

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: P188618

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188618
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-L835-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3528.0 lumens
Efficiency: N/A
Efficacy: 92.4 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

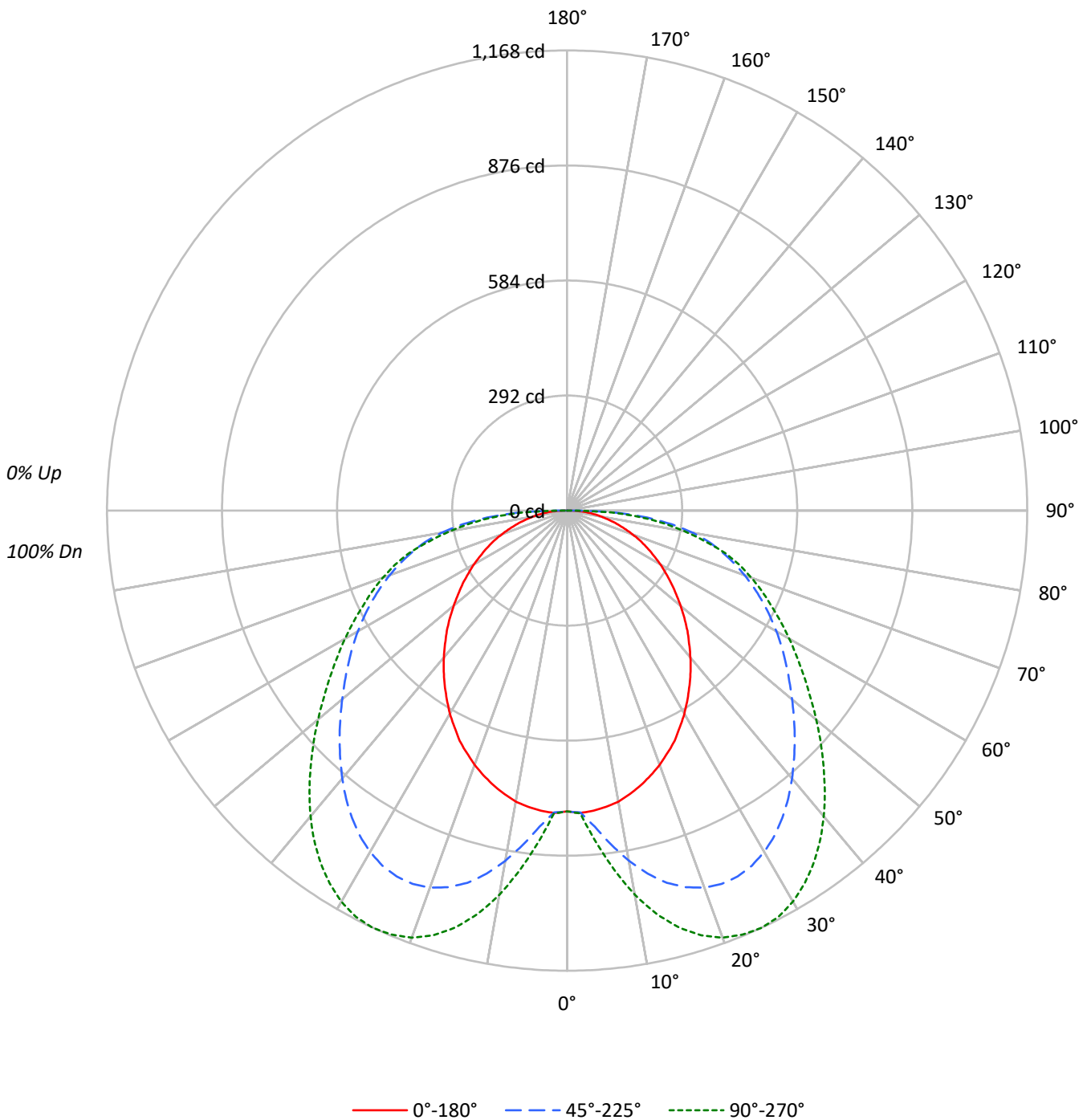
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1027	1027	1027
5°	1033	1087	1141
10°	1025	1233	1353
15°	1006	1362	1525
20°	983	1458	1652
25°	958	1521	1734
30°	925	1554	1781
35°	889	1564	1793
40°	855	1559	1780
45°	821	1555	1752
50°	786	1560	1728
55°	758	1590	1722
60°	735	1651	1752
65°	714	1743	1821
70°	696	1886	1958
75°	678	2117	2155
80°	680	2504	2343
85°	753	3145	2842



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.2	2.2
10°-20°	266.7	7.6
20°-30°	446.6	12.7
30°-40°	559.3	15.9
40°-50°	586.7	16.6
50°-60°	554.4	15.7
60°-70°	485.3	13.8
70°-80°	374.8	10.6
80°-90°	174.9	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°	792.6	22.5
0°-40°	1351.9	38.3
0°-60°	2493.0	70.7
0°-90°	3528.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3528.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	765	764	805	835	845	73
15°	722	823	978	1066	1095	203
25°	645	828	1024	1129	1168	296
35°	542	757	952	1055	1091	339
45°	432	641	817	896	921	333
55°	323	533	678	722	734	289
65°	224	437	548	563	572	222
75°	130	327	407	411	415	138
85°	49	172	204	188	184	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°	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4
2.5°	768.3	767.1	765.8	763.4	762.2	762.2	762.2	762.2	763.4	767.1	769.5
5°	764.6	764.6	762.2	761.0	762.2	765.8	771.9	781.7	791.5	804.9	815.8
7.5°	758.5	757.3	756.1	757.3	768.3	784.1	800.0	818.3	835.4	854.9	870.7
10°	750.0	748.8	750.0	759.7	781.7	807.3	830.5	853.6	876.8	902.4	924.4
12.5°	736.6	736.6	741.5	763.4	793.9	825.6	856.1	885.4	914.6	943.9	969.5
15°	721.9	723.2	735.4	767.1	804.9	841.5	876.8	911.0	945.1	978.0	1006.1
17.5°	704.9	707.3	728.0	767.1	809.7	852.4	892.7	930.5	967.1	1002.4	1031.7
