

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: P231469

Luminaire Tested: **SSLED-LD5-9-W-UNV-L850-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: P231469  
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-LD5-9-W-UNV-L850-CD1-U-CLR22  
Description: STEELER CLEAR 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: 9297.0 lumens  
Efficiency: N/A  
Efficacy: 145.0 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

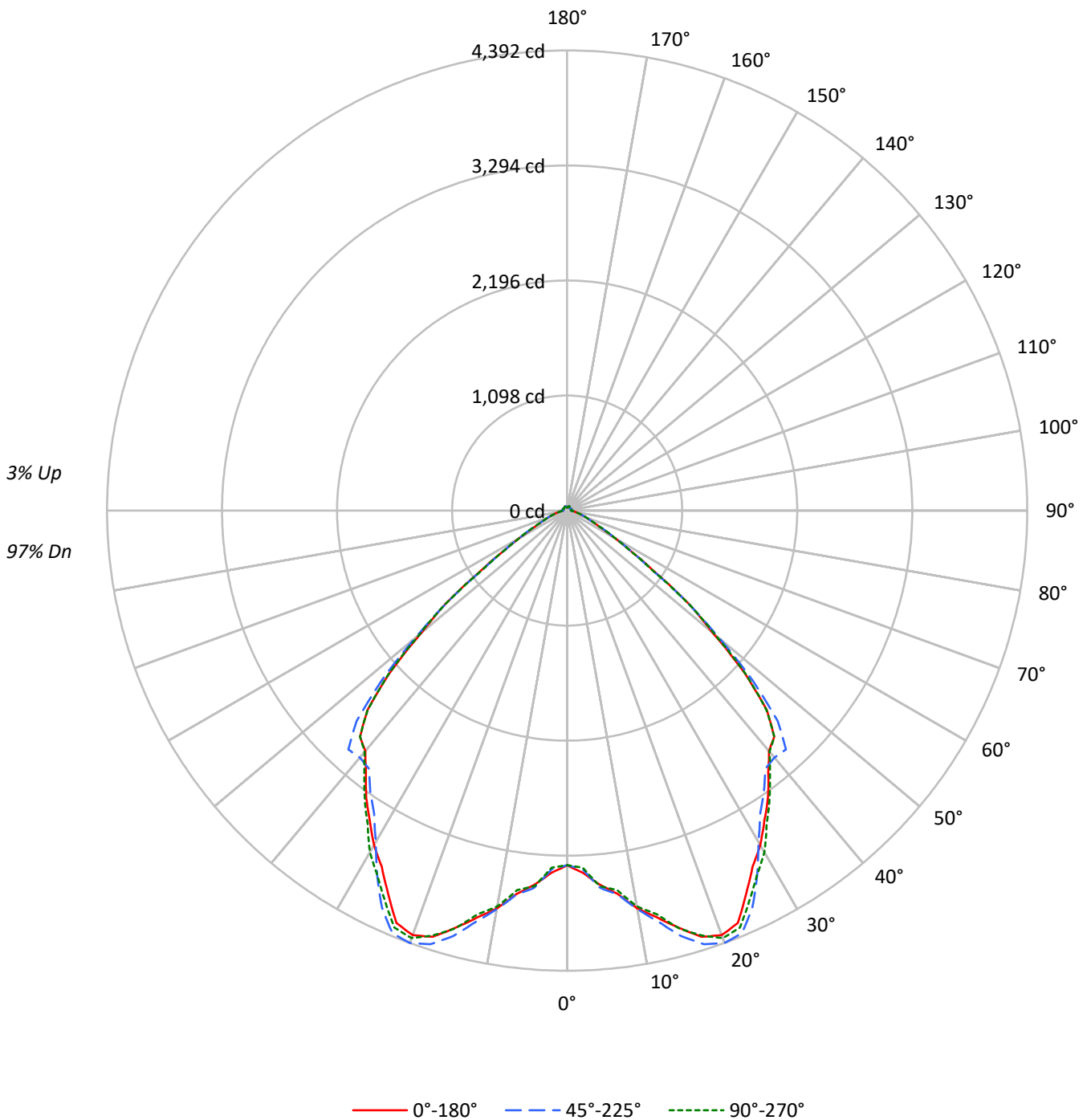
Input Watts (W): 64.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	13803	13803	13803
5°	13827	13947	13888
10°	14217	14249	14147
15°	14675	14961	14691
20°	14935	15214	15038
25°	13728	14215	13979
30°	12389	12269	12656
35°	11197	10968	11281
40°	10075	10352	10110
45°	9175	9666	9158
50°	6300	6567	6397
55°	3637	3514	3549
60°	1964	1998	1967
65°	1129	1177	1146
70°	772	792	792
75°	547	556	549
80°	408	413	406
85°	292	294	289



