

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: P188497

Luminaire Tested: **24SR-LD2-48-C-UNV-L830-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188497
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24779)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-48-C-UNV-L830-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2817.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

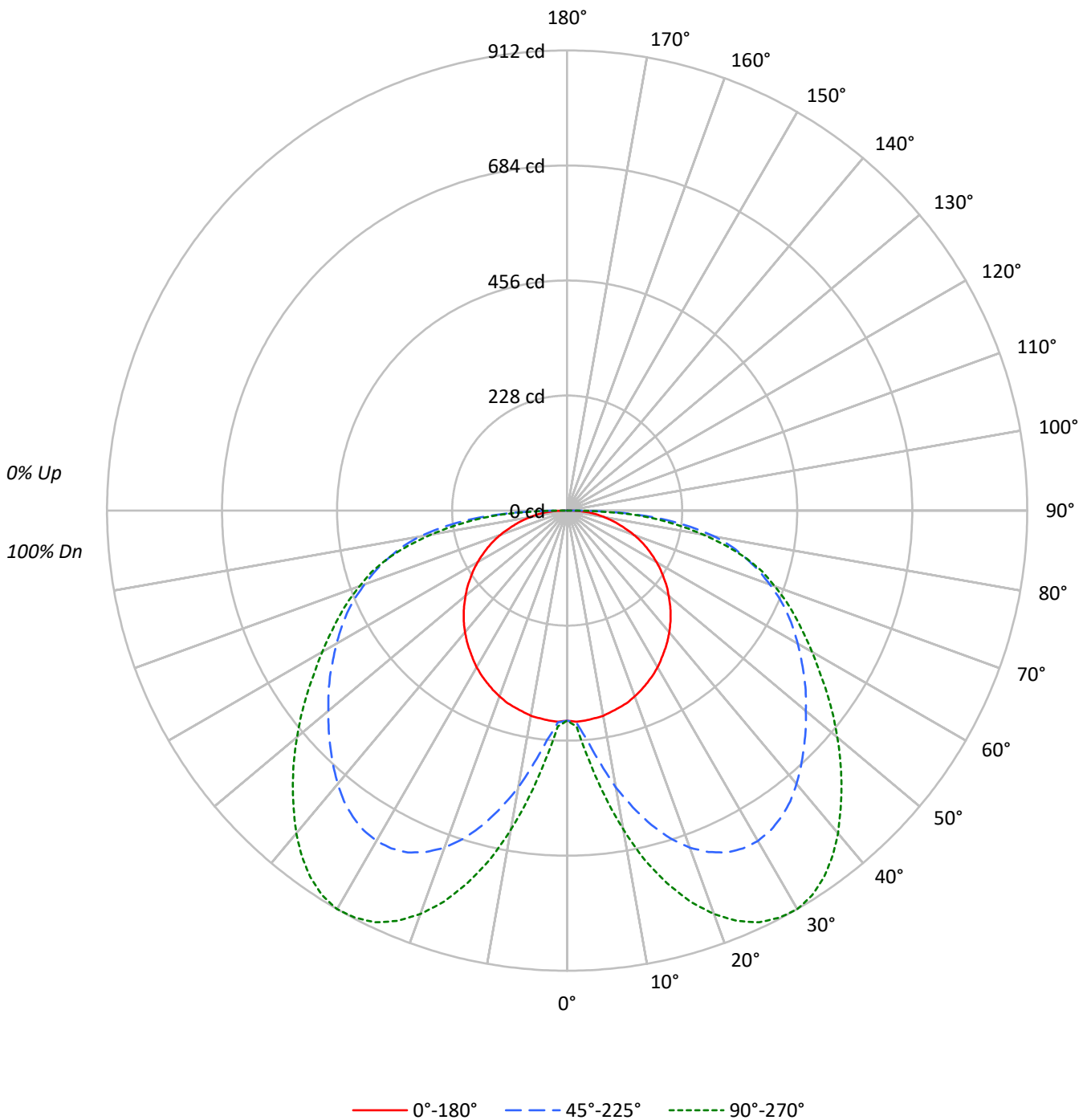
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20
10	48	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°	560	560	560
5°	564	617	671
10°	564	761	878
15°	562	898	1064
20°	561	1018	1218
25°	559	1110	1337
30°	557	1174	1417
35°	554	1216	1457
40°	553	1242	1467
45°	551	1263	1463
50°	550	1293	1464
55°	549	1346	1474
60°	551	1420	1509
65°	554	1533	1589
70°	554	1680	1722
75°	554	1913	1919
80°	577	2300	2118
85°	676	2885	2612



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.2	1.6
10°-20°	175.0	6.2
20°-30°	322.0	11.4
30°-40°	429.2	15.2
40°-50°	470.2	16.7
50°-60°	462.4	16.4
60°-70°	419.6	14.9
70°-80°	334.0	11.9
80°-90°	158.3	5.6
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°	543.2	19.3
0°-40°	972.4	34.5
0°-60°	1905.0	67.6
0°-90°	2817.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2817.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	418	421	457	486	497	40
15°	403	500	645	735	764	114
25°	376	554	748	859	900	174
35°	337	545	741	850	887	211
45°	290	491	664	744	769	224
55°	234	434	574	617	628	210
65°	174	375	482	492	499	172
75°	106	293	368	366	369	113
85°	44	158	187	169	169	45
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°	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4
2.5°	418.8	418.8	417.6	417.6	417.6	416.4	416.4	417.6	418.8	420.0	421.2
5°	417.6	417.6	417.6	417.6	418.8	423.5	429.4	437.7	444.8	456.6	462.6
7.5°	415.2	415.2	416.4	420.0	429.4	442.4	457.8	475.6	489.8	505.1	519.3
10°	412.9	412.9	415.2	427.1	446.0	468.5	490.9	513.4	533.5	557.2	574.9
12.5°	408.1	408.1	415.2	436.5	464.9	493.3	521.7	551.3	577.3	602.2	627.0
