

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: P188663

Luminaire Tested: **24SR-LD2-53-C-UNV-L835-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188663
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-LD2-53-C-UNV-L835-CD1-ST-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5032.0 lumens
Efficiency: N/A
Efficacy: 116.8 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

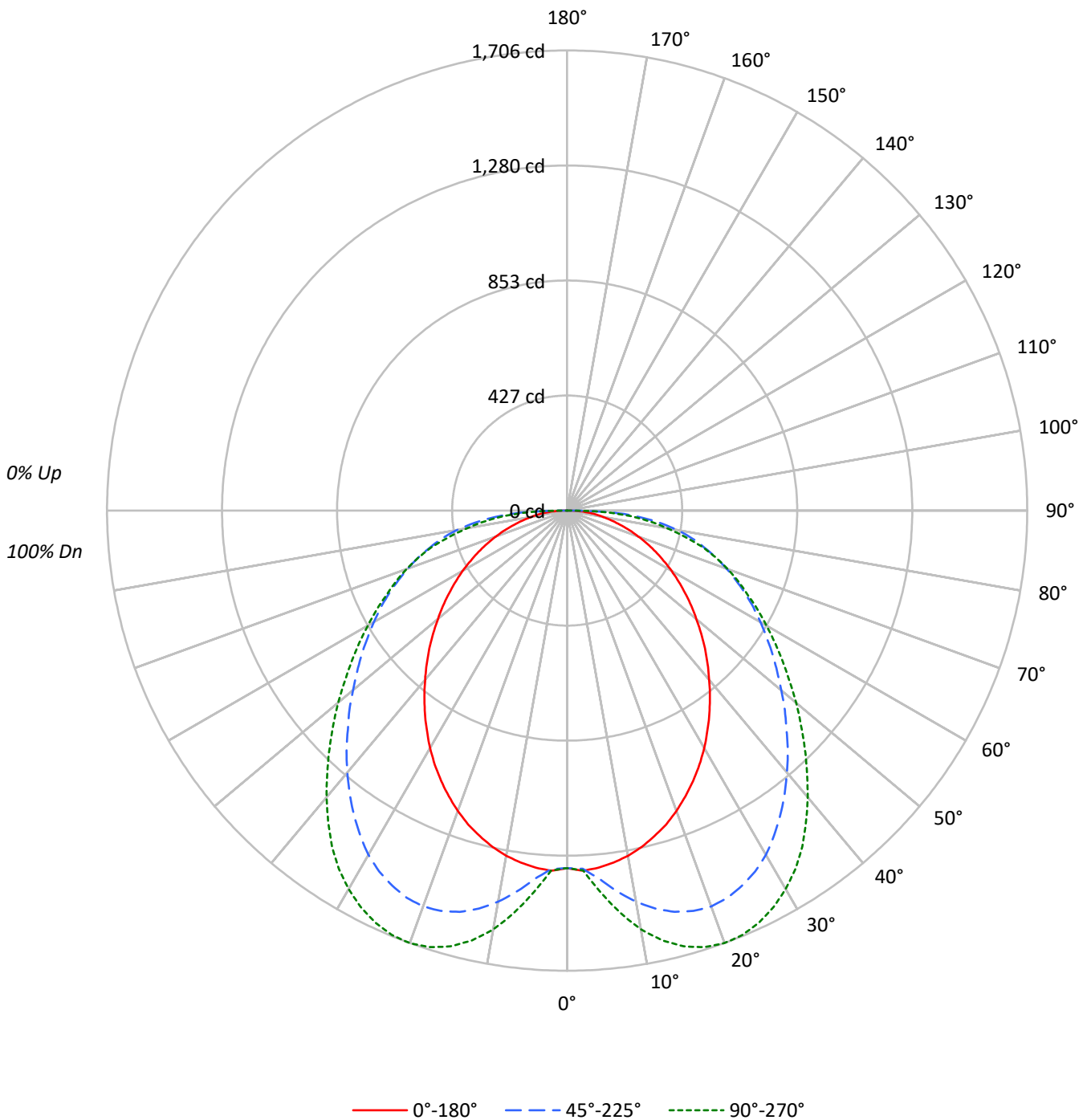
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	107	102	97	92	104	99	95	91	95	91	88	91	88	85	87	85	83	80					80			
2	97	88	80	74	94	86	79	73	82	76	71	79	74	69	76	71	68	66					66			
3	88	76	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	54					54			
4	80	67	58	51	78	66	57	50	63	56	50	61	54	49	59	53	48	46					46			
5	74	60	50	43	71	59	50	43	57	49	43	55	48	42	53	47	42	40					40			
6	68	54	44	38	66	53	44	38	51	43	37	49	42	37	48	41	37	34					34			
7	63	49	40	33	61	48	39	33	46	39	33	45	38	33	43	37	32	30					30			
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	26	53	40	32	26	39	31	26	38	31	26	37	31	26	24					24			
10	51	37	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1783	1783	1783
5°	1796	1850	1918
10°	1776	2012	2154
15°	1741	2145	2330
20°	1697	2236	2443
25°	1641	2278	2501
30°	1579	2290	2516
35°	1510	2264	2496
40°	1439	2226	2437
45°	1374	2188	2371
50°	1308	2170	2320
55°	1254	2182	2289
60°	1202	2227	2296
65°	1152	2321	2351
70°	1105	2474	2491
75°	1053	2730	2688
80°	1046	3221	2907
85°	1145	4147	3626



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	2.6
10°-20°	422.9	8.4
20°-30°	676.3	13.4
30°-40°	818.7	16.3
40°-50°	836.1	16.6
50°-60°	770.5	15.3
60°-70°	655.4	13.0
70°-80°	490.0	9.7
80°-90°	228.9	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°	1232.4	24.5
0°-40°	2051.2	40.8
0°-60°	3657.7	72.7
0°-90°	5032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5032.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1330	1322	1370	1405	1420	126
15°	1250	1362	1540	1637	1672	352
25°	1106	1314	1535	1644	1684	509
35°	919	1162	1378	1483	1520	575
45°	722	961	1150	1224	1246	557
55°	534	777	930	966	976	479
65°	362	615	729	734	738	359
75°	202	444	525	517	517	217
85°	74	234	269	238	235	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°	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5
2.5°	1336.3	1333.6	1329.5	1324.1	1322.8	1322.8	1321.4	1321.4	1324.1	1329.5	1337.6
