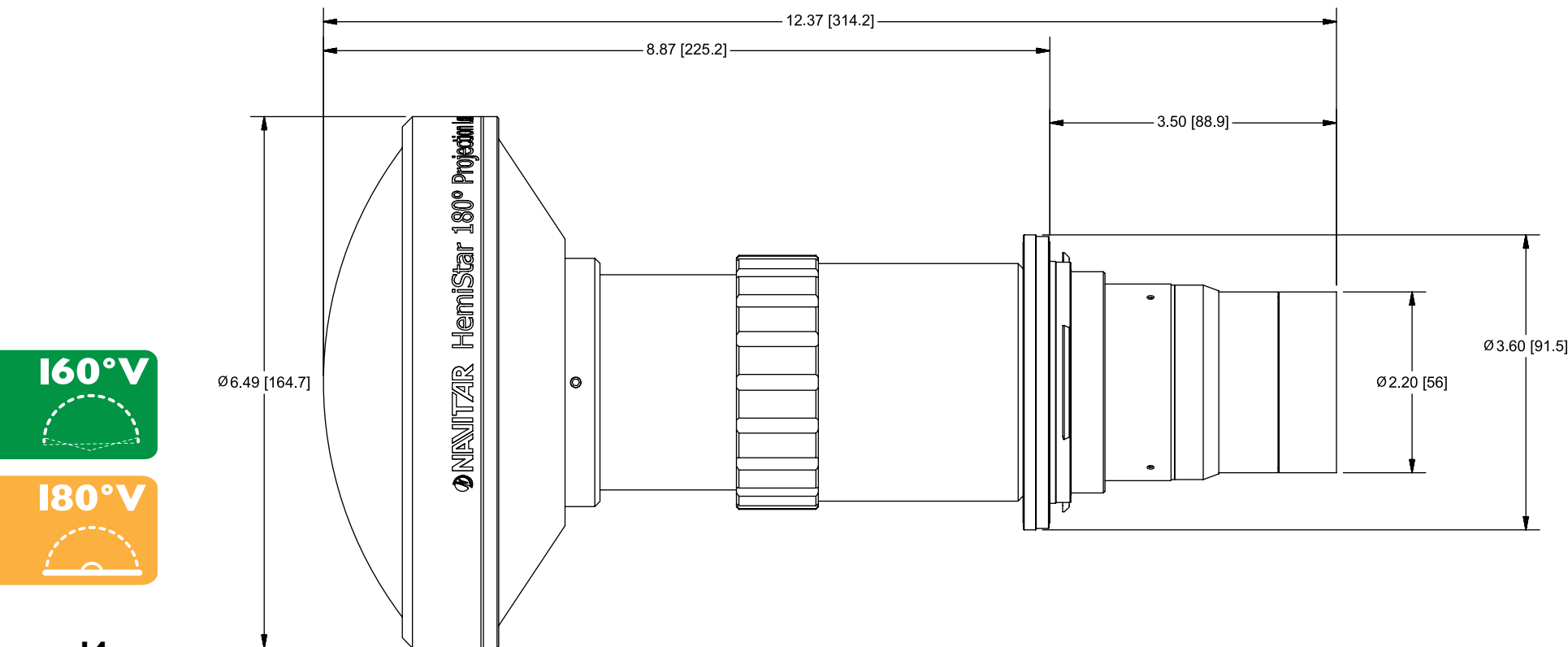


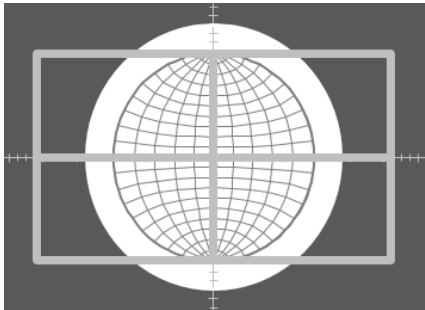
# HemiStar HS48

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 Panels	0.96” WUXGA	1920	1200	10.8	20.736	12.960	24.453	1377	1200	1338	1.13	185.9	160.2	0%	7%	12.9	
	0.94” SXGA+	1400	1050	13.68	19.152	14.364	23.940	1087	1050	1056	0.87	185.9	179.0	0%	2%	3.5	
Alternate Panels	0.94” HD1080	1920	1080	10.8	20.736	11.664	23.791	1377	1080	1338	0.92	185.9	143.2	0%	14%	21.4	
	0.90” WQXGA	2560	1400	7.56	19.354	12.096	22.823	1967	1600	1911	2.01	185.9	148.8	0%	11%	18.6	
Partial Dome	0.76” 3LCD WUXGA	1920	1200	8.5	16.320	10.200	19.245	1749	1200	1700	1.13	185.9	124.4	0%	23%	30.8	
	0.74” 3LCD 1080p	1920	1080	8.5	16.320	9.180	18.725	1749	1080	1700	0.92	185.9	111.5	0%	31%	37.3	
	0.67” WUXGA	1920	1200	7.56	14.515	9.072	17.117	1920	1200	1911	1.13	181.0	110.1	1%	32%	37.9	
	0.66” HD1080	1920	1080	7.56	14.515	8.165	16.654	1920	1080	1911	0.92	181.0	98.8	1%	41%	43.6	
	0.61” 3LCD 1080p	1920	1080	7.03	13.498	7.592	15.486	1920	1080	2056	0.92	167.3	98.1	5%	48%	47.1	



Panel Usage

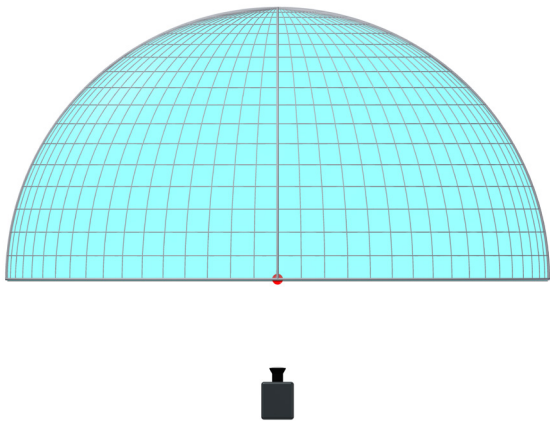
Active Image on Projector Panel



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 HS48 projecting a 0.90" WQXGA 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

<b>Focal Length</b>	4.8mm	<b>MTF Center</b>	72% @ 66 lp/mm
<b>Image Circle</b>	14.868mm	<b>MTF Edge</b>	45% @ 66 lp/mm
<b>Max Half-Angle</b>	93°	<b>Lateral Color R-G</b>	< 3.6µm
<b>F/#</b>	F/2.5	<b>Lateral Color B-G</b>	< 4.4µm
<b>Focus Range</b>	800mm – Inf.	<b>F-Theta Distortion</b>	-4% Max
<b>Transmittance</b>	80%	<b>Relative Illum.</b>	95%
<b>Back Focus</b>	Suitable for 0.95" single-chip DLP and 3LCD.		

HS48 - Model Numbers

Navitar Part #*	Projector	Resolution	Brightness+
I-2288I	Barco F32	SXGA+, 1080p, WUXGA	8,000
I-2288I	Barco F35	1080p, WUXGA, WQXGA	7,500
I-2288I	DP dVision 35	1080p, WUXGA, WQXGA	7,500
I-2288I	Barco F70/F90	WUXGA, WQXGA, 4K UHD	8,000 - 13,000
TBD	Norxe PI	WQXGA	4,000
I-26669	Christie DI3WU-HS	1080p, WUXGA	11,000

\* 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.

