

**1, 2, 3, or 4 Lamp  
T12-20w, F40 U6", or F40 U3-5/8"**

**Some of these fixtures meet the basic requirements of IESNA RP-1 for use in spaces containing Video Display Terminals.**

**APPLICATION**

- Ideal for areas with video display terminals.
- Premium quality recessed air handling troffer for use in:
  - Grid inverted T (NEMA "G") ceilings.
  - Flange-type ceilings with concealed mechanical suspension (NEMA "F").
  - Modular and "Z" spline (NEMA "M/Z") ceilings.
  - Contact Day-Brite for other ceiling types.
- Select one of the four air handling functions:
  - Static; non-air handling.
  - Heat transfer; air return through lamp compartment.
  - Air supply; (or air return) through side slots.
  - Combination; both heat transfer and air supply features listed above.
- Adjustable pattern control blades are optional.
- Air boots by others.

**CONSTRUCTION/FINISH**

- Housing is multi-stage phosphate treated for maximum corrosion resistance and finish coat is high reflectance baked white enamel.
- Access plate (2 K.O.'s) factory installed includes grounding screw.
- T Bar grid clips (UL listed, patented) built into fixture end plates, no extra parts required.

**SIDE MOUNTED BALLASTS**

- Reduce ballast operating temperatures (two surface contact, away from lamps).
- Increase average ballast life and fixture efficiency.
- All lamps on the same plane.

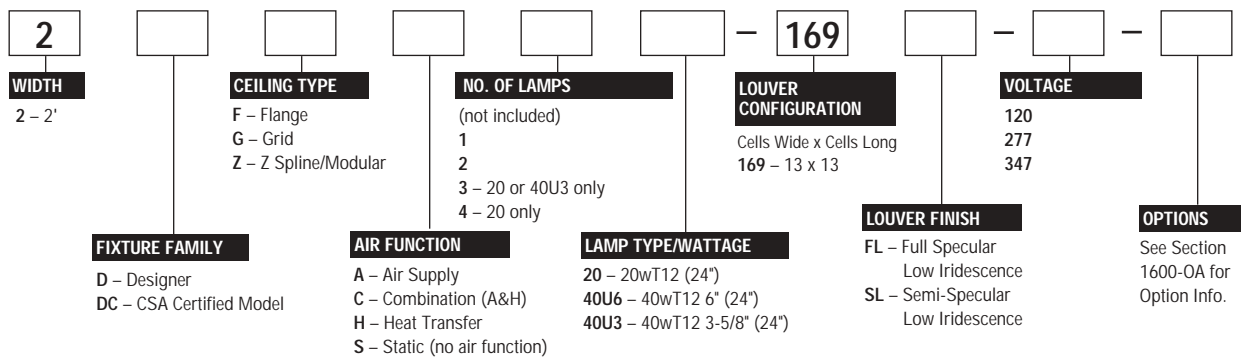
**ELECTRICAL**

- Class P, HPF, CBM certified ballasts comply with ©Federal Ballast Law (Public Law 100-357,1988).
- Self-contained fluorescent emergency power packs can be incorporated. (1 and 2 lamp fixtures only).
- UL listed for damp locations. C.S.A. certified optional.

**ENCLOSURES**

- Exceptionally low brightness in the 60-90° zone.
- 1-1/2" x 1-1/2" x 3/4" Anodized Aluminum Louvers with concealed frame.
- 30° Shielding.
- Black Reveal for "Floating Louver" appearance.
- Anodized aluminum louvers resist stains and scratches and can be cleaned repeatedly without damage to louver finish.
- Specular low iridescence aluminum is standard. Semi-specular low iridescence aluminum is optional.
- Interchangeability between louvers and lensed enclosures.
- Shipped with plastic film to keep out construction dirt.

**CATALOG NUMBER**



**NOTES:**

- With generic Electronic Ballasts (Brand selected by Day-Brite)  
Suffix Catalog # with- **Ballast Quantity** - / - **EB Lamps Per Ballast**.

