

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: P188514

Luminaire Tested: **24SR-LD2-64-C-UNV-L840-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188514
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24779)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-64-C-UNV-L840-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3993.0 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

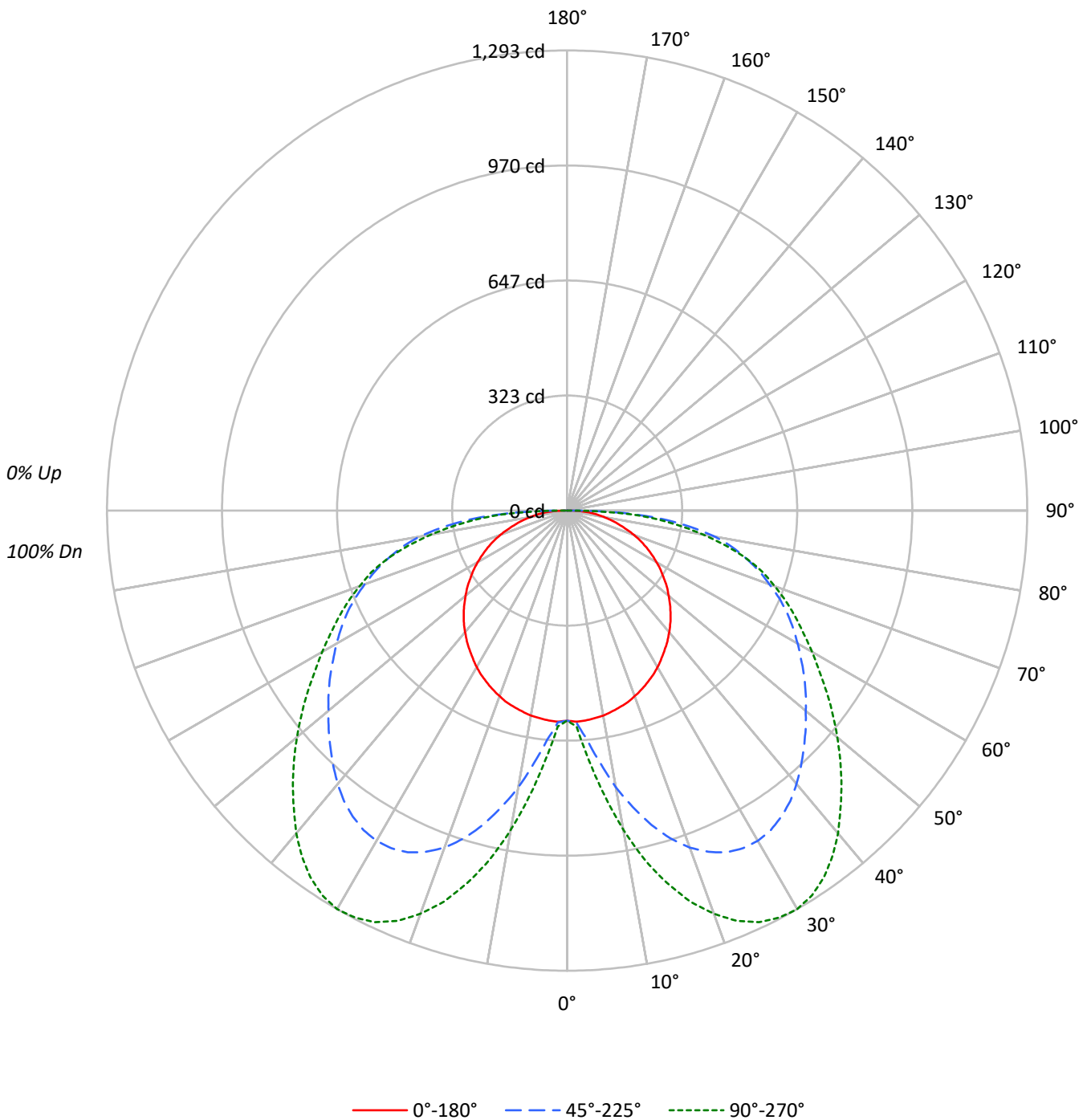
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20
10	48	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°	794	794	794
5°	799	874	951
10°	800	1079	1244
15°	796	1273	1509
20°	795	1443	1726
25°	792	1573	1894
30°	789	1665	2009
35°	785	1724	2066
40°	783	1761	2079
45°	782	1790	2074
50°	779	1832	2074
55°	779	1908	2089
60°	781	2013	2139
65°	785	2173	2253
70°	785	2382	2441
75°	784	2711	2720
80°	818	3261	3002
85°	957	4089	3702



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.4	1.6
10°-20°	248.1	6.2
20°-30°	456.4	11.4
30°-40°	608.4	15.2
40°-50°	666.5	16.7
50°-60°	655.4	16.4
60°-70°	594.8	14.9
70°-80°	473.5	11.9
80°-90°	224.4	5.6
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°	770.0	19.3
0°-40°	1378.4	34.5
0°-60°	2700.3	67.6
0°-90°	3993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3993.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	592	597	647	689	704	56
15°	572	708	914	1041	1083	162
25°	533	785	1060	1218	1276	246
35°	478	772	1050	1205	1258	299
45°	411	696	941	1055	1090	317
55°	332	615	813	874	890	297
65°	246	532	682	697	708	243
75°	151	415	522	518	523	160
85°	62	224	265	240	240	64
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°	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3
2.5°	593.6	593.6	591.9	591.9	591.9	590.3	590.3	591.9	593.6	595.3	597.0
5°	591.9	591.9	591.9	591.9	593.6	600.3	608.7	620.4	630.5	647.3	655.7
7.5°	588.6	588.6	590.3	595.3	608.7	627.2	648.9	674.1	694.2	716.0	736.1
10°	585.2	585.2	588.6	605.4	632.2	664.0	695.9	727.8	756.3	789.8	815.0
12.5°	578.5	578.5	588.6	618.8	659.0	699.3	739.5	781.4	818.3	853.5	888.7
15°	571.8	571.8	591.9	633.9	684.2	732.8	779.7	828.4	872.0	913.9	950.8
