

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: P231432

Luminaire Tested: **SSLED-LD5-15-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: P231432  
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-LD5-15-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: 14564.0 lumens  
Efficiency: N/A  
Efficacy: 131.5 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

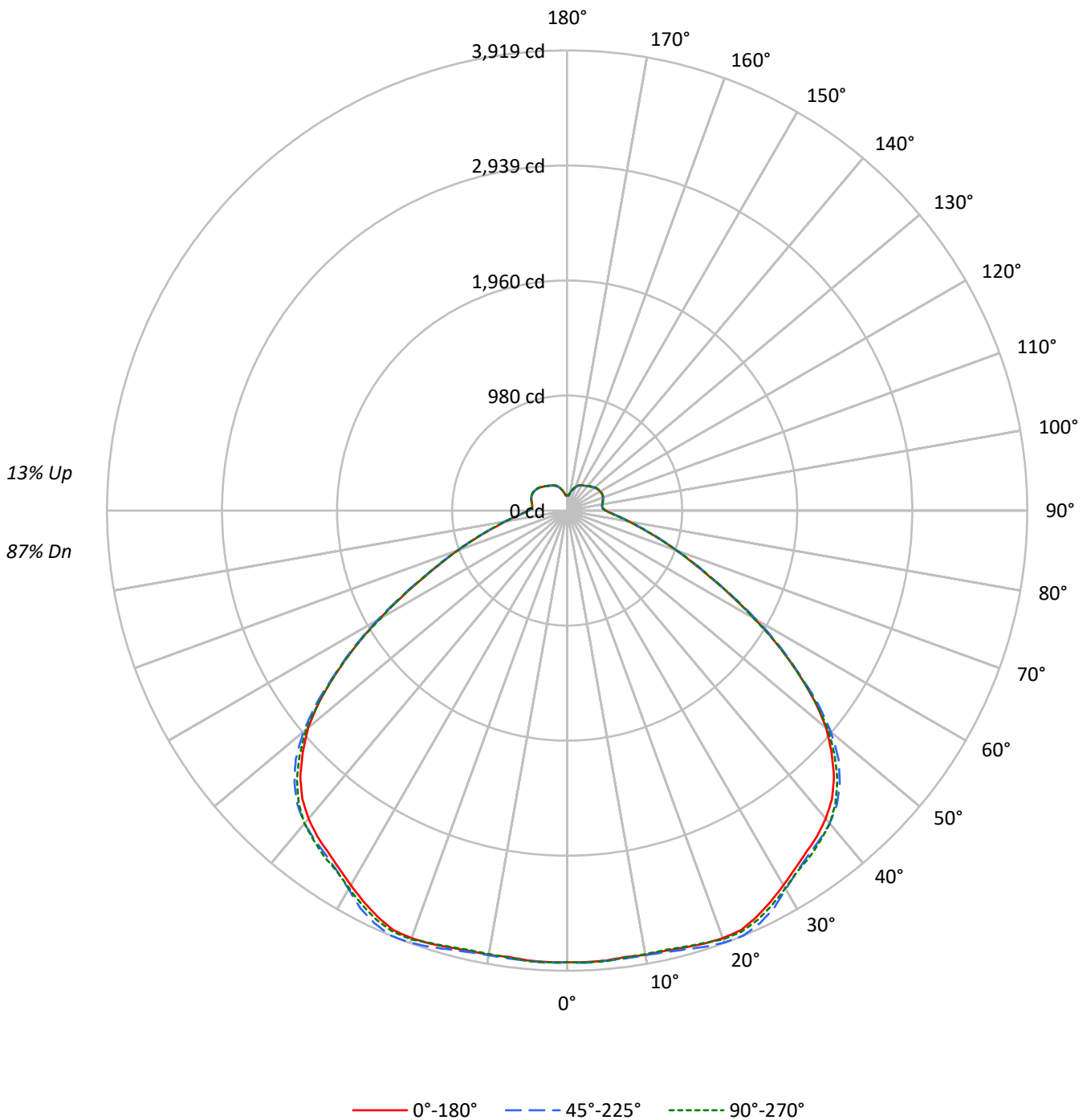
Input Watts (W): 110.74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	18983	18983	18983
5°	17666	17681	17695
10°	16634	16648	16607
15°	15884	15955	15861
20°	15360	15523	15403
25°	14681	14917	14784
30°	13854	14003	13973
35°	13170	13282	13355
40°	12623	12819	12824
45°	11855	12114	12006
50°	10719	10911	10802
55°	9043	9091	9052
60°	7155	7225	7115
65°	5397	5458	5423
70°	4146	4163	4130
75°	3167	3209	3178
80°	2502	2524	2495
85°	2027	2058	2046



