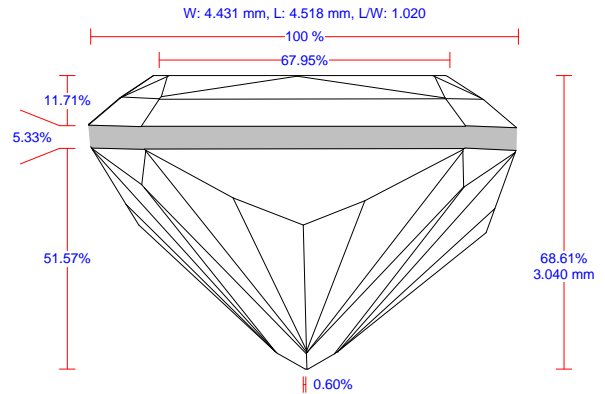


Full report for square radiant

General information

Model: Simple
 Expert name: Makoed A.G.
 Report date: 10.06.2009
 Real weight, ct:
 Calculated weight, ct: 0.51, 0.5154
 Spread: -0.06 ct, -13.54 %
 Extra Facet Girdle / Nat: No
 Extra Facet Crown: No
 Extra Facet Pavilion: No
 Appraiser title: AGS_2005
 Overall cut quality: N/A
 Symmetry appraiser title: Internal
 Overall symmetry quality: GD



Main parameters

Width	Length	Ratio (L/W)	Corner Ratio	Diameter Minimum	Diameter Maximum	Total height	MIC
4.431 mm	4.518 mm	1.020	1.005	4.431 mm	5.584 mm	3.040 mm	4.418 mm

Parameter		Avg	Min	Max	Dev	Cut	Sym
Diameter	mm		4.431	5.584		N/A	
Diameter: Corner	%	124.69	124.40	124.98	0.58		
Diameter: Corner	mm	5.525	5.512	5.538	0.026		
Radius	%	55.64	49.85	63.44	13.59		
Radius	mm	2.465	2.209	2.811	0.602		
Crown height: Side	%	11.71	11.16	12.02	0.85	N/A	VG
Crown height: Side	mm	0.519	0.495	0.533	0.038		
Crown height: Joint	%	N/A	N/A	N/A	N/A		
Crown height: Joint	mm	N/A	N/A	N/A	N/A		
Pavilion height: Side	%	51.57	50.77	52.32	1.55	N/A	GD
Pavilion height: Side	mm	2.285	2.250	2.319	0.069		
Pavilion height: Joint	%	N/A	N/A	N/A	N/A		
Pavilion height: Joint	mm	N/A	N/A	N/A	N/A		
Total height	%	68.61				N/A	
Table: Side	%	67.95	67.67	68.23	0.56	Grading	EX
Table: Side	mm	3.040	3.023	3.057	0.034		
Table: Corner w.r.t. Corner	%	70.10	70.10	70.11	0.01		
Table: Corner w.r.t. Width	%	87.41	87.20	87.63	0.43		
Table: Corner	mm	3.873	3.864	3.883	0.019		
Culet	%	0.60	0.37	0.68	0.30	0	EX
Culet	mm	0.026	0.017	0.030	0.013		
Girdle thickness: Side	%	5.33	4.84	5.84	1.00		GD
Girdle thickness: Side	mm	0.236	0.215	0.259	0.044		
Girdle thickness: Joint	%	N/A	N/A	N/A	N/A		N/A
Girdle thickness: Joint	mm	N/A	N/A	N/A	N/A		
Girdle facet angle	°	86.97	84.29	89.99	5.69		
Girdle side	%	75.81	74.67	76.89	2.21		
Girdle side	mm	3.359	3.309	3.407	0.098		
Girdle side corner	%	18.11	17.52	18.86	1.34		
Girdle side corner	mm	0.802	0.777	0.836	0.059		
Girdle internal angle	°	135.0	131.9	138.1	6.2		
Corner angle width	%	12.02	11.71	12.69	0.98		
Corner angle width	mm	0.532	0.519	0.563	0.043		
Corner angle length	%	12.23	11.52	13.07	1.56		
Corner angle length	mm	0.542	0.510	0.579	0.069		
Crown 1 Main angle	°	40.17	39.07	41.18	2.11		
Crown 1 Main height	%	6.42	6.36	6.50	0.14		
Crown 1 Main height	mm	0.285	0.282	0.288	0.006		
Crown 1 Corner angle	°	37.14	36.55	37.63	1.08		
Crown 1 Corner height	%	6.56	6.11	6.88	0.78		
Crown 1 Corner height	mm	0.291	0.271	0.305	0.034		
Crown 2 Main angle	°	33.29	32.97	33.81	0.83		
Crown 2 Main height	%	5.56	5.30	5.77	0.47		
Crown 2 Main height	mm	0.247	0.235	0.256	0.021		
Crown 2 Corner angle	°	28.62	28.38	28.82	0.44		
Crown 2 Corner height	%	5.48	5.33	5.61	0.28		
Crown 2 Corner height	mm	0.243	0.236	0.249	0.012		

Parameter		Avg	Min	Max	Dev
Crown Star angle	°	24.09	22.97	24.72	1.75
Crown Star height	%	5.12	4.73	5.40	0.68
Crown Star height	mm	0.227	0.209	0.239	0.030
Pavilion 1 Main angle	°	67.12	58.91	70.42	11.51
Pavilion 1 Main height	%	18.90	17.87	19.49	1.63
Pavilion 1 Main height	mm	0.837	0.792	0.864	0.072
Pavilion 1 Corner angle	°	44.72	44.05	45.18	1.13
Pavilion 1 Corner height	%	9.27	8.56	10.00	1.44
Pavilion 1 Corner height	mm	0.411	0.379	0.443	0.064
Pavilion 2 Main angle	°	N/A	N/A	N/A	N/A
Pavilion 2 Main height	%	N/A	N/A	N/A	N/A
Pavilion 2 Main height	mm	N/A	N/A	N/A	N/A
Pavilion 2 Corner angle	°	38.89	37.93	39.51	1.58
Pavilion 2 Corner height	%	42.27	41.02	43.16	2.14
Pavilion 2 Corner height	mm	1.873	1.818	1.913	0.095
Pavilion Halves 1 angle	°	40.05	39.23	40.64	1.41
Pavilion Halves 1 height	%	47.16	46.05	48.33	2.28
Pavilion Halves 1 height	mm	2.090	2.040	2.141	0.101
Pavilion Halves 2 angle	°	41.04	39.65	42.91	3.26
Pavilion Halves 2 height	%	47.13	46.02	48.39	2.37
Pavilion Halves 2 height	mm	2.088	2.039	2.144	0.105
Pavilion Halves 3 angle	°	41.06	39.73	43.31	3.57
Pavilion Halves 3 height	%	34.54	33.01	35.63	2.62
Pavilion Halves 3 height	mm	1.531	1.463	1.579	0.116

