Tables of Terminal Fano 4-folds

This is a supplement to the article titled "Terminal Fano 4-folds in low codimension," which is currently under review for publication in a journal. Below, we explain the notations used in the accompanying tables.

- $X_I \subset \mathbb{P}(W)$ represents a variety defined by equations of weighted degrees specified by the sequence I, within the weighted projective space characterized by weights given in the sequence W.
- The anti-canonical degree $-K_X^4$ is given in the first row of Table 1 and in the third column of Tables 2, 3, and 4.
- The column $\mathcal{B}$ represents the basket of singular points of X, as shown in Tables 2, 3, and 4. Moreover, for each case in Table 1, it is listed in the second row.
- In Tables 3 and 4, the last column displays the matrix of weights, which provides the weights of the ambient weighted projective space containing $\mathrm{wGr}(2,5)$ or the weighted $\mathbb{P}^1 \times \mathbb{P}^1$ variety.

Table 1: Complete intersection ITF4s of Type-I

S.No	ITF4 (X, $-K_X^4$, Basket $\mathcal{B}$)
1	$X_{16,18} \subset \mathbb{P}(2,3^2,4,5,7,11)$; $\frac{4}{385}$
	$6 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,2,3,4), \frac{1}{7}(3,3,4,5), \frac{1}{11}(2,3,3,4)$
2	$X_{18,20} \subset \mathbb{P}(2,3,4,5^2,7,13)$; $\frac{3}{455}$
	$4 \times \frac{1}{5}(2,2,3,4), \frac{1}{7}(2,3,5,5), \frac{1}{13}(2,3,4,5)$
3	$X_{16,24} \subset \mathbb{P}(2,3^2,4,5,11,13)$; $\frac{16}{2145}$
	$8 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,3,3,3), \frac{1}{11}(2,3,3,4), \frac{1}{13}(2,3,4,5)$
4	$X_{18,24} \subset \mathbb{P}(2,3,5,6,7,9,11)$; $\frac{4}{1155}$
	$8 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(1,1,2,2), \frac{1}{7}(2,2,5,6), \frac{1}{11}(3,5,6,9)$
5	$X_{18,24} \subset \mathbb{P}(2,3^2,7,8,9,11)$; $\frac{1}{231}$
	$16 \times \frac{1}{3}(1,2,2,2), \frac{1}{7}(1,2,2,3), \frac{1}{11}(3,3,8,9)$
6	$X_{22,24} \subset \mathbb{P}(2,3^2,4,5,11,19)$; $\frac{2}{285}$

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	$8 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(1,3,3,4), \frac{1}{19}(2,3,4,11)$
7	$X_{22,24} \subset \mathbb{P}(2,3^2,5,7,8,19); \quad \frac{11}{1995}$
	$8 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,3,3,3), \frac{1}{7}(2,3,5,5), \frac{1}{19}(2,3,7,8)$
8	$X_{20,26} \subset \mathbb{P}(2,3,4,5,7,13^2); \quad \frac{1}{273}$
	$\frac{1}{3}(1,1,1,1), \frac{1}{7}(2,3,4,6), 2 \times \frac{1}{13}(2,3,4,5)$
9	$X_{18,28} \subset \mathbb{P}(2,3,5,6,7,11,13); \quad \frac{2}{715}$
	$3 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(1,1,2,2), \frac{1}{11}(2,2,3,5), \frac{1}{13}(3,6,7,11)$
10	$X_{20,28} \subset \mathbb{P}(2,3,5^2,7,13,14); \quad \frac{4}{1365}$
	$\frac{1}{3}(1,2,2,2), 4 \times \frac{1}{5}(2,2,3,4), 2 \times \frac{1}{7}(2,3,5,5), \frac{1}{13}(1,3,5,5)$
11	$X_{24,26} \subset \mathbb{P}(2,3,4,5,7,11,19); \quad \frac{26}{7315}$
	$\frac{1}{5}(2,2,3,4), \frac{1}{7}(2,4,4,5), \frac{1}{11}(3,5,7,8), \frac{1}{19}(2,3,4,11)$
12	$X_{24,26} \subset \mathbb{P}(2,3,4,5,11,13^2); \quad \frac{2}{715}$
	$\frac{1}{5}(2,3,3,3), \frac{1}{11}(2,2,3,5), 2 \times \frac{1}{13}(2,3,4,5)$
13	$X_{20,30} \subset \mathbb{P}(2,3,4,5,7,13,17); \quad \frac{5}{1547}$
	$\frac{1}{7}(3,3,4,5), \frac{1}{13}(2,3,4,5), \frac{1}{17}(2,4,5,7)$
14	$X_{18,33} \subset \mathbb{P}(2,3,5,7,11^2,13); \quad \frac{9}{5005}$
	$\frac{1}{5}(1,1,2,2), \frac{1}{7}(2,3,4,6), 3 \times \frac{1}{11}(2,2,3,5), \frac{1}{13}(2,3,11,11)$
15	$X_{22,30} \subset \mathbb{P}(2,3^2,5,10,11,19); \quad \frac{1}{285}$
	$10 \times \frac{1}{3}(1,2,2,2), 3 \times \frac{1}{5}(1,3,3,4), \frac{1}{19}(2,3,5,10)$
16	$X_{22,30} \subset \mathbb{P}(2^2,3,5,11^2,19); \quad \frac{1}{209}$
	$2 \times \frac{1}{11}(2,2,3,5), \frac{1}{19}(2,2,5,11)$