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	349.2	3.8
10°-20°	1184.0	12.7
20°-30°	1899.1	20.4
30°-40°	2088.3	22.5
40°-50°	2032.1	21.9
50°-60°	974.3	10.5
60°-70°	318.6	3.4
70°-80°	138.8	1.5
80°-90°	64.1	0.7
90°-100°	43.7	0.5
100°-110°	44.3	0.5
110°-120°	40.1	0.4
120°-130°	32.0	0.3
130°-140°	28.2	0.3
140°-150°	25.9	0.3
150°-160°	20.1	0.2
160°-170°	10.9	0.1
170°-180°	3.0	0.0
0°-30°	3432.3	36.9
0°-40°	5520.6	59.4
0°-60°	8527.1	91.7
0°-90°	9048.7	97.3
90°-120°	128.1	1.4
90°-150°	214.2	2.3
90°-180°	248.0	2.7
0°-180°	9297.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3385	3385	3385	3385	3385	
5°	3583	3581	3614	3601	3599	349
15°	4123	4169	4204	4155	4128	1173
25°	4039	4180	4183	4228	4113	1857
35°	3343	3271	3275	3304	3368	2087
45°	2696	2662	2840	2665	2691	1987
55°	1019	1024	984	1015	994	971
65°	291	297	304	302	296	312
75°	125	126	127	126	125	138
85°	56	56	56	56	55	52
90°	39	40	40	40	39	22
95°	37	36	37	38	38	32
105°	45	41	41	39	43	45
115°	39	41	41	41	40	40
125°	34	34	34	34	36	32
135°	36	36	35	36	37	28
145°	41	41	41	41	42	26
155°	44	44	44	44	43	20
165°	39	38	38	38	38	11
175°	31	31	30	30	31	3
180°	31	31	31	31	31	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3385.2	3385.2	3385.2	3385.2	3385.2
2.5°	3460.7	3442.9	3426.2	3413.8	3410.9
5°	3583.4	3580.9	3614.5	3600.7	3599.2
7.5°	3689.4	3695.8	3694.3	3676.6	3653.4
10°	3854.1	3855.5	3862.9	3853.1	3835.3
12.5°	3979.3	4036.0	4018.7	4001.0	3945.7
15°	4123.2	4169.1	4203.6	4154.8	4127.7
17.5°	4265.2	4314.0	4339.6	4327.3	4251.4
20°	4312.0	4387.9	4392.4	4404.2	4341.6
22.5°	4259.3	4346.0	4362.3	4385.0	4307.6
25°	4039.4	4180.4	4182.9	4228.2	4113.4
27.5°	3832.4	3951.2	3926.0	4010.3	3923.1
30°	3686.4	3707.1	3650.5	3756.9	3765.8
32.5°	3505.0	3453.8	3429.1	3479.4	3545.0
35°	3343.3	3271.4	3274.8	3303.9	3368.5
37.5°	3154.0	3204.3	3106.7	3244.7	3179.7
40°	2995.8	3092.9	3078.1	3116.6	3006.1
42.5°	2925.8	2916.4	3091.9	2922.3	2926.3
45°	2696.1	2662.0	2840.5	2665.0	2691.1
47.5°	2298.7	2409.6	2403.2	2442.7	2313.0
50°	1815.1	1928.5	1892.0	1975.8	1843.2
52.5°	1465.6	1416.8	1455.7	1432.1	1465.6
55°	1019.0	1023.9	984.5	1015.0	994.3
57.5°	722.7	739.0	724.7	723.7	716.3
60°	530.4	532.4	539.8	538.3	531.4
62.5°	388.0	391.9	400.3	399.8	395.4
65°	291.3	296.8	303.7	302.2	295.8
67.5°	227.3	233.2	234.7	235.6	236.6
70°	188.3	190.3	193.2	193.2	193.2
72.5°	156.8	159.2	159.7	160.2	159.2
75°	124.7	125.7	126.7	125.7	125.2
77.5°	103.0	103.0	102.5	102.0	102.5
80°	85.8	86.3	86.8	85.8	85.3
82.5°	70.0	70.5	71.0	70.5	70.5
85°	55.7	55.7	56.2	56.2	55.2
87.5°	45.8	45.8	45.8	46.3	45.8
90°	38.9	39.9	39.9	40.4	39.4
92.5°	35.0	36.0	36.0	37.0	36.0
95°	37.0	36.5	37.0	38.0	38.5
97.5°	41.4	42.4	43.9	45.4	43.9
100°	43.4	46.8	47.8	47.8	44.9
102.5°	42.4	41.9	43.9	42.9	44.4
105°	45.4	41.4	41.4	39.4	42.9
107.5°	39.9	41.9	35.5	41.9	39.4
110°	40.4	39.4	38.9	40.4	40.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	41.4	38.0	40.9	38.0	41.4
115°	38.9	41.4	40.9	40.9	39.9
117.5°	40.4	41.4	42.4	42.9	40.4
120°	39.4	38.0	39.4	40.4	40.4
122.5°	35.5	35.0	35.5	36.5	38.5
125°	34.0	34.0	34.0	34.5	35.5
127.5°	34.5	34.5	34.0	34.5	35.0
130°	36.0	35.5	36.0	36.0	36.5
132.5°	36.5	36.0	35.0	36.0	37.5
135°	36.5	36.0	35.0	36.0	37.0
137.5°	37.0	36.5	36.5	36.5	37.5
140°	38.0	38.5	38.5	38.5	38.5
142.5°	39.9	39.9	39.9	39.9	40.9
145°	41.4	40.9	41.4	41.4	42.4
147.5°	42.9	42.4	42.9	42.9	43.4
150°	43.9	43.4	43.9	43.9	43.9
152.5°	44.4	43.9	44.4	44.4	44.4
155°	43.9	43.9	43.9	43.9	43.4
157.5°	42.9	42.9	42.9	42.9	42.4
160°	41.9	42.4	41.9	41.9	41.4
162.5°	40.4	40.4	40.4	39.9	39.9
165°	38.9	38.5	38.5	38.0	37.5
167.5°	37.0	36.5	36.0	36.0	35.5
170°	34.0	34.0	34.0	33.5	33.5
172.5°	31.1	30.6	30.6	30.6	30.1
175°	30.6	30.6	30.1	30.1	30.6
177.5°	30.6	30.6	31.1	30.6	30.6
180°	31.1	31.1	31.1	31.1	31.1

(END OF REPORT)