

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: P188578

Luminaire Tested: **24SR-LD2-48-C-UNV-L835-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188578
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-L835-CD1-PL-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4620.0 lumens
Efficiency: N/A
Efficacy: 120.9 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

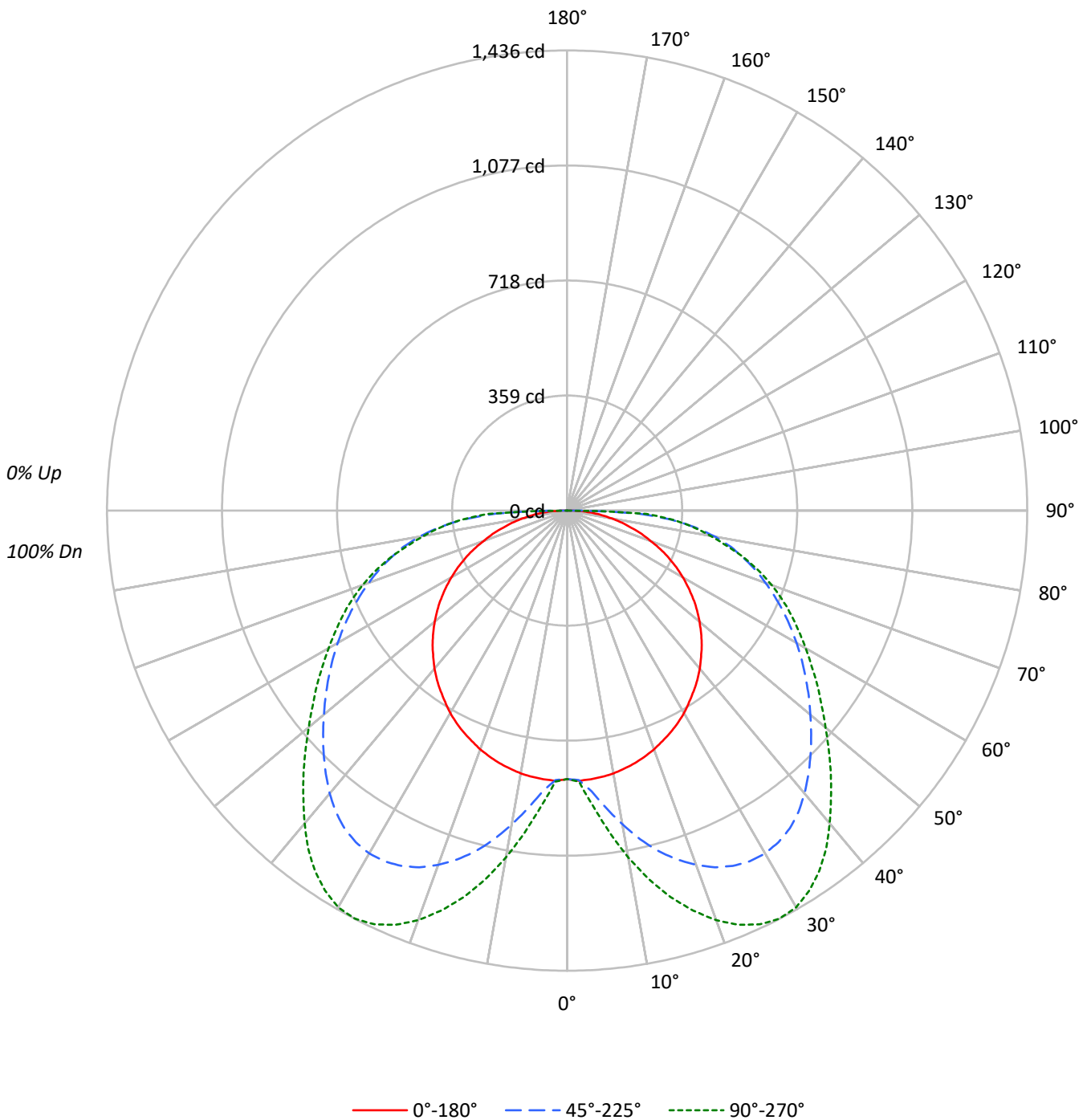
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1127	1127	1127
5°	1137	1188	1249
10°	1138	1358	1501
15°	1137	1532	1740
20°	1135	1685	1947
25°	1133	1816	2115
30°	1133	1920	2221
35°	1130	1989	2254
40°	1131	2024	2239
45°	1130	2045	2214
50°	1128	2073	2203
55°	1127	2131	2237
60°	1122	2225	2314
65°	1114	2369	2458
70°	1094	2591	2672
75°	1078	2961	2980
80°	1087	3629	3515
85°	1186	5027	5121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	1.9
10°-20°	302.6	6.5
20°-30°	536.4	11.6
30°-40°	705.8	15.3
40°-50°	765.4	16.6
50°-60°	745.0	16.1
60°-70°	669.4	14.5
70°-80°	530.3	11.5
80°-90°	277.9	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°	926.1	20.0
0°-40°	1631.9	35.3
0°-60°	3142.4	68.0
0°-90°	4620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4620.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	842	842	879	913	924	80
15°	816	922	1100	1210	1249	230
25°	764	972	1223	1371	1424	352
35°	688	947	1211	1334	1372	431
45°	594	859	1074	1145	1164	458
55°	480	747	909	940	954	429
65°	350	626	744	758	772	346
75°	207	471	570	570	573	221
85°	77	250	326	326	332	82
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°	837.9	837.9	837.9	837.9	837.9	837.9	837.9	837.9	837.9	837.9	837.9
2.5°	844.0	842.8	841.5	840.3	839.1	837.9	837.9	837.9	839.1	841.5	845.2
5°	841.5	840.3	839.1	839.1	840.3	842.8	850.1	858.6	867.2	879.4	892.8
7.5°	837.9	836.7	836.7	839.1	848.9	863.5	880.6	898.9	917.2	936.7	955.0
10°	833.0	831.8	833.0	844.0	865.9	890.3	915.9	941.6	966.0	994.0	1019.6
12.5°	824.5	824.5	830.6	852.5	884.2	917.2	950.1	984.2	1016.0	1050.1	1079.4
15°	815.9	815.9	829.4	862.3	902.5	941.6	983.0	1023.3	1061.1	1100.1	1134.3
17.5°	805.0	805.0	828.1	869.6	915.9	963.5	1011.1	1056.2	1098.9	1141.6	1178.2
