

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: P231495

Luminaire Tested: **SSLED-LD5-15-W-UNV-L840-CD1-U-CLR22-CLCDL22**

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: P231495  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-6)  
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-L840-CD1-U-CLR22-CLCDL22  
Description: STEELER CLEAR REFRACTOR LENS AND CONICAL DROP  
Light Source: (240) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: (1) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14315.0 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Spacing Criteria (0/90/45): 1.63 / 1.67 / 1.65  
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 1.17')  
CIE Type: Direct

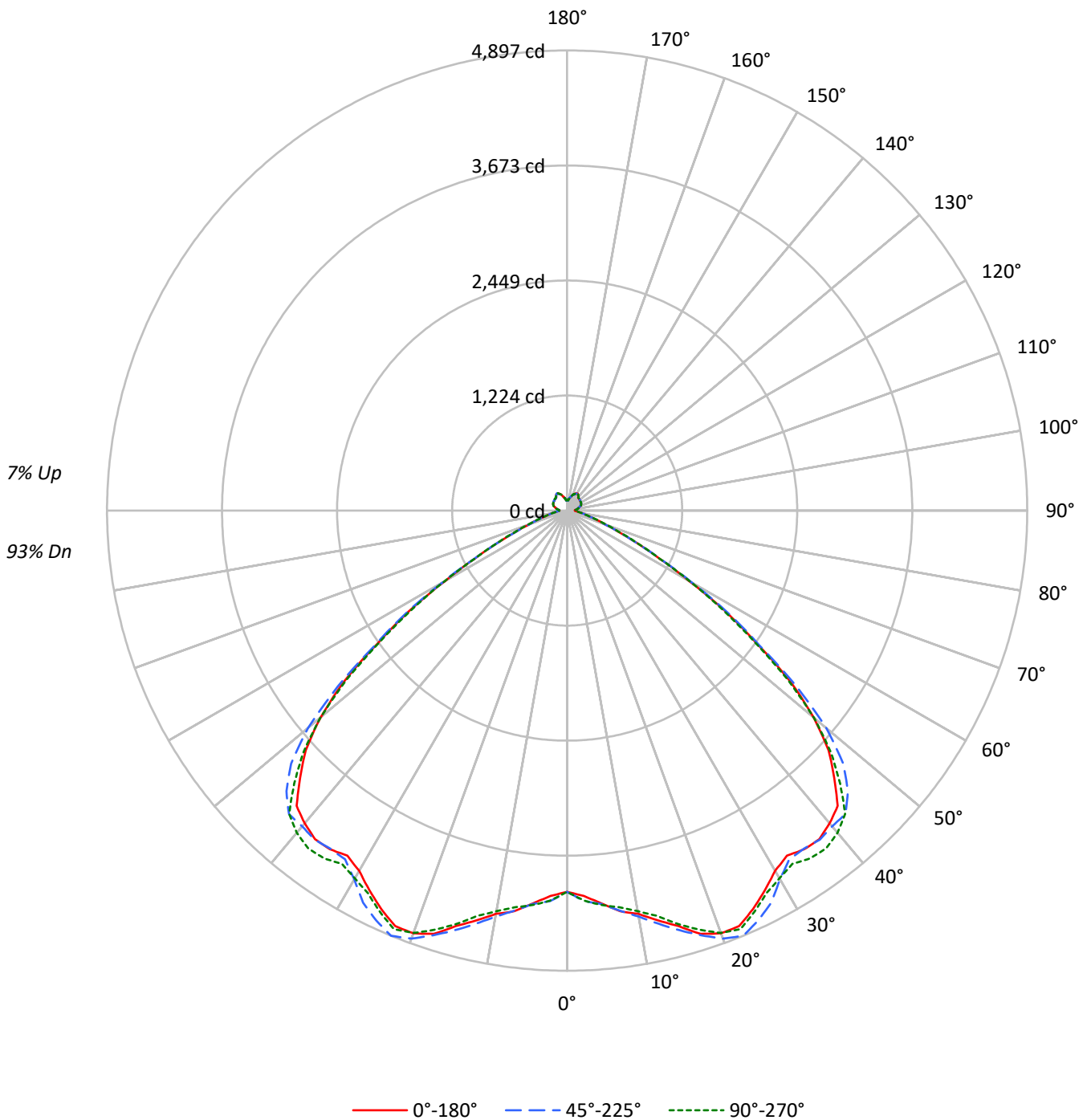
Input Watts (W): 110.74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0	
RCR																						
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93				
1	109	105	101	98	105	102	98	95	96	94	91	91	89	87	87	85	84	81				
2	100	93	87	82	97	90	85	80	86	81	77	82	78	75	78	75	72	70				
3	92	82	75	69	89	80	73	68	76	71	66	73	68	64	69	65	62	60				
4	84	73	65	59	81	71	64	58	68	62	57	65	60	55	62	58	54	52				
5	78	66	57	51	75	64	56	50	61	54	49	59	53	48	56	51	47	45				
6	72	59	51	44	69	58	50	44	55	48	43	53	47	42	51	46	41	39				
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35				
8	62	49	40	35	60	48	40	34	46	39	34	44	38	33	42	37	33	31				
9	57	44	36	31	56	44	36	31	42	35	30	40	34	30	39	33	29	28				
10	54	41	33	28	52	40	33	28	39	32	27	37	31	27	36	30	27	25				

