



Focal Length 18 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (ft-inch)	23' 6"	20' 9"	17' 6"	14' 9"	12' 6"	10' 6"	8' 11"

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
Infinity	23' 5.2"	Infinity	20' 8.6"	Infinity	17' 5.5"	Infinity	14' 8.6"	Infinity	12' 4.9"	Infinity	10' 5.6"	Infinity	8' 10.1"	Infinity
30' 0"	13' 3.4"	Infinity	12' 4.5"	Infinity	11' 1.8"	Infinity	9' 11.8"	Infinity	8' 10.6"	Infinity	7' 10.3"	Infinity	6' 11"	Infinity
15' 0"	9' 3.2"	40' 7.3"	8' 9.9"	52' 7.8"	8' 2.3"	101' 4.9"	7' 6.6"	Infinity	6' 11"	Infinity	6' 3.4"	Infinity	5' 8.1"	Infinity
10' 0"	7' 1.4"	17' 0.5"	6' 10.2"	18' 9.8"	6' 5.7"	22' 7.7"	6' 0.9"	29' 10.9"	5' 7.9"	48' 6"	5' 2.9"	189' 4.8"	4' 9.8"	Infinity
7' 0"	5' 5.7"	9' 9.1"	5' 3.9"	10' 3.7"	5' 1.2"	11' 4"	4' 10.2"	12' 10.3"	4' 7.1"	15' 4"	4' 3.8"	19' 10.9"	4' 0.4"	30' 11.9"
5' 0"	4' 2.3"	6' 2.6"	4' 1.3"	6' 5.2"	3' 11.7"	6' 9.6"	3' 9.9"	7' 3.7"	3' 8"	8' 0.3"	3' 5.9"	9' 1"	3' 3.7"	10' 9.4"
3' 0"	2' 8.5"	3' 4.4"	2' 8.1"	3' 5.1"	2' 7.5"	3' 6.3"	2' 6.7"	3' 7.7"	2' 5.9"	3' 9.6"	2' 5"	4' 0.1"	2' 4"	4' 3.4"
2' 0"	1' 10.5"	2' 1.7"	1' 10.3"	2' 2"	1' 10.1"	2' 2.4"	1' 9.7"	2' 2.9"	1' 9.4"	2' 3.5"	1' 8.9"	2' 4.3"	1' 8.4"	2' 5.3"
1' 6"	1' 5.2"	1' 6.9"	1' 5.1"	1' 7"	1' 5"	1' 7.2"	1' 4.8"	1' 7.4"	1' 4.6"	1' 7.7"	1' 4.4"	1' 8.1"	1' 4.1"	1' 8.5"
1' 0"	0' 11.7"	1' 0.3"	0' 11.7"	1' 0.3"	0' 11.6"	1' 0.4"	0' 11.6"	1' 0.5"	0' 11.5"	1' 0.6"	0' 11.4"	1' 0.7"	0' 11.3"	1' 0.9"
0' 9"	0' 8.9"	0' 9.1"	0' 8.9"	0' 9.1"	0' 8.8"	0' 9.2"	0' 8.8"	0' 9.2"	0' 8.8"	0' 9.3"	0' 8.7"	0' 9.3"	0' 8.7"	0' 9.4"



6.7	8	9.5	11	13	16	19	22
7' 6"	6' 4"	5' 5"	4' 7"	3' 11"	3' 4"	2' 10"	2' 5"

