

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: P231519

Luminaire Tested: **SSLED-LD5-18-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: P231519
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-LD5-18-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: 16396.0 lumens
Efficiency: N/A
Efficacy: 122.5 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

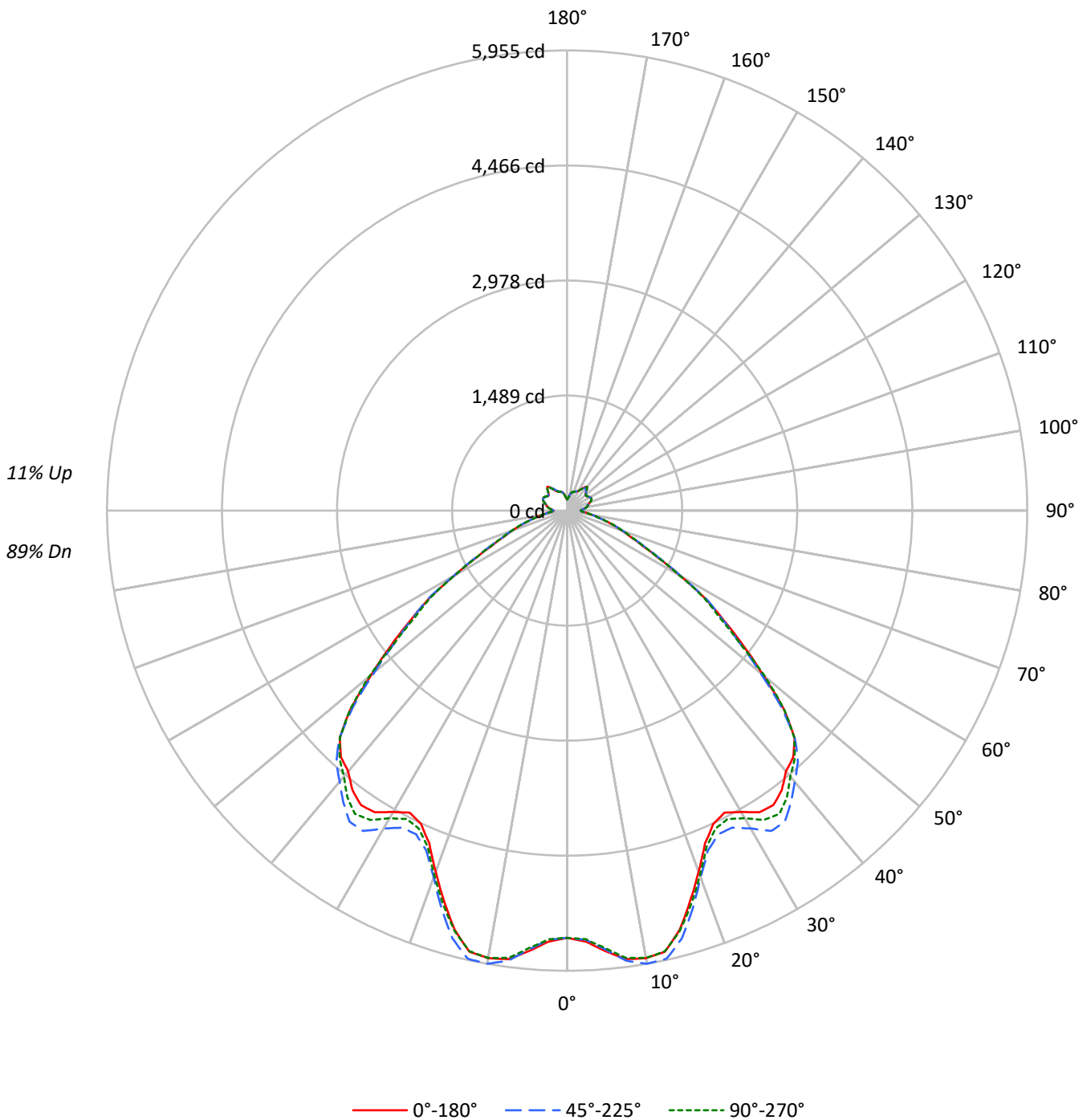
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	22540	22540	22540
5°	22086	21996	21932
10°	21692	21965	21685
15°	19998	20397	20037
20°	17228	17478	17402
25°	15207	15708	15434
30°	15132	15961	15447
35°	15583	16453	16040
40°	14821	15407	15108
45°	14166	14192	14148
50°	11485	11324	11604
55°	8833	8733	8571
60°	6276	6317	6225
65°	4165	4280	4215
70°	3085	3119	3131
75°	2243	2247	2247
80°	1601	1579	1593
85°	1117	1122	1122



