

DESCRIPTION

The Fail-Safe FDI Series combines maximum security construction features with energy saving technology. This wall mount task/ambient luminaire utilizes a heavy gauge housing, security lensing and tamper resistant fasteners to maximize impact resistance and prevent unauthorized fixture penetration. U.L. listed and C.S.A. certified for damp locations.

The FDI Series provides necessary lighting levels when wall mounted over a desk or grooming areas in inmate cell applications. Also suitable for use in public rest areas, dormitories and psychiatric hospitals.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

A ... Lens

Choice of prismatic acrylic, prismatic polycarbonate or prismatic tempered glass on fixture side, clear polycarbonate or clear tempered glass on environmental side.

B ... Fasteners

Stainless steel tamper-resistant TORX® screws are standard. Allen-head screws with center reject pin are optional.

C ... Housing

Die-formed 14 ga. CRS body with continuous welded and ground ends to form a one-piece,

C ... Housing Cont.

seamless, housing for maximum impact resistance and prevention of unauthorized fixture penetration. Standard white high reflectance polyester powder coat finish. Gloss: 85%; Reflectance: 93%; Hardness: 2H; Salt Spray: 500 Hours.

D ... Lamps

(By Others)

E ... Lens Retention

Lens secured by thru-studs and vertically adjustable internal CRS hold-downs.

F ... Hinge

Continuous, concealed piano hinge (1/4" diameter knuckle) with welded pin end to prevent removal.

G ... Door

One-piece, CRS door frame with die-formed edges and tightly closed corners increases rigidity (gauge to match housing).

H ... Ballast

Standard Class P, CBM/ETL ballast.

Labels

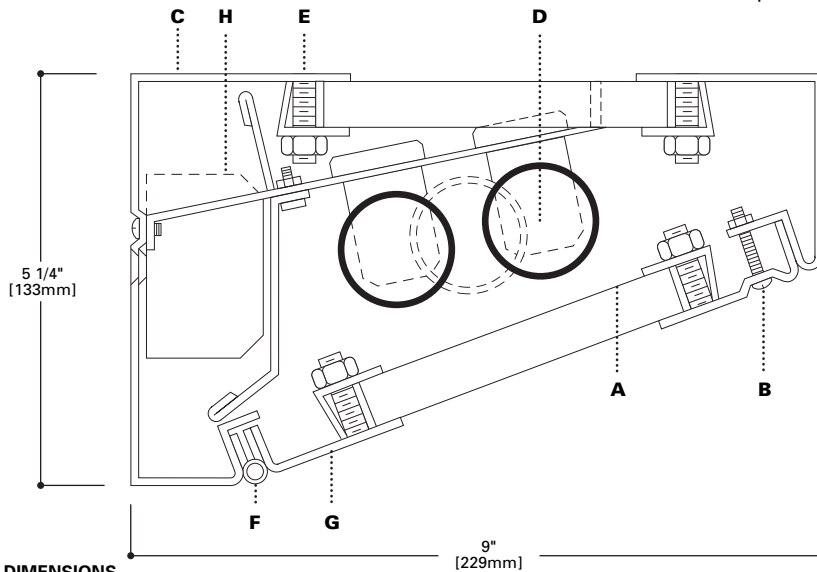
U.L. listed, C.S.A. certified, standard damp label.



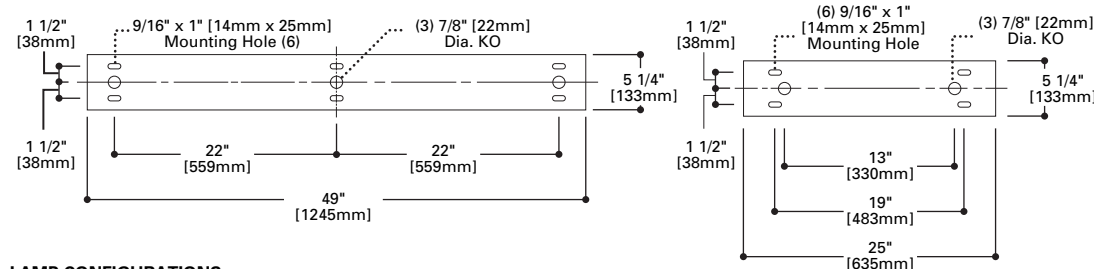
FDI

17W - 80W
Fluorescent

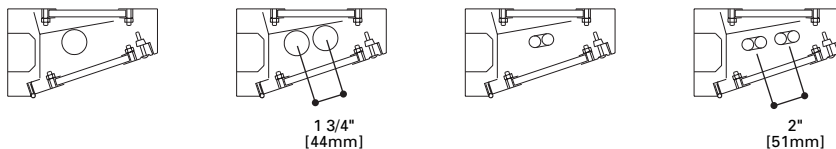
MAXIMUM SECURITY
TASK/AMBIENT
LUMINAIRE



MOUNTING DIMENSIONS



LAMP CONFIGURATIONS



ENERGY DATA

Input Watts:

STD Ballasts & STD Lamps

- (1) 20W T12 Fluorescent: 32W
- (2) 20W T12 Fluorescents: 53W
- (1) 40W Biaxial Fluorescent: 45W
- (2) 40W Biaxial Fluorescents: 82W

ES Ballasts & STD Lamps

- (1) 17W T8 Fluorescent: 23W
- (2) 17W T8 Fluorescents: 45W
- (1) 32W T8 Fluorescent: 37W
- (2) 32W T8 Fluorescents: 71W
- (1) 40W T12 Fluorescent: 50W
- (2) 40W T12 Fluorescents: 86W

