

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: 163P115

Luminaire Tested: **GC2048-432A**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 163P115  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: GC2048-432A  
Description: 20 X 48 Recessed Convertible Body Luminaire with a  
.095 pattern 12 acrylic lens.  
Light Source: Four - FO32/35K - 2800 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B432I120RH Electronic - L.O.B.F. = 89.5%

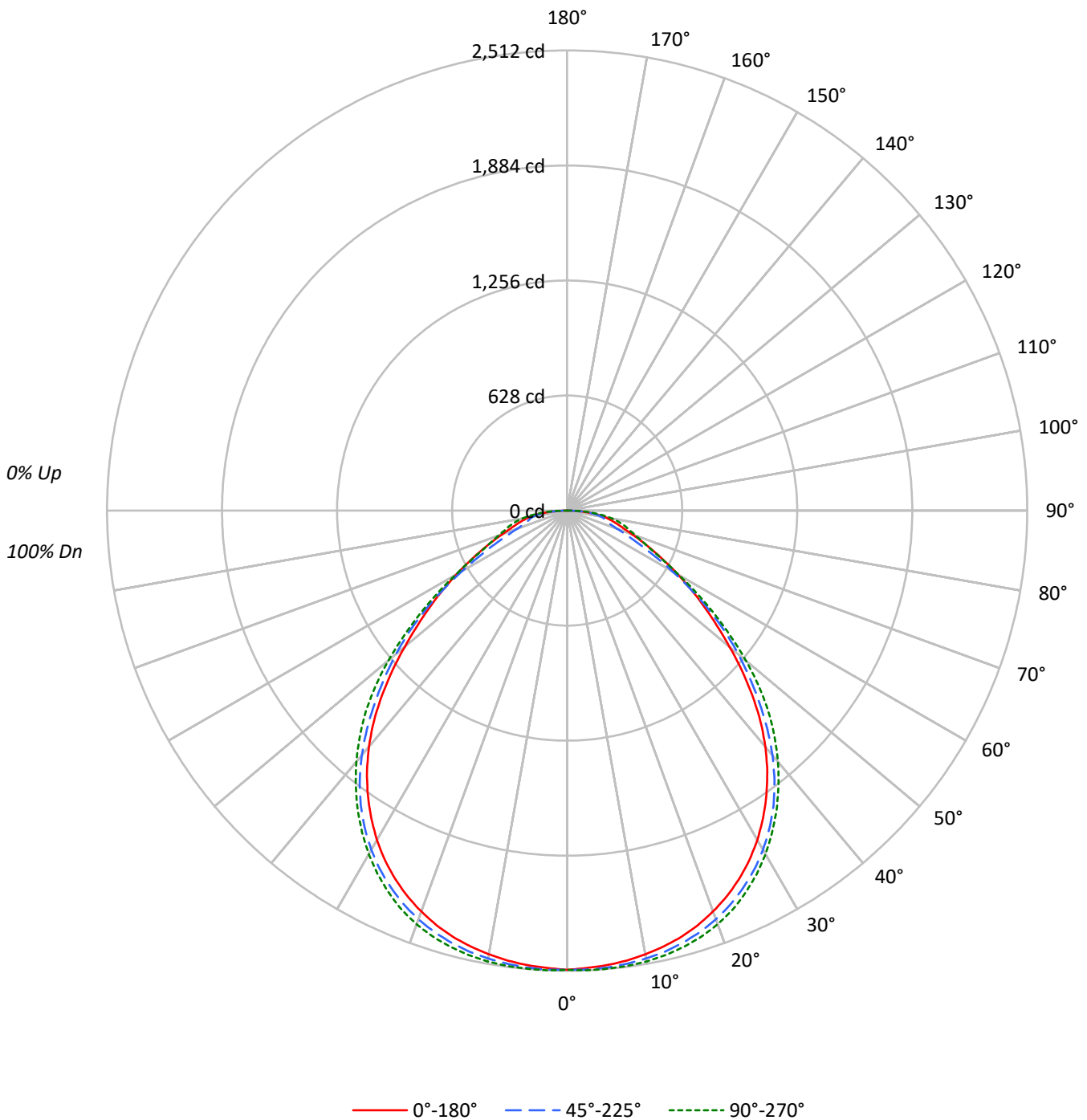
**Summary**

Lumens per Lamp: 2800 (3 lamps)  
Luminaire Lumens: 6067.2 lumens  
Efficiency: 72.2%  
Efficacy: 55.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.32  
Luminous Opening: Rectangular (W 1.46' x L: 3.81' x H: 0')  
CIE Type: Direct

