

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: 155P100

Luminaire Tested: **2P5GAX-3BX40S34M/I**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 155P100  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P5GAX-3BX40S34M/I  
Description: 2 X 2 Recessed Convertable Body Troffer with a 12 cell specular low iridescent precision cell II parabolic louver.  
Light Source: Three-F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.  
Ballast/Driver:

**Summary**

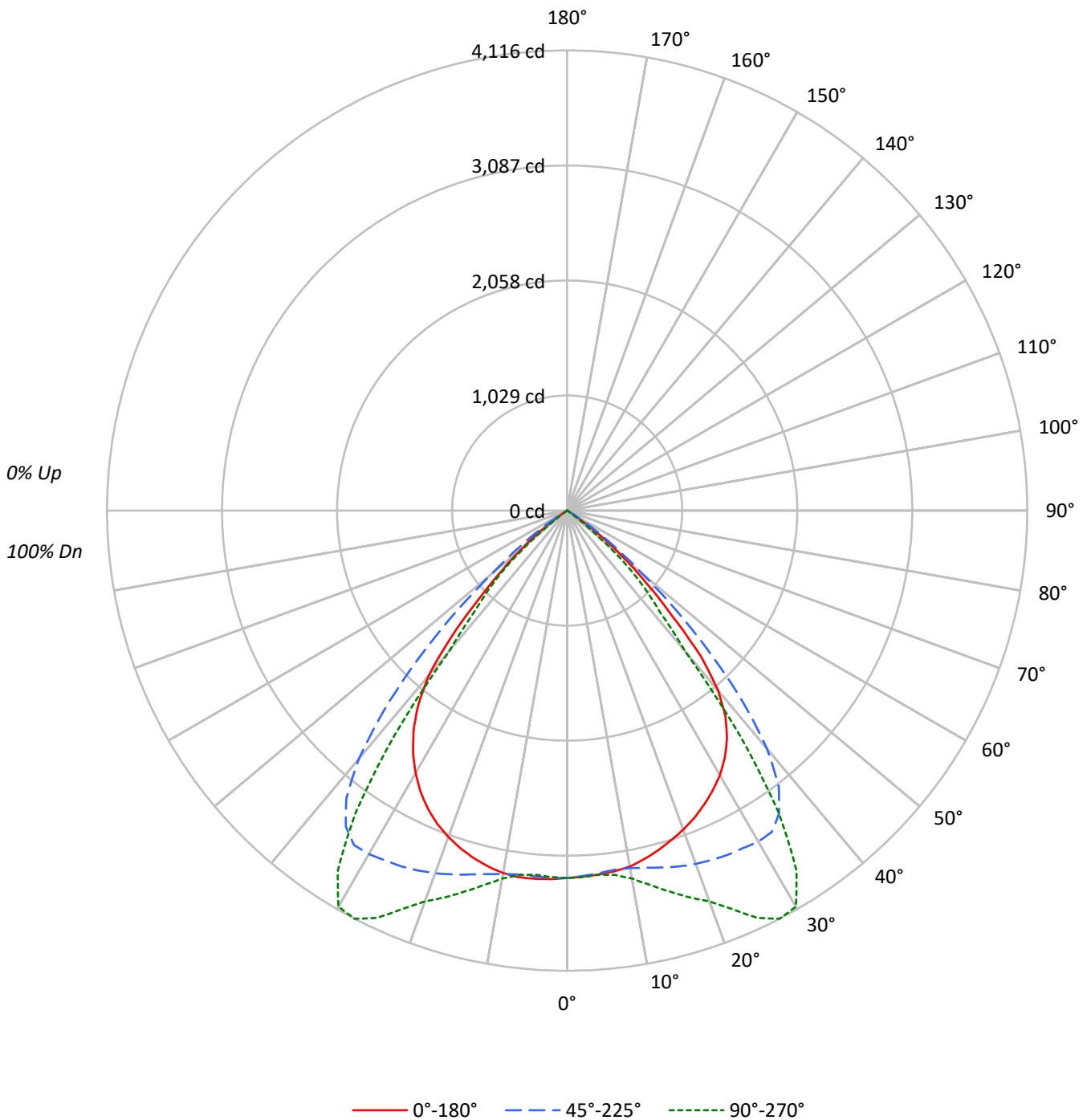
Lumens per Lamp: 3150 (3 lamps)  
Luminaire Lumens: 6136.8 lumens  
Efficiency: 64.9%  
Efficacy: 45.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.44 / 1.33  
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')  
CIE Type: Direct

