

# **J Series 1.0 and 1.2kW Lens Throw Ratios Technical Reference Information**

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## **INTRODUCTION**

The table on the following pages detail the information required to calculate the Lens Throw Ratios for the J Series projector.

### J SERIES HD LENS INFORMATION

Lens Name	Ratio	Throw Distance (TD) Formula		Vertical Offset	Horizontal Offset	Min/Max Screen Width	
		Standard (Inches)	Metric (cm)			Standard (Inches)	Metric (cm)
CHRISTIE ILS LENS 0.73:1 SX+ / 0.67:1 HD 0.95" 3-CHIP DLP® <b>(118-100110-01)</b>	<b>0.67:1 Fixed</b>	TD = 0.703 x W + 3.204	TD = 0.703 x W + 8.140	+/- 35% V	+/- 12% H	57.04 to 555.62	144.9 to 1411.3
CHRISTIE ILS LENS 1.2:1 SX+ / 1.1:1 HD 0.95" 3-CHIP DLP® <b>(118-100117-01)</b>	<b>1.1:1 Fixed</b>	TD = 1.139 x W + 4.212	TD = 1.139 x W + 10.70	+/- 120% V	+/- 42% H	100.03 to 515.0	254.1 to 1308.1
CHRISTIE ILS LENS 1.25-1.6:1 SX+ / 1.16-1.49:1 HD 0.95" 3-CHIP DLP® <b>(118-100111-01)</b>	<b>1.16-1.49:1 Zoom</b>	TD = 1.159 x W + 4.173	TD = 1.159 x W + 10.60	+/- 102% V	+/- 40% H	98.34 to 506.10	249.8 to 1285.5
		TD = 1.495 x W + 4.252	TD = 1.495 x W + 10.80	+/- 102% V	+/- 40% H	76.18 to 392.28	193.5 to 996.4
CHRISTIE ILS LENS 1.5-2.0:1 SX+ / 1.4-1.8:1 HD 0.95" 3-CHIP DLP® <b>(118-100112-01)</b>	<b>1.4-1.8:1 Zoom</b>	TD = 1.392 x W + 0.566	TD = 1.392 x W + 1.440	+/- 120% V	+/- 42% H	112.75 to 678.54	286.4 to 1723.5
		TD = 1.884 x W + 0.720	TD = 1.884 x W + 1.830	+/- 120% V	+/- 42% H	83.18 to 501.06	211.3 to 1272.7
CHRISTIE ILS LENS 2.0-2.8:1 SX+ / 1.8-2.6:1 HD 0.95" 3-CHIP DLP® <b>(118-100113-01)</b>	<b>1.8-2.6:1 Zoom</b>	TD = 1.876 x W + 0.795	TD = 1.876 x W + 2.020	+/- 120% V	+/- 42% H	83.50 to 503.14	212.1 to 1278.0
		TD = 2.579 x W + 0.393	TD = 2.579 x W + 1.00	+/- 120% V	+/- 42% H	61.22 to 366.57	155.5 to 931.1
CHRISTIE ILS LENS 2.8-4.5:1 SX+ / 2.6-4.1:1 HD 0.95" 3-CHIP DLP® <b>(118-100114-01)</b>	<b>2.6-4.1:1 Zoom</b>	TD = 2.517 x W + 12.40	TD = 2.517 x W + 31.50	+/- 120% V	+/- 42% H	137.44 to 699.05	349.1 to 1775.6
		TD = 4.119 x W + 11.88	TD = 4.119 x W + 30.20	+/- 120% V	+/- 42% H	84.09 to 427.24	213.6 to 1085.2
CHRISTIE ILS LENS 4.5-7.5:1 SX+ / 4.1-6.9:1 HD 0.95" 3-CHIP DLP® <b>(118-100115-01)</b>	<b>4.1-6.9:1 Zoom</b>	TD = 4.083 x W + 13.46	TD = 4.083 x W + 34.20	+/- 120% V	+/- 42% H	112.40 to 768.03	285.5 to 1950.8
		TD = 6.867 x W + 13.30	TD = 6.867 x W + 33.80	+/- 120% V	+/- 42% H	66.85 to 456.73	169.8 to 1160.1
CHRISTIE ILS LENS 7.5-11.2:1 SX+ / 6.9-10.4:1 HD 0.95" 3-CHIP DLP® <b>(118-100116-01)</b>	<b>6.9-10.4:1 Zoom</b>	TD = 6.739 x W + 20.27	TD = 6.739 x W + 51.50	+/- 120% V	+/- 42% H	67.08 to 464.33	170.4 to 1179.4
		TD = 10.111 x W + 19.84	TD = 10.111 x W + 50.40	+/- 120% V	+/- 42% H	44.76 to 309.56	113.7 to 786.3

**NOTES:** **1)** Calculated Throw Distance values are subject to a +/-5% lens tolerance. **2)** Calculated Vertical and Horizontal Offsets are subject to a +/-7% centering tolerance. **3)** Throw distance is measured from the middle of the front foot of the projector to the screen.

