

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: ITL44171

Luminaire Tested: **DIM-396HO**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: ITL44171
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DIM-396HO
Description: WHITE PAINTED FABRICATED METAL STRIP BALLAST HOUSING WITH
WHITE PAINTED SOCKET HOUSINGS, WHITE PAINTED FABRICATED METAL
REFLECTOR WITH UPLIGHT APERTURES, OPEN BOTTOM.
Light Source: THREE 95-WATT F96T12/CW/HO/WM FLUORESCENTS.
Ballast/Driver: ONE MAGNETEK UNIVERSAL 480-XLH-TC-P (BALLAST FACTOR 83.9 %),
ONE MAGNETEK UNIVERSAL 481-LH-TC-P (BALLAST FACTOR 83.5 %).

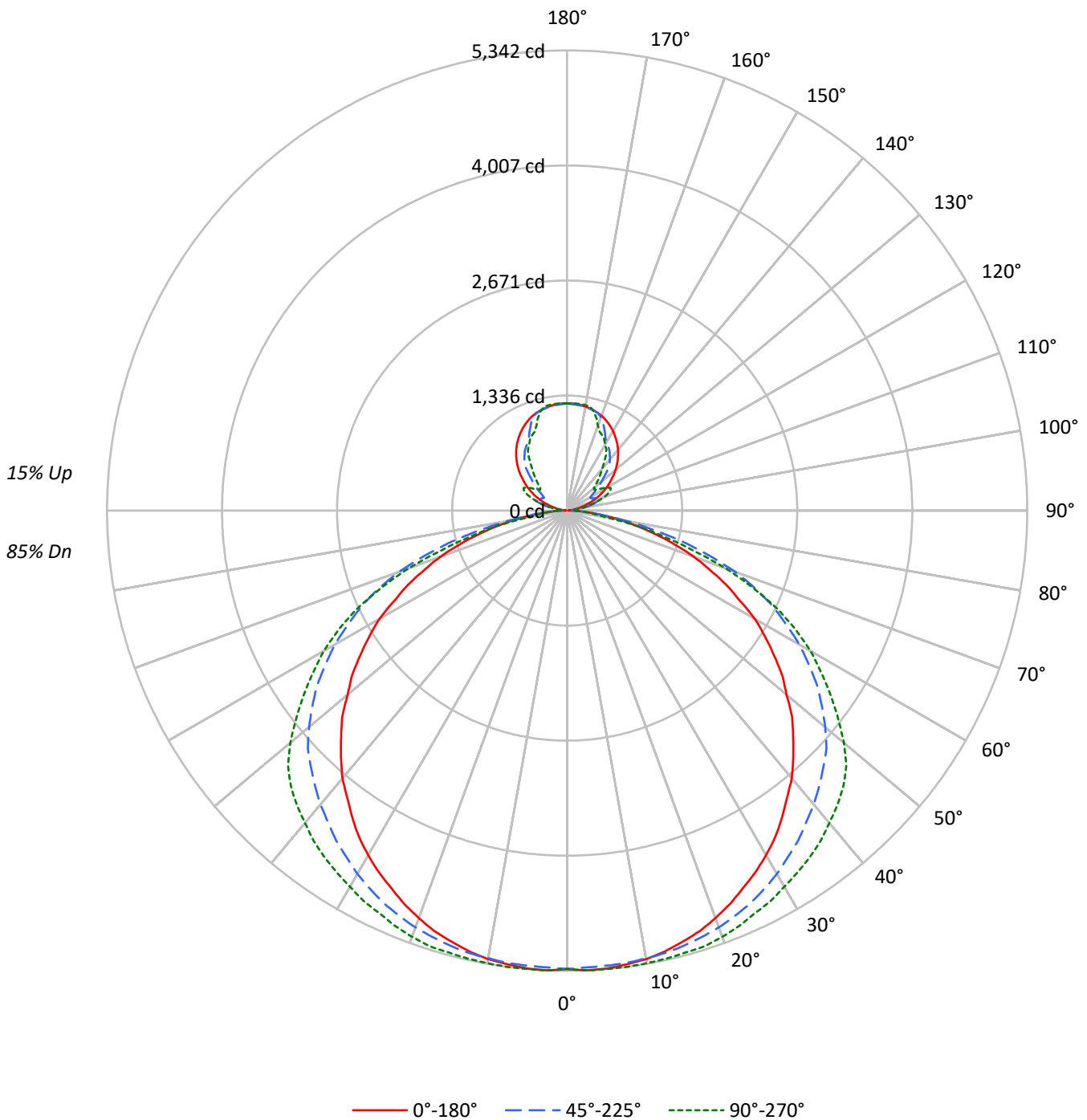
Summary

Lumens per Lamp: 8000 (3 lamps)
Luminaire Lumens: 20971.4 lumens
Efficiency: 87.4%
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.42 / 1.51
Luminous Opening: Rectangular (W 1.08' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 318
Input Voltage (V): NR
Input Current (A_{in}): 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	101	101	101	101	97	97	97	97	90	90	90	83	83	83	77	77	77	74
