

		MISC	Value	TU	FA	VA	VI	MI	CR	IF	DG	EL	IO	LA	DA	GE
4th GAS	spring constant of 4th GAS filter		473kg/s <sup>2</sup>				VI									
4th GAS	T dependence of spring constant		TBD				VI		CR	IF						
4th GAS	loss of GAS filter blades		1e-2				VI									
4th GAS	mass of GAS filter joint for wire		<100g				VI									
4th GAS	wire length btw 4th GAS filter and PF		2.1m				VI									
4th GAS	wire diameter		3.11mm				VI									
4th GAS	number of wires		1				VI									
4th GAS	wire material		Maraging				VI									
4th GAS	wire young's modulus		186GPa				VI									
4th GAS	wire tensile strength		2GPa				VI									
4th GAS	loss of wire		TBD				VI									
4th GAS	wire length btw 4th GAS filter and CB		2.1m				VI									
4th GAS	wire diameter		3.74mm				VI									
4th GAS	number of wires		1				VI									
4th GAS	wire material		Maraging				VI									
4th GAS	wire young's modulus		186GPa				VI									
4th GAS	wire tensile strength		2GPa				VI									
4th GAS	total mass suspended by 4th GAS filter		120kg				VI									
4th GAS	local sensor for GAS filter		LVDT				VI				DG	EL				
4th GAS	local control for GAS filter		Coil				VI				DG	EL				
BS	BS radius		19cm					MI		IF						
BS	BS thickness		12cm					MI		IF						
BS	BS reflectivity		50%					MI		IF						
BS	BS HR surface optical loss		50ppm					MI		IF						
BS	BS AR surface reflectivity		50ppm					MI		IF						
BS	RoC of BS		>100km					MI		IF						
BS	BS substrate absorption		1ppm/cm (problematic!)					MI		IF						
BS	AR wedge of BS		0.383deg					MI		IF						
Cryostat	radiation shield diameter		50cm				VA									
Cryostat	radiation shield aperture (diameter)		25cm				VA			CR						
Cryostat	cryostat shield aperture (diameter)		25cm				VA			CR	IF					
Cryostat	top hole diameter (to SAS)	*	15cm				VA	VI		CR	IF					
Cryostat	cryostat cylinder dimension		f=2.4m,t=2cm,h=3.05m	TU	FA		VA	VI		CR						
Cryostat	cryostat weight		10t	TU	FA		VA	VI		CR						
Cryostat	heat from shield aperture		4W				VA			CR						
Cryostat	heat from vacuum duct support		24W				VA			CR						

Cryostat	radiation from upper stages	*	10mW	VA	VI	CR	IF		
Cryostat	radiation from BS chamber	*	10mW	VA		CR	IF		
Cryostat	radiation from arm cavity	*	10mW	VA		CR	IF		
Cryostat	heat from radiation shield	*	100mW	VA		CR	IF		
Cryostat	heat from scattering light	*	0mW	VA		CR	IF		
Cryostat	heat from view ports	*	10mW	VA		CR	IF		
Cryostat	heat link thermal conductivity at 10K		4kW/m/K		VI	CR			
Cryostat	number of view ports		1	VA		CR	IF		
Cryostat	cooling time		1week	VA		CR	IF		
Cryostat	warming up time		1month	VA		CR	IF		
Cryostat	vibration at cryostat		TBD	TU	FA	VA	VI	CR	IF
Cryostat	cryostat resonant frequency		30Hz	VA	VI	CR			
Cryostat	inner shield tempeprature		8K	VA	VI	CR	IF		
Cryostat	duct shield temperature		80K	VA	VI	CR	IF		
Cryostat	duct emissivity		0.03	VA		CR			
