

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: P776853

Luminaire Tested: HCDJBL510CSD-HCD42TRMW-750lm-4000K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776853  
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-750lm-4000K  
Description: 4 INCH ROUND NARROW MATTE WHITE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

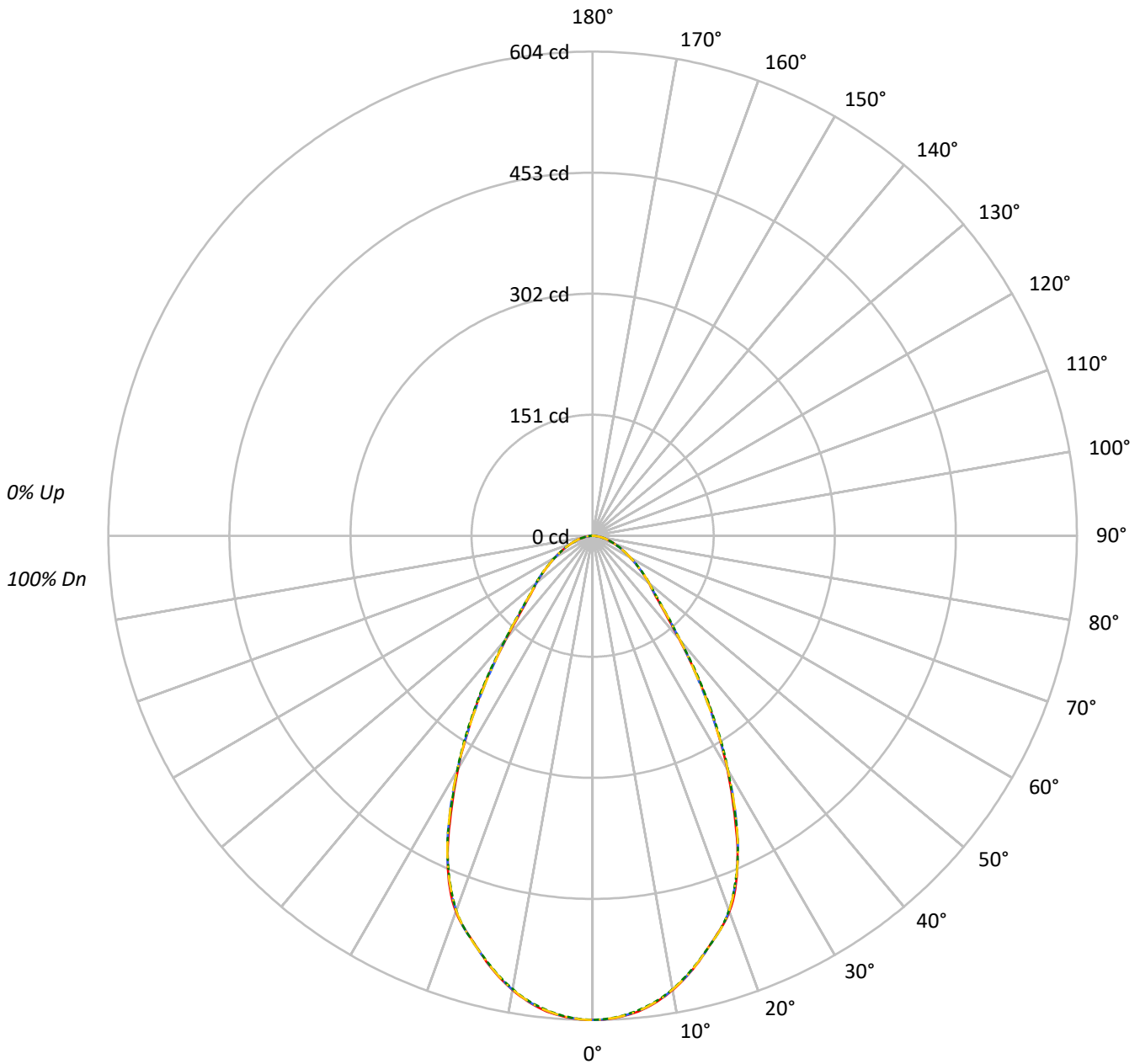
Lumens per Lamp: N/A  
Luminaire Lumens: 780.0 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.97 / 0.95  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.5  
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	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°	76013	76013	76013	76013
5°	75482	75318	75482	75318
10°	73531	73365	73531	73365
15°	70278	70187	70278	70187
20°	66816	66588	66816	66588
25°	59307	59501	59307	59501
30°	48798	49060	48798	49060
35°	37855	38270	37855	38270
40°	27501	27978	27501	27978
45°	20823	21340	20823	21340
50°	17934	18071	17934	18071
55°	15578	15754	15578	15754
60°	13617	13743	13617	13743
65°	11971	12060	11971	12060
70°	10560	10634	10560	10634
75°	9287	9287	9287	9287
80°	8045	7972	8045	7972
85°	6353	6353	6353	6353

