

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: 157P102

Luminaire Tested: **P5GX-1U1-5/8S14M/I**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 157P102
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: P5GX-1U1-5/8S14M/I
Description: 1 X 2 Recessed Convertible Body Troffer
with a 4 cell specular low iridescent
precision cell II parabolic louver.
Light Source: FBO31/35K - 2800 Lumens - 31 Watts
Ballast/Driver: Triad-Utrad B232I120 Electronic

Summary

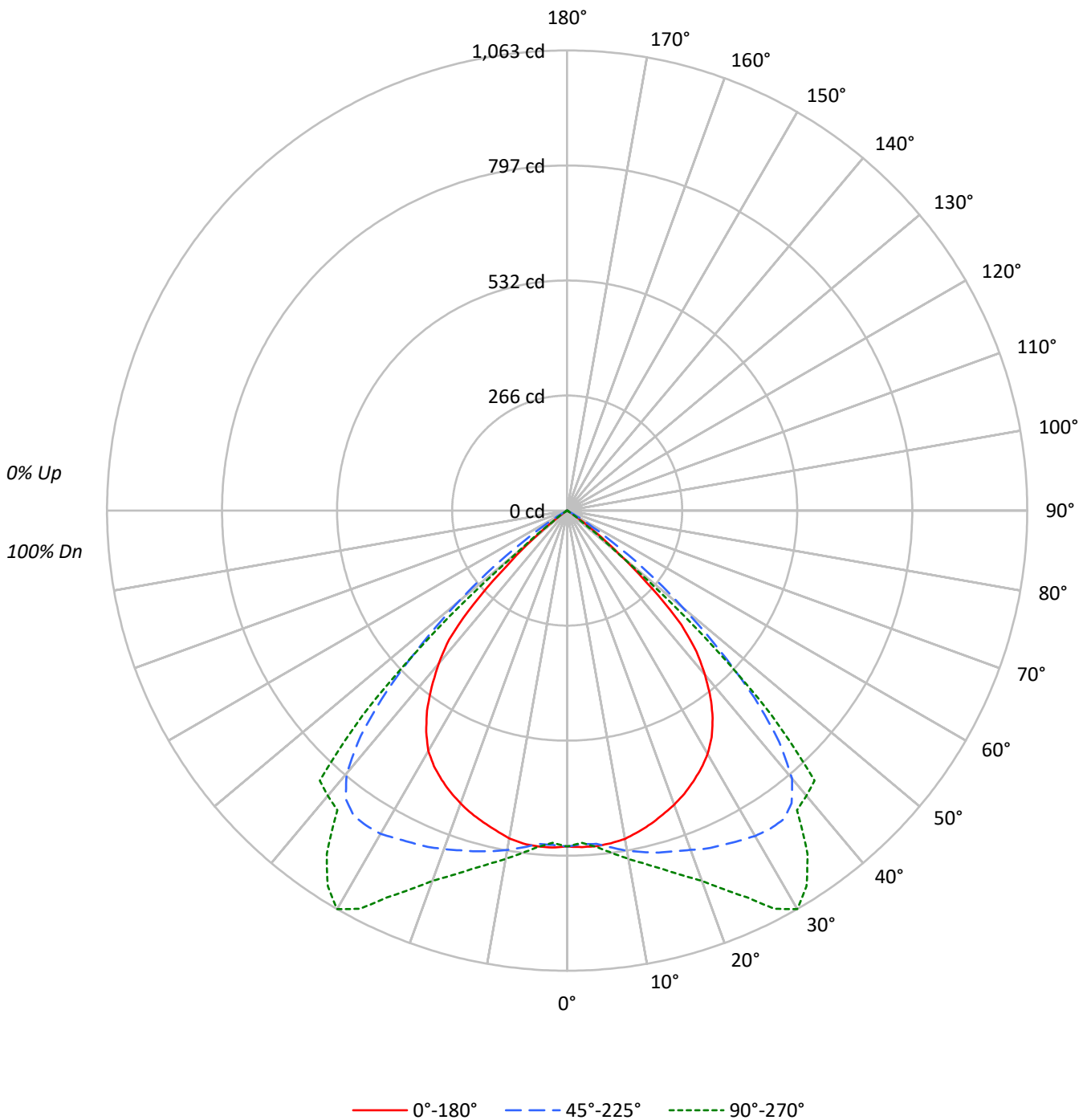
Lumens per Lamp: 2800 (1 lamp)
Luminaire Lumens: 1683.0 lumens
Efficiency: 60.1%
Efficacy: 49.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.67 / 1.45
Luminous Opening: Rectangular (W 0.73' x L: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 34.3
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				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	72	72	72	72	70	70	70	70	67	67	67	64	64	64	61	61	61	60
1	68	66	64	62	66	64	63	61	62	61	59	60	59	58	57	57	56	55
2	63	60	57	54	62	59	56	54	57	54	53	55	53	51	53	52	50	49
3	59	54	51	48	58	54	50	47	52	49	47	50	48	46	49	47	45	44
4	55	50	46	42	54	49	45	42	47	44	42	46	43	41	45	43	41	40
5	51	45	41	38	50	45	41	38	43	40	37	42	39	37	41	39	37	35
6	48	41	37	34	47	41	37	34	40	36	33	39	36	33	38	35	33	32
7	45	38	34	30	44	37	33	30	37	33	30	36	32	30	35	32	30	29
8	42	35	31	27	41	35	30	27	34	30	27	33	30	27	32	29	27	26
9	39	32	28	25	38	32	28	25	31	27	25	31	27	25	30	27	25	24
10	37	30	26	23	36	29	25	23	29	25	23	28	25	23	28	25	22	22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6500	6500	6500
5°	6542	6559	6550
10°	6549	6949	6541
15°	6495	7441	6469
20°	6445	8112	6418
25°	6377	9113	6340
30°	6277	10282	6200
35°	5992	9899	5767
40°	5413	9404	5041
45°	4419	7913	3625
50°	2059	1890	1394
55°	497	146	175
60°	67	50	50
65°	40	20	40
70°	24	24	24
75°	32	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp	0°	45°	90°	135°	180°	Flux
0°-10°	74.7	4.4	2.7	0°	776	776	776	776	
10°-20°	229.7	13.6	8.2	5°	778	773	780	773	74
20°-30°	391.9	23.3	14.0	15°	749	818	858	815	211
30°-40°	507.2	30.1	18.1	25°	690	852	986	847	318
40°-50°	403.4	24.0	14.4	35°	586	871	968	860	363
50°-60°	73.5	4.4	2.6	45°	373	612	668	589	269
60°-70°	2.3	0.1	0.1	55°	34	132	10	115	45
70°-80°	0.4	0.0	0.0	65°	2	2	1	2	2
80°-90°	0.0	0.0	0.0	75°	1	0	0	0	1
90°-100°	0.0	0.0	0.0	85°	0	0	0	0	0
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0
0°-30°	696.2	41.4	24.9	165°	0	0	0	0	0
0°-40°	1203.4	71.5	43.0	175°	0	0	0	0	0
0°-60°	1680.3	99.8	60.0	180°	0	0	0	0	0
0°-90°	1683.0	100.0	60.1						
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°	1683.0	100.0	60.1						



