

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: P188588

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188588  
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-L835-CD1-PL-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.  
  
Light Source: EATON LED 3500K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

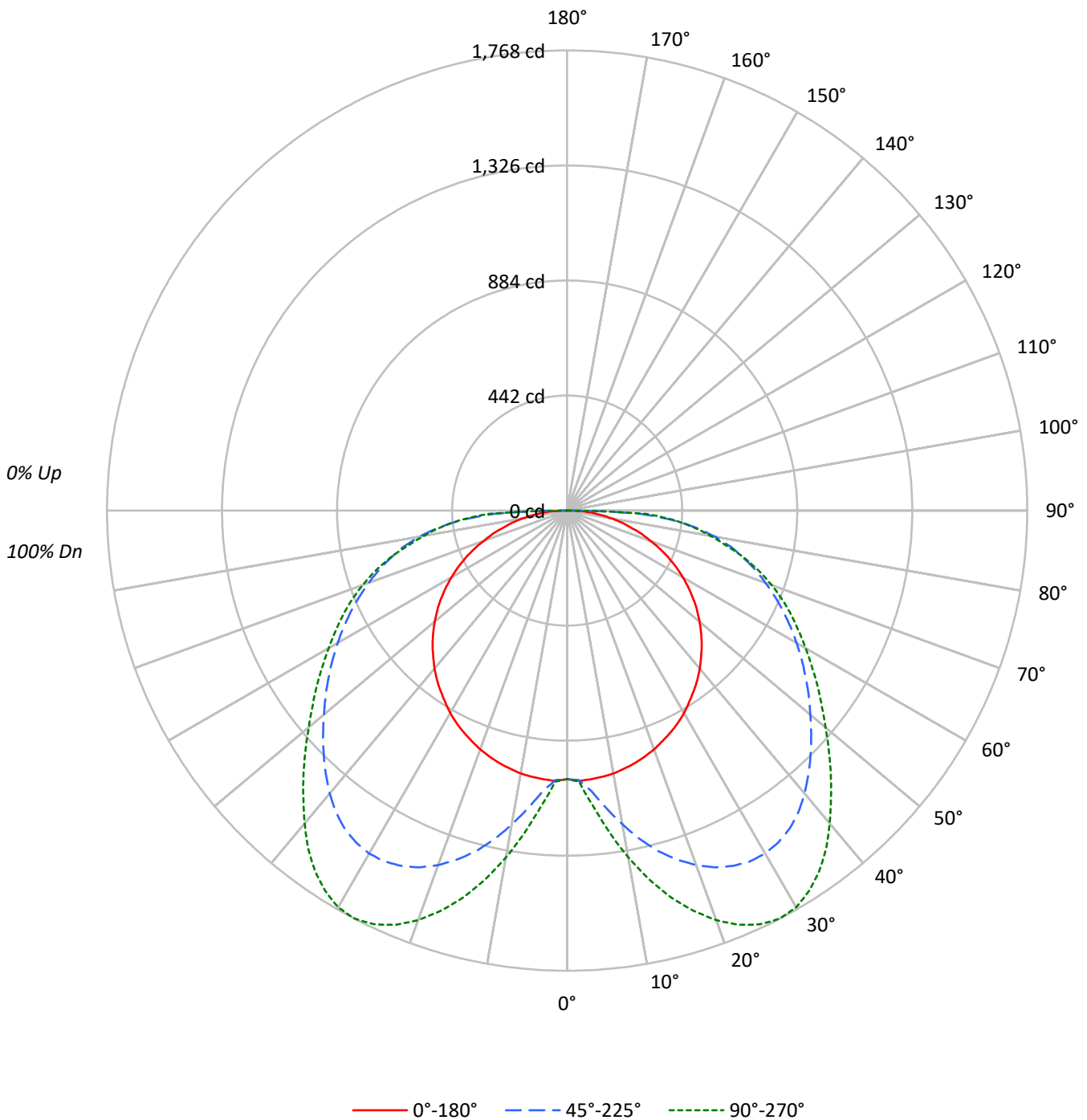
Lumens per Lamp: N/A  
Luminaire Lumens: 5689.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 50.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	1388	1388	1388
5°	1400	1462	1538
10°	1401	1672	1849
15°	1399	1887	2142
20°	1398	2075	2398
25°	1396	2236	2604
30°	1395	2364	2735
35°	1391	2450	2775
40°	1393	2493	2757
45°	1392	2518	2726
50°	1389	2553	2713
55°	1388	2625	2755
60°	1382	2740	2849
65°	1372	2917	3027
70°	1347	3190	3291
75°	1327	3646	3670
80°	1338	4468	4329
85°	1460	6191	6306



