

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: P231412

Luminaire Tested: **SSLED-LD5-15-W-UNV-L850-CD1-U-FRR22**

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: P231412  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-2)  
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-FRR22  
Description: STEELER WHITE REFRACTOR LENS  
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: 15740.0 lumens  
Efficiency: N/A  
Efficacy: 142.1 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.43 / 1.45  
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')  
CIE Type: Direct

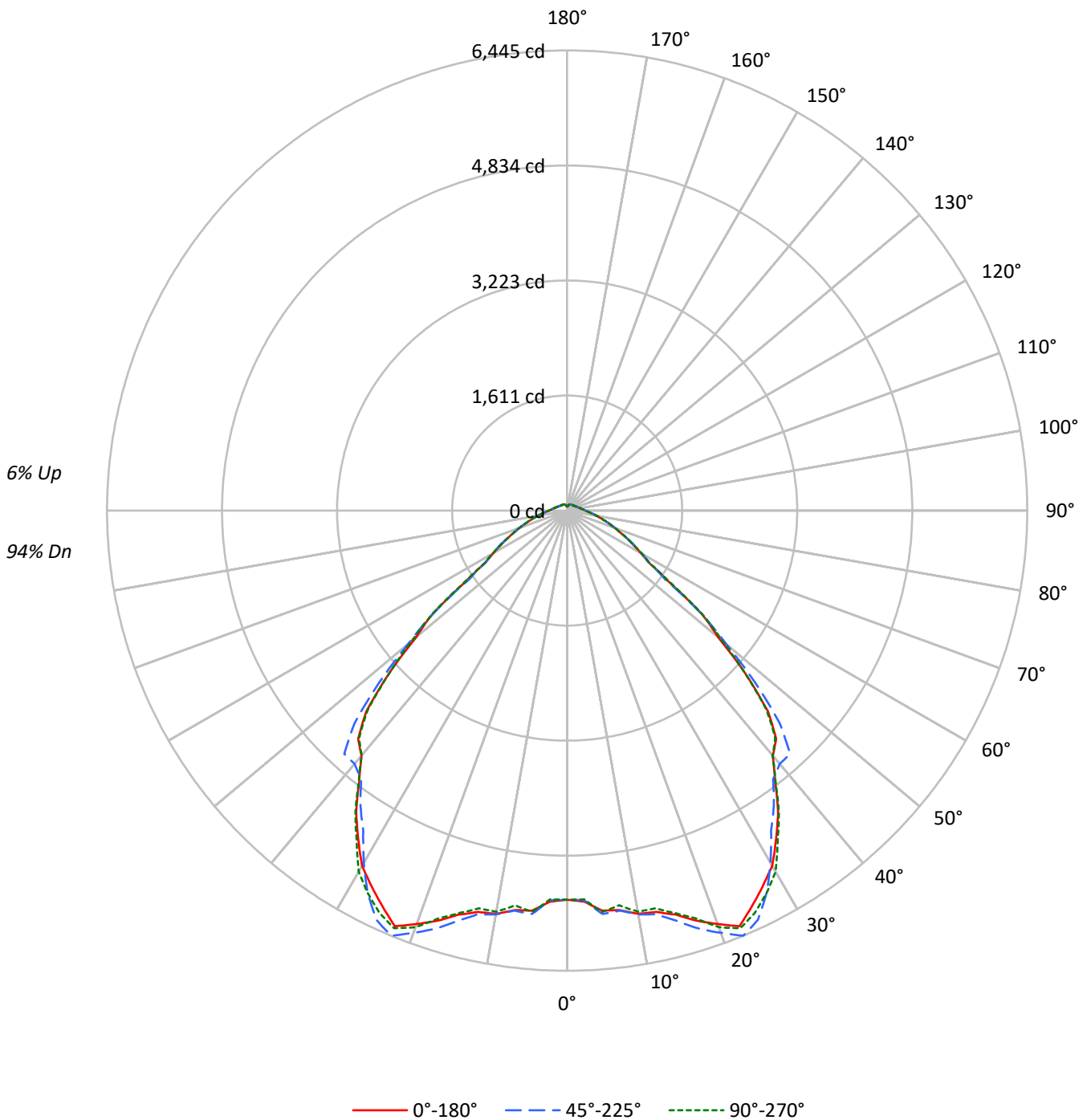
Input Watts (W): 110.74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P231412

