Beam splitter and polarization beam splitter quantitative testing

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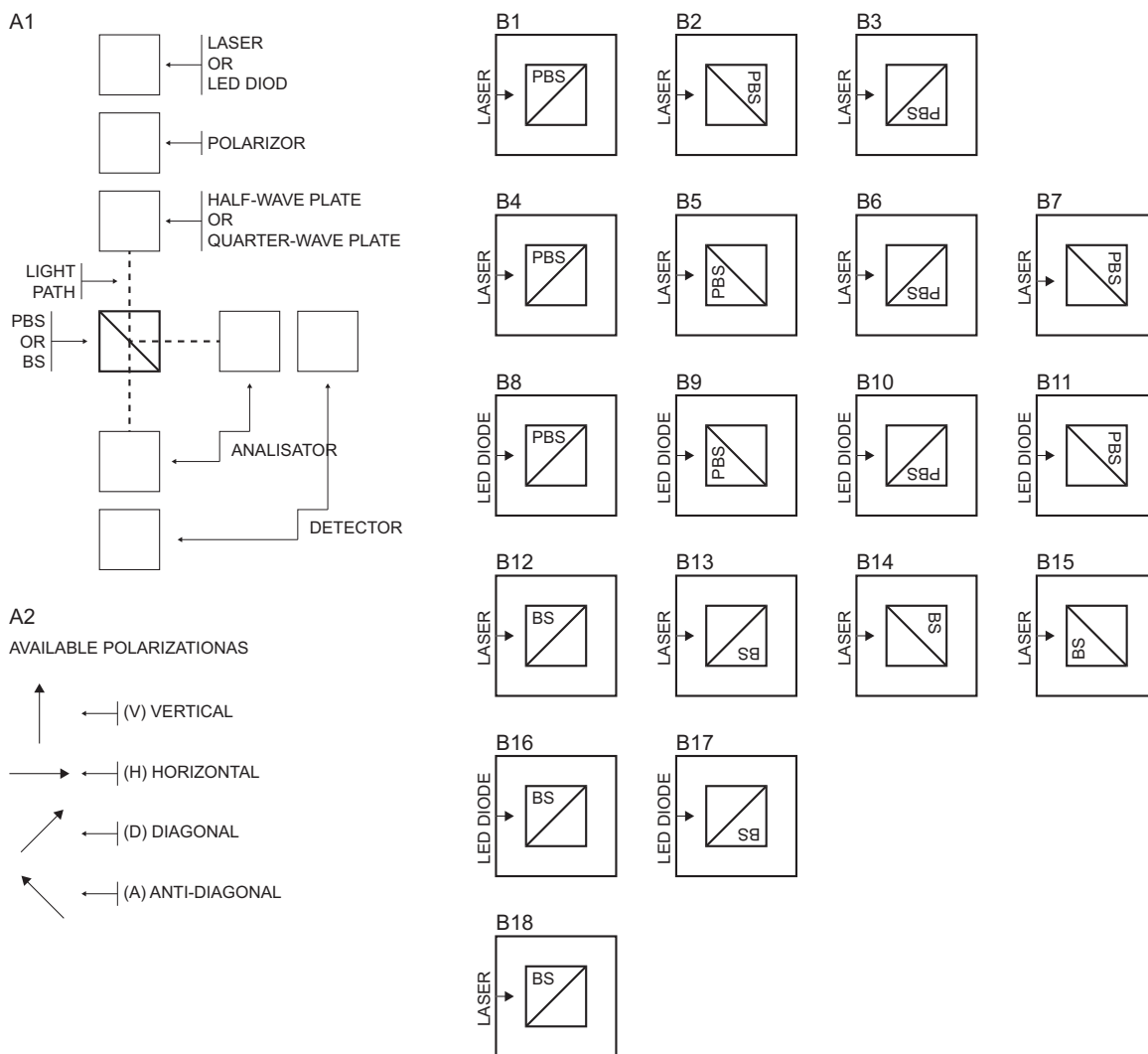## CONTENTS

