

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: 196P100

Luminaire Tested: **2P5GX-3U15/8S34I**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 196P100  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P5GX-3U15/8S34I  
Description: 2 X 2 Recessed Convertible Body Troffer with a  
5" deep 12 cell semi-specular low iridescent  
parabolic louver.  
Light Source: Three-FBO31T8/35K - 2750 Lumens ea. - 31 Watts ea.  
Ballast/Driver: Triad B332I120RH Electronic

**Summary**

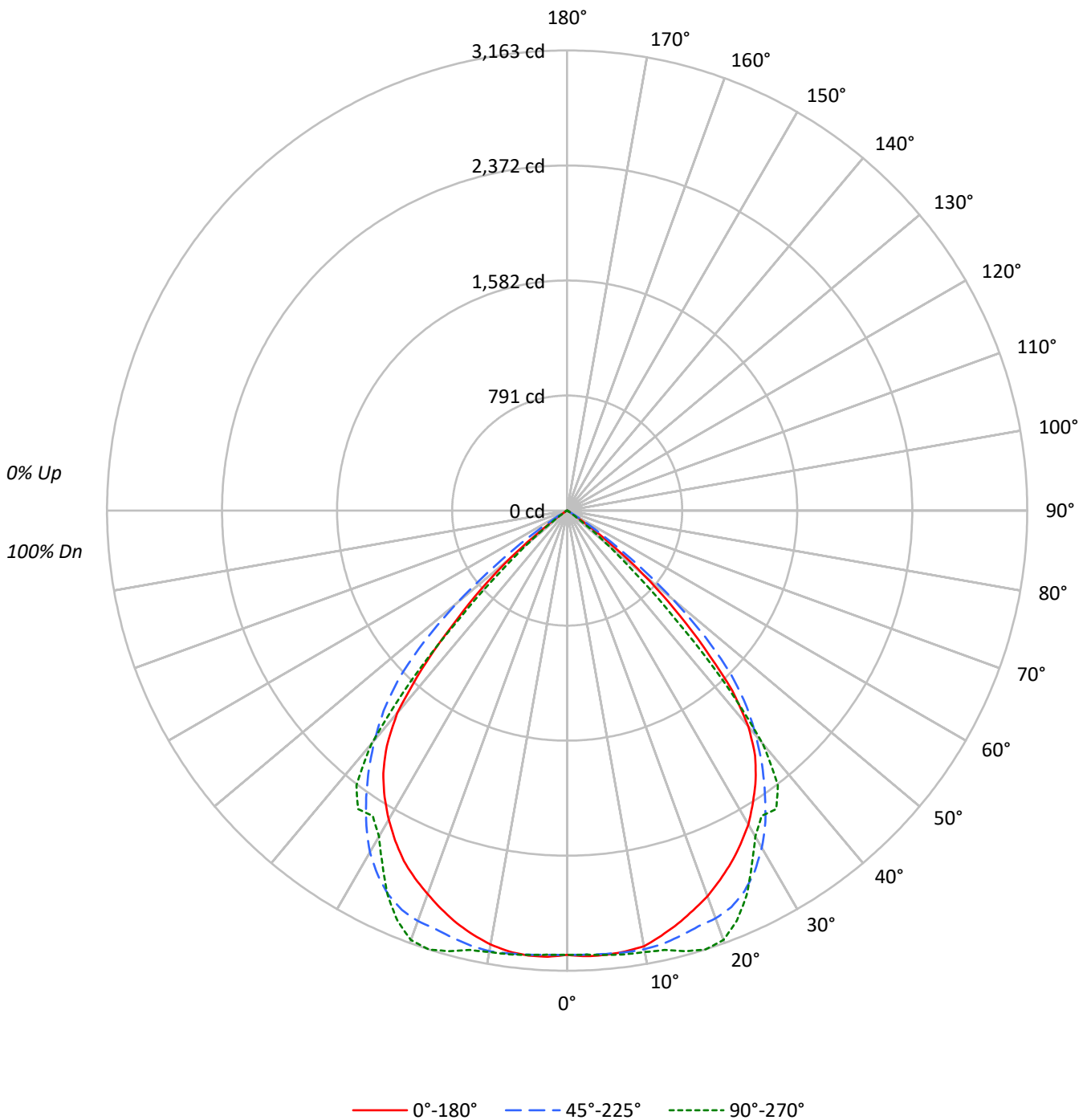
Lumens per Lamp: 2850 (3 lamps)  
Luminaire Lumens: 5233.2 lumens  
Efficiency: 61.2%  
Efficacy: 66.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.28  
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 78.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



