

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: P231453

Luminaire Tested: **SSLED-LD5-15-W-UNV-L840-CD1-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: P231453
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-LD5-15-W-UNV-L840-CD1-U-FRR22-FRCDL22
Description: STEELER WHITE REFRACTOR LENS AND CIRCULAR 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: 14361.0 lumens
Efficiency: N/A
Efficacy: 129.7 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

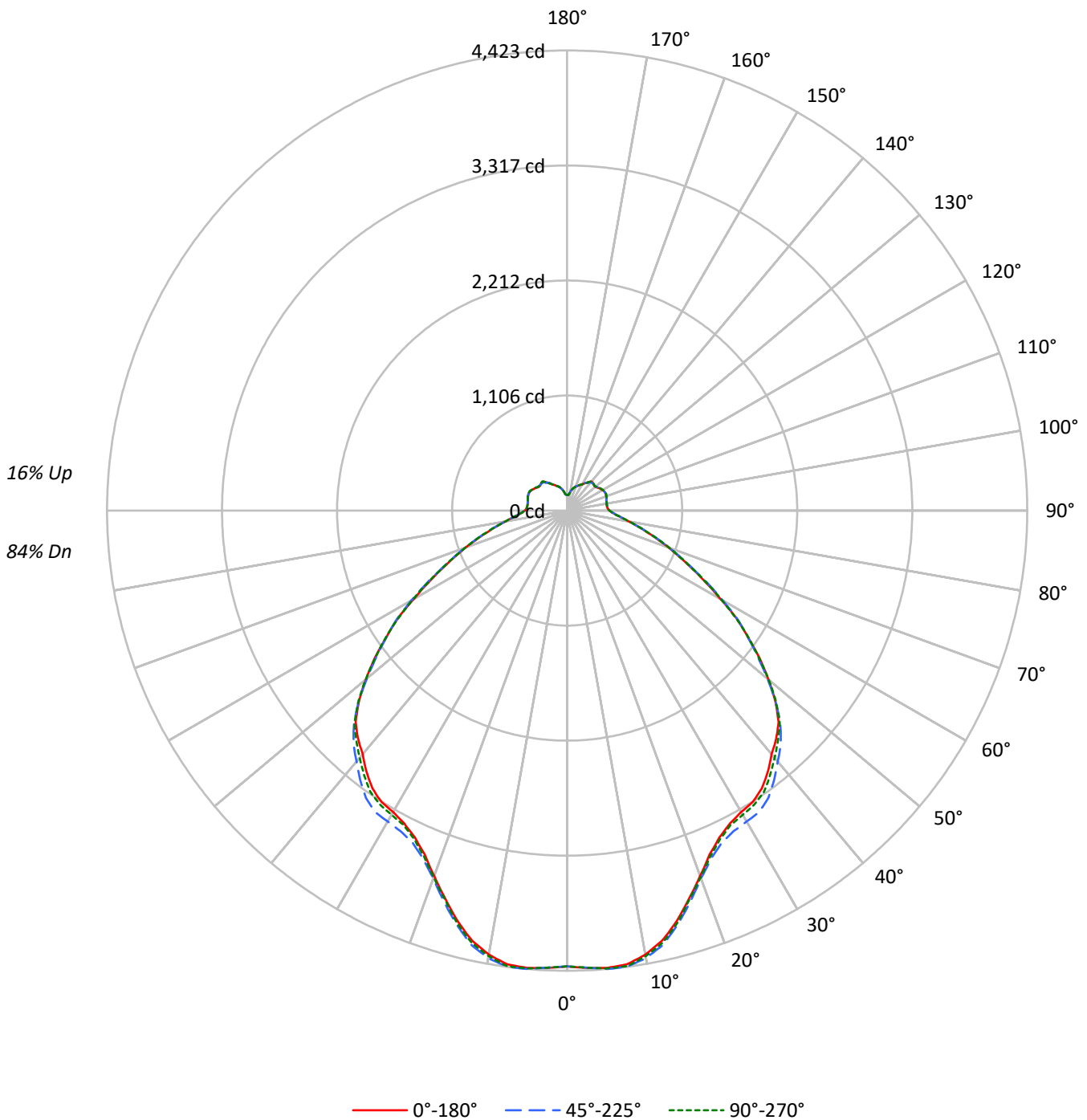
Input Watts (W): 110.74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	17867	17867	17867
5°	17027	17066	17045
10°	15983	16111	16041
15°	14527	14645	14591
20°	12947	13027	12986
25°	11775	11957	11831
30°	11243	11596	11349
35°	10924	11292	11051
40°	10281	10589	10432
45°	9783	9858	9836
50°	8768	8722	8782
55°	7570	7573	7604
60°	6308	6387	6343
65°	5162	5208	5180
70°	4245	4271	4275
75°	3458	3503	3503
80°	2858	2881	2885
85°	2473	2493	2468



