

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: P188508

Luminaire Tested: **24SR-LD2-59-C-UNV-L835-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188508
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24779)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-59-C-UNV-L835-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3576.0 lumens
Efficiency: N/A
Efficacy: 71.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

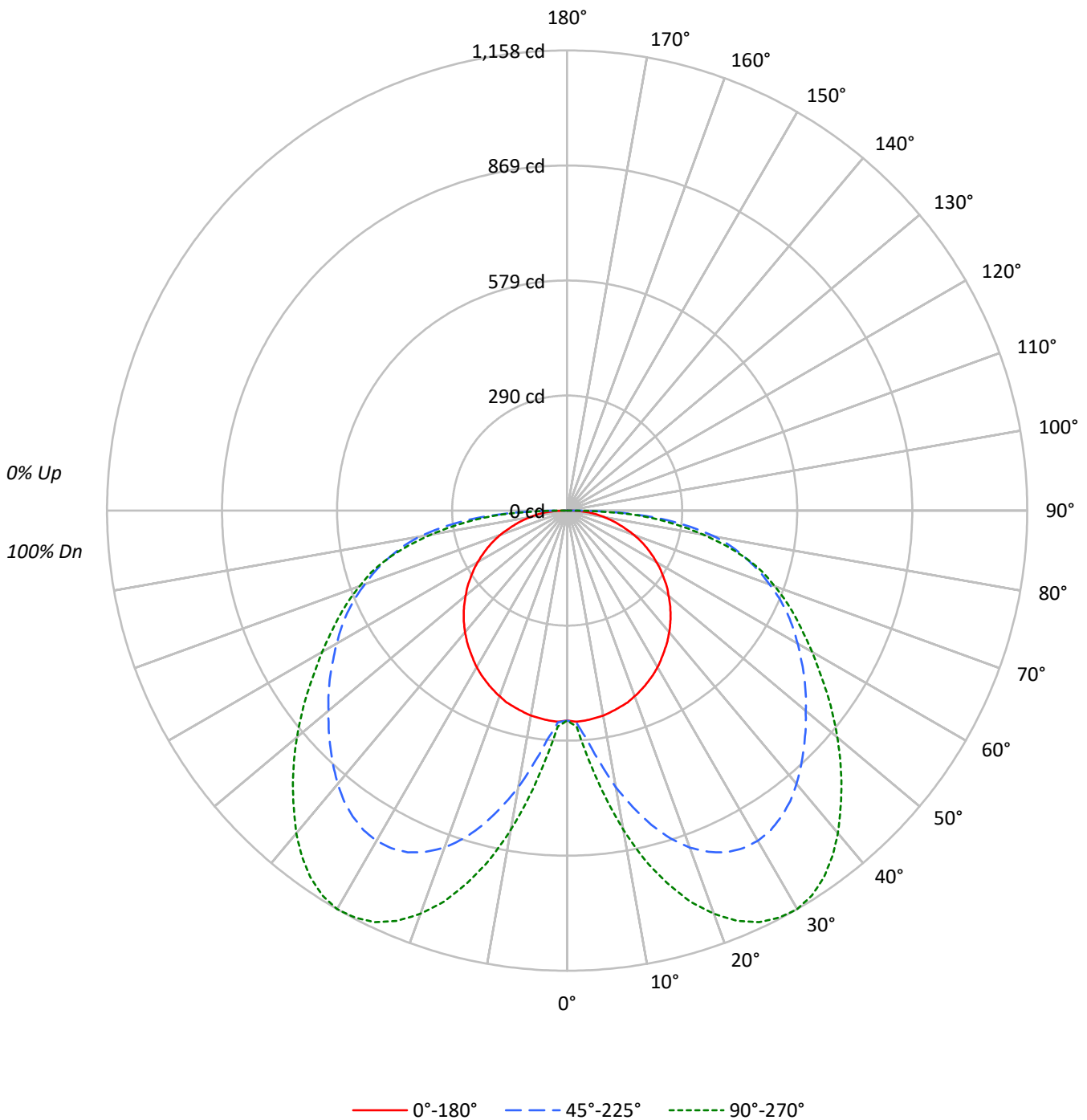
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	711	711	711
5°	716	783	852
10°	716	966	1114
15°	713	1140	1351
20°	712	1292	1546
25°	709	1409	1697
30°	707	1491	1799
35°	703	1544	1850
40°	702	1577	1862
45°	700	1603	1857
50°	698	1641	1858
55°	697	1708	1871
60°	699	1802	1915
65°	703	1946	2018
70°	703	2133	2186
75°	703	2428	2436
80°	733	2920	2688
85°	858	3663	3316



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	1.6
10°-20°	222.2	6.2
20°-30°	408.7	11.4
30°-40°	544.9	15.2
40°-50°	596.9	16.7
50°-60°	586.9	16.4
60°-70°	532.7	14.9
70°-80°	424.0	11.9
80°-90°	201.0	5.6
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°	689.6	19.3
0°-40°	1234.4	34.5
0°-60°	2418.3	67.6
0°-90°	3576.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3576.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	530	535	580	617	631	50
15°	512	634	818	933	970	145
25°	478	703	949	1091	1143	220
35°	428	692	940	1079	1126	268
45°	368	623	842	945	976	284
55°	297	550	728	783	797	266
65°	221	476	611	624	634	218
75°	135	372	467	464	468	143
85°	56	200	237	215	215	57
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°	528.6	528.6	528.6	528.6	528.6	528.6	528.6	528.6	528.6	528.6	528.6
2.5°	531.6	531.6	530.1	530.1	530.1	528.6	528.6	530.1	531.6	533.1	534.6
5°	530.1	530.1	530.1	530.1	531.6	537.6	545.1	555.6	564.7	579.7	587.2
7.5°	527.1	527.1	528.6	533.1	545.1	561.7	581.2	603.7	621.7	641.2	659.3
10°	524.1	524.1	527.1	542.1	566.2	594.7	623.2	651.8	677.3	707.3	729.9
12.5°	518.1	518.1	527.1	554.1	590.2	626.2	662.3	699.8	732.9	764.4	795.9
15°	512.1	512.1	530.1	567.7	612.7	656.3	698.3	741.9	780.9	818.5	851.5
