

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: ITL44174

Luminaire Tested: **EIM-296T8**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44174
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: EIM-296T8
Description: FABRICATED METAL STRIP BALLAST HOUSING, WHITE PAINTED FABRICATED METAL REFLECTOR WITH UP-LIGHT APERTURES, OPEN ENDS AND BOTTOM.
Light Source: TWO 59-WATT F96T8/SPX35 FLUORESCENTS.
Ballast/Driver: MAGNETEK TRIAD B259I120HP (BALLAST FACTOR 96.6 %).

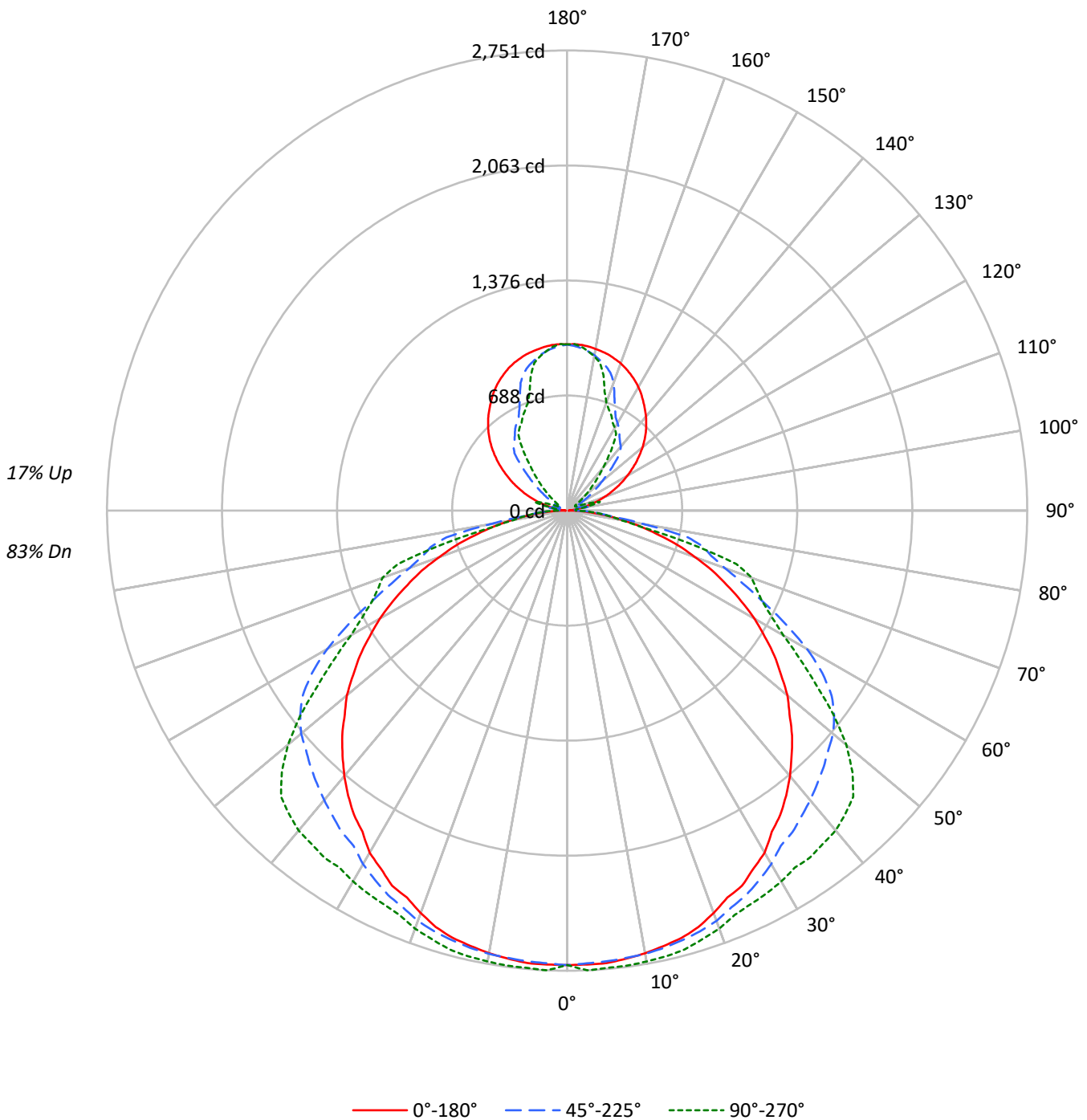
Summary

Lumens per Lamp: 5950 (2 lamps)
Luminaire Lumens: 11112.6 lumens
Efficiency: 93.4%
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.43 / 1.52
Luminous Opening: Rectangular (W 1.08' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 124
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	107	107	107	107	103	103	103	103	95	95	95	88	88	88	81	81	81	78
1	97	93	89	85	93	89	85	82	82	79	77	76	74	71	70	68	67	64
2	88	80	74	68	84	77	71	66	71	66	62	66	62	58	61	58	55	52
3	80	70	62	56	76	67	60	54	62	56	51	57	53	49	53	49	46	43
4	73	61	53	47	69	59	51	46	55	48	43	51	45	41	47	43	39	36
5	67	55	46	40	64	53	45	39	49	42	37	45	40	35	42	37	33	31
6	61	49	40	34	59	47	39	34	44	37	32	41	35	31	38	33	29	27
7	57	44	36	30	54	43	35	29	40	33	28	37	31	27	34	29	26	23
8	53	40	32	27	50	39	31	26	36	30	25	34	28	24	32	27	23	21
9	49	37	29	24	47	35	28	23	33	27	22	31	25	21	29	24	20	19
10	46	34	26	21	44	33	26	21	31	24	20	29	23	19	27	22	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3375	3375	3375
5°	3386	3373	3421
10°	3389	3394	3452
15°	3401	3419	3492
20°	3384	3450	3515
25°	3392	3474	3558
30°	3388	3499	3671
35°	3368	3560	3839
40°	3359	3664	4049
45°	3341	3808	4249
50°	3322	4011	4208
55°	3276	4181	3937
60°	3214	4119	3706
65°	3098	3803	3782
70°	2952	3635	4263
75°	2750	4055	3599
80°	2482	3340	2325
85°	2223	2722	2622



