

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: P231436

Luminaire Tested: **SSLED-LD5-18-W-UNV-L850-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: P231436  
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-L850-CD1-U-FRR22-CLCDL22  
Description: STEELER WHITE 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: 17651.0 lumens  
Efficiency: N/A  
Efficacy: 131.9 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

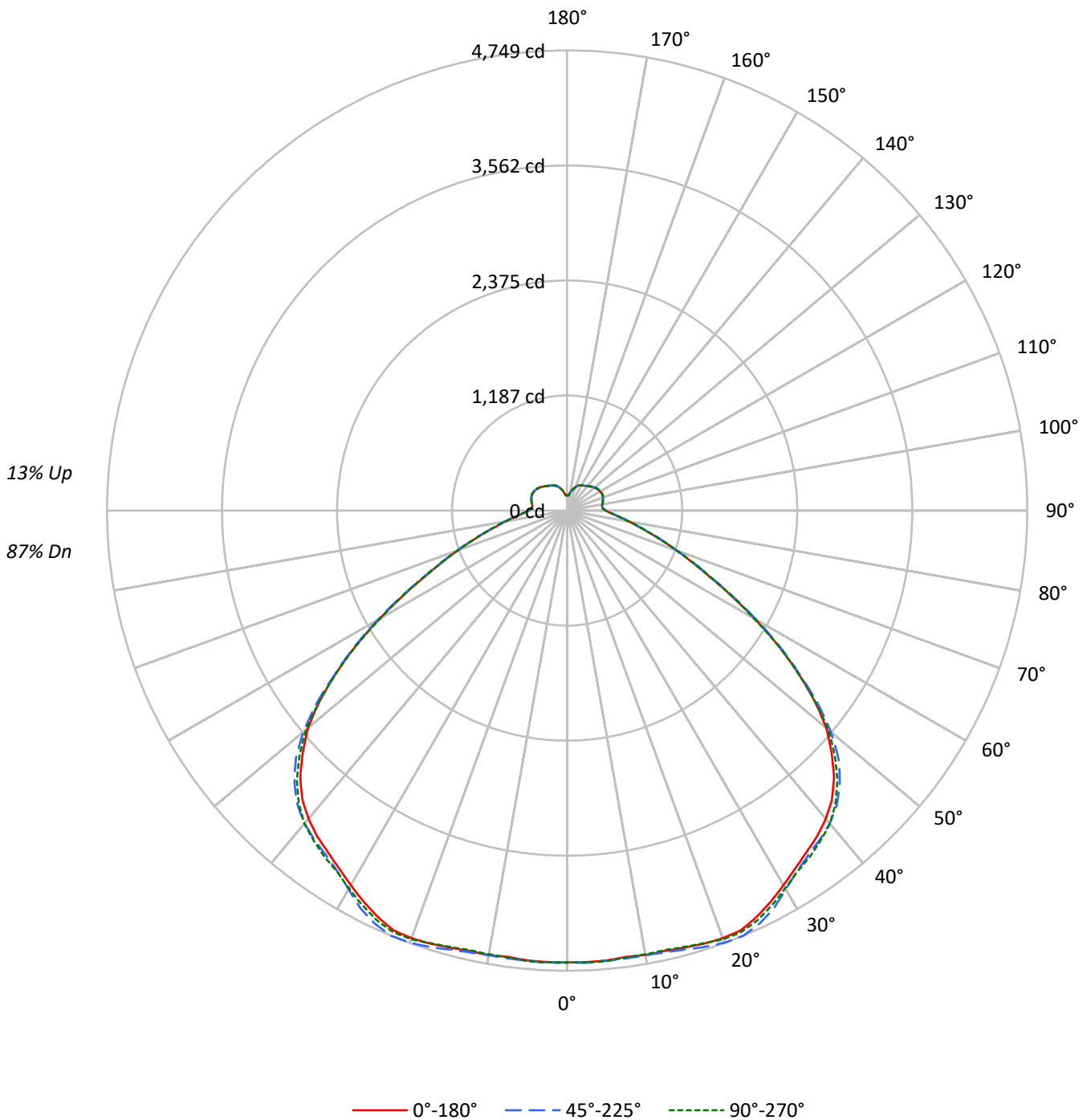
Input Watts (W): 133.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	23007	23007	23007
5°	21411	21428	21446
10°	20160	20176	20127
15°	19250	19337	19223
20°	18615	18813	18668
25°	17792	18080	17917
30°	16791	16971	16935
35°	15962	16097	16186
40°	15299	15535	15542
45°	14367	14682	14551
50°	12992	13223	13091
55°	10960	11018	10970
60°	8671	8757	8623
65°	6541	6614	6572
70°	5025	5045	5005
75°	3839	3889	3851
80°	3032	3059	3024
85°	2456	2495	2480



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	444.5	2.5
10°-20°	1327.2	7.5
20°-30°	2147.5	12.2
30°-40°	2729.7	15.5
40°-50°	3026.1	17.1
50°-60°	2592.5	14.7
60°-70°	1658.1	9.4
70°-80°	945.5	5.4
80°-90°	548.8	3.1
90°-100°	405.7	2.3
100°-110°	403.5	2.3
110°-120°	394.4	2.2
120°-130°	345.3	2.0
130°-140°	271.6	1.5
140°-150°	197.7	1.1
150°-160°	131.1	0.7
160°-170°	65.5	0.4
170°-180°	16.1	0.1
0°-30°	3919.3	22.2
0°-40°	6649.1	37.7
0°-60°	12267.7	69.5
0°-90°	15420.1	87.4
90°-120°	1203.6	6.8
90°-150°	2018.2	11.4
90°-180°	2231.0	12.6
0°-180°	17651.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4663	4663	4663	4663	4663	
5°	4660	4659	4664	4659	4668	444
15°	4669	4677	4690	4674	4662	1325
25°	4627	4654	4701	4655	4659	2131
35°	4304	4346	4340	4365	4364	2702
45°	3894	3927	3980	3953	3944	2987
55°	2896	2911	2911	2905	2899	2579
65°	1631	1647	1649	1651	1639	1647
75°	871	875	883	877	874	940
85°	485	492	493	489	490	432
90°	397	398	400	398	397	220
95°	363	363	366	364	364	299
105°	380	381	382	382	382	402
115°	397	398	398	400	400	393
125°	384	385	386	387	388	344
135°	349	350	349	350	351	271
145°	314	314	313	313	314	197
155°	285	285	280	283	285	132
165°	229	229	228	227	228	66
175°	158	158	157	157	158	16
180°	159	159	159	159	159	



