



Phil's Lapidery

Arya Akhavan and Phil Lagas-Rivera

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Angles for R.I. = 1.540

47 + 14 girdles = 61 facets

2-fold, mirror-image symmetry

96 index

$L/W = 1.426$ $T/W = 0.839$ $U/W = 0.507$

$P/W = 0.446$ $C/W = 0.172$

$Vol./W^3 = 0.365$

PAVILION

P1	41.80°	01-47-49-95	Cut to centerpoint.
P2	41.00°	02-46-50-94	Meet at culet.
G1	90.00°	01-47-49-95	Set stone width.
G2	90.00°	08-40-56-88	Meet P1, P2, G1
P3	42.40°	08-40-56-88	Level girdle.
P4	41.50°	10-38-58-86	Meet P2, P3
P5	42.40°	12-36-60-84	Meet G2, P3, P4
P6	42.20°	24-72	Meet P4, P5
G3	90.00°	12-36-60-84	Level girdle.
G4	90.00°	24-72	Level girdle.

CROWN

C1	38.58°	01-47-49-95	Set girdle width.
C2	47.40°	08-40-56-88	Level girdle.
C3	42.09°	12-36-60-84	Level girdle.
C4	30.36°	24-72	Level girdle.
C5	34.90°	96-48	Meet G1, C1
C6	41.58°	10-38-58-86	Meet G2, G3, C2, C3; C1, C2, C5
C7	22.10°	03-45-51-93	Meet C1, C2, C5, C6; C3, C4, C6
T	0.00°	Table	Meet C5, C7; C3, C4, C6, C7

Phil Lagas-Rivera, a good friend and frequent test-cutter of mine, tried to cut one of my Tessellation designs and instead completely screwed up somewhere. As far as he could tell, this is what it ended up as. Works well in quartz (RI = 1.54), but as you increase the RI you get weird scattered windowing effects at the ends, similar to the tip of a pear or marquise. Try it and see what happens!

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