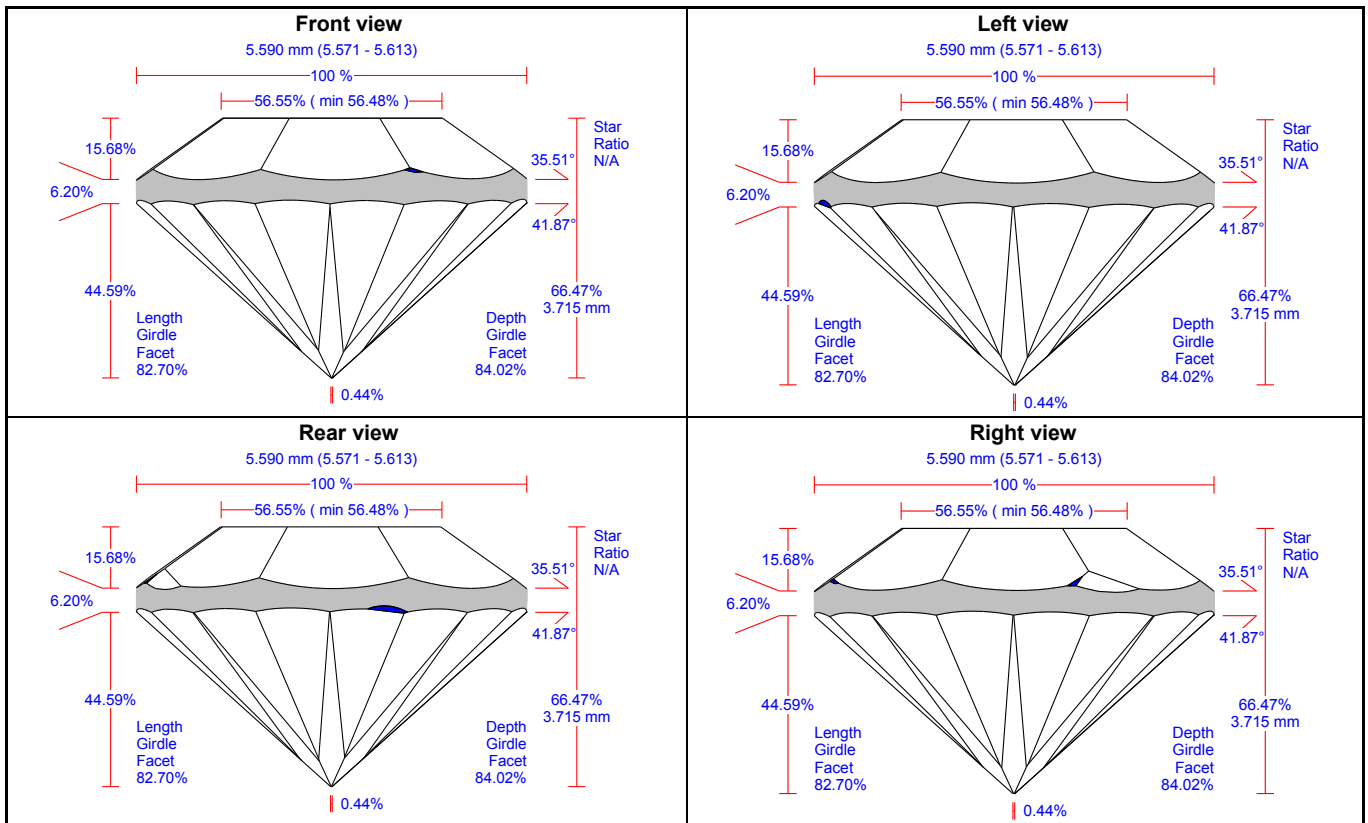


Full Report for Brilliant

General Information

Model	Simple	Extra Facet Girdle / Nat	Yes (3)
Expert name	N/A	Extra Facet Crown	Yes (1)
Report date	05.09.2011	Extra Facet Pavilion	No
Real weight, ct		Appraiser title	N/A
Calculated weight, ct	0.75, 0.7515	Overall cut quality	N/A
Spread	-0.11 ct, -16.39%	Symmetry appraiser title	Symmetry
AGS Spread	N/A ct, N/A%	Overall symmetry quality	VG

Main Views



Main Parameters

Width	Length	Ratio (L/W)	Diameter Average	Diameter Minimum	Diameter Maximum	Total height	MIC	Girdle to MIC
5.571 mm	5.613 mm	1.007	5.590 mm	5.571 mm	5.613 mm	3.715 mm	5.568 mm	0.002 mm

Parameter		Avg	Min	Max	Dev	Cut	Sym
Diameter	mm	5.590	5.571	5.613	0.75 %	N/A	VG
Radius	mm	2.794	2.784	2.808	0.024		
Radius	%	49.98	49.81	50.24	0.43		
Crown angle	°	35.51	35.47	35.59	0.12	N/A	EX
Crown height	%	15.68	15.46	15.88	0.42	N/A	EX
Crown height	mm	0.876	0.864	0.887	0.023		
Crown height bone	%	13.00	12.70	13.20	0.50		
Crown height bone	mm	0.727	0.710	0.738	0.028		
Crown height valley	%	15.68	15.46	15.88	0.42	N/A	EX
Crown height valley	mm	0.876	0.864	0.887	0.024		
Pavilion angle	°	41.87	41.79	41.92	0.13	N/A	EX
Pavilion height	%	44.59	44.35	44.78	0.43		
Pavilion height	mm	2.493	2.479	2.503	0.024		
Pavilion height bezel	%	44.59	44.35	44.78	0.43	N/A	EX
Pavilion height bezel	mm	2.493	2.479	2.503	0.024		
Pavilion height upper bone	%	44.62	44.37	44.86	0.50		
Pavilion height upper bone	mm	2.494	2.480	2.508	0.028		
Pavilion height bone	%	44.62	44.37	44.86	0.50		
Pavilion height bone	mm	2.494	2.480	2.508	0.028		

Parameter		Avg	Min	Max	Dev	Cut	Sym
Pavilion height valley	%	45.47	45.35	45.57	0.23	N/A	EX
Pavilion height valley	mm	2.542	2.535	2.547	0.013		
Pavilion height valley type 2	%	45.49	45.29	45.72	0.43	N/A	N/A
Pavilion height valley type 2	mm	2.543	2.531	2.556	0.024		
Upper girdle facets angle	°	N/A	N/A	N/A	N/A		N/A
Upper girdle facets height	%	N/A	N/A	N/A	N/A		N/A
Upper girdle facets height	mm	N/A	N/A	N/A	N/A		N/A
Star facets angle	°	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
Lower girdle facets angle	°	42.85	42.77	42.92	0.15		EX
Lower girdle facets height	%	38.50	37.87	39.31	1.44	N/A	EX
Lower girdle facets height	mm	2.152	2.117	2.197	0.081		
Depth girdle facet	%	84.02	82.63	85.37	2.73		
Length girdle facet	%	82.70	81.18	84.16	2.98		
Total height	%	66.47					
Total height	mm	3.715				N/A	
Table	%	56.55	56.48	56.61	0.13	N/A	EX
Table	mm	3.161	3.157	3.164	0.007		
Culet	%	0.44	0.36	0.52	0.16	N/A	EX
Culet	mm	0.025	0.020	0.029	0.009		
Twist	°	1.45	1.05	1.72	0.68		EX
Girdle height bezel	%	6.20	5.90	6.47	0.57	N/A	EX
Girdle height bezel	mm	0.346	0.330	0.362	0.032		
Girdle height bone	%	8.85	8.48	9.26	0.77		VG
Girdle height bone	mm	0.494	0.474	0.517	0.043		
Girdle height valley	%	5.61	5.43	5.84	0.41	N/A	EX
Girdle height valley	mm	0.314	0.303	0.326	0.023		
Girdle height valley type 2	%	5.71	5.43	6.14	0.71	N/A	N/A
Girdle height valley type 2	mm	0.319	0.303	0.343	0.040		
Girdle height (Crown Mains)	%	5.96	5.66	6.42	0.75		
Girdle height (Crown Mains)	mm	0.333	0.317	0.359	0.042		
Girdle height (Pavilion Mains)	%	6.21	5.91	6.48	0.57		
Girdle height (Pavilion Mains)	mm	0.347	0.330	0.362	0.032		
Girdle height (Upper girdle facets)	%	N/A	N/A	N/A	N/A		
Girdle height (Upper girdle facets)	mm	N/A	N/A	N/A	N/A		
Girdle height (Lower girdle facets)	%	5.98	5.52	6.82	1.30		
Girdle height (Lower girdle facets)	mm	0.334	0.308	0.381	0.073		

Measurement as per OctoNus theory							
Crown angle	°	35.51	35.48	35.55	0.06		
Pavilion angle	°	41.87	41.85	41.88	0.03		
Culet through bezel	°	3.97				N/A	
Fish eye effect	°	12.30				N/A	

Table of Correspondence of New Parameters and Obsolete Parameters (from Old Full Report for Brilliant)

Obsolete parameter	New parameter		Avg	Min	Max	Dev
Pavilion depth	Pavilion height bezel	%	44.59	44.35	44.78	0.43
Pavilion depth	Pavilion height bezel	mm	2.493	2.479	2.503	0.024

Table of Obsolete Parameters (from Old Full Report for Brilliant)

