

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



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

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P775663

Luminaire Tested: HCDJBL510CSD-HCD42TRMW-1000lm-4000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775663
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156A001)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD42TRMW-1000lm-4000K
Description: 4 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

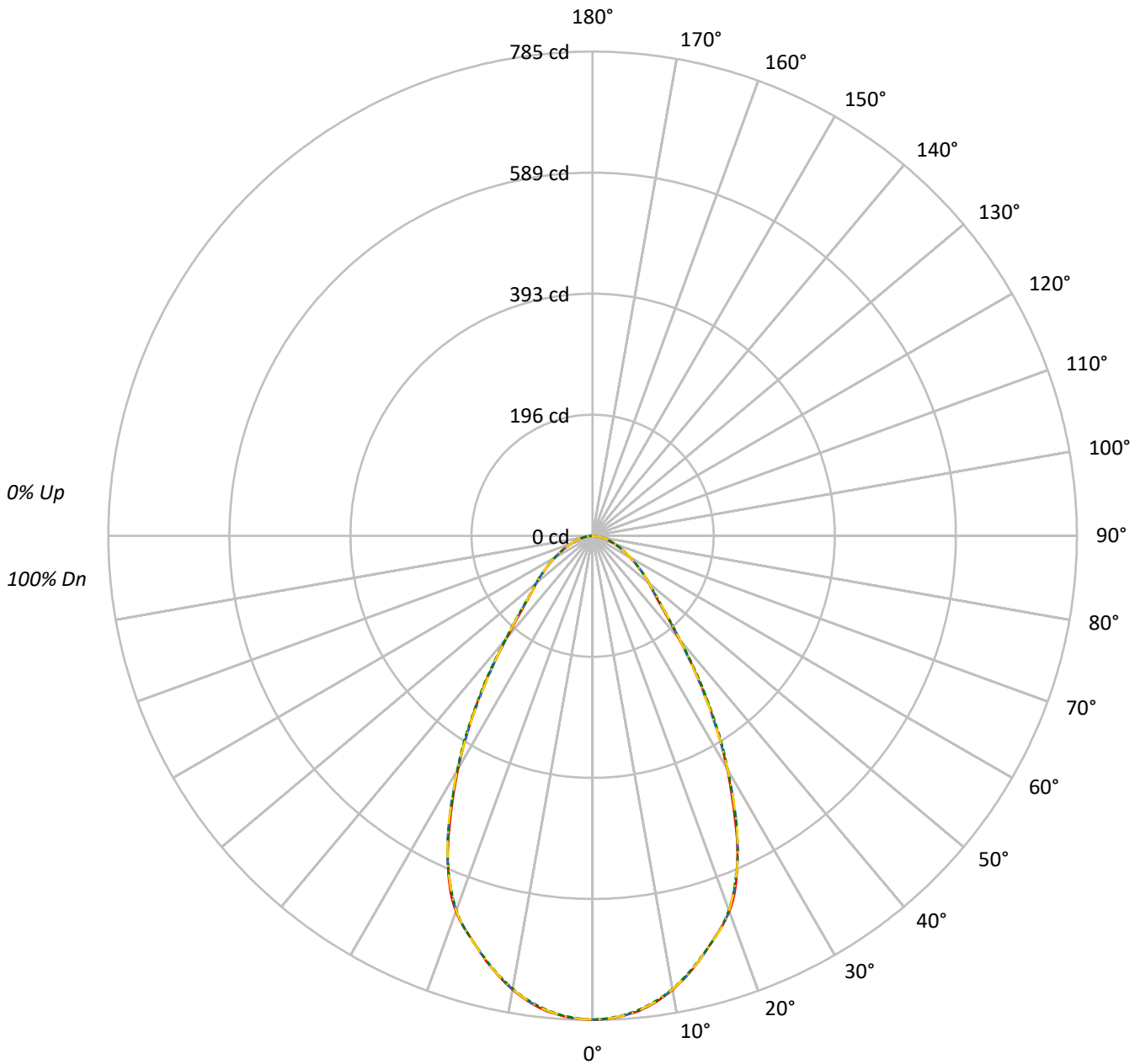
Lumens per Lamp: N/A
Luminaire Lumens: 1013.0 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.97 / 0.95
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64								
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58								
6	80	69	62	57	78	68	61	56	67	60	56	65	60	55	64	59	55	53								
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49								
8	71	60	52	48	70	59	52	47	58	52	47	57	51	47	56	51	47	45								
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	52	45	41	51	45	41	50	44	41	49	44	40	39								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	98729	98729	98729	98729
5°	98032	97818	98032	97818
10°	95498	95281	95498	95281
15°	91281	91163	91281	91163
20°	86784	86476	86784	86476
25°	77026	77276	77026	77276
30°	63374	63708	63374	63708
35°	49163	49701	49163	49701
40°	35716	36340	35716	36340
45°	27035	27711	27035	27711
50°	23279	23475	23279	23475
55°	20230	20471	20230	20471
60°	17694	17846	17694	17846
65°	15544	15664	15544	15664
70°	13725	13799	13725	13799
75°	12059	12059	12059	12059
80°	10436	10364	10436	10364
85°	8375	8375	8375	8375

