

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: P188583

Luminaire Tested: **24SR-LD2-53-C-UNV-L835-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188583
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-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: 5113.0 lumens
Efficiency: N/A
Efficacy: 118.6 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

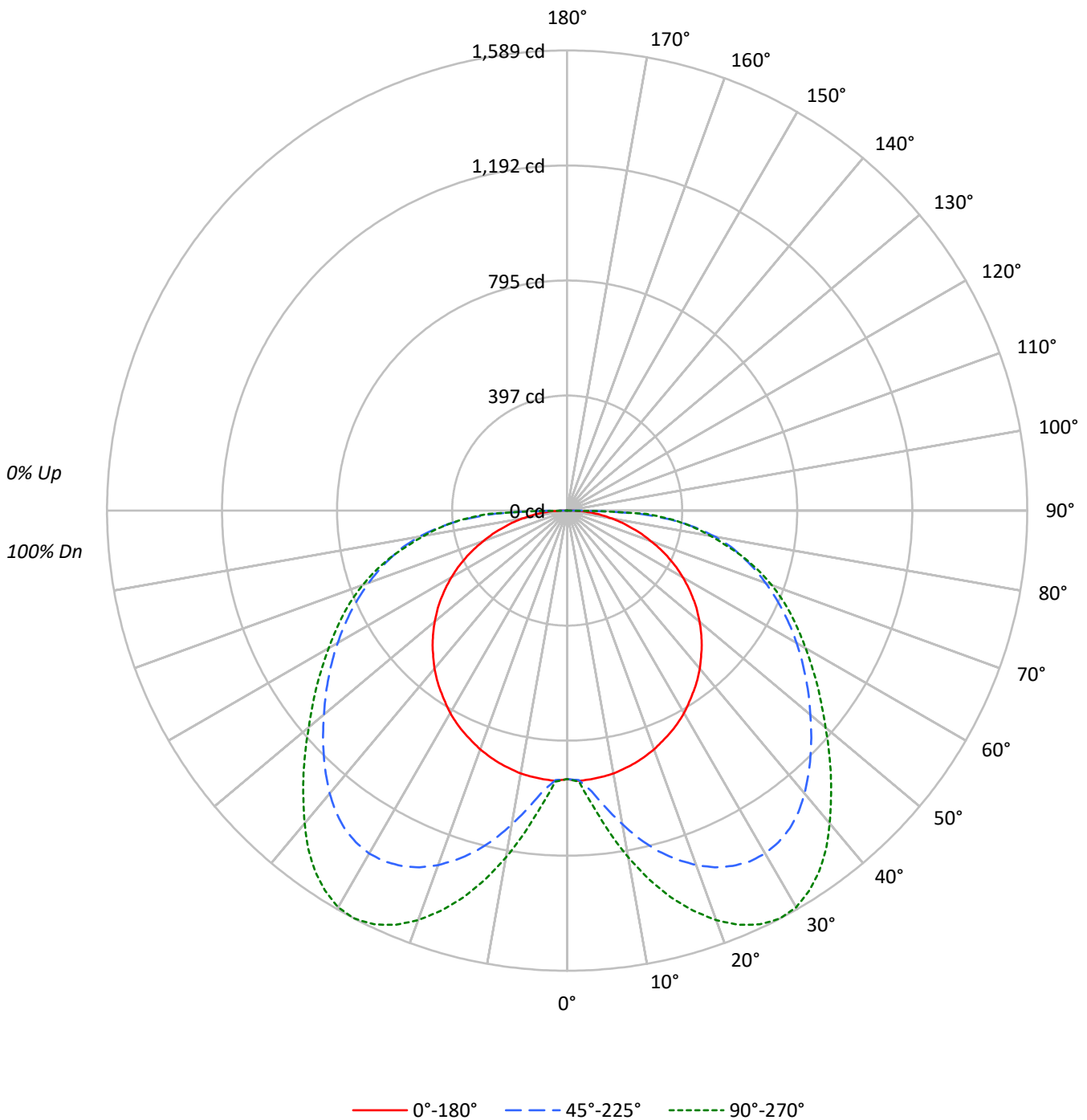
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1248	1248	1248
5°	1258	1314	1382
10°	1260	1503	1662
15°	1258	1696	1925
20°	1256	1865	2155
25°	1254	2010	2340
30°	1254	2124	2458
35°	1250	2201	2494
40°	1252	2240	2477
45°	1251	2263	2450
50°	1249	2294	2438
55°	1247	2359	2476
60°	1242	2463	2561
65°	1233	2621	2720
70°	1211	2867	2958
75°	1193	3277	3298
80°	1203	4016	3890
85°	1312	5564	5667



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	1.9
10°-20°	334.9	6.5
20°-30°	593.6	11.6
30°-40°	781.2	15.3
40°-50°	847.1	16.6
50°-60°	824.6	16.1
60°-70°	740.9	14.5
70°-80°	586.9	11.5
80°-90°	307.6	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°	1024.9	20.0
0°-40°	1806.1	35.3
0°-60°	3477.7	68.0
0°-90°	5113.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5113.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	927	927	927	927	927	
5°	931	931	973	1010	1023	89
15°	903	1020	1218	1340	1382	255
25°	845	1076	1354	1518	1576	390
35°	761	1048	1340	1477	1518	477
45°	657	951	1189	1267	1288	507
55°	532	827	1006	1041	1056	475
65°	387	693	823	839	854	383
75°	230	521	630	631	634	244
85°	85	277	360	361	367	91
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°	927.3	927.3	927.3	927.3	927.3	927.3	927.3	927.3	927.3	927.3	927.3
2.5°	934.0	932.7	931.3	930.0	928.6	927.3	927.3	927.3	928.6	931.3	935.4
5°	931.3	930.0	928.6	928.6	930.0	932.7	940.8	950.2	959.7	973.2	988.0
7.5°	927.3	925.9	925.9	928.6	939.4	955.6	974.5	994.8	1015.0	1036.6	1056.9
10°	921.9	920.6	921.9	934.0	958.3	985.3	1013.7	1042.0	1069.0	1100.1	1128.4
12.5°	912.5	912.5	919.2	943.5	978.6	1015.0	1051.5	1089.3	1124.4	1162.2	1194.6
15°	903.0	903.0	917.9	954.3	998.8	1042.0	1087.9	1132.5	1174.3	1217.5	1255.3
17.5°	890.9	890.9	916.5	962.4	1013.7	1066.3	1119.0	1168.9	1216.2	1263.4	1303.9
