

Warning: Could not find appropriate function on path loading function handle  
C:␣

\Users\enric\AppData\Local\Temp\Editor\_wdtkz\LiveEditorEvaluationHelperESectionEval  
cfd29ef8.m>@(x)ff\_2RL\_all\_indietro\_moo(x,sim,data)␣

> In DT\_follower (line 43)

Warning: Unable to load Python object. Saving (serializing) Python objects into a  
MAT-file is not supported.

> In DT\_follower (line 43)

Your initial point x0 is not between bounds lb and ub; FMINCON  
shifted x0 to strictly satisfy the bounds.

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
0	501	-1.029670e+01	2.253e-01	3.098e+01	
1	1002	-4.635018e+00	1.436e-01	3.102e+01	4.534e-01
2	1504	-3.499458e+00	1.333e-01	3.106e+01	6.586e-02
3	2005	-5.050697e-01	1.110e-01	3.130e+01	3.182e-01
4	2506	2.942905e+00	9.068e-02	3.168e+01	5.418e-01
5	3007	4.116192e+00	8.231e-02	3.216e+01	2.566e-01
6	3509	4.495870e+00	7.925e-02	3.243e+01	1.045e-01
7	4010	5.696806e+00	6.979e-02	2.915e+01	3.734e-01
8	4511	6.486229e+00	6.413e-02	2.307e+01	4.740e-01
9	5012	6.973011e+00	6.029e-02	2.311e+01	2.656e-01
10	5513	8.121520e+00	5.122e-02	3.244e+01	5.490e-01
11	6014	9.500349e+00	3.857e-02	6.294e+01	6.311e-01
12	6515	1.018060e+01	3.192e-02	7.748e+01	4.499e-01
13	7016	1.117703e+01	2.211e-02	1.000e+02	1.845e+00
14	7517	1.141444e+01	1.760e-02	1.112e+02	8.429e-01
15	8019	1.138034e+01	1.743e-02	1.111e+02	1.190e-01
16	8521	1.138220e+01	1.734e-02	1.114e+02	2.704e-02
17	9022	1.140710e+01	1.672e-02	1.133e+02	1.713e-01
18	9523	1.150696e+01	1.499e-02	1.209e+02	6.754e-01
19	10024	1.168184e+01	1.288e-02	1.327e+02	5.090e-01
20	10525	1.167724e+01	1.245e-02	1.336e+02	1.850e-01
21	11027	1.169213e+01	1.227e-02	1.346e+02	1.466e-01
22	11528	1.191579e+01	1.154e-02	1.381e+02	1.379e+00
23	12029	1.255584e+01	1.025e-02	1.414e+02	1.670e+00
24	12530	1.361859e+01	7.953e-03	1.430e+02	1.929e+00
25	13032	1.367348e+01	7.813e-03	1.430e+02	1.230e-01
26	13533	1.383214e+01	7.123e-03	1.457e+02	3.040e-01
27	14034	1.455653e+01	5.625e-03	1.569e+02	1.161e+00
28	14535	1.489124e+01	5.233e-03	1.628e+02	3.556e-01
29	15036	1.489434e+01	3.894e-03	1.888e+02	1.006e+00
30	15537	1.516161e+01	2.955e-03	2.031e+02	3.384e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
31	16038	1.548069e+01	2.403e-03	2.515e+02	1.020e+00
32	16540	1.606055e+01	1.873e-03	3.083e+02	1.108e+00
33	17045	1.635724e+01	1.436e-03	9.247e+01	8.748e-01
34	17546	1.646676e+01	1.446e-03	9.246e+01	3.184e-01
35	18048	1.646678e+01	1.443e-03	9.247e+01	8.301e-02

36	18550	1.647041e+01	1.443e-03	9.247e+01	3.288e-01
37	19053	1.653454e+01	1.444e-03	9.247e+01	1.738e-01
38	19558	1.674135e+01	1.448e-03	7.986e+01	7.511e-01
39	20059	1.680406e+01	1.449e-03	7.986e+01	2.650e-01
40	20561	1.697681e+01	1.444e-03	7.986e+01	6.994e-01
41	21062	1.705048e+01	1.444e-03	7.986e+01	3.006e-01
42	21564	1.733617e+01	1.446e-03	7.986e+01	9.635e-01
43	22065	1.749235e+01	1.450e-03	7.986e+01	9.293e-01
44	22566	1.793540e+01	1.453e-03	7.987e+01	1.248e+00
45	23068	1.807890e+01	1.452e-03	7.986e+01	8.504e-01
46	23572	1.816328e+01	1.452e-03	7.986e+01	2.687e-01
47	24075	1.830199e+01	1.451e-03	7.986e+01	8.177e-01
48	24578	1.840001e+01	1.451e-03	7.986e+01	4.871e-01
49	25081	1.848070e+01	1.450e-03	7.987e+01	6.627e-01
50	25584	1.856334e+01	1.448e-03	7.986e+01	9.814e-01
51	26087	1.861620e+01	1.446e-03	7.986e+01	9.421e-01
52	26589	1.869613e+01	1.442e-03	7.986e+01	1.352e+00
53	27092	1.879723e+01	1.438e-03	7.986e+01	1.537e+00
54	27595	1.889125e+01	1.434e-03	7.986e+01	1.373e+00
55	28099	1.894427e+01	1.432e-03	7.986e+01	5.302e-01
56	28603	1.899153e+01	1.430e-03	7.986e+01	5.054e-01
57	29108	1.914290e+01	1.425e-03	7.986e+01	4.787e-01
58	29609	1.924099e+01	1.427e-03	7.986e+01	1.330e+00
59	30110	1.943199e+01	1.422e-03	7.986e+01	2.020e+00
60	30613	1.958721e+01	1.420e-03	7.987e+01	9.286e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
61	31120	1.965699e+01	1.361e-03	7.987e+01	2.150e-01
62	31622	1.965861e+01	1.362e-03	7.987e+01	1.006e-02
63	32124	1.978692e+01	1.363e-03	7.987e+01	8.551e-01
64	32628	1.983517e+01	1.363e-03	7.987e+01	2.795e-01
65	33134	1.980004e+01	1.341e-03	7.987e+01	4.579e-02
66	33636	1.980155e+01	1.341e-03	7.987e+01	9.347e-03
67	34138	1.988611e+01	1.340e-03	7.987e+01	5.078e-01
68	34642	1.997315e+01	1.340e-03	7.987e+01	4.782e-01
69	35146	2.004966e+01	1.340e-03	7.987e+01	4.024e-01
70	35650	2.011966e+01	1.341e-03	7.988e+01	3.429e-01
71	36154	2.018429e+01	1.341e-03	7.988e+01	3.007e-01
72	36658	2.024677e+01	1.341e-03	7.988e+01	2.760e-01
73	37161	2.037153e+01	1.342e-03	7.988e+01	5.311e-01
74	37664	2.049560e+01	1.343e-03	7.988e+01	5.103e-01
75	38167	2.063750e+01	1.344e-03	7.988e+01	5.686e-01
76	38670	2.083314e+01	1.345e-03	7.988e+01	7.138e-01
77	39173	2.105962e+01	1.345e-03	7.988e+01	8.993e-01
78	39676	2.137871e+01	1.344e-03	7.988e+01	9.857e-01
79	40180	2.154640e+01	1.344e-03	7.988e+01	4.816e-01
80	40684	2.176800e+01	1.343e-03	7.988e+01	5.132e-01
81	41190	2.183915e+01	1.321e-03	7.988e+01	1.700e-01
82	41692	2.184515e+01	1.321e-03	7.988e+01	1.847e-02
83	42195	2.218618e+01	1.320e-03	7.988e+01	8.433e-01
84	42698	2.250715e+01	1.319e-03	7.988e+01	7.206e-01
85	43201	2.274380e+01	1.318e-03	7.988e+01	4.177e-01

86	43704	2.299254e+01	1.317e-03	7.988e+01	4.756e-01
87	44207	2.320308e+01	1.317e-03	7.988e+01	3.002e-01
88	44711	2.337793e+01	1.316e-03	7.988e+01	3.004e-01
89	45215	2.354213e+01	1.315e-03	7.988e+01	2.308e-01
90	45719	2.375886e+01	1.314e-03	7.988e+01	3.393e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
91	46223	2.397948e+01	1.312e-03	7.988e+01	3.443e-01
92	46726	2.445100e+01	1.307e-03	7.988e+01	7.168e-01
93	47229	2.483056e+01	1.304e-03	7.988e+01	4.930e-01
94	47731	2.545086e+01	1.299e-03	7.988e+01	6.454e-01
95	48233	2.574513e+01	1.296e-03	7.988e+01	2.885e-01
96	48735	2.596056e+01	1.293e-03	7.988e+01	2.352e-01
97	49237	2.626017e+01	1.290e-03	7.988e+01	4.104e-01
98	49739	2.677966e+01	1.284e-03	7.988e+01	5.784e-01
99	50242	2.695091e+01	1.282e-03	7.988e+01	1.609e-01
100	50745	2.711604e+01	1.280e-03	7.988e+01	2.162e-01
101	51249	2.726442e+01	1.278e-03	7.988e+01	2.618e-01
102	51754	2.739110e+01	1.247e-03	7.988e+01	5.228e-01
103	52256	2.739896e+01	1.247e-03	7.988e+01	5.029e-02
104	52759	2.742515e+01	1.246e-03	7.988e+01	2.393e-01
105	53262	2.743912e+01	1.245e-03	7.988e+01	2.737e-01
106	53765	2.743759e+01	1.244e-03	7.988e+01	2.965e-01
107	54268	2.741662e+01	1.243e-03	7.988e+01	3.262e-01
108	54771	2.737259e+01	1.243e-03	7.988e+01	3.657e-01
109	55274	2.732592e+01	1.244e-03	7.988e+01	4.302e-01
110	55777	2.727525e+01	1.245e-03	7.988e+01	4.942e-01
111	56280	2.722484e+01	1.245e-03	7.988e+01	4.820e-01
112	56783	2.716112e+01	1.245e-03	7.988e+01	6.153e-01
113	57286	2.711953e+01	1.244e-03	7.988e+01	5.078e-01
114	57789	2.710799e+01	1.243e-03	7.988e+01	4.007e-01
115	58292	2.712326e+01	1.242e-03	7.989e+01	3.414e-01
116	58795	2.716201e+01	1.241e-03	7.989e+01	2.957e-01
117	59298	2.722519e+01	1.239e-03	7.989e+01	2.706e-01
118	59801	2.733081e+01	1.238e-03	7.989e+01	2.785e-01
119	60304	2.744589e+01	1.237e-03	7.989e+01	2.406e-01
120	60807	2.754342e+01	1.236e-03	7.989e+01	2.201e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
121	61310	2.761293e+01	1.236e-03	7.989e+01	2.121e-01
122	61812	2.769755e+01	1.236e-03	7.989e+01	4.178e-01
123	62314	2.771243e+01	1.239e-03	7.989e+01	3.736e-01
124	62816	2.774779e+01	1.244e-03	7.990e+01	6.665e-01
125	63319	2.773520e+01	1.244e-03	7.990e+01	7.918e-01
126	63823	2.772423e+01	1.243e-03	7.990e+01	3.442e-01
127	64326	2.770873e+01	1.240e-03	7.990e+01	6.123e-01
128	64829	2.770914e+01	1.238e-03	7.990e+01	4.930e-01
129	65332	2.772088e+01	1.235e-03	7.990e+01	4.122e-01
130	65835	2.774042e+01	1.233e-03	7.990e+01	3.624e-01
131	66338	2.776620e+01	1.230e-03	7.990e+01	3.456e-01
132	66841	2.780179e+01	1.227e-03	7.990e+01	4.955e-01

