

made with pride in the  
United States of America

## 2 Lamp T5, T5HO, or T8

### APPLICATION

- Subtle enclosure curves provide architectural styling to complement any space.
- Smooth brightness across the face of the luminaire prevents glare and provides excellent visual comfort.
- Directs a controlled amount of light to higher angles to eliminate "cave effect" without creating glare.
- Ideal for modern offices, schools and retail environments.
- Excellent optical efficiency and luminaire efficacy provide significant energy savings.
- Many ballast/lamp systems are available, providing flexibility to tailor the luminaire to specific applications.
- Step dimming ballasts can be switched to less than 50% input power for energy savings to meet most energy codes while maintaining symmetrical illumination.
- Grid, Flange or Z-spline/ Modular models available.

### CONSTRUCTION/FINISH

- One piece die-formed embossed steel housing provides added rigidity, resists damage during shipment/handling.
- Wireway cover is easily removable without tools for quick ballast or wiring access from below.
- T-bar grid clips are built into luminaire ends for quick and easy installation, no extra parts required.

- Suitable for end-to-end mounting.
- End K.O.s for thru wiring or conduit entry in shallow plenums.

### ELECTRICAL

- UL listed for damp locations. Canadian certified optional.
- Emergency ballasts can be incorporated, UL listed for dry locations.
- Systems are available offering electrical system efficacy ratings up to 102 Lumens/Watt.
- Total luminaire efficacy as high as 88 LPW.

### ENCLOSURES

- Center section is flush with outer panels, eliminating the dirt and debris collection typical of suspended "baskets."
- One-piece enclosure hinges down as an assembly for easy access to lamps and ballast from below without tools.
- T-hinges provide secure retention of enclosure and eliminate non-captive parts to hold during servicing.
- Guide-post spring loaded latches allow easy opening and closing of the enclosure.
- Choice of center sections includes diffuse acrylic with smooth or ribbed surface, round perforated steel with overlay or white radial louver with overlay.
- Smooth side diffusers standard, ribbed optional.
- Any center section can be used with either side diffuser.

### CATALOG NUMBER

<b>2</b>	<b>ST</b>		<b>2</b>		-		-		-	<b>1/2</b>	-		-	
<b>WIDTH</b>	<b>FAMILY</b>	<b>CEILING TYPE</b>	<b>NO. OF LAMPS</b>	<b>CENTER DIFFUSER</b>	<b>BALLAST CONFIG.</b>	<b>OPTIONS</b>								
2 - 2'	ST - SofTrace	G - Grid F - Flange Z - Z Spline/Modular	(not included) 2	D - Diffuse (Ribbed) DS - Diffuse (Smooth) PMW - Round Perf. w/white overlay WO - Radial louver w/white overlay	1/2 - One 2-lamp ballast	<b>CM</b> - Canadian Market <b>CC</b> - Custom Color <b>F1</b> - 3/8" flex, 3 wire 18 gauge <b>F2</b> - 3/8" flex, 4 wire 18 gauge <b>E1*</b> - DEB-1 emerg. ballast, T8 lamps, 350-450 lumens <b>E7*</b> - DEB-7 emerg. ballast, T8 lamps, 600-700 lumens <b>E5*</b> - DEB-5 emerg. ballast, T8 lamps, 1100-1400 lumens <b>E7LP*</b> - DEB-7LP emerg. ballast T5/T5HO, 430-700 lumens <b>E6*</b> - DEB-6LP emerg. ballast, T5/T5HO lamps, 750-1325 lumens <b>GLR#</b> - Fusing, fast blow (# = number of ballasts) <b>LPT730</b> - Installed T8 lamps, 70+ CRI, 3000K <b>LPT735</b> - Installed T8 lamps, 70+ CRI, 3500K <b>LPT741</b> - Installed T8 lamps, 70+ CRI, 4100K <b>LPT830HL</b> - Installed T8 or T5 hi lumen lamps, 80+ CRI, 3000K <b>LPT835HL</b> - Installed T8 or T5 hi lumen lamps, 80+ CRI, 3500K <b>LPT841HL</b> - Installed T8 or T5 hi lumen lamps, 80+ CRI, 4100K <b>LPT830</b> - Installed T8/T5/T5HO lamps, 80+ CRI, 3000K <b>LPT835</b> - Installed T8/T5/T5HO lamps, 80+ CRI, 3500K <b>LPT841</b> - Installed T8/T5/T5HO lamps, 80+ CRI, 4100K <b>PAF</b> - Housing painted after stamping <b>RIB</b> - Ribbed side diffusers								
<b>LAMP TYPE/WATTAGE</b>	<b>VOLTAGE</b>		<b>BALLAST TYPE</b>											
28 - 28wT5 (46") 32 - 32wT8 (48") 54HO - 54wT5HO (46")	120 277 347 UNV - Universal Voltage, 120-277 volt		<b>EB95</b> - 28wT5 Electronic ballast, .95 ballast factor <b>EB115</b> - 28wT5 Electronic ballast, 1.15 ballast factor <b>EBS095</b> - 28wT5 Electronic step dimming ballast, .95 ballast factor <b>EBS0115</b> - 28wT5 Electronic step dimming ballast, 1.15 ballast factor <b>EBS080</b> - 54wT5HO Electronic step dimming ballast, .80 ballast factor <b>EBD</b> - T5/T5HO/T8 electronic dimming ballast <b>EB</b> - T5/T5HO/T8 electronic ballast, std. ballast factor <b>EBL</b> - T8 Electronic ballast, low ballast factor <b>EBH</b> - T8 Electronic ballast, hi ballast factor <b>EB10I</b> - T8 Electronic ballast, <10% THD, instant start <b>EB10R</b> - T8 Electronic ballast, <10% THD, rapid start *Factory installed <b>EBS0</b> - T8 Electronic step dimming ballast <b>EBHE</b> - T8 Electronic ballast, high efficiency, std. ballast factor											

