

Metaline

Designed for highly efficient, glare-free, even illumination of large areas such as sports arenas and sport stadiums, race tracks, docks, railroad yards, container terminals, industrial areas, airport aprons, architectural and building lighting.

- Compact, low profile design
- Metal halide lamps give excellent color rendering
- High performance, low glare optical system
- Choice of beam distributions
- Aiming angle remains undisturbed when cleaning glass or replacing lamp

Lamps

1500W Linear Metal Halide (MBIL) lamp
 1000W Linear High Pressure Sodium (TD) lamp
 For 750W Metal Halide and 400W High Pressure Sodium lamps - consult factory.

Materials/Finish

Body: Two, marine grade - copper free, die cast aluminum end castings, black polyester powder coat finish

Front lens: Heat and impact resistant tempered glass

Reflectors: Features two distinct reflector systems. The MA Series specular compound reflector, and the MS Series specular parabolic reflector. Both systems feature:

- 1) Specular side reflector for improved overall efficiency
- 2) Wide horizontal beam spread with excellent spread uniformity
- 3) Sharp cut-off above the peak of superior glare control
- 4) Linear beam spread for maximum efficiency in lighting rectangular areas

Installation/Mounting

Yoke or pole top fitter allows for horizontal and vertical adjustment. Ballast housing can be remotely mounted except ignitors for 1000W HPS-TD. Die cast aluminum lens frame, hinged for front lamp replacement, with silicone gasket, secured by four stainless steel swivel bolts.

Note: Luminaire must not be operated without glass. MBIL lamp must be used within 15° of horizontal.

Standard

UL listed - 1000W High Pressure Sodium
 1500W Metal Halide - consult factory

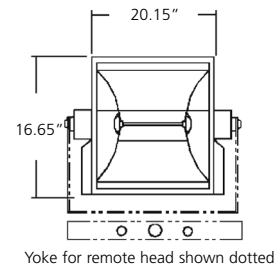
Specification

To specify state:
 Yoke mounted, enclosed, low-glare area floodlight for linear MBIL or HPS-TD lamps with remote control gear. As North Star Metaline Series.

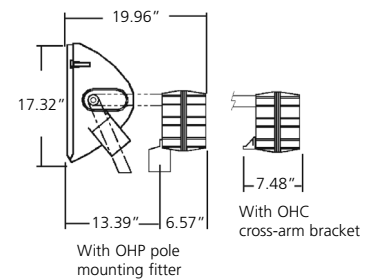


Lamp included

Effective Projected Area
 EPA = 1.9 SQ. FT.
 WEIGHT = 68 lbs (remote head only 24 lbs.)



Yoke for remote head shown dotted



With OHP pole mounting fitter

With OHC cross-arm bracket

Ordering Example

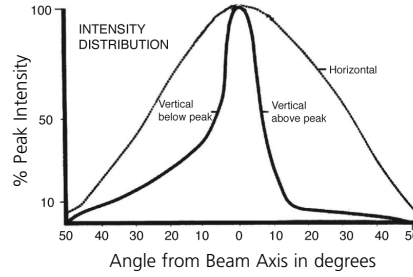
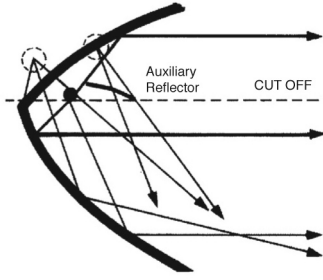
Unit	Photometrics	Lamp Style	Wattage	Voltage
M	A	M	1500	120H
Metaline	A - Assymmetric P - Symmetric	M - Metal Halide S - High Pressure Sodium	1000 1500	120H 208H 240H 277H 480H 4MT

Catalog Number (1)	Wattage	Lamp	Field Angle (1/10 Peak)	NEMA Type
MA Series Reflector				
MAS	1000	HPS-TD	82.3 x 46	5 x 3
MAM	1500	MBIL	85.8 x 57.7	5 x 4
MP Series Reflector				
MPS	1000	HPS-TD	81.4 x 18.6	5 x 2
MPM	1500	MBIL	82 x 20	5 x 2

Accessories	
OHC	Cross Arm Mounting Bracket
OHP	Pole Top Fitter
MAR	Reflector insert for MA series

*MAR - Reflector insert for MA series increases vertical beam spread above peak. For low mounting heights and aiming angles below 50°.

