

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: P188477

Luminaire Tested: **24SR-LD2-29-C-UNV-L830-CD1-MR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188477  
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-LD2-29-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**

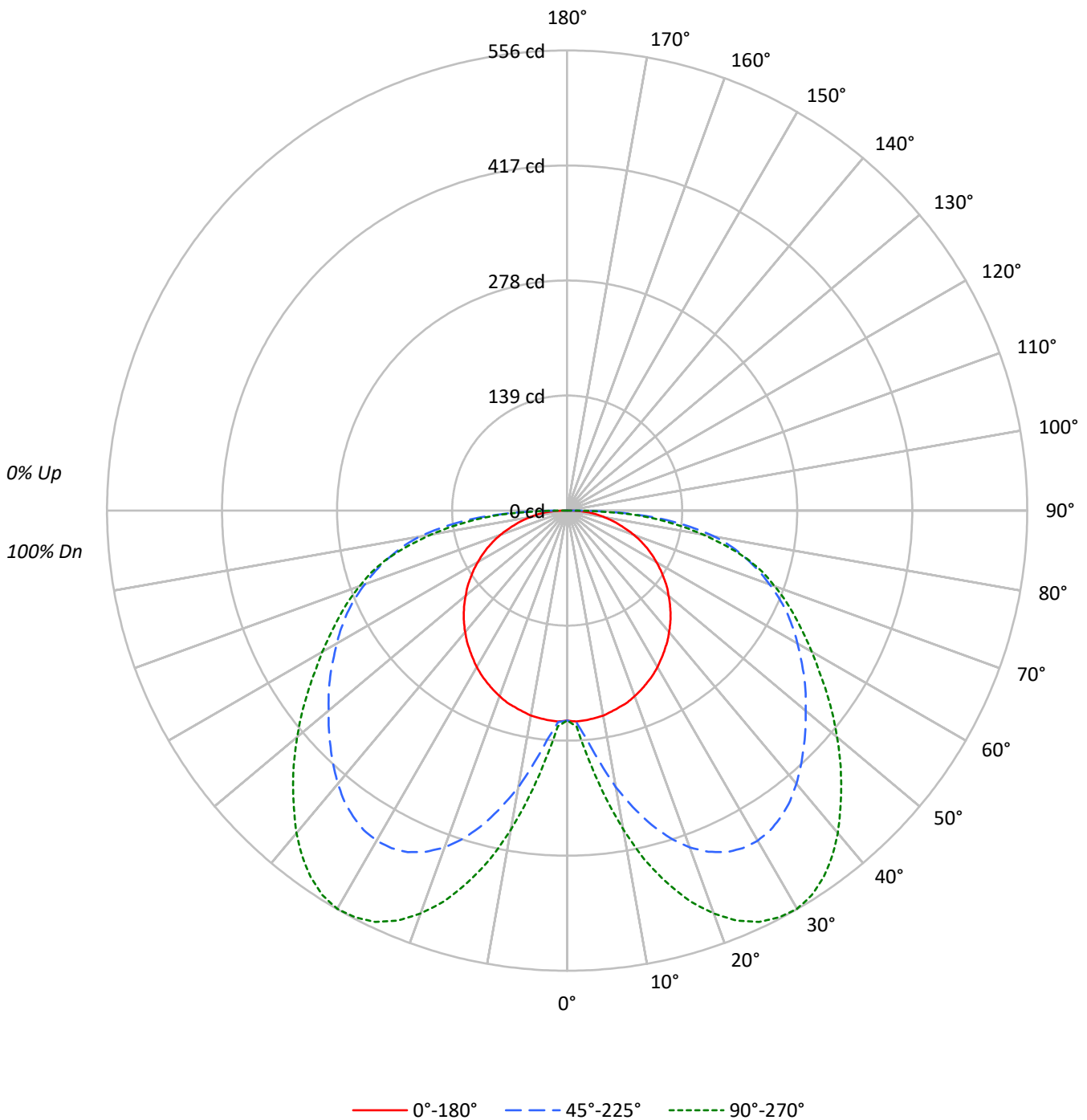
Lumens per Lamp: N/A  
Luminaire Lumens: 1716.0 lumens  
Efficiency: N/A  
Efficacy: 75.9 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	341	341	341
5°	344	376	409
10°	344	464	535
15°	342	547	648
20°	341	620	742
25°	340	676	814
30°	339	715	863
35°	337	741	888
40°	337	757	894
45°	336	769	891
50°	335	787	891
55°	335	820	898
60°	336	865	919
65°	337	934	968
70°	338	1024	1049
75°	337	1165	1169
80°	352	1402	1290
85°	412	1758	1592



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.1	1.6
10°-20°	106.6	6.2
20°-30°	196.1	11.4
30°-40°	261.5	15.2
40°-50°	286.4	16.7
50°-60°	281.7	16.4
60°-70°	255.6	14.9
70°-80°	203.5	11.9
80°-90°	96.5	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°	330.9	19.3
0°-40°	592.4	34.5
0°-60°	1160.5	67.6
0°-90°	1716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1716.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	254	254	254	254	254	
5°	254	257	278	296	303	24
15°	246	304	393	448	466	69
25°	229	337	455	524	548	106
35°	205	332	451	518	540	129
45°	177	299	404	453	468	136
55°	143	264	350	376	383	128
65°	106	228	293	299	304	105
75°	65	178	224	223	225	69
85°	27	96	114	103	103	28
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°	253.7	253.7	253.7	253.7	253.7	253.7	253.7	253.7	253.7	253.7	253.7
2.5°	255.1	255.1	254.4	254.4	254.4	253.7	253.7	254.4	255.1	255.8	256.5
5°	254.4	254.4	254.4	254.4	255.1	258.0	261.6	266.6	271.0	278.2	281.8
7.5°	252.9	252.9	253.7	255.8	261.6	269.5	278.9	289.7	298.3	307.7	316.4
10°	251.5	251.5	252.9	260.2	271.7	285.4	299.1	312.8	325.0	339.4	350.2
12.5°	248.6	248.6	252.9	265.9	283.2	300.5	317.8	335.8	351.7	366.8	381.9
15°	245.7	245.7	254.4	272.4	294.0	314.9	335.1	356.0	374.7	392.7	408.6
