

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: P188575

Luminaire Tested: **24SR-LD2-45-C-UNV-L850-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188575
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-LD2-45-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: 4815.0 lumens
Efficiency: N/A
Efficacy: 131.2 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

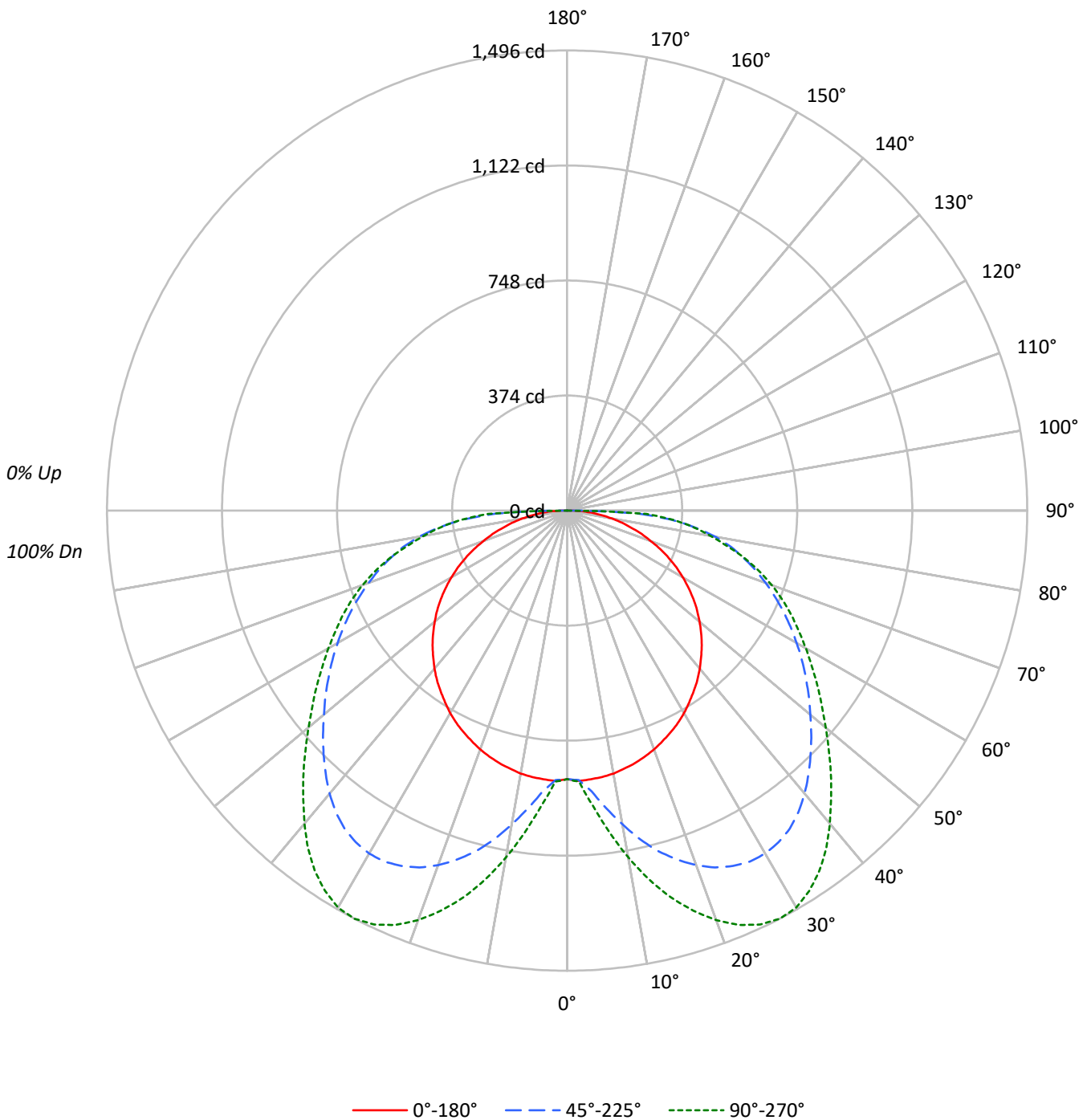
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1175	1175	1175
5°	1185	1238	1301
10°	1186	1415	1565
15°	1185	1597	1813
20°	1183	1756	2029
25°	1181	1893	2204
30°	1181	2000	2314
35°	1178	2073	2349
40°	1179	2110	2333
45°	1178	2131	2307
50°	1176	2160	2296
55°	1175	2221	2332
60°	1170	2319	2411
65°	1161	2469	2562
70°	1140	2700	2785
75°	1123	3086	3106
80°	1133	3782	3664
85°	1237	5240	5337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.8	1.9
10°-20°	315.4	6.5
20°-30°	559.0	11.6
30°-40°	735.6	15.3
40°-50°	797.7	16.6
50°-60°	776.5	16.1
60°-70°	697.7	14.5
70°-80°	552.7	11.5
80°-90°	289.6	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°	965.2	20.0
0°-40°	1700.8	35.3
0°-60°	3275.0	68.0
0°-90°	4815.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4815.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	873	873	873	873	873	
5°	877	877	916	951	964	83
15°	850	961	1146	1262	1302	240
25°	796	1013	1275	1429	1485	367
35°	717	987	1262	1391	1430	449
45°	619	896	1120	1194	1213	477
55°	501	779	947	980	994	447
65°	365	653	775	790	805	360
75°	216	491	594	594	597	230
85°	80	261	339	340	346	85
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°	873.3	873.3	873.3	873.3	873.3	873.3	873.3	873.3	873.3	873.3	873.3
2.5°	879.6	878.3	877.1	875.8	874.5	873.3	873.3	873.3	874.5	877.1	880.9
5°	877.1	875.8	874.5	874.5	875.8	878.3	886.0	894.9	903.8	916.5	930.5
7.5°	873.3	872.0	872.0	874.5	884.7	899.9	917.7	936.8	955.9	976.2	995.3
10°	868.2	866.9	868.2	879.6	902.5	927.9	954.6	981.3	1006.7	1036.0	1062.6
12.5°	859.3	859.3	865.6	888.5	921.6	955.9	990.2	1025.8	1058.8	1094.4	1124.9
15°	850.4	850.4	864.4	898.7	940.6	981.3	1024.5	1066.5	1105.9	1146.5	1182.1
