

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: P775886

Luminaire Tested: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775886
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-HCD8TRMW-1000lm-3000K
Description: 8 INCH ROUND MEDIUM MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

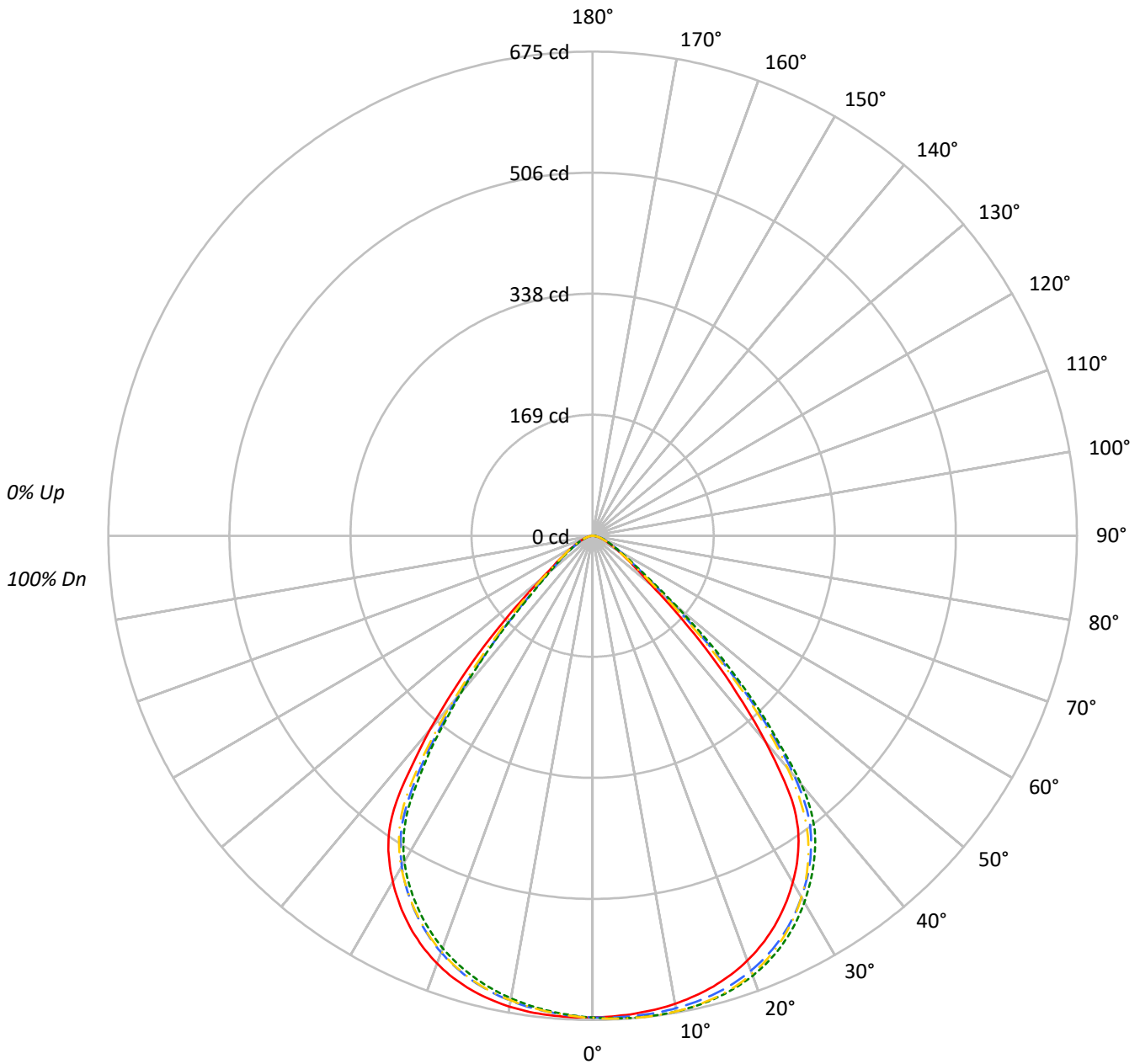
Lumens per Lamp: N/A
Luminaire Lumens: 1088.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): 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: P775886
CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91								
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	84	82								
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	81	78	75	74								
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66								
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60								
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55								
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50								
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46								
9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42								
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40	39								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	20507	20507	20507	20507
5°	20497	20668	20570	20399
10°	20535	20873	20665	20300
15°	20557	21082	20709	20146
20°	20478	21203	20611	19871
25°	20212	21138	20283	19356
30°	19671	20810	19636	18504
35°	18602	20119	18341	16172
40°	14937	18042	14021	11359
45°	9693	12715	8670	6317
50°	5134	7224	4465	3652
55°	3348	3838	2853	2550
60°	2406	2674	2064	1917
65°	1864	2066	1604	1524
70°	1500	1705	1294	1232
75°	1239	1451	1038	979
80°	985	1266	774	721
85°	701	1191	420	350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 12979 cd/sqm



