

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: P188652

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24808)
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-ST-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4141.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.62 / 1.56
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

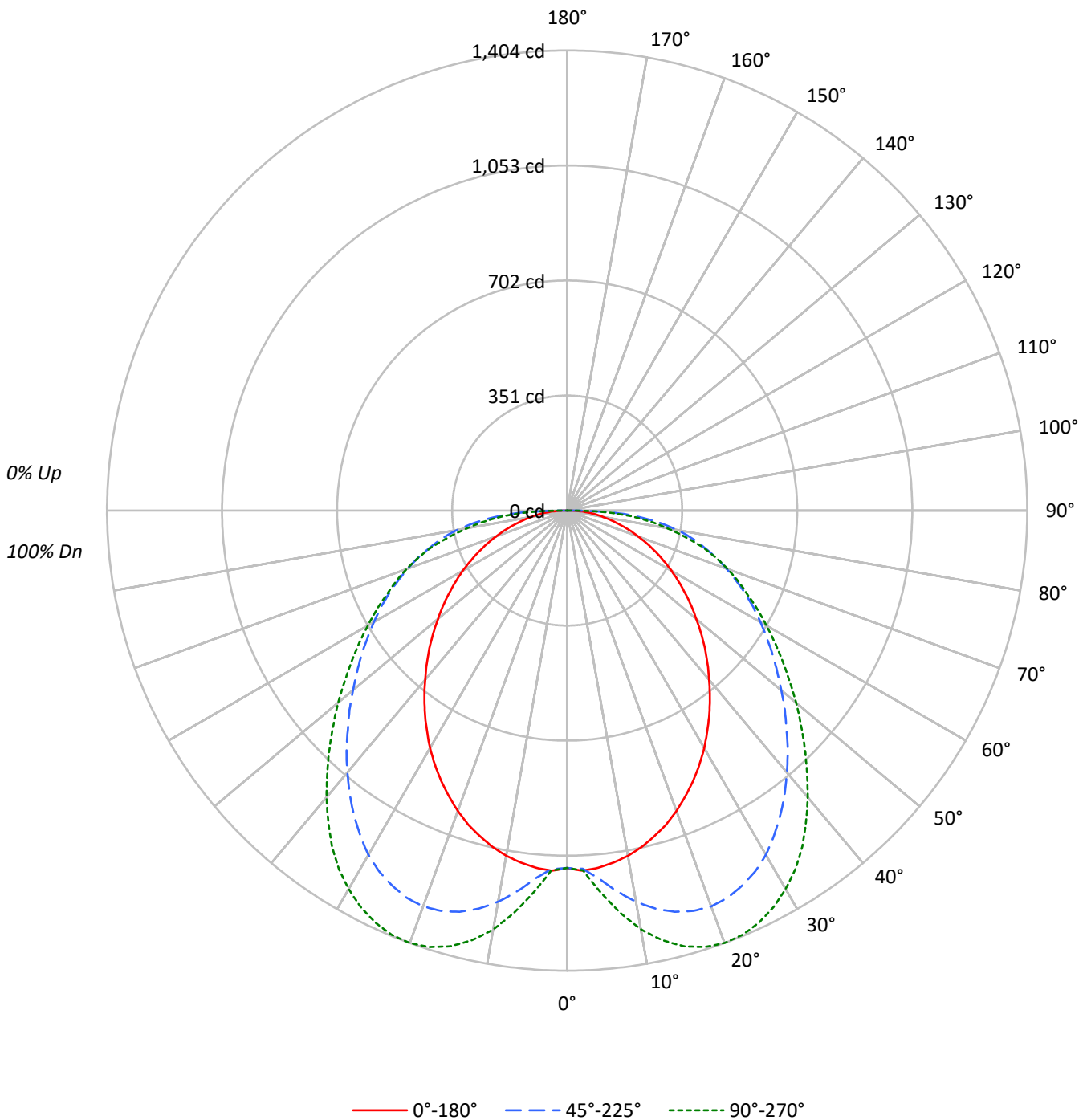
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	102	97	92	104	99	95	91	95	91	88		91	88	85		87	85	83	80
2	97	88	80	74	94	86	79	73	82	76	71		79	74	69		76	71	68	66
3	88	76	68	61	85	75	67	60	72	65	59		69	63	58		66	61	57	54
4	80	67	58	51	78	66	57	50	63	56	50		61	54	49		59	53	48	46
5	74	60	50	43	71	59	50	43	57	49	43		55	48	42		53	47	42	40
6	68	54	44	38	66	53	44	38	51	43	37		49	42	37		48	41	37	34
7	63	49	40	33	61	48	39	33	46	39	33		45	38	33		43	37	32	30
8	58	44	36	30	57	44	35	29	42	35	29		41	34	29		40	34	29	27
9	55	41	32	26	53	40	32	26	39	31	26		38	31	26		37	31	26	24
10	51	37	29	24	50	37	29	24	36	29	24		35	28	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1468	1468	1468
5°	1478	1523	1578
10°	1461	1656	1773
15°	1433	1765	1917
20°	1396	1840	2010
25°	1351	1875	2058
30°	1299	1885	2071
35°	1242	1863	2054
40°	1184	1832	2006
45°	1131	1801	1951
50°	1077	1786	1909
55°	1032	1795	1884
60°	989	1832	1889
65°	948	1910	1934
70°	909	2036	2050
75°	866	2246	2211
80°	861	2651	2393
85°	943	3412	2984



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.6	2.6
10°-20°	348.0	8.4
20°-30°	556.6	13.4
30°-40°	673.7	16.3
40°-50°	688.1	16.6
50°-60°	634.0	15.3
60°-70°	539.3	13.0
70°-80°	403.2	9.7
80°-90°	188.4	4.5
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°	1014.2	24.5
0°-40°	1688.0	40.8
0°-60°	3010.1	72.7
0°-90°	4141.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4141.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1094	1088	1127	1156	1168	104
15°	1029	1121	1267	1347	1376	290
25°	910	1081	1263	1353	1386	419
35°	756	956	1134	1220	1251	473
45°	594	791	946	1008	1025	459
55°	440	639	765	795	803	394
65°	298	506	600	604	608	295
75°	167	365	432	425	425	178
85°	61	193	221	196	193	64
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°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1099.7	1097.5	1094.1	1089.7	1088.6	1088.6	1087.5	1087.5	1089.7	1094.1	1100.8
