

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: ITL44167

Luminaire Tested: **DI-296HO**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44167
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DI-296HO
Description: WHITE PAINTED FABRICATED METAL STRIP BALLAST HOUSING, WHITE PAINTED FABRICATED METAL REFLECTOR WITH UP-LIGHT APERTURES, OPEN ENDS AND BOTTOM.
Light Source: TWO 95-WATT F96T12/CW/HO/WM FLUORESCENTS.
Ballast/Driver: MAGNETEK UNIVERSAL 480-XLH-TC-P (BALLAST FACTOR 83.9 %).

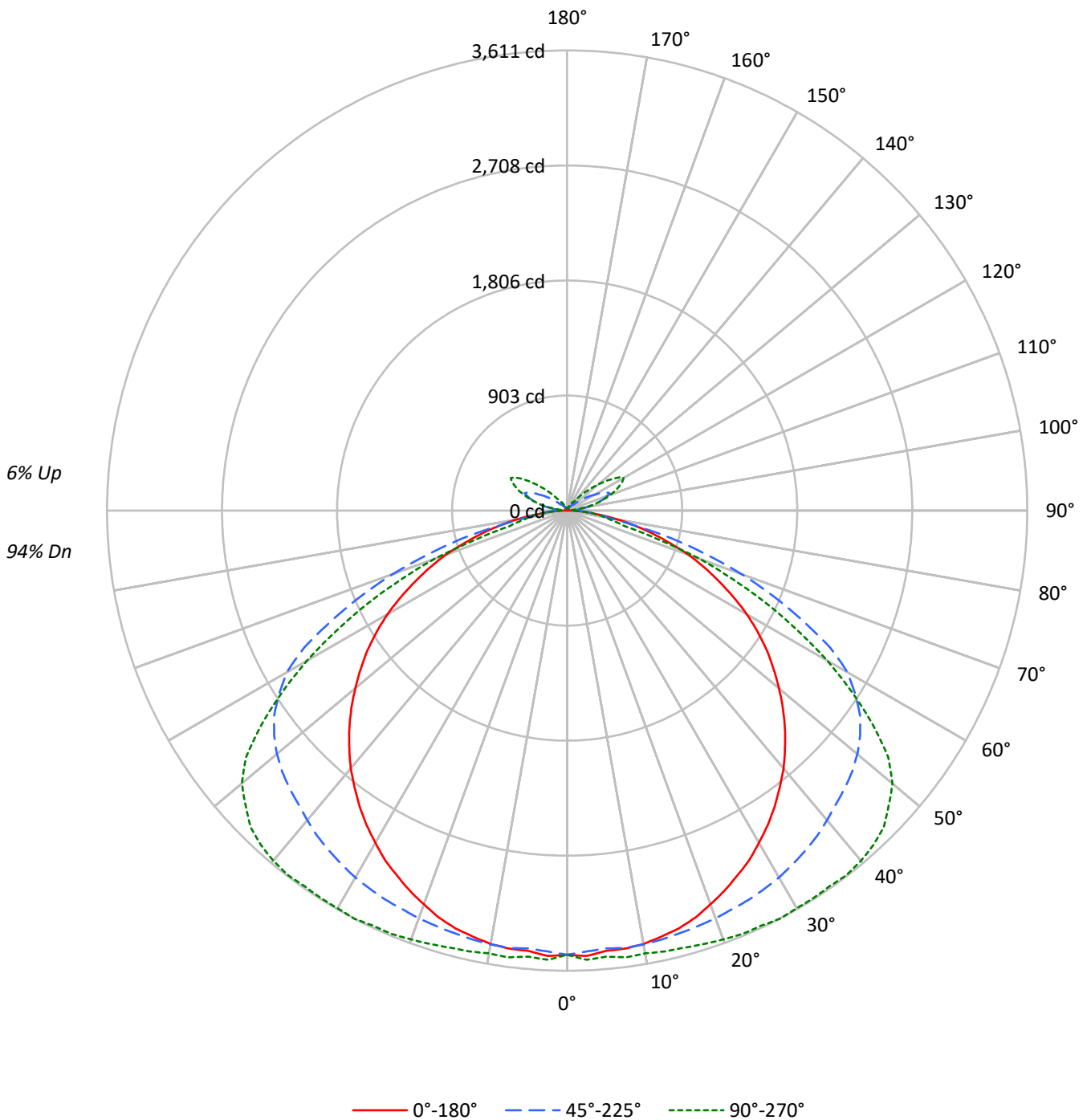
Summary

Lumens per Lamp: 8000 (2 lamps)
Luminaire Lumens: 13346.3 lumens
Efficiency: 83.4%
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.58 / 1.61
Luminous Opening: Rectangular (W 1.08' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 209
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	98	98	98	98	95	95	95	95	90	90	90	85	85	85	80	80	80	78
1	89	85	81	78	86	83	79	76	78	75	73	74	72	70	70	68	67	65
2	81	74	68	63	78	71	66	62	68	63	59	64	60	57	61	58	55	53
3	73	64	57	51	71	62	56	51	59	53	49	56	51	47	53	49	46	44
4	67	56	49	43	64	55	48	42	52	46	41	49	44	40	47	43	39	37
5	61	50	42	36	59	49	41	36	46	40	35	44	38	34	42	37	33	31
6	56	45	37	31	54	43	36	31	41	35	30	39	34	30	38	33	29	27
7	52	40	33	27	50	39	32	27	37	31	26	36	30	26	34	29	25	24
8	48	36	29	24	46	36	29	24	34	28	23	33	27	23	31	26	22	21
9	45	33	26	21	43	33	26	21	31	25	21	30	24	21	29	24	20	19
10	42	31	24	19	40	30	23	19	29	23	19	28	22	18	26	22	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4328	4328	4328
5°	4324	4300	4380
10°	4355	4360	4449
15°	4363	4412	4566
20°	4346	4499	4733
25°	4331	4618	4928
30°	4317	4769	5167
35°	4302	4940	5452
40°	4284	5143	5817
45°	4245	5412	6171
50°	4191	5745	6440
55°	4145	6078	6340
60°	4047	6312	5855
65°	3862	5978	5075
70°	3679	5287	4005
75°	3316	4127	2231
80°	2897	2360	2146
85°	2351	2679	2351