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17	$X_{18,35} \subset \mathbb{P}(2,5,7^2,9,11,13)$;	$\frac{1}{1001}$
	$5 \times \frac{1}{7}(2,2,5,6), \frac{1}{11}(2,5,7,9), \frac{1}{13}(2,7,7,11)$	
18	$X_{24,30} \subset \mathbb{P}(2,3,5,7,8,11,19)$;	$\frac{3}{1463}$
	$\frac{1}{7}(1,4,5,5), \frac{1}{11}(3,5,7,8), \frac{1}{19}(2,3,7,8)$	
19	$X_{24,30} \subset \mathbb{P}(2,3,7,8,9,11,15)$;	$\frac{1}{693}$
	$5 \times \frac{1}{3}(1,2,2,2), \frac{1}{7}(1,1,2,4), \frac{1}{9}(2,2,7,8), \frac{1}{11}(3,4,7,9)$	
20	$X_{28,30} \subset \mathbb{P}(2,3,5,7,9,10,23)$;	$\frac{2}{1035}$
	$3 \times \frac{1}{3}(1,2,2,2), 3 \times \frac{1}{5}(2,2,3,4), \frac{1}{9}(2,5,5,7), \frac{1}{23}(2,3,9,10)$	
21	$X_{28,30} \subset \mathbb{P}(2,3,4,5,7,13,25)$;	$\frac{1}{325}$
	$\frac{1}{5}(2,2,3,4), \frac{1}{13}(3,5,7,12), \frac{1}{25}(2,4,7,13)$	
22	$X_{28,30} \subset \mathbb{P}(3^2,4,5,7,14,23)$;	$\frac{1}{483}$
	$10 \times \frac{1}{3}(1,2,2,2), 2 \times \frac{1}{7}(3,3,4,5), \frac{1}{23}(3,3,4,14)$	
23	$X_{28,30} \subset \mathbb{P}(2,3,4,5,7,15,23)$;	$\frac{1}{345}$
	$2 \times \frac{1}{3}(1,2,2,2), 2 \times \frac{1}{5}(2,2,3,4), \frac{1}{23}(2,3,4,15)$	
24	$X_{28,30} \subset \mathbb{P}(3,4,5,7^2,10,23)$;	$\frac{1}{805}$
	$3 \times \frac{1}{5}(2,2,3,4), 4 \times \frac{1}{7}(3,3,4,5), \frac{1}{23}(3,4,7,10)$	
25	$X_{28,30} \subset \mathbb{P}(2,3,5^2,7,14,23)$;	$\frac{2}{805}$
	$6 \times \frac{1}{5}(2,2,3,4), 2 \times \frac{1}{7}(2,3,5,5), \frac{1}{23}(2,3,5,14)$	
26	$X_{22,36} \subset \mathbb{P}(2^2,3,5,11,17,19)$;	$\frac{6}{1615}$
	$\frac{1}{5}(2,2,3,4), \frac{1}{17}(2,2,3,11), \frac{1}{19}(2,2,5,11)$	
27	$X_{20,39} \subset \mathbb{P}(2,3,5,9,11,13,17)$;	$\frac{2}{1683}$

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	$4 \times \frac{1}{3}(1,2,2,2), \frac{1}{9}(2,4,5,8), \frac{1}{11}(2,2,3,5), \frac{1}{17}(2,9,11,13)$
28	$X_{22,38} \subset \mathbb{P}(2^2,3,5,11,19^2)$; $\frac{1}{285}$
	$\frac{1}{3}(1,2,2,2), \frac{1}{5}(1,2,4,4), 2 \times \frac{1}{19}(2,2,5,11)$
29	$X_{30,32} \subset \mathbb{P}(3^2,4,10,11,13,19)$; $\frac{8}{8151}$
	$10 \times \frac{1}{3}(1,1,1,1), \frac{1}{11}(2,3,3,4), \frac{1}{13}(3,3,10,11), \frac{1}{19}(3,3,4,10)$
30	$X_{24,38} \subset \mathbb{P}(2,3,4,5,11,19^2)$; $\frac{2}{1045}$
	$\frac{1}{5}(1,2,4,4), \frac{1}{11}(3,4,8,8), 2 \times \frac{1}{19}(2,3,4,11)$
31	$X_{20,42} \subset \mathbb{P}(3,4,5,7,10,13,21)$; $\frac{1}{1365}$
	$2 \times \frac{1}{3}(1,1,1,1), 2 \times \frac{1}{5}(1,3,3,4), 2 \times \frac{1}{7}(3,3,4,5), \frac{1}{13}(4,5,8,10)$
32	$X_{28,36} \subset \mathbb{P}(2,5,6,7,9,13,23)$; $\frac{4}{4485}$
	$2 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,2,3,4), \frac{1}{13}(5,6,7,9), \frac{1}{23}(2,6,7,9)$
33	$X_{28,36} \subset \mathbb{P}(2,3,4,9,11,17,19)$; $\frac{14}{10659}$
	$4 \times \frac{1}{3}(1,2,2,2), \frac{1}{11}(2,4,8,9), \frac{1}{17}(2,3,4,9), \frac{1}{19}(2,3,4,11)$
34	$X_{26,38} \subset \mathbb{P}(2^2,3,7,13,19^2)$; $\frac{1}{399}$
	$\frac{1}{3}(1,1,1,1), \frac{1}{7}(2,2,5,6), 2 \times \frac{1}{19}(2,2,3,13)$
35	$X_{30,36} \subset \mathbb{P}(2,3,4,7,13,15,23)$; $\frac{3}{2093}$
	$\frac{1}{7}(2,3,4,6), \frac{1}{13}(2,2,3,7), \frac{1}{23}(2,3,4,15)$
36	$X_{30,38} \subset \mathbb{P}(2^2,3,5,11,19,27)$; $\frac{1}{297}$
	$\frac{1}{3}(1,2,2,2), \frac{1}{11}(2,2,3,5), \frac{1}{27}(2,2,5,19)$
37	$X_{30,38} \subset \mathbb{P}(2,3,5,10,11,19^2)$; $\frac{1}{1045}$
	$3 \times \frac{1}{5}(1,2,4,4), \frac{1}{11}(2,3,8,10), 2 \times \frac{1}{19}(2,3,5,10)$

