

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: P231470

Luminaire Tested: **SSLED-LD5-12-W-UNV-L835-CD1-U-CLR22**

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: P231470  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SSLED-LD5-12-W-UNV-L835-CD1-U-CLR22  
Description: STEELER CLEAR REFRACTOR LENS  
Light Source: (240) 3500 CCT, 80 CRI LEDS  
Ballast/Driver: (1) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11236.0 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Spacing Criteria (0/90/45): 1.47 / 1.48 / 1.49  
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')  
CIE Type: Direct

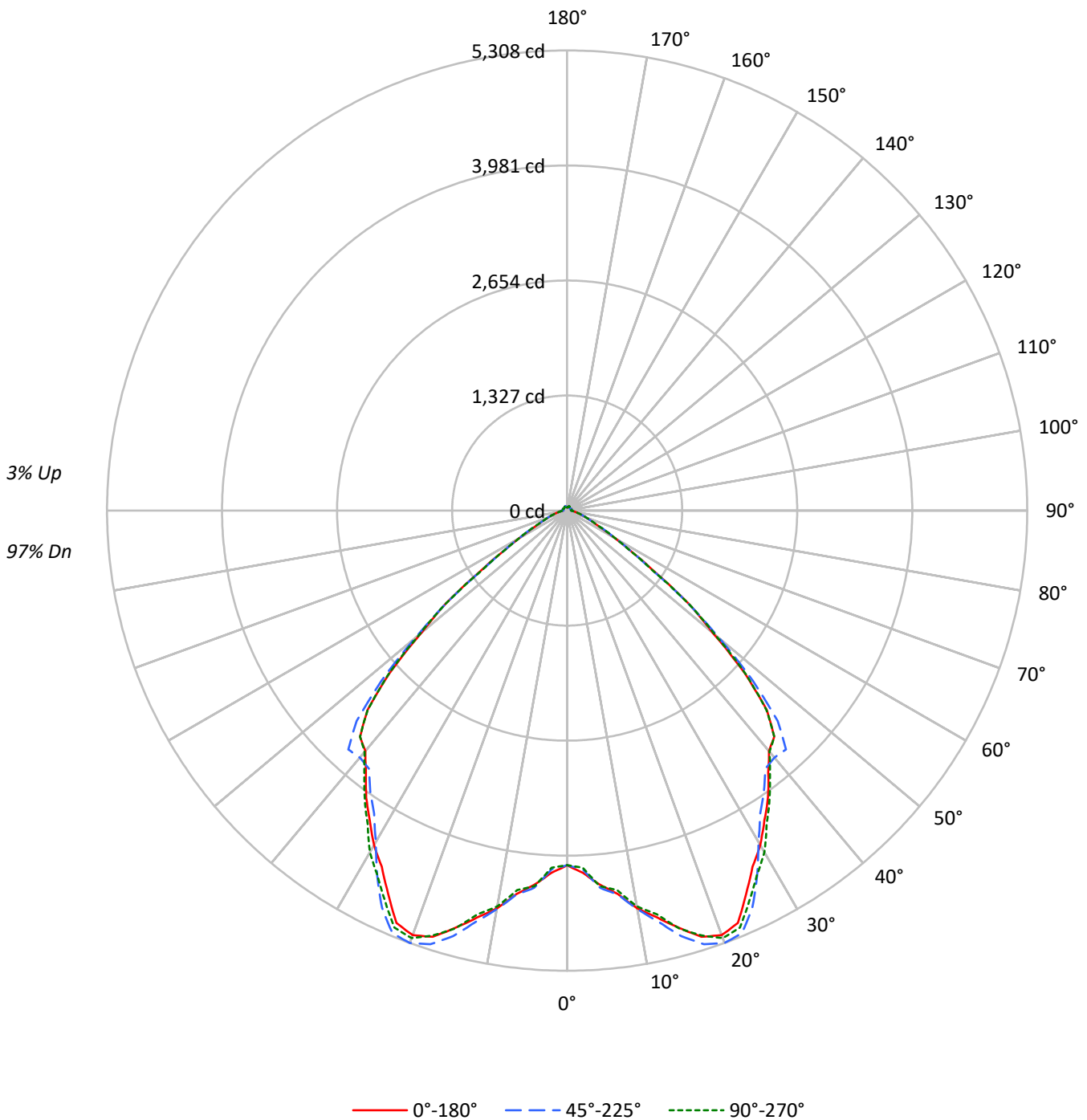
Input Watts (W): 85.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	111	107	103	100	108	104	101	99	100	97	95	95	94	92	92	90	89	86
2	103	96	91	86	100	94	89	85	90	86	82	87	83	80	83	81	78	76
3	95	86	80	74	93	85	78	73	81	76	72	78	74	70	76	72	69	67
4	88	78	70	65	86	76	70	64	74	68	63	71	66	62	69	65	61	59
5	82	71	63	57	80	69	62	57	67	61	56	65	59	55	63	58	54	52
6	76	64	56	51	74	63	56	50	61	55	50	59	54	49	58	53	49	47
7	71	59	51	45	69	58	50	45	56	49	45	54	49	44	53	48	44	42
8	66	54	46	41	64	53	46	41	52	45	40	50	44	40	49	43	39	38
9	62	50	42	37	60	49	42	37	48	41	36	46	40	36	45	40	36	34
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	42	37	33	31

