

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: P188707

Luminaire Tested: **24SR-LD2-59-C-UNV-L830-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188707
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-LD2-59-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: 3789.0 lumens
Efficiency: N/A
Efficacy: 75.5 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

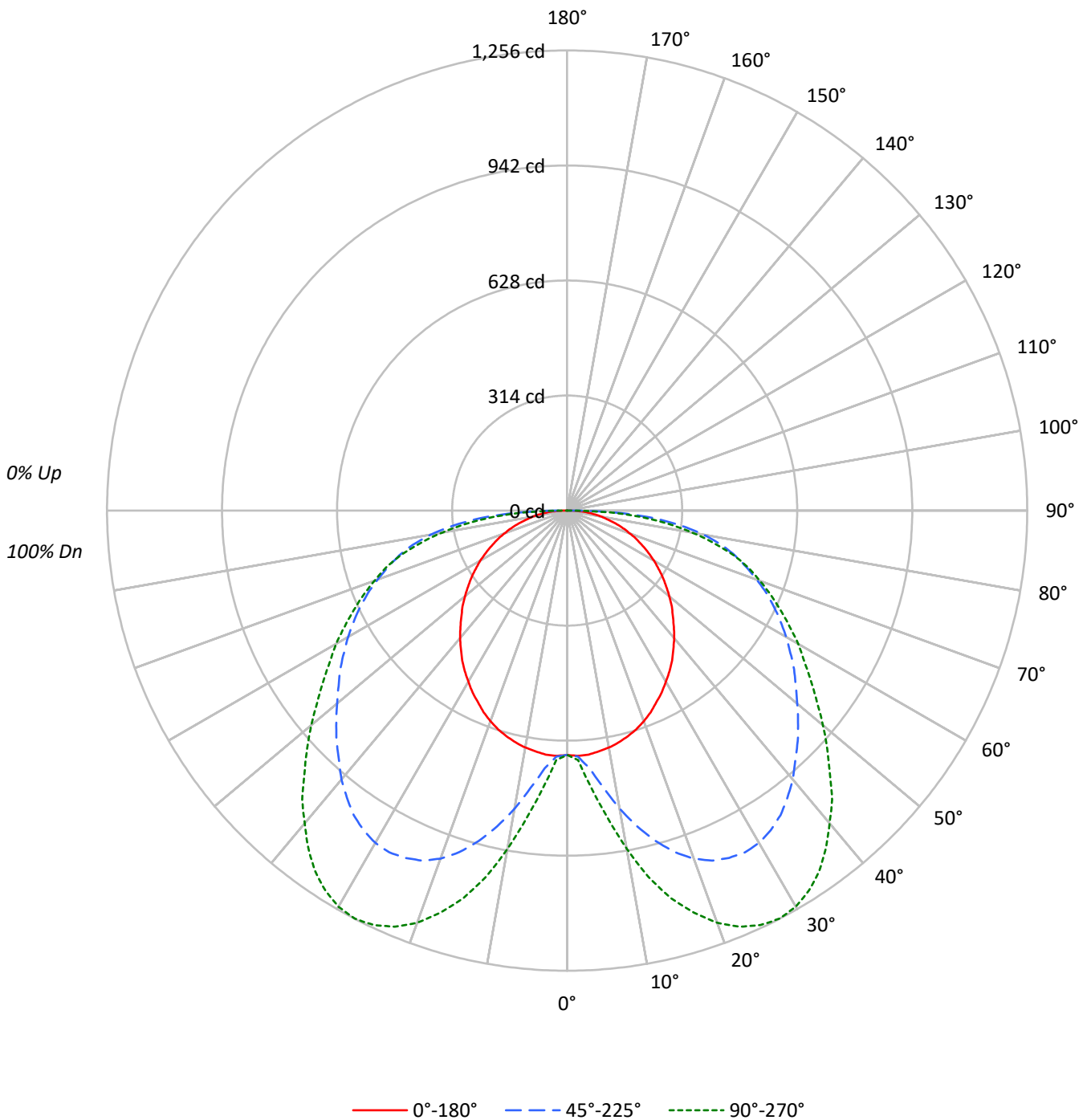
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	898	898	898
5°	903	954	1027
10°	897	1128	1282
15°	889	1301	1526
20°	876	1447	1714
25°	856	1553	1853
30°	837	1627	1939
35°	821	1668	1971
40°	798	1683	1957
45°	776	1694	1929
50°	762	1716	1909
55°	748	1773	1907
60°	737	1858	1960
65°	723	1985	2045
70°	716	2166	2200
75°	712	2468	2446
80°	734	2934	2686
85°	809	3643	3148



