

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 237P100

Luminaire Tested: **BSX-232-TD**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 237P100
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BSX-232-TD
Description: Basix strip fixture with Teardrop Lens and endplates.
Light Source: Two - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Sylvania QT2X32/120 IS-SC

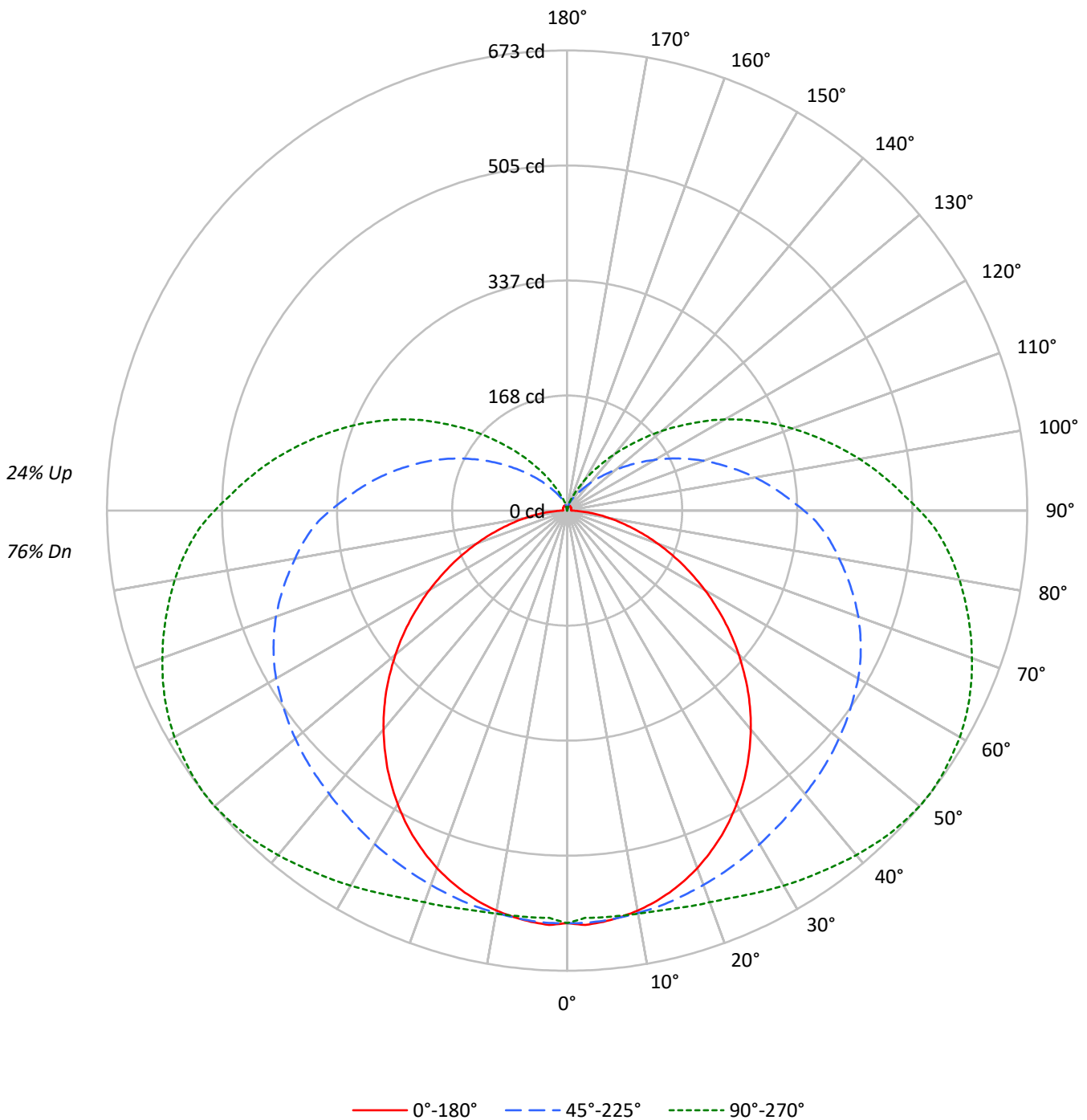
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 3825.7 lumens
Efficiency: 68.3%
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.65 / 1.63
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4.02' x H: 0.29')
CIE Type: Semi-Direct