Input Watts (W): 109.1  
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	86	86	86	86	84	84	84	84	80	80	80	77	77	77	74	74	74	72				
1	79	76	73	71	77	74	72	69	71	69	67	68	67	65	66	65	63	62				
2	73	67	63	59	71	66	62	58	63	60	57	61	58	55	59	56	54	53				
3	67	60	54	50	65	59	53	49	56	52	49	54	51	48	53	50	47	45				
4	61	53	47	43	60	52	47	43	51	46	42	49	45	41	47	44	41	39				
5	57	48	42	37	55	47	42	37	46	41	37	44	40	36	43	39	36	35				
6	53	44	37	33	51	43	37	33	42	36	33	40	36	32	39	35	32	31				
7	49	40	34	29	48	39	33	29	38	33	29	37	32	29	36	32	29	27				
8	46	36	30	26	45	36	30	26	35	30	26	34	29	26	33	29	26	25				
9	43	33	28	24	42	33	28	24	32	27	24	31	27	24	31	27	23	22				
10	40	31	25	22	39	31	25	22	30	25	22	29	25	21	29	24	21	20				

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

	0°	45°	90°
0°	4854	4854	4854
5°	4841	4866	4880
10°	4836	4881	4913
15°	4828	4895	4941
20°	4798	4891	4951
25°	4742	4856	4920
30°	4641	4780	4842
35°	4483	4642	4710
40°	4253	4408	4524
45°	3918	4066	4258
50°	3485	3675	3837
55°	3075	3190	3301
60°	2703	2571	2730
65°	2368	1997	2332
70°	2128	1636	2242
75°	2109	1668	2439
80°	2352	2096	2776
85°	2555	2421	3021



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	238.1	3.9	2.8	0°	2507	2507	2507	2507	2507	
10°-20°	688.3	11.3	8.2	5°	2491	2494	2504	2507	2511	237
20°-30°	1043.1	17.2	12.4	15°	2409	2418	2442	2457	2465	679
30°-40°	1217.9	20.1	14.5	25°	2220	2239	2273	2295	2303	1021
40°-50°	1142.0	18.8	13.6	35°	1897	1922	1964	1984	1993	1183
50°-60°	839.4	13.8	10.0	45°	1431	1451	1485	1514	1555	1100
60°-70°	486.7	8.0	5.8	55°	911	903	945	961	978	818
70°-80°	289.0	4.8	3.4	65°	517	465	436	502	509	518
80°-90°	122.7	2.0	1.5	75°	282	261	223	296	326	302
90°-100°	0.0	0.0	0.0	85°	115	109	109	128	136	113
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	8
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°	1969.5	32.5	23.4	165°	0	0	0	0	0	0
0°-40°	3187.4	52.5	37.9	175°	0	0	0	0	0	0
0°-60°	5168.8	85.2	61.5	180°	0	0	0	0	0	0
0°-90°	6067.2	100.0	72.2							
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°	6067.2	100.0	72.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2507	2507	2507	2507	2507
2.5°	2499	2501	2508	2509	2512
5°	2491	2494	2504	2507	2511
7.5°	2478	2483	2496	2501	2507
10°	2460	2467	2483	2492	2499
12.5°	2437	2445	2466	2478	2485
15°	2409	2418	2442	2457	2465
17.5°	2373	2385	2412	2430	2439
20°	2329	2344	2374	2395	2403
22.5°	2279	2296	2328	2350	2359
25°	2220	2239	2273	2295	2303
27.5°	2153	2174	2211	2231	2239
30°	2076	2099	2138	2158	2166
32.5°	1991	2015	2056	2076	2083
35°	1897	1922	1964	1984	1993
37.5°	1795	1819	1860	1882	1896
40°	1683	1706	1744	1769	1790
42.5°	1563	1581	1618	1646	1677
45°	1431	1451	1485	1514	1555
47.5°	1294	1312	1352	1379	1420
50°	1157	1172	1220	1240	1274
52.5°	1028	1038	1086	1098	1124
55°	911	903	945	961	978
57.5°	800	772	801	827	837
60°	698	652	664	699	705
62.5°	602	549	540	589	595
65°	517	465	436	502	509
67.5°	441	398	352	435	445
70°	376	343	289	382	396
72.5°	322	299	246	338	358
75°	282	261	223	296	326
77.5°	248	225	208	257	291
80°	211	189	188	218	249
82.5°	165	150	155	177	197
85°	115	109	109	128	136
87.5°	58	61	58	72	72
90°	0	0	0	0	0
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)