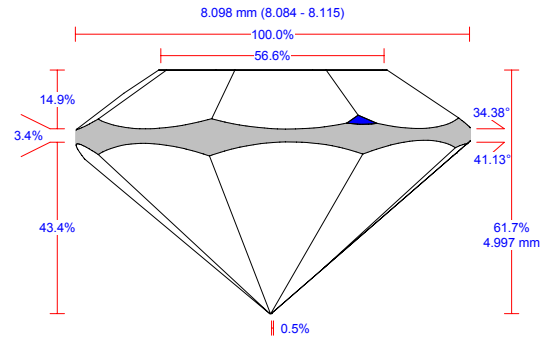


HELIUM FULL REPORT

Semi-polished Round

General information

Model	Simple
Expert name	Makoed A.G.
Report date	29.11.2006
Real weight, ct	
Calculated weight, ct	2.08, 2.0851
Spread	-0.11 ct, -5.73%



Main parameters

Parameter		Avg	Min	Max	Dev
Diameter	mm	8.098	8.084	8.115	0.39 %, 0.032 mm
Crown angle	°	34.38	33.93	34.66	0.73
Crown height (Mains)	%	14.89	14.71	15.04	0.33
Crown height (Mains)	mm	1.206	1.191	1.218	0.027
Crown height (Upper girdle facets)	%	15.31	15.31	15.31	0.00
Crown height (Upper girdle facets)	mm	1.240	1.240	1.240	0.000
Upper girdle facets angle	°	39.63	39.63	39.63	0.00
Upper girdle facets height	%	9.42	9.42	9.42	0.00
Upper girdle facets height	mm	0.763	0.763	0.763	0.000
Star facets angle	°	N/A	N/A	N/A	N/A
Star : Upper ratio	%	N/A : N/A	N/A : N/A	N/A : N/A	N/A
Pavilion angle	°	41.13	40.95	41.34	0.39
Pavilion depth (Mains)	%	43.43	43.01	43.92	0.90
Pavilion depth (Mains)	mm	3.517	3.483	3.556	0.073
Pavilion depth (Lower girdle facets)	%	43.05	43.05	43.05	0.00
Pavilion depth (Lower girdle facets)	mm	3.486	3.486	3.486	0.000
Lower girdle facets angle	°	40.71	40.71	40.71	0.00
Lower girdle facets height	%	32.19	32.19	32.19	0.00
Lower girdle facets height	mm	2.607	2.607	2.607	0.000
Total height	%	61.71			
Total height	mm	4.997			
Table	%	56.62	56.13	56.93	0.80
Table	mm	4.585	4.545	4.610	0.065
Culet	%	0.49	0.42	0.57	0.16
Culet	mm	0.040	0.034	0.046	0.013
Twist	°	1.43	0.15	2.82	2.66
Girdle thickness (Mains)	%	3.40	3.00	3.72	0.72
Girdle thickness (Mains)	mm	0.275	0.243	0.301	0.058
Girdle thickness (Upper/Lower g.f.)	%	4.61	4.30	4.92	0.62
Girdle thickness (Upper/Lowe g.f.)	mm	0.373	0.348	0.398	0.050
Girdle thickness (Crown Mains)	%	3.41	3.07	3.72	0.65
Girdle thickness (Crown Mains)	mm	0.276	0.248	0.301	0.053
Girdle thickness (Upper girdle facets)	%	4.30	4.30	4.30	0.00
Girdle thickness (Upper girdle facets)	mm	0.348	0.348	0.348	0.000
Girdle thickness (Pavilion Mains)	%	3.39	3.00	3.70	0.70
Girdle thickness (Pavilion Mains)	mm	0.275	0.243	0.300	0.057
Girdle thickness (Lower girdle facets)	%	4.92	4.92	4.92	0.00
Girdle thickness (Lower girdle facets)	mm	0.398	0.398	0.398	0.000

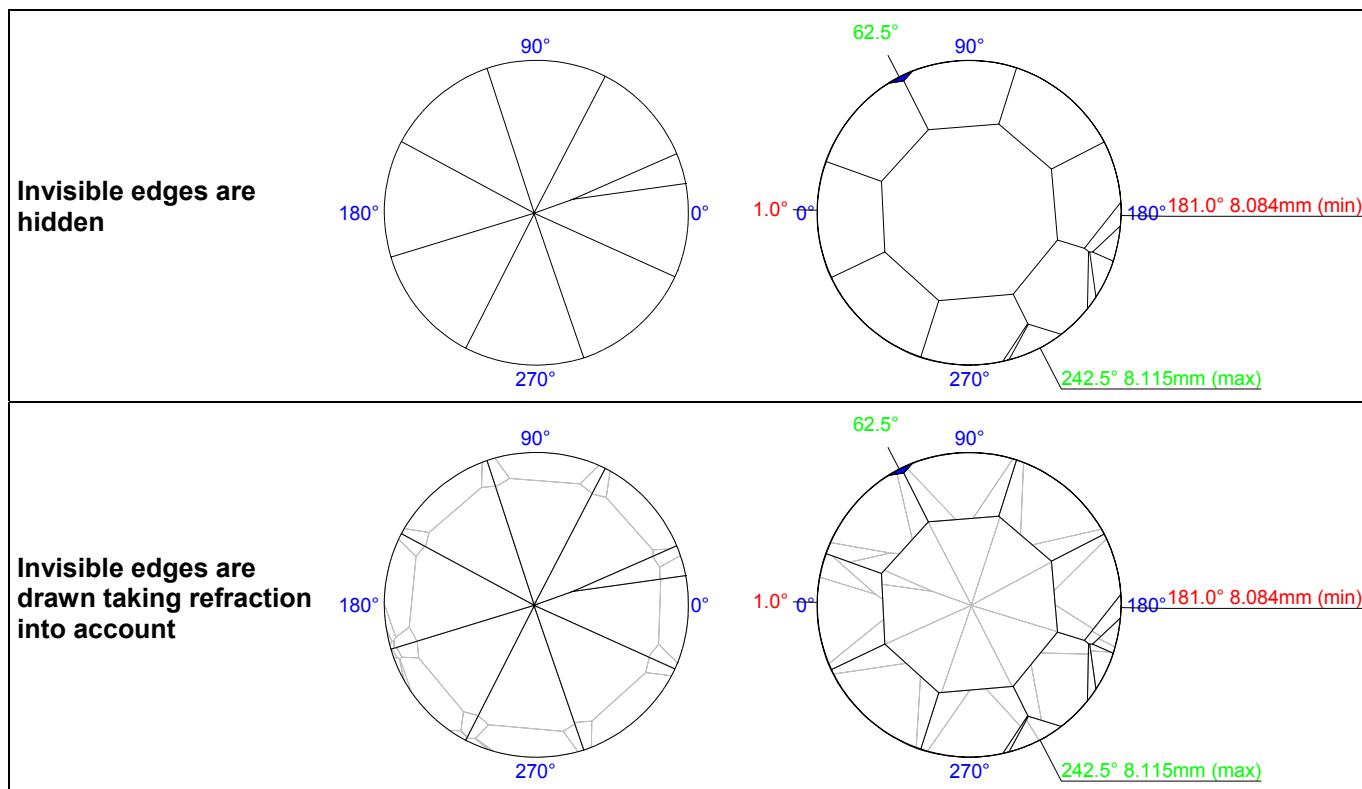
Offset	Distance, %	Distance, mm
Girdle-Culet offset by table axis	0.76 ± 0.24	0.004 ± 0.017
Girdle-Table offset by table axis	0.05 ± 0.22	0.062 ± 0.019
Culet-Table offset by table axis	0.76 ± 0.25	0.061 ± 0.021
Girdle to table-culet line offset	0.23	0.018

