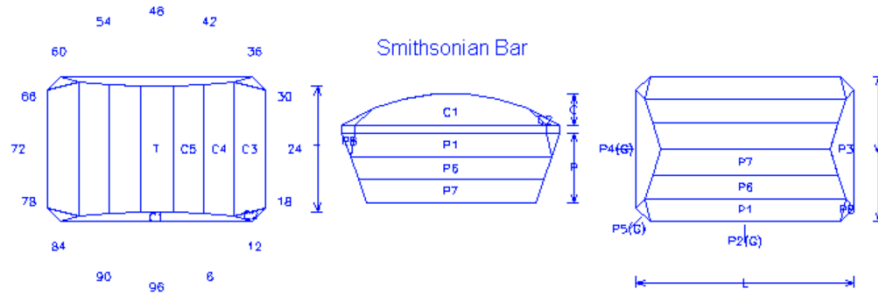
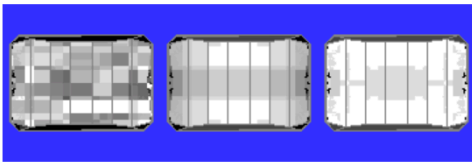


# Smithsonian Bar



GemCad Ray Traces for RI = 1.62



Random Model      Cosine Model      ISO Model

**Smithsonian Bar** Designed by Jeff Graham [jeff@faceters.com](mailto:jeff@faceters.com)

Angles for R.I. = 1.62	25 facets + 8 facets on girdle = 33
2-fold, mirror-image symmetry	96 index
L/W = 1.500 T/W = 0.862 T/L = 0.575 P/W = 0.482 C/W = 0.212 H/W = (P+C)/W+0.02 = 0.714 P/H = 0.675 C/H = 0.297	
Vol./W <sup>3</sup> = 0.632	Brightness at 0 degrees tilt for RI = 1.62 COS = 75.7 ISO = 86.7

## PAVILION

P1	47.00	96-48	Cut to center.
P2(G)	90.00	96-48	Cut a level girdle.
P3	70.78	24-72	Cut to whatever L/W desired.
P4(G)	90.00	24-72	Cut level girdle.
P5(G)	90.00	12-36-60-84	Cut corners, if desired...
P6	43.99	96-48	Cut equal step.
P7	41.00	96-48	Cut equal step.
P8	62.51	12-36-60-84	Cut to meet girdle, P1.

## CROWN

C1	72.00	96-48	Cut to meet girdle.
C2	45.33	12-36-60-84	Cut to meet girdle.
C3	28.00	24-72	Cut to meet girdle.
C4	18.00	24-72	Cut a level step, meet C2.
C5	8.00	24-72	Cut a level step.
T	0.00	Table	Cut table same size as steps.