

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: P231498

Luminaire Tested: **SSLED-LD5-18-W-UNV-L840-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: P231498
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-L840-CD1-U-CLR22-CLCDL22
Description: STEELER CLEAR REFRACTOR LENS AND CONICAL 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: 16817.0 lumens
Efficiency: N/A
Efficacy: 125.7 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

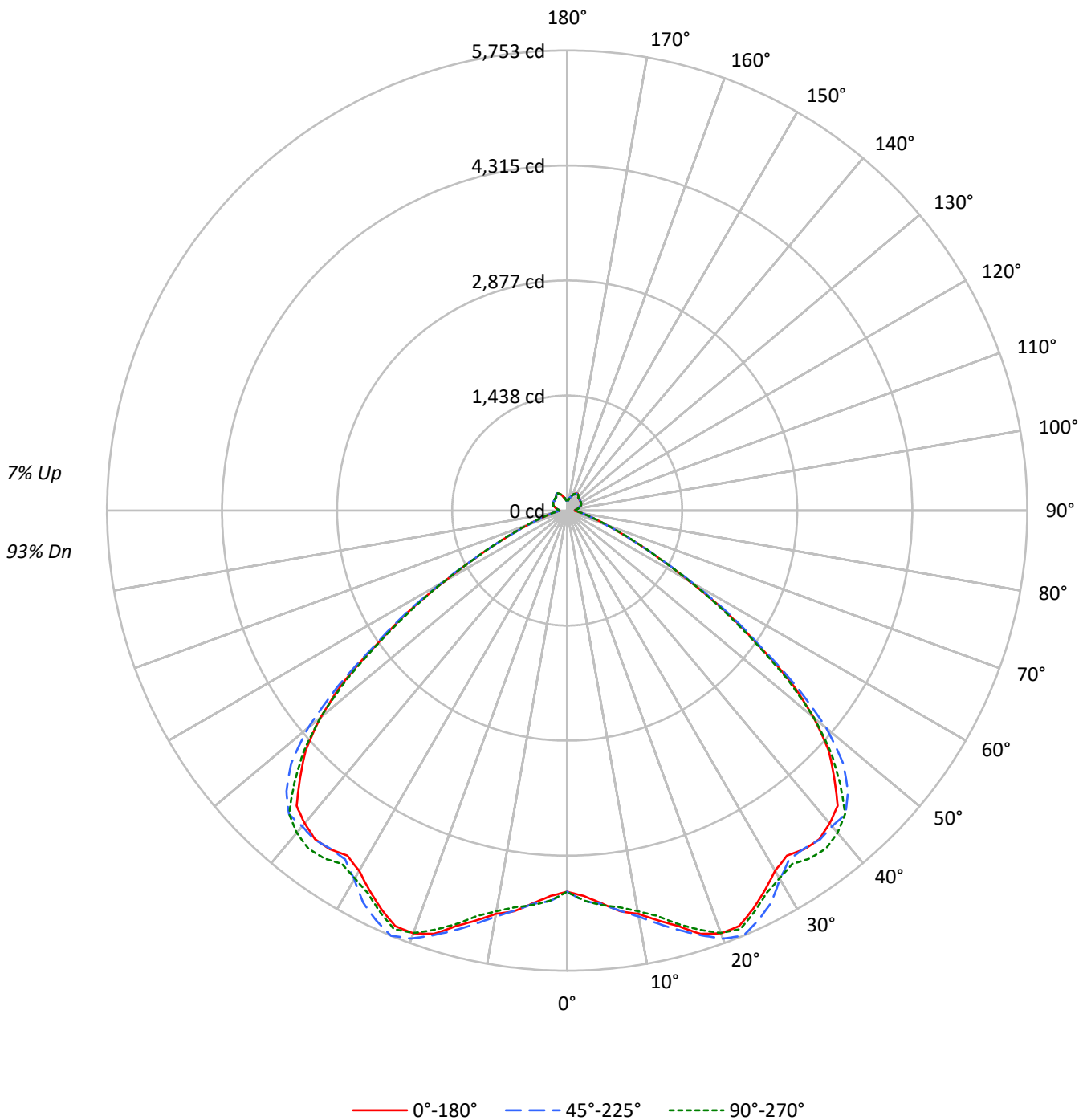
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93					93			
1	109	105	101	98	105	102	98	95	96	94	91	91	89	87	87	85	84	81					81			
2	100	93	87	82	97	90	85	80	86	81	77	82	78	75	78	75	72	70					70			
3	92	82	75	69	89	80	73	68	76	71	66	73	68	64	69	65	62	60					60			
4	84	73	65	59	81	71	64	58	68	62	57	65	60	55	62	58	54	52					52			
5	78	66	57	51	75	64	56	50	61	54	49	59	53	48	56	51	47	45					45			
6	72	59	51	44	69	58	50	44	55	48	43	53	47	42	51	46	41	39					39			
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35					35			
8	62	49	40	35	60	48	40	34	46	39	34	44	38	33	42	37	33	31					31			
9	57	44	36	31	56	44	36	31	42	35	30	40	34	30	39	33	29	28					28			
10	54	41	33	28	52	40	33	28	39	32	27	37	31	27	36	30	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23511	23511	23511
5°	22644	22682	22742
10°	22162	22310	22013
15°	22177	22395	22059
20°	22294	22574	22276
25°	21141	21740	21291
30°	19561	20015	19970
35°	19170	19135	19675
40°	18811	18985	19375
45°	17423	18310	17803
50°	14977	15740	14984
55°	10930	11084	10796
60°	6843	7016	6901
65°	3855	3852	3930
70°	2142	2104	2239
75°	1280	1292	1313
80°	897	888	893
85°	615	620	615



