

**2019
ANNUAL
FACETING
COMPETITION**



**SCHEDULE
CONDITIONS
DIAGRAMS &
ENTRY FORM**

2019 AUSTRALIAN FACETORS' GUILD COMPETITION

CONDITIONS, TROPHIES, DIAGRAMS & ENTRY FORM

CONDITIONS OF ENTRY:

1. Unless otherwise stated in these Conditions, this competition is staged in accordance with the Competition & Judging Manual No. 8, issued April 2015 by the Australian Federation of Lapidary & Allied Crafts Association (AFLACA) with 2 additional **OPTIONAL** Sections in Open.
2. This is a Level 3 competition as defined in the AFLACA Judging & Rules Manual on page 6. Copies of the Manual are available from the AFG Supplies Officer, whose address is shown on the supplies order form in Facet Talk.
3. The competition is conducted in three Divisions – **NOVICE, INTERMEDIATE & OPEN:**
NOVICE DIVISION entrants should carefully read Rule B4.2 on page 6 of the Manual.
INTERMEDIATE DIVISION entrants should carefully read Rule B4.3 on page 7 of the Manual.
OPEN DIVISION entrants should carefully read Rule B4.4 on page 7 of the Manual & **SPECIAL CONDITIONS**.
4. Section numbers used in this competition reflect the numbers in the AFLACA Manual; e.g. In Section N8A.1, N = Novice Division, 8A is Standard Round Brilliant with Continuous Girdle, as defined on page 44 of the Manual: 1 means the first section in Novice Division.
5. Competitors are permitted only one entry in each Section for which they are eligible.
6. **There are NO ENTRY OR RETURN POSTAGE FEES for this competition.**
7. The Competition Committee reserves the right to change the competition Division or Section of entries where it is deemed appropriate under the rules governing this competition. Competitors are urged to consult the AFLACA Manual and this Schedule before completing the official Entry Form in this Schedule.
8. Boxes containing entries must be clearly marked with the Section number in this Schedule, with the name and colour of the gem material. The abbreviation MM is acceptable for man-made material.
The entrant's name must NOT appear on the box, but MUST be enclosed separately for identification purposes.
9. **Competitors are totally responsible for postage & insurance for their entries. (See clause 6.)**
All entries will be return posted as you indicate on the entry form.
Overseas entrants should note: (1) Packages should be labeled "**Lapidary Competition Entries to be returned to sender**", with no reference to gemstones. (2) To minimize possible difficulties with Australian Customs, it is recommended that a copy of the competition entry form be included with the stones and only **nominal value** be placed on the customs declaration form which must be fixed to the package.
10. Where **Coloured** material is specified, it must be **obviously coloured in the cut stone**. Colour variations are not to be too wide from indicated colour.
11. Except for 'Specified Size Sections' & 'Specified Minimum Size' the minimum size in all other Sections is 6mm on shortest axis of outline shape when viewed from above. Stones up to and including 0.1mm below minimum size, as measured by the Judge, will be eligible. Stones which are more than 0.1mm below minimum size will be ineligible. Minimum size does not apply to 'Specified Size' sections.
12. Entries, with official Entry Form as described in Clause 6 must be received no later than **1st June 2019** to **Competition Co-ordinator at P.O. Box 277, Modbury North, South Australia, 5092**. We recommend Australian entries be mailed no later than **25/05/2019**.
We recommend Overseas entries be mailed no later than 04/05/19
Entrants wanting confirmation of receipt of entries MUST enclose stamped, self-addressed envelope with entries, or by nominating an e-mail address on the entry form.
13. All entries will be displayed and results announced at the AFG Annual Seminar held in September 2019.
14. Judging sheets may be collected at noon on the Saturday of the Seminar.
15. Entries, medallions and keeper trophies will be available for collection from 2.00pm on the Sunday of the Seminar. Entries and awards not being collected at the Seminar will be mailed to entrants by 31/10/2019.

SPECIAL CONDITIONS:

- A** All chosen designs have either been previously used in competitions or are known to have been successfully cut using instructions given. Please note the following:
- B** Angles are not judged and competitors may vary those supplied in this Schedule **PROVIDED** this does not change meet points or facet index. Entrants may vary cutting sequence if desired.
- C** All designs must be cut according to the diagram, i.e.; the facet position, basic shape, direction of any spiral effect and meet points must conform to the diagram. However facet sizes may be altered slightly if necessary to achieve meet points.
- D** ALL facets are flat, except I.8A.1, I.11.4 Girdle Facet and O.10.6 Pavilion Cone & Concave Facets. Any other entry with concave or curved facets will be disqualified.
- E** Section O.10.6 Girdle, Cone & Concave facets will be judged for evenness of curvature, uniformity, polish and meetpoints. Mandrel size is at cutters choice to achieve meetpoints and concave facet shape.
- F** **Girdle Too Wide:** A Girdle which, at its narrowest point, is more than 5% of the total height of the stone from the Culet to the Table/Apex, **as measured by the Judge with a Graticule Loupe**, will lose all points for this feature.
- G** **Specified Size:** For every 0.1mm or part thereof away from Specified Size, 1 point will be deducted from the maximum for this feature. **However**, a total tolerance of up to and including 0.1mm above or below Specified Size, as measured by the Judge, will be allowed before any points deduction.
- H** Entrants should only enter in the Division and Sections they are eligible for; Novice, Intermediate or Open. If an entrant has never won a 1st place in a Level 3 or 4 Competition they should start off in Novice and progress through as they gain experience to the higher Divisions when a 1st place is attained.
- I** Sections O.10.5 and O.10.6 are optional and will not count towards aggregate scores.
- J** Note: Section N.9A.2 L/W to be judged at 1.50; N.10.3 P4 facets to be frosted.

TROPHY SECTIONS & CONDITIONS:

- a. Open Champion - Quality Gem Rough Trophy – Keeper donated by Glenn Huntley:**
Entrant with the highest aggregate points score in Open Sections 1, 2, 3 & 4.
- b. Open Runner - up – Bob Chipperfield Trophy - Second to a. above. Keeper donated by AFG**
- c. Intermediate Champion – Tony Annear Trophy – Keeper provided by AFG**
Entrant with highest aggregate points score in Intermediate Sections 1, 2, 3 & 4.
- d. Intermediate Runner - up – Sydney Faceting Group Trophy - Second to c. above. Keeper donated by Sydney Faceting Group.**
- e. Novice Champion Facetor – Keith Pittaway Memorial Trophy – Keeper donated by Ian Pittaway.**
Entrant with the highest aggregate points score for the best entries in Novice sections 1, 2, 3, and 4.
- f. Novice Runner - up – Jim Goldacre Trophy - Second to e. above. Keeper donated by Mr. Richard Dunn.**
- g. Champion State – Peter Collins Trophy – (No Keeper):** Aggregate of 2 Highest scores per State/Territory in each of Novice, Intermediate & Open Divisions, with a minimum of 3 entrants from a State or Territory contributing to the aggregate.
- h. Highest Scoring Entry – Gold Medallion:** Highest scoring entry in any Section or Division.
- i.** The selection/presentation of the above trophies is subject to the approval being obtained/given by each donor prior to the competition.
- j.** Gold, Silver and Bronze medallions will be awarded to the Winner, Second and Third place getter in each section. Special Award for Sections O.10.5 & O.10.6

2019 AUSTRALIAN FACETORS' GUILD COMPETITION SCHEDULE

NOTE: this schedule includes diagrams of all cuts nominated in the Sections below

NOVICE	INTERMEDIATE	OPEN
<p><u>Section N.8B.1 STD CUT</u></p> <p>STANDARD ROUND BRILLIANT with FACETED GIRDLE COLOURLESS TOPAZ</p>	<p><u>Section I.8A.1 STD CUT</u></p> <p>STANDARD ROUND BRILLIANT with CONTINUOUS GIRDLE SPECIFIED SIZE 7.25MM ANY COLOURED TOPAZ</p>	<p><u>Section O.10.1 MODIFIED STD CUT</u></p> <p>SENTSCHUK STAR 80 COLOURLESS TOPAZ</p>
<p><u>Section N.9A.2 STD CUT</u></p> <p>STANDARD OBLONG STEP CUT with CUT CORNERS L/W 1.50 LABRADORITE</p>	<p><u>Section I.10.2 MODIFIED STD CUT</u></p> <p>OUTBACK STAR SYNTHETIC CORUNDUM</p>	<p><u>Section O.10.2 MODIFIED STD CUT</u></p> <p>BRILLIANT RECTANGLE COLOURLESS TOPAZ</p>
<p><u>Section N.10.3 MODIFIED STD CUT</u></p> <p>AUSTRALIAN STAR SYNTHETIC QUARTZ P4 TO BE FROSTED</p>	<p><u>Section I.10.3 MODIFIED STD CUT</u></p> <p>EIGHT MAINS OVAL ANY COLOURED CUBIC ZIRCONIA</p>	<p><u>Section O.10.3 MODIFIED STD CUT</u></p> <p>TOP AS BOTTOM SPECIFIED SIZE 9.5MM COLOURLESS CUBIC ZIRCONIA</p>
<p><u>Section N.11.4 FANCY CUT</u></p> <p>MONIQUE 3 ANY COLOURED MM SPINEL</p>	<p><u>Section I.11.4 FANCY CUT</u></p> <p>SPOKES APEX ANY COLOURED MM CORUNDUM</p>	<p><u>Section O.11.4 FANCY CUT</u></p> <p>DODECA TOPAZ ANY COLOURED TOPAZ</p>
		<p><u>Section O.10.5 FREEFORM CUT</u> <i>OPTIONAL</i> DEFIANT FREEFORM Minimum Size 10mm ANY MATERIAL, ANY COLOUR</p>
		<p><u>Section O.10.6 CONCAVE CUT</u> <i>OPTIONAL</i> SPOKED CONCAVE Minimum Size 10mm ANY COLOURED CUBIC ZIRCONIA ALSO REFER NOTES ON DIAGRAM & SPECIAL CONDITIONS</p>