133	67345	2.784715e+01	1.226e-03	7.990e+01	2.127e-01
134	67850	2.804122e+01	1.153e-03	7.409e+01	2.978e-01
135	68351	2.809260e+01	1.152e-03	7.408e+01	3.389e-01
136	68853	2.816280e+01	1.148e-03	7.408e+01	5.722e-01
137	69356	2.828058e+01	1.144e-03	7.408e+01	7.868e-01
138	69859	2.839919e+01	1.143e-03	7.409e+01	5.265e-01
139	70362	2.859133e+01	1.144e-03	7.410e+01	5.644e-01
140	70865	2.876932e+01	1.145e-03	7.414e+01	5.489e-01
141	71367	2.900732e+01	1.149e-03	7.420e+01	7.489e-01
142	71869	2.908743e+01	1.147e-03	7.421e+01	6.707e-01
143	72372	2.919718e+01	1.148e-03	7.419e+01	7.122e-01
144	72873	2.940476e+01	1.148e-03	7.415e+01	8.700e-01
145	73375	2.977678e+01	1.141e-03	7.409e+01	1.219e+00
146	73878	2.999174e+01	1.135e-03	7.408e+01	5.838e-01
147	74380	3.028859e+01	1.126e-03	7.409e+01	6.913e-01
148	74882	3.044877e+01	1.119e-03	7.409e+01	4.797e-01
149	75384	3.053433e+01	1.113e-03	7.412e+01	4.708e-01
150	75887	3.058711e+01	1.102e-03	7.409e+01	8.180e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
151	76390	3.061115e+01	1.095e-03	7.411e+01	6.524e-01
152	76893	3.062646e+01	1.088e-03	7.409e+01	5.932e-01
153	77395	3.068708e+01	1.077e-03	7.407e+01	9.631e-01
154	77897	3.073310e+01	1.064e-03	7.406e+01	1.062e+00
155	78399	3.074249e+01	1.057e-03	7.406e+01	6.407e-01
156	78900	3.077426e+01	1.047e-03	8.155e+01	1.026e+00
157	79403	3.082760e+01	1.041e-03	8.598e+01	7.209e-01
158	79906	3.087188e+01	1.036e-03	8.926e+01	5.836e-01
159	80409	3.090886e+01	1.031e-03	9.164e+01	4.671e-01
160	80912	3.093629e+01	1.028e-03	9.347e+01	3.561e-01
161	81414	3.097994e+01	1.022e-03	9.653e+01	5.649e-01
162	81916	3.102936e+01	1.018e-03	9.885e+01	4.628e-01
163	82419	3.107335e+01	1.014e-03	1.010e+02	3.983e-01
164	82924	3.189321e+01	7.884e-04	8.584e+01	6.553e-01
165	83426	3.189460e+01	7.882e-04	8.584e+01	8.023e-02
166	83929	3.190055e+01	7.872e-04	8.583e+01	2.477e-01
167	84433	3.190526e+01	7.863e-04	8.583e+01	2.019e-01
168	84937	3.191190e+01	7.846e-04	8.583e+01	3.411e-01
169	85442	3.233594e+01	6.745e-04	8.584e+01	3.227e-01
170	85945	3.233615e+01	6.750e-04	8.584e+01	4.533e-02
171	86448	3.235960e+01	6.779e-04	8.584e+01	3.486e-01
172	86951	3.243270e+01	6.799e-04	8.584e+01	5.842e-01
173	87453	3.257823e+01	6.847e-04	8.583e+01	9.559e-01
174	87954	3.313734e+01	6.933e-04	8.584e+01	1.508e+00
175	88455	3.382580e+01	6.949e-04	8.583e+01	1.978e+00
176	88957	3.382974e+01	6.957e-04	8.584e+01	6.746e-01
177	89459	3.385057e+01	6.928e-04	8.585e+01	8.399e-01
178	89960	3.405153e+01	6.935e-04	1.157e+02	2.351e+00
179	90464	3.408660e+01	6.924e-04	1.205e+02	4.262e-01
180	90971	3.464697e+01	5.657e-04	7.901e+01	7.981e-01

First-order

Norm of

Iter	F-count	f(x)	Feasibility	optimality	step
181	91477	3.525261e+01	4.437e-04	7.690e+01	7.538e-01
182	91978	3.524713e+01	4.409e-04	7.690e+01	1.179e-01
183	92482	3.523264e+01	4.271e-04	7.696e+01	6.553e-01
184	92989	3.590502e+01	5.377e-04	7.686e+01	8.298e-01
185	93490	3.589580e+01	5.367e-04	7.688e+01	8.368e-02
186	93992	3.585584e+01	5.380e-04	7.690e+01	2.429e-01
187	94495	3.583436e+01	5.384e-04	7.693e+01	2.646e-01
188	95000	3.630868e+01	3.841e-04	7.363e+01	4.882e-01
189	95503	3.628922e+01	3.851e-04	7.365e+01	1.391e-01
190	96007	3.627615e+01	3.863e-04	7.366e+01	1.343e-01
191	96511	3.626138e+01	3.889e-04	7.368e+01	1.585e-01
192	97017	3.661591e+01	2.203e-04	7.379e+01	5.475e-01
193	97524	3.704295e+01	2.136e-04	7.390e+01	6.670e-01
194	98026	3.703591e+01	2.129e-04	7.390e+01	7.140e-02
195	98530	3.702260e+01	2.118e-04	7.391e+01	1.031e-01
196	99036	3.701009e+01	1.622e-04	7.386e+01	3.084e-01
197	99540	3.700403e+01	1.618e-04	7.386e+01	4.913e-02
198	100045	3.714105e+01	1.445e-04	7.389e+01	2.270e-01
199	100549	3.713686e+01	1.442e-04	7.389e+01	5.313e-02
200	101054	3.725152e+01	1.406e-04	7.393e+01	1.887e-01
201	101557	3.724859e+01	1.406e-04	7.393e+01	5.608e-02
202	102062	3.737403e+01	1.407e-04	7.396e+01	1.787e-01
203	102565	3.737267e+01	1.407e-04	7.396e+01	5.335e-02
204	103070	3.750007e+01	1.401e-04	7.401e+01	1.807e-01
205	103573	3.749970e+01	1.401e-04	7.401e+01	4.863e-02
206	104078	3.764112e+01	1.388e-04	7.406e+01	1.831e-01
207	104581	3.764150e+01	1.387e-04	7.406e+01	4.948e-02
208	105086	3.777200e+01	1.367e-04	7.412e+01	1.837e-01
209	105590	3.777228e+01	1.367e-04	7.412e+01	2.309e-02
210	106095	3.783721e+01	1.354e-04	7.413e+01	9.411e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
211	106598	3.783763e+01	1.354e-04	7.413e+01	2.294e-02
212	107103	3.790612e+01	1.344e-04	7.415e+01	7.121e-02
213	107606	3.790640e+01	1.344e-04	7.415e+01	2.205e-02
214	108111	3.797871e+01	1.331e-04	7.417e+01	7.842e-02
215	108616	3.805257e+01	1.317e-04	7.418e+01	8.390e-02
216	109118	3.805494e+01	1.316e-04	7.418e+01	5.292e-02
217	109623	3.821016e+01	1.287e-04	7.420e+01	1.652e-01
218	110126	3.821359e+01	1.286e-04	7.420e+01	5.438e-02
219	110631	3.836035e+01	1.259e-04	7.421e+01	1.358e-01
220	111134	3.836380e+01	1.259e-04	7.421e+01	5.171e-02
221	111639	3.849046e+01	1.232e-04	7.421e+01	1.203e-01
222	112142	3.849267e+01	1.232e-04	7.421e+01	4.160e-02
223	112647	3.860086e+01	1.207e-04	7.422e+01	1.025e-01
224	113151	3.860201e+01	1.207e-04	7.422e+01	2.371e-02
225	113656	3.864303e+01	1.195e-04	7.422e+01	4.401e-02
226	114158	3.864452e+01	1.195e-04	7.422e+01	2.473e-02
227	114663	3.872626e+01	1.170e-04	7.431e+01	9.659e-02
228	115168	3.879822e+01	1.144e-04	7.439e+01	1.025e-01
229	115673	3.886807e+01	1.119e-04	7.446e+01	9.228e-02

230	116178	3.893154e+01	1.093e-04	7.452e+01	9.023e-02
231	116683	3.899792e+01	1.067e-04	7.457e+01	8.714e-02
232	117188	3.906611e+01	1.041e-04	7.462e+01	8.922e-02
233	117693	3.913947e+01	1.012e-04	7.468e+01	9.658e-02
234	118198	3.922931e+01	9.787e-05	7.474e+01	1.076e-01
235	118703	3.932408e+01	9.415e-05	7.480e+01	1.189e-01
236	119208	3.942450e+01	8.984e-05	7.486e+01	1.300e-01
237	119713	3.952716e+01	8.494e-05	7.492e+01	1.370e-01
238	120218	3.962356e+01	7.962e-05	7.497e+01	1.419e-01
239	120723	3.972342e+01	7.375e-05	7.503e+01	1.445e-01
240	121228	3.983117e+01	6.693e-05	7.509e+01	1.421e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
241	121732	3.983109e+01	6.692e-05	7.509e+01	1.487e-02
242	122237	3.988404e+01	6.288e-05	7.511e+01	7.118e-02
243	122740	3.988382e+01	6.287e-05	7.511e+01	3.338e-02
244	123245	3.998854e+01	5.431e-05	7.517e+01	1.363e-01
245	123749	3.998817e+01	5.429e-05	7.517e+01	3.539e-02
246	124254	4.009079e+01	4.437e-05	7.521e+01	1.290e-01
247	124758	4.009134e+01	4.435e-05	7.521e+01	2.972e-02
248	125263	4.018679e+01	3.287e-05	7.525e+01	1.327e-01
249	125768	4.027251e+01	1.697e-05	7.527e+01	2.715e-01
250	126274	4.008677e+01	1.738e-05	7.513e+01	4.038e-01
251	126778	4.008595e+01	1.745e-05	7.513e+01	6.370e-02
252	127284	3.969302e+01	1.811e-05	7.488e+01	3.691e-01
253	127788	3.969357e+01	1.818e-05	7.488e+01	5.206e-02
254	128294	3.947574e+01	1.794e-05	7.474e+01	1.526e-01
255	128800	3.928321e+01	1.776e-05	7.460e+01	1.357e-01
256	129306	3.912404e+01	1.763e-05	7.448e+01	1.368e-01
257	129812	3.897639e+01	1.752e-05	7.436e+01	1.370e-01
258	130318	3.882595e+01	1.743e-05	7.421e+01	1.398e-01
259	130824	3.866253e+01	1.733e-05	7.404e+01	1.473e-01
260	131330	3.847927e+01	1.724e-05	7.300e+01	1.583e-01
261	131837	3.827190e+01	1.714e-05	7.192e+01	1.720e-01
262	132344	3.804008e+01	1.704e-05	7.190e+01	1.871e-01
263	132851	3.778902e+01	1.694e-05	7.188e+01	1.994e-01
264	133358	3.752730e+01	1.686e-05	7.186e+01	2.049e-01
265	133865	3.726009e+01	1.678e-05	7.185e+01	2.039e-01
266	134372	3.698419e+01	1.671e-05	7.185e+01	2.005e-01
267	134879	3.669034e+01	1.664e-05	7.185e+01	1.992e-01
268	135386	3.636957e+01	1.656e-05	7.187e+01	2.014e-01
269	135893	3.601958e+01	1.648e-05	7.189e+01	2.060e-01
270	136400	3.564953e+01	1.640e-05	7.191e+01	2.094e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
271	136907	3.527557e+01	1.634e-05	7.193e+01	2.080e-01
272	137414	3.490658e+01	1.629e-05	7.193e+01	2.040e-01
273	137921	3.453987e+01	1.626e-05	7.191e+01	2.007e-01
274	138428	3.417296e+01	1.624e-05	7.190e+01	1.965e-01
275	138935	3.381193e+01	1.623e-05	7.187e+01	1.869e-01
276	139442	3.346501e+01	1.623e-05	7.051e+01	1.714e-01