6.7		8		9.5		11		13		16		19		22	
Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
7' 5.6"	Infinity	6' 3.8"	Infinity	5' 4.1"	Infinity	4' 6.3"	Infinity	3' 10.1"	Infinity	3' 3.2"	Infinity	2' 9.4"	Infinity	2' 4.5"	Infinity
6' 0.7"	Infinity	5' 3.4"	Infinity	4' 7.2"	Infinity	3' 11.9"	Infinity	3' 5.5"	Infinity	2' 11.9"	Infinity	2' 7"	Infinity	2' 2.8"	Infinity
5' 1.1"	Infinity	4' 6.6"	Infinity	4' 0.4"	Infinity	3' 6.8"	Infinity	3' 1.7"	Infinity	2' 9"	Infinity	2' 4.9"	Infinity	2' 1.3"	Infinity
4' 4.8"	Infinity	3' 11.9"	Infinity	3' 7.1"	Infinity	3' 2.7"	Infinity	2' 10.5"	Infinity	2' 6.6"	Infinity	2' 3.1"	Infinity	1' 11.9"	Infinity
3' 8.9"	93' 3.7"	3' 5.3"	Infinity	3' 1.8"	Infinity	2' 10.4"	Infinity	2' 7.1"	Infinity	2' 4"	Infinity	2' 1.1"	Infinity	1' 10.4"	Infinity
3' 1.4"	13' 11.1"	2' 11"	21' 5"	2' 8.5"	60' 8.2"	2' 6"	Infinity	2' 3.5"	Infinity	2' 1.1"	Infinity	1' 10.8"	Infinity	1' 8.6"	Infinity
2' 2.9"	4' 8"	2' 1.7"	5' 2.9"	2' 0.4"	6' 1.7"	1' 11.1"	7' 9.1"	1' 9.7"	11' 4.4"	1' 8.3"	26' 1"	1' 6.8"	Infinity	1' 5.4"	Infinity
1' 7.9"	2' 6.6"	1' 7.3"	2' 8.4"	1' 6.6"	2' 10.8"	1' 5.9"	3' 2.2"	1' 5.1"	3' 7.3"	1' 4.3"	4' 3.7"	1' 3.4"	5' 7.6"	1' 2.5"	9' 0.5"
1' 3.8"	1' 9.1"	1' 3.4"	1' 9.8"	1' 3"	1' 10.8"	1' 2.6"	2' 0.1"	1' 2.1"	2' 1.8"	1' 1.6"	2' 4.3"	1' 1"	2' 8"	1' 0.4"	3' 2"
0' 11.2"	1' 1"	0' 11"	1' 1.3"	0' 10.8"	1' 1.5"	0' 10.7"	1' 1.9"	0' 10.4"	1' 2.3"	0' 10.2"	1' 2.9"	0' 9.9"	1' 3.7"	0' 9.7"	1' 4.7"
0' 8.6"	0' 9.4"	0' 8.5"	0' 9.5"	0' 8.5"	0' 9.6"	0' 8.4"	0' 9.8"	0' 8.3"	0' 9.9"	0' 8.1"	0' 10.2"	0' 8"	0' 10.4"	0' 7.9"	0' 10.8"



Focal Length 25 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (ft-inch)	43'	38'	32'	27'	22' 9"	19' 2"	16' 2"

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
Infinity	42' 11.3"	Infinity	37' 11.3"	Infinity	31' 11.2"	Infinity	26' 10.7"	Infinity	22' 7.7"	Infinity	19' 0.9"	Infinity	16' 0.8"	Infinity
30' 0"	17' 9.4"	97' 11.5"	16' 10.5"	140' 4"	15' 7.1"	468' 1.9"	14' 3.6"	Infinity	13' 0.3"	Infinity	11' 9.3"	Infinity	10' 6.9"	Infinity
15' 0"	11' 2.5"	22' 9.2"	10' 10.2"	24' 5.5"	10' 3.7"	27' 9.5"	9' 8.9"	33' 2.3"	9' 1.7"	43' 2.3"	8' 6.2"	67' 5"	7' 10.6"	203' 11.2"
10' 0"	8' 2.2"	12' 10.6"	7' 11.9"	13' 4.8"	7' 8.4"	14' 3.9"	7' 4.6"	15' 7.3"	7' 0.5"	17' 5.8"	6' 8"	20' 4.8"	6' 3.3"	25' 5.7"
7' 0"	6' 0.9"	8' 3.2"	5' 11.7"	8' 5.7"	5' 9.8"	8' 9.9"	5' 7.6"	9' 3.4"	5' 5.2"	9' 10.8"	5' 2.6"	10' 9.1"	4' 11.7"	11' 11.9"
5' 0"	4' 6.3"	5' 7.1"	4' 5.6"	5' 8.2"	4' 4.5"	5' 10.1"	4' 3.4"	6' 0.4"	4' 2"	6' 3.3"	4' 0.5"	6' 7.2"	3' 10.8"	7' 0.4"
3' 0"	2' 10"	3' 2.3"	2' 9.7"	3' 2.6"	2' 9.4"	3' 3.1"	2' 8.9"	3' 3.8"	2' 8.4"	3' 4.6"	2' 7.8"	3' 5.6"	2' 7.1"	3' 6.9"
2' 0"	1' 11.2"	2' 0.9"	1' 11.1"	2' 1"	1' 10.9"	2' 1.2"	1' 10.7"	2' 1.5"	1' 10.5"	2' 1.8"	1' 10.2"	2' 2.2"	1' 9.9"	2' 2.6"
1' 6"	1' 5.6"	1' 6.5"	1' 5.5"	1' 6.5"	1' 5.4"	1' 6.6"	1' 5.3"	1' 6.7"	1' 5.2"	1' 6.9"	1' 5.1"	1' 7.1"	1' 4.9"	1' 7.3"
1' 0"	0' 11.8"	1' 0.2"	0' 11.8"	1' 0.2"	0' 11.8"	1' 0.2"	0' 11.7"	1' 0.3"	0' 11.7"	1' 0.3"	0' 11.6"	1' 0.4"	0' 11.6"	1' 0.5"



