

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: P188620

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188620
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-L850-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3916.0 lumens
Efficiency: N/A
Efficacy: 102.5 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

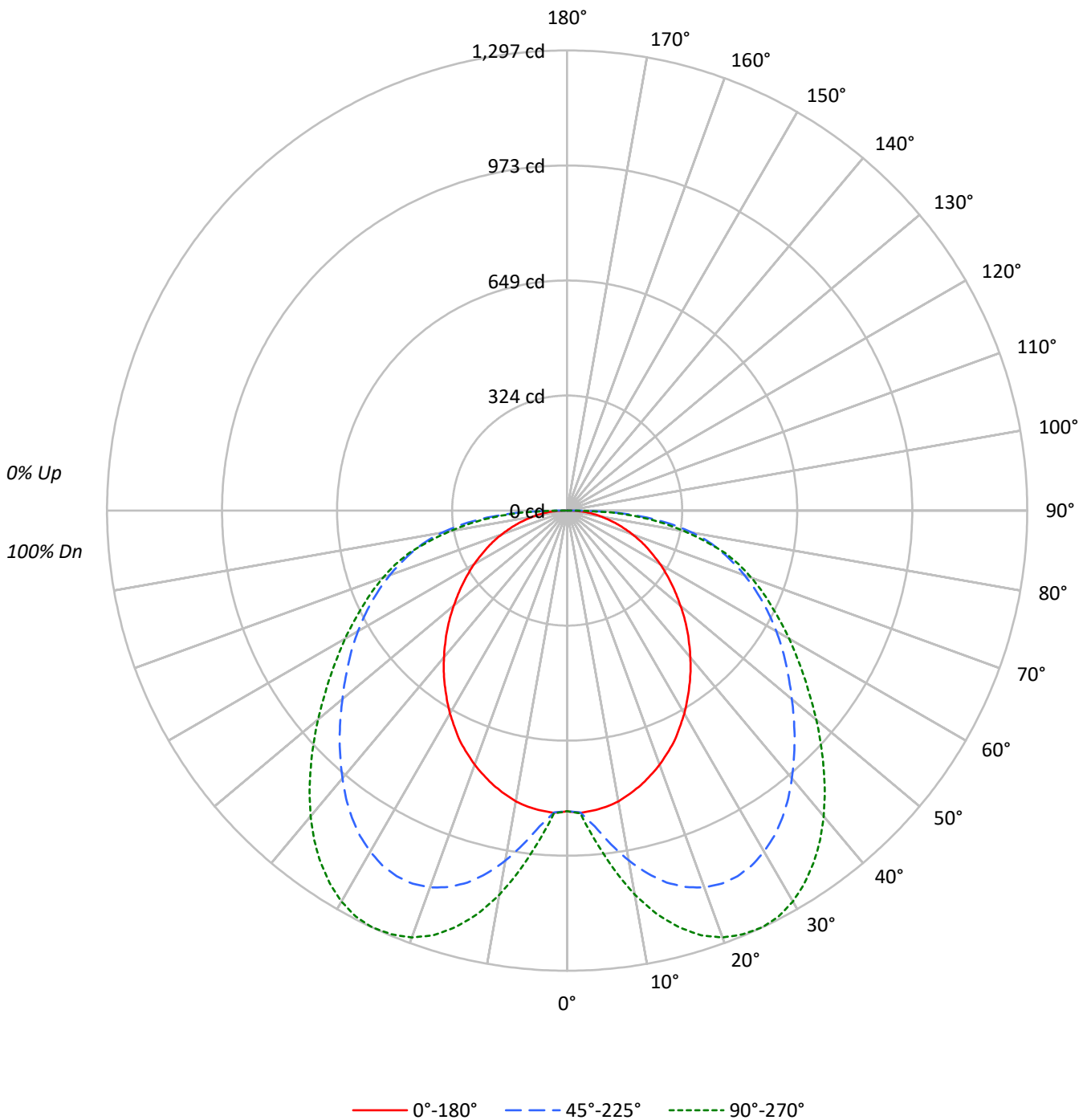
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1140	1140	1140
5°	1146	1207	1267
10°	1137	1369	1502
15°	1116	1512	1693
20°	1091	1618	1833
25°	1063	1688	1925
30°	1026	1725	1977
35°	987	1736	1990
40°	949	1731	1976
45°	912	1726	1945
50°	873	1731	1918
55°	841	1765	1912
60°	816	1832	1945
65°	793	1935	2021
70°	772	2093	2173
75°	753	2350	2392
80°	755	2779	2601
85°	835	3490	3155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	2.2
10°-20°	296.1	7.6
20°-30°	495.8	12.7
30°-40°	620.8	15.9
40°-50°	651.3	16.6
50°-60°	615.4	15.7
60°-70°	538.7	13.8
70°-80°	416.0	10.6
80°-90°	194.1	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°	879.8	22.5
0°-40°	1500.5	38.3
0°-60°	2767.2	70.7
0°-90°	3916.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3916.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	849	848	893	927	938	80
15°	801	914	1086	1184	1216	226
25°	716	919	1137	1253	1297	329
35°	601	840	1057	1171	1212	376
45°	479	712	907	995	1022	369
55°	359	592	753	801	815	321
65°	249	485	608	625	635	247
75°	145	363	452	456	460	153
85°	54	191	226	209	204	57
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°	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4
2.5°	852.8	851.4	850.1	847.4	846.0	846.0	846.0	846.0	847.4	851.4	854.1
5°	848.7	848.7	846.0	844.7	846.0	850.1	856.8	867.7	878.5	893.4	905.6
7.5°	841.9	840.6	839.2	840.6	852.8	870.4	888.0	908.3	927.2	948.9	966.5
10°	832.5	831.1	832.5	843.3	867.7	896.1	921.8	947.5	973.2	1001.7	1026.0
12.5°	817.6	817.6	823.0	847.4	881.2	916.4	950.2	982.7	1015.2	1047.7	1076.1
15°	801.3	802.7	816.2	851.4	893.4	934.0	973.2	1011.1	1049.1	1085.6	1116.7
17.5°	782.4	785.1	808.1	851.4	898.8	946.2	990.8	1032.8	1073.4	1112.7	1145.2
