

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: P188637

Luminaire Tested: **24SR-LD2-29-C-UNV-L830-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188637
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24808)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-29-C-UNV-L830-CD1-ST-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2687.0 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.62 / 1.56
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

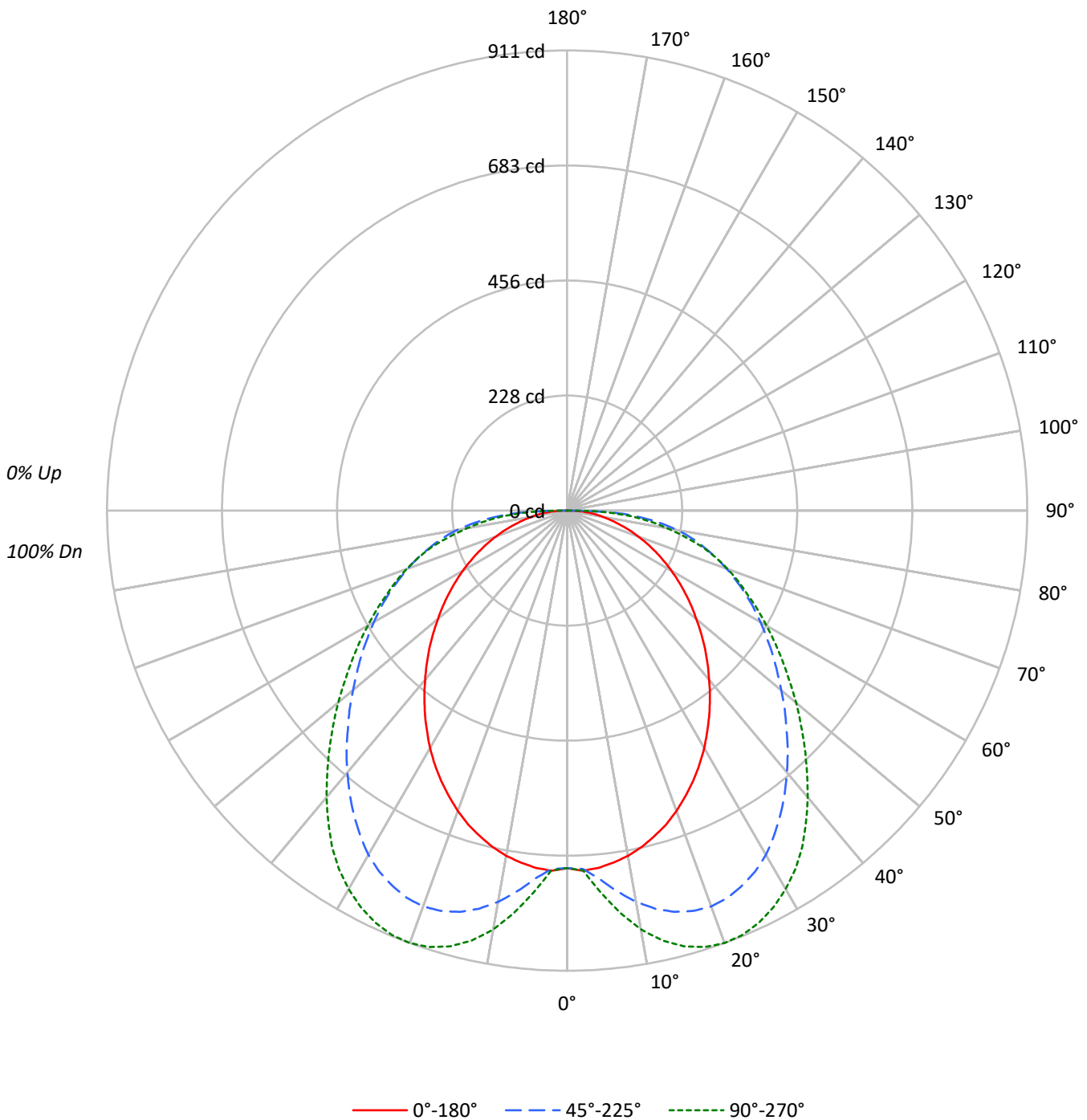
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	97	92	104	99	95	91	95	91	88		91	88	85		87	85	83	80
2	97	88	80	74	94	86	79	73	82	76	71		79	74	69		76	71	68	66
3	88	76	68	61	85	75	67	60	72	65	59		69	63	58		66	61	57	54
4	80	67	58	51	78	66	57	50	63	56	50		61	54	49		59	53	48	46
5	74	60	50	43	71	59	50	43	57	49	43		55	48	42		53	47	42	40
6	68	54	44	38	66	53	44	38	51	43	37		49	42	37		48	41	37	34
7	63	49	40	33	61	48	39	33	46	39	33		45	38	33		43	37	32	30
8	58	44	36	30	57	44	35	29	42	35	29		41	34	29		40	34	29	27
9	55	41	32	26	53	40	32	26	39	31	26		38	31	26		37	31	26	24
10	51	37	29	24	50	37	29	24	36	29	24		35	28	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	952	952	952
5°	959	988	1024
10°	948	1074	1150
15°	930	1146	1244
20°	906	1194	1304
25°	876	1217	1335
30°	843	1223	1344
35°	806	1209	1333
40°	768	1189	1301
45°	734	1169	1266
50°	699	1159	1239
55°	669	1165	1222
60°	642	1189	1226
65°	615	1239	1255
70°	590	1321	1330
75°	562	1458	1435
80°	559	1720	1553
85°	611	2214	1936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.1	2.6
10°-20°	225.8	8.4
20°-30°	361.1	13.4
30°-40°	437.2	16.3
40°-50°	446.5	16.6
50°-60°	411.4	15.3
60°-70°	349.9	13.0
70°-80°	261.7	9.7
80°-90°	122.2	4.5
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°	658.1	24.5
0°-40°	1095.3	40.8
0°-60°	1953.2	72.7
0°-90°	2687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2687.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	710	706	732	750	758	67
15°	667	727	822	874	893	188
25°	590	702	820	878	900	272
35°	491	620	736	792	812	307
45°	386	513	614	654	665	298
55°	285	415	497	516	521	256
65°	193	328	389	392	394	192
75°	108	237	280	276	276	116
85°	40	125	143	127	125	42
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°	707.8	707.8	707.8	707.8	707.8	707.8	707.8	707.8	707.8	707.8	707.8
