

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: P231435

Luminaire Tested: **SSLED-LD5-18-W-UNV-L840-CD1-U-FRR22-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: P231435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-3)
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-FRR22-CLCDL22
Description: STEELER WHITE 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: 17110.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.43 / 1.55
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 1.17')
CIE Type: Semi-Direct

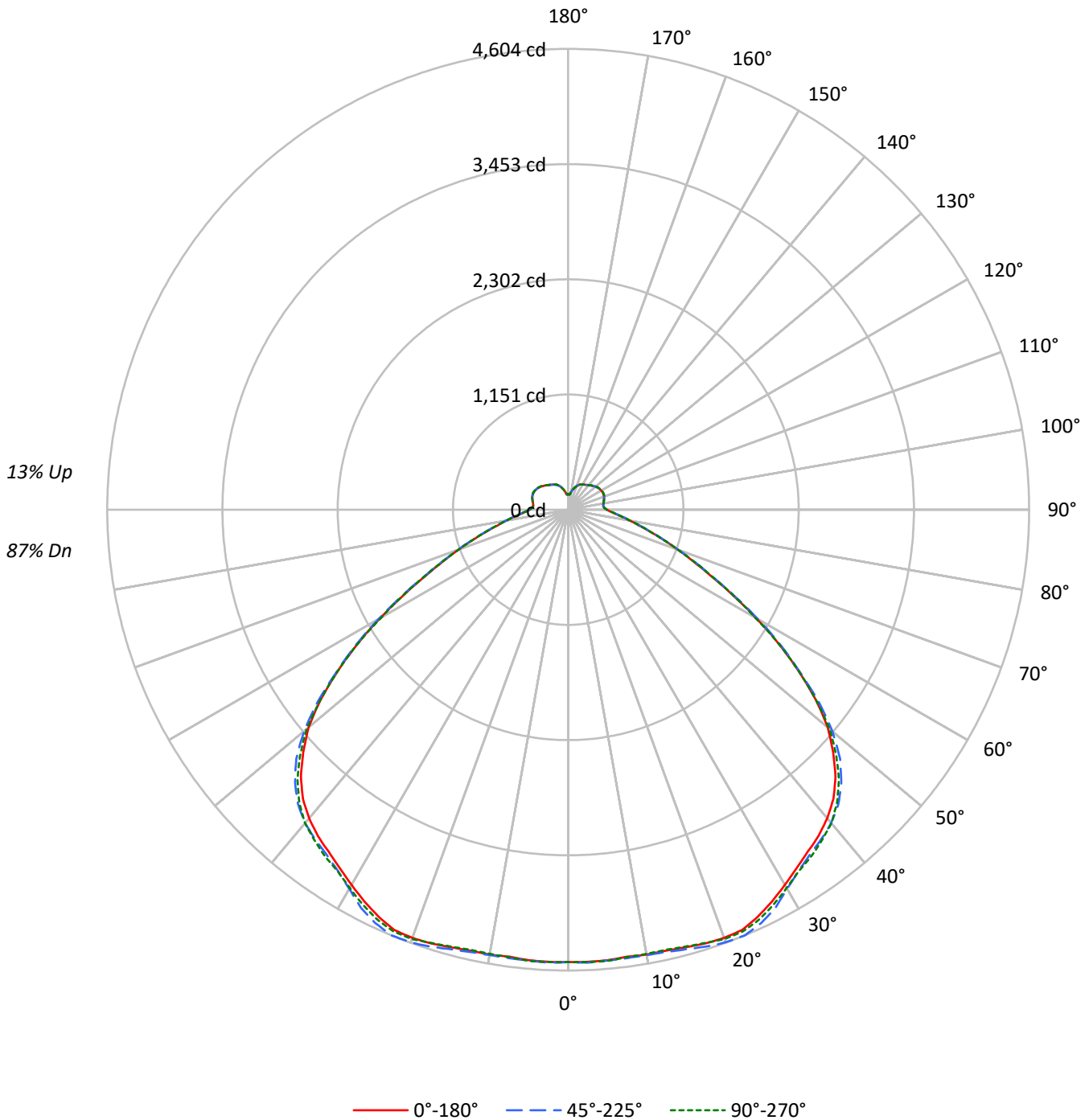
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P231435

