

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: 160P112

Luminaire Tested: **GCASF-232A**

Issue Date: 3/3/2020



**Test Information**

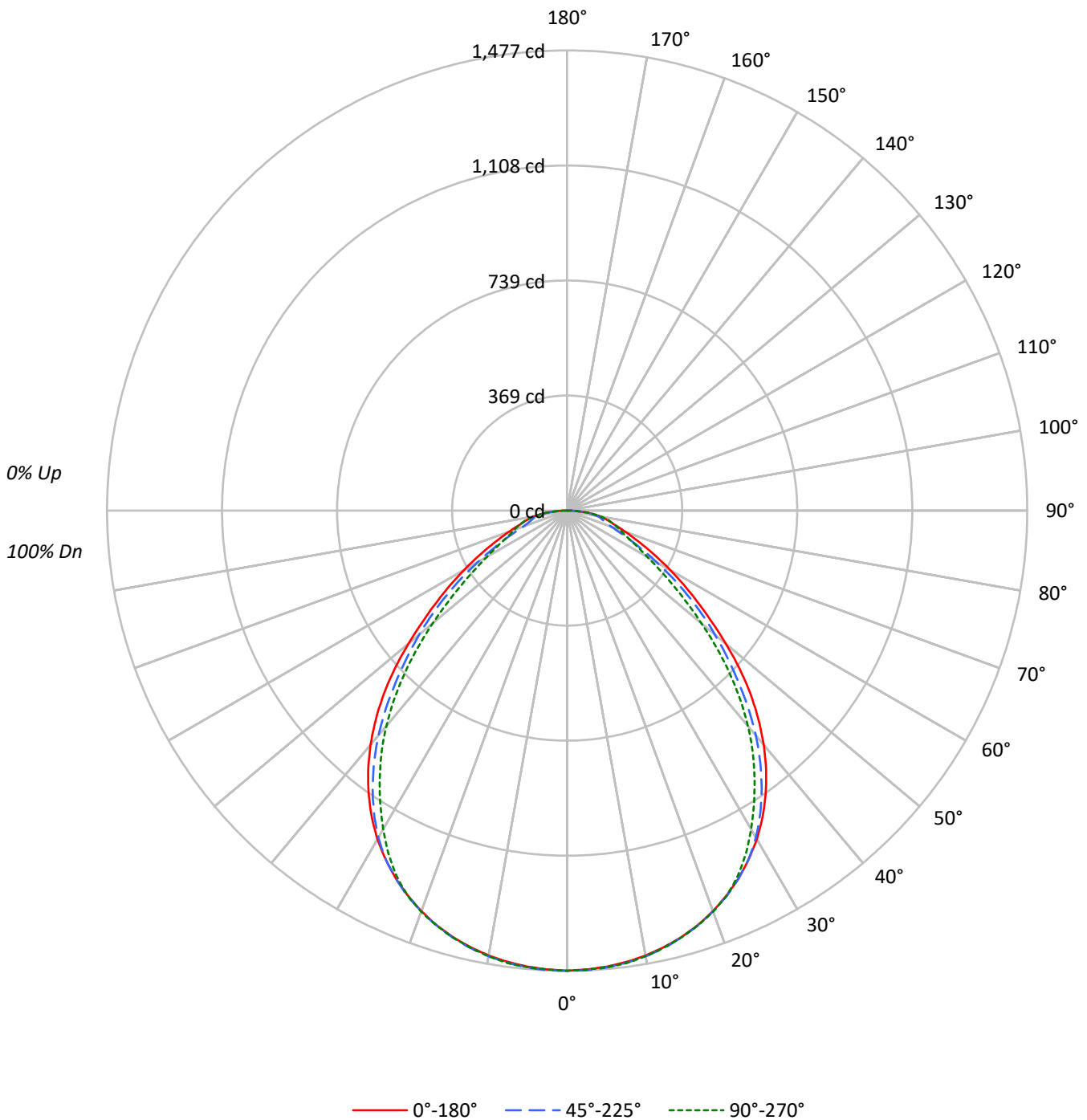
Test Method: LM-41-14  
Report Number: 160P112  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: GCASF-232A  
Description: 1 X 4 Recessed Air Supply Convertible Body  
Luminaire with a .095 pattern 12 acrylic lens.  
Light Source: Two - FO32/735 - 2800 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 87.16%