CATALOG NUMBER: SSLED-LD5-15-W-UNV-L850-CD1-U-FRR22

### Luminous Intensity Polar Plot





TEST NUMBER: P231412

CATALOG NUMBER: SSLED-LD5-15-W-UNV-L850-CD1-U-FRR22

**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	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	94				
1	109	104	100	97	105	101	98	95	96	93	91	91	89	87	87	85	84	81				
2	100	93	87	81	97	90	85	80	86	81	77	82	78	75	78	75	72	70				
3	92	83	75	69	89	81	74	69	77	71	67	74	69	65	70	66	63	61				
4	85	74	66	60	82	72	65	59	69	63	58	66	61	57	64	59	55	53				
5	79	67	59	53	76	65	58	52	63	56	51	60	55	50	58	53	49	47				
6	73	61	52	46	71	59	52	46	57	50	45	55	49	44	53	48	44	42				
7	68	55	47	41	66	54	47	41	52	45	40	50	44	40	49	43	39	37				
8	63	51	43	37	61	50	42	37	48	41	36	46	40	36	45	39	35	33				
9	59	47	39	34	58	46	38	33	44	38	33	43	37	32	41	36	32	30				
10	55	43	35	31	54	42	35	30	41	34	30	40	34	30	38	33	29	28				

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

	0°	45°	90°
0°	22223	22223	22223
5°	21700	21882	21769
10°	21150	21186	21042
15°	20847	21178	20766
20°	21339	21799	21505
25°	20796	21491	21131
30°	19305	19141	19628
35°	17251	16905	17317
40°	15070	15580	15059
45°	13530	14338	13453
50°	9597	10106	9831
55°	6192	5968	6320
60°	4419	4480	4480
65°	3582	3623	3585
70°	2890	2937	2920
75°	2373	2409	2380
80°	1980	2003	1999
85°	1672	1702	1685



TEST NUMBER: P231412

CATALOG NUMBER: SSLED-LD5-15-W-UNV-L850-CD1-U-FRR22

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	537.6	3.4
10°-20°	1693.1	10.8
20°-30°	2864.2	18.2
30°-40°	3202.7	20.3
40°-50°	3026.9	19.2
50°-60°	1663.9	10.6
60°-70°	931.3	5.9
70°-80°	585.7	3.7
80°-90°	356.9	2.3
90°-100°	238.3	1.5
100°-110°	177.6	1.1
110°-120°	135.9	0.9
120°-130°	106.1	0.7
130°-140°	83.2	0.5
140°-150°	63.7	0.4
150°-160°	44.3	0.3
160°-170°	23.0	0.1
170°-180°	5.8	0.0
0°-30°	5094.9	32.4
0°-40°	8297.6	52.7
0°-60°	12988.4	82.5
0°-90°	14862.2	94.4
90°-120°	551.8	3.5
90°-150°	804.7	5.1
90°-180°	878.0	5.6
0°-180°	15740.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5450	5450	5450	5450	5450	
5°	5624	5633	5671	5634	5642	538
15°	5858	5912	5950	5885	5835	1678
25°	6119	6338	6324	6426	6218	2805
35°	5151	5042	5048	5058	5171	3203
45°	3976	3942	4213	3907	3953	2949
55°	1735	1724	1672	1753	1771	1656
65°	924	927	935	930	925	921
75°	541	545	549	548	543	580
85°	319	320	325	321	322	281
90°	252	254	256	255	253	139
95°	214	216	218	217	216	170
105°	166	166	167	167	167	177
115°	135	136	136	137	137	135
125°	116	117	117	118	118	105
135°	107	107	107	107	108	83
145°	101	101	101	101	102	64
155°	95	96	95	95	96	44
165°	81	81	80	80	80	23
175°	59	59	58	58	59	6
180°	60	60	60	60	60	



