

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: P188622

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188622
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-L830-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3788.0 lumens
Efficiency: N/A
Efficacy: 87.9 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

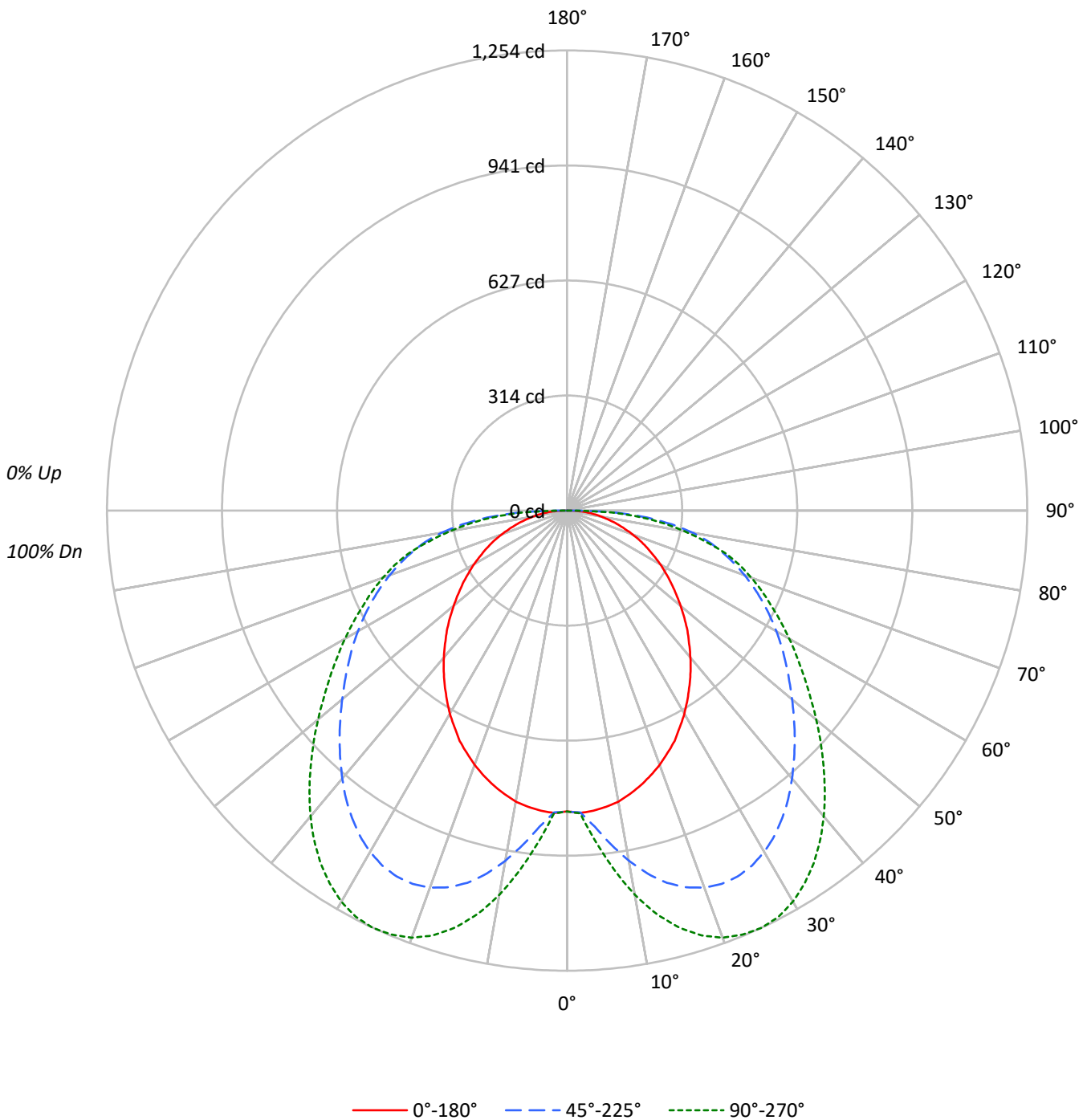
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188622

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L830-CD1-SO-U

Luminous Intensity Polar Plot





TEST NUMBER: P188622

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L830-CD1-SO-U

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°	1103	1103	1103
5°	1109	1167	1226
10°	1100	1324	1453
15°	1080	1463	1638
20°	1056	1565	1774
25°	1028	1633	1862
30°	993	1668	1912
35°	955	1680	1925
40°	918	1674	1911
45°	882	1669	1881
50°	844	1675	1855
55°	814	1708	1849
60°	789	1772	1882
65°	767	1872	1955
70°	747	2024	2102
75°	728	2273	2314
80°	731	2689	2516
85°	809	3376	3052



