

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: ITL44172

Luminaire Tested: **DIVM-296HO**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44172
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DIVM-296HO
Description: FABRICATED METAL STRIP BALLAST HOUSING WITH WHITE PAINTED SOCKET HOUSINGS, FABRICATED METAL REFLECTOR WITH UP-LIGHT APERTURES, TRIANGULAR RAISED CENTER SECTION, OPEN ENDS AND BOTTOM.
Light Source: TWO 95-WATT F96T12/CW/HO/WM FLUORESCENTS.
Ballast/Driver: MAGNETEK UNIVERSAL 480-XLH-TC-P (BALLAST FACTOR 90.8 %).

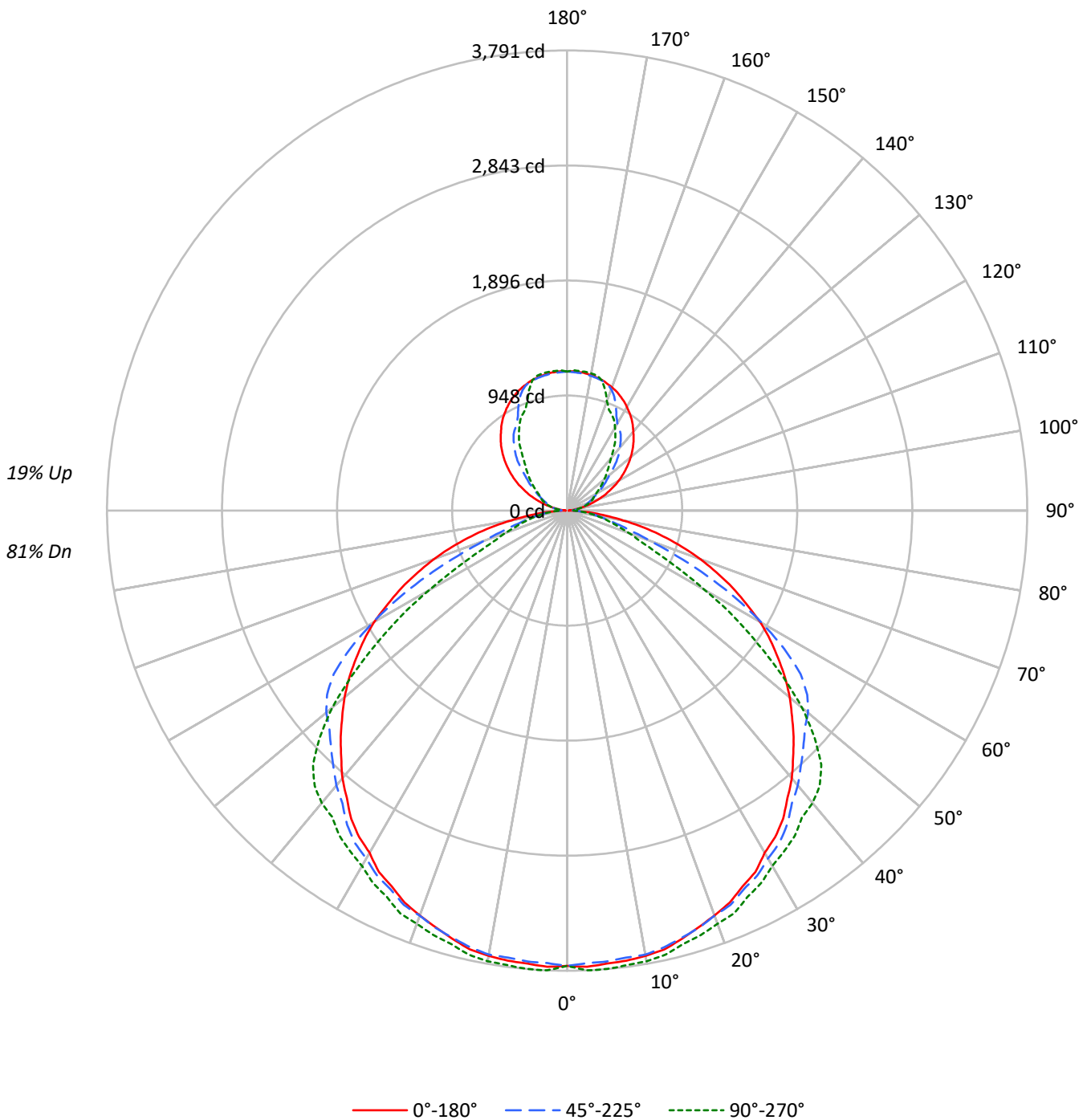
Summary

Lumens per Lamp: 8000 (2 lamps)
Luminaire Lumens: 13767.6 lumens
Efficiency: 86.0%
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.35 / 1.45
Luminous Opening: Rectangular (W 1.08' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 214
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	94	94	94	94	86	86	86	79	79	79	72	72	72	69
1	90	86	83	80	86	83	80	77	76	74	71	70	68	66	64	63	61	58
2	82	75	70	65	78	72	67	63	67	63	59	61	58	55	56	54	52	49
3	75	66	59	54	71	64	57	53	59	54	50	54	50	47	50	47	44	41
4	68	59	51	46	65	56	50	45	52	47	42	48	44	40	44	41	38	35
5	63	52	45	39	60	50	43	38	47	41	36	43	38	34	40	36	33	30
6	58	47	39	34	55	45	38	33	42	36	32	39	34	30	36	32	29	26
7	54	42	35	30	51	41	34	29	38	32	28	35	30	27	33	29	25	23
8	50	38	31	26	47	37	31	26	35	29	25	32	27	24	30	26	23	21
9	46	35	28	24	44	34	28	23	32	26	22	30	25	21	28	23	20	19
10	43	32	26	21	41	31	25	21	29	24	20	27	23	19	26	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4659	4659	4659
5°	4672	4649	4727
10°	4698	4684	4753
15°	4696	4686	4752
20°	4691	4695	4787
25°	4683	4717	4813
30°	4668	4747	4847
35°	4702	4790	4958
40°	4669	4794	5099
45°	4634	4834	5201
50°	4628	5005	4885
55°	4597	5084	4168
60°	4563	4608	3267
65°	4426	3747	2354
70°	4242	2640	1976
75°	3916	2025	1800
80°	3362	1838	1788
85°	2822	1881	1995



