

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: P188504

Luminaire Tested: **24SR-LD2-53-C-UNV-L840-CD1-MR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188504  
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-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: 3278.0 lumens  
Efficiency: N/A  
Efficacy: 76.1 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

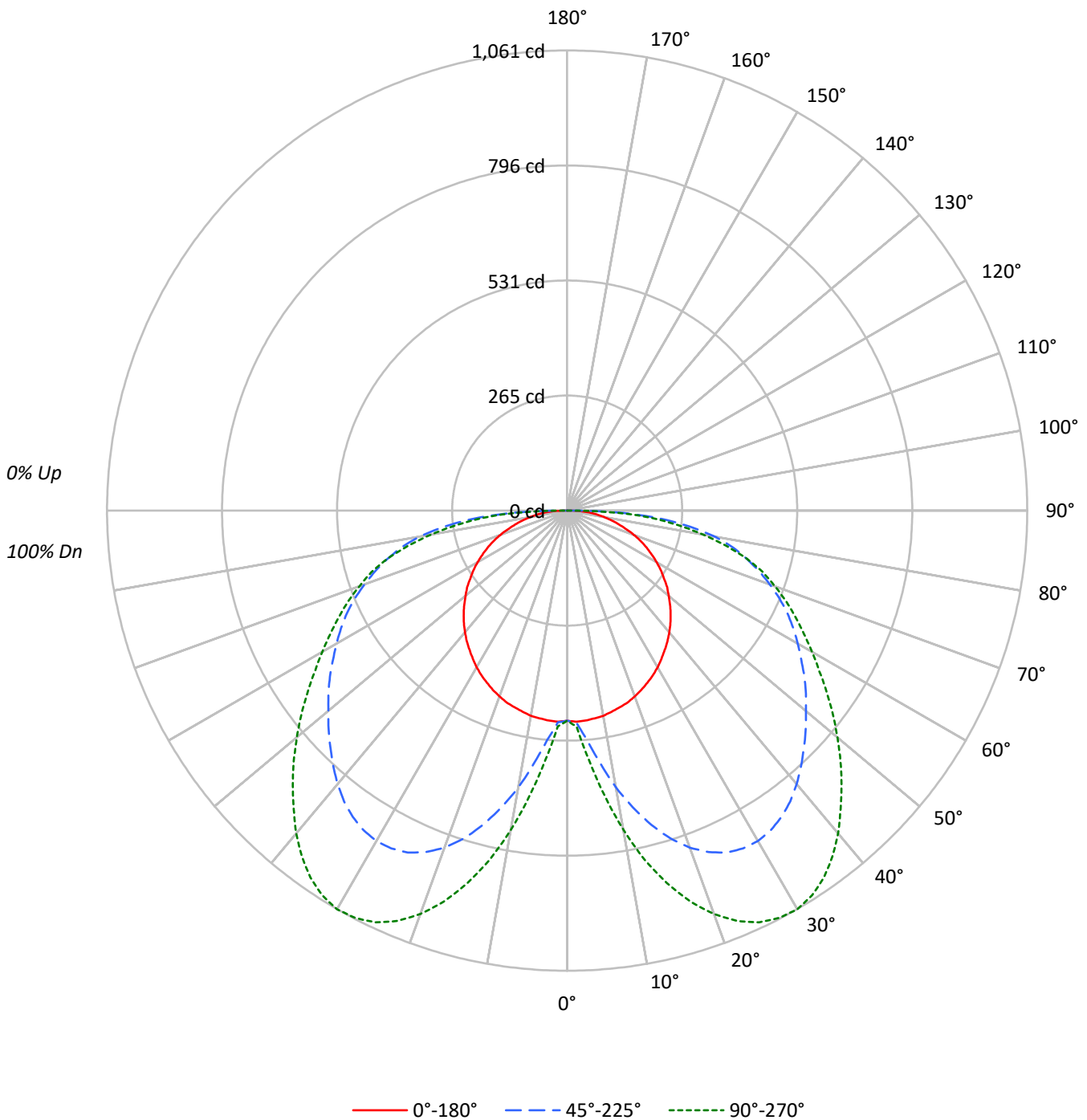
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P188504

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L840-CD1-MR-U

### Luminous Intensity Polar Plot





TEST NUMBER: P188504

CATALOG NUMBER: 24SR-LD2-53-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°	652	652	652
5°	656	718	781
10°	656	886	1021
15°	654	1045	1239
20°	652	1185	1417
25°	650	1292	1555
30°	648	1367	1649
35°	644	1416	1696
40°	643	1446	1707
45°	642	1470	1703
50°	640	1504	1703
55°	639	1566	1715
60°	641	1652	1756
65°	644	1784	1849
70°	644	1955	2004
75°	644	2226	2233
80°	672	2677	2464
85°	786	3358	3040



