

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: P188512

Luminaire Tested: **24SR-LD2-64-C-UNV-L830-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188512
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-L830-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3797.0 lumens
Efficiency: N/A
Efficacy: 68.4 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

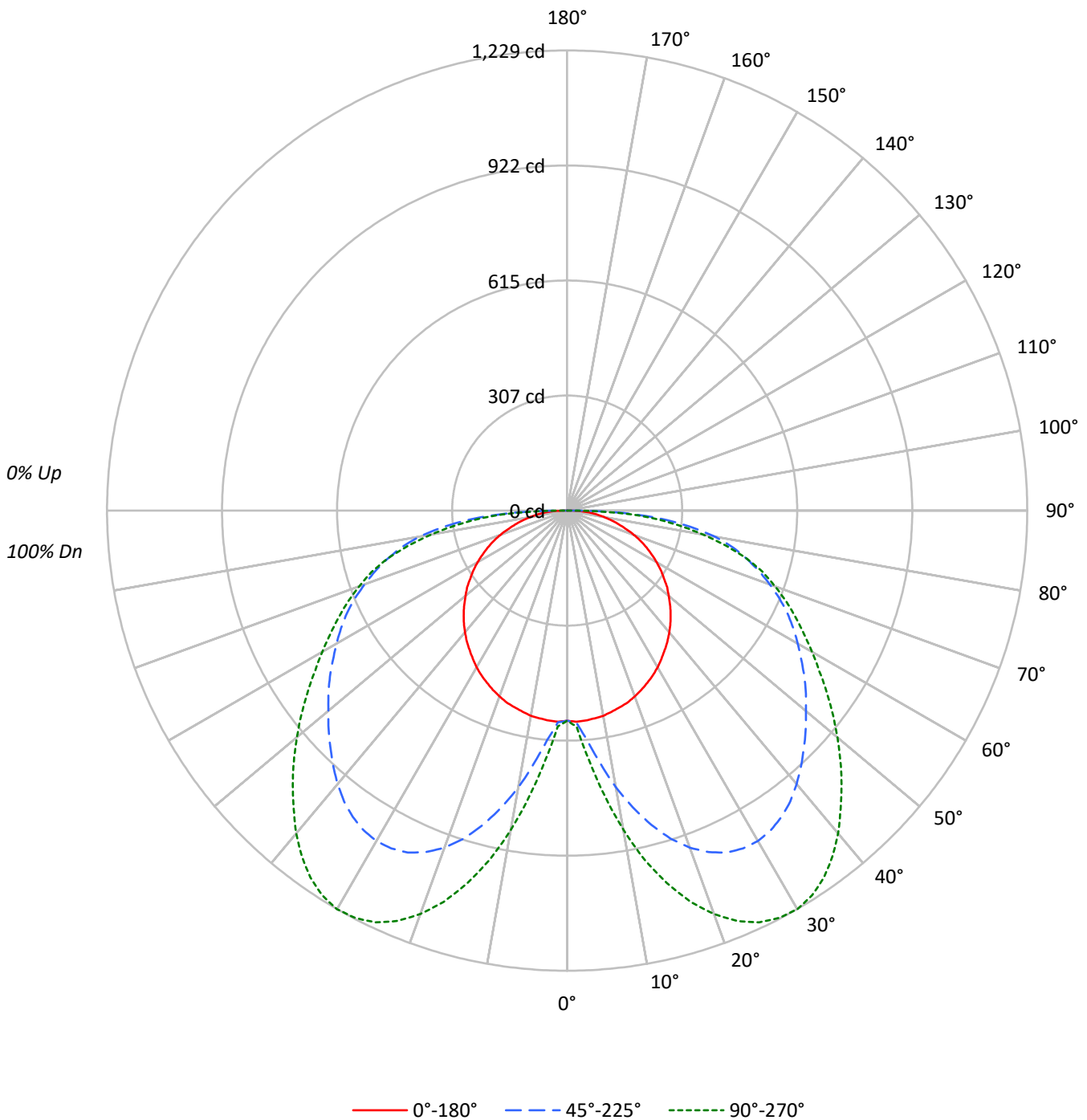
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	755	755	755
5°	760	831	905
10°	760	1026	1183
15°	757	1210	1435
20°	756	1372	1642
25°	753	1496	1802
30°	751	1583	1910
35°	746	1640	1964
40°	745	1675	1977
45°	743	1702	1972
50°	741	1742	1973
55°	741	1814	1986
60°	742	1914	2034
65°	746	2066	2142
70°	747	2264	2321
75°	746	2578	2586
80°	779	3101	2854
85°	911	3889	3520



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.2	1.6
10°-20°	235.9	6.2
20°-30°	434.0	11.4
30°-40°	578.6	15.2
40°-50°	633.8	16.7
50°-60°	623.2	16.4
60°-70°	565.6	14.9
70°-80°	450.2	11.9
80°-90°	213.4	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°	732.2	19.3
0°-40°	1310.7	34.5
0°-60°	2567.8	67.6
0°-90°	3797.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3797.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	563	568	616	655	670	53
15°	544	674	869	990	1030	154
25°	507	746	1008	1158	1214	234
35°	454	734	998	1146	1196	285
45°	391	662	894	1003	1036	302
55°	316	584	773	832	847	283
65°	234	506	649	662	673	231
75°	144	395	496	493	498	152
85°	59	213	252	228	228	61
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°	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3
2.5°	564.5	564.5	562.9	562.9	562.9	561.3	561.3	562.9	564.5	566.1	567.7
5°	562.9	562.9	562.9	562.9	564.5	570.9	578.8	590.0	599.6	615.5	623.5
7.5°	559.7	559.7	561.3	566.1	578.8	596.4	617.1	641.0	660.1	680.9	700.0
10°	556.5	556.5	559.7	575.6	601.1	631.4	661.7	692.0	719.1	751.0	775.0
12.5°	550.1	550.1	559.7	588.4	626.7	664.9	703.2	743.1	778.1	811.6	845.1
15°	543.7	543.7	562.9	602.7	650.6	696.8	741.5	787.7	829.2	869.0	904.1
17.5°	537.4	539.0	567.7	618.7	671.3	725.5	778.1	827.6	873.8	918.5	958.3
