

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: P231471

Luminaire Tested: **SSLED-LD5-12-W-UNV-L840-CD1-U-CLR22**

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: P231471
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-5)
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
Description: STEELER CLEAR REFRACTOR LENS
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: 12017.0 lumens
Efficiency: N/A
Efficacy: 140.9 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 1.48 / 1.49
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Direct

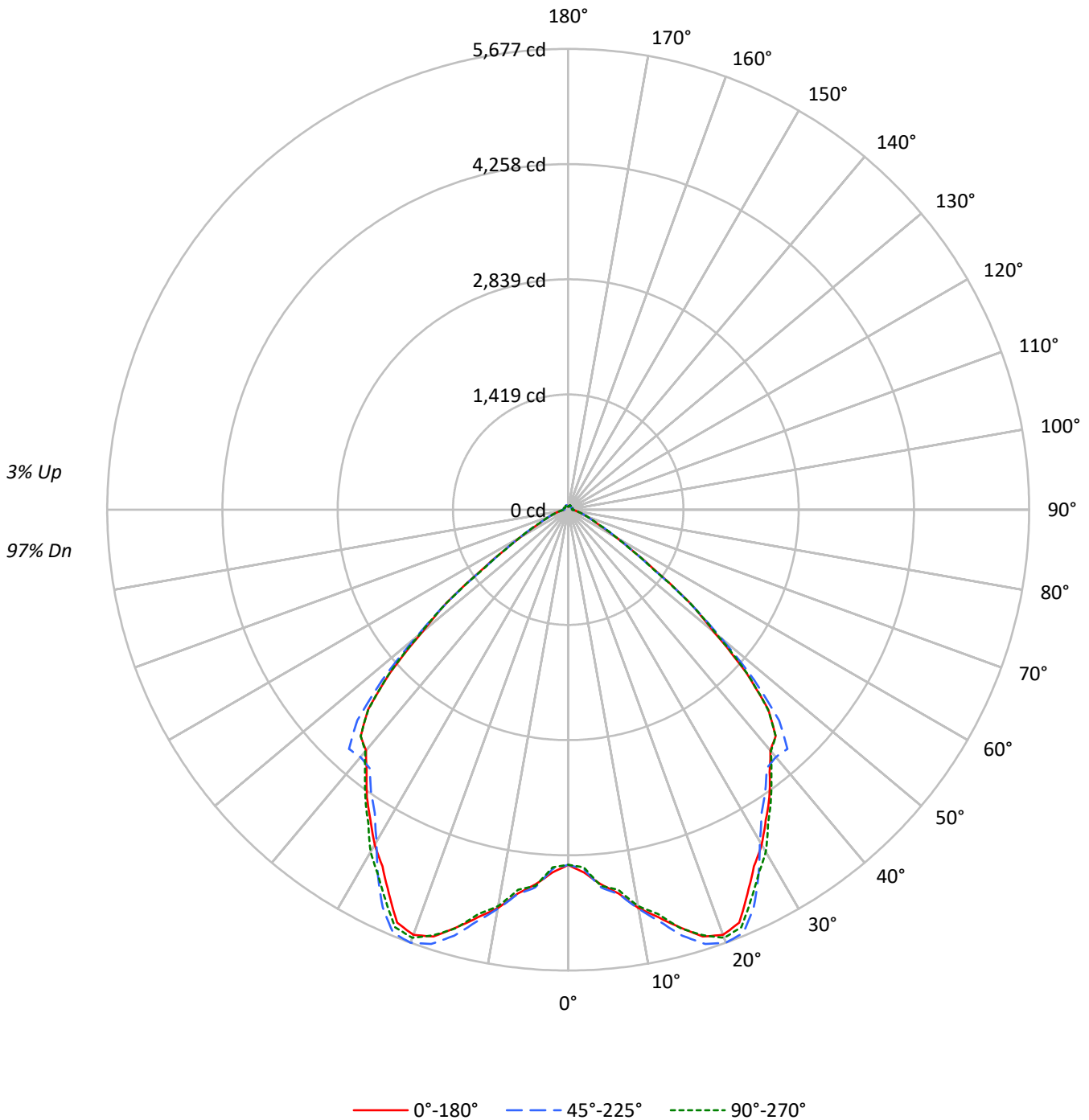
Input Watts (W): 85.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P231471

