

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: P231516

Luminaire Tested: **SSLED-LD5-15-W-UNV-L840-CD1-U-CLR22-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: P231516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-7)
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-L840-CD1-U-CLR22-FRCDL22
Description: STEELER CLEAR 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: 13957.0 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.32 / 1.45
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Semi-Direct

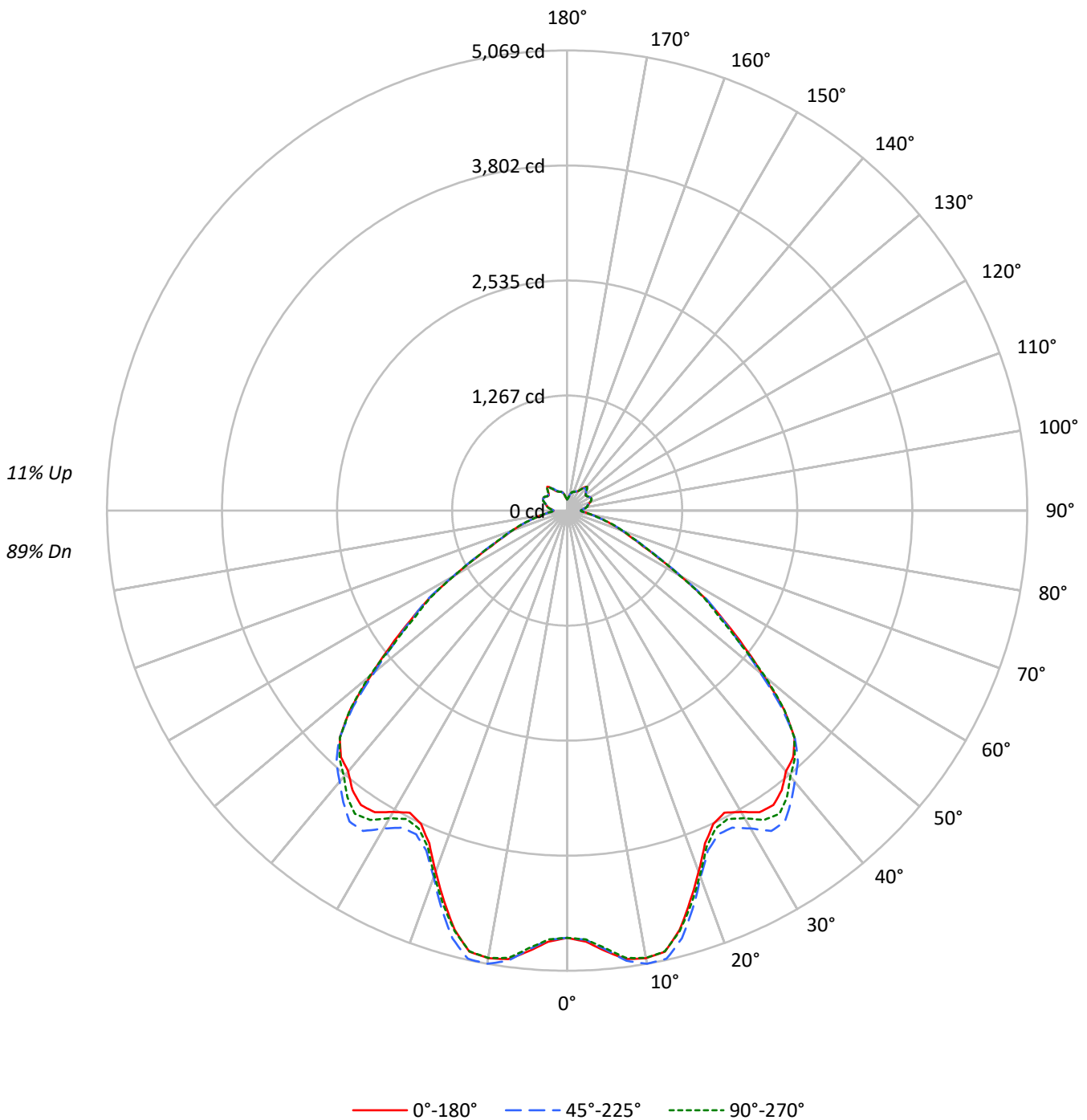
Input Watts (W): 110.74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	98	98	98	92	92	92	89
1	107	103	99	95	103	99	96	93	93	90	88	87	85	83	82	80	79	76
2	98	91	85	79	95	88	82	78	83	78	74	78	74	71	73	70	68	65
3	90	80	73	67	87	78	71	66	73	68	63	69	65	61	65	62	58	56
4	83	72	63	57	80	70	62	56	66	59	54	62	57	52	59	54	51	48
5	76	64	56	50	73	62	55	49	59	52	47	56	50	46	53	48	44	42
6	70	58	49	43	68	56	48	43	53	47	42	51	45	40	48	43	39	37
7	65	53	44	38	63	51	43	38	49	42	37	46	40	36	44	39	35	33
8	61	48	40	34	59	47	39	34	45	38	33	42	36	32	40	35	31	29
9	57	44	36	31	55	43	35	30	41	34	30	39	33	29	37	32	28	26
10	53	40	33	28	51	40	32	27	38	31	27	36	30	26	35	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19187	19187	19187
5°	18800	18724	18669
10°	18465	18698	18459
15°	17023	17363	17056
20°	14665	14879	14813
25°	12945	13372	13138
30°	12881	13587	13149
35°	13265	14005	13654
40°	12616	13115	12860
45°	12059	12081	12043
50°	9777	9640	9878
55°	7519	7434	7296
60°	5343	5378	5299
65°	3545	3643	3588
70°	2626	2655	2665
75°	1909	1912	1912
80°	1363	1345	1356
85°	951	955	955



