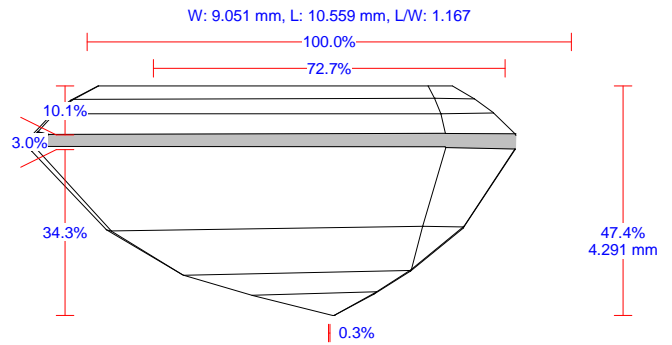


Full report for step cuts

Step Cut

General information

Model Simple
 Expert name Makoed A.G.
 Report date 22.01.2008
 Real weight, ct
 Calculated weight, ct 2.56, 2.5621
 Appraiser title AGS_2005
 Overall cut quality N/A
 Symmetry appraiser title Internal
 Overall symmetry quality PR
 Spread -0.02 ct, -0.94 %
 EF / Nat Yes (1)



Main parameters

Parameter		Avg	Min	Max	Dev	Cut	Sym
Width, length	mm		9.051	10.559	Ratio: 1.167	N/A	
Crown height	%	10.12	9.87	10.64	0.76	N/A	VG
Crown height	mm	0.916	0.894	0.963	0.069		
Pavilion height	%	34.25	33.65	34.88	1.23	N/A	VG
Pavilion height	mm	3.100	3.046	3.157	0.111		
Total height	%	47.41				N/A	
Total height	mm	4.291					
Table	%	72.66	72.31	73.19	0.88	N/A	EX
Table	mm	6.686	6.624	6.758	0.134		
Culet	%	0.35	0.31	0.37	0.06	N/A	EX
Culet	mm	0.031	0.028	0.033	0.005		
Culet length	%	0.00					
Culet length	mm	0.033					
Girdle thickness	%	3.04	2.65	3.33	0.68		EX
Girdle thickness	mm	0.275	0.240	0.302	0.061		
Crown Main 1 angle	°	46.38	44.18	48.24	4.06		
Crown Main 1 height	%	4.50	4.26	4.62	0.37		
Crown Main 1 height	mm	0.407	0.385	0.418	0.033		
Crown Main 2 angle	°	37.95	36.35	38.91	2.56		
Crown Main 2 height	%	3.16	3.11	3.20	0.09		
Crown Main 2 height	mm	0.286	0.282	0.290	0.008		
Crown Main 3 angle	°	31.02	28.84	33.89	5.05		
Crown Main 3 height	%	2.81	2.64	3.01	0.38		
Crown Main 3 height	mm	0.255	0.239	0.273	0.034		
Crown Main 4 angle	°	N/A	N/A	N/A	N/A		
Crown Main 4 height	%	N/A	N/A	N/A	N/A		
Crown Main 4 height	mm	N/A	N/A	N/A	N/A		
Crown Main 5 angle	°	N/A	N/A	N/A	N/A		
Crown Main 5 height	%	N/A	N/A	N/A	N/A		
Crown Main 5 height	mm	N/A	N/A	N/A	N/A		
Crown Corner 1 angle	°	43.11	40.70	47.04	6.34		
Crown Corner 1 height	%	4.58	4.29	5.02	0.72		
Crown Corner 1 height	mm	0.415	0.389	0.454	0.066		
Crown Corner 2 angle	°	33.71	30.96	36.80	5.84		
Crown Corner 2 height	%	3.26	3.04	3.52	0.48		
Crown Corner 2 height	mm	0.295	0.275	0.319	0.043		
Crown Corner 3 angle	°	25.41	23.34	27.92	4.58		
Crown Corner 3 height	%	2.87	2.68	2.98	0.30		
Crown Corner 3 height	mm	0.260	0.243	0.270	0.027		
Crown Corner 4 angle	°	N/A	N/A	N/A	N/A		
Crown Corner 4 height	%	N/A	N/A	N/A	N/A		
Crown Corner 4 height	mm	N/A	N/A	N/A	N/A		
Crown Corner 5 angle	°	N/A	N/A	N/A	N/A		
Crown Corner 5 height	%	N/A	N/A	N/A	N/A		
Crown Corner 5 height	mm	N/A	N/A	N/A	N/A		
Pavilion Main 1 angle	°	55.58	53.89	56.58	2.69		
Pavilion Main 1 height	%	16.69	16.27	17.46	1.19		
Pavilion Main 1 height	mm	1.511	1.472	1.580	0.107		
Pavilion Main 2 angle	°	38.18	37.02	39.32	2.30		
Pavilion Main 2 height	%	9.69	9.31	10.11	0.80		
Pavilion Main 2 height	mm	0.877	0.843	0.915	0.073		
Pavilion Main 3 angle	°	31.25	30.23	32.48	2.25		
Pavilion Main 3 height	%	5.04	4.91	5.12	0.21		
Pavilion Main 3 height	mm	0.456	0.445	0.464	0.019		

Parameter		Avg	Min	Max	Dev	Cut	Sym
Pavilion Main 4 angle	°	27.38	26.81	28.52	1.71		
Pavilion Main 4 height	%	4.66	4.29	4.88	0.59		
Pavilion Main 4 height	mm	0.422	0.388	0.442	0.054		
Pavilion Main 5 angle	°	N/A	N/A	N/A	N/A		
Pavilion Main 5 height	%	N/A	N/A	N/A	N/A		
Pavilion Main 5 height	mm	N/A	N/A	N/A	N/A		
Pavilion Corner 1 angle	°	45.81	44.25	47.02	2.77		
Pavilion Corner 1 height	%	16.53	16.31	16.89	0.57		
Pavilion Corner 1 height	mm	1.496	1.477	1.528	0.052		
Pavilion Corner 2 angle	°	32.50	31.18	33.17	1.99		
Pavilion Corner 2 height	%	9.00	8.77	9.32	0.55		
Pavilion Corner 2 height	mm	0.814	0.794	0.843	0.050		
Pavilion Corner 3 angle	°	N/A	N/A	N/A	N/A		
Pavilion Corner 3 height	%	N/A	N/A	N/A	N/A		
Pavilion Corner 3 height	mm	N/A	N/A	N/A	N/A		
Pavilion Corner 4 angle	°	N/A	N/A	N/A	N/A		
Pavilion Corner 4 height	%	N/A	N/A	N/A	N/A		
Pavilion Corner 4 height	mm	N/A	N/A	N/A	N/A		
Pavilion Corner 5 angle	°	N/A	N/A	N/A	N/A		
Pavilion Corner 5 height	%	N/A	N/A	N/A	N/A		
Pavilion Corner 5 height	mm	N/A	N/A	N/A	N/A		