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CATALOG NUMBER: SSLED-LD5-18-W-UNV-L850-CD1-U-FRR22-CLCDL22

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4663.1	4663.1	4663.1	4663.1	4663.1
2.5°	4664.0	4671.7	4672.6	4666.9	4666.9
5°	4660.2	4659.2	4664.0	4659.2	4667.8
7.5°	4645.8	4646.8	4661.1	4652.5	4651.6
10°	4656.4	4646.8	4660.2	4648.7	4648.7
12.5°	4655.4	4653.5	4668.8	4655.4	4645.8
15°	4668.8	4677.4	4689.9	4673.6	4662.1
17.5°	4688.0	4698.5	4721.5	4690.8	4681.3
20°	4695.6	4700.4	4745.4	4700.4	4709.0
22.5°	4687.0	4693.7	4749.2	4693.7	4705.2
25°	4626.7	4654.4	4701.4	4655.4	4659.2
27.5°	4550.1	4597.0	4623.8	4601.8	4586.5
30°	4463.9	4526.2	4511.8	4537.7	4502.2
32.5°	4378.7	4439.1	4414.2	4452.5	4418.0
35°	4304.1	4346.2	4340.4	4365.3	4364.4
37.5°	4238.0	4262.9	4282.1	4292.6	4294.5
40°	4151.9	4186.3	4216.0	4209.3	4217.9
42.5°	4044.6	4082.0	4120.3	4100.2	4098.2
45°	3894.3	3926.9	3979.5	3952.7	3944.1
47.5°	3701.9	3763.2	3799.6	3770.8	3746.0
50°	3490.4	3521.0	3552.6	3536.3	3517.2
52.5°	3213.7	3215.6	3253.9	3231.9	3216.6
55°	2895.9	2911.2	2911.2	2905.4	2898.7
57.5°	2574.2	2585.7	2593.4	2584.7	2574.2
60°	2235.3	2247.8	2257.3	2253.5	2222.9
62.5°	1918.5	1930.9	1936.6	1925.2	1928.0
65°	1631.3	1646.6	1649.4	1651.4	1638.9
67.5°	1395.8	1407.2	1413.9	1408.2	1407.2
70°	1201.4	1204.3	1206.2	1210.0	1196.6
72.5°	1025.3	1026.2	1031.0	1032.0	1024.3
75°	871.2	875.0	882.6	876.9	874.0
77.5°	743.8	749.6	753.4	755.3	751.5
80°	646.2	647.1	651.9	648.1	644.3
82.5°	561.0	561.0	563.9	563.9	561.9
85°	485.4	492.1	493.0	489.2	490.1
87.5°	434.6	437.5	438.4	436.5	435.6
90°	397.3	398.2	400.2	398.2	397.3
92.5°	373.4	375.3	376.2	375.3	376.2
95°	362.8	362.8	365.7	363.8	363.8
97.5°	362.8	362.8	365.7	364.7	363.8
100°	367.6	368.6	369.5	369.5	369.5
102.5°	373.4	374.3	375.3	375.3	375.3
105°	380.1	381.0	382.0	382.0	382.0
107.5°	386.8	387.7	388.7	388.7	388.7
110°	393.5	392.5	394.4	394.4	395.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	396.3	397.3	397.3	398.2	399.2
115°	397.3	398.2	398.2	400.2	400.2
117.5°	397.3	397.3	398.2	399.2	400.2
120°	393.5	394.4	395.4	396.3	397.3
122.5°	390.6	390.6	391.5	392.5	393.5
125°	383.9	384.8	385.8	386.8	387.7
127.5°	377.2	377.2	378.1	379.1	380.1
130°	369.5	369.5	370.5	371.4	372.4
132.5°	359.0	359.9	359.9	360.9	361.9
135°	349.4	350.4	349.4	350.4	351.3
137.5°	339.8	339.8	338.9	339.8	340.8
140°	329.3	330.3	329.3	330.3	330.3
142.5°	320.7	322.6	321.7	321.7	322.6
145°	314.0	314.0	313.0	313.0	314.0
147.5°	306.3	307.3	306.3	306.3	306.3
150°	298.7	299.6	297.7	298.7	298.7
152.5°	292.9	293.9	289.1	292.9	292.9
155°	285.3	285.3	280.5	283.4	285.3
157.5°	274.7	273.8	270.9	273.8	272.8
160°	261.3	262.3	259.4	260.4	259.4
162.5°	244.1	246.0	245.1	245.1	244.1
165°	228.8	228.8	227.8	226.9	227.8
167.5°	211.6	211.6	210.6	211.6	210.6
170°	190.5	192.4	191.5	192.4	190.5
172.5°	169.4	168.5	168.5	168.5	168.5
175°	158.0	158.0	157.0	157.0	158.0
177.5°	157.0	157.0	158.0	156.0	156.0
180°	158.9	158.9	158.9	158.9	158.9

(END OF REPORT)