

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: P188499

Luminaire Tested: **24SR-LD2-48-C-UNV-L840-CD1-MR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188499  
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-LD2-48-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: 2962.0 lumens  
Efficiency: N/A  
Efficacy: 77.5 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

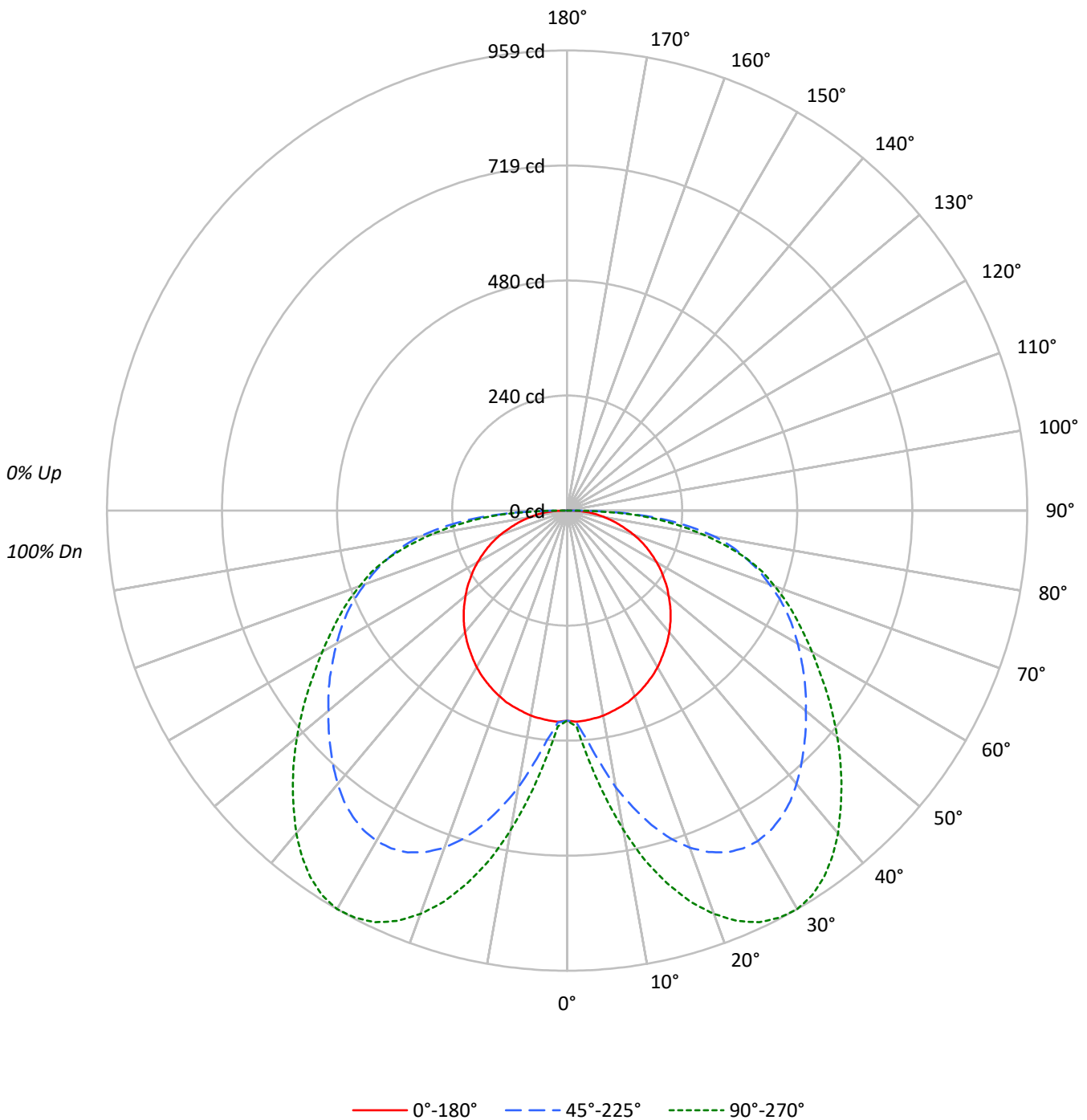
Input Watts (W): 38.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	589	589	589
5°	593	648	706
10°	593	800	923
15°	591	944	1119
20°	589	1070	1281
25°	587	1167	1405
30°	586	1235	1490
35°	582	1279	1532
40°	581	1307	1542
45°	580	1328	1538
50°	578	1359	1539
55°	578	1415	1549
60°	579	1493	1587
65°	582	1612	1671
70°	582	1766	1810
75°	582	2011	2018
80°	607	2419	2226
85°	710	3034	2746



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.5	1.6
10°-20°	184.1	6.2
20°-30°	338.6	11.4
30°-40°	451.3	15.2
40°-50°	494.4	16.7
50°-60°	486.2	16.4
60°-70°	441.2	14.9
70°-80°	351.2	11.9
80°-90°	166.5	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°	571.2	19.3
0°-40°	1022.5	34.5
0°-60°	2003.1	67.6
0°-90°	2962.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2962.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	438	438	438	438	438	
5°	439	443	480	511	522	42
15°	424	526	678	772	804	120
25°	396	582	786	904	947	182
35°	354	573	779	894	933	222
45°	305	516	698	782	808	235
55°	246	456	603	649	660	221
65°	183	394	506	517	525	180
75°	112	308	387	384	388	119
85°	46	166	196	178	178	48
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°	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9
2.5°	440.3	440.3	439.1	439.1	439.1	437.9	437.9	439.1	440.3	441.6	442.8
5°	439.1	439.1	439.1	439.1	440.3	445.3	451.5	460.2	467.7	480.1	486.4
7.5°	436.6	436.6	437.9	441.6	451.5	465.2	481.4	500.0	515.0	531.1	546.1
10°	434.1	434.1	436.6	449.0	469.0	492.6	516.2	539.9	561.0	585.9	604.5
12.5°	429.1	429.1	436.6	459.0	488.9	518.7	548.6	579.7	607.0	633.1	659.3
15°	424.2	424.2	439.1	470.2	507.5	543.6	578.4	614.5	646.8	677.9	705.3
