

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: 102P118

Luminaire Tested: **IAF-SS-232**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 102P118  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: IAF-SS-232  
Description: IAF Series Industrial Luminaire with a Silver  
Insert under the lamps.  
Light Source: Two - F032/35K - 2800 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Motorola M2-IN-T8-GP-D-120 Electronic - L.O.B.F. = 88.6%

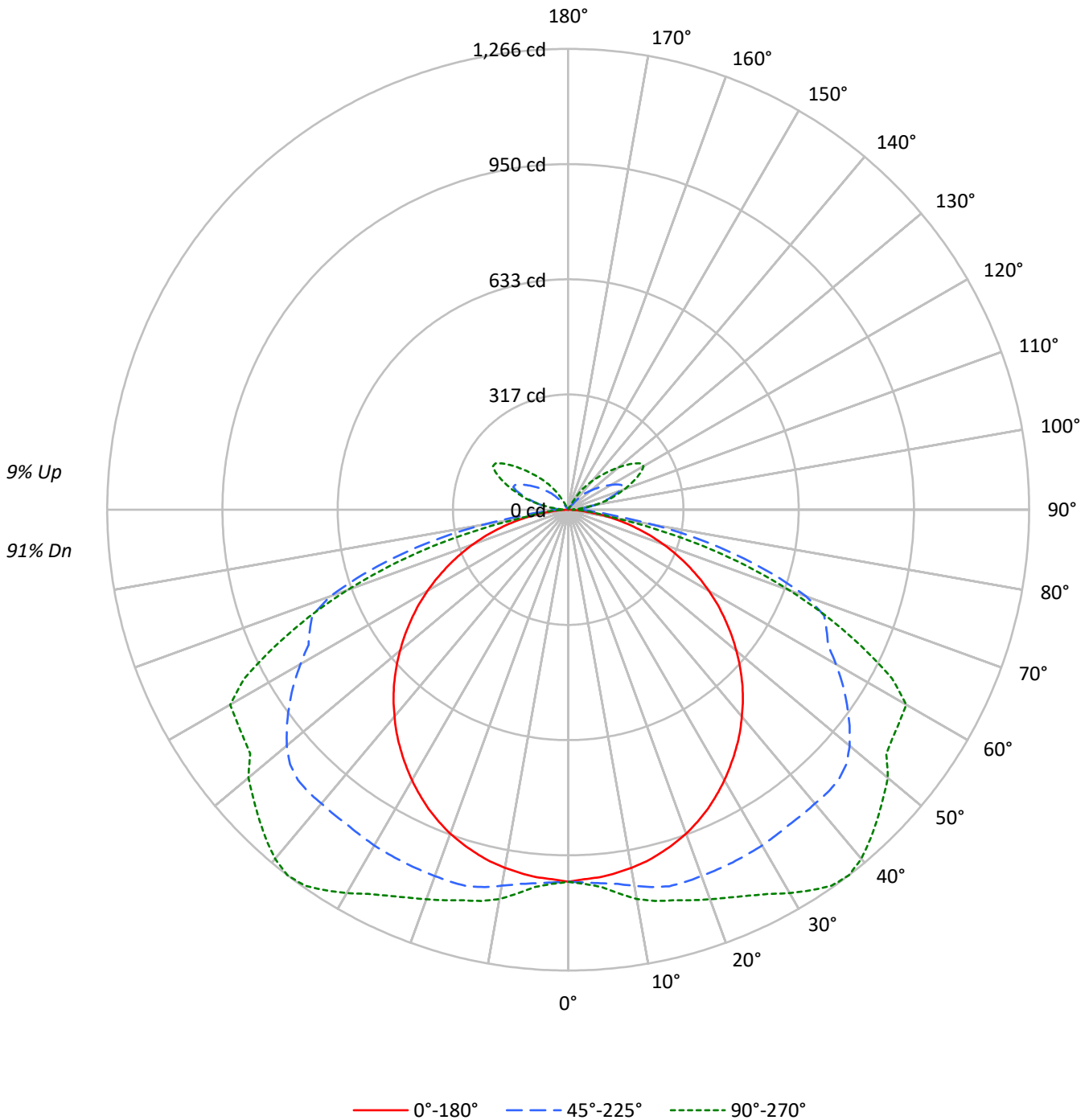
**Summary**

Lumens per Lamp: 2800 (2 lamps)  
Luminaire Lumens: 4734.4 lumens  
Efficiency: 84.5%  
Efficacy: 77.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.79 / 1.73  
Luminous Opening: Rectangular w/ Sides (W: 0.93' x L: 4' x H: 0.22')  
CIE Type: Direct

Input Watts (W): 61  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: 102P118  
CATALOG NUMBER: IAF-SS-232

### 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	99	99	99	99	96	96	96	96	90	90	90		84	84	84		79	79	79	77
1	89	85	81	77	86	82	79	75	77	74	72		73	70	68		68	67	65	63
2	80	73	67	61	77	71	65	60	66	62	57		62	58	55		59	55	53	50
3	73	63	56	50	70	61	54	49	57	52	47		54	49	45		51	47	43	41
4	66	55	47	41	63	53	46	40	50	44	39		47	42	38		45	40	36	34
5	60	49	41	35	58	47	40	34	45	38	33		42	36	32		40	35	31	29
6	55	43	35	30	53	42	35	29	40	33	28		38	32	28		36	31	27	25
7	51	39	31	26	49	38	31	25	36	29	25		34	28	24		32	27	23	21
8	47	35	28	23	45	34	27	22	33	26	22		31	25	21		29	24	21	19
9	44	32	25	20	42	31	25	20	30	24	19		28	23	19		27	22	18	17
10	41	30	23	18	40	29	22	18	27	21	17		26	21	17		25	20	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2957	2957	2957
5°	2928	2939	2960
10°	2907	2974	3063
15°	2884	3040	3130
20°	2859	3068	3229
25°	2823	3114	3364
30°	2778	3180	3575
35°	2731	3263	3821
40°	2679	3394	3946
45°	2622	3562	3974
50°	2547	3646	4024
55°	2460	3644	4106
60°	2357	3620	4401
65°	2223	3717	4038
70°	2051	3754	3307
75°	1790	3014	2256
80°	1384	1813	911
85°	673	772	502



