

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: P188542

Luminaire Tested: **24SR-LD2-53-C-UNV-L830-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188542
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-L830-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3176.0 lumens
Efficiency: N/A
Efficacy: 73.7 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

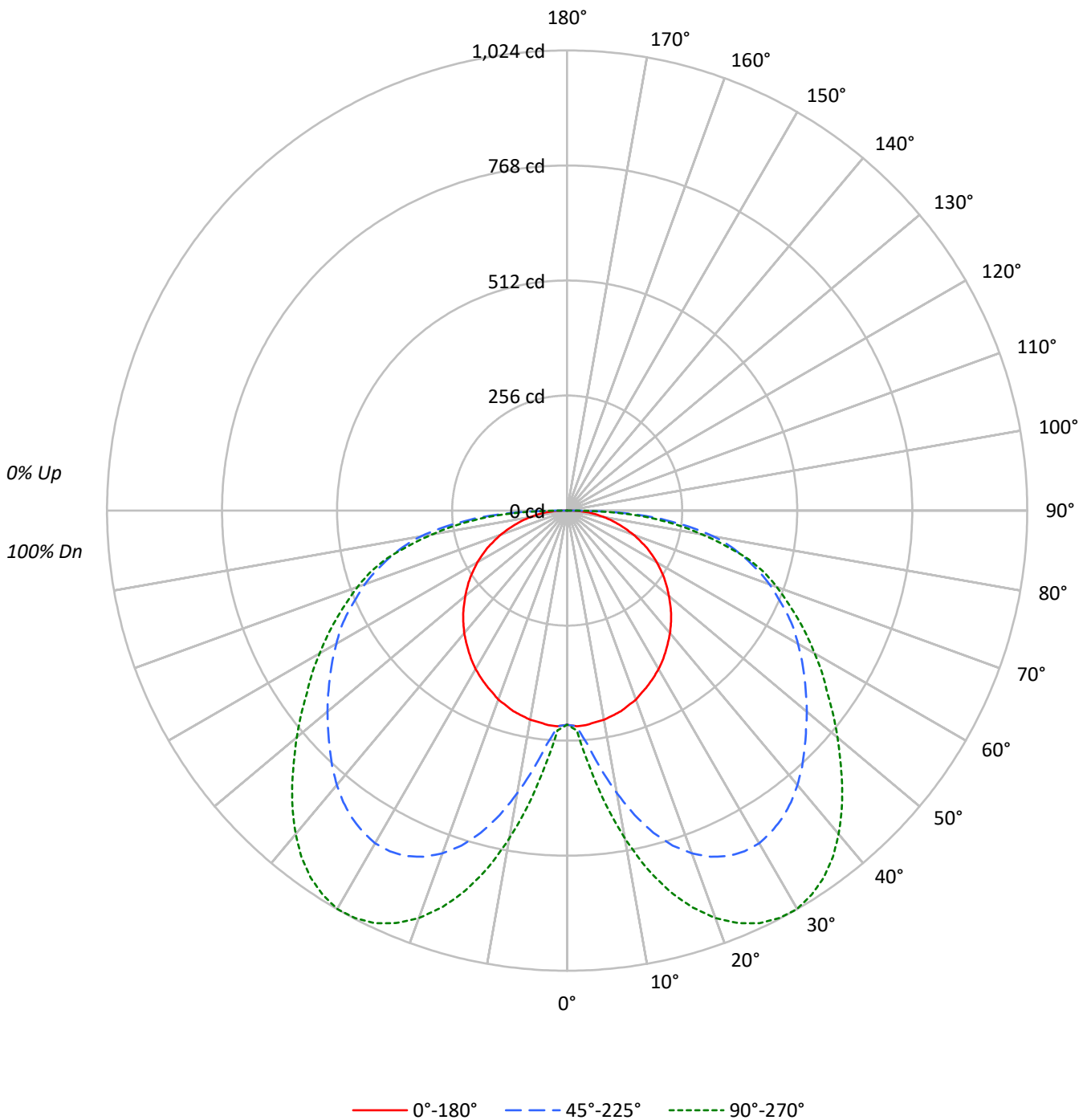
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	641	641	641
5°	647	705	773
10°	646	873	1012
15°	644	1034	1220
20°	641	1162	1381
25°	635	1259	1504
30°	632	1328	1590
35°	628	1372	1636
40°	625	1400	1651
45°	623	1422	1646
50°	619	1458	1644
55°	620	1511	1658
60°	620	1596	1712
65°	621	1717	1800
70°	618	1885	1952
75°	619	2137	2171
80°	639	2566	2363
85°	747	3193	2870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.0	1.7
10°-20°	200.5	6.3
20°-30°	364.8	11.5
30°-40°	483.9	15.2
40°-50°	530.1	16.7
50°-60°	521.0	16.4
60°-70°	472.6	14.9
70°-80°	374.6	11.8
80°-90°	175.6	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°	618.3	19.5
0°-40°	1102.1	34.7
0°-60°	2153.3	67.8
0°-90°	3176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3176.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	479	482	522	559	572	45
15°	462	574	742	842	876	130
25°	428	633	848	969	1013	197
35°	382	618	835	954	996	239
45°	327	556	747	838	865	252
55°	264	488	644	694	707	236
65°	195	421	539	555	566	192
75°	119	326	411	412	418	126
85°	48	175	207	186	186	50
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°	476.5	476.5	476.5	476.5	476.5	476.5	476.5	476.5	476.5	476.5	476.5
2.5°	480.4	479.1	479.1	479.1	477.8	477.8	477.8	479.1	479.1	480.4	483.0
5°	479.1	477.8	477.8	477.8	480.4	484.3	492.2	501.3	511.8	522.3	534.1
7.5°	475.2	475.2	475.2	479.1	490.9	506.6	526.2	545.8	562.9	581.2	598.2
10°	472.5	472.5	475.2	488.2	511.8	538.0	564.2	590.3	613.9	638.8	662.3
12.5°	467.3	467.3	475.2	500.0	532.8	566.8	599.5	632.2	663.7	693.8	719.9
15°	462.1	462.1	479.1	514.4	553.7	594.3	633.5	671.5	708.2	742.2	772.3
