

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: P188488

Luminaire Tested: **24SR-LD2-39-C-UNV-L835-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188488
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-LD2-39-C-UNV-L835-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2415.0 lumens
Efficiency: N/A
Efficacy: 75.7 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

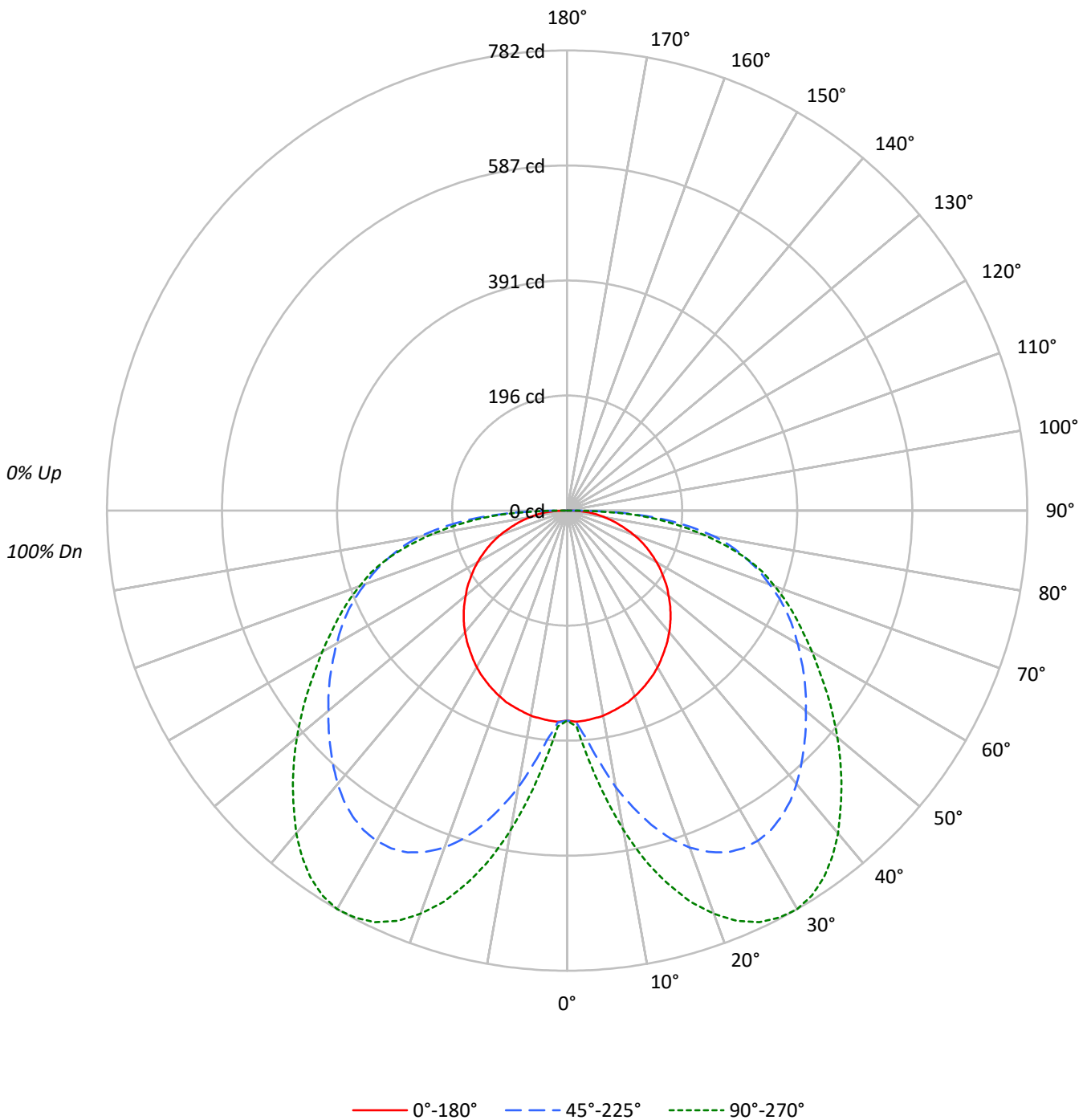
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78					78			
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62					62			
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50					50			
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42					42			
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35					35			
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30					30			
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26					26			
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23					23			
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20					20			
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18					18			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	480	480	480
5°	484	529	575
10°	484	653	752
15°	482	770	913
20°	481	873	1044
25°	479	952	1146
30°	477	1007	1215
35°	475	1043	1249
40°	474	1065	1258
45°	473	1083	1254
50°	471	1108	1255
55°	471	1154	1263
60°	472	1217	1294
65°	475	1314	1363
70°	475	1440	1476
75°	475	1640	1645
80°	495	1973	1815
85°	579	2473	2238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.6	1.6
10°-20°	150.1	6.2
20°-30°	276.0	11.4
30°-40°	368.0	15.2
40°-50°	403.1	16.7
50°-60°	396.4	16.4
60°-70°	359.7	14.9
70°-80°	286.4	11.9
80°-90°	135.8	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°	465.7	19.3
0°-40°	833.7	34.5
0°-60°	1633.2	67.6
0°-90°	2415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	357	357	357	357	357	
5°	358	361	392	417	426	34
15°	346	428	553	630	655	98
25°	322	475	641	737	772	149
35°	289	467	635	729	761	181
45°	248	421	569	638	659	192
55°	201	372	492	529	538	180
65°	149	322	413	421	428	147
75°	91	251	315	313	316	97
85°	38	135	160	145	145	39
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°	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0
