

**1, 2, or 3 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”)
 - Modular and “Z” Spline (NEMA “M/Z”) ceilings
 - Screw Slot (NEMA “SS”) with door frame at ceiling plane
 - 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, adjustable pattern control blade is optional
 - Combination; both heat transfer and air supply features listed above.
- Air boots by others.

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 (UL listed, patented) built into fixture end plates, no extra parts required.

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 (1 and 2 lamp fixtures only).

ENCLOSURES

- Black reveal produces floating door appearance.
- Mitered corner door frames with a choice of: Flat Steel, Flat Aluminum, or Regressed Aluminum.
- Door frames standard with guide post spring loaded latches.
- Mechanically designed interlocks block light, no gaskets are needed.
- Prismatic acrylic pattern 12 lens standard (01). Other lenses or louvers optional.
- Choice of door finishes; white (standard), or black.

CATALOG NUMBER

1										
WIDTH	CEILING TYPE	NO. OF LAMPS	DOOR FRAME	DOOR FINISH	OPTIONS	FIXTURE FAMILY	AIR FUNCTION	LAMP TYPE/WATTAGE	LENS	VOLTAGE
1 - 1'	G - Grid F - Flange Z - Z Spline/Modular T - Screw Slot	(not included) 1 2 3	FS - Flat Steel FA - Flat Aluminum RA - Regressed Aluminum	BLANK - White B - Black Door	See Section 1600-OA for Option Info.	D - Designer DC - CSA Certified Model	A - Air Supply C - Combination (A&H) H - Heat Transfer S - Static (no air function)	32 - 32wT8 (48") 40 - 40wT12 (48")	01 - Prismatic Acrylic 12 - DB-12 (.125") 19 - DB-19 (.156") 21 - Patt. 12 (.125") See Page 401-SR for other lens options	120 277 347

NOTES:

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

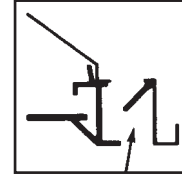
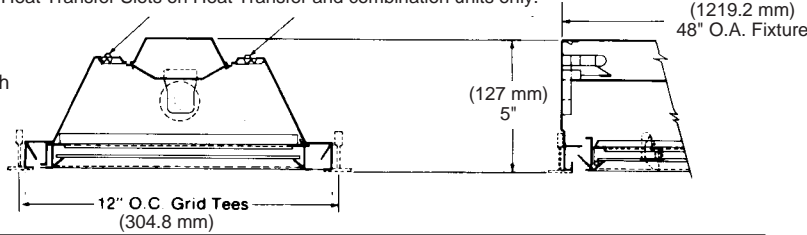
Example: -1/1-EB = One 1 Lamp Electronic Ballast.
Example: -1/2-EB = One 2 Lamp Electronic Ballast.
Example: -1/3-EB = One 3 Lamp Electronic Ballast.

1' x 4' 1 LAMP

DIMENSIONS

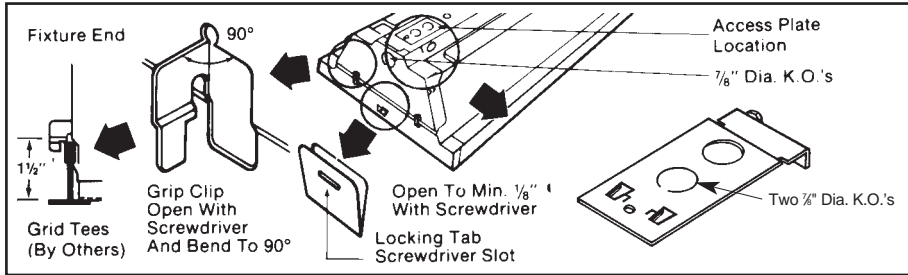
Heat Transfer Dampers available as an option.
Heat Transfer Slots on Heat Transfer and combination units only.

