

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: 241p104

Luminaire Tested: **2AC2-228T5PBW-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 241p104
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2AC2-228T5PBW-UNV-EB81
Description: 2X4 2-LAMP 28W T5 TROFFER WITH FROSTED LENS AND WHITE
PARABOLIC BAFFLE
Light Source: TWO - PHILIPS - F28T5/835 - 2900 LUMENS - 28 WATTS
Ballast/Driver: -

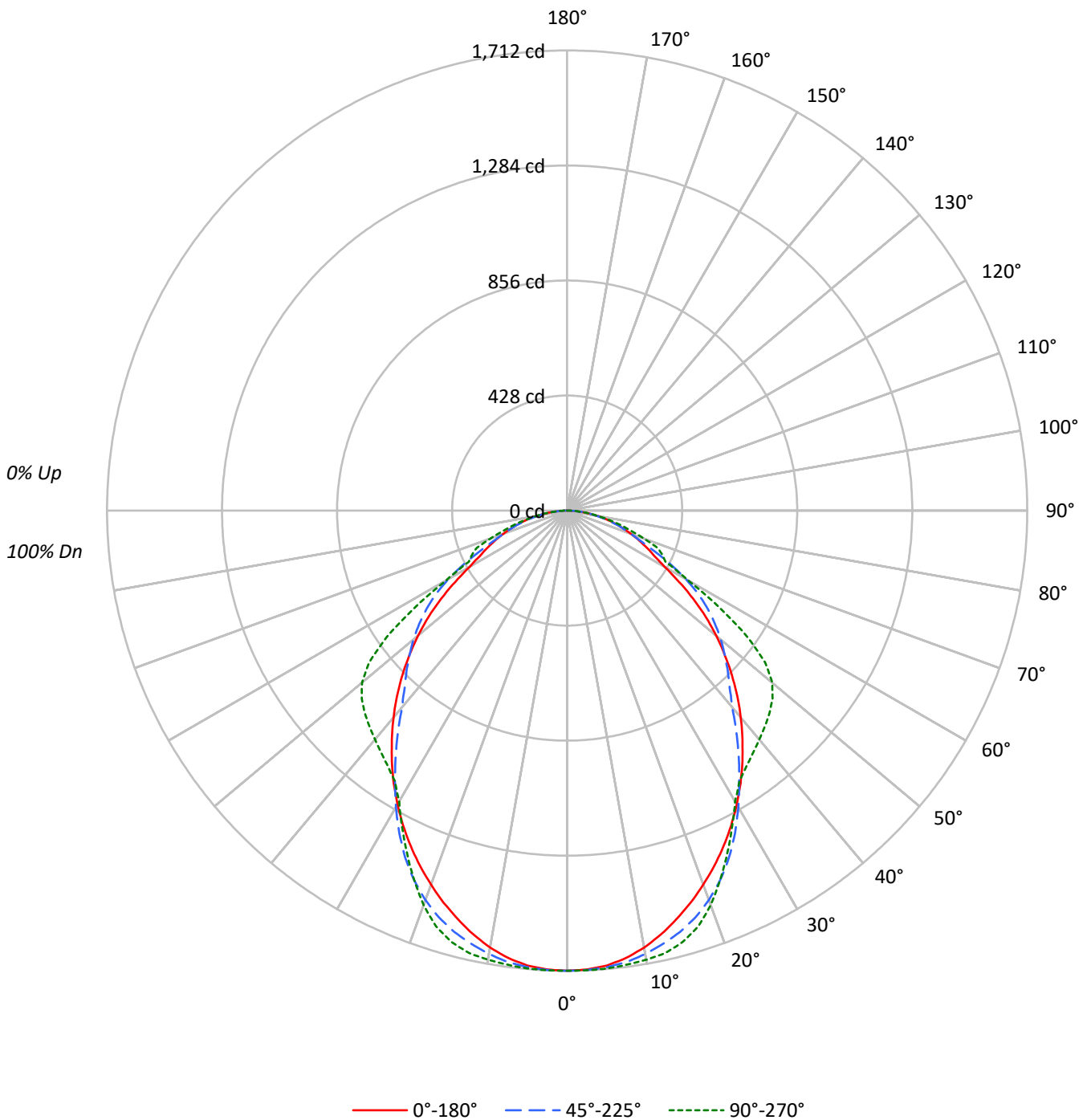
Summary

Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 3872.1 lumens
Efficiency: 66.8%
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.19
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	79	79	79	79	78	78	78	78	74	74	74	71	71	71	68	68	68	67
1	73	70	68	65	71	69	66	64	66	64	62	63	62	60	61	60	58	57
2	67	62	58	54	65	61	57	54	58	55	52	56	53	51	54	52	50	49
3	62	55	50	46	60	54	49	45	52	48	45	50	47	44	48	46	43	42
4	57	49	44	39	55	48	43	39	47	42	39	45	41	38	44	40	37	36
5	52	44	38	34	51	43	38	34	42	37	34	41	37	33	40	36	33	32
6	48	40	34	30	47	39	34	30	38	33	30	37	33	30	36	32	29	28
7	45	36	31	27	44	36	31	27	35	30	27	34	30	26	33	29	26	25
8	42	33	28	24	41	33	28	24	32	27	24	31	27	24	30	27	24	22
9	39	31	25	22	38	30	25	22	30	25	22	29	25	22	28	24	22	20
10	37	28	23	20	36	28	23	20	27	23	20	27	23	20	26	22	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2328	2328	2328
5°	2319	2327	2334
10°	2279	2313	2343
15°	2214	2285	2339
20°	2143	2231	2260
25°	2066	2138	2114
30°	1981	2000	1962
35°	1887	1846	1929
40°	1784	1695	1974
45°	1667	1625	2048
50°	1531	1578	2107
55°	1356	1515	1939
60°	1139	1390	1422
65°	1052	1152	1258
70°	1002	1002	1209
75°	956	935	1056
80°	900	861	916
85°	811	764	811



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	161.8	4.2	2.8	0°	1712	1712	1712	1712	1712	
