

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: P188500

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188500
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-LD2-48-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: 3223.0 lumens
Efficiency: N/A
Efficacy: 84.4 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

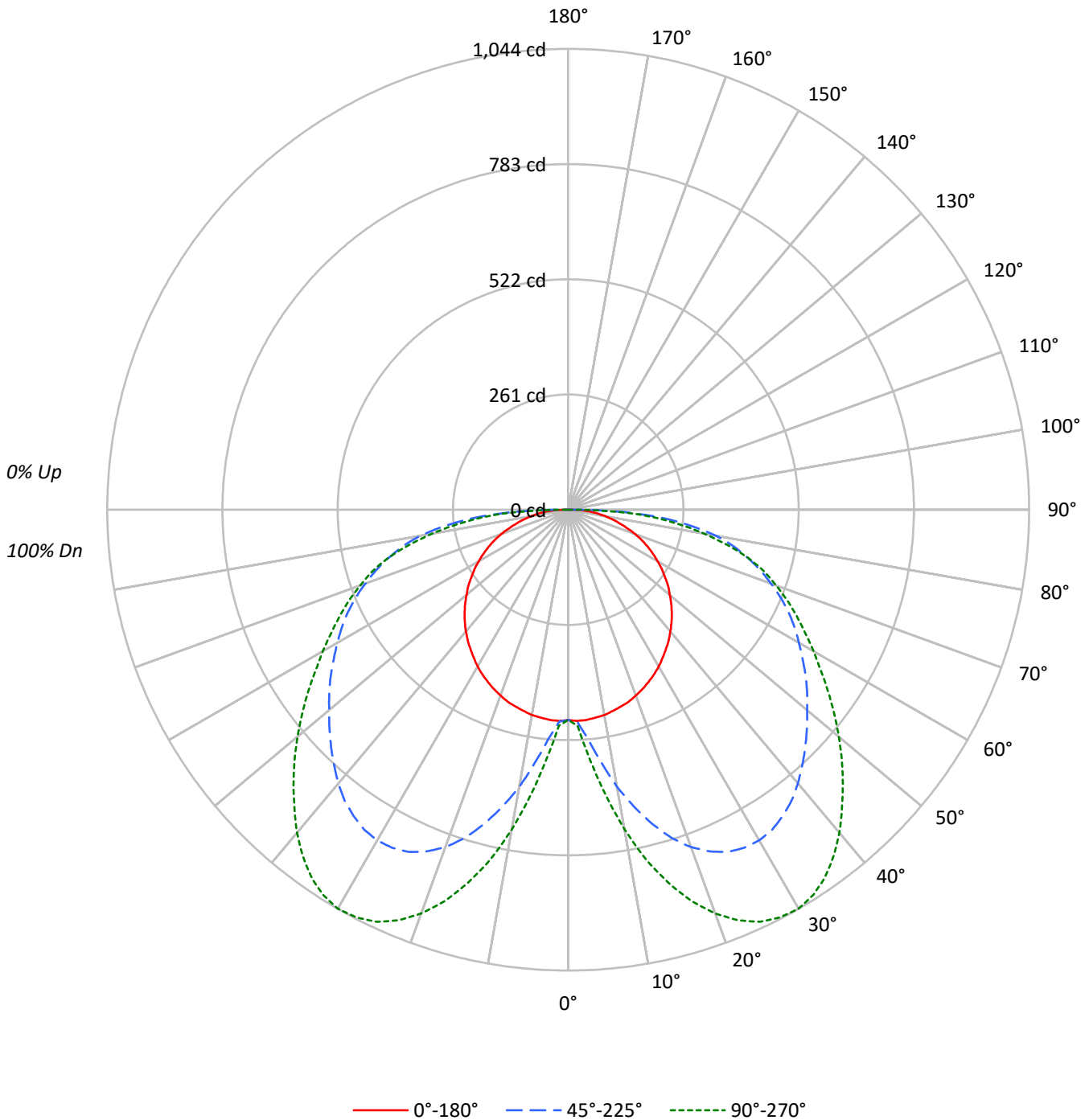
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	641	641	641
5°	645	706	768
10°	645	871	1004
15°	643	1028	1218
20°	641	1165	1393
25°	639	1270	1529
30°	637	1344	1621
35°	634	1392	1667
40°	632	1422	1678
45°	631	1445	1674
50°	629	1479	1674
55°	629	1540	1686
60°	630	1625	1727
65°	634	1754	1819
70°	634	1922	1970
75°	633	2188	2195
80°	661	2632	2423
85°	773	3302	2989



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	1.6
10°-20°	200.3	6.2
20°-30°	368.4	11.4
30°-40°	491.1	15.2
40°-50°	538.0	16.7
50°-60°	529.0	16.4
60°-70°	480.1	14.9
70°-80°	382.2	11.9
80°-90°	181.2	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°	621.5	19.3
0°-40°	1112.6	34.5
0°-60°	2179.6	67.6
0°-90°	3223.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3223.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	478	482	522	556	568	45
15°	462	572	738	840	874	130
25°	430	633	855	983	1030	199
35°	386	623	847	972	1015	242
45°	332	562	759	851	880	256
55°	268	496	656	706	719	240
65°	199	429	551	562	571	196
75°	122	335	421	418	422	129
85°	50	181	214	194	194	52
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°	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4
2.5°	479.1	479.1	477.8	477.8	477.8	476.4	476.4	477.8	479.1	480.5	481.8
5°	477.8	477.8	477.8	477.8	479.1	484.6	491.3	500.8	508.9	522.5	529.2
7.5°	475.1	475.1	476.4	480.5	491.3	506.2	523.8	544.1	560.4	577.9	594.2
10°	472.4	472.4	475.1	488.6	510.3	536.0	561.7	587.4	610.4	637.5	657.8
12.5°	467.0	467.0	475.1	499.4	531.9	564.4	596.9	630.7	660.5	688.9	717.4
15°	461.5	461.5	477.8	511.6	552.2	591.5	629.4	668.6	703.8	737.7	767.4
17.5°	456.1	457.5	481.8	525.2	569.8	615.8	660.5	702.5	741.7	779.6	813.5
