

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: P188539

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
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-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3018.0 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

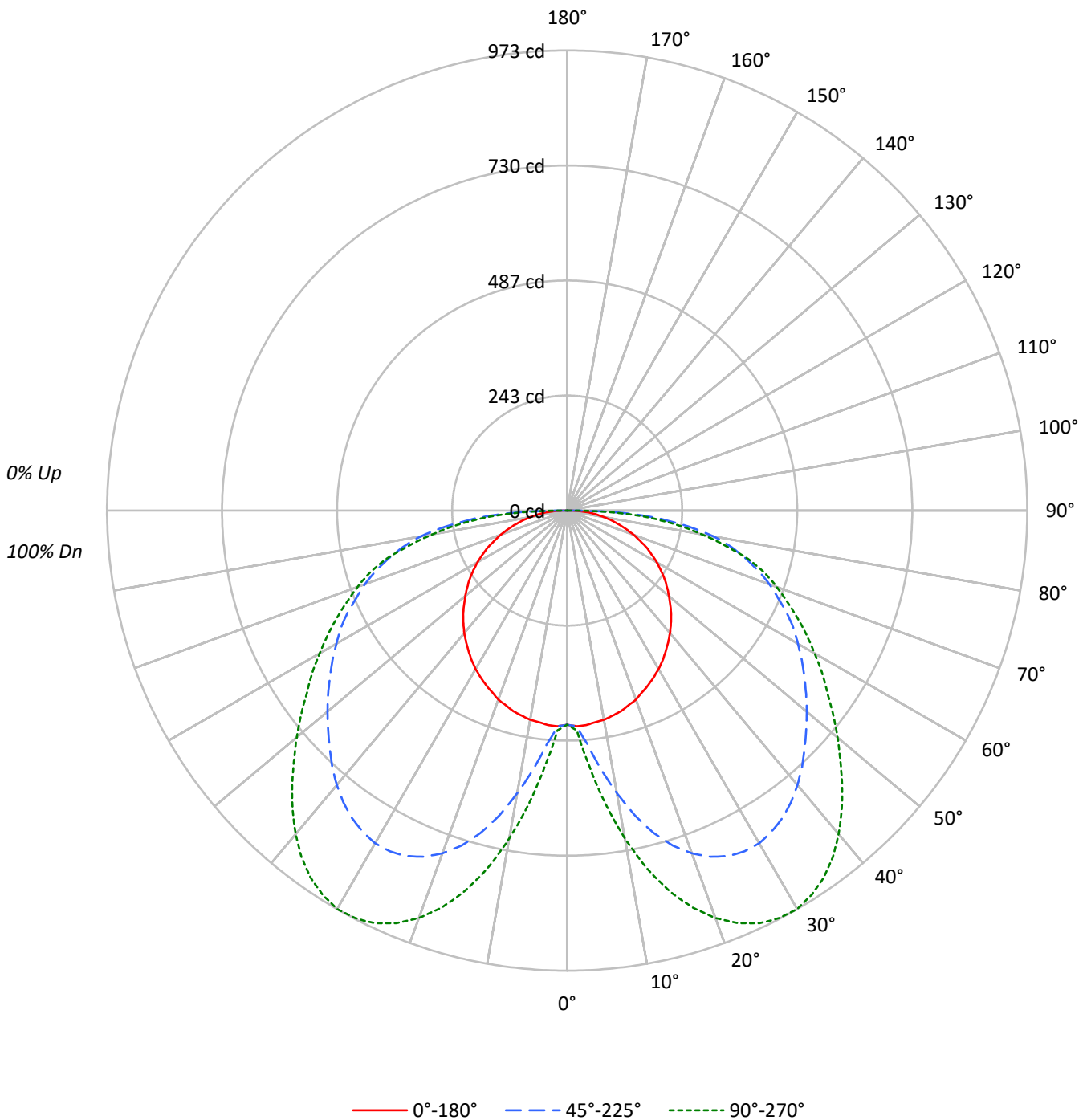
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	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°	609	609	609
5°	615	670	734
10°	613	829	962
15°	612	982	1159
20°	609	1104	1313
25°	604	1197	1429
30°	601	1262	1511
35°	597	1304	1555
40°	594	1330	1569
45°	592	1351	1564
50°	588	1385	1562
55°	589	1436	1576
60°	589	1516	1627
65°	590	1632	1711
70°	587	1791	1854
75°	588	2031	2063
80°	607	2438	2245
85°	710	3034	2726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	1.7
10°-20°	190.5	6.3
20°-30°	346.6	11.5
30°-40°	459.8	15.2
40°-50°	503.7	16.7
50°-60°	495.1	16.4
60°-70°	449.1	14.9
70°-80°	355.9	11.8
80°-90°	166.8	5.5
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°	587.5	19.5
0°-40°	1047.3	34.7
0°-60°	2046.1	67.8
0°-90°	3018.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3018.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	455	458	496	531	544	43
15°	439	545	705	800	832	124
25°	407	601	806	920	963	188
35°	363	588	794	906	947	227
45°	311	529	710	796	822	240
55°	251	464	612	660	672	224
65°	185	400	512	527	537	183
75°	113	310	391	391	397	120
85°	46	167	196	177	177	47
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°	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8
2.5°	456.5	455.3	455.3	455.3	454.0	454.0	454.0	455.3	455.3	456.5	459.0
5°	455.3	454.0	454.0	454.0	456.5	460.2	467.7	476.4	486.3	496.3	507.5
7.5°	451.5	451.5	451.5	455.3	466.4	481.4	500.0	518.7	534.9	552.3	568.4
10°	449.0	449.0	451.5	464.0	486.3	511.2	536.1	561.0	583.4	607.0	629.4
12.5°	444.1	444.1	451.5	475.2	506.3	538.6	569.7	600.8	630.6	659.2	684.1
15°	439.1	439.1	455.3	488.8	526.2	564.7	602.0	638.1	672.9	705.3	733.9
17.5°	431.6	432.9	457.7	498.8	543.6	587.1	628.1	669.2	706.5	742.6	772.4
