

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: P188617

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188617  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24785)  
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-SO-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3422.0 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.85 / 1.72  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

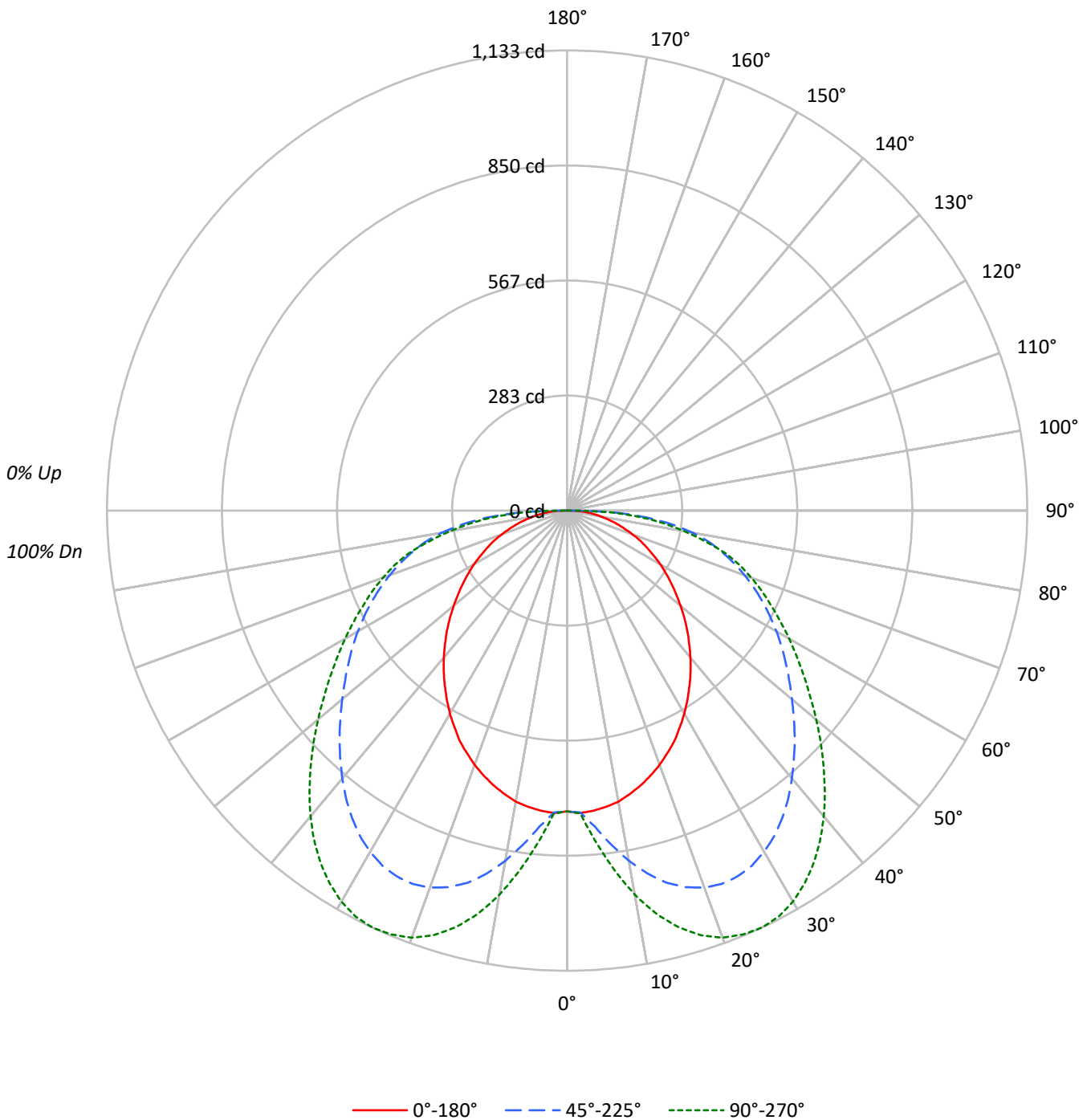
Input Watts (W): 38.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66	64
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55	53
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47	44
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20

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

	0°	45°	90°
0°	996	996	996
5°	1002	1054	1107
10°	994	1196	1312
15°	975	1321	1480
20°	953	1414	1602
25°	929	1475	1682
30°	897	1507	1727
35°	863	1517	1739
40°	829	1512	1727
45°	797	1508	1699
50°	763	1513	1676
55°	735	1543	1670
60°	713	1601	1700
65°	693	1691	1766
70°	675	1829	1899
75°	658	2054	2091
80°	660	2429	2273
85°	730	3049	2757