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

	0°	45°	90°
0°	16682	16682	16682
5°	16711	16856	16784
10°	17182	17221	17098
15°	17736	18081	17754
20°	18050	18387	18174
25°	16591	17180	16894
30°	14973	14827	15296
35°	13532	13255	13634
40°	12176	12511	12218
45°	11089	11682	11068
50°	7614	7936	7732
55°	4395	4246	4289
60°	2373	2415	2378
65°	1365	1422	1386
70°	933	957	957
75°	661	672	664
80°	493	499	490
85°	352	355	349



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	422.0	3.8
10°-20°	1430.9	12.7
20°-30°	2295.2	20.4
30°-40°	2523.8	22.5
40°-50°	2456.0	21.9
50°-60°	1177.6	10.5
60°-70°	385.0	3.4
70°-80°	167.8	1.5
80°-90°	77.5	0.7
90°-100°	52.8	0.5
100°-110°	53.6	0.5
110°-120°	48.5	0.4
120°-130°	38.6	0.3
130°-140°	34.1	0.3
140°-150°	31.3	0.3
150°-160°	24.3	0.2
160°-170°	13.2	0.1
170°-180°	3.6	0.0
0°-30°	4148.2	36.9
0°-40°	6672.0	59.4
0°-60°	10305.6	91.7
0°-90°	10935.9	97.3
90°-120°	154.9	1.4
90°-150°	258.9	2.3
90°-180°	300.0	2.7
0°-180°	11236.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4091	4091	4091	4091	4091	
5°	4331	4328	4368	4352	4350	422
15°	4983	5039	5080	5021	4988	1418
25°	4882	5052	5055	5110	4971	2244
35°	4041	3954	3958	3993	4071	2522
45°	3258	3217	3433	3221	3252	2401
55°	1232	1237	1190	1227	1202	1173
65°	352	359	367	365	358	377
75°	151	152	153	152	151	166
85°	67	67	68	68	67	63
90°	47	48	48	49	48	26
95°	45	44	45	46	46	39
105°	55	50	50	48	52	54
115°	47	50	50	50	48	48
125°	41	41	41	42	43	38
135°	44	44	42	44	45	34
145°	50	50	50	50	51	31
155°	53	53	53	53	52	24
165°	47	46	46	46	45	13
175°	37	37	36	36	37	4
180°	38	38	38	38	38	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4091.3	4091.3	4091.3	4091.3	4091.3
2.5°	4182.4	4161.0	4140.7	4125.8	4122.2
5°	4330.8	4327.8	4368.3	4351.6	4349.8
7.5°	4458.9	4466.6	4464.8	4443.4	4415.4
10°	4657.9	4659.6	4668.6	4656.7	4635.2
12.5°	4809.2	4877.7	4856.9	4835.4	4768.7
15°	4983.2	5038.6	5080.3	5021.3	4988.5
17.5°	5154.7	5213.7	5244.7	5229.8	5138.1
20°	5211.3	5303.1	5308.5	5322.8	5247.1
22.5°	5147.6	5252.5	5272.1	5299.5	5206.0
25°	4881.9	5052.3	5055.3	5110.1	4971.2
27.5°	4631.6	4775.2	4744.8	4846.7	4741.3
