

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: P188475

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24786)
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-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4444.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 2.29 / 2.08
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

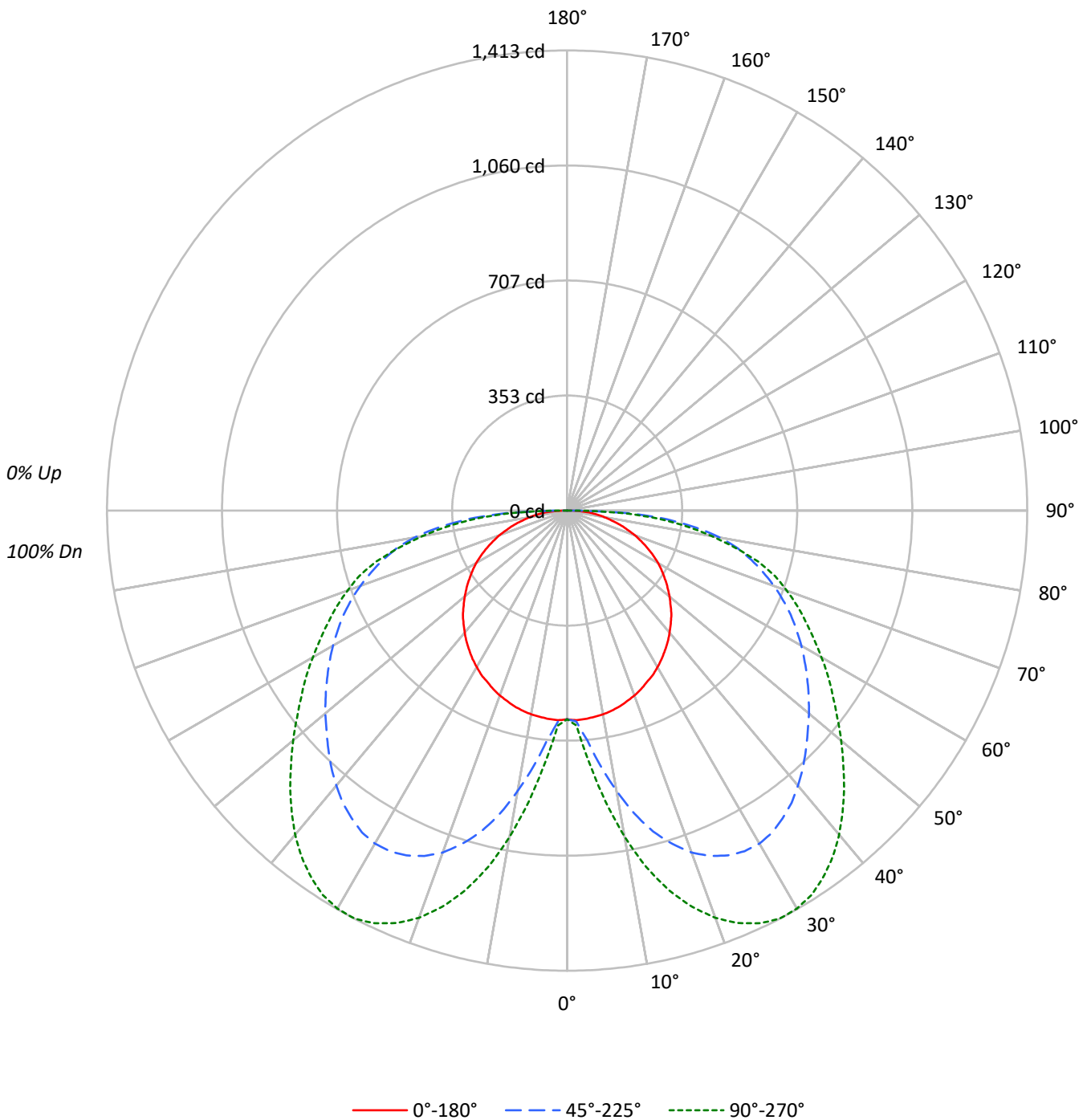
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	90	103	97	93	88	93	89	85	89	86	83	85	83	80	78
2	95	85	77	70	92	83	75	69	79	73	67	76	70	66	73	68	64	62
3	85	73	64	56	83	71	63	56	68	61	55	65	59	54	63	57	53	50
4	77	64	54	46	75	62	53	46	60	52	45	57	50	45	55	49	44	41
5	71	56	46	39	68	55	46	39	53	45	38	51	44	38	49	42	37	35
6	65	50	40	33	63	49	40	33	47	39	33	46	38	33	44	37	32	30
7	60	45	36	29	58	44	35	29	43	35	29	41	34	28	40	33	28	26
8	56	41	32	25	54	40	31	25	39	31	25	38	30	25	36	30	25	23
9	52	37	29	23	50	37	28	22	36	28	22	34	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	862	862	862
5°	868	957	1048
10°	868	1195	1389
15°	867	1421	1681
20°	865	1600	1905
25°	862	1734	2076
30°	862	1835	2192
35°	861	1895	2255
40°	859	1936	2283
45°	861	1973	2289
50°	860	2029	2300
55°	861	2111	2338
60°	869	2235	2426
65°	866	2412	2574
70°	869	2657	2822
75°	873	3046	3160
80°	905	3691	3493
85°	1042	4763	4312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	1.6
10°-20°	274.8	6.2
20°-30°	502.3	11.3
30°-40°	668.0	15.0
40°-50°	735.5	16.6
50°-60°	729.0	16.4
60°-70°	667.3	15.0
70°-80°	537.3	12.1
80°-90°	257.8	5.8
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°	849.0	19.1
0°-40°	1517.0	34.1
0°-60°	2981.5	67.1
0°-90°	4444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4444.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	641	641	641	641	641	
5°	642	648	708	757	776	61
15°	622	783	1020	1156	1206	176
25°	580	870	1168	1337	1398	268
35°	524	855	1154	1316	1373	328
45°	453	771	1037	1162	1203	349
55°	367	680	900	975	997	328
65°	272	588	758	790	809	269
75°	168	458	586	602	608	177
85°	68	250	308	283	279	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°	640.7	640.7	640.7	640.7	640.7	640.7	640.7	640.7	640.7	640.7	640.7
2.5°	644.3	644.3	642.5	642.5	642.5	642.5	642.5	642.5	644.3	648.0	649.8
5°	642.5	642.5	642.5	642.5	644.3	651.6	660.8	675.4	690.0	708.2	724.6
