

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: P231499

Luminaire Tested: **SSLED-LD5-18-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: P231499
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-LD5-18-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: 17349.0 lumens
Efficiency: N/A
Efficacy: 129.7 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

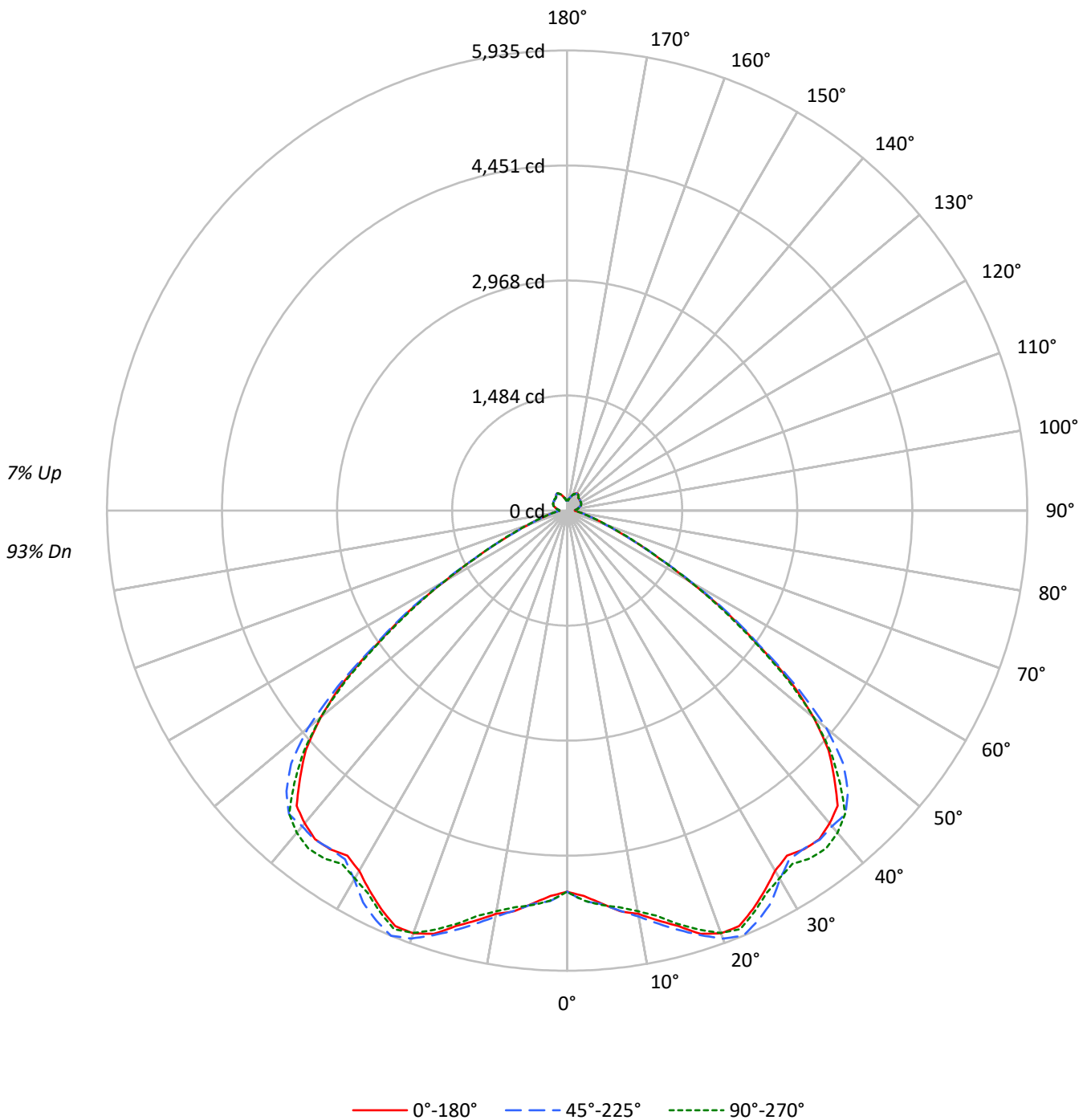
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	24255	24255	24255
5°	23360	23400	23461
10°	22863	23016	22710
15°	22879	23103	22756
20°	23000	23288	22981
25°	21810	22428	21964
30°	20180	20648	20602
35°	19776	19740	20298
40°	19406	19586	19988
45°	17974	18889	18366
50°	15451	16238	15458
55°	11275	11435	11138
60°	7060	7238	7119
65°	3977	3973	4054
70°	2211	2170	2311
75°	1320	1333	1354
80°	925	916	921
85°	635	640	635



