

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: 158P104

Luminaire Tested: **P5GX2024-217S24M/I**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 158P104
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: P5GX2024-217S24M/I
Description: 20" X 24" Recessed Convertible Body Troffer
with an 8 cell specular low iridescent
precision cell II parabolic louver.
Light Source: Two-F17T8/35K - 1350 Lumens ea. - 17 Watts ea.
Ballast/Driver: Triad-Utrad B232I120RH Electronic

Summary

Lumens per Lamp: 1350 (2 lamps)
Luminaire Lumens: 1876.0 lumens
Efficiency: 69.5%
Efficacy: 52.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.77 / 1.45
Luminous Opening: Rectangular (W 1.4' x L: 1.75' x H: 0')
CIE Type: Direct

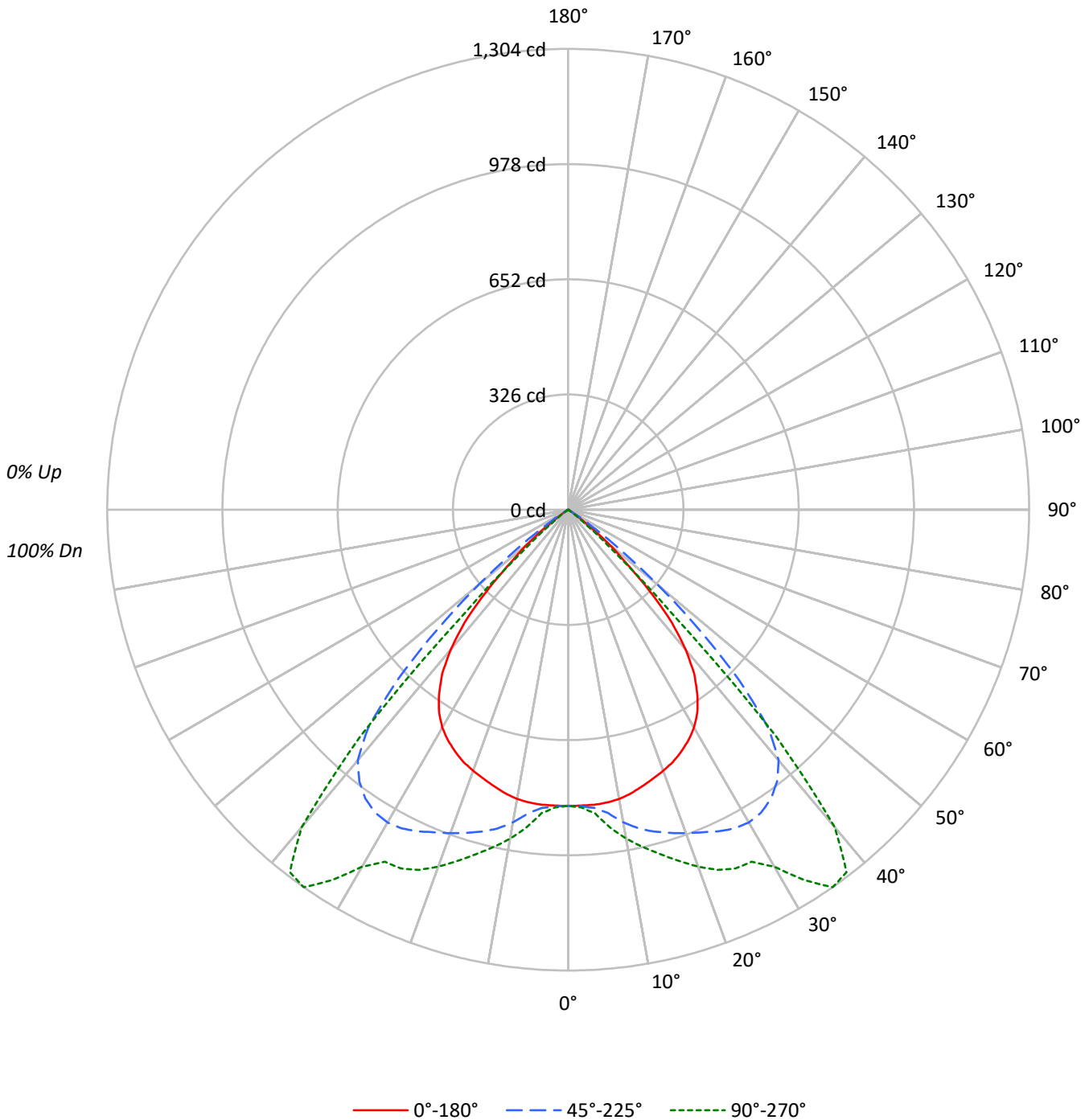
Input Watts (W): 36
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	83	83	83	83	81	81	81	81	77	77	77	74	74	74	71	71	71	69				
1	78	76	74	72	76	74	73	71	72	70	69	69	68	67	67	66	65	63				
2	73	69	66	63	72	68	65	62	66	63	61	64	62	60	62	60	59	57				
3	69	63	59	56	67	62	58	55	60	57	54	59	56	54	57	55	53	51				
4	64	58	53	50	63	57	53	49	55	52	49	54	51	48	52	50	47	46				
5	60	53	48	44	59	52	48	44	51	47	44	50	46	43	48	45	43	42				
6	56	48	43	40	55	48	43	40	47	42	39	46	42	39	45	41	39	38				
7	52	44	39	36	51	44	39	36	43	39	36	42	38	35	41	38	35	34				
8	49	41	36	32	48	40	36	32	40	35	32	39	35	32	38	35	32	31				
9	46	38	33	29	45	37	33	29	37	32	29	36	32	29	35	32	29	28				
10	43	35	30	27	42	35	30	27	34	30	27	33	29	27	33	29	27	26				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3679	3679	3679
5°	3693	3733	3799
10°	3705	4003	4213
15°	3682	4286	4586
20°	3672	4551	5022
25°	3662	4864	5425
30°	3609	5181	5911
35°	3414	5354	6989
40°	2963	5307	6723
45°	2030	4259	2533
50°	1011	2247	519
