

Data for study diamonds not listed in Table 1, to accompany:

A. Gilbertson et al., "Cutting diffraction gratings to improve dispersion ("fire") in diamonds," Winter 2009 *G&G*, pp. 260–270.

Number	GIA CUT GRADE*	PATTERN STYLE	WEIGHT	TABLE %	CROWN ANGLE	PAVILION ANGLE	STAR LENGTH %	LOWER HALF LENGTH %	GIRDLE MINIMUM	GIRDLE MAXIMUM	GIRDLE %	CULET SIZE	POLISH	SYMMETRY
1	NA	entire pav	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	NA	entire pav	0.07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	NA	entire pav	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	NA	entire pav	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	NA	entire pav	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	VG	A	0.40	59	35.5	40.8	50	80	MEDIUM	SLIGHTLY THICK	4.5	NONE	VG	VG
7	VG	A	0.37	59	37	40.6	55	85	MEDIUM	SLIGHTLY THICK	4.5	NONE	VG	VG
8	VG	A	0.40	59	36	41.4	50	85	THICK	SLIGHTLY THICK	6	NONE	VG	G
9	VG	A	0.38	56	36	41	60	85	SLIGHTLY THICK	SLIGHTLY THICK	4.5	NONE	VG	G
10	G	A	0.38	54	37.5	42	60	80	MEDIUM	SLIGHTLY THICK	4	NONE	VG	G
11	G	A	0.39	54	37.5	40.8	65	80	SLIGHTLY THICK	SLIGHTLY THICK	5	NONE	VG	G
12	VG	A	0.44	59	37	41	55	80	SLIGHTLY THICK	SLIGHTLY THICK	4	NONE	VG	VG
13	VG	A	0.38	58	37	41.2	50	85	MEDIUM	SLIGHTLY THICK	3.5	NONE	VG	G
14	VG	A	0.38	59	37.5	40.8	60	85	MEDIUM	SLIGHTLY THICK	3.5	NONE	VG	VG
15	G	A	0.38	67	34.5	41	45	85	THICK	VERY THICK	6	NONE	VG	G
16	VG	A	0.42	52	33.5	41	55	80	MEDIUM	SLIGHTLY THICK	3.5	NONE	VG	G
17	VG	A	0.42	56	34	41.2	60	85	MEDIUM	SLIGHTLY THICK	4	NONE	VG	G
18	VG	A	0.37	62	31.5	41	45	85	MEDIUM	MEDIUM	3.5	NONE	VG	G
19	VG	A	0.41	56	33	41.2	50	80	THIN	THIN	2.5	VERY SMALL	VG	G

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20	VG	A	0.37	58	37	40.6	65	85	SLIGHTLY THICK	SLIGHTLY THICK	4	NONE	VG	G
21	G	A	0.37	57	37.5	41.6	45	85	SLIGHTLY THICK	THICK	4.5	NONE	VG	G
22	VG	A	0.38	58	35.5	41	50	85	MEDIUM	SLIGHTLY THICK	3.5	NONE	VG	G
23	VG	A	0.40	59	35.5	41.2	45	85	THIN	MEDIUM	3	NONE	VG	G
24	VG	A	0.37	59	35	41	55	85	SLIGHTLY THICK	THICK	4.5	VERY SMALL	VG	G
25	VG	A	0.44	62	33.5	42	45	80	THICK	THICK	5.5	NONE	VG	G
26	VG	A	0.42	63	34.5	40.6	45	85	MEDIUM	MEDIUM	3.5	NONE	VG	G
27	VG	A	0.43	57	35	41	60	75	MEDIUM	SLIGHTLY THICK	4	NONE	VG	G
28	G	A	0.38	60	38	40.6	45	85	THICK	VERY THICK	6.5	NONE	VG	G
29	G	A	0.38	60	37	41.6	55	85	MEDIUM	SLIGHTLY THICK	4.5	NONE	VG	G
30	VG	A	0.45	58	36.5	41	45	80	SLIGHTLY THICK	SLIGHTLY THICK	4.5	NONE	VG	G
31	VG	A	0.43	59	35.5	41.4	40	80	MEDIUM	SLIGHTLY THICK	4.5	NONE	VG	VG
34	VG	D	0.45	65	32	41	60	85	THIN	THIN	2	NONE	VG	VG
35	G	B	0.44	60	38	42	55	80	SLIGHTLY THICK	THICK	5.5	NONE	VG	VG
36	VG	E	0.47	59	33.5	40.6	55	80	MEDIUM	MEDIUM	3	NONE	VG	VG
38	EX	F	0.52	56	34	40.8	55	80	MEDIUM	MEDIUM	3.5	NONE	VG	EX
39	EX	F	0.51	55	34	40.8	55	75	MEDIUM	MEDIUM	2.5	VERY SMALL	EX	EX
40	EX	F	0.41	55	35	40.8	55	80	MEDIUM	MEDIUM	3.5	VERY SMALL	EX	EX
41	EX	C	2.30	57	35	41.2	55	85	THIN	MEDIUM	3	VERY SMALL	EX	EX
42	Octagon	Variation of C	0.43	72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

* Equivalent GIA Cut Grades are used for the plasma etched diamonds, based on proportions, polish, and symmetry. In practice, plasma-etched diamonds do not receive GIA cut grades.