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	552.1	3.4
10°-20°	1572.5	9.6
20°-30°	2166.9	13.2
30°-40°	2947.6	18.0
40°-50°	3142.0	19.2
50°-60°	2216.2	13.5
60°-70°	1131.2	6.9
70°-80°	554.1	3.4
80°-90°	251.3	1.5
90°-100°	232.0	1.4
100°-110°	298.0	1.8
110°-120°	337.2	2.1
120°-130°	290.2	1.8
130°-140°	270.0	1.6
140°-150°	220.1	1.3
150°-160°	128.1	0.8
160°-170°	69.2	0.4
170°-180°	17.3	0.1
0°-30°	4291.5	26.2
0°-40°	7239.1	44.2
0°-60°	12597.4	76.8
0°-90°	14534.0	88.6
90°-120°	867.1	5.3
90°-150°	1647.5	10.0
90°-180°	1862.0	11.4
0°-180°	16396.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5528	5528	5528	5528	5528	
5°	5724	5712	5700	5682	5684	552
15°	5619	5668	5731	5670	5630	1558
25°	4475	4630	4622	4678	4541	2109
35°	4653	4663	4913	4733	4789	2873
45°	4163	4147	4170	4186	4157	3116
55°	2475	2498	2447	2456	2402	2223
65°	1075	1087	1104	1093	1088	1116
75°	511	509	512	508	512	553
85°	213	214	214	213	214	202
90°	176	177	176	178	178	99
95°	211	210	209	212	212	181
105°	283	280	276	278	279	299
115°	346	345	344	345	349	337
125°	319	318	320	320	322	290
135°	348	347	348	354	354	271
145°	354	349	354	349	349	222
155°	270	271	274	271	273	126
165°	246	244	244	242	246	69
175°	167	166	164	166	166	17
180°	144	144	144	144	144	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5527.9	5527.9	5527.9	5527.9	5527.9
2.5°	5583.5	5574.3	5559.4	5555.7	5552.9
5°	5723.7	5711.6	5700.5	5681.9	5683.8
7.5°	5855.4	5862.8	5875.8	5853.6	5838.7
10°	5880.5	5908.3	5954.7	5916.7	5878.6
12.5°	5847.1	5891.6	5940.8	5885.1	5840.6
15°	5618.8	5668.0	5731.1	5669.8	5629.9
17.5°	5295.9	5337.6	5403.5	5334.8	5340.4
20°	4973.9	5019.3	5046.2	5061.1	5024.0
22.5°	4661.1	4780.8	4761.4	4818.9	4710.3
25°	4474.6	4630.5	4622.2	4677.8	4541.4
27.5°	4406.9	4588.8	4624.0	4626.8	4497.8
30°	4502.5	4574.8	4749.3	4626.8	4596.2
32.5°	4629.6	4603.6	4916.3	4678.8	4746.5
35°	4652.8	4663.0	4912.6	4732.6	4789.2
37.5°	4561.9	4675.1	4757.6	4747.4	4673.2
40°	4406.9	4588.8	4581.3	4634.2	4492.3
42.5°	4330.8	4419.9	4419.9	4457.9	4358.6
45°	4162.8	4147.1	4170.3	4186.0	4157.3
47.5°	3802.8	3773.1	3758.2	3813.0	3810.2
50°	3309.1	3289.6	3262.7	3327.7	3343.4
52.5°	2878.5	2837.7	2812.6	2831.2	2813.6
55°	2474.9	2498.1	2447.0	2456.3	2401.6
57.5°	2117.6	2169.6	2146.4	2138.9	2098.1
60°	1695.4	1731.6	1706.5	1717.7	1681.5
62.5°	1333.5	1358.5	1369.7	1365.0	1346.5
65°	1074.6	1086.6	1104.3	1093.1	1087.6
67.5°	887.1	898.3	902.9	900.1	903.8
70°	752.6	755.4	760.9	752.6	763.7
72.5°	630.1	635.7	635.7	636.6	642.1
75°	511.3	509.4	512.2	508.5	512.2
77.5°	411.1	411.1	409.2	407.4	412.9
80°	336.8	333.1	332.2	331.3	335.0
82.5°	268.2	269.1	269.1	268.2	267.3
85°	213.4	214.4	214.4	213.4	214.4
87.5°	183.7	183.7	184.7	184.7	183.7
90°	176.3	177.2	176.3	178.2	178.2
92.5°	188.4	188.4	189.3	191.2	190.2
95°	210.6	209.7	208.8	211.6	212.5
97.5°	232.0	231.1	232.9	234.8	236.6
100°	256.1	256.1	258.0	258.9	260.8
102.5°	266.3	266.3	265.4	268.2	270.0
105°	283.0	280.2	276.5	277.5	279.3
107.5°	296.0	295.1	294.2	296.0	296.9
110°	315.5	314.6	314.6	314.6	316.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.0	335.0	334.1	335.0	336.8
115°	346.1	345.2	344.3	345.2	348.9
117.5°	348.9	348.9	347.1	349.8	352.6
120°	344.3	343.3	343.3	345.2	348.0
122.5°	332.2	331.3	331.3	333.1	335.9
125°	319.2	318.3	320.1	320.1	322.0
127.5°	309.9	310.9	312.7	310.9	311.8
130°	311.8	312.7	316.4	313.7	313.7
132.5°	322.0	322.9	329.4	327.6	327.6
135°	348.0	347.1	348.0	353.6	354.5
137.5°	377.7	370.3	360.0	378.6	383.2
140°	402.7	382.3	378.6	387.0	400.9
142.5°	384.2	373.0	363.8	374.9	383.2
145°	353.6	348.9	354.5	348.9	348.9
147.5°	318.3	324.8	336.8	320.1	319.2
150°	291.4	304.4	309.0	299.7	293.2
152.5°	279.3	284.9	287.7	283.0	283.0
155°	270.0	271.0	273.7	271.0	272.8
157.5°	263.5	266.3	266.3	266.3	265.4
160°	258.0	261.7	260.8	260.8	258.9
162.5°	254.3	256.1	255.2	255.2	255.2
165°	245.9	244.1	244.1	242.2	245.9
167.5°	232.0	229.2	229.2	228.3	231.1
170°	214.4	214.4	213.4	213.4	211.6
172.5°	185.6	184.7	183.7	183.7	183.7
175°	167.0	166.1	164.2	166.1	166.1
177.5°	153.1	153.1	154.0	152.2	152.2
180°	143.8	143.8	143.8	143.8	143.8

(END OF REPORT)