

# INVÜE™

VISION FLOOD ARCHITECTURAL FLOOD LUMINAIRE

# VISION FLOOD

## ARCHITECTURAL FLOOD LUMINAIRE

- Facade
- Sign
- Landscape
- Architectural Highlighting
- General Area Illumination

### FLUENT FORM

VISION Flood's cylindrical form blends effortlessly to architectural and landscape environments. Available in wattages up to 1000 watt Metal Halide and in two (2) housing sizes, VISION Flood offers properly scaled solutions for any floodlighting application.

### EXCEPTIONAL DESIGN

Designed for sustaining quality, VISION Flood's precisely engineered die-cast aluminum housing and door incorporate IP65 rated gasketing strategies, while the heavy duty knuckle provides infinite aiming flexibility and lock-down strength tested to withstand 3G of vibration.

### OPTICAL FLEXIBILITY

Designed to offer community friendly optical control, VISION Flood optics focus lamp output into defined rectangular patterns while controlling direct visibility of the lamp, a root cause of glare and light pollution. Six (6) available optical systems provide maximum design flexibility, while a broad array of light control accessories provide supplemental cutoff control.





# FLOODLIGHTING FUNDAMENTALS

- Inverse Square Cosine Law

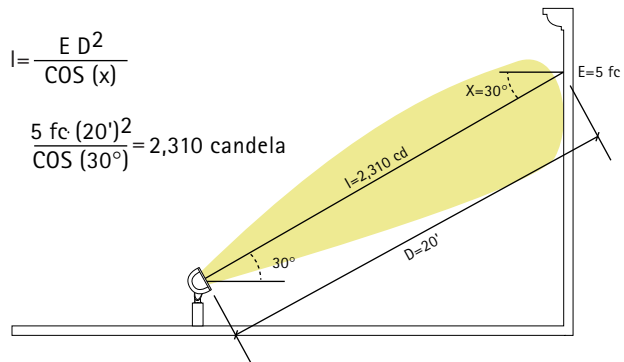
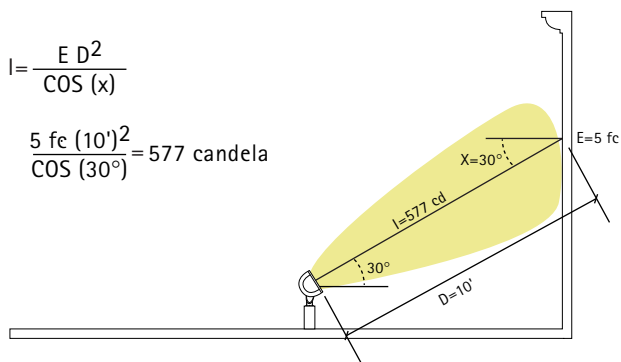
Footcandle levels are ultimately dependent upon the projected distance, aiming angle, and luminous intensity of a lamp/reflector combination. A cursory understanding of the equation which relates these variables provides insights to proper design technique and distribution selection.

## INVERSE SQUARE COSINE LAW

$E = I \cos(x) / D^2$  -or-

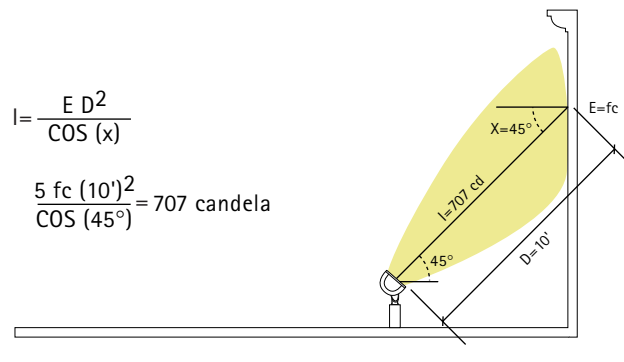
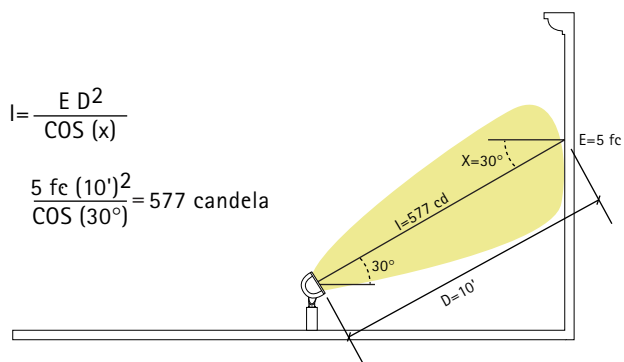
**Illuminance (Footcandles, fc) = Luminous Intensity (Candelas, Cd) \* cos (incident angle X) / Distance<sup>2</sup>**

Holding other variables constant, as the projected distance increases from the luminaire to the surface being illuminated, a greater amount of luminous intensity (I, Candela) is required to sustain an equal illuminance (E, Footcandle) level.



Holding incident angle X constant at 30° while increasing the projected distance D from 10' to 20' requires an increase in candela from 577 to 2310 respectively to sustain an equal 5 footcandles (fc) of illumination at the target point.

The incident angle as measured from a luminaire's directed intensity to the target surface normal also plays a significant role in determining illuminance values. Holding other variables constant as the incident angle from the target surface to the projected aiming line increases, so does the amount of luminous intensity (I, Candela) required to sustain an equal illuminance value.



Holding projected distance D constant at 10' while increasing incident angle X from 30° to 45° requires an increase in candela from 577 to 707 respectively to sustain an equal 5 footcandles (fc) of illumination at the target point.

# FLOODLIGHTING TERMINOLOGY

- Floodlighting Terminology
- NEMA [IES] Classifications

## FLOODLIGHTING TERMINOLOGY

Ever wonder how NEMA (H x V) Classifications are derived, or how they relate to the performance and design application of a floodlighting distribution? How about beam and field angles, and maximum candela values?

- **Maximum Candela** is defined as the maximum candela value emitted from the luminaire in any given direction.
- **Beam angle** is defined as the included angle between points of 50% of Maximum Candela.
- **Field Angle** is defined as the included angle between points of 10% of Maximum Candela.

As an example, a distribution with a 50,000 Cd maximum candela value as shown in the intensity distribution graph to the right (FIG. 1) would have a Beam Angle defined by the included angle of 25,000 Cd values, and a Field Angle defined by the included angle of 5,000 Cd values.

