

**4 Lamp T8 or T12
24 or 32 Cell**

APPLICATION

- Low-brightness troffer for most ceilings:
 - Grid inverted T (NEMA “G”)
 - Flange-type for concealed mechanical suspension (NEMA “F”)
 - Modular and “Z” spline (NEMA “M/Z”)
 - Screw Slot; with louvers at ceiling plane (NEMA “SS”)
- Designed for air supply/return through side slots and/or heat transfer. Select the appropriate catalog no. for air function desired. 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).
- Excellent visual comfort and inconspicuous appearance.

CONSTRUCTION/FINISH

- Housing is multi-stage phosphate treated for maximum corrosion resistance and finish coat is high reflectance baked white enamel.
- Painted after fabrication housing available
- Flat black finish inside perimeter reveal for “floating door” appearance.
- T-bar grid clips (UL listed, patented) built into fixture end plates, no extra parts required. Designed for use with standard grid ceiling members, 1-1/2” maximum height
- Shallow wireway cover standard.

- Deep wireway cover available for cell segregation (DWC).
- Factory installed access plate includes 7/8” hole, 7/8” knockout and grounding screw.
- One-piece housing features integral end plates that increase rigidity and minimize damage from handling or shipping

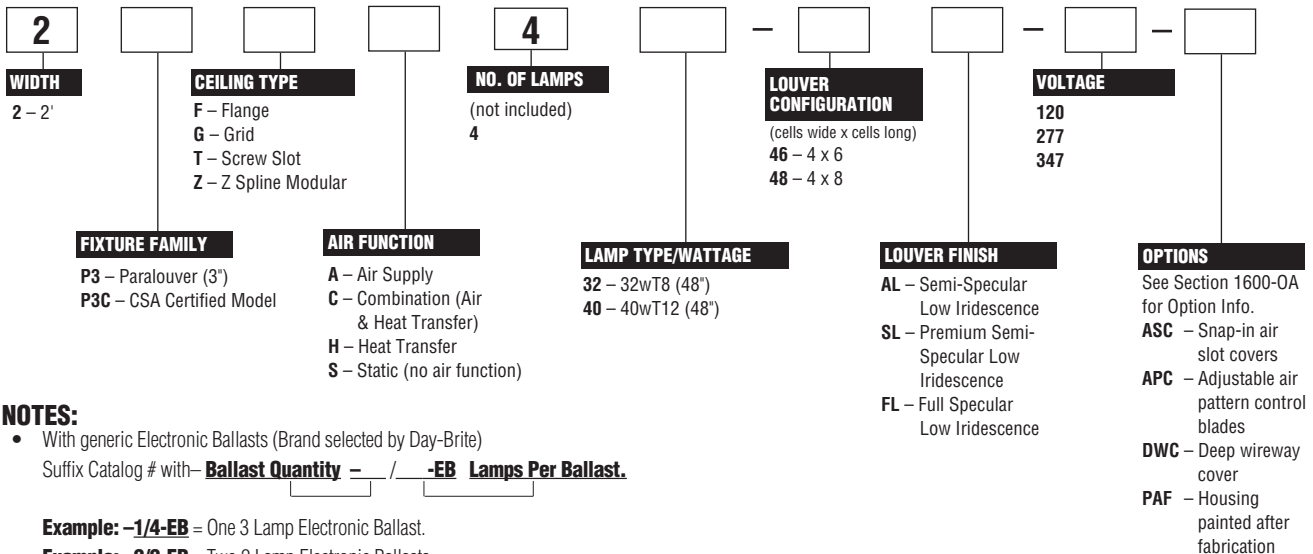
ELECTRICAL

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

ENCLOSURES

- Full 3” parabolic-shaped louvers closely controlled for uniform low-brightness appearance, and interlocked to avoid vibration.
- Lengthwise shielding is 30°. Crosswise shielding is 45° for 32 cell louver.
- Bottom aluminum flange has mitered corners and fits flush with ceiling.
- 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.
- Can be hinged and latched from either side.
- 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: -1/4-EB = One 3 Lamp Electronic Ballast.
Example: -2/2-EB = Two 2 Lamp Electronic Ballasts.

