

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: P231493

Luminaire Tested: **SSLED-LD5-12-W-UNV-L850-CD1-U-CLR22-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: P231493
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-6)
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-CLR22-CLCDL22
Description: STEELER CLEAR REFRACTOR LENS AND CONICAL 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: 11913.0 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Spacing Criteria (0/90/45): 1.63 / 1.67 / 1.65
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 1.17')
CIE Type: Direct

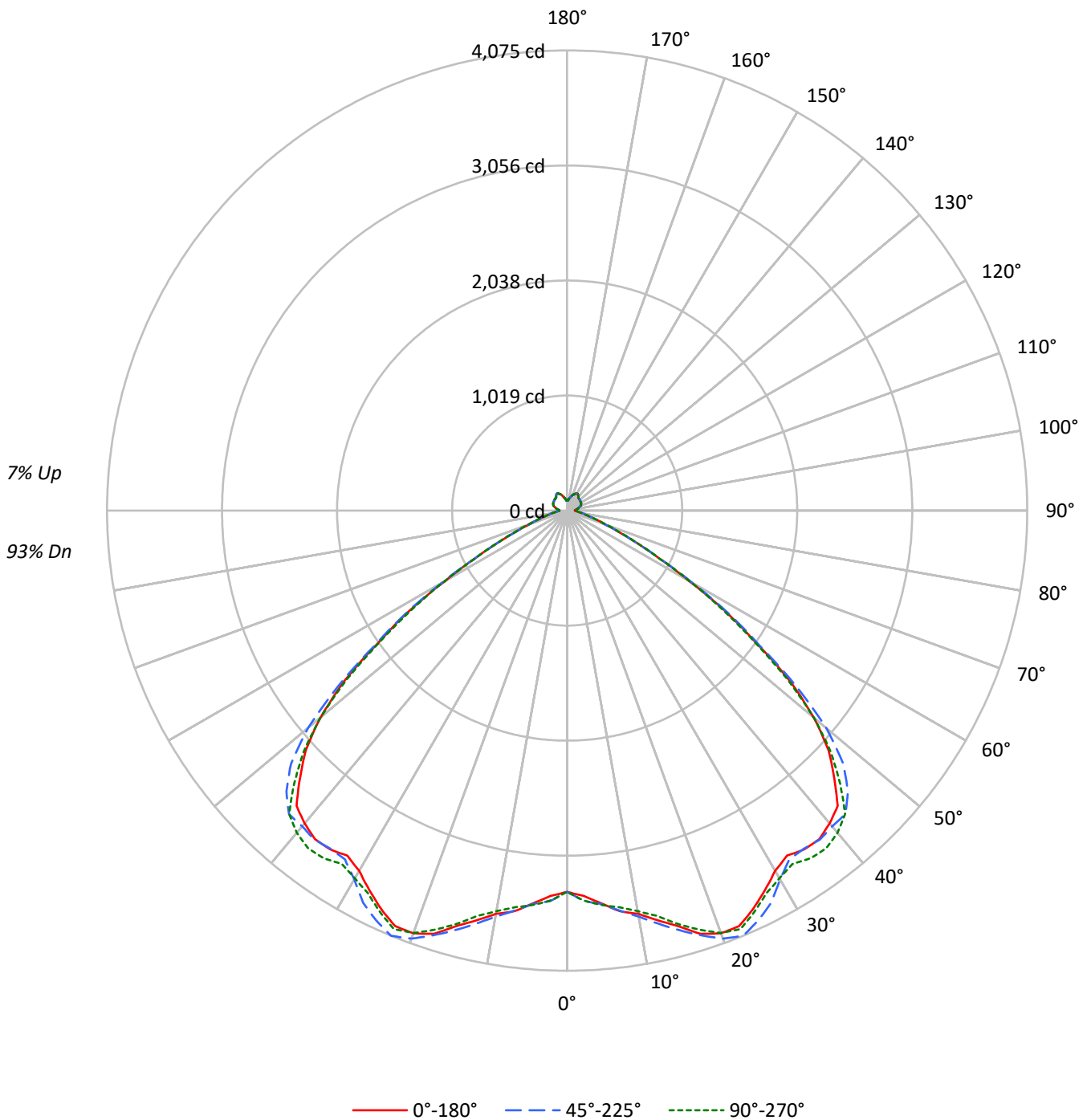
Input Watts (W): 85.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93								
1	109	105	101	98	105	102	98	95	96	94	91	91	89	87	87	85	84	81								
2	100	93	87	82	97	90	85	80	86	81	77	82	78	75	78	75	72	70								
3	92	82	75	69	89	80	73	68	76	71	66	73	68	64	69	65	62	60								
4	84	73	65	59	81	71	64	58	68	62	57	65	60	55	62	58	54	52								
5	78	66	57	51	75	64	56	50	61	54	49	59	53	48	56	51	47	45								
6	72	59	51	44	69	58	50	44	55	48	43	53	47	42	51	46	41	39								
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35								
8	62	49	40	35	60	48	40	34	46	39	34	44	38	33	42	37	33	31								
9	57	44	36	31	56	44	36	31	42	35	30	40	34	30	39	33	29	28								
10	54	41	33	28	52	40	33	28	39	32	27	37	31	27	36	30	27	25								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16655	16655	16655
5°	16040	16068	16110
10°	15699	15804	15594
15°	15710	15864	15626
20°	15793	15991	15780
25°	14976	15401	15082
30°	13857	14179	14147
35°	13579	13555	13938
40°	13325	13449	13725
45°	12342	12970	12612
50°	10610	11150	10614
55°	7743	7852	7648
60°	4848	4970	4889
65°	2731	2728	2784
70°	1518	1490	1587
75°	907	915	930
80°	635	629	633
85°	436	439	436