### J SERIES SX+ LENS INFORMATION

Lens Name	Ratio	Throw Distance (TD) Formula		Vertical Offset	Horizontal Offset	Min/Max Screen Width	
		Standard (Inches)	Metric (cm)			Standard (Inches)	Metric (cm)
CHRISTIE ILS LENS 0.73:1 SX+ / 0.67:1 HD 0.95" 3-CHIP DLP® <b>(118-100110-01)</b>	<b>0.73:1 Fixed</b>	TD = 0.760 x W + 3.267	TD = 0.760 x W + 8.30	+/- 23% V	+/- 13% H	52.67 to 513.70	133.8 to 1304.8
CHRISTIE ILS LENS 1.2:1 SX+ / 1.1:1 HD 0.95" 3-CHIP DLP® <b>(118-100117-01)</b>	<b>1.2:1 Fixed</b>	TD = 1.233 x W + 5.59	TD = 1.233 x W + 14.2	+/- 100% V	+/- 50% H	91.3 to 474.4	231.9 to 1205
CHRISTIE ILS LENS 1.25-1.6:1 SX+ / 1.16-1.49:1 HD 0.95" 3-CHIP DLP® <b>(118-100111-01)</b>	<b>1.25-1.6:1 Zoom</b>	TD = 1.255 x W + 4.173	TD = 1.255 x W + 10.60	+/- 73% V	+/- 45% H	90.78 to 467.20	230.6 to 1186.7
		TD = 1.618 x W + 4.291	TD = 1.618 x W + 10.90	+/- 73% V	+/- 45% H	70.31 to 363.24	178.6 to 920.1
CHRISTIE ILS LENS 1.5-2.0:1 SX+ / 1.4-1.8:1 HD 0.95" 3-CHIP DLP® <b>(118-100112-01)</b>	<b>1.5-2.0:1 Zoom</b>	TD = 1.508 x W + 0.4488	TD = 1.508 x W + 1.140	+/- 100% V	+/- 50% H	104.09 to 626.29	264.4 to 1590.8
		TD = 2.040 x W + 0.6929	TD = 2.040 x W + 1.760	+/- 100% V	+/- 50% H	76.85 to 462.87	195.2 to 1175.7
CHRISTIE ILS LENS 2.0-2.8:1 SX+ / 1.8-2.6:1 HD 0.95" 3-CHIP DLP® <b>(118-100113-01)</b>	<b>2.0-2.8:1 Zoom</b>	TD = 2.033 x W + 0.7795	TD = 2.033 x W + 1.980	+/- 100% V	+/- 50% H	77.08 to 464.44	195.8 to 1179.7
		TD = 2.793 x W + 0.4212	TD = 2.793 x W + 1.070	+/- 100% V	+/- 50% H	56.53 to 338.46	143.6 to 859.7
CHRISTIE ILS LENS 2.8-4.5:1 SX+ / 2.6-4.1:1 HD 0.95" 3-CHIP DLP® <b>(118-100114-01)</b>	<b>2.8-4.5:1 Zoom</b>	TD = 2.727 x W + 12.32	TD = 2.727 x W + 31.30	+/- 100% V	+/- 50% H	126.88 to 645.23	322.3 to 1638.9
		TD = 4.458 x W + 11.81	TD = 4.458 x W + 30.00	+/- 100% V	+/- 50% H	77.71 to 394.76	197.4 to 1002.7
CHRISTIE ILS LENS 4.5-7.5:1 SX+ / 4.1-6.9:1 HD 0.95" 3-CHIP DLP® <b>(118-100115-01)</b>	<b>4.5-7.5:1 Zoom</b>	TD = 4.422 x W + 13.46	TD = 4.422 x W + 34.20	+/- 100% V	+/- 50% H	103.77 to 709.17	263.6 to 1801.3
		TD = 7.432 x W + 13.26	TD = 7.432 x W + 33.70	+/- 100% V	+/- 50% H	61.77 to 422.01	156.9 to 1071.9
CHRISTIE ILS LENS 7.5-11.2:1 SX+ / 6.9-10.4:1 HD 0.95" 3-CHIP DLP® <b>(118-100116-01)</b>	<b>7.5-11.2:1 Zoom</b>	TD = 7.300 x W + 20.19	TD = 7.300 x W + 54.50	+/- 100% V	+/- 50% H	61.96 to 428.70	157.4 to 1088.9
		TD = 10.947 x W + 19.84	TD = 10.947 x W + 50.40	+/- 100% V	+/- 50% H	41.33 to 285.90	105.0 to 726.2

**NOTES:** **1)** Calculated Throw Distance values are subject to a +/-5% lens tolerance. **2)** Calculated Vertical and Horizontal Offsets are subject to a +/-7% centering tolerance. **3)** Throw distance is measured from the middle of the front foot of the projector to the screen.

