

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: ITL44168

Luminaire Tested: **DIM-296T8**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44168
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DIM-296T8
Description: WHITE PAINTED FABRICATED METAL STRIP BALLAST HOUSING WITH
WHITE PAINTED SOCKET HOUSINGS, WHITE PAINTED FABRICATED METAL
REFLECTOR WITH UP-LIGHT APERTURES, OPEN BOTTOM.
Light Source: TWO 59-WATT F96T8/SPX35 FLUORESCENTS.
Ballast/Driver: ONE MAGNETEK TRIAD B259I120HP (BALLAST FACTOR 96.6 %).

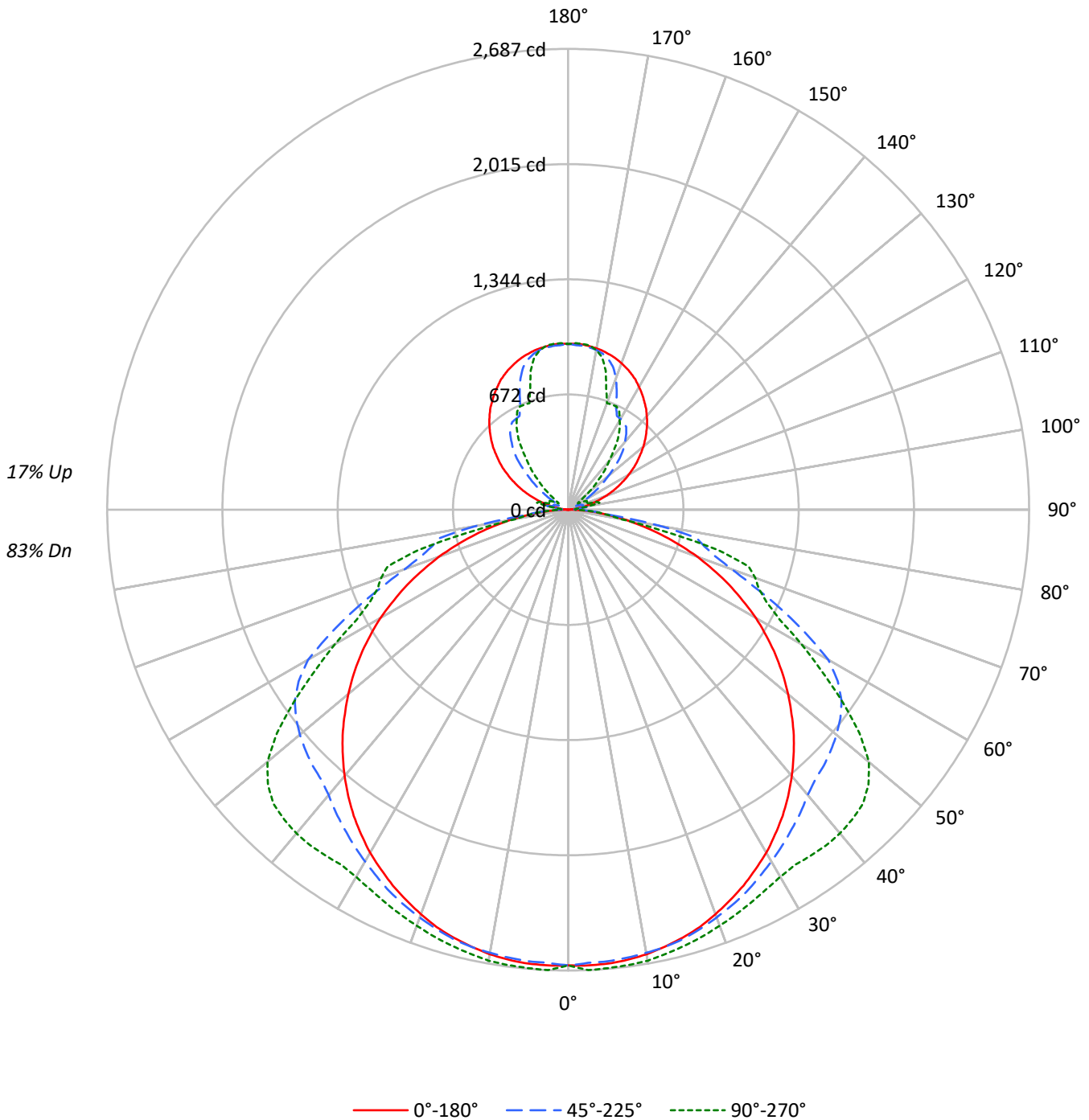
Summary

Lumens per Lamp: 5950 (2 lamps)
Luminaire Lumens: 11080.6 lumens
Efficiency: 93.1%
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.43 / 1.52
Luminous Opening: Rectangular (W 1.08' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 123.9
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	50	30	10	0	
RCR																						
0	107	107	107	107	103	103	103	103	95	95	95	87	87	87	80	80	80	77				
1	97	92	88	84	93	89	85	81	82	79	76	75	73	71	70	68	66	63				
2	88	80	73	68	84	76	71	65	71	66	62	65	61	58	60	57	54	51				
3	79	69	62	55	76	67	59	54	62	56	51	57	52	48	52	49	45	42				
4	72	61	53	46	69	59	51	45	54	48	43	50	45	40	46	42	38	36				
5	66	54	46	39	63	52	44	38	48	42	36	45	39	35	41	37	33	30				
6	61	48	40	34	58	47	39	33	43	37	32	40	34	30	37	32	29	26				
7	56	44	35	30	54	42	34	29	39	32	28	36	31	26	34	29	25	23				
8	52	40	32	26	50	38	31	26	36	29	24	33	28	23	31	26	22	20				
9	49	36	28	23	46	35	28	23	33	26	22	31	25	21	29	24	20	18				
10	45	33	26	21	44	32	25	21	30	24	20	28	23	19	26	22	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3300	3300	3300
5°	3313	3295	3345
10°	3319	3309	3367
15°	3321	3332	3383
20°	3318	3344	3411
25°	3314	3370	3462
30°	3313	3398	3545
35°	3304	3446	3734
40°	3286	3522	3995
45°	3267	3703	4265
50°	3235	3946	4421
55°	3196	4212	4223
60°	3140	4347	3900
65°	3045	4017	3747
70°	2905	3671	4212
75°	2683	3940	4329
80°	2432	3927	2146
85°	2081	2494	2366



