

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: P188692

Luminaire Tested: **24SR-LD2-45-C-UNV-L830-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188692
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-LD2-45-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: 2889.0 lumens
Efficiency: N/A
Efficacy: 78.7 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

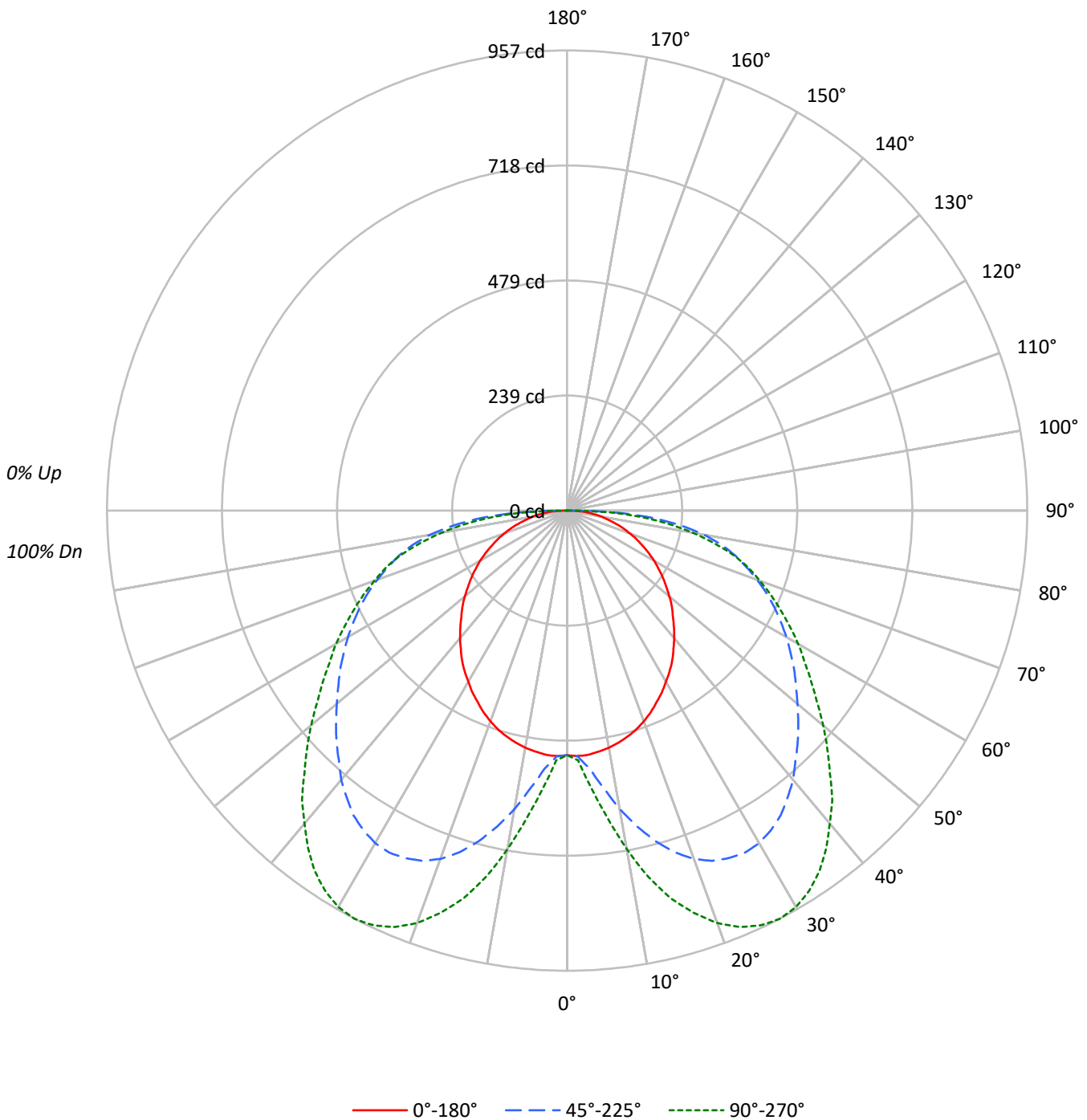
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	684	684	684
5°	689	727	783
10°	684	860	977
15°	678	992	1163
20°	668	1104	1307
25°	653	1184	1413
30°	638	1241	1479
35°	626	1271	1503
40°	609	1284	1492
45°	592	1291	1471
50°	581	1309	1455
55°	570	1352	1454
60°	562	1417	1494
65°	552	1513	1559
70°	546	1651	1678
75°	543	1882	1865
80°	559	2238	2048
85°	618	2777	2401



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.9
10°-20°	195.6	6.8
20°-30°	348.5	12.1
30°-40°	451.8	15.6
40°-50°	481.8	16.7
50°-60°	463.5	16.0
60°-70°	414.7	14.4
70°-80°	326.5	11.3
80°-90°	152.2	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°	598.3	20.7
0°-40°	1050.2	36.4
0°-60°	1995.5	69.1
0°-90°	2889.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2889.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	509	509	509	509	509	
5°	510	516	539	568	580	48
15°	486	579	712	805	835	137
25°	440	615	797	917	952	203
35°	381	585	774	885	915	238
45°	311	510	679	757	773	241
55°	243	438	576	614	620	217
65°	173	372	475	485	490	172
75°	104	286	362	357	359	110
85°	40	152	180	160	156	42
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°	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7
2.5°	510.9	510.9	509.8	509.8	510.9	510.9	510.9	510.9	512.0	512.0	513.1
5°	509.8	508.7	508.7	510.9	514.2	517.5	520.9	526.4	530.9	538.6	545.3
7.5°	505.3	505.3	507.5	513.1	520.9	532.0	544.2	557.5	569.7	582.0	596.4
10°	500.9	500.9	506.4	516.4	532.0	552.0	572.0	591.9	610.8	629.7	645.3
12.5°	494.2	495.3	504.2	522.0	547.5	575.3	600.8	626.4	651.9	673.0	696.3
15°	486.4	488.7	502.0	528.6	562.0	595.3	626.4	657.5	686.3	711.9	736.3
