

DESCRIPTION

The IAF Series is an energy efficient family of light duty industrials that feature premium performance and durability. The series incorporates sturdy embossed reflectors that precisely direct and effectively control light. The IAF Series can be installed using various mounting methods and numerous options and accessories are available. The series is available with both Apertured (IAF) and Closed Top (ICF) reflector combinations.

The IAF Series can be utilized in simple task and area lighting and industrial applications.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Nominal Channel is code gauge prime cold rolled steel. Numerous KOs for ease of installation. End plate quickly connects to channel connector. Groove for tong hanger lamp holder bracket flips in place.

Electrical*

Ballast are CBM/ETL Class "P" and positively secured by mounting bolts. UL/CUL listed. Suitable for damp locations.

Finish

Multistage iron phosphate pretreatment ensures maximum bonding and rust inhibitor. Lighting grade, baked white enamel finish.

Reflectors

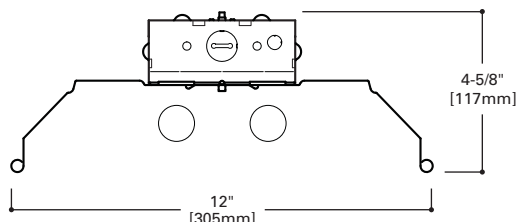
Die formed prime steel, code gauge. Formed edges for added strength. 12" width. Reflectors secured with quarter-turn fasteners. All reflectors 4' sections. Baked white enamel. Standard with 8% uplight (IAF). Closed top reflector (ICF).



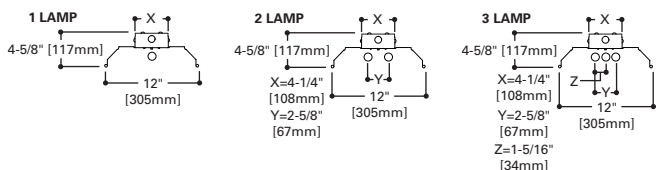
IAF, ICF
 117, 217, 317,
 128T8, 228T8,
 328T8,
 132, 232, 332

2', 4' OR 8' INDUSTRIAL
 1, 2 OR 3 T8 LAMPS,

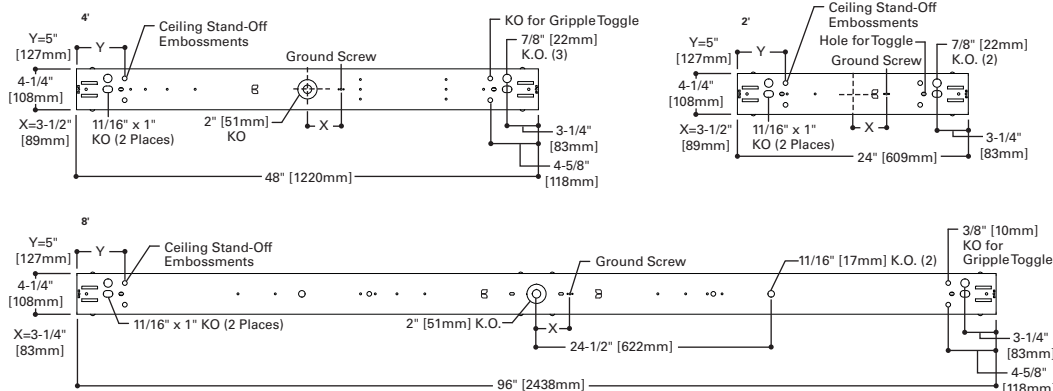
Light Duty Industrial



LAMP CONFIGURATIONS



MOUNTING DATA



ENERGY DATA

Input Watts:
HB Ballast, Normal Ballast Factor
 117 (17), 217 (25), 132 (30),
 228T8 (49), 232 (53),
 328T8 (71), 332 (80)

Luminaire Efficacy Rating
LER = FL-80
Catalog Number: ICF-232
Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.00

*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

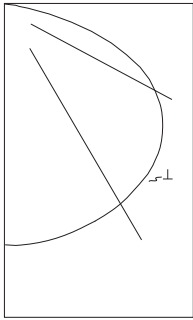
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.



