Stage	Section	Element	Туре	Parameter	Value	Unit	Comment
0	Facility	Global	Name	Name	LION		
0	Facility	Global	Reference particle	Kinetic energy	20	MeV	
0	Facility	Global	Vacuum chamber	Mother volume radius	0.5	m	
1	Source	Source	Parameterised TNSA	SourceMode	0		Gaussian kinetic energy
1	Source	Source	Parameterised TNSA	SigmaX	0.000004	m	Gaussian width, x
1	Source	Source	Parameterised TNSA	SigmaY	0.000004	m	Gaussian width, y
1	Source	Source	Parameterised TNSA	Emin	1	MeV	Minimum of energy distribution
1	Source	Source	Parameterised TNSA	Emax	25	MeV	Maximum of energy distribution
1	Source	Source	Parameterised TNSA	nPnts	1000		Number of points to sample for integration of PDF
1	Source	Source	Parameterised TNSA	MinCTheta	0.999691		Maximum theta for flat cos theta
1	Source	Source	Parameterised TNSA	Power	2.5E+15	W	Laser power
1	Source	Source	Parameterised TNSA	Energy	70	J	Laser energy
1	Source	Source	Parameterised TNSA	Wavelength	0.8	um	Laser wavelength
1	Source	Source	Parameterised TNSA	Duration	2.80E-14	S	Laser pulse duration
1	Source	Source	Parameterised TNSA	Thickness	4E-07	m	Target thickness
1	Source	Source	Parameterised TNSA	Intensity	4.00E+20	W/cm2	Laser intensity
1	Source	Source	Parameterised TNSA	DivAngle	25	degrees	Electron divergence angle
1	Capture	Drift		Length	0.04034	m	Length of first drift
1	Capture	Aperture	Elliptical	RadiusX	0.003	m	Half aperture in x of elliptical colimator
1	Capture	Aperture	Elliptical	RadiusY	0.0015	m	Half aperture in y of ellipseof elliptical colimator
1	Capture	Drift		Length	0	m	Gap between colimator and first quad
1	Capture	Fquad		Length	0.04	m	Length of focusing quad
1	Capture	Fquad		Strength	332	T/m	Strength of focusing quad
1	Capture	Aperture	Circular	Radius	0.005	m	Aperture of quad
1	Capture	Drift		Length	0.02577	m	Gap between colimator first (F)quad and second (D)quad
1	Capture	Dquad		Length	0.02	m	Length of defocusing quad
1	Capture	Dquad		Strength	318.5	T/m	Strength of defocusing quad
		Aperture	Circular	Radius	0.005		Aperture of quad
1	Delivery	Drift		Length	1.728652	m	Main drift from last quad to kapton/aluminium foils
1	Delivery	Drift		Length	0.015	m	Drift from kapton/aluminium foils to collimator
1	Delivery	Aperture	Circular	Radius	0.0015	m	Collimator before "end station"
1	Delivery	Drift		Length	0.02	m	Final drift

LION:1:Source:Source 1e6 1.5 0.00 -Number 1.0 delta -0.05 -0.5 -0.100.0 0.2 0.4 -0.100.00 -0.4 -0.20.0 -0.05z (m) Delta 1e6 1e6 2 2 Number Number 0 -0.50-0.250.00 0.25 0.50 -0.50 -0.250.00 0.25 0.50 z (m) t (s) 1e6 Kinetic energy (MeV) 1.5 20 -Number 1.0 10 -0.5 0.0 -0.4 - 0.210 20 0.0 0.2 0 0.4 Kinetic energy (MeV) t (s)