2.5°	359.0	359.0	358.0	358.0	358.0	357.0	357.0	358.0	359.0	360.0	361.1
5°	358.0	358.0	358.0	358.0	359.0	363.1	368.1	375.2	381.3	391.5	396.5
7.5°	356.0	356.0	357.0	360.0	368.1	379.3	392.5	407.7	419.9	433.1	445.2
10°	354.0	354.0	356.0	366.1	382.3	401.6	420.9	440.2	457.4	477.7	492.9
12.5°	349.9	349.9	356.0	374.2	398.6	422.9	447.3	472.6	494.9	516.2	537.5
15°	345.8	345.8	358.0	383.4	413.8	443.2	471.6	501.0	527.4	552.7	575.0
17.5°	341.8	342.8	361.1	393.5	427.0	461.5	494.9	526.4	555.8	584.2	609.5
20°	335.7	337.7	363.1	400.6	438.1	476.7	512.2	546.6	579.1	609.5	635.9
22.5°	329.6	333.7	364.1	405.7	447.3	488.8	526.4	561.9	596.3	627.8	655.2
25°	322.5	327.6	365.1	408.7	453.3	495.9	535.5	573.0	608.5	641.0	668.3
27.5°	315.4	322.5	363.1	408.7	455.4	500.0	539.5	578.1	615.6	647.1	676.5
30°	307.3	316.4	360.0	407.7	455.4	499.0	539.5	579.1	615.6	648.1	676.5
32.5°	298.2	310.3	355.0	403.6	451.3	495.9	536.5	575.0	611.6	644.0	671.4
35°	289.0	302.2	348.9	397.6	445.2	488.8	528.4	566.9	602.4	634.9	662.3
37.5°	279.9	295.1	341.8	390.5	436.1	478.7	518.2	556.8	591.3	622.7	648.1
40°	269.8	286.0	332.7	380.3	426.0	466.5	506.1	542.6	576.1	606.5	630.8
42.5°	259.6	276.9	322.5	370.2	413.8	454.4	492.9	528.4	560.8	588.2	610.5
45°	248.5	266.7	312.4	358.0	400.6	441.2	478.7	512.2	543.6	569.0	589.2
47.5°	237.3	256.6	301.2	346.9	388.4	428.0	464.5	497.0	525.3	549.7	569.0
50°	225.1	245.4	290.1	334.7	376.3	414.8	450.3	480.7	508.1	529.4	547.7
52.5°	214.0	235.3	278.9	323.5	364.1	402.6	437.1	465.5	490.9	511.1	526.4
55°	200.8	224.1	268.8	312.4	352.9	390.5	422.9	450.3	473.6	491.9	505.1
57.5°	188.6	213.0	257.6	301.2	340.8	378.3	408.7	435.1	455.4	471.6	483.8
60°	175.5	201.8	246.4	290.1	329.6	366.1	395.5	419.9	439.1	452.3	462.5
62.5°	162.3	189.7	236.3	278.9	317.4	351.9	380.3	402.6	419.9	433.1	439.1
65°	149.1	177.5	224.1	267.7	305.3	337.7	365.1	386.4	401.6	412.8	416.8
67.5°	134.9	165.3	212.0	253.5	291.1	322.5	347.9	368.1	381.3	390.5	392.5
70°	120.7	151.1	197.8	239.3	274.8	304.3	329.6	346.9	360.0	366.1	368.1
72.5°	105.5	136.9	183.6	223.1	256.6	286.0	308.3	326.6	337.7	341.8	341.8
75°	91.3	121.7	167.3	204.9	237.3	264.7	286.0	302.2	312.4	315.4	314.4
77.5°	77.1	107.5	150.1	185.6	215.0	240.4	260.6	275.9	285.0	288.0	287.0
80°	63.9	92.3	129.8	163.3	189.7	213.0	231.2	247.5	255.6	254.6	248.5