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	5.9
10°-20°	184.1	16.9
20°-30°	276.2	25.4
30°-40°	298.9	27.5
40°-50°	170.3	15.6
50°-60°	56.5	5.2
60°-70°	24.9	2.3
70°-80°	10.9	1.0
80°-90°	2.4	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°	524.1	48.2
0°-40°	823.0	75.6
0°-60°	1049.8	96.5
0°-90°	1088.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1088.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	672	672	672	672	672	
5°	669	674	671	666	669	64
15°	650	667	655	637	650	183
25°	600	628	602	575	600	276
35°	499	540	492	434	499	304
45°	224	294	201	146	224	175
55°	63	72	54	48	63	59
65°	26	29	22	21	26	26
75°	10	12	9	8	10	11
85°	2	3	1	1	2	2
90°	0	0	0	0	0	



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7
0.5°	671.4	671.6	671.6	671.7	672.1	672.4	672.7	672.3	671.7	671.4	671.1
1°	671.3	671.6	671.7	671.9	672.5	672.8	673.0	672.5	671.8	671.3	670.8
1.5°	671.1	671.5	671.9	672.2	672.8	673.2	673.3	672.7	671.8	671.2	670.5
2°	670.9	671.5	672.0	672.5	673.1	673.6	673.6	672.9	671.8	671.0	670.1
2.5°	670.7	671.4	672.1	672.7	673.4	673.8	673.8	673.0	671.8	670.8	669.7
3°	670.4	671.3	672.1	672.9	673.7	674.3	674.0	673.1	671.8	670.5	669.3
3.5°	670.0	671.2	672.1	673.1	673.9	674.5	674.4	673.1	671.6	670.3	668.7
4°	669.7	671.0	672.1	673.2	674.1	674.7	674.5	673.2	671.5	670.0	668.2
4.5°	669.4	670.7	672.0	673.3	674.3	674.9	674.6	673.2	671.4	669.6	667.7
5°	668.8	670.4	671.9	673.3	674.4	675.0	674.7	673.1	671.2	669.2	667.1
5.5°	668.4	670.2	671.8	673.4	674.4	675.1	674.7	673.0	671.0	668.7	666.5
6°	667.9	669.8	671.6	673.4	674.5	675.2	674.8	672.9	670.7	668.2	665.8
6.5°	667.4	669.5	671.4	673.3	674.5	675.2	674.8	672.7	670.4	667.7	665.1
7°	666.9	668.9	671.2	673.2	674.5	675.2	674.7	672.5	670.0	667.1	664.3
7.5°	666.3	668.5	670.9	673.1	674.4	675.2	674.6	672.3	669.6	666.5	663.4
8°	665.6	668.0	670.6	672.9	674.3	675.1	674.4	672.0	669.0	665.9	662.5
8.5°	664.9	667.5	670.2	672.7	674.0	675.0	674.1	671.6	668.5	665.1	661.6
9°	664.2	666.9	669.8	672.4	673.8	674.9	673.9	671.2	667.9	664.4	660.6
9.5°	663.3	666.2	669.4	672.2	673.6	674.6	673.6	670.7	667.3	663.4	659.5
10°	662.4	665.5	668.7	671.8	673.3	674.4	673.2	670.2	666.6	662.5	658.2
10.5°	661.5	664.8	668.2	671.5	672.9	673.9	672.8	669.6	665.8	661.5	657.1
11°	660.6	663.9	667.6	671.0	672.5	673.5	672.3	668.9	664.9	660.4	655.9
11.5°	659.5	663.0	667.0	670.6	672.1	673.1	671.8	668.2	663.9	659.4	654.6
12°	658.3	662.1	666.3	670.1	671.6	672.6	671.2	667.4	662.9	658.1	653.0
12.5°	657.2	661.2	665.5	669.5	671.0	672.1	670.5	666.5	661.8	656.8	651.6
13°	655.9	660.1	664.7	668.7	670.4	671.5	669.8	665.5	660.7	655.4	650.0
13.5°	654.7	658.9	663.7	668.1	669.6	670.8	668.8	664.5	659.5	654.0	648.3
14°	653.3	657.7	662.8	667.3	668.8	670.0	667.9	663.3	658.1	652.4	646.5
14.5°	651.9	656.5	661.8	666.5	667.9	669.2	667.0	662.1	656.7	650.8	644.8
15°	650.4	655.3	660.8	665.6	667.0	668.2	666.0	660.8	655.2	649.0	642.8
15.5°	648.7	653.8	659.6	664.6	665.9	667.2	664.9	659.5	653.5	647.1	640.8
16°	647.0	652.4	658.3	663.4	664.9	666.1	663.6	657.9	651.8	645.2	638.7
16.5°	645.3	650.9	657.0	662.3	663.6	665.0	662.2	656.3	650.0	643.1	636.5
17°	643.3	649.3	655.7	661.1	662.3	663.7	660.8	654.6	648.1	641.0	634.1
17.5°	641.5	647.5	654.2	659.8	661.0	662.4	659.3	652.7	646.1	638.9	631.7
18°	639.5	645.8	652.6	658.2	659.6	661.0	657.6	650.8	644.0	636.4	629.2
18.5°	637.3	643.9	650.9	656.8	657.9	659.4	655.8	648.9	641.7	634.0	626.6
19°	635.0	641.9	649.2	655.2	656.2	657.6	654.0	646.7	639.5	631.4	623.9
19.5°	632.6	639.9	647.3	653.4	654.5	656.0	652.1	644.5	636.9	628.8	620.9
20°	630.3	637.6	645.2	651.6	652.6	654.1	650.1	642.0	634.4	625.9	617.9
20.5°	627.7	635.4	643.2	649.7	650.6	652.0	647.8	639.6	631.7	623.0	615.0
21°	625.1	633.0	641.1	647.7	648.5	649.9	645.5	636.9	628.9	620.0	611.6



