

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: P231513

Luminaire Tested: **SSLED-LD5-12-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: P231513
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-LD5-12-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: 11259.0 lumens
Efficiency: N/A
Efficacy: 132.0 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

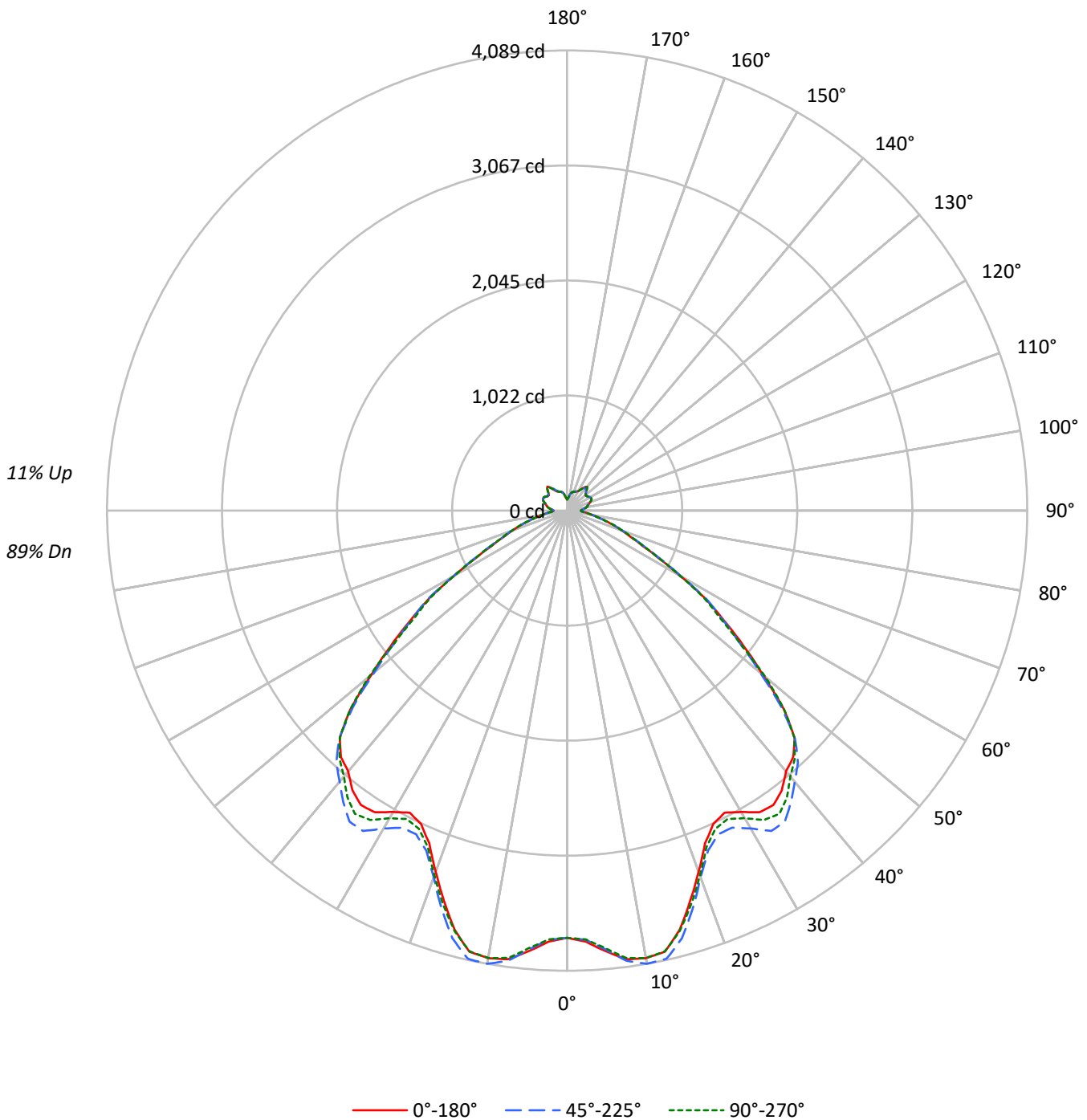
Input Watts (W): 85.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	15478	15478	15478
5°	15166	15105	15060
10°	14895	15084	14891
15°	13732	14007	13759
20°	11830	12002	11949
25°	10442	10787	10598
30°	10391	10960	10607
35°	10700	11298	11014
40°	10177	10580	10374
45°	9728	9745	9715
50°	7887	7776	7969
55°	6066	5997	5886
60°	4310	4338	4274
65°	2860	2939	2894
70°	2119	2142	2150
75°	1540	1543	1543
80°	1100	1085	1094
85°	767	770	770



