

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: 105P106

Luminaire Tested: **2G-240A110**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 105P106
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2G-240A110
Description: 2 X 4 Recessed Troffer with a .110 pattern 12
acrylic lens.
Light Source: Two-F40LW/RS/WMII - 2925 Lumens ea. - 34 Watts ea.
Ballast/Driver: -

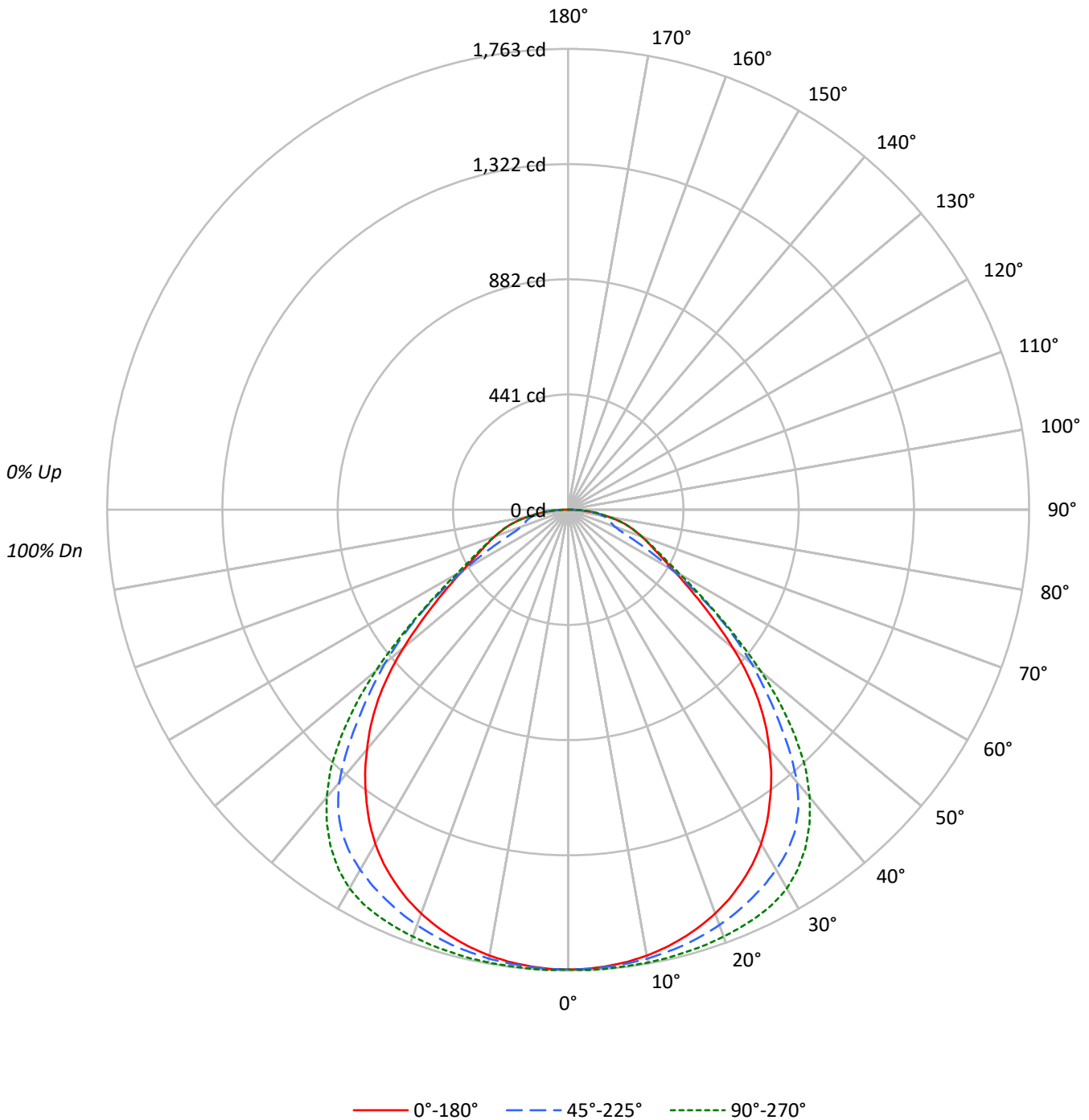
Summary

Lumens per Lamp: 2925 (2 lamps)
Luminaire Lumens: 4439.8 lumens
Efficiency: 75.9%
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.39 / 1.37
Luminous Opening: Rectangular (W 1.79' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 74.9
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									
RC	80									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	50	30	10	0													
RCR																																					
0	90	90	90	90	88	88	88	88	84	84	84	81	81	81	77	77	77	76																			
1	83	80	77	74	81	78	75	73	75	73	71	72	70	69	69	68	67	65																			
2	76	71	66	62	74	69	65	61	67	63	60	64	61	58	62	59	57	56																			
3	70	63	57	52	68	62	56	52	59	55	51	57	53	50	55	52	49	48																			
4	65	56	50	45	63	55	49	45	53	48	44	52	47	44	50	46	43	42																			
5	60	51	44	39	58	50	44	39	48	43	39	47	42	38	45	41	38	36																			
6	55	46	39	35	54	45	39	35	44	38	34	42	38	34	41	37	34	32																			
7	51	42	35	31	50	41	35	31	40	34	31	39	34	30	38	33	30	29																			
8	48	38	32	28	47	38	32	28	37	31	27	36	31	27	35	30	27	26																			
9	45	35	29	25	44	35	29	25	34	28	25	33	28	25	32	28	25	23																			
10	42	32	27	23	41	32	26	23	31	26	23	31	26	22	30	26	22	21																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2772	2772	2772
5°	2771	2776	2787
10°	2771	2791	2815
15°	2767	2811	2857
20°	2757	2836	2914
25°	2733	2864	2984
30°	2686	2895	3044
35°	2591	2903	3041
40°	2462	2802	2956
45°	2291	2532	2737
50°	2015	2243	2358
55°	1701	1876	1904
60°	1465	1443	1551
65°	1365	1055	1402
70°	1378	866	1378
75°	1437	1011	1431