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 21340 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.3	7.2
10°-20°	151.5	19.4
20°-30°	194.0	24.9
30°-40°	153.8	19.7
40°-50°	94.1	12.1
50°-60°	64.4	8.3
60°-70°	40.3	5.2
70°-80°	20.4	2.6
80°-90°	5.2	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°	401.8	51.5
0°-40°	555.6	71.2
0°-60°	714.1	91.6
0°-90°	780.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	780.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	604	604	604	604	604	
5°	598	596	598	596	598	56
15°	539	539	539	539	539	152
25°	427	428	427	428	427	194
35°	246	249	246	249	246	154
45°	117	120	117	120	117	93
55°	71	72	71	72	71	64
65°	40	40	40	40	40	40
75°	19	19	19	19	19	20
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



TEST NUMBER: P776853

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0	604.0
0.5°	604.1	604.0	603.9	603.8	603.5	603.8	603.9	604.0	604.1	604.0	603.9
1°	603.9	603.8	603.7	603.6	603.3	603.6	603.7	603.8	603.9	603.8	603.7
1.5°	603.5	603.4	603.4	603.2	603.0	603.2	603.4	603.4	603.5	603.4	603.4
2°	603.1	603.0	602.8	602.7	602.4	602.7	602.8	603.0	603.1	603.0	602.8
2.5°	602.5	602.3	602.2	602.1	601.7	602.1	602.2	602.3	602.5	602.3	602.2
3°	601.7	601.5	601.4	601.2	600.8	601.2	601.4	601.5	601.7	601.5	601.4
3.5°	600.8	600.6	600.4	600.2	600.0	600.2	600.4	600.6	600.8	600.6	600.4
4°	599.7	599.7	599.3	599.2	598.8	599.2	599.3	599.7	599.7	599.7	599.3
4.5°	598.6	598.4	598.1	598.0	597.5	598.0	598.1	598.4	598.6	598.4	598.1
5°	597.5	597.2	596.9	596.7	596.2	596.7	596.9	597.2	597.5	597.2	596.9
5.5°	596.3	595.7	595.3	595.1	594.6	595.1	595.3	595.7	596.3	595.7	595.3
6°	594.4	594.1	593.7	593.4	592.8	593.4	593.7	594.1	594.4	594.1	593.7
6.5°	592.5	592.3	591.8	591.6	590.9	591.6	591.8	592.3	592.5	592.3	591.8
7°	590.6	590.3	590.0	589.6	589.1	589.6	590.0	590.3	590.6	590.3	590.0
7.5°	588.4	588.1	587.8	587.6	587.0	587.6	587.8	588.1	588.4	588.1	587.8
8°	586.1	585.8	585.5	585.3	584.9	585.3	585.5	585.8	586.1	585.8	585.5
8.5°	583.6	583.3	583.0	582.8	582.4	582.8	583.0	583.3	583.6	583.3	583.0
9°	581.1	580.8	580.4	580.2	579.8	580.2	580.4	580.8	581.1	580.8	580.4
9.5°	578.2	578.1	577.7	577.4	577.1	577.4	577.7	578.1	578.2	578.1	577.7
10°	575.4	575.1	574.8	574.5	574.1	574.5	574.8	575.1	575.4	575.1	574.8
10.5°	572.2	572.1	571.7	571.4	571.1	571.4	571.7	572.1	572.2	572.1	571.7
11°	569.1	568.9	568.6	568.3	567.9	568.3	568.6	568.9	569.1	568.9	568.6
11.5°	565.8	565.6	565.3	565.0	564.6	565.0	565.3	565.6	565.8	565.6	565.3
12°	562.4	562.2	562.0	561.6	561.2	561.6	562.0	562.2	562.4	562.2	562.0
12.5°	558.8	558.6	558.4	558.0	557.6	558.0	558.4	558.6	558.8	558.6	558.4
13°	555.2	555.0	554.8	554.4	554.0	554.4	554.8	555.0	555.2	555.0	554.8
13.5°	551.4	551.2	551.0	550.7	550.4	550.7	551.0	551.2	551.4	551.2	551.0
14°	547.5	547.4	547.2	546.9	546.6	546.9	547.2	547.4	547.5	547.4	547.2
14.5°	543.4	543.4	543.3	543.0	542.6	543.0	543.3	543.4	543.4	543.4	543.3
15°	539.4	539.4	539.2	539.1	538.7	539.1	539.2	539.4	539.4	539.4	539.2
15.5°	535.2	535.2	535.4	535.2	535.0	535.2	535.4	535.2	535.2	535.2	535.4
16°	531.1	531.2	531.5	531.4	531.2	531.4	531.5	531.2	531.1	531.2	531.5
16.5°	527.1	527.3	527.6	527.6	527.5	527.6	527.6	527.3	527.1	527.3	527.6
