

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: P188574

Luminaire Tested: **24SR-LD2-45-C-UNV-L840-CD1-PL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188574
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-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: 4425.0 lumens
Efficiency: N/A
Efficacy: 120.6 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

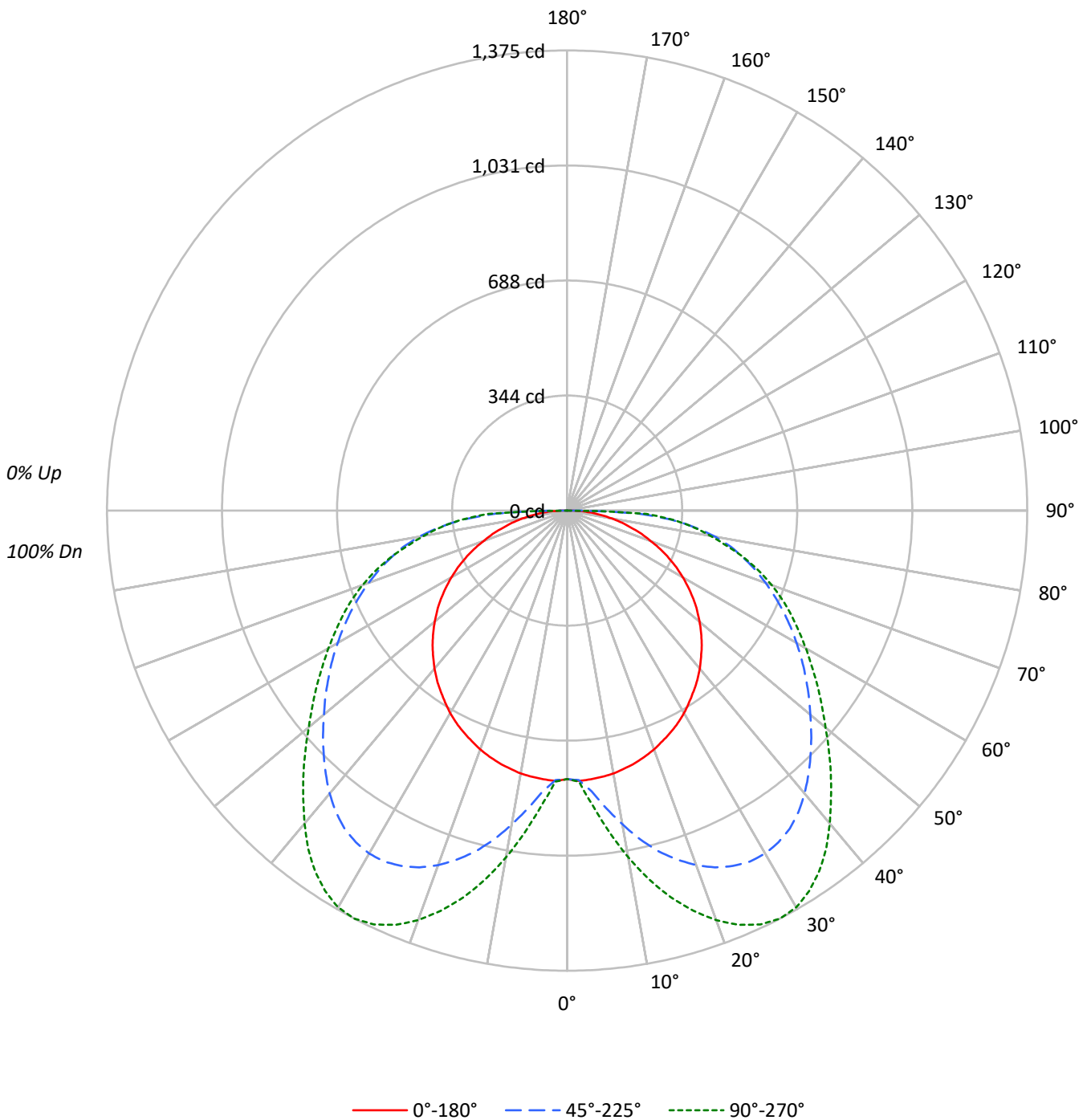
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1080	1080	1080
5°	1089	1137	1196
10°	1090	1301	1438
15°	1089	1468	1666
20°	1087	1614	1865
25°	1086	1739	2026
30°	1085	1838	2127
35°	1082	1905	2159
40°	1083	1939	2144
45°	1083	1958	2120
50°	1081	1985	2110
55°	1080	2042	2143
60°	1075	2131	2216
65°	1067	2269	2354
70°	1048	2482	2560
75°	1032	2836	2854
80°	1041	3476	3367
85°	1136	4815	4905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	1.9
10°-20°	289.8	6.5
20°-30°	513.7	11.6
30°-40°	676.0	15.3
40°-50°	733.1	16.6
50°-60°	713.6	16.1
60°-70°	641.2	14.5
70°-80°	507.9	11.5
80°-90°	266.2	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°	887.0	20.0
0°-40°	1563.0	35.3
0°-60°	3009.7	68.0
0°-90°	4425.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4425.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	806	806	842	874	886	77
15°	782	883	1054	1159	1196	221
25°	731	931	1172	1314	1364	337
35°	659	907	1160	1278	1314	413
45°	569	823	1029	1097	1114	439
55°	460	715	870	901	914	411
65°	335	600	713	726	739	331
75°	199	451	546	546	549	211
85°	74	240	312	312	318	78
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°	802.5	802.5	802.5	802.5	802.5	802.5	802.5	802.5	802.5	802.5	802.5
2.5°	808.4	807.2	806.0	804.9	803.7	802.5	802.5	802.5	803.7	806.0	809.5
5°	806.0	804.9	803.7	803.7	804.9	807.2	814.2	822.4	830.6	842.2	855.1
7.5°	802.5	801.4	801.4	803.7	813.0	827.1	843.4	860.9	878.5	897.1	914.7
10°	797.9	796.7	797.9	808.4	829.4	852.8	877.3	901.8	925.2	952.0	976.6
12.5°	789.7	789.7	795.5	816.5	846.9	878.5	910.0	942.7	973.1	1005.8	1033.8
15°	781.5	781.5	794.3	825.9	864.4	901.8	941.5	980.1	1016.3	1053.7	1086.4
17.5°	771.0	771.0	793.2	832.9	877.3	922.8	968.4	1011.6	1052.5	1093.4	1128.4