### J SERIES WUXGA LENS INFORMATION

Lens Name	Ratio	Throw Distance (TD) Formula		Vertical Offset	Horizontal Offset	Min/Max Screen Width	
		Standard (Inches)	Metric (cm)			Standard (Inches)	Metric (cm)
CHRISTIE ILS LENS 0.73:1 SX+ / 0.67:1 HD 0.95" 3-CHIP DLP® <b>(118-100110-01)</b>	<b>0.67:1 Fixed</b>	TD = 0.703 x W + 3.204	TD = 0.703 x W + 8.140	+/- 22% V	+/-13% H	57.04 to 555.62	144.9 to 1411.3
CHRISTIE ILS LENS 1.2:1 SX+ / 1.1:1 HD 0.95" 3-CHIP DLP® <b>(118-100117-01)</b>	<b>1.1:1 Fixed</b>	TD = 1.139 x W + 4.212	TD = 1.139 x W + 10.70	+/- 112% V	+/- 50% H	100.03 to 515.0	254.1 to 1308.1
CHRISTIE ILS LENS 1.25-1.6:1 SX+ / 1.16-1.49:1 HD 0.95" 3-CHIP DLP® <b>(118-100111-01)</b>	<b>1.16-1.49:1 Zoom</b>	TD = 1.159 x W + 4.173	TD = 1.159 x W + 10.60	+/- 82% V	+/- 45% H	98.34 to 506.10	249.8 to 1285.5
		TD = 1.495 x W + 4.252	TD = 1.495 x W + 10.80	+/- 82% V	+/- 45% H	76.18 to 392.28	193.5 to 996.4
CHRISTIE ILS LENS 1.5-2.0:1 SX+ / 1.4-1.8:1 HD 0.95" 3-CHIP DLP® <b>(118-100112-01)</b>	<b>1.4-1.8:1 Zoom</b>	TD = 1.392 x W + 0.566	TD = 1.392 x W + 1.440	+/- 112% V	+/- 50% H	112.75 to 678.54	286.4 to 1723.5
		TD = 1.884 x W + 0.720	TD = 1.884 x W + 1.830	+/- 112% V	+/- 50% H	83.18 to 501.06	211.3 to 1272.7
CHRISTIE ILS LENS 2.0-2.8:1 SX+ / 1.8-2.6:1 HD 0.95" 3-CHIP DLP® <b>(118-100113-01)</b>	<b>1.8-2.6:1 Zoom</b>	TD = 1.876 x W + 0.795	TD = 1.876 x W + 2.020	+/- 112% V	+/- 50% H	83.50 to 503.14	212.1 to 1278.0
		TD = 2.579 x W + 0.393	TD = 2.579 x W + 1.00	+/- 112% V	+/- 50% H	61.22 to 366.57	155.5 to 931.1
CHRISTIE ILS LENS 2.8-4.5:1 SX+ / 2.6-4.1:1 HD 0.95" 3-CHIP DLP® <b>(118-100114-01)</b>	<b>2.6-4.1:1 Zoom</b>	TD = 2.517 x W + 12.40	TD = 2.517 x W + 31.50	+/- 112% V	+/- 50% H	137.44 to 699.05	349.1 to 1775.6
		TD = 4.119 x W + 11.88	TD = 4.119 x W + 30.20	+/- 112% V	+/- 50% H	84.09 to 427.24	213.6 to 1085.2
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		TD = 6.867 x W + 13.30	TD = 6.867 x W + 33.80	+/- 112% V	+/- 50% H	66.85 to 456.73	169.8 to 1160.1
CHRISTIE ILS LENS 7.5-11.2:1 SX+ / 6.9-10.4:1 HD 0.95" 3-CHIP DLP® <b>(118-100116-01)</b>	<b>6.9-10.4:1 Zoom</b>	TD = 6.739 x W + 20.27	TD = 6.739 x W + 51.50	+/- 112% V	+/- 50% H	67.08 to 464.33	170.4 to 1179.4
		TD = 10.111 x W + 19.84	TD = 10.111 x W + 50.40	+/- 112% V	+/- 50% H	44.76 to 309.56	113.7 to 786.3

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