

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: 128P103

Luminaire Tested: **2P5MX-3BX40S34M/I**

Issue Date: 3/3/2020



**Test Information**

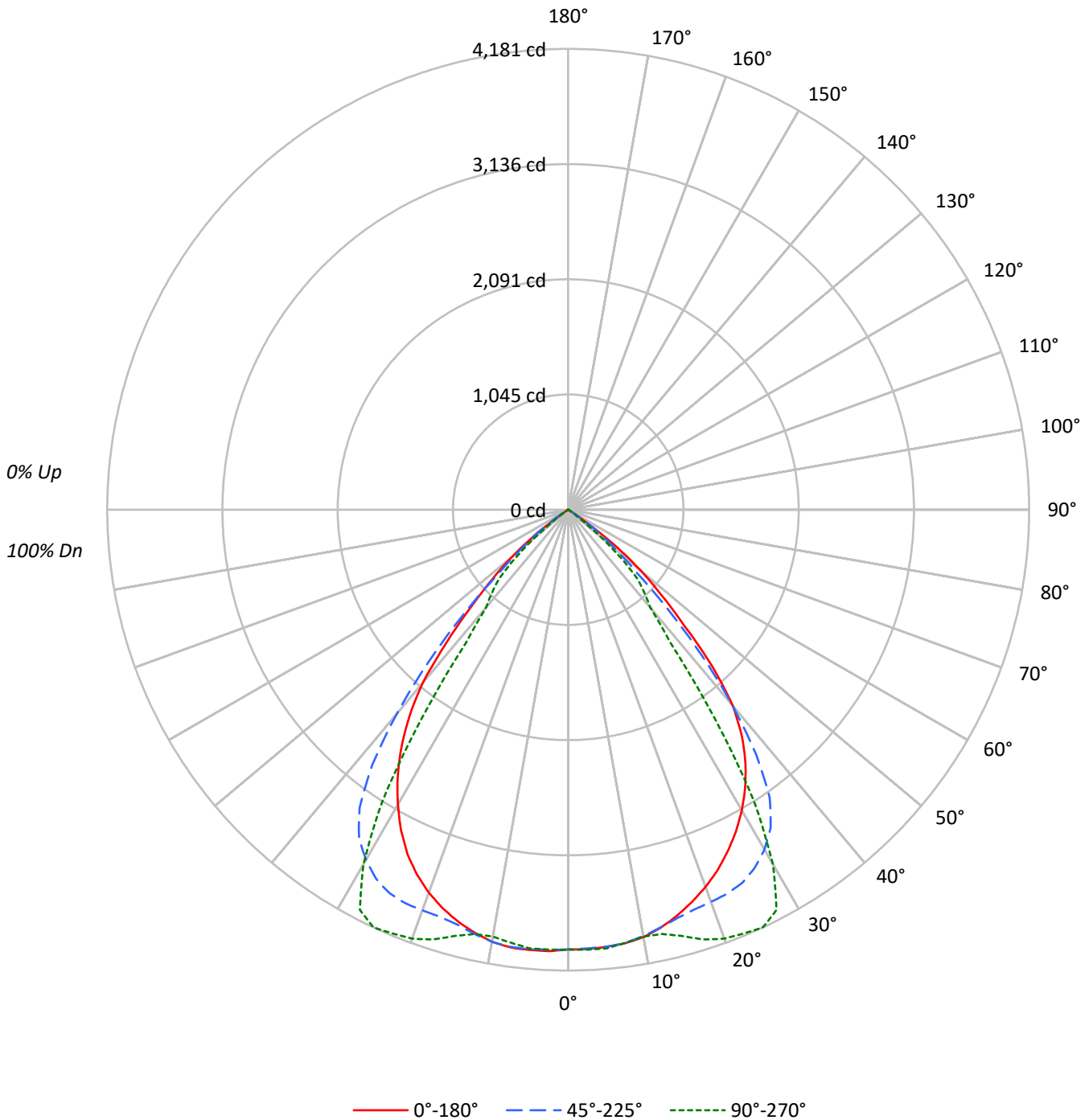
Test Method: LM-41-14  
Report Number: 128P103  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P5MX-3BX40S34M/I  
Description: 2 X 2 Surface Modular Luminaire with  
a 12 cell specular low iridescent  
precision cell II parabolic louver.  
Light Source: Three-F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.  
Ballast/Driver: Triad-Utrad B332I120RH Electronic

**Summary**

Lumens per Lamp: 3150 (3 lamps)  
Luminaire Lumens: 6139.8 lumens  
Efficiency: 65.0%  
Efficacy: 59.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.25 / 1.19  
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 103.1  
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: 128P103  
CATALOG NUMBER: 2P5MX-3BX40S34M/I