20°	425.4	427.9	460.2	507.5	557.2	605.8	651.8	694.1	733.9	771.2	803.5
22.5°	415.4	420.4	461.5	513.7	567.2	619.4	666.7	711.5	753.8	792.3	824.7
25°	406.7	413.0	460.2	516.2	574.7	628.1	676.7	722.7	766.2	806.0	839.6
27.5°	396.8	406.7	459.0	517.4	577.2	631.9	681.6	728.9	772.4	812.2	847.1
30°	386.8	399.3	455.3	516.2	575.9	630.6	680.4	728.9	772.4	812.2	845.8
32.5°	375.6	389.3	447.8	510.0	570.9	624.4	674.2	721.4	766.2	804.8	838.4
35°	363.2	379.4	439.1	501.3	561.0	614.5	663.0	710.2	753.8	793.6	825.9
37.5°	350.8	369.4	429.1	491.3	549.8	602.0	649.3	696.6	738.9	777.4	808.5
40°	338.3	358.2	417.9	478.9	536.1	587.1	634.4	680.4	720.2	757.5	786.1
42.5°	324.6	347.0	405.5	465.2	519.9	569.7	617.0	661.7	700.3	735.1	762.5
45°	311.0	333.4	391.8	450.3	505.0	552.3	598.3	641.8	677.9	710.2	736.4
47.5°	296.0	320.9	379.4	435.4	487.6	536.1	580.9	620.7	656.8	685.4	710.2
50°	281.1	307.2	364.5	420.4	471.4	518.7	562.2	600.8	634.4	661.7	682.9
52.5°	266.2	293.6	350.8	405.5	456.5	502.5	544.8	580.9	612.0	636.9	658.0
55°	251.3	279.9	337.1	390.6	441.6	486.3	527.4	561.0	590.8	612.0	629.4
57.5°	235.1	266.2	323.4	376.9	426.6	471.4	510.0	542.3	569.7	588.3	603.3
60°	218.9	251.3	308.5	363.2	411.7	455.3	492.6	523.7	547.3	563.5	577.2
62.5°	201.5	236.3	294.8	348.3	396.8	439.1	473.9	501.3	524.9	539.8	547.3
65°	185.3	221.4	279.9	333.4	380.6	420.4	454.0	480.1	500.0	512.5	518.7
67.5°	166.7	205.2	263.7	317.2	362.0	400.5	431.6	456.5	473.9	482.6	487.6
70°	149.3	189.1	246.3	298.5	340.8	378.1	408.0	431.6	446.5	455.3	456.5
72.5°	130.6	171.7	228.9	278.6	319.7	354.5	383.1	404.3	416.7	424.2	425.4
75°	113.2	153.0	207.7	255.0	293.6	325.9	353.3	373.2	385.6	390.6	390.6
77.5°	95.8	133.1	185.3	230.1	266.2	296.0	320.9	340.8	350.8	355.7	355.7
80°	78.4	114.4	161.7	202.7	235.1	262.5	287.3	304.7	314.7	314.7	307.2
82.5°	62.2	93.3	134.3	171.7	199.0	223.9	247.5	258.7	261.2	258.7	252.5
85°	46.0	70.9	104.5	133.1	158.0	175.4	190.3	197.8	199.0	196.5	191.6
87.5°	26.1	41.0	59.7	78.4	94.5	103.2	115.7	118.2	118.2	121.9	115.7