2.5°	713.6	712.1	710.0	707.1	706.3	706.3	705.6	705.6	707.1	710.0	714.3
5°	710.0	708.5	706.3	704.2	704.9	707.1	711.4	716.4	723.6	731.6	740.2
7.5°	702.7	702.0	700.6	700.6	706.3	716.4	726.5	736.6	748.2	760.4	773.4
10°	694.1	693.4	692.7	698.4	711.4	726.5	740.9	754.6	770.5	786.4	801.5
12.5°	681.8	681.8	684.0	697.0	715.0	733.7	751.8	769.8	788.5	807.3	823.8
15°	667.4	667.4	674.6	693.4	716.4	738.1	759.7	779.9	801.5	822.4	839.7
17.5°	651.6	650.8	664.5	687.6	713.6	738.8	763.3	785.6	808.0	831.0	849.1
20°	632.8	634.3	652.3	679.0	707.8	735.9	761.8	785.6	809.4	833.9	851.2
22.5°	611.9	614.8	637.2	666.7	699.1	728.0	755.4	780.6	805.1	829.6	846.9
25°	590.3	593.9	621.3	652.3	686.9	716.4	743.8	770.5	795.0	819.5	836.8
27.5°	567.2	572.3	603.3	635.7	670.3	701.3	728.7	756.1	780.6	805.8	821.7
30°	542.7	549.2	582.4	615.5	651.6	681.8	709.2	737.3	762.6	787.1	802.2
32.5°	516.8	524.7	558.6	594.6	629.9	659.5	686.9	715.7	739.5	762.6	777.7
35°	490.8	500.2	534.8	570.8	605.4	635.0	661.7	690.5	714.3	735.9	750.3
37.5°	464.2	475.7	510.3	545.6	579.5	609.0	636.4	663.1	686.9	707.1	721.5
40°	437.5	450.5	485.1	519.7	553.5	581.7	608.3	635.0	658.8	676.8	690.5
42.5°	411.6	424.5	459.8	494.4	525.4	554.3	580.9	606.9	628.5	646.5	658.8
45°	385.6	399.3	433.9	467.8	498.8	527.6	554.3	578.1	599.0	614.1	626.3
47.5°	359.7	374.1	408.7	442.5	472.1	500.2	527.6	549.2	569.4	584.5	594.6
50°	333.7	349.6	383.4	418.0	446.9	475.0	500.9	521.1	539.9	553.5	562.9
52.5°	309.9	325.1	359.7	394.3	423.1	451.2	475.7	495.2	511.7	524.0	533.4
55°	285.4	302.0	338.0	371.2	400.7	428.9	451.2	469.2	484.4	496.6	503.8
57.5°	261.6	280.4	315.7	348.8	379.1	405.8	427.4	444.7	458.4	468.5	475.0
60°	238.6	258.0	294.8	327.9	358.2	384.2	405.1	420.9	433.2	441.8	447.6
62.5°	215.5	237.9	273.9	308.5	337.3	362.5	382.0	396.4	408.0	415.9	419.5
65°	193.2	216.2	253.7	287.6	316.4	340.2	358.9	371.9	382.7	389.2	390.7
67.5°	171.5	196.0	233.5	267.4	295.5	317.9	335.9	348.1	357.5	361.8	363.3
70°	149.9	175.1	213.3	247.2	273.9	295.5	312.1	323.6	331.6	335.9	335.9
72.5°	129.7	155.0	193.2	226.3	250.8	272.4	287.6	298.4	305.6	308.5	307.8
75°	108.1	134.1	171.5	203.3	227.0	247.2	262.4	273.2	278.2	280.4	279.7
77.5°	89.4	113.9	149.9	179.5	204.7	221.3	236.4	246.5	251.5	253.0	252.3
