

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: P188535

Luminaire Tested: **24SR-LD2-45-C-UNV-L850-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188535
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-45-C-UNV-L850-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3084.0 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

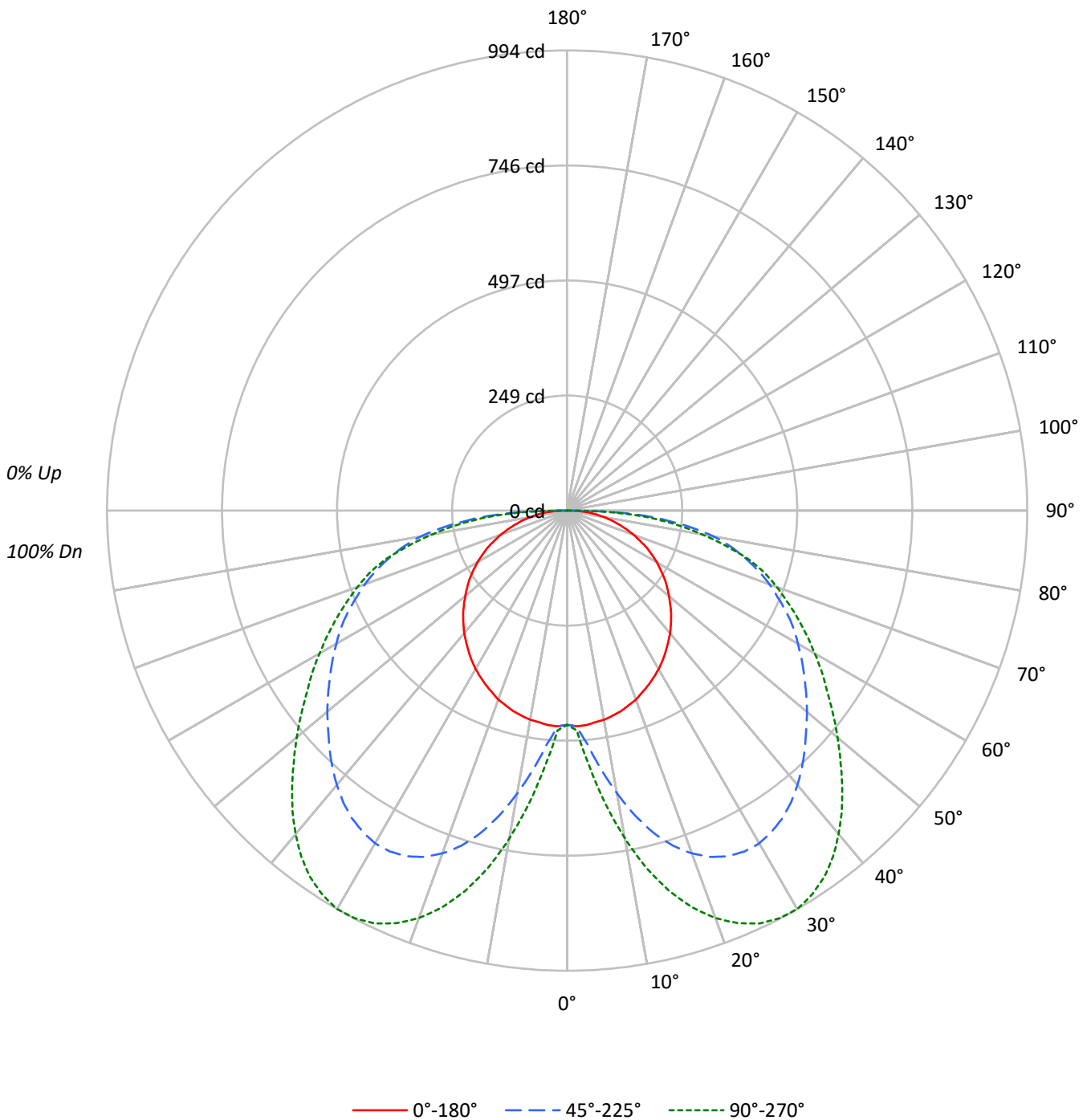
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	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°	623	623	623
5°	628	685	750
10°	627	847	983
15°	625	1004	1184
20°	622	1128	1341
25°	617	1223	1461
30°	614	1290	1544
35°	610	1332	1589
40°	607	1360	1603
45°	605	1381	1599
50°	601	1415	1596
55°	602	1467	1610
60°	602	1549	1662
65°	603	1667	1748
70°	600	1830	1895
75°	601	2075	2108
80°	621	2492	2295
85°	726	3100	2787



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	1.7
10°-20°	194.7	6.3
20°-30°	354.2	11.5
30°-40°	469.9	15.2
40°-50°	514.7	16.7
50°-60°	505.9	16.4
60°-70°	458.9	14.9
70°-80°	363.7	11.8
80°-90°	170.5	5.5
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°	600.4	19.5
0°-40°	1070.2	34.7
0°-60°	2090.9	67.8
0°-90°	3084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	465	468	507	543	556	44
15°	449	557	721	818	850	127
25°	416	615	824	941	984	192
35°	371	601	811	926	967	232
45°	318	540	726	814	840	245
55°	257	474	625	674	686	229
65°	189	409	524	539	549	187
75°	116	316	399	400	406	122
85°	47	170	201	180	180	48
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°	462.7	462.7	462.7	462.7	462.7	462.7	462.7	462.7	462.7	462.7	462.7
2.5°	466.5	465.2	465.2	465.2	463.9	463.9	463.9	465.2	465.2	466.5	469.0
5°	465.2	463.9	463.9	463.9	466.5	470.3	477.9	486.8	497.0	507.2	518.6
7.5°	461.4	461.4	461.4	465.2	476.6	491.9	511.0	530.0	546.6	564.4	580.9
10°	458.9	458.9	461.4	474.1	497.0	522.4	547.8	573.2	596.1	620.3	643.2
12.5°	453.8	453.8	461.4	485.5	517.3	550.4	582.1	613.9	644.4	673.7	699.1
15°	448.7	448.7	465.2	499.5	537.7	577.1	615.2	652.1	687.6	720.7	749.9