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 27711 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	7.2
10°-20°	196.8	19.4
20°-30°	252.0	24.9
30°-40°	199.7	19.7
40°-50°	122.3	12.1
50°-60°	83.6	8.3
60°-70°	52.3	5.2
70°-80°	26.5	2.6
80°-90°	6.7	0.7
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°	521.9	51.5
0°-40°	721.6	71.2
0°-60°	927.5	91.6
0°-90°	1013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1013.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	784	784	784	784	784	
5°	776	774	776	774	776	73
15°	701	700	701	700	701	197
25°	555	556	555	556	555	251
35°	320	324	320	324	320	199
45°	152	156	152	156	152	121
55°	92	93	92	93	92	83
65°	52	53	52	53	52	52
75°	25	25	25	25	25	26
85°	6	6	6	6	6	7
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°	784.5	784.5	784.5	784.5	784.5	784.5	784.5	784.5	784.5	784.5	784.5
0.5°	784.6	784.5	784.3	784.2	783.9	784.2	784.3	784.5	784.6	784.5	784.3
1°	784.3	784.2	784.1	784.0	783.6	784.0	784.1	784.2	784.3	784.2	784.1
1.5°	783.9	783.7	783.7	783.5	783.1	783.5	783.7	783.7	783.9	783.7	783.7
2°	783.2	783.1	782.9	782.8	782.4	782.8	782.9	783.1	783.2	783.1	782.9
2.5°	782.5	782.3	782.1	782.0	781.5	782.0	782.1	782.3	782.5	782.3	782.1
3°	781.5	781.2	781.0	780.8	780.3	780.8	781.0	781.2	781.5	781.2	781.0
3.5°	780.3	780.1	779.8	779.6	779.3	779.6	779.8	780.1	780.3	780.1	779.8
4°	778.9	778.8	778.4	778.2	777.7	778.2	778.4	778.8	778.9	778.8	778.4
4.5°	777.5	777.3	776.8	776.6	776.0	776.6	776.8	777.3	777.5	777.3	776.8
5°	776.0	775.7	775.3	775.0	774.3	775.0	775.3	775.7	776.0	775.7	775.3
5.5°	774.4	773.7	773.2	772.9	772.3	772.9	773.2	773.7	774.4	773.7	773.2
6°	772.0	771.6	771.1	770.7	769.9	770.7	771.1	771.6	772.0	771.6	771.1
6.5°	769.6	769.3	768.6	768.3	767.5	768.3	768.6	769.3	769.6	769.3	768.6
7°	767.1	766.6	766.3	765.8	765.1	765.8	766.3	766.6	767.1	766.6	766.3
7.5°	764.2	763.8	763.4	763.2	762.4	763.2	763.4	763.8	764.2	763.8	763.4
8°	761.2	760.9	760.4	760.1	759.7	760.1	760.4	760.9	761.2	760.9	760.4
8.5°	758.0	757.6	757.2	756.9	756.5	756.9	757.2	757.6	758.0	757.6	757.2
9°	754.7	754.4	753.8	753.5	753.1	753.5	753.8	754.4	754.7	754.4	753.8
9.5°	751.0	750.8	750.3	749.9	749.5	749.9	750.3	750.8	751.0	750.8	750.3
10°	747.3	747.0	746.6	746.2	745.6	746.2	746.6	747.0	747.3	747.0	746.6
10.5°	743.2	743.0	742.5	742.2	741.7	742.2	742.5	743.0	743.2	743.0	742.5
11°	739.1	738.9	738.5	738.1	737.5	738.1	738.5	738.9	739.1	738.9	738.5
11.5°	734.8	734.6	734.2	733.8	733.3	733.8	734.2	734.6	734.8	734.6	734.2
12°	730.4	730.2	729.9	729.3	728.9	729.3	729.9	730.2	730.4	730.2	729.9
12.5°	725.8	725.6	725.2	724.7	724.2	724.7	725.2	725.6	725.8	725.6	725.2
13°	721.0	720.8	720.5	720.1	719.6	720.1	720.5	720.8	721.0	720.8	720.5
13.5°	716.1	715.9	715.7	715.3	714.8	715.3	715.7	715.9	716.1	715.9	715.7
14°	711.1	711.0	710.8	710.3	709.9	710.3	710.8	711.0	711.1	711.0	710.8
14.5°	705.8	705.7	705.6	705.2	704.8	705.2	705.6	705.7	705.8	705.7	705.6
15°	700.6	700.6	700.3	700.1	699.7	700.1	700.3	700.6	700.6	700.6	700.3
15.5°	695.1	695.1	695.3	695.1	694.9	695.1	695.3	695.1	695.1	695.1	695.3
16°	689.8	689.9	690.3	690.2	689.9	690.2	690.3	689.9	689.8	689.9	690.3
16.5°	684.6	684.8	685.2	685.2	685.1	685.2	685.2	684.8	684.6	684.8	685.2
17°	679.7	679.9	680.3	680.2	680.3	680.2	680.3	679.9	679.7	679.9	680.3
