

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: P188533

Luminaire Tested: **24SR-LD2-45-C-UNV-L835-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188533
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-LD2-45-C-UNV-L835-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2778.0 lumens
Efficiency: N/A
Efficacy: 75.7 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

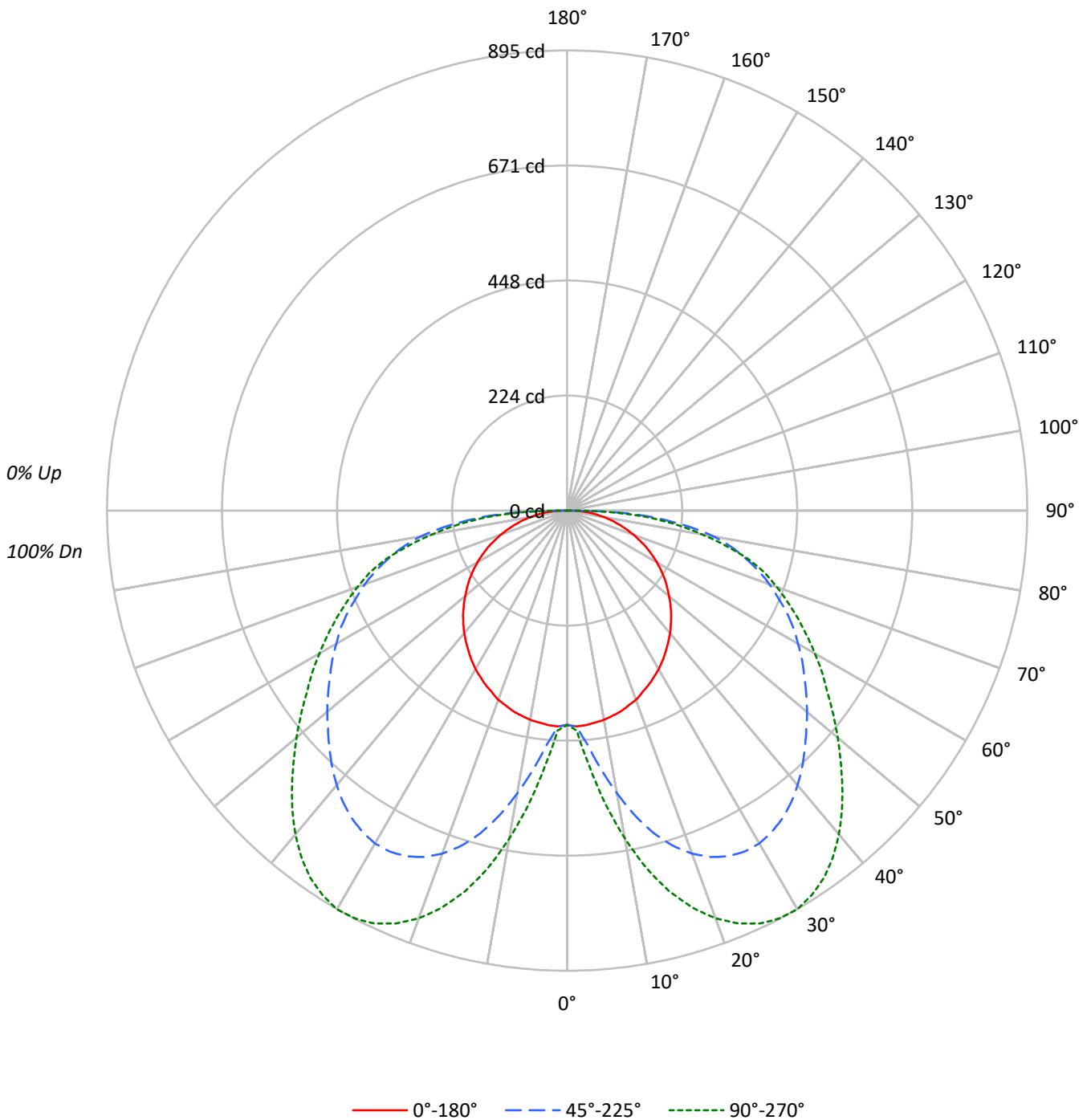
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	561	561	561
5°	566	617	676
10°	565	763	885
15°	563	904	1067
20°	561	1016	1208
25°	556	1101	1316
30°	553	1161	1391
35°	549	1200	1431
40°	547	1225	1444
45°	545	1244	1440
50°	542	1275	1438
55°	543	1321	1450
60°	542	1396	1497
65°	543	1502	1575
70°	541	1648	1707
75°	542	1869	1899
80°	559	2245	2067
85°	655	2793	2510



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	1.7
10°-20°	175.3	6.3
20°-30°	319.1	11.5
30°-40°	423.2	15.2
40°-50°	463.7	16.7
50°-60°	455.7	16.4
60°-70°	413.4	14.9
70°-80°	327.6	11.8
80°-90°	153.6	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°	540.8	19.5
0°-40°	964.0	34.7
0°-60°	1883.4	67.8
0°-90°	2778.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2778.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	417	417	417	417	417	
5°	419	422	457	489	500	40
15°	404	502	649	737	766	114
25°	374	554	742	847	886	173
35°	334	541	730	834	871	209
45°	286	487	654	733	757	221
55°	231	427	563	607	618	206
65°	171	369	472	485	495	168
75°	104	285	360	360	365	110
85°	42	153	181	163	163	43
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°	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8
2.5°	420.2	419.0	419.0	419.0	417.9	417.9	417.9	419.0	419.0	420.2	422.5
5°	419.0	417.9	417.9	417.9	420.2	423.6	430.5	438.5	447.7	456.8	467.1
7.5°	415.6	415.6	415.6	419.0	429.4	443.1	460.3	477.4	492.3	508.4	523.2
10°	413.3	413.3	415.6	427.1	447.7	470.6	493.5	516.4	537.0	558.7	579.3
12.5°	408.7	408.7	415.6	437.4	466.0	495.8	524.4	553.0	580.5	606.8	629.7
15°	404.2	404.2	419.0	450.0	484.3	519.8	554.2	587.4	619.4	649.2	675.5