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	776	776	776	776	776	776	776	776	776
2.5°	778	773	771	769	768	769	773	776	779
5°	778	770	773	778	780	778	773	773	779
7.5°	775	768	785	796	798	796	785	770	776
10°	770	768	798	813	817	814	796	767	769
12.5°	760	768	808	831	836	831	806	765	757
15°	749	766	818	850	858	850	815	763	746
17.5°	736	763	825	872	883	872	823	761	734
20°	723	759	834	893	910	892	832	757	720
22.5°	708	755	845	920	947	917	841	751	704
25°	690	748	852	950	986	945	847	744	686
27.5°	671	738	860	985	1037	978	854	733	666
30°	649	724	868	1023	1063	1013	862	719	641
32.5°	621	705	872	1022	1029	1014	863	699	606
35°	586	682	871	978	968	969	860	669	564
37.5°	544	652	852	912	872	902	840	639	514
40°	495	619	808	803	860	799	792	603	461
42.5°	442	567	725	758	846	754	706	537	404
45°	373	475	612	675	668	662	589	444	306
47.5°	266	367	477	489	420	478	452	322	189
50°	158	240	351	296	145	287	327	200	107
52.5°	84	142	237	115	44	112	214	116	47
55°	34	72	132	38	10	35	115	48	12
57.5°	7	21	58	7	4	7	48	11	4
60°	4	4	16	3	3	3	12	4	3
62.5°	3	3	4	2	2	2	3	3	2
65°	2	2	2	2	1	2	2	2	2
67.5°	2	2	1	1	1	1	1	1	1
70°	1	1	1	1	1	1	1	1	1
72.5°	1	1	1	1	0	1	1	1	1
75°	1	1	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	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



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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)