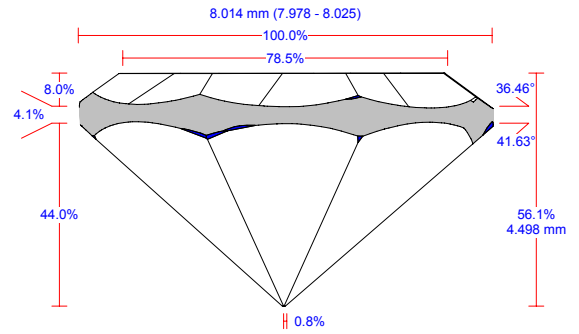


HELIUM FULL REPORT

Semi-polished Round

General information

Model	Simple
Expert name	Makoed A.G.
Report date	24.05.2006
Real weight, ct	
Calculated weight, ct	1.86, 1.8673
Total height	4.498 mm, 56.13 %
Spread	0.05 ct, 2.41%
Girdle-Culet offset (by table axis)	0.75 ± 0.20 %, 0.072 ± 0.013 mm
Girdle-Table offset (by table axis)	0.90 ± 0.17 %, 0.060 ± 0.016 mm
Culet-Table offset (by table axis)	0.36 ± 0.21 %, 0.029 ± 0.017 mm
Girdle to table-culet line offset	0.87 %, 0.069 mm



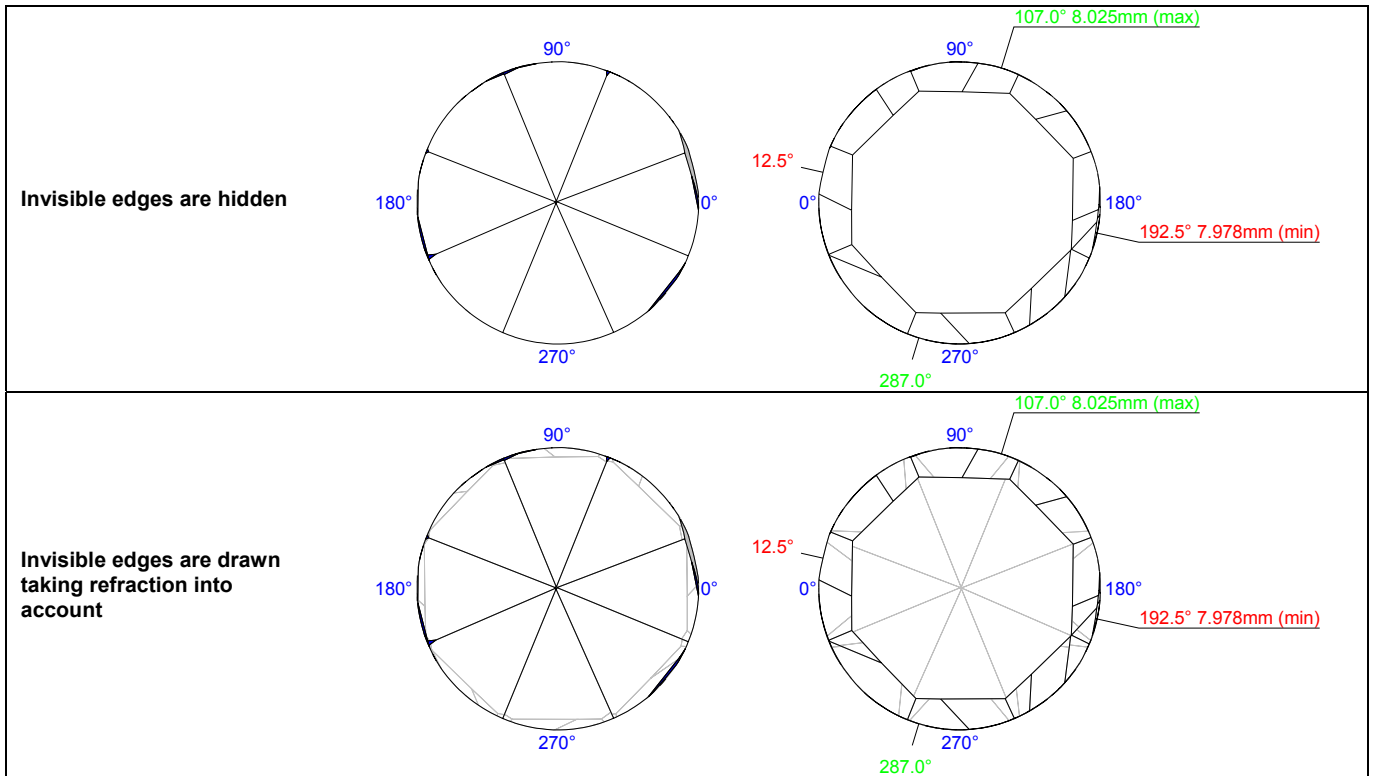
Main parameters

Parameter	mm	Avg	Min	Max	Dev
Diameter	mm	8.014	7.978	8.025	0.59 %, 0.047 mm
Crown angle	°	36.46	35.62	37.47	1.85
Crown height (Mains)	%	7.95	6.88	8.99	2.12
Crown height (Mains)	mm	0.637	0.551	0.721	0.170
Crown height (Upper girdle facets)	%	7.61	7.30	7.92	0.62
Crown height (Upper girdle facets)	mm	0.610	0.585	0.635	0.049
Upper girdle facets angle	°	45.14	44.97	45.31	0.34
Upper girdle facets height	%	7.60	7.28	7.92	0.64
Upper girdle facets height	mm	0.609	0.584	0.635	0.051
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	°	41.63	40.87	42.20	1.33
Pavilion depth (Mains)	%	44.04	43.33	44.53	1.21
Pavilion depth (Mains)	mm	3.529	3.472	3.569	0.097
Pavilion depth (Lower girdle facets)	%	N/A	N/A	N/A	N/A
Pavilion depth (Lower girdle facets)	mm	N/A	N/A	N/A	N/A
Lower girdle facets angle	°	N/A	N/A	N/A	N/A
Lower girdle facets height	%	N/A	N/A	N/A	N/A
Lower girdle facets height	mm	N/A	N/A	N/A	N/A
Table	%	78.49	78.27	78.68	0.41
Table	mm	6.290	6.272	6.305	0.033
Culet	%	0.78	0.60	0.89	0.29
Culet	mm	0.063	0.048	0.071	0.023
Twist	°	0.47	0.01	1.41	1.41
Girdle thickness (Mains)	%	4.09	3.44	5.63	2.19
Girdle thickness (Mains)	mm	0.327	0.276	0.451	0.175
Girdle thickness (Upper/Lower g.f.)	%	6.30	5.35	7.25	1.90
Girdle thickness (Upper/Lowe g.f.)	mm	0.505	0.429	0.581	0.152
Girdle thickness (Crown Mains)	%	4.25	3.44	5.63	2.19
Girdle thickness (Crown Mains)	mm	0.340	0.276	0.451	0.175
Girdle thickness (Upper girdle facets)	%	6.30	5.35	7.25	1.90
Girdle thickness (Upper girdle facets)	mm	0.505	0.429	0.581	0.152
Girdle thickness (Pavilion Mains)	%	3.93	3.44	4.54	1.09
Girdle thickness (Pavilion Mains)	mm	0.315	0.276	0.364	0.088
Girdle thickness (Lower girdle facets)	%	N/A	N/A	N/A	N/A
Girdle thickness (Lower girdle facets)	mm	N/A	N/A	N/A	N/A