17.5°	674.8	675.0	675.3	675.2	675.1	675.2	675.3	675.0	674.8	675.0	675.3
18°	670.1	670.2	670.4	670.2	670.0	670.2	670.4	670.2	670.1	670.2	670.4
18.5°	665.0	665.0	665.0	664.8	664.5	664.8	665.0	665.0	665.0	665.0	665.0
19°	659.9	659.6	659.4	659.1	658.7	659.1	659.4	659.6	659.9	659.6	659.4
19.5°	654.2	653.8	653.2	653.0	652.7	653.0	653.2	653.8	654.2	653.8	653.2
20°	648.0	647.5	646.3	646.5	645.7	646.5	646.3	647.5	648.0	647.5	646.3
20.5°	641.2	640.4	639.0	639.4	638.6	639.4	639.0	640.4	641.2	640.4	639.0
21°	634.1	632.8	631.2	631.7	630.7	631.7	631.2	632.8	634.1	632.8	631.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	607.9	606.6	605.6	605.5	605.0	605.5	605.6	606.6	607.9	606.6	605.6
23°	597.9	596.9	596.7	595.9	595.7	595.9	596.7	596.9	597.9	596.9	596.7
23.5°	587.7	586.8	587.3	586.0	586.6	586.0	587.3	586.8	587.7	586.8	587.3
24°	577.1	576.4	577.6	576.0	576.9	576.0	577.6	576.4	577.1	576.4	577.6
24.5°	566.2	565.9	567.4	565.8	567.0	565.8	567.4	565.9	566.2	565.9	567.4
25°	554.7	554.9	556.8	555.6	556.5	555.6	556.8	554.9	554.7	554.9	556.8
25.5°	542.9	544.2	545.9	545.4	545.6	545.4	545.9	544.2	542.9	544.2	545.9
26°	530.7	533.1	534.7	534.8	533.9	534.8	534.7	533.1	530.7	533.1	534.7
26.5°	518.2	521.7	523.0	523.7	521.8	523.7	523.0	521.7	518.2	521.7	523.0
27°	506.0	510.0	511.2	512.4	509.6	512.4	511.2	510.0	506.0	510.0	511.2
27.5°	494.0	497.8	499.3	500.7	497.1	500.7	499.3	497.8	494.0	497.8	499.3
28°	482.0	485.6	487.1	488.5	484.6	488.5	487.1	485.6	482.0	485.6	487.1
28.5°	470.4	473.2	474.9	476.1	472.5	476.1	474.9	473.2	470.4	473.2	474.9
29°	458.8	460.7	462.7	463.5	461.0	463.5	462.7	460.7	458.8	460.7	462.7
29.5°	447.5	448.4	450.6	450.9	449.8	450.9	450.6	448.4	447.5	448.4	450.6
30°	436.1	435.8	438.2	438.3	438.4	438.3	438.2	435.8	436.1	435.8	438.2
30.5°	424.3	423.6	425.9	426.1	427.7	426.1	425.9	423.6	424.3	423.6	425.9
31°	412.7	411.1	413.5	413.9	416.4	413.9	413.5	411.1	412.7	411.1	413.5
31.5°	400.7	399.1	401.1	401.9	404.9	401.9	401.1	399.1	400.7	399.1	401.1
32°	388.5	387.1	388.8	390.0	393.1	390.0	388.8	387.1	388.5	387.1	388.8
32.5°	376.8	375.5	376.8	378.2	381.4	378.2	376.8	375.5	376.8	375.5	376.8
33°	364.9	363.9	364.4	366.5	369.4	366.5	364.4	363.9	364.9	363.9	364.4
33.5°	354.3	352.4	352.1	354.7	357.3	354.7	352.1	352.4	354.3	352.4	352.1
34°	342.8	340.8	339.9	343.1	345.9	343.1	339.9	340.8	342.8	340.8	339.9
34.5°	331.5	329.4	328.0	331.5	334.5	331.5	328.0	329.4	331.5	329.4	328.0
35°	320.0	318.2	316.8	320.2	323.5	320.2	316.8	318.2	320.0	318.2	316.8
35.5°	308.9	307.2	305.6	309.1	312.7	309.1	305.6	307.2	308.9	307.2	305.6
36°	298.0	296.2	294.8	298.4	302.1	298.4	294.8	296.2	298.0	296.2	294.8
36.5°	287.1	285.6	284.3	287.8	291.2	287.8	284.3	285.6	287.1	285.6	284.3
37°	276.2	275.1	274.0	277.5	280.5	277.5	274.0	275.1	276.2	275.1	274.0
37.5°	265.6	264.9	264.1	267.6	269.8	267.6	264.1	264.9	265.6	264.9	264.1
38°	255.1	255.0	254.7	257.9	259.2	257.9	254.7	255.0	255.1	255.0	254.7
38.5°	245.2	245.4	245.6	248.5	249.0	248.5	245.6	245.4	245.2	245.4	245.6
39°	235.7	236.2	236.6	239.3	239.2	239.3	236.6	236.2	235.7	236.2	236.6
39.5°	226.3	227.3	228.0	230.3	230.0	230.3	228.0	227.3	226.3	227.3	228.0
40°	217.4	218.4	219.7	221.6	221.2	221.6	219.7	218.4	217.4	218.4	219.7
40.5°	209.0	210.0	211.7	213.1	213.0	213.1	211.7	210.0	209.0	210.0	211.7