## EXAMPLE

Max Candela = 50,000 Cd

Candela Value defining Beam Angle = (50% \* 50,000 Cd) = 25,000 Cd

Candela Value defining Field Angle = (10% \* 50,000 Cd) = 5,000 Cd

Beam Angle = 90°

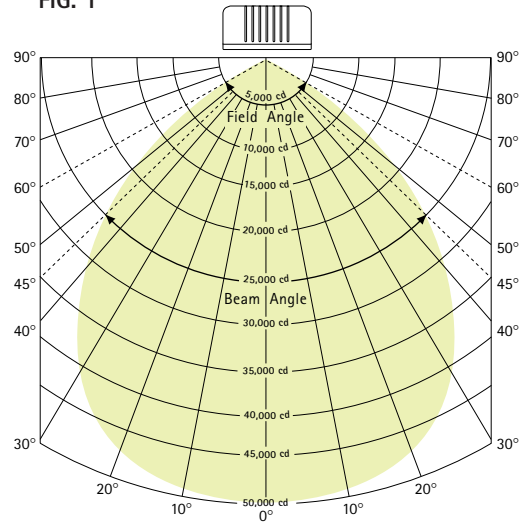
Field Angle = 120°

## NEMA [IES] CLASSIFICATIONS

NEMA classifications are extrapolated from the table below and are determined by a distribution's Field Angle. This relative classification is used to describe the general shape and application of a distribution. NEMA classifications are used to classify both the horizontal and vertical components of a floodlight distribution.

The example distribution in FIG. 1 above would have a NEMA Classification of 6 as the 120° Field Angle falls between the 100-130° range.

FIG. 1



NEMA Beam Classification	Field Angle Range	Description + Setback
1	10-18°	Narrowest Beam, Long Setback
2	18-29°	Narrow Beam, Long Setback
3	29-46°	Narrow Beam, Long Setback
4	46-70°	Medium Beam, Medium Setback
5	70-100°	Medium Beam, Medium Setback
6	100-130°	Wide Beam, Shorter Setback
7	130°-Greater	Widest Beam, Short Setback

**VISION Flood offers a host of beam control options that limit unwanted stray light and control direct viewing of the lamp source.**

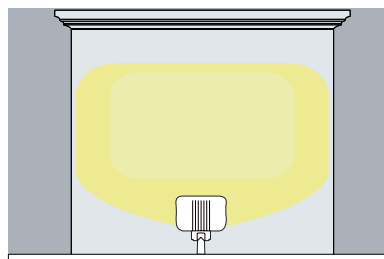
## **SPILL + GLARE CONTROL**

- Internal Louvers
- External Grid Louvers
- Top Visor
- 4 Sided Shield
- Barn Doors
- Rectangular Beam Patterns

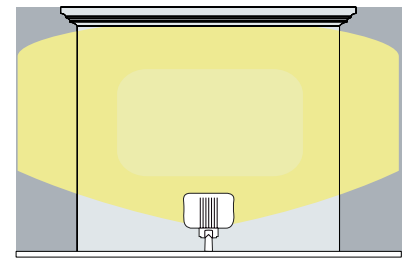
Limiting the amount of stray light which falls beyond the boundaries of the intended target is not only good design practice, but is increasingly a mandate of local and state adopted lighting ordinances. The VISION Flood series offers a family of beam control options to limit unwanted stray light and control direct viewing of the lamp, a common source of discomfort and disability glare.

### **INTERNAL LOUVERS**

Standard on Narrow Spot and Narrow Flood distributions, integral ring louver controls lamp glare while eliminating spill light outside the main beam.



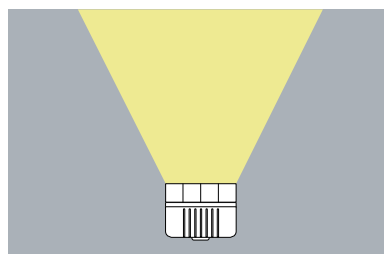
With Internal Louvers



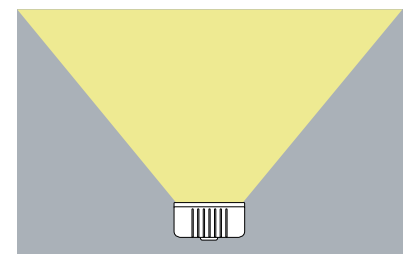
Without Internal Louvers

### **EXTERNAL GRID LOUVERS**

Designed to control lamp glare and spill light while maintaining beam efficiency. Useful when aiming direction or intended target lies in close proximity to pedestrian and/or motor vehicle activity. Mounts to accessory channel in doorframe. Compatible with all distributions. Available on VFM only.



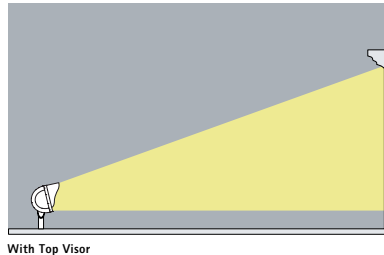
With External Louvers



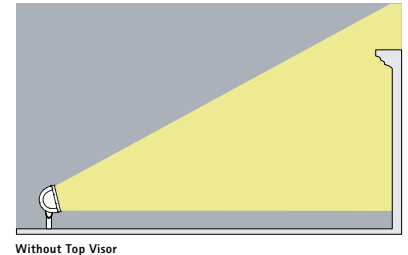
Without External Louvers

## TOP VISOR

Controls excess spill and glare on top portion of distribution. Especially useful in uplighting applications to limit light travel above an intended wall surface or sign. Mounts to accessory channel in doorframe. Compatible with all distributions.



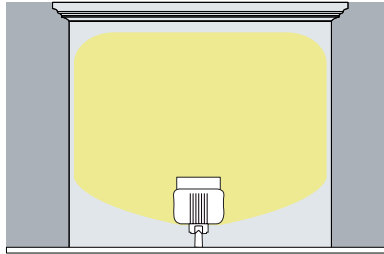
With Top Visor



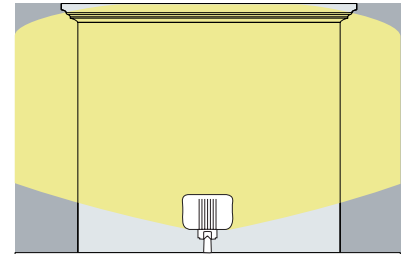
Without Top Visor

## 4-SIDED SHIELD

Controls lamp glare and spill light in all directions. Useful when aiming direction or intended target lies in close proximity to pedestrian and/or motor vehicle activity. Mounts to accessory channel in doorframe. Compatible with all distributions. Available on VFM only.



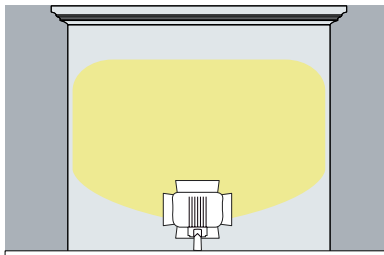
With 4-Sided Shield



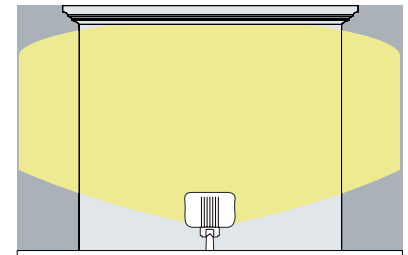
Without 4-Sided Shield

## BARN DOORS

Four (4) independently mounted and adjustable doors control cutoff angles in all directions, allowing custom distribution control. Compatible with all distributions.



