

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: METALUX

Report Number: P231517

Luminaire Tested: **SSLED-LD5-15-W-UNV-L850-CD1-U-CLR22-FRCDL22**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P231517  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-7)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SSLED-LD5-15-W-UNV-L850-CD1-U-CLR22-FRCDL22  
Description: STEELER CLEAR REFRACTOR LENS AND CIRCULAR DROP  
Light Source: (240) 5000 CCT, 80 CRI LEDS  
Ballast/Driver: (1) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14398.0 lumens  
Efficiency: N/A  
Efficacy: 130.0 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.32 / 1.45  
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')  
CIE Type: Semi-Direct

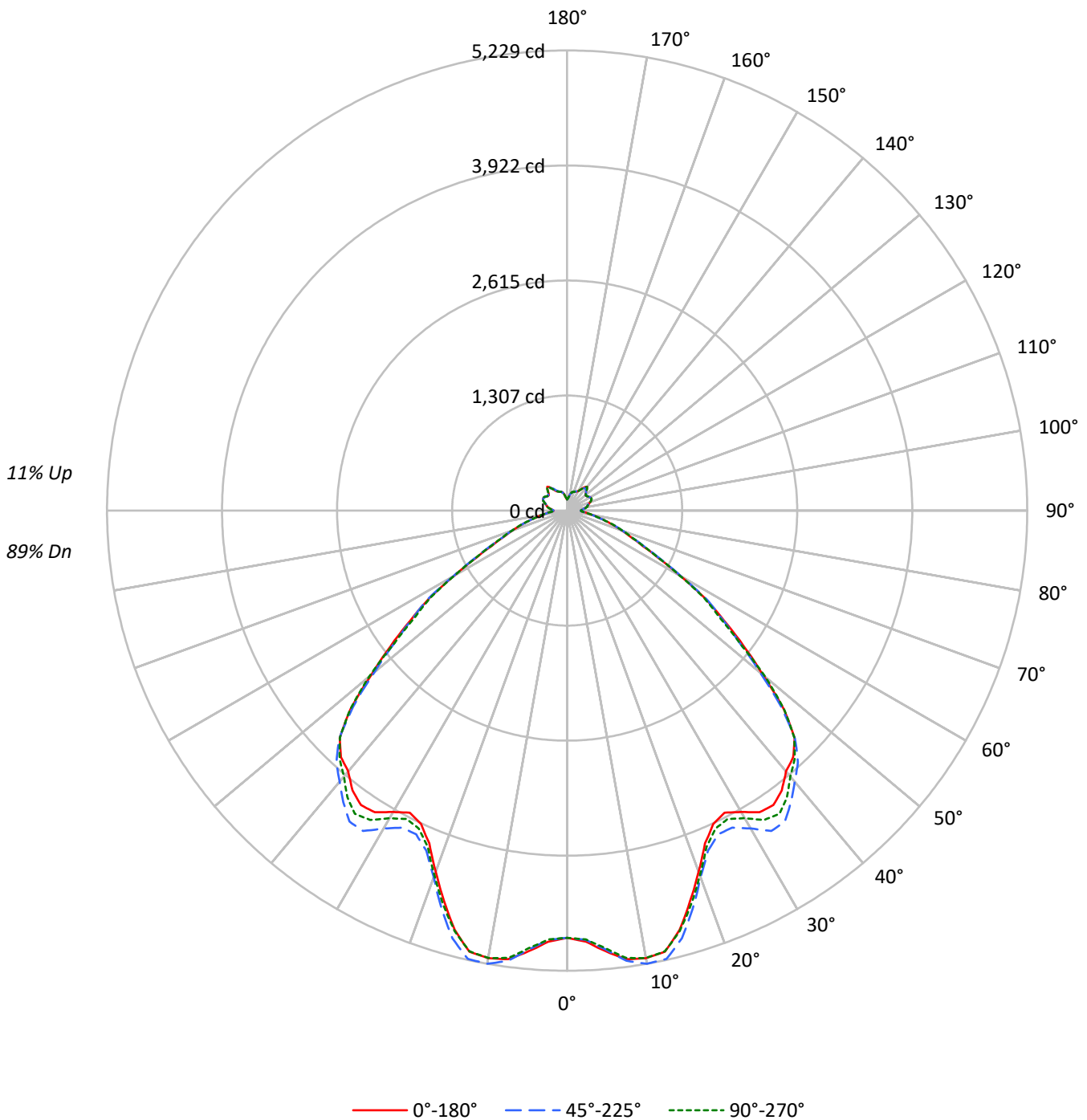
Input Watts (W): 110.74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									20									
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89																												
1	107	103	99	95	103	99	96	93	93	90	88	87	85	83	82	80	79	76																												
2	98	91	85	79	95	88	82	78	83	78	74	78	74	71	73	70	68	65																												
3	90	80	73	67	87	78	71	66	73	68	63	69	65	61	65	62	58	56																												
4	83	72	63	57	80	70	62	56	66	59	54	62	57	52	59	54	51	48																												
5	76	64	56	50	73	62	55	49	59	52	47	56	50	46	53	48	44	42																												
6	70	58	49	43	68	56	48	43	53	47	42	51	45	40	48	43	39	37																												
7	65	53	44	38	63	51	43	38	49	42	37	46	40	36	44	39	35	33																												
8	61	48	40	34	59	47	39	34	45	38	33	42	36	32	40	35	31	29																												
9	57	44	36	31	55	43	35	30	41	34	30	39	33	29	37	32	28	26																												
10	53	40	33	28	51	40	32	27	38	31	27	36	30	26	35	29	26	24																												