* M/Z Type is 6 1/4" high



Optional Air Pattern Control
(on Air and Combination Units)

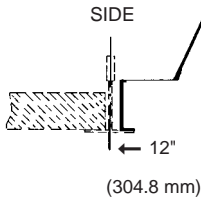
- Fully adjustable
 - Closed=Static
 - 45°= Horizontal Air Supply
 - 90°=(fully open)-Vertical Air Supply
- Side Slots may also be used for Return Air to Plenum



1 D G S 1 32

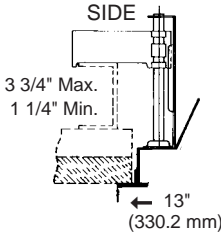
CEILING TYPE

G = GRID (NEMA G)



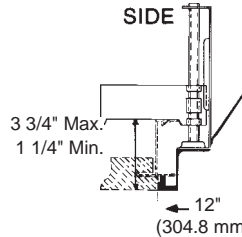
(NEMA Type G)
Lay-in acoustical ceilings using exposed grid suspension, with tees for fixtures on 12" x 48" spacing.

F = FLANGE (NEMA F)



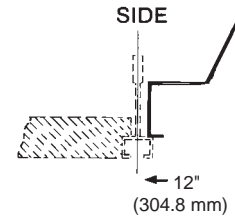
(NEMA Type F)
Flange for acoustical ceilings using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 3 3/4" max. and 1 1/4" min.

Z = (NEMA M/Z) MODULAR AND "Z" SPLINE



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

T = SCREW SLOT (NEMA SS)



Lensed fixture with door frame at the ceiling plane.
(NEMA Type SS)
Typical Screw Slot Ceiling System.

PHOTOMETRIC DATA

CATALOG # 1DGS132-FA01-1/1-B
TEST #15550 S/MH=1.4

LAMPS = F32 T8
BALLAST = ELECTRONIC BALLAST FACTOR = 1.00

LER = FL-60

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$4.00 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 72.6%

CANDLEPOWER				
Angle	End	45	Cross	
0	892	892	892	
5	888	890	893	
10	877	887	896	
15	858	881	904	
20	830	871	910	
25	794	859	911	
30	745	839	889	
35	680	790	808	
40	603	662	669	
45	517	527	508	
50	408	394	383	
55	311	267	298	
60	233	168	225	
65	168	108	165	
70	118	79	118	
75	84	61	86	
80	52	40	55	
85	25	23	25	

MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture*

■ 80-50-20 Reflectances (Ceiling-Wall-Floor)
■ LLF = 0.83 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
1' X 4' 1 Lamp	5	-	62	37	-	-
	2	132	44	-	-	-
	1	99	33	-	-	-

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	2922	2979	2871
55	2167	1860	2076
65	1589	1021	1560
75	1297	942	1328
85	1146	1055	1146

TYPICAL V.C.P.'s Mounting Height				
Room Size	Lengthwise		Crosswise	
	8.5	10	8.5	10
30x30	68	72	68	71
40x40	66	68	65	67
60x30	71	73	70	73
60x60	63	65	62	64
100x100	61	62	61	62

COEFFICIENT OF UTILIZATION								
pfc	pcc	pw	20					
			70	50	30	50		
RCR	0	85	85	85	83	83	81	81
	1	80	77	73	78	75	72	71
	2	73	68	64	71	67	63	65
	3	68	60	56	66	59	55	57
4	63	55	48	60	54	48	52	
5	57	50	44	56	48	42	46	
6	54	45	39	53	44	39	42	
7	50	40	34	48	40	34	40	
8	46	38	32	46	36	32	35	
9	44	34	28	42	34	28	34	
10	40	32	27	40	32	27	30	

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	728	25.1	34.6
0-40	1203	41.5	57.2
0-60	1863	64.2	88.5
0-90	2104	72.6	100.0