**Summary**

Lumens per Lamp: 2800 (2 lamps)  
Luminaire Lumens: 3272.6 lumens  
Efficiency: 58.4%  
Efficacy: 58.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.26  
Luminous Opening: Rectangular (W 0.69' x L: 3.7' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 56.4  
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	70	70	70	70	68	68	68	68	65	65	65	62	62	62	60	60	60	58
1	64	62	60	57	63	60	58	57	58	56	55	56	54	53	54	53	52	50
2	59	55	51	48	58	54	50	48	52	49	47	50	48	45	48	46	45	43
3	54	49	45	41	53	48	44	41	46	43	40	45	42	39	43	41	39	38
4	50	44	39	36	49	43	39	35	42	38	35	40	37	34	39	36	34	33
5	47	40	35	31	45	39	34	31	38	34	31	37	33	30	36	33	30	29
6	43	36	31	28	42	35	31	28	34	30	27	33	30	27	33	29	27	26
7	40	33	28	25	39	32	28	25	32	27	24	31	27	24	30	27	24	23
8	38	30	25	22	37	30	25	22	29	25	22	28	25	22	28	24	22	21
9	35	28	23	20	34	27	23	20	27	23	20	26	23	20	26	22	20	19
10	33	26	21	18	32	25	21	18	25	21	18	24	21	18	24	21	18	17

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

	0°	45°	90°
0°	6253	6253	6253
5°	6243	6256	6252
10°	6234	6247	6242
15°	6211	6220	6215
20°	6164	6168	6173
25°	6082	6087	6050
30°	5955	5925	5774
35°	5742	5629	5422
40°	5428	5206	4991
45°	4982	4652	4413
50°	4380	4077	3708
55°	3765	3469	3026
60°	3235	2811	2523
65°	2765	2224	2234
70°	2451	1857	2228
75°	2372	1947	2437
80°	2609	2341	2658
85°	2720	2526	2720



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	139.8	4.3	2.5	0°	1477	1477	1477	1477	1477	
10°-20°	400.0	12.2	7.1	5°	1469	1469	1472	1473	1471	140
20°-30°	597.5	18.3	10.7	15°	1417	1417	1419	1420	1418	400
30°-40°	674.8	20.6	12.1	25°	1302	1300	1303	1301	1295	599
40°-50°	600.2	18.3	10.7	35°	1111	1109	1089	1055	1049	692
50°-60°	420.1	12.8	7.5	45°	832	813	777	745	737	638
60°-70°	241.6	7.4	4.3	55°	510	504	470	433	410	460
70°-80°	141.0	4.3	2.5	65°	276	258	222	224	223	278
80°-90°	57.5	1.8	1.0	75°	145	131	119	132	149	156
90°-100°	0.0	0.0	0.0	85°	56	55	52	57	56	56
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	4
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°	1137.3	34.8	20.3	165°	0	0	0	0	0	0
0°-40°	1812.1	55.4	32.4	175°	0	0	0	0	0	0
0°-60°	2832.5	86.6	50.6	180°	0	0	0	0	0	0
0°-90°	3272.6	100.0	58.4							
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°	3272.6	100.0	58.4							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1477	1477	1477	1477	1477
2.5°	1474	1474	1477	1477	1474
5°	1469	1469	1472	1473	1471
7.5°	1461	1461	1464	1466	1465
10°	1450	1450	1453	1454	1452
12.5°	1435	1435	1438	1439	1437
15°	1417	1417	1419	1420	1418
17.5°	1395	1393	1396	1398	1396
20°	1368	1366	1369	1372	1370
22.5°	1337	1335	1339	1341	1338
25°	1302	1300	1303	1301	1295
27.5°	1262	1261	1262	1251	1242
30°	1218	1217	1212	1192	1181
32.5°	1167	1167	1154	1126	1116
35°	1111	1109	1089	1055	1049
37.5°	1049	1043	1018	983	979
40°	982	971	942	906	903
42.5°	909	894	861	827	822
45°	832	813	777	745	737
47.5°	750	731	696	663	649
50°	665	651	619	583	563
52.5°	583	576	544	507	483
55°	510	504	470	433	410
57.5°	444	435	399	368	349
60°	382	370	332	311	298
62.5°	326	310	273	263	256
65°	276	258	222	224	223
67.5°	234	213	180	193	198
70°	198	178	150	169	180
72.5°	168	151	130	150	165
75°	145	131	119	132	149
77.5°	127	114	110	115	130
80°	107	96	96	100	109
82.5°	84	78	76	81	84
85°	56	55	52	57	56
87.5°	27	28	24	28	25
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)