

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: P188502

Luminaire Tested: **24SR-LD2-53-C-UNV-L830-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188502
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-L830-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3117.0 lumens
Efficiency: N/A
Efficacy: 72.3 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

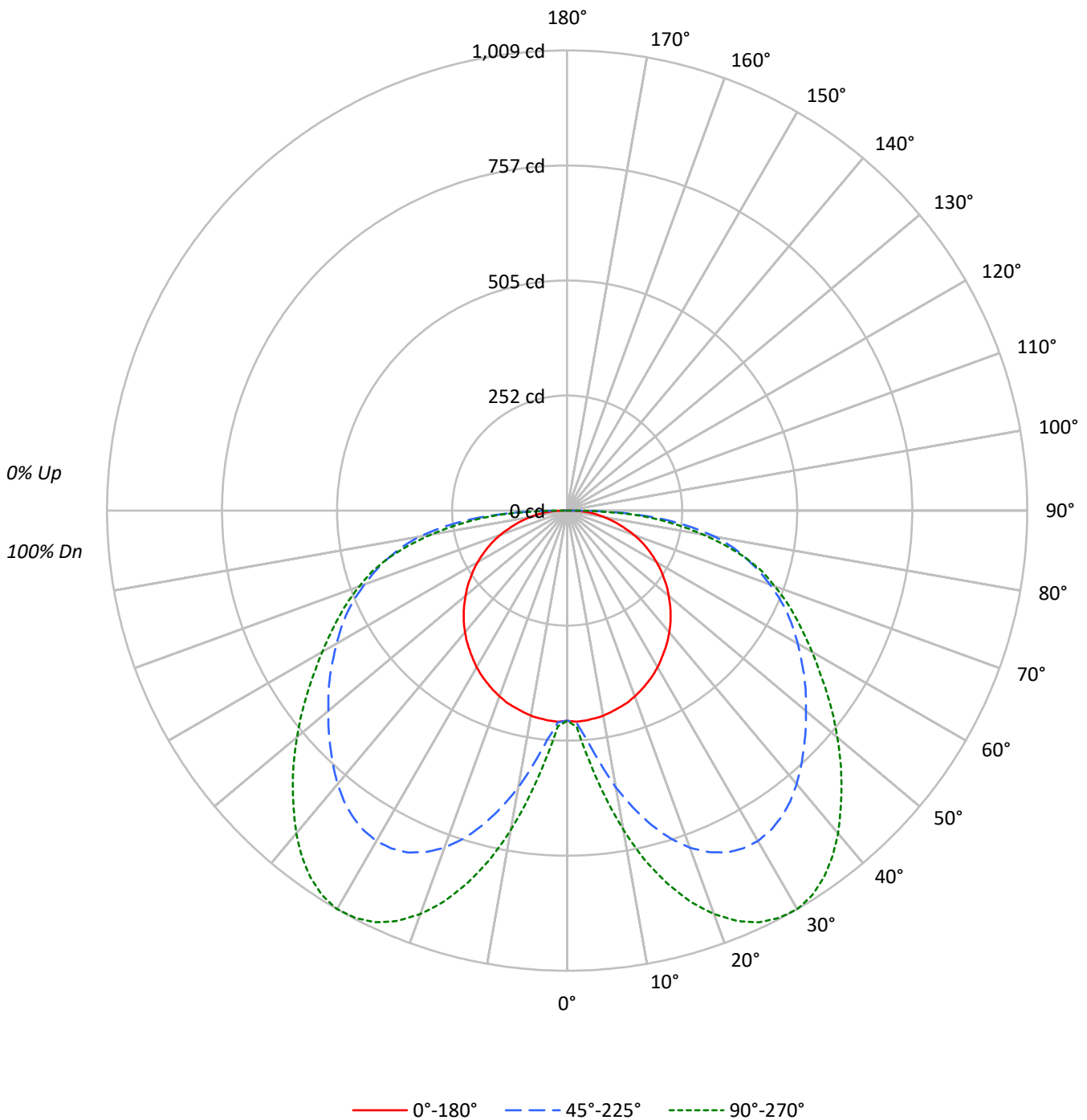
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
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°	620	620	620
5°	624	682	743
10°	624	842	971
15°	622	994	1178
20°	620	1126	1348
25°	618	1228	1479
30°	616	1299	1568
35°	613	1346	1612
40°	612	1375	1623
45°	610	1397	1619
50°	608	1430	1619
55°	608	1489	1631
60°	610	1571	1670
65°	613	1696	1759
70°	613	1859	1905
75°	612	2116	2123
80°	639	2546	2343
85°	747	3193	2890



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	1.6
10°-20°	193.7	6.2
20°-30°	356.3	11.4
30°-40°	474.9	15.2
40°-50°	520.3	16.7
50°-60°	511.6	16.4
60°-70°	464.3	14.9
70°-80°	369.6	11.9
80°-90°	175.2	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°	601.1	19.3
0°-40°	1076.0	34.5
0°-60°	2107.9	67.6
0°-90°	3117.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3117.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	461	461	461	461	461	
5°	462	466	505	538	550	44
15°	446	553	713	813	846	126
25°	416	613	827	951	996	192
35°	373	603	819	940	982	234
45°	321	543	734	823	851	248
55°	259	480	635	683	695	232
65°	192	415	533	544	552	190
75°	118	324	407	404	408	125
85°	48	175	207	187	187	50
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°	460.8	460.8	460.8	460.8	460.8	460.8	460.8	460.8	460.8	460.8	460.8
2.5°	463.4	463.4	462.1	462.1	462.1	460.8	460.8	462.1	463.4	464.7	466.0
5°	462.1	462.1	462.1	462.1	463.4	468.6	475.2	484.3	492.2	505.3	511.8
7.5°	459.5	459.5	460.8	464.7	475.2	489.6	506.6	526.2	541.9	558.9	574.6
10°	456.8	456.8	459.5	472.5	493.5	518.4	543.2	568.1	590.4	616.5	636.2
12.5°	451.6	451.6	459.5	483.0	514.4	545.9	577.3	610.0	638.8	666.3	693.8