20°	448.0	450.7	484.6	534.6	584.7	636.1	683.5	729.5	772.9	813.5	848.6
22.5°	439.9	445.3	485.9	541.4	596.9	652.4	702.5	749.8	795.9	837.8	874.4
25°	430.4	437.2	487.3	545.5	605.0	661.9	714.7	764.7	812.1	855.4	892.0
27.5°	420.9	430.4	484.6	545.5	607.7	667.3	720.1	771.5	821.6	863.5	902.8
30°	410.1	422.3	480.5	544.1	607.7	665.9	720.1	772.9	821.6	864.9	902.8
32.5°	397.9	414.2	473.7	538.7	602.3	661.9	716.0	767.4	816.2	859.5	896.0
35°	385.7	403.3	465.6	530.6	594.2	652.4	705.2	756.6	804.0	847.3	883.8
37.5°	373.6	393.9	456.1	521.1	582.0	638.9	691.6	743.1	789.1	831.1	864.9
40°	360.0	381.7	444.0	507.6	568.5	622.6	675.4	724.1	768.8	809.4	841.9
42.5°	346.5	369.5	430.4	494.0	552.2	606.4	657.8	705.2	748.5	785.0	814.8
45°	331.6	356.0	416.9	477.8	534.6	588.8	638.9	683.5	725.5	759.3	786.4
47.5°	316.7	342.4	402.0	462.9	518.4	571.2	619.9	663.2	701.1	733.6	759.3
50°	300.5	327.5	387.1	446.7	502.2	553.6	601.0	641.6	678.1	706.5	730.9
52.5°	285.6	314.0	372.2	431.8	485.9	537.3	583.4	621.3	655.1	682.2	702.5
55°	268.0	299.1	358.7	416.9	471.0	521.1	564.4	601.0	632.1	656.5	674.0
57.5°	251.8	284.2	343.8	402.0	454.8	504.9	545.5	580.7	607.7	629.4	645.6
60°	234.2	269.3	328.9	387.1	439.9	488.6	527.9	560.4	586.1	603.7	617.2
62.5°	216.6	253.1	315.4	372.2	423.6	469.7	507.6	537.3	560.4	577.9	586.1
65°	199.0	236.9	299.1	357.3	407.4	450.7	487.3	515.7	536.0	550.9	556.3
67.5°	180.0	220.6	282.9	338.4	388.5	430.4	464.3	491.3	508.9	521.1	523.8
70°	161.1	201.7	263.9	319.4	366.8	406.1	439.9	462.9	480.5	488.6	491.3
72.5°	140.8	182.7	245.0	297.8	342.4	381.7	411.5	435.8	450.7	456.1	456.1
75°	121.8	162.4	223.3	273.4	316.7	353.3	381.7	403.3	416.9	420.9	419.6
77.5°	102.9	143.5	200.3	247.7	286.9	320.8	347.9	368.2	380.3	384.4	383.0
80°	85.3	123.2	173.2	217.9	253.1	284.2	308.6	330.3	341.1	339.7	331.6
82.5°	67.7	100.2	144.8	184.1	215.2	243.6	268.0	281.5	285.6	281.5	273.4
85°	50.1	75.8	112.3	143.5	169.2	192.2	207.1	216.6	217.9	213.9	207.1
87.5°	29.8	44.7	66.3	85.3	104.2	115.0	123.2	129.9	131.3	127.2	124.5
