PrimEx production (2021)

Beam Energy: 10.04 GeV
Beam current: 10^{-4} X_0
Converter: 750 μm Be

Setup: hd_all.tsg_ccal_prod
Configuration: CCAL_FCAL_PS_m9 (m10)

HV adjusted on FCAL modules

Production on Be target (200 nA)

list_of_runs_be_200

Run	Date	Events (M)	Target	PS (A)	Comments	PS	PSC	TAGH	TAGM	
Phase I										
81262	9/28 21:18	201								35 ns
81263		203								
81264		71								
81265		200								
81266		200								
81267	9/29 5:00	175								
Phase II										
81374	10/3 16:15	252								39 ns
81375		251								
81376		253								
81377		23								
81378		181								
81379		187								
81380		176								
81381	10/4 5:00	177								
Total (14)		2550			2789, Spring 2019					

Production on Be target (50 nA) CDC/FDC switched On

list_of_runs_be_50

81330	10/1 2:42	64						-0.2	-0.5	39 ns
81331		64						-0.2	-0.5	
81334		18								
81337		33								
81338		28								
81341		50								
81342		27								
81344		11								
81347		42								
81348		46								
81349		49								
81350		48								
81351		52								
81352		51								
81353	10/2 10:00	39						-0.2	-0.5	
Total (15)		622		430 (He 50 nA) Sprin 2019						

Production on Be target (100 nA)

list_of_runs_be_100

81356	10/2 16:52	25								39 ns
81358		117								
81359		65								
81366		109								
81367		110								
81369		110								

81270		97							
81372	10/3 9:42	62							

Total(8) 695 549 (He 100 nA) Spring 2019

Empty Target Run, Be target removed, no LHe cell (200 nA)

list_of_runs_be_empty

81384	10/4 14:10	61								39 ns
81385		55								
81386		58								
81387	10/4 20:20	62								

Total 236

Empty Target Run, Be target removed, no LHe cell (100 nA)

81388	10/4 22:20	31							
81389		31							
81390	10/5 2:20	12							

Total 74

Empty Target Run, Be target removed, no LHe cell (50 nA)

81391	10/5/ 3:10	15							
81392		17							
81393	10/5 7:20	15							

Total (10) 47

Empty Target Run, He cell installed, don't cool (200 nA)

list_of_runs_he_empty1

81396	10/5 21:10	25				strange	strange	strange	strange	39 ns
81397		53								
81398		59						-0.4	-0.6	
81399		77								
81400	10/6 5:55	36								
Total		250								

Start cooling the target, cold gass in the target cell (100 nA)

81401	10/6 7:20	22							
81402	10/6 9:10	38							
Total		60							

Filling target cell with liquid He, some liquid in the cell (100 nA)

81403	10/6 13:05	40							
81404		36							
81405	10/6 17:50	35							
Total (10)		111							

Production run on He target (200 nA), Data Set 1

list_of_runs_he1

81411	10/6 21:00	129								39 ns
81412		136								
81413		130								
81414		129								

81415		129							
81416		98							
81419		57							
81421		130							
81422		140							
81423		116							
81424		134							
81425		126							
81426		131							
81427		60							
81428		132							
81429		119							
81430		149							
Total (17)		2045							

Production run on He target (100 nA) Data Set 2

list_of_runs_he2

81431		53								39 ns
81432		58								
81433		55								
81434		65								
81435		63								
81436		53								
81437		58								
81438		59								
81439		52								
81440		34								
81442		66								
81443		43								
81444		6				small	small	small	small	
Total (12)		665								

Production run on He target (200 nA), Data Set 3

list_of_runs_he3

81445		134						-0.2	-1	39 ns
81446		135								
81447		134								
81448		63								
81449		131						-0.2		
81450		10						-0.2	-0.6	
81451		93								
81452		42								
81453		119								
81454		120								
81455		129								
81456		131								
81457		128								
81459		127								
81460		133								
81461		128								
81462		127								
81463		120								
81464		117								
81465		49								
81466		118								
81467		119								
81468		86								
81469		3						-0.2	-1.2	
81470		31								
Total (26)		2527								

81471	10/11 18:30	5	ramping solenoid
81472		14	ramping solenoid

LED changed

Production run on He target (200 nA), Solenoid Filed ON, Data set 4

list_of_runs_he4

81473	10/11 23:11	54						-0.2	-0.6	38 ns
81475		35	CDC scan 2150					-0.2	-0.6	
81476		35	CDC scan, 2100					-0.2	-0.6	
81477		59	CDC scan, 2125					-0.2	-0.6	
81478		31	CDC scan, 2120					-0.2	-0.6	
81479		31	CDC scan, 2130					-0.2	-0.6	
81480		28	CDC scan, 2140					-0.2	-0.6	
81487	10/12 10:30	42								
81488		54				shift	shift	4	4	
81489		104				shift	shift	4	4	
81490		111				shift	shift	4	4	
81491		99								
81492		58								
81495		67								
81496		111								
81497		77								
81498		88								
81499		114								
81500		8						-0.2	-0.6	
81501		62								
81502		61								
81503		23								
81505		3						-0.2	-1.2	
81506		88				shift	shift	-0.2		
81507		44				shift	shift	-0.2		
81508		97						-0.2		
81509		68						-0.2	-0.6	
81510		19						-0.2	-0.6	