17.5°	454.2	455.5	481.7	524.9	572.0	617.8	661.0	704.2	743.5	781.5	812.9
20°	447.7	450.3	484.3	534.1	586.4	637.5	685.9	730.4	772.3	811.6	845.6
22.5°	437.2	442.4	485.6	540.6	596.9	651.9	701.6	748.7	793.2	833.8	867.9
25°	428.0	434.6	484.3	543.2	604.7	661.0	712.1	760.5	806.3	848.2	883.6
27.5°	417.6	428.0	483.0	544.5	607.4	665.0	717.3	767.1	812.9	854.8	891.4
30°	407.1	420.2	479.1	543.2	606.1	663.7	716.0	767.1	812.9	854.8	890.1
32.5°	395.3	409.7	471.2	536.7	600.8	657.1	709.5	759.2	806.3	846.9	882.3
35°	382.2	399.2	462.1	527.5	590.3	646.6	697.7	747.4	793.2	835.1	869.2
37.5°	369.1	388.8	451.6	517.0	578.6	633.5	683.3	733.0	777.5	818.1	850.8
40°	356.0	377.0	439.8	504.0	564.2	617.8	667.6	716.0	757.9	797.2	827.3
42.5°	341.6	365.2	426.7	489.6	547.2	599.5	649.3	696.4	737.0	773.6	802.4
45°	327.2	350.8	412.3	473.9	531.4	581.2	629.6	675.4	713.4	747.4	774.9
47.5°	311.5	337.7	399.2	458.1	513.1	564.2	611.3	653.2	691.1	721.2	747.4
50°	295.8	323.3	383.5	442.4	496.1	545.8	591.7	632.2	667.6	696.4	718.6
52.5°	280.1	308.9	369.1	426.7	480.4	528.8	573.3	611.3	644.0	670.2	692.4
55°	264.4	294.5	354.7	411.0	464.7	511.8	555.0	590.3	621.8	644.0	662.3
57.5°	247.4	280.1	340.3	396.6	449.0	496.1	536.7	570.7	599.5	619.1	634.9
60°	230.4	264.4	324.6	382.2	433.3	479.1	518.4	551.1	576.0	593.0	607.4
62.5°	212.1	248.7	310.2	366.5	417.6	462.1	498.7	527.5	552.4	568.1	576.0
65°	195.0	233.0	294.5	350.8	400.5	442.4	477.8	505.3	526.2	539.3	545.8
67.5°	175.4	216.0	277.5	333.8	380.9	421.5	454.2	480.4	498.7	507.9	513.1
70°	157.1	199.0	259.2	314.2	358.7	397.9	429.3	454.2	469.9	479.1	480.4
72.5°	137.4	180.6	240.9	293.2	336.4	373.1	403.2	425.4	438.5	446.4	447.7
75°	119.1	161.0	218.6	268.3	308.9	343.0	371.7	392.7	405.8	411.0	411.0
77.5°	100.8	140.1	195.0	242.2	280.1	311.5	337.7	358.7	369.1	374.4	374.4
80°	82.5	120.4	170.2	213.4	247.4	276.2	302.4	320.7	331.2	331.2	323.3
82.5°	65.4	98.2	141.4	180.6	209.4	235.6	260.5	272.3	274.9	272.3	265.7
85°	48.4	74.6	110.0	140.1	166.2	184.6	200.3	208.1	209.4	206.8	201.6
87.5°	27.5	43.2	62.8	82.5	99.5	108.6	121.7	124.4	124.4	128.3	121.7
