

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: P188615

Luminaire Tested: **24SR-LD2-45-C-UNV-L850-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188615
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-L850-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3677.0 lumens
Efficiency: N/A
Efficacy: 100.2 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

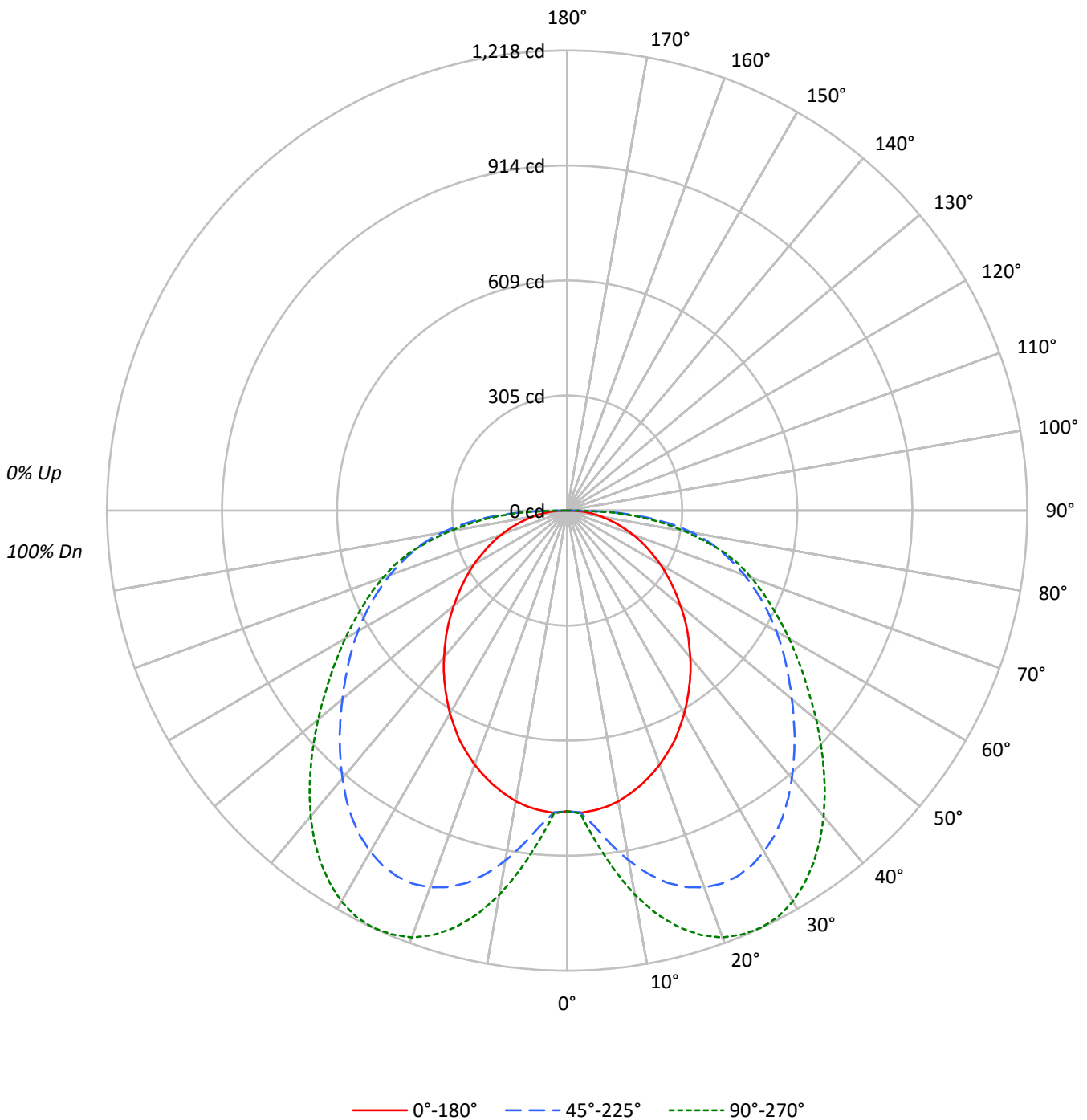
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1070	1070	1070
5°	1076	1133	1190
10°	1068	1285	1410
15°	1048	1420	1590
20°	1025	1520	1722
25°	998	1585	1808
30°	964	1619	1856
35°	927	1631	1868
40°	891	1625	1855
45°	856	1620	1826
50°	819	1626	1801
55°	790	1658	1795
60°	766	1720	1826
65°	745	1817	1898
70°	725	1965	2040
75°	707	2207	2246
80°	709	2610	2442
85°	784	3277	2963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	2.2
10°-20°	278.0	7.6
20°-30°	465.5	12.7
30°-40°	582.9	15.9
40°-50°	611.5	16.6
50°-60°	577.8	15.7
60°-70°	505.8	13.8
70°-80°	390.6	10.6
80°-90°	182.3	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°	826.1	22.5
0°-40°	1409.0	38.3
0°-60°	2598.3	70.7
0°-90°	3677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3677.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	797	796	839	871	881	76
15°	752	858	1019	1112	1141	212
25°	672	863	1068	1176	1218	309
35°	564	789	993	1099	1138	353
45°	450	669	852	934	960	347
55°	337	555	707	752	765	302
65°	234	455	571	587	596	232
75°	136	341	424	428	432	144
85°	51	179	212	196	192	54
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°	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6
2.5°	800.7	799.5	798.2	795.6	794.4	794.4	794.4	794.4	795.6	799.5	802.0
5°	796.9	796.9	794.4	793.1	794.4	798.2	804.5	814.7	824.9	838.9	850.3
7.5°	790.6	789.3	788.0	789.3	800.7	817.3	833.8	852.8	870.6	891.0	907.5
10°	781.7	780.4	781.7	791.8	814.7	841.4	865.6	889.7	913.8	940.5	963.4
12.5°	767.7	767.7	772.8	795.6	827.4	860.5	892.2	922.7	953.3	983.8	1010.4
15°	752.4	753.7	766.4	799.5	838.9	877.0	913.8	949.4	985.0	1019.3	1048.6
17.5°	734.6	737.2	758.8	799.5	843.9	888.4	930.4	969.8	1007.9	1044.8	1075.3