17°	523.3	523.5	523.8	523.7	523.8	523.7	523.8	523.5	523.3	523.5	523.8
17.5°	519.6	519.7	520.0	519.9	519.8	519.9	520.0	519.7	519.6	519.7	520.0
18°	515.9	516.0	516.2	516.0	515.9	516.0	516.2	516.0	515.9	516.0	516.2
18.5°	512.1	512.1	512.1	511.9	511.6	511.9	512.1	512.1	512.1	512.1	512.1
19°	508.1	507.8	507.7	507.4	507.2	507.4	507.7	507.8	508.1	507.8	507.7
19.5°	503.7	503.4	502.9	502.8	502.5	502.8	502.9	503.4	503.7	503.4	502.9
20°	498.9	498.5	497.7	497.7	497.2	497.7	497.7	498.5	498.9	498.5	497.7
20.5°	493.7	493.0	492.0	492.3	491.7	492.3	492.0	493.0	493.7	493.0	492.0
21°	488.2	487.2	486.0	486.4	485.6	486.4	486.0	487.2	488.2	487.2	486.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	468.0	467.1	466.3	466.2	465.8	466.2	466.3	467.1	468.0	467.1	466.3
23°	460.4	459.6	459.4	458.8	458.7	458.8	459.4	459.6	460.4	459.6	459.4
23.5°	452.5	451.8	452.2	451.2	451.6	451.2	452.2	451.8	452.5	451.8	452.2
24°	444.3	443.8	444.8	443.5	444.2	443.5	444.8	443.8	444.3	443.8	444.8
24.5°	435.9	435.7	436.9	435.6	436.6	435.6	436.9	435.7	435.9	435.7	436.9
25°	427.1	427.3	428.7	427.8	428.5	427.8	428.7	427.3	427.1	427.3	428.7
25.5°	418.0	419.0	420.3	419.9	420.1	419.9	420.3	419.0	418.0	419.0	420.3
26°	408.6	410.5	411.7	411.7	411.1	411.7	411.7	410.5	408.6	410.5	411.7
26.5°	399.0	401.7	402.7	403.3	401.8	403.3	402.7	401.7	399.0	401.7	402.7
27°	389.6	392.7	393.6	394.5	392.3	394.5	393.6	392.7	389.6	392.7	393.6
27.5°	380.4	383.3	384.4	385.5	382.7	385.5	384.4	383.3	380.4	383.3	384.4
28°	371.1	373.9	375.0	376.2	373.1	376.2	375.0	373.9	371.1	373.9	375.0
28.5°	362.2	364.3	365.6	366.6	363.8	366.6	365.6	364.3	362.2	364.3	365.6
29°	353.3	354.7	356.3	356.9	355.0	356.9	356.3	354.7	353.3	354.7	356.3
29.5°	344.5	345.3	347.0	347.2	346.3	347.2	347.0	345.3	344.5	345.3	347.0
30°	335.8	335.5	337.4	337.5	337.6	337.5	337.4	335.5	335.8	335.5	337.4
30.5°	326.7	326.2	327.9	328.1	329.3	328.1	327.9	326.2	326.7	326.2	327.9
31°	317.7	316.5	318.4	318.7	320.6	318.7	318.4	316.5	317.7	316.5	318.4
31.5°	308.5	307.3	308.8	309.4	311.8	309.4	308.8	307.3	308.5	307.3	308.8
32°	299.1	298.0	299.4	300.3	302.7	300.3	299.4	298.0	299.1	298.0	299.4
32.5°	290.1	289.1	290.1	291.2	293.6	291.2	290.1	289.1	290.1	289.1	290.1
33°	280.9	280.2	280.5	282.2	284.4	282.2	280.5	280.2	280.9	280.2	280.5
33.5°	272.8	271.3	271.1	273.1	275.1	273.1	271.1	271.3	272.8	271.3	271.1
34°	264.0	262.4	261.7	264.2	266.3	264.2	261.7	262.4	264.0	262.4	261.7
34.5°	255.2	253.6	252.5	255.2	257.6	255.2	252.5	253.6	255.2	253.6	252.5
35°	246.4	245.0	243.9	246.6	249.1	246.6	243.9	245.0	246.4	245.0	243.9
35.5°	237.8	236.5	235.3	238.0	240.7	238.0	235.3	236.5	237.8	236.5	235.3
36°	229.4	228.0	227.0	229.7	232.6	229.7	227.0	228.0	229.4	228.0	227.0
36.5°	221.1	219.9	218.9	221.6	224.2	221.6	218.9	219.9	221.1	219.9	218.9
37°	212.7	211.8	211.0	213.6	216.0	213.6	211.0	211.8	212.7	211.8	211.0
37.5°	204.5	203.9	203.4	206.0	207.7	206.0	203.4	203.9	204.5	203.9	203.4
38°	196.4	196.3	196.1	198.6	199.6	198.6	196.1	196.3	196.4	196.3	196.1
38.5°	188.8	189.0	189.1	191.3	191.7	191.3	189.1	189.0	188.8	189.0	189.1
39°	181.4	181.8	182.2	184.3	184.2	184.3	182.2	181.8	181.4	181.8	182.2
39.5°	174.2	175.0	175.5	177.3	177.1	177.3	175.5	175.0	174.2	175.0	175.5
40°	167.4	168.2	169.1	170.6	170.3	170.6	169.1	168.2	167.4	168.2	169.1
