

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: P188545

Luminaire Tested: **24SR-LD2-53-C-UNV-L850-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-53-C-UNV-L850-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3635.0 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

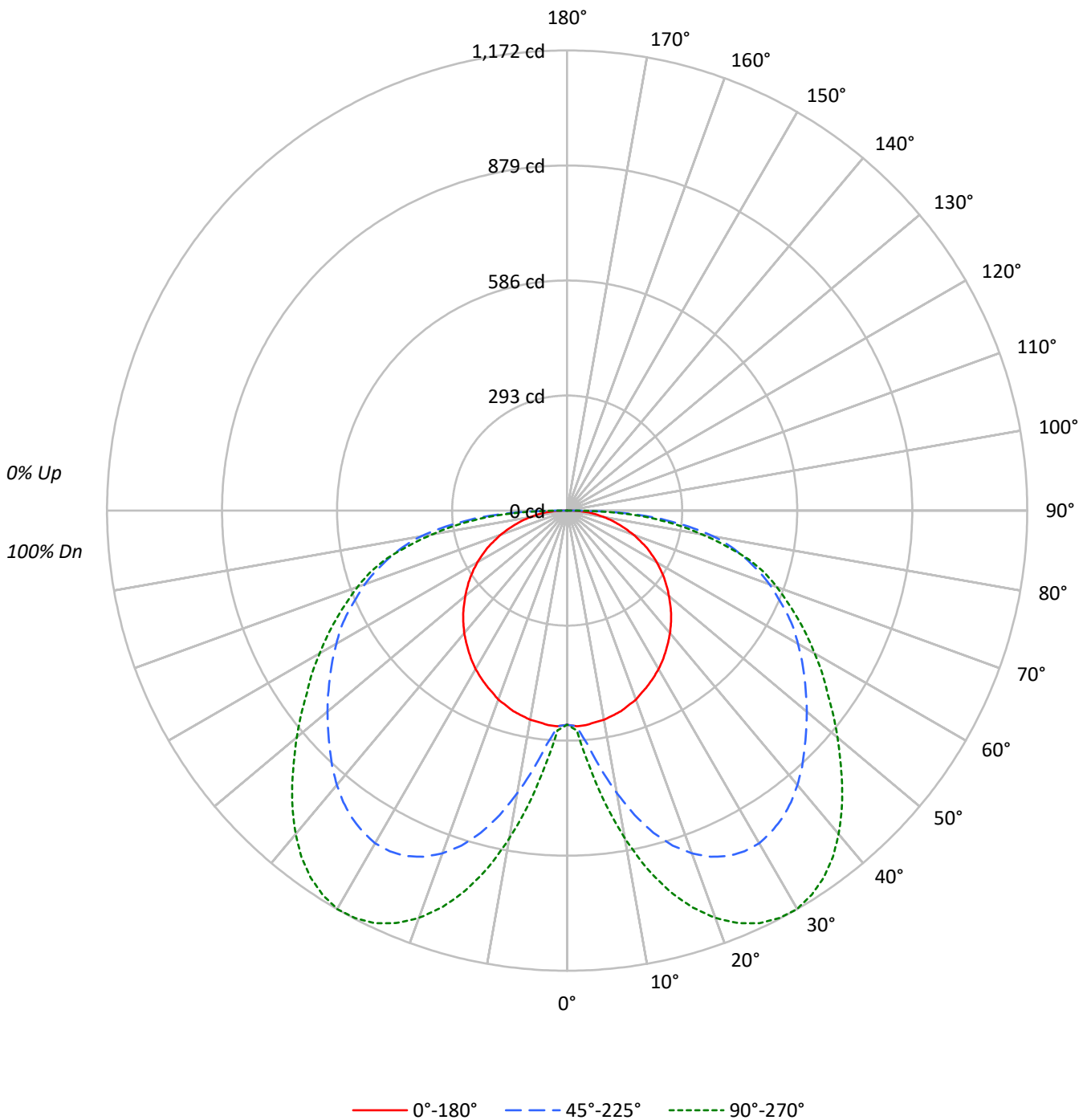
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	100	95	90	103	98	93	88	93	89	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	734	734	734
5°	741	807	884
10°	739	999	1159
15°	737	1183	1396
20°	734	1330	1581
25°	727	1441	1722
30°	724	1520	1820
35°	719	1570	1873
40°	716	1603	1889
45°	713	1628	1884
50°	709	1668	1882
55°	710	1729	1898
60°	710	1826	1959
65°	711	1965	2060
70°	707	2157	2234
75°	709	2445	2484
80°	731	2937	2705
85°	855	3654	3284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	1.7
10°-20°	229.4	6.3
20°-30°	417.5	11.5
30°-40°	553.8	15.2
40°-50°	606.7	16.7
50°-60°	596.3	16.4
60°-70°	540.9	14.9
70°-80°	428.7	11.8
80°-90°	200.9	5.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	707.6	19.5
0°-40°	1261.4	34.7
0°-60°	2464.5	67.8
0°-90°	3635.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3635.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	545	545	545	545	545	
5°	548	552	598	640	655	52
15°	529	657	850	964	1002	149
25°	490	724	971	1109	1160	226
35°	438	708	956	1091	1140	274
45°	374	637	855	959	990	289
55°	303	559	737	795	809	270
65°	223	482	617	635	647	220
75°	136	373	470	471	478	144
85°	55	201	237	213	213	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	545.3	545.3	545.3	545.3	545.3	545.3	545.3	545.3	545.3	545.3	545.3
2.5°	549.8	548.3	548.3	548.3	546.8	546.8	546.8	548.3	548.3	549.8	552.8
5°	548.3	546.8	546.8	546.8	549.8	554.3	563.3	573.8	585.8	597.8	611.2
7.5°	543.8	543.8	543.8	548.3	561.8	579.8	602.3	624.7	644.2	665.2	684.7
10°	540.8	540.8	543.8	558.8	585.8	615.7	645.7	675.7	702.6	731.1	758.1
12.5°	534.8	534.8	543.8	572.3	609.7	648.7	686.2	723.6	759.6	794.0	824.0
15°	528.8	528.8	548.3	588.8	633.7	680.2	725.1	768.6	810.5	849.5	883.9