CATALOG NUMBER: SSLED-LD5-18-W-UNV-L840-CD1-U-FRR22-CLCDL22

Luminous Intensity Polar Plot





TEST NUMBER: P231435

CATALOG NUMBER: SSLED-LD5-18-W-UNV-L840-CD1-U-FRR22-CLCDL22

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	0	
RCR																						
0	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87				
1	106	101	96	92	101	97	93	90	91	87	85	85	82	80	79	77	75	72				
2	96	88	81	75	92	85	79	73	79	74	70	74	70	66	69	66	63	60				
3	87	77	69	62	84	74	67	61	70	63	58	65	60	56	61	57	53	51				
4	80	68	59	53	77	66	58	52	62	55	50	58	52	48	54	50	46	43				
5	73	61	52	45	70	59	50	44	55	48	43	52	46	41	49	44	39	37				
6	68	54	45	39	65	53	44	38	50	42	37	47	41	36	44	39	35	32				
7	62	49	40	34	60	48	40	34	45	38	33	42	36	32	40	35	31	28				
8	58	45	36	30	56	43	35	30	41	34	29	39	33	28	37	31	27	25				
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	28	24	22				
10	51	37	30	24	49	37	29	24	35	28	23	33	27	23	31	26	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22301	22301	22301
5°	20755	20772	20789
10°	19542	19558	19510
15°	18660	18744	18633
20°	18045	18236	18096
25°	17247	17526	17368
30°	16276	16451	16416
35°	15473	15604	15690
40°	14830	15059	15066
45°	13927	14232	14105
50°	12593	12818	12690
55°	10624	10680	10634
60°	8405	8488	8359
65°	6341	6412	6371
70°	4871	4891	4852
75°	3721	3770	3733
80°	2940	2965	2931
85°	2381	2418	2404



TEST NUMBER: P231435

CATALOG NUMBER: SSLED-LD5-18-W-UNV-L840-CD1-U-FRR22-CLCDL22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	430.9	2.5
10°-20°	1286.6	7.5
20°-30°	2081.7	12.2
30°-40°	2646.1	15.5
40°-50°	2933.4	17.1
50°-60°	2513.0	14.7
60°-70°	1607.3	9.4
70°-80°	916.6	5.4
80°-90°	532.0	3.1
90°-100°	393.3	2.3
100°-110°	391.1	2.3
110°-120°	382.3	2.2
120°-130°	334.7	2.0
130°-140°	263.2	1.5
140°-150°	191.6	1.1
150°-160°	127.1	0.7
160°-170°	63.5	0.4
170°-180°	15.6	0.1
0°-30°	3799.2	22.2
0°-40°	6445.3	37.7
0°-60°	11891.6	69.5
0°-90°	14947.4	87.4
90°-120°	1166.7	6.8
90°-150°	1956.3	11.4
90°-180°	2163.0	12.6
0°-180°	17110.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4520	4520	4520	4520	4520	
5°	4517	4516	4521	4516	4525	431
15°	4526	4534	4546	4530	4519	1284
25°	4485	4512	4557	4513	4516	2066
35°	4172	4213	4207	4232	4231	2619
45°	3775	3806	3858	3832	3823	2895
55°	2807	2822	2822	2816	2810	2500
65°	1581	1596	1599	1601	1589	1597
75°	844	848	856	850	847	912
85°	470	477	478	474	475	419
90°	385	386	388	386	385	213
95°	352	352	354	353	353	289
105°	368	369	370	370	370	390
115°	385	386	386	388	388	381
125°	372	373	374	375	376	334
135°	339	340	339	340	341	263
145°	304	304	303	303	304	191
155°	276	276	272	275	276	128
165°	222	222	221	220	221	63
175°	153	153	152	152	153	16
180°	154	154	154	154	154	



