

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: P30174

Luminaire Tested: **2GR8-332A-UNV-EB81**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P30174  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GR8-332A-UNV-EB81  
Description: METALUX 2' X 4' COMMERCIAL TROFFER WITH ACRYLIC PRISMATIC LENS  
Light Source: (3) DOUBLE ENDED BIPIN T8 LINEAR FLUORESCENT LAMPS  
Ballast/Driver: -  
GE332MAX-N/ULTRA

**Summary**

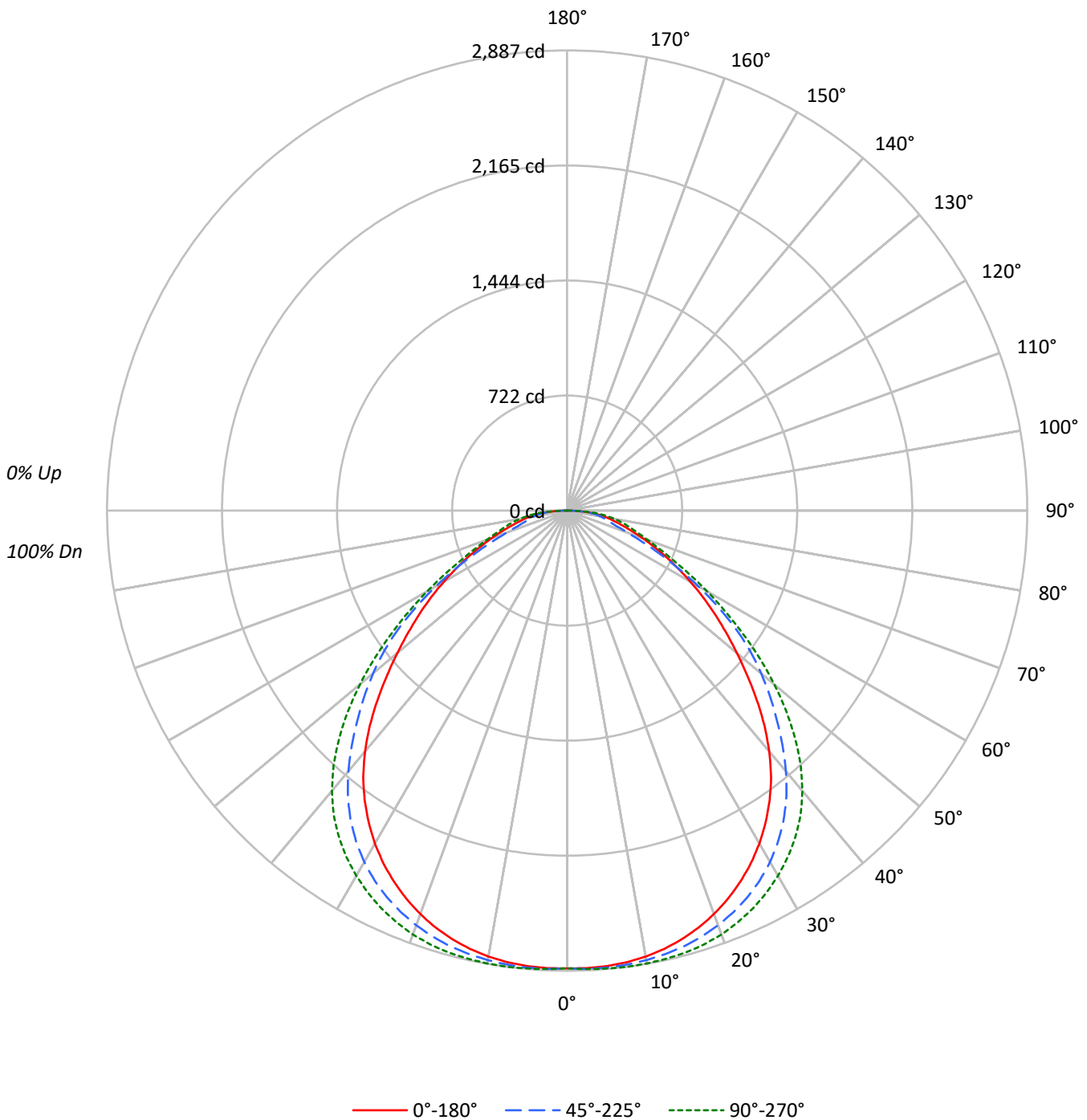
Lumens per Lamp: 3100 (3 lamps)  
Luminaire Lumens: 7514.5 lumens  
Efficiency: 80.8%  
Efficacy: 92.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.35 / 1.37  
Luminous Opening: Rectangular (W 1.79' x L: 3.79' x H: 0')  
CIE Type: Direct

