

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: 241p105

Luminaire Tested: **2AC2-228T5PBI-UNV-EB81**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 241p105  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2AC2-228T5PBI-UNV-EB81  
Description: 2X4 2-LAMP 28W T5 TROFFER WITH FROSTED LENS AND SEMI-SPECULAR  
PARABOLIC BAFFLE  
Light Source: TWO - PHILIPS - F28T5/835 - 2900 LUMENS - 28 WATTS  
Ballast/Driver: -

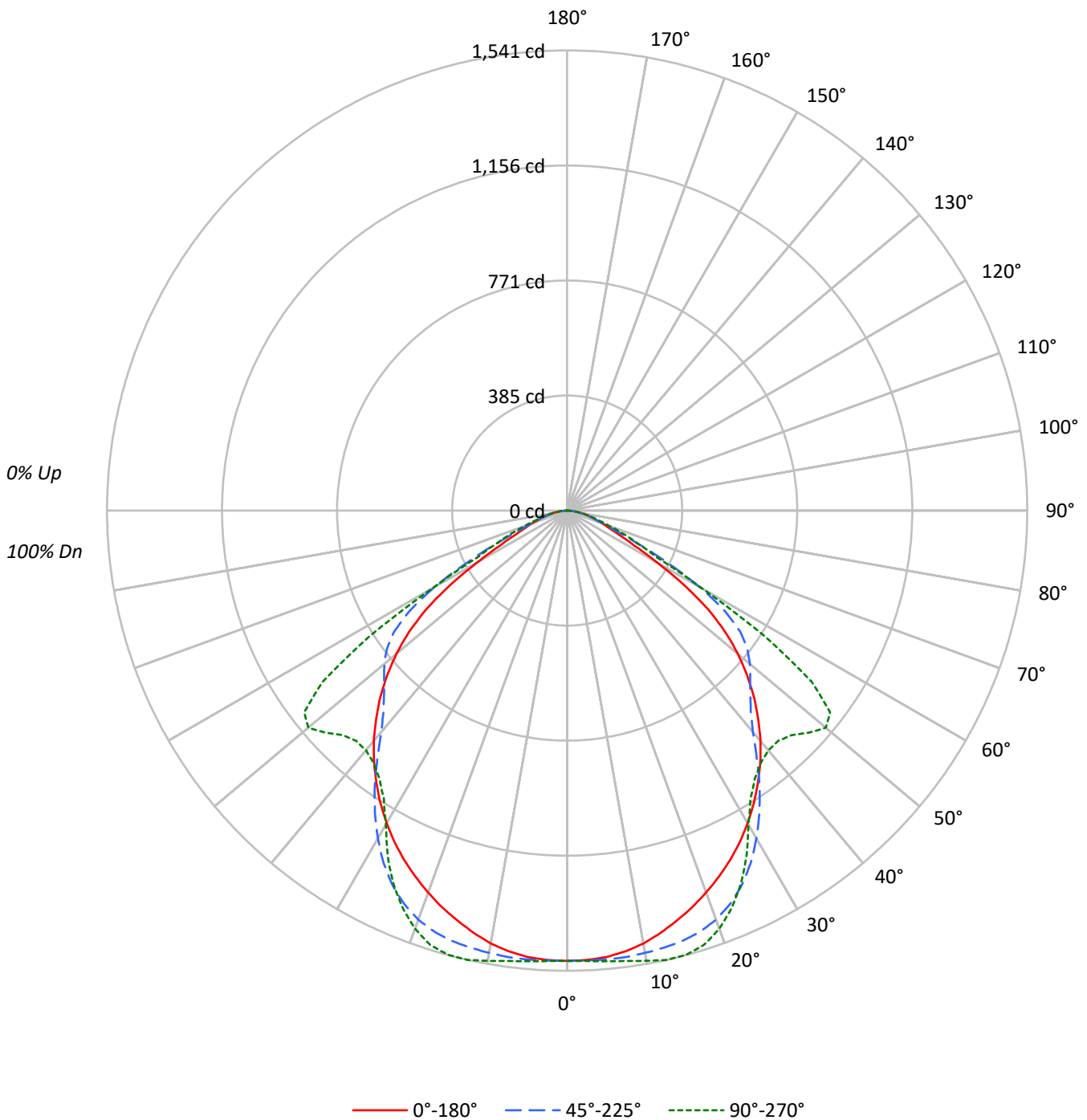
**Summary**

Lumens per Lamp: 2900 (2 lamps)  
Luminaire Lumens: 3611.5 lumens  
Efficiency: 62.3%  
Efficacy: 64.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.28  
Luminous Opening: Rectangular (W 1.98' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 56  
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	74	74	74	74	72	72	72	72	69	69	69	66	66	66	64	64	64	62
1	69	66	64	62	67	65	63	61	62	61	59	60	59	57	58	57	56	54
2	63	59	55	52	62	58	54	51	56	53	50	54	51	49	52	50	48	47
3	58	52	48	44	57	51	47	44	50	46	43	48	45	42	46	44	42	40
4	54	47	42	38	52	46	41	38	44	40	37	43	40	37	42	39	36	35
5	49	42	37	33	48	41	36	33	40	36	33	39	35	32	38	34	32	31
6	46	38	33	29	45	37	33	29	36	32	29	35	31	28	34	31	28	27
7	43	35	29	26	41	34	29	26	33	29	26	32	28	25	31	28	25	24
8	40	32	27	23	39	31	26	23	30	26	23	30	26	23	29	25	23	22
9	37	29	24	21	36	29	24	21	28	24	21	27	23	21	27	23	21	19
10	35	27	22	19	34	27	22	19	26	22	19	25	21	19	25	21	19	18

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

	0°	45°	90°
0°	2050	2050	2050
5°	2049	2060	2068
10°	2032	2076	2114
15°	2000	2100	2168
20°	1969	2110	2156
25°	1937	2076	2067
30°	1898	1991	1906
35°	1849	1864	1819
40°	1787	1716	1860
45°	1702	1667	2044
50°	1578	1690	2392
55°	1363	1676	2368
60°	949	1398	1419
65°	614	830	840
70°	493	505	596
75°	426	405	462
80°	368	337	352
85°	312	281	296