Digital	ADC noise		3uV/rtHz				IF	DG	EL
Digital	DAC noise		3uV/rtHz				IF	DG	EL
Digital	sampling frequency		16384Hz				IF	DG	EL
Digital	observation bandwidth		5kHz				IF	DG	EL
Digital	control bandwidth		200Hz				IF	DG	EL
Digital	time delay		100usec				IF	DG	EL
Digital	ADC dynamic range		15V					DG	EL
Digital	DAC dynamic range		10V					DG	EL
Digital	AA filter noise level		0.1uV/rtHz					DG	EL
Digital	AI filter noise level		0.1uV/rtHz					DG	EL
Digital	whitening filter noise level		1nV/rtHz					DG	EL
Digital	dewhitening fileter noise level		1nV/rtHz					DG	EL
Digital	connector		D-sub 9pin					DG	EL
Electronics	accuracy of 90deg for I&Q LO	*	1%				IF		EL
Electronics	RF PD aperture (high power)	*	3mm				IF		EL
Electronics	RF PD aperture (low power)	*	3mm				IF		EL
Electronics	DC PD aperture (high power)	*	3mm				IF		EL
Electronics	DC PD aperture (low power)	*	3mm				IF		EL
Electronics	RF PD input power (high power)	*	300mW				IF		EL
Electronics	RF PD input power (low power)	*	100mW				IF		EL
Electronics	DC PD input power (high power)	*	100mW				IF		EL
Electronics	DC PD input power (low power)	*	10mW				IF		EL

Electronics	RF HOM suppression at LO distributor	TBD				IF		EL
Electronics	DC power supply	24V				IF	DG	EL
Electronics	power supply cable selection	TBD				IF	DG	EL
Electronics	power supply conector selection	TBD				IF	DG	EL
Electronics	AC cable selection	100V / AWG14 triplet				IF	DG	EL
Electronics	AC conector selection	D-sub				IF	DG	EL
Electronics	RF cable selection	co-axial				IF	DG	EL
Electronics	RF connector selection	SMA				IF	DG	EL
Facility	tunnel width/height	TUN 4m	TU	FA	VA			GE
Facility	tunnel tilt	TUN 1/300	TU	FA	VA		IF	GE
Facility	chamber room size (2nd floor)	TUN 8m x 12m	TU	FA	VA		IF	GE
Facility	chamber room size (1st floor)	TUN 20m x 12m	TU	FA	VA	CR	IF	GE
Facility	flange flatness	VAC 0.1mm			VA			
Facility	flange thickness	VAC 30mm			VA			
Facility	vacuum level	VAC 2e-7Pa		FA	VA		IF	
Facility	duct height from floor	VAC 1.2m from the floor		FA	VA		IF	
Facility	duct diameter	VAC 80cm		FA	VA		IF	
Facility	position of chambers	VAC (see MIF doc)		FA	VA		IF	
Facility	number of pumps	VAC 10 per arm		FA	VA			
Facility	pumping speed of ion pump	VAC 1000L/s		FA	VA			
Facility	pumping speed of turbo pump	VAC 2000L/s		FA	VA			
Facility	number of gate valves	VAC 2 per arm (both ends)		FA	VA			
Facility	number of vacuum monitors	VAC TBD		FA	VA			
Facility	room temperature	FAC 289K		FA				
Facility	laser room cleanliness	FAC CLASS 100		FA				IO LA
Facility	room cleanliness	FAC CLASS 1000		FA		MI	CR	IO
Facility	cleanliness for chamber working	FAC CLASS 100		FA		MI	CR	IO
Facility	cleanliness of cryostat body (?)	CRY CLASS 10000		FA		MI	CR	
Facility	noise level of accelerometers	PEM TBD		FA				
Facility	noise level of tilt meters	PEM TBD		FA				