20°	877.4	880.1	913.8	969.1	1027.2	1086.6	1143.3	1198.6	1251.2	1302.5	1347.1
22.5°	861.2	866.6	909.8	971.8	1038.0	1100.1	1162.2	1221.6	1276.9	1333.6	1378.1
25°	845.0	853.1	904.4	971.8	1042.0	1109.5	1174.3	1236.4	1295.8	1353.8	1402.4
27.5°	827.4	838.2	896.3	967.8	1043.4	1112.2	1179.7	1244.5	1306.6	1366.0	1415.9
30°	807.2	820.7	884.1	959.7	1038.0	1108.2	1178.4	1245.8	1307.9	1367.3	1415.9
32.5°	784.2	801.8	869.3	947.5	1027.2	1098.7	1168.9	1236.4	1299.8	1357.9	1403.8
35°	761.3	782.9	853.1	932.7	1012.3	1083.9	1154.1	1222.9	1285.0	1340.3	1380.8
37.5°	738.3	761.3	832.8	912.5	992.1	1063.6	1135.2	1201.3	1260.7	1312.0	1348.4
40°	712.7	738.3	809.9	890.9	969.1	1040.7	1110.9	1174.3	1228.3	1275.5	1309.3
42.5°	684.3	712.7	785.6	866.6	943.5	1013.7	1081.2	1140.6	1191.9	1233.7	1262.0
45°	657.3	687.0	759.9	840.9	916.5	985.3	1050.1	1105.5	1151.4	1189.2	1213.5
47.5°	627.6	658.7	734.3	812.6	886.8	954.3	1016.4	1066.3	1110.9	1143.3	1164.9
50°	596.6	630.3	705.9	784.2	857.1	923.3	982.6	1028.5	1069.0	1096.0	1116.3
52.5°	565.6	600.7	676.2	754.5	827.4	890.9	947.5	992.1	1027.2	1051.5	1069.0
55°	531.8	571.0	646.5	724.8	795.0	858.5	912.5	952.9	985.3	1005.6	1021.8
57.5°	496.7	538.6	616.9	695.1	765.3	826.1	877.4	915.2	943.5	961.0	973.2
60°	461.6	506.2	584.5	662.7	731.6	792.3	840.9	876.0	901.7	915.2	924.6
62.5°	425.2	472.4	552.1	630.3	700.5	757.2	803.1	835.5	858.5	869.3	878.7
65°	387.4	437.3	518.3	596.6	666.8	719.4	764.0	793.7	813.9	823.4	828.8
67.5°	348.2	400.9	483.2	561.5	629.0	680.3	722.1	751.8	768.0	776.1	780.2
70°	307.8	363.1	445.4	523.7	588.5	637.1	677.6	704.6	720.8	728.9	730.2
72.5°	270.0	323.9	407.6	483.2	545.3	592.6	630.3	658.7	674.9	681.6	681.6
75°	229.5	283.5	365.8	438.7	498.1	544.0	581.8	608.8	623.6	630.3	630.3
77.5°	194.4	244.3	321.2	391.4	446.8	491.3	527.8	556.1	572.3	579.1	579.1
80°	155.2	203.8	275.4	340.1	391.4	431.9	469.7	499.4	515.6	518.3	514.3
82.5°	120.1	164.7	225.4	283.5	330.7	368.5	406.3	430.6	442.7	445.4	444.1
85°	85.0	121.5	172.8	220.0	259.2	294.3	321.2	344.2	356.3	360.4	363.1
87.5°	49.9	70.2	102.6	139.0	168.7	191.7	207.9	228.1	240.3	248.4	256.5
