

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: P188547

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188547
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-LD2-59-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: 3534.0 lumens
Efficiency: N/A
Efficacy: 70.4 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

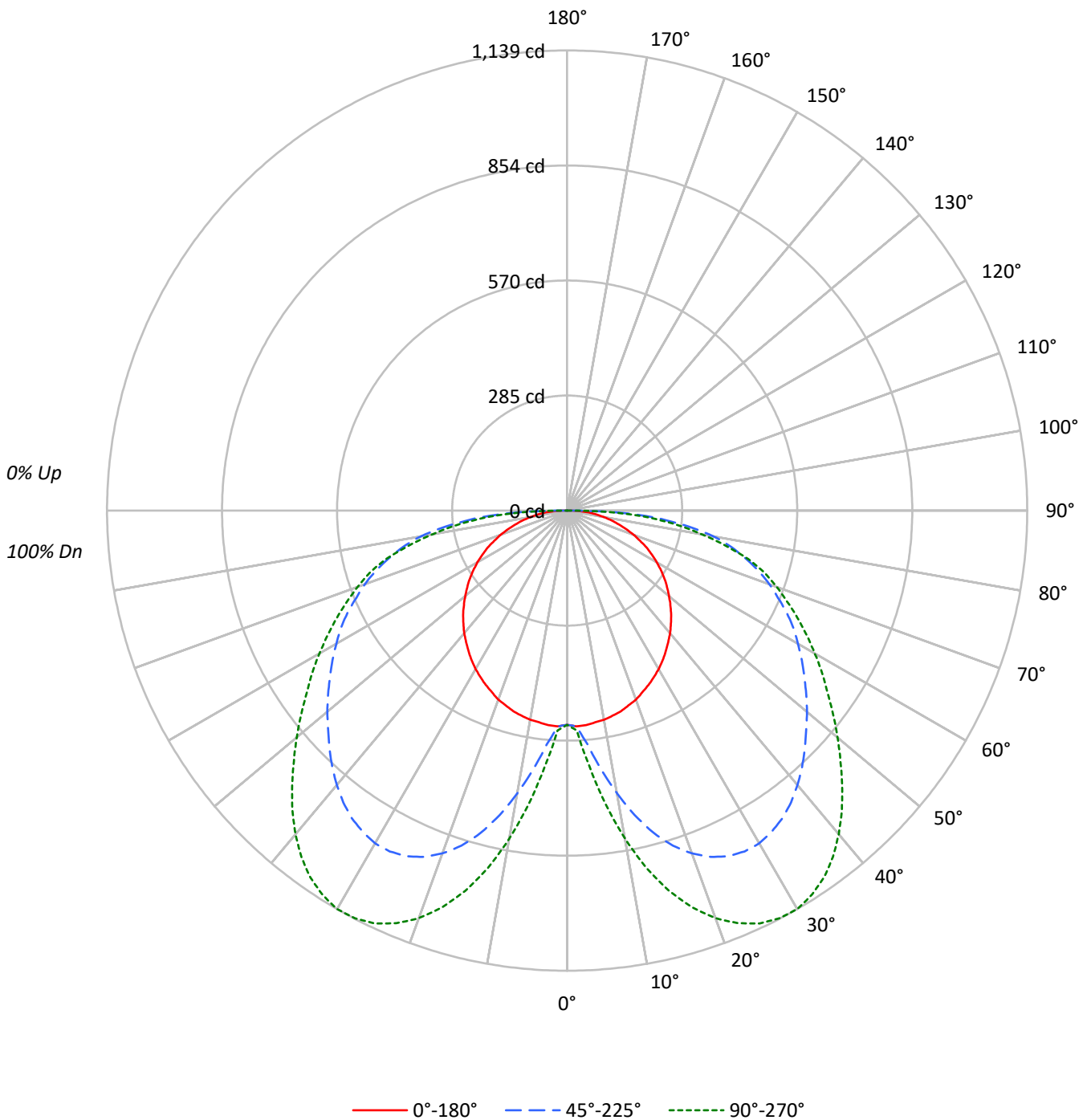
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	713	713	713
5°	720	785	860
10°	718	971	1126
15°	716	1150	1357
20°	713	1293	1537
25°	707	1401	1674
30°	704	1478	1770
35°	699	1526	1821
40°	696	1558	1837
45°	693	1583	1832
50°	689	1622	1829
55°	690	1681	1845
60°	690	1776	1905
65°	691	1911	2003
70°	688	2097	2172
75°	689	2377	2415
80°	711	2855	2630
85°	832	3552	3193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.0	1.7
10°-20°	223.1	6.3
20°-30°	405.9	11.5
30°-40°	538.4	15.2
40°-50°	589.9	16.7
50°-60°	579.8	16.4
60°-70°	525.9	14.9
70°-80°	416.8	11.8
80°-90°	195.3	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°	688.0	19.5
0°-40°	1226.4	34.7
0°-60°	2396.0	67.8
0°-90°	3534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3534.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	533	537	581	622	636	51
15°	514	639	826	937	974	145
25°	476	704	944	1078	1127	220
35°	425	688	929	1061	1108	266
45°	364	619	832	932	963	281
55°	294	543	717	773	786	263
65°	217	469	600	618	629	214
75°	132	363	457	458	465	140
85°	54	195	230	207	207	55
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°	530.2	530.2	530.2	530.2	530.2	530.2	530.2	530.2	530.2	530.2	530.2
2.5°	534.5	533.1	533.1	533.1	531.6	531.6	531.6	533.1	533.1	534.5	537.5
5°	533.1	531.6	531.6	531.6	534.5	538.9	547.7	557.8	569.5	581.2	594.3
7.5°	528.7	528.7	528.7	533.1	546.2	563.7	585.5	607.4	626.3	646.7	665.6
10°	525.8	525.8	528.7	543.3	569.5	598.6	627.8	656.9	683.1	710.8	737.0
12.5°	520.0	520.0	528.7	556.4	592.8	630.7	667.1	703.5	738.5	772.0	801.1
15°	514.2	514.2	533.1	572.4	616.1	661.3	705.0	747.2	788.0	825.9	859.4
17.5°	505.4	506.9	536.0	584.1	636.5	687.5	735.5	783.6	827.3	869.5	904.5
