

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: P188703

Luminaire Tested: **24SR-LD2-53-C-UNV-L835-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188703
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-LD2-53-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: 3511.0 lumens
Efficiency: N/A
Efficacy: 81.5 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

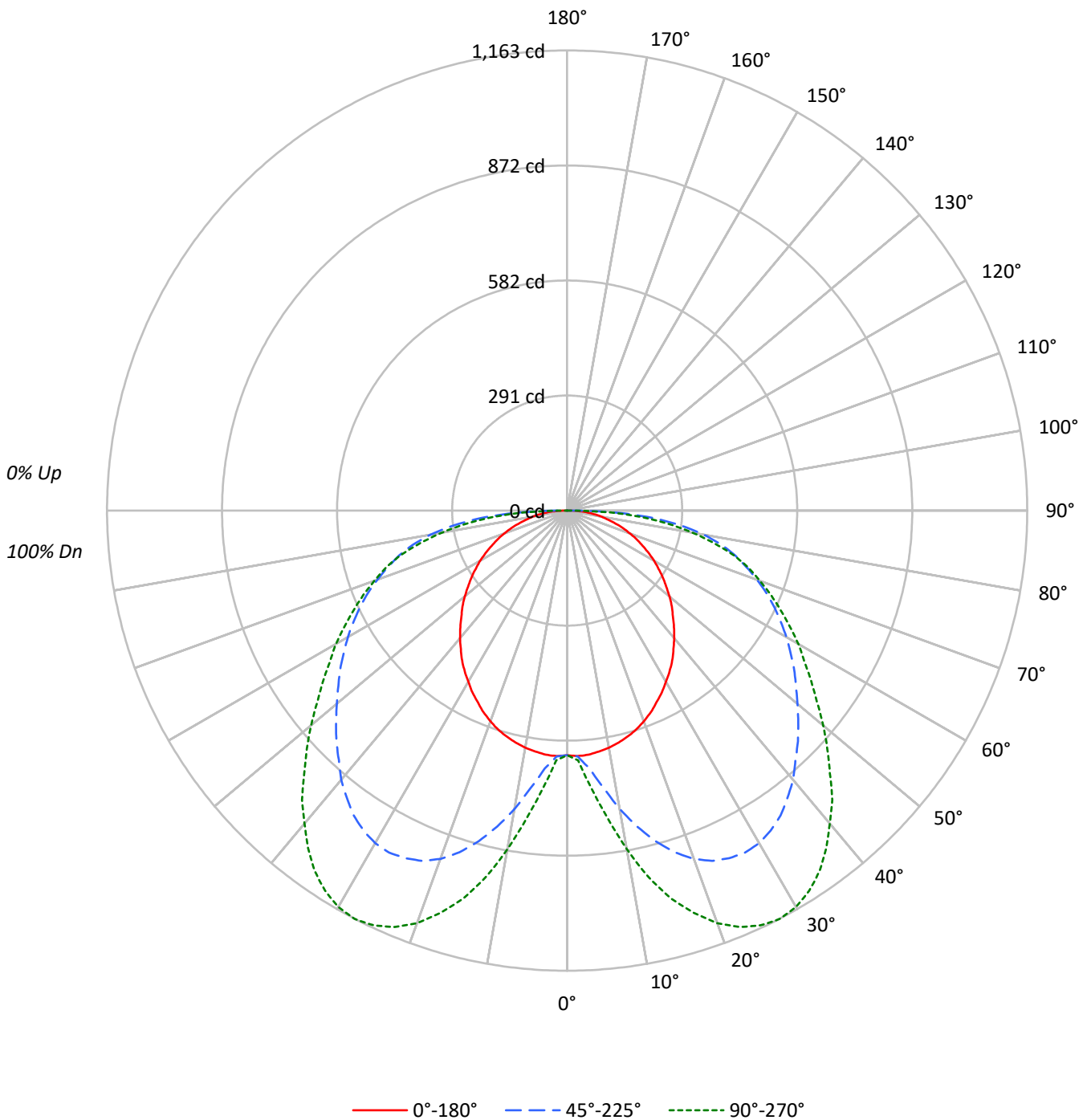
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	832	832	832
5°	837	884	952
10°	832	1046	1188
15°	824	1205	1414
20°	812	1341	1589
25°	794	1439	1717
30°	776	1508	1797
35°	760	1545	1827
40°	740	1560	1813
45°	719	1569	1787
50°	706	1591	1769
55°	693	1643	1767
60°	683	1722	1816
65°	670	1839	1895
70°	664	2007	2039
75°	660	2287	2267
80°	680	2719	2489
85°	750	3376	2918



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	1.9
10°-20°	237.8	6.8
20°-30°	423.5	12.1
30°-40°	549.1	15.6
40°-50°	585.6	16.7
50°-60°	563.3	16.0
60°-70°	504.0	14.4
70°-80°	396.8	11.3
80°-90°	185.0	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°	727.1	20.7
0°-40°	1276.3	36.4
0°-60°	2425.1	69.1
0°-90°	3511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3511.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	620	627	655	690	704	59
15°	591	703	865	978	1015	167
25°	534	747	969	1115	1157	246
35°	463	711	941	1076	1112	289
45°	378	620	825	920	939	293
55°	296	532	700	746	753	264
65°	211	452	578	590	595	209
75°	127	348	440	434	436	134
85°	49	184	219	194	189	51
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°	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2
2.5°	620.9	620.9	619.5	619.5	620.9	620.9	620.9	620.9	622.2	622.2	623.6
5°	619.5	618.2	618.2	620.9	624.9	629.0	633.0	639.8	645.2	654.6	662.7
7.5°	614.1	614.1	616.8	623.6	633.0	646.5	661.4	677.6	692.4	707.2	724.8
10°	608.7	608.7	615.5	627.6	646.5	670.8	695.1	719.4	742.3	765.3	784.2
12.5°	600.6	602.0	612.8	634.4	665.4	699.1	730.2	761.2	792.3	817.9	846.3
15°	591.2	593.9	610.1	642.5	682.9	723.4	761.2	799.0	834.1	865.2	894.9
17.5°	580.4	584.4	607.4	649.2	696.4	742.3	789.6	832.8	870.6	905.6	939.4
