

**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.
- Outstanding visual comfort, ideal for modern offices, schools and retail environments.
- Lumen packages range from 2,400 to 3,800 initial lumens, providing flexibility to optimize light levels for a specific application.
- High CRI source provides excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since frequent switching does not affect the life of the light source.
- Grid, Flange, Z-spline/ Modular or Screw Slot models available.
- Designed for air supply/return through side slots in black reveal.

**contruction/finish**

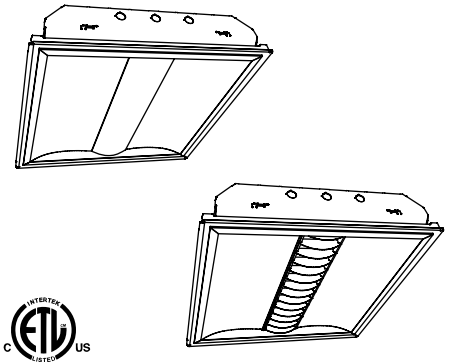
- One piece die-formed embossed steel housing provides added rigidity, resists damage during shipment/handling.
- Black reveal around enclosure provides floating appearance and disguises air slots. White reveal is available.
- T-bar grid clips are built into luminaire ends for quick and easy installation, no extra parts required.
- End K.O.s for thru wiring or conduit entry in shallow plenums.

**electrical**

- Driver and LED boards are easily accessible from below without tools. LED boards are individually replaceable, if required, via plug-in connectors.
- 0-10V dimming is available for 3,000 lumen or 3,800 lumen models.
- Available emergency option provides 1600 delivered lumens in emergency mode (requires ballast enclosure on top of luminaire).
- Five year standard luminaire warranty including LED boards and driver. Emergency driver and batteries have a three year warranty in models so equipped.
- High efficiency LEDs have a minimum 50,000 hour rated life (L<sub>70</sub>).
- ETL listed to UL standards, suitable for damp locations.

**enclosure**

- Center section is flush with outer panels, eliminating the dirt and debris collection typical of suspended “baskets.”
- Choice of center sections: smooth or ribbed acrylic, 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, creating a wide variety of aesthetic treatments.



**Specifier's Reference**

Project
Type
Model No.
Comments

**Green Choice: 2STGA24L840-2-D-UNV**

2	ST	A	-	2	-	-	-
<b>Width</b> 2 - 2'	<b>Ceiling Type</b> G - Grid F - Flange Z - Z Spline/ Modular T - Screw Slot	<b>Lumens</b> 24L840 - 2400 delivered lumens, 80 CRI, 4000K 30L840 - 3000 delivered lumens, 80 CRI, 4000K 34L840 - 3400 delivered lumens, 80 CRI, 4000K 38L840 - 3800 delivered lumens, 80 CRI, 4000K	<b>Center Diffuser</b> D - Diffuse (Ribbed) DS - Diffuse (Smooth) PMW - Round Perf. w/white overlay WO - Radial louver w/white overlay)	<b>Options</b> APC - Air pattern control blades ASC - Snap out air slot covers CM - Canadian Market CC - Custom Color F1 - 3/8" flex, 3 wire 18 gauge F2 - 3/8" flex, 4 wire 18 gauge GLR1 - Fusing, Fast Blow PAF - Housing painted after fabrication WR - White reveal RIB - Ribbed side diffusers DIM - 0-10V dimming driver (30L840 and 38L840 models only) EMLED16 - Integral emergency battery pack (1600 delivered lumens, requires ballast enclosure on top of luminaire)			
<b>Family</b> ST - SofTrace	<b>Air Function</b> A - Air Supply/Return	<b>Length</b> 2 - 2'	<b>Voltage</b> UNV - Universal Voltage, 120-277 volt				

**Accessories**

- FKDP22 - Flange conversion kit 2'x2'
- FMA22 - 2'x2' "F" mounting frame for NEMA "F" mounting

## energy data

Model	Initial Delivered Lumens at 25°C Ambient	Input Power	Lumens Per Watt
2STGA24L840-2-D*	2406	31W	78LPW
2STGA24L840-2-PMW	2138	30W	71LPW
2STGA24L840-2-WO	2269	30W	76LPW
2STGA30L840-2-D*	3015	40W	75LPW
2STGA30L840-2-PMW	2690	39W	69LPW
2STGA30L840-2-WO	2888	39W	74LPW
2STGA34L840-2-D*	3368	46W	73LPW
2STGA34L840-2-PMW	3002	45W	67LPW
2STGA34L840-2-WO	3216	44W	73LPW
2STGA38L840-2-D*	3810	54W	71LPW
2STGA38L840-2-PMW	3463	54W	64LPW
2STGA38L840-2-WO	3715	53W	70LPW

