

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: P188700

Luminaire Tested: **24SR-LD2-48-C-UNV-L850-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188700
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-LD2-48-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: 3521.0 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 2.07 / 1.9
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

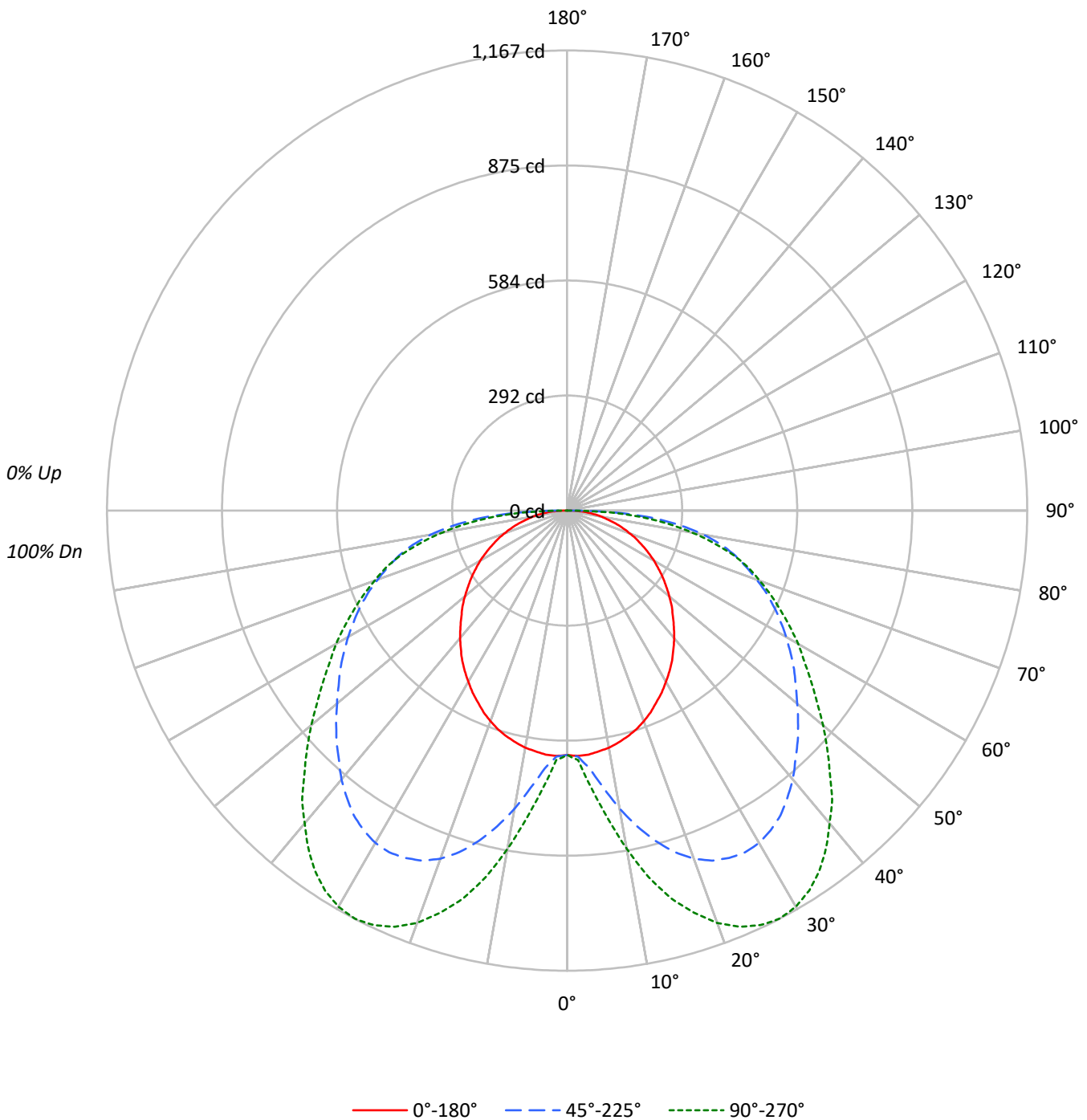
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	834	834	834
5°	839	887	954
10°	834	1049	1191
15°	826	1209	1418
20°	814	1345	1593
25°	796	1443	1722
30°	778	1512	1802
35°	763	1550	1832
40°	742	1564	1819
45°	721	1574	1793
50°	708	1595	1774
55°	695	1648	1772
60°	685	1727	1821
65°	672	1844	1900
70°	666	2013	2045
75°	661	2294	2273
80°	682	2727	2496
85°	752	3386	2925



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	1.9
10°-20°	238.4	6.8
20°-30°	424.7	12.1
30°-40°	550.7	15.6
40°-50°	587.2	16.7
50°-60°	564.9	16.0
60°-70°	505.5	14.4
70°-80°	397.9	11.3
80°-90°	185.6	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°	729.2	20.7
0°-40°	1279.9	36.4
0°-60°	2432.0	69.1
0°-90°	3521.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3521.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	621	629	656	692	707	59
15°	593	705	868	981	1018	167
25°	536	749	972	1118	1160	247
35°	464	713	943	1079	1115	290
45°	379	622	827	923	942	293
55°	296	534	702	748	755	265
65°	211	453	579	592	597	210
75°	127	349	441	435	437	135
85°	49	185	219	195	190	51
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°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9
2.5°	622.6	622.6	621.3	621.3	622.6	622.6	622.6	622.6	624.0	624.0	625.3
5°	621.3	619.9	619.9	622.6	626.7	630.8	634.8	641.6	647.0	656.5	664.6
7.5°	615.9	615.9	618.6	625.3	634.8	648.3	663.2	679.5	694.4	709.3	726.9
10°	610.4	610.4	617.2	629.4	648.3	672.7	697.1	721.4	744.5	767.5	786.4
12.5°	602.3	603.7	614.5	636.2	667.3	701.1	732.3	763.4	794.5	820.2	848.7
15°	592.9	595.6	611.8	644.3	684.9	725.5	763.4	801.3	836.5	867.6	897.4
