

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: P188590

Luminaire Tested: **24SR-LD2-59-C-UNV-L850-CD1-PL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188590  
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-L850-CD1-PL-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.  
  
Light Source: EATON LED 5000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

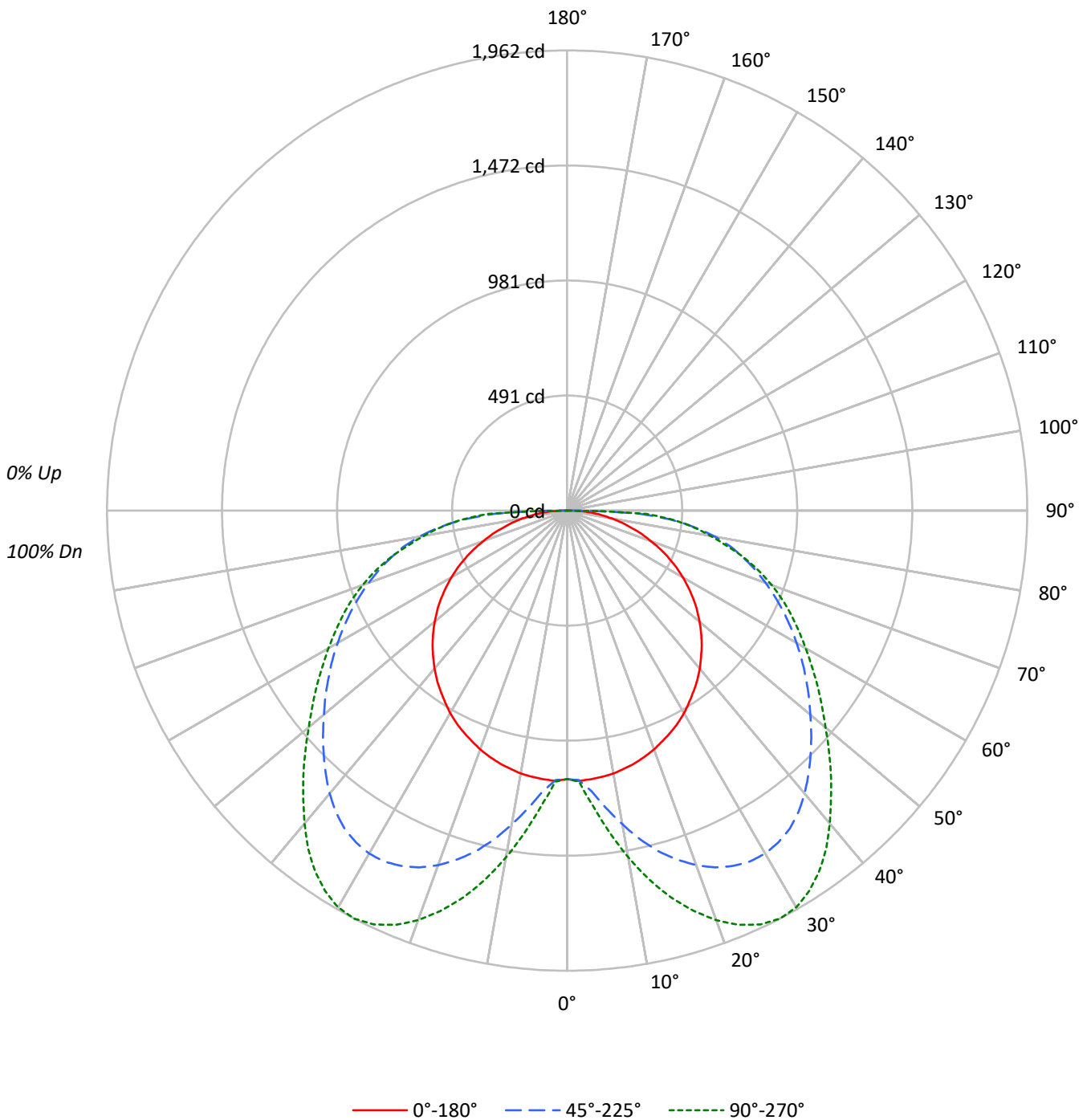
Lumens per Lamp: N/A  
Luminaire Lumens: 6314.0 lumens  
Efficiency: N/A  
Efficacy: 125.8 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 50.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	1541	1541	1541
5°	1553	1623	1707
10°	1555	1856	2052
15°	1553	2094	2377
20°	1551	2303	2661
25°	1549	2482	2890
30°	1549	2623	3035
35°	1544	2719	3080
40°	1546	2767	3059
45°	1545	2794	3026
50°	1542	2833	3011
55°	1540	2913	3058
60°	1534	3041	3162
65°	1523	3237	3359
70°	1495	3541	3652
75°	1473	4047	4073
80°	1485	4960	4805
85°	1621	6870	6999