TEST NUMBER: P188622

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L830-CD1-SO-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	2.2
10°-20°	286.4	7.6
20°-30°	479.6	12.7
30°-40°	600.5	15.9
40°-50°	630.0	16.6
50°-60°	595.3	15.7
60°-70°	521.1	13.8
70°-80°	402.4	10.6
80°-90°	187.8	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°	851.0	22.5
0°-40°	1451.5	38.3
0°-60°	2676.7	70.7
0°-90°	3788.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3788.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	821	820	864	897	907	78
15°	775	884	1050	1145	1176	218
25°	693	889	1100	1212	1254	318
35°	581	812	1023	1133	1172	364
45°	464	689	877	962	989	357
55°	347	572	728	775	788	311
65°	241	469	588	604	614	239
75°	140	351	437	441	445	148
85°	52	185	219	202	198	55
90°	0	0	0	0	0	



TEST NUMBER: P188622

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L830-CD1-SO-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7
2.5°	824.9	823.6	822.3	819.7	818.4	818.4	818.4	818.4	819.7	823.6	826.2
5°	821.0	821.0	818.4	817.0	818.4	822.3	828.8	839.3	849.8	864.2	876.0
7.5°	814.4	813.1	811.8	813.1	824.9	841.9	858.9	878.6	896.9	917.9	934.9
10°	805.3	804.0	805.3	815.7	839.3	866.8	891.7	916.6	941.4	968.9	992.5
12.5°	790.9	790.9	796.1	819.7	852.4	886.4	919.2	950.6	982.0	1013.5	1040.9
15°	775.1	776.5	789.5	823.6	864.2	903.5	941.4	978.1	1014.8	1050.1	1080.2
17.5°	756.8	759.4	781.7	823.6	869.4	915.2	958.5	999.0	1038.3	1076.3	1107.7
20°	737.2	739.8	772.5	821.0	872.0	921.8	967.6	1012.1	1054.0	1093.3	1126.1
22.5°	714.9	718.8	760.7	813.1	869.4	923.1	970.2	1016.1	1059.3	1101.2	1133.9
25°	692.7	697.9	746.3	802.6	861.6	916.6	966.3	1012.1	1058.0	1099.9	1132.6
27.5°	665.2	674.3	729.3	786.9	849.8	904.8	954.5	1003.0	1048.8	1090.7	1123.4
30°	639.0	650.8	708.4	768.6	832.8	887.8	937.5	986.0	1031.8	1073.7	1106.4
32.5°	610.2	624.6	684.8	747.6	810.5	864.2	915.2	963.7	1009.5	1051.4	1082.8
35°	581.4	598.4	659.9	724.1	785.6	839.3	889.1	937.5	982.0	1022.6	1052.7
37.5°	552.6	570.9	632.4	697.9	756.8	809.2	858.9	906.1	951.9	989.9	1020.0
40°	522.4	543.4	604.9	667.8	726.7	777.8	827.5	873.3	916.6	953.2	982.0
42.5°	492.3	515.9	577.4	639.0	695.3	745.0	794.8	839.3	879.9	915.2	942.7
45°	463.5	487.1	547.3	608.9	663.8	713.6	762.1	805.3	844.5	877.3	903.5
47.5°	433.4	459.6	519.8	580.1	632.4	682.2	729.3	769.9	807.9	838.0	862.9
50°	403.3	432.1	491.0	549.9	603.6	652.1	697.9	737.2	772.5	800.0	823.6
52.5°	374.5	404.6	464.8	522.4	574.8	623.3	667.8	705.7	738.5	763.4	784.3
55°	347.0	378.4	438.6	494.9	548.6	595.8	637.7	674.3	704.4	728.0	746.3
57.5°	319.5	353.5	413.8	471.4	522.4	569.6	610.2	644.2	671.7	694.0	709.7
60°	293.3	328.7	390.2	446.5	497.6	543.4	582.7	614.1	640.3	658.6	670.4
62.5°	265.8	303.8	365.3	422.9	474.0	517.2	555.2	585.3	607.5	623.3	633.7
65°	240.9	278.9	341.7	399.4	447.8	489.7	525.1	553.9	574.8	587.9	594.5
67.5°	216.0	255.3	318.2	374.5	421.6	462.2	494.9	522.4	540.8	551.2	556.5
70°	189.9	231.8	293.3	348.3	394.1	432.1	464.8	488.4	505.4	514.6	517.2
72.5°	163.7	206.9	268.4	322.1	365.3	402.0	432.1	454.4	470.1	476.6	477.9
75°	140.1	180.7	240.9	292.0	333.9	367.9	398.0	419.0	430.8	437.3	438.6
77.5°	116.5	155.8	213.4	261.9	298.5	331.3	360.1	379.7	391.5	396.7	396.7
80°	94.3	130.9	183.3	226.5	261.9	292.0	318.2	337.8	348.3	347.0	341.7
82.5°	73.3	107.4	151.9	189.9	221.3	248.8	275.0	286.8	290.7	286.8	282.8
85°	52.4	79.9	115.2	146.6	174.1	195.1	212.1	221.3	222.6	218.7	214.7
87.5°	30.1	44.5	65.5	89.0	103.4	116.5	130.9	136.2	136.2	138.8	130.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188622

