

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: P188540

Luminaire Tested: **24SR-LD2-48-C-UNV-L850-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188540
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-LD2-48-C-UNV-L850-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3284.0 lumens
Efficiency: N/A
Efficacy: 86.0 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

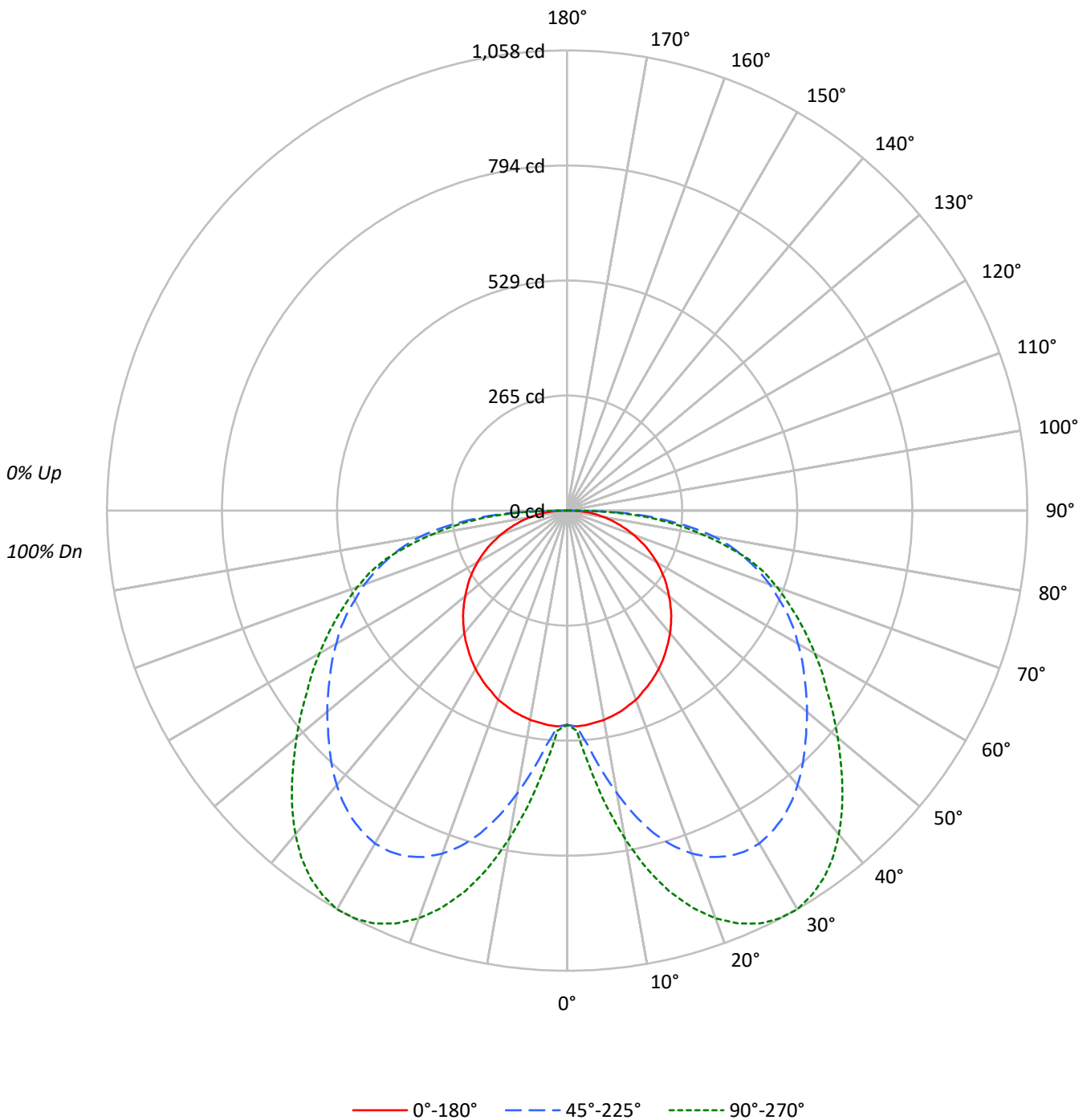
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	663	663	663
5°	669	729	799
10°	668	902	1047
15°	666	1069	1261
20°	663	1202	1428
25°	657	1302	1555
30°	654	1373	1644
35°	649	1418	1692
40°	647	1448	1707
45°	644	1470	1702
50°	640	1507	1700
55°	641	1562	1715
60°	641	1650	1770
65°	642	1775	1862
70°	639	1949	2018
75°	640	2209	2245
80°	661	2653	2444
85°	773	3302	2967



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	1.7
10°-20°	207.3	6.3
20°-30°	377.2	11.5
30°-40°	500.3	15.2
40°-50°	548.1	16.7
50°-60°	538.7	16.4
60°-70°	488.7	14.9
70°-80°	387.3	11.8
80°-90°	181.5	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°	639.3	19.5
0°-40°	1139.6	34.7
0°-60°	2226.5	67.8
0°-90°	3284.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3284.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	493	493	493	493	493	
5°	495	499	540	578	592	47
15°	478	594	767	871	906	135
25°	443	654	877	1002	1048	204
35°	395	640	864	986	1030	248
45°	338	575	773	866	895	261
55°	273	505	666	718	731	244
65°	202	436	558	574	585	199
75°	123	337	425	426	432	130
85°	50	181	214	192	192	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°	492.7	492.7	492.7	492.7	492.7	492.7	492.7	492.7	492.7	492.7	492.7
2.5°	496.7	495.4	495.4	495.4	494.0	494.0	494.0	495.4	495.4	496.7	499.4
5°	495.4	494.0	494.0	494.0	496.7	500.8	508.9	518.4	529.2	540.0	552.2
7.5°	491.3	491.3	491.3	495.4	507.6	523.8	544.1	564.4	582.0	600.9	618.5
10°	488.6	488.6	491.3	504.9	529.2	556.3	583.4	610.4	634.8	660.5	684.9
12.5°	483.2	483.2	491.3	517.0	550.9	586.1	619.9	653.7	686.2	717.3	744.4
15°	477.8	477.8	495.4	531.9	572.5	614.5	655.1	694.3	732.2	767.4	798.6
