

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: P188662

Luminaire Tested: **24SR-LD2-53-C-UNV-L830-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188662
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-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: 4881.0 lumens
Efficiency: N/A
Efficacy: 113.2 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

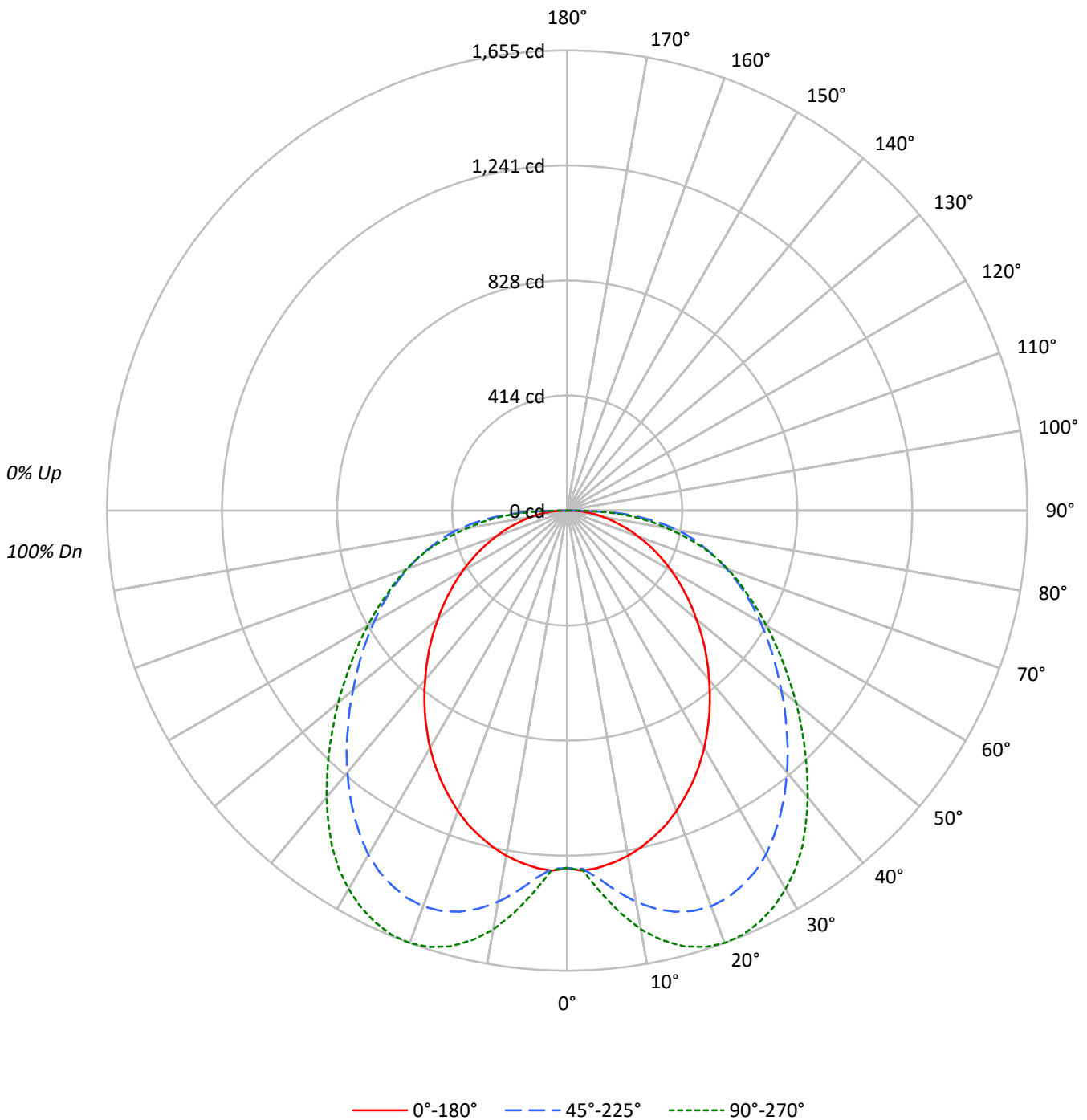
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1730	1730	1730
5°	1742	1795	1860
10°	1723	1952	2089
15°	1689	2081	2260
20°	1646	2169	2370
25°	1592	2210	2426
30°	1532	2221	2441
35°	1464	2196	2422
40°	1396	2159	2364
45°	1333	2123	2300
50°	1269	2105	2250
55°	1216	2116	2221
60°	1166	2160	2227
65°	1117	2251	2280
70°	1071	2400	2416
75°	1021	2648	2607
80°	1014	3125	2820
85°	1112	4022	3517



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.2	2.6
10°-20°	410.2	8.4
20°-30°	656.0	13.4
30°-40°	794.1	16.3
40°-50°	811.0	16.6
50°-60°	747.3	15.3
60°-70°	635.7	13.0
70°-80°	475.3	9.7
80°-90°	222.0	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°	1195.5	24.5
0°-40°	1989.6	40.8
0°-60°	3548.0	72.7
0°-90°	4881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4881.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1286	1286	1286	1286	1286	
5°	1290	1282	1329	1363	1377	122
15°	1212	1321	1494	1588	1622	341
25°	1072	1275	1489	1595	1634	493
35°	892	1127	1337	1438	1474	557
45°	700	932	1116	1188	1208	540
55°	518	754	902	937	947	464
65°	351	596	707	712	716	348
75°	196	431	509	501	502	210
85°	72	227	260	231	228	76
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°	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7
2.5°	1296.2	1293.6	1289.6	1284.4	1283.1	1283.1	1281.8	1281.8	1284.4	1289.6	1297.5
5°	1289.6	1287.0	1283.1	1279.2	1280.5	1284.4	1292.3	1301.4	1314.5	1328.9	1344.6
7.5°	1276.6	1275.2	1272.6	1272.6	1283.1	1301.4	1319.8	1338.1	1359.0	1381.3	1404.9
10°	1260.8	1259.5	1258.2	1268.7	1292.3	1319.8	1345.9	1370.8	1399.6	1428.4	1455.9
12.5°	1238.6	1238.6	1242.5	1266.1	1298.8	1332.9	1365.6	1398.3	1432.4	1466.4	1496.5
15°	1212.4	1212.4	1225.5	1259.5	1301.4	1340.7	1380.0	1416.6	1455.9	1493.9	1525.3