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.3	1.9
10°-20°	372.6	6.5
20°-30°	660.5	11.6
30°-40°	869.2	15.3
40°-50°	942.5	16.6
50°-60°	917.4	16.1
60°-70°	824.3	14.5
70°-80°	653.0	11.5
80°-90°	342.2	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°	1140.4	20.0
0°-40°	2009.5	35.3
0°-60°	3869.5	68.0
0°-90°	5689.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5689.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1032	1032	1032	1032	1032	
5°	1036	1036	1083	1124	1138	99
15°	1005	1135	1355	1491	1538	284
25°	940	1197	1506	1689	1754	434
35°	847	1166	1491	1643	1690	531
45°	731	1058	1323	1410	1433	564
55°	592	920	1119	1158	1174	529
65°	431	771	916	933	951	426
75°	255	580	701	702	706	272
85°	95	308	401	402	408	101
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°	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8
2.5°	1039.3	1037.8	1036.3	1034.8	1033.3	1031.8	1031.8	1031.8	1033.3	1036.3	1040.8
5°	1036.3	1034.8	1033.3	1033.3	1034.8	1037.8	1046.8	1057.3	1067.8	1082.8	1099.3
7.5°	1031.8	1030.3	1030.3	1033.3	1045.3	1063.3	1084.3	1106.9	1129.4	1153.4	1175.9
10°	1025.8	1024.3	1025.8	1039.3	1066.3	1096.3	1127.9	1159.4	1189.5	1224.0	1255.5
12.5°	1015.2	1015.2	1022.8	1049.8	1088.8	1129.4	1169.9	1212.0	1251.0	1293.1	1329.1
15°	1004.7	1004.7	1021.3	1061.8	1111.4	1159.4	1210.5	1260.0	1306.6	1354.7	1396.7
17.5°	991.2	991.2	1019.7	1070.8	1127.9	1186.5	1245.0	1300.6	1353.2	1405.7	1450.8
20°	976.2	979.2	1016.7	1078.3	1142.9	1209.0	1272.1	1333.6	1392.2	1449.3	1498.8
22.5°	958.2	964.2	1012.2	1081.3	1154.9	1224.0	1293.1	1359.2	1420.7	1483.8	1533.4
25°	940.2	949.2	1006.2	1081.3	1159.4	1234.5	1306.6	1375.7	1441.8	1506.3	1560.4
27.5°	920.6	932.6	997.2	1076.8	1160.9	1237.5	1312.6	1384.7	1453.8	1519.9	1575.4
30°	898.1	913.1	983.7	1067.8	1154.9	1233.0	1311.1	1386.2	1455.3	1521.4	1575.4
32.5°	872.6	892.1	967.2	1054.3	1142.9	1222.5	1300.6	1375.7	1446.3	1510.9	1561.9
35°	847.0	871.1	949.2	1037.8	1126.4	1206.0	1284.1	1360.7	1429.8	1491.3	1536.4
37.5°	821.5	847.0	926.6	1015.2	1103.9	1183.4	1263.0	1336.6	1402.7	1459.8	1500.3
40°	793.0	821.5	901.1	991.2	1078.3	1157.9	1236.0	1306.6	1366.7	1419.2	1456.8
42.5°	761.4	793.0	874.1	964.2	1049.8	1127.9	1203.0	1269.1	1326.1	1372.7	1404.2
45°	731.4	764.4	845.5	935.6	1019.7	1096.3	1168.4	1230.0	1281.1	1323.1	1350.2
47.5°	698.4	732.9	817.0	904.1	986.7	1061.8	1130.9	1186.5	1236.0	1272.1	1296.1
50°	663.8	701.4	785.5	872.6	953.7	1027.3	1093.3	1144.4	1189.5	1219.5	1242.0
52.5°	629.3	668.3	752.4	839.5	920.6	991.2	1054.3	1103.9	1142.9	1169.9	1189.5
55°	591.7	635.3	719.4	806.5	884.6	955.2	1015.2	1060.3	1096.3	1118.9	1136.9
57.5°	552.7	599.2	686.3	773.4	851.5	919.1	976.2	1018.2	1049.8	1069.3	1082.8
60°	513.6	563.2	650.3	737.4	814.0	881.6	935.6	974.7	1003.2	1018.2	1028.8
62.5°	473.1	525.6	614.3	701.4	779.5	842.5	893.6	929.6	955.2	967.2	977.7
65°	431.0	486.6	576.7	663.8	741.9	800.5	850.0	883.1	905.6	916.1	922.1
