

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: P188604

Luminaire Tested: **24SR-LD2-34-C-UNV-L840-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188604
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-LD2-34-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: 2594.0 lumens
Efficiency: N/A
Efficacy: 95.4 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

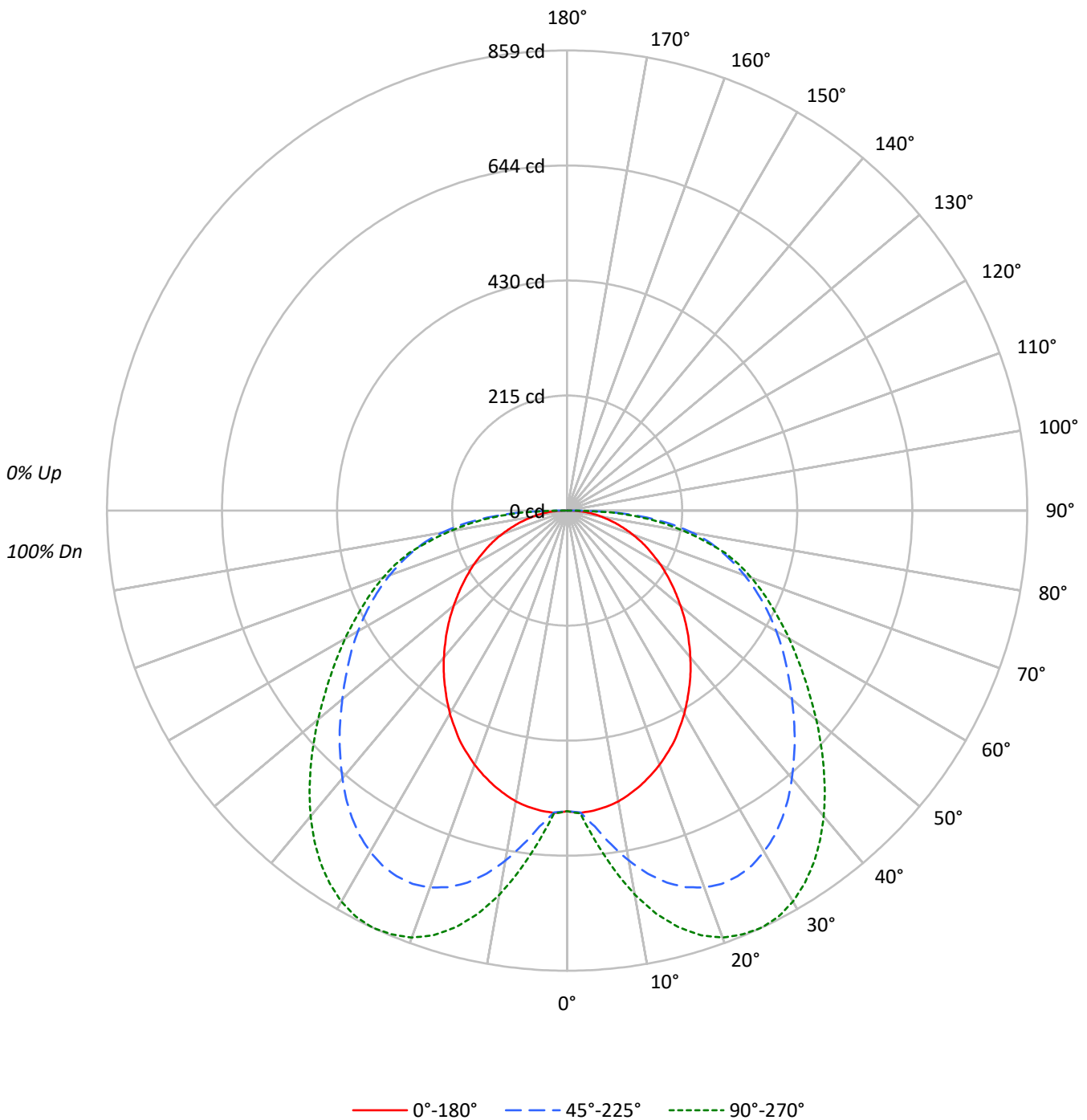
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	107	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79	79	79
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66	64	64	64
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55	53	53	53
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47	44	44	44
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40	38	38	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33	33	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29	29	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25	25	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23	23	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20	20	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	755	755	755
5°	759	799	839
10°	753	907	995
15°	739	1002	1122
20°	723	1072	1214
25°	704	1118	1275
30°	680	1142	1309
35°	654	1150	1318
40°	628	1147	1309
45°	604	1143	1288
50°	578	1147	1271
55°	557	1169	1266
60°	540	1214	1288
65°	525	1282	1339
70°	511	1386	1439
75°	499	1557	1585
80°	501	1841	1723
85°	554	2311	2090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.2	2.2
10°-20°	196.1	7.6
20°-30°	328.4	12.7
30°-40°	411.2	15.9
40°-50°	431.4	16.6
50°-60°	407.6	15.7
60°-70°	356.8	13.8
70°-80°	275.6	10.6
80°-90°	128.6	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°	582.8	22.5
0°-40°	994.0	38.3
0°-60°	1833.0	70.7
0°-90°	2594.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2594.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	562	562	592	614	621	53
15°	531	605	719	784	805	149
25°	474	609	753	830	859	218
35°	398	556	700	776	802	249
45°	317	472	601	659	677	245
55°	238	392	498	531	540	213
65°	165	321	403	414	420	163
75°	96	240	300	302	305	102
85°	36	126	150	139	135	38
90°	0	0	0	0	0	