6.7	8	9.5	11	13	16	19	22
13' 8"	11' 6"	9' 9"	8' 3"	7'	5' 11"	5'	4' 3"

6.7		8		9.5		11		13		16		19		22	
Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
13' 6.5"	Infinity	11' 5.1"	Infinity	9' 7.6"	Infinity	8' 1.6"	Infinity	6' 10.5"	Infinity	5' 9.7"	Infinity	4' 11"	Infinity	4' 2"	Infinity
9' 5.2"	Infinity	8' 4.4"	Infinity	7' 4.6"	Infinity	6' 5.8"	Infinity	5' 8"	Infinity	4' 11.2"	Infinity	4' 3.4"	Infinity	3' 8.5"	Infinity
7' 2.9"	Infinity	6' 7.2"	Infinity	5' 11.8"	Infinity	5' 4.6"	Infinity	4' 9.8"	Infinity	4' 3.4"	Infinity	3' 9.5"	Infinity	3' 4.1"	Infinity
5' 10.5"	36' 2.9"	5' 5.4"	73' 3.1"	5' 0.3"	Infinity	4' 7.3"	Infinity	4' 2.3"	Infinity	3' 9.5"	Infinity	3' 4.8"	Infinity	3' 0.5"	Infinity
4' 8.7"	13' 10.7"	4' 5.5"	17' 1.6"	4' 2.1"	23' 9.5"	3' 10.6"	44' 5.7"	3' 7.1"	Infinity	3' 3.5"	Infinity	3' 0.1"	Infinity	2' 8.7"	Infinity
3' 9"	7' 7.5"	3' 7"	8' 5.8"	3' 4.8"	9' 9.5"	3' 2.5"	12' 0.4"	3' 0.2"	16' 6.8"	2' 9.7"	30' 3.6"	2' 7.2"	Infinity	2' 4.7"	Infinity
2' 6.3"	3' 8.6"	2' 5.5"	3' 10.7"	2' 4.5"	4' 1.6"	2' 3.4"	4' 5.5"	2' 2.3"	4' 11.1"	2' 1"	5' 7.5"	1' 11.7"	6' 9.6"	1' 10.3"	9' 0.9"
1' 9.5"	2' 3.2"	1' 9.1"	2' 3.9"	1' 8.7"	2' 4.8"	1' 8.2"	2' 6"	1' 7.6"	2' 7.5"	1' 6.9"	2' 9.5"	1' 6.2"	3' 0.3"	1' 5.5"	3' 4.5"
1' 4.7"	1' 7.6"	1' 4.5"	1' 7.9"	1' 4.2"	1' 8.3"	1' 3.9"	1' 8.8"	1' 3.6"	1' 9.5"	1' 3.2"	1' 10.3"	1' 2.8"	1' 11.4"	1' 2.3"	2' 0.9"
0' 11.5"	1' 0.5"	0' 11.4"	1' 0.7"	0' 11.3"	1' 0.8"	0' 11.2"	1' 1"	0' 11.1"	1' 1.2"	0' 10.9"	1' 1.4"	0' 10.7"	1' 1.7"	0' 10.5"	1' 2.1"



Focal Length 35 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (ft-inch)	83' 11"	74' 2"	62' 5"	52' 6"	44' 2"	37' 3"	31' 4"

