

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: P188679

Luminaire Tested: **24SR-LD2-29-C-UNV-L840-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33587)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-29-C-UNV-L840-CD1-TB-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1972.0 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 2.07 / 1.9
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

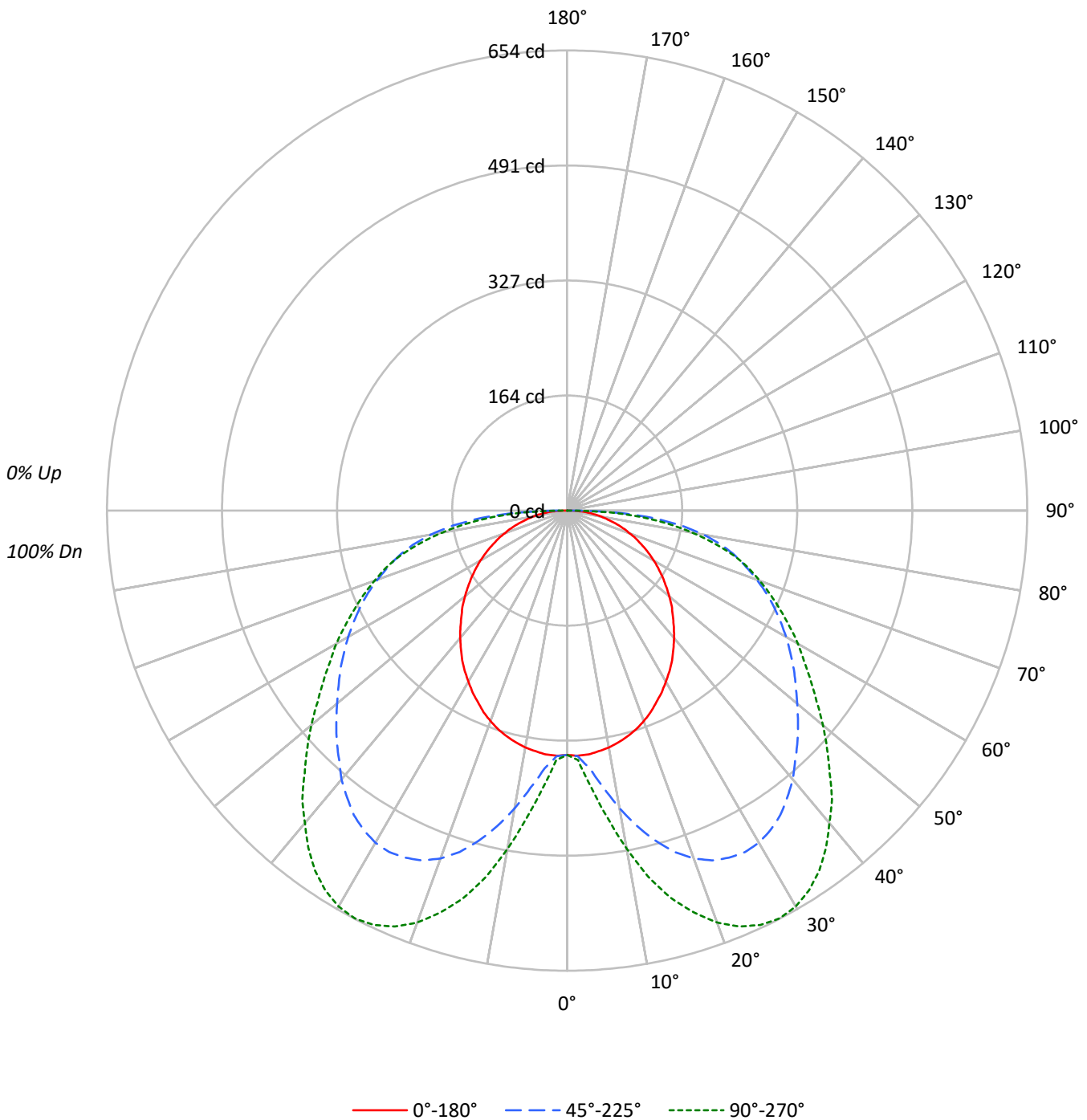
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	103	98	93	89	94	90	86	90	86	83	86	83	81	79
2	95	86	78	71	93	84	77	70	80	74	69	77	72	67	74	69	65	63
3	86	74	65	58	83	73	64	57	69	62	56	67	60	55	64	59	54	52
4	78	65	55	48	76	64	54	47	61	53	47	59	52	46	56	50	45	43
5	72	58	48	40	69	56	47	40	54	46	40	52	45	39	50	44	39	36
6	66	51	42	35	64	50	41	35	49	40	34	47	39	34	45	39	34	31
7	61	46	37	30	59	45	37	30	44	36	30	42	35	30	41	34	29	27
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24
9	53	38	30	24	51	38	29	24	37	29	24	35	28	23	34	28	23	21
10	49	35	27	21	48	35	27	21	34	26	21	33	26	21	32	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	467	467	467
5°	470	497	534
10°	467	587	667
15°	462	677	794
20°	456	753	892
25°	446	808	965
30°	436	847	1009
35°	427	868	1026
40°	415	876	1019
45°	404	881	1004
50°	397	893	993
55°	389	923	992
60°	383	967	1020
65°	377	1033	1064
70°	373	1127	1145
75°	371	1285	1273
80°	382	1527	1398
85°	421	1896	1638



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.0	1.9
10°-20°	133.5	6.8
20°-30°	237.9	12.1
30°-40°	308.4	15.6
40°-50°	328.9	16.7
50°-60°	316.4	16.0
60°-70°	283.1	14.4
70°-80°	222.9	11.3
80°-90°	103.9	5.3
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°	408.4	20.7
0°-40°	716.8	36.4
0°-60°	1362.1	69.1
0°-90°	1972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1972.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	347	347	347	347	347	
5°	348	352	368	387	396	33
15°	332	395	486	549	570	94
25°	300	420	544	626	650	138
35°	260	399	528	604	625	162
45°	212	348	463	517	528	164
55°	166	299	393	419	423	148
65°	118	254	324	331	334	117
75°	71	195	247	244	245	75
85°	27	103	123	109	106	29
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°	347.2	347.2	347.2	347.2	347.2	347.2	347.2	347.2	347.2	347.2	347.2