17.5°	469.7	471.0	498.1	542.7	591.5	638.8	683.5	728.2	768.8	808.0	840.5
20°	462.9	465.6	500.8	552.2	606.4	659.1	709.2	755.2	798.6	839.2	874.4
22.5°	452.1	457.5	502.1	559.0	617.2	674.0	725.5	774.2	820.2	862.2	897.4
25°	442.6	449.4	500.8	561.7	625.3	683.5	736.3	786.4	833.7	877.1	913.6
27.5°	431.8	442.6	499.4	563.1	628.0	687.6	741.7	793.1	840.5	883.8	921.7
30°	420.9	434.5	495.4	561.7	626.7	686.2	740.4	793.1	840.5	883.8	920.4
32.5°	408.8	423.6	487.3	554.9	621.3	679.5	733.6	785.0	833.7	875.7	912.3
35°	395.2	412.8	477.8	545.5	610.4	668.6	721.4	772.8	820.2	863.5	898.7
37.5°	381.7	402.0	467.0	534.6	598.2	655.1	706.5	758.0	804.0	845.9	879.8
40°	368.1	389.8	454.8	521.1	583.4	638.8	690.3	740.4	783.7	824.3	855.4
42.5°	353.3	377.6	441.2	506.2	565.8	619.9	671.3	720.1	762.0	799.9	829.7
45°	338.4	362.7	426.3	490.0	549.5	600.9	651.0	698.4	737.7	772.8	801.3
47.5°	322.1	349.2	412.8	473.7	530.6	583.4	632.1	675.4	714.6	745.8	772.8
50°	305.9	334.3	396.6	457.5	513.0	564.4	611.8	653.7	690.3	720.1	743.1
52.5°	289.6	319.4	381.7	441.2	496.7	546.8	592.8	632.1	665.9	693.0	716.0
55°	273.4	304.5	366.8	425.0	480.5	529.2	573.9	610.4	642.9	665.9	684.9
57.5°	255.8	289.6	351.9	410.1	464.2	513.0	554.9	590.1	619.9	640.2	656.4
60°	238.2	273.4	335.7	395.2	448.0	495.4	536.0	569.8	595.5	613.1	628.0
62.5°	219.3	257.2	320.8	379.0	431.8	477.8	515.7	545.5	571.2	587.4	595.5
65°	201.7	240.9	304.5	362.7	414.2	457.5	494.0	522.4	544.1	557.6	564.4
67.5°	181.4	223.3	286.9	345.1	393.9	435.8	469.7	496.7	515.7	525.2	530.6
70°	162.4	205.7	268.0	324.8	370.9	411.5	443.9	469.7	485.9	495.4	496.7
72.5°	142.1	186.8	249.0	303.2	347.8	385.7	416.9	439.9	453.4	461.5	462.9
75°	123.2	166.5	226.0	277.5	319.4	354.6	384.4	406.0	419.6	425.0	425.0
77.5°	104.2	144.8	201.7	250.4	289.6	322.1	349.2	370.9	381.7	387.1	387.1
80°	85.3	124.5	176.0	220.6	255.8	285.6	312.7	331.6	342.4	342.4	334.3
82.5°	67.7	101.5	146.2	186.8	216.6	243.6	269.3	281.5	284.2	281.5	274.8
85°	50.1	77.1	113.7	144.8	171.9	190.8	207.1	215.2	216.6	213.9	208.4
87.5°	28.4	44.7	65.0	85.3	102.9	112.3	125.9	128.6	128.6	132.6	125.9