17.5°	565.1	566.8	597.0	650.6	706.0	763.0	818.3	870.3	918.9	965.9	1007.8
20°	555.0	558.4	600.3	662.4	724.4	788.1	846.8	903.8	957.5	1007.8	1051.4
22.5°	545.0	551.7	602.0	670.7	739.5	808.3	870.3	929.0	986.0	1038.0	1083.3
25°	533.2	541.6	603.7	675.8	749.6	820.0	885.4	947.4	1006.1	1059.8	1105.1
27.5°	521.5	533.2	600.3	675.8	752.9	826.7	892.1	955.8	1017.9	1069.8	1118.5
30°	508.1	523.2	595.3	674.1	752.9	825.0	892.1	957.5	1017.9	1071.5	1118.5
32.5°	493.0	513.1	586.9	667.4	746.2	820.0	887.1	950.8	1011.2	1064.8	1110.1
35°	477.9	499.7	576.8	657.3	736.1	808.3	873.7	937.4	996.1	1049.7	1095.0
37.5°	462.8	488.0	565.1	645.6	721.1	791.5	856.9	920.6	977.6	1029.6	1071.5
40°	446.0	472.9	550.0	628.8	704.3	771.4	836.8	897.1	952.5	1002.8	1043.0
42.5°	429.3	457.8	533.2	612.1	684.2	751.2	815.0	873.7	927.3	972.6	1009.5
45°	410.8	441.0	516.5	591.9	662.4	729.4	791.5	846.8	898.8	940.7	974.3
47.5°	392.4	424.2	498.0	573.5	642.2	707.6	768.0	821.7	868.6	908.9	940.7
50°	372.3	405.8	479.6	553.4	622.1	685.8	744.5	794.8	840.1	875.3	905.5
52.5°	353.8	389.0	461.1	534.9	602.0	665.7	722.7	769.7	811.6	845.1	870.3
55°	332.0	370.6	444.4	516.5	583.6	645.6	699.3	744.5	783.1	813.3	835.1
57.5°	311.9	352.1	425.9	498.0	563.4	625.5	675.8	719.4	752.9	779.7	799.9
60°	290.1	333.7	407.5	479.6	545.0	605.4	654.0	694.2	726.1	747.9	764.7
62.5°	268.3	313.6	390.7	461.1	524.9	581.9	628.8	665.7	694.2	716.0	726.1
65°	246.5	293.5	370.6	442.7	504.7	558.4	603.7	638.9	664.0	682.5	689.2
67.5°	223.0	273.3	350.5	419.2	481.3	533.2	575.2	608.7	630.5	645.6	648.9
70°	199.5	249.9	327.0	395.7	454.4	503.1	545.0	573.5	595.3	605.4	608.7
72.5°	174.4	226.4	303.5	368.9	424.2	472.9	509.8	540.0	558.4	565.1	565.1
75°	150.9	201.2	276.7	338.7	392.4	437.7	472.9	499.7	516.5	521.5	519.8
77.5°	127.4	177.7	248.2	306.9	355.5	397.4	431.0	456.1	471.2	476.2	474.6
80°	105.6	152.6	214.6	270.0	313.6	352.1	382.3	409.2	422.6	420.9	410.8
82.5°	83.8	124.1	179.4	228.1	266.6	301.8	332.0	348.8	353.8	348.8	338.7
85°	62.0	93.9	139.2	177.7	209.6	238.1	256.6	268.3	270.0	264.9	256.6
87.5°	36.9	55.3	82.2	105.6	129.1	142.5	152.6	161.0	162.7	157.6	154.3