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°	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8
2.5°	460.2	461.5	461.5	465.2	465.2	466.4	465.2	465.2
5°	515.0	519.9	527.4	534.9	537.3	542.3	541.1	543.6
7.5°	580.9	590.8	602.0	612.0	617.0	621.9	623.2	626.9
10°	646.8	659.2	672.9	686.6	694.1	697.8	702.8	704.0
12.5°	704.0	722.7	736.4	751.3	761.2	766.2	771.2	773.7
15°	756.3	774.9	792.3	808.5	818.5	825.9	830.9	832.1
17.5°	796.1	817.2	835.9	853.3	863.2	871.9	876.9	879.4
20°	827.2	850.8	869.5	886.9	898.1	908.0	915.5	916.7
22.5°	849.6	873.2	894.3	911.7	925.4	935.4	941.6	944.1
25°	865.7	890.6	911.7	929.2	942.8	954.0	960.3	962.7
27.5°	873.2	899.3	921.7	937.9	951.6	962.7	970.2	971.5
30°	874.4	899.3	921.7	939.1	952.8	964.0	970.2	972.7
32.5°	865.7	891.8	914.2	930.4	944.1	955.3	961.5	962.7
35°	853.3	876.9	898.1	914.2	927.9	937.9	944.1	946.6
37.5°	834.6	857.0	876.9	891.8	904.3	914.2	920.5	922.9
40°	812.2	833.4	852.0	865.7	876.9	885.6	890.6	893.1
42.5°	786.1	806.0	823.4	834.6	845.8	853.3	857.0	859.5
45°	758.8	777.4	791.1	801.0	811.0	817.2	820.9	822.2
47.5°	730.1	746.3	757.5	766.2	773.7	779.9	783.6	783.6
50°	701.5	715.2	723.9	732.6	738.9	742.6	745.1	746.3
52.5°	672.9	684.1	690.3	697.8	702.8	706.5	709.0	709.0
55°	643.1	651.8	656.8	663.0	668.0	670.4	672.9	671.7
57.5°	614.5	620.7	624.4	629.4	633.1	635.6	638.1	639.3
60°	584.6	589.6	590.8	595.8	599.5	602.0	603.3	604.5
62.5°	553.5	557.2	559.7	562.2	566.0	568.4	569.7	570.9
65°	522.4	524.9	524.9	529.9	533.6	534.9	536.1	537.3
67.5°	490.1	491.3	492.6	496.3	500.0	501.3	503.8	503.8
70°	457.7	457.7	459.0	462.7	466.4	467.7	470.2	471.4
72.5°	424.2	425.4	425.4	429.1	432.9	435.4	436.6	437.8
75°	389.3	389.3	390.6	391.8	393.1	394.3	394.3	396.8
77.5°	352.0	347.0	344.5	342.1	343.3	343.3	342.1	343.3
80°	299.8	293.6	289.8	288.6	289.8	288.6	288.6	289.8
82.5°	246.3	238.8	236.3	235.1	235.1	235.1	233.8	236.3
85°	185.3	180.4	177.9	175.4	176.6	176.6	175.4	176.6
87.5°	111.9	109.5	107.0	104.5	105.7	104.5	103.2	107.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)