



## Photometric Data

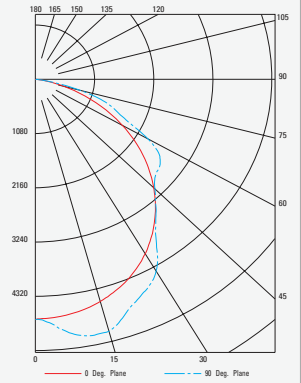
LTL#: 13107  
CAT#: CS DLI 454 UV IPS E 84I SC

### Zonal Lumen Summary

ZONE	LUMENS	%LAMP	%FIXT
0-30	3990	22.7	29.3
0-40	6487	36.9	47.6
0-60	11143	63.3	81.7
0-90	13638	77.5	100.0
90-180	0	0.0	0.0
0-180	13638	77.5	100.0

Total Luminaire Efficiency: 77.5%

CIE Type: Direct  
Plane: 0-Deg 90-Deg  
Spacing Criteria: 1.2 1.3  
Luminous Length: 46 12



## CS SERIES

### Specialty cold storage fluorescent High-Bay

The CS is a custom fixture that can be modified to meet varied operating temperature requirements within your facility; these ranging from refrigerated coolers to subzero freezers. Applications include refrigerated warehouses, cold storage, freezers, food warehouses and unheated warehousing.

#### Heat Dissipation

In each application, the fixture housing and reflector are customized allowing for the manipulation of heat for: build-up or dissipation. This unique customized design, provides conditions conducive to maximum lumen output for each given application temperature.

#### Mounting Methods

CS fixtures offer flexible mounting methods that most commonly include: standard chain hangers and surface mounting. There are several other mounting options for this fixture series, and they are listed as "hanging options" below.

#### Hanging Options

- Surface Mount [Mounting holes provided in the housing] (Standard)
- Chain Mount [Chain hangers are supplied with the fixture] (Standard)
- Quick Cable [QC – Quick hang cable system] (Optional)
- Junction Box [JB – Slide-on splice box for 3/4" stem] (Optional)
- Pendant Stabilizer [PS – Bracket for stabilizing fixture when single point hanging with a 3/4" stem] (Optional)
- Quick Bracket System [QB – Innovative hanging system for easy installation. Available with various connection points] (Optional)
- Hook [SPSH – 12" Stem, pendant stabilizer & hook for hanging in loop or eye-bolt] (Optional)
- Quick Toggle [SPST – 12" Stem, pendant stabilizer & quick toggle hanger for hanging in an eye-bolt] (Optional)

#### Product Construction

The CS fixture housing is brake formed from heavy gauge cold rolled steel. Ends and socket plates are permanently riveted together for strength and rigidity. The housing is post painted with a durable, highly reflective powder-coat finish.

#### Optical Reflector

The system is precision brake formed of the selected aluminum material, enhanced aluminum or highly reflective white. The one piece reflector is removable without the use of tools, using 1/4 turn fasteners to secure it in place.

#### Lampholders

Made of a Polycarbonate material; these locking-style lampholders are utilized to ensure positive lamp retention. Additionally, the material contributes to a longer life product in high temperature applications.

#### Lens

Standard lens is a high efficiency, high dispersion 23 pattern clear acrylic. Optional lenses are available, see ordering information.

#### Ballasts

All ballasts are electronic programmed-start (T5HO) or instant-start (T8) as a standard. Optional ballasts are available, consult factory for available systems and system specifications. Available voltages: 120v, 277v, 347v, voltage sensing 120-277v and 347-480v.

#### Lamps

Philips Optimum recommends the use of Amalgam Tip or Arctic lamps, which tolerate a much broader range of ambient temperature extremes with minimal impact on lumen output, in reduced temperature environments.

#### Listings

All fixtures are UL and CUL listed.

Please specify when ordering

Fixture Series	Temperature	Lens	# of Lamps	Lamp Type	Voltage	# Ballasts	Ballast Type	Reflector	Hanging	Options	Lamp Color	Lamp Options
CS												

## Fixture ordering guide

Fixture Series*1	Temperature	Lens	# of Lamps	Lamp Type	Voltage	# Ballasts	Ballast Type	Reflector	Hanging	Options	Lamp Color	Lamp Options*4
CS14	Specify*3	D12	3	32	12	1	HI	E	BLANK	C ( )	BLANK	HP
CS18		D125	4	54	27	2	LI	W	JB	6T1	830	A*5
CS19		D23	5		34	3	SI	B	PS	6T2	835	TG*6
CS21		DL1	6		UV	4	SI+		QB ( )	E ( )	841	SS*6
CS14T*2		DL2			HV	5	PS		QBH ( )	F	850	ES ( )
CS18T*2		CALI					PSL		QBT ( )	GSK		XL
CS19T*2							PSH		QC	NV		
							PD		QC ( )	OS ( )		
							SDH		SPSH	SC		
									SPST	WG		
										20G		
										SDT		
										PC		

\*1 14" wide fixture recommended for sub-zero applications (3-5 lamps), 18" wide for su-zero applications (6 lamps). 19" wide body for open fixture and 21" wide body for lensed fixture selection (non sub zero)

\*2 CST is an 8ft tandem fixture, # of lamps are for the profile of the fixture.

