

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: P188677

Luminaire Tested: **24SR-LD2-29-C-UNV-L830-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188677
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-L830-CD1-TB-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1875.0 lumens
Efficiency: N/A
Efficacy: 83.0 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

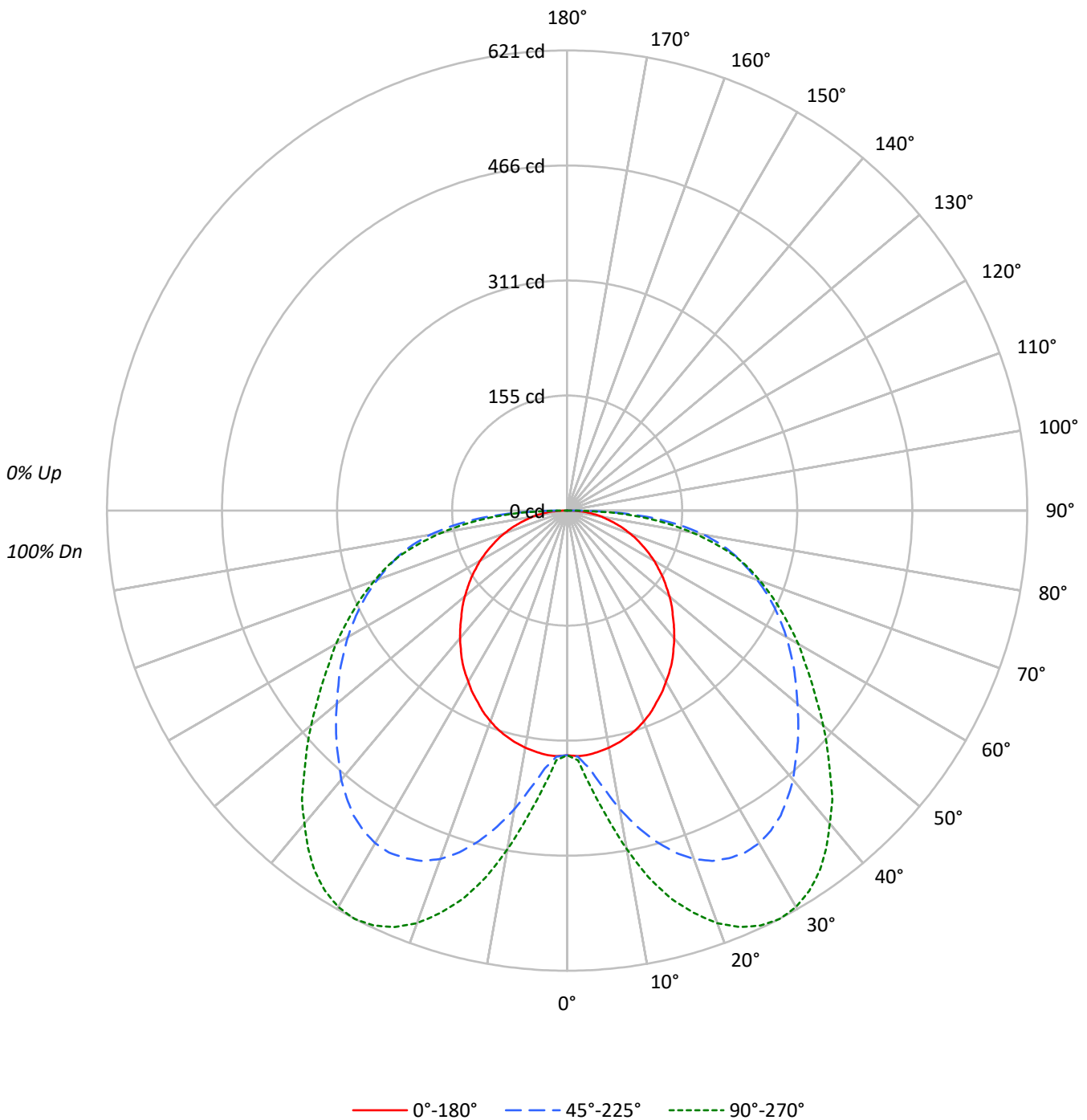
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	444	444	444
5°	447	472	508
10°	444	558	634
15°	440	644	755
20°	433	716	848
25°	424	768	917
30°	414	805	960
35°	406	825	976
40°	395	833	968
45°	384	838	955
50°	377	849	944
55°	370	878	943
60°	365	920	970
65°	358	982	1012
70°	354	1072	1089
75°	352	1222	1210
80°	363	1452	1329
85°	400	1803	1558



