

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: 126P108

Luminaire Tested: **2GC-2BX40A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 126P108
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC-2BX40A-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with
a .095 pattern 12 acrylic lens.
Light Source: Two-F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: Triad-Utrad B232I120RH Electronic

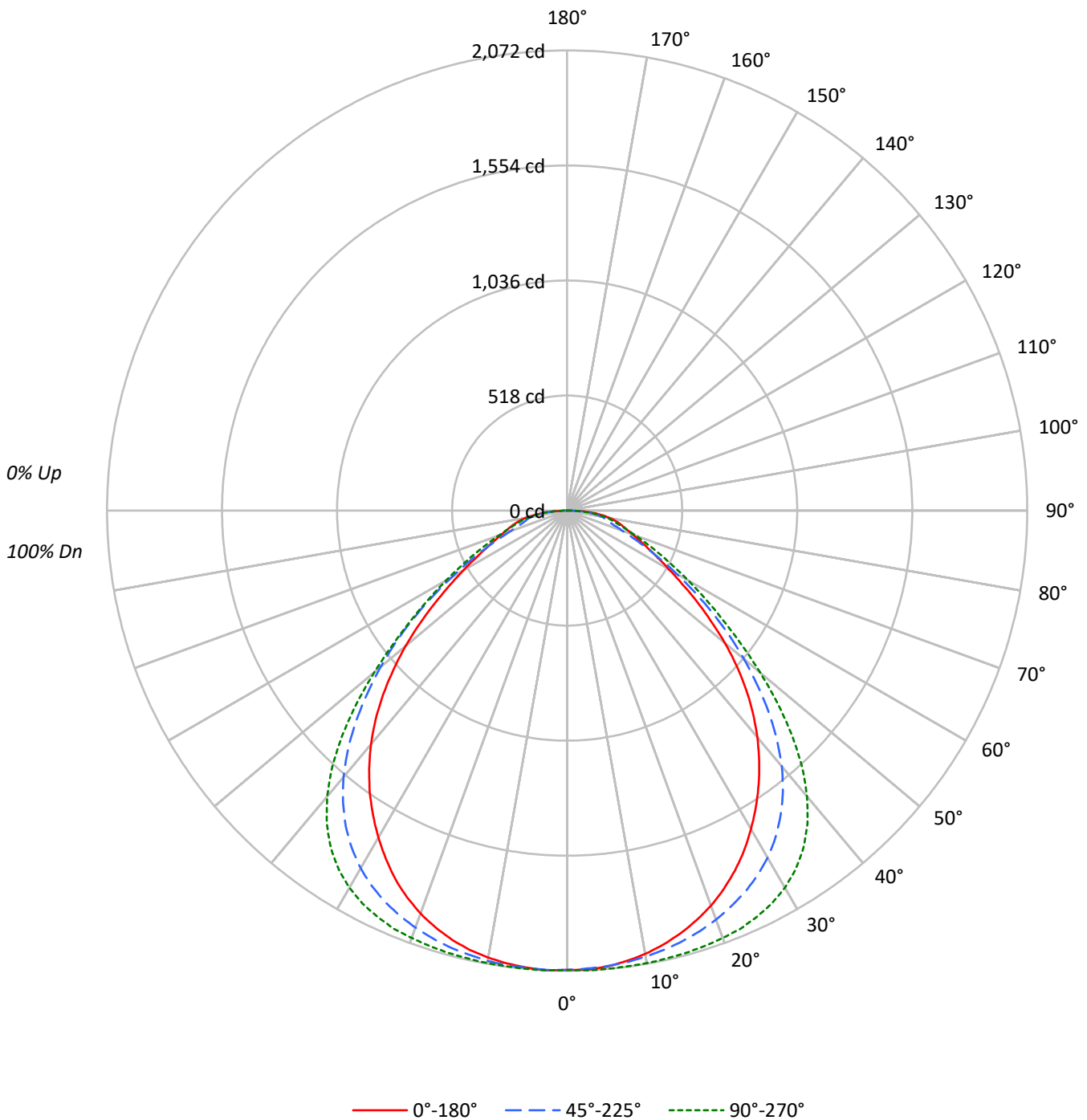
Summary

Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 5194.9 lumens
Efficiency: 82.5%
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.39 / 1.36
Luminous Opening: Rectangular (W 1.79' x L: 1.81' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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	0
RCR																				
0	98	98	98	98	96	96	96	96	92	92	92		88	88	88		84	84	84	82
1	90	87	83	81	88	85	82	79	81	79	77		78	76	74		75	74	72	70
2	83	77	71	67	81	75	70	66	72	68	65		70	66	63		67	64	62	60
3	76	68	62	57	74	67	61	56	64	59	55		62	58	54		60	56	53	52
4	70	61	54	49	68	60	53	48	58	52	48		56	51	47		54	50	47	45
5	65	55	48	43	63	54	47	42	52	46	42		50	45	41		49	45	41	39
6	60	50	42	37	58	49	42	37	47	41	37		46	41	37		45	40	36	35
7	56	45	38	33	54	44	38	33	43	37	33		42	37	33		41	36	32	31
8	52	41	35	30	51	41	34	30	40	34	30		39	33	29		38	33	29	28
9	49	38	31	27	47	37	31	27	37	31	27		36	30	27		35	30	27	25
10	46	35	29	25	45	35	29	24	34	28	24		33	28	24		32	28	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6894	6894	6894
5°	6897	6934	6914
10°	6862	7004	6919
15°	6803	7117	6906
20°	6716	7266	6851
25°	6577	7427	6735
30°	6375	7549	6544
35°	6121	7549	6304
40°	5797	7316	5980
45°	5375	6751	5526
50°	4808	5876	4927
55°	4133	4958	4220
60°	3527	4187	3600
65°	3171	3589	3179
70°	3051	3187	3041
75°	3272	3091	3272
80°	3763	3437	3648
85°	4475	3672	3787



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	196.6	3.8	3.1	0°	2068	2068	2068	2068	2068	
10°-20°	571.4	11.0	9.1	5°	2061	2059	2072	2067	2066	196
20°-30°	882.4	17.0	14.0	15°	1971	2007	2062	2036	2001	556
30°-40°	1057.4	20.4	16.8	25°	1788	1895	2019	1943	1831	822
40°-50°	999.4	19.2	15.9	35°	1504	1676	1855	1737	1549	938
50°-60°	717.9	13.8	11.4	45°	1140	1284	1432	1345	1172	875
60°-70°	420.6	8.1	6.7	55°	711	793	853	841	726	640