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

	0°	45°	90°
0°	20013	20013	20013
5°	19275	19308	19359
10°	18865	18991	18738
15°	18878	19063	18777
20°	18977	19216	18962
25°	17996	18506	18123
30°	16651	17037	16999
35°	16318	16288	16748
40°	16012	16161	16492
45°	14831	15585	15154
50°	12749	13399	12755
55°	9303	9435	9190
60°	5825	5972	5874
65°	3282	3279	3345
70°	1824	1791	1907
75°	1089	1100	1117
80°	764	756	760
85°	524	528	524



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	405.9	2.8
10°-20°	1304.5	9.1
20°-30°	2171.5	15.2
30°-40°	2793.4	19.5
40°-50°	3156.1	22.0
50°-60°	2241.5	15.7
60°-70°	864.5	6.0
70°-80°	284.3	2.0
80°-90°	121.0	0.8
90°-100°	103.6	0.7
100°-110°	140.9	1.0
110°-120°	162.0	1.1
120°-130°	154.3	1.1
130°-140°	138.2	1.0
140°-150°	125.9	0.9
150°-160°	91.1	0.6
160°-170°	44.7	0.3
170°-180°	11.3	0.1
0°-30°	3882.0	27.1
0°-40°	6675.4	46.6
0°-60°	12073.0	84.3
0°-90°	13342.8	93.2
90°-120°	406.6	2.8
90°-150°	825.1	5.8
90°-180°	972.0	6.8
0°-180°	14315.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4056	4056	4056	4056	4056	
5°	4195	4193	4202	4183	4214	406
15°	4578	4599	4623	4585	4554	1306
25°	4680	4656	4812	4691	4713	2150
35°	4400	4402	4392	4476	4516	2756
45°	4020	4082	4224	4146	4108	3076
55°	2458	2521	2493	2489	2428	2211
65°	818	805	818	818	834	858
75°	247	253	250	251	254	284
85°	104	104	104	104	104	97
90°	81	82	82	83	82	46
95°	90	90	91	92	92	79
105°	135	134	130	132	131	142
115°	164	164	164	165	166	162
125°	171	171	173	172	173	154
135°	178	177	178	180	182	138
145°	204	204	204	205	206	126
155°	198	197	190	196	196	92
165°	150	153	152	152	148	44
175°	109	107	107	107	107	11
180°	118	118	118	118	118	



