

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: P188515

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188515
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24779)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-64-C-UNV-L850-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4345.0 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

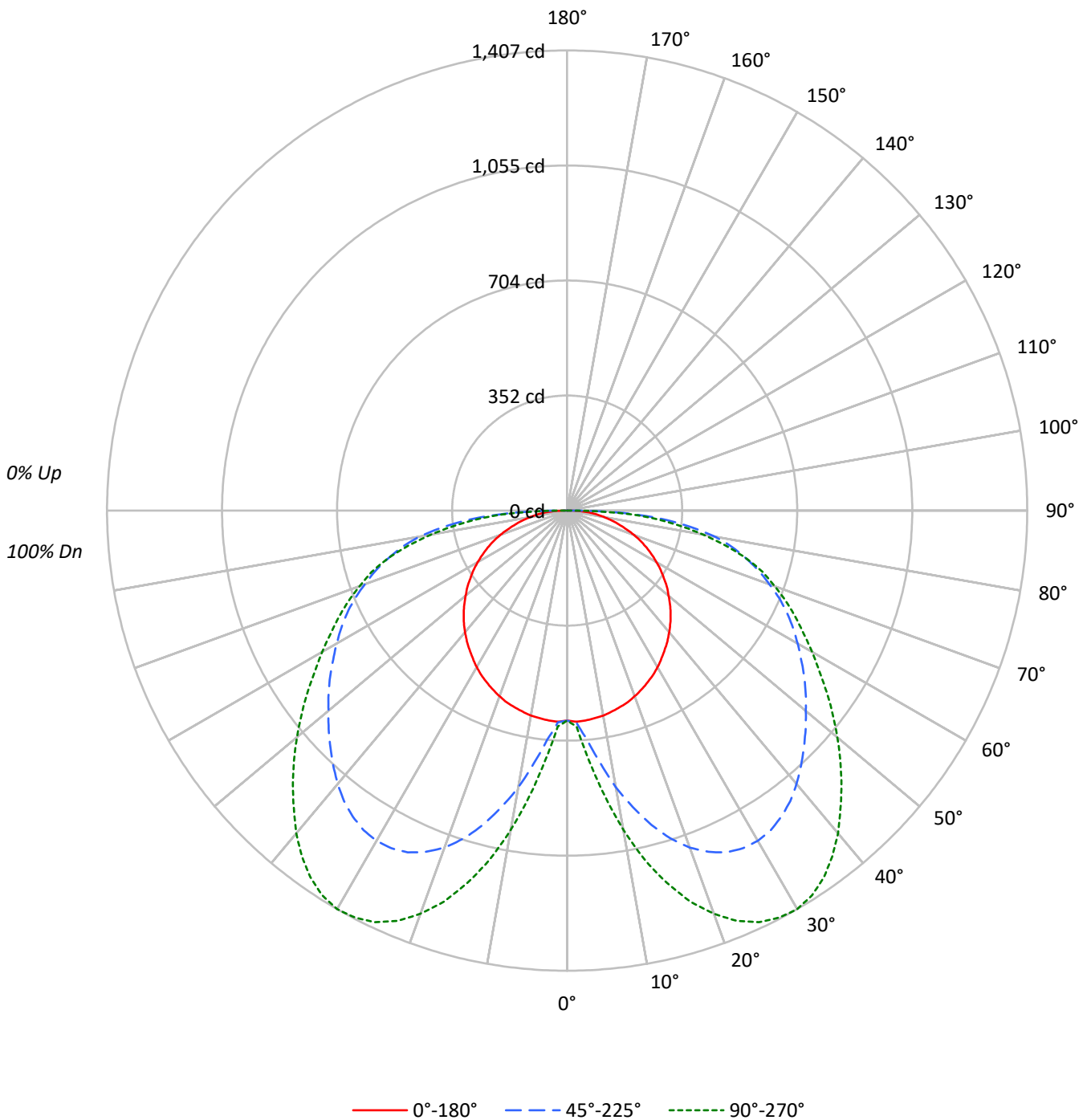
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	864	864	864
5°	870	951	1035
10°	870	1174	1354
15°	867	1385	1642
20°	865	1570	1879
25°	862	1712	2061
30°	859	1812	2186
35°	854	1876	2248
40°	853	1917	2263
45°	851	1948	2257
50°	848	1994	2257
55°	848	2076	2273
60°	850	2190	2327
65°	854	2365	2451
70°	854	2591	2656
75°	854	2950	2960
80°	891	3549	3266
85°	1042	4451	4028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	1.6
10°-20°	270.0	6.2
20°-30°	496.6	11.4
30°-40°	662.1	15.2
40°-50°	725.3	16.7
50°-60°	713.2	16.4
60°-70°	647.2	14.9
70°-80°	515.2	11.9
80°-90°	244.2	5.6
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°	837.8	19.3
0°-40°	1499.9	34.5
0°-60°	2938.4	67.6
0°-90°	4345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	642	642	642	642	642	
5°	644	650	704	750	766	61
15°	622	771	994	1133	1179	176
25°	580	854	1153	1326	1389	268
35°	520	840	1142	1311	1368	326
45°	447	757	1024	1148	1186	345
55°	361	669	885	952	969	324
65°	268	578	743	758	770	265
75°	164	452	568	564	569	174
85°	68	244	288	261	261	70
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°	642.3	642.3	642.3	642.3	642.3	642.3	642.3	642.3	642.3	642.3	642.3
2.5°	645.9	645.9	644.1	644.1	644.1	642.3	642.3	644.1	645.9	647.8	649.6
5°	644.1	644.1	644.1	644.1	645.9	653.2	662.4	675.1	686.1	704.3	713.5
7.5°	640.5	640.5	642.3	647.8	662.4	682.4	706.2	733.5	755.4	779.1	801.0
10°	636.8	636.8	640.5	658.7	687.9	722.6	757.2	791.9	822.9	859.4	886.8
12.5°	629.5	629.5	640.5	673.3	717.1	760.9	804.7	850.3	890.5	928.8	967.1
15°	622.2	622.2	644.1	689.7	744.5	797.4	848.5	901.4	948.8	994.5	1034.6
17.5°	614.9	616.7	649.6	708.0	768.2	830.2	890.5	947.0	999.9	1051.0	1096.6