20°	715.6	718.1	749.9	796.9	846.5	894.8	939.3	982.5	1023.2	1061.3	1093.1
22.5°	694.0	697.8	738.5	789.3	843.9	896.1	941.8	986.3	1028.2	1068.9	1100.7
25°	672.4	677.4	724.5	779.1	836.3	889.7	938.0	982.5	1027.0	1067.6	1099.4
27.5°	645.7	654.6	707.9	763.9	824.9	878.3	926.6	973.6	1018.1	1058.7	1090.5
30°	620.2	631.7	687.6	746.1	808.4	861.7	910.0	957.1	1001.5	1042.2	1074.0
32.5°	592.3	606.3	664.7	725.7	786.7	838.9	888.4	935.5	979.9	1020.6	1051.1
35°	564.3	580.8	640.6	702.9	762.6	814.7	863.0	910.0	953.3	992.7	1021.9
37.5°	536.4	554.2	613.9	677.4	734.6	785.5	833.8	879.5	924.0	960.9	990.1
40°	507.1	527.5	587.2	648.2	705.4	755.0	803.3	847.8	889.7	925.3	953.3
42.5°	477.9	500.8	560.5	620.2	674.9	723.2	771.5	814.7	854.1	888.4	915.1
45°	449.9	472.8	531.3	591.0	644.4	692.7	739.7	781.7	819.8	851.6	877.0
47.5°	420.7	446.1	504.6	563.1	613.9	662.2	707.9	747.3	784.2	813.4	837.6
50°	391.5	419.4	476.6	533.8	585.9	633.0	677.4	715.6	749.9	776.6	799.5
52.5°	363.5	392.7	451.2	507.1	558.0	605.0	648.2	685.1	716.8	741.0	761.3
55°	336.8	367.3	425.8	480.4	532.5	578.3	619.0	654.6	683.8	706.7	724.5
57.5°	310.1	343.2	401.6	457.6	507.1	552.9	592.3	625.3	652.0	673.6	688.9
60°	284.7	319.0	378.8	433.4	483.0	527.5	565.6	596.1	621.5	639.3	650.8
62.5°	258.0	294.9	354.6	410.5	460.1	502.0	538.9	568.1	589.7	605.0	615.2
65°	233.9	270.7	331.7	387.7	434.7	475.4	509.7	537.6	558.0	570.7	577.0
67.5°	209.7	247.8	308.9	363.5	409.3	448.7	480.4	507.1	524.9	535.1	540.2
70°	184.3	225.0	284.7	338.1	382.6	419.4	451.2	474.1	490.6	499.5	502.0
72.5°	158.9	200.8	260.6	312.7	354.6	390.2	419.4	441.0	456.3	462.6	463.9
75°	136.0	175.4	233.9	283.4	324.1	357.2	386.4	406.7	418.2	424.5	425.8
77.5°	113.1	151.2	207.2	254.2	289.8	321.6	349.5	368.6	380.0	385.1	385.1
80°	91.5	127.1	177.9	219.9	254.2	283.4	308.9	327.9	338.1	336.8	331.7
82.5°	71.2	104.2	147.4	184.3	214.8	241.5	266.9	278.3	282.2	278.3	274.5
85°	50.8	77.5	111.8	142.4	169.0	189.4	205.9	214.8	216.1	212.3	208.4
87.5°	29.2	43.2	63.6	86.4	100.4	113.1	127.1	132.2	132.2	134.7	127.1
