

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: P231511

Luminaire Tested: **SSLED-LD5-9-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: P231511
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-LD5-9-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: 8710.1 lumens
Efficiency: N/A
Efficacy: 135.9 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

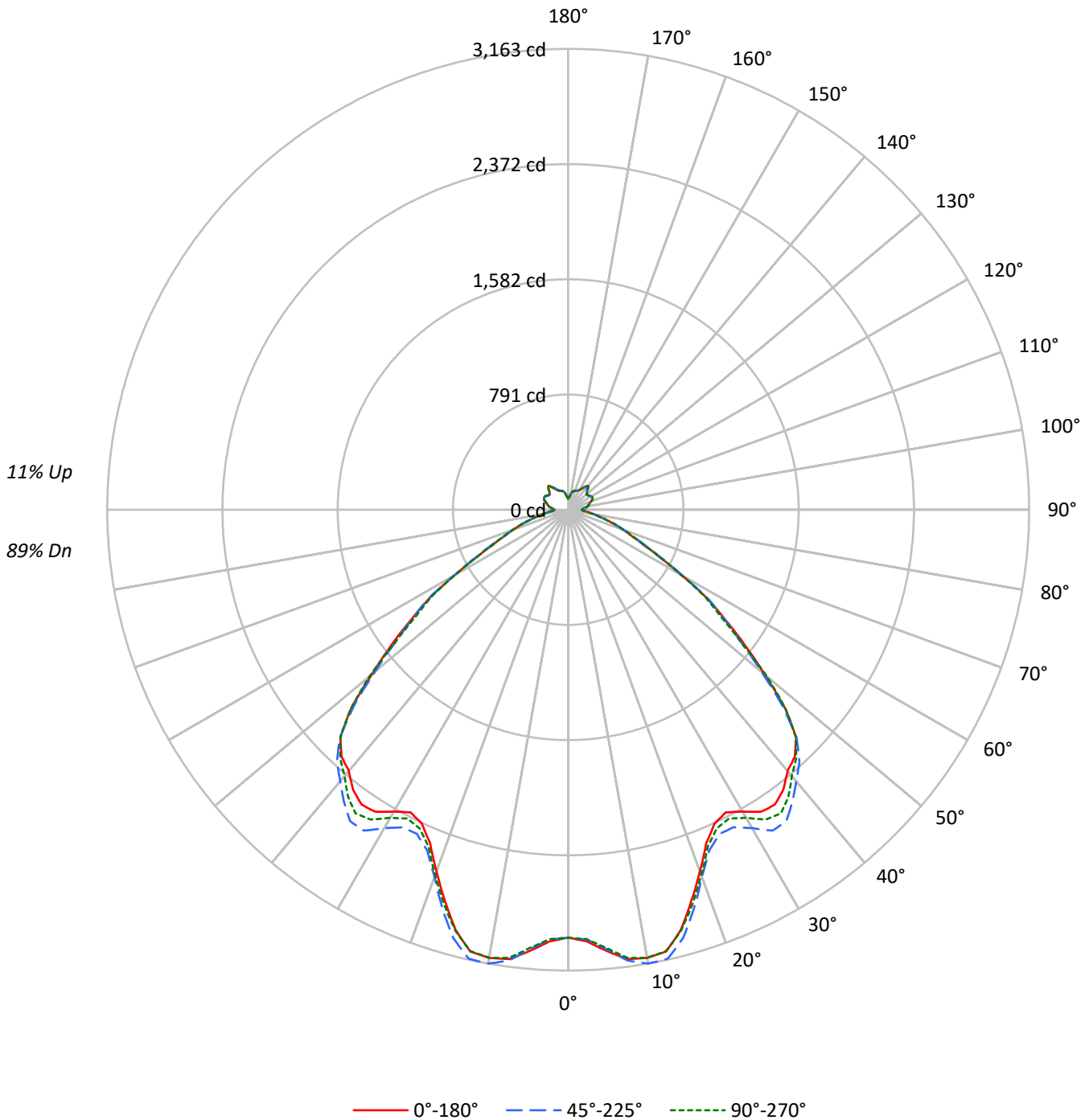
Input Watts (W): 64.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	11974	11974	11974
5°	11733	11685	11651
10°	11523	11669	11520
15°	10623	10836	10644
20°	9152	9285	9244
25°	8078	8345	8199
30°	8038	8479	8206
35°	8278	8740	8521
40°	7873	8185	8026
45°	7526	7539	7515
50°	6101	6016	6165
55°	4692	4639	4553
60°	3334	3356	3307
65°	2212	2274	2239
70°	1639	1657	1663
75°	1191	1193	1193
80°	851	839	846
85°	594	596	596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.3	3.4
10°-20°	835.3	9.6
20°-30°	1151.1	13.2
30°-40°	1565.8	18.0
40°-50°	1669.1	19.2
50°-60°	1177.3	13.5
60°-70°	600.9	6.9
70°-80°	294.3	3.4
80°-90°	133.5	1.5
90°-100°	123.2	1.4
100°-110°	158.3	1.8
110°-120°	179.1	2.1
120°-130°	154.2	1.8
130°-140°	143.4	1.6
140°-150°	116.9	1.3
150°-160°	68.1	0.8
160°-170°	36.7	0.4
170°-180°	9.2	0.1
0°-30°	2279.8	26.2
0°-40°	3845.6	44.2
0°-60°	6692.1	76.8
0°-90°	7720.9	88.6
90°-120°	460.7	5.3
90°-150°	875.2	10.0
90°-180°	989.0	11.4
0°-180°	8710.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2936	2936	2936	2936	2936	
5°	3041	3034	3028	3018	3019	293
15°	2985	3011	3044	3012	2991	828
25°	2377	2460	2455	2485	2412	1120
35°	2472	2477	2610	2514	2544	1526
45°	2211	2203	2215	2224	2208	1655
55°	1315	1327	1300	1305	1276	1181
65°	571	577	587	581	578	593
75°	272	271	272	270	272	294
85°	113	114	114	113	114	107
90°	94	94	94	95	95	53
95°	112	111	111	112	113	96
105°	150	149	147	147	148	159
115°	184	183	183	183	185	179
125°	170	169	170	170	171	154
135°	185	184	185	188	188	144
145°	188	185	188	185	185	118
155°	144	144	145	144	145	67
165°	131	130	130	129	131	37
175°	89	88	87	88	88	9
180°	76	76	76	76	76	