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.1	1.9
10°-20°	256.6	6.8
20°-30°	457.0	12.1
30°-40°	592.6	15.6
40°-50°	631.9	16.7
50°-60°	607.9	16.0
60°-70°	543.9	14.4
70°-80°	428.2	11.3
80°-90°	199.7	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°	784.7	20.7
0°-40°	1377.3	36.4
0°-60°	2617.1	69.1
0°-90°	3789.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3789.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	669	677	706	744	760	63
15°	638	759	934	1055	1095	180
25°	577	806	1046	1203	1248	266
35°	500	767	1015	1161	1200	312
45°	408	669	890	993	1014	316
55°	319	575	756	806	813	285
65°	227	487	623	637	642	226
75°	137	375	475	468	470	145
85°	52	199	236	210	204	55
90°	0	0	0	0	0	



TEST NUMBER: P188707

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L830-CD1-TB-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.1	667.1	667.1	667.1	667.1	667.1	667.1	667.1	667.1	667.1	667.1
2.5°	670.0	670.0	668.6	668.6	670.0	670.0	670.0	670.0	671.5	671.5	672.9
5°	668.6	667.1	667.1	670.0	674.4	678.8	683.1	690.4	696.2	706.4	715.2
7.5°	662.7	662.7	665.7	672.9	683.1	697.7	713.7	731.2	747.2	763.2	782.2
10°	656.9	656.9	664.2	677.3	697.7	723.9	750.1	776.4	801.1	825.9	846.3
12.5°	648.2	649.6	661.3	684.6	718.1	754.5	788.0	821.5	855.0	882.7	913.3
15°	638.0	640.9	658.4	693.3	737.0	780.7	821.5	862.3	900.2	933.7	965.7
17.5°	626.3	630.7	655.5	700.6	751.6	801.1	852.1	898.7	939.5	977.4	1013.8
20°	611.8	619.0	652.5	706.4	763.2	820.0	873.9	923.5	970.1	1010.9	1051.6
22.5°	595.7	604.5	646.7	707.9	770.5	831.7	891.4	942.4	991.9	1034.2	1076.4
25°	576.8	589.9	640.9	706.4	773.4	839.0	900.2	952.6	1003.6	1045.8	1092.4
27.5°	559.3	573.9	630.7	700.6	770.5	839.0	900.2	955.5	1007.9	1051.6	1096.8
30°	538.9	557.9	620.5	691.9	763.2	831.7	894.3	949.7	1000.7	1047.3	1093.9
32.5°	520.0	540.4	604.5	677.3	750.1	818.6	882.7	936.6	987.6	1034.2	1079.3
35°	499.6	520.0	587.0	662.7	732.7	801.1	862.3	917.6	967.2	1015.2	1057.5
37.5°	476.3	499.6	568.1	642.3	710.8	779.3	839.0	892.9	942.4	987.6	1028.3
40°	454.4	479.2	546.2	620.5	689.0	754.5	812.8	863.7	911.8	958.4	994.8
42.5°	431.1	457.4	525.8	597.2	664.2	726.8	782.2	834.6	881.2	922.0	958.4
45°	407.8	437.0	504.0	573.9	638.0	700.6	756.0	804.0	849.2	890.0	920.6
47.5°	387.4	416.6	480.7	550.6	614.7	674.4	728.3	774.9	818.6	855.0	885.6
50°	364.1	393.3	458.8	527.3	589.9	649.6	700.6	745.8	786.5	820.0	849.2
52.5°	340.8	372.9	437.0	505.4	568.1	624.9	675.8	719.5	756.0	786.5	811.3
55°	319.0	351.0	416.6	483.6	546.2	603.0	651.1	693.3	728.3	756.0	774.9
57.5°	295.7	330.6	397.6	464.6	525.8	579.7	627.8	667.1	699.2	722.5	738.5
60°	273.8	310.2	378.7	444.3	505.4	559.3	604.5	642.3	670.0	690.4	703.5
62.5°	250.5	289.9	358.3	423.9	483.6	537.5	579.7	614.7	640.9	656.9	665.7
65°	227.2	269.5	337.9	403.5	461.7	512.7	553.5	585.5	608.8	623.4	630.7
67.5°	205.4	249.1	317.5	381.6	438.4	486.5	525.8	556.4	576.8	588.5	591.4
70°	182.1	227.2	295.7	358.3	413.7	458.8	496.7	522.9	541.8	550.6	553.5
72.5°	160.2	205.4	272.4	333.6	386.0	428.2	464.6	490.9	506.9	512.7	512.7
75°	136.9	182.1	247.6	305.9	353.9	396.2	429.7	453.0	467.6	474.8	471.9
77.5°	113.6	158.8	221.4	275.3	319.0	356.9	390.4	412.2	426.8	431.1	428.2
80°	94.7	135.5	190.8	240.3	281.1	316.1	346.7	368.5	381.6	378.7	371.4
82.5°	72.8	110.7	158.8	201.0	237.4	270.9	300.1	317.5	320.4	314.6	305.9
85°	52.4	81.6	120.9	154.4	186.4	211.2	231.6	243.2	243.2	236.0	230.1
87.5°	30.6	48.1	69.9	93.2	107.8	123.8	139.8	142.7	142.7	142.7	135.5
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: P188707