41°	200.9	201.9	204.1	205.1	205.4	205.1	204.1	201.9	200.9	201.9	204.1
41.5°	193.2	194.4	196.9	197.4	198.4	197.4	196.9	194.4	193.2	194.4	196.9
42°	186.1	187.2	190.0	190.3	191.5	190.3	190.0	187.2	186.1	187.2	190.0
42.5°	179.3	180.5	183.4	183.5	184.9	183.5	183.4	180.5	179.3	180.5	183.4
43°	172.9	174.2	177.0	177.2	178.5	177.2	177.0	174.2	172.9	174.2	177.0
43.5°	167.1	168.3	171.0	171.1	172.3	171.1	171.0	168.3	167.1	168.3	171.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	151.9	153.0	154.7	155.2	155.7	155.2	154.7	153.0	151.9	153.0	154.7
45.5°	147.5	148.3	149.9	150.5	150.9	150.5	149.9	148.3	147.5	148.3	149.9
46°	143.3	144.0	145.4	146.1	146.4	146.1	145.4	144.0	143.3	144.0	145.4
46.5°	139.4	140.0	141.1	141.9	142.2	141.9	141.1	140.0	139.4	140.0	141.1
47°	135.7	136.2	137.2	138.1	138.4	138.1	137.2	136.2	135.7	136.2	137.2
47.5°	132.3	132.6	133.5	134.5	134.9	134.5	133.5	132.6	132.3	132.6	133.5
48°	129.0	129.4	130.4	131.2	131.6	131.2	130.4	129.4	129.0	129.4	130.4
48.5°	126.4	126.6	127.3	128.2	128.5	128.2	127.3	126.6	126.4	126.6	127.3
49°	123.9	124.0	124.6	125.2	125.6	125.2	124.6	124.0	123.9	124.0	124.6
49.5°	121.5	121.6	122.0	122.5	122.6	122.5	122.0	121.6	121.5	121.6	122.0
50°	118.9	119.0	119.4	119.8	119.9	119.8	119.4	119.0	118.9	119.0	119.4
50.5°	116.4	116.5	116.7	117.1	117.1	117.1	116.7	116.5	116.4	116.5	116.7
51°	113.6	113.8	114.1	114.5	114.5	114.5	114.1	113.8	113.6	113.8	114.1
51.5°	110.8	110.9	111.4	111.9	112.0	111.9	111.4	110.9	110.8	110.9	111.4
52°	108.0	108.2	108.6	109.2	109.3	109.2	108.6	108.2	108.0	108.2	108.6
52.5°	105.2	105.4	105.9	106.3	106.5	106.3	105.9	105.4	105.2	105.4	105.9
53°	102.5	102.8	103.2	103.6	103.8	103.6	103.2	102.8	102.5	102.8	103.2
53.5°	99.8	100.0	100.4	101.0	101.2	101.0	100.4	100.0	99.8	100.0	100.4
54°	97.3	97.4	97.8	98.2	98.4	98.2	97.8	97.4	97.3	97.4	97.8
54.5°	94.8	94.9	95.3	95.7	95.9	95.7	95.3	94.9	94.8	94.9	95.3
55°	92.2	92.5	92.9	93.2	93.3	93.2	92.9	92.5	92.2	92.5	92.9
55.5°	89.8	90.0	90.5	90.8	90.9	90.8	90.5	90.0	89.8	90.0	90.5
56°	87.5	87.7	88.0	88.4	88.5	88.4	88.0	87.7	87.5	87.7	88.0
56.5°	85.2	85.4	85.7	86.0	86.2	86.0	85.7	85.4	85.2	85.4	85.7
57°	82.9	83.1	83.4	83.7	83.8	83.7	83.4	83.1	82.9	83.1	83.4
57.5°	80.6	80.9	81.2	81.4	81.6	81.4	81.2	80.9	80.6	80.9	81.2
58°	78.6	78.7	79.0	79.3	79.4	79.3	79.0	78.7	78.6	78.7	79.0
58.5°	76.5	76.6	76.9	77.1	77.2	77.1	76.9	76.6	76.5	76.6	76.9
59°	74.4	74.5	74.7	74.9	75.1	74.9	74.7	74.5	74.4	74.5	74.7
59.5°	72.3	72.4	72.6	72.9	73.0	72.9	72.6	72.4	72.3	72.4	72.6
60°	70.3	70.4	70.6	70.8	70.9	70.8	70.6	70.4	70.3	70.4	70.6
60.5°	68.3	68.4	68.6	68.8	68.9	68.8	68.6	68.4	68.3	68.4	68.6
61°	66.4	66.5	66.7	66.9	67.0	66.9	66.7	66.5	66.4	66.5	66.7
61.5°	64.5	64.6	64.8	65.0	65.1	65.0	64.8	64.6	64.5	64.6	64.8
62°	62.7	62.7	62.9	63.1	63.1	63.1	62.9	62.7	62.7	62.7	62.9
62.5°	60.8	60.9	61.0	61.3	61.4	61.3	61.0	60.9	60.8	60.9	61.0
63°	59.0	59.2	59.3	59.5	59.5	59.5	59.3	59.2	59.0	59.2	59.3
63.5°	57.3	57.4	57.5	57.7	57.8	57.7	57.5	57.4	57.3	57.4	57.5
64°	55.6	55.7	55.8	55.9	56.0	55.9	55.8	55.7	55.6	55.7	55.8
64.5°	53.9	54.0	54.1	54.2	54.3	54.2	54.1	54.0	53.9	54.0	54.1
65°	52.2	52.3	52.4	52.5	52.6	52.5	52.4	52.3	52.2	52.3	52.4
65.5°	50.6	50.6	50.7	51.0	51.0	51.0	50.7	50.6	50.6	50.6	50.7
66°	49.0	49.1	49.2	49.3	49.4	49.3	49.2	49.1	49.0	49.1	49.2



