

**2, 3, or 4 Lamp  
CF TT5**

**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.
- Air boots by others.
- Air handling or combination models are available with optional factory installed snap-in air slot covers (ASC) or adjustable air pattern control blades (APC).

**CONSTRUCTION/FINISH**

- Housing is multi-stage phosphate treated for maximum corrosion resistance and finish coat is high reflectance baked white enamel.
- Three lamp and two lamp U6 models are supplied with one wireway cover (except when required by ballast configuration.) Two ballast covers (2WC) are available.
- Models utilizing 3 ballasts (including emergency ballast) will be supplied with a top mounted ballast box, which will increase the height of the luminaire.
- Factory installed access plate includes 7/8” hole, 7/8”

knockout and grounding screw.

- Flat black finish inside perimeter reveal for “floating door” appearance.
- T-bar grid clips (UL listed, patented) built into fixture, no extra parts required. Designed for use with standard grid ceiling members, 1-1/2” maximum height.
- One-piece housing feature integral end plates that increase rigidity and minimize damage from handling or shipping.

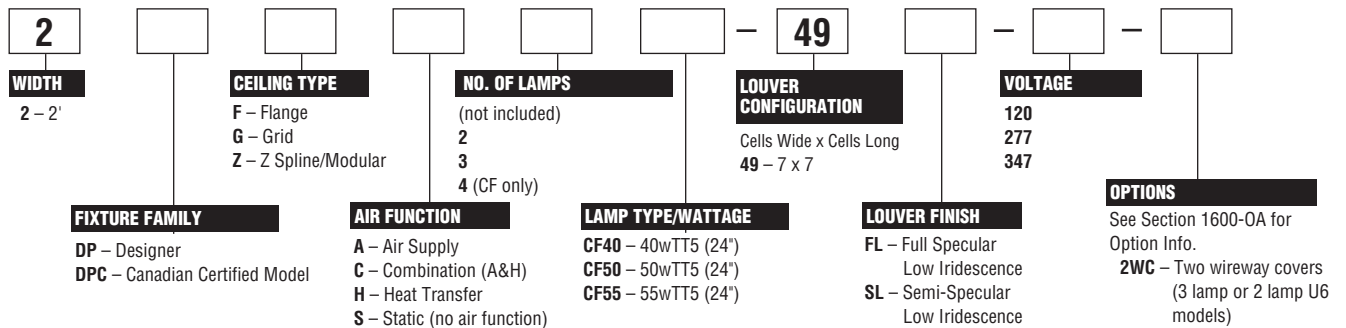
**ELECTRICAL**

- Class P, HPF ballasts comply with © Federal Ballast Law (Public Law 100-357,1988).
- UL listed for damp locations. Canadian certified optional.
- Self-contained fluorescent emergency power packs can be incorporated. UL listed for dry locations.

**ENCLOSURES**

- Exceptionally low brightness in the 60-90° zone.
- 3" x 3" x 1-1/2" “frameless” anodized aluminum louvers feature mitered corners and can be hinged from either side.
- 30° Shielding.
- 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.
- T-hinges are standard for positive support of the enclosure.
- Guide-post spring loaded latches are standard for ease of use and secure retention of the louver.

**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.

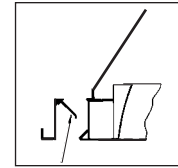
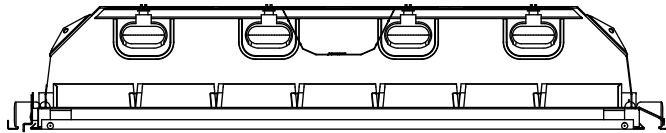
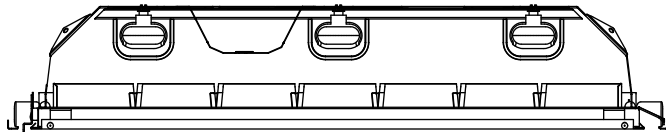
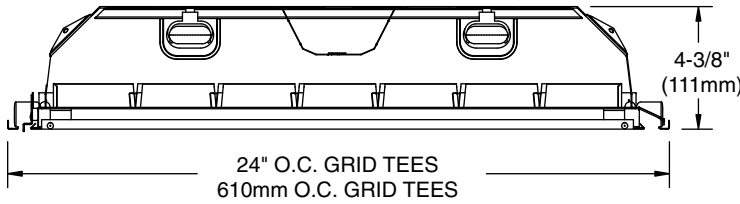
**Example:** -1/21-EB = One 2 Lamp and One 1 Lamp Electronic Ballast.

