

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: P188634

Luminaire Tested: **24SR-LD2-64-C-UNV-L840-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188634
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-LD2-64-C-UNV-L840-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4852.0 lumens
Efficiency: N/A
Efficacy: 87.4 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

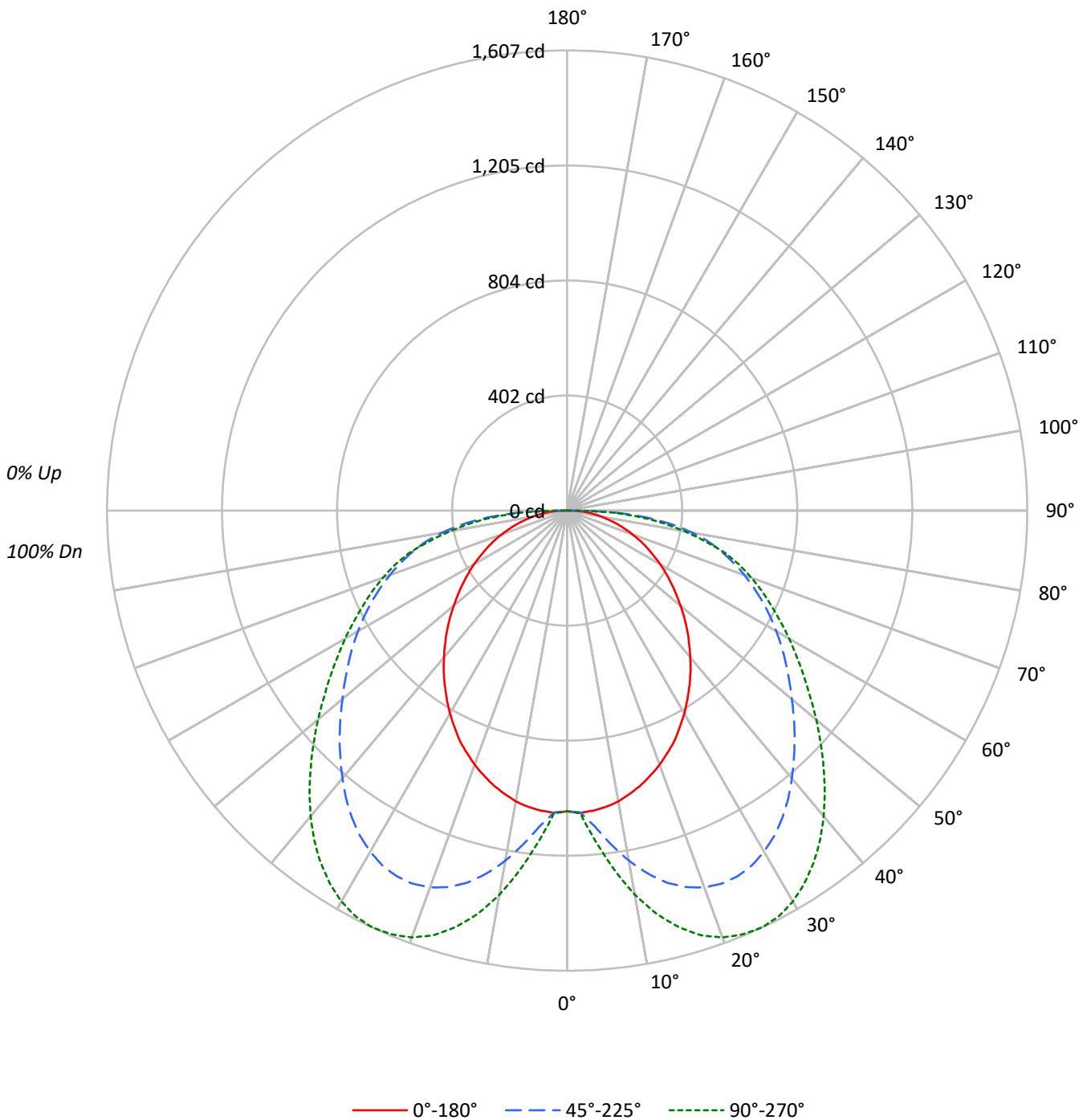
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1413	1413	1413
5°	1420	1495	1570
10°	1409	1696	1861
15°	1383	1874	2098
20°	1352	2005	2272
25°	1317	2091	2385
30°	1272	2137	2449
35°	1223	2152	2466
40°	1175	2145	2448
45°	1130	2138	2410
50°	1081	2145	2377
55°	1042	2187	2368
60°	1011	2270	2410
65°	982	2397	2504
70°	957	2593	2692
75°	933	2912	2964
80°	936	3443	3223
85°	1036	4324	3910



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	2.2
10°-20°	366.8	7.6
20°-30°	614.3	12.7
30°-40°	769.2	15.9
40°-50°	806.9	16.6
50°-60°	762.5	15.7
60°-70°	667.4	13.8
70°-80°	515.5	10.6
80°-90°	240.5	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°	1090.0	22.5
0°-40°	1859.2	38.3
0°-60°	3428.6	70.7
0°-90°	4852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4852.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1052	1051	1107	1149	1162	100
15°	993	1132	1345	1467	1506	280
25°	887	1139	1409	1552	1607	407
35°	745	1041	1310	1451	1501	466
45°	594	882	1124	1233	1266	458
55°	444	733	932	993	1010	398
65°	309	600	753	774	787	306
75°	180	450	560	565	570	190
85°	67	236	280	259	253	71
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°	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9
2.5°	1056.6	1054.9	1053.3	1049.9	1048.2	1048.2	1048.2	1048.2	1049.9	1054.9	1058.3
5°	1051.6	1051.6	1048.2	1046.5	1048.2	1053.3	1061.6	1075.1	1088.5	1106.9	1122.0
7.5°	1043.2	1041.5	1039.8	1041.5	1056.6	1078.4	1100.2	1125.4	1148.9	1175.7	1197.5
10°	1031.4	1029.8	1031.4	1044.9	1075.1	1110.3	1142.1	1174.0	1205.9	1241.1	1271.3
12.5°	1013.0	1013.0	1019.7	1049.9	1091.8	1135.4	1177.4	1217.6	1257.9	1298.1	1333.3
15°	992.9	994.6	1011.3	1054.9	1106.9	1157.2	1205.9	1252.8	1299.8	1345.1	1383.7
