

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: P231431

Luminaire Tested: **SSLED-LD5-15-W-UNV-L835-CD1-U-FRR22-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: P231431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-3)
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-L835-CD1-U-FRR22-CLCDL22
Description: STEELER WHITE REFRACTOR LENS AND CONICAL DROP
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: 13618.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.43 / 1.55
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 1.17')
CIE Type: Semi-Direct

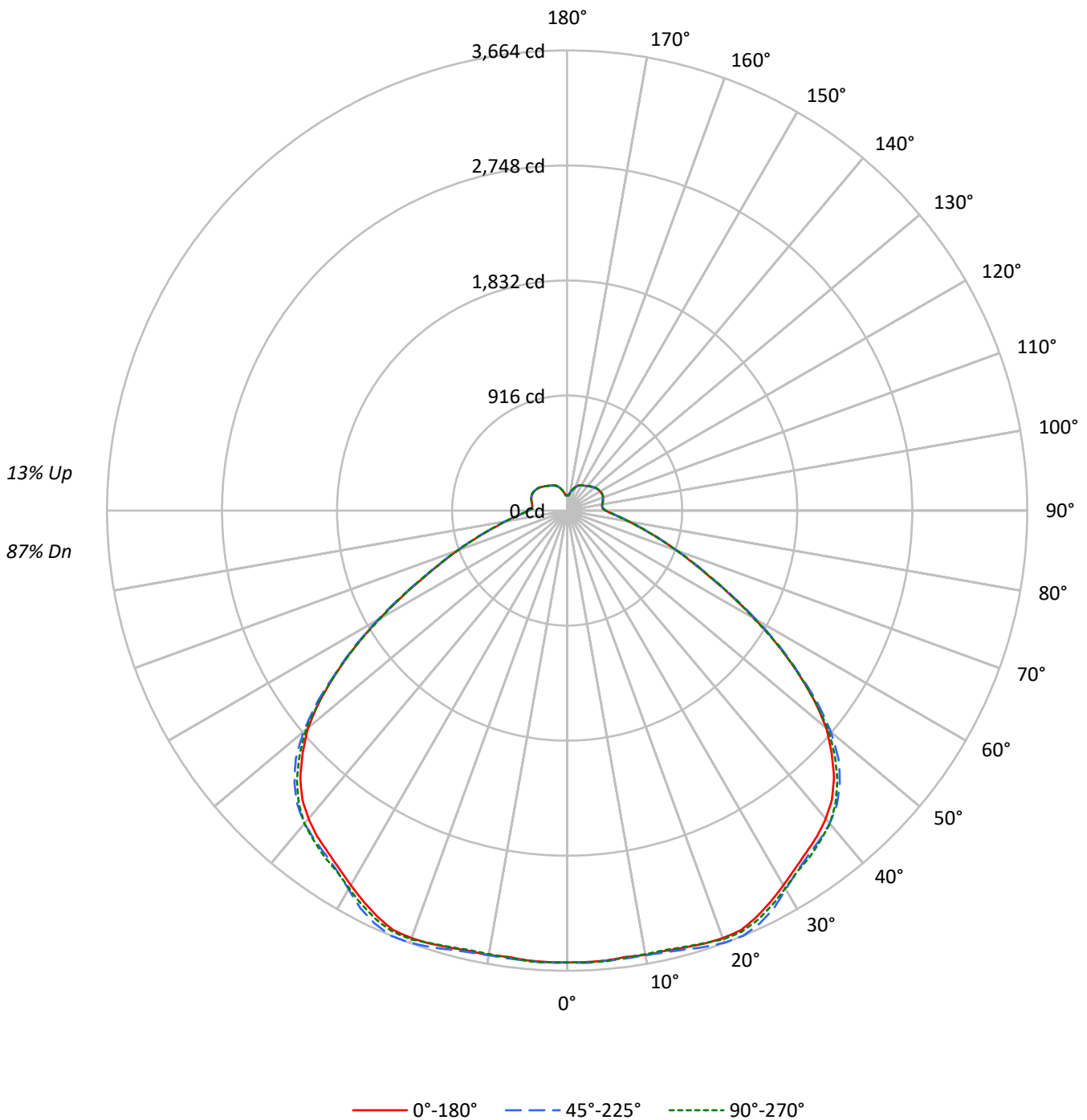
Input Watts (W): 110.74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87
1	106	101	96	92	101	97	93	90	91	87	85	85	82	80	79	77	75	72
2	96	88	81	75	92	85	79	73	79	74	70	74	70	66	69	66	63	60
3	87	77	69	62	84	74	67	61	70	63	58	65	60	56	61	57	53	51
4	80	68	59	53	77	66	58	52	62	55	50	58	52	48	54	50	46	43
5	73	61	52	45	70	59	50	44	55	48	43	52	46	41	49	44	39	37
6	68	54	45	39	65	53	44	38	50	42	37	47	41	36	44	39	35	32
7	62	49	40	34	60	48	40	34	45	38	33	42	36	32	40	35	31	28
8	58	45	36	30	56	43	35	30	41	34	29	39	33	28	37	31	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	28	24	22
10	51	37	30	24	49	37	29	24	35	28	23	33	27	23	31	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17750	17750	17750
5°	16519	16533	16546
10°	15553	15566	15528
15°	14852	14919	14831
20°	14362	14514	14403
25°	13727	13949	13824
30°	12955	13093	13066
35°	12315	12419	12488
40°	11803	11986	11991
45°	11085	11327	11226
50°	10023	10202	10100
55°	8456	8500	8464
60°	6690	6756	6653
65°	5047	5103	5070
70°	3877	3893	3862
75°	2961	3001	2971
80°	2339	2360	2333
85°	1895	1925	1914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.0	2.5
10°-20°	1024.0	7.5
20°-30°	1656.9	12.2
30°-40°	2106.0	15.5
40°-50°	2334.7	17.1
50°-60°	2000.1	14.7
60°-70°	1279.2	9.4
70°-80°	729.5	5.4
80°-90°	423.4	3.1
90°-100°	313.0	2.3