### JOB INFORMATION

0169.2-AR

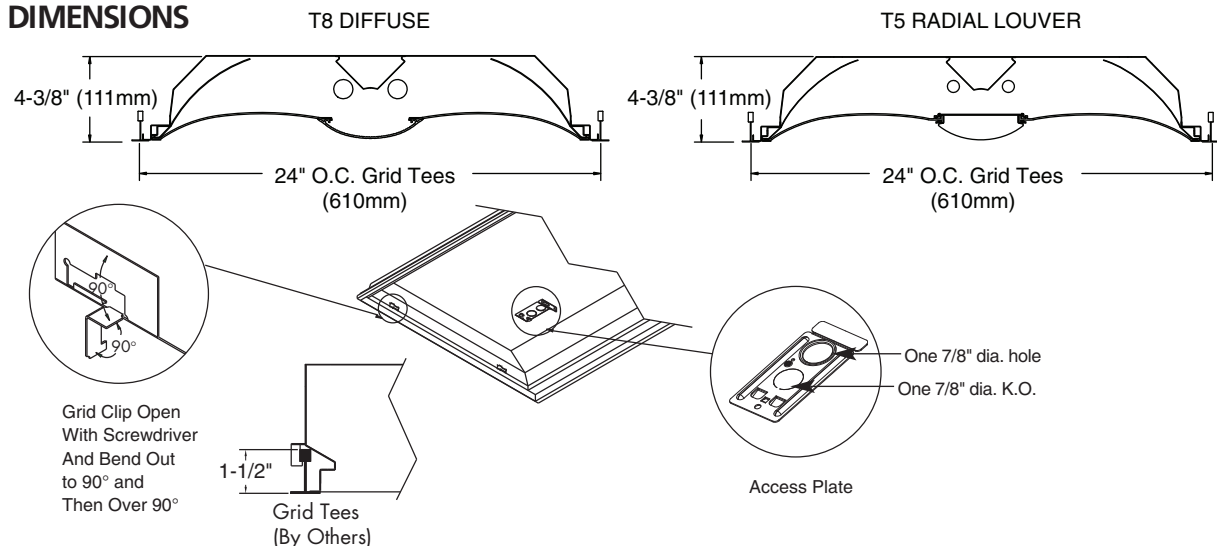
**PHILIPS**  
**Day-Brite**

## ENERGY DATA

Lamp Type	Ballast Type	Input Power (120/277V)	Electrical System Lumens/Watt	
			Std. Lamps*	Hi-lumen Lamps
28	EB95	60W / 58W	95	100
	EBSD95@hi	60W / 58W	95	100
	EBSD95@lo	28W / 28W	73	76
	EB115	72W / 71W	94	99
	EBSD115@hi	72W / 71W	94	99
	EBSD115@lo	35W / 35W	80	81
	EB	66W / 64W	95	100
32	EB	58W / 58W	85	94
	EB10I	59W / 58W	85	94
	EB10R	62W / 60W	82	91
	EBL	47W / 47W	92	<b>102</b>
	EBH	77W / 77W	87	97
	EBSD@hi	57W / 56W	88	97
	EBSD@lo	28W / 28W	60	66
54HO	EB	120W / 117W	85	-
	EBSD80@hi	96W / 93W	86	-
	EBSD80@lo	52W / 51W	78	-

\*Standard lamp T8 values assume 70+CRI 32W lamp. 80+CRI lamps or energy saving lamps are also available.

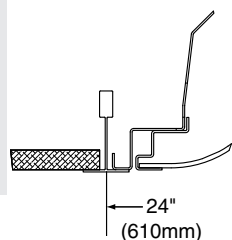
## DIMENSIONS



**2** **ST** **G** **2** **32**

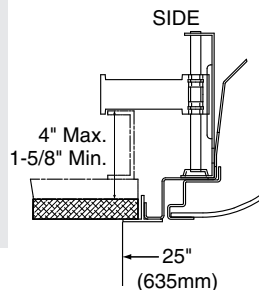
### CEILING TYPE

**G = GRID (NEMA G)**  
SIDE



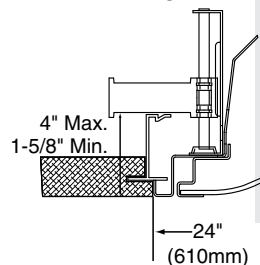
(NEMA Type G)  
Lay-in acoustical ceilings using exposed grid suspension, with tees for fixtures on 24" x 48" spacing.

**F = FLANGE (NEMA F)**  
SIDE



(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**  
SIDE