20°	792.8	795.2	825.7	875.7	928.1	981.8	1033.0	1083.0	1130.6	1176.9	1217.2
22.5°	778.1	783.0	822.0	878.1	937.9	994.0	1050.1	1103.8	1153.8	1205.0	1245.2
25°	763.5	770.8	817.2	878.1	941.6	1002.5	1061.1	1117.2	1170.8	1223.3	1267.2
27.5°	747.6	757.4	809.8	874.5	942.8	1005.0	1066.0	1124.5	1180.6	1234.3	1279.4
30°	729.3	741.5	798.9	867.2	937.9	1001.3	1064.7	1125.7	1181.8	1235.5	1279.4
32.5°	708.6	724.5	785.4	856.2	928.1	992.8	1056.2	1117.2	1174.5	1227.0	1268.4
35°	687.9	707.4	770.8	842.8	914.7	979.4	1042.8	1105.0	1161.1	1211.1	1247.7
37.5°	667.1	687.9	752.5	824.5	896.4	961.1	1025.7	1085.5	1139.1	1185.5	1218.4
40°	644.0	667.1	731.8	805.0	875.7	940.3	1003.8	1061.1	1109.9	1152.6	1183.0
42.5°	618.4	644.0	709.8	783.0	852.5	915.9	976.9	1030.6	1076.9	1114.7	1140.4
45°	594.0	620.8	686.7	759.8	828.1	890.3	948.9	998.9	1040.3	1074.5	1096.5
47.5°	567.1	595.2	663.5	734.2	801.3	862.3	918.4	963.5	1003.8	1033.0	1052.5
50°	539.1	569.6	637.9	708.6	774.5	834.2	887.9	929.4	966.0	990.3	1008.6
52.5°	511.0	542.7	611.0	681.8	747.6	805.0	856.2	896.4	928.1	950.1	966.0
55°	480.5	515.9	584.2	654.9	718.4	775.7	824.5	861.1	890.3	908.6	923.3
57.5°	448.8	486.6	557.4	628.1	691.5	746.4	792.8	826.9	852.5	868.4	879.4
60°	417.1	457.4	528.1	598.8	661.0	715.9	759.8	791.5	814.7	826.9	835.4
62.5°	384.2	426.9	498.8	569.6	633.0	684.2	725.7	755.0	775.7	785.4	794.0
65°	350.0	395.2	468.3	539.1	602.5	650.1	690.3	717.1	735.4	744.0	748.9
67.5°	314.7	362.2	436.6	507.4	568.3	614.7	652.5	679.3	694.0	701.3	704.9
70°	278.1	328.1	402.5	473.2	531.8	575.7	612.3	636.6	651.3	658.6	659.8
72.5°	243.9	292.7	368.3	436.6	492.7	535.4	569.6	595.2	609.8	615.9	615.9
75°	207.3	256.1	330.5	396.4	450.0	491.5	525.7	550.1	563.5	569.6	569.6
77.5°	175.6	220.8	290.3	353.7	403.7	443.9	476.9	502.5	517.1	523.2	523.2
80°	140.3	184.2	248.8	307.3	353.7	390.3	424.4	451.3	465.9	468.3	464.7
82.5°	108.5	148.8	203.7	256.1	298.8	333.0	367.1	389.1	400.0	402.5	401.3
85°	76.8	109.8	156.1	198.8	234.2	265.9	290.3	311.0	322.0	325.6	328.1
87.5°	45.1	63.4	92.7	125.6	152.5	173.2	187.8	206.1	217.1	224.4	231.7
