



# COP UK Support Document

## Lens selection chart

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## Simple Field of View Calculator

This chart allow you to estimate the image area that can be obtained using various combinations of lens and cameras.

### How to Use this Chart

1. Select focal length of lens (e.g 8mm)
2. Select camera format (e.g 1/3")
3. Select distance between camera and object in metres (e.g 20m)

This shows that by using a 8mm lens on a 1/3" camera the horizontal field of view will be 33° and that at 20 metres the monitor image will be 8 metres high and 11 meters wide.

FOCAL LENGTH IN MM	FIELD OF VIEW (HORIZONTAL)	FORMAT H = HEIGHT W = WIDTH	DISTANCE BETWEEN CAMERA AND OBJECT IN METRES						
			1	5	10	20	30	50	100
4mm	63°	1/3" H w	0.8 1.1	4.0 5.5	8.0 11.0	16.0 21.0	---	---	---
	88°	1/2" H w	1.2 1.6	5.9 7.9	12.0 16.0	---	---	---	---
6mm	38°	1/3" H w	0.6 0.8	2.7 3.7	5.5 7.6	11.0 15.0	17.0 22.0	28.0 37.0	55.0 75.0
	58°	1/2" H w	0.8 1.1	4.0 5.3	7.2 11.0	16.0 21.0	24.0 32.0	40.0 53.0	---
8mm	33°	1/3" H w	0.4 0.6	2.0 2.7	4.0 5.5	8.0 11.0	12.0 16.0	20.0 27.0	40.0 53.0
	43°	1/2" H w	0.6 0.8	3.0 4.0	5.9 7.9	12.0 16.0	16.0 24.0	30.0 40.0	59.0 79.0
12.5mm	20°	1/3" H w	0.3 0.4	1.3 1.7	2.6 3.4	5.0 7.0	7.5 10.0	13.0 17.0	26.0 34.0
	29°	1/2" H w	0.4 0.5	1.9 2.5	3.6 5.1	7.6 10.0	11.0 15.0	19.0 25.0	38.0 51.0
25mm	10°	1/3" H w	0.1 0.2	0.7 0.9	1.3 1.7	2.6 3.4	3.8 5.0	6.5 8.5	13.0 17.0
	15°	1/2" H w	0.2 0.3	0.9 1.3	1.9 2.5	3.8 5.1	5.7 7.6	9.5 13.0	19.0 25.0
50mm	5°	1/3" H w	0.1 0.1	0.3 0.4	0.7 0.9	1.3 1.7	1.9 2.6	3.2 4.3	6.5 8.5
	7°	1/2" H w	---	0.4 0.6	1.0 1.3	2.0 2.5	2.8 3.8	4.7 6.3	9.8 13.0
75mm	3°	1/3" H w	---	0.2 0.3	0.4 0.6	0.9 1.2	1.3 1.7	2.1 2.9	4.3 5.5
	5°	1/2" H w	---	0.3 0.4	0.6 0.8	1.3 1.7	1.9 2.5	3.2 4.2	6.4 8.4
100mm	2°	1/3" H w	---	0.2 0.2	0.3 0.4	0.7 0.9	1.0 1.3	1.6 2.1	3.4 4.3
	3°	1/2" H w	---	0.2 0.3	0.4 0.6	0.9 1.3	1.4 1.9	2.4 3.2	4.7 6.3
160mm	1°	1/3" H w	---	---	0.2 0.3	0.4 0.6	0.6 0.8	1.0 1.3	2.0 2.7
	2°	1/2" H w	---	---	0.3 0.4	0.6 0.8	0.9 1.2	1.5 2.0	3.0 4.0