17.5°	1183.6	1182.3	1207.2	1249.1	1296.2	1342.0	1386.5	1427.1	1467.7	1509.6	1542.3
20°	1149.6	1152.2	1184.9	1233.3	1285.7	1336.8	1383.9	1427.1	1470.3	1514.8	1546.3
22.5°	1111.6	1116.8	1157.4	1211.1	1270.0	1322.4	1372.1	1418.0	1462.5	1507.0	1538.4
25°	1072.3	1078.9	1128.6	1184.9	1247.7	1301.4	1351.2	1399.6	1444.1	1488.7	1520.1
27.5°	1030.4	1039.6	1095.9	1154.8	1217.6	1273.9	1323.7	1373.4	1418.0	1463.8	1492.6
30°	985.9	997.7	1057.9	1118.1	1183.6	1238.6	1288.3	1339.4	1385.2	1429.7	1457.2
32.5°	938.8	953.2	1014.7	1080.2	1144.3	1198.0	1247.7	1300.1	1343.3	1385.2	1412.7
35°	891.6	908.6	971.5	1037.0	1099.8	1153.5	1201.9	1254.3	1297.5	1336.8	1363.0
37.5°	843.2	864.1	927.0	991.1	1052.7	1106.3	1156.1	1204.5	1247.7	1284.4	1310.6
40°	794.7	818.3	881.1	944.0	1005.5	1056.6	1105.0	1153.5	1196.7	1229.4	1254.3
42.5°	747.6	771.2	835.3	898.2	954.5	1006.8	1055.3	1102.4	1141.7	1174.4	1196.7
45°	700.5	725.3	788.2	849.7	906.0	958.4	1006.8	1050.0	1088.0	1115.5	1137.8
47.5°	653.3	679.5	742.4	803.9	857.6	908.6	958.4	997.7	1034.3	1061.8	1080.2
50°	606.2	635.0	696.5	759.4	811.8	862.8	910.0	946.6	980.7	1005.5	1022.6
52.5°	563.0	590.5	653.3	716.2	768.5	819.6	864.1	899.5	929.6	951.8	968.9
55°	518.5	548.6	614.1	674.3	728.0	779.0	819.6	852.3	879.8	902.1	915.2
57.5°	475.3	509.3	573.5	633.7	688.7	737.1	776.4	807.8	832.7	851.0	862.8
60°	433.4	468.7	535.5	595.7	650.7	697.8	735.8	764.6	786.9	802.6	813.1
62.5°	391.5	432.1	497.5	560.4	612.7	658.6	693.9	720.1	741.1	755.5	762.0
65°	350.9	392.8	460.9	522.4	574.8	618.0	652.0	675.6	695.2	707.0	709.6
67.5°	311.6	356.1	424.2	485.7	536.8	577.4	610.1	632.4	649.4	657.3	659.9
70°	272.3	318.2	387.5	449.1	497.5	536.8	566.9	587.9	602.3	610.1	610.1
72.5°	235.7	281.5	350.9	411.1	455.6	494.9	522.4	542.0	555.1	560.4	559.1
75°	196.4	243.5	311.6	369.2	412.4	449.1	476.6	496.2	505.4	509.3	508.0
77.5°	162.4	206.9	272.3	326.0	371.8	402.0	429.4	447.8	456.9	459.6	458.2
80°	130.9	172.8	230.4	281.5	320.8	353.5	378.4	398.0	405.9	403.3	391.5
82.5°	100.8	138.8	189.8	234.4	271.0	301.1	327.3	339.1	340.4	333.9	323.4
85°	72.0	100.8	144.0	182.0	216.0	238.3	254.0	263.2	265.8	260.5	248.8
87.5°	40.6	58.9	85.1	112.6	138.8	154.5	163.7	168.9	172.8	167.6	159.7