Detailed parameters

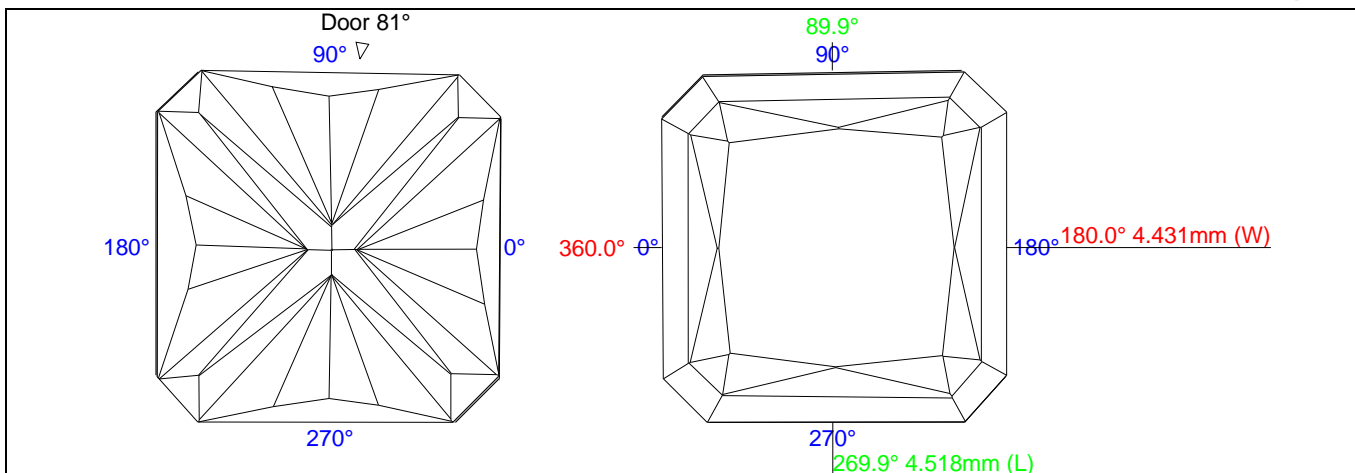
Parameter		1	2	3	4	5	6	7	8
Diameter: Corner	%	124.40	124.98						
Diameter: Corner	mm	5.512	5.538						
Crown height: Side	%	12.02	11.96	11.88	11.77	11.45	11.16	11.57	11.90
Crown height: Side	mm	0.533	0.530	0.527	0.522	0.507	0.495	0.512	0.527
Crown height: Joint	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crown height: Joint	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion height: Side	%	50.77	51.39	51.48	51.52	52.32	52.28	51.92	50.87
Pavilion height: Side	mm	2.250	2.277	2.281	2.283	2.319	2.317	2.301	2.254
Pavilion height: Joint	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion height: Joint	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Table: Side	%	68.23	67.67						
Table: Side	mm	3.023	3.057						
Table: Corner w.r.t. Corner	%	70.10	70.11						
Table: Corner w.r.t. Width	%	87.20	87.63						
Table: Corner	mm	3.864	3.883						
Girdle thickness: Side	%	5.83	5.26	5.25	5.33	4.84	5.17	5.13	5.84
Girdle thickness: Side	mm	0.258	0.233	0.233	0.236	0.215	0.229	0.227	0.259
Girdle thickness: Joint	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Girdle thickness: Joint	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Girdle facet angle	°	88.69	86.36	84.68	87.23	84.75	89.74	89.99	84.29
Girdle facet azimuth	°	359.6	44.3	89.0	133.6	180.0	221.9	269.9	315.0
Corner angle width	%	11.89	11.76	11.71	12.69				
Corner angle width	mm	0.527	0.521	0.519	0.563				
Corner angle length	%	11.68	11.52	13.07	12.66				
Corner angle length	mm	0.518	0.510	0.579	0.561				
Crown 1 Main angle	°	40.27	41.18	40.18	39.07				
Crown 1 Main height	%	6.50	6.44	6.36	6.38				
Crown 1 Main height	mm	0.288	0.286	0.282	0.283				
Crown 1 Main azimuth	°	359.9	89.0	179.9	270.7				
Crown 1 Corner angle	°	37.42	37.63	36.97	36.55				
Crown 1 Corner height	%	6.80	6.88	6.11	6.46				
Crown 1 Corner height	mm	0.301	0.305	0.271	0.286				
Crown 1 Corner azimuth	°	42.5	132.1	220.5	314.3				
Crown 2 Main angle	°	33.21	33.18	33.81	32.97				
Crown 2 Main height	%	5.77	5.56	5.30	5.63				
Crown 2 Main height	mm	0.256	0.246	0.235	0.250				
Crown 2 Main azimuth	°	359.9	89.1	179.8	270.7				
Crown 2 Corner angle	°	28.38	28.82	28.58	28.68				
Crown 2 Corner height	%	5.55	5.43	5.33	5.61				
Crown 2 Corner height	mm	0.246	0.241	0.236	0.249				
Crown 2 Corner azimuth	°	42.1	131.2	220.3	314.5				

Parameter		1	2	3	4	5	6	7	8
Crown Star angle	°	24.57	23.79	24.72	24.02	24.18	22.97	24.01	24.49
Crown Star height	%	5.20	5.27	4.96	5.07	4.93	4.73	5.40	5.40
Crown Star height	mm	0.230	0.233	0.220	0.225	0.219	0.209	0.239	0.239
Crown Star azimuth	°	5.7	82.7	94.7	173.5	186.2	264.1	277.3	353.8
Pavilion 1 Main angle	°	70.42	69.01	58.91	70.13				
Pavilion 1 Main height	%	19.27	17.87	18.96	19.49				
Pavilion 1 Main height	mm	0.854	0.792	0.840	0.864				
Pavilion 1 Main azimuth	°	359.8	89.0	180.3	269.6				
Pavilion 1 Corner angle	°	44.99	45.18	44.64	44.05				
Pavilion 1 Corner height	%	9.10	8.56	9.40	10.00				
Pavilion 1 Corner height	mm	0.403	0.379	0.417	0.443				
Pavilion 1 Corner azimuth	°	46.3	134.5	223.8	314.2				
Pavilion 2 Main angle	°	N/A	N/A	N/A	N/A				
Pavilion 2 Main height	%	N/A	N/A	N/A	N/A				
Pavilion 2 Main height	mm	N/A	N/A	N/A	N/A				
Pavilion 2 Main azimuth	°	N/A	N/A	N/A	N/A				
Pavilion 2 Corner angle	°	38.82	37.93	39.31	39.51				
Pavilion 2 Corner height	%	42.58	42.33	43.16	41.02				
Pavilion 2 Corner height	mm	1.887	1.876	1.913	1.818				
Pavilion 2 Corner azimuth	°	45.0	135.2	224.8	315.1				
Pavilion Halves 1 angle	°	39.85	40.14	39.23	39.68	40.64	40.23	40.36	40.30
Pavilion Halves 1 height	%	47.05	46.67	47.46	47.62	48.33	47.77	46.05	46.32
Pavilion Halves 1 height	mm	2.085	2.068	2.103	2.110	2.141	2.117	2.040	2.052
Pavilion Halves 1 azimuth	°	34.8	58.5	121.5	149.4	210.9	233.6	305.3	323.1
Pavilion Halves 2 angle	°	40.49	40.65	39.65	42.34	42.91	40.77	40.71	40.84
Pavilion Halves 2 height	%	46.38	47.46	47.24	47.06	48.39	47.89	46.02	46.61
Pavilion Halves 2 height	mm	2.055	2.103	2.093	2.085	2.144	2.122	2.039	2.065
Pavilion Halves 2 azimuth	°	28.2	63.6	117.1	164.4	196.4	240.2	299.8	330.4
Pavilion Halves 3 angle	°	40.32	40.43	39.73	43.02	43.31	40.65	40.31	40.68
Pavilion Halves 3 height	%	33.01	35.13	35.63	34.28	33.91	35.59	34.08	34.71
Pavilion Halves 3 height	mm	1.463	1.557	1.579	1.519	1.502	1.577	1.510	1.538
Pavilion Halves 3 azimuth	°	19.2	70.4	107.8	171.1	188.7	249.3	286.8	338.9
Girdle side	%	75.91	75.77	76.89	74.67				
Girdle side	mm	3.364	3.357	3.407	3.309				
Girdle side corner	%	17.52	17.82	18.23	18.86				
Girdle side corner	mm	0.777	0.790	0.808	0.836				
Girdle internal angle	°	135.3	135.3	135.4	133.6	138.1	131.9	135.0	135.3
Girdle internal angle deviation from average	°	0.3	0.3	0.4	-1.4	3.1	-3.1	-0.0	0.3

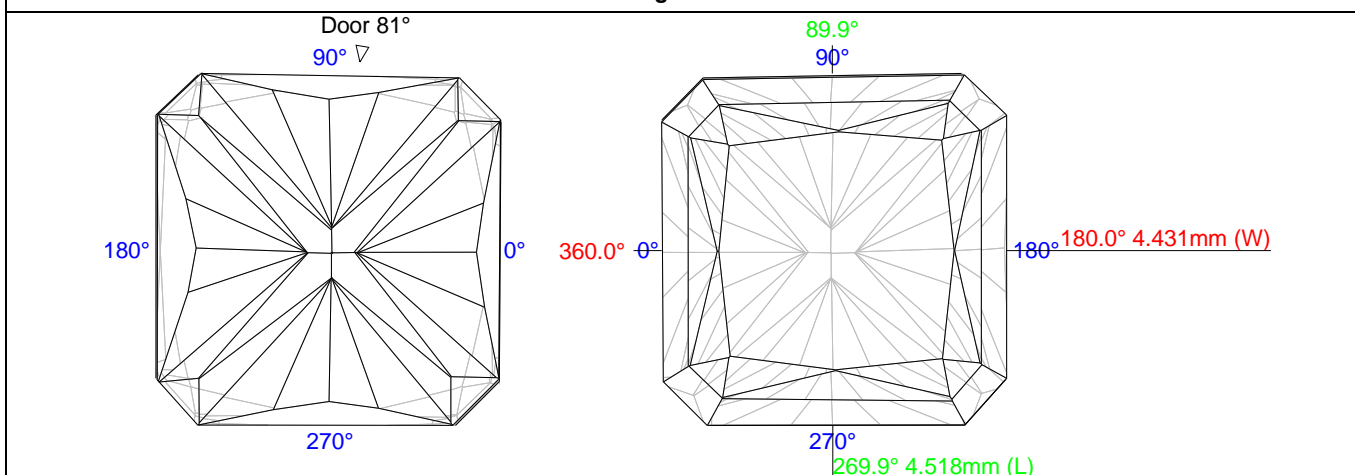
Offset		Distance	Width wise	Length wise
Culet-Table offset by table axis	%	1.89 ± 0.30	1.74	0.73
Culet-Table offset by table axis	mm	0.084 ± 0.013	0.077	0.032
Girdle-Culet offset by table axis	%	1.04 ± 0.29	0.58	0.87
Girdle-Culet offset by table axis	mm	0.046 ± 0.013	0.026	0.039
Girdle-Table offset by table axis	%	1.17 ± 0.25	1.16	0.14
Girdle-Table offset by table axis	mm	0.052 ± 0.011	0.052	0.006
Girdle to table-culet line offset	%	0.85		
Girdle to table-culet line offset	mm	0.037		