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	143.9	4.0	2.5	0°	1508	1508	1508	1508	1508	
10°-20°	419.3	11.6	7.2	5°	1501	1504	1509	1516	1515	142
20°-30°	624.0	17.3	10.8	15°	1421	1443	1492	1536	1540	401
30°-40°	701.7	19.4	12.1	25°	1291	1336	1384	1386	1378	594
40°-50°	719.8	19.9	12.4	35°	1114	1168	1123	1078	1096	696
50°-60°	637.3	17.6	11.0	45°	885	899	867	970	1063	680
60°-70°	256.4	7.1	4.4	55°	575	585	707	894	999	502
70°-80°	87.9	2.4	1.5	65°	191	204	258	251	261	205
80°-90°	21.3	0.6	0.4	75°	81	78	77	81	88	87
90°-100°	0.0	0.0	0.0	85°	20	17	18	18	19	23
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°	1187.2	32.9	20.5							
0°-40°	1888.9	52.3	32.6							
0°-60°	3246.0	89.9	56.0							
0°-90°	3611.5	100.0	62.3							
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°	3611.5	100.0	62.3							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1508	1508	1508	1508	1508
2.5°	1506	1507	1508	1511	1510
5°	1501	1504	1509	1516	1515
7.5°	1489	1495	1508	1520	1521
10°	1472	1483	1504	1528	1531
12.5°	1448	1465	1499	1536	1541
15°	1421	1443	1492	1536	1540
17.5°	1393	1418	1479	1522	1525
20°	1361	1393	1458	1493	1490
22.5°	1327	1366	1426	1446	1440
25°	1291	1336	1384	1386	1378
27.5°	1252	1302	1331	1317	1302
30°	1209	1264	1268	1234	1214
32.5°	1163	1219	1198	1144	1143
35°	1114	1168	1123	1078	1096
37.5°	1062	1110	1043	1032	1065
40°	1007	1046	967	999	1048
42.5°	947	975	910	978	1046
45°	885	899	867	970	1063
47.5°	817	820	831	974	1100
50°	746	741	799	982	1131
52.5°	667	664	761	966	1110
55°	575	585	707	894	999
57.5°	466	496	627	748	787
60°	349	394	514	546	522
62.5°	253	284	380	358	337
65°	191	204	258	251	261
67.5°	152	154	173	194	203
70°	124	122	127	147	150
72.5°	101	98	99	109	114
75°	81	78	77	81	88
77.5°	64	60	59	61	66
80°	47	44	43	44	45
82.5°	33	30	29	29	31
85°	20	17	18	18	19
87.5°	8	7	8	8	9
90°	0	0	0	0	0

(END OF REPORT)