55°	138	582	46
60°	26	61	26
65°	21	21	21
70°	13	13	13
75°	0	0	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°	82.5	4.4	3.1	0°	838	838	838	838	838	
10°-20°	263.1	14.0	9.7	5°	838	841	847	857	862	80
20°-30°	451.8	24.1	16.7	15°	810	853	943	996	1009	229
30°-40°	609.0	32.5	22.6	25°	756	868	1004	1108	1120	348
40°-50°	413.3	22.0	15.3	35°	637	797	999	1199	1304	393
50°-60°	54.2	2.9	2.0	45°	327	500	686	622	408	249
60°-70°	1.8	0.1	0.1	55°	18	39	76	23	6	37
70°-80°	0.2	0.0	0.0	65°	2	2	2	2	2	2
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°	797.4	42.5	29.5	165°	0	0	0	0	0	0
0°-40°	1406.5	75.0	52.1	175°	0	0	0	0	0	0
0°-60°	1874.0	99.9	69.4	180°	0	0	0	0	0	0
0°-90°	1876.0	100.0	69.5							
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°	1876.0	100.0	69.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	838	838	838	838	838
2.5°	838	838	840	842	843
5°	838	841	847	857	862
7.5°	836	843	866	897	907
10°	831	845	898	935	945
12.5°	822	847	924	966	978
15°	810	853	943	996	1009
17.5°	798	861	959	1024	1042
20°	786	866	974	1054	1075
22.5°	773	869	988	1084	1103
25°	756	868	1004	1108	1120
27.5°	736	863	1017	1120	1123
30°	712	852	1022	1121	1166
32.5°	680	831	1016	1156	1242
35°	637	797	999	1199	1304
37.5°	585	753	970	1193	1293
40°	517	701	926	1096	1173
42.5°	435	624	838	904	871
45°	327	500	686	622	408
47.5°	215	335	503	303	175
50°	148	200	329	136	76
52.5°	75	109	182	65	28
55°	18	39	76	23	6
57.5°	4	8	25	5	4
60°	3	3	7	3	3
62.5°	2	2	2	2	2
65°	2	2	2	2	2
67.5°	1	1	1	1	1
70°	1	1	1	1	1
72.5°	1	1	0	0	0
75°	0	0	0	0	0
77.5°	0	0	0	0	0
80°	0	0	0	0	0
82.5°	0	0	0	0	0
85°	0	0	0	0	0
87.5°	0	0	0	0	0
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	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
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)