

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: P188678

Luminaire Tested: **24SR-LD2-29-C-UNV-L835-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188678
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-L835-CD1-TB-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1933.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 2.07 / 1.9
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

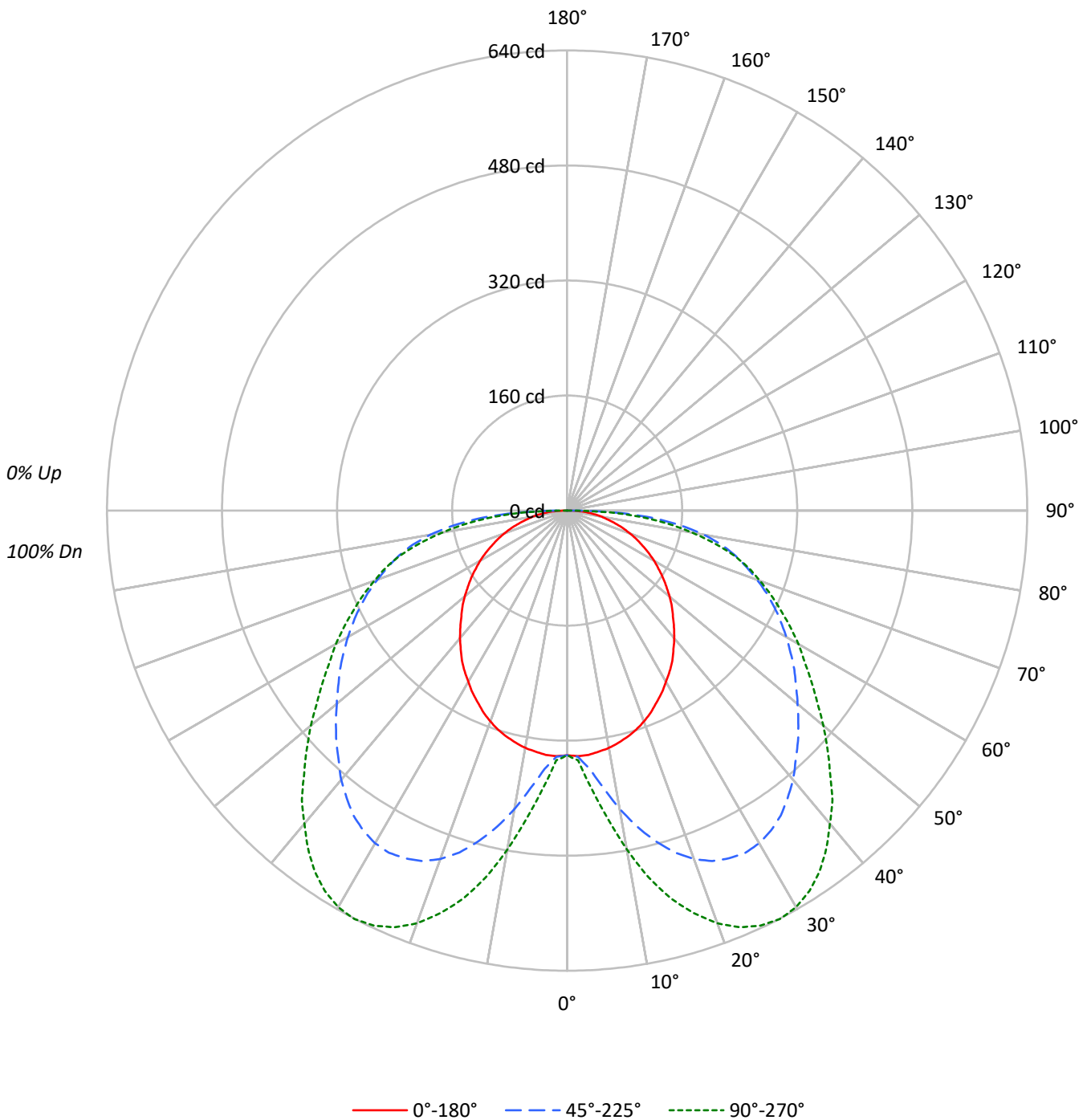
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	458	458	458
5°	461	487	524
10°	458	576	654
15°	453	663	778
20°	447	738	875
25°	437	792	945
30°	427	830	989
35°	419	851	1006
40°	407	859	999
45°	396	864	984
50°	389	876	974
55°	382	905	973
60°	376	948	1000
65°	369	1012	1043
70°	365	1105	1122
75°	363	1259	1248
80°	374	1497	1371
85°	414	1859	1606



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	1.9
10°-20°	130.9	6.8
20°-30°	233.2	12.1
30°-40°	302.3	15.6
40°-50°	322.4	16.7
50°-60°	310.1	16.0
60°-70°	277.5	14.4
70°-80°	218.5	11.3
80°-90°	101.9	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°	400.3	20.7
0°-40°	702.7	36.4
0°-60°	1335.2	69.1
0°-90°	1933.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1933.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	340	340	340	340	340	
5°	341	345	360	380	388	32
15°	326	387	476	538	559	92
25°	294	411	534	614	637	136
35°	255	391	518	592	612	159
45°	208	341	454	507	517	161
55°	163	293	386	411	415	145
65°	116	249	318	325	328	115
75°	70	191	242	239	240	74
85°	27	101	120	107	104	28
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°	340.3	340.3	340.3	340.3	340.3	340.3	340.3	340.3	340.3	340.3	340.3
2.5°	341.8	341.8	341.1	341.1	341.8	341.8	341.8	341.8	342.6	342.6	343.3
5°	341.1	340.3	340.3	341.8	344.0	346.3	348.5	352.2	355.2	360.4	364.9
7.5°	338.1	338.1	339.6	343.3	348.5	355.9	364.1	373.0	381.2	389.4	399.0
10°	335.1	335.1	338.8	345.5	355.9	369.3	382.7	396.1	408.7	421.3	431.7
12.5°	330.7	331.4	337.4	349.3	366.3	384.9	402.0	419.1	436.2	450.3	465.9
15°	325.5	327.0	335.9	353.7	376.0	398.3	419.1	439.9	459.2	476.3	492.7
