

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: 104P235

Luminaire Tested: **2P2GX-232S28I**

Issue Date: 3/3/2020



**Test Information**

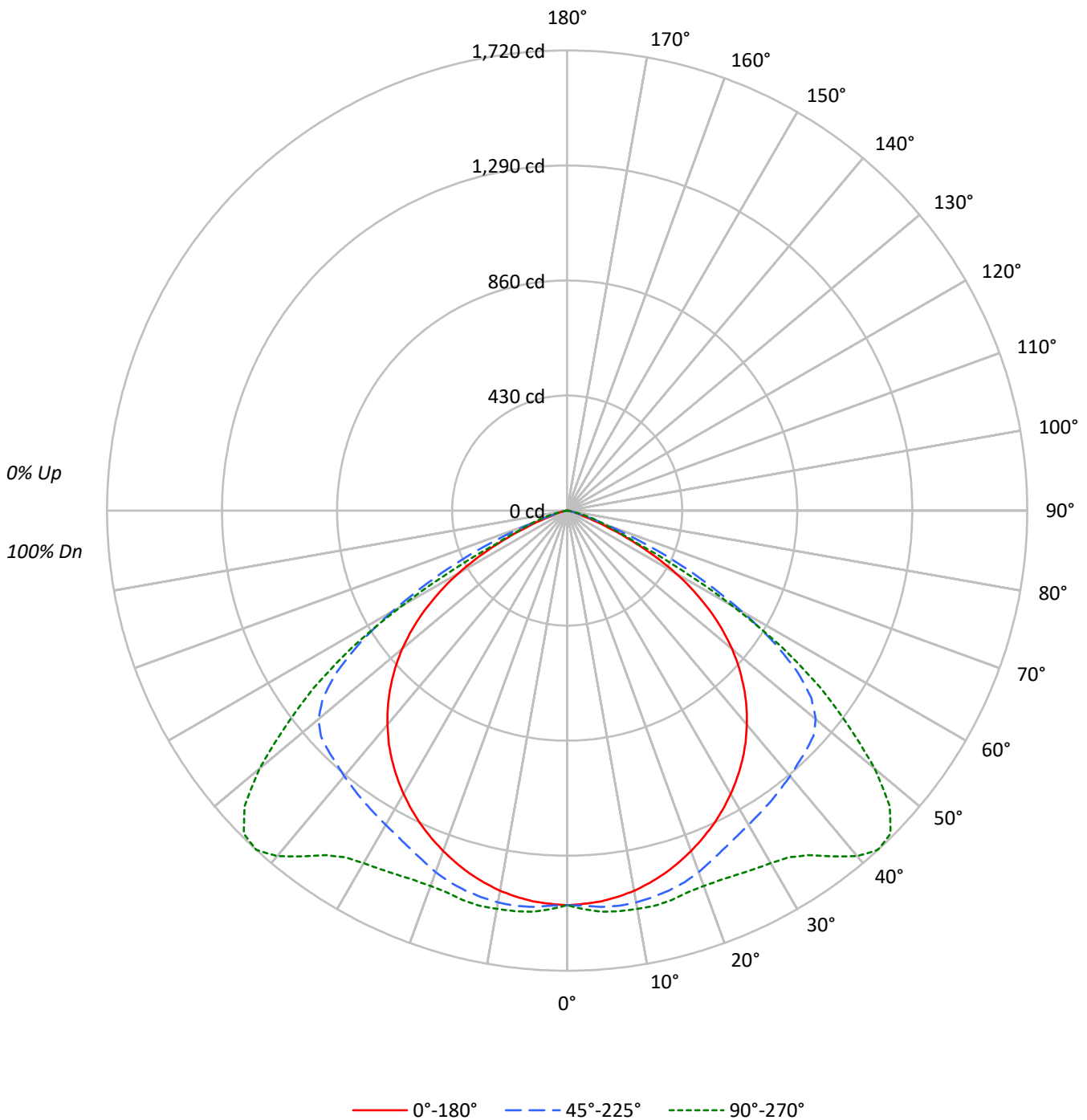
Test Method: LM-41-14  
Report Number: 104P235  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P2GX-232S28I  
Description: 2 X 4 Recessed Convertible Body Luminaire with a 2"  
deep 16 cell semi-specular parabolic louver.  
Light Source: Two - FO32/735 - 2800 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B232I120RH Electronic L.O.B.F. = 88.22%

