2015.11.27 - Helium Polish version 5.6.80.1, report.dll version 2.7.6.1, report templates dd 26.11.2015

Release contains:

File	Version
HeliimPolish.exe	5.6.80.1
report.dll	2.7.6.1
Reports templates	2015-11-26

In this version we made following changes:

1. New parameters and bookmarks are added in reports:
   a. Following parameters are added to Full_report_for_brilliant.rtf (which were presented early in Appraiser Editor HPO panel (Cut and Symmetry Tabs) but absent in Polish Reports):
      i. **Girdle height bezel local Deviation (%)** (GirdleBezelLocal in Appraiser Editor HPO panel)**:**
         GIRDLE_HEIGHT_BEZEL_LOCAL_DEV_PC_AVG
         GIRDLE_HEIGHT_BEZEL_LOCAL_DEV_PC_MIN
         GIRDLE_HEIGHT_BEZEL_LOCAL_DEV_PC_MAX
         GIRDLE_HEIGHT_BEZEL_LOCAL_DEV_PC_DEV
         GIRDLE_HEIGHT_BEZEL_LOCAL_DEV_PC_1..8
      ii. **Girdle height bone local Deviation (%)** (GirdleBoneLocal in Appraiser Editor HPO panel)**:**
         GIRDLE_HEIGHT_BONE_LOCAL_DEV_PC_AVG
         GIRDLE_HEIGHT_BONE_LOCAL_DEV_PC_MIN
         GIRDLE_HEIGHT_BONE_LOCAL_DEV_PC_MAX
         GIRDLE_HEIGHT_BONE_LOCAL_DEV_PC_DEV
         GIRDLE_HEIGHT_BONE_LOCAL_DEV_PC_1..8
      iii. **Girdle height valley local Deviation (%)** (GirdleValleyLocal in Appraiser Editor HPO panel)**:**
         GIRDLE_HEIGHT_VALLEY_LOCAL_DEV_PC_AVG
         GIRDLE_HEIGHT_VALLEY_LOCAL_DEV_PC_MIN
         GIRDLE_HEIGHT_VALLEY_LOCAL_DEV_PC_MAX
         GIRDLE_HEIGHT_VALLEY_LOCAL_DEV_PC_DEV
         GIRDLE_HEIGHT_VALLEY_LOCAL_DEV_PC_1..16
      iv. **Sum painting (°)** (SumPainting in Appraiser Editor HPO panel)**:**
         GIA_SUM_PAINTING_DEG
      v. **Star Facet Twist Symmetry (°)** (StarFacetTwist in Appraiser Editor HPO panel)**:**
         STAR_FACET_TWIST_AVG
         STAR_FACET_TWIST_MIN
         STAR_FACET_TWIST_MAX
         STAR_FACET_TWIST_DEV
         STAR_FACET_TWIST_1..8
      vi. Opposite Azimuth consists of 3 parameters:
         1. **Opposite Azimuth Pavilion (°):**
            PAV_OPPOSITE_AZIMUTH_AVG
            PAV_OPPOSITE_AZIMUTH_MIN
            PAV_OPPOSITE_AZIMUTH_MAX
            PAV_OPPOSITE_AZIMUTH_DEV
            PAV_OPPOSITE_AZIMUTH_1..4
         2. **Opposite Azimuth Crown (°):**
            CRN_OPPOSITE_AZIMUTH_AVG
            CRN_OPPOSITE_AZIMUTH_MIN
            CRN_OPPOSITE_AZIMUTH_MAX
            CRN_OPPOSITE_AZIMUTH_DEV
            CRN_OPPOSITE_AZIMUTH_1..4
         3. **Opposite Azimuth Crown-Pavilion (°):**
            PAV_CRN_OPPOSITE_AZIMUTH_AVG
            PAV_CRN_OPPOSITE_AZIMUTH_MIN
            PAV_CRN_OPPOSITE_AZIMUTH_MAX
            PAV_CRN_OPPOSITE_AZIMUTH_DEV
            PAV_CRN_OPPOSITE_AZIMUTH_1..8