Full size copies of this Schedule, complete with diagrams of all cuts, are available from the AFG Website: www.facetorsguild.com.au

2019 AFG FACETING COMPETITION

ENTRY FORM

NAME: Miss, Mrs., Ms., Mr. ----- **JUNIOR:** YES/NO

ADDRESS: -----(under 16 years at 1/09/19)

-----**STATE** -----**POSTCODE** -----**PHONE**-----

E-mail ADDRESS:-----

NOVICE		INTERMEDIATE		OPEN	
Material	Colour	Material	Colour	Material	Colour
Section N.8B.1		Section I.8A.1		Section O.10.1	
Section N.9A.2		Section I.10.2		Section O.10.2	
Section N.10.3		Section I.10.3		Section O.10.3	
Section N.11.4		Section I.11.4		Section O.10.4	
				Section O.10.5	
				Section O.10.6	

Notes for Entrants:

1. Decide which Sections you are going to enter.
2. Write **Name of Material & Colour** in appropriate space for each Section entered.
3. Fill in the section below and send this form with your Entries to:

Competition Committee: P.O. Box 277. Modbury North, South Australia, 5092.

To arrive not later than 1ST June 2019

My entries will be collected at the Seminar.

My entries are to be returned to the address above.

I declare that my entries are all my own work, and have not previously won a first prize in any competition at the same Level and Division.

Entrants Signature ----- **Date** -----/-----/-----

Official Use Only:

Entry Form & Entries Received: -----

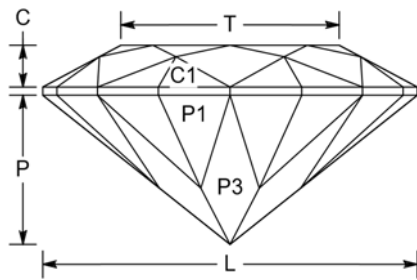
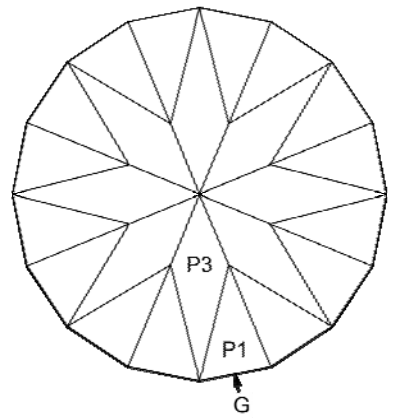
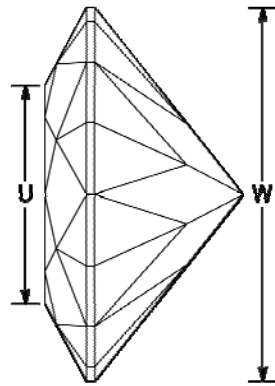
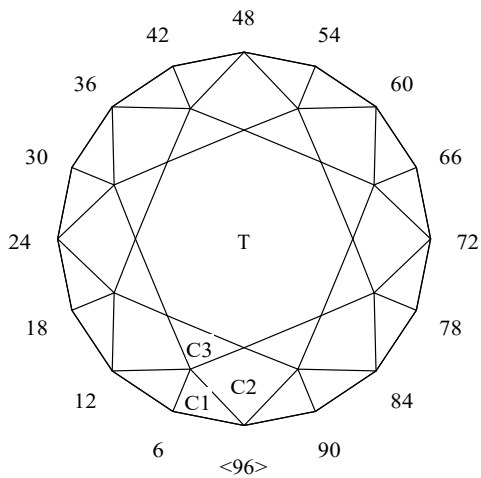
Entries Checked -----

2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section N.8B.1 Standard Brilliant Faceted Girdle

Colourless Topaz

73 Facets: 57 + 16; Meets: 57 (25 Pavilion + 32 Crown)



Standard Brilliant Faceted Girdle

Angles for R.I. = 1.610

57 + 16 girdles = 73 facets

8-fold, mirror-image symmetry

96 index

$L/W = 1.000$ $T/W = 0.583$ $U/W = 0.583$

$P/W = 0.396$ $C/W = 0.111$

$Vol. /W^3 = 0.178$

PAVILION

P1	42.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Form TCP
G	90.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Set size
P3	40.00°	96-12-24-36-48-60-72-84	Meet P1,G form PCP

CROWN

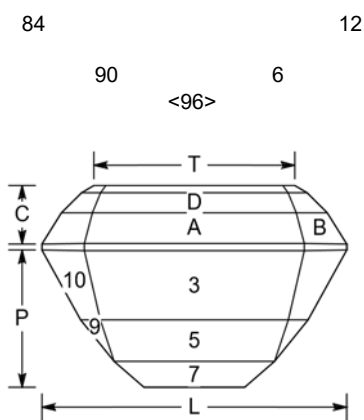
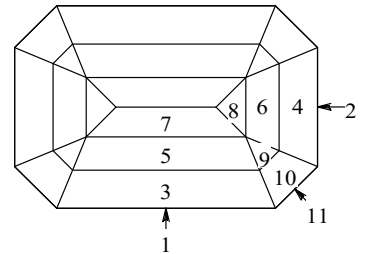
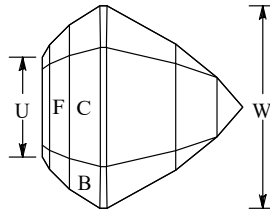
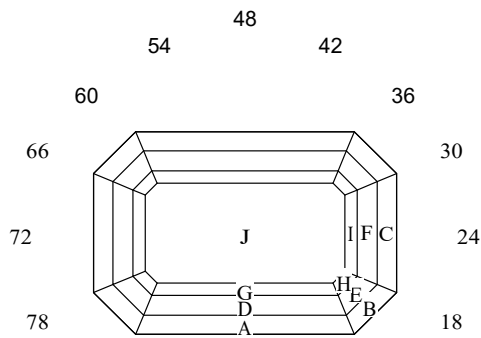
C1	36.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Set girdle thickness
C2	30.00°	96-12-24-36-48-60-72-84	Meet C1, G
C3	17.00°	06-18-30-42-54-66-78-90	Meet C1,C2
T	0.00°	Table	Meet C2,C3

2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section N.9A.2 Oblong Step Cut with Cut Corners L/W 1.50

Labradorite

53 Facets: 45 + 8; Meets: 44 (20 Pavilion + 24 Crown)



Standard Oblong Step Cut with Cut Corners

Angles for R.I. = 1.540

45 + 8 girdles = 53 facets

2-fold, mirror-image symmetry

96 index

L/W = 1.50 T/W = 0.988 U/W = 0.493

P/W = 0.675 C/W = 0.287

Vol. /W³ = 0.785

PAVILION

1	90.00°	96-48	Size to width
2	90.00°	24-72	Size to length
3	61.00°	96-48	Locate girdle
4	61.00°	24-72	Level girdle, MP 1-2-3
5	51.00°	96-48	Cut as required
6	51.00°	24-72	MP, 3-4-5
7	41.00°	96-48	Cut as required
8	41.00°	24-72	MP, 5-6-7
9	51.00°	12-36-60-84	MP, 5-6-7-8
10	61.00°	12-36-60-84	MP, 3-5-9
11	90.00°	11.9-36.1-59.9-84.1	MP, 1-3-10-2 level girdle