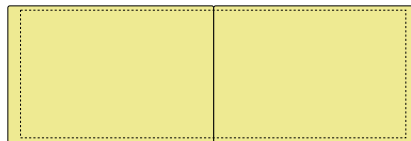
With Barn Doors



Without Barn Doors

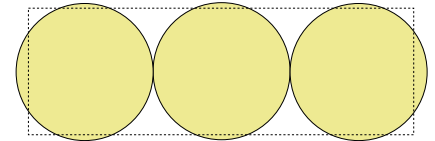
## RECTANGULAR BEAM PATTERNS

Structures, signs, and other various objects which dominate our visual landscape are largely defined by straight lines and planar surfaces. Lighting these objects with rectangular distributions eliminates excess spill light while maintaining optimal uniformity.



Rectangular Beam Patterns

Rectangular beams produce more uniform coverage, resulting in reduced fixture counts and less stray light spilling beyond the intended target.



Typical Round Beam Patterns

Typical round patterns create shadows in corners, requiring closer fixture spacings. Uniformity is compromised.

# DESIGN GUIDE

- Illumination Recommendations
- Beam Pattern Information

## ILLUMINATION RECOMMENDATIONS

Effective floodlighting design is a complex and subjective task. Results are heavily dependent upon surrounding light levels, surface finish of the intended target, spectral color distribution of the lamp source, mounting location allowances, and viewers perceptions.

The following table lists IESNA (Illuminating Engineering Society of North America) recommended illuminance levels for the floodlighting of buildings and monuments.

Area Description	Target Surface Finish	Average Target Illuminance
Bright Surroundings	Light Surfaces	5 fc
Bright Surroundings	Medium Light Surfaces	7 fc
Bright Surroundings	Dark Surfaces	10 fc
Dark Surroundings	Light Surfaces	2 fc
Dark Surroundings	Medium Light Surfaces	3 fc
Dark Surroundings	Medium Dark Surfaces	4 fc
Dark Surroundings	Dark Surfaces	5 fc

Cooper Lighting Application Engineers are available to assist in providing design layouts, aiming diagrams, and illuminance plots for your next floodlighting project. Consult your INVUE Lighting Systems Representative for more information.

## BEAM PATTERN INFORMATION

Lamp Wattage	Lamp Type	Beam Pattern	NEMA IES Type	Beam (50% Max. Candela) in Degrees	Field Angle (10% Max. Candela) in Degrees	Maximum Candela Value	Total Efficiency
175W MH <sup>1</sup>	ED-17	Narrow Spot	1 H x 3 V	7 H x 15 V	17 H x 33 V	102,434	60%
		Narrow Flood	3 H x 3 V	16 H x 23 V	30 H x 45 V	53,892	71%
		Medium Flood	5 H x 3 V	52 H x 18 V	74 H x 41 V	25,698	84%
		Wide Flood	7 H x 6 V	70 H x 55 V	132 H x 103 V	8,346	84%
		Vertical Flood	7 H x 6 V	98 H x 58 V	147 H x 130 V	5,420	71%
		Horizontal Spot	6 H x 6 V	80 H x 27 V	111 H x 120 V	10,694	83%
400W MH <sup>2</sup>	BT-37	Narrow Spot	1 H x 2 V	8 H x 16 V	14 H x 27 V	304,593	41%
		Narrow Flood	2 H x 3 V	12 H x 19 V	23 H x 36 V	162,701	50%
		Medium Flood	4 H x 4 V	22 H x 23 V	48 H x 49 V	92,191	81%
		Wide Flood	7 H x 6 V	86 H x 58 V	137 H x 101 V	20,734	81%
		Vertical Flood	7 H x 7 V	106 H x 57 V	145 H x 139 V	14,761	74%
		Horizontal Spot	5 H x 5 V	86 H x 15 V	94 H x 90 V	34,463	61%
1000W MH <sup>3</sup>	BT-37	Narrow Spot	1 H x 4 V	5 H x 16 V	13 H x 48 V	633,201	51%
		Narrow Flood	2 H x 4 V	14 H x 27 V	29 H x 55 V	279,879	53%
		Medium Flood	4 H x 4 V	23 H x 33 V	53 H x 68 V	197,476	78%
		Wide Flood	7 H x 6 V	85 H x 74 V	139 H x 116 V	52,625	83%
		Vertical Flood	7 H x 7 V	111 H x 55 V	152 H x 135 V	42,981	76%
		Horizontal Spot	6 H x 5 V	85 H x 16 V	105 H x 96 V	99,290	64%
150W HPS <sup>4</sup>	ED-17	Narrow Spot	1 H x 4 V	9 H x 23 V	17 H x 46 V	74,261	61%
		Narrow Flood	3 H x 4 V	21 H x 31 V	31 H x 57 V	41,007	70%
		Medium Flood	5 H x 4 V	49 H x 27 V	77 H x 54 V	23,522	81%
		Wide Flood	7 H x 6 V	8 x 69 V	136 H x 109 V	7,567	79%
		Vertical Flood	7 H x 6 V	99 H x 55 V	145 H x 126 V	6,331	69%
		Horizontal Spot	5 H x 6 V	77 H x 14 V	95 H x 112 V	18,237	84%
400W HPS <sup>5</sup>	ED-18	Narrow Spot	1 H x 4 V	6 H x 20 V	13 H x 47 V	260,454	48%
		Narrow Flood	2 H x 4 V	15 H x 27 V	27 H x 52 V	112,314	44%
		Medium Flood	4 H x 5 V	23 H x 33 V	54 H x 71 V	86,573	78%
		Wide Flood	7 H x 6 V	88 H x 80 V	140 H x 117 V	21,630	80%
		Vertical Flood	7 H x 7 V	102 H x 60 V	145 H x 137 V	20,686	75%
		Horizontal Spot	6 H x 5 V	81 H x 15 V	102 H x 100 V	44,433	62%

<sup>1</sup> If using a 100W MH lamp, apply a 0.629 scaling factor to the 175W MH maximum candela values.

<sup>2</sup> If using a 250W MH lamp, apply a 0.569 scaling factor to the 400W MH maximum candela values.

<sup>3</sup> If using a 750W MH lamp, apply a 0.745 scaling factor to the 1000W MH maximum candela values.

<sup>4</sup> If using a 100W HPS lamp, apply a 0.594 scaling factor to the 150W HPS maximum candela values.

<sup>5</sup> If using a 250W HPS lamp, apply a 0.55 scaling factor to the 400W HPS maximum candela values.



# COLOR CAPABILITIES

Infusing color to a visual landscape elicits attention,  
emotion, and intrigue.

## COLOR CAPABILITIES

VISION Flood can be specified with one of four (4) standard color gels: Deep Green, Bright Blue, Red or Warm Orange. Dichoric glass filter options and custom colors are also available. Consult your INVUE Lighting Systems Representative for more information.



