

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: P188628

Luminaire Tested: **24SR-LD2-59-C-UNV-L835-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188628
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-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: 4345.0 lumens
Efficiency: N/A
Efficacy: 86.6 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

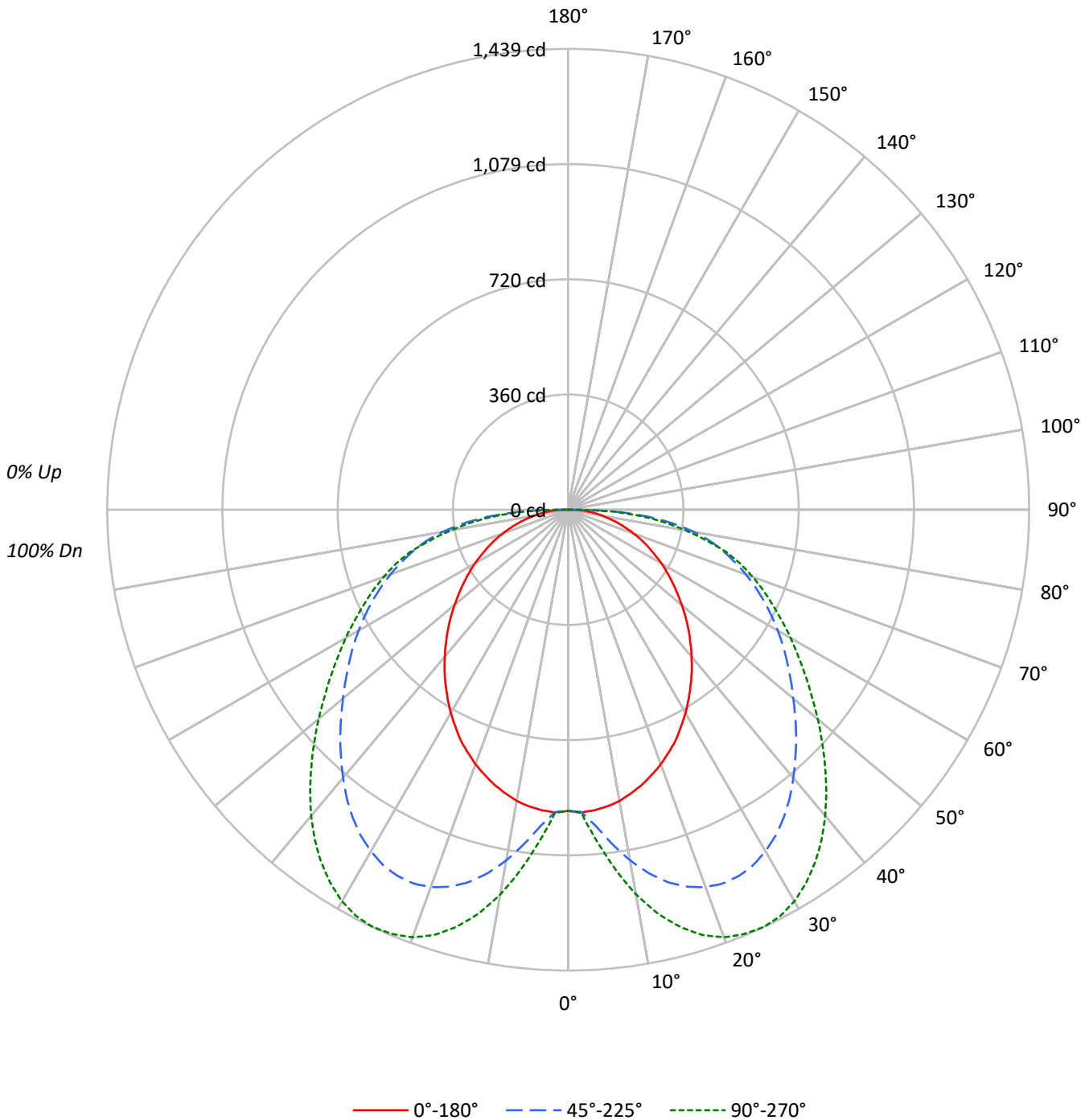
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1265	1265	1265
5°	1272	1339	1406
10°	1262	1518	1666
15°	1238	1678	1879
20°	1211	1796	2034
25°	1180	1873	2136
30°	1139	1913	2193
35°	1095	1927	2208
40°	1053	1920	2192
45°	1012	1915	2158
50°	968	1921	2128
55°	934	1959	2121
60°	905	2033	2158
65°	880	2147	2243
70°	857	2322	2411
75°	835	2608	2654
80°	838	3084	2886
85°	928	3872	3501



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.5	2.2
10°-20°	328.5	7.6
20°-30°	550.1	12.7
30°-40°	688.8	15.9
40°-50°	722.6	16.6
50°-60°	682.8	15.7
60°-70°	597.7	13.8
70°-80°	461.6	10.6
80°-90°	215.4	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°	976.1	22.5
0°-40°	1664.9	38.3
0°-60°	3070.3	70.7
0°-90°	4345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	940	940	940	940	940	
5°	942	941	991	1029	1041	89
15°	889	1014	1204	1313	1349	250
25°	794	1020	1262	1390	1439	365
35°	667	932	1173	1299	1344	417
45°	532	790	1006	1104	1134	410
55°	398	656	835	889	904	356
65°	276	538	674	693	704	274
75°	161	402	502	506	511	170
85°	60	212	251	232	227	63
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°	940.2	940.2	940.2	940.2	940.2	940.2	940.2	940.2	940.2	940.2	940.2
2.5°	946.2	944.7	943.2	940.2	938.7	938.7	938.7	938.7	940.2	944.7	947.7
5°	941.7	941.7	938.7	937.2	938.7	943.2	950.7	962.7	974.7	991.3	1004.8
7.5°	934.2	932.7	931.2	932.7	946.2	965.7	985.2	1007.8	1028.8	1052.8	1072.4
10°	923.7	922.2	923.7	935.7	962.7	994.3	1022.8	1051.3	1079.9	1111.4	1138.4
12.5°	907.1	907.1	913.2	940.2	977.7	1016.8	1054.3	1090.4	1126.4	1162.5	1194.0
15°	889.1	890.6	905.6	944.7	991.3	1036.3	1079.9	1121.9	1164.0	1204.5	1239.1
17.5°	868.1	871.1	896.6	944.7	997.3	1049.8	1099.4	1146.0	1191.0	1234.6	1270.6