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	616.5	625.2	633.9	640.9	641.5	642.9	637.8	628.5	619.8	610.3	601.4
23°	613.5	622.4	631.3	638.4	639.1	640.3	635.1	625.3	616.5	606.7	597.6
23.5°	610.2	619.6	628.6	635.9	636.4	637.7	632.0	622.1	612.9	603.1	593.9
24°	606.9	616.5	625.6	633.1	633.6	634.9	629.1	618.8	609.5	599.3	590.0
24.5°	603.5	613.5	622.8	630.3	630.6	631.9	625.9	615.3	605.9	595.5	585.9
25°	600.0	610.1	619.7	627.3	627.5	628.9	622.6	611.7	602.1	591.4	581.7
25.5°	596.3	606.7	616.5	624.3	624.4	625.7	619.2	607.9	598.2	587.1	577.4
26°	592.4	603.3	613.0	621.1	621.2	622.4	615.6	604.1	594.0	582.9	573.0
26.5°	588.6	599.6	609.8	617.7	617.6	619.0	611.8	600.0	589.9	578.7	568.6
27°	584.6	595.9	606.2	614.4	614.2	615.3	608.0	595.9	585.6	574.1	563.8
27.5°	580.5	591.9	602.4	610.8	610.5	611.6	604.1	591.6	581.2	569.5	559.0
28°	576.3	588.1	598.8	607.1	606.7	607.7	600.0	587.3	576.6	564.9	554.0
28.5°	571.8	583.9	594.7	603.3	602.7	603.9	595.7	582.8	571.9	559.9	549.0
29°	567.3	579.7	590.7	599.4	598.8	599.7	591.2	578.1	567.1	554.9	543.6
29.5°	562.7	575.2	586.4	595.4	594.6	595.4	586.7	573.2	562.1	549.7	537.9
30°	558.0	570.8	582.2	591.1	590.3	591.0	582.0	568.3	557.0	544.5	532.0
30.5°	552.9	566.2	577.7	586.9	585.8	586.5	577.3	563.3	551.6	538.8	525.7
31°	547.9	561.4	573.2	582.4	581.2	581.9	572.3	557.9	546.4	533.0	519.4
31.5°	542.8	556.2	568.5	577.9	576.4	577.0	567.2	552.3	540.6	527.1	512.7
32°	537.5	551.4	563.6	573.1	571.9	572.2	561.8	546.4	534.8	520.9	505.6
32.5°	531.9	546.1	558.6	568.4	566.8	567.1	556.1	540.4	528.8	514.2	498.1
33°	526.0	540.7	553.6	563.5	561.7	561.8	550.2	534.3	522.6	507.1	489.9
33.5°	519.7	535.2	548.4	558.4	556.4	556.4	544.3	527.7	515.7	499.3	480.8
34°	513.4	529.3	542.9	553.3	551.1	550.7	537.8	520.8	508.6	491.1	470.6
34.5°	506.5	522.9	537.0	547.9	545.5	544.7	531.3	513.6	500.8	480.8	459.4
35°	499.1	516.3	531.0	542.4	539.8	538.6	524.4	505.8	492.1	470.1	447.1
35.5°	490.8	509.2	524.5	536.5	533.9	532.3	517.2	497.0	482.0	458.5	433.5
36°	482.4	501.7	517.9	530.5	527.9	525.7	509.1	487.2	471.2	445.3	419.1
36.5°	472.7	493.7	510.6	524.4	521.2	518.5	500.5	476.9	458.8	430.9	404.3
37°	461.5	484.4	503.1	517.7	514.3	510.6	491.4	466.2	444.6	415.8	389.2
37.5°	448.2	474.1	494.7	510.2	506.4	502.0	481.3	454.0	428.9	400.0	373.3
38°	433.9	462.5	485.1	502.0	497.8	492.9	470.6	441.7	412.7	383.4	357.1
38.5°	419.0	449.3	474.5	492.9	488.2	482.8	459.8	428.3	396.4	366.7	340.6
39°	404.1	434.9	463.3	482.7	477.9	472.3	448.0	414.9	381.3	350.0	324.2
39.5°	389.5	420.5	451.1	472.1	466.1	460.2	435.7	399.9	366.6	333.8	307.7
40°	374.8	406.4	437.9	460.0	452.7	448.1	422.2	385.0	351.8	317.9	291.2
40.5°	359.4	392.8	423.6	447.1	436.7	434.6	408.7	369.1	336.4	302.0	275.0
41°	344.1	378.5	408.6	433.1	420.3	421.3	394.8	353.2	320.4	285.7	259.0
41.5°	328.7	364.0	393.3	418.2	403.4	406.8	380.6	337.3	304.6	269.5	243.6
42°	313.3	348.7	377.9	402.2	387.6	391.5	365.9	322.1	288.9	254.4	227.9
42.5°	298.0	332.5	362.1	385.6	373.0	375.6	350.1	306.1	273.6	239.3	212.8
43°	283.2	316.5	345.7	368.3	358.2	359.9	333.6	290.4	258.9	225.0	198.8
43.5°	268.5	300.7	329.7	351.6	342.7	343.9	317.2	274.6	244.5	211.3	185.0