Input Watts (W): 135.7  
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



TEST NUMBER: 155P100  
CATALOG NUMBER: 2P5GAX-3BX40S34M/I

### Luminous Intensity Polar Plot





TEST NUMBER: 155P100

CATALOG NUMBER: 2P5GAX-3BX40S34M/I

**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	77	77	77	77	76	76	76	76	72	72	72	69	69	69	66	66	66	65																				
1	73	71	69	68	71	70	68	66	67	66	64	65	63	62	62	61	61	59																				
2	69	65	62	59	67	64	61	59	62	59	57	60	58	56	58	56	55	54																				
3	64	59	56	53	63	58	55	52	57	54	51	55	53	50	54	51	50	49																				
4	60	54	50	47	59	54	50	47	52	49	46	51	48	45	50	47	45	44																				
5	56	50	45	42	55	49	45	42	48	44	41	47	44	41	46	43	41	40																				
6	53	46	41	38	52	45	41	38	44	40	38	43	40	37	42	39	37	36																				
7	49	42	38	34	48	42	37	34	41	37	34	40	37	34	39	36	34	33																				
8	46	39	34	31	45	39	34	31	38	34	31	37	34	31	36	33	31	30																				
9	44	36	32	29	43	36	31	29	35	31	28	34	31	28	34	31	28	27																				
10	41	34	29	26	40	33	29	26	33	29	26	32	29	26	32	28	26	25																				

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

	0°	90°	180°
0°	11584	11584	11584
5°	11558	11568	11699
10°	11573	11963	11788
15°	11478	12872	11752
20°	11393	13952	11656
25°	11280	15629	11451
30°	11125	16653	11036
35°	10725	14198	10298
40°	9664	7561	8863
45°	6576	4906	5514
50°	3713	2172	2857
55°	1082	197	559
60°	141	113	127
65°	100	92	92
70°	72	72	72
75°	68	68	54
80°	61	61	41
85°	81	81	81



TEST NUMBER: 155P100

CATALOG NUMBER: 2P5GAX-3BX40S34M/I

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	312.9	5.1	3.3	0°	3286	3286	3286	3286	3286	
10°-20°	948.9	15.5	10.0	5°	3266	3255	3269	3284	3306	311
20°-30°	1598.1	26.0	16.9	15°	3145	3305	3527	3370	3220	888
30°-40°	1891.1	30.8	20.0	25°	2900	3398	4018	3511	2944	1336
40°-50°	1136.4	18.5	12.0	35°	2492	3305	3299	3451	2393	1541
50°-60°	230.3	3.8	2.4	45°	1319	1826	984	1905	1106	1038
60°-70°	12.0	0.2	0.1	55°	176	313	32	300	91	215
70°-80°	5.1	0.1	0.1	65°	12	11	11	11	11	12
80°-90°	1.9	0.0	0.0	75°	5	5	5	4	4	5
90°-100°	0.0	0.0	0.0	85°	2	2	2	2	2	2
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°	2860.0	46.6	30.3	165°	0	0	0	0	0	0
0°-40°	4751.0	77.4	50.3	175°	0	0	0	0	0	0
0°-60°	6117.7	99.7	64.7	180°	0	0	0	0	0	0
0°-90°	6136.8	100.0	64.9							
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°	6136.8	100.0	64.9							



TEST NUMBER: 155P100

CATALOG NUMBER: 2P5GAX-3BX40S34M/I

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3286	3286	3286	3286	3286	3286	3286	3286	3286
2.5°	3277	3274	3271	3276	3281	3284	3289	3295	3300
5°	3266	3259	3255	3259	3269	3276	3284	3300	3306
7.5°	3254	3242	3240	3266	3287	3290	3284	3298	3307
10°	3233	3218	3247	3306	3342	3336	3300	3286	3293
12.5°	3193	3185	3271	3378	3430	3412	3330	3262	3261
15°	3145	3149	3305	3458	3527	3506	3370	3234	3220
17.5°	3092	3117	3338	3540	3626	3599	3412	3207	3168
20°	3037	3090	3363	3621	3719	3690	3452	3176	3107
22.5°	2974	3062	3383	3696	3857	3778	3484	3139	3034
25°	2900	3032	3398	3823	4018	3924	3511	3093	2944
27.5°	2821	2993	3404	3910	4116	4031	3527	3036	2838
30°	2733	2945	3420	3934	4091	4070	3547	2966	2711
32.5°	2623	2885	3408	3759	3818	3899	3547	2877	2564
35°	2492	2806	3305	3370	3299	3504	3451	2759	2393
37.5°	2327	2695	3108	2781	2547	2922	3244	2607	2185
40°	2100	2539	2779	2111	1643	2217	2898	2422	1926
42.5°	1769	2305	2333	1370	1228	1436	2430	2167	1536
45°	1319	1937	1826	1035	984	1067	1905	1782	1106
47.5°	965	1495	1325	786	717	808	1375	1352	782
50°	677	1086	867	532	396	547	873	963	521
52.5°	428	704	556	261	135	273	540	595	308
55°	176	328	313	77	32	81	300	263	91
57.5°	32	75	117	24	20	25	113	58	26
60°	20	24	27	17	16	18	27	22	18
62.5°	15	17	14	13	13	14	14	15	13
65°	12	13	11	11	11	11	11	12	11
67.5°	9	10	9	8	9	9	9	9	9
70°	7	8	7	7	7	7	7	7	7
72.5°	6	6	6	6	5	6	6	6	5
75°	5	5	5	5	5	5	4	5	4
77.5°	3	4	4	4	3	4	4	4	3
80°	3	3	3	3	3	3	3	3	2
82.5°	2	2	3	2	3	3	3	2	1
85°	2	2	2	2	2	2	2	2	2
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: 155P100

CATALOG NUMBER: 2P5GAX-3BX40S34M/I

**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)