

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: P188580

Luminaire Tested: **24SR-LD2-48-C-UNV-L850-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188580
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-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: 5128.0 lumens
Efficiency: N/A
Efficacy: 134.2 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

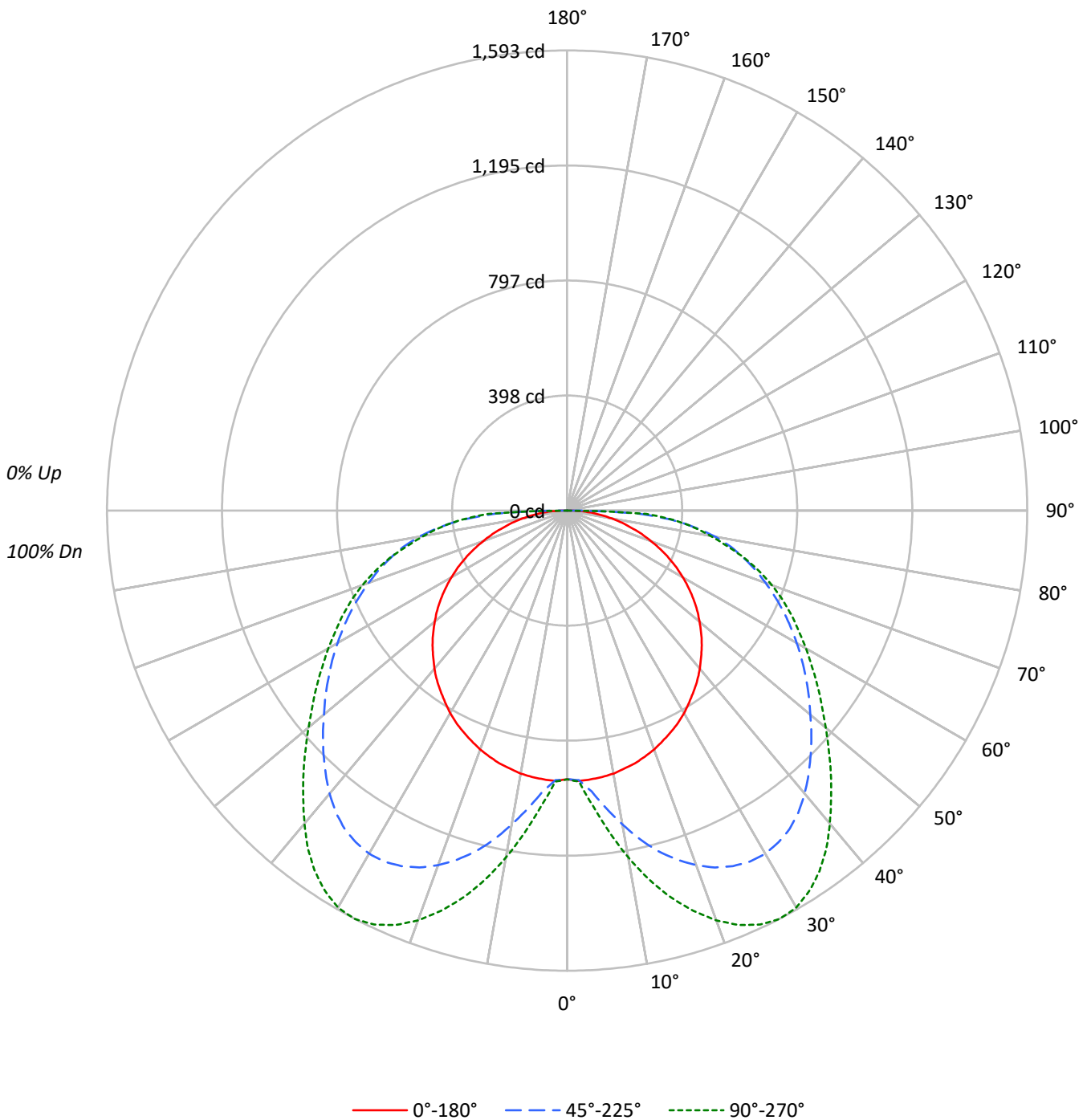
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188580

CATALOG NUMBER: 24SR-LD2-48-C-UNV-L850-CD1-PL-U

Luminous Intensity Polar Plot





TEST NUMBER: P188580

CATALOG NUMBER: 24SR-LD2-48-C-UNV-L850-CD1-PL-U

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°	1251	1251	1251
5°	1262	1318	1386
10°	1263	1507	1666
15°	1262	1701	1931
20°	1260	1871	2161
25°	1258	2016	2347
30°	1258	2131	2465
35°	1254	2208	2502
40°	1255	2247	2485
45°	1255	2269	2457
50°	1253	2301	2445
55°	1251	2366	2483
60°	1246	2470	2568
65°	1237	2629	2728
70°	1214	2876	2966
75°	1196	3287	3308
80°	1206	4028	3902
85°	1317	5579	5684



