

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: 157P103

Luminaire Tested: **P5GX-117S14M/I**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 157P103
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: P5GX-117S14M/I
Description: 1 X 2 Recessed Convertible Body Troffer with a
4 cell specular low iridescent precision cell
II parabolic louver.
Light Source: F17T8/35K - 1350 Lumens - 17 Watts
Ballast/Driver: Advance REL-2P32-RH-TP Electronic

Summary

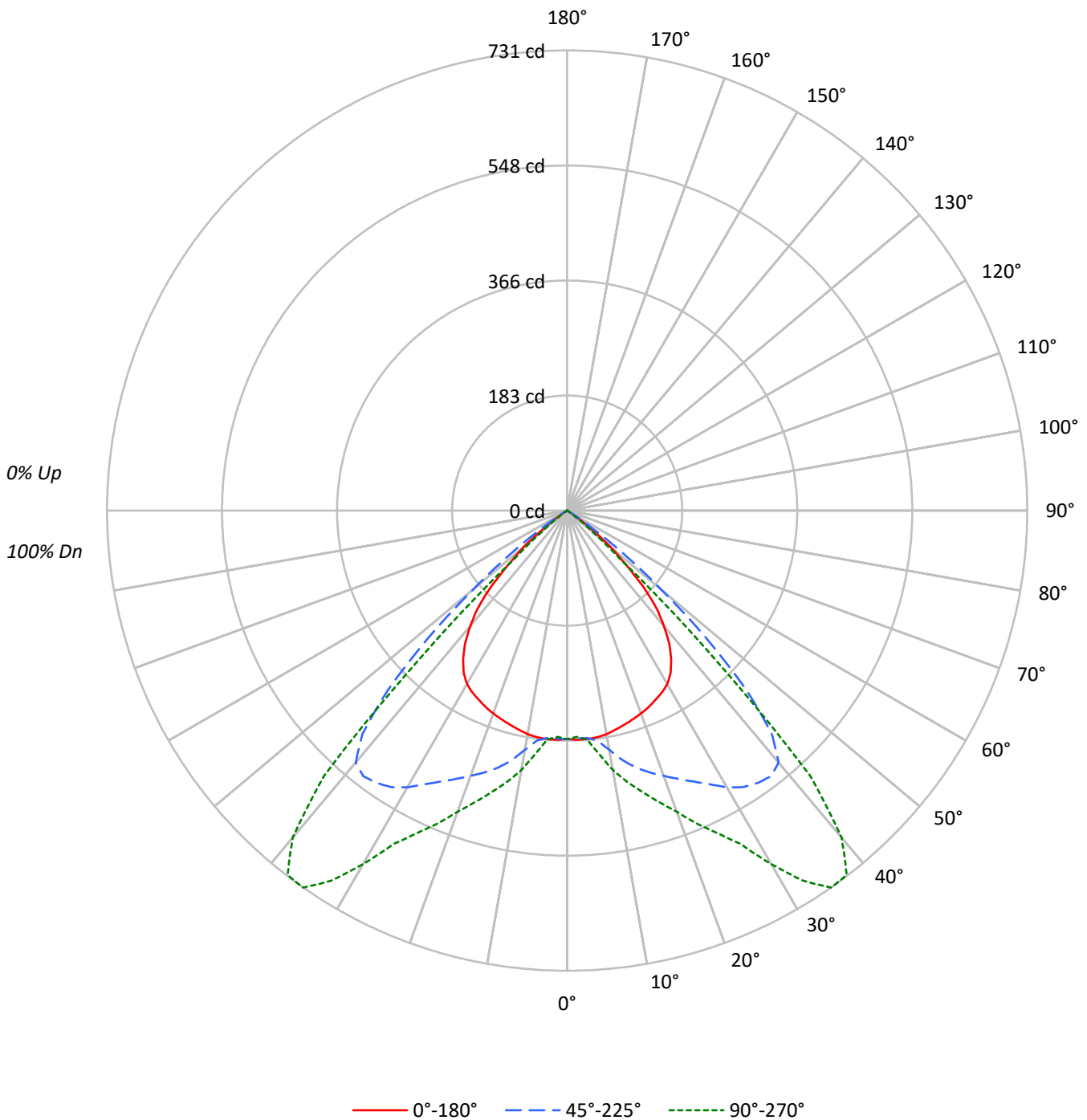
Lumens per Lamp: 1350 (1 lamp)
Luminaire Lumens: 970.4 lumens
Efficiency: 71.9%
Efficacy: 38.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.9 / 1.54
Luminous Opening: Rectangular (W 0.73' x L: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 25
Input Voltage (V): NR
Input Current (A_{in}): 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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	86	86	86	86	84	84	84	84	80	80	80	76	76	76	73	73	73	72						72													
1	81	78	76	74	79	77	75	73	74	72	71	71	70	69	69	68	67	65						65													
2	76	71	68	65	74	70	67	64	68	65	63	65	63	61	63	62	60	59						59													
3	70	65	60	57	69	64	60	56	62	58	55	60	57	55	58	56	54	52						52													
4	66	59	54	50	64	58	53	50	56	52	49	55	51	49	53	51	48	47						47													
5	61	54	48	45	60	53	48	44	52	47	44	50	46	44	49	46	43	42						42													
6	57	49	44	40	56	48	43	40	47	43	39	46	42	39	45	41	39	37						37													
7	53	45	39	36	52	44	39	36	43	39	35	42	38	35	41	38	35	34						34													
8	49	41	36	32	48	41	36	32	40	35	32	39	35	32	38	34	31	30						30													
9	46	38	33	29	45	37	32	29	37	32	29	36	32	29	35	31	29	27						27													
10	43	35	30	26	42	34	30	26	34	29	26	33	29	26	33	29	26	25						25													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3040	3040	3040
5°	3064	3049	3070
10°	3068	3281	3560
15°	3053	3664	4014
20°	3057	3997	4536
25°	3067	4388	5227
30°	3078	4909	6271
35°	2946	5400	7477