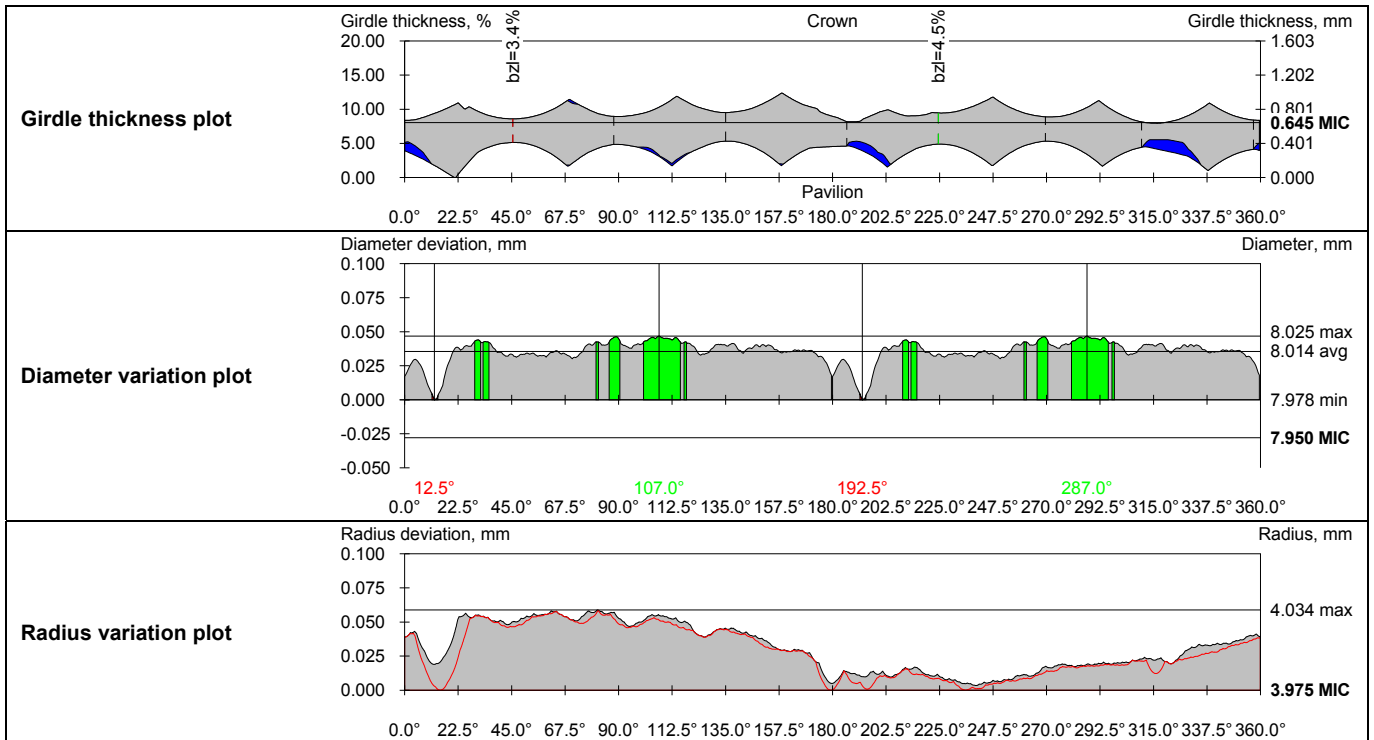
Detailed parameters

Parameter		1	2	3	4	5	6	7	8
Crown angle	°	36.43	36.62	37.20	36.36	35.75	35.62	36.24	37.47
Crown height (Mains)	%	8.56	8.35	7.99	7.43	6.88	7.50	7.93	8.99
Crown height (Mains)	mm	0.686	0.669	0.641	0.595	0.551	0.601	0.635	0.721
Crown height (Upper girdle facets)	%	7.92	7.30	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
Crown height (Upper girdle facets)	mm	0.635	0.585	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	°	359.7	45.7	90.8	135.0	180.8	225.8	269.7	316.0
Upper girdle facets angle	°	44.97	45.31	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
Upper girdle facets height	%	7.92	7.28	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	0.635	0.584	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	°	213.8	194.8	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	°	40.87	41.72	41.82	42.20	42.00	41.71	41.70	40.99
Pavilion depth (Mains)	%	43.33	44.34	44.04	44.53	43.81	44.11	44.53	43.62
Pavilion depth (Mains)	mm	3.472	3.553	3.530	3.569	3.511	3.535	3.569	3.496
Pavilion depth (Lower girdle facets)	%	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 depth (Lower girdle facets)	mm	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 azimuth	°	0.0	45.9	90.8	135.7	180.4	225.3	270.0	314.6
Lower girdle facets angle	°	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
Lower girdle facets height	%	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
Lower girdle facets height	mm	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
Lower girdle facets azimuth	°	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
Crown azimuth deviation from ideal	°	-0.27	0.66	0.75	0.03	0.78	0.80	-0.29	0.99
Upper girdle facets azimuth deviation from ideal	°	-157.42	161.05	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
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	0.85	0.76	0.67	0.38	0.26	0.05	-0.43
Lower girdle facets azimuth deviation from ideal	°	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
Table	%	78.54	78.27	78.68	78.47				
Table	mm	6.294	6.272	6.305	6.288				
Twist	°	0.27	0.20	0.01	0.64	0.40	0.54	0.34	1.41
Girdle thickness (Crown Mains)	%	4.52	3.44	4.09	4.17	5.63	4.53	3.81	3.78
Girdle thickness (Crown Mains)	mm	0.362	0.276	0.328	0.334	0.451	0.363	0.305	0.303
Girdle thickness (Upper girdle facets)	%	5.35	7.25	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	0.429	0.581	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)	%	4.29	3.44	4.11	4.18	3.57	4.54	3.55	3.72
Girdle thickness (Pavilion Mains)	mm	0.344	0.276	0.329	0.335	0.286	0.364	0.285	0.298
Girdle thickness (Lower girdle facets)	%	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
Girdle thickness (Lower girdle facets)	mm	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