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

**PHOTOMETRIC DATA**

**CATALOG #** 2STG232-D-1/2-EB  
**TEST #**27034 **S/MH**=1.2

**LAMPS =** F32T8  
**BALLAST =** ELECTRONIC

**INPUT WATTS =** 59  
**BALLAST FACTOR =** 0.88

**LER =** 72

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$3.33** BASED ON 3000 HRS. AND \$.08 PER KWH.

**FIXTURE EFFICIENCY=** 85.2%

**T8, DIFFUSE\***  
\*smooth or ribbed center,  
smooth or ribbed sides

CANDLEPOWER				
Angle	End	45	Cross	
0	1725	1725	1725	
5	1730	1719	1707	
10	1701	1693	1680	
15	1661	1653	1639	
20	1608	1597	1584	
25	1533	1525	1515	
30	1444	1439	1443	
35	1334	1345	1372	
40	1219	1241	1294	
45	1089	1137	1214	
50	944	1020	1120	
55	814	895	996	
60	642	756	850	
65	492	606	688	
70	359	462	517	
75	236	320	355	
80	135	195	188	
85	56	73	66	

MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture*			
<ul style="list-style-type: none"> <li>80-50-20 Reflectances (Ceiling-Wall-Floor)</li> <li>LLF = 0.75 2850 Lumens/Lamp very clean</li> <li>Room width divided by room height = 5 or more, 2 or 1</li> </ul>			
Fixture Size & # of Lamps	Room Width Room Height =	Approx. Area (sq. ft.) per Fixture	
		30 ft-c	50 ft-c
2x4	5	127	76
2-Lamp T8	2	86	52
Diffuse	1	63	38