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CATALOG NUMBER: SSLED-LD5-18-W-UNV-L840-CD1-U-CLR22-CLCDL22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	476.9	2.8
10°-20°	1532.5	9.1
20°-30°	2551.1	15.2
30°-40°	3281.6	19.5
40°-50°	3707.7	22.0
50°-60°	2633.2	15.7
60°-70°	1015.7	6.0
70°-80°	334.0	2.0
80°-90°	142.1	0.8
90°-100°	121.7	0.7
100°-110°	165.6	1.0
110°-120°	190.3	1.1
120°-130°	181.3	1.1
130°-140°	162.4	1.0
140°-150°	147.9	0.9
150°-160°	107.0	0.6
160°-170°	52.5	0.3
170°-180°	13.3	0.1
0°-30°	4560.5	27.1
0°-40°	7842.1	46.6
0°-60°	14183.1	84.3
0°-90°	15674.9	93.2
90°-120°	477.6	2.8
90°-150°	969.3	5.8
90°-180°	1142.0	6.8
0°-180°	16817.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4765	4765	4765	4765	4765	
5°	4928	4926	4937	4915	4950	477
15°	5379	5403	5432	5386	5350	1535
25°	5497	5470	5653	5510	5536	2526
35°	5169	5172	5160	5258	5305	3237
45°	4722	4796	4963	4870	4826	3614
55°	2888	2961	2929	2924	2853	2597
65°	961	946	960	961	980	1008
75°	290	297	293	295	298	334
85°	122	122	122	122	122	114
90°	96	96	96	97	96	54
95°	106	106	107	108	109	93
105°	159	157	152	155	154	166
115°	193	192	192	194	195	190
125°	201	201	203	202	203	180
135°	209	208	209	212	213	162
145°	239	239	239	241	242	148
155°	232	231	224	230	230	108
165°	176	180	179	178	174	52
175°	128	126	126	126	126	13
180°	138	138	138	138	138	