TEST NUMBER: P188504

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L840-CD1-MR-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.7	1.6
10°-20°	203.7	6.2
20°-30°	374.7	11.4
30°-40°	499.5	15.2
40°-50°	547.2	16.7
50°-60°	538.0	16.4
60°-70°	488.3	14.9
70°-80°	388.7	11.9
80°-90°	184.3	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°	632.1	19.3
0°-40°	1131.6	34.5
0°-60°	2216.8	67.6
0°-90°	3278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3278.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	486	490	531	566	578	46
15°	469	582	750	855	889	133
25°	438	644	870	1000	1048	202
35°	392	634	862	989	1032	246
45°	337	571	772	866	895	260
55°	273	505	668	718	731	244
65°	202	436	560	572	581	200
75°	124	341	428	425	430	131
85°	51	184	218	197	197	53
90°	0	0	0	0	0	



TEST NUMBER: P188504

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L840-CD1-MR-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	484.6	484.6	484.6	484.6	484.6	484.6	484.6	484.6	484.6	484.6	484.6
2.5°	487.3	487.3	485.9	485.9	485.9	484.6	484.6	485.9	487.3	488.7	490.1
5°	485.9	485.9	485.9	485.9	487.3	492.8	499.7	509.3	517.6	531.4	538.3
7.5°	483.2	483.2	484.6	488.7	499.7	514.9	532.7	553.4	569.9	587.8	604.3
10°	480.4	480.4	483.2	497.0	519.0	545.1	571.3	597.4	620.8	648.4	669.0
12.5°	474.9	474.9	483.2	508.0	541.0	574.0	607.1	641.5	671.8	700.7	729.6
15°	469.4	469.4	485.9	520.4	561.7	601.6	640.1	680.0	715.8	750.2	780.5
17.5°	463.9	465.3	490.1	534.1	579.6	626.4	671.8	714.5	754.4	792.9	827.3
20°	455.7	458.4	492.8	543.8	594.7	647.0	695.2	742.0	786.0	827.3	863.1
22.5°	447.4	452.9	494.2	550.6	607.1	663.5	714.5	762.6	809.4	852.1	889.3
25°	437.8	444.6	495.6	554.8	615.3	673.2	726.8	777.8	826.0	870.0	907.2
27.5°	428.1	437.8	492.8	554.8	618.1	678.7	732.4	784.7	835.6	878.3	918.2
30°	417.1	429.5	488.7	553.4	618.1	677.3	732.4	786.0	835.6	879.7	918.2
32.5°	404.7	421.2	481.8	547.9	612.6	673.2	728.2	780.5	830.1	874.1	911.3
35°	392.3	410.2	473.6	539.6	604.3	663.5	717.2	769.5	817.7	861.8	898.9
37.5°	379.9	400.6	463.9	530.0	591.9	649.8	703.4	755.8	802.6	845.2	879.7
40°	366.2	388.2	451.5	516.2	578.2	633.2	686.9	736.5	781.9	823.2	856.2
42.5°	352.4	375.8	437.8	502.5	561.7	616.7	669.0	717.2	761.3	798.4	828.7
45°	337.3	362.0	424.0	485.9	543.8	598.8	649.8	695.2	737.9	772.3	799.8
47.5°	322.1	348.3	408.9	470.8	527.2	580.9	630.5	674.5	713.1	746.1	772.3
50°	305.6	333.1	393.7	454.3	510.7	563.0	611.2	652.5	689.7	718.6	743.4
52.5°	290.5	319.4	378.6	439.1	494.2	546.5	593.3	631.9	666.3	693.8	714.5
55°	272.6	304.2	364.8	424.0	479.1	530.0	574.0	611.2	642.9	667.7	685.5
57.5°	256.0	289.1	349.7	408.9	462.5	513.5	554.8	590.6	618.1	640.1	656.6
60°	238.2	273.9	334.5	393.7	447.4	497.0	536.9	569.9	596.1	614.0	627.7
62.5°	220.3	257.4	320.7	378.6	430.9	477.7	516.2	546.5	569.9	587.8	596.1
65°	202.4	240.9	304.2	363.4	414.4	458.4	495.6	524.5	545.1	560.3	565.8
67.5°	183.1	224.4	287.7	344.2	395.1	437.8	472.2	499.7	517.6	530.0	532.7
70°	163.8	205.1	268.4	324.9	373.1	413.0	447.4	470.8	488.7	497.0	499.7
72.5°	143.2	185.8	249.2	302.9	348.3	388.2	418.5	443.3	458.4	463.9	463.9
75°	123.9	165.2	227.1	278.1	322.1	359.3	388.2	410.2	424.0	428.1	426.7
77.5°	104.6	145.9	203.7	251.9	291.8	326.3	353.8	374.4	386.8	391.0	389.6
80°	86.7	125.3	176.2	221.6	257.4	289.1	313.9	335.9	346.9	345.5	337.3
82.5°	68.8	101.9	147.3	187.2	218.9	247.8	272.6	286.3	290.5	286.3	278.1
85°	50.9	77.1	114.3	145.9	172.1	195.5	210.6	220.3	221.6	217.5	210.6
87.5°	30.3	45.4	67.5	86.7	106.0	117.0	125.3	132.2	133.5	129.4	126.6
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: P188504

