

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: P231462

Luminaire Tested: **SSLED-LD5-30-W-UNV-L840-CD2-U-FRR22-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: P231462  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-4)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SSLED-LD5-30-W-UNV-L840-CD2-U-FRR22-FRCDL22  
Description: STEELER WHITE REFRACTOR LENS AND CIRCULAR DROP  
Light Source: (240) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: (2) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28605.0 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.16 / 1.37  
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')  
CIE Type: Semi-Direct

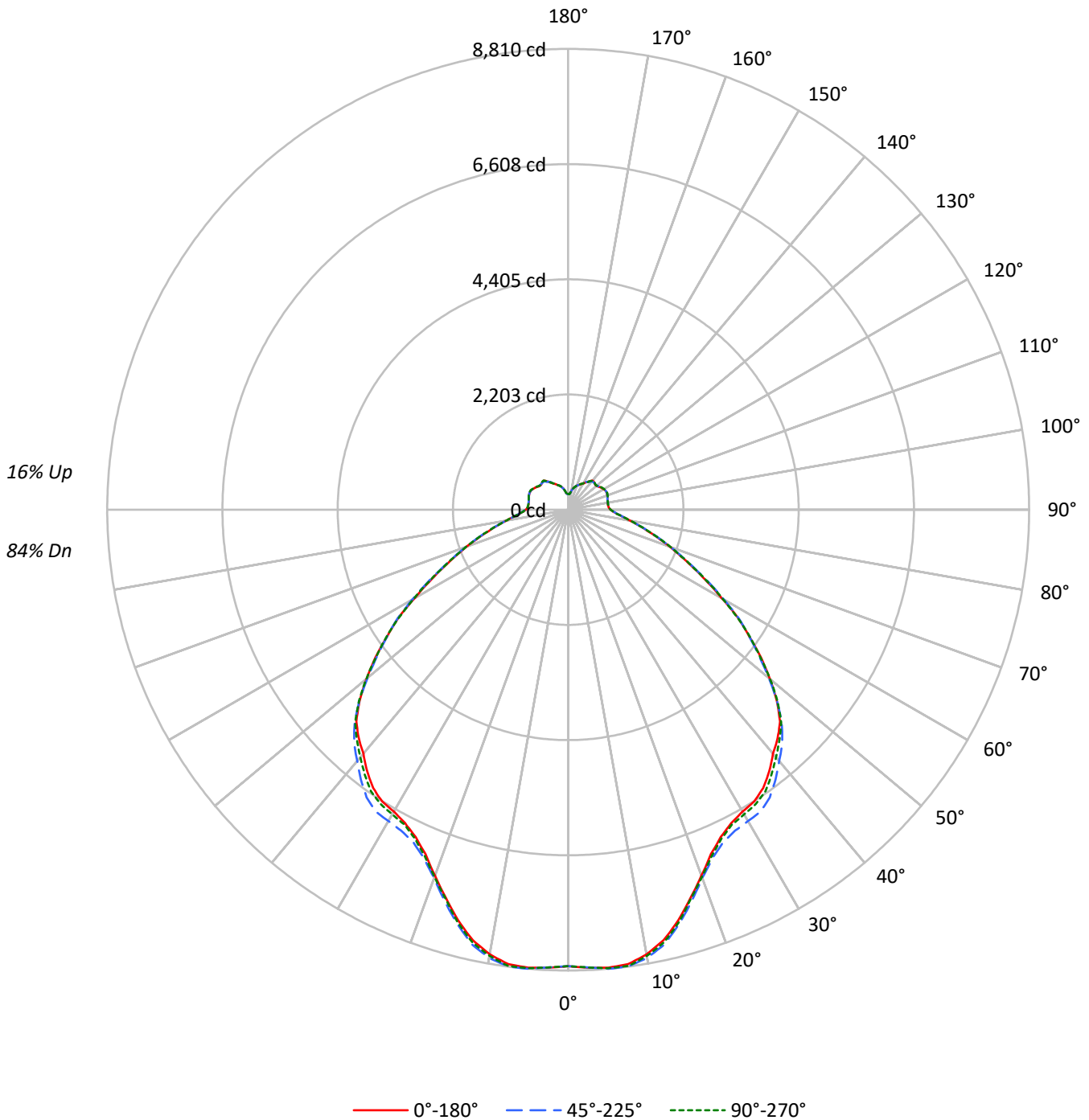
Input Watts (W): 266.35  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	115	115	115	115	111	111	111	111	102	102	102	95	95	95	88	88	88	84
1	104	100	95	91	100	96	92	88	89	85	82	82	79	77	76	74	72	69
2	95	87	80	74	91	83	77	72	77	72	68	72	68	64	66	63	60	57
3	87	76	68	61	83	73	66	60	68	62	57	63	58	54	59	55	51	48
4	79	67	59	52	76	65	57	51	60	54	48	56	51	46	52	48	44	41
5	73	60	51	45	70	58	50	44	54	47	42	51	45	40	47	42	38	36
6	67	54	45	39	64	52	44	38	49	42	37	46	40	35	43	38	34	31
7	62	49	40	34	60	47	39	34	44	37	32	42	36	31	39	34	30	28
8	58	45	36	30	55	43	35	30	41	34	29	38	32	28	36	31	27	25
9	54	41	33	27	52	40	32	27	37	31	26	35	29	25	33	28	24	22
10	51	38	30	25	49	37	29	24	34	28	23	33	27	23	31	26	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	35589	35589	35589
5°	33915	33994	33952
10°	31835	32091	31951
15°	28936	29170	29064
20°	25789	25947	25865
25°	23454	23817	23566
30°	22395	23098	22606
35°	21759	22491	22011
40°	20479	21092	20780
45°	19485	19635	19593
50°	17465	17372	17492
55°	15078	15084	15146
60°	12564	12721	12634
65°	10282	10374	10319
70°	8457	8508	8515
75°	6887	6977	6977
80°	5693	5738	5746
85°	4925	4966	4917