1	92	87	84	80	88	84	81	78	78	75	73	72	70	68	67	65	64	61
2	83	76	70	65	79	73	67	63	68	63	59	63	59	56	58	55	53	50
3	75	66	59	53	72	64	57	52	59	54	49	55	50	47	51	47	44	42
4	69	58	50	44	66	56	49	43	52	46	41	49	44	39	45	41	38	35
5	63	52	44	38	60	50	43	37	46	40	35	43	38	34	40	36	32	30
6	58	46	38	33	55	45	37	32	42	35	31	39	34	29	36	32	28	26
7	54	42	34	29	51	40	33	28	38	32	27	35	30	26	33	28	25	23
8	50	38	30	25	48	37	30	25	34	28	24	32	27	23	30	26	22	20
9	46	35	27	23	44	34	27	22	32	26	21	30	24	21	28	23	20	18
10	43	32	25	20	42	31	24	20	29	23	19	27	22	19	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6610	6610	6610
5°	6652	6613	6660
10°	6669	6655	6728
15°	6662	6726	6830
20°	6654	6807	6959
25°	6625	6895	7069
30°	6624	6983	7231
35°	6594	7090	7446
40°	6578	7220	7675
45°	6517	7390	7964
50°	6425	7557	8106
55°	6351	7676	8083
60°	6252	7735	8108
65°	5995	7750	7897
70°	5676	7521	7099
75°	5096	6594	5576
80°	4406	5150	3469
85°	3734	3791	3406



