

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: p30846

Luminaire Tested: **2GR8-332PB1S-UNV-EB81**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: p30846  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GR8-332PB1S-UNV-EB81  
Description: METALUX 2' X 4' COMMERCIAL TROFFER WITH SILVER PARABOLIC  
PB1S, 1/2 X 1/2 X 1/2 SILVER PARABOLIC LOUVER, SHIELDING MEDIA  
Light Source: (3) DOUBLE BIPIN T8 LINEAR FLUORESCENT LAMPS  
Ballast/Driver: -  
GE332MAX-N/ULTRA

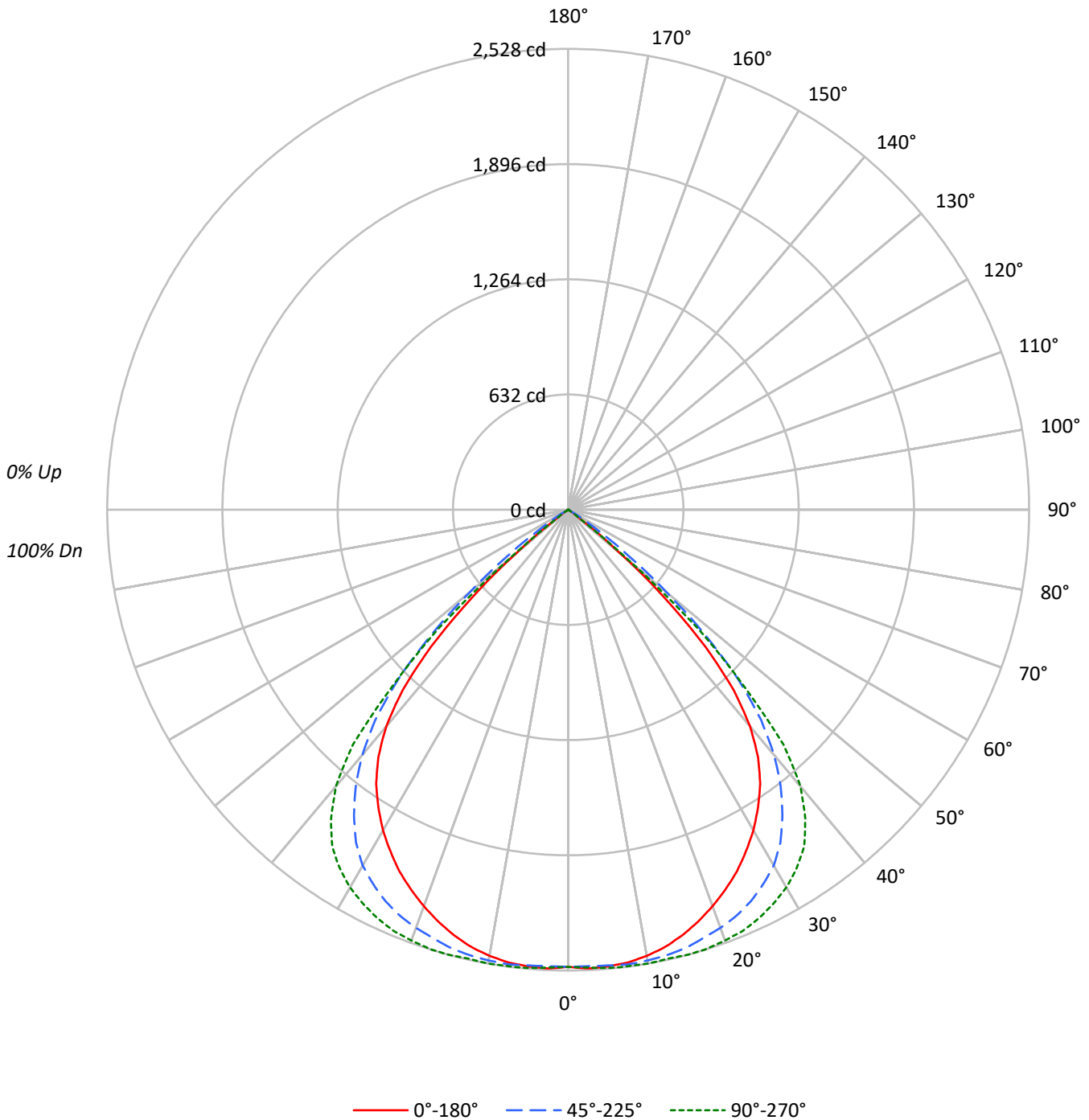
**Summary**

Lumens per Lamp: 3100 (3 lamps)  
Luminaire Lumens: 4377.6 lumens  
Efficiency: 47.1%  
Efficacy: 52.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.39 / 1.3  
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 83.2  
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	56	56	56	56	55	55	55	55	52	52	52		50	50	50		48	48	48	47
1	53	52	50	49	52	50	49	48	49	48	47		47	46	45		45	45	44	43
2	50	47	45	43	49	46	44	43	45	43	42		43	42	41		42	41	40	39
3	47	43	40	38	46	42	40	38	41	39	37		40	38	37		39	37	36	35
4	44	39	36	34	43	39	36	34	38	35	33		37	35	33		36	34	33	32
5	41	36	33	31	40	36	33	30	35	32	30		34	32	30		33	31	30	29
6	38	33	30	28	37	33	30	27	32	29	27		31	29	27		31	29	27	26
7	36	31	27	25	35	30	27	25	30	27	25		29	26	25		28	26	24	24
8	34	28	25	23	33	28	25	23	27	25	23		27	24	22		26	24	22	22
9	32	26	23	21	31	26	23	21	25	23	21		25	22	21		25	22	20	20
10	30	24	21	19	29	24	21	19	24	21	19		23	21	19		23	21	19	18

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

	0°	45°	90°
0°	4024	4024	4024
5°	4051	4043	4065
10°	4049	4091	4119
15°	4015	4135	4199
20°	3953	4168	4293
25°	3875	4196	4378
30°	3763	4176	4434
35°	3596	4012	4419
40°	3251	3678	4149
45°	2417	3007	3050
50°	946	1757	1133
55°	45	604	25
60°	16	55	10
65°	11	11	8
70°	14	9	5
75°	19	12	6
80°	18	9	9
85°	37	18	18