277	139949	3.312995e+01	1.623e-05	6.805e+01	1.550e-01
278	140456	3.279247e+01	1.624e-05	6.780e+01	1.413e-01
279	140963	3.243384e+01	1.622e-05	6.754e+01	1.304e-01
280	141470	3.203597e+01	1.618e-05	6.743e+01	1.215e-01
281	141977	3.158334e+01	1.612e-05	6.562e+01	1.145e-01
282	142484	3.106619e+01	1.602e-05	6.347e+01	1.103e-01
283	142991	3.048702e+01	1.591e-05	6.160e+01	1.107e-01
284	143498	2.986700e+01	1.581e-05	6.156e+01	1.184e-01
285	144005	2.923946e+01	1.572e-05	6.152e+01	1.369e-01
286	144514	2.893440e+01	1.532e-05	6.150e+01	8.103e-02
287	145021	2.863341e+01	1.497e-05	6.148e+01	8.809e-02
288	145528	2.833666e+01	1.466e-05	6.146e+01	9.503e-02
289	146035	2.804405e+01	1.439e-05	6.143e+01	1.014e-01
290	146542	2.775537e+01	1.416e-05	6.140e+01	1.071e-01
291	147049	2.747045e+01	1.395e-05	6.137e+01	1.121e-01
292	147556	2.718933e+01	1.377e-05	6.134e+01	1.164e-01
293	148062	2.691235e+01	1.361e-05	6.130e+01	1.199e-01
294	148569	2.664032e+01	1.347e-05	6.126e+01	1.227e-01
295	149076	2.637452e+01	1.335e-05	6.122e+01	1.247e-01
296	149583	2.611655e+01	1.324e-05	6.117e+01	1.259e-01
297	150090	2.586801e+01	1.316e-05	6.113e+01	1.264e-01
298	150597	2.563030e+01	1.309e-05	6.107e+01	1.262e-01
299	151104	2.540455e+01	1.304e-05	6.102e+01	1.256e-01
300	151611	2.519162e+01	1.300e-05	6.096e+01	1.248e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
301	152118	2.499219e+01	1.298e-05	6.091e+01	1.240e-01
302	152625	2.480649e+01	1.297e-05	6.086e+01	1.232e-01
303	153132	2.463419e+01	1.298e-05	6.082e+01	1.225e-01
304	153641	2.455455e+01	1.277e-05	6.081e+01	5.998e-02
305	154147	2.447747e+01	1.259e-05	6.080e+01	5.975e-02
306	154653	2.440286e+01	1.242e-05	6.078e+01	5.953e-02
307	155160	2.433050e+01	1.226e-05	6.078e+01	5.930e-02
308	155667	2.426017e+01	1.212e-05	6.077e+01	5.905e-02
309	156174	2.419163e+01	1.199e-05	6.077e+01	5.878e-02
310	156681	2.412464e+01	1.187e-05	6.077e+01	5.850e-02
311	157188	2.405895e+01	1.176e-05	6.077e+01	5.819e-02
312	157695	2.399435e+01	1.166e-05	6.077e+01	5.787e-02
313	158202	2.393057e+01	1.156e-05	6.078e+01	5.752e-02
314	158709	2.386738e+01	1.148e-05	6.079e+01	5.715e-02
315	159216	2.380454e+01	1.139e-05	6.080e+01	5.675e-02
316	159723	2.374180e+01	1.132e-05	6.081e+01	5.631e-02
317	160230	2.367892e+01	1.124e-05	6.082e+01	5.583e-02
318	160737	2.361564e+01	1.118e-05	6.084e+01	5.530e-02
319	161244	2.355169e+01	1.111e-05	6.085e+01	5.471e-02
320	161751	2.348680e+01	1.105e-05	6.087e+01	5.405e-02
321	162258	2.342067e+01	1.099e-05	6.089e+01	5.331e-02
322	162765	2.335299e+01	1.093e-05	6.091e+01	5.249e-02
323	163272	2.328344e+01	1.087e-05	6.093e+01	5.157e-02
324	163779	2.321169e+01	1.082e-05	6.095e+01	5.056e-02
325	164286	2.313737e+01	1.077e-05	6.097e+01	4.945e-02
326	164793	2.306016e+01	1.071e-05	6.099e+01	4.827e-02

327	165300	2.297973e+01	1.066e-05	6.101e+01	4.701e-02
328	165807	2.289579e+01	1.061e-05	6.076e+01	4.572e-02
329	166314	2.280814e+01	1.056e-05	6.025e+01	4.442e-02
330	166821	2.271665e+01	1.051e-05	5.968e+01	4.316e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
331	167328	2.262139e+01	1.045e-05	5.900e+01	4.199e-02
332	167835	2.252258e+01	1.040e-05	5.819e+01	4.094e-02
333	168342	2.242065e+01	1.036e-05	5.721e+01	4.007e-02
334	168849	2.231627e+01	1.031e-05	5.603e+01	3.941e-02
335	169356	2.221029e+01	1.026e-05	5.465e+01	3.899e-02
336	169863	2.210374e+01	1.022e-05	5.308e+01	3.882e-02
337	170370	2.199771e+01	1.019e-05	5.137e+01	3.892e-02
338	170877	2.189328e+01	1.015e-05	4.957e+01	3.929e-02
339	171384	2.179145e+01	1.013e-05	4.775e+01	3.991e-02
340	171891	2.169302e+01	1.011e-05	4.595e+01	4.076e-02
341	172398	2.159863e+01	1.009e-05	4.424e+01	4.179e-02
342	172905	2.150866e+01	1.008e-05	4.263e+01	4.295e-02
343	173412	2.142332e+01	1.008e-05	4.114e+01	4.418e-02
344	173913	1.886060e+01	6.847e-04	3.681e+01	3.513e+00
345	174414	1.828663e+01	1.889e-03	5.793e+01	3.461e+00
346	174915	1.703913e+01	3.693e-03	8.435e+01	1.142e+01
347	175416	1.696011e+01	3.145e-03	8.401e+01	2.411e+00
348	175917	1.603958e+01	2.631e-03	8.607e+01	3.347e+00
349	176422	1.747878e+01	9.934e-04	3.188e+01	1.810e+00
350	176924	1.764943e+01	9.099e-04	3.185e+01	2.632e+00
351	177427	1.781036e+01	7.860e-04	3.201e+01	2.922e+00
352	177930	1.789504e+01	6.557e-04	4.513e+01	2.036e+00
353	178432	1.810261e+01	4.541e-04	5.377e+01	1.835e+00
354	178933	1.847435e+01	3.881e-04	5.946e+01	1.882e+00
355	179436	1.833381e+01	3.071e-04	5.838e+01	1.320e+00
356	179939	1.829728e+01	1.880e-04	6.411e+01	1.843e+00
357	180443	1.827632e+01	1.872e-04	6.385e+01	6.338e-01
358	180945	1.822050e+01	1.773e-04	6.404e+01	1.255e+00
359	181446	1.850965e+01	9.494e-05	5.965e+01	1.112e+00
360	181949	1.845503e+01	6.332e-05	5.963e+01	7.127e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
361	182450	1.847055e+01	5.863e-05	6.019e+01	9.090e-01
362	182952	1.854431e+01	7.013e-06	5.296e+01	1.104e+00
363	183455	1.843636e+01	5.048e-05	5.259e+01	8.323e-01
364	183957	1.847421e+01	1.692e-05	4.974e+01	1.381e+00
365	184458	1.832169e+01	9.713e-05	5.404e+01	1.765e+00
366	184961	1.827859e+01	6.964e-05	4.862e+01	1.084e+00
367	185463	1.825979e+01	5.479e-05	4.884e+01	7.220e-01
368	185966	1.824227e+01	4.855e-05	4.961e+01	6.835e-01
369	186467	1.826880e+01	1.904e-05	4.877e+01	7.685e-01
370	186969	1.823550e+01	5.323e-06	4.349e+01	1.246e+00
371	187473	1.819432e+01	2.112e-05	4.282e+01	3.330e-01
372	187975	1.818748e+01	1.415e-05	4.236e+01	1.246e+00
373	188476	1.808099e+01	6.466e-05	3.804e+01	8.027e-01



