

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: ITL44170

Luminaire Tested: **DIM-396T8**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44170
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DIM-396T8
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 59-WATT F96T8/SPX35 FLUORESCENTS.
Ballast/Driver: TWO MAGNETEK TRIAD B259I120HP (BALLAST FACTORS 110.6 % ONE
LAMP, 96.6 % TWO LAMP).

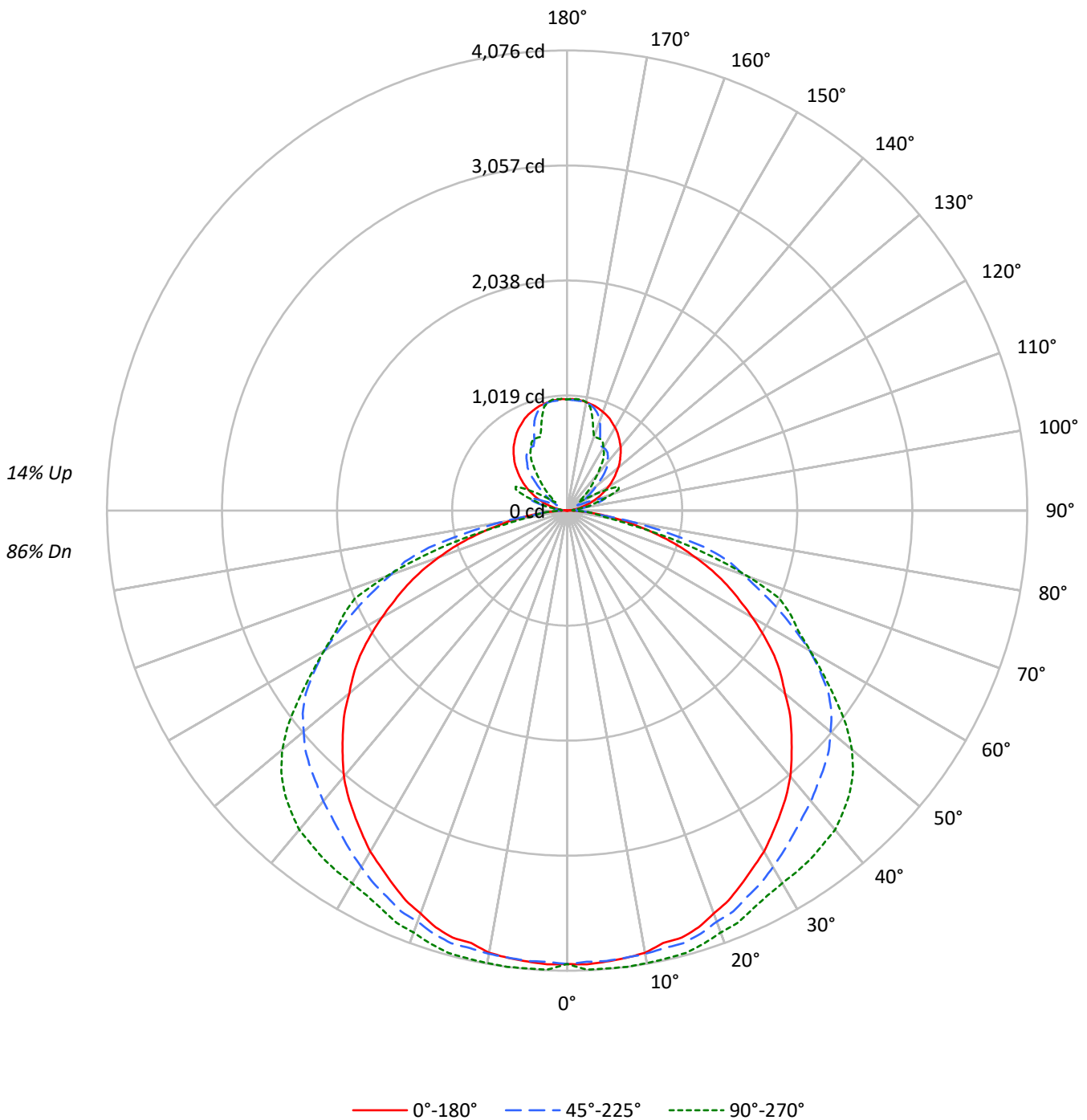
Summary

Lumens per Lamp: 5950 (3 lamps)
Luminaire Lumens: 16094.3 lumens
Efficiency: 90.2%
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.44 / 1.52
Luminous Opening: Rectangular (W 1.08' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 196.7
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	104	104	104	104	100	100	100	100	93	93	93	86	86	86	80	80	80	77
1	95	90	86	83	91	87	83	80	81	78	75	75	73	71	70	68	66	64
2	86	78	72	66	82	75	69	64	70	65	61	65	61	58	60	57	55	52
3	78	68	60	54	74	65	59	53	61	55	50	57	52	48	53	49	46	43
4	71	60	52	45	68	58	50	44	54	47	42	50	45	40	47	42	39	36
5	65	53	45	39	62	51	44	38	48	41	36	45	39	35	42	37	33	31
6	60	47	39	33	57	46	38	33	43	36	31	40	34	30	38	33	29	27
7	55	43	35	29	53	41	34	29	39	32	27	36	31	26	34	29	25	23
8	51	39	31	26	49	38	30	25	35	29	24	33	28	23	31	26	23	21
9	48	35	28	23	46	34	27	23	32	26	22	31	25	21	29	24	20	18
10	45	33	25	21	43	32	25	20	30	24	20	28	23	19	27	22	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4988	4988	4988
5°	5000	4992	5074
10°	5016	5028	5133
15°	5037	5101	5217
20°	5020	5120	5257
25°	5005	5173	5332
30°	5001	5229	5466
35°	4985	5301	5709
40°	4987	5449	5986
45°	4936	5652	6218
50°	4867	5886	6365
55°	4851	6122	6273
60°	4710	6165	6175
65°	4596	6057	6427
70°	4380	6028	6188
75°	4007	6090	4487
80°	3555	4313	2468
85°	2921	2921	2921