TEST NUMBER: P231498

CATALOG NUMBER: SSLED-LD5-18-W-UNV-L840-CD1-U-CLR22-CLCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4765.2	4765.2	4765.2	4765.2	4765.2
2.5°	4822.8	4878.4	4885.9	4845.0	4881.2
5°	4928.5	4925.8	4936.9	4914.6	4949.9
7.5°	5052.0	5035.3	5043.6	5015.8	5000.9
10°	5118.8	5115.1	5153.1	5113.2	5084.5
12.5°	5246.8	5239.4	5291.4	5232.0	5189.3
15°	5378.6	5402.8	5431.5	5386.0	5349.9
17.5°	5548.4	5494.6	5566.1	5488.1	5492.8
20°	5623.6	5548.4	5694.1	5559.6	5619.0
22.5°	5622.7	5580.0	5752.6	5545.7	5662.6
25°	5497.4	5469.6	5653.3	5510.4	5536.4
27.5°	5351.7	5404.6	5524.3	5452.9	5393.5
30°	5200.4	5365.6	5321.1	5441.7	5309.0
32.5°	5115.1	5273.8	5169.8	5361.9	5238.5
35°	5168.9	5171.7	5159.6	5258.0	5305.3
37.5°	5178.2	5141.1	5187.5	5212.5	5321.1
40°	5104.9	5125.3	5152.2	5213.4	5258.0
42.5°	5006.5	5029.7	5148.5	5104.9	5143.8
45°	4722.5	4795.8	4962.9	4870.1	4825.5
47.5°	4433.9	4607.5	4682.6	4659.4	4472.0
50°	4023.8	4168.5	4228.8	4215.9	4025.6
52.5°	3530.1	3553.3	3611.7	3564.4	3479.0
55°	2887.9	2961.2	2928.7	2924.1	2852.6
57.5°	2356.2	2398.9	2390.5	2378.4	2296.8
60°	1764.1	1797.5	1808.6	1804.9	1779.0
62.5°	1306.6	1313.1	1317.7	1337.2	1302.0
65°	961.4	945.6	960.5	961.4	980.0
67.5°	688.6	683.0	691.4	696.0	719.2
70°	512.2	505.8	503.0	517.8	535.4
72.5°	392.5	387.0	389.8	396.3	399.0
75°	290.5	297.0	293.2	295.1	297.9
77.5°	231.1	230.1	228.3	229.2	232.0
80°	191.2	189.3	189.3	187.5	190.2
82.5°	152.2	154.0	153.1	154.0	154.0
85°	121.6	122.5	122.5	122.5	121.6
87.5°	102.1	103.0	102.1	103.9	103.0
90°	95.6	96.5	96.5	97.4	96.5
92.5°	97.4	99.3	99.3	101.2	100.2
95°	105.8	105.8	106.7	107.6	108.6
97.5°	120.6	121.6	123.4	124.4	124.4
100°	134.6	136.4	137.3	138.3	140.1
102.5°	142.9	142.9	142.9	144.8	144.8
105°	158.7	156.8	152.2	155.0	154.0
107.5°	169.8	168.0	167.0	169.8	171.7
110°	181.9	180.0	179.1	181.9	183.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	187.5	186.5	186.5	188.4	190.2
115°	193.0	192.1	192.1	193.9	194.9
117.5°	195.8	195.8	197.7	197.7	198.6
120°	196.7	197.7	199.5	199.5	199.5
122.5°	199.5	198.6	201.4	200.4	201.4
125°	201.4	201.4	203.2	202.3	203.2
127.5°	203.2	202.3	204.2	204.2	204.2
130°	205.1	205.1	206.9	206.9	206.9
132.5°	206.9	206.0	207.9	208.8	210.7
135°	208.8	207.9	208.8	211.6	213.4
137.5°	210.7	209.7	209.7	212.5	215.3
140°	213.4	214.4	212.5	215.3	216.2
142.5°	226.4	226.4	223.6	226.4	230.1
145°	239.4	239.4	239.4	241.3	242.2
147.5°	245.9	246.8	247.8	247.8	248.7
150°	247.8	247.8	247.8	247.8	248.7
152.5°	245.0	244.1	238.5	243.1	244.1
155°	232.0	231.1	223.6	230.1	230.1
157.5°	220.9	219.9	212.5	219.0	219.9
160°	212.5	217.1	209.7	216.2	211.6
162.5°	192.1	201.4	196.7	198.6	191.2
165°	176.3	180.0	179.1	178.2	174.5
167.5°	166.1	169.8	168.0	168.9	163.3
170°	155.9	158.7	159.6	156.8	153.1
172.5°	138.3	140.1	142.9	138.3	138.3
175°	128.1	126.2	126.2	126.2	126.2
177.5°	132.7	132.7	133.6	130.8	130.8
180°	138.3	138.3	138.3	138.3	138.3

(END OF REPORT)