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.1	1.9
10°-20°	413.6	6.5
20°-30°	733.0	11.6
30°-40°	964.6	15.3
40°-50°	1046.1	16.6
50°-60°	1018.2	16.1
60°-70°	914.9	14.5
70°-80°	724.7	11.5
80°-90°	379.8	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°	1265.6	20.0
0°-40°	2230.3	35.3
0°-60°	4294.6	68.0
0°-90°	6314.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6314.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1145	1145	1145	1145	1145	
5°	1150	1150	1202	1248	1264	109
15°	1115	1260	1504	1654	1707	315
25°	1043	1328	1672	1874	1947	481
35°	940	1294	1655	1824	1875	589
45°	812	1174	1468	1565	1590	626
55°	657	1021	1242	1285	1304	587
65°	478	856	1017	1036	1055	472
75°	283	643	778	779	783	301
85°	105	342	445	446	453	112
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°	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1
2.5°	1153.4	1151.8	1150.1	1148.4	1146.8	1145.1	1145.1	1145.1	1146.8	1150.1	1155.1
5°	1150.1	1148.4	1146.8	1146.8	1148.4	1151.8	1161.8	1173.5	1185.1	1201.8	1220.1
7.5°	1145.1	1143.4	1143.4	1146.8	1160.1	1180.1	1203.5	1228.5	1253.5	1280.1	1305.1
10°	1138.4	1136.8	1138.4	1153.4	1183.5	1216.8	1251.8	1286.8	1320.1	1358.5	1393.5
12.5°	1126.8	1126.8	1135.1	1165.1	1208.5	1253.5	1298.5	1345.1	1388.5	1435.1	1475.1
15°	1115.1	1115.1	1133.4	1178.5	1233.5	1286.8	1343.5	1398.5	1450.1	1503.5	1550.2
17.5°	1100.1	1100.1	1131.8	1188.5	1251.8	1316.8	1381.8	1443.5	1501.8	1560.2	1610.2
20°	1083.4	1086.8	1128.4	1196.8	1268.5	1341.8	1411.8	1480.1	1545.2	1608.5	1663.5
22.5°	1063.4	1070.1	1123.4	1200.1	1281.8	1358.5	1435.1	1508.5	1576.8	1646.8	1701.8
25°	1043.4	1053.4	1116.8	1200.1	1286.8	1370.1	1450.1	1526.8	1600.2	1671.8	1731.8
27.5°	1021.8	1035.1	1106.8	1195.1	1288.5	1373.5	1456.8	1536.8	1613.5	1686.8	1748.5
30°	996.8	1013.4	1091.8	1185.1	1281.8	1368.5	1455.1	1538.5	1615.2	1688.5	1748.5
32.5°	968.4	990.1	1073.4	1170.1	1268.5	1356.8	1443.5	1526.8	1605.2	1676.8	1733.5
35°	940.1	966.8	1053.4	1151.8	1250.1	1338.5	1425.1	1510.2	1586.8	1655.2	1705.2
37.5°	911.8	940.1	1028.4	1126.8	1225.1	1313.5	1401.8	1483.5	1556.8	1620.2	1665.2
40°	880.1	911.8	1000.1	1100.1	1196.8	1285.1	1371.8	1450.1	1516.8	1575.2	1616.8
42.5°	845.1	880.1	970.1	1070.1	1165.1	1251.8	1335.1	1408.5	1471.8	1523.5	1558.5
45°	811.7	848.4	938.4	1038.4	1131.8	1216.8	1296.8	1365.1	1421.8	1468.5	1498.5
47.5°	775.1	813.4	906.8	1003.4	1095.1	1178.5	1255.1	1316.8	1371.8	1411.8	1438.5
50°	736.7	778.4	871.8	968.4	1058.4	1140.1	1213.5	1270.1	1320.1	1353.5	1378.5
52.5°	698.4	741.7	835.1	931.8	1021.8	1100.1	1170.1	1225.1	1268.5	1298.5	1320.1
55°	656.7	705.1	798.4	895.1	981.8	1060.1	1126.8	1176.8	1216.8	1241.8	1261.8
57.5°	613.4	665.1	761.7	858.4	945.1	1020.1	1083.4	1130.1	1165.1	1186.8	1201.8
60°	570.1	625.1	721.7	818.4	903.4	978.4	1038.4	1081.8	1113.4	1130.1	1141.8
62.5°	525.1	583.4	681.7	778.4	865.1	935.1	991.8	1031.8	1060.1	1073.4	1085.1
65°	478.4	540.1	640.1	736.7	823.4	888.4	943.4	980.1	1005.1	1016.8	1023.4