         In Appraiser Editor HPO panel we have **OppositeAzimuth**, it is maximum from last 3 parameters, we will add this parameter in next version.

      vii. **Girdle Angle Max (°)** (GirdleAngleMax in Appraiser Editor HPO panel)**:**
         GIA_GIRDLE_ANGLE_MAX_DEG
      viii.
         1. **Main Crown Facets Azimuth Symm 1 (°):**
            MAIN_CRN_FACET_AZIMUTH_SYM_DEG1
         2. **Main Crown Facets Azimuth Symm 2 (°):**
            MAIN_CRN_FACET_AZIMUTH_SYM_DEG2
      ix.
         1. **Main Pavilion Facets Azimuth Symm 1 (°):**
            MAIN_PAV_FACET_AZIMUTH_SYM_DEG1
         2. **Main Pavilion Facets Azimuth Symm 2 (°):**
            MAIN_PAV_FACET_AZIMUTH_SYM_DEG2
      x.

1. **Star Facets Azimuth Symm 1 (°):**
   STAR_FACET_AZIMUTH_SYM_DEG1
2. **Star Facets Azimuth Symm 2 (°):**
   STAR_FACET_AZIMUTH_SYM_DEG2

These last 3 groups of parameters are separated to 1 (…_DEG1) and 2 (…_DEG2) because in SR we have different grade of deviation for 1st class and 2nd class . 1st class means maximum from maximal deviations between azimuths of concrete facet and neighbouring facets and opposite facets but 2^{n} class means maximum from maximal deviations between azimuths of concrete facet and any other facets from the same group (groups and crown mains, pavilion mains and star facets) .

xi.
1. **Opposite Slope Sum Pavilion (°):**
   PAV_OPPOSITE_SLOP_SUM_AVG
   PAV_OPPOSITE_SLOP_SUM_MIN
   PAV_OPPOSITE_SLOP_SUM_MAX
   PAV_OPPOSITE_SLOP_SUM_DEV
   PAV_OPPOSITE_SLOP_SUM_1..4
2. **Opposite Slope Sum Crown (°):**
   CRN_OPPOSITE_SLOP_SUM_AVG
   CRN_OPPOSITE_SLOP_SUM_MIN
   CRN_OPPOSITE_SLOP_SUM_MAX
   CRN_OPPOSITE_SLOP_SUM_DEV
   CRN_OPPOSITE_SLOP_SUM_1..4

In Appraiser Editor HPO panel we have **OppositeSlopeSum**, it is maximum from Opposite Slope Sum Pavilion and Opposite Slope Sum Crown, we will add this parameter in next version.

Parameter		Avg	Min	Max	Dev	Cut	Sym
Misalignment (ALN)	°	1.93					
Junction Bezel Twist	°	0.49	-1.61	1.93	3.53		
Junction Bezel Twist	mm	0.028	-0.094	0.112	0.206		
Junction Bone Twist	°	0.44	-0.42	0.93	1.35		
Junction Bone Twist	mm	0.026	-0.024	0.054	0.078		
Sum painting	°	-2.35					
Girdle Angle Max	°	3.66					
Main Crown Facets Azimuth Symm 1	°	1.06					
Main Crown Facets Azimuth Symm 2	°	0.88					
Main Pavilion Facets Azimuth Symm 1	°	0.95					
Main Pavilion Facets Azimuth Symm 2	°	0.83					
Star Facets Azimuth Symm 1	°	1.01					
Star Facets Azimuth Symm 2	°	1.33					
Girdle height Bezel local Deviation	%	0.20	0.00	0.38	0.37		
Girdle height Bone local Deviation	%	0.16	0.01	0.26	0.25		
Girdle height Valley local Deviation	%	0.14	0.01	0.33	0.32		
Star Facet Twist Symmetry	°	0.3	-0.2	0.6	0.8		
Opposite Azimuth Pavilion	°	0.6	0.2	0.9	0.8		
Opposite Azimuth Crown	°	0.3	0.0	0.7	0.6		
Opposite Azimuth Crown-Pavilion	°	0.5	0.0	1.1	1.1		
Opposite Slope Sum Pavilion	°	82.6	82.5	82.8	0.2		
Opposite Slope Sum Crown	°	69.4	69.3	69.5	0.2		