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CATALOG NUMBER: 24SR-LD2-34-C-UNV-L840-CD1-SO-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3
2.5°	564.9	564.0	563.1	561.3	560.4	560.4	560.4	560.4	561.3	564.0	565.8
5°	562.2	562.2	560.4	559.5	560.4	563.1	567.6	574.8	581.9	591.8	599.9
7.5°	557.7	556.8	555.9	556.8	564.9	576.5	588.2	601.7	614.2	628.6	640.2
10°	551.4	550.5	551.4	558.6	574.8	593.6	610.6	627.7	644.7	663.5	679.7
12.5°	541.6	541.6	545.2	561.3	583.7	607.0	629.4	651.0	672.5	694.0	712.8
15°	530.8	531.7	540.7	564.0	591.8	618.7	644.7	669.8	694.9	719.1	739.7
17.5°	518.3	520.1	535.3	564.0	595.4	626.8	656.3	684.1	711.0	737.0	758.6
20°	504.8	506.6	529.0	562.2	597.2	631.2	662.6	693.1	721.8	748.7	771.1
22.5°	489.6	492.3	521.0	556.8	595.4	632.1	664.4	695.8	725.4	754.1	776.5
25°	474.3	477.9	511.1	549.6	590.0	627.7	661.7	693.1	724.5	753.2	775.6
27.5°	455.5	461.8	499.4	538.9	581.9	619.6	653.7	686.8	718.2	746.9	769.3
30°	437.6	445.6	485.1	526.3	570.3	607.9	642.0	675.2	706.6	735.3	757.7
32.5°	417.8	427.7	468.9	512.0	555.0	591.8	626.8	659.9	691.3	720.0	741.5
35°	398.1	409.8	451.9	495.8	538.0	574.8	608.8	642.0	672.5	700.3	720.9
37.5°	378.4	390.9	433.1	477.9	518.3	554.1	588.2	620.5	651.9	677.9	698.5
40°	357.8	372.1	414.3	457.3	497.6	532.6	566.7	598.1	627.7	652.8	672.5
42.5°	337.1	353.3	395.4	437.6	476.1	510.2	544.3	574.8	602.5	626.8	645.6
45°	317.4	333.6	374.8	416.9	454.6	488.7	521.8	551.4	578.3	600.8	618.7
47.5°	296.8	314.7	356.0	397.2	433.1	467.2	499.4	527.2	553.2	573.9	590.9
50°	276.2	295.9	336.2	376.6	413.4	446.5	477.9	504.8	529.0	547.9	564.0
52.5°	256.4	277.1	318.3	357.8	393.6	426.8	457.3	483.3	505.7	522.7	537.1
55°	237.6	259.1	300.4	338.9	375.7	408.0	436.7	461.8	482.4	498.5	511.1
57.5°	218.8	242.1	283.3	322.8	357.8	390.0	417.8	441.2	460.0	475.2	486.0
60°	200.8	225.1	267.2	305.8	340.7	372.1	399.0	420.5	438.5	451.0	459.1
62.5°	182.0	208.0	250.2	289.6	324.6	354.2	380.2	400.8	416.0	426.8	434.0
65°	165.0	191.0	234.0	273.5	306.7	335.3	359.6	379.3	393.6	402.6	407.1
67.5°	147.9	174.8	217.9	256.4	288.7	316.5	338.9	357.8	370.3	377.5	381.1
70°	130.0	158.7	200.8	238.5	269.9	295.9	318.3	334.4	346.1	352.4	354.2
72.5°	112.1	141.7	183.8	220.6	250.2	275.3	295.9	311.1	321.9	326.4	327.3
75°	95.9	123.7	165.0	200.0	228.6	252.0	272.6	286.9	295.0	299.5	300.4
77.5°	79.8	106.7	146.2	179.3	204.4	226.9	246.6	260.0	268.1	271.7	271.7
80°	64.6	89.7	125.5	155.1	179.3	200.0	217.9	231.3	238.5	237.6	234.0
82.5°	50.2	73.5	104.0	130.0	151.5	170.4	188.3	196.4	199.1	196.4	193.7
85°	35.9	54.7	78.9	100.4	119.3	133.6	145.3	151.5	152.4	149.7	147.1
87.5°	20.6	30.5	44.8	61.0	70.8	79.8	89.7	93.3	93.3	95.0	89.7
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: P188604