5°	1329.5	1326.8	1322.8	1318.7	1320.1	1324.1	1332.2	1341.7	1355.2	1370.0	1386.2
7.5°	1316.0	1314.7	1312.0	1312.0	1322.8	1341.7	1360.6	1379.5	1401.1	1424.0	1448.3
10°	1299.8	1298.5	1297.1	1307.9	1332.2	1360.6	1387.6	1413.2	1442.9	1472.6	1501.0
12.5°	1276.9	1276.9	1280.9	1305.2	1339.0	1374.1	1407.8	1441.6	1476.7	1511.8	1542.8
15°	1249.9	1249.9	1263.4	1298.5	1341.7	1382.2	1422.7	1460.5	1501.0	1540.1	1572.5
17.5°	1220.2	1218.9	1244.5	1287.7	1336.3	1383.5	1429.4	1471.3	1513.1	1556.3	1590.1
20°	1185.1	1187.8	1221.6	1271.5	1325.5	1378.1	1426.7	1471.3	1515.8	1561.7	1594.1
22.5°	1146.0	1151.4	1193.2	1248.6	1309.3	1363.3	1414.6	1461.8	1507.7	1553.6	1586.0
25°	1105.5	1112.2	1163.5	1221.6	1286.3	1341.7	1393.0	1442.9	1488.8	1534.7	1567.1
27.5°	1062.3	1071.7	1129.8	1190.5	1255.3	1313.3	1364.6	1415.9	1461.8	1509.1	1538.8
30°	1016.4	1028.5	1090.6	1152.7	1220.2	1276.9	1328.2	1380.8	1428.1	1474.0	1502.3
32.5°	967.8	982.6	1046.1	1113.6	1179.7	1235.1	1286.3	1340.3	1384.9	1428.1	1456.4
35°	919.2	936.8	1001.5	1069.0	1133.8	1189.2	1239.1	1293.1	1337.6	1378.1	1405.1
37.5°	869.3	890.9	955.7	1021.8	1085.2	1140.6	1191.9	1241.8	1286.3	1324.1	1351.1
40°	819.3	843.6	908.4	973.2	1036.6	1089.3	1139.2	1189.2	1233.7	1267.5	1293.1
42.5°	770.7	795.0	861.2	926.0	984.0	1038.0	1087.9	1136.5	1177.0	1210.8	1233.7
45°	722.1	747.8	812.6	876.0	934.1	988.0	1038.0	1082.5	1121.7	1150.0	1173.0
47.5°	673.5	700.5	765.3	828.8	884.1	936.8	988.0	1028.5	1066.3	1094.7	1113.6
50°	625.0	654.6	718.1	782.9	836.9	889.5	938.1	975.9	1011.0	1036.6	1054.2
52.5°	580.4	608.8	673.5	738.3	792.3	845.0	890.9	927.3	958.3	981.3	998.8
55°	534.5	565.6	633.1	695.1	750.5	803.1	845.0	878.7	907.1	930.0	943.5
57.5°	490.0	525.1	591.2	653.3	710.0	759.9	800.4	832.8	858.5	877.4	889.5
60°	446.8	483.2	552.1	614.2	670.8	719.4	758.6	788.3	811.2	827.4	838.2
62.5°	403.6	445.4	512.9	577.7	631.7	678.9	715.4	742.4	764.0	778.8	785.6
65°	361.7	404.9	475.1	538.6	592.6	637.1	672.2	696.5	716.7	728.9	731.6
67.5°	321.2	367.1	437.3	500.8	553.4	595.3	629.0	651.9	669.5	677.6	680.3
70°	280.8	328.0	399.5	463.0	512.9	553.4	584.5	606.1	620.9	629.0	629.0
72.5°	243.0	290.2	361.7	423.8	469.7	510.2	538.6	558.8	572.3	577.7	576.4
75°	202.5	251.1	321.2	380.6	425.2	463.0	491.3	511.6	521.0	525.1	523.7
77.5°	167.4	213.3	280.8	336.1	383.3	414.4	442.7	461.6	471.1	473.8	472.4
80°	135.0	178.2	237.6	290.2	330.7	364.4	390.1	410.3	418.4	415.7	403.6
