

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: P188624

Luminaire Tested: **24SR-LD2-53-C-UNV-L840-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188624
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24785)
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-L840-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3983.0 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.85 / 1.72
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

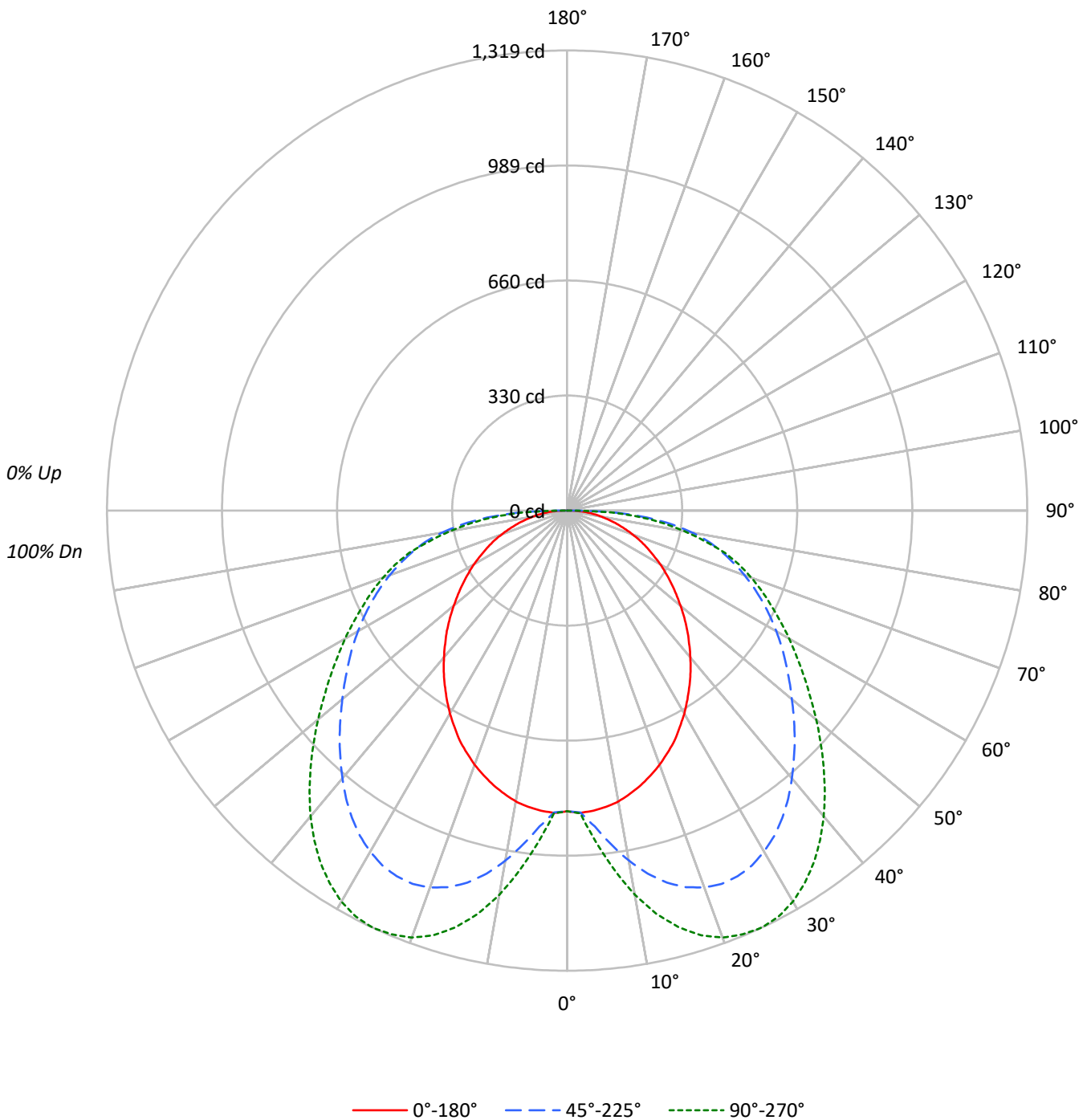
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66	64
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55	53
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47	44
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1160	1160	1160
5°	1166	1227	1289
10°	1157	1392	1527
15°	1135	1538	1722
20°	1110	1646	1865
25°	1081	1717	1958
30°	1044	1754	2011
35°	1004	1766	2024
40°	965	1760	2010
45°	927	1755	1978
50°	888	1761	1951
55°	856	1796	1944
60°	830	1864	1978
65°	806	1968	2056
70°	785	2129	2210
75°	766	2390	2433
80°	768	2827	2645
85°	851	3549	3210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.4	2.2
10°-20°	301.1	7.6
20°-30°	504.3	12.7
30°-40°	631.4	15.9
40°-50°	662.4	16.6
50°-60°	625.9	15.7
60°-70°	547.9	13.8
70°-80°	423.1	10.6
80°-90°	197.4	5.0
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°	894.8	22.5
0°-40°	1526.2	38.3
0°-60°	2814.5	70.7
0°-90°	3983.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3983.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	863	863	909	943	954	82
15°	815	929	1104	1204	1236	230
25°	728	935	1156	1274	1319	335
35°	611	854	1075	1191	1232	382
45°	487	724	922	1012	1040	376
55°	365	602	766	815	829	327
65°	253	493	618	635	646	251
75°	147	369	460	464	468	156
85°	55	194	230	213	208	58
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°	861.9	861.9	861.9	861.9	861.9	861.9	861.9	861.9	861.9	861.9	861.9
2.5°	867.4	866.0	864.6	861.9	860.5	860.5	860.5	860.5	861.9	866.0	868.7
5°	863.2	863.2	860.5	859.1	860.5	864.6	871.5	882.5	893.5	908.7	921.1
7.5°	856.4	855.0	853.6	855.0	867.4	885.3	903.2	923.8	943.1	965.1	983.0
10°	846.7	845.3	846.7	857.7	882.5	911.4	937.6	963.7	989.9	1018.8	1043.6