Detailed parameters

Parameter		1	2	3	4
Diameter (side-based)	mm	9.051	9.325	9.233	
Diameter (side-based)	%	100.00	103.02	102.01	
Crown height	mm	0.907	0.894	0.900	0.963
Crown height	%	10.02	9.87	9.94	10.64
Pavilion height	mm	3.109	3.157	3.089	3.046
Pavilion height	%	34.35	34.88	34.13	33.65
Table	mm	6.624	6.758	6.676	
Table	%	73.19	72.47	72.31	
Width-wise table	%	73.19	74.66	73.76	
Girdle thickness	mm	0.275	0.240	0.302	0.282
Girdle thickness	%	3.04	2.65	3.33	3.12
Corner angle width	mm	3.473	5.462	5.563	3.486
Corner angle width	%	38.38	60.35	61.46	38.52
Corner angle length	mm	4.603	0.888	0.876	4.512
Corner angle length	%	50.86	9.81	9.68	49.85
Crown Main 1 angle	°	44.18	46.73	48.24	N/A
Crown Main 1 height	mm	0.417	0.385	0.418	N/A
Crown Main 1 height	%	4.61	4.26	4.62	N/A
Crown Main 1 azimuth	°	359.9	120.9	240.4	N/A
Crown Main 2 angle	°	36.35	38.58	38.91	N/A
Crown Main 2 height	mm	0.282	0.290	0.285	N/A
Crown Main 2 height	%	3.11	3.20	3.15	N/A
Crown Main 2 azimuth	°	359.9	120.9	240.4	N/A
Crown Main 3 angle	°	30.32	28.84	33.89	N/A
Crown Main 3 height	mm	0.239	0.252	0.273	N/A
Crown Main 3 height	%	2.64	2.79	3.01	N/A
Crown Main 3 azimuth	°	359.9	120.9	240.4	N/A
Crown Main 4 angle	°	N/A	N/A	N/A	N/A
Crown Main 4 height	mm	N/A	N/A	N/A	N/A
Crown Main 4 height	%	N/A	N/A	N/A	N/A
Crown Main 4 azimuth	°	N/A	N/A	N/A	N/A
Crown Main 5 angle	°	N/A	N/A	N/A	N/A
Crown Main 5 height	mm	N/A	N/A	N/A	N/A
Crown Main 5 height	%	N/A	N/A	N/A	N/A
Crown Main 5 azimuth	°	N/A	N/A	N/A	N/A
Crown Corner 1 angle	°	40.70	47.04	41.58	N/A
Crown Corner 1 height	mm	0.389	0.402	0.454	N/A
Crown Corner 1 height	%	4.29	4.44	5.02	N/A
Crown Corner 1 azimuth	°	57.4	178.1	298.7	N/A
Crown Corner 2 angle	°	30.96	36.80	33.36	N/A
Crown Corner 2 height	mm	0.292	0.275	0.319	N/A
Crown Corner 2 height	%	3.23	3.04	3.52	N/A
Crown Corner 2 azimuth	°	57.8	178.3	297.9	N/A
Crown Corner 3 angle	°	23.34	27.92	24.96	N/A
Crown Corner 3 height	mm	0.243	0.270	0.267	N/A
Crown Corner 3 height	%	2.68	2.98	2.95	N/A
Crown Corner 3 azimuth	°	57.2	178.8	296.6	N/A

Parameter		1	2	3	4
Crown Corner 4 angle	°	N/A	N/A	N/A	N/A
Crown Corner 4 height	mm	N/A	N/A	N/A	N/A
Crown Corner 4 height	%	N/A	N/A	N/A	N/A
Crown Corner 4 azimuth	°	N/A	N/A	N/A	N/A
Crown Corner 5 angle	°	N/A	N/A	N/A	N/A
Crown Corner 5 height	mm	N/A	N/A	N/A	N/A
Crown Corner 5 height	%	N/A	N/A	N/A	N/A
Crown Corner 5 azimuth	°	N/A	N/A	N/A	N/A
Pavilion Main 1 angle	°	56.58	53.89	56.28	N/A
Pavilion Main 1 height	mm	1.480	1.580	1.472	N/A
Pavilion Main 1 height	%	16.35	17.46	16.27	N/A
Pavilion Main 1 azimuth	°	0.1	120.8	240.0	N/A
Pavilion Main 2 angle	°	39.32	38.20	37.02	N/A
Pavilion Main 2 height	mm	0.843	0.915	0.873	N/A
Pavilion Main 2 height	%	9.31	10.11	9.65	N/A
Pavilion Main 2 azimuth	°	0.2	120.4	240.1	N/A
Pavilion Main 3 angle	°	32.48	31.05	30.23	N/A
Pavilion Main 3 height	mm	0.459	0.464	0.445	N/A
Pavilion Main 3 height	%	5.07	5.12	4.91	N/A
Pavilion Main 3 azimuth	°	0.3	120.0	240.4	N/A
Pavilion Main 4 angle	°	28.52	26.82	26.81	N/A
Pavilion Main 4 height	%	4.82	4.88	4.29	N/A
Pavilion Main 4 height	mm	0.436	0.442	0.388	N/A
Pavilion Main 4 azimuth	°	0.6	119.5	240.5	N/A
Pavilion Main 5 angle	°	N/A	N/A	N/A	N/A
Pavilion Main 5 height	mm	N/A	N/A	N/A	N/A
Pavilion Main 5 height	%	N/A	N/A	N/A	N/A
Pavilion Main 5 azimuth	°	N/A	N/A	N/A	N/A
Pavilion Corner 1 angle	°	44.25	47.02	46.17	N/A
Pavilion Corner 1 height	mm	1.484	1.528	1.477	N/A
Pavilion Corner 1 height	%	16.40	16.89	16.31	N/A
Pavilion Corner 1 azimuth	°	58.8	175.6	302.5	N/A
Pavilion Corner 2 angle	°	33.17	31.18	33.15	N/A
Pavilion Corner 2 height	mm	0.807	0.843	0.794	N/A
Pavilion Corner 2 height	%	8.91	9.32	8.77	N/A
Pavilion Corner 2 azimuth	°	59.2	176.7	302.8	N/A
Pavilion Corner 3 angle	°	N/A	N/A	N/A	N/A
Pavilion Corner 3 height	mm	N/A	N/A	N/A	N/A
Pavilion Corner 3 height	%	N/A	N/A	N/A	N/A
Pavilion Corner 3 azimuth	°	N/A	N/A	N/A	N/A
Pavilion Corner 4 angle	°	N/A	N/A	N/A	N/A
Pavilion Corner 4 height	mm	N/A	N/A	N/A	N/A
Pavilion Corner 4 height	%	N/A	N/A	N/A	N/A
Pavilion Corner 4 azimuth	°	N/A	N/A	N/A	N/A
Pavilion Corner 5 angle	°	N/A	N/A	N/A	N/A
Pavilion Corner 5 height	mm	N/A	N/A	N/A	N/A
Pavilion Corner 5 height	%	N/A	N/A	N/A	N/A
Pavilion Corner 5 azimuth	°	N/A	N/A	N/A	N/A
Girdle facet angle	°	88.68	89.94	88.40	N/A
Girdle facet azimuth	°	0.1	120.7	240.2	N/A
Girdle corner angle	°	88.93	89.42	88.49	N/A
Girdle corner azimuth	°	57.7	176.7	300.6	N/A

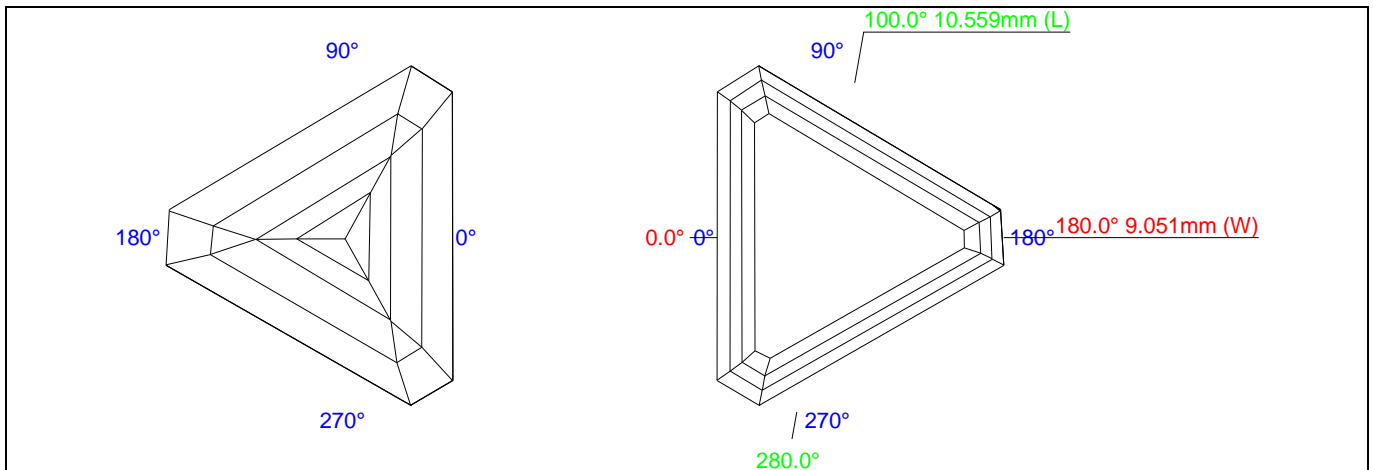
Girdle side width & length		1	2
Girdle side width	%	98.1	98.1
Girdle side width	mm	8.882	8.882
Girdle side length	%	100.7	98.4
Girdle side length	mm	9.115	8.902
Girdle side width-based length	%	86.6	85.7
Girdle side width-based length	mm	7.842	7.755