67.5°	430.0	495.0	596.7	693.4	776.7	840.1	891.8	928.4	948.4	958.4	963.4
70°	380.0	448.4	550.1	646.7	726.7	786.7	836.8	870.1	890.1	900.1	901.8
72.5°	333.4	400.0	503.4	596.7	673.4	731.7	778.4	813.4	833.4	841.8	841.8
75°	283.4	350.0	451.7	541.7	615.1	671.7	718.4	751.7	770.1	778.4	778.4
77.5°	240.0	301.7	396.7	483.4	551.7	606.7	651.7	686.7	706.7	715.1	715.1
80°	191.7	251.7	340.0	420.0	483.4	533.4	580.1	616.7	636.7	640.1	635.1
82.5°	148.3	203.4	278.4	350.0	408.4	455.0	501.7	531.7	546.7	550.1	548.4
85°	105.0	150.0	213.4	271.7	320.0	363.4	396.7	425.0	440.0	445.0	448.4
87.5°	61.7	86.7	126.7	171.7	208.4	236.7	256.7	281.7	296.7	306.7	316.7
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°	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1	1145.1
2.5°	1153.4	1155.1	1156.8	1156.8	1156.8	1158.4	1156.8	1156.8
5°	1226.8	1236.8	1245.1	1250.1	1255.1	1263.5	1261.8	1263.5
7.5°	1318.5	1335.1	1353.5	1363.5	1370.1	1380.1	1383.5	1383.5
10°	1413.5	1436.8	1458.5	1473.5	1483.5	1498.5	1500.1	1501.8
12.5°	1503.5	1531.8	1556.8	1573.5	1588.5	1601.8	1608.5	1610.2
15°	1580.2	1615.2	1643.5	1665.2	1680.2	1695.2	1703.5	1706.8
17.5°	1648.5	1685.2	1716.8	1741.8	1760.2	1775.2	1785.2	1788.5
20°	1701.8	1741.8	1776.8	1803.5	1825.2	1841.9	1855.2	1858.5
22.5°	1745.2	1786.8	1823.5	1853.5	1875.2	1895.2	1906.9	1911.9
25°	1776.8	1821.8	1860.2	1888.5	1911.9	1930.2	1941.9	1946.9
27.5°	1795.2	1840.2	1876.9	1905.2	1928.5	1945.2	1956.9	1961.9
30°	1795.2	1838.5	1875.2	1901.9	1923.5	1940.2	1948.5	1953.5
32.5°	1776.8	1818.5	1851.9	1875.2	1895.2	1911.9	1918.5	1921.9
35°	1746.8	1783.5	1813.5	1833.5	1850.2	1865.2	1871.9	1875.2
37.5°	1703.5	1736.8	1760.2	1778.5	1791.8	1806.8	1811.8	1815.2
40°	1648.5	1680.2	1696.8	1713.5	1725.2	1738.5	1741.8	1741.8
42.5°	1588.5	1615.2	1631.8	1643.5	1651.8	1660.2	1665.2	1665.2
45°	1525.2	1548.5	1560.2	1570.2	1578.5	1585.2	1590.2	1590.2
47.5°	1461.8	1480.1	1490.1	1496.8	1503.5	1510.2	1513.5	1513.5
50°	1398.5	1411.8	1420.1	1425.1	1431.8	1436.8	1440.1	1438.5
52.5°	1335.1	1345.1	1351.8	1356.8	1360.1	1365.1	1366.8	1368.5
55°	1271.8	1278.5	1283.5	1286.8	1293.5	1298.5	1300.1	1303.5
57.5°	1210.1	1213.5	1220.1	1221.8	1228.5	1233.5	1235.1	1236.8
60°	1146.8	1150.1	1155.1	1158.4	1166.8	1170.1	1171.8	1175.1
62.5°	1085.1	1086.8	1093.4	1100.1	1106.8	1110.1	1111.8	1113.4
65°	1023.4	1028.4	1033.4	1038.4	1045.1	1050.1	1051.8	1055.1
67.5°	963.4	966.8	973.4	978.4	983.4	988.4	991.8	993.4
70°	901.8	905.1	910.1	913.4	918.4	923.4	928.4	928.4
72.5°	841.8	841.8	845.1	848.4	853.4	856.8	858.4	858.4
75°	776.7	775.1	778.4	780.1	780.1	780.1	781.7	783.4
77.5°	706.7	700.1	696.7	696.7	698.4	695.1	696.7	698.4
80°	626.7	620.1	618.4	618.4	620.1	618.4	620.1	620.1
82.5°	541.7	541.7	536.7	538.4	540.1	536.7	540.1	543.4
85°	443.4	445.0	443.4	448.4	448.4	448.4	450.0	453.4
87.5°	318.4	328.4	325.0	331.7	330.0	331.7	333.4	338.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)