20°	498.1	501.0	538.9	594.3	652.5	709.3	763.2	812.7	859.4	903.0	940.9
22.5°	486.5	492.3	540.4	601.5	664.2	725.4	780.7	833.1	882.7	927.8	965.7
25°	476.3	483.6	538.9	604.5	672.9	735.5	792.4	846.2	897.2	943.8	983.2
27.5°	464.6	476.3	537.5	605.9	675.8	739.9	798.2	853.5	904.5	951.1	991.9
30°	453.0	467.5	533.1	604.5	674.4	738.5	796.7	853.5	904.5	951.1	990.4
32.5°	439.9	455.9	524.3	597.2	668.5	731.2	789.4	844.8	897.2	942.4	981.7
35°	425.3	444.2	514.2	587.0	656.9	719.5	776.3	831.7	882.7	929.3	967.1
37.5°	410.7	432.6	502.5	575.3	643.8	705.0	760.3	815.7	865.2	910.3	946.7
40°	396.2	419.5	489.4	560.8	627.8	687.5	742.8	796.7	843.3	887.0	920.5
42.5°	380.2	406.4	474.8	544.7	608.8	667.1	722.4	774.9	820.0	860.8	892.9
45°	364.1	390.3	458.8	527.3	591.3	646.7	700.6	751.6	793.8	831.7	862.3
47.5°	346.7	375.8	444.2	509.8	571.0	627.8	680.2	726.8	769.0	802.5	831.7
50°	329.2	359.8	426.8	492.3	552.0	607.4	658.4	703.5	742.8	774.9	799.6
52.5°	311.7	343.7	410.7	474.8	534.5	588.4	638.0	680.2	716.6	745.7	770.5
55°	294.2	327.7	394.7	457.3	517.1	569.5	617.6	656.9	691.9	716.6	737.0
57.5°	275.3	311.7	378.7	441.3	499.6	552.0	597.2	635.0	667.1	688.9	706.4
60°	256.3	294.2	361.2	425.3	482.1	533.1	576.8	613.2	640.9	659.8	675.8
62.5°	236.0	276.7	345.2	407.8	464.6	514.2	554.9	587.0	614.7	632.1	640.9
65°	217.0	259.3	327.7	390.3	445.7	492.3	531.6	562.2	585.5	600.1	607.4
67.5°	195.2	240.3	308.8	371.4	423.8	469.0	505.4	534.5	554.9	565.1	571.0
70°	174.8	221.4	288.4	349.6	399.1	442.8	477.7	505.4	522.9	533.1	534.5
72.5°	152.9	201.0	268.0	326.3	374.3	415.1	448.6	473.4	487.9	496.7	498.1
75°	132.5	179.2	243.2	298.6	343.7	381.6	413.7	437.0	451.5	457.3	457.3
77.5°	112.2	155.8	217.0	269.5	311.7	346.7	375.8	399.1	410.7	416.6	416.6
80°	91.8	134.0	189.3	237.4	275.3	307.3	336.5	356.8	368.5	368.5	359.8
82.5°	72.8	109.2	157.3	201.0	233.0	262.2	289.8	303.0	305.9	303.0	295.7
85°	53.9	83.0	122.3	155.8	185.0	205.4	222.8	231.6	233.0	230.1	224.3
87.5°	30.6	48.1	69.9	91.8	110.7	120.9	135.5	138.4	138.4	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	530.2	530.2	530.2	530.2	530.2	530.2	530.2	530.2
