

CS SERIES Specialty Cold Storage Fluorescent High-Bay

Product Description

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 Retention – 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 Include:

- 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 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 are 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 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 – Optimum Lighting 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.

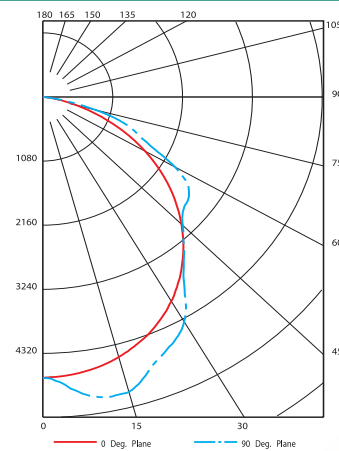
Photometric Data

LTL NUMBER: 13107
CAT#: CS DL1 454 UV 1PS E 841SC

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:	46.000 12.000



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HIGH/LOW BAY
FIXTURES



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CS – Fixture Ordering Information

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		SI+		QB ()	E ()	841	SS*6
CS14T*2		DL2			HV		PS		QBH ()	F	850	ES ()
CS18T*2		CAL1					PSL		QBT ()	GSK		XL
CS19T*2							PSH		QC	NV		
CS21T*2							PD		QC ()	OS ()		
							SDH		SPSH	SC		
									SPST	WG		
										20G		
										SDT		
										PC		

Please Specify When Ordering:

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

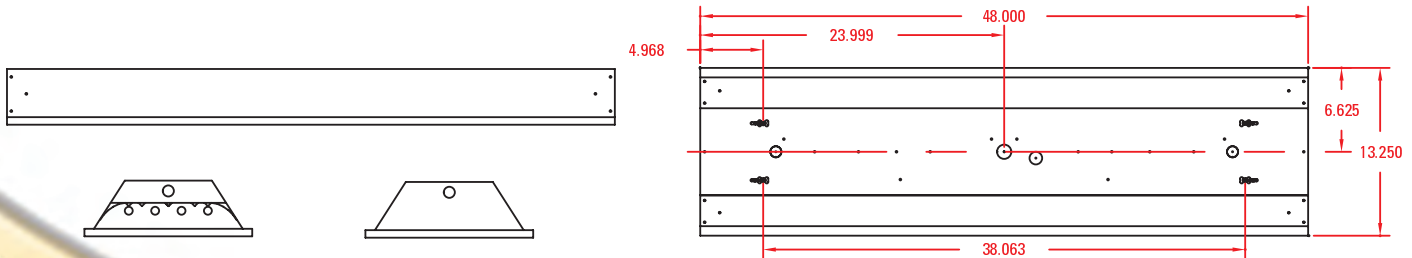
*1 14" Wide fixture recommended for Sub-Zero Applications (3-5 lamps), 18" Wide for Sub-Zero Applications (6 lamps), 19" Wide Body for open fixture and 21" Wide Body for lensed fixture selection (non Sub Zero)
 *2 CST is an 8ft Tandem fixture, # of lamps are for the profile of the fixture. *3 Specify Temperature at which Fixture will be installed *4 Consult Factory for Manufacturer Specific Ordering Codes/Availability.
 *5 Optimum Lighting recommends the use of amalgam tip lamps in extreme temperature applications. *6 Use in lensed fixtures is limited. Contact factory for specific application details.

Lens Selections D12 Standard Prismatic D125 0.125" Prismatic D23 23 Pattern High Dispersion, High Efficiency DL1 0.118" Clear Lexan DL2 0.220" Clear Lexan CAL1 0.118" Clear Acrylic Lamp Type Selections 32 F32T8 System 54 F54T5HO System Voltage Selections 12 120V 27 277V 34 347V UV 120-277V HV 347-480V	Ballast Selections HI High Ballast Factor (HBF) Electronic* LI Low Ballast Factor (LBF) Electronic* SI Standard Ballast Factor (NBF) Electronic* SI+ 1.0BF Electronic* PS Programmed Start (NBF) PSL Programmed Start LBF* PSH Programmed Start HBF* PD Programmed Start Dimming SDH Step Dimming HBF (100% to 60% Dimming)* <small>* T8 Only</small>	Reflector Selections E Enhanced Aluminum W Highly Reflective White Aluminum B 95% Reflective Extreme White Aluminum Hanging Selections BLANK V-Chain Hangers JB Slide-On Junction Box PS Pendant Stabilizer QB Quick Bracket (24", 30" or 36") QBH Quick Bracket with Hook (24", 30" or 36") QBT Quick Bracket for Threaded Rod (24", 30" or 36") QC Quick Hang Cable (10') QC() Quick Hang Cable (Specify Length) SPSH 12" Stem/PS/Hook SPST 12" Stem/PS/Toggle	Options Selections C() Single Circuit Cord (Specify Length) 6T1 6' Cord with L5-15 Locking End 6T2 6' Cord with L7-15 Locking End E() Emergency Pack (# Lumens) F Inline Fuse GSK Gasket Door Frame & Housing OS() Occupancy Sensor (Specify Lamps on Low/Lamps on High) SC Safety Cable WG Wire Guard 20G 20 gauge NYC Standards SDT Step Down Transformer (480V to 277V) PC Photocell	Lamp Color Selections BLANK Lamps Not Included 830 80+ CRI, 3000K 835 80+ CRI, 3500K 841 80+ CRI, 4100K 850 80+ CRI, 5000K Lamp Options Selections HP High Performance, Long Life Lamps* A Amalgam Tip Lamps** TG Tubeguarded Lamps SS Shattershielded Lamps ES() Energy Saver (Specify Wattage) XL Long Life* <small>* T8 Only ** T5HO Only</small>
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Common Fixture Selections

Catalog Number	System	# of Lamps	Wattage (120/277V)*	Initial System Lumens*	Mean System Lumens*
CS14 (-10F) DL1 454 UV 1PS E	T5HO(Amalgam)	4	232w / 226w	19,600	18,620
CS18 (-5F) DL1 654 UV 1PS E	T5HO(Amalgam)	6	348w / 341w	29,400	27,930
CS21 (10F) D23 454 UV 1PS 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 Optimum Lighting for current availability and ordering information.



Fixture Type: _____

Catalog #: _____ Quantity: _____

Project: _____