

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: P188495

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188495
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-L850-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3027.0 lumens
Efficiency: N/A
Efficacy: 82.5 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

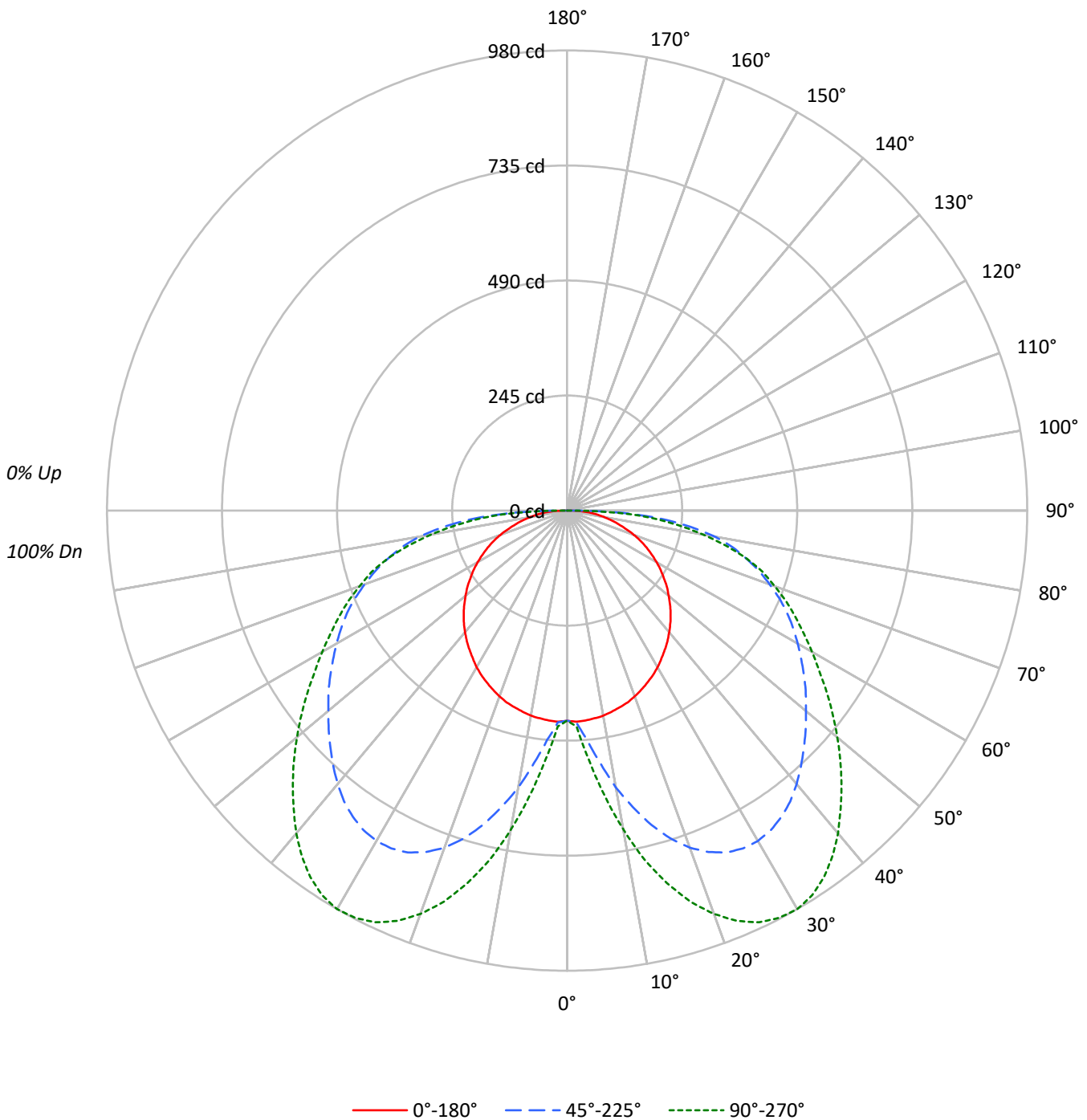
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188495

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-MR-U

Luminous Intensity Polar Plot





TEST NUMBER: P188495

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-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°	602	602	602
5°	606	663	721
10°	606	818	943
15°	604	965	1144
20°	603	1094	1309
25°	600	1193	1436
30°	598	1262	1523
35°	595	1307	1566
40°	594	1335	1576
45°	593	1357	1572
50°	591	1389	1573
55°	590	1446	1583
60°	592	1526	1621
65°	595	1647	1708
70°	595	1805	1850
75°	595	2055	2062
80°	621	2473	2275
85°	726	3100	2807