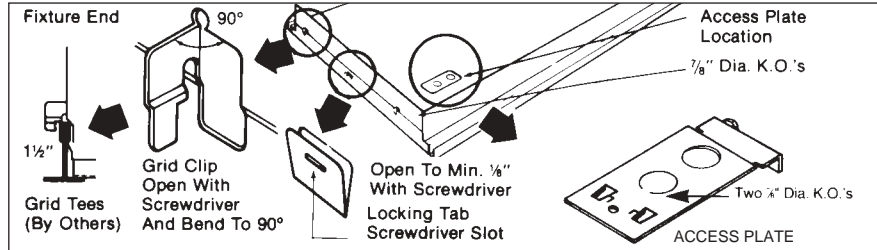
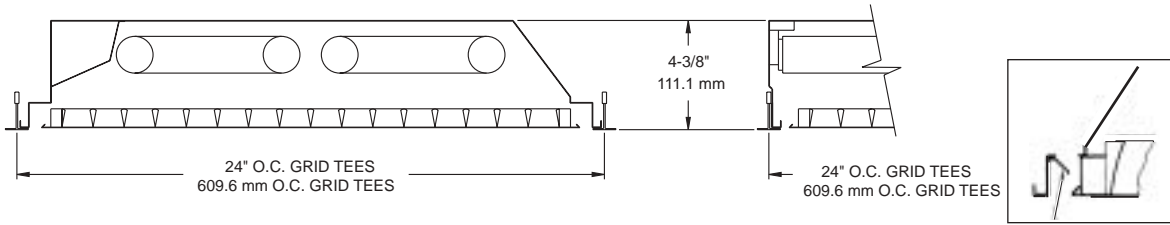
**Example:** -1/2-EB = One 2 Lamp Electronic Ballast.

**Example:** -1/3-EB = One 3 Lamp Electronic Ballast.

# 2' x 2' VDT CF-15 2 LAMP



## DIMENSIONS



Optional Air Pattern Control (on Air and Combination Units)

- Fully adjustable
  - Closed= Static
  - 45°= Horizontal Air Supply
  - 90°= (fully open) - Vertical Air Supply
- Side Slots may also be used for Return Air to Plenum

## PHOTOMETRIC DATA

CATALOG # 2D65240U6-169FL-1/2-EB  
TEST #15462 S/MH=1.4

LAMPS = F40 U6 WM  
BALLAST = ELECTRONIC BALLAST FACTOR = .83

INPUT WATTS = 60

LER = FP-38

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$6.32 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 53.6%

CANDLEPOWER				
Angle	End	45	Cross	
0	1204	1204	1204	
5	1201	1204	1205	
10	1175	1190	1198	
15	1134	1160	1176	
20	1083	1116	1160	
25	1018	1071	1130	
30	947	1015	1101	
35	870	950	1054	
40	780	879	982	
45	685	794	913	
50	586	685	827	
55	470	551	675	
60	345	348	315	
65	63	91	16	
70	8	8	5	
75	4	3	3	
80	2	1	1	
85	1	1	1	

MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture*						
■ 80-50-20 Reflectances (Ceiling-Wall-Floor) ■ LLF = 0.69 2550 Lumens/Lamp very clean ■ Room width divided by room height = 5 or more, 2 or 1						
Fixture Size & # of Lamps	Room Width	Room Height =	Approx. Area (sq. ft.) per Fixture			
			10 ft-c	30 ft-c	50 ft-c	70 ft-c 100 ft-c
2' X 2'	5		-	67	40	- -
2 Lamp	2		146	49	-	- -
	1		108	36	-	- -

\*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2550 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	3778	4379	5035
55	3196	3746	4589
65	581	840	148
75	60	45	45
85	45	45	45

TYPICAL V.C.P.'s				
Room Size	Mounting Height		Crosswise	
	8.5	10	8.5	10
30x30	91	86	91	84
40x40	94	91	94	90
60x30	94	91	94	90
60x60	96	93	96	93
100x100	98	96	98	96

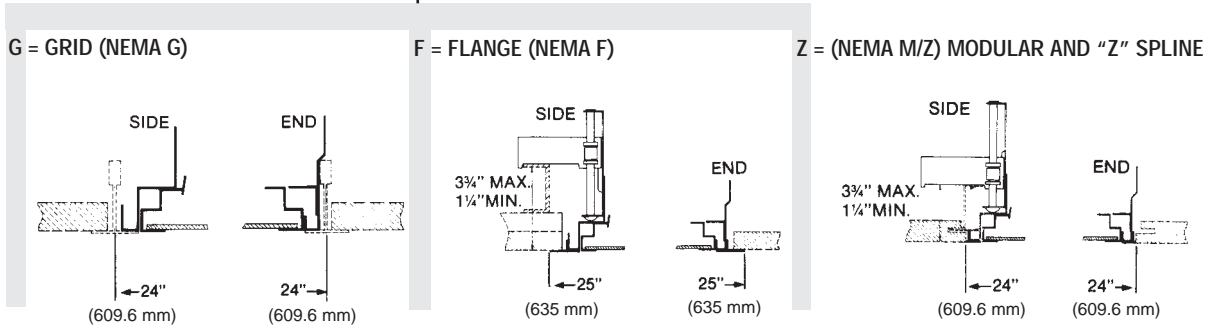
COEFFICIENT OF UTILIZATION								
pfc	pcc	20		70		50		
		70	50	30	70	50	30	
RCR	0	64	64	64	62	62	60	60
	1	60	58	56	58	57	55	54
	2	55	52	49	54	51	48	47
	3	51	46	43	50	46	42	44
	4	47	42	38	46	41	37	40
	5	44	37	33	43	37	33	36
	6	40	34	30	39	33	29	33
	7	38	31	27	37	30	26	30
	8	35	28	24	34	28	24	27
	9	33	26	22	32	26	22	25
	10	31	24	20	30	24	20	23