CROWN

A	58.00°	96-48	Set girdle thickness
B	58.00°	12-36-60-84	Level girdle
C	58.00°	24-72	Level girdle
D	45.00°	96-48	Cut as required
E	45.00°	12-36-60-84	Level 2nd tier
F	45.00°	24-72	Level 2nd tier
G	30.00°	96-48	Cut as required
H	30.00°	12-36-60-84	Level 3rd tier
I	30.00°	24-72	Level 3rd tier
J	0.00°	Table	Cut as required to set 3rd tier & table

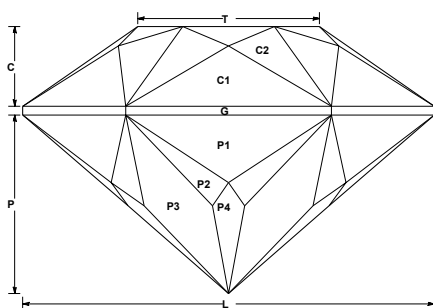
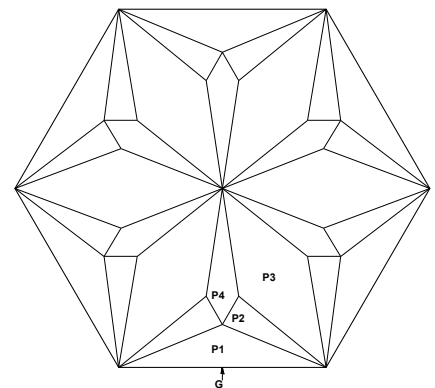
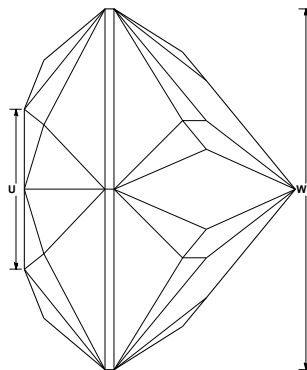
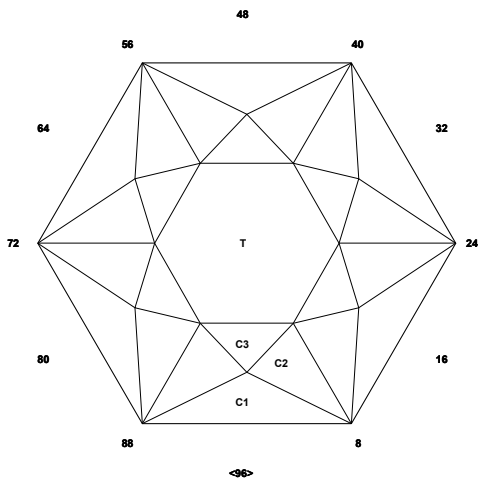
Note: L/W is set at 1:50 and will be judged.

2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section N.10.3 Australian Star

Any Colour Synthetic Quartz

61 Facets: 55 + 6; Meets: 31 (13 Pavilion + 18 Crown)



Australian Star

John Wren, AFG 2000

Angles for R.I. = 1.540

55 + 6 girdles = 61 facets

6-fold, mirror-image symmetry

96 index

$L/W = 1.155$ $T/W = 0.512$ $U/W = 0.443$

$P/W = 0.502$ $C/W = 0.223$

$Vol. /W^3 = 0.308$

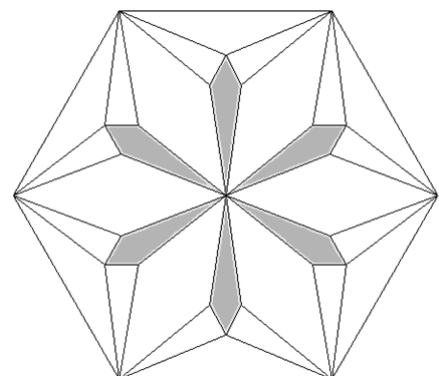
PAVILION

P1	57.86° 96-16-32-48-64-80	Cut to TCP
G	90.00° 96-16-32-48-64-80	Set stone size and level girdle
P2	45.03° 04-12-20-28-36-44-52-60-68-76-84-92	Meet G, P1, Create New TCP
P3	41.00° 08-24-40-56-72-88	Meet G, P1, P2 Create PCP
P4	39.31° 96-16-32-48-64-80	Meet P1, P2 and PCP. LEAVE FROSTED

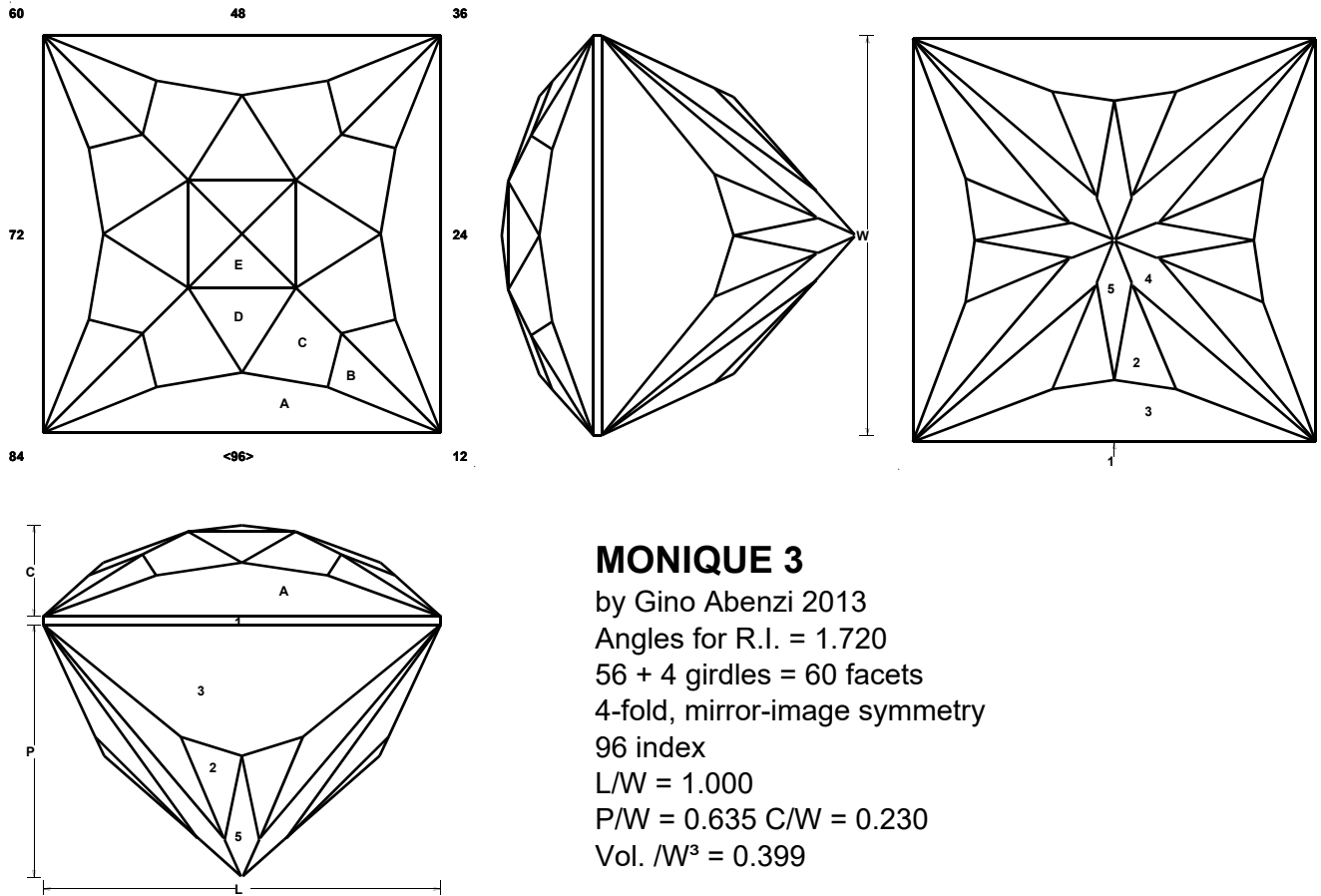
CROWN

C1	49.94° 96-16-32-48-64-80	Set girdle thickness
C2	35.00° 06-10-22-26-38-42-54-58-70-74-86-90	Cut scissors to meet G and C1 at corners
C3	21.53° 96-16-32-48-64-80	Meet C1, C2
T	0.00° Table	Meet C2, C3

Leave P4 unpolished - Frosted



2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION
Section N.11.4 Monique 3
Any Coloured MM Spinel
60 Facets: 56 + 4; Meets: 34 (17 Pavilion + 17 Crown)



PAVILION

1	90.00°	96-24-48-72	Set size
2	43.00°	03-09-15-21- 27-33-39-45- 51-57-63-69- 75-81-87-93	Cut to TCP
3	65.00°	96-24-48-72	Set girdle line
4	42.00°	12-36-60-84	Cut to meet 1, 2, 3 form PCP
5	41.41°	96-24-48-72	Cut to meet 2-3, 2-4, Culet PCP

