

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: P231439

Luminaire Tested: **SSLED-LD5-24-W-UNV-L850-CD2-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: P231439
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-LD5-24-W-UNV-L850-CD2-U-FRR22-CLCDL22
Description: STEELER WHITE REFRACTOR LENS AND CONICAL DROP
Light Source: (240) 5000 CCT, 80 CRI LEDS
Ballast/Driver: (2) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23652.0 lumens
Efficiency: N/A
Efficacy: 124.1 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

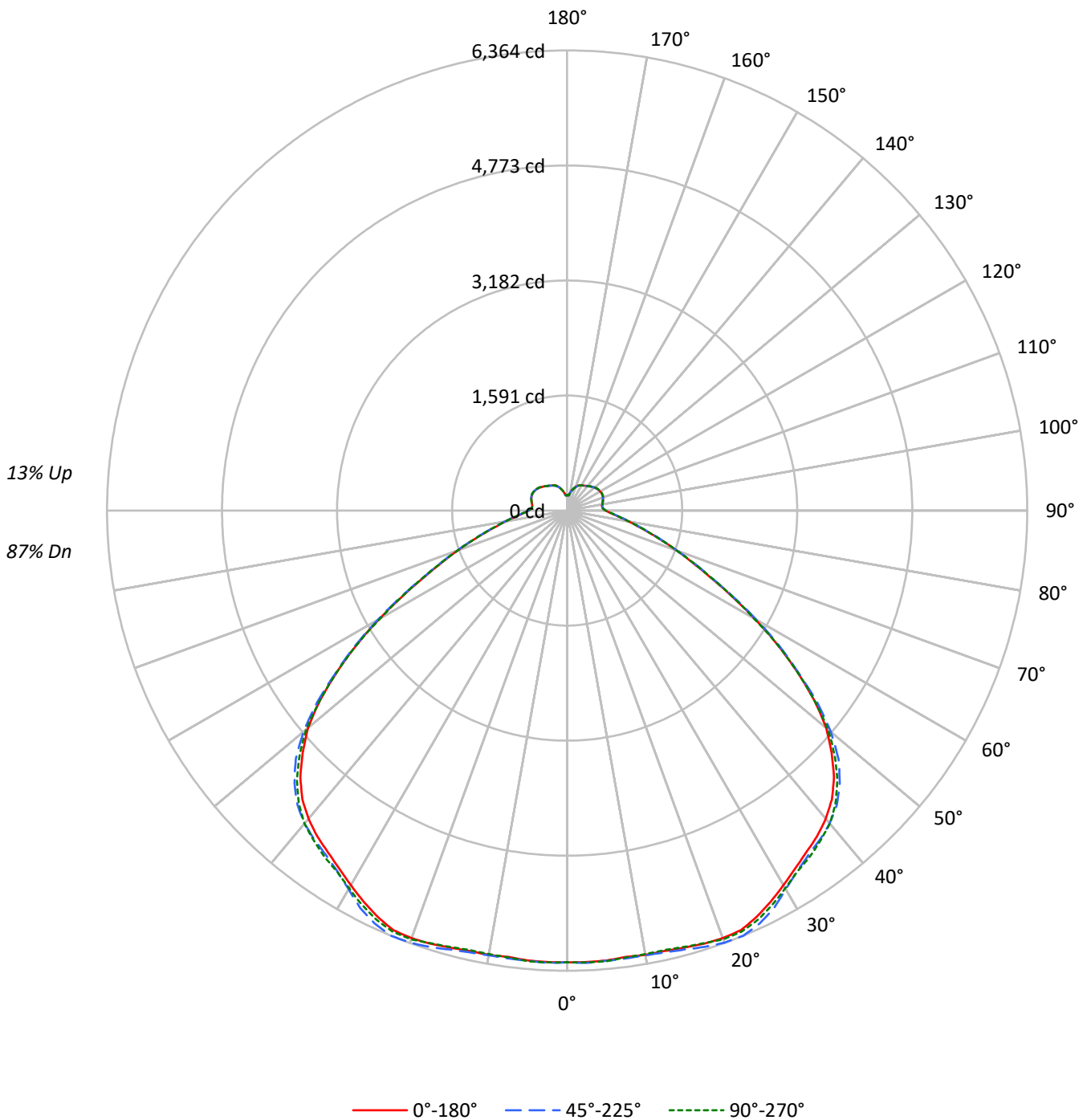
Input Watts (W): 190.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	30828	30828	30828
5°	28690	28714	28737
10°	27014	27036	26969
15°	25795	25911	25758
20°	24944	25209	25015
25°	23842	24226	24009
30°	22500	22741	22693
35°	21389	21570	21689
40°	20500	20817	20826
45°	19252	19673	19498
50°	17408	17719	17542
55°	14686	14763	14700
60°	11619	11734	11555
65°	8765	8863	8806
70°	6734	6761	6707
75°	5143	5211	5161
80°	4063	4100	4051
85°	3291	3343	3324



