

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: P188534

Luminaire Tested: **24SR-LD2-45-C-UNV-L840-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188534
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-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: 2834.0 lumens
Efficiency: N/A
Efficacy: 77.2 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

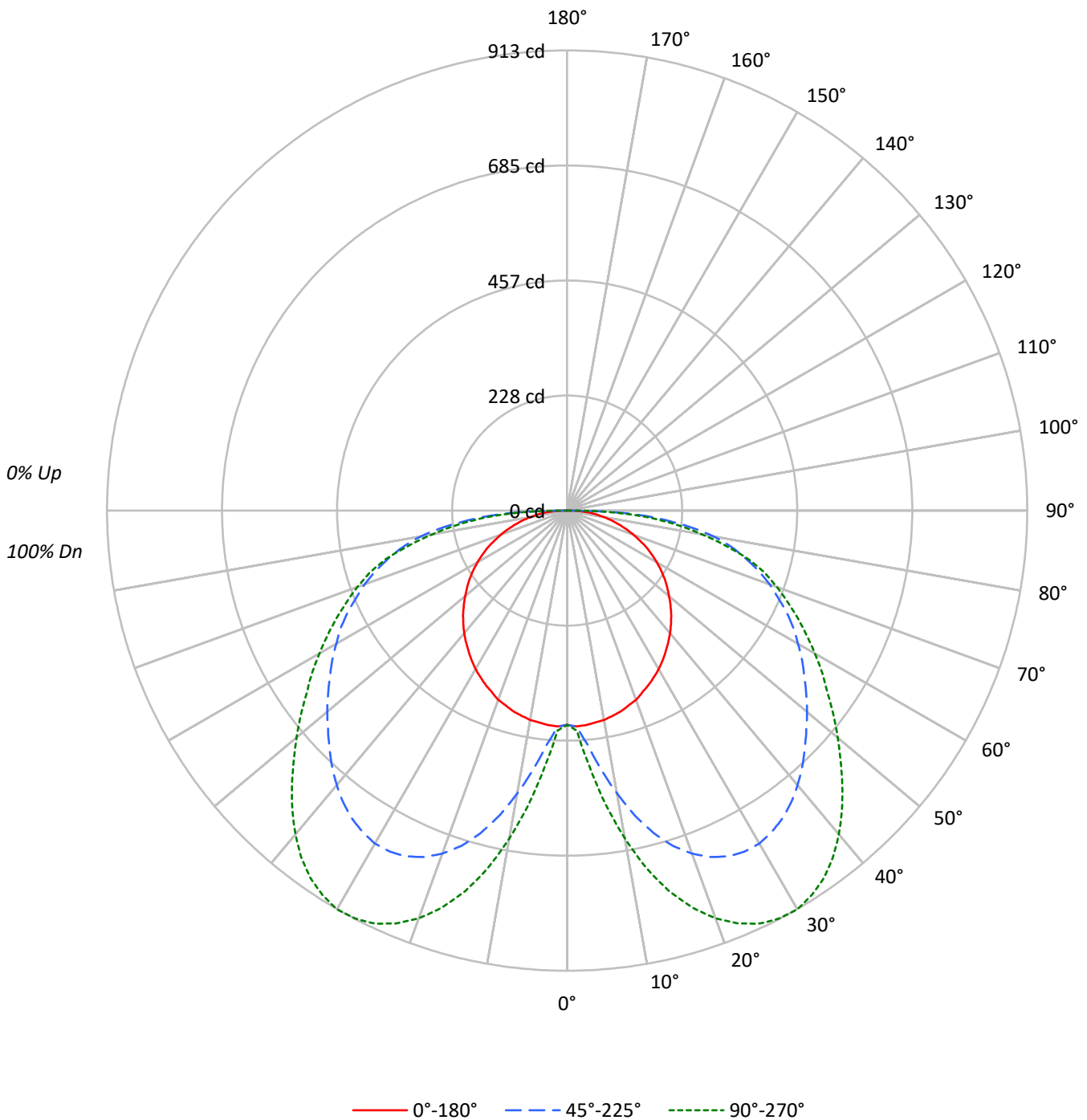
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	572	572	572
5°	577	629	689
10°	576	779	903
15°	574	923	1088
20°	572	1037	1233
25°	567	1124	1342
30°	564	1185	1419
35°	560	1224	1460
40°	558	1249	1473
45°	556	1269	1469
50°	553	1301	1467
55°	553	1348	1479
60°	553	1424	1528
65°	554	1532	1606
70°	552	1682	1742
75°	553	1907	1937
80°	570	2290	2108
85°	667	2848	2561



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	1.7
10°-20°	178.9	6.3
20°-30°	325.5	11.5
30°-40°	431.8	15.2
40°-50°	473.0	16.7
50°-60°	464.9	16.4
60°-70°	421.7	14.9
70°-80°	334.2	11.8
80°-90°	156.7	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°	551.7	19.5
0°-40°	983.5	34.7
0°-60°	1921.4	67.8
0°-90°	2834.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2834.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	428	430	466	499	510	41
15°	412	512	662	752	781	116
25°	382	565	757	864	904	176
35°	341	552	745	851	889	214
45°	292	496	667	748	772	225
55°	236	436	575	620	631	211
65°	174	376	481	495	505	171
75°	106	291	367	367	373	112
85°	43	156	184	166	166	44
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°	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2
2.5°	428.7	427.5	427.5	427.5	426.3	426.3	426.3	427.5	427.5	428.7	431.0
5°	427.5	426.3	426.3	426.3	428.7	432.2	439.2	447.4	456.7	466.0	476.6
7.5°	424.0	424.0	424.0	427.5	438.0	452.0	469.5	487.1	502.3	518.6	533.8
10°	421.7	421.7	424.0	435.7	456.7	480.1	503.4	526.8	547.8	570.0	591.0
12.5°	417.0	417.0	424.0	446.2	475.4	505.8	535.0	564.2	592.2	619.1	642.4
15°	412.3	412.3	427.5	459.0	494.1	530.3	565.3	599.2	631.9	662.3	689.1