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.8	2.2
10°-20°	258.7	7.6
20°-30°	433.2	12.7
30°-40°	542.5	15.9
40°-50°	569.1	16.6
50°-60°	537.8	15.7
60°-70°	470.7	13.8
70°-80°	363.6	10.6
80°-90°	169.6	5.0
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°	768.8	22.5
0°-40°	1311.2	38.3
0°-60°	2418.1	70.7
0°-90°	3422.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3422.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	742	741	781	810	820	70
15°	700	798	949	1034	1062	197
25°	626	803	994	1095	1133	287
35°	525	734	924	1023	1059	329
45°	419	622	792	869	893	323
55°	314	517	658	700	712	281
65°	218	423	531	546	555	216
75°	127	317	395	399	402	134
85°	47	167	198	183	179	50
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°	740.5	740.5	740.5	740.5	740.5	740.5	740.5	740.5	740.5	740.5	740.5
2.5°	745.2	744.0	742.8	740.5	739.3	739.3	739.3	739.3	740.5	744.0	746.4
5°	741.7	741.7	739.3	738.1	739.3	742.8	748.7	758.2	767.7	780.7	791.3
7.5°	735.7	734.6	733.4	734.6	745.2	760.6	776.0	793.7	810.3	829.2	844.6
10°	727.5	726.3	727.5	736.9	758.2	783.1	805.5	828.0	850.5	875.3	896.6
12.5°	714.4	714.4	719.2	740.5	770.0	800.8	830.4	858.8	887.1	915.5	940.4
15°	700.3	701.4	713.3	744.0	780.7	816.2	850.5	883.6	916.7	948.7	975.9
17.5°	683.7	686.1	706.2	744.0	785.4	826.8	865.9	902.5	938.0	972.3	1000.7
20°	665.9	668.3	697.9	741.7	787.8	832.7	874.1	914.3	952.2	987.7	1017.3
22.5°	645.8	649.4	687.2	734.6	785.4	833.9	876.5	917.9	956.9	994.8	1024.4
25°	625.7	630.5	674.2	725.1	778.3	828.0	872.9	914.3	955.7	993.6	1023.2
27.5°	600.9	609.2	658.9	710.9	767.7	817.4	862.3	906.1	947.5	985.3	1014.9
30°	577.2	587.9	639.9	694.3	752.3	802.0	846.9	890.7	932.1	969.9	999.5
32.5°	551.2	564.2	618.6	675.4	732.2	780.7	826.8	870.6	912.0	949.8	978.2
35°	525.2	540.6	596.2	654.1	709.7	758.2	803.2	846.9	887.1	923.8	951.0
37.5°	499.2	515.7	571.3	630.5	683.7	731.0	776.0	818.5	859.9	894.2	921.4
40°	472.0	490.9	546.5	603.3	656.5	702.6	747.6	789.0	828.0	861.1	887.1
42.5°	444.8	466.0	521.6	577.2	628.1	673.0	718.0	758.2	794.9	826.8	851.7
45°	418.7	440.0	494.4	550.0	599.7	644.7	688.4	727.5	762.9	792.5	816.2
47.5°	391.5	415.2	469.6	524.0	571.3	616.3	658.9	695.5	729.8	757.0	779.5
50°	364.3	390.3	443.6	496.8	545.3	589.1	630.5	665.9	697.9	722.7	744.0
52.5°	338.3	365.5	419.9	472.0	519.3	563.0	603.3	637.6	667.1	689.6	708.5
55°	313.5	341.8	396.3	447.1	495.6	538.2	576.1	609.2	636.4	657.7	674.2
57.5°	288.6	319.4	373.8	425.8	472.0	514.5	551.2	582.0	606.8	626.9	641.1
60°	265.0	296.9	352.5	403.4	449.5	490.9	526.4	554.8	578.4	595.0	605.6
62.5°	240.1	274.4	330.0	382.1	428.2	467.2	501.5	528.7	548.8	563.0	572.5
65°	217.6	251.9	308.7	360.8	404.5	442.4	474.3	500.3	519.3	531.1	537.0
