

OUTGOING BEAM FROM HWS COLLIMATOR AT ETMY

Beam Widths in um

Order measured (photos taken)	Measurement	Distance downstream from iris (mm)	Distance downstream from HWS -SOURCE (mm)	A1 horizontal 13.5%	A2 vertical 13.5%	A1 horizontal 50%	A2 vertical 50%
1	From iris	8	245	1285	1287	948	945
2	From iris	51.5	288.5	1908	1912	1201	1195
3	From iris	123	360	3089	3033	1856	1840
4	From iris	189	426	4182	4205	2620	2635
5	From source (front of collimator)		18	2924	2920	2553	2522
6	From source (front of collimator)		46	2583	2576	2160	2157
7	From source (front of collimator)		64	2344	2327	1900	1892
8	From source (front of collimator)		3	3126	3142	2699	2725
9	From iris	23	260	1455	1444	1014	1000

Note that D4sigma values were unreliable as there were strange wings, used 50% as second measurement.

Closest to Vacuum

Distance **mm**
 Front of collimator to mirror 205
 Mirror to iris 32

There is no Optics that would change the beam's shape in this path, just steering mirror, BS and HWP.
 The 50% beam measurements (I have photos) showed a more symmetric beam, maybe there was tails making the larger A1 values big.

