

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: P188569

Luminaire Tested: **24SR-LD2-39-C-UNV-L840-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188569
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-L840-CD1-PL-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3920.0 lumens
Efficiency: N/A
Efficacy: 122.9 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

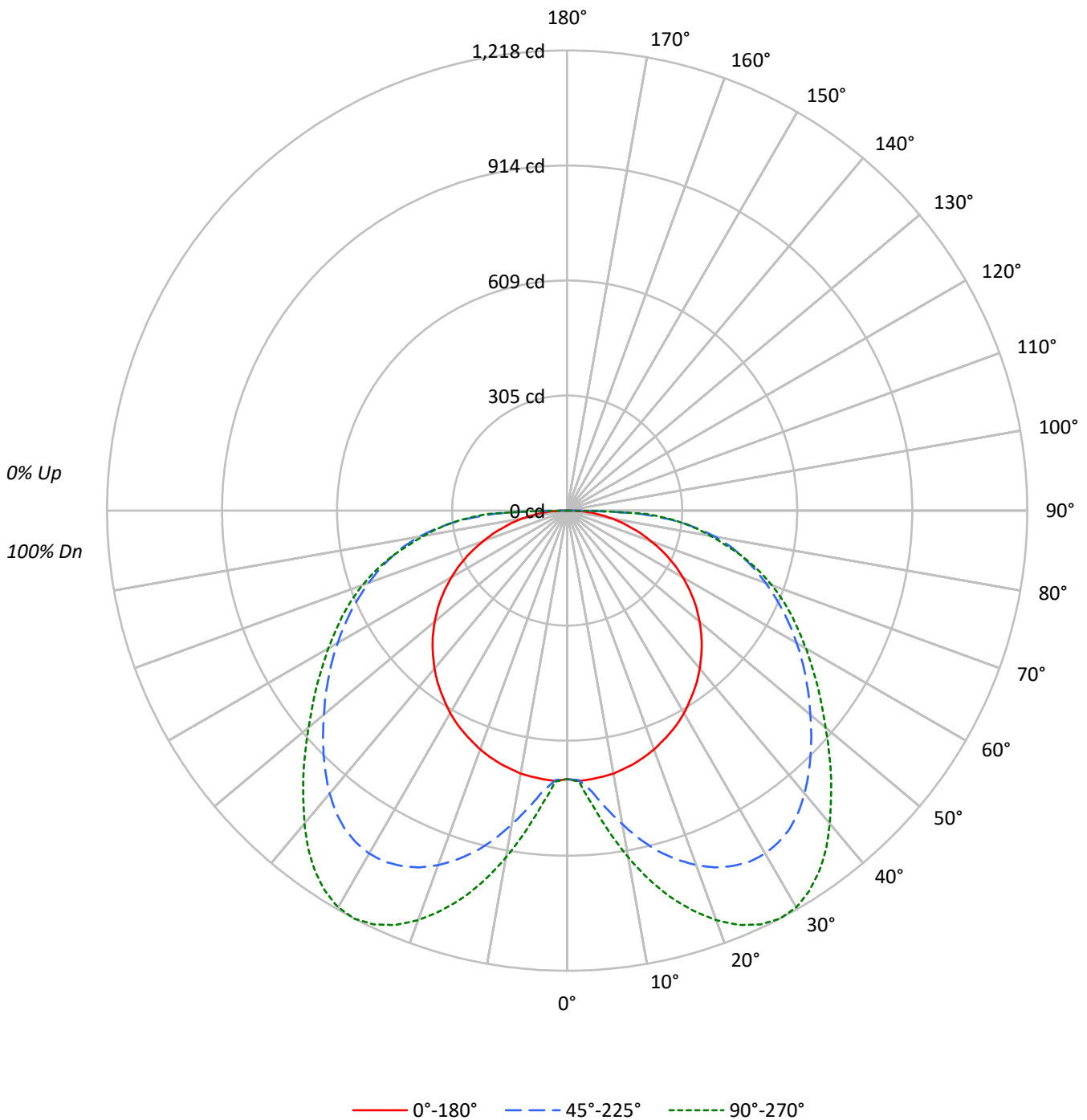
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	957	957	957
5°	964	1008	1059
10°	966	1152	1274
15°	964	1300	1476
20°	963	1430	1652
25°	962	1541	1794
30°	961	1629	1884
35°	959	1688	1912
40°	960	1718	1899
45°	959	1735	1878
50°	957	1759	1869
55°	956	1809	1898
60°	952	1888	1963
65°	946	2010	2086
70°	928	2198	2268
75°	914	2512	2529
80°	922	3079	2983
85°	1007	4265	4346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	1.9
10°-20°	256.8	6.5
20°-30°	455.1	11.6
30°-40°	598.9	15.3
40°-50°	649.4	16.6
50°-60°	632.2	16.1
60°-70°	568.0	14.5
70°-80°	449.9	11.5
80°-90°	235.8	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°	785.8	20.0
0°-40°	1384.7	35.3
0°-60°	2666.3	68.0
0°-90°	3920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3920.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	714	714	746	775	784	68
15°	692	782	933	1027	1060	195
25°	648	825	1038	1164	1209	299
35°	584	804	1028	1132	1164	366
45°	504	729	912	972	987	389
55°	408	634	771	798	809	364
65°	297	531	631	643	655	293
75°	176	399	483	484	486	187
85°	65	212	276	277	282	69
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°	710.9	710.9	710.9	710.9	710.9	710.9	710.9	710.9	710.9	710.9	710.9
2.5°	716.1	715.1	714.0	713.0	712.0	710.9	710.9	710.9	712.0	714.0	717.1
5°	714.0	713.0	712.0	712.0	713.0	715.1	721.3	728.5	735.8	746.1	757.5
7.5°	710.9	709.9	709.9	712.0	720.2	732.7	747.2	762.7	778.2	794.8	810.3
10°	706.8	705.8	706.8	716.1	734.7	755.4	777.2	798.9	819.6	843.4	865.1
12.5°	699.6	699.6	704.7	723.4	750.3	778.2	806.1	835.1	862.0	891.0	915.8
15°	692.3	692.3	703.7	731.6	765.8	798.9	834.1	868.2	900.3	933.4	962.4
17.5°	683.0	683.0	702.7	737.8	777.2	817.5	857.9	896.2	932.4	968.6	999.7