I. TEST SETUP

FIG. 1. Beam splitter or polarization beam splitter measurement setup (A1). Available polarizations generater from light source, laser diode of 808 nm wavelength or LED diode of ca. 810 nm wavelength (A2)

II. TEST RESULTS

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →	0	6.690000	0.002000	93.83%	0.03%
horizontal →	45	4.840000	0.006660	67.88%	0.09%
horizontal →	90	0.001100	0.012880	0.02%	0.18%
horizontal →	135	5.000000	0.006500	70.13%	0.09%
horizontal →	Total:	6.930000	0.200000	97.19%	2.81%

TABLE I: Results for Fig. 1 B1 aligment of polarisation beam splitter, with laser diode as source and for initial horizontal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗	0	4.430000	0.012700	41.17%	0.12%
diagonal ↗	45	2.440000	2.200000	22.68%	20.45%
diagonal ↗	90	0.001000	4.740000	0.01%	44.05%
diagonal ↗	135	2.600000	2.500000	24.16%	23.23%
diagonal ↗	Total:	5.300000	5.460000	49.26%	50.74%

TABLE II: Results for Fig. 1 B1 aligment of polarisation beam splitter, with laser diode as source and for initial diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑	0	0.001800	0.002100	0.01%	0.02%
vertical ↑	45	0.001300	7.000000	0.01%	50.86%
vertical ↑	90	0.000700	12.800000	0.01%	93.00%
vertical ↑	135	0.001300	6.460000	0.01%	46.94%
vertical ↑	Total:	0.002900	13.760000	0.02%	99.98%

TABLE III: Results for Fig. 1 B1 aligment of polarisation beam splitter, with laser diode as source and for initial vertical polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖	0	5.000000	0.012860	41.74%	0.11%
anti-diagonal ↖	45	2.700000	3.110000	22.54%	25.96%
anti-diagonal ↖	90	0.000900	6.200000	0.01%	51.75%
anti-diagonal ↖	135	2.900000	3.060000	24.21%	25.54%
anti-diagonal ↖	Total:	5.380000	6.600000	44.91%	55.09%

TABLE IV: Results for Fig. 1 B1 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →	0	12.450000	0.130000	89.93%	0.94%
horizontal →	45	6.260000	0.060770	45.22%	0.44%
horizontal →	90	0.000780	0.002200	0.01%	0.02%
horizontal →	135	6.430000	0.070350	46.45%	0.51%
horizontal →	Total:	13.700000	0.143650	98.96%	1.04%

TABLE V: Results for Fig. 1 B2 aligment of polarisation beam splitter, with laser diode as source and for initial horizontal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗	0	4.000000	0.038000	37.49%	0.36%
diagonal ↗	45	2.170000	1.740000	20.34%	16.31%
diagonal ↗	90	0.002000	3.600000	0.02%	33.74%
diagonal ↗	135	2.200000	1.970000	20.62%	18.46%
diagonal ↗	Total:	5.000000	5.670000	46.86%	53.14%

TABLE VI: Results for Fig. 1 B2 aligment of polarisation beam splitter, with laser diode as source and for initial diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑	0	0.000550	0.001200	0.00%	0.01%
vertical ↑	45	0.003000	5.640000	0.02%	42.67%
vertical ↑	90	0.003600	12.100000	0.03%	91.55%
vertical ↑	135	0.002700	6.250000	0.02%	47.29%
vertical ↑	Total:	0.007530	13.210000	0.06%	99.94%

TABLE VII: Results for Fig. 1 B2 aligment of polarisation beam splitter, with laser diode as source and for initial vertical polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖	0	4.000000	0.051000	35.03%	0.45%
anti-diagonal ↖	45	1.900000	3.380000	16.64%	29.60%
anti-diagonal ↖	90	0.002850	6.360000	0.02%	55.69%
anti-diagonal ↖	135	1.950000	3.100000	17.08%	27.15%
anti-diagonal ↖	Total:	4.420000	7.000000	38.70%	61.30%

