

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: P188584

Luminaire Tested: **24SR-LD2-53-C-UNV-L840-CD1-PL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188584  
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-LD2-53-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**

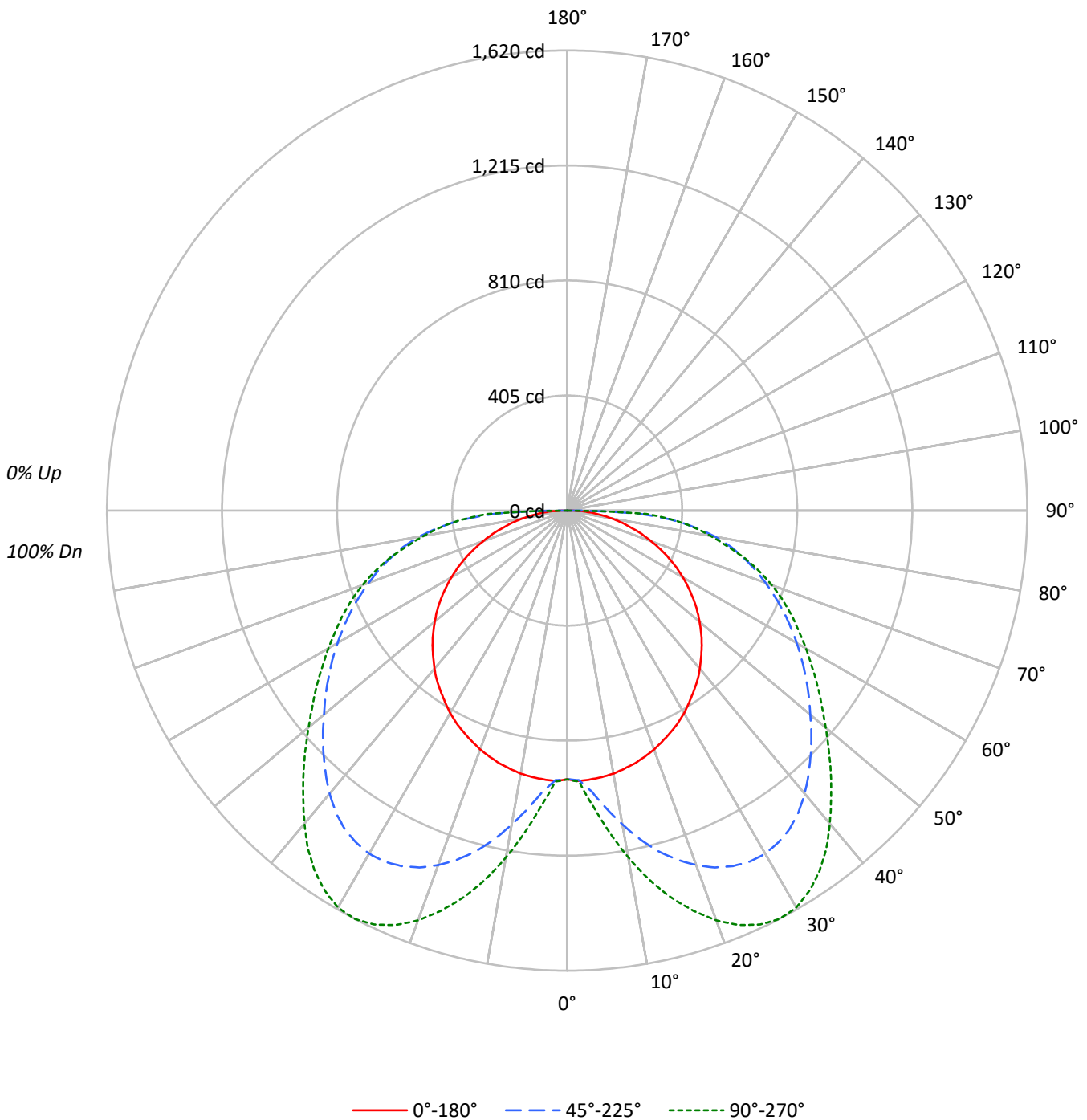
Lumens per Lamp: N/A  
Luminaire Lumens: 5215.0 lumens  
Efficiency: N/A  
Efficacy: 121.0 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1273	1273	1273
5°	1283	1341	1409
10°	1285	1533	1695
15°	1283	1730	1964
20°	1281	1902	2198
25°	1279	2050	2387
30°	1279	2167	2507
35°	1275	2246	2544
40°	1277	2285	2527
45°	1276	2308	2499
50°	1274	2340	2487
55°	1272	2406	2525
60°	1267	2512	2612
65°	1258	2674	2775
70°	1235	2924	3017
75°	1216	3342	3364
80°	1227	4097	3968
85°	1338	5675	5781



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.3	1.9
10°-20°	341.6	6.5
20°-30°	605.4	11.6
30°-40°	796.7	15.3
40°-50°	864.0	16.6
50°-60°	841.0	16.1
60°-70°	755.7	14.5
70°-80°	598.6	11.5
80°-90°	313.7	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°	1045.3	20.0
0°-40°	1842.1	35.3
0°-60°	3547.1	68.0
0°-90°	5215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5215.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	950	950	993	1030	1044	90
15°	921	1041	1242	1366	1410	260
25°	862	1097	1381	1548	1608	397
35°	776	1069	1367	1506	1549	486
45°	670	970	1213	1293	1313	517
55°	542	843	1026	1061	1077	485
65°	395	707	840	856	872	390
75°	234	531	643	644	647	249
85°	87	282	368	368	374	92
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°	945.8	945.8	945.8	945.8	945.8	945.8	945.8	945.8	945.8	945.8	945.8
2.5°	952.7	951.3	949.9	948.6	947.2	945.8	945.8	945.8	947.2	949.9	954.1
5°	949.9	948.6	947.2	947.2	948.6	951.3	959.6	969.2	978.8	992.6	1007.8
7.5°	945.8	944.4	944.4	947.2	958.2	974.7	994.0	1014.6	1035.3	1057.3	1078.0
10°	940.3	938.9	940.3	952.7	977.5	1005.0	1033.9	1062.8	1090.4	1122.0	1150.9
12.5°	930.7	930.7	937.5	962.3	998.1	1035.3	1072.5	1111.0	1146.8	1185.3	1218.4
15°	921.0	921.0	936.2	973.3	1018.8	1062.8	1109.6	1155.1	1197.7	1241.8	1280.3
17.5°	908.6	908.6	934.8	981.6	1033.9	1087.6	1141.3	1192.2	1240.4	1288.6	1329.9
