

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: P30896

Luminaire Tested: **2GC8-432PB1S-UNV-EB81**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P30896  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GC8-432PB1S-UNV-EB81  
Description: METALUX 2' X 4' SPECIFICATION GRADE RECESSED FLUORESCENT TROFFER  
WITH HIGH REFLECTANCE WHITE INTERIOR FINISH AND SILVER PARABOLIC PB1S,  
1/2 X 1/2 X 1/2 SILVER PARABOLIC LOUVER, SHIELDING MEDIA  
Light Source: (4) T8 LINEAR FLUORESCENT LAMPS  
Ballast/Driver: -  
QTP4x32T8/UNV ISN-SC

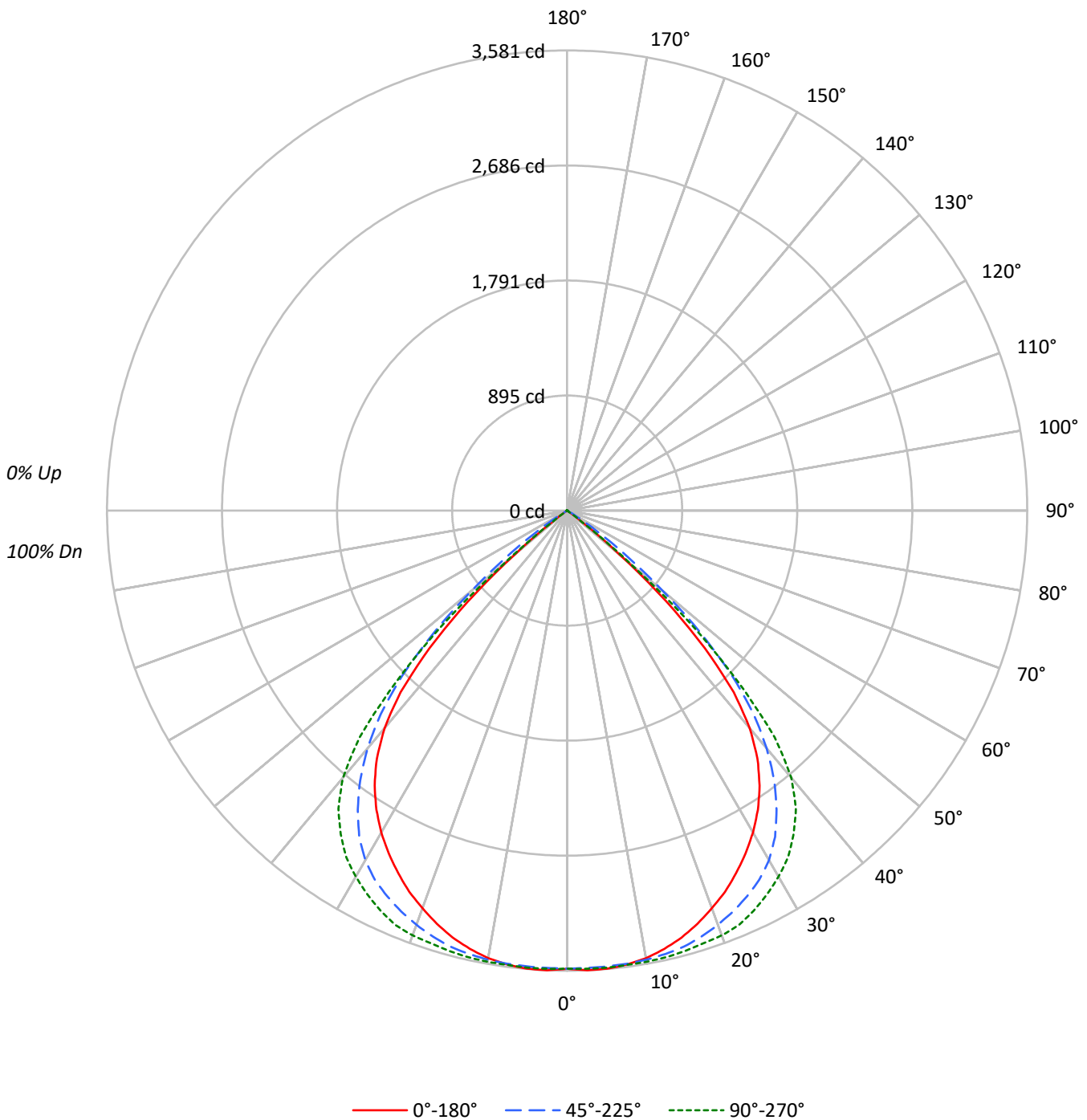
**Summary**

Lumens per Lamp: 3100 (4 lamps)  
Luminaire Lumens: 6121.0 lumens  
Efficiency: 49.4%  
Efficacy: 56.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.35 / 1.28  
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 108.5  
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	59	59	59	59	57	57	57	57	55	55	55	53	53	53	50	50	50	49
1	56	54	53	51	54	53	52	51	51	50	49	49	48	48	47	47	46	45
2	52	49	47	45	51	49	46	45	47	45	44	45	44	43	44	43	42	41
3	49	45	42	40	48	44	42	40	43	41	39	42	40	38	41	39	38	37
4	46	41	38	36	45	41	38	35	40	37	35	39	36	35	38	36	34	33
5	43	38	35	32	42	37	34	32	37	34	32	36	33	31	35	33	31	30
6	40	35	31	29	39	34	31	29	34	31	29	33	30	28	32	30	28	27
7	38	32	29	26	37	32	28	26	31	28	26	30	28	26	30	27	26	25
8	35	30	26	24	35	29	26	24	29	26	24	28	26	24	28	25	23	23
9	33	28	24	22	33	27	24	22	27	24	22	26	24	22	26	23	22	21
10	31	26	22	20	31	25	22	20	25	22	20	25	22	20	24	22	20	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5720	5720	5720
5°	5763	5736	5750
10°	5761	5782	5808
15°	5714	5836	5894
20°	5621	5857	6007
25°	5510	5864	6083
30°	5358	5821	6094
35°	5114	5565	6019
40°	4631	5058	5687
45°	3436	4116	4252
50°	1318	2414	1613
55°	62	859	45
60°	22	87	16
65°	19	19	15
70°	19	19	14
75°	19	19	12
80°	18	18	18
85°	37	37	37



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	339.7	5.5	2.7	0°	3565	3565	3565	3565	3565	