**WITH COLOR FILTER  
ADAPTER**



**METAL HALIDE  
DEEP GREEN FILTER**



**HIGH PRESSURE SODIUM  
DEEP GREEN FILTER**



**METAL HALIDE  
BRIGHT BLUE FILTER**



**HIGH PRESSURE SODIUM  
BRIGHT BLUE FILTER**



**METAL HALIDE  
RED FILTER**



**HIGH PRESSURE SODIUM  
RED FILTER**



**METAL HALIDE  
WARM ORANGE FILTER**



**HIGH PRESSURE SODIUM  
WARM ORANGE FILTER**

**NOTE:** Color representations are for comparative purposes only, and do not imply achieved color in application which is dependent upon lamp source, optic, and target surface properties.





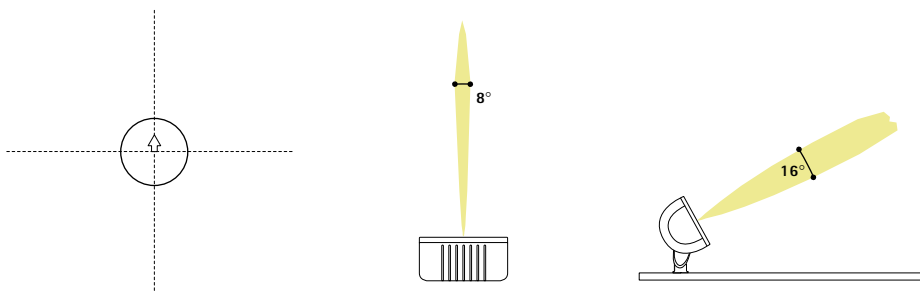
With six (6) uniquely shaped optical distributions, the VISION Flood provides targeted lighting solutions for facade, sign, landscape, architectural highlighting, and more.

## OPTICAL CONFIGURATIONS

All optical systems are fully interchangeable, featuring toolless release fasteners and wire connectors.

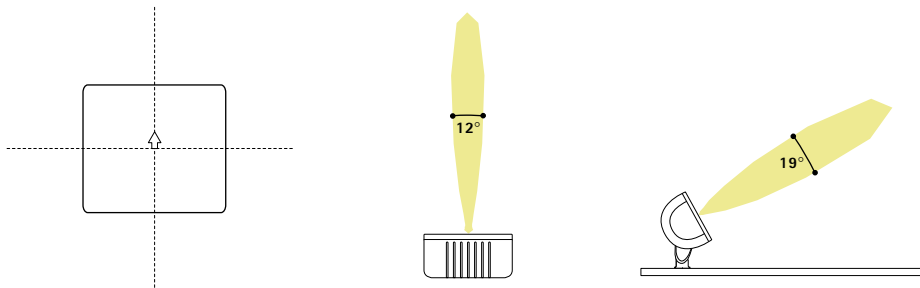
### NARROW SPOT [NS]

The Narrow Spot distribution creates a narrow column of light, free from spill light outside the main beam. Ideal for illuminating columns, small architectural details, tall trees, high mount signage, and flagpoles. Generally used with farther setbacks.



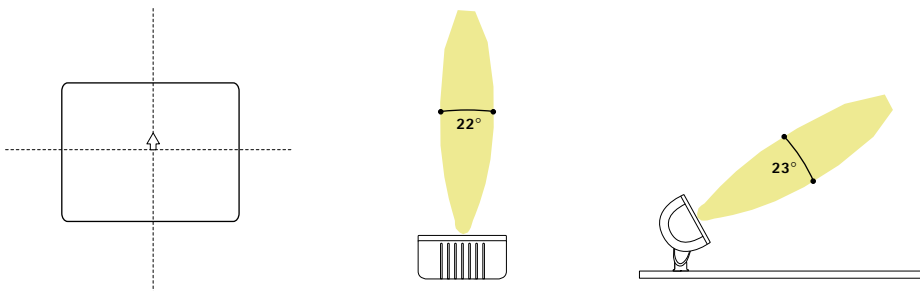
### NARROW FLOOD [NF]

Designed for applications where a tight, symmetrical beam is required, often with farther setbacks. Ideal for longer distance facade highlighting, flag lighting, and high mount signage.



### MEDIUM FLOOD [MF]

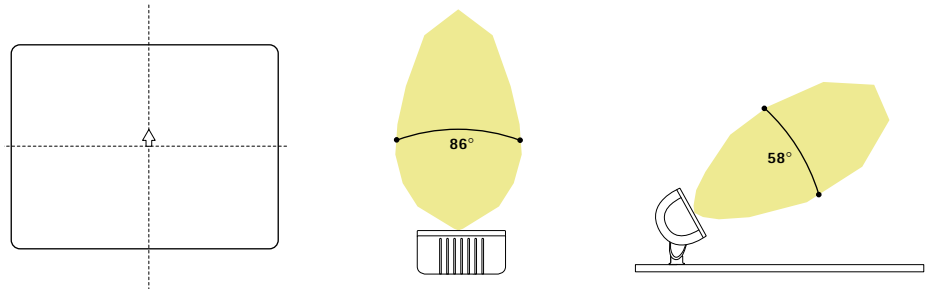
Designed for applications requiring a wider, rectangular pattern of uniform illumination. Ideal for medium setback floodlighting of facades, signage, general landscape, and indirect canopy lighting.



# OPTICAL CONFIGURATIONS

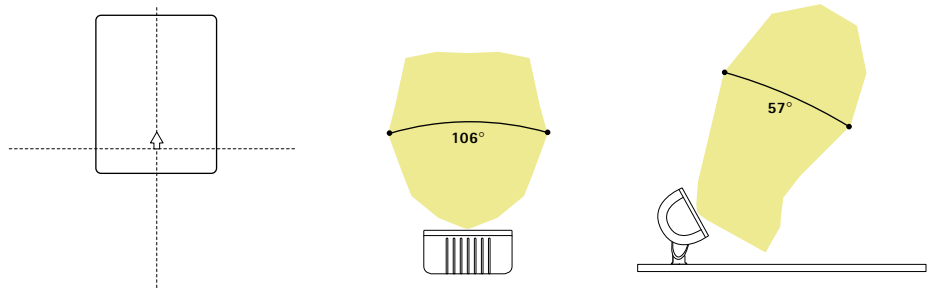
## WIDE FLOOD [WF]

Designed for applications requiring a wide rectangular pattern of uniform illumination. Generally used with shorter setbacks to floodlight large facades, signage, and broad leaf foliage. Also effective in pole mount applications for general area illumination.



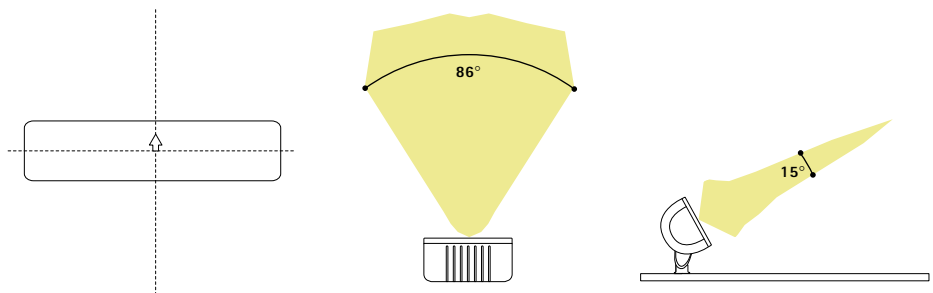
## VERTICAL FLOOD [VF]

Designed to illuminate tall facades and signage in limited setback applications. In pole mount applications, the Vertical Flood produces a broad forward throw distribution ideal for area lighting.



