

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: P231450

Luminaire Tested: **SSLED-LD5-12-W-UNV-L840-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: P231450
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-L840-CD1-U-FRR22-FRCDL22
Description: STEELER WHITE REFRACTOR LENS AND CIRCULAR DROP
Light Source: (240) 4000 CCT, 80 CRI LEDS
Ballast/Driver: (1) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11585.1 lumens
Efficiency: N/A
Efficacy: 135.8 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

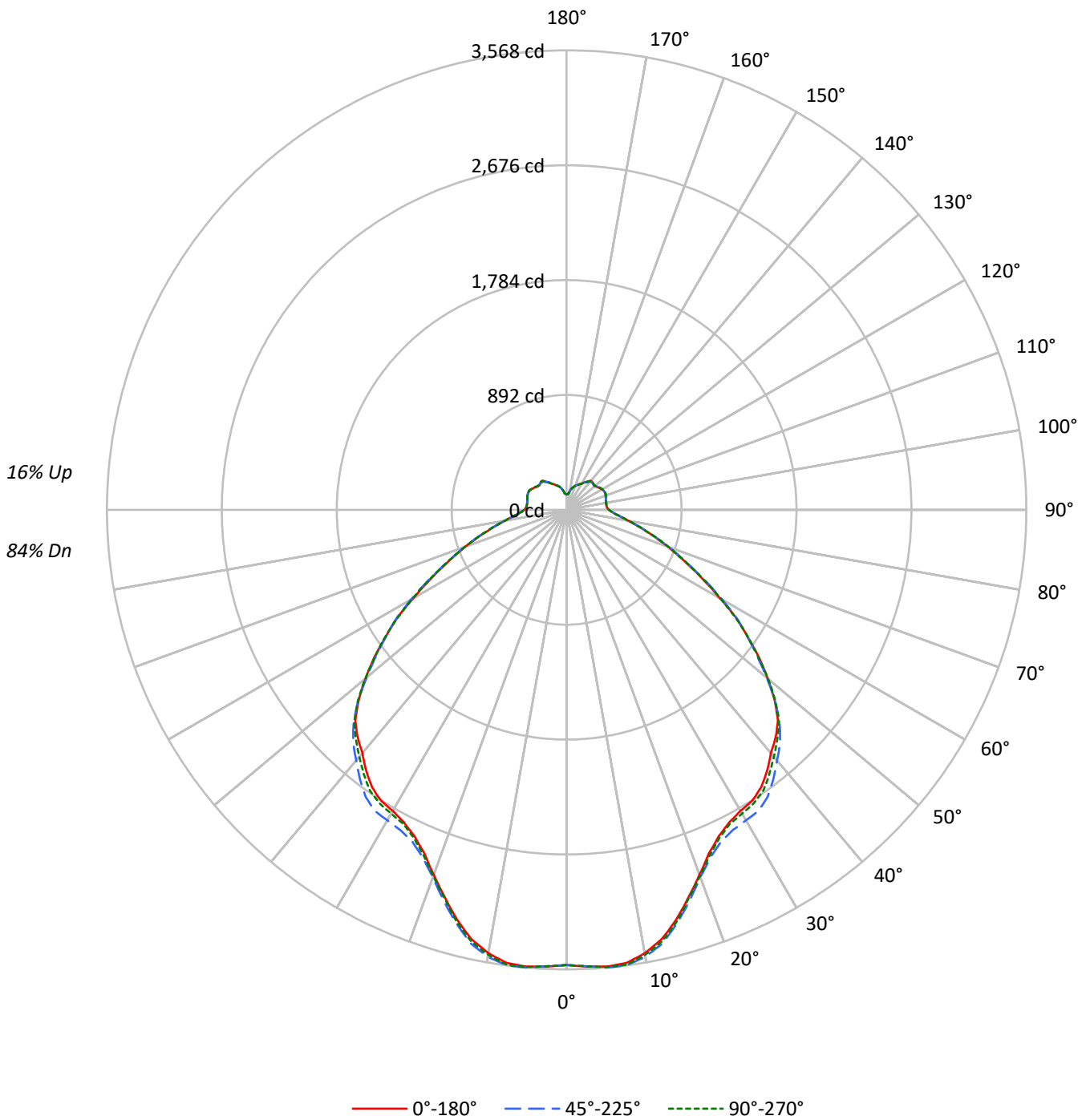
Input Watts (W): 85.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	14413	14413	14413
5°	13736	13768	13750
10°	12893	12997	12940
15°	11719	11814	11771
20°	10445	10508	10476
25°	9499	9646	9544
30°	9070	9355	9155
35°	8812	9109	8915
40°	8294	8542	8416
45°	7892	7952	7935
50°	7073	7036	7084
55°	6107	6109	6134
60°	5088	5152	5117
65°	4164	4201	4179
70°	3425	3446	3449
75°	2790	2826	2826
80°	2306	2324	2327
85°	1995	2012	1991



