

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: P188489

Luminaire Tested: **24SR-LD2-39-C-UNV-L840-CD1-MR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188489  
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-L840-CD1-MR-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.  
  
Light Source: EATON LED 4000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

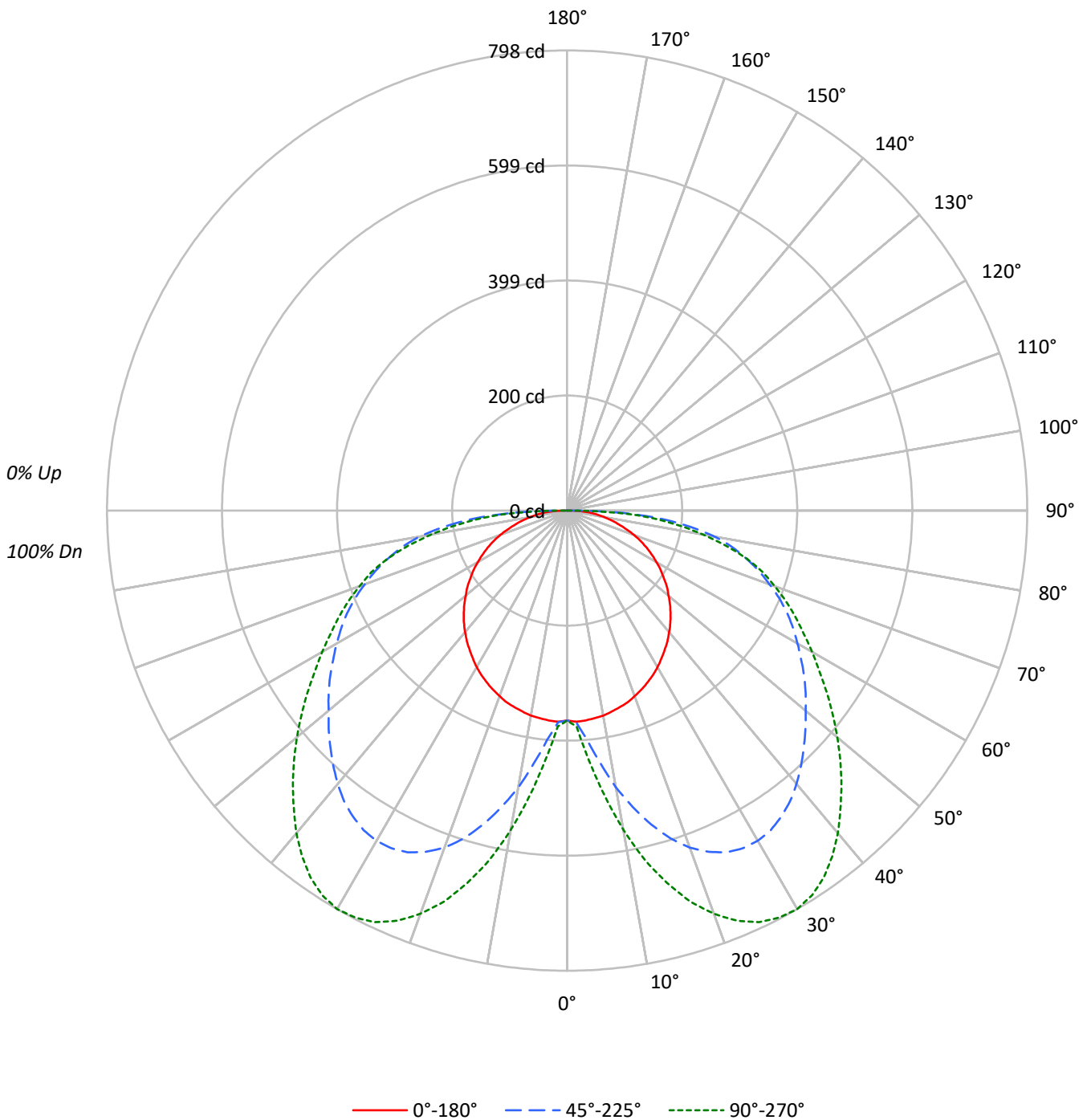
Lumens per Lamp: N/A  
Luminaire Lumens: 2464.0 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.9  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P188489

