

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: P188715

Luminaire Tested: **24SR-LD2-64-C-UNV-L850-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188715
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33587)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-64-C-UNV-L850-CD1-TB-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4747.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 2.07 / 1.9
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

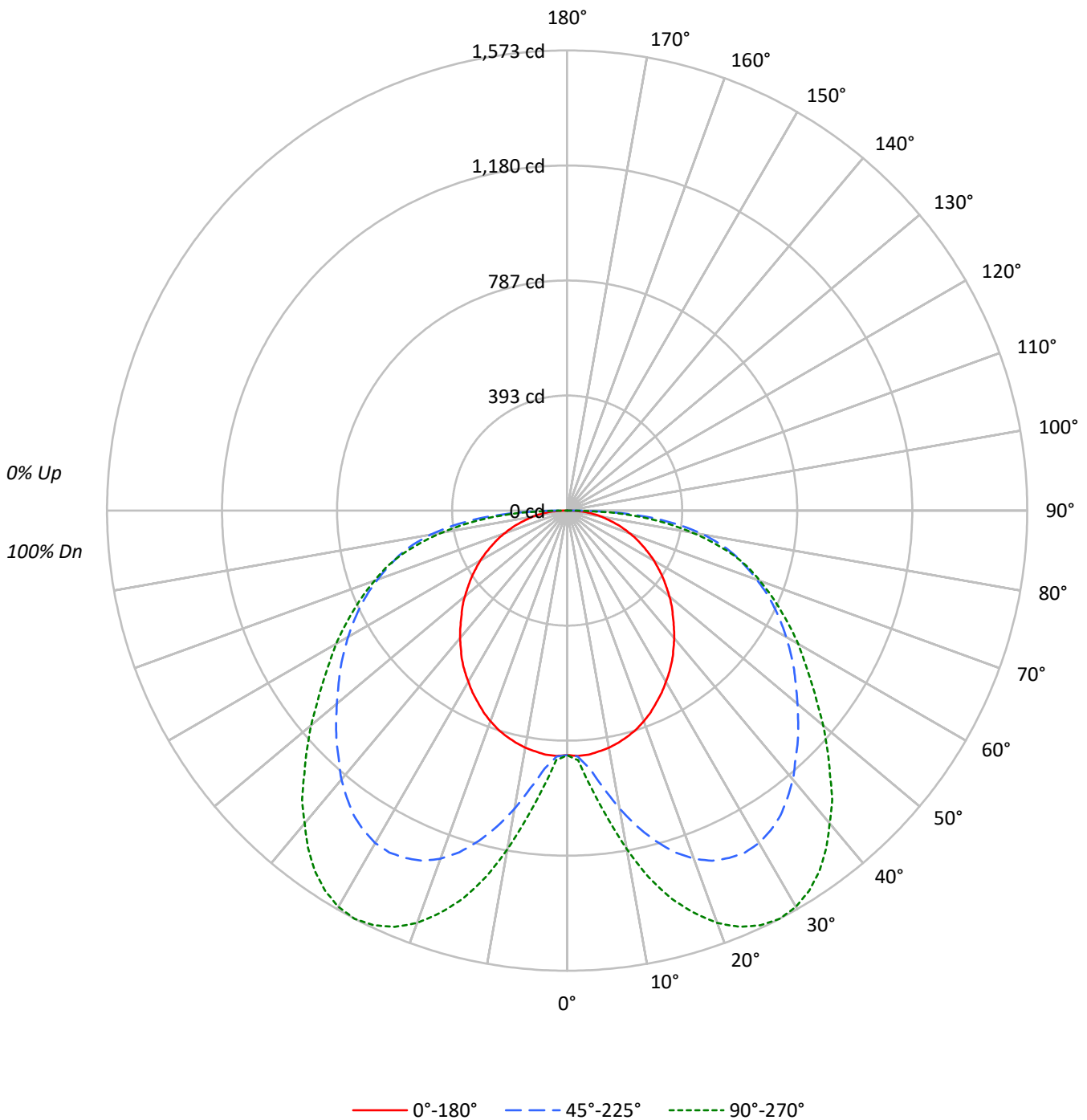
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	103	98	93	89	94	90	86	90	86	83	86	83	81	79
2	95	86	78	71	93	84	77	70	80	74	69	77	72	67	74	69	65	63
3	86	74	65	58	83	73	64	57	69	62	56	67	60	55	64	59	54	52
4	78	65	55	48	76	64	54	47	61	53	47	59	52	46	56	50	45	43
5	72	58	48	40	69	56	47	40	54	46	40	52	45	39	50	44	39	36
6	66	51	42	35	64	50	41	35	49	40	34	47	39	34	45	39	34	31
7	61	46	37	30	59	45	37	30	44	36	30	42	35	30	41	34	29	27
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24
9	53	38	30	24	51	38	29	24	37	29	24	35	28	23	34	28	23	21
10	49	35	27	21	48	35	27	21	34	26	21	33	26	21	32	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1125	1125	1125
5°	1131	1195	1287
10°	1124	1414	1606
15°	1113	1629	1912
20°	1097	1813	2148
25°	1073	1945	2322
30°	1049	2039	2430
35°	1028	2089	2470
40°	1000	2109	2452
45°	972	2122	2417
50°	955	2151	2391
55°	937	2222	2389
60°	923	2328	2455
65°	906	2486	2562
70°	897	2714	2757
75°	892	3093	3064
80°	919	3677	3365
85°	1014	4563	3944



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.1	1.9
10°-20°	321.4	6.8
20°-30°	572.6	12.1
30°-40°	742.4	15.6
40°-50°	791.7	16.7
50°-60°	761.6	16.0
60°-70°	681.5	14.4
70°-80°	536.5	11.3
80°-90°	250.2	5.3
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°	983.1	20.7
0°-40°	1725.6	36.4
0°-60°	3278.9	69.1
0°-90°	4747.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4747.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	838	848	885	932	953	79
15°	799	951	1170	1322	1372	225
25°	723	1010	1310	1507	1564	333
35°	626	961	1272	1454	1504	391
45°	511	839	1115	1244	1270	396
55°	400	720	947	1009	1018	357
65°	285	610	781	797	805	283
75°	172	470	595	587	589	181
85°	66	249	296	263	256	69
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°	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8
2.5°	839.4	839.4	837.6	837.6	839.4	839.4	839.4	839.4	841.3	841.3	843.1