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.2	3.4
10°-20°	1079.8	9.6
20°-30°	1488.0	13.2
30°-40°	2024.1	18.0
40°-50°	2157.6	19.2
50°-60°	1521.9	13.5
60°-70°	776.8	6.9
70°-80°	380.5	3.4
80°-90°	172.5	1.5
90°-100°	159.3	1.4
100°-110°	204.7	1.8
110°-120°	231.5	2.1
120°-130°	199.3	1.8
130°-140°	185.4	1.6
140°-150°	151.1	1.3
150°-160°	88.0	0.8
160°-170°	47.5	0.4
170°-180°	11.9	0.1
0°-30°	2947.0	26.2
0°-40°	4971.1	44.2
0°-60°	8650.5	76.8
0°-90°	9980.3	88.6
90°-120°	595.4	5.3
90°-150°	1131.3	10.0
90°-180°	1279.0	11.4
0°-180°	11259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3796	3796	3796	3796	3796	
5°	3930	3922	3914	3902	3903	379
15°	3858	3892	3936	3893	3866	1070
25°	3073	3180	3174	3212	3119	1448
35°	3195	3202	3374	3250	3289	1973
45°	2859	2848	2864	2874	2855	2140
55°	1700	1715	1680	1687	1649	1527
65°	738	746	758	751	747	766
75°	351	350	352	349	352	380
85°	147	147	147	147	147	139
90°	121	122	121	122	122	68
95°	145	144	143	145	146	124
105°	194	192	190	190	192	205
115°	238	237	236	237	240	232
125°	219	219	220	220	221	199
135°	239	238	239	243	243	186
145°	243	240	243	240	240	152
155°	185	186	188	186	187	87
165°	169	168	168	166	169	48
175°	115	114	113	114	114	12
180°	99	99	99	99	99	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3795.9	3795.9	3795.9	3795.9	3795.9
2.5°	3834.2	3827.8	3817.6	3815.1	3813.1
5°	3930.4	3922.1	3914.5	3901.7	3903.0
7.5°	4020.9	4026.0	4034.9	4019.6	4009.4
10°	4038.1	4057.2	4089.1	4062.9	4036.8
12.5°	4015.1	4045.7	4079.5	4041.3	4010.7
15°	3858.4	3892.2	3935.5	3893.4	3866.0
17.5°	3636.6	3665.3	3710.5	3663.4	3667.2
20°	3415.5	3446.7	3465.2	3475.4	3449.9
22.5°	3200.8	3283.0	3269.6	3309.1	3234.5
25°	3072.7	3179.7	3174.0	3212.2	3118.6
27.5°	3026.2	3151.1	3175.3	3177.2	3088.6
30°	3091.8	3141.5	3261.3	3177.2	3156.2
32.5°	3179.1	3161.3	3376.0	3212.9	3259.4
35°	3195.0	3202.0	3373.5	3249.8	3288.7
37.5°	3132.6	3210.3	3267.0	3260.0	3209.1
40°	3026.2	3151.1	3146.0	3182.3	3084.8
42.5°	2973.9	3035.1	3035.1	3061.2	2993.0
45°	2858.6	2847.7	2863.7	2874.5	2854.8
47.5°	2611.3	2590.9	2580.8	2618.3	2616.4
50°	2272.3	2259.0	2240.5	2285.1	2295.9
52.5°	1976.7	1948.6	1931.4	1944.2	1932.1
55°	1699.5	1715.4	1680.4	1686.7	1649.1
57.5°	1454.1	1489.8	1473.9	1468.8	1440.8
60°	1164.2	1189.1	1171.9	1179.5	1154.6
62.5°	915.7	932.9	940.5	937.4	924.6
65°	737.9	746.2	758.3	750.6	746.8
67.5°	609.2	616.8	620.0	618.1	620.7
70°	516.8	518.7	522.5	516.8	524.4
72.5°	432.7	436.5	436.5	437.1	441.0
75°	351.1	349.8	351.7	349.2	351.7
77.5°	282.3	282.3	281.0	279.7	283.6
80°	231.3	228.8	228.1	227.5	230.0
82.5°	184.2	184.8	184.8	184.2	183.5
85°	146.6	147.2	147.2	146.6	147.2
87.5°	126.2	126.2	126.8	126.8	126.2
90°	121.1	121.7	121.1	122.3	122.3
92.5°	129.4	129.4	130.0	131.3	130.6
95°	144.6	144.0	143.4	145.3	145.9
97.5°	159.3	158.7	159.9	161.2	162.5
100°	175.9	175.9	177.1	177.8	179.1
102.5°	182.9	182.9	182.2	184.2	185.4
105°	194.4	192.4	189.9	190.5	191.8
107.5°	203.3	202.6	202.0	203.3	203.9
110°	216.7	216.0	216.0	216.0	217.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	230.0	230.0	229.4	230.0	231.3
115°	237.7	237.0	236.4	237.0	239.6
117.5°	239.6	239.6	238.3	240.2	242.1
120°	236.4	235.8	235.8	237.0	239.0
122.5°	228.1	227.5	227.5	228.8	230.7
125°	219.2	218.6	219.8	219.8	221.1
127.5°	212.8	213.5	214.7	213.5	214.1
130°	214.1	214.7	217.3	215.4	215.4
132.5°	221.1	221.8	226.2	224.9	224.9
135°	239.0	238.3	239.0	242.8	243.4
137.5°	259.3	254.3	247.2	260.0	263.2
140°	276.6	262.5	260.0	265.7	275.3
142.5°	263.8	256.2	249.8	257.4	263.2
145°	242.8	239.6	243.4	239.6	239.6
147.5°	218.6	223.0	231.3	219.8	219.2
150°	200.1	209.0	212.2	205.8	201.4
152.5°	191.8	195.6	197.5	194.4	194.4
155°	185.4	186.1	188.0	186.1	187.3
157.5°	181.0	182.9	182.9	182.9	182.2
160°	177.1	179.7	179.1	179.1	177.8
162.5°	174.6	175.9	175.2	175.2	175.2
165°	168.9	167.6	167.6	166.3	168.9
167.5°	159.3	157.4	157.4	156.8	158.7
170°	147.2	147.2	146.6	146.6	145.3
172.5°	127.4	126.8	126.2	126.2	126.2
175°	114.7	114.1	112.8	114.1	114.1
177.5°	105.1	105.1	105.8	104.5	104.5
180°	98.8	98.8	98.8	98.8	98.8

(END OF REPORT)