

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: P188614

Luminaire Tested: **24SR-LD2-45-C-UNV-L840-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188614
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-LD2-45-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: 3379.0 lumens
Efficiency: N/A
Efficacy: 92.1 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

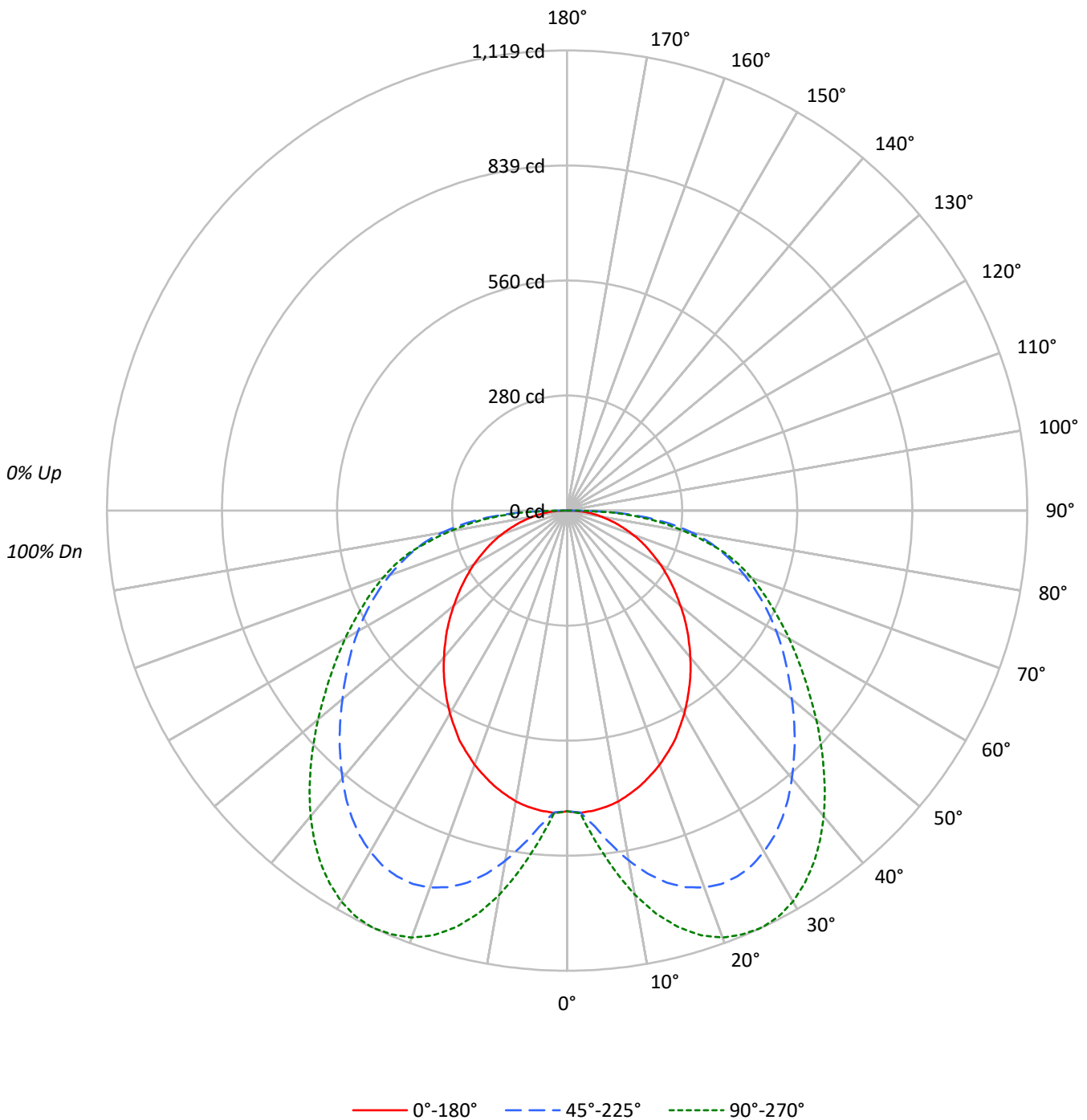
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	984	984	984
5°	989	1041	1093
10°	981	1181	1296
15°	963	1305	1461
20°	942	1396	1582
25°	917	1457	1661
30°	886	1488	1706
35°	852	1498	1717
40°	818	1493	1705
45°	787	1489	1678
50°	753	1494	1655
55°	726	1523	1649
60°	704	1581	1678
65°	684	1670	1744
70°	666	1806	1875
75°	650	2028	2064
80°	652	2398	2245
85°	721	3012	2723



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.9	2.2
10°-20°	255.5	7.6
20°-30°	427.8	12.7
30°-40°	535.7	15.9
40°-50°	562.0	16.6
50°-60°	531.0	15.7
60°-70°	464.8	13.8
70°-80°	359.0	10.6
80°-90°	167.5	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°	759.1	22.5
0°-40°	1294.8	38.3
0°-60°	2387.7	70.7
0°-90°	3379.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3379.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	732	732	771	800	809	69
15°	692	788	937	1021	1049	195
25°	618	793	981	1081	1119	284
35°	519	725	912	1010	1045	324
45°	414	614	783	858	882	319
55°	310	510	649	691	703	277
65°	215	418	524	539	548	213
75°	125	313	390	394	397	132
85°	47	165	195	180	176	49
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°	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2
2.5°	735.8	734.7	733.5	731.2	730.0	730.0	730.0	730.0	731.2	734.7	737.0
5°	732.3	732.3	730.0	728.8	730.0	733.5	739.3	748.7	758.0	770.9	781.4
7.5°	726.5	725.3	724.2	725.3	735.8	751.0	766.2	783.7	800.1	818.8	833.9
10°	718.3	717.1	718.3	727.7	748.7	773.2	795.4	817.6	839.8	864.3	885.3
12.5°	705.5	705.5	710.1	731.2	760.4	790.7	819.9	848.0	876.0	904.0	928.6
15°	691.5	692.6	704.3	734.7	770.9	805.9	839.8	872.5	905.2	936.7	963.6