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
Infinity	83' 9.5"	Infinity	74' 0.1"	Infinity	62' 3.1"	Infinity	52' 4.6"	Infinity	44' 1"	Infinity	37' 1.1"	Infinity	31' 2.7"	Infinity
30' 0"	22' 2.2"	46' 5.1"	21' 5.3"	50' 0.8"	20' 4.2"	57' 4.2"	19' 2.2"	69' 4.3"	17' 11.6"	92' 4.5"	16' 8.5"	152' 9.4"	15' 5"	690' 11.6"
15' 0"	12' 9.4"	18' 1.9"	12' 6.5"	18' 8.2"	12' 2"	19' 7.2"	11' 8.9"	20' 9.7"	11' 3.4"	22' 5.5"	10' 9.4"	24' 9.7"	10' 2.9"	28' 4"
10' 0"	8' 11.8"	11' 3.5"	8' 10.3"	11' 5.8"	8' 8.1"	11' 9.8"	8' 5.5"	12' 2.9"	8' 2.7"	12' 9.4"	7' 11.5"	13' 6"	7' 7.9"	14' 5.6"
7' 0"	6' 5.9"	7' 7.1"	6' 5.2"	7' 8.2"	6' 4"	7' 9.9"	6' 2.7"	8' 0"	6' 1.2"	8' 2.7"	5' 11.4"	8' 6.1"	5' 9.5"	8' 10.5"
5' 0"	4' 8.9"	5' 3.4"	4' 8.5"	5' 3.9"	4' 7.9"	5' 4.7"	4' 7.2"	5' 5.7"	4' 6.4"	5' 6.9"	4' 5.5"	5' 8.4"	4' 4.4"	5' 10.3"
4' 0"	3' 10.1"	4' 2.1"	3' 9.8"	4' 2.4"	3' 9.4"	4' 2.9"	3' 9"	4' 3.5"	3' 8.4"	4' 4.2"	3' 7.8"	4' 5.1"	3' 7.1"	4' 6.2"
3' 0"	2' 10.9"	3' 1.1"	2' 10.8"	3' 1.3"	2' 10.6"	3' 1.5"	2' 10.3"	3' 1.8"	2' 10"	3' 2.2"	2' 9.7"	3' 2.7"	2' 9.3"	3' 3.2"
2' 0"	1' 11.6"	2' 0.5"	1' 11.5"	2' 0.5"	1' 11.4"	2' 0.6"	1' 11.3"	2' 0.7"	1' 11.2"	2' 0.9"	1' 11"	2' 1.1"	1' 10.9"	2' 1.3"
1' 6"	1' 5.8"	1' 6.2"	1' 5.7"	1' 6.3"	1' 5.7"	1' 6.3"	1' 5.6"	1' 6.4"	1' 5.6"	1' 6.4"	1' 5.5"	1' 6.5"	1' 5.4"	1' 6.6"
1' 2"	1' 1.9"	1' 2.1"	1' 1.9"	1' 2.1"	1' 1.8"	1' 2.2"	1' 1.8"	1' 2.2"	1' 1.8"	1' 2.2"	1' 1.7"	1' 2.3"	1' 1.7"	1' 2.3"



6.7	8	9.5	11	13	16	19	22
26' 5"	22' 3"	18' 9"	15' 10"	13' 4"	11' 3"	9' 6"	8' 1"

6.7		8		9.5		11		13		16		19		22	
Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
26' 3.4"	Infinity	22' 1.6"	Infinity	18' 7.7"	Infinity	15' 8.4"	Infinity	13' 2.8"	Infinity	11' 1.9"	Infinity	9' 4.9"	Infinity	7' 11.3"	Infinity
14' 1.6"	Infinity	12' 10.2"	Infinity	11' 7.3"	Infinity	10' 5"	Infinity	9' 3.4"	Infinity	8' 2.7"	Infinity	7' 3"	Infinity	6' 4.3"	Infinity
9' 7.9"	34' 1.3"	9' 0.7"	45' 0.6"	8' 5.2"	72' 12"	7' 9.5"	280' 9.8"	7' 1.8"	Infinity	6' 6.2"	Infinity	5' 10.8"	Infinity	5' 3.6"	Infinity
7' 4.1"	15' 9.7"	6' 11.9"	17' 9.3"	6' 7.4"	20' 10.5"	6' 2.7"	26' 4.4"	5' 9.8"	38' 5.2"	5' 4.7"	84' 9.3"	4' 11.6"	Infinity	4' 6.5"	Infinity
5' 7.3"	9' 4.3"	5' 4.9"	9' 12"	5' 2.2"	10' 10.6"	4' 11.3"	12' 2.2"	4' 8.2"	14' 2.3"	4' 5"	17' 8.3"	4' 1.6"	25' 0.9"	3' 10.1"	50' 1.5"
4' 3.2"	6' 0.7"	4' 1.8"	6' 3.8"	4' 0.3"	6' 7.8"	3' 10.6"	7' 1.1"	3' 8.7"	7' 8.5"	3' 6.7"	8' 7.3"	3' 4.5"	10' 0"	3' 2.2"	12' 4.8"
3' 6.3"	4' 7.6"	3' 5.4"	4' 9.3"	3' 4.3"	4' 11.5"	3' 3.2"	5' 2.3"	3' 1.9"	5' 6.1"	3' 0.4"	5' 11.3"	2' 10.9"	6' 6.7"	2' 9.2"	7' 5.8"
2' 8.8"	3' 3.9"	2' 8.3"	3' 4.7"	2' 7.7"	3' 5.8"	2' 7"	3' 7.1"	2' 6.2"	3' 8.8"	2' 5.3"	3' 11"	2' 4.3"	4' 2"	2' 3.3"	4' 6.1"
1' 10.7"	2' 1.5"	1' 10.4"	2' 1.8"	1' 10.2"	2' 2.2"	1' 9.8"	2' 2.7"	1' 9.5"	2' 3.3"	1' 9.1"	2' 4"	1' 8.6"	2' 4.9"	1' 8.1"	2' 6.1"
1' 5.3"	1' 6.8"	1' 5.2"	1' 6.9"	1' 5"	1' 7.1"	1' 4.9"	1' 7.3"	1' 4.7"	1' 7.6"	1' 4.4"	1' 7.9"	1' 4.2"	1' 8.4"	1' 3.9"	1' 8.9"
1' 1.6"	1' 2.4"	1' 1.6"	1' 2.5"	1' 1.5"	1' 2.6"	1' 1.4"	1' 2.7"	1' 1.3"	1' 2.8"	1' 1.1"	1' 3"	1' 1"	1' 3.2"	1' 0.8"	1' 3.5"