17.5°	242.9	243.6	256.5	279.6	303.4	327.9	351.7	374.0	394.9	415.1	433.1
20°	238.5	240.0	258.0	284.7	311.3	338.7	363.9	388.4	411.5	433.1	451.8
22.5°	234.2	237.1	258.7	288.3	317.8	347.3	374.0	399.2	423.7	446.1	465.5
25°	229.2	232.8	259.4	290.4	322.1	352.4	380.5	407.2	432.4	455.4	474.9
27.5°	224.1	229.2	258.0	290.4	323.6	355.3	383.4	410.8	437.4	459.8	480.7
30°	218.4	224.8	255.8	289.7	323.6	354.6	383.4	411.5	437.4	460.5	480.7
32.5°	211.9	220.5	252.2	286.8	320.7	352.4	381.2	408.6	434.5	457.6	477.1
35°	205.4	214.8	247.9	282.5	316.4	347.3	375.5	402.8	428.1	451.1	470.6
37.5°	198.9	209.7	242.9	277.4	309.9	340.1	368.2	395.6	420.1	442.5	460.5
40°	191.7	203.2	236.4	270.2	302.7	331.5	359.6	385.5	409.3	430.9	448.2
42.5°	184.5	196.7	229.2	263.0	294.0	322.8	350.2	375.5	398.5	418.0	433.8
45°	176.6	189.5	222.0	254.4	284.7	313.5	340.1	363.9	386.3	404.3	418.7
47.5°	168.6	182.3	214.0	246.5	276.0	304.1	330.1	353.1	373.3	390.6	404.3
50°	160.0	174.4	206.1	237.8	267.4	294.7	320.0	341.6	361.0	376.2	389.1
52.5°	152.1	167.2	198.2	229.9	258.7	286.1	310.6	330.8	348.8	363.2	374.0
55°	142.7	159.3	191.0	222.0	250.8	277.4	300.5	320.0	336.5	349.5	358.9
57.5°	134.0	151.3	183.0	214.0	242.1	268.8	290.4	309.2	323.6	335.1	343.7
60°	124.7	143.4	175.1	206.1	234.2	260.2	281.0	298.3	312.0	321.4	328.6
62.5°	115.3	134.8	167.9	198.2	225.6	250.1	270.2	286.1	298.3	307.7	312.0
65°	105.9	126.1	159.3	190.2	216.9	240.0	259.4	274.6	285.4	293.3	296.2
67.5°	95.8	117.5	150.6	180.2	206.8	229.2	247.2	261.6	271.0	277.4	278.9
70°	85.8	107.4	140.5	170.1	195.3	216.2	234.2	246.5	255.8	260.2	261.6
72.5°	74.9	97.3	130.4	158.5	182.3	203.2	219.1	232.0	240.0	242.9	242.9
75°	64.9	86.5	118.9	145.6	168.6	188.1	203.2	214.8	222.0	224.1	223.4
77.5°	54.8	76.4	106.7	131.9	152.8	170.8	185.2	196.0	202.5	204.7	203.9
80°	45.4	65.6	92.2	116.0	134.8	151.3	164.3	175.8	181.6	180.9	176.6
82.5°	36.0	53.3	77.1	98.0	114.6	129.7	142.7	149.9	152.1	149.9	145.6
85°	26.7	40.4	59.8	76.4	90.1	102.3	110.3	115.3	116.0	113.9	110.3
87.5°	15.9	23.8	35.3	45.4	55.5	61.3	65.6	69.2	69.9	67.7	66.3