20°	566.9	573.6	604.7	654.6	707.2	759.9	809.8	855.7	898.9	936.7	974.5
22.5°	552.0	560.1	599.3	656.0	714.0	770.7	826.0	873.3	919.1	958.3	997.4
25°	534.5	546.6	593.9	654.6	716.7	777.4	834.1	882.7	929.9	969.1	1012.3
27.5°	518.3	531.8	584.4	649.2	714.0	777.4	834.1	885.4	934.0	974.5	1016.3
30°	499.4	516.9	575.0	641.1	707.2	770.7	828.7	880.0	927.2	970.4	1013.6
32.5°	481.8	500.7	560.1	627.6	695.1	758.5	817.9	867.9	915.1	958.3	1000.1
35°	462.9	481.8	543.9	614.1	678.9	742.3	799.0	850.3	896.2	940.7	979.9
37.5°	441.4	462.9	526.4	595.2	658.7	722.1	777.4	827.4	873.3	915.1	952.9
40°	421.1	444.1	506.1	575.0	638.4	699.1	753.1	800.4	844.9	888.1	921.8
42.5°	399.5	423.8	487.2	553.4	615.5	673.5	724.8	773.4	816.6	854.4	888.1
45°	377.9	404.9	467.0	531.8	591.2	649.2	700.5	745.0	786.9	824.7	853.0
47.5°	359.0	386.0	445.4	510.2	569.6	624.9	674.9	718.0	758.5	792.3	820.6
50°	337.4	364.4	425.2	488.6	546.6	602.0	649.2	691.0	728.8	759.9	786.9
52.5°	315.8	345.5	404.9	468.3	526.4	579.0	626.3	666.8	700.5	728.8	751.8
55°	295.6	325.3	386.0	448.1	506.1	558.8	603.3	642.5	674.9	700.5	718.0
57.5°	274.0	306.4	368.5	430.6	487.2	537.2	581.7	618.2	647.9	669.5	684.3
60°	253.7	287.5	350.9	411.7	468.3	518.3	560.1	595.2	620.9	639.8	651.9
62.5°	232.1	268.6	332.0	392.8	448.1	498.0	537.2	569.6	593.9	608.7	616.8
65°	210.6	249.7	313.1	373.9	427.9	475.1	512.9	542.6	564.2	577.7	584.4
67.5°	190.3	230.8	294.2	353.6	406.3	450.8	487.2	515.6	534.5	545.3	548.0
70°	168.7	210.6	274.0	332.0	383.3	425.2	460.2	484.5	502.1	510.2	512.9
72.5°	148.5	190.3	252.4	309.1	357.7	396.8	430.6	454.8	469.7	475.1	475.1
75°	126.9	168.7	229.4	283.4	328.0	367.1	398.2	419.8	433.3	440.0	437.3
77.5°	105.3	147.1	205.2	255.1	295.6	330.7	361.7	382.0	395.5	399.5	396.8
80°	87.7	125.5	176.8	222.7	260.5	292.9	321.2	341.5	353.6	350.9	344.2
82.5°	67.5	102.6	147.1	186.3	220.0	251.0	278.0	294.2	296.9	291.5	283.4
85°	48.6	75.6	112.0	143.1	172.8	195.7	214.6	225.4	225.4	218.7	213.3
87.5°	28.3	44.5	64.8	86.4	99.9	114.7	129.6	132.3	132.3	132.3	125.5