Culet shift ratio by main diameter	
Main diameter (avg)	8.098 mm, 100%
Width-wise culet shift ratio	3.987 mm, 49.23 %
Length-wise culet shift ratio	4.031 mm, 49.78 %

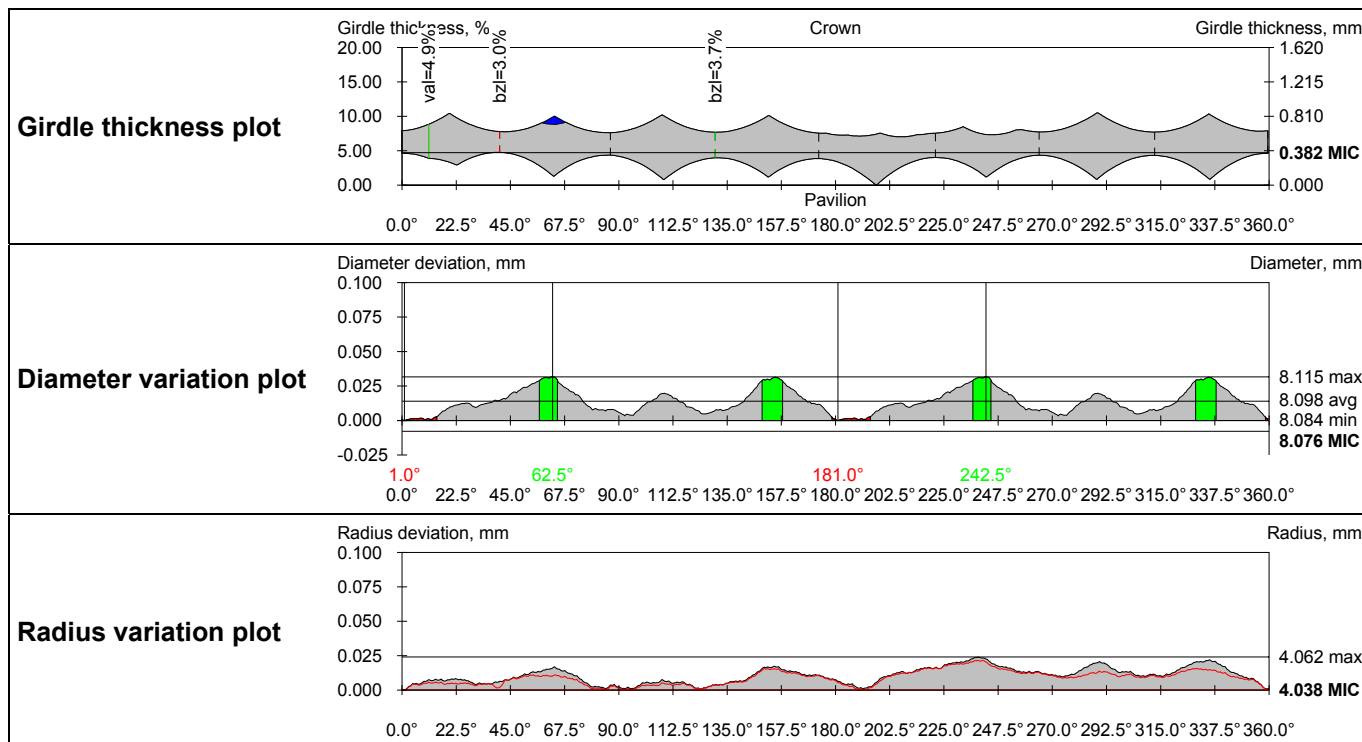
Detailed parameters

Parameter		1	2	3	4	5	6	7	8
Crown angle	°	34.29	34.24	34.55	34.66	34.58	34.53	33.93	34.28
Crown height (Mains)	%	14.71	14.81	14.95	14.88	15.02	15.04	14.83	14.86
Crown height (Mains)	mm	1.191	1.199	1.210	1.205	1.216	1.218	1.201	1.204
Crown height (Upper girdle facets)	%	15.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crown height (Upper girdle facets)	mm	1.240	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crown azimuth	°	357.2	42.3	85.5	130.4	175.1	219.2	265.1	312.0
Upper girdle facets angle	°	39.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upper girdle facets height	%	9.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upper girdle facets height	mm	0.763	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upper girdle facets azimuth	°	183.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Star facets angle	°	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Star facets azimuth	°	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Star : Upper ratio	%	N/A : N/A	N/A : N/A	N/A : N/A	N/A : N/A	N/A : N/A	N/A : N/A	N/A : N/A	N/A : N/A
Pavilion angle	°	40.97	41.05	41.08	41.13	41.22	41.28	41.34	40.95
Pavilion depth (Mains)	%	43.77	43.92	43.51	43.12	43.01	43.17	43.50	43.48
Pavilion depth (Mains)	mm	3.544	3.556	3.523	3.492	3.483	3.495	3.523	3.521
Pavilion depth (Lower girdle facets)	%	43.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion depth (Lower girdle facets)	mm	3.486	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion azimuth	°	0.0	39.7	85.4	131.1	172.8	221.4	264.7	311.6
Lower girdle facets angle	°	40.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower girdle facets height	%	32.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower girdle facets height	mm	2.607	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower girdle facets azimuth	°	10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crown azimuth deviation from ideal	°	-2.82	-2.71	-4.48	-4.62	-4.93	-5.77	-4.89	-3.00
Upper girdle facets azimuth deviation from ideal	°	172.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Star facets azimuth deviation from ideal	°	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion azimuth deviation from ideal	°	0.00	-5.34	-4.63	-3.89	-7.16	-3.60	-5.25	-3.37
Lower girdle facets azimuth deviation from ideal	°	-0.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Table	%	56.93	56.13	56.82	N/A				
Table	mm	4.610	4.545	4.601	N/A				
Twist	°	2.82	2.63	0.15	0.73	2.24	2.17	0.36	0.38
Girdle thickness (Crown Mains)	%	3.25	3.07	3.25	3.70	3.72	3.53	3.37	3.36
Girdle thickness (Crown Mains)	mm	0.263	0.248	0.263	0.300	0.301	0.286	0.273	0.272
Girdle thickness (Upper girdle facets)	%	4.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Girdle thickness (Upper girdle facets)	mm	0.348	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Girdle thickness (Pavilion Mains)	%	3.26	3.00	3.25	3.70	3.68	3.52	3.37	3.37
Girdle thickness (Pavilion Mains)	mm	0.264	0.243	0.263	0.300	0.298	0.285	0.273	0.273
Girdle thickness (Lower girdle facets)	%	4.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Girdle thickness (Lower girdle facets)	mm	0.398	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