17.5°	319.5	321.8	334.4	357.4	383.4	408.7	434.7	458.5	479.3	498.6	517.2
20°	312.1	315.8	332.9	360.4	389.4	418.4	445.9	471.1	494.9	515.7	536.5
22.5°	303.9	308.4	329.9	361.1	393.1	424.3	454.8	480.8	506.0	527.6	549.1
25°	294.3	300.9	327.0	360.4	394.6	428.0	459.2	486.0	512.0	533.5	557.3
27.5°	285.3	292.8	321.8	357.4	393.1	428.0	459.2	487.5	514.2	536.5	559.5
30°	274.9	284.6	316.6	353.0	389.4	424.3	456.3	484.5	510.5	534.3	558.1
32.5°	265.3	275.7	308.4	345.5	382.7	417.6	450.3	477.8	503.8	527.6	550.6
35°	254.9	265.3	299.5	338.1	373.8	408.7	439.9	468.1	493.4	517.9	539.5
37.5°	243.0	254.9	289.8	327.7	362.6	397.6	428.0	455.5	480.8	503.8	524.6
40°	231.8	244.5	278.7	316.6	351.5	384.9	414.6	440.6	465.2	489.0	507.5
42.5°	220.0	233.3	268.3	304.7	338.8	370.8	399.0	425.8	449.6	470.4	489.0
45°	208.1	222.9	257.1	292.8	325.5	357.4	385.7	410.2	433.2	454.0	469.6
47.5°	197.7	212.5	245.2	280.9	313.6	344.0	371.5	395.3	417.6	436.2	451.8
50°	185.8	200.6	234.1	269.0	300.9	331.4	357.4	380.5	401.3	418.4	433.2
52.5°	173.9	190.2	222.9	257.9	289.8	318.8	344.8	367.1	385.7	401.3	413.9
55°	162.7	179.1	212.5	246.7	278.7	307.6	332.2	353.7	371.5	385.7	395.3
57.5°	150.8	168.7	202.9	237.0	268.3	295.7	320.3	340.3	356.7	368.6	376.7
60°	139.7	158.3	193.2	226.6	257.9	285.3	308.4	327.7	341.8	352.2	358.9
62.5°	127.8	147.9	182.8	216.2	246.7	274.2	295.7	313.6	327.0	335.1	339.6
65°	115.9	137.5	172.4	205.8	235.6	261.6	282.4	298.7	310.6	318.0	321.8
67.5°	104.8	127.1	162.0	194.7	223.7	248.2	268.3	283.9	294.3	300.2	301.7
70°	92.9	115.9	150.8	182.8	211.0	234.1	253.4	266.8	276.4	280.9	282.4
72.5°	81.7	104.8	139.0	170.2	196.9	218.5	237.0	250.4	258.6	261.6	261.6
75°	69.9	92.9	126.3	156.0	180.6	202.1	219.2	231.1	238.5	242.2	240.8
77.5°	58.0	81.0	112.9	140.4	162.7	182.1	199.1	210.3	217.7	220.0	218.5
80°	48.3	69.1	97.3	122.6	143.4	161.2	176.9	188.0	194.7	193.2	189.5
82.5°	37.2	56.5	81.0	102.5	121.1	138.2	153.1	162.0	163.5	160.5	156.0
85°	26.8	41.6	61.7	78.8	95.1	107.7	118.2	124.1	124.1	120.4	117.4
87.5°	15.6	24.5	35.7	47.6	55.0	63.2	71.3	72.8	72.8	72.8	69.1