Input Watts (W): 81.7  
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: P30174

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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	50	30	10	0	
RCR																						
0	96	96	96	96	94	94	94	94	90	90	90	86	86	86	82	82	82	81				81
1	88	85	82	79	86	83	80	77	80	77	75	76	74	73	74	72	70	69				69
2	81	75	69	65	79	73	68	64	70	66	63	68	64	61	65	63	60	58				58
3	74	66	60	55	72	65	59	54	63	58	53	60	56	53	58	55	52	50				50
4	68	59	52	47	66	58	52	47	56	50	46	54	49	45	52	48	45	43				43
5	63	53	46	41	61	52	46	41	50	45	40	49	44	40	47	43	39	38				38
6	58	48	41	36	57	47	41	36	46	40	35	44	39	35	43	38	35	33				33
7	54	44	37	32	53	43	36	32	42	36	31	40	35	31	39	35	31	29				29
8	50	40	33	28	49	39	33	28	38	32	28	37	32	28	36	31	28	26				26
9	47	37	30	26	46	36	30	26	35	29	26	34	29	25	33	29	25	24				24
10	44	34	28	23	43	33	27	23	33	27	23	32	27	23	31	26	23	22				22

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

	0°	45°	90°
0°	4551	4551	4551
5°	4563	4578	4587
10°	4571	4608	4642
15°	4567	4642	4709
20°	4542	4667	4772
25°	4493	4678	4816
30°	4413	4658	4841
35°	4284	4582	4832
40°	4079	4418	4749
45°	3773	4172	4535
50°	3426	3919	4186
55°	3124	3564	3715
60°	2830	3010	3213
65°	2549	2388	2744
70°	2316	1862	2478
75°	2179	1684	2492
80°	2318	1953	2774
85°	2563	2382	3181



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	274.1	3.6	2.9	0°	2872	2872	2872	2872	2872	
10°-20°	798.7	10.6	8.6	5°	2869	2872	2878	2880	2884	273
20°-30°	1228.9	16.4	13.2	15°	2784	2799	2830	2856	2871	785
30°-40°	1472.3	19.6	15.8	25°	2570	2606	2676	2730	2755	1183
40°-50°	1430.5	19.0	15.4	35°	2215	2265	2369	2456	2498	1381
50°-60°	1122.9	14.9	12.1	45°	1684	1747	1862	1967	2024	1297
60°-70°	672.3	8.9	7.2	55°	1131	1187	1290	1321	1345	1014
70°-80°	364.4	4.8	3.9	65°	680	634	637	686	732	679
80°-90°	150.4	2.0	1.6	75°	356	322	275	376	407	385
90°-100°	0.0	0.0	0.0	85°	141	127	131	169	175	148
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	2301.7	30.6	24.7							
0°-40°	3774.0	50.2	40.6							
0°-60°	6327.4	84.2	68.0							
0°-90°	7514.5	100.0	80.8							
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°	7514.5	100.0	80.8							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2872	2872	2872	2872	2872
2.5°	2873	2875	2878	2877	2879
5°	2869	2872	2878	2880	2884
7.5°	2858	2863	2873	2880	2887
10°	2841	2849	2864	2876	2885
12.5°	2816	2827	2849	2869	2879
15°	2784	2799	2830	2856	2871
17.5°	2743	2762	2803	2836	2854
20°	2694	2718	2768	2809	2830
22.5°	2636	2666	2727	2774	2796
25°	2570	2606	2676	2730	2755
27.5°	2496	2536	2616	2676	2705
30°	2412	2456	2546	2614	2646
32.5°	2318	2366	2463	2540	2577
35°	2215	2265	2369	2456	2498
37.5°	2102	2151	2260	2357	2406
40°	1972	2023	2136	2240	2296
42.5°	1833	1887	2001	2109	2169
45°	1684	1747	1862	1967	2024
47.5°	1534	1607	1726	1818	1866
50°	1390	1470	1590	1663	1698
52.5°	1256	1331	1448	1498	1522
55°	1131	1187	1290	1321	1345
57.5°	1011	1041	1121	1144	1175
60°	893	895	950	975	1014
62.5°	783	757	786	820	865
65°	680	634	637	686	732
67.5°	585	528	506	580	623
70°	500	444	402	500	535
72.5°	423	377	325	434	465
75°	356	322	275	376	407
77.5°	302	271	242	322	356
80°	254	222	214	271	304
82.5°	201	174	179	222	244
85°	141	127	131	169	175
87.5°	76	76	74	98	97
90°	0	0	0	0	0

(END OF REPORT)