TABLE VIII: Results for Fig. 1 B2 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →	0	8.000000	0.207000	92.49%	2.39%
horizontal →	45	2.830000	0.106000	32.72%	1.23%
horizontal →	90	0.000700	0.000750	0.01%	0.01%
horizontal →	135	2.400000	0.101000	27.75%	1.17%
horizontal →	Total:	8.400000	0.250000	97.11%	2.89%

TABLE IX: Results for Fig. 1 B3 aligment of polarisation beam splitter, with laser diode as source and for initial horizontal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗	0	5.400000	0.102000	42.25%	0.80%
diagonal ↗	45	2.200000	3.100000	17.21%	24.26%
diagonal ↗	90	0.002500	6.200000	0.02%	48.51%
diagonal ↗	135	2.000000	3.200000	15.65%	25.04%
diagonal ↗	Total:	5.700000	7.080000	44.60%	55.40%

TABLE X: Results for Fig. 1 B3 aligment of polarisation beam splitter, with laser diode as source and for initial diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑	0	0.001000	0.001280	0.01%	0.01%
vertical ↑	45	0.004000	5.950000	0.03%	45.29%
vertical ↑	90	0.006600	11.600000	0.05%	88.29%
vertical ↑	135	0.003700	6.500000	0.03%	49.47%
vertical ↑	Total:	0.008900	13.130000	0.07%	99.93%

TABLE XI: Results for Fig. 1 B3 aligment of polarisation beam splitter, with laser diode as source and for initial vertical polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖	0	5.450000	0.101000	43.08%	0.80%
anti-diagonal ↖	45	2.680000	3.100000	21.19%	24.51%
anti-diagonal ↖	90	0.003400	6.100000	0.03%	48.22%
anti-diagonal ↖	135	2.000000	3.150000	15.81%	24.90%
anti-diagonal ↖	Total:	5.800000	6.850000	45.85%	54.15%

TABLE XII: Results for Fig. 1 B3 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →	Soruce power:		16.800000		
horizontal →	0	11.200000	0.052800	66.67%	0.31%
horizontal →	90	0.001400	0.003650	0.01%	0.02%

TABLE XIII: Results for Fig. 1 B4 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗	Soruce power:		16.400000		
diagonal ↗	0	5.800000	0.014600	35.37%	0.09%
diagonal ↗	90	0.000750	4.550000	0.00%	27.74%

TABLE XIV: Results for Fig. 1 B4 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑	Soruce power:		16.800000		
vertical ↑	0	0.000890	2.250000	0.01%	13.39%
vertical ↑	90	0.000600	10.240000	0.00%	60.95%

TABLE XV: Results for Fig. 1 B4 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖	Soruce power:		16.350000		
anti-diagonal ↖	0	5.600000	0.007400	34.25%	0.05%
anti-diagonal ↖	90	0.001300	3.400000	0.01%	20.80%

TABLE XVI: Results for Fig. 1 B4 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →	Soruce power:		12.800000		
horizontal →	0	11.760000	0.000980	91.88%	0.08%
horizontal →	90	0.001980	0.010000	0.02%	0.01%

TABLE XVII: Results for Fig. 1 B5 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗	Soruce power:		12.840000		
diagonal ↗	0	3.700000	0.005100	28.82%	0.04%
diagonal ↗	90	0.000800	4.050000	0.01%	31.54%

TABLE XVIII: Results for Fig. 1 B5 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑	Soruce power:		12.900000		
vertical ↑	0	0.001100	0.000950	0.01%	0.01%
vertical ↑	90	0.600000	10.050000	4.65%	77.91%

TABLE XIX: Results for Fig. 1 B5 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖	Soruce power:		12.800000		
anti-diagonal ↖	0	3.600000	0.003670	28.13%	0.03%
anti-diagonal ↖	90	0.001100	3.400000	0.01%	26.56%