Offset		Distance	Width wise	Length wise
Culet-Table offset by table axis	%	1.73 ± 0.72	1.62	0.62
Culet-Table offset by table axis	mm	0.157 ± 0.065	0.146	0.056
Girdle-Culet offset by table axis	%	1.00 ± 0.71	0.90	0.44
Girdle-Culet offset by table axis	mm	0.090 ± 0.064	0.081	0.040
Girdle-Table offset by table axis	%	0.74 ± 0.69	0.72	0.19
Girdle-Table offset by table axis	mm	0.067 ± 0.062	0.065	0.017
Girdle to table-culet line offset	%	0.32		
Girdle to table-culet line offset	mm	0.029		

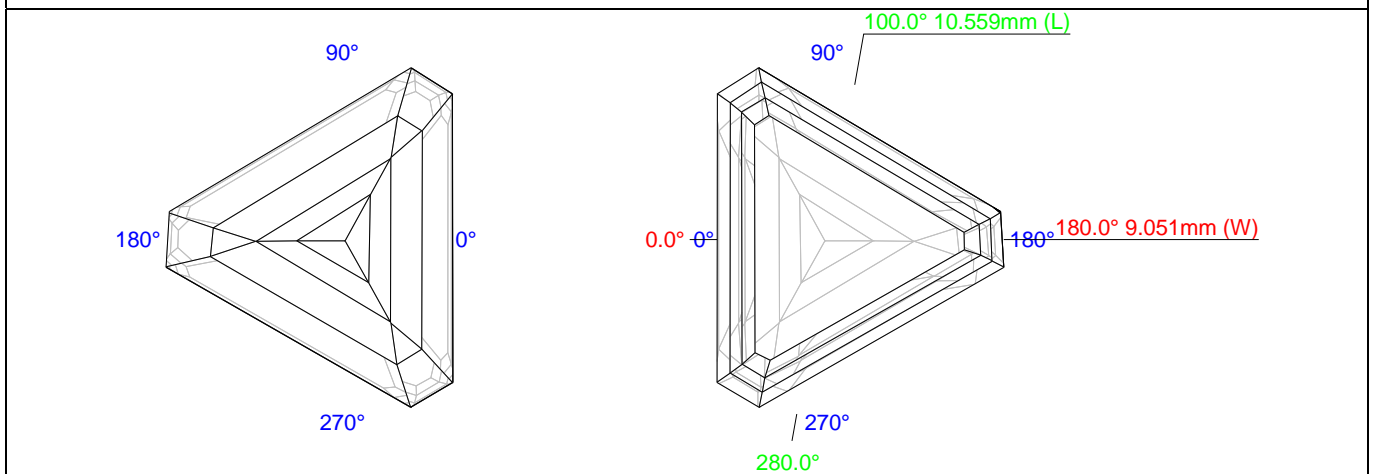
Culet shift ratio by width & length		
Width	9.051 mm, 100%	
Width-wise culet shift ratio	5.646 mm, 62.38 %	3.405 mm, 37.62 %
Length	10.559 mm, 100%	
Length-wise culet shift ratio	5.259 mm, 49.80 %	5.466 mm, 51.77 %

Culet shift ratio by main diameter		
Main diameter (width)	9.051 mm, 100%	
Width-wise culet shift width ratio	5.646 mm, 62.38 %	3.405 mm, 37.62 %
Width-wise culet shift length ratio	5.259 mm, 58.10 %	5.466 mm, 60.39 %

Crown and pavilion views of the diamond with indication of the diameter minimum and maximum