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38	$X_{28,40} \subset \mathbb{P}(2,5,7,9,13,14,19)$;	$\frac{8}{15561}$
	$2 \times \frac{1}{7}(2,2,5,6), \frac{1}{9}(2,5,5,7), \frac{1}{13}(5,6,7,9), \frac{1}{19}(5,7,13,14)$	
39	$X_{28,40} \subset \mathbb{P}(2,4,5,7,11,17,23)$;	$\frac{4}{4301}$
	$\frac{1}{11}(1,2,4,5), \frac{1}{17}(2,4,5,7), \frac{1}{23}(2,4,7,11)$	
40	$X_{26,42} \subset \mathbb{P}(2^2,3,7,13,19,23)$;	$\frac{1}{437}$
	$\frac{1}{19}(2,2,3,13), \frac{1}{23}(2,2,7,13)$	
41	$X_{34,36} \subset \mathbb{P}(2,3,4,5,9,17,31)$;	$\frac{1}{465}$
	$4 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,2,3,4), \frac{1}{31}(2,4,9,17)$	
42	$X_{34,36} \subset \mathbb{P}(3,4,5,6,7,17,29)$;	$\frac{1}{1015}$
	$6 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,2,3,4), \frac{1}{7}(3,3,4,5), \frac{1}{29}(3,4,6,17)$	
43	$X_{32,38} \subset \mathbb{P}(2^2,3,7,13,19,25)$;	$\frac{16}{6825}$
	$\frac{1}{3}(1,1,1,1), \frac{1}{7}(2,2,5,6), \frac{1}{13}(2,2,3,7), \frac{1}{25}(2,2,3,19)$	
44	$X_{28,42} \subset \mathbb{P}(2,5,6,7,9,19,23)$;	$\frac{14}{19665}$
	$2 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(1,2,4,4), \frac{1}{9}(2,5,5,7), \frac{1}{19}(2,5,6,7), \frac{1}{23}(2,6,7,9)$	
45	$X_{26,44} \subset \mathbb{P}(3,4,5,11,13^2,22)$;	$\frac{1}{2145}$
	$\frac{1}{3}(1,1,1,1), \frac{1}{5}(2,3,3,3), 2 \times \frac{1}{11}(2,2,3,5), 2 \times \frac{1}{13}(3,4,9,11)$	
46	$X_{24,46} \subset \mathbb{P}(2,3,7,11,12,13,23)$;	$\frac{2}{3003}$
	$2 \times \frac{1}{3}(1,2,2,2), \frac{1}{7}(2,2,5,6), \frac{1}{11}(1,1,3,7), \frac{1}{13}(2,3,10,12)$	
47	$X_{32,40} \subset \mathbb{P}(3,5,7,8,10,11,29)$;	$\frac{16}{33495}$
	$\frac{1}{3}(1,2,2,2), 4 \times \frac{1}{5}(1,3,3,4), \frac{1}{7}(1,1,3,3), \frac{1}{11}(3,5,7,8), \frac{1}{29}(5,7,8,10)$	
48	$X_{30,42} \subset \mathbb{P}(2,3,5,7,14,15,27)$;	$\frac{1}{945}$

