

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: P231457

Luminaire Tested: **SSLED-LD5-18-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: P231457
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-LD5-18-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: 17404.0 lumens
Efficiency: N/A
Efficacy: 130.1 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

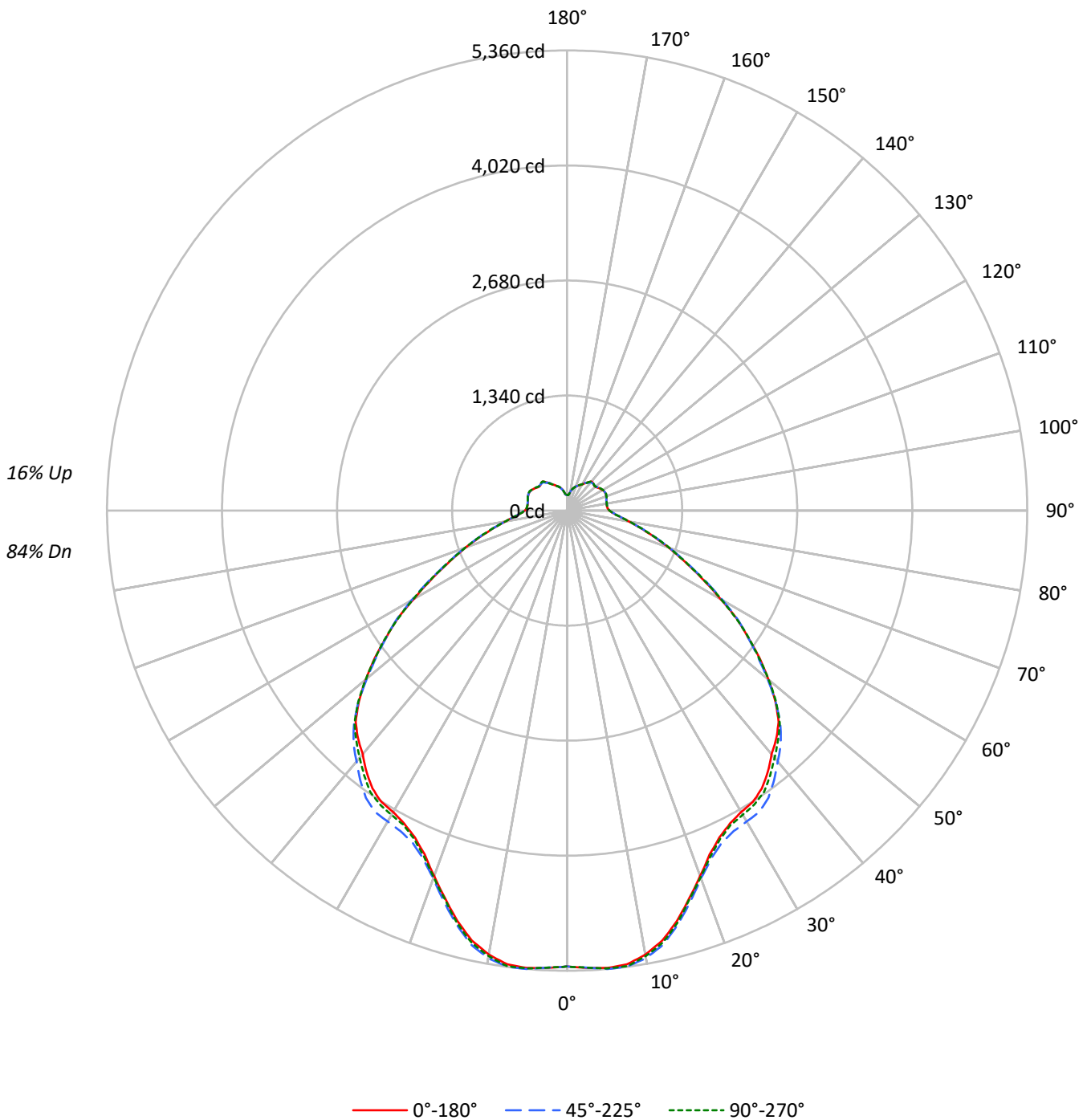
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	21653	21653	21653
5°	20635	20683	20657
10°	19369	19525	19440
15°	17605	17748	17684
20°	15691	15787	15737
25°	14270	14491	14338
30°	13626	14053	13754
35°	13238	13684	13392
40°	12460	12833	12643
45°	11855	11947	11921
50°	10626	10570	10643
55°	9174	9177	9215
60°	7645	7740	7687
65°	6256	6311	6278
70°	5145	5176	5181
75°	4190	4245	4245
80°	3464	3491	3496
85°	2997	3022	2991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	508.8	2.9
10°-20°	1391.8	8.0
20°-30°	1979.0	11.4
30°-40°	2500.0	14.4
40°-50°	2679.1	15.4
50°-60°	2297.7	13.2
60°-70°	1625.5	9.3
70°-80°	1031.8	5.9
80°-90°	643.0	3.7
90°-100°	516.9	3.0
100°-110°	502.0	2.9
110°-120°	484.3	2.8
120°-130°	410.4	2.4
130°-140°	336.9	1.9
140°-150°	249.8	1.4
150°-160°	151.4	0.9
160°-170°	76.5	0.4
170°-180°	19.1	0.1
0°-30°	3879.6	22.3
0°-40°	6379.6	36.7
0°-60°	11356.4	65.3
0°-90°	14656.7	84.2
90°-120°	1503.3	8.6
90°-150°	2500.3	14.4
90°-180°	2747.0	15.8
0°-180°	17404.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5310	5310	5310	5310	5310	
5°	5348	5354	5360	5357	5353	508
15°	4946	4953	4987	4974	4969	1385
25°	4199	4262	4264	4290	4219	1953
35°	3953	3967	4086	3999	3999	2461
45°	3484	3491	3510	3518	3503	2658
55°	2570	2570	2571	2558	2582	2302
65°	1614	1624	1628	1625	1620	1613
75°	955	966	968	968	968	1025
85°	572	572	577	572	572	502
90°	493	494	496	495	493	272
95°	467	468	470	470	469	382
105°	472	472	473	474	475	500
115°	489	490	491	493	494	483
125°	456	457	459	459	460	408
135°	435	435	435	436	438	337
145°	395	397	396	394	392	250
155°	324	324	324	323	326	151
165°	269	268	267	268	269	77
175°	187	186	185	186	186	19
180°	182	182	182	182	182	