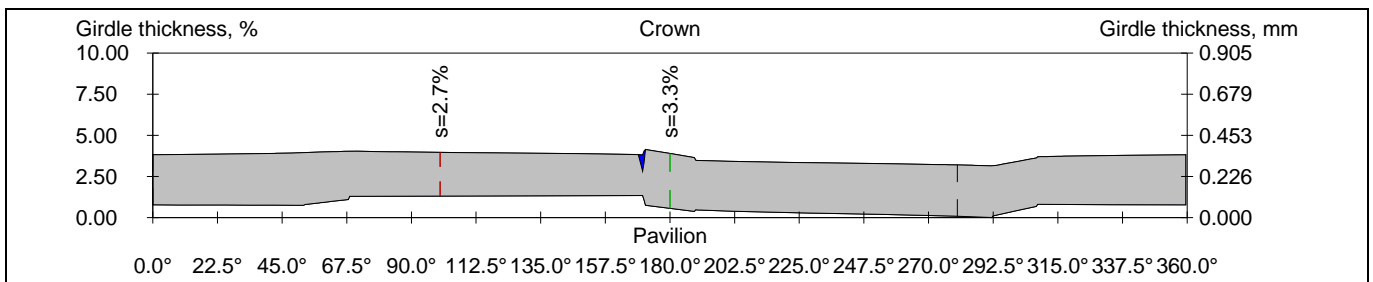


Invisible edges are hidden

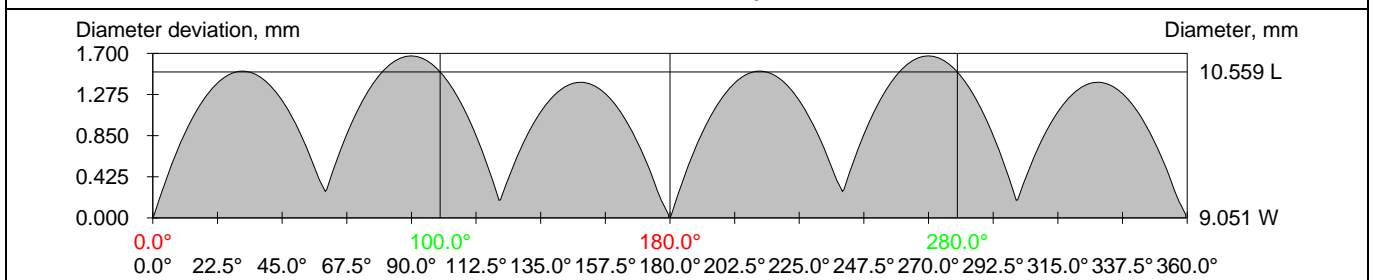


Invisible edges are drawn taking refraction into account

Plots

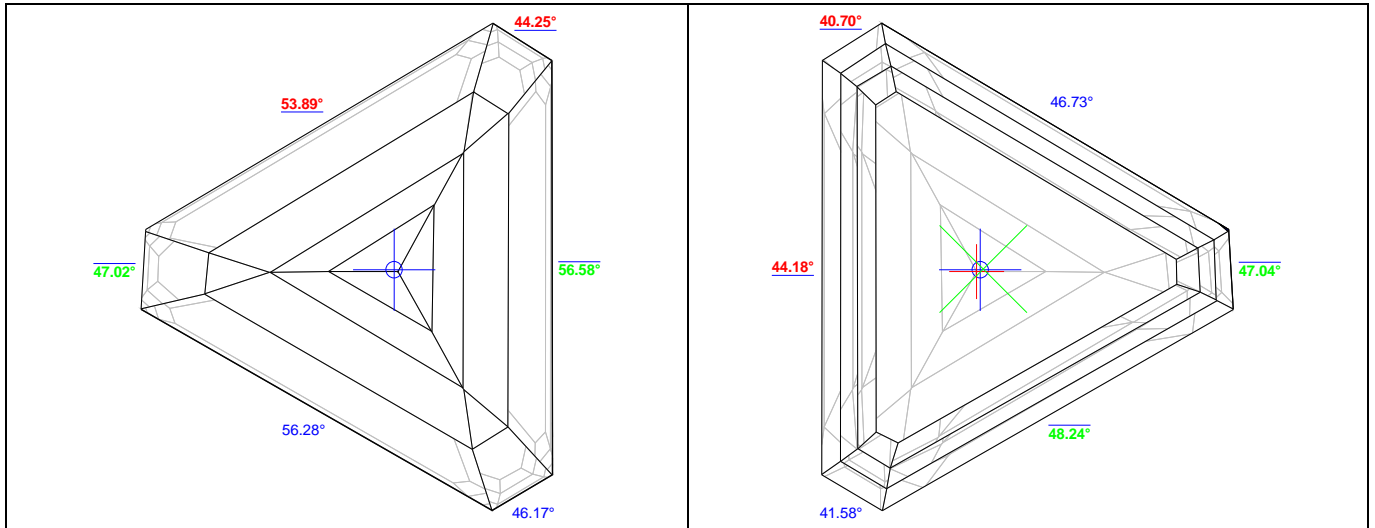


Girdle thickness plot

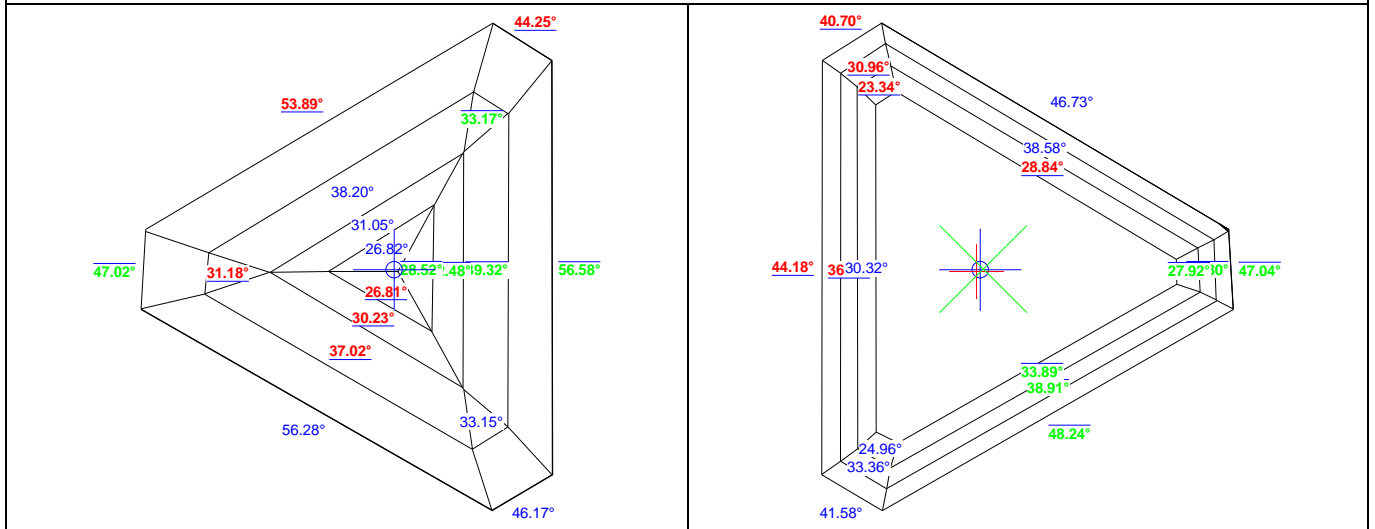


Diameter variation plot

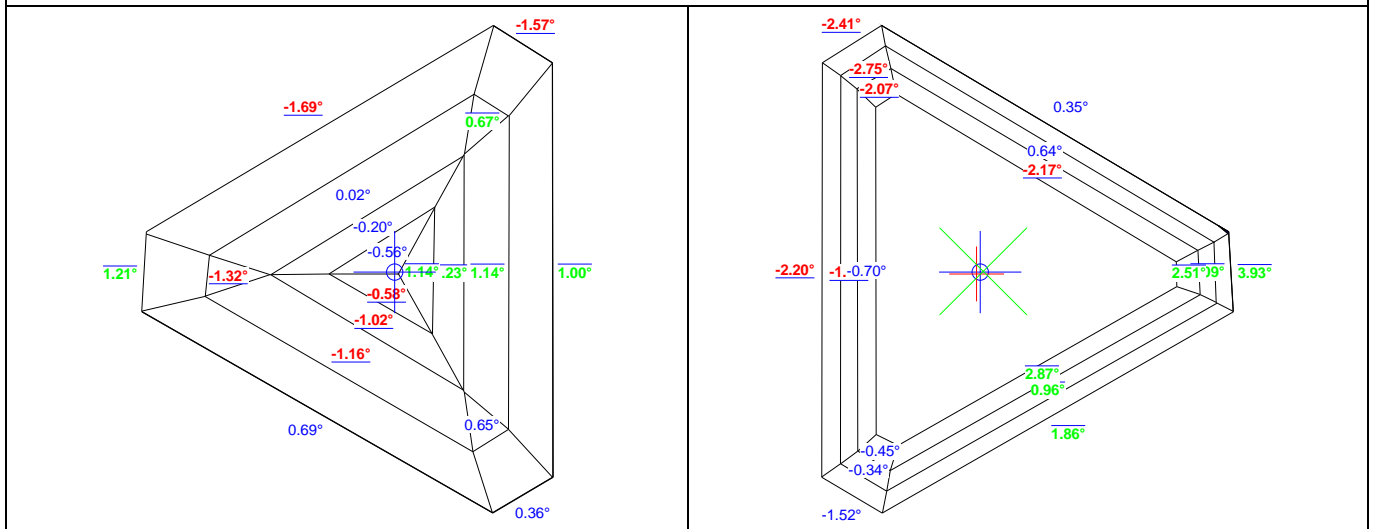
Facets' slope and azimuth angles



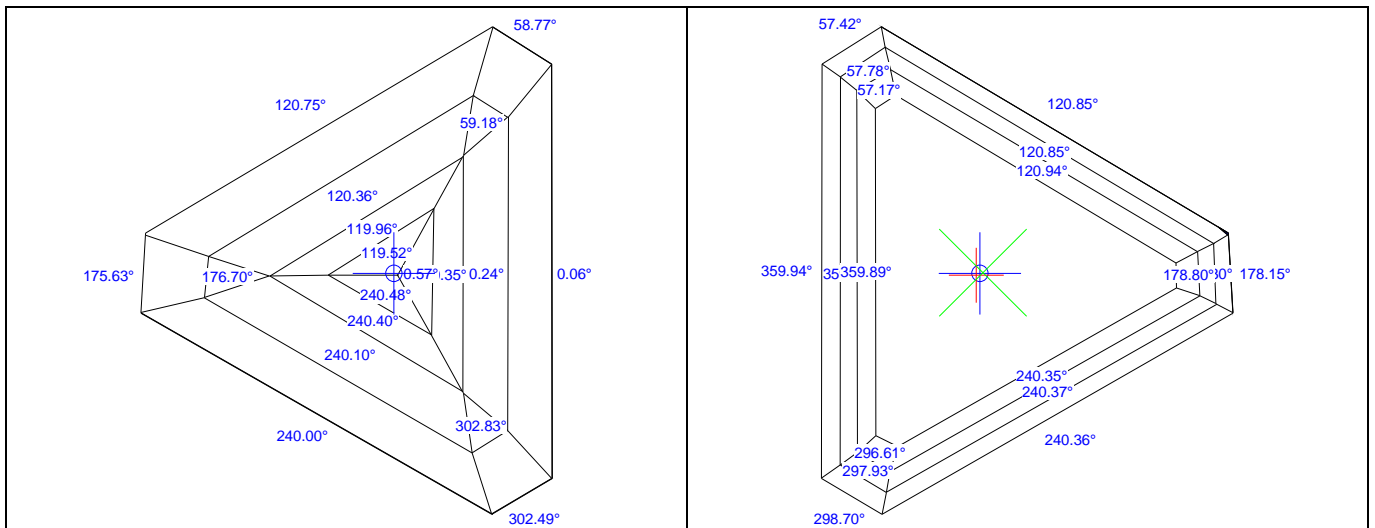
Pavilion and crown views of the diamond with indication of main facets' slope angles
Invisible edges are drawn taking refraction into account



