

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: ITL44166

Luminaire Tested: **DI-296T8**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44166
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DI-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: ONE MAGNETEK TRIAD B259I120HP (BALLAST FACTOR 96.6 %).

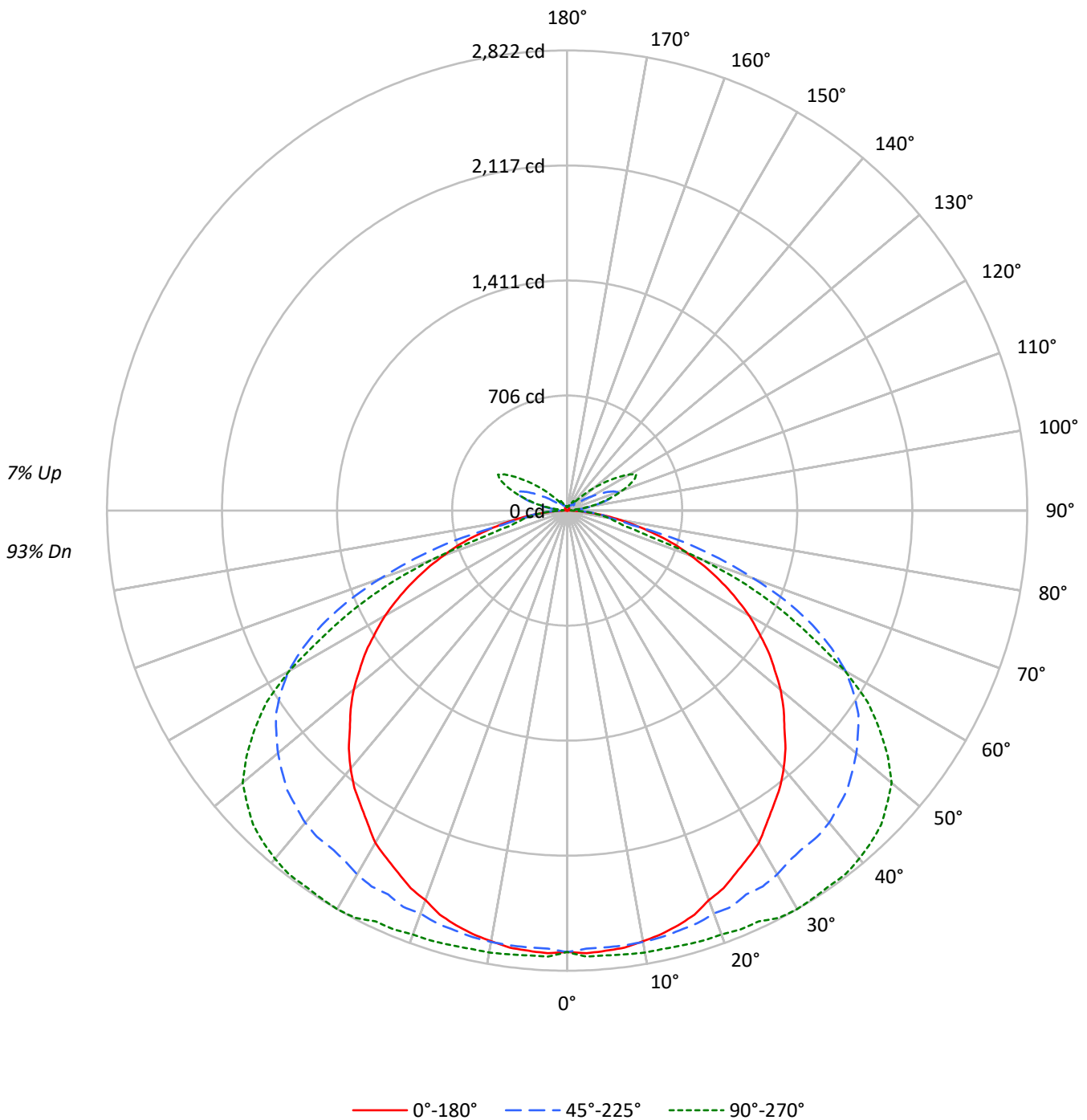
Summary

Lumens per Lamp: 5950 (2 lamps)
Luminaire Lumens: 10578.1 lumens
Efficiency: 88.9%
Efficacy: 86.0 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): 123
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	104	104	104	104	101	101	101	101	95	95	95	90	90	90	85	85	85	83
1	95	90	86	83	92	88	84	81	83	80	77	78	76	74	74	72	71	68
2	86	78	72	66	83	76	70	65	72	67	63	68	64	60	64	61	58	56
3	78	68	60	54	75	66	59	53	62	57	52	59	54	50	56	52	48	46
4	71	60	51	45	68	58	50	45	55	48	43	52	47	42	50	45	41	39
5	65	53	45	38	62	51	44	38	49	42	37	46	41	36	44	39	35	33
6	59	47	39	33	57	46	38	33	44	37	32	42	36	31	40	34	30	28
7	55	42	34	29	53	41	34	28	39	33	28	38	32	27	36	31	27	25
8	51	39	31	25	49	38	30	25	36	29	25	34	28	24	33	28	24	22
9	47	35	28	23	46	34	27	22	33	26	22	31	26	22	30	25	21	19
10	44	32	25	20	43	32	25	20	30	24	20	29	23	19	28	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3362	3362	3362
5°	3379	3353	3414
10°	3383	3388	3471
15°	3386	3427	3548
20°	3360	3476	3656
25°	3359	3560	3810
30°	3375	3696	4047
35°	3345	3828	4258
40°	3350	4053	4519
45°	3309	4263	4785
50°	3302	4473	5020
55°	3261	4723	5065
60°	3202	4906	4889
65°	3086	4879	4282
70°	2923	4427	3203
75°	2687	3479	1747
80°	2353	1931	1853
85°	1796	2252	1995



