

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: 187P106

Luminaire Tested: **2EP3GX-3BX40S33I-PAF**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 187P106  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2EP3GX-3BX40S33I-PAF  
Description: 2 X 2 Recessed Convertible Body Troffer with a 3"  
deep 9 cell semi-specular parabolic louver.  
Light Source: Three - F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.  
Ballast/Driver: Magnetek B340I120HP Electronic

**Summary**

Lumens per Lamp: 3150 (3 lamps)  
Luminaire Lumens: 7299.2 lumens  
Efficiency: 77.2%  
Efficacy: 73.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.67 / 1.54  
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')  
CIE Type: Direct

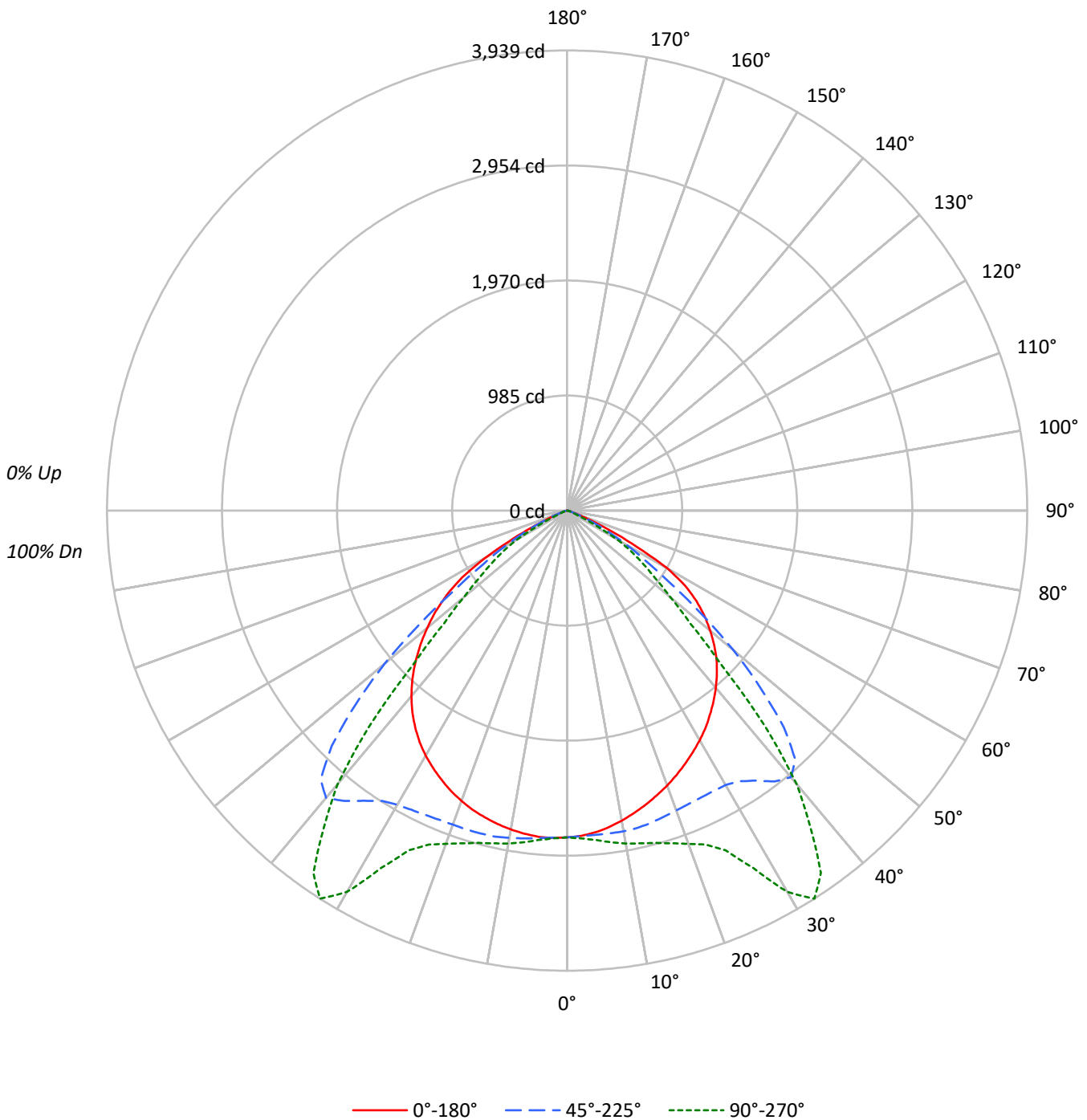
Input Watts (W): 99.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																				
0	92	92	92	92	90	90	90	90	86	86	86		82	82	82		79	79	79	77
1	86	83	81	78	84	81	79	77	78	76	75		75	74	72		73	71	70	69
2	80	75	70	67	78	73	69	66	71	67	64		68	65	63		66	64	62	60
3	74	67	61	57	72	66	61	57	63	59	56		61	58	55		59	57	54	52
4	68	60	54	50	66	59	53	49	57	52	49		55	51	48		54	50	47	46
5	63	54	48	43	61	53	47	43	52	47	43		50	46	42		49	45	42	40
6	58	49	43	38	57	48	42	38	47	42	38		46	41	37		44	40	37	36
7	54	44	38	34	53	44	38	34	43	37	34		42	37	33		41	36	33	32
8	50	41	34	30	49	40	34	30	39	34	30		38	33	30		37	33	30	28
9	47	37	31	27	46	37	31	27	36	31	27		35	30	27		34	30	27	25
10	44	34	28	25	43	34	28	25	33	28	24		32	28	24		32	27	24	23

