

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General	5
4.1 The use of the word “diamond”.....	5
4.2 Composite stones/assembled stones.....	6
5 Mass and measurements	6
5.1 Mass.....	6
5.2 Measurements.....	6
6 Colour	6
6.1 General.....	6
6.1.1 Colourless to yellow, brown and grey (D to L).....	6
6.1.2 Colourless to yellow, brown and grey (M to Z).....	7
6.1.3 Other hues.....	7
6.2 Colour grades (colourless to yellow, brown and grey).....	7
6.3 Colour grades (other than for yellow, brown and grey).....	7
6.4 Fluorescence.....	9
7 Clarity	10
7.1 General.....	10
7.2 Clarity grades.....	10
7.3 Clarity characteristics.....	10
7.4 Laser drilling.....	10
8 Cut	12
8.1 Cut characteristics.....	12
8.2 Shape.....	12
8.3 Proportions.....	12
8.3.1 Description.....	12
8.3.2 Basis for descriptions of proportions.....	12
8.3.3 Table size (percentage).....	13
8.3.4 Crown height (percentage) and/or crown angle (degrees).....	13
8.3.5 Pavilion depth (percentage) and/or pavilion angle (degrees).....	13
8.3.6 Girdle thickness (percentage) and description.....	13
8.3.7 Culet size (percentage) and description.....	14
8.3.8 Total depth/height.....	14
8.3.9 Proportions comment.....	14
8.4 Finish.....	17
8.4.1 Polish.....	17
8.4.2 Symmetry.....	17
9 Identification	18
10 Testing mass and measurements	18
10.1 Testing mass.....	18
10.2 Testing measurements.....	18
11 Testing and grading colour and fluorescence	18
11.1 Cleaning of masterstones.....	18
11.2 Masterstones for colour.....	18
11.3 Procedure.....	19
11.3.1 Precautions.....	19
11.3.2 Cleaning.....	19

11.3.3	Comparisons.....	19
11.3.4	Round stones.....	19
11.3.5	Fancy shapes.....	19
11.3.6	Colours.....	19
11.3.7	Lighting.....	19
11.3.8	Positioning.....	19
11.3.9	The grade.....	20
11.3.10	Master-eye effect.....	21
11.4	Description of fluorescence.....	22
11.4.1	Equipment and References.....	22
11.4.2	Masterstones for fluorescence.....	22
11.4.3	Working conditions and methodology.....	22
11.4.4	Fluorescence, other than blue.....	22
12	Testing and grading clarity.....	23
12.1	General.....	23
12.2	Apparatus.....	23
12.3	Procedure.....	23
12.3.1	General.....	23
12.3.2	Lighting.....	23
12.3.3	Distance.....	23
12.3.4	Plotting.....	23
12.3.5	Plotting symbols.....	25
12.3.6	Laser drill holes.....	27
12.3.7	Surface grain lines.....	27
12.3.8	Internal graining.....	28
12.3.9	General.....	28
13	Testing shape.....	28
14	Testing and grading proportions.....	28
14.1	Appropriate instruments.....	28
14.2	Description.....	28
14.2.1	Table sizes.....	28
14.2.2	Crown height.....	28
14.2.3	Pavilion depth.....	29
14.2.4	Girdle thickness.....	29
14.2.5	Culet size.....	29
14.3	Proportions comments.....	29
15	Grading of symmetry and polish (Finish).....	29
15.1	Symmetry.....	29
15.2	Polish.....	31
16	Expression of results.....	32
17	Comments.....	32
18	Diamond grading report.....	33
Annex A (normative) Clarity, polish and symmetry characteristics.....		35
Annex B (informative) Clarity examples.....		38
Bibliography.....		55