b. Parameters Girdle height method (GIRDLE_HEIGHT_METHOD) Girdle center method (GIRDLE_CENTER) for following report templates:
Full_report_for_brilliant.rtf
Full_report_for_cushion.rtf
Full_report_for_princess.rtf
Full_report_for_radiant.rtf
Full_report_for_rounded_fancies.rtf
Full_report_for_semi-polished_princess_rectangular.rtf
Full_report_for_square_radiant.rtf
Full_report_for_step_cuts.rtf

General Information

Model	Simple	Extra Facet Girdle (steep/shallow)	4 (4/0)
Expert name	N/A	Extra Facet Crown	No
Report date	27.11.2015	Extra Facet Pavilion	No
Scale weight, ct		Appraiser title	N/A
Model mass, ct	1.14, 1.1393	Overall cut quality	N/A
Corrected mass, ct	1.1384	Symmetry appraiser title	Symmetry
Spread	-0.03 ct, -2.26%	Overall symmetry quality	VG
AGS Spread	-0.03 ct, -2.41%	Density, g/cm3	3.51524
Girdle height method	Octonus	Rake Girdle angle, °	75.0
Girdle center method	Girdle center mass		

c. Misprint in parameter is fixed: "Dug" should be "Dig" for:
HTML_report_for_brilliant.htm
HTML5_Illustrated_report_for_brilliant.html
Illustrated_report_for_brilliant.rtf
Full_report_for_brilliant.rtf

2. New facets type recognition for cushion with 8 pavilion mains:

Before report.dll version 2.7.4.1	Since report.dll version 2.7.4.1
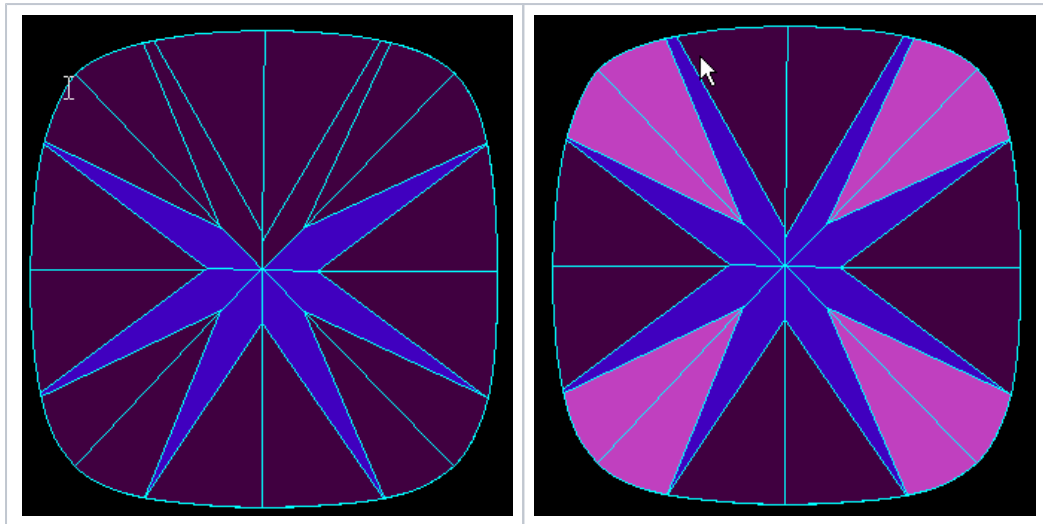
First query regarding support of 8-pavilion mains of Cushion in Export All we will add in next version.

3. Determination of marquise\oval and radiant\princess is improved.
4. Improvement of 2-fold axis symmetry pictures – now program uses ideal "net" of azimuths instead of zero azimuth of first facet.