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	506.5	2.4	2.1	0°	5322	5322	5322	5322	5322	
10°-20°	1480.2	7.1	6.2	5°	5335	5296	5304	5323	5342	507
20°-30°	2313.7	11.0	9.6	15°	5181	5173	5231	5288	5312	1464
30°-40°	2916.3	13.9	12.2	25°	4834	4880	5031	5138	5158	2232
40°-50°	3220.0	15.4	13.4	35°	4349	4469	4676	4861	4911	2722
50°-60°	3087.3	14.7	12.9	45°	3710	3907	4207	4476	4534	2864
60°-70°	2492.8	11.9	10.4	55°	2933	3198	3545	3760	3733	2623
70°-80°	1392.1	6.6	5.8	65°	2040	2406	2637	2756	2687	2009
80°-90°	344.4	1.6	1.4	75°	1062	1451	1374	1320	1162	1131
90°-100°	102.5	0.5	0.4	85°	262	343	266	258	239	288
100°-110°	287.2	1.4	1.2	90°	21	67	70	76	71	23
110°-120°	410.0	2.0	1.7	95°	29	102	70	69	67	39
120°-130°	426.5	2.0	1.8	105°	187	171	330	331	313	202
130°-140°	506.5	2.4	2.1	115°	412	330	341	530	553	408
140°-150°	550.5	2.6	2.3	125°	626	562	403	374	429	561
150°-160°	480.8	2.3	2.0	135°	830	737	661	554	515	639
160°-170°	336.3	1.6	1.4	145°	997	981	854	822	786	623
170°-180°	117.7	0.6	0.5	155°	1123	1125	1027	963	965	518
0°-30°	4300.4	20.5	17.9	165°	1203	1195	1201	1206	1193	340
0°-40°	7216.7	34.4	30.1	175°	1242	1231	1233	1238	1246	118
0°-60°	13524.1	64.5	56.4	180°	1243	1243	1243	1243	1243	
0°-90°	17753.4	84.7	74.0							
90°-120°	799.6	3.8	3.3							
90°-150°	2283.2	10.9	9.5							
90°-180°	3218.0	15.3	13.4							
0°-180°	20971.4	100.0	87.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5322	5322	5322	5322	5322
2.5°	5342	5304	5308	5327	5342
5°	5335	5296	5304	5323	5342
7.5°	5312	5273	5296	5319	5342
10°	5288	5254	5277	5315	5335
12.5°	5242	5219	5261	5304	5327
15°	5181	5173	5231	5288	5312
17.5°	5119	5108	5192	5269	5304
20°	5034	5054	5150	5238	5265
22.5°	4942	4961	5092	5196	5219
25°	4834	4880	5031	5138	5158
27.5°	4734	4792	4954	5077	5111
30°	4619	4696	4869	5007	5042
32.5°	4496	4576	4769	4930	4980
35°	4349	4469	4676	4861	4911
37.5°	4195	4338	4561	4780	4834
40°	4057	4203	4453	4676	4734
42.5°	3887	4053	4334	4576	4642
45°	3710	3907	4207	4476	4534
47.5°	3541	3745	4084	4357	4395
50°	3325	3556	3911	4157	4195
52.5°	3148	3391	3726	3957	3964
55°	2933	3198	3545	3760	3733
57.5°	2725	3002	3325	3526	3495
60°	2517	2825	3114	3299	3264
62.5°	2255	2598	2867	3029	2987
65°	2040	2406	2637	2756	2687
67.5°	1786	2182	2367	2413	2325
70°	1563	1963	2071	2067	1955
72.5°	1309	1694	1720	1701	1524
75°	1062	1451	1374	1320	1162
77.5°	831	1193	1016	966	831
80°	616	928	720	608	485
82.5°	431	620	431	373	316
85°	262	343	266	258	239
87.5°	115	162	154	169	146
90°	21	67	70	76	71
92.5°	14	60	61	67	67
95°	29	102	70	69	67
97.5°	58	161	124	132	109
100°	96	196	195	188	176
102.5°	139	188	264	260	238
105°	187	171	330	331	313
107.5°	244	183	380	401	384
110°	300	225	405	466	452



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	356	275	378	510	511
115°	412	330	341	530	553
117.5°	469	399	311	497	570
120°	524	461	311	446	533
122.5°	574	515	350	401	477
125°	626	562	403	374	429
127.5°	682	613	458	393	396
130°	733	652	516	440	406
132.5°	782	691	583	496	457
135°	830	737	661	554	515
137.5°	875	801	727	615	572
140°	919	864	770	685	630
142.5°	960	928	813	768	704
145°	997	981	854	822	786
147.5°	1031	1032	885	860	845
150°	1065	1070	910	905	883
152.5°	1097	1102	962	943	931
155°	1123	1125	1027	963	965
157.5°	1149	1148	1096	1014	989
160°	1170	1167	1150	1088	1046
162.5°	1190	1183	1185	1159	1128
165°	1203	1195	1201	1206	1193
167.5°	1215	1207	1211	1224	1233
170°	1226	1216	1222	1231	1242
172.5°	1235	1225	1227	1235	1247
175°	1242	1231	1233	1238	1246
177.5°	1245	1233	1236	1239	1248
180°	1243	1243	1243	1243	1243

(END OF REPORT)