**Summary**

Lumens per Lamp: 2800 (2 lamps)  
Luminaire Lumens: 4314.0 lumens  
Efficiency: 77.0%  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.72 / 1.6  
Luminous Opening: Rectangular (W 1.74' x L: 3.76' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 59.1  
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	0
RCR																				
0	92	92	92	92	90	90	90	90	86	86	86		82	82	82		79	79	79	77
1	85	82	79	77	83	80	78	76	77	75	73		74	72	71		71	70	69	67
2	78	73	68	64	76	71	67	63	68	65	62		66	63	60		64	61	59	57
3	72	64	58	54	70	63	58	53	61	56	52		59	55	51		57	53	51	49
4	66	57	51	46	64	56	50	45	54	49	45		52	48	44		51	47	44	42
5	60	51	44	39	59	50	44	39	48	43	39		47	42	38		45	41	38	36
6	56	46	39	34	54	45	39	34	44	38	34		42	37	34		41	37	33	32
7	51	41	35	30	50	41	34	30	39	34	30		38	33	30		37	33	29	28
8	48	38	31	27	47	37	31	27	36	30	26		35	30	26		34	30	26	25
9	44	34	28	24	43	34	28	24	33	28	24		32	27	24		31	27	23	22
10	42	32	26	22	41	31	25	21	30	25	21		30	25	21		29	24	21	20

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

	0°	45°	90°
0°	2427	2427	2427
5°	2421	2456	2486
10°	2411	2485	2526
15°	2393	2504	2567
20°	2371	2518	2614
25°	2349	2527	2727
30°	2324	2576	2892
35°	2292	2666	3158
40°	2245	2784	3622
45°	2173	2944	3977
50°	2061	3105	3842
55°	1868	3012	3316
60°	1547	2485	2356
65°	1028	1682	1121
70°	438	751	693
75°	229	229	388
80°	142	114	95
85°	94	76	76



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	141.7	3.3	2.5	0°	1475	1475	1475	1475	1475	
10°-20°	413.7	9.6	7.4	5°	1466	1473	1487	1497	1505	139
20°-30°	647.5	15.0	11.6	15°	1405	1437	1470	1497	1507	396
30°-40°	845.5	19.6	15.1	25°	1294	1344	1392	1467	1502	596
40°-50°	990.3	23.0	17.7	35°	1141	1210	1327	1482	1572	713
50°-60°	847.2	19.6	15.1	45°	934	1030	1265	1569	1709	718
60°-70°	365.7	8.5	6.5	55°	651	786	1050	1110	1156	577
70°-80°	57.0	1.3	1.0	65°	264	365	432	334	288	265
80°-90°	5.3	0.1	0.1	75°	36	37	36	55	61	44
90°-100°	0.0	0.0	0.0	85°	5	4	4	4	4	6
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	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°	1202.9	27.9	21.5	165°	0	0	0	0	0	0
0°-40°	2048.4	47.5	36.6	175°	0	0	0	0	0	0
0°-60°	3885.9	90.1	69.4	180°	0	0	0	0	0	0
0°-90°	4314.0	100.0	77.0							
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°	4314.0	100.0	77.0							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1475	1475	1475	1475	1475
2.5°	1471	1472	1478	1484	1492
5°	1466	1473	1487	1497	1505
7.5°	1456	1471	1490	1502	1510
10°	1443	1465	1487	1503	1512
12.5°	1425	1453	1480	1503	1513
15°	1405	1437	1470	1497	1507
17.5°	1381	1418	1457	1484	1496
20°	1354	1396	1438	1473	1493
22.5°	1325	1371	1414	1467	1495
25°	1294	1344	1392	1467	1502
27.5°	1260	1315	1373	1468	1511
30°	1223	1283	1356	1470	1522
32.5°	1183	1249	1341	1474	1537
35°	1141	1210	1327	1482	1572
37.5°	1095	1166	1311	1505	1629
40°	1045	1122	1296	1541	1686
42.5°	992	1077	1279	1568	1720
45°	934	1030	1265	1569	1709
47.5°	872	979	1248	1526	1635
50°	805	923	1213	1427	1501
52.5°	731	860	1150	1280	1329
55°	651	786	1050	1110	1156
57.5°	564	701	915	936	956
60°	470	605	755	741	716
62.5°	367	494	589	525	483
65°	264	365	432	334	288
67.5°	167	236	281	198	195
70°	91	128	156	136	144
72.5°	54	61	75	92	100
75°	36	37	36	55	61
77.5°	23	23	19	27	28
80°	15	14	12	11	10
82.5°	8	8	7	7	6
85°	5	4	4	4	4
87.5°	2	2	2	2	2
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)