17.5°	838.9	838.9	863.1	906.3	954.6	1004.2	1053.8	1100.8	1145.3	1189.8	1227.9
20°	826.2	828.8	860.5	912.7	967.3	1023.2	1076.6	1128.7	1178.3	1226.6	1268.6
22.5°	811.0	816.1	856.7	915.2	977.5	1036.0	1094.4	1150.4	1202.5	1255.9	1297.8
25°	795.7	803.3	851.6	915.2	981.3	1044.9	1105.9	1164.3	1220.3	1274.9	1320.7
27.5°	779.2	789.4	844.0	911.4	982.6	1047.4	1111.0	1172.0	1230.4	1286.4	1333.4
30°	760.1	772.8	832.6	903.8	977.5	1043.6	1109.7	1173.2	1231.7	1287.6	1333.4
32.5°	738.5	755.0	818.6	892.3	967.3	1034.7	1100.8	1164.3	1224.1	1278.7	1322.0
35°	716.9	737.2	803.3	878.3	953.3	1020.7	1086.8	1151.6	1210.1	1262.2	1300.3
37.5°	695.3	716.9	784.3	859.3	934.3	1001.6	1069.0	1131.3	1187.2	1235.5	1269.8
40°	671.1	695.3	762.7	838.9	912.7	980.0	1046.1	1105.9	1156.7	1201.2	1233.0
42.5°	644.5	671.1	739.8	816.1	888.5	954.6	1018.2	1074.1	1122.4	1161.8	1188.5
45°	619.0	647.0	715.6	791.9	863.1	927.9	988.9	1041.0	1084.3	1119.8	1142.7
47.5°	591.1	620.3	691.5	765.2	835.1	898.7	957.1	1004.2	1046.1	1076.6	1097.0
50°	561.8	593.6	664.8	738.5	807.2	869.4	925.4	968.6	1006.7	1032.1	1051.2
52.5°	532.6	565.6	636.8	710.6	779.2	838.9	892.3	934.3	967.3	990.2	1006.7
55°	500.8	537.7	608.9	682.6	748.7	808.4	859.3	897.4	927.9	947.0	962.2
57.5°	467.8	507.2	580.9	654.6	720.7	777.9	826.2	861.8	888.5	905.0	916.5
60°	434.7	476.7	550.4	624.1	688.9	746.1	791.9	825.0	849.1	861.8	870.7
62.5°	400.4	444.9	519.9	593.6	659.7	713.1	756.3	786.8	808.4	818.6	827.5
65°	364.8	411.8	488.1	561.8	627.9	677.5	719.4	747.4	766.5	775.4	780.5
67.5°	327.9	377.5	455.1	528.8	592.3	640.6	680.0	708.0	723.3	730.9	734.7
70°	289.8	341.9	419.5	493.2	554.2	600.0	638.1	663.5	678.8	686.4	687.7
72.5°	254.2	305.1	383.9	455.1	513.5	558.0	593.6	620.3	635.6	641.9	641.9
75°	216.1	266.9	344.5	413.1	469.0	512.3	547.8	573.3	587.3	593.6	593.6
77.5°	183.0	230.1	302.5	368.6	420.7	462.7	497.0	523.7	539.0	545.3	545.3
80°	146.2	191.9	259.3	320.3	368.6	406.8	442.3	470.3	485.6	488.1	484.3
82.5°	113.1	155.1	212.3	266.9	311.4	347.0	382.6	405.5	416.9	419.5	418.2
85°	80.1	114.4	162.7	207.2	244.1	277.1	302.5	324.1	335.6	339.4	341.9
87.5°	47.0	66.1	96.6	130.9	158.9	180.5	195.8	214.8	226.3	233.9	241.5
