

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: P188613

Luminaire Tested: **24SR-LD2-45-C-UNV-L835-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188613
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-L835-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3313.0 lumens
Efficiency: N/A
Efficacy: 90.3 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

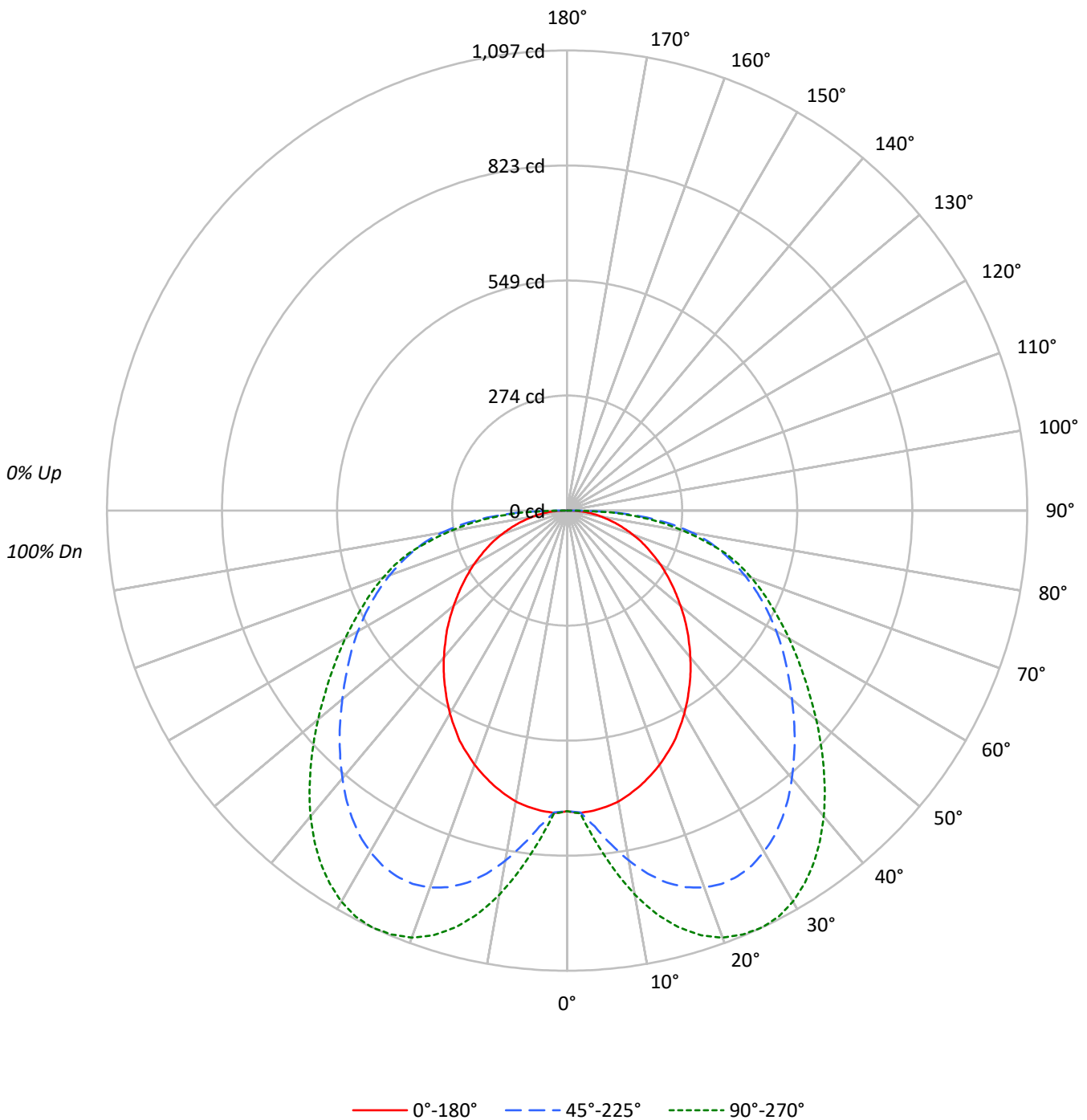
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	965	965	965
5°	970	1021	1072
10°	962	1158	1270
15°	944	1279	1433
20°	923	1369	1551
25°	899	1428	1629
30°	868	1459	1672
35°	835	1469	1683
40°	803	1464	1671
45°	771	1460	1645
50°	738	1465	1623
55°	712	1494	1617
60°	690	1550	1646
65°	671	1637	1710
70°	653	1771	1838
75°	637	1988	2024
80°	639	2352	2201
85°	707	2952	2669



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	2.2
10°-20°	250.5	7.6
20°-30°	419.4	12.7
30°-40°	525.2	15.9
40°-50°	551.0	16.6
50°-60°	520.6	15.7
60°-70°	455.7	13.8
70°-80°	352.0	10.6
80°-90°	164.2	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°	744.3	22.5
0°-40°	1269.5	38.3
0°-60°	2341.1	70.7
0°-90°	3313.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3313.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	718	717	756	784	794	68
15°	678	773	918	1002	1028	191
25°	606	778	962	1060	1097	278
35°	508	711	894	991	1025	318
45°	405	602	767	842	865	313
55°	304	500	637	678	689	272
65°	211	410	514	528	537	209
75°	122	307	382	386	389	130
85°	46	161	191	177	173	48
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°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9
2.5°	721.5	720.3	719.2	716.9	715.7	715.7	715.7	715.7	716.9	720.3	722.6
5°	718.0	718.0	715.7	714.6	715.7	719.2	724.9	734.1	743.2	755.8	766.1
7.5°	712.3	711.2	710.0	711.2	721.5	736.4	751.2	768.4	784.4	802.8	817.7
10°	704.3	703.1	704.3	713.4	734.1	758.1	779.9	801.6	823.4	847.4	868.0
12.5°	691.7	691.7	696.3	716.9	745.5	775.3	803.9	831.4	858.9	886.4	910.4
15°	677.9	679.1	690.5	720.3	755.8	790.2	823.4	855.4	887.5	918.4	944.8