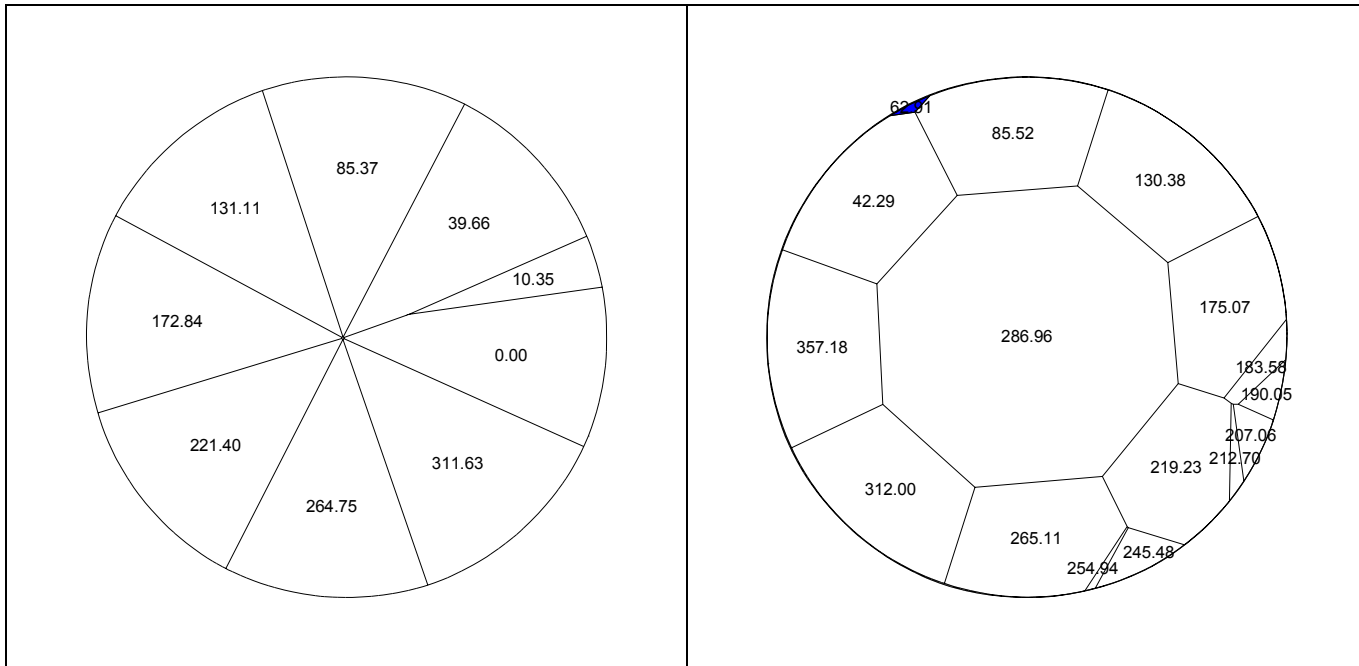
Pavilion and crown views of the diamond with indication of the diameter minimum and maximum