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°	837.9	837.9	837.9	837.9	837.9	837.9	837.9	837.9
2.5°	844.0	845.2	846.4	846.4	846.4	847.6	846.4	846.4
5°	897.7	905.0	911.1	914.7	918.4	924.5	923.3	924.5
7.5°	964.7	976.9	990.3	997.7	1002.5	1009.9	1012.3	1012.3
10°	1034.2	1051.3	1067.2	1078.2	1085.5	1096.5	1097.7	1098.9
12.5°	1100.1	1120.8	1139.1	1151.3	1162.3	1172.1	1176.9	1178.2
15°	1156.2	1181.8	1202.6	1218.4	1229.4	1240.4	1246.5	1248.9
17.5°	1206.2	1233.1	1256.2	1274.5	1287.9	1298.9	1306.2	1308.7
20°	1245.2	1274.5	1300.1	1319.6	1335.5	1347.7	1357.5	1359.9
22.5°	1277.0	1307.4	1334.3	1356.2	1372.1	1386.7	1395.3	1398.9
25°	1300.1	1333.1	1361.1	1381.8	1398.9	1412.3	1420.9	1424.5
27.5°	1313.5	1346.5	1373.3	1394.0	1411.1	1423.3	1431.9	1435.5
30°	1313.5	1345.3	1372.1	1391.6	1407.5	1419.7	1425.8	1429.4
32.5°	1300.1	1330.6	1355.0	1372.1	1386.7	1398.9	1403.8	1406.2
35°	1278.2	1305.0	1327.0	1341.6	1353.8	1364.8	1369.6	1372.1
37.5°	1246.5	1270.9	1287.9	1301.3	1311.1	1322.1	1325.7	1328.2
40°	1206.2	1229.4	1241.6	1253.8	1262.3	1272.1	1274.5	1274.5
42.5°	1162.3	1181.8	1194.0	1202.6	1208.7	1214.8	1218.4	1218.4
45°	1116.0	1133.0	1141.6	1148.9	1155.0	1159.9	1163.5	1163.5
47.5°	1069.6	1083.0	1090.4	1095.2	1100.1	1105.0	1107.4	1107.4
50°	1023.3	1033.0	1039.1	1042.8	1047.7	1051.3	1053.8	1052.5
52.5°	976.9	984.2	989.1	992.8	995.2	998.9	1000.1	1001.3
55°	930.6	935.5	939.1	941.6	946.4	950.1	951.3	953.8
57.5°	885.5	887.9	892.8	894.0	898.9	902.5	903.7	905.0
60°	839.1	841.5	845.2	847.6	853.7	856.2	857.4	859.8
62.5°	794.0	795.2	800.1	805.0	809.8	812.3	813.5	814.7
65°	748.9	752.5	756.2	759.8	764.7	768.4	769.6	772.0
67.5°	704.9	707.4	712.3	715.9	719.6	723.2	725.7	726.9
70°	659.8	662.3	665.9	668.4	672.0	675.7	679.3	679.3
72.5°	615.9	615.9	618.4	620.8	624.5	626.9	628.1	628.1
75°	568.3	567.1	569.6	570.8	570.8	570.8	572.0	573.2
77.5°	517.1	512.2	509.8	509.8	511.0	508.6	509.8	511.0
80°	458.6	453.7	452.5	452.5	453.7	452.5	453.7	453.7
82.5°	396.4	396.4	392.7	393.9	395.2	392.7	395.2	397.6
85°	324.4	325.6	324.4	328.1	328.1	328.1	329.3	331.7
87.5°	233.0	240.3	237.8	242.7	241.5	242.7	243.9	247.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)