

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: 105P115

Luminaire Tested: **2G-240A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 105P115
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2G-240A
Description: 2 X 4 Recessed Troffer with a .095
pattern 12 acrylic lens.
Light Source: Two-F40CW/RS/WM - 2650 Lumens ea. - 34 Watts ea.
Ballast/Driver: Advance R-2S40-1-TP

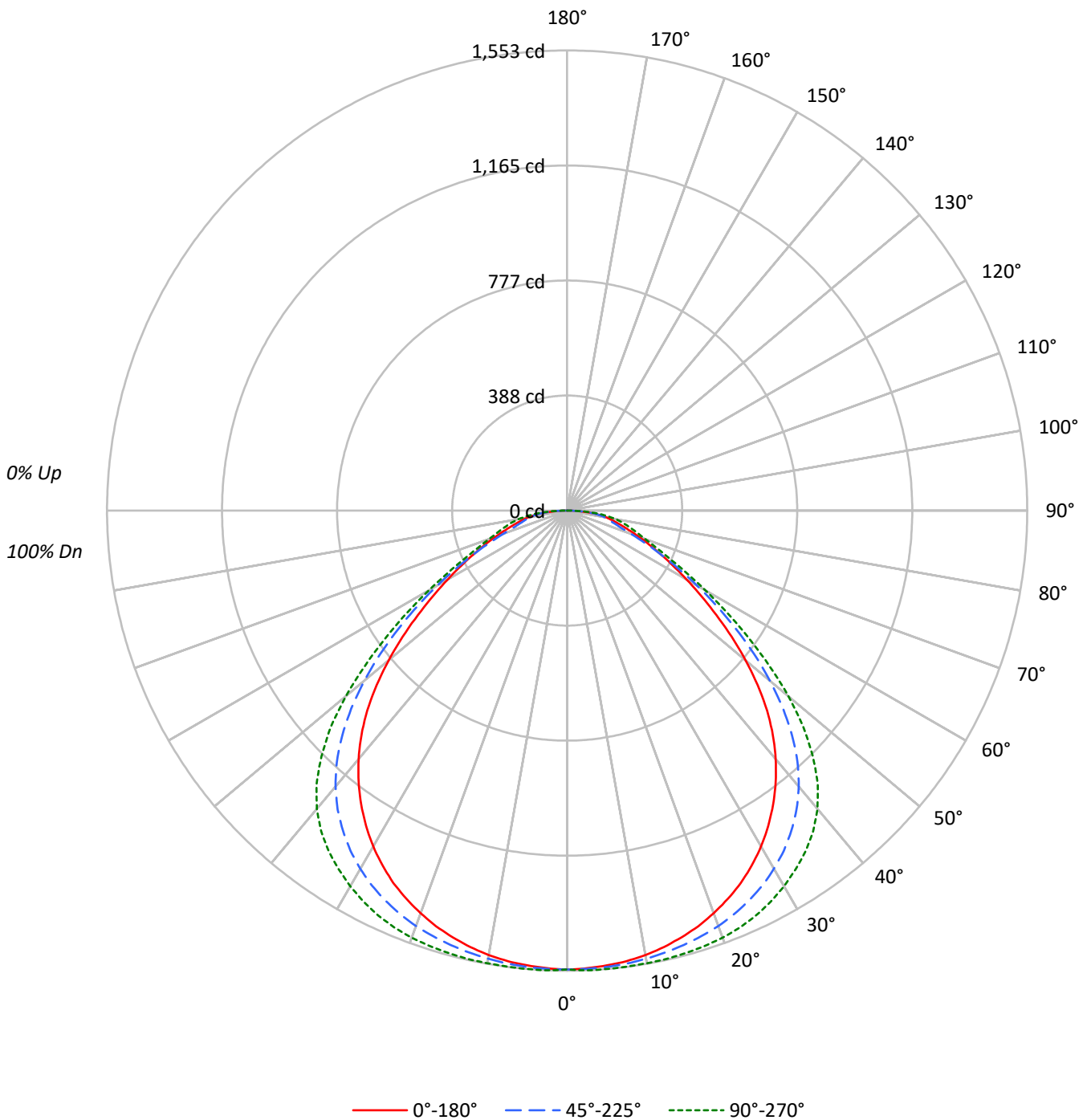
Summary

Lumens per Lamp: 2650 (2 lamps)
Luminaire Lumens: 4143.6 lumens
Efficiency: 78.2%
Efficacy: 56.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.4 / 1.41
Luminous Opening: Rectangular (W 1.79' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 73.9
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	93	93	93	93	91	91	91	91	87	87	87	83	83	83	80	80	80	80	80	80	78	
1	86	82	79	76	83	80	77	75	77	75	72	74	72	70	71	70	68	68	68	68	67	
2	78	72	67	63	76	71	66	62	68	64	61	65	62	59	63	60	58	58	58	58	56	
3	72	64	58	53	70	63	57	53	60	56	52	58	54	51	56	53	50	50	50	50	48	
4	66	57	50	45	64	56	50	45	54	49	45	52	48	44	51	47	43	43	43	43	42	
5	61	51	44	39	59	50	44	39	49	43	39	47	42	38	46	41	38	38	38	38	36	
6	56	46	39	35	55	45	39	34	44	38	34	43	38	34	42	37	34	34	34	34	32	
7	52	42	35	31	51	41	35	31	40	34	30	39	34	30	38	33	30	30	30	30	28	
8	49	38	32	27	47	38	32	27	37	31	27	36	31	27	35	30	27	27	27	27	25	
9	45	35	29	25	44	35	29	25	34	28	25	33	28	24	32	28	24	24	24	24	23	
10	43	33	26	22	42	32	26	22	31	26	22	31	26	22	30	25	22	22	22	22	21	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2441	2441	2441
5°	2438	2445	2457
10°	2437	2458	2482
15°	2432	2476	2522
20°	2425	2502	2572
25°	2412	2525	2622
30°	2382	2540	2664
35°	2331	2537	2699
40°	2252	2501	2703
45°	2128	2393	2614
50°	1927	2192	2390
55°	1687	1909	2049
60°	1465	1595	1699
65°	1298	1294	1409
70°	1179	1050	1285
75°	1132	986	1333
80°	1234	1162	1506
85°	1320	1356	1681



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	147.2	3.6	2.8	0°	1549	1549	1549	1549	1549	