TEST NUMBER: 196P100  
CATALOG NUMBER: 2P5GX-3U15/8S34I

### Luminous Intensity Polar Plot





TEST NUMBER: 196P100

CATALOG NUMBER: 2P5GX-3U15/8S34I

**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	0		
RCR																										
0	73	73	73	73	71	71	71	71	68	68	68	65	65	65	62	62	62	61					61			
1	69	67	65	64	67	66	64	63	63	62	61	61	60	59	59	58	57					56				
2	65	61	58	56	63	60	58	55	58	56	54	56	54	53	55	53	52					51				
3	61	56	52	50	59	55	52	49	53	51	48	52	50	48	50	48	47					46				
4	57	51	47	44	56	51	47	44	49	46	43	48	45	43	47	44	42					41				
5	53	47	43	40	52	46	42	39	45	42	39	44	41	39	43	40	38					37				
6	50	43	39	36	49	43	39	36	42	38	35	41	38	35	40	37	35					34				
7	47	40	35	32	46	39	35	32	39	35	32	38	34	32	37	34	32					31				
8	44	37	32	30	43	36	32	29	36	32	29	35	32	29	34	31	29					28				
9	41	34	30	27	40	34	30	27	33	29	27	33	29	27	32	29	27					26				
10	39	32	28	25	38	31	27	25	31	27	25	30	27	25	30	27	25					24				

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

	0°	90°	180°
0°	10831	10831	10831
5°	10912	10915	10933
10°	10951	11096	10908
15°	10795	11511	10776
20°	10647	11855	10583
25°	10448	11419	10397
30°	10201	10590	10041
35°	9785	10846	9538
40°	8972	9690	8408
45°	6656	5206	5597
50°	3802	1892	2825
55°	872	247	445
60°	142	99	121
65°	84	67	76
70°	62	41	52
75°	41	41	41
80°	20	20	20
85°	0	41	0



TEST NUMBER: 196P100

CATALOG NUMBER: 2P5GX-3U15/8S34I

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	292.4	5.6	3.4	0°	3054	3054	3054	3054	3054	
10°-20°	859.0	16.4	10.0	5°	3065	3059	3066	3064	3071	292
20°-30°	1303.1	24.9	15.2	15°	2940	3024	3135	3040	2935	829
30°-40°	1475.1	28.2	17.3	25°	2670	2886	2918	2912	2657	1229
40°-50°	1063.2	20.3	12.4	35°	2260	2370	2505	2408	2203	1403
50°-60°	226.2	4.3	2.6	45°	1327	1592	1038	1640	1116	1016
60°-70°	10.7	0.2	0.1	55°	141	310	40	330	72	196
70°-80°	3.1	0.1	0.0	65°	10	10	8	10	9	11
80°-90°	0.4	0.0	0.0	75°	3	3	3	3	3	3
90°-100°	0.0	0.0	0.0	85°	0	0	1	0	0	0
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°	2454.4	46.9	28.7	165°	0	0	0	0	0	0
0°-40°	3929.5	75.1	46.0	175°	0	0	0	0	0	0
0°-60°	5218.9	99.7	61.0	180°	0	0	0	0	0	0
0°-90°	5233.2	100.0	61.2							
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°	5233.2	100.0	61.2							



TEST NUMBER: 196P100

CATALOG NUMBER: 2P5GX-3U15/8S34I

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3054	3054	3054	3054	3054	3054	3054	3054	3054
2.5°	3066	3054	3055	3058	3055	3058	3056	3058	3070
5°	3065	3055	3059	3071	3066	3070	3064	3057	3071
7.5°	3057	3050	3062	3074	3076	3078	3071	3057	3057
10°	3041	3034	3062	3070	3081	3084	3075	3051	3029
12.5°	2993	3004	3050	3081	3093	3091	3063	3022	2986
15°	2940	2958	3024	3113	3135	3117	3040	2976	2935
17.5°	2881	2902	2997	3140	3163	3150	3015	2926	2873
20°	2821	2844	2983	3129	3141	3149	3002	2872	2804
22.5°	2746	2780	2950	3073	3050	3092	2971	2810	2735
25°	2670	2708	2886	2957	2918	2978	2912	2734	2657
27.5°	2583	2630	2793	2797	2748	2824	2822	2656	2559
30°	2491	2551	2676	2623	2586	2653	2712	2578	2452
32.5°	2377	2465	2537	2459	2487	2489	2570	2488	2336
35°	2260	2364	2370	2355	2505	2381	2408	2378	2203
37.5°	2123	2239	2200	2284	2379	2327	2237	2247	2036
40°	1938	2084	2017	2065	2093	2113	2058	2093	1816
42.5°	1682	1877	1827	1719	1590	1765	1867	1878	1481
45°	1327	1584	1592	1251	1038	1292	1640	1569	1116
47.5°	996	1248	1289	793	620	827	1333	1223	809
50°	689	910	949	458	343	484	985	898	512
52.5°	373	570	599	234	147	248	632	578	247
55°	141	284	310	87	40	95	330	293	72
57.5°	33	77	113	27	19	31	127	88	24
60°	20	24	32	17	14	17	36	24	17
62.5°	14	15	14	12	10	12	15	15	12
65°	10	10	10	9	8	9	10	10	9
67.5°	8	8	7	7	6	7	7	7	7
70°	6	6	5	4	4	5	5	6	5
72.5°	4	4	4	3	4	4	4	4	4
75°	3	3	3	3	3	3	3	3	3
77.5°	2	2	2	2	2	2	2	2	2
80°	1	1	1	1	1	1	1	1	1
82.5°	1	1	1	1	1	1	1	1	0
85°	0	0	0	0	1	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0
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



TEST NUMBER: 196P100

CATALOG NUMBER: 2P5GX-3U15/8S34I

**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)