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	257.8	2.4	2.2	0°	2707	2707	2707	2707	2707	
10°-20°	757.5	7.2	6.4	5°	2710	2682	2689	2714	2738	258
20°-30°	1208.2	11.4	10.2	15°	2633	2630	2665	2717	2759	742
30°-40°	1581.3	14.9	13.3	25°	2451	2493	2598	2707	2780	1132
40°-50°	1824.1	17.2	15.3	35°	2206	2308	2525	2724	2808	1384
50°-60°	1842.0	17.4	15.5	45°	1884	2094	2427	2637	2724	1459
60°-70°	1469.6	13.9	12.3	55°	1506	1831	2181	2350	2339	1343
70°-80°	719.0	6.8	6.0	65°	1050	1502	1660	1558	1457	1039
80°-90°	197.3	1.9	1.7	75°	560	984	725	434	364	596
90°-100°	67.4	0.6	0.6	85°	126	207	158	158	140	149
100°-110°	200.5	1.9	1.7	90°	11	63	39	31	27	11
110°-120°	230.5	2.2	1.9	95°	1	88	41	27	21	2
120°-130°	125.3	1.2	1.1	105°	4	122	258	257	246	5
130°-140°	46.8	0.4	0.4	115°	7	31	268	438	457	6
140°-150°	26.2	0.2	0.2	125°	11	27	96	248	330	10
150°-160°	14.9	0.1	0.1	135°	19	26	63	69	118	14
160°-170°	7.5	0.1	0.1	145°	21	23	41	65	71	13
170°-180°	2.3	0.0	0.0	155°	22	27	31	38	41	10
0°-30°	2223.5	21.0	18.7	165°	22	26	28	28	27	6
0°-40°	3804.8	36.0	32.0	175°	20	20	23	24	25	2
0°-60°	7470.9	70.6	62.8	180°	20	20	20	20	20	
0°-90°	9856.8	93.2	82.8							
90°-120°	498.4	4.7	4.2							
90°-150°	696.6	6.6	5.9							
90°-180°	721.0	6.8	6.1							
0°-180°	10578.1	100.0	88.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2707	2707	2707	2707	2707
2.5°	2717	2686	2689	2710	2738
5°	2710	2682	2689	2714	2738
7.5°	2703	2675	2689	2717	2745
10°	2682	2668	2686	2714	2752
12.5°	2661	2654	2679	2717	2752
15°	2633	2630	2665	2717	2759
17.5°	2598	2612	2654	2721	2766
20°	2542	2560	2630	2707	2766
22.5°	2507	2542	2630	2728	2780
25°	2451	2493	2598	2707	2780
27.5°	2402	2462	2598	2731	2815
30°	2353	2416	2577	2742	2822
32.5°	2276	2360	2542	2728	2815
35°	2206	2308	2525	2724	2808
37.5°	2143	2262	2521	2728	2808
40°	2066	2213	2500	2703	2787
42.5°	1982	2146	2462	2675	2759
45°	1884	2094	2427	2637	2724
47.5°	1800	2020	2371	2598	2661
50°	1709	1950	2315	2535	2598
52.5°	1604	1891	2248	2465	2479
55°	1506	1831	2181	2350	2339
57.5°	1394	1754	2083	2209	2185
60°	1289	1684	1975	2052	1968
62.5°	1170	1604	1828	1810	1702
65°	1050	1502	1660	1558	1457
67.5°	931	1397	1457	1313	1191
70°	805	1289	1219	1075	882
72.5°	693	1156	977	732	532
75°	560	984	725	434	364
77.5°	441	812	406	315	301
80°	329	613	270	263	259
82.5°	231	406	221	214	196
85°	126	207	158	158	140
87.5°	56	137	95	95	77
90°	11	63	39	31	27
92.5°	4	55	33	25	24
95°	1	88	41	27	21
97.5°	3	129	106	87	56
100°	3	157	155	156	137
102.5°	4	151	206	207	197
105°	4	122	258	257	246
107.5°	6	91	301	322	306
110°	6	61	330	371	362



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4	37	308	411	413
115°	7	31	268	438	457
117.5°	7	35	222	406	478
120°	8	39	177	357	443
122.5°	10	32	137	302	391
125°	11	27	96	248	330
127.5°	13	27	65	196	273
130°	15	28	50	151	219
132.5°	17	26	53	103	170
135°	19	26	63	69	118
137.5°	20	26	65	55	79
140°	20	25	51	60	57
142.5°	20	23	42	71	60
145°	21	23	41	65	71
147.5°	21	24	39	49	67
150°	22	25	36	44	49
152.5°	22	27	34	42	43
155°	22	27	31	38	41
157.5°	22	28	28	35	37
160°	22	27	26	32	33
162.5°	21	26	26	27	28
165°	22	26	28	28	27
167.5°	21	23	28	28	28
170°	21	22	28	29	28
172.5°	21	21	28	29	28
175°	20	20	23	24	25
177.5°	20	19	20	21	20
180°	20	20	20	20	20

(END OF REPORT)