10°-20°	429.1	10.4	8.1	5°	1541	1543	1546	1547	1553	147
20°-30°	668.0	16.1	12.6	15°	1491	1499	1518	1536	1546	421
30°-40°	819.7	19.8	15.5	25°	1387	1408	1452	1490	1508	638
40°-50°	818.2	19.7	15.4	35°	1212	1249	1319	1376	1403	756
50°-60°	614.5	14.8	11.6	45°	955	995	1074	1142	1173	732
60°-70°	360.3	8.7	6.8	55°	614	641	695	724	746	552
70°-80°	203.4	4.9	3.8	65°	348	338	347	377	378	349
80°-90°	83.1	2.0	1.6	75°	186	183	162	212	219	201
90°-100°	0.0	0.0	0.0	85°	73	72	75	91	93	73
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	5
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	1244.4	30.0	23.5	165°	0	0	0	0	0	0
0°-40°	2064.1	49.8	38.9	175°	0	0	0	0	0	0
0°-60°	3496.8	84.4	66.0	180°	0	0	0	0	0	0
0°-90°	4143.6	100.0	78.2							
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°	4143.6	100.0	78.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1549	1549	1549	1549	1549
2.5°	1546	1547	1548	1548	1553
5°	1541	1543	1546	1547	1553
7.5°	1534	1536	1542	1546	1552
10°	1523	1527	1536	1544	1551
12.5°	1509	1514	1528	1541	1550
15°	1491	1499	1518	1536	1546
17.5°	1471	1481	1506	1529	1541
20°	1446	1460	1492	1519	1534
22.5°	1418	1436	1474	1507	1523
25°	1387	1408	1452	1490	1508
27.5°	1350	1376	1427	1469	1488
30°	1309	1339	1396	1442	1464
32.5°	1263	1297	1361	1412	1435
35°	1212	1249	1319	1376	1403
37.5°	1156	1196	1272	1334	1364
40°	1095	1136	1216	1282	1314
42.5°	1028	1069	1151	1219	1252
45°	955	995	1074	1142	1173
47.5°	872	912	988	1051	1082
50°	786	824	894	947	975
52.5°	700	733	795	836	860
55°	614	641	695	724	746
57.5°	536	553	597	620	638
60°	465	472	506	529	539
62.5°	403	399	422	446	451
65°	348	338	347	377	378
67.5°	299	286	281	322	322
70°	256	245	228	279	279
72.5°	218	211	188	243	246
75°	186	183	162	212	219
77.5°	160	156	144	182	194
80°	136	129	128	154	166
82.5°	107	100	105	124	133
85°	73	72	75	91	93
87.5°	38	39	40	48	48
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)