

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: 109P146

Luminaire Tested: **2P2GX-3U1-5/8S55M/I-PAF**

Issue Date: 3/3/2020



**Test Information**

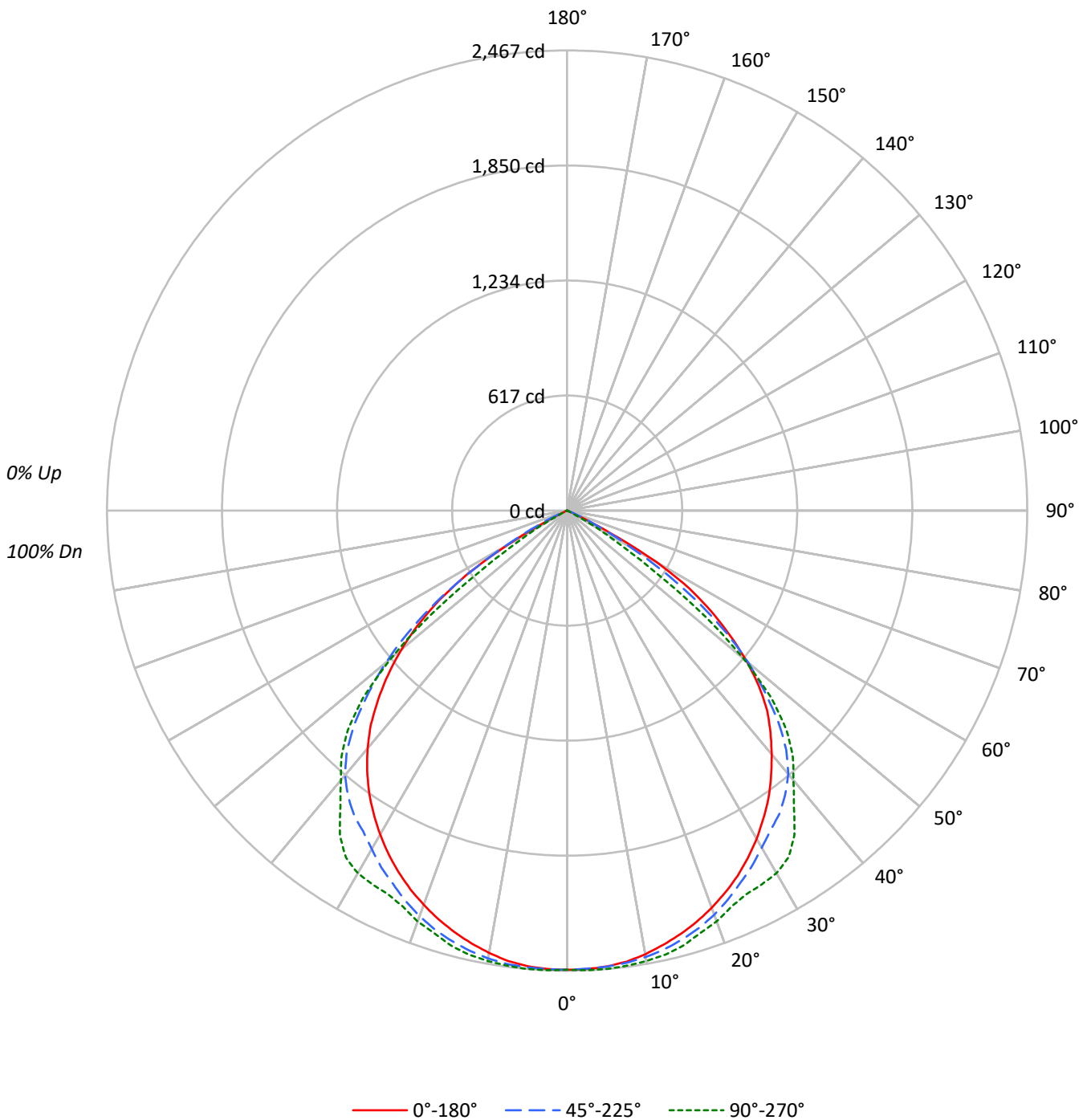
Test Method: LM-41-14  
Report Number: 109P146  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P2GX-3U1-5/8S55M/I-PAF  
Description: 2 X 2 Recessed Convertible Body Troffer with  
a 2" deep 25 cell specular low iridescent  
parabolic louver.  
Light Source: Three-FB031/35K - 2800 Lumens ea. - 31 Watts ea.  
Ballast/Driver: Triad-Utrad B332I120RH Electronic

**Summary**

Lumens per Lamp: 2800 (3 lamps)  
Luminaire Lumens: 5183.7 lumens  
Efficiency: 61.7%  
Efficacy: 62.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.35 / 1.37  
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 83.1  
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: 109P146  
CATALOG NUMBER: 2P2GX-3U1-5/8S55M/I-PAF

