

**4, 6, or 8 Lamp  
T8 or T12**

**APPLICATION**

- Premium quality recessed static troffer for:
  - Grid inverted T (NEMA “G”)
  - Flange-type for concealed mechanical suspension (NEMA “F”)
  - Contact Day-Brite for other ceiling types.

**CONSTRUCTION/FINISH**

- Die formed ribbed and embossed steel housing.
- 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 available but must be ordered separately (#GCC)

**SIDE MOUNTED BALLASTS**

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

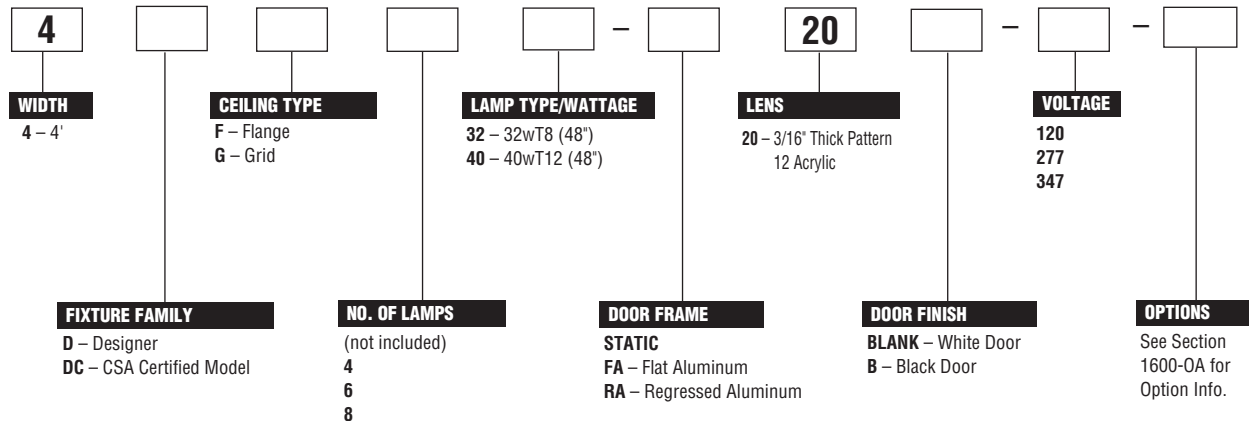
**ELECTRICAL**

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

**ENCLOSURES**

- Mitered corner door frames with a choice of: Flat Aluminum, or Regressed Aluminum.
- Door frames standard with guide post spring loaded latches.
- Mechanically designed interlocks block light, no gaskets are needed.
- 3/16" nominal thickness acrylic pattern 12 lens standard (20).
- Choice of door finishes; white (standard) or black.

