

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: P188639

Luminaire Tested: **24SR-LD2-29-C-UNV-L840-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188639
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-L840-CD1-ST-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2826.0 lumens
Efficiency: N/A
Efficacy: 125.0 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

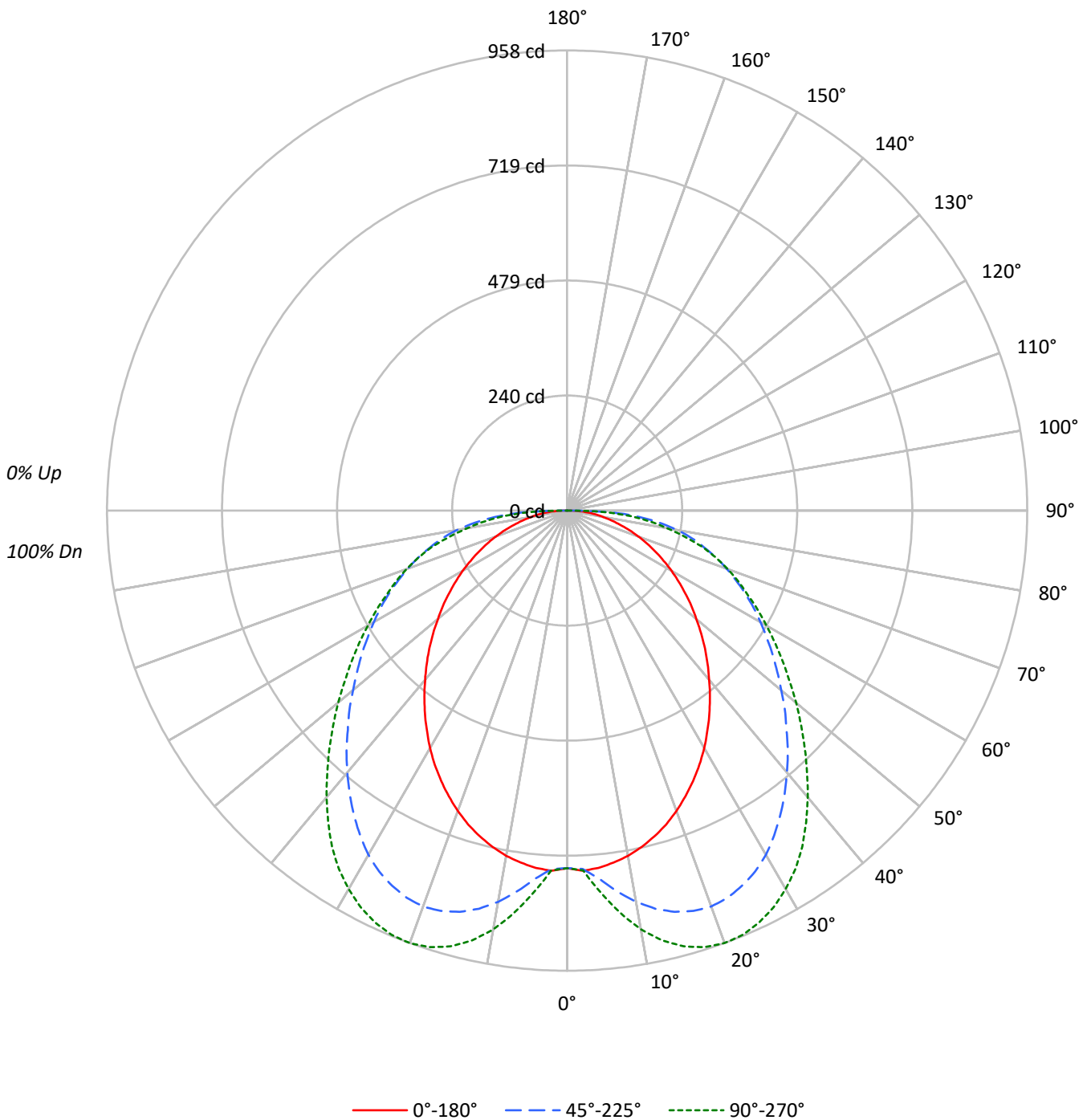
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1002	1002	1002
5°	1009	1039	1077
10°	997	1130	1210
15°	978	1205	1308
20°	953	1256	1372
25°	922	1280	1404
30°	887	1286	1413
35°	848	1271	1402
40°	808	1250	1369
45°	772	1229	1331
50°	735	1219	1303
55°	704	1225	1286
60°	675	1250	1289
65°	647	1303	1320
70°	620	1390	1399
75°	591	1533	1509
80°	587	1809	1633
85°	644	2330	2036



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.8	2.6
10°-20°	237.5	8.4
20°-30°	379.8	13.4
30°-40°	459.8	16.3
40°-50°	469.6	16.6
50°-60°	432.7	15.3
60°-70°	368.1	13.0
70°-80°	275.2	9.7
80°-90°	128.6	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°	692.1	24.5
0°-40°	1151.9	40.8
0°-60°	2054.2	72.7
0°-90°	2826.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2826.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	747	742	769	789	798	71
15°	702	765	865	919	939	198
25°	621	738	862	923	946	286
35°	516	652	774	833	854	323
45°	406	540	646	688	700	313
55°	300	436	522	542	548	269
65°	203	345	409	412	415	202
75°	114	249	295	290	290	122
85°	42	132	151	134	132	44
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°	744.4	744.4	744.4	744.4	744.4	744.4	744.4	744.4	744.4	744.4	744.4
2.5°	750.5	749.0	746.7	743.6	742.9	742.9	742.1	742.1	743.6	746.7	751.2
5°	746.7	745.2	742.9	740.6	741.4	743.6	748.2	753.5	761.1	769.4	778.5
7.5°	739.1	738.3	736.8	736.8	742.9	753.5	764.1	774.7	786.9	799.7	813.4
10°	730.0	729.2	728.5	734.5	748.2	764.1	779.3	793.7	810.4	827.0	843.0
12.5°	717.1	717.1	719.4	733.0	752.0	771.7	790.6	809.6	829.3	849.0	866.5
15°	702.0	702.0	709.5	729.2	753.5	776.2	799.0	820.2	843.0	864.9	883.1