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L840-CD1-MR-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	484.6	484.6	484.6	484.6	484.6	484.6	484.6	484.6
2.5°	491.4	492.8	494.2	497.0	495.6	497.0	497.0	498.3
5°	547.9	556.1	561.7	569.9	569.9	574.0	575.4	578.2
7.5°	616.7	627.7	640.1	652.5	653.9	660.8	663.5	663.5
10°	686.9	702.1	717.2	731.0	735.1	743.4	747.5	747.5
12.5°	750.2	766.8	787.4	802.6	808.1	817.7	823.2	824.6
15°	805.3	826.0	846.6	863.1	872.8	882.4	887.9	889.3
17.5°	852.1	876.9	898.9	915.4	926.5	937.5	944.4	945.7
20°	889.3	916.8	938.8	956.7	969.1	982.9	988.4	989.8
22.5°	918.2	944.4	969.1	988.4	1002.2	1015.9	1022.8	1024.2
25°	937.5	965.0	989.8	1010.4	1025.6	1038.0	1044.8	1047.6
27.5°	948.5	977.4	1002.2	1021.4	1036.6	1050.3	1057.2	1058.6
30°	949.9	978.8	1003.5	1022.8	1038.0	1051.7	1058.6	1061.4
32.5°	943.0	971.9	995.3	1014.6	1029.7	1042.1	1049.0	1051.7
35°	929.2	956.7	980.1	998.0	1011.8	1022.8	1031.1	1032.5
37.5°	909.9	936.1	956.7	973.3	987.0	998.0	1004.9	1004.9
40°	883.8	908.6	926.5	941.6	955.4	963.6	971.9	971.9
42.5°	854.9	878.3	894.8	908.6	918.2	927.8	933.3	933.3
45°	824.6	843.9	860.4	871.4	881.0	887.9	894.8	894.8
47.5°	794.3	810.8	823.2	834.2	842.5	849.4	854.9	854.9
50°	762.6	777.8	787.4	797.1	803.9	809.4	813.6	813.6
52.5°	731.0	743.4	750.2	758.5	764.0	769.5	772.3	772.3
55°	700.7	709.0	714.5	721.3	725.5	728.2	731.0	731.0
57.5°	667.7	673.2	678.7	682.8	685.5	688.3	691.1	689.7
60°	634.6	638.7	642.9	645.6	648.4	651.1	652.5	652.5
62.5°	601.6	603.0	604.3	609.8	612.6	614.0	615.3	615.3
65°	568.5	568.5	569.9	574.0	576.8	579.6	580.9	580.9
67.5°	532.7	534.1	535.5	539.6	541.0	543.8	546.5	546.5
70°	497.0	498.3	498.3	502.5	503.8	506.6	509.3	509.3
72.5°	462.5	462.5	462.5	465.3	468.0	470.8	473.6	473.6
75°	424.0	424.0	424.0	426.7	426.7	428.1	430.9	429.5
77.5°	382.7	378.6	374.4	373.1	373.1	374.4	375.8	375.8
80°	329.0	323.5	320.7	318.0	316.6	318.0	319.4	318.0
82.5°	272.6	265.7	261.6	260.2	260.2	260.2	261.6	258.8
85°	206.5	199.6	196.9	196.9	195.5	195.5	195.5	196.9
87.5°	123.9	119.8	115.6	117.0	115.6	114.3	115.6	118.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)