

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: P188698

Luminaire Tested: **24SR-LD2-48-C-UNV-L835-CD1-TB-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188698  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33587)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24SR-LD2-48-C-UNV-L835-CD1-TB-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.  
  
Light Source: EATON LED 3500K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3172.0 lumens  
Efficiency: N/A  
Efficacy: 83.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 2.07 / 1.9  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

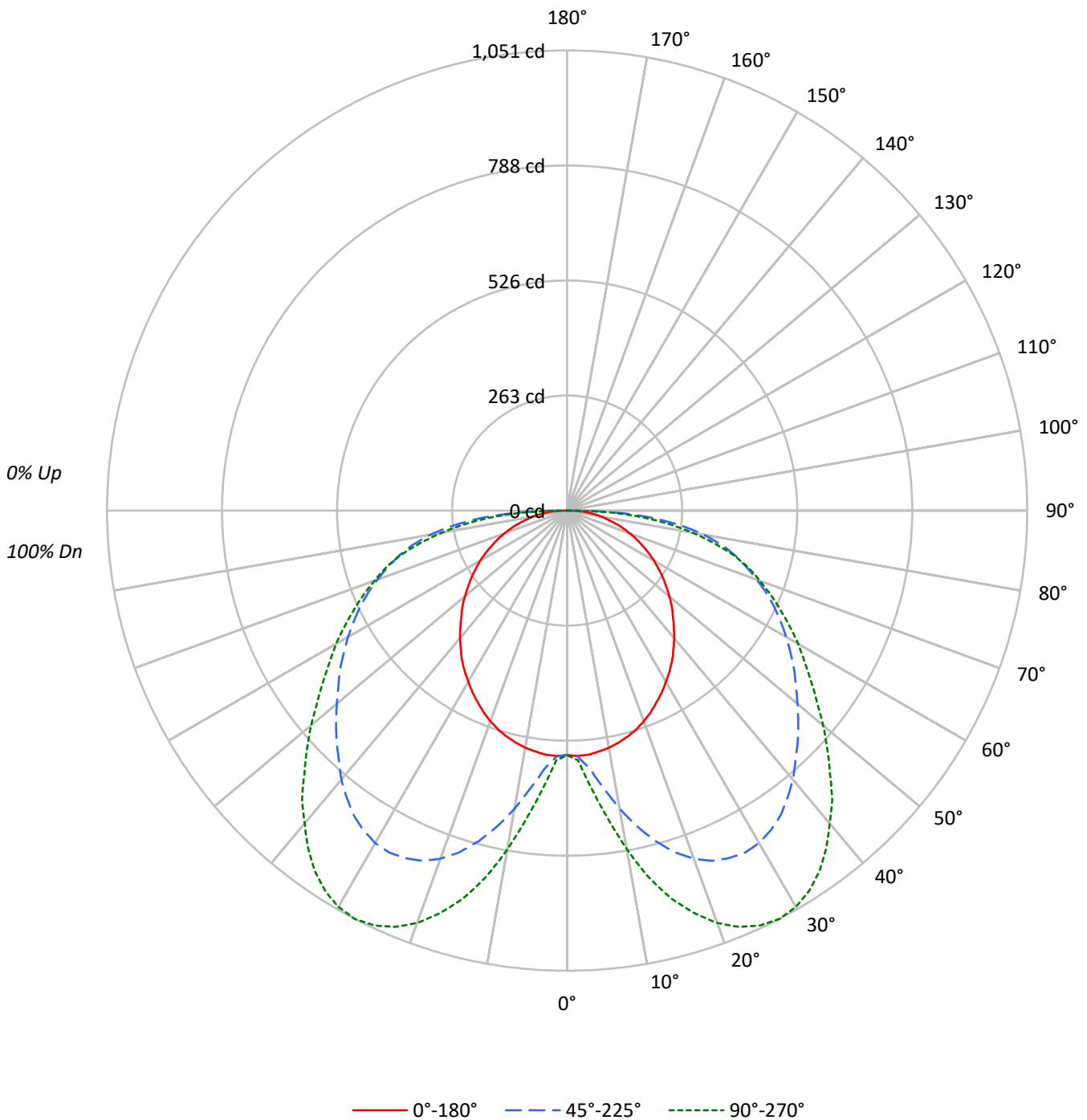
Input Watts (W): 38.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	91	103	98	93	89	94	90	86	90	86	83	86	83	81	79
2	95	86	78	71	93	84	77	70	80	74	69	77	72	67	74	69	65	63
3	86	74	65	58	83	73	64	57	69	62	56	67	60	55	64	59	54	52
4	78	65	55	48	76	64	54	47	61	53	47	59	52	46	56	50	45	43
5	72	58	48	40	69	56	47	40	54	46	40	52	45	39	50	44	39	36
6	66	51	42	35	64	50	41	35	49	40	34	47	39	34	45	39	34	31
7	61	46	37	30	59	45	37	30	44	36	30	42	35	30	41	34	29	27
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24
9	53	38	30	24	51	38	29	24	37	29	24	35	28	23	34	28	23	21
10	49	35	27	21	48	35	27	21	34	26	21	33	26	21	32	25	21	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	751	751	751
5°	756	799	860
10°	751	945	1073
15°	744	1089	1277
20°	733	1212	1435
25°	717	1300	1551
30°	701	1362	1624
35°	687	1396	1650
40°	668	1409	1638
45°	650	1418	1615
50°	638	1437	1598
55°	626	1485	1596
60°	617	1555	1641
65°	606	1662	1712
70°	600	1813	1842
75°	596	2066	2048
80°	614	2456	2249
85°	678	3049	2635



