

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: P188570

Luminaire Tested: **24SR-LD2-39-C-UNV-L850-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24637)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-39-C-UNV-L850-CD1-PL-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4266.0 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

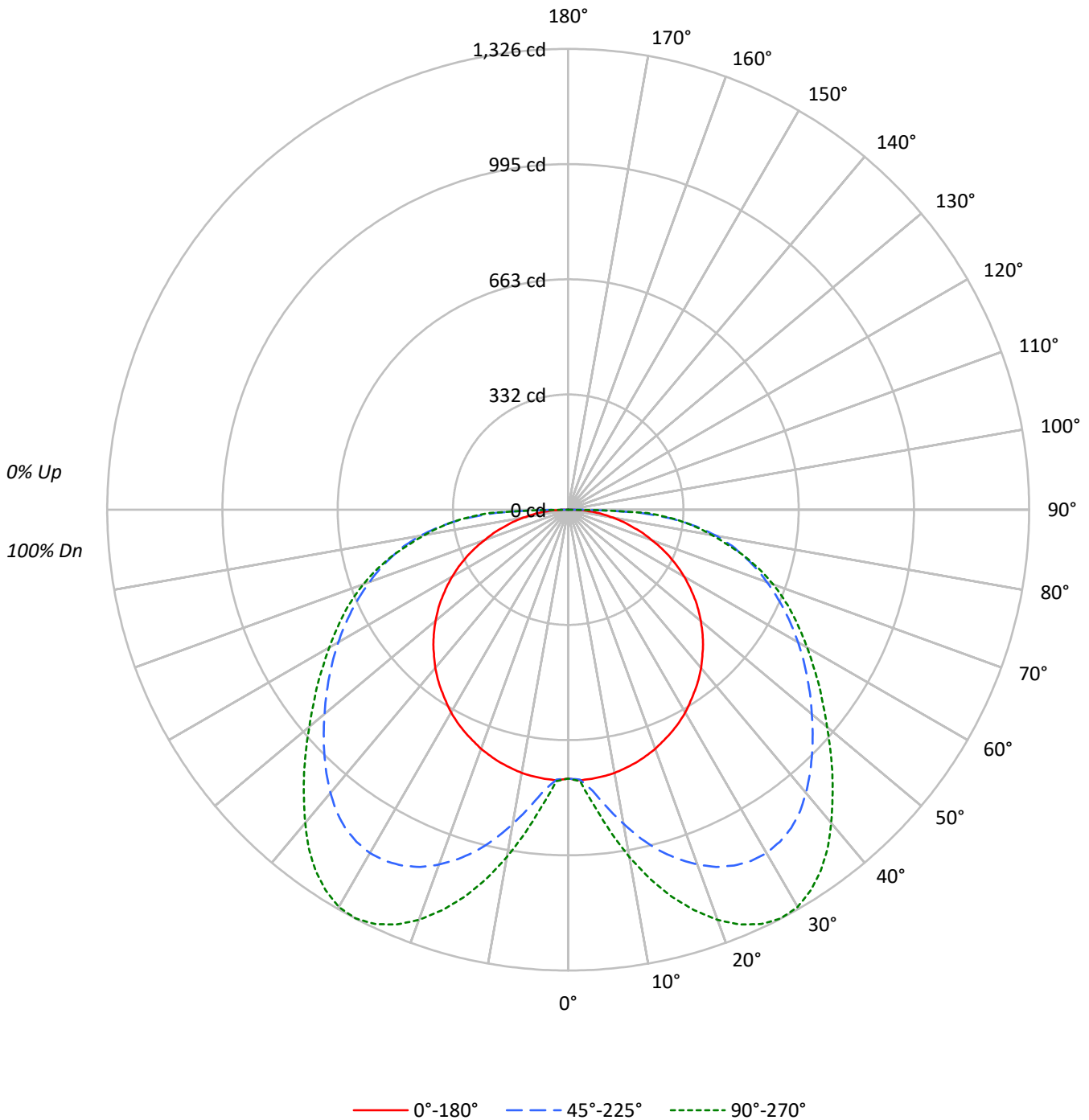
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	70	80	73	68	76	71	66	73	69	65	62
3	86	74	64	57	83	72	63	56	69	61	55	66	60	54	63	58	53	51
4	78	64	55	47	75	63	54	47	60	52	46	58	51	45	56	50	45	42
5	71	57	47	40	69	56	47	40	54	45	39	52	44	39	50	43	38	36
6	65	51	41	34	63	50	41	34	48	40	34	46	39	33	45	38	33	31
7	60	46	36	30	59	45	36	30	43	35	29	42	35	29	40	34	29	27
8	56	42	32	26	54	41	32	26	39	32	26	38	31	26	37	30	26	23
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21
10	49	35	26	21	48	34	26	21	33	26	21	32	25	21	31	25	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1041	1041	1041
5°	1050	1097	1153
10°	1051	1254	1386
15°	1049	1415	1606
20°	1048	1556	1798
25°	1047	1677	1953
30°	1046	1772	2051
35°	1043	1837	2081
40°	1044	1869	2067
45°	1044	1888	2044
50°	1042	1914	2034
55°	1041	1968	2066
60°	1037	2055	2137
65°	1029	2187	2270
70°	1010	2392	2468
75°	996	2734	2752
80°	1003	3351	3246
85°	1095	4642	4729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.4	1.9
10°-20°	279.4	6.5
20°-30°	495.3	11.6
30°-40°	651.8	15.3
40°-50°	706.8	16.6
50°-60°	688.0	16.1
60°-70°	618.1	14.5
70°-80°	489.6	11.5
80°-90°	256.6	6.0
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°	855.1	20.0
0°-40°	1506.9	35.3
0°-60°	2901.6	68.0
0°-90°	4266.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4266.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	777	777	812	843	854	74
15°	753	851	1016	1118	1153	213
25°	705	898	1130	1266	1315	325
35°	635	874	1118	1232	1267	398
45°	548	793	992	1058	1074	423
55°	444	690	839	868	881	396
65°	323	578	687	700	713	319
75°	192	435	526	526	529	204
85°	71	231	301	301	306	76
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°	773.7	773.7	773.7	773.7	773.7	773.7	773.7	773.7	773.7	773.7	773.7
2.5°	779.3	778.2	777.1	775.9	774.8	773.7	773.7	773.7	774.8	777.1	780.4
5°	777.1	775.9	774.8	774.8	775.9	778.2	784.9	792.8	800.7	812.0	824.4
