



flickerfree speeds

50 Hz Flickerfree Filming Speeds at Any Shutter Angle

1.000	1.250	2.000	2.500
3.125	3.333	4.000	4.166
4.347	4.545	4.761	5.000
5.263	5.555	5.882	6.250
6.666	7.142	7.692	8.333
9.090	10.000	11.111	12.500
14.285	16.666	20.000	25.000
33.333	50.000	100.000	

50 Hz Flickerfree Filming Speeds at Specific Shutter Angles

Speed (fps)

Shutter Angle

22.222	80.0°	160.0°
24.000	86.4°	172.8°
27.778	100.0°	
29.167	105.0°	
30.556	110.0°	
36.111	130.0°	
37.500	135.0°	
38.889	140.0°	
40.000	144.0°	
41.667	150.0°	
44.444	160.0°	
45.833	165.0°	
47.222	170.0°	
48.000	172.8°	
52.778	190.0°	
54.167	195.0°	
55.556	200.0°	
58.333	210.0°	
59.722	215.0°	

NOTE: Film Tests Should be Used to Verify Results