

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: P231523

Luminaire Tested: **SSLED-LD5-24-W-UNV-L850-CD2-U-CLR22-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: P231523
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-7)
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-CLR22-FRCDL22
Description: STEELER CLEAR REFRACTOR LENS AND CIRCULAR 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: 22665.0 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.32 / 1.45
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Semi-Direct

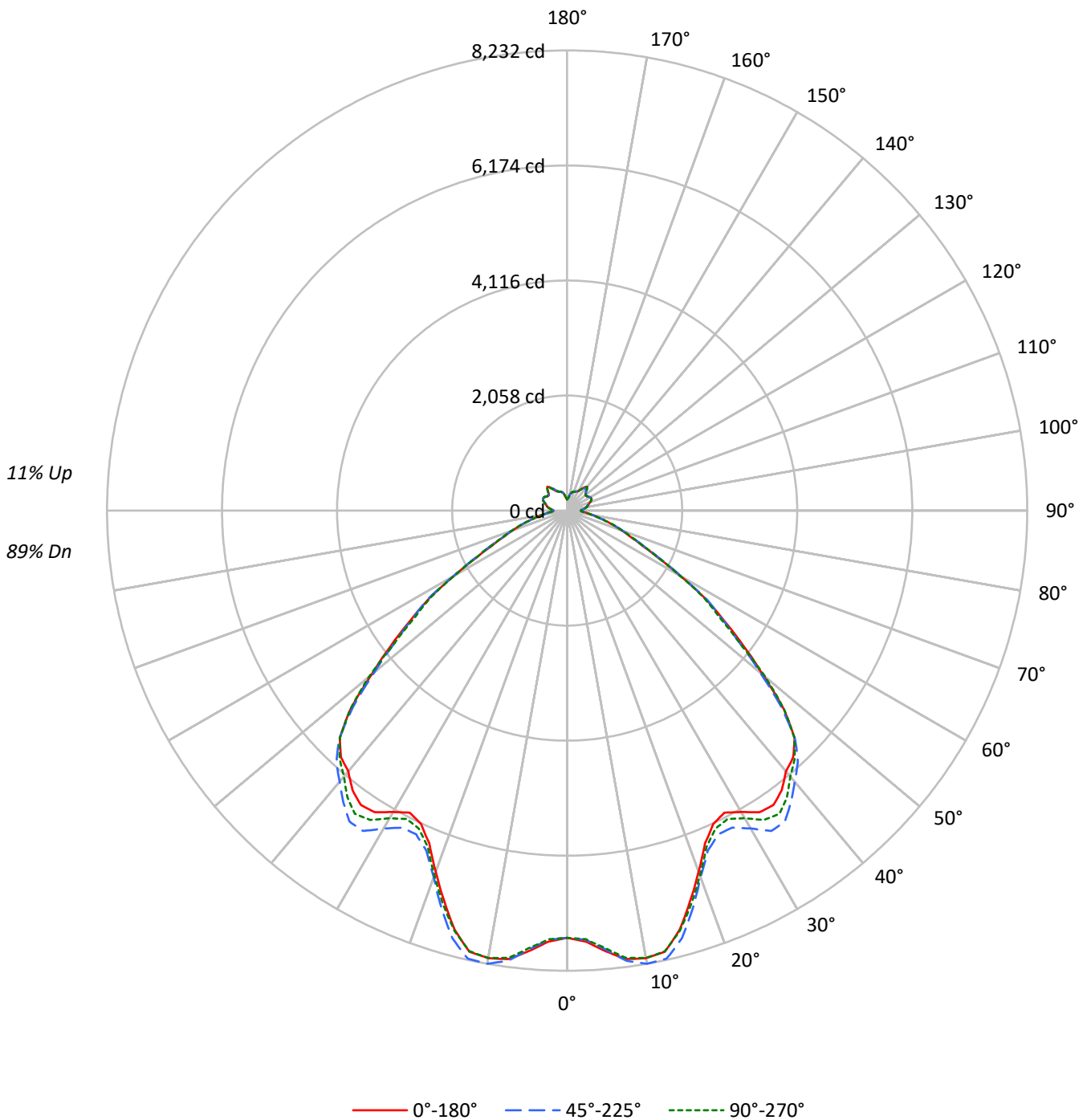
Input Watts (W): 190.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89				
1	107	103	99	95	103	99	96	93	93	90	88	87	85	83	82	80	79	76				
2	98	91	85	79	95	88	82	78	83	78	74	78	74	71	73	70	68	65				
3	90	80	73	67	87	78	71	66	73	68	63	69	65	61	65	62	58	56				
4	83	72	63	57	80	70	62	56	66	59	54	62	57	52	59	54	51	48				
5	76	64	56	50	73	62	55	49	59	52	47	56	50	46	53	48	44	42				
6	70	58	49	43	68	56	48	43	53	47	42	51	45	40	48	43	39	37				
7	65	53	44	38	63	51	43	38	49	42	37	46	40	36	44	39	35	33				
8	61	48	40	34	59	47	39	34	45	38	33	42	36	32	40	35	31	29				
9	57	44	36	31	55	43	35	30	41	34	30	39	33	29	37	32	28	26				
10	53	40	33	28	51	40	32	27	38	31	27	36	30	26	35	29	26	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31158	31158	31158
5°	30530	30406	30317
10°	29985	30364	29976
15°	27644	28196	27698
20°	23815	24162	24055
25°	21021	21715	21335
30°	20917	22064	21353
35°	21541	22744	22172
40°	20487	21298	20884
45°	19583	19618	19557
50°	15877	15654	16041
55°	12210	12073	11849
60°	8676	8733	8605
65°	5757	5916	5827
70°	4265	4312	4328
75°	3100	3106	3106
80°	2214	2183	2202
85°	1544	1551	1551