7.5°	773.7	772.6	772.6	774.8	783.8	797.3	813.1	830.0	846.9	864.9	881.8
10°	769.2	768.1	769.2	779.3	799.6	822.1	845.8	869.4	891.9	917.8	941.5
12.5°	761.3	761.3	766.9	787.2	816.5	846.9	877.3	908.8	938.1	969.6	996.7
15°	753.4	753.4	765.8	796.2	833.4	869.4	907.7	944.9	979.8	1015.8	1047.3
17.5°	743.3	743.3	764.7	803.0	845.8	889.7	933.6	975.3	1014.7	1054.1	1087.9
20°	732.0	734.3	762.4	808.6	857.0	906.6	953.9	1000.0	1044.0	1086.8	1123.9
22.5°	718.5	723.0	759.0	810.9	866.0	917.8	969.6	1019.2	1065.4	1112.7	1149.8
25°	705.0	711.7	754.5	810.9	869.4	925.7	979.8	1031.6	1081.1	1129.6	1170.1
27.5°	690.3	699.4	747.8	807.5	870.5	928.0	984.3	1038.3	1090.1	1139.7	1181.4
30°	673.5	684.7	737.6	800.7	866.0	924.6	983.2	1039.5	1091.3	1140.8	1181.4
32.5°	654.3	669.0	725.3	790.6	857.0	916.7	975.3	1031.6	1084.5	1132.9	1171.2
35°	635.2	653.2	711.7	778.2	844.6	904.3	962.9	1020.3	1072.1	1118.3	1152.1
37.5°	616.0	635.2	694.9	761.3	827.7	887.4	947.1	1002.3	1051.9	1094.6	1125.1
40°	594.6	616.0	675.7	743.3	808.6	868.3	926.8	979.8	1024.8	1064.2	1092.4
42.5°	571.0	594.6	655.4	723.0	787.2	845.8	902.1	951.6	994.4	1029.3	1053.0
45°	548.5	573.2	634.0	701.6	764.7	822.1	876.2	922.3	960.6	992.2	1012.4
47.5°	523.7	549.6	612.6	678.0	739.9	796.2	848.0	889.7	926.8	953.9	971.9
50°	497.8	525.9	589.0	654.3	715.1	770.3	819.9	858.2	891.9	914.5	931.4
52.5°	471.9	501.2	564.2	629.5	690.3	743.3	790.6	827.7	857.0	877.3	891.9
55°	443.7	476.4	539.4	604.8	663.3	716.3	761.3	795.1	822.1	839.0	852.5
57.5°	414.4	449.3	514.7	580.0	638.5	689.2	732.0	763.6	787.2	801.8	812.0
60°	385.2	422.3	487.6	553.0	610.4	661.1	701.6	730.9	752.3	763.6	771.4
62.5°	354.7	394.2	460.6	525.9	584.5	631.8	670.1	697.1	716.3	725.3	733.1
65°	323.2	364.9	432.5	497.8	556.3	600.3	637.4	662.2	679.1	687.0	691.5
67.5°	290.6	334.5	403.2	468.5	524.8	567.6	602.5	627.3	640.8	647.6	650.9
70°	256.8	302.9	371.6	437.0	491.0	531.6	565.3	587.9	601.4	608.1	609.3
72.5°	225.2	270.3	340.1	403.2	455.0	494.4	525.9	549.6	563.1	568.7	568.7
75°	191.5	236.5	305.2	366.0	415.6	453.9	485.4	507.9	520.3	525.9	525.9
77.5°	162.2	203.8	268.0	326.6	372.8	409.9	440.3	464.0	477.5	483.1	483.1
80°	129.5	170.1	229.7	283.8	326.6	360.4	391.9	416.7	430.2	432.5	429.1
82.5°	100.2	137.4	188.1	236.5	275.9	307.4	339.0	359.3	369.4	371.6	370.5
