

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: P188559

Luminaire Tested: **24SR-LD2-29-C-UNV-L840-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188559
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24637)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-29-C-UNV-L840-CD1-PL-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2871.0 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

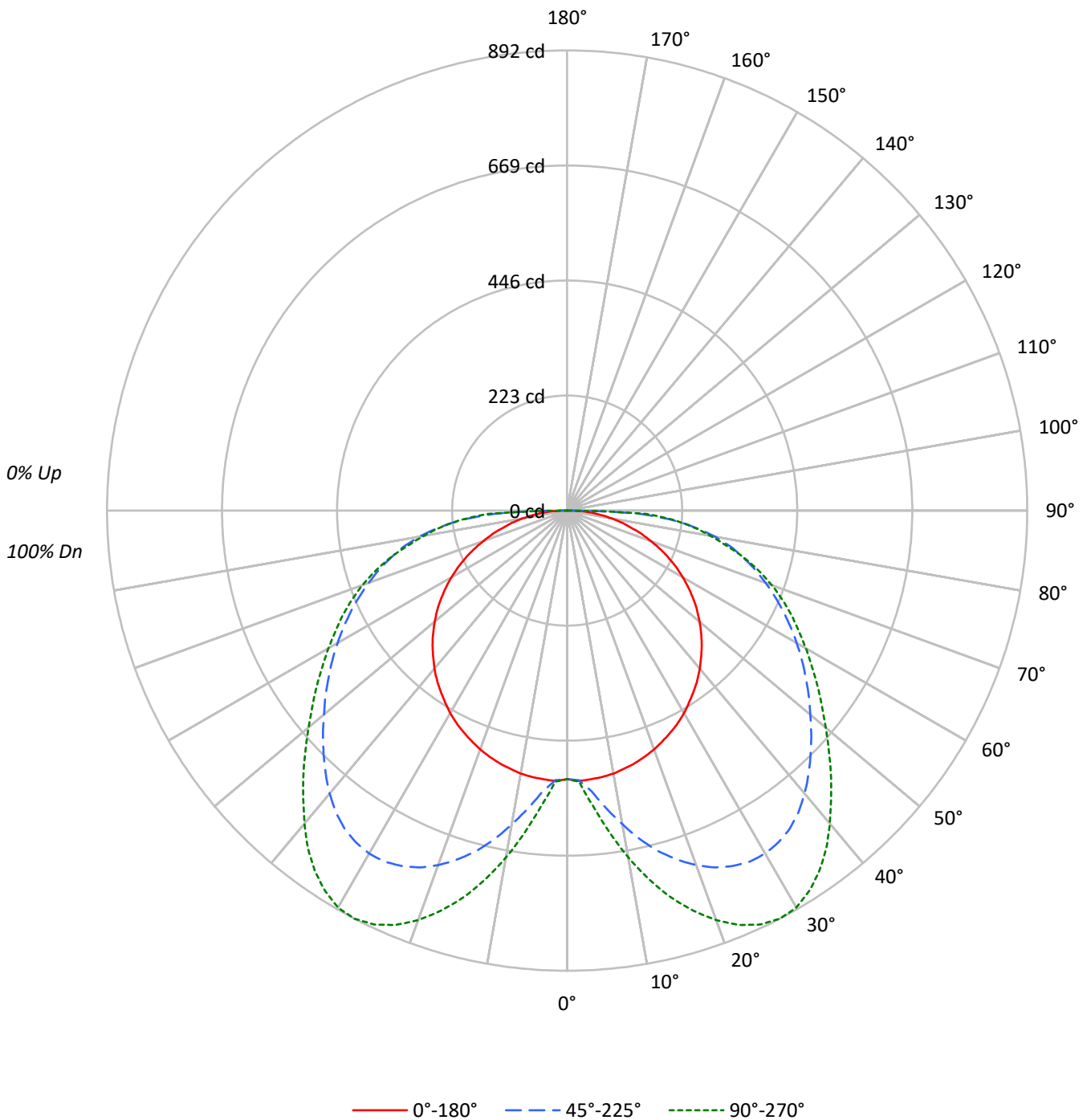
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	70	80	73	68	76	71	66	73	69	65	62
3	86	74	64	57	83	72	63	56	69	61	55	66	60	54	63	58	53	51
4	78	64	55	47	75	63	54	47	60	52	46	58	51	45	56	50	45	42
5	71	57	47	40	69	56	47	40	54	45	39	52	44	39	50	43	38	36
6	65	51	41	34	63	50	41	34	48	40	34	46	39	33	45	38	33	31
7	60	46	36	30	59	45	36	30	43	35	29	42	35	29	40	34	29	27
8	56	42	32	26	54	41	32	26	39	32	26	38	31	26	37	30	26	23
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21
10	49	35	26	21	48	34	26	21	33	26	21	32	25	21	31	25	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	701	701	701
5°	706	738	776
10°	707	844	933
15°	706	952	1081
20°	705	1047	1210
25°	704	1129	1314
30°	704	1193	1380
35°	702	1236	1401
40°	703	1258	1391
45°	702	1271	1376
50°	701	1288	1369
55°	700	1324	1390
60°	698	1383	1438
65°	692	1472	1528
70°	680	1610	1661
75°	670	1840	1852
80°	676	2255	2184
85°	736	3125	3183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.1	1.9
10°-20°	188.0	6.5
20°-30°	333.3	11.6
30°-40°	438.6	15.3
40°-50°	475.6	16.6
50°-60°	463.0	16.1
60°-70°	416.0	14.5
70°-80°	329.5	11.5
80°-90°	172.7	6.0
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°	575.5	20.0
0°-40°	1014.1	35.3
0°-60°	1952.8	68.0
0°-90°	2871.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2871.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	523	523	546	567	574	50
15°	507	573	684	752	776	143
25°	474	604	760	852	885	219
35°	428	588	753	829	853	268
45°	369	534	668	712	723	285
55°	299	464	565	584	593	267
65°	218	389	462	471	480	215
75°	129	293	354	354	356	137
85°	48	155	202	203	206	51
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°	520.7	520.7	520.7	520.7	520.7	520.7	520.7	520.7	520.7	520.7	520.7
2.5°	524.5	523.7	523.0	522.2	521.4	520.7	520.7	520.7	521.4	523.0	525.2
