

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: P188594

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188594
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-LD2-64-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: 6353.0 lumens
Efficiency: N/A
Efficacy: 114.5 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

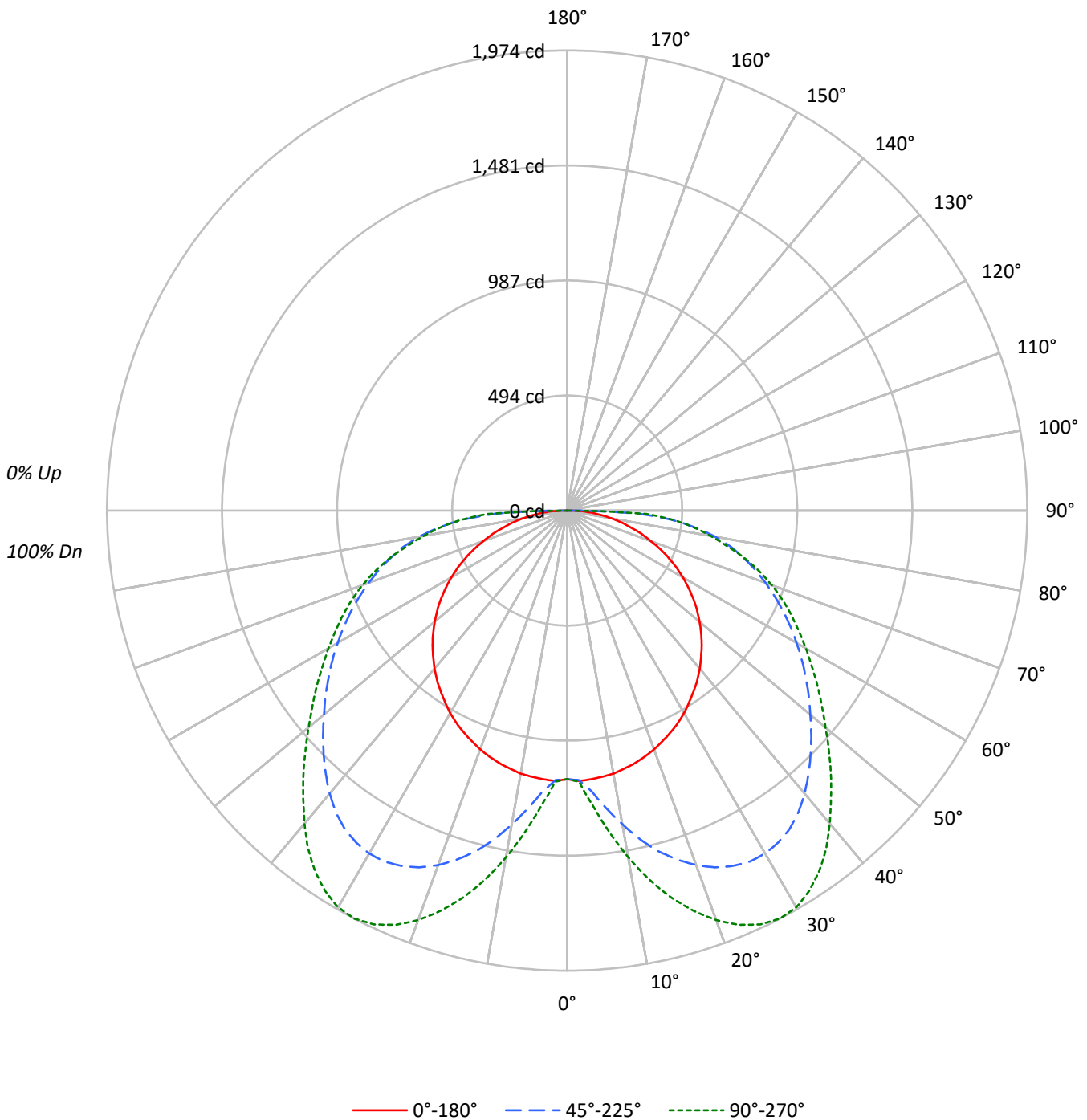
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1550	1550	1550
5°	1563	1633	1717
10°	1565	1868	2065
15°	1563	2107	2392
20°	1561	2317	2678
25°	1559	2497	2908
30°	1558	2639	3054
35°	1554	2735	3099
40°	1555	2784	3078
45°	1554	2812	3044
50°	1552	2851	3030
55°	1550	2931	3077
60°	1544	3060	3182
65°	1532	3257	3380
70°	1504	3563	3675
75°	1482	4072	4098
80°	1495	4990	4834
85°	1632	6913	7043