TEST NUMBER: P188495

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-MR-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.6	1.6
10°-20°	188.1	6.2
20°-30°	346.0	11.4
30°-40°	461.2	15.2
40°-50°	505.3	16.7
50°-60°	496.8	16.4
60°-70°	450.9	14.9
70°-80°	358.9	11.9
80°-90°	170.1	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°	583.7	19.3
0°-40°	1044.9	34.5
0°-60°	2047.0	67.6
0°-90°	3027.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3027.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	449	453	491	522	534	43
15°	434	537	693	789	821	122
25°	404	595	803	924	967	186
35°	362	585	796	913	953	227
45°	311	528	713	800	826	240
55°	252	466	616	663	675	225
65°	187	403	517	528	536	184
75°	114	315	395	393	397	121
85°	47	170	201	182	182	49
90°	0	0	0	0	0	



TEST NUMBER: P188495

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-MR-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	447.5	447.5	447.5	447.5	447.5	447.5	447.5	447.5	447.5	447.5	447.5
2.5°	450.0	450.0	448.7	448.7	448.7	447.5	447.5	448.7	450.0	451.3	452.5
5°	448.7	448.7	448.7	448.7	450.0	455.1	461.4	470.3	478.0	490.7	497.0
7.5°	446.2	446.2	447.5	451.3	461.4	475.4	492.0	511.0	526.3	542.8	558.1
10°	443.6	443.6	446.2	458.9	479.2	503.4	527.5	551.7	573.3	598.7	617.8
12.5°	438.6	438.6	446.2	469.1	499.6	530.1	560.6	592.4	620.3	647.0	673.7
15°	433.5	433.5	448.7	480.5	518.6	555.5	591.1	628.0	661.0	692.8	720.8
17.5°	428.4	429.7	452.5	493.2	535.2	578.4	620.3	659.8	696.6	732.2	764.0
20°	420.8	423.3	455.1	502.1	549.2	597.5	642.0	685.2	725.9	764.0	797.0
22.5°	413.1	418.2	456.4	508.5	560.6	612.7	659.8	704.2	747.5	786.9	821.2
25°	404.2	410.6	457.6	512.3	568.2	621.6	671.2	718.2	762.7	803.4	837.7
27.5°	395.3	404.2	455.1	512.3	570.8	626.7	676.3	724.6	771.6	811.0	847.9
30°	385.2	396.6	451.3	511.0	570.8	625.4	676.3	725.9	771.6	812.3	847.9
32.5°	373.7	389.0	444.9	505.9	565.7	621.6	672.5	720.8	766.5	807.2	841.5
35°	362.3	378.8	437.3	498.3	558.1	612.7	662.3	710.6	755.1	795.8	830.1
37.5°	350.9	369.9	428.4	489.4	546.6	600.0	649.6	697.9	741.1	780.5	812.3
40°	338.1	358.5	417.0	476.7	533.9	584.8	634.3	680.1	722.0	760.2	790.7
42.5°	325.4	347.0	404.2	464.0	518.6	569.5	617.8	662.3	703.0	737.3	765.3
45°	311.4	334.3	391.5	448.7	502.1	553.0	600.0	642.0	681.4	713.1	738.6
47.5°	297.5	321.6	377.5	434.7	486.9	536.4	582.2	622.9	658.5	689.0	713.1
50°	282.2	307.6	363.6	419.5	471.6	519.9	564.4	602.5	636.9	663.6	686.4
52.5°	268.2	294.9	349.6	405.5	456.4	504.7	547.9	583.5	615.3	640.7	659.8
55°	251.7	280.9	336.9	391.5	442.4	489.4	530.1	564.4	593.6	616.5	633.1
57.5°	236.4	267.0	322.9	377.5	427.1	474.2	512.3	545.3	570.8	591.1	606.4
60°	219.9	253.0	308.9	363.6	413.1	458.9	495.8	526.3	550.4	567.0	579.7
62.5°	203.4	237.7	296.2	349.6	397.9	441.1	476.7	504.7	526.3	542.8	550.4
65°	186.9	222.5	280.9	335.6	382.6	423.3	457.6	484.3	503.4	517.4	522.5
67.5°	169.1	207.2	265.7	317.8	364.8	404.2	436.0	461.4	478.0	489.4	492.0
70°	151.3	189.4	247.9	300.0	344.5	381.4	413.1	434.7	451.3	458.9	461.4
72.5°	132.2	171.6	230.1	279.7	321.6	358.5	386.4	409.3	423.3	428.4	428.4
75°	114.4	152.5	209.7	256.8	297.5	331.8	358.5	378.8	391.5	395.3	394.1
77.5°	96.6	134.7	188.1	232.6	269.5	301.3	326.7	345.8	357.2	361.0	359.7
80°	80.1	115.7	162.7	204.7	237.7	267.0	289.8	310.2	320.3	319.1	311.4
82.5°	63.6	94.1	136.0	172.9	202.1	228.8	251.7	264.4	268.2	264.4	256.8
85°	47.0	71.2	105.5	134.7	158.9	180.5	194.5	203.4	204.7	200.8	194.5
87.5°	28.0	41.9	62.3	80.1	97.9	108.1	115.7	122.0	123.3	119.5	117.0
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: P188495