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	224.5	254.3	280.4	300.6	294.5	296.9	267.3	228.8	200.8	172.6	149.2
45.5°	210.4	239.0	263.8	284.8	278.9	281.4	250.3	213.9	187.1	160.2	138.6
46°	196.6	223.8	247.1	268.4	263.9	265.7	235.2	199.3	173.7	148.9	129.2
46.5°	183.2	208.9	231.2	253.2	249.1	250.0	219.2	185.0	161.2	137.5	120.4
47°	170.1	194.4	215.5	238.1	234.3	234.6	204.5	171.6	149.4	127.4	112.3
47.5°	157.1	180.1	201.5	223.7	219.3	219.3	190.3	158.4	137.9	118.1	104.9
48°	145.6	166.9	187.6	209.7	204.5	204.6	177.0	146.1	127.1	109.7	98.2
48.5°	134.5	154.2	174.3	196.6	190.3	190.2	163.4	134.2	117.0	101.7	93.1
49°	124.5	142.3	162.2	183.2	176.9	176.0	151.1	123.5	107.8	96.0	87.9
49.5°	115.5	131.9	150.8	170.7	164.2	162.4	139.5	113.8	99.7	90.3	82.7
50°	108.1	122.0	140.3	158.3	152.1	149.1	128.8	105.2	94.0	84.6	77.5
50.5°	101.5	113.4	130.2	146.5	140.4	137.2	118.3	97.5	88.4	78.8	72.3
51°	95.5	105.8	121.1	135.6	128.6	125.9	109.2	91.7	82.8	73.2	69.1
51.5°	90.0	99.4	112.7	125.5	118.6	116.2	100.9	85.8	77.2	69.8	66.0
52°	85.2	93.3	105.1	116.1	109.0	107.1	95.0	79.9	71.7	66.7	63.0
52.5°	80.6	88.1	98.3	107.6	100.5	99.0	89.1	74.1	68.4	63.8	60.0
53°	76.2	83.2	91.9	100.1	94.8	92.9	83.2	70.3	65.4	60.7	57.1
53.5°	72.2	78.7	86.2	93.2	89.2	86.9	77.3	67.1	62.3	57.7	54.4
54°	69.2	74.5	80.8	86.8	83.4	80.8	71.5	64.1	59.4	54.9	51.8
54.5°	66.1	71.0	76.1	81.3	77.7	74.8	68.1	60.9	56.4	52.2	49.4
55°	62.9	67.7	72.0	76.2	72.1	71.0	65.0	57.8	53.6	49.7	47.0
55.5°	60.0	64.7	68.8	72.0	68.6	67.8	61.8	55.0	50.9	47.3	45.0
56°	57.1	61.6	65.5	68.6	65.6	64.6	58.7	52.1	48.6	45.2	42.9
56.5°	54.4	58.7	62.5	65.5	62.3	61.4	55.7	49.6	46.3	43.1	41.1
57°	51.7	55.8	59.4	62.3	59.2	58.3	52.9	47.2	44.1	41.3	39.4
57.5°	49.4	53.0	56.5	59.3	56.2	55.3	50.3	45.1	42.1	39.6	37.7
58°	47.0	50.5	53.7	56.2	53.3	52.5	47.8	42.9	40.3	37.8	36.2
58.5°	45.0	48.1	51.1	53.5	50.7	50.0	45.6	41.0	38.6	36.3	34.7
59°	42.9	46.0	48.7	50.8	48.2	47.5	43.5	39.2	36.9	34.8	33.3
59.5°	41.2	44.0	46.4	48.4	45.9	45.3	41.4	37.5	35.3	33.4	31.9
60°	39.4	42.0	44.3	46.1	43.8	43.1	39.6	36.0	33.8	32.0	30.7
60.5°	37.6	40.2	42.3	44.0	41.8	41.2	37.9	34.5	32.4	30.7	29.5
61°	36.2	38.6	40.5	41.9	40.0	39.4	36.3	33.0	31.0	29.5	28.4
61.5°	34.8	36.8	38.8	40.1	38.3	37.7	34.8	31.7	29.7	28.4	27.2
62°	33.4	35.5	37.1	38.4	36.6	36.0	33.4	30.4	28.5	27.1	26.2
62.5°	31.9	34.1	35.8	36.6	35.1	34.6	31.9	29.2	27.3	26.1	25.2
63°	30.5	32.7	34.4	35.3	33.6	33.0	30.7	28.1	26.2	25.1	24.2
63.5°	29.3	31.3	33.0	33.9	32.2	31.7	29.5	26.9	25.2	24.1	23.3
64°	28.1	30.0	31.6	32.5	30.9	30.5	28.3	25.8	24.1	23.1	22.3
64.5°	26.9	28.8	30.2	31.2	29.7	29.3	27.2	24.8	23.2	22.2	21.4
65°	25.8	27.5	29.1	29.9	28.6	28.2	26.1	23.8	22.2	21.2	20.6
65.5°	24.7	26.5	27.8	28.8	27.3	27.0	25.1	22.8	21.3	20.4	19.8
66°	23.8	25.4	26.8	27.6	26.3	26.0	24.1	21.9	20.4	19.6	19.0