20°	686.6	689.0	719.5	764.6	812.2	858.5	901.2	942.7	981.7	1018.3	1048.8
22.5°	665.8	669.5	708.5	757.3	809.7	859.7	903.6	946.3	986.6	1025.6	1056.1
25°	645.1	650.0	695.1	747.6	802.4	853.6	900.0	942.7	985.4	1024.4	1054.9
27.5°	619.5	628.0	679.3	732.9	791.5	842.7	889.0	934.1	976.8	1015.8	1046.3
30°	595.1	606.1	659.7	715.8	775.6	826.8	873.2	918.3	961.0	1000.0	1030.5
32.5°	568.3	581.7	637.8	696.3	754.9	804.9	852.4	897.5	940.2	979.3	1008.5
35°	541.5	557.3	614.6	674.4	731.7	781.7	828.0	873.2	914.6	952.4	980.5
37.5°	514.6	531.7	589.0	650.0	704.9	753.6	800.0	843.9	886.6	921.9	950.0
40°	486.6	506.1	563.4	621.9	676.8	724.4	770.7	813.4	853.6	887.8	914.6
42.5°	458.5	480.5	537.8	595.1	647.6	693.9	740.2	781.7	819.5	852.4	878.0
45°	431.7	453.7	509.7	567.1	618.3	664.6	709.7	750.0	786.6	817.1	841.5
47.5°	403.7	428.0	484.1	540.2	589.0	635.4	679.3	717.1	752.4	780.5	803.6
50°	375.6	402.4	457.3	512.2	562.2	607.3	650.0	686.6	719.5	745.1	767.1
52.5°	348.8	376.8	432.9	486.6	535.4	580.5	621.9	657.3	687.8	711.0	730.5
55°	323.2	352.4	408.5	461.0	511.0	554.9	593.9	628.0	656.1	678.0	695.1
57.5°	297.6	329.3	385.4	439.0	486.6	530.5	568.3	600.0	625.6	646.3	661.0
60°	273.2	306.1	363.4	415.8	463.4	506.1	542.7	571.9	596.3	613.4	624.4
62.5°	247.6	282.9	340.2	393.9	441.5	481.7	517.1	545.1	565.8	580.5	590.2
65°	224.4	259.8	318.3	371.9	417.1	456.1	489.0	515.8	535.4	547.6	553.7
67.5°	201.2	237.8	296.3	348.8	392.7	430.5	461.0	486.6	503.7	513.4	518.3
70°	176.8	215.9	273.2	324.4	367.1	402.4	432.9	454.9	470.7	479.3	481.7
72.5°	152.4	192.7	250.0	300.0	340.2	374.4	402.4	423.2	437.8	443.9	445.1
75°	130.5	168.3	224.4	271.9	311.0	342.7	370.7	390.2	401.2	407.3	408.5
77.5°	108.5	145.1	198.8	243.9	278.0	308.5	335.4	353.7	364.6	369.5	369.5
80°	87.8	121.9	170.7	211.0	243.9	271.9	296.3	314.6	324.4	323.2	318.3
82.5°	68.3	100.0	141.5	176.8	206.1	231.7	256.1	267.1	270.7	267.1	263.4
85°	48.8	74.4	107.3	136.6	162.2	181.7	197.6	206.1	207.3	203.7	200.0
87.5°	28.0	41.5	61.0	82.9	96.3	108.5	121.9	126.8	126.8	129.3	121.9
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°	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4