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CATALOG NUMBER: SSLED-LD5-18-W-UNV-L850-CD1-U-CLR22-CLCDL22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.0	2.8
10°-20°	1581.0	9.1
20°-30°	2631.8	15.2
30°-40°	3385.4	19.5
40°-50°	3825.0	22.0
50°-60°	2716.5	15.7
60°-70°	1047.8	6.0
70°-80°	344.6	2.0
80°-90°	146.7	0.8
90°-100°	125.6	0.7
100°-110°	170.8	1.0
110°-120°	196.4	1.1
120°-130°	187.0	1.1
130°-140°	167.5	1.0
140°-150°	152.6	0.9
150°-160°	110.4	0.6
160°-170°	54.1	0.3
170°-180°	13.7	0.1
0°-30°	4704.8	27.1
0°-40°	8090.2	46.6
0°-60°	14631.8	84.3
0°-90°	16170.8	93.2
90°-120°	492.7	2.8
90°-150°	999.9	5.8
90°-180°	1178.0	6.8
0°-180°	17349.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4916	4916	4916	4916	4916	
5°	5084	5082	5093	5070	5106	492
15°	5549	5574	5603	5556	5519	1583
25°	5671	5643	5832	5685	5712	2606
35°	5332	5335	5323	5424	5473	3340
45°	4872	4948	5120	5024	4978	3728
55°	2979	3055	3021	3017	2943	2680
65°	992	976	991	992	1011	1040
75°	300	306	302	304	307	344
85°	125	126	126	126	125	118
90°	99	100	100	100	100	55
95°	109	109	110	111	112	96
105°	164	162	157	160	159	172
115°	199	198	198	200	201	196
125°	208	208	210	209	210	186
135°	215	214	215	218	220	167
145°	247	247	247	249	250	152
155°	239	238	231	237	237	111
165°	182	186	185	184	180	53
175°	132	130	130	130	130	14
180°	143	143	143	143	143	



