GCA 6300 DSW 5X g-line Stepper

Instrument	Resist	Prebake	Exposure Time, PEB	Development
GCA 5X	S1805	90 / 115°C, 45 sec.	0.2, (115°C, 60 sec.)	726 MIF, 60 sec.
GCA 5X	S1813	90 / 115°C, 60 sec.	0.35, (115°C, 60 sec.)	726 MIF, 60 sec.
GCA 5X	S1818	90 / 115°C, 60 sec.	0.45, (115°C, 60 sec.)	726 MIF, 60 sec.
GCA 5X	S1827	90 / 115°C, 90 sec.	0.6, (115°C, 60 sec.)	726 MIF, 60 sec.
GCA 5X	SPR220-3.0	115°C, 90 sec.	0.65, 115°C, 90 sec.	726 MIF, 90 sec.
GCA 5X	SPR220-7.0	115°C, 90 sec.	.09, 115°C, 90 sec.	726 MIF, 120 sec.
GCA 5X	AZ P4903	115°C, 90 sec.	(wait 45 min.) 2.5	AZ 421K, 180 sec.

Note: all exposure times are approximate. Your process may be 0.5-2x these values or more.

The 5X stepper uses 436nm illumination. These resists are specified as g-line or broadband; i-line resists should not be used. Output is measured as around 200mW/cm^2 @436nm. Post exposure bake (PEB) is not required for these processes, but is recommended for sidewall smoothness and etch uniformity.

Image reversal: expose as usual, run YES oven NH_3 process, flood expose 60 sec. using the ABM, develop 60 sec. in MF-321. Thicker films may require 726 MIF or longer develop times.

Image reversal for S1800 series resists requires 4-5X normal dose; this can be characterized by exposing test doses and developing (without NH_3 baking) in MF-321 for 60 sec. The best dose for this process will be very close to the correct reversal dose. The reversal dose should still be fully characterized in the usual way. Be sure to measure the resist thickness after development to make certain that full height is retained. Underexposure will result in thinner resist with poor sidewall profile.