Obsolete parameter		Avg	Min	Max	Dev
Crown height at girdle minima	%	15.68	15.46	15.88	0.42
Crown height at girdle minima	mm	0.876	0.864	0.887	0.024
Pavilion depth bone	%	44.62	44.37	44.86	0.50
Pavilion depth bone	mm	2.494	2.480	2.508	0.028
Pavilion depth at girdle minima	%	45.49	45.29	45.72	0.43
Pavilion depth at girdle minima	mm	2.543	2.531	2.556	0.024

Detailed Parameters

Parameter		1	2	3	4	5	6	7	8
Diameter	mm	5.598	5.575	5.599	5.574				
Radius	mm	2.802	2.790	2.799	2.786	2.796	2.786	2.799	2.787
Radius	%	50.12	49.91	50.07	49.84	50.01	49.83	50.08	49.85
Crown angle	°	35.50	35.52	35.59	35.49	35.47	35.52	35.50	35.49
Crown height	%	15.55	15.49	15.79	15.72	15.88	15.74	15.79	15.46
Crown height	mm	0.869	0.866	0.883	0.879	0.887	0.880	0.882	0.864
Crown height bone	%	12.90	12.84	13.16	13.08	13.20	13.02	13.08	12.70
Crown height bone	mm	0.721	0.718	0.736	0.731	0.738	0.728	0.731	0.710
Crown height valley	%	15.55	15.49	15.79	15.72	15.88	15.74	15.79	15.46
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crown height valley	mm	0.869	0.866	0.882	0.879	0.887	0.880	0.882	0.864
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crown azimuth	°	358.7	43.9	88.9	133.9	179.0	224.0	268.9	313.9
Crown azimuth deviation from ideal	°	-1.27	-1.07	-1.09	-1.08	-0.99	-1.01	-1.09	-1.12
Pavilion angle	°	41.92	41.90	41.85	41.79	41.81	41.83	41.91	41.91
Pavilion height	%	44.78	44.50	44.53	44.35	44.65	44.58	44.78	44.57
Pavilion height	mm	2.503	2.487	2.489	2.479	2.496	2.492	2.503	2.491
Pavilion height bezel	%	44.78	44.50	44.53	44.35	44.65	44.58	44.78	44.57
Pavilion height bezel	mm	2.503	2.487	2.489	2.479	2.496	2.492	2.503	2.491
Pavilion height upper bone	%	44.74	44.37	44.61	44.49	44.79	44.51	44.86	44.61
Pavilion height upper bone	mm	2.501	2.480	2.493	2.487	2.503	2.488	2.508	2.494
Pavilion height bone	%	44.74	44.37	44.61	44.49	44.79	44.51	44.86	44.61
Pavilion height bone	mm	2.501	2.480	2.493	2.487	2.503	2.488	2.508	2.494
Pavilion height valley	%	45.54	45.45	45.40	45.35	45.46	45.54	45.47	45.57
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion height valley	mm	2.545	2.540	2.538	2.535	2.541	2.546	2.541	2.547
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion height valley type 2	%	45.72	45.45	45.34	45.40	45.49	45.35	45.29	45.46
		45.67	45.54	45.46	45.47	45.72	45.57	45.40	45.54
Pavilion height valley type 2	mm	2.555	2.540	2.534	2.538	2.543	2.535	2.531	2.541
		2.553	2.546	2.541	2.541	2.556	2.547	2.538	2.545
Pavilion azimuth	°	0.0	45.0	90.5	135.6	180.5	225.5	270.4	315.4
Pavilion azimuth deviation from ideal	°	0.00	-0.02	0.50	0.65	0.52	0.45	0.41	0.36
Upper 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
Upper 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
Upper 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
Upper 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
Upper 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
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 facets azimuth deviation from ideal	°	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
Lower girdle facets angle	°	42.89	42.89	42.90	42.85	42.84	42.82	42.77	42.77
		42.80	42.88	42.86	42.92	42.87	42.84	42.88	42.85
Lower girdle facets height	%	39.31	38.41	38.34	38.89	38.54	37.90	38.62	38.52
		38.68	37.94	38.23	37.87	38.59	39.11	38.09	38.93
Lower girdle facets height	mm	2.197	2.147	2.143	2.174	2.154	2.119	2.159	2.153
		2.162	2.121	2.137	2.117	2.157	2.186	2.129	2.176
Lower girdle facets azimuth	°	11.5	34.1	56.5	79.1	101.6	124.3	146.8	169.3
		191.7	214.4	236.7	259.3	281.5	304.2	326.5	349.0
Lower girdle facets azimuth deviation from ideal	°	0.30	0.35	0.29	0.36	0.36	0.52	0.50	0.56
		0.44	0.62	0.49	0.58	0.29	0.43	0.25	0.29
Depth girdle facet	%	85.37	83.97	83.90	85.02	84.11	83.00	84.70	84.11
		84.09	82.72	83.45	82.63	83.79	85.28	83.29	84.88
Length girdle facet	%	84.16	82.74	82.55	83.69	82.69	81.56	83.42	82.82
		82.78	81.39	82.01	81.18	82.47	83.99	82.03	83.65
Table	%	56.57	56.48	56.54	56.61				
Table	mm	3.162	3.157	3.160	3.164				
Twist	°	1.27	1.05	1.59	1.72	1.52	1.46	1.50	1.47
Girdle height bezel	%	6.13	6.47	6.14	6.39	5.94	6.14	5.90	6.44
Girdle height bezel	mm	0.343	0.362	0.343	0.357	0.332	0.343	0.330	0.360
Girdle height bone	%	8.83	9.26	8.70	8.90	8.48	8.94	8.52	9.15
Girdle height bone	mm	0.493	0.517	0.486	0.497	0.474	0.500	0.476	0.512

Parameter		1	2	3	4	5	6	7	8
Girdle height valley	%	5.65	5.84	5.57	5.71	5.43	5.52	5.46	5.74
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Girdle height valley	mm	0.316	0.326	0.312	0.319	0.303	0.309	0.305	0.321
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Girdle height valley type 2	%	5.71	5.84	6.07	5.57	5.74	5.71	6.02	5.43
		5.45	5.52	5.80	5.46	5.43	5.74	6.14	5.65
Girdle height valley type 2	mm	0.319	0.326	0.339	0.312	0.321	0.319	0.336	0.303
		0.305	0.309	0.324	0.305	0.304	0.321	0.343	0.316
Girdle height (Crown Mains)	%	6.11	6.42	5.86	5.94	5.71	5.92	5.66	6.09
Girdle height (Crown Mains)	mm	0.341	0.359	0.328	0.332	0.319	0.331	0.317	0.340
Girdle height (Pavilion Mains)	%	6.15	6.48	6.15	6.40	5.95	6.16	5.91	6.47
Girdle height (Pavilion Mains)	mm	0.344	0.362	0.344	0.358	0.333	0.345	0.330	0.362
Girdle height (Upper 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 height (Upper 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
Girdle height (Lower girdle facets)	%	6.15	6.03	6.57	5.75	6.03	5.91	6.38	5.52
		5.77	5.70	5.99	5.57	5.71	6.00	6.82	5.83
Girdle height (Lower girdle facets)	mm	0.344	0.337	0.367	0.321	0.337	0.330	0.356	0.308
		0.322	0.318	0.335	0.311	0.319	0.335	0.381	0.326

Measurement as per OctoNus theory									
Crown angle	°	35.48	35.52	35.55	35.49				
Pavilion angle	°	41.86	41.87	41.88	41.85				

Table of Correspondence of New Parameters and Obsolete Parameters (from Old Full Report for Brilliant)

Obsolete parameter	New parameter		1	2	3	4	5	6	7	8
Pavilion depth	Pavilion height bezel	%	44.78	44.50	44.53	44.35	44.65	44.58	44.78	44.57
Pavilion depth	Pavilion height bezel	mm	2.503	2.487	2.489	2.479	2.496	2.492	2.503	2.491

Table Correspondence of New Parameters and Obsolete Parameters (from Old Full Report for Semi-Polished Brilliant)

Obsolete parameter	New parameter		1	2	3	4	5	6	7	8
Crown height (Mains)	Crown height	%	15.55	15.49	15.79	15.72	15.88	15.74	15.79	15.46
Crown height (Mains)	Crown height	mm	0.869	0.866	0.882	0.879	0.887	0.880	0.882	0.864
Pavilion depth (Mains)	Pavilion height bezel	%	44.78	44.50	44.53	44.35	44.65	44.58	44.77	44.57
Pavilion depth (Mains)	Pavilion height bezel	mm	2.503	2.487	2.489	2.479	2.496	2.492	2.503	2.491

Table of Obsolete Parameters (from Old Full Report for Brilliant)

Obsolete parameter		1	2	3	4	5	6	7	8
Crown height at girdle minima	%	15.55	15.49	15.79	15.72	15.88	15.74	15.79	15.46
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crown height at girdle minima	mm	0.869	0.866	0.882	0.879	0.887	0.880	0.882	0.864
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion depth bone	%	44.74	44.37	44.61	44.49	44.79	44.51	44.86	44.61
Pavilion depth bone	mm	2.501	2.480	2.493	2.487	2.503	2.488	2.508	2.494
Pavilion depth at girdle minima	%	45.72	45.45	45.34	45.40	45.49	45.35	45.29	45.46
		45.67	45.54	45.46	45.47	45.72	45.57	45.40	45.54
Pavilion depth at girdle minima	mm	2.555	2.540	2.534	2.538	2.543	2.535	2.531	2.541
		2.553	2.546	2.541	2.541	2.556	2.547	2.538	2.545

