

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: P30894

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

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P30894  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GC8-432A-UNV-EB81  
Description: METALUX 2' X 4' SPECIFICATION GRADE RECESSED FLUORESCENT TROFFER  
WITH HIGH REFLECTANCE WHITE INTERIOR FINISH AND ACRYLIC PRISMATIC LENS  
Light Source: (4) T8 LINEAR FLUORESCENT LAMPS  
Ballast/Driver: -  
QTP4x32T8/UNV ISN-SC

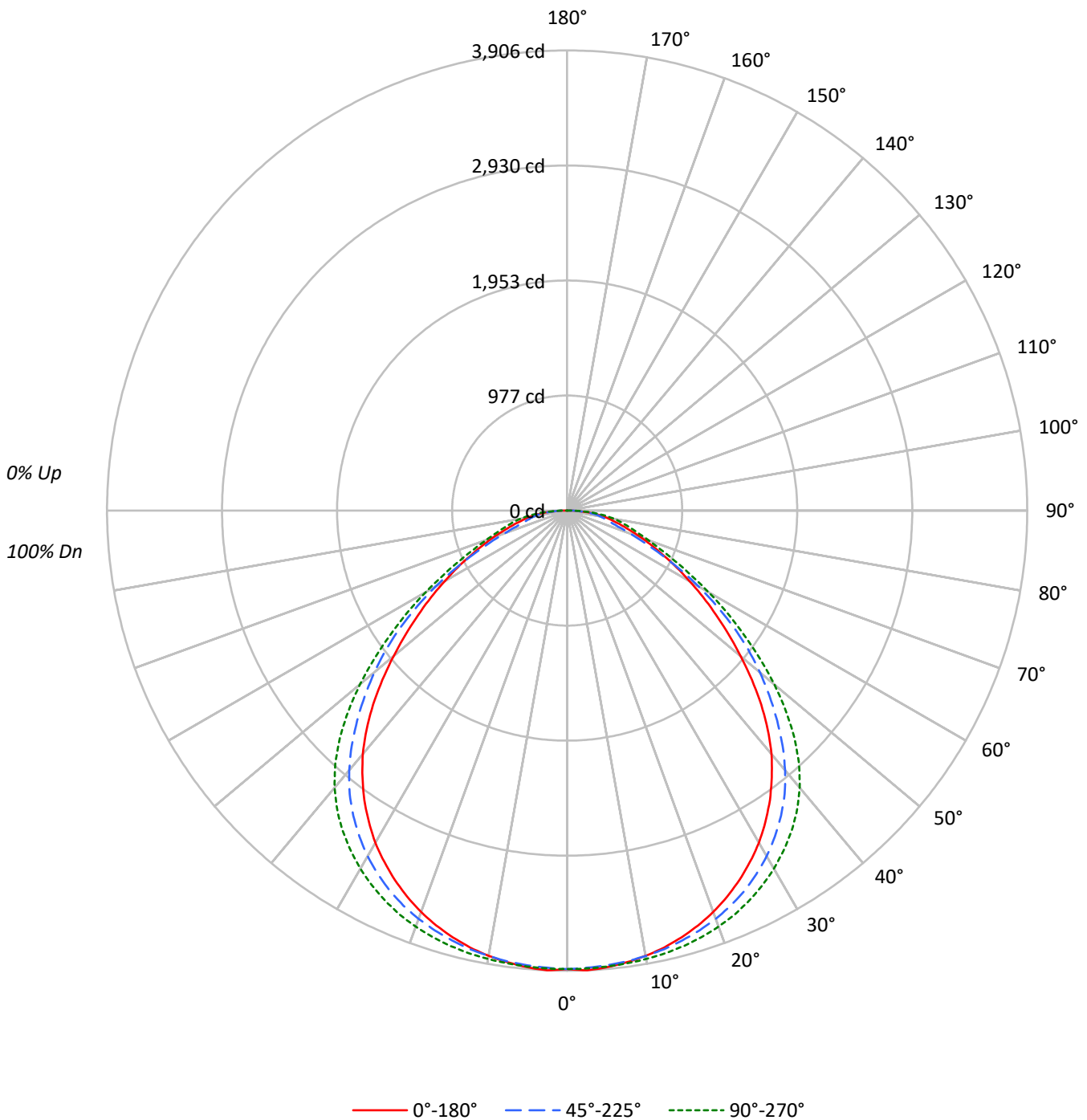
**Summary**

Lumens per Lamp: 3100 (4 lamps)  
Luminaire Lumens: 10123.8 lumens  
Efficiency: 81.6%  
Efficacy: 93.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.33 / 1.36  
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 107.9  
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: P30894