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°	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4
2.5°	483.2	484.6	485.9	488.6	487.3	488.6	488.6	490.0
5°	538.7	546.8	552.2	560.4	560.4	564.4	565.8	568.5
7.5°	606.4	617.2	629.4	641.6	642.9	649.7	652.4	652.4
10°	675.4	690.3	705.2	718.7	722.8	730.9	735.0	735.0
12.5°	737.7	753.9	774.2	789.1	794.5	804.0	809.4	810.8
15°	791.8	812.1	832.4	848.6	858.1	867.6	873.0	874.4
17.5°	837.8	862.2	883.8	900.1	910.9	921.7	928.5	929.9
20°	874.4	901.4	923.1	940.7	952.9	966.4	971.8	973.2
22.5°	902.8	928.5	952.9	971.8	985.4	998.9	1005.7	1007.0
25°	921.7	948.8	973.2	993.5	1008.4	1020.5	1027.3	1030.0
27.5°	932.6	961.0	985.4	1004.3	1019.2	1032.7	1039.5	1040.8
30°	933.9	962.3	986.7	1005.7	1020.5	1034.1	1040.8	1043.6
32.5°	927.2	955.6	978.6	997.5	1012.4	1024.6	1031.4	1034.1
35°	913.6	940.7	963.7	981.3	994.8	1005.7	1013.8	1015.1
37.5°	894.7	920.4	940.7	956.9	970.5	981.3	988.1	988.1
40°	869.0	893.3	910.9	925.8	939.3	947.5	955.6	955.6
42.5°	840.5	863.5	879.8	893.3	902.8	912.3	917.7	917.7
45°	810.8	829.7	845.9	856.8	866.2	873.0	879.8	879.8
47.5°	781.0	797.2	809.4	820.2	828.3	835.1	840.5	840.5
50°	749.8	764.7	774.2	783.7	790.4	795.9	799.9	799.9
52.5°	718.7	730.9	737.7	745.8	751.2	756.6	759.3	759.3
55°	688.9	697.1	702.5	709.2	713.3	716.0	718.7	718.7
57.5°	656.5	661.9	667.3	671.3	674.0	676.8	679.5	678.1
60°	624.0	628.0	632.1	634.8	637.5	640.2	641.6	641.6
62.5°	591.5	592.8	594.2	599.6	602.3	603.7	605.0	605.0
65°	559.0	559.0	560.4	564.4	567.1	569.8	571.2	571.2
67.5°	523.8	525.2	526.5	530.6	531.9	534.6	537.3	537.3
70°	488.6	490.0	490.0	494.0	495.4	498.1	500.8	500.8
72.5°	454.8	454.8	454.8	457.5	460.2	462.9	465.6	465.6
75°	416.9	416.9	416.9	419.6	419.6	420.9	423.6	422.3
77.5°	376.3	372.2	368.2	366.8	366.8	368.2	369.5	369.5
80°	323.5	318.1	315.4	312.7	311.3	312.7	314.0	312.7
82.5°	268.0	261.2	257.2	255.8	255.8	255.8	257.2	254.5
85°	203.0	196.3	193.6	193.6	192.2	192.2	192.2	193.6
87.5°	121.8	117.8	113.7	115.0	113.7	112.3	113.7	116.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)