

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: P188612

Luminaire Tested: **24SR-LD2-45-C-UNV-L830-CD1-SO-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188612  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24785)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24SR-LD2-45-C-UNV-L830-CD1-SO-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

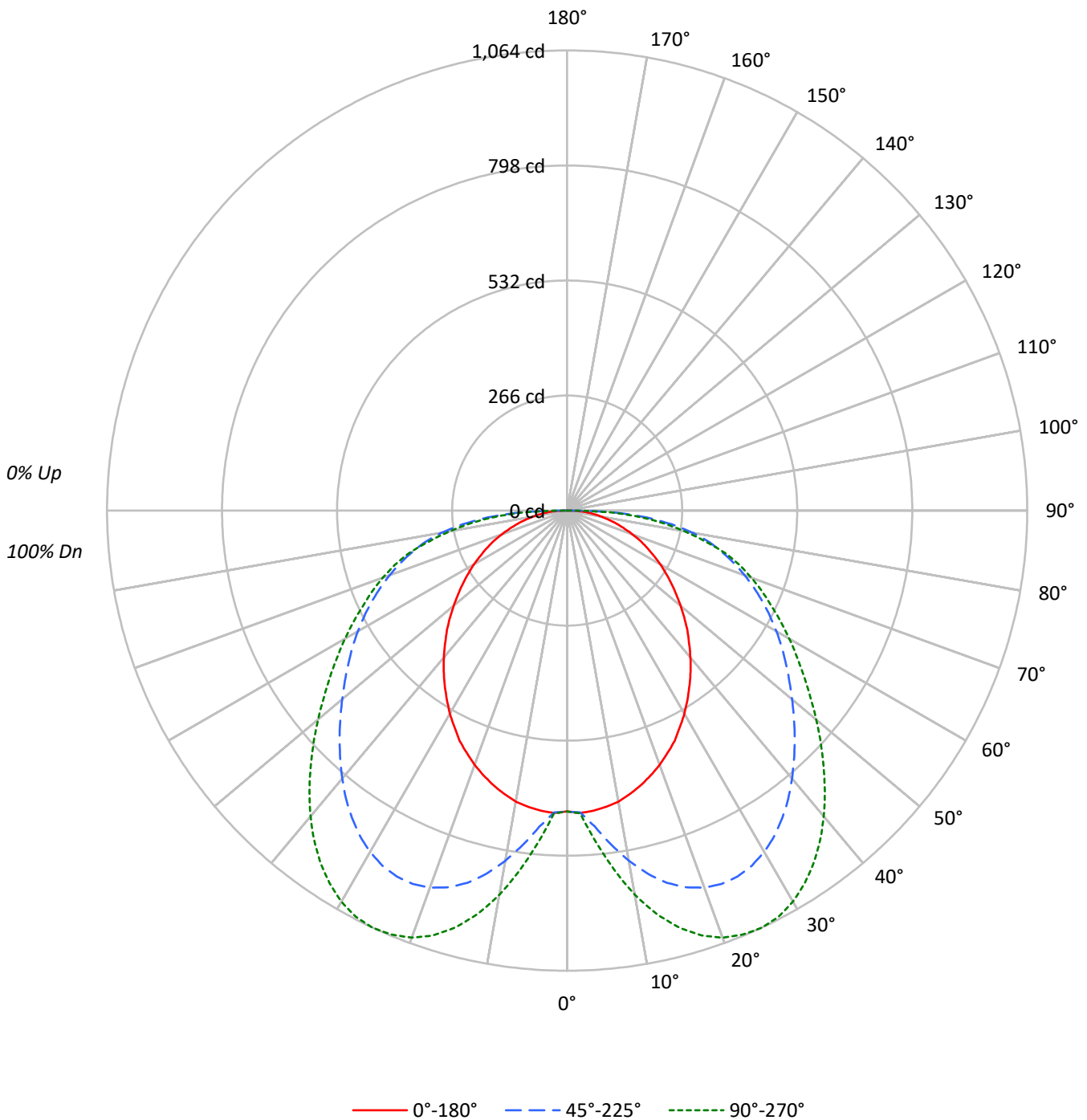
Lumens per Lamp: N/A  
Luminaire Lumens: 3214.0 lumens  
Efficiency: N/A  
Efficacy: 87.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.85 / 1.72  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	107	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66	64
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55	53
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47	44
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	936	936	936
5°	941	990	1040
10°	933	1123	1232
15°	916	1241	1390
20°	896	1328	1505
25°	872	1385	1580
30°	842	1415	1622
35°	810	1425	1633
40°	779	1421	1622
45°	748	1416	1596
50°	716	1421	1574
55°	691	1449	1569
60°	670	1504	1597
65°	651	1588	1659
70°	634	1718	1783
75°	618	1929	1964
80°	620	2281	2135
85°	685	2864	2590



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.2	2.2
10°-20°	243.0	7.6
20°-30°	406.9	12.7
30°-40°	509.5	15.9
40°-50°	534.5	16.6
50°-60°	505.1	15.7
60°-70°	442.1	13.8
70°-80°	341.4	10.6
80°-90°	159.3	5.0
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°	722.0	22.5
0°-40°	1231.5	38.3
0°-60°	2271.1	70.7
0°-90°	3214.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3214.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	696	696	696	696	696	
5°	697	696	733	761	770	66
15°	658	750	891	972	998	185
25°	588	754	933	1028	1064	270
35°	493	689	868	961	994	309
45°	393	584	744	817	839	303
55°	294	486	618	658	669	264
65°	204	398	499	513	521	202
75°	119	298	371	374	378	126
85°	44	157	186	172	168	47
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°	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5
2.5°	699.9	698.8	697.7	695.5	694.3	694.3	694.3	694.3	695.5	698.8	701.0
5°	696.6	696.6	694.3	693.2	694.3	697.7	703.2	712.1	721.0	733.2	743.2
7.5°	691.0	689.9	688.8	689.9	699.9	714.3	728.8	745.5	761.0	778.8	793.2