TABLE XX: Results for Fig. 1 B5 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →	Soruce power:		12.300000		
horizontal →	0	11.740000	0.145000	95.45%	1.18%
horizontal →	90	0.001970	0.015000	0.02%	0.12%

TABLE XXI: Results for Fig. 1 B6 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗	Soruce power:		11.200000		
diagonal ↗	0	5.600000	0.012700	50.00%	0.11%
diagonal ↗	90	0.001300	6.300000	0.01%	56.25%

TABLE XXII: Results for Fig. 1 B6 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑	Soruce power:		12.400000		
vertical ↑	0	0.001570	0.001150	0.01%	0.01%
vertical ↑	90	0.000600	12.100000	0.00%	97.58%

TABLE XXIII: Results for Fig. 1 B6 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖	Soruce power:		11.400000		
anti-diagonal ↖	0	5.880000	0.010000	51.58%	0.09%
anti-diagonal ↖	90	0.002000	5.900000	0.02%	51.75%

TABLE XXIV: Results for Fig. 1 B6 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →	Soruce power:		16.900000		
horizontal →	0	11.100000	0.164000	65.68%	0.97%
horizontal →	90	0.001630	0.010800	0.01%	0.06%

TABLE XXV: Results for Fig. 1 B7 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗	Soruce power:		6.700000		
diagonal ↗	0	5.100000	0.011000	76.12%	0.16%
diagonal ↗	90	0.004000	4.500000	0.06%	67.16%

TABLE XXVI: Results for Fig. 1 B7 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑	Soruce power:		16.900000		
vertical ↑	0	0.001800	0.002650	0.01%	0.02%
vertical ↑	90	2.700000	14.500000	15.98%	85.80%

TABLE XXVII: Results for Fig. 1 B7 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖	Soruce power:		5.600000		
anti-diagonal ↖	0	5.300000	0.011100	94.64%	0.20%
anti-diagonal ↖	90	0.002500	4.450000	0.04%	79.46%

TABLE XXVIII: Results for Fig. 1 B7 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
horizontal →	Soruce power:		5.990000		
horizontal →	0	4.455000	0.050000	74.37%	0.83%
horizontal →	90	0.007000	0.010000	0.12%	0.17%

TABLE XXIX: Results for Fig. 1 B8 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
diagonal ↗	Soruce power:		5.800000		
diagonal ↗	0	2.065000	0.020000	35.60%	0.34%
diagonal ↗	90	0.010000	2.460000	0.17%	42.41%

TABLE XXX: Results for Fig. 1 B8 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
vertical ↑	Soruce power:		7.500000		
vertical ↑	0	0.009000	0.025000	0.12%	0.33%
vertical ↑	90	0.008000	2.460000	0.11%	32.80%

TABLE XXXI: Results for Fig. 1 B8 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
anti-diagonal ↖	Soruce power:		5.710000		
anti-diagonal ↖	0	2.100000	0.010000	36.78%	0.18%
anti-diagonal ↖	90	0.010000	2.410000	0.18%	42.21%

TABLE XXXII: Results for Fig. 1 B8 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
horizontal →	Soruce power:		5.990000		
horizontal →	0	4.600000		76.79%	0.00%
horizontal →	90	0.010000		0.17%	0.00%

TABLE XXXIII: Results for Fig. 1 B9 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
diagonal ↗	Soruce power:		5.800000		
diagonal ↗	0	2.510000	0.010000	43.28%	0.17%
diagonal ↗	90	0.010000	2.440000	0.17%	42.07%

TABLE XXXIV: Results for Fig. 1 B9 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
vertical ↑	Soruce power:		7.500000		
vertical ↑	0	0.040000		0.00%	0.53%
vertical ↑	90	4.620000		0.00%	61.60%

TABLE XXXV: Results for Fig. 1 B9 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
anti-diagonal ↖	Soruce power:		5.710000		
anti-diagonal ↖	0	2.150000	0.040000	37.65%	0.70%
anti-diagonal ↖	90	0.015000	2.390000	0.26%	41.86%

