The fitted circle:



Comparison of results:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Equal lamp powers** | **Least-squares with saturation** | **Regularized least squares** | **Chebyshev** | **Exact solution** |
|  | 0.3453 | 1 | 0.5004 | 1 | 1 |
|  | 0.3453 | 0 | 0.4778 | 0.1165 | 0.2023 |
|  | 0.3453 | 1 | 0.0833 | 0 | 0 |
|  | 0.3453 | 0 | 0.0000 | 0 | 0 |
|  | 0.3453 | 0 | 0.4561 | 1 | 1 |
|  | 0.3453 | 1 | 0.4354 | 0 | 0 |
|  | 0.3453 | 0 | 0.4598 | 1 | 1 |
|  | 0.3453 | 1 | 0.4307 | 0.0249 | 0.1882 |
|  | 0.3453 | 0 | 0.4034 | 0 | 0 |
|  | 0.3453 | 1 | 0.4526 | 1 | 1 |
|  | 0.4677 | 0.8628 | 0.4439 | 0.4198 | 0.3575 |