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-CLR22

Luminous Intensity Polar Plot





TEST NUMBER: P231471

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-CLR22

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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	111	107	103	100	108	104	101	99	100	97	95	95	94	92	92	90	89	86
2	103	96	91	86	100	94	89	85	90	86	82	87	83	80	83	81	78	76
3	95	86	80	74	93	85	78	73	81	76	72	78	74	70	76	72	69	67
4	88	78	70	65	86	76	70	64	74	68	63	71	66	62	69	65	61	59
5	82	71	63	57	80	69	62	57	67	61	56	65	59	55	63	58	54	52
6	76	64	56	51	74	63	56	50	61	55	50	59	54	49	58	53	49	47
7	71	59	51	45	69	58	50	45	56	49	45	54	49	44	53	48	44	42
8	66	54	46	41	64	53	46	41	52	45	40	50	44	40	49	43	39	38
9	62	50	42	37	60	49	42	37	48	41	36	46	40	36	45	40	36	34
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17842	17842	17842
5°	17873	18027	17951
10°	18376	18418	18286
15°	18968	19338	18989
20°	19305	19665	19438
25°	17744	18374	18069
30°	16014	15858	16359
35°	14473	14176	14582
40°	13023	13381	13067
45°	11859	12494	11838
50°	8143	8488	8269
55°	4701	4542	4587
60°	2538	2583	2543
65°	1460	1521	1482
70°	998	1024	1024
75°	707	718	710
80°	527	533	524
85°	377	380	374



TEST NUMBER: P231471

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-CLR22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	451.4	3.8
10°-20°	1530.4	12.7
20°-30°	2454.8	20.4
30°-40°	2699.3	22.5
40°-50°	2626.7	21.9
50°-60°	1259.4	10.5
60°-70°	411.8	3.4
70°-80°	179.5	1.5
80°-90°	82.9	0.7
90°-100°	56.5	0.5
100°-110°	57.3	0.5
110°-120°	51.9	0.4
120°-130°	41.3	0.3
130°-140°	36.4	0.3
140°-150°	33.5	0.3
150°-160°	26.0	0.2
160°-170°	14.1	0.1
170°-180°	3.9	0.0
0°-30°	4436.5	36.9
0°-40°	7135.8	59.4
0°-60°	11021.9	91.7
0°-90°	11696.1	97.3
90°-120°	165.7	1.4
90°-150°	276.9	2.3
90°-180°	321.0	2.7
0°-180°	12017.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4376	4376	4376	4376	4376	
5°	4632	4629	4672	4654	4652	452
15°	5330	5389	5433	5370	5335	1516
25°	5221	5403	5407	5465	5317	2400
35°	4322	4228	4233	4270	4354	2698
45°	3485	3441	3672	3445	3478	2568
55°	1317	1324	1272	1312	1285	1255
65°	377	384	392	391	382	403
75°	161	162	164	162	162	178
85°	72	72	73	73	71	67
90°	50	52	52	52	51	28
95°	48	47	48	49	50	41
105°	59	54	54	51	55	58
115°	50	54	53	53	52	52
125°	44	44	44	45	46	41
135°	47	46	45	46	48	37
145°	54	53	54	54	55	33
155°	57	57	57	57	56	26
165°	50	50	50	49	48	14
175°	40	40	39	39	40	4
180°	40	40	40	40	40	