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°	873.3	873.3	873.3	873.3	873.3	873.3	873.3	873.3
2.5°	879.6	880.9	882.2	882.2	882.2	883.4	882.2	882.2
5°	935.5	943.2	949.5	953.3	957.1	963.5	962.2	963.5
7.5°	1005.4	1018.2	1032.1	1039.8	1044.9	1052.5	1055.0	1055.0
10°	1077.9	1095.7	1112.2	1123.7	1131.3	1142.7	1144.0	1145.3
12.5°	1146.5	1168.2	1187.2	1199.9	1211.4	1221.5	1226.6	1227.9
15°	1205.0	1231.7	1253.3	1269.8	1281.3	1292.7	1299.1	1301.6
17.5°	1257.1	1285.1	1309.2	1328.3	1342.3	1353.7	1361.4	1363.9
20°	1297.8	1328.3	1355.0	1375.3	1391.9	1404.6	1414.7	1417.3
22.5°	1330.9	1362.6	1390.6	1413.5	1430.0	1445.3	1454.2	1458.0
25°	1355.0	1389.3	1418.6	1440.2	1458.0	1471.9	1480.8	1484.7
27.5°	1369.0	1403.3	1431.3	1452.9	1470.7	1483.4	1492.3	1496.1
30°	1369.0	1402.0	1430.0	1450.3	1466.9	1479.6	1485.9	1489.7
32.5°	1355.0	1386.8	1412.2	1430.0	1445.3	1458.0	1463.1	1465.6
35°	1332.1	1360.1	1383.0	1398.2	1410.9	1422.4	1427.5	1430.0
37.5°	1299.1	1324.5	1342.3	1356.3	1366.4	1377.9	1381.7	1384.2
40°	1257.1	1281.3	1294.0	1306.7	1315.6	1325.8	1328.3	1328.3
42.5°	1211.4	1231.7	1244.4	1253.3	1259.7	1266.0	1269.8	1269.8
45°	1163.1	1180.9	1189.8	1197.4	1203.7	1208.8	1212.6	1212.6
47.5°	1114.8	1128.7	1136.4	1141.5	1146.5	1151.6	1154.2	1154.2
50°	1066.5	1076.6	1083.0	1086.8	1091.9	1095.7	1098.2	1097.0
52.5°	1018.2	1025.8	1030.9	1034.7	1037.2	1041.0	1042.3	1043.6
55°	969.9	974.9	978.8	981.3	986.4	990.2	991.5	994.0
57.5°	922.8	925.4	930.5	931.7	936.8	940.6	941.9	943.2
60°	874.5	877.1	880.9	883.4	889.8	892.3	893.6	896.1
62.5°	827.5	828.8	833.8	838.9	844.0	846.6	847.8	849.1
65°	780.5	784.3	788.1	791.9	797.0	800.8	802.1	804.6
67.5°	734.7	737.2	742.3	746.1	750.0	753.8	756.3	757.6
70°	687.7	690.2	694.0	696.6	700.4	704.2	708.0	708.0
72.5°	641.9	641.9	644.5	647.0	650.8	653.4	654.6	654.6
75°	592.3	591.1	593.6	594.9	594.9	594.9	596.2	597.4
77.5°	539.0	533.9	531.3	531.3	532.6	530.1	531.3	532.6
80°	477.9	472.9	471.6	471.6	472.9	471.6	472.9	472.9
82.5°	413.1	413.1	409.3	410.6	411.8	409.3	411.8	414.4
85°	338.1	339.4	338.1	341.9	341.9	341.9	343.2	345.7
87.5°	242.8	250.4	247.9	253.0	251.7	253.0	254.2	258.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)