374	188978	1.812585e+01	6.373e-06	3.570e+01	1.428e+00
375	189479	1.801539e+01	3.910e-05	3.308e+01	9.274e-01
376	189981	1.808404e+01	1.049e-05	3.301e+01	9.745e-01
377	190482	1.795079e+01	2.858e-05	3.302e+01	7.010e-01
378	190983	1.791399e+01	6.211e-05	3.256e+01	9.573e-01
379	191484	1.788414e+01	1.871e-05	3.145e+01	8.940e-01
380	191987	1.780332e+01	4.779e-05	3.147e+01	8.173e-01
381	192488	1.780398e+01	1.625e-05	3.167e+01	6.137e-01
382	192990	1.774818e+01	6.369e-06	3.181e+01	1.206e+00
383	193491	1.770768e+01	1.766e-05	3.197e+01	6.732e-01
384	193992	1.770733e+01	2.447e-05	3.192e+01	4.506e-01
385	194493	1.769766e+01	4.693e-06	3.208e+01	3.672e-01
386	194995	1.770718e+01	3.683e-06	3.215e+01	8.370e-01
387	195497	1.767077e+01	1.675e-06	3.216e+01	7.071e-01
388	196000	1.764671e+01	2.991e-05	3.206e+01	4.112e-01
389	196501	1.765835e+01	9.947e-06	3.208e+01	2.692e-01
390	197002	1.763554e+01	2.088e-05	3.205e+01	5.165e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
391	197503	1.764876e+01	4.041e-06	3.325e+01	3.169e-01
392	198005	1.764850e+01	1.560e-06	3.660e+01	6.345e-01
393	198506	1.763379e+01	5.898e-06	3.582e+01	3.456e-01
394	199007	1.763085e+01	6.670e-06	3.687e+01	2.523e-01
395	199508	1.761933e+01	3.250e-06	3.681e+01	3.340e-01
396	200009	1.760613e+01	7.688e-06	3.822e+01	4.265e-01
397	200510	1.759326e+01	5.696e-06	3.862e+01	3.040e-01
398	201011	1.759059e+01	1.459e-06	3.901e+01	1.338e-01
399	201512	1.758439e+01	5.296e-06	4.017e+01	2.489e-01
400	202013	1.758243e+01	1.918e-06	4.095e+01	2.290e-01
401	202514	1.756470e+01	5.479e-06	4.281e+01	4.842e-01
402	203015	1.757013e+01	1.858e-06	4.365e+01	1.933e-01
403	203516	1.755665e+01	5.344e-06	4.471e+01	3.437e-01
404	204017	1.755918e+01	1.813e-06	4.628e+01	2.756e-01
405	204518	1.754416e+01	7.202e-06	4.873e+01	4.974e-01
406	205019	1.754967e+01	1.510e-06	4.927e+01	2.079e-01
407	205520	1.752380e+01	1.195e-05	4.788e+01	7.562e-01
408	206021	1.754000e+01	2.121e-06	4.273e+01	2.635e-01
409	206522	1.752010e+01	6.896e-06	4.286e+01	4.126e-01
410	207023	1.752803e+01	1.685e-06	3.857e+01	2.892e-01
411	207524	1.750884e+01	5.990e-06	3.804e+01	4.887e-01
412	208025	1.750725e+01	2.644e-06	3.768e+01	2.011e-01
413	208526	1.748056e+01	7.530e-06	3.776e+01	4.175e-01
414	209027	1.748113e+01	1.505e-06	3.774e+01	1.834e-01
415	209528	1.746254e+01	4.325e-06	3.767e+01	5.074e-01
416	210029	1.746089e+01	1.241e-06	3.772e+01	1.899e-01
417	210530	1.744169e+01	4.049e-06	3.777e+01	4.713e-01
418	211031	1.744589e+01	1.222e-06	3.777e+01	1.710e-01
419	211532	1.742493e+01	3.452e-06	3.788e+01	3.873e-01
420	212033	1.743266e+01	2.050e-06	3.784e+01	2.530e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
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421	212534	1.740974e+01	3.636e-06	3.780e+01	3.348e-01
422	213035	1.742186e+01	1.188e-06	3.720e+01	1.458e-01
423	213536	1.741973e+01	4.754e-06	3.629e+01	3.061e-01
424	214037	1.742281e+01	1.171e-06	3.613e+01	1.375e-01
425	214538	1.741958e+01	1.494e-06	3.564e+01	2.278e-01
426	215039	1.741801e+01	1.156e-06	3.545e+01	7.734e-02
427	215540	1.741565e+01	1.169e-06	3.515e+01	1.885e-01
428	216041	1.740956e+01	1.140e-06	3.496e+01	8.795e-02
429	216542	1.740178e+01	1.279e-06	3.492e+01	2.648e-01
430	217043	1.739654e+01	1.126e-06	3.489e+01	1.153e-01
431	217544	1.739210e+01	4.193e-06	3.489e+01	4.955e-01
432	218045	1.738928e+01	1.112e-06	3.489e+01	2.140e-01
433	218546	1.738542e+01	3.995e-06	3.495e+01	4.818e-01
434	219047	1.738383e+01	1.099e-06	3.421e+01	1.795e-01
435	219548	1.738116e+01	3.175e-06	3.358e+01	3.894e-01
436	220049	1.738130e+01	1.086e-06	3.313e+01	1.007e-01
437	220550	1.737944e+01	2.041e-06	3.311e+01	2.054e-01
438	221051	1.737835e+01	1.073e-06	3.310e+01	1.073e-01
439	221552	1.736968e+01	3.614e-06	3.309e+01	3.179e-01
440	222053	1.737087e+01	1.061e-06	3.309e+01	1.101e-01
441	222554	1.736397e+01	1.749e-06	3.311e+01	2.955e-01
442	223055	1.736771e+01	1.049e-06	3.311e+01	1.423e-01
443	223556	1.736148e+01	2.088e-06	3.313e+01	3.395e-01
444	224057	1.736678e+01	1.038e-06	3.295e+01	1.108e-01
445	224558	1.736347e+01	1.358e-06	3.294e+01	2.313e-01
446	225059	1.736764e+01	1.027e-06	3.270e+01	1.180e-01
447	225560	1.736240e+01	2.086e-06	3.272e+01	3.678e-01
448	226061	1.736589e+01	1.016e-06	3.262e+01	1.192e-01
449	226562	1.735859e+01	1.925e-06	3.191e+01	2.827e-01
450	227063	1.736037e+01	1.006e-06	3.190e+01	1.069e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
451	227564	1.735210e+01	1.229e-06	3.112e+01	2.206e-01
452	228065	1.735283e+01	9.960e-07	3.110e+01	5.827e-02
453	228566	1.734324e+01	1.195e-06	3.025e+01	2.134e-01
454	229067	1.734432e+01	9.863e-07	3.023e+01	6.028e-02
455	229568	1.733905e+01	1.556e-06	3.024e+01	2.619e-01
456	230069	1.733980e+01	1.014e-06	3.024e+01	2.068e-01
457	230570	1.733908e+01	1.530e-06	3.026e+01	3.146e-01
458	231071	1.733923e+01	9.677e-07	3.026e+01	1.842e-01
459	231572	1.733519e+01	9.632e-07	3.026e+01	1.359e-01
460	232073	1.733247e+01	9.588e-07	3.025e+01	9.210e-02
461	232574	1.732728e+01	9.544e-07	3.026e+01	1.390e-01
462	233075	1.732563e+01	9.501e-07	3.025e+01	2.197e-01
463	233576	1.732128e+01	2.327e-06	3.027e+01	4.018e-01
464	234077	1.731879e+01	3.114e-06	2.999e+01	5.086e-01
465	234578	1.731230e+01	2.563e-06	2.932e+01	5.335e-01
466	235079	1.730825e+01	2.485e-06	2.931e+01	3.692e-01
467	235580	1.730126e+01	2.079e-06	2.931e+01	3.707e-01
468	236081	1.729494e+01	3.465e-06	2.928e+01	4.135e-01
469	236582	1.728702e+01	5.812e-06	2.928e+01	4.674e-01
470	237083	1.727552e+01	8.481e-06	2.930e+01	5.598e-01

471	237584	1.726451e+01	2.375e-05	2.967e+01	6.602e-01
472	238085	1.724725e+01	1.051e-05	2.931e+01	6.323e-01
473	238589	1.723804e+01	1.201e-05	2.930e+01	4.903e-01
474	239093	1.721705e+01	1.568e-05	2.896e+01	4.450e-01
475	239595	1.721298e+01	4.338e-06	2.867e+01	1.329e+00
476	240099	1.720306e+01	6.658e-06	2.864e+01	3.734e-01
477	240601	1.720929e+01	9.152e-07	2.855e+01	1.008e+00
478	241102	1.719698e+01	4.269e-06	2.856e+01	4.232e-01
479	241604	1.719435e+01	8.821e-07	2.828e+01	4.523e-01
480	242105	1.718869e+01	1.953e-06	2.830e+01	2.217e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
481	242606	1.717419e+01	1.238e-05	2.825e+01	6.277e-01
482	243107	1.717063e+01	5.837e-06	2.829e+01	2.373e-01
483	243608	1.715713e+01	1.184e-05	2.811e+01	3.873e-01
484	244109	1.715319e+01	1.981e-06	2.740e+01	1.776e-01
485	244610	1.714261e+01	4.380e-06	2.725e+01	2.772e-01
486	245111	1.714024e+01	3.808e-06	2.725e+01	2.136e-01
487	245612	1.713416e+01	2.716e-06	2.719e+01	3.378e-01
488	246113	1.713296e+01	3.869e-06	2.716e+01	3.272e-01
489	246614	1.712393e+01	1.110e-06	2.718e+01	2.838e-01
490	247115	1.712071e+01	3.124e-06	2.717e+01	3.968e-01
491	247616	1.711340e+01	2.123e-06	2.716e+01	3.339e-01
492	248117	1.710846e+01	5.369e-06	2.711e+01	5.326e-01
493	248618	1.709441e+01	6.803e-06	2.708e+01	5.920e-01
494	249119	1.708288e+01	7.147e-06	2.706e+01	6.739e-01
495	249620	1.706190e+01	1.050e-05	2.952e+01	5.867e-01
496	250121	1.704442e+01	5.006e-06	2.958e+01	5.291e-01
497	250623	1.702116e+01	8.235e-07	3.137e+01	8.262e-01
498	251126	1.701904e+01	5.244e-06	3.106e+01	5.327e-01
499	251627	1.700699e+01	8.568e-06	3.106e+01	6.074e-01
500	252128	1.700676e+01	3.777e-06	3.104e+01	2.694e-01

Solver stopped prematurely.

fmincon stopped because it exceeded the iteration limit,  
options.MaxIterations = 5.000000e+02.

Your initial point x0 is not between bounds lb and ub; FMINCON  
shifted x0 to strictly satisfy the bounds.

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
0	501	-1.447631e+01	2.261e-01	5.879e+01	
1	1002	-1.200860e+01	1.864e-01	5.878e+01	1.975e-01
2	1504	-1.047282e+01	1.623e-01	5.877e+01	1.685e-01
3	2005	-9.010973e+00	1.402e-01	3.671e+01	1.723e-01
4	2506	-5.444586e+00	9.509e-02	1.993e+01	4.167e-01
5	3008	-4.969760e+00	8.863e-02	1.675e+01	1.492e-01
6	3509	-4.144420e+00	7.738e-02	2.255e+01	4.090e-01
7	4010	-3.365293e+00	6.788e-02	1.062e+02	9.332e-01
8	4511	-2.749404e+00	6.346e-02	3.836e+02	2.016e+00

9	5012	-2.020645e+00	5.972e-02	3.519e+02	4.672e+00
10	5514	-2.016794e+00	5.970e-02	3.518e+02	4.620e-03
11	6015	-1.734419e+00	5.802e-02	4.120e+02	8.992e-01
12	6516	-8.318814e-01	5.292e-02	4.365e+02	3.491e+00
13	7017	-3.819397e-01	5.028e-02	4.606e+02	4.267e-01
14	7518	2.393330e-01	4.715e-02	4.959e+02	6.633e-01
15	8019	1.624489e+00	4.054e-02	5.398e+02	1.555e+00
16	8520	1.945598e+00	3.981e-02	5.330e+02	6.413e-01
17	9021	2.279309e+00	3.883e-02	5.189e+02	6.069e-01
18	9522	3.060853e+00	3.678e-02	4.860e+02	1.752e+00
19	10024	3.070036e+00	3.675e-02	4.863e+02	9.868e-03
20	10525	3.239280e+00	3.619e-02	4.959e+02	3.388e-01
21	11026	4.129548e+00	3.181e-02	5.500e+02	2.404e+00
22	11527	4.405738e+00	3.040e-02	5.521e+02	1.331e+00
23	12028	4.602106e+00	2.732e-02	5.503e+02	2.205e+00
24	12530	4.614128e+00	2.726e-02	5.497e+02	7.988e-02
25	13032	4.622965e+00	2.721e-02	5.487e+02	1.034e-01
26	13533	4.687059e+00	2.698e-02	5.473e+02	4.460e-01
27	14034	4.833697e+00	2.660e-02	5.460e+02	1.235e+00
28	14535	5.718437e+00	2.497e-02	5.410e+02	2.125e+00
29	15036	6.188983e+00	2.400e-02	5.380e+02	7.096e-01
30	15537	8.333520e+00	2.255e-02	5.296e+02	2.421e+00

