

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

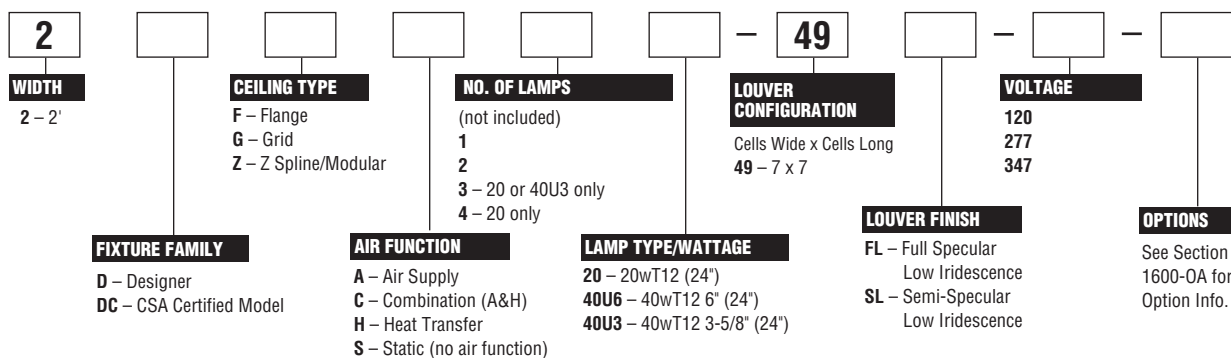
**ELECTRICAL**

- 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.
- 3" x 3" x 1-1/2" 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:**

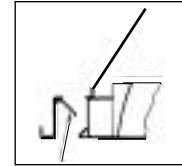
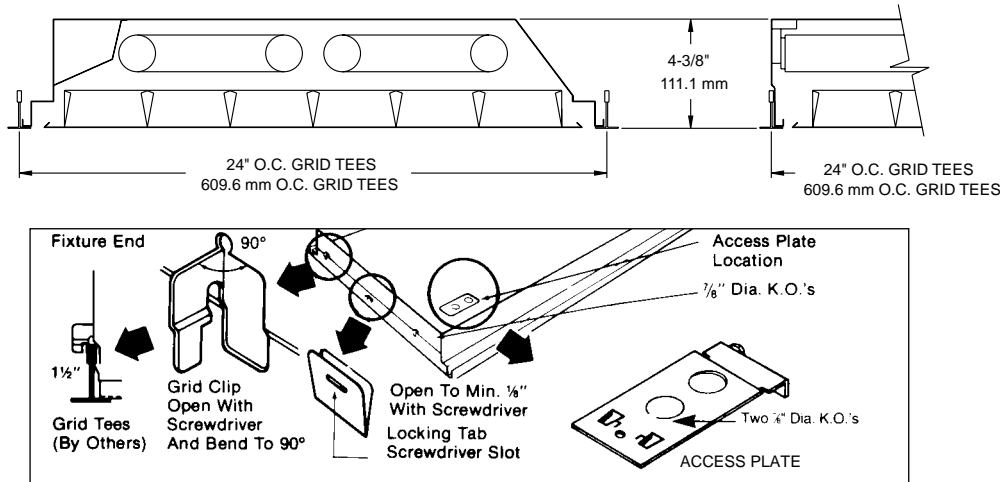
- With generic Electronic Ballasts (Brand selected by Day-Brite)  
Suffix Catalog # with— **Ballast Quantity** — / — **-EB Lamps Per Ballast.**

**Example: -1/2-EB** = One 2 Lamp Electronic Ballast.  
**Example: -1/3-EB** = One 3 Lamp Electronic Ballast.

# 2' x 2' VDT CF-33 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 # 2DGS240U6-49FL-1/2-EB LAMPS = F40 U6 WM INPUT WATTS = 60  
 TEST #15301 S/MH=1.6 BALLAST = ELECTRONIC BALLAST FACTOR = .83

LER = FP-39

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$6.15 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 55.5%

CANDLEPOWER			
Angle	End	45	Cross
0	1144	1144	1144
5	1141	1146	1144
10	1122	1135	1131
15	1092	1112	1127
20	1048	1083	1148
25	998	1069	1198
30	940	1070	1241
35	869	1065	1223
40	784	1030	1137
45	697	936	982
50	601	786	823
55	477	580	701
60	203	302	279
65	18	51	14
70	2	4	4
75	0	2	1
80	1	3	2
85	2	4	3

### 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	-	70	42	-	-
2 Lamp	2	-	50	30	-	-
	1	111	37	-	-	-

\*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2550 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	3844	5162	5416
55	3243	3943	4766
65	166	471	129
75	0	30	15
85	89	179	134

TYPICAL V.C.P.'s				
Room Size	Mounting Height		Crosswise	
	8.5	10	8.5	10
30x30	93	88	92	85
40x40	96	92	95	90
60x30	96	92	95	90
60x60	97	94	97	93
100x100	98	97	98	96