Table of Obsolete Parameters (from Old Full Report for Semi-Polished Brilliant)

Obsolete parameter		1	2	3	4	5	6	7	8
Crown height (Upper 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
Crown height (Upper 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 depth (Lower girdle facets)	%	45.72	45.45	45.34	45.40	45.49	45.35	45.29	45.45
		45.67	45.54	45.46	45.46	45.72	45.57	45.40	45.54
Pavilion depth (Lower girdle facets)	mm	2.555	2.540	2.534	2.538	2.543	2.535	2.531	2.541
		2.553	2.546	2.541	2.541	2.556	2.547	2.538	2.545

Paint / Dug		Avg	Type	Sym	Max	Dev	Sym
Crown	°	N/A	N/A	N/A	N/A	N/A	N/A
Crown	notches	N/A, N/A			N/A	N/A	
Pavilion	°	-0.05		EX	-0.38	0.70	EX
Pavilion	notches	0.0, Negligible			0.1	0.2	

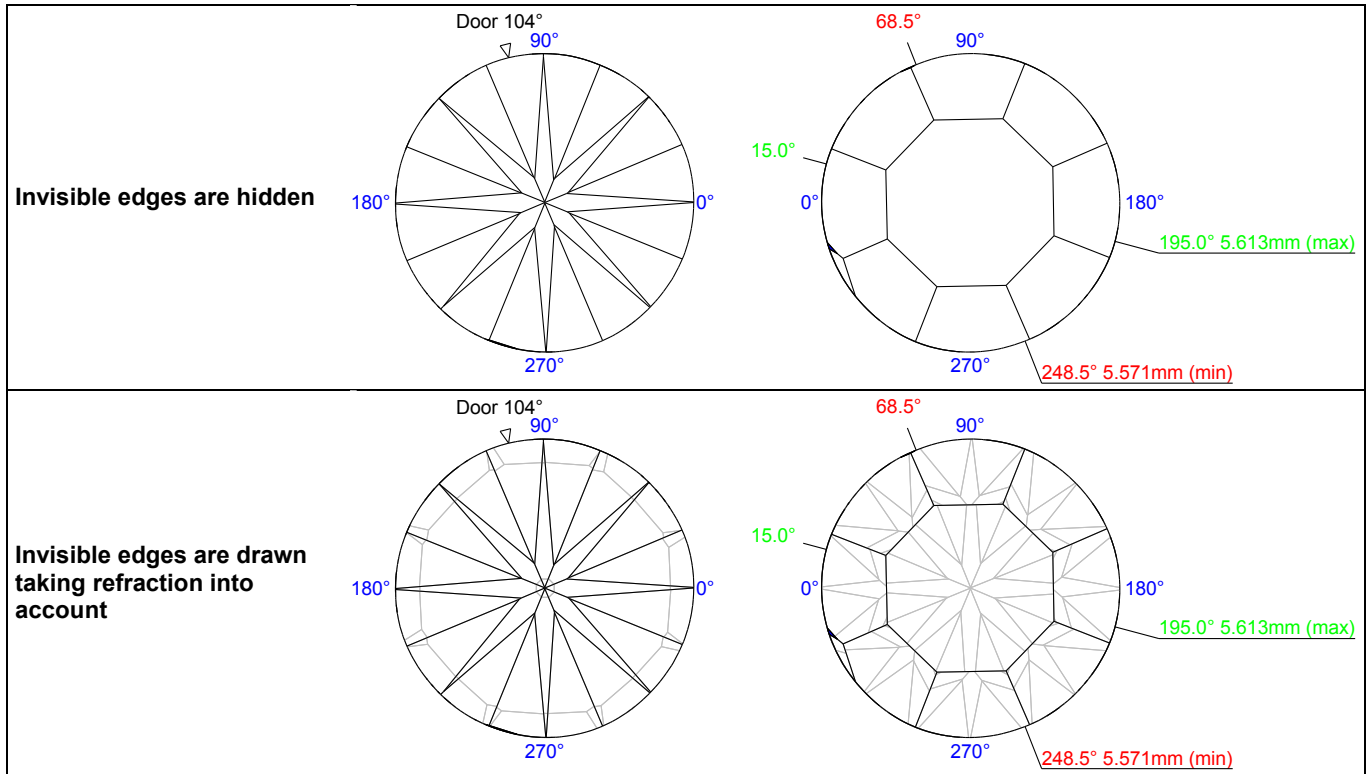
Paint / Dug		1	2	3	4	5	6	7	8
Crown painting	°	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crown painting	notches	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavilion painting	°	0.30	-0.38	0.32	0.13	-0.14	0.13	-0.14	-0.04
		-0.08	-0.17	0.04	-0.17	-0.12	-0.07	-0.10	-0.29
Pavilion painting	notches	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Offset	Distance, %	Distance, mm
Girdle-Culet offset by table axis	0.13 ± 0.23	0.016 ± 0.011
Girdle-Table offset by table axis	0.28 ± 0.20	0.007 ± 0.013
Culet-Table offset by table axis	0.19 ± 0.25	0.011 ± 0.014
Girdle to table-culet line offset	0.24	0.013

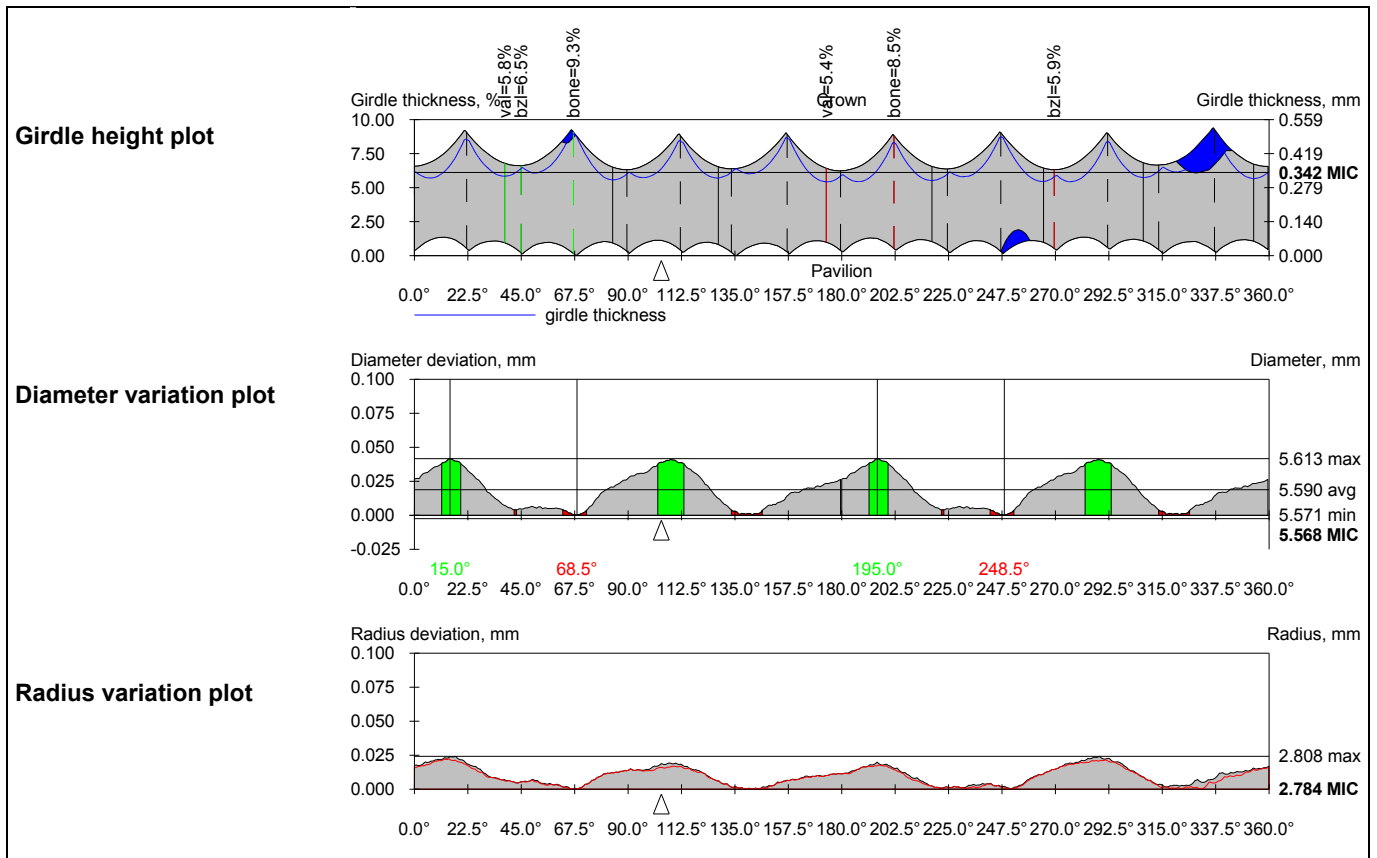
Culet shift ratio by main diameter	
Main diameter (avg)	5.590 mm, 100%
Width-wise culet shift ratio	2.801 mm, 50.12 % 2.796 mm, 50.02 %
Length-wise culet shift ratio	2.804 mm, 50.16 % 2.794 mm, 49.99 %

