

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: P231451

Luminaire Tested: **SSLED-LD5-12-W-UNV-L850-CD1-U-FRR22-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: P231451
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-4)
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-L850-CD1-U-FRR22-FRCDL22
Description: STEELER WHITE 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: 11951.0 lumens
Efficiency: N/A
Efficacy: 140.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.16 / 1.37
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Semi-Direct

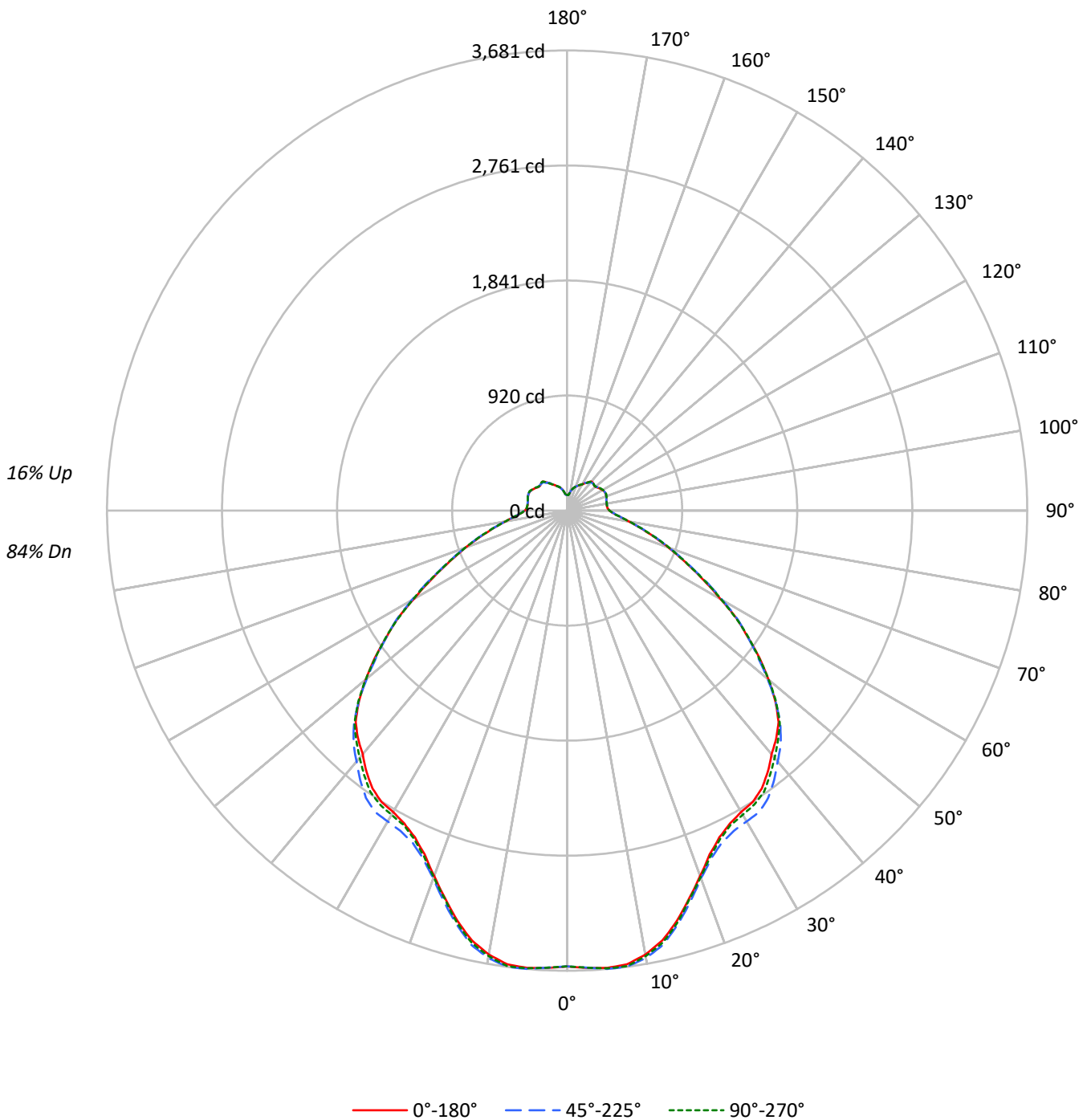
Input Watts (W): 85.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	115	115	115	115	111	111	111	111	102	102	102	95	95	95	88	88	88	84
1	104	100	95	91	100	96	92	88	89	85	82	82	79	77	76	74	72	69
2	95	87	80	74	91	83	77	72	77	72	68	72	68	64	66	63	60	57
3	87	76	68	61	83	73	66	60	68	62	57	63	58	54	59	55	51	48
4	79	67	59	52	76	65	57	51	60	54	48	56	51	46	52	48	44	41
5	73	60	51	45	70	58	50	44	54	47	42	51	45	40	47	42	38	36
6	67	54	45	39	64	52	44	38	49	42	37	46	40	35	43	38	34	31
7	62	49	40	34	60	47	39	34	44	37	32	42	36	31	39	34	30	28
8	58	45	36	30	55	43	35	30	41	34	29	38	32	28	36	31	27	25
9	54	41	33	27	52	40	32	27	37	31	26	35	29	25	33	28	24	22
10	51	38	30	25	49	37	29	24	34	28	23	33	27	23	31	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14869	14869	14869
5°	14169	14203	14185
10°	13300	13407	13349
15°	12089	12187	12143
20°	10774	10841	10806
25°	9799	9951	9846
30°	9356	9650	9445
35°	9090	9397	9196
40°	8556	8812	8682
45°	8141	8203	8186
50°	7297	7258	7308
55°	6300	6302	6328
60°	5249	5315	5279
65°	4296	4334	4311
70°	3533	3555	3557
75°	2878	2915	2915
80°	2379	2397	2401
85°	2058	2075	2054