17.5°	397.3	398.4	421.3	459.1	500.3	540.4	578.2	616.0	650.3	683.5	711.0
20°	391.6	393.9	423.6	467.1	512.9	557.6	600.0	638.9	675.5	709.9	739.6
22.5°	382.4	387.0	424.8	472.9	522.1	570.2	613.7	654.9	693.8	729.3	759.1
25°	374.4	380.1	423.6	475.2	529.0	578.2	622.8	665.2	705.3	741.9	772.8
27.5°	365.2	374.4	422.5	476.3	531.3	581.6	627.4	670.9	711.0	747.6	779.7
30°	356.1	367.5	419.0	475.2	530.1	580.5	626.3	670.9	711.0	747.6	778.6
32.5°	345.8	358.4	412.2	469.4	525.5	574.8	620.6	664.1	705.3	740.8	771.7
35°	334.3	349.2	404.2	461.4	516.4	565.6	610.3	653.8	693.8	730.5	760.2
37.5°	322.9	340.0	395.0	452.3	506.1	554.2	597.7	641.2	680.1	715.6	744.2
40°	311.4	329.7	384.7	440.8	493.5	540.4	583.9	626.3	662.9	697.3	723.6
42.5°	298.8	319.4	373.3	428.2	478.6	524.4	567.9	609.1	644.6	676.7	701.9
45°	286.2	306.8	360.7	414.5	464.8	508.4	550.7	590.8	624.0	653.8	677.8
47.5°	272.5	295.4	349.2	400.7	448.8	493.5	534.7	571.3	604.5	630.9	653.8
50°	258.8	282.8	335.5	387.0	433.9	477.4	517.5	553.0	583.9	609.1	628.6
52.5°	245.0	270.2	322.9	373.3	420.2	462.6	501.5	534.7	563.3	586.2	605.7
55°	231.3	257.6	310.3	359.5	406.5	447.7	485.5	516.4	543.8	563.3	579.3
57.5°	216.4	245.0	297.7	346.9	392.7	433.9	469.4	499.2	524.4	541.6	555.3
60°	201.5	231.3	283.9	334.3	379.0	419.0	453.4	482.0	503.8	518.7	531.3
62.5°	185.5	217.5	271.4	320.6	365.2	404.2	436.2	461.4	483.2	496.9	503.8
65°	170.6	203.8	257.6	306.8	350.4	387.0	417.9	441.9	460.3	471.7	477.4
67.5°	153.4	188.9	242.7	292.0	333.2	368.7	397.3	420.2	436.2	444.2	448.8
70°	137.4	174.0	226.7	274.8	313.7	348.1	375.5	397.3	411.0	419.0	420.2
72.5°	120.2	158.0	210.7	256.5	294.3	326.3	352.6	372.1	383.6	390.4	391.6
75°	104.2	140.8	191.2	234.7	270.2	300.0	325.2	343.5	354.9	359.5	359.5
77.5°	88.2	122.5	170.6	211.8	245.0	272.5	295.4	313.7	322.9	327.5	327.5
80°	72.1	105.3	148.8	186.6	216.4	241.6	264.5	280.5	289.7	289.7	282.8
82.5°	57.2	85.9	123.7	158.0	183.2	206.1	227.8	238.1	240.4	238.1	232.4
85°	42.4	65.3	96.2	122.5	145.4	161.4	175.2	182.0	183.2	180.9	176.3
87.5°	24.0	37.8	55.0	72.1	87.0	95.0	106.5	108.8	108.8	112.2	106.5