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	20.9	22.4	23.8	24.5	23.4	23.1	21.4	19.4	18.0	17.2	16.7
68°	20.0	21.5	22.8	23.6	22.4	22.1	20.6	18.6	17.2	16.5	16.0
68.5°	19.2	20.6	21.9	22.6	21.5	21.2	19.7	17.7	16.5	15.8	15.4
69°	18.4	19.8	21.0	21.7	20.7	20.4	19.0	17.0	15.8	15.1	14.7
69.5°	17.6	19.0	20.2	20.8	19.9	19.6	18.2	16.3	15.1	14.5	14.1
70°	16.8	18.2	19.4	20.0	19.1	18.8	17.4	15.6	14.5	13.8	13.5
70.5°	16.1	17.4	18.6	19.2	18.3	18.1	16.7	14.9	13.8	13.2	12.9
71°	15.4	16.6	17.9	18.5	17.5	17.3	16.0	14.3	13.2	12.5	12.2
71.5°	14.7	15.9	17.1	17.6	16.8	16.6	15.4	13.7	12.5	11.9	11.6
72°	14.1	15.3	16.4	16.9	16.1	15.9	14.7	13.1	11.9	11.3	11.1
72.5°	13.5	14.6	15.7	16.2	15.5	15.2	14.1	12.4	11.4	10.8	10.5
73°	12.9	14.0	15.0	15.6	14.8	14.6	13.5	11.8	10.8	10.3	10.0
73.5°	12.2	13.3	14.4	14.9	14.2	14.0	12.9	11.3	10.3	9.7	9.5
74°	11.6	12.6	13.8	14.3	13.6	13.4	12.2	10.7	9.8	9.2	9.0
74.5°	11.0	12.0	13.1	13.7	13.0	12.8	11.7	10.2	9.3	8.7	8.6
75°	10.5	11.5	12.5	13.1	12.3	12.1	11.1	9.7	8.8	8.3	8.1
75.5°	9.9	10.9	11.9	12.4	11.8	11.6	10.6	9.2	8.3	7.8	7.5
76°	9.4	10.3	11.3	11.9	11.2	11.1	10.1	8.7	7.8	7.2	7.1
76.5°	8.9	9.8	10.8	11.3	10.7	10.5	9.6	8.2	7.3	6.8	6.6
77°	8.4	9.3	10.2	10.8	10.2	10.0	9.1	7.8	6.8	6.3	6.2
77.5°	7.9	8.8	9.7	10.2	9.7	9.5	8.6	7.2	6.4	5.9	5.7
78°	7.4	8.3	9.2	9.7	9.2	9.0	8.1	6.7	5.9	5.5	5.3
78.5°	6.9	7.8	8.7	9.3	8.7	8.6	7.7	6.3	5.5	5.1	4.9
79°	6.5	7.3	8.3	8.8	8.2	8.1	7.1	5.9	5.1	4.7	4.6
79.5°	6.0	6.8	7.8	8.3	7.8	7.7	6.6	5.5	4.8	4.3	4.2
80°	5.6	6.4	7.2	7.8	7.2	7.1	6.2	5.1	4.4	3.9	3.8
80.5°	5.2	5.9	6.8	7.3	6.8	6.6	5.8	4.7	4.0	3.6	3.5
81°	4.8	5.5	6.3	6.8	6.4	6.3	5.4	4.3	3.7	3.2	3.1
81.5°	4.4	5.1	5.9	6.4	5.9	5.8	5.0	3.9	3.3	2.9	2.8
82°	4.1	4.7	5.5	6.0	5.5	5.4	4.7	3.6	3.0	2.6	2.4
82.5°	3.7	4.3	5.1	5.6	5.2	5.1	4.3	3.2	2.7	2.2	2.1
83°	3.4	4.0	4.7	5.2	4.8	4.7	3.9	2.9	2.3	1.9	1.8
83.5°	3.0	3.6	4.4	4.8	4.4	4.3	3.6	2.6	2.0	1.6	1.6
84°	2.7	3.3	4.0	4.5	4.1	4.0	3.3	2.2	1.7	1.3	1.3
84.5°	2.3	2.9	3.7	4.1	3.7	3.6	3.0	1.9	1.4	1.0	1.1
85°	2.0	2.6	3.3	3.8	3.4	3.3	2.6	1.6	1.2	0.8	0.8
85.5°	1.7	2.2	3.0	3.5	3.1	3.0	2.2	1.3	0.9	0.6	0.6
86°	1.4	1.9	2.6	3.1	2.8	2.7	2.0	1.1	0.7	0.5	0.4
86.5°	1.1	1.6	2.2	2.8	2.4	2.3	1.7	0.9	0.5	0.3	0.2
87°	0.9	1.3	2.0	2.4	2.1	2.0	1.4	0.7	0.4	0.2	0.0
87.5°	0.7	1.0	1.7	2.1	1.8	1.7	1.2	0.5	0.2	0.1	0.0
88°	0.5	0.8	1.4	1.8	1.5	1.5	1.0	0.4	0.1	0.0	0.0
88.5°	0.3	0.6	1.2	1.5	1.3	1.2	0.7	0.2	0.0	0.0	0.0



