

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: P775867

Luminaire Tested: HCDJBS510CSD-HCD8TRC-1000lm-3500K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775867
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-HCD8TRC-1000lm-3500K
Description: 8 INCH ROUND MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

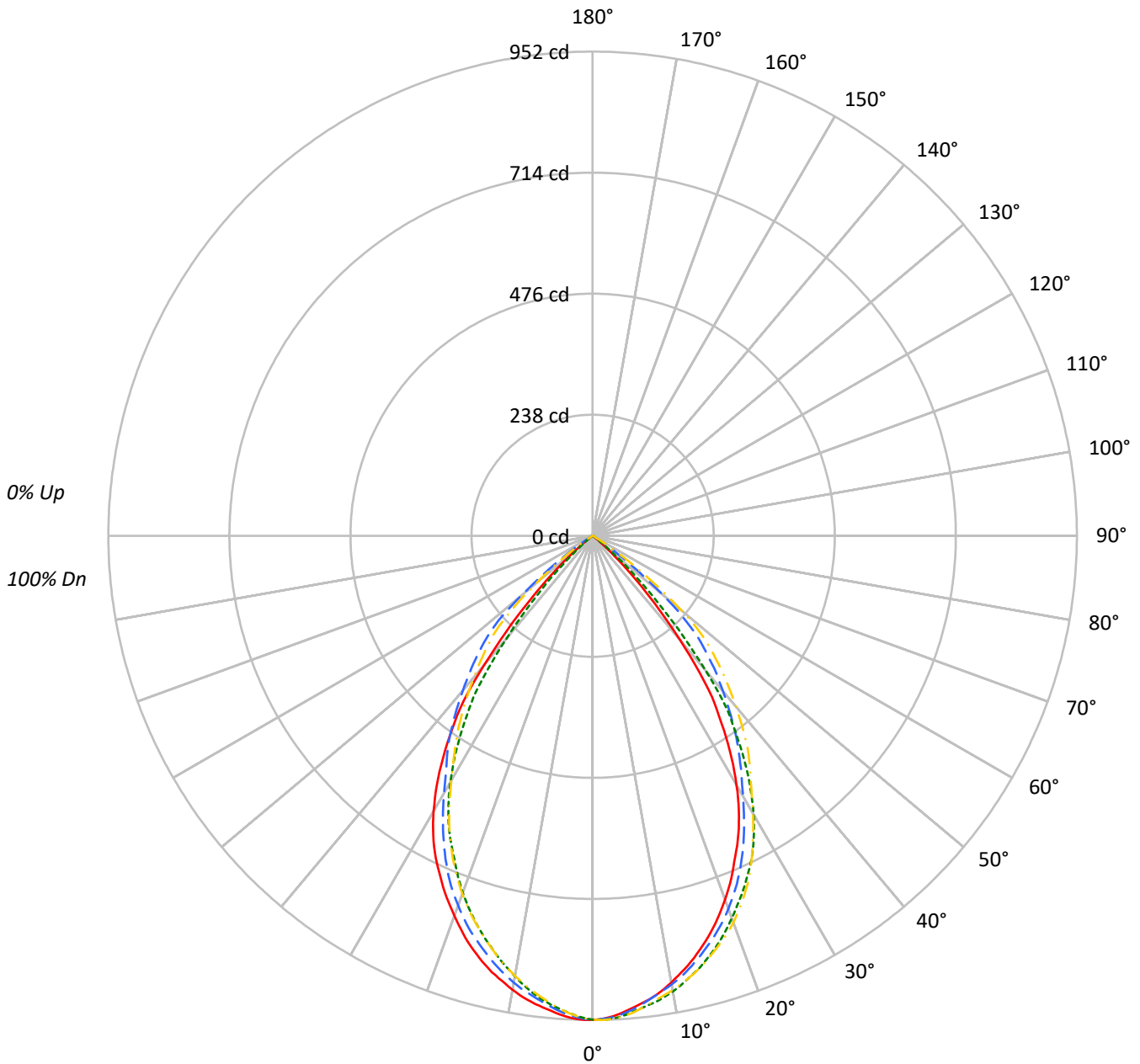
Lumens per Lamp: N/A
Luminaire Lumens: 1129.4 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.05
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P775867
CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