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°	476.5	476.5	476.5	476.5	476.5	476.5	476.5	476.5
2.5°	484.3	485.6	485.6	489.6	489.6	490.9	489.6	489.6
5°	541.9	547.2	555.0	562.9	565.5	570.7	569.4	572.0
7.5°	611.3	621.8	633.5	644.0	649.3	654.5	655.8	659.7
10°	680.7	693.8	708.2	722.6	730.4	734.3	739.6	740.9
12.5°	740.9	760.5	774.9	790.6	801.1	806.3	811.6	814.2
15°	795.9	815.5	833.8	850.8	861.3	869.2	874.4	875.7
17.5°	837.7	860.0	879.6	898.0	908.4	917.6	922.8	925.4
20°	870.5	895.3	915.0	933.3	945.1	955.6	963.4	964.7
22.5°	894.0	918.9	941.2	959.5	973.9	984.4	990.9	993.5
25°	911.0	937.2	959.5	977.8	992.2	1004.0	1010.5	1013.1
27.5°	918.9	946.4	970.0	987.0	1001.4	1013.1	1021.0	1022.3
30°	920.2	946.4	970.0	988.3	1002.7	1014.5	1021.0	1023.6
32.5°	911.0	938.5	962.1	979.1	993.5	1005.3	1011.8	1013.1
35°	898.0	922.8	945.1	962.1	976.5	987.0	993.5	996.1
37.5°	878.3	901.9	922.8	938.5	951.6	962.1	968.6	971.3
40°	854.8	877.0	896.6	911.0	922.8	932.0	937.2	939.8
42.5°	827.3	848.2	866.5	878.3	890.1	898.0	901.9	904.5
45°	798.5	818.1	832.5	843.0	853.5	860.0	863.9	865.2
47.5°	768.4	785.4	797.2	806.3	814.2	820.7	824.7	824.7
50°	738.3	752.7	761.8	771.0	777.5	781.5	784.1	785.4
52.5°	708.2	719.9	726.5	734.3	739.6	743.5	746.1	746.1
55°	676.7	685.9	691.1	697.7	702.9	705.5	708.2	706.8
57.5°	646.6	653.2	657.1	662.3	666.3	668.9	671.5	672.8
60°	615.2	620.5	621.8	627.0	630.9	633.5	634.9	636.2
62.5°	582.5	586.4	589.0	591.7	595.6	598.2	599.5	600.8
65°	549.8	552.4	552.4	557.6	561.6	562.9	564.2	565.5
67.5°	515.7	517.0	518.4	522.3	526.2	527.5	530.1	530.1
70°	481.7	481.7	483.0	486.9	490.9	492.2	494.8	496.1
72.5°	446.4	447.7	447.7	451.6	455.5	458.1	459.5	460.8
75°	409.7	409.7	411.0	412.3	413.6	414.9	414.9	417.6
77.5°	370.4	365.2	362.6	360.0	361.3	361.3	360.0	361.3
80°	315.5	308.9	305.0	303.7	305.0	303.7	303.7	305.0
82.5°	259.2	251.3	248.7	247.4	247.4	247.4	246.1	248.7
85°	195.0	189.8	187.2	184.6	185.9	185.9	184.6	185.9
87.5°	117.8	115.2	112.6	110.0	111.3	110.0	108.6	112.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)