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	470.0	3.4
10°-20°	1338.6	9.6
20°-30°	1844.6	13.2
30°-40°	2509.1	18.0
40°-50°	2674.6	19.2
50°-60°	1886.6	13.5
60°-70°	963.0	6.9
70°-80°	471.7	3.4
80°-90°	213.9	1.5
90°-100°	197.4	1.4
100°-110°	253.7	1.8
110°-120°	287.0	2.1
120°-130°	247.1	1.8
130°-140°	229.9	1.6
140°-150°	187.3	1.3
150°-160°	109.1	0.8
160°-170°	58.9	0.4
170°-180°	14.7	0.1
0°-30°	3653.2	26.2
0°-40°	6162.3	44.2
0°-60°	10723.5	76.8
0°-90°	12371.9	88.6
90°-120°	738.2	5.3
90°-150°	1402.4	10.0
90°-180°	1585.0	11.4
0°-180°	13957.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4706	4706	4706	4706	4706	
5°	4872	4862	4852	4837	4838	470
15°	4783	4825	4878	4826	4792	1326
25°	3809	3942	3935	3982	3866	1795
35°	3961	3969	4182	4029	4077	2445
45°	3544	3530	3550	3563	3539	2653
55°	2107	2126	2083	2091	2044	1893
65°	915	925	940	930	926	950
75°	435	434	436	433	436	471
85°	182	182	182	182	182	172
90°	150	151	150	152	152	85
95°	179	178	178	180	181	154
105°	241	239	235	236	238	254
115°	295	294	293	294	297	287
125°	272	271	272	272	274	246
135°	296	295	296	301	302	231
145°	301	297	302	297	297	189
155°	230	231	233	231	232	108
165°	209	208	208	206	209	59
175°	142	141	140	141	141	15
180°	122	122	122	122	122	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4753.0	4745.1	4732.4	4729.3	4726.9
5°	4872.2	4862.0	4852.5	4836.7	4838.3
7.5°	4984.4	4990.7	5001.8	4982.8	4970.2
10°	5005.7	5029.4	5068.9	5036.5	5004.1
12.5°	4977.3	5015.2	5057.1	5009.7	4971.8
15°	4783.0	4824.8	4878.5	4826.4	4792.4
17.5°	4508.1	4543.6	4599.7	4541.3	4546.0
20°	4234.0	4272.7	4295.6	4308.2	4276.6
22.5°	3967.8	4069.7	4053.1	4102.1	4009.6
25°	3809.0	3941.7	3934.6	3982.0	3865.9
27.5°	3751.3	3906.2	3936.2	3938.5	3828.7
30°	3832.7	3894.3	4042.8	3938.5	3912.5
32.5°	3940.9	3918.8	4185.0	3982.8	4040.4
35°	3960.7	3969.3	4181.8	4028.6	4076.8
37.5°	3883.2	3979.6	4049.9	4041.2	3978.0
40°	3751.3	3906.2	3899.8	3944.9	3824.0
42.5°	3686.6	3762.4	3762.4	3794.8	3710.3
45°	3543.6	3530.2	3549.9	3563.3	3538.8