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	836.3	2.9
10°-20°	2287.5	8.0
20°-30°	3252.6	11.4
30°-40°	4109.0	14.4
40°-50°	4403.4	15.4
50°-60°	3776.5	13.2
60°-70°	2671.6	9.3
70°-80°	1695.9	5.9
80°-90°	1056.9	3.7
90°-100°	849.6	3.0
100°-110°	825.1	2.9
110°-120°	796.0	2.8
120°-130°	674.5	2.4
130°-140°	553.7	1.9
140°-150°	410.6	1.4
150°-160°	248.9	0.9
160°-170°	125.7	0.4
170°-180°	31.4	0.1
0°-30°	6376.4	22.3
0°-40°	10485.4	36.7
0°-60°	18665.3	65.3
0°-90°	24089.6	84.2
90°-120°	2470.7	8.6
90°-150°	4109.5	14.4
90°-180°	4515.0	15.8
0°-180°	28605.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8728	8728	8728	8728	8728	
5°	8789	8800	8810	8805	8799	834
15°	8130	8141	8196	8176	8166	2277
25°	6901	7005	7008	7051	6934	3211
35°	6497	6520	6716	6572	6572	4045
45°	5726	5738	5770	5782	5757	4368
55°	4225	4223	4226	4204	4244	3783
65°	2653	2669	2676	2670	2662	2651
75°	1570	1588	1591	1591	1591	1684
85°	941	939	949	941	939	824
90°	810	812	815	814	810	447
95°	768	769	773	773	771	628
105°	776	776	777	779	780	822
115°	804	806	807	810	812	793
125°	749	750	754	754	757	670
135°	714	714	714	718	721	553
145°	650	653	651	648	645	411
155°	532	533	533	530	535	248
165°	442	441	439	441	442	126
175°	307	305	304	305	305	31
180°	299	299	299	299	299	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8728.0	8728.0	8728.0	8728.0	8728.0
2.5°	8764.2	8764.2	8757.9	8762.6	8757.9
5°	8789.3	8800.4	8809.8	8805.1	8798.8
7.5°	8762.6	8773.6	8805.1	8797.2	8797.2
10°	8630.4	8650.9	8699.7	8685.5	8661.9
12.5°	8430.6	8465.2	8509.3	8482.5	8471.5
15°	8130.1	8141.1	8196.1	8175.7	8166.3
17.5°	7777.6	7777.6	7846.8	7843.7	7796.5
20°	7445.6	7469.2	7491.2	7513.3	7467.6
22.5°	7126.2	7208.0	7206.4	7247.4	7164.0
25°	6901.2	7005.0	7008.2	7050.7	6934.2
27.5°	6753.3	6869.7	6913.8	6910.6	6784.8
30°	6663.6	6731.3	6872.9	6786.3	6726.5
32.5°	6616.4	6619.5	6843.0	6673.0	6673.0
35°	6496.8	6520.4	6715.5	6572.3	6572.3
37.5°	6309.6	6400.8	6506.3	6449.6	6383.5
40°	6089.3	6240.3	6271.8	6262.4	6179.0
42.5°	5925.6	6010.6	6057.8	6046.8	5976.0
45°	5725.8	5738.4	5769.9	5782.5	5757.3