**CATALOG NUMBER**



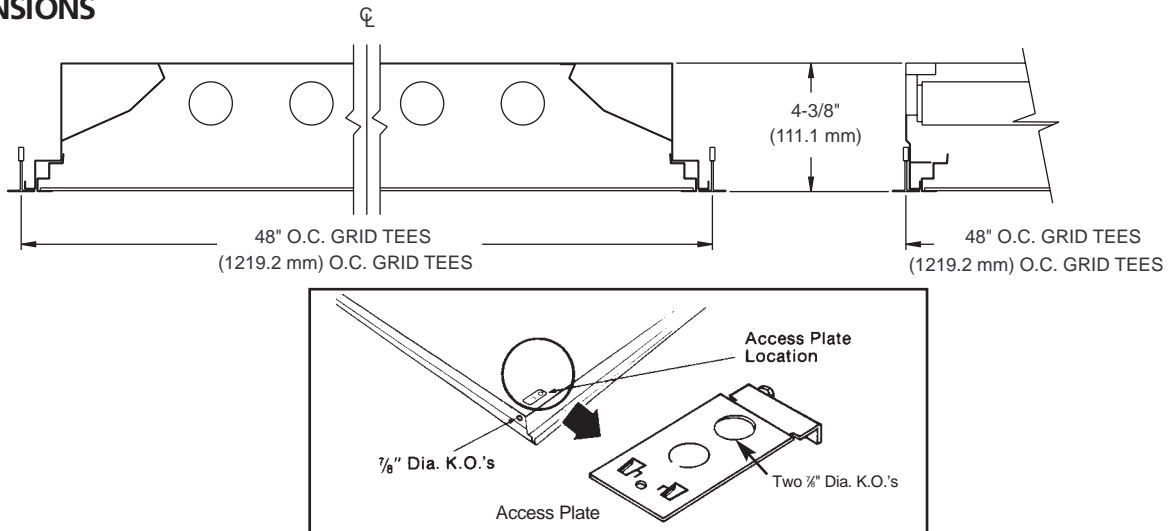
**NOTES:**

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

**Example: -1/4-EB** = One 4 Lamp Electronic Ballast.  
**Example: -2/4-EB** = Two 4 Lamp Electronic Ballasts.  
**Example: -2/3-EB** = Two 3 Lamp Electronic Ballasts.

# 4' x 4' 4 LAMP

## DIMENSIONS

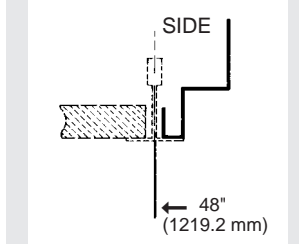


**4 D G 4 32**

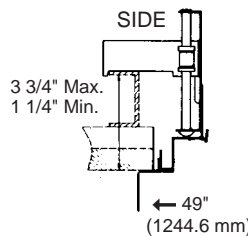
### CEILING TYPE

**G = GRID (NEMA G)**

**F = FLANGE (NEMA F)**



(NEMA Type G)  
Lay-in acoustical ceilings using exposed grid suspension, with tees for fixtures on 48" x 48" spacing.



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

## PHOTOMETRIC DATA

CATALOG # 4DG432-RA20-1/4-EB  
TEST #16172 S/MH=1.5

LAMPS = F32 T8  
BALLAST = ELECTRONIC

INPUT WATTS = 113  
BALLAST FACTOR = .91

LER = FL-74

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$3.24 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 79.1%

CANDLEPOWER			
Angle	End	45	Cross
0	3622	3622	3622
5	3621	3607	3602
10	3572	3576	3592
15	3494	3532	3579
20	3386	3468	3554
25	3247	3393	3526
30	3072	3301	3490
35	2862	3181	3461
40	2585	3018	3409
45	2237	2629	3047
50	1731	1723	2259
55	1245	1097	1516
60	853	791	993
65	554	659	625
70	371	500	407
75	346	358	376
80	286	294	290
85	126	150	131

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

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.75 2900 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
4' X 4' 4 Lamp	5	-	-	146	104
	2	-	-	103	74
	1	-	127	76	55

\*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ. M WITH 2900 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	2422	2846	3298
55	1661	1464	2023
65	1003	1194	1132
75	1023	1059	1112
85	1107	1317	1150

Room Size	TYPICAL V.C.P.'s Mounting Height	
	Lengthwise	Crosswise
	8.5	10
30x30	68	73
40x40	65	68
60x30	70	74
60x60	61	64
100x100	59	61

### COEFFICIENT OF UTILIZATION

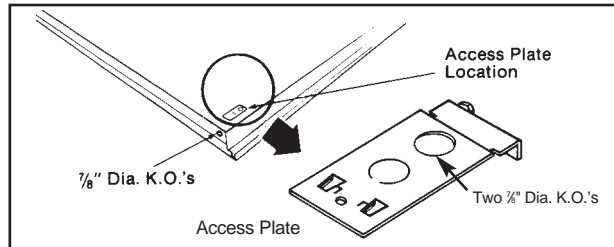
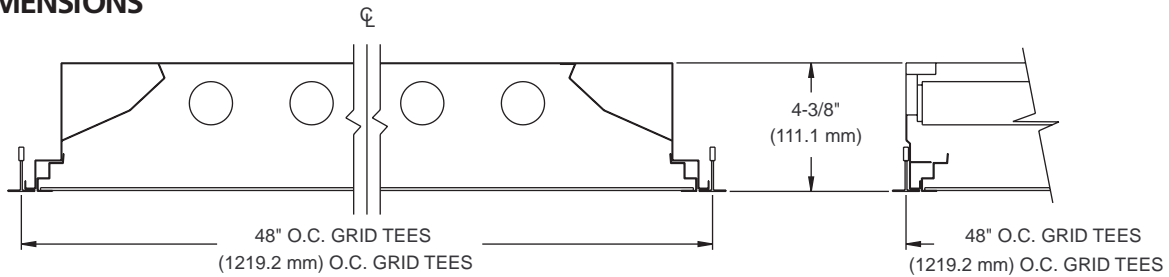
pfc pc	20			70			50		
	70	50	30	70	50	30	50	30	
RCR	0	93	93	93	92	92	92	88	
	1	86	83	81	84	81	79	78	
	2	80	73	68	78	72	68	69	
	3	73	66	59	71	65	58	61	
	4	68	58	53	66	57	52	56	
	5	63	53	46	60	52	46	51	
	6	57	47	40	56	46	40	46	
	7	54	44	36	53	42	36	41	
	8	50	40	34	48	40	33	38	
	9	46	36	30	46	35	29	34	
	10	44	34	28	42	34	28	33	

