

Output coupler
(A7)
 $T = 7540$ ppm
 $\text{RoC} = \infty$

OMC cavity parameters

Finesse = 397
 $L_{\text{RT}} = 1.13142$ m
 $\nu_{\text{FSR}} = 264.970$ MHz
 $\text{TMS}_x = 57.9396$ MHz
 $\text{TMS}_y = 58.0479$ MHz
[c.f. [OMC:134](#)]

Input coupler
(A8)
 $T = 7600$ ppm
 $\text{RoC} = \infty$

HR BS
(E10)


Curved mirror
(C5)
 $T = 35.9$ ppm
 $\text{RoC} = 2.57369 \pm 9$ m
Mnt prism:

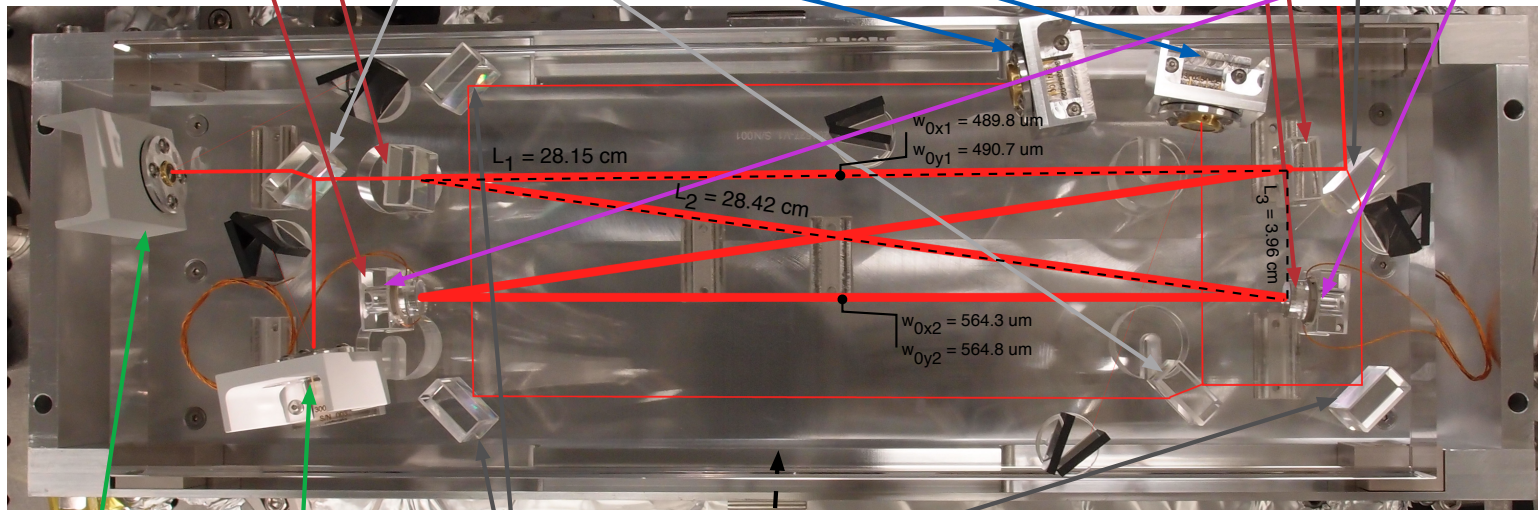
BS, 50/50
(B7)
(B3)

QPD2
OSI
FCI-InGaAs-Q3000
 $\varnothing 3$ mm
Assy: [D1201273](#)

QPD1
OSI
FCI-InGaAs-Q3000
 $\varnothing 3$ mm
Assy: [D1201273](#)

Curved mirror
(C6)
 $T = 36.0$ ppm
 $\text{RoC} = 2.57321 \pm 4$ m

PZT
Noliac 2124

 $\varnothing i = 9$ mm
 $\varnothing o = 15$ mm
 $d = 2$ mm
 ± 2.7 μm



DCPD1
Perkin-Elmer
C30665GH
 $\varnothing 3$ mm InGaAs
Assy: [D1201273](#)

DCPD2
Perkin-Elmer
C30665GH
 $\varnothing 3$ mm InGaAs
Assy: [D1201273](#)

HR
(E16)
(E4) (E12)

Breadboard
dimensions
450 x 150 x 41.275 mm

Documents
Coating specs: [E1101095](#) Mounting prism drawing: [D1102069](#)
Breadboard drawing: [D1200105](#) Mounting prism spec: [D1101087](#)
BB vender report: [E1300059](#)
Prism drawing: [D1101968](#)
Prism spec: [E1101086](#)

Measurement links indexed in [OMC:101](#)

aLIGO L1 OMC as-built diagram

Z. Korth, 6/4/2013 | D1300507-v1