20°	672.6	674.7	700.6	743.0	787.5	833.0	876.5	918.9	959.3	998.6	1032.8
22.5°	660.2	664.4	697.5	745.1	795.8	843.4	891.0	936.5	979.0	1022.4	1056.6
25°	647.8	654.0	693.3	745.1	798.9	850.6	900.3	947.9	993.4	1037.9	1075.2
27.5°	634.4	642.6	687.1	742.0	799.9	852.7	904.5	954.1	1001.7	1047.3	1085.5
30°	618.8	629.2	677.8	735.8	795.8	849.6	903.4	955.2	1002.8	1048.3	1085.5
32.5°	601.2	614.7	666.4	726.5	787.5	842.4	896.2	947.9	996.6	1041.1	1076.2
35°	583.7	600.2	654.0	715.1	776.1	831.0	884.8	937.6	985.2	1027.6	1058.6
37.5°	566.1	583.7	638.5	699.6	760.6	815.5	870.3	921.0	966.5	1005.9	1033.8
40°	546.4	566.1	620.9	683.0	743.0	797.9	851.7	900.3	941.7	977.9	1003.8
42.5°	524.7	546.4	602.3	664.4	723.4	777.2	828.9	874.4	913.8	945.8	967.6
45°	504.0	526.7	582.6	644.7	702.7	755.4	805.1	847.5	882.7	911.7	930.3
47.5°	481.2	505.0	563.0	623.0	679.9	731.6	779.2	817.5	851.7	876.5	893.1
50°	457.4	483.3	541.2	601.2	657.1	707.8	753.4	788.5	819.6	840.3	855.8
52.5°	433.6	460.5	518.5	578.5	634.4	683.0	726.5	760.6	787.5	806.1	819.6
55°	407.7	437.7	495.7	555.7	609.5	658.2	699.6	730.6	755.4	771.0	783.4
57.5°	380.8	412.9	472.9	532.9	586.8	633.3	672.6	701.6	723.4	736.8	746.1
60°	353.9	388.1	448.1	508.1	560.9	607.5	644.7	671.6	691.3	701.6	708.9
62.5°	326.0	362.2	423.3	483.3	537.1	580.5	615.7	640.6	658.2	666.4	673.7
65°	297.0	335.3	397.4	457.4	511.2	551.6	585.7	608.5	624.0	631.3	635.4
67.5°	267.0	307.3	370.5	430.5	482.2	521.6	553.6	576.4	588.8	595.0	598.1
70°	235.9	278.4	341.5	401.5	451.2	488.4	519.5	540.2	552.6	558.8	559.8
72.5°	207.0	248.4	312.5	370.5	418.1	454.3	483.3	505.0	517.4	522.6	522.6
75°	175.9	217.3	280.4	336.3	381.9	417.0	446.0	466.7	478.1	483.3	483.3
77.5°	149.0	187.3	246.3	300.1	342.5	376.7	404.6	426.4	438.8	443.9	443.9
80°	119.0	156.3	211.1	260.8	300.1	331.1	360.1	382.9	395.3	397.4	394.3
82.5°	92.1	126.3	172.8	217.3	253.5	282.5	311.5	330.1	339.4	341.5	340.5
85°	65.2	93.1	132.5	168.7	198.7	225.6	246.3	263.9	273.2	276.3	278.4
87.5°	38.3	53.8	78.6	106.6	129.4	146.9	159.4	174.9	184.2	190.4	196.6