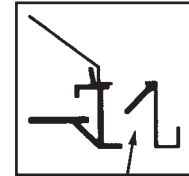
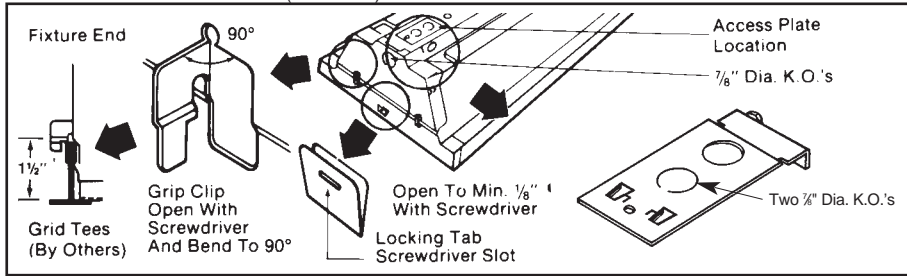
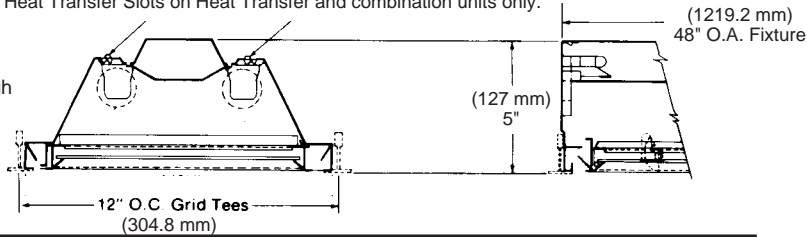
LLF = .83 LLF = LIGHT LOSS FACTOR LLD = LDD X LLD X BF LDD = VERY CLEAN 0.94 CLEAN 0.90
LLD = 0.88 @ 40% RATED LAMP LIFE BF = 1.00 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

1' x 4' 2 LAMP

DIMENSIONS

Heat Transfer Dampers available as an option.
Heat Transfer Slots on Heat Transfer and combination units only.

* M/Z Type is 6 1/2" high



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 # 1DGS232-FA01-1/2-EB
TEST #15551 S/MH=1.1

LAMPS = F32 T8
BALLAST = ELECTRONIC

INPUT WATTS = 59
BALLAST FACTOR = .92

LER = FL-60

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$4.00 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 66.8%

CANDLEPOWER			
Angle	End	45	Cross
0	1909	1909	1909
5	1904	1896	1895
10	1876	1866	1857
15	1830	1810	1785
20	1762	1715	1676
25	1669	1600	1550
30	1540	1467	1441
35	1379	1332	1303
40	1175	1134	1133
45	969	911	883
50	752	692	663
55	569	478	513
60	422	308	394
65	306	200	293
70	219	149	215
75	154	113	156
80	97	74	98
85	43	41	45

MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture*

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.76 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
1' X 4' 2 Lamp	5	-	105	63	45	31
	2	-	75	45	32	-
	1	-	57	34	-	-

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	5477	5149	4991
55	3965	3331	3574
65	2894	1891	2771
75	2378	1745	2409
85	1972	1880	2063

Room Size	TYPICAL V.C.P.'s Mounting Height			
	Lengthwise		Crosswise	
	8.5	10	8.5	10
30x30	54	58	54	58
40x40	51	54	51	53
60x30	57	60	57	60
60x60	49	50	48	50
100x100	48	49	48	48

COEFFICIENT OF UTILIZATION

pfc pcc pw	20			70			50		
	70	50	30	70	50	30	50	30	
RCR	80	80	80	78	78	78	73	73	
0	73	70	68	71	69	67	67	65	
2	68	63	58	66	61	58	59	56	
3	63	56	52	60	56	51	54	50	
4	57	51	46	56	50	45	48	44	
5	54	46	40	53	46	40	44	40	
6	50	41	36	48	40	35	40	35	
7	46	39	33	46	38	33	36	32	
8	44	34	29	42	34	29	34	29	
9	40	33	28	40	32	27	32	27	
10	39	29	25	38	29	25	28	25	

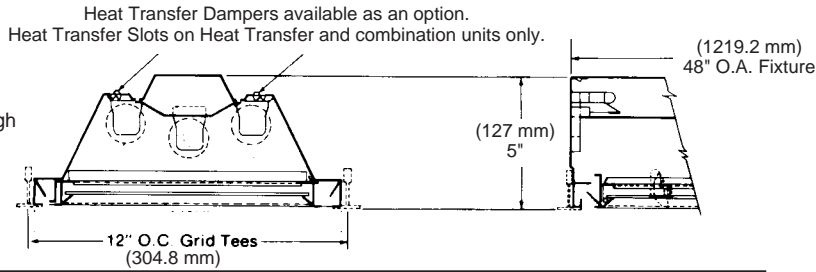
LIGHT DISTRIBUTION

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1428	24.6	36.8
0-40	2258	38.9	58.3
0-60	3434	59.2	88.6
0-90	3875	66.8	100.0

