Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
0	457	0.000000e+00	1.571e+00	7.694e-17	
1	914	8.923201e+02	3.359e-01	1.689e+00	2.129e+02
2	1371	5.390413e+02	4.683e-01	1.633e+00	8.607e+01
3	1828	4.618237e+02	2.009e-02	1.592e+00	1.796e+01
4	2285	4.520279e+02	4.037e-03	1.560e+00	2.678e+00
5	2748	4.291215e+02	4.848e-04	1.067e+00	5.367e+00
6	3217	4.088068e+02	3.293e-04	1.085e+00	4.699e+00
7	3682	3.882044e+02	3.096e-04	1.090e+00	4.702e+00
8	4146	3.676237e+02	2.746e-04	1.041e+00	4.704e+00
9	4608	3.270198e+02	1.958e-03	1.048e+00	9.423e+00
10	5068	3.172629e+02	1.618e-03	1.024e+00	2.348e+00
11	5530	2.982285e+02	2.156e-04	1.008e+00	4.697e+00
12	5996	2.676518e+02	8.653e-04	9.522e-01	7.806e+00
13	6460	2.391583e+02	7.901e-04	8.697e-01	7.789e+00
14	6924	2.129622e+02	7.791e-04	8.029e-01	7.752e+00
15	7384	2.078071e+02	7.047e-04	7.759e-01	1.610e+00
16	7846	1.979038e+02	6.010e-05	7.376e-01	3.210e+00
17	8308	1.718440e+02	1.458e-03	4.805e-01	9.149e+00
18	8765	1.682146e+02	1.176e-03	4.530e-01	2.057e+00
19	9228	1.611396e+02	2.863e-04	3.962e-01	4.793e+00
20	9693	1.550496e+02	2.865e-04	5.647e-01	4.567e+00
21	10157	1.496846e+02	2.692e-04	1.087e+00	4.581e+00
22	10622	1.450305e+02	3.158e-04	1.620e+00	4.596e+00
23	11087	1.410232e+02	3.827e-04	2.176e+00	4.585e+00
24	11552	1.376313e+02	5.232e-04	2.756e+00	4.562e+00
25	12017	1.361638e+02	9.865e-05	3.060e+00	2.258e+00
26	12482	1.348314e+02	1.116e-04	3.365e+00	2.238e+00
27	12947	1.336341e+02	1.371e-04	3.669e+00	2.207e+00
28	13412	1.325677e+02	1.793e-04	8.916e-02	2.167e+00
29	13875	1.316274e+02	2.181e-04	7.883e-02	2.133e+00
30	14332	1.287279e+02	1.323e-01	5.297e-01	9.719e+00

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
31	14789	1.278773e+02	4.501e-03	4.620e-01	1.977e+00
32	15246	1.272281e+02	1.979e-02	9.843e-01	3.895e+00
33	15703	1.265926e+02	3.556e-02	7.150e-01	5.137e+00
34	16160	1.263432e+02	1.556e-03	8.443e-01	8.852e-01
35	16617	1.257586e+02	2.998e-02	1.234e+00	3.440e+00
36	17074	1.248537e+02	1.769e-01	1.075e+00	9.453e+00
37	17531	1.241593e+02	2.653e-03	1.026e+00	3.178e+00
38	17988	1.240011e+02	1.386e-02	4.821e-01	2.771e+00
39	18445	1.237178e+02	4.741e-02	5.342e-01	5.068e+00
40	18902	1.231119e+02	2.429e-02	1.209e+00	3.602e+00
41	19359	1.224130e+02	5.241e-02	1.532e+00	5.316e+00
42	19816	1.217158e+02	1.456e-02	1.227e+00	3.754e+00
43	20273	1.213762e+02	7.274e-03	8.466e-01	3.110e+00

