TGL4S

Sensor Ready Select LED Backlit Troffer

Product Description

The TGL4S is a high-performance, premium LED troffer designed to meet the demands of commercial environments. Featuring an integrated sensor socket, the TGL4S is controls ready to meet the growing requirements for wirelessly controlled fixtures. Featuring a large, highly accessible junction box and a sealed, maintenance-free chamber it effectively keeps out dust and insects. Available with selectable CCT and lumen output options, users can choose between 3500K, 4000K, or 5000K CCTs, as well as low, medium, or high lumen outputs. Additionally, it holds the DLC 5.1 Premium certification, ensuring exceptional quality and performance. Ideal for offices, hospitals, and a variety of other commercial spaces, the TGL4S offers a reliable and efficient lighting solution.

Construction

- Extruded aluminum frame with powder coat finish (1'x4' model)
- Durable stamped steel housing (2'x2' and 2' x 4' models)
- High efficiency, maintenance-free LED chamber
- · Smooth formed sides for safe handling
- Increased junction box volume with 7 wiring knockouts.

Optical System

- · Patented internal optical system
- · Precision engineered polystyrene diffuser
- · High reflectivity internal coating
- No visible diodes, hot-spots, or shadows providing high uniformity, and reduced glare
- · 80 CRI for good color definition in public places

Electrical

- Input voltage of 120-277VAC
- Dim-to-off dimming via 0-10VDC controls
- Sensor-ready socket for field installable sensors.
- 12V accessory output to power sensors or other control items
- CCT and Wattage selector switches accessible on junction box
- Power factor > 0.9
- THD < 10%
- Luminaire surge protection level: designed to withstand up to 2.5kV ring wave per ANSI C82.77-5-2017 requirements for Indoor Hard-wired and Indoor Portable Luminaires
- Operating temperature range: 4°F to 104°F (-20° to 40°C)

Controls

- · Snap-in PIR motion sensor available
- NLC (Network Lighting Controls) sensor available
 - Bluetooth Low Energy (BLE) mesh network providing Luminaire Level Lighting Control
 - Luminaire integrated BLE PIR/Daylight sensor available
 - Configurable with the NICOR NLC app available on iOS and Android devices
 - Provides full dimming control with occupancy and daylight harvesting functions

Mounting and installation

- · Single cover plate with access to both line and low voltage connections
- Emergency battery backup available
- Integral grid tie clips with wire holes provided for seismic requirements
- Surface mount installation with an optional adapter
- Drywall installation with an optional adaptor
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

Listinas

- cULus 1598 Listed for damp locations
- Certified for direct contact with insulation (IC)
- RoHS Compliant
- DLC 5.1 Listing
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- TM-21 Reported L70(9k) life >54,000 hours
- LM-79, LM-80 testing performed in accordance with IESNA standards

Warranty

- 5-year limited system warranty standard
- · Warranty does not cover product failure due to an overvoltage event (power surge.)

Project

Catalog

Type

Date





TGL4S LED Backlit Troffer1x4, 2x2, 2x4
Selectable Wattage & CCT











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Ordering

Ordering Information					Example:	TGL42230SUS8S		
Series	Version	Size	Wattage	Voltage	сст	CRI	Sensor Socket	EM (Optional)
TGL	4	14 (1x4)	30S (30/25/20)	U (120-277V)	S (35/40/50)	8 (80+)	S (Sensor Ready)	Blank (none)
		22 (2 x 2)	30S (30/25/20)					E1 (EMB045)
		24 (2 x 4)	50S (50/40/30)					E2 (EMB080)

 $Specifications\ and\ dimensions\ subject\ to\ change\ without\ notice.$

Sensor Accessories	
PIR Sensor	SNAPINSENSORPIR1WH
NICOR NLC Sensor	NLCSPSS1WH

Sensor Default Settings	PIR	NLC
Hold Time	20 min	20 min
Standby Dimming Level	20%	50%
Standby Period	10 min	1 min
Sensitivity	100%	100%
Daylight Sensor	Off	Off

For complete sensor information reference the sensor spec sheet $% \frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}$

Mounting Accessories		
Flange Kit - 1x4	TPE10FK14	
Flange Kit - 2x2	TPE10FK22	
Flange Kit - 2x4	TPE10FK24	
Surface Kit - 1x4	SK22M10WH	
Surface Kit - 2x2	SK22M10WH	
Surface Kit - 2x4	SK24M10WH	

