

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: 175P157

Luminaire Tested: **BASIX PERF ARCH 1 LIGHT**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 175P157
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BASIX PERF ARCH 1 LIGHT
Description: Basix Perf Arch Luminaire with perforated shield
and lens.
Light Source: One - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad B232IUNVHP-B Electronic L.O.B.F. = Unknown

Summary

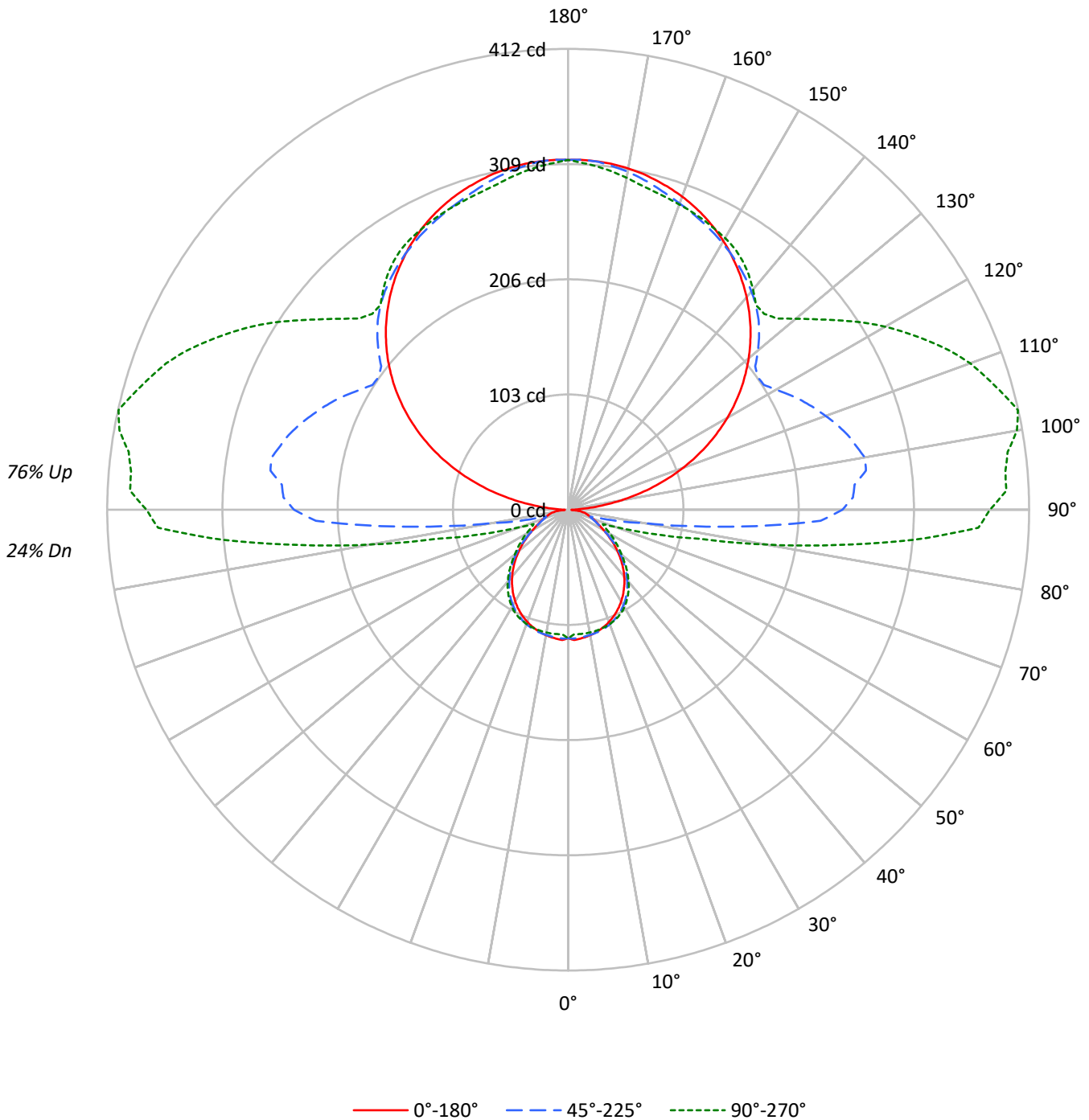
Lumens per Lamp: 2800 (1 lamp)
Luminaire Lumens: 2051.9 lumens
Efficiency: 73.3%
Efficacy: 57.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.29 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.8' x L: 4.01' x H: 0.29')
CIE Type: Semi-Indirect