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CATALOG NUMBER: SSLED-LD5-12-W-UNV-L850-CD1-U-CLR22-CLCDL22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.8	2.8
10°-20°	1085.6	9.1
20°-30°	1807.2	15.2
30°-40°	2324.7	19.5
40°-50°	2626.5	22.0
50°-60°	1865.3	15.7
60°-70°	719.5	6.0
70°-80°	236.6	2.0
80°-90°	100.7	0.8
90°-100°	86.2	0.7
100°-110°	117.3	1.0
110°-120°	134.8	1.1
120°-130°	128.4	1.1
130°-140°	115.0	1.0
140°-150°	104.8	0.9
150°-160°	75.8	0.6
160°-170°	37.2	0.3
170°-180°	9.4	0.1
0°-30°	3230.6	27.1
0°-40°	5555.3	46.6
0°-60°	10047.2	84.3
0°-90°	11104.0	93.2
90°-120°	338.3	2.8
90°-150°	686.6	5.8
90°-180°	809.0	6.8
0°-180°	11913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3376	3376	3376	3376	3376	
5°	3491	3489	3497	3482	3506	338
15°	3810	3827	3848	3815	3790	1087
25°	3894	3875	4005	3904	3922	1789
35°	3662	3664	3655	3725	3758	2293
45°	3345	3397	3516	3450	3418	2560
55°	2046	2098	2075	2071	2021	1840
65°	681	670	680	681	694	714
75°	206	210	208	209	211	236
85°	86	87	87	87	86	81
90°	68	68	68	69	68	38
95°	75	75	76	76	77	66
105°	112	111	108	110	109	118
115°	137	136	136	137	138	135
125°	143	143	144	143	144	128
135°	148	147	148	150	151	115
145°	170	170	170	171	172	105
155°	164	164	158	163	163	76
165°	125	128	127	126	124	37
175°	91	89	89	89	89	9
180°	98	98	98	98	98	