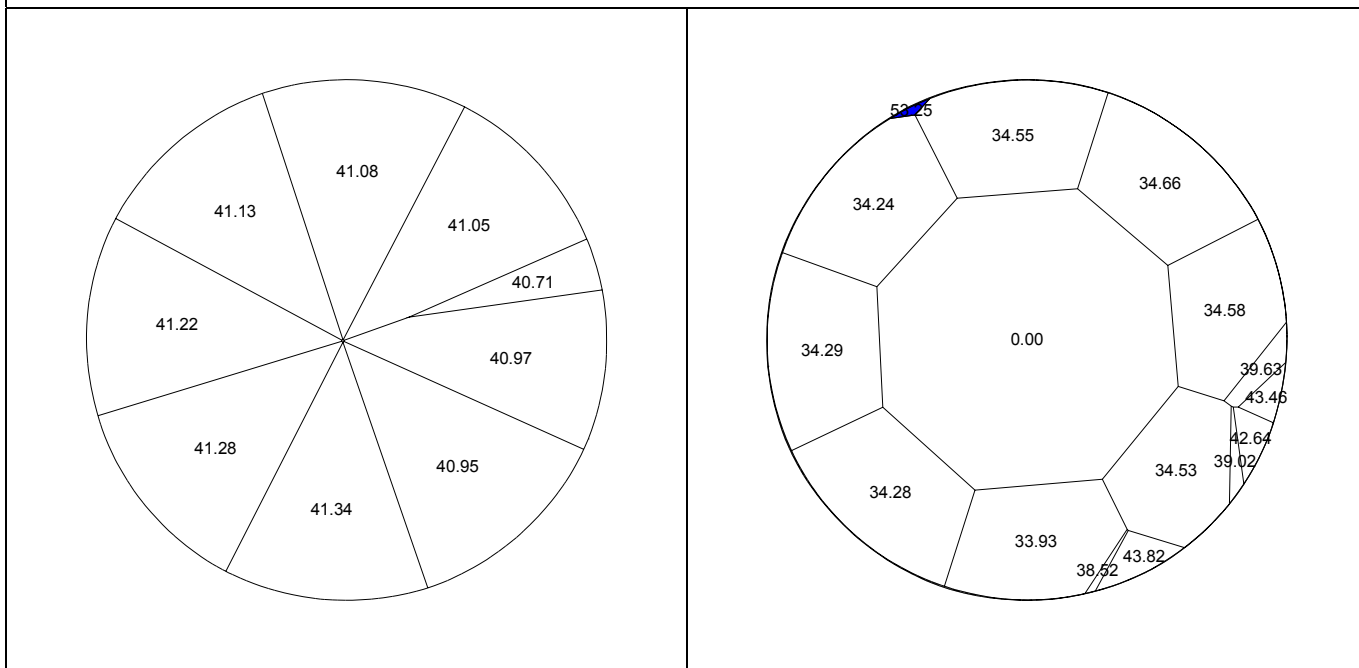
Plots



All facets' slope and azimuth angles without breakdown into groups

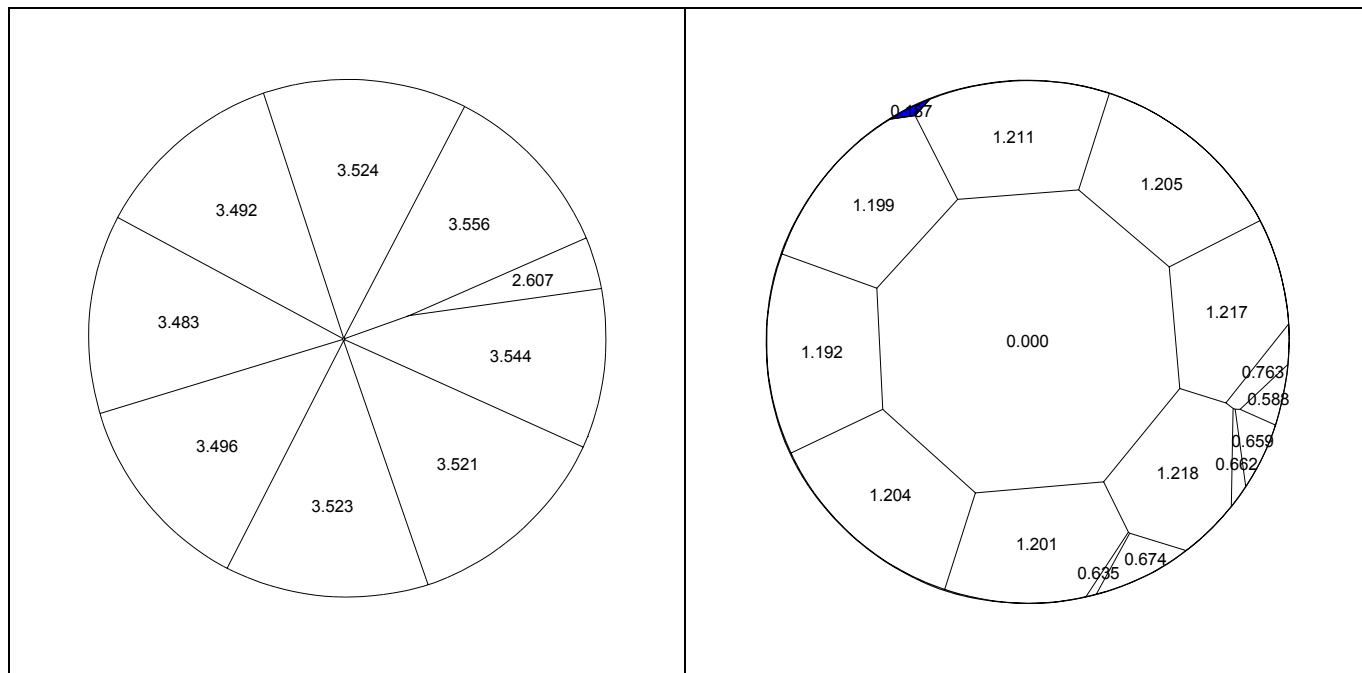


Pavilion and crown views of the diamond with indication of facets' azimuth angles