17.5°	405.3	406.5	429.8	468.4	510.4	551.3	589.9	628.4	663.4	697.3	725.3
20°	399.5	401.8	432.2	476.6	523.3	568.8	612.0	651.8	689.1	724.2	754.5
22.5°	390.1	394.8	433.3	482.4	532.6	581.7	626.1	668.1	707.8	744.0	774.4
25°	381.9	387.8	432.2	484.7	539.6	589.9	635.4	678.6	719.5	756.9	788.4
27.5°	372.6	381.9	431.0	485.9	542.0	593.4	640.1	684.5	725.3	762.7	795.4
30°	363.3	374.9	427.5	484.7	540.8	592.2	638.9	684.5	725.3	762.7	794.3
32.5°	352.7	365.6	420.5	478.9	536.1	586.3	633.1	677.5	719.5	755.7	787.2
35°	341.1	356.2	412.3	470.7	526.8	577.0	622.6	666.9	707.8	745.2	775.6
37.5°	329.4	346.9	403.0	461.4	516.3	565.3	609.7	654.1	693.8	730.0	759.2
40°	317.7	336.4	392.5	449.7	503.4	551.3	595.7	638.9	676.3	711.3	738.2
42.5°	304.9	325.9	380.8	436.8	488.2	535.0	579.3	621.4	657.6	690.3	716.0
45°	292.0	313.0	367.9	422.8	474.2	518.6	561.8	602.7	636.6	666.9	691.5
47.5°	278.0	301.4	356.2	408.8	457.9	503.4	545.5	582.8	616.7	643.6	666.9
50°	264.0	288.5	342.2	394.8	442.7	487.1	527.9	564.2	595.7	621.4	641.2
52.5°	250.0	275.7	329.4	380.8	428.7	471.9	511.6	545.5	574.7	598.0	617.9
55°	235.9	262.8	316.5	366.8	414.6	456.7	495.2	526.8	554.8	574.7	591.0
57.5°	220.8	250.0	303.7	353.9	400.6	442.7	478.9	509.3	535.0	552.5	566.5
60°	205.6	235.9	289.7	341.1	386.6	427.5	462.5	491.7	513.9	529.1	542.0
62.5°	189.2	221.9	276.8	327.0	372.6	412.3	445.0	470.7	492.9	506.9	513.9
65°	174.0	207.9	262.8	313.0	357.4	394.8	426.3	450.9	469.5	481.2	487.1
67.5°	156.5	192.7	247.6	297.8	339.9	376.1	405.3	428.7	445.0	453.2	457.9
70°	140.2	177.5	231.3	280.3	320.0	355.1	383.1	405.3	419.3	427.5	428.7
72.5°	122.6	161.2	214.9	261.6	300.2	332.9	359.8	379.6	391.3	398.3	399.5
75°	106.3	143.7	195.1	239.4	275.7	306.0	331.7	350.4	362.1	366.8	366.8
77.5°	89.9	125.0	174.0	216.1	250.0	278.0	301.4	320.0	329.4	334.1	334.1
80°	73.6	107.5	151.8	190.4	220.8	246.5	269.8	286.2	295.5	295.5	288.5
82.5°	58.4	87.6	126.1	161.2	186.9	210.2	232.4	242.9	245.3	242.9	237.1
85°	43.2	66.6	98.1	125.0	148.3	164.7	178.7	185.7	186.9	184.5	179.9
87.5°	24.5	38.5	56.1	73.6	88.8	96.9	108.6	111.0	111.0	114.5	108.6
