

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: 175P162

Luminaire Tested: **BSX-FA-4**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 175P162
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BSX-FA-4
Description: BASIX Frost Arch Luminaire with Acrylic lens.
Light Source: Two - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad B232IUNVHP-B Electronic L.O.B.F. = Unknown

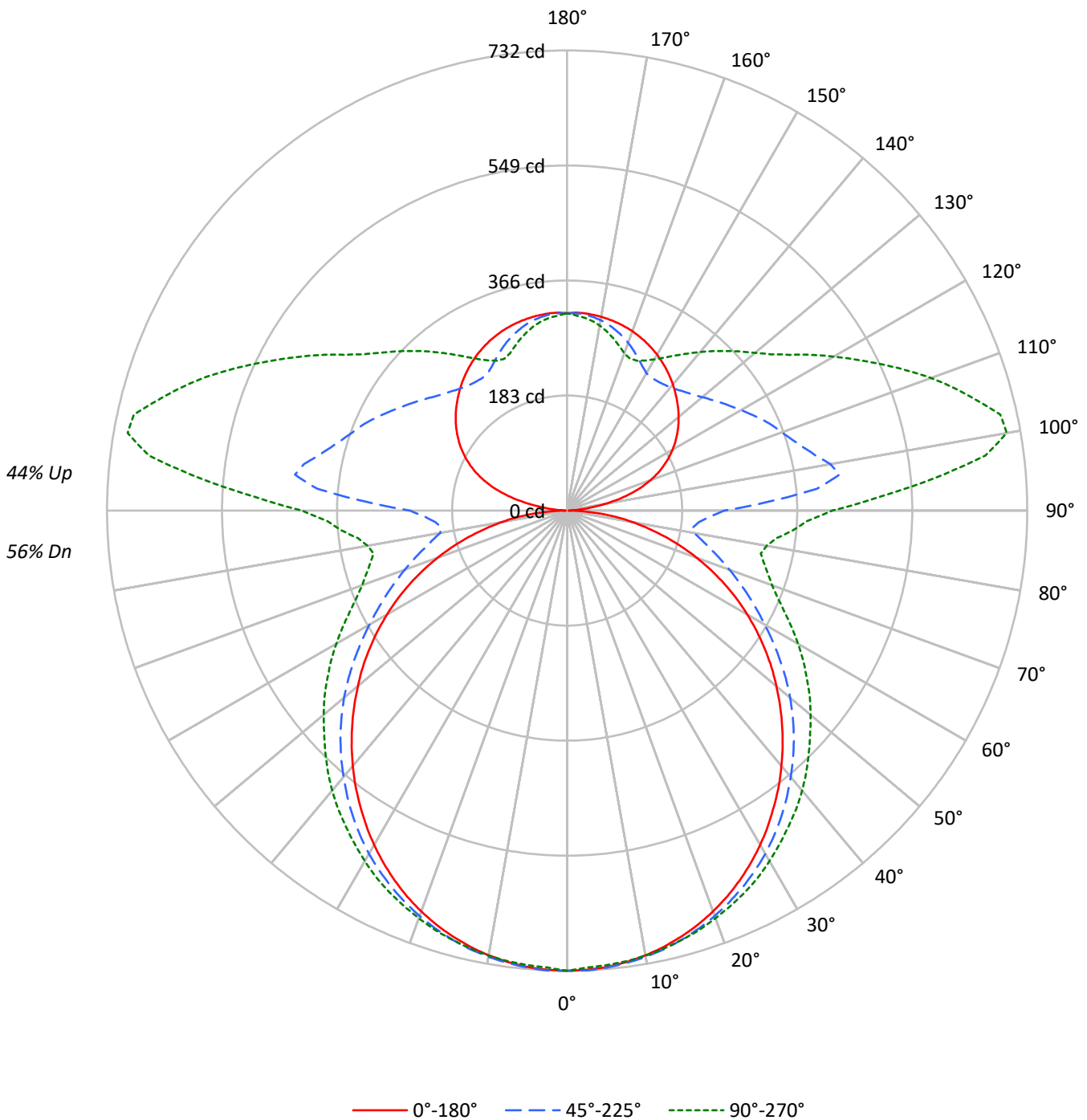
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 4540.7 lumens
Efficiency: 81.1%
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 0.82' x L: 4.01' x H: 0.31')
CIE Type: General Diffuse