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	366.8	2.5
10°-20°	1095.1	7.5
20°-30°	1771.9	12.2
30°-40°	2252.3	15.5
40°-50°	2496.9	17.1
50°-60°	2139.1	14.7
60°-70°	1368.1	9.4
70°-80°	780.2	5.4
80°-90°	452.8	3.1
90°-100°	334.7	2.3
100°-110°	332.9	2.3
110°-120°	325.5	2.2
120°-130°	284.9	2.0
130°-140°	224.1	1.5
140°-150°	163.1	1.1
150°-160°	108.2	0.7
160°-170°	54.1	0.4
170°-180°	13.3	0.1
0°-30°	3233.9	22.2
0°-40°	5486.2	37.7
0°-60°	10122.1	69.5
0°-90°	12723.3	87.4
90°-120°	993.1	6.8
90°-150°	1665.2	11.4
90°-180°	1841.0	12.6
0°-180°	14564.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3848	3848	3848	3848	3848	
5°	3845	3844	3848	3844	3852	367
15°	3852	3859	3870	3856	3847	1093
25°	3818	3840	3879	3841	3844	1758
35°	3551	3586	3581	3602	3601	2230
45°	3213	3240	3284	3261	3254	2464
55°	2389	2402	2402	2397	2392	2128
65°	1346	1359	1361	1363	1352	1359
75°	719	722	728	724	721	776
85°	400	406	407	404	404	356
90°	328	329	330	329	328	181
95°	299	299	302	300	300	246
105°	314	314	315	315	315	332
115°	328	329	329	330	330	324
125°	317	318	318	319	320	284
135°	288	289	288	289	290	224
145°	259	259	258	258	259	163
155°	235	235	231	234	235	109
165°	189	189	188	187	188	54
175°	130	130	130	130	130	13
180°	131	131	131	131	131	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3847.5	3847.5	3847.5	3847.5	3847.5
2.5°	3848.3	3854.6	3855.4	3850.7	3850.7
5°	3845.2	3844.4	3848.3	3844.4	3851.5
7.5°	3833.3	3834.1	3846.0	3838.8	3838.1
10°	3842.0	3834.1	3845.2	3835.7	3835.7
12.5°	3841.2	3839.6	3852.3	3841.2	3833.3
15°	3852.3	3859.4	3869.7	3856.2	3846.7
17.5°	3868.1	3876.8	3895.7	3870.4	3862.5
20°	3874.4	3878.3	3915.5	3878.3	3885.4
22.5°	3867.3	3872.8	3918.6	3872.8	3882.3
25°	3817.5	3840.4	3879.1	3841.2	3844.4
27.5°	3754.3	3793.0	3815.1	3797.0	3784.3
30°	3683.2	3734.6	3722.7	3744.1	3714.8
32.5°	3612.9	3662.7	3642.2	3673.8	3645.3
35°	3551.3	3586.1	3581.3	3601.9	3601.1
37.5°	3496.8	3517.4	3533.2	3541.8	3543.4
40°	3425.7	3454.2	3478.7	3473.1	3480.2
42.5°	3337.3	3368.1	3399.7	3383.1	3381.5
45°	3213.3	3240.1	3283.6	3261.4	3254.3
47.5°	3054.5	3105.0	3135.1	3111.4	3090.8
50°	2879.9	2905.2	2931.3	2917.8	2902.0
52.5°	2651.6	2653.2	2684.8	2666.7	2654.0
55°	2389.4	2402.0	2402.0	2397.3	2391.8
57.5°	2124.0	2133.5	2139.8	2132.7	2124.0
60°	1844.4	1854.7	1862.6	1859.4	1834.1
62.5°	1582.9	1593.2	1597.9	1588.5	1590.8
65°	1346.0	1358.6	1361.0	1362.6	1352.3
67.5°	1151.7	1161.1	1166.7	1161.9	1161.1
70°	991.3	993.7	995.3	998.4	987.4
72.5°	846.0	846.8	850.7	851.5	845.2
75°	718.8	722.0	728.3	723.5	721.2
77.5°	613.7	618.5	621.6	623.2	620.1
80°	533.2	534.0	537.9	534.8	531.6
82.5°	462.9	462.9	465.2	465.2	463.7
85°	400.5	406.0	406.8	403.6	404.4
87.5°	358.6	361.0	361.8	360.2	359.4
90°	327.8	328.6	330.2	328.6	327.8
92.5°	308.1	309.6	310.4	309.6	310.4
95°	299.4	299.4	301.7	300.2	300.2
97.5°	299.4	299.4	301.7	300.9	300.2
100°	303.3	304.1	304.9	304.9	304.9
102.5°	308.1	308.8	309.6	309.6	309.6
105°	313.6	314.4	315.2	315.2	315.2
107.5°	319.1	319.9	320.7	320.7	320.7
110°	324.6	323.9	325.4	325.4	326.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	327.0	327.8	327.8	328.6	329.4
115°	327.8	328.6	328.6	330.2	330.2
117.5°	327.8	327.8	328.6	329.4	330.2
120°	324.6	325.4	326.2	327.0	327.8
122.5°	322.3	322.3	323.1	323.9	324.6
125°	316.7	317.5	318.3	319.1	319.9
127.5°	311.2	311.2	312.0	312.8	313.6
130°	304.9	304.9	305.7	306.5	307.3
132.5°	296.2	297.0	297.0	297.8	298.6
135°	288.3	289.1	288.3	289.1	289.9
137.5°	280.4	280.4	279.6	280.4	281.2
140°	271.7	272.5	271.7	272.5	272.5
142.5°	264.6	266.2	265.4	265.4	266.2
145°	259.1	259.1	258.3	258.3	259.1
147.5°	252.8	253.6	252.8	252.8	252.8
150°	246.4	247.2	245.7	246.4	246.4
152.5°	241.7	242.5	238.5	241.7	241.7
155°	235.4	235.4	231.4	233.8	235.4
157.5°	226.7	225.9	223.5	225.9	225.1
160°	215.6	216.4	214.1	214.8	214.1
162.5°	201.4	203.0	202.2	202.2	201.4
165°	188.8	188.8	188.0	187.2	188.0
167.5°	174.6	174.6	173.8	174.6	173.8
170°	157.2	158.8	158.0	158.8	157.2
172.5°	139.8	139.0	139.0	139.0	139.0
175°	130.3	130.3	129.5	129.5	130.3
177.5°	129.5	129.5	130.3	128.8	128.8
180°	131.1	131.1	131.1	131.1	131.1

(END OF REPORT)