

# Jazz Series lens throw ratios

The following table details the information required to calculate the lens throw ratios for the Christie Jazz Series (DWU1800(A)-JS, DWU2400(A)-JS, 4K1600(A)-JS, and 4K2100(A)-JS) projectors.

Lens	Throw distance formula		Vertical and horizontal offset (%)	Diagonal screen sizes	
	Imperial (in)	Metric (cm)		Standard (in)	Metric (cm)
0.34 - 0.37 :1 zoom (140-164102-XX)	TDmin = 0.339 x W + 9.53	TDmin = 0.339 x W + 24.2	+ 120%/- 120% V	50 to 500	127 to 1,270
	TDmax = 0.371 x W + 9.68	TDmax = 0.371 x W + 24.6	+ 50%/- 50% H		
0.46:1 fixed (900-300413-XX)	TDmin = 0.456 x W - 0.65	TDmin = 0.456 x W - 1.65	+ 120%/- 120% V	200 to 600	508 to 1,524
			+ 50%/- 50% H		
1.3 - 1.8 :1 zoom (140-158105-XX)	TDmin = 1.321 x W + 3.882	TDmin = 1.321 x W + 9.861	+ 102%/- 102% V	50 to 500	127 to 1,270
	TDmax = 1.82 x W + 4.163	TDmax = 1.82 x W + 10.576	+ 48%/- 48% H		
0.90 -1.30 :1 zoom (140-159106-XX)	TDmin = 0.917 x W+ 5.01	TDmin = 0.917 x W + 12.735	+ 102%/- 102% V	50 to 500	127 to 1,270
	TDmax = 1.318 x W+5.14	TDmax = 1.318 x W + 13.065	+ 48%/- 48% H		
0.78-0.90:1 zoom (140-144100-XX)	TDmin = 0.793 x W+6.299	TDmin = 0.793 x W + 16	+ 102%/- 102% V	50 to 500	127 to 1,270
	TDmax = 0.952 x W+3.54	TDmax = 0.952 x W + 9	+ 48%/- 48% H		
1.44-1.8:1 zoom (140-109101-XX)	TDmin = 1.49 x W -0.393	TDmin = 1.49 x W - 1	+ 120%/- 120% V	50 to 500	127 to 1,270
	TDmax = 1.862 x W -0.393	TDmax = 1.862 x W - 1	+ 50%/- 50% H		
1.8-2.4:1 zoom (140-110103-XX)	TDmin = 1.826 x W + 4.72	TDmin = 1.826 x W + 12	+ 120%/- 120% V	50 to 500	127 to 1,270
	TDmax = 2.427 x W + 3.54	TDmax = 2.427 x W + 9	+ 50%/- 50% H		

Lens	Throw distance formula		Vertical and horizontal offset (%)	Diagonal screen sizes	
	Imperial (in)	Metric (cm)		Standard (in)	Metric (cm)
2.4-4.8:1 zoom (140-111104-XX)	TDmin = 2.331 x W + 12.20	TDmin = 2.331 x W + 31	+ 120%/- 120% V	50 to 500	127 to 1,270
	TDmax = 4.734 x W + 9.055	TDmax = 4.734 x W + 23	+ 50%/- 50% H		
4.8-8.64 :1 zoom (140-116109-XX )	TDmin = 4.75 x W + 12.59	TDmin = 4.75 x W + 32	+ 120%/- 120% V	50 to 500	127 to 1,270
	TDmax = 8.579 x W + 10.62	TDmax = 8.579 x W + 27	+ 50%/- 50% H		
8.64-12.96:1 zoom (140-145101-XX)	TDmin = 8.627 x W + 10.12	TDmin = 8.627 x W + 26	+ 120%/- 120% V	80 to 500	203 to 1,270
	TDmax = 12.976 x W + 10.15	TDmax = 12.976 x W + 26	+ 50%/- 50% H		

- The 0.34 - 0.37:1 ultra short throw lens has a 10% brightness loss.
- The 0.46:1 ultra short throw lens throw distance measured from the vertex of the lens closest to the screen.
- The 0.46:1 ultra short throw lens has a 35% brightness loss.
- For all other lenses, throw distance measured from the center of the front foot of the projector.
- All lenses are made of glass.
- Calculated throw distance (TD) values are subject to a +/- 5% tolerance for individual lens variation.
- Calculated offset values are subject to a +/- 7% centering tolerance.