Input Watts (W): 58
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

TEST NUMBER: 175P162
CATALOG NUMBER: BSX-FA-4

Luminous Intensity Polar Plot





TEST NUMBER: 175P162

CATALOG NUMBER: BSX-FA-4

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	88	88	88	88	82	82	82	82	70	70	70	59	59	59	50	50	50	45
1	79	74	71	67	73	69	66	63	59	56	54	50	48	46	41	40	39	35
2	71	64	59	54	66	60	55	50	51	47	44	43	40	37	36	33	32	28
3	65	56	49	44	59	52	46	41	45	40	36	38	34	31	31	29	26	23
4	59	49	42	37	54	46	40	35	39	34	31	33	29	26	28	25	22	19
5	54	44	37	32	50	41	34	30	35	30	26	30	26	23	25	22	19	17
6	50	39	32	27	46	37	30	26	31	26	23	27	23	20	22	19	17	14
7	46	35	29	24	42	33	27	22	29	24	20	24	20	17	20	17	15	13
8	43	32	25	21	39	30	24	20	26	21	18	22	18	15	19	16	13	11
9	40	29	23	19	37	27	22	18	24	19	16	20	17	14	17	14	12	10
10	37	27	21	17	34	25	20	16	22	17	14	19	15	12	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2396	2396	2396
5°	2378	2332	2308
10°	2356	2268	2240
15°	2329	2204	2175
20°	2299	2140	2113
25°	2264	2075	2056
30°	2222	2009	1998
35°	2175	1937	1939
40°	2128	1861	1887
45°	2078	1786	1827
50°	2027	1704	1775
55°	1974	1615	1725
60°	1911	1527	1678
65°	1835	1453	1632
70°	1730	1396	1628
75°	1587	1357	1701
80°	1389	1367	1933
85°	1017	1688	2543



TEST NUMBER: 175P162
 CATALOG NUMBER: BSX-FA-4

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	69.3	1.5	1.2	0°	732	732	732	732	732	
10°-20°	199.3	4.4	3.6	5°	729	730	730	729	726	69
20°-30°	304.6	6.7	5.4	15°	702	704	706	709	707	198
30°-40°	372.1	8.2	6.6	25°	649	654	661	669	670	299
40°-50°	395.4	8.7	7.1	35°	574	581	594	609	614	359
50°-60°	375.5	8.3	6.7	45°	484	490	510	535	544	373
60°-70°	320.9	7.1	5.7	55°	384	390	413	451	466	343
70°-80°	253.9	5.6	4.5	65°	276	284	317	363	382	273
80°-90°	232.2	5.1	4.1	75°	162	176	236	298	324	171
90°-100°	371.6	8.2	6.6	85°	51	96	210	316	360	53
100°-110°	405.7	8.9	7.2	90°	3	113	250	372	421	5
110°-120°	340.3	7.5	6.1	95°	22	183	399	534	585	26
120°-130°	272.1	6.0	4.9	105°	105	158	389	594	676	109
130°-140°	217.2	4.8	3.9	115°	170	170	342	497	551	167
140°-150°	170.2	3.7	3.0	125°	214	189	299	396	432	191
150°-160°	127.0	2.8	2.3	135°	247	216	266	334	359	191
160°-170°	83.8	1.8	1.5	145°	275	256	251	286	301	172
170°-180°	29.7	0.7	0.5	155°	296	287	267	261	263	137
0°-30°	573.2	12.6	10.2	165°	309	306	298	289	284	87
0°-40°	945.2	20.8	16.9	175°	315	314	313	311	308	30
0°-60°	1716.1	37.8	30.6	180°	314	314	314	314	314	
0°-90°	2523.1	55.6	45.1							
90°-120°	1117.7	24.6	20.0							
90°-150°	1777.2	39.1	31.7							
90°-180°	2018.0	44.4	36.0							
0°-180°	4540.7	100.0	81.1							