HL (IM-RM)	material	6N Aluminum			VI		CR	
HL (IM-RM)	number	TBD			VI		CR	
HL (IM-RM)	length	TBD			VI		CR	
HL (IM-RM)	spring constant	TBD			VI		CR	
HL (IM-RM)	diameter	TBD			VI		CR	
HL (IM-RM)	loss	TBD			VI		CR	
HL (PF-IM)	material	6N Aluminum			VI		CR	

HL (PF-IM)	number		TBD	VI	CR			
HL (PF-IM)	length		TBD	VI	CR			
HL (PF-IM)	spring constant		TBD	VI	CR			
HL (PF-IM)	diameter		TBD	VI	CR			
HL (PF-IM)	loss		TBD	VI	CR			
IM	actuator power on IM		TBD	VI	IF	EL		
IM	mass of IM		60kg	VI	CR			
IM	material		Cu	VI	CR			
IM	dimension		310x200x110 mm	VI	CR			
IM	temperature of IM		10K	VI	CR			
IM	emmissivity of surface of IM	*	0.02	VI	CR			
IM	specific heat of IM		TBD	VI	CR			
IM	thermal conductutivity of IM		TBD	VI	CR			
IM	local sensor for IM		TBD	VI	CR	EL		
IM	local control for IM		TBD	VI	CR	EL		
IM	RRR of material		TBD	VI	CR			
IM fiber	number of wires	*	4	VI	CR			
IM fiber	material		Tungsten	VI	CR			
IM fiber	Young's modulus	*	161GPa	VI	CR			
IM fiber	tensile strength	*	5GPa	VI	CR			
IM fiber	loss		1e-4	VI	CR			
IM fiber	thermal conductivity		TBD	VI	CR			
IM fiber	length		0.4m	VI	CR			
IM fiber	diameter		0.72mm	VI	CR			
IM fiber	density		19250kg/m <sup>3</sup>	VI	CR			
IM fiber	temperature		10K	VI	CR			
RM fiber	yaw-mode resonant frequency		TBD	VI	CR			
RM fiber	pitch-mode resonant frequency		TBD	VI	CR			
RM fiber	yaw-mode loss		TBD	VI	CR			
RM fiber	pitch-mode loss		TBD	VI	CR			
RM fiber	yaw-mode moment of inertia		TBD	VI	CR			
RM fiber	pitch-mode moment of inertia		TBD	VI	CR			
IOO	AF RIN (requirement)		TBD		IF		IO	LA
IOO	RF RIN (requirement)		1e-9W/W/rtHz		IF		IO	LA
IOO	FSS gain at 100Hz		300dB		IF		IO	LA
IOO	FSS gain at 1kHz		180dB		IF		IO	
IOO	Ref Cav length		15cm (single FP)				IO	

IOO	Ref Cav finesse	1e4			IO
IOO	pick-off power for FSS	100mW			IO
IOO	FSS PD noise level	1e-9V/rtHz			IO
IOO	COF between EOM and PZT	10kHz			IO LA
IOO	COF between PZT and MC length *	a few Hz			IO LA
IOO	COF between MC length and thermal	TBD			IO LA
IOO	input angle control range to MC	TBD			IO
IOO	input angle actuator noise level	TBD			IO
IOO	RF oscillator phase noise	-160dBc			IO
IOO	scattered light inside IO chamber	TBD	VA		IO
IOO	scattered light from IO view port	TBD	VA		IO
IOO	power attenuation range	100%-0.1%			IO
IOO	extinction ratio of Faraday Isolator	40dB			IO
Laser	laser power	180W			IO LA
Laser	wavelength	1064nm			IO LA
Laser	free-run frequency noise	100Hz/rtHz at 100Hz			IO LA
Laser	free-run intensity noise	1e-4 W/W/rtHz			IO LA
Laser	linewidth	a few kHz			IO LA
Laser	intensity control range	TBD			IO LA
Laser	intensity control method	TBD			IO LA
Laser	chiller temperature	15deg			IO LA
Laser	Laser temperature	TBD			IO LA
Laser	Laser temperature control method	water			IO LA
Laser	frequency control range for EOM	800kHz			IO LA
Laser	frequency control range for PZT	TBD			IO LA