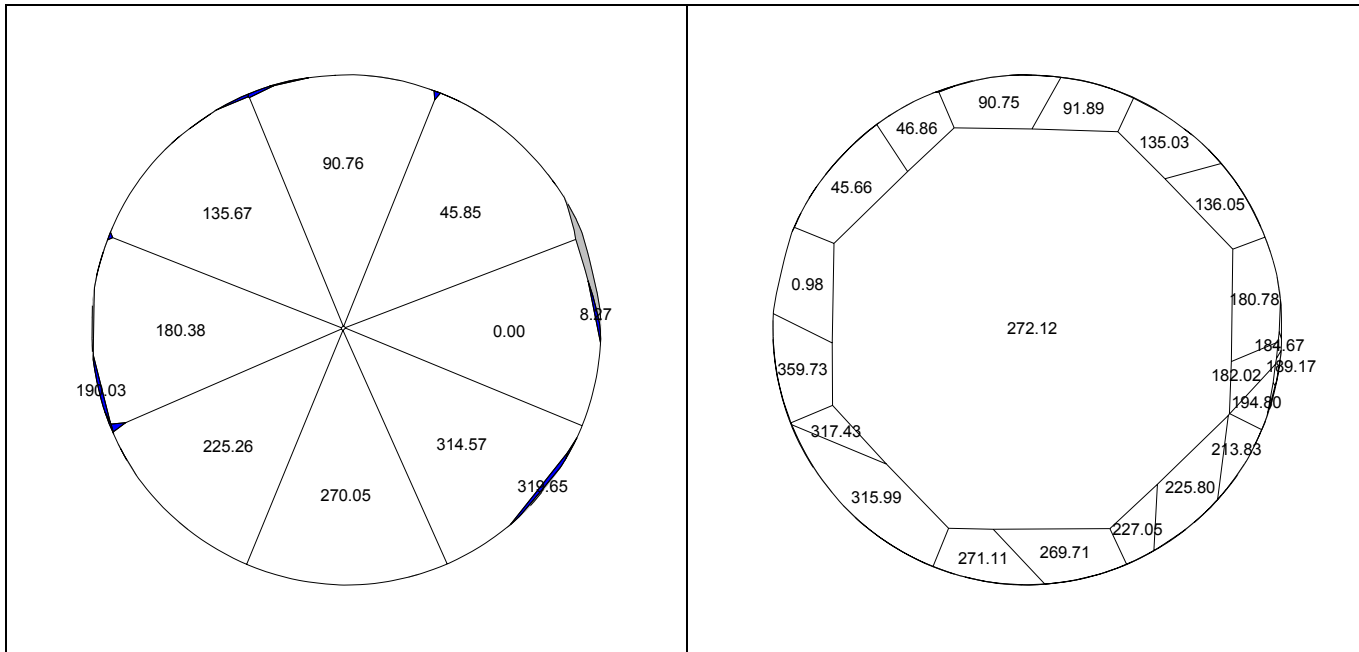
Pavilion and crown views of the diamond with indication of the diameter minimum and maximum