17.5°	661.9	664.2	683.7	720.3	760.4	800.5	838.3	873.8	908.1	941.3	968.8
20°	644.7	647.0	675.7	718.0	762.7	806.2	846.3	885.2	921.9	956.2	984.9
22.5°	625.3	628.7	665.3	711.2	760.4	807.4	848.6	888.7	926.4	963.1	991.7
25°	605.8	610.4	652.8	702.0	753.5	801.6	845.1	885.2	925.3	962.0	990.6
27.5°	581.8	589.8	637.9	688.3	743.2	791.3	834.8	877.2	917.3	953.9	982.6
30°	558.8	569.2	619.5	672.2	728.3	776.4	819.9	862.3	902.4	939.0	967.7
32.5°	533.7	546.3	598.9	653.9	708.9	755.8	800.5	842.9	882.9	919.6	947.1
35°	508.5	523.3	577.2	633.3	687.1	734.1	777.6	819.9	858.9	894.4	920.7
37.5°	483.3	499.3	553.1	610.4	661.9	707.7	751.2	792.5	832.5	865.8	892.1
40°	456.9	475.2	529.1	584.0	635.6	680.2	723.8	763.8	801.6	833.7	858.9
42.5°	430.6	451.2	505.0	558.8	608.1	651.6	695.1	734.1	769.6	800.5	824.5
45°	405.4	426.0	478.7	532.5	580.6	624.1	666.5	704.3	738.6	767.3	790.2
47.5°	379.1	402.0	454.6	507.3	553.1	596.6	637.9	673.4	706.6	732.9	754.7
50°	352.7	377.9	429.4	481.0	527.9	570.3	610.4	644.7	675.7	699.7	720.3
52.5°	327.5	353.9	406.5	456.9	502.7	545.1	584.0	617.3	645.9	667.6	686.0
55°	303.5	331.0	383.6	432.9	479.8	521.1	557.7	589.8	616.1	636.7	652.8
57.5°	279.4	309.2	361.9	412.3	456.9	498.2	533.7	563.4	587.5	606.9	620.7
60°	256.5	287.4	341.3	390.5	435.2	475.2	509.6	537.1	560.0	576.0	586.3
62.5°	232.5	265.7	319.5	369.9	414.6	452.3	485.6	511.9	531.4	545.1	554.3
65°	210.7	243.9	298.9	349.3	391.7	428.3	459.2	484.4	502.7	514.2	519.9
67.5°	189.0	223.3	278.3	327.5	368.7	404.2	432.9	456.9	473.0	482.1	486.7
70°	166.1	202.7	256.5	304.6	344.7	377.9	406.5	427.2	442.0	450.1	452.3
72.5°	143.1	180.9	234.8	281.7	319.5	351.6	377.9	397.4	411.1	416.8	418.0
75°	122.5	158.0	210.7	255.4	292.0	321.8	348.1	366.5	376.8	382.5	383.6
77.5°	101.9	136.3	186.7	229.0	261.1	289.7	314.9	332.1	342.4	347.0	347.0
80°	82.5	114.5	160.3	198.1	229.0	255.4	278.3	295.5	304.6	303.5	298.9
82.5°	64.1	93.9	132.8	166.1	193.5	217.6	240.5	250.8	254.2	250.8	247.4
85°	45.8	69.9	100.8	128.3	152.3	170.6	185.5	193.5	194.7	191.2	187.8
87.5°	26.3	38.9	57.3	77.9	90.5	101.9	114.5	119.1	119.1	121.4	114.5