12.5°	831.6	831.6	837.1	861.9	896.3	932.1	966.5	999.5	1032.6	1065.6	1094.5
15°	815.0	816.4	830.2	866.0	908.7	950.0	989.9	1028.4	1067.0	1104.2	1135.8
17.5°	795.8	798.5	821.9	866.0	914.2	962.4	1007.8	1050.5	1091.8	1131.7	1164.7
20°	775.1	777.9	812.3	863.2	916.9	969.2	1017.4	1064.2	1108.3	1149.6	1184.0
22.5°	751.7	755.8	799.9	855.0	914.2	970.6	1020.2	1068.4	1113.8	1157.9	1192.3
25°	728.3	733.8	784.8	844.0	905.9	963.7	1016.1	1064.2	1112.4	1156.5	1190.9
27.5°	699.4	709.0	766.9	827.4	893.5	951.4	1003.7	1054.6	1102.8	1146.9	1181.3
30°	671.9	684.3	744.8	808.2	875.6	933.5	985.8	1036.7	1084.9	1129.0	1163.4
32.5°	641.6	656.7	720.1	786.1	852.2	908.7	962.4	1013.3	1061.5	1105.5	1138.6
35°	611.3	629.2	693.9	761.4	826.1	882.5	934.8	985.8	1032.6	1075.3	1106.9
37.5°	581.0	600.3	665.0	733.8	795.8	850.8	903.2	952.7	1000.9	1040.8	1072.5
40°	549.3	571.4	636.1	702.2	764.1	817.8	870.1	918.3	963.7	1002.3	1032.6
42.5°	517.7	542.4	607.2	671.9	731.1	783.4	835.7	882.5	925.2	962.4	991.3
45°	487.4	512.2	575.5	640.2	698.0	750.3	801.3	846.7	888.0	922.4	950.0
47.5°	455.7	483.2	546.6	609.9	665.0	717.3	766.9	809.5	849.5	881.1	907.3
50°	424.0	454.3	516.3	578.2	634.7	685.6	733.8	775.1	812.3	841.2	866.0
52.5°	393.8	425.4	488.8	549.3	604.4	655.3	702.2	742.1	776.5	802.7	824.7
55°	364.8	397.9	461.2	520.4	576.9	626.4	670.5	709.0	740.7	765.5	784.8
57.5°	335.9	371.7	435.1	495.6	549.3	598.9	641.6	677.4	706.3	729.7	746.2
60°	308.4	345.6	410.3	469.5	523.2	571.4	612.7	645.7	673.2	692.5	704.9
62.5°	279.5	319.4	384.1	444.7	498.4	543.8	583.8	615.4	638.8	655.3	666.4
65°	253.3	293.3	359.3	419.9	470.9	514.9	552.1	582.4	604.4	618.2	625.1
67.5°	227.2	268.5	334.6	393.8	443.3	486.0	520.4	549.3	568.6	579.6	585.1
70°	199.6	243.7	308.4	366.2	414.4	454.3	488.8	513.5	531.4	541.1	543.8
72.5°	172.1	217.5	282.2	338.7	384.1	422.7	454.3	477.7	494.3	501.1	502.5
75°	147.3	190.0	253.3	307.0	351.1	386.9	418.5	440.6	453.0	459.8	461.2
77.5°	122.5	163.8	224.4	275.4	313.9	348.3	378.6	399.3	411.7	417.2	417.2
80°	99.1	137.7	192.7	238.2	275.4	307.0	334.6	355.2	366.2	364.8	359.3
82.5°	77.1	112.9	159.7	199.6	232.7	261.6	289.1	301.5	305.6	301.5	297.4
85°	55.1	84.0	121.2	154.2	183.1	205.1	223.0	232.7	234.1	229.9	225.8
