

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: 193P102

Luminaire Tested: **PGX2048-432S46I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 193P102
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: PGX2048-432S46I-PAF
Description: 20 X 48 Recessed Convertible Body Troffer with a
4" deep 24 cell semi-specular parabolic louver.
Light Source: FOUR - FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B432I120RH Electronic - L.O.B.F. = 89.5

Summary

Lumens per Lamp: 2850 (4 lamps)
Luminaire Lumens: 6647.8 lumens
Efficiency: 58.3%
Efficacy: 59.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.22
Luminous Opening: Rectangular (W 1.4' x L: 3.76' x H: 0')
CIE Type: Direct

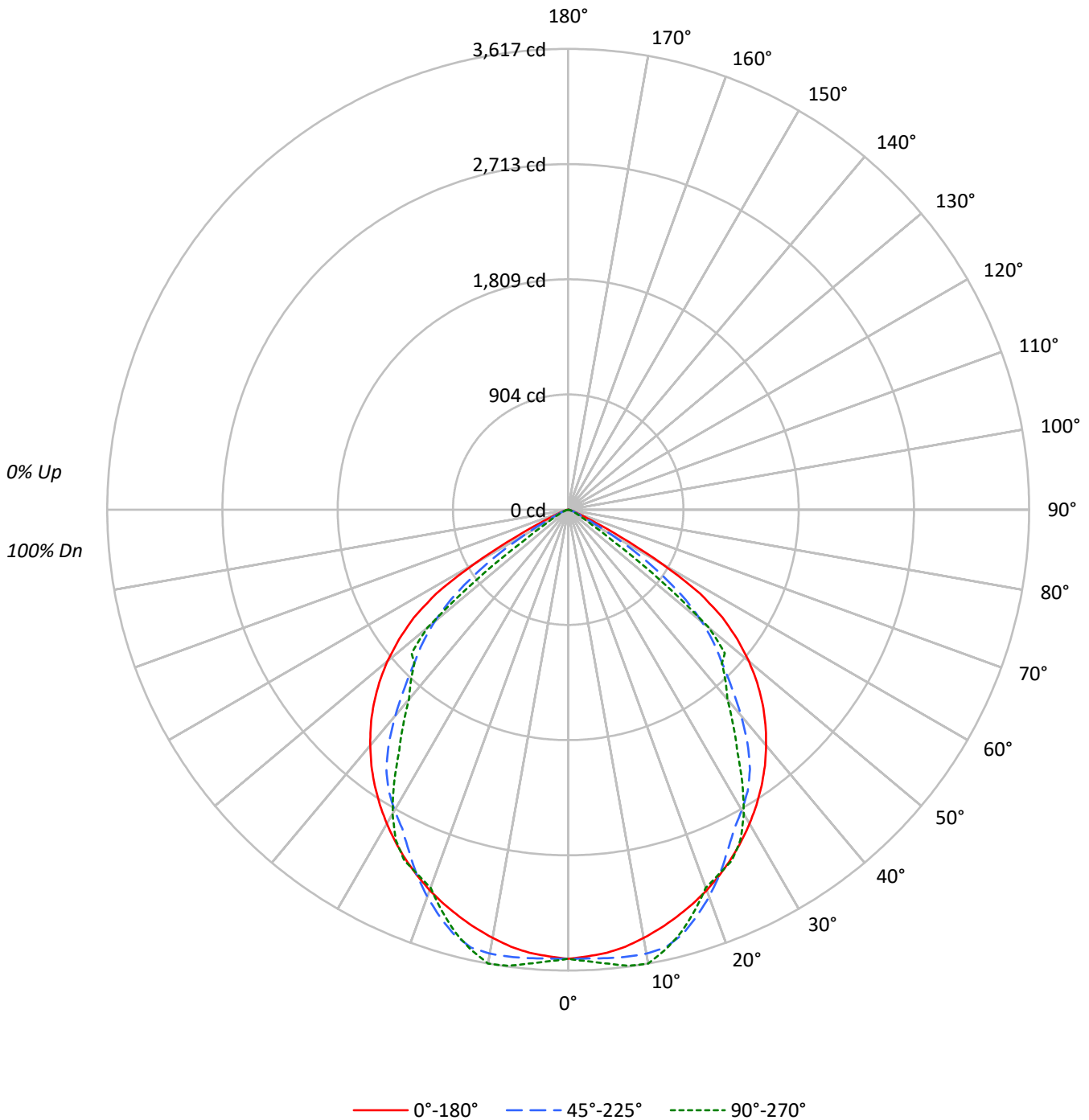
Input Watts (W): 111.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: 193P102

