

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: 188P140

Luminaire Tested: **2EP3GX-232S28MI-PAF**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 188P140  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2EP3GX-232S28MI-PAF  
Description: 2 X 4 Recessed Convertible Body Luminaire with a 3" deep  
16 cell specular low iridescent parabolic louver.  
Light Source: Two - FO32T8/35K - 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: 4384.1 lumens  
Efficiency: 78.3%  
Efficacy: 74.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.6 / 1.7  
Luminous Opening: Rectangular (W 1.73' x L: 3.75' x H: 0')  
CIE Type: Direct

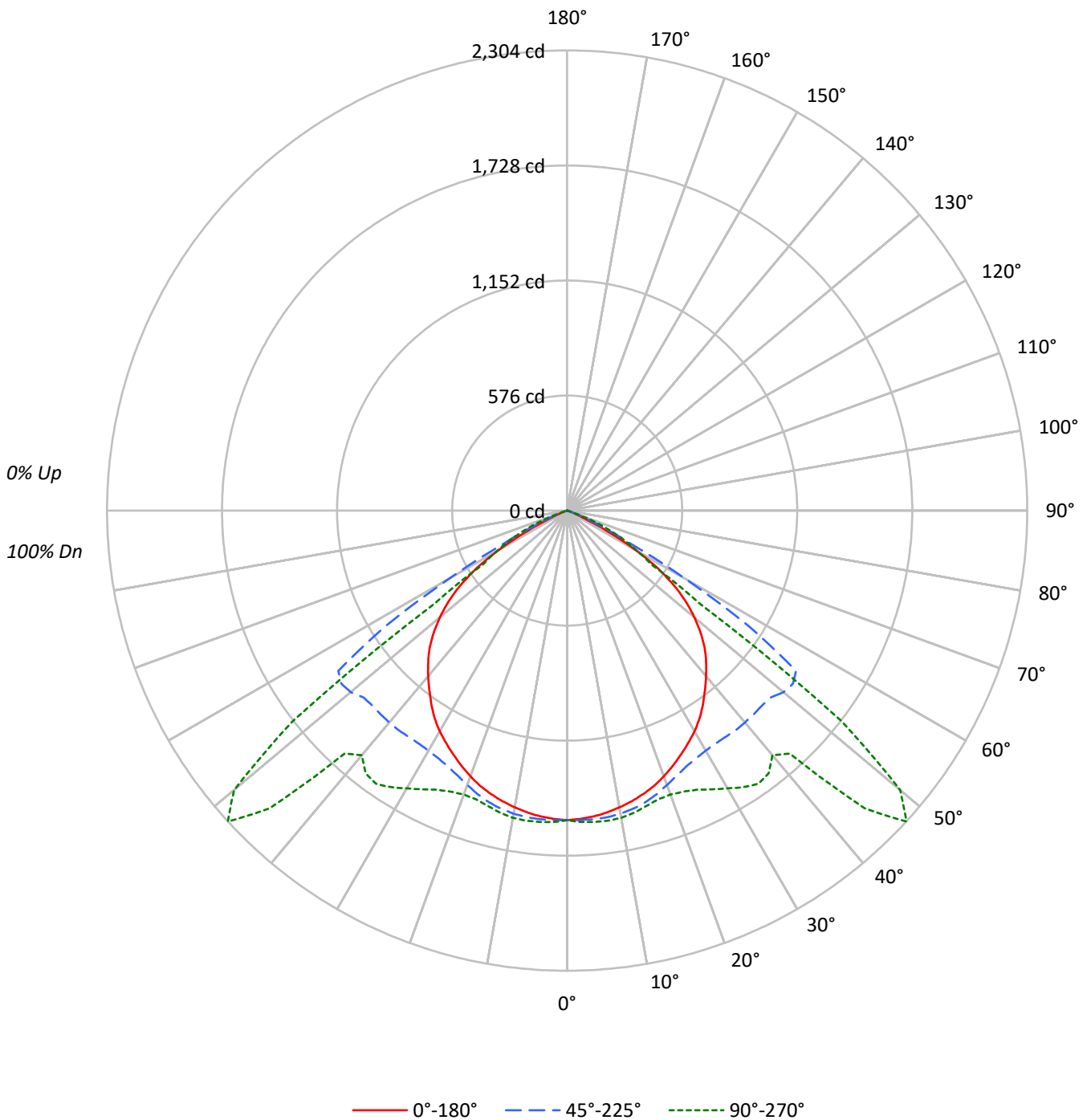
Input Watts (W): 58.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	50	30	10	0																			
RCR																																														
0	93	93	93	93	91	91	91	91	87	87	87	83	83	83	80	80	80	80	80	80	80	80	80	80	80	80	80	78																		
1	87	84	81	79	85	82	80	77	79	77	75	76	74	73	73	72	71	71	71	71	71	71	71	71	71	71	71	69																		
2	80	74	70	66	78	73	69	65	70	67	64	68	65	62	66	63	61	61	61	61	61	61	61	61	61	61	61	60																		
3	73	66	60	56	72	65	60	55	63	58	54	61	57	54	59	55	53	53	53	53	53	53	53	53	53	53	53	51																		
4	67	59	53	48	66	58	52	47	56	51	47	54	50	46	52	49	46	46	46	46	46	46	46	46	46	46	46	44																		
5	62	53	46	41	60	52	46	41	50	45	40	49	44	40	47	43	40	40	40	40	40	40	40	40	40	40	40	38																		
6	57	47	41	36	56	46	40	36	45	39	35	44	39	35	43	38	35	35	35	35	35	35	35	35	35	35	35	33																		
7	53	43	36	31	51	42	36	31	41	35	31	40	35	31	39	34	31	31	31	31	31	31	31	31	31	31	31	29																		
8	49	39	32	28	48	38	32	28	37	32	28	36	31	27	35	31	27	27	27	27	27	27	27	27	27	27	27	26																		
9	46	35	29	25	45	35	29	25	34	29	25	33	28	25	32	28	24	24	24	24	24	24	24	24	24	24	24	23																		
10	43	33	26	22	42	32	26	22	31	26	22	31	26	22	30	25	22	22	22	22	22	22	22	22	22	22	22	21																		