Culet shift ratio by width & length	
Width	4.431 mm, 100%
Width-wise culet shift ratio	2.258 mm, 50.95 %
Length-wise culet shift ratio	2.214 mm, 49.96 %
Length	4.518 mm, 100%
Length-wise culet shift ratio	2.214 mm, 49.00 %
	2.308 mm, 51.09 %

Crown and pavilion views of the diamond with indication of Width & Length

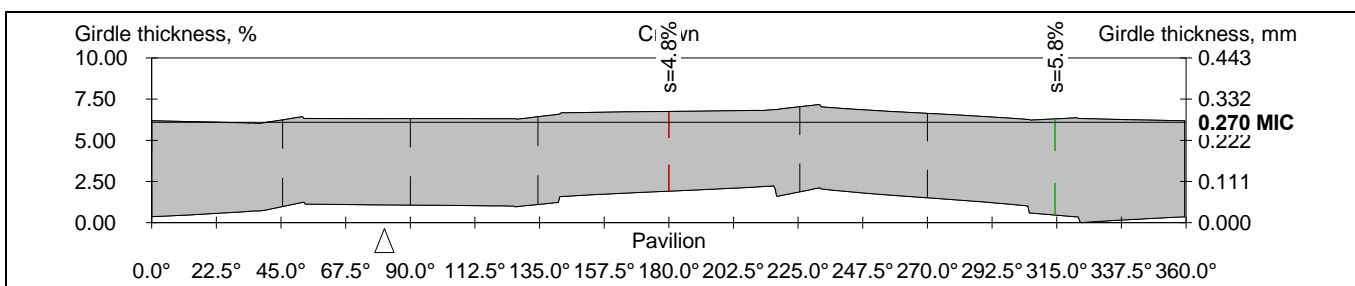


Invisible edges are hidden

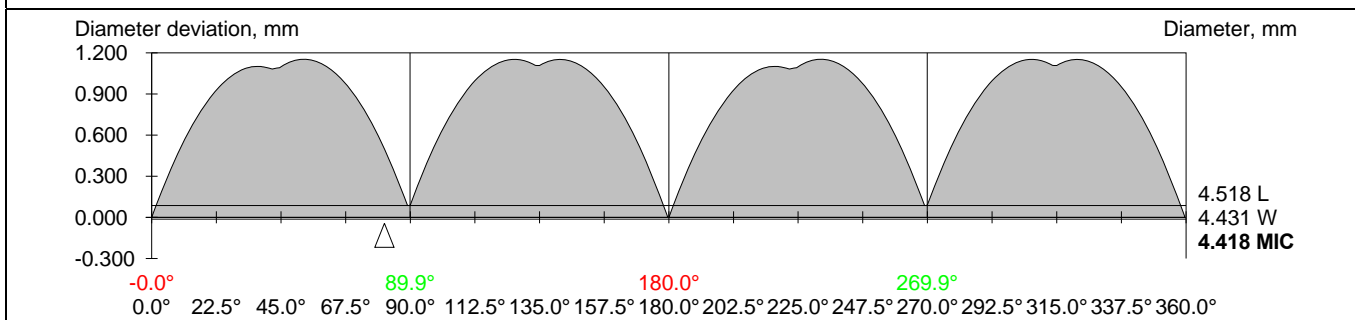


Invisible edges are drawn taking refraction into account

Plots

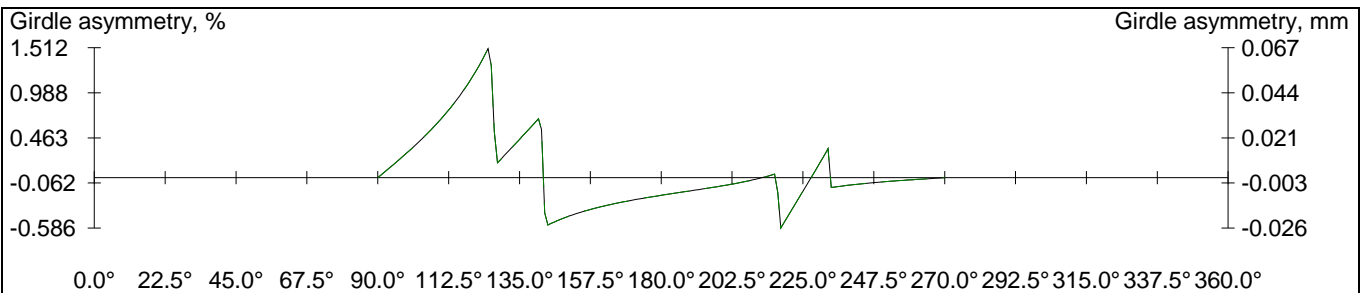
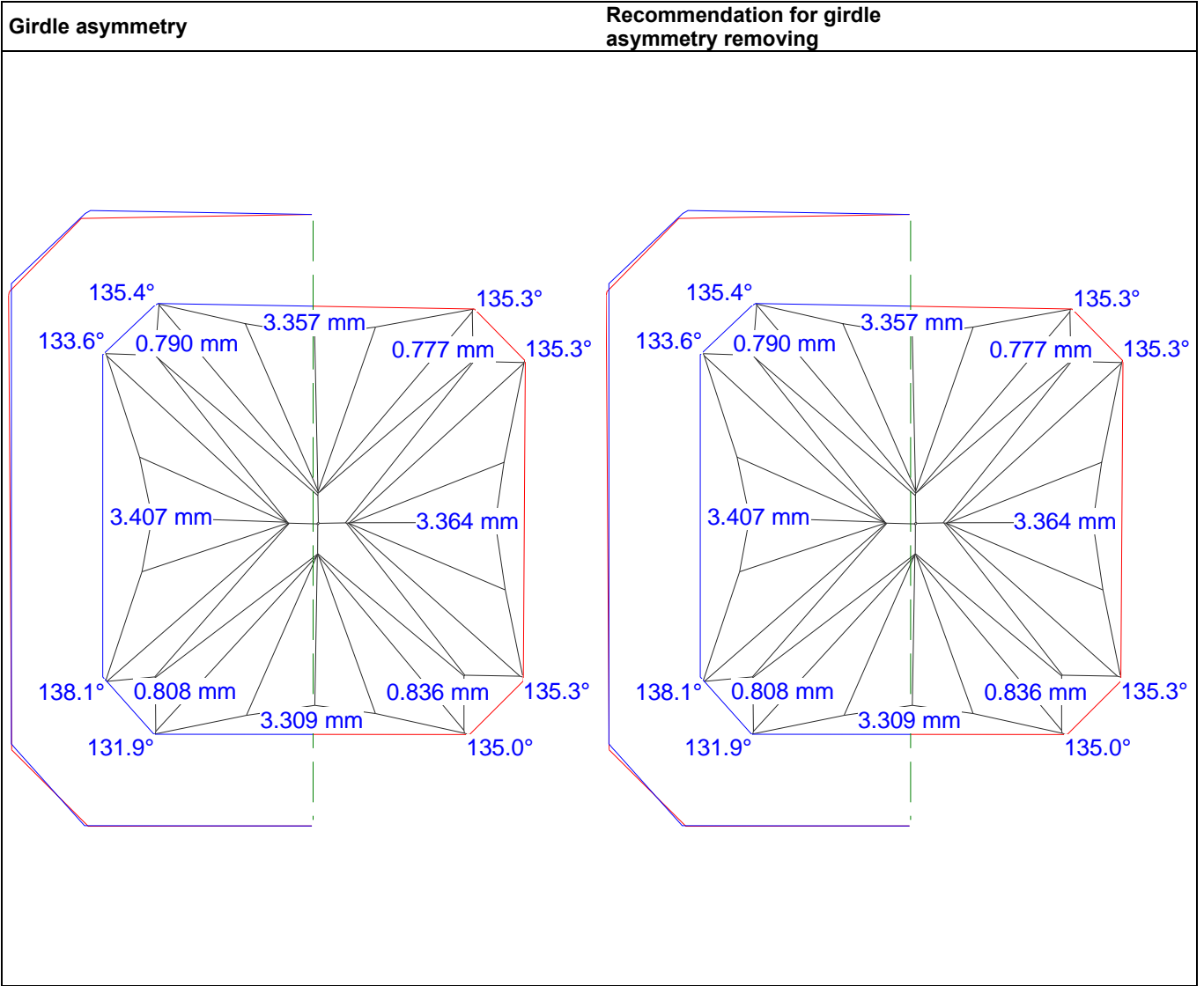