TEST NUMBER: P231499

CATALOG NUMBER: SSLED-LD5-18-W-UNV-L850-CD1-U-CLR22-CLCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4916.0	4916.0	4916.0	4916.0	4916.0
2.5°	4975.3	5032.8	5040.4	4998.3	5035.6
5°	5084.5	5081.6	5093.1	5070.1	5106.5
7.5°	5211.8	5194.6	5203.2	5174.5	5159.1
10°	5280.7	5276.9	5316.1	5275.0	5245.3
12.5°	5412.8	5405.2	5458.8	5397.5	5353.5
15°	5548.8	5573.7	5603.3	5556.4	5519.1
17.5°	5724.0	5668.4	5742.2	5661.7	5666.5
20°	5801.5	5724.0	5874.3	5735.5	5796.7
22.5°	5800.6	5756.5	5934.6	5721.1	5841.7
25°	5671.3	5642.6	5832.1	5684.7	5711.5
27.5°	5521.0	5575.6	5699.1	5625.4	5564.1
30°	5365.0	5535.4	5489.4	5613.9	5477.0
32.5°	5276.9	5440.6	5333.4	5531.5	5404.2
35°	5332.4	5335.3	5322.8	5424.3	5473.1
37.5°	5342.0	5303.7	5351.6	5377.4	5489.4
40°	5266.4	5287.4	5315.2	5378.4	5424.3
42.5°	5164.9	5188.8	5311.4	5266.4	5306.6
45°	4871.9	4947.6	5119.9	5024.1	4978.2
47.5°	4574.2	4753.2	4830.8	4806.8	4613.4
50°	4151.0	4300.4	4362.6	4349.2	4153.0
52.5°	3641.7	3665.7	3726.0	3677.2	3589.1
55°	2979.3	3054.9	3021.4	3016.6	2942.9
57.5°	2430.7	2474.7	2466.1	2453.7	2369.4
60°	1819.9	1854.4	1865.9	1862.0	1835.2
62.5°	1347.9	1354.6	1359.4	1379.5	1343.2
65°	991.8	975.5	990.9	991.8	1011.0
67.5°	710.4	704.6	713.2	718.0	741.9
70°	528.5	521.8	518.9	534.2	552.4
72.5°	405.0	399.2	402.1	408.8	411.7
75°	299.6	306.4	302.5	304.4	307.3
77.5°	238.4	237.4	235.5	236.5	239.3
80°	197.2	195.3	195.3	193.4	196.3
82.5°	157.0	158.9	158.0	158.9	158.9
85°	125.4	126.4	126.4	126.4	125.4
87.5°	105.3	106.3	105.3	107.2	106.3
90°	98.6	99.6	99.6	100.5	99.6
92.5°	100.5	102.4	102.4	104.4	103.4
95°	109.1	109.1	110.1	111.1	112.0
97.5°	124.5	125.4	127.3	128.3	128.3
100°	138.8	140.7	141.7	142.6	144.6
102.5°	147.4	147.4	147.4	149.3	149.3
105°	163.7	161.8	157.0	159.9	158.9
107.5°	175.2	173.3	172.3	175.2	177.1
110°	187.6	185.7	184.8	187.6	189.6



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CATALOG NUMBER: SSLED-LD5-18-W-UNV-L850-CD1-U-CLR22-CLCDL22

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	193.4	192.4	192.4	194.3	196.3
115°	199.1	198.2	198.2	200.1	201.0
117.5°	202.0	202.0	203.9	203.9	204.9
120°	203.0	203.9	205.8	205.8	205.8
122.5°	205.8	204.9	207.7	206.8	207.7
125°	207.7	207.7	209.7	208.7	209.7
127.5°	209.7	208.7	210.6	210.6	210.6
130°	211.6	211.6	213.5	213.5	213.5
132.5°	213.5	212.5	214.4	215.4	217.3
135°	215.4	214.4	215.4	218.3	220.2
137.5°	217.3	216.4	216.4	219.2	222.1
140°	220.2	221.1	219.2	222.1	223.1
142.5°	233.6	233.6	230.7	233.6	237.4
145°	247.0	247.0	247.0	248.9	249.9
147.5°	253.7	254.7	255.6	255.6	256.6
150°	255.6	255.6	255.6	255.6	256.6
152.5°	252.7	251.8	246.0	250.8	251.8
155°	239.3	238.4	230.7	237.4	237.4
157.5°	227.8	226.9	219.2	225.9	226.9
160°	219.2	224.0	216.4	223.1	218.3
162.5°	198.2	207.7	203.0	204.9	197.2
165°	181.9	185.7	184.8	183.8	180.0
167.5°	171.4	175.2	173.3	174.2	168.5
170°	160.8	163.7	164.7	161.8	158.0
172.5°	142.6	144.6	147.4	142.6	142.6
175°	132.1	130.2	130.2	130.2	130.2
177.5°	136.9	136.9	137.9	135.0	135.0
180°	142.6	142.6	142.6	142.6	142.6

(END OF REPORT)