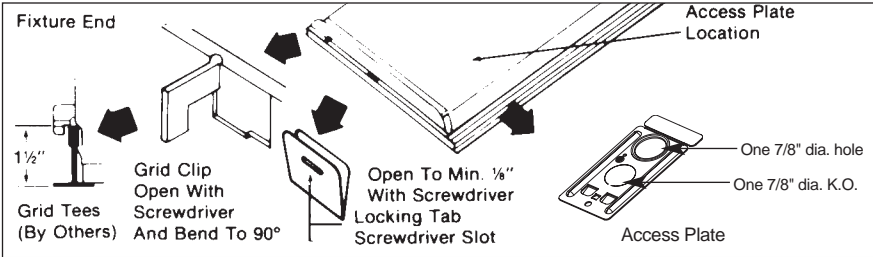
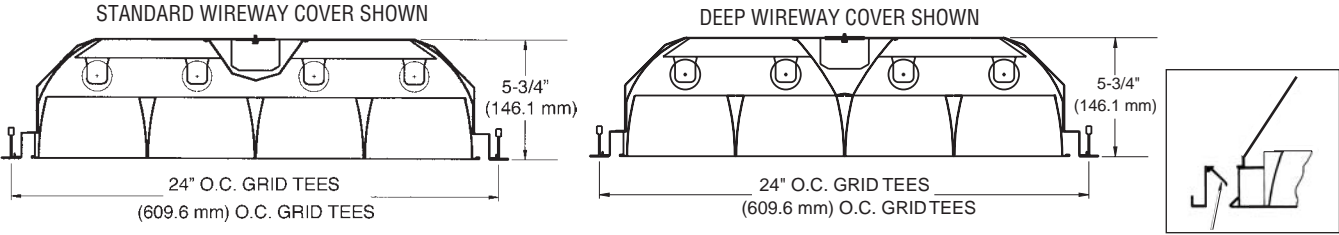
JOB INFORMATION

234.1-PLV

2' x 4' 4 LAMP 32 CELL



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
- Snap-in Air Slot Covers (ASC) also available

PHOTOMETRIC DATA

CATALOG # 2P3GS432-48AL-1/4-EB LAMPS = F32 T8 INPUT WATTS = 112
 TEST #17852 S/MH= 1.4 BALLAST = ELECTRONIC BALLAST FACTOR = .91

LER = FP-58

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$4.14 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 62.1%

CANDLEPOWER			
Angle	End	45	Cross
0	3102	3102	3102
5	3100	3098	3104
10	3025	3086	3156
15	2936	3068	3192
20	2831	3022	3192
25	2701	2956	3383
30	2554	2916	3400
35	2382	2832	2875
40	2177	2518	2090
45	1953	1974	1543
50	1659	1436	1341
55	1308	1091	1568
60	861	772	987
65	375	306	220
70	109	95	86
75	41	43	38
80	16	19	16
85	5	6	4

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
2' X 4'	5	-	-	117	83	58
4 Lamp	2	-	140	84	60	42
	1	-	105	63	45	31

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	4412	4459	3486
55	3642	3038	4366
65	1417	1156	831
75	253	265	234
85	91	110	73

TYPICAL V.C.P.'s				
Room Size	Mounting Height		Crosswise	
	Lengthwise	Crosswise	8.5	10
30x30	84	79	85	79
40x40	88	83	89	84
60x30	89	85	90	85
60x60	90	87	92	87
100x100	95	92	95	92

LLF = .75 LLF = LIGHT LOSS FACTOR LFF = LDD X LLD X BF LDD = VERY CLEAN 0.94 CLEAN 0.90
 LLD = 0.88 @ 40% RATED LAMP LIFE BF = .91 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

COEFFICIENT OF UTILIZATION							
ptc Cell Wall	20		70		50		
	70	50	30	70	50	30	
RCR	0	73	73	73	71	71	68
	1	68	67	65	67	65	64
	2	64	59	56	61	58	56
	3	58	54	48	57	53	48
	4	55	47	42	53	46	42
	5	51	42	39	48	42	38
	6	46	39	34	46	39	34
	7	44	35	30	42	34	29
	8	40	33	28	40	32	27
	9	38	29	26	36	29	25
	10	35	28	23	34	28	23

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2753	23.7	38.2
0-40	4432	38.2	61.6
0-60	6877	59.3	95.5
0-90	7199	62.1	100.0

PHOTOMETRIC DATA

CATALOG # 2P3GS432-48SL-1/4-EB LAMPS = F32 T8 INPUT WATTS = 111
 TEST #15685 S/MH= 1.4 BALLAST = ELECTRONIC BALLAST FACTOR = .91

LER = FP-65

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$3.69 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 67.9%

CANDLEPOWER			
Angle	End	45	Cross
0	3448	3448	3448
5	3468	3444	3459
10	3402	3444	3501
15	3299	3408	3503
20	3178	3340	3475
25	3027	3246	3714
30	2860	3237	3837
35	2650	3227	3346
40	2413	2969	2446
45	2147	2351	1788
50	1821	1682	1524
55	1466	1226	1527
60	751	741	711
65	113	188	167
70	44	57	64
75	22	27	28
80	11	13	12
85	5	5	4

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
2' X 4'	5	-	-	128	91	64
4 Lamp	2	-	-	93	66	47
	1	-	116	70	50	35

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	4851	5311	4040
55	4083	3415	4253
65	427	711	631
75	136	167	173
85	92	92	73

TYPICAL V.C.P.'s				
Room Size	Mounting Height		Crosswise	
	Lengthwise	Crosswise	8.5	10
30x30	89	83	89	83
40x40	92	88	92	87
60x30	93	89	93	89
60x60	94	91	95	91
100x100	97	95	97	95

