

**4, 6, or 8 Lamp
T8 or T12
Prismatic Acrylic Lens**

APPLICATION

- Premium quality recessed air handling troffer for:
 - Grid inverted T (NEMA "G") ceilings
 - Flange for concealed mechanical suspension (NEMA "F")
 - Contact Day-Brite for other ceiling types.
- Universal model will perform any of the air handling functions:
 - Static; non-air handling
 - Heat transfer; air return through lamp compartment
 - Air supply; (or air return) through side slots, adjustable pattern control blade is standard.
 - Combination; both heat transfer and air supply features listed above
- 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 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.

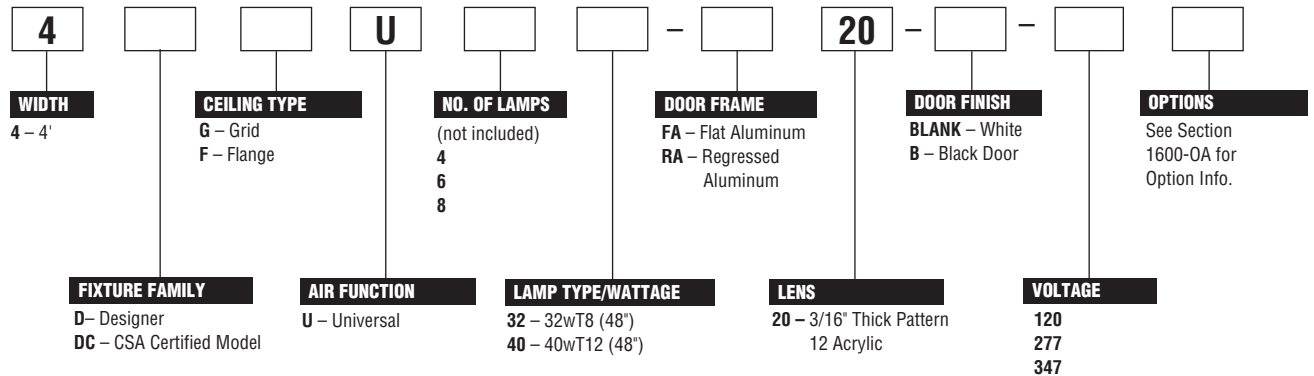
ELECTRICAL

- 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

- Black reveal produces floating door appearance.
- 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). Other lenses or louvers optional.
- Choice of door finishes; white (standard), or black.

CATALOG NUMBER



NOTES:

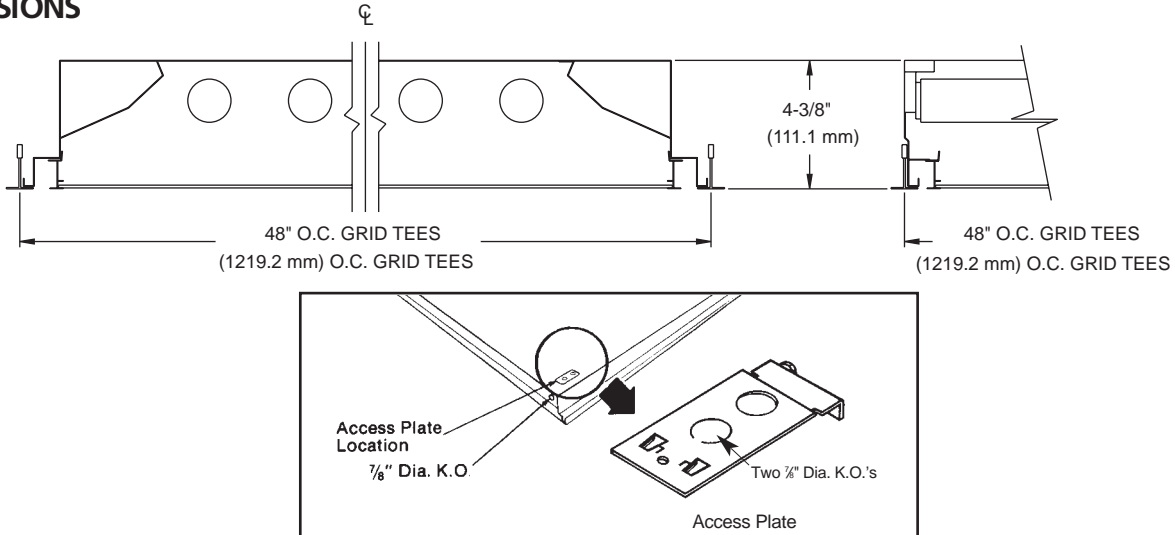
- With generic Electronic Ballasts (Brand selected by Day-Brite)
- Suffix Catalog # with- **Ballast Quantity** - / -**EB** **Lamps Per Ballast**.