7.5°	638.9	638.9	638.9	644.3	660.8	686.3	710.0	737.4	764.8	792.2	814.1
10°	635.2	635.2	638.9	658.9	691.8	730.1	766.6	803.1	837.8	874.3	905.4
12.5°	629.7	629.7	640.7	677.2	724.6	772.1	819.6	863.4	907.2	952.8	987.5
15°	622.4	622.4	646.2	695.4	753.9	812.3	867.0	920.0	971.1	1020.3	1058.7
17.5°	613.3	617.0	651.6	713.7	779.4	846.9	907.2	967.4	1022.2	1073.3	1118.9
20°	604.2	609.7	657.1	728.3	801.3	876.1	941.9	1003.9	1062.3	1117.1	1164.5
22.5°	593.2	600.5	660.8	739.2	817.7	896.2	965.6	1031.3	1093.4	1148.1	1197.4
25°	580.4	591.4	662.6	744.7	830.5	909.0	980.2	1047.7	1111.6	1168.2	1217.5
27.5°	569.5	584.1	660.8	748.4	836.0	916.3	989.3	1056.9	1122.6	1179.1	1230.3
30°	554.9	573.1	657.1	746.5	834.2	916.3	987.5	1056.9	1122.6	1181.0	1230.3
32.5°	540.3	562.2	648.0	739.2	828.7	907.2	980.2	1049.5	1113.4	1171.8	1219.3
35°	523.9	549.4	637.0	728.3	815.9	894.4	965.6	1033.1	1098.8	1153.6	1201.0
37.5°	507.4	534.8	622.4	713.7	799.5	876.1	945.5	1013.0	1075.1	1131.7	1175.5
40°	489.2	520.2	607.8	697.3	779.4	854.2	923.6	989.3	1049.5	1102.5	1144.5
42.5°	470.9	503.8	591.4	679.0	759.3	830.5	899.9	961.9	1020.3	1071.5	1109.8
45°	452.7	485.5	571.3	658.9	735.6	806.8	872.5	934.6	989.3	1036.8	1073.3
47.5°	430.8	467.3	553.1	637.0	711.9	783.1	846.9	905.4	960.1	1002.1	1036.8
50°	410.7	449.0	533.0	615.1	688.1	759.3	821.4	878.0	929.1	969.2	1000.3
52.5°	388.8	428.9	512.9	595.0	668.1	735.6	797.7	850.6	896.2	934.6	963.8
55°	366.9	408.9	494.7	573.1	646.2	713.7	772.1	823.2	867.0	899.9	927.3
57.5°	345.0	388.8	474.6	554.9	626.1	691.8	748.4	794.0	836.0	865.2	888.9
60°	323.1	368.7	452.7	533.0	606.0	668.1	722.8	766.6	803.1	830.5	850.6
62.5°	297.5	346.8	432.6	511.1	582.3	642.5	695.4	735.6	770.3	794.0	810.4
65°	272.0	324.9	410.7	489.2	558.5	617.0	666.2	704.6	735.6	757.5	768.5
67.5°	246.4	303.0	388.8	467.3	533.0	587.7	635.2	671.7	699.1	717.3	726.5
70°	220.9	277.4	363.2	439.9	503.8	554.9	600.5	635.2	658.9	675.4	682.7
72.5°	193.5	251.9	335.9	410.7	470.9	522.0	564.0	596.9	618.8	631.6	637.0
75°	167.9	224.5	306.7	377.8	434.4	481.9	522.0	554.9	576.8	585.9	591.4
77.5°	140.5	197.1	275.6	341.3	394.3	438.1	476.4	507.4	527.5	536.6	542.1
80°	116.8	167.9	239.1	299.3	348.6	390.6	425.3	458.2	474.6	476.4	470.9
82.5°	91.3	138.7	200.8	253.7	295.7	335.9	368.7	390.6	397.9	397.9	392.4
