

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: P188572

Luminaire Tested: **24SR-LD2-45-C-UNV-L830-CD1-PL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188572  
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-LD2-45-C-UNV-L830-CD1-PL-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

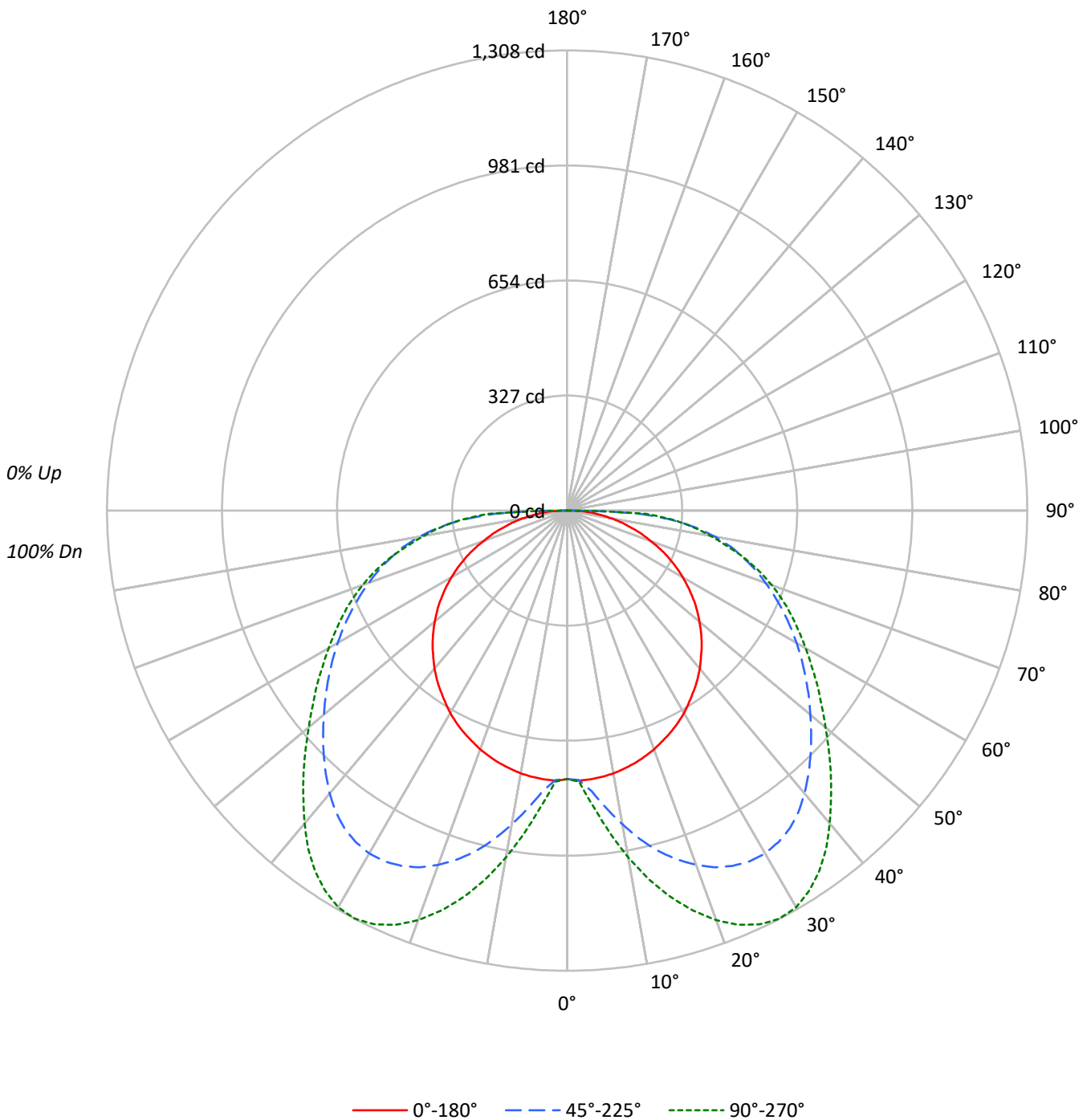
Lumens per Lamp: N/A  
Luminaire Lumens: 4208.0 lumens  
Efficiency: N/A  
Efficacy: 114.7 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



TEST NUMBER: P188572

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L830-CD1-PL-U

### Luminous Intensity Polar Plot





TEST NUMBER: P188572

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L830-CD1-PL-U

**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°	1027	1027	1027
5°	1035	1082	1137
10°	1037	1237	1367
15°	1035	1396	1584
20°	1034	1535	1773
25°	1032	1654	1926
30°	1032	1748	2023
35°	1029	1812	2053
40°	1030	1844	2039
45°	1029	1862	2017
50°	1028	1888	2007
55°	1027	1941	2038
60°	1022	2027	2108
65°	1015	2157	2239
70°	996	2360	2434
75°	981	2697	2714
80°	990	3305	3202
85°	1081	4579	4665



