



CHALLENGER® (Various reflectors are protected by U.S. Patent No. 6,464,378.)

HOUSING - Rectangular shaped, multi-radiused, one-piece, die-cast aluminum with cast mounting arm. All hardware is stainless steel or electro-zinc plated steel.

DOOR FRAME - One-piece, die-cast aluminum door frame secures to the housing with two internal hinges. Two stainless steel captive door fasteners allow easy access. A one-piece extruded silicone gasket seals the door frame against the housing. The standard housing/door seal design prevents external contaminants from entering the Challenger, resulting in an IP65 rating for all versions.

LENS/GASKET - Contoured clear impact resistant glass lens for vertical lamp optics. A tempered flat clear glass lens or contoured clear impact resistant glass lens is offered for horizontal lamp optics. A one-piece extruded silicone gasket seals the lens to the die-cast aluminum door frame.

SOCKETS - Porcelain mogul-base sockets. All sockets are factory prewired with a disconnect plug for the ballast. All sockets are pulse-rated.

LIGHT SOURCES - Pulse-Start Metal Halide, Super Metal Halide, Metal Halide, Metal Halide Reduced Envelope, or High Pressure Sodium. Clear lamp is supplied as standard.

BALLASTS - High-power factor ballast with removable/hinged ballast tray. Pulse-Start Metal Halide, Metal Halide, Super Metal Halide, and High Pressure Sodium fixtures feature a CWA type ballast. All ballasts are designed for -20° F operation. Optional Quick Connect package includes supply wiring plus modular plugs for easy ballast wiring.

REFLECTORS/DISTRIBUTION PATTERNS - Vertical Burn systems include: Type II (2), Type III (3), Type V (5), Perimeter Forward Throw (FP), Automotive Forward Throw (FA), and ART (Advanced Reflector Technology) optical systems: Automotive Forward Throw (AFT) and Automotive Interior (AI). Horizontal Burn systems include: Type III (3), Type V (5) and Forward Throw (FT). All reflectors are field-rotatable, enabling generous flexibility in distribution patterns, without fixture movement. Photometric data is tested in accordance with IESNA guidelines.

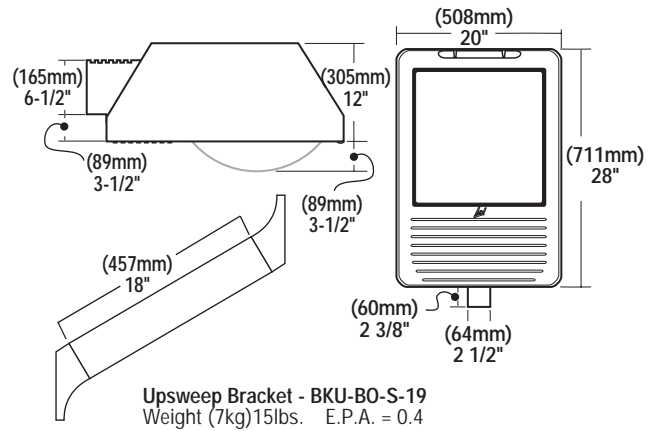
BRACKETS - Cast mounting arm is flat for square pole applications. Fixture may also be mounted to round poles using the round pole adaptor accessory (RPPC), which must be ordered separately. An extruded 6" arm extension is required for D90°, Q90°, T90° and TN 120° fixture configurations. A locking nut secures two through bolts and a reinforcing plate to the pole, stabilizing it for easy fixture mounting.

FINISHES - Each fixture is finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, buff, white, satin verde green, metallic silver, and graphite.

PHOTOMETRICS - Please visit our web site at www.lsi-industries.com for detailed photometric data.



DIMENSIONS



LUMINAIRE EPA CHART

Challenger	Cast Arm		With Extension Arm	
	F	CT	F	CT
Single	1.8	2.0	2.2	2.3
D180°	3.7	4.1	4.3	4.6
D90°	Extension Arm Required		3.9	4.3
T90°			6.1	6.5
TN120°			6.3	6.9
Q90°			7.7	8.6

Note: F - Flat Glass CT - Contoured

Note: House Side Shield adds to fixture EPA. Consult factory.

