

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: P188697

Luminaire Tested: **24SR-LD2-48-C-UNV-L830-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188697
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-LD2-48-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: 3077.0 lumens
Efficiency: N/A
Efficacy: 80.5 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

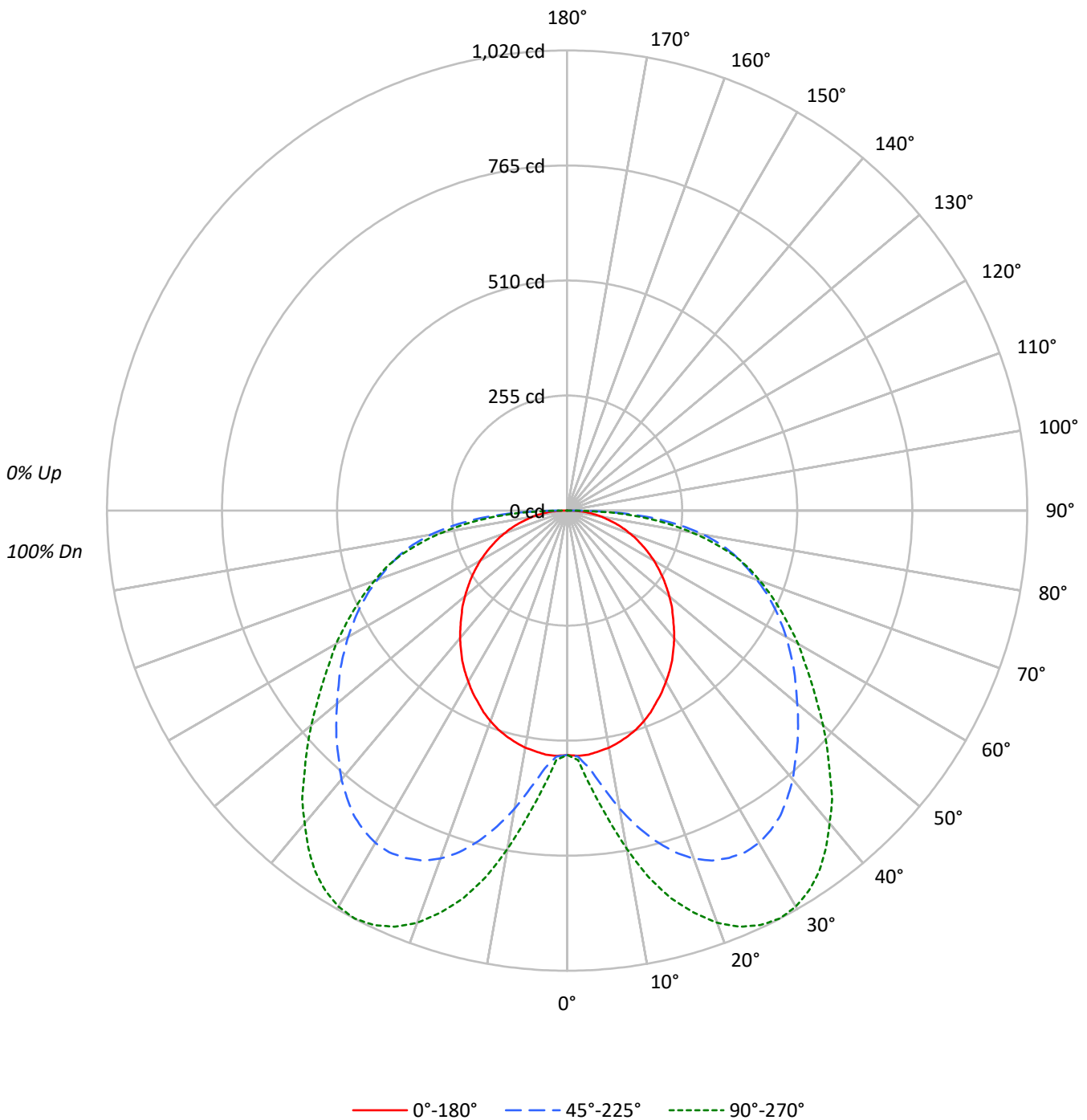
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	729	729	729
5°	733	775	834
10°	729	916	1041
15°	722	1056	1239
20°	711	1175	1392
25°	695	1261	1505
30°	680	1321	1575
35°	666	1354	1601
40°	648	1367	1589
45°	630	1375	1567
50°	619	1394	1550
55°	608	1440	1548
60°	598	1509	1591
65°	587	1612	1661
70°	582	1759	1787
75°	578	2005	1986
80°	596	2383	2181
85°	658	2958	2556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	1.9
10°-20°	208.4	6.8
20°-30°	371.1	12.1
30°-40°	481.3	15.6
40°-50°	513.2	16.7
50°-60°	493.6	16.0
60°-70°	441.7	14.4
70°-80°	347.8	11.3
80°-90°	162.2	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°	637.3	20.7
0°-40°	1118.5	36.4
0°-60°	2125.3	69.1
0°-90°	3077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	543	549	574	604	618	51
15°	518	616	758	857	890	146
25°	468	655	849	977	1014	216
35°	406	623	824	943	975	253
45°	331	544	723	807	823	256
55°	259	467	614	654	660	232
65°	184	396	506	517	522	183
75°	111	305	386	380	382	118
85°	43	161	192	170	166	45
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°	541.8	541.8	541.8	541.8	541.8	541.8	541.8	541.8	541.8	541.8	541.8
2.5°	544.1	544.1	542.9	542.9	544.1	544.1	544.1	544.1	545.3	545.3	546.5
5°	542.9	541.8	541.8	544.1	547.7	551.2	554.8	560.7	565.4	573.7	580.8
7.5°	538.2	538.2	540.6	546.5	554.8	566.6	579.6	593.8	606.8	619.8	635.2
10°	533.5	533.5	539.4	550.0	566.6	587.9	609.2	630.5	650.6	670.7	687.2
12.5°	526.4	527.6	537.0	555.9	583.2	612.7	639.9	667.1	694.3	716.8	741.7
15°	518.1	520.5	534.7	563.0	598.5	634.0	667.1	700.3	731.0	758.2	784.2
17.5°	508.6	512.2	532.3	569.0	610.4	650.6	692.0	729.8	762.9	793.7	823.3