80°	1434	1216	1443
85°	1446	1609	1591



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	167.1	3.8	2.9	0°	1759	1759	1759	1759	1759	
10°-20°	486.8	11.0	8.3	5°	1752	1752	1755	1755	1762	167
20°-30°	758.7	17.1	13.0	15°	1696	1703	1723	1739	1751	479
30°-40°	924.8	20.8	15.8	25°	1572	1596	1647	1695	1716	723
40°-50°	868.4	19.6	14.8	35°	1347	1405	1509	1565	1581	841
50°-60°	606.7	13.7	10.4	45°	1028	1062	1136	1197	1228	787
60°-70°	335.0	7.5	5.7	55°	619	658	683	710	693	560
70°-80°	205.0	4.6	3.5	65°	366	321	283	330	376	368
80°-90°	87.1	2.0	1.5	75°	236	188	166	191	235	246
90°-100°	0.0	0.0	0.0	85°	80	83	89	87	88	81
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	6
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°	1412.7	31.8	24.1	165°	0	0	0	0	0	0
0°-40°	2337.5	52.6	40.0	175°	0	0	0	0	0	0
0°-60°	3812.7	85.9	65.2	180°	0	0	0	0	0	0
0°-90°	4439.8	100.0	75.9							
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°	4439.8	100.0	75.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1759	1759	1759	1759	1759
2.5°	1758	1756	1758	1757	1763
5°	1752	1752	1755	1755	1762
7.5°	1744	1745	1750	1753	1760
10°	1732	1734	1744	1750	1759
12.5°	1716	1720	1734	1746	1756
15°	1696	1703	1723	1739	1751
17.5°	1672	1682	1708	1731	1746
20°	1644	1657	1691	1722	1738
22.5°	1611	1629	1671	1709	1728
25°	1572	1596	1647	1695	1716
27.5°	1528	1558	1621	1677	1699
30°	1476	1514	1591	1653	1673
32.5°	1416	1463	1555	1616	1633
35°	1347	1405	1509	1565	1581
37.5°	1276	1339	1446	1501	1516
40°	1197	1261	1362	1420	1437
42.5°	1117	1169	1254	1317	1344
45°	1028	1062	1136	1197	1228
47.5°	929	952	1023	1072	1101
50°	822	851	915	949	962
52.5°	715	753	802	827	821
55°	619	658	683	710	693
57.5°	535	560	565	595	583
60°	465	467	458	490	492
62.5°	410	387	363	400	426
65°	366	321	283	330	376
67.5°	331	276	222	282	335
70°	299	245	188	249	299
72.5°	267	217	174	221	268
75°	236	188	166	191	235
77.5°	199	159	152	163	199
80°	158	134	134	140	159
82.5°	116	111	115	117	122
85°	80	83	89	87	88
87.5°	45	47	48	49	51
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)