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.2	1.9
10°-20°	127.0	6.8
20°-30°	226.2	12.1
30°-40°	293.3	15.6
40°-50°	312.7	16.7
50°-60°	300.8	16.0
60°-70°	269.2	14.4
70°-80°	211.9	11.3
80°-90°	98.8	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°	388.3	20.7
0°-40°	681.6	36.4
0°-60°	1295.1	69.1
0°-90°	1875.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1875.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	331	335	350	368	376	31
15°	316	376	462	522	542	89
25°	285	399	518	595	618	132
35°	247	380	502	574	594	154
45°	202	331	440	492	502	156
55°	158	284	374	399	402	141
65°	112	241	308	315	318	112
75°	68	186	235	232	233	72
85°	26	98	117	104	101	27
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°	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1
2.5°	331.6	331.6	330.8	330.8	331.6	331.6	331.6	331.6	332.3	332.3	333.0
5°	330.8	330.1	330.1	331.6	333.7	335.9	338.1	341.7	344.5	349.6	353.9
7.5°	328.0	328.0	329.4	333.0	338.1	345.3	353.2	361.8	369.8	377.7	387.1
10°	325.1	325.1	328.7	335.2	345.3	358.2	371.2	384.2	396.4	408.7	418.8
12.5°	320.8	321.5	327.2	338.8	355.3	373.4	389.9	406.5	423.1	436.8	451.9
15°	315.7	317.1	325.8	343.1	364.7	386.3	406.5	426.7	445.4	462.0	477.9
17.5°	309.9	312.1	324.4	346.7	371.9	396.4	421.7	444.7	464.9	483.6	501.7
20°	302.7	306.3	322.9	349.6	377.7	405.8	432.5	457.0	480.0	500.2	520.4
22.5°	294.8	299.1	320.0	350.3	381.3	411.6	441.1	466.4	490.9	511.8	532.7
25°	285.4	291.9	317.1	349.6	382.7	415.2	445.4	471.4	496.6	517.5	540.6
27.5°	276.8	284.0	312.1	346.7	381.3	415.2	445.4	472.8	498.8	520.4	542.8
30°	266.7	276.1	307.1	342.4	377.7	411.6	442.6	470.0	495.2	518.2	541.3
32.5°	257.3	267.4	299.1	335.2	371.2	405.1	436.8	463.5	488.7	511.8	534.1
35°	247.2	257.3	290.5	328.0	362.6	396.4	426.7	454.1	478.6	502.4	523.3
37.5°	235.7	247.2	281.1	317.9	351.7	385.6	415.2	441.8	466.4	488.7	508.9
40°	224.9	237.1	270.3	307.1	340.9	373.4	402.2	427.4	451.2	474.3	492.3
42.5°	213.4	226.3	260.2	295.5	328.7	359.7	387.1	413.0	436.1	456.3	474.3
45°	201.8	216.2	249.4	284.0	315.7	346.7	374.1	397.9	420.2	440.4	455.5
47.5°	191.7	206.1	237.9	272.5	304.2	333.7	360.4	383.5	405.1	423.1	438.2
50°	180.2	194.6	227.0	260.9	291.9	321.5	346.7	369.0	389.2	405.8	420.2
52.5°	168.7	184.5	216.2	250.1	281.1	309.2	334.4	356.1	374.1	389.2	401.5
55°	157.9	173.7	206.1	239.3	270.3	298.4	322.2	343.1	360.4	374.1	383.5
57.5°	146.3	163.6	196.8	229.9	260.2	286.9	310.7	330.1	346.0	357.5	365.4
60°	135.5	153.5	187.4	219.8	250.1	276.8	299.1	317.9	331.6	341.7	348.1
62.5°	124.0	143.4	177.3	209.7	239.3	266.0	286.9	304.2	317.1	325.1	329.4
65°	112.4	133.3	167.2	199.7	228.5	253.7	273.9	289.8	301.3	308.5	312.1
67.5°	101.6	123.3	157.1	188.8	217.0	240.7	260.2	275.3	285.4	291.2	292.6
70°	90.1	112.4	146.3	177.3	204.7	227.0	245.8	258.8	268.1	272.5	273.9
72.5°	79.3	101.6	134.8	165.1	191.0	211.9	229.9	242.9	250.8	253.7	253.7
75°	67.8	90.1	122.5	151.4	175.2	196.1	212.6	224.2	231.4	235.0	233.5
77.5°	56.2	78.6	109.6	136.2	157.9	176.6	193.2	204.0	211.2	213.4	211.9
80°	46.9	67.0	94.4	118.9	139.1	156.4	171.5	182.4	188.8	187.4	183.8
82.5°	36.0	54.8	78.6	99.5	117.5	134.1	148.5	157.1	158.6	155.7	151.4
85°	25.9	40.4	59.8	76.4	92.3	104.5	114.6	120.4	120.4	116.8	113.9
87.5°	15.1	23.8	34.6	46.1	53.3	61.3	69.2	70.6	70.6	70.6	67.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188677