Model building info		1	2	3	4	5	6	7	8
The model is built correctly									
Girdle deviation / error	mkm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inner linear deviation / error	mkm	5.6	5.3	N/A	N/A	N/A	N/A	N/A	N/A
		small	small	N/A	N/A	N/A	N/A	N/A	N/A
Average deviation / error	mkm	2.9	2.8	2.7	2.6	2.5	2.3	2.3	2.3
		small	small	small	small	small	small	small	small

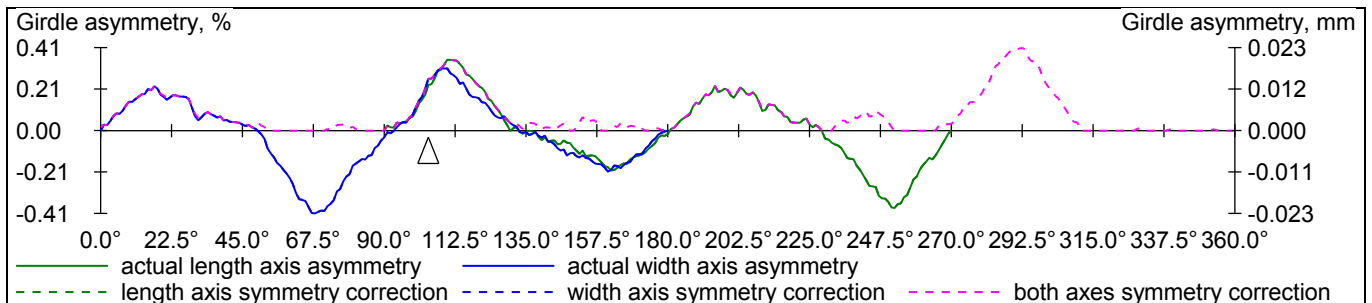
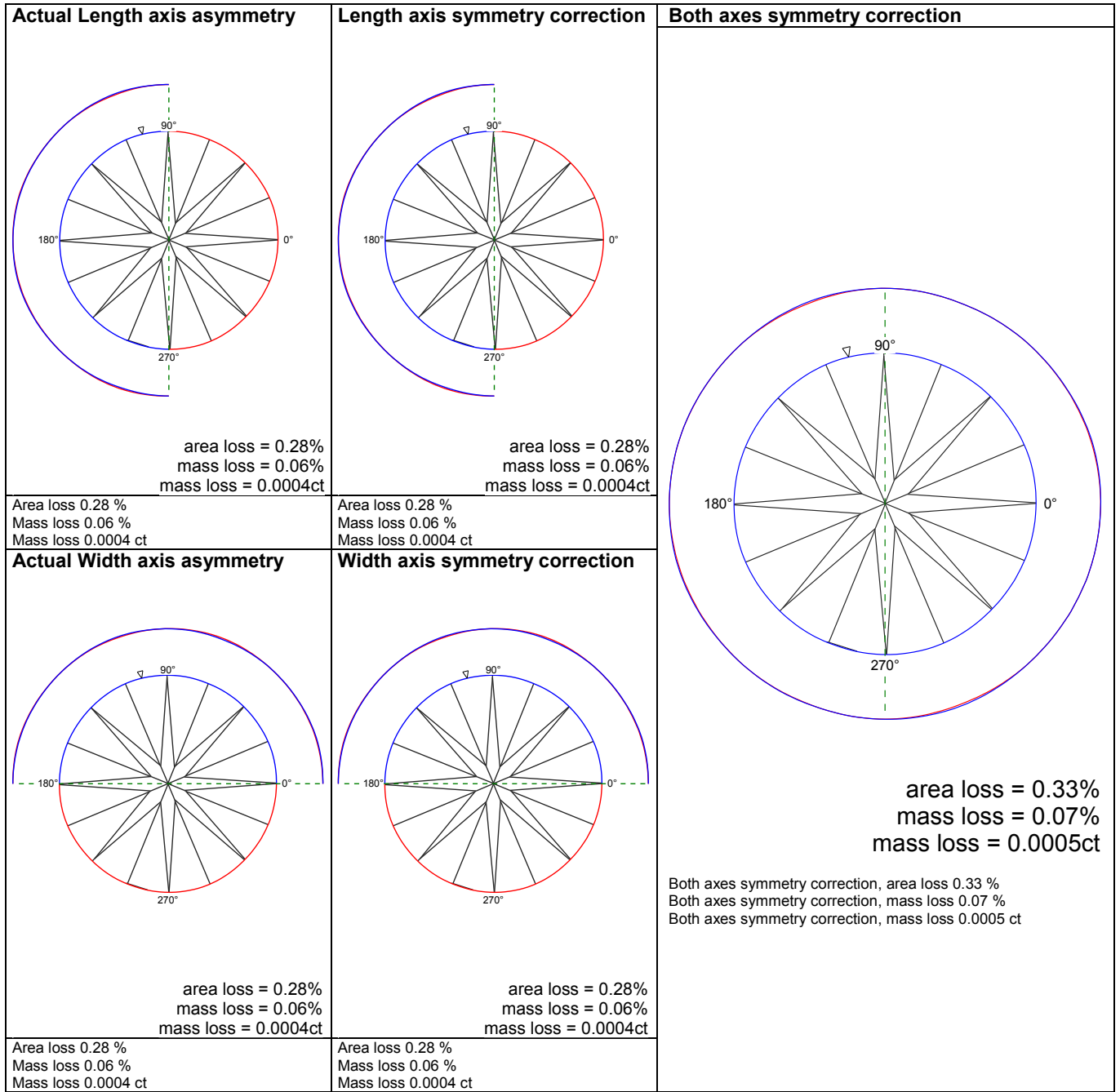
Crown and pavilion views with indication minimum and maximum