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CATALOG NUMBER: SSLED-LD5-18-W-UNV-L850-CD1-U-FRR22-FRCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5310.3	5310.3	5310.3	5310.3	5310.3
2.5°	5332.3	5332.3	5328.5	5331.4	5328.5
5°	5347.7	5354.4	5360.1	5357.2	5353.4
7.5°	5331.4	5338.1	5357.2	5352.4	5352.4
10°	5251.0	5263.4	5293.1	5284.5	5270.1
12.5°	5129.4	5150.4	5177.3	5161.0	5154.3
15°	4946.5	4953.2	4986.7	4974.3	4968.6
17.5°	4732.1	4732.1	4774.2	4772.3	4743.6
20°	4530.1	4544.5	4557.9	4571.3	4543.5
22.5°	4335.8	4385.5	4384.6	4409.5	4358.7
25°	4198.9	4262.0	4264.0	4289.8	4219.0
27.5°	4108.9	4179.7	4206.5	4204.6	4128.0
30°	4054.3	4095.5	4181.6	4129.0	4092.6
32.5°	4025.6	4027.5	4163.4	4060.0	4060.0
35°	3952.8	3967.2	4085.9	3998.8	3998.8
37.5°	3838.9	3894.4	3958.6	3924.1	3883.9
40°	3704.9	3796.8	3815.9	3810.2	3759.4
42.5°	3605.3	3657.0	3685.7	3679.0	3635.9
45°	3483.7	3491.4	3510.5	3518.2	3502.9
47.5°	3290.3	3287.5	3296.1	3300.9	3302.8
50°	3061.5	3039.5	3045.3	3044.3	3066.3
52.5°	2827.0	2799.2	2799.2	2794.5	2813.6
55°	2570.4	2569.5	2571.4	2558.0	2581.9
57.5°	2338.8	2346.4	2352.2	2335.9	2330.1
60°	2065.0	2090.8	2090.8	2084.1	2076.5
62.5°	1827.5	1846.7	1857.2	1841.9	1840.9
65°	1614.1	1623.6	1628.4	1624.6	1619.8
67.5°	1418.8	1430.3	1436.0	1427.4	1428.3
70°	1255.1	1258.9	1262.7	1271.3	1263.7
72.5°	1098.1	1100.9	1108.6	1106.7	1106.7
75°	955.4	965.9	967.9	967.9	967.9
77.5°	836.7	842.5	841.5	839.6	837.7
80°	728.5	734.3	734.3	734.3	735.2
82.5°	644.3	643.3	645.2	647.2	647.2
85°	572.5	571.5	577.3	572.5	571.5
87.5°	522.7	525.6	527.5	526.5	524.6
90°	493.0	494.0	495.9	494.9	493.0
92.5°	474.8	476.8	478.7	478.7	477.7
95°	467.2	468.1	470.0	470.0	469.1
97.5°	465.3	466.2	468.1	468.1	467.2
100°	466.2	467.2	468.1	468.1	469.1
102.5°	467.2	468.1	469.1	470.0	470.0
105°	472.0	472.0	472.9	473.9	474.8
107.5°	477.7	478.7	479.6	480.6	480.6
110°	484.4	485.4	485.4	487.3	487.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	489.2	490.2	490.2	492.1	493.0
115°	489.2	490.2	491.1	493.0	494.0
117.5°	485.4	485.4	486.3	488.2	490.2
120°	476.8	476.8	478.7	479.6	481.5
122.5°	466.2	467.2	469.1	470.0	471.0
125°	455.7	456.6	458.6	458.6	460.5
127.5°	441.3	444.2	446.1	446.1	447.1
130°	429.8	432.7	434.6	435.6	434.6
132.5°	427.0	429.8	432.7	430.8	428.9
135°	434.6	434.6	434.6	436.5	438.5
137.5°	442.3	440.4	433.7	441.3	444.2
140°	442.3	435.6	430.8	434.6	442.3
142.5°	420.3	418.4	408.8	416.4	419.3
145°	395.4	397.3	396.3	394.4	392.5
147.5°	374.3	378.1	381.0	373.4	373.4
150°	351.3	360.0	360.0	357.1	354.2
152.5°	338.9	340.8	340.8	338.9	339.9
155°	323.6	324.5	324.5	322.6	325.5
157.5°	308.3	310.2	310.2	310.2	309.2
160°	297.7	298.7	297.7	297.7	296.8
162.5°	284.3	283.4	283.4	283.4	284.3
165°	269.0	268.1	267.1	268.1	269.0
167.5°	250.8	250.8	249.9	249.9	249.9
170°	228.8	229.8	228.8	228.8	227.8
172.5°	200.1	199.1	200.1	200.1	201.0
175°	186.7	185.7	184.8	185.7	185.7
177.5°	181.9	182.9	182.9	181.9	180.9
180°	181.9	181.9	181.9	181.9	181.9

(END OF REPORT)