17.5°	969.4	972.7	1001.3	1054.9	1113.6	1172.3	1227.7	1279.7	1330.0	1378.6	1418.9
20°	944.2	947.6	989.5	1051.6	1117.0	1180.7	1239.4	1296.4	1350.1	1400.4	1442.4
22.5°	915.7	920.8	974.4	1041.5	1113.6	1182.4	1242.8	1301.5	1356.8	1410.5	1452.4
25°	887.2	893.9	956.0	1028.1	1103.6	1174.0	1237.7	1296.4	1355.1	1408.8	1450.7
27.5°	852.0	863.7	934.2	1008.0	1088.5	1158.9	1222.6	1284.7	1343.4	1397.1	1439.0
30°	818.5	833.5	907.3	984.5	1066.7	1137.1	1200.8	1262.9	1321.6	1375.3	1417.2
32.5°	781.6	800.0	877.2	957.7	1038.2	1106.9	1172.3	1234.4	1293.1	1346.8	1387.0
35°	744.7	766.5	845.3	927.5	1006.3	1075.1	1138.8	1200.8	1257.9	1309.9	1348.4
37.5°	707.8	731.2	810.1	893.9	969.4	1036.5	1100.2	1160.6	1219.3	1267.9	1306.5
40°	669.2	696.0	774.8	855.3	930.8	996.2	1060.0	1118.7	1174.0	1221.0	1257.9
42.5°	630.6	660.8	739.6	818.5	890.6	954.3	1018.0	1075.1	1127.0	1172.3	1207.6
45°	593.7	623.9	701.1	779.9	850.3	914.0	976.1	1031.4	1081.8	1123.7	1157.2
47.5°	555.1	588.7	665.8	743.0	810.1	873.8	934.2	986.2	1034.8	1073.4	1105.2
50°	516.6	553.5	628.9	704.4	773.2	835.2	893.9	944.2	989.5	1024.7	1054.9
52.5°	479.7	518.2	595.4	669.2	736.3	798.3	855.3	904.0	945.9	977.8	1004.6
55°	444.4	484.7	561.8	634.0	702.7	763.1	816.8	863.7	902.3	932.5	956.0
57.5°	409.2	452.8	530.0	603.8	669.2	729.6	781.6	825.2	860.4	888.9	909.0
60°	375.7	421.0	499.8	571.9	637.3	696.0	746.3	786.6	820.1	843.6	858.7
62.5°	340.5	389.1	467.9	541.7	607.1	662.5	711.1	749.7	778.2	798.3	811.7
65°	308.6	357.2	437.7	511.5	573.6	627.3	672.5	709.4	736.3	753.0	761.4
67.5°	276.7	327.0	407.5	479.7	540.0	592.0	634.0	669.2	692.7	706.1	712.8
70°	243.2	296.9	375.7	446.1	504.8	553.5	595.4	625.6	647.4	659.1	662.5
72.5°	209.6	265.0	343.8	412.6	467.9	514.9	553.5	582.0	602.1	610.5	612.2
75°	179.5	231.4	308.6	374.0	427.7	471.3	509.9	536.7	551.8	560.2	561.8
77.5°	149.3	199.6	273.4	335.4	382.4	424.3	461.2	486.4	501.5	508.2	508.2
80°	120.8	167.7	234.8	290.1	335.4	374.0	407.5	432.7	446.1	444.4	437.7
82.5°	93.9	137.5	194.5	243.2	283.4	318.7	352.2	367.3	372.3	367.3	362.3
85°	67.1	102.3	147.6	187.8	223.1	249.9	271.7	283.4	285.1	280.1	275.1
87.5°	38.6	57.0	83.9	114.0	132.5	149.3	167.7	174.4	174.4	177.8	167.7
