

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: 196P101

Luminaire Tested: **2P5GX-3BX40S34VDT**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 196P101  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P5GX-3BX40S34VDT  
Description: 2 X 2 Recessed Convertible Body Troffer with a 12 cell semi-specular low iridescent precision cell II VDT parabolic louver.  
Light Source: Three - F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.  
Ballast/Driver: Magnetek C340I120RH Electronic - L.O.B.F. = 90.8

**Summary**

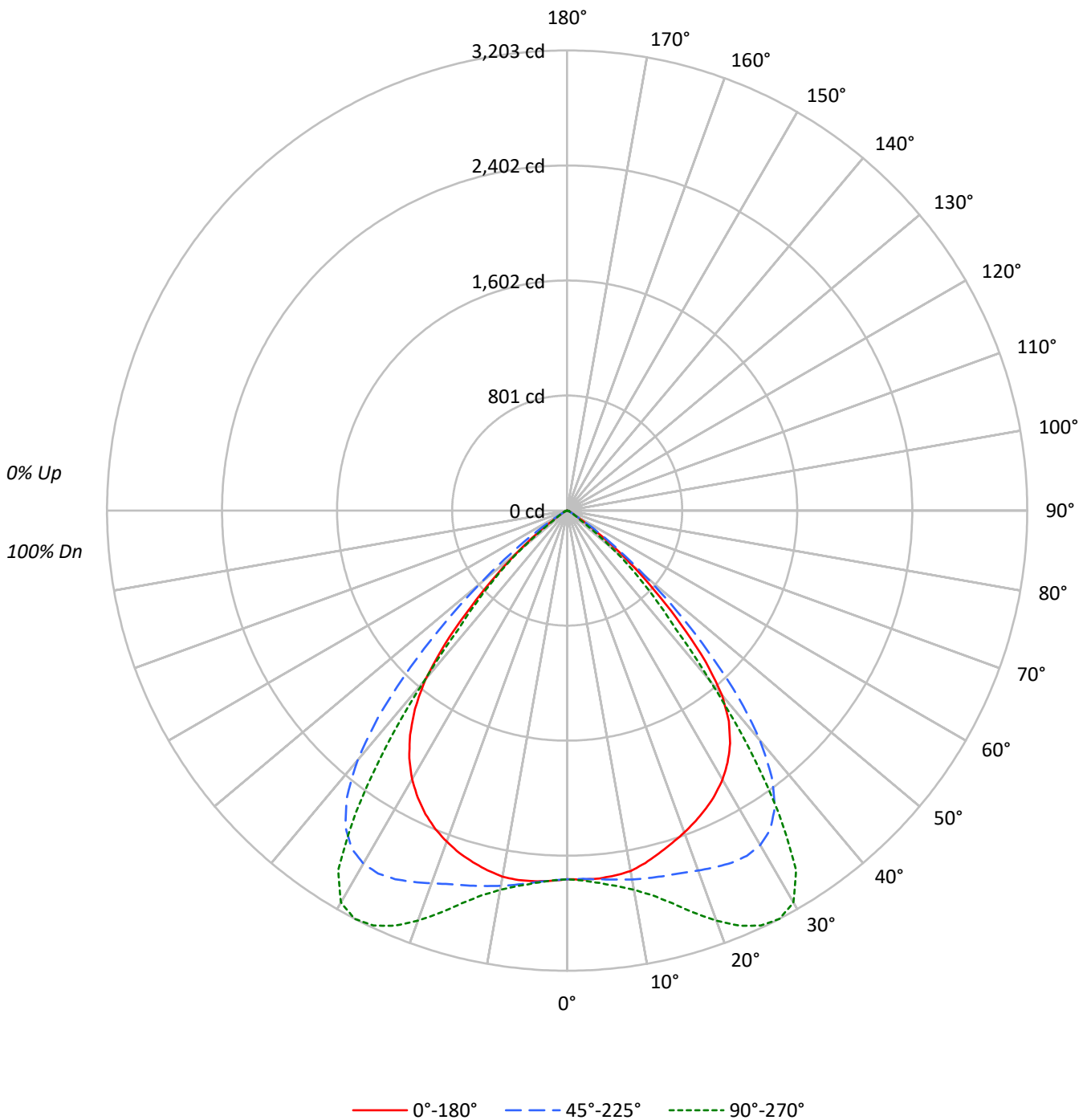
Lumens per Lamp: 3150 (3 lamps)  
Luminaire Lumens: 4959.1 lumens  
Efficiency: 52.5%  
Efficacy: 49.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.44 / 1.33  
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')  
CIE Type: Direct