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°	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8
2.5°	423.6	424.8	424.8	428.2	428.2	429.4	428.2	428.2
5°	474.0	478.6	485.5	492.3	494.6	499.2	498.1	500.3
7.5°	534.7	543.8	554.2	563.3	567.9	572.5	573.6	577.1
10°	595.4	606.8	619.4	632.0	638.9	642.3	646.9	648.0
12.5°	648.0	665.2	677.8	691.5	700.7	705.3	709.9	712.2
15°	696.1	713.3	729.3	744.2	753.4	760.2	764.8	766.0
17.5°	732.8	752.2	769.4	785.4	794.6	802.6	807.2	809.5
20°	761.4	783.1	800.3	816.3	826.6	835.8	842.7	843.8
22.5°	782.0	803.8	823.2	839.2	851.8	861.0	866.7	869.0
25°	796.9	819.8	839.2	855.3	867.9	878.2	883.9	886.2
27.5°	803.8	827.8	848.4	863.3	875.9	886.2	893.1	894.2
30°	804.9	827.8	848.4	864.4	877.0	887.3	893.1	895.3
32.5°	796.9	820.9	841.5	856.4	869.0	879.3	885.0	886.2
35°	785.4	807.2	826.6	841.5	854.1	863.3	869.0	871.3
37.5°	768.3	788.9	807.2	820.9	832.4	841.5	847.3	849.5
40°	747.6	767.1	784.3	796.9	807.2	815.2	819.8	822.1
42.5°	723.6	741.9	758.0	768.3	778.6	785.4	788.9	791.2
45°	698.4	715.6	728.2	737.3	746.5	752.2	755.7	756.8
47.5°	672.1	687.0	697.3	705.3	712.2	717.9	721.3	721.3
50°	645.7	658.3	666.4	674.4	680.1	683.5	685.8	687.0
52.5°	619.4	629.7	635.4	642.3	646.9	650.3	652.6	652.6
55°	591.9	600.0	604.5	610.3	614.8	617.1	619.4	618.3
57.5°	565.6	571.3	574.8	579.3	582.8	585.1	587.4	588.5
60°	538.1	542.7	543.8	548.4	551.9	554.2	555.3	556.4
62.5°	509.5	512.9	515.2	517.5	520.9	523.2	524.4	525.5
65°	480.9	483.2	483.2	487.7	491.2	492.3	493.5	494.6
67.5°	451.1	452.3	453.4	456.8	460.3	461.4	463.7	463.7
70°	421.3	421.3	422.5	425.9	429.4	430.5	432.8	433.9
72.5°	390.4	391.6	391.6	395.0	398.4	400.7	401.9	403.0
75°	358.4	358.4	359.5	360.7	361.8	362.9	362.9	365.2
77.5°	324.0	319.4	317.1	314.9	316.0	316.0	314.9	316.0
80°	275.9	270.2	266.8	265.6	266.8	265.6	265.6	266.8
82.5°	226.7	219.8	217.5	216.4	216.4	216.4	215.2	217.5
85°	170.6	166.0	163.7	161.4	162.6	162.6	161.4	162.6
87.5°	103.0	100.8	98.5	96.2	97.3	96.2	95.0	98.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)