15°	446.4	446.4	462.1	494.8	534.1	572.0	608.7	646.6	680.7	713.4	742.2
17.5°	441.1	442.4	466.0	507.9	551.1	595.6	638.8	679.4	717.3	754.0	786.7
20°	433.3	435.9	468.6	517.1	565.5	615.2	661.0	705.5	747.4	786.7	820.7
22.5°	425.4	430.7	469.9	523.6	577.3	630.9	679.4	725.2	769.7	810.3	845.6
25°	416.3	422.8	471.2	527.5	585.1	640.1	691.1	739.6	785.4	827.3	862.6
27.5°	407.1	416.3	468.6	527.5	587.7	645.3	696.4	746.1	794.6	835.1	873.1
30°	396.6	408.4	464.7	526.2	587.7	644.0	696.4	747.4	794.6	836.4	873.1
32.5°	384.8	400.6	458.1	521.0	582.5	640.1	692.5	742.2	789.3	831.2	866.6
35°	373.1	390.1	450.3	513.1	574.6	630.9	682.0	731.7	777.5	819.4	854.8
37.5°	361.3	380.9	441.1	504.0	562.9	617.8	668.9	718.6	763.1	803.7	836.4
40°	348.2	369.1	429.3	490.9	549.8	602.1	653.2	700.3	743.5	782.8	814.2
42.5°	335.1	357.4	416.3	477.8	534.1	586.4	636.2	682.0	723.9	759.2	788.0
45°	320.7	344.3	403.2	462.1	517.1	569.4	617.8	661.0	701.6	734.3	760.5
47.5°	306.3	331.2	388.8	447.7	501.3	552.4	599.5	641.4	678.1	709.5	734.3
50°	290.6	316.8	374.4	432.0	485.6	535.4	581.2	620.5	655.8	683.3	706.9
52.5°	276.2	303.7	360.0	417.6	469.9	519.7	564.2	600.8	633.6	659.7	679.4
55°	259.2	289.3	346.9	403.2	455.5	504.0	545.9	581.2	611.3	634.9	651.9
57.5°	243.5	274.9	332.5	388.8	439.8	488.3	527.5	561.6	587.7	608.7	624.4
60°	226.5	260.5	318.1	374.4	425.4	472.5	510.5	541.9	566.8	583.8	596.9
62.5°	209.4	244.8	305.0	360.0	409.7	454.2	490.9	519.7	541.9	558.9	566.8
65°	192.4	229.1	289.3	345.6	394.0	435.9	471.2	498.7	518.4	532.8	538.0
67.5°	174.1	213.4	273.6	327.2	375.7	416.3	449.0	475.2	492.2	504.0	506.6
70°	155.8	195.0	255.3	308.9	354.7	392.7	425.4	447.7	464.7	472.5	475.2
72.5°	136.1	176.7	236.9	288.0	331.2	369.1	397.9	421.5	435.9	441.1	441.1
75°	117.8	157.1	216.0	264.4	306.3	341.6	369.1	390.1	403.2	407.1	405.8
77.5°	99.5	138.8	193.7	239.5	277.5	310.2	336.4	356.0	367.8	371.8	370.4
80°	82.5	119.1	167.6	210.7	244.8	274.9	298.5	319.4	329.9	328.6	320.7
82.5°	65.4	96.9	140.1	178.0	208.1	235.6	259.2	272.3	276.2	272.3	264.4
85°	48.4	73.3	108.6	138.8	163.6	185.9	200.3	209.4	210.7	206.8	200.3