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	$3 \times \frac{1}{3}(1,2,2,2), 2 \times \frac{1}{5}(2,2,3,4), 3 \times \frac{1}{7}(1,3,5,6), \frac{1}{27}(2,5,7,14)$
49	$X_{28,44} \subset \mathbb{P}(2,4,5,7,11,21,23)$; $\frac{2}{2415}$
	$\frac{1}{5}(1,1,2,2), \frac{1}{7}(2,4,4,5), \frac{1}{21}(2,4,5,11), \frac{1}{23}(2,4,7,11)$
50	$X_{36,40} \subset \mathbb{P}(3,4,5,7,11,18,29)$; $\frac{4}{6699}$
	$2 \times \frac{1}{3}(1,2,2,2), \frac{1}{7}(3,4,4,4), \frac{1}{11}(4,5,7,7), \frac{1}{29}(3,4,5,18)$
51	$X_{36,40} \subset \mathbb{P}(5^2,7,8,9,12,31)$; $\frac{1}{3255}$
	$\frac{1}{3}(1,2,2,2), 8 \times \frac{1}{5}(2,2,3,4), \frac{1}{7}(2,3,5,5), \frac{1}{31}(5,7,8,12)$
52	$X_{36,40} \subset \mathbb{P}(2,3,5,7,11,20,29)$; $\frac{12}{11165}$
	$2 \times \frac{1}{5}(2,2,3,4), \frac{1}{7}(2,3,4,6), \frac{1}{11}(2,5,7,9), \frac{1}{29}(2,3,5,20)$
53	$X_{36,40} \subset \mathbb{P}(3,5,7,10,11,12,29)$; $\frac{4}{11165}$
	$3 \times \frac{1}{3}(1,2,2,2), 4 \times \frac{1}{5}(2,2,3,4), \frac{1}{7}(3,3,4,5), \frac{1}{11}(1,5,7,10), \frac{1}{29}(3,5,10,12)$
54	$X_{20,56} \subset \mathbb{P}(3,4,5,7,13,17,28)$; $\frac{2}{4641}$
	$\frac{1}{3}(1,1,1,1), 2 \times \frac{1}{7}(3,3,4,5), \frac{1}{13}(2,3,4,5), \frac{1}{17}(4,7,11,13)$
55	$X_{38,40} \subset \mathbb{P}(2,4,5,9,11,19,29)$; $\frac{2}{2871}$
	$\frac{1}{9}(1,2,2,5), \frac{1}{11}(2,4,8,9), \frac{1}{29}(2,4,5,19)$
56	$X_{36,42} \subset \mathbb{P}(3,4,5,7,11,18,31)$; $\frac{1}{1705}$
	$\frac{1}{5}(1,3,3,4), \frac{1}{11}(4,5,7,7), \frac{1}{31}(3,4,7,18)$
57	$X_{30,49} \subset \mathbb{P}(2,3,7,13,15,17,23)$; $\frac{7}{15249}$
	$2 \times \frac{1}{3}(1,2,2,2), \frac{1}{13}(2,2,3,7), \frac{1}{17}(2,3,6,7), \frac{1}{23}(2,13,15,17)$
58	$X_{40,42} \subset \mathbb{P}(3^2,5,8,13,14,37)$; $\frac{1}{1443}$
	$14 \times \frac{1}{3}(1,2,2,2), \frac{1}{13}(3,5,8,11), \frac{1}{37}(3,8,13,14)$

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59	$X_{40,42} \subset \mathbb{P}(2,3,5,7,8,21,37)$;	$\frac{1}{777}$
	$2 \times \frac{1}{3}(1,2,2,2), 2 \times \frac{1}{7}(1,2,2,3), \frac{1}{37}(2,7,8,21)$	
60	$X_{34,48} \subset \mathbb{P}(2,3,5,9,16,17,31)$;	$\frac{1}{1395}$
	$5 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(1,1,2,2), \frac{1}{9}(2,4,5,8), \frac{1}{31}(2,5,9,16)$	
61	$X_{30,54} \subset \mathbb{P}(2,3,5,13,17,18,27)$;	$\frac{1}{1989}$
	$3 \times \frac{1}{3}(1,2,2,2), \frac{1}{9}(2,4,5,8), \frac{1}{13}(1,3,5,5), \frac{1}{17}(1,2,5,10)$	
62	$X_{42,44} \subset \mathbb{P}(2,4,5,7,11,21,37)$;	$\frac{1}{1295}$
	$\frac{1}{5}(1,1,2,2), 2 \times \frac{1}{7}(2,4,4,5), \frac{1}{37}(2,4,11,21)$	
63	$X_{42,44} \subset \mathbb{P}(2,5,6,11,19,21,23)$;	$\frac{2}{6555}$
	$\frac{1}{3}(1,2,2,2), \frac{1}{5}(1,1,1,3), \frac{1}{19}(2,2,5,11), \frac{1}{23}(2,5,6,11)$	
64	$X_{42,44} \subset \mathbb{P}(3,4,11^2,13,14,31)$;	$\frac{1}{4433}$
	$4 \times \frac{1}{11}(2,3,3,4), \frac{1}{13}(1,4,11,11), \frac{1}{31}(3,4,11,14)$	
65	$X_{38,48} \subset \mathbb{P}(3,4,6,7,17,19,31)$;	$\frac{4}{11067}$
	$8 \times \frac{1}{3}(1,1,1,1), \frac{1}{7}(3,3,4,5), \frac{1}{17}(2,3,6,7), \frac{1}{31}(3,4,6,19)$	
66	$X_{42,46} \subset \mathbb{P}(2,5,6,7,9,23,37)$;	$\frac{1}{1665}$
	$2 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,2,3,4), \frac{1}{9}(2,5,5,7), \frac{1}{37}(2,6,7,23)$	
67	$X_{36,52} \subset \mathbb{P}(2,3,7,12,13,23,29)$;	$\frac{2}{4669}$
	$3 \times \frac{1}{3}(1,2,2,2), \frac{1}{7}(2,2,5,6), \frac{1}{23}(2,3,7,12), \frac{1}{29}(2,3,12,13)$	
68	$X_{44,46} \subset \mathbb{P}(2,4,5,11,13,23,33)$;	$\frac{1}{2145}$
	$\frac{1}{5}(2,3,3,3), \frac{1}{11}(1,2,4,5), \frac{1}{13}(2,4,10,11), \frac{1}{33}(2,4,5,23)$	
69	$X_{44,46} \subset \mathbb{P}(2,4,5,7,11,23,39)$;	$\frac{1}{1365}$

