

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: P188479

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188479
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-LD2-29-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: 1805.0 lumens
Efficiency: N/A
Efficacy: 79.9 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

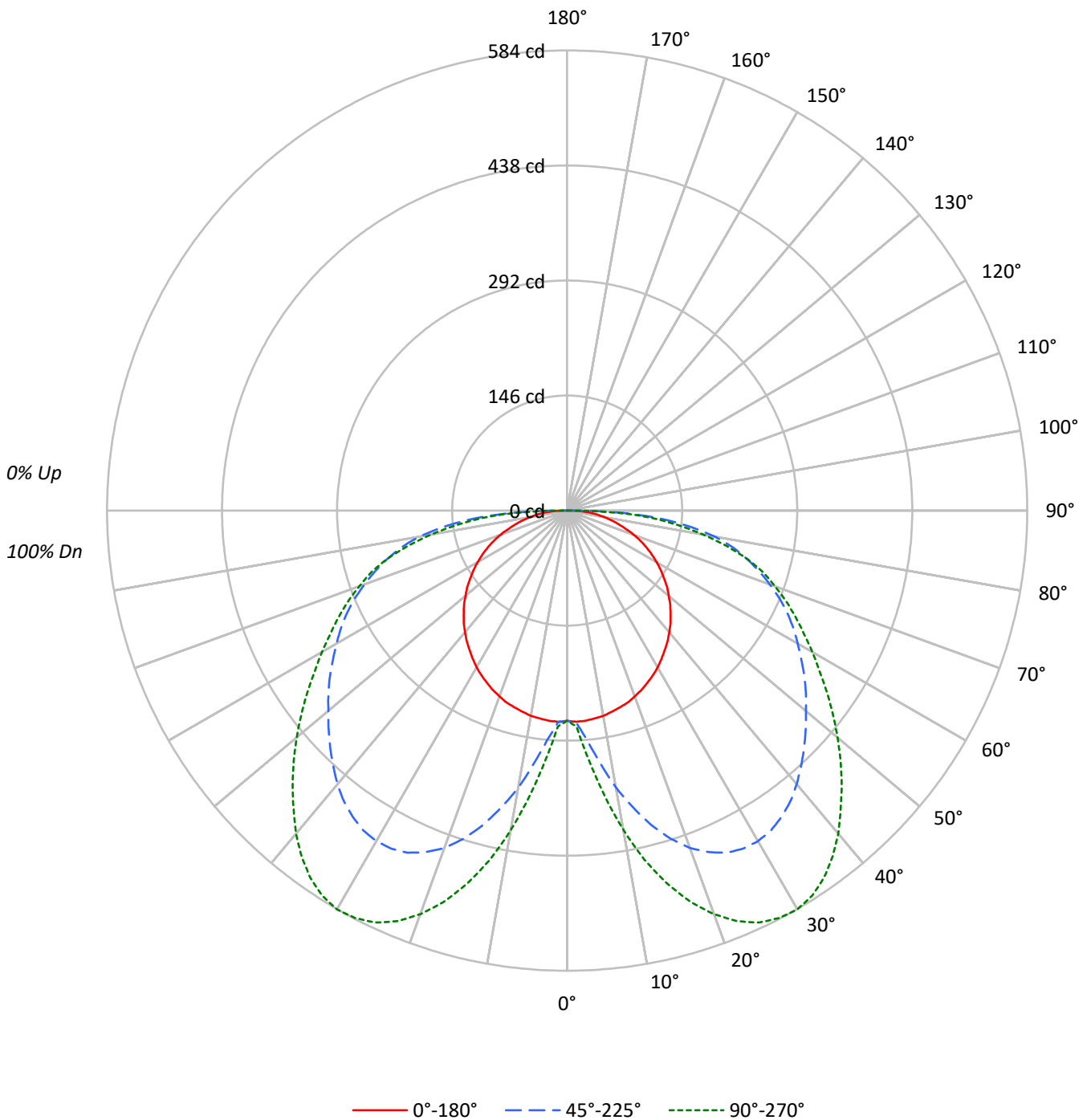
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	359	359	359
5°	361	395	430
10°	361	488	562
15°	360	575	682
20°	359	652	780
25°	358	711	856
30°	357	753	908
35°	355	779	934
40°	354	796	940
45°	353	809	938
50°	352	828	938
55°	352	862	944
60°	353	910	967
65°	355	982	1018
70°	355	1076	1103
75°	355	1225	1229
80°	370	1475	1357
85°	432	1849	1673



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.6	1.6
10°-20°	112.2	6.2
20°-30°	206.3	11.4
30°-40°	275.0	15.2
40°-50°	301.3	16.7
50°-60°	296.3	16.4
60°-70°	268.9	14.9
70°-80°	214.0	11.9
80°-90°	101.5	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°	348.1	19.3
0°-40°	623.1	34.5
0°-60°	1220.6	67.6
0°-90°	1805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	267	267	267	267	267	
5°	268	270	293	312	318	25
15°	258	320	413	471	490	73
25°	241	355	479	551	577	111
35°	216	349	474	545	568	135
45°	186	315	425	477	493	143
55°	150	278	368	395	402	134
65°	111	240	308	315	320	110
75°	68	188	236	234	236	72
85°	28	101	120	108	108	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°	266.8	266.8	266.8	266.8	266.8	266.8	266.8	266.8	266.8	266.8	266.8
2.5°	268.3	268.3	267.6	267.6	267.6	266.8	266.8	267.6	268.3	269.1	269.9
5°	267.6	267.6	267.6	267.6	268.3	271.4	275.2	280.5	285.0	292.6	296.4
7.5°	266.1	266.1	266.8	269.1	275.2	283.5	293.4	304.7	313.8	323.7	332.8
10°	264.5	264.5	266.1	273.6	285.8	300.2	314.6	329.0	341.9	357.0	368.4
12.5°	261.5	261.5	266.1	279.7	297.9	316.1	334.3	353.2	369.9	385.8	401.7
15°	258.5	258.5	267.6	286.5	309.3	331.3	352.5	374.5	394.2	413.1	429.8
17.5°	255.5	256.2	269.9	294.1	319.1	344.9	369.9	393.4	415.4	436.6	455.6