20°	845.6	848.6	886.1	941.7	1000.3	1057.3	1109.9	1161.0	1209.0	1254.1	1291.6
22.5°	820.0	824.5	872.6	932.7	997.3	1058.8	1112.9	1165.5	1215.0	1263.1	1300.6
25°	794.5	800.5	856.1	920.7	988.3	1051.3	1108.4	1161.0	1213.5	1261.6	1299.1
27.5°	763.0	773.5	836.6	902.6	974.7	1037.8	1094.9	1150.5	1203.0	1251.1	1288.6
30°	732.9	746.4	812.5	881.6	955.2	1018.3	1075.4	1130.9	1183.5	1231.6	1269.1
32.5°	699.9	716.4	785.5	857.6	929.7	991.3	1049.8	1105.4	1158.0	1206.0	1242.1
35°	666.8	686.4	757.0	830.6	901.1	962.7	1019.8	1075.4	1126.4	1173.0	1207.5
37.5°	633.8	654.8	725.4	800.5	868.1	928.2	985.2	1039.3	1091.9	1135.4	1170.0
40°	599.3	623.3	693.9	766.0	833.6	892.1	949.2	1001.8	1051.3	1093.4	1126.4
42.5°	564.7	591.7	662.3	732.9	797.5	854.6	911.7	962.7	1009.3	1049.8	1081.4
45°	531.7	558.7	627.8	698.4	761.5	818.5	874.1	923.7	968.7	1006.3	1036.3
47.5°	497.1	527.2	596.3	665.3	725.4	782.5	836.6	883.1	926.7	961.2	989.8
50°	462.6	495.6	563.2	630.8	692.4	747.9	800.5	845.6	886.1	917.7	944.7
52.5°	429.5	464.1	533.2	599.3	659.3	714.9	766.0	809.5	847.1	875.6	899.6
55°	398.0	434.0	503.1	567.7	629.3	683.4	731.4	773.5	808.0	835.1	856.1
57.5°	366.5	405.5	474.6	540.7	599.3	653.3	699.9	738.9	770.5	796.0	814.0
60°	336.4	377.0	447.6	512.1	570.7	623.3	668.3	704.4	734.4	755.5	769.0
62.5°	304.9	348.4	419.0	485.1	543.7	593.3	636.8	671.4	696.9	714.9	726.9
65°	276.4	319.9	392.0	458.1	513.7	561.7	602.3	635.3	659.3	674.4	681.9
67.5°	247.8	292.9	365.0	429.5	483.6	530.2	567.7	599.3	620.3	632.3	638.3
70°	217.8	265.8	336.4	399.5	452.1	495.6	533.2	560.2	579.7	590.2	593.3
72.5°	187.7	237.3	307.9	369.5	419.0	461.1	495.6	521.2	539.2	546.7	548.2
75°	160.7	207.3	276.4	334.9	383.0	422.0	456.6	480.6	494.1	501.6	503.1
77.5°	133.7	178.7	244.8	300.4	342.4	380.0	413.0	435.6	449.1	455.1	455.1
80°	108.1	150.2	210.3	259.8	300.4	334.9	365.0	387.5	399.5	398.0	392.0
82.5°	84.1	123.2	174.2	217.8	253.8	285.4	315.4	328.9	333.4	328.9	324.4
85°	60.1	91.6	132.2	168.2	199.8	223.8	243.3	253.8	255.3	250.8	246.3
87.5°	34.5	51.1	75.1	102.1	118.7	133.7	150.2	156.2	156.2	159.2	150.2
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°	940.2	940.2	940.2	940.2	940.2	940.2	940.2	940.2