17.5°	477.6	480.9	499.8	534.2	573.1	610.8	649.7	685.2	716.3	745.2	773.0
20°	466.4	472.0	497.5	538.6	582.0	625.3	666.4	704.1	739.7	770.8	801.8
22.5°	454.2	460.9	493.1	539.7	587.5	634.1	679.7	718.6	756.3	788.5	820.7
25°	439.8	449.8	488.7	538.6	589.7	639.7	686.3	726.3	765.2	797.4	832.9
27.5°	426.5	437.6	480.9	534.2	587.5	639.7	686.3	728.5	768.5	801.8	836.3
30°	410.9	425.4	473.1	527.5	582.0	634.1	681.9	724.1	763.0	798.5	834.1
32.5°	396.5	412.0	460.9	516.4	572.0	624.2	673.0	714.1	753.0	788.5	822.9
35°	380.9	396.5	447.6	505.3	558.6	610.8	657.5	699.7	737.4	774.1	806.3
37.5°	363.2	380.9	433.1	489.8	542.0	594.2	639.7	680.8	718.6	753.0	784.1
40°	346.5	365.4	416.5	473.1	525.3	575.3	619.7	658.6	695.2	730.8	758.5
42.5°	328.7	348.7	400.9	455.3	506.4	554.2	596.4	636.4	671.9	703.0	730.8
45°	311.0	333.2	384.3	437.6	486.4	534.2	576.4	613.0	647.5	678.6	701.9
47.5°	295.4	317.6	366.5	419.8	468.7	514.2	555.3	590.8	624.2	651.9	675.2
50°	277.6	299.9	349.8	402.0	449.8	495.3	534.2	568.6	599.7	625.3	647.5
52.5°	259.9	284.3	333.2	385.4	433.1	476.4	515.3	548.6	576.4	599.7	618.6
55°	243.2	267.7	317.6	368.7	416.5	459.8	496.4	528.6	555.3	576.4	590.8
57.5°	225.5	252.1	303.2	354.3	400.9	442.0	478.7	508.7	533.1	550.9	563.1
60°	208.8	236.6	288.8	338.7	385.4	426.5	460.9	489.8	510.9	526.4	536.4
62.5°	191.0	221.0	273.2	323.2	368.7	409.8	442.0	468.7	488.7	500.9	507.5
65°	173.3	205.5	257.7	307.6	352.1	390.9	422.0	446.5	464.2	475.3	480.9
67.5°	156.6	189.9	242.1	291.0	334.3	370.9	400.9	424.2	439.8	448.7	450.9
70°	138.8	173.3	225.5	273.2	315.4	349.8	378.7	398.7	413.1	419.8	422.0
72.5°	122.2	156.6	207.7	254.3	294.3	326.5	354.3	374.3	386.5	390.9	390.9
75°	104.4	138.8	188.8	233.2	269.9	302.1	327.6	345.4	356.5	362.1	359.8
77.5°	86.6	121.1	168.8	209.9	243.2	272.1	297.6	314.3	325.4	328.7	326.5
80°	72.2	103.3	145.5	183.2	214.3	241.0	264.3	281.0	291.0	288.8	283.2
82.5°	55.5	84.4	121.1	153.3	181.0	206.6	228.8	242.1	244.3	239.9	233.2
85°	40.0	62.2	92.2	117.7	142.2	161.0	176.6	185.5	185.5	179.9	175.5
87.5°	23.3	36.6	53.3	71.1	82.2	94.4	106.6	108.8	108.8	108.8	103.3