17.5°	685.3	684.5	698.9	723.2	750.5	777.0	802.8	826.3	849.8	874.0	893.0
20°	665.6	667.1	686.0	714.1	744.4	774.0	801.3	826.3	851.3	877.1	895.3
22.5°	643.6	646.6	670.1	701.2	735.3	765.6	794.4	821.0	846.7	872.5	890.7
25°	620.8	624.6	653.4	686.0	722.4	753.5	782.3	810.4	836.1	861.9	880.1
27.5°	596.6	601.9	634.5	668.6	705.0	737.6	766.4	795.2	821.0	847.5	864.2
30°	570.8	577.6	612.5	647.4	685.3	717.1	745.9	775.5	802.0	827.8	843.7
32.5°	543.5	551.9	587.5	625.4	662.5	693.6	722.4	752.7	777.8	802.0	817.9
35°	516.2	526.1	562.5	600.4	636.8	667.8	695.9	726.2	751.2	774.0	789.1
37.5°	488.2	500.3	536.7	573.8	609.5	640.6	669.4	697.4	722.4	743.6	758.8
40°	460.1	473.8	510.2	546.6	582.2	611.7	639.8	667.8	692.9	711.8	726.2
42.5°	432.8	446.5	483.6	520.0	552.6	582.9	611.0	638.3	661.0	680.0	692.9
45°	405.6	420.0	456.3	492.0	524.6	554.9	582.9	608.0	629.9	645.9	658.7
47.5°	378.3	393.4	429.8	465.4	496.5	526.1	554.9	577.6	598.9	614.8	625.4
50°	351.0	367.7	403.3	439.7	470.0	499.6	526.8	548.1	567.8	582.2	592.0
52.5°	326.0	341.9	378.3	414.7	445.0	474.5	500.3	520.8	538.2	551.1	561.0
55°	300.2	317.6	355.5	390.4	421.5	451.0	474.5	493.5	509.4	522.3	529.9
57.5°	275.2	294.9	332.0	366.9	398.7	426.8	449.5	467.7	482.1	492.7	499.6
60°	250.9	271.4	310.0	344.9	376.8	404.0	426.0	442.7	455.6	464.7	470.7
62.5°	226.7	250.2	288.1	324.4	354.8	381.3	401.8	416.9	429.1	437.4	441.2
65°	203.2	227.4	266.8	302.5	332.8	357.8	377.5	391.2	402.5	409.3	410.9
67.5°	180.4	206.2	245.6	281.2	310.8	334.3	353.3	366.1	376.0	380.5	382.1
70°	157.7	184.2	224.4	260.0	288.1	310.8	328.2	340.4	348.7	353.3	353.3
72.5°	136.4	163.0	203.2	238.0	263.8	286.5	302.5	313.8	321.4	324.4	323.7
75°	113.7	141.0	180.4	213.8	238.8	260.0	275.9	287.3	292.6	294.9	294.1
77.5°	94.0	119.8	157.7	188.8	215.3	232.7	248.6	259.3	264.6	266.1	265.3
80°	75.8	100.1	133.4	163.0	185.7	204.7	219.1	230.4	235.0	233.5	226.7
82.5°	58.4	80.4	109.9	135.7	156.9	174.4	189.5	196.3	197.1	193.3	187.2
85°	41.7	58.4	83.4	105.4	125.1	138.0	147.1	152.4	153.9	150.9	144.0
87.5°	23.5	34.1	49.3	65.2	80.4	89.4	94.8	97.8	100.1	97.0	92.5
