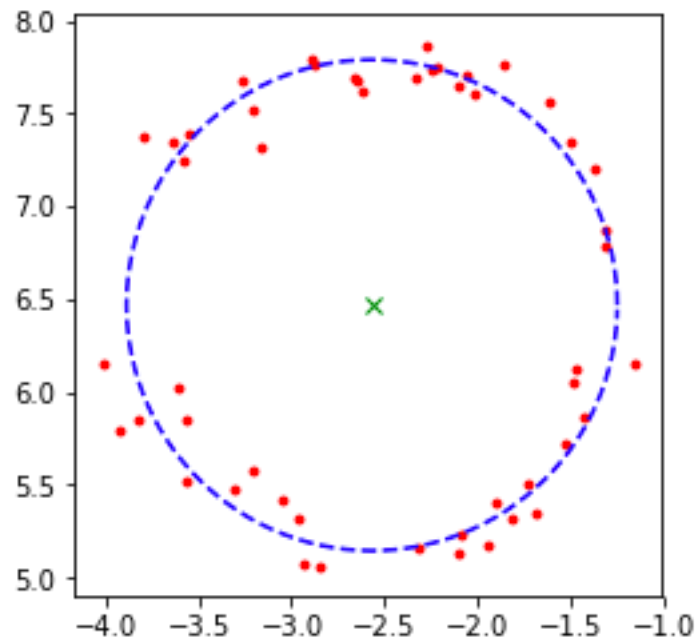The fitted circle:

Comparison of results:

	Equal lamp powers	Least-squares with saturation	Regularized least squares	Chebyshev	Exact solution
p_1	0.3453	1	0.5004	1	1
p_2	0.3453	0	0.4778	0.1165	0.2023
p_3	0.3453	1	0.0833	0	0
p_4	0.3453	0	0.0000	0	0
p_5	0.3453	0	0.4561	1	1
p_6	0.3453	1	0.4354	0	0
p_7	0.3453	0	0.4598	1	1
p_8	0.3453	1	0.4307	0.0249	0.1882
p_9	0.3453	0	0.4034	0	0
p_{10}	0.3453	1	0.4526	1	1
$f_0(p)$	0.4677	0.8628	0.4439	0.4198	0.3575