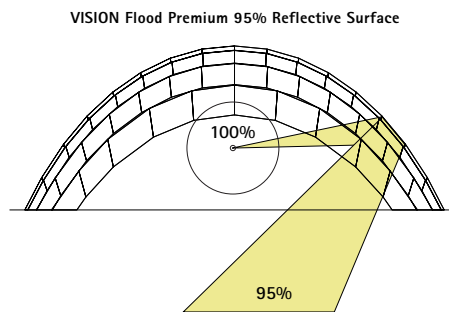
## HORIZONTAL SPOT [HS]

The Horizontal Spot optic creates a concentrated pattern that is wide horizontally, yet tight vertically. Ideal for lighting wide ground mount signage, and highlighting wide building-mounted objects and signage. Also ideal in wall mount and short setback applications to graze a wall surface, creating depth and contrast that accentuates architectural details.



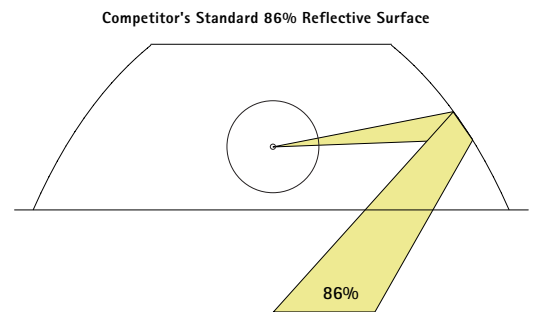
## PREMIUM MATERIALS

A commitment to using premium 95% reflective aluminum sheet for all reflective faces allows for efficiency gains of up to 10%.



### PREMIUM MATERIAL

Premium material reflects a higher intensity of light in a more controllable fashion.



### STANDARD MATERIAL

Standard material reflects a lower intensity of light.

VISION Flood luminaires provide unsurpassed levels of protection against entry of airborne contaminants. With a certified IP65 fixture rating, dust, insects, and moisture simply have no chance of penetrating the fixture's outer enclosure.

## FIXTURE SEALING

- IP Rating



### IP RATING

"IP" stands for Ingress Protection and is a rating system established by the European organization IEC, International Electrotechnical Commission. Over 50 countries strong, this organization publishes international standards for electrical products and other related technologies. The two numbers proceeding the "IP" individually callout the fixture's protection ratings against airborne particulates and moisture respectively.

<b>I</b>	<b>P</b>	<b>6</b>	<b>5</b>
Ingress	Protection	Complete protection against dust entry	No moisture within fixture after a constant 100L/min. pressure jet spray from all practical directions

# LAMP SOURCE OPTIONS

- Metal Halide | Pulse Start Metal Halide
- High Pressure Sodium

## LAMP OPTIONS

VISION Flood optical systems are offered with a variety of high efficiency lamp sources.



### METAL HALIDE/ PULSE START METAL HALIDE

Produces a whitish-blue light, excellent color rendition up to 92 CRI, and high efficacy (lumens per watt).

**APPLICATION:** Generally, Metal Halide sources best compliment concrete surfaces, light colored masonry, foliage, and bright colored objects and surfaces.

### HIGH PRESSURE SODIUM

Produces an yellowish-orange light with high efficacy (lumens per watt) and long life.

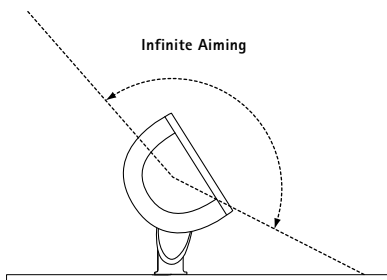
**APPLICATION:** HPS sources add a richness and warmth that best complements brick, wood, and dark colored masonry or stone surfaces.

### AVAILABLE LAMP OPTIONS PER HOUSING SIZE

	VFS	VFM
Metal Halide	50, 70, 100, 175W	175, 250, 400, 1000W
Pulse Start Metal Halide		250, 320, 350, 400, 750W
High Pressure Sodium	50, 70, 100, 150W	150, 250, 400W

## AIMING VERSATILITY

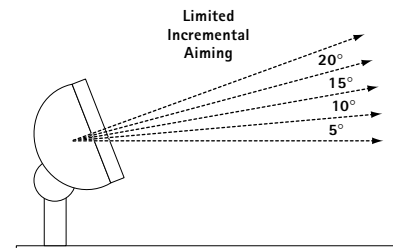
- Taper Lock Knuckle
- Competitor's Tooth Lock Knuckle



### TAPER-LOCK KNUCKLE

The taper-lock knuckle featured on all VISION Flood luminaires is a powerful differentiator that insures ultimate aiming flexibility, and rock solid strength.

VISION Flood's taper-lock mechanism allows for infinite vertical aiming adjustment within the fixture's aiming range. This feature empowers Designers with ultimate aiming discretion, and allows installers or end users the ability to visually optimize the distribution once installed to deliver exacting performance.



### COMPETITOR'S TOOTH LOCK KNUCKLE

Competitors tooth lock knuckle designs notably limit the vertical aiming adjustment of the luminaire, making it more difficult to achieve desired uniformity ratios and cutoff control. Typical tooth lock designs are limited to adjustments in increments of 5 to 7.5°.







## HOUSING

One-piece, die-cast aluminum housing maintains a nominal .125" thickness to endure the toughest environments while maintaining precise tolerance control.

## DOOR

Die-cast aluminum door maintains a nominal .125" thickness and features concealed hinging to the housing. Door is secured with four (4) tamper resistant recessed stainless steel allen head fasteners. Door frame features an integral accessory channel for the mounting of optional light control accessories. Doorframe seals to housing with a continuous extruded silicone gasket. Lens is impact resistant .180" thick tempered clear flat glass, sealed to the door with a one-piece silicone gasket.

# PRODUCT SPECIFICATIONS

- Features + Benefits

## OPTICAL ASSEMBLY

Choice of six (6) high efficiency optical systems constructed of premium 95% reflective anodized aluminum sheet, or bright specular anodized polished spun aluminum. Available distributions include Narrow Spot, Narrow Flood, Medium Flood, Wide Flood, Horizontal Spot, and Vertical Flood. All reflector modules feature toolless removal, quick disconnect wire connections, and are field interchangeable. Medium housing (VFM) optics feature mogul-base lampholders while small housing (VFS) optics feature medium-base lampholders.