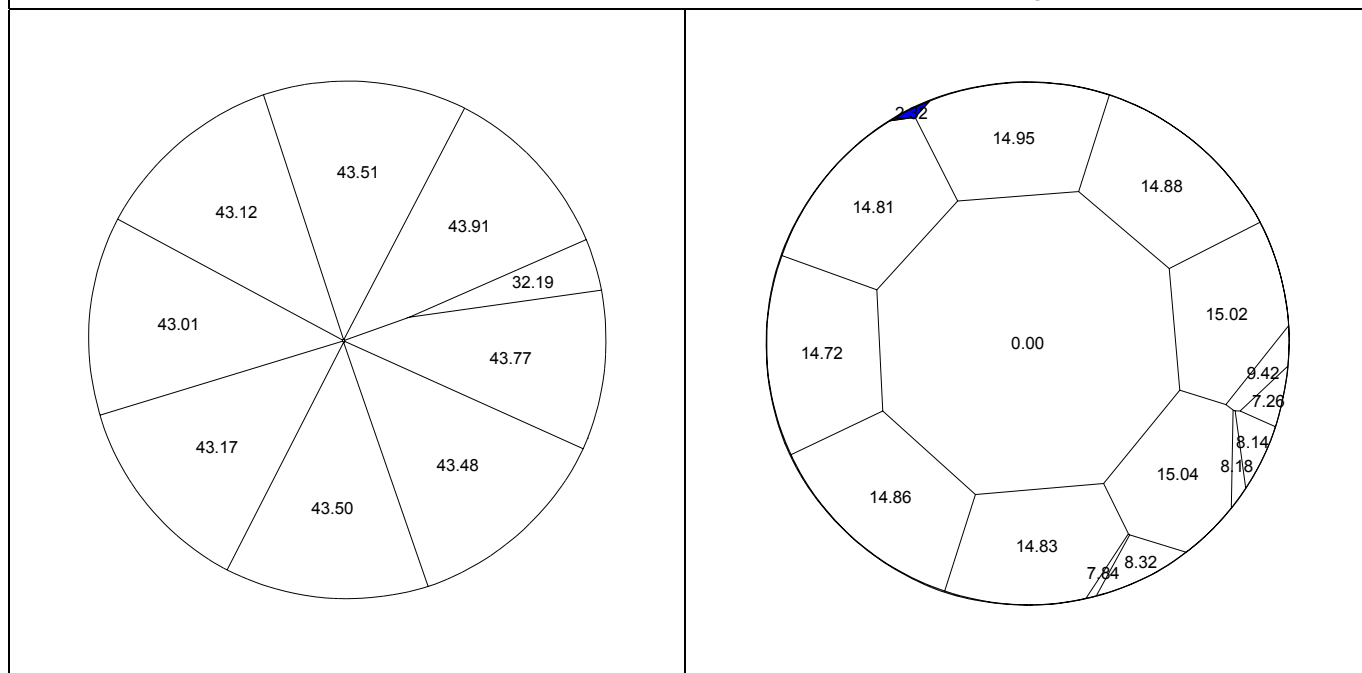


Pavilion and crown views of the diamond with indication of facets' slope angles

All facets' heights without breakdown into groups

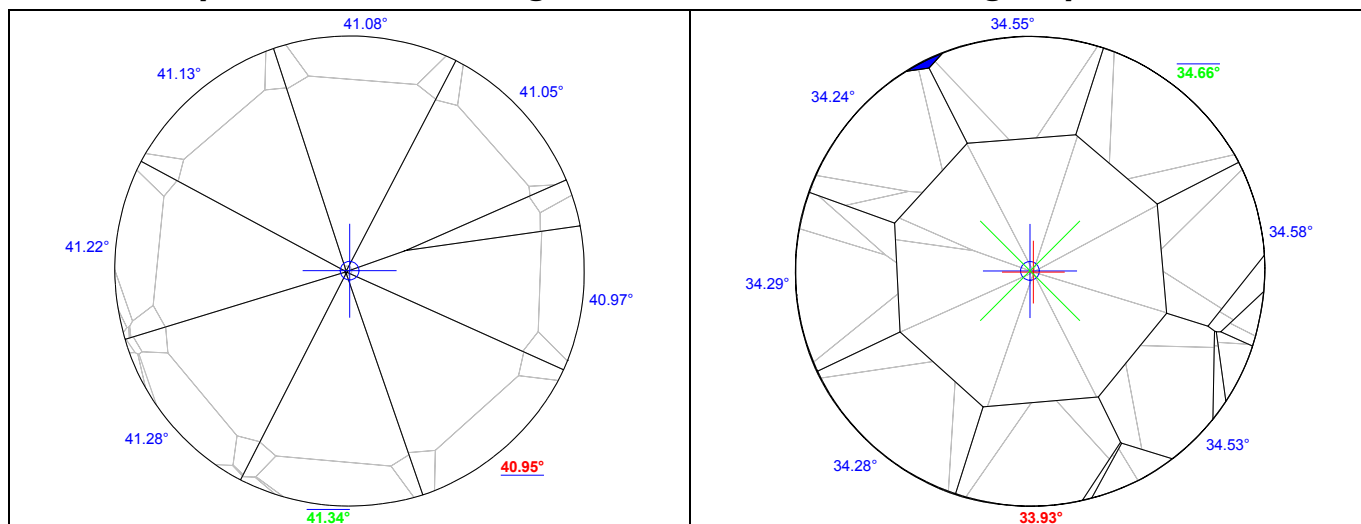


Pavilion and crown views of the diamond with indication of facets' heights (mm)

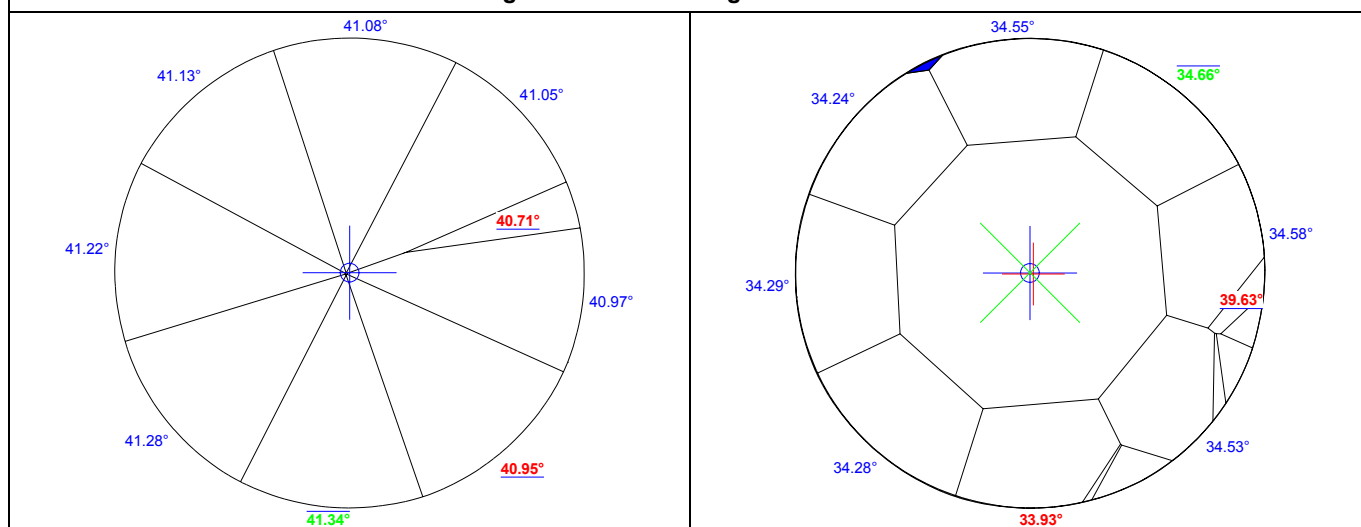


Pavilion and crown views of the diamond with indication of facets' heights (%)

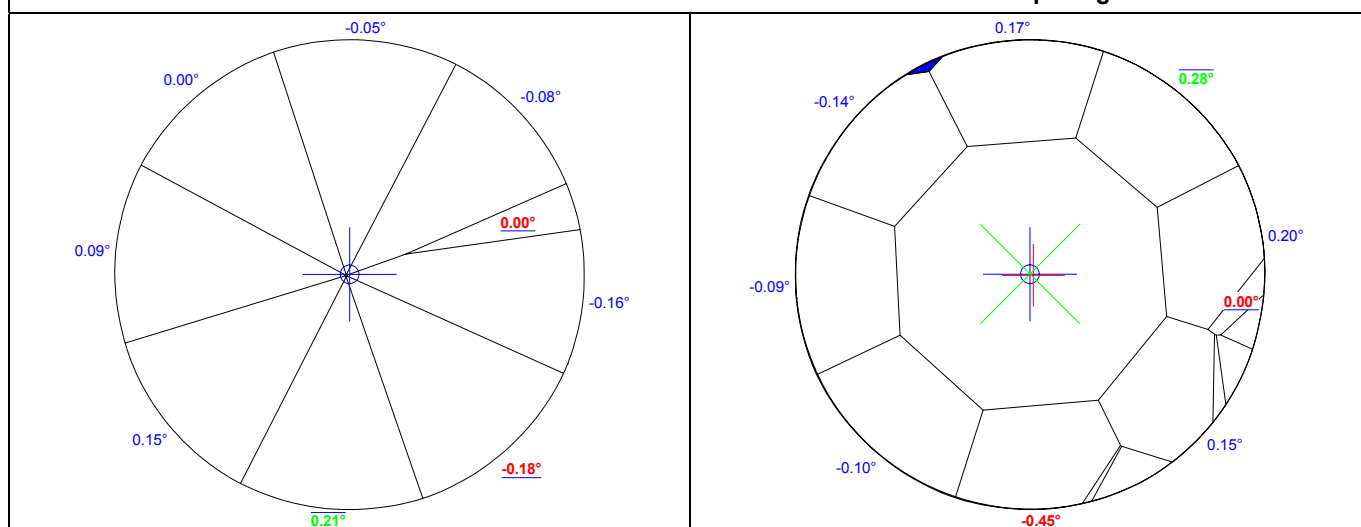
Facets' slope and azimuth angles with breakdown into groups