40.5°	160.9	161.7	163.0	164.1	164.0	164.1	163.0	161.7	160.9	161.7	163.0
41°	154.7	155.5	157.2	157.9	158.1	157.9	157.2	155.5	154.7	155.5	157.2
41.5°	148.8	149.7	151.6	152.0	152.7	152.0	151.6	149.7	148.8	149.7	151.6
42°	143.3	144.2	146.3	146.5	147.5	146.5	146.3	144.2	143.3	144.2	146.3
42.5°	138.1	139.0	141.2	141.3	142.4	141.3	141.2	139.0	138.1	139.0	141.2
43°	133.1	134.1	136.3	136.5	137.4	136.5	136.3	134.1	133.1	134.1	136.3
43.5°	128.6	129.6	131.7	131.8	132.7	131.8	131.7	129.6	128.6	129.6	131.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	117.0	117.8	119.1	119.5	119.9	119.5	119.1	117.8	117.0	117.8	119.1
45.5°	113.6	114.2	115.4	115.8	116.2	115.8	115.4	114.2	113.6	114.2	115.4
46°	110.3	110.9	112.0	112.5	112.7	112.5	112.0	110.9	110.3	110.9	112.0
46.5°	107.3	107.8	108.6	109.3	109.4	109.3	108.6	107.8	107.3	107.8	108.6
47°	104.5	104.8	105.6	106.3	106.5	106.3	105.6	104.8	104.5	104.8	105.6
47.5°	101.8	102.1	102.8	103.5	103.9	103.5	102.8	102.1	101.8	102.1	102.8
48°	99.3	99.7	100.4	101.0	101.4	101.0	100.4	99.7	99.3	99.7	100.4
48.5°	97.3	97.5	98.0	98.7	98.9	98.7	98.0	97.5	97.3	97.5	98.0
49°	95.4	95.5	95.9	96.4	96.7	96.4	95.9	95.5	95.4	95.5	95.9
49.5°	93.5	93.6	93.9	94.3	94.4	94.3	93.9	93.6	93.5	93.6	93.9
50°	91.6	91.7	91.9	92.2	92.3	92.2	91.9	91.7	91.6	91.7	91.9
50.5°	89.6	89.7	89.9	90.2	90.2	90.2	89.9	89.7	89.6	89.7	89.9
51°	87.4	87.6	87.8	88.2	88.2	88.2	87.8	87.6	87.4	87.6	87.8
51.5°	85.3	85.4	85.7	86.2	86.2	86.2	85.7	85.4	85.3	85.4	85.7
52°	83.2	83.3	83.6	84.0	84.1	84.0	83.6	83.3	83.2	83.3	83.6
52.5°	81.0	81.1	81.5	81.9	82.0	81.9	81.5	81.1	81.0	81.1	81.5
53°	79.0	79.1	79.4	79.8	79.9	79.8	79.4	79.1	79.0	79.1	79.4
53.5°	76.8	77.0	77.3	77.7	77.9	77.7	77.3	77.0	76.8	77.0	77.3
54°	74.9	75.0	75.3	75.6	75.8	75.6	75.3	75.0	74.9	75.0	75.3
54.5°	73.0	73.0	73.4	73.7	73.9	73.7	73.4	73.0	73.0	73.0	73.4
55°	71.0	71.2	71.5	71.8	71.8	71.8	71.5	71.2	71.0	71.2	71.5
55.5°	69.2	69.3	69.6	69.9	70.0	69.9	69.6	69.3	69.2	69.3	69.6
56°	67.4	67.5	67.8	68.0	68.1	68.0	67.8	67.5	67.4	67.5	67.8
56.5°	65.6	65.8	66.0	66.3	66.3	66.3	66.0	65.8	65.6	65.8	66.0
57°	63.8	64.0	64.2	64.5	64.6	64.5	64.2	64.0	63.8	64.0	64.2
57.5°	62.0	62.3	62.5	62.7	62.9	62.7	62.5	62.3	62.0	62.3	62.5
58°	60.5	60.6	60.8	61.1	61.2	61.1	60.8	60.6	60.5	60.6	60.8
58.5°	58.9	59.0	59.2	59.4	59.5	59.4	59.2	59.0	58.9	59.0	59.2
59°	57.3	57.4	57.5	57.7	57.8	57.7	57.5	57.4	57.3	57.4	57.5
59.5°	55.7	55.7	55.9	56.1	56.2	56.1	55.9	55.7	55.7	55.7	55.9
60°	54.1	54.2	54.4	54.5	54.6	54.5	54.4	54.2	54.1	54.2	54.4
60.5°	52.6	52.7	52.8	53.0	53.1	53.0	52.8	52.7	52.6	52.7	52.8
61°	51.1	51.2	51.4	51.5	51.6	51.5	51.4	51.2	51.1	51.2	51.4
61.5°	49.7	49.7	49.9	50.1	50.2	50.1	49.9	49.7	49.7	49.7	49.9
62°	48.3	48.3	48.5	48.6	48.6	48.6	48.5	48.3	48.3	48.3	48.5
62.5°	46.8	46.9	47.0	47.2	47.2	47.2	47.0	46.9	46.8	46.9	47.0
63°	45.5	45.5	45.6	45.8	45.8	45.8	45.6	45.5	45.5	45.5	45.6
63.5°	44.1	44.2	44.2	44.4	44.5	44.4	44.2	44.2	44.1	44.2	44.2
64°	42.8	42.9	43.0	43.0	43.1	43.0	43.0	42.9	42.8	42.9	43.0
64.5°	41.5	41.6	41.7	41.7	41.8	41.7	41.7	41.6	41.5	41.6	41.7
65°	40.2	40.3	40.4	40.4	40.5	40.4	40.4	40.3	40.2	40.3	40.4
65.5°	39.0	39.0	39.1	39.2	39.2	39.2	39.1	39.0	39.0	39.0	39.1
66°	37.7	37.8	37.9	37.9	38.0	37.9	37.9	37.8	37.7	37.8	37.9