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	252.5	2.3	2.1	0°	2657	2657	2657	2657	2657	
10°-20°	733.0	6.6	6.2	5°	2657	2636	2643	2656	2683	253
20°-30°	1136.7	10.3	9.6	15°	2583	2574	2591	2604	2631	729
30°-40°	1440.3	13.0	12.1	25°	2418	2430	2459	2493	2526	1115
40°-50°	1640.3	14.8	13.8	35°	2179	2205	2273	2378	2463	1363
50°-60°	1611.9	14.5	13.5	45°	1860	1917	2108	2339	2428	1433
60°-70°	1275.7	11.5	10.7	55°	1476	1585	1945	2015	1950	1318
70°-80°	850.5	7.7	7.1	65°	1036	1306	1367	1280	1275	1021
80°-90°	224.5	2.0	1.9	75°	559	863	821	986	902	593
90°-100°	58.5	0.5	0.5	85°	146	283	175	177	166	159
100°-110°	114.5	1.0	1.0	90°	0	46	43	44	43	11
110°-120°	143.0	1.3	1.2	95°	20	57	36	38	40	29
120°-130°	218.2	2.0	1.8	105°	148	40	84	127	176	159
130°-140°	320.9	2.9	2.7	115°	320	194	51	101	120	317
140°-150°	379.8	3.4	3.2	125°	491	380	200	99	68	439
150°-160°	339.2	3.1	2.9	135°	645	478	423	308	258	498
160°-170°	249.8	2.3	2.1	145°	772	688	589	543	505	484
170°-180°	91.3	0.8	0.8	155°	873	855	659	650	665	402
0°-30°	2122.1	19.2	17.8	165°	936	929	907	874	842	264
0°-40°	3562.4	32.2	29.9	175°	967	956	959	962	971	92
0°-60°	6814.6	61.5	57.3	180°	966	966	966	966	966	
0°-90°	9165.4	82.7	77.0							
90°-120°	316.0	2.9	2.7							
90°-150°	1234.8	11.1	10.4							
90°-180°	1915.0	17.3	16.1							
0°-180°	11080.6	100.0	93.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2657	2657	2657	2657	2657
2.5°	2660	2638	2645	2659	2687
5°	2657	2636	2643	2656	2683
7.5°	2647	2628	2635	2650	2678
10°	2632	2616	2624	2641	2670
12.5°	2609	2598	2611	2626	2651
15°	2583	2574	2591	2604	2631
17.5°	2551	2547	2562	2582	2608
20°	2510	2513	2530	2556	2581
22.5°	2465	2472	2496	2524	2555
25°	2418	2430	2459	2493	2526
27.5°	2364	2379	2413	2459	2497
30°	2310	2325	2369	2427	2472
32.5°	2245	2268	2322	2398	2457
35°	2179	2205	2273	2378	2463
37.5°	2106	2142	2225	2378	2468
40°	2027	2072	2172	2372	2464
42.5°	1945	1996	2132	2360	2450
45°	1860	1917	2108	2339	2428
47.5°	1766	1838	2077	2310	2373
50°	1674	1754	2042	2251	2288
52.5°	1576	1672	1999	2160	2139
55°	1476	1585	1945	2015	1950
57.5°	1369	1499	1863	1818	1752
60°	1264	1431	1750	1632	1570
62.5°	1146	1369	1560	1440	1389
65°	1036	1306	1367	1280	1275
67.5°	913	1232	1171	1172	1202
70°	800	1154	1011	1099	1160
72.5°	676	1039	894	1064	1104
75°	559	863	821	986	902
77.5°	445	667	766	698	543
80°	340	501	549	361	300
82.5°	236	414	259	244	232
85°	146	283	175	177	166
87.5°	69	122	102	109	95
90°	0	46	43	44	43
92.5°	9	36	37	38	40
95°	20	57	36	38	40
97.5°	44	54	92	76	55
100°	76	54	125	148	125
102.5°	110	41	92	171	186
105°	148	40	84	127	176
107.5°	190	68	91	101	123
110°	232	109	84	109	107



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	277	148	63	113	118
115°	320	194	51	101	120
117.5°	364	249	67	81	107
120°	407	297	105	63	86
122.5°	450	340	151	66	66
125°	491	380	200	99	68
127.5°	531	417	251	147	102
130°	572	443	305	199	152
132.5°	609	462	364	252	206
135°	645	478	423	308	258
137.5°	681	508	475	366	318
140°	713	559	513	427	372
142.5°	745	625	556	494	437
145°	772	688	589	543	505
147.5°	801	744	606	583	558
150°	826	789	611	624	600
152.5°	852	826	615	647	644
155°	873	855	659	650	665
157.5°	892	879	739	646	663
160°	909	899	814	696	661
162.5°	924	916	872	797	736
165°	936	929	907	874	842
167.5°	947	939	931	920	911
170°	955	945	946	945	945
172.5°	961	952	954	958	965
175°	967	956	959	962	971
177.5°	969	959	961	964	972
180°	966	966	966	966	966

(END OF REPORT)