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L830-CD1-SO-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7
2.5°	824.9	826.2	826.2	828.8	830.1	830.1	828.8	826.2
5°	879.9	887.8	893.0	900.8	904.8	908.7	910.0	907.4
7.5°	944.1	955.8	966.3	978.1	983.3	987.3	992.5	988.6
10°	1005.6	1021.3	1034.4	1047.5	1055.4	1060.6	1064.5	1063.2
12.5°	1058.0	1076.3	1090.7	1103.8	1114.3	1122.1	1126.1	1126.1
15°	1098.6	1119.5	1137.8	1152.2	1162.7	1170.6	1175.8	1175.8
17.5°	1130.0	1150.9	1170.6	1185.0	1195.5	1205.9	1211.2	1213.8
20°	1148.3	1170.6	1190.2	1205.9	1217.7	1229.5	1234.7	1238.7
22.5°	1157.5	1179.7	1200.7	1217.7	1230.8	1241.3	1247.8	1250.4
25°	1157.5	1181.1	1203.3	1220.3	1233.4	1245.2	1251.8	1254.4
27.5°	1149.6	1174.5	1196.8	1212.5	1226.9	1238.7	1245.2	1247.8
30°	1133.9	1158.8	1181.1	1196.8	1211.2	1221.6	1228.2	1230.8
32.5°	1109.0	1135.2	1156.2	1171.9	1186.3	1196.8	1203.3	1204.6
35°	1080.2	1105.1	1124.7	1140.5	1154.9	1164.0	1169.3	1171.9
37.5°	1044.9	1068.4	1088.1	1102.5	1115.6	1126.1	1131.3	1132.6
40°	1006.9	1029.2	1046.2	1059.3	1072.4	1081.5	1086.8	1088.1
42.5°	966.3	987.3	1003.0	1014.8	1026.5	1034.4	1038.3	1039.6
45°	924.4	942.7	957.1	967.6	978.1	984.6	988.6	988.6
47.5°	882.5	899.5	911.3	919.2	928.3	934.9	938.8	937.5
50°	840.6	855.0	864.2	872.0	879.9	883.8	887.8	886.4
52.5°	798.7	811.8	817.0	823.6	830.1	834.1	838.0	835.4
55°	758.1	767.3	772.5	777.8	783.0	786.9	789.5	788.2
57.5°	718.8	725.4	729.3	734.6	738.5	741.1	743.7	742.4
60°	676.9	682.2	684.8	690.0	694.0	696.6	699.2	699.2
62.5°	637.7	641.6	642.9	648.1	650.8	653.4	657.3	656.0
65°	595.8	599.7	602.3	606.2	608.9	611.5	615.4	614.1
67.5°	556.5	560.4	561.7	565.6	569.6	573.5	574.8	574.8
70°	517.2	519.8	521.1	526.4	527.7	531.6	534.2	534.2
72.5°	477.9	479.2	481.8	485.8	488.4	491.0	493.6	492.3
75°	436.0	438.6	439.9	442.6	442.6	445.2	445.2	445.2
77.5°	392.8	388.9	387.6	386.3	385.0	385.0	385.0	383.6
80°	333.9	330.0	328.7	326.0	326.0	326.0	326.0	324.7
82.5°	276.3	271.0	268.4	267.1	265.8	265.8	265.8	264.5
85°	209.5	204.3	203.0	201.6	201.6	200.3	199.0	197.7
87.5°	129.6	125.7	124.4	121.8	123.1	120.5	120.5	120.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)