TEST NUMBER: P776853

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	34.1	34.2	34.3	34.4	34.4	34.4	34.3	34.2	34.1	34.2	34.3
68°	33.0	33.1	33.2	33.2	33.2	33.2	33.2	33.1	33.0	33.1	33.2
68.5°	31.9	32.0	32.0	32.0	32.1	32.0	32.0	32.0	31.9	32.0	32.0
69°	30.8	30.8	30.8	31.0	31.0	31.0	30.8	30.8	30.8	30.8	30.8
69.5°	29.7	29.8	29.8	29.8	29.9	29.8	29.8	29.8	29.7	29.8	29.8
70°	28.7	28.8	28.7	28.8	28.9	28.8	28.7	28.8	28.7	28.8	28.7
70.5°	27.7	27.7	27.7	27.7	27.8	27.7	27.7	27.7	27.7	27.7	27.7
71°	26.7	26.7	26.7	26.7	26.8	26.7	26.7	26.7	26.7	26.7	26.7
71.5°	25.6	25.6	25.7	25.7	25.7	25.7	25.7	25.6	25.6	25.6	25.7
72°	24.7	24.7	24.7	24.8	24.8	24.8	24.7	24.7	24.7	24.7	24.7
72.5°	23.7	23.7	23.7	23.8	23.8	23.8	23.7	23.7	23.7	23.7	23.7
73°	22.7	22.7	22.7	22.8	22.8	22.8	22.7	22.7	22.7	22.7	22.7
73.5°	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8
74°	20.9	20.9	20.9	21.0	21.0	21.0	20.9	20.9	20.9	20.9	20.9
74.5°	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
75°	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
75.5°	18.2	18.2	18.2	18.2	18.3	18.2	18.2	18.2	18.2	18.2	18.2
76°	17.4	17.3	17.3	17.4	17.4	17.4	17.3	17.3	17.4	17.3	17.3
76.5°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
77°	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7
77.5°	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9
78°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
78.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
79°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
79.5°	11.8	11.8	11.7	11.8	11.8	11.8	11.7	11.8	11.8	11.8	11.7
80°	11.1	11.1	11.0	11.0	11.0	11.0	11.0	11.1	11.1	11.1	11.0
80.5°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
81°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
81.5°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
82°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
82.5°	7.6	7.6	7.6	7.6	7.5	7.6	7.6	7.6	7.6	7.6	7.6
83°	7.0	7.0	7.0	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0
83.5°	6.3	6.3	6.3	6.2	6.2	6.2	6.3	6.3	6.3	6.3	6.3
84°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
84.5°	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.1	5.0	5.0
85°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
85.5°	3.9	3.8	3.9	3.8	3.9	3.8	3.9	3.8	3.9	3.8	3.9
86°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
86.5°	2.8	2.7	2.7	2.7	2.8	2.7	2.7	2.7	2.8	2.7	2.7
87°	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.2
87.5°	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6
88°	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1
88.5°	0.6	0.6	0.7	0.8	1.0	0.8	0.7	0.6	0.6	0.6	0.7



