

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: ITL44179

Luminaire Tested: **EIVM-296PG**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44179
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: EIVM-296PG
Description: FABRICATED METAL STRIP BALLAST HOUSING WITH WHITE PAINTED SOCKET HOUSINGS, WHITE PAINTED FABRICATED METAL REFLECTOR WITH UP-LIGHT APERTURES, TRIANGULAR RAISED CENTER SECTION, OPEN ENDS AND BOTTOM.
Light Source: TWO 215-WATT F96PG17/CW FLUORESCENTS.
Ballast/Driver: MAGNETEK UNIVERSAL 931-LH-TC-P (BALLAST FACTOR 90.2 %).

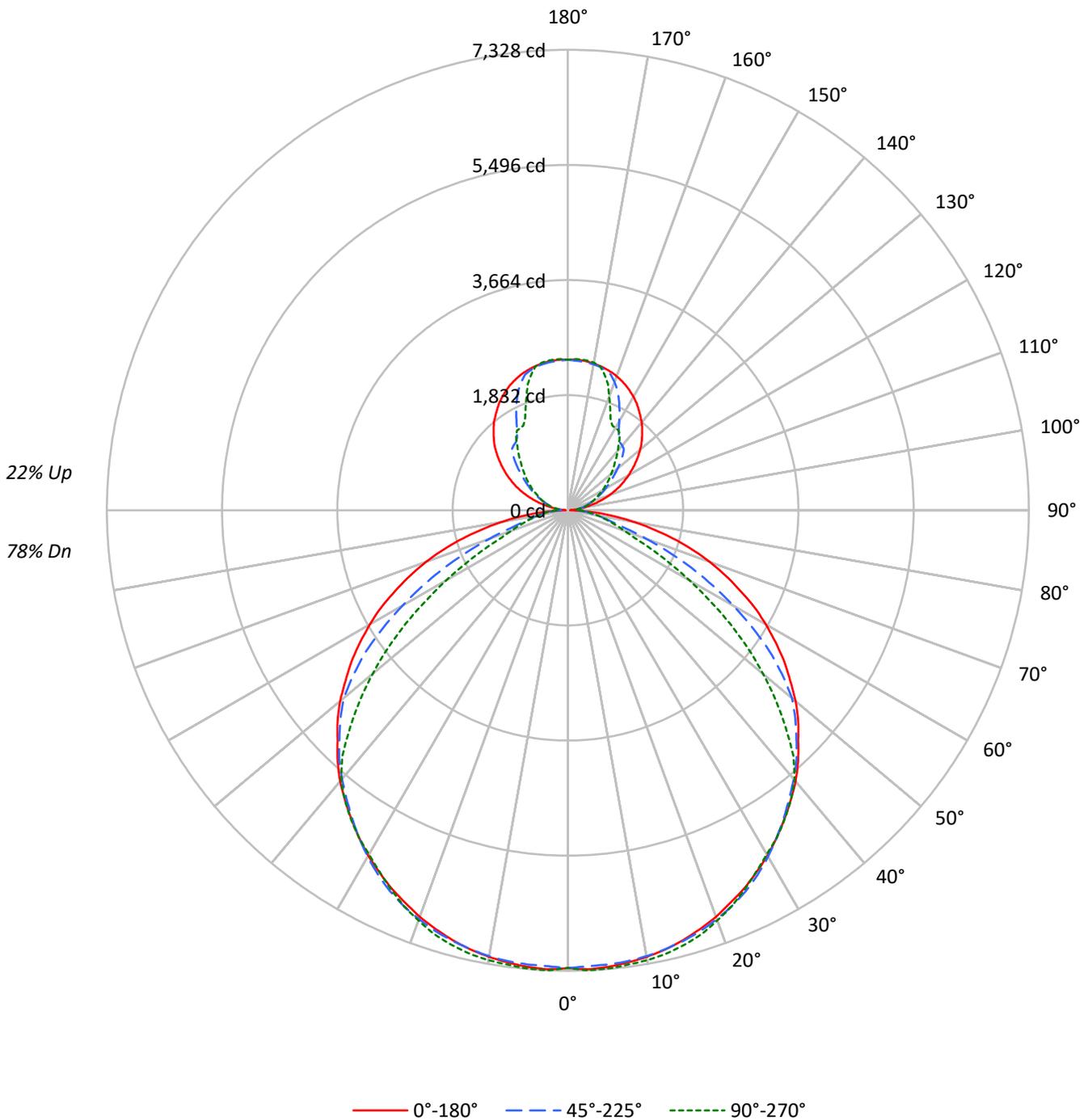
Summary

Lumens per Lamp: 15300 (2 lamps)
Luminaire Lumens: 26318.0 lumens
Efficiency: 86.0%
Efficacy: 67.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41
Luminous Opening: Rectangular (W 1.08' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 393
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	98	98	98	98	93	93	93	93	85	85	85	78	78	78	71	71	71	67