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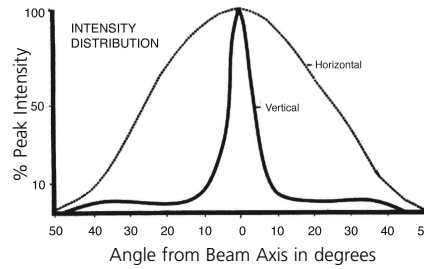
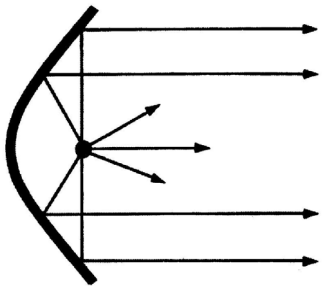
MA Series (Assymmetric)

Description

The MA Series has a specially developed reflector profile coupled with an internal lamp shield/auxiliary reflector. This has the dual function of cutting off the beam above horizontal, and re-directing it at low angles, resulting in a smooth distribution from mounting position to aiming point from this arrangement.

Cut-Off

The output above peak reduces to 50% in 4° (1000W HPS) or 4° (1500W MH)



MP Series (Symetric)

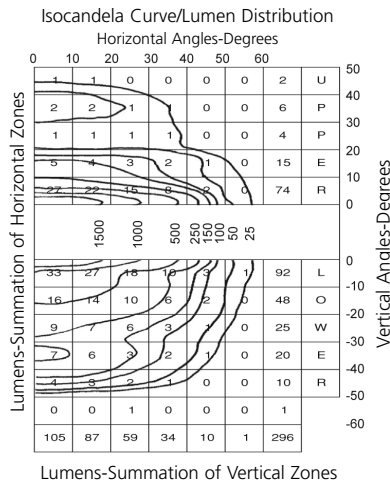
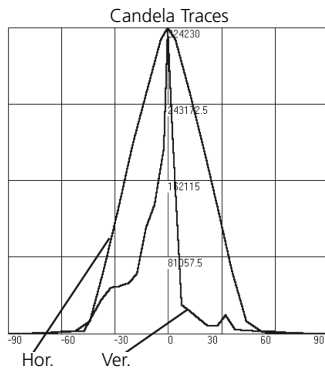
Description

The MS Series has a parabolic reflector without any auxiliary devices. A smooth beam results, which is essentially symmetrical in the vertical plane. However, it is a sufficiently narrow beam to achieve the same cut-off as the MA Series, both above and below the horizontal.

Cut-Off

The output above peak reduces to 50% in 4-1/2° (1000W HPS) or 4° (1500W MH)

Photometrics



Fixture: MALS-1000

Lamp: 1000 Watt Clear Double-Ended High Pressure Sodium

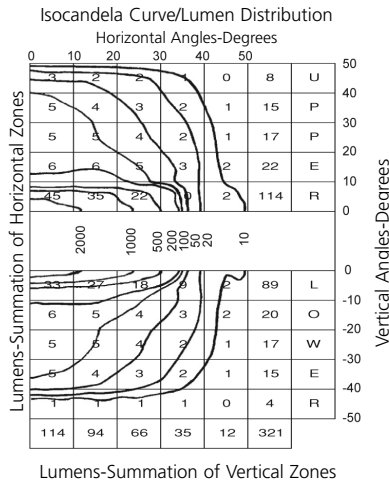
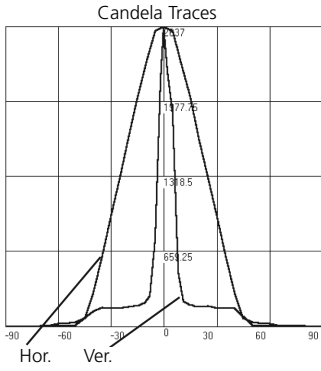
IES Type	5H x 3V
Max Candela	2315
Hor Field Angle (10%)	82.3 deg
Ver Field Angle (10%)	46.0 deg
Field Lumens	500
Field Efficiency	50%
Total Lumens	626
Total Efficiency	62.6%