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.1	0.5	0.8	0.5	0.5	0.1	0.0	0.0	0.0	0.0



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	671.7	671.7	671.7	671.7	671.7	671.7
0.5°	670.9	671.4	671.5	671.9	671.8	671.4
1°	670.5	670.9	671.0	671.5	671.5	671.3
1.5°	670.0	670.3	670.5	671.0	671.1	671.1
2°	669.5	669.8	669.9	670.5	670.8	670.9
2.5°	668.8	669.2	669.3	670.0	670.4	670.7
3°	668.3	668.5	668.6	669.4	669.9	670.4
3.5°	667.6	667.8	667.9	668.8	669.5	670.0
4°	667.0	667.1	667.3	668.2	669.0	669.7
4.5°	666.3	666.4	666.5	667.6	668.5	669.4
5°	665.5	665.6	665.7	666.9	668.0	668.8
5.5°	664.7	664.8	664.9	666.3	667.4	668.4
6°	663.7	663.7	663.9	665.5	666.8	667.9
6.5°	662.8	662.9	663.0	664.7	666.1	667.4
7°	661.8	661.9	662.1	663.8	665.5	666.9
7.5°	660.8	660.9	661.0	663.0	664.8	666.3
8°	659.8	659.7	660.0	662.0	663.9	665.6
8.5°	658.5	658.5	658.8	661.1	663.1	664.9
9°	657.4	657.3	657.6	660.1	662.3	664.2
9.5°	656.1	656.2	656.3	658.8	661.4	663.3
10°	654.8	654.8	655.1	657.7	660.4	662.4
10.5°	653.4	653.3	653.6	656.5	659.4	661.5
11°	651.9	651.9	652.2	655.3	658.2	660.6
11.5°	650.4	650.4	650.6	654.0	657.1	659.5
12°	648.7	648.7	649.1	652.5	655.9	658.3
12.5°	647.1	647.0	647.3	651.0	654.5	657.2
13°	645.4	645.3	645.5	649.4	653.1	655.9
13.5°	643.5	643.4	643.8	647.7	651.7	654.7
14°	641.6	641.5	641.8	646.0	650.2	653.3
14.5°	639.6	639.6	639.8	644.2	648.5	651.9
15°	637.5	637.4	637.7	642.2	646.8	650.4
15.5°	635.4	635.2	635.5	640.1	645.1	648.7
16°	633.0	633.0	633.1	637.9	643.1	647.0
16.5°	630.7	630.7	630.8	635.7	641.2	645.3
17°	628.1	628.2	628.3	633.3	639.1	643.3
17.5°	625.7	625.7	625.7	631.0	636.9	641.5
18°	622.9	623.1	623.0	628.3	634.6	639.5
18.5°	620.2	620.3	620.2	625.7	632.2	637.3
19°	617.3	617.4	617.3	622.8	629.7	635.0
19.5°	614.3	614.7	614.4	620.1	627.0	632.6
20°	611.2	611.6	611.1	616.9	624.3	630.3
20.5°	608.0	608.4	607.9	614.0	621.5	627.7
21°	604.7	605.1	604.6	610.7	618.7	625.1