15°	403.4	403.4	417.6	447.2	482.7	517.0	550.1	584.4	615.2	644.7	670.8
17.5°	398.7	399.9	421.2	459.0	498.0	538.3	577.3	614.0	648.3	681.4	711.0
20°	391.6	393.9	423.5	467.3	511.1	556.0	597.4	637.6	675.5	711.0	741.7
22.5°	384.5	389.2	424.7	473.2	521.7	570.2	614.0	655.4	695.6	732.3	764.2
25°	376.2	382.1	425.9	476.8	528.8	578.5	624.6	668.4	709.8	747.7	779.6
27.5°	367.9	376.2	423.5	476.8	531.2	583.2	629.4	674.3	718.1	754.8	789.1
30°	358.5	369.1	420.0	475.6	531.2	582.0	629.4	675.5	718.1	755.9	789.1
32.5°	347.8	362.0	414.1	470.8	526.4	578.5	625.8	670.8	713.4	751.2	783.2
35°	337.2	352.5	407.0	463.7	519.3	570.2	616.3	661.3	702.7	740.6	772.5
37.5°	326.5	344.3	398.7	455.5	508.7	558.4	604.5	649.5	689.7	726.4	755.9
40°	314.7	333.6	388.0	443.6	496.9	544.2	590.3	632.9	671.9	707.4	735.8
42.5°	302.8	323.0	376.2	431.8	482.7	530.0	574.9	616.3	654.2	686.1	712.2
45°	289.8	311.1	364.4	417.6	467.3	514.6	558.4	597.4	634.1	663.7	687.3
47.5°	276.8	299.3	351.4	404.6	453.1	499.2	541.8	579.7	612.8	641.2	663.7
50°	262.6	286.3	338.3	390.4	438.9	483.8	525.3	560.7	592.7	617.5	638.8
52.5°	249.6	274.5	325.3	377.4	424.7	469.7	509.9	543.0	572.6	596.2	614.0
55°	234.2	261.4	313.5	364.4	411.7	455.5	493.3	525.3	552.5	573.8	589.1
57.5°	220.0	248.4	300.5	351.4	397.5	441.3	476.8	507.5	531.2	550.1	564.3
60°	204.7	235.4	287.5	338.3	384.5	427.1	461.4	489.8	512.2	527.6	539.5
62.5°	189.3	221.2	275.6	325.3	370.3	410.5	443.6	469.7	489.8	505.1	512.2
65°	173.9	207.0	261.4	312.3	356.1	393.9	425.9	450.7	468.5	481.5	486.2
67.5°	157.3	192.8	247.2	295.8	339.5	376.2	405.8	429.4	444.8	455.5	457.8
70°	140.8	176.3	230.7	279.2	320.6	354.9	384.5	404.6	420.0	427.1	429.4
72.5°	123.0	159.7	214.1	260.3	299.3	333.6	359.6	380.9	393.9	398.7	398.7
75°	106.5	142.0	195.2	239.0	276.8	308.8	333.6	352.5	364.4	367.9	366.7
77.5°	89.9	125.4	175.1	216.5	250.8	280.4	304.0	321.8	332.4	336.0	334.8
80°	74.5	107.7	151.4	190.5	221.2	248.4	269.7	288.7	298.1	296.9	289.8
82.5°	59.2	87.5	126.6	160.9	188.1	212.9	234.2	246.1	249.6	246.1	239.0
85°	43.8	66.2	98.2	125.4	147.9	168.0	181.0	189.3	190.5	186.9	181.0
