

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: P188577

Luminaire Tested: **24SR-LD2-48-C-UNV-L830-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188577
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-LD2-48-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: 4481.0 lumens
Efficiency: N/A
Efficacy: 117.3 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

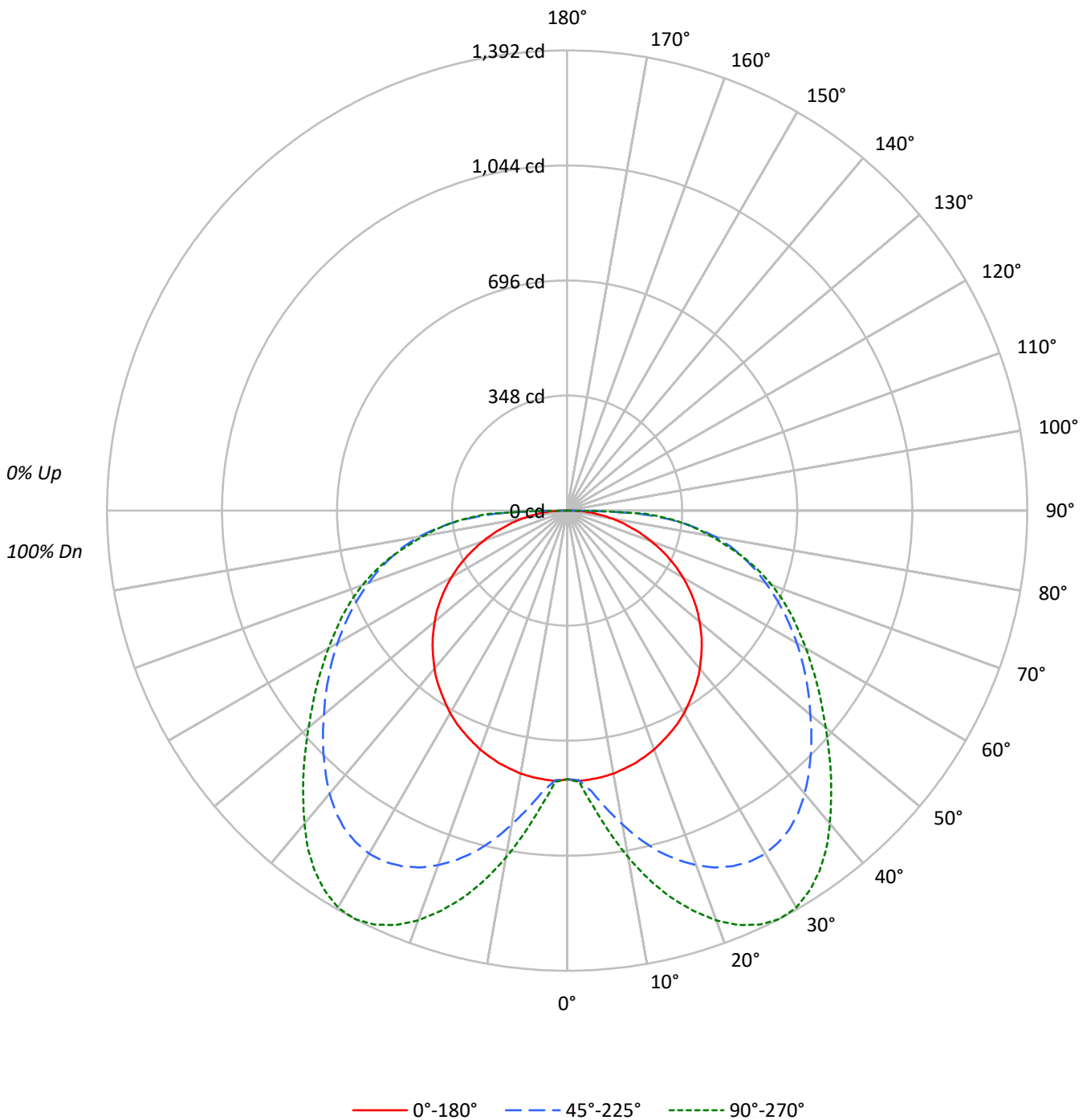
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1093	1093	1093
5°	1102	1152	1211
10°	1104	1317	1456
15°	1102	1486	1687
20°	1101	1634	1889
25°	1099	1761	2051
30°	1099	1862	2154
35°	1096	1929	2186
40°	1097	1963	2171
45°	1096	1983	2147
50°	1095	2011	2137
55°	1093	2067	2170
60°	1089	2158	2244
65°	1081	2297	2384
70°	1061	2513	2592
75°	1045	2872	2890
80°	1054	3519	3410
85°	1150	4875	4968



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	1.9
10°-20°	293.5	6.5
20°-30°	520.2	11.6
30°-40°	684.6	15.3
40°-50°	742.4	16.6
50°-60°	722.6	16.1
60°-70°	649.3	14.5
70°-80°	514.3	11.5
80°-90°	269.6	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°	898.2	20.0
0°-40°	1582.8	35.3
0°-60°	3047.8	68.0
0°-90°	4481.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4481.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	813	813	813	813	813	
5°	816	816	853	885	897	78
15°	791	894	1067	1174	1211	223
25°	740	943	1186	1330	1382	342
35°	667	919	1175	1294	1331	418
45°	576	833	1042	1111	1128	444
55°	466	725	881	912	925	416
65°	340	607	722	735	749	335
75°	201	457	552	553	556	214
85°	74	242	316	316	322	79
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°	812.7	812.7	812.7	812.7	812.7	812.7	812.7	812.7	812.7	812.7	812.7
2.5°	818.6	817.4	816.2	815.0	813.9	812.7	812.7	812.7	813.9	816.2	819.8
5°	816.2	815.0	813.9	813.9	815.0	817.4	824.5	832.8	841.1	852.9	865.9
7.5°	812.7	811.5	811.5	813.9	823.3	837.5	854.1	871.8	889.6	908.5	926.2
10°	807.9	806.8	807.9	818.6	839.9	863.5	888.4	913.2	936.9	964.1	988.9
12.5°	799.7	799.7	805.6	826.9	857.6	889.6	921.5	954.6	985.4	1018.5	1046.9
15°	791.4	791.4	804.4	836.3	875.4	913.2	953.4	992.5	1029.2	1067.0	1100.1
