

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: 126P107

Luminaire Tested: **2GCASF-2U1-5/8H8246-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 126P107
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GCASF-2U1-5/8H8246-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with
a Holophane 8246 refractive grid lens.
Light Source: Two-FBO31/35K - 2900 Lumens ea. - 31 Watts ea.
Ballast/Driver: Triad-Utrad B232I120RH Electronic

Summary

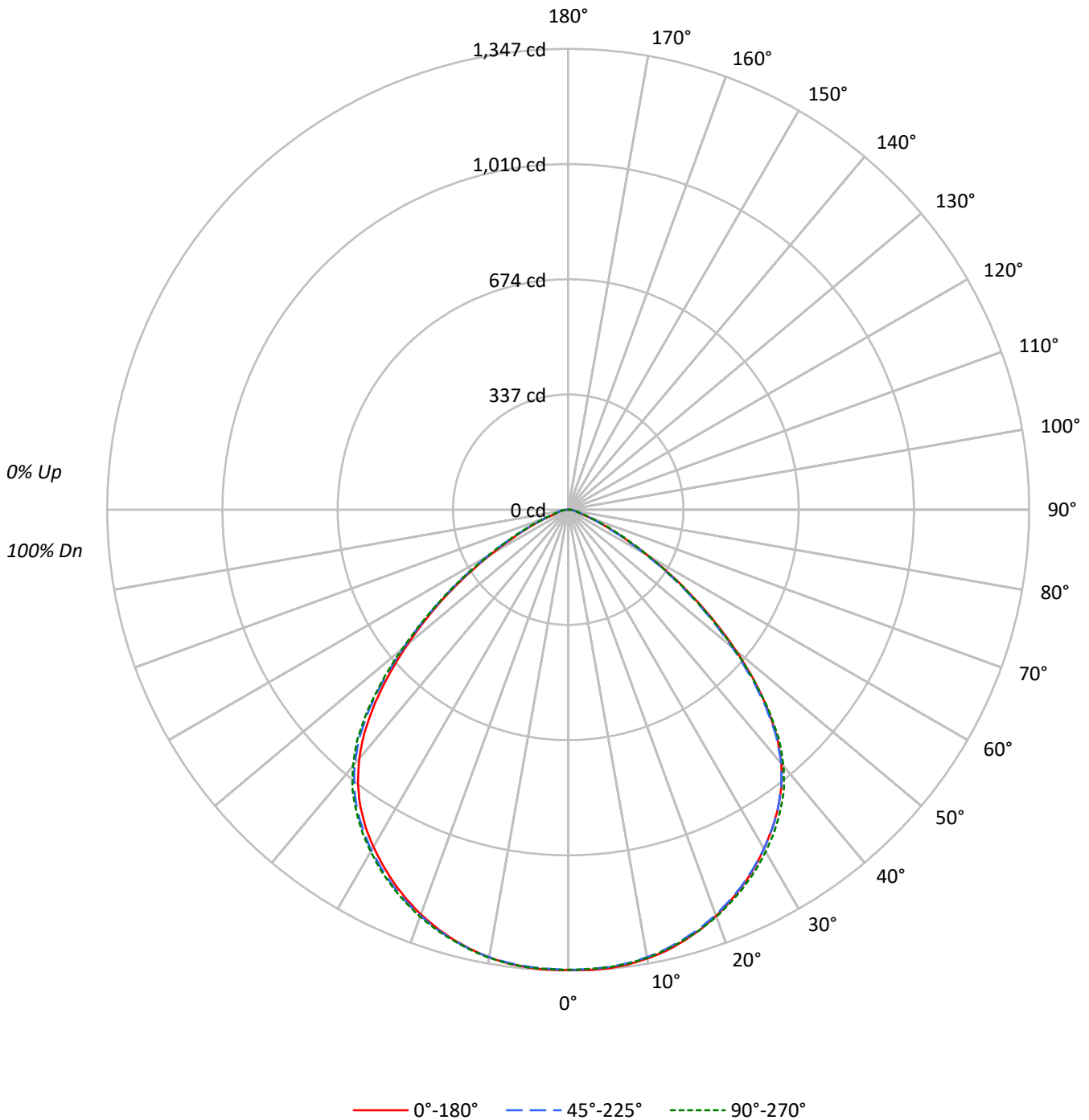
Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 2940.4 lumens
Efficiency: 50.7%
Efficacy: 52.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.33
Luminous Opening: Rectangular (W 1.68' x L: 1.7' x H: 0')
CIE Type: Direct