\*Observe Fixture S/MH Requirements for Specific Applications

COEFFICIENT OF UTILIZATION									
pfc pcc pw RCR	20			70			50		
	70	50	30	70	50	30	50	30	50
0	101	101	101	98	98	98	94	94	94
1	93	89	84	90	86	82	82	80	80
2	83	77	70	81	76	69	72	68	67
3	77	68	60	75	66	59	64	57	57
4	69	59	53	68	58	52	56	51	51
5	65	54	46	63	53	45	51	44	44
6	59	47	40	57	46	40	46	39	39
7	55	44	35	54	42	35	41	34	34
8	51	40	33	50	39	32	38	32	32
9	47	36	29	46	35	28	34	28	28
10	45	34	27	44	33	27	32	26	26

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1331	23.4	27.4
0-40	2175	38.2	44.8
0-60	3856	67.7	79.4
0-90	4854	85.2	100.0

.75LLF = .94LDD x .91LLD x 0.88BF

**PHOTOMETRIC DATA**

**CATALOG #** 2STG228-D-1/2-EB95  
**TEST #**27100 **S/MH**=1.2

**LAMPS =** F28T5  
**BALLAST =** ELECTRONIC

**INPUT WATTS =** 60  
**BALLAST FACTOR =** 0.95

**LER =** 78

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$3.08** BASED ON 3000 HRS. AND \$.08 PER KWH.

**FIXTURE EFFICIENCY=** 95.1%

**T5, DIFFUSE\***  
\*smooth or ribbed center,  
smooth or ribbed sides

CANDLEPOWER				
Angle	End	45	Cross	
0	1759	1759	1759	
5	1757	1749	1745	
10	1732	1723	1718	
15	1690	1682	1675	
20	1636	1626	1608	
25	1559	1549	1534	
30	1466	1456	1451	
35	1358	1354	1374	
40	1232	1249	1306	
45	1093	1139	1237	
50	941	1024	1154	
55	791	903	1046	
60	640	768	903	
65	495	624	739	
70	356	476	565	
75	236	335	390	
80	136	203	203	
85	54	74	65	

MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture*			
<ul style="list-style-type: none"> <li>80-50-20 Reflectances (Ceiling-Wall-Floor)</li> <li>LLF = 0.85 2600 Lumens/Lamp very clean</li> <li>Room width divided by room height = 5 or more, 2 or 1</li> </ul>			
Fixture Size & # of Lamps	Room Width Room Height =	Approx. Area (sq. ft.) per Fixture	
		30 ft-c	50 ft-c
2x4	5	145	87
2-Lamp T5	2	98	59
Diffuse	1	71	43

\*Observe Fixture S/MH Requirements for Specific Applications

COEFFICIENT OF UTILIZATION									
pfc pcc pw RCR	20			70			50		
	70	50	30	70	50	30	50	30	50
0	112	112	112	111	111	111	106	106	106
1	103	98	94	101	96	93	93	90	90
2	93	85	80	91	83	78	81	76	76
3	85	76	68	82	73	67	70	65	65
4	78	67	57	76	66	57	63	56	56
5	71	59	51	69	58	51	56	48	48
6	66	54	45	65	53	45	51	44	44
7	61	48	40	59	47	40	46	39	39
8	56	44	35	56	44	35	41	34	34
9	54	40	33	52	40	33	39	32	32
10	50	38	29	48	36	29	35	28	28

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1354	26.0	27.4
0-40	2205	42.4	44.6
0-60	3906	75.1	79.0
0-90	4943	95.1	100.0

.85LLF = .94LDD x .95LLD x 0.95BF

**PHOTOMETRIC DATA**

**CATALOG #** 2STG232-PMW-1/2-EB  
**TEST #**27092 **S/MH**=1.3

**LAMPS =** F32T8  
**BALLAST =** ELECTRONIC

**INPUT WATTS =** 61  
**BALLAST FACTOR =** 0.88

**LER =** 59

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$4.07** BASED ON 3000 HRS. AND \$.08 PER KWH.