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	356.4	2.6	2.2	0°	3751	3751	3751	3751	3751	
10°-20°	1033.6	7.5	6.5	5°	3747	3721	3729	3747	3791	357
20°-30°	1596.5	11.6	10.0	15°	3652	3637	3644	3666	3696	1031
30°-40°	1981.6	14.4	12.4	25°	3417	3424	3442	3486	3512	1578
40°-50°	2150.5	15.6	13.4	35°	3101	3119	3159	3215	3270	1933
50°-60°	1927.7	14.0	12.0	45°	2638	2693	2752	2946	2961	2036
60°-70°	1255.1	9.1	7.8	55°	2123	2197	2348	2123	1925	1899
70°-80°	606.5	4.4	3.8	65°	1506	1646	1275	951	801	1485
80°-90°	175.8	1.3	1.1	75°	816	841	422	408	375	863
90°-100°	68.6	0.5	0.4	85°	198	154	132	147	140	217
100°-110°	162.0	1.2	1.0	90°	13	49	48	57	55	16
110°-120°	264.9	1.9	1.7	95°	28	66	56	61	57	36
120°-130°	374.4	2.7	2.3	105°	181	137	150	161	155	191
130°-140°	457.4	3.3	2.9	115°	382	286	230	233	236	380
140°-150°	496.9	3.6	3.1	125°	588	502	369	346	332	526
150°-160°	440.5	3.2	2.8	135°	771	672	575	495	473	594
160°-170°	310.6	2.3	1.9	145°	924	911	768	716	689	577
170°-180°	108.7	0.8	0.7	155°	1038	1038	949	872	872	479
0°-30°	2986.5	21.7	18.7	165°	1113	1105	1108	1116	1110	314
0°-40°	4968.1	36.1	31.1	175°	1146	1136	1138	1144	1154	109
0°-60°	9046.3	65.7	56.5	180°	1146	1146	1146	1146	1146	
0°-90°	11083.7	80.5	69.3							
90°-120°	495.4	3.6	3.1							
90°-150°	1824.1	13.2	11.4							
90°-180°	2684.0	19.5	16.8							
0°-180°	13767.6	100.0	86.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3751	3751	3751	3751	3751
2.5°	3762	3725	3732	3751	3791
5°	3747	3721	3729	3747	3791
7.5°	3740	3710	3714	3736	3777
10°	3725	3703	3714	3732	3769
12.5°	3703	3681	3685	3710	3747
15°	3652	3637	3644	3666	3696
17.5°	3600	3593	3604	3633	3666
20°	3549	3549	3552	3589	3622
22.5°	3497	3501	3516	3552	3593
25°	3417	3424	3442	3486	3512
27.5°	3358	3365	3391	3442	3461
30°	3255	3281	3310	3350	3380
32.5°	3189	3207	3251	3295	3328
35°	3101	3119	3159	3215	3270
37.5°	2983	3012	3042	3141	3181
40°	2880	2921	2957	3071	3145
42.5°	2755	2803	2851	3001	3079
45°	2638	2693	2752	2946	2961
47.5°	2513	2579	2656	2825	2763
50°	2395	2469	2590	2649	2528
52.5°	2263	2336	2494	2414	2234
55°	2123	2197	2348	2123	1925
57.5°	1984	2054	2123	1822	1631
60°	1837	1914	1855	1514	1315
62.5°	1661	1778	1572	1216	1029
65°	1506	1646	1275	951	801
67.5°	1330	1517	977	724	639
70°	1168	1334	727	580	544
72.5°	992	1117	544	489	448
75°	816	841	422	408	375
77.5°	647	566	327	327	309
80°	470	364	257	265	250
82.5°	323	239	195	206	191
85°	198	154	132	147	140
87.5°	81	96	88	99	88
90°	13	49	48	57	55
92.5°	11	48	45	52	53
95°	28	66	56	61	57
97.5°	55	81	81	82	75
100°	88	93	106	109	101
102.5°	133	111	129	136	129
105°	181	137	150	161	155
107.5°	227	167	167	183	179
110°	279	201	181	202	200



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	333	241	204	218	221
115°	382	286	230	233	236
117.5°	438	344	260	251	250
120°	489	397	293	279	270
122.5°	539	451	330	312	299
125°	588	502	369	346	332
127.5°	637	549	409	379	365
130°	684	588	456	416	399
132.5°	729	625	512	453	436
135°	771	672	575	495	473
137.5°	811	733	629	543	513
140°	848	795	674	601	561
142.5°	888	856	724	667	623
145°	924	911	768	716	689
147.5°	956	954	799	764	740
150°	986	987	827	812	788
152.5°	1014	1015	879	850	838
155°	1038	1038	949	872	872
157.5°	1062	1059	1015	927	899
160°	1080	1075	1064	1004	958
162.5°	1097	1092	1093	1069	1042
165°	1113	1105	1108	1116	1110
167.5°	1124	1116	1118	1130	1139
170°	1133	1124	1127	1137	1148
172.5°	1141	1131	1133	1142	1153
175°	1146	1136	1138	1144	1154
177.5°	1149	1138	1141	1147	1157
180°	1146	1146	1146	1146	1146

(END OF REPORT)