5°	523.0	522.2	521.4	521.4	522.2	523.7	528.3	533.6	538.9	546.5	554.8
7.5°	520.7	519.9	519.9	521.4	527.5	536.6	547.2	558.6	570.0	582.1	593.4
10°	517.7	516.9	517.7	524.5	538.1	553.3	569.2	585.1	600.3	617.7	633.6
12.5°	512.4	512.4	516.1	529.8	549.5	570.0	590.4	611.6	631.3	652.6	670.8
15°	507.0	507.0	515.4	535.8	560.9	585.1	610.9	635.9	659.4	683.6	704.9
17.5°	500.2	500.2	514.6	540.4	569.2	598.8	628.3	656.4	682.9	709.4	732.1
20°	492.6	494.2	513.1	544.2	576.8	610.1	642.0	673.0	702.6	731.4	756.4
22.5°	483.6	486.6	510.8	545.7	582.8	617.7	652.6	685.9	717.0	748.8	773.8
25°	474.5	479.0	507.8	545.7	585.1	623.0	659.4	694.3	727.6	760.2	787.5
27.5°	464.6	470.7	503.3	543.4	585.9	624.5	662.4	698.8	733.7	767.0	795.1
30°	453.2	460.8	496.4	538.9	582.8	622.2	661.7	699.6	734.4	767.8	795.1
32.5°	440.3	450.2	488.1	532.1	576.8	616.9	656.4	694.3	729.9	762.5	788.2
35°	427.5	439.6	479.0	523.7	568.4	608.6	648.0	686.7	721.5	752.6	775.3
37.5°	414.6	427.5	467.6	512.4	557.1	597.2	637.4	674.5	707.9	736.7	757.2
40°	400.2	414.6	454.7	500.2	544.2	584.4	623.8	659.4	689.7	716.2	735.2
42.5°	384.3	400.2	441.1	486.6	529.8	569.2	607.1	640.4	669.2	692.7	708.7
45°	369.1	385.8	426.7	472.2	514.6	553.3	589.7	620.7	646.5	667.7	681.4
47.5°	352.4	369.9	412.3	456.3	498.0	535.8	570.7	598.8	623.8	642.0	654.1
50°	335.0	353.9	396.4	440.3	481.3	518.4	551.8	577.5	600.3	615.4	626.8
52.5°	317.6	337.3	379.7	423.7	464.6	500.2	532.1	557.1	576.8	590.4	600.3
55°	298.6	320.6	363.0	407.0	446.4	482.0	512.4	535.1	553.3	564.6	573.7
57.5°	278.9	302.4	346.4	390.3	429.7	463.8	492.6	513.9	529.8	539.6	546.5
60°	259.2	284.2	328.2	372.1	410.8	444.9	472.2	491.9	506.3	513.9	519.2
62.5°	238.7	265.3	310.0	353.9	393.4	425.2	451.0	469.1	482.0	488.1	493.4
65°	217.5	245.6	291.0	335.0	374.4	404.0	429.0	445.7	457.0	462.3	465.4
67.5°	195.5	225.1	271.3	315.3	353.2	382.0	405.5	422.2	431.3	435.8	438.1
70°	172.8	203.9	250.1	294.1	330.5	357.7	380.5	395.6	404.7	409.3	410.0
72.5°	151.6	181.9	228.9	271.3	306.2	332.7	353.9	369.9	379.0	382.7	382.7
75°	128.8	159.2	205.4	246.3	279.7	305.4	326.7	341.8	350.2	353.9	353.9
77.5°	109.1	137.2	180.4	219.8	250.9	275.9	296.3	312.3	321.4	325.1	325.1
80°	87.2	114.4	154.6	191.0	219.8	242.5	263.8	280.4	289.5	291.0	288.8