SHIPPING WEIGHTS - Challenger

Catalog Number	Est. Weight (kg/lbs.)	Length (mm/in.)	Width (mm/in.)	Height (mm/in.)
CHV	41 / 91	87 / 34.5	603 / 23.75	464 / 18.25
CHH	39 / 86	87 / 34.5	603 / 23.75	464 / 18.25



IP65

wet location



Project Name _____ Fixture Type _____
Catalog # _____



LUMINAIRE ORDERING INFORMATION

Luminaire Prefix	Distribution	Lamp Wattage	Light Source	Lens	Line Voltage ⁵	Luminaire Finish
Vertical Burn CHV	2-Type II	250	PSMV – Pulse-Start Metal Halide	CT – Contoured Clear Impact-resistant Glass	480	BRZ - Bronze BLK - Black PLP - Platinum Plus BUF - Buff WHT - White SVG - Satin Verde Green GPT - Graphite MSV - Metallic Silver
	3-Type III	320	250, 320, 400, 750, 1000 ² Watt			
	5 - Type V	400	SMV – Super Metal Halide		MT - Multi Tap ⁶ TT - Tri-Tap ⁷	
	FP- Forward Throw Perimeter	750	400 Watt			
	FA-Automotive Forward Throw	1000	MH - Metal Halide 250, 400 Watt			
	MHR – Metal Halide Reduced Envelope 1000 Watt					
	HPS – High Pressure Sodium 250,400,750 ³ Watt					
	Advanced Reflector Technology Optical Systems:	750 ¹	PSMV – Pulse-Start Metal Halide			
	AFT-Automotive Forward Throw	1000	750, 1000 ² Watt			
	Al-Automotive Interior		MHR – Metal Halide Reduced Envelope 1000 Watt			
Horizontal Burn CHH	3 – Type III	250	PSMH – Pulse-Start Metal Halide	F – Flat Clear Tempered Glass		
	FT – Forward Throw	320	320, 750, 1000 ²			
	5 – Type V	400	SMH – Super Metal Halide	CT – Contoured Clear Impact-resistant Glass ⁴		
		750	250, 400 Watt			
		1000	MH – Metal Halide 250, 400 Watt			
			MHR – Metal Halide Reduced Envelope 1000 Watt			
			HPS – High Pressure Sodium 250, 400, 750 ³ Watt			

EXAMPLE OF A TYPICAL ORDER

CHV 5 1000 MHR CT MT MSV PCR

Options

PCR - Photoelectric Control Receptacle⁸

QC - Quick Connect Package

GR - Ground Relamping⁹

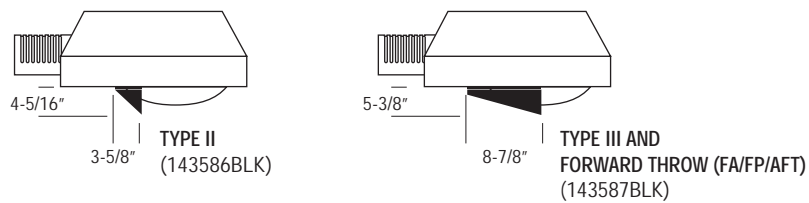
LL - Less Lamp

- FOOTNOTES:**
- 1- 750 Watt ART reflectors are available with PSMV only.
 - 2- Tri-Tap not available in 1000 Watt PSMV. Voltage must be specified – 120V, 277V, or 347V.
 - 3- When ordering 750 Watt High Pressure Sodium, voltage must be specified.
 - 4- Use to match vertical appearance.
 - 5- For international voltages, consult factory.
 - 6- MT – Multi Tap is shipped standard unless otherwise specified. Multi Tap consists of 120V, 208V, 240V, and 277V. Multi Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.
 - 7- Tri-Tap is shipped standard for Canadian applications. Tri-Tap consists of 120V, 277V, and 347V. Tri-Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.
 - 8- Factory installed PCR requires field wiring to proper voltage. On QC version, PCR is factory pre-wired to highest voltage. Alternate voltages will require field re-wiring.
 - 9- Ground relamping option is available for CHV only. Maximum tool length 15 ft. See below for Ground Lamp Changer.

ACCESSORY ORDERING INFORMATION (Accessories are field installed)

Description	Order Number	Description	Order Number
PC120 – Photocell	122514	CHH/CHV 3 HSS – External House Side Shield	143587BLK++
PC208-277 – Photocell for 208V, 240V or 277V	122515	CHV FA/AFT HSS – External House Side Shield	143587BLK++
PC347 – Photocell	159516	CHH/CHV FP/FT HSS – External House Side Shield	143587BLK++
PC480 – Photocell	1225180	RPPC – Round Pole Plate	141940CLR
FK120 - Single Fusing	FK120+	BKS-BO-WM-* -CLR Wall Mount Plate	123111CLR
FK277 - Single Fusing	FK277+	BKA-BO-EC-6-CLR Extension Arm	
DFK208, 240 - Double Fusing	DFK208, 240+	Required for multiple mounting @ all 90° & 120° configurations	142862CLR
DFK480 - Double Fusing	DFK480+	BKU-BO-S-19-CLR Upsweep Bracket for round and square poles	144191CLR
FK347 - Single Fusing	FK347+	Ground Lamp Changer	132678A 146018A
CHH/CHV 2 HSS – External House Side Shield	143586BLK++		(250, 320 Watt) (400 Std, 1000 Watt Reduced & 750 Watt HPS)

HOUSE SIDE SHIELDS



Project Name _____ Fixture Type _____

Catalog # _____