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CATALOG NUMBER: SSLED-LD5-9-W-UNV-L850-CD1-U-CLR22-FRCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2936.5	2936.5	2936.5	2936.5	2936.5
2.5°	2966.1	2961.2	2953.3	2951.3	2949.9
5°	3040.6	3034.2	3028.2	3018.4	3019.4
7.5°	3110.6	3114.5	3121.4	3109.6	3101.7
10°	3123.9	3138.7	3163.3	3143.1	3122.9
12.5°	3106.1	3129.8	3155.9	3126.3	3102.7
15°	2984.9	3011.0	3044.5	3012.0	2990.8
17.5°	2813.3	2835.5	2870.5	2834.0	2837.0
20°	2642.3	2666.4	2680.7	2688.6	2668.9
22.5°	2476.1	2539.7	2529.4	2559.9	2502.3
25°	2377.0	2459.9	2455.4	2485.0	2412.5
27.5°	2341.1	2437.7	2456.4	2457.9	2389.4
30°	2391.8	2430.3	2523.0	2457.9	2441.6
32.5°	2459.4	2445.6	2611.7	2485.5	2521.5
35°	2471.7	2477.1	2609.7	2514.1	2544.2
37.5°	2423.4	2483.5	2527.4	2522.0	2482.5
40°	2341.1	2437.7	2433.7	2461.8	2386.4
42.5°	2300.6	2348.0	2348.0	2368.2	2315.4
45°	2211.4	2203.0	2215.4	2223.7	2208.4
47.5°	2020.1	2004.4	1996.5	2025.6	2024.1
50°	1757.9	1747.5	1733.2	1767.7	1776.1
52.5°	1529.2	1507.5	1494.2	1504.0	1494.6
55°	1314.7	1327.0	1299.9	1304.9	1275.8
57.5°	1124.9	1152.5	1140.2	1136.3	1114.6
60°	900.6	919.9	906.5	912.5	893.2
62.5°	708.4	721.7	727.6	725.1	715.3
65°	570.8	577.3	586.6	580.7	577.7
67.5°	471.3	477.2	479.6	478.2	480.1
70°	399.8	401.3	404.2	399.8	405.7
72.5°	334.7	337.7	337.7	338.2	341.1
75°	271.6	270.6	272.1	270.1	272.1
77.5°	218.4	218.4	217.4	216.4	219.4
80°	178.9	177.0	176.5	176.0	178.0
82.5°	142.5	143.0	143.0	142.5	142.0
85°	113.4	113.9	113.9	113.4	113.9
87.5°	97.6	97.6	98.1	98.1	97.6
90°	93.7	94.2	93.7	94.6	94.6
92.5°	100.1	100.1	100.6	101.5	101.1
95°	111.9	111.4	110.9	112.4	112.9
97.5°	123.2	122.7	123.7	124.7	125.7
100°	136.1	136.1	137.0	137.5	138.5
102.5°	141.5	141.5	141.0	142.5	143.5
105°	150.4	148.9	146.9	147.4	148.4
107.5°	157.3	156.8	156.3	157.3	157.7
110°	167.6	167.1	167.1	167.1	168.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.0	178.0	177.5	178.0	178.9
115°	183.9	183.4	182.9	183.4	185.4
117.5°	185.4	185.4	184.4	185.8	187.3
120°	182.9	182.4	182.4	183.4	184.9
122.5°	176.5	176.0	176.0	177.0	178.5
125°	169.6	169.1	170.1	170.1	171.1
127.5°	164.6	165.1	166.1	165.1	165.6
130°	165.6	166.1	168.1	166.6	166.6
132.5°	171.1	171.5	175.0	174.0	174.0
135°	184.9	184.4	184.9	187.8	188.3
137.5°	200.6	196.7	191.3	201.1	203.6
140°	213.9	203.1	201.1	205.6	213.0
142.5°	204.1	198.2	193.2	199.2	203.6
145°	187.8	185.4	188.3	185.4	185.4
147.5°	169.1	172.5	178.9	170.1	169.6
150°	154.8	161.7	164.2	159.2	155.8
152.5°	148.4	151.3	152.8	150.4	150.4
155°	143.5	143.9	145.4	143.9	144.9
157.5°	140.0	141.5	141.5	141.5	141.0
160°	137.0	139.0	138.5	138.5	137.5
162.5°	135.1	136.1	135.6	135.6	135.6
165°	130.6	129.6	129.6	128.7	130.6
167.5°	123.2	121.8	121.8	121.3	122.7
170°	113.9	113.9	113.4	113.4	112.4
172.5°	98.6	98.1	97.6	97.6	97.6
175°	88.7	88.2	87.3	88.2	88.2
177.5°	81.3	81.3	81.8	80.8	80.8
180°	76.4	76.4	76.4	76.4	76.4

(END OF REPORT)