

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: P188582

Luminaire Tested: **24SR-LD2-53-C-UNV-L830-CD1-PL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188582  
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-L830-CD1-PL-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

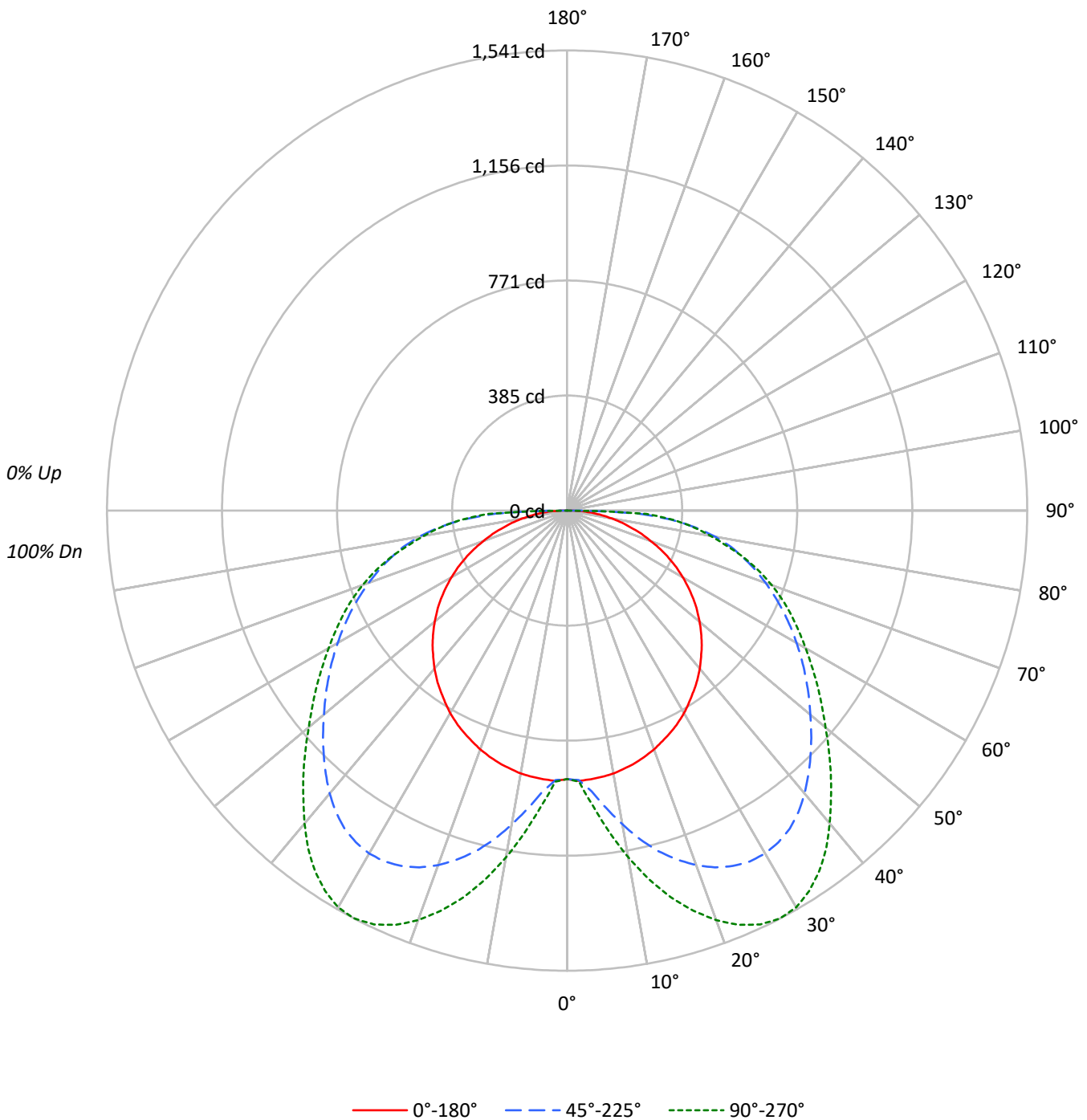
Lumens per Lamp: N/A  
Luminaire Lumens: 4959.0 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1210	1210	1210
5°	1220	1275	1340
10°	1222	1458	1611
15°	1220	1645	1867
20°	1218	1809	2090
25°	1217	1949	2270
30°	1216	2060	2384
35°	1213	2135	2419
40°	1214	2173	2403
45°	1213	2195	2376
50°	1211	2225	2365
55°	1210	2288	2401
60°	1205	2389	2484
65°	1196	2543	2638
70°	1174	2781	2869
75°	1157	3178	3199
80°	1166	3895	3773
85°	1274	5395	5497



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.5	1.9
10°-20°	324.8	6.5
20°-30°	575.7	11.6
30°-40°	757.6	15.3
40°-50°	821.6	16.6
50°-60°	799.7	16.1
60°-70°	718.6	14.5
70°-80°	569.2	11.5
80°-90°	298.3	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°	994.0	20.0
0°-40°	1751.7	35.3
0°-60°	3372.9	68.0
0°-90°	4959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4959.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	899	899	899	899	899	
5°	903	903	944	980	992	86
15°	876	990	1181	1299	1340	247
25°	820	1043	1313	1472	1529	378
35°	738	1016	1300	1432	1473	463
45°	638	922	1153	1229	1249	492
55°	516	802	975	1009	1024	461
65°	376	672	799	814	829	371
75°	223	505	611	612	615	237
85°	82	268	350	350	356	88
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°	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4
2.5°	905.9	904.6	903.3	902.0	900.7	899.4	899.4	899.4	900.7	903.3	907.2
5°	903.3	902.0	900.7	900.7	902.0	904.6	912.5	921.6	930.8	943.9	958.3
7.5°	899.4	898.1	898.1	900.7	911.2	926.9	945.2	964.8	984.5	1005.4	1025.0
10°	894.1	892.8	894.1	905.9	929.5	955.7	983.2	1010.6	1036.8	1066.9	1094.4
12.5°	885.0	885.0	891.5	915.1	949.1	984.5	1019.8	1056.5	1090.5	1127.2	1158.6
15°	875.8	875.8	890.2	925.6	968.8	1010.6	1055.2	1098.4	1138.9	1180.8	1217.5
17.5°	864.0	864.0	888.9	933.4	983.2	1034.2	1085.3	1133.7	1179.5	1225.3	1264.6