CROWN

A	42.00°	96-24-48-72	Set girdle thickness
B	25.60°	06-18-30-42- 54-66-78-90	Cut to meet A, 1 at corners
C	23.00°	03-21-27-45- 51-69-75-93	Cut to 1/2 edge length B
D	20.00°	96-24-48-72	Cut to meet A, C
E	7.00°	96-24-48-72	Cut to meet D, C, form Apex

Caution at Pavilion Step 5, Polish into meetpoints.
 Caution at Pavilion step 1, do not use coarse lap as chips on corners

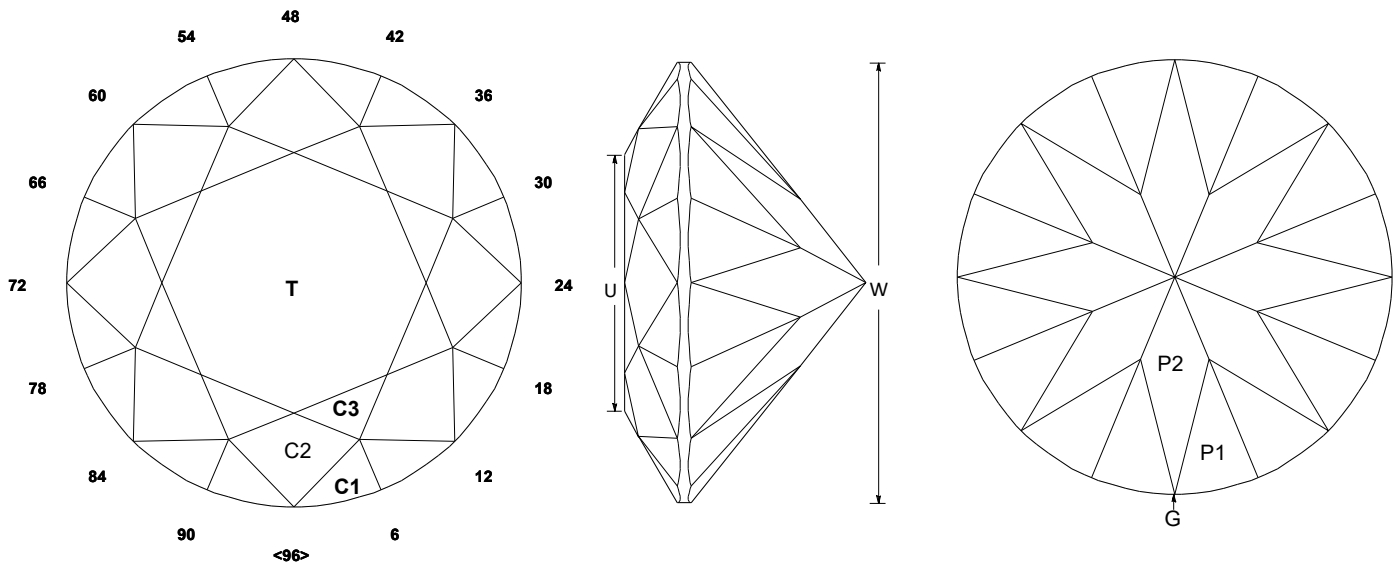
2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section I.8A.1 Standard Round Brilliant Continuous Girdle

Any Coloured Topaz

Specified Size 7.25mm

58 Facets: 57 + 1; Meets: 33 (17 Pavilion + 24 Crown)



Standard Round Brilliant Continuous Girdle

Angles for R.I. = 1.610
 57 + 1 girdles = 58 facets
 8-fold, mirror-image symmetry
 96 index
 $L/W = 1.000$ $T/W = 0.583$ $U/W = 0.583$
 $P/W = 0.404$ $C/W = 0.127$
 $Vol./W^3 = 0.191$

PAVILION

P1	42.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Form TCP
G	90.00°		Set size, Continuous girdle
P2	40.00°	96-12-24-36-48-60-72-84	Meet P1, G, form PCP

CROWN

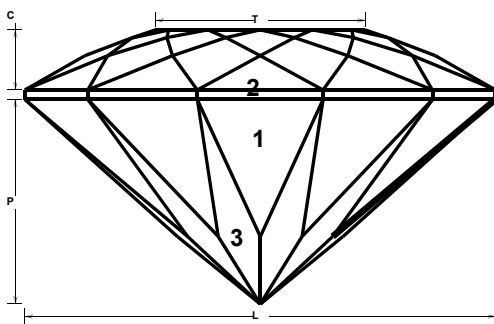
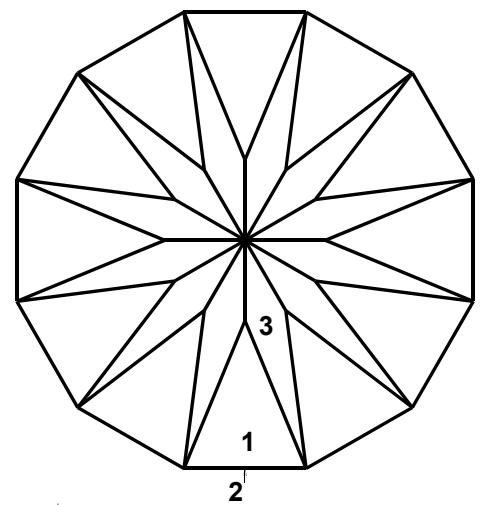
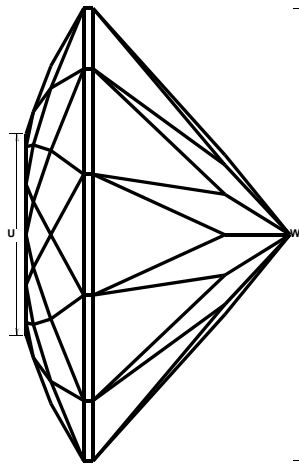
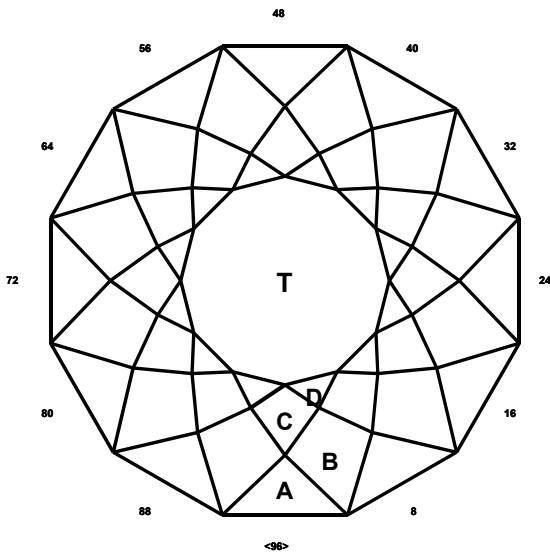
C1	36.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Set girdle thickness
C2	30.00°	96-12-24-36-48-60-72-84	Meet C1, G
C3	17.00°	06-18-30-42-54-66-78-90	Meet C1, C2
T	0.00°	Table	Meet C2, C3

2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section I.10.2 121_Outback Star

Any Colour MM Corundum

85 Facets: 73 + 12; Meets: 61 (13 Pavilion + 48 Crown)



121_Outback Star

by Bob Kay 2007

Angles for R.I. = 1.760

73 + 12 girdles = 85 facets

12-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.447 U/W = 0.447

P/W = 0.434 C/W = 0.128

Vol. /W³ = 0.195

PAVILION

1	42.00° 96-08-16-24-32-40-48-56-64-72-80-88	Cut to TCP
2	90.00° 96-08-16-24-32-40-48-56-64-72-80-88	Set size
3	40.00° 04-12-20-28-36-44-52-60-68-76-84-92	Cut to meet 1 - 2, form PCP