47.5°	3237.1	3211.8	3199.2	3245.8	3243.4
50°	2816.9	2800.3	2777.4	2832.7	2846.1
52.5°	2450.3	2415.6	2394.2	2410.0	2395.0
55°	2106.7	2126.5	2083.0	2090.9	2044.3
57.5°	1802.6	1846.8	1827.1	1820.8	1786.0
60°	1443.2	1474.0	1452.7	1462.1	1431.3
62.5°	1135.1	1156.4	1165.9	1162.0	1146.2
65°	914.7	925.0	940.0	930.5	925.8
67.5°	755.2	764.6	768.6	766.2	769.4
70°	640.6	643.0	647.7	640.6	650.1
72.5°	536.4	541.1	541.1	541.9	546.6
75°	435.2	433.7	436.0	432.9	436.0
77.5°	349.9	349.9	348.4	346.8	351.5
80°	286.7	283.6	282.8	282.0	285.2
82.5°	228.3	229.1	229.1	228.3	227.5
85°	181.7	182.5	182.5	181.7	182.5
87.5°	156.4	156.4	157.2	157.2	156.4
90°	150.1	150.9	150.1	151.7	151.7
92.5°	160.4	160.4	161.1	162.7	161.9
95°	179.3	178.5	177.7	180.1	180.9
97.5°	197.5	196.7	198.3	199.8	201.4
100°	218.0	218.0	219.6	220.4	222.0
102.5°	226.7	226.7	225.9	228.3	229.9
105°	240.9	238.6	235.4	236.2	237.8
107.5°	252.0	251.2	250.4	252.0	252.8
110°	268.6	267.8	267.8	267.8	269.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	285.2	285.2	284.4	285.2	286.7
115°	294.6	293.9	293.1	293.9	297.0
117.5°	297.0	297.0	295.4	297.8	300.2
120°	293.1	292.3	292.3	293.9	296.2
122.5°	282.8	282.0	282.0	283.6	286.0
125°	271.7	270.9	272.5	272.5	274.1
127.5°	263.8	264.6	266.2	264.6	265.4
130°	265.4	266.2	269.4	267.0	267.0
132.5°	274.1	274.9	280.4	278.8	278.8
135°	296.2	295.4	296.2	301.0	301.7
137.5°	321.5	315.2	306.5	322.3	326.2
140°	342.8	325.4	322.3	329.4	341.2
142.5°	327.0	317.5	309.6	319.1	326.2
145°	301.0	297.0	301.7	297.0	297.0
147.5°	270.9	276.5	286.7	272.5	271.7
150°	248.0	259.1	263.0	255.1	249.6
152.5°	237.8	242.5	244.9	240.9	240.9
155°	229.9	230.7	233.0	230.7	232.2
157.5°	224.3	226.7	226.7	226.7	225.9
160°	219.6	222.8	222.0	222.0	220.4
162.5°	216.4	218.0	217.2	217.2	217.2
165°	209.3	207.7	207.7	206.2	209.3
167.5°	197.5	195.1	195.1	194.3	196.7
170°	182.5	182.5	181.7	181.7	180.1
172.5°	158.0	157.2	156.4	156.4	156.4
175°	142.2	141.4	139.8	141.4	141.4
177.5°	130.3	130.3	131.1	129.5	129.5
180°	122.4	122.4	122.4	122.4	122.4

(END OF REPORT)