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	936	18.4	34.2
0-40	1534	30.1	56.0
0-60	2632	51.6	96.2
0-90	2736	53.6	100.0

LLF = .69 LLF = LIGHT LOSS FACTOR LLF = LDD X LLD X BF LDD = VERY CLEAN 0.94 CLEAN 0.90  
LLD = 0.88 @ 40% RATED LAMP LIFE BF = 0.83 ELECTRONIC BALLAST & 34W LAMP (RELAMP AT 70% LAMP LIFE)

**2 D G S 2 40U6**

**CEILING TYPE**



**(NEMA Type G)**  
Lay-in acoustical ceilings using exposed grid suspension, with tees for fixtures on 24" x 24" spacing.

**(NEMA Type F)**  
Flange for acoustical ceilings using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 3/4" max. and 1/4" min.

**(NEMA M/Z)**  
Modular and "Z" Spline using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 3/4" max. and 1/4" min.

**PHOTOMETRIC DATA**

CATALOG # 2DGS340U3-169FL-1/3-EB  
TEST #15460 S/MH=1.4

LAMPS = F40 U3 WM  
BALLAST = ELECTRONIC

INPUT WATTS = 82  
BALLAST FACTOR = .83

LER = FP-35

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$6.86** BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 49.2%

CANDLEPOWER				
Angle	End	45	Cross	
0	1569	1569	1569	
5	1571	1565	1567	
10	1537	1547	1558	
15	1482	1508	1534	
20	1414	1454	1513	
25	1329	1394	1470	
30	1236	1316	1423	
35	1129	1228	1360	
40	1007	1128	1265	
45	877	1011	1144	
50	736	856	988	
55	576	670	768	
60	412	406	364	
65	72	109	20	
70	10	9	6	
75	5	4	3	
80	3	2	2	
85	1	1	1	

**MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture\***

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.69 2350 Lumens/Lamp very clean
- Room width divided by room height = 5 or more, 2 or 1

Fixture Size & # of Lamps	Room Width Room Height =	Approx. Area (sq. ft.) per Fixture			
		10 ft-c	30 ft-c	50 ft-c	70 ft-c
2' X 2' 3 Lamp	5	-	86	51	37
	2	-	62	37	-
	1	138	46	-	-

\*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2350 LUMEN LAMPS				
ANGLE	END	45°	CROSS	
45	4837	5576	6309	
55	3916	4555	5222	
65	664	1006	185	
75	75	60	45	
85	45	45	45	

TYPICAL V.C.P.'s				
Room Size	Mounting Height			
	Lengthwise	Crosswise	8.5	10
30x30	89	83	90	82
40x40	93	89	93	88
60x30	93	89	93	88
60x60	95	92	96	92
100x100	97	98	98	95

**COEFFICIENT OF UTILIZATION**

pfc ccc pw RCR	20		70		50	
	70	50	30	70	50	30
0	59	59	59	57	57	55
1	55	53	52	54	52	51
2	51	48	45	50	47	44
3	47	43	39	46	42	39
4	43	38	35	42	38	34
5	40	35	31	39	34	30
6	37	31	27	36	31	27
7	35	29	25	34	28	24
8	32	26	22	32	26	22
9	30	24	20	30	24	20
10	28	22	19	28	22	18

**LIGHT DISTRIBUTION**

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1218	17.3	35.1
0-40	1990	28.2	57.3
0-60	3348	47.5	96.5
0-90	3471	49.2	100.0

LLF = .69 LLF = LIGHT LOSS FACTOR LLF = LDD X LLD X BF LDD = VERY CLEAN 0.94 CLEAN 0.90  
LLD = 0.88 @ 40% RATED LAMP LIFE BF = 0.83 ELECTRONIC BALLAST & 34W LAMP (RELAMP AT 70% LAMP LIFE)