5°	1094.1	1091.9	1088.6	1085.2	1086.3	1089.7	1096.3	1104.1	1115.2	1127.4	1140.8
7.5°	1083.0	1081.9	1079.7	1079.7	1088.6	1104.1	1119.7	1135.2	1153.0	1171.9	1191.9
10°	1069.7	1068.6	1067.5	1076.4	1096.3	1119.7	1141.9	1163.0	1187.4	1211.9	1235.2
12.5°	1050.8	1050.8	1054.1	1074.1	1101.9	1130.8	1158.5	1186.3	1215.2	1244.1	1269.6
15°	1028.6	1028.6	1039.7	1068.6	1104.1	1137.4	1170.8	1201.9	1235.2	1267.4	1294.1
17.5°	1004.2	1003.0	1024.1	1059.7	1099.7	1138.6	1176.3	1210.8	1245.2	1280.7	1308.5
20°	975.3	977.5	1005.3	1046.4	1090.8	1134.1	1174.1	1210.8	1247.4	1285.2	1311.8
22.5°	943.1	947.5	981.9	1027.5	1077.5	1121.9	1164.1	1203.0	1240.7	1278.5	1305.2
25°	909.7	915.3	957.5	1005.3	1058.6	1104.1	1146.3	1187.4	1225.2	1263.0	1289.6
27.5°	874.2	882.0	929.7	979.7	1033.0	1080.8	1123.0	1165.2	1203.0	1241.9	1266.3
30°	836.4	846.4	897.5	948.6	1004.2	1050.8	1093.0	1136.3	1175.2	1213.0	1236.3
32.5°	796.4	808.7	860.9	916.4	970.8	1016.4	1058.6	1103.0	1139.7	1175.2	1198.5
35°	756.4	770.9	824.2	879.7	933.1	978.6	1019.7	1064.1	1100.8	1134.1	1156.3
37.5°	715.3	733.1	786.4	840.9	893.1	938.6	980.8	1021.9	1058.6	1089.7	1111.9
40°	674.2	694.2	747.6	800.9	853.1	896.4	937.5	978.6	1015.3	1043.0	1064.1
42.5°	634.3	654.3	708.7	762.0	809.8	854.2	895.3	935.3	968.6	996.4	1015.3
45°	594.3	615.4	668.7	720.9	768.7	813.1	854.2	890.9	923.1	946.4	965.3
47.5°	554.3	576.5	629.8	682.0	727.6	770.9	813.1	846.4	877.5	900.8	916.4
50°	514.3	538.7	590.9	644.3	688.7	732.0	772.0	803.1	832.0	853.1	867.5
52.5°	477.6	501.0	554.3	607.6	652.0	695.4	733.1	763.1	788.7	807.5	822.0
55°	439.9	465.4	521.0	572.1	617.6	660.9	695.4	723.1	746.4	765.3	776.4
57.5°	403.2	432.1	486.5	537.6	584.3	625.4	658.7	685.4	706.5	722.0	732.0
60°	367.7	397.7	454.3	505.4	552.1	592.0	624.3	648.7	667.6	680.9	689.8
62.5°	332.1	366.6	422.1	475.4	519.8	558.7	588.7	610.9	628.7	640.9	646.5
65°	297.7	333.2	391.0	443.2	487.6	524.3	553.2	573.2	589.8	599.8	602.0
67.5°	264.4	302.1	359.9	412.1	455.4	489.9	517.6	536.5	550.9	557.6	559.8
70°	231.0	269.9	328.8	381.0	422.1	455.4	481.0	498.7	511.0	517.6	517.6
72.5°	199.9	238.8	297.7	348.8	386.6	419.9	443.2	459.9	471.0	475.4	474.3
75°	166.6	206.6	264.4	313.2	349.9	381.0	404.3	421.0	428.8	432.1	431.0
77.5°	137.7	175.5	231.0	276.6	315.5	341.0	364.3	379.9	387.7	389.9	388.8
80°	111.1	146.6	195.5	238.8	272.1	299.9	321.0	337.7	344.3	342.1	332.1