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	763.3	3.4
10°-20°	2173.7	9.6
20°-30°	2995.4	13.2
30°-40°	4074.6	18.0
40°-50°	4343.3	19.2
50°-60°	3063.6	13.5
60°-70°	1563.8	6.9
70°-80°	765.9	3.4
80°-90°	347.3	1.5
90°-100°	320.6	1.4
100°-110°	412.0	1.8
110°-120°	466.1	2.1
120°-130°	401.2	1.8
130°-140°	373.3	1.6
140°-150°	304.2	1.3
150°-160°	177.1	0.8
160°-170°	95.6	0.4
170°-180°	23.9	0.1
0°-30°	5932.4	26.2
0°-40°	10007.0	44.2
0°-60°	17414.0	76.8
0°-90°	20091.0	88.6
90°-120°	1198.7	5.3
90°-150°	2277.4	10.0
90°-180°	2574.0	11.4
0°-180°	22665.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7641	7641	7641	7641	7641	
5°	7912	7895	7880	7854	7857	763
15°	7767	7835	7922	7838	7782	2154
25°	6186	6401	6390	6466	6278	2915
35°	6432	6446	6791	6542	6620	3971
45°	5754	5733	5765	5787	5747	4308
55°	3421	3453	3383	3396	3320	3073
65°	1485	1502	1526	1511	1503	1542
75°	707	704	708	703	708	764
85°	295	296	296	295	296	279
90°	244	245	244	246	246	137
95°	291	290	289	292	294	250
105°	391	387	382	384	386	413
115°	478	477	476	477	482	466
125°	441	440	443	443	445	400
135°	481	480	481	489	490	375
145°	489	482	490	482	482	307
155°	373	375	378	375	377	175
165°	340	337	337	335	340	96
175°	231	230	227	230	230	24
180°	199	199	199	199	199	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7641.4	7641.4	7641.4	7641.4	7641.4
2.5°	7718.4	7705.6	7685.0	7679.9	7676.1
5°	7912.1	7895.4	7880.0	7854.4	7856.9
7.5°	8094.2	8104.5	8122.5	8091.7	8071.2
10°	8128.9	8167.4	8231.5	8178.9	8126.3
12.5°	8082.7	8144.3	8212.3	8135.3	8073.7
15°	7767.1	7835.1	7922.4	7837.7	7782.5
17.5°	7320.7	7378.5	7469.5	7374.6	7382.3
20°	6875.6	6938.5	6975.7	6996.2	6944.9
22.5°	6443.3	6608.8	6581.9	6661.4	6511.3
25°	6185.5	6401.0	6389.5	6466.4	6277.8
27.5°	6091.8	6343.3	6392.0	6395.9	6217.6
30°	6224.0	6324.0	6565.2	6395.9	6353.5
32.5°	6399.7	6363.8	6796.1	6467.7	6561.3
35°	6431.8	6445.9	6791.0	6542.1	6620.3
37.5°	6306.1	6462.6	6576.7	6562.6	6460.0
40°	6091.8	6343.3	6333.0	6406.1	6209.9
42.5°	5986.7	6109.8	6109.8	6162.4	6025.1
45°	5754.5	5732.7	5764.7	5786.6	5746.8
