

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: P231491

Luminaire Tested: **SSLED-LD5-12-W-UNV-L835-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: P231491
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-L835-CD1-U-CLR22-CLCDL22
Description: STEELER CLEAR REFRACTOR LENS AND CONICAL DROP
Light Source: (240) 3500 CCT, 80 CRI LEDS
Ballast/Driver: (1) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10797.0 lumens
Efficiency: N/A
Efficacy: 126.6 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

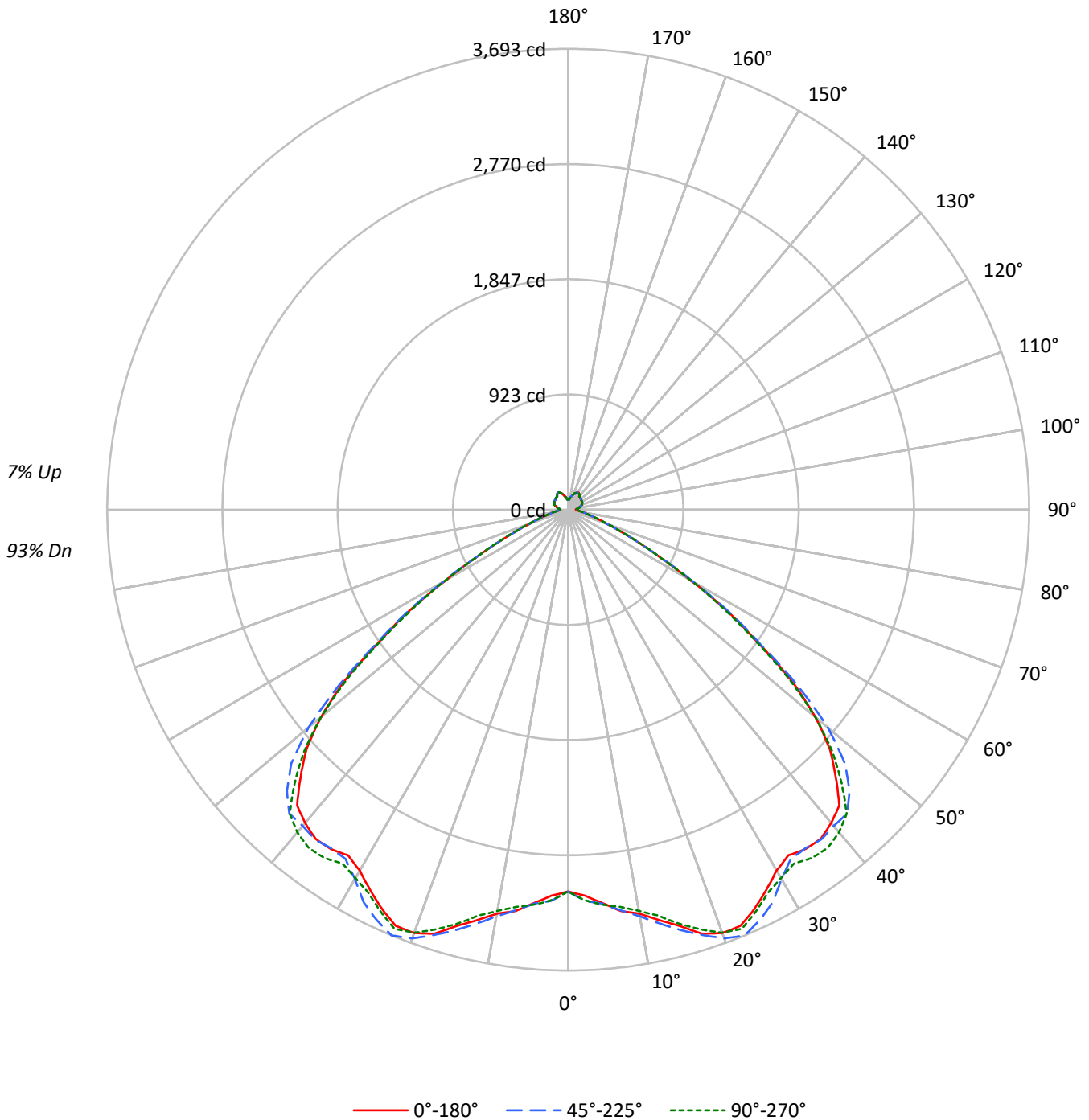
Input Watts (W): 85.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	15095	15095	15095
5°	14538	14562	14601
10°	14229	14324	14133
15°	14238	14378	14162
20°	14314	14493	14302
25°	13573	13958	13669
30°	12559	12850	12821
35°	12307	12285	12632
40°	12077	12189	12439
45°	11186	11755	11430
50°	9616	10106	9620
55°	7017	7116	6931
60°	4394	4505	4430
65°	2475	2473	2523
70°	1376	1351	1438
75°	822	830	843
80°	576	570	573
85°	395	398	395



