

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: 108P133

Luminaire Tested: **2GC-232A-PAF**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 108P133  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GC-232A-PAF  
Description: 2 X 4 Recessed Convertible Body Troffer  
with a .095 pattern 12 acrylic lens.  
Light Source: Two-F32T8/35K - 2900 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Triad-Utrad B232I120RH Electronic

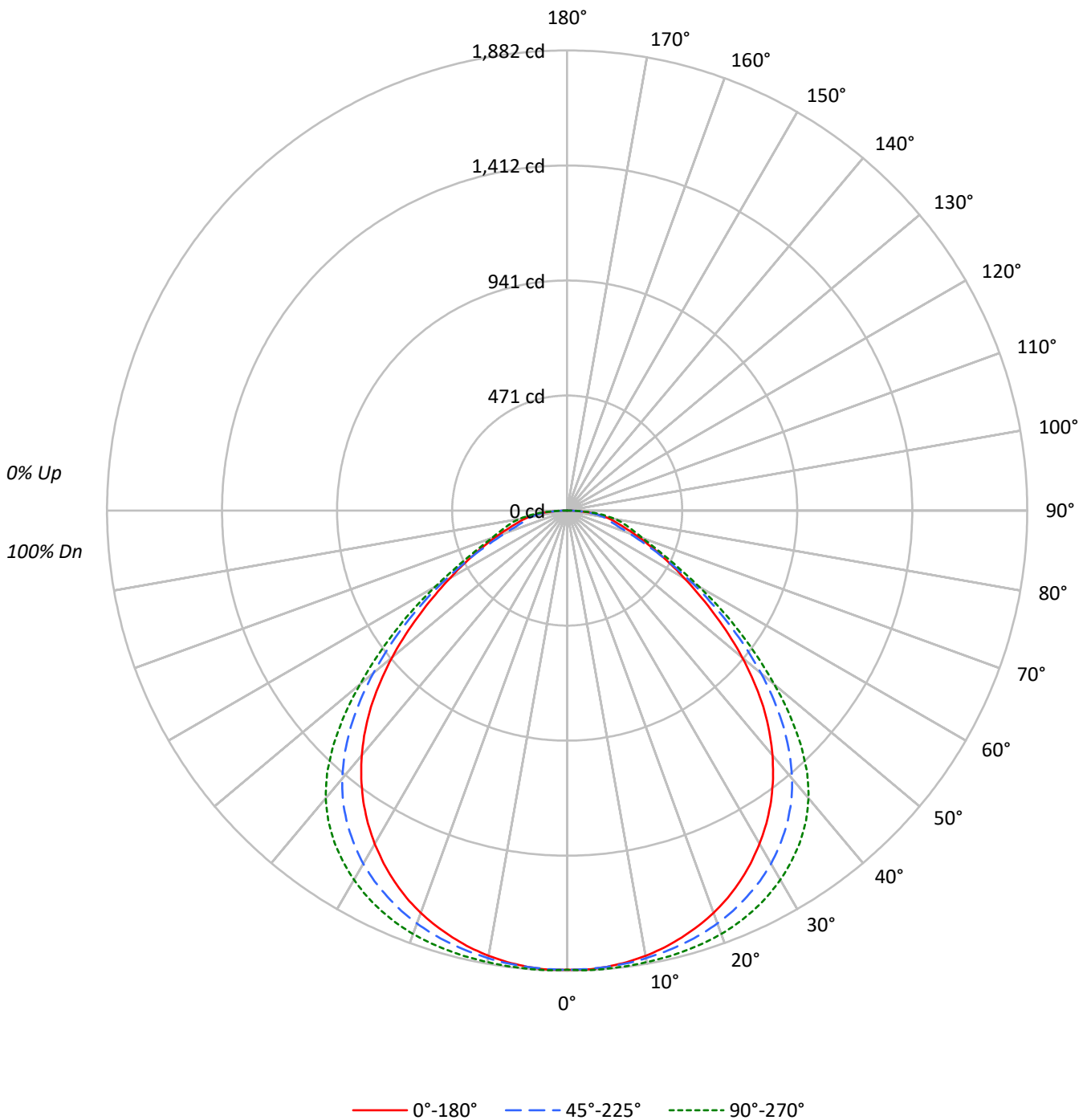
**Summary**

Lumens per Lamp: 2900 (2 lamps)  
Luminaire Lumens: 4901.4 lumens  
Efficiency: 84.5%  
Efficacy: 78.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.37 / 1.38  
Luminous Opening: Rectangular (W 1.79' x L: 3.8' x H: 0')  
CIE Type: Direct

