

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: P31268

Luminaire Tested: **2GR5-324T5A-UNV-EBT2-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P31268  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GR5-324T5A-UNV-EBT2-U  
Description: METALUX 2' X 2' COMMERCIAL T5HO TROFFER WITH ACRYLIC PRISMATIC LENS  
Light Source: (3) BIPIN T5 DOUBLE ENDED LINEAR FLUORESCENT LAMP 3500K  
F24W/T5/841/ECO  
Ballast/Driver: -  
B224PUNV-C

**Summary**

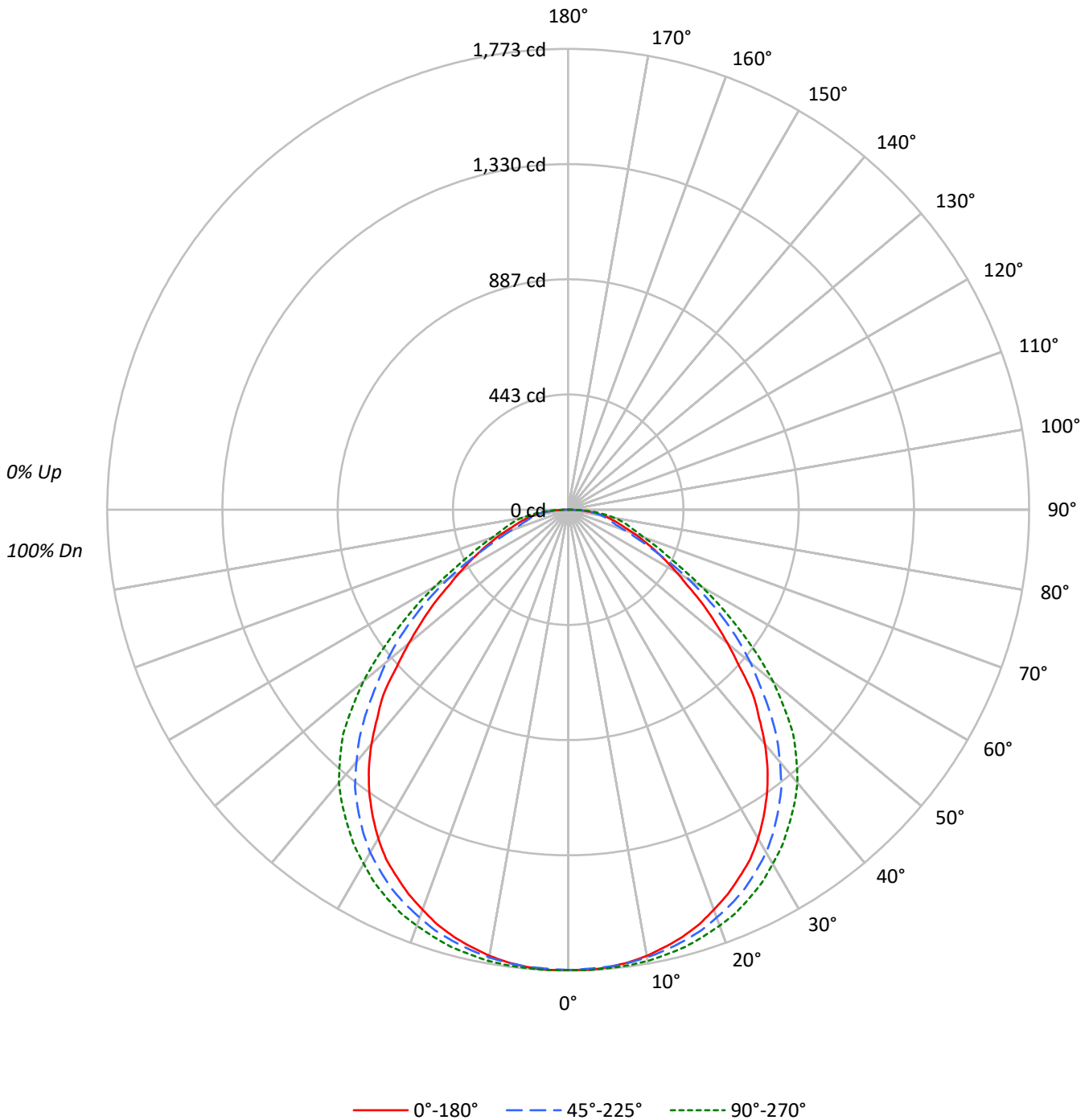
Lumens per Lamp: 2000 (3 lamps)  
Luminaire Lumens: 4441.2 lumens  
Efficiency: 74.0%  
Efficacy: 58.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.34  
Luminous Opening: Rectangular (W 1.77' x L: 1.77' x H: 0')  
CIE Type: Direct