CROWN

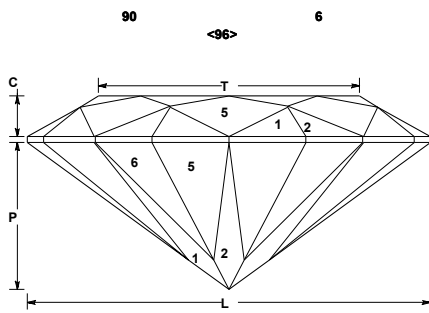
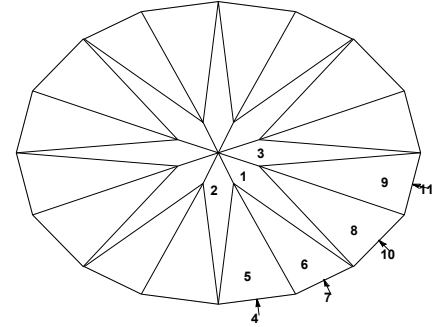
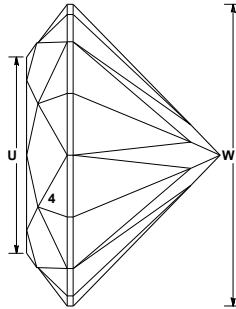
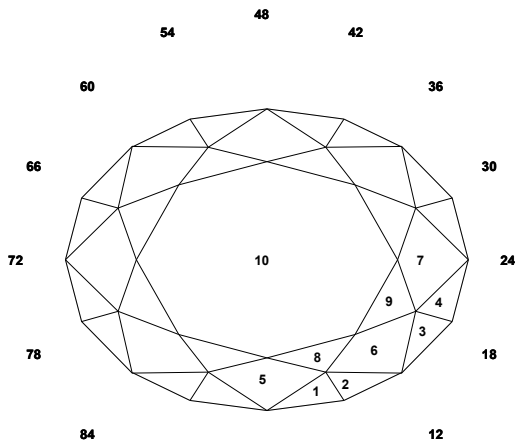
A	30.00° 96-08-16-24-32-40-48-56-64-72-80-88	Set girdle thickness
B	25.00° 04-12-20-28-36-44-52-60-68-76-84-92	Cut to meet A - 2
C	20.00° 96-08-16-24-32-40-48-56-64-72-80-88	Cut to meet A - B
D	15.00° 04-12-20-28-36-44-52-60-68-76-84-92	Cut to meet B - C
T	0.00° Table	Cut to meet C - D

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Section I.10.3 Eight Main Oval

Any Coloured Cubic Zirconia

73 Facets: 57 + 16; Meets: 57 (25 Pavilion + 32 Crown)



Eight Main Oval

Long, Robert H: Steele, Norman W

Angles for R.I. = 2.160

57 + 16 girdles = 73 facets

2-fold, mirror-image symmetry

96 index

$L/W = 1.333$ $T/W = 0.867$ $U/W = 0.650$

$P/W = 0.484$ $C/W = 0.133$

$Vol. /W^3 = 0.287$

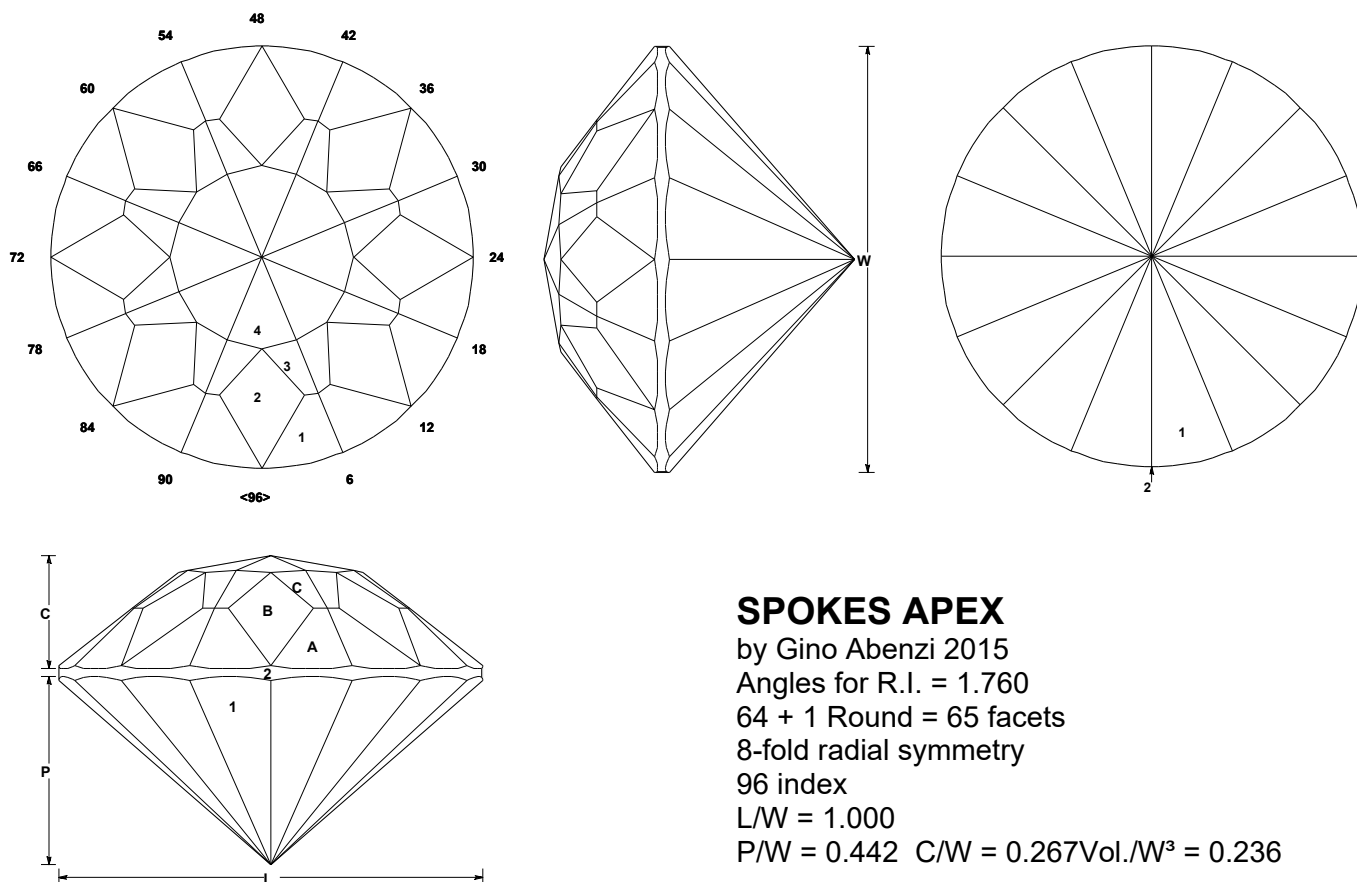
PAVILION

1	41.00°	09-39-57-87
2	44.07°	96-48
3	35.98°	24-72
4	90.00°	02-46-50-94
5	44.80°	02-46-50-94
6	42.75°	07-41-55-89
7	90.00°	07-41-55-89
8	40.61°	12-36-60-84
9	37.56°	20-28-68-76
10	90.00°	12-36-60-84
11	90.00°	20-28-68-76

CROWN

1	43.66°	02-46-50-94
2	41.14°	07-41-55-89
3	42.38°	12-36-60-84
4	38.69°	20-28-68-76
5	37.22°	96-48
6	35.00°	09-39-57-87
7	29.67°	24-72
8	20.02°	04-44-52-92
9	14.00°	16-32-64-80
10	0.00°	Table

2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION
Section I.11.4 SPOKES APEX
ANY COLOURED MM CORUNDUM
65 Facets: 64 + 1; Meets: 34 (1 Pavilion + 33 Crown)



SPOKES APEX

by Gino Abenzi 2015
 Angles for R.I. = 1.760
 64 + 1 Round = 65 facets
 8-fold radial symmetry
 96 index
 L/W = 1.000
 P/W = 0.442 C/W = 0.267 Vol./W³ = 0.236

PAVILION

1	41.50°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93	Cut to PCP
2	90.00°		Round girdle, set size