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	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92								
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85								
3	101	94	88	84	99	92	87	83	90	85	82	87	83	80	85	82	79	78								
4	95	86	80	76	93	85	80	75	83	78	74	81	77	74	79	76	73	71								
5	89	80	74	69	88	79	73	69	77	72	68	76	71	67	74	70	67	65								
6	84	74	68	63	83	73	67	63	72	66	62	70	66	62	69	65	61	60								
7	79	69	62	58	78	68	62	58	67	61	57	66	61	57	65	60	57	55								
8	75	64	58	53	74	64	58	53	63	57	53	62	56	53	61	56	52	51								
9	71	60	54	49	70	60	54	49	59	53	49	58	53	49	57	52	49	47								
10	67	56	50	46	66	56	50	46	55	50	46	54	49	45	54	49	45	44								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	29047	29047	29047	29047
5°	28520	28765	28738	28382
10°	27641	28199	28103	27272
15°	26389	27280	27166	25883
20°	24734	25985	25820	24254
25°	22647	24470	24247	22250
30°	19943	22305	22030	19724
35°	16168	18874	18561	16049
40°	10617	13762	13204	10470
45°	4663	7068	6632	4559
50°	1021	2052	1833	983
55°	133	197	181	128
60°	110	159	147	104
65°	87	137	123	79
70°	71	107	98	62
75°	59	94	83	59
80°	53	88	70	53
85°	35	70	70	35

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°

Vertical Angle: 45°

Luminance: 14814 cd/sqm



TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.8	7.8
10°-20°	236.4	20.9
20°-30°	317.9	28.1
30°-40°	300.4	26.6
40°-50°	161.2	14.3
50°-60°	23.3	2.1
60°-70°	1.5	0.1
70°-80°	0.7	0.1
80°-90°	0.2	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°	642.1	56.9
0°-40°	942.5	83.5
0°-60°	1127.1	99.8
0°-90°	1129.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1129.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	951	951	951	951	951	
5°	931	939	938	926	931	88
15°	835	863	860	819	835	234
25°	672	726	720	660	672	307
35°	434	506	498	431	434	266
45°	108	164	154	106	108	90
55°	2	4	3	2	2	4
65°	1	2	2	1	1	1
75°	0	1	1	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4
0.5°	951.3	951.4	951.3	951.5	951.7	951.9	952.0	952.3	952.1	951.6	950.7
1°	950.3	950.6	950.7	951.4	951.9	952.1	952.3	952.3	951.9	950.9	949.7
1.5°	948.9	949.6	949.8	950.6	951.5	951.9	952.0	952.0	951.1	950.0	948.6
2°	947.2	948.2	948.6	949.6	950.8	951.1	951.3	951.3	950.2	948.7	946.9
2.5°	945.2	946.5	946.9	948.2	949.8	950.1	950.3	950.2	948.9	946.9	944.9
3°	942.8	944.2	944.9	946.4	948.2	948.8	948.9	948.7	947.3	945.0	942.5
3.5°	940.1	941.6	942.5	944.2	946.4	947.0	947.1	946.8	945.2	942.6	939.9
4°	936.7	938.6	940.0	941.8	944.1	944.8	945.0	944.7	942.9	940.0	936.7
4.5°	933.8	935.7	936.9	938.7	941.4	942.3	942.6	942.1	940.3	937.1	933.4
5°	930.6	932.9	933.5	935.6	938.6	939.4	939.9	939.4	937.7	933.9	929.9
5.5°	927.4	929.6	930.0	932.1	935.8	936.5	936.6	936.5	935.3	930.8	926.5
6°	924.1	926.2	926.4	929.0	933.3	933.7	933.3	934.0	932.6	927.8	923.0
6.5°	921.2	923.0	922.5	925.7	930.8	931.0	930.0	931.1	930.1	924.6	919.3
7°	918.0	919.8	918.6	922.3	928.2	928.2	926.4	928.3	927.5	921.5	915.9
7.5°	914.1	916.3	914.7	919.2	925.9	925.5	923.0	925.2	924.4	918.1	912.3
8°	910.3	912.6	910.9	916.0	923.1	922.8	919.8	921.9	921.3	914.6	908.5
8.5°	906.3	908.6	907.1	912.6	920.1	919.8	916.4	918.4	918.0	910.7	904.6
9°	901.5	904.2	903.4	908.7	916.5	916.4	913.4	914.9	914.3	907.0	900.8
9.5°	896.6	899.5	899.5	904.8	913.2	913.0	910.2	910.8	910.5	903.2	896.6
10°	891.6	894.7	895.7	900.8	909.6	909.5	906.8	906.7	906.5	899.0	892.3
10.5°	886.3	889.5	891.6	896.7	905.7	905.8	903.5	902.4	902.2	894.9	887.6
11°	881.0	883.8	887.3	892.2	901.6	901.6	899.7	898.1	897.7	890.2	882.9
11.5°	875.9	878.2	882.7	887.6	896.9	897.4	895.8	893.3	893.3	885.5	877.9
12°	870.6	872.7	877.8	882.6	892.2	892.7	891.9	888.6	889.1	880.8	872.8
12.5°	865.2	867.2	872.6	877.7	887.6	887.7	887.8	883.8	884.7	876.3	867.5
13°	859.6	861.5	867.6	872.5	883.2	882.7	883.8	879.4	880.5	871.8	862.4
13.5°	853.5	855.9	861.9	867.6	878.8	878.2	879.4	875.0	875.5	867.4	856.7
14°	847.4	850.0	856.5	862.7	874.0	873.6	875.0	870.7	870.2	862.7	850.9
14.5°	841.1	843.8	850.7	857.9	868.6	868.9	870.1	866.0	865.0	857.6	845.1
15°	834.9	837.4	845.1	852.7	863.1	863.9	865.0	860.9	859.5	852.1	839.1
15.5°	828.3	831.1	839.1	847.0	857.4	858.4	859.6	855.6	854.0	846.5	833.3
16°	821.7	824.6	833.7	841.2	851.9	852.9	854.2	850.6	848.2	840.7	827.4
16.5°	814.8	818.2	827.7	835.3	846.3	847.1	849.0	845.0	842.3	834.9	821.6
17°	807.6	811.4	821.4	829.2	840.3	841.6	843.7	839.5	836.3	828.7	815.2
17.5°	800.4	804.9	814.8	823.0	834.2	835.7	838.5	833.8	829.8	822.3	809.1
18°	792.8	797.9	808.8	816.6	827.7	829.8	833.5	828.0	822.8	815.6	802.1
18.5°	785.0	790.6	801.9	810.2	821.1	823.5	827.8	821.9	815.9	808.7	795.1
19°	777.3	783.4	795.0	803.4	814.2	816.9	821.9	815.4	809.1	801.5	787.9
19.5°	769.4	776.0	787.8	796.1	807.0	810.3	815.5	808.7	801.7	794.3	780.6
20°	761.3	768.2	780.6	788.9	799.8	803.4	809.0	801.8	794.7	787.0	773.1
20.5°	753.1	760.5	772.8	781.3	792.8	796.3	801.9	794.8	787.6	779.3	765.6
21°	744.4	752.6	764.8	773.6	785.6	789.1	795.1	787.7	780.5	771.7	758.2



TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	717.7	727.4	740.7	749.8	764.2	767.7	772.5	766.2	759.0	748.8	733.9
23°	708.0	718.3	731.9	741.6	756.9	760.6	764.7	758.9	751.9	740.6	725.1
23.5°	698.7	709.4	723.3	733.8	749.8	753.4	756.9	751.7	743.4	732.4	716.1
24°	689.6	699.7	714.1	725.7	741.7	745.4	749.2	743.5	735.3	724.1	706.8
24.5°	680.9	690.6	704.7	717.8	733.9	737.8	740.3	735.3	727.4	715.7	697.3
25°	672.3	681.7	695.3	709.5	726.4	729.7	731.1	727.0	719.8	707.2	687.5
25.5°	663.0	673.0	685.5	701.1	719.1	721.4	721.6	718.3	712.2	699.1	677.8
26°	653.5	664.9	675.7	692.7	711.1	713.4	712.1	709.9	704.1	691.3	667.8
26.5°	643.8	656.5	665.7	684.4	702.4	705.7	701.8	701.7	695.4	683.6	657.8
27°	633.5	647.7	655.3	676.5	693.5	698.5	691.4	694.0	686.3	675.7	647.7
27.5°	623.0	638.5	644.9	668.7	684.3	690.7	681.4	686.3	676.9	667.4	637.4
28°	612.0	628.6	634.0	660.4	674.7	682.5	671.3	678.2	667.2	658.6	627.1
28.5°	601.0	619.0	623.5	651.8	664.7	674.0	661.2	669.3	657.2	649.6	616.7
29°	589.4	609.1	612.7	642.3	654.2	665.0	651.4	660.7	646.8	640.1	606.2
29.5°	577.8	598.8	601.9	632.9	643.6	655.8	640.9	651.1	635.8	630.3	595.1
30°	565.7	588.0	591.4	623.0	632.7	646.2	630.8	641.4	624.9	620.1	583.9
30.5°	553.5	576.7	581.1	612.8	621.3	636.0	620.2	631.3	613.4	609.4	573.2
31°	540.2	565.4	570.8	602.2	609.8	625.6	609.8	621.1	602.1	598.6	562.9
31.5°	528.4	554.2	561.3	591.3	597.8	614.9	599.1	610.1	590.1	587.4	553.1
32°	515.3	542.7	551.7	580.3	585.7	603.9	589.2	599.3	578.2	576.2	544.0
32.5°	502.4	530.8	542.3	569.4	573.4	592.7	579.4	588.0	565.2	564.8	535.1
33°	488.6	519.0	532.9	558.3	560.9	581.3	570.4	576.6	552.6	553.3	526.8
33.5°	475.8	506.9	523.3	546.9	547.8	569.7	561.7	564.9	539.1	541.1	518.3
34°	461.7	494.5	514.2	535.3	534.3	558.2	553.3	553.0	525.5	529.2	509.8
34.5°	448.0	481.9	505.1	523.3	520.2	545.8	544.8	541.1	511.5	516.4	500.8
35°	433.8	469.0	495.9	511.7	506.4	533.3	536.4	528.8	498.0	503.9	492.1
35.5°	420.9	456.1	486.6	499.6	492.6	520.7	527.5	516.6	483.8	491.0	482.6
36°	407.6	443.1	476.6	487.2	478.6	508.0	518.3	503.9	470.0	478.1	473.4
36.5°	394.8	429.9	466.8	474.6	464.9	494.5	508.8	490.9	456.7	464.8	463.8
37°	378.3	417.1	456.8	461.8	451.6	481.1	499.1	478.0	443.3	451.8	454.1
37.5°	359.7	404.6	447.0	449.0	439.0	467.6	488.9	465.0	427.7	438.6	444.3
38°	341.2	392.3	436.8	436.2	422.9	454.3	478.8	452.2	411.3	425.8	434.7
38.5°	322.7	379.7	426.8	423.7	405.5	441.5	468.7	439.2	392.7	413.3	425.2
39°	304.2	362.7	417.2	411.9	387.0	429.0	458.7	427.2	373.1	401.0	415.8
39.5°	285.6	345.5	407.5	399.8	366.0	417.3	448.3	414.9	351.9	386.8	406.1
40°	266.4	328.3	398.2	388.5	345.3	402.5	438.3	402.4	331.3	370.9	396.8
40.5°	247.4	311.1	388.4	375.2	324.8	386.6	428.4	389.1	311.3	353.8	387.6
41°	229.9	293.9	379.2	358.4	305.1	369.3	418.6	373.6	292.0	335.8	378.5
41.5°	212.3	275.7	374.1	341.5	286.2	350.4	409.0	357.1	273.5	317.1	369.7
42°	196.3	258.2	364.1	324.6	267.3	331.1	399.2	339.5	254.5	298.8	360.6
42.5°	180.6	240.6	353.9	307.8	249.7	312.1	390.0	321.6	236.7	281.5	352.0
43°	165.5	223.1	343.9	290.9	230.6	294.0	380.7	303.9	218.4	264.4	343.4
43.5°	149.9	206.4	333.7	273.8	213.1	276.5	371.3	286.4	200.8	248.1	334.6



TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	108.0	161.3	307.1	226.1	163.7	224.9	343.1	237.3	153.6	198.9	308.0
45.5°	95.2	146.5	298.3	210.2	149.2	208.0	333.6	220.8	139.2	183.5	299.4
46°	83.5	132.5	288.6	195.2	134.2	191.8	324.3	204.6	125.2	168.2	290.7
46.5°	71.9	118.9	277.2	179.8	120.8	176.5	315.1	188.9	111.9	154.7	280.6
47°	61.2	106.1	264.1	165.4	108.8	161.6	306.7	173.7	100.3	140.4	270.9
47.5°	51.3	93.8	250.6	151.1	96.9	146.8	295.8	159.2	88.7	127.4	259.5
48°	43.0	82.1	237.2	138.0	85.0	132.9	285.0	145.0	77.0	114.1	248.3
48.5°	35.8	71.0	224.4	124.6	73.0	119.4	272.7	131.4	65.5	102.6	233.3
49°	30.9	60.6	209.4	112.0	61.1	107.5	257.8	118.0	55.8	91.0	217.2
49.5°	26.2	51.0	194.3	99.6	51.7	95.8	242.5	106.5	46.9	79.5	200.0
50°	21.5	42.3	177.8	87.9	43.2	83.9	225.7	94.9	38.6	68.0	183.2
50.5°	16.8	34.6	161.3	76.4	35.4	72.2	209.1	83.4	31.2	58.2	167.3
51°	13.1	30.0	145.1	66.2	28.5	60.4	192.3	71.9	24.7	49.3	151.8
51.5°	9.4	25.3	130.0	56.5	22.7	51.2	176.1	60.4	20.5	41.2	136.9
52°	5.9	20.5	115.7	47.6	19.0	42.7	159.6	51.0	16.3	33.4	122.2
52.5°	3.6	15.9	102.2	39.5	15.2	34.7	144.4	42.3	12.1	26.4	110.0
53°	3.2	12.2	89.2	33.6	11.4	27.9	129.1	34.5	7.9	20.4	97.6
53.5°	3.0	8.8	77.1	27.8	7.7	22.1	114.8	27.4	3.8	16.9	85.4
54°	2.8	5.4	66.0	21.9	4.0	18.2	102.3	21.1	3.6	13.4	73.1
54.5°	2.6	3.0	56.0	16.0	3.8	14.5	89.7	17.5	3.5	9.8	60.8
55°	2.5	2.8	46.8	10.2	3.7	10.8	77.3	13.9	3.4	6.3	51.5
55.5°	2.4	2.6	38.8	5.9	3.5	7.0	64.8	10.2	3.3	2.9	43.0
56°	2.3	2.5	33.3	3.2	3.4	3.3	54.5	6.5	3.2	2.8	35.2
56.5°	2.3	2.3	27.9	3.0	3.3	3.1	45.1	3.0	3.1	2.7	28.5
57°	2.2	2.2	22.4	2.9	3.2	3.0	36.7	2.9	3.0	2.6	22.6
57.5°	2.1	2.2	17.0	2.8	3.1	2.9	29.2	2.8	2.9	2.6	17.8
58°	2.0	2.1	11.6	2.7	3.0	2.8	22.8	2.8	2.8	2.5	15.0
58.5°	2.0	2.0	8.9	2.6	2.9	2.7	17.5	2.7	2.7	2.4	12.3
59°	1.9	2.0	6.8	2.5	2.8	2.7	14.7	2.6	2.6	2.3	9.5
59.5°	1.9	1.9	5.3	2.4	2.7	2.6	12.0	2.5	2.5	2.3	6.8
60°	1.8	1.9	4.0	2.4	2.6	2.5	9.4	2.4	2.4	2.2	4.1
60.5°	1.7	1.8	3.4	2.3	2.5	2.4	6.7	2.4	2.4	2.1	3.1
61°	1.7	1.8	2.9	2.2	2.5	2.3	4.0	2.3	2.3	2.1	2.3
61.5°	1.6	1.7	2.4	2.2	2.4	2.3	3.0	2.2	2.2	2.0	1.9
62°	1.6	1.7	1.8	2.1	2.3	2.2	2.4	2.2	2.1	1.9	1.7
62.5°	1.5	1.6	1.8	2.0	2.2	2.1	2.0	2.1	2.1	1.9	1.7
63°	1.5	1.6	1.7	2.0	2.2	2.1	1.9	2.0	2.0	1.8	1.6
63.5°	1.3	1.5	1.7	1.9	2.1	2.0	1.9	2.0	1.9	1.8	1.6
64°	1.3	1.5	1.6	1.9	2.0	2.0	1.8	1.9	1.9	1.7	1.5
64.5°	1.2	1.3	1.6	1.8	2.0	1.9	1.8	1.8	1.8	1.7	1.5
65°	1.2	1.3	1.5	1.7	1.9	1.8	1.7	1.8	1.7	1.6	1.3
65.5°	1.1	1.3	1.5	1.7	1.8	1.8	1.7	1.7	1.7	1.6	1.3
66°	1.1	1.2	1.3	1.6	1.8	1.7	1.6	1.7	1.6	1.5	1.2



TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	1.0	1.1	1.2	1.5	1.6	1.6	1.5	1.5	1.3	1.3	1.1
68°	0.9	1.0	1.2	1.3	1.5	1.5	1.3	1.3	1.3	1.2	1.1
68.5°	0.9	1.0	1.1	1.3	1.5	1.5	1.3	1.3	1.2	1.2	1.0
69°	0.9	0.9	1.1	1.2	1.3	1.3	1.2	1.2	1.2	1.1	1.0
69.5°	0.8	0.9	1.0	1.2	1.3	1.3	1.2	1.2	1.1	1.1	1.0
70°	0.8	0.9	1.0	1.1	1.2	1.2	1.1	1.1	1.1	1.0	0.9
70.5°	0.8	0.8	0.9	1.1	1.2	1.2	1.1	1.1	1.1	1.0	0.9
71°	0.7	0.8	0.9	1.0	1.2	1.1	1.0	1.0	1.0	1.0	0.8
71.5°	0.7	0.8	0.9	1.0	1.1	1.1	1.0	1.0	1.0	0.9	0.8
72°	0.7	0.7	0.8	1.0	1.1	1.0	0.9	1.0	0.9	0.9	0.8
72.5°	0.7	0.7	0.8	0.9	1.0	1.0	0.9	0.9	0.9	0.8	0.7
73°	0.6	0.7	0.7	0.9	1.0	1.0	0.8	0.9	0.9	0.8	0.7
73.5°	0.6	0.7	0.7	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.6
74°	0.6	0.6	0.7	0.8	0.9	0.9	0.8	0.8	0.8	0.7	0.6
74.5°	0.6	0.6	0.6	0.8	0.9	0.9	0.7	0.8	0.8	0.7	0.6
75°	0.5	0.6	0.6	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.5
75.5°	0.5	0.5	0.6	0.7	0.8	0.8	0.6	0.7	0.7	0.6	0.5
76°	0.5	0.5	0.5	0.7	0.8	0.7	0.6	0.7	0.7	0.6	0.5
76.5°	0.5	0.5	0.5	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.5
77°	0.4	0.5	0.5	0.6	0.7	0.7	0.5	0.6	0.6	0.5	0.4
77.5°	0.4	0.4	0.4	0.6	0.7	0.6	0.5	0.6	0.6	0.5	0.4
78°	0.4	0.4	0.4	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.4
78.5°	0.4	0.4	0.4	0.5	0.6	0.6	0.4	0.5	0.5	0.5	0.4
79°	0.4	0.4	0.4	0.5	0.6	0.5	0.4	0.5	0.5	0.4	0.3
79.5°	0.3	0.3	0.3	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.3
80°	0.3	0.3	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.3
80.5°	0.3	0.3	0.3	0.4	0.5	0.4	0.3	0.4	0.4	0.3	0.3
81°	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.2
81.5°	0.2	0.3	0.2	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.2
82°	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2
82.5°	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.2
83°	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2
83.5°	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.1
84°	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1
84.5°	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1
85°	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1
85.5°	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1
86°	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
86.5°	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
87°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	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: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