TEST NUMBER: P231471

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-CLR22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4375.6	4375.6	4375.6	4375.6	4375.6
2.5°	4473.1	4450.2	4428.5	4412.6	4408.8
5°	4631.8	4628.6	4671.9	4654.1	4652.2
7.5°	4768.8	4777.1	4775.2	4752.2	4722.3
10°	4981.6	4983.5	4993.1	4980.3	4957.4
12.5°	5143.5	5216.8	5194.4	5171.5	5100.1
15°	5329.5	5388.8	5433.4	5370.3	5335.3
17.5°	5513.0	5576.1	5609.3	5593.3	5495.2
20°	5573.6	5671.7	5677.4	5692.7	5611.8
22.5°	5505.4	5617.5	5638.6	5667.9	5567.8
25°	5221.2	5403.4	5406.6	5465.3	5316.8
27.5°	4953.6	5107.2	5074.7	5183.6	5070.8
30°	4765.0	4791.7	4718.5	4856.1	4867.6
32.5°	4530.5	4464.2	4432.4	4497.4	4582.1
35°	4321.5	4228.5	4232.9	4270.5	4354.0
37.5°	4076.8	4141.8	4015.6	4194.0	4109.9
40°	3872.3	3997.8	3978.7	4028.4	3885.6
42.5°	3781.8	3769.7	3996.5	3777.3	3782.4
45°	3484.8	3440.9	3671.5	3444.7	3478.5
47.5°	2971.3	3114.6	3106.3	3157.3	2989.7
50°	2346.2	2492.7	2445.6	2553.9	2382.5
52.5°	1894.4	1831.3	1881.6	1851.1	1894.4
55°	1317.1	1323.5	1272.5	1312.0	1285.2
57.5°	934.1	955.2	936.7	935.4	925.9
60°	685.6	688.2	697.7	695.8	686.9
62.5°	501.5	506.6	517.4	516.8	511.0
65°	376.6	383.6	392.5	390.6	382.3
67.5°	293.7	301.4	303.3	304.6	305.9
70°	243.4	246.0	249.8	249.8	249.8
72.5°	202.6	205.8	206.5	207.1	205.8
75°	161.2	162.5	163.8	162.5	161.8
77.5°	133.2	133.2	132.5	131.9	132.5
80°	110.9	111.5	112.1	110.9	110.2
82.5°	90.5	91.1	91.8	91.1	91.1
85°	72.0	72.0	72.6	72.6	71.4
87.5°	59.3	59.3	59.3	59.9	59.3
90°	50.3	51.6	51.6	52.3	51.0
92.5°	45.2	46.5	46.5	47.8	46.5
95°	47.8	47.2	47.8	49.1	49.7
97.5°	53.5	54.8	56.7	58.6	56.7
100°	56.1	60.5	61.8	61.8	58.0
102.5°	54.8	54.2	56.7	55.4	57.3
105°	58.6	53.5	53.5	51.0	55.4
107.5°	51.6	54.2	45.9	54.2	51.0
110°	52.3	51.0	50.3	52.3	52.9



TEST NUMBER: P231471

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L840-CD1-U-CLR22

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.5	49.1	52.9	49.1	53.5
115°	50.3	53.5	52.9	52.9	51.6
117.5°	52.3	53.5	54.8	55.4	52.3
120°	51.0	49.1	51.0	52.3	52.3
122.5°	45.9	45.2	45.9	47.2	49.7
125°	44.0	44.0	44.0	44.6	45.9
127.5°	44.6	44.6	44.0	44.6	45.2
130°	46.5	45.9	46.5	46.5	47.2
132.5°	47.2	46.5	45.2	46.5	48.4
135°	47.2	46.5	45.2	46.5	47.8
137.5°	47.8	47.2	47.2	47.2	48.4
140°	49.1	49.7	49.7	49.7	49.7
142.5°	51.6	51.6	51.6	51.6	52.9
145°	53.5	52.9	53.5	53.5	54.8
147.5°	55.4	54.8	55.4	55.4	56.1
150°	56.7	56.1	56.7	56.7	56.7
152.5°	57.3	56.7	57.3	57.3	57.3
155°	56.7	56.7	56.7	56.7	56.1
157.5°	55.4	55.4	55.4	55.4	54.8
160°	54.2	54.8	54.2	54.2	53.5
162.5°	52.3	52.3	52.3	51.6	51.6
165°	50.3	49.7	49.7	49.1	48.4
167.5°	47.8	47.2	46.5	46.5	45.9
170°	44.0	44.0	44.0	43.3	43.3
172.5°	40.1	39.5	39.5	39.5	38.9
175°	39.5	39.5	38.9	38.9	39.5
177.5°	39.5	39.5	40.1	39.5	39.5
180°	40.1	40.1	40.1	40.1	40.1

(END OF REPORT)