20°	762.1	764.8	798.6	848.7	901.5	952.9	1000.3	1046.3	1089.7	1130.3	1164.1
22.5°	739.1	743.1	786.4	840.6	898.8	954.3	1003.0	1050.4	1095.1	1138.4	1172.2
25°	716.1	721.5	771.6	829.8	890.7	947.5	999.0	1046.3	1093.7	1137.0	1170.9
27.5°	687.6	697.1	754.0	813.5	878.5	935.3	986.8	1036.9	1084.2	1127.6	1161.4
30°	660.6	672.7	732.3	794.6	860.9	917.7	969.2	1019.3	1066.6	1110.0	1143.8
32.5°	630.8	645.7	707.9	772.9	837.9	893.4	946.2	996.3	1043.6	1087.0	1119.4
35°	601.0	618.6	682.2	748.5	812.2	867.7	919.1	969.2	1015.2	1057.2	1088.3
37.5°	571.2	590.2	653.8	721.5	782.4	836.5	888.0	936.7	984.1	1023.3	1054.5
40°	540.1	561.7	625.4	690.3	751.3	804.0	855.5	902.9	947.5	985.4	1015.2
42.5°	509.0	533.3	596.9	660.6	718.8	770.2	821.6	867.7	909.6	946.2	974.6
45°	479.2	503.5	565.8	629.4	686.3	737.7	787.8	832.5	873.1	906.9	934.0
47.5°	448.0	475.1	537.4	599.7	653.8	705.2	754.0	795.9	835.2	866.3	892.0
50°	416.9	446.7	507.6	568.5	624.0	674.1	721.5	762.1	798.6	827.1	851.4
52.5°	387.1	418.3	480.5	540.1	594.2	644.3	690.3	729.6	763.4	789.2	810.8
55°	358.7	391.2	453.5	511.7	567.2	615.9	659.2	697.1	728.2	752.6	771.6
57.5°	330.3	365.5	427.7	487.3	540.1	588.8	630.8	666.0	694.4	717.4	733.7
60°	303.2	339.8	403.4	461.6	514.4	561.7	602.4	634.8	661.9	680.9	693.1
62.5°	274.8	314.0	377.7	437.2	490.0	534.7	573.9	605.1	628.1	644.3	655.1
65°	249.1	288.3	353.3	412.9	462.9	506.3	542.8	572.6	594.2	607.8	614.5
67.5°	223.3	264.0	328.9	387.1	435.9	477.8	511.7	540.1	559.0	569.9	575.3
70°	196.3	239.6	303.2	360.1	407.4	446.7	480.5	504.9	522.5	532.0	534.7
72.5°	169.2	213.9	277.5	333.0	377.7	415.6	446.7	469.7	485.9	492.7	494.1
75°	144.8	186.8	249.1	301.9	345.2	380.4	411.5	433.2	445.3	452.1	453.5
77.5°	120.5	161.1	220.6	270.7	308.6	342.5	372.2	392.5	404.7	410.1	410.1
80°	97.5	135.4	189.5	234.2	270.7	301.9	328.9	349.2	360.1	358.7	353.3
82.5°	75.8	111.0	157.0	196.3	228.8	257.2	284.3	296.4	300.5	296.4	292.4
85°	54.1	82.6	119.1	151.6	180.0	201.7	219.3	228.8	230.1	226.1	222.0
87.5°	31.1	46.0	67.7	92.0	106.9	120.5	135.4	140.8	140.8	143.5	135.4
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°	847.4	847.4	847.4	847.4	847.4	847.4	847.4	847.4
