

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: P188623

Luminaire Tested: **24SR-LD2-53-C-UNV-L835-CD1-SO-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188623  
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-LD2-53-C-UNV-L835-CD1-SO-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.  
  
Light Source: EATON LED 3500K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

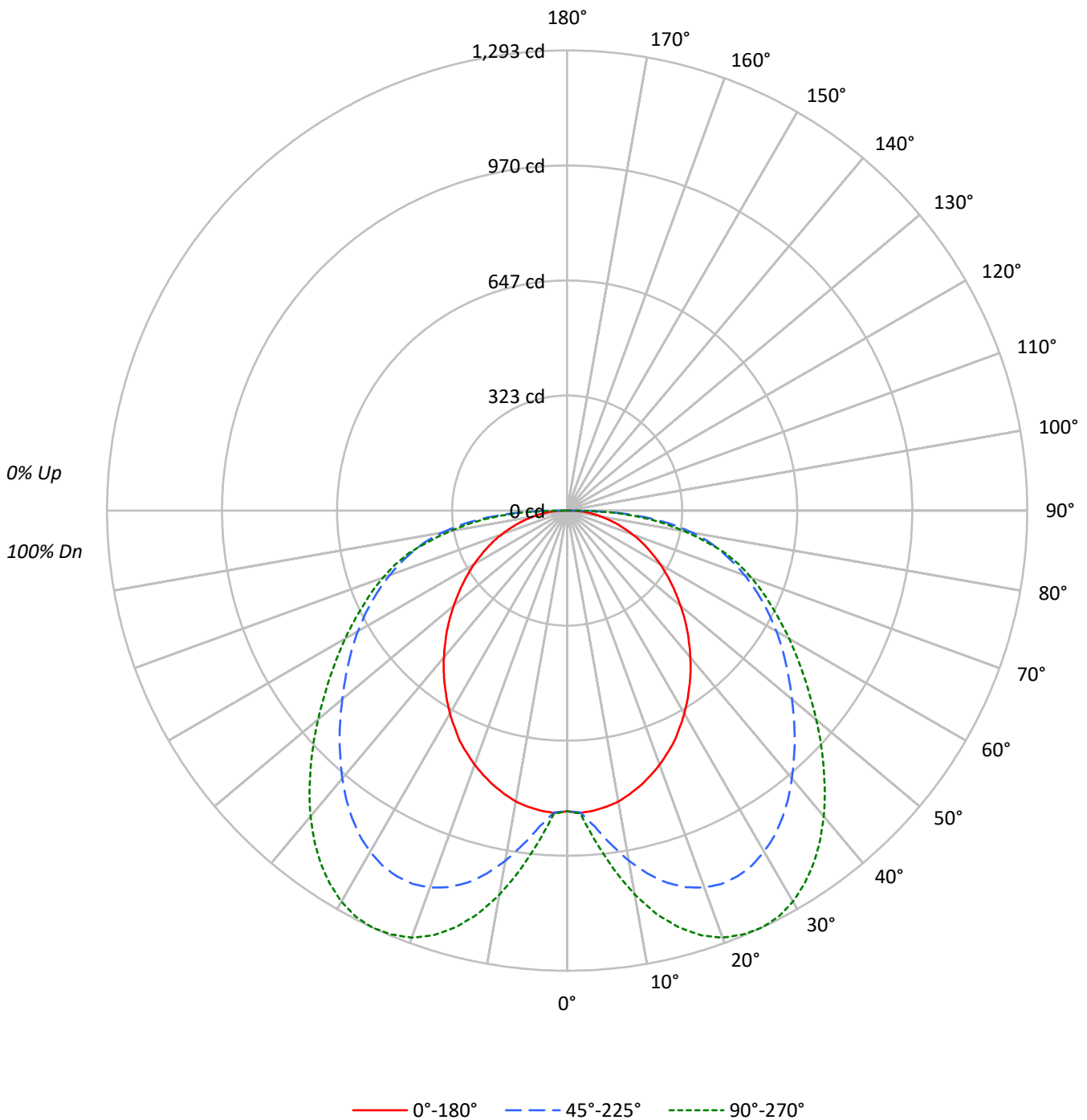
Lumens per Lamp: N/A  
Luminaire Lumens: 3905.0 lumens  
Efficiency: N/A  
Efficacy: 90.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.85 / 1.72  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	107	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