82.5°	85.5	117.7	161.1	198.8	229.9	255.5	277.7	287.7	288.8	283.3	274.4
85°	61.1	85.5	122.2	154.4	183.3	202.2	215.5	223.3	225.5	221.0	211.0
87.5°	34.4	50.0	72.2	95.5	117.7	131.1	138.8	143.3	146.6	142.2	135.5
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°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1094.1	1097.5	1096.3	1098.6	1099.7	1099.7	1096.3	1098.6
5°	1141.9	1148.6	1153.0	1159.7	1164.1	1164.1	1165.2	1168.5
7.5°	1194.1	1205.2	1215.2	1223.0	1228.5	1230.8	1234.1	1237.4
10°	1243.0	1256.3	1267.4	1277.4	1284.1	1288.5	1291.8	1297.4
12.5°	1280.7	1296.3	1308.5	1319.6	1328.5	1335.2	1338.5	1342.9
15°	1308.5	1326.3	1340.7	1352.9	1360.7	1368.5	1371.8	1376.3
17.5°	1325.2	1342.9	1358.5	1370.7	1379.6	1387.4	1391.8	1396.3
20°	1329.6	1347.4	1364.0	1376.3	1385.2	1395.1	1399.6	1404.0
22.5°	1322.9	1340.7	1358.5	1371.8	1381.8	1391.8	1396.3	1400.7
25°	1309.6	1328.5	1346.3	1359.6	1368.5	1378.5	1384.0	1386.3
27.5°	1288.5	1307.4	1325.2	1337.4	1347.4	1357.4	1362.9	1364.0
30°	1258.5	1277.4	1295.2	1307.4	1318.5	1327.4	1332.9	1332.9
32.5°	1221.9	1239.6	1258.5	1269.6	1279.6	1288.5	1294.1	1296.3
35°	1179.7	1197.4	1215.2	1225.2	1236.3	1243.0	1247.4	1250.7
37.5°	1134.1	1151.9	1166.3	1175.2	1187.4	1191.9	1198.5	1197.4
40°	1085.2	1099.7	1113.0	1120.8	1130.8	1136.3	1143.0	1141.9
42.5°	1034.1	1048.6	1059.7	1068.6	1074.1	1079.7	1084.1	1083.0
45°	981.9	995.3	1005.3	1009.7	1018.6	1020.8	1025.3	1025.3
47.5°	929.7	940.8	949.7	956.4	960.8	963.1	967.5	967.5
50°	879.7	889.7	895.3	900.8	905.3	908.6	910.8	912.0
52.5°	830.9	838.6	843.1	847.5	852.0	854.2	856.4	855.3
55°	784.2	789.8	793.1	796.4	799.8	803.1	803.1	803.1
57.5°	737.6	740.9	744.2	746.4	749.8	752.0	752.0	752.0
60°	692.0	695.4	696.5	698.7	702.0	703.1	704.2	702.0
62.5°	647.6	648.7	649.8	650.9	654.3	656.5	656.5	655.4
65°	602.0	602.0	603.2	604.3	606.5	608.7	609.8	607.6
67.5°	557.6	557.6	558.7	558.7	562.1	564.3	565.4	565.4
70°	514.3	513.2	515.4	516.5	518.7	518.7	521.0	521.0
72.5°	471.0	469.9	472.1	472.1	474.3	475.4	475.4	475.4
75°	428.8	425.4	426.5	424.3	426.5	426.5	425.4	425.4
77.5°	383.2	375.4	373.2	368.8	368.8	368.8	366.6	366.6
80°	325.5	317.7	314.4	311.0	311.0	309.9	308.8	308.8
82.5°	267.7	261.0	257.7	254.4	256.6	253.3	254.4	255.5
85°	205.5	199.9	197.7	194.4	193.3	193.3	194.4	193.3
87.5°	133.3	127.7	127.7	124.4	126.6	123.3	120.0	122.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)