

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: P188627

Luminaire Tested: **24SR-LD2-59-C-UNV-L830-CD1-SO-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188627  
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-LD2-59-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**

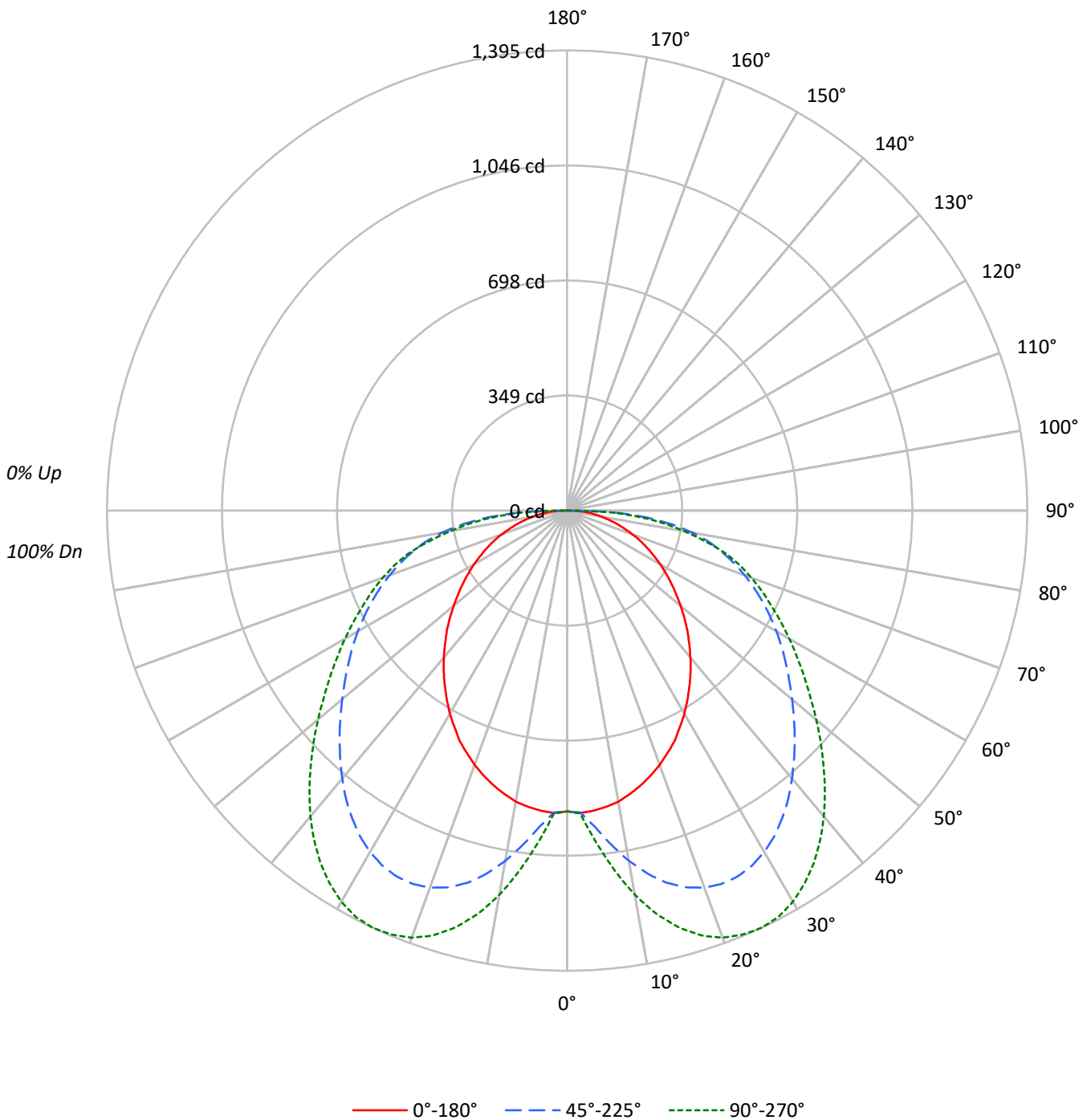
Lumens per Lamp: N/A  
Luminaire Lumens: 4214.0 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.85 / 1.72  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 50.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	1227	1227	1227
5°	1234	1298	1363
10°	1224	1473	1616
15°	1201	1627	1822
20°	1174	1742	1973
25°	1144	1817	2072
30°	1104	1856	2127
35°	1062	1869	2141
40°	1021	1862	2126
45°	981	1857	2093
50°	939	1863	2064
55°	905	1900	2057
60°	878	1972	2093
65°	853	2082	2175
70°	831	2252	2338
75°	810	2529	2575
80°	813	2991	2799
85°	900	3756	3395



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.6	2.2
10°-20°	318.6	7.6
20°-30°	533.5	12.7
30°-40°	668.0	15.9
40°-50°	700.8	16.6
50°-60°	662.2	15.7
60°-70°	579.7	13.8
70°-80°	447.7	10.6
80°-90°	208.9	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°	946.7	22.5
0°-40°	1614.7	38.3
0°-60°	2977.8	70.7
0°-90°	4214.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4214.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	913	913	961	998	1009	87
15°	862	983	1168	1274	1308	243
25°	771	989	1224	1348	1395	354
35°	647	904	1138	1260	1304	405
45°	516	766	976	1071	1100	398
55°	386	637	810	862	877	346
65°	268	522	654	672	683	265
75°	156	390	486	491	495	165
85°	58	205	243	225	220	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°	911.8	911.8	911.8	911.8	911.8	911.8	911.8	911.8	911.8	911.8	911.8
2.5°	917.7	916.2	914.8	911.8	910.4	910.4	910.4	910.4	911.8	916.2	919.1
5°	913.3	913.3	910.4	908.9	910.4	914.8	922.0	933.7	945.3	961.4	974.5
7.5°	906.0	904.6	903.1	904.6	917.7	936.6	955.5	977.4	997.8	1021.1	1040.0
10°	895.8	894.4	895.8	907.5	933.7	964.3	992.0	1019.6	1047.3	1077.9	1104.1
12.5°	879.8	879.8	885.6	911.8	948.3	986.1	1022.5	1057.5	1092.5	1127.4	1158.0
15°	862.3	863.8	878.3	916.2	961.4	1005.1	1047.3	1088.1	1128.9	1168.2	1201.7
