

Summary

	Multi-Blade 2013	Multi-Blade 2015 (actual status)		Goal	What to do next
Uniformity X	15%	20% (measured in Charge Div. 1350V)	-	<5%	Mech. Improvements and new meas. at lower gain 800V and individual r/o
Uniformity Y	15%	20% (measured in Charge Div. 1350V)	-	<5%	Mech. Improvements and new meas. at lower gain 800V and individual r/o
Overlap	2mm gap 50% loss	0.7mm gap 50% loss	o	$\leq 1 \times$ Resolution (≤ 0.5 mm)	Mech. Improvements and new meas.
Spatial Res. X	0.3mm	0.6mm (wire pitch can be adjusted)	+	0.5mm	Nothing – Matches the goal
Spatial Res. Y	4mm	2.5mm	+	2-3mm	Nothing – Matches the goal
Stability	Not measured	~1% (over 12h)	+	1% (over days)	Longer tests
Efficiency	Measured 26% @ 10deg 2.5Å Extrapolated 43% @ 5deg 2.5Å	>44% @ 2.5Å Measured 55% @ 5deg 4.1Å Measured 65% @ 5deg 5.1Å	+	>40% @ 2.5Å	Nothing – Matches the goal
Low gain operation	Gain ~60	Gain ~20	+	--	Nothing – Matches the goal
Counting Rate Cap.	Not measured (dead time limited by electr. 2us)	> 2 KHz/mm ² (>40KHz/mm ² extrapolated)	o	500 KHz/mm ² (4 MHz/mm ²)	Needs to be measured
Gamma sensitivity	Not measured	Not measured (but full eff. with 100KeV Threshold)	o	<10 ⁻⁶	Needs to be measured, but in principle is already good due to the threshold used, not different from what measured on other prototypes.
Dynamic range	Not measured	Not measured	o	10 ⁹ - 10 ⁰	Needs to be measured
Self Scattering	Not measured	Not measured	o	$\leq 10^{-4}$	Needs to be measured
Fast neutrons sensitivity	Not measured	Not measured	o	<10 ⁻⁶	Needs to be measured
Reproduce scientific output	Not measured	Not measured	o	--	Needs to be measured