20°	496.8	502.7	529.9	573.7	619.8	666.0	709.7	749.9	787.8	820.9	854.0
22.5°	483.8	490.9	525.2	574.9	625.7	675.4	723.9	765.3	805.5	839.8	874.1
25°	468.4	479.1	520.5	573.7	628.1	681.3	731.0	773.6	815.0	849.3	887.1
27.5°	454.2	466.0	512.2	569.0	625.7	681.3	731.0	776.0	818.5	854.0	890.7
30°	437.7	453.0	503.9	561.9	619.8	675.4	726.3	771.2	812.6	850.5	888.3
32.5°	422.3	438.8	490.9	550.0	609.2	664.8	716.8	760.6	802.0	839.8	876.5
35°	405.7	422.3	476.7	538.2	595.0	650.6	700.3	745.2	785.4	824.5	858.8
37.5°	386.8	405.7	461.3	521.6	577.2	632.8	681.3	725.1	765.3	802.0	835.1
40°	369.1	389.2	443.6	503.9	559.5	612.7	660.0	701.4	740.5	778.3	807.9
42.5°	350.1	371.4	427.0	485.0	539.4	590.2	635.2	677.8	715.6	748.8	778.3
45°	331.2	354.9	409.3	466.0	518.1	569.0	613.9	652.9	689.6	722.7	747.6
47.5°	314.6	338.3	390.3	447.1	499.2	547.7	591.4	629.3	664.8	694.3	719.2
50°	295.7	319.4	372.6	428.2	479.1	527.6	569.0	605.6	638.7	666.0	689.6
52.5°	276.8	302.8	354.9	410.5	461.3	507.4	548.8	584.3	613.9	638.7	658.9
55°	259.0	285.1	338.3	392.7	443.6	489.7	528.7	563.0	591.4	613.9	629.3
57.5°	240.1	268.5	322.9	377.3	427.0	470.8	509.8	541.8	567.8	586.7	599.7
60°	222.4	251.9	307.5	360.8	410.5	454.2	490.9	521.6	544.1	560.7	571.3
62.5°	203.5	235.4	291.0	344.2	392.7	436.5	470.8	499.2	520.5	533.5	540.6
65°	184.5	218.8	274.4	327.7	375.0	416.4	449.5	475.5	494.4	506.3	512.2
67.5°	166.8	202.3	257.9	309.9	356.0	395.1	427.0	451.9	468.4	477.9	480.2
70°	147.9	184.5	240.1	291.0	335.9	372.6	403.4	424.6	440.0	447.1	449.5
72.5°	130.1	166.8	221.2	270.9	313.5	347.8	377.3	398.6	411.6	416.4	416.4
75°	111.2	147.9	201.1	248.4	287.4	321.7	348.9	367.9	379.7	385.6	383.2
77.5°	92.3	128.9	179.8	223.6	259.0	289.8	317.0	334.8	346.6	350.1	347.8
80°	76.9	110.0	155.0	195.2	228.3	256.7	281.5	299.3	309.9	307.5	301.6
82.5°	59.1	89.9	128.9	163.2	192.8	220.0	243.7	257.9	260.2	255.5	248.4
85°	42.6	66.2	98.2	125.4	151.4	171.5	188.1	197.5	197.5	191.6	186.9
87.5°	24.8	39.0	56.8	75.7	87.5	100.5	113.6	115.9	115.9	115.9	110.0