17.5°	675.1	677.4	697.3	734.7	775.5	816.4	855.0	891.2	926.2	960.1	988.1
20°	657.6	659.9	689.1	732.3	777.9	822.3	863.1	902.9	940.2	975.3	1004.5
22.5°	637.7	641.2	678.6	725.3	775.5	823.4	865.5	906.4	944.9	982.3	1011.5
25°	617.9	622.5	665.8	716.0	768.5	817.6	862.0	902.9	943.7	981.1	1010.3
27.5°	593.3	601.5	650.6	702.0	758.0	807.1	851.5	894.7	935.6	972.9	1002.1
30°	570.0	580.5	631.9	685.6	742.8	791.9	836.3	879.5	920.4	957.8	987.0
32.5°	544.3	557.1	610.9	666.9	723.0	770.9	816.4	859.6	900.5	937.9	965.9
35°	518.6	533.8	588.7	645.9	700.8	748.7	793.1	836.3	876.0	912.2	939.1
37.5°	492.9	509.2	564.1	622.5	675.1	721.8	766.2	808.3	849.1	883.0	909.9
40°	466.0	484.7	539.6	595.7	648.2	693.8	738.2	779.1	817.6	850.3	876.0
42.5°	439.2	460.2	515.1	570.0	620.2	664.6	709.0	748.7	784.9	816.4	841.0
45°	413.5	434.5	488.2	543.1	592.2	636.6	679.8	718.3	753.4	782.6	805.9
47.5°	386.6	410.0	463.7	517.4	564.1	608.5	650.6	686.8	720.7	747.5	769.7
50°	359.7	385.4	438.0	490.6	538.4	581.7	622.5	657.6	689.1	713.6	734.7
52.5°	334.0	360.9	414.6	466.0	512.7	556.0	595.7	629.5	658.7	680.9	699.6
55°	309.5	337.5	391.3	441.5	489.4	531.4	568.8	601.5	628.4	649.4	665.8
57.5°	285.0	315.4	369.1	420.5	466.0	508.1	544.3	574.7	599.2	619.0	633.1
60°	261.6	293.2	348.1	398.3	443.8	484.7	519.8	547.8	571.1	587.5	598.0
62.5°	237.1	271.0	325.9	377.3	422.8	461.4	495.2	522.1	541.9	556.0	565.3
65°	214.9	248.8	304.8	356.2	399.5	436.8	468.4	494.1	512.7	524.4	530.3
67.5°	192.7	227.8	283.8	334.0	376.1	412.3	441.5	466.0	482.4	491.7	496.4
70°	169.4	206.7	261.6	310.7	351.6	385.4	414.6	435.7	450.8	459.0	461.4
72.5°	146.0	184.5	239.4	287.3	325.9	358.6	385.4	405.3	419.3	425.1	426.3
75°	125.0	161.2	214.9	260.5	297.8	328.2	355.1	373.8	384.3	390.1	391.3
77.5°	104.0	139.0	190.4	233.6	266.3	295.5	321.2	338.7	349.2	353.9	353.9
80°	84.1	116.8	163.5	202.1	233.6	260.5	283.8	301.3	310.7	309.5	304.8
82.5°	65.4	95.8	135.5	169.4	197.4	221.9	245.3	255.8	259.3	255.8	252.3
85°	46.7	71.2	102.8	130.8	155.3	174.0	189.2	197.4	198.6	195.1	191.6
87.5°	26.9	39.7	58.4	79.4	92.3	104.0	116.8	121.5	121.5	123.8	116.8