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	595.7	2.5
10°-20°	1778.5	7.5
20°-30°	2877.7	12.2
30°-40°	3657.8	15.5
40°-50°	4055.0	17.1
50°-60°	3473.9	14.7
60°-70°	2221.8	9.4
70°-80°	1267.0	5.4
80°-90°	735.4	3.1
90°-100°	543.6	2.3
100°-110°	540.6	2.3
110°-120°	528.5	2.2
120°-130°	462.7	2.0
130°-140°	363.9	1.5
140°-150°	264.9	1.1
150°-160°	175.7	0.7
160°-170°	87.8	0.4
170°-180°	21.6	0.1
0°-30°	5251.8	22.2
0°-40°	8909.6	37.7
0°-60°	16438.4	69.5
0°-90°	20662.6	87.4
90°-120°	1612.8	6.8
90°-150°	2704.3	11.4
90°-180°	2989.0	12.6
0°-180°	23652.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6248	6248	6248	6248	6248	
5°	6245	6243	6250	6243	6255	595
15°	6256	6268	6284	6262	6247	1776
25°	6200	6237	6300	6238	6243	2855
35°	5767	5824	5816	5850	5848	3621
45°	5218	5262	5332	5297	5285	4002
55°	3880	3901	3901	3893	3884	3456
65°	2186	2206	2210	2213	2196	2207
75°	1167	1172	1183	1175	1171	1260
85°	650	659	661	656	657	579
90°	532	534	536	534	532	294
95°	486	486	490	488	488	400
105°	509	510	512	512	512	539
115°	532	534	534	536	536	527
125°	514	516	517	518	520	461
135°	468	470	468	470	471	363
145°	421	421	420	420	421	265
155°	382	382	376	380	382	176
165°	307	307	305	304	305	88
175°	212	212	210	210	212	22
180°	213	213	213	213	213	