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	$\frac{1}{5}(2,2,3,4), \frac{1}{7}(2,4,4,5), \frac{1}{39}(2,4,11,23)$
70	$X_{34,56} \subset \mathbb{P}(4,5,13,14,17^2,21)$; $\frac{2}{23205}$
	$\frac{1}{5}(2,2,3,4), \frac{1}{7}(3,3,4,5), \frac{1}{13}(1,4,4,5), 2\times\frac{1}{17}(4,4,13,14), \frac{1}{21}(4,5,17,17)$
71	$X_{24,66} \subset \mathbb{P}(2,5,9,11,12,19,33)$; $\frac{2}{9405}$
	$\frac{1}{3}(1,2,2,2), \frac{1}{5}(2,2,3,4), \frac{1}{9}(1,2,2,5), 2\times\frac{1}{11}(1,5,8,9), \frac{1}{19}(2,11,12,14)$
72	$X_{22,68} \subset \mathbb{P}(2,3,5,11,17,19,34)$; $\frac{2}{4845}$
	$\frac{1}{3}(1,2,2,2), \frac{1}{5}(1,2,4,4), 2\times\frac{1}{17}(2,2,3,11), \frac{1}{19}(2,5,15,17)$
73	$X_{44,48} \subset \mathbb{P}(2,3,5,7,11,24,41)$; $\frac{4}{4305}$
	$2\times\frac{1}{3}(1,2,2,2), \frac{1}{5}(1,1,2,2), \frac{1}{7}(3,3,4,5), \frac{1}{41}(2,5,11,24)$
74	$X_{40,54} \subset \mathbb{P}(2,3,4,5,19,27,35)$; $\frac{2}{1995}$
	$2\times\frac{1}{3}(1,2,2,2), \frac{1}{5}(2,2,3,4), \frac{1}{19}(3,4,5,8), \frac{1}{35}(2,3,4,27)$
75	$X_{40,54} \subset \mathbb{P}(2,3,5,8,17,23,37)$; $\frac{9}{14467}$
	$\frac{1}{17}(2,3,5,8), \frac{1}{23}(2,3,5,14), \frac{1}{37}(2,5,8,23)$
76	$X_{36,60} \subset \mathbb{P}(4,5,7,9,12,29,31)$; $\frac{1}{6293}$
	$\frac{1}{7}(2,3,5,5), \frac{1}{29}(4,5,9,12), \frac{1}{31}(4,7,9,12)$
77	$X_{36,60} \subset \mathbb{P}(3,4,5,7,18,29,31)$; $\frac{2}{6293}$
	$\frac{1}{7}(3,3,4,5), \frac{1}{29}(3,4,5,18), \frac{1}{31}(3,4,7,18)$
78	$X_{46,52} \subset \mathbb{P}(2,4,5,11,13,23,41)$; $\frac{1}{2255}$
	$\frac{1}{5}(1,3,3,4), \frac{1}{11}(1,2,4,5), \frac{1}{41}(2,4,13,23)$
79	$X_{48,52} \subset \mathbb{P}(3,5,7,8,11,26,41)$; $\frac{4}{15785}$
	$\frac{1}{5}(1,1,1,3), \frac{1}{7}(1,4,5,5), \frac{1}{11}(3,5,7,8), \frac{1}{41}(3,5,8,26)$