40°	2613	5713	7416
45°	2017	4763	3769
50°	1161	2539	708
55°	263	726	83
60°	30	74	27
65°	20	16	16
70°	12	7	5
75°	6	3	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	35.5	3.7	2.6	0°	363	363	363	363	363	
10°-20°	117.6	12.1	8.7	5°	364	363	363	365	365	35
20°-30°	216.4	22.3	16.0	15°	352	364	422	454	463	100
30°-40°	322.2	33.2	23.9	25°	332	392	475	547	566	153
40°-50°	243.0	25.0	18.0	35°	288	380	528	675	731	178
50°-60°	34.7	3.6	2.6	45°	170	263	402	413	318	128
60°-70°	1.0	0.1	0.1	55°	18	26	50	17	6	26
70°-80°	0.1	0.0	0.0	65°	1	1	1	1	1	1
80°-90°	0.0	0.0	0.0	75°	0	0	0	0	0	0
90°-100°	0.0	0.0	0.0	85°	0	0	0	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°	369.5	38.1	27.4	165°	0	0	0	0	0	0
0°-40°	691.7	71.3	51.2	175°	0	0	0	0	0	0
0°-60°	969.3	99.9	71.8	180°	0	0	0	0	0	0
0°-90°	970.4	100.0	71.9							
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°	970.4	100.0	71.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	362.9	362.9	362.9	362.9	362.9
2.5°	364.4	363.4	362.5	361.3	359.8
5°	364.4	362.8	362.6	364.6	365.1
7.5°	363.3	361.4	368.4	384.0	389.8
10°	360.7	360.7	385.7	412.4	418.5
12.5°	356.4	361.0	405.9	434.2	441.3
15°	352.0	363.8	422.5	454.2	462.9
17.5°	347.5	371.0	436.0	475.3	485.5
20°	342.9	379.8	448.4	495.2	508.9
22.5°	337.9	386.9	461.4	518.5	537.9
25°	331.8	391.6	474.8	546.6	565.5
27.5°	326.0	394.2	490.0	572.0	597.0
30°	318.2	393.6	507.5	602.9	648.4
32.5°	305.7	389.3	520.8	646.6	696.7
35°	288.1	380.2	528.1	675.0	731.2
37.5°	266.4	368.9	531.8	678.1	729.4
40°	239.0	353.2	522.5	635.2	678.2
42.5°	210.2	322.4	481.1	542.4	572.0
45°	170.3	263.3	402.1	412.6	318.2
47.5°	124.6	188.3	298.1	220.2	115.9
50°	89.1	119.3	194.8	88.7	54.3
52.5°	51.4	66.2	112.9	44.2	21.5
55°	18.0	26.5	49.7	16.6	5.7
57.5°	3.0	6.7	16.1	3.9	2.2
60°	1.8	2.0	4.4	1.8	1.6
62.5°	1.4	1.4	1.4	1.2	1.1
65°	1.0	1.0	0.8	0.8	0.8
67.5°	0.8	0.7	0.6	0.5	0.5
70°	0.5	0.4	0.3	0.3	0.2
72.5°	0.3	0.3	0.2	0.1	0.1
75°	0.2	0.1	0.1	0.0	0.0
77.5°	0.1	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)