10°	683.2	682.1	683.2	692.1	712.1	735.5	756.6	777.7	798.8	822.1	842.1
12.5°	671.0	671.0	675.5	695.5	723.2	752.1	779.9	806.6	833.2	859.9	883.2
15°	657.7	658.8	669.9	698.8	733.2	766.6	798.8	829.9	861.0	891.0	916.5
17.5°	642.1	644.4	663.2	698.8	737.7	776.6	813.2	847.7	881.0	913.2	939.9
20°	625.5	627.7	655.5	696.6	739.9	782.1	821.0	858.8	894.3	927.7	955.4
22.5°	606.6	609.9	645.5	689.9	737.7	783.2	823.2	862.1	898.8	934.3	962.1
25°	587.7	592.1	633.2	681.0	731.0	777.7	819.9	858.8	897.7	933.2	961.0
27.5°	564.4	572.1	618.8	667.7	721.0	767.7	809.9	851.0	889.9	925.4	953.2
30°	542.1	552.1	601.0	652.1	706.6	753.2	795.4	836.6	875.4	911.0	938.8
32.5°	517.7	529.9	581.0	634.4	687.7	733.2	776.6	817.7	856.5	892.1	918.8
35°	493.3	507.7	559.9	614.4	666.6	712.1	754.3	795.4	833.2	867.7	893.2
37.5°	468.8	484.4	536.6	592.1	642.1	686.6	728.8	768.8	807.7	839.9	865.4
40°	443.3	461.0	513.3	566.6	616.6	659.9	702.1	741.0	777.7	808.8	833.2
42.5°	417.7	437.7	489.9	542.1	589.9	632.1	674.4	712.1	746.6	776.6	799.9
45°	393.3	413.3	464.4	516.6	563.3	605.5	646.6	683.2	716.6	744.3	766.6
47.5°	367.7	389.9	441.1	492.2	536.6	578.8	618.8	653.2	685.5	711.0	732.1
50°	342.2	366.6	416.6	466.6	512.2	553.3	592.1	625.5	655.5	678.8	698.8
52.5°	317.7	343.3	394.4	443.3	487.7	528.8	566.6	598.8	626.6	647.7	665.5
55°	294.4	321.1	372.2	419.9	465.5	505.5	541.0	572.1	597.7	617.7	633.2
57.5°	271.1	300.0	351.1	399.9	443.3	483.3	517.7	546.6	569.9	588.8	602.1
60°	248.9	278.9	331.1	378.8	422.2	461.0	494.4	521.0	543.3	558.8	568.8
62.5°	225.5	257.7	310.0	358.8	402.2	438.8	471.0	496.6	515.5	528.8	537.7
65°	204.4	236.6	290.0	338.8	379.9	415.5	445.5	469.9	487.7	498.8	504.4
67.5°	183.3	216.6	270.0	317.7	357.7	392.2	419.9	443.3	458.8	467.7	472.2
70°	161.1	196.6	248.9	295.5	334.4	366.6	394.4	414.4	428.8	436.6	438.8
72.5°	138.9	175.5	227.7	273.3	310.0	341.1	366.6	385.5	398.8	404.4	405.5
75°	118.9	153.3	204.4	247.7	283.3	312.2	337.7	355.5	365.5	371.1	372.2
77.5°	98.9	132.2	181.1	222.2	253.3	281.1	305.5	322.2	332.2	336.6	336.6
80°	80.0	111.1	155.5	192.2	222.2	247.7	270.0	286.6	295.5	294.4	290.0
82.5°	62.2	91.1	128.9	161.1	187.8	211.1	233.3	243.3	246.6	243.3	240.0
