

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: 128P106

Luminaire Tested: **2P5MX-3BX40S34VDT**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 128P106
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P5MX-3BX40S34VDT
Description: 2 X 2 Surface Modular Luminaire 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

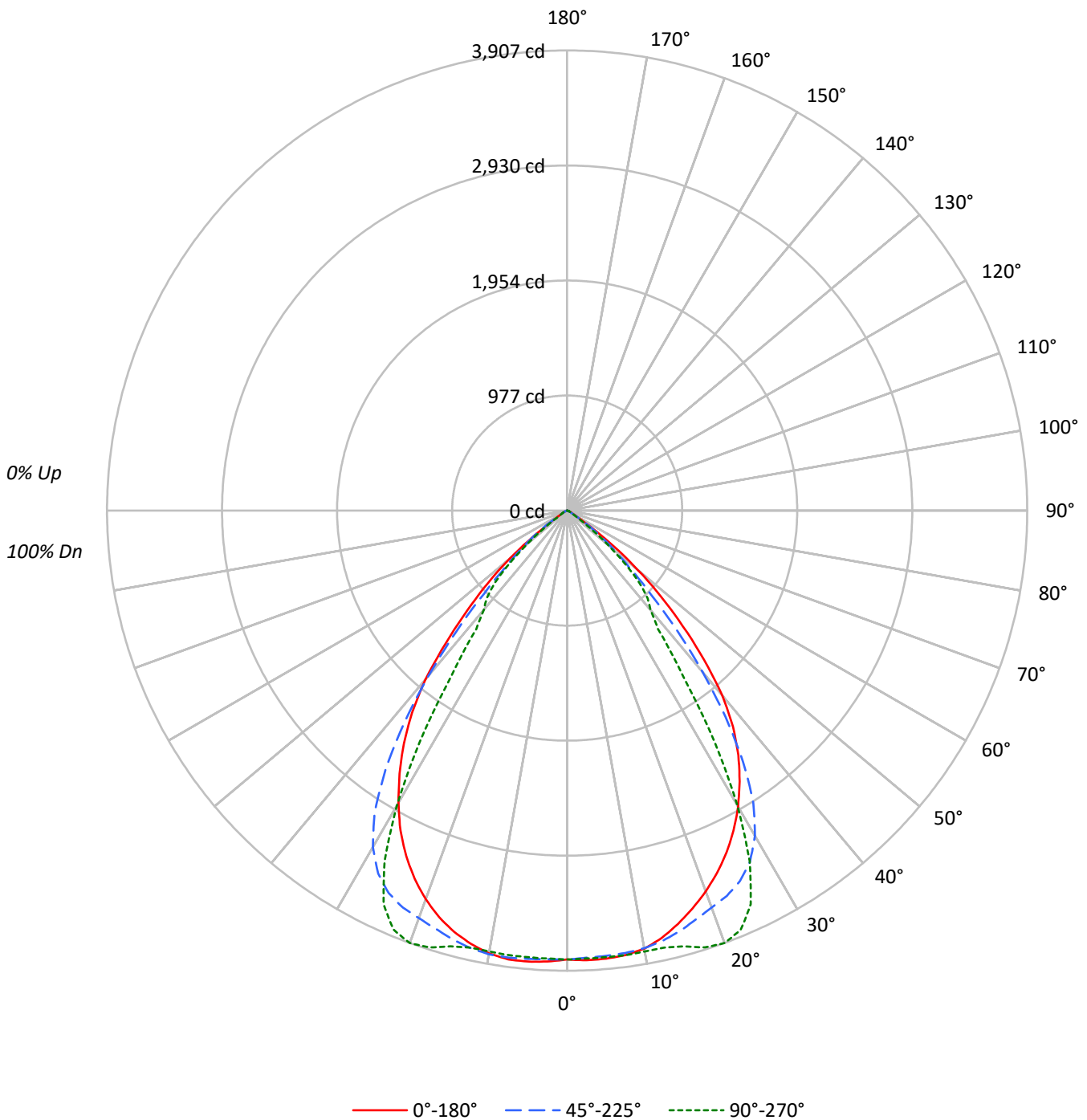
Summary

Lumens per Lamp: 3150 (3 lamps)
Luminaire Lumens: 5560.7 lumens
Efficiency: 58.8%
Efficacy: 55.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.15 / 1.12
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')
CIE Type: Direct

Input Watts (W): 100.1
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: 128P106
CATALOG NUMBER: 2P5MX-3BX40S34VDT