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°	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2
2.5°	735.8	737.0	737.0	739.3	740.5	740.5	739.3	737.0
5°	784.9	791.9	796.6	803.6	807.1	810.6	811.8	809.4
7.5°	842.1	852.6	862.0	872.5	877.2	880.7	885.3	881.8
10°	897.0	911.0	922.7	934.4	941.4	946.1	949.6	948.4
12.5°	943.7	960.1	972.9	984.6	994.0	1001.0	1004.5	1004.5
15°	979.9	998.6	1015.0	1027.8	1037.2	1044.2	1048.9	1048.9
17.5°	1008.0	1026.7	1044.2	1057.0	1066.4	1075.7	1080.4	1082.7
20°	1024.3	1044.2	1061.7	1075.7	1086.2	1096.7	1101.4	1104.9
22.5°	1032.5	1052.4	1071.0	1086.2	1097.9	1107.3	1113.1	1115.4
25°	1032.5	1053.5	1073.4	1088.6	1100.2	1110.8	1116.6	1118.9
27.5°	1025.5	1047.7	1067.5	1081.6	1094.4	1104.9	1110.8	1113.1
30°	1011.5	1033.7	1053.5	1067.5	1080.4	1089.7	1095.6	1097.9
32.5°	989.3	1012.6	1031.3	1045.4	1058.2	1067.5	1073.4	1074.6
35°	963.6	985.8	1003.3	1017.3	1030.2	1038.3	1043.0	1045.4
37.5°	932.1	953.1	970.6	983.4	995.1	1004.5	1009.1	1010.3
40°	898.2	918.0	933.2	944.9	956.6	964.8	969.4	970.6
42.5°	862.0	880.7	894.7	905.2	915.7	922.7	926.2	927.4
45°	824.6	841.0	853.8	863.1	872.5	878.3	881.8	881.8
47.5°	787.2	802.4	812.9	819.9	828.1	833.9	837.5	836.3
50°	749.9	762.7	770.9	777.9	784.9	788.4	791.9	790.7
52.5°	712.5	724.2	728.8	734.7	740.5	744.0	747.5	745.2
55°	676.3	684.4	689.1	693.8	698.5	702.0	704.3	703.1
57.5°	641.2	647.1	650.6	655.2	658.7	661.1	663.4	662.3
60°	603.9	608.5	610.9	615.5	619.0	621.4	623.7	623.7
62.5°	568.8	572.3	573.5	578.2	580.5	582.8	586.3	585.2
65°	531.4	534.9	537.3	540.8	543.1	545.5	549.0	547.8
67.5°	496.4	499.9	501.1	504.6	508.1	511.6	512.7	512.7
70°	461.4	463.7	464.9	469.5	470.7	474.2	476.5	476.5
72.5°	426.3	427.5	429.8	433.3	435.7	438.0	440.3	439.2
75°	388.9	391.3	392.4	394.8	394.8	397.1	397.1	397.1
77.5°	350.4	346.9	345.7	344.6	343.4	343.4	343.4	342.2
80°	297.8	294.3	293.2	290.8	290.8	290.8	290.8	289.7
82.5°	246.4	241.8	239.4	238.3	237.1	237.1	237.1	235.9
85°	186.9	182.2	181.0	179.9	179.9	178.7	177.5	176.4
87.5°	115.6	112.1	111.0	108.6	109.8	107.5	107.5	107.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)