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°	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7	1285.7
2.5°	1289.6	1293.6	1292.3	1294.9	1296.2	1296.2	1292.3	1294.9
5°	1345.9	1353.8	1359.0	1366.9	1372.1	1372.1	1373.4	1377.4
7.5°	1407.5	1420.6	1432.4	1441.5	1448.1	1450.7	1454.6	1458.5
10°	1465.1	1480.8	1493.9	1505.7	1513.5	1518.8	1522.7	1529.2
12.5°	1509.6	1527.9	1542.3	1555.4	1565.9	1573.8	1577.7	1582.9
15°	1542.3	1563.3	1580.3	1594.7	1603.9	1613.0	1617.0	1622.2
17.5°	1562.0	1582.9	1601.3	1615.7	1626.1	1635.3	1640.5	1645.8
20°	1567.2	1588.2	1607.8	1622.2	1632.7	1644.5	1649.7	1654.9
22.5°	1559.4	1580.3	1601.3	1617.0	1628.7	1640.5	1645.8	1651.0
25°	1543.6	1565.9	1586.9	1602.6	1613.0	1624.8	1631.4	1634.0
27.5°	1518.8	1541.0	1562.0	1576.4	1588.2	1599.9	1606.5	1607.8
30°	1483.4	1505.7	1526.6	1541.0	1554.1	1564.6	1571.1	1571.1
32.5°	1440.2	1461.2	1483.4	1496.5	1508.3	1518.8	1525.3	1527.9
35°	1390.5	1411.4	1432.4	1444.1	1457.2	1465.1	1470.3	1474.3
37.5°	1336.8	1357.7	1374.7	1385.2	1399.6	1404.9	1412.7	1411.4
40°	1279.2	1296.2	1311.9	1321.1	1332.9	1339.4	1347.3	1345.9
42.5°	1218.9	1236.0	1249.1	1259.5	1266.1	1272.6	1277.9	1276.6
45°	1157.4	1173.1	1184.9	1190.1	1200.6	1203.2	1208.5	1208.5
47.5°	1095.9	1109.0	1119.4	1127.3	1132.5	1135.1	1140.4	1140.4
50°	1037.0	1048.7	1055.3	1061.8	1067.1	1071.0	1073.6	1074.9
52.5°	979.3	988.5	993.7	999.0	1004.2	1006.8	1009.5	1008.1
55°	924.4	930.9	934.8	938.8	942.7	946.6	946.6	946.6
57.5°	869.4	873.3	877.2	879.8	883.8	886.4	886.4	886.4
60°	815.7	819.6	820.9	823.5	827.5	828.8	830.1	827.5
62.5°	763.3	764.6	765.9	767.2	771.2	773.8	773.8	772.5
65°	709.6	709.6	710.9	712.3	714.9	717.5	718.8	716.2
67.5°	657.3	657.3	658.6	658.6	662.5	665.1	666.4	666.4
70°	606.2	604.9	607.5	608.8	611.4	611.4	614.1	614.1
72.5°	555.1	553.8	556.4	556.4	559.1	560.4	560.4	560.4
75°	505.4	501.5	502.8	500.1	502.8	502.8	501.5	501.5
77.5°	451.7	442.5	439.9	434.7	434.7	434.7	432.1	432.1
80°	383.6	374.5	370.5	366.6	366.6	365.3	364.0	364.0
82.5°	315.5	307.7	303.8	299.8	302.4	298.5	299.8	301.1
85°	242.2	235.7	233.1	229.1	227.8	227.8	229.1	227.8
87.5°	157.1	150.6	150.6	146.6	149.3	145.3	141.4	144.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)