2.5°	946.2	947.7	947.7	950.7	952.2	952.2	950.7	947.7
5°	1009.3	1018.3	1024.3	1033.3	1037.8	1042.3	1043.8	1040.8
7.5°	1082.9	1096.4	1108.4	1121.9	1127.9	1132.4	1138.4	1133.9
10°	1153.5	1171.5	1186.5	1201.5	1210.5	1216.5	1221.0	1219.5
12.5°	1213.5	1234.6	1251.1	1266.1	1278.1	1287.1	1291.6	1291.6
15°	1260.1	1284.1	1305.2	1321.7	1333.7	1342.7	1348.7	1348.7
17.5°	1296.1	1320.2	1342.7	1359.2	1371.2	1383.3	1389.3	1392.3
20°	1317.2	1342.7	1365.2	1383.3	1396.8	1410.3	1416.3	1420.8
22.5°	1327.7	1353.2	1377.2	1396.8	1411.8	1423.8	1431.3	1434.3
25°	1327.7	1354.7	1380.2	1399.8	1414.8	1428.3	1435.8	1438.8
27.5°	1318.7	1347.2	1372.7	1390.8	1407.3	1420.8	1428.3	1431.3
30°	1300.6	1329.2	1354.7	1372.7	1389.3	1401.3	1408.8	1411.8
32.5°	1272.1	1302.1	1326.2	1344.2	1360.7	1372.7	1380.2	1381.8
35°	1239.1	1267.6	1290.1	1308.2	1324.7	1335.2	1341.2	1344.2
37.5°	1198.5	1225.6	1248.1	1264.6	1279.6	1291.6	1297.6	1299.1
40°	1155.0	1180.5	1200.0	1215.0	1230.1	1240.6	1246.6	1248.1
42.5°	1108.4	1132.4	1150.5	1164.0	1177.5	1186.5	1191.0	1192.5
45°	1060.3	1081.4	1097.9	1109.9	1121.9	1129.4	1133.9	1133.9
47.5°	1012.3	1031.8	1045.3	1054.3	1064.8	1072.4	1076.9	1075.4
50°	964.2	980.7	991.3	1000.3	1009.3	1013.8	1018.3	1016.8
52.5°	916.2	931.2	937.2	944.7	952.2	956.7	961.2	958.2
55°	869.6	880.1	886.1	892.1	898.1	902.6	905.6	904.1
57.5°	824.5	832.1	836.6	842.6	847.1	850.1	853.1	851.6
60°	776.5	782.5	785.5	791.5	796.0	799.0	802.0	802.0
62.5°	731.4	735.9	737.4	743.4	746.4	749.4	754.0	752.5
65°	683.4	687.9	690.9	695.4	698.4	701.4	705.9	704.4
67.5°	638.3	642.8	644.3	648.8	653.3	657.8	659.3	659.3
70°	593.3	596.3	597.8	603.8	605.3	609.8	612.8	612.8
72.5°	548.2	549.7	552.7	557.2	560.2	563.2	566.2	564.7
75°	500.1	503.1	504.6	507.6	507.6	510.6	510.6	510.6
77.5°	450.6	446.1	444.6	443.1	441.6	441.6	441.6	440.1
80°	383.0	378.5	377.0	374.0	374.0	374.0	374.0	372.5
82.5°	316.9	310.9	307.9	306.4	304.9	304.9	304.9	303.4
85°	240.3	234.3	232.8	231.3	231.3	229.8	228.3	226.8
87.5°	148.7	144.2	142.7	139.7	141.2	138.2	138.2	138.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)