TEST NUMBER: P231439

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L850-CD2-U-FRR22-CLCDL22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6248.4	6248.4	6248.4	6248.4	6248.4
2.5°	6249.7	6260.0	6261.2	6253.5	6253.5
5°	6244.6	6243.3	6249.7	6243.3	6254.8
7.5°	6225.3	6226.6	6245.8	6234.3	6233.0
10°	6239.4	6226.6	6244.6	6229.2	6229.2
12.5°	6238.1	6235.6	6256.1	6238.1	6225.3
15°	6256.1	6267.7	6284.3	6262.5	6247.1
17.5°	6281.8	6295.9	6326.7	6285.6	6272.8
20°	6292.0	6298.4	6358.7	6298.4	6310.0
22.5°	6280.5	6289.5	6363.9	6289.5	6304.9
25°	6199.7	6236.9	6299.7	6238.1	6243.3
27.5°	6097.0	6159.9	6195.8	6166.3	6145.8
30°	5981.6	6065.0	6045.7	6080.4	6032.9
32.5°	5867.4	5948.2	5914.9	5966.2	5920.0
35°	5767.4	5823.8	5816.1	5849.5	5848.2
37.5°	5678.9	5712.2	5737.9	5752.0	5754.5
40°	5563.4	5609.6	5649.4	5640.4	5651.9
42.5°	5419.7	5469.8	5521.1	5494.1	5491.6
45°	5218.3	5262.0	5332.5	5296.6	5285.0
47.5°	4960.5	5042.6	5091.3	5052.9	5019.5
50°	4677.0	4718.1	4760.4	4738.6	4712.9
52.5°	4306.3	4308.9	4360.2	4330.7	4310.1
55°	3880.4	3900.9	3900.9	3893.2	3884.3
57.5°	3449.4	3464.8	3475.0	3463.5	3449.4
60°	2995.3	3012.0	3024.8	3019.7	2978.6
62.5°	2570.7	2587.4	2595.1	2579.7	2583.5
65°	2185.9	2206.4	2210.2	2212.8	2196.1
67.5°	1870.3	1885.7	1894.7	1887.0	1885.7
70°	1609.9	1613.7	1616.3	1621.4	1603.5
72.5°	1373.9	1375.1	1381.6	1382.8	1372.6
75°	1167.3	1172.5	1182.7	1175.0	1171.2
77.5°	996.7	1004.4	1009.5	1012.1	1007.0
80°	865.9	867.2	873.6	868.4	863.3
82.5°	751.7	751.7	755.6	755.6	753.0
85°	650.4	659.3	660.6	655.5	656.8
87.5°	582.4	586.2	587.5	584.9	583.7
90°	532.4	533.6	536.2	533.6	532.4
92.5°	500.3	502.8	504.1	502.8	504.1
95°	486.2	486.2	490.0	487.5	487.5
97.5°	486.2	486.2	490.0	488.7	487.5
100°	492.6	493.9	495.2	495.2	495.2
102.5°	500.3	501.6	502.8	502.8	502.8
105°	509.3	510.5	511.8	511.8	511.8
107.5°	518.2	519.5	520.8	520.8	520.8
110°	527.2	525.9	528.5	528.5	529.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	531.1	532.4	532.4	533.6	534.9
115°	532.4	533.6	533.6	536.2	536.2
117.5°	532.4	532.4	533.6	534.9	536.2
120°	527.2	528.5	529.8	531.1	532.4
122.5°	523.4	523.4	524.7	525.9	527.2
125°	514.4	515.7	517.0	518.2	519.5
127.5°	505.4	505.4	506.7	508.0	509.3
130°	495.2	495.2	496.4	497.7	499.0
132.5°	481.0	482.3	482.3	483.6	484.9
135°	468.2	469.5	468.2	469.5	470.8
137.5°	455.4	455.4	454.1	455.4	456.7
140°	441.3	442.6	441.3	442.6	442.6
142.5°	429.7	432.3	431.0	431.0	432.3
145°	420.8	420.8	419.5	419.5	420.8
147.5°	410.5	411.8	410.5	410.5	410.5
150°	400.2	401.5	398.9	400.2	400.2
152.5°	392.5	393.8	387.4	392.5	392.5
155°	382.3	382.3	375.9	379.7	382.3
157.5°	368.2	366.9	363.0	366.9	365.6
160°	350.2	351.5	347.6	348.9	347.6
162.5°	327.1	329.7	328.4	328.4	327.1
165°	306.6	306.6	305.3	304.0	305.3
167.5°	283.5	283.5	282.2	283.5	282.2
170°	255.3	257.8	256.6	257.8	255.3
172.5°	227.1	225.8	225.8	225.8	225.8
175°	211.7	211.7	210.4	210.4	211.7
177.5°	210.4	210.4	211.7	209.1	209.1
180°	212.9	212.9	212.9	212.9	212.9

(END OF REPORT)