TEST NUMBER: P231412

CATALOG NUMBER: SSLED-LD5-15-W-UNV-L850-CD1-U-FRR22

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5450.1	5450.1	5450.1	5450.1	5450.1
2.5°	5481.9	5477.8	5463.1	5449.3	5450.1
5°	5623.7	5633.4	5670.9	5634.2	5641.6
7.5°	5643.2	5666.0	5651.4	5620.4	5576.4
10°	5733.7	5741.8	5743.4	5727.1	5704.3
12.5°	5758.1	5833.1	5790.7	5776.0	5707.6
15°	5857.5	5912.1	5950.4	5885.2	5834.7
17.5°	6023.0	6115.9	6140.3	6112.6	5986.3
20°	6160.7	6290.2	6293.5	6305.7	6208.8
22.5°	6301.7	6423.9	6445.1	6467.9	6331.8
25°	6119.1	6337.5	6323.7	6426.3	6217.7
27.5°	5931.7	6089.0	6047.4	6163.9	6043.3
30°	5744.3	5779.3	5695.4	5814.3	5840.4
32.5°	5446.8	5340.1	5316.4	5386.5	5486.7
35°	5151.0	5041.8	5047.5	5058.1	5170.6
37.5°	4785.1	4896.8	4738.7	4926.9	4795.7
40°	4481.2	4653.1	4632.7	4659.6	4477.9
42.5°	4332.8	4324.7	4621.3	4330.4	4312.5
45°	3975.9	3941.7	4213.1	3906.6	3953.1
47.5°	3394.9	3614.1	3580.7	3615.7	3391.6
50°	2765.0	2979.3	2911.7	3032.3	2832.6
52.5°	2379.5	2274.4	2351.0	2307.0	2389.3
55°	1734.9	1724.3	1672.2	1752.9	1770.8
57.5°	1356.0	1363.3	1369.0	1364.1	1360.9
60°	1193.8	1210.9	1210.1	1209.3	1210.1
62.5°	1048.8	1058.6	1069.2	1061.8	1062.6
65°	924.1	927.4	934.7	929.8	924.9
67.5°	803.5	813.3	817.3	818.2	814.1
70°	704.9	712.2	716.3	714.7	712.2
72.5°	621.0	625.0	632.4	629.9	625.0
75°	541.1	545.2	549.2	547.6	542.7
77.5°	474.3	477.5	480.8	481.6	478.3
80°	416.4	419.7	421.3	418.9	420.5
82.5°	364.3	367.5	369.2	368.3	367.5
85°	319.4	320.3	325.1	321.1	321.9
87.5°	281.1	282.0	283.6	283.6	282.0
90°	251.8	254.2	255.9	255.1	253.4
92.5°	231.4	233.9	233.9	233.9	233.1
95°	214.3	215.9	217.6	216.8	215.9
97.5°	200.5	201.3	202.9	202.1	201.3
100°	187.4	188.2	189.9	189.1	188.2
102.5°	175.2	176.8	177.6	177.6	176.8
105°	166.2	166.2	167.1	167.1	167.1
107.5°	157.3	157.3	158.1	158.1	158.1
110°	149.9	149.9	149.9	149.9	150.8



TEST NUMBER: P231412

CATALOG NUMBER: SSLED-LD5-15-W-UNV-L850-CD1-U-FRR22

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	141.8	142.6	142.6	142.6	143.4
115°	135.3	136.1	136.1	136.9	136.9
117.5°	129.6	129.6	130.4	130.4	131.2
120°	124.7	125.5	125.5	126.3	126.3
122.5°	120.6	120.6	121.4	121.4	122.2
125°	116.5	117.3	117.3	118.2	118.2
127.5°	113.3	114.1	114.9	114.9	114.9
130°	111.6	112.5	112.5	112.5	113.3
132.5°	109.2	109.2	109.2	110.0	110.8
135°	106.8	106.8	106.8	106.8	107.6
137.5°	104.3	105.1	105.1	105.1	105.1
140°	102.7	103.5	103.5	103.5	103.5
142.5°	101.9	102.7	102.7	102.7	102.7
145°	101.0	101.0	101.0	101.0	101.9
147.5°	100.2	100.2	100.2	100.2	100.2
150°	99.4	99.4	98.6	98.6	99.4
152.5°	97.8	97.8	97.0	97.8	97.8
155°	95.3	96.2	95.3	95.3	96.2
157.5°	93.7	93.7	93.7	93.7	93.7
160°	90.5	90.5	89.6	89.6	90.5
162.5°	85.6	85.6	85.6	85.6	85.6
165°	80.7	80.7	79.9	79.9	79.9
167.5°	75.0	75.0	75.0	75.0	75.0
170°	67.6	68.5	67.6	67.6	67.6
172.5°	59.5	59.5	59.5	59.5	59.5
175°	58.7	58.7	57.9	57.9	58.7
177.5°	58.7	59.5	59.5	59.5	58.7
180°	60.3	60.3	60.3	60.3	60.3

(END OF REPORT)