TEST NUMBER: P776853

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-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	0.2	0.2	0.1	0.0	0.0	0.0	0.1



TEST NUMBER: P776853

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	604.0	604.0	604.0	604.0	604.0	604.0
0.5°	603.8	603.5	603.8	603.9	604.0	604.1
1°	603.6	603.3	603.6	603.7	603.8	603.9
1.5°	603.2	603.0	603.2	603.4	603.4	603.5
2°	602.7	602.4	602.7	602.8	603.0	603.1
2.5°	602.1	601.7	602.1	602.2	602.3	602.5
3°	601.2	600.8	601.2	601.4	601.5	601.7
3.5°	600.2	600.0	600.2	600.4	600.6	600.8
4°	599.2	598.8	599.2	599.3	599.7	599.7
4.5°	598.0	597.5	598.0	598.1	598.4	598.6
5°	596.7	596.2	596.7	596.9	597.2	597.5
5.5°	595.1	594.6	595.1	595.3	595.7	596.3
6°	593.4	592.8	593.4	593.7	594.1	594.4
6.5°	591.6	590.9	591.6	591.8	592.3	592.5
7°	589.6	589.1	589.6	590.0	590.3	590.6
7.5°	587.6	587.0	587.6	587.8	588.1	588.4
8°	585.3	584.9	585.3	585.5	585.8	586.1
8.5°	582.8	582.4	582.8	583.0	583.3	583.6
9°	580.2	579.8	580.2	580.4	580.8	581.1
9.5°	577.4	577.1	577.4	577.7	578.1	578.2
10°	574.5	574.1	574.5	574.8	575.1	575.4
10.5°	571.4	571.1	571.4	571.7	572.1	572.2
11°	568.3	567.9	568.3	568.6	568.9	569.1
11.5°	565.0	564.6	565.0	565.3	565.6	565.8
12°	561.6	561.2	561.6	562.0	562.2	562.4
12.5°	558.0	557.6	558.0	558.4	558.6	558.8
13°	554.4	554.0	554.4	554.8	555.0	555.2
13.5°	550.7	550.4	550.7	551.0	551.2	551.4
14°	546.9	546.6	546.9	547.2	547.4	547.5
14.5°	543.0	542.6	543.0	543.3	543.4	543.4
15°	539.1	538.7	539.1	539.2	539.4	539.4
15.5°	535.2	535.0	535.2	535.4	535.2	535.2
16°	531.4	531.2	531.4	531.5	531.2	531.1
16.5°	527.6	527.5	527.6	527.6	527.3	527.1
17°	523.7	523.8	523.7	523.8	523.5	523.3
17.5°	519.9	519.8	519.9	520.0	519.7	519.6
18°	516.0	515.9	516.0	516.2	516.0	515.9
18.5°	511.9	511.6	511.9	512.1	512.1	512.1
19°	507.4	507.2	507.4	507.7	507.8	508.1
19.5°	502.8	502.5	502.8	502.9	503.4	503.7
20°	497.7	497.2	497.7	497.7	498.5	498.9
20.5°	492.3	491.7	492.3	492.0	493.0	493.7
21°	486.4	485.6	486.4	486.0	487.2	488.2