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



PHOTOMETRIC DATA

CATALOG # 4DGU432-RA20-1/4-EB
TEST #16173 S/MH=1.5

LAMPS = F32 T8

INPUT WATTS = 113

LER = FL-71

BALLAST = ELECTRONIC

BALLAST FACTOR = .91

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$3.38 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 76.2%

CANDLEPOWER				
Angle	End	45	Cross	
0	3544	3544	3544	
5	3542	3528	3527	
10	3495	3500	3518	
15	3417	3459	3506	
20	3309	3399	3486	
25	3170	3324	3457	
30	2981	3234	3424	
35	2770	3119	3393	
40	2493	2941	3317	
45	2110	2495	2985	
50	1632	1580	2260	
55	1154	993	1519	
60	790	707	981	
65	503	598	609	
70	309	484	369	
75	292	363	306	
80	255	288	271	
85	115	147	128	

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'	5	-	-	141	100
4 Lamp	2	-	-	100	71
	1	-	123	74	53

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS				
ANGLE	END	45°	CROSS	
45	2336	2762	3304	
55	1575	1355	2073	
65	932	1108	1128	
75	883	1098	925	
85	1033	1320	1150	

Room Size	TYPICAL V.C.P.'s Mounting Height			
	Lengthwise		Crosswise	
	8.5	10	8.5	10
30x30	69	74	68	73
40x40	66	69	65	68
60x30	71	75	70	74
60x60	62	65	62	64
100x100	60	61	60	61

COEFFICIENT OF UTILIZATION

pfc pcc pw	20				70				50			
	70	50	30		70	50	30		50	30		
RCR												
0	91	91	91		89	89	89		84	84		
1	83	81	78		81	79	76		76	72		
2	77	70	67		75	69	66		67	64		
3	70	64	57		68	61	56		59	56		
4	65	56	51		64	56	50		54	48		
5	59	51	45		58	51	45		48	44		
6	56	46	40		55	46	40		45	39		
7	52	41	35		51	41	35		40	34		
8	48	39	33		46	38	32		36	32		
9	45	35	29		44	34	28		34	28		
10	42	33	27		41	33	27		32	27		