100°-110°	311.3	2.3
110°-120°	304.3	2.2
120°-130°	266.4	2.0
130°-140°	209.5	1.5
140°-150°	152.5	1.1
150°-160°	101.2	0.7
160°-170°	50.5	0.4
170°-180°	12.5	0.1
0°-30°	3023.8	22.2
0°-40°	5129.8	37.7
0°-60°	9464.7	69.5
0°-90°	11896.8	87.4
90°-120°	928.6	6.8
90°-150°	1557.0	11.4
90°-180°	1721.0	12.6
0°-180°	13618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3598	3598	3598	3598	3598	
5°	3595	3595	3598	3595	3601	343
15°	3602	3609	3618	3606	3597	1022
25°	3570	3591	3627	3592	3595	1644
35°	3321	3353	3349	3368	3367	2085
45°	3004	3030	3070	3050	3043	2304
55°	2234	2246	2246	2242	2236	1990
65°	1258	1270	1273	1274	1264	1271
75°	672	675	681	676	674	726
85°	374	380	380	377	378	333
90°	306	307	309	307	306	169
95°	280	280	282	281	281	230
105°	293	294	295	295	295	310
115°	306	307	307	309	309	303
125°	296	297	298	298	299	265
135°	270	270	270	270	271	209
145°	242	242	242	242	242	152
155°	220	220	216	219	220	102
165°	176	176	176	175	176	51
175°	122	122	121	121	122	12
180°	123	123	123	123	123	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3597.6	3597.6	3597.6	3597.6	3597.6
2.5°	3598.4	3604.3	3605.0	3600.6	3600.6
5°	3595.4	3594.7	3598.4	3594.7	3601.3
7.5°	3584.3	3585.1	3596.1	3589.5	3588.8
10°	3592.4	3585.1	3595.4	3586.5	3586.5
12.5°	3591.7	3590.2	3602.1	3591.7	3584.3
15°	3602.1	3608.7	3618.3	3605.7	3596.9
17.5°	3616.8	3624.9	3642.7	3619.0	3611.7
20°	3622.7	3626.4	3661.1	3626.4	3633.1
22.5°	3616.1	3621.3	3664.1	3621.3	3630.1
25°	3569.6	3591.0	3627.2	3591.7	3594.7
27.5°	3510.5	3546.7	3567.3	3550.3	3538.5
30°	3444.0	3492.0	3480.9	3500.9	3473.5
32.5°	3378.3	3424.8	3405.6	3435.1	3408.5
35°	3320.7	3353.1	3348.7	3367.9	3367.2
37.5°	3269.7	3288.9	3303.7	3311.8	3313.3
40°	3203.2	3229.8	3252.7	3247.5	3254.2
42.5°	3120.5	3149.3	3178.8	3163.3	3161.9
45°	3004.5	3029.7	3070.3	3049.6	3042.9
47.5°	2856.1	2903.4	2931.4	2909.3	2890.1
50°	2692.9	2716.5	2740.9	2728.3	2713.5
52.5°	2479.4	2480.9	2510.4	2493.4	2481.6