2.5°	538.9	540.4	540.4	544.7	544.7	546.2	544.7	544.7
5°	603.0	608.8	617.6	626.3	629.2	635.0	633.6	636.5
7.5°	680.2	691.9	705.0	716.6	722.4	728.3	729.7	734.1
10°	757.4	772.0	788.0	804.0	812.7	817.1	822.9	824.4
12.5°	824.4	846.2	862.3	879.7	891.4	897.2	903.0	906.0
15°	885.6	907.4	927.8	946.7	958.4	967.1	973.0	974.4
17.5°	932.2	956.9	978.8	999.2	1010.8	1021.0	1026.9	1029.8
20°	968.6	996.3	1018.1	1038.5	1051.6	1063.3	1072.0	1073.5
22.5°	994.8	1022.5	1047.2	1067.6	1083.7	1095.3	1102.6	1105.5
25°	1013.7	1042.9	1067.6	1088.0	1104.0	1117.2	1124.4	1127.4
27.5°	1022.5	1053.1	1079.3	1098.2	1114.2	1127.4	1136.1	1137.5
30°	1023.9	1053.1	1079.3	1099.7	1115.7	1128.8	1136.1	1139.0
32.5°	1013.7	1044.3	1070.5	1089.5	1105.5	1118.6	1125.9	1127.4
35°	999.2	1026.9	1051.6	1070.5	1086.6	1098.2	1105.5	1108.4
37.5°	977.3	1003.5	1026.9	1044.3	1058.9	1070.5	1077.8	1080.7
40°	951.1	975.9	997.7	1013.7	1026.9	1037.0	1042.9	1045.8
42.5°	920.5	943.8	964.2	977.3	990.4	999.2	1003.5	1006.5
45°	888.5	910.3	926.4	938.0	949.7	956.9	961.3	962.8
47.5°	855.0	873.9	887.0	897.2	906.0	913.2	917.6	917.6
50°	821.5	837.5	847.7	857.9	865.2	869.5	872.5	873.9
52.5°	788.0	801.1	808.4	817.1	822.9	827.3	830.2	830.2
55°	753.0	763.2	769.0	776.3	782.2	785.1	788.0	786.5
57.5°	719.5	726.8	731.2	737.0	741.4	744.3	747.2	748.7
60°	684.6	690.4	691.9	697.7	702.0	705.0	706.4	707.9
62.5°	648.2	652.5	655.4	658.4	662.7	665.6	667.1	668.5
65°	611.7	614.7	614.7	620.5	624.8	626.3	627.8	629.2
67.5°	573.9	575.3	576.8	581.2	585.5	587.0	589.9	589.9
70°	536.0	536.0	537.5	541.8	546.2	547.7	550.6	552.0
72.5°	496.7	498.1	498.1	502.5	506.9	509.8	511.2	512.7
75°	455.9	455.9	457.3	458.8	460.3	461.7	461.7	464.6
77.5°	412.2	406.4	403.5	400.5	402.0	402.0	400.5	402.0
80°	351.0	343.7	339.4	337.9	339.4	337.9	337.9	339.4
82.5°	288.4	279.7	276.7	275.3	275.3	275.3	273.8	276.7
85°	217.0	211.2	208.3	205.4	206.8	206.8	205.4	206.8
87.5°	131.1	128.2	125.3	122.3	123.8	122.3	120.9	125.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)