20°	759.3	761.6	790.8	838.7	889.0	940.4	989.4	1037.3	1082.9	1127.3	1165.8
22.5°	745.3	750.0	787.3	841.1	898.3	952.0	1005.8	1057.2	1105.1	1154.1	1192.7
25°	731.3	738.3	782.7	841.1	901.8	960.2	1016.3	1070.0	1121.4	1171.7	1213.7
27.5°	716.1	725.4	775.7	837.6	903.0	962.6	1021.0	1077.0	1130.8	1182.2	1225.4
30°	698.6	710.2	765.1	830.6	898.3	959.1	1019.8	1078.2	1131.9	1183.3	1225.4
32.5°	678.7	693.9	752.3	820.0	889.0	950.9	1011.6	1070.0	1124.9	1175.2	1214.9
35°	658.8	677.5	738.3	807.2	876.1	938.0	998.8	1058.3	1112.1	1160.0	1195.0
37.5°	639.0	658.8	720.8	789.7	858.6	920.5	982.4	1039.7	1091.1	1135.4	1167.0
40°	616.8	639.0	700.9	771.0	838.7	900.6	961.4	1016.3	1063.0	1103.9	1133.1
42.5°	592.3	616.8	679.9	750.0	816.5	877.3	935.7	987.1	1031.5	1067.7	1092.2
45°	568.9	594.6	657.7	727.8	793.2	852.8	908.8	956.7	996.4	1029.1	1050.2
47.5°	543.2	570.1	635.5	703.2	767.5	825.9	879.6	922.8	961.4	989.4	1008.1
50°	516.3	545.5	610.9	678.7	741.8	799.0	850.4	890.1	925.2	948.5	966.1
52.5°	489.5	519.8	585.2	653.0	716.1	771.0	820.0	858.6	889.0	910.0	925.2
55°	460.3	494.1	559.5	627.3	688.0	742.9	789.7	824.7	852.8	870.3	884.3
57.5°	429.9	466.1	533.8	601.6	662.3	714.9	759.3	792.0	816.5	831.7	842.2
60°	399.5	438.1	505.8	573.6	633.1	685.7	727.8	758.1	780.3	792.0	800.2
62.5°	368.0	408.9	477.8	545.5	606.3	655.3	695.1	723.1	742.9	752.3	760.5
65°	335.3	378.5	448.6	516.3	577.1	622.6	661.2	686.9	704.4	712.6	717.2
67.5°	301.4	346.9	418.2	486.0	544.4	588.8	625.0	650.7	664.7	671.7	675.2
70°	266.3	314.2	385.5	453.2	509.3	551.4	586.4	609.8	623.8	630.8	632.0
72.5°	233.6	280.4	352.8	418.2	471.9	512.8	545.5	570.1	584.1	589.9	589.9
75°	198.6	245.3	316.6	379.7	431.0	470.8	503.5	526.8	539.7	545.5	545.5
77.5°	168.2	211.4	278.0	338.8	386.7	425.2	456.7	481.3	495.3	501.1	501.1
80°	134.3	176.4	238.3	294.4	338.8	373.8	406.5	432.2	446.2	448.6	445.1
82.5°	104.0	142.5	195.1	245.3	286.2	318.9	351.6	372.6	383.2	385.5	384.3
85°	73.6	105.1	149.5	190.4	224.3	254.7	278.0	297.9	308.4	311.9	314.2
87.5°	43.2	60.7	88.8	120.3	146.0	165.9	179.9	197.4	207.9	214.9	221.9