PHOTOMETRICS



ICF-232

High Performance Ballast

Two-F32T8/35K Lamps
2850 Lumens

Spacing criterion:
(H) 1.3 x mounting height, (L) 1.5 x mounting height
Efficiency 89.2%

Test Report:
ICF-232.IES

LER = FL-80

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$3.00

Coefficients of Utilization

rc	Effective floor cavity reflectance																									
	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	50	30	10	0		
RCR																										
0	106	106	106	106	104	104	104	104	99	99	99	95	95	95	91	91	91	89	89	89	89	89	89	89	89	89
1	96	92	87	84	94	89	86	82	86	82	80	82	79	77	79	77	75	73	73	73	73	73	73	73	73	73
2	87	79	72	67	84	77	71	66	74	69	64	71	66	63	68	64	61	59	59	59	59	59	59	59	59	59
3	78	68	61	54	76	67	60	54	64	58	53	62	56	52	59	55	51	49	49	49	49	49	49	49	49	49
4	71	60	52	45	69	59	51	45	56	50	44	54	48	44	52	47	43	41	41	41	41	41	41	41	41	41
5	65	53	45	39	63	52	44	38	50	43	38	48	42	37	47	41	37	35	35	35	35	35	35	35	35	35
6	60	48	39	33	58	47	39	33	45	38	33	43	37	32	42	36	32	30	30	30	30	30	30	30	30	30
7	56	43	35	29	54	42	34	29	41	34	29	39	33	28	38	32	28	26	26	26	26	26	26	26	26	26
8	52	39	31	26	50	38	31	26	37	30	25	36	30	25	35	29	25	23	23	23	23	23	23	23	23	23
9	48	36	28	23	47	35	28	23	34	27	23	33	27	23	32	26	22	21	21	21	21	21	21	21	21	21
10	45	33	26	21	44	32	25	21	31	25	20	31	25	20	30	24	20	19	19	19	19	19	19	19	19	19

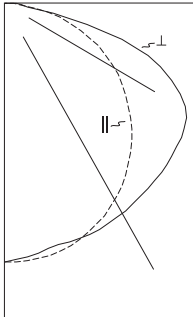
Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1155.37	20.3	22.7
0-40	1949.47	34.2	38.3
0-60	3744.86	65.7	73.7
0-90	5061.97	88.8	99.6
90-180	22.24	.4	.4
0-180	5084.21	89.2	100.0

Candela

Angle	Along H	45°	Across ⊥
0	1433	1433	1433
10	1411	1422	1429
20	1341	1377	1412
30	1227	1312	1387
40	1076	1223	1348
50	890	1117	1247
60	673	949	1053
70	432	696	646
80	175	244	111
90	2	23	0
100	0	11	0
110	0	4	0
120	0	2	0
130	0	2	0
140	0	1	0
150	0	0	0
160	0	0	0
170	0	0	0
180	0	0	0

PHOTOMETRICS



ICF-132

High Performance Ballast

One-F32T8/35K Lamp
3100 Lumens

Spacing criterion:
(H) 1.3 x mounting height, (L) 1.4 x mounting height
Efficiency 96.9%

Test Report:
ICF-132.IES

LER = FL-88

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$2.73

Coefficients of Utilization

rc	Effective floor cavity reflectance																									
	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	50	30	10	0		
RCR																										
0	115	115	115	115	112	112	112	112	107	107	107	103	103	103	99	99	99	97	97	97	97	97	97	97	97	97
1	104	99	94	90	101	97	92	89	92	89	86	89	86	83	85	83	81	78	78	78	78	78	78	78	78	78
2	93	85	77	71	91	83	76	70	79	73	69	76	71	67	73	69	65	63	63	63	63	63	63	63	63	63
3	84	73	65	58	82	72	64	57	69	62	56	66	60	55	63	58	54	52	52	52	52	52	52	52	52	52
4	77	64	55	48	74	63	54	48	60	53	47	58	51	46	56	50	45	43	43	43	43	43	43	43	43	43
5	70	57	47	41	68	56	47	40	54	46	40	52	45	39	50	44	39	37	37	37	37	37	37	37	37	37
6	65	51	42	35	63	50	41	35	48	40	34	46	39	34	45	39	34	32	32	32	32	32	32	32	32	32
7	60	46	37	30	58	45	36	30	43	36	30	42	35	30	41	34	30	28	28	28	28	28	28	28	28	28
8	55	42	33	27	54	41	33	27	40	32	27	38	31	26	37	31	26	24	24	24	24	24	24	24	24	24
9	52	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22	22	22	22	22	22	22	22	22
10	48	35	27	22	47	34	27	22	33	26	22	33	26	21	32	26	21	20	20	20	20	20	20	20	20	20