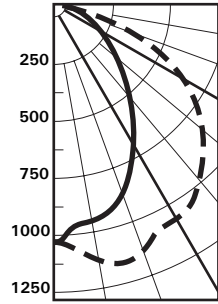
ES Ballasts & ES Lamps

- (1) 40W T12 Fluorescent: 44W
- (2) 40W T12 Fluorescents: 76W

Electronic Ballast Data
Consult Cooper Lighting Representative

PHOTOMETRICS

Candlepower Distribution



Test No. 5489
FDI-240-120V
 Lamp=(2) F40T12RS/
 WW
 Lumens=3200
 Efficiency=32.9%



Candlepower

Deg.	⊥	
0	1027	1027
5	1059	982
15	1131	933
25	1077	765
35	1017	575
45	915	388
55	792	253
65	466	144
75	239	78
85	146	30
90	124	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-20	356	5.6	16.9
0-40	1078	16.8	51.1
0-60	1752	27.4	83.1
0-90	2081	32.5	98.7
0-120	2108	32.9	100.0
0-180	2108	32.9	100.0

Coefficient of Utilization

rc	80%				70%			50%		30%		10%		0%
	70	50	30	10	50	30	10	50	10	50	10	50	10	0
RCR														
0	39	39	39	39	38	38	38	36	36	35	35	33	33	33
1	36	35	34	32	34	33	32	33	31	31	30	30	29	28
2	33	31	29	27	30	29	27	29	26	28	26	27	25	24
3	31	28	25	24	27	25	23	26	23	25	22	25	22	21
4	29	25	22	20	25	22	20	24	20	23	20	22	19	19
5	26	22	20	18	22	19	17	21	17	21	17	20	17	16
6	24	20	17	15	20	17	15	19	15	19	15	18	15	14
7	22	18	16	14	18	15	14	17	13	17	13	16	13	13
8	21	16	14	12	16	14	12	16	12	15	12	15	12	11
9	19	15	12	10	15	12	10	14	10	14	10	13	10	10
10	18	14	11	09	13	11	09	13	09	13	09	12	09	09

rc = Ceiling reflectance, rw = Wall reflectance, RCR = Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

ORDERING INFORMATION

SAMPLE NUMBER: FDI-240-120-80/86-LE3-RIF

Product Family	Lamp Type	Voltage	Lens Type	Ballast	Options
FDI			/		
FDI=Maximum Security Task/Ambient Luminaires	2' Nom. Length T8 Fluorescents 117=(1) 17W Lamp 217=(2) 17W Lamps T12 Fluorescents ⁽²⁾ 120=(1) 20W Lamp 220=(2) 20W Lamps Biaxial Fluorescents 140BX=(1) 40W Lamp 240BX=(2) 40W Lamps 4' Nom. Length T8 Fluorescents 132=(1) 32W Lamp 232=(2) 32W Lamps T12 Fluorescents 140=(1) 40W Lamp 240=(2) 40W Lamps	120=120V 277=277V	Inner Layer (Optional) 90=.005 UV Absorbing Overlay Fixture Side 80=.125 Prismatic Acrylic 81=.156 Prismatic Polycarbonate 82=.187 Prismatic Polycarbonate 93=.156 Prismatic Tempered Glass Environmental Side 84=.125 Clear Polycarbonate 85=.187 Clear Polycarbonate 86=.250 Clear Polycarbonate 87=.375 Clear Polycarbonate 94=.187 Clear Tempered Glass 96=.250 Clear Tempered Glass 97=.375 Clear Tempered Glass	Blank=Magnetic Ballast (Standard) ⁽³⁾ LEOC8=T8 Energy Saving Ballast LE3=40W T12 Energy Saving Ballast Electronic Ballast ⁽¹⁾ EB81=(1) Ballast for use with T8 Lamp EB82=(2) Ballasts for use with T8 Lamp EB21=(1) Ballast for use with T12 Lamp ⁽²⁾ EB22=(2) Ballasts for use with T12 Lamp ⁽²⁾ EBX1=(1) Ballast for use with Biaxial Lamp EBX2=(2) Ballasts for use with Biaxial Lamp	DSR=Duplex Security Receptacle EBP=Emergency Battery Pack FNL=Fluorescent Night Light (Lamp by others.) LNL= LED Night Light (50,000 hrs.) provided by Cooper GLR=Fuse and Holder ISH=Internal Security Hinge (doubles the number of fasteners) RIF=Radio Interference Filter SPK=Speaker Housing Compartment (extends housing) On/Off Switches SPS=Security Push Button TCS=Touch Control Stainless Steel Housing SSN=Natural Brushed Finish SSP=Polyester Powder Coat Finish Fasteners SF3=Allen-Head (center pin reject)

Notes:
 For additional options consult Cooper Lighting Representative. Specifications and Dimensions subject to change without notice.
 Electronic ballast may cause interference with other electronic devices. If interference occurs, move the device away from the product or plug/connect into a different circuit/outlet.
¹For specific electronic ballast specify brand and catalog number.
²Electronic ballast not available for F20T12 lamps.
³For use with Compact Fluorescent, Biaxial, and 20W T12 lamps.
⁴For additional information about the TCS option see Fail-Safe spec sheet for TCS Touch Control System (ADC030025) or pages 1106 and 1107 in the 4th Edition of the Cooper Lighting Buyer's Guide.

Accessories (order separately)

- 9306=Allen-Head Wrench
- VRSD=TORX®-Head Vandal Resistant Screwdriver