

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: P188493

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188493  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24779)  
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-MR-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.  
  
Light Source: EATON LED 3500K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

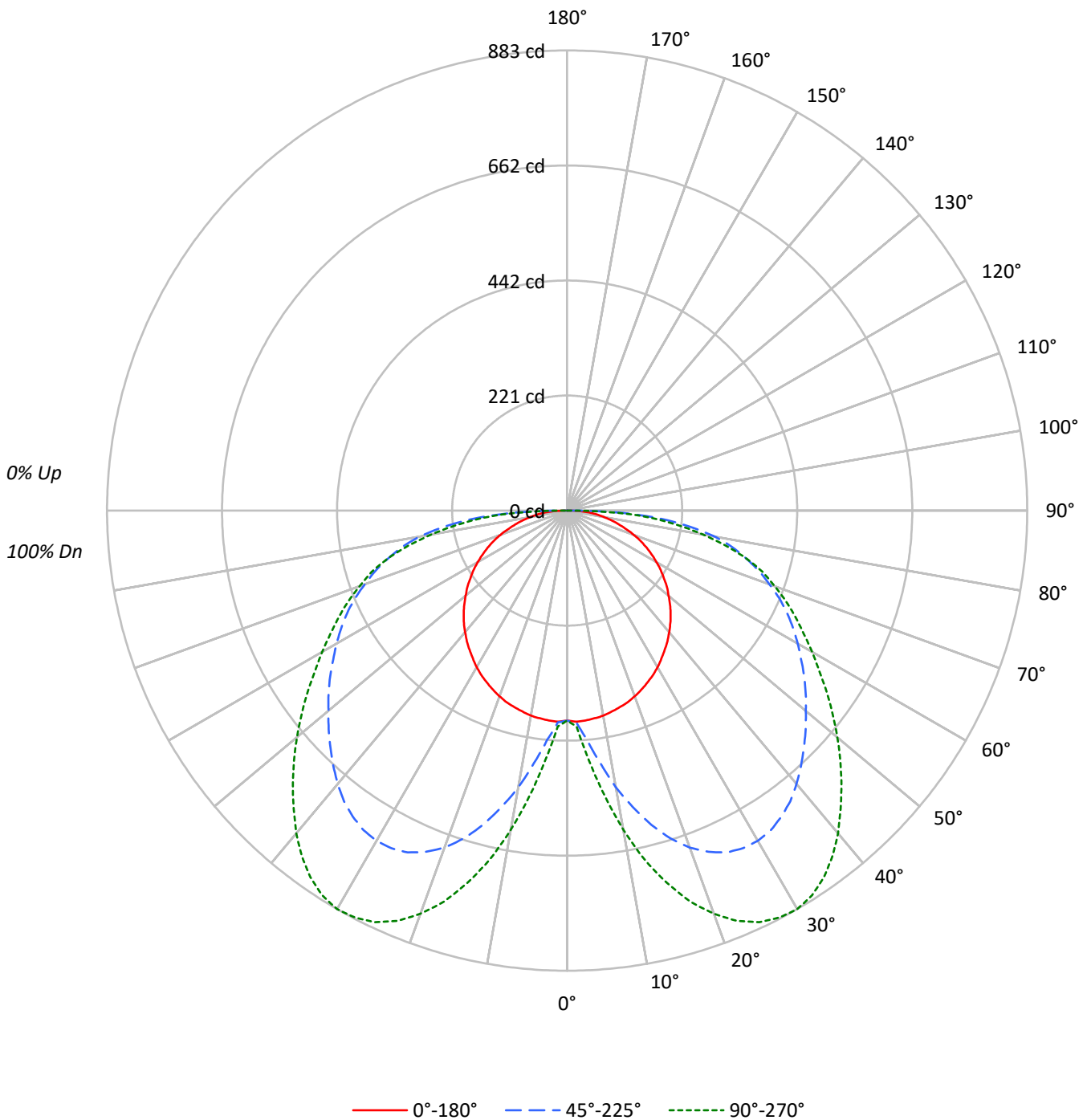
Lumens per Lamp: N/A  
Luminaire Lumens: 2727.0 lumens  
Efficiency: N/A  
Efficacy: 74.3 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P188493