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°	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3
2.5°	598.6	600.3	602.0	605.4	603.7	605.4	605.4	607.0
5°	667.4	677.5	684.2	694.2	694.2	699.3	700.9	704.3
7.5°	751.2	764.7	779.7	794.8	796.5	804.9	808.3	808.3
10°	836.8	855.2	873.7	890.4	895.4	905.5	910.5	910.5
12.5°	913.9	934.0	959.2	977.6	984.3	996.1	1002.8	1004.4
15°	981.0	1006.1	1031.3	1051.4	1063.1	1074.9	1081.6	1083.3
17.5°	1038.0	1068.2	1095.0	1115.1	1128.5	1141.9	1150.3	1152.0
20°	1083.3	1116.8	1143.6	1165.4	1180.5	1197.3	1204.0	1205.7
22.5°	1118.5	1150.3	1180.5	1204.0	1220.8	1237.5	1245.9	1247.6
25°	1141.9	1175.5	1205.7	1230.8	1249.3	1264.4	1272.7	1276.1
27.5°	1155.4	1190.6	1220.8	1244.2	1262.7	1279.5	1287.8	1289.5
30°	1157.0	1192.3	1222.4	1245.9	1264.4	1281.1	1289.5	1292.9
32.5°	1148.7	1183.9	1212.4	1235.9	1254.3	1269.4	1277.8	1281.1
35°	1131.9	1165.4	1193.9	1215.7	1232.5	1245.9	1256.0	1257.7
37.5°	1108.4	1140.3	1165.4	1185.5	1202.3	1215.7	1224.1	1224.1
40°	1076.6	1106.7	1128.5	1147.0	1163.7	1173.8	1183.9	1183.9
42.5°	1041.3	1069.8	1090.0	1106.7	1118.5	1130.2	1136.9	1136.9
45°	1004.4	1027.9	1048.0	1061.5	1073.2	1081.6	1090.0	1090.0
47.5°	967.6	987.7	1002.8	1016.2	1026.2	1034.6	1041.3	1041.3
50°	929.0	947.4	959.2	970.9	979.3	986.0	991.0	991.0
52.5°	890.4	905.5	913.9	924.0	930.7	937.4	940.7	940.7
55°	853.5	863.6	870.3	878.7	883.7	887.1	890.4	890.4
57.5°	813.3	820.0	826.7	831.7	835.1	838.4	841.8	840.1
60°	773.0	778.1	783.1	786.5	789.8	793.2	794.8	794.8
62.5°	732.8	734.5	736.1	742.9	746.2	747.9	749.6	749.6
65°	692.5	692.5	694.2	699.3	702.6	706.0	707.6	707.6
67.5°	648.9	650.6	652.3	657.3	659.0	662.4	665.7	665.7
70°	605.4	607.0	607.0	612.1	613.7	617.1	620.4	620.4
72.5°	563.4	563.4	563.4	566.8	570.1	573.5	576.8	576.8
75°	516.5	516.5	516.5	519.8	519.8	521.5	524.9	523.2
77.5°	466.2	461.1	456.1	454.4	454.4	456.1	457.8	457.8
80°	400.8	394.1	390.7	387.4	385.7	387.4	389.0	387.4
82.5°	332.0	323.6	318.6	316.9	316.9	316.9	318.6	315.3
85°	251.5	243.1	239.8	239.8	238.1	238.1	238.1	239.8
87.5°	150.9	145.9	140.9	142.5	140.9	139.2	140.9	144.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)