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens



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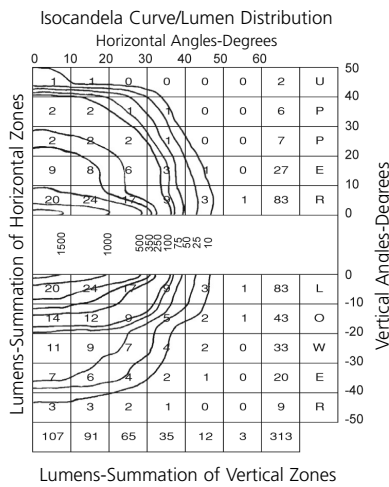
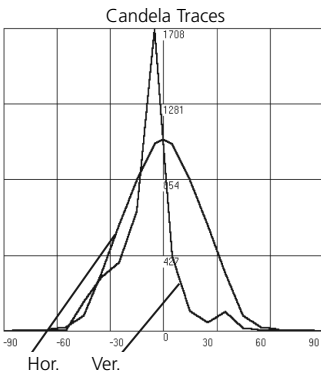


Fixture: MSLS-1000
Lamp: 1000 Watt Clear Double-Ended High Pressure Sodium

IES Type 5H x 2V
Max Candela 2637
Hor Field Angle (10%) 81.4 deg
Ver Field Angle (10%) 18.6 deg
Field Lumens 206
Field Efficiency 20.6%
Total Lumens 384
Total Efficiency 38.4%

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens

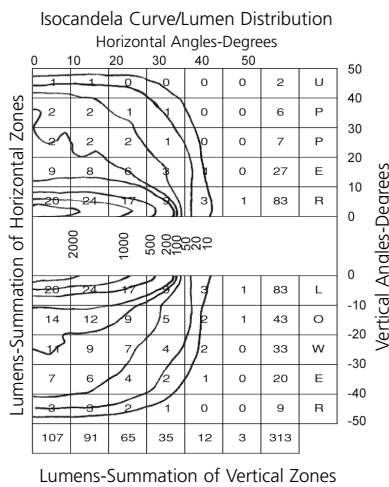
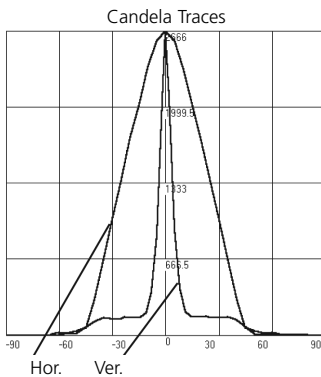


Fixture: MAMH-1500
Lamp: 1500 Watt Frosted Double-Ended Metal Halide

IES Type 5H x 4V
Max Candela 1708
Hor Field Angle (10%) 85.8 deg
Ver Field Angle (10%) 57.7 deg
Field Lumens 536
Field Efficiency 53.6%
Total Lumens 642
Total Efficiency 64.2%

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens



Fixture: MSMH-1500
Lamp: 1500 Watt Frosted Double-Ended Metal Halide

IES Type 5H x 2V
Max Candela 2666
Hor Field Angle (10%) 82.0 deg
Ver Field Angle (10%) 20.0 deg
Field Lumens 356
Field Efficiency 35.6%
Total Lumens 570
Total Efficiency 57.0%

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens