

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: 175P160

Luminaire Tested: **BSX-AP-4**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 175P160
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BSX-AP-4
Description: BASIX Acrylic Point Luminaire
Light Source: Two - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad B232IUNVHP-B Electronic L.O.B.F. = Unknown

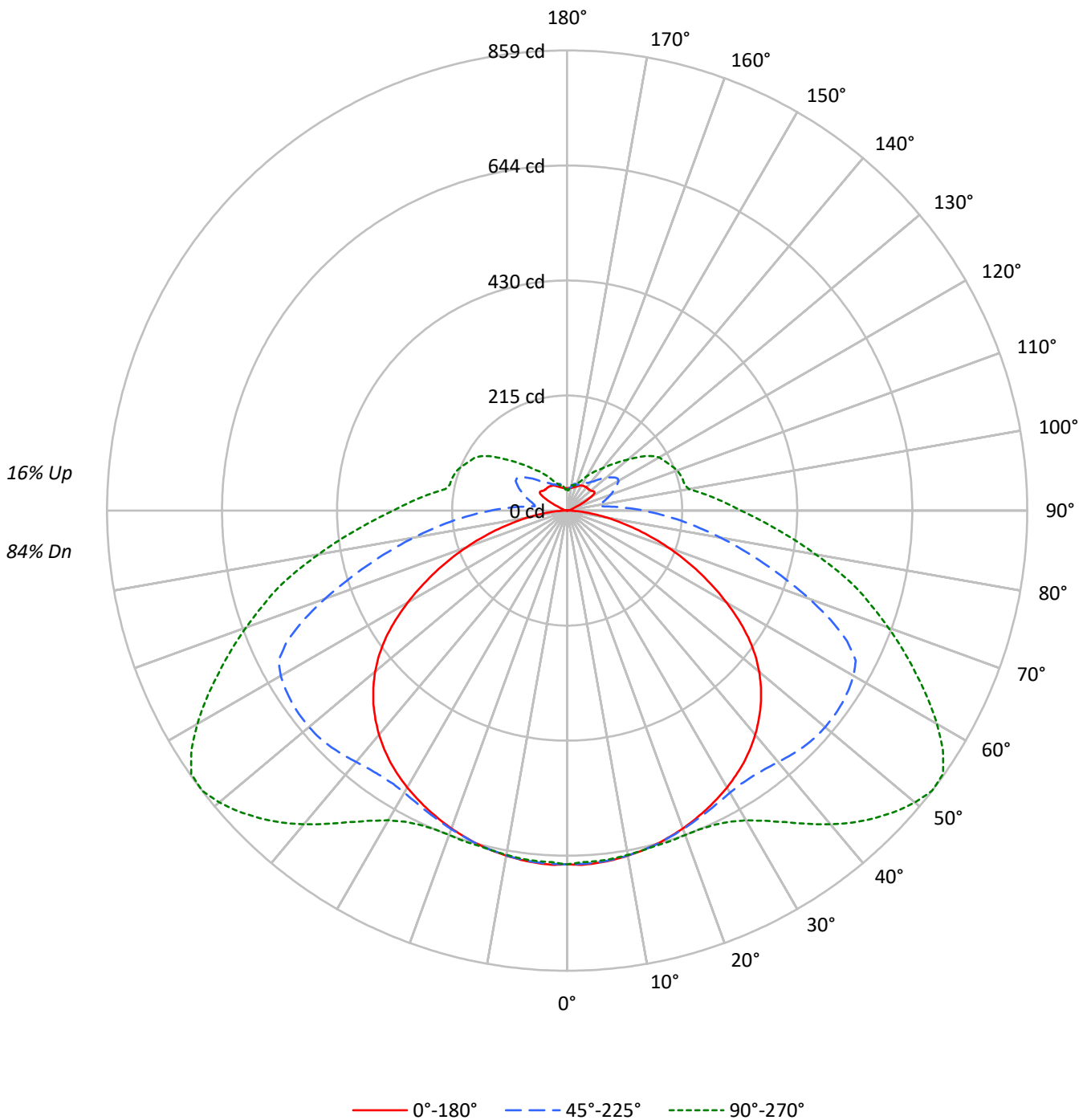
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 3750.2 lumens
Efficiency: 67.0%
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.75 / 1.72
Luminous Opening: Rectangular w/ Sides (W: 0.79' x L: 4.01' x H: 0.34')
CIE Type: Semi-Direct

Input Watts (W): 53
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	68	68	68	63	63	63	58	58	58	56
1	68	64	61	57	65	62	58	55	57	54	52	52	50	48	48	46	45	43
2	61	54	49	44	58	52	47	43	48	44	40	44	41	38	40	38	35	33
3	55	47	40	35	52	45	39	34	41	36	32	38	34	31	35	31	29	27
4	50	41	34	29	47	39	33	28	36	31	27	33	29	25	30	27	24	22
5	45	36	29	24	43	34	28	24	32	26	22	29	25	21	27	23	20	18
6	42	32	25	21	39	31	25	20	28	23	19	26	22	18	24	20	17	15
7	38	29	22	18	36	28	22	18	25	20	17	24	19	16	22	18	15	13
8	35	26	20	16	34	25	19	15	23	18	15	21	17	14	20	16	13	12
9	33	24	18	14	31	23	17	14	21	16	13	20	15	12	18	14	12	10
10	31	22	16	12	29	21	16	12	19	15	12	18	14	11	17	13	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2244	2244	2244
5°	2236	2179	2159
10°	2224	2119	2092
15°	2217	2067	2041
20°	2215	2021	2015
25°	2220	1987	2022
30°	2232	1971	2098
35°	2249	1999	2263
40°	2262	2081	2491
45°	2265	2197	2728
50°	2247	2318	2961
55°	2181	2443	3143
60°	2038	2572	3105
65°	1846	2604	3002
70°	1611	2388	2902
75°	1322	2112	2818
80°	987	1855	2679
85°	582	1600	2577



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	62.8	1.7	1.1	0°	660	660	660	660	660	
10°-20°	182.8	4.9	3.3	5°	660	660	659	660	657	63
20°-30°	290.0	7.7	5.2	15°	645	645	645	649	647	182
30°-40°	393.5	10.5	7.0	25°	616	614	620	639	648	284
40°-50°	495.4	13.2	8.8	35°	574	574	605	679	710	360
50°-60°	557.1	14.9	9.9	45°	511	520	624	759	812	394
60°-70°	523.3	14.0	9.3	55°	413	444	627	799	857	367
70°-80°	400.0	10.7	7.1	65°	271	373	577	680	718	269
80°-90°	245.1	6.5	4.4	75°	133	284	380	513	560	142
90°-100°	133.2	3.6	2.4	85°	29	122	212	345	391	33
100°-110°	105.1	2.8	1.9	90°	0	65	142	274	324	2
110°-120°	109.1	2.9	1.9	95°	1	32	83	219	275	2
120°-130°	99.9	2.7	1.8	105°	8	28	73	179	224	8
130°-140°	66.7	1.8	1.2	115°	26	46	100	176	208	29
140°-150°	42.7	1.1	0.8	125°	62	69	108	155	177	53
150°-160°	25.7	0.7	0.5	135°	56	58	81	112	123	44
160°-170°	13.8	0.4	0.2	145°	55	54	63	81	89	35
170°-180°	4.1	0.1	0.1	155°	51	52	54	58	61	24
0°-30°	535.5	14.3	9.6	165°	45	47	52	49	48	13
0°-40°	929.0	24.8	16.6	175°	42	42	41	41	40	4
0°-60°	1981.6	52.8	35.4	180°	40	40	40	40	40	
0°-90°	3150.0	84.0	56.2							
90°-120°	347.3	9.3	6.2							
90°-150°	556.6	14.8	9.9							
90°-180°	600.0	16.0	10.7							
0°-180°	3750.2	100.0	67.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	660.4	660.4	660.4	660.4	660.4
2.5°	661.9	661.0	660.0	659.8	656.9
5°	660.3	659.9	659.1	659.6	656.8
7.5°	657.7	657.1	656.8	657.9	655.2
10°	654.1	654.5	653.7	654.4	652.5
12.5°	649.8	650.2	649.5	651.1	649.7
15°	644.7	645.4	645.0	648.6	647.2
17.5°	638.4	638.6	638.9	645.4	646.2
20°	631.6	631.2	632.9	641.7	644.4
22.5°	623.8	623.2	626.2	639.4	644.2
25°	615.6	614.1	619.9	638.8	647.6
27.5°	606.5	605.2	613.4	641.4	654.8
30°	596.8	594.6	608.0	648.5	667.6
32.5°	586.2	584.8	604.8	661.3	686.3
35°	574.5	574.5	604.8	678.7	709.9
37.5°	561.1	563.2	607.8	699.4	737.2
40°	546.2	550.9	612.6	721.1	764.4
42.5°	529.6	536.7	618.6	741.3	789.9
45°	511.4	520.4	623.8	759.2	812.0
47.5°	490.6	501.8	627.7	774.9	831.6
50°	468.1	482.2	628.9	786.7	847.6
52.5°	442.3	462.0	628.6	794.7	858.9
55°	412.8	444.4	626.9	799.2	856.7
57.5°	379.8	427.7	622.8	788.2	831.8
60°	344.0	411.7	617.3	758.0	797.4
62.5°	307.5	394.0	607.4	720.7	759.1
65°	271.4	372.8	576.8	679.8	718.0
67.5°	235.6	350.5	532.0	638.2	678.1
70°	199.9	329.8	481.0	597.6	637.6
72.5°	165.3	309.1	428.6	556.7	597.9
75°	132.6	284.0	379.6	513.2	559.5
77.5°	102.1	242.1	333.9	467.5	515.9
80°	74.7	200.1	290.6	423.6	471.1
82.5°	50.5	160.7	249.6	383.6	430.3
85°	29.4	122.0	211.9	344.7	391.2
87.5°	11.5	92.2	175.6	307.0	356.1
90°	0.2	64.6	142.3	274.1	324.4
92.5°	0.1	42.0	111.2	245.1	298.9
95°	1.1	31.9	82.9	219.2	275.1
97.5°	2.4	30.6	60.9	196.7	252.1
100°	4.1	29.5	61.9	180.2	230.8
102.5°	6.0	28.2	66.5	178.8	224.2
105°	7.9	27.5	73.3	179.3	223.6
107.5°	9.7	28.4	79.5	180.3	221.4
110°	12.4	31.9	86.7	179.1	218.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	17.4	38.2	92.7	176.7	213.6
115°	26.5	46.5	99.6	175.5	208.1
117.5°	39.7	55.6	105.3	173.1	202.9
120°	52.9	63.8	110.8	170.5	198.4
122.5°	60.6	68.9	111.7	165.4	189.5
125°	61.7	69.4	107.9	155.1	177.2
127.5°	59.8	67.1	101.9	143.7	162.2
130°	58.0	63.6	94.8	132.8	148.3
132.5°	57.0	59.8	88.4	120.9	135.9
135°	56.4	57.5	81.2	111.6	123.4
137.5°	56.5	56.3	74.3	103.7	113.3
140°	56.4	55.3	69.8	95.4	103.0
142.5°	56.0	54.4	65.5	88.4	95.0
145°	55.4	54.3	63.3	81.4	88.9
147.5°	54.7	54.2	60.2	75.0	80.9
150°	53.9	53.4	56.8	68.3	74.6
152.5°	52.8	52.4	55.2	62.7	67.4
155°	51.0	51.8	53.5	58.3	60.6
157.5°	49.1	50.6	52.1	55.1	56.4
160°	47.4	49.7	51.0	52.6	53.6
162.5°	46.0	48.2	52.0	50.4	51.1
165°	44.7	46.9	51.6	49.1	47.8
167.5°	43.9	45.9	48.1	50.1	48.4
170°	43.1	44.4	45.3	47.3	48.0
172.5°	42.7	43.1	43.4	43.4	42.6
175°	42.4	42.3	41.3	41.0	39.8
177.5°	42.3	42.2	39.9	38.6	37.2
180°	40.0	40.0	40.0	40.0	40.0

(END OF REPORT)