

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: P188589

Luminaire Tested: **24SR-LD2-59-C-UNV-L840-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188589
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24637)
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-L840-CD1-PL-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5803.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

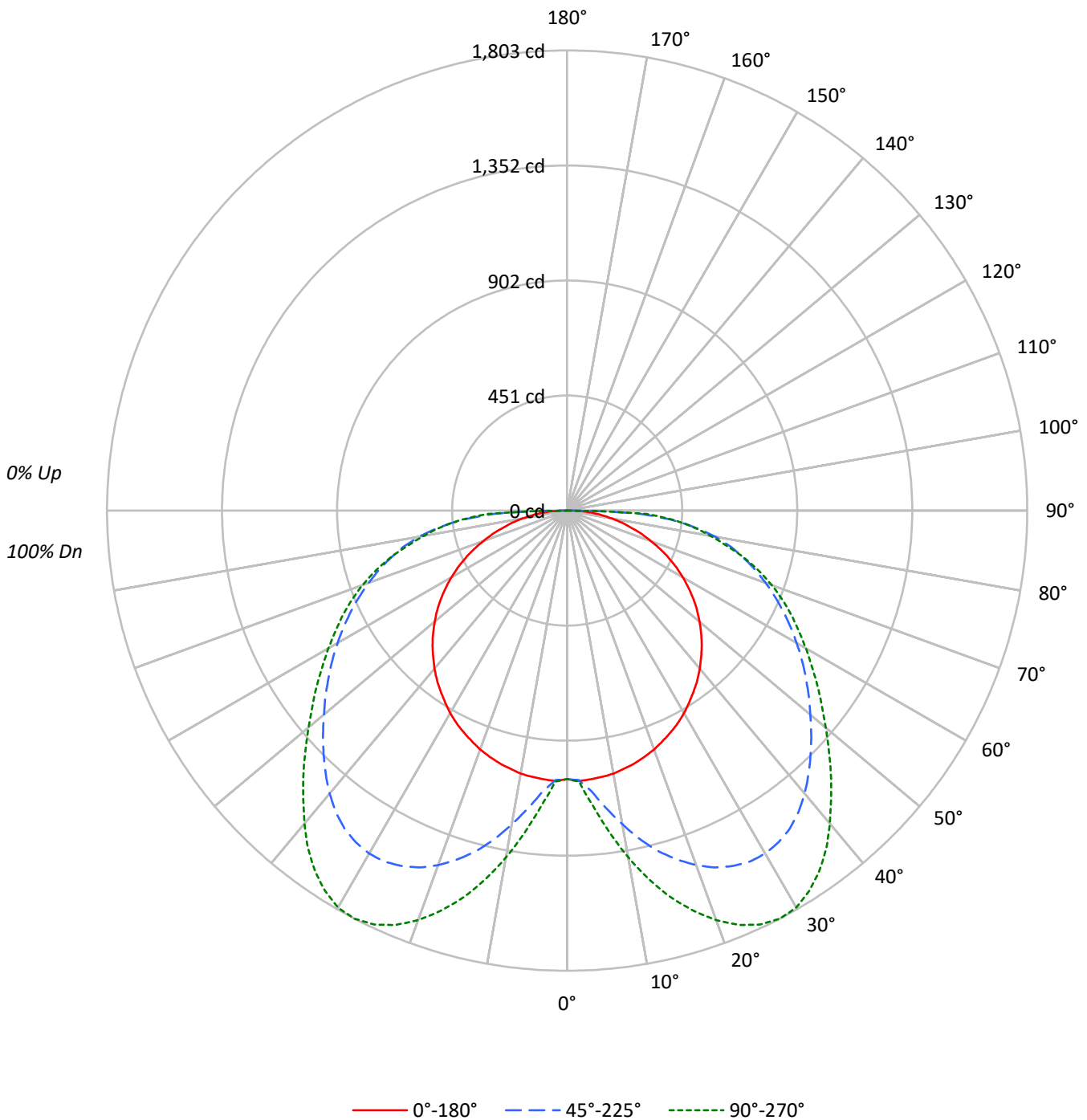
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78					78			
2	95	85	77	70	92	83	76	70	80	73	68	76	71	66	73	69	65	62					62			
3	86	74	64	57	83	72	63	56	69	61	55	66	60	54	63	58	53	51					51			
4	78	64	55	47	75	63	54	47	60	52	46	58	51	45	56	50	45	42					42			
5	71	57	47	40	69	56	47	40	54	45	39	52	44	39	50	43	38	36					36			
6	65	51	41	34	63	50	41	34	48	40	34	46	39	33	45	38	33	31					31			
7	60	46	36	30	59	45	36	30	43	35	29	42	35	29	40	34	29	27					27			
8	56	42	32	26	54	41	32	26	39	32	26	38	31	26	37	30	26	23					23			
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21					21			
10	49	35	26	21	48	34	26	21	33	26	21	32	25	21	31	25	20	19					19			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1416	1416	1416
5°	1428	1492	1568
10°	1430	1706	1886
15°	1428	1925	2185
20°	1426	2117	2446
25°	1424	2281	2656
30°	1423	2411	2789
35°	1419	2499	2831
40°	1421	2543	2812
45°	1420	2568	2781
50°	1417	2604	2767
55°	1416	2677	2810
60°	1410	2795	2906
65°	1400	2975	3087
70°	1374	3254	3357
75°	1354	3719	3743
80°	1365	4558	4416
85°	1490	6314	6433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.4	1.9
10°-20°	380.1	6.5
20°-30°	673.7	11.6
30°-40°	886.6	15.3
40°-50°	961.4	16.6
50°-60°	935.8	16.1
60°-70°	840.9	14.5
70°-80°	666.1	11.5
80°-90°	349.1	6.0
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°	1163.2	20.0
0°-40°	2049.8	35.3
0°-60°	3947.0	68.0
0°-90°	5803.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1052	1052	1052	1052	1052	
5°	1057	1057	1104	1147	1161	101
15°	1025	1158	1382	1520	1569	289
25°	959	1221	1536	1723	1789	442
35°	864	1190	1521	1676	1723	541
45°	746	1079	1350	1438	1462	575
55°	604	938	1141	1181	1198	539
65°	440	787	934	952	970	434
75°	260	591	715	716	720	277
85°	96	314	409	410	417	103
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°	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4
2.5°	1060.1	1058.6	1057.0	1055.5	1054.0	1052.4	1052.4	1052.4	1054.0	1057.0	1061.6
