

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: P30832

Luminaire Tested: **2GR8-432A-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30832
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR8-432A-UNV-EB81
Description: METALUX 2' X 4' COMMERCIAL TROFFER WITH ACRYLIC PRISMATIC LENS
Light Source: (4) DOUBLE BIPIN T8 LINEAR FLUORESCENT LAMPS 5000K
Ballast/Driver: -
GE432MAX-N/ULTRA

Summary

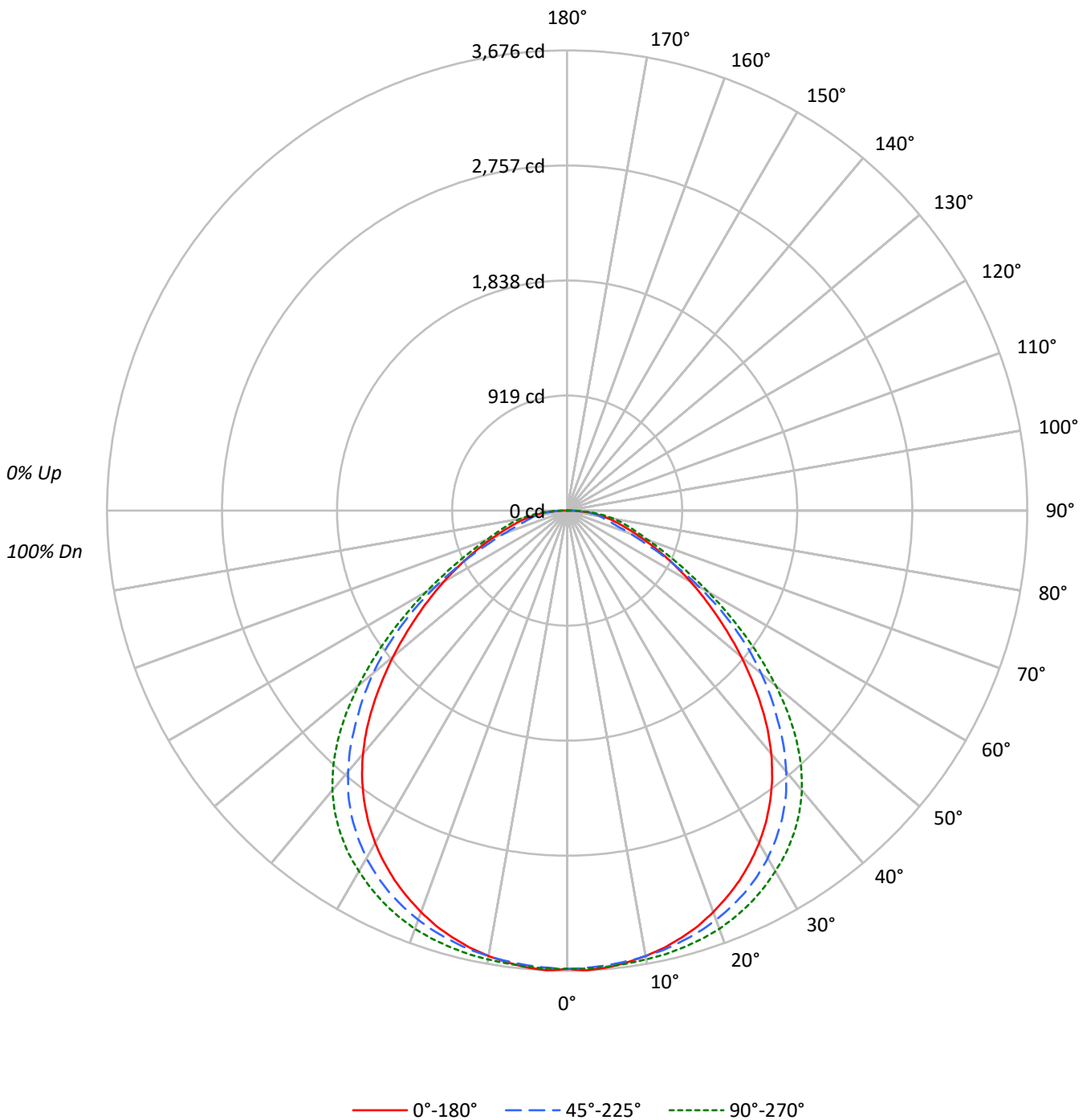
Lumens per Lamp: 3100 (4 lamps)
Luminaire Lumens: 9565.7 lumens
Efficiency: 77.1%
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.34 / 1.37
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 109.7
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