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

	0°	45°	90°
0°	2573	2573	2573
5°	2561	2584	2608
10°	2543	2597	2633
15°	2526	2598	2631
20°	2501	2583	2673
25°	2469	2588	2824
30°	2446	2660	3078
35°	2401	2803	3384
40°	2345	3001	3463
45°	2286	3240	4949
50°	2149	3652	5622
55°	1890	4049	2335
60°	1331	2267	1351
65°	452	750	951
70°	44	218	359
75°	26	32	32
80°	29	29	19
85°	19	19	19



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	147.6	3.4	2.6	0°	1550	1550	1550	1550	1550	
10°-20°	425.3	9.7	7.6	5°	1537	1541	1551	1558	1565	146
20°-30°	664.1	15.1	11.9	15°	1470	1488	1512	1523	1531	415
30°-40°	877.6	20.0	15.7	25°	1348	1379	1413	1494	1542	622
40°-50°	1101.5	25.1	19.7	35°	1185	1225	1383	1583	1670	741
50°-60°	925.2	21.1	16.5	45°	974	1056	1380	1660	2108	746
60°-70°	229.9	5.2	4.1	55°	653	895	1399	1225	807	570
70°-80°	12.0	0.3	0.2	65°	115	212	191	228	242	147
80°-90°	1.0	0.0	0.0	75°	4	5	5	6	5	5
90°-100°	0.0	0.0	0.0	85°	1	1	1	1	1	1
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°	1236.9	28.2	22.1	165°	0	0	0	0	0	0
0°-40°	2114.6	48.2	37.8	175°	0	0	0	0	0	0
0°-60°	4141.2	94.5	73.9	180°	0	0	0	0	0	0
0°-90°	4384.1	100.0	78.3							
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°	4384.1	100.0	78.3							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1550	1550	1550	1550	1550
2.5°	1545	1546	1551	1553	1561
5°	1537	1541	1551	1558	1565
7.5°	1525	1532	1548	1558	1566
10°	1509	1520	1541	1554	1562
12.5°	1491	1506	1529	1543	1550
15°	1470	1488	1512	1523	1531
17.5°	1446	1467	1489	1502	1516
20°	1416	1443	1462	1489	1513
22.5°	1383	1413	1435	1487	1523
25°	1348	1379	1413	1494	1542
27.5°	1312	1343	1398	1511	1573
30°	1276	1306	1388	1535	1606
32.5°	1234	1268	1383	1559	1642
35°	1185	1225	1383	1583	1670
37.5°	1133	1179	1386	1592	1658
40°	1082	1133	1385	1574	1598
42.5°	1030	1091	1383	1552	1650
45°	974	1056	1380	1660	2108
47.5°	907	1025	1384	2003	2304
50°	832	996	1414	2034	2177
52.5°	750	959	1425	1757	1733
55°	653	895	1399	1225	807
57.5°	537	793	1080	598	497
60°	401	642	683	403	407
62.5°	243	420	359	312	326
65°	115	212	191	228	242
67.5°	38	72	103	146	158
70°	9	15	45	71	74
72.5°	5	6	14	24	23
75°	4	5	5	6	5
77.5°	3	3	4	3	4
80°	3	2	3	2	2
82.5°	1	2	2	1	1
85°	1	1	1	1	1
87.5°	1	0	0	0	0
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)