82.5°	103.9	143.1	195.7	241.6	279.4	310.5	337.4	349.6	350.9	344.2	333.4
85°	74.2	103.9	148.5	187.6	222.7	245.7	261.9	271.3	274.0	268.6	256.5
87.5°	41.8	60.7	87.7	116.1	143.1	159.3	168.7	174.1	178.2	172.8	164.7
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°	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5	1325.5
2.5°	1329.5	1333.6	1332.2	1334.9	1336.3	1336.3	1332.2	1334.9
5°	1387.6	1395.7	1401.1	1409.2	1414.6	1414.6	1415.9	1420.0
7.5°	1451.0	1464.5	1476.7	1486.1	1492.9	1495.6	1499.6	1503.7
10°	1510.4	1526.6	1540.1	1552.3	1560.4	1565.8	1569.8	1576.6
12.5°	1556.3	1575.2	1590.1	1603.5	1614.3	1622.4	1626.5	1631.9
15°	1590.1	1611.6	1629.2	1644.0	1653.5	1662.9	1667.0	1672.4
17.5°	1610.3	1631.9	1650.8	1665.6	1676.4	1685.9	1691.3	1696.7
20°	1615.7	1637.3	1657.5	1672.4	1683.2	1695.3	1700.7	1706.1
22.5°	1607.6	1629.2	1650.8	1667.0	1679.1	1691.3	1696.7	1702.1
25°	1591.4	1614.3	1635.9	1652.1	1662.9	1675.1	1681.8	1684.5
27.5°	1565.8	1588.7	1610.3	1625.1	1637.3	1649.4	1656.2	1657.5
30°	1529.3	1552.3	1573.9	1588.7	1602.2	1613.0	1619.7	1619.7
32.5°	1484.8	1506.4	1529.3	1542.8	1555.0	1565.8	1572.5	1575.2
35°	1433.5	1455.1	1476.7	1488.8	1502.3	1510.4	1515.8	1519.9
37.5°	1378.1	1399.7	1417.3	1428.1	1442.9	1448.3	1456.4	1455.1
40°	1318.7	1336.3	1352.5	1361.9	1374.1	1380.8	1388.9	1387.6
42.5°	1256.7	1274.2	1287.7	1298.5	1305.2	1312.0	1317.4	1316.0
45°	1193.2	1209.4	1221.6	1227.0	1237.8	1240.5	1245.9	1245.9
47.5°	1129.8	1143.3	1154.1	1162.2	1167.6	1170.3	1175.7	1175.7
50°	1069.0	1081.2	1087.9	1094.7	1100.1	1104.1	1106.8	1108.2
52.5°	1009.6	1019.1	1024.5	1029.9	1035.3	1038.0	1040.7	1039.3
55°	953.0	959.7	963.7	967.8	971.8	975.9	975.9	975.9
57.5°	896.3	900.3	904.4	907.1	911.1	913.8	913.8	913.8
60°	840.9	845.0	846.3	849.0	853.1	854.4	855.8	853.1
62.5°	786.9	788.3	789.6	791.0	795.0	797.7	797.7	796.4
65°	731.6	731.6	732.9	734.3	737.0	739.7	741.0	738.3
67.5°	677.6	677.6	678.9	678.9	683.0	685.7	687.0	687.0
70°	625.0	623.6	626.3	627.7	630.4	630.4	633.1	633.1
72.5°	572.3	571.0	573.7	573.7	576.4	577.7	577.7	577.7
75°	521.0	517.0	518.3	515.6	518.3	518.3	517.0	517.0
77.5°	465.7	456.2	453.5	448.1	448.1	448.1	445.4	445.4
80°	395.5	386.0	382.0	377.9	377.9	376.6	375.2	375.2
82.5°	325.3	317.2	313.2	309.1	311.8	307.8	309.1	310.5
85°	249.7	243.0	240.3	236.2	234.9	234.9	236.2	234.9
87.5°	162.0	155.2	155.2	151.2	153.9	149.8	145.8	148.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)