17.5°	582.0	586.1	609.1	651.1	698.4	744.5	791.8	835.1	873.0	908.2	942.1
20°	568.5	575.3	606.4	656.5	709.3	762.0	812.1	858.1	901.5	939.4	977.3
22.5°	553.6	561.7	601.0	657.8	716.0	772.9	828.4	875.7	921.8	961.0	1000.3
25°	536.0	548.2	595.6	656.5	718.7	779.6	836.5	885.2	932.6	971.8	1015.2
27.5°	519.8	533.3	586.1	651.1	716.0	779.6	836.5	887.9	936.7	977.3	1019.2
30°	500.8	518.4	576.6	642.9	709.3	772.9	831.1	882.5	929.9	973.2	1016.5
32.5°	483.2	502.2	561.7	629.4	697.1	760.7	820.2	870.3	917.7	961.0	1003.0
35°	464.3	483.2	545.5	615.9	680.8	744.5	801.3	852.7	898.8	943.4	982.7
37.5°	442.6	464.3	527.9	596.9	660.5	724.1	779.6	829.7	875.7	917.7	955.6
40°	422.3	445.3	507.6	576.6	640.2	701.1	755.3	802.7	847.3	890.6	924.5
42.5°	400.6	425.0	488.6	555.0	617.2	675.4	726.9	775.6	818.9	856.8	890.6
45°	379.0	406.1	468.3	533.3	592.9	651.1	702.5	747.2	789.1	827.0	855.4
47.5°	360.0	387.1	446.7	511.6	571.2	626.7	676.8	720.1	760.7	794.5	823.0
50°	338.4	365.5	426.4	490.0	548.2	603.7	651.1	693.0	730.9	762.0	789.1
52.5°	316.7	346.5	406.1	469.7	527.9	580.7	628.0	668.7	702.5	730.9	753.9
55°	296.4	326.2	387.1	449.4	507.6	560.4	605.0	644.3	676.8	702.5	720.1
57.5°	274.8	307.3	369.5	431.8	488.6	538.7	583.4	619.9	649.7	671.4	686.2
60°	254.5	288.3	351.9	412.8	469.7	519.8	561.7	596.9	622.6	641.6	653.8
62.5°	232.8	269.4	333.0	393.9	449.4	499.5	538.7	571.2	595.6	610.4	618.6
65°	211.2	250.4	314.0	374.9	429.1	476.4	514.3	544.1	565.8	579.3	586.1
67.5°	190.8	231.5	295.1	354.6	407.4	452.1	488.6	517.1	536.0	546.8	549.5
70°	169.2	211.2	274.8	333.0	384.4	426.4	461.6	485.9	503.5	511.6	514.3
72.5°	148.9	190.8	253.1	310.0	358.7	397.9	431.8	456.1	471.0	476.4	476.4
75°	127.2	169.2	230.1	284.2	328.9	368.2	399.3	421.0	434.5	441.3	438.5
77.5°	105.6	147.5	205.7	255.8	296.4	331.6	362.8	383.1	396.6	400.6	397.9
80°	88.0	125.9	177.3	223.3	261.2	293.7	322.1	342.4	354.6	351.9	345.2
82.5°	67.7	102.9	147.5	186.8	220.6	251.8	278.8	295.1	297.8	292.4	284.2
85°	48.7	75.8	112.3	143.5	173.3	196.3	215.2	226.0	226.0	219.3	213.9
87.5°	28.4	44.7	65.0	86.6	100.2	115.1	129.9	132.6	132.6	132.6	125.9