20°	850.9	853.6	886.3	940.0	996.2	1053.8	1108.8	1162.5	1213.6	1263.3	1306.5
22.5°	835.2	840.5	882.4	942.6	1006.7	1066.9	1127.2	1184.8	1238.4	1293.4	1336.6
25°	819.5	827.4	877.1	942.6	1010.6	1076.1	1138.9	1199.2	1256.8	1313.1	1360.2
27.5°	802.5	813.0	869.3	938.6	1012.0	1078.7	1144.2	1207.0	1267.2	1324.8	1373.3
30°	782.9	795.9	857.5	930.8	1006.7	1074.8	1142.9	1208.3	1268.5	1326.1	1373.3
32.5°	760.6	777.6	843.1	919.0	996.2	1065.6	1133.7	1199.2	1260.7	1317.0	1361.5
35°	738.3	759.3	827.4	904.6	981.8	1051.2	1119.3	1186.1	1246.3	1300.0	1339.2
37.5°	716.1	738.3	807.7	885.0	962.2	1031.6	1101.0	1165.1	1222.7	1272.5	1307.8
40°	691.2	716.1	785.5	864.0	940.0	1009.3	1077.4	1138.9	1191.3	1237.1	1269.9
42.5°	663.7	691.2	761.9	840.5	915.1	983.2	1048.6	1106.2	1156.0	1196.5	1224.0
45°	637.5	666.3	737.0	815.6	888.9	955.7	1018.5	1072.2	1116.7	1153.3	1176.9
47.5°	608.7	638.9	712.2	788.1	860.1	925.6	985.8	1034.2	1077.4	1108.8	1129.8
50°	578.6	611.4	684.7	760.6	831.3	895.4	953.0	997.6	1036.8	1063.0	1082.6
52.5°	548.5	582.6	655.9	731.8	802.5	864.0	919.0	962.2	996.2	1019.8	1036.8
55°	515.8	553.8	627.1	703.0	771.1	832.6	885.0	924.2	955.7	975.3	991.0
57.5°	481.8	522.3	598.3	674.2	742.3	801.2	850.9	887.6	915.1	932.1	943.9
60°	447.7	490.9	566.9	642.8	709.5	768.5	815.6	849.6	874.5	887.6	896.8
62.5°	412.4	458.2	535.4	611.4	679.4	734.4	778.9	810.3	832.6	843.1	852.2
65°	375.7	424.2	502.7	578.6	646.7	697.8	741.0	769.8	789.4	798.6	803.8
67.5°	337.8	388.8	468.7	544.6	610.1	659.8	700.4	729.2	744.9	752.7	756.7
70°	298.5	352.2	432.0	507.9	570.8	617.9	657.2	683.4	699.1	706.9	708.2
72.5°	261.8	314.2	395.4	468.7	528.9	574.7	611.4	638.9	654.6	661.1	661.1
75°	222.6	274.9	354.8	425.5	483.1	527.6	564.2	590.4	604.8	611.4	611.4
77.5°	188.5	237.0	311.6	379.6	433.3	476.5	511.9	539.4	555.1	561.6	561.6
80°	150.5	197.7	267.1	329.9	379.6	418.9	455.6	484.4	500.1	502.7	498.8
82.5°	116.5	159.7	218.6	274.9	320.7	357.4	394.0	417.6	429.4	432.0	430.7
85°	82.5	117.8	167.6	213.4	251.4	285.4	311.6	333.8	345.6	349.5	352.2
87.5°	48.4	68.1	99.5	134.8	163.6	185.9	201.6	221.2	233.0	240.9	248.7