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°	340.3	340.3	340.3	340.3	340.3	340.3	340.3	340.3
2.5°	345.5	346.3	347.0	347.8	348.5	348.5	348.5	347.8
5°	369.3	373.8	377.5	381.9	383.4	384.9	386.4	387.9
7.5°	407.2	413.2	419.1	425.0	428.8	433.2	431.7	431.7
10°	443.6	454.8	461.5	468.9	472.6	477.1	479.3	478.5
12.5°	479.3	491.9	501.6	508.3	514.2	518.7	520.2	522.4
15°	509.8	522.4	534.3	542.5	549.9	554.3	557.3	558.8
17.5°	535.0	547.7	561.0	571.4	578.1	584.1	585.6	587.0
20°	553.6	569.9	582.6	593.7	601.2	607.1	610.1	610.8
22.5°	568.5	584.1	598.2	609.3	617.5	624.2	627.2	627.2
25°	576.6	593.0	607.8	619.7	627.9	633.9	636.8	636.8
27.5°	579.6	596.7	610.8	622.7	631.6	637.6	639.8	640.5
30°	577.4	594.5	608.6	619.7	628.7	633.9	636.1	636.8
32.5°	569.9	587.0	600.4	610.8	619.0	624.9	627.2	627.2
35°	558.1	573.7	587.0	597.4	604.9	609.3	612.3	612.3
37.5°	542.5	558.1	569.9	578.9	585.6	590.8	592.2	592.2
40°	524.6	538.0	549.1	558.1	564.0	567.7	569.2	568.5
42.5°	504.6	517.2	526.1	533.5	538.7	542.5	544.7	546.2
45°	483.7	495.6	503.8	509.8	513.5	515.7	517.9	517.2
47.5°	465.2	472.6	480.0	484.5	488.2	490.4	491.2	491.2
50°	443.6	450.3	456.3	460.0	462.2	463.7	463.7	465.2
52.5°	422.1	428.0	432.5	436.2	437.7	438.4	439.2	438.4
55°	402.8	406.5	409.4	412.4	413.9	414.6	416.1	414.6
57.5°	382.7	385.7	389.4	390.1	391.6	391.6	392.3	391.6
60°	362.6	364.9	366.3	367.1	369.3	370.1	370.1	371.5
62.5°	342.6	343.3	345.5	346.3	347.0	348.5	350.0	349.3
65°	322.5	323.2	324.0	325.5	327.0	328.4	328.4	327.7
67.5°	301.7	302.4	303.2	304.7	306.2	306.2	306.9	306.9
70°	281.6	281.6	282.4	283.1	284.6	285.3	286.1	285.3
72.5°	260.8	260.8	260.8	261.6	262.3	263.8	264.5	264.5
75°	239.3	239.3	239.3	238.5	239.3	240.8	240.0	240.0
77.5°	215.5	213.3	211.0	209.6	210.3	209.6	209.6	209.6
80°	185.8	182.1	179.1	177.6	176.9	177.6	176.9	176.9
82.5°	153.1	149.4	146.4	144.2	144.9	143.4	144.2	142.7
85°	113.7	110.7	107.7	106.3	107.0	107.0	106.3	104.0
87.5°	66.9	63.2	62.4	61.7	62.4	61.7	59.4	60.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)