TEST NUMBER: P775663

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	44.3	44.4	44.5	44.7	44.7	44.7	44.5	44.4	44.3	44.4	44.5
68°	42.9	43.0	43.1	43.2	43.2	43.2	43.1	43.0	42.9	43.0	43.1
68.5°	41.4	41.5	41.6	41.6	41.7	41.6	41.6	41.5	41.4	41.5	41.6
69°	40.0	40.0	40.0	40.2	40.2	40.2	40.0	40.0	40.0	40.0	40.0
69.5°	38.6	38.7	38.7	38.8	38.9	38.8	38.7	38.7	38.6	38.7	38.7
70°	37.3	37.4	37.3	37.4	37.5	37.4	37.3	37.4	37.3	37.4	37.3
70.5°	35.9	36.0	36.0	36.0	36.1	36.0	36.0	36.0	35.9	36.0	36.0
71°	34.7	34.7	34.7	34.7	34.8	34.7	34.7	34.7	34.7	34.7	34.7
71.5°	33.3	33.3	33.4	33.4	33.4	33.4	33.4	33.3	33.3	33.3	33.4
72°	32.0	32.0	32.0	32.1	32.1	32.1	32.0	32.0	32.0	32.0	32.0
72.5°	30.8	30.8	30.8	30.9	30.9	30.9	30.8	30.8	30.8	30.8	30.8
73°	29.5	29.5	29.5	29.6	29.6	29.6	29.5	29.5	29.5	29.5	29.5
73.5°	28.3	28.3	28.4	28.4	28.4	28.4	28.4	28.3	28.3	28.3	28.4
74°	27.1	27.1	27.1	27.2	27.2	27.2	27.1	27.1	27.1	27.1	27.1
74.5°	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
75°	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
75.5°	23.6	23.6	23.6	23.6	23.7	23.6	23.6	23.6	23.6	23.6	23.6
76°	22.6	22.5	22.5	22.6	22.6	22.6	22.5	22.5	22.6	22.5	22.5
76.5°	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
77°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
77.5°	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
78°	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
78.5°	17.3	17.3	17.2	17.2	17.3	17.2	17.2	17.3	17.3	17.3	17.2
79°	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
79.5°	15.3	15.3	15.2	15.3	15.3	15.3	15.2	15.3	15.3	15.3	15.2
80°	14.4	14.4	14.3	14.3	14.3	14.3	14.3	14.4	14.4	14.4	14.3
80.5°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
81°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
81.5°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
82°	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7
82.5°	9.9	9.9	9.9	9.9	9.8	9.9	9.9	9.9	9.9	9.9	9.9
83°	9.0	9.0	9.0	8.9	8.9	8.9	9.0	9.0	9.0	9.0	9.0
83.5°	8.2	8.2	8.2	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2
84°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
84.5°	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.6	6.5	6.5
85°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
85.5°	5.0	4.9	5.0	4.9	5.0	4.9	5.0	4.9	5.0	4.9	5.0
86°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
86.5°	3.6	3.5	3.5	3.5	3.6	3.5	3.5	3.5	3.6	3.5	3.5
87°	2.8	2.8	2.8	2.7	2.8	2.7	2.8	2.8	2.8	2.8	2.8
87.5°	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1
88°	1.4	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.4	1.5	1.5
88.5°	0.8	0.8	0.9	1.1	1.3	1.1	0.9	0.8	0.8	0.8	0.9