Girdle thickness plot

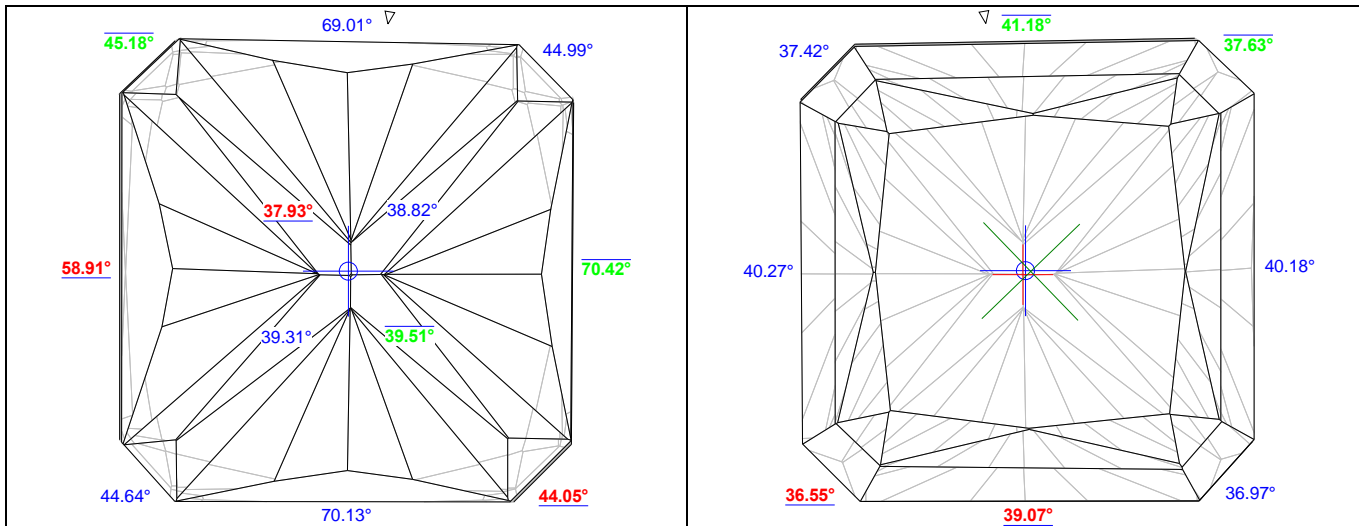


Diameter variation plot

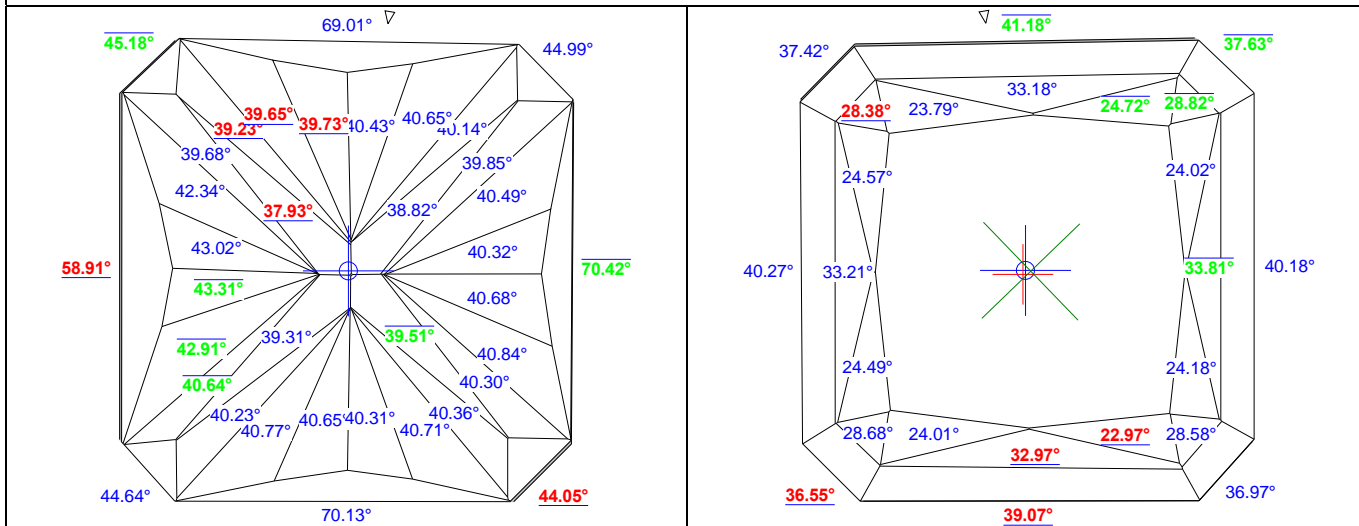
Girdle asymmetry



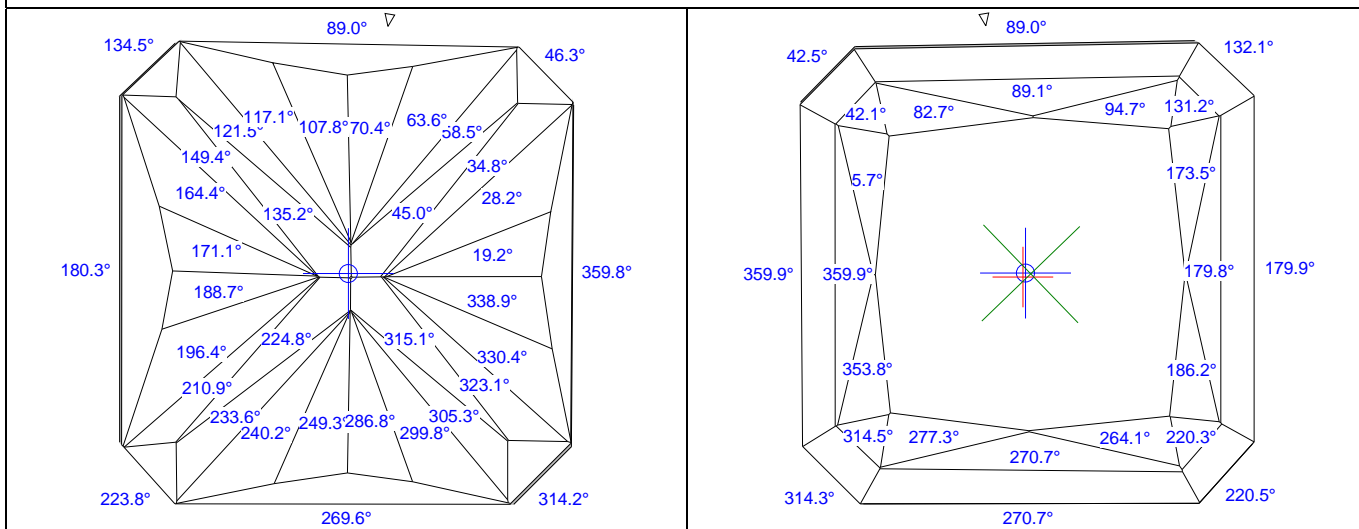
Facets slope and azimuth angles



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

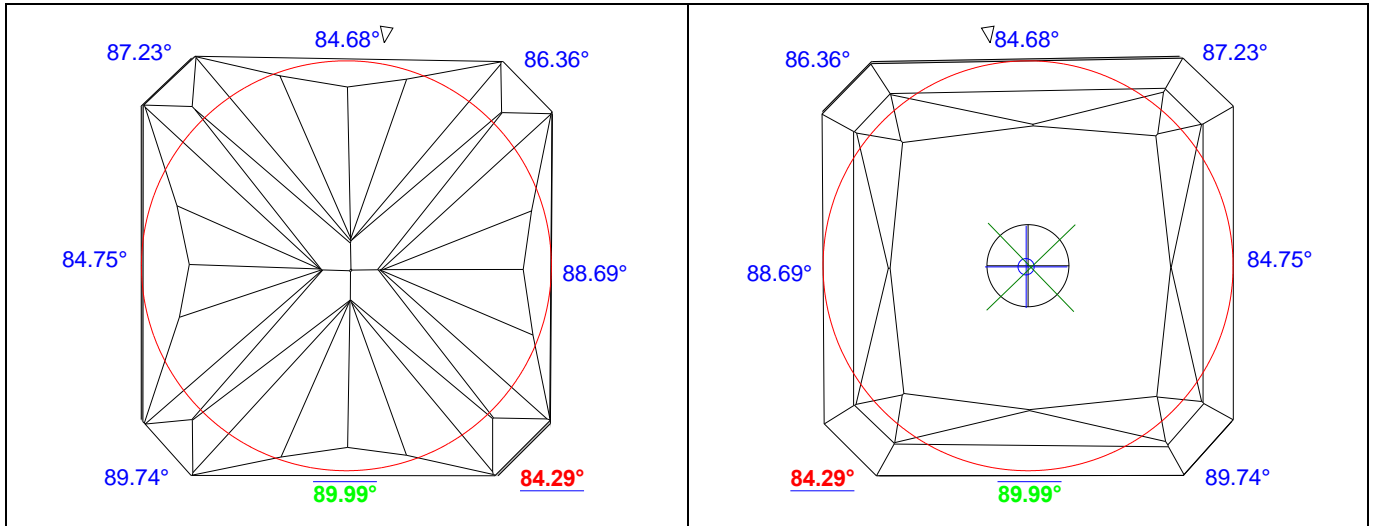


Pavilion and crown views of the diamond with indication of facets slope angles