**JOB INFORMATION**

**122.1-VDT**

# 2' x 2' VDT CF-33

## DIMENSIONS

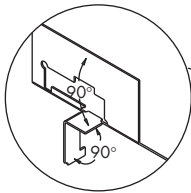


Optional Air Pattern Control (APC)  
(on Air and Combination Units)

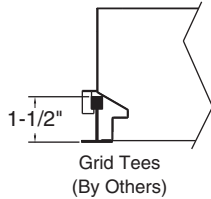
- Fully adjustable
  - Closed= Static
  - 45°= Horizontal Air Supply
  - 90°= (fully open) - Vertical Air Supply

• Side Slots may also be used for Return Air to Plenum

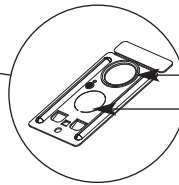
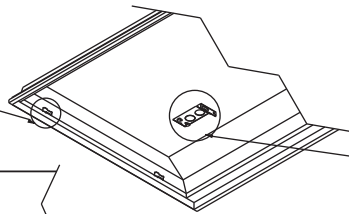
Snap-in air slot covers (ASC) also available.



Grid Clip  
Open With  
Screwdriver  
And Bend Out  
to 90° and  
Then Over 90°



Grid Tees  
(By Others)



One 7/8" dia. hole  
One 7/8" dia. K.O.

Access Plate

## PHOTOMETRIC DATA

CATALOG # 2DGS2CF40-49FL-1/2-EB LAMPS = 40wT5  
TEST #15396 S/MH=1.3

INPUT WATTS = 69  
BALLAST = ELECTRONIC BALLAST FACTOR = .92

LER = FP-57

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$4.10 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 69.0%

CANDLEPOWER				
Angle	End	45	Cross	
0	1947	1947	1947	
5	1959	1950	1952	
10	1927	1935	1931	
15	1860	1873	1857	
20	1776	1774	1779	
25	1667	1660	1686	
30	1544	1530	1664	
35	1407	1431	1583	
40	1249	1350	1698	
45	1075	1251	1759	
50	888	1187	1525	
55	672	950	1050	
60	318	471	321	
65	51	81	13	
70	7	11	1	
75	0	2	0	
80	0	4	0	
85	0	3	0	

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

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.76 3100 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	-	117	70	50	35
2 Lamp	2	-	85	51	36	-
	1	-	63	38	-	-

\*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 3100 LUMEN LAMPS				
ANGLE	END	45°	CROSS	
45	6082	7078	9953	
55	4687	6627	7324	
65	483	767	123	
75	0	31	0	
85	0	138	0	

TYPICAL V.C.P.'s Room Mounting Height				
Room Size	Lengthwise	Crosswise		
	8.5	10	8.5	10
30x30	89	82	88 78	
40x40	93	88	92 85	
60x30	93	88	92 85	
60x60	95	91	94 89	
100x100	97	95	97 94	

### COEFFICIENT OF UTILIZATION

pfc pcc pw RCR	20		30		40		50	
	70	50	30	70	50	30	50	30
0	82	82	82	80	80	80	77	77
1	77	75	72	75	73	71	70	69
2	71	67	63	70	66	62	63	60
3	66	60	55	64	59	55	57	53
4	61	54	49	60	53	48	51	47
5	56	49	43	55	48	43	46	42
6	52	44	39	51	43	38	42	38
7	49	40	35	47	40	34	39	34
8	45	37	31	44	36	31	35	31
9	42	34	28	41	33	28	33	28
10	40	31	26	39	31	26	30	26