Before report.dll version 2.7.5.1	Since report.dll version 2.7.5.1
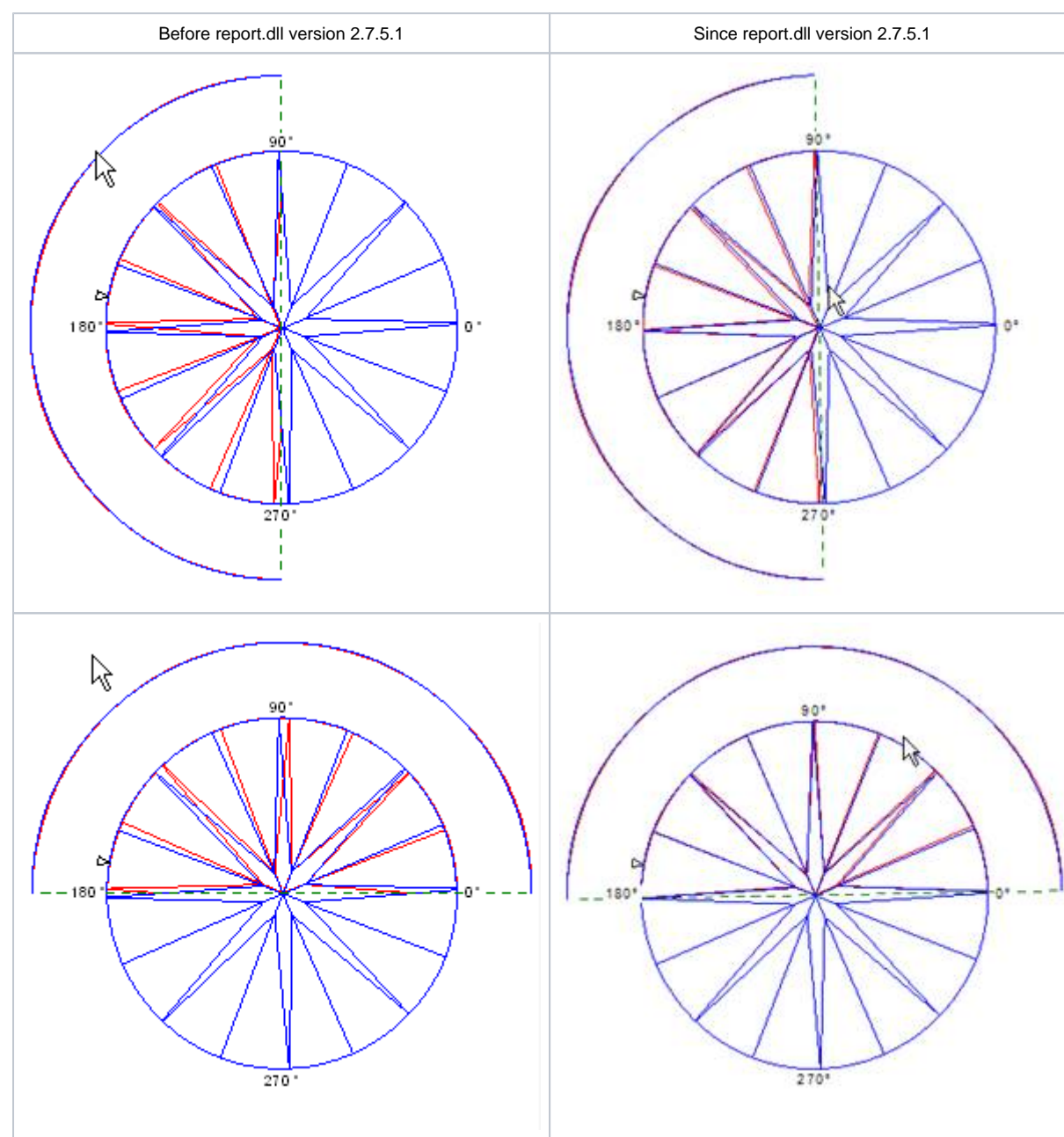
5. Girdle center for models of Heart with groove calculation is improved.

6. Since this version we keep settings of "GIA Heights" and "Girdle Center" and "Decimal Digits" boxes in System Registry of HPP, before it was in Windows registry.