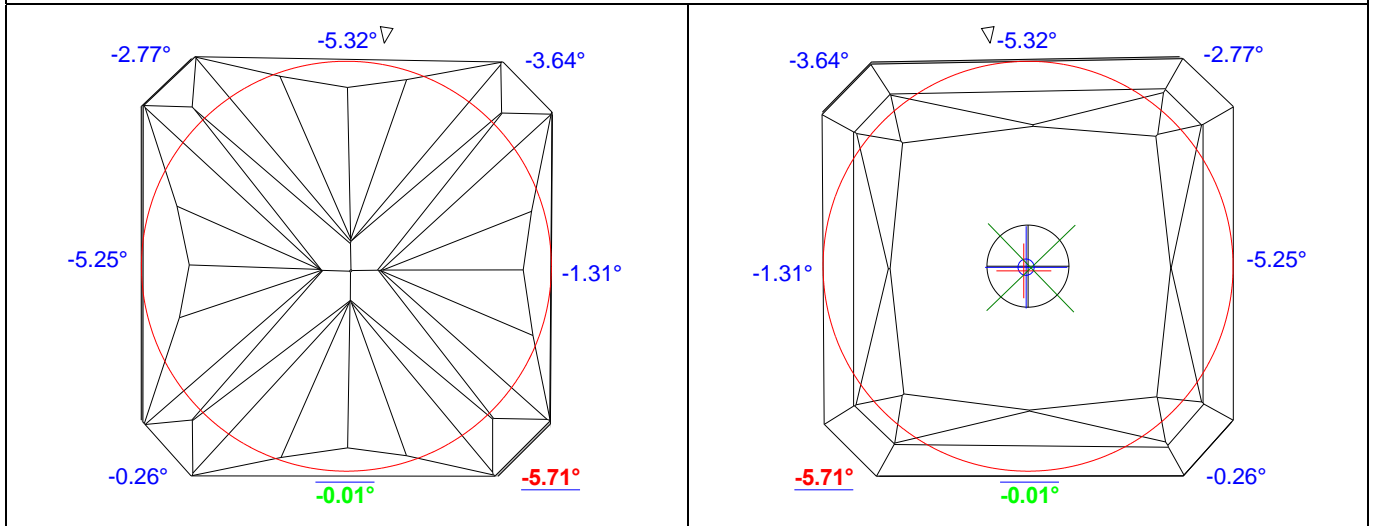


Pavilion and crown views of the diamond with indication of facets azimuth angles

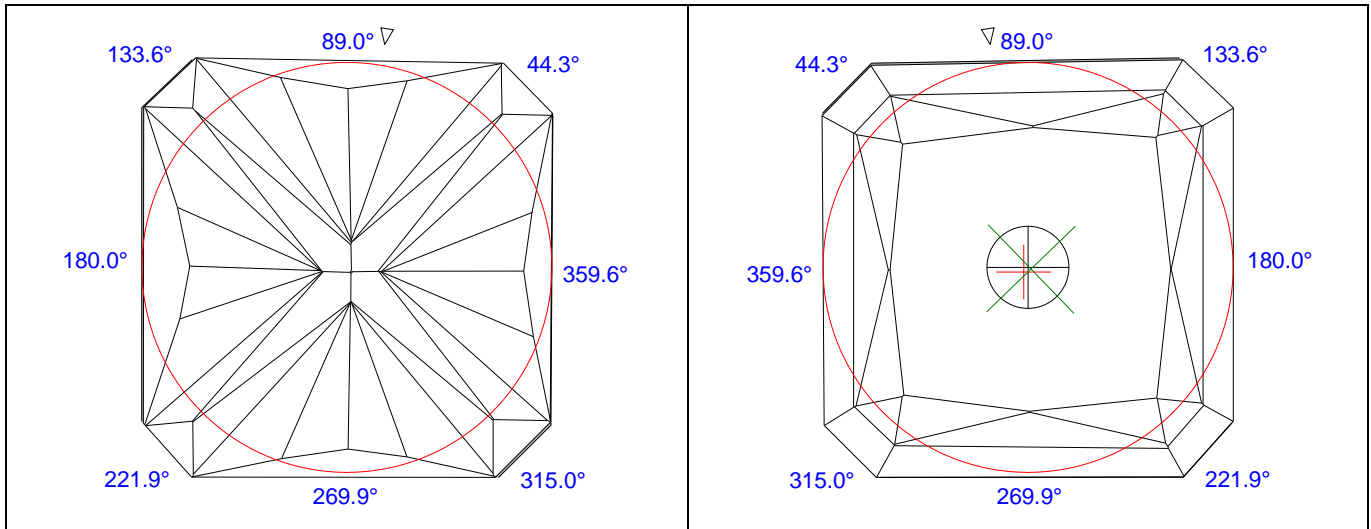
Girdle facets slope and azimuth angles



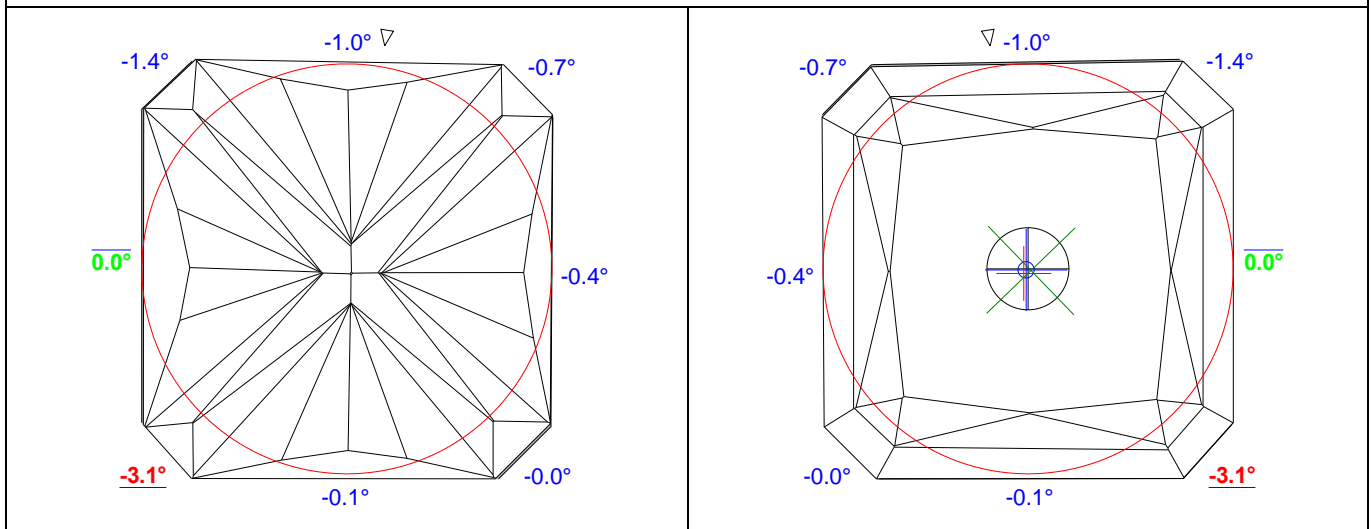
Pavilion and crown views of the diamond with indication of girdle facets slope angles



