

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: P188505

Luminaire Tested: **24SR-LD2-53-C-UNV-L850-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188505
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-LD2-53-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: 3567.0 lumens
Efficiency: N/A
Efficacy: 82.8 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

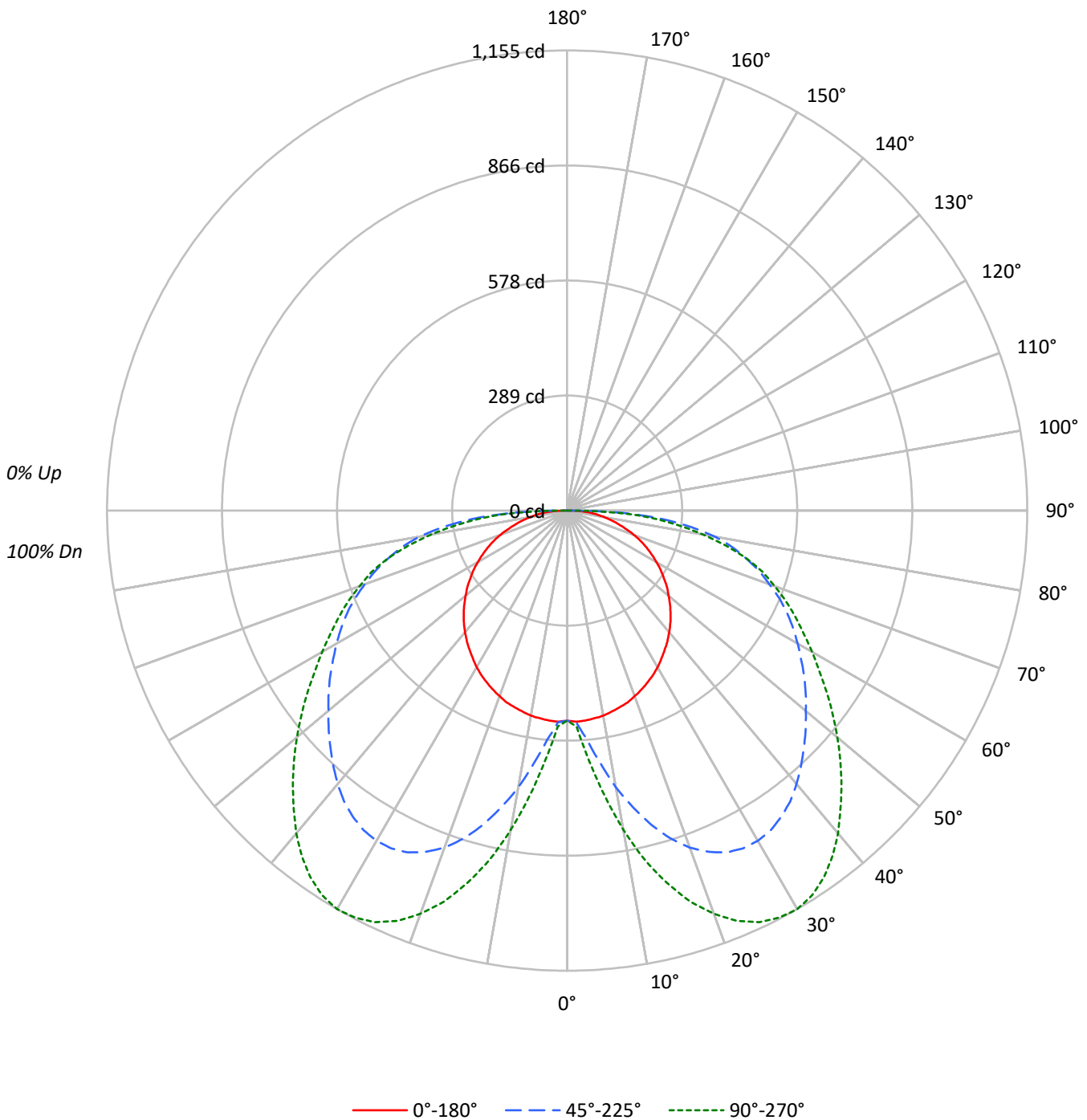
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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°	709	709	709
5°	714	781	850
10°	714	964	1111
15°	712	1137	1348
20°	710	1289	1542
25°	707	1405	1692
30°	705	1487	1794
35°	701	1540	1845
40°	700	1573	1858
45°	698	1599	1853
50°	696	1637	1853
55°	696	1704	1866
60°	697	1798	1911
65°	701	1941	2012
70°	701	2127	2180
75°	701	2422	2430
80°	731	2913	2681
85°	855	3654	3307



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	1.6
10°-20°	221.6	6.2
20°-30°	407.7	11.4
30°-40°	543.5	15.2
40°-50°	595.4	16.7
50°-60°	585.5	16.4
60°-70°	531.3	14.9
70°-80°	423.0	11.9
80°-90°	200.5	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°	687.8	19.3
0°-40°	1231.3	34.5
0°-60°	2412.2	67.6
0°-90°	3567.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3567.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	529	533	578	616	629	50
15°	511	633	816	930	968	144
25°	476	701	947	1088	1140	220
35°	427	690	938	1076	1124	267
45°	367	622	840	942	974	283
55°	297	549	726	781	795	266
65°	220	475	610	622	632	217
75°	135	371	466	463	467	143
85°	55	200	237	214	214	57
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°	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3
2.5°	530.3	530.3	528.8	528.8	528.8	527.3	527.3	528.8	530.3	531.8	533.3
5°	528.8	528.8	528.8	528.8	530.3	536.3	543.8	554.2	563.2	578.2	585.7
7.5°	525.8	525.8	527.3	531.8	543.8	560.2	579.7	602.2	620.2	639.6	657.6
10°	522.8	522.8	525.8	540.8	564.7	593.2	621.7	650.1	675.6	705.5	728.0
12.5°	516.8	516.8	525.8	552.8	588.7	624.7	660.6	698.1	731.0	762.5	793.9
15°	510.8	510.8	528.8	566.2	611.2	654.6	696.6	740.0	778.9	816.4	849.4