87.5°	31.7	46.8	68.8	93.6	108.8	122.5	137.7	143.2	143.2	145.9	137.7
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°	861.9	861.9	861.9	861.9	861.9	861.9	861.9	861.9
2.5°	867.4	868.7	868.7	871.5	872.9	872.9	871.5	868.7
5°	925.2	933.5	939.0	947.2	951.4	955.5	956.9	954.1
7.5°	992.7	1005.0	1016.1	1028.4	1034.0	1038.1	1043.6	1039.5
10°	1057.4	1073.9	1087.7	1101.4	1109.7	1115.2	1119.3	1117.9
12.5°	1112.4	1131.7	1146.9	1160.6	1171.6	1179.9	1184.0	1184.0
15°	1155.1	1177.1	1196.4	1211.6	1222.6	1230.8	1236.3	1236.3
17.5°	1188.2	1210.2	1230.8	1246.0	1257.0	1268.0	1273.5	1276.3
20°	1207.4	1230.8	1251.5	1268.0	1280.4	1292.8	1298.3	1302.4
22.5°	1217.1	1240.5	1262.5	1280.4	1294.2	1305.2	1312.1	1314.8
25°	1217.1	1241.8	1265.3	1283.2	1296.9	1309.3	1316.2	1318.9
27.5°	1208.8	1235.0	1258.4	1274.9	1290.0	1302.4	1309.3	1312.1
30°	1192.3	1218.4	1241.8	1258.4	1273.5	1284.5	1291.4	1294.2
32.5°	1166.1	1193.7	1215.7	1232.2	1247.4	1258.4	1265.3	1266.6
35°	1135.8	1162.0	1182.6	1199.2	1214.3	1224.0	1229.5	1232.2
37.5°	1098.7	1123.4	1144.1	1159.2	1173.0	1184.0	1189.5	1190.9
40°	1058.7	1082.1	1100.0	1113.8	1127.6	1137.2	1142.7	1144.1
42.5°	1016.1	1038.1	1054.6	1067.0	1079.4	1087.7	1091.8	1093.2
45°	972.0	991.3	1006.4	1017.4	1028.4	1035.3	1039.5	1039.5
47.5°	927.9	945.8	958.2	966.5	976.1	983.0	987.1	985.8
50°	883.9	899.0	908.7	916.9	925.2	929.3	933.5	932.1
52.5°	839.8	853.6	859.1	866.0	872.9	877.0	881.1	878.4
55°	797.2	806.8	812.3	817.8	823.3	827.4	830.2	828.8
57.5°	755.8	762.7	766.9	772.4	776.5	779.3	782.0	780.6
60°	711.8	717.3	720.1	725.6	729.7	732.4	735.2	735.2
62.5°	670.5	674.6	676.0	681.5	684.3	687.0	691.1	689.8
65°	626.4	630.6	633.3	637.4	640.2	643.0	647.1	645.7
67.5°	585.1	589.3	590.6	594.8	598.9	603.0	604.4	604.4
70°	543.8	546.6	548.0	553.5	554.8	559.0	561.7	561.7
72.5°	502.5	503.9	506.7	510.8	513.5	516.3	519.0	517.7
75°	458.5	461.2	462.6	465.3	465.3	468.1	468.1	468.1
77.5°	413.0	408.9	407.5	406.1	404.8	404.8	404.8	403.4
80°	351.1	346.9	345.6	342.8	342.8	342.8	342.8	341.4
82.5°	290.5	285.0	282.2	280.9	279.5	279.5	279.5	278.1
85°	220.3	214.8	213.4	212.0	212.0	210.6	209.3	207.9
87.5°	136.3	132.2	130.8	128.0	129.4	126.7	126.7	126.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)