Laser	frequency control range for thermal	TBD			IO LA
MC2	suspension type	Type-C			IO
MC2	MC length	26.6388m	VA		IO
MC2	MC finesse	500	VA		IO
MC2	output polarization	S-polarization			IO
MC2	output frequency noise	TBD			IO
MC2	output intensity noise	TBD			IO
MC2	output beam jitter	TBD			IO
MC2	HOM suppression	1e-3			IO
MC2	control band (FSS slow)	TBD	VI		IO LA
MC2	QPD noise	1e-9 V/rtHz			EL IO
MC2	(coupling factor from ASC to LSC)	1e-4 m/rad			IO

MC2	Beam centering error		0.1mm			IF	IO
MC2	PD dynamic range		TBD			IF	EL IO
MC2	QPD dynamic range		TBD			IF	EL IO
MIF	contrast defect (alignment etc)	*	0.5%			IF	
MIF	AS POM reflectivity (if any)	*	0	VA	VI	IF	
MIF	(laser power in PRC)		825W			IF	IO LA
MIF	(total optical loss in SRC)		2%		MI	IF	IO
MIF	quantum efficiency (DC PD)		90%			IF	EL IO
MIF	demodulation function		square wave			IF	IO
MIF	differential offset on arm cavities		+/- 2e-12m			IF	IO
MIF	(DC readout phase)		134.5deg (DRSE)			IF	IO
MIF	detune phase		3.55deg			IF	
MIF	PRM-PR2 distance		14.761m	VA		IF	
MIF	PR2-PR3 distance		12.067m	VA		IF	
MIF	PR3-BS distance		14.764m	VA		IF	
MIF	SRM-SR2 distance		14.761m	VA		IF	
MIF	SR2-SR3 distance		12.067m	VA		IF	
MIF	SR3-BS distance		14.764m	VA		IF	
MIF	folding angle		0.6293deg	VA		IF	
MIF	BS-ITM average distance		25.0285m	VA		IF	
MIF	(PRC length)		66.6205m	VA		IF	
MIF	(SRC length)		66.6205m	VA		IF	
MIF	Gouy phase shift in PRC		20deg			IF	
MIF	Gouy phase shift in SRC		20deg			IF	
MIF	arm length	*	3km	VA		IF	
MIF	asymmetry length		3.3310m	VA		IF	
MIF	f1 sideband frequencies		16.875MHz			IF	IO
MIF	f1 sideband types		PM			IF	IO
MIF	f1 sideband modulation depths	*	0.2 at IFO			IF	IO
MIF	f2 sideband frequencies		45MHz			IF	IO
MIF	f2 sideband types		PM			IF	IO
MIF	f2 sideband modulation depths	*	0.2 at IFO			IF	IO
MIF	f3 sideband freq (if any)		39.375MHz			IF	EL IO
MIF	f2 sideband types (if any)		AM			IF	EL IO
MIF	f2 sideband modulation depths (if any)		TBD			IF	IO
MIF	MZ configuration		single, if any			IF	IO
MIF	tilt noise on each WFS DOF		TBD		VI	IF	

MIF	(coupling factor from ASC to LSC)	*	$1e-4\text{m/rad}$	VI	IF		
MIF	Beam centering error on TM	*	0.1mm	VI	IF		
MIF	QPD dynamic range		TBD		IF	EL	
MIF	QPD noise level for transmitted light	*	$1e-9\text{V/rtHz}$		IF	EL	
MIF	Oplev QPD noise level		TBD		IF	EL	
MIF	Oplev control band width for pit, yaw	*	3Hz		IF	EL	
MIF	maximum DC voltage for demo signal		100mV		IF	EL	
MIF	electric noise on demo signal		$1e-9\text{V/rtHz}$		IF	EL	
MIF	CARM UGF		10kHz	VI	IF	EL	
MIF	DARM UGF		200Hz	VI	IF	EL	
MIF	PRCL UGF		20Hz	VI	IF	EL	
MIF	MICH UGF		20Hz	VI	IF	EL	
MIF	SRCL UGF		20Hz	VI	IF	EL	
MIF	PRCL FF gain		100		IF	DG	
MIF	MICH FF gain		100		IF	DG	
MIF	SRCL FF gain		100		IF	DG	
MIF	CARM signal extraction port		REFL	VA	IF		
MIF	DARM signal extraction port		OMCout	VA	IF		