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
31	16038	9.455346e+00	2.113e-02	5.232e+02	1.669e+00
32	16539	9.711797e+00	2.072e-02	5.211e+02	3.538e-01
33	17040	1.002314e+01	2.019e-02	5.176e+02	1.026e+00
34	17541	1.062648e+01	1.989e-02	5.175e+02	1.614e+00
35	18042	1.074320e+01	1.965e-02	5.153e+02	7.479e-01
36	18543	1.113195e+01	1.923e-02	5.132e+02	2.450e+00
37	19044	1.127391e+01	1.895e-02	5.255e+02	7.650e-01
38	19545	1.206459e+01	1.841e-02	5.652e+02	3.659e+00
39	20048	1.206728e+01	1.840e-02	5.653e+02	7.632e-03
40	20549	1.217350e+01	1.818e-02	5.666e+02	3.913e-01
41	21050	1.234342e+01	1.808e-02	5.687e+02	7.915e-01
42	21551	1.256568e+01	1.765e-02	5.700e+02	7.904e-01
43	22052	1.277142e+01	1.725e-02	5.734e+02	1.143e+00
44	22553	1.273396e+01	1.703e-02	5.742e+02	1.299e+00
45	23054	1.244088e+01	1.669e-02	5.741e+02	9.274e-01
46	23555	1.237520e+01	1.655e-02	5.744e+02	6.685e-01
47	24056	1.191870e+01	1.607e-02	5.691e+02	1.833e+00
48	24557	1.195048e+01	1.591e-02	5.663e+02	5.456e-01
49	25058	1.198454e+01	1.581e-02	5.616e+02	3.933e-01
50	25559	1.231891e+01	1.522e-02	5.349e+02	2.432e+00
51	26061	1.235060e+01	1.515e-02	5.358e+02	1.419e-01
52	26563	1.238709e+01	1.510e-02	5.373e+02	2.686e-01
53	27065	1.241398e+01	1.504e-02	5.387e+02	2.439e-01
54	27566	1.251593e+01	1.484e-02	5.434e+02	1.237e+00
55	28067	1.265793e+01	1.465e-02	5.471e+02	1.063e+00
56	28569	1.269211e+01	1.460e-02	5.474e+02	1.241e-01
57	29070	1.308689e+01	1.418e-02	5.462e+02	1.368e+00
58	29571	1.340130e+01	1.400e-02	5.446e+02	9.519e-01

59	30072	1.385921e+01	1.387e-02	5.420e+02	8.118e-01
60	30574	1.407180e+01	1.382e-02	5.403e+02	5.071e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
61	31076	1.419100e+01	1.381e-02	5.393e+02	3.351e-01
62	31578	1.428125e+01	1.379e-02	5.384e+02	2.841e-01
63	32080	1.437829e+01	1.378e-02	5.376e+02	3.155e-01
64	32582	1.446234e+01	1.376e-02	5.369e+02	2.897e-01
65	33084	1.456289e+01	1.375e-02	5.361e+02	3.687e-01
66	33586	1.478152e+01	1.373e-02	5.340e+02	8.819e-01
67	34088	1.489916e+01	1.371e-02	5.328e+02	5.396e-01
68	34589	1.511293e+01	1.367e-02	5.310e+02	9.975e-01
69	35090	1.584892e+01	1.346e-02	5.253e+02	3.669e+00
70	35592	1.585990e+01	1.345e-02	5.253e+02	1.383e-01
71	36094	1.586514e+01	1.343e-02	5.250e+02	2.429e-01
72	36596	1.586407e+01	1.341e-02	5.248e+02	4.229e-01
73	37098	1.585797e+01	1.340e-02	5.247e+02	2.938e-01
74	37600	1.584689e+01	1.338e-02	5.245e+02	2.864e-01
75	38102	1.582267e+01	1.336e-02	5.243e+02	4.279e-01
76	38603	1.571117e+01	1.330e-02	5.231e+02	1.415e+00
77	39105	1.568034e+01	1.329e-02	5.229e+02	2.513e-01
78	39607	1.566701e+01	1.328e-02	5.230e+02	1.474e-01
79	40109	1.564588e+01	1.327e-02	5.231e+02	2.102e-01
80	40610	1.559924e+01	1.324e-02	5.231e+02	5.984e-01
81	41111	1.550346e+01	1.312e-02	5.256e+02	2.401e+00
82	41612	1.542187e+01	1.308e-02	5.253e+02	4.173e-01
83	42113	1.563159e+01	1.284e-02	5.214e+02	3.330e+00
84	42614	1.594454e+01	1.272e-02	5.202e+02	2.150e+00
85	43116	1.602350e+01	1.270e-02	5.195e+02	3.355e-01
86	43618	1.609460e+01	1.269e-02	5.190e+02	2.815e-01
87	44119	1.640084e+01	1.263e-02	5.176e+02	1.321e+00
88	44620	1.699447e+01	1.250e-02	5.160e+02	2.460e+00
89	45122	1.700835e+01	1.249e-02	5.161e+02	6.523e-02
90	45624	1.702324e+01	1.248e-02	5.164e+02	1.175e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
91	46126	1.703533e+01	1.248e-02	5.167e+02	1.109e-01
92	46628	1.705247e+01	1.247e-02	5.173e+02	1.700e-01
93	47130	1.707940e+01	1.245e-02	5.187e+02	2.772e-01
94	47632	1.711324e+01	1.243e-02	5.205e+02	3.694e-01
95	48134	1.712877e+01	1.242e-02	5.215e+02	1.881e-01
96	48636	1.714025e+01	1.241e-02	5.219e+02	1.096e-01
97	49138	1.715856e+01	1.240e-02	5.221e+02	9.889e-02
98	49639	1.726280e+01	1.235e-02	5.291e+02	4.421e-01
99	50141	1.730812e+01	1.233e-02	5.305e+02	1.399e-01
100	50642	1.762897e+01	1.223e-02	5.397e+02	1.042e+00
101	51143	1.803032e+01	1.215e-02	5.490e+02	1.608e+00
102	51645	1.805338e+01	1.214e-02	5.493e+02	5.285e-02
103	52146	1.824650e+01	1.211e-02	5.533e+02	4.678e-01
104	52647	1.906713e+01	1.198e-02	5.678e+02	2.153e+00
105	53150	1.906829e+01	1.198e-02	5.678e+02	2.823e-03

106	53651	1.908845e+01	1.191e-02	5.688e+02	6.499e-02
107	54152	1.914668e+01	1.166e-02	5.745e+02	5.056e-01
108	54653	1.916254e+01	1.152e-02	5.765e+02	4.866e-01
109	55154	1.919897e+01	1.141e-02	5.777e+02	4.095e-01
110	55655	1.928530e+01	1.131e-02	5.824e+02	8.114e-01
111	56156	1.943888e+01	1.117e-02	5.872e+02	1.164e+00
112	56657	1.955110e+01	1.111e-02	5.935e+02	5.144e-01
113	57158	1.967789e+01	1.105e-02	5.905e+02	5.036e-01
114	57659	1.984535e+01	1.101e-02	5.936e+02	8.067e-01
115	58160	2.025149e+01	1.095e-02	5.986e+02	1.550e+00
116	58662	2.026425e+01	1.094e-02	5.986e+02	5.646e-02
117	59163	2.050396e+01	1.088e-02	5.985e+02	9.676e-01
118	59664	2.063542e+01	1.085e-02	5.984e+02	5.024e-01
119	60165	2.080833e+01	1.081e-02	5.990e+02	6.443e-01
120	60666	2.084057e+01	1.079e-02	5.991e+02	1.349e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
121	61167	2.103034e+01	1.071e-02	5.998e+02	9.767e-01
122	61668	2.108106e+01	1.069e-02	6.004e+02	1.713e-01
123	62169	2.124562e+01	1.064e-02	6.017e+02	5.517e-01
124	62670	2.151526e+01	1.054e-02	6.036e+02	9.527e-01
125	63171	2.169122e+01	1.048e-02	6.044e+02	8.456e-01
126	63672	2.178944e+01	1.046e-02	6.049e+02	4.788e-01
127	64174	2.179442e+01	1.045e-02	6.050e+02	5.062e-02
128	64676	2.179946e+01	1.044e-02	6.051e+02	6.318e-02
129	65177	2.184537e+01	1.042e-02	6.056e+02	5.829e-01
130	65678	2.196901e+01	1.038e-02	6.075e+02	1.592e+00
131	66179	2.199283e+01	1.036e-02	6.082e+02	1.599e-01
132	66680	2.201979e+01	1.030e-02	6.089e+02	4.367e-01
133	67182	2.202111e+01	1.029e-02	6.088e+02	4.544e-02
134	67683	2.203271e+01	1.021e-02	6.106e+02	6.487e-01
135	68184	2.203992e+01	1.014e-02	6.103e+02	5.279e-01
136	68685	2.206396e+01	1.011e-02	6.100e+02	3.521e-01
137	69186	2.205173e+01	1.004e-02	6.096e+02	4.012e-01
138	69687	2.225317e+01	9.859e-03	6.077e+02	1.270e+00
139	70188	2.230563e+01	9.742e-03	6.072e+02	8.518e-01
140	70689	2.246246e+01	9.685e-03	6.065e+02	5.940e-01
141	71191	2.249430e+01	9.681e-03	6.066e+02	1.192e-01
142	71693	2.251567e+01	9.677e-03	6.065e+02	8.289e-02
143	72195	2.254993e+01	9.670e-03	6.064e+02	1.568e-01
144	72696	2.275363e+01	9.611e-03	6.058e+02	9.824e-01
145	73197	2.281337e+01	9.564e-03	6.079e+02	3.304e-01
146	73698	2.285029e+01	9.537e-03	6.085e+02	2.114e-01
147	74199	2.290536e+01	9.435e-03	6.111e+02	5.272e-01
148	74700	2.295840e+01	9.294e-03	6.152e+02	1.033e+00
149	75202	2.296290e+01	9.289e-03	6.152e+02	3.520e-02
150	75703	2.302520e+01	9.247e-03	6.139e+02	5.569e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
151	76204	2.315413e+01	9.205e-03	6.060e+02	1.442e+00
152	76705	2.324713e+01	9.174e-03	6.042e+02	9.276e-01