20°	250.9	252.4	271.4	299.4	327.5	356.3	382.8	408.6	432.8	455.6	475.3
22.5°	246.4	249.4	272.1	303.2	334.3	365.4	393.4	419.9	445.7	469.2	489.7
25°	241.0	244.8	272.9	305.5	338.8	370.7	400.2	428.3	454.8	479.1	499.5
27.5°	235.7	241.0	271.4	305.5	340.3	373.7	403.3	432.1	460.1	483.6	505.6
30°	229.7	236.5	269.1	304.7	340.3	372.9	403.3	432.8	460.1	484.4	505.6
32.5°	222.9	232.0	265.3	301.7	337.3	370.7	401.0	429.8	457.1	481.3	501.8
35°	216.0	225.9	260.8	297.1	332.8	365.4	394.9	423.7	450.3	474.5	495.0
37.5°	209.2	220.6	255.5	291.8	325.9	357.8	387.3	416.2	441.9	465.4	484.4
40°	201.6	213.8	248.6	284.3	318.4	348.7	378.2	405.5	430.6	453.3	471.5
42.5°	194.1	206.9	241.0	276.7	309.3	339.6	368.4	394.9	419.2	439.6	456.3
45°	185.7	199.4	233.5	267.6	299.4	329.7	357.8	382.8	406.3	425.2	440.4
47.5°	177.4	191.8	225.1	259.2	290.3	319.9	347.2	371.4	392.7	410.8	425.2
50°	168.3	183.4	216.8	250.1	281.2	310.0	336.6	359.3	379.8	395.7	409.3
52.5°	159.9	175.9	208.5	241.8	272.1	300.9	326.7	347.9	366.9	382.0	393.4
55°	150.1	167.5	200.9	233.5	263.8	291.8	316.1	336.6	354.0	367.6	377.5
57.5°	141.0	159.2	192.5	225.1	254.7	282.7	305.5	325.2	340.3	352.5	361.6
60°	131.1	150.8	184.2	216.8	246.4	273.6	295.6	313.8	328.2	338.1	345.7
62.5°	121.3	141.7	176.6	208.5	237.3	263.0	284.3	300.9	313.8	323.7	328.2
65°	111.4	132.7	167.5	200.1	228.2	252.4	272.9	288.8	300.2	308.5	311.5
67.5°	100.8	123.6	158.4	189.5	217.6	241.0	260.0	275.2	285.0	291.8	293.4
70°	90.2	112.9	147.8	178.9	205.4	227.4	246.4	259.2	269.1	273.6	275.2
72.5°	78.8	102.3	137.2	166.8	191.8	213.8	230.4	244.1	252.4	255.5	255.5
75°	68.2	91.0	125.1	153.1	177.4	197.8	213.8	225.9	233.5	235.7	235.0
77.5°	57.6	80.3	112.2	138.7	160.7	179.6	194.8	206.2	213.0	215.3	214.5
80°	47.8	69.0	97.0	122.0	141.7	159.2	172.8	185.0	191.0	190.3	185.7
82.5°	37.9	56.1	81.1	103.1	120.5	136.4	150.1	157.7	159.9	157.7	153.1
85°	28.0	42.4	62.9	80.3	94.8	107.6	116.0	121.3	122.0	119.8	116.0
87.5°	16.7	25.0	37.1	47.8	58.4	64.4	69.0	72.8	73.5	71.3	69.7