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°	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4
2.5°	905.9	907.2	908.5	908.5	908.5	909.8	908.5	908.5
5°	963.5	971.4	977.9	981.8	985.8	992.3	991.0	992.3
7.5°	1035.5	1048.6	1063.0	1070.9	1076.1	1084.0	1086.6	1086.6
10°	1110.1	1128.5	1145.5	1157.3	1165.1	1176.9	1178.2	1179.5
12.5°	1180.8	1203.1	1222.7	1235.8	1247.6	1258.1	1263.3	1264.6
15°	1241.1	1268.5	1290.8	1307.8	1319.6	1331.4	1337.9	1340.5
17.5°	1294.7	1323.5	1348.4	1368.0	1382.4	1394.2	1402.1	1404.7
20°	1336.6	1368.0	1395.5	1416.5	1433.5	1446.6	1457.1	1459.7
22.5°	1370.7	1403.4	1432.2	1455.7	1472.8	1488.5	1497.6	1501.6
25°	1395.5	1430.9	1461.0	1483.2	1501.6	1516.0	1525.1	1529.1
27.5°	1409.9	1445.3	1474.1	1496.3	1514.7	1527.8	1536.9	1540.8
30°	1409.9	1444.0	1472.8	1493.7	1510.7	1523.8	1530.4	1534.3
32.5°	1395.5	1428.3	1454.4	1472.8	1488.5	1501.6	1506.8	1509.4
35°	1372.0	1400.8	1424.3	1440.0	1453.1	1464.9	1470.1	1472.8
37.5°	1337.9	1364.1	1382.4	1396.8	1407.3	1419.1	1423.0	1425.6
40°	1294.7	1319.6	1332.7	1345.8	1354.9	1365.4	1368.0	1368.0
42.5°	1247.6	1268.5	1281.6	1290.8	1297.3	1303.9	1307.8	1307.8
45°	1197.9	1216.2	1225.3	1233.2	1239.7	1245.0	1248.9	1248.9
47.5°	1148.1	1162.5	1170.4	1175.6	1180.8	1186.1	1188.7	1188.7
50°	1098.4	1108.8	1115.4	1119.3	1124.5	1128.5	1131.1	1129.8
52.5°	1048.6	1056.5	1061.7	1065.6	1068.2	1072.2	1073.5	1074.8
55°	998.9	1004.1	1008.0	1010.6	1015.9	1019.8	1021.1	1023.7
57.5°	950.4	953.0	958.3	959.6	964.8	968.8	970.1	971.4
60°	900.7	903.3	907.2	909.8	916.4	919.0	920.3	922.9
62.5°	852.2	853.6	858.8	864.0	869.3	871.9	873.2	874.5
65°	803.8	807.7	811.7	815.6	820.8	824.7	826.1	828.7
67.5°	756.7	759.3	764.5	768.5	772.4	776.3	778.9	780.2
70°	708.2	710.9	714.8	717.4	721.3	725.3	729.2	729.2
72.5°	661.1	661.1	663.7	666.3	670.3	672.9	674.2	674.2
75°	610.1	608.7	611.4	612.7	612.7	612.7	614.0	615.3
77.5°	555.1	549.8	547.2	547.2	548.5	545.9	547.2	548.5
80°	492.2	487.0	485.7	485.7	487.0	485.7	487.0	487.0
82.5°	425.5	425.5	421.5	422.8	424.2	421.5	424.2	426.8
85°	348.2	349.5	348.2	352.2	352.2	352.2	353.5	356.1
87.5°	250.0	257.9	255.3	260.5	259.2	260.5	261.8	265.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)