17.5°	441.1	442.3	467.8	509.7	555.5	599.9	641.9	683.8	722.0	758.8	789.3
20°	434.7	437.2	470.3	518.6	569.4	619.0	666.0	709.3	749.9	788.1	821.1
22.5°	424.5	429.6	471.6	524.9	579.6	633.0	681.3	727.0	770.3	809.7	842.7
25°	415.6	422.0	470.3	527.5	587.2	641.9	691.5	738.5	783.0	823.6	858.0
27.5°	405.5	415.6	469.0	528.8	589.8	645.7	696.5	744.8	789.3	830.0	865.6
30°	395.3	408.0	465.2	527.5	588.5	644.4	695.3	744.8	789.3	830.0	864.3
32.5°	383.9	397.8	457.6	521.1	583.4	638.1	688.9	737.2	783.0	822.4	856.7
35°	371.1	387.7	448.7	512.2	573.2	627.9	677.5	725.8	770.3	810.9	844.0
37.5°	358.4	377.5	438.5	502.1	561.8	615.2	663.5	711.8	755.0	794.4	826.2
40°	345.7	366.1	427.1	489.4	547.8	599.9	648.2	695.3	735.9	774.1	803.3
42.5°	331.7	354.6	414.4	475.4	531.3	582.1	630.4	676.2	715.6	751.2	779.2
45°	317.8	340.6	400.4	460.1	516.1	564.4	611.4	655.9	692.7	725.8	752.5
47.5°	302.5	327.9	387.7	444.9	498.3	547.8	593.6	634.3	671.1	700.4	725.8
50°	287.3	314.0	372.4	429.6	481.7	530.0	574.5	613.9	648.2	676.2	697.8
52.5°	272.0	300.0	358.4	414.4	466.5	513.5	556.7	593.6	625.4	650.8	672.4
55°	256.8	286.0	344.5	399.1	451.2	497.0	538.9	573.2	603.8	625.4	643.2
57.5°	240.2	272.0	330.5	385.1	436.0	481.7	521.1	554.2	582.1	601.2	616.5
60°	223.7	256.8	315.2	371.1	420.7	465.2	503.3	535.1	559.3	575.8	589.8
62.5°	205.9	241.5	301.2	355.9	405.5	448.7	484.3	512.2	536.4	551.6	559.3
65°	189.4	226.2	286.0	340.6	388.9	429.6	463.9	490.6	511.0	523.7	530.0
67.5°	170.3	209.7	269.5	324.1	369.9	409.3	441.1	466.5	484.3	493.2	498.3
70°	152.5	193.2	251.7	305.1	348.3	386.4	416.9	441.1	456.3	465.2	466.5
72.5°	133.5	175.4	233.9	284.7	326.7	362.3	391.5	413.1	425.8	433.4	434.7
75°	115.7	156.3	212.3	260.6	300.0	333.0	361.0	381.3	394.0	399.1	399.1
77.5°	97.9	136.0	189.4	235.1	272.0	302.5	327.9	348.3	358.4	363.5	363.5
80°	80.1	116.9	165.2	207.2	240.2	268.2	293.6	311.4	321.6	321.6	314.0
82.5°	63.6	95.3	137.3	175.4	203.4	228.8	252.9	264.4	266.9	264.4	258.0
85°	47.0	72.5	106.8	136.0	161.4	179.2	194.5	202.1	203.4	200.8	195.7
87.5°	26.7	41.9	61.0	80.1	96.6	105.5	118.2	120.8	120.8	124.6	118.2