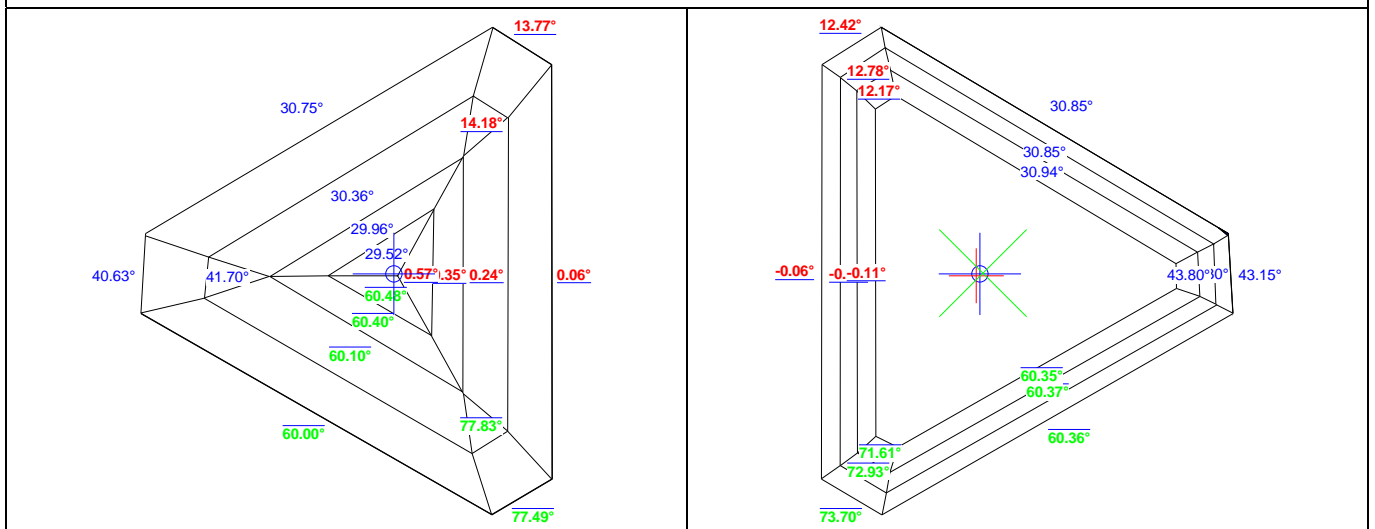
Pavilion and crown views of the diamond with indication of facets' slope angles



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

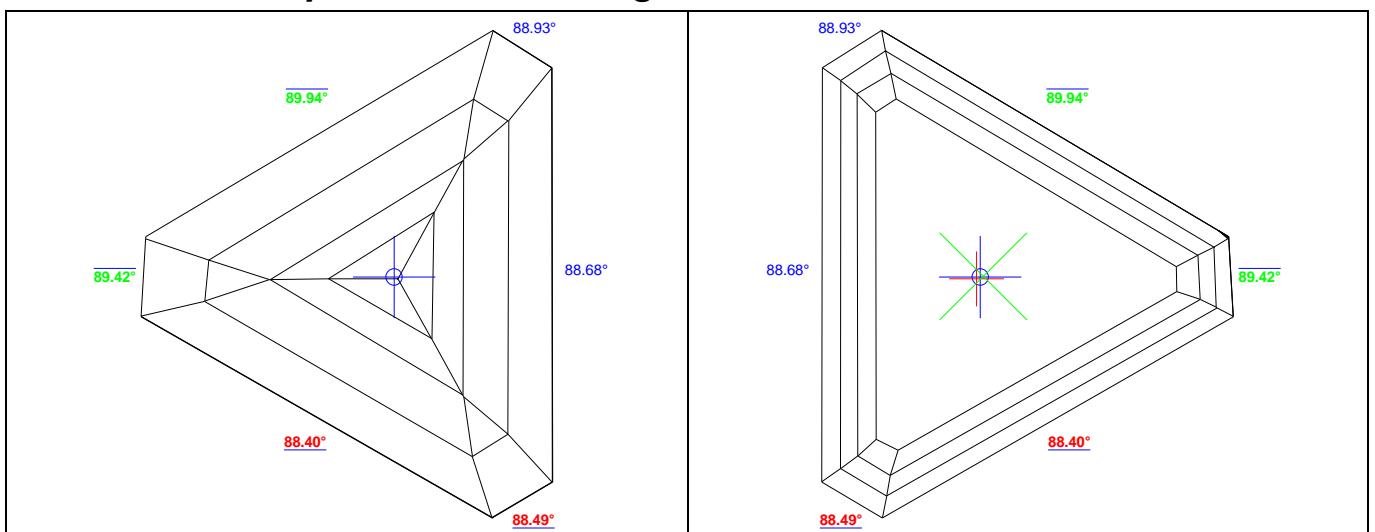


Pavilion and crown views of the diamond with indication of facets' azimuth angles

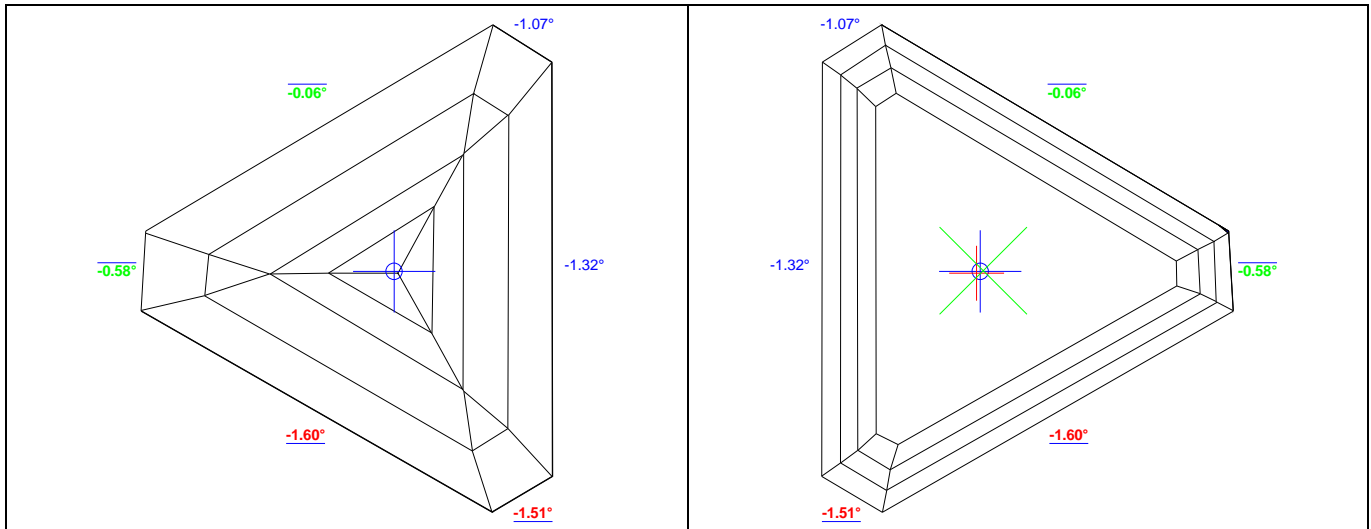


Pavilion and crown views of the diamond with indication of deviation of facets' azimuth angles from their ideal positions for the emerald.