TABLE XXXVI: Results for Fig. 1 B9 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
horizontal →	Soruce power:		5.250000		
horizontal →	0	4.730000	0.080000	90.10%	1.52%
horizontal →	90	0.030000	0.030000	0.57%	0.57%

TABLE XXXVII: Results for Fig. 1 B10 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
diagonal ↗	Soruce power:		5.530000		
diagonal ↗	0	2.300000	0.059000	41.59%	1.07%
diagonal ↗	90	0.050000	2.290000	0.90%	41.41%

TABLE XXXVIII: Results for Fig. 1 B10 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
vertical ↑	Soruce power:		5.650000		
vertical ↑	0	0.030000	0.060000	0.53%	1.06%
vertical ↑	90	0.020000	4.380000	0.35%	77.52%

TABLE XXXIX: Results for Fig. 1 B10 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
anti-diagonal ↖	Soruce power:		5.580000		
anti-diagonal ↖	0	0.960000	0.500000	17.20%	8.96%
anti-diagonal ↖	90	0.040000	2.300000	0.72%	41.22%

TABLE XL: Results for Fig. 1 B10 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
horizontal →	Soruce power:		5.990000		
horizontal →	0	4.490000	0.058000	74.91%	0.97%
horizontal →	90	0.008000	0.015000	0.13%	0.25%

TABLE XLI: Results for Fig. 1 B11 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
diagonal ↗	Soruce power:		5.800000		
diagonal ↗	0	2.080000	0.035000	35.86%	0.60%
diagonal ↗	90	0.006500	2.390000	0.11%	41.21%

TABLE XLII: Results for Fig. 1 B11 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
vertical ↑	Soruce power:		7.500000		
vertical ↑	0	0.010000	Soruce power:	0.00%	0.13%
vertical ↑	90	4.620000	Soruce power:	0.00%	61.60%

TABLE XLIII: Results for Fig. 1 B11 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
anti-diagonal ↖	Soruce power:		5.700000		
anti-diagonal ↖	0	2.070000	0.020000	36.37%	0.35%
anti-diagonal ↖	90	0.007000	2.390000	0.12%	41.93%

TABLE XLIV: Results for Fig. 1 B11 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →			Soruce power:		12.900000		
horizontal →	−1	3	horizontal →	4.320000	5.260000	33.49%	40.78%
horizontal →	89	93	vertical ↑	0.001220	0.005570	0.01%	0.04%

TABLE XLV: Results for Fig. 1 B12 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗			Soruce power:		12.800000		
diagonal ↗	45	46	diagonal ↗	4.540000	0.059000	35.47%	0.46%
diagonal ↗	136	137	anti-diagonal ↖	0.007960	3.320000	0.06%	25.94%

TABLE XLVI: Results for Fig. 1 B12 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑			Soruce power:		13.100000		
vertical ↑	0	2	horizontal →	0.003430	0.002900	0.03%	0.02%
vertical ↑	88	92	vertical ↑	4.200000	4.920000	32.06%	37.56%

TABLE XLVII: Results for Fig. 1 B12 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖			Soruce power:		12.400000		
anti-diagonal ↖	44	47	diagonal ↗	0.010800	4.450000	0.09%	35.89%
anti-diagonal ↖	133	137	anti-diagonal ↖	4.440000	0.095200	35.81%	0.77%

TABLE XLVIII: Results for Fig. 1 B12 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →			Soruce power:		13.200000		
horizontal →	−1	2	horizontal →	4.870000	5.110000	36.89%	0.04%
horizontal →	90	92	vertical ↑	0.004620	0.005670	0.04%	38.71%

TABLE XLIX: Results for Fig. 1 B13 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗			Soruce power:		12.770000		
diagonal ↗	45	137	diagonal ↗	4.600000	4.820000	36.02%	37.74%
diagonal ↗	137	46	anti-diagonal ↖	0.001340	0.298000	0.01%	2.33%