87.5°	26.0	39.0	58.0	74.5	91.1	100.6	107.7	113.6	114.8	111.2	108.8
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°	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4
2.5°	422.3	423.5	424.7	427.1	425.9	427.1	427.1	428.2
5°	470.8	477.9	482.7	489.8	489.8	493.3	494.5	496.9
7.5°	530.0	539.5	550.1	560.7	561.9	567.8	570.2	570.2
10°	590.3	603.3	616.3	628.2	631.7	638.8	642.4	642.4
12.5°	644.7	658.9	676.7	689.7	694.4	702.7	707.4	708.6
15°	692.1	709.8	727.5	741.7	750.0	758.3	763.0	764.2
17.5°	732.3	753.6	772.5	786.7	796.2	805.6	811.5	812.7
20°	764.2	787.9	806.8	822.2	832.8	844.7	849.4	850.6
22.5°	789.1	811.5	832.8	849.4	861.2	873.1	879.0	880.2
25°	805.6	829.3	850.6	868.3	881.3	892.0	897.9	900.3
27.5°	815.1	839.9	861.2	877.8	890.8	902.6	908.5	909.7
30°	816.3	841.1	862.4	879.0	892.0	903.8	909.7	912.1
32.5°	810.4	835.2	855.3	871.9	884.9	895.5	901.5	903.8
35°	798.5	822.2	842.3	857.7	869.5	879.0	886.1	887.3
37.5°	782.0	804.4	822.2	836.4	848.2	857.7	863.6	863.6
40°	759.5	780.8	796.2	809.2	821.0	828.1	835.2	835.2
42.5°	734.6	754.8	769.0	780.8	789.1	797.3	802.1	802.1
45°	708.6	725.2	739.4	748.8	757.1	763.0	769.0	769.0
47.5°	682.6	696.8	707.4	716.9	724.0	729.9	734.6	734.6
50°	655.4	668.4	676.7	685.0	690.9	695.6	699.2	699.2
52.5°	628.2	638.8	644.7	651.8	656.6	661.3	663.7	663.7
55°	602.2	609.2	614.0	619.9	623.4	625.8	628.2	628.2
57.5°	573.8	578.5	583.2	586.8	589.1	591.5	593.9	592.7
60°	545.4	548.9	552.5	554.8	557.2	559.6	560.7	560.7
62.5°	517.0	518.2	519.3	524.1	526.4	527.6	528.8	528.8
65°	488.6	488.6	489.8	493.3	495.7	498.0	499.2	499.2
67.5°	457.8	459.0	460.2	463.7	464.9	467.3	469.7	469.7
70°	427.1	428.2	428.2	431.8	433.0	435.3	437.7	437.7
72.5°	397.5	397.5	397.5	399.9	402.2	404.6	407.0	407.0
75°	364.4	364.4	364.4	366.7	366.7	367.9	370.3	369.1
77.5°	328.9	325.3	321.8	320.6	320.6	321.8	323.0	323.0
80°	282.7	278.0	275.6	273.3	272.1	273.3	274.5	273.3
82.5°	234.2	228.3	224.8	223.6	223.6	223.6	224.8	222.4
85°	177.5	171.5	169.2	169.2	168.0	168.0	168.0	169.2
87.5°	106.5	102.9	99.4	100.6	99.4	98.2	99.4	101.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)