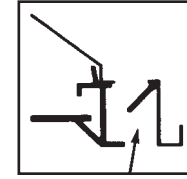
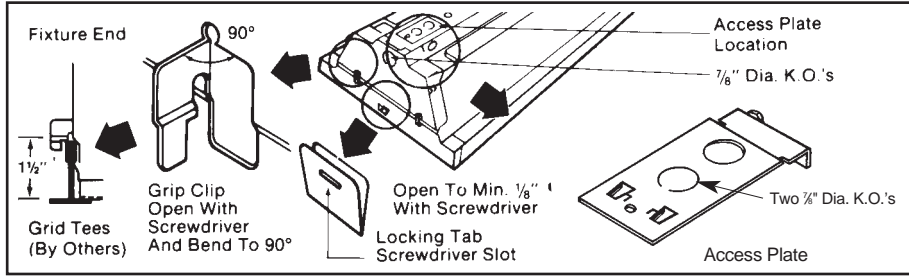
LLF = .76 LLF = LIGHT LOSS FACTOR LLF = LDD X LLD X BF LDD = VERY CLEAN 0.94 CLEAN 0.90
LLD = 0.88 @ 40% RATED LAMP LIFE BF = 0.92 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

1' x 4' 3 LAMP

DIMENSIONS



* M/Z Type is 6 1/4" high



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 # 1DGS332-FA01-1/3-EB
TEST #15555 S/MH=1.2

LAMPS = F32 T8
BALLAST = ELECTRONIC

INPUT WATTS = 82
BALLAST FACTOR = .93

LER = FL-61

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$3.93 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 62.1%

CANDLEPOWER			
Angle	End	45	Cross
0	2634	2634	2634
5	2619	2623	2619
10	2583	2586	2581
15	2520	2522	2510
20	2430	2420	2406
25	2313	2291	2269
30	2147	2125	2103
35	1920	1920	1845
40	1648	1597	1528
45	1346	1268	1179
50	1043	958	901
55	789	640	705
60	578	404	545
65	420	265	402
70	300	197	290
75	213	153	209
80	135	99	133
85	61	58	62

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
1' X 4'	5	-	147	88	63
3 Lamp	2	-	106	64	46
	1	-	80	48	34

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS

ANGLE	END	45°	CROSS
45	7608	7167	6664
55	5498	4459	4912
65	3972	2506	3802
75	3289	2363	3227
85	2797	2660	2843

TYPICAL V.C.P.'s Mounting Height

Room Size	Mounting Height			
	Lengthwise	Crosswise	8.5	10
30x30	46	50	46	50
40x40	43	46	43	46
60x30	49	52	49	52
60x60	41	42	41	42
100x100	40	41	40	41

COEFFICIENT OF UTILIZATION

pfc pcc pw	20				70				50			
	70	50	30	10	70	50	30	10	50	30	10	30
RCR	0	73	73	73	71	71	71	68	68	68	68	68
	1	68	66	64	67	65	63	61	59	59	59	59
	2	63	58	55	61	57	55	56	53	53	53	53
	3	58	53	47	56	52	47	50	46	46	46	46
	4	54	47	42	53	46	41	45	40	40	40	40
	5	50	42	38	48	41	38	40	36	36	36	36
	6	46	39	34	46	39	34	38	33	33	33	33
	7	44	35	30	42	34	30	34	29	29	29	29
	8	40	33	28	40	33	28	32	28	28	28	28
	9	38	30	26	36	29	26	28	25	25	25	25
	10	35	28	23	34	28	23	27	23	23	23	23

LIGHT DISTRIBUTION

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2013	23.1	37.2
0-40	3194	36.7	59.1
0-60	4808	55.3	88.9
0-90	5406	62.1	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)