

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: 160P113

Luminaire Tested: **GC-232A**

Issue Date: 3/3/2020



**Test Information**

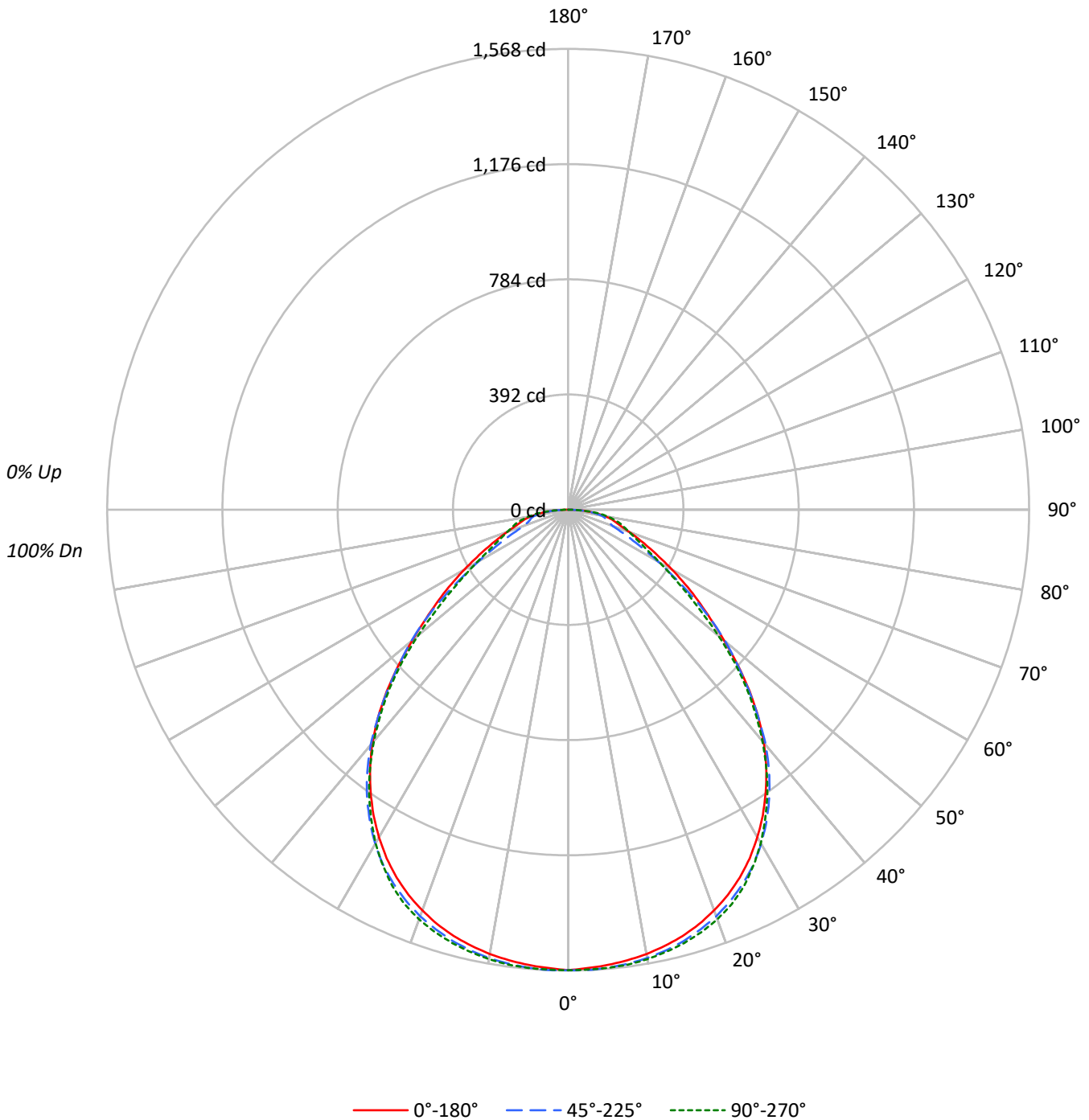
Test Method: LM-41-14  
Report Number: 160P113  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: GC-232A  
Description: 1 X 4 Recessed Convertible Body Luminaire with a  
.095 pattern 12 acrylic lens.  
Light Source: Two - FO32/735 - 2800 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Motorola M2-RN-T8-1LL-120 Electronic - L.O.B.F. = 84.73%