87.5°	28.8	43.2	64.1	82.5	100.8	111.3	119.1	125.7	127.0	123.0	120.4
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°	460.8	460.8	460.8	460.8	460.8	460.8	460.8	460.8
2.5°	467.3	468.6	469.9	472.5	471.2	472.5	472.5	473.9
5°	521.0	528.8	534.1	541.9	541.9	545.9	547.2	549.8
7.5°	586.4	596.9	608.7	620.5	621.8	628.3	630.9	630.9
10°	653.2	667.6	682.0	695.1	699.0	706.9	710.8	710.8
12.5°	713.4	729.1	748.7	763.1	768.4	777.5	782.8	784.1
15°	765.8	785.4	805.0	820.7	829.9	839.1	844.3	845.6
17.5°	810.3	833.8	854.8	870.5	881.0	891.4	898.0	899.3
20°	845.6	871.8	892.7	909.8	921.5	934.6	939.9	941.2
22.5°	873.1	898.0	921.5	939.9	952.9	966.0	972.6	973.9
25°	891.4	917.6	941.2	960.8	975.2	987.0	993.5	996.1
27.5°	901.9	929.4	952.9	971.3	985.7	998.8	1005.3	1006.6
30°	903.2	930.7	954.3	972.6	987.0	1000.1	1006.6	1009.2
32.5°	896.7	924.1	946.4	964.7	979.1	990.9	997.5	1000.1
35°	883.6	909.8	932.0	949.0	962.1	972.6	980.4	981.7
37.5°	865.2	890.1	909.8	925.5	938.5	949.0	955.6	955.6
40°	840.4	863.9	881.0	895.4	908.4	916.3	924.1	924.1
42.5°	812.9	835.1	850.8	863.9	873.1	882.3	887.5	887.5
45°	784.1	802.4	818.1	828.6	837.8	844.3	850.8	850.8
47.5°	755.3	771.0	782.8	793.2	801.1	807.6	812.9	812.9
50°	725.2	739.6	748.7	757.9	764.5	769.7	773.6	773.6
52.5°	695.1	706.9	713.4	721.3	726.5	731.7	734.3	734.3
55°	666.3	674.1	679.4	685.9	689.8	692.5	695.1	695.1
57.5°	634.9	640.1	645.3	649.3	651.9	654.5	657.1	655.8
60°	603.4	607.4	611.3	613.9	616.5	619.2	620.5	620.5
62.5°	572.0	573.3	574.6	579.9	582.5	583.8	585.1	585.1
65°	540.6	540.6	541.9	545.9	548.5	551.1	552.4	552.4
67.5°	506.6	507.9	509.2	513.1	514.4	517.1	519.7	519.7
70°	472.5	473.9	473.9	477.8	479.1	481.7	484.3	484.3
72.5°	439.8	439.8	439.8	442.4	445.1	447.7	450.3	450.3
75°	403.2	403.2	403.2	405.8	405.8	407.1	409.7	408.4
77.5°	363.9	360.0	356.0	354.7	354.7	356.0	357.4	357.4
80°	312.8	307.6	305.0	302.4	301.1	302.4	303.7	302.4
82.5°	259.2	252.6	248.7	247.4	247.4	247.4	248.7	246.1
85°	196.3	189.8	187.2	187.2	185.9	185.9	185.9	187.2
87.5°	117.8	113.9	110.0	111.3	110.0	108.6	110.0	112.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)