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°	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9	1049.9
2.5°	1056.6	1058.3	1058.3	1061.6	1063.3	1063.3	1061.6	1058.3
5°	1127.0	1137.1	1143.8	1153.9	1158.9	1163.9	1165.6	1162.3
7.5°	1209.2	1224.3	1237.7	1252.8	1259.5	1264.6	1271.3	1266.3
10°	1288.1	1308.2	1325.0	1341.7	1351.8	1358.5	1363.5	1361.8
12.5°	1355.1	1378.6	1397.1	1413.8	1427.3	1437.3	1442.4	1442.4
15°	1407.1	1434.0	1457.4	1475.9	1489.3	1499.4	1506.1	1506.1
17.5°	1447.4	1474.2	1499.4	1517.8	1531.2	1544.7	1551.4	1554.7
20°	1470.9	1499.4	1524.5	1544.7	1559.8	1574.8	1581.6	1586.6
22.5°	1482.6	1511.1	1537.9	1559.8	1576.5	1589.9	1598.3	1601.7
25°	1482.6	1512.8	1541.3	1563.1	1579.9	1595.0	1603.4	1606.7
27.5°	1472.5	1504.4	1532.9	1553.0	1571.5	1586.6	1595.0	1598.3
30°	1452.4	1484.3	1512.8	1532.9	1551.4	1564.8	1573.2	1576.5
32.5°	1420.5	1454.1	1480.9	1501.1	1519.5	1532.9	1541.3	1543.0
35°	1383.7	1415.5	1440.7	1460.8	1479.2	1491.0	1497.7	1501.1
37.5°	1338.4	1368.6	1393.7	1412.2	1428.9	1442.4	1449.1	1450.7
40°	1289.7	1318.2	1340.0	1356.8	1373.6	1385.3	1392.0	1393.7
42.5°	1237.7	1264.6	1284.7	1299.8	1314.9	1325.0	1330.0	1331.7
45°	1184.1	1207.6	1226.0	1239.4	1252.8	1261.2	1266.3	1266.3
47.5°	1130.4	1152.2	1167.3	1177.4	1189.1	1197.5	1202.5	1200.8
50°	1076.7	1095.2	1106.9	1117.0	1127.0	1132.1	1137.1	1135.4
52.5°	1023.1	1039.8	1046.5	1054.9	1063.3	1068.3	1073.4	1070.0
55°	971.1	982.8	989.5	996.2	1002.9	1008.0	1011.3	1009.6
57.5°	920.8	929.1	934.2	940.9	945.9	949.3	952.6	950.9
60°	867.1	873.8	877.2	883.9	888.9	892.2	895.6	895.6
62.5°	816.8	821.8	823.5	830.2	833.5	836.9	841.9	840.3
65°	763.1	768.1	771.5	776.5	779.9	783.2	788.3	786.6
67.5°	712.8	717.8	719.5	724.5	729.6	734.6	736.3	736.3
70°	662.5	665.8	667.5	674.2	675.9	680.9	684.3	684.3
72.5°	612.2	613.8	617.2	622.2	625.6	628.9	632.3	630.6
75°	558.5	561.8	563.5	566.9	566.9	570.2	570.2	570.2
77.5°	503.1	498.1	496.4	494.8	493.1	493.1	493.1	491.4
80°	427.7	422.6	421.0	417.6	417.6	417.6	417.6	415.9
82.5°	353.9	347.2	343.8	342.1	340.5	340.5	340.5	338.8
85°	268.3	261.6	260.0	258.3	258.3	256.6	254.9	253.3
87.5°	166.0	161.0	159.3	156.0	157.7	154.3	154.3	154.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)