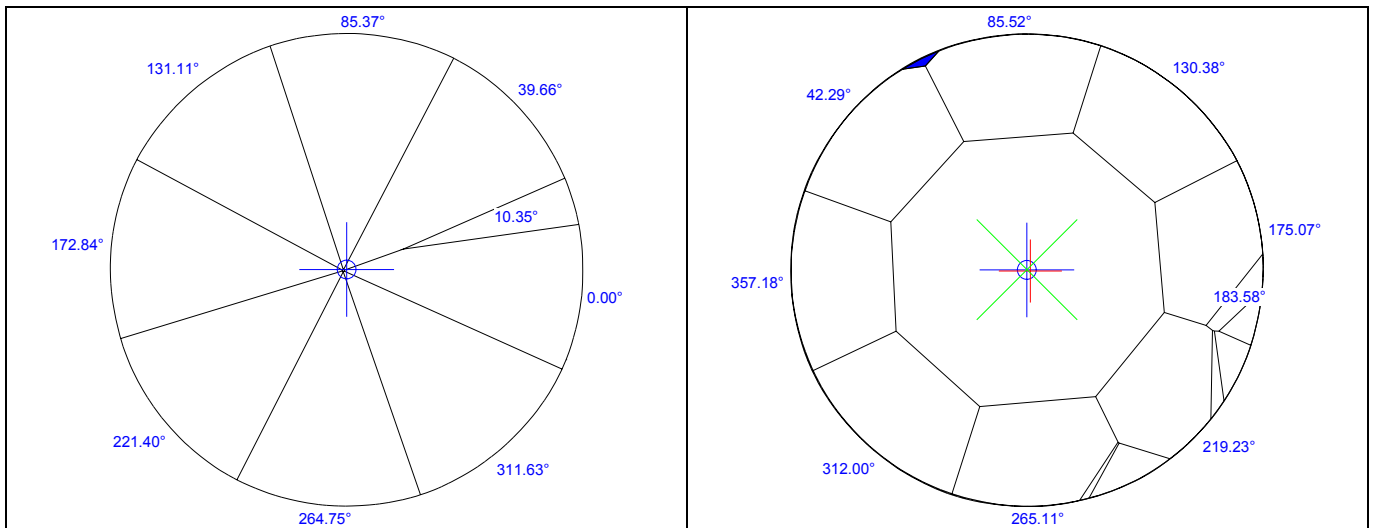
**Pavilion and crown views of the diamond with indication of main facets' slope angles (if present)
Invisible edges are drawn taking refraction into account**



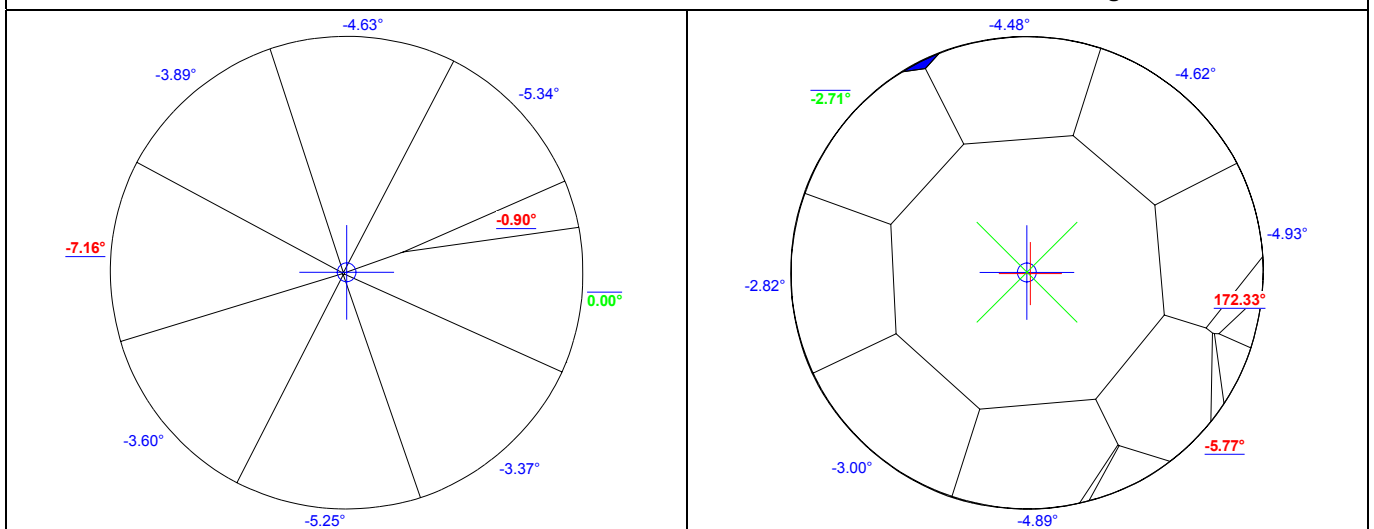
Pavilion and crown views of the diamond with indication of facets' slope angles