20°	527.8	531.0	570.9	629.9	688.9	749.4	805.3	859.5	910.5	958.3	999.8
22.5°	518.2	524.6	572.4	637.8	703.2	768.6	827.6	883.4	937.6	987.0	1030.1
25°	507.1	515.0	574.0	642.6	712.8	779.7	841.9	900.9	956.7	1007.8	1050.8
27.5°	495.9	507.1	570.9	642.6	716.0	786.1	848.3	908.9	967.9	1017.3	1063.6
30°	483.2	497.5	566.1	641.0	716.0	784.5	848.3	910.5	967.9	1018.9	1063.6
32.5°	468.8	487.9	558.1	634.6	709.6	779.7	843.5	904.1	961.5	1012.5	1055.6
35°	454.4	475.2	548.5	625.1	700.0	768.6	830.8	891.4	947.2	998.2	1041.2
37.5°	440.1	464.0	537.4	613.9	685.7	752.6	814.8	875.4	929.6	979.1	1018.9
40°	424.2	449.7	523.0	598.0	669.7	733.5	795.7	853.1	905.7	953.5	991.8
42.5°	408.2	435.3	507.1	582.0	650.6	714.4	775.0	830.8	881.8	924.8	959.9
45°	390.7	419.4	491.1	562.9	629.9	693.6	752.6	805.3	854.7	894.5	926.4
47.5°	373.1	403.4	473.6	545.3	610.7	672.9	730.3	781.3	826.0	864.3	894.5
50°	354.0	385.9	456.0	526.2	591.6	652.2	708.0	755.8	798.9	832.4	861.1
52.5°	336.5	369.9	438.5	508.7	572.4	633.0	687.3	731.9	771.8	803.7	827.6
55°	315.7	352.4	422.6	491.1	554.9	613.9	664.9	708.0	744.7	773.4	794.1
57.5°	296.6	334.9	405.0	473.6	535.8	594.8	642.6	684.1	716.0	741.5	760.6
60°	275.9	317.3	387.5	456.0	518.2	575.6	621.9	660.1	690.4	711.2	727.1
62.5°	255.1	298.2	371.5	438.5	499.1	553.3	598.0	633.0	660.1	680.9	690.4
65°	234.4	279.0	352.4	421.0	480.0	531.0	574.0	607.5	631.4	649.0	655.4
67.5°	212.1	259.9	333.3	398.6	457.6	507.1	546.9	578.8	599.6	613.9	617.1
70°	189.8	237.6	310.9	376.3	432.1	478.4	518.2	545.3	566.1	575.6	578.8
72.5°	165.8	215.3	288.6	350.8	403.4	449.7	484.7	513.4	531.0	537.4	537.4
75°	143.5	191.3	263.1	322.1	373.1	416.2	449.7	475.2	491.1	495.9	494.3
77.5°	121.2	169.0	236.0	291.8	338.0	377.9	409.8	433.7	448.1	452.9	451.3
80°	100.5	145.1	204.1	256.7	298.2	334.9	363.6	389.1	401.8	400.2	390.7
82.5°	79.7	118.0	170.6	216.9	253.5	287.0	315.7	331.7	336.5	331.7	322.1
85°	59.0	89.3	132.3	169.0	199.3	226.4	244.0	255.1	256.7	251.9	244.0
87.5°	35.1	52.6	78.1	100.5	122.8	135.5	145.1	153.1	154.7	149.9	146.7