Input Watts (W): 36
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: 175P157

CATALOG NUMBER: BASIX PERF ARCH 1 LIGHT

Luminous Intensity Polar Plot





TEST NUMBER: 175P157

CATALOG NUMBER: BASIX PERF ARCH 1 LIGHT

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	74	74	74	74	66	66	66	66	51	51	51	37	37	37	24	24	24	18
1	65	61	58	54	58	54	51	48	41	39	37	29	27	26	17	17	16	10
2	59	53	48	44	52	47	43	39	35	32	30	25	23	21	15	14	13	8
3	54	46	41	36	47	41	36	32	31	28	25	22	19	17	13	12	10	7
4	49	41	35	30	43	36	31	27	27	24	21	19	17	15	12	10	9	6
5	45	36	30	26	40	32	27	23	25	21	18	17	15	13	11	9	8	5
6	41	32	26	22	36	29	24	20	22	18	15	16	13	11	10	8	7	4
7	38	29	23	19	34	26	21	17	20	16	14	14	12	10	9	7	6	4
8	35	26	21	17	31	23	19	15	18	14	12	13	10	9	8	7	5	3
9	33	24	19	15	29	21	17	13	16	13	11	12	9	8	7	6	5	3
10	31	22	17	13	27	20	15	12	15	12	9	11	9	7	7	5	4	3

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	386	386	386
5°	388	377	364
10°	383	367	357
15°	378	359	350
20°	372	350	343
25°	363	338	335
30°	352	325	322
35°	338	307	304
40°	322	285	282
45°	301	260	256
50°	277	230	227
55°	248	195	202
60°	219	161	179
65°	199	134	157
70°	189	119	221
75°	187	168	490
80°	190	489	1135
85°	141	1430	2318



TEST NUMBER: 175P157

CATALOG NUMBER: BASIX PERF ARCH 1 LIGHT

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	10.9	0.5	0.4	0°	115	115	115	115	115	
10°-20°	31.4	1.5	1.1	5°	116	116	115	113	112	11
20°-30°	47.9	2.3	1.7	15°	111	111	112	112	111	31
30°-40°	56.6	2.8	2.0	25°	101	102	104	106	106	47
40°-50°	54.7	2.7	2.0	35°	87	88	91	93	93	54
50°-60°	43.8	2.1	1.6	45°	68	69	72	73	73	52
60°-70°	31.0	1.5	1.1	55°	47	48	48	50	52	42
70°-80°	49.0	2.4	1.8	65°	29	28	28	33	35	29
80°-90°	172.6	8.4	6.2	75°	18	15	28	72	89	19
90°-100°	256.4	12.5	9.2	85°	7	40	168	272	310	7
100°-110°	259.9	12.7	9.3	90°	3	105	245	343	377	2
110°-120°	234.9	11.4	8.4	95°	20	118	257	357	392	22
120°-130°	205.3	10.0	7.3	105°	79	122	259	364	402	83
130°-140°	184.7	9.0	6.6	115°	138	148	231	323	356	136
140°-150°	166.6	8.1	5.9	125°	189	193	207	270	295	168
150°-160°	131.8	6.4	4.7	135°	230	229	240	241	248	178
160°-170°	84.8	4.1	3.0	145°	264	259	266	272	272	165
170°-180°	29.5	1.4	1.1	155°	289	284	284	286	286	133
0°-30°	90.2	4.4	3.2	165°	305	303	299	296	295	86
0°-40°	146.8	7.2	5.2	175°	312	313	312	310	308	30
0°-60°	245.4	12.0	8.8	180°	313	313	313	313	313	
0°-90°	498.0	24.3	17.8							
90°-120°	751.2	36.6	26.8							
90°-150°	1307.8	63.7	46.7							
90°-180°	1554.0	75.7	55.5							
0°-180°	2051.9	100.0	73.3							