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.5	1.9
10°-20°	214.8	6.8
20°-30°	382.6	12.1
30°-40°	496.1	15.6
40°-50°	529.0	16.7
50°-60°	508.9	16.0
60°-70°	455.4	14.4
70°-80°	358.5	11.3
80°-90°	167.2	5.3
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°	656.9	20.7
0°-40°	1153.0	36.4
0°-60°	2191.0	69.1
0°-90°	3172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3172.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	560	566	591	623	636	53
15°	534	635	782	883	917	151
25°	483	675	876	1007	1045	223
35°	418	642	850	972	1005	261
45°	341	560	745	832	849	264
55°	267	481	633	674	680	239
65°	190	408	522	533	538	189
75°	115	314	398	392	394	121
85°	44	166	198	176	171	46
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°	558.5	558.5	558.5	558.5	558.5	558.5	558.5	558.5	558.5	558.5	558.5
2.5°	560.9	560.9	559.7	559.7	560.9	560.9	560.9	560.9	562.1	562.1	563.4
5°	559.7	558.5	558.5	560.9	564.6	568.2	571.9	578.0	582.9	591.4	598.7
7.5°	554.8	554.8	557.3	563.4	571.9	584.1	597.5	612.1	625.5	639.0	654.8
10°	549.9	549.9	556.0	567.0	584.1	606.0	628.0	649.9	670.7	691.4	708.5
12.5°	542.6	543.8	553.6	573.1	601.2	631.6	659.7	687.7	715.8	738.9	764.6
15°	534.1	536.5	551.2	580.4	617.0	653.6	687.7	721.9	753.6	781.6	808.5
17.5°	524.3	528.0	548.7	586.5	629.2	670.7	713.3	752.4	786.5	818.2	848.7
20°	512.1	518.2	546.3	591.4	639.0	686.5	731.6	773.1	812.1	846.3	880.4
22.5°	498.7	506.0	541.4	592.6	645.1	696.3	746.3	788.9	830.4	865.8	901.1
25°	482.9	493.9	536.5	591.4	647.5	702.4	753.6	797.5	840.2	875.5	914.5
27.5°	468.2	480.4	528.0	586.5	645.1	702.4	753.6	799.9	843.8	880.4	918.2
30°	451.2	467.0	519.5	579.2	639.0	696.3	748.7	795.0	837.7	876.7	915.8
32.5°	435.3	452.4	506.0	567.0	628.0	685.3	738.9	784.1	826.7	865.8	903.6
35°	418.2	435.3	491.4	554.8	613.3	670.7	721.9	768.2	809.7	849.9	885.3
37.5°	398.7	418.2	475.6	537.7	595.1	652.4	702.4	747.5	788.9	826.7	860.9
40°	380.4	401.2	457.3	519.5	576.8	631.6	680.4	723.1	763.3	802.4	832.8
42.5°	360.9	382.9	440.2	499.9	556.0	608.5	654.8	698.7	737.7	771.9	802.4
45°	341.4	365.8	421.9	480.4	534.1	586.5	632.9	673.1	710.9	745.0	770.6
47.5°	324.4	348.7	402.4	460.9	514.6	564.6	609.7	648.7	685.3	715.8	741.4
50°	304.8	329.2	384.1	441.4	493.9	543.8	586.5	624.3	658.5	686.5	710.9
52.5°	285.3	312.2	365.8	423.1	475.6	523.1	565.8	602.4	632.9	658.5	679.2
55°	267.0	293.9	348.7	404.8	457.3	504.8	545.1	580.4	609.7	632.9	648.7
57.5°	247.5	276.8	332.9	389.0	440.2	485.3	525.6	558.5	585.3	604.8	618.2
60°	229.2	259.7	317.0	371.9	423.1	468.2	506.0	537.7	560.9	578.0	589.0
62.5°	209.7	242.7	300.0	354.8	404.8	450.0	485.3	514.6	536.5	549.9	557.3
65°	190.2	225.6	282.9	337.8	386.5	429.2	463.4	490.2	509.7	521.9	528.0