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.1	667.1	667.1	667.1	667.1	667.1	667.1	667.1
2.5°	677.3	678.8	680.2	681.7	683.1	683.1	683.1	681.7
5°	723.9	732.7	739.9	748.7	751.6	754.5	757.4	760.3
7.5°	798.2	809.9	821.5	833.2	840.4	849.2	846.3	846.3
10°	869.6	891.4	904.5	919.1	926.4	935.1	939.5	938.0
12.5°	939.5	964.2	983.2	996.3	1007.9	1016.7	1019.6	1024.0
15°	999.2	1024.0	1047.3	1063.3	1077.9	1086.6	1092.4	1095.3
17.5°	1048.7	1073.5	1099.7	1120.1	1133.2	1144.9	1147.8	1150.7
20°	1085.1	1117.2	1142.0	1163.8	1178.4	1190.0	1195.8	1197.3
22.5°	1114.3	1144.9	1172.5	1194.4	1210.4	1223.5	1229.3	1229.3
25°	1130.3	1162.3	1191.5	1214.8	1230.8	1242.5	1248.3	1248.3
27.5°	1136.1	1169.6	1197.3	1220.6	1238.1	1249.7	1254.1	1255.6
30°	1131.8	1165.3	1192.9	1214.8	1232.3	1242.5	1246.8	1248.3
32.5°	1117.2	1150.7	1176.9	1197.3	1213.3	1225.0	1229.3	1229.3
35°	1093.9	1124.5	1150.7	1171.1	1185.6	1194.4	1200.2	1200.2
37.5°	1063.3	1093.9	1117.2	1134.7	1147.8	1158.0	1160.9	1160.9
40°	1028.3	1054.6	1076.4	1093.9	1105.5	1112.8	1115.7	1114.3
42.5°	989.0	1013.8	1031.3	1045.8	1056.0	1063.3	1067.7	1070.6
45°	948.2	971.5	987.6	999.2	1006.5	1010.9	1015.2	1013.8
47.5°	911.8	926.4	940.9	949.7	957.0	961.3	962.8	962.8
50°	869.6	882.7	894.3	901.6	906.0	908.9	908.9	911.8
52.5°	827.3	839.0	847.7	855.0	857.9	859.4	860.8	859.4
55°	789.5	796.7	802.6	808.4	811.3	812.8	815.7	812.8
57.5°	750.1	756.0	763.2	764.7	767.6	767.6	769.1	767.6
60°	710.8	715.2	718.1	719.5	723.9	725.4	725.4	728.3
62.5°	671.5	672.9	677.3	678.8	680.2	683.1	686.0	684.6
65°	632.2	633.6	635.1	638.0	640.9	643.8	643.8	642.3
67.5°	591.4	592.8	594.3	597.2	600.1	600.1	601.6	601.6
70°	552.0	552.0	553.5	555.0	557.9	559.3	560.8	559.3
72.5°	511.3	511.3	511.3	512.7	514.2	517.1	518.5	518.5
75°	469.0	469.0	469.0	467.6	469.0	471.9	470.5	470.5
77.5°	422.4	418.0	413.7	410.8	412.2	410.8	410.8	410.8
80°	364.1	356.9	351.0	348.1	346.7	348.1	346.7	346.7
82.5°	300.1	292.8	286.9	282.6	284.0	281.1	282.6	279.7
85°	222.9	217.0	211.2	208.3	209.7	209.7	208.3	203.9
87.5°	131.1	123.8	122.4	120.9	122.4	120.9	116.5	118.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)