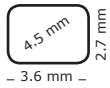


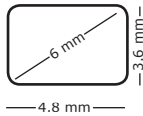
# CONVERSION TABLE FOR HORIZONTAL ANGLE OF VIEW

Lenses for 1", 2/3", 1/2", 1/3" and 1/4" can be used on cameras with a smaller CCD chip, but not vice versa. By doing this, the viewing angle will change according to the table below.

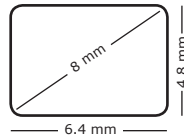
**1/4" Chip**



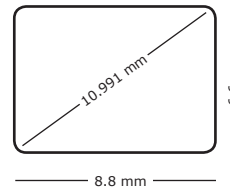
**1/3" Chip**



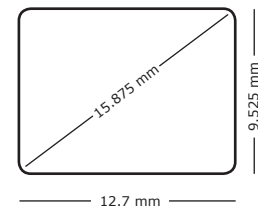
**1/2" Chip**



**2/3" Chip**



**1" Chip**



## Horizontal angle of view

Focal Length	1/4"	1/3"	1/2"	2/3"	1"
Fisheye 1.6 mm	180.00°	180.00°			
2.2 mm	92.60°				
2.6 mm	77.80°	104.40°			
2.8 mm	71.50°	94.30°			
2.9 mm	70.70°	96.20°			
3.0 mm	69.00°	93.20°			
Fisheye 3.4 mm	64.90°	89.60°			
3.5 mm	58.70°	79.80°			
3.7 mm	53.50°	71.00°	93.70°		
4.0 mm	49.10°	63.90°			
4.2 mm	47.90°	64.30°	86.80°		
4.8 mm	41.70°	55.10°	72.40°	96.40°	
5.8 mm	33.80°	44.10°			
6.0 mm	33.00°	43.60°	56.90°		
6.2 mm	32.40°	42.80°	56.10°		
6.5 mm	29.90°	39.70°	52.50°	71.00°	97.90°
7.5 mm	26.50°	34.90°	45.60°		
8.0 mm	25.20°	33.30°	43.90°	58.70°	
8.5 mm	24.00°	31.90°	42.10°	56.50°	
9.0 mm	22.30°	29.60°	39.10°	52.60°	
10.0 mm	19.90°	26.40°	35.00°	47.00°	
10.5 mm	19.00°	25.20°	33.50°	45.50°	
12.0 mm	16.50°	21.90°	28.90°		
12.5 mm	16.50°	21.90°	29.00°	39.40°	55.50°
16.0 mm	12.90°	17.10°	22.70°	31.00°	
25.0 mm	8.20°	11.00°	14.60°	20.00°	28.95°
35.0 mm	6.10°	8.10°	10.80°	14.80°	
38.0 mm	5.60°	7.40°			
40.0 mm	5.10°	6.80°	9.10°		
48.0 mm	4.40°	5.90°	7.70°		
50.0 mm	4.10°	5.50°	7.30°	10.10°	14.41°
58.0 mm	3.60°	4.80°			
75.0 mm	2.80°	3.80°	5.00°	6.90°	9.78°
105.0 mm	2.00°	2.70°	3.60°	4.80°	
120.0 mm	1.80°	2.30°	3.10°		
140.0 mm	1.50°	2.00°	2.70°	3.60°	
240.0 mm	0.90°	1.20°	1.60°		
330.0 mm		0.90°	1.10°		
660.0 mm	0.31°	0.42°	0.56°		
1320.0 mm	0.16°	0.21°	0.28°		
1680.0 mm	0.12°	0.16°	0.22°		