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	594.1	594.5	593.9	600.3	609.2	616.5
23°	590.2	590.8	590.0	596.7	605.7	613.5
23.5°	586.2	586.9	586.2	592.9	602.2	610.2
24°	582.1	583.0	582.1	589.0	598.6	606.9
24.5°	578.1	578.9	578.0	585.1	594.9	603.5
25°	573.7	574.6	573.7	580.8	591.0	600.0
25.5°	569.3	570.3	569.3	576.6	587.1	596.3
26°	564.6	565.8	564.9	572.2	583.1	592.4
26.5°	560.1	561.3	560.2	567.9	579.0	588.6
27°	555.2	556.5	555.4	563.3	574.6	584.6
27.5°	550.3	551.6	550.6	558.6	570.2	580.5
28°	545.2	546.6	545.5	553.7	565.7	576.3
28.5°	539.8	541.6	540.5	548.8	561.1	571.8
29°	533.9	536.2	535.2	543.8	556.3	567.3
29.5°	527.8	530.7	529.7	538.7	551.3	562.7
30°	521.5	524.9	523.8	533.5	546.4	558.0
30.5°	514.9	518.6	517.6	528.0	541.3	552.9
31°	508.0	512.1	510.8	522.1	536.1	547.9
31.5°	500.6	504.9	504.1	515.9	530.7	542.8
32°	492.7	497.4	497.0	509.3	524.8	537.5
32.5°	484.3	489.3	489.5	502.5	518.8	531.9
33°	475.2	480.5	481.6	495.1	512.4	526.0
33.5°	464.6	471.3	472.7	487.5	505.6	519.7
34°	452.6	460.4	462.8	479.1	498.6	513.4
34.5°	439.1	448.0	450.7	469.8	490.9	506.5
35°	425.2	433.9	436.8	459.1	482.9	499.1
35.5°	410.7	419.3	421.9	447.0	473.9	490.8
36°	395.8	405.4	406.1	433.8	463.4	482.4
36.5°	381.5	391.9	390.1	419.5	451.6	472.7
37°	367.2	377.8	374.4	404.9	438.3	461.5
37.5°	352.7	362.3	359.3	388.9	423.7	448.2
38°	337.8	346.2	344.6	372.5	408.6	433.9
38.5°	321.7	329.9	329.0	356.3	393.1	419.0
39°	305.8	314.3	313.6	340.0	377.5	404.1
39.5°	289.5	299.5	298.0	323.9	361.2	389.5
40°	273.8	285.0	282.8	307.0	345.3	374.8
40.5°	257.8	270.7	267.6	290.6	329.3	359.4
41°	242.3	255.8	253.2	274.5	313.7	344.1
41.5°	227.2	240.8	238.9	259.8	298.6	328.7
42°	212.1	225.9	224.5	244.8	283.3	313.3
42.5°	197.1	211.8	210.7	230.6	267.3	298.0
43°	182.7	198.3	197.5	217.0	252.3	283.2
43.5°	169.5	184.7	184.4	203.9	237.7	268.5



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	135.4	146.3	149.7	168.4	196.5	224.5
45.5°	125.8	134.7	139.5	157.9	184.0	210.4
46°	117.0	124.4	130.1	148.0	172.1	196.6
46.5°	109.3	115.7	121.3	138.7	161.2	183.2
47°	102.6	108.1	113.2	130.0	150.5	170.1
47.5°	96.4	101.5	106.0	121.6	140.7	157.1
48°	91.6	95.8	99.5	113.8	131.4	145.6
48.5°	86.9	90.7	93.6	106.8	123.0	134.5
49°	82.1	86.0	88.1	100.2	115.1	124.5
49.5°	77.3	81.3	83.1	94.0	107.6	115.5
50°	72.6	76.9	78.4	88.1	100.9	108.1
50.5°	69.5	73.0	74.3	82.8	94.7	101.5
51°	66.4	69.8	70.7	77.9	88.9	95.5
51.5°	63.4	66.8	67.6	73.5	83.5	90.0
52°	60.5	63.9	64.7	70.1	78.6	85.2
52.5°	57.6	60.9	61.7	67.1	74.4	80.6
53°	54.9	57.9	58.8	64.1	70.8	76.2
53.5°	52.2	55.3	55.9	61.0	67.7	72.2
54°	49.9	52.6	53.2	58.0	64.6	69.2
54.5°	47.6	50.2	50.9	55.3	61.5	66.1
55°	45.5	47.9	48.6	52.6	58.6	62.9
55.5°	43.6	45.8	46.4	50.3	55.8	60.0
56°	41.6	43.8	44.3	47.9	53.1	57.1
56.5°	39.9	41.9	42.4	45.8	50.7	54.4
57°	38.3	40.1	40.6	43.9	48.4	51.7
57.5°	36.7	38.5	38.9	41.9	46.2	49.4
58°	35.1	36.8	37.3	40.2	44.2	47.0
58.5°	33.8	35.4	36.0	38.5	42.2	45.0
59°	32.3	34.1	34.6	36.8	40.4	42.9
59.5°	31.1	32.7	33.3	35.5	38.8	41.2
60°	29.9	31.4	31.9	34.2	37.1	39.4
60.5°	28.7	30.2	30.5	32.8	35.8	37.6
61°	27.5	29.0	29.3	31.5	34.5	36.2
61.5°	26.5	27.8	28.2	30.2	33.0	34.8
62°	25.5	26.8	27.1	29.1	31.7	33.4
62.5°	24.5	25.7	26.0	27.9	30.4	31.9
63°	23.5	24.7	25.0	26.8	29.2	30.5
63.5°	22.5	23.8	24.1	25.7	28.1	29.3
64°	21.7	22.8	23.1	24.8	26.8	28.1
64.5°	20.8	21.9	22.2	23.8	25.8	26.9
65°	20.0	21.1	21.3	22.8	24.8	25.8
65.5°	19.2	20.2	20.5	21.9	23.8	24.7
66°	18.5	19.4	19.6	21.1	22.8	23.8