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°	253.7	253.7	253.7	253.7	253.7	253.7	253.7	253.7
2.5°	257.3	258.0	258.7	260.2	259.4	260.2	260.2	260.9
5°	286.8	291.1	294.0	298.3	298.3	300.5	301.2	302.7
7.5°	322.8	328.6	335.1	341.6	342.3	345.9	347.3	347.3
10°	359.6	367.5	375.5	382.7	384.8	389.1	391.3	391.3
12.5°	392.7	401.4	412.2	420.1	423.0	428.1	430.9	431.7
15°	421.6	432.4	443.2	451.8	456.9	461.9	464.8	465.5
17.5°	446.1	459.0	470.6	479.2	485.0	490.8	494.4	495.1
20°	465.5	479.9	491.5	500.8	507.3	514.5	517.4	518.1
22.5°	480.7	494.4	507.3	517.4	524.6	531.8	535.4	536.2
25°	490.8	505.2	518.1	528.9	536.9	543.4	547.0	548.4
27.5°	496.5	511.7	524.6	534.7	542.6	549.8	553.5	554.2
30°	497.2	512.4	525.3	535.4	543.4	550.6	554.2	555.6
32.5°	493.6	508.8	521.0	531.1	539.0	545.5	549.1	550.6
35°	486.4	500.8	513.1	522.5	529.7	535.4	539.8	540.5
37.5°	476.3	490.0	500.8	509.5	516.7	522.5	526.1	526.1
40°	462.7	475.6	485.0	492.9	500.1	504.4	508.8	508.8
42.5°	447.5	459.8	468.4	475.6	480.7	485.7	488.6	488.6
45°	431.7	441.8	450.4	456.2	461.2	464.8	468.4	468.4
47.5°	415.8	424.5	430.9	436.7	441.0	444.6	447.5	447.5
50°	399.2	407.2	412.2	417.3	420.9	423.7	425.9	425.9
52.5°	382.7	389.1	392.7	397.1	400.0	402.8	404.3	404.3
55°	366.8	371.1	374.0	377.6	379.8	381.2	382.7	382.7
57.5°	349.5	352.4	355.3	357.4	358.9	360.3	361.8	361.0
60°	332.2	334.4	336.5	338.0	339.4	340.9	341.6	341.6
62.5°	314.9	315.6	316.4	319.2	320.7	321.4	322.1	322.1
65°	297.6	297.6	298.3	300.5	301.9	303.4	304.1	304.1
67.5°	278.9	279.6	280.3	282.5	283.2	284.7	286.1	286.1
70°	260.2	260.9	260.9	263.0	263.8	265.2	266.6	266.6
72.5°	242.1	242.1	242.1	243.6	245.0	246.5	247.9	247.9
75°	222.0	222.0	222.0	223.4	223.4	224.1	225.6	224.8
77.5°	200.3	198.2	196.0	195.3	195.3	196.0	196.7	196.7
80°	172.2	169.4	167.9	166.5	165.7	166.5	167.2	166.5
82.5°	142.7	139.1	136.9	136.2	136.2	136.2	136.9	135.5
85°	108.1	104.5	103.1	103.1	102.3	102.3	102.3	103.1
87.5°	64.9	62.7	60.5	61.3	60.5	59.8	60.5	62.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)