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

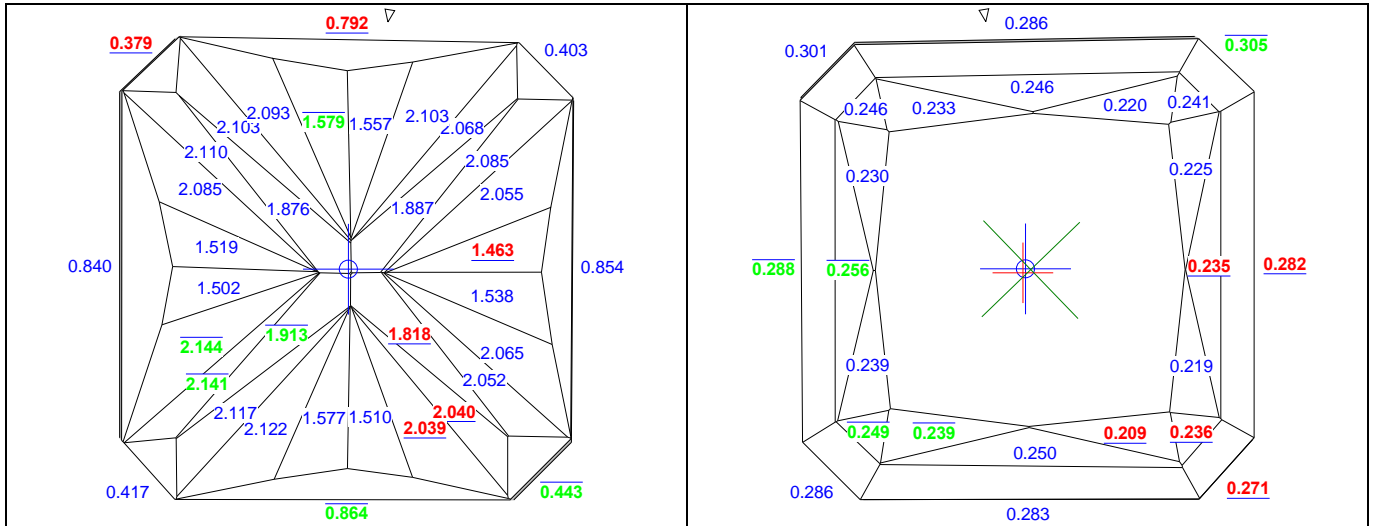


Pavilion and crown views of the diamond with indication of girdle facets azimuth angles

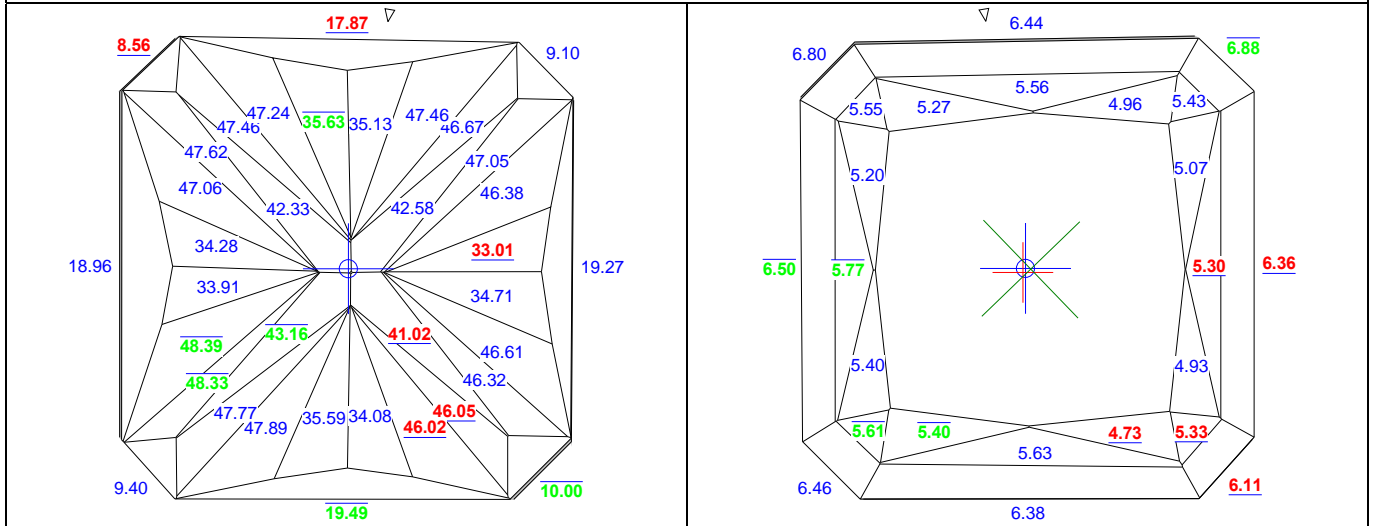


Pavilion and crown views of the diamond with indication of deviation of girdle facets azimuth angles