### Luminous Intensity Polar Plot





TEST NUMBER: 109P146

CATALOG NUMBER: 2P2GX-3U1-5/8S55M/I-PAF

**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	73	73	73	73	72	72	72	72	69	69	69	66	66	66	63	63	63	62
1	69	67	65	63	67	65	64	62	63	62	60	61	59	58	58	58	57	56
2	64	60	57	54	63	59	56	54	57	55	52	55	53	51	53	52	50	49
3	60	54	50	47	58	53	50	47	52	49	46	50	47	45	49	46	44	43
4	55	49	45	41	54	48	44	41	47	43	40	45	42	40	44	42	39	38
5	51	44	40	36	50	44	39	36	43	39	36	41	38	35	40	37	35	34
6	48	40	36	32	46	40	35	32	39	35	32	38	34	31	37	34	31	30
7	44	37	32	29	43	36	32	29	35	31	28	35	31	28	34	31	28	27
8	41	34	29	26	40	33	29	26	33	29	26	32	28	25	31	28	25	24
9	39	31	26	23	38	31	26	23	30	26	23	29	26	23	29	25	23	22
10	36	29	24	21	36	28	24	21	28	24	21	27	24	21	27	23	21	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	8654	8654	8654
5°	8655	8704	8651
10°	8619	8751	8594
15°	8551	8781	8508
20°	8476	8768	8409
25°	8381	8804	8292
30°	8247	9112	8138
35°	8075	9114	7938
40°	7828	8658	7635
45°	7536	8266	7118
50°	6868	6737	6349
55°	5785	3560	5135
60°	3880	1153	2566
65°	532	42	216
70°	72	31	62
75°	54	27	41
80°	40	20	20
85°	0	0	0



TEST NUMBER: 109P146

CATALOG NUMBER: 2P2GX-3U1-5/8S55M/I-PAF

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	233.8	4.5	2.8	0°	2462	2462	2462	2462	2462	
10°-20°	672.1	13.0	8.0	5°	2453	2454	2467	2458	2452	233
20°-30°	1021.0	19.7	12.2	15°	2350	2381	2413	2389	2338	663
30°-40°	1242.8	24.0	14.8	25°	2161	2200	2270	2209	2138	995
40°-50°	1202.7	23.2	14.3	35°	1882	1984	2124	1993	1850	1175
50°-60°	709.1	13.7	8.4	45°	1516	1601	1663	1608	1432	1158
60°-70°	99.1	1.9	1.2	55°	944	856	581	858	838	830
70°-80°	2.7	0.1	0.0	65°	64	90	5	86	26	150
80°-90°	0.5	0.0	0.0	75°	4	2	2	2	3	4
90°-100°	0.0	0.0	0.0	85°	0	1	0	1	0	1
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°	1926.9	37.2	22.9	165°	0	0	0	0	0	0
0°-40°	3169.7	61.1	37.7	175°	0	0	0	0	0	0
0°-60°	5081.4	98.0	60.5	180°	0	0	0	0	0	0
0°-90°	5183.7	100.0	61.7							
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°	5183.7	100.0	61.7							



TEST NUMBER: 109P146

CATALOG NUMBER: 2P2GX-3U1-5/8S55M/I-PAF

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2462	2462	2462	2462	2462	2462	2462	2462	2462
2.5°	2460	2457	2458	2463	2466	2464	2460	2459	2460
5°	2453	2450	2454	2462	2467	2464	2458	2454	2452
7.5°	2439	2437	2445	2456	2461	2459	2452	2443	2435
10°	2415	2415	2430	2445	2452	2451	2438	2423	2408
12.5°	2384	2387	2409	2430	2438	2436	2417	2395	2376
15°	2350	2355	2381	2405	2413	2413	2389	2365	2338
17.5°	2311	2318	2347	2369	2374	2377	2356	2327	2297
20°	2266	2276	2306	2326	2344	2333	2314	2284	2248
22.5°	2216	2228	2256	2285	2299	2294	2265	2238	2197
25°	2161	2177	2200	2232	2270	2243	2209	2185	2138
27.5°	2099	2119	2147	2212	2259	2220	2157	2127	2075
30°	2032	2055	2087	2189	2245	2197	2095	2063	2005
32.5°	1958	1984	2030	2159	2207	2164	2037	1992	1930
35°	1882	1909	1984	2098	2124	2103	1993	1916	1850
37.5°	1796	1825	1920	1994	1997	2002	1930	1832	1761
40°	1706	1734	1845	1861	1887	1869	1852	1740	1664
42.5°	1614	1636	1738	1739	1791	1744	1748	1640	1558
45°	1516	1532	1601	1619	1663	1621	1608	1528	1432
47.5°	1395	1410	1436	1457	1482	1461	1443	1396	1302
50°	1256	1272	1266	1243	1232	1249	1268	1256	1161
52.5°	1102	1113	1075	988	939	990	1076	1100	1008
55°	944	917	856	701	581	703	858	902	838
57.5°	776	699	624	396	314	400	621	686	632
60°	552	477	399	211	164	211	396	462	365
62.5°	262	261	221	85	38	85	216	247	131
65°	64	81	90	12	5	11	86	76	26
67.5°	12	13	27	4	4	4	25	12	9
70°	7	6	5	3	3	3	5	6	6
72.5°	5	4	3	2	2	3	3	4	4
75°	4	3	2	2	2	2	2	3	3
77.5°	3	2	2	1	1	1	2	2	2
80°	2	1	1	1	1	1	1	1	1
82.5°	1	1	1	1	1	1	1	1	0
85°	0	0	1	0	0	0	1	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



TEST NUMBER: 109P146

CATALOG NUMBER: 2P2GX-3U1-5/8S55M/I-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)