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°	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3
2.5°	569.3	570.9	572.4	575.6	574.0	575.6	575.6	577.2
5°	634.6	644.2	650.6	660.1	660.1	664.9	666.5	669.7
7.5°	714.4	727.1	741.5	755.8	757.4	765.4	768.6	768.6
10°	795.7	813.2	830.8	846.7	851.5	861.1	865.8	865.8
12.5°	869.0	888.2	912.1	929.6	936.0	947.2	953.5	955.1
15°	932.8	956.7	980.7	999.8	1011.0	1022.1	1028.5	1030.1
17.5°	987.0	1015.7	1041.2	1060.4	1073.1	1085.9	1093.9	1095.5
20°	1030.1	1062.0	1087.5	1108.2	1122.6	1138.5	1144.9	1146.5
22.5°	1063.6	1093.9	1122.6	1144.9	1160.8	1176.8	1184.8	1186.4
25°	1085.9	1117.8	1146.5	1170.4	1187.9	1202.3	1210.3	1213.5
27.5°	1098.7	1132.1	1160.8	1183.2	1200.7	1216.7	1224.6	1226.2
30°	1100.2	1133.7	1162.4	1184.8	1202.3	1218.2	1226.2	1229.4
32.5°	1092.3	1125.8	1152.9	1175.2	1192.7	1207.1	1215.1	1218.2
35°	1076.3	1108.2	1135.3	1156.1	1172.0	1184.8	1194.3	1195.9
37.5°	1054.0	1084.3	1108.2	1127.4	1143.3	1156.1	1164.0	1164.0
40°	1023.7	1052.4	1073.1	1090.7	1106.6	1116.2	1125.8	1125.8
42.5°	990.2	1017.3	1036.5	1052.4	1063.6	1074.7	1081.1	1081.1
45°	955.1	977.5	996.6	1009.4	1020.5	1028.5	1036.5	1036.5
47.5°	920.1	939.2	953.5	966.3	975.9	983.8	990.2	990.2
50°	883.4	900.9	912.1	923.3	931.2	937.6	942.4	942.4
52.5°	846.7	861.1	869.0	878.6	885.0	891.4	894.5	894.5
55°	811.6	821.2	827.6	835.5	840.3	843.5	846.7	846.7
57.5°	773.4	779.7	786.1	790.9	794.1	797.3	800.5	798.9
60°	735.1	739.9	744.7	747.8	751.0	754.2	755.8	755.8
62.5°	696.8	698.4	700.0	706.4	709.6	711.2	712.8	712.8
65°	658.6	658.6	660.1	664.9	668.1	671.3	672.9	672.9
67.5°	617.1	618.7	620.3	625.1	626.7	629.9	633.0	633.0
70°	575.6	577.2	577.2	582.0	583.6	586.8	590.0	590.0
72.5°	535.8	535.8	535.8	539.0	542.2	545.3	548.5	548.5
75°	491.1	491.1	491.1	494.3	494.3	495.9	499.1	497.5
77.5°	443.3	438.5	433.7	432.1	432.1	433.7	435.3	435.3
80°	381.1	374.7	371.5	368.3	366.7	368.3	369.9	368.3
82.5°	315.7	307.8	303.0	301.4	301.4	301.4	303.0	299.8
85°	239.2	231.2	228.0	228.0	226.4	226.4	226.4	228.0
87.5°	143.5	138.7	133.9	135.5	133.9	132.3	133.9	137.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)