TABLE L: Results for Fig. 1 B13 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑			Soruce power:		13.300000		
vertical ↑	0	2	horizontal →	0.003100	0.001500	0.02%	0.01%
vertical ↑	89	92	vertical ↑	4.740000	5.000000	35.64%	37.59%

TABLE LI: Results for Fig. 1 B13 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖			Soruce power:		12.900000		
anti-diagonal ↖	43	133	diagonal ↗	0.001850	0.270000	0.01%	2.09%
anti-diagonal ↖	131	49	anti-diagonal ↖	4.520000	4.720000	35.04%	36.59%

TABLE LII: Results for Fig. 1 B13 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →			Soruce power:		13.300000		
horizontal →	3	3	horizontal →	4.740000	4.660000	35.64%	35.04%
horizontal →	90	90	vertical ↑	0.001400	0.005200	0.01%	0.04%

TABLE LIII: Results for Fig. 1 B14 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗			Soruce power:		13.360000		
diagonal ↗	47	134	diagonal ↗	5.300000	3.700000	39.67%	27.69%
diagonal ↗	136	46	anti-diagonal ↖	0.012500	0.245000	0.09%	1.83%

TABLE LIV: Results for Fig. 1 B14 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑			Soruce power:		13.400000		
vertical ↑	0	2	horizontal →	0.000640	0.850000	0.00%	6.34%
vertical ↑	90	91	vertical ↑	5.680000	2.560000	42.39%	19.10%

TABLE LV: Results for Fig. 1 B14 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖			Soruce power:		12.600000		
anti-diagonal ↖	43	139	diagonal ↗	0.012800	0.227000	0.10%	1.80%
anti-diagonal ↖	133	46	anti-diagonal ↖	5.360000	3.630000	42.54%	28.81%

TABLE LVI: Results for Fig. 1 B14 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →			Soruce power:		13.200000		
horizontal →	−1	3	horizontal →	5.590000	5.600000	42.35%	42.42%
horizontal →	90	93	vertical ↑	0.009160	0.003000	0.07%	0.02%

TABLE LVII: Results for Fig. 1 B15 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗			Soruce power:		12.900000		
diagonal ↗	45	136	diagonal ↗	5.460000	4.400000	42.33%	34.11%
diagonal ↗	136	47	anti-diagonal ↖	0.017300	0.107000	0.13%	0.83%

TABLE LVIII: Results for Fig. 1 B15 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑			Soruce power:		13.250000		
vertical ↑	0	3	horizontal →	0.001980	0.002650	0.01%	0.02%
vertical ↑	90	95	vertical ↑	5.670000	3.000000	42.79%	22.64%

TABLE LIX: Results for Fig. 1 B15 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖			Soruce power:		12.800000		
anti-diagonal ↖	134	139	diagonal ↗	5.430000	0.078000	42.42%	0.61%
anti-diagonal ↖	43	45	anti-diagonal ↖	0.014000	3.600000	0.11%	28.13%

TABLE LX: Results for Fig. 1 B15 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
horizontal →			Soruce power:		5.790000		
horizontal →	0	2	horizontal →	2.080000	2.150000	35.87%	37.13%
horizontal →	91	94	vertical ↑	0.003500	0.009800	0.06%	0.17%

TABLE LXI: Results for Fig. 1 B16 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
diagonal ↗			Soruce power:		5.770000		
diagonal ↗	47	46	diagonal ↗	2.068000	2.050000	35.84%	35.53%
diagonal ↗	136	136	anti-diagonal ↖	0.000400	0.092000	0.01%	1.59%

TABLE LXII: Results for Fig. 1 B16 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
vertical ↑			Soruce power:		5.960000		
vertical ↑	0	3	horizontal →	0.000500	0.023000	0.01%	0.39%
vertical ↑	92	93	vertical ↑	2.100000	2.130000	35.23%	35.74%

