

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: 223P137

Luminaire Tested: **EFIX-3R**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 223P137
Test Lab: METALUX RESEARCH LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: EFIX-3R
Description: 2 X 4 RECESSED LUMINAIRE WITH A CENTER MOUNT CURVED
PERFORATED DIFFUSER
Light Source: THREE- F28T8-SP-35-UMX-UCO- 2750 LUMENS EA. 28 WATTS EA.
Ballast/Driver: GE-332-MAX-L/ ULTRA

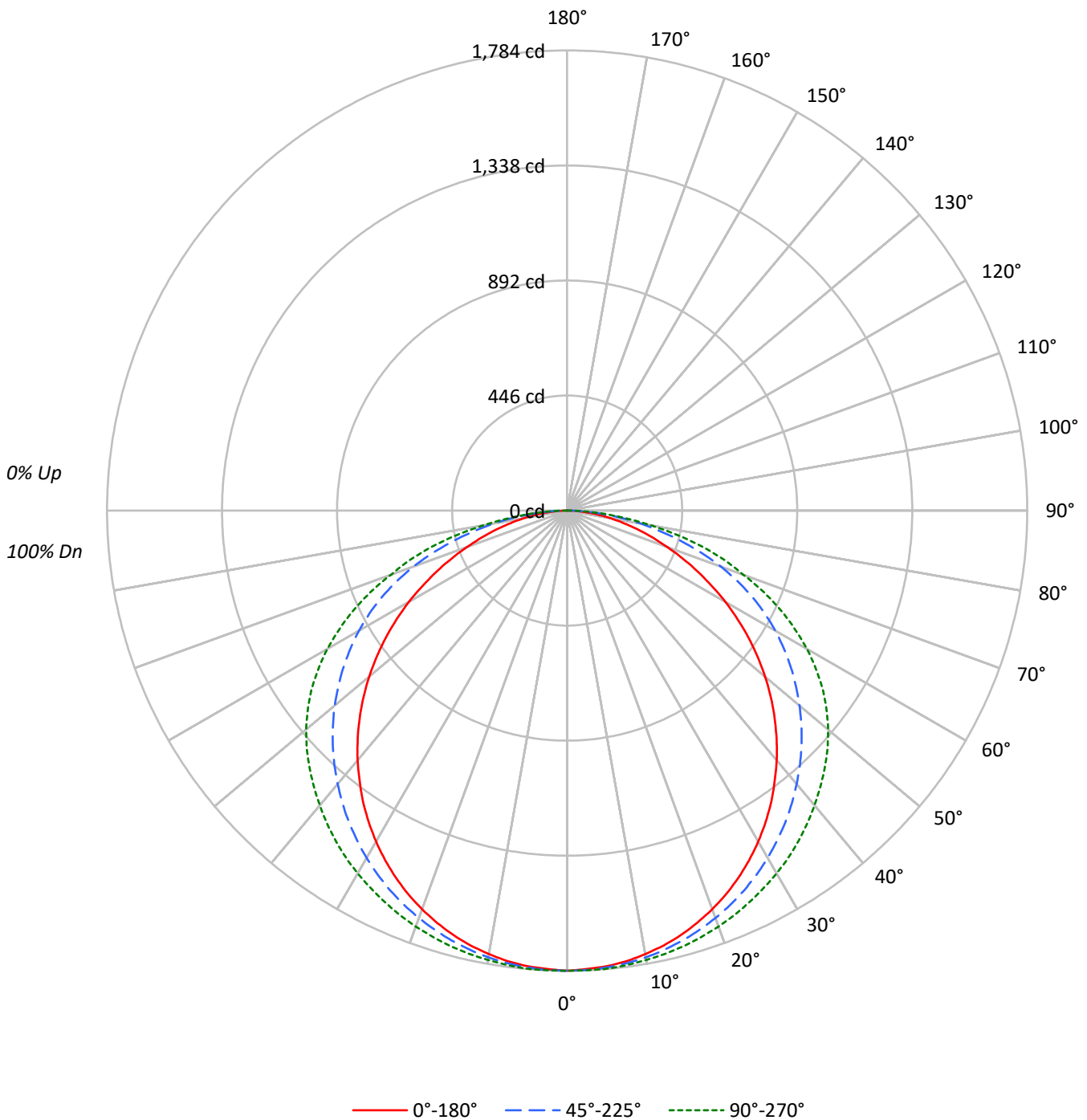
Summary

Lumens per Lamp: 2750 (3 lamps)
Luminaire Lumens: 5595.4 lumens
Efficiency: 67.8%
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.36 / 1.43
Luminous Opening: Rectangular (W 1.88' x L: 3.93' x H: 0')
CIE Type: Direct