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°	927.3	927.3	927.3	927.3	927.3	927.3	927.3	927.3
2.5°	934.0	935.4	936.7	936.7	936.7	938.1	936.7	936.7
5°	993.4	1001.5	1008.3	1012.3	1016.4	1023.1	1021.8	1023.1
7.5°	1067.7	1081.2	1096.0	1104.1	1109.5	1117.6	1120.3	1120.3
10°	1144.6	1163.5	1181.1	1193.2	1201.3	1213.5	1214.8	1216.2
12.5°	1217.5	1240.4	1260.7	1274.2	1286.3	1297.1	1302.5	1303.9
15°	1279.6	1307.9	1330.9	1348.4	1360.6	1372.7	1379.5	1382.2
17.5°	1334.9	1364.6	1390.3	1410.5	1425.4	1437.5	1445.6	1448.3
20°	1378.1	1410.5	1438.9	1460.5	1478.0	1491.5	1502.3	1505.0
22.5°	1413.2	1447.0	1476.7	1501.0	1518.5	1534.7	1544.1	1548.2
25°	1438.9	1475.3	1506.4	1529.3	1548.2	1563.0	1572.5	1576.5
27.5°	1453.7	1490.2	1519.9	1542.8	1561.7	1575.2	1584.6	1588.7
30°	1453.7	1488.8	1518.5	1540.1	1557.6	1571.1	1577.9	1581.9
32.5°	1438.9	1472.6	1499.6	1518.5	1534.7	1548.2	1553.6	1556.3
35°	1414.6	1444.3	1468.6	1484.8	1498.3	1510.4	1515.8	1518.5
37.5°	1379.5	1406.5	1425.4	1440.2	1451.0	1463.2	1467.2	1469.9
40°	1334.9	1360.6	1374.1	1387.6	1397.0	1407.8	1410.5	1410.5
42.5°	1286.3	1307.9	1321.4	1330.9	1337.6	1344.4	1348.4	1348.4
45°	1235.0	1253.9	1263.4	1271.5	1278.2	1283.6	1287.7	1287.7
47.5°	1183.8	1198.6	1206.7	1212.1	1217.5	1222.9	1225.6	1225.6
50°	1132.5	1143.3	1150.0	1154.1	1159.5	1163.5	1166.2	1164.9
52.5°	1081.2	1089.3	1094.7	1098.7	1101.4	1105.5	1106.8	1108.2
55°	1029.9	1035.3	1039.3	1042.0	1047.4	1051.5	1052.8	1055.5
57.5°	979.9	982.6	988.0	989.4	994.8	998.8	1000.2	1001.5
60°	928.6	931.3	935.4	938.1	944.8	947.5	948.9	951.6
62.5°	878.7	880.1	885.5	890.9	896.3	899.0	900.3	901.7
65°	828.8	832.8	836.9	840.9	846.3	850.4	851.7	854.4
67.5°	780.2	782.9	788.3	792.3	796.4	800.4	803.1	804.5
70°	730.2	732.9	737.0	739.7	743.7	747.8	751.8	751.8
72.5°	681.6	681.6	684.3	687.0	691.1	693.8	695.1	695.1
75°	629.0	627.6	630.3	631.7	631.7	631.7	633.0	634.4
77.5°	572.3	566.9	564.2	564.2	565.6	562.9	564.2	565.6
80°	507.5	502.1	500.8	500.8	502.1	500.8	502.1	502.1
82.5°	438.7	438.7	434.6	436.0	437.3	434.6	437.3	440.0
85°	359.0	360.4	359.0	363.1	363.1	363.1	364.4	367.1
87.5°	257.8	265.9	263.2	268.6	267.3	268.6	270.0	274.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)