

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: P30818

Luminaire Tested: **2GR8-228T8A125-UNV-EB81**

Issue Date: 3/3/2020



**Test Information**

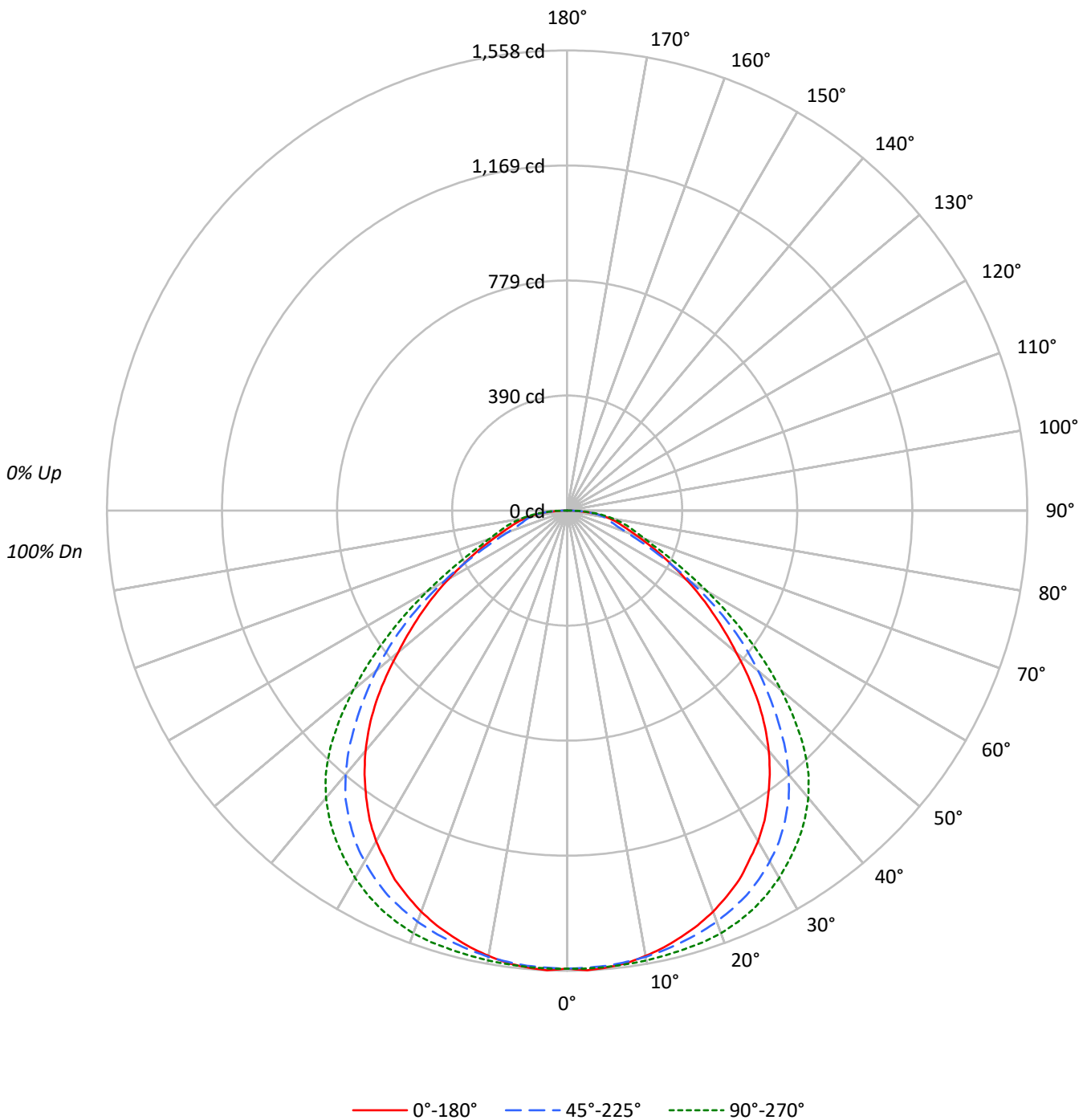
Test Method: LM-41-14  
Report Number: P30818  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GR8-228T8A125-UNV-EB81  
Description: METALUX 2' X 4' COMMERCIAL TROFFER W/ ACRYLIC PRISMATIC LENS, NOM.  
0.125" THICK  
Light Source: (2) DOUBLE BIPIN 28W T8 LINEAR FLUORESCENT LAMPS  
Ballast/Driver: -  
(1)GE232MAX-N/ULTRA