10°-20°	455.7	11.8	7.9	5°	1699	1701	1705	1711	1710	161
20°-30°	646.8	16.7	11.2	15°	1573	1588	1623	1657	1662	443
30°-40°	711.4	18.4	12.3	25°	1377	1402	1425	1414	1409	634
40°-50°	703.2	18.2	12.1	35°	1137	1164	1112	1111	1162	710
50°-60°	585.7	15.1	10.1	45°	867	870	845	966	1065	668
60°-70°	354.8	9.2	6.1	55°	572	567	639	756	818	510
70°-80°	195.9	5.1	3.4	65°	327	321	358	357	391	326
80°-90°	56.8	1.5	1.0	75°	182	177	178	190	201	192
90°-100°	0.0	0.0	0.0	85°	52	49	49	51	52	58
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°	1264.3	32.7	21.8							
0°-40°	1975.7	51.0	34.1							
0°-60°	3264.6	84.3	56.3							
0°-90°	3872.1	100.0	66.8							
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°	3872.1	100.0	66.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1712	1712	1712	1712	1712
2.5°	1709	1710	1711	1714	1712
5°	1699	1701	1705	1711	1710
7.5°	1679	1684	1694	1704	1704
10°	1651	1659	1675	1694	1697
12.5°	1615	1626	1651	1681	1686
15°	1573	1588	1623	1657	1662
17.5°	1529	1545	1587	1620	1622
20°	1481	1500	1542	1565	1562
22.5°	1431	1452	1488	1494	1488
25°	1377	1402	1425	1414	1409
27.5°	1321	1348	1352	1331	1329
30°	1262	1291	1274	1249	1250
32.5°	1201	1230	1192	1168	1193
35°	1137	1164	1112	1111	1162
37.5°	1071	1094	1033	1072	1136
40°	1005	1022	955	1036	1112
42.5°	937	947	895	1001	1089
45°	867	870	845	966	1065
47.5°	796	792	795	929	1036
50°	724	715	746	886	996
52.5°	650	640	694	832	928
55°	572	567	639	756	818
57.5°	494	495	579	651	673
60°	419	427	511	531	523
62.5°	366	365	435	423	412
65°	327	321	358	357	391
67.5°	289	283	296	327	365
70°	252	246	252	283	304
72.5°	216	211	214	234	248
75°	182	177	178	190	201
77.5°	147	143	143	151	158
80°	115	110	110	115	117
82.5°	82	79	79	81	84
85°	52	49	49	51	52
87.5°	21	21	22	22	22
90°	0	0	0	0	0

(END OF REPORT)