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°	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6
2.5°	800.7	802.0	802.0	804.5	805.8	805.8	804.5	802.0
5°	854.1	861.7	866.8	874.4	878.3	882.1	883.3	880.8
7.5°	916.4	927.8	938.0	949.4	954.5	958.3	963.4	959.6
10°	976.1	991.4	1004.1	1016.8	1024.4	1029.5	1033.3	1032.1
12.5°	1027.0	1044.8	1058.7	1071.5	1081.6	1089.2	1093.1	1093.1
15°	1066.4	1086.7	1104.5	1118.5	1128.6	1136.3	1141.4	1141.4
17.5°	1096.9	1117.2	1136.3	1150.3	1160.4	1170.6	1175.7	1178.2
20°	1114.7	1136.3	1155.3	1170.6	1182.0	1193.5	1198.6	1202.4
22.5°	1123.6	1145.2	1165.5	1182.0	1194.7	1204.9	1211.3	1213.8
25°	1123.6	1146.4	1168.0	1184.6	1197.3	1208.7	1215.1	1217.6
27.5°	1115.9	1140.1	1161.7	1176.9	1190.9	1202.4	1208.7	1211.3
30°	1100.7	1124.8	1146.4	1161.7	1175.7	1185.8	1192.2	1194.7
32.5°	1076.5	1102.0	1122.3	1137.5	1151.5	1161.7	1168.0	1169.3
35°	1048.6	1072.7	1091.8	1107.0	1121.0	1129.9	1135.0	1137.5
37.5°	1014.3	1037.1	1056.2	1070.2	1082.9	1093.1	1098.1	1099.4
40°	977.4	999.0	1015.5	1028.2	1040.9	1049.8	1054.9	1056.2
42.5°	938.0	958.3	973.6	985.0	996.5	1004.1	1007.9	1009.2
45°	897.3	915.1	929.1	939.3	949.4	955.8	959.6	959.6
47.5°	856.7	873.2	884.6	892.2	901.1	907.5	911.3	910.0
50°	816.0	830.0	838.9	846.5	854.1	857.9	861.7	860.5
52.5°	775.3	788.0	793.1	799.5	805.8	809.6	813.4	810.9
55°	735.9	744.8	749.9	755.0	760.1	763.9	766.4	765.1
57.5°	697.8	704.1	707.9	713.0	716.8	719.4	721.9	720.7
60°	657.1	662.2	664.7	669.8	673.6	676.2	678.7	678.7
62.5°	619.0	622.8	624.1	629.1	631.7	634.2	638.0	636.8
65°	578.3	582.1	584.7	588.5	591.0	593.6	597.4	596.1
67.5°	540.2	544.0	545.3	549.1	552.9	556.7	558.0	558.0
70°	502.0	504.6	505.9	510.9	512.2	516.0	518.6	518.6
72.5°	463.9	465.2	467.7	471.5	474.1	476.6	479.2	477.9
75°	423.2	425.8	427.1	429.6	429.6	432.1	432.1	432.1
77.5°	381.3	377.5	376.2	374.9	373.7	373.7	373.7	372.4
80°	324.1	320.3	319.0	316.5	316.5	316.5	316.5	315.2
82.5°	268.2	263.1	260.6	259.3	258.0	258.0	258.0	256.7
85°	203.4	198.3	197.0	195.7	195.7	194.5	193.2	191.9
87.5°	125.8	122.0	120.7	118.2	119.5	116.9	116.9	116.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)