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°	541.8	541.8	541.8	541.8	541.8	541.8	541.8	541.8
2.5°	550.0	551.2	552.4	553.6	554.8	554.8	554.8	553.6
5°	587.9	595.0	600.9	608.0	610.4	612.7	615.1	617.5
7.5°	648.2	657.7	667.1	676.6	682.5	689.6	687.2	687.2
10°	706.2	723.9	734.6	746.4	752.3	759.4	762.9	761.8
12.5°	762.9	783.1	798.4	809.1	818.5	825.6	828.0	831.6
15°	811.4	831.6	850.5	863.5	875.3	882.4	887.1	889.5
17.5°	851.7	871.8	893.1	909.6	920.3	929.7	932.1	934.5
20°	881.2	907.3	927.4	945.1	956.9	966.4	971.1	972.3
22.5°	904.9	929.7	952.2	969.9	983.0	993.6	998.3	998.3
25°	917.9	943.9	967.6	986.5	999.5	1009.0	1013.7	1013.7
27.5°	922.6	949.8	972.3	991.2	1005.4	1014.9	1018.4	1019.6
30°	919.1	946.3	968.8	986.5	1000.7	1009.0	1012.5	1013.7
32.5°	907.3	934.5	955.8	972.3	985.3	994.8	998.3	998.3
35°	888.3	913.2	934.5	951.0	962.9	969.9	974.7	974.7
37.5°	863.5	888.3	907.3	921.5	932.1	940.4	942.7	942.7
40°	835.1	856.4	874.1	888.3	897.8	903.7	906.1	904.9
42.5°	803.2	823.3	837.5	849.3	857.6	863.5	867.0	869.4
45°	770.0	789.0	802.0	811.4	817.4	820.9	824.5	823.3
47.5°	740.5	752.3	764.1	771.2	777.1	780.7	781.9	781.9
50°	706.2	716.8	726.3	732.2	735.7	738.1	738.1	740.5
52.5°	671.9	681.3	688.4	694.3	696.7	697.9	699.1	697.9
55°	641.1	647.0	651.8	656.5	658.9	660.0	662.4	660.0
57.5°	609.2	613.9	619.8	621.0	623.4	623.4	624.6	623.4
60°	577.2	580.8	583.2	584.3	587.9	589.1	589.1	591.4
62.5°	545.3	546.5	550.0	551.2	552.4	554.8	557.1	555.9
65°	513.4	514.5	515.7	518.1	520.5	522.8	522.8	521.6
67.5°	480.2	481.4	482.6	485.0	487.3	487.3	488.5	488.5
70°	448.3	448.3	449.5	450.7	453.0	454.2	455.4	454.2
72.5°	415.2	415.2	415.2	416.4	417.6	419.9	421.1	421.1
75°	380.9	380.9	380.9	379.7	380.9	383.2	382.1	382.1
77.5°	343.0	339.5	335.9	333.6	334.8	333.6	333.6	333.6
80°	295.7	289.8	285.1	282.7	281.5	282.7	281.5	281.5
82.5°	243.7	237.8	233.0	229.5	230.7	228.3	229.5	227.1
85°	181.0	176.2	171.5	169.1	170.3	170.3	169.1	165.6
87.5°	106.5	100.5	99.4	98.2	99.4	98.2	94.6	95.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)