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	561.3	561.3	561.3	561.3	561.3	561.3	561.3	561.3
2.5°	564.9	565.8	565.8	567.6	568.5	568.5	567.6	565.8
5°	602.5	607.9	611.5	616.9	619.6	622.3	623.2	621.4
7.5°	646.5	654.6	661.7	669.8	673.4	676.1	679.7	677.0
10°	688.6	699.4	708.4	717.3	722.7	726.3	729.0	728.1
12.5°	724.5	737.0	746.9	755.9	763.0	768.4	771.1	771.1
15°	752.3	766.6	779.2	789.1	796.2	801.6	805.2	805.2
17.5°	773.8	788.2	801.6	811.5	818.6	825.8	829.4	831.2
20°	786.4	801.6	815.1	825.8	833.9	842.0	845.5	848.2
22.5°	792.6	807.9	822.2	833.9	842.8	850.0	854.5	856.3
25°	792.6	808.8	824.0	835.7	844.6	852.7	857.2	859.0
27.5°	787.3	804.3	819.5	830.3	840.2	848.2	852.7	854.5
30°	776.5	793.5	808.8	819.5	829.4	836.6	841.1	842.8
32.5°	759.5	777.4	791.7	802.5	812.4	819.5	824.0	824.9
35°	739.7	756.8	770.2	781.0	790.8	797.1	800.7	802.5
37.5°	715.5	731.7	745.1	755.0	763.9	771.1	774.7	775.6
40°	689.5	704.8	716.4	725.4	734.4	740.6	744.2	745.1
42.5°	661.7	676.1	686.8	694.9	703.0	708.4	711.0	711.9
45°	633.0	645.6	655.4	662.6	669.8	674.3	677.0	677.0
47.5°	604.3	616.0	624.1	629.4	635.7	640.2	642.9	642.0
50°	575.6	585.5	591.8	597.2	602.5	605.2	607.9	607.0
52.5°	547.0	555.9	559.5	564.0	568.5	571.2	573.9	572.1
55°	519.2	525.4	529.0	532.6	536.2	538.9	540.7	539.8
57.5°	492.3	496.7	499.4	503.0	505.7	507.5	509.3	508.4
60°	463.6	467.2	468.9	472.5	475.2	477.0	478.8	478.8
62.5°	436.7	439.4	440.3	443.8	445.6	447.4	450.1	449.2
65°	408.0	410.7	412.5	415.1	416.9	418.7	421.4	420.5
67.5°	381.1	383.8	384.7	387.4	390.0	392.7	393.6	393.6
70°	354.2	356.0	356.9	360.5	361.3	364.0	365.8	365.8
72.5°	327.3	328.2	330.0	332.7	334.4	336.2	338.0	337.1
75°	298.6	300.4	301.3	303.1	303.1	304.9	304.9	304.9
77.5°	269.0	266.3	265.4	264.5	263.6	263.6	263.6	262.7
80°	228.6	226.0	225.1	223.3	223.3	223.3	223.3	222.4
82.5°	189.2	185.6	183.8	182.9	182.0	182.0	182.0	181.1
85°	143.5	139.9	139.0	138.1	138.1	137.2	136.3	135.4
87.5°	88.8	86.1	85.2	83.4	84.3	82.5	82.5	82.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)