Luminous Intensity Polar Plot





TEST NUMBER: 128P106

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	13395	13395	13395
5°	13475	13429	13563
10°	13480	13566	13627
15°	13224	13937	13478
20°	12871	14614	13133
25°	12418	14299	12546
30°	11778	11725	11624
35°	10873	7346	10362
40°	9397	5052	8580
45°	6914	4325	5955
50°	4298	2466	3489
55°	1550	643	999
60°	464	359	380
65°	266	250	233
70°	185	185	154
75°	122	136	109
80°	101	121	81
85°	81	121	81



TEST NUMBER: 128P106

CATALOG NUMBER: 2P5MX-3BX40S34VDT

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	363.6	6.5	3.8	0°	3811	3811	3811	3811	3811	
10°-20°	1058.5	19.0	11.2	5°	3819	3795	3806	3821	3844	363
20°-30°	1586.1	28.5	16.8	15°	3634	3696	3830	3767	3704	1023
30°-40°	1460.9	26.3	15.5	25°	3202	3472	3687	3584	3235	1470
40°-50°	839.4	15.1	8.9	35°	2534	2604	1712	2691	2415	1568
50°-60°	209.7	3.8	2.2	45°	1391	1005	870	999	1198	1073
60°-70°	29.7	0.5	0.3	55°	253	212	105	206	163	282
70°-80°	10.2	0.2	0.1	65°	32	24	30	23	28	35
80°-90°	2.5	0.0	0.0	75°	9	9	10	8	8	11
90°-100°	0.0	0.0	0.0	85°	2	2	3	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°	3008.3	54.1	31.8	165°	0	0	0	0	0	0
0°-40°	4469.1	80.4	47.3	175°	0	0	0	0	0	0
0°-60°	5518.3	99.2	58.4	180°	0	0	0	0	0	0
0°-90°	5560.7	100.0	58.8							
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°	5560.7	100.0	58.8							



TEST NUMBER: 128P106

CATALOG NUMBER: 2P5MX-3BX40S34VDT

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3811	3811	3811	3811	3811	3811	3811	3811	3811
2.5°	3821	3809	3800	3805	3807	3810	3813	3826	3832
5°	3819	3803	3795	3802	3806	3812	3821	3839	3844
7.5°	3806	3790	3788	3801	3807	3817	3828	3841	3843
10°	3777	3762	3773	3791	3801	3817	3825	3825	3818
12.5°	3716	3709	3742	3780	3801	3817	3804	3782	3769
15°	3634	3635	3696	3779	3830	3825	3767	3723	3704
17.5°	3541	3549	3639	3813	3889	3867	3721	3649	3619
20°	3441	3456	3586	3831	3907	3893	3682	3554	3511
22.5°	3329	3350	3541	3797	3852	3869	3647	3442	3383
25°	3202	3237	3472	3679	3687	3755	3584	3317	3235
27.5°	3061	3115	3361	3439	3355	3515	3475	3176	3065
30°	2902	2982	3189	3062	2889	3132	3299	3013	2864
32.5°	2726	2827	2942	2571	2333	2642	3042	2827	2648
35°	2534	2642	2604	2031	1712	2089	2691	2614	2415
37.5°	2312	2420	2208	1487	1267	1519	2273	2374	2162
40°	2048	2155	1786	1113	1101	1135	1826	2093	1870
42.5°	1722	1827	1379	949	1012	969	1394	1765	1523
45°	1391	1468	1005	826	870	845	999	1397	1198
47.5°	1079	1115	722	672	659	688	708	1047	916
50°	786	776	525	484	451	491	515	721	638
52.5°	503	464	359	303	245	307	355	422	366
55°	253	234	212	156	105	156	206	207	163
57.5°	106	108	103	75	69	75	97	99	82
60°	66	59	50	52	51	52	47	55	54
62.5°	45	40	33	38	40	38	32	37	38
65°	32	29	24	29	30	29	23	27	28
67.5°	24	21	19	22	23	22	18	20	20
70°	18	16	15	17	18	17	14	15	15
72.5°	13	12	12	13	14	13	11	12	11
75°	9	9	9	10	10	10	8	9	8
77.5°	7	6	7	7	8	7	6	6	6
80°	5	5	5	6	6	5	5	4	4
82.5°	3	3	4	4	4	4	3	3	2
85°	2	2	2	3	3	2	2	2	2
87.5°	1	1	1	1	2	1	1	1	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: 128P106

CATALOG NUMBER: 2P5MX-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)