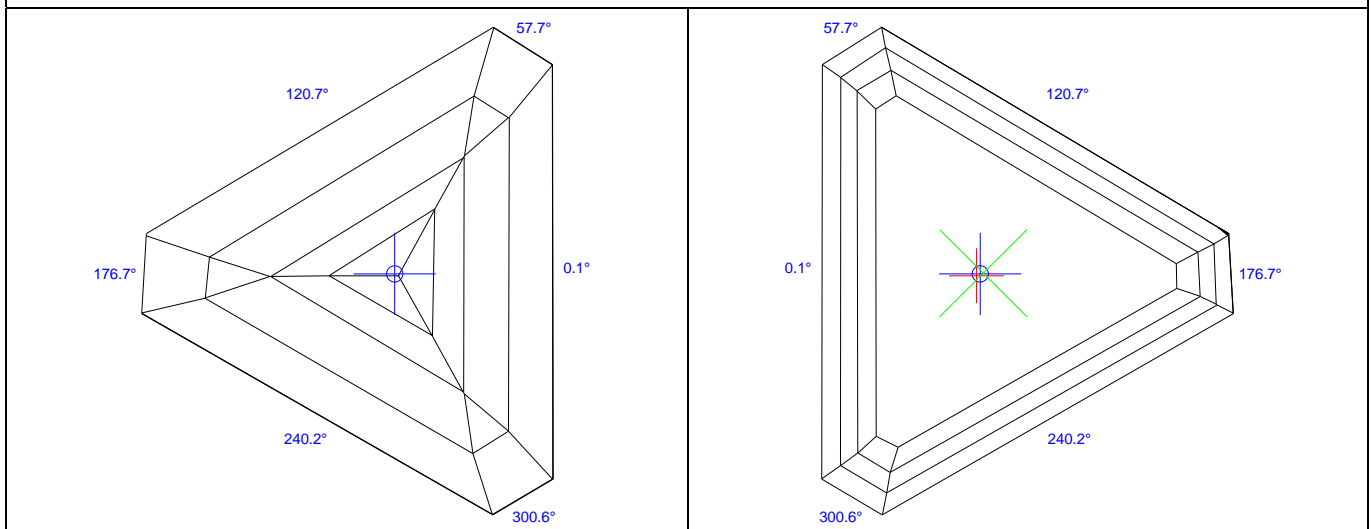
Girdle facets' slope and azimuth angles



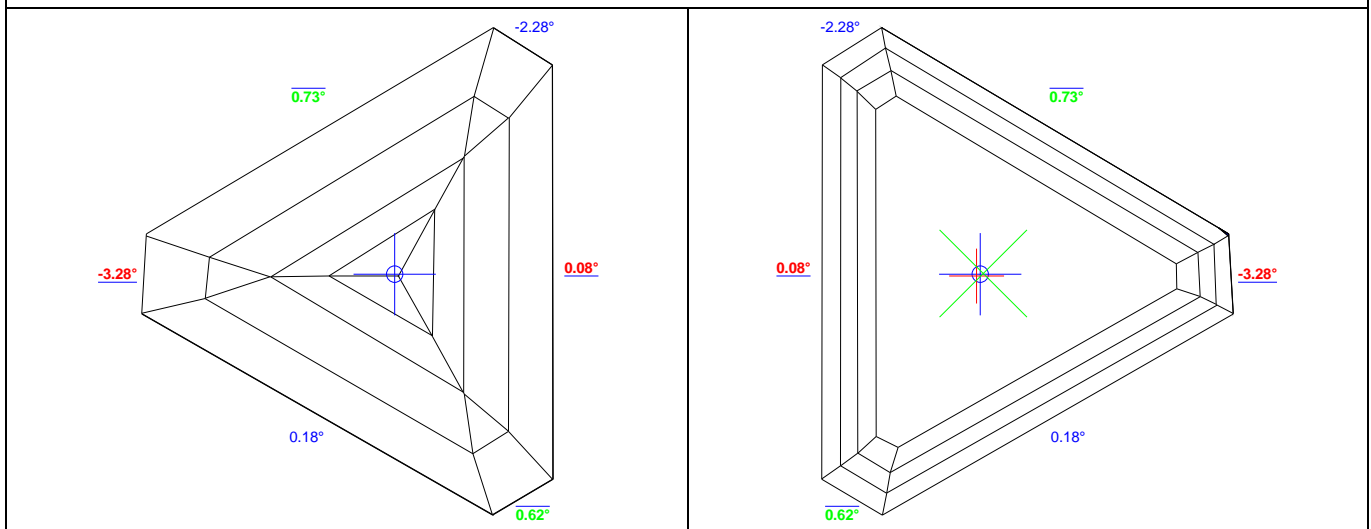
Pavilion and crown views of the diamond with indication of girdle facets' slope angles



Pavilion and crown views of the diamond with indication of deviation of girdle facets' slope angles from there ideal (90°)

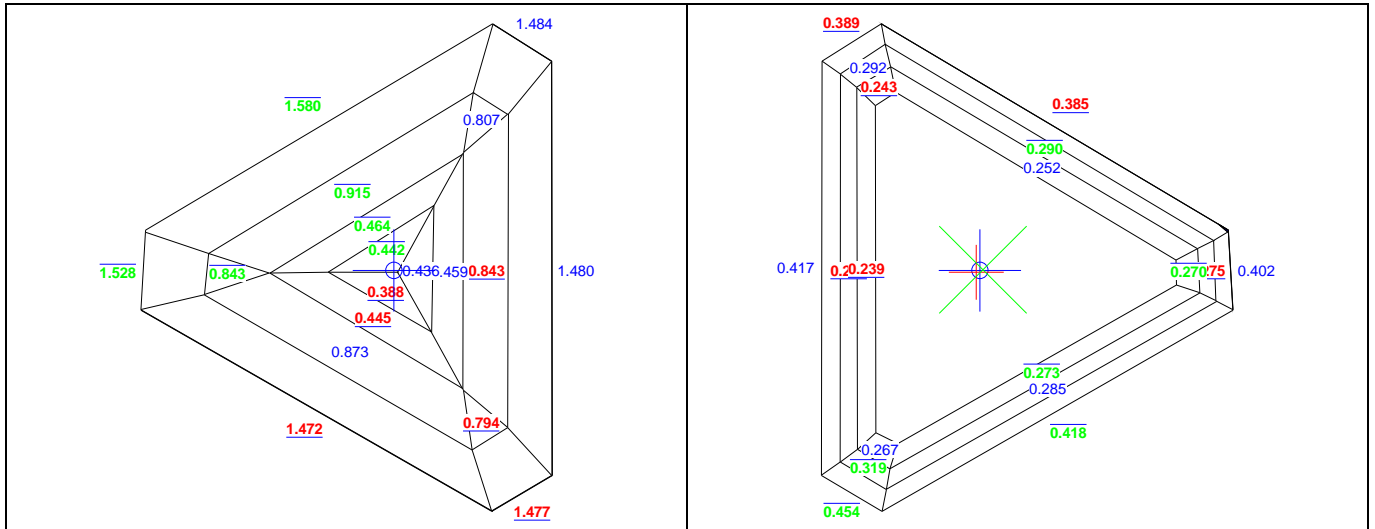


Pavilion and crown views of the diamond with indication of girdle facets' azimuth angles

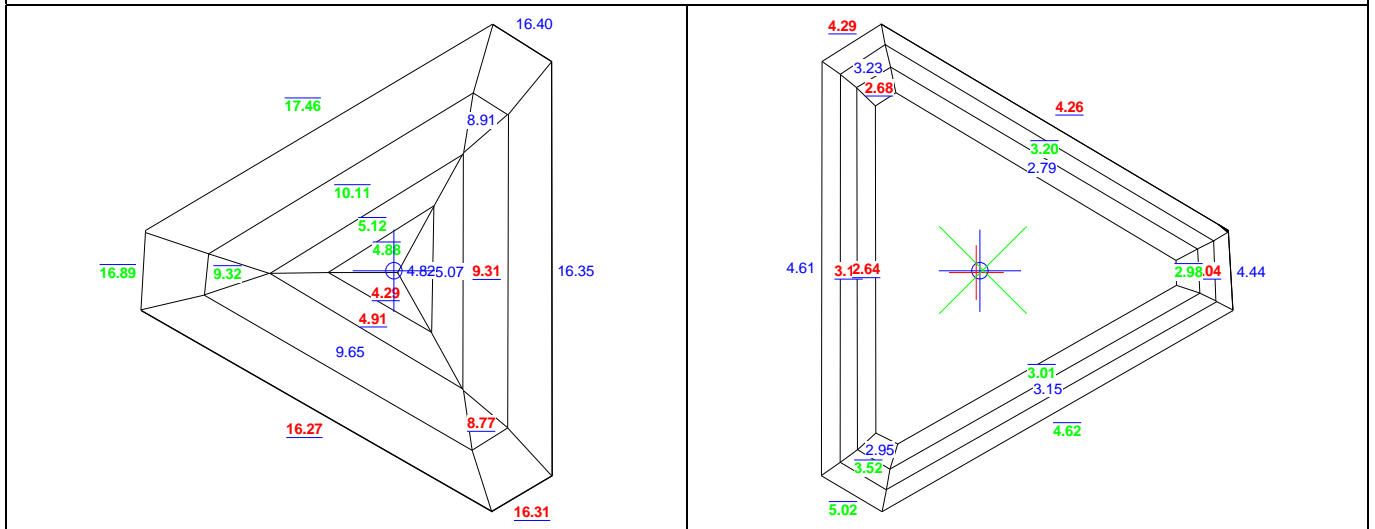


Pavilion and crown views of the diamond with indication of deviation of girdle facets' azimuth angles