47.5°	5256.8	5215.7	5195.2	5270.9	5267.0
50°	4574.3	4547.4	4510.2	4600.0	4621.8
52.5°	3979.1	3922.7	3888.1	3913.7	3889.3
55°	3421.1	3453.2	3382.7	3395.5	3319.8
57.5°	2927.3	2999.1	2967.0	2956.8	2900.3
60°	2343.6	2393.6	2359.0	2374.4	2324.4
62.5°	1843.3	1878.0	1893.4	1886.9	1861.3
65°	1485.4	1502.1	1526.5	1511.1	1503.4
67.5°	1226.3	1241.7	1248.1	1244.3	1249.4
70°	1040.3	1044.2	1051.9	1040.3	1055.7
72.5°	871.0	878.7	878.7	880.0	887.7
75°	706.8	704.2	708.1	703.0	708.1
77.5°	568.3	568.3	565.7	563.1	570.8
80°	465.6	460.5	459.2	457.9	463.1
82.5°	370.7	372.0	372.0	370.7	369.4
85°	295.0	296.3	296.3	295.0	296.3
87.5°	254.0	254.0	255.3	255.3	254.0
90°	243.7	245.0	243.7	246.3	246.3
92.5°	260.4	260.4	261.7	264.2	263.0
95°	291.2	289.9	288.6	292.5	293.8
97.5°	320.7	319.4	322.0	324.5	327.1
100°	354.0	354.0	356.6	357.9	360.5
102.5°	368.2	368.2	366.9	370.7	373.3
105°	391.2	387.4	382.3	383.5	386.1
107.5°	409.2	407.9	406.6	409.2	410.5
110°	436.1	434.9	434.9	434.9	437.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	463.1	463.1	461.8	463.1	465.6
115°	478.5	477.2	475.9	477.2	482.3
117.5°	482.3	482.3	479.8	483.6	487.5
120°	475.9	474.6	474.6	477.2	481.0
122.5°	459.2	457.9	457.9	460.5	464.4
125°	441.3	440.0	442.6	442.6	445.1
127.5°	428.4	429.7	432.3	429.7	431.0
130°	431.0	432.3	437.4	433.6	433.6
132.5°	445.1	446.4	455.4	452.8	452.8
135°	481.0	479.8	481.0	488.7	490.0
137.5°	522.1	511.8	497.7	523.4	529.8
140°	556.7	528.5	523.4	534.9	554.2
142.5°	531.1	515.7	502.8	518.2	529.8
145°	488.7	482.3	490.0	482.3	482.3
147.5°	440.0	449.0	465.6	442.6	441.3
150°	402.8	420.7	427.2	414.3	405.4
152.5°	386.1	393.8	397.7	391.2	391.2
155°	373.3	374.6	378.4	374.6	377.1
157.5°	364.3	368.2	368.2	368.2	366.9
160°	356.6	361.7	360.5	360.5	357.9
162.5°	351.5	354.0	352.8	352.8	352.8
165°	339.9	337.4	337.4	334.8	339.9
167.5°	320.7	316.8	316.8	315.6	319.4
170°	296.3	296.3	295.0	295.0	292.5
172.5°	256.6	255.3	254.0	254.0	254.0
175°	230.9	229.6	227.0	229.6	229.6
177.5°	211.7	211.7	212.9	210.4	210.4
180°	198.8	198.8	198.8	198.8	198.8

(END OF REPORT)