20°	604.0	607.6	653.2	720.8	788.3	857.6	921.5	983.5	1041.9	1096.6	1144.1
22.5°	593.0	600.3	655.1	729.9	804.7	879.5	947.0	1010.9	1072.9	1129.5	1178.8
25°	580.3	589.4	656.9	735.4	815.6	892.3	963.4	1031.0	1094.8	1153.2	1202.5
27.5°	567.5	580.3	653.2	735.4	819.3	899.6	970.7	1040.1	1107.6	1164.2	1217.1
30°	552.9	569.3	647.8	733.5	819.3	897.7	970.7	1041.9	1107.6	1166.0	1217.1
32.5°	536.5	558.4	638.6	726.2	812.0	892.3	965.3	1034.6	1100.3	1158.7	1207.9
35°	520.0	543.8	627.7	715.3	801.0	879.5	950.7	1020.0	1083.9	1142.3	1191.5
37.5°	503.6	531.0	614.9	702.5	784.6	861.3	932.4	1001.8	1063.8	1120.4	1166.0
40°	485.4	514.6	598.5	684.3	766.4	839.4	910.5	976.2	1036.4	1091.2	1135.0
42.5°	467.1	498.1	580.3	666.0	744.5	817.5	886.8	950.7	1009.1	1058.3	1098.5
45°	447.1	479.9	562.0	644.1	720.8	793.7	861.3	921.5	978.0	1023.7	1060.1
47.5°	427.0	461.6	541.9	624.0	698.9	770.0	835.7	894.1	945.2	989.0	1023.7
50°	405.1	441.6	521.9	602.1	677.0	746.3	810.2	864.9	914.2	952.5	985.3
52.5°	385.0	423.3	501.8	582.1	655.1	724.4	786.4	837.5	883.2	919.6	947.0
55°	361.3	403.3	483.5	562.0	635.0	702.5	760.9	810.2	852.1	885.0	908.7
57.5°	339.4	383.2	463.5	541.9	613.1	680.6	735.4	782.8	819.3	848.5	870.4
60°	315.7	363.1	443.4	521.9	593.0	658.7	711.6	755.4	790.1	813.8	832.1
62.5°	292.0	341.2	425.2	501.8	571.1	633.2	684.3	724.4	755.4	779.1	790.1
65°	268.2	319.3	403.3	481.7	549.2	607.6	656.9	695.2	722.6	742.7	749.9
67.5°	242.7	297.4	381.4	456.2	523.7	580.3	625.9	662.4	686.1	702.5	706.2
70°	217.1	271.9	355.8	430.6	494.5	547.4	593.0	624.0	647.8	658.7	662.4
72.5°	189.8	246.3	330.3	401.4	461.6	514.6	554.7	587.6	607.6	614.9	614.9
75°	164.2	219.0	301.1	368.6	427.0	476.2	514.6	543.8	562.0	567.5	565.7
77.5°	138.7	193.4	270.1	333.9	386.8	432.5	468.9	496.3	512.7	518.2	516.4
80°	115.0	166.0	233.6	293.8	341.2	383.2	416.0	445.2	459.8	458.0	447.1
82.5°	91.2	135.0	195.2	248.2	290.1	328.4	361.3	379.5	385.0	379.5	368.6
85°	67.5	102.2	151.4	193.4	228.1	259.1	279.2	292.0	293.8	288.3	279.2
87.5°	40.1	60.2	89.4	115.0	140.5	155.1	166.0	175.2	177.0	171.5	167.9
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°	642.3	642.3	642.3	642.3	642.3	642.3	642.3	642.3