TEST NUMBER: P775663
CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-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	0.1	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.1



TEST NUMBER: P775663

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	784.5	784.5	784.5	784.5	784.5	784.5
0.5°	784.2	783.9	784.2	784.3	784.5	784.6
1°	784.0	783.6	784.0	784.1	784.2	784.3
1.5°	783.5	783.1	783.5	783.7	783.7	783.9
2°	782.8	782.4	782.8	782.9	783.1	783.2
2.5°	782.0	781.5	782.0	782.1	782.3	782.5
3°	780.8	780.3	780.8	781.0	781.2	781.5
3.5°	779.6	779.3	779.6	779.8	780.1	780.3
4°	778.2	777.7	778.2	778.4	778.8	778.9
4.5°	776.6	776.0	776.6	776.8	777.3	777.5
5°	775.0	774.3	775.0	775.3	775.7	776.0
5.5°	772.9	772.3	772.9	773.2	773.7	774.4
6°	770.7	769.9	770.7	771.1	771.6	772.0
6.5°	768.3	767.5	768.3	768.6	769.3	769.6
7°	765.8	765.1	765.8	766.3	766.6	767.1
7.5°	763.2	762.4	763.2	763.4	763.8	764.2
8°	760.1	759.7	760.1	760.4	760.9	761.2
8.5°	756.9	756.5	756.9	757.2	757.6	758.0
9°	753.5	753.1	753.5	753.8	754.4	754.7
9.5°	749.9	749.5	749.9	750.3	750.8	751.0
10°	746.2	745.6	746.2	746.6	747.0	747.3
10.5°	742.2	741.7	742.2	742.5	743.0	743.2
11°	738.1	737.5	738.1	738.5	738.9	739.1
11.5°	733.8	733.3	733.8	734.2	734.6	734.8
12°	729.3	728.9	729.3	729.9	730.2	730.4
12.5°	724.7	724.2	724.7	725.2	725.6	725.8
13°	720.1	719.6	720.1	720.5	720.8	721.0
13.5°	715.3	714.8	715.3	715.7	715.9	716.1
14°	710.3	709.9	710.3	710.8	711.0	711.1
14.5°	705.2	704.8	705.2	705.6	705.7	705.8
15°	700.1	699.7	700.1	700.3	700.6	700.6
15.5°	695.1	694.9	695.1	695.3	695.1	695.1
16°	690.2	689.9	690.2	690.3	689.9	689.8
16.5°	685.2	685.1	685.2	685.2	684.8	684.6
17°	680.2	680.3	680.2	680.3	679.9	679.7
17.5°	675.2	675.1	675.2	675.3	675.0	674.8
18°	670.2	670.0	670.2	670.4	670.2	670.1
18.5°	664.8	664.5	664.8	665.0	665.0	665.0
19°	659.1	658.7	659.1	659.4	659.6	659.9
19.5°	653.0	652.7	653.0	653.2	653.8	654.2
20°	646.5	645.7	646.5	646.3	647.5	648.0
20.5°	639.4	638.6	639.4	639.0	640.4	641.2
21°	631.7	630.7	631.7	631.2	632.8	634.1