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°	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2
2.5°	432.2	433.3	433.3	436.8	436.8	438.0	436.8	436.8
5°	483.6	488.2	495.2	502.3	504.6	509.3	508.1	510.4
7.5°	545.5	554.8	565.3	574.7	579.3	584.0	585.2	588.7
10°	607.4	619.1	631.9	644.7	651.8	655.3	659.9	661.1
12.5°	661.1	678.6	691.5	705.5	714.8	719.5	724.2	726.5
15°	710.2	727.7	744.0	759.2	768.6	775.6	780.2	781.4
17.5°	747.5	767.4	784.9	801.3	810.6	818.8	823.5	825.8
20°	776.7	798.9	816.4	832.8	843.3	852.7	859.7	860.8
22.5°	797.8	820.0	839.8	856.2	869.0	878.4	884.2	886.5
25°	812.9	836.3	856.2	872.5	885.4	895.9	901.7	904.1
27.5°	820.0	844.5	865.5	880.7	893.5	904.1	911.1	912.2
30°	821.1	844.5	865.5	881.9	894.7	905.2	911.1	913.4
32.5°	812.9	837.5	858.5	873.7	886.5	897.0	902.9	904.1
35°	801.3	823.5	843.3	858.5	871.3	880.7	886.5	888.9
37.5°	783.7	804.8	823.5	837.5	849.2	858.5	864.3	866.7
40°	762.7	782.6	800.1	812.9	823.5	831.6	836.3	838.6
42.5°	738.2	756.9	773.2	783.7	794.3	801.3	804.8	807.1
45°	712.5	730.0	742.9	752.2	761.6	767.4	770.9	772.1
47.5°	685.6	700.8	711.3	719.5	726.5	732.4	735.9	735.9
50°	658.8	671.6	679.8	688.0	693.8	697.3	699.6	700.8
52.5°	631.9	642.4	648.3	655.3	659.9	663.4	665.8	665.8
55°	603.9	612.0	616.7	622.6	627.2	629.6	631.9	630.7
57.5°	577.0	582.8	586.3	591.0	594.5	596.9	599.2	600.4
60°	549.0	553.6	554.8	559.5	563.0	565.3	566.5	567.7
62.5°	519.8	523.3	525.6	527.9	531.5	533.8	535.0	536.1
65°	490.6	492.9	492.9	497.6	501.1	502.3	503.4	504.6
67.5°	460.2	461.4	462.5	466.0	469.5	470.7	473.0	473.0
70°	429.8	429.8	431.0	434.5	438.0	439.2	441.5	442.7
72.5°	398.3	399.5	399.5	403.0	406.5	408.8	410.0	411.1
75°	365.6	365.6	366.8	367.9	369.1	370.3	370.3	372.6
77.5°	330.6	325.9	323.5	321.2	322.4	322.4	321.2	322.4
80°	281.5	275.7	272.1	271.0	272.1	271.0	271.0	272.1
82.5°	231.3	224.3	221.9	220.8	220.8	220.8	219.6	221.9
85°	174.0	169.4	167.0	164.7	165.9	165.9	164.7	165.9
87.5°	105.1	102.8	100.5	98.1	99.3	98.1	96.9	100.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)