

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: 109P160

Luminaire Tested: **2PGX-3U15/8S33I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 109P160
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2PGX-3U15/8S33I-PAF
Description: 2 X 2 Recessed Troffer with a 4" deep 9 cell
semi-specular low iridescent parabolic louver.
Light Source: Three-FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.
Ballast/Driver: Two-Triad-Utrad B232I120RH Electronic

Summary

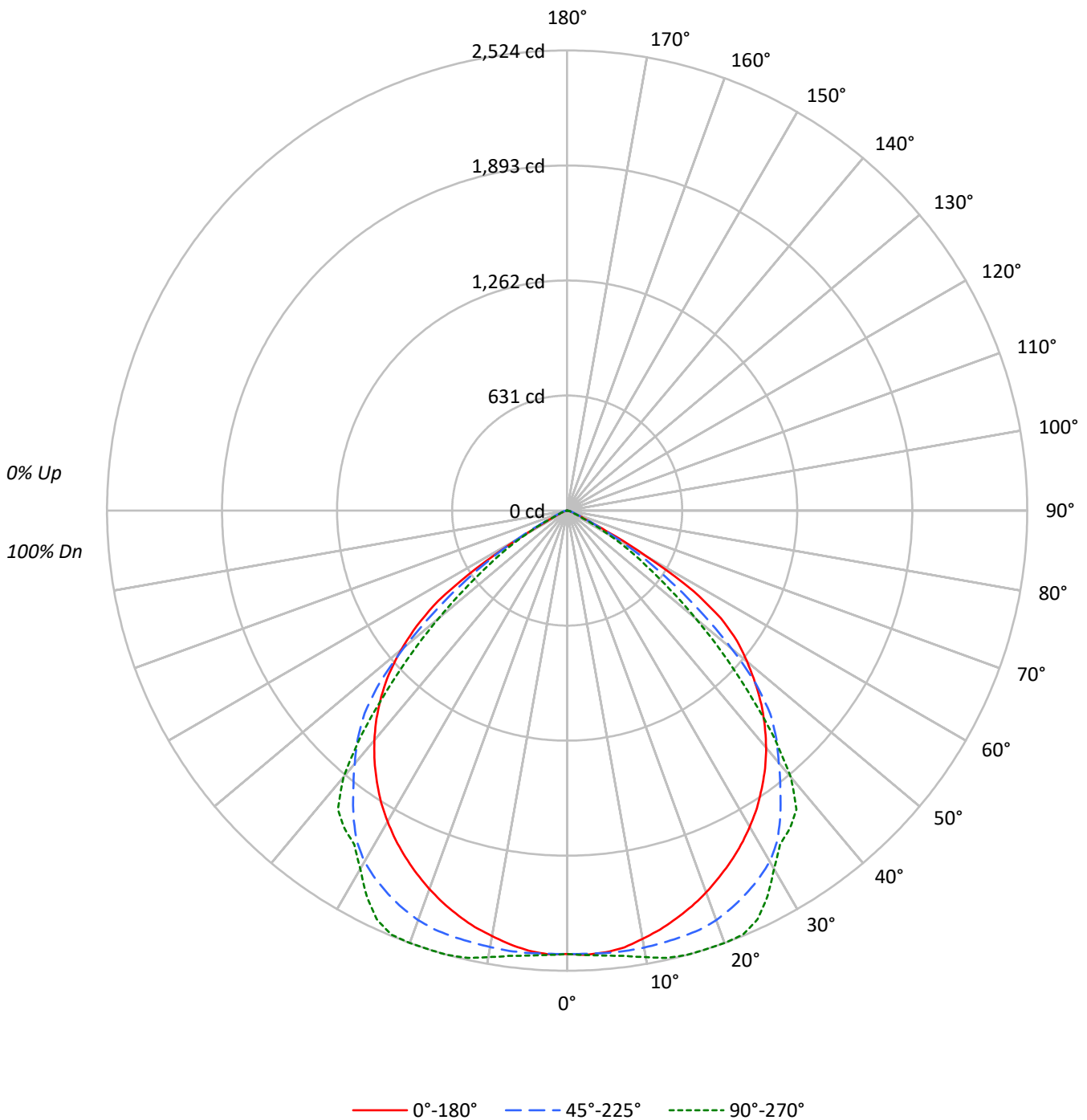
Lumens per Lamp: 2750 (3 lamps)
Luminaire Lumens: 5190.7 lumens
Efficiency: 62.9%
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.36
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')
CIE Type: Direct

Input Watts (W): 88.1
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



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CATALOG NUMBER: 2PGX-3U15/8S33I-PAF

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	75	75	75	75	73	73	73	73	70	70	70	67	67	67	64	64	64	63				63
1	70	68	66	64	69	67	65	63	64	63	61	62	61	59	60	59	58	57				57
2	65	61	58	55	64	60	57	55	58	56	53	56	54	52	54	53	51	50				50
3	61	55	51	48	59	54	51	48	53	49	47	51	48	46	50	47	45	44				44
4	56	50	45	42	55	49	45	42	48	44	41	46	43	41	45	42	40	39				39
5	52	45	41	37	51	45	40	37	43	39	36	42	39	36	41	38	36	35				35
6	49	41	36	33	47	41	36	33	40	36	32	39	35	32	38	34	32	31				31
7	45	38	33	29	44	37	33	29	36	32	29	35	32	29	35	31	29	28				28
8	42	35	30	26	41	34	30	26	33	29	26	33	29	26	32	29	26	25				25
9	40	32	27	24	39	32	27	24	31	27	24	30	26	24	30	26	24	23				23
10	37	29	25	22	36	29	25	22	29	25	22	28	24	22	27	24	22	21				21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8548	8548	8548
5°	8581	8644	8549
10°	8512	8876	8459
15°	8428	9184	8373
20°	8337	9441	8263
25°	8237	9591	8137
30°	8129	9209	7995
35°	7985	9135	7805
40°	7791	8759	7548
45°	7491	6969	7163
50°	7043	5036	6507
55°	6306	3278	5288
60°	3529	1835	2032
65°	823	574	524
70°	370	319	288
75°	244	231	190
80°	182	162	142
85°	121	121	81



TEST NUMBER: 109P160

CATALOG NUMBER: 2PGX-3U15/8S33I-PAF

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	232.4	4.5	2.8	0°	2432	2432	2432	2432	2432	
10°-20°	683.5	13.2	8.3	5°	2432	2436	2450	2436	2423	231
20°-30°	1060.2	20.4	12.9	15°	2316	2421	2524	2419	2301	653
30°-40°	1254.7	24.2	15.2	25°	2124	2320	2473	2322	2098	979
40°-50°	1149.5	22.1	13.9	35°	1861	2039	2129	2044	1819	1163
50°-60°	658.1	12.7	8.0	45°	1507	1576	1402	1572	1441	1158
60°-70°	125.0	2.4	1.5	55°	1029	735	535	710	863	873
70°-80°	22.8	0.4	0.3	65°	99	104	69	92	63	162
80°-90°	4.3	0.1	0.1	75°	18	23	17	22	14	21
90°-100°	0.0	0.0	0.0	85°	3	4	3	3	2	4
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°	1976.1	38.1	24.0	165°	0	0	0	0	0	0
0°-40°	3230.9	62.2	39.2	175°	0	0	0	0	0	0
0°-60°	5038.5	97.1	61.1	180°	0	0	0	0	0	0
0°-90°	5190.7	100.0	62.9							
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°	5190.7	100.0	62.9							



TEST NUMBER: 109P160

CATALOG NUMBER: 2PGX-3U15/8S33I-PAF

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2432	2432	2432	2432	2432	2432	2432	2432	2432
2.5°	2439	2433	2433	2436	2440	2436	2433	2434	2436
5°	2432	2427	2436	2443	2450	2445	2436	2429	2423
7.5°	2416	2415	2437	2456	2464	2456	2436	2415	2400
10°	2385	2394	2434	2472	2487	2471	2431	2393	2370
12.5°	2354	2368	2428	2491	2513	2491	2425	2368	2340
15°	2316	2339	2421	2501	2524	2501	2419	2339	2301
17.5°	2275	2307	2412	2494	2524	2494	2410	2308	2258
20°	2229	2273	2391	2481	2524	2481	2390	2272	2209
22.5°	2177	2234	2359	2466	2518	2467	2360	2232	2156
25°	2124	2192	2320	2433	2473	2435	2322	2190	2098
27.5°	2066	2147	2276	2358	2382	2362	2277	2144	2037
30°	2003	2096	2223	2247	2269	2254	2224	2091	1970
32.5°	1936	2034	2146	2131	2172	2136	2149	2028	1899
35°	1861	1963	2039	2040	2129	2047	2044	1956	1819
37.5°	1783	1882	1921	1985	2066	1986	1927	1872	1736
40°	1698	1792	1806	1881	1909	1882	1813	1777	1645
42.5°	1605	1692	1699	1691	1669	1689	1701	1675	1548
45°	1507	1583	1576	1443	1402	1438	1572	1562	1441
47.5°	1399	1462	1402	1185	1153	1180	1393	1437	1326
50°	1288	1333	1179	953	921	946	1165	1301	1190
52.5°	1175	1190	947	745	712	742	927	1135	1040
55°	1029	1000	735	565	535	561	710	923	863
57.5°	823	736	540	415	397	411	511	650	595
60°	502	424	359	290	261	284	327	355	289
62.5°	243	204	201	174	142	169	179	169	125
65°	99	103	104	95	69	92	92	87	63
67.5°	54	61	63	58	44	56	58	54	41
70°	36	42	44	40	31	39	41	38	28
72.5°	25	30	32	29	23	28	30	27	20
75°	18	22	23	21	17	20	22	20	14
77.5°	13	16	17	15	12	15	16	14	10
80°	9	11	12	11	8	10	11	10	7
82.5°	6	7	8	7	5	6	7	6	4
85°	3	4	4	4	3	4	3	3	2
87.5°	1	1	2	1	1	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: 109P160

CATALOG NUMBER: 2PGX-3U15/8S33I-PAF

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)