Input Watts (W): 62.3  
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	101	101	101	101	98	98	98	98	94	94	94		90	90	90		86	86	86	85
1	92	89	85	82	90	87	84	81	83	81	78		80	78	76		77	75	74	72
2	85	78	73	68	83	77	72	67	74	69	66		71	67	64		68	65	63	61
3	78	69	63	58	76	68	62	57	65	60	56		63	59	55		61	57	54	52
4	71	62	55	49	70	61	54	49	59	53	48		57	52	48		55	51	47	45
5	66	55	48	43	64	55	48	43	53	47	42		51	46	42		50	45	41	40
6	61	50	43	38	59	49	42	37	48	42	37		46	41	37		45	40	37	35
7	57	46	38	33	55	45	38	33	44	38	33		42	37	33		41	36	33	31
8	53	42	35	30	51	41	34	30	40	34	30		39	33	29		38	33	29	28
9	49	38	32	27	48	38	31	27	37	31	27		36	31	27		35	30	26	25
10	46	35	29	24	45	35	29	24	34	28	24		33	28	24		33	28	24	23

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

	0°	45°	90°
0°	2967	2967	2967
5°	2971	2971	2983
10°	2967	2983	3008
15°	2958	3000	3049
20°	2944	3022	3099
25°	2917	3037	3145
30°	2872	3043	3182
35°	2803	3023	3200
40°	2696	2954	3168
45°	2534	2798	3017
50°	2298	2544	2719
55°	2017	2220	2358
60°	1751	1861	1969
65°	1548	1510	1649
70°	1409	1234	1515
75°	1368	1166	1587
80°	1492	1374	1811
85°	1632	1614	2031



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	178.4	3.6	3.1	0°	1878	1878	1878	1878	1878	
10°-20°	518.4	10.6	8.9	5°	1873	1871	1873	1875	1881	178
20°-30°	801.5	16.4	13.8	15°	1808	1814	1834	1853	1864	510
30°-40°	973.3	19.9	16.8	25°	1673	1693	1742	1784	1804	770
40°-50°	954.3	19.5	16.5	35°	1453	1488	1567	1630	1659	907
50°-60°	713.8	14.6	12.3	45°	1134	1171	1252	1317	1350	870
60°-70°	422.5	8.6	7.3	55°	732	752	806	832	856	658
70°-80°	240.0	4.9	4.1	65°	414	401	404	439	441	415
80°-90°	99.1	2.0	1.7	75°	224	217	191	246	260	241
90°-100°	0.0	0.0	0.0	85°	90	86	89	106	112	88
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	7
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°	1498.3	30.6	25.8	165°	0	0	0	0	0	0
0°-40°	2471.7	50.4	42.6	175°	0	0	0	0	0	0
0°-60°	4139.8	84.5	71.4	180°	0	0	0	0	0	0
0°-90°	4901.4	100.0	84.5							
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°	4901.4	100.0	84.5							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1878	1878	1878	1878	1878
2.5°	1879	1875	1877	1876	1882
5°	1873	1871	1873	1875	1881
7.5°	1863	1862	1868	1871	1879
10°	1849	1850	1859	1868	1875
12.5°	1831	1834	1848	1861	1871
15°	1808	1814	1834	1853	1864
17.5°	1782	1791	1818	1841	1855
20°	1751	1762	1797	1827	1843
22.5°	1715	1730	1772	1809	1826
25°	1673	1693	1742	1784	1804
27.5°	1626	1651	1708	1754	1777
30°	1574	1603	1668	1719	1744
32.5°	1517	1549	1620	1678	1705
35°	1453	1488	1567	1630	1659
37.5°	1383	1421	1505	1571	1604
40°	1307	1346	1432	1500	1536
42.5°	1224	1263	1347	1417	1453
45°	1134	1171	1252	1317	1350
47.5°	1036	1072	1147	1203	1234
50°	935	966	1035	1078	1106
52.5°	832	858	921	953	979
55°	732	752	806	832	856
57.5°	639	650	694	719	738
60°	554	557	589	614	623
62.5°	480	473	491	519	523
65°	414	401	404	439	441
67.5°	356	341	328	375	377
70°	305	291	267	324	328
72.5°	261	251	221	282	290
75°	224	217	191	246	260
77.5°	194	185	171	212	231
80°	164	153	151	179	199
82.5°	129	119	124	145	159
85°	90	86	89	106	112
87.5°	48	49	48	59	61
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)