Input Watts (W): 75.5  
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	50	30	10	0	
RCR																						
0	88	88	88	88	86	86	86	86	82	82	82	79	79	79	76	76	76	74				
1	81	78	75	72	79	76	73	71	73	71	69	70	68	67	67	66	65	63				
2	74	69	64	60	72	67	63	59	65	61	58	62	59	57	60	58	55	54				
3	68	61	55	51	66	60	54	50	58	53	49	56	52	48	54	50	48	46				
4	63	54	48	43	61	53	48	43	52	47	43	50	46	42	48	45	41	40				
5	58	49	42	38	56	48	42	38	46	41	37	45	40	37	44	40	36	35				
6	54	44	38	33	52	43	37	33	42	37	33	41	36	33	40	36	32	31				
7	50	40	34	30	49	40	34	29	38	33	29	37	33	29	36	32	29	27				
8	46	37	31	27	45	36	30	26	35	30	26	34	30	26	34	29	26	25				
9	43	34	28	24	42	33	28	24	33	27	24	32	27	24	31	27	24	22				
10	41	31	26	22	40	31	25	22	30	25	22	29	25	22	29	25	21	20				

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

	0°	45°	90°
0°	6079	6079	6079
5°	6088	6082	6102
10°	6075	6096	6145
15°	6045	6105	6187
20°	5983	6100	6221
25°	5905	6090	6245
30°	5791	6036	6235
35°	5586	5904	6202
40°	5278	5677	6148
45°	4879	5320	5947
50°	4272	4886	5490
55°	3770	4357	4811
60°	3295	3666	4071
65°	2973	2867	3411
70°	2730	2308	3081
75°	2613	2215	3183
80°	2807	2609	3578
85°	3072	3111	4057



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	168.2	3.8	2.8	0°	1771	1771	1771	1771	1771	
10°-20°	485.3	10.9	8.1	5°	1767	1765	1765	1769	1771	168
20°-30°	739.7	16.7	12.3	15°	1701	1705	1718	1733	1741	480
30°-40°	878.3	19.8	14.6	25°	1559	1576	1608	1638	1649	718
40°-50°	845.8	19.0	14.1	35°	1333	1357	1409	1456	1480	831
50°-60°	642.6	14.5	10.7	45°	1005	1026	1096	1173	1225	766
60°-70°	378.9	8.5	6.3	55°	630	655	728	777	804	564
70°-80°	214.4	4.8	3.6	65°	366	346	353	404	420	366
80°-90°	88.0	2.0	1.5	75°	197	188	167	229	240	212
90°-100°	0.0	0.0	0.0	85°	78	72	79	100	103	82
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°	1393.2	31.4	23.2							
0°-40°	2271.5	51.1	37.9							
0°-60°	3759.9	84.7	62.7							
0°-90°	4441.2	100.0	74.0							
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°	4441.2	100.0	74.0							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1771	1771	1771	1771	1771
2.5°	1772	1769	1768	1771	1773
5°	1767	1765	1765	1769	1771
7.5°	1757	1756	1759	1765	1768
10°	1743	1745	1749	1757	1763
12.5°	1723	1726	1735	1748	1752
15°	1701	1705	1718	1733	1741
17.5°	1673	1679	1698	1716	1723
20°	1638	1650	1670	1694	1703
22.5°	1602	1617	1641	1668	1681
25°	1559	1576	1608	1638	1649
27.5°	1516	1534	1566	1600	1616
30°	1461	1481	1523	1558	1573
32.5°	1399	1418	1469	1511	1532
35°	1333	1357	1409	1456	1480
37.5°	1260	1287	1347	1397	1429
40°	1178	1205	1267	1333	1372
42.5°	1087	1118	1188	1261	1299
45°	1005	1026	1096	1173	1225
47.5°	894	930	1000	1076	1126
50°	800	835	915	989	1028
52.5°	712	749	824	881	919
55°	630	655	728	777	804
57.5°	545	566	631	669	698
60°	480	480	534	567	593
62.5°	421	407	437	473	499
65°	366	346	353	404	420
67.5°	317	295	285	346	363
70°	272	253	230	300	307
72.5°	229	219	193	262	270
75°	197	188	167	229	240
77.5°	169	158	148	196	214
80°	142	130	132	165	181
82.5°	113	102	108	134	144
85°	78	72	79	100	103
87.5°	39	43	43	53	53
90°	0	0	0	0	0

(END OF REPORT)