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	19793	19793	19793
5°	19394	19316	19259
10°	19048	19289	19042
15°	17561	17912	17596
20°	15129	15349	15281
25°	13354	13794	13553
30°	13288	14016	13564
35°	13684	14448	14085
40°	13015	13530	13267
45°	12440	12462	12424
50°	10086	9944	10190
55°	7757	7669	7527
60°	5511	5548	5466
65°	3657	3758	3701
70°	2709	2739	2749
75°	1969	1973	1973
80°	1406	1387	1399
85°	981	985	985



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	484.9	3.4
10°-20°	1380.9	9.6
20°-30°	1902.9	13.2
30°-40°	2588.4	18.0
40°-50°	2759.1	19.2
50°-60°	1946.2	13.5
60°-70°	993.4	6.9
70°-80°	486.6	3.4
80°-90°	220.6	1.5
90°-100°	203.7	1.4
100°-110°	261.7	1.8
110°-120°	296.1	2.1
120°-130°	254.9	1.8
130°-140°	237.1	1.6
140°-150°	193.3	1.3
150°-160°	112.5	0.8
160°-170°	60.7	0.4
170°-180°	15.2	0.1
0°-30°	3768.6	26.2
0°-40°	6357.0	44.2
0°-60°	11062.3	76.8
0°-90°	12762.9	88.6
90°-120°	761.5	5.3
90°-150°	1446.7	10.0
90°-180°	1635.0	11.4
0°-180°	14398.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4854	4854	4854	4854	4854	
5°	5026	5016	5006	4990	4991	485
15°	4934	4977	5033	4979	4944	1368
25°	3929	4066	4059	4108	3988	1852
35°	4086	4095	4314	4156	4206	2522
45°	3656	3642	3662	3676	3651	2737
55°	2173	2194	2149	2157	2109	1952
65°	944	954	970	960	955	980
75°	449	447	450	447	450	486
85°	187	188	188	187	188	177
90°	155	156	155	156	156	87
95°	185	184	183	186	187	159
105°	248	246	243	244	245	263
115°	304	303	302	303	306	296
125°	280	280	281	281	283	254
135°	306	305	306	310	311	238
145°	310	306	311	306	306	195
155°	237	238	240	238	240	111
165°	216	214	214	213	216	61
175°	147	146	144	146	146	15
180°	126	126	126	126	126	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4854.2	4854.2	4854.2	4854.2	4854.2
2.5°	4903.1	4895.0	4881.9	4878.7	4876.2
5°	5026.2	5015.6	5005.8	4989.5	4991.1
7.5°	5141.9	5148.4	5159.8	5140.3	5127.2
10°	5163.9	5188.3	5229.1	5195.7	5162.3
12.5°	5134.6	5173.7	5216.9	5168.0	5128.9
15°	4934.1	4977.3	5032.7	4978.9	4943.9
17.5°	4650.5	4687.2	4745.0	4684.7	4689.6
20°	4367.8	4407.7	4431.3	4444.4	4411.8
22.5°	4093.1	4198.3	4181.1	4231.7	4136.3
25°	3929.3	4066.2	4058.9	4107.8	3988.0
27.5°	3869.9	4029.6	4060.5	4063.0	3949.7
30°	3953.8	4017.4	4170.6	4063.0	4036.1
32.5°	4065.4	4042.6	4317.2	4108.6	4168.1