TEST NUMBER: P188580

CATALOG NUMBER: 24SR-LD2-48-C-UNV-L850-CD1-PL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	1.9
10°-20°	335.9	6.5
20°-30°	595.3	11.6
30°-40°	783.5	15.3
40°-50°	849.6	16.6
50°-60°	827.0	16.1
60°-70°	743.1	14.5
70°-80°	588.6	11.5
80°-90°	308.5	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°	1027.9	20.0
0°-40°	1811.4	35.3
0°-60°	3487.9	68.0
0°-90°	5128.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5128.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	934	934	976	1013	1026	89
15°	906	1023	1221	1344	1386	256
25°	847	1079	1358	1522	1581	391
35°	764	1051	1344	1481	1523	478
45°	659	954	1193	1271	1292	508
55°	533	829	1008	1044	1059	476
65°	388	695	826	841	857	384
75°	230	523	632	633	636	245
85°	85	278	361	362	368	91
90°	0	0	0	0	0	



TEST NUMBER: P188580

CATALOG NUMBER: 24SR-LD2-48-C-UNV-L850-CD1-PL-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0
2.5°	936.8	935.4	934.1	932.7	931.4	930.0	930.0	930.0	931.4	934.1	938.1
5°	934.1	932.7	931.4	931.4	932.7	935.4	943.6	953.0	962.5	976.0	990.9
7.5°	930.0	928.7	928.7	931.4	942.2	958.4	977.4	997.7	1018.0	1039.7	1060.0
10°	924.6	923.3	924.6	936.8	961.2	988.2	1016.7	1045.1	1072.2	1103.3	1131.7
12.5°	915.1	915.1	921.9	946.3	981.5	1018.0	1054.6	1092.5	1127.7	1165.6	1198.1
15°	905.7	905.7	920.5	957.1	1001.8	1045.1	1091.1	1135.8	1177.8	1221.1	1259.0
17.5°	893.5	893.5	919.2	965.2	1016.7	1069.5	1122.3	1172.3	1219.7	1267.1	1307.7
20°	879.9	882.6	916.5	972.0	1030.2	1089.8	1146.6	1202.1	1254.9	1306.4	1351.0
22.5°	863.7	869.1	912.4	974.7	1041.0	1103.3	1165.6	1225.1	1280.6	1337.5	1382.2
25°	847.4	855.6	907.0	974.7	1045.1	1112.8	1177.8	1240.0	1299.6	1357.8	1406.5
27.5°	829.8	840.7	898.9	970.6	1046.4	1115.5	1183.2	1248.1	1310.4	1370.0	1420.1
30°	809.5	823.1	886.7	962.5	1041.0	1111.4	1181.8	1249.5	1311.8	1371.3	1420.1
32.5°	786.5	804.1	871.8	950.3	1030.2	1101.9	1172.3	1240.0	1303.7	1361.9	1407.9
35°	763.5	785.2	855.6	935.4	1015.3	1087.1	1157.4	1226.5	1288.8	1344.3	1384.9
37.5°	740.5	763.5	835.3	915.1	995.0	1066.7	1138.5	1204.8	1264.4	1315.8	1352.4
40°	714.8	740.5	812.2	893.5	972.0	1043.7	1114.1	1177.8	1231.9	1279.3	1313.1
42.5°	686.3	714.8	787.9	869.1	946.3	1016.7	1084.3	1143.9	1195.4	1237.3	1265.7
45°	659.3	689.1	762.2	843.4	919.2	988.2	1053.2	1108.7	1154.7	1192.6	1217.0
47.5°	629.5	660.6	736.4	815.0	889.4	957.1	1019.4	1069.5	1114.1	1146.6	1168.3
50°	598.4	632.2	708.0	786.5	859.6	926.0	985.5	1031.6	1072.2	1099.2	1119.5
52.5°	567.2	602.4	678.2	756.7	829.8	893.5	950.3	995.0	1030.2	1054.6	1072.2
55°	533.4	572.6	648.4	727.0	797.4	861.0	915.1	955.7	988.2	1008.5	1024.8
57.5°	498.2	540.1	618.7	697.2	767.6	828.5	879.9	917.8	946.3	963.9	976.0
60°	463.0	507.7	586.2	664.7	733.7	794.6	843.4	878.6	904.3	917.8	927.3
62.5°	426.4	473.8	553.7	632.2	702.6	759.4	805.5	838.0	861.0	871.8	881.3
65°	388.5	438.6	519.8	598.4	668.7	721.5	766.2	796.0	816.3	825.8	831.2
67.5°	349.3	402.1	484.6	563.2	630.8	682.3	724.3	754.0	770.3	778.4	782.5
70°	308.7	364.2	446.7	525.3	590.2	639.0	679.6	706.7	722.9	731.0	732.4
72.5°	270.7	324.9	408.8	484.6	546.9	594.3	632.2	660.6	676.9	683.6	683.6
75°	230.1	284.3	366.9	440.0	499.5	545.6	583.5	610.5	625.4	632.2	632.2
77.5°	194.9	245.0	322.2	392.6	448.1	492.8	529.3	557.7	574.0	580.8	580.8
80°	155.7	204.4	276.2	341.1	392.6	433.2	471.1	500.9	517.1	519.8	515.8
82.5°	120.5	165.2	226.1	284.3	331.7	369.6	407.5	431.8	444.0	446.7	445.4
85°	85.3	121.8	173.3	220.7	259.9	295.1	322.2	345.2	357.4	361.4	364.2
87.5°	50.1	70.4	102.9	139.4	169.2	192.2	208.5	228.8	241.0	249.1	257.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188580