17.5°	506.1	507.6	534.6	582.7	632.2	683.3	732.9	779.4	823.0	865.0	902.6
20°	497.1	500.1	537.6	593.2	648.8	705.8	758.4	809.4	857.5	902.6	941.6
22.5°	488.1	494.1	539.1	600.7	662.3	723.8	779.4	832.0	883.0	929.6	970.1
25°	477.6	485.1	540.6	605.2	671.3	734.4	792.9	848.5	901.1	949.1	989.7
27.5°	467.0	477.6	537.6	605.2	674.3	740.4	798.9	856.0	911.6	958.1	1001.7
30°	455.0	468.5	533.1	603.7	674.3	738.9	798.9	857.5	911.6	959.6	1001.7
32.5°	441.5	459.5	525.6	597.7	668.3	734.4	794.4	851.5	905.6	953.6	994.2
35°	428.0	447.5	516.6	588.7	659.3	723.8	782.4	839.5	892.0	940.1	980.6
37.5°	414.5	437.0	506.1	578.2	645.8	708.8	767.4	824.5	875.5	922.1	959.6
40°	399.5	423.5	492.6	563.2	630.7	690.8	749.4	803.4	853.0	898.0	934.1
42.5°	384.4	410.0	477.6	548.1	612.7	672.8	729.9	782.4	830.5	871.0	904.1
45°	367.9	395.0	462.5	530.1	593.2	653.3	708.8	758.4	804.9	842.5	872.5
47.5°	351.4	379.9	446.0	513.6	575.2	633.7	687.8	735.9	777.9	813.9	842.5
50°	333.4	363.4	429.5	495.6	557.1	614.2	666.8	711.8	752.4	783.9	810.9
52.5°	316.9	348.4	413.0	479.1	539.1	596.2	647.3	689.3	726.8	756.9	779.4
55°	297.3	331.9	398.0	462.5	522.6	578.2	626.2	666.8	701.3	728.3	747.9
57.5°	279.3	315.4	381.4	446.0	504.6	560.2	605.2	644.3	674.3	698.3	716.3
60°	259.8	298.8	364.9	429.5	488.1	542.1	585.7	621.7	650.3	669.8	684.8
62.5°	240.3	280.8	349.9	413.0	470.0	521.1	563.2	596.2	621.7	641.2	650.3
65°	220.8	262.8	331.9	396.5	452.0	500.1	540.6	572.2	594.7	611.2	617.2
67.5°	199.7	244.8	313.9	375.4	431.0	477.6	515.1	545.1	564.7	578.2	581.2
70°	178.7	223.8	292.8	354.4	407.0	450.5	488.1	513.6	533.1	542.1	545.1
72.5°	156.2	202.7	271.8	330.4	379.9	423.5	456.5	483.6	500.1	506.1	506.1
75°	135.2	180.2	247.8	303.4	351.4	392.0	423.5	447.5	462.5	467.0	465.5
77.5°	114.1	159.2	222.3	274.8	318.4	355.9	386.0	408.5	422.0	426.5	425.0
80°	94.6	136.7	192.2	241.8	280.8	315.4	342.4	366.4	378.4	376.9	367.9
82.5°	75.1	111.1	160.7	204.2	238.8	270.3	297.3	312.4	316.9	312.4	303.4
85°	55.6	84.1	124.6	159.2	187.7	213.2	229.8	240.3	241.8	237.3	229.8
87.5°	33.0	49.6	73.6	94.6	115.6	127.6	136.7	144.2	145.7	141.2	138.2