2.5°	852.8	854.1	854.1	856.8	858.2	858.2	856.8	854.1
5°	909.6	917.7	923.2	931.3	935.3	939.4	940.8	938.1
7.5°	976.0	988.1	999.0	1011.1	1016.6	1020.6	1026.0	1022.0
10°	1039.6	1055.8	1069.4	1082.9	1091.0	1096.4	1100.5	1099.1
12.5°	1093.7	1112.7	1127.6	1141.1	1151.9	1160.0	1164.1	1164.1
15°	1135.7	1157.3	1176.3	1191.2	1202.0	1210.1	1215.5	1215.5
17.5°	1168.2	1189.8	1210.1	1225.0	1235.8	1246.7	1252.1	1254.8
20°	1187.1	1210.1	1230.4	1246.7	1258.9	1271.0	1276.5	1280.5
22.5°	1196.6	1219.6	1241.3	1258.9	1272.4	1283.2	1290.0	1292.7
25°	1196.6	1221.0	1244.0	1261.6	1275.1	1287.3	1294.1	1296.8
27.5°	1188.5	1214.2	1237.2	1253.4	1268.3	1280.5	1287.3	1290.0
30°	1172.2	1197.9	1221.0	1237.2	1252.1	1262.9	1269.7	1272.4
32.5°	1146.5	1173.6	1195.2	1211.5	1226.4	1237.2	1244.0	1245.3
35°	1116.7	1142.4	1162.8	1179.0	1193.9	1203.4	1208.8	1211.5
37.5°	1080.2	1104.5	1124.9	1139.7	1153.3	1164.1	1169.5	1170.9
40°	1040.9	1063.9	1081.5	1095.1	1108.6	1118.1	1123.5	1124.9
42.5°	999.0	1020.6	1036.9	1049.1	1061.2	1069.4	1073.4	1074.8
45°	955.7	974.6	989.5	1000.3	1011.1	1017.9	1022.0	1022.0
47.5°	912.3	929.9	942.1	950.2	959.7	966.5	970.5	969.2
50°	869.0	883.9	893.4	901.5	909.6	913.7	917.7	916.4
52.5°	825.7	839.2	844.7	851.4	858.2	862.3	866.3	863.6
55°	783.7	793.2	798.6	804.0	809.5	813.5	816.2	814.9
57.5°	743.1	749.9	754.0	759.4	763.4	766.1	768.9	767.5
60°	699.8	705.2	707.9	713.4	717.4	720.1	722.8	722.8
62.5°	659.2	663.3	664.6	670.0	672.7	675.5	679.5	678.2
65°	615.9	620.0	622.7	626.7	629.4	632.1	636.2	634.8
67.5°	575.3	579.3	580.7	584.8	588.8	592.9	594.2	594.2
70°	534.7	537.4	538.7	544.2	545.5	549.6	552.3	552.3
72.5°	494.1	495.4	498.1	502.2	504.9	507.6	510.3	509.0
75°	450.8	453.5	454.8	457.5	457.5	460.2	460.2	460.2
77.5°	406.1	402.0	400.7	399.3	398.0	398.0	398.0	396.6
80°	345.2	341.1	339.8	337.0	337.0	337.0	337.0	335.7
82.5°	285.6	280.2	277.5	276.1	274.8	274.8	274.8	273.4
85°	216.6	211.2	209.8	208.5	208.5	207.1	205.7	204.4
87.5°	134.0	129.9	128.6	125.9	127.2	124.5	124.5	124.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)