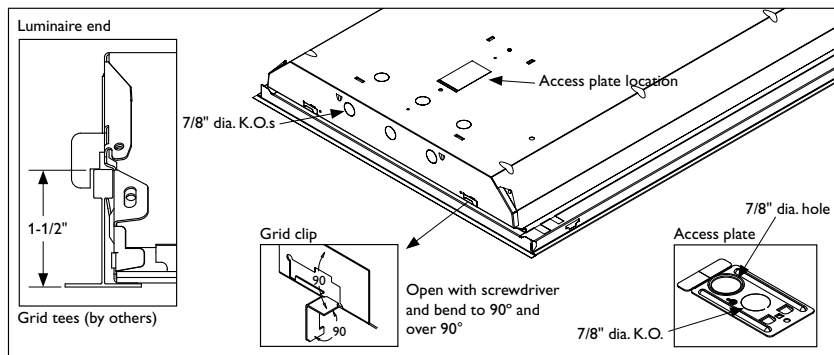
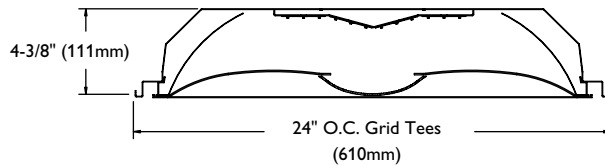
\* – DS center section and – RIB side diffusers provide the same performance as the standard – D configuration.

Fluorescent Configuration	Approx. Total Delivered Lumens	SofTrace Air LED Equivalent*
2 lamp T8 31U6	3,500	2STGA34L840-2-D
2 lamp T8 31U1	3,900	2STGA38L840-2-D
3 lamp T8 31U1	5,500	n/a max. lumens would be 2STGA38L840-2-D
2 lamp T12 40U6	2,800	2STGA30L840-2-D
3 lamp T12 40U3	3,800	2STGA38L840-2-D

Fluorescent Configuration	Approx. Total Delivered Lumens	SofTrace Air LED Equivalent
2 lamp T8 17W	2,000	2STGA24L840-2-D
3 lamp T8 17W	2,850	2STGA30L840-2-D
4 lamp T8 17W	3,650	2STGA34L840-2-D
2 lamp CF40	4,800	n/a, max. lumens would be 2STGA38L840-2-D
3 lamp CF40	6,900	n/a, max. lumens would be 2STGA38L840-2-D

\*SofTrace Air LED equivalent will provide similar delivered lumens and light levels. Analysis to determine appropriate light levels for the space is highly recommended.

## dimensions



# ceiling configuration

2 ST G A 34L840  
Ceiling type

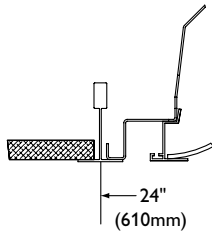
G = Grid (NEMA G)

F = Flange (NEMA F)

T = Screw Slot (NEMA SS)

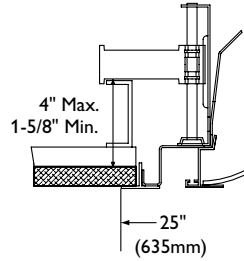
Z = Modular & "Z" Spline (NEMA M/Z)

SIDE



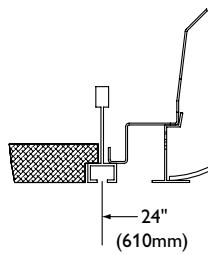
(NEMA Type G)  
Lay-in acoustical ceilings using exposed grid suspension, with tees for luminaires on 24" x 24" spacing.

SIDE



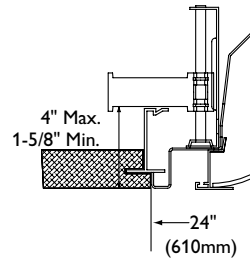
(NEMA Type F)  
Flange for acoustical ceilings using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 4" max. and 1-5/8" min. Refer to sheet 801-CL for cut-out information.

SIDE



(NEMA Type SS)  
Typical Screw Slot Ceiling System. Bottom of enclosure is flush with ceiling plane.