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.4	2.9
10°-20°	955.7	8.0
20°-30°	1358.9	11.4
30°-40°	1716.7	14.4
40°-50°	1839.7	15.4
50°-60°	1577.8	13.2
60°-70°	1116.2	9.3
70°-80°	708.5	5.9
80°-90°	441.6	3.7
90°-100°	355.0	3.0
100°-110°	344.7	2.9
110°-120°	332.6	2.8
120°-130°	281.8	2.4
130°-140°	231.3	1.9
140°-150°	171.5	1.4
150°-160°	104.0	0.9
160°-170°	52.5	0.4
170°-180°	13.1	0.1
0°-30°	2664.0	22.3
0°-40°	4380.8	36.7
0°-60°	7798.2	65.3
0°-90°	10064.5	84.2
90°-120°	1032.3	8.6
90°-150°	1717.0	14.4
90°-180°	1887.0	15.8
0°-180°	11951.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3646	3646	3646	3646	3646	
5°	3672	3677	3681	3679	3676	349
15°	3397	3401	3424	3416	3412	951
25°	2883	2927	2928	2946	2897	1341
35°	2714	2724	2806	2746	2746	1690
45°	2392	2398	2411	2416	2405	1825
55°	1765	1764	1766	1756	1773	1580
65°	1108	1115	1118	1116	1112	1108
75°	656	663	665	665	665	704
85°	393	392	396	393	392	344
90°	339	339	340	340	339	187
95°	321	322	323	323	322	262
105°	324	324	325	325	326	344
115°	336	337	337	339	339	331
125°	313	314	315	315	316	280
135°	298	298	298	300	301	231
145°	272	273	272	271	270	172
155°	222	223	223	222	224	103
165°	185	184	183	184	185	53
175°	128	128	127	128	128	13
180°	125	125	125	125	125	