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°	802.5	802.5	802.5	802.5	802.5	802.5	802.5	802.5
2.5°	808.4	809.5	810.7	810.7	810.7	811.9	810.7	810.7
5°	859.8	866.8	872.6	876.1	879.6	885.5	884.3	885.5
7.5°	924.0	935.7	948.5	955.6	960.2	967.2	969.6	969.6
10°	990.6	1007.0	1022.1	1032.6	1039.7	1050.2	1051.3	1052.5
12.5°	1053.7	1073.5	1091.1	1102.7	1113.3	1122.6	1127.3	1128.4
15°	1107.4	1131.9	1151.8	1167.0	1177.5	1188.0	1193.9	1196.2
17.5°	1155.3	1181.0	1203.2	1220.7	1233.6	1244.1	1251.1	1253.4
20°	1192.7	1220.7	1245.3	1263.9	1279.1	1290.8	1300.2	1302.5
22.5°	1223.1	1252.3	1278.0	1299.0	1314.2	1328.2	1336.4	1339.9
25°	1245.3	1276.8	1303.7	1323.5	1339.9	1352.7	1360.9	1364.4
27.5°	1258.1	1289.6	1315.3	1335.2	1351.6	1363.2	1371.4	1374.9
30°	1258.1	1288.5	1314.2	1332.9	1348.1	1359.7	1365.6	1369.1
32.5°	1245.3	1274.5	1297.8	1314.2	1328.2	1339.9	1344.5	1346.9
35°	1224.2	1249.9	1271.0	1285.0	1296.7	1307.2	1311.8	1314.2
37.5°	1193.9	1217.2	1233.6	1246.4	1255.8	1266.3	1269.8	1272.1
40°	1155.3	1177.5	1189.2	1200.9	1209.0	1218.4	1220.7	1220.7
42.5°	1113.3	1131.9	1143.6	1151.8	1157.6	1163.5	1167.0	1167.0
45°	1068.9	1085.2	1093.4	1100.4	1106.2	1110.9	1114.4	1114.4
47.5°	1024.5	1037.3	1044.3	1049.0	1053.7	1058.3	1060.7	1060.7
50°	980.1	989.4	995.3	998.8	1003.4	1007.0	1009.3	1008.1
52.5°	935.7	942.7	947.4	950.9	953.2	956.7	957.9	959.1
55°	891.3	896.0	899.5	901.8	906.5	910.0	911.2	913.5
57.5°	848.1	850.4	855.1	856.3	860.9	864.4	865.6	866.8
60°	803.7	806.0	809.5	811.9	817.7	820.0	821.2	823.6
62.5°	760.5	761.6	766.3	771.0	775.7	778.0	779.2	780.3
65°	717.2	720.8	724.3	727.8	732.4	735.9	737.1	739.4
67.5°	675.2	677.5	682.2	685.7	689.2	692.7	695.1	696.2
70°	632.0	634.3	637.8	640.1	643.7	647.2	650.7	650.7
72.5°	589.9	589.9	592.3	594.6	598.1	600.4	601.6	601.6
75°	544.4	543.2	545.5	546.7	546.7	546.7	547.9	549.0
77.5°	495.3	490.6	488.3	488.3	489.5	487.1	488.3	489.5
80°	439.2	434.6	433.4	433.4	434.6	433.4	434.6	434.6
82.5°	379.7	379.7	376.1	377.3	378.5	376.1	378.5	380.8
85°	310.7	311.9	310.7	314.2	314.2	314.2	315.4	317.7
87.5°	223.1	230.1	227.8	232.5	231.3	232.5	233.6	237.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)