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.8	1.9
10°-20°	416.1	6.5
20°-30°	737.5	11.6
30°-40°	970.6	15.3
40°-50°	1052.5	16.6
50°-60°	1024.5	16.1
60°-70°	920.6	14.5
70°-80°	729.2	11.5
80°-90°	382.2	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°	1273.5	20.0
0°-40°	2244.1	35.3
0°-60°	4321.1	68.0
0°-90°	6353.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6353.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1152	1152	1152	1152	1152	
5°	1157	1157	1209	1255	1271	110
15°	1122	1268	1513	1665	1717	317
25°	1050	1337	1682	1886	1959	484
35°	946	1302	1665	1835	1887	593
45°	817	1182	1478	1575	1600	630
55°	661	1027	1250	1293	1312	590
65°	481	861	1023	1042	1062	475
75°	285	647	783	784	788	303
85°	106	344	448	449	456	113
90°	0	0	0	0	0	



TEST NUMBER: P188594

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L840-CD1-PL-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2
2.5°	1160.6	1158.9	1157.2	1155.5	1153.9	1152.2	1152.2	1152.2	1153.9	1157.2	1162.3
5°	1157.2	1155.5	1153.9	1153.9	1155.5	1158.9	1169.0	1180.7	1192.4	1209.2	1227.7
7.5°	1152.2	1150.5	1150.5	1153.9	1167.3	1187.4	1210.9	1236.0	1261.2	1288.0	1313.2
10°	1145.5	1143.8	1145.5	1160.6	1190.8	1224.3	1259.5	1294.7	1328.3	1366.9	1402.1
12.5°	1133.7	1133.7	1142.1	1172.3	1215.9	1261.2	1306.5	1353.4	1397.0	1444.0	1484.3
15°	1122.0	1122.0	1140.4	1185.7	1241.1	1294.7	1351.8	1407.1	1459.1	1512.8	1559.7
17.5°	1106.9	1106.9	1138.8	1195.8	1259.5	1324.9	1390.3	1452.4	1511.1	1569.8	1620.1
20°	1090.1	1093.5	1135.4	1204.2	1276.3	1350.1	1420.5	1489.3	1554.7	1618.4	1673.8
22.5°	1070.0	1076.7	1130.4	1207.5	1289.7	1366.9	1444.0	1517.8	1586.6	1657.0	1712.3
25°	1049.9	1059.9	1123.7	1207.5	1294.7	1378.6	1459.1	1536.3	1610.0	1682.2	1742.5
27.5°	1028.1	1041.5	1113.6	1202.5	1296.4	1382.0	1465.8	1546.3	1623.5	1697.3	1759.3
30°	1002.9	1019.7	1098.5	1192.4	1289.7	1376.9	1464.1	1548.0	1625.1	1698.9	1759.3
32.5°	974.4	996.2	1080.1	1177.3	1276.3	1365.2	1452.4	1536.3	1615.1	1687.2	1744.2
35°	945.9	972.7	1059.9	1158.9	1257.8	1346.7	1433.9	1519.5	1596.6	1665.4	1715.7
37.5°	917.4	945.9	1034.8	1133.7	1232.7	1321.6	1410.5	1492.6	1566.4	1630.2	1675.5
40°	885.5	917.4	1006.3	1106.9	1204.2	1293.1	1380.3	1459.1	1526.2	1584.9	1626.8
42.5°	850.3	885.5	976.1	1076.7	1172.3	1259.5	1343.4	1417.2	1480.9	1532.9	1568.1
45°	816.8	853.7	944.2	1044.9	1138.8	1224.3	1304.8	1373.6	1430.6	1477.6	1507.7
47.5°	779.9	818.4	912.4	1009.6	1101.9	1185.7	1262.9	1324.9	1380.3	1420.5	1447.4
50°	741.3	783.2	877.1	974.4	1065.0	1147.2	1220.9	1278.0	1328.3	1361.8	1387.0
52.5°	702.7	746.3	840.2	937.5	1028.1	1106.9	1177.3	1232.7	1276.3	1306.5	1328.3
55°	660.8	709.4	803.3	900.6	987.8	1066.7	1133.7	1184.1	1224.3	1249.5	1269.6
57.5°	617.2	669.2	766.4	863.7	950.9	1026.4	1090.1	1137.1	1172.3	1194.1	1209.2
60°	573.6	628.9	726.2	823.5	909.0	984.5	1044.9	1088.5	1120.3	1137.1	1148.8
62.5°	528.3	587.0	685.9	783.2	870.4	940.9	997.9	1038.1	1066.7	1080.1	1091.8
65°	481.3	543.4	644.0	741.3	828.5	893.9	949.3	986.2	1011.3	1023.0	1029.8
67.5°	432.7	498.1	600.4	697.7	781.5	845.3	897.3	934.2	954.3	964.3	969.4
70°	382.4	451.1	553.5	650.7	731.2	791.6	841.9	875.5	895.6	905.6	907.3
72.5°	335.4	402.5	506.5	600.4	677.6	736.3	783.2	818.4	838.6	847.0	847.0
75°	285.1	352.2	454.5	545.1	618.9	675.9	722.8	756.4	774.8	783.2	783.2
77.5°	241.5	303.6	399.2	486.4	555.1	610.5	655.8	691.0	711.1	719.5	719.5
80°	192.9	253.2	342.1	422.6	486.4	536.7	583.6	620.5	640.7	644.0	639.0
82.5°	149.3	204.6	280.1	352.2	410.9	457.9	504.8	535.0	550.1	553.5	551.8
85°	105.7	150.9	214.7	273.4	322.0	365.6	399.2	427.7	442.8	447.8	451.1
87.5°	62.1	87.2	127.5	172.7	209.6	238.2	258.3	283.4	298.5	308.6	318.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188594