Focal Length 50 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (ft-inch)	176' 2"	155' 7"	130' 10"	110' 1"	92' 8"	77' 11"	65' 7"

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
Infinity	175' 11.7"	Infinity	155' 4.7"	Infinity	130' 8.3"	Infinity	109' 11"	Infinity	92' 5.5"	Infinity	77' 9.2"	Infinity	65' 5"	Infinity
30' 0"	25' 8.2"	36' 0.8"	25' 2.5"	37' 0.7"	24' 5.6"	38' 9.5"	23' 7.7"	41' 0.8"	22' 8.8"	44' 1.8"	21' 8.9"	48' 5.9"	20' 8"	54' 10.9"
15' 0"	13' 10.3"	16' 4.2"	13' 8.6"	16' 6.6"	13' 6"	16' 10.6"	13' 3"	17' 3.5"	12' 11.5"	17' 9.7"	12' 7.6"	18' 5.6"	12' 3.3"	19' 3.8"
10' 0"	9' 5.8"	10' 6.9"	9' 5.1"	10' 7.9"	9' 3.8"	10' 9.5"	9' 2.4"	10' 11.4"	9' 0.8"	11' 1.9"	8' 10.9"	11' 4.9"	8' 8.7"	11' 8.6"
7' 0"	6' 9"	7' 3.3"	6' 8.6"	7' 3.7"	6' 8"	7' 4.4"	6' 7.3"	7' 5.3"	6' 6.4"	7' 6.4"	6' 5.5"	7' 7.8"	6' 4.4"	7' 9.4"
5' 0"	4' 10.5"	5' 1.6"	4' 10.3"	5' 1.8"	4' 10"	5' 2.2"	4' 9.6"	5' 2.6"	4' 9.2"	5' 3.1"	4' 8.7"	5' 3.7"	4' 8.1"	5' 4.5"
4' 0"	3' 11"	4' 1"	3' 10.9"	4' 1.1"	3' 10.7"	4' 1.3"	3' 10.5"	4' 1.6"	3' 10.2"	4' 1.9"	3' 9.9"	4' 2.3"	3' 9.5"	4' 2.8"
3' 0"	2' 11.5"	3' 0.5"	2' 11.4"	3' 0.6"	2' 11.3"	3' 0.7"	2' 11.2"	3' 0.9"	2' 11"	3' 1"	2' 10.9"	3' 1.2"	2' 10.6"	3' 1.5"
2' 6"	2' 5.7"	2' 6.4"	2' 5.6"	2' 6.4"	2' 5.5"	2' 6.5"	2' 5.4"	2' 6.6"	2' 5.3"	2' 6.7"	2' 5.2"	2' 6.8"	2' 5.1"	2' 7"
2' 0"	1' 11.8"	2' 0.2"	1' 11.8"	2' 0.2"	1' 11.7"	2' 0.3"	1' 11.7"	2' 0.3"	1' 11.6"	2' 0.4"	1' 11.5"	2' 0.5"	1' 11.4"	2' 0.6"
1' 9"	1' 8.8"	1' 9.2"	1' 8.8"	1' 9.2"	1' 8.8"	1' 9.2"	1' 8.8"	1' 9.3"	1' 8.7"	1' 9.3"	1' 8.6"	1' 9.4"	1' 8.6"	1' 9.4"



6.7	8	9.5	11	13	16	19	22
55' 2"	46' 6"	39' 2"	33'	27' 9"	23' 5"	19' 9"	16' 8"