20°	894.9	897.6	932.0	988.5	1047.7	1108.3	1166.1	1222.5	1276.2	1328.5	1374.0
22.5°	878.3	883.8	927.9	991.2	1058.7	1122.0	1185.3	1245.9	1302.4	1360.2	1405.6
25°	861.8	870.1	922.4	991.2	1062.8	1131.7	1197.7	1261.1	1321.6	1380.8	1430.4
27.5°	843.9	854.9	914.1	987.1	1064.2	1134.4	1203.2	1269.3	1332.7	1393.2	1444.2
30°	823.3	837.0	901.7	978.8	1058.7	1130.3	1201.9	1270.7	1334.0	1394.6	1444.2
32.5°	799.9	817.8	886.6	966.4	1047.7	1120.6	1192.2	1261.1	1325.8	1385.0	1431.8
35°	776.5	798.5	870.1	951.3	1032.5	1105.5	1177.1	1247.3	1310.6	1367.1	1408.4
37.5°	753.1	776.5	849.4	930.7	1011.9	1084.8	1157.8	1225.3	1285.8	1338.2	1375.3
40°	726.9	753.1	826.0	908.6	988.5	1061.4	1133.0	1197.7	1252.8	1301.0	1335.4
42.5°	698.0	726.9	801.2	883.8	962.3	1033.9	1102.7	1163.3	1215.6	1258.3	1287.2
45°	670.5	700.7	775.1	857.7	934.8	1005.0	1071.1	1127.5	1174.3	1212.9	1237.7
47.5°	640.2	671.8	748.9	828.8	904.5	973.3	1036.7	1087.6	1133.0	1166.1	1188.1
50°	608.5	642.9	720.0	799.9	874.2	941.7	1002.2	1049.1	1090.4	1117.9	1138.5
52.5°	576.8	612.6	689.7	769.6	843.9	908.6	966.4	1011.9	1047.7	1072.5	1090.4
55°	542.4	582.3	659.4	739.3	810.9	875.6	930.7	972.0	1005.0	1025.6	1042.2
57.5°	506.6	549.3	629.2	709.0	780.6	842.5	894.9	933.4	962.3	980.2	992.6
60°	470.8	516.3	596.1	676.0	746.2	808.1	857.7	893.5	919.6	933.4	943.0
62.5°	433.7	481.8	563.1	642.9	714.5	772.3	819.1	852.2	875.6	886.6	896.2
65°	395.1	446.1	528.7	608.5	680.1	733.8	779.2	809.5	830.2	839.8	845.3
67.5°	355.2	408.9	492.9	572.7	641.5	693.9	736.5	766.8	783.3	791.6	795.7
70°	313.9	370.3	454.3	534.2	600.2	649.8	691.1	718.6	735.2	743.4	744.8
72.5°	275.3	330.4	415.8	492.9	556.2	604.4	642.9	671.8	688.4	695.2	695.2
75°	234.0	289.1	373.1	447.4	508.0	554.8	593.4	620.9	636.0	642.9	642.9
77.5°	198.2	249.2	327.7	399.2	455.7	501.1	538.3	567.2	583.7	590.6	590.6
80°	158.3	207.9	280.8	346.9	399.2	440.5	479.1	509.4	525.9	528.7	524.5
82.5°	122.5	168.0	229.9	289.1	337.3	375.8	414.4	439.2	451.6	454.3	452.9
85°	86.7	123.9	176.2	224.4	264.3	300.1	327.7	351.1	363.5	367.6	370.3
87.5°	50.9	71.6	104.6	141.8	172.1	195.5	212.0	232.7	245.1	253.3	261.6