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L840-CD1-PL-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2
2.5°	1160.6	1162.3	1163.9	1163.9	1163.9	1165.6	1163.9	1163.9
5°	1234.4	1244.4	1252.8	1257.8	1262.9	1271.3	1269.6	1271.3
7.5°	1326.6	1343.4	1361.8	1371.9	1378.6	1388.7	1392.0	1392.0
10°	1422.2	1445.7	1467.5	1482.6	1492.6	1507.7	1509.4	1511.1
12.5°	1512.8	1541.3	1566.4	1583.2	1598.3	1611.7	1618.4	1620.1
15°	1589.9	1625.1	1653.6	1675.5	1690.5	1705.6	1714.0	1717.4
17.5°	1658.7	1695.6	1727.4	1752.6	1771.0	1786.1	1796.2	1799.6
20°	1712.3	1752.6	1787.8	1814.7	1836.5	1853.2	1866.6	1870.0
22.5°	1756.0	1797.9	1834.8	1865.0	1886.8	1906.9	1918.6	1923.7
25°	1787.8	1833.1	1871.7	1900.2	1923.7	1942.1	1953.9	1958.9
27.5°	1806.3	1851.6	1888.4	1917.0	1940.4	1957.2	1968.9	1974.0
30°	1806.3	1849.9	1886.8	1913.6	1935.4	1952.2	1960.6	1965.6
32.5°	1787.8	1829.7	1863.3	1886.8	1906.9	1923.7	1930.4	1933.7
35°	1757.6	1794.5	1824.7	1844.8	1861.6	1876.7	1883.4	1886.8
37.5°	1714.0	1747.6	1771.0	1789.5	1802.9	1818.0	1823.0	1826.4
40°	1658.7	1690.5	1707.3	1724.1	1735.8	1749.2	1752.6	1752.6
42.5°	1598.3	1625.1	1641.9	1653.6	1662.0	1670.4	1675.5	1675.5
45°	1534.6	1558.1	1569.8	1579.9	1588.2	1594.9	1600.0	1600.0
47.5°	1470.8	1489.3	1499.4	1506.1	1512.8	1519.5	1522.8	1522.8
50°	1407.1	1420.5	1428.9	1433.9	1440.7	1445.7	1449.0	1447.4
52.5°	1343.4	1353.4	1360.2	1365.2	1368.5	1373.6	1375.2	1376.9
55°	1279.6	1286.4	1291.4	1294.7	1301.5	1306.5	1308.2	1311.5
57.5°	1217.6	1220.9	1227.7	1229.3	1236.0	1241.1	1242.8	1244.4
60°	1153.9	1157.2	1162.3	1165.6	1174.0	1177.3	1179.0	1182.4
62.5°	1091.8	1093.5	1100.2	1106.9	1113.6	1117.0	1118.6	1120.3
65°	1029.8	1034.8	1039.8	1044.9	1051.6	1056.6	1058.3	1061.6
67.5°	969.4	972.7	979.4	984.5	989.5	994.5	997.9	999.6
70°	907.3	910.7	915.7	919.1	924.1	929.1	934.2	934.2
72.5°	847.0	847.0	850.3	853.7	858.7	862.0	863.7	863.7
75°	781.5	779.9	783.2	784.9	784.9	784.9	786.6	788.3
77.5°	711.1	704.4	701.0	701.0	702.7	699.4	701.0	702.7
80°	630.6	623.9	622.2	622.2	623.9	622.2	623.9	623.9
82.5°	545.1	545.1	540.0	541.7	543.4	540.0	543.4	546.7
85°	446.1	447.8	446.1	451.1	451.1	451.1	452.8	456.2
87.5°	320.3	330.4	327.0	333.7	332.1	333.7	335.4	340.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)