17.5°	504.8	506.3	533.3	581.2	630.6	681.6	731.0	777.4	820.9	862.8	900.3
20°	495.8	498.8	536.3	591.7	647.1	704.0	756.5	807.4	855.3	900.3	939.2
22.5°	486.8	492.8	537.8	599.2	660.6	722.0	777.4	829.9	880.8	927.2	967.7
25°	476.4	483.8	539.3	603.7	669.6	732.5	790.9	846.4	898.8	946.7	987.2
27.5°	465.9	476.4	536.3	603.7	672.6	738.5	796.9	853.8	909.3	955.7	999.1
30°	453.9	467.4	531.8	602.2	672.6	737.0	796.9	855.3	909.3	957.2	999.1
32.5°	440.4	458.4	524.3	596.2	666.6	732.5	792.4	849.4	903.3	951.2	991.7
35°	426.9	446.4	515.3	587.2	657.6	722.0	780.4	837.4	889.8	937.7	978.2
37.5°	413.4	435.9	504.8	576.7	644.1	707.0	765.5	822.4	873.3	919.8	957.2
40°	398.5	422.4	491.3	561.7	629.1	689.1	747.5	801.4	850.8	895.8	931.7
42.5°	383.5	408.9	476.4	546.8	611.2	671.1	728.0	780.4	828.4	868.8	901.8
45°	367.0	394.0	461.4	528.8	591.7	651.6	707.0	756.5	802.9	840.4	870.3
47.5°	350.5	379.0	444.9	512.3	573.7	632.1	686.1	734.0	775.9	811.9	840.4
50°	332.5	362.5	428.4	494.3	555.7	612.7	665.1	710.0	750.5	781.9	808.9
52.5°	316.1	347.5	411.9	477.9	537.8	594.7	645.6	687.6	725.0	755.0	777.4
55°	296.6	331.1	397.0	461.4	521.3	576.7	624.7	665.1	699.6	726.5	746.0
57.5°	278.6	314.6	380.5	444.9	503.3	558.7	603.7	642.6	672.6	696.6	714.5
60°	259.1	298.1	364.0	428.4	486.8	540.8	584.2	620.2	648.6	668.1	683.1
62.5°	239.7	280.1	349.0	411.9	468.9	519.8	561.7	594.7	620.2	639.6	648.6
65°	220.2	262.1	331.1	395.5	450.9	498.8	539.3	570.7	593.2	609.7	615.7
67.5°	199.2	244.2	313.1	374.5	429.9	476.4	513.8	543.8	563.2	576.7	579.7
70°	178.3	223.2	292.1	353.5	406.0	449.4	486.8	512.3	531.8	540.8	543.8
72.5°	155.8	202.2	271.1	329.6	379.0	422.4	455.4	482.3	498.8	504.8	504.8
75°	134.8	179.8	247.2	302.6	350.5	391.0	422.4	446.4	461.4	465.9	464.4
77.5°	113.8	158.8	221.7	274.1	317.6	355.0	385.0	407.4	420.9	425.4	423.9
80°	94.4	136.3	191.7	241.2	280.1	314.6	341.5	365.5	377.5	376.0	367.0
82.5°	74.9	110.8	160.3	203.7	238.2	269.6	296.6	311.6	316.1	311.6	302.6
85°	55.4	83.9	124.3	158.8	187.2	212.7	229.2	239.7	241.2	236.7	229.2
87.5°	33.0	49.4	73.4	94.4	115.3	127.3	136.3	143.8	145.3	140.8	137.8