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

	0°	90°	180°
0°	9949	9949	9949
5°	9873	10108	10008
10°	9734	10453	10012
15°	9593	10845	10013
20°	9478	11488	10012
25°	9380	12587	9985
30°	9324	15485	9948
35°	9258	16444	9844
40°	9199	14195	9630
45°	9100	9362	9246
50°	8848	6386	8655
55°	8378	4899	7783
60°	7057	3486	5748
65°	3510	1010	2474
70°	1019	416	707
75°	454	289	371
80°	266	205	246
85°	163	163	122



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	268.0	3.7	2.8	0°	2797	2797	2797	2797	2797	
10°-20°	796.2	10.9	8.4	5°	2765	2787	2831	2814	2803	262
20°-30°	1315.0	18.0	13.9	15°	2605	2768	2945	2862	2719	735
30°-40°	1845.6	25.3	19.5	25°	2390	2711	3207	2874	2544	1103
40°-50°	1701.4	23.3	18.0	35°	2132	2821	3787	3032	2267	1335
50°-60°	1027.6	14.1	10.9	45°	1809	2625	1861	2849	1838	1391
60°-70°	305.0	4.2	3.2	55°	1351	1058	790	1147	1255	1190
70°-80°	34.7	0.5	0.4	65°	417	261	120	276	294	453
80°-90°	5.7	0.1	0.1	75°	33	30	21	30	27	43
90°-100°	0.0	0.0	0.0	85°	4	5	4	5	3	5
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°	2379.2	32.6	25.2	165°	0	0	0	0	0	0
0°-40°	4224.8	57.9	44.7	175°	0	0	0	0	0	0
0°-60°	6953.8	95.3	73.6	180°	0	0	0	0	0	0
0°-90°	7299.2	100.0	77.2							
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°	7299.2	100.0	77.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2797	2797	2797	2797	2797	2797	2797	2797	2797
2.5°	2787	2783	2788	2799	2809	2808	2802	2803	2805
5°	2765	2767	2787	2812	2831	2828	2814	2806	2803
7.5°	2734	2744	2787	2835	2863	2859	2830	2802	2790
10°	2695	2717	2788	2855	2894	2890	2846	2793	2772
12.5°	2651	2685	2782	2868	2917	2912	2858	2783	2748
15°	2605	2654	2768	2877	2945	2931	2862	2771	2719
17.5°	2555	2621	2749	2893	2986	2957	2862	2756	2686
20°	2504	2586	2731	2918	3035	2995	2861	2736	2645
22.5°	2449	2546	2718	2947	3094	3039	2864	2707	2598
25°	2390	2500	2711	2989	3207	3099	2874	2670	2544
27.5°	2331	2452	2707	3106	3450	3235	2887	2626	2485
30°	2270	2402	2713	3327	3770	3462	2907	2578	2422
32.5°	2205	2351	2746	3568	3939	3723	2947	2526	2350
35°	2132	2301	2821	3625	3787	3801	3032	2468	2267
37.5°	2059	2251	2922	3405	3423	3585	3133	2403	2177
40°	1981	2202	2980	3042	3057	3204	3210	2334	2074
42.5°	1897	2151	2891	2656	2516	2805	3123	2261	1961
45°	1809	2093	2625	2121	1861	2249	2849	2174	1838
47.5°	1707	2023	2242	1566	1431	1667	2457	2073	1704
50°	1599	1928	1852	1206	1154	1288	2039	1958	1564
52.5°	1482	1796	1436	963	950	1030	1578	1814	1420
55°	1351	1607	1058	779	790	834	1147	1627	1255
57.5°	1198	1346	789	626	647	670	847	1378	1064
60°	992	1018	588	477	490	514	625	1049	808
62.5°	672	670	413	316	274	342	437	683	516
65°	417	368	261	161	120	182	276	364	294
67.5°	215	180	143	80	58	87	151	169	140
70°	98	89	74	50	40	53	77	83	68
72.5°	53	51	43	36	29	38	44	49	41
75°	33	34	30	26	21	27	30	33	27
77.5°	21	23	21	18	15	19	22	22	18
80°	13	15	15	13	10	14	15	15	12
82.5°	8	9	9	8	7	8	9	9	7
85°	4	4	5	4	4	5	5	5	3
87.5°	1	1	1	2	1	1	2	2	1
90°	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)