85°	67.5	104.0	157.0	199.0	235.5	264.7	284.7	303.0	306.7	308.5	301.2
87.5°	38.3	58.4	93.1	120.5	142.4	162.5	177.1	186.2	186.2	188.0	184.4
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°	640.7	640.7	640.7	640.7	640.7	640.7	640.7	640.7
2.5°	649.8	653.5	653.5	657.1	658.9	658.9	660.8	660.8
5°	731.9	746.5	752.0	761.2	766.6	773.9	777.6	775.8
7.5°	830.5	852.4	863.4	876.1	890.7	894.4	899.9	899.9
10°	929.1	954.6	971.1	985.7	1002.1	1009.4	1016.7	1016.7
12.5°	1018.5	1044.1	1066.0	1084.2	1100.7	1111.6	1118.9	1120.7
15°	1091.5	1124.4	1146.3	1166.4	1184.6	1195.6	1204.7	1206.5
17.5°	1151.8	1182.8	1212.0	1233.9	1250.3	1266.8	1272.2	1275.9
20°	1199.2	1232.1	1263.1	1285.0	1303.3	1319.7	1327.0	1330.6
22.5°	1233.9	1268.6	1299.6	1323.3	1341.6	1358.0	1367.2	1370.8
25°	1255.8	1292.3	1325.2	1348.9	1369.0	1385.4	1394.5	1398.2
27.5°	1270.4	1306.9	1337.9	1361.7	1381.8	1398.2	1407.3	1412.8
30°	1270.4	1306.9	1337.9	1361.7	1381.8	1398.2	1407.3	1411.0
32.5°	1259.5	1296.0	1327.0	1348.9	1369.0	1385.4	1394.5	1398.2
35°	1239.4	1275.9	1305.1	1327.0	1347.1	1361.7	1370.8	1372.6
37.5°	1212.0	1246.7	1274.1	1296.0	1314.2	1328.8	1337.9	1339.8
40°	1181.0	1213.8	1239.4	1259.5	1275.9	1288.7	1297.8	1299.6
42.5°	1144.5	1175.5	1197.4	1217.5	1232.1	1244.9	1254.0	1252.2
45°	1106.1	1135.3	1153.6	1170.0	1186.4	1195.6	1202.9	1202.9
47.5°	1067.8	1091.5	1108.0	1122.6	1135.3	1144.5	1149.9	1149.9
50°	1027.6	1047.7	1062.3	1075.1	1086.1	1093.4	1098.8	1098.8
52.5°	987.5	1005.7	1016.7	1027.6	1036.8	1042.2	1047.7	1045.9
55°	947.3	961.9	969.2	980.2	987.5	994.8	998.4	996.6
57.5°	907.2	916.3	923.6	932.7	940.0	947.3	949.2	951.0
60°	863.4	872.5	878.0	887.1	894.4	899.9	903.5	901.7
62.5°	821.4	826.9	832.3	839.6	845.1	852.4	854.2	854.2
65°	775.8	781.2	786.7	794.0	799.5	806.8	810.4	808.6
67.5°	731.9	737.4	742.9	748.4	755.7	763.0	764.8	764.8
70°	686.3	691.8	695.4	702.7	708.2	715.5	717.3	717.3
72.5°	642.5	646.2	649.8	657.1	660.8	666.2	669.9	669.9
75°	593.2	596.9	600.5	604.2	606.0	607.8	609.7	607.8
77.5°	538.5	534.8	531.2	531.2	527.5	529.3	531.2	529.3
80°	463.6	460.0	456.3	454.5	450.8	450.8	452.7	450.8
82.5°	385.1	377.8	374.2	372.4	368.7	368.7	368.7	368.7
85°	290.2	286.6	284.7	281.1	277.4	275.6	277.4	279.3
87.5°	180.7	177.1	173.4	169.8	167.9	166.1	169.8	164.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)