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-MR-U

### Luminous Intensity Polar Plot





TEST NUMBER: P188493

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-MR-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	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	542	542	542
5°	546	597	650
10°	546	737	850
15°	544	869	1031
20°	543	986	1179
25°	541	1075	1294
30°	539	1137	1372
35°	536	1178	1411
40°	535	1203	1420
45°	534	1223	1416
50°	532	1251	1417
55°	532	1303	1426
60°	533	1375	1461
65°	536	1484	1539
70°	536	1626	1667
75°	536	1852	1857
80°	559	2227	2049
85°	655	2793	2529



TEST NUMBER: P188493

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-MR-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.7	1.6
10°-20°	169.5	6.2
20°-30°	311.7	11.4
30°-40°	415.5	15.2
40°-50°	455.2	16.7
50°-60°	447.6	16.4
60°-70°	406.2	14.9
70°-80°	323.4	11.9
80°-90°	153.3	5.6
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°	525.8	19.3
0°-40°	941.4	34.5
0°-60°	1844.2	67.6
0°-90°	2727.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2727.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	403	403	403	403	403	
5°	404	408	442	471	481	38
15°	390	484	624	711	740	110
25°	364	536	724	832	872	168
35°	326	527	717	823	859	204
45°	281	475	642	720	744	217
55°	227	420	555	597	608	203
65°	168	363	466	476	483	166
75°	103	283	356	354	357	109
85°	42	153	181	164	164	44
90°	0	0	0	0	0	



TEST NUMBER: P188493

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-MR-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1
2.5°	405.4	405.4	404.3	404.3	404.3	403.1	403.1	404.3	405.4	406.6	407.7
5°	404.3	404.3	404.3	404.3	405.4	410.0	415.7	423.7	430.6	442.1	447.8
7.5°	402.0	402.0	403.1	406.6	415.7	428.3	443.2	460.4	474.1	489.0	502.7
10°	399.7	399.7	402.0	413.4	431.7	453.5	475.3	497.0	516.5	539.4	556.6
12.5°	395.1	395.1	402.0	422.6	450.1	477.6	505.0	533.7	558.9	582.9	607.0
15°	390.5	390.5	404.3	432.9	467.2	500.5	532.5	565.7	595.5	624.1	649.3
17.5°	385.9	387.1	407.7	444.3	482.1	521.1	558.9	594.4	627.6	659.6	688.3
20°	379.1	381.4	410.0	452.4	494.7	538.2	578.3	617.3	653.9	688.3	718.0
22.5°	372.2	376.8	411.1	458.1	505.0	552.0	594.4	634.4	673.4	708.9	739.8
25°	364.2	369.9	412.3	461.5	511.9	560.0	604.7	647.0	687.1	723.8	754.7
27.5°	356.2	364.2	410.0	461.5	514.2	564.6	609.3	652.8	695.1	730.6	763.9
30°	347.0	357.3	406.6	460.4	514.2	563.4	609.3	653.9	695.1	731.8	763.9
32.5°	336.7	350.4	400.8	455.8	509.6	560.0	605.8	649.3	690.6	727.2	758.1
35°	326.4	341.3	394.0	448.9	502.7	552.0	596.7	640.2	680.3	716.9	747.8
37.5°	316.1	333.3	385.9	440.9	492.4	540.5	585.2	628.7	667.7	703.2	731.8
40°	304.6	322.9	375.6	429.5	481.0	526.8	571.5	612.7	650.5	684.8	712.3
42.5°	293.2	312.6	364.2	418.0	467.2	513.1	556.6	596.7	633.3	664.2	689.4
45°	280.6	301.2	352.7	404.3	452.4	498.2	540.5	578.3	613.8	642.5	665.4
47.5°	268.0	289.7	340.1	391.7	438.6	483.3	524.5	561.2	593.2	620.7	642.5
50°	254.2	277.1	327.5	377.9	424.9	468.4	508.5	542.8	573.8	597.8	618.4
52.5°	241.6	265.7	314.9	365.3	411.1	454.6	493.6	525.7	554.3	577.2	594.4
55°	226.8	253.1	303.5	352.7	398.5	440.9	477.6	508.5	534.8	555.4	570.3
57.5°	213.0	240.5	290.9	340.1	384.8	427.2	461.5	491.3	514.2	532.5	546.3
60°	198.1	227.9	278.3	327.5	372.2	413.4	446.6	474.1	495.9	510.8	522.2
62.5°	183.2	214.2	266.8	314.9	358.5	397.4	429.5	454.6	474.1	489.0	495.9
65°	168.3	200.4	253.1	302.3	344.7	381.4	412.3	436.3	453.5	466.1	470.7
67.5°	152.3	186.7	239.3	286.3	328.7	364.2	392.8	415.7	430.6	440.9	443.2
70°	136.3	170.6	223.3	270.3	310.4	343.6	372.2	391.7	406.6	413.4	415.7
72.5°	119.1	154.6	207.3	251.9	289.7	322.9	348.1	368.8	381.4	385.9	385.9
75°	103.1	137.4	189.0	231.3	268.0	298.9	322.9	341.3	352.7	356.2	355.0
77.5°	87.0	121.4	169.5	209.6	242.8	271.4	294.3	311.5	321.8	325.2	324.1
80°	72.1	104.2	146.6	184.4	214.2	240.5	261.1	279.4	288.6	287.4	280.6
82.5°	57.3	84.7	122.5	155.7	182.1	206.1	226.8	238.2	241.6	238.2	231.3
85°	42.4	64.1	95.1	121.4	143.2	162.6	175.2	183.2	184.4	180.9	175.2
87.5°	25.2	37.8	56.1	72.1	88.2	97.3	104.2	109.9	111.1	107.6	105.4
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: P188493