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80	$X_{30,70} \subset \mathbb{P}(2,5,13,14,15,17,35)$;	$\frac{1}{7735}$
	$4 \times \frac{1}{5}(2,2,3,4), \frac{1}{7}(1,3,5,6), \frac{1}{13}(1,2,2,9), \frac{1}{17}(1,5,14,15)$	
81	$X_{9,10,12} \subset \mathbb{P}(2,3^3,4,5^2,7)$;	$\frac{1}{35}$
	$12 \times \frac{1}{3}(1,2,2,2), 2 \times \frac{1}{5}(2,3,3,3), \frac{1}{7}(3,3,4,5)$	
82	$X_{10,12,12} \subset \mathbb{P}(2,3^2,4,5^2,6,7)$;	$\frac{2}{105}$
	$8 \times \frac{1}{3}(1,2,2,2), 2 \times \frac{1}{5}(1,3,3,4), \frac{1}{7}(2,3,4,6)$	
83	$X_{10,12,18} \subset \mathbb{P}(2,3,4,5^2,6,7,9)$;	$\frac{1}{105}$
	$4 \times \frac{1}{3}(1,2,2,2), 2 \times \frac{1}{5}(1,2,4,4), \frac{1}{7}(2,2,5,6)$	
84	$X_{16,18,20} \subset \mathbb{P}(2,3,5^2,7,9,11,13)$;	$\frac{64}{15015}$
	$2 \times \frac{1}{3}(1,2,2,2), 4 \times \frac{1}{5}(2,2,3,4), \frac{1}{7}(2,3,5,5), \frac{1}{11}(2,2,3,5), \frac{1}{13}(2,5,9,11)$	
85	$X_{16,18,20} \subset \mathbb{P}(4,5^2,6,7,8,9,11)$;	$\frac{2}{1155}$
	$\frac{1}{3}(1,2,2,2), 4 \times \frac{1}{5}(1,2,4,4), \frac{1}{7}(1,4,5,5), \frac{1}{11}(4,5,6,8)$	
86	$X_{14,20,21} \subset \mathbb{P}(3,4,5,7^2,9,10,11)$;	$\frac{1}{495}$
	$2 \times \frac{1}{3}(1,1,1,1), 2 \times \frac{1}{5}(2,2,3,4), \frac{1}{9}(1,4,7,7), \frac{1}{11}(4,5,7,7)$	
87	$X_{16,18,24} \subset \mathbb{P}(3^2,5,7,8,9,11,13)$;	$\frac{32}{15015}$
	$16 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,3,3,3), \frac{1}{7}(1,3,5,6), \frac{1}{11}(3,3,8,9), \frac{1}{13}(3,7,8,9)$	
88	$X_{16,21,22} \subset \mathbb{P}(2,3,7^2,8,9,11,13)$;	$\frac{2}{819}$
	$2 \times \frac{1}{3}(1,2,2,2), 3 \times \frac{1}{7}(2,3,4,6), \frac{1}{9}(2,2,7,8), \frac{1}{13}(2,7,7,11)$	
89	$X_{18,20,24} \subset \mathbb{P}(2,5,6,7,9,10,11,13)$;	$\frac{8}{5005}$
	$2 \times \frac{1}{5}(1,1,2,2), \frac{1}{7}(2,2,5,6), \frac{1}{11}(2,5,6,10), \frac{1}{13}(2,6,9,10)$	
90	$X_{18,20,26} \subset \mathbb{P}(3,4,5,7,9,11,13^2)$;	$\frac{4}{3003}$

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	$2 \times \frac{1}{3}(1,1,1,1), \frac{1}{7}(2,3,4,6), \frac{1}{11}(2,2,3,5), 2 \times \frac{1}{13}(3,4,9,11)$	
91	$X_{18,20,26} \subset \mathbb{P}(4,5,6,7,9,10,11,13)$;	$\frac{1}{1155}$
	$\frac{1}{3}(1,1,1,1), 2 \times \frac{1}{5}(1,2,4,4), \frac{1}{7}(2,3,4,6), \frac{1}{11}(2,5,6,10)$	
92	$X_{18,20,28} \subset \mathbb{P}(2,5,6,7,9,11,13,14)$;	$\frac{4}{3003}$
	$\frac{1}{3}(1,2,2,2), 2 \times \frac{1}{7}(2,2,5,6), \frac{1}{11}(2,2,3,5), \frac{1}{13}(1,6,9,11)$	
93	$X_{21,22,24} \subset \mathbb{P}(2,3,4,5,7,11,17,19)$;	$\frac{6}{1615}$
	$\frac{1}{5}(2,2,3,4), \frac{1}{17}(2,2,3,11), \frac{1}{19}(4,7,11,17)$	
94	$X_{18,20,30} \subset \mathbb{P}(4,5,6,7,9,10,13,15)$;	$\frac{1}{1365}$
	$2 \times \frac{1}{3}(1,1,1,1), 4 \times \frac{1}{5}(1,2,4,4), \frac{1}{7}(1,3,5,6), \frac{1}{13}(2,6,9,10)$	

Table 2: Complete intersection ITF4s of Type-II

S.No	ITF4	$-K^4$	Basket $\mathcal{B}$
95	$X_{6,16} \subset \mathbb{P}(1^2,2,3^2,5,8)$;	$\frac{2}{15}$	$2 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,2,3,4),$
96	$X_{8,15} \subset \mathbb{P}(1^2,3^2,4,5,7)$;	$\frac{2}{21}$	$5 \times \frac{1}{3}(1,1,1,1), \frac{1}{7}(3,3,4,5)$
97	$X_{8,15} \subset \mathbb{P}(1^2,2,3,5^2,7)$;	$\frac{4}{35}$	$3 \times \frac{1}{5}(1,1,2,2), \frac{1}{7}(2,3,5,5)$
98	$X_{12,12} \subset \mathbb{P}(1^2,2^2,3,5,11)$;	$\frac{12}{55}$	$\frac{1}{5}(1,1,1,3), \frac{1}{11}(2,2,3,5)$
99	$X_{12,12} \subset \mathbb{P}(1^2,2,3^2,4,11)$;	$\frac{2}{11}$	$\frac{1}{11}(2,3,3,4)$
100	$X_{14,14} \subset \mathbb{P}(1^2,2^2,3,7,13)$;	$\frac{7}{39}$	$\frac{1}{3}(1,1,1,1), \frac{1}{13}(2,2,3,7)$
101	$X_{16,21} \subset \mathbb{P}(1^2,3,5,7,8,13)$;	$\frac{2}{65}$	$\frac{1}{5}(2,3,3,3), \frac{1}{13}(1,1,5,7)$
102	$X_{20,20} \subset \mathbb{P}(1^2,2,3,5,10,19)$;	$\frac{4}{57}$	$\frac{1}{3}(1,1,1,1), \frac{1}{19}(2,3,5,10)$