85°	44.4	67.8	97.8	124.4	147.8	165.5	180.0	187.8	188.9	185.5	182.2
87.5°	25.6	37.8	55.5	75.5	87.8	98.9	111.1	115.5	115.5	117.8	111.1
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°	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5
2.5°	699.9	701.0	701.0	703.2	704.3	704.3	703.2	701.0
5°	746.6	753.2	757.7	764.3	767.7	771.0	772.1	769.9
7.5°	801.0	811.0	819.9	829.9	834.3	837.7	842.1	838.8
10°	853.2	866.5	877.7	888.8	895.4	899.9	903.2	902.1
12.5°	897.7	913.2	925.4	936.5	945.4	952.1	955.4	955.4
15°	932.1	949.9	965.4	977.6	986.5	993.2	997.6	997.6
17.5°	958.8	976.5	993.2	1005.4	1014.3	1023.2	1027.6	1029.9
20°	974.3	993.2	1009.9	1023.2	1033.2	1043.2	1047.6	1051.0
22.5°	982.1	1001.0	1018.7	1033.2	1044.3	1053.2	1058.7	1061.0
25°	982.1	1002.1	1021.0	1035.4	1046.5	1056.5	1062.1	1064.3
27.5°	975.4	996.5	1015.4	1028.7	1041.0	1051.0	1056.5	1058.7
30°	962.1	983.2	1002.1	1015.4	1027.6	1036.5	1042.1	1044.3
32.5°	941.0	963.2	981.0	994.3	1006.5	1015.4	1021.0	1022.1
35°	916.5	937.6	954.3	967.6	979.9	987.6	992.1	994.3
37.5°	886.5	906.5	923.2	935.4	946.5	955.4	959.9	961.0
40°	854.3	873.2	887.7	898.8	909.9	917.7	922.1	923.2
42.5°	819.9	837.7	851.0	861.0	871.0	877.7	881.0	882.1
45°	784.3	799.9	812.1	821.0	829.9	835.4	838.8	838.8
47.5°	748.8	763.2	773.2	779.9	787.7	793.2	796.6	795.4
50°	713.2	725.5	733.2	739.9	746.6	749.9	753.2	752.1
52.5°	677.7	688.8	693.2	698.8	704.3	707.7	711.0	708.8
55°	643.2	651.0	655.5	659.9	664.4	667.7	669.9	668.8
57.5°	609.9	615.5	618.8	623.2	626.6	628.8	631.0	629.9
60°	574.4	578.8	581.0	585.5	588.8	591.0	593.3	593.3
62.5°	541.0	544.4	545.5	549.9	552.1	554.4	557.7	556.6
65°	505.5	508.8	511.0	514.4	516.6	518.8	522.2	521.0
67.5°	472.2	475.5	476.6	479.9	483.3	486.6	487.7	487.7
70°	438.8	441.1	442.2	446.6	447.7	451.0	453.3	453.3
72.5°	405.5	406.6	408.8	412.2	414.4	416.6	418.8	417.7
75°	369.9	372.2	373.3	375.5	375.5	377.7	377.7	377.7
77.5°	333.3	330.0	328.8	327.7	326.6	326.6	326.6	325.5
80°	283.3	280.0	278.9	276.6	276.6	276.6	276.6	275.5
82.5°	234.4	230.0	227.7	226.6	225.5	225.5	225.5	224.4
85°	177.8	173.3	172.2	171.1	171.1	170.0	168.9	167.8
87.5°	110.0	106.7	105.5	103.3	104.4	102.2	102.2	102.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)