SIDE



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

## photometry

### 2x2 SofTrace Air LED, 2400 delivered lumens, diffuse

### LER – 78

<b>Catalog No.</b> 2STGA24L840-2-D <b>Test No.</b> 29805D1 <b>S/MH</b> 1.3 <b>Lamp Type</b> 30WLED <b>Lumens/Lamp</b> 2406 <b>Input Watts</b> 31  Comparative yearly lighting energy cost per 1000 lumens – <b>\$3.08</b> based on 3000 hrs. and \$.08 pwr KWH.  The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.  Photometric values based on test performed in compliance with LM-79.	<b>Candlepower</b>				<b>Light Distribution</b>			<b>Average Luminance</b>				
	<b>Angle</b>	<b>End</b>	<b>45</b>	<b>Cross</b>	<b>Degrees</b>	<b>Lumens</b>	<b>% Luminaire</b>	<b>Angle</b>	<b>End</b>	<b>45°</b>	<b>Cross</b>	
	0	853	853	853	0-30	664	27.6	45	2216	2517	2743	
	5	847	847	851	0-40	1092	45.4	55	1970	2373	2630	
	10	832	834	843	0-60	1927	80.1	65	1668	2135	2375	
	15	808	816	830	0-90	2407	100.0	75	1356	1784	1939	
	20	776	794	813								
	25	736	764	791								
	30	688	729	764								
	35	633	688	731								
40	572	638	686									
45	509	578	630									
50	434	518	567									
55	367	442	490									
60	296	367	411									
65	229	293	326									
70	169	221	245									
75	114	150	163									
80	65	85	92									
85	24	32	35									

### 2x2 SofTrace Air LED, 3000 delivered lumens, diffuse

### LER – 75

<b>Catalog No.</b> 2STGA30L840-2-D <b>Test No.</b> 29807D1 <b>S/MH</b> 1.3 <b>Lamp Type</b> 38WLED <b>Lumens/Lamp</b> 3015 <b>Input Watts</b> 40  Comparative yearly lighting energy cost per 1000 lumens – <b>\$3.20</b> based on 3000 hrs. and \$.08 pwr KWH.  The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.  Photometric values based on test performed in compliance with LM-79.	<b>Candlepower</b>				<b>Light Distribution</b>			<b>Average Luminance</b>				
	<b>Angle</b>	<b>End</b>	<b>45</b>	<b>Cross</b>	<b>Degrees</b>	<b>Lumens</b>	<b>% Luminaire</b>	<b>Angle</b>	<b>End</b>	<b>45°</b>	<b>Cross</b>	
	0	1069	1069	1069	0-30	832	27.6	45	2756	3157	3470	
	5	1064	1061	1066	0-40	1369	45.4	55	2448	2963	3317	
	10	1043	1046	1058	0-60	2413	80.0	65	2120	2674	3009	
	15	1013	1023	1042	0-90	3015	100.0	75	1713	2236	2474	
	20	975	994	1020								
	25	923	958	993								
	30	861	912	961								
	35	794	859	919								
40	718	798	865									
45	633	725	797									
50	545	641	712									
55	456	552	618									
60	372	464	521									
65	291	367	413									
70	212	275	311									
75	144	188	208									
80	84	107	115									
85	30	40	45									

photometry

2x2 SofTrace Air LED, 3400 delivered lumens, diffuse

LER – 73

<b>Catalog No.</b> 2STGA34L840-2-D <b>Test No.</b> 29804D1 <b>S/MH</b> 1.3 <b>Lamp Type</b> 45WLED <b>Lumens/Lamp</b> 3368 <b>Input Watts</b> 46  Comparative yearly lighting energy cost per 1000 lumens – <b>\$3.29</b> based on 3000 hrs. and \$.08 pwr KWH.  The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.  Photometric values based on test performed in compliance with LM-79.	<b>Candlepower</b>				<b>Light Distribution</b>			<b>Average Luminance</b>									
	<b>Angle</b>	<b>End</b>	<b>45</b>	<b>Cross</b>	<b>Degrees</b>	<b>Lumens</b>	<b>% Luminaire</b>	<b>Angle</b>	<b>End</b>	<b>45°</b>	<b>Cross</b>						
	0	1196	1196	1196	0-30	930	27.6	45	3083	3522	3893						
	5	1189	1187	1192	0-40	1529	45.4	55	2738	3328	3698						
	10	1168	1168	1182	0-60	2697	80.1	65	2339	2972	3366						
	15	1135	1145	1165	0-90	3367	100.0	75	1915	2522	2795						
	20	1088	1112	1141	<b>Coefficients of Utilization</b>												
	25	1034	1071	1112	<b>EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)</b>												
	30	966	1018	1074	pcc	80			70			50					
	35	888	959	1026	pw	70	50	30	70	50	30	50	30				
	40	804	890	966	RCR												
	45	708	809	894	0	118	118	118	115	115	115	111	111				
	50	612	721	798	1	109	104	100	106	102	97	97	94				
	55	510	620	689	2	98	91	83	95	89	82	84	80				
	60	418	516	583	3	90	80	71	88	78	70	75	68				
	65	321	408	462	4	82	70	61	80	68	60	67	59				
	70	238	310	348	5	76	63	54	73	61	54	59	53				
	75	161	212	235	6	69	56	47	68	56	47	54	46				
80	92	118	131	7	65	52	42	63	51	41	48	41					
85	36	43	53	8	60	46	39	58	46	38	45	38					
				9	56	42	34	55	42	34	40	34					
				10	53	40	32	52	39	32	38	30					