**Pavilion and crown views of the diamond with indication of deviation of facets' slope angles
from the average values**

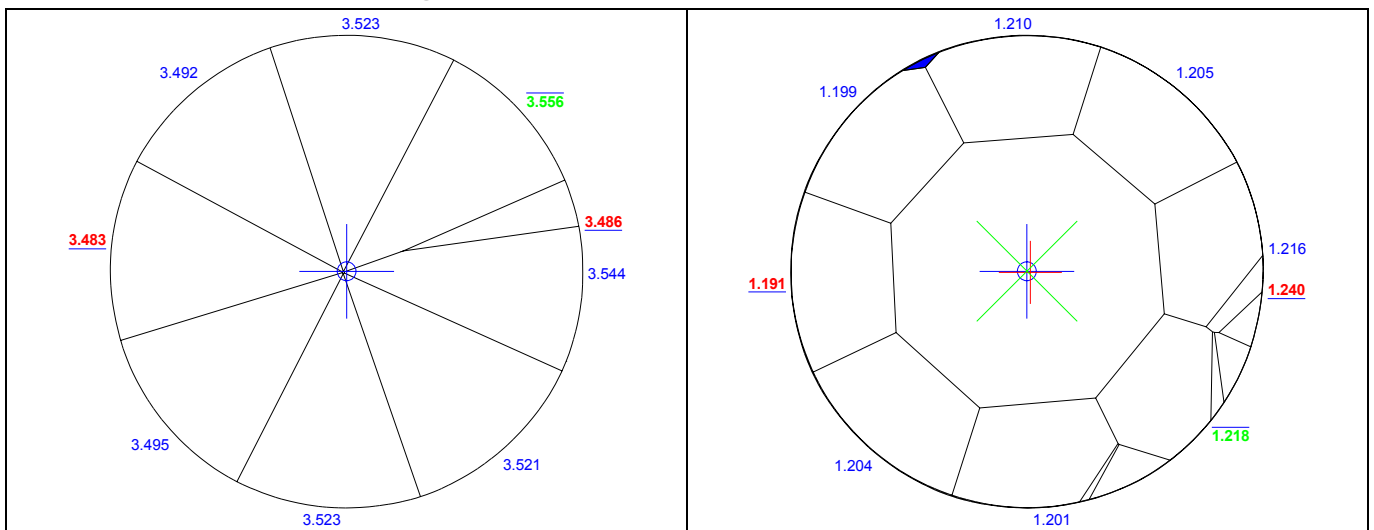


Pavilion and crown views of the diamond with indication of facets' azimuth angles

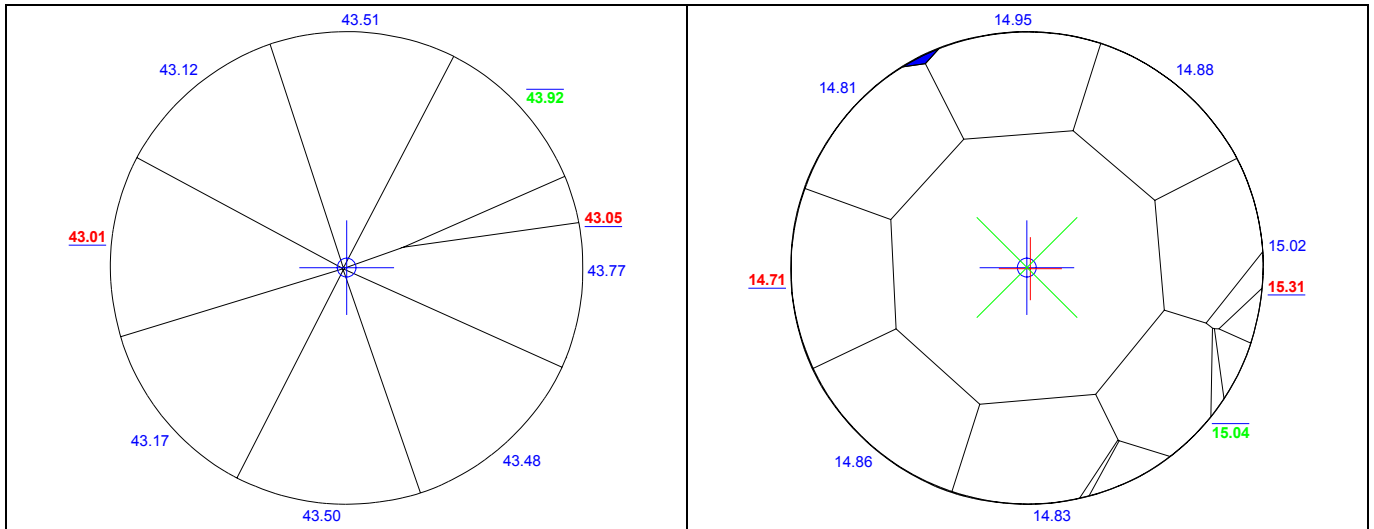


Pavilion and crown views of the diamond with indication of deviation of facets' azimuth angles from their ideal positions for the round brilliant