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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	92	92	92	92	90	90	90	90	86	86	86	82	82	82	79	79	79	77				
1	84	81	78	75	82	79	76	74	76	74	71	73	71	69	70	69	67	66				
2	77	71	66	62	75	70	65	61	67	63	60	65	61	59	62	60	57	56				
3	71	63	57	52	69	62	56	52	60	55	51	57	53	50	56	52	49	48				
4	65	56	50	45	63	55	49	44	53	48	44	52	47	43	50	46	43	41				
5	60	50	44	39	58	50	43	39	48	42	38	46	42	38	45	41	37	36				
6	56	46	39	34	54	45	39	34	43	38	34	42	37	33	41	37	33	32				
7	52	41	35	30	50	41	35	30	40	34	30	39	33	30	37	33	30	28				
8	48	38	31	27	47	37	31	27	36	31	27	35	30	27	34	30	27	25				
9	45	35	29	24	44	34	28	24	33	28	24	33	28	24	32	27	24	23				
10	42	32	26	22	41	32	26	22	31	26	22	30	25	22	30	25	22	21				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5876	5876	5876
5°	5902	5874	5890
10°	5887	5888	5931
15°	5866	5914	5997
20°	5828	5942	6070
25°	5772	5958	6127
30°	5682	5940	6164
35°	5541	5872	6180
40°	5316	5704	6112
45°	4965	5407	5879
50°	4533	5050	5432
55°	4076	4560	4837
60°	3652	3889	4185
65°	3261	3140	3607
70°	2937	2486	3223
75°	2771	2226	3205
80°	2901	2513	3511
85°	3167	3075	3940



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	347.4	3.6	2.8	0°	3662	3662	3662	3662	3662	
10°-20°	1006.6	10.5	8.1	5°	3664	3649	3647	3646	3657	348
20°-30°	1548.1	16.2	12.5	15°	3531	3532	3560	3589	3610	996
30°-40°	1867.0	19.5	15.1	25°	3260	3289	3365	3430	3461	1501
40°-50°	1834.5	19.2	14.8	35°	2829	2881	2998	3102	3155	1765
50°-60°	1431.8	15.0	11.5	45°	2188	2252	2383	2518	2591	1683
60°-70°	863.6	9.0	7.0	55°	1457	1507	1630	1680	1729	1308
70°-80°	467.5	4.9	3.8	65°	859	798	827	902	950	858
80°-90°	194.6	2.0	1.6	75°	447	409	359	492	517	482
90°-100°	4.7	0.0	0.0	85°	172	161	167	211	214	169
100°-110°	0.0	0.0	0.0	90°	14	25	33	48	47	16
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°	2902.1	30.3	23.4	165°	0	0	0	0	0	0
0°-40°	4769.2	49.9	38.5	175°	0	0	0	0	0	0
0°-60°	8035.4	84.0	64.8	180°	0	0	0	0	0	0
0°-90°	9561.0	100.0	77.1							
90°-120°	4.7	0.0	0.0							
90°-150°	4.7	0.0	0.0							
90°-180°	5.0	0.1	0.0							
0°-180°	9565.7	100.0	77.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3662	3662	3662	3662	3662
2.5°	3676	3661	3655	3651	3661
5°	3664	3649	3647	3646	3657
7.5°	3642	3630	3632	3638	3650
10°	3613	3605	3614	3625	3640
12.5°	3578	3574	3592	3611	3630
15°	3531	3532	3560	3589	3610
17.5°	3479	3484	3524	3562	3587
20°	3413	3429	3480	3528	3555
22.5°	3340	3363	3425	3483	3513
25°	3260	3289	3365	3430	3461
27.5°	3168	3204	3290	3364	3399
30°	3067	3108	3206	3288	3327
32.5°	2954	3001	3106	3201	3249
35°	2829	2881	2998	3102	3155
37.5°	2691	2745	2870	2986	3046
40°	2538	2595	2723	2851	2918
42.5°	2371	2429	2563	2696	2767
45°	2188	2252	2383	2518	2591
47.5°	1999	2073	2208	2324	2392
50°	1816	1887	2023	2115	2176
52.5°	1632	1700	1832	1901	1954
55°	1457	1507	1630	1680	1729
57.5°	1293	1315	1422	1464	1510
60°	1138	1127	1212	1256	1304
62.5°	992	952	1013	1062	1110
65°	859	798	827	902	950
67.5°	737	665	664	764	805
70°	626	558	530	656	687
72.5°	532	474	426	566	593
75°	447	409	359	492	517
77.5°	378	345	309	420	450
80°	314	284	272	352	380
82.5°	247	224	226	287	303
85°	172	161	167	211	214
87.5°	90	93	93	124	128
90°	14	25	33	48	47
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)