153	77206	2.333687e+01	9.144e-03	6.035e+02	5.241e-01
154	77707	2.339158e+01	9.087e-03	6.038e+02	1.340e-01
155	78208	2.353373e+01	9.002e-03	6.044e+02	4.812e-01
156	78709	2.361454e+01	8.786e-03	6.038e+02	2.322e-01
157	79210	2.374391e+01	8.555e-03	6.011e+02	9.173e-01
158	79713	2.374508e+01	8.554e-03	6.011e+02	6.149e-03
159	80214	2.387817e+01	8.512e-03	5.984e+02	7.161e-01
160	80715	2.408598e+01	8.467e-03	5.928e+02	1.180e+00
161	81217	2.409702e+01	8.459e-03	5.925e+02	4.592e-02
162	81718	2.416724e+01	8.423e-03	5.911e+02	3.108e-01
163	82219	2.423377e+01	8.396e-03	5.898e+02	3.149e-01
164	82720	2.429463e+01	8.378e-03	5.888e+02	3.218e-01
165	83221	2.451670e+01	8.240e-03	5.879e+02	7.720e-01
166	83722	2.469701e+01	8.213e-03	5.886e+02	7.216e-01
167	84224	2.470276e+01	8.208e-03	5.885e+02	2.355e-02
168	84725	2.486801e+01	8.175e-03	5.887e+02	8.062e-01
169	85228	2.487109e+01	8.174e-03	5.887e+02	1.754e-02
170	85729	2.493168e+01	8.154e-03	5.881e+02	3.325e-01
171	86230	2.524413e+01	8.080e-03	5.844e+02	1.476e+00
172	86731	2.583461e+01	8.011e-03	5.784e+02	2.012e+00
173	87232	2.678365e+01	7.766e-03	5.702e+02	2.628e+00
174	87733	2.695587e+01	7.708e-03	5.685e+02	4.848e-01
175	88234	2.713933e+01	7.623e-03	5.691e+02	4.403e-01
176	88735	2.744424e+01	7.551e-03	5.684e+02	6.841e-01
177	89237	2.746354e+01	7.546e-03	5.685e+02	3.775e-02
178	89738	2.764530e+01	7.511e-03	5.689e+02	2.559e-01
179	90239	2.852913e+01	7.426e-03	5.681e+02	1.259e+00
180	90740	2.900033e+01	7.401e-03	5.652e+02	6.320e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
181	91242	2.901471e+01	7.395e-03	5.650e+02	3.591e-02
182	91743	2.920654e+01	7.361e-03	5.617e+02	5.034e-01
183	92244	2.948033e+01	7.334e-03	5.559e+02	7.337e-01
184	92746	2.951122e+01	7.328e-03	5.553e+02	7.595e-02
185	93247	2.968365e+01	7.262e-03	5.528e+02	4.142e-01
186	93748	3.008277e+01	7.159e-03	5.496e+02	1.134e+00
187	94250	3.010114e+01	7.154e-03	5.494e+02	5.861e-02
188	94751	3.028782e+01	7.108e-03	5.471e+02	6.493e-01
189	95252	3.041922e+01	7.057e-03	5.456e+02	4.813e-01
190	95753	3.055251e+01	6.995e-03	5.437e+02	4.942e-01
191	96254	3.059676e+01	6.968e-03	5.435e+02	1.243e-01
192	96755	3.082664e+01	6.926e-03	5.418e+02	7.613e-01
193	97257	3.086848e+01	6.921e-03	5.414e+02	1.292e-01
194	97759	3.089950e+01	6.918e-03	5.412e+02	9.691e-02
195	98261	3.092736e+01	6.916e-03	5.409e+02	8.853e-02
196	98763	3.095701e+01	6.913e-03	5.405e+02	9.445e-02
197	99265	3.099824e+01	6.910e-03	5.401e+02	1.305e-01
198	99767	3.107177e+01	6.903e-03	5.392e+02	2.310e-01
199	100269	3.120480e+01	6.890e-03	5.377e+02	4.144e-01
200	100771	3.129022e+01	6.880e-03	5.368e+02	2.663e-01
201	101272	3.149920e+01	6.852e-03	5.345e+02	6.532e-01
202	101773	3.158659e+01	6.836e-03	5.339e+02	2.734e-01

203	102274	3.166485e+01	6.817e-03	5.330e+02	3.001e-01
204	102775	3.178474e+01	6.787e-03	5.316e+02	3.913e-01
205	103276	3.181140e+01	6.749e-03	5.306e+02	2.222e-01
206	103778	3.181454e+01	6.746e-03	5.303e+02	3.922e-02
207	104279	3.195185e+01	6.646e-03	5.162e+02	1.959e+00
208	104781	3.195812e+01	6.642e-03	5.155e+02	8.253e-02
209	105282	3.202037e+01	6.616e-03	5.095e+02	6.822e-01
210	105783	3.237970e+01	6.474e-03	4.707e+02	3.462e+00

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
211	106284	3.278449e+01	6.408e-03	4.269e+02	3.580e+00
212	106785	3.286667e+01	6.391e-03	4.190e+02	7.571e-01
213	107287	3.303394e+01	6.371e-03	4.022e+02	1.734e+00
214	107789	3.313183e+01	6.356e-03	3.934e+02	1.063e+00
215	108290	3.325158e+01	6.334e-03	3.852e+02	1.221e+00
216	108791	3.333908e+01	6.308e-03	3.823e+02	4.959e-01
217	109292	3.352954e+01	6.285e-03	3.915e+02	1.090e+00
218	109794	3.353826e+01	6.282e-03	3.923e+02	5.824e-02
219	110295	3.367432e+01	6.262e-03	4.022e+02	8.032e-01
220	110797	3.369963e+01	6.257e-03	4.034e+02	9.553e-02
221	111298	3.381678e+01	6.243e-03	4.086e+02	4.098e-01
222	111799	3.387955e+01	6.213e-03	4.106e+02	1.863e-01
223	112300	3.416858e+01	6.100e-03	4.123e+02	7.487e-01
224	112801	3.446339e+01	6.071e-03	4.146e+02	7.725e-01
225	113302	3.466907e+01	6.053e-03	4.160e+02	4.930e-01
226	113805	3.467082e+01	6.052e-03	4.160e+02	4.732e-03
227	114306	3.497305e+01	5.985e-03	4.301e+02	9.360e-01
228	114809	3.497463e+01	5.984e-03	4.302e+02	4.001e-03
229	115310	3.515558e+01	5.954e-03	4.357e+02	4.413e-01
230	115811	3.538692e+01	5.927e-03	4.419e+02	6.219e-01
231	116312	3.558611e+01	5.895e-03	4.444e+02	4.873e-01
232	116813	3.568541e+01	5.860e-03	4.453e+02	2.327e-01
233	117314	3.670491e+01	5.631e-03	4.610e+02	2.261e+00
234	117815	3.697124e+01	5.578e-03	4.639e+02	5.179e-01
235	118316	3.698790e+01	5.568e-03	4.639e+02	7.485e-02
236	118817	3.727331e+01	5.463e-03	4.612e+02	1.187e+00
237	119318	3.738012e+01	5.433e-03	4.597e+02	4.500e-01
238	119819	3.742366e+01	5.423e-03	4.589e+02	1.343e-01
239	120320	3.805594e+01	5.359e-03	4.447e+02	1.746e+00
240	120821	3.823684e+01	5.335e-03	4.462e+02	4.963e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
241	121323	3.824176e+01	5.333e-03	4.462e+02	1.713e-02
242	121824	3.834972e+01	5.310e-03	4.472e+02	4.228e-01
243	122325	3.840438e+01	5.281e-03	4.466e+02	2.942e-01
244	122826	3.857391e+01	5.245e-03	4.471e+02	8.886e-01
245	123327	3.891052e+01	5.195e-03	4.427e+02	1.300e+00
246	123830	3.891146e+01	5.195e-03	4.427e+02	2.226e-03
247	124331	3.894850e+01	5.186e-03	4.426e+02	6.570e-02
248	124832	3.925282e+01	5.139e-03	4.425e+02	5.673e-01
249	125333	3.940677e+01	5.119e-03	4.423e+02	3.004e-01



250	125834	3.985140e+01	5.071e-03	4.415e+02	8.465e-01
251	126335	4.050551e+01	5.011e-03	4.419e+02	1.196e+00
252	126836	4.074006e+01	4.978e-03	4.439e+02	4.879e-01
253	127337	4.078639e+01	4.972e-03	4.442e+02	1.126e-01
254	127838	4.102525e+01	4.896e-03	4.479e+02	1.088e+00
255	128340	4.103051e+01	4.894e-03	4.479e+02	2.160e-02
256	128841	4.113483e+01	4.872e-03	4.476e+02	4.232e-01
257	129342	4.121822e+01	4.853e-03	4.473e+02	3.883e-01
258	129844	4.121992e+01	4.852e-03	4.474e+02	6.648e-03
259	130345	4.134201e+01	4.815e-03	4.494e+02	4.863e-01
260	130846	4.135015e+01	4.812e-03	4.493e+02	3.738e-02
261	131347	4.151510e+01	4.751e-03	4.560e+02	7.719e-01
262	131848	4.152399e+01	4.744e-03	4.567e+02	3.160e-02
263	132349	4.159645e+01	4.712e-03	4.611e+02	2.100e-01
264	132850	4.190328e+01	4.583e-03	4.803e+02	8.367e-01
265	133351	4.217978e+01	4.495e-03	4.874e+02	8.438e-01
266	133852	4.219076e+01	4.490e-03	4.879e+02	3.380e-02
267	134353	4.250534e+01	4.382e-03	4.969e+02	9.722e-01
268	134854	4.258566e+01	4.362e-03	4.990e+02	2.824e-01
269	135355	4.317267e+01	4.265e-03	4.931e+02	2.470e+00
270	135856	4.319496e+01	4.259e-03	4.928e+02	7.766e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
271	136357	4.338085e+01	4.209e-03	4.883e+02	4.656e-01
272	136858	4.415825e+01	4.045e-03	4.502e+02	1.844e+00
273	137359	4.472777e+01	3.952e-03	4.797e+02	1.021e+00
274	137860	4.475570e+01	3.945e-03	4.815e+02	5.547e-02
275	138361	4.508785e+01	3.870e-03	4.914e+02	7.334e-01
276	138862	4.540402e+01	3.808e-03	5.142e+02	8.010e-01
277	139363	4.569425e+01	3.760e-03	5.070e+02	6.518e-01
278	139864	4.605617e+01	3.690e-03	5.178e+02	1.055e+00
279	140365	4.641222e+01	3.642e-03	5.169e+02	1.254e+00
280	140866	4.699306e+01	3.574e-03	5.211e+02	2.079e+00
281	141367	4.706958e+01	3.559e-03	5.212e+02	1.530e-01
282	141868	4.714431e+01	3.544e-03	5.221e+02	1.396e-01
283	142369	4.759056e+01	3.446e-03	4.967e+02	1.062e+00
284	142870	4.783810e+01	3.393e-03	4.966e+02	4.864e-01
285	143371	4.821774e+01	3.364e-03	4.912e+02	7.801e-01
286	143872	4.841534e+01	3.350e-03	4.867e+02	3.890e-01
287	144373	4.843830e+01	3.343e-03	4.864e+02	4.903e-02
288	144874	4.913703e+01	3.271e-03	4.712e+02	1.534e+00
289	145376	4.914119e+01	3.271e-03	4.713e+02	7.273e-03
290	145877	4.921236e+01	3.258e-03	4.728e+02	1.523e-01
291	146378	4.936178e+01	3.247e-03	4.778e+02	3.565e-01
292	146879	4.946101e+01	3.240e-03	4.812e+02	2.387e-01
293	147380	4.947494e+01	3.226e-03	4.820e+02	5.695e-02
294	147881	4.961403e+01	3.202e-03	4.926e+02	4.880e-01
295	148382	4.965994e+01	3.192e-03	5.030e+02	1.967e-01
296	148883	4.986080e+01	3.172e-03	5.553e+02	1.003e+00
297	149384	4.986927e+01	3.168e-03	5.551e+02	3.331e-02
298	149885	4.999257e+01	3.101e-03	5.512e+02	3.934e-01
299	150387	4.999344e+01	3.101e-03	5.513e+02	2.933e-03