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°	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7
2.5°	516.4	517.5	518.6	519.8	520.9	520.9	520.9	519.8
5°	552.0	558.6	564.2	570.8	573.1	575.3	577.5	579.7
7.5°	608.6	617.5	626.4	635.3	640.8	647.5	645.3	645.3
10°	663.0	679.7	689.7	700.8	706.3	713.0	716.3	715.2
12.5°	716.3	735.2	749.6	759.6	768.5	775.2	777.4	780.7
15°	761.9	780.7	798.5	810.7	821.8	828.5	832.9	835.2
17.5°	799.6	818.5	838.5	854.0	864.0	872.9	875.1	877.4
20°	827.4	851.8	870.7	887.4	898.5	907.4	911.8	912.9
22.5°	849.6	872.9	894.0	910.7	922.9	932.9	937.3	937.3
25°	861.8	886.3	908.5	926.2	938.4	947.3	951.8	951.8
27.5°	866.3	891.8	912.9	930.7	944.0	952.9	956.2	957.3
30°	862.9	888.5	909.6	926.2	939.6	947.3	950.7	951.8
32.5°	851.8	877.4	897.4	912.9	925.1	934.0	937.3	937.3
35°	834.1	857.4	877.4	892.9	904.0	910.7	915.1	915.1
37.5°	810.7	834.1	851.8	865.2	875.1	882.9	885.1	885.1
40°	784.1	804.1	820.7	834.1	842.9	848.5	850.7	849.6
42.5°	754.1	773.0	786.3	797.4	805.2	810.7	814.1	816.3
45°	723.0	740.8	753.0	761.9	767.4	770.8	774.1	773.0
47.5°	695.2	706.3	717.4	724.1	729.7	733.0	734.1	734.1
50°	663.0	673.0	681.9	687.5	690.8	693.0	693.0	695.2
52.5°	630.8	639.7	646.4	651.9	654.1	655.2	656.4	655.2
55°	601.9	607.5	611.9	616.4	618.6	619.7	621.9	619.7
57.5°	572.0	576.4	582.0	583.1	585.3	585.3	586.4	585.3
60°	542.0	545.3	547.5	548.6	552.0	553.1	553.1	555.3
62.5°	512.0	513.1	516.4	517.5	518.6	520.9	523.1	522.0
65°	482.0	483.1	484.2	486.4	488.7	490.9	490.9	489.8
67.5°	450.9	452.0	453.1	455.3	457.6	457.6	458.7	458.7
70°	420.9	420.9	422.0	423.1	425.4	426.5	427.6	426.5
72.5°	389.8	389.8	389.8	390.9	392.0	394.3	395.4	395.4
75°	357.6	357.6	357.6	356.5	357.6	359.8	358.7	358.7
77.5°	322.1	318.7	315.4	313.2	314.3	313.2	313.2	313.2
80°	277.6	272.1	267.7	265.4	264.3	265.4	264.3	264.3
82.5°	228.8	223.2	218.8	215.5	216.6	214.3	215.5	213.2
85°	169.9	165.5	161.0	158.8	159.9	159.9	158.8	155.5
87.5°	100.0	94.4	93.3	92.2	93.3	92.2	88.8	90.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)