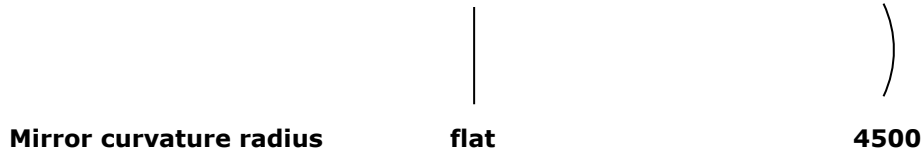


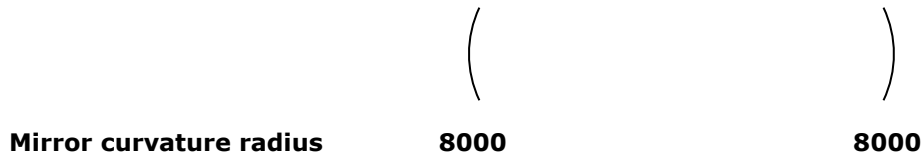
LCGT arm cavity design (L=3000m)

Design A: TAMA like



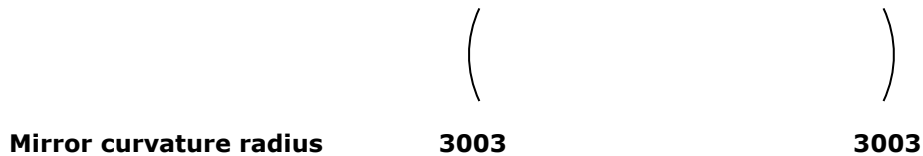
	waist	mirror1	mirror2
W (mm)	26.803961	26.803961	46.425825
Z (m)	0.000000	0.000000	3000.000000
R (m)	2121.320184	<- Rayleigh range	
theta	0.126355E-04	<- divergence angle	

Design B: Mid-point waist design



	waist	mirror1	mirror2
W (mm)	31.326510	35.275231	35.275231
Z (m)	1500.000000	0.000000	3000.000000
R (m)	2897.558993	<- Rayleigh range	
theta	0.108113E-04	<- divergence angle	

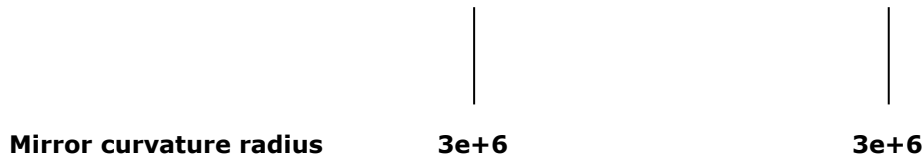
Design C: Near confocal design



$g_1=g_2=0.001$

	waist	mirror1	mirror2
W (mm)	22.550628	31.875471	31.875471
Z (m)	1500.000000	0.000000	3000.000000
R (m)	1501.500751	<- Rayleigh range	
theta	0.150187E-04	<- divergence angle	

Design D: Near conflat design



$g_1=g_2=0.999$

	waist	mirror1	mirror2
W (mm)	150.710913	150.748604	150.748604
Z (m)	1500.000000	0.000000	3000.000000
R (m)	67065.266718	<- Rayleigh range	
theta	0.224723E-05	<- divergence angle	