82.5°	67.5	92.5	126.6	159.2	185.7	206.9	228.1	241.8	248.6	250.1	249.4
85°	47.7	68.2	97.0	123.5	145.5	165.2	180.4	193.3	200.1	202.4	203.9
87.5°	28.0	39.4	57.6	78.1	94.7	107.6	116.7	128.1	134.9	139.5	144.0
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°	520.7	520.7	520.7	520.7	520.7	520.7	520.7	520.7
2.5°	524.5	525.2	526.0	526.0	526.0	526.8	526.0	526.0
5°	557.8	562.4	566.2	568.4	570.7	574.5	573.7	574.5
7.5°	599.5	607.1	615.4	620.0	623.0	627.6	629.1	629.1
10°	642.7	653.3	663.2	670.0	674.5	681.4	682.1	682.9
12.5°	683.6	696.5	707.9	715.5	722.3	728.4	731.4	732.1
15°	718.5	734.4	747.3	757.2	764.0	770.8	774.6	776.1
17.5°	749.6	766.3	780.7	792.0	800.4	807.2	811.7	813.2
20°	773.8	792.0	807.9	820.1	829.9	837.5	843.6	845.1
22.5°	793.5	812.5	829.2	842.8	852.7	861.7	867.1	869.3
25°	807.9	828.4	845.8	858.7	869.3	877.7	883.0	885.2
27.5°	816.3	836.7	853.4	866.3	876.9	884.5	889.8	892.1
30°	816.3	836.0	852.7	864.8	874.6	882.2	886.0	888.3
32.5°	807.9	826.9	842.0	852.7	861.7	869.3	872.4	873.9
35°	794.3	811.0	824.6	833.7	841.3	848.1	851.1	852.7
37.5°	774.6	789.7	800.4	808.7	814.8	821.6	823.9	825.4
40°	749.6	764.0	771.6	779.1	784.4	790.5	792.0	792.0
42.5°	722.3	734.4	742.0	747.3	751.1	754.9	757.2	757.2
45°	693.5	704.1	709.4	714.0	717.7	720.8	723.1	723.1
47.5°	664.7	673.0	677.6	680.6	683.6	686.7	688.2	688.2
50°	635.9	642.0	645.7	648.0	651.0	653.3	654.8	654.1
52.5°	607.1	611.6	614.7	616.9	618.5	620.7	621.5	622.2
55°	578.3	581.3	583.6	585.1	588.1	590.4	591.2	592.7
57.5°	550.2	551.8	554.8	555.6	558.6	560.9	561.6	562.4
60°	521.4	523.0	525.2	526.8	530.5	532.1	532.8	534.3
62.5°	493.4	494.2	497.2	500.2	503.3	504.8	505.5	506.3
65°	465.4	467.6	469.9	472.2	475.2	477.5	478.2	479.8
67.5°	438.1	439.6	442.6	444.9	447.2	449.4	451.0	451.7
70°	410.0	411.5	413.8	415.3	417.6	419.9	422.2	422.2
72.5°	382.7	382.7	384.3	385.8	388.1	389.6	390.3	390.3
75°	353.2	352.4	353.9	354.7	354.7	354.7	355.5	356.2
77.5°	321.4	318.3	316.8	316.8	317.6	316.1	316.8	317.6
80°	285.0	281.9	281.2	281.2	281.9	281.2	281.9	281.9
82.5°	246.3	246.3	244.0	244.8	245.6	244.0	245.6	247.1
85°	201.6	202.4	201.6	203.9	203.9	203.9	204.6	206.2
87.5°	144.8	149.3	147.8	150.8	150.1	150.8	151.6	153.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)