10°-20°	988.4	16.1	8.0	5°	3578	3565	3561	3560	3570	340
20°-30°	1518.3	24.8	12.2	15°	3440	3457	3513	3539	3548	969
30°-40°	1766.6	28.9	14.2	25°	3112	3182	3312	3430	3436	1432
40°-50°	1300.4	21.2	10.5	35°	2611	2711	2841	3007	3073	1618
50°-60°	196.7	3.2	1.6	45°	1514	1651	1814	1895	1874	1115
60°-70°	5.5	0.1	0.0	55°	22	85	307	64	16	98
70°-80°	3.1	0.1	0.0	65°	5	5	5	5	4	5
80°-90°	2.0	0.0	0.0	75°	3	3	3	3	2	3
90°-100°	0.2	0.0	0.0	85°	2	2	2	2	2	1
100°-110°	0.0	0.0	0.0	90°	1	2	1	1	2	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°	2846.4	46.5	23.0	165°	0	0	0	0	0	0
0°-40°	4613.0	75.4	37.2	175°	0	0	0	0	0	0
0°-60°	6110.2	99.8	49.3	180°	0	0	0	0	0	0
0°-90°	6120.8	100.0	49.4							
90°-120°	0.2	0.0	0.0							
90°-150°	0.2	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	6121.0	100.0	49.4							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3565	3565	3565	3565	3565
2.5°	3581	3567	3562	3558	3569
5°	3578	3565	3561	3560	3570
7.5°	3563	3555	3557	3556	3566
10°	3536	3534	3549	3554	3565
12.5°	3494	3504	3534	3552	3560
15°	3440	3457	3513	3539	3548
17.5°	3372	3399	3477	3521	3530
20°	3292	3334	3430	3500	3518
22.5°	3211	3263	3376	3478	3491
25°	3112	3182	3312	3430	3436
27.5°	3008	3093	3239	3358	3368
30°	2892	2988	3142	3268	3289
32.5°	2762	2865	3011	3154	3200
35°	2611	2711	2841	3007	3073
37.5°	2433	2526	2646	2815	2924
40°	2211	2305	2415	2586	2715
42.5°	1918	2024	2147	2289	2391
45°	1514	1651	1814	1895	1874
47.5°	1048	1187	1403	1361	1306
50°	528	722	967	835	646
52.5°	157	317	598	356	141
55°	22	85	307	64	16
57.5°	9	13	114	10	7
60°	7	7	27	6	5
62.5°	6	6	7	5	4
65°	5	5	5	5	4
67.5°	4	5	4	4	3
70°	4	4	4	4	3
72.5°	3	4	3	3	2
75°	3	3	3	3	2
77.5°	3	3	3	2	2
80°	2	3	2	2	2
82.5°	2	3	2	2	2
85°	2	2	2	2	2
87.5°	1	2	1	1	1
90°	1	2	1	1	2
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



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**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)