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°	744.4	744.4	744.4	744.4	744.4	744.4	744.4	744.4
2.5°	746.7	749.0	748.2	749.7	750.5	750.5	748.2	749.7
5°	779.3	783.8	786.9	791.4	794.4	794.4	795.2	797.5
7.5°	814.9	822.5	829.3	834.6	838.4	839.9	842.2	844.5
10°	848.3	857.4	864.9	871.8	876.3	879.3	881.6	885.4
12.5°	874.0	884.6	893.0	900.6	906.6	911.2	913.4	916.5
15°	893.0	905.1	915.0	923.3	928.6	933.9	936.2	939.2
17.5°	904.4	916.5	927.1	935.4	941.5	946.8	949.8	952.9
20°	907.4	919.5	930.9	939.2	945.3	952.1	955.1	958.2
22.5°	902.8	915.0	927.1	936.2	943.0	949.8	952.9	955.9
25°	893.7	906.6	918.8	927.9	933.9	940.7	944.5	946.0
27.5°	879.3	892.2	904.4	912.7	919.5	926.3	930.1	930.9
30°	858.9	871.8	883.9	892.2	899.8	905.9	909.7	909.7
32.5°	833.9	846.0	858.9	866.5	873.3	879.3	883.1	884.6
35°	805.0	817.2	829.3	836.1	843.7	848.3	851.3	853.6
37.5°	774.0	786.1	796.0	802.0	810.4	813.4	817.9	817.2
40°	740.6	750.5	759.6	764.9	771.7	775.5	780.0	779.3
42.5°	705.7	715.6	723.2	729.2	733.0	736.8	739.9	739.1
45°	670.1	679.2	686.0	689.1	695.1	696.6	699.7	699.7
47.5°	634.5	642.1	648.1	652.7	655.7	657.2	660.3	660.3
50°	600.4	607.2	611.0	614.8	617.8	620.1	621.6	622.4
52.5°	567.0	572.3	575.4	578.4	581.4	582.9	584.5	583.7
55°	535.2	539.0	541.2	543.5	545.8	548.1	548.1	548.1
57.5°	503.3	505.6	507.9	509.4	511.7	513.2	513.2	513.2
60°	472.3	474.5	475.3	476.8	479.1	479.8	480.6	479.1
62.5°	441.9	442.7	443.5	444.2	446.5	448.0	448.0	447.2
65°	410.9	410.9	411.6	412.4	413.9	415.4	416.2	414.7
67.5°	380.5	380.5	381.3	381.3	383.6	385.1	385.8	385.8
70°	351.0	350.2	351.7	352.5	354.0	354.0	355.5	355.5
72.5°	321.4	320.7	322.2	322.2	323.7	324.4	324.4	324.4
75°	292.6	290.3	291.1	289.6	291.1	291.1	290.3	290.3
77.5°	261.5	256.2	254.7	251.7	251.7	251.7	250.2	250.2
80°	222.1	216.8	214.5	212.3	212.3	211.5	210.7	210.7
82.5°	182.7	178.1	175.9	173.6	175.1	172.8	173.6	174.4
85°	140.2	136.4	134.9	132.7	131.9	131.9	132.7	131.9
87.5°	91.0	87.2	87.2	84.9	86.4	84.1	81.9	83.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)