

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: P188619

Luminaire Tested: **24SR-LD2-48-C-UNV-L840-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188619
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-LD2-48-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: 3599.0 lumens
Efficiency: N/A
Efficacy: 94.2 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

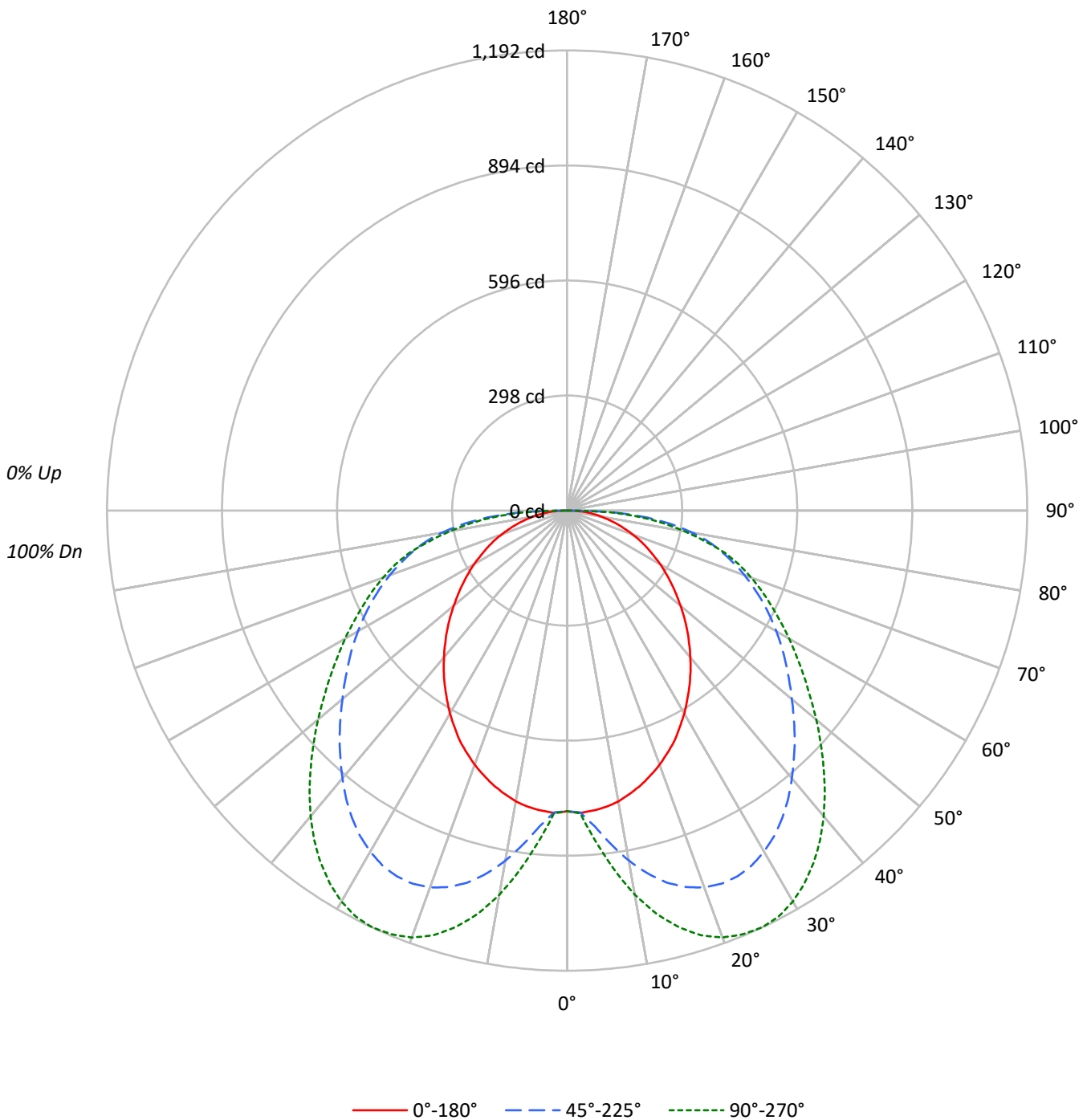
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1048	1048	1048
5°	1053	1109	1164
10°	1045	1258	1380
15°	1026	1390	1556
20°	1003	1487	1685
25°	977	1551	1769
30°	943	1585	1817
35°	907	1596	1829
40°	872	1591	1816
45°	838	1586	1787
50°	802	1591	1763
55°	773	1623	1757
60°	750	1684	1788
65°	729	1778	1858
70°	710	1923	1997
75°	692	2160	2199
80°	694	2555	2390
85°	769	3208	2899



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	2.2
10°-20°	272.1	7.6
20°-30°	455.6	12.7
30°-40°	570.5	15.9
40°-50°	598.5	16.6
50°-60°	565.6	15.7
60°-70°	495.1	13.8
70°-80°	382.4	10.6
80°-90°	178.4	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°	808.5	22.5
0°-40°	1379.1	38.3
0°-60°	2543.2	70.7
0°-90°	3599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	779	779	779	779	779	
5°	780	779	821	852	862	74
15°	736	840	998	1088	1117	207
25°	658	845	1045	1151	1192	302
35°	552	772	972	1076	1113	346
45°	440	654	834	914	939	340
55°	330	544	692	736	749	295
65°	229	445	559	574	584	227
75°	133	333	416	419	423	141
85°	50	175	208	192	188	53
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°	778.8	778.8	778.8	778.8	778.8	778.8	778.8	778.8	778.8	778.8	778.8
2.5°	783.7	782.5	781.3	778.8	777.5	777.5	777.5	777.5	778.8	782.5	785.0
5°	780.0	780.0	777.5	776.3	777.5	781.3	787.5	797.4	807.4	821.1	832.3
7.5°	773.8	772.5	771.3	772.5	783.7	799.9	816.1	834.7	852.2	872.1	888.2
10°	765.1	763.8	765.1	775.0	797.4	823.6	847.2	870.8	894.5	920.6	943.0
12.5°	751.4	751.4	756.4	778.8	809.9	842.2	873.3	903.2	933.0	962.9	989.0
15°	736.5	737.7	750.2	782.5	821.1	858.4	894.5	929.3	964.1	997.7	1026.3
17.5°	719.1	721.5	742.7	782.5	826.0	869.6	910.6	949.2	986.5	1022.6	1052.5