47.5°	5408.0	5403.3	5417.4	5425.3	5428.4
50°	5031.9	4995.7	5005.2	5003.6	5039.8
52.5°	4646.4	4600.8	4600.8	4592.9	4624.4
55°	4224.7	4223.2	4226.3	4204.3	4243.6
57.5°	3844.0	3856.5	3866.0	3839.2	3829.8
60°	3394.0	3436.4	3436.4	3425.4	3412.8
62.5°	3003.7	3035.2	3052.5	3027.3	3025.8
65°	2652.9	2668.6	2676.5	2670.2	2662.3
67.5°	2331.9	2350.7	2360.2	2346.0	2347.6
70°	2062.8	2069.1	2075.4	2089.6	2077.0
72.5°	1804.8	1809.5	1822.1	1818.9	1818.9
75°	1570.3	1587.6	1590.8	1590.8	1590.8
77.5°	1375.2	1384.6	1383.1	1379.9	1376.8
80°	1197.4	1206.8	1206.8	1206.8	1208.4
82.5°	1058.9	1057.4	1060.5	1063.7	1063.7
85°	940.9	939.4	948.8	940.9	939.4
87.5°	859.1	863.8	867.0	865.4	862.3
90°	810.3	811.9	815.1	813.5	810.3
92.5°	780.4	783.6	786.7	786.7	785.2
95°	767.8	769.4	772.6	772.6	771.0
97.5°	764.7	766.3	769.4	769.4	767.8
100°	766.3	767.8	769.4	769.4	771.0
102.5°	767.8	769.4	771.0	772.6	772.6
105°	775.7	775.7	777.3	778.9	780.4
107.5°	785.2	786.7	788.3	789.9	789.9
110°	796.2	797.7	797.7	800.9	800.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	804.0	805.6	805.6	808.8	810.3
115°	804.0	805.6	807.2	810.3	811.9
117.5°	797.7	797.7	799.3	802.5	805.6
120°	783.6	783.6	786.7	788.3	791.4
122.5°	766.3	767.8	771.0	772.6	774.1
125°	749.0	750.5	753.7	753.7	756.8
127.5°	725.4	730.1	733.2	733.2	734.8
130°	706.5	711.2	714.4	715.9	714.4
132.5°	701.8	706.5	711.2	708.1	704.9
135°	714.4	714.4	714.4	717.5	720.6
137.5°	726.9	723.8	712.8	725.4	730.1
140°	726.9	715.9	708.1	714.4	726.9
142.5°	690.7	687.6	671.9	684.5	689.2
145°	649.8	653.0	651.4	648.3	645.1
147.5°	615.2	621.5	626.2	613.6	613.6
150°	577.5	591.6	591.6	586.9	582.2
152.5°	557.0	560.2	560.2	557.0	558.6
155°	531.8	533.4	533.4	530.3	535.0
157.5°	506.7	509.8	509.8	509.8	508.2
160°	489.3	490.9	489.3	489.3	487.8
162.5°	467.3	465.7	465.7	465.7	467.3
165°	442.1	440.6	439.0	440.6	442.1
167.5°	412.2	412.2	410.7	410.7	410.7
170°	376.1	377.6	376.1	376.1	374.5
172.5°	328.9	327.3	328.9	328.9	330.4
175°	306.8	305.3	303.7	305.3	305.3
177.5°	299.0	300.5	300.5	299.0	297.4
180°	299.0	299.0	299.0	299.0	299.0

(END OF REPORT)