

HHS – High Security Hi Bay

- Re-lighting correctional facilities or other demanding institutional environments requires extremely vandal resistant fixtures.
 - The HHS combines energy efficiency and heavy duty construction to provide the vandal resistance needed to stand up to the toughest of institutional challenges.
 - Deep, well ventilated, 22 steel gauge housing
 - Internal aluminum ballast plates ensure optimal BCT
 - 1/4" tempered glass lens protects fully enclosed lamp cavity
 - Protective lens shield requires removal of tamper resistant screws for lens frame access

- Why P2? It's Simple, Our Experience.
 - Municipalities and government institutions need solutions to difficult applications.
 - We made the HHS so you can provide security and energy efficiency to your toughest institutional customers.

HHS – Extreme Vandal Resistant Hi-Bay



Application

- Penitentiaries, detention centers, correctional facilities, psychiatric hospitals, schools.
- High vandalism areas.
- Available in 3 or 4-lamp T5HO.

HHS – 2x4 – 4L – T5HO – UL1 – MN – PS – ST – EA – TG – C8 – PPC

HHS	2x4	4L	T5HO	UL1	MN	PS	ST	EA	TG	C8	PPC	
Model	Fixt Size	Lamp Qty	Lamp Type	Voltage	Ballast Factor	Ballast Starting	Ballast Grade	Reflector Material	Lens	Cord Plug	Other	Other

Fixture Model
HHS = High Security Hi Bay

Fixture Size
2x4 = 2x4 Nominal

Lamp Qty
xL = x Indicates quantity of lamps

Lamp Type
T5HO = Linear T5HO Lamps

Voltage (1)
UHx = Universal 347-480
ULx = Universal 120-277

Ballast Factor (2)
MN = Neutral Power (.97 - 1.04)

Ballast Starting
PS = Programmed Start

Ballast Grade
ST = Standard Grade

Reflector Material
EA = Enhanced Aluminum 93-94%
WA = White Aluminum Reflector 90-91%
MM = Micro Matte Enhanced Aluminum Reflector 91-93%

Lens
TG = 1/4" Tempered Glass
CP = 1/4" Clear Polycarbonate

Cord & Plug
C8 = 8' Cord, No Plug
C8/L715 = 8' Cord & Plug (L7-15P)
PQC15 = 15' Cord/Quick Connect

Occupancy Sensor(3)
SHx = Standard 360 View Hi-Bay
RHx = Rectangular Aisle View Hi-Bay

Other
LF = Factory Lamps (Lamp spec elsewhere)
PPC = Post Production Powdercoat White

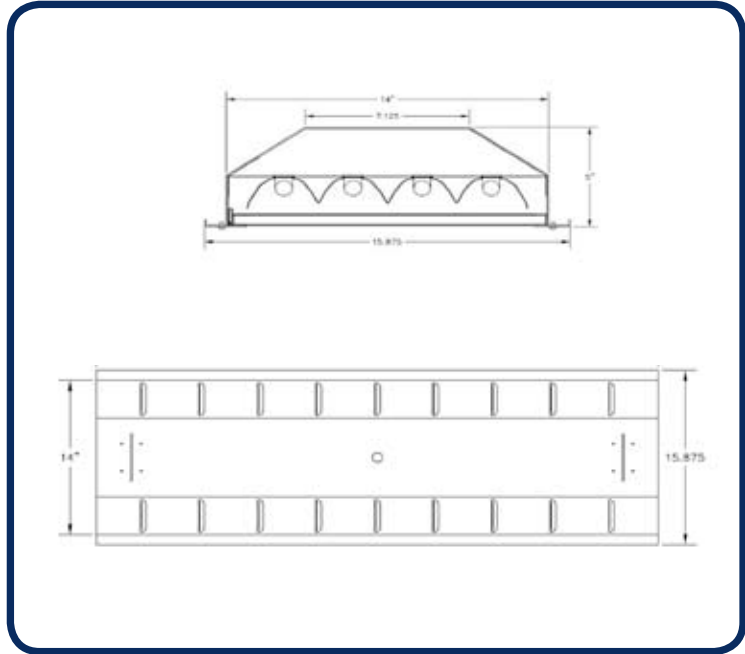
Numeric Footnotes

- Numeral indicates number ballasts per fixture.
- Ballast factors outside ranges shown to be called out numerically.
- Numeral indicates number of lamps controlled.

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Fixture Construction

- 22 gauge pre-paint white steel body.
- Optional post production powdercoat.
- Enhanced aluminum reflector 93-95% reflectivity.
- ¼" Tempered Glass Lens.
- Dedicated 2-point hanging brackets and V-Hangers.
- Tamper resistant screws secure the protective lens shield in place to prevent lens frame access.
- Made in the USA: Hudson WI, Gainesville FL, Orange County CA.



Existing System

Existing Lamp / Ballast System	Lamp Qty & Type	Initial Lamp Lumens	Lumen Maintenance	EOL(1) Lumens All Lamps	Total Fixture Lumens	Ballast Factor	Fixture Efficiency	EOL(1) Lumens Per Fixt	S/P (2) Ratio	Net (3) EOL Lumens	Fixt Input Watts
MH320PS	1 PS MH320	31,700	62%	19,654	19,654	1.00	0.75	14,741	1.49	20,119	368
MH400	1 Std MH400	38,000	58%	22,040	22,040	1.00	0.75	16,530	1.49	22,561	458
HPS400	1 Std HPS400	50,000	70%	35,000	35,000	1.00	0.75	26,250	0.62	18,080	464

Re-Lighting Options

Existing Lamp / Ballast System	Lamp Qty & Type	Initial Lamp Lumens	Lumen Maintenance	EOL(1) Lumens All Lamps	Total Fixture Lumens	Ballast Factor	Fixture Efficiency	EOL(1) Lumens Per Fixt	S/P (2) Ratio	Net (3) EOL Lumens	Fixt Input Watts
3L-T5HO	3 FP54T5HO	5,000	93%	4,650	13,950	1.00	0.90	12,555	1.62	18,291	176
4L-T5HO	4 FP54T5HO	5,000	93%	4,650	18,600	1.00	0.90	16,740	1.62	24,388	234

(1) EOL = End of Life (2) S/P Ratio = Scotopic to Photopic Lumens (3) Net EOL Lumens = EOL Lumens Per Fixture x (S/P).78 [.78 exponent]

General Notes

- Lamp/ballast system values shown are a general reference intended to supply a quick comparison of several common lamp/ballast systems, the associated energy consumption, and net lumen output.
- Values shown are based on rated lamp operating temperatures (25c T8 and 35c T5) and wattage at 277 volts. Light output will vary in this sealed fixture based external ambient temperatures and heat load associated with the lamp ballast combination selected. Consult factory for RLO curves required to properly design your system.
- Fixture efficiency percentages are generally representative of each system type, actual values will vary.
- There are many operating variables that affect system output, in addition to rating variances from brand to brand.
- All T8 electronic ballast values shown are based on Ultra Efficient (aka 3rd Generation) T8 ballasts.
- All T5 and T8 lamp values shown are for basic grade lamps. Extended life and higher lumen lamps types are available.
- In addition to those shown there are a wide variety of systems to choose from, each with distinct features and cost points.
- Please consult the lamp/ballast manufacturer's catalogs for the detailed information required to model your system.