

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: 163P100

Luminaire Tested: **GC2048-240A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 163P100
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GC2048-240A-PAF
Description: 20" X 48" Recessed Convertible Body Troffer
with a .095 pattern 12 acrylic lens.
Light Source: Two-F40CW - 3050 Lumens ea. - 40 Watts ea.
Ballast/Driver: Advance R-2S40-1-TP

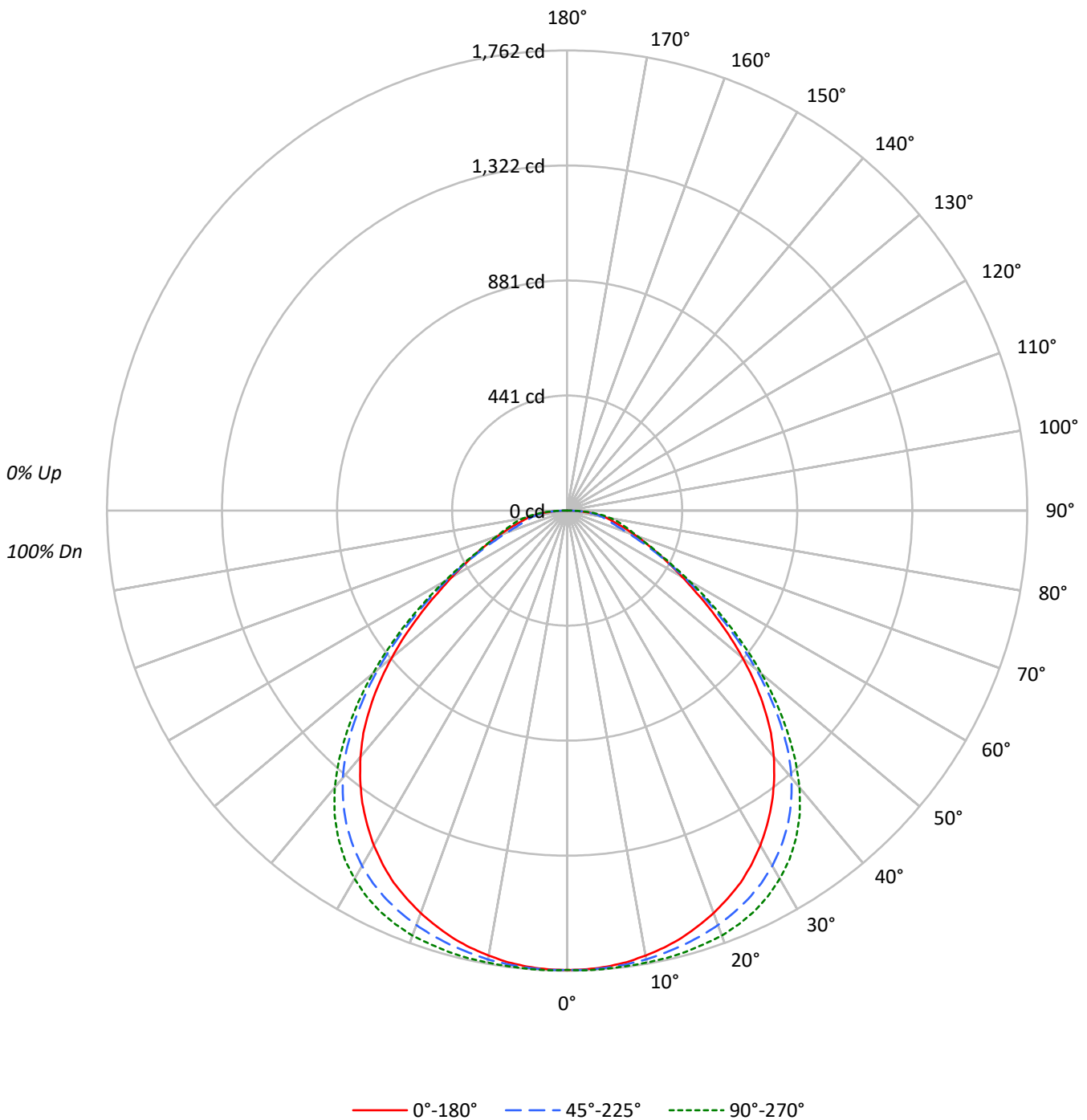
Summary

Lumens per Lamp: 3050 (2 lamps)
Luminaire Lumens: 4516.8 lumens
Efficiency: 74.0%
Efficacy: 53.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.35 / 1.37
Luminous Opening: Rectangular (W 1.45' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 84.8
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: 163P100
CATALOG NUMBER: GC2048-240A-PAF