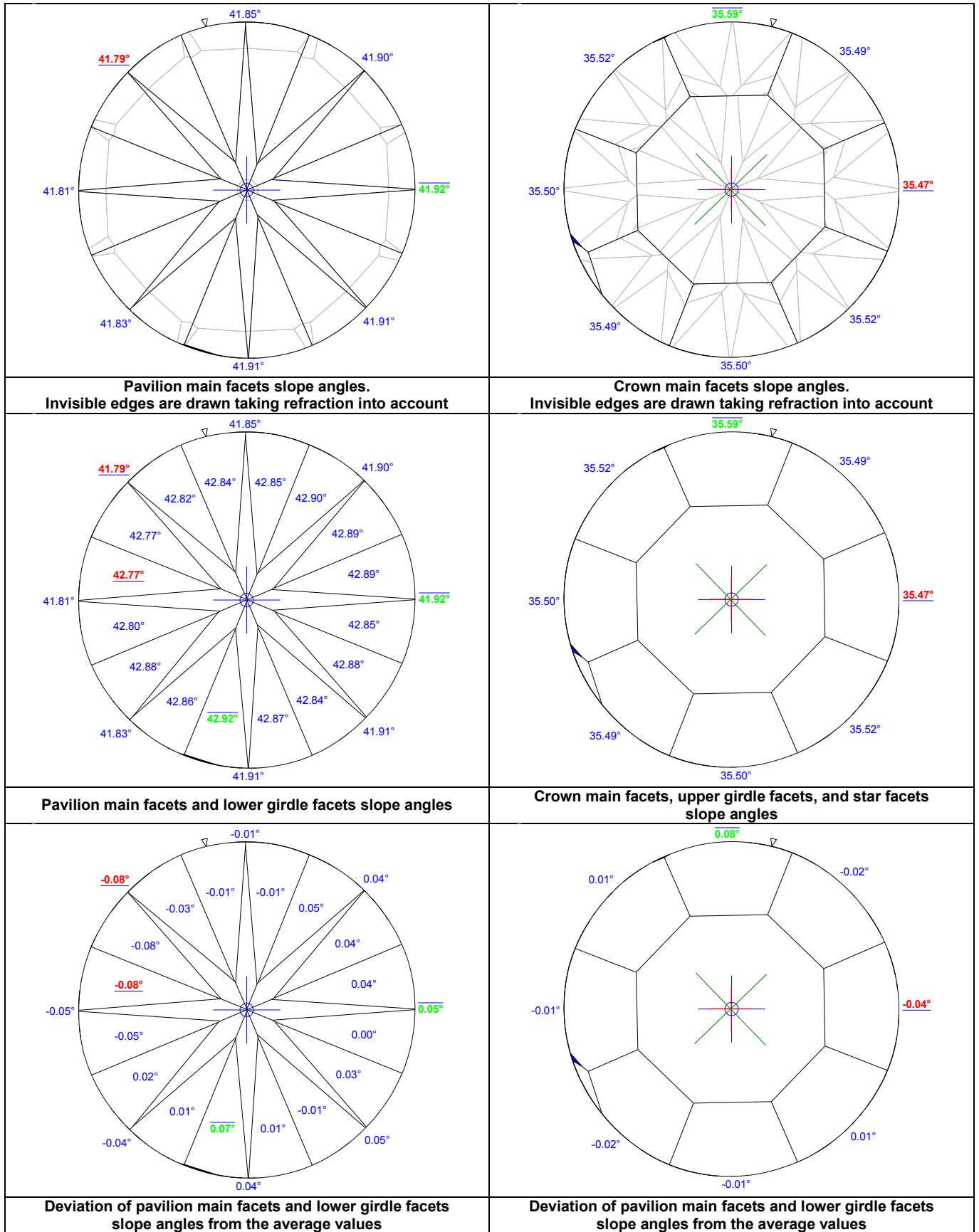
Plots

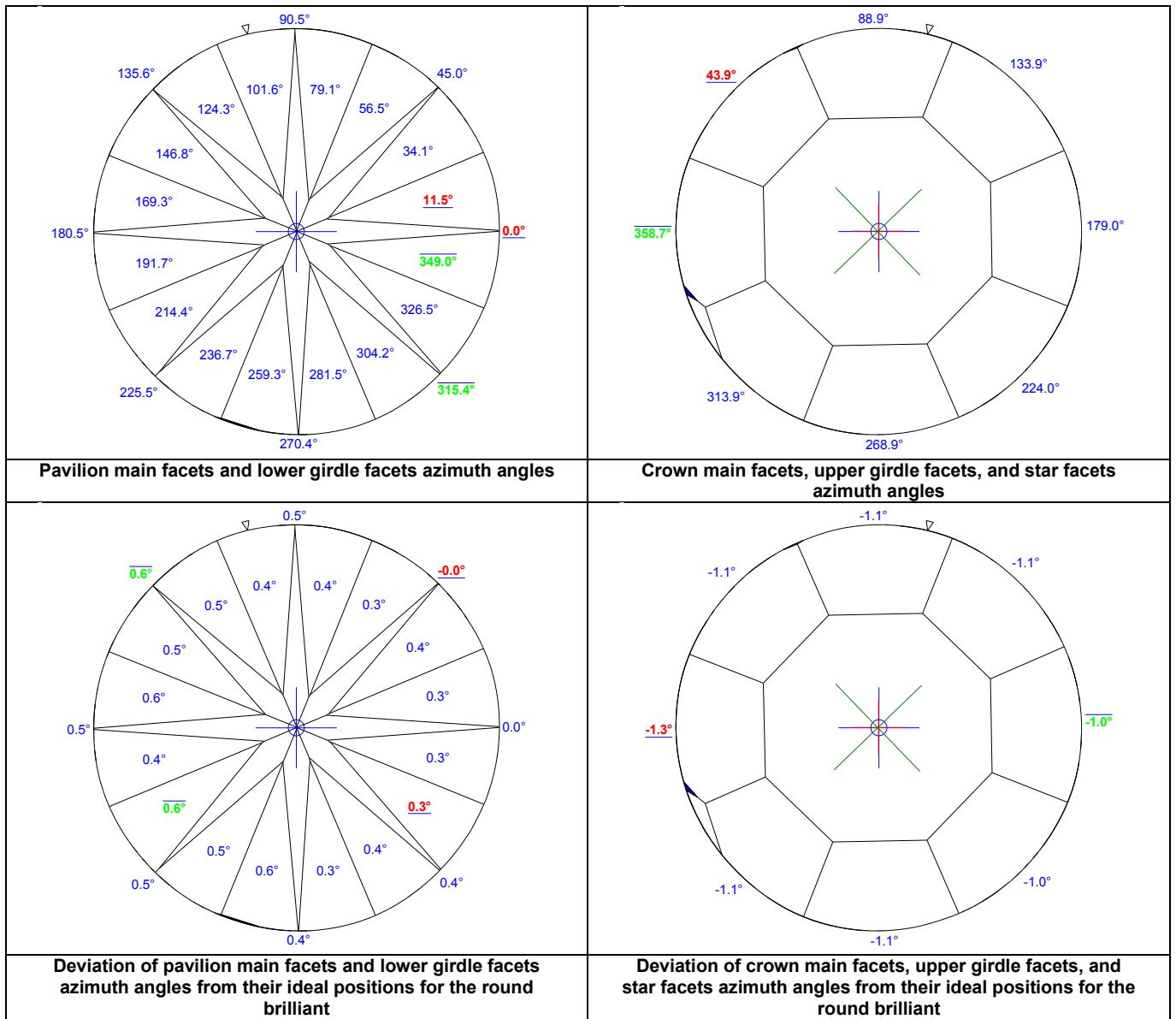


Girdle asymmetry

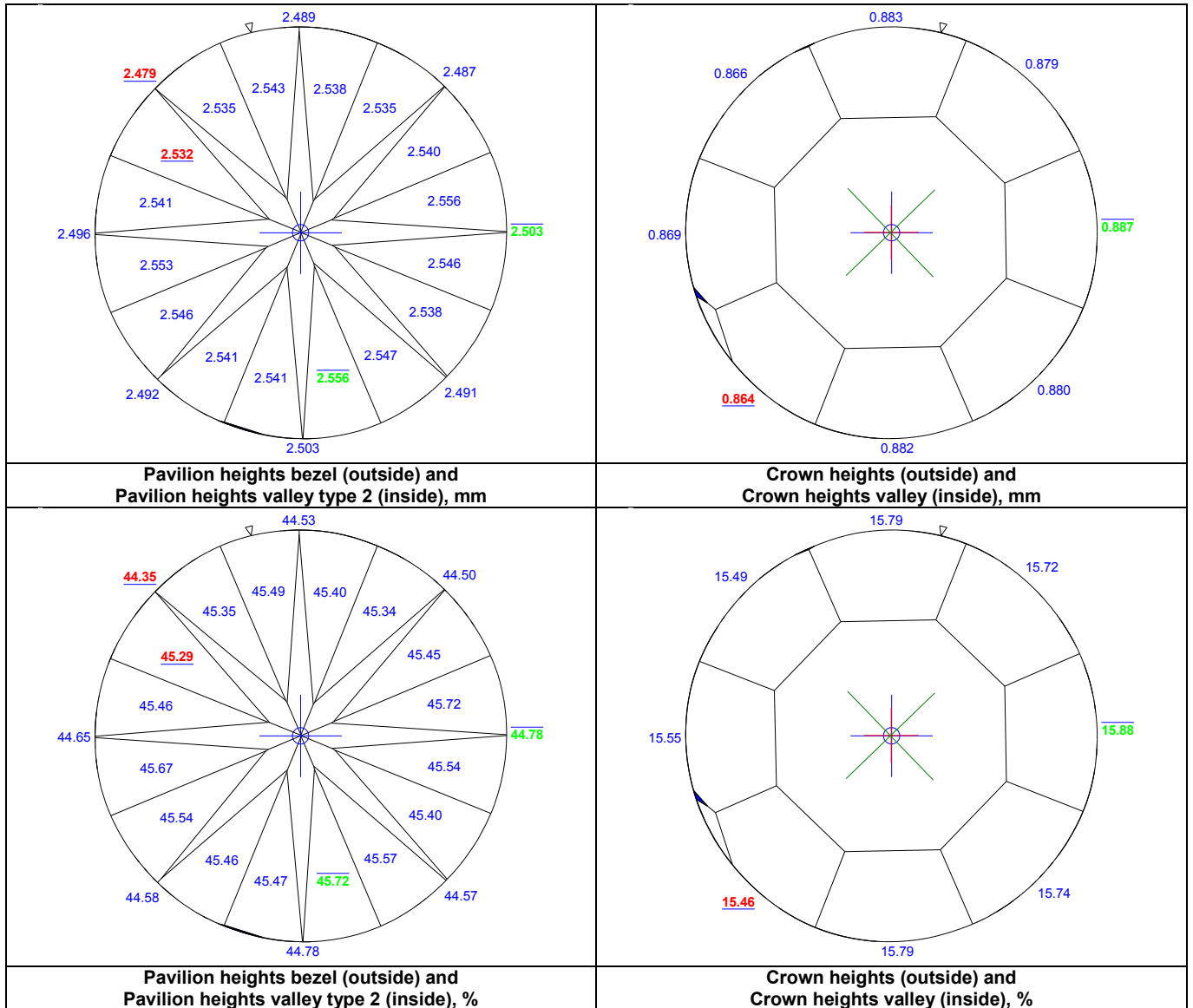


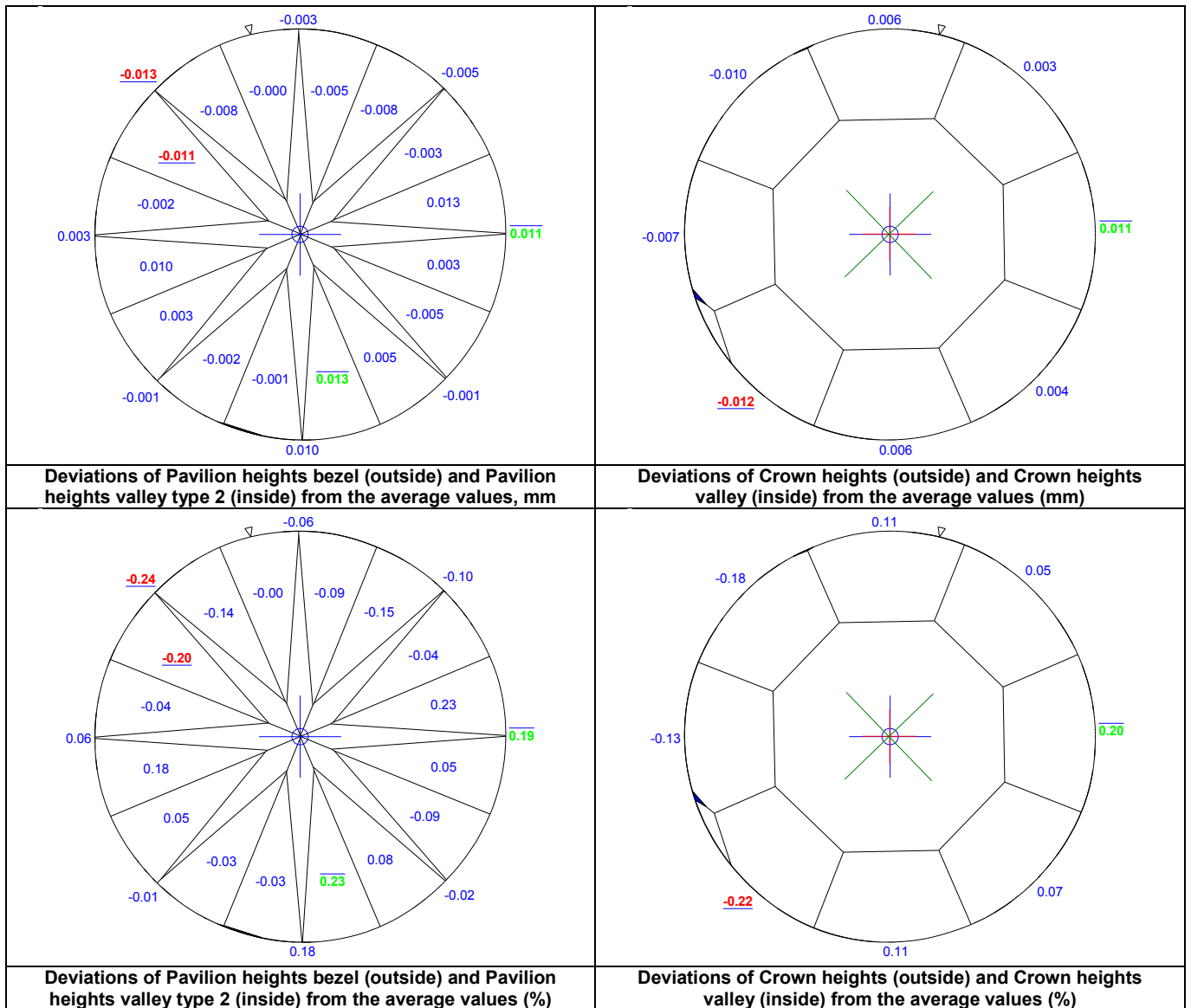
Facets slope and azimuth angles



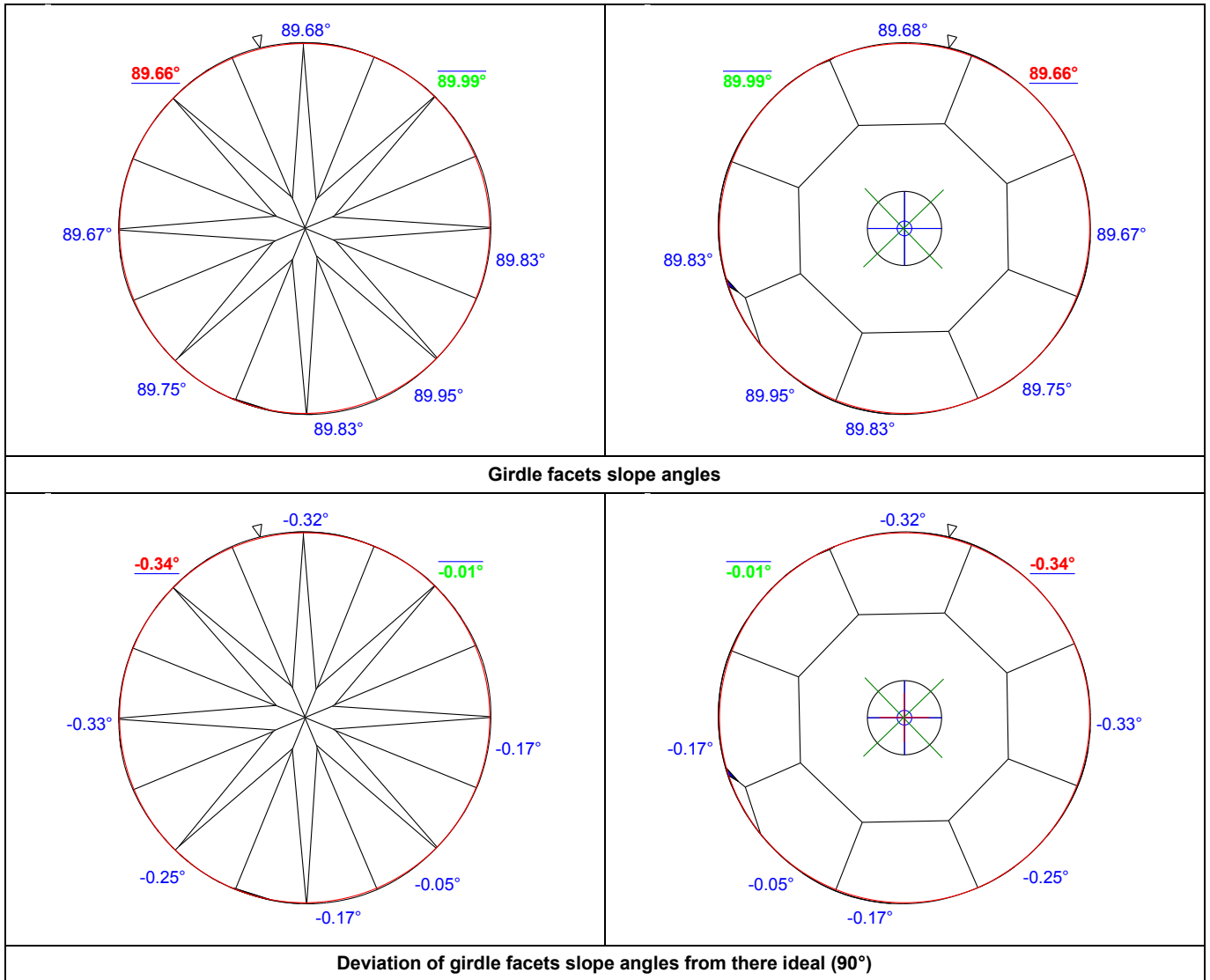


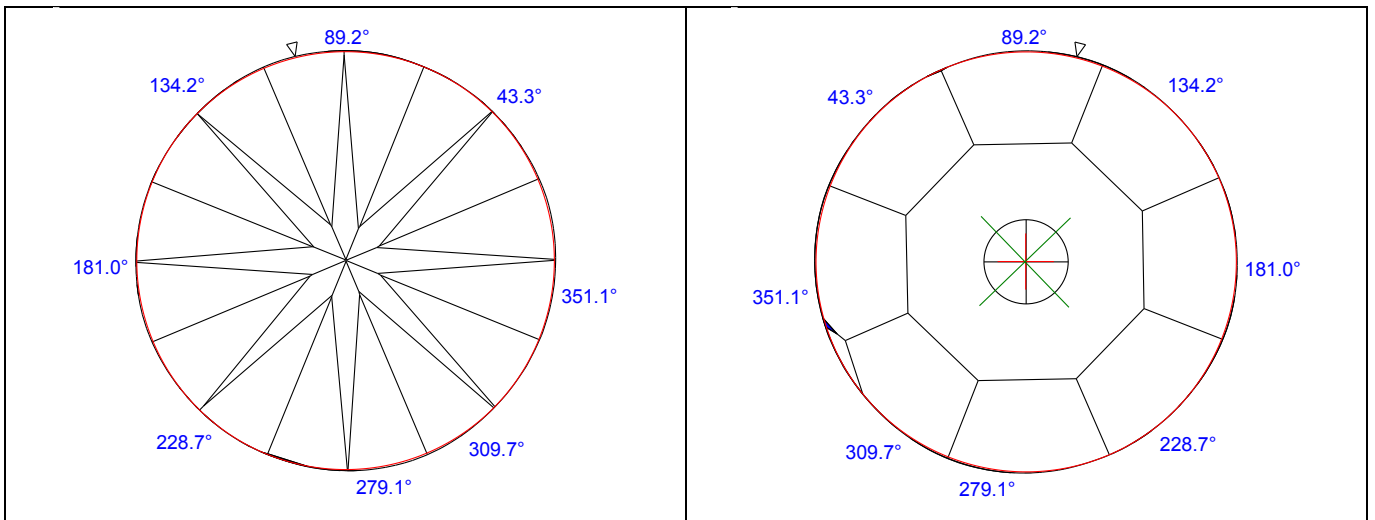
Pavilion and crown heights