2.5°	768.3	769.5	769.5	771.9	773.2	773.2	771.9	769.5
5°	819.5	826.8	831.7	839.0	842.7	846.3	847.6	845.1
7.5°	879.3	890.2	900.0	911.0	915.8	919.5	924.4	920.7
10°	936.6	951.2	963.4	975.6	982.9	987.8	991.5	990.2
12.5°	985.4	1002.4	1015.8	1028.0	1037.8	1045.1	1048.8	1048.8
15°	1023.2	1042.7	1059.7	1073.2	1082.9	1090.2	1095.1	1095.1
17.5°	1052.4	1071.9	1090.2	1103.6	1113.4	1123.2	1128.0	1130.5
20°	1069.5	1090.2	1108.5	1123.2	1134.1	1145.1	1150.0	1153.6
22.5°	1078.0	1098.8	1118.3	1134.1	1146.3	1156.1	1162.2	1164.6
25°	1078.0	1100.0	1120.7	1136.6	1148.8	1159.7	1165.8	1168.3
27.5°	1070.7	1093.9	1114.6	1129.3	1142.7	1153.6	1159.7	1162.2
30°	1056.1	1079.3	1100.0	1114.6	1128.0	1137.8	1143.9	1146.3
32.5°	1032.9	1057.3	1076.8	1091.4	1104.9	1114.6	1120.7	1121.9
35°	1006.1	1029.3	1047.5	1062.2	1075.6	1084.1	1089.0	1091.4
37.5°	973.2	995.1	1013.4	1026.8	1039.0	1048.8	1053.6	1054.9
40°	937.8	958.5	974.4	986.6	998.8	1007.3	1012.2	1013.4
42.5°	900.0	919.5	934.1	945.1	956.1	963.4	967.1	968.3
45°	861.0	878.0	891.5	901.2	911.0	917.1	920.7	920.7
47.5°	821.9	837.8	848.8	856.1	864.6	870.7	874.4	873.2
50°	782.9	796.3	804.9	812.2	819.5	823.2	826.8	825.6
52.5°	743.9	756.1	761.0	767.1	773.2	776.8	780.5	778.0
55°	706.1	714.6	719.5	724.4	729.3	732.9	735.4	734.1
57.5°	669.5	675.6	679.3	684.1	687.8	690.2	692.7	691.5
60°	630.5	635.4	637.8	642.7	646.3	648.8	651.2	651.2
62.5°	593.9	597.6	598.8	603.7	606.1	608.5	612.2	611.0
65°	554.9	558.5	561.0	564.6	567.1	569.5	573.2	571.9
67.5°	518.3	521.9	523.2	526.8	530.5	534.1	535.4	535.4
70°	481.7	484.1	485.4	490.2	491.5	495.1	497.6	497.6
72.5°	445.1	446.3	448.8	452.4	454.9	457.3	459.8	458.5
75°	406.1	408.5	409.8	412.2	412.2	414.6	414.6	414.6
77.5°	365.8	362.2	361.0	359.8	358.5	358.5	358.5	357.3
80°	311.0	307.3	306.1	303.7	303.7	303.7	303.7	302.4
82.5°	257.3	252.4	250.0	248.8	247.6	247.6	247.6	246.3
85°	195.1	190.2	189.0	187.8	187.8	186.6	185.4	184.1
87.5°	120.7	117.1	115.9	113.4	114.6	112.2	112.2	112.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)