80°	72.1	95.1	126.9	155.0	176.6	194.6	208.3	219.1	223.4	222.0	215.5
82.5°	55.5	76.4	104.5	129.0	149.2	165.8	180.2	186.7	187.4	183.8	178.0
85°	39.6	55.5	79.3	100.2	118.9	131.2	139.8	144.9	146.3	143.4	136.9
87.5°	22.3	32.4	46.8	62.0	76.4	85.1	90.1	93.0	95.1	92.3	87.9
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°	707.8	707.8	707.8	707.8	707.8	707.8	707.8	707.8
2.5°	710.0	712.1	711.4	712.8	713.6	713.6	711.4	712.8
5°	740.9	745.3	748.2	752.5	755.4	755.4	756.1	758.2
7.5°	774.8	782.0	788.5	793.6	797.2	798.6	800.8	802.9
10°	806.5	815.2	822.4	828.9	833.2	836.1	838.2	841.9
12.5°	831.0	841.1	849.1	856.3	862.0	866.4	868.5	871.4
15°	849.1	860.6	870.0	877.9	882.9	888.0	890.1	893.0
17.5°	859.9	871.4	881.5	889.4	895.2	900.2	903.1	906.0
20°	862.8	874.3	885.1	893.0	898.8	905.3	908.2	911.0
22.5°	858.4	870.0	881.5	890.1	896.6	903.1	906.0	908.9
25°	849.8	862.0	873.6	882.2	888.0	894.5	898.1	899.5
27.5°	836.1	848.3	859.9	867.8	874.3	880.8	884.4	885.1
30°	816.6	828.9	840.4	848.3	855.5	861.3	864.9	864.9
32.5°	792.8	804.4	816.6	823.8	830.3	836.1	839.7	841.1
35°	765.5	777.0	788.5	795.0	802.2	806.5	809.4	811.6
37.5°	735.9	747.4	756.8	762.6	770.5	773.4	777.7	777.0
40°	704.2	713.6	722.2	727.3	733.7	737.3	741.7	740.9
42.5°	671.0	680.4	687.6	693.4	697.0	700.6	703.5	702.7
45°	637.2	645.8	652.3	655.2	660.9	662.4	665.3	665.3
47.5°	603.3	610.5	616.3	620.6	623.5	624.9	627.8	627.8
50°	570.8	577.3	580.9	584.5	587.4	589.6	591.0	591.7
52.5°	539.1	544.2	547.1	549.9	552.8	554.3	555.7	555.0
55°	508.9	512.5	514.6	516.8	518.9	521.1	521.1	521.1
57.5°	478.6	480.7	482.9	484.4	486.5	488.0	488.0	488.0
60°	449.0	451.2	451.9	453.4	455.5	456.2	457.0	455.5
62.5°	420.2	420.9	421.6	422.4	424.5	426.0	426.0	425.3
65°	390.7	390.7	391.4	392.1	393.5	395.0	395.7	394.3
67.5°	361.8	361.8	362.5	362.5	364.7	366.1	366.9	366.9
70°	333.7	333.0	334.4	335.2	336.6	336.6	338.0	338.0
72.5°	305.6	304.9	306.3	306.3	307.8	308.5	308.5	308.5
75°	278.2	276.1	276.8	275.3	276.8	276.8	276.1	276.1
77.5°	248.7	243.6	242.2	239.3	239.3	239.3	237.9	237.9
80°	211.2	206.1	204.0	201.8	201.8	201.1	200.4	200.4
82.5°	173.7	169.4	167.2	165.1	166.5	164.3	165.1	165.8
85°	133.3	129.7	128.3	126.1	125.4	125.4	126.1	125.4
87.5°	86.5	82.9	82.9	80.7	82.2	80.0	77.8	79.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)