1	90	86	82	79	85	82	79	76	75	73	70	69	67	65	63	61	60	57
2	82	75	70	65	78	72	67	63	66	62	58	60	57	54	55	53	51	48
3	75	66	59	54	71	63	57	52	58	53	49	53	49	46	49	46	43	40
4	68	59	51	46	65	56	50	45	52	46	42	48	43	39	44	40	37	35
5	63	52	45	39	60	50	43	38	46	41	36	43	38	34	39	35	32	30
6	58	47	40	34	55	45	38	33	42	36	32	39	34	30	36	32	28	26
7	54	42	35	30	51	41	34	29	38	32	28	35	30	27	32	28	25	23
8	50	39	32	27	47	37	31	26	35	29	25	32	27	24	30	26	22	21
9	46	35	29	24	44	34	28	23	32	26	22	30	25	21	27	23	20	19
10	43	32	26	22	41	31	25	21	29	24	20	27	23	19	25	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9048	9048	9048
5°	9094	9047	9126
10°	9102	9087	9168
15°	9105	9122	9204
20°	9100	9150	9178
25°	9096	9167	9119
30°	9103	9127	9067
35°	9093	9067	9107
40°	9130	9054	9088
45°	9095	9021	8602
50°	9132	8985	7829
55°	9088	8480	6817
60°	9027	7544	5552
65°	8875	6357	4288
70°	8705	4819	3472
75°	8312	3542	3316
80°	7689	3419	3476
85°	6684	4019	4503