## KNUCKLE

Heavy-duty die-cast aluminum knuckle utilizes a taper-lock adjustment mechanism for both solid engagement and infinite aiming adjustment. Knuckle adjustment is made via one (1) captive stainless steel allen head fastener consistent with doorframe fasteners. Tested to sustain 3G of vibration without losing aiming position. VFS knuckle features a 3/4" NPT nipple on bottom surface for rigid attachment to available mounting accessories. Optional slipfitter mount available for VFS. VFM lower knuckle slip-fits over a standard 2" pipe size (2 3/8" O.D.) tenon.

## ELECTRICAL COMPONENTS

High Power Factor (HPF) ballast components are strategically located and heat sunk to the housing for cooler operation and longer life. The VFS housing is rated for 40°C (104°F) ambient environments.





## FINISH

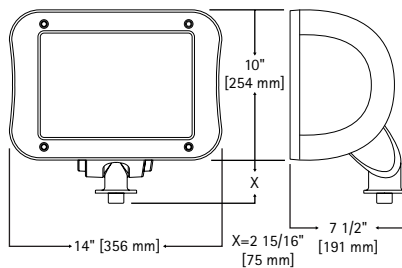
Housing and arm finished in a 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available. Consult your INVUE Lighting Systems Representative for more information.

### Certifications

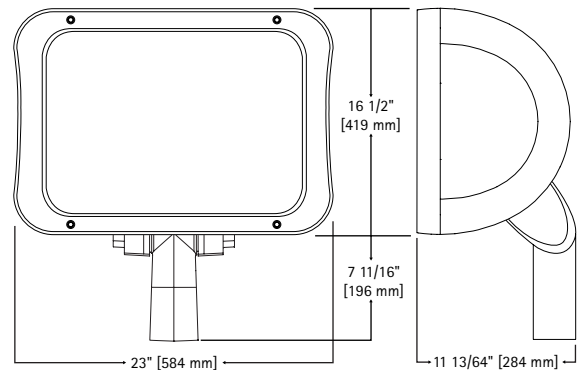
IP65 Rated	U.L. 1598 Listed	3G Vibration Rated	ISO 9001
CSA Listed	40°C Ambient [VFS]	25°C Ambient [VFM]	

## DIMENSIONS

Vision Flood Small [VFS]

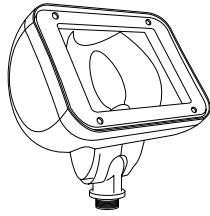


Vision Flood Medium [VFM]



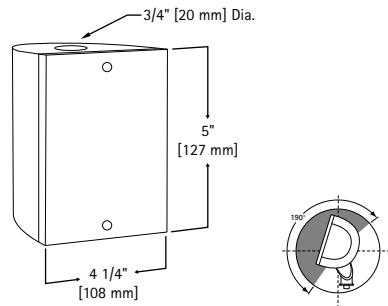
# VFS MOUNTING OPTIONS + SPECIFICATIONS

- Specifications + Dimensions [VFS Standard Mount]



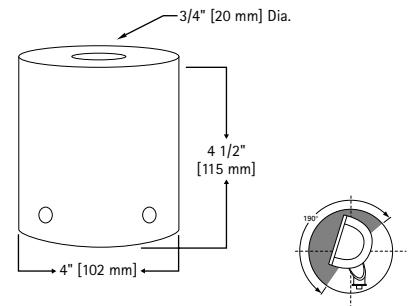
## VFS STANDARD MOUNT

The VFS knuckle features a 3/4" NPT threaded nipple on its bottom surface for direct mounting to the following accessories: Junction Box (JB), Slipfitter (SF), Stanchion Mount (SM), Twin Arm Mount (TMA), Wall Mount Arm (WMA), Wall Mount (WM), and Post Mount Extensions (PM1, PM2).



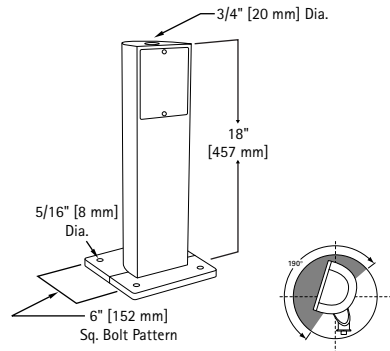
## JUNCTION BOX [JB]

U.L. and CSA listed for wet locations, the Vision J-Box is supplied with a 3/4" clearance hole on the top surface and two (2) 3/4" NPT openings on the bottom surface. An optional drilling consisting of one (1) 1/2" NPT opening on the bottom surface can be specified.



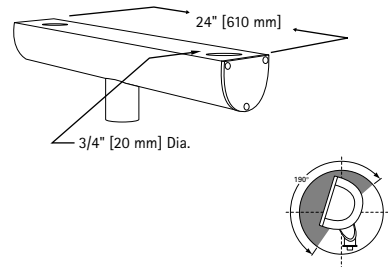
## SLIPFITTER [SF]

Die-cast aluminum slipfitter features a 3/4" NPT entry point on top surface to mate to standard VFS knuckle. Allows fixture assembly to be mounted to standard 2" pipe size (2 3/8" O.D.) tenons and tenon equipped accessories.



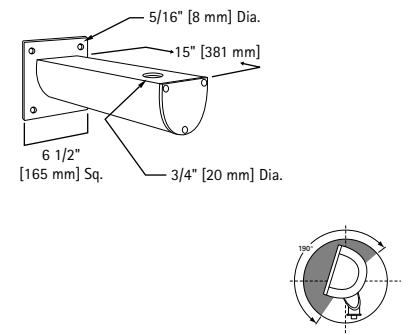
## STANCHION MOUNT [SM]

Used to mount fixture above grade to solid surface, or partially buried when secured to concrete pad. Cast aluminum housing and mounting plate is 18" tall and is supplied with a single 3/4" clearance hole entry point.



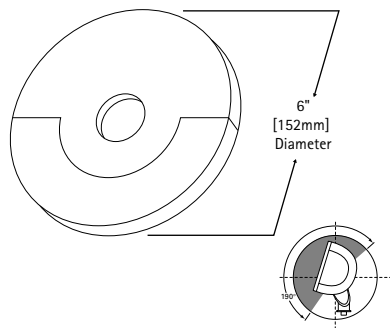
## TWIN ARM MOUNT [TMA]

Soft form extruded aluminum arm is 24" in length and features two (2) 3/4" clearance holes for twin fixture mount. Other lengths and drilling patterns available upon request. Twin arm base slip fits over standard 2" pipe size (2 3/8" O.D.) tenon. End caps are removable for wiring access. Useful in ground mount and pole mount applications.



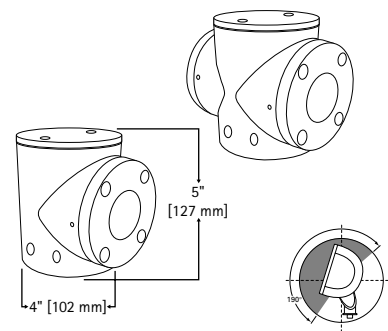
## WALL MOUNT ARM [WMA]

Extruded aluminum arm with cast mounting plate is 15" in length and is supplied with a 3/4" clearance hole entry point. Also useful as an arm extension off square area light poles.