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°	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3
2.5°	534.8	536.3	537.8	540.8	539.3	540.8	540.8	542.3
5°	596.2	605.2	611.2	620.2	620.2	624.7	626.2	629.1
7.5°	671.1	683.1	696.6	710.0	711.5	719.0	722.0	722.0
10°	747.5	764.0	780.4	795.4	799.9	808.9	813.4	813.4
12.5°	816.4	834.4	856.8	873.3	879.3	889.8	895.8	897.3
15°	876.3	898.8	921.3	939.2	949.7	960.2	966.2	967.7
17.5°	927.2	954.2	978.2	996.2	1008.1	1020.1	1027.6	1029.1
20°	967.7	997.6	1021.6	1041.1	1054.6	1069.6	1075.5	1077.0
22.5°	999.1	1027.6	1054.6	1075.5	1090.5	1105.5	1113.0	1114.5
25°	1020.1	1050.1	1077.0	1099.5	1116.0	1129.5	1137.0	1140.0
27.5°	1032.1	1063.6	1090.5	1111.5	1128.0	1143.0	1150.4	1151.9
30°	1033.6	1065.1	1092.0	1113.0	1129.5	1144.5	1151.9	1154.9
32.5°	1026.1	1057.6	1083.0	1104.0	1120.5	1134.0	1141.5	1144.5
35°	1011.1	1041.1	1066.6	1086.0	1101.0	1113.0	1122.0	1123.5
37.5°	990.2	1018.6	1041.1	1059.1	1074.0	1086.0	1093.5	1093.5
40°	961.7	988.7	1008.1	1024.6	1039.6	1048.6	1057.6	1057.6
42.5°	930.2	955.7	973.7	988.7	999.1	1009.6	1015.6	1015.6
45°	897.3	918.3	936.2	948.2	958.7	966.2	973.7	973.7
47.5°	864.3	882.3	895.8	907.8	916.8	924.2	930.2	930.2
50°	829.9	846.4	856.8	867.3	874.8	880.8	885.3	885.3
52.5°	795.4	808.9	816.4	825.4	831.4	837.4	840.4	840.4
55°	762.5	771.5	777.4	784.9	789.4	792.4	795.4	795.4
57.5°	726.5	732.5	738.5	743.0	746.0	749.0	752.0	750.5
60°	690.6	695.1	699.6	702.5	705.5	708.5	710.0	710.0
62.5°	654.6	656.1	657.6	663.6	666.6	668.1	669.6	669.6
65°	618.7	618.7	620.2	624.7	627.7	630.6	632.1	632.1
67.5°	579.7	581.2	582.7	587.2	588.7	591.7	594.7	594.7
70°	540.8	542.3	542.3	546.8	548.3	551.3	554.2	554.2
72.5°	503.3	503.3	503.3	506.3	509.3	512.3	515.3	515.3
75°	461.4	461.4	461.4	464.4	464.4	465.9	468.9	467.4
77.5°	416.4	411.9	407.4	406.0	406.0	407.4	408.9	408.9
80°	358.0	352.0	349.0	346.0	344.5	346.0	347.5	346.0
82.5°	296.6	289.1	284.6	283.1	283.1	283.1	284.6	281.6
85°	224.7	217.2	214.2	214.2	212.7	212.7	212.7	214.2
87.5°	134.8	130.3	125.8	127.3	125.8	124.3	125.8	128.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)