6.7		8		9.5		11		13		16		19		22	
Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
55' 0.4"	Infinity	46' 3.6"	Infinity	38' 11.5"	Infinity	32' 9.3"	Infinity	27' 7"	Infinity	23' 2.6"	Infinity	19' 6.6"	Infinity	16' 5.5"	Infinity
19' 6.2"	65' 2"	18' 3.8"	83' 9.8"	17' 0.7"	127' 1.3"	15' 9.3"	330' 2.5"	14' 5.8"	Infinity	13' 2.4"	Infinity	11' 11.3"	Infinity	10' 8.8"	Infinity
11' 10.4"	20' 5.1"	11' 5"	21' 11.2"	10' 11.1"	24' 0.5"	10' 4.7"	27' 1.9"	9' 9.8"	32' 1.2"	9' 2.7"	41' 0"	8' 7.2"	61' 2.7"	7' 11.5"	148' 7.4"
8' 6.3"	12' 1.4"	8' 3.5"	12' 7.4"	8' 0.4"	13' 3.3"	7' 8.9"	14' 1.9"	7' 5.1"	15' 4.5"	7' 1"	17' 1.6"	6' 8.6"	19' 9.9"	6' 3.9"	24' 4.8"
6' 3.1"	7' 11.4"	6' 1.6"	8' 1.9"	5' 11.9"	8' 5.1"	5' 10"	8' 9.2"	5' 7.9"	9' 2.5"	5' 5.5"	9' 9.6"	5' 2.9"	10' 7.3"	5' 0.1"	11' 9.1"
4' 7.4"	5' 5.4"	4' 6.6"	5' 6.6"	4' 5.7"	5' 8"	4' 4.7"	5' 9.8"	4' 3.5"	6' 0"	4' 2.2"	6' 2.9"	4' 0.7"	6' 6.6"	3' 11"	6' 11.5"
3' 9.1"	4' 3.3"	3' 8.6"	4' 4"	3' 8"	4' 4.9"	3' 7.3"	4' 5.9"	3' 6.5"	4' 7.2"	3' 5.6"	4' 8.8"	3' 4.6"	4' 10.9"	3' 3.5"	5' 1.5"
2' 10.4"	3' 1.8"	2' 10.1"	3' 2.1"	2' 9.8"	3' 2.6"	2' 9.4"	3' 3.1"	2' 8.9"	3' 3.7"	2' 8.4"	3' 4.5"	2' 7.8"	3' 5.5"	2' 7.2"	3' 6.8"
2' 4.9"	2' 7.2"	2' 4.7"	2' 7.4"	2' 4.5"	2' 7.7"	2' 4.2"	2' 8"	2' 3.9"	2' 8.5"	2' 3.5"	2' 9"	2' 3.1"	2' 9.6"	2' 2.7"	2' 10.4"
1' 11.3"	2' 0.7"	1' 11.2"	2' 0.8"	1' 11.1"	2' 1"	1' 10.9"	2' 1.2"	1' 10.7"	2' 1.5"	1' 10.5"	2' 1.8"	1' 10.2"	2' 2.1"	1' 9.9"	2' 2.6"
1' 8.5"	1' 9.5"	1' 8.4"	1' 9.6"	1' 8.3"	1' 9.7"	1' 8.2"	1' 9.9"	1' 8"	1' 10.1"	1' 7.9"	1' 10.3"	1' 7.7"	1' 10.5"	1' 7.4"	1' 10.9"



Focal Length 73 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (ft-inch)	341' 2"	301' 4"	253' 5"	213' 2"	179' 4"	150' 10"	126' 11"

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
Infinity	340' 11"	Infinity	301' 0.4"	Infinity	253' 2"	Infinity	212' 11"	Infinity	179' 0.8"	Infinity	150' 7.3"	Infinity	126' 8.1"	Infinity
30' 0"	27' 7.4"	32' 10"	27' 3.9"	33' 3"	26' 10.5"	33' 11.4"	26' 4.3"	34' 9.8"	25' 9.2"	35' 10.9"	25' 1.2"	37' 3.7"	24' 4.1"	39' 1.3"
15' 0"	14' 4.7"	15' 8"	14' 3.8"	15' 9.1"	14' 2.3"	15' 10.9"	14' 0.6"	16' 1.1"	13' 10.6"	16' 3.8"	13' 8.3"	16' 7.1"	13' 5.6"	16' 11.2"
10' 0"	9' 8.8"	10' 3.4"	9' 8.4"	10' 3.9"	9' 7.7"	10' 4.6"	9' 6.9"	10' 5.6"	9' 6"	10' 6.7"	9' 4.9"	10' 8"	9' 3.7"	10' 9.7"
7' 0"	6' 10.4"	7' 1.6"	6' 10.2"	7' 1.8"	6' 9.9"	7' 2.2"	6' 9.5"	7' 2.6"	6' 9.1"	7' 3.1"	6' 8.6"	7' 3.8"	6' 7.9"	7' 4.5"
5' 0"	4' 11.2"	5' 0.8"	4' 11.1"	5' 0.9"	4' 11"	5' 1.1"	4' 10.8"	5' 1.3"	4' 10.5"	5' 1.5"	4' 10.3"	5' 1.8"	4' 10"	5' 2.2"
4' 0"	3' 11.5"	4' 0.5"	3' 11.5"	4' 0.6"	3' 11.4"	4' 0.7"	3' 11.2"	4' 0.8"	3' 11.1"	4' 0.9"	3' 10.9"	4' 1.1"	3' 10.7"	4' 1.3"
3' 0"	2' 11.7"	3' 0.3"	2' 11.7"	3' 0.3"	2' 11.7"	3' 0.4"	2' 11.6"	3' 0.4"	2' 11.5"	3' 0.5"	2' 11.4"	3' 0.6"	2' 11.3"	3' 0.7"
2' 6"	2' 5.8"	2' 6.2"	2' 5.8"	2' 6.2"	2' 5.8"	2' 6.2"	2' 5.7"	2' 6.3"	2' 5.7"	2' 6.3"	2' 5.6"	2' 6.4"	2' 5.5"	2' 6.5"