17.5°	780.7	780.7	803.2	843.4	888.4	934.5	980.7	1024.4	1065.8	1107.2	1142.7
20°	768.9	771.3	800.9	849.4	900.2	952.3	1001.9	1050.5	1096.6	1141.5	1180.6
22.5°	754.7	759.4	797.3	851.7	909.7	964.1	1018.5	1070.6	1119.1	1168.7	1207.8
25°	740.5	747.6	792.6	851.7	913.2	972.4	1029.2	1083.6	1135.6	1186.5	1229.1
27.5°	725.1	734.6	785.5	848.2	914.4	974.7	1033.9	1090.7	1145.1	1197.1	1240.9
30°	707.4	719.2	774.8	841.1	909.7	971.2	1032.7	1091.9	1146.3	1198.3	1240.9
32.5°	687.3	702.7	761.8	830.4	900.2	962.9	1024.4	1083.6	1139.2	1190.0	1230.3
35°	667.2	686.1	747.6	817.4	887.2	949.9	1011.4	1071.7	1126.2	1174.7	1210.1
37.5°	647.1	667.2	729.9	799.7	869.5	932.2	994.9	1052.8	1104.9	1149.8	1181.8
40°	624.6	647.1	709.8	780.7	849.4	912.0	973.6	1029.2	1076.5	1117.9	1147.5
42.5°	599.8	624.6	688.5	759.4	826.9	888.4	947.5	999.6	1044.5	1081.2	1106.0
45°	576.1	602.1	666.0	737.0	803.2	863.5	920.3	968.8	1009.0	1042.2	1063.5
47.5°	550.1	577.3	643.5	712.1	777.2	836.3	890.8	934.5	973.6	1001.9	1020.9
50°	522.9	552.4	618.7	687.3	751.2	809.1	861.2	901.4	936.9	960.5	978.3
52.5°	495.7	526.4	592.7	661.3	725.1	780.7	830.4	869.5	900.2	921.5	936.9
55°	466.1	500.4	566.6	635.2	696.8	752.3	799.7	835.2	863.5	881.3	895.5
57.5°	435.3	472.0	540.6	609.2	670.7	724.0	768.9	802.0	826.9	842.3	852.9
60°	404.6	443.6	512.2	580.8	641.2	694.4	737.0	767.7	790.2	802.0	810.3
62.5°	372.6	414.0	483.8	552.4	613.9	663.6	703.8	732.2	752.3	761.8	770.1
65°	339.5	383.3	454.2	522.9	584.4	630.5	669.5	695.6	713.3	721.6	726.3
67.5°	305.2	351.3	423.5	492.1	551.2	596.2	632.9	658.9	673.1	680.2	683.7
70°	269.7	318.2	390.4	459.0	515.8	558.3	593.8	617.5	631.7	638.8	640.0
72.5°	236.6	283.9	357.2	423.5	477.9	519.3	552.4	577.3	591.5	597.4	597.4
75°	201.1	248.4	320.6	384.5	436.5	476.7	509.8	533.5	546.5	552.4	552.4
77.5°	170.3	214.1	281.5	343.1	391.6	430.6	462.5	487.4	501.6	507.5	507.5
80°	136.0	178.6	241.3	298.1	343.1	378.5	411.7	437.7	451.9	454.2	450.7
82.5°	105.3	144.3	197.6	248.4	289.8	322.9	356.1	377.4	388.0	390.4	389.2
85°	74.5	106.5	151.4	192.8	227.1	257.9	281.5	301.6	312.3	315.8	318.2
87.5°	43.8	61.5	89.9	121.8	147.9	168.0	182.2	199.9	210.6	217.7	224.8