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CATALOG NUMBER: SSLED-LD5-12-W-UNV-L850-CD1-U-FRR22-FRCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3646.5	3646.5	3646.5	3646.5	3646.5
2.5°	3661.6	3661.6	3659.0	3661.0	3659.0
5°	3672.1	3676.7	3680.7	3678.7	3676.1
7.5°	3661.0	3665.6	3678.7	3675.4	3675.4
10°	3605.7	3614.3	3634.7	3628.7	3618.9
12.5°	3522.3	3536.7	3555.1	3543.9	3539.3
15°	3396.7	3401.3	3424.3	3415.8	3411.8
17.5°	3249.4	3249.4	3278.4	3277.0	3257.3
20°	3110.7	3120.6	3129.8	3139.0	3119.9
22.5°	2977.3	3011.5	3010.8	3027.9	2993.1
25°	2883.3	2926.7	2928.0	2945.7	2897.1
27.5°	2821.5	2870.1	2888.5	2887.2	2834.6
30°	2784.0	2812.3	2871.4	2835.3	2810.3
32.5°	2764.3	2765.6	2859.0	2788.0	2788.0
35°	2714.3	2724.2	2805.7	2745.9	2745.9
37.5°	2636.1	2674.2	2718.3	2694.6	2667.0
40°	2544.1	2607.2	2620.3	2616.4	2581.5
42.5°	2475.7	2511.2	2530.9	2526.3	2496.7
45°	2392.2	2397.5	2410.6	2415.9	2405.4
47.5°	2259.4	2257.4	2263.4	2266.7	2268.0
50°	2102.3	2087.2	2091.1	2090.5	2105.6
52.5°	1941.2	1922.2	1922.2	1918.9	1932.0
55°	1765.1	1764.4	1765.7	1756.5	1773.0
57.5°	1606.0	1611.2	1615.2	1604.0	1600.1
60°	1418.0	1435.7	1435.7	1431.1	1425.9
62.5°	1254.9	1268.1	1275.3	1264.8	1264.1
65°	1108.3	1114.9	1118.2	1115.6	1112.3
67.5°	974.2	982.1	986.1	980.2	980.8
70°	861.8	864.5	867.1	873.0	867.7
72.5°	754.0	756.0	761.2	759.9	759.9
75°	656.1	663.3	664.6	664.6	664.6
77.5°	574.6	578.5	577.8	576.5	575.2
80°	500.3	504.2	504.2	504.2	504.9
82.5°	442.4	441.8	443.1	444.4	444.4
85°	393.1	392.5	396.4	393.1	392.5
87.5°	358.9	360.9	362.2	361.6	360.2
90°	338.6	339.2	340.5	339.9	338.6
92.5°	326.1	327.4	328.7	328.7	328.0
95°	320.8	321.5	322.8	322.8	322.1
97.5°	319.5	320.1	321.5	321.5	320.8
100°	320.1	320.8	321.5	321.5	322.1
102.5°	320.8	321.5	322.1	322.8	322.8
105°	324.1	324.1	324.7	325.4	326.1
107.5°	328.0	328.7	329.3	330.0	330.0
110°	332.6	333.3	333.3	334.6	334.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.9	336.6	336.6	337.9	338.6
115°	335.9	336.6	337.2	338.6	339.2
117.5°	333.3	333.3	333.9	335.3	336.6
120°	327.4	327.4	328.7	329.3	330.7
122.5°	320.1	320.8	322.1	322.8	323.4
125°	312.9	313.6	314.9	314.9	316.2
127.5°	303.1	305.0	306.3	306.3	307.0
130°	295.2	297.1	298.5	299.1	298.5
132.5°	293.2	295.2	297.1	295.8	294.5
135°	298.5	298.5	298.5	299.8	301.1
137.5°	303.7	302.4	297.8	303.1	305.0
140°	303.7	299.1	295.8	298.5	303.7
142.5°	288.6	287.3	280.7	286.0	287.9
145°	271.5	272.8	272.2	270.8	269.5
147.5°	257.0	259.7	261.6	256.4	256.4
150°	241.3	247.2	247.2	245.2	243.2
152.5°	232.7	234.0	234.0	232.7	233.4
155°	222.2	222.9	222.9	221.5	223.5
157.5°	211.7	213.0	213.0	213.0	212.3
160°	204.4	205.1	204.4	204.4	203.8
162.5°	195.2	194.6	194.6	194.6	195.2
165°	184.7	184.1	183.4	184.1	184.7
167.5°	172.2	172.2	171.6	171.6	171.6
170°	157.1	157.8	157.1	157.1	156.5
172.5°	137.4	136.7	137.4	137.4	138.1
175°	128.2	127.5	126.9	127.5	127.5
177.5°	124.9	125.6	125.6	124.9	124.2
180°	124.9	124.9	124.9	124.9	124.9

(END OF REPORT)