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300    150888    5.019299e+01    2.996e-03    5.736e+02    6.626e-01
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Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
301	151389	5.040778e+01	2.960e-03	5.743e+02	5.528e-01
302	151890	5.081200e+01	2.904e-03	5.840e+02	8.196e-01
303	152392	5.081581e+01	2.904e-03	5.840e+02	5.751e-03
304	152893	5.109486e+01	2.878e-03	5.846e+02	3.404e-01
305	153394	5.130046e+01	2.866e-03	5.853e+02	2.579e-01
306	153895	5.133024e+01	2.859e-03	5.858e+02	7.684e-02
307	154396	5.146021e+01	2.830e-03	5.938e+02	4.126e-01
308	154897	5.175257e+01	2.808e-03	6.057e+02	1.317e+00
309	155398	5.183879e+01	2.801e-03	6.079e+02	3.709e-01
310	155900	5.183996e+01	2.800e-03	6.079e+02	3.444e-03
311	156401	5.215204e+01	2.775e-03	6.089e+02	1.025e+00
312	156902	5.250804e+01	2.745e-03	6.073e+02	1.125e+00
313	157403	5.264656e+01	2.737e-03	6.075e+02	3.553e-01
314	157904	5.278805e+01	2.731e-03	6.084e+02	3.294e-01
315	158407	5.319934e+01	2.720e-03	6.111e+02	9.702e-01
316	158909	5.379918e+01	2.703e-03	6.138e+02	1.409e+00
317	159410	5.440015e+01	2.623e-03	6.111e+02	1.348e+00
318	159911	5.466677e+01	2.601e-03	6.101e+02	6.596e-01
319	160412	5.468930e+01	2.600e-03	6.099e+02	4.943e-02
320	160913	5.473960e+01	2.595e-03	6.091e+02	9.947e-02
321	161414	5.491427e+01	2.585e-03	6.071e+02	3.643e-01
322	161915	5.499448e+01	2.582e-03	6.054e+02	1.671e-01
323	162416	5.537852e+01	2.569e-03	5.942e+02	7.844e-01
324	162917	5.600146e+01	2.547e-03	5.703e+02	1.186e+00
325	163418	5.628911e+01	2.534e-03	5.600e+02	5.225e-01
326	163920	5.629558e+01	2.533e-03	5.598e+02	1.233e-02
327	164421	5.644604e+01	2.525e-03	5.554e+02	2.837e-01
328	164922	5.656367e+01	2.518e-03	5.500e+02	1.887e-01
329	165423	5.667366e+01	2.511e-03	5.480e+02	1.858e-01
330	165924	5.667677e+01	2.502e-03	5.477e+02	3.833e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
331	166425	5.671587e+01	2.471e-03	5.469e+02	2.937e-01
332	166926	5.681962e+01	2.366e-03	5.410e+02	9.518e-01
333	167427	5.704764e+01	2.282e-03	5.229e+02	1.782e+00
334	167928	5.726099e+01	2.235e-03	5.071e+02	9.766e-01
335	168429	5.737037e+01	2.230e-03	5.002e+02	3.398e-01
336	168931	5.737394e+01	2.230e-03	4.999e+02	1.106e-02
337	169432	5.739042e+01	2.229e-03	4.987e+02	5.305e-02
338	169933	5.754834e+01	2.217e-03	4.874e+02	5.290e-01
339	170434	5.809770e+01	2.180e-03	4.421e+02	1.713e+00
340	170935	5.815475e+01	2.177e-03	4.359e+02	1.847e-01
341	171436	5.850940e+01	2.165e-03	3.968e+02	1.093e+00
342	171937	5.852468e+01	2.164e-03	3.952e+02	4.489e-02
343	172439	5.891880e+01	2.153e-03	3.526e+02	1.105e+00
344	172941	5.923746e+01	2.144e-03	3.183e+02	8.688e-01
345	173442	5.964952e+01	2.132e-03	3.319e+02	1.072e+00
346	173943	5.966164e+01	2.131e-03	3.324e+02	3.027e-02

347	174444	5.987680e+01	2.096e-03	3.399e+02	5.206e-01
348	174945	5.989808e+01	2.095e-03	3.406e+02	5.048e-02
349	175446	6.063199e+01	2.058e-03	3.391e+02	1.910e+00
350	175947	6.065636e+01	2.057e-03	3.381e+02	5.053e-02
351	176448	6.078413e+01	2.053e-03	3.311e+02	2.947e-01
352	176950	6.079001e+01	2.053e-03	3.307e+02	1.266e-02
353	177451	6.112189e+01	2.042e-03	3.135e+02	7.368e-01
354	177952	6.114901e+01	2.040e-03	3.136e+02	6.352e-02
355	178453	6.129661e+01	2.033e-03	3.137e+02	3.712e-01
356	178954	6.135574e+01	2.027e-03	3.145e+02	1.493e-01
357	179455	6.173619e+01	2.010e-03	3.162e+02	1.110e+00
358	179956	6.175174e+01	2.008e-03	3.163e+02	3.382e-02
359	180457	6.181596e+01	1.981e-03	3.166e+02	2.474e-01
360	180958	6.198906e+01	1.918e-03	3.165e+02	5.341e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
361	181459	6.207968e+01	1.898e-03	3.166e+02	3.730e-01
362	181960	6.209272e+01	1.885e-03	3.167e+02	9.104e-02
363	182461	6.217753e+01	1.824e-03	3.173e+02	9.520e-01
364	182962	6.226269e+01	1.791e-03	3.182e+02	5.327e-01
365	183463	6.227348e+01	1.780e-03	3.183e+02	7.365e-02
366	183964	6.244448e+01	1.721e-03	3.208e+02	6.292e-01
367	184467	6.259795e+01	1.699e-03	3.243e+02	5.383e-01
368	184970	6.267726e+01	1.692e-03	3.271e+02	3.140e-01
369	185473	6.273517e+01	1.689e-03	3.292e+02	2.227e-01
370	185975	6.281675e+01	1.686e-03	3.322e+02	3.106e-01
371	186477	6.286698e+01	1.684e-03	3.339e+02	1.837e-01
372	186979	6.294341e+01	1.681e-03	3.363e+02	2.764e-01
373	187480	6.302785e+01	1.676e-03	3.389e+02	3.112e-01
374	187981	6.323370e+01	1.656e-03	3.472e+02	8.425e-01
375	188482	6.330901e+01	1.637e-03	3.522e+02	2.714e-01
376	188983	6.337465e+01	1.624e-03	3.558e+02	2.382e-01
377	189484	6.339790e+01	1.620e-03	3.569e+02	8.146e-02
378	189985	6.354646e+01	1.606e-03	3.635e+02	5.060e-01
379	190486	6.378707e+01	1.567e-03	3.704e+02	8.099e-01
380	190987	6.397159e+01	1.542e-03	3.747e+02	5.320e-01
381	191488	6.403419e+01	1.532e-03	3.752e+02	1.507e-01
382	191989	6.423324e+01	1.514e-03	3.749e+02	4.881e-01
383	192490	6.429021e+01	1.507e-03	3.757e+02	1.586e-01
384	192991	6.436815e+01	1.501e-03	3.768e+02	2.122e-01
385	193492	6.456311e+01	1.488e-03	3.790e+02	5.182e-01
386	193993	6.464397e+01	1.479e-03	3.795e+02	1.916e-01
387	194494	6.484830e+01	1.464e-03	3.807e+02	4.966e-01
388	194995	6.556568e+01	1.440e-03	3.814e+02	1.864e+00
389	195497	6.556949e+01	1.440e-03	3.814e+02	9.016e-03
390	195998	6.567656e+01	1.435e-03	3.820e+02	2.444e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
391	196499	6.573342e+01	1.408e-03	3.823e+02	1.439e-01
392	197000	6.583696e+01	1.392e-03	3.826e+02	2.632e-01
393	197501	6.644469e+01	1.286e-03	3.842e+02	1.452e+00

394	198002	6.653196e+01	1.277e-03	3.845e+02	1.765e-01
395	198503	6.662969e+01	1.259e-03	3.851e+02	3.096e-01
396	199004	6.663384e+01	1.258e-03	3.851e+02	1.149e-02
397	199506	6.692183e+01	1.236e-03	3.852e+02	7.244e-01
398	200008	6.719598e+01	1.221e-03	3.851e+02	6.935e-01
399	200510	6.732547e+01	1.216e-03	3.849e+02	3.398e-01
400	201012	6.739076e+01	1.214e-03	3.848e+02	1.780e-01
401	201514	6.743645e+01	1.213e-03	3.848e+02	1.207e-01
402	202017	6.748584e+01	1.212e-03	3.849e+02	1.254e-01
403	202522	6.628066e+01	6.089e-04	8.291e+01	5.689e-01
404	203023	6.628564e+01	6.084e-04	8.291e+01	2.081e-02
405	203524	6.630647e+01	5.979e-04	8.292e+01	1.972e-01
406	204026	6.649245e+01	5.074e-04	8.278e+01	2.114e+00
407	204527	6.604706e+01	3.729e-04	8.264e+01	1.276e+00
408	205028	6.574724e+01	1.920e-04	8.252e+01	1.410e+00
409	205530	6.548473e+01	2.953e-05	8.227e+01	1.340e+00
410	206032	6.553322e+01	2.516e-05	8.210e+01	1.139e+00
411	206534	6.548030e+01	4.166e-05	8.203e+01	1.424e+00
412	207036	6.527072e+01	1.124e-05	8.201e+01	1.292e+00
413	207538	6.520713e+01	1.117e-05	8.196e+01	8.607e-01
414	208040	6.505843e+01	7.961e-06	8.193e+01	7.300e-01
415	208545	6.505059e+01	7.917e-06	8.192e+01	1.273e-01
416	209052	6.503043e+01	8.106e-06	8.189e+01	2.064e-01
417	209559	6.499189e+01	8.845e-06	8.183e+01	4.420e-01
418	210066	6.494968e+01	9.479e-06	8.176e+01	4.935e-01
419	210573	6.490151e+01	9.998e-06	8.166e+01	5.594e-01
420	211082	6.487307e+01	1.013e-05	8.160e+01	3.307e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
421	211589	6.484050e+01	1.031e-05	8.151e+01	3.631e-01
422	212096	6.480496e+01	1.049e-05	8.140e+01	3.737e-01
423	212603	6.476548e+01	1.068e-05	8.129e+01	3.728e-01
424	213110	6.471865e+01	1.086e-05	8.117e+01	3.660e-01
425	213617	6.466002e+01	1.103e-05	8.105e+01	3.591e-01
426	214124	6.458760e+01	1.122e-05	8.091e+01	3.615e-01
427	214631	6.450406e+01	1.139e-05	8.074e+01	3.730e-01
428	215138	6.441513e+01	1.156e-05	8.055e+01	3.880e-01
429	215645	6.432749e+01	1.173e-05	8.031e+01	4.018e-01
430	216152	6.424645e+01	1.189e-05	8.004e+01	4.130e-01
431	216659	6.417570e+01	1.205e-05	7.983e+01	4.217e-01
432	217166	6.411599e+01	1.221e-05	7.982e+01	4.293e-01
433	217673	6.406790e+01	1.236e-05	7.981e+01	4.354e-01
434	218180	6.402991e+01	1.253e-05	7.977e+01	4.402e-01
435	218687	6.399839e+01	1.270e-05	7.971e+01	4.440e-01
436	219194	6.397032e+01	1.287e-05	7.962e+01	4.464e-01
437	219701	6.394191e+01	1.303e-05	7.829e+01	4.474e-01
438	220208	6.390951e+01	1.320e-05	7.828e+01	4.482e-01
439	220715	6.386934e+01	1.336e-05	7.827e+01	4.491e-01
440	221222	6.382343e+01	1.347e-05	7.825e+01	4.509e-01
441	221729	6.377438e+01	1.355e-05	7.823e+01	4.541e-01
442	222236	6.372389e+01	1.361e-05	7.821e+01	4.581e-01
443	222743	6.367460e+01	1.365e-05	7.818e+01	4.619e-01