### LIGHT DISTRIBUTION

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2910	25.1	31.7
0-40	4896	42.2	53.3
0-60	7984	68.8	87.0
0-90	9179	79.1	100.0

LLF = .75 LLF = LIGHT LOSS FACTOR LLD = LDD X LLD X BF LDD = VERY CLEAN 0.94 CLEAN 0.90  
LLD = 0.88 @ 40% RATED LAMP LIFE BF = 0.91 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

**DIMENSIONS**



**PHOTOMETRIC DATA**

CATALOG # 4DG 632-RA20-2/3-EB  
TEST #16168 S/MH=1.5

LAMPS = F32T8  
BALLAST = ELECTRONIC

INPUT WATTS = 172  
BALLAST FACTOR = .93

LER = FL-73

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$3.29** BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 77.6%

CANDLEPOWER				
Angle	End	45	Cross	
0	5378	5378	5378	
5	5364	5344	5367	
10	5294	5302	5353	
15	5180	5236	5336	
20	5025	5150	5301	
25	4815	5036	5257	
30	4546	4905	5201	
35	4236	4727	5133	
40	3826	4474	4992	
45	3288	3843	4417	
50	2552	2495	3212	
55	1838	1580	2187	
60	1251	1151	1422	
65	808	960	906	
70	540	729	581	
75	509	528	549	
80	413	431	421	
85	178	219	189	

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

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.77 2900 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
4' X 4' 6 Lamp	5	-	-	-	-	110
	2	-	-	-	111	78
	1	-	-	115	82	58

\*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS				
ANGLE	END	45°	CROSS	
45	3559	4160	4781	
55	2453	2108	2919	
65	1463	1739	1641	
75	1505	1562	1624	
85	1563	1923	1660	

TYPICAL V.C.P.'s				
Room Size	Mounting Height			
	Lengthwise	Crosswise		
	8.5	10	8.5	10
30x30	60	65	59	64
40x40	56	60	55	59
60x30	62	66	61	66
60x60	53	55	52	55
100x100	51	52	51	52

**COEFFICIENT OF UTILIZATION**

pfc pcc RCR	20				70				50				
	70	50	30		70	50	30		50	30		50	30
0	92	92	92		90	90	90		85	85		85	85
1	84	81	79		82	80	78		77	75		77	75
2	78	72	68		77	70	67		68	65		68	65
3	71	65	58		69	64	57		60	56		60	56
4	67	57	52		65	56	51		55	50		55	50
5	61	52	46		59	51	45		50	44		50	44
6	56	46	40		56	46	40		45	40		45	40
7	53	42	36		52	41	35		40	35		40	35
8	48	39	33		47	39	33		38	32		38	32
9	46	35	29		45	35	29		34	29		34	29
10	42	33	28		41	33	27		32	27		32	27