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

	0°	45°	90°
0°	1137	1137	1137
5°	1143	1203	1263
10°	1134	1365	1497
15°	1113	1508	1688
20°	1088	1614	1828
25°	1060	1683	1920
30°	1023	1720	1971
35°	984	1732	1984
40°	946	1726	1970
45°	909	1721	1939
50°	870	1726	1913
55°	839	1761	1906
60°	814	1827	1940
65°	791	1930	2016
70°	770	2087	2166
75°	751	2344	2386
80°	753	2772	2594
85°	834	3480	3146



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.7	2.2
10°-20°	295.2	7.6
20°-30°	494.4	12.7
30°-40°	619.0	15.9
40°-50°	649.4	16.6
50°-60°	613.7	15.7
60°-70°	537.2	13.8
70°-80°	414.9	10.6
80°-90°	193.6	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°	877.3	22.5
0°-40°	1496.3	38.3
0°-60°	2759.4	70.7
0°-90°	3905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3905.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	846	846	891	925	935	80
15°	799	911	1082	1180	1212	225
25°	714	917	1134	1249	1293	328
35°	599	838	1054	1168	1208	375
45°	478	710	904	992	1019	368
55°	358	590	750	799	813	320
65°	248	483	606	623	633	246
75°	144	362	451	455	459	153
85°	54	190	225	209	204	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°	845.0	845.0	845.0	845.0	845.0	845.0	845.0	845.0	845.0	845.0	845.0
2.5°	850.4	849.0	847.7	845.0	843.6	843.6	843.6	843.6	845.0	849.0	851.7
5°	846.3	846.3	843.6	842.3	843.6	847.7	854.4	865.2	876.0	890.9	903.0
7.5°	839.6	838.2	836.9	838.2	850.4	867.9	885.5	905.7	924.6	946.2	963.8
10°	830.1	828.8	830.1	840.9	865.2	893.6	919.2	944.9	970.5	998.9	1023.2
12.5°	815.3	815.3	820.7	845.0	878.7	913.8	947.6	980.0	1012.4	1044.8	1073.1
15°	799.1	800.4	813.9	849.0	890.9	931.4	970.5	1008.3	1046.1	1082.5	1113.6
17.5°	780.2	782.9	805.8	849.0	896.3	943.5	988.1	1029.9	1070.4	1109.5	1141.9
20°	759.9	762.6	796.4	846.3	899.0	950.3	997.5	1043.4	1086.6	1127.1	1160.8
22.5°	737.0	741.0	784.2	838.2	896.3	951.6	1000.2	1047.5	1092.0	1135.2	1168.9
25°	714.1	719.4	769.4	827.4	888.2	944.9	996.2	1043.4	1090.6	1133.8	1167.6
27.5°	685.7	695.2	751.8	811.2	876.0	932.7	984.0	1034.0	1081.2	1124.4	1158.1
30°	658.7	670.9	730.2	792.3	858.5	915.2	966.5	1016.4	1063.7	1106.8	1140.6
32.5°	629.0	643.9	706.0	770.7	835.5	890.9	943.5	993.5	1040.7	1083.9	1116.3
35°	599.3	616.9	680.3	746.4	809.9	865.2	916.5	966.5	1012.4	1054.2	1085.2
37.5°	569.6	588.5	652.0	719.4	780.2	834.2	885.5	934.1	981.3	1020.5	1051.5
40°	538.6	560.2	623.6	688.4	749.1	801.8	853.1	900.3	944.9	982.7	1012.4
42.5°	507.5	531.8	595.3	658.7	716.7	768.0	819.3	865.2	907.1	943.5	971.9
45°	477.8	502.1	564.2	627.7	684.4	735.6	785.6	830.1	870.6	904.4	931.4
47.5°	446.8	473.8	535.9	598.0	652.0	703.3	751.8	793.7	832.8	863.9	889.5
50°	415.7	445.4	506.2	566.9	622.3	672.2	719.4	759.9	796.4	824.7	849.0
52.5°	386.0	417.1	479.2	538.6	592.6	642.5	688.4	727.5	761.3	786.9	808.5
55°	357.7	390.1	452.2	510.2	565.6	614.2	657.4	695.2	726.2	750.5	769.4
57.5°	329.4	364.4	426.5	485.9	538.6	587.2	629.0	664.1	692.5	715.4	731.6
60°	302.4	338.8	402.2	460.3	512.9	560.2	600.7	633.1	660.1	679.0	691.1