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°	492.7	492.7	492.7	492.7	492.7	492.7	492.7	492.7
2.5°	500.8	502.1	502.1	506.2	506.2	507.6	506.2	506.2
5°	560.3	565.8	573.9	582.0	584.7	590.1	588.8	591.5
7.5°	632.1	642.9	655.1	665.9	671.3	676.7	678.1	682.2
10°	703.8	717.3	732.2	747.1	755.2	759.3	764.7	766.1
12.5°	766.1	786.4	801.3	817.5	828.3	833.7	839.2	841.9
15°	822.9	843.2	862.2	879.8	890.6	898.7	904.1	905.5
17.5°	866.2	889.2	909.5	928.5	939.3	948.8	954.2	956.9
20°	900.1	925.8	946.1	965.0	977.2	988.0	996.2	997.5
22.5°	924.4	950.1	973.2	992.1	1007.0	1017.8	1024.6	1027.3
25°	942.0	969.1	992.1	1011.1	1025.9	1038.1	1044.9	1047.6
27.5°	950.1	978.6	1002.9	1020.5	1035.4	1047.6	1055.7	1057.1
30°	951.5	978.6	1002.9	1021.9	1036.8	1049.0	1055.7	1058.4
32.5°	942.0	970.5	994.8	1012.4	1027.3	1039.5	1046.2	1047.6
35°	928.5	954.2	977.2	994.8	1009.7	1020.5	1027.3	1030.0
37.5°	908.2	932.6	954.2	970.5	984.0	994.8	1001.6	1004.3
40°	883.8	906.8	927.1	942.0	954.2	963.7	969.1	971.8
42.5°	855.4	877.1	896.0	908.2	920.4	928.5	932.6	935.3
45°	825.6	845.9	860.8	871.6	882.5	889.2	893.3	894.7
47.5°	794.5	812.1	824.3	833.7	841.9	848.6	852.7	852.7
50°	763.4	778.3	787.7	797.2	804.0	808.0	810.7	812.1
52.5°	732.2	744.4	751.2	759.3	764.7	768.8	771.5	771.5
55°	699.8	709.2	714.6	721.4	726.8	729.5	732.2	730.9
57.5°	668.6	675.4	679.5	684.9	688.9	691.6	694.3	695.7
60°	636.1	641.6	642.9	648.3	652.4	655.1	656.4	657.8
62.5°	602.3	606.4	609.1	611.8	615.8	618.5	619.9	621.3
65°	568.5	571.2	571.2	576.6	580.6	582.0	583.4	584.7
67.5°	533.3	534.6	536.0	540.0	544.1	545.5	548.2	548.2
70°	498.1	498.1	499.4	503.5	507.6	508.9	511.6	513.0
72.5°	461.5	462.9	462.9	467.0	471.0	473.7	475.1	476.4
75°	423.6	423.6	425.0	426.3	427.7	429.1	429.1	431.8
77.5°	383.0	377.6	374.9	372.2	373.6	373.6	372.2	373.6
80°	326.2	319.4	315.4	314.0	315.4	314.0	314.0	315.4
82.5°	268.0	259.9	257.2	255.8	255.8	255.8	254.5	257.2
85°	201.7	196.3	193.5	190.8	192.2	192.2	190.8	192.2
87.5°	121.8	119.1	116.4	113.7	115.0	113.7	112.3	116.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)