LLF = .75 LLF = LIGHT LOSS FACTOR LFF = LDD X LLD X BF LDD = VERY CLEAN 0.94 CLEAN 0.90
 LLD = 0.88 @ 40% RATED LAMP LIFE BF = .91 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

COEFFICIENT OF UTILIZATION							
ptc pcc pw	20		70		50		
	70	50	30	70	50	30	
RCR	0	81	81	81	79	79	75
	1	76	72	70	73	71	69
	2	69	66	61	68	65	61
	3	65	58	55	63	57	54
	4	59	53	47	58	52	47
	5	56	47	42	54	46	41
	6	52	44	38	50	42	38
	7	47	40	34	46	39	34
	8	45	35	30	44	35	30
	9	41	34	28	40	33	28
	10	39	30	26	39	30	26

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2825	24.4	35.9
0-40	4738	40.8	60.2
0-60	7592	65.5	96.5
0-90	7871	67.9	100.0

PHOTOMETRIC DATA

CATALOG # 2P3GS432-48FL-1/4-EB **LAMPS =** F32 T8 **INPUT WATTS =** 112
TEST # 15684 **S/MH =** 1.5 **BALLAST =** ELECTRONIC **BALLAST FACTOR =** .91

LER = FP-68

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$3.53** BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 71.7%

CANDLEPOWER				
Angle	End	45	Cross	
0	3479	3479	3479	
5	3499	3481	3492	
10	3432	3489	3559	
15	3338	3473	3546	
20	3223	3394	3494	
25	3077	3290	3890	
30	2905	3347	4231	
35	2706	3562	3709	
40	2481	3389	2660	
45	2221	2651	1879	
50	1914	1853	1523	
55	1564	1414	1706	
60	831	836	823	
65	101	86	58	
70	11	10	9	
75	6	5	4	
80	4	3	2	
85	3	2	1	

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
2' X 4' 4 Lamp	5	-	-	135	97	68
	2	-	-	98	70	49
	1	-	122	73	52	37

*Observe Fixture S/MH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2900 LUMEN LAMPS

ANGLE	END	45°	CROSS
45	5018	5989	4245
55	4356	3938	4752
65	382	325	219
75	37	31	25
85	55	37	18

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

Room Size	Lengthwise		Crosswise	
	8.5	10	8.5	10
30x30	92	85	93	85
40x40	95	90	95	90
60x30	95	90	95	90
60x60	96	93	97	93
100x100	98	96	98	96

COEFFICIENT OF UTILIZATION

pfc pcc pw	20		70		50	
	70	50	30	70	50	30
RCR						
0	84	84	84	82	82	80
1	80	77	75	78	76	73
2	73	69	66	72	68	65
3	68	61	57	67	60	56
4	64	56	51	61	55	50
5	58	51	45	56	50	45
6	54	46	40	53	45	40
7	51	41	35	48	40	35
8	46	38	33	46	38	32
9	44	34	29	42	34	28
10	40	32	27	40	32	27

LIGHT DISTRIBUTION

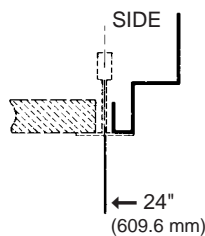
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2889	24.9	34.7
0-40	4955	42.7	59.6
0-60	8104	69.9	97.5
0-90	8316	71.7	100.0

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 = .91 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

2 P3 G S 4 32

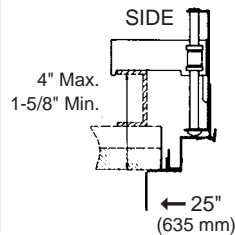
CEILING TYPE

G = GRID (NEMA G)



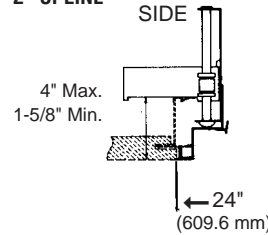
(NEMA Type G)
Lay-in acoustical ceilings using exposed grid suspension, with tees for fixtures on 24" x 48" spacing.

F = FLANGE (NEMA F)



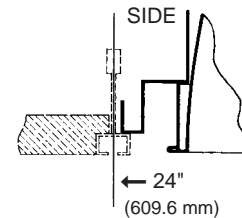
(NEMA Type F)
Flange for acoustical ceilings using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 4" max. and 1-5/8" min. Refer to sheet 801-CL for cut-out information.

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



(NEMA M/Z)
Modular and "Z" Spline using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 4" max. and 1-5/8" min.

T = SCREW SLOT (NEMA SS)



Louvered fixture with louvers at the ceiling plane.
(NEMA Type SS)
Typical Screw Slot Ceiling System. Bottom of louver is flush with ceiling plane.

2' x 4'

234.1-PLV

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