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L840-CD1-MR-U

### Luminous Intensity Polar Plot





TEST NUMBER: P188489

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L840-CD1-MR-U

**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°	490	490	490
5°	493	539	587
10°	493	666	768
15°	492	785	931
20°	490	890	1065
25°	489	971	1169
30°	487	1027	1239
35°	484	1064	1275
40°	483	1087	1283
45°	482	1105	1280
50°	481	1131	1280
55°	481	1177	1289
60°	482	1242	1320
65°	484	1341	1390
70°	484	1469	1506
75°	484	1673	1678
80°	505	2012	1852
85°	591	2524	2285



TEST NUMBER: P188489

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L840-CD1-MR-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.4	1.6
10°-20°	153.1	6.2
20°-30°	281.6	11.4
30°-40°	375.4	15.2
40°-50°	411.3	16.7
50°-60°	404.4	16.4
60°-70°	367.0	14.9
70°-80°	292.2	11.9
80°-90°	138.5	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°	475.1	19.3
0°-40°	850.6	34.5
0°-60°	1666.3	67.6
0°-90°	2464.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2464.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	364	364	364	364	364	
5°	365	368	399	425	435	35
15°	353	437	564	643	668	100
25°	329	484	654	752	788	152
35°	295	477	648	744	776	185
45°	254	429	580	651	673	196
55°	205	379	502	540	550	183
65°	152	328	421	430	437	150
75°	93	256	322	320	323	99
85°	38	138	164	148	148	40
90°	0	0	0	0	0	



TEST NUMBER: P188489

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L840-CD1-MR-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	364.2	364.2	364.2	364.2	364.2	364.2	364.2	364.2	364.2	364.2	364.2
2.5°	366.3	366.3	365.3	365.3	365.3	364.2	364.2	365.3	366.3	367.3	368.4
5°	365.3	365.3	365.3	365.3	366.3	370.4	375.6	382.9	389.1	399.4	404.6
7.5°	363.2	363.2	364.2	367.3	375.6	387.0	400.5	416.0	428.4	441.8	454.3
10°	361.1	361.1	363.2	373.5	390.1	409.8	429.4	449.1	466.7	487.4	502.9
12.5°	357.0	357.0	363.2	381.8	406.7	431.5	456.3	482.2	505.0	526.7	548.4
15°	352.9	352.9	365.3	391.1	422.2	452.2	481.2	511.2	538.1	563.9	586.7
17.5°	348.7	349.8	368.4	401.5	435.6	470.8	505.0	537.0	567.1	596.0	621.9
20°	342.5	344.6	370.4	408.7	447.0	486.3	522.6	557.7	590.9	621.9	648.8
22.5°	336.3	340.4	371.5	413.9	456.3	498.8	537.0	573.3	608.4	640.5	668.5
25°	329.1	334.2	372.5	417.0	462.5	506.0	546.4	584.6	620.9	654.0	681.9
27.5°	321.8	329.1	370.4	417.0	464.6	510.1	550.5	589.8	628.1	660.2	690.2
30°	313.5	322.8	367.3	416.0	464.6	509.1	550.5	590.9	628.1	661.2	690.2
32.5°	304.2	316.6	362.2	411.8	460.5	506.0	547.4	586.7	624.0	657.1	685.0
35°	294.9	308.4	356.0	405.6	454.3	498.8	539.1	578.4	614.6	647.8	675.7
37.5°	285.6	301.1	348.7	398.4	444.9	488.4	528.8	568.1	603.3	635.3	661.2
40°	275.2	291.8	339.4	388.0	434.6	476.0	516.3	553.6	587.7	618.8	643.6
42.5°	264.9	282.5	329.1	377.7	422.2	463.6	502.9	539.1	572.2	600.2	622.9
45°	253.5	272.1	318.7	365.3	408.7	450.1	488.4	522.6	554.6	580.5	601.2
47.5°	242.1	261.8	307.3	353.9	396.3	436.7	473.9	507.0	536.0	560.8	580.5
50°	229.7	250.4	295.9	341.5	383.9	423.2	459.4	490.5	518.4	540.1	558.8
52.5°	218.3	240.1	284.6	330.1	371.5	410.8	446.0	475.0	500.8	521.5	537.0
55°	204.9	228.7	274.2	318.7	360.1	398.4	431.5	459.4	483.2	501.9	515.3
57.5°	192.5	217.3	262.8	307.3	347.7	386.0	417.0	443.9	464.6	481.2	493.6
60°	179.0	205.9	251.4	295.9	336.3	373.5	403.6	428.4	448.1	461.5	471.9
62.5°	165.6	193.5	241.1	284.6	323.9	359.1	388.0	410.8	428.4	441.8	448.1
65°	152.1	181.1	228.7	273.2	311.5	344.6	372.5	394.2	409.8	421.1	425.3
67.5°	137.6	168.7	216.3	258.7	297.0	329.1	354.9	375.6	389.1	398.4	400.5
70°	123.1	154.2	201.8	244.2	280.4	310.4	336.3	353.9	367.3	373.5	375.6
72.5°	107.6	139.7	187.3	227.6	261.8	291.8	314.6	333.2	344.6	348.7	348.7
75°	93.1	124.2	170.7	209.0	242.1	270.1	291.8	308.4	318.7	321.8	320.8
77.5°	78.6	109.7	153.1	189.4	219.4	245.2	265.9	281.5	290.8	293.9	292.8
80°	65.2	94.2	132.4	166.6	193.5	217.3	235.9	252.5	260.8	259.7	253.5
82.5°	51.7	76.6	110.7	140.7	164.5	186.3	204.9	215.2	218.3	215.2	209.0
85°	38.3	57.9	85.9	109.7	129.3	146.9	158.3	165.6	166.6	163.5	158.3
87.5°	22.8	34.1	50.7	65.2	79.7	88.0	94.2	99.3	100.4	97.3	95.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188489