MIF	PRCL signal extraction port		POP	VA	IF		
MIF	MICH signal extraction port		REFL	VA	IF		
MIF	SRCL signal extraction port		REFL	VA	IF		
MIF	RF PD (high power) dynamic range		TBD		IF	EL	
MIF	RF PD (low power) dynamic range		TBD		IF	EL	
MIF	DC PD (high power) dynamic range		TBD		IF	EL	
MIF	DC PD (low power) dynamic range		TBD		IF	EL	
MIF	DC PD noise level for transmitted light		TBD		IF	EL	
MIF	Green Laser finesse in arms		19 (ITM80%–ETM90%)	MI	IF		
MIF	Green Laser power		100mW		IF	IO	LA
MIF	Green laser's frequency gap (X and Y)		100MHz		IF	IO	LA
MIF	Green Laser phase lock tightness		TBD		IF	IO	LA
MIF	Green laser Injection Point		PR3 and SR3	VA	IF	IO	
MIF	BS reflectivity for green		<1%	MI	IF		
MIF	PR2, SR2 reflectivity for green		<1%	MI	IF		
MIF	PR3, SR3 reflectivity for green		<1%	MI	IF		
MIF	rms fluctuation of DARM		$1e-14\text{m}$	VI	IF	IO	
OMC	number of mirrors		4	MI	IF	IO	
OMC	OMC optical loss	*	1%	MI	IF	IO	

OMC	OMC length	*	38cm	VA		IF	IO
OMC	OMC finesse	*	1000 (too high for 1% loss)			IF	IO
OMC	OMC displacement noise		TBD	VI		IF	IO
OMC	actuator range		TBD			IF	IO
OMC	actuator noise level		TBD			IF	EL IO
OMC	RF reduction ratio		110dB			IF	IO
OMC	dither frequency for length control		TBD			IF	IO
OMC	dither frequency for angle control		TBD			IF	IO
OMC	dither PD noise level		1e-9 V/rtHz			IF	EL IO
OMC	dither QPD noise level		1e-9 V/rtHz			IF	EL IO
PMC	number of mirrors		4	VI MI			EL IO
PMC	cavity length		48.8cm				IO
PMC	finesse		155				IO
PMC	RF PD noise level		1e-9 V/rtHz				IO
PMC	actuator range		TBD				EL IO
PMC	actuator noise level		TBD				EL IO
PRMs	PM1 radius		12.5cm	VI MI			
PRMs	PM1 thickness		10cm	VI MI			
PRMs	PM2 radius		12.5cm	VI MI			
PRMs	PM2 thickness		10cm	VI MI			
PRMs	PM3 radius		12.5cm	VI MI			
PRMs	PM3 thickness		10cm	VI MI			
PRMs	PRM reflectivity		90%		MI	IF	
PRMs	PRM optical loss		100ppm		MI	IF	
PRMs	RoC of PRM		370m		MI	IF	IO
PRMs	RoC of PR2		4.17m		MI	IF	IO
PRMs	RoC of PR3		32.34m		MI	IF	IO
PRMs	wedge angle of PRM	*	0.3deg	VA	MI	IF	IO
RM	mass of RMTM		30kg	VI		CR	
RM	material of RMTM		Cu	VI		CR	
RM	outer diameter		29cm	VI		CR	
RM	inner diameter		26cm	VI		CR	
RM	thickness		26cm	VI		CR	
RM	temperature of RMTM		20K	VI		CR	
RM	emmissivity of surface of RMTM		0.02	VI		CR	
RM	specific heat of RMTM		TBD	VI		CR	
RM	thermal conductutivity of RMTM		TBD	VI		CR	

RM	number of coil	4		VI	CR	EL	
RM	resistance of coil	TBD		VI	CR	EL	
RM fiber	material	BeCu		VI	CR		
RM fiber	thermal conductivity	TBD		VI	CR		
RM fiber	length	30cm		VI	CR		
RM fiber	diameter	0.4mm		VI	CR		
RM fiber	number of fibers	4		VI	CR		
RM fiber	Young's modulus	130GPa		VI	CR		
RM fiber	density	8360kg/m <sup>3</sup>		VI	CR		
RM fiber	effective temperature	16K		VI	CR		
RM fiber	loss	5e-6		VI	CR		
RM fiber	yaw-mode resonant frequency	TBD		VI	CR		
RM fiber	pitch-mode resonant frequency	TBD		VI	CR		