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: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	951.4	951.4	951.4	951.4	951.4	951.4
0.5°	950.5	949.9	950.1	950.3	950.8	951.3
1°	949.4	948.6	948.3	948.9	949.7	950.3
1.5°	947.7	946.5	946.4	946.9	948.0	948.9
2°	945.8	944.2	943.8	944.5	945.9	947.2
2.5°	943.5	941.4	941.0	941.8	943.5	945.2
3°	940.7	938.4	938.1	938.8	940.8	942.8
3.5°	937.7	935.4	934.6	935.6	937.6	940.1
4°	934.7	932.4	931.6	931.8	934.2	936.7
4.5°	931.8	929.4	928.1	927.9	930.4	933.8
5°	928.7	926.1	924.6	924.2	926.8	930.6
5.5°	925.3	922.4	920.8	920.1	923.0	927.4
6°	921.7	919.0	916.9	915.8	918.8	924.1
6.5°	918.1	915.0	913.0	911.7	914.9	921.2
7°	914.4	910.9	908.5	907.3	911.1	918.0
7.5°	910.1	906.2	903.8	902.8	907.0	914.1
8°	905.5	901.4	898.9	898.4	902.8	910.3
8.5°	900.6	896.2	893.5	893.4	898.3	906.3
9°	895.5	890.8	888.1	888.7	893.6	901.5
9.5°	890.1	885.4	882.3	883.8	888.8	896.6
10°	884.6	879.7	876.7	878.7	883.6	891.6
10.5°	879.1	873.9	870.6	873.5	878.2	886.3
11°	873.3	868.2	864.5	868.1	872.7	881.0
11.5°	867.5	862.6	858.4	862.5	867.2	875.9
12°	861.8	856.8	852.7	856.7	861.5	870.6
12.5°	856.3	850.6	846.7	850.8	856.0	865.2
13°	850.7	844.4	840.9	844.8	850.4	859.6
13.5°	844.6	838.1	834.2	838.6	844.9	853.5
14°	838.8	831.7	827.7	832.1	839.2	847.4
14.5°	832.5	825.3	821.1	825.8	833.2	841.1
15°	826.4	818.9	814.8	819.4	826.9	834.9
15.5°	819.9	812.3	808.0	813.0	820.4	828.3
16°	813.7	805.4	801.4	806.5	813.8	821.7
16.5°	807.3	798.8	794.6	799.7	807.2	814.8
17°	800.8	791.8	787.8	793.2	800.4	807.6
17.5°	794.0	784.5	780.9	786.2	793.4	800.4
18°	787.3	777.0	773.6	779.1	786.2	792.8
18.5°	780.0	769.8	766.5	772.0	778.7	785.0
19°	772.8	762.1	758.9	764.3	771.1	777.3
19.5°	765.5	754.3	751.3	756.8	763.3	769.4
20°	758.3	746.5	743.5	749.1	755.0	761.3
20.5°	750.9	738.2	735.8	741.1	746.8	753.1
21°	743.1	729.8	727.9	732.9	738.4	744.4



TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	717.9	703.2	702.6	707.8	712.4	717.7
23°	709.3	693.9	693.9	698.8	703.3	708.0
23.5°	700.0	685.6	684.6	690.1	694.1	698.7
24°	690.8	677.2	675.4	680.6	684.8	689.6
24.5°	681.2	668.8	666.8	671.2	675.0	680.9
25°	672.2	660.5	658.3	661.5	664.9	672.3
25.5°	663.4	652.0	650.4	652.1	655.6	663.0
26°	655.2	643.1	642.0	641.8	646.4	653.5
26.5°	647.2	633.9	633.7	631.6	637.8	643.8
27°	639.2	624.3	625.4	621.2	629.0	633.5
27.5°	630.8	614.1	616.6	610.4	619.7	623.0
28°	622.2	603.6	607.7	599.4	610.4	612.0
28.5°	613.1	593.0	598.3	588.6	600.8	601.0
29°	603.8	582.2	588.5	577.5	590.7	589.4
29.5°	593.9	570.8	578.6	566.7	580.2	577.8
30°	584.1	559.5	568.1	555.7	569.6	565.7
30.5°	573.7	547.7	557.4	545.3	558.7	553.5
31°	563.5	535.6	546.4	535.0	547.5	540.2
31.5°	552.5	523.2	535.3	524.9	536.1	528.4
32°	541.9	510.9	524.0	514.7	524.5	515.3
32.5°	530.8	497.9	512.7	505.3	512.8	502.4
33°	519.5	484.9	500.8	495.9	501.1	488.6
33.5°	508.2	471.5	488.4	486.9	489.3	475.8
34°	496.7	457.9	476.3	477.9	477.4	461.7
34.5°	484.6	444.2	463.2	468.4	465.0	448.0
35°	472.8	430.6	450.4	458.9	452.8	433.8
35.5°	460.8	417.7	437.4	449.4	440.5	420.9
36°	448.6	405.3	424.5	439.3	428.1	407.6
36.5°	436.1	392.6	411.3	429.5	415.8	394.8
37°	423.7	376.4	398.8	419.8	403.2	378.3
37.5°	411.3	357.4	386.3	410.1	390.8	359.7
38°	399.2	338.5	375.5	400.3	378.5	341.2
38.5°	387.8	319.6	358.6	390.5	365.2	322.7
39°	377.2	300.6	341.6	381.3	351.9	304.2
39.5°	365.7	281.7	324.6	370.6	338.6	285.6
40°	351.1	262.7	307.7	362.1	325.3	266.4
40.5°	334.3	244.0	290.8	353.5	311.9	247.4
41°	317.3	226.0	273.8	344.9	296.1	229.9
41.5°	300.4	208.6	256.4	336.3	280.3	212.3
42°	284.1	192.7	239.0	327.6	264.8	196.3
42.5°	267.5	177.4	221.8	318.8	248.5	180.6
43°	250.7	162.1	205.4	310.2	232.3	165.5
43.5°	233.6	146.8	189.9	301.4	216.4	149.9



TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	186.4	105.6	146.7	276.4	172.5	108.0
45.5°	171.9	93.4	132.9	266.5	158.9	95.2
46°	157.5	81.6	119.9	255.8	145.4	83.5
46.5°	143.5	70.3	107.2	242.2	131.5	71.9
47°	130.0	59.6	95.2	229.1	118.9	61.2
47.5°	116.7	50.2	83.3	216.6	106.2	51.3
48°	105.2	42.0	72.2	203.5	94.4	43.0
48.5°	93.7	35.0	61.9	189.5	82.7	35.8
49°	82.3	30.2	52.3	173.4	72.1	30.9
49.5°	70.8	25.4	43.8	157.3	61.5	26.2
50°	59.3	20.7	36.3	142.7	51.9	21.5
50.5°	49.8	16.1	31.5	128.5	43.2	16.8
51°	41.5	12.3	26.8	115.4	35.9	13.1
51.5°	34.2	8.7	22.1	102.8	31.2	9.4
52°	28.2	5.3	17.4	90.9	26.5	5.9
52.5°	23.1	3.1	12.6	79.7	21.9	3.6
53°	18.9	2.9	9.0	69.2	17.2	3.2
53.5°	15.6	2.8	5.6	59.3	12.6	3.0
54°	12.4	2.6	3.1	50.6	9.0	2.8
54.5°	9.1	2.5	2.9	42.6	5.7	2.6
55°	5.9	2.4	2.6	35.3	3.2	2.5
55.5°	2.7	2.3	2.4	30.1	2.9	2.4
56°	2.2	2.2	2.2	24.8	2.6	2.3
56.5°	2.2	2.2	2.1	19.5	2.3	2.3
57°	2.1	2.1	2.0	14.2	2.1	2.2
57.5°	2.0	2.0	2.0	10.8	2.0	2.1
58°	2.0	2.0	1.9	8.2	1.9	2.0
58.5°	1.9	1.9	1.9	6.0	1.9	2.0
59°	1.9	1.8	1.8	4.5	1.8	1.9
59.5°	1.8	1.8	1.8	3.9	1.8	1.9
60°	1.8	1.7	1.7	3.3	1.7	1.8
60.5°	1.7	1.7	1.7	2.7	1.7	1.7
61°	1.7	1.6	1.6	2.1	1.6	1.7
61.5°	1.6	1.6	1.6	1.6	1.6	1.6
62°	1.6	1.5	1.5	1.5	1.5	1.6
62.5°	1.5	1.5	1.5	1.5	1.5	1.5
63°	1.5	1.3	1.3	1.3	1.5	1.5
63.5°	1.3	1.2	1.3	1.3	1.3	1.3
64°	1.3	1.2	1.2	1.3	1.3	1.3
64.5°	1.2	1.1	1.2	1.2	1.2	1.2
65°	1.2	1.1	1.2	1.2	1.2	1.2
65.5°	1.2	1.1	1.1	1.1	1.2	1.1
66°	1.1	1.0	1.1	1.1	1.1	1.1