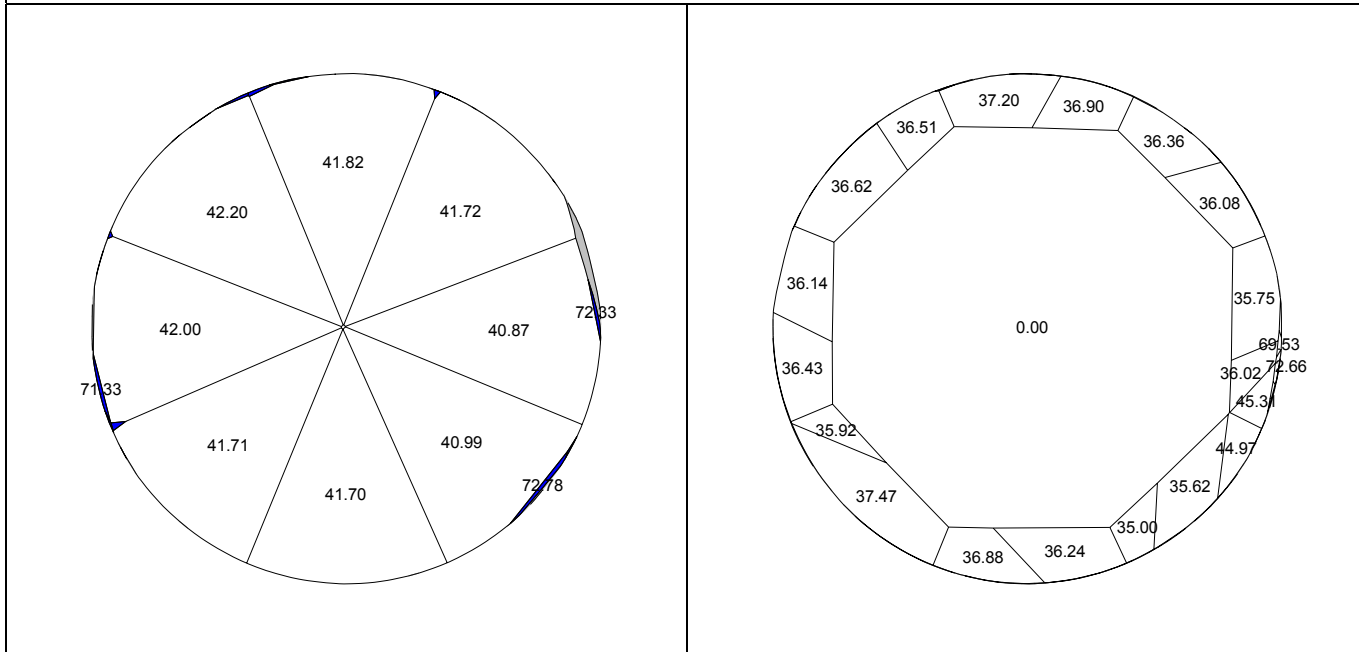
Plots



All facets' slope and azimuth angles without breakdown into groups

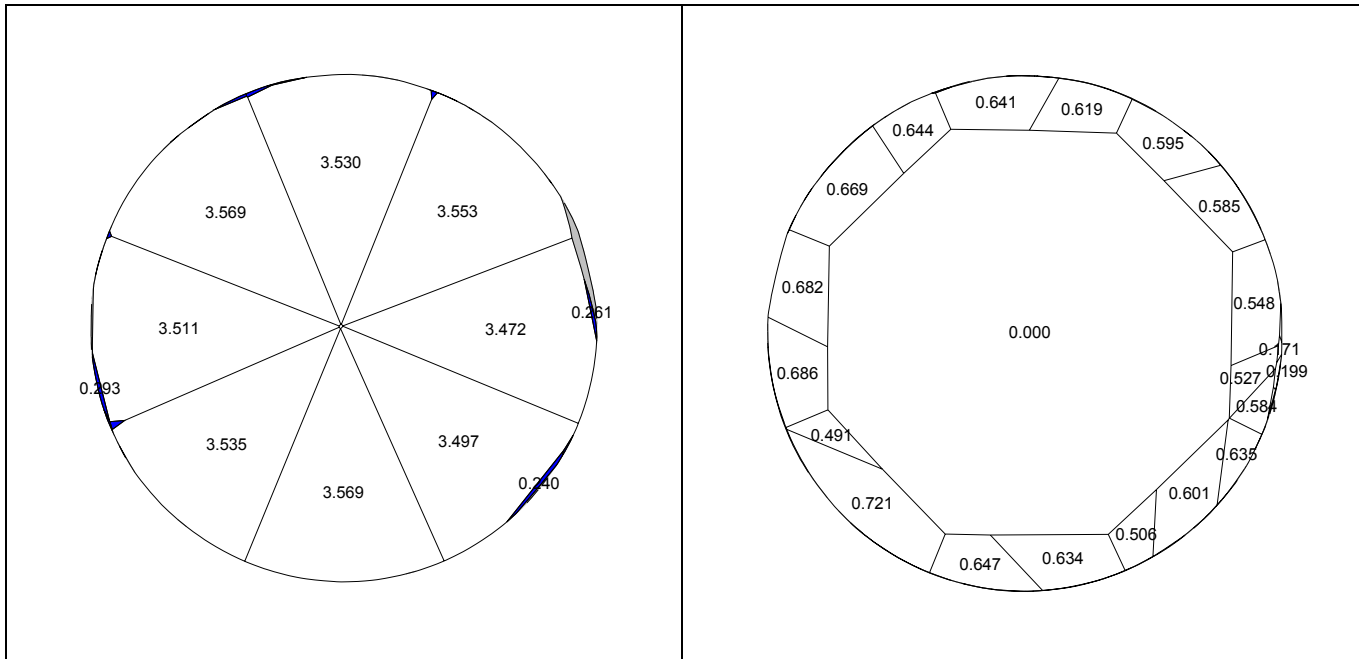


Pavilion and crown views of the diamond with indication of facets' azimuth angles