TEST NUMBER: 102P118  
 CATALOG NUMBER: IAF-SS-232

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	98.8	2.1	1.8	0°	1022	1022	1022	1022	1022	
10°-20°	299.4	6.3	5.3	5°	1013	1019	1030	1038	1040	96
20°-30°	489.8	10.3	8.7	15°	977	1011	1071	1102	1111	276
30°-40°	659.0	13.9	11.8	25°	907	985	1069	1143	1170	418
40°-50°	765.4	16.2	13.7	35°	803	910	1057	1208	1261	502
50°-60°	782.2	16.5	14.0	45°	676	809	1050	1175	1201	521
60°-70°	708.4	15.0	12.7	55°	526	702	935	1031	1089	470
70°-80°	414.7	8.8	7.4	65°	363	588	783	901	889	359
80°-90°	97.7	2.1	1.7	75°	193	406	477	411	380	204
90°-100°	39.2	0.8	0.7	85°	33	127	78	59	56	44
100°-110°	95.4	2.0	1.7	90°	2	44	27	15	12	2
110°-120°	123.5	2.6	2.2	95°	0	42	38	32	31	0
120°-130°	94.3	2.0	1.7	105°	0	74	113	119	121	0
130°-140°	48.5	1.0	0.9	115°	0	43	161	201	207	0
140°-150°	15.2	0.3	0.3	125°	1	8	108	191	222	1
150°-160°	1.9	0.0	0.0	135°	1	3	59	117	140	1
160°-170°	0.8	0.0	0.0	145°	1	3	5	49	69	1
170°-180°	0.2	0.0	0.0	155°	2	2	4	5	5	1
0°-30°	888.0	18.8	15.9	165°	2	2	3	3	3	1
0°-40°	1546.9	32.7	27.6	175°	2	2	2	2	2	0
0°-60°	3094.6	65.4	55.3	180°	2	2	2	2	2	
0°-90°	4315.4	91.2	77.1							
90°-120°	258.1	5.5	4.6							
90°-150°	416.1	8.8	7.4							
90°-180°	419.0	8.9	7.5							
0°-180°	4734.4	100.0	84.5							



TEST NUMBER: 102P118  
 CATALOG NUMBER: IAF-SS-232

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1022	1022	1022	1022	1022
2.5°	1016	1019	1025	1029	1029
5°	1013	1019	1030	1038	1040
7.5°	1007	1018	1037	1056	1063
10°	999	1016	1049	1077	1086
12.5°	990	1013	1062	1093	1101
15°	977	1011	1071	1102	1111
17.5°	963	1008	1072	1111	1125
20°	947	1002	1071	1121	1139
22.5°	928	995	1070	1131	1153
25°	907	985	1069	1143	1170
27.5°	883	971	1067	1155	1190
30°	858	954	1065	1172	1216
32.5°	831	933	1061	1190	1240
35°	803	910	1057	1208	1261
37.5°	774	887	1056	1221	1266
40°	742	862	1054	1218	1252
42.5°	710	836	1054	1198	1228
45°	676	809	1050	1175	1201
47.5°	640	781	1036	1142	1173
50°	603	753	1009	1111	1146
52.5°	565	727	974	1077	1101
55°	526	702	935	1031	1089
57.5°	487	677	894	1020	1080
60°	446	652	849	1008	1072
62.5°	405	625	804	985	1002
65°	363	588	783	901	889
67.5°	321	543	761	784	772
70°	279	494	695	667	645
72.5°	236	446	590	538	513
75°	193	406	477	411	380
77.5°	151	374	359	273	242
80°	109	305	236	148	128
82.5°	68	218	127	83	78
85°	33	127	78	59	56
87.5°	10	75	51	32	28
90°	2	44	27	15	12
92.5°	0	34	27	19	18
95°	0	42	38	32	31
97.5°	0	54	55	52	51
100°	0	67	75	74	73
102.5°	0	77	94	97	98
105°	0	74	113	119	121
107.5°	0	67	132	140	142
110°	0	59	151	161	164



TEST NUMBER: 102P118  
 CATALOG NUMBER: IAF-SS-232

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0	51	163	182	186
115°	0	43	161	201	207
117.5°	0	37	150	216	226
120°	1	28	136	219	239
122.5°	1	17	122	209	237
125°	1	8	108	191	222
127.5°	1	4	95	172	202
130°	1	3	82	153	181
132.5°	1	3	71	134	160
135°	1	3	59	117	140
137.5°	1	3	43	100	121
140°	1	3	26	86	103
142.5°	1	3	12	69	87
145°	1	3	5	49	69
147.5°	1	3	4	28	47
150°	1	2	4	11	25
152.5°	2	2	4	5	9
155°	2	2	4	5	5
157.5°	2	2	3	4	5
160°	2	2	3	4	4
162.5°	2	2	3	4	4
165°	2	2	3	3	3
167.5°	2	2	2	3	3
170°	2	2	2	3	3
172.5°	2	2	2	3	3
175°	2	2	2	2	2
177.5°	2	2	2	2	2
180°	2	2	2	2	2

(END OF REPORT)