## WALL MOUNT [WM]

Cast aluminum mounting plate adapts around 4" square or octagonal J-box by others. Additional stud mounting is required beyond J-box attachment. Consists of mounting bracket and cast aluminum splice access cover providing a clean transition to the wall surface. Hanger mount integral to mounting plate allows for ease of installation.

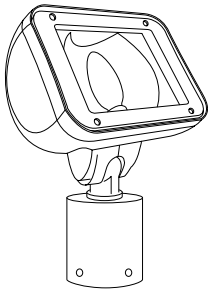


## POST MOUNT EXTENSION [PM1/PM2]

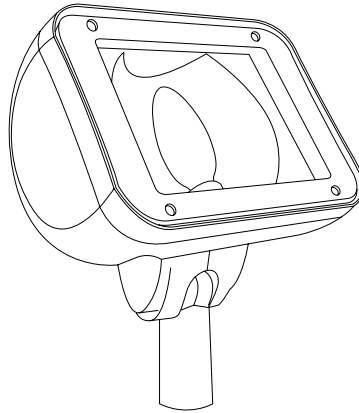
Cast aluminum assembly slip fits over standard 2" pipe size (2 3/8" O.D.) tenons, and allows for single (PM1), or double (PM2) mount configurations. Assembly allows for 360° of fixture rotation. Top cap provides splice access. Useful for single or twin, pole mounted downward aiming applications.

# VFS | VFM MOUNTING OPTIONS + SPECIFICATIONS

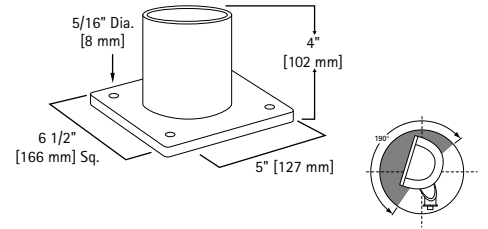
- Specifications + Dimensions [Slipfitter Mount]



When coupled with the available slipfitter (SF), the VFS can be mounted to the following accessories: Surface Mount Tenon (SMT), Stanchion Mount Tenon (ST), Twin Mount Arm Tenon (TMT), and Wall Mount Arm Tenon (WMT).

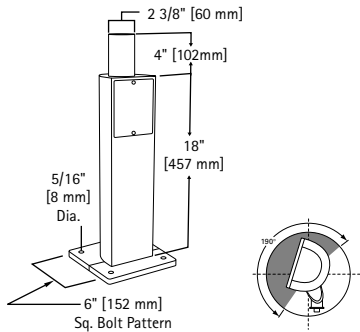


The VFM lower knuckle slip-fits over a standard 2" pipe size (2 3/8" O.D.) tenon. VFM can be mounted to the following accessories: Surface Mount Tenon (SMT), Stanchion Mount Tenon (ST), Twin Mount Arm Tenon (TMT), and Wall Mount Arm Tenon (WMT).



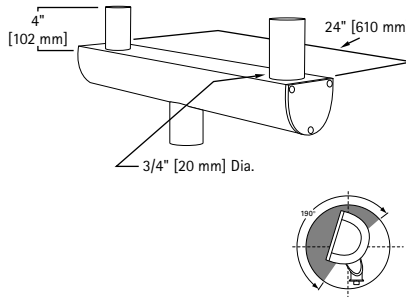
## SURFACE MOUNT TENON [SMT]

For above-grade surface mount placement, the SMT is supplied with a 4" tall standard 2" pipe size (2 3/8" O.D.) tenon.



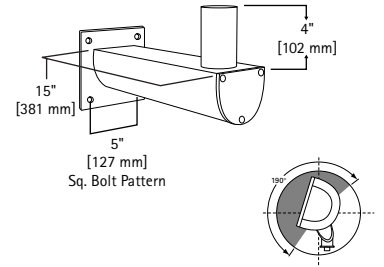
## STANCHION MOUNT TENON [ST]

Used to mount fixture above grade to solid surface, or partially buried when secured to concrete pad. Cast aluminum housing and mounting plate is 18" tall and is supplied with a standard 2" pipe size (2 3/8" O.D.) tenon.



## TWIN ARM MOUNT TENON [TMT]

Soft form extruded aluminum arm is 24" in length and features two (2) standard 2" pipe size (2 3/8" O.D.) tenons for twin fixture mount. Other lengths and drilling patterns available upon request. Twin arm base slip fits over standard 2" pipe size (2 3/8" O.D.) tenon. End caps are removable for wiring access. Useful in ground mount and pole mount applications. For extended downward aiming, utilize PM1 or PM2 in conjunction with TMT.

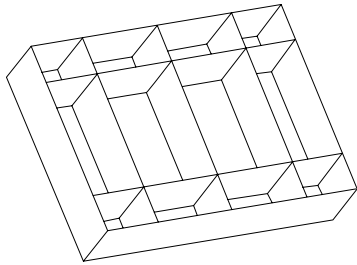


## WALL MOUNT ARM TENON [WMT]

Extruded aluminum arm with cast mounting plate is 15" in length and is supplied with a standard 2" pipe size (2 3/8" O.D.) tenon. Also useful as an arm extension off square area light pole.

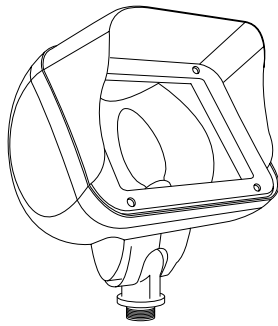
# OPTIONS + ACCESSORIES SPECIFICATIONS

- Specifications + Dimensions



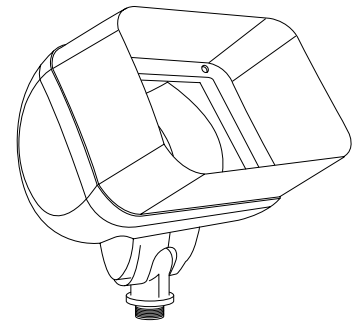
## EXTERNAL GRID LOUVERS

Designed to control lamp glare and spill light while maintaining beam efficiency. Useful when aiming direction or intended target lies in close proximity to pedestrian and/or motor vehicle activity. Mounts to accessory channel in doorframe. Finished in black powder coat paint. Compatible with all distributions. Available on VFM only.



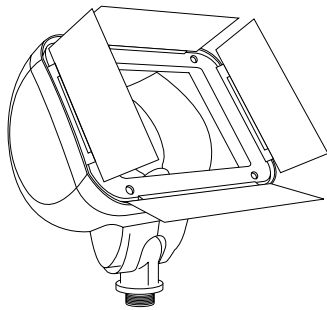
## TOP VISOR

Controls excess spill and glare on top portion of distribution. Especially useful in uplighting applications to limit light travel above intended wall surface or sign. Mounts to accessory channel in doorframe. Compatible with all distributions.