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	419.9	2.9
10°-20°	1148.4	8.0
20°-30°	1632.9	11.4
30°-40°	2062.9	14.4
40°-50°	2210.7	15.4
50°-60°	1896.0	13.2
60°-70°	1341.3	9.3
70°-80°	851.4	5.9
80°-90°	530.6	3.7
90°-100°	426.5	3.0
100°-110°	414.2	2.9
110°-120°	399.7	2.8
120°-130°	338.6	2.4
130°-140°	278.0	1.9
140°-150°	206.1	1.4
150°-160°	124.9	0.9
160°-170°	63.1	0.4
170°-180°	15.7	0.1
0°-30°	3201.3	22.3
0°-40°	5264.2	36.7
0°-60°	9370.8	65.3
0°-90°	12094.0	84.2
90°-120°	1240.4	8.6
90°-150°	2063.2	14.4
90°-180°	2267.0	15.8
0°-180°	14361.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4382	4382	4382	4382	4382	
5°	4413	4418	4423	4420	4417	419
15°	4082	4087	4115	4105	4100	1143
25°	3465	3517	3518	3540	3481	1612
35°	3262	3274	3372	3300	3300	2031
45°	2875	2881	2897	2903	2890	2193
55°	2121	2120	2122	2111	2130	1899
65°	1332	1340	1344	1340	1337	1331
75°	788	797	799	799	799	846
85°	472	472	476	472	472	414
90°	407	408	409	408	407	224
95°	386	386	388	388	387	315
105°	389	389	390	391	392	413
115°	404	404	405	407	408	398
125°	376	377	378	378	380	337
135°	359	359	359	360	362	278
145°	326	328	327	326	324	207
155°	267	268	268	266	269	124
165°	222	221	220	221	222	63
175°	154	153	152	153	153	16
180°	150	150	150	150	150	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4381.8	4381.8	4381.8	4381.8	4381.8
2.5°	4400.0	4400.0	4396.8	4399.2	4396.8
5°	4412.6	4418.2	4422.9	4420.5	4417.4
7.5°	4399.2	4404.7	4420.5	4416.6	4416.6
10°	4332.9	4343.1	4367.6	4360.5	4348.7
12.5°	4232.5	4249.9	4272.0	4258.6	4253.1
15°	4081.7	4087.2	4114.8	4104.6	4099.8
17.5°	3904.7	3904.7	3939.5	3937.9	3914.2
20°	3738.0	3749.9	3760.9	3772.0	3749.1
22.5°	3577.7	3618.7	3618.0	3638.5	3596.6
25°	3464.7	3516.8	3518.4	3539.8	3481.3
27.5°	3390.5	3448.9	3471.0	3469.4	3406.3
30°	3345.4	3379.4	3450.5	3407.0	3377.0
32.5°	3321.7	3323.3	3435.5	3350.2	3350.2
35°	3261.7	3273.5	3371.5	3299.6	3299.6
37.5°	3167.7	3213.5	3266.4	3238.0	3204.8
40°	3057.1	3132.9	3148.7	3144.0	3102.1
42.5°	2974.9	3017.6	3041.3	3035.8	3000.2
45°	2874.6	2880.9	2896.7	2903.1	2890.4
47.5°	2715.0	2712.7	2719.8	2723.7	2725.3
50°	2526.3	2508.1	2512.8	2512.0	2530.2
52.5°	2332.7	2309.8	2309.8	2305.9	2321.7
55°	2121.0	2120.2	2121.8	2110.7	2130.5
57.5°	1929.8	1936.2	1940.9	1927.5	1922.7
60°	1703.9	1725.2	1725.2	1719.7	1713.4
62.5°	1508.0	1523.8	1532.5	1519.9	1519.1
65°	1331.9	1339.8	1343.7	1340.5	1336.6
67.5°	1170.7	1180.2	1184.9	1177.8	1178.6
70°	1035.6	1038.8	1041.9	1049.1	1042.7
72.5°	906.1	908.4	914.8	913.2	913.2
75°	788.4	797.1	798.6	798.6	798.6
77.5°	690.4	695.2	694.4	692.8	691.2
80°	601.1	605.9	605.9	605.9	606.7
82.5°	531.6	530.8	532.4	534.0	534.0
85°	472.4	471.6	476.3	472.4	471.6
87.5°	431.3	433.7	435.3	434.5	432.9
90°	406.8	407.6	409.2	408.4	406.8
92.5°	391.8	393.4	395.0	395.0	394.2
95°	385.5	386.3	387.9	387.9	387.1
97.5°	383.9	384.7	386.3	386.3	385.5
100°	384.7	385.5	386.3	386.3	387.1
102.5°	385.5	386.3	387.1	387.9	387.9
105°	389.4	389.4	390.2	391.0	391.8
107.5°	394.2	395.0	395.8	396.6	396.6
110°	399.7	400.5	400.5	402.1	402.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	403.7	404.5	404.5	406.0	406.8
115°	403.7	404.5	405.2	406.8	407.6
117.5°	400.5	400.5	401.3	402.9	404.5
120°	393.4	393.4	395.0	395.8	397.3
122.5°	384.7	385.5	387.1	387.9	388.7
125°	376.0	376.8	378.4	378.4	380.0
127.5°	364.2	366.5	368.1	368.1	368.9
130°	354.7	357.1	358.6	359.4	358.6
132.5°	352.3	354.7	357.1	355.5	353.9
135°	358.6	358.6	358.6	360.2	361.8
137.5°	365.0	363.4	357.8	364.2	366.5
140°	365.0	359.4	355.5	358.6	365.0
142.5°	346.8	345.2	337.3	343.6	346.0
145°	326.2	327.8	327.0	325.5	323.9
147.5°	308.9	312.0	314.4	308.1	308.1
150°	289.9	297.0	297.0	294.7	292.3
152.5°	279.6	281.2	281.2	279.6	280.4
155°	267.0	267.8	267.8	266.2	268.6
157.5°	254.4	255.9	255.9	255.9	255.2
160°	245.7	246.5	245.7	245.7	244.9
162.5°	234.6	233.8	233.8	233.8	234.6
165°	222.0	221.2	220.4	221.2	222.0
167.5°	207.0	207.0	206.2	206.2	206.2
170°	188.8	189.6	188.8	188.8	188.0
172.5°	165.1	164.3	165.1	165.1	165.9
175°	154.0	153.2	152.5	153.2	153.2
177.5°	150.1	150.9	150.9	150.1	149.3
180°	150.1	150.1	150.1	150.1	150.1

(END OF REPORT)