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Table 2 continued from previous page

103	$X_{22,22} \subset \mathbb{P}(1^2, 3, 7, 11^3)$;	$\frac{4}{231}$	$\frac{1}{3}(1,2,2,2), \frac{1}{7}(3,4,4,4), 4 \times \frac{1}{11}(1,1,3,7)$
104	$X_{21,26} \subset \mathbb{P}(1^2, 2, 5, 7, 13, 19)$;	$\frac{3}{95}$	$\frac{1}{5}(2,2,3,4), \frac{1}{19}(1,1,5,13)$
105	$X_{30,30} \subset \mathbb{P}(1^2, 2, 3, 10, 15, 29)$;	$\frac{1}{29}$	$\frac{1}{29}(2,3,10,15)$
106	$X_{20,58} \subset \mathbb{P}(1^2, 7, 9, 13, 19, 29)$;	$\frac{40}{15561}$	$\frac{1}{7}(1,1,1,5), \frac{1}{9}(1,1,1,7), \frac{1}{13}(1,1,3,9), \frac{1}{19}(7,9,10,13)$
107	$X_{6,6,6} \subset \mathbb{P}(1^3, 2, 3^3, 5)$;	$\frac{4}{5}$	$\frac{1}{5}(2,3,3,3)$
108	$X_{6,6,7} \subset \mathbb{P}(1^2, 2^2, 3^3, 5)$;	$\frac{7}{15}$	$4 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,3,3,3)$
109	$X_{6,6,8} \subset \mathbb{P}(1^2, 2^2, 3^2, 4, 5)$;	$\frac{2}{5}$	$\frac{1}{5}(2,2,3,4)$
110	$X_{6,6,10} \subset \mathbb{P}(1^2, 2, 3^3, 5^2)$;	$\frac{4}{15}$	$4 \times \frac{1}{3}(1,2,2,2), 2 \times \frac{1}{5}(2,3,3,3)$
111	$X_{8,8,9} \subset \mathbb{P}(1^2, 2, 3^2, 4, 5, 7)$;	$\frac{8}{35}$	$3 \times \frac{1}{3}(1,1,1,1), \frac{1}{5}(1,1,2,2), \frac{1}{7}(3,3,4,5)$
112	$X_{8,8,10} \subset \mathbb{P}(1^2, 2, 3, 4^2, 5, 7)$;	$\frac{4}{21}$	$\frac{1}{3}(1,1,1,1), \frac{1}{7}(2,4,4,5)$
113	$X_{10,10,14} \subset \mathbb{P}(1^2, 2, 5^3, 7, 9)$;	$\frac{4}{45}$	$4 \times \frac{1}{5}(1,1,2,2), \frac{1}{9}(2,5,5,7)$
114	$X_{12,12,14} \subset \mathbb{P}(1^2, 3, 4, 6^2, 7, 11)$;	$\frac{2}{33}$	$4 \times \frac{1}{3}(1,1,1,1), \frac{1}{11}(4,6,6,7)$

Table 3: ITF4s of Type-I in $\mathrm{Gr}(2,5)$ and $\mathbb{P}^2 \times \mathbb{P}^2$ formats

S.No	ITF4	$-K^4$	Basket $\mathcal{B}$	Weight Matrix
115	$X_{17,27,30,32,36} \subset \mathbb{P}(2,3,5,7,8,9,11,27)$	$\frac{29}{10395}$	$3 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(1,3,3,4), \frac{1}{7}(2,2,5,6), \frac{1}{11}(2,5,7,9), \frac{1}{27}(2,7,8,11)$	$\begin{matrix} 3 & 5 & 8 & 18 \\ & 9 & 12 & 22 \\ & & 14 & 24 \\ & & & 27 \end{matrix}$
116	$X_{9,10,11,14,15,16,16,17,18} \subset \mathbb{P}(2,3^3,4,5^2,7,11)$	$\frac{34}{1155}$	$14 \times \frac{1}{3}(1,2,2,2), \frac{1}{5}(2,3,3,3), \frac{1}{7}(2,3,5,5), \frac{1}{11}(2,3,3,4)$	$\begin{matrix} 3 & 4 & 5 \\ 5 & 6 & 7 \\ 10 & 11 & 12 \end{matrix}$

Table 4: ITF4s of Type-II in $\mathrm{Gr}(2,5)$ and $\mathbb{P}^2 \times \mathbb{P}^2$ formats