### COEFFICIENT OF UTILIZATION

ptc pcc pw RCR	20				70				50			
	70	50	30	10	70	50	30	10	50	30	10	30
0	66	66	66	65	65	65	62	62	62	62	62	62
1	62	60	58	60	59	57	56	55	56	55	55	55
2	57	54	51	56	53	50	51	48	51	48	46	43
3	53	48	44	52	47	44	46	43	46	43	41	38
4	49	43	39	48	42	38	41	38	41	38	37	33
5	45	39	34	44	38	34	37	33	37	33	34	30
6	42	35	31	41	35	30	34	30	34	30	31	27
7	39	32	27	38	31	27	31	27	31	27	28	24
8	36	29	25	35	29	24	28	24	28	24	26	22
9	34	27	22	33	26	22	26	22	26	22	24	20
10	31	25	20	31	24	20	24	20	24	20	22	18

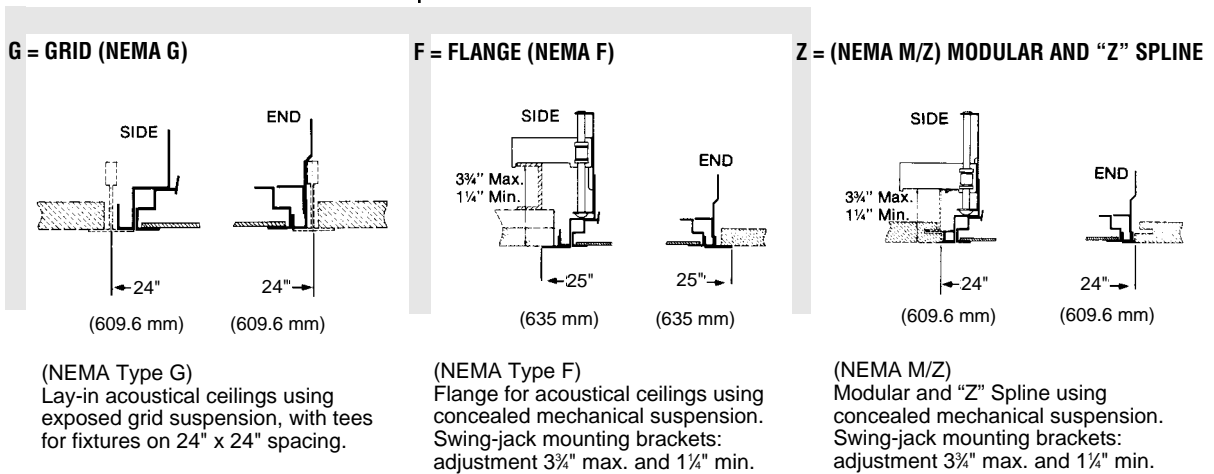
### LIGHT DISTRIBUTION

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	926	18.2	32.7
0-40	1581	31.0	55.9
0-60	2756	54.0	97.4
0-90	2830	55.5	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**



**PHOTOMETRIC DATA**

CATALOG # 2DGS340U3-49FL-1/3-EB LAMPS = F40 ES

INPUT WATTS = 82

LER = FP-37

TEST #15307 S/MH=1.5

BALLAST = ELECTRONIC

BALLAST FACTOR = .83

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$6.49** BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 50.6%

CANDLEPOWER			
Angle	End	45	Cross
0	1539	1539	1539
5	1525	1549	1548
10	1503	1533	1536
15	1458	1497	1531
20	1402	1466	1562
25	1330	1443	1607
30	1245	1430	1623
35	1145	1400	1552
40	1029	1323	1385
45	903	1166	1197
50	762	953	998
55	590	705	828
60	264	369	324
65	23	68	26
70	3	8	14
75	2	6	12
80	1	6	8
85	0	5	6

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

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.69 2400 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'	5	-	90	54	39
3 Lamp	2	-	65	39	-
	1	145	48	-	-

\*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2400 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	4980	6431	6602
55	4011	4793	5630
65	212	627	240
75	30	90	181
85	0	224	268

TYPICAL V.C.P.'s				
Room Size	Mounting Height		Crosswise	
	8.5	10	8.5	10
30x30	92	85	88	82
40x40	95	90	91	86
60x30	95	90	92	88
60x60	96	93	92	89
100x100	98	96	93	91

COEFFICIENT OF UTILIZATION						
pfc pcc pw	20		70		50	
	70	50	30	70	50	30
RCR	0	60	60	59	59	56
	1	56	55	53	52	51
	2	52	49	46	51	48
	3	48	44	41	47	43
	4	45	40	36	44	39
	5	41	36	32	40	35
	6	38	32	28	37	32
	7	36	29	25	35	29
	8	33	27	23	32	26
	9	31	25	21	30	24
	10	29	23	19	28	22

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1244	17.3	34.2
0-40	2096	29.1	57.5
0-60	3550	49.3	97.5
0-90	3643	50.6	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)