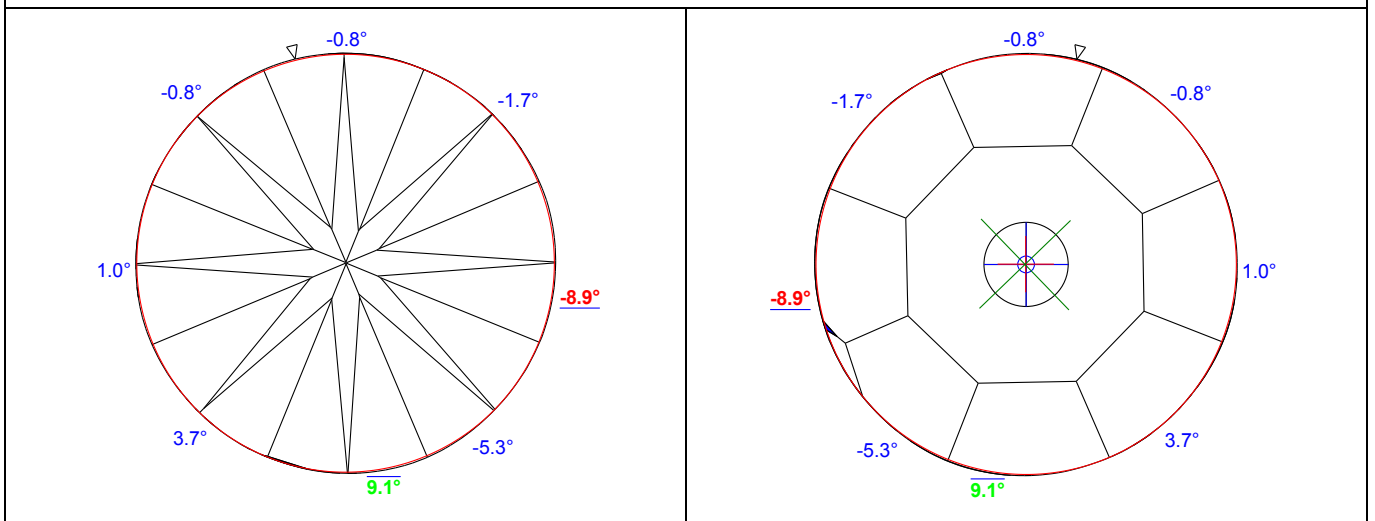


Girdle facets slope and azimuth angles



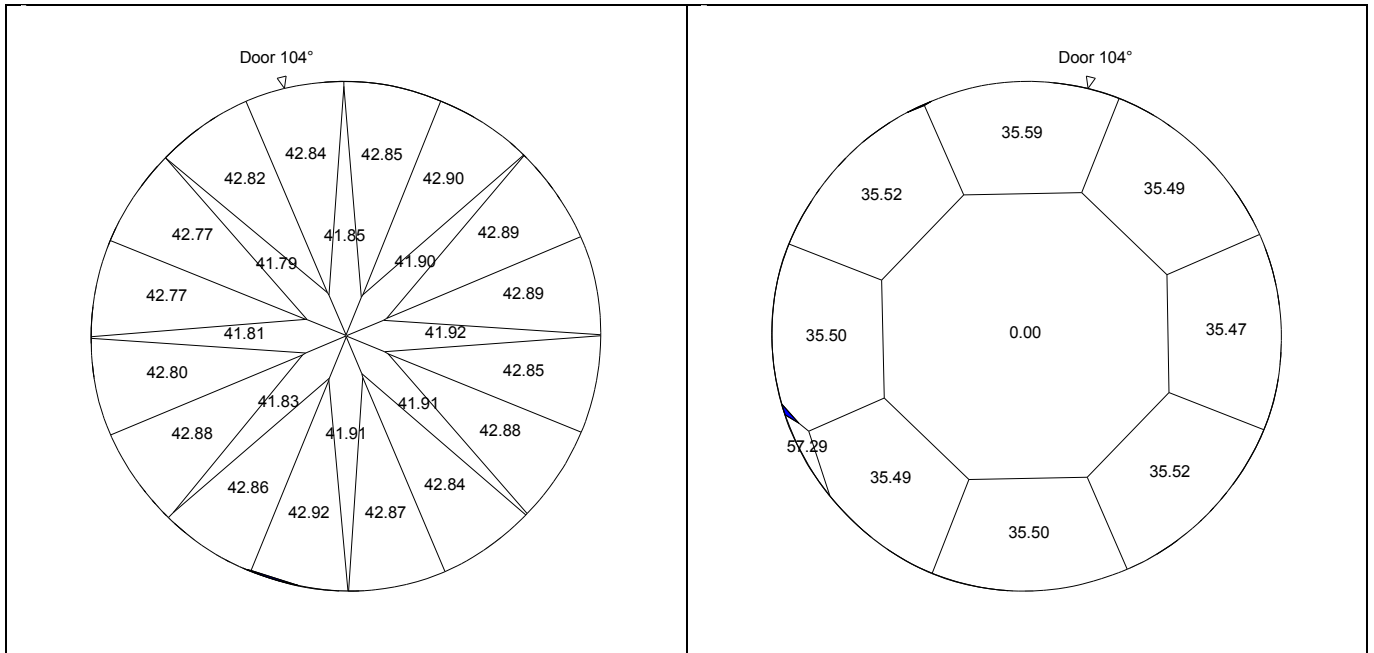


Girdle facets azimuth angles

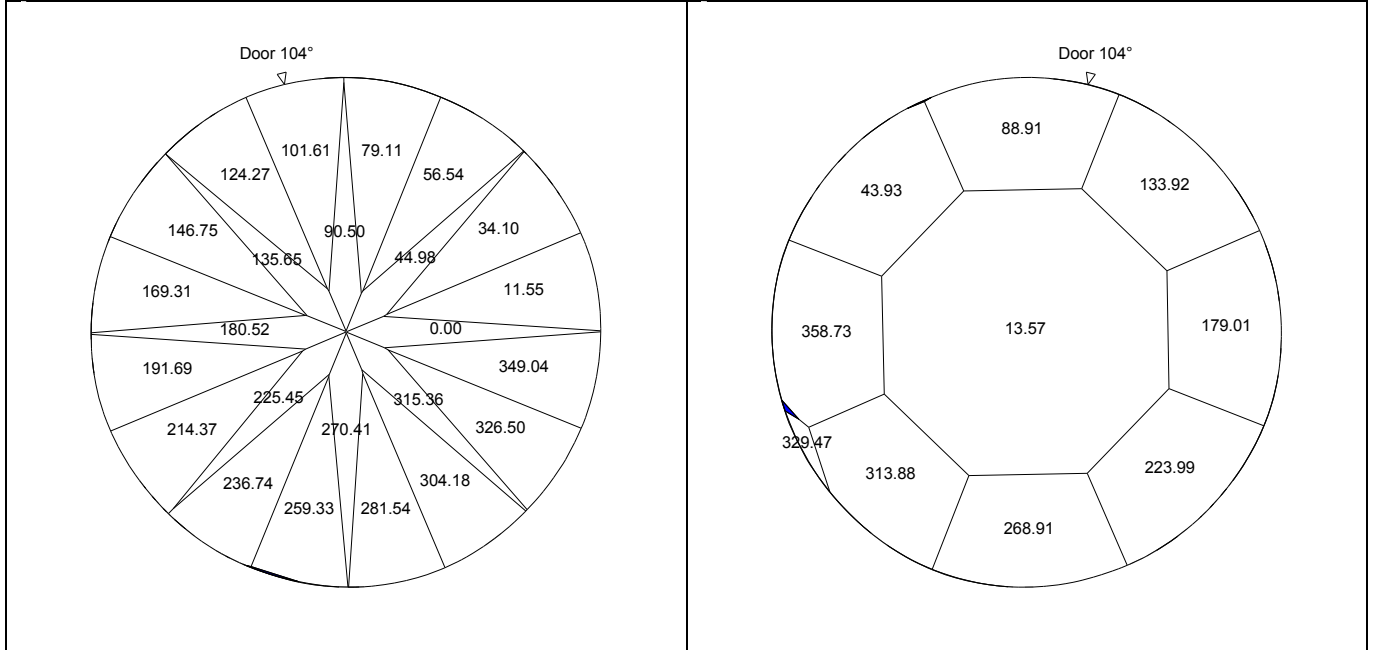


Deviation of girdle facets azimuth angles

All facets slope and azimuth angles without breakdown into groups

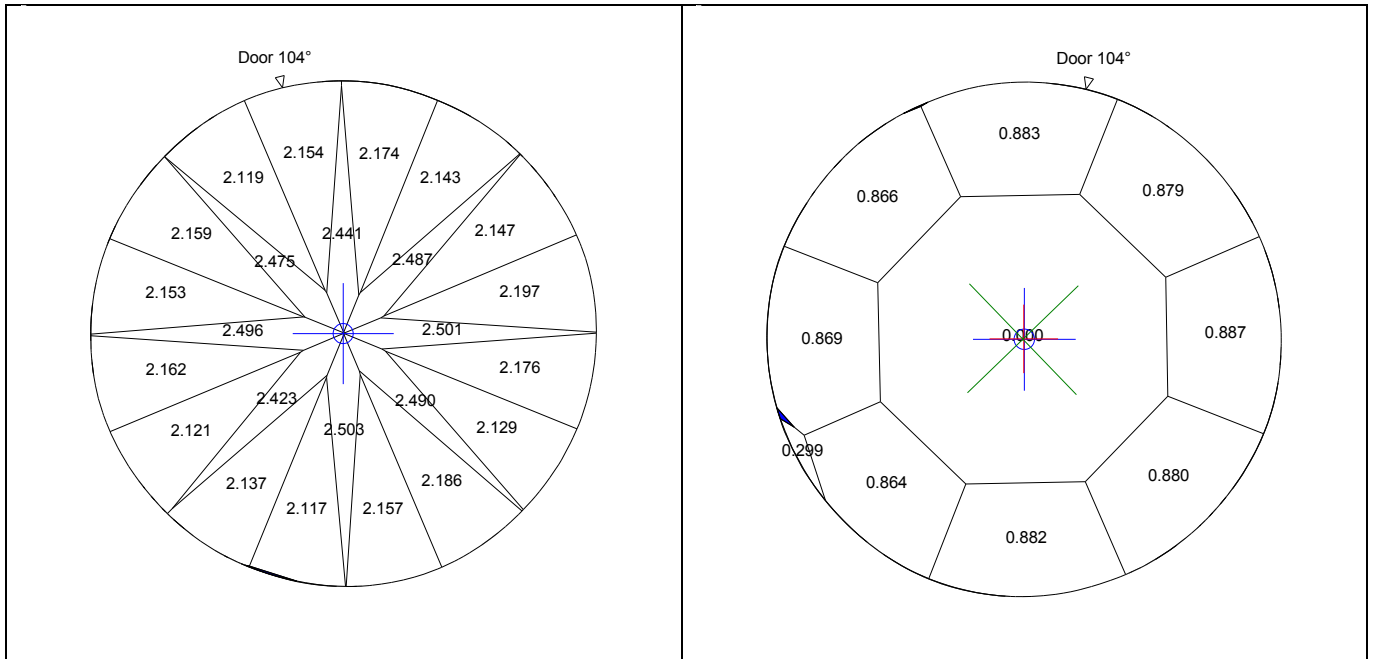