17.5°	841.9	844.8	869.6	916.2	967.2	1018.2	1066.2	1111.4	1155.1	1197.3	1232.3
20°	820.1	823.0	859.4	913.3	970.1	1025.5	1076.4	1126.0	1172.6	1216.3	1252.7
22.5°	795.3	799.7	846.3	904.6	967.2	1026.9	1079.4	1130.3	1178.4	1225.0	1261.4
25°	770.6	776.4	830.3	892.9	958.5	1019.6	1075.0	1126.0	1176.9	1223.6	1260.0
27.5°	740.0	750.2	811.3	875.4	945.3	1006.5	1061.9	1115.8	1166.8	1213.4	1249.8
30°	710.8	723.9	788.0	855.0	926.4	987.6	1042.9	1096.8	1147.8	1194.4	1230.8
32.5°	678.8	694.8	761.8	831.7	901.6	961.4	1018.2	1072.1	1123.1	1169.7	1204.6
35°	646.7	665.7	734.1	805.5	874.0	933.7	989.0	1042.9	1092.5	1137.6	1171.1
37.5°	614.7	635.1	703.5	776.4	841.9	900.2	955.5	1008.0	1059.0	1101.2	1134.7
40°	581.2	604.5	673.0	742.9	808.4	865.2	920.6	971.6	1019.6	1060.4	1092.5
42.5°	547.7	573.9	642.4	710.8	773.5	828.8	884.2	933.7	978.8	1018.2	1048.8
45°	515.6	541.9	608.9	677.3	738.5	793.9	847.8	895.8	939.5	975.9	1005.1
47.5°	482.1	511.3	578.3	645.3	703.5	758.9	811.3	856.5	898.7	932.2	959.9
50°	448.6	480.7	546.2	611.8	671.5	725.4	776.4	820.1	859.4	890.0	916.2
52.5°	416.6	450.1	517.1	581.2	639.5	693.4	742.9	785.1	821.5	849.2	872.5
55°	386.0	421.0	488.0	550.6	610.3	662.8	709.4	750.2	783.7	809.9	830.3
57.5°	355.4	393.3	460.3	524.4	581.2	633.6	678.8	716.7	747.2	772.0	789.5
60°	326.3	365.6	434.1	496.7	553.5	604.5	648.2	683.2	712.3	732.7	745.8
62.5°	295.7	337.9	406.4	470.5	527.3	575.4	617.6	651.1	675.9	693.4	705.0
65°	268.0	310.3	380.2	444.3	498.2	544.8	584.1	616.2	639.5	654.0	661.3
67.5°	240.3	284.0	354.0	416.6	469.0	514.2	550.6	581.2	601.6	613.2	619.1
70°	211.2	257.8	326.3	387.5	438.4	480.7	517.1	543.3	562.3	572.5	575.4
72.5°	182.1	230.1	298.6	358.3	406.4	447.2	480.7	505.4	522.9	530.2	531.7
75°	155.9	201.0	268.0	324.8	371.4	409.3	442.8	466.1	479.2	486.5	488.0
77.5°	129.6	173.3	237.4	291.3	332.1	368.5	400.6	422.4	435.5	441.4	441.4
80°	104.9	145.7	203.9	252.0	291.3	324.8	354.0	375.8	387.5	386.0	380.2
82.5°	81.6	119.4	169.0	211.2	246.2	276.8	305.9	319.0	323.4	319.0	314.6
85°	58.3	88.9	128.2	163.1	193.7	217.0	236.0	246.2	247.6	243.3	238.9
87.5°	33.5	49.5	72.8	99.1	115.1	129.6	145.7	151.5	151.5	154.4	145.7