35°	4085.8	4094.8	4314.0	4155.9	4205.6
37.5°	4005.9	4105.4	4177.9	4168.9	4103.7
40°	3869.9	4029.6	4023.1	4069.5	3944.8
42.5°	3803.0	3881.3	3881.3	3914.7	3827.5
45°	3655.5	3641.7	3662.1	3675.9	3650.7
47.5°	3339.4	3313.3	3300.3	3348.3	3345.9
50°	2905.9	2888.7	2865.1	2922.2	2936.0
52.5°	2527.8	2491.9	2469.9	2486.2	2470.7
55°	2173.3	2193.7	2148.8	2157.0	2108.9
57.5°	1859.6	1905.2	1884.8	1878.3	1842.4
60°	1488.8	1520.6	1498.6	1508.3	1476.6
62.5°	1171.0	1193.0	1202.8	1198.7	1182.4
65°	943.6	954.2	969.7	959.9	955.0
67.5°	779.0	788.8	792.9	790.4	793.7
70°	660.9	663.3	668.2	660.9	670.6
72.5°	553.3	558.2	558.2	559.0	563.9
75°	449.0	447.4	449.8	446.6	449.8
77.5°	361.0	361.0	359.4	357.7	362.6
80°	295.8	292.5	291.7	290.9	294.2
82.5°	235.5	236.3	236.3	235.5	234.7
85°	187.4	188.2	188.2	187.4	188.2
87.5°	161.3	161.3	162.2	162.2	161.3
90°	154.8	155.6	154.8	156.5	156.5
92.5°	165.4	165.4	166.2	167.9	167.1
95°	185.0	184.2	183.3	185.8	186.6
97.5°	203.7	202.9	204.5	206.2	207.8
100°	224.9	224.9	226.5	227.4	229.0
102.5°	233.9	233.9	233.1	235.5	237.1
105°	248.5	246.1	242.8	243.6	245.3
107.5°	259.9	259.1	258.3	259.9	260.8
110°	277.1	276.2	276.2	276.2	277.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	294.2	294.2	293.4	294.2	295.8
115°	304.0	303.1	302.3	303.1	306.4
117.5°	306.4	306.4	304.8	307.2	309.7
120°	302.3	301.5	301.5	303.1	305.6
122.5°	291.7	290.9	290.9	292.5	295.0
125°	280.3	279.5	281.1	281.1	282.8
127.5°	272.2	273.0	274.6	273.0	273.8
130°	273.8	274.6	277.9	275.4	275.4
132.5°	282.8	283.6	289.3	287.7	287.7
135°	305.6	304.8	305.6	310.5	311.3
137.5°	331.7	325.1	316.2	332.5	336.5
140°	353.7	335.7	332.5	339.8	352.0
142.5°	337.4	327.6	319.4	329.2	336.5
145°	310.5	306.4	311.3	306.4	306.4
147.5°	279.5	285.2	295.8	281.1	280.3
150°	255.9	267.3	271.4	263.2	257.5
152.5°	245.3	250.2	252.6	248.5	248.5
155°	237.1	237.9	240.4	237.9	239.6
157.5°	231.4	233.9	233.9	233.9	233.1
160°	226.5	229.8	229.0	229.0	227.4
162.5°	223.3	224.9	224.1	224.1	224.1
165°	215.9	214.3	214.3	212.7	215.9
167.5°	203.7	201.3	201.3	200.5	202.9
170°	188.2	188.2	187.4	187.4	185.8
172.5°	163.0	162.2	161.3	161.3	161.3
175°	146.7	145.9	144.2	145.9	145.9
177.5°	134.5	134.5	135.3	133.6	133.6
180°	126.3	126.3	126.3	126.3	126.3

(END OF REPORT)