67.5°	387.5	446.0	537.7	624.8	699.9	756.9	803.5	836.5	854.5	863.6	868.1
70°	342.4	404.0	495.6	582.7	654.8	708.9	753.9	784.0	802.0	811.0	812.5
72.5°	300.4	360.4	453.6	537.7	606.7	659.3	701.4	732.9	750.9	758.4	758.4
75°	255.3	315.4	407.0	488.1	554.2	605.2	647.3	677.3	693.8	701.4	701.4
77.5°	216.3	271.8	357.4	435.5	497.1	546.7	587.2	618.8	636.8	644.3	644.3
80°	172.7	226.8	306.4	378.5	435.5	480.6	522.6	555.7	573.7	576.7	572.2
82.5°	133.7	183.2	250.8	315.4	368.0	410.0	452.1	479.1	492.6	495.6	494.1
85°	94.6	135.2	192.2	244.8	288.4	327.4	357.4	383.0	396.5	401.0	404.0
87.5°	55.6	78.1	114.1	154.7	187.7	213.3	231.3	253.8	267.3	276.3	285.3
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°	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8	1031.8
2.5°	1039.3	1040.8	1042.3	1042.3	1042.3	1043.8	1042.3	1042.3
5°	1105.4	1114.4	1121.9	1126.4	1130.9	1138.4	1136.9	1138.4
7.5°	1188.0	1203.0	1219.5	1228.5	1234.5	1243.5	1246.5	1246.5
10°	1273.6	1294.6	1314.1	1327.6	1336.6	1350.2	1351.7	1353.2
12.5°	1354.7	1380.2	1402.7	1417.7	1431.3	1443.3	1449.3	1450.8
15°	1423.7	1455.3	1480.8	1500.3	1513.9	1527.4	1534.9	1537.9
17.5°	1485.3	1518.4	1546.9	1569.4	1585.9	1599.5	1608.5	1611.5
20°	1533.4	1569.4	1601.0	1625.0	1644.5	1659.5	1671.5	1674.6
22.5°	1572.4	1610.0	1643.0	1670.0	1689.6	1707.6	1718.1	1722.6
25°	1601.0	1641.5	1676.1	1701.6	1722.6	1739.1	1749.6	1754.1
27.5°	1617.5	1658.0	1691.1	1716.6	1737.6	1752.6	1763.2	1767.7
30°	1617.5	1656.5	1689.6	1713.6	1733.1	1748.1	1755.7	1760.2
32.5°	1601.0	1638.5	1668.5	1689.6	1707.6	1722.6	1728.6	1731.6
35°	1573.9	1607.0	1634.0	1652.0	1667.0	1680.6	1686.6	1689.6
37.5°	1534.9	1564.9	1585.9	1602.5	1614.5	1628.0	1632.5	1635.5
40°	1485.3	1513.9	1528.9	1543.9	1554.4	1566.4	1569.4	1569.4
42.5°	1431.3	1455.3	1470.3	1480.8	1488.3	1495.8	1500.3	1500.3
45°	1374.2	1395.2	1405.7	1414.7	1422.2	1428.2	1432.8	1432.8
47.5°	1317.1	1333.6	1342.6	1348.7	1354.7	1360.7	1363.7	1363.7
50°	1260.0	1272.1	1279.6	1284.1	1290.1	1294.6	1297.6	1296.1
52.5°	1203.0	1212.0	1218.0	1222.5	1225.5	1230.0	1231.5	1233.0
55°	1145.9	1151.9	1156.4	1159.4	1165.4	1169.9	1171.4	1174.4
57.5°	1090.3	1093.3	1099.3	1100.8	1106.9	1111.4	1112.9	1114.4
60°	1033.3	1036.3	1040.8	1043.8	1051.3	1054.3	1055.8	1058.8
62.5°	977.7	979.2	985.2	991.2	997.2	1000.2	1001.7	1003.2
65°	922.1	926.6	931.1	935.6	941.7	946.2	947.7	950.7
67.5°	868.1	871.1	877.1	881.6	886.1	890.6	893.6	895.1
70°	812.5	815.5	820.0	823.0	827.5	832.0	836.5	836.5
72.5°	758.4	758.4	761.4	764.4	768.9	771.9	773.4	773.4
75°	699.9	698.4	701.4	702.9	702.9	702.9	704.4	705.9
77.5°	636.8	630.8	627.8	627.8	629.3	626.3	627.8	629.3
80°	564.7	558.7	557.2	557.2	558.7	557.2	558.7	558.7
82.5°	488.1	488.1	483.6	485.1	486.6	483.6	486.6	489.6
85°	399.5	401.0	399.5	404.0	404.0	404.0	405.5	408.5
87.5°	286.9	295.9	292.9	298.9	297.4	298.9	300.4	304.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)