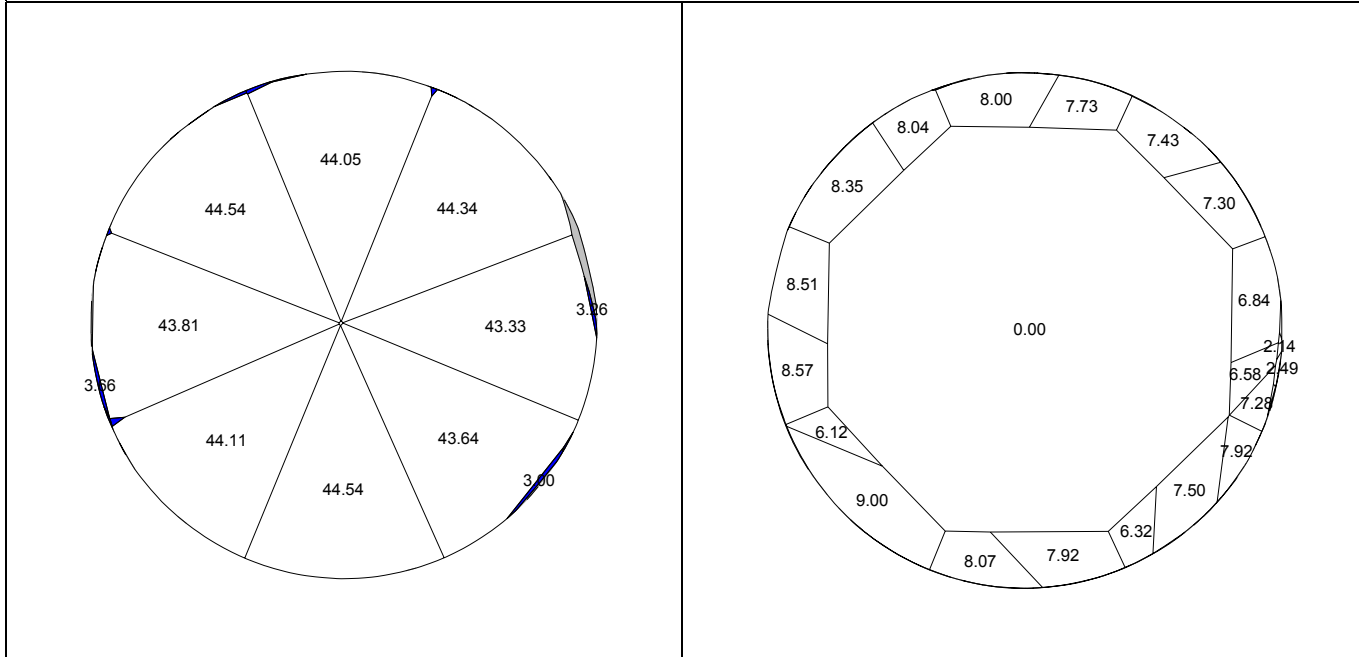


Pavilion and crown views of the diamond with indication of facets' slope angles

All facets' heights without breakdown into groups

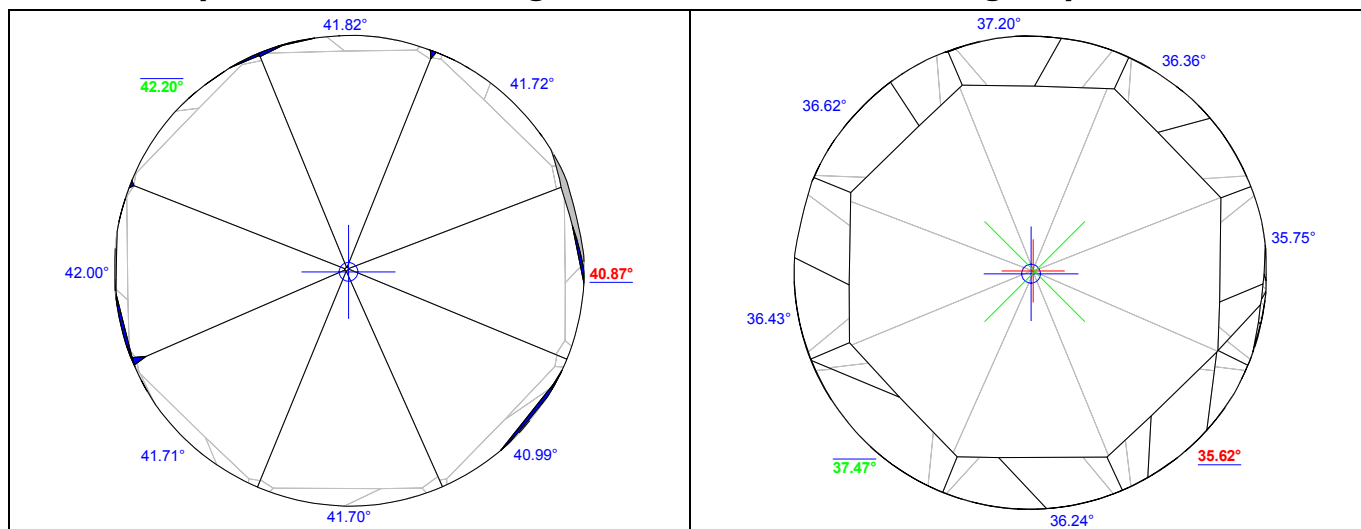


Pavilion and crown views of the diamond with indication of facets' heights (mm)

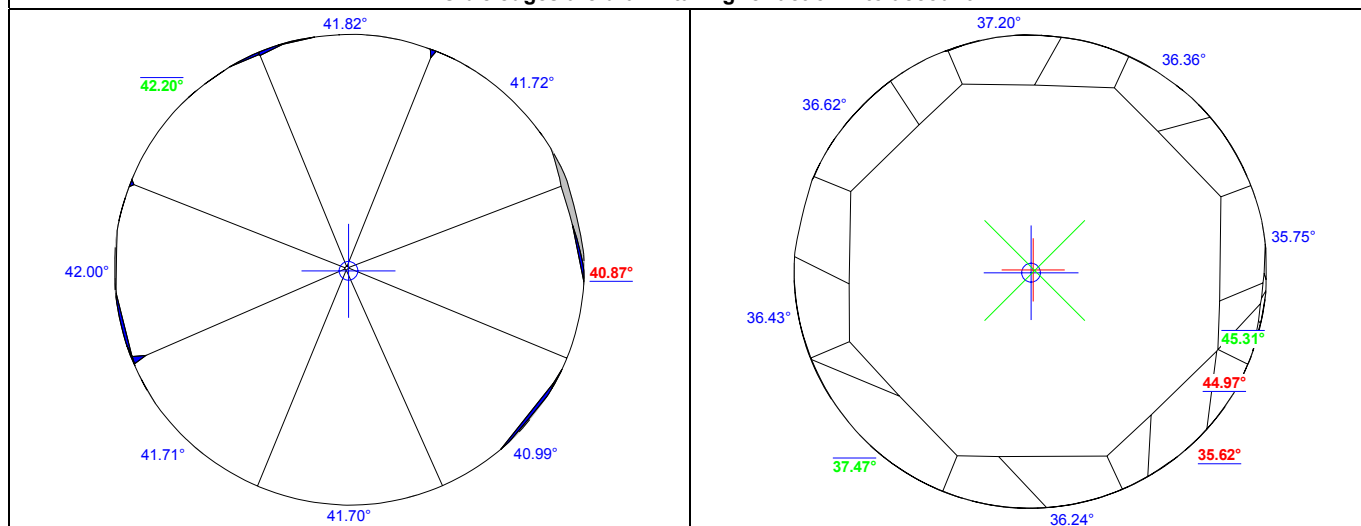


Pavilion and crown views of the diamond with indication of facets' heights (%)

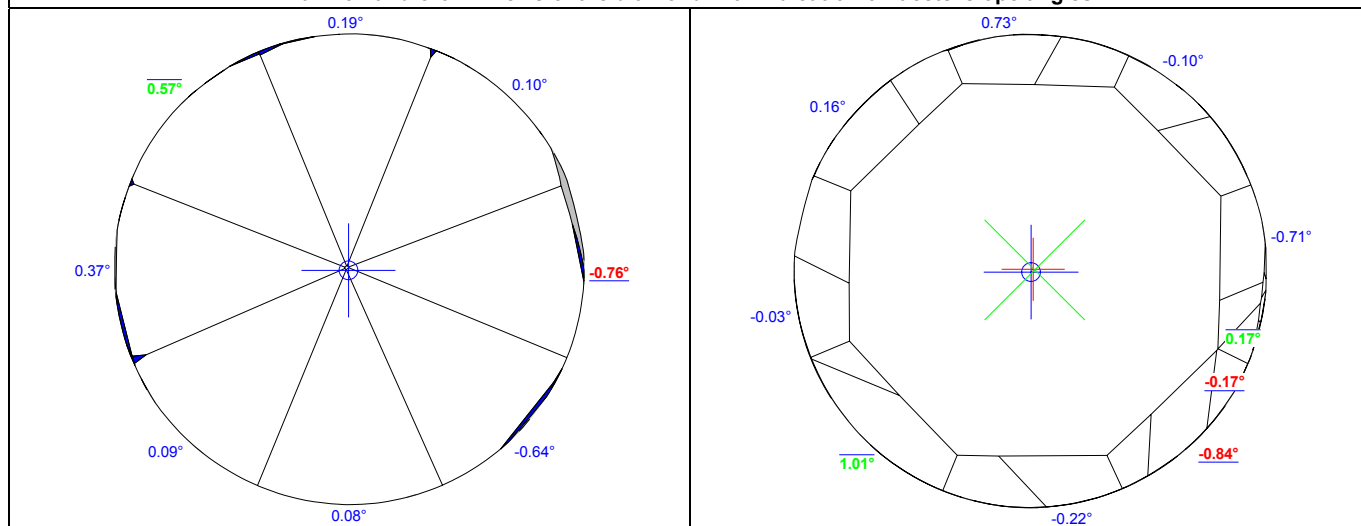
Facets' slope and azimuth angles with breakdown into groups