Input Watts (W): 54
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	77	77	77	77	74	74	74	74	67	67	67	61	61	61	55	55	55	52
1	68	63	59	56	64	60	56	53	54	51	48	48	46	44	43	42	40	37
2	60	53	48	43	57	51	46	41	46	41	38	41	37	34	36	34	31	29
3	54	46	40	34	51	44	38	33	39	34	30	35	31	28	31	28	25	23
4	49	40	33	28	46	38	32	27	34	29	25	31	26	23	27	24	21	19
5	45	35	29	24	42	34	28	23	30	25	21	27	23	19	24	21	18	16
6	41	32	25	20	39	30	24	20	27	22	18	24	20	17	22	18	15	14
7	38	28	22	18	36	27	21	17	25	19	16	22	18	15	20	16	13	12
8	35	26	20	16	33	25	19	15	22	17	14	20	16	13	18	15	12	10
9	33	24	18	14	31	22	17	13	20	16	12	19	14	11	17	13	11	9
10	31	22	16	12	29	21	15	12	19	14	11	17	13	10	16	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5570	5570	5570
5°	5561	5235	5089
10°	5501	4942	4771
15°	5423	4699	4542
20°	5328	4487	4391
25°	5212	4316	4310
30°	5074	4176	4281
35°	4921	4067	4279
40°	4749	3987	4312
45°	4556	3942	4360
50°	4336	3916	4411
55°	4091	3909	4446
60°	3817	3925	4482
65°	3517	3943	4511
70°	3168	3968	4539
75°	2769	3998	4582
80°	2336	4053	4644
85°	1783	4151	4719