5°	1057.0	1055.5	1054.0	1054.0	1055.5	1058.6	1067.8	1078.5	1089.2	1104.5	1121.4
7.5°	1052.4	1050.9	1050.9	1054.0	1066.2	1084.6	1106.1	1129.0	1152.0	1176.5	1199.5
10°	1046.3	1044.8	1046.3	1060.1	1087.7	1118.3	1150.5	1182.7	1213.3	1248.5	1280.7
12.5°	1035.6	1035.6	1043.2	1070.8	1110.7	1152.0	1193.4	1236.3	1276.1	1319.0	1355.8
15°	1024.9	1024.9	1041.7	1083.1	1133.6	1182.7	1234.7	1285.3	1332.8	1381.8	1424.7
17.5°	1011.1	1011.1	1040.2	1092.3	1150.5	1210.2	1270.0	1326.7	1380.3	1433.9	1479.8
20°	995.8	998.8	1037.1	1099.9	1165.8	1233.2	1297.5	1360.4	1420.1	1478.3	1528.9
22.5°	977.4	983.5	1032.5	1103.0	1178.1	1248.5	1319.0	1386.4	1449.2	1513.6	1564.1
25°	959.0	968.2	1026.4	1103.0	1182.7	1259.3	1332.8	1403.3	1470.7	1536.5	1591.7
27.5°	939.1	951.3	1017.2	1098.4	1184.2	1262.3	1338.9	1412.4	1482.9	1550.3	1607.0
30°	916.1	931.4	1003.4	1089.2	1178.1	1257.7	1337.4	1414.0	1484.4	1551.8	1607.0
32.5°	890.1	910.0	986.6	1075.4	1165.8	1247.0	1326.7	1403.3	1475.3	1541.1	1593.2
35°	864.0	888.5	968.2	1058.6	1149.0	1230.1	1309.8	1387.9	1458.4	1521.2	1567.2
37.5°	838.0	864.0	945.2	1035.6	1126.0	1207.2	1288.4	1363.4	1430.8	1489.0	1530.4
40°	808.9	838.0	919.2	1011.1	1099.9	1181.1	1260.8	1332.8	1394.1	1447.7	1486.0
42.5°	776.7	808.9	891.6	983.5	1070.8	1150.5	1227.1	1294.5	1352.7	1400.2	1432.4
45°	746.1	779.8	862.5	954.4	1040.2	1118.3	1191.8	1254.7	1306.7	1349.6	1377.2
47.5°	712.3	747.6	833.4	922.2	1006.5	1083.1	1153.5	1210.2	1260.8	1297.5	1322.1
50°	677.1	715.4	801.2	890.1	972.8	1047.8	1115.2	1167.3	1213.3	1243.9	1266.9
52.5°	641.9	681.7	767.5	856.4	939.1	1011.1	1075.4	1126.0	1165.8	1193.4	1213.3
55°	603.6	648.0	733.8	822.6	902.3	974.3	1035.6	1081.5	1118.3	1141.3	1159.7
57.5°	563.8	611.2	700.1	788.9	868.6	937.5	995.8	1038.7	1070.8	1090.7	1104.5
60°	523.9	574.5	663.3	752.2	830.3	899.2	954.4	994.2	1023.3	1038.7	1049.4
62.5°	482.6	536.2	626.6	715.4	795.1	859.4	911.5	948.3	974.3	986.6	997.3
65°	439.7	496.3	588.3	677.1	756.8	816.5	867.1	900.8	923.8	934.5	940.6
67.5°	395.2	455.0	548.4	637.3	713.9	772.1	819.6	853.3	871.7	880.9	885.5
70°	349.3	412.1	505.5	594.4	667.9	723.1	769.0	799.7	818.1	827.2	828.8
72.5°	306.4	367.7	462.6	548.4	618.9	672.5	715.4	747.6	766.0	773.6	773.6
75°	260.4	321.7	415.2	497.9	565.3	617.4	660.3	690.9	707.8	715.4	715.4
77.5°	220.6	277.3	364.6	444.3	507.1	557.6	599.0	631.2	649.5	657.2	657.2
80°	176.2	231.3	312.5	386.0	444.3	490.2	533.1	566.8	585.2	588.3	583.7