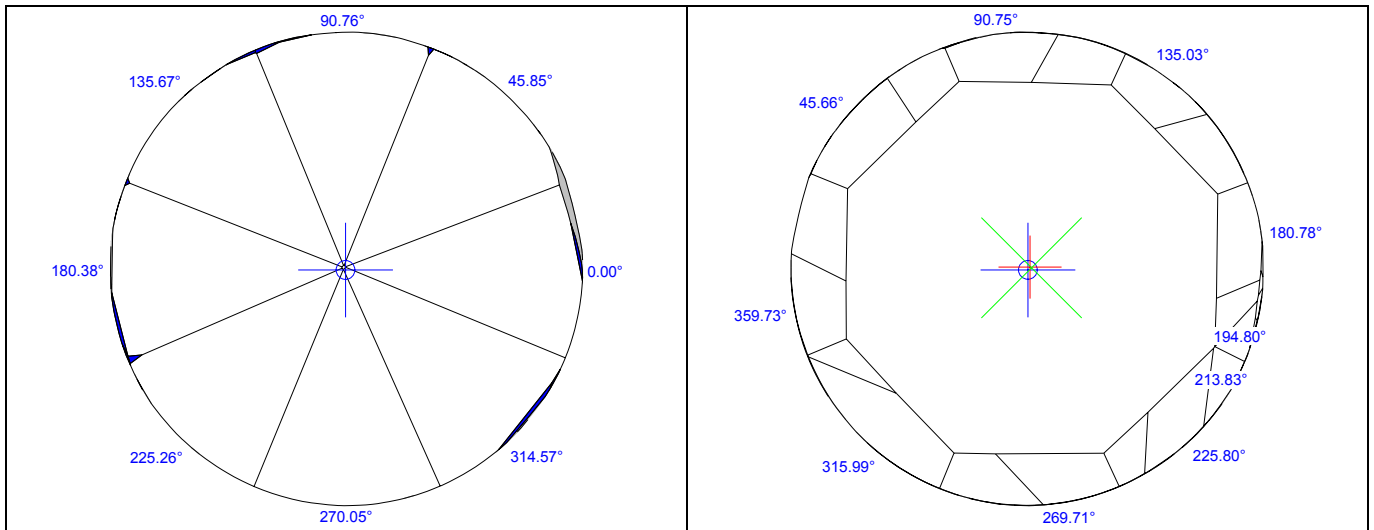
Pavilion and crown views of the diamond with indication of main facets' slope angles (if present)
Invisible edges are drawn taking refraction into account



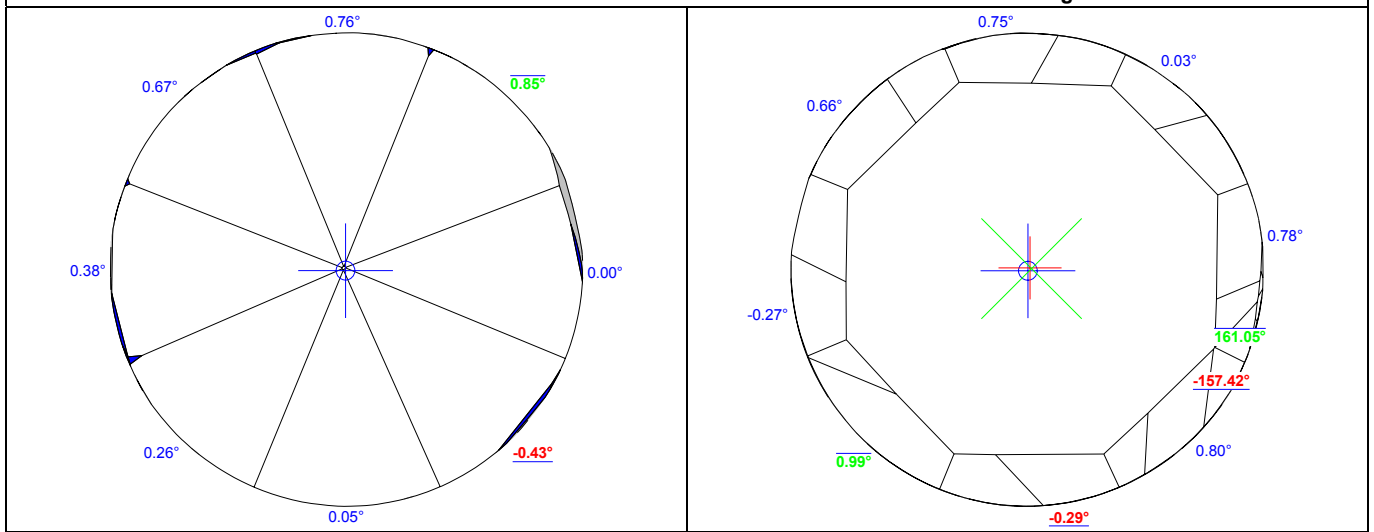
Pavilion and crown views of the diamond with indication of facets' slope angles