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-MR-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	447.5	447.5	447.5	447.5	447.5	447.5	447.5	447.5
2.5°	453.8	455.1	456.4	458.9	457.6	458.9	458.9	460.2
5°	505.9	513.6	518.6	526.3	526.3	530.1	531.4	533.9
7.5°	569.5	579.7	591.1	602.5	603.8	610.2	612.7	612.7
10°	634.3	648.3	662.3	675.0	678.8	686.4	690.3	690.3
12.5°	692.8	708.1	727.1	741.1	746.2	755.1	760.2	761.4
15°	743.7	762.7	781.8	797.0	805.9	814.8	819.9	821.2
17.5°	786.9	809.8	830.1	845.3	855.5	865.7	872.0	873.3
20°	821.2	846.6	867.0	883.5	894.9	907.6	912.7	914.0
22.5°	847.9	872.0	894.9	912.7	925.4	938.1	944.5	945.8
25°	865.7	891.1	914.0	933.1	947.0	958.5	964.8	967.4
27.5°	875.9	902.6	925.4	943.2	957.2	969.9	976.3	977.6
30°	877.1	903.8	926.7	944.5	958.5	971.2	977.6	980.1
32.5°	870.8	897.5	919.1	936.9	950.9	962.3	968.7	971.2
35°	858.1	883.5	905.1	921.6	934.3	944.5	952.1	953.4
37.5°	840.3	864.4	883.5	898.7	911.4	921.6	928.0	928.0
40°	816.1	839.0	855.5	869.5	882.2	889.8	897.5	897.5
42.5°	789.4	811.0	826.3	839.0	847.9	856.8	861.9	861.9
45°	761.4	779.2	794.5	804.7	813.6	819.9	826.3	826.3
47.5°	733.5	748.7	760.2	770.3	778.0	784.3	789.4	789.4
50°	704.2	718.2	727.1	736.0	742.4	747.5	751.3	751.3
52.5°	675.0	686.4	692.8	700.4	705.5	710.6	713.1	713.1
55°	647.0	654.7	659.8	666.1	669.9	672.5	675.0	675.0
57.5°	616.5	621.6	626.7	630.5	633.1	635.6	638.1	636.9
60°	586.0	589.8	593.6	596.2	598.7	601.3	602.5	602.5
62.5°	555.5	556.8	558.1	563.1	565.7	567.0	568.2	568.2
65°	525.0	525.0	526.3	530.1	532.6	535.2	536.4	536.4
67.5°	492.0	493.2	494.5	498.3	499.6	502.1	504.7	504.7
70°	458.9	460.2	460.2	464.0	465.3	467.8	470.3	470.3
72.5°	427.1	427.1	427.1	429.7	432.2	434.7	437.3	437.3
75°	391.5	391.5	391.5	394.1	394.1	395.3	397.9	396.6
77.5°	353.4	349.6	345.8	344.5	344.5	345.8	347.0	347.0
80°	303.8	298.7	296.2	293.6	292.4	293.6	294.9	293.6
82.5°	251.7	245.3	241.5	240.3	240.3	240.3	241.5	239.0
85°	190.7	184.3	181.8	181.8	180.5	180.5	180.5	181.8
87.5°	114.4	110.6	106.8	108.1	106.8	105.5	106.8	109.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)