44	20730	1.211099e+02	1.597e-03	4.061e-01	2.505e+00
45	21187	1.209860e+02	7.469e-04	2.237e-01	1.642e+00
46	21644	1.208935e+02	6.338e-04	2.606e-01	1.475e+00
47	22101	1.207354e+02	9.708e-04	4.213e-01	1.690e+00
48	22558	1.205044e+02	6.610e-03	5.167e-01	2.625e+00
49	23015	1.203080e+02	8.311e-03	5.138e-01	2.697e+00
50	23472	1.201785e+02	6.620e-03	3.816e-01	2.624e+00
51	23929	1.201188e+02	1.436e-03	1.821e-01	1.454e+00
52	24386	1.201048e+02	2.549e-04	1.003e-01	6.109e-01
53	24843	1.200946e+02	3.139e-04	8.532e-02	6.439e-01
54	25300	1.200683e+02	6.800e-04	1.136e-01	9.002e-01
55	25757	1.200293e+02	3.460e-04	1.101e-01	8.722e-01
56	26214	1.200075e+02	6.923e-05	5.795e-02	4.847e-01
57	26671	1.200004e+02	4.008e-05	2.666e-02	2.724e-01
58	27128	1.199972e+02	2.519e-05	3.027e-02	2.061e-01
59	27585	1.199944e+02	1.834e-05	4.953e-02	2.598e-01
60	28042	1.199923e+02	2.658e-05	5.247e-02	3.201e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
61	28499	1.199919e+02	7.617e-05	2.626e-02	3.345e-01
62	28956	1.199916e+02	3.267e-05	2.000e-02	1.897e-01
63	29413	1.198274e+02	7.724e-05	5.507e-02	4.282e-01
64	29870	1.198073e+02	3.820e-05	3.401e-02	3.580e-01
65	30327	1.198110e+02	1.846e-06	2.414e-02	1.050e-01
66	30784	1.198028e+02	2.578e-06	3.854e-02	2.121e-01
67	31241	1.197935e+02	1.750e-05	4.311e-02	3.673e-01
68	31698	1.197898e+02	1.848e-06	3.219e-02	1.688e-01
69	32155	1.197886e+02	1.126e-05	1.385e-02	1.567e-01
70	32612	1.197887e+02	1.873e-06	5.581e-03	5.706e-02
71	33069	1.197888e+02	1.655e-06	9.874e-03	5.870e-02
72	33526	1.197887e+02	1.197e-06	1.406e-02	8.236e-02
73	33983	1.197885e+02	1.254e-06	1.456e-02	1.112e-01
74	34440	1.197882e+02	2.182e-06	8.405e-03	9.452e-02
75	34897	1.197880e+02	8.165e-07	5.326e-03	4.742e-02
76	35354	1.197879e+02	8.896e-08	5.257e-03	2.400e-02
77	35811	1.197878e+02	2.187e-07	5.700e-03	3.058e-02
78	36268	1.197877e+02	4.853e-07	5.138e-03	3.904e-02
79	36725	1.197877e+02	8.594e-07	4.000e-03	3.884e-02
80	37182	1.197643e+02	6.866e-06	4.296e-02	2.670e-01
81	37639	1.197635e+02	3.434e-06	5.133e-03	2.058e-01
82	38096	1.197629e+02	4.141e-08	2.615e-03	1.783e-02
83	38553	1.197626e+02	1.173e-07	8.324e-03	3.949e-02
84	39010	1.197624e+02	1.318e-07	1.078e-02	4.895e-02
85	39467	1.197623e+02	1.377e-07	7.392e-03	5.073e-02
86	39924	1.197623e+02	1.051e-07	3.248e-03	3.018e-02
87	40381	1.197623e+02	1.407e-08	9.936e-04	1.171e-02
88	40838	1.197623e+02	6.628e-10	8.000e-04	3.194e-03
89	41295	1.197590e+02	1.298e-06	1.621e-02	1.240e-01

90	41752	1.197589e+02	3.065e-07	1.413e-03	6.640e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
91	42209	1.197588e+02	2.108e-09	4.723e-04	6.068e-03
92	42666	1.197588e+02	2.411e-09	1.054e-03	3.306e-03
93	43123	1.197588e+02	9.562e-09	1.574e-03	6.570e-03
94	43580	1.197588e+02	2.995e-09	1.504e-03	6.917e-03
95	44037	1.197588e+02	4.506e-09	8.072e-04	6.300e-03
96	44494	1.197588e+02	3.138e-09	2.952e-04	2.974e-03
97	44951	1.197588e+02	3.747e-10	1.600e-04	9.736e-04
98	45408	1.197583e+02	9.704e-08	3.884e-03	4.904e-02
99	45865	1.197583e+02	2.009e-08	4.351e-04	1.558e-02
100	46322	1.197583e+02	9.635e-12	5.750e-05	6.052e-04
101	46779	1.197583e+02	3.543e-11	8.044e-05	7.434e-04
102	47236	1.197583e+02	5.468e-11	2.375e-04	1.333e-03
103	47693	1.197583e+02	2.434e-10	2.581e-04	1.246e-03
104	48150	1.197583e+02	4.458e-10	1.391e-04	1.303e-03
105	48607	1.197583e+02	6.341e-11	3.481e-05	6.081e-04
106	49064	1.197583e+02	7.326e-12	3.202e-05	2.674e-04
107	49521	1.197583e+02	8.149e-12	5.952e-05	2.557e-04
108	49978	1.197583e+02	2.723e-11	7.392e-05	4.540e-04
109	50435	1.197583e+02	9.226e-12	4.201e-05	2.725e-04
110	50892	1.197583e+02	2.666e-12	3.200e-05	2.500e-04
111	51349	1.197582e+02	8.807e-09	3.966e-04	1.479e-02
112	51806	1.197582e+02	2.555e-10	3.182e-05	2.029e-03
113	52263	1.197582e+02	9.379e-12	1.660e-05	1.982e-04
114	52720	1.197582e+02	5.834e-13	1.093e-05	7.700e-05
115	53177	1.197582e+02	1.956e-12	1.587e-05	9.973e-05
116	53634	1.197582e+02	4.258e-12	1.876e-05	1.492e-04
117	54091	1.197582e+02	3.221e-12	1.553e-05	1.175e-04
118	54548	1.197582e+02	3.059e-12	6.400e-06	1.410e-04
119	55005	1.197581e+02	4.576e-10	5.351e-05	3.410e-03
120	55462	1.197581e+02	2.601e-11	8.063e-06	3.699e-04