**Summary**

Lumens per Lamp: 2800 (2 lamps)  
Luminaire Lumens: 3591.4 lumens  
Efficiency: 64.1%  
Efficacy: 65.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.28  
Luminous Opening: Rectangular (W 0.79' x L: 3.8' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 54.6  
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	76	76	76	76	75	75	75	75	71	71	71	68	68	68	65	65	65	64
1	70	68	65	63	69	66	64	62	63	62	60	61	59	58	59	57	56	55
2	65	60	56	53	63	59	55	52	56	53	51	54	52	50	53	50	49	47
3	60	53	49	45	58	52	48	44	51	47	44	49	46	43	47	44	42	41
4	55	48	43	39	54	47	42	38	45	41	38	44	40	37	43	40	37	36
5	51	43	38	34	50	42	37	34	41	37	33	40	36	33	39	35	33	31
6	47	39	34	30	46	39	34	30	37	33	30	36	32	29	35	32	29	28
7	44	36	30	27	43	35	30	27	34	30	26	33	29	26	33	29	26	25
8	41	33	28	24	40	32	27	24	32	27	24	31	27	24	30	26	24	22
9	38	30	25	22	38	30	25	22	29	25	22	28	24	22	28	24	21	20
10	36	28	23	20	35	28	23	20	27	23	20	26	23	20	26	22	20	19

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

	0°	45°	90°
0°	5640	5640	5640
5°	5619	5651	5655
10°	5611	5662	5676
15°	5597	5661	5687
20°	5558	5639	5681
25°	5485	5580	5616
30°	5349	5457	5445
35°	5150	5242	5190
40°	4868	4910	4830
45°	4439	4419	4368
50°	3875	3909	3735
55°	3376	3238	3069
60°	2930	2527	2577
65°	2555	2002	2317
70°	2315	1694	2315
75°	2350	1878	2559
80°	2633	2384	2881
85°	2850	2643	3015



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	148.7	4.1	2.7	0°	1567	1567	1567	1567	1567	
10°-20°	428.1	11.9	7.6	5°	1555	1559	1564	1568	1565	148
20°-30°	644.3	17.9	11.5	15°	1502	1508	1519	1527	1526	424
30°-40°	737.8	20.5	13.2	25°	1381	1390	1405	1416	1414	635
40°-50°	665.0	18.5	11.9	35°	1172	1182	1193	1186	1181	731
50°-60°	461.3	12.8	8.2	45°	872	875	868	850	858	669
60°-70°	266.9	7.4	4.8	55°	538	525	516	494	489	484
70°-80°	168.0	4.7	3.0	65°	300	265	235	266	272	302
80°-90°	71.4	2.0	1.3	75°	169	155	135	169	184	180
90°-100°	0.0	0.0	0.0	85°	69	66	64	74	73	67
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	5
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°	1221.0	34.0	21.8	165°	0	0	0	0	0	0
0°-40°	1958.8	54.5	35.0	175°	0	0	0	0	0	0
0°-60°	3085.1	85.9	55.1	180°	0	0	0	0	0	0
0°-90°	3591.4	100.0	64.1							
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°	3591.4	100.0	64.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1567	1567	1567	1567	1567
2.5°	1561	1564	1568	1570	1566
5°	1555	1559	1564	1568	1565
7.5°	1546	1551	1558	1563	1561
10°	1535	1541	1549	1555	1553
12.5°	1520	1527	1536	1543	1541
15°	1502	1508	1519	1527	1526
17.5°	1479	1486	1497	1508	1507
20°	1451	1458	1472	1484	1483
22.5°	1419	1426	1441	1453	1453
25°	1381	1390	1405	1416	1414
27.5°	1337	1347	1363	1369	1365
30°	1287	1299	1313	1315	1310
32.5°	1232	1244	1256	1253	1247
35°	1172	1182	1193	1186	1181
37.5°	1107	1115	1123	1112	1107
40°	1036	1043	1045	1030	1028
42.5°	957	963	957	941	944
45°	872	875	868	850	858
47.5°	782	785	781	760	765
50°	692	697	698	668	667
52.5°	610	612	609	578	572
55°	538	525	516	494	489
57.5°	471	443	427	421	417
60°	407	371	351	359	358
62.5°	350	312	287	306	309
65°	300	265	235	266	272
67.5°	257	227	192	236	243
70°	220	198	161	212	220
72.5°	190	175	144	190	201
75°	169	155	135	169	184
77.5°	151	136	128	146	163
80°	127	114	115	124	139
82.5°	98	91	92	102	110
85°	69	66	64	74	73
87.5°	34	36	33	39	35
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)