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	331.4	2.5	2.1	0°	3485	3485	3485	3485	3485	
10°-20°	975.7	7.3	6.1	5°	3468	3438	3449	3476	3513	331
20°-30°	1557.6	11.7	9.7	15°	3393	3385	3431	3494	3551	957
30°-40°	2028.0	15.2	12.7	25°	3160	3213	3370	3521	3596	1458
40°-50°	2337.2	17.5	14.6	35°	2837	2969	3258	3483	3596	1775
50°-60°	2340.3	17.5	14.6	45°	2417	2672	3081	3404	3513	1863
60°-70°	1806.3	13.5	11.3	55°	1914	2320	2807	3014	2928	1706
70°-80°	892.6	6.7	5.6	65°	1314	1895	2034	1873	1727	1304
80°-90°	233.1	1.7	1.5	75°	691	1242	860	619	465	733
90°-100°	80.3	0.6	0.5	85°	165	240	188	180	165	181
100°-110°	211.0	1.6	1.3	90°	21	82	59	38	46	16
110°-120°	258.6	1.9	1.6	95°	5	106	59	42	35	4
120°-130°	174.7	1.3	1.1	105°	7	152	257	270	258	7
130°-140°	72.3	0.5	0.5	115°	11	51	337	447	450	11
140°-150°	28.1	0.2	0.2	125°	14	29	172	348	433	13
150°-160°	12.5	0.1	0.1	135°	16	26	65	150	215	14
160°-170°	5.1	0.0	0.0	145°	23	22	39	70	81	14
170°-180°	1.7	0.0	0.0	155°	21	16	27	31	39	10
0°-30°	2864.7	21.5	17.9	165°	22	17	16	15	21	6
0°-40°	4892.7	36.7	30.6	175°	21	18	17	16	17	2
0°-60°	9570.1	71.7	59.8	180°	20	20	20	20	20	
0°-90°	12502.0	93.7	78.1							
90°-120°	549.9	4.1	3.4							
90°-150°	824.9	6.2	5.2							
90°-180°	844.0	6.3	5.3							
0°-180°	13346.3	100.0	83.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3485	3485	3485	3485	3485
2.5°	3498	3457	3464	3487	3528
5°	3468	3438	3449	3476	3513
7.5°	3468	3442	3461	3494	3536
10°	3453	3431	3457	3494	3528
12.5°	3423	3412	3446	3498	3543
15°	3393	3385	3431	3494	3551
17.5°	3348	3352	3419	3502	3566
20°	3288	3310	3404	3509	3581
22.5°	3228	3262	3385	3521	3596
25°	3160	3213	3370	3521	3596
27.5°	3093	3157	3348	3521	3611
30°	3010	3096	3325	3517	3603
32.5°	2928	3033	3292	3502	3603
35°	2837	2969	3258	3483	3596
37.5°	2740	2905	3220	3476	3603
40°	2642	2830	3172	3461	3588
42.5°	2530	2755	3123	3434	3558
45°	2417	2672	3081	3404	3513
47.5°	2297	2594	3033	3348	3423
50°	2169	2500	2973	3262	3333
52.5°	2042	2413	2898	3164	3175
55°	1914	2320	2807	3014	2928
57.5°	1772	2214	2680	2762	2650
60°	1629	2109	2541	2500	2357
62.5°	1471	2001	2327	2184	2042
65°	1314	1895	2034	1873	1727
67.5°	1164	1772	1745	1554	1404
70°	1013	1629	1456	1246	1103
72.5°	841	1468	1145	938	743
75°	691	1242	860	619	465
77.5°	540	965	548	398	368
80°	405	709	330	315	300
82.5°	263	462	259	255	240
85°	165	240	188	180	165
87.5°	68	161	120	105	90
90°	21	82	59	38	46
92.5°	7	73	49	32	32
95°	5	106	59	42	35
97.5°	4	132	116	101	74
100°	5	160	169	166	143
102.5°	5	173	213	218	205
105°	7	152	257	270	258
107.5°	8	124	299	319	312
110°	7	95	334	367	358



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	11	72	360	411	411
115°	11	51	337	447	450
117.5°	11	42	295	471	487
120°	12	43	251	452	510
122.5°	14	36	212	400	486
125°	14	29	172	348	433
127.5°	15	28	134	295	376
130°	17	27	100	245	322
132.5°	17	27	74	195	266
135°	16	26	65	150	215
137.5°	20	26	65	111	165
140°	22	25	53	84	123
142.5°	23	22	42	74	89
145°	23	22	39	70	81
147.5°	21	18	34	49	74
150°	23	18	33	40	55
152.5°	23	18	31	36	44
155°	21	16	27	31	39
157.5°	23	17	23	29	37
160°	21	15	18	24	32
162.5°	21	15	17	18	29
165°	22	17	16	15	21
167.5°	21	17	15	15	19
170°	21	18	15	14	18
172.5°	21	18	17	13	17
175°	21	18	17	16	17
177.5°	22	20	20	17	19
180°	20	20	20	20	20

(END OF REPORT)