6	11.6	11.5	11.5	11.0	10.8
73.5°	10.8	10.9	10.7	10.7	10.3	10.2
74°	10.2	10.2	10.1	10.1	9.7	9.6
74.5°	9.6	9.6	9.5	9.5	9.0	8.9
75°	9.0	9.0	8.9	8.8	8.5	8.3
75.5°	8.5	8.4	8.3	8.3	7.9	7.8
76°	8.0	7.9	7.8	7.7	7.4	7.2
76.5°	7.5	7.4	7.2	7.2	6.8	6.7
77°	6.9	6.9	6.8	6.7	6.3	6.2
77.5°	6.4	6.4	6.3	6.2	5.9	5.8
78°	5.9	6.0	5.9	5.8	5.4	5.4
78.5°	5.5	5.6	5.5	5.4	4.9	4.9
79°	5.0	5.1	5.0	4.9	4.6	4.5
79.5°	4.7	4.7	4.6	4.5	4.2	4.1
80°	4.3	4.3	4.3	4.1	3.8	3.8
80.5°	3.9	4.0	3.9	3.8	3.5	3.5
81°	3.6	3.7	3.6	3.5	3.2	3.2
81.5°	3.3	3.4	3.3	3.2	2.7	2.7
82°	2.9	3.0	2.9	2.8	2.4	2.5
82.5°	2.6	2.6	2.6	2.5	2.1	2.2
83°	2.3	2.4	2.3	2.2	1.8	1.9
83.5°	2.1	2.1	2.0	1.9	1.6	1.7
84°	1.8	1.8	1.8	1.7	1.4	1.4
84.5°	1.6	1.6	1.5	1.5	1.1	1.2
85°	1.3	1.3	1.3	1.3	0.9	0.8
85.5°	1.1	1.1	1.1	0.9	0.7	0.6
86°	0.8	0.8	0.8	0.7	0.6	0.5
86.5°	0.6	0.6	0.5	0.5	0.4	0.4
87°	0.3	0.4	0.3	0.3	0.3	0.3
87.5°	0.1	0.2	0.1	0.2	0.2	0.2
88°	0.0	0.0	0.0	0.0	0.1	0.1
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775788

CATALOG NUMBER: HCDJBL510CSD-HCD6TRMW-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°	626.7	635.4	639.0	640.1	636.6	632.0	625.2	617.6	611.3	603.2	600.5
22°	623.7	632.5	636.4	637.4	633.9	629.2	622.1	614.5	608.0	599.6	596.8



44°	282.6	314.0	328.1	330.7	321.5	311.2	299.9	286.2	270.9	243.3	231.5
44.5°	270.7	301.4	315.1	318.1	308.7	298.5	286.8	274.3	259.5	232.5	221.1



66.5°	24.0	27.2	28.7	29.7	29.6	29.8	29.6	28.7	26.9	25.0	24.7
67°	22.6	25.6	27.2	28.2	28.2	28.4	28.0	27.2	25.4	23.6	23.4



89°	0.0	0.1	0.2	0.4	0.4	0.4	0.3	0.2	0.1	0.0	0.0
89.5°	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0

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21.5°	600.1	603.4	607.5	613.1	619.8	626.7
22°	596.4	599.8	603.9	609.7	616.7	623.7



44°	230.3	238.8	243.3	249.4	262.2	282.6
44.5°	219.6	227.6	231.3	237.3	250.4	270.7

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66.5°	24.0	24.1	23.8	24.0	24.0	24.0
67°	22.7	22.8	22.6	22.7	22.7	22.6

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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)