2.5°	348.7	348.7	348.0	348.0	348.7	348.7	348.7	348.7	349.5	349.5	350.2
5°	348.0	347.2	347.2	348.7	351.0	353.3	355.5	359.3	362.4	367.7	372.2
7.5°	344.9	344.9	346.4	350.2	355.5	363.1	371.5	380.6	388.9	397.2	407.1
10°	341.9	341.9	345.7	352.5	363.1	376.8	390.4	404.1	416.9	429.8	440.4
12.5°	337.3	338.1	344.2	356.3	373.7	392.7	410.1	427.6	445.0	459.4	475.3
15°	332.0	333.6	342.7	360.8	383.6	406.3	427.6	448.8	468.5	485.9	502.6
17.5°	326.0	328.2	341.1	364.6	391.2	416.9	443.5	467.7	489.0	508.7	527.6
20°	318.4	322.2	339.6	367.7	397.2	426.8	454.8	480.6	504.9	526.1	547.3
22.5°	310.1	314.6	336.6	368.4	401.0	432.9	463.9	490.5	516.3	538.2	560.2
25°	300.2	307.0	333.6	367.7	402.5	436.7	468.5	495.8	522.3	544.3	568.6
27.5°	291.1	298.7	328.2	364.6	401.0	436.7	468.5	497.3	524.6	547.3	570.8
30°	280.5	290.3	322.9	360.1	397.2	432.9	465.5	494.3	520.8	545.1	569.3
32.5°	270.6	281.2	314.6	352.5	390.4	426.0	459.4	487.4	514.0	538.2	561.7
35°	260.0	270.6	305.5	344.9	381.3	416.9	448.8	477.6	503.4	528.4	550.4
37.5°	247.9	260.0	295.7	334.3	369.9	405.6	436.7	464.7	490.5	514.0	535.2
40°	236.5	249.4	284.3	322.9	358.6	392.7	423.0	449.5	474.6	498.8	517.8
42.5°	224.4	238.0	273.7	310.8	345.7	378.3	407.1	434.4	458.6	479.9	498.8
45°	212.3	227.4	262.3	298.7	332.0	364.6	393.4	418.5	442.0	463.2	479.1
47.5°	201.6	216.8	250.2	286.6	319.9	351.0	379.0	403.3	426.0	445.0	460.9
50°	189.5	204.7	238.8	274.4	307.0	338.1	364.6	388.1	409.4	426.8	442.0
52.5°	177.4	194.1	227.4	263.1	295.7	325.2	351.7	374.5	393.4	409.4	422.2
55°	166.0	182.7	216.8	251.7	284.3	313.8	338.9	360.8	379.0	393.4	403.3
57.5°	153.9	172.1	207.0	241.8	273.7	301.7	326.7	347.2	363.9	376.0	384.3
60°	142.5	161.5	197.1	231.2	263.1	291.1	314.6	334.3	348.7	359.3	366.2
62.5°	130.4	150.9	186.5	220.6	251.7	279.7	301.7	319.9	333.6	341.9	346.4
65°	118.3	140.2	175.9	210.0	240.3	266.8	288.1	304.7	316.9	324.5	328.2
67.5°	106.9	129.6	165.3	198.6	228.2	253.2	273.7	289.6	300.2	306.3	307.8
70°	94.8	118.3	153.9	186.5	215.3	238.8	258.5	272.1	282.0	286.6	288.1
72.5°	83.4	106.9	141.8	173.6	200.9	222.9	241.8	255.5	263.8	266.8	266.8
75°	71.3	94.8	128.9	159.2	184.2	206.2	223.6	235.8	243.3	247.1	245.6
77.5°	59.1	82.6	115.2	143.3	166.0	185.7	203.2	214.5	222.1	224.4	222.9