S.No	ITF4	$-K^4$	Basket $\mathcal{B}$	Weight Matrix
117	$X_{12,12,22,22,22} \subset \mathbb{P}(1^3, 3, 7, 11^3)$	$\frac{25}{231}$	$\frac{1}{3}(1,2,2,2), \frac{1}{7}(3,4,4,4),$ $3 \times \frac{1}{11}(1,1,3,7), \frac{1}{11}(2,5,7,9),$ $\frac{1}{27}(2,7,8,11)$	$\begin{matrix} 1 & 1 & 11 & 11 \\ & 1 & 11 & 11 \\ & & 11 & 11 \\ & & & 21 \end{matrix}$
118	$X_{12,15,15,16,20} \subset \mathbb{P}(1^2, 3, 4^2, 7, 9, 11)$	$\frac{47}{693}$	$\frac{1}{7}(3,4,4,4), \frac{1}{9}(1,1,4,4),$ $\frac{1}{11}(1,1,3,7)$	$\begin{matrix} 3 & 4 & 4 & 7 \\ & 8 & 8 & 11 \\ & & 9 & 12 \\ & & & 12 \end{matrix}$
119	$X_{10,15,18,19,22} \subset \mathbb{P}(1^2, 2, 5^2, 7, 9, 13)$	$\frac{256}{4095}$	$\frac{1}{5}(1,1,2,2), \frac{1}{7}(2,2,5,6),$ $\frac{1}{9}(2,5,5,7), \frac{1}{13}(1,1,5,7)$	$\begin{matrix} 1 & 2 & 5 & 10 \\ & 5 & 8 & 13 \\ & & 9 & 14 \\ & & & 17 \end{matrix}$
120	$X_{15,15,18,18,20} \subset \mathbb{P}(1^2, 2, 5^2, 7, 10, 13)$	$\frac{31}{455}$	$4 \times \frac{1}{5}(1,1,2,2),$ $\frac{1}{7}(2,3,5,5), \frac{1}{13}(1,1,2,10)$	$\begin{matrix} 5 & 5 & 8 & 8 \\ & 7 & 10 & 10 \\ & & 10 & 10 \\ & & & 13 \end{matrix}$
121	$X_{8,18,19,21,22} \subset \mathbb{P}(1^2, 3, 4, 5, 7^2, 17)$	$\frac{31}{595}$	$\frac{1}{5}(1,1,2,2), \frac{1}{7}(1,1,3,3),$ $2 \times \frac{1}{7}(3,3,4,5), \frac{1}{17}(1,3,7,7)$	$\begin{matrix} 1 & 3 & 4 & 14 \\ & 4 & 5 & 15 \\ & & 7 & 17 \\ & & & 18 \end{matrix}$
122	$X_{13,15,20,22,24} \subset \mathbb{P}(1^2, 2, 3, 5, 7, 10, 19)$	$\frac{62}{665}$	$\frac{1}{5}(1,1,2,2), \frac{1}{7}(2,3,5,5),$ $\frac{1}{19}(1,2,7,10)$	$\begin{matrix} 1 & 3 & 8 & 10 \\ & 5 & 10 & 12 \\ & & 12 & 14 \\ & & & 19 \end{matrix}$
123	$X_{14,18,22,22,26} \subset \mathbb{P}(1^2, 3^2, 7^2, 11, 19)$	$\frac{1}{19}$	$6 \times \frac{1}{3}(1,1,1,1), \frac{1}{7}(1,1,3,3),$ $\frac{1}{7}(3,3,4,5), \frac{1}{19}(1,1,7,11)$	$\begin{matrix} 3 & 3 & 7 & 11 \\ & 7 & 11 & 15 \\ & & 11 & 15 \\ & & & 19 \end{matrix}$

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124	$X_{2,12,12,12,22,22,12,22,22} \subset \mathbb{P}(1^4,3,7,11^3)$	$\frac{46}{231}$	$\frac{1}{3}(1,2,2,2), \frac{1}{7}(3,4,4,4), 2\times\frac{1}{11}(2,3,3,4)$	1	1	11
				1	1	11
				11	11	21
125	$X_{7,8,9,10,11,12,14,15,16} \subset \mathbb{P}(1^2,2^2,3,5^2,7,9)$	$\frac{17}{63}$	$2\times\frac{1}{5}(1,1,2,2), \frac{1}{5}(2,2,3,4), \frac{1}{7}(2,3,5,5), \frac{1}{9}(1,2,2,5)$	1	2	3
				5	6	7
				8	9	10
126	$X_{8,12,12,15,15,16,19,19,22} \subset \mathbb{P}(1^3,3,4,7,8,11^2)$	$\frac{46}{231}$	$\frac{1}{3}(1,2,2,2), \frac{1}{7}(3,4,4,4), 2\times\frac{1}{11}(1,1,3,7)$	1	4	8
				4	7	11
				8	11	15
127	$X_{10,13,13,15,15,16,18,18,20} \subset \mathbb{P}(1^2,2,3,5^2,7,10,13)$	$\frac{184}{1365}$	$\frac{1}{3}(1,2,2,2), 2\times\frac{1}{5}(1,1,2,2), \frac{1}{7}(2,3,5,5), \frac{1}{13}(1,1,2,10)$	3	5	8
				5	7	10
				8	10	13
128	$X_{6,14,14,16,16,22,24,24,26} \subset \mathbb{P}(1^2,3^2,5,7,11^2,13)$	$\frac{18}{385}$	$\frac{1}{5}(2,3,3,3), \frac{1}{7}(1,4,4,6), 2\times\frac{1}{11}(1,1,3,7)$	1	3	11
				3	5	13
				11	13	21

References

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