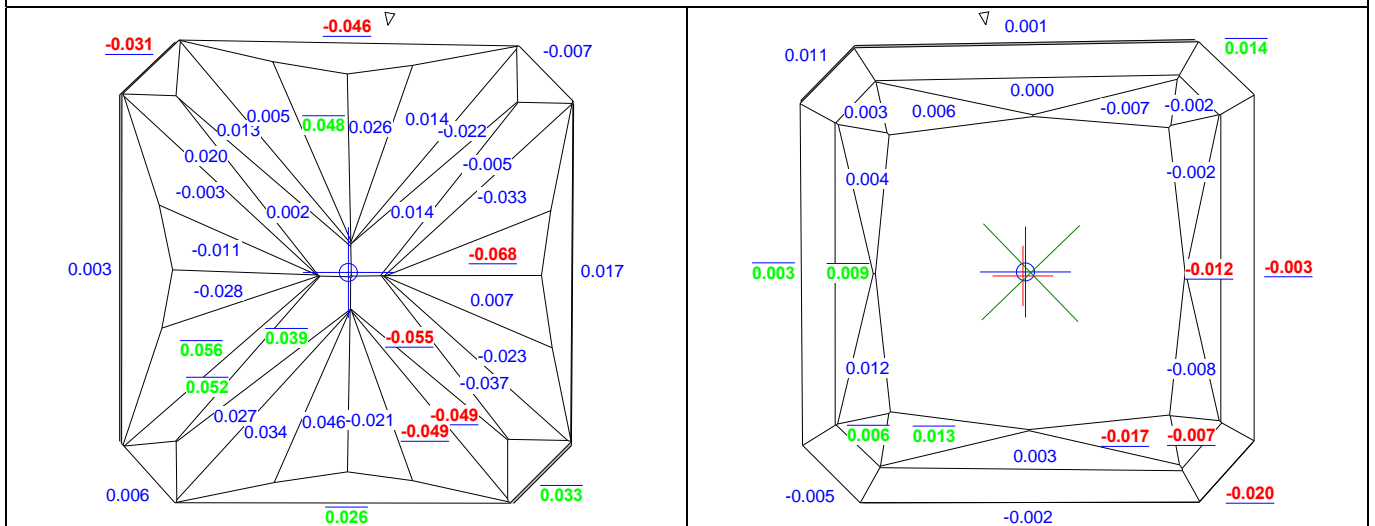
Facets heights



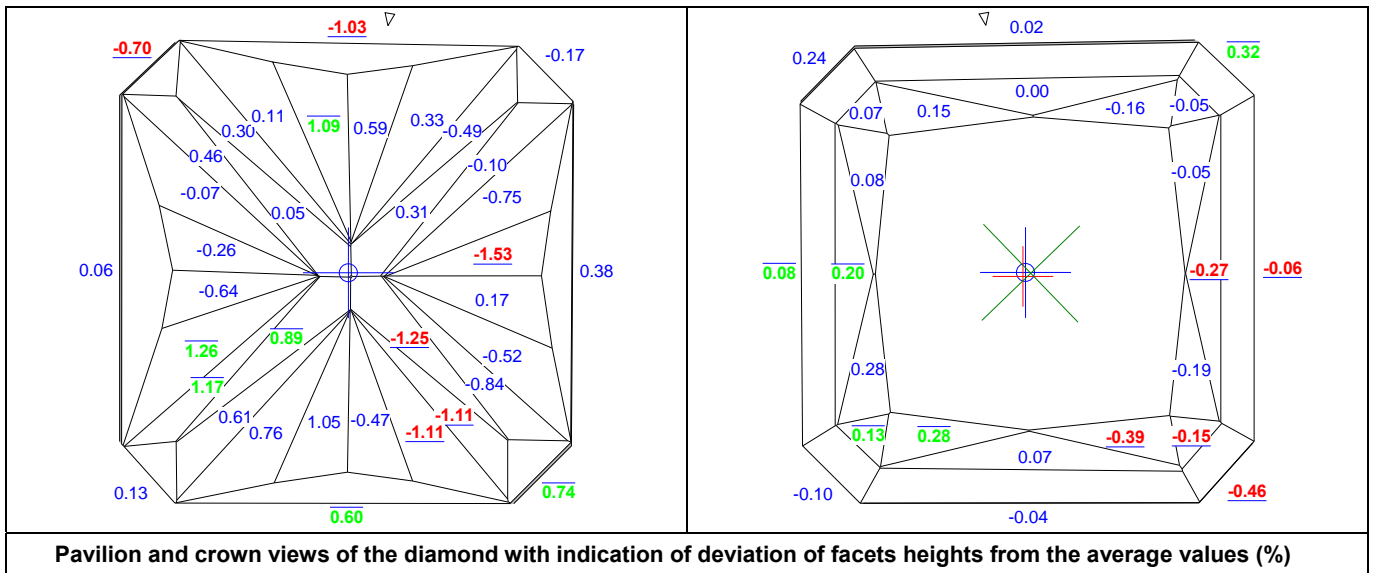
Pavilion and crown views of the diamond with indication of facets heights (mm)



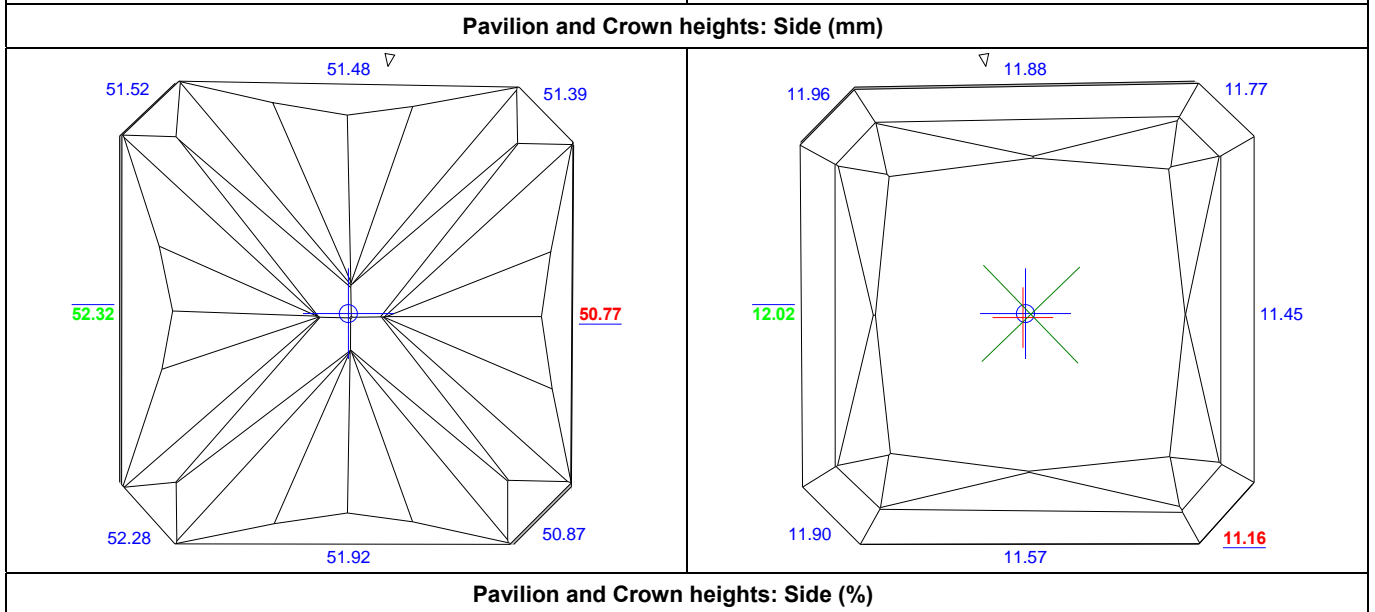
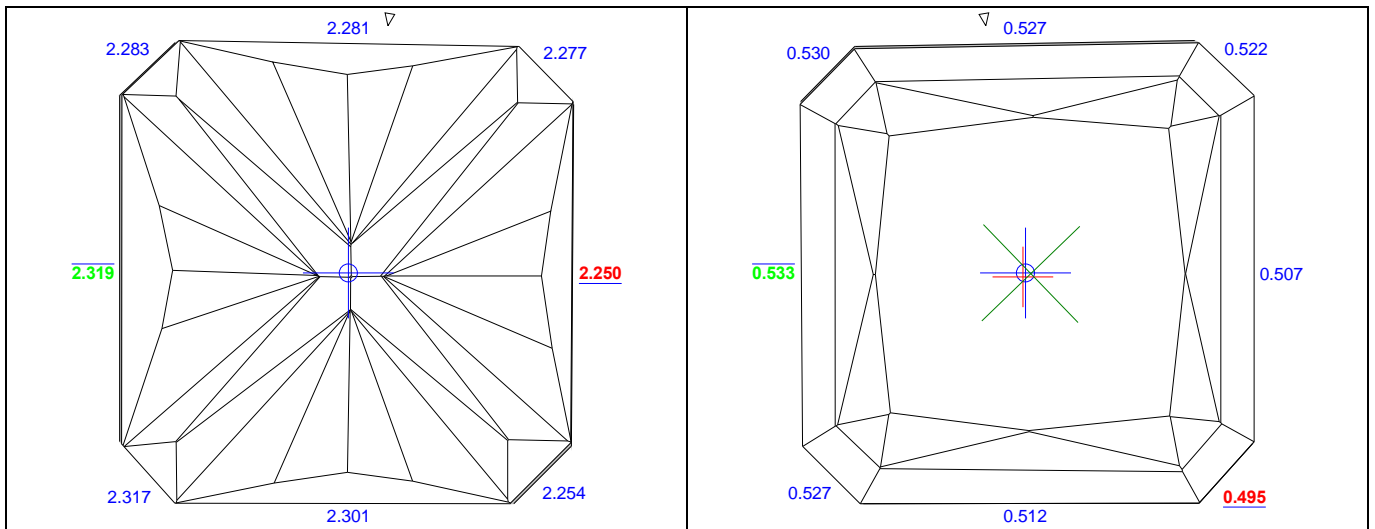
Pavilion and crown views of the diamond with indication of facets heights (%)