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
121	55919	1.197581e+02	1.251e-11	4.376e-06	1.940e-04
122	56376	1.197581e+02	7.724e-14	3.309e-06	2.992e-05
123	56833	1.197581e+02	4.630e-13	7.488e-06	6.307e-05
124	57290	1.197581e+02	6.450e-14	4.732e-06	1.961e-05
125	57747	1.197581e+02	4.491e-13	5.469e-06	6.509e-05
126	58204	1.197581e+02	2.442e-13	5.788e-06	3.006e-05
127	58662	1.197581e+02	5.826e-13	4.278e-06	3.904e-05
128	59119	1.197581e+02	3.199e-13	2.892e-06	3.222e-05
129	59578	1.197581e+02	2.413e-13	1.815e-06	9.298e-06
130	60035	1.197581e+02	5.129e-14	3.832e-06	3.155e-05
131	60492	1.197581e+02	5.596e-14	1.408e-06	1.447e-05
132	60950	1.197581e+02	2.842e-14	1.280e-06	9.668e-06

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  133   61407    1.197581e+02    4.946e-11    4.155e-05    7.580e-04
  134   61864    1.197581e+02    9.073e-13    5.600e-06    1.286e-04
  135   62321    1.197581e+02    1.311e-12    4.021e-06    8.577e-05
  136   62778    1.197581e+02    8.645e-13    3.508e-06    6.506e-05
  137   63235    1.197581e+02    2.476e-14    2.112e-06    1.975e-05
  138   63694    1.197581e+02    6.481e-14    2.061e-06    2.661e-05
  139   64151    1.197581e+02    1.628e-13    2.140e-06    1.631e-05
  140   64611    1.197581e+02    1.914e-13    2.724e-06    1.368e-05
  141   65070    1.197581e+02    1.474e-13    2.737e-06    1.046e-05
  142   65530    1.197581e+02    1.223e-13    3.385e-06    1.280e-05
  143   65992    1.197581e+02    1.554e-14    1.469e-06    1.550e-05
  144   66449    1.197581e+02    3.637e-13    1.283e-06    2.414e-05
  145   66906    1.197581e+02    9.770e-15    1.475e-06    1.395e-05
  146   67363    1.197581e+02    2.667e-14    2.812e-06    1.912e-05
  147   67820    1.197581e+02    2.598e-14    2.597e-06    1.115e-05
  148   68283    1.197581e+02    2.354e-14    1.490e-06    1.296e-05
  149   68741    1.197581e+02    2.509e-14    1.479e-06    1.108e-05
  150   69199    1.197581e+02    2.903e-14    1.763e-06    1.676e-05

                                             First-order      Norm of
 Iter F-count            f(x)  Feasibility   optimality         step
  151   69656    1.197581e+02    9.326e-15    1.416e-06    5.692e-06
  152   70116    1.197581e+02    1.199e-14    1.135e-06    6.392e-06
  153   70575    1.197581e+02    2.220e-14    1.526e-06    4.712e-06
  154   71038    1.197581e+02    1.377e-14    8.224e-07    4.922e-06

Local minimum found that satisfies the constraints.

Optimization completed because the objective function is non-decreasing in
feasible directions, to within the value of the optimality tolerance,
and constraints are satisfied to within the value of the constraint tolerance.

<stopping criteria details>
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