Luminous Intensity Polar Plot





TEST NUMBER: 163P100

CATALOG NUMBER: GC2048-240A-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	88	88	88	88	86	86	86	86	82	82	82		79	79	79		76	76	76	74
1	81	78	75	72	79	76	73	71	73	71	69		70	68	67		68	66	65	63
2	74	69	64	60	72	67	63	59	65	61	58		62	59	57		60	58	55	54
3	68	61	55	51	66	60	55	50	58	53	49		56	52	49		54	51	48	46
4	63	54	48	44	61	53	48	43	52	47	43		50	46	42		48	45	42	40
5	58	49	43	38	56	48	42	38	47	41	37		45	40	37		44	40	36	35
6	54	44	38	33	52	44	38	33	42	37	33		41	36	33		40	36	32	31
7	50	40	34	30	49	40	34	29	39	33	29		37	33	29		36	32	29	27
8	46	37	31	27	45	36	30	26	35	30	26		34	30	26		34	29	26	25
9	43	34	28	24	42	33	28	24	33	27	24		32	27	24		31	27	24	22
10	41	31	26	22	40	31	25	22	30	25	22		29	25	22		29	25	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3417	3417	3417
5°	3419	3427	3434
10°	3413	3443	3466
15°	3407	3464	3520
20°	3391	3492	3581
25°	3370	3518	3631
30°	3320	3524	3652
35°	3242	3491	3626
40°	3122	3391	3510
45°	2932	3179	3270
50°	2651	2853	2938
55°	2303	2452	2537
60°	1974	2052	2102
65°	1738	1673	1765
70°	1585	1380	1625
75°	1509	1299	1689
80°	1645	1510	1913
85°	1783	1761	2140



TEST NUMBER: 163P100

CATALOG NUMBER: GC2048-240A-PAF

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	167.2	3.7	2.7	0°	1759	1759	1759	1759	1759	
10°-20°	486.4	10.8	8.0	5°	1753	1752	1757	1757	1761	167
20°-30°	753.4	16.7	12.4	15°	1694	1700	1722	1740	1750	478
30°-40°	909.2	20.1	14.9	25°	1572	1591	1641	1679	1694	723
40°-50°	876.5	19.4	14.4	35°	1367	1403	1472	1511	1529	853
50°-60°	644.1	14.3	10.6	45°	1067	1106	1157	1179	1190	819
60°-70°	377.8	8.4	6.2	55°	680	699	724	733	749	611
70°-80°	214.7	4.8	3.5	65°	378	364	364	385	384	380
80°-90°	87.5	1.9	1.4	75°	201	195	173	220	225	217
90°-100°	0.0	0.0	0.0	85°	80	76	79	94	96	79
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	6
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°	1406.9	31.1	23.1	165°	0	0	0	0	0	0
0°-40°	2316.2	51.3	38.0	175°	0	0	0	0	0	0
0°-60°	3836.8	84.9	62.9	180°	0	0	0	0	0	0
0°-90°	4516.8	100.0	74.0							
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°	4516.8	100.0	74.0							



TEST NUMBER: 163P100

CATALOG NUMBER: GC2048-240A-PAF

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1759	1759	1759	1759	1759
2.5°	1758	1757	1760	1758	1762
5°	1753	1752	1757	1757	1761
7.5°	1744	1744	1752	1755	1759
10°	1730	1734	1745	1751	1757
12.5°	1714	1718	1734	1747	1755
15°	1694	1700	1722	1740	1750
17.5°	1668	1679	1707	1730	1741
20°	1640	1653	1689	1718	1732
22.5°	1607	1624	1667	1701	1715
25°	1572	1591	1641	1679	1694
27.5°	1528	1553	1609	1649	1665
30°	1480	1509	1571	1611	1628
32.5°	1426	1459	1525	1566	1584
35°	1367	1403	1472	1511	1529
37.5°	1302	1341	1409	1446	1463
40°	1231	1271	1337	1370	1384
42.5°	1155	1193	1253	1280	1292
45°	1067	1106	1157	1179	1190
47.5°	975	1011	1052	1070	1084
50°	877	909	944	958	972
52.5°	778	803	833	844	859
55°	680	699	724	733	749
57.5°	589	600	622	629	641
60°	508	509	528	534	541
62.5°	439	431	441	453	455
65°	378	364	364	385	384
67.5°	326	308	298	331	329
70°	279	262	243	287	286
72.5°	237	226	202	252	252
75°	201	195	173	220	225
77.5°	172	167	153	190	200
80°	147	138	135	160	171
82.5°	117	107	111	129	137
85°	80	76	79	94	96
87.5°	41	41	42	50	50
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



TEST NUMBER: 163P100

CATALOG NUMBER: GC2048-240A-PAF

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)