TEST NUMBER: P231495

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4056.3	4056.3	4056.3	4056.3	4056.3
2.5°	4105.2	4152.6	4159.0	4124.2	4155.0
5°	4195.3	4192.9	4202.4	4183.4	4213.5
7.5°	4300.3	4286.1	4293.2	4269.5	4256.9
10°	4357.2	4354.1	4386.5	4352.5	4328.0
12.5°	4466.2	4459.9	4504.1	4453.6	4417.3
15°	4578.4	4598.9	4623.4	4584.7	4553.9
17.5°	4723.0	4677.1	4738.0	4671.6	4675.6
20°	4786.9	4723.0	4847.0	4732.4	4783.0
22.5°	4786.2	4749.8	4896.7	4720.6	4820.1
25°	4679.5	4655.8	4812.2	4690.6	4712.7
27.5°	4555.5	4600.5	4702.4	4641.6	4591.0
30°	4426.7	4567.3	4529.4	4632.1	4519.2
32.5°	4354.1	4489.1	4400.7	4564.2	4459.1
35°	4399.9	4402.2	4392.0	4475.7	4516.0
37.5°	4407.8	4376.2	4415.7	4437.0	4529.4
40°	4345.4	4362.8	4385.7	4437.8	4475.7
42.5°	4261.6	4281.4	4382.5	4345.4	4378.6
45°	4019.9	4082.3	4224.5	4145.5	4107.6
47.5°	3774.3	3922.0	3986.0	3966.2	3806.6
50°	3425.1	3548.3	3599.7	3588.6	3426.7
52.5°	3004.9	3024.6	3074.4	3034.1	2961.4
55°	2458.2	2520.6	2493.0	2489.1	2428.2
57.5°	2005.6	2042.0	2034.8	2024.6	1955.1
60°	1501.6	1530.1	1539.6	1536.4	1514.3
62.5°	1112.2	1117.7	1121.7	1138.3	1108.3
65°	818.4	804.9	817.6	818.4	834.2
67.5°	586.1	581.4	588.5	592.4	612.2
70°	436.0	430.5	428.1	440.8	455.8
72.5°	334.1	329.4	331.8	337.3	339.7
75°	247.2	252.8	249.6	251.2	253.6
77.5°	196.7	195.9	194.3	195.1	197.5
80°	162.7	161.1	161.1	159.6	161.9
82.5°	129.5	131.1	130.3	131.1	131.1
85°	103.5	104.3	104.3	104.3	103.5
87.5°	86.9	87.7	86.9	88.5	87.7
90°	81.4	82.2	82.2	82.9	82.2
92.5°	82.9	84.5	84.5	86.1	85.3
95°	90.1	90.1	90.8	91.6	92.4
97.5°	102.7	103.5	105.1	105.8	105.8
100°	114.5	116.1	116.9	117.7	119.3
102.5°	121.6	121.6	121.6	123.2	123.2
105°	135.1	133.5	129.5	131.9	131.1
107.5°	144.6	143.0	142.2	144.6	146.1
110°	154.8	153.2	152.5	154.8	156.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	159.6	158.8	158.8	160.4	161.9
115°	164.3	163.5	163.5	165.1	165.9
117.5°	166.7	166.7	168.3	168.3	169.0
120°	167.5	168.3	169.8	169.8	169.8
122.5°	169.8	169.0	171.4	170.6	171.4
125°	171.4	171.4	173.0	172.2	173.0
127.5°	173.0	172.2	173.8	173.8	173.8
130°	174.6	174.6	176.2	176.2	176.2
132.5°	176.2	175.4	176.9	177.7	179.3
135°	177.7	176.9	177.7	180.1	181.7
137.5°	179.3	178.5	178.5	180.9	183.3
140°	181.7	182.5	180.9	183.3	184.1
142.5°	192.7	192.7	190.4	192.7	195.9
145°	203.8	203.8	203.8	205.4	206.2
147.5°	209.3	210.1	210.9	210.9	211.7
150°	210.9	210.9	210.9	210.9	211.7
152.5°	208.5	207.8	203.0	207.0	207.8
155°	197.5	196.7	190.4	195.9	195.9
157.5°	188.0	187.2	180.9	186.4	187.2
160°	180.9	184.8	178.5	184.1	180.1
162.5°	163.5	171.4	167.5	169.0	162.7
165°	150.1	153.2	152.5	151.7	148.5
167.5°	141.4	144.6	143.0	143.8	139.0
170°	132.7	135.1	135.9	133.5	130.3
172.5°	117.7	119.3	121.6	117.7	117.7
175°	109.0	107.4	107.4	107.4	107.4
177.5°	113.0	113.0	113.7	111.4	111.4
180°	117.7	117.7	117.7	117.7	117.7

(END OF REPORT)