\*3 Specify temperature at which fixture will be installed

\*4 Consult factory for manufacturing specific ordering codes/availability.

\*5 Philips Optimum recommends the use of amalgam tipped lamps in extreme temperature applications.

\*6 Use in lensed fixtures is limited. Contact factory for specifi application details.

## Available fixture selections

Lens Selections	Ballast Selections	Reflector Selections	Options Selections	Lamp Color Selections
D12 Standard Prismatic	HI High Ballast Factor (HBF) Electronic*	E Enhanced Aluminum	C ( ) Single Circuit Cord (Specify Length)	BLANK Lamps Not Included
D125 0.125" Prismatic	LI Low Ballast Factor (LBF) Electronic*	W Highly Reflective White Aluminum	6T1 6' Cord with L5-I5 Locking End	830 80+ CRI, 3000K
D23 23 Pattern High Dispersion, High Efficiency	SI Standard Ballast Factor (NBF) Electronic*	B 95% Reflective Extreme White Aluminum	6T2 6' Cord with L7-I5 Locking End	835 80+ CRI, 3500K
DL1 0.118" Clear Lexan	SI+ I.OBF Electronic*		E ( ) Emergency Pack (# Lumens)	841 80+ CRI, 4100K
DL2 0.220" Clear Lexan	PS Programmed Start (NBF)	<b>Hanging Selections</b>	F Inline Fuse	850 80+ CRI, 5000K
CALI 0.118" Clear Acrylic	PSL Programmed Start LBF*	Blank V-Chain Hangers	GSK Gasket Door Frame & Housing	
	PSH Programmed Start HBF*	JB Slide-On Junction Box	NV No Venting in Housing	<b>Lamp Options Selections</b>
	PD Programmed Start Dimming	PS Pendant Stabilizer	OS ( ) Occupancy Sensor (Specify Lamps on Low/ Lamps on High)	HP High Performance, Long Life Lamps*
	SDH Step Dimming HBF (100% to 60% Dimming)*	QB Q Bracket (24", 30" or 36")	SC Safety Cable	A Amalgam Tip Lamps**
	* T8 Only	QBH Quick Bracket with Hook (24", 30" or 36")	WG Wire Guard	TG Tubeguarded Lamps
		QBT Quick Bracket for Threaded Rod (24", 30" or 36")	20G 20 gauge NYC Standards	SS Shattershielded Lamps
		QC Quick Hang Cable (10')	SDT Step Down Transformer (480V to 277V)	ES ( ) Energy Saver (Specify Wattage)
		QC ( ) Quick Hang Cable (Specify Length)	PC Photocell	XL Long Life*
		SPSH 12" Stem/PS/Hook		* T8 Only
		SPST 12" Stem/PS/Toggle		** T5HO Only

## Common fixture selections

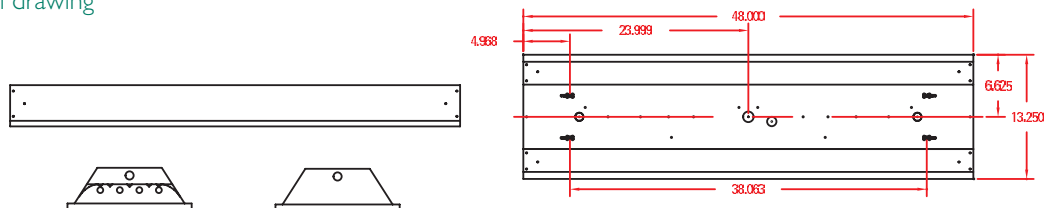
Catalog number	System	# of lamps	Wattage (120/277V)*	Initial system lumens*	Mean system lumens*
CS14 (-10F) DL1 454 UV IPS E	T5HO(Amalgam)	4	232w / 226w	19,600	18,620
CS18 (-5F) DL1 654 UV IPS E	T5HO(Amalgam)	6	348w / 341w	29,400	27,930
CS21 (10F) D23 454 UV IPS E	T5HO(Amalgam)	4	232w / 226w	19,600	18,620
CS19 (35F) 554 UV 2PS E	T5HO(Amalgam)	5	304w / 300w	24,647	23,415

\*Wattages may vary depending on the ballast manufacturer and lamp type used.

Initial and mean system lumens are the initial/mean lumen output of the lamp/ballast system as rated by lamp and ballast manufacturer and may vary from manufacturer to manufacturer.

Specifications and dimensions subject to change without notice. Contact Philips Optimum for current availability and ordering information

## Dimensional drawing



Fixture Type: \_\_\_\_\_

Catalog #: \_\_\_\_\_ Quantity: \_\_\_\_\_

Project: \_\_\_\_\_

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