Input Watts (W): 56.1
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	60	60	60	60	59	59	59	59	56	56	56		54	54	54		52	52	52	51
1	56	54	53	51	55	53	52	50	51	50	49		49	48	47		47	47	46	45
2	52	49	46	44	51	48	45	43	46	44	42		45	43	41		43	42	40	39
3	48	44	40	37	47	43	40	37	42	39	36		40	38	36		39	37	35	34
4	45	39	35	33	44	39	35	32	37	34	32		36	34	32		35	33	31	30
5	41	36	32	29	40	35	31	28	34	31	28		33	30	28		32	30	28	27
6	38	32	28	25	37	32	28	25	31	28	25		30	27	25		29	27	25	24
7	36	29	25	23	35	29	25	23	28	25	22		28	25	22		27	24	22	21
8	33	27	23	20	33	27	23	20	26	23	20		25	22	20		25	22	20	19
9	31	25	21	18	31	25	21	18	24	21	18		24	20	18		23	20	18	17
10	29	23	19	17	29	23	19	17	22	19	17		22	19	17		21	19	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5068	5068	5068
5°	5092	5080	5080
10°	5097	5089	5085
15°	5091	5083	5072
20°	5069	5077	5049
25°	5031	5056	5006
30°	4978	5021	4952
35°	4913	4964	4872
40°	4767	4816	4673
45°	4391	4413	4247
50°	3746	3711	3594
55°	2937	2897	2819
60°	2042	2042	1944
65°	1257	1338	1222
70°	705	793	650
75°	437	510	480
80°	434	456	521
85°	562	562	649



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	127.7	4.3	2.2	0°	1345	1345	1345	1345	1345	
10°-20°	367.4	12.5	6.3	5°	1346	1342	1343	1341	1343	128
20°-30°	557.7	19.0	9.6	15°	1305	1300	1303	1302	1300	368
30°-40°	667.8	22.7	11.5	25°	1210	1208	1216	1212	1204	557
40°-50°	624.8	21.2	10.8	35°	1068	1068	1079	1074	1059	666
50°-60°	393.0	13.4	6.8	45°	824	817	828	820	797	629
60°-70°	148.8	5.1	2.6	55°	447	434	441	441	429	400
70°-80°	40.0	1.4	0.7	65°	141	135	150	144	137	148
80°-90°	13.2	0.4	0.2	75°	30	33	35	37	33	36
90°-100°	0.0	0.0	0.0	85°	13	11	13	13	15	12
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	1
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	1052.9	35.8	18.2	165°	0	0	0	0	0	0
0°-40°	1720.6	58.5	29.7	175°	0	0	0	0	0	0
0°-60°	2738.4	93.1	47.2	180°	0	0	0	0	0	0
0°-90°	2940.4	100.0	50.7							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	2940.4	100.0	50.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1345	1345	1345	1345	1345	1345	1345	1345	1345
2.5°	1347	1344	1344	1345	1344	1344	1343	1344	1346
5°	1346	1342	1342	1343	1343	1342	1341	1342	1343
7.5°	1341	1337	1337	1337	1338	1337	1336	1337	1338
10°	1332	1328	1328	1329	1330	1329	1328	1329	1329
12.5°	1321	1315	1316	1318	1318	1318	1317	1317	1316
15°	1305	1300	1300	1302	1303	1303	1302	1302	1300
17.5°	1286	1280	1282	1284	1286	1285	1284	1285	1281
20°	1264	1259	1260	1262	1266	1264	1263	1264	1259
22.5°	1238	1234	1235	1238	1242	1239	1239	1240	1233
25°	1210	1206	1208	1210	1216	1212	1212	1212	1204
27.5°	1179	1176	1177	1180	1187	1182	1182	1183	1172
30°	1144	1143	1144	1147	1154	1149	1150	1150	1138
32.5°	1108	1107	1108	1111	1119	1113	1114	1114	1101
35°	1068	1067	1068	1071	1079	1073	1074	1074	1059
37.5°	1023	1021	1022	1025	1035	1026	1027	1027	1009
40°	969	966	968	970	979	971	971	970	950
42.5°	903	899	900	903	912	903	902	902	880
45°	824	818	817	820	828	820	820	819	797
47.5°	735	724	724	728	733	730	726	725	706
50°	639	623	626	630	633	633	628	627	613
52.5°	542	525	529	533	534	537	532	532	521
55°	447	430	434	438	441	443	441	441	429
57.5°	355	342	344	346	351	352	353	353	340
60°	271	262	262	263	271	269	271	274	258
62.5°	198	195	192	192	204	197	204	205	188
65°	141	140	135	136	150	142	144	150	137
67.5°	97	96	93	93	105	99	99	105	96
70°	64	65	63	61	72	65	69	73	59
72.5°	41	45	45	42	49	45	50	53	42
75°	30	33	33	32	35	35	37	39	33
77.5°	24	24	25	26	27	29	29	30	28
80°	20	19	20	22	21	25	24	23	24
82.5°	17	15	16	18	17	20	19	18	20
85°	13	11	11	13	13	14	13	14	15
87.5°	7	6	6	6	8	7	7	8	7
90°	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)