All facets slope angles without breakdown into groups

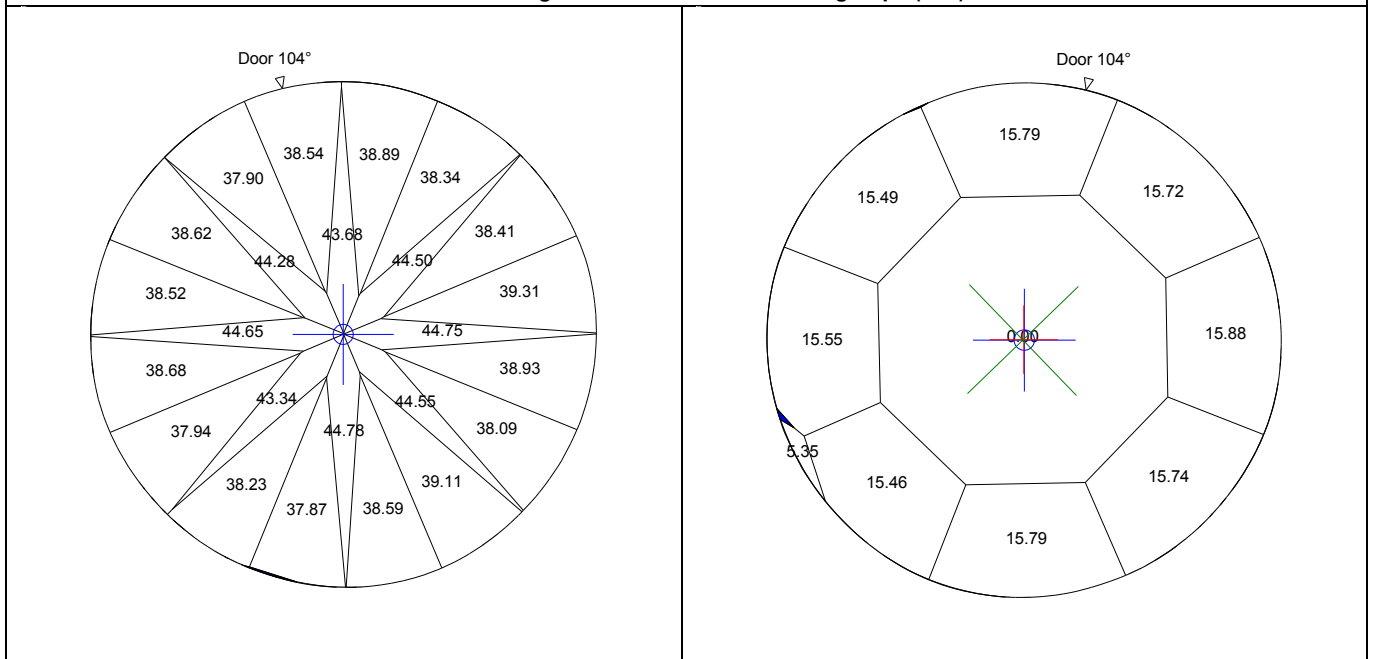


All facets azimuth angles without breakdown into groups

All facets heights without breakdown into groups

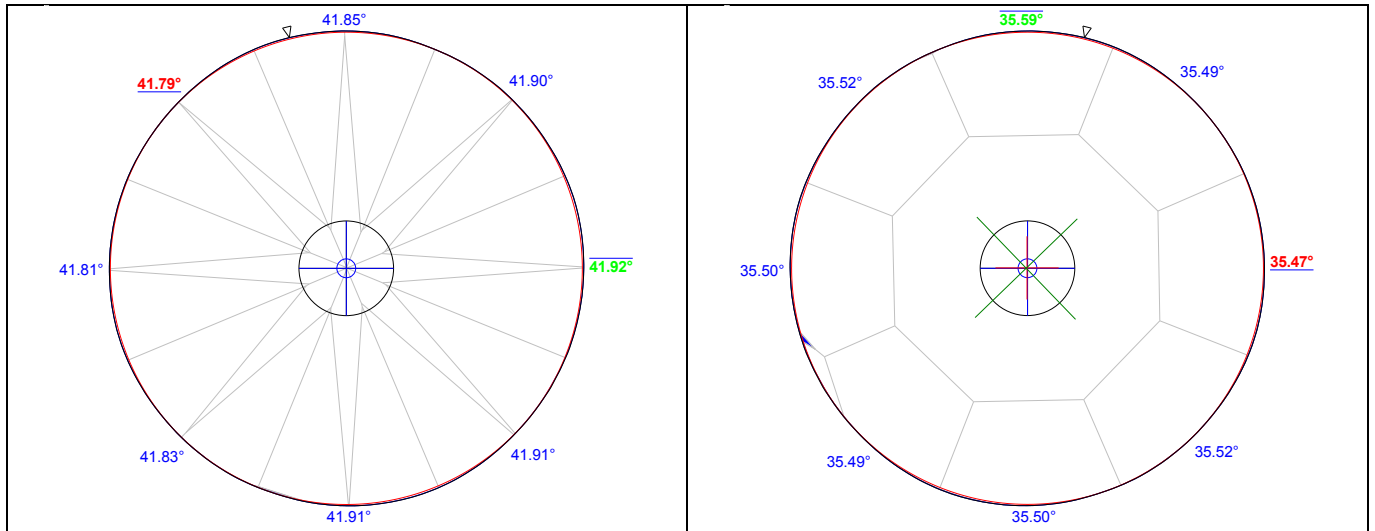


All facets heights without breakdown into groups (mm)

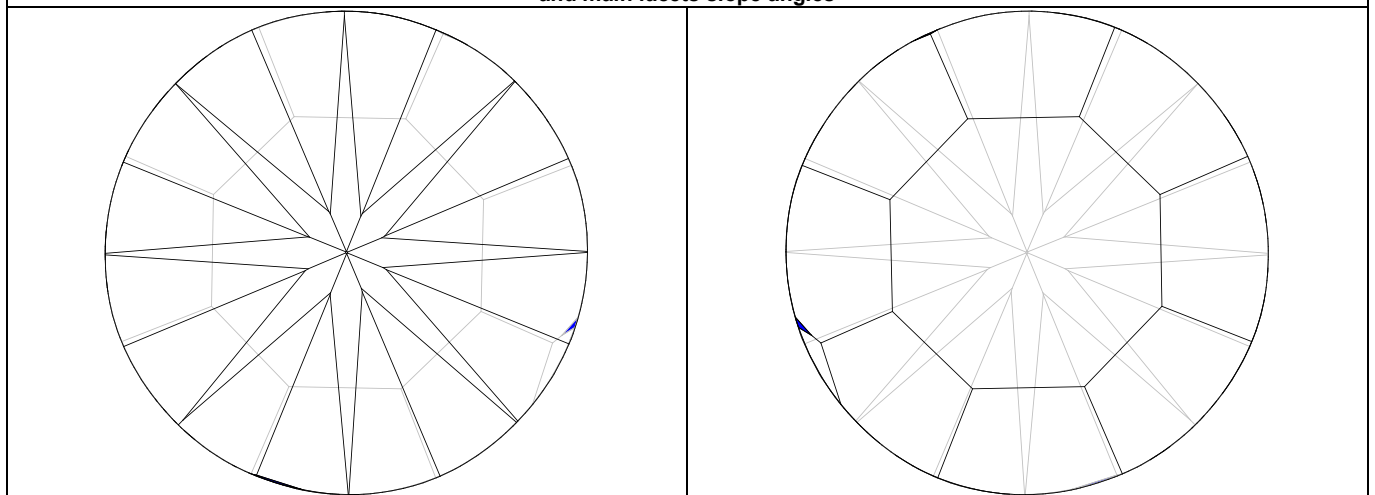


All facets heights without breakdown into groups (%)

Additional illustrations



Pavilion and crown views 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, and main facets slope angles



Pavilion and crown views with indication of invisible edges without refraction



Girdle center



Culet center



Table center



MIC center