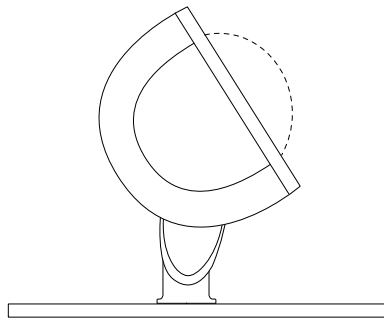
## 4-SIDED SHIELD

Controls lamp glare and spill light in all directions. Useful when aiming direction or intended target lies in close proximity to pedestrian and/or motor vehicle activity. Mounts to accessory channel in doorframe. Compatible with all distributions. Available on VFM only.



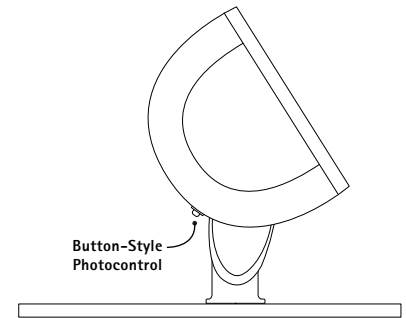
## BARN DOORS

Four (4) independently mounted and adjustable doors control cutoff angles in all directions, allowing custom distribution control for any application. Compatible with all distributions.



## VANDAL SHIELD

3/16" thick molded polycarbonate convex lens. Treated with UV inhibitor to discourage the gradual discoloration that results from exposure to sunlight and metal halide lamps.

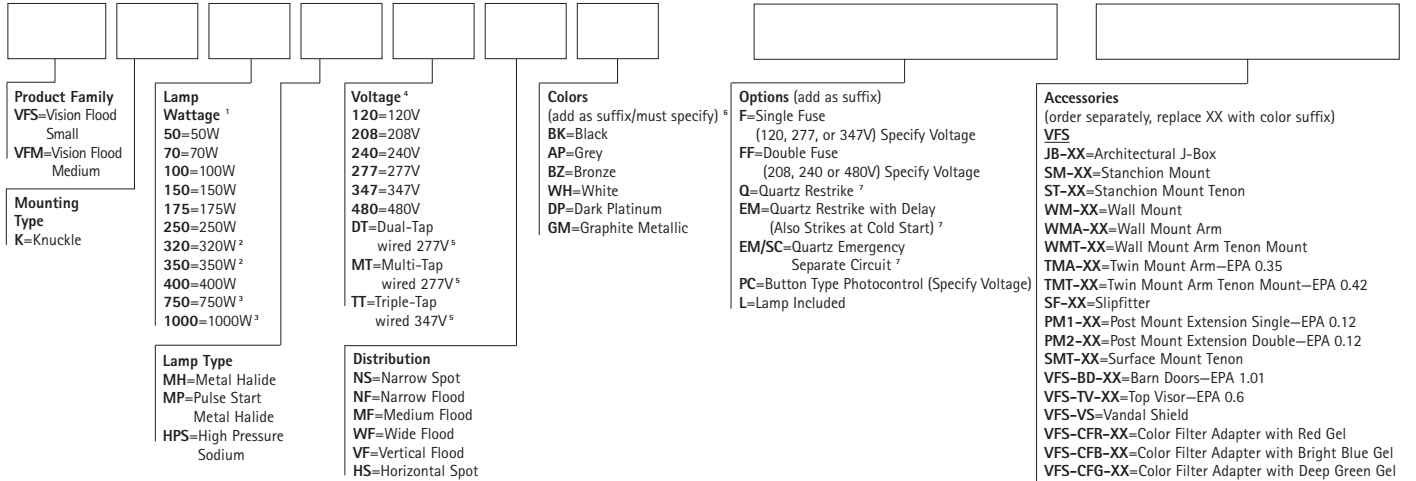


## PHOTOCELL CONTROL

Internal button-style photocell with sensor located on backside of housing.

# ORDERING INFORMATION

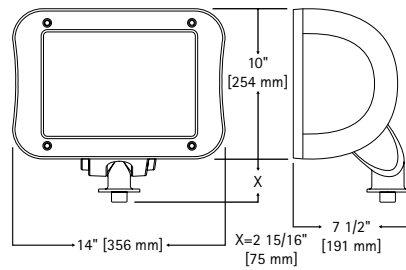
Sample Number: VFM-K-400-MH-MT-MF-GM-L



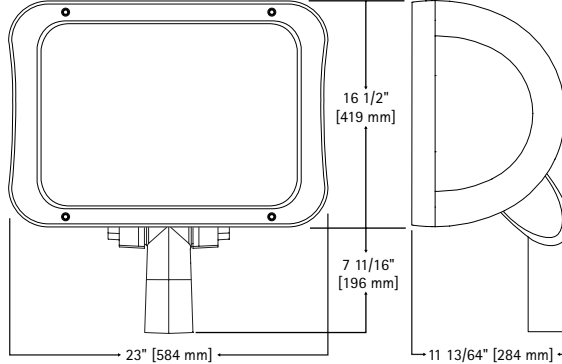
**NOTE:** 1 All lamps are mogul-base on VFM fixtures and medium-base on VFS. 2 320/350W Pulse Start Metal Halide lamps only. 3 Metal Halide only, requires reduced envelope BT or ED37 lamp. 4 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 5 Dual-Tap is 120/277V wired 277V. Multi-Tap is 120/208/240/277V wired 277V. Triple-Tap ballast is 120/277/347V wired 347V. 6 RAL and custom color matches available. Consult your INVUE Lighting Systems Representative for more information. 7 Quartz options available on VFM only.

## DIMENSIONS

### Vision Flood Small [VFS]



### Vision Flood Medium [VFM]



## WATTAGE TABLE

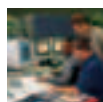
	VFS	VFM
Metal Halide	50, 70, 100, 175W	175, 250, 400, 1000W
Pulse Start Metal Halide		250, 320, 350, 400, 750W
High Pressure Sodium	50, 70, 100, 150W	150, 250, 400W

## SHIPPING DATA

	VFS	VFM
Net. Weight (lbs.)	37	53
E.P.A. (lbs.)	1.19	3.24

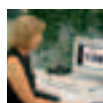
**NOTE:** The above are approximate weights.

## STANDARD COLORS



### APPLICATIONS DEPARTMENT

Let the application experts at Cooper Lighting design your next lighting layout. Aided by the latest computer simulation software and a comprehensive lighting background, our Application Engineers can design, analyze, and provide statistical layouts for any lighting application. Whether the design criteria calls for Illuminance, Luminance, or Small Target Visibility (STV) compliance, Cooper Lighting can provide the fixture layout and supporting documentation necessary to help secure your next project.



### INVUE WEBSITE

Visit [invuelighting.com](http://invuelighting.com) for the latest product information from INVUE Lighting Systems. With instant access to IES photometric files, PDF product specification sheets, new product announcements, and other helpful specification tools, the INVUE Lighting website is an invaluable resource for getting information to customers-quickly.



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# VISION FLOOD

ARCHITECTURAL FLOOD LUMINAIRE