2x2 SofTrace Air LED, 3800 delivered lumens, diffuse

LER – 71

<b>Catalog No.</b> 2STGA38L840-2-D <b>Test No.</b> 29734D1 <b>S/MH</b> 1.3 <b>Lamp Type</b> 53WLED <b>Lumens/Lamp</b> 3810 <b>Input Watts</b> 54  Comparative yearly lighting energy cost per 1000 lumens – <b>\$3.38</b> based on 3000 hrs. and \$.08 pwr KWH.  The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.  Photometric values based on test performed in compliance with LM-79.	<b>Candlepower</b>				<b>Light Distribution</b>			<b>Average Luminance</b>									
	<b>Angle</b>	<b>End</b>	<b>45</b>	<b>Cross</b>	<b>Degrees</b>	<b>Lumens</b>	<b>% Luminaire</b>	<b>Angle</b>	<b>End</b>	<b>45°</b>	<b>Cross</b>						
	0	1378	1378	1378	0-30	1069	28.1	45	3566	3945	4367						
	5	1373	1366	1372	0-40	1754	46.0	55	3167	3645	4149						
	10	1348	1347	1360	0-60	3064	80.5	65	2725	3278	3781						
	15	1310	1317	1340	0-90	3809	100.0	75	2201	2784	3069						
	20	1259	1278	1313	<b>Coefficients of Utilization</b>												
	25	1193	1226	1278	<b>EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)</b>												
	30	1116	1165	1230	pcc	80			70			50					
	35	1030	1091	1173	pw	70	50	30	70	50	30	50	30				
	40	929	1005	1099	RCR												
	45	819	906	1003	0	118	118	118	115	115	115	111	111				
	50	711	803	898	1	109	104	100	106	102	97	97	94				
	55	590	679	773	2	98	91	83	96	89	82	85	80				
	60	480	566	652	3	91	80	71	88	79	70	76	68				
	65	374	450	519	4	82	70	61	81	69	61	67	59				
	70	275	340	386	5	76	64	55	73	61	54	59	53				
	75	185	234	258	6	69	56	47	68	56	47	54	46				
80	105	133	144	7	65	52	42	64	51	42	50	41					
85	42	52	57	8	60	46	39	58	46	39	45	38					
				9	56	42	34	55	42	34	41	34					
				10	53	40	32	52	40	32	39	32					

Use the following photometric tests for applications with optional enclosures:

Test Number	Catalog Number
29980D1	2STGA24L840-2-PMW
29979D1	2STGA30L840-2-PMW
29984D1	2STGA34L840-2-PMW
29986D1	2STGA38L840-2-PMW
29981D1	2STGA24L840-2-WO
29978D1	2STGA30L840-2-WO
29982D1	2STGA34L840-2-WO
29987D1	2STGA38L840-2-WO

For applications with -DS center section and/or -RIB side diffusers, use standard -D photometric tests.



©2011 Philips Day-Brite  
 All rights reserved.  
 776 South Green Street • Tupelo, MS 38804  
 p. 800.234.1890 • f. 662.841.5501 • www.daybrite.com  
 Canadian Division  
 189 Bullock Drive • Markham, Ontario L3P 1W4  
 p. 905.294.9570 • f. 905.294.9811

Contact Factory for Additional Configurations.  
 Specifications are subject to change without notice.  
 Consult website for latest version of this spec sheet.