6.7	8	9.5	11	13	16	19	22
106' 9"	89' 10"	75' 8"	63' 8"	53' 7"	45' 2"	38'	32'

6.7		8		9.5		11		13		16		19		22	
Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
106' 6.6"	Infinity	89' 7.5"	Infinity	75' 4.7"	Infinity	63' 5.1"	Infinity	53' 4.3"	Infinity	44' 10.8"	Infinity	37' 9.4"	Infinity	31' 9.6"	Infinity
23' 6.1"	41' 6"	22' 7"	44' 9"	21' 6.9"	49' 4.2"	20' 5.9"	56' 2.7"	19' 4"	67' 5"	18' 1.5"	88' 4"	16' 10.4"	140' 1.4"	15' 7"	464' 2.5"
13' 2.5"	17' 4.3"	12' 11"	17' 10.7"	12' 7.1"	18' 6.8"	12' 2.6"	19' 5.4"	11' 9.7"	20' 7.3"	11' 4.2"	22' 2.2"	10' 10.3"	24' 4.8"	10' 3.8"	27' 8.5"
9' 2.2"	10' 11.7"	9' 0.6"	11' 2.2"	8' 10.7"	11' 5.2"	8' 8.5"	11' 9.1"	8' 6"	12' 2"	8' 3.2"	12' 8.2"	8' 0"	13' 4.4"	7' 8.5"	14' 3.4"
6' 7.2"	7' 5.4"	6' 6.4"	7' 6.5"	6' 5.4"	7' 7.9"	6' 4.3"	7' 9.5"	6' 3"	7' 11.6"	6' 1.5"	8' 2.2"	5' 11.8"	8' 5.4"	5' 9.9"	8' 9.6"
4' 9.6"	5' 2.6"	4' 9.2"	5' 3.1"	4' 8.7"	5' 3.8"	4' 8.1"	5' 4.5"	4' 7.4"	5' 5.5"	4' 6.6"	5' 6.6"	4' 5.7"	5' 8.1"	4' 4.6"	5' 9.8"
3' 10.5"	4' 1.6"	3' 10.2"	4' 1.9"	3' 9.9"	4' 2.3"	3' 9.5"	4' 2.8"	3' 9.1"	4' 3.3"	3' 8.6"	4' 4"	3' 8"	4' 4.9"	3' 7.3"	4' 5.9"
2' 11.2"	3' 0.8"	2' 11"	3' 1"	2' 10.9"	3' 1.2"	2' 10.7"	3' 1.5"	2' 10.4"	3' 1.7"	2' 10.1"	3' 2.1"	2' 9.8"	3' 2.5"	2' 9.4"	3' 3"
2' 5.5"	2' 6.6"	2' 5.4"	2' 6.7"	2' 5.2"	2' 6.8"	2' 5.1"	2' 7"	2' 4.9"	2' 7.1"	2' 4.7"	2' 7.4"	2' 4.5"	2' 7.6"	2' 4.3"	2' 8"



Focal Length 100 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (ft-inch)	632' 10"	558' 10"	470'	395' 4"	332' 6"	279' 8"	235' 3"