CROWN

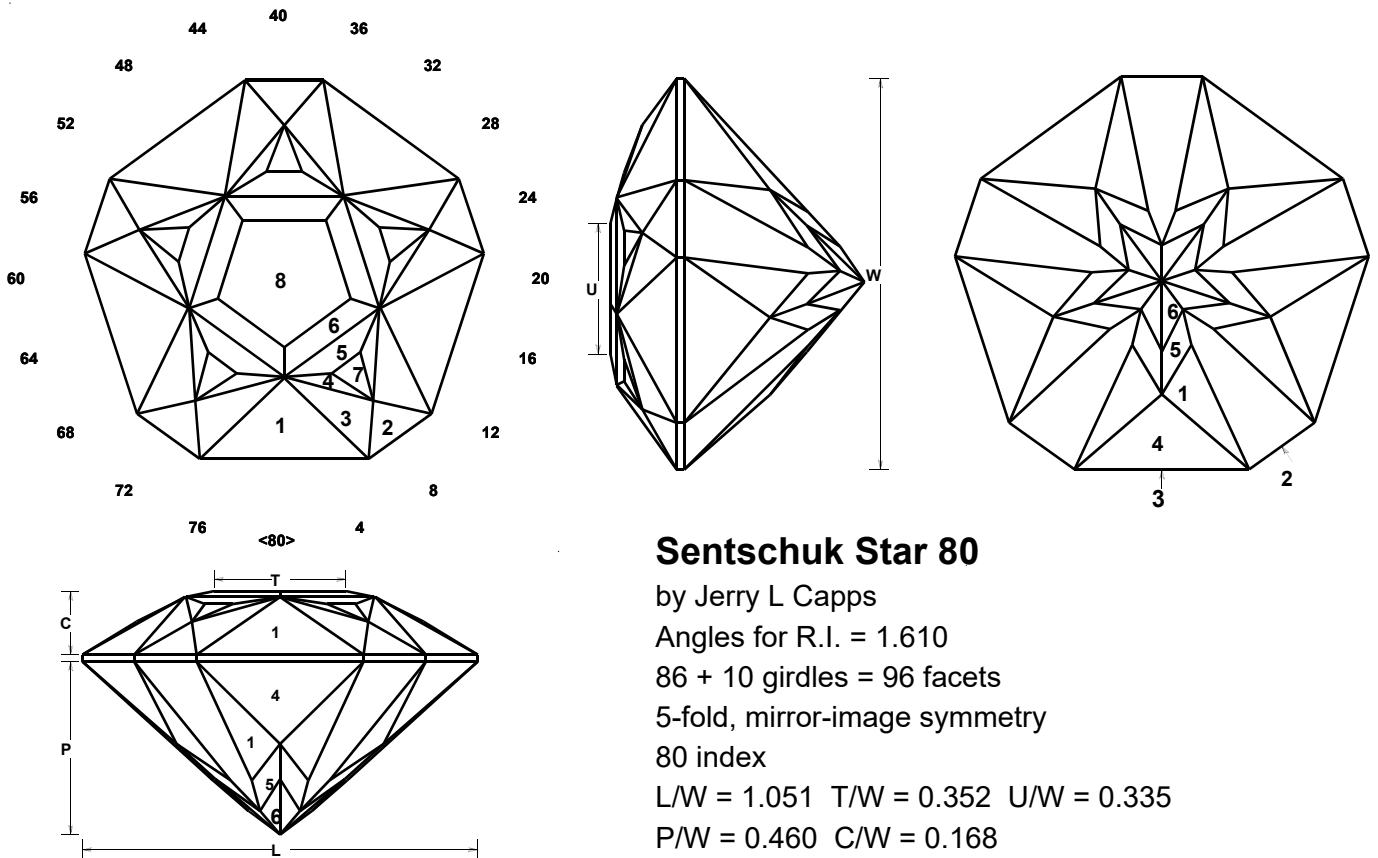
A	42.00°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93	Set girdle thickness
B	38.00°	96-12-24-36-48-60-72-84	Cut to meet A, G
C	34.00°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93	Estimate meet at A, B
D	10.00°	96-12-24-36-48-60-72-84	Cut to meet B, C, form Apex

2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section O.10.1 Sentschuk Star 80

Colourless Topaz

96 Facets: 86 + 10; Meets: 46 (26 Pavilion + 20 Crown)



Sentschuk Star 80

by Jerry L Capps

Angles for R.I. = 1.610

86 + 10 girdles = 96 facets

5-fold, mirror-image symmetry

80 index

L/W = 1.051 T/W = 0.352 U/W = 0.335

P/W = 0.460 C/W = 0.168

Vol./W³ = 0.224

PAVILION

1	42.80°	03-08-13-19-24-29-35-40-45-51-56-61-67-72-77
2	90.00°	08-24-40-56-72
3	90.00°	80-16-32-48-64
4	49.00°	80-16-32-48-64
5	40.75°	02-14-18-30-34-46-50-62-66-78
6	39.30°	01-15-17-31-33-47-49-63-65-79

Cut to TCP

Set size

Meet 1 - 2 at girdle line

Level girdle

MP 1 - 4 - 1 form PCP

MP 5 - 1 - 5

CROWN

1	35.00°	80-16-32-48-64
2	36.00°	08-24-40-56-72
3	30.00°	03-13-19-29-35-45-51-61-67-77
4	22.21°	06-10-22-26-38-42-54-58-70-74
5	16.50°	08-24-40-56-72
6	14.50°	08-24-40-56-72
7	20.75°	08-24-40-56-72
8	0.00°	Table

Set girdle thickness

Level girdle

Girdle MP (GMP)

MP 3 - 1 - 3 & 3 - 2 - 3

MP 4 - 3 - 1 - 3 - 4

MP 5 - 4 - 3 - 1 - 3 - 4 - 5

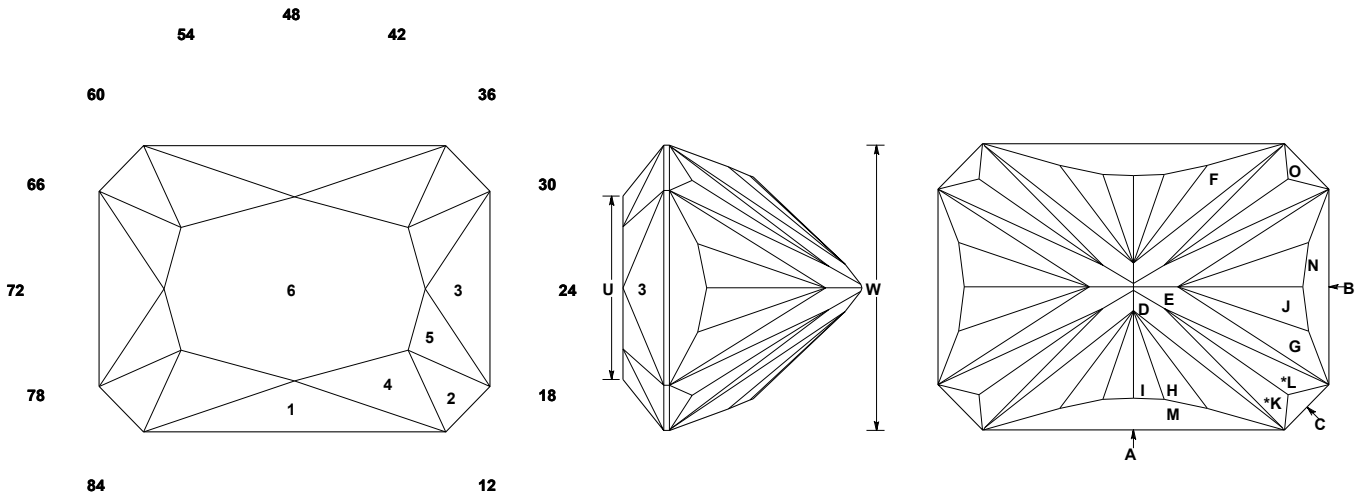
MP 4 - 3 - 2 - 3 - 4

38% of Length

Notes: Close angles, small facets - experienced Facetors

Pavilion Step 2, Cut all the same mast height setting

2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION
Section O.10.2 Brilliant Rectangle
Colourless Topaz
69 Facets: 61 + 8; Meets: 33 (17 Pavilion + 16 Crown)



Brilliant Rectangle

by Boyd Sweeney 1995

Angles for R.I. = 1.610

61 + 8 girdles = 69 facets

2-fold, mirror-image symmetry

96 index

L/W = 1.370 T/W = 0.913 U/W = 0.642

P/W = 0.675 C/W = 0.144

Vol. /W³ = 0.493

PAVILION

A	90.00°	96-48
B	90.00°	24-72
C	90.00°	12-36-60-84
D	43.44°	10-38-58-86
E	41.44°	18-30-66-78
F	43.98°	09-39-57-87
G	43.05°	21-27-69-75
H	45.44°	05-43-53-91
I	46.44°	01-47-49-95
J	43.78°	23-25-71-73
* K	43.27°	11-37-59-85
* L	42.60°	13-35-61-83
M	69.63°	96-48
N	54.47°	24-72
O	45.44°	12-36-60-84

CROWN

1	38.71°	96-48
2	26.08°	12-36-60-84
3	32.11°	24-72
4	24.87°	04-44-52-92
5	24.87°	20-28-68-76
6	0.00°	Table