TEST NUMBER: 175P157

CATALOG NUMBER: BASIX PERF ARCH 1 LIGHT

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	114.9	114.9	114.9	114.9	114.9
2.5°	116.6	116.3	115.3	113.4	111.7
5°	115.9	115.7	114.9	113.3	111.6
7.5°	115.0	114.9	114.3	113.0	111.7
10°	113.9	114.0	113.6	112.6	111.5
12.5°	112.6	112.8	112.9	112.1	111.2
15°	110.9	111.4	111.9	111.5	110.6
17.5°	109.0	109.7	110.6	110.5	109.9
20°	106.8	107.6	109.0	109.3	108.7
22.5°	104.2	105.2	107.0	107.8	107.4
25°	101.3	102.5	104.3	106.0	105.7
27.5°	98.2	99.4	101.9	103.7	103.4
30°	94.6	96.0	98.7	100.7	100.5
32.5°	90.9	92.4	95.2	97.2	97.0
35°	86.8	88.3	91.2	93.1	93.1
37.5°	82.5	84.0	86.7	88.7	88.8
40°	77.9	79.4	81.9	83.9	84.0
42.5°	73.1	74.5	76.9	78.6	78.8
45°	68.0	69.3	71.6	72.9	73.4
47.5°	62.8	63.9	66.0	67.2	67.7
50°	57.6	58.5	60.1	61.2	62.2
52.5°	52.1	53.0	54.0	55.5	57.2
55°	46.8	47.5	48.0	50.5	52.5
57.5°	41.5	42.2	42.1	45.8	47.9
60°	36.7	37.2	36.7	41.3	43.5
62.5°	32.5	32.6	32.1	37.2	39.1
65°	29.0	28.3	28.1	33.2	35.2
67.5°	25.9	24.5	24.9	29.9	33.6
70°	23.1	21.0	22.3	32.8	44.9
72.5°	20.6	17.7	20.6	48.6	63.2
75°	18.3	15.4	27.9	72.2	89.0
77.5°	16.2	13.5	47.6	94.3	120.2
80°	13.9	12.1	69.4	146.1	179.5
82.5°	11.1	20.6	113.4	206.1	241.9
85°	6.7	39.6	167.7	271.8	309.7
87.5°	3.0	78.8	225.7	330.6	367.0
90°	2.9	104.6	245.0	343.2	376.9
92.5°	9.3	108.7	254.8	357.1	391.9
95°	19.7	117.6	256.8	357.3	392.1
97.5°	32.8	118.2	268.4	363.2	396.2
100°	48.0	119.2	269.2	375.1	407.3
102.5°	63.4	120.5	263.5	373.3	411.7
105°	78.8	122.3	258.6	363.7	401.8
107.5°	94.0	123.0	252.0	355.8	392.1
110°	109.0	124.7	245.0	346.6	382.4



TEST NUMBER: 175P157

CATALOG NUMBER: BASIX PERF ARCH 1 LIGHT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	123.5	133.8	237.9	335.1	370.2
115°	137.7	147.5	230.6	322.6	356.2
117.5°	151.2	160.4	222.6	309.8	341.8
120°	164.3	172.3	214.5	296.6	327.3
122.5°	176.7	183.0	207.5	283.1	311.7
125°	188.6	193.1	206.7	269.8	295.0
127.5°	199.8	202.7	210.7	256.4	279.5
130°	210.6	212.0	221.4	244.5	265.4
132.5°	220.7	220.8	231.4	240.0	253.0
135°	230.4	229.1	240.5	241.0	247.7
137.5°	239.5	237.1	248.4	250.2	248.2
140°	248.1	244.7	254.8	258.6	257.1
142.5°	256.1	251.9	260.6	266.0	265.0
145°	263.7	259.0	266.0	272.1	271.6
147.5°	270.8	265.8	271.0	276.3	276.9
150°	277.4	272.3	275.6	280.0	280.4
152.5°	283.4	278.6	279.9	283.2	283.2
155°	288.8	284.5	283.8	286.1	285.9
157.5°	293.6	290.0	287.6	288.9	288.3
160°	297.9	294.9	291.4	291.4	290.4
162.5°	301.6	299.3	295.2	293.7	292.5
165°	304.8	303.1	299.4	296.4	294.7
167.5°	307.6	306.5	303.3	299.8	297.5
170°	309.8	309.4	306.8	303.7	301.3
172.5°	311.4	311.7	309.6	307.0	304.8
175°	312.4	312.8	312.1	309.8	307.7
177.5°	313.0	313.3	313.2	311.9	310.2
180°	312.7	312.7	312.7	312.7	312.7

(END OF REPORT)