17.5°	519.9	521.4	551.3	600.8	654.7	707.1	756.6	806.0	851.0	894.4	930.4
20°	512.4	515.4	554.3	611.2	671.2	729.6	785.0	836.0	883.9	928.9	967.8
22.5°	500.4	506.4	555.8	618.7	683.2	746.1	803.0	856.9	907.9	954.3	993.3
25°	489.9	497.4	554.3	621.7	692.1	756.6	815.0	870.4	922.9	970.8	1011.3
27.5°	477.9	489.9	552.8	623.2	695.1	761.1	821.0	877.9	930.4	978.3	1020.2
30°	465.9	480.9	548.3	621.7	693.6	759.6	819.5	877.9	930.4	978.3	1018.7
32.5°	452.4	468.9	539.3	614.2	687.7	752.1	812.0	868.9	922.9	969.3	1009.8
35°	437.5	456.9	528.8	603.8	675.7	740.1	798.5	855.4	907.9	955.8	994.8
37.5°	422.5	445.0	516.9	591.8	662.2	725.1	782.0	839.0	889.9	936.3	973.8
40°	407.5	431.5	503.4	576.8	645.7	707.1	764.1	819.5	867.4	912.4	946.8
42.5°	391.0	418.0	488.4	560.3	626.2	686.2	743.1	797.0	843.5	885.4	918.4
45°	374.5	401.5	471.9	542.3	608.3	665.2	720.6	773.0	816.5	855.4	886.9
47.5°	356.6	386.5	456.9	524.4	587.3	645.7	699.6	747.6	791.0	825.5	855.4
50°	338.6	370.0	439.0	506.4	567.8	624.7	677.2	723.6	764.1	797.0	822.5
52.5°	320.6	353.6	422.5	488.4	549.8	605.3	656.2	699.6	737.1	767.1	792.5
55°	302.6	337.1	406.0	470.4	531.8	585.8	635.2	675.7	711.6	737.1	758.1
57.5°	283.2	320.6	389.5	453.9	513.9	567.8	614.2	653.2	686.2	708.6	726.6
60°	263.7	302.6	371.5	437.5	495.9	548.3	593.3	630.7	659.2	678.7	695.1
62.5°	242.7	284.6	355.1	419.5	477.9	528.8	570.8	603.8	632.2	650.2	659.2
65°	223.2	266.7	337.1	401.5	458.4	506.4	546.8	578.3	602.3	617.2	624.7
67.5°	200.8	247.2	317.6	382.0	436.0	482.4	519.9	549.8	570.8	581.3	587.3
70°	179.8	227.7	296.6	359.6	410.5	455.4	491.4	519.9	537.8	548.3	549.8
72.5°	157.3	206.7	275.7	335.6	385.0	427.0	461.4	486.9	501.9	510.9	512.4
75°	136.3	184.3	250.2	307.1	353.6	392.5	425.5	449.4	464.4	470.4	470.4
77.5°	115.4	160.3	223.2	277.2	320.6	356.6	386.5	410.5	422.5	428.5	428.5
80°	94.4	137.8	194.8	244.2	283.2	316.1	346.1	367.0	379.0	379.0	370.0
82.5°	74.9	112.4	161.8	206.7	239.7	269.7	298.1	311.6	314.6	311.6	304.1
85°	55.4	85.4	125.8	160.3	190.3	211.2	229.2	238.2	239.7	236.7	230.7
87.5°	31.5	49.4	71.9	94.4	113.9	124.3	139.3	142.3	142.3	146.8	139.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	545.3	545.3	545.3	545.3	545.3	545.3	545.3	545.3