CATALOG NUMBER: 24SR-LD2-48-C-UNV-L850-CD1-PL-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0
2.5°	936.8	938.1	939.5	939.5	939.5	940.9	939.5	939.5
5°	996.4	1004.5	1011.2	1015.3	1019.4	1026.1	1024.8	1026.1
7.5°	1070.8	1084.3	1099.2	1107.4	1112.8	1120.9	1123.6	1123.6
10°	1148.0	1166.9	1184.5	1196.7	1204.8	1217.0	1218.4	1219.7
12.5°	1221.1	1244.1	1264.4	1277.9	1290.1	1300.9	1306.4	1307.7
15°	1283.3	1311.8	1334.8	1352.4	1364.6	1376.8	1383.5	1386.2
17.5°	1338.8	1368.6	1394.4	1414.7	1429.6	1441.7	1449.9	1452.6
20°	1382.2	1414.7	1443.1	1464.7	1482.3	1495.9	1506.7	1509.4
22.5°	1417.4	1451.2	1481.0	1505.4	1523.0	1539.2	1548.7	1552.7
25°	1443.1	1479.6	1510.8	1533.8	1552.7	1567.6	1577.1	1581.2
27.5°	1458.0	1494.5	1524.3	1547.3	1566.3	1579.8	1589.3	1593.4
30°	1458.0	1493.2	1523.0	1544.6	1562.2	1575.8	1582.5	1586.6
32.5°	1443.1	1476.9	1504.0	1523.0	1539.2	1552.7	1558.2	1560.9
35°	1418.7	1448.5	1472.9	1489.1	1502.7	1514.8	1520.3	1523.0
37.5°	1383.5	1410.6	1429.6	1444.4	1455.3	1467.5	1471.5	1474.2
40°	1338.8	1364.6	1378.1	1391.6	1401.1	1412.0	1414.7	1414.7
42.5°	1290.1	1311.8	1325.3	1334.8	1341.6	1348.3	1352.4	1352.4
45°	1238.7	1257.6	1267.1	1275.2	1282.0	1287.4	1291.5	1291.5
47.5°	1187.2	1202.1	1210.2	1215.7	1221.1	1226.5	1229.2	1229.2
50°	1135.8	1146.6	1153.4	1157.4	1162.9	1166.9	1169.6	1168.3
52.5°	1084.3	1092.5	1097.9	1101.9	1104.7	1108.7	1110.1	1111.4
55°	1032.9	1038.3	1042.4	1045.1	1050.5	1054.6	1055.9	1058.6
57.5°	982.8	985.5	990.9	992.3	997.7	1001.8	1003.1	1004.5
60°	931.4	934.1	938.1	940.9	947.6	950.3	951.7	954.4
62.5°	881.3	882.6	888.1	893.5	898.9	901.6	902.9	904.3
65°	831.2	835.3	839.3	843.4	848.8	852.9	854.2	856.9
67.5°	782.5	785.2	790.6	794.6	798.7	802.8	805.5	806.8
70°	732.4	735.1	739.1	741.9	745.9	750.0	754.0	754.0
72.5°	683.6	683.6	686.3	689.1	693.1	695.8	697.2	697.2
75°	630.8	629.5	632.2	633.6	633.6	633.6	634.9	636.3
77.5°	574.0	568.6	565.9	565.9	567.2	564.5	565.9	567.2
80°	509.0	503.6	502.2	502.2	503.6	502.2	503.6	503.6
82.5°	440.0	440.0	435.9	437.3	438.6	435.9	438.6	441.3
85°	360.1	361.4	360.1	364.2	364.2	364.2	365.5	368.2
87.5°	258.6	266.7	264.0	269.4	268.0	269.4	270.7	274.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)