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

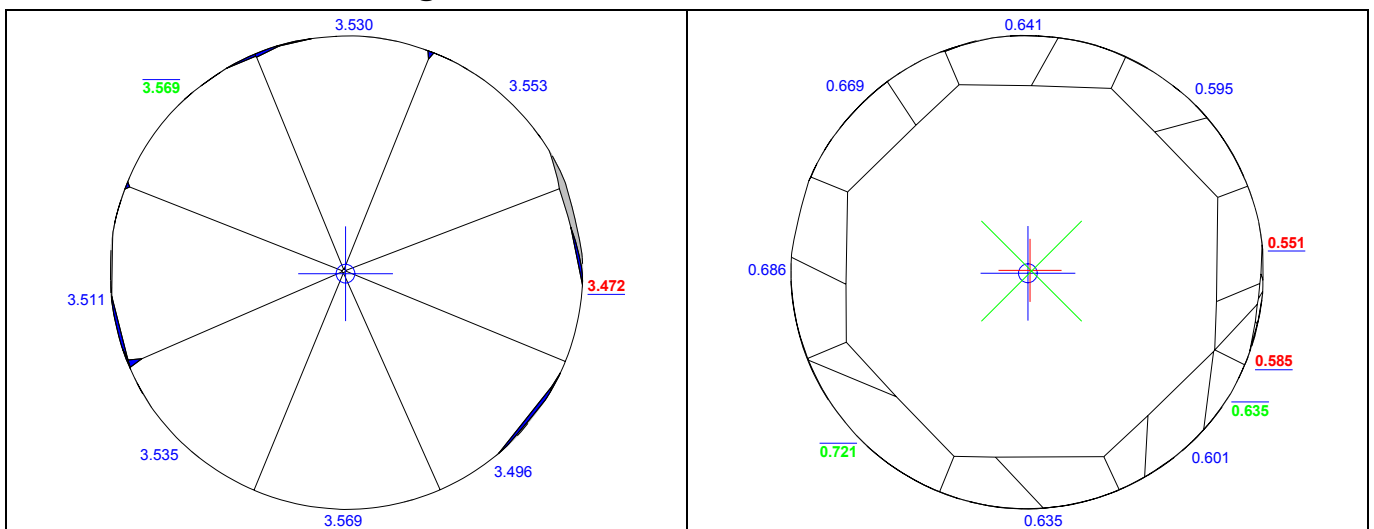


Pavilion and crown views of the diamond with indication of facets' azimuth angles

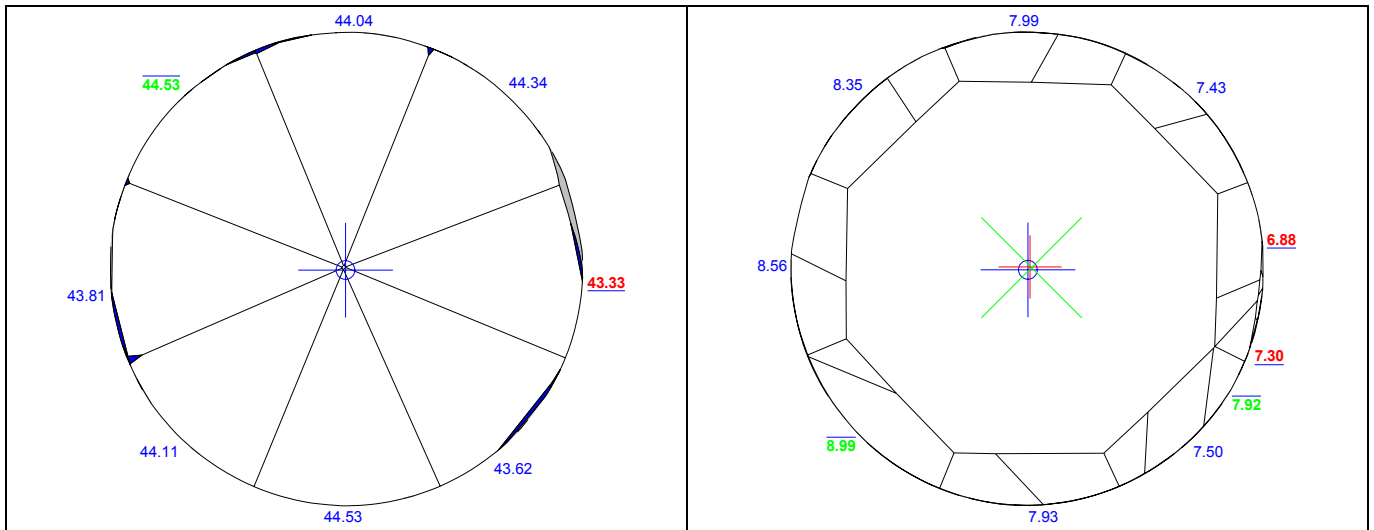


Pavilion and crown views of the diamond with indication of deviation of facets' azimuth angles from their ideal positions for the round brilliant