RM fiber	yaw-mode loss	TBD		VI	CR		
RM fiber	pitch-mode loss	TBD		VI	CR		
RM fiber	yaw-mode moment of inertia	TBD		VI	CR		
RM fiber	pitch-mode moment of inertia	TBD		VI	CR		
SAS	Vertical horizontal coupling	worse 1/200	TU FA VA	VI MI	IF		GE
SAS	TM seismic motion	Type-1 4e-20m/rtHz at 10Hz	VA	VI MI	IF		GE
SAS	PRM seismic motion	Type-1 2e-21m/rtHz at 10Hz		VI	IF		
SAS	SRM seismic motion	Type-1 2e-21m/rtHz at 10Hz		VI	IF		
SAS	OMC seismic motion	TBD		VI	IF	IO	
SAS	adjustable distance (DC)	* 1cm		VI	IF	EL	
SAS	actuation range (AC)	TBD		VI	IF	EL	
SAS	actuator noise	TBD		VI		EL	
SAS	TF from actuators to test mass	TBD		VI MI	IF		
SAS	RMS displacement	0.1um		VI MI	IF DG		
SAS	RMS velocity	0.1um/s		VI MI	IF DG		
SAS	RMS pitch	TBD		VI MI	IF DG		
SAS	RMS yaw	TBD		VI MI	IF DG		
SAS	speed of sound	TBD	TU FA	VI			GE
SAS	CMRR (3km)	TBD	TU FA	VI			GE
SAS	CMR cutoff frequency	TBD	TU FA	VI			GE
SAS	local seismic motion at center	2e-9 m/rtHz at 1Hz	TU FA	VI	CR		GE
SAS	local seismic motion at itmx	2e-9 m/rtHz at 1Hz	TU FA	VI	CR		GE
SAS	local seismic motion at itmy	2e-9 m/rtHz at 1Hz	TU FA	VI	CR		GE
SAS	local seismic motion at etmx	2e-9 m/rtHz at 1Hz	TU FA	VI	CR		GE

SAS	local seismic motion at etmy		2e-9 m/rtHz at 1Hz	TU FA	VI		CR		GE
SRMs	SM1 radius		12.5cm		VI	MI			
SRMs	SM1 thickness		10cm		VI	MI			
SRMs	SM2 radius		12.5cm		VI	MI			
SRMs	SM2 thickness		10cm		VI	MI			
SRMs	SM3 radius		12.5cm		VI	MI			
SRMs	SM3 thickness		10cm		VI	MI			
SRMs	SRM reflectivity		85%			MI	IF		
SRMs	SRM optical loss		100ppm			MI	IF		
SRMs	RoC of SRM		370m			MI	IF	IO	
SRMs	RoC of SR2		4.17m			MI	IF	IO	
SRMs	RoC of SR3		32.34m			MI	IF	IO	
SRMs	wedge of SRM	*	0.3deg	VA		MI	IF	IO	
TM	actuator power on ITM		TBD				IF	EL	
TM	actuator power on ETM		TBD				IF	EL	
TM	material of TM		Sapphire		VI	MI	CR		
TM	dimension		f250 x t150		VI	MI	CR		
TM	emmissivity of surface of TM		TBD			MI	CR		
TM	specific heat of TM		0.69 J/K/kg			MI	CR		
TM	thermal conducutivity of TM		1.57e4 W/m/K			MI	CR		
TM	Outer Diameter		25cm		VI	MI	CR		
TM	Outer Diameter Flat to Flat	*	24.6cm		VI	MI	CR		
TM	scratches and sleeks on two surfaces		TBD		VI	MI	CR		
TM	point defects on two surfaces		TBD		VI	MI	CR		
TM	central region surface rms		0.3nm (d<12cm)		VI	MI	CR	IF	
TM	outer region surface rms	*	1nm (d>12cm)		VI	MI	CR	IF	
TM	AR side surface flatness		TBD		VI	MI	CR	IF	
TM	ROC seen from AR side		TBD		VI	MI	CR	IF	
TM	coating / substrate homogeneity		TBD		VI	MI	CR	IF	
TM	dr/dt of AR (reflectivity change)		TBD		VI	MI	CR	IF	
TM	point scattering		TBD		VI	MI	CR	IF	
TM	surface quality after coating		TBD		VI	MI	CR	IF	
TM	birefringence		TBD		VI	MI	CR	IF	
TM	beam radius on ETM		4.53cm			MI	IF	IO	
TM	beam radius on ITM		3.43cm			MI	IF	IO	
TM	mirror radius of ETM		12.5cm		VI	MI			
TM	mirror radius of ITM		12.5cm		VI	MI			

TM	mirror bulk density of ETM	4000 kg/m <sup>3</sup>	VI MI