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	239.8	5.5	2.6	0°	2508	2508	2508	2508	2508	
10°-20°	700.8	16.0	7.5	5°	2515	2507	2510	2517	2524	239
20°-30°	1083.6	24.8	11.7	15°	2417	2446	2489	2517	2528	681
30°-40°	1272.0	29.1	13.7	25°	2189	2254	2370	2467	2473	1006
40°-50°	936.8	21.4	10.1	35°	1836	1928	2048	2195	2256	1137
50°-60°	137.9	3.2	1.5	45°	1065	1166	1325	1375	1344	781
60°-70°	3.4	0.1	0.0	55°	16	56	216	38	9	70
70°-80°	2.0	0.0	0.0	65°	3	3	3	3	2	3
80°-90°	1.2	0.0	0.0	75°	3	2	2	2	1	3
90°-100°	0.1	0.0	0.0	85°	2	1	1	1	1	1
100°-110°	0.0	0.0	0.0	90°	0	1	1	0	1	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°	2024.1	46.2	21.8	165°	0	0	0	0	0	0
0°-40°	3296.1	75.3	35.4	175°	0	0	0	0	0	0
0°-60°	4370.8	99.8	47.0	180°	0	0	0	0	0	0
0°-90°	4377.5	100.0	47.1							
90°-120°	0.1	0.0	0.0							
90°-150°	0.1	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	4377.6	100.0	47.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2508	2508	2508	2508	2508
2.5°	2519	2508	2506	2508	2514
5°	2515	2507	2510	2517	2524
7.5°	2505	2504	2516	2519	2526
10°	2485	2495	2511	2520	2528
12.5°	2457	2476	2503	2517	2523
15°	2417	2446	2489	2517	2528
17.5°	2369	2404	2464	2516	2526
20°	2315	2359	2441	2505	2514
22.5°	2254	2310	2411	2489	2501
25°	2189	2254	2370	2467	2473
27.5°	2112	2189	2316	2422	2437
30°	2031	2116	2254	2368	2393
32.5°	1937	2032	2165	2293	2332
35°	1836	1928	2048	2195	2256
37.5°	1709	1799	1915	2063	2136
40°	1552	1642	1756	1889	1981
42.5°	1344	1438	1565	1674	1748
45°	1065	1166	1325	1375	1344
47.5°	725	832	1026	982	969
50°	379	500	704	609	454
52.5°	112	220	427	244	79
55°	16	56	216	38	9
57.5°	6	8	80	6	5
60°	5	5	17	4	3
62.5°	4	4	4	3	3
65°	3	3	3	3	2
67.5°	3	3	3	2	2
70°	3	3	2	2	1
72.5°	3	3	2	2	1
75°	3	2	2	2	1
77.5°	2	2	2	1	1
80°	2	2	1	1	1
82.5°	2	2	1	1	1
85°	2	1	1	1	1
87.5°	1	1	1	1	1
90°	0	1	1	0	1
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)