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CATALOG NUMBER: SSLED-LD5-12-W-UNV-L835-CD1-U-CLR22-CLCDL22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.2	2.8
10°-20°	983.9	9.1
20°-30°	1637.9	15.2
30°-40°	2106.9	19.5
40°-50°	2380.5	22.0
50°-60°	1690.6	15.7
60°-70°	652.1	6.0
70°-80°	214.5	2.0
80°-90°	91.2	0.8
90°-100°	78.1	0.7
100°-110°	106.3	1.0
110°-120°	122.2	1.1
120°-130°	116.4	1.1
130°-140°	104.3	1.0
140°-150°	95.0	0.9
150°-160°	68.7	0.6
160°-170°	33.7	0.3
170°-180°	8.5	0.1
0°-30°	2928.0	27.1
0°-40°	5034.9	46.6
0°-60°	9106.0	84.3
0°-90°	10063.7	93.2
90°-120°	306.7	2.8
90°-150°	622.3	5.8
90°-180°	733.0	6.8
0°-180°	10797.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3059	3059	3059	3059	3059	
5°	3164	3162	3170	3155	3178	306
15°	3453	3469	3487	3458	3435	985
25°	3530	3512	3630	3538	3554	1622
35°	3319	3320	3313	3376	3406	2079
45°	3032	3079	3186	3127	3098	2320
55°	1854	1901	1880	1877	1832	1668
65°	617	607	617	617	629	647
75°	186	191	188	190	191	214
85°	78	79	79	79	78	73
90°	61	62	62	63	62	34
95°	68	68	68	69	70	60
105°	102	101	98	100	99	107
115°	124	123	123	124	125	122
125°	129	129	130	130	130	116
135°	134	134	134	136	137	104
145°	154	154	154	155	156	95
155°	149	148	144	148	148	69
165°	113	116	115	114	112	33
175°	82	81	81	81	81	9
180°	89	89	89	89	89	