TEST NUMBER: P231435

CATALOG NUMBER: SSLED-LD5-18-W-UNV-L840-CD1-U-FRR22-CLCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4520.1	4520.1	4520.1	4520.1	4520.1
2.5°	4521.1	4528.5	4529.4	4523.9	4523.9
5°	4517.4	4516.4	4521.1	4516.4	4524.8
7.5°	4503.4	4504.4	4518.3	4509.9	4509.0
10°	4513.6	4504.4	4517.4	4506.2	4506.2
12.5°	4512.7	4510.9	4525.7	4512.7	4503.4
15°	4525.7	4534.1	4546.1	4530.3	4519.2
17.5°	4544.3	4554.5	4576.7	4547.1	4537.8
20°	4551.7	4556.3	4599.9	4556.3	4564.7
22.5°	4543.3	4549.8	4603.7	4549.8	4561.0
25°	4484.9	4511.8	4557.3	4512.7	4516.4
27.5°	4410.6	4456.1	4482.1	4460.7	4445.9
30°	4327.1	4387.4	4373.5	4398.6	4364.2
32.5°	4244.5	4303.0	4278.9	4316.0	4282.6
35°	4172.2	4213.0	4207.4	4231.5	4230.6
37.5°	4108.1	4132.2	4150.8	4161.0	4162.9
40°	4024.6	4058.0	4086.8	4080.3	4088.6
42.5°	3920.7	3956.9	3994.0	3974.5	3972.6
45°	3775.0	3806.5	3857.6	3831.6	3823.2
47.5°	3588.5	3647.8	3683.1	3655.3	3631.1
50°	3383.4	3413.1	3443.7	3427.9	3409.4
52.5°	3115.2	3117.0	3154.2	3132.8	3118.0
55°	2807.1	2822.0	2822.0	2816.4	2809.9
57.5°	2495.3	2506.4	2513.9	2505.5	2495.3
60°	2166.8	2178.9	2188.2	2184.4	2154.7
62.5°	1859.7	1871.7	1877.3	1866.1	1868.9
65°	1581.3	1596.1	1598.9	1600.7	1588.7
67.5°	1353.0	1364.1	1370.6	1365.0	1364.1
70°	1164.6	1167.4	1169.2	1173.0	1160.0
72.5°	993.9	994.8	999.4	1000.4	992.9
75°	844.5	848.2	855.6	850.0	847.2
77.5°	721.0	726.6	730.3	732.2	728.5
80°	626.4	627.3	631.9	628.2	624.5
82.5°	543.8	543.8	546.6	546.6	544.7
85°	470.5	477.0	477.9	474.2	475.1
87.5°	421.3	424.1	425.0	423.2	422.2
90°	385.1	386.0	387.9	386.0	385.1
92.5°	361.9	363.8	364.7	363.8	364.7
95°	351.7	351.7	354.5	352.6	352.6
97.5°	351.7	351.7	354.5	353.6	352.6
100°	356.3	357.3	358.2	358.2	358.2
102.5°	361.9	362.8	363.8	363.8	363.8
105°	368.4	369.3	370.3	370.3	370.3
107.5°	374.9	375.8	376.8	376.8	376.8
110°	381.4	380.5	382.3	382.3	383.3



TEST NUMBER: P231435

CATALOG NUMBER: SSLED-LD5-18-W-UNV-L840-CD1-U-FRR22-CLCDL22

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.2	385.1	385.1	386.0	387.0
115°	385.1	386.0	386.0	387.9	387.9
117.5°	385.1	385.1	386.0	387.0	387.9
120°	381.4	382.3	383.3	384.2	385.1
122.5°	378.6	378.6	379.5	380.5	381.4
125°	372.1	373.0	374.0	374.9	375.8
127.5°	365.6	365.6	366.5	367.5	368.4
130°	358.2	358.2	359.1	360.1	361.0
132.5°	348.0	348.9	348.9	349.8	350.8
135°	338.7	339.6	338.7	339.6	340.6
137.5°	329.4	329.4	328.5	329.4	330.4
140°	319.2	320.1	319.2	320.1	320.1
142.5°	310.9	312.7	311.8	311.8	312.7
145°	304.4	304.4	303.4	303.4	304.4
147.5°	297.0	297.9	297.0	297.0	297.0
150°	289.5	290.5	288.6	289.5	289.5
152.5°	284.0	284.9	280.2	284.0	284.0
155°	276.5	276.5	271.9	274.7	276.5
157.5°	266.3	265.4	262.6	265.4	264.5
160°	253.3	254.3	251.5	252.4	251.5
162.5°	236.6	238.5	237.6	237.6	236.6
165°	221.8	221.8	220.9	219.9	220.9
167.5°	205.1	205.1	204.2	205.1	204.2
170°	184.7	186.5	185.6	186.5	184.7
172.5°	164.3	163.3	163.3	163.3	163.3
175°	153.1	153.1	152.2	152.2	153.1
177.5°	152.2	152.2	153.1	151.3	151.3
180°	154.0	154.0	154.0	154.0	154.0

(END OF REPORT)