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	258.4	2.3	2.2	0°	2717	2717	2717	2717	2717	
10°-20°	752.9	6.8	6.3	5°	2716	2695	2705	2719	2744	258
20°-30°	1168.0	10.5	9.8	15°	2645	2634	2659	2691	2716	746
30°-40°	1483.1	13.3	12.5	25°	2475	2489	2535	2567	2596	1137
40°-50°	1668.5	15.0	14.0	35°	2221	2288	2348	2472	2532	1389
50°-60°	1592.2	14.3	13.4	45°	1902	1991	2168	2355	2419	1465
60°-70°	1263.4	11.4	10.6	55°	1513	1662	1931	1899	1818	1349
70°-80°	817.4	7.4	6.9	65°	1054	1326	1294	1269	1287	1045
80°-90°	233.4	2.1	2.0	75°	573	810	845	891	750	610
90°-100°	60.2	0.5	0.5	85°	156	251	191	198	184	168
100°-110°	113.1	1.0	1.0	90°	11	58	55	57	53	15
110°-120°	124.2	1.1	1.0	95°	23	62	45	52	53	31
120°-130°	211.9	1.9	1.8	105°	152	48	82	161	203	162
130°-140°	311.9	2.8	2.6	115°	326	186	52	51	56	322
140°-150°	372.3	3.4	3.1	125°	503	360	178	107	79	449
150°-160°	337.9	3.0	2.8	135°	665	490	401	279	224	512
160°-170°	251.0	2.3	2.1	145°	794	691	545	533	481	497
170°-180°	92.7	0.8	0.8	155°	898	847	674	638	626	414
0°-30°	2179.3	19.6	18.3	165°	964	936	894	879	838	272
0°-40°	3662.5	33.0	30.8	175°	994	981	975	980	983	94
0°-60°	6923.2	62.3	58.2	180°	993	993	993	993	993	
0°-90°	9237.4	83.1	77.6							
90°-120°	297.5	2.7	2.5							
90°-150°	1193.7	10.7	10.0							
90°-180°	1875.0	16.9	15.8							
0°-180°	11112.6	100.0	93.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2717	2717	2717	2717	2717
2.5°	2716	2698	2709	2726	2751
5°	2716	2695	2705	2719	2744
7.5°	2702	2687	2698	2719	2744
10°	2687	2673	2691	2709	2737
12.5°	2666	2656	2677	2698	2730
15°	2645	2634	2659	2691	2716
17.5°	2610	2610	2638	2670	2687
20°	2560	2571	2610	2638	2659
22.5°	2504	2518	2567	2592	2617
25°	2475	2489	2535	2567	2596
27.5°	2412	2443	2489	2535	2581
30°	2362	2397	2440	2507	2560
32.5°	2277	2330	2376	2472	2532
35°	2221	2288	2348	2472	2532
37.5°	2150	2217	2302	2447	2511
40°	2072	2150	2260	2422	2497
42.5°	1987	2065	2214	2394	2461
45°	1902	1991	2168	2355	2419
47.5°	1803	1899	2118	2302	2313
50°	1719	1821	2076	2199	2178
52.5°	1612	1736	2012	2058	2009
55°	1513	1662	1931	1899	1818
57.5°	1400	1581	1810	1715	1648
60°	1294	1496	1658	1542	1492
62.5°	1174	1411	1475	1386	1379
65°	1054	1326	1294	1269	1287
67.5°	941	1238	1135	1181	1224
70°	813	1124	1001	1128	1174
72.5°	700	980	905	1075	1061
75°	573	810	845	891	750
77.5°	460	640	739	566	460
80°	347	509	467	339	325
82.5°	248	428	265	265	255
85°	156	251	191	198	184
87.5°	78	134	120	131	120
90°	11	58	55	57	53
92.5°	9	45	48	50	50
95°	23	62	45	52	53
97.5°	47	58	68	60	55
100°	78	38	124	110	83
102.5°	113	34	113	175	147
105°	152	48	82	161	203
107.5°	194	69	56	116	158
110°	237	99	45	74	114



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281	138	45	53	78
115°	326	186	52	51	56
117.5°	371	237	72	51	54
120°	414	295	104	56	54
122.5°	459	333	139	78	60
125°	503	360	178	107	79
127.5°	546	395	224	141	107
130°	588	429	275	181	141
132.5°	628	461	334	225	181
135°	665	490	401	279	224
137.5°	700	529	466	333	278
140°	733	577	499	401	336
142.5°	764	632	518	474	403
145°	794	691	545	533	481
147.5°	825	752	579	559	544
150°	852	790	603	582	570
152.5°	877	819	628	612	591
155°	898	847	674	638	626
157.5°	919	873	738	668	653
160°	937	898	813	720	686
162.5°	950	918	863	800	744
165°	964	936	894	879	838
167.5°	973	950	918	913	905
170°	981	963	943	939	936
172.5°	989	973	961	961	961
175°	994	981	975	980	983
177.5°	996	985	985	990	996
180°	993	993	993	993	993

(END OF REPORT)