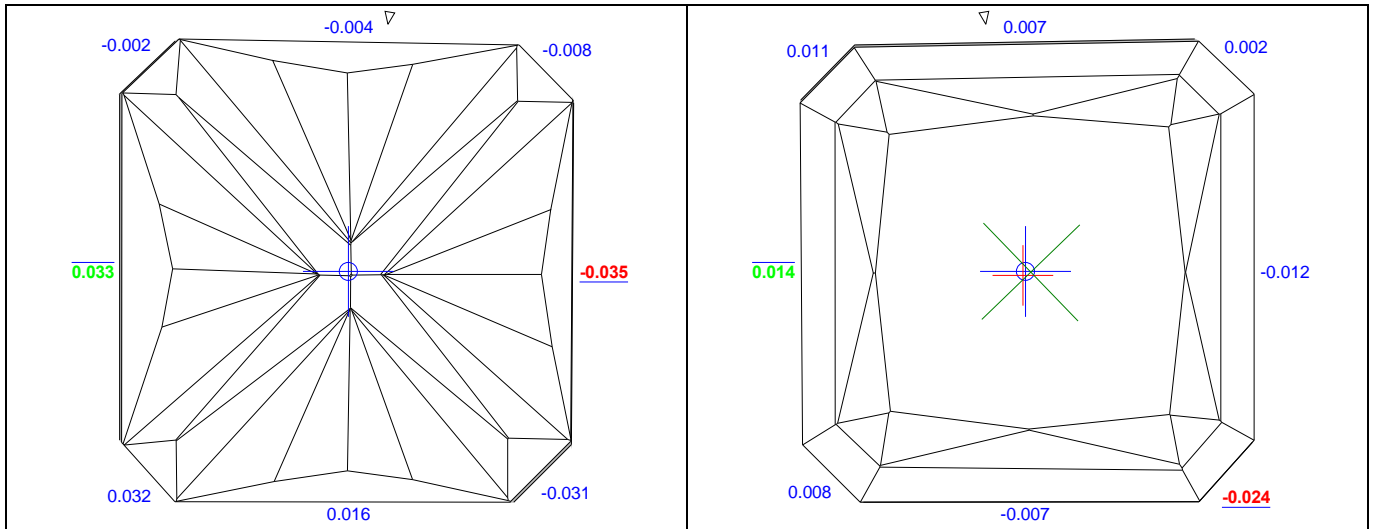


Pavilion and crown views of the diamond with indication of deviation of facets heights from the average values (mm)

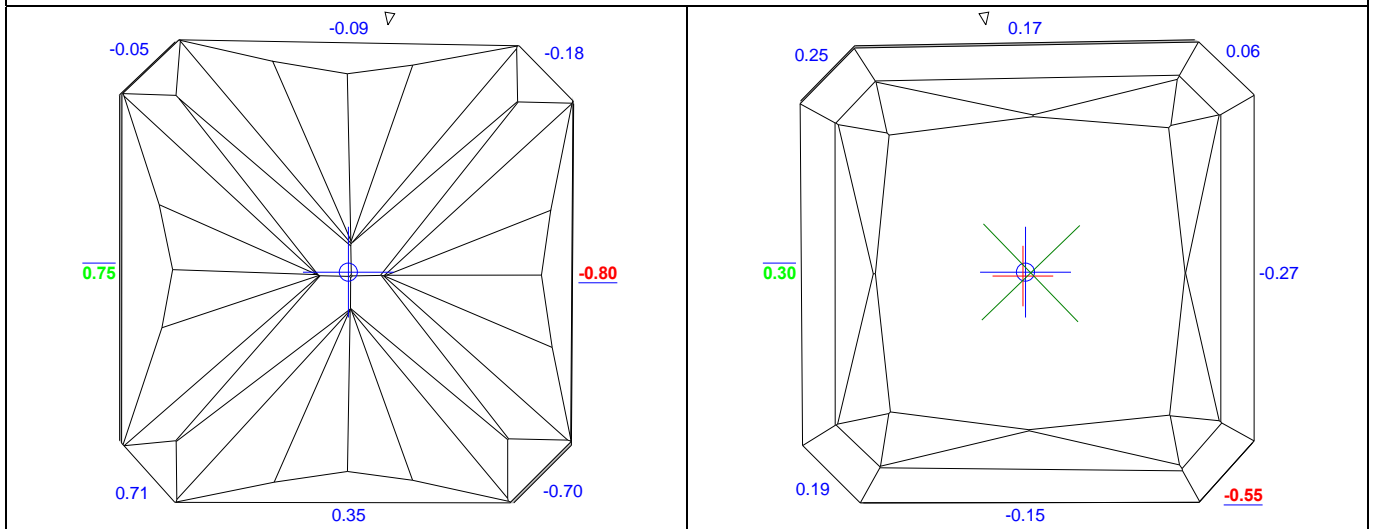


Pavilion and Crown heights: Side



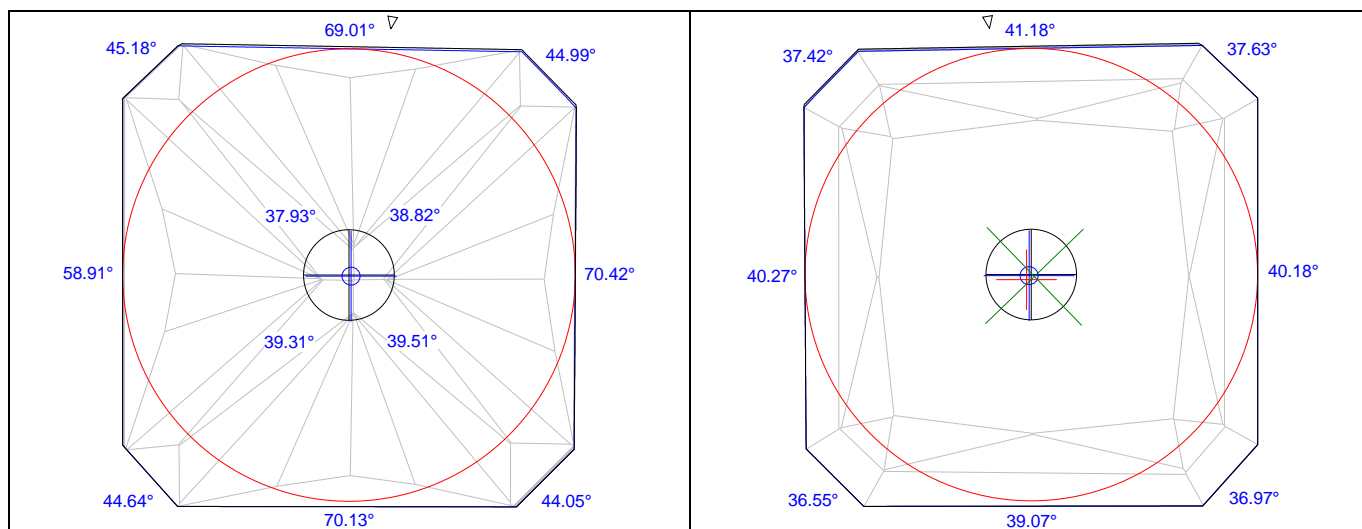


Deviations of Pavilion and Crown heights: Side from the average values (mm)

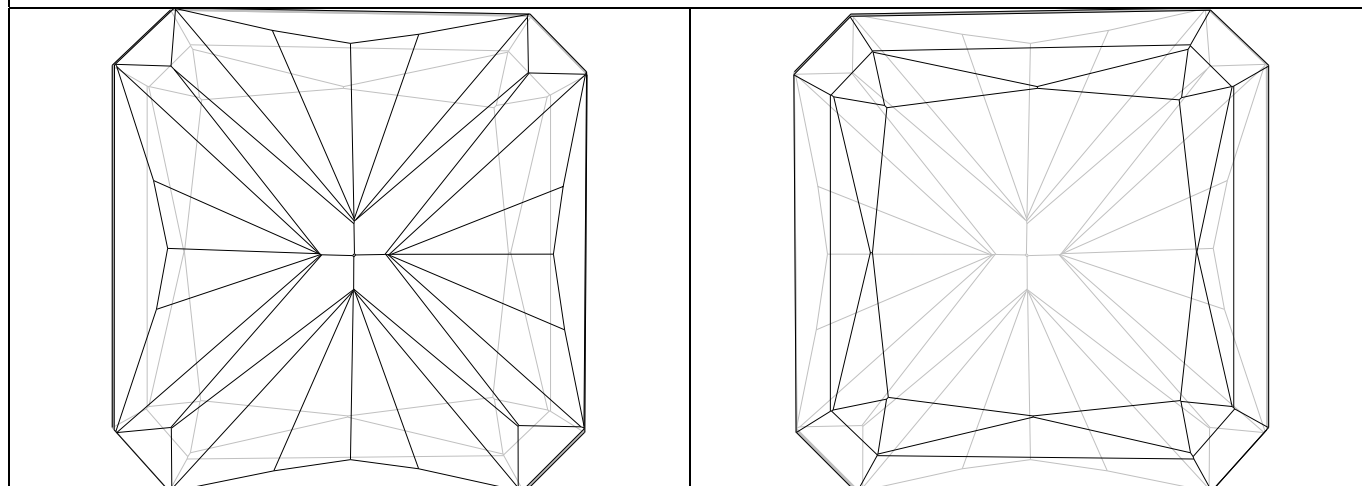


Deviations of Pavilion and Crown heights: Side from the average values (%)

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

