

Constants	Notation	Values	Units	Measured
speed of light in vacuum	C	3,00E+08	m/s	
Plank constant	h	6,63E-34	J.s	
Parameters				
Laser power output	Plaser	6,30E-03	W	7,00E-03
Number of FC connectors	Nfc	5	-	
FC connector losses	Lfc	-0,10	db	
Number of 1->2 splitters	Ns	1	-	
1->2 splitters losses	Ls	-3,70	db	
Modulator losses	Lmod	-6,00	db	
Switch losses	Lswitch	-2,00	db	
PM fibres NA	θ	0,0830	-	
visibility	V	0,6000	-	
distance fibres to CCD	L	0,6	m	
effective well size	w	200000	-	
pixel size	e	2,40E-05	m	
CCD mean quantum efficiency	ρ_{pix}	8,00E-01	-	
metrology wavelength	λ_m	6,32E-07	m	
Detector minimum read time	Tmin	1,00E-03	s	
Number of metrology photons needed / pixel	Np_e	1,90E+08	-	
Intermediate quantities				
Transmission of integrated metrology	T	-1,22E+01	db	
Metrology power output (one fiber)	Ptip	3,80E-04	W	
Metrology mean power / pixel (one fiber, beam center)	Ppix	5,61E-11	W	
Photo electron max flux / pixel (one fiber, beam center)	Fe_pix	1,43E+08	s-1	
Fringe photon flux / pixel (max)	Fe_max_pix	4,57E+08	s-1	
Number of metrology frames needed	Nf	1,58E+03	-	
Final quantities				
Integration time (source limited)	Ty_i	4,38E-04	s	
Source optimality coefficient	η	2,28	-	0.4
Integration time	Ti	1,00E-03		
Total integration time	Ttot	1,58E+00	-	