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°	462.7	462.7	462.7	462.7	462.7	462.7	462.7	462.7
2.5°	470.3	471.6	471.6	475.4	475.4	476.6	475.4	475.4
5°	526.2	531.3	538.9	546.6	549.1	554.2	552.9	555.5
7.5°	593.6	603.8	615.2	625.4	630.4	635.5	636.8	640.6
10°	661.0	673.7	687.6	701.6	709.3	713.1	718.1	719.4
12.5°	719.4	738.5	752.5	767.7	777.9	783.0	788.1	790.6
15°	772.8	791.9	809.7	826.2	836.4	844.0	849.1	850.3
17.5°	813.5	835.1	854.2	871.9	882.1	891.0	896.1	898.6
20°	845.3	869.4	888.5	906.3	917.7	927.9	935.5	936.8
22.5°	868.1	892.3	913.9	931.7	945.7	955.8	962.2	964.7
25°	884.7	910.1	931.7	949.5	963.5	974.9	981.3	983.8
27.5°	892.3	919.0	941.9	958.4	972.4	983.8	991.4	992.7
30°	893.6	919.0	941.9	959.7	973.6	985.1	991.4	994.0
32.5°	884.7	911.4	934.2	950.8	964.7	976.2	982.5	983.8
35°	871.9	896.1	917.7	934.2	948.2	958.4	964.7	967.3
37.5°	852.9	875.8	896.1	911.4	924.1	934.2	940.6	943.1
40°	830.0	851.6	870.7	884.7	896.1	905.0	910.1	912.6
42.5°	803.3	823.6	841.4	852.9	864.3	871.9	875.8	878.3
45°	775.3	794.4	808.4	818.6	828.7	835.1	838.9	840.2
47.5°	746.1	762.6	774.1	783.0	790.6	797.0	800.8	800.8
50°	716.9	730.9	739.8	748.7	755.0	758.8	761.4	762.6
52.5°	687.6	699.1	705.4	713.1	718.1	722.0	724.5	724.5
55°	657.1	666.0	671.1	677.5	682.6	685.1	687.6	686.4
57.5°	627.9	634.3	638.1	643.2	647.0	649.5	652.1	653.3
60°	597.4	602.5	603.8	608.8	612.7	615.2	616.5	617.7
62.5°	565.6	569.4	572.0	574.5	578.3	580.9	582.1	583.4
65°	533.8	536.4	536.4	541.5	545.3	546.6	547.8	549.1
67.5°	500.8	502.1	503.3	507.2	511.0	512.2	514.8	514.8
70°	467.8	467.8	469.0	472.8	476.6	477.9	480.5	481.7
72.5°	433.4	434.7	434.7	438.5	442.3	444.9	446.1	447.4
75°	397.8	397.8	399.1	400.4	401.7	402.9	402.9	405.5
77.5°	359.7	354.6	352.1	349.5	350.8	350.8	349.5	350.8
80°	306.3	300.0	296.2	294.9	296.2	294.9	294.9	296.2
82.5°	251.7	244.0	241.5	240.2	240.2	240.2	239.0	241.5
85°	189.4	184.3	181.8	179.2	180.5	180.5	179.2	180.5
87.5°	114.4	111.9	109.3	106.8	108.0	106.8	105.5	109.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)