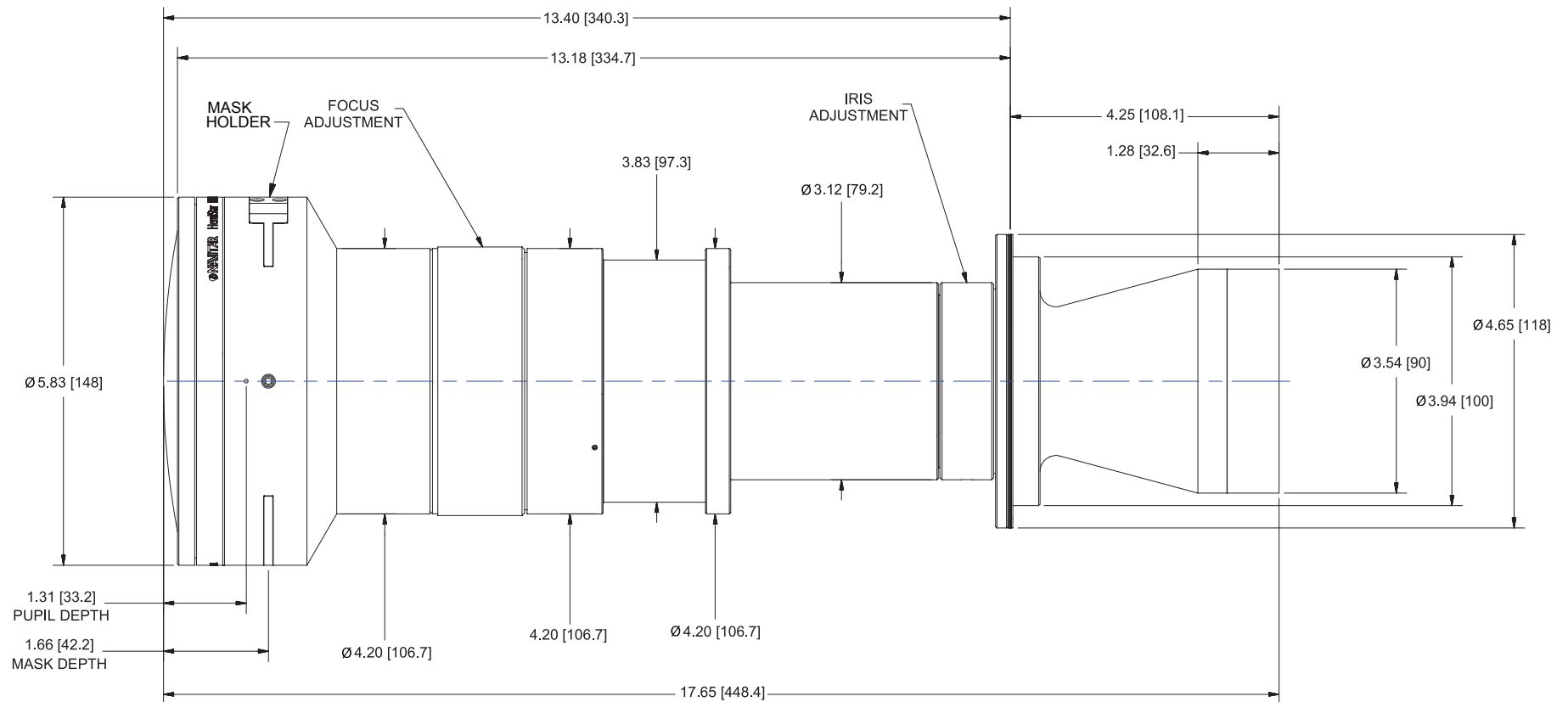


HemiStar HM4K-168

Projection Angle Chart

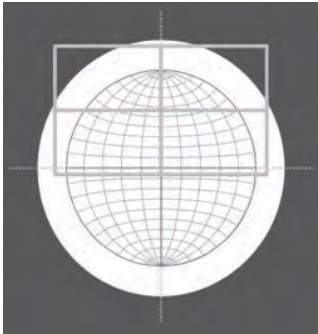
Display Type	Resolution			Panel Size (mm)			# Pixels Projected			Projection Angles (°)				Shift		
Dome Lens	H	V	Pixel Pitch (µm)	H	V	Diag.	H	V	Mpixel Count	H	V	Diag.	TR Equiv.	H +/-%	V +/-%	V Angle +/-°
Original Panel 1.38" JVC LCoS	4096	2400	6.8	27.853	16.320	32.282	4096	2400	9.83	102.9	57.0	123.1	0.40	8%	49%	33.1



HM4K-I68

Panel Usage

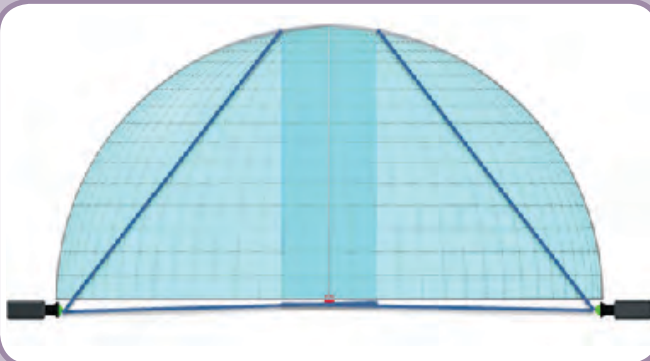
Active Image on Projector Panel



The illustration shows the active pixels used to project a hemisphere. A full hemisphere is projected as a circle of (active) pixels. This dual channel examples shows the HM4K-I68 projecting a 3-chip 4K 1.38" D-ILA panel with blend allowance.

On-Screen Projection

Active Image on Screen



The illustration shows the projected image against a 5° azimuth-elevation grid. The projectors are positioned at dome edges and uniformly cast a hemispherical beam to the screen.

Lens Specifications

Focal Length	16.81mm	MTF Center	71% @ 73 lp/mm
Image Circle	32.3mm	MTF Edge	35% @ 73 lp/mm
Max Half-Angle	61.6°	Lateral Color R-G	<3μm
F/#	F/3.2	Lateral Color B-G	<4μm
Focus Range	2m – Inf.	F-Theta Distortion	< -11.9% Max
Transmittance	73-86%	Relative Illum.	>87%
Back Focus	JVC 4K LCoS compatible		

Suggested Projectors

Navitar Part #*	Projector	Resolution	Lumens
I-23280	JVC DLA-SH7NLG	4096 x 2400	5000
I-23280	JVC DLA-SH4KNLG	4096 x 2400	3500

* Part numbers vary depending on projector manufacturer and model.