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°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9
2.5°	721.5	722.6	722.6	724.9	726.0	726.0	724.9	722.6
5°	769.6	776.4	781.0	787.9	791.3	794.8	795.9	793.6
7.5°	825.7	836.0	845.1	855.4	860.0	863.5	868.0	864.6
10°	879.5	893.2	904.7	916.1	923.0	927.6	931.0	929.9
12.5°	925.3	941.3	953.9	965.4	974.5	981.4	984.9	984.9
15°	960.8	979.1	995.2	1007.8	1016.9	1023.8	1028.4	1028.4
17.5°	988.3	1006.6	1023.8	1036.4	1045.5	1054.7	1059.3	1061.6
20°	1004.3	1023.8	1041.0	1054.7	1065.0	1075.3	1079.9	1083.3
22.5°	1012.3	1031.8	1050.1	1065.0	1076.5	1085.6	1091.4	1093.6
25°	1012.3	1033.0	1052.4	1067.3	1078.8	1089.1	1094.8	1097.1
27.5°	1005.5	1027.2	1046.7	1060.4	1073.0	1083.3	1089.1	1091.4
30°	991.7	1013.5	1033.0	1046.7	1059.3	1068.5	1074.2	1076.5
32.5°	970.0	992.9	1011.2	1024.9	1037.5	1046.7	1052.4	1053.6
35°	944.8	966.5	983.7	997.5	1010.0	1018.1	1022.6	1024.9
37.5°	913.9	934.5	951.6	964.2	975.7	984.9	989.4	990.6
40°	880.6	900.1	915.0	926.4	937.9	945.9	950.5	951.6
42.5°	845.1	863.5	877.2	887.5	897.8	904.7	908.1	909.3
45°	808.5	824.5	837.1	846.3	855.4	861.2	864.6	864.6
47.5°	771.9	786.7	797.0	803.9	811.9	817.7	821.1	819.9
50°	735.2	747.8	755.8	762.7	769.6	773.0	776.4	775.3
52.5°	698.6	710.0	714.6	720.3	726.0	729.5	732.9	730.6
55°	663.1	671.1	675.7	680.2	684.8	688.3	690.5	689.4
57.5°	628.7	634.4	637.9	642.4	645.9	648.2	650.5	649.3
60°	592.1	596.6	598.9	603.5	606.9	609.2	611.5	611.5
62.5°	557.7	561.1	562.3	566.9	569.2	571.4	574.9	573.7
65°	521.1	524.5	526.8	530.2	532.5	534.8	538.2	537.1
67.5°	486.7	490.1	491.3	494.7	498.2	501.6	502.7	502.7
70°	452.3	454.6	455.8	460.4	461.5	464.9	467.2	467.2
72.5°	418.0	419.1	421.4	424.9	427.2	429.4	431.7	430.6
75°	381.3	383.6	384.8	387.1	387.1	389.4	389.4	389.4
77.5°	343.6	340.1	339.0	337.8	336.7	336.7	336.7	335.5
80°	292.0	288.6	287.4	285.1	285.1	285.1	285.1	284.0
82.5°	241.6	237.1	234.8	233.6	232.5	232.5	232.5	231.3
85°	183.2	178.6	177.5	176.4	176.4	175.2	174.1	172.9
87.5°	113.4	109.9	108.8	106.5	107.6	105.4	105.4	105.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)