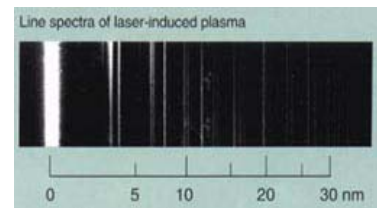
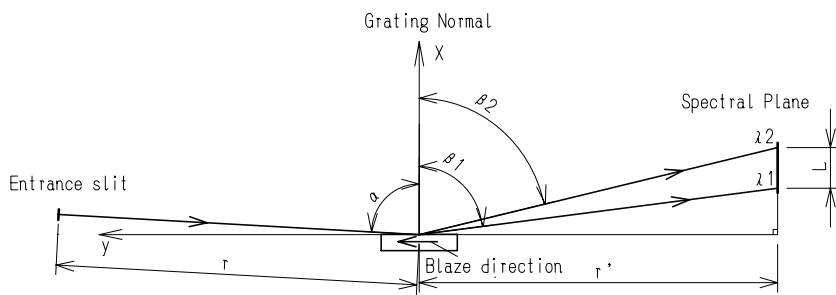


# Hitachi Aberration-Corrected Concave Gratings for Flat-Field Spectrographs

## Grazing-Incidence Type



### Grazing-incidence soft X-ray spectrograph with flat-field image focusing

The spectra of the soft X-ray region can be observed on a flat photographic plate when the grating is mounted at an incidence angle of 87° (001-0437, 001-0266).

Part No.	Grooves per mm	Radius of curvature (mm)	Blaze WL (nm)	Blank size H×W×T (mm)	Blaze angle (degree)	$\alpha$ (degree)	$r$ (mm)	$\beta_1$ (degree)	$\beta_2$ (degree)	$r'$ (mm)	WL Rang $\lambda_1$ to $\lambda_2$ (nm)	L (mm)	Material
001-0437 *1,2	1200	5649	10	30×50×10	3.2	87	237	-83.04	-77.07	235.3	5~20	25.3	Pyrex
001-0266 *1,2	1200	5649	10	30×50×10	3.2	87	237	-83.04	-77.07	235.3	5~20	25.3	Zero Dur
001-0450 *2	2400	15920	1.5	30×50×10	1.9	88.7	237	-85.81	-81.01	235.3	1~5	19.99	Pyrex
001-0471 *2	2400	15920	1.5	30×50×10	1.9	88.7	237	-85.81	-81.01	235.3	1~5	19.99	Zero Dur
001-0639	600	5649	31	30×50×10	3.7	85.3	350	-79.56	-67.26	469	22~124	110.16	Pyrex
001-0640	1200	5649	16	30×50×10	3.7	85.3	350	-79.56	-67.26	469	11~62	110.16	Pyrex
001-0659 *3	2400	57680	3	40×70×12	3	89	564	-85.91	-80.21	563.2	1~6	56.83	BK7
001-0660 *3	1200	13450	9	40×70×12	3	87	564	-83.04	-75.61	563.2	5~25	75.73	BK7

## References

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2. N. Nakano, H. Kuroda, T. Kita and T. Harada, "Development of a flat-field grazing-incidence XUV spectrometer and its application in picosecond XUV spectroscopy", Appl. Opt. 23, 2386-2392 (1984)
3. T. Harada, K. Takahashi, H. Sakuma and A. Osyczka, "Optimum design of a grazing-incidence flat-field spectrograph with a spherical varied-line-space grating", Appl. Opt. 38, 2743-2748(1999)