81511		105								42 ns
81512		109								42 ns
81513		63								42 ns
81514		64				shift op	shift op	-4	-4	42 ns
81518		115								42 ns
81519		33								42 ns
81520		100								42 ns
81524		47				shift op	shift op	-4	-4	42 ns
81525		98								42 ns
81526		98								42 ns
81527		88				shift	shift	4	4	42 ns
81528		12								42 ns
81529		85								42 ns
81530		92								42 ns
81531	10/15 15:00	109								42 ns
Total (43)		2616								

Empty He target (200 nA), Solenoid Filed ON, Data set 2

list_of_runs_he_empty2

81532	10/15 17:00	0.4	emptying target			small	small	small	small	
81533		110	empty target							42 ns
81534		41								42 ns
81535		60								
81536		51								
81537		52								
81538		51								42 ns
81539		48								46 ns
81540		46								38 ns
81541		10						-0.2	-0.6	38 ns
81542		41								38 ns
81543		69								38 ns

81544		65								38 ns
81547		60							0.1	
81548		58								38 ns
81549		56								38 ns
81550		60								42 ns
81551		59								42 ns
81552		52								38 ns
81553		4				small	small	-0.2	-0.4	38 ns
81554		63						-0.2	-0.4	38 ns
81555		59						-0.2	-0.4	
81556		61								38 ns
81557		67						-0.2	-0.9	38 ns
81558		66								
81559		51								
81560		56						-0.2	-0.4	38 ns
81561		54								42 ns
81562		10						-0.2	-0.4	42 ns
81563		14								38 ns
Total (32)		1494								

Production run on He target (200 nA), Solenoid Filed ON, Data set 5

list_of_runs_he5

81564		85								38 ns
81565		76								
81566		30								
81567		6	unstable beam					-0.2	-0.4	
81569		10	unstable beam					-0.2	-0.4	
81570		5	unstable beam					-0.2	-0.4	
81571		10	unstable beam							
81572		68	unstable beam							
81573		31								
81576		64								

81578		103								
81579		115								
81580		112								
81581		6						-0.2	-0.4	
81582		24								
81583		76	no beam							
81585		5				small	small	small	small	
81590		91								
81591		98								38 ns
81592		81								38 ns
81593		75								38 ns
81594		106								38 ns
81595	10/21 13:30	52								38 ns
Total (32)		1329								

Production run on He target (200 nA), Solenoid Filed ON, Data set 6

list_of_runs_he6

81596	10/26 18:22	30	unstable LHe							38 ns
81597		85	stable He							
81598		86								
81599		22	no FDC							
81601		92	prob with FDC							
81602		114						shift	shift	
81603		94						shift	shift	
81604		71								
81605		18						shift	shift	
81606		102						no shift	no shift	
81608		34						no shift	no shift	
81609		99						no shift	no shift	
81610		104						no shift	no shift	

81611		93						no shift	no shift
81612		108							
81613		109							
81614		116						no shift	no shift
81615		116							
81616		68							
81617		56						-0.2	
81618	10/28 10:08	102							
81619		101							
81620		90							
81621		107						no shift	no shift
81622		109							
81623		111							
81624		109							
81625		109							
81626		113							
81627		97							
81628		102							
81629		90							
81630		102							
81632		106							
81633		31							
Total (38)		3096							

Empty He target (200 nA), Solenoid Filed ON, Data set 3

list_of_runs_he_empty3

81634		14	Emptying target							38 ns
81635		54								
81636		54								
81637		55								
81638		58								
81639		53								

81640		39							
81641		60							
81642		62							
81643		57						-0.2	-1
81644		56							
81645		60							
81646		58							
81647		76							
81648		53							
81649		61							
81650		53						-0.2	
81651		56						-0.2	-0.6
81652		61							
81655		59							
81656		58							
81657		50							
81658		51							
81659		11							
81661		4						-0.2	-0.6
81662		51							
81663		50							
81664		30							
81665		11							
81666		8						-0.2	-0.8
81667		36							
81668		52							
81669		60							
81670		23							
Total (37)		1594							

Production run on He target (200 nA), Solenoid Filed ON, Data set 7

list_of_runs_he7

81674		8	Raw mode, Filling					-0.2	-0.8	34 ns
81675		90								38 ns
81676		110								
81677		94								
81678		75								
81679		111								
81680		99								
81681		44								
81682		107								
81683		103								
81684		112								
81685		3				small	small	small	small	
81686		100								
81687		91								
81688		94								
81689		101								
81690		61								
81691		105								
81692		105								
81693		96								
81694		108								
81695		111								
81696		62								
Total (23)		1990								

Production run on He target (200 nA), Solenoid Filed ON, Data set 8

list_of_runs_he8

81702		82								38 ns
81703		12								
81704		26								
81705		34								

81709		90							
81710		101							
81711		98							
81712		108							
81713		109							
81714		108							
81715		107							
81716		99						-0.2	-0.8
Total (12)		974							