CATALOG NUMBER: 24SR-LD2-29-C-UNV-L830-CD1-TB-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1
2.5°	335.2	335.9	336.6	337.3	338.1	338.1	338.1	337.3
5°	358.2	362.6	366.2	370.5	371.9	373.4	374.8	376.3
7.5°	395.0	400.8	406.5	412.3	415.9	420.2	418.8	418.8
10°	430.3	441.1	447.6	454.8	458.4	462.7	464.9	464.2
12.5°	464.9	477.2	486.5	493.0	498.8	503.1	504.6	506.7
15°	494.5	506.7	518.2	526.2	533.4	537.7	540.6	542.0
17.5°	519.0	531.2	544.2	554.3	560.8	566.5	568.0	569.4
20°	537.0	552.8	565.1	575.9	583.1	588.9	591.8	592.5
22.5°	551.4	566.5	580.2	591.0	599.0	605.5	608.3	608.3
25°	559.3	575.2	589.6	601.1	609.1	614.8	617.7	617.7
27.5°	562.2	578.8	592.5	604.0	612.7	618.4	620.6	621.3
30°	560.1	576.6	590.3	601.1	609.8	614.8	617.0	617.7
32.5°	552.8	569.4	582.4	592.5	600.4	606.2	608.3	608.3
35°	541.3	556.4	569.4	579.5	586.7	591.0	593.9	593.9
37.5°	526.2	541.3	552.8	561.5	568.0	573.0	574.5	574.5
40°	508.9	521.9	532.7	541.3	547.1	550.7	552.1	551.4
42.5°	489.4	501.7	510.3	517.5	522.6	526.2	528.3	529.8
45°	469.2	480.8	488.7	494.5	498.1	500.2	502.4	501.7
47.5°	451.2	458.4	465.6	470.0	473.6	475.7	476.4	476.4
50°	430.3	436.8	442.6	446.2	448.3	449.8	449.8	451.2
52.5°	409.4	415.2	419.5	423.1	424.5	425.3	426.0	425.3
55°	390.7	394.3	397.2	400.0	401.5	402.2	403.6	402.2
57.5°	371.2	374.1	377.7	378.4	379.9	379.9	380.6	379.9
60°	351.7	353.9	355.3	356.1	358.2	359.0	359.0	360.4
62.5°	332.3	333.0	335.2	335.9	336.6	338.1	339.5	338.8
65°	312.8	313.5	314.3	315.7	317.1	318.6	318.6	317.9
67.5°	292.6	293.4	294.1	295.5	297.0	297.0	297.7	297.7
70°	273.2	273.2	273.9	274.6	276.1	276.8	277.5	276.8
72.5°	253.0	253.0	253.0	253.7	254.4	255.9	256.6	256.6
75°	232.1	232.1	232.1	231.4	232.1	233.5	232.8	232.8
77.5°	209.0	206.9	204.7	203.3	204.0	203.3	203.3	203.3
80°	180.2	176.6	173.7	172.3	171.5	172.3	171.5	171.5
82.5°	148.5	144.9	142.0	139.8	140.6	139.1	139.8	138.4
85°	110.3	107.4	104.5	103.1	103.8	103.8	103.1	100.9
87.5°	64.9	61.3	60.5	59.8	60.5	59.8	57.7	58.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)