

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: P188544

Luminaire Tested: **24SR-LD2-53-C-UNV-L840-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-53-C-UNV-L840-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3340.0 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

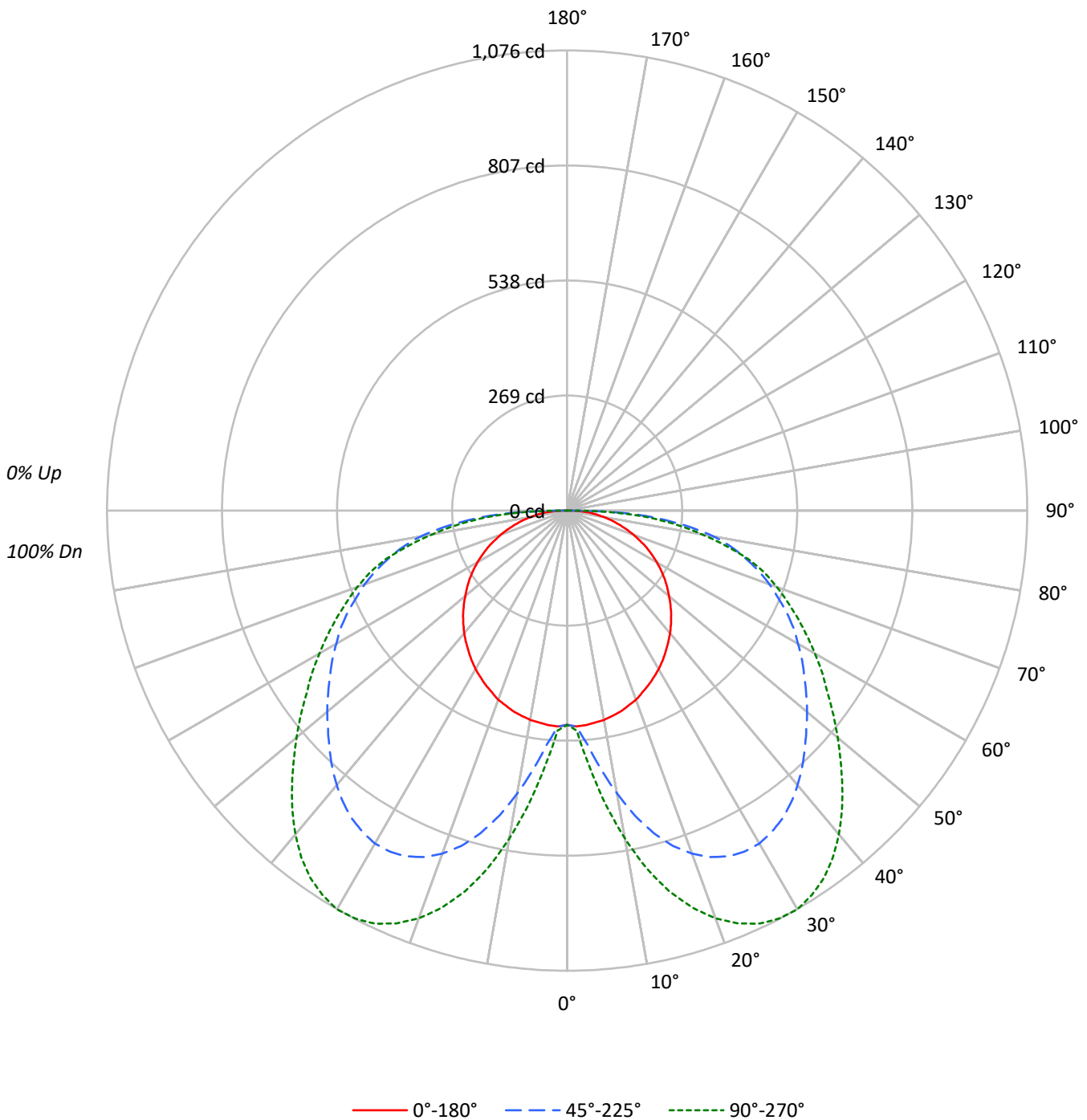
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	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°	674	674	674
5°	680	742	813
10°	679	918	1064
15°	677	1087	1283
20°	674	1222	1453
25°	668	1324	1582
30°	665	1397	1672
35°	660	1443	1721
40°	658	1472	1736
45°	655	1496	1731
50°	651	1533	1729
55°	652	1589	1744
60°	652	1678	1800
65°	653	1805	1893
70°	650	1982	2052
75°	651	2247	2283
80°	672	2699	2485
85°	786	3358	3018



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.8	1.7
10°-20°	210.8	6.3
20°-30°	383.6	11.5
30°-40°	508.9	15.2
40°-50°	557.5	16.7
50°-60°	547.9	16.4
60°-70°	497.0	14.9
70°-80°	393.9	11.8
80°-90°	184.6	5.5
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°	650.2	19.5
0°-40°	1159.1	34.7
0°-60°	2264.5	67.8
0°-90°	3340.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3340.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	501	501	501	501	501	
5°	504	507	549	588	602	48
15°	486	604	780	886	921	137
25°	450	666	892	1019	1066	208
35°	402	650	878	1003	1048	252
45°	344	585	786	881	910	265
55°	278	513	677	730	743	248
65°	205	443	567	584	595	202
75°	125	343	432	433	439	132
85°	51	184	218	195	196	52
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°	501.1	501.1	501.1	501.1	501.1	501.1	501.1	501.1	501.1	501.1	501.1
2.5°	505.2	503.8	503.8	503.8	502.4	502.4	502.4	503.8	503.8	505.2	508.0
5°	503.8	502.4	502.4	502.4	505.2	509.3	517.6	527.2	538.2	549.3	561.6
7.5°	499.7	499.7	499.7	503.8	516.2	532.7	553.4	574.0	591.9	611.2	629.1
10°	496.9	496.9	499.7	513.5	538.2	565.8	593.3	620.8	645.6	671.8	696.5
12.5°	491.4	491.4	499.7	525.8	560.3	596.1	630.5	664.9	697.9	729.6	757.1
15°	485.9	485.9	503.8	541.0	582.3	625.0	666.3	706.2	744.7	780.5	812.2