20°	700.4	702.9	734.0	780.0	828.5	875.8	919.3	961.6	1001.5	1038.8	1069.9
22.5°	679.2	683.0	722.8	772.5	826.0	877.0	921.8	965.4	1006.4	1046.2	1077.3
25°	658.1	663.1	709.1	762.6	818.6	870.8	918.1	961.6	1005.2	1045.0	1076.1
27.5°	632.0	640.7	692.9	747.7	807.4	859.6	906.9	952.9	996.5	1036.3	1067.4
30°	607.1	618.3	673.0	730.3	791.2	843.5	890.7	936.8	980.3	1020.1	1051.2
32.5°	579.7	593.4	650.6	710.3	770.1	821.1	869.6	915.6	959.2	999.0	1028.8
35°	552.4	568.5	627.0	688.0	746.4	797.4	844.7	890.7	933.0	971.6	1000.2
37.5°	525.0	542.4	600.9	663.1	719.1	768.8	816.1	860.9	904.4	940.5	969.1
40°	496.4	516.3	574.7	634.5	690.4	739.0	786.2	829.8	870.8	905.7	933.0
42.5°	467.8	490.2	548.6	607.1	660.6	707.9	755.1	797.4	836.0	869.6	895.7
45°	440.4	462.8	520.0	578.5	630.7	678.0	724.0	765.1	802.4	833.5	858.4
47.5°	411.8	436.7	493.9	551.1	600.9	648.1	692.9	731.5	767.6	796.2	819.8
50°	383.2	410.5	466.5	522.5	573.5	619.5	663.1	700.4	734.0	760.1	782.5
52.5°	355.8	384.4	441.6	496.4	546.1	592.2	634.5	670.5	701.6	725.3	745.2
55°	329.7	359.5	416.8	470.2	521.3	566.0	605.8	640.7	669.3	691.7	709.1
57.5°	303.5	335.9	393.1	447.9	496.4	541.2	579.7	612.1	638.2	659.3	674.3
60°	278.7	312.3	370.7	424.2	472.7	516.3	553.6	583.5	608.3	625.8	636.9
62.5°	252.5	288.6	347.1	401.8	450.3	491.4	527.5	556.1	577.2	592.2	602.1
65°	228.9	265.0	324.7	379.4	425.5	465.3	498.9	526.2	546.1	558.6	564.8
67.5°	205.3	242.6	302.3	355.8	400.6	439.1	470.2	496.4	513.8	523.7	528.7
70°	180.4	220.2	278.7	330.9	374.5	410.5	441.6	464.0	480.2	488.9	491.4
72.5°	155.5	196.6	255.0	306.0	347.1	381.9	410.5	431.7	446.6	452.8	454.1
75°	133.1	171.7	228.9	277.4	317.2	349.6	378.2	398.1	409.3	415.5	416.8
77.5°	110.7	148.0	202.8	248.8	283.6	314.7	342.1	360.8	372.0	376.9	376.9
80°	89.6	124.4	174.2	215.2	248.8	277.4	302.3	321.0	330.9	329.7	324.7
82.5°	69.7	102.0	144.3	180.4	210.2	236.4	261.2	272.4	276.2	272.4	268.7
85°	49.8	75.9	109.5	139.3	165.5	185.4	201.5	210.2	211.5	207.8	204.0
87.5°	28.6	42.3	62.2	84.6	98.3	110.7	124.4	129.4	129.4	131.9	124.4