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	382.7	2.4	2.1	0°	4016	4016	4016	4016	4016	
10°-20°	1120.2	7.0	6.3	5°	4010	3987	4004	4030	4070	382
20°-30°	1744.5	10.8	9.8	15°	3917	3927	3967	4010	4057	1103
30°-40°	2208.7	13.7	12.4	25°	3652	3712	3775	3844	3891	1685
40°-50°	2474.4	15.4	13.9	35°	3288	3397	3496	3669	3765	2059
50°-60°	2408.3	15.0	13.5	45°	2810	2970	3218	3463	3540	2168
60°-70°	1988.0	12.4	11.1	55°	2240	2482	2827	2950	2897	1991
70°-80°	1178.4	7.3	6.6	65°	1564	1965	2061	2148	2187	1542
80°-90°	288.0	1.8	1.6	75°	835	1236	1269	1133	935	887
90°-100°	78.5	0.5	0.4	85°	205	331	205	222	205	226
100°-110°	234.1	1.5	1.3	90°	0	59	53	54	53	14
110°-120°	281.1	1.7	1.6	95°	23	79	45	48	48	32
120°-130°	254.5	1.6	1.4	105°	155	67	304	281	258	167
130°-140°	346.4	2.2	1.9	115°	333	217	122	388	503	329
140°-150°	402.3	2.5	2.3	125°	508	407	227	139	127	453
150°-160°	353.5	2.2	2.0	135°	666	506	465	344	296	514
160°-170°	257.4	1.6	1.4	145°	796	718	624	589	556	498
170°-180°	93.5	0.6	0.5	155°	896	886	685	684	699	412
0°-30°	3247.4	20.2	18.2	165°	958	952	935	906	861	270
0°-40°	5456.1	33.9	30.6	175°	986	975	978	983	991	94
0°-60°	10338.7	64.2	57.9	180°	985	985	985	985	985	
0°-90°	13793.1	85.7	77.3							
90°-120°	593.7	3.7	3.3							
90°-150°	1596.9	9.9	8.9							
90°-180°	2301.0	14.3	12.9							
0°-180°	16094.3	100.0	90.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4016	4016	4016	4016	4016
2.5°	4023	3990	4000	4020	4070
5°	4010	3987	4004	4030	4070
7.5°	3997	3977	3994	4030	4076
10°	3977	3960	3987	4030	4070
12.5°	3924	3941	3970	4014	4063
15°	3917	3927	3967	4010	4057
17.5°	3871	3888	3931	3980	4023
20°	3798	3825	3874	3934	3977
22.5°	3738	3785	3844	3911	3951
25°	3652	3712	3775	3844	3891
27.5°	3566	3642	3719	3795	3844
30°	3487	3569	3646	3748	3811
32.5°	3387	3487	3573	3705	3791
35°	3288	3397	3496	3669	3765
37.5°	3188	3294	3424	3636	3725
40°	3076	3208	3361	3603	3692
42.5°	2943	3086	3284	3533	3619
45°	2810	2970	3218	3463	3540
47.5°	2678	2857	3145	3394	3434
50°	2519	2721	3046	3258	3294
52.5°	2386	2615	2953	3135	3115
55°	2240	2482	2827	2950	2897
57.5°	2068	2340	2658	2721	2685
60°	1896	2217	2482	2522	2486
62.5°	1723	2091	2264	2317	2307
65°	1564	1965	2061	2148	2187
67.5°	1392	1806	1849	2008	2035
70°	1206	1647	1660	1829	1704
72.5°	1027	1458	1508	1481	1332
75°	835	1236	1269	1133	935
77.5°	650	1021	908	769	563
80°	497	815	603	437	345
82.5°	331	623	295	295	272
85°	205	331	205	222	205
87.5°	93	149	126	143	113
90°	0	59	53	54	53
92.5°	10	47	45	46	48
95°	23	79	45	48	48
97.5°	48	142	105	84	61
100°	81	159	158	167	139
102.5°	117	101	222	221	217
105°	155	67	304	281	258
107.5°	198	89	352	372	332
110°	243	128	308	443	423



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289	168	207	464	494
115°	333	217	122	388	503
117.5°	378	274	102	276	411
120°	421	326	135	173	294
122.5°	466	367	181	121	188
125°	508	407	227	139	127
127.5°	548	446	281	186	144
130°	591	472	336	234	190
132.5°	631	490	397	287	243
135°	666	506	465	344	296
137.5°	702	535	519	403	350
140°	737	586	552	470	411
142.5°	766	651	592	542	484
145°	796	718	624	589	556
147.5°	825	776	639	623	606
150°	850	823	644	663	642
152.5°	871	856	645	681	682
155°	896	886	685	684	699
157.5°	914	911	766	680	698
160°	930	927	846	728	693
162.5°	944	941	900	825	765
165°	958	952	935	906	861
167.5°	966	960	958	951	941
170°	975	967	972	974	975
172.5°	983	974	977	984	991
175°	986	975	978	983	991
177.5°	989	977	980	983	990
180°	985	985	985	985	985

(END OF REPORT)