2.5°	651.4	653.2	655.1	658.7	656.9	658.7	658.7	660.5
5°	726.2	737.2	744.5	755.4	755.4	760.9	762.7	766.4
7.5°	817.5	832.1	848.5	864.9	866.7	875.9	879.5	879.5
10°	910.5	930.6	950.7	968.9	974.4	985.3	990.8	990.8
12.5°	994.5	1016.4	1043.7	1063.8	1071.1	1083.9	1091.2	1093.0
15°	1067.4	1094.8	1122.2	1144.1	1156.9	1169.6	1176.9	1178.8
17.5°	1129.5	1162.3	1191.5	1213.4	1228.0	1242.6	1251.7	1253.6
20°	1178.8	1215.2	1244.4	1268.2	1284.6	1302.8	1310.1	1312.0
22.5°	1217.1	1251.7	1284.6	1310.1	1328.4	1346.6	1355.7	1357.6
25°	1242.6	1279.1	1312.0	1339.3	1359.4	1375.8	1384.9	1388.6
27.5°	1257.2	1295.5	1328.4	1353.9	1374.0	1392.2	1401.4	1403.2
30°	1259.0	1297.4	1330.2	1355.7	1375.8	1394.1	1403.2	1406.8
32.5°	1249.9	1288.2	1319.3	1344.8	1364.9	1381.3	1390.4	1394.1
35°	1231.7	1268.2	1299.2	1322.9	1341.2	1355.7	1366.7	1368.5
37.5°	1206.1	1240.8	1268.2	1290.1	1308.3	1322.9	1332.0	1332.0
40°	1171.5	1204.3	1228.0	1248.1	1266.3	1277.3	1288.2	1288.2
42.5°	1133.1	1164.2	1186.1	1204.3	1217.1	1229.8	1237.1	1237.1
45°	1093.0	1118.5	1140.4	1155.0	1167.8	1176.9	1186.1	1186.1
47.5°	1052.8	1074.7	1091.2	1105.8	1116.7	1125.8	1133.1	1133.1
50°	1010.9	1031.0	1043.7	1056.5	1065.6	1072.9	1078.4	1078.4
52.5°	968.9	985.3	994.5	1005.4	1012.7	1020.0	1023.7	1023.7
55°	928.8	939.7	947.0	956.1	961.6	965.3	968.9	968.9
57.5°	885.0	892.3	899.6	905.0	908.7	912.3	916.0	914.2
60°	841.2	846.7	852.1	855.8	859.4	863.1	864.9	864.9
62.5°	797.4	799.2	801.0	808.3	812.0	813.8	815.6	815.6
65°	753.6	753.6	755.4	760.9	764.5	768.2	770.0	770.0
67.5°	706.2	708.0	709.8	715.3	717.1	720.8	724.4	724.4
70°	658.7	660.5	660.5	666.0	667.8	671.5	675.1	675.1
72.5°	613.1	613.1	613.1	616.7	620.4	624.0	627.7	627.7
75°	562.0	562.0	562.0	565.7	565.7	567.5	571.1	569.3
77.5°	507.3	501.8	496.3	494.5	494.5	496.3	498.1	498.1
80°	436.1	428.8	425.2	421.5	419.7	421.5	423.3	421.5
82.5°	361.3	352.2	346.7	344.9	344.9	344.9	346.7	343.0
85°	273.7	264.6	260.9	260.9	259.1	259.1	259.1	260.9
87.5°	164.2	158.7	153.3	155.1	153.3	151.4	153.3	156.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)