**Summary**

Lumens per Lamp: 2725 (2 lamps)  
Luminaire Lumens: 4041.2 lumens  
Efficiency: 74.2%  
Efficacy: 85.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.36 / 1.37  
Luminous Opening: Rectangular (W 1.88' x L: 3.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 47.4  
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	56	60	57	55	54				
3	68	61	55	50	66	60	54	50	57	53	49	55	52	48	54	50	47	46				
4	63	54	48	43	61	53	47	43	51	46	42	50	45	42	48	44	41	40				
5	58	49	42	38	56	48	42	37	46	41	37	45	40	37	43	39	36	35				
6	53	44	38	33	52	43	37	33	42	37	33	41	36	32	40	35	32	31				
7	50	40	34	29	48	39	33	29	38	33	29	37	32	29	36	32	29	27				
8	46	37	30	26	45	36	30	26	35	30	26	34	29	26	33	29	26	24				
9	43	34	28	24	42	33	27	24	32	27	23	31	27	23	31	26	23	22				
10	41	31	25	21	40	31	25	21	30	25	21	29	25	21	29	24	21	20				

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

	0°	45°	90°
0°	2273	2273	2273
5°	2285	2276	2282
10°	2279	2283	2302
15°	2267	2293	2332
20°	2254	2310	2376
25°	2230	2324	2410
30°	2188	2322	2430
35°	2122	2299	2441
40°	2032	2233	2430
45°	1897	2096	2349
50°	1703	1925	2155
55°	1533	1715	1896
60°	1357	1422	1604
65°	1200	1124	1342
70°	1089	904	1200
75°	1076	889	1235
80°	1182	1089	1342
85°	1244	1312	1446



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	147.3	3.6	2.7	0°	1551	1551	1551	1551	1551	
10°-20°	427.4	10.6	7.8	5°	1553	1546	1547	1546	1551	148
20°-30°	660.2	16.3	12.1	15°	1494	1495	1511	1526	1537	422
30°-40°	798.0	19.7	14.6	25°	1379	1393	1437	1472	1490	634
40°-50°	778.7	19.3	14.3	35°	1186	1218	1285	1336	1364	741
50°-60°	600.7	14.9	11.0	45°	915	937	1011	1084	1133	702
60°-70°	351.9	8.7	6.5	55°	600	621	671	732	742	538
70°-80°	193.9	4.8	3.6	65°	346	328	324	371	387	346
80°-90°	83.1	2.1	1.5	75°	190	170	157	191	218	203
90°-100°	0.0	0.0	0.0	85°	74	75	78	90	86	79
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°	1234.9	30.6	22.7							
0°-40°	2032.9	50.3	37.3							
0°-60°	3412.3	84.4	62.6							
0°-90°	4041.2	100.0	74.2							
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°	4041.2	100.0	74.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1551	1551	1551	1551	1551
2.5°	1558	1550	1549	1546	1552
5°	1553	1546	1547	1546	1551
7.5°	1545	1538	1541	1543	1549
10°	1531	1527	1534	1538	1547
12.5°	1515	1512	1524	1533	1542
15°	1494	1495	1511	1526	1537
17.5°	1472	1475	1498	1518	1532
20°	1445	1450	1481	1507	1523
22.5°	1413	1422	1460	1491	1508
25°	1379	1393	1437	1472	1490
27.5°	1335	1356	1407	1445	1465
30°	1293	1317	1372	1414	1436
32.5°	1244	1272	1333	1378	1401
35°	1186	1218	1285	1336	1364
37.5°	1127	1160	1232	1289	1321
40°	1062	1094	1167	1232	1270
42.5°	991	1018	1093	1163	1210
45°	915	937	1011	1084	1133
47.5°	831	852	927	996	1043
50°	747	771	844	912	945
52.5°	672	697	760	825	845
55°	600	621	671	732	742
57.5°	532	546	578	634	643
60°	463	470	485	537	547
62.5°	400	396	400	449	461
65°	346	328	324	371	387
67.5°	296	272	261	309	324
70°	254	229	211	259	280
72.5°	218	197	177	221	246
75°	190	170	157	191	218
77.5°	166	146	144	166	190
80°	140	124	129	144	159
82.5°	109	102	107	120	125
85°	74	75	78	90	86
87.5°	38	43	44	50	47
90°	0	0	0	0	0

(END OF REPORT)