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°	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2
2.5°	627.6	629.0	630.3	631.7	633.0	633.0	633.0	631.7
5°	670.8	678.9	685.6	693.7	696.4	699.1	701.8	704.5
7.5°	739.6	750.4	761.2	772.0	778.8	786.9	784.2	784.2
10°	805.8	826.0	838.2	851.7	858.4	866.5	870.6	869.2
12.5°	870.6	893.5	911.0	923.2	934.0	942.1	944.8	948.8
15°	925.9	948.8	970.4	985.3	998.8	1006.9	1012.3	1015.0
17.5°	971.8	994.7	1019.0	1037.9	1050.1	1060.9	1063.6	1066.3
20°	1005.5	1035.2	1058.2	1078.4	1091.9	1102.7	1108.1	1109.5
22.5°	1032.5	1060.9	1086.5	1106.8	1121.6	1133.7	1139.1	1139.1
25°	1047.4	1077.1	1104.1	1125.7	1140.5	1151.3	1156.7	1156.7
27.5°	1052.8	1083.8	1109.5	1131.0	1147.2	1158.0	1162.1	1163.4
30°	1048.7	1079.8	1105.4	1125.7	1141.8	1151.3	1155.3	1156.7
32.5°	1035.2	1066.3	1090.6	1109.5	1124.3	1135.1	1139.1	1139.1
35°	1013.6	1042.0	1066.3	1085.2	1098.7	1106.8	1112.2	1112.2
37.5°	985.3	1013.6	1035.2	1051.4	1063.6	1073.0	1075.7	1075.7
40°	952.9	977.2	997.4	1013.6	1024.4	1031.2	1033.9	1032.5
42.5°	916.4	939.4	955.6	969.1	978.5	985.3	989.3	992.0
45°	878.7	900.3	915.1	925.9	932.6	936.7	940.7	939.4
47.5°	844.9	858.4	871.9	880.0	886.8	890.8	892.2	892.2
50°	805.8	817.9	828.7	835.5	839.5	842.2	842.2	844.9
52.5°	766.6	777.4	785.5	792.3	795.0	796.3	797.7	796.3
55°	731.5	738.3	743.7	749.1	751.8	753.1	755.8	753.1
57.5°	695.1	700.5	707.2	708.6	711.3	711.3	712.6	711.3
60°	658.7	662.7	665.4	666.8	670.8	672.2	672.2	674.9
62.5°	622.2	623.6	627.6	629.0	630.3	633.0	635.7	634.4
65°	585.8	587.1	588.5	591.2	593.9	596.6	596.6	595.2
67.5°	548.0	549.3	550.7	553.4	556.1	556.1	557.4	557.4
70°	511.5	511.5	512.9	514.2	516.9	518.3	519.6	518.3
72.5°	473.7	473.7	473.7	475.1	476.4	479.1	480.5	480.5
75°	434.6	434.6	434.6	433.3	434.6	437.3	436.0	436.0
77.5°	391.4	387.4	383.3	380.6	382.0	380.6	380.6	380.6
80°	337.4	330.7	325.3	322.6	321.2	322.6	321.2	321.2
82.5°	278.0	271.3	265.9	261.8	263.2	260.5	261.8	259.1
85°	206.5	201.1	195.7	193.0	194.4	194.4	193.0	189.0
87.5°	121.5	114.7	113.4	112.0	113.4	112.0	108.0	109.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)