Input Watts (W): 101.3  
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



TEST NUMBER: 196P101  
CATALOG NUMBER: 2P5GX-3BX40S34VDT

### Luminous Intensity Polar Plot





TEST NUMBER: 196P101

CATALOG NUMBER: 2P5GX-3BX40S34VDT

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	62	62	62	62	61	61	61	61	58	58	58	56	56	56	54	54	54	52						52														
1	59	57	56	54	58	56	55	54	54	53	52	52	51	50	50	50	49						48															
2	55	52	50	48	54	51	49	47	50	48	46	48	47	45	47	45	44						43															
3	52	48	45	42	51	47	44	42	46	43	41	44	42	41	43	41	40						39															
4	48	44	40	38	47	43	40	37	42	39	37	41	38	36	40	38	36						35															
5	45	40	36	34	44	40	36	33	39	35	33	38	35	33	37	34	33						32															
6	42	37	33	30	41	36	33	30	35	32	30	35	32	30	34	31	30						29															
7	40	34	30	27	39	33	30	27	33	30	27	32	29	27	31	29	27						26															
8	37	31	28	25	36	31	27	25	30	27	25	30	27	25	29	26	25						24															
9	35	29	25	23	34	29	25	23	28	25	23	28	25	23	27	24	22						22															
10	33	27	23	21	32	27	23	21	26	23	21	26	23	21	25	23	21						20															

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

	0°	90°	180°
0°	9019	9019	9019
5°	9068	9181	9138
10°	9090	9565	9237
15°	8988	10294	9221
20°	8917	11363	9172
25°	8873	12360	9044
30°	8775	12781	8763
35°	8487	11006	8174
40°	7690	7089	7039
45°	5577	4265	4697
50°	3199	2258	2483
55°	1201	613	840
60°	401	351	330
65°	241	250	208
70°	154	175	144
75°	109	136	95
80°	81	101	61
85°	40	81	40



TEST NUMBER: 196P101

CATALOG NUMBER: 2P5GX-3BX40S34VDT

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	248.2	5.0	2.6	0°	2566	2566	2566	2566	2566	
10°-20°	758.2	15.3	8.0	5°	2570	2576	2602	2598	2590	245
20°-30°	1270.2	25.6	13.4	15°	2470	2632	2829	2701	2534	697
30°-40°	1482.3	29.9	15.7	25°	2288	2706	3187	2831	2332	1053
40°-50°	930.4	18.8	9.8	35°	1978	2520	2565	2689	1905	1223
50°-60°	227.8	4.6	2.4	45°	1122	1391	858	1543	945	861
60°-70°	30.1	0.6	0.3	55°	196	253	100	289	137	216
70°-80°	9.6	0.2	0.1	65°	29	25	30	26	25	31
80°-90°	2.2	0.0	0.0	75°	8	8	10	9	7	9
90°-100°	0.0	0.0	0.0	85°	1	2	2	2	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°	2276.6	45.9	24.1	165°	0	0	0	0	0	0
0°-40°	3758.9	75.8	39.8	175°	0	0	0	0	0	0
0°-60°	4917.2	99.2	52.0	180°	0	0	0	0	0	0
0°-90°	4959.1	100.0	52.5							
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°	4959.1	100.0	52.5							



TEST NUMBER: 196P101

CATALOG NUMBER: 2P5GX-3BX40S34VDT

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2566	2566	2566	2566	2566	2566	2566	2566	2566
2.5°	2570	2563	2566	2569	2577	2575	2576	2578	2580
5°	2570	2564	2576	2589	2602	2600	2598	2594	2590
7.5°	2562	2564	2591	2617	2636	2635	2625	2608	2594
10°	2547	2557	2607	2651	2680	2677	2652	2615	2588
12.5°	2513	2537	2620	2697	2742	2731	2677	2608	2564
15°	2470	2508	2632	2762	2829	2804	2701	2591	2534
17.5°	2427	2481	2645	2840	2934	2893	2726	2572	2498
20°	2384	2453	2666	2924	3038	2990	2760	2548	2452
22.5°	2338	2425	2687	2996	3127	3077	2798	2519	2398
25°	2288	2393	2706	3044	3187	3139	2831	2482	2332
27.5°	2230	2357	2709	3050	3203	3161	2848	2435	2252
30°	2162	2313	2688	3003	3149	3130	2837	2377	2159
32.5°	2079	2258	2632	2868	2966	3007	2791	2307	2045
35°	1978	2183	2520	2599	2565	2751	2689	2215	1905
37.5°	1848	2079	2340	2174	2073	2323	2520	2093	1740
40°	1676	1930	2089	1707	1545	1838	2270	1936	1534
42.5°	1428	1711	1768	1257	1121	1350	1941	1724	1256
45°	1122	1425	1391	913	858	976	1543	1441	945
47.5°	830	1106	1035	680	631	731	1148	1131	673
50°	585	794	712	472	413	516	788	823	454
52.5°	373	496	450	285	212	317	498	536	276
55°	196	251	253	139	100	158	289	286	137
57.5°	93	111	117	75	67	82	140	127	70
60°	57	60	53	52	50	56	61	63	47
62.5°	39	40	34	39	39	41	35	41	34
65°	29	28	25	29	30	30	26	29	25
67.5°	21	20	18	21	22	22	19	21	18
70°	15	15	14	16	17	17	15	16	14
72.5°	11	11	11	12	13	13	11	12	10
75°	8	8	8	9	10	9	9	8	7
77.5°	6	6	6	7	7	7	6	6	5
80°	4	4	4	5	5	5	5	4	3
82.5°	2	3	3	3	3	3	3	3	2
85°	1	1	2	2	2	2	2	2	1
87.5°	1	1	1	1	2	1	1	1	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



TEST NUMBER: 196P101

CATALOG NUMBER: 2P5GX-3BX40S34VDT

**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)