CATALOG NUMBER: PGX2048-432S46I-PAF

Luminous Intensity Polar Plot





TEST NUMBER: 193P102

CATALOG NUMBER: PGX2048-432S46I-PAF

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	69	69	69	69	68	68	68	68	65	65	65		62	62	62		60	60	60	58
1	65	63	61	60	64	62	60	59	60	58	57		57	56	55		55	54	54	53
2	61	57	54	52	59	56	53	51	54	52	50		52	50	49		51	49	48	47
3	56	52	48	45	55	51	47	44	49	46	44		48	45	43		46	44	42	41
4	52	47	43	39	51	46	42	39	45	41	39		43	40	38		42	40	38	37
5	49	42	38	35	48	42	38	35	41	37	34		40	36	34		39	36	34	33
6	45	39	34	31	44	38	34	31	37	33	31		36	33	30		35	32	30	29
7	42	35	31	28	41	35	31	28	34	30	28		33	30	27		33	30	27	26
8	40	33	28	25	39	32	28	25	32	28	25		31	27	25		30	27	25	24
9	37	30	26	23	36	30	26	23	29	25	23		29	25	23		28	25	23	22
10	35	28	24	21	34	28	24	21	27	23	21		27	23	21		26	23	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7212	7212	7212
5°	7170	7256	7346
10°	7091	7350	7514
15°	7000	7316	7269
20°	6919	7037	6876
25°	6827	6673	6860
30°	6724	6435	6511
35°	6606	6212	5775
40°	6453	5638	5189
45°	6244	4951	4933
50°	5892	4361	4583
55°	5269	3232	1545
60°	3499	1608	585
65°	1026	508	324
70°	383	293	203
75°	229	198	134
80°	153	130	94
85°	70	70	23



TEST NUMBER: 193P102

CATALOG NUMBER: PGX2048-432S46I-PAF

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	337.1	5.1	3.0	0°	3525	3525	3525	3525	3525	
10°-20°	957.2	14.4	8.4	5°	3491	3502	3533	3559	3577	331
20°-30°	1387.4	20.9	12.2	15°	3305	3378	3454	3433	3432	933
30°-40°	1542.1	23.2	13.5	25°	3024	3113	2956	2973	3039	1393
40°-50°	1399.9	21.1	12.3	35°	2645	2594	2487	2337	2312	1653
50°-60°	836.4	12.6	7.3	45°	2158	1963	1711	1656	1705	1658
60°-70°	156.1	2.3	1.4	55°	1477	1188	906	652	433	1277
70°-80°	27.7	0.4	0.2	65°	212	140	105	79	67	302
80°-90°	3.8	0.1	0.0	75°	29	29	25	21	17	34
90°-100°	0.0	0.0	0.0	85°	3	3	3	2	1	4
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	0
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	2681.7	40.3	23.5	165°	0	0	0	0	0	0
0°-40°	4223.9	63.5	37.1	175°	0	0	0	0	0	0
0°-60°	6460.2	97.2	56.7	180°	0	0	0	0	0	0
0°-90°	6647.8	100.0	58.3							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	6647.8	100.0	58.3							



TEST NUMBER: 193P102

CATALOG NUMBER: PGX2048-432S46I-PAF

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3525	3525	3525	3525	3525
2.5°	3509	3516	3526	3534	3548
5°	3491	3502	3533	3559	3577
7.5°	3458	3481	3539	3589	3611
10°	3413	3452	3538	3600	3617
12.5°	3362	3417	3520	3534	3536
15°	3305	3378	3454	3433	3432
17.5°	3245	3330	3350	3314	3300
20°	3178	3275	3232	3162	3158
22.5°	3104	3206	3103	3041	3093
25°	3024	3113	2956	2973	3039
27.5°	2938	2998	2820	2892	2926
30°	2846	2872	2724	2746	2756
32.5°	2748	2738	2620	2557	2543
35°	2645	2594	2487	2337	2312
37.5°	2535	2443	2311	2116	2126
40°	2416	2284	2111	1938	1943
42.5°	2292	2122	1903	1774	1828
45°	2158	1963	1711	1656	1705
47.5°	2011	1796	1550	1497	1667
50°	1851	1615	1370	1362	1440
52.5°	1673	1412	1162	1079	913
55°	1477	1188	906	652	433
57.5°	1227	916	653	321	225
60°	855	586	393	179	143
62.5°	464	286	190	116	96
65°	212	140	105	79	67
67.5°	102	88	69	55	48
70°	64	60	49	40	34
72.5°	43	41	34	28	24
75°	29	29	25	21	17
77.5°	19	20	17	14	12
80°	13	13	11	9	8
82.5°	7	8	6	5	4
85°	3	3	3	2	1
87.5°	0	0	0	0	0
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



TEST NUMBER: 193P102

CATALOG NUMBER: PGX2048-432S46I-PAF

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)