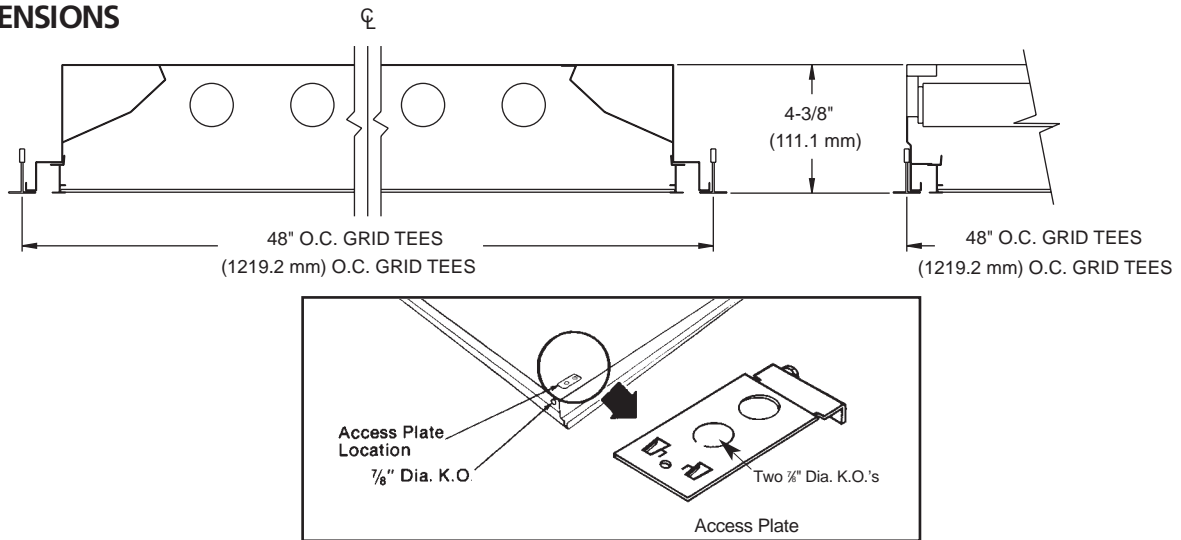
LIGHT DISTRIBUTION

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2846	24.5	32.2
0-40	4783	41.2	54.1
0-60	7712	66.5	87.3
0-90	8837	76.2	100.0

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)

4' x 4' 6 LAMP

DIMENSIONS



PHOTOMETRIC DATA

CATALOG # 4DGU632-RA20-2/3-EB
TEST #16169 S/MH=1.5

LAMPS = F32T8

BALLAST = ELECTRONIC

INPUT WATTS = 172

BALLAST FACTOR = .93

LER = FL-71

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$3.38 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 75.4%

CANDLEPOWER				
Angle	End	45	Cross	
0	5319	5319	5319	
5	5308	5297	5293	
10	5237	5256	5280	
15	5119	5189	5259	
20	4959	5103	5230	
25	4741	4995	5186	
30	4462	4861	5135	
35	4142	4691	5065	
40	3713	4397	4896	
45	3140	3655	4332	
50	2410	2339	3304	
55	1707	1463	2231	
60	1172	1039	1412	
65	733	884	886	
70	466	727	542	
75	430	534	444	
80	376	422	395	
85	171	214	185	

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 2 1	- - -	- - -	- - 113	- 108 81	107 76 56

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS

ANGLE	END	45°	CROSS
45	3476	4046	4795
55	2329	1997	3045
65	1358	1637	1641
75	1300	1615	1343
85	1536	1922	1661

TYPICAL V.C.P.'s

Room Size	Mounting Height			
	Lengthwise		Crosswise	
	8.5	10	8.5	10
30x30	61	66	60	65
40x40	57	60	56	60
60x30	62	67	62	66
60x60	53	56	53	55
100x100	52	53	51	52

COEFFICIENT OF UTILIZATION

pfc pcc pw RCR	20			70			50		
	70	50	30	70	50	30	50	30	
0	90	90	90	88	88	88	83	83	
1	82	80	77	81	78	75	75	72	
2	76	70	66	73	68	65	67	63	
3	69	63	57	68	61	56	59	55	
4	65	56	51	63	56	50	54	48	
5	59	51	45	57	50	44	48	42	
6	56	46	40	54	46	40	44	39	
7	52	41	35	50	41	35	40	34	
8	47	39	32	46	38	32	36	32	
9	45	34	29	44	34	28	34	28	
10	41	33	27	40	32	27	32	27	

