

D4KLH60 and Mirage 4KLH lens throw ratios

The following tables details the information required to calculate the lens throw ratios for the D4KLH60 and Mirage 4KLH projectors.

Lens	Throw distance formula		Vertical and horizontal offset	Min screen widths	
	Inches	Meters		Inches	Meters
2K 0.8:1/4K 0.72:1 HB fixed (113-104106-XX)	TD = 0.727 × W + 18.98	TD = 0.727 × W + 0.4827	0% V	55	1.4
			0% H		
2K 1:1/4K 0.9:1 fixed (38-809071-61)	TD = 0.930 × W + 19.14	TD = 0.930 × W + 0.4861	+/- 29% V	150	3.8
			+/- 9% H		
2K 1.25-1.45:1/4K 1.13-1.31:1 HB zoom (129-104106-XX)	TDmin = 1.130 × W + 17.48	TDmin = 1.130 × W + 0.4440	+/- 56%V	122	3.1
	TDmax = 1.325 × W + 16.65	TDmax = 1.325 × W + 0.4230	+/- 19% H		
2K 1.45-1.8:1/4K 1.31-1.63:1 HB zoom (129-105107-XX)	TDmin = 1.311 × W + 15.22	TDmin = 1.311 × W + 0.3865	+/- 13% V	106	2.7
	TDmax = 1.637 × W + 14.61	TDmax = 1.637 × W + 0.3712	+/- 4% H		
2K 1.8-2.4:1/4K 1.63-2.17:1 HB zoom (129-106108-XX)	TDmin = 1.628 × W + 15.03	TDmin = 1.628 × W + 0.3818	+/- 13% V	86.5	2.2
	TDmax = 2.182 × W + 13.93	TDmax = 2.182 × W + 0.3539	+/- 4% H		

Lens	Throw distance formula		Vertical and horizontal offset	Min screen widths	
	Inches	Meters		Inches	Meters
2K 2.2-3.0:1/4K 2.03:1-2.71:1 HB zoom (129-107109-XX)	TDmin = $2.028 \times W + 11.75$	TDmin = $2.028 \times W + 0.2985$	+/- 13% V	71	1.8
	TDmax = $2.756 \times W + 9.54$	TDmax = $2.756 \times W + 0.2451$	+/- 4% H		
2K 3.0-4.3:1/4K 2.71:1-3.89:1 HB zoom (129-108100-XX)	TDmin = $2.764 \times W + 8.96$	TDmin = $2.764 \times W + 0.2275$	+/- 13% V	51	1.3
	TDmax = $3.936 \times W + 9.54$	TDmax = $3.936 \times W + 0.2451$	+/- 4% H		
2K 4.3-6.0:1/4K 3.89:1-5.43:1 HB zoom (129-109101-XX)	TDmin = $3.957 \times W + 10.86$	TDmin = $3.957 \times W + 0.2759$	+/- 13% V	75	1.9
	TDmax = $5.571 \times W + 6.78$	TDmax = $5.571 \times W + 0.1722$	+/- 4% H		
2K 5.5-8.5:1/4K 5.0:1 -7.69:1 HB zoom (129-110103-XX)	TDmin = $5.0561 \times W + 12.70$	TDmin = $5.0561 \times W + 0.3226$	+/- 56% V	59	1.5
	TDmax = $7.8819 \times W + 9.20$	TDmax = $7.8819 \times W + 0.2337$	+/- 19% H		

- 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.