62.5°	274.0	313.2	376.6	436.0	488.6	533.2	572.3	603.4	626.3	642.5	653.3
65°	248.4	287.5	352.3	411.7	461.6	504.8	541.3	571.0	592.6	606.1	612.8
67.5°	222.7	263.2	328.0	386.0	434.6	476.5	510.2	538.6	557.5	568.3	573.7
70°	195.7	238.9	302.4	359.0	406.3	445.4	479.2	503.5	521.0	530.5	533.2
72.5°	168.7	213.3	276.7	332.1	376.6	414.4	445.4	468.4	484.6	491.3	492.7
75°	144.4	186.3	248.4	301.0	344.2	379.3	410.3	431.9	444.1	450.8	452.2
77.5°	120.1	160.6	220.0	270.0	307.8	341.5	371.2	391.4	403.6	409.0	409.0
80°	97.2	135.0	189.0	233.5	270.0	301.0	328.0	348.3	359.0	357.7	352.3
82.5°	75.6	110.7	156.6	195.7	228.1	256.5	283.5	295.6	299.7	295.6	291.6
85°	54.0	82.3	118.8	151.2	179.5	201.1	218.7	228.1	229.5	225.4	221.4
87.5°	31.0	45.9	67.5	91.8	106.6	120.1	135.0	140.4	140.4	143.1	135.0
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°	845.0	845.0	845.0	845.0	845.0	845.0	845.0	845.0
2.5°	850.4	851.7	851.7	854.4	855.8	855.8	854.4	851.7
5°	907.1	915.2	920.6	928.7	932.7	936.8	938.1	935.4
7.5°	973.2	985.4	996.2	1008.3	1013.7	1017.8	1023.2	1019.1
10°	1036.7	1052.9	1066.4	1079.8	1087.9	1093.3	1097.4	1096.0
12.5°	1090.6	1109.5	1124.4	1137.9	1148.7	1156.8	1160.8	1160.8
15°	1132.5	1154.1	1173.0	1187.8	1198.6	1206.7	1212.1	1212.1
17.5°	1164.9	1186.5	1206.7	1221.6	1232.4	1243.2	1248.6	1251.3
20°	1183.8	1206.7	1227.0	1243.2	1255.3	1267.5	1272.9	1276.9
22.5°	1193.2	1216.2	1237.8	1255.3	1268.8	1279.6	1286.4	1289.1
25°	1193.2	1217.5	1240.5	1258.0	1271.5	1283.7	1290.4	1293.1
27.5°	1185.1	1210.8	1233.7	1249.9	1264.8	1276.9	1283.7	1286.4
30°	1168.9	1194.6	1217.5	1233.7	1248.6	1259.4	1266.1	1268.8
32.5°	1143.3	1170.3	1191.9	1208.1	1222.9	1233.7	1240.5	1241.8
35°	1113.6	1139.2	1159.5	1175.7	1190.5	1200.0	1205.4	1208.1
37.5°	1077.1	1101.4	1121.7	1136.5	1150.0	1160.8	1166.2	1167.6
40°	1038.0	1061.0	1078.5	1092.0	1105.5	1114.9	1120.3	1121.7
42.5°	996.2	1017.8	1034.0	1046.1	1058.3	1066.4	1070.4	1071.8
45°	953.0	971.9	986.7	997.5	1008.3	1015.1	1019.1	1019.1
47.5°	909.8	927.3	939.5	947.6	957.0	963.8	967.8	966.5
50°	866.6	881.4	890.9	899.0	907.1	911.1	915.2	913.8
52.5°	823.4	836.9	842.3	849.0	855.8	859.8	863.9	861.2
55°	781.5	791.0	796.4	801.8	807.2	811.2	813.9	812.6
57.5°	741.0	747.8	751.8	757.2	761.3	764.0	766.7	765.3
60°	697.9	703.3	706.0	711.4	715.4	718.1	720.8	720.8
62.5°	657.4	661.4	662.8	668.2	670.9	673.6	677.6	676.3
65°	614.2	618.2	620.9	625.0	627.7	630.4	634.4	633.1
67.5°	573.7	577.7	579.1	583.1	587.2	591.2	592.6	592.6
70°	533.2	535.9	537.2	542.6	544.0	548.0	550.7	550.7
72.5°	492.7	494.0	496.7	500.8	503.5	506.2	508.9	507.5
75°	449.5	452.2	453.5	456.2	456.2	458.9	458.9	458.9
77.5°	404.9	400.9	399.5	398.2	396.8	396.8	396.8	395.5
80°	344.2	340.2	338.8	336.1	336.1	336.1	336.1	334.8
82.5°	284.8	279.4	276.7	275.4	274.0	274.0	274.0	272.7
85°	216.0	210.6	209.2	207.9	207.9	206.5	205.2	203.8
87.5°	133.6	129.6	128.2	125.5	126.9	124.2	124.2	124.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)