17.5°	477.7	479.0	506.6	552.0	601.6	649.7	695.2	740.6	781.9	821.8	854.9
20°	470.8	473.5	509.3	561.6	616.7	670.4	721.3	768.1	812.2	853.5	889.3
22.5°	459.8	465.3	510.7	568.5	627.7	685.5	737.8	787.4	834.2	876.9	912.7
25°	450.1	457.0	509.3	571.3	636.0	695.2	748.9	799.8	848.0	892.0	929.2
27.5°	439.1	450.1	508.0	572.7	638.7	699.3	754.4	806.7	854.9	898.9	937.4
30°	428.1	441.9	503.8	571.3	637.4	697.9	753.0	806.7	854.9	898.9	936.1
32.5°	415.7	430.9	495.6	564.4	631.8	691.0	746.1	798.4	848.0	890.6	927.8
35°	402.0	419.9	485.9	554.8	620.8	680.0	733.7	786.0	834.2	878.3	914.0
37.5°	388.2	408.8	474.9	543.7	608.4	666.3	718.6	770.9	817.7	860.4	894.8
40°	374.4	396.5	462.5	530.0	593.3	649.7	702.1	753.0	797.0	838.3	870.0
42.5°	359.3	384.1	448.8	514.8	575.4	630.5	682.8	732.3	775.0	813.6	843.8
45°	344.1	368.9	433.6	498.3	558.9	611.2	662.1	710.3	750.2	786.0	814.9
47.5°	327.6	355.2	419.9	481.8	539.6	593.3	642.9	686.9	726.8	758.5	786.0
50°	311.1	340.0	403.3	465.3	521.7	574.0	622.2	664.9	702.1	732.3	755.7
52.5°	294.6	324.9	388.2	448.8	505.2	556.1	602.9	642.9	677.3	704.8	728.2
55°	278.1	309.7	373.1	432.2	488.7	538.2	583.7	620.8	653.9	677.3	696.5
57.5°	260.2	294.6	357.9	417.1	472.2	521.7	564.4	600.2	630.5	651.1	667.6
60°	242.3	278.1	341.4	402.0	455.6	503.8	545.1	579.5	605.7	623.6	638.7
62.5°	223.0	261.5	326.2	385.4	439.1	485.9	524.5	554.8	580.9	597.4	605.7
65°	205.1	245.0	309.7	368.9	421.2	465.3	502.4	531.4	553.4	567.1	574.0
67.5°	184.5	227.1	291.8	351.0	400.6	443.3	477.7	505.2	524.5	534.1	539.6
70°	165.2	209.2	272.6	330.4	377.2	418.5	451.5	477.7	494.2	503.8	505.2
72.5°	144.5	190.0	253.3	308.4	353.8	392.3	424.0	447.4	461.2	469.4	470.8
75°	125.3	169.3	229.9	282.2	324.9	360.7	390.9	413.0	426.7	432.2	432.2
77.5°	106.0	147.3	205.1	254.7	294.6	327.6	355.2	377.2	388.2	393.7	393.7
80°	86.7	126.6	179.0	224.4	260.2	290.5	318.0	337.3	348.3	348.3	340.0
82.5°	68.8	103.2	148.7	190.0	220.3	247.8	273.9	286.3	289.1	286.3	279.4
85°	50.9	78.5	115.6	147.3	174.8	194.1	210.6	218.9	220.3	217.5	212.0
87.5°	28.9	45.4	66.1	86.7	104.6	114.3	128.0	130.8	130.8	134.9	128.0