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CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-FRR22-FRCDL22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.7	2.9
10°-20°	926.5	8.0
20°-30°	1317.3	11.4
30°-40°	1664.1	14.4
40°-50°	1783.4	15.4
50°-60°	1529.5	13.2
60°-70°	1082.0	9.3
70°-80°	686.8	5.9
80°-90°	428.0	3.7
90°-100°	344.1	3.0
100°-110°	334.2	2.9
110°-120°	322.4	2.8
120°-130°	273.2	2.4
130°-140°	224.2	1.9
140°-150°	166.3	1.4
150°-160°	100.8	0.9
160°-170°	50.9	0.4
170°-180°	12.7	0.1
0°-30°	2582.4	22.3
0°-40°	4246.6	36.7
0°-60°	7559.4	65.3
0°-90°	9756.3	84.2
90°-120°	1000.7	8.6
90°-150°	1664.4	14.4
90°-180°	1829.0	15.8
0°-180°	11585.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3535	3535	3535	3535	3535	
5°	3560	3564	3568	3566	3564	338
15°	3293	3297	3319	3311	3307	922
25°	2795	2837	2838	2856	2808	1300
35°	2631	2641	2720	2662	2662	1638
45°	2319	2324	2337	2342	2332	1769
55°	1711	1710	1712	1703	1719	1532
65°	1074	1081	1084	1081	1078	1074
75°	636	643	644	644	644	682
85°	381	380	384	381	380	334
90°	328	329	330	330	328	181
95°	311	312	313	313	312	254
105°	314	314	315	315	316	333
115°	326	326	327	328	329	321
125°	303	304	305	305	306	271
135°	289	289	289	291	292	224
145°	263	264	264	262	261	167
155°	215	216	216	215	217	100
165°	179	178	178	178	179	51
175°	124	124	123	124	124	13
180°	121	121	121	121	121	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3534.8	3534.8	3534.8	3534.8	3534.8
2.5°	3549.5	3549.5	3546.9	3548.8	3546.9
5°	3559.7	3564.1	3568.0	3566.0	3563.5
7.5°	3548.8	3553.3	3566.0	3562.9	3562.9
10°	3495.3	3503.6	3523.4	3517.6	3508.1
12.5°	3414.4	3428.4	3446.2	3435.4	3431.0
15°	3292.7	3297.1	3319.4	3311.1	3307.3
17.5°	3149.9	3149.9	3178.0	3176.7	3157.6
20°	3015.5	3025.0	3033.9	3042.9	3024.4
22.5°	2886.1	2919.2	2918.6	2935.2	2901.4
25°	2795.0	2837.0	2838.3	2855.5	2808.4
27.5°	2735.1	2782.2	2800.1	2798.8	2747.8
30°	2698.8	2726.2	2783.5	2748.5	2724.2
32.5°	2679.6	2680.9	2771.4	2702.6	2702.6
35°	2631.2	2640.8	2719.8	2661.8	2661.8
37.5°	2555.4	2592.3	2635.0	2612.1	2585.3
40°	2466.2	2527.3	2540.1	2536.3	2502.5
42.5°	2399.9	2434.3	2453.4	2448.9	2420.3
45°	2319.0	2324.0	2336.8	2341.9	2331.7
47.5°	2190.2	2188.3	2194.1	2197.2	2198.5
50°	2037.9	2023.3	2027.1	2026.5	2041.1
52.5°	1881.8	1863.3	1863.3	1860.1	1872.9
55°	1711.0	1710.4	1711.7	1702.7	1718.7
57.5°	1556.8	1561.9	1565.7	1554.9	1551.1
60°	1374.5	1391.8	1391.8	1387.3	1382.2
62.5°	1216.5	1229.3	1236.3	1226.1	1225.4
65°	1074.4	1080.8	1084.0	1081.4	1078.2
67.5°	944.4	952.1	955.9	950.1	950.8
70°	835.4	838.0	840.5	846.3	841.2
72.5°	730.9	732.8	737.9	736.7	736.7
75°	636.0	643.0	644.3	644.3	644.3
77.5°	557.0	560.8	560.1	558.9	557.6
80°	484.9	488.8	488.8	488.8	489.4
82.5°	428.9	428.2	429.5	430.8	430.8
85°	381.1	380.4	384.3	381.1	380.4
87.5°	347.9	349.8	351.1	350.5	349.2
90°	328.2	328.8	330.1	329.5	328.2
92.5°	316.1	317.4	318.6	318.6	318.0
95°	311.0	311.6	312.9	312.9	312.3
97.5°	309.7	310.3	311.6	311.6	311.0
100°	310.3	311.0	311.6	311.6	312.3
102.5°	311.0	311.6	312.3	312.9	312.9
105°	314.2	314.2	314.8	315.4	316.1
107.5°	318.0	318.6	319.3	319.9	319.9
110°	322.4	323.1	323.1	324.4	324.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	325.6	326.3	326.3	327.5	328.2
115°	325.6	326.3	326.9	328.2	328.8
117.5°	323.1	323.1	323.7	325.0	326.3
120°	317.4	317.4	318.6	319.3	320.5
122.5°	310.3	311.0	312.3	312.9	313.5
125°	303.3	304.0	305.2	305.2	306.5
127.5°	293.8	295.7	297.0	297.0	297.6
130°	286.1	288.0	289.3	289.9	289.3
132.5°	284.2	286.1	288.0	286.8	285.5
135°	289.3	289.3	289.3	290.6	291.9
137.5°	294.4	293.1	288.7	293.8	295.7
140°	294.4	289.9	286.8	289.3	294.4
142.5°	279.8	278.5	272.1	277.2	279.1
145°	263.2	264.5	263.8	262.5	261.3
147.5°	249.2	251.7	253.6	248.5	248.5
150°	233.9	239.6	239.6	237.7	235.8
152.5°	225.6	226.9	226.9	225.6	226.2
155°	215.4	216.0	216.0	214.8	216.7
157.5°	205.2	206.5	206.5	206.5	205.8
160°	198.2	198.8	198.2	198.2	197.5
162.5°	189.3	188.6	188.6	188.6	189.3
165°	179.1	178.4	177.8	178.4	179.1
167.5°	167.0	167.0	166.3	166.3	166.3
170°	152.3	152.9	152.3	152.3	151.7
172.5°	133.2	132.5	133.2	133.2	133.8
175°	124.3	123.6	123.0	123.6	123.6
177.5°	121.1	121.7	121.7	121.1	120.4
180°	121.1	121.1	121.1	121.1	121.1

(END OF REPORT)