Input Watts (W): 66
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	81	81	81	81	79	79	79	79	75	75	75	72	72	72	69	69	69	68
1	73	70	67	64	71	68	66	63	65	63	61	63	61	59	60	59	57	56
2	66	60	56	52	65	59	55	51	57	53	50	54	51	49	52	50	47	46
3	60	53	47	42	59	52	46	42	50	45	41	48	44	41	46	43	40	38
4	55	47	40	36	53	46	40	35	44	39	35	42	38	34	41	37	34	32
5	50	41	35	30	49	41	35	30	39	34	30	38	33	30	37	33	29	28
6	47	37	31	26	45	37	31	26	35	30	26	34	29	26	33	29	26	24
7	43	34	28	23	42	33	27	23	32	27	23	31	26	23	30	26	23	21
8	40	31	25	21	39	30	25	21	29	24	20	28	24	20	28	23	20	19
9	37	28	22	19	36	28	22	18	27	22	18	26	22	18	25	21	18	17
10	35	26	20	17	34	26	20	17	25	20	17	24	20	17	24	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2608	2608	2608
5°	2602	2609	2616
10°	2592	2611	2626
15°	2579	2612	2645
20°	2559	2615	2670
25°	2534	2619	2700
30°	2502	2625	2741
35°	2461	2632	2791
40°	2412	2641	2847
45°	2353	2657	2919
50°	2279	2674	3004
55°	2187	2699	3084
60°	2073	2725	3140
65°	1927	2740	3162
70°	1761	2706	3107
75°	1598	2576	3073
80°	1423	2433	2795
85°	1191	2113	2382



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	169.0	3.0	2.0	0°	1784	1784	1784	1784	1784	
10°-20°	487.2	8.7	5.9	5°	1773	1771	1778	1782	1783	168
20°-30°	748.0	13.4	9.1	15°	1704	1707	1726	1741	1748	481
30°-40°	921.1	16.5	11.2	25°	1571	1582	1624	1659	1674	724
40°-50°	986.4	17.6	12.0	35°	1379	1404	1475	1538	1564	862
50°-60°	933.2	16.7	11.3	45°	1138	1180	1285	1374	1412	877
60°-70°	752.3	13.4	9.1	55°	858	922	1059	1165	1210	766
70°-80°	462.0	8.3	5.6	65°	557	643	792	879	914	552
80°-90°	135.3	2.4	1.6	75°	283	366	456	521	544	301
90°-100°	0.8	0.0	0.0	85°	71	95	126	138	142	79
100°-110°	0.0	0.0	0.0	90°	6	6	6	6	5	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°	1404.2	25.1	17.0	165°	0	0	0	0	0	0
0°-40°	2325.3	41.6	28.2	175°	0	0	0	0	0	0
0°-60°	4244.9	75.9	51.5	180°	0	0	0	0	0	0
0°-90°	5594.6	100.0	67.8							
90°-120°	0.8	0.0	0.0							
90°-150°	0.8	0.0	0.0							
90°-180°	1.0	0.0	0.0							
0°-180°	5595.4	100.0	67.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784	1784	1784	1784	1784
2.5°	1779	1777	1783	1785	1784
5°	1773	1771	1778	1782	1783
7.5°	1762	1761	1770	1775	1777
10°	1746	1747	1759	1766	1769
12.5°	1727	1728	1744	1755	1760
15°	1704	1707	1726	1741	1748
17.5°	1676	1681	1705	1725	1733
20°	1645	1652	1681	1706	1716
22.5°	1610	1619	1654	1684	1697
25°	1571	1582	1624	1659	1674
27.5°	1528	1542	1591	1632	1650
30°	1482	1499	1555	1603	1624
32.5°	1432	1453	1516	1571	1596
35°	1379	1404	1475	1538	1564
37.5°	1322	1351	1431	1500	1529
40°	1264	1297	1384	1460	1492
42.5°	1202	1239	1336	1418	1453
45°	1138	1180	1285	1374	1412
47.5°	1071	1118	1232	1327	1369
50°	1002	1054	1176	1278	1321
52.5°	931	989	1118	1224	1268
55°	858	922	1059	1165	1210
57.5°	783	853	996	1103	1144
60°	709	784	932	1034	1074
62.5°	632	713	864	959	996
65°	557	643	792	879	914
67.5°	484	572	714	794	825
70°	412	503	633	701	727
72.5°	346	434	547	610	641
75°	283	366	456	521	544
77.5°	224	296	371	422	437
80°	169	225	289	322	332
82.5°	118	152	205	225	230
85°	71	95	126	138	142
87.5°	31	46	57	63	64
90°	6	6	6	6	5
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)