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°	710.9	710.9	710.9	710.9	710.9	710.9	710.9	710.9
2.5°	716.1	717.1	718.2	718.2	718.2	719.2	718.2	718.2
5°	761.6	767.9	773.0	776.1	779.2	784.4	783.4	784.4
7.5°	818.6	828.9	840.3	846.5	850.6	856.8	858.9	858.9
10°	877.5	892.0	905.5	914.8	921.0	930.3	931.4	932.4
12.5°	933.4	951.0	966.5	976.9	986.2	994.5	998.6	999.7
15°	981.0	1002.8	1020.4	1033.8	1043.1	1052.4	1057.6	1059.7
17.5°	1023.5	1046.2	1065.9	1081.4	1092.8	1102.1	1108.3	1110.4
20°	1056.6	1081.4	1103.1	1119.7	1133.2	1143.5	1151.8	1153.8
22.5°	1083.5	1109.3	1132.1	1150.7	1164.2	1176.6	1183.9	1187.0
25°	1103.1	1131.1	1154.9	1172.5	1187.0	1198.3	1205.6	1208.7
27.5°	1114.5	1142.5	1165.2	1182.8	1197.3	1207.7	1214.9	1218.0
30°	1114.5	1141.4	1164.2	1180.8	1194.2	1204.6	1209.7	1212.8
32.5°	1103.1	1129.0	1149.7	1164.2	1176.6	1187.0	1191.1	1193.2
35°	1084.5	1107.3	1125.9	1138.3	1148.7	1158.0	1162.1	1164.2
37.5°	1057.6	1078.3	1092.8	1104.2	1112.5	1121.8	1124.9	1126.9
40°	1023.5	1043.1	1053.5	1063.8	1071.1	1079.3	1081.4	1081.4
42.5°	986.2	1002.8	1013.1	1020.4	1025.5	1030.7	1033.8	1033.8
45°	946.9	961.4	968.6	974.8	980.0	984.1	987.2	987.2
47.5°	907.6	918.9	925.1	929.3	933.4	937.6	939.6	939.6
50°	868.2	876.5	881.7	884.8	888.9	892.0	894.1	893.1
52.5°	828.9	835.1	839.3	842.4	844.4	847.5	848.6	849.6
55°	789.6	793.7	796.8	798.9	803.0	806.1	807.2	809.2
57.5°	751.3	753.4	757.5	758.5	762.7	765.8	766.8	767.9
60°	712.0	714.0	717.1	719.2	724.4	726.5	727.5	729.6
62.5°	673.7	674.7	678.9	683.0	687.1	689.2	690.2	691.3
65°	635.4	638.5	641.6	644.7	648.8	651.9	653.0	655.1
67.5°	598.1	600.2	604.3	607.5	610.6	613.7	615.7	616.8
70°	559.8	561.9	565.0	567.1	570.2	573.3	576.4	576.4
72.5°	522.6	522.6	524.7	526.7	529.8	531.9	532.9	532.9
75°	482.2	481.2	483.3	484.3	484.3	484.3	485.3	486.4
77.5°	438.8	434.6	432.6	432.6	433.6	431.5	432.6	433.6
80°	389.1	385.0	383.9	383.9	385.0	383.9	385.0	385.0
82.5°	336.3	336.3	333.2	334.3	335.3	333.2	335.3	337.4
85°	275.3	276.3	275.3	278.4	278.4	278.4	279.4	281.5
87.5°	197.7	203.9	201.8	205.9	204.9	205.9	207.0	210.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)