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L835-CD1-MR-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1
2.5°	408.8	410.0	411.1	413.4	412.3	413.4	413.4	414.6
5°	455.8	462.7	467.2	474.1	474.1	477.6	478.7	481.0
7.5°	513.1	522.2	532.5	542.8	544.0	549.7	552.0	552.0
10°	571.5	584.1	596.7	608.1	611.5	618.4	621.8	621.8
12.5°	624.1	637.9	655.1	667.7	672.2	680.3	684.8	686.0
15°	669.9	687.1	704.3	718.0	726.1	734.1	738.7	739.8
17.5°	708.9	729.5	747.8	761.6	770.7	779.9	785.6	786.8
20°	739.8	762.7	781.0	795.9	806.2	817.7	822.3	823.4
22.5°	763.9	785.6	806.2	822.3	833.7	845.2	850.9	852.0
25°	779.9	802.8	823.4	840.6	853.2	863.5	869.2	871.5
27.5°	789.1	813.1	833.7	849.7	862.3	873.8	879.5	880.7
30°	790.2	814.2	834.9	850.9	863.5	874.9	880.7	883.0
32.5°	784.5	808.5	828.0	844.0	856.6	866.9	872.7	874.9
35°	773.0	795.9	815.4	830.3	841.7	850.9	857.8	858.9
37.5°	757.0	778.7	795.9	809.7	821.1	830.3	836.0	836.0
40°	735.2	755.8	770.7	783.3	794.8	801.6	808.5	808.5
42.5°	711.2	730.6	744.4	755.8	763.9	771.9	776.5	776.5
45°	686.0	702.0	715.8	724.9	732.9	738.7	744.4	744.4
47.5°	660.8	674.5	684.8	694.0	700.9	706.6	711.2	711.2
50°	634.4	647.0	655.1	663.1	668.8	673.4	676.8	676.8
52.5°	608.1	618.4	624.1	631.0	635.6	640.2	642.5	642.5
55°	582.9	589.8	594.4	600.1	603.5	605.8	608.1	608.1
57.5°	555.4	560.0	564.6	568.0	570.3	572.6	574.9	573.8
60°	527.9	531.4	534.8	537.1	539.4	541.7	542.8	542.8
62.5°	500.5	501.6	502.7	507.3	509.6	510.8	511.9	511.9
65°	473.0	473.0	474.1	477.6	479.8	482.1	483.3	483.3
67.5°	443.2	444.3	445.5	448.9	450.1	452.4	454.6	454.6
70°	413.4	414.6	414.6	418.0	419.1	421.4	423.7	423.7
72.5°	384.8	384.8	384.8	387.1	389.4	391.7	394.0	394.0
75°	352.7	352.7	352.7	355.0	355.0	356.2	358.5	357.3
77.5°	318.4	314.9	311.5	310.4	310.4	311.5	312.6	312.6
80°	273.7	269.1	266.8	264.5	263.4	264.5	265.7	264.5
82.5°	226.8	221.0	217.6	216.4	216.4	216.4	217.6	215.3
85°	171.8	166.1	163.8	163.8	162.6	162.6	162.6	163.8
87.5°	103.1	99.6	96.2	97.3	96.2	95.1	96.2	98.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)