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	692.2	2.6	2.3	0°	7285	7285	7285	7285	7285	
10°-20°	2005.2	7.6	6.6	5°	7294	7243	7256	7273	7320	694
20°-30°	3073.3	11.7	10.0	15°	7081	7077	7094	7115	7158	1999
30°-40°	3767.1	14.3	12.3	25°	6637	6680	6689	6654	6654	3059
40°-50°	3952.8	15.0	12.9	35°	5997	6096	5980	6002	6006	3757
50°-60°	3393.6	12.9	11.1	45°	5178	5268	5136	5085	4897	4006
60°-70°	2259.1	8.6	7.4	55°	4197	4227	3916	3438	3148	3747
70°-80°	1102.5	4.2	3.6	65°	3020	3016	2163	1676	1459	2993
80°-90°	359.3	1.4	1.2	75°	1732	1433	738	717	691	1824
90°-100°	158.0	0.6	0.5	85°	469	269	282	320	316	502
100°-110°	372.5	1.4	1.2	90°	36	105	122	143	142	37
110°-120°	617.2	2.3	2.0	95°	94	136	121	138	139	116
120°-130°	823.0	3.1	2.7	105°	479	347	317	339	329	507
130°-140°	977.7	3.7	3.2	115°	913	690	548	532	512	900
140°-150°	1005.5	3.8	3.3	125°	1307	987	845	792	763	1169
150°-160°	888.3	3.4	2.9	135°	1668	1386	1229	1106	1050	1287
160°-170°	643.6	2.4	2.1	145°	1960	1880	1408	1463	1437	1227
170°-180°	227.2	0.9	0.7	155°	2188	2179	1923	1703	1607	1008
0°-30°	5770.7	21.9	18.9	165°	2329	2318	2306	2285	2241	658
0°-40°	9537.7	36.2	31.2	175°	2396	2379	2379	2390	2408	228
0°-60°	16884.1	64.2	55.2	180°	2396	2396	2396	2396	2396	
0°-90°	20605.0	78.3	67.3							
90°-120°	1147.8	4.4	3.8							
90°-150°	3954.0	15.0	12.9							
90°-180°	5713.0	21.7	18.7							
0°-180°	26318.0	100.0	86.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7285	7285	7285	7285	7285
2.5°	7311	7247	7260	7273	7328
5°	7294	7243	7256	7273	7320
7.5°	7260	7226	7239	7256	7294
10°	7217	7183	7205	7226	7269
12.5°	7158	7132	7153	7179	7226
15°	7081	7077	7094	7115	7158
17.5°	6987	6991	7017	7047	7072
20°	6885	6906	6923	6944	6944
22.5°	6757	6795	6816	6812	6816
25°	6637	6680	6689	6654	6654
27.5°	6492	6543	6535	6497	6484
30°	6347	6407	6364	6326	6322
32.5°	6177	6253	6177	6155	6177
35°	5997	6096	5980	6002	6006
37.5°	5818	5908	5780	5823	5818
40°	5631	5733	5584	5631	5605
42.5°	5417	5515	5379	5396	5306
45°	5178	5268	5136	5085	4897
47.5°	4965	5042	4901	4722	4487
50°	4726	4769	4650	4304	4052
52.5°	4453	4483	4291	3860	3609
55°	4197	4227	3916	3438	3148
57.5°	3916	3929	3481	2986	2670
60°	3634	3656	3037	2542	2235
62.5°	3344	3340	2598	2099	1826
65°	3020	3016	2163	1676	1459
67.5°	2713	2662	1723	1301	1143
70°	2397	2261	1327	1037	956
72.5°	2065	1847	968	853	810
75°	1732	1433	738	717	691
77.5°	1382	1007	589	597	572
80°	1075	657	478	495	486
82.5°	759	401	371	410	392
85°	469	269	282	320	316
87.5°	162	179	205	243	230
90°	36	105	122	143	142
92.5°	36	97	109	132	136
95°	94	136	121	138	139
97.5°	179	172	169	178	166
100°	271	221	227	235	218
102.5°	372	280	276	292	275
105°	479	347	317	339	329
107.5°	587	421	362	386	377
110°	698	507	418	427	419



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	806	596	482	476	466
115°	913	690	548	532	512
117.5°	1013	793	616	594	570
120°	1111	893	689	658	636
122.5°	1211	948	764	724	698
125°	1307	987	845	792	763
127.5°	1404	1050	935	862	832
130°	1500	1138	1031	934	899
132.5°	1587	1257	1128	1019	973
135°	1668	1386	1229	1106	1050
137.5°	1749	1512	1317	1195	1139
140°	1827	1636	1345	1290	1230
142.5°	1892	1773	1360	1403	1326
145°	1960	1880	1408	1463	1437
147.5°	2027	1979	1503	1468	1506
150°	2085	2065	1632	1485	1507
152.5°	2137	2128	1773	1560	1525
155°	2188	2179	1923	1703	1607
157.5°	2230	2223	2061	1859	1757
160°	2270	2261	2171	2021	1923
162.5°	2302	2292	2263	2174	2110
165°	2329	2318	2306	2285	2241
167.5°	2352	2339	2339	2345	2351
170°	2371	2355	2357	2370	2384
172.5°	2387	2369	2371	2384	2403
175°	2396	2379	2379	2390	2408
177.5°	2402	2384	2385	2394	2409
180°	2396	2396	2396	2396	2396

(END OF REPORT)