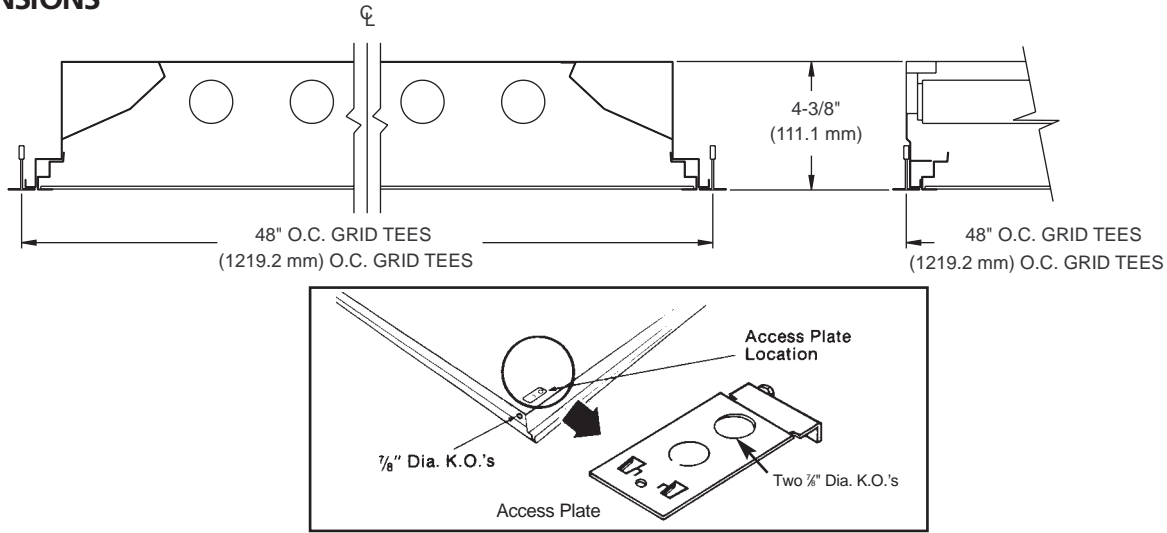
**LIGHT DISTRIBUTION**

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	4322	24.8	32.0
0-40	7269	41.8	53.8
0-60	11764	67.6	87.1
0-90	13505	77.6	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 & F32 T8 LAMP (RELAMP AT 70% LAMP LIFE)

# 4' X 4' 8 LAMP

## DIMENSIONS



## PHOTOMETRIC DATA

CATALOG # 4DG832-RA20-2/4-EB  
TEST #16171 S/MH=1.4

LAMPS = F32T8  
BALLAST = ELECTRONIC

INPUT WATTS = 216  
BALLAST FACTOR = .91

LER = FL-73

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$3.29 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 74.7%

CANDLEPOWER				
Angle	End	45	Cross	
0	6981	6981	6981	
5	6958	6941	6961	
10	6862	6885	6935	
15	6714	6799	6903	
20	6509	6680	6853	
25	6238	6533	6784	
30	5886	6356	6703	
35	5461	6121	6588	
40	4955	5769	6332	
45	4231	4858	5558	
50	3281	3169	4040	
55	2323	1999	2706	
60	1603	1469	1794	
65	1024	1220	1121	
70	698	932	741	
75	653	674	698	
80	536	545	535	
85	230	282	235	

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

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.75 2900 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
4' X 4'	5	-	-	-	-	138
8 Lamp	2	-	-	140	-	98
	1	-	-	145	104	73

\*Observe Fixture S/MH Requirements for Specific Applications

### AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS

ANGLE	END	45°	CROSS
45	4580	5259	6016
55	3100	2668	3611
65	1855	2210	2030
75	1931	1993	2064
85	2020	2477	2064

### TYPICAL V.C.P.'s Room Mounting Height

Room Size	Lengthwise Crosswise			
	8.5	10	8.5	10
30x30	54	59	53	58
40x40	50	54	49	53
60x30	56	61	55	60
60x60	46	49	46	49
100x100	45	46	45	46

LLF = .75 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 = 0.91 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

### COEFFICIENT OF UTILIZATION

pfc pcc pw RCR	20			70			50		
	70	50	30	70	50	30	50	30	
0	89	89	89	86	86	86	82	82	
1	81	79	76	80	77	75	73	71	
2	76	69	65	73	68	64	66	63	
3	69	61	56	68	60	56	58	55	
4	64	56	50	63	55	48	53	47	
5	58	50	44	57	50	44	47	42	
6	55	46	39	54	45	39	44	38	
7	51	41	34	50	40	34	40	34	
8	47	38	32	46	38	32	36	30	
9	45	34	28	44	34	28	34	28	
10	41	32	27	40	32	27	30	26	

### LIGHT DISTRIBUTION

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	5601	24.1	32.3
0-40	9404	40.5	54.2
0-60	15119	65.2	87.2
0-90	17337	74.7	100.0