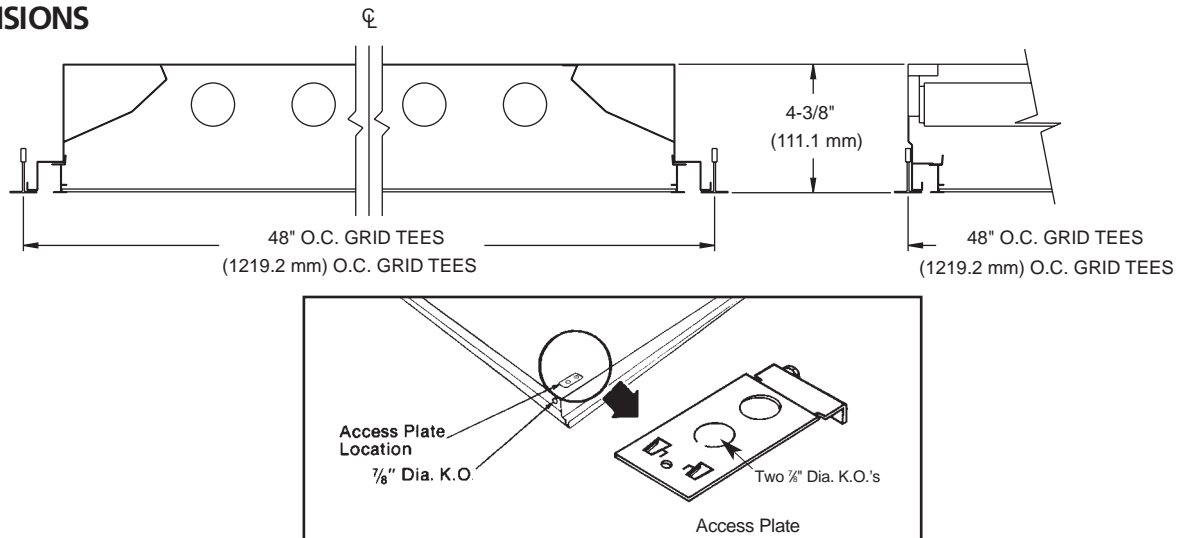
LIGHT DISTRIBUTION

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	4271	24.5	32.5
0-40	7168	41.2	54.6
0-60	11483	66.0	87.5
0-90	13128	75.4	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 & T8 LAMP (RELAMP AT 70% LAMP LIFE)

4' X 4' 8 LAMP

DIMENSIONS



PHOTOMETRIC DATA

CATALOG # 4DGU832-RA20-2/4-EB
TEST #16170 S/MH=1.4

LAMPS = F32T8
BALLAST = ELECTRONIC

INPUT WATTS = 215
BALLAST FACTOR = .91

LER = FL-71

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$3.38 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 72.4%

CANDLEPOWER				
Angle	End	45	Cross	
0	6895	6895	6895	
5	6881	6859	6862	
10	6788	6804	6839	
15	6632	6712	6804	
20	6419	6585	6754	
25	6140	6435	6689	
30	5780	6247	6614	
35	5362	6008	6494	
40	4797	5590	6184	
45	4075	4583	5453	
50	3096	2949	4093	
55	2184	1819	2749	
60	1477	1316	1780	
65	948	1120	1097	
70	593	920	679	
75	543	677	566	
80	479	539	497	
85	222	266	226	

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' 8 Lamp	5 2 1	- - -	- - -	- - 142	- 136 101	134 95 71

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS

ANGLE	END	45°	CROSS
45	4557	5125	6098
55	3011	2508	3790
65	1774	2096	2053
75	1659	2068	1729
85	2014	2413	2050

TYPICAL V.C.P.'s Room Mounting Height Size Lengthwise Crosswise

Room Size	Mounting Height			
	8.5	10	8.5	10
30x30	54	60	54	59
40x40	50	54	50	54
60x30	56	61	56	60
60x60	47	49	47	49
100x100	46	46	46	47

COEFFICIENT OF UTILIZATION

pfc pcc pw	20						70						50					
	70	50	30	70	50	30	50	30	70	50	30	50	30					
RCR																		
0	85	85	85	83	83	83	80	80	80	80	80	80	80	80	80	80	80	
1	80	77	73	78	75	71	71	69	71	69	69	69	69	69	69	69	69	
2	72	68	64	70	67	63	64	60	64	60	60	60	60	60	60	60	60	
3	68	60	55	66	59	55	56	53	55	53	53	53	53	53	53	53	53	
4	61	54	48	60	53	47	52	46	52	46	46	46	46	46	46	46	46	
5	57	48	42	56	47	42	46	41	46	41	41	41	41	41	41	41	41	
6	53	44	38	52	44	38	42	36	42	36	36	36	36	36	36	36	36	
7	50	40	34	48	40	34	39	34	39	34	34	34	34	34	34	34	34	
8	46	36	30	45	36	30	35	30	35	30	30	30	30	30	30	30	30	
9	42	34	28	41	34	28	33	28	33	28	28	28	28	28	28	28	28	
10	40	32	26	40	30	26	29	26	29	26	26	26	26	26	26	26	26	

LIGHT DISTRIBUTION

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	5524	23.8	32.9
0-40	9252	39.9	55.1
0-60	14694	63.3	87.5
0-90	16790	72.4	100.0

LLF = .75 LLF = LIGHT LOSS FACTOR LLLF = 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)