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°	528.6	528.6	528.6	528.6	528.6	528.6	528.6	528.6
2.5°	536.1	537.6	539.1	542.1	540.6	542.1	542.1	543.6
5°	597.7	606.7	612.7	621.7	621.7	626.2	627.7	630.7
7.5°	672.8	684.8	698.3	711.8	713.3	720.8	723.8	723.8
10°	749.4	765.9	782.4	797.4	801.9	810.9	815.5	815.5
12.5°	818.5	836.5	859.0	875.5	881.5	892.0	898.0	899.5
15°	878.5	901.1	923.6	941.6	952.1	962.6	968.6	970.1
17.5°	929.6	956.6	980.6	998.7	1010.7	1022.7	1030.2	1031.7
20°	970.1	1000.2	1024.2	1043.7	1057.2	1072.3	1078.3	1079.8
22.5°	1001.7	1030.2	1057.2	1078.3	1093.3	1108.3	1115.8	1117.3
25°	1022.7	1052.7	1079.8	1102.3	1118.8	1132.3	1139.8	1142.8
27.5°	1034.7	1066.2	1093.3	1114.3	1130.8	1145.8	1153.3	1154.8
30°	1036.2	1067.7	1094.8	1115.8	1132.3	1147.3	1154.8	1157.9
32.5°	1028.7	1060.2	1085.8	1106.8	1123.3	1136.8	1144.3	1147.3
35°	1013.7	1043.7	1069.2	1088.8	1103.8	1115.8	1124.8	1126.3
37.5°	992.7	1021.2	1043.7	1061.7	1076.8	1088.8	1096.3	1096.3
40°	964.1	991.2	1010.7	1027.2	1042.2	1051.2	1060.2	1060.2
42.5°	932.6	958.1	976.1	991.2	1001.7	1012.2	1018.2	1018.2
45°	899.5	920.6	938.6	950.6	961.1	968.6	976.1	976.1
47.5°	866.5	884.5	898.0	910.1	919.1	926.6	932.6	932.6
50°	832.0	848.5	859.0	869.5	877.0	883.0	887.5	887.5
52.5°	797.4	810.9	818.5	827.5	833.5	839.5	842.5	842.5
55°	764.4	773.4	779.4	786.9	791.4	794.4	797.4	797.4
57.5°	728.3	734.4	740.4	744.9	747.9	750.9	753.9	752.4
60°	692.3	696.8	701.3	704.3	707.3	710.3	711.8	711.8
62.5°	656.3	657.8	659.3	665.3	668.3	669.8	671.3	671.3
65°	620.2	620.2	621.7	626.2	629.2	632.2	633.7	633.7
67.5°	581.2	582.7	584.2	588.7	590.2	593.2	596.2	596.2
70°	542.1	543.6	543.6	548.1	549.6	552.6	555.6	555.6
72.5°	504.6	504.6	504.6	507.6	510.6	513.6	516.6	516.6
75°	462.5	462.5	462.5	465.5	465.5	467.0	470.0	468.5
77.5°	417.5	413.0	408.5	407.0	407.0	408.5	410.0	410.0
80°	358.9	352.9	349.9	346.9	345.4	346.9	348.4	346.9
82.5°	297.3	289.8	285.3	283.8	283.8	283.8	285.3	282.3
85°	225.3	217.8	214.8	214.8	213.2	213.2	213.2	214.8
87.5°	135.2	130.7	126.1	127.6	126.1	124.6	126.1	129.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)