TEST NUMBER: P775663

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	605.5	605.0	605.5	605.6	606.6	607.9
23°	595.9	595.7	595.9	596.7	596.9	597.9
23.5°	586.0	586.6	586.0	587.3	586.8	587.7
24°	576.0	576.9	576.0	577.6	576.4	577.1
24.5°	565.8	567.0	565.8	567.4	565.9	566.2
25°	555.6	556.5	555.6	556.8	554.9	554.7
25.5°	545.4	545.6	545.4	545.9	544.2	542.9
26°	534.8	533.9	534.8	534.7	533.1	530.7
26.5°	523.7	521.8	523.7	523.0	521.7	518.2
27°	512.4	509.6	512.4	511.2	510.0	506.0
27.5°	500.7	497.1	500.7	499.3	497.8	494.0
28°	488.5	484.6	488.5	487.1	485.6	482.0
28.5°	476.1	472.5	476.1	474.9	473.2	470.4
29°	463.5	461.0	463.5	462.7	460.7	458.8
29.5°	450.9	449.8	450.9	450.6	448.4	447.5
30°	438.3	438.4	438.3	438.2	435.8	436.1
30.5°	426.1	427.7	426.1	425.9	423.6	424.3
31°	413.9	416.4	413.9	413.5	411.1	412.7
31.5°	401.9	404.9	401.9	401.1	399.1	400.7
32°	390.0	393.1	390.0	388.8	387.1	388.5
32.5°	378.2	381.4	378.2	376.8	375.5	376.8
33°	366.5	369.4	366.5	364.4	363.9	364.9
33.5°	354.7	357.3	354.7	352.1	352.4	354.3
34°	343.1	345.9	343.1	339.9	340.8	342.8
34.5°	331.5	334.5	331.5	328.0	329.4	331.5
35°	320.2	323.5	320.2	316.8	318.2	320.0
35.5°	309.1	312.7	309.1	305.6	307.2	308.9
36°	298.4	302.1	298.4	294.8	296.2	298.0
36.5°	287.8	291.2	287.8	284.3	285.6	287.1
37°	277.5	280.5	277.5	274.0	275.1	276.2
37.5°	267.6	269.8	267.6	264.1	264.9	265.6
38°	257.9	259.2	257.9	254.7	255.0	255.1
38.5°	248.5	249.0	248.5	245.6	245.4	245.2
39°	239.3	239.2	239.3	236.6	236.2	235.7
39.5°	230.3	230.0	230.3	228.0	227.3	226.3
40°	221.6	221.2	221.6	219.7	218.4	217.4
40.5°	213.1	213.0	213.1	211.7	210.0	209.0
41°	205.1	205.4	205.1	204.1	201.9	200.9
41.5°	197.4	198.4	197.4	196.9	194.4	193.2
42°	190.3	191.5	190.3	190.0	187.2	186.1
42.5°	183.5	184.9	183.5	183.4	180.5	179.3
43°	177.2	178.5	177.2	177.0	174.2	172.9
43.5°	171.1	172.3	171.1	171.0	168.3	167.1



TEST NUMBER: P775663

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	155.2	155.7	155.2	154.7	153.0	151.9
45.5°	150.5	150.9	150.5	149.9	148.3	147.5
46°	146.1	146.4	146.1	145.4	144.0	143.3
46.5°	141.9	142.2	141.9	141.1	140.0	139.4
47°	138.1	138.4	138.1	137.2	136.2	135.7
47.5°	134.5	134.9	134.5	133.5	132.6	132.3
48°	131.2	131.6	131.2	130.4	129.4	129.0
48.5°	128.2	128.5	128.2	127.3	126.6	126.4
49°	125.2	125.6	125.2	124.6	124.0	123.9
49.5°	122.5	122.6	122.5	122.0	121.6	121.5
50°	119.8	119.9	119.8	119.4	119.0	118.9
50.5°	117.1	117.1	117.1	116.7	116.5	116.4
51°	114.5	114.5	114.5	114.1	113.8	113.6
51.5°	111.9	112.0	111.9	111.4	110.9	110.8
52°	109.2	109.3	109.2	108.6	108.2	108.0
52.5°	106.3	106.5	106.3	105.9	105.4	105.2
53°	103.6	103.8	103.6	103.2	102.8	102.5
53.5°	101.0	101.2	101.0	100.4	100.0	99.8
54°	98.2	98.4	98.2	97.8	97.4	97.3
54.5°	95.7	95.9	95.7	95.3	94.9	94.8
55°	93.2	93.3	93.2	92.9	92.5	92.2
55.5°	90.8	90.9	90.8	90.5	90.0	89.8
56°	88.4	88.5	88.4	88.0	87.7	87.5
56.5°	86.0	86.2	86.0	85.7	85.4	85.2
57°	83.7	83.8	83.7	83.4	83.1	82.9
57.5°	81.4	81.6	81.4	81.2	80.9	80.6
58°	79.3	79.4	79.3	79.0	78.7	78.6
58.5°	77.1	77.2	77.1	76.9	76.6	76.5
59°	74.9	75.1	74.9	74.7	74.5	74.4
59.5°	72.9	73.0	72.9	72.6	72.4	72.3
60°	70.8	70.9	70.8	70.6	70.4	70.3
60.5°	68.8	68.9	68.8	68.6	68.4	68.3
61°	66.9	67.0	66.9	66.7	66.5	66.4
61.5°	65.0	65.1	65.0	64.8	64.6	64.5
62°	63.1	63.1	63.1	62.9	62.7	62.7
62.5°	61.3	61.4	61.3	61.0	60.9	60.8
63°	59.5	59.5	59.5	59.3	59.2	59.0
63.5°	57.7	57.8	57.7	57.5	57.4	57.3
64°	55.9	56.0	55.9	55.8	55.7	55.6
64.5°	54.2	54.3	54.2	54.1	54.0	53.9
65°	52.5	52.6	52.5	52.4	52.3	52.2
65.5°	51.0	51.0	51.0	50.7	50.6	50.6
66°	49.3	49.4	49.3	49.2	49.1	49.0