TEST NUMBER: P231491

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L835-CD1-U-CLR22-CLCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3059.4	3059.4	3059.4	3059.4	3059.4
2.5°	3096.3	3132.1	3136.9	3110.6	3133.9
5°	3164.3	3162.5	3169.6	3155.3	3178.0
7.5°	3243.5	3232.8	3238.1	3220.3	3210.7
10°	3286.4	3284.0	3308.5	3282.8	3264.4
12.5°	3368.6	3363.9	3397.2	3359.1	3331.7
15°	3453.2	3468.7	3487.2	3458.0	3434.8
17.5°	3562.3	3527.7	3573.6	3523.5	3526.5
20°	3610.5	3562.3	3655.8	3569.4	3607.5
22.5°	3609.9	3582.5	3693.3	3560.5	3635.5
25°	3529.5	3511.6	3629.6	3537.8	3554.5
27.5°	3436.0	3469.9	3546.8	3500.9	3462.8
30°	3338.8	3444.9	3416.3	3493.7	3408.5
32.5°	3284.0	3385.9	3319.2	3442.5	3363.3
35°	3318.6	3320.4	3312.6	3375.8	3406.2
37.5°	3324.5	3300.7	3330.5	3346.6	3416.3
40°	3277.5	3290.6	3307.9	3347.2	3375.8
42.5°	3214.3	3229.2	3305.5	3277.5	3302.5
45°	3032.0	3079.1	3186.3	3126.7	3098.1
47.5°	2846.7	2958.1	3006.4	2991.5	2871.1
50°	2583.4	2676.3	2715.0	2706.7	2584.6
52.5°	2266.4	2281.3	2318.8	2288.5	2233.6
55°	1854.1	1901.2	1880.3	1877.4	1831.5
57.5°	1512.7	1540.1	1534.8	1527.0	1474.6
60°	1132.6	1154.1	1161.2	1158.8	1142.1
62.5°	838.9	843.1	846.0	858.5	835.9
65°	617.2	607.1	616.6	617.2	629.2
67.5°	442.1	438.5	443.9	446.8	461.7
70°	328.9	324.7	322.9	332.5	343.8
72.5°	252.0	248.4	250.2	254.4	256.2
75°	186.5	190.7	188.3	189.5	191.3
77.5°	148.4	147.8	146.6	147.2	148.9
80°	122.7	121.5	121.5	120.4	122.1
82.5°	97.7	98.9	98.3	98.9	98.9
85°	78.0	78.6	78.6	78.6	78.0
87.5°	65.5	66.1	65.5	66.7	66.1
90°	61.4	62.0	62.0	62.6	62.0
92.5°	62.6	63.8	63.8	64.9	64.3
95°	67.9	67.9	68.5	69.1	69.7
97.5°	77.5	78.0	79.2	79.8	79.8
100°	86.4	87.6	88.2	88.8	90.0
102.5°	91.8	91.8	91.8	92.9	92.9
105°	101.9	100.7	97.7	99.5	98.9
107.5°	109.0	107.8	107.2	109.0	110.2
110°	116.8	115.6	115.0	116.8	118.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.4	119.8	<i>119.8</i>	120.9	122.1
115°	123.9	123.3	<i>123.3</i>	124.5	125.1
117.5°	125.7	125.7	<i>126.9</i>	126.9	127.5
120°	126.3	126.9	<i>128.1</i>	128.1	128.1
122.5°	128.1	127.5	<i>129.3</i>	128.7	129.3
125°	129.3	129.3	<i>130.5</i>	129.9	130.5
127.5°	130.5	129.9	<i>131.1</i>	131.1	131.1
130°	131.7	131.7	<i>132.9</i>	132.9	132.9
132.5°	132.9	132.3	<i>133.5</i>	134.1	135.2
135°	134.1	133.5	<i>134.1</i>	135.8	137.0
137.5°	135.2	134.6	<i>134.6</i>	136.4	138.2
140°	137.0	137.6	<i>136.4</i>	138.2	138.8
142.5°	145.4	145.4	<i>143.6</i>	145.4	147.8
145°	153.7	153.7	<i>153.7</i>	154.9	155.5
147.5°	157.9	158.5	<i>159.1</i>	159.1	159.7
150°	159.1	159.1	<i>159.1</i>	159.1	159.7
152.5°	157.3	156.7	<i>153.1</i>	156.1	156.7
155°	148.9	148.4	<i>143.6</i>	147.8	147.8
157.5°	141.8	141.2	<i>136.4</i>	140.6	141.2
160°	136.4	139.4	<i>134.6</i>	138.8	135.8
162.5°	123.3	129.3	<i>126.3</i>	127.5	122.7
165°	113.2	115.6	<i>115.0</i>	114.4	112.0
167.5°	106.6	109.0	<i>107.8</i>	108.4	104.9
170°	100.1	101.9	<i>102.5</i>	100.7	98.3
172.5°	88.8	90.0	<i>91.8</i>	88.8	88.8
175°	82.2	81.0	<i>81.0</i>	81.0	81.0
177.5°	85.2	85.2	<i>85.8</i>	84.0	84.0
180°	88.8	88.8	<i>88.8</i>	88.8	88.8

(END OF REPORT)