TEST NUMBER: P188572

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L830-CD1-PL-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.4	1.9
10°-20°	275.6	6.5
20°-30°	488.5	11.6
30°-40°	642.9	15.3
40°-50°	697.1	16.6
50°-60°	678.6	16.1
60°-70°	609.7	14.5
70°-80°	483.0	11.5
80°-90°	253.1	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°	843.5	20.0
0°-40°	1486.4	35.3
0°-60°	2862.1	68.0
0°-90°	4208.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4208.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	766	766	801	832	842	73
15°	743	840	1002	1103	1138	210
25°	695	885	1114	1249	1298	321
35°	626	863	1103	1215	1250	392
45°	541	783	979	1043	1060	417
55°	438	680	828	856	869	391
65°	319	570	678	690	703	315
75°	189	429	519	519	522	201
85°	70	228	297	297	302	75
90°	0	0	0	0	0	



TEST NUMBER: P188572

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L830-CD1-PL-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	763.2	763.2	763.2	763.2	763.2	763.2	763.2	763.2	763.2	763.2	763.2
2.5°	768.7	767.6	766.5	765.4	764.3	763.2	763.2	763.2	764.3	766.5	769.8
5°	766.5	765.4	764.3	764.3	765.4	767.6	774.3	782.1	789.8	800.9	813.2
7.5°	763.2	762.1	762.1	764.3	773.2	786.5	802.0	818.7	835.4	853.1	869.8
10°	758.7	757.6	758.7	768.7	788.7	810.9	834.3	857.6	879.8	905.4	928.7
12.5°	750.9	750.9	756.5	776.5	805.4	835.4	865.4	896.5	925.4	956.5	983.1
15°	743.2	743.2	755.4	785.4	822.0	857.6	895.4	932.0	966.5	1002.0	1033.1
17.5°	733.2	733.2	754.3	792.1	834.3	877.6	920.9	962.0	1000.9	1039.8	1073.1
20°	722.1	724.3	752.1	797.6	845.4	894.3	940.9	986.5	1029.8	1072.0	1108.6
22.5°	708.7	713.2	748.7	799.8	854.3	905.4	956.5	1005.3	1050.9	1097.5	1134.2
25°	695.4	702.1	744.3	799.8	857.6	913.1	966.5	1017.6	1066.4	1114.2	1154.2
27.5°	681.0	689.9	737.6	796.5	858.7	915.4	970.9	1024.2	1075.3	1124.2	1165.3
30°	664.3	675.4	727.6	789.8	854.3	912.0	969.8	1025.3	1076.4	1125.3	1165.3
32.5°	645.4	659.9	715.4	779.8	845.4	904.2	962.0	1017.6	1069.8	1117.5	1155.3
35°	626.5	644.3	702.1	767.6	833.2	892.0	949.8	1006.4	1057.5	1103.1	1136.4
37.5°	607.6	626.5	685.4	750.9	816.5	875.4	934.2	988.7	1037.6	1079.8	1109.8
40°	586.5	607.6	666.5	733.2	797.6	856.5	914.2	966.5	1010.9	1049.8	1077.5
42.5°	563.2	586.5	646.5	713.2	776.5	834.3	889.8	938.7	980.9	1015.3	1038.7
45°	541.0	565.4	625.4	692.1	754.3	810.9	864.3	909.8	947.6	978.7	998.7
47.5°	516.6	542.1	604.3	668.7	729.8	785.4	836.5	877.6	914.2	940.9	958.7
50°	491.0	518.8	581.0	645.4	705.4	759.8	808.7	846.5	879.8	902.0	918.7
52.5°	465.5	494.3	556.5	621.0	681.0	733.2	779.8	816.5	845.4	865.4	879.8
55°	437.7	469.9	532.1	596.5	654.3	706.5	750.9	784.3	810.9	827.6	840.9
57.5°	408.8	443.2	507.7	572.1	629.9	679.9	722.1	753.2	776.5	790.9	800.9
60°	379.9	416.6	481.0	545.4	602.1	652.1	692.1	721.0	742.1	753.2	760.9
62.5°	349.9	388.8	454.3	518.8	576.5	623.2	661.0	687.6	706.5	715.4	723.2
65°	318.8	359.9	426.6	491.0	548.8	592.1	628.8	653.2	669.9	677.6	682.1
67.5°	286.6	329.9	397.7	462.1	517.7	559.9	594.3	618.8	632.1	638.8	642.1
70°	253.3	298.8	366.6	431.0	484.3	524.3	557.7	579.9	593.2	599.9	601.0
72.5°	222.2	266.6	335.5	397.7	448.8	487.7	518.8	542.1	555.4	561.0	561.0
75°	188.8	233.3	301.0	361.0	409.9	447.7	478.8	501.0	513.2	518.8	518.8
77.5°	160.0	201.1	264.4	322.2	367.7	404.4	434.4	457.7	471.0	476.6	476.6
80°	127.8	167.7	226.6	279.9	322.2	355.5	386.6	411.0	424.4	426.6	423.2
82.5°	98.9	135.5	185.5	233.3	272.2	303.3	334.4	354.4	364.4	366.6	365.5
85°	70.0	100.0	142.2	181.1	213.3	242.2	264.4	283.3	293.3	296.6	298.8
87.5°	41.1	57.8	84.4	114.4	138.9	157.7	171.1	187.7	197.7	204.4	211.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188572

