

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: 232P107

Luminaire Tested: **2GC8-2BX40A-120-EB51**

Issue Date: 3/3/2020



**Test Information**

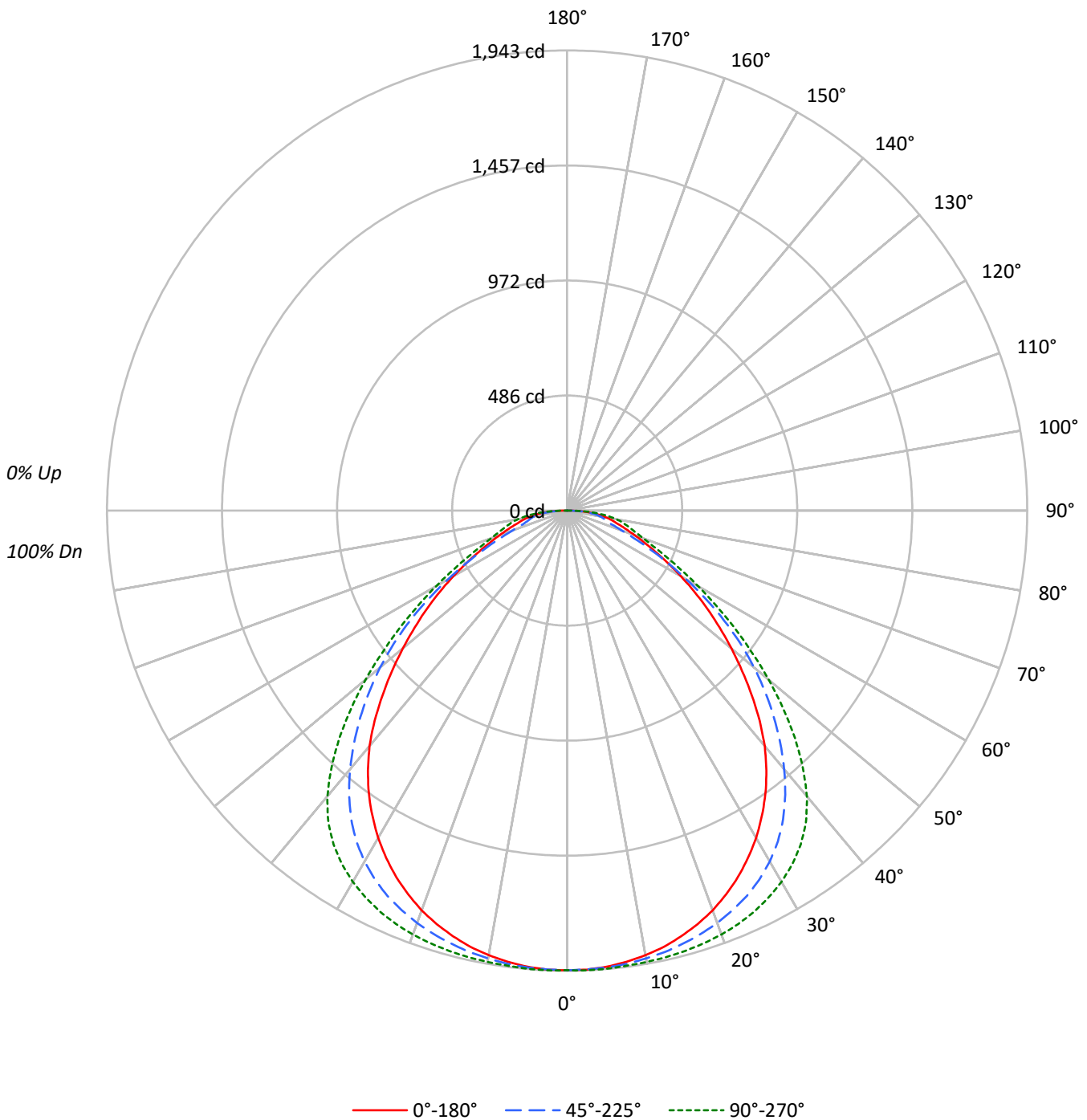
Test Method: LM-41-14  
Report Number: 232P107  
Test Lab: METALUX RESEARCH LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GC8-2BX40A-120-EB51  
Description: [METALUX 2' X 2' SPECIFICATION GRADE RECESSED FLUORESCENT TROFFER  
WITH HIGH REFLECTANCE WHITE INTERIOR FINISH AND ACRYLIC PRISMATIC LENS  
Light Source: (2) F40BX /SP35 /RS -3150 LUMENS EA.- 40 WATTS EA.  
Ballast/Driver: ADVANCE RCN 2TTP40-SC