5°	837.6	835.8	835.8	839.4	844.9	850.4	855.9	865.0	872.3	885.1	896.0
7.5°	830.3	830.3	834.0	843.1	855.9	874.1	894.2	916.1	936.1	956.2	979.9
10°	823.0	823.0	832.1	848.6	874.1	906.9	939.8	972.6	1003.7	1034.7	1060.2
12.5°	812.1	813.9	828.5	857.7	899.6	945.3	987.2	1029.2	1071.2	1105.9	1144.2
15°	799.3	802.9	824.8	868.6	923.4	978.1	1029.2	1080.3	1127.8	1169.7	1209.9
17.5°	784.7	790.2	821.2	877.8	941.6	1003.7	1067.5	1125.9	1177.0	1224.5	1270.1
20°	766.4	775.6	817.5	885.1	956.2	1027.4	1094.9	1157.0	1215.3	1266.4	1317.5
22.5°	746.4	757.3	810.2	886.9	965.3	1042.0	1116.8	1180.7	1242.7	1295.6	1348.6
25°	722.6	739.1	802.9	885.1	969.0	1051.1	1127.8	1193.4	1257.3	1310.2	1368.6
27.5°	700.7	719.0	790.2	877.8	965.3	1051.1	1127.8	1197.1	1262.8	1317.5	1374.1
30°	675.2	698.9	777.4	866.8	956.2	1042.0	1120.5	1189.8	1253.7	1312.1	1370.5
32.5°	651.5	677.0	757.3	848.6	939.8	1025.6	1105.9	1173.4	1237.2	1295.6	1352.2
35°	625.9	651.5	735.4	830.3	917.9	1003.7	1080.3	1149.7	1211.7	1271.9	1324.8
37.5°	596.7	625.9	711.7	804.8	890.5	976.3	1051.1	1118.6	1180.7	1237.2	1288.3
40°	569.4	600.4	684.3	777.4	863.2	945.3	1018.3	1082.1	1142.4	1200.7	1246.4
42.5°	540.2	573.0	658.8	748.2	832.1	910.6	979.9	1045.6	1104.0	1155.1	1200.7
45°	511.0	547.5	631.4	719.0	799.3	877.8	947.1	1007.3	1063.9	1115.0	1153.3
47.5°	485.4	521.9	602.2	689.8	770.1	844.9	912.4	970.8	1025.6	1071.2	1109.5
50°	456.2	492.7	574.8	660.6	739.1	813.9	877.8	934.3	985.4	1027.4	1063.9
52.5°	427.0	467.2	547.5	633.2	711.7	782.9	846.7	901.5	947.1	985.4	1016.4
55°	399.6	439.8	521.9	605.8	684.3	755.5	815.7	868.6	912.4	947.1	970.8
57.5°	370.4	414.2	498.2	582.1	658.8	726.3	786.5	835.8	875.9	905.1	925.2
60°	343.1	388.7	474.5	556.6	633.2	700.7	757.3	804.8	839.4	865.0	881.4
62.5°	313.9	363.1	448.9	531.0	605.8	673.4	726.3	770.1	802.9	823.0	834.0
65°	284.7	337.6	423.4	505.5	578.5	642.3	693.4	733.6	762.8	781.0	790.2
67.5°	257.3	312.0	397.8	478.1	549.3	609.5	658.8	697.1	722.6	737.2	740.9
70°	228.1	284.7	370.4	448.9	518.3	574.8	622.3	655.1	678.8	689.8	693.4
72.5°	200.7	257.3	341.2	417.9	483.6	536.5	582.1	615.0	635.0	642.3	642.3
75°	171.5	228.1	310.2	383.2	443.4	496.4	538.3	567.5	585.8	594.9	591.2
77.5°	142.3	198.9	277.4	344.9	399.6	447.1	489.1	516.4	534.7	540.2	536.5
80°	118.6	169.7	239.1	301.1	352.2	396.0	434.3	461.7	478.1	474.5	465.3