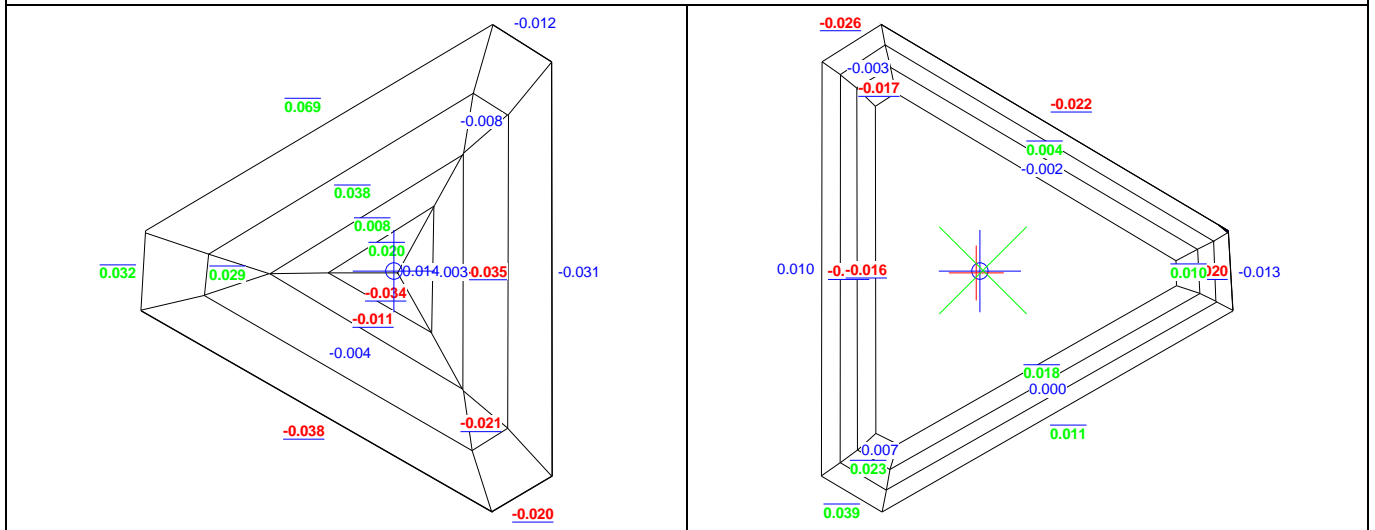
Facets' heights



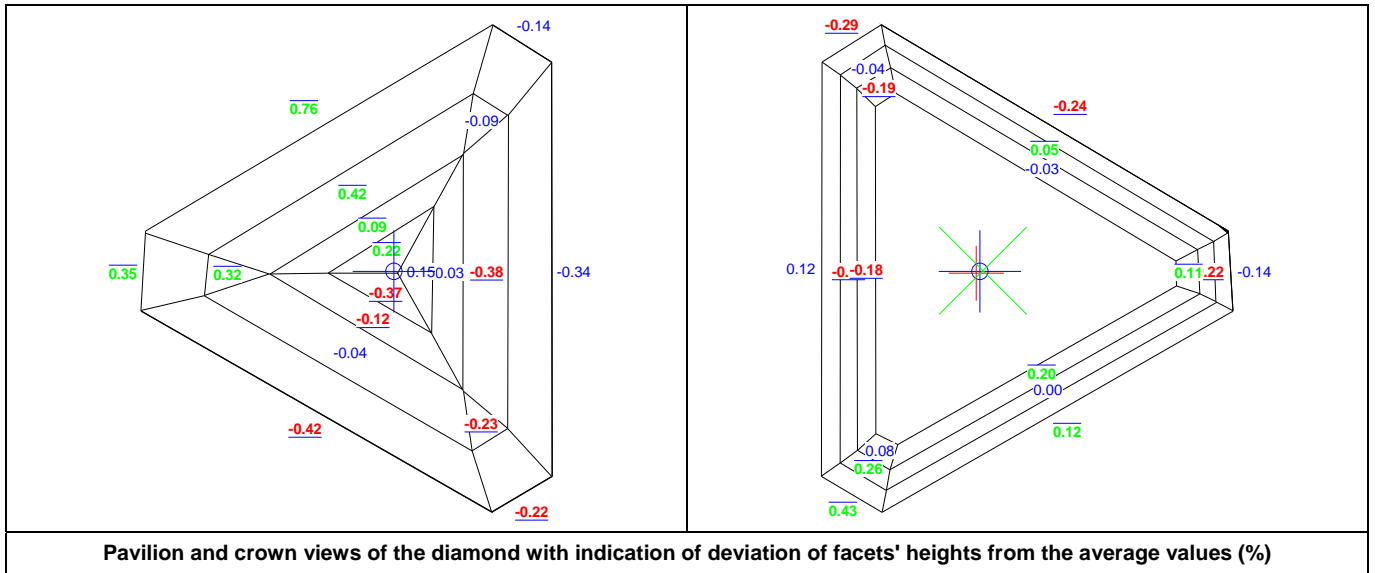
Pavilion and crown views of the diamond with indication of facets' heights (mm)



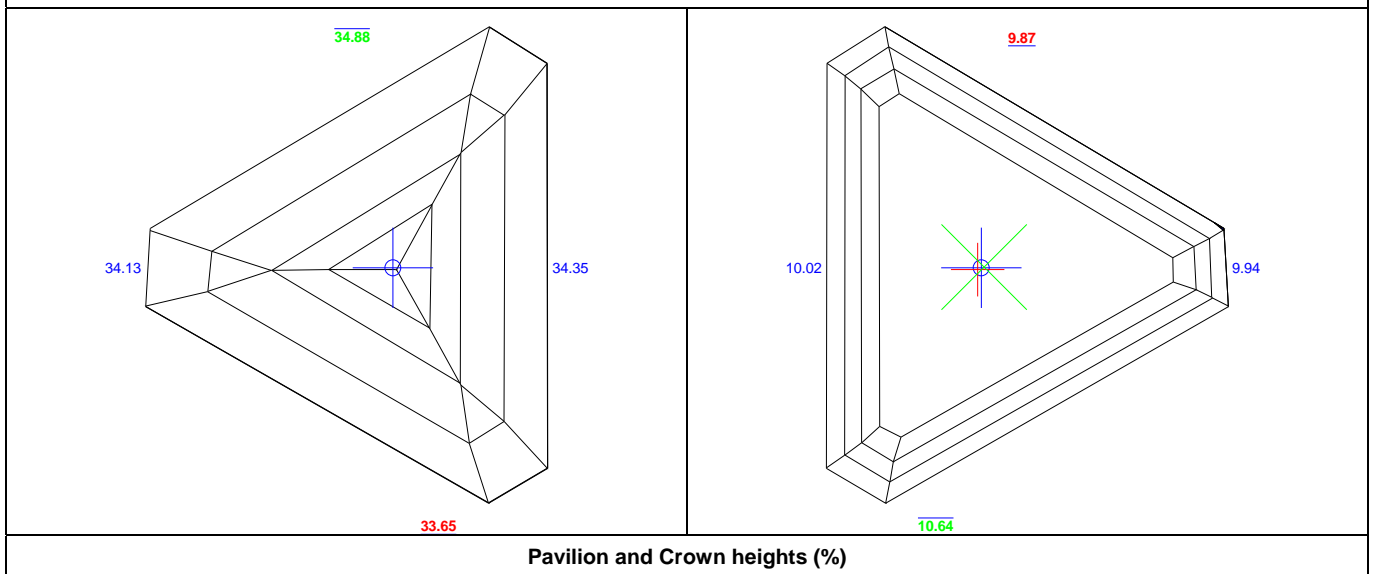
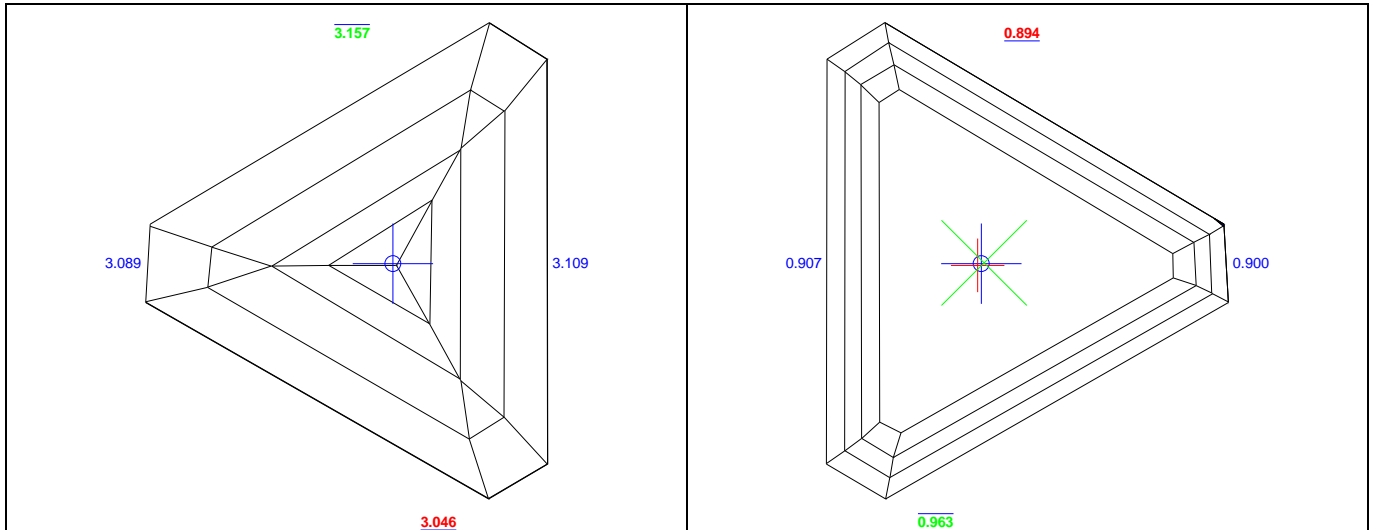
Pavilion and crown views of the diamond with indication of facets' heights (%)