TEST NUMBER: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.0	0.9	1.0	1.0	1.0	1.0
68°	0.9	0.9	0.9	1.0	1.0	0.9
68.5°	0.9	0.8	0.9	0.9	0.9	0.9
69°	0.9	0.8	0.9	0.9	0.9	0.9
69.5°	0.8	0.8	0.8	0.9	0.9	0.8
70°	0.8	0.7	0.8	0.8	0.8	0.8
70.5°	0.8	0.7	0.8	0.8	0.8	0.8
71°	0.7	0.7	0.7	0.7	0.8	0.7
71.5°	0.7	0.7	0.7	0.7	0.7	0.7
72°	0.7	0.6	0.7	0.7	0.7	0.7
72.5°	0.7	0.6	0.6	0.6	0.7	0.7
73°	0.6	0.6	0.6	0.6	0.7	0.6
73.5°	0.6	0.6	0.6	0.6	0.6	0.6
74°	0.6	0.5	0.6	0.5	0.6	0.6
74.5°	0.5	0.5	0.5	0.5	0.6	0.6
75°	0.5	0.5	0.5	0.5	0.5	0.5
75.5°	0.5	0.5	0.5	0.5	0.5	0.5
76°	0.5	0.4	0.5	0.4	0.5	0.5
76.5°	0.5	0.4	0.4	0.4	0.5	0.5
77°	0.4	0.4	0.4	0.4	0.4	0.4
77.5°	0.4	0.4	0.4	0.4	0.4	0.4
78°	0.4	0.4	0.4	0.3	0.4	0.4
78.5°	0.4	0.4	0.4	0.3	0.4	0.4
79°	0.3	0.3	0.3	0.3	0.4	0.4
79.5°	0.3	0.3	0.3	0.3	0.3	0.3
80°	0.3	0.3	0.3	0.3	0.3	0.3
80.5°	0.3	0.3	0.3	0.2	0.3	0.3
81°	0.3	0.3	0.3	0.2	0.3	0.3
81.5°	0.2	0.2	0.2	0.2	0.2	0.2
82°	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2
83°	0.2	0.2	0.2	0.1	0.2	0.2
83.5°	0.2	0.2	0.2	0.1	0.1	0.2
84°	0.1	0.2	0.1	0.1	0.1	0.1
84.5°	0.1	0.1	0.1	0.1	0.1	0.1
85°	0.1	0.1	0.1	0.1	0.1	0.1
85.5°	0.1	0.1	0.1	0.1	0.1	0.1
86°	0.1	0.1	0.1	0.1	0.1	0.1
86.5°	0.1	0.1	0.1	0.0	0.0	0.1
87°	0.0	0.1	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: P775867

CATALOG NUMBER: HCDJBL510CSD-HCD8TRC-1000lm-3500K

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

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - 135°-315°

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

Scaled Data Report



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

Scaled Data Report





21.5°	735.8	744.3	756.9	765.6	778.5	781.9	788.0	780.6	773.3	764.0	750.7
22°	727.0	736.0	748.9	757.6	771.3	774.8	780.4	773.3	766.2	756.4	742.5



44°	135.1	191.1	324.7	257.8	195.2	259.3	362.0	269.7	183.9	231.2	325.8
44.5°	121.0	176.0	315.6	241.8	179.7	242.4	352.5	253.6	168.3	215.1	316.9



66.5°	1.0	1.2	1.3	1.6	1.7	1.7	1.5	1.6	1.5	1.5	1.2
67°	1.0	1.1	1.3	1.5	1.6	1.6	1.5	1.5	1.5	1.3	1.2



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

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

Scaled Data Report





21.5°	735.0	721.3	719.4	724.9	730.0	735.8
22°	726.5	712.2	710.9	716.4	721.3	727.0



44°	217.0	132.7	175.5	292.7	200.8	135.1
44.5°	201.5	118.6	160.9	284.0	186.4	121.0

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

Scaled Data Report



66.5°	1.1	1.0	1.0	1.1	1.1	1.0
67°	1.0	0.9	1.0	1.0	1.0	1.0

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

Scaled Data Report



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

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

Scaled Data Report



(END OF REPORT)