70°-80°	246.6	4.7	3.9	65°	402	388	455	408	403	404
80°-90°	102.7	2.0	1.6	75°	254	195	240	202	254	268
90°-100°	0.0	0.0	0.0	85°	117	91	96	95	99	111
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	9
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°	1650.4	31.8	26.2	165°	0	0	0	0	0	0
0°-40°	2707.8	52.1	43.0	175°	0	0	0	0	0	0
0°-60°	4425.0	85.2	70.2	180°	0	0	0	0	0	0
0°-90°	5194.9	100.0	82.5							
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°	5194.9	100.0	82.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2068	2068	2068	2068	2068	2068	2068	2068	2068
2.5°	2069	2063	2064	2066	2072	2070	2070	2069	2072
5°	2061	2054	2059	2065	2072	2070	2067	2067	2066
7.5°	2046	2040	2051	2061	2070	2068	2064	2061	2057
10°	2027	2022	2039	2056	2069	2067	2059	2049	2044
12.5°	2002	2001	2025	2050	2066	2064	2048	2034	2026
15°	1971	1972	2007	2042	2062	2057	2036	2015	2001
17.5°	1935	1939	1986	2032	2056	2049	2019	1989	1969
20°	1893	1901	1960	2018	2048	2039	1998	1956	1931
22.5°	1844	1856	1929	2001	2038	2025	1973	1918	1884
25°	1788	1807	1895	1979	2019	2005	1943	1873	1831
27.5°	1726	1748	1854	1950	1995	1978	1905	1820	1768
30°	1656	1685	1805	1912	1961	1942	1860	1760	1700
32.5°	1582	1614	1746	1861	1915	1893	1804	1692	1627
35°	1504	1538	1676	1797	1855	1831	1737	1618	1549
37.5°	1420	1456	1596	1717	1778	1754	1658	1538	1465
40°	1332	1367	1504	1621	1681	1658	1567	1450	1374
42.5°	1239	1270	1398	1507	1566	1545	1462	1352	1276
45°	1140	1166	1284	1380	1432	1418	1345	1245	1172
47.5°	1035	1057	1161	1241	1286	1278	1222	1131	1061
50°	927	945	1038	1097	1133	1126	1097	1015	950
52.5°	815	832	916	955	987	986	970	899	836
55°	711	725	793	822	853	849	841	786	726
57.5°	613	624	675	700	734	724	717	679	627
60°	529	534	567	590	628	612	601	580	540
62.5°	460	458	471	497	534	514	497	495	465
65°	402	396	388	420	455	432	408	425	403
67.5°	352	348	318	356	385	365	332	369	352
70°	313	309	263	304	327	311	272	325	312
72.5°	280	275	222	263	279	269	230	287	280
75°	254	242	195	229	240	233	202	252	254
77.5°	228	209	177	196	209	200	184	217	225
80°	196	176	158	162	179	166	165	183	190
82.5°	160	144	130	127	140	130	135	151	148
85°	117	105	91	91	96	94	95	111	99
87.5°	67	57	49	51	50	53	51	60	43
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)