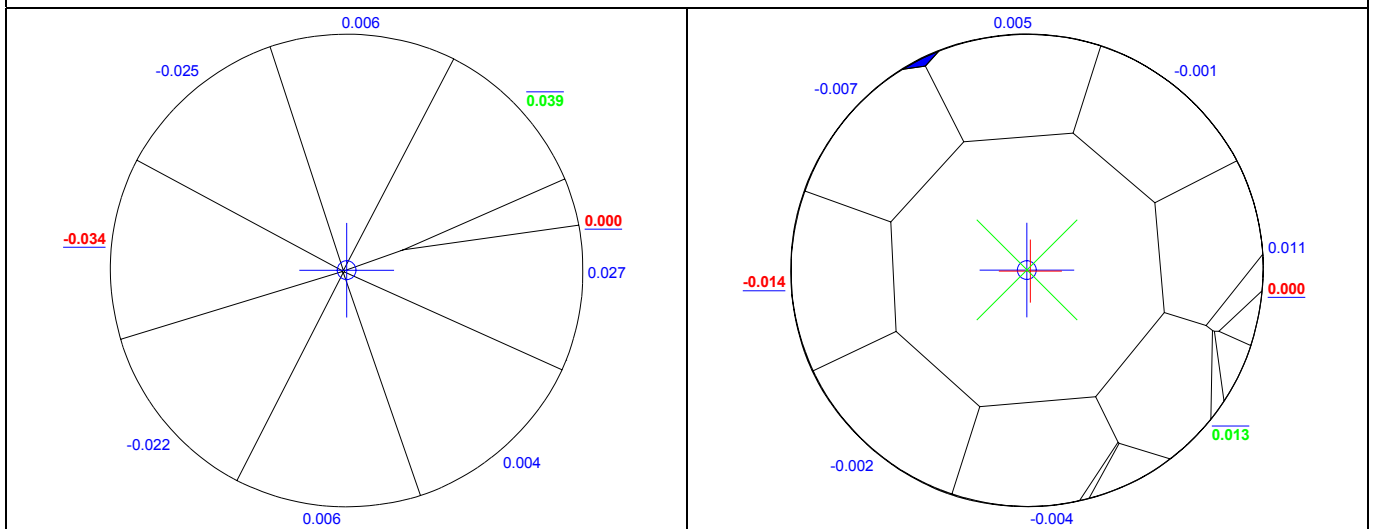
Pavilion and Crown heights



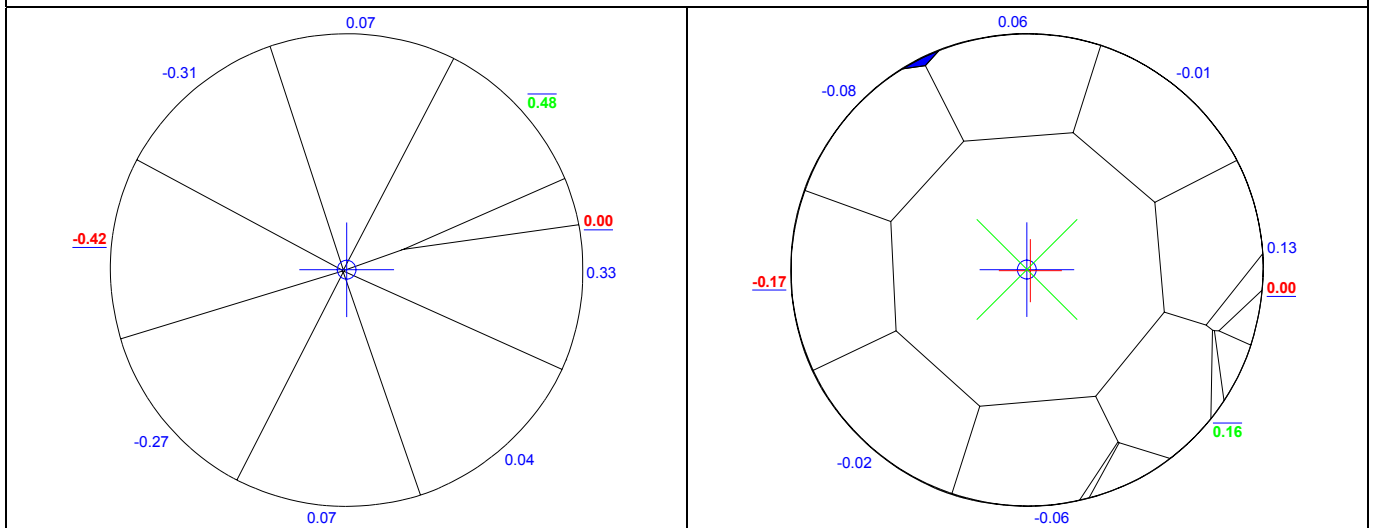
Pavilion and Crown heights at mains and halves (mm)



Pavilion and Crown heights at mains and halves (%)

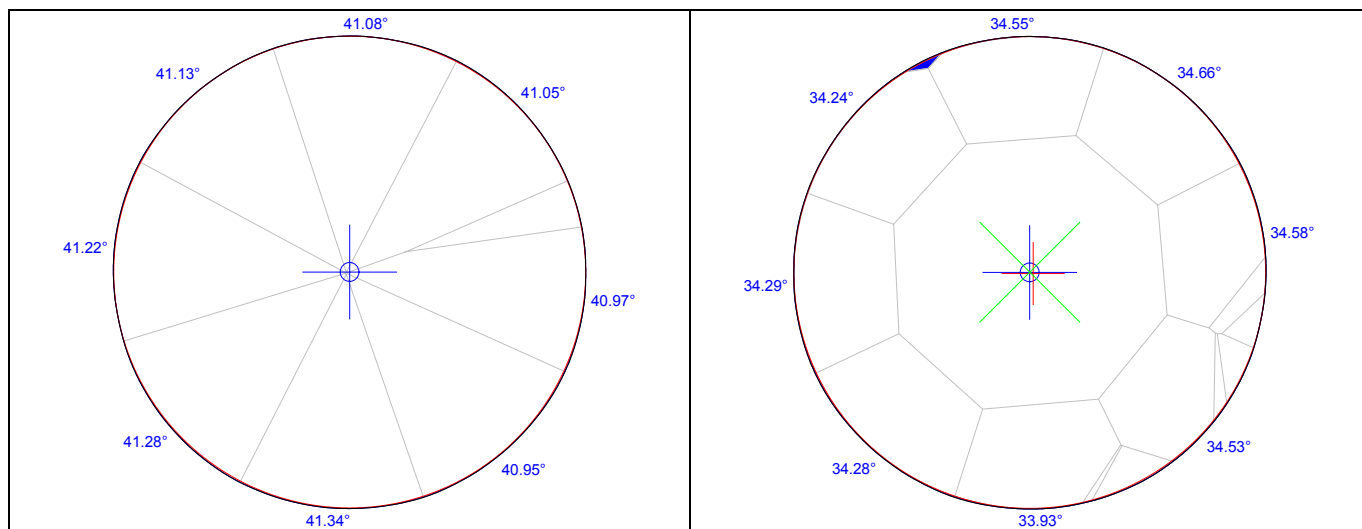


Deviations of Pavilion and Crown heights from the average values (mm)

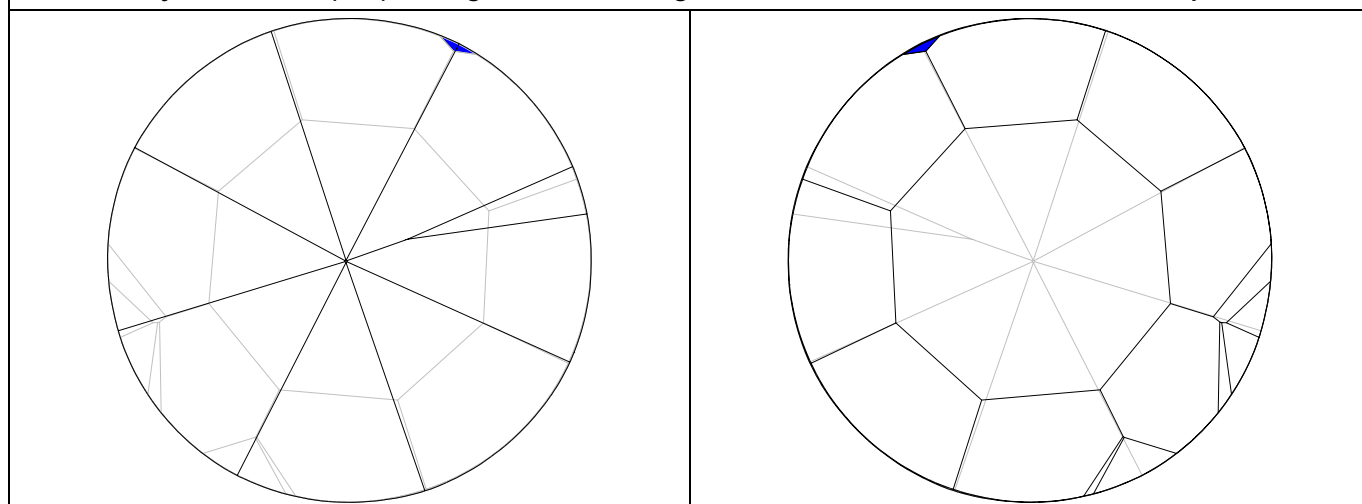


Deviations of Pavilion and Crown heights from the average values (%)




Additional illustrations



Pavilion and crown views of the diamond with indication of the maximum circle that may be inscribed (MIC) in the girdle outline along with the section of the model in the circle's plane



Pavilion and crown views of the diamond with indication of invisible edges without refraction

	Girdle center		Culet center		Table center
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