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°	812.7	812.7	812.7	812.7	812.7	812.7	812.7	812.7
2.5°	818.6	819.8	821.0	821.0	821.0	822.1	821.0	821.0
5°	870.6	877.7	883.7	887.2	890.8	896.7	895.5	896.7
7.5°	935.7	947.5	960.5	967.6	972.4	979.5	981.8	981.8
10°	1003.1	1019.7	1035.1	1045.7	1052.8	1063.5	1064.6	1065.8
12.5°	1067.0	1087.1	1104.9	1116.7	1127.3	1136.8	1141.5	1142.7
15°	1121.4	1146.3	1166.4	1181.8	1192.4	1203.0	1209.0	1211.3
17.5°	1169.9	1196.0	1218.4	1236.2	1249.2	1259.8	1266.9	1269.3
20°	1207.8	1236.2	1261.0	1279.9	1295.3	1307.1	1316.6	1319.0
22.5°	1238.5	1268.1	1294.1	1315.4	1330.8	1345.0	1353.3	1356.8
25°	1261.0	1293.0	1320.2	1340.3	1356.8	1369.8	1378.1	1381.7
27.5°	1274.0	1306.0	1332.0	1352.1	1368.7	1380.5	1388.8	1392.3
30°	1274.0	1304.8	1330.8	1349.7	1365.1	1376.9	1382.9	1386.4
32.5°	1261.0	1290.6	1314.2	1330.8	1345.0	1356.8	1361.6	1363.9
35°	1239.7	1265.7	1287.0	1301.2	1313.1	1323.7	1328.4	1330.8
37.5°	1209.0	1232.6	1249.2	1262.2	1271.7	1282.3	1285.9	1288.2
40°	1169.9	1192.4	1204.2	1216.1	1224.3	1233.8	1236.2	1236.2
42.5°	1127.3	1146.3	1158.1	1166.4	1172.3	1178.2	1181.8	1181.8
45°	1082.4	1099.0	1107.2	1114.3	1120.2	1125.0	1128.5	1128.5
47.5°	1037.4	1050.5	1057.5	1062.3	1067.0	1071.7	1074.1	1074.1
50°	992.5	1001.9	1007.9	1011.4	1016.1	1019.7	1022.1	1020.9
52.5°	947.5	954.6	959.4	962.9	965.3	968.8	970.0	971.2
55°	902.6	907.3	910.9	913.2	918.0	921.5	922.7	925.1
57.5°	858.8	861.2	865.9	867.1	871.8	875.4	876.6	877.7
60°	813.9	816.2	819.8	822.1	828.1	830.4	831.6	834.0
62.5°	770.1	771.3	776.0	780.7	785.5	787.8	789.0	790.2
65°	726.3	729.9	733.4	737.0	741.7	745.3	746.4	748.8
67.5°	683.7	686.1	690.8	694.4	697.9	701.5	703.8	705.0
70°	640.0	642.3	645.9	648.3	651.8	655.3	658.9	658.9
72.5°	597.4	597.4	599.8	602.1	605.7	608.0	609.2	609.2
75°	551.2	550.1	552.4	553.6	553.6	553.6	554.8	556.0
77.5°	501.6	496.8	494.5	494.5	495.7	493.3	494.5	495.7
80°	444.8	440.1	438.9	438.9	440.1	438.9	440.1	440.1
82.5°	384.5	384.5	380.9	382.1	383.3	380.9	383.3	385.6
85°	314.7	315.8	314.7	318.2	318.2	318.2	319.4	321.8
87.5°	225.9	233.0	230.7	235.4	234.2	235.4	236.6	240.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)