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°	501.1	501.1	501.1	501.1	501.1	501.1	501.1	501.1
2.5°	509.3	510.7	510.7	514.8	514.8	516.2	514.8	514.8
5°	569.9	575.4	583.7	591.9	594.7	600.2	598.8	601.6
7.5°	642.9	653.9	666.3	677.3	682.8	688.3	689.7	693.8
10°	715.8	729.6	744.7	759.9	768.1	772.3	777.8	779.1
12.5°	779.1	799.8	814.9	831.4	842.5	848.0	853.5	856.2
15°	837.0	857.6	876.9	894.8	905.8	914.0	919.5	920.9
17.5°	881.0	904.4	925.1	944.3	955.3	965.0	970.5	973.2
20°	915.4	941.6	962.2	981.5	993.9	1004.9	1013.2	1014.5
22.5°	940.2	966.4	989.8	1009.0	1024.2	1035.2	1042.1	1044.8
25°	958.1	985.6	1009.0	1028.3	1043.4	1055.8	1062.7	1065.5
27.5°	966.4	995.3	1020.0	1037.9	1053.1	1065.5	1073.7	1075.1
30°	967.7	995.3	1020.0	1039.3	1054.5	1066.8	1073.7	1076.5
32.5°	958.1	987.0	1011.8	1029.7	1044.8	1057.2	1064.1	1065.5
35°	944.3	970.5	993.9	1011.8	1026.9	1037.9	1044.8	1047.6
37.5°	923.7	948.5	970.5	987.0	1000.8	1011.8	1018.7	1021.4
40°	898.9	922.3	943.0	958.1	970.5	980.1	985.6	988.4
42.5°	870.0	892.0	911.3	923.7	936.1	944.3	948.5	951.2
45°	839.7	860.4	875.5	886.5	897.5	904.4	908.5	909.9
47.5°	808.0	825.9	838.3	848.0	856.2	863.1	867.2	867.2
50°	776.4	791.5	801.2	810.8	817.7	821.8	824.6	825.9
52.5°	744.7	757.1	764.0	772.3	777.8	781.9	784.6	784.6
55°	711.7	721.3	726.8	733.7	739.2	742.0	744.7	743.3
57.5°	680.0	686.9	691.0	696.5	700.7	703.4	706.2	707.6
60°	647.0	652.5	653.9	659.4	663.5	666.3	667.6	669.0
62.5°	612.6	616.7	619.5	622.2	626.3	629.1	630.5	631.8
65°	578.2	580.9	580.9	586.4	590.5	591.9	593.3	594.7
67.5°	542.4	543.7	545.1	549.3	553.4	554.8	557.5	557.5
70°	506.6	506.6	508.0	512.1	516.2	517.6	520.3	521.7
72.5°	469.4	470.8	470.8	474.9	479.0	481.8	483.2	484.6
75°	430.9	430.9	432.2	433.6	435.0	436.4	436.4	439.1
77.5°	389.6	384.1	381.3	378.6	379.9	379.9	378.6	379.9
80°	331.8	324.9	320.7	319.4	320.7	319.4	319.4	320.7
82.5°	272.6	264.3	261.5	260.2	260.2	260.2	258.8	261.5
85°	205.1	199.6	196.8	194.1	195.5	195.5	194.1	195.5
87.5°	123.9	121.1	118.4	115.6	117.0	115.6	114.3	118.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)