### Luminous Intensity Polar Plot





TEST NUMBER: 128P103

CATALOG NUMBER: 2P5MX-3BX40S34M/I

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

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

	0°	90°	180°
0°	14066	14066	14066
5°	14088	14137	14190
10°	14097	14079	14247
15°	13916	14613	14113
20°	13659	15539	13866
25°	13307	16263	13412
30°	12818	15122	12578
35°	12067	10040	11366
40°	10686	5320	9475
45°	7433	4417	6172
50°	4700	2194	3658
55°	1266	178	516
60°	106	92	92
65°	67	75	58
70°	52	62	52
75°	41	41	27
80°	0	41	0
85°	0	0	0



TEST NUMBER: 128P103

CATALOG NUMBER: 2P5MX-3BX40S34M/I

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	379.6	6.2	4.0	0°	3990	3990	3990	3990	3990	
10°-20°	1105.8	18.0	11.7	5°	3981	3980	3995	4003	4010	379
20°-30°	1733.4	28.2	18.3	15°	3813	3834	4004	3896	3867	1074
30°-40°	1746.7	28.4	18.5	25°	3421	3735	4181	3838	3448	1573
40°-50°	969.0	15.8	10.3	35°	2804	3186	2333	3299	2641	1735
50°-60°	192.5	3.1	2.0	45°	1491	1279	886	1335	1238	1179
60°-70°	9.0	0.1	0.1	55°	206	202	29	207	84	264
70°-80°	3.4	0.1	0.0	65°	8	8	9	8	7	9
80°-90°	0.5	0.0	0.0	75°	3	3	3	3	2	3
90°-100°	0.0	0.0	0.0	85°	0	0	0	2	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°	3218.7	52.4	34.1	165°	0	0	0	0	0	0
0°-40°	4965.4	80.9	52.5	175°	0	0	0	0	0	0
0°-60°	6126.9	99.8	64.8	180°	0	0	0	0	0	0
0°-90°	6139.8	100.0	65.0							
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°	6139.8	100.0	65.0							



TEST NUMBER: 128P103

CATALOG NUMBER: 2P5MX-3BX40S34M/I

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3990	3990	3990	3990	3990	3990	3990	3990	3990
2.5°	3990	3981	3983	3985	3995	3991	3995	3996	4009
5°	3981	3973	3980	3984	3995	3998	4003	4001	4010
7.5°	3967	3961	3965	3954	3963	3979	4001	4003	4006
10°	3938	3936	3927	3916	3933	3948	3981	3992	3980
12.5°	3884	3886	3881	3904	3942	3937	3941	3956	3929
15°	3813	3813	3834	3935	4004	3977	3896	3895	3867
17.5°	3732	3722	3803	3999	4088	4049	3871	3819	3790
20°	3641	3627	3787	4052	4142	4113	3869	3725	3696
22.5°	3540	3528	3770	4054	4161	4130	3864	3622	3583
25°	3421	3426	3735	4040	4181	4121	3838	3505	3448
27.5°	3292	3323	3663	3992	4092	4078	3775	3373	3281
30°	3149	3219	3560	3782	3715	3887	3667	3230	3090
32.5°	2987	3102	3418	3327	3141	3443	3532	3069	2880
35°	2804	2959	3186	2712	2333	2816	3299	2883	2641
37.5°	2587	2782	2800	1962	1519	2049	2920	2669	2368
40°	2322	2545	2316	1296	1156	1351	2418	2401	2059
42.5°	1948	2233	1794	1000	1026	1024	1879	2072	1633
45°	1491	1809	1279	850	886	872	1335	1663	1238
47.5°	1144	1350	836	688	653	710	855	1248	933
50°	857	941	571	469	400	488	564	871	667
52.5°	548	566	376	244	150	253	372	516	392
55°	206	240	202	77	29	85	207	212	84
57.5°	23	53	70	20	17	20	75	47	19
60°	15	17	17	14	13	14	18	15	13
62.5°	11	12	10	11	11	11	10	11	10
65°	8	10	8	9	9	9	8	8	7
67.5°	7	8	7	7	7	7	6	7	5
70°	5	6	5	6	6	6	5	5	5
72.5°	4	5	4	4	5	4	4	4	3
75°	3	3	3	3	3	3	3	3	2
77.5°	1	2	2	3	3	3	2	2	1
80°	0	1	1	2	2	2	1	1	0
82.5°	0	0	1	1	1	1	1	0	0
85°	0	0	0	0	0	1	2	0	0
87.5°	0	0	0	0	0	0	1	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: 128P103

CATALOG NUMBER: 2P5MX-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)