**Summary**

Lumens per Lamp: 3150 (2 lamps)  
Luminaire Lumens: 4946.1 lumens  
Efficiency: 78.5%  
Efficacy: 66.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.37 / 1.36  
Luminous Opening: Rectangular (W 1.79' x L: 1.81' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 74  
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	93	93	93	93	91	91	91	91	87	87	87		84	84	84		80	80	80	79
1	86	82	79	76	84	81	78	75	77	75	73		74	72	71		72	70	69	67
2	79	73	68	64	77	71	67	63	69	65	61		66	63	60		64	61	59	57
3	72	65	59	54	70	63	58	53	61	56	52		59	55	51		57	53	51	49
4	67	58	51	46	65	57	51	46	55	49	45		53	48	45		51	47	44	42
5	61	52	45	40	60	51	45	40	49	44	39		48	43	39		46	42	39	37
6	57	47	40	35	55	46	40	35	45	39	35		43	38	35		42	38	34	33
7	53	43	36	31	52	42	36	31	41	35	31		40	35	31		39	34	31	29
8	49	39	33	28	48	38	32	28	37	32	28		36	31	28		36	31	28	26
9	46	36	30	25	45	35	29	25	34	29	25		34	29	25		33	28	25	24
10	43	33	27	23	42	33	27	23	32	27	23		31	26	23		31	26	23	21

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

	0°	45°	90°
0°	6434	6434	6434
5°	6432	6442	6462
10°	6415	6462	6513
15°	6386	6496	6606
20°	6335	6536	6720
25°	6243	6565	6835
30°	6109	6549	6928
35°	5908	6434	6960
40°	5616	6170	6815
45°	5170	5789	6380
50°	4667	5317	5729
55°	4172	4675	4976
60°	3673	3852	4243
65°	3216	3020	3608
70°	2927	2365	3295
75°	2882	2241	3471
80°	3207	2711	4047
85°	3689	3195	4754



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	184.3	3.7	2.9	0°	1941	1941	1941	1941	1941	
10°-20°	534.9	10.8	8.5	5°	1933	1934	1936	1938	1942	184
20°-30°	825.1	16.7	13.1	15°	1861	1870	1893	1915	1925	525
30°-40°	990.6	20.0	15.7	25°	1707	1734	1795	1848	1869	785
40°-50°	946.7	19.1	15.0	35°	1460	1502	1590	1680	1720	910
50°-60°	710.8	14.4	11.3	45°	1103	1143	1235	1316	1361	850
60°-70°	417.4	8.4	6.6	55°	722	742	809	834	861	647
70°-80°	233.9	4.7	3.7	65°	410	389	385	443	460	412
80°-90°	102.5	2.1	1.6	75°	225	209	175	240	271	242
90°-100°	0.0	0.0	0.0	85°	97	89	84	116	125	102
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	1544.2	31.2	24.5							
0°-40°	2534.8	51.2	40.2							
0°-60°	4192.3	84.8	66.5							
0°-90°	4946.1	100.0	78.5							
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°	4946.1	100.0	78.5							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1941	1941	1941	1941	1941
2.5°	1940	1940	1939	1940	1943
5°	1933	1934	1936	1938	1942
7.5°	1922	1924	1930	1934	1938
10°	1906	1911	1920	1930	1935
12.5°	1887	1893	1909	1923	1931
15°	1861	1870	1893	1915	1925
17.5°	1831	1844	1875	1904	1916
20°	1796	1813	1853	1890	1905
22.5°	1754	1776	1826	1871	1889
25°	1707	1734	1795	1848	1869
27.5°	1654	1686	1757	1819	1842
30°	1596	1632	1711	1783	1810
32.5°	1530	1571	1656	1737	1770
35°	1460	1502	1590	1680	1720
37.5°	1382	1424	1513	1608	1657
40°	1298	1336	1426	1523	1575
42.5°	1203	1241	1332	1425	1474
45°	1103	1143	1235	1316	1361
47.5°	1002	1043	1134	1200	1237
50°	905	944	1031	1078	1111
52.5°	811	843	922	954	983
55°	722	742	809	834	861
57.5°	636	643	694	720	745
60°	554	550	581	616	640
62.5°	478	463	477	522	542
65°	410	389	385	443	460
67.5°	352	326	306	376	392
70°	302	277	244	322	340
72.5°	260	240	200	278	300
75°	225	209	175	240	271
77.5°	196	178	159	207	243
80°	168	149	142	177	212
82.5°	135	119	118	150	172
85°	97	89	84	116	125
87.5°	57	55	48	70	71
90°	0	0	0	0	0

(END OF REPORT)