30°	4455.3	4480.3	4411.8	4540.5	4551.2
32.5°	4236.0	4174.1	4144.3	4205.1	4284.3
35°	4040.6	3953.6	3957.8	3993.0	4071.0
37.5°	3811.8	3872.6	3754.6	3921.5	3842.8
40°	3620.6	3738.0	3720.1	3766.6	3633.1
42.5°	3536.0	3524.7	3736.8	3531.8	3536.6
45°	3258.4	3217.2	3432.9	3220.8	3252.4
47.5°	2778.2	2912.2	2904.5	2952.1	2795.4
50°	2193.7	2330.7	2286.6	2387.9	2227.6
52.5°	1771.3	1712.3	1759.4	1730.8	1771.3
55°	1231.5	1237.4	1189.8	1226.7	1201.7
57.5°	873.4	893.1	875.8	874.6	865.7
60°	641.1	643.4	652.4	650.6	642.3
62.5°	468.9	473.7	483.8	483.2	477.8
65°	352.1	358.7	367.0	365.2	357.5
67.5°	274.7	281.8	283.6	284.8	286.0
70°	227.6	230.0	233.5	233.5	233.5
72.5°	189.5	192.4	193.0	193.6	192.4
75°	150.7	151.9	153.1	151.9	151.3
77.5°	124.5	124.5	123.9	123.3	123.9
80°	103.7	104.3	104.9	103.7	103.1
82.5°	84.6	85.2	85.8	85.2	85.2
85°	67.3	67.3	67.9	67.9	66.7
87.5°	55.4	55.4	55.4	56.0	55.4
90°	47.1	48.3	48.3	48.9	47.7
92.5°	42.3	43.5	43.5	44.7	43.5
95°	44.7	44.1	44.7	45.9	46.5
97.5°	50.0	51.2	53.0	54.8	53.0
100°	52.4	56.6	57.8	57.8	54.2
102.5°	51.2	50.6	53.0	51.8	53.6
105°	54.8	50.0	50.0	47.7	51.8
107.5°	48.3	50.6	42.9	50.6	47.7
110°	48.9	47.7	47.1	48.9	49.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	50.0	45.9	49.5	45.9	50.0
115°	47.1	50.0	49.5	49.5	48.3
117.5°	48.9	50.0	51.2	51.8	48.9
120°	47.7	45.9	47.7	48.9	48.9
122.5°	42.9	42.3	42.9	44.1	46.5
125°	41.1	41.1	41.1	41.7	42.9
127.5°	41.7	41.7	41.1	41.7	42.3
130°	43.5	42.9	43.5	43.5	44.1
132.5°	44.1	43.5	42.3	43.5	45.3
135°	44.1	43.5	42.3	43.5	44.7
137.5°	44.7	44.1	44.1	44.1	45.3
140°	45.9	46.5	46.5	46.5	46.5
142.5°	48.3	48.3	48.3	48.3	49.5
145°	50.0	49.5	50.0	50.0	51.2
147.5°	51.8	51.2	51.8	51.8	52.4
150°	53.0	52.4	53.0	53.0	53.0
152.5°	53.6	53.0	53.6	53.6	53.6
155°	53.0	53.0	53.0	53.0	52.4
157.5°	51.8	51.8	51.8	51.8	51.2
160°	50.6	51.2	50.6	50.6	50.0
162.5°	48.9	48.9	48.9	48.3	48.3
165°	47.1	46.5	46.5	45.9	45.3
167.5°	44.7	44.1	43.5	43.5	42.9
170°	41.1	41.1	41.1	40.5	40.5
172.5°	37.5	36.9	36.9	36.9	36.3
175°	36.9	36.9	36.3	36.3	36.9
177.5°	36.9	36.9	37.5	36.9	36.9
180°	37.5	37.5	37.5	37.5	37.5

(END OF REPORT)