**FIXTURE EFFICIENCY=** 72.2%

**T8, PERF.**

CANDLEPOWER				
Angle	End	45	Cross	
0	1394	1394	1394	
5	1395	1390	1383	
10	1373	1372	1369	
15	1339	1343	1349	
20	1293	1306	1322	
25	1230	1258	1288	
30	1157	1198	1251	
35	1075	1132	1213	
40	970	1057	1162	
45	869	979	1105	
50	755	889	1023	
55	632	783	918	
60	506	666	790	
65	385	529	651	
70	279	403	508	
75	184	279	348	
80	103	158	156	
85	40	38	39	

MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture*			
<ul style="list-style-type: none"> <li>80-50-20 Reflectances (Ceiling-Wall-Floor)</li> <li>LLF = 0.75 2850 Lumens/Lamp very clean</li> <li>Room width divided by room height = 5 or more, 2 or 1</li> </ul>			
Fixture Size & # of Lamps	Room Width Room Height =	Approx. Area (sq. ft.) per Fixture	
		30 ft-c	50 ft-c
2x4	5	108	65
2-Lamp T8	2	72	43
Perf.	1	53	32

\*Observe Fixture S/MH Requirements for Specific Applications

COEFFICIENT OF UTILIZATION									
pfc pcc pw RCR	20			70			50		
	70	50	30	70	50	30	50	30	50
0	85	85	85	83	83	83	80	80	80
1	79	75	71	77	72	70	69	68	68
2	70	65	59	68	64	58	60	57	57
3	65	56	51	63	56	51	54	48	48
4	58	51	44	57	50	44	47	42	42
5	55	45	39	53	44	38	42	36	36
6	50	40	34	48	40	34	39	33	33
7	46	36	29	45	35	29	34	29	29
8	42	33	27	41	33	27	32	27	27
9	40	30	25	39	29	25	28	23	23
10	38	28	23	36	28	22	27	22	22

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1091	19.1	26.5
0-40	1803	31.6	43.8
0-60	3254	57.1	79.1
0-90	4115	72.2	100.0

.75LLF = .94LDD x .91LLD x 0.88BF

## PHOTOMETRIC DATA

CATALOG # 2STG228-PMW-1/2-EB95  
TEST #27099 S/MH=1.3

LAMPS = F28T5

BALLAST = ELECTRONIC

INPUT WATTS = 60

BALLAST FACTOR = 0.95

LER = 66

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = **\$3.64** BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY= 80.6%

T5, PERF.

CANDLEPOWER			
Angle	End	45	Cross
0	1403	1403	1403
5	1407	1401	1390
10	1382	1380	1377
15	1348	1348	1355
20	1300	1314	1326
25	1242	1265	1290
30	1169	1205	1252
35	1086	1141	1217
40	986	1069	1178
45	880	990	1127
50	760	900	1054
55	640	801	953
60	514	683	827
65	394	553	688
70	287	418	544
75	190	294	361
80	106	165	161
85	43	40	40

MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture*			
<ul style="list-style-type: none"> <li>■ 80-50-20 Reflectances (Ceiling-Wall-Floor)</li> <li>■ LLF = 0.85 2600 Lumens/Lamp very clean</li> <li>■ Room width divided by room height = 5 or more, 2 or 1</li> </ul>			
Fixture Size & # of Lamps	Room Width Room Height =	Approx. Area (sq. ft.) per Fixture	
		30 ft-c	50 ft-c
2x4	5	123	74
2-Lamp T5	2	83	50
Perf.	1	60	36

\*Observe Fixture S/MH Requirements for Specific Applications

.85LLF = .94LDD x .95LLD x 0.95BF

COEFFICIENT OF UTILIZATION						
pfc pcc pw RCR	20		70		50	
	70	50	30	70	50	30
0	105	105	105	102	102	97
1	96	93	89	93	91	88
2	89	81	76	85	80	75
3	81	71	66	79	70	65
4	75	65	56	72	63	56
5	68	57	50	67	56	50
6	64	52	45	61	52	44
7	58	47	40	57	46	40
8	55	44	35	54	42	35
9	52	40	33	50	40	33
10	47	36	29	46	36	29

LIGHT DISTRIBUTION			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1098	21.1	26.2
0-40	1815	34.9	43.3
0-60	3293	63.3	78.6
0-90	4189	80.6	100.0