67.5°	171.9	208.5	265.8	319.5	367.0	407.3	440.2	465.8	482.9	492.6	495.1
70°	152.4	190.2	247.5	300.0	346.3	384.1	415.8	437.8	453.6	460.9	463.4
72.5°	134.1	171.9	228.0	279.2	323.1	358.5	389.0	410.9	424.3	429.2	429.2
75°	114.6	152.4	207.3	256.1	296.3	331.7	359.7	379.2	391.4	397.5	395.1
77.5°	95.1	132.9	185.3	230.5	267.0	298.7	326.8	345.1	357.3	360.9	358.5
80°	79.3	113.4	159.7	201.2	235.3	264.6	290.2	308.5	319.5	317.0	310.9
82.5°	61.0	92.7	132.9	168.3	198.8	226.8	251.2	265.8	268.3	263.4	256.1
85°	43.9	68.3	101.2	129.3	156.1	176.8	193.9	203.6	203.6	197.5	192.7
87.5°	25.6	40.2	58.5	78.0	90.2	103.6	117.1	119.5	119.5	119.5	113.4
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°	558.5	558.5	558.5	558.5	558.5	558.5	558.5	558.5
2.5°	567.0	568.2	569.5	570.7	571.9	571.9	571.9	570.7
5°	606.0	613.3	619.4	626.8	629.2	631.6	634.1	636.5
7.5°	668.2	678.0	687.7	697.5	703.6	710.9	708.5	708.5
10°	728.0	746.3	757.2	769.4	775.5	782.8	786.5	785.3
12.5°	786.5	807.2	823.1	834.1	843.8	851.1	853.6	857.2
15°	836.5	857.2	876.7	890.1	902.3	909.7	914.5	917.0
17.5°	878.0	898.7	920.6	937.7	948.7	958.4	960.9	963.3
20°	908.4	935.3	956.0	974.3	986.5	996.2	1001.1	1002.3
22.5°	932.8	958.4	981.6	999.9	1013.3	1024.3	1029.2	1029.2
25°	946.2	973.1	997.5	1017.0	1030.4	1040.1	1045.0	1045.0
27.5°	951.1	979.2	1002.3	1021.8	1036.5	1046.2	1049.9	1051.1
30°	947.5	975.5	998.7	1017.0	1031.6	1040.1	1043.8	1045.0
32.5°	935.3	963.3	985.3	1002.3	1015.7	1025.5	1029.2	1029.2
35°	915.8	941.4	963.3	980.4	992.6	999.9	1004.8	1004.8
37.5°	890.1	915.8	935.3	949.9	960.9	969.4	971.8	971.8
40°	860.9	882.8	901.1	915.8	925.5	931.6	934.0	932.8
42.5°	828.0	848.7	863.3	875.5	884.1	890.1	893.8	896.2
45°	793.8	813.3	826.7	836.5	842.6	846.3	849.9	848.7
47.5°	763.3	775.5	787.7	795.0	801.1	804.8	806.0	806.0
50°	728.0	738.9	748.7	754.8	758.5	760.9	760.9	763.3
52.5°	692.6	702.4	709.7	715.8	718.2	719.4	720.7	719.4
55°	660.9	667.0	671.9	676.8	679.2	680.4	682.9	680.4
57.5°	628.0	632.9	639.0	640.2	642.6	642.6	643.8	642.6
60°	595.1	598.7	601.2	602.4	606.0	607.3	607.3	609.7
62.5°	562.1	563.4	567.0	568.2	569.5	571.9	574.3	573.1
65°	529.2	530.4	531.7	534.1	536.5	539.0	539.0	537.7
67.5°	495.1	496.3	497.5	499.9	502.4	502.4	503.6	503.6
70°	462.1	462.1	463.4	464.6	467.0	468.2	469.5	468.2
72.5°	428.0	428.0	428.0	429.2	430.4	432.9	434.1	434.1
75°	392.6	392.6	392.6	391.4	392.6	395.1	393.9	393.9
77.5°	353.6	350.0	346.3	343.9	345.1	343.9	343.9	343.9
80°	304.8	298.7	293.9	291.4	290.2	291.4	290.2	290.2
82.5°	251.2	245.1	240.2	236.6	237.8	235.3	236.6	234.1
85°	186.6	181.7	176.8	174.4	175.6	175.6	174.4	170.7
87.5°	109.7	103.6	102.4	101.2	102.4	101.2	97.6	98.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)