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
Infinity	632' 4.8"	Infinity	558' 5"	Infinity	469' 7.4"	Infinity	394' 11.4"	Infinity	332' 1.8"	Infinity	279' 4.2"	Infinity	234' 11.3"	Infinity
30' 0"	28' 8.1"	31' 5.4"	28' 6.1"	31' 7.9"	28' 2.9"	31' 11.9"	27' 11.2"	32' 4.8"	27' 6.9"	32' 10.8"	27' 1.9"	33' 6.1"	26' 8.2"	34' 3.2"
15' 0"	14' 8"	15' 4.1"	14' 7.5"	15' 4.7"	14' 6.7"	15' 5.6"	14' 5.7"	15' 6.7"	14' 4.6"	15' 8.1"	14' 3.3"	15' 9.7"	14' 1.7"	15' 11.6"
10' 0"	9' 10.3"	10' 1.8"	9' 10.1"	10' 2"	9' 9.7"	10' 2.4"	9' 9.3"	10' 2.9"	9' 8.8"	10' 3.4"	9' 8.2"	10' 4.1"	9' 7.5"	10' 4.9"
7' 0"	6' 11.2"	7' 0.8"	6' 11.1"	7' 0.9"	6' 10.9"	7' 1.1"	6' 10.7"	7' 1.3"	6' 10.5"	7' 1.6"	6' 10.2"	7' 1.9"	6' 9.8"	7' 2.3"
5' 0"	4' 11.6"	5' 0.4"	4' 11.5"	5' 0.5"	4' 11.5"	5' 0.5"	4' 11.4"	5' 0.7"	4' 11.2"	5' 0.8"	4' 11.1"	5' 0.9"	4' 10.9"	5' 1.1"
4' 0"	3' 11.8"	4' 0.2"	3' 11.7"	4' 0.3"	3' 11.7"	4' 0.3"	3' 11.6"	4' 0.4"	3' 11.5"	4' 0.5"	3' 11.4"	4' 0.6"	3' 11.3"	4' 0.7"
3' 0"	2' 11.9"	3' 0.1"	2' 11.9"	3' 0.1"	2' 11.8"	3' 0.2"	2' 11.8"	3' 0.2"	2' 11.8"	3' 0.2"	2' 11.7"	3' 0.3"	2' 11.7"	3' 0.3"
2' 9"	2' 8.9"	2' 9.1"	2' 8.9"	2' 9.1"	2' 8.9"	2' 9.1"	2' 8.8"	2' 9.2"	2' 8.8"	2' 9.2"	2' 8.8"	2' 9.2"	2' 8.7"	2' 9.3"



6.7	8	9.5	11	13	16	19	22
197' 11"	166' 6"	140' 1"	117' 11"	99' 3"	83' 7"	70' 4"	59' 3"

6.7		8		9.5		11		13		16		19		22	
Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)	Short Focus (ft-inch)	Long Focus (ft-inch)
197' 7.2"	Infinity	166' 2.4"	Infinity	139' 9.6"	Infinity	117' 7.1"	Infinity	98' 11.1"	Infinity	83' 2.6"	Infinity	70' 0.2"	Infinity	58' 11"	Infinity
26' 1.6"	35' 2.6"	25' 6.2"	36' 5"	24' 9.8"	37' 11.5"	24' 0.4"	39' 11.6"	23' 1.9"	42' 7.9"	22' 2.5"	46' 4.4"	21' 2"	51' 8.7"	20' 0.7"	59' 11.7"
13' 11.9"	16' 2"	13' 9.8"	16' 4.9"	13' 7.4"	16' 8.5"	13' 4.6"	17' 0.9"	13' 1.4"	17' 6.4"	12' 9.7"	18' 1.3"	12' 5.6"	18' 10.2"	12' 1"	19' 9.8"
9' 6.6"	10' 5.9"	9' 5.7"	10' 7.1"	9' 4.6"	10' 8.5"	9' 3.3"	10' 10.3"	9' 1.8"	11' 0.4"	9' 0"	11' 3"	8' 10"	11' 6.3"	8' 7.8"	11' 10.5"
6' 9.4"	7' 2.7"	6' 9"	7' 3.3"	6' 8.4"	7' 3.9"	6' 7.8"	7' 4.7"	6' 7"	7' 5.7"	6' 6.2"	7' 6.8"	6' 5.1"	7' 8.3"	6' 4"	7' 10"
4' 10.7"	5' 1.3"	4' 10.5"	5' 1.6"	4' 10.2"	5' 1.9"	4' 9.9"	5' 2.2"	4' 9.5"	5' 2.7"	4' 9.1"	5' 3.2"	4' 8.6"	5' 3.9"	4' 8"	5' 4.7"
3' 11.2"	4' 0.8"	3' 11.1"	4' 1"	3' 10.9"	4' 1.1"	3' 10.7"	4' 1.4"	3' 10.5"	4' 1.6"	3' 10.2"	4' 2"	3' 9.9"	4' 2.3"	3' 9.5"	4' 2.8"
2' 11.6"	3' 0.4"	2' 11.5"	3' 0.5"	2' 11.4"	3' 0.6"	2' 11.3"	3' 0.7"	2' 11.2"	3' 0.8"	2' 11.1"	3' 1"	2' 10.9"	3' 1.2"	2' 10.7"	3' 1.4"
2' 8.7"	2' 9.3"	2' 8.6"	2' 9.4"	2' 8.5"	2' 9.5"	2' 8.4"	2' 9.6"	2' 8.3"	2' 9.7"	2' 8.2"	2' 9.8"	2' 8.1"	2' 10"	2' 7.9"	2' 10.2"