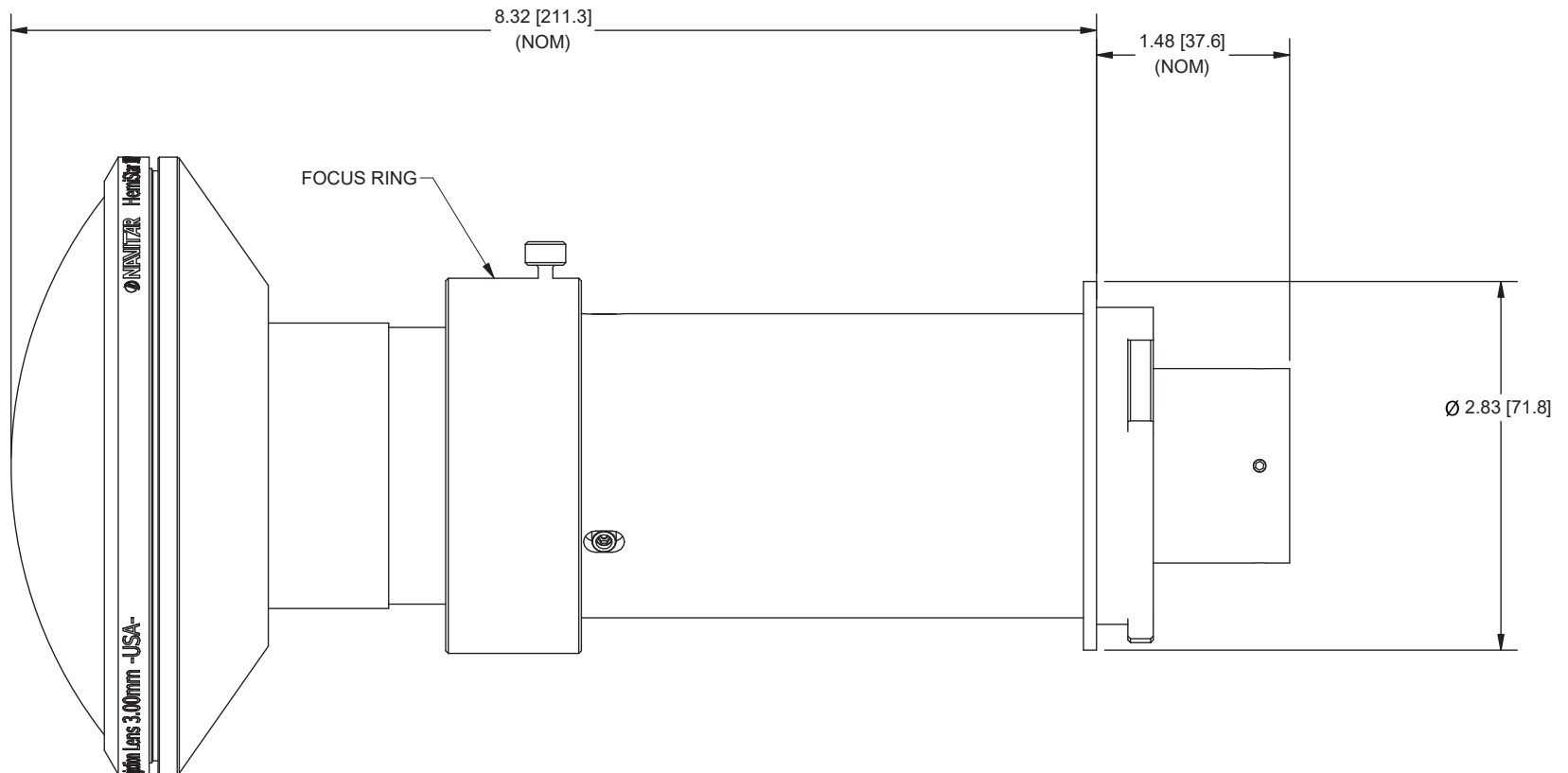


HemiStar HS30

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	@ 180°	Mpixel Count	H	V	H +/-%	V +/-%	V Angle +/-°
Original Panel 0.67" WUXGA		1920	1200	7.56	14.515	9.072	17.117	1200	1200	1176	1.13	184.7	184.7	0%	0%	0.0
Alternate Panels	0.76" 3LCD WUXGA	1920	1200	8.5	16.320	10.200	19.245	1067	1067	1046	0.89	184.7	184.7	0%	0%	0.0
	0.74" 3LCD 1080p	1920	1080	8.5	16.320	9.180	18.725	1067	1067	1046	0.89	184.7	184.7	0%	0%	0.0
	0.69" XGA	1024	768	13.68	14.008	10.506	17.510	663	663	650	0.35	184.7	184.7	0%	0%	0.0
	0.66" HD1080	1920	1080	7.56	14.515	8.165	16.654	1200	1080	1176	0.92	184.7	163.3	0%	6%	10.7
	0.65" WXGA	1280	800	10.8	13.824	8.640	16.302	840	800	823	0.50	184.7	174.3	0%	2%	5.2

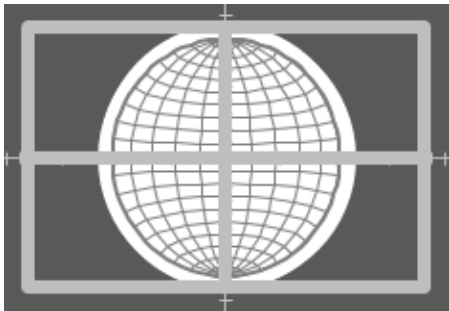


180°V



Panel Usage

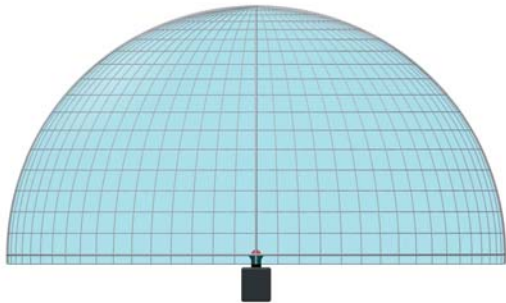
Active Image on Projector Panel



The illustration shows the active pixels used to project a hemisphere. A full hemisphere is projected as a circle of (active) pixels. This is a single channel example of the HS30 projecting a 0.67" WUXGA panel.

On-Screen Projection

Active Image on Screen



The illustration shows the projected image against a 5° azimuth-elevation grid. The projector is positioned at dome center and uniformly casts a hemispherical beam to the screen.

Lens Specifications

Focal Length	3.00mm	MTF Center	66% @ 66 lp/mm
Image Circle	9.072mm	MTF Edge	60% @ 66 lp/mm
Max Half-Angle	92°	Lateral Color R-G	< 4µm
F/#	F/2.5	Lateral Color B-G	< 2µm
Focus Range	600mm – Inf.	F-Theta Distortion	-6.0% Max
Transmittance	81-89%	Relative Illum.	>95%
Back Focus	Suitable for small format single-chip DLP and 3LCD.		

HS30 - Model Numbers

Navitar Part #*	Projector	Resolution	Brightness ⁺
I-28190	Barco F80	WQXGA	7,000
I-27901	Christie GS Series	WUXGA	6,750
I-22450	DP E-Vision 4500	WUXGA	4,000
I-28478	NEC PX602WL-BK	WXGA	6,000
I-28478	NEC PA-653U	WUXGA	6,500
I-28478	NEC PA-803U	WUXGA	8,000
I-24106**	Optoma EH505	WUXGA	5,000
I-27901	Optoma ZU850	WUXGA	8,000
I-27901	Optoma ZU1050	WUXGA	10,000
I-22450	Panasonic PT-DZ870/780	WUXGA	7,000
I-22450	Panasonic PT-RZ770/970	WUXGA	9,400
I-22450	Panasonic PT-RW930/730/630	WXGA	6,500
I-22450	Panasonic PT-DX100/820	XGA	10,000
I-24106	Vivitek DU5671	WUXGA	6,200

* Part numbers vary depending on projector manufacturer and model
⁺ Projector brightness is stated for reference only, it is not representative a maximum lens brightness rating.
 ** I-24106 includes the projector mounting plate. The drawing can be found on www.navitar.com.