TEST NUMBER: P231493

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L850-CD1-U-CLR22-CLCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3375.6	3375.6	3375.6	3375.6	3375.6
2.5°	3416.4	3455.8	3461.1	3432.2	3457.8
5°	3491.3	3489.4	3497.3	3481.5	3506.5
7.5°	3578.8	3566.9	3572.9	3553.1	3542.6
10°	3626.1	3623.5	3650.4	3622.2	3601.8
12.5°	3716.8	3711.6	3748.4	3706.3	3676.1
15°	3810.2	3827.3	3847.6	3815.4	3789.8
17.5°	3930.5	3892.3	3943.0	3887.7	3891.0
20°	3983.7	3930.5	4033.7	3938.4	3980.4
22.5°	3983.1	3952.8	4075.1	3928.5	4011.3
25°	3894.3	3874.6	4004.7	3903.5	3921.9
27.5°	3791.1	3828.6	3913.4	3862.8	3820.7
30°	3683.9	3801.0	3769.4	3854.9	3760.9
32.5°	3623.5	3735.9	3662.3	3798.3	3710.9
35°	3661.6	3663.6	3655.0	3724.7	3758.2
37.5°	3668.2	3641.9	3674.7	3692.5	3769.4
40°	3616.2	3630.7	3649.8	3693.2	3724.7
42.5°	3546.6	3563.0	3647.1	3616.2	3643.8
45°	3345.4	3397.3	3515.7	3449.9	3418.4
47.5°	3141.0	3263.9	3317.1	3300.7	3167.9
50°	2850.4	2952.9	2995.7	2986.5	2851.7
52.5°	2500.7	2517.1	2558.5	2525.0	2464.5
55°	2045.8	2097.7	2074.7	2071.4	2020.8
57.5°	1669.1	1699.3	1693.4	1684.9	1627.0
60°	1249.7	1273.3	1281.2	1278.6	1260.2
62.5°	925.6	930.2	933.5	947.3	922.3
65°	681.0	669.9	680.4	681.0	694.2
67.5°	487.8	483.8	489.7	493.0	509.5
70°	362.9	358.3	356.3	366.8	379.3
72.5°	278.1	274.1	276.1	280.7	282.7
75°	205.8	210.4	207.7	209.0	211.0
77.5°	163.7	163.0	161.7	162.4	164.3
80°	135.4	134.1	134.1	132.8	134.8
82.5°	107.8	109.1	108.5	109.1	109.1
85°	86.1	86.8	86.8	86.8	86.1
87.5°	72.3	73.0	72.3	73.6	73.0
90°	67.7	68.4	68.4	69.0	68.4
92.5°	69.0	70.3	70.3	71.7	71.0
95°	74.9	74.9	75.6	76.3	76.9
97.5°	85.5	86.1	87.4	88.1	88.1
100°	95.3	96.6	97.3	97.9	99.3
102.5°	101.2	101.2	101.2	102.6	102.6
105°	112.4	111.1	107.8	109.8	109.1
107.5°	120.3	119.0	118.3	120.3	121.6
110°	128.8	127.5	126.9	128.8	130.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.8	132.1	132.1	133.4	134.8
115°	136.7	136.1	136.1	137.4	138.0
117.5°	138.7	138.7	140.0	140.0	140.7
120°	139.4	140.0	141.3	141.3	141.3
122.5°	141.3	140.7	142.7	142.0	142.7
125°	142.7	142.7	144.0	143.3	144.0
127.5°	144.0	143.3	144.6	144.6	144.6
130°	145.3	145.3	146.6	146.6	146.6
132.5°	146.6	145.9	147.3	147.9	149.2
135°	147.9	147.3	147.9	149.9	151.2
137.5°	149.2	148.6	148.6	150.5	152.5
140°	151.2	151.9	150.5	152.5	153.2
142.5°	160.4	160.4	158.4	160.4	163.0
145°	169.6	169.6	169.6	170.9	171.6
147.5°	174.2	174.9	175.5	175.5	176.2
150°	175.5	175.5	175.5	175.5	176.2
152.5°	173.5	172.9	168.9	172.2	172.9
155°	164.3	163.7	158.4	163.0	163.0
157.5°	156.5	155.8	150.5	155.1	155.8
160°	150.5	153.8	148.6	153.2	149.9
162.5°	136.1	142.7	139.4	140.7	135.4
165°	124.9	127.5	126.9	126.2	123.6
167.5°	117.7	120.3	119.0	119.6	115.7
170°	110.4	112.4	113.1	111.1	108.5
172.5°	97.9	99.3	101.2	97.9	97.9
175°	90.7	89.4	89.4	89.4	89.4
177.5°	94.0	94.0	94.7	92.7	92.7
180°	97.9	97.9	97.9	97.9	97.9

(END OF REPORT)