55°	2234.2	2246.0	2246.0	2241.6	2236.4
57.5°	1986.0	1994.9	2000.8	1994.2	1986.0
60°	1724.6	1734.2	1741.6	1738.6	1715.0
62.5°	1480.1	1489.7	1494.1	1485.3	1487.5
65°	1258.5	1270.4	1272.6	1274.0	1264.4
67.5°	1076.8	1085.7	1090.9	1086.4	1085.7
70°	926.9	929.1	930.6	933.6	923.2
72.5°	791.0	791.8	795.4	796.2	790.3
75°	672.1	675.1	681.0	676.5	674.3
77.5°	573.9	578.3	581.3	582.7	579.8
80°	498.5	499.3	503.0	500.0	497.1
82.5°	432.8	432.8	435.0	435.0	433.5
85°	374.5	379.6	380.4	377.4	378.2
87.5°	335.3	337.5	338.3	336.8	336.1
90°	306.5	307.2	308.7	307.2	306.5
92.5°	288.0	289.5	290.3	289.5	290.3
95°	279.9	279.9	282.1	280.7	280.7
97.5°	279.9	279.9	282.1	281.4	280.7
100°	283.6	284.4	285.1	285.1	285.1
102.5°	288.0	288.8	289.5	289.5	289.5
105°	293.2	294.0	294.7	294.7	294.7
107.5°	298.4	299.1	299.9	299.9	299.9
110°	303.6	302.8	304.3	304.3	305.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	305.8	306.5	306.5	307.2	308.0
115°	306.5	307.2	307.2	308.7	308.7
117.5°	306.5	306.5	307.2	308.0	308.7
120°	303.6	304.3	305.0	305.8	306.5
122.5°	301.3	301.3	302.1	302.8	303.6
125°	296.2	296.9	297.6	298.4	299.1
127.5°	291.0	291.0	291.7	292.5	293.2
130°	285.1	285.1	285.8	286.6	287.3
132.5°	277.0	277.7	277.7	278.4	279.2
135°	269.6	270.3	269.6	270.3	271.1
137.5°	262.2	262.2	261.5	262.2	262.9
140°	254.1	254.8	254.1	254.8	254.8
142.5°	247.4	248.9	248.2	248.2	248.9
145°	242.3	242.3	241.5	241.5	242.3
147.5°	236.3	237.1	236.3	236.3	236.3
150°	230.4	231.2	229.7	230.4	230.4
152.5°	226.0	226.7	223.1	226.0	226.0
155°	220.1	220.1	216.4	218.6	220.1
157.5°	212.0	211.2	209.0	211.2	210.5
160°	201.6	202.4	200.2	200.9	200.2
162.5°	188.3	189.8	189.1	189.1	188.3
165°	176.5	176.5	175.8	175.0	175.8
167.5°	163.2	163.2	162.5	163.2	162.5
170°	147.0	148.5	147.7	148.5	147.0
172.5°	130.7	130.0	130.0	130.0	130.0
175°	121.9	121.9	121.1	121.1	121.9
177.5°	121.1	121.1	121.9	120.4	120.4
180°	122.6	122.6	122.6	122.6	122.6

(END OF REPORT)