* Points at which these facets meet may be closer to culet than in diagram

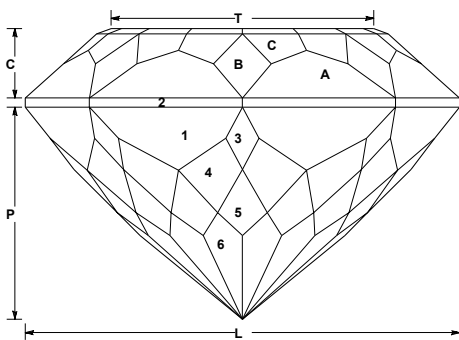
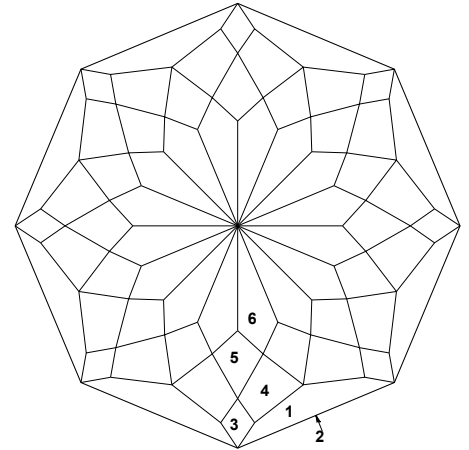
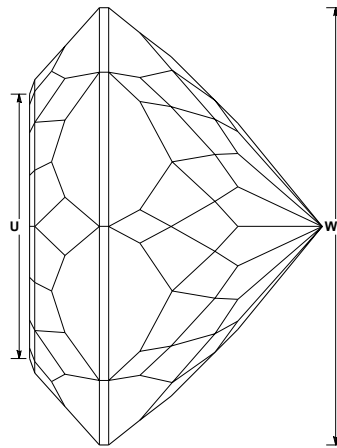
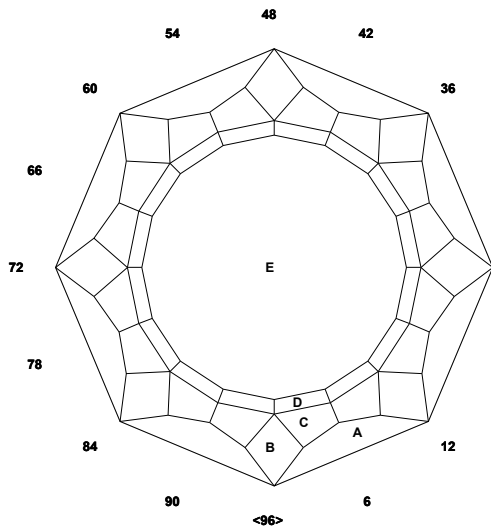
2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section O.10.3 Top as Bottom

Colourless Cubic Zirconia

Specified Size 9.5mm

121 Facets: 113 + 8; Meets: 65 (41 Pavilion + 24 Crown)



Top as Bottom

by Alfred Mosshammer 2009

Angles for R.I. = 2.160

113 + 8 girdles = 121 facets

8-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.605 U/W = 0.605

P/W = 0.490 C/W = 0.160

Vol. /W³ = 0.241

PAVILION

1	62.61°	06-18-30-42-54-66-78-90
2	90.00°	06-18-30-42-54-66-78-90
3	52.11°	96-12-24-36-48-60-72-84
4	49.03°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93
5	44.98°	96-06-12-18-24-30-36-42- 48-54-60-66-72-78-84-90
6	40.00°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93

CROWN

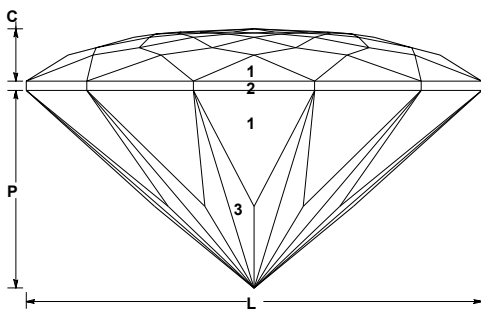
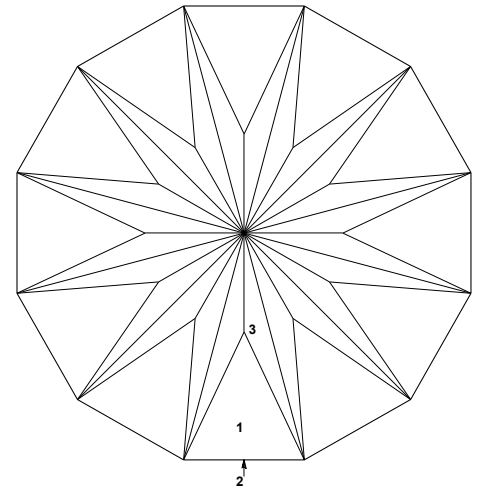
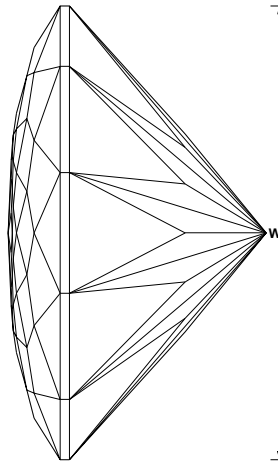
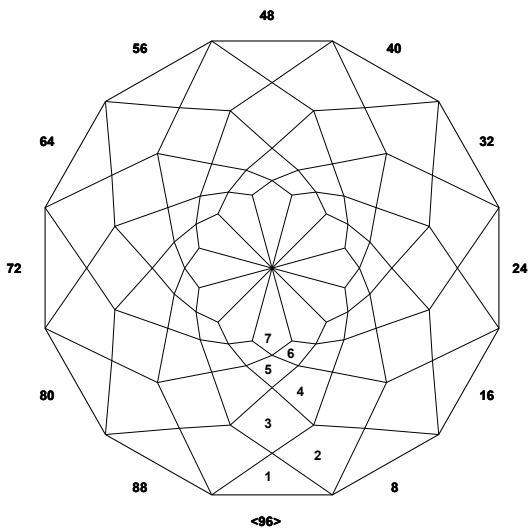
A	55.00°	06-18-30-42-54-66-78-90
B	42.00°	96-12-24-36-48-60-72-84
C	38.00°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93
D	20.82°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93
E	0.00°	Table

2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section O.11.4 208_DoDeca Topaz

Any Coloured Topaz

132 Facets: 120 + 12; Meets: 86 (13 Pavilion + 73 Crown)



208_DoDeca Topaz

by Bob Kay 2009

Angles for R.I. = 1.610

120 + 12 girdles = 132 facets

12-fold, mirror-image symmetry

96 index

L/W = 1.000

P/W = 0.433 C/W = 0.116

Vol. /W³ = 0.188

PAVILION

1	42.00°	96-08-16-24-32-40-48-56-64-72-80-88
2	90.00°	96-08-16-24-32-40-48-56-64-72-80-88
3	40.00°	03-05-11-13-19-21-27-29-35-37-43-45-51-53-59-61-67-69-75-77-83-85-91-93

CROWN

1	32.00°	96-08-16-24-32-40-48-56-64-72-80-88
2	25.00°	04-12-20-28-36-44-52-60-68-76-84-92
3	15.00°	96-08-16-24-32-40-48-56-64-72-80-88
4	12.00°	04-12-20-28-36-44-52-60-68-76-84-92
5	8.00°	96-08-16-24-32-40-48-56-64-72-80-88
6	5.00°	04-12-20-28-36-44-52-60-68-76-84-92
7	3.00°	96-08-16-24-32-40-48-56-64-72-80-88

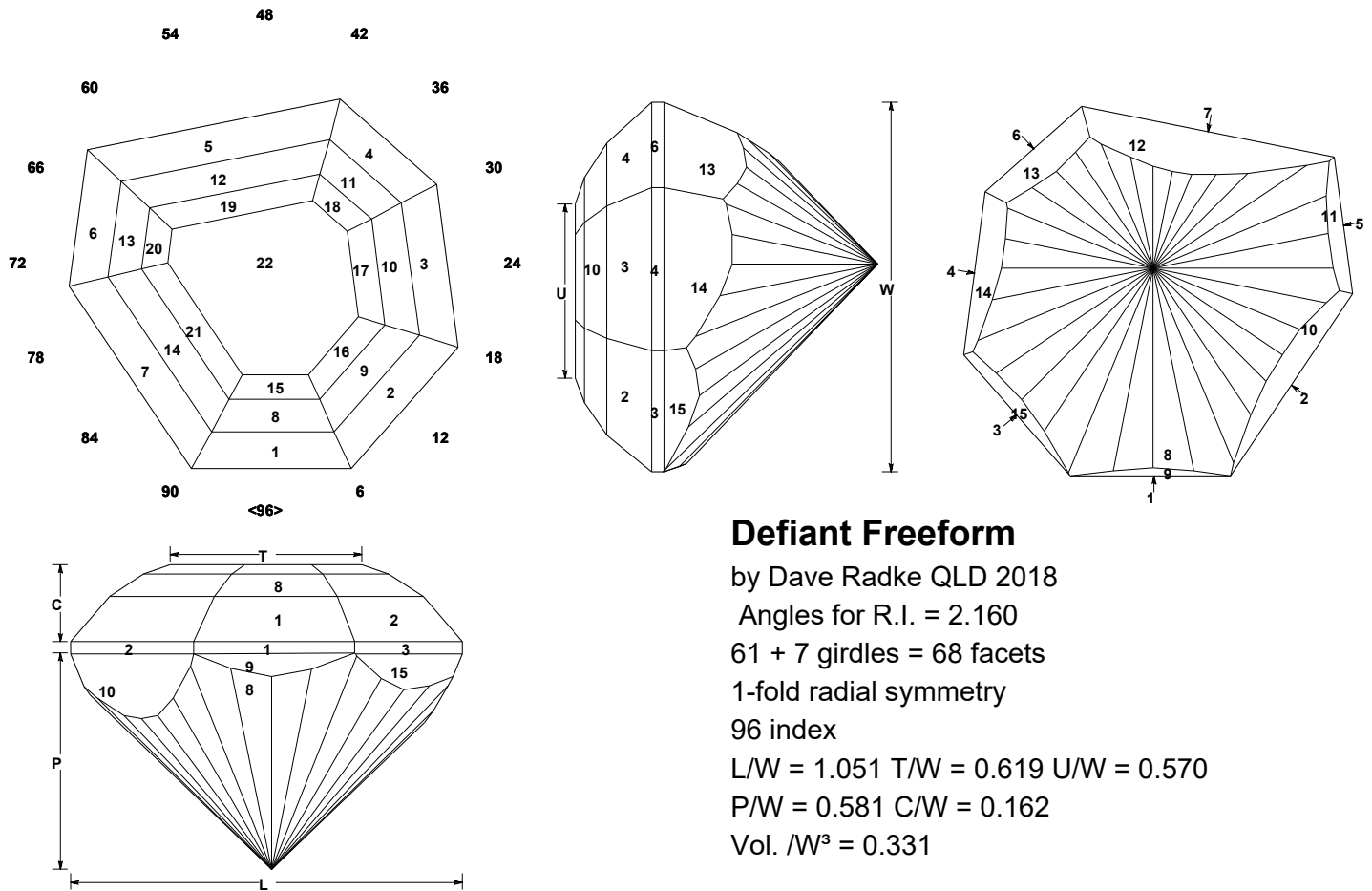
2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section O.10.5 DEFIANT FREEFORM