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°	911.8	911.8	911.8	911.8	911.8	911.8	911.8	911.8
2.5°	917.7	919.1	919.1	922.0	923.5	923.5	922.0	919.1
5°	978.8	987.6	993.4	1002.2	1006.5	1010.9	1012.4	1009.4
7.5°	1050.2	1063.3	1075.0	1088.1	1093.9	1098.3	1104.1	1099.7
10°	1118.7	1136.2	1150.7	1165.3	1174.0	1179.9	1184.2	1182.8
12.5°	1176.9	1197.3	1213.4	1227.9	1239.6	1248.3	1252.7	1252.7
15°	1222.1	1245.4	1265.8	1281.8	1293.5	1302.2	1308.0	1308.0
17.5°	1257.1	1280.4	1302.2	1318.2	1329.9	1341.5	1347.4	1350.3
20°	1277.5	1302.2	1324.1	1341.5	1354.7	1367.8	1373.6	1378.0
22.5°	1287.7	1312.4	1335.7	1354.7	1369.2	1380.9	1388.2	1391.1
25°	1287.7	1313.9	1338.6	1357.6	1372.1	1385.2	1392.5	1395.4
27.5°	1278.9	1306.6	1331.4	1348.8	1364.9	1378.0	1385.2	1388.2
30°	1261.4	1289.1	1313.9	1331.4	1347.4	1359.0	1366.3	1369.2
32.5°	1233.8	1262.9	1286.2	1303.7	1319.7	1331.4	1338.6	1340.1
35°	1201.7	1229.4	1251.2	1268.7	1284.7	1294.9	1300.8	1303.7
37.5°	1162.4	1188.6	1210.5	1226.5	1241.0	1252.7	1258.5	1260.0
40°	1120.1	1144.9	1163.8	1178.4	1193.0	1203.2	1209.0	1210.5
42.5°	1075.0	1098.3	1115.8	1128.9	1142.0	1150.7	1155.1	1156.6
45°	1028.4	1048.8	1064.8	1076.4	1088.1	1095.4	1099.7	1099.7
47.5°	981.8	1000.7	1013.8	1022.5	1032.7	1040.0	1044.4	1042.9
50°	935.2	951.2	961.4	970.1	978.8	983.2	987.6	986.1
52.5°	888.5	903.1	908.9	916.2	923.5	927.9	932.2	929.3
55°	843.4	853.6	859.4	865.2	871.1	875.4	878.3	876.9
57.5°	799.7	807.0	811.3	817.2	821.5	824.4	827.4	825.9
60°	753.1	758.9	761.8	767.6	772.0	774.9	777.8	777.8
62.5°	709.4	713.7	715.2	721.0	723.9	726.9	731.2	729.8
65°	662.8	667.1	670.0	674.4	677.3	680.2	684.6	683.2
67.5°	619.1	623.4	624.9	629.3	633.6	638.0	639.5	639.5
70°	575.4	578.3	579.7	585.6	587.0	591.4	594.3	594.3
72.5°	531.7	533.1	536.0	540.4	543.3	546.2	549.1	547.7
75°	485.1	488.0	489.4	492.3	492.3	495.3	495.3	495.3
77.5°	437.0	432.6	431.2	429.7	428.2	428.2	428.2	426.8
80°	371.4	367.1	365.6	362.7	362.7	362.7	362.7	361.2
82.5°	307.3	301.5	298.6	297.2	295.7	295.7	295.7	294.2
85°	233.1	227.2	225.8	224.3	224.3	222.9	221.4	219.9
87.5°	144.2	139.8	138.4	135.5	136.9	134.0	134.0	134.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)