67.5°	195.2	230.7	287.4	338.3	380.9	417.5	447.1	472.0	488.5	498.0	502.7
70°	171.5	209.4	265.0	314.6	356.0	390.3	419.9	441.2	456.6	464.9	467.2
72.5°	147.9	186.9	242.5	291.0	330.0	363.1	390.3	410.5	424.6	430.6	431.7
75°	126.6	163.2	217.6	263.8	301.6	332.4	359.6	378.5	389.2	395.1	396.3
77.5°	105.3	140.8	192.8	236.6	269.7	299.3	325.3	343.0	353.7	358.4	358.4
80°	85.2	118.3	165.6	204.6	236.6	263.8	287.4	305.2	314.6	313.5	308.7
82.5°	66.2	97.0	137.2	171.5	199.9	224.7	248.4	259.0	262.6	259.0	255.5
85°	47.3	72.2	104.1	132.5	157.3	176.2	191.6	199.9	201.1	197.5	194.0
87.5°	27.2	40.2	59.1	80.4	93.4	105.3	118.3	123.0	123.0	125.4	118.3
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°	740.5	740.5	740.5	740.5	740.5	740.5	740.5	740.5
2.5°	745.2	746.4	746.4	748.7	749.9	749.9	748.7	746.4
5°	794.9	802.0	806.7	813.8	817.4	820.9	822.1	819.7
7.5°	852.8	863.5	872.9	883.6	888.3	891.9	896.6	893.1
10°	908.4	922.6	934.5	946.3	953.4	958.1	961.7	960.5
12.5°	955.7	972.3	985.3	997.1	1006.6	1013.7	1017.3	1017.3
15°	992.4	1011.3	1027.9	1040.9	1050.4	1057.5	1062.2	1062.2
17.5°	1020.8	1039.7	1057.5	1070.5	1079.9	1089.4	1094.1	1096.5
20°	1037.4	1057.5	1075.2	1089.4	1100.1	1110.7	1115.4	1119.0
22.5°	1045.6	1065.8	1084.7	1100.1	1111.9	1121.3	1127.3	1129.6
25°	1045.6	1066.9	1087.0	1102.4	1114.3	1124.9	1130.8	1133.2
27.5°	1038.5	1061.0	1081.1	1095.3	1108.3	1119.0	1124.9	1127.3
30°	1024.4	1046.8	1066.9	1081.1	1094.1	1103.6	1109.5	1111.9
32.5°	1001.9	1025.5	1044.5	1058.7	1071.7	1081.1	1087.0	1088.2
35°	975.9	998.3	1016.1	1030.3	1043.3	1051.6	1056.3	1058.7
37.5°	943.9	965.2	983.0	996.0	1007.8	1017.3	1022.0	1023.2
40°	909.6	929.7	945.1	956.9	968.8	977.0	981.8	983.0
42.5°	872.9	891.9	906.1	916.7	927.4	934.5	938.0	939.2
45°	835.1	851.7	864.7	874.1	883.6	889.5	893.1	893.1
47.5°	797.2	812.6	823.3	830.4	838.6	844.6	848.1	846.9
50°	759.4	772.4	780.7	787.8	794.9	798.4	802.0	800.8
52.5°	721.5	733.4	738.1	744.0	749.9	753.5	757.0	754.7
55°	684.9	693.2	697.9	702.6	707.3	710.9	713.3	712.1
57.5°	649.4	655.3	658.9	663.6	667.1	669.5	671.9	670.7
60°	611.5	616.3	618.6	623.4	626.9	629.3	631.6	631.6
62.5°	576.1	579.6	580.8	585.5	587.9	590.2	593.8	592.6
65°	538.2	541.7	544.1	547.7	550.0	552.4	555.9	554.8
67.5°	502.7	506.3	507.4	511.0	514.5	518.1	519.3	519.3
70°	467.2	469.6	470.8	475.5	476.7	480.2	482.6	482.6
72.5°	431.7	432.9	435.3	438.8	441.2	443.6	445.9	444.8
75°	393.9	396.3	397.4	399.8	399.8	402.2	402.2	402.2
77.5°	354.9	351.3	350.1	348.9	347.8	347.8	347.8	346.6
80°	301.6	298.1	296.9	294.5	294.5	294.5	294.5	293.3
82.5°	249.6	244.9	242.5	241.3	240.1	240.1	240.1	238.9
85°	189.3	184.5	183.3	182.2	182.2	181.0	179.8	178.6
87.5°	117.1	113.6	112.4	110.0	111.2	108.8	108.8	108.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)