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	661.26	21.3	22.1
0-40	1109.36	35.8	37.0
0-60	2138.86	69.0	71.3
0-90	2997.95	96.7	100.0
90-180	0	0	0
0-180	2997.95	96.7	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg fcd/sm
45	4395	4950	5642
55	4330	5568	6656
65	4211	6743	7570
75	3760	7500	5692
85	1727	3455	2283

Candela

Angle	Along H	45°	Across ⊥
0	840	840	840
5	840	835	827
10	832	818	808
15	816	797	803
20	792	781	802
25	762	766	792
30	724	743	778
35	680	714	765
40	632	683	754
45	578	651	742
50	522	622	727
55	463	594	710
60	400	564	673
65	331	530	595
70	259	460	494
75	181	361	274
80	98	175	72
85	28	56	37
90	0	0	0

ORDERING INFORMATION

SAMPLE NUMBER: ICF-232-UNV-HB81-U

Tandem Blank =2' or 4' Length ⁽¹⁾ 8T =8' Length	Ballast Type ⁽²⁾ EB8 =T8 Electronic Instant Start. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 EB8 / PLUS = T8 Electronic Instant Start. High Ballast Factor >1.13. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 ER8 =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 ER8 / PLUS = T8 Electronic Program Start. High Ballast Factor >1.13. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 HPT8 Ballast HB8_L =T8 Electronic Instant Start. Low Ballast Factor .77 HB8 =T8 Electronic Instant Start. Ballast Factor .88 HB8_N =T8 Electronic Instant Start. Normal Ballast Factor 1.0 HB8_H =T8 Electronic Instant Start. High Ballast Factor 1.15-1.2 HR8_DIM =T8 Electronic Program Start Step Dimming. Ballast Factor .88 HR8_L =T8 Electronic Program Start. Low Ballast Factor .77 HR8 =T8 Electronic Program Start. Ballast Factor .88 HR8_H =T8 Electronic Program Start. High Ballast Factor 1.15-1.2	Options 6-3/18 SJT-C&P-515P =Cord & Plug (120V), (15 AMP) ⁽³⁾ 6-3/18 SJT-C&P-L715P =Cord & Plug (277V), (15 AMP) ⁽⁴⁾ PI/CPI =Plug-In Option ⁽⁵⁾ TILW =Tandem In-Line Wiring Option (Consult TILW Option Catalog Page) ⁽⁴⁾ (See options & accessories)	Packaging U =Unit Pack 4B =4 Bulk
Series IAF =Apertured Reflector ICF =Closed Top Reflector	ACCESSORIES (Order Separately)		
Number of Lamps (Not Included) 1=1 Lamp 2=2 Lamps 3=3 Lamps	A-1-B/Spacer-U =Spacer 1-1/2" to 2-1/2" from ceiling (Use 2 per fixture) GRP-SSF =Gripper Hanger (Use 2 per fixture) SCF =Fixed Stem Set (Specify Length) SCS =Swivel Stem Set (Specify Length) SCA =Adjustable 48" Stem Set AYC-Chain/Set-U =Chain Hanger Set (Use 1 set per fixture) WG/ICF-4FT-U ² =Wire Guard CLC-SSF =Long Channel Connector SSF TOGGLE =Single Toggle NO. 2 (Specify Length) Y-TOGGLE =Y Toggle NO. 2 (Specify Length)		
Wattage 17 =17W T8 (24") 28T8 =28W T8 (48") ⁽³⁾ 32 =32W T8 (48")			
Voltage ⁽²⁾ 120V =120 Volt 277V =277 Volt 347V =347 Volt UNV =Universal Voltage 120-277 ⁽³⁾			
Options GL =Single Element Fuse GM =Double Element Fuse EL4 =Emergency Installed EL8 =Emergency Installed			

NOTES: ⁽¹⁾Length of fixture (2' or 4') as determined by lamp wattage chosen. ⁽²⁾Products also available in non-US voltages and frequencies for international markets. ⁽³⁾Not available when specifying emergencies, voltage must be specific. Exception EL4. ⁽⁴⁾Socket brackets left uninstalled. ⁽⁵⁾When utilizing 28WT8 lamps, HPT8 Ballast must be specified. ⁽⁶⁾Not available with HO lamps.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING DATA

Catalog No.	Wt.
IAF-117	8 lbs.
IAF-217	8 lbs.
IAF-132	13 lbs.
IAF-232	13 lbs.
8TIAF-232	26 lbs.