TEST NUMBER: 175P162
 CATALOG NUMBER: BSX-FA-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	732.0	732.0	732.0	732.0	732.0
2.5°	731.2	732.5	732.1	730.9	727.5
5°	728.7	729.9	729.7	729.1	725.7
7.5°	724.3	725.6	725.8	725.8	723.1
10°	718.4	720.0	720.9	721.1	718.9
12.5°	710.8	712.7	714.5	715.5	713.4
15°	701.6	703.9	706.5	708.9	706.8
17.5°	690.9	693.6	697.1	700.5	699.3
20°	678.5	681.8	686.3	690.6	690.1
22.5°	664.7	668.5	674.2	680.0	680.2
25°	649.3	653.5	660.9	668.8	669.7
27.5°	632.3	637.1	646.2	656.1	657.7
30°	614.1	619.4	630.4	641.6	643.9
32.5°	594.7	600.6	612.9	625.5	629.0
35°	573.8	580.6	594.1	609.0	613.6
37.5°	553.0	559.3	574.2	591.7	598.5
40°	530.3	537.0	553.3	574.3	581.6
42.5°	507.5	514.1	532.0	555.0	563.2
45°	483.6	490.3	509.9	534.9	543.9
47.5°	459.3	466.0	486.8	514.3	524.3
50°	434.7	441.0	463.1	493.7	505.7
52.5°	410.0	415.6	438.5	472.6	486.4
55°	384.1	390.1	413.1	450.6	465.5
57.5°	357.8	363.9	387.7	428.0	445.4
60°	331.0	337.5	363.2	406.5	424.2
62.5°	304.0	311.1	339.4	384.4	402.8
65°	276.2	284.2	317.2	363.2	381.5
67.5°	247.8	257.0	295.5	343.3	362.4
70°	219.1	229.3	274.8	325.5	346.7
72.5°	190.4	202.1	255.1	310.8	335.0
75°	161.7	176.3	236.3	298.5	324.3
77.5°	133.4	153.4	219.8	286.1	315.4
80°	106.0	132.6	204.9	287.9	322.4
82.5°	78.9	113.7	202.2	296.4	335.8
85°	51.0	96.5	210.3	316.2	360.3
87.5°	20.4	100.5	226.1	336.3	381.9
90°	2.7	112.7	250.0	371.7	421.4
92.5°	9.3	163.3	319.4	445.2	496.7
95°	22.1	182.8	398.9	533.7	585.4
97.5°	39.7	171.1	436.8	612.0	671.0
100°	61.4	164.1	425.0	634.8	710.0
102.5°	83.8	160.1	404.9	620.2	705.8
105°	105.0	158.0	389.1	594.1	675.7
107.5°	124.1	158.5	375.0	571.6	646.6
110°	141.2	162.4	363.4	549.5	616.3



TEST NUMBER: 175P162
 CATALOG NUMBER: BSX-FA-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	156.4	166.5	353.5	524.2	583.6
115°	170.0	170.4	342.4	497.1	550.8
117.5°	182.3	174.6	330.8	470.9	519.3
120°	193.7	179.3	319.5	444.7	490.0
122.5°	204.1	184.1	309.0	419.3	461.1
125°	213.9	189.0	299.1	396.3	432.0
127.5°	223.0	194.2	289.5	376.8	408.2
130°	231.5	200.2	280.6	360.2	390.2
132.5°	239.6	207.3	272.8	346.4	374.5
135°	247.3	216.4	266.2	333.6	359.1
137.5°	254.6	226.8	260.6	320.8	344.0
140°	261.7	237.1	256.0	308.4	329.2
142.5°	268.5	247.1	252.7	296.8	314.9
145°	274.8	256.4	250.9	286.0	301.2
147.5°	280.7	265.0	250.4	276.5	288.6
150°	286.3	273.0	252.4	268.9	277.7
152.5°	291.3	280.2	258.9	263.5	269.2
155°	295.9	286.8	267.3	260.9	263.1
157.5°	299.9	292.7	275.8	263.7	261.3
160°	303.6	297.9	283.9	271.6	266.1
162.5°	306.6	302.4	291.1	280.4	274.8
165°	309.2	306.0	297.5	288.8	283.8
167.5°	311.2	309.2	303.1	296.2	291.8
170°	313.0	311.7	307.6	302.5	298.8
172.5°	314.2	313.7	310.8	307.5	304.3
175°	315.0	314.5	313.4	311.0	308.1
177.5°	315.4	314.7	314.2	313.1	310.8
180°	313.8	313.8	313.8	313.8	313.8

(END OF REPORT)