

# Coronado Personal Solar Telescope (PST) Reference Sheet

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## PST Specifications:

Objective Lens = 40 mm diameter.  
 Focal length = 400 mm.  
 H alpha wavelength = 656.3 nm.  
 Standard Eyepiece = 20 mm Kellner.

## Maximum Magnification for the PST

Maximum Magnification = 50 x per inch of aperture.  
 2 x per mm of aperture.  
 Maximum Magnification for PST = 80 x  
 Minimum EP focal length for PST = 5 mm.

## Magnification for Various EP Combinations

EP FL	1x	2x	2.5x	3x	(← Barlow)
5	80	<del>160</del>	200	<del>240</del>	
6	66.66666667	<del>133.3333333</del>	<del>166.6666667</del>	200	
7	57.14285714	<del>114.2857143</del>	<del>142.8571429</del>	<del>171.4285714</del>	
8	50	100	125	150	
9	44.44444444	<del>88.88888889</del>	<del>111.1111111</del>	<del>133.3333333</del>	
10	40	80	100	120	
11	36.36363636	<del>72.72727273</del>	<del>90.90909091</del>	<del>109.0909091</del>	
12	33.33333333	66.66666667	<del>83.33333333</del>	100	
13	30.76923077	61.53846154	76.92307692	<del>92.30769231</del>	
14	28.57142857	57.14285714	71.42857143	<del>85.71428571</del>	
15	26.66666667	53.33333333	66.66666667	80	
16	25	50	62.5	75	
17	23.52941176	47.05882353	58.82352941	70.58823529	
18	22.22222222	44.44444444	55.55555556	66.66666667	
19	21.05263158	42.10526316	52.63157895	63.15789474	
<b>20</b>	<b>20</b>	<b>40</b>	<b>50</b>	<b>60</b>	Standard EP

## PST Resolution:

Dawes Limit = 2.9 arc seconds  
 Rayleigh Criteria = 4.128833567 arc seconds  
 Astronomical Unit = 149600000 km.  
 Therefore minimum feature size visible on the sun is:  
 Dawes Limit: 2103 km.  
 Rayleigh Criteria: 2995 km.