TABLE LXIII: Results for Fig. 1 B16 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
anti-diagonal ↖			Soruce power:		5.760000		
anti-diagonal ↖	133	139	diagonal ↗	0.000500	0.080000	0.01%	1.39%
anti-diagonal ↖	45	50	anti-diagonal ↖	2.080000	2.040000	36.09%	35.42%

TABLE LXIV: Results for Fig. 1 B16 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
horizontal →			Soruce power:		5.778000		
horizontal →	0	5	horizontal →	1.993000	2.060000	34.49%	0.14%
horizontal →	92	92	vertical ↑	0.058000	0.008000	1.00%	35.65%

TABLE LXV: Results for Fig. 1 B17 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
diagonal ↗			Soruce power:		5.710000		
diagonal ↗	47	50	diagonal ↗	1.980000	2.000000	34.68%	35.03%
diagonal ↗	137	139	anti-diagonal ↖	0.006000	0.117000	0.11%	2.05%

TABLE LXVI: Results for Fig. 1 B17 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
vertical ↑			Soruce power:		5.790000		
vertical ↑	−2	3	horizontal →	0.009000	0.002000	0.16%	0.03%
vertical ↑	91	91	vertical ↑	2.020000	2.050000	34.89%	35.41%

TABLE LXVII: Results for Fig. 1 B17 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	T angle	R angle	Analisator [°]	Transmission [μW] (T)	Reflection [μW] (R)	T%	R%
anti-diagonal ↖			Soruce power:		5.730000		
anti-diagonal ↖	45	49	diagonal ↗	0.006000	0.002000	0.10%	0.03%
anti-diagonal ↖	132	137	anti-diagonal ↖	1.980000	1.910000	34.55%	33.33%

TABLE LXVIII: Results for Fig. 1 B17 aligment of polarisation beam splitter, with LED diode as source and for initial anti-diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
horizontal →	0	5.050000	4.500000	41.77%	37.22%
horizontal →	45	3.000000	2.450000	24.81%	20.26%
horizontal →	90	0.002000	0.008400	0.02%	0.07%
horizontal →	135	2.600000	2.300000	21.51%	19.02%
horizontal →	*All*	6.900000	5.190000	57.07%	42.93%

TABLE LXIX: Results for Fig. 1 B18 aligment of polarisation beam splitter, with laser diode as source and for initial horizontal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
diagonal ↗	0	1.600000	1.200000	15.09%	11.32%
diagonal ↗	45	2.800000	2.450000	26.42%	23.11%
diagonal ↗	90	1.440000	1.330000	13.58%	12.55%
diagonal ↗	135	0.002900	0.054000	0.03%	0.51%
diagonal ↗	*All*	6.420000	4.180000	60.57%	39.43%

TABLE LXX: Results for Fig. 1 B18 aligment of polarisation beam splitter, with laser diode as source and for initial diagonal polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
vertical ↑	0	0.003900	0.001850	0.03%	0.01%
vertical ↑	45	3.480000	2.900000	28.09%	23.41%
vertical ↑	90	6.770000	5.160000	54.64%	41.65%
vertical ↑	135	3.350000	2.760000	27.04%	22.28%
vertical ↑	*All*	7.240000	5.150000	58.43%	41.57%

TABLE LXXI: Results for Fig. 1 B18 aligment of polarisation beam splitter, with laser diode as source and for initial vertical polarization.

Beam polarization	Analisator [°]	Transmission [mW] (T)	Reflection [mW] (R)	T%	R%
anti-diagonal ↖	0	3.130000	2.600000	26.15%	21.72%
anti-diagonal ↖	45	0.004800	0.129000	0.04%	1.08%
anti-diagonal ↖	90	3.400000	2.800000	28.40%	23.39%
anti-diagonal ↖	135	6.300000	4.730000	52.63%	39.52%
anti-diagonal ↖	*All*	6.890000	5.080000	57.56%	42.44%

TABLE LXXII: Results for Fig. 1 B18 aligment of polarisation beam splitter, with laser diode as source and for initial anti-diagonal polarization.