82.5°	91.2	138.7	198.9	251.8	297.4	339.4	375.9	397.8	401.5	394.2	383.2
85°	65.7	102.2	151.5	193.4	233.6	264.6	290.2	304.7	304.7	295.6	288.3
87.5°	38.3	60.2	87.6	116.8	135.0	155.1	175.2	178.8	178.8	178.8	169.7
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°	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8
2.5°	848.6	850.4	852.2	854.0	855.9	855.9	855.9	854.0
5°	906.9	917.9	927.0	938.0	941.6	945.3	948.9	952.6
7.5°	1000.0	1014.6	1029.2	1043.8	1052.9	1063.9	1060.2	1060.2
10°	1089.4	1116.8	1133.2	1151.5	1160.6	1171.6	1177.0	1175.2
12.5°	1177.0	1208.0	1231.8	1248.2	1262.8	1273.7	1277.4	1282.9
15°	1251.8	1282.9	1312.1	1332.1	1350.4	1361.3	1368.6	1372.3
17.5°	1313.9	1344.9	1377.8	1403.3	1419.7	1434.3	1438.0	1441.6
20°	1359.5	1399.7	1430.7	1458.1	1476.3	1490.9	1498.2	1500.0
22.5°	1396.0	1434.3	1469.0	1496.4	1516.4	1532.9	1540.2	1540.2
25°	1416.1	1456.2	1492.7	1521.9	1542.0	1556.6	1563.9	1563.9
27.5°	1423.4	1465.4	1500.0	1529.2	1551.1	1565.7	1571.2	1573.0
30°	1417.9	1459.9	1494.5	1521.9	1543.8	1556.6	1562.1	1563.9
32.5°	1399.7	1441.6	1474.5	1500.0	1520.1	1534.7	1540.2	1540.2
35°	1370.5	1408.8	1441.6	1467.2	1485.4	1496.4	1503.7	1503.7
37.5°	1332.1	1370.5	1399.7	1421.6	1438.0	1450.8	1454.4	1454.4
40°	1288.3	1321.2	1348.6	1370.5	1385.1	1394.2	1397.8	1396.0
42.5°	1239.1	1270.1	1292.0	1310.2	1323.0	1332.1	1337.6	1341.3
45°	1188.0	1217.2	1237.2	1251.8	1261.0	1266.4	1271.9	1270.1
47.5°	1142.4	1160.6	1178.9	1189.8	1198.9	1204.4	1206.2	1206.2
50°	1089.4	1105.9	1120.5	1129.6	1135.1	1138.7	1138.7	1142.4
52.5°	1036.5	1051.1	1062.1	1071.2	1074.8	1076.7	1078.5	1076.7
55°	989.1	998.2	1005.5	1012.8	1016.4	1018.3	1021.9	1018.3
57.5°	939.8	947.1	956.2	958.0	961.7	961.7	963.5	961.7
60°	890.5	896.0	899.6	901.5	906.9	908.8	908.8	912.4
62.5°	841.3	843.1	848.6	850.4	852.2	855.9	859.5	857.7
65°	792.0	793.8	795.6	799.3	802.9	806.6	806.6	804.8
67.5°	740.9	742.7	744.5	748.2	751.8	751.8	753.7	753.7
70°	691.6	691.6	693.4	695.3	698.9	700.7	702.6	700.7
72.5°	640.5	640.5	640.5	642.3	644.2	647.8	649.6	649.6
75°	587.6	587.6	587.6	585.8	587.6	591.2	589.4	589.4
77.5°	529.2	523.7	518.3	514.6	516.4	514.6	514.6	514.6
80°	456.2	447.1	439.8	436.1	434.3	436.1	434.3	434.3
82.5°	375.9	366.8	359.5	354.0	355.8	352.2	354.0	350.4
85°	279.2	271.9	264.6	261.0	262.8	262.8	261.0	255.5
87.5°	164.2	155.1	153.3	151.5	153.3	151.5	146.0	147.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)