TEST NUMBER: P776853

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	466.2	465.8	466.2	466.3	467.1	468.0
23°	458.8	458.7	458.8	459.4	459.6	460.4
23.5°	451.2	451.6	451.2	452.2	451.8	452.5
24°	443.5	444.2	443.5	444.8	443.8	444.3
24.5°	435.6	436.6	435.6	436.9	435.7	435.9
25°	427.8	428.5	427.8	428.7	427.3	427.1
25.5°	419.9	420.1	419.9	420.3	419.0	418.0
26°	411.7	411.1	411.7	411.7	410.5	408.6
26.5°	403.3	401.8	403.3	402.7	401.7	399.0
27°	394.5	392.3	394.5	393.6	392.7	389.6
27.5°	385.5	382.7	385.5	384.4	383.3	380.4
28°	376.2	373.1	376.2	375.0	373.9	371.1
28.5°	366.6	363.8	366.6	365.6	364.3	362.2
29°	356.9	355.0	356.9	356.3	354.7	353.3
29.5°	347.2	346.3	347.2	347.0	345.3	344.5
30°	337.5	337.6	337.5	337.4	335.5	335.8
30.5°	328.1	329.3	328.1	327.9	326.2	326.7
31°	318.7	320.6	318.7	318.4	316.5	317.7
31.5°	309.4	311.8	309.4	308.8	307.3	308.5
32°	300.3	302.7	300.3	299.4	298.0	299.1
32.5°	291.2	293.6	291.2	290.1	289.1	290.1
33°	282.2	284.4	282.2	280.5	280.2	280.9
33.5°	273.1	275.1	273.1	271.1	271.3	272.8
34°	264.2	266.3	264.2	261.7	262.4	264.0
34.5°	255.2	257.6	255.2	252.5	253.6	255.2
35°	246.6	249.1	246.6	243.9	245.0	246.4
35.5°	238.0	240.7	238.0	235.3	236.5	237.8
36°	229.7	232.6	229.7	227.0	228.0	229.4
36.5°	221.6	224.2	221.6	218.9	219.9	221.1
37°	213.6	216.0	213.6	211.0	211.8	212.7
37.5°	206.0	207.7	206.0	203.4	203.9	204.5
38°	198.6	199.6	198.6	196.1	196.3	196.4
38.5°	191.3	191.7	191.3	189.1	189.0	188.8
39°	184.3	184.2	184.3	182.2	181.8	181.4
39.5°	177.3	177.1	177.3	175.5	175.0	174.2
40°	170.6	170.3	170.6	169.1	168.2	167.4
40.5°	164.1	164.0	164.1	163.0	161.7	160.9
41°	157.9	158.1	157.9	157.2	155.5	154.7
41.5°	152.0	152.7	152.0	151.6	149.7	148.8
42°	146.5	147.5	146.5	146.3	144.2	143.3
42.5°	141.3	142.4	141.3	141.2	139.0	138.1
43°	136.5	137.4	136.5	136.3	134.1	133.1
43.5°	131.8	132.7	131.8	131.7	129.6	128.6



TEST NUMBER: P776853

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	119.5	119.9	119.5	119.1	117.8	117.0
45.5°	115.8	116.2	115.8	115.4	114.2	113.6
46°	112.5	112.7	112.5	112.0	110.9	110.3
46.5°	109.3	109.4	109.3	108.6	107.8	107.3
47°	106.3	106.5	106.3	105.6	104.8	104.5
47.5°	103.5	103.9	103.5	102.8	102.1	101.8
48°	101.0	101.4	101.0	100.4	99.7	99.3
48.5°	98.7	98.9	98.7	98.0	97.5	97.3
49°	96.4	96.7	96.4	95.9	95.5	95.4
49.5°	94.3	94.4	94.3	93.9	93.6	93.5
50°	92.2	92.3	92.2	91.9	91.7	91.6
50.5°	90.2	90.2	90.2	89.9	89.7	89.6
51°	88.2	88.2	88.2	87.8	87.6	87.4
51.5°	86.2	86.2	86.2	85.7	85.4	85.3
52°	84.0	84.1	84.0	83.6	83.3	83.2
52.5°	81.9	82.0	81.9	81.5	81.1	81.0
53°	79.8	79.9	79.8	79.4	79.1	79.0
53.5°	77.7	77.9	77.7	77.3	77.0	76.8
54°	75.6	75.8	75.6	75.3	75.0	74.9
54.5°	73.7	73.9	73.7	73.4	73.0	73.0
55°	71.8	71.8	71.8	71.5	71.2	71.0
55.5°	69.9	70.0	69.9	69.6	69.3	69.2
56°	68.0	68.1	68.0	67.8	67.5	67.4
56.5°	66.3	66.3	66.3	66.0	65.8	65.6
57°	64.5	64.6	64.5	64.2	64.0	63.8
57.5°	62.7	62.9	62.7	62.5	62.3	62.0
58°	61.1	61.2	61.1	60.8	60.6	60.5
58.5°	59.4	59.5	59.4	59.2	59.0	58.9
59°	57.7	57.8	57.7	57.5	57.4	57.3
59.5°	56.1	56.2	56.1	55.9	55.7	55.7
60°	54.5	54.6	54.5	54.4	54.2	54.1
60.5°	53.0	53.1	53.0	52.8	52.7	52.6
61°	51.5	51.6	51.5	51.4	51.2	51.1
61.5°	50.1	50.2	50.1	49.9	49.7	49.7
62°	48.6	48.6	48.6	48.5	48.3	48.3
62.5°	47.2	47.2	47.2	47.0	46.9	46.8
63°	45.8	45.8	45.8	45.6	45.5	45.5
63.5°	44.4	44.5	44.4	44.2	44.2	44.1
64°	43.0	43.1	43.0	43.0	42.9	42.8
64.5°	41.7	41.8	41.7	41.7	41.6	41.5
65°	40.4	40.5	40.4	40.4	40.3	40.2
65.5°	39.2	39.2	39.2	39.1	39.0	39.0
66°	37.9	38.0	37.9	37.9	37.8	37.7