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°	778.8	778.8	778.8	778.8	778.8	778.8	778.8	778.8
2.5°	783.7	785.0	785.0	787.5	788.7	788.7	787.5	785.0
5°	836.0	843.5	848.4	855.9	859.6	863.4	864.6	862.1
7.5°	897.0	908.1	918.1	929.3	934.3	938.0	943.0	939.2
10°	955.4	970.4	982.8	995.2	1002.7	1007.7	1011.4	1010.2
12.5°	1005.2	1022.6	1036.3	1048.7	1058.7	1066.1	1069.9	1069.9
15°	1043.7	1063.7	1081.1	1094.8	1104.7	1112.2	1117.1	1117.1
17.5°	1073.6	1093.5	1112.2	1125.9	1135.8	1145.8	1150.7	1153.2
20°	1091.0	1112.2	1130.8	1145.8	1157.0	1168.2	1173.1	1176.9
22.5°	1099.7	1120.9	1140.8	1157.0	1169.4	1179.3	1185.6	1188.1
25°	1099.7	1122.1	1143.3	1159.4	1171.9	1183.1	1189.3	1191.8
27.5°	1092.3	1115.9	1137.1	1152.0	1165.7	1176.9	1183.1	1185.6
30°	1077.3	1101.0	1122.1	1137.1	1150.7	1160.7	1166.9	1169.4
32.5°	1053.7	1078.6	1098.5	1113.4	1127.1	1137.1	1143.3	1144.5
35°	1026.3	1050.0	1068.6	1083.6	1097.2	1106.0	1110.9	1113.4
37.5°	992.7	1015.1	1033.8	1047.5	1059.9	1069.9	1074.8	1076.1
40°	956.7	977.8	994.0	1006.4	1018.9	1027.6	1032.6	1033.8
42.5°	918.1	938.0	952.9	964.1	975.3	982.8	986.5	987.8
45°	878.3	895.7	909.4	919.3	929.3	935.5	939.2	939.2
47.5°	838.5	854.7	865.9	873.3	882.0	888.2	892.0	890.7
50°	798.7	812.4	821.1	828.5	836.0	839.7	843.5	842.2
52.5°	758.9	771.3	776.3	782.5	788.7	792.5	796.2	793.7
55°	720.3	729.0	734.0	739.0	743.9	747.7	750.2	748.9
57.5°	683.0	689.2	692.9	697.9	701.6	704.1	706.6	705.4
60°	643.2	648.1	650.6	655.6	659.3	661.8	664.3	664.3
62.5°	605.8	609.6	610.8	615.8	618.3	620.8	624.5	623.3
65°	566.0	569.8	572.3	576.0	578.5	581.0	584.7	583.5
67.5°	528.7	532.4	533.7	537.4	541.2	544.9	546.1	546.1
70°	491.4	493.9	495.1	500.1	501.3	505.1	507.6	507.6
72.5°	454.1	455.3	457.8	461.5	464.0	466.5	469.0	467.8
75°	414.3	416.8	418.0	420.5	420.5	423.0	423.0	423.0
77.5°	373.2	369.5	368.2	367.0	365.7	365.7	365.7	364.5
80°	317.2	313.5	312.3	309.8	309.8	309.8	309.8	308.5
82.5°	262.5	257.5	255.0	253.8	252.5	252.5	252.5	251.3
85°	199.0	194.1	192.8	191.6	191.6	190.3	189.1	187.8
87.5°	123.2	119.4	118.2	115.7	116.9	114.5	114.5	114.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)