TM	mirror buld density of ITM	4000 kg/m <sup>3</sup>	VI MI
TM	mirror temperature of ETM	20K	VI MI CR
TM	mirror temeprature of ITM	20K	VI MI CR
TM	Young's modulus of ETM substrate	400GPa	MI
TM	Young's modulus of ITM substrate	400GPa	MI
TM	mirror bulk Poisson ratio of ETM	0.29	MI
TM	mirror bulk Poisson ratio of ITM	0.29	MI
TM	mirror thermal expansion of ETM	5.6e-9 1/K	MI CR
TM	mirror thermal expansion of ITM	5.6e-9 1/K	MI CR
TM	mirror specific heat of ETM	0.69 J/K/kg	MI CR
TM	mirror specific heat of ITM	0.69 J/K/kg	MI CR
TM	mirror thermal conductivity of ETM	1.57e4 W/m/K	MI CR
TM	mirror thermal conductivity of ITM	1.57e4 W/m/K	MI CR
TM	mirror mechanical loss of ETM	1e-8	MI CR
TM	mirror mechanical loss of ITM	1e-8	MI CR
TM	silica coating Youngs modulus	72GPa	MI CR
TM	tantala coating Youngs modulus	140GPa	MI CR
TM	silica coating Poisson ratio	0.17	MI CR
TM	tantala coating Poisson ratio	0.23	MI CR
TM	silica coating loss	3e-4	MI CR
TM	tantala coating loss	5e-4	MI CR
TM	silica coating specific heat per volume	1.64e6 J/K/m <sup>3</sup>	MI CR
TM	tantala coating specific heat per volume	2.10e6 J/K/m <sup>3</sup>	MI CR
TM	silica coating thermal expansion	5.1e-7 1/K	MI CR
TM	tantala coating thermal expansion	3.6e-6 1/K	MI CR
TM	silica coating thermal conductivity	1.38 W/m/K	MI CR
TM	tantala coating thermal conductivity	33 W/m/K	MI CR
TM	number of layers on ETM	18	MI CR
TM	number of layers on ITM	9	MI CR
TM	coating absorption	challer 0.5ppm	MI CR
TM	AR surface absorption	1ppm	MI CR
TM	mirror contamination	TBD	MI CR
TM	ETM reflectivity	0.999945	MI IF
TM	ITM reflectivity	0.996	MI IF
TM	ETM optical loss	45ppm	MI IF
TM	ITM optical loss	45ppm	MI IF

TM	optical loss imbalance		+/-15ppm		MI	IF
TM	finesse imbalance		0.5%		MI	IF
TM	ITM substrate optical loss		20ppm/cm		MI	CR IF
TM	ITM AR surface optical loss	*	1000ppm		MI	IF
TM	ETM mass		30kg		MI	IF
TM	ITM mass		30kg		MI	IF
TM	RoC error of ETM	*	1%		MI	IF
TM	RoC error of ITM	*	1%		MI	IF
TM	RoC of ETM		7km		MI	IF
TM	RoC of ITM		>500km		MI	IF
TM	RoC imbalance in two arms	*	0.5%		MI	IF
TM	wedge angle of ETM	*	0.3deg	VA	MI	IF
TM	wedge angle of ITM	*	0.3deg	VA	MI	IF
TM fiber	uniformity of TM fiber		TBD		VI	CR
TM fiber	material		Sapphire		VI	CR
TM fiber	thermal conductivity	*	7kW/m/K at 20K		VI	CR
TM fiber	length		30cm		VI	CR
TM fiber	diameter		1.6mm		VI	CR
TM fiber	number of fibers		4		VI	CR
TM fiber	Young's modulus		400GPa		VI	CR
TM fiber	density		4000kg/m <sup>3</sup>		VI	CR
TM fiber	effective temperature		16		VI	CR
TM fiber	loss		2e-7		VI	CR
TM fiber	yaw-mode resonant frequency		TBD		VI	CR
TM fiber	pitch-mode resonant frequency		TBD		VI	CR
TM fiber	yaw-mode loss		TBD		VI	CR
TM fiber	pitch-mode loss		TBD		VI	CR
TM fiber	yaw-mode moment of inertia		TBD		VI	CR
TM fiber	pitch-mode moment of inertia		TBD		VI	CR