85°	70.9	101.4	144.2	183.6	216.2	245.5	268.0	287.2	297.3	300.7	302.9
87.5°	41.7	58.6	85.6	116.0	140.8	159.9	173.4	190.3	200.5	207.2	214.0
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°	773.7	773.7	773.7	773.7	773.7	773.7	773.7	773.7
2.5°	779.3	780.4	781.6	781.6	781.6	782.7	781.6	781.6
5°	828.9	835.6	841.3	844.6	848.0	853.6	852.5	853.6
7.5°	890.8	902.1	914.5	921.2	925.7	932.5	934.7	934.7
10°	955.0	970.8	985.4	995.5	1002.3	1012.4	1013.6	1014.7
12.5°	1015.8	1035.0	1051.9	1063.1	1073.3	1082.3	1086.8	1087.9
15°	1067.6	1091.3	1110.4	1125.1	1135.2	1145.3	1151.0	1153.2
17.5°	1113.8	1138.6	1160.0	1176.9	1189.2	1199.4	1206.1	1208.4
20°	1149.8	1176.9	1200.5	1218.5	1233.2	1244.4	1253.4	1255.7
22.5°	1179.1	1207.3	1232.0	1252.3	1267.0	1280.5	1288.4	1291.7
25°	1200.5	1230.9	1256.8	1276.0	1291.7	1304.1	1312.0	1315.4
27.5°	1212.9	1243.3	1268.1	1287.2	1303.0	1314.3	1322.1	1325.5
30°	1212.9	1242.2	1267.0	1285.0	1299.6	1310.9	1316.5	1319.9
32.5°	1200.5	1228.7	1251.2	1267.0	1280.5	1291.7	1296.2	1298.5
35°	1180.2	1205.0	1225.3	1238.8	1250.1	1260.2	1264.7	1267.0
37.5°	1151.0	1173.5	1189.2	1201.6	1210.6	1220.8	1224.2	1226.4
40°	1113.8	1135.2	1146.5	1157.7	1165.6	1174.6	1176.9	1176.9
42.5°	1073.3	1091.3	1102.5	1110.4	1116.0	1121.7	1125.1	1125.1
45°	1030.5	1046.2	1054.1	1060.9	1066.5	1071.0	1074.4	1074.4
47.5°	987.7	1000.0	1006.8	1011.3	1015.8	1020.3	1022.6	1022.6
50°	944.9	953.9	959.5	962.9	967.4	970.8	973.0	971.9
52.5°	902.1	908.8	913.3	916.7	919.0	922.3	923.5	924.6
55°	859.3	863.8	867.2	869.4	873.9	877.3	878.4	880.7
57.5°	817.6	819.9	824.4	825.5	830.0	833.4	834.5	835.6
60°	774.8	777.1	780.4	782.7	788.3	790.6	791.7	794.0
62.5°	733.1	734.3	738.8	743.3	747.8	750.0	751.2	752.3
65°	691.5	694.9	698.2	701.6	706.1	709.5	710.6	712.9
67.5°	650.9	653.2	657.7	661.1	664.4	667.8	670.1	671.2
70°	609.3	611.5	614.9	617.1	620.5	623.9	627.3	627.3
72.5°	568.7	568.7	571.0	573.2	576.6	578.9	580.0	580.0
75°	524.8	523.7	525.9	527.1	527.1	527.1	528.2	529.3
77.5°	477.5	473.0	470.7	470.7	471.9	469.6	470.7	471.9
80°	423.4	418.9	417.8	417.8	418.9	417.8	418.9	418.9
82.5°	366.0	366.0	362.6	363.8	364.9	362.6	364.9	367.1
85°	299.6	300.7	299.6	302.9	302.9	302.9	304.1	306.3
87.5°	215.1	221.9	219.6	224.1	223.0	224.1	225.2	228.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)