TEST NUMBER: P776853

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	34.4	34.4	34.4	34.3	34.2	34.1
68°	33.2	33.2	33.2	33.2	33.1	33.0
68.5°	32.0	32.1	32.0	32.0	32.0	31.9
69°	31.0	31.0	31.0	30.8	30.8	30.8
69.5°	29.8	29.9	29.8	29.8	29.8	29.7
70°	28.8	28.9	28.8	28.7	28.8	28.7
70.5°	27.7	27.8	27.7	27.7	27.7	27.7
71°	26.7	26.8	26.7	26.7	26.7	26.7
71.5°	25.7	25.7	25.7	25.7	25.6	25.6
72°	24.8	24.8	24.8	24.7	24.7	24.7
72.5°	23.8	23.8	23.8	23.7	23.7	23.7
73°	22.8	22.8	22.8	22.7	22.7	22.7
73.5°	21.8	21.8	21.8	21.8	21.8	21.8
74°	21.0	21.0	21.0	20.9	20.9	20.9
74.5°	20.0	20.0	20.0	20.0	20.0	20.0
75°	19.1	19.1	19.1	19.1	19.1	19.1
75.5°	18.2	18.3	18.2	18.2	18.2	18.2
76°	17.4	17.4	17.4	17.3	17.3	17.4
76.5°	16.5	16.5	16.5	16.5	16.5	16.5
77°	15.7	15.7	15.7	15.7	15.7	15.7
77.5°	14.9	14.9	14.9	14.9	14.9	14.9
78°	14.1	14.1	14.1	14.1	14.1	14.1
78.5°	13.3	13.3	13.3	13.3	13.3	13.3
79°	12.5	12.5	12.5	12.5	12.5	12.5
79.5°	11.8	11.8	11.8	11.7	11.8	11.8
80°	11.0	11.0	11.0	11.0	11.1	11.1
80.5°	10.4	10.4	10.4	10.4	10.4	10.4
81°	9.6	9.6	9.6	9.6	9.6	9.6
81.5°	8.9	8.9	8.9	8.9	8.9	8.9
82°	8.3	8.3	8.3	8.3	8.3	8.3
82.5°	7.6	7.5	7.6	7.6	7.6	7.6
83°	6.9	6.9	6.9	7.0	7.0	7.0
83.5°	6.2	6.2	6.2	6.3	6.3	6.3
84°	5.7	5.7	5.7	5.7	5.7	5.7
84.5°	5.0	5.0	5.0	5.0	5.0	5.1
85°	4.4	4.4	4.4	4.4	4.4	4.4
85.5°	3.8	3.9	3.8	3.9	3.8	3.9
86°	3.2	3.2	3.2	3.2	3.2	3.2
86.5°	2.7	2.8	2.7	2.7	2.7	2.8
87°	2.1	2.2	2.1	2.2	2.2	2.2
87.5°	1.6	1.7	1.6	1.6	1.6	1.6
88°	1.2	1.2	1.2	1.1	1.1	1.1
88.5°	0.8	1.0	0.8	0.7	0.6	0.6



TEST NUMBER: P776853

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.2	0.2	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°	481.8	481.0	479.6	480.0	479.2	480.0	479.6	481.0	481.8	481.0	479.6
22°	475.1	474.3	473.1	473.2	472.4	473.2	473.1	474.3	475.1	474.3	473.1



44°	124.4	125.4	127.2	127.4	128.2	127.4	127.2	125.4	124.4	125.4	127.2
44.5°	120.5	121.5	123.1	123.4	123.9	123.4	123.1	121.5	120.5	121.5	123.1



66.5°	36.5	36.6	36.6	36.7	36.8	36.7	36.6	36.6	36.5	36.6	36.6
67°	35.4	35.4	35.4	35.5	35.6	35.5	35.4	35.4	35.4	35.4	35.4



89°	0.2	0.3	0.5	0.6	0.6	0.6	0.5	0.3	0.2	0.3	0.5
89.5°	0.0	0.1	0.2	0.3	0.4	0.3	0.2	0.1	0.0	0.1	0.2



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21.5°	480.0	479.2	480.0	479.6	481.0	481.8
22°	473.2	472.4	473.2	473.1	474.3	475.1



44°	127.4	128.2	127.4	127.2	125.4	124.4
44.5°	123.4	123.9	123.4	123.1	121.5	120.5

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66.5°	36.7	36.8	36.7	36.6	36.6	36.5
67°	35.5	35.6	35.5	35.4	35.4	35.4

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89°	0.6	0.6	0.6	0.5	0.3	0.2
89.5°	0.3	0.4	0.3	0.2	0.1	0.0

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(END OF REPORT)