### LIGHT DISTRIBUTION

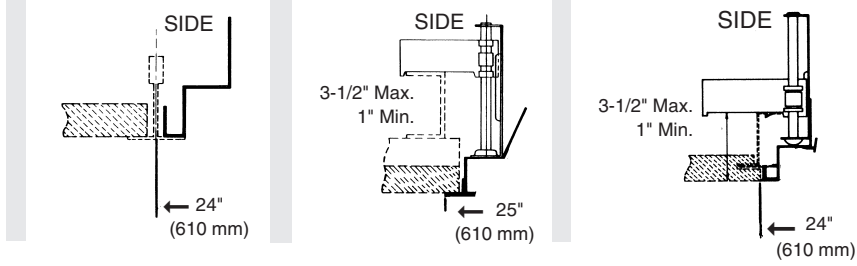
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1482	23.9	34.6
0-40	2407	38.8	56.2
0-60	4178	67.4	97.6
0-90	4280	69.0	100.0

LLF = .76 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 = 0.92 ELECTRONIC BALLAST & BIAx LAMP (RELAMP AT 70% LAMP LIFE)

**2 DP G S 2 CF40**

**CEILING TYPE**

**G = GRID (NEMA G)      F = FLANGE (NEMA F)      Z = (NEMA M/Z) MODULAR AND "Z" SPLINE**



(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 3-1/2" max. and 1" min. Refer to sheet 801-CL for cut-out information.

(NEMA M/Z)  
Modular and "Z" Spline using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 3-1/2" max. and 1" min.

**PHOTOMETRIC DATA**

**CATALOG # 2DGS3CF40-49FL-1/3-EB LAMPS = 40wT5**  
**TEST #15317 S/MH=1.3 BALLAST = ELECTRONIC INPUT WATTS = 98**  
**BALLAST FACTOR = .93**

**LER = FP-56**

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$4.29** BASED ON 3000 HRS. AND \$.08 PER KWH.

**FIXTURE EFFICIENCY= 63.2%**

CANDLEPOWER			
Angle	End	45	Cross
0	2772	2772	2772
5	2776	2759	2749
10	2730	2743	2716
15	2647	2654	2602
20	2528	2506	2466
25	2385	2344	2352
30	2220	2157	2270
35	2023	1988	2235
40	1795	1857	2241
45	1559	1725	2188
50	1294	1552	1949
55	967	1198	1393
60	412	608	486
65	38	91	21
70	5	0	0
75	3	0	0
80	4	0	0
85	1	0	0

MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture*					
<ul style="list-style-type: none"> <li>80-50-20 Reflectances (Ceiling-Wall-Floor)</li> <li>LLF = 0.77 3100 Lumens/Lamp very clean</li> <li>Room width divided by room height = 5 or more, 2 or 1</li> </ul>					
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'	5	-	-	98	70
3 Lamp	2	118	71	51	36
	1	-	88	53	38

\*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 3100 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	8598	9514	12067
55	6575	8145	9471
65	351	840	194
75	45	0	0
85	45	0	0

TYPICAL V.C.P.'s				
Room Size	Mounting Height		Crosswise	
	8.5	10	8.5	10
30x30	87	78	85	75
40x40	92	85	90	82
60x30	91	85	90	82
60x60	94	89	93	87
100x100	97	94	96	92

COEFFICIENT OF UTILIZATION						
pfc pcc pw RCR	20		70		50	
	70	50	30	70	50	30
0	75	75	75	73	73	73
1	71	68	66	69	67	65
2	65	61	58	64	60	57
3	61	55	51	59	54	50
4	56	50	45	55	49	44
5	52	45	40	51	44	40
6	48	41	36	47	40	35
7	45	37	32	44	37	32
8	42	34	29	41	33	29
9	39	31	26	38	31	26
10	37	29	24	36	28	24

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2095	22.5	35.6
0-40	3391	36.5	57.7
0-60	5756	61.9	98.0
0-90	5876	63.2	100.0

LLF = .77 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 = 0.93 ELECTRONIC BALLAST & BIAx LAMP (RELAMP AT 70% LAMP LIFE)