82.5°	136.3	186.9	255.8	321.7	375.3	418.2	461.1	488.7	502.5	505.5	504.0
85°	96.5	137.9	196.1	249.7	294.1	334.0	364.6	390.6	404.4	409.0	412.1
87.5°	56.7	79.7	116.4	157.8	191.5	217.5	235.9	258.9	272.7	281.9	291.1
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°	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4	1052.4
2.5°	1060.1	1061.6	1063.2	1063.2	1063.2	1064.7	1063.2	1063.2
5°	1127.5	1136.7	1144.4	1149.0	1153.5	1161.2	1159.7	1161.2
7.5°	1211.8	1227.1	1243.9	1253.1	1259.3	1268.4	1271.5	1271.5
10°	1299.1	1320.5	1340.4	1354.2	1363.4	1377.2	1378.7	1380.3
12.5°	1381.8	1407.8	1430.8	1446.1	1459.9	1472.2	1478.3	1479.8
15°	1452.3	1484.4	1510.5	1530.4	1544.2	1558.0	1565.6	1568.7
17.5°	1515.1	1548.8	1577.9	1600.9	1617.7	1631.5	1640.7	1643.8
20°	1564.1	1600.9	1633.0	1657.6	1677.5	1692.8	1705.0	1708.1
22.5°	1603.9	1642.2	1675.9	1703.5	1723.4	1741.8	1752.5	1757.1
25°	1633.0	1674.4	1709.6	1735.7	1757.1	1774.0	1784.7	1789.3
27.5°	1649.9	1691.3	1725.0	1751.0	1772.4	1787.8	1798.5	1803.1
30°	1649.9	1689.7	1723.4	1747.9	1767.9	1783.2	1790.8	1795.4
32.5°	1633.0	1671.3	1702.0	1723.4	1741.8	1757.1	1763.3	1766.3
35°	1605.5	1639.2	1666.7	1685.1	1700.4	1714.2	1720.4	1723.4
37.5°	1565.6	1596.3	1617.7	1634.6	1646.8	1660.6	1665.2	1668.3
40°	1515.1	1544.2	1559.5	1574.8	1585.6	1597.8	1600.9	1600.9
42.5°	1459.9	1484.4	1499.8	1510.5	1518.1	1525.8	1530.4	1530.4
45°	1401.7	1423.2	1433.9	1443.1	1450.7	1456.9	1461.5	1461.5
47.5°	1343.5	1360.4	1369.5	1375.7	1381.8	1387.9	1391.0	1391.0
50°	1285.3	1297.5	1305.2	1309.8	1315.9	1320.5	1323.6	1322.1
52.5°	1227.1	1236.3	1242.4	1247.0	1250.1	1254.7	1256.2	1257.7
55°	1168.9	1175.0	1179.6	1182.7	1188.8	1193.4	1194.9	1198.0
57.5°	1112.2	1115.2	1121.4	1122.9	1129.0	1133.6	1135.2	1136.7
60°	1054.0	1057.0	1061.6	1064.7	1072.4	1075.4	1076.9	1080.0
62.5°	997.3	998.8	1004.9	1011.1	1017.2	1020.3	1021.8	1023.3
65°	940.6	945.2	949.8	954.4	960.5	965.1	966.7	969.7
67.5°	885.5	888.5	894.6	899.2	903.8	908.4	911.5	913.0
70°	828.8	831.8	836.4	839.5	844.1	848.7	853.3	853.3
72.5°	773.6	773.6	776.7	779.8	784.4	787.4	788.9	788.9
75°	713.9	712.3	715.4	716.9	716.9	716.9	718.5	720.0
77.5°	649.5	643.4	640.3	640.3	641.9	638.8	640.3	641.9
80°	576.0	569.9	568.3	568.3	569.9	568.3	569.9	569.9
82.5°	497.9	497.9	493.3	494.8	496.3	493.3	496.3	499.4
85°	407.5	409.0	407.5	412.1	412.1	412.1	413.6	416.7
87.5°	292.6	301.8	298.7	304.9	303.3	304.9	306.4	311.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)