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°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9
2.5°	629.4	630.8	632.1	633.5	634.8	634.8	634.8	633.5
5°	672.7	680.8	687.6	695.7	698.4	701.1	703.8	706.6
7.5°	741.7	752.6	763.4	774.2	781.0	789.1	786.4	786.4
10°	808.1	828.4	840.6	854.1	860.9	869.0	873.0	871.7
12.5°	873.0	896.0	913.6	925.8	936.7	944.8	947.5	951.5
15°	928.5	951.5	973.2	988.1	1001.6	1009.7	1015.2	1017.9
17.5°	974.6	997.6	1021.9	1040.9	1053.1	1063.9	1066.6	1069.3
20°	1008.4	1038.2	1061.2	1081.5	1095.0	1105.8	1111.3	1112.6
22.5°	1035.5	1063.9	1089.6	1109.9	1124.8	1137.0	1142.4	1142.4
25°	1050.4	1080.1	1107.2	1128.9	1143.7	1154.6	1160.0	1160.0
27.5°	1055.8	1086.9	1112.6	1134.3	1150.5	1161.3	1165.4	1166.8
30°	1051.7	1082.8	1108.6	1128.9	1145.1	1154.6	1158.6	1160.0
32.5°	1038.2	1069.3	1093.7	1112.6	1127.5	1138.3	1142.4	1142.4
35°	1016.5	1044.9	1069.3	1088.3	1101.8	1109.9	1115.3	1115.3
37.5°	988.1	1016.5	1038.2	1054.4	1066.6	1076.1	1078.8	1078.8
40°	955.6	980.0	1000.3	1016.5	1027.3	1034.1	1036.8	1035.5
42.5°	919.1	942.1	958.3	971.8	981.3	988.1	992.1	994.9
45°	881.2	902.8	917.7	928.5	935.3	939.4	943.4	942.1
47.5°	847.3	860.9	874.4	882.5	889.3	893.3	894.7	894.7
50°	808.1	820.2	831.1	837.8	841.9	844.6	844.6	847.3
52.5°	768.8	779.6	787.8	794.5	797.2	798.6	799.9	798.6
55°	733.6	740.4	745.8	751.2	753.9	755.3	758.0	755.3
57.5°	697.1	702.5	709.3	710.6	713.3	713.3	714.7	713.3
60°	660.5	664.6	667.3	668.7	672.7	674.1	674.1	676.8
62.5°	624.0	625.3	629.4	630.8	632.1	634.8	637.5	636.2
65°	587.4	588.8	590.1	592.9	595.6	598.3	598.3	596.9
67.5°	549.5	550.9	552.2	555.0	557.7	557.7	559.0	559.0
70°	513.0	513.0	514.3	515.7	518.4	519.8	521.1	519.8
72.5°	475.1	475.1	475.1	476.4	477.8	480.5	481.9	481.9
75°	435.8	435.8	435.8	434.5	435.8	438.5	437.2	437.2
77.5°	392.5	388.5	384.4	381.7	383.1	381.7	381.7	381.7
80°	338.4	331.6	326.2	323.5	322.1	323.5	322.1	322.1
82.5°	278.8	272.1	266.6	262.6	263.9	261.2	262.6	259.9
85°	207.1	201.7	196.3	193.6	194.9	194.9	193.6	189.5
87.5°	121.8	115.1	113.7	112.3	113.7	112.3	108.3	109.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)