17.5°	419.2	420.4	442.8	482.6	523.7	566.0	607.0	645.6	681.7	716.5	747.6
20°	411.7	414.2	445.3	491.3	537.4	584.6	628.2	670.5	710.3	747.6	779.9
22.5°	404.3	409.2	446.6	497.6	548.6	599.6	645.6	689.1	731.4	770.0	803.6
25°	395.6	401.8	447.8	501.3	556.0	608.3	656.8	702.8	746.3	786.1	819.7
27.5°	386.9	395.6	445.3	501.3	558.5	613.2	661.8	709.0	755.0	793.6	829.7
30°	376.9	388.1	441.6	500.0	558.5	612.0	661.8	710.3	755.0	794.9	829.7
32.5°	365.7	380.6	435.4	495.1	553.5	608.3	658.0	705.3	750.1	789.9	823.5
35°	354.5	370.7	427.9	487.6	546.1	599.6	648.1	695.3	738.9	778.7	812.3
37.5°	343.3	362.0	419.2	478.9	534.9	587.1	635.6	682.9	725.2	763.8	794.9
40°	330.9	350.8	408.0	466.5	522.4	572.2	620.7	665.5	706.5	743.9	773.7
42.5°	318.4	339.6	395.6	454.0	507.5	557.3	604.5	648.1	687.9	721.5	748.8
45°	304.8	327.1	383.1	439.1	491.3	541.1	587.1	628.2	666.7	697.8	722.7
47.5°	291.1	314.7	369.4	425.4	476.4	524.9	569.7	609.5	644.3	674.2	697.8
50°	276.1	301.0	355.8	410.5	461.5	508.8	552.3	589.6	623.2	649.3	671.7
52.5°	262.5	288.6	342.1	396.8	446.6	493.8	536.1	571.0	602.0	626.9	645.6
55°	246.3	274.9	329.6	383.1	432.9	478.9	518.7	552.3	580.9	603.3	619.5
57.5°	231.4	261.2	316.0	369.4	418.0	464.0	501.3	533.6	558.5	578.4	593.3
60°	215.2	247.5	302.3	355.8	404.3	449.0	485.1	515.0	538.6	554.8	567.2
62.5°	199.0	232.6	289.8	342.1	389.3	431.6	466.5	493.8	515.0	531.1	538.6
65°	182.9	217.7	274.9	328.4	374.4	414.2	447.8	473.9	492.6	506.3	511.2
67.5°	165.4	202.8	260.0	311.0	357.0	395.6	426.7	451.5	467.7	478.9	481.4
70°	148.0	185.3	242.6	293.6	337.1	373.2	404.3	425.4	441.6	449.0	451.5
72.5°	129.4	167.9	225.1	273.7	314.7	350.8	378.1	400.5	414.2	419.2	419.2
75°	112.0	149.3	205.2	251.3	291.1	324.7	350.8	370.7	383.1	386.9	385.6
77.5°	94.5	131.9	184.1	227.6	263.7	294.8	319.7	338.3	349.5	353.3	352.0
80°	78.4	113.2	159.2	200.3	232.6	261.2	283.6	303.5	313.5	312.2	304.8
82.5°	62.2	92.0	133.1	169.2	197.8	223.9	246.3	258.7	262.5	258.7	251.3
85°	46.0	69.7	103.2	131.9	155.5	176.6	190.3	199.0	200.3	196.5	190.3
87.5°	27.4	41.0	61.0	78.4	95.8	105.7	113.2	119.4	120.7	116.9	114.4