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°	266.8	266.8	266.8	266.8	266.8	266.8	266.8	266.8
2.5°	270.6	271.4	272.1	273.6	272.9	273.6	273.6	274.4
5°	301.7	306.2	309.3	313.8	313.8	316.1	316.9	318.4
7.5°	339.6	345.7	352.5	359.3	360.1	363.8	365.4	365.4
10°	378.2	386.6	394.9	402.5	404.8	409.3	411.6	411.6
12.5°	413.1	422.2	433.6	441.9	445.0	450.3	453.3	454.1
15°	443.4	454.8	466.2	475.3	480.6	485.9	488.9	489.7
17.5°	469.2	482.9	495.0	504.1	510.1	516.2	520.0	520.8
20°	489.7	504.8	517.0	526.8	533.6	541.2	544.3	545.0
22.5°	505.6	520.0	533.6	544.3	551.8	559.4	563.2	564.0
25°	516.2	531.4	545.0	556.4	564.7	571.5	575.3	576.8
27.5°	522.3	538.2	551.8	562.4	570.8	578.4	582.2	582.9
30°	523.0	538.9	552.6	563.2	571.5	579.1	582.9	584.4
32.5°	519.2	535.2	548.0	558.7	567.0	573.8	577.6	579.1
35°	511.7	526.8	539.7	549.6	557.1	563.2	567.8	568.5
37.5°	501.0	515.5	526.8	535.9	543.5	549.6	553.4	553.4
40°	486.6	500.3	510.1	518.5	526.1	530.6	535.2	535.2
42.5°	470.7	483.6	492.7	500.3	505.6	510.9	513.9	513.9
45°	454.1	464.7	473.8	479.8	485.1	488.9	492.7	492.7
47.5°	437.4	446.5	453.3	459.4	463.9	467.7	470.7	470.7
50°	419.9	428.3	433.6	438.9	442.7	445.7	448.0	448.0
52.5°	402.5	409.3	413.1	417.7	420.7	423.7	425.2	425.2
55°	385.8	390.4	393.4	397.2	399.5	401.0	402.5	402.5
57.5°	367.6	370.7	373.7	376.0	377.5	379.0	380.5	379.8
60°	349.4	351.7	354.0	355.5	357.0	358.5	359.3	359.3
62.5°	331.3	332.0	332.8	335.8	337.3	338.1	338.8	338.8
65°	313.1	313.1	313.8	316.1	317.6	319.1	319.9	319.9
67.5°	293.4	294.1	294.9	297.1	297.9	299.4	300.9	300.9
70°	273.6	274.4	274.4	276.7	277.4	278.9	280.5	280.5
72.5°	254.7	254.7	254.7	256.2	257.7	259.2	260.8	260.8
75°	233.5	233.5	233.5	235.0	235.0	235.7	237.3	236.5
77.5°	210.7	208.5	206.2	205.4	205.4	206.2	206.9	206.9
80°	181.2	178.1	176.6	175.1	174.3	175.1	175.9	175.1
82.5°	150.1	146.3	144.0	143.3	143.3	143.3	144.0	142.5
85°	113.7	109.9	108.4	108.4	107.6	107.6	107.6	108.4
87.5°	68.2	65.9	63.7	64.4	63.7	62.9	63.7	65.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)