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°	945.8	945.8	945.8	945.8	945.8	945.8	945.8	945.8
2.5°	952.7	954.1	955.4	955.4	955.4	956.8	955.4	955.4
5°	1013.3	1021.5	1028.4	1032.5	1036.7	1043.5	1042.2	1043.5
7.5°	1089.0	1102.7	1117.9	1126.1	1131.7	1139.9	1142.7	1142.7
10°	1167.4	1186.7	1204.6	1217.0	1225.3	1237.7	1239.0	1240.4
12.5°	1241.8	1265.2	1285.8	1299.6	1312.0	1323.0	1328.5	1329.9
15°	1305.1	1334.0	1357.4	1375.3	1387.7	1400.1	1407.0	1409.7
17.5°	1361.6	1391.9	1418.0	1438.7	1453.8	1466.2	1474.5	1477.2
20°	1405.6	1438.7	1467.6	1489.6	1507.5	1521.3	1532.3	1535.0
22.5°	1441.4	1475.8	1506.1	1530.9	1548.8	1565.3	1575.0	1579.1
25°	1467.6	1504.7	1536.4	1559.8	1579.1	1594.2	1603.9	1608.0
27.5°	1482.7	1519.9	1550.2	1573.6	1592.9	1606.6	1616.3	1620.4
30°	1482.7	1518.5	1548.8	1570.8	1588.7	1602.5	1609.4	1613.5
32.5°	1467.6	1502.0	1529.5	1548.8	1565.3	1579.1	1584.6	1587.3
35°	1442.8	1473.1	1497.9	1514.4	1528.1	1540.5	1546.0	1548.8
37.5°	1407.0	1434.5	1453.8	1468.9	1480.0	1492.4	1496.5	1499.2
40°	1361.6	1387.7	1401.5	1415.3	1424.9	1435.9	1438.7	1438.7
42.5°	1312.0	1334.0	1347.8	1357.4	1364.3	1371.2	1375.3	1375.3
45°	1259.7	1279.0	1288.6	1296.9	1303.7	1309.2	1313.4	1313.4
47.5°	1207.4	1222.5	1230.8	1236.3	1241.8	1247.3	1250.1	1250.1
50°	1155.1	1166.1	1173.0	1177.1	1182.6	1186.7	1189.5	1188.1
52.5°	1102.7	1111.0	1116.5	1120.6	1123.4	1127.5	1128.9	1130.3
55°	1050.4	1055.9	1060.1	1062.8	1068.3	1072.5	1073.8	1076.6
57.5°	999.5	1002.2	1007.8	1009.1	1014.6	1018.8	1020.1	1021.5
60°	947.2	949.9	954.1	956.8	963.7	966.4	967.8	970.6
62.5°	896.2	897.6	903.1	908.6	914.1	916.9	918.3	919.6
65°	845.3	849.4	853.6	857.7	863.2	867.3	868.7	871.5
67.5°	795.7	798.5	804.0	808.1	812.3	816.4	819.1	820.5
70°	744.8	747.6	751.7	754.4	758.6	762.7	766.8	766.8
72.5°	695.2	695.2	698.0	700.7	704.9	707.6	709.0	709.0
75°	641.5	640.2	642.9	644.3	644.3	644.3	645.7	647.1
77.5°	583.7	578.2	575.5	575.5	576.8	574.1	575.5	576.8
80°	517.6	512.1	510.8	510.8	512.1	510.8	512.1	512.1
82.5°	447.4	447.4	443.3	444.7	446.1	443.3	446.1	448.8
85°	366.2	367.6	366.2	370.3	370.3	370.3	371.7	374.5
87.5°	263.0	271.2	268.5	274.0	272.6	274.0	275.3	279.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)