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°	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9
2.5°	444.1	445.3	446.6	449.0	447.8	449.0	449.0	450.3
5°	495.1	502.5	507.5	515.0	515.0	518.7	520.0	522.4
7.5°	557.3	567.2	578.4	589.6	590.9	597.1	599.6	599.6
10°	620.7	634.4	648.1	660.5	664.2	671.7	675.4	675.4
12.5°	677.9	692.9	711.5	725.2	730.2	738.9	743.9	745.1
15°	727.7	746.3	765.0	779.9	788.6	797.3	802.3	803.6
17.5°	770.0	792.4	812.3	827.2	837.1	847.1	853.3	854.6
20°	803.6	828.4	848.3	864.5	875.7	888.1	893.1	894.4
22.5°	829.7	853.3	875.7	893.1	905.6	918.0	924.2	925.5
25°	847.1	872.0	894.4	913.0	926.7	937.9	944.1	946.6
27.5°	857.0	883.2	905.6	923.0	936.7	949.1	955.3	956.6
30°	858.3	884.4	906.8	924.2	937.9	950.3	956.6	959.0
32.5°	852.1	878.2	899.3	916.8	930.4	941.6	947.9	950.3
35°	839.6	864.5	885.7	901.8	914.3	924.2	931.7	932.9
37.5°	822.2	845.9	864.5	879.4	891.9	901.8	908.0	908.0
40°	798.6	821.0	837.1	850.8	863.3	870.7	878.2	878.2
42.5°	772.5	793.6	808.5	821.0	829.7	838.4	843.4	843.4
45°	745.1	762.5	777.4	787.4	796.1	802.3	808.5	808.5
47.5°	717.7	732.7	743.9	753.8	761.3	767.5	772.5	772.5
50°	689.1	702.8	711.5	720.2	726.4	731.4	735.1	735.1
52.5°	660.5	671.7	677.9	685.4	690.4	695.3	697.8	697.8
55°	633.1	640.6	645.6	651.8	655.5	658.0	660.5	660.5
57.5°	603.3	608.3	613.2	617.0	619.5	622.0	624.4	623.2
60°	573.4	577.2	580.9	583.4	585.9	588.4	589.6	589.6
62.5°	543.6	544.8	546.1	551.0	553.5	554.8	556.0	556.0
65°	513.7	513.7	515.0	518.7	521.2	523.7	524.9	524.9
67.5°	481.4	482.6	483.9	487.6	488.9	491.3	493.8	493.8
70°	449.0	450.3	450.3	454.0	455.3	457.8	460.2	460.2
72.5°	418.0	418.0	418.0	420.4	422.9	425.4	427.9	427.9
75°	383.1	383.1	383.1	385.6	385.6	386.9	389.3	388.1
77.5°	345.8	342.1	338.3	337.1	337.1	338.3	339.6	339.6
80°	297.3	292.3	289.8	287.3	286.1	287.3	288.6	287.3
82.5°	246.3	240.1	236.3	235.1	235.1	235.1	236.3	233.9
85°	186.6	180.4	177.9	177.9	176.6	176.6	176.6	177.9
87.5°	112.0	108.2	104.5	105.7	104.5	103.2	104.5	107.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)