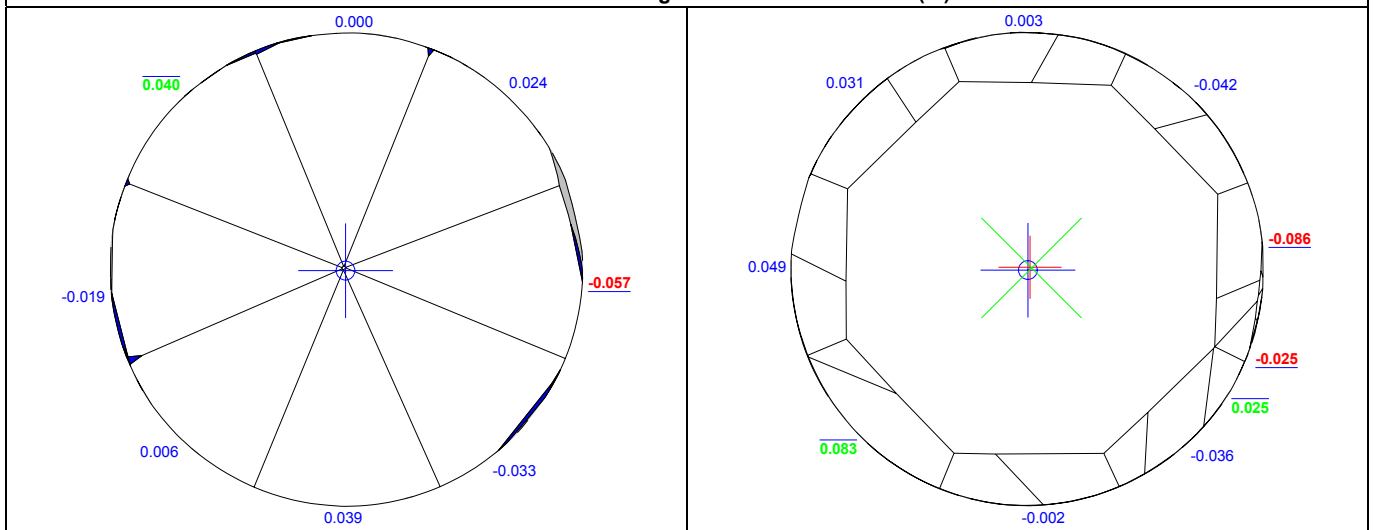
Pavilion and Crown heights



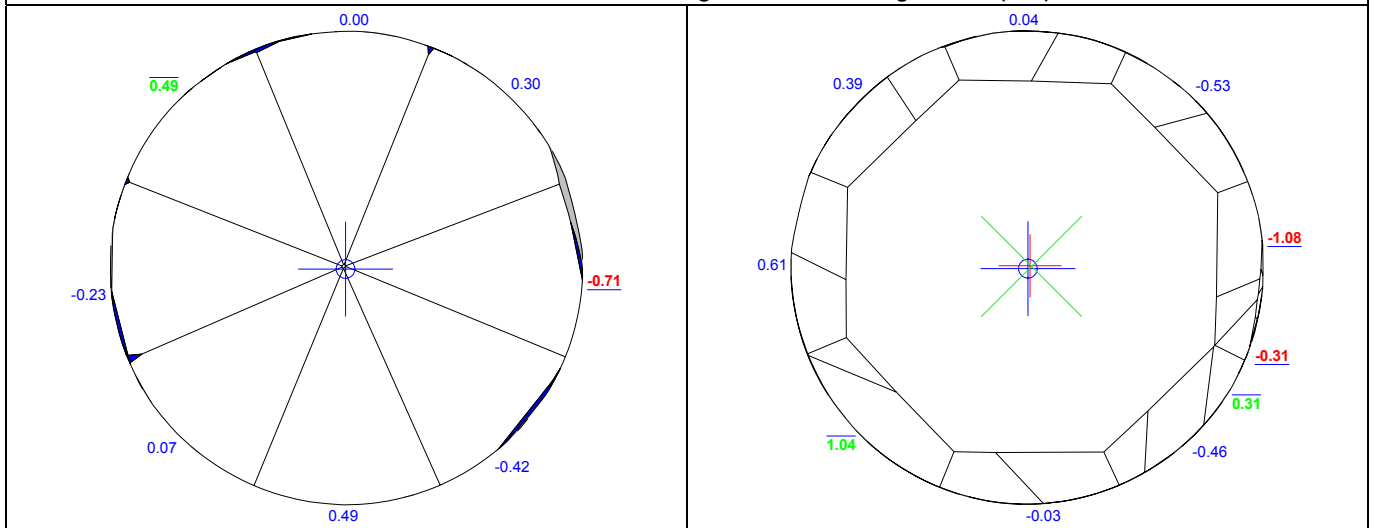
Pavilion and Crown heights at mains and halves (mm)



Pavilion and Crown heights at mains and halves (%)

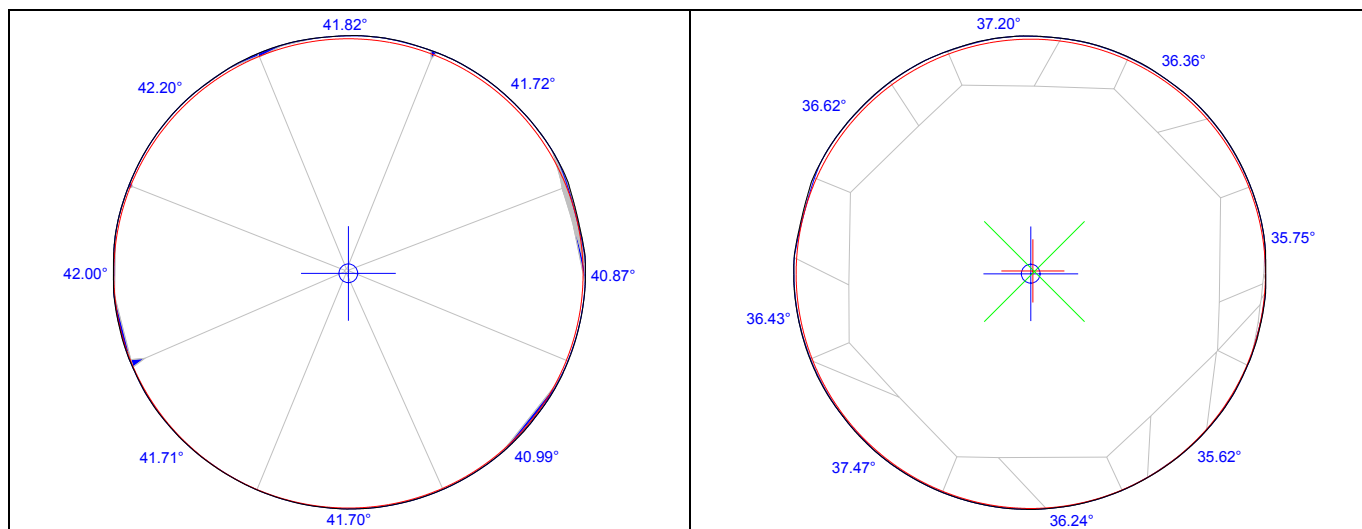


Deviations of Pavilion and Crown heights from the average values (mm)

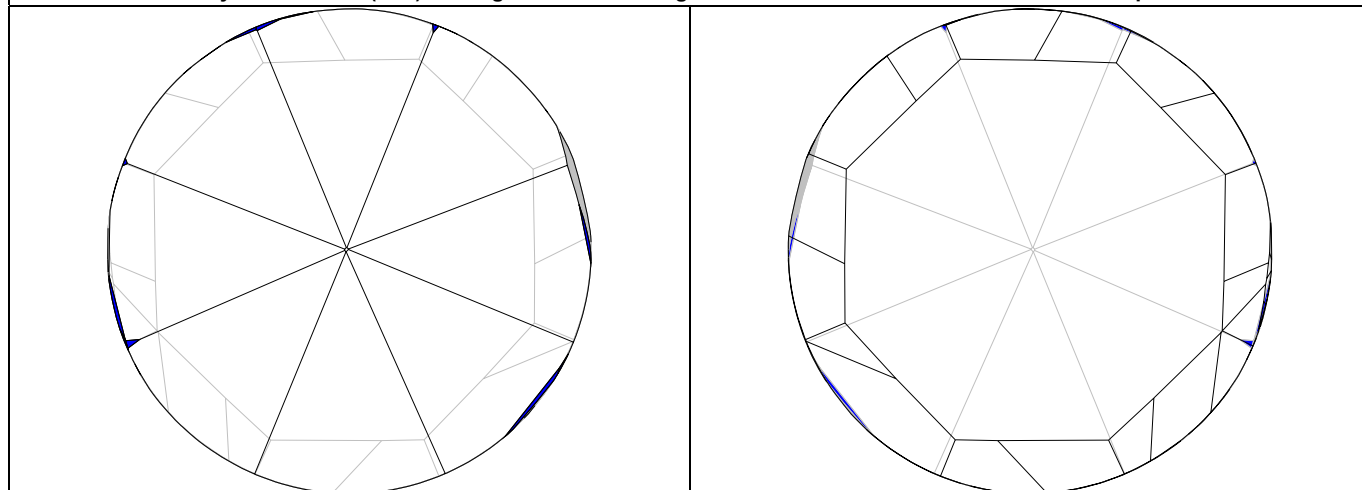


Deviations of Pavilion and Crown heights from the average values (%)




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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