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	16.2	17.1	17.3	18.7	20.1	20.9
68°	15.6	16.4	16.6	17.9	19.3	20.0
68.5°	14.9	15.7	15.9	17.1	18.5	19.2
69°	14.3	15.1	15.3	16.4	17.6	18.4
69.5°	13.7	14.4	14.6	15.7	16.9	17.6
70°	13.1	13.8	14.0	15.1	16.2	16.8
70.5°	12.4	13.2	13.4	14.4	15.5	16.1
71°	11.8	12.5	12.8	13.8	14.8	15.4
71.5°	11.3	12.0	12.1	13.2	14.2	14.7
72°	10.8	11.4	11.5	12.5	13.5	14.1
72.5°	10.2	10.9	11.0	11.9	12.9	13.5
73°	9.7	10.3	10.5	11.4	12.2	12.9
73.5°	9.3	9.8	9.9	10.8	11.6	12.2
74°	8.7	9.3	9.4	10.3	11.1	11.6
74.5°	8.3	8.8	8.9	9.7	10.5	11.0
75°	7.8	8.3	8.5	9.2	10.0	10.5
75.5°	7.3	7.9	8.0	8.7	9.4	9.9
76°	6.8	7.3	7.4	8.3	9.0	9.4
76.5°	6.4	6.9	7.0	7.8	8.5	8.9
77°	6.0	6.4	6.5	7.2	8.0	8.4
77.5°	5.5	6.0	6.1	6.8	7.4	7.9
78°	5.2	5.6	5.7	6.3	6.9	7.4
78.5°	4.8	5.2	5.3	5.9	6.5	6.9
79°	4.4	4.8	4.9	5.5	6.0	6.5
79.5°	4.1	4.5	4.5	5.1	5.6	6.0
80°	3.7	4.1	4.2	4.7	5.2	5.6
80.5°	3.4	3.8	3.8	4.3	4.8	5.2
81°	3.0	3.4	3.5	4.0	4.4	4.8
81.5°	2.7	3.1	3.2	3.6	4.0	4.4
82°	2.3	2.8	2.9	3.3	3.7	4.1
82.5°	2.0	2.4	2.6	3.0	3.3	3.7
83°	1.7	2.1	2.1	2.6	3.0	3.4
83.5°	1.5	1.8	1.8	2.2	2.6	3.0
84°	1.2	1.5	1.6	1.9	2.2	2.7
84.5°	0.9	1.2	1.3	1.7	1.9	2.3
85°	0.7	1.0	1.0	1.4	1.6	2.0
85.5°	0.4	0.7	0.8	1.1	1.3	1.7
86°	0.2	0.5	0.5	0.9	1.1	1.4
86.5°	0.0	0.2	0.2	0.6	0.9	1.1
87°	0.0	0.0	0.0	0.4	0.7	0.9
87.5°	0.0	0.0	0.0	0.2	0.5	0.7
88°	0.0	0.0	0.0	0.0	0.3	0.5
88.5°	0.0	0.0	0.0	0.0	0.2	0.3



TEST NUMBER: P775886

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-3000K

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



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°	622.3	630.5	638.8	645.6	646.3	647.6	643.0	634.3	625.9	616.9	608.4
22°	619.4	627.9	636.3	643.3	644.0	645.4	640.5	631.3	622.9	613.6	605.0



44°	253.8	285.1	313.6	334.4	326.7	328.4	300.8	259.5	230.0	198.5	172.4
44.5°	238.9	269.7	297.2	318.1	310.4	313.0	284.0	243.9	215.4	185.0	160.5



66.5°	22.7	24.4	25.8	26.5	25.3	24.9	23.2	21.0	19.6	18.8	18.3
67°	21.8	23.4	24.7	25.5	24.3	24.0	22.2	20.2	18.8	18.0	17.4



89°	0.1	0.5	0.9	1.3	1.0	1.0	0.5	0.1	0.0	0.0	0.0
89.5°	0.0	0.3	0.7	1.0	0.8	0.7	0.3	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°	601.3	601.6	601.1	607.2	615.6	622.3
22°	597.6	598.2	597.5	604.0	612.3	619.4



44°	157.5	171.6	172.2	191.3	223.2	253.8
44.5°	146.0	158.5	160.4	179.7	209.5	238.9

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

Scaled Data Report



66.5°	17.6	18.7	18.9	20.2	21.8	22.7
67°	16.9	17.9	18.1	19.5	21.0	21.8

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	0.1
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)