82.5°	50.7	75.0	108.5	137.9	161.3	182.6	200.8	211.0	214.0	211.0	204.9
85°	37.5	56.8	84.2	107.5	126.8	144.0	155.2	162.3	163.3	160.2	155.2
87.5°	22.3	33.5	49.7	63.9	78.1	86.2	92.3	97.4	98.4	95.3	93.3
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°	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0
2.5°	362.1	363.1	364.1	366.1	365.1	366.1	366.1	367.1
5°	403.6	409.7	413.8	419.9	419.9	422.9	423.9	426.0
7.5°	454.4	462.5	471.6	480.7	481.7	486.8	488.8	488.8
10°	506.1	517.2	528.4	538.5	541.6	547.7	550.7	550.7
12.5°	552.7	564.9	580.1	591.3	595.3	602.4	606.5	607.5
15°	593.3	608.5	623.7	635.9	643.0	650.1	654.2	655.2
17.5°	627.8	646.0	662.3	674.4	682.5	690.7	695.7	696.7
20°	655.2	675.4	691.7	704.9	714.0	724.1	728.2	729.2
22.5°	676.5	695.7	714.0	728.2	738.3	748.5	753.5	754.6
25°	690.7	710.9	729.2	744.4	755.6	764.7	769.8	771.8
27.5°	698.8	720.1	738.3	752.5	763.7	773.8	778.9	779.9
30°	699.8	721.1	739.3	753.5	764.7	774.8	779.9	781.9
32.5°	694.7	716.0	733.3	747.5	758.6	767.7	772.8	774.8
35°	684.6	704.9	722.1	735.3	745.4	753.5	759.6	760.6
37.5°	670.4	689.6	704.9	717.0	727.2	735.3	740.4	740.4
40°	651.1	669.4	682.5	693.7	703.8	709.9	716.0	716.0
42.5°	629.8	647.1	659.2	669.4	676.5	683.6	687.6	687.6
45°	607.5	621.7	633.9	642.0	649.1	654.2	659.2	659.2
47.5°	585.2	597.4	606.5	614.6	620.7	625.8	629.8	629.8
50°	561.9	573.0	580.1	587.2	592.3	596.3	599.4	599.4
52.5°	538.5	547.7	552.7	558.8	562.9	566.9	569.0	569.0
55°	516.2	522.3	526.4	531.4	534.5	536.5	538.5	538.5
57.5°	491.9	495.9	500.0	503.0	505.1	507.1	509.1	508.1
60°	467.5	470.6	473.6	475.7	477.7	479.7	480.7	480.7
62.5°	443.2	444.2	445.2	449.3	451.3	452.3	453.3	453.3
65°	418.9	418.9	419.9	422.9	424.9	427.0	428.0	428.0
67.5°	392.5	393.5	394.5	397.6	398.6	400.6	402.6	402.6
70°	366.1	367.1	367.1	370.2	371.2	373.2	375.2	375.2
72.5°	340.8	340.8	340.8	342.8	344.8	346.9	348.9	348.9
75°	312.4	312.4	312.4	314.4	314.4	315.4	317.4	316.4
77.5°	281.9	278.9	275.9	274.8	274.8	275.9	276.9	276.9
80°	242.4	238.3	236.3	234.3	233.3	234.3	235.3	234.3
82.5°	200.8	195.7	192.7	191.7	191.7	191.7	192.7	190.7
85°	152.1	147.1	145.0	145.0	144.0	144.0	144.0	145.0
87.5°	91.3	88.2	85.2	86.2	85.2	84.2	85.2	87.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)