80°	49.3	70.5	99.3	125.1	146.3	164.5	180.4	191.8	198.6	197.1	193.3
82.5°	37.9	57.6	82.6	104.6	123.6	141.0	156.2	165.3	166.8	163.7	159.2
85°	27.3	42.5	62.9	80.4	97.0	109.9	120.5	126.6	126.6	122.8	119.8
87.5°	15.9	25.0	36.4	48.5	56.1	64.4	72.8	74.3	74.3	74.3	70.5
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°	347.2	347.2	347.2	347.2	347.2	347.2	347.2	347.2
2.5°	352.5	353.3	354.0	354.8	355.5	355.5	355.5	354.8
5°	376.8	381.3	385.1	389.7	391.2	392.7	394.2	395.7
7.5°	415.4	421.5	427.6	433.6	437.4	442.0	440.4	440.4
10°	452.6	463.9	470.8	478.3	482.1	486.7	489.0	488.2
12.5°	489.0	501.8	511.7	518.5	524.6	529.1	530.7	532.9
15°	520.0	532.9	545.1	553.4	561.0	565.5	568.6	570.1
17.5°	545.8	558.7	572.3	583.0	589.8	595.8	597.4	598.9
20°	564.8	581.4	594.3	605.7	613.3	619.3	622.4	623.1
22.5°	579.9	595.8	610.3	621.6	630.0	636.8	639.8	639.8
25°	588.3	604.9	620.1	632.2	640.6	646.6	649.7	649.7
27.5°	591.3	608.7	623.1	635.3	644.4	650.4	652.7	653.5
30°	589.0	606.5	620.9	632.2	641.3	646.6	648.9	649.7
32.5°	581.4	598.9	612.5	623.1	631.5	637.5	639.8	639.8
35°	569.3	585.2	598.9	609.5	617.1	621.6	624.7	624.7
37.5°	553.4	569.3	581.4	590.5	597.4	602.7	604.2	604.2
40°	535.2	548.8	560.2	569.3	575.4	579.2	580.7	579.9
42.5°	514.7	527.6	536.7	544.3	549.6	553.4	555.7	557.2
45°	493.5	505.6	514.0	520.0	523.8	526.1	528.4	527.6
47.5°	474.6	482.1	489.7	494.3	498.1	500.3	501.1	501.1
50°	452.6	459.4	465.5	469.3	471.5	473.0	473.0	474.6
52.5°	430.6	436.7	441.2	445.0	446.5	447.3	448.0	447.3
55°	410.9	414.7	417.7	420.7	422.2	423.0	424.5	423.0
57.5°	390.4	393.4	397.2	398.0	399.5	399.5	400.3	399.5
60°	369.9	372.2	373.7	374.5	376.8	377.5	377.5	379.0
62.5°	349.5	350.2	352.5	353.3	354.0	355.5	357.1	356.3
65°	329.0	329.8	330.5	332.0	333.6	335.1	335.1	334.3
67.5°	307.8	308.5	309.3	310.8	312.3	312.3	313.1	313.1
70°	287.3	287.3	288.1	288.8	290.3	291.1	291.9	291.1
72.5°	266.1	266.1	266.1	266.8	267.6	269.1	269.9	269.9
75°	244.1	244.1	244.1	243.3	244.1	245.6	244.9	244.9
77.5°	219.8	217.6	215.3	213.8	214.5	213.8	213.8	213.8
80°	189.5	185.7	182.7	181.2	180.4	181.2	180.4	180.4
82.5°	156.2	152.4	149.3	147.1	147.8	146.3	147.1	145.6
85°	116.0	113.0	109.9	108.4	109.2	109.2	108.4	106.1
87.5°	68.2	64.4	63.7	62.9	63.7	62.9	60.6	61.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)