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L830-CD1-PL-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	763.2	763.2	763.2	763.2	763.2	763.2	763.2	763.2
2.5°	768.7	769.8	770.9	770.9	770.9	772.1	770.9	770.9
5°	817.6	824.3	829.8	833.2	836.5	842.0	840.9	842.0
7.5°	878.7	889.8	902.0	908.7	913.1	919.8	922.0	922.0
10°	942.0	957.6	972.0	982.0	988.7	998.7	999.8	1000.9
12.5°	1002.0	1020.9	1037.6	1048.7	1058.7	1067.5	1072.0	1073.1
15°	1053.1	1076.4	1095.3	1109.8	1119.8	1129.8	1135.3	1137.5
17.5°	1098.7	1123.1	1144.2	1160.9	1173.1	1183.1	1189.7	1192.0
20°	1134.2	1160.9	1184.2	1202.0	1216.4	1227.5	1236.4	1238.6
22.5°	1163.1	1190.9	1215.3	1235.3	1249.7	1263.1	1270.8	1274.2
25°	1184.2	1214.2	1239.7	1258.6	1274.2	1286.4	1294.2	1297.5
27.5°	1196.4	1226.4	1250.8	1269.7	1285.3	1296.4	1304.2	1307.5
30°	1196.4	1225.3	1249.7	1267.5	1281.9	1293.1	1298.6	1301.9
32.5°	1184.2	1212.0	1234.2	1249.7	1263.1	1274.2	1278.6	1280.8
35°	1164.2	1188.6	1208.6	1222.0	1233.1	1243.1	1247.5	1249.7
37.5°	1135.3	1157.5	1173.1	1185.3	1194.2	1204.2	1207.5	1209.7
40°	1098.7	1119.8	1130.9	1142.0	1149.8	1158.6	1160.9	1160.9
42.5°	1058.7	1076.4	1087.5	1095.3	1100.9	1106.4	1109.8	1109.8
45°	1016.4	1032.0	1039.8	1046.4	1052.0	1056.4	1059.8	1059.8
47.5°	974.2	986.5	993.1	997.6	1002.0	1006.4	1008.7	1008.7
50°	932.0	940.9	946.5	949.8	954.2	957.6	959.8	958.7
52.5°	889.8	896.5	900.9	904.2	906.5	909.8	910.9	912.0
55°	847.6	852.0	855.4	857.6	862.0	865.4	866.5	868.7
57.5°	806.5	808.7	813.2	814.3	818.7	822.0	823.2	824.3
60°	764.3	766.5	769.8	772.1	777.6	779.8	780.9	783.2
62.5°	723.2	724.3	728.7	733.2	737.6	739.8	741.0	742.1
65°	682.1	685.4	688.7	692.1	696.5	699.8	701.0	703.2
67.5°	642.1	644.3	648.7	652.1	655.4	658.7	661.0	662.1
70°	601.0	603.2	606.5	608.8	612.1	615.4	618.8	618.8
72.5°	561.0	561.0	563.2	565.4	568.8	571.0	572.1	572.1
75°	517.7	516.6	518.8	519.9	519.9	519.9	521.0	522.1
77.5°	471.0	466.6	464.3	464.3	465.5	463.2	464.3	465.5
80°	417.7	413.2	412.1	412.1	413.2	412.1	413.2	413.2
82.5°	361.0	361.0	357.7	358.8	359.9	357.7	359.9	362.1
85°	295.5	296.6	295.5	298.8	298.8	298.8	299.9	302.2
87.5°	212.2	218.8	216.6	221.1	220.0	221.1	222.2	225.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)