 $*Not\ a\ complete\ list.\ Check\ compatibility\ before\ installation.$

Recommended Dimmers*

Lutron NTSTV Leviton IP710 Cooper SF10P Legrand RH4FBL3PW

Photometric Data

		Performar	nce Data				:k Performance ata
Model	Output Setting	Nominal CCT	Lumens	Max Watts	Efficiency	E1 Lumens	E2 Lumens
		3500	2433	20.0	121.6	547	973
	Standard	4000	2513	20.3	123.9	557	991
		5000	2435	20.0	121.9	548	975
		3500	3041	25.0	121.6	547	973
TGL414-S	Medium	4000	3142	25.4	123.9	557	991
		5000	3044	25.0	121.9	548	975
		3500	3649	30.1	121.6	547	972
	High	4000	3770	30.5	123.8	557	990
		5000	3653	30.0	121.8	548	974
		3500	2645	20.3	130.3	586	1042
	Standard	4000	2748	19.4	141.7	638	1134
		5000	2654	19.9	133.2	599	1066
	Medium	3500	3306	25.0	132.2	595	1058
TGL422-S		4000	3435	24.2	141.7	638	1134
		5000	3318	24.9	133.2	599	1066
		3500	3967	30.8	128.5	578	1028
	High	4000	4122	29.8	137.7	619	1101
		5000	3981	30.7	129.4	582	1035
		3500	3035	30.0	101.2	455	809
	Standard	4000	3223	28.8	111.8	503	894
		5000	3039	29.8	102.1	459	816
		3500	4553	40.0	113.8	512	911
TGL424-S	Medium	4000	4835	38.5	125.7	566	1006
		5000	4559	39.7	114.8	517	919
	·	3500	6070	52.1	141.9	638	1135
	High	4000	6446	50.1	156.7	705	1254
		5000	6079	51.7	143.1	644	1145

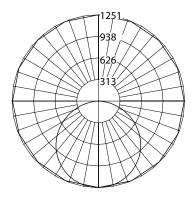


Sensor Ready Select LED Backlit Troffer

Photometric Data

TGL414S 40K 30W

Input Voltage (VAC)	120-277
System Level Power (W)	30.1
Delivered Lumens (Lm)	3770
System Efficacy (Lm/W)	125.3
Correlated Color Temp (K)	4156
Color Rendering Index (CRI)	84
Beam Angle (0)	113.3
Beam Angle (90)	120.5
Spacing Criteria (0)	1.32
Spacing Criteria (90)	1.28

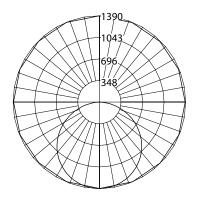


Cone of Light Tabulation			
Mounted height	Footcandles	Diameter	
(Feet)	Beam Center	(Feet)	
8	19.4	24.3	
10	12.4	30.4	
12	8.6	36.5	
14	6.3	42.5	

Data Multiplier				
TGL41430SUS8S				
35K 40K 50K				
Low	0.645	0.667	0.646	
Med	0.807	0.833	0.808	
High	0.968	1.000	0.969	

TGL422S 40K 30W

Input Voltage (VAC)	120-277
System Level Power (W)	29.8
Delivered Lumens (Lm)	4122
System Efficacy (Lm/W)	138.3
Correlated Color Temp (K)	4098
Color Rendering Index (CRI)	84
Beam Angle (0)	115.9
Beam Angle (90)	115.6
Spacing Criteria (0)	1.30
Spacing Criteria (90)	1.28

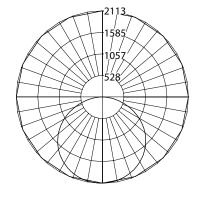


Cone of Light Tabulation				
Mounted height	Footcandles	Diameter		
(Feet)	Beam Center	(Feet)		
8	21.7	25.6		
10	13.9	31.9		
12	9.6	38.3		
14	7.1	44.7		

Data Multiplier					
	TGL42230SUS8S				
	35K 40K 50K				
Low	0.642	0.667	0.644		
Med	0.802	0.833	0.805		
High	0.962	1.000	0.966		

TGL424S 40K 50W

Input Voltage (VAC)	120-277
System Level Power (W)	50.1
Delivered Lumens (Lm)	6447
System Efficacy (Lm/W)	128.7
Correlated Color Temp (K)	4220
Color Rendering Index (CRI)	84
Beam Angle (0)	115.9
Beam Angle (90)	120.5
Spacing Criteria (0)	1.32
Spacing Criteria (90)	1.28



Cone of Light Tabulation				
Mounted height	Footcandles	Diameter		
(Feet)	Beam Center	(Feet)		
8	33.0	25.6		
10	21.1	31.9		
12	14.6	38.3		
14	10.7	44.7		

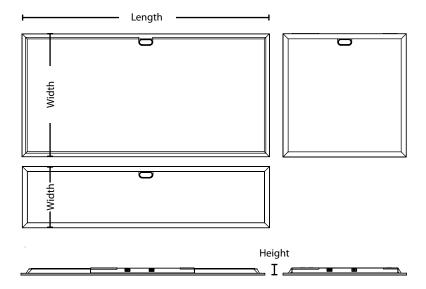
Data Multiplier					
TGL42450SUS8S					
	35K	40K	50K		
Low	0.471	0.500	0.471		
Med	0.706	0.750	0.707		
High	0.942	1.000	0.943		

 $Fixture\ tested\ per\ LM-79-08.\ Photometric\ data\ is\ of\ the\ performance\ of\ a\ representative\ fixture.\ Results\ may\ vary\ in\ the\ field.$



Dimensions

	TGL414S	TGL422S	TGL424S
Length	47.75" (1213mm)	23.74" (603mm)	47.75" (1213mm)
Width	11.89" (302mm)	23.74" (603mm)	23.74" (603mm)
Height	1.46" (3mm)		



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