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	57.3	1.5	1.0	0°	603	603	603	603	603	
10°-20°	167.2	4.4	3.0	5°	604	602	602	601	597	57
20°-30°	265.3	6.9	4.7	15°	578	581	591	601	602	163
30°-40°	346.4	9.1	6.2	25°	529	540	573	609	620	243
40°-50°	406.2	10.6	7.3	35°	459	483	552	621	646	287
50°-60°	439.3	11.5	7.8	45°	374	419	531	631	668	288
60°-70°	443.2	11.6	7.9	55°	280	353	506	627	671	251
70°-80°	418.9	10.9	7.5	65°	186	294	474	603	649	184
80°-90°	372.8	9.7	6.7	75°	98	242	429	561	608	105
90°-100°	306.3	8.0	5.5	85°	31	191	379	508	554	31
100°-110°	236.0	6.2	4.2	90°	6	164	346	472	516	5
110°-120°	166.7	4.4	3.0	95°	6	137	312	433	474	5
120°-130°	104.7	2.7	1.9	105°	6	91	245	355	392	7
130°-140°	56.9	1.5	1.0	115°	7	56	180	276	309	7
140°-150°	26.1	0.7	0.5	125°	7	34	119	196	222	6
150°-160°	9.8	0.3	0.2	135°	7	22	71	123	142	6
160°-170°	2.4	0.1	0.0	145°	8	16	38	66	77	5
170°-180°	0.0	0.0	0.0	155°	8	13	20	29	32	4
0°-30°	489.9	12.8	8.7	165°	8	10	12	12	11	2
0°-40°	836.3	21.9	14.9	175°	0	0	0	0	0	0
0°-60°	1681.9	44.0	30.0	180°	0	0	0	0	0	
0°-90°	2916.7	76.2	52.1							
90°-120°	709.0	18.5	12.7							
90°-150°	896.8	23.4	16.0							
90°-180°	909.0	23.8	16.2							
0°-180°	3825.7	100.0	68.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	603.3	603.3	603.3	603.3	603.3
2.5°	606.6	604.9	603.7	600.9	596.3
5°	603.8	602.4	602.3	601.2	597.1
7.5°	599.6	599.0	600.1	600.9	597.7
10°	594.2	594.2	597.6	600.4	598.6
12.5°	587.1	588.3	594.8	600.5	600.1
15°	578.3	581.3	591.4	601.4	602.5
17.5°	568.2	572.9	587.0	602.4	606.4
20°	556.5	563.0	582.7	603.3	609.6
22.5°	543.1	552.0	578.3	605.5	614.1
25°	528.8	539.8	573.4	608.6	620.4
27.5°	512.9	526.7	568.2	611.6	626.9
30°	495.7	512.9	563.2	614.9	633.4
32.5°	477.6	498.5	557.6	618.0	639.6
35°	458.6	483.2	552.3	621.1	645.5
37.5°	438.4	467.6	546.7	623.9	651.7
40°	417.9	451.5	541.2	626.6	657.9
42.5°	396.5	435.1	536.0	628.9	663.0
45°	374.1	418.6	530.8	631.2	667.8
47.5°	350.9	402.1	525.2	632.6	670.6
50°	327.8	385.5	518.9	632.6	673.0
52.5°	304.3	368.9	512.6	631.1	673.1
55°	280.3	352.7	505.7	627.2	670.7
57.5°	256.4	337.2	498.4	622.7	667.0
60°	232.5	322.5	491.6	618.1	663.1
62.5°	208.9	308.0	483.3	611.2	657.0
65°	185.9	293.8	473.9	602.9	649.3
67.5°	162.9	280.3	463.8	593.8	640.3
70°	140.6	267.4	453.2	583.8	630.1
72.5°	119.0	254.6	441.4	572.5	619.4
75°	98.5	241.8	429.2	560.7	607.8
77.5°	79.6	229.0	416.6	548.5	595.5
80°	61.9	216.2	404.0	536.0	582.7
82.5°	45.6	203.6	391.8	522.7	568.9
85°	30.7	191.4	378.7	508.1	553.7
87.5°	16.1	178.9	364.2	491.9	536.6
90°	5.8	163.7	346.4	471.8	515.5
92.5°	6.0	149.0	328.5	451.7	494.2
95°	6.1	136.6	312.1	433.0	474.4
97.5°	6.2	124.5	295.6	414.0	454.5
100°	6.2	113.0	279.1	394.6	434.3
102.5°	6.3	101.9	262.3	374.7	413.2
105°	6.3	91.4	245.4	354.7	392.1
107.5°	6.4	81.4	228.9	335.1	371.5
110°	6.5	72.0	212.7	315.5	350.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6.6	63.6	196.4	295.7	330.1
115°	6.6	56.2	180.2	275.5	308.6
117.5°	6.7	49.5	164.1	255.6	287.7
120°	6.8	43.7	148.4	235.5	266.5
122.5°	6.8	38.5	133.5	215.2	244.9
125°	6.9	33.9	119.0	195.8	222.3
127.5°	7.0	29.9	105.4	176.5	201.5
130°	7.1	26.5	92.9	157.4	181.6
132.5°	7.2	23.9	81.4	139.6	161.7
135°	7.3	21.7	70.8	122.6	142.1
137.5°	7.4	19.7	61.3	106.8	124.0
140°	7.5	18.1	52.6	92.1	107.2
142.5°	7.6	16.8	44.7	78.5	91.4
145°	7.7	15.7	37.8	66.1	76.8
147.5°	7.8	14.8	32.0	54.9	63.6
150°	7.9	14.0	27.2	44.7	51.6
152.5°	7.9	13.3	23.2	36.0	40.8
155°	8.0	12.7	19.8	28.8	32.0
157.5°	8.1	12.0	17.1	23.1	24.7
160°	8.2	11.4	14.9	18.3	18.9
162.5°	8.3	10.7	13.2	14.6	14.2
165°	8.3	10.0	11.8	11.8	10.7
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)