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L840-CD1-MR-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	364.2	364.2	364.2	364.2	364.2	364.2	364.2	364.2
2.5°	369.4	370.4	371.5	373.5	372.5	373.5	373.5	374.6
5°	411.8	418.0	422.2	428.4	428.4	431.5	432.5	434.6
7.5°	463.6	471.9	481.2	490.5	491.5	496.7	498.8	498.8
10°	516.3	527.7	539.1	549.5	552.6	558.8	561.9	561.9
12.5°	563.9	576.4	591.9	603.3	607.4	614.6	618.8	619.8
15°	605.3	620.9	636.4	648.8	656.0	663.3	667.4	668.5
17.5°	640.5	659.1	675.7	688.1	696.4	704.7	709.8	710.9
20°	668.5	689.2	705.7	719.2	728.5	738.8	743.0	744.0
22.5°	690.2	709.8	728.5	743.0	753.3	763.7	768.8	769.9
25°	704.7	725.4	744.0	759.5	770.9	780.2	785.4	787.5
27.5°	713.0	734.7	753.3	767.8	779.2	789.5	794.7	795.7
30°	714.0	735.7	754.3	768.8	780.2	790.6	795.7	797.8
32.5°	708.8	730.5	748.1	762.6	774.0	783.3	788.5	790.6
35°	698.5	719.2	736.8	750.2	760.6	768.8	775.0	776.1
37.5°	684.0	703.6	719.2	731.6	741.9	750.2	755.4	755.4
40°	664.3	682.9	696.4	707.8	718.1	724.3	730.5	730.5
42.5°	642.6	660.2	672.6	682.9	690.2	697.4	701.6	701.6
45°	619.8	634.3	646.7	655.0	662.2	667.4	672.6	672.6
47.5°	597.1	609.5	618.8	627.1	633.3	638.4	642.6	642.6
50°	573.3	584.6	591.9	599.1	604.3	608.4	611.5	611.5
52.5°	549.5	558.8	563.9	570.2	574.3	578.4	580.5	580.5
55°	526.7	532.9	537.0	542.2	545.3	547.4	549.5	549.5
57.5°	501.9	506.0	510.1	513.2	515.3	517.4	519.5	518.4
60°	477.0	480.1	483.2	485.3	487.4	489.4	490.5	490.5
62.5°	452.2	453.2	454.3	458.4	460.5	461.5	462.5	462.5
65°	427.4	427.4	428.4	431.5	433.6	435.6	436.7	436.7
67.5°	400.5	401.5	402.5	405.6	406.7	408.7	410.8	410.8
70°	373.5	374.6	374.6	377.7	378.7	380.8	382.9	382.9
72.5°	347.7	347.7	347.7	349.8	351.8	353.9	356.0	356.0
75°	318.7	318.7	318.7	320.8	320.8	321.8	323.9	322.8
77.5°	287.7	284.6	281.5	280.4	280.4	281.5	282.5	282.5
80°	247.3	243.2	241.1	239.0	238.0	239.0	240.1	239.0
82.5°	204.9	199.7	196.6	195.6	195.6	195.6	196.6	194.5
85°	155.2	150.0	148.0	148.0	146.9	146.9	146.9	148.0
87.5°	93.1	90.0	86.9	88.0	86.9	85.9	86.9	89.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)