TEST NUMBER: P775663

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	44.7	44.7	44.7	44.5	44.4	44.3
68°	43.2	43.2	43.2	43.1	43.0	42.9
68.5°	41.6	41.7	41.6	41.6	41.5	41.4
69°	40.2	40.2	40.2	40.0	40.0	40.0
69.5°	38.8	38.9	38.8	38.7	38.7	38.6
70°	37.4	37.5	37.4	37.3	37.4	37.3
70.5°	36.0	36.1	36.0	36.0	36.0	35.9
71°	34.7	34.8	34.7	34.7	34.7	34.7
71.5°	33.4	33.4	33.4	33.4	33.3	33.3
72°	32.1	32.1	32.1	32.0	32.0	32.0
72.5°	30.9	30.9	30.9	30.8	30.8	30.8
73°	29.6	29.6	29.6	29.5	29.5	29.5
73.5°	28.4	28.4	28.4	28.4	28.3	28.3
74°	27.2	27.2	27.2	27.1	27.1	27.1
74.5°	26.0	26.0	26.0	26.0	26.0	26.0
75°	24.8	24.8	24.8	24.8	24.8	24.8
75.5°	23.6	23.7	23.6	23.6	23.6	23.6
76°	22.6	22.6	22.6	22.5	22.5	22.6
76.5°	21.4	21.4	21.4	21.4	21.4	21.4
77°	20.4	20.4	20.4	20.4	20.4	20.4
77.5°	19.3	19.3	19.3	19.3	19.3	19.3
78°	18.3	18.3	18.3	18.3	18.3	18.3
78.5°	17.2	17.3	17.2	17.2	17.3	17.3
79°	16.3	16.3	16.3	16.3	16.3	16.3
79.5°	15.3	15.3	15.3	15.2	15.3	15.3
80°	14.3	14.3	14.3	14.3	14.4	14.4
80.5°	13.4	13.4	13.4	13.4	13.4	13.4
81°	12.5	12.5	12.5	12.5	12.5	12.5
81.5°	11.6	11.6	11.6	11.6	11.6	11.6
82°	10.7	10.7	10.7	10.7	10.7	10.7
82.5°	9.9	9.8	9.9	9.9	9.9	9.9
83°	8.9	8.9	8.9	9.0	9.0	9.0
83.5°	8.1	8.1	8.1	8.2	8.2	8.2
84°	7.4	7.4	7.4	7.4	7.4	7.4
84.5°	6.5	6.5	6.5	6.5	6.5	6.6
85°	5.8	5.8	5.8	5.8	5.8	5.8
85.5°	4.9	5.0	4.9	5.0	4.9	5.0
86°	4.2	4.2	4.2	4.2	4.2	4.2
86.5°	3.5	3.6	3.5	3.5	3.5	3.6
87°	2.7	2.8	2.7	2.8	2.8	2.8
87.5°	2.1	2.2	2.1	2.1	2.1	2.1
88°	1.6	1.6	1.6	1.5	1.5	1.4
88.5°	1.1	1.3	1.1	0.9	0.8	0.8



TEST NUMBER: P775663

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.2	0.3	0.2	0.1	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

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

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21.5°	625.8	624.7	622.9	623.4	622.4	623.4	622.9	624.7	625.8	624.7	622.9
22°	617.0	616.0	614.4	614.6	613.6	614.6	614.4	616.0	617.0	616.0	614.4



44°	161.6	162.8	165.3	165.5	166.5	165.5	165.3	162.8	161.6	162.8	165.3
44.5°	156.5	157.8	159.9	160.2	161.0	160.2	159.9	157.8	156.5	157.8	159.9



66.5°	47.4	47.5	47.6	47.7	47.8	47.7	47.6	47.5	47.4	47.5	47.6
67°	45.9	45.9	46.0	46.1	46.2	46.1	46.0	45.9	45.9	45.9	46.0



89°	0.3	0.4	0.6	0.7	0.8	0.7	0.6	0.4	0.3	0.4	0.6
89.5°	0.0	0.1	0.3	0.4	0.5	0.4	0.3	0.1	0.0	0.1	0.3

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21.5°	623.4	622.4	623.4	622.9	624.7	625.8
22°	614.6	613.6	614.6	614.4	616.0	617.0



44°	165.5	166.5	165.5	165.3	162.8	161.6
44.5°	160.2	161.0	160.2	159.9	157.8	156.5



66.5°	47.7	47.8	47.7	47.6	47.5	47.4
67°	46.1	46.2	46.1	46.0	45.9	45.9



89°	0.7	0.8	0.7	0.6	0.4	0.3
89.5°	0.4	0.5	0.4	0.3	0.1	0.0

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(END OF REPORT)