2.5°	554.3	555.8	555.8	560.3	560.3	561.8	560.3	560.3
5°	620.2	626.2	635.2	644.2	647.2	653.2	651.7	654.7
7.5°	699.6	711.6	725.1	737.1	743.1	749.1	750.6	755.1
10°	779.0	794.0	810.5	827.0	836.0	840.5	846.5	848.0
12.5°	848.0	870.4	886.9	904.9	916.9	922.9	928.9	931.9
15°	910.9	933.3	954.3	973.8	985.8	994.8	1000.8	1002.3
17.5°	958.8	984.3	1006.8	1027.7	1039.7	1050.2	1056.2	1059.2
20°	996.3	1024.7	1047.2	1068.2	1081.7	1093.7	1102.6	1104.1
22.5°	1023.2	1051.7	1077.2	1098.1	1114.6	1126.6	1134.1	1137.1
25°	1042.7	1072.7	1098.1	1119.1	1135.6	1149.1	1156.6	1159.6
27.5°	1051.7	1083.2	1110.1	1129.6	1146.1	1159.6	1168.6	1170.1
30°	1053.2	1083.2	1110.1	1131.1	1147.6	1161.1	1168.6	1171.6
32.5°	1042.7	1074.2	1101.1	1120.6	1137.1	1150.6	1158.1	1159.6
35°	1027.7	1056.2	1081.7	1101.1	1117.6	1129.6	1137.1	1140.1
37.5°	1005.3	1032.2	1056.2	1074.2	1089.2	1101.1	1108.6	1111.6
40°	978.3	1003.8	1026.2	1042.7	1056.2	1066.7	1072.7	1075.7
42.5°	946.8	970.8	991.8	1005.3	1018.7	1027.7	1032.2	1035.2
45°	913.9	936.3	952.8	964.8	976.8	984.3	988.8	990.3
47.5°	879.4	898.9	912.4	922.9	931.9	939.3	943.8	943.8
50°	845.0	861.4	871.9	882.4	889.9	894.4	897.4	898.9
52.5°	810.5	824.0	831.5	840.5	846.5	851.0	853.9	853.9
55°	774.5	785.0	791.0	798.5	804.5	807.5	810.5	809.0
57.5°	740.1	747.6	752.1	758.1	762.6	765.6	768.6	770.1
60°	704.1	710.1	711.6	717.6	722.1	725.1	726.6	728.1
62.5°	666.7	671.2	674.2	677.2	681.7	684.7	686.2	687.7
65°	629.2	632.2	632.2	638.2	642.7	644.2	645.7	647.2
67.5°	590.3	591.8	593.3	597.8	602.3	603.8	606.8	606.8
70°	551.3	551.3	552.8	557.3	561.8	563.3	566.3	567.8
72.5°	510.9	512.4	512.4	516.9	521.4	524.4	525.9	527.4
75°	468.9	468.9	470.4	471.9	473.4	474.9	474.9	477.9
77.5°	424.0	418.0	415.0	412.0	413.5	413.5	412.0	413.5
80°	361.1	353.6	349.1	347.6	349.1	347.6	347.6	349.1
82.5°	296.6	287.6	284.6	283.2	283.2	283.2	281.7	284.6
85°	223.2	217.2	214.2	211.2	212.7	212.7	211.2	212.7
87.5°	134.8	131.8	128.8	125.8	127.3	125.8	124.3	128.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)