CATALOG NUMBER: 2GC8-432A-UNV-EB81

### Luminous Intensity Polar Plot





TEST NUMBER: P30894

CATALOG NUMBER: 2GC8-432A-UNV-EB81

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	97	97	97	97	95	95	95	95	91	91	91	87	87	87	83	83	83	83	83	83	83	83	82														
1	89	86	82	79	87	84	81	78	80	78	76	77	75	73	74	73	71	74	73	71	74	73	69														
2	82	75	70	66	80	74	69	65	71	67	63	68	65	62	66	63	61	66	63	61	66	63	59														
3	75	67	60	55	73	65	60	55	63	58	54	61	57	53	59	55	52	59	55	52	59	55	50														
4	69	59	53	47	67	58	52	47	56	51	46	55	50	46	53	49	45	53	49	45	53	49	43														
5	64	53	46	41	62	53	46	41	51	45	40	49	44	40	48	43	40	48	43	40	48	43	38														
6	59	48	41	36	57	47	41	36	46	40	36	45	39	35	43	39	35	43	39	35	43	39	33														
7	55	44	37	32	53	43	37	32	42	36	32	41	35	31	40	35	31	40	35	31	40	35	30														
8	51	40	33	29	50	40	33	29	38	33	28	37	32	28	36	32	28	36	32	28	36	32	27														
9	48	37	30	26	46	36	30	26	35	30	26	35	29	26	34	29	25	34	29	25	34	29	24														
10	45	34	28	23	44	34	28	23	33	27	23	32	27	23	31	27	23	31	27	23	31	27	22														

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

	0°	45°	90°
0°	6245	6245	6245
5°	6267	6241	6258
10°	6253	6255	6297
15°	6229	6274	6356
20°	6192	6296	6417
25°	6126	6305	6469
30°	6033	6277	6503
35°	5878	6198	6505
40°	5655	6028	6433
45°	5285	5718	6190
50°	4803	5332	5729
55°	4316	4823	5105
60°	3861	4133	4448
65°	3444	3330	3812
70°	3139	2641	3420
75°	2926	2343	3391
80°	3095	2652	3742
85°	3351	3222	4198



TEST NUMBER: P30894

CATALOG NUMBER: 2GC8-432A-UNV-EB81

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	369.1	3.6	3.0	0°	3892	3892	3892	3892	3892	
10°-20°	1067.7	10.5	8.6	5°	3891	3878	3875	3873	3885	370
20°-30°	1638.4	16.2	13.2	15°	3750	3750	3777	3805	3826	1058
30°-40°	1972.6	19.5	15.9	25°	3460	3488	3561	3622	3654	1593
40°-50°	1938.4	19.1	15.6	35°	3001	3050	3164	3268	3321	1872
50°-60°	1515.8	15.0	12.2	45°	2329	2388	2520	2651	2728	1790
60°-70°	915.9	9.0	7.4	55°	1543	1596	1724	1782	1825	1385
70°-80°	495.7	4.9	4.0	65°	907	847	877	951	1004	908
80°-90°	205.5	2.0	1.7	75°	472	433	378	519	547	511
90°-100°	4.8	0.0	0.0	85°	182	170	175	223	228	180
100°-110°	0.0	0.0	0.0	90°	15	28	32	49	48	17
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°	3075.2	30.4	24.8	165°	0	0	0	0	0	0
0°-40°	5047.8	49.9	40.7	175°	0	0	0	0	0	0
0°-60°	8502.0	84.0	68.6	180°	0	0	0	0	0	0
0°-90°	10119.0	100.0	81.6							
90°-120°	4.8	0.0	0.0							
90°-150°	4.8	0.0	0.0							
90°-180°	5.0	0.0	0.0							
0°-180°	10123.8	100.0	81.6							



TEST NUMBER: P30894

CATALOG NUMBER: 2GC8-432A-UNV-EB81

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3892	3892	3892	3892	3892
2.5°	3906	3890	3884	3881	3891
5°	3891	3878	3875	3873	3885
7.5°	3868	3858	3860	3863	3877
10°	3838	3830	3839	3849	3865
12.5°	3800	3795	3813	3831	3849
15°	3750	3750	3777	3805	3826
17.5°	3693	3698	3736	3772	3797
20°	3626	3637	3687	3731	3758
22.5°	3549	3569	3630	3683	3713
25°	3460	3488	3561	3622	3654
27.5°	3362	3395	3479	3548	3588
30°	3256	3293	3388	3466	3510
32.5°	3133	3180	3282	3373	3420
35°	3001	3050	3164	3268	3321
37.5°	2854	2911	3033	3146	3206
40°	2700	2750	2878	3003	3071
42.5°	2521	2576	2707	2837	2912
45°	2329	2388	2520	2651	2728
47.5°	2127	2195	2329	2447	2520
50°	1924	2000	2136	2231	2295
52.5°	1728	1800	1936	2012	2061
55°	1543	1596	1724	1782	1825
57.5°	1369	1393	1505	1554	1607
60°	1203	1195	1288	1332	1386
62.5°	1049	1011	1074	1128	1184
65°	907	847	877	951	1004
67.5°	780	708	706	808	853
70°	669	595	563	694	729
72.5°	563	507	454	601	629
75°	472	433	378	519	547
77.5°	399	366	328	444	476
80°	335	301	287	373	405
82.5°	265	238	238	303	323
85°	182	170	175	223	228
87.5°	95	100	96	129	130
90°	15	28	32	49	48
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: P30894

CATALOG NUMBER: 2GC8-432A-UNV-EB81

**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)