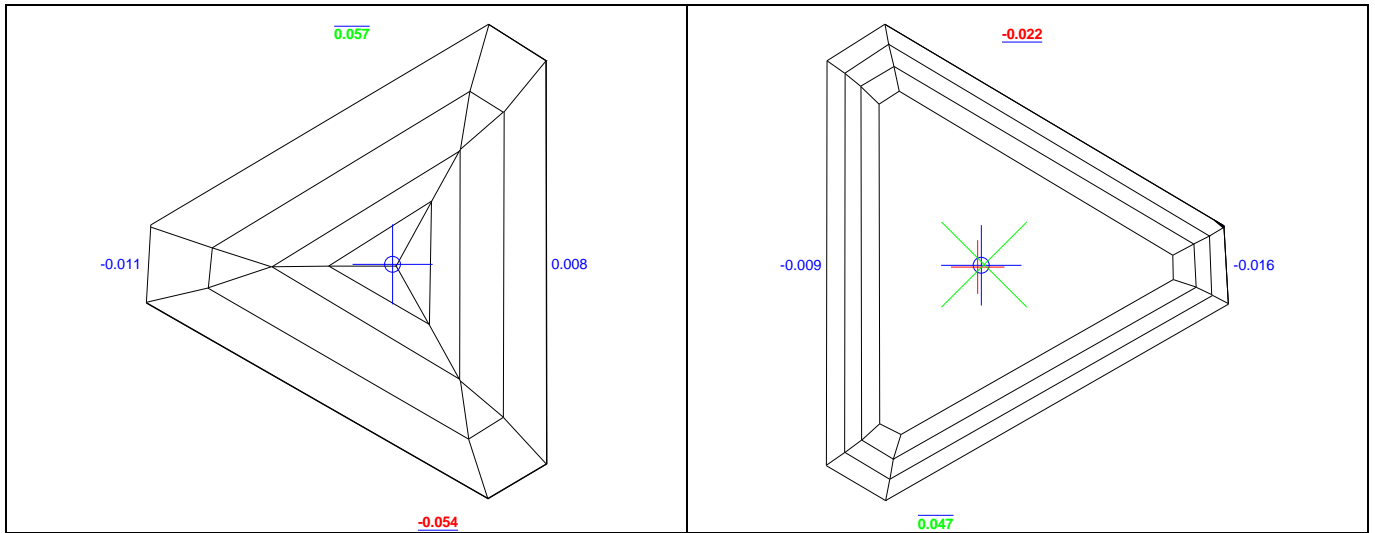


Pavilion and crown views of the diamond with indication of deviation of facets' heights from the average values (mm)

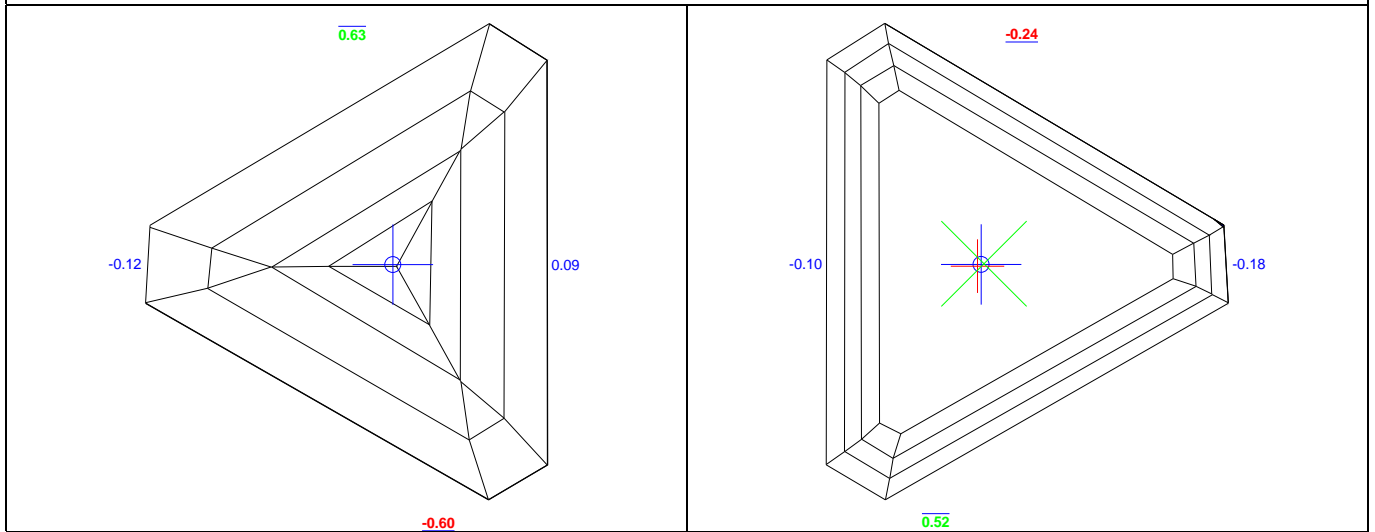


Pavilion and Crown heights



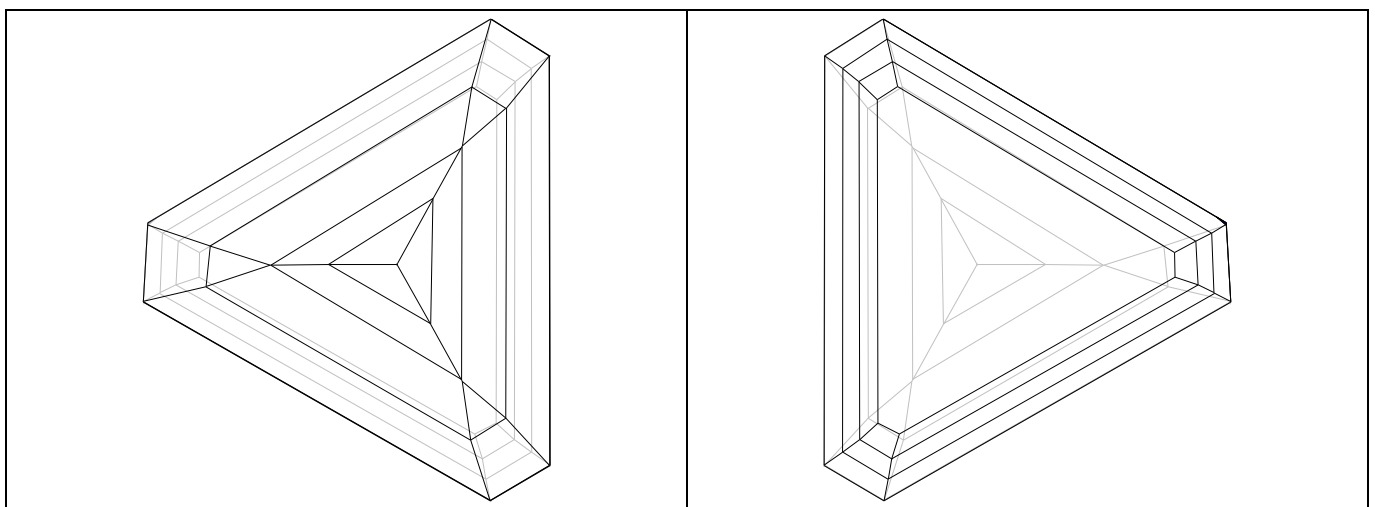


Deviations of Pavilion and Crown heights from the average values (mm)



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

Additional Illustrations



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