ANY MATERIAL, ANY COLOUR

MINIMUM SIZE 10mm Measured across longest axis of plan view (18 – 63).

68 Facets: 61 + 7; Meets: 29 (8 Pavilion + 21 Crown)



Defiant Freeform

by Dave Radke QLD 2018

Angles for R.I. = 2.160

61 + 7 girdles = 68 facets

1-fold radial symmetry

96 index

$L/W = 1.051$ $T/W = 0.619$ $U/W = 0.570$

$P/W = 0.581$ $C/W = 0.162$

$Vol. /W^3 = 0.331$

PAVILION

1	90.00°	96
2	90.00°	15
3	90.00°	83
4	90.00°	70
5	90.00°	26
6	90.00°	59
7	90.00°	45
8	44.00°	02-04-08-10-14-16-20-22-26-28-32-34-38-40-44-46-50-52-56-58-62-64-68-70-74-76-80-82-86-88-92-94
9	69.00°	96
10	69.00°	15
11	69.00°	26
12	69.00°	45
13	69.00°	59
14	69.00°	70
15	69.00°	83

CROWN

1	50.00°	96
2	50.00°	13
3	50.00°	26
4	50.00°	37
5	50.00°	51
6	50.00°	70
7	50.00°	81
8	35.00°	96
9	35.00°	13
10	35.00°	26
11	35.00°	37
12	35.00°	51
13	35.00°	70
14	35.00°	81
15	20.00°	96
16	20.00°	13
17	20.00°	26
18	20.00°	37
19	20.00°	51

CROWN CONTD.

20	20.00°	70
21	20.00°	81
22	0.00°	Table

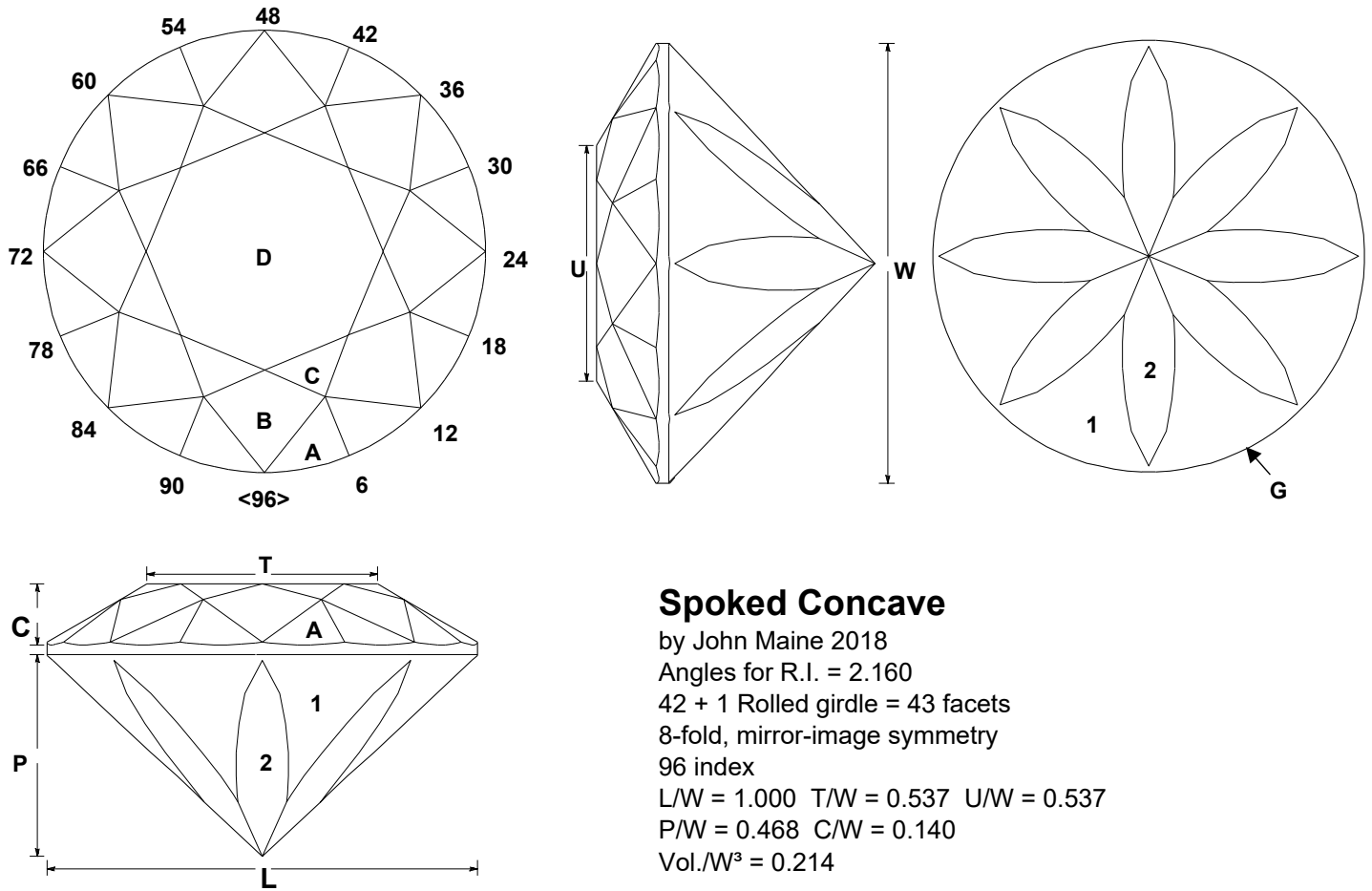
2019 AUSTRALIAN FACETORS' GUILD LIMITED ANNUAL FACETING COMPETITION

Section O.10.6 Spoked Concave

Any Coloured Cubic Zirconia

Minimum Size 10mm

43 Facets: 42 + 1 Rolled Girdle; Meets: 25 (1 Pavilion + 24 Crown)



Spoked Concave

by John Maine 2018

Angles for R.I. = 2.160

42 + 1 Rolled girdle = 43 facets

8-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.537 U/W = 0.537

P/W = 0.468 C/W = 0.140

Vol./W³ = 0.214

PAVILION

1	44.00°	Rolled Cone, Form TCP
G	90.00°	Rolled Girdle, Set Size (Minimum Size 10mm)
2	43.00°	96-12-24-36-48-60-72-84 Cut Concaves Just Short of Girdle Line. Form PCP (See Note)

CROWN

A	35.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93 Set Girdle Thickness
B	30.00°	96-12-24-36-48-60-72-84 Cut Mains to Meet A, G
C	18.00°	06-18-30-42-54-66-78-90 Cut Stars to Meet B, C
D	0.00°	Table Cut Table to Meet B, C, D

Note: Cutters Choice for Mandrel Size to Achieve Concave Facet Shape. Angle may be changed to achieve Concave Facet Shape. Minimum Outline Size 10mm.