444	223250	6.362818e+01	1.368e-05	7.815e+01	4.650e-01
445	223757	6.358457e+01	1.371e-05	7.811e+01	4.676e-01
446	224264	6.354322e+01	1.374e-05	7.806e+01	4.697e-01
447	224771	6.350362e+01	1.377e-05	7.800e+01	4.721e-01
448	225278	6.346452e+01	1.381e-05	7.793e+01	4.754e-01
449	225785	6.342459e+01	1.385e-05	7.788e+01	4.791e-01
450	226292	6.338141e+01	1.392e-05	7.840e+01	4.829e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
451	226799	6.333425e+01	1.397e-05	7.898e+01	4.857e-01
452	227306	6.328149e+01	1.403e-05	7.961e+01	4.874e-01
453	227813	6.322499e+01	1.405e-05	7.975e+01	4.882e-01
454	228320	6.316564e+01	1.407e-05	7.984e+01	4.874e-01
455	228827	6.310361e+01	1.409e-05	7.987e+01	4.860e-01
456	229334	6.303938e+01	1.414e-05	7.988e+01	4.827e-01
457	229841	6.297568e+01	1.422e-05	7.985e+01	4.794e-01
458	230348	6.291300e+01	1.433e-05	7.978e+01	4.739e-01
459	230855	6.285299e+01	1.452e-05	8.011e+01	4.646e-01
460	231362	6.279847e+01	1.476e-05	8.052e+01	4.535e-01
461	231871	6.277459e+01	1.460e-05	8.074e+01	2.237e-01
462	232378	6.275235e+01	1.447e-05	8.094e+01	2.243e-01
463	232885	6.272990e+01	1.434e-05	8.114e+01	2.241e-01
464	233392	6.270507e+01	1.423e-05	8.135e+01	2.204e-01
465	233899	6.267640e+01	1.412e-05	8.156e+01	2.152e-01
466	234406	6.264443e+01	1.402e-05	8.178e+01	2.146e-01
467	234913	6.260921e+01	1.393e-05	8.200e+01	2.167e-01
468	235420	6.256982e+01	1.384e-05	8.221e+01	2.197e-01
469	235927	6.252546e+01	1.376e-05	8.241e+01	2.217e-01
470	236434	6.247736e+01	1.368e-05	8.260e+01	2.212e-01
471	236941	6.242673e+01	1.359e-05	8.279e+01	2.178e-01
472	237448	6.237389e+01	1.351e-05	8.299e+01	2.132e-01
473	237955	6.231877e+01	1.342e-05	8.320e+01	2.079e-01
474	238462	6.226153e+01	1.333e-05	8.342e+01	2.038e-01
475	238969	6.220265e+01	1.324e-05	8.364e+01	2.026e-01
476	239476	6.214283e+01	1.316e-05	8.383e+01	2.016e-01
477	239983	6.208212e+01	1.309e-05	8.398e+01	1.998e-01
478	240490	6.202146e+01	1.303e-05	8.408e+01	1.991e-01
479	240997	6.196102e+01	1.297e-05	8.414e+01	2.024e-01
480	241504	6.190226e+01	1.292e-05	8.418e+01	2.068e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
481	242011	6.184353e+01	1.287e-05	8.423e+01	2.101e-01
482	242518	6.178438e+01	1.281e-05	8.430e+01	2.118e-01
483	243025	6.172400e+01	1.276e-05	8.439e+01	2.126e-01
484	243532	6.165903e+01	1.273e-05	8.451e+01	2.143e-01
485	244039	6.158823e+01	1.270e-05	8.460e+01	2.142e-01
486	244546	6.151521e+01	1.269e-05	8.469e+01	2.170e-01
487	245053	6.144022e+01	1.267e-05	8.477e+01	2.180e-01
488	245560	6.136368e+01	1.266e-05	8.484e+01	2.195e-01
489	246067	6.128220e+01	1.265e-05	8.489e+01	2.170e-01
490	246574	6.119637e+01	1.265e-05	8.492e+01	2.158e-01

491	247081	6.110891e+01	1.265e-05	8.495e+01	2.200e-01
492	247588	6.101863e+01	1.264e-05	8.498e+01	2.249e-01
493	248095	6.092461e+01	1.264e-05	8.502e+01	2.291e-01
494	248602	6.082638e+01	1.264e-05	8.504e+01	2.325e-01
495	249109	6.072761e+01	1.265e-05	8.505e+01	2.350e-01
496	249616	6.062886e+01	1.265e-05	8.504e+01	2.368e-01
497	250123	6.053017e+01	1.265e-05	8.501e+01	2.372e-01
498	250630	6.043449e+01	1.265e-05	8.496e+01	2.351e-01
499	251137	6.034278e+01	1.266e-05	8.491e+01	2.330e-01
500	251644	6.025498e+01	1.265e-05	8.486e+01	2.311e-01

Solver stopped prematurely.

fmincon stopped because it exceeded the iteration limit,  
options.MaxIterations = 5.000000e+02.

Your initial point x0 is not between bounds lb and ub; FMINCON  
shifted x0 to strictly satisfy the bounds.

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
0	501	-1.524781e+01	2.255e-01	1.014e+00	
1	1002	-2.597722e+00	1.053e-01	1.168e+01	1.021e+00
2	1503	2.652891e+00	5.646e-02	1.878e+01	9.574e-01
3	2006	3.514056e+00	4.884e-02	1.998e+01	2.621e-01
4	2507	7.535976e+00	1.380e-02	9.958e+00	1.453e+00
5	3008	9.533740e+00	4.002e-04	2.130e+01	1.713e+00
6	3509	9.820773e+00	7.534e-05	1.116e+01	7.053e-01
7	4010	9.795828e+00	1.205e-04	9.324e+00	7.845e-01
8	4511	9.859847e+00	3.121e-05	1.106e+01	4.352e-01
9	5012	9.852816e+00	1.531e-04	1.286e+01	1.538e+00
10	5513	9.954611e+00	4.317e-05	1.504e+01	3.124e-01
11	6014	9.946892e+00	4.943e-05	4.487e+00	7.462e-01
12	6515	9.944295e+00	3.134e-05	4.256e+00	5.262e-01
13	7016	9.967706e+00	2.609e-05	4.183e+00	7.742e-01
14	7517	9.986372e+00	2.297e-05	5.435e+00	6.167e-01
15	8018	1.002040e+01	1.709e-05	6.226e+00	5.109e-01
16	8519	1.001376e+01	1.985e-05	6.513e+00	4.569e-01
17	9020	1.003548e+01	1.946e-05	5.934e+00	5.426e-01
18	9521	9.998530e+00	2.828e-05	4.931e+00	6.034e-01
19	10022	1.005071e+01	1.323e-05	4.530e+00	4.883e-01
20	10523	1.000570e+01	2.413e-05	3.378e+00	5.412e-01
21	11024	1.006233e+01	1.146e-05	2.595e+00	4.197e-01
22	11525	9.473984e+00	2.463e-04	4.509e+00	1.658e+00
23	12028	9.494027e+00	1.848e-04	4.830e+00	1.502e-01
24	12529	9.521702e+00	6.579e-05	4.225e+00	4.989e-01
25	13030	9.535384e+00	2.156e-05	3.769e+00	2.720e-01
26	13531	9.512543e+00	2.686e-05	2.917e+00	7.424e-01
27	14032	9.508819e+00	6.028e-06	2.207e+00	1.382e-01
28	14533	9.503743e+00	3.419e-06	1.695e+00	1.446e-01
29	15034	9.502756e+00	2.133e-06	9.528e-01	1.128e-01
30	15535	9.502801e+00	4.572e-07	9.861e-01	7.764e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
31	16036	9.502711e+00	2.249e-06	5.760e-01	2.056e-01
32	16537	9.378055e+00	5.180e-05	5.811e-01	2.764e-01
33	17038	9.359770e+00	6.051e-05	1.070e+00	2.166e-01
34	17539	9.360172e+00	4.089e-06	6.035e-01	1.603e-01
35	18040	9.359941e+00	7.508e-07	1.747e-01	3.265e-02
36	18541	9.359641e+00	2.370e-06	1.937e-01	4.759e-02
37	19042	9.359334e+00	1.822e-06	1.972e-01	5.906e-02
38	19543	9.358995e+00	2.209e-06	2.515e-01	7.205e-02
39	20044	9.358675e+00	1.061e-06	3.051e-01	6.651e-02
40	20545	9.358304e+00	9.113e-07	2.476e-01	5.578e-02
41	21046	9.358087e+00	3.664e-07	1.975e-01	3.677e-02
42	21547	9.357857e+00	6.518e-07	1.557e-01	3.839e-02
43	22048	9.357657e+00	9.548e-07	1.529e-01	4.753e-02
44	22549	9.357427e+00	1.284e-06	2.616e-01	5.749e-02
45	23050	9.357220e+00	1.037e-06	3.609e-01	5.881e-02
46	23551	9.357046e+00	5.863e-07	3.967e-01	5.403e-02
47	24052	9.356936e+00	2.900e-07	3.913e-01	5.459e-02
48	24553	9.356858e+00	1.756e-07	3.766e-01	6.517e-02
49	25054	9.356826e+00	9.357e-08	3.920e-01	8.229e-02
50	25555	9.356811e+00	8.423e-08	4.260e-01	9.053e-02
51	26056	9.356824e+00	8.416e-08	4.581e-01	8.557e-02
52	26557	9.356835e+00	8.408e-08	4.741e-01	7.954e-02
53	27058	9.356865e+00	8.401e-08	4.995e-01	7.402e-02
54	27559	9.356895e+00	8.393e-08	5.173e-01	7.516e-02
55	28060	9.356947e+00	8.385e-08	5.114e-01	7.106e-02
56	28561	9.356986e+00	8.378e-08	4.412e-01	7.226e-02
57	29062	9.357017e+00	8.370e-08	3.645e-01	7.381e-02
58	29563	9.357014e+00	8.363e-08	3.536e-01	8.422e-02
59	30064	9.357002e+00	8.355e-08	4.444e-01	9.372e-02
60	30565	9.356987e+00	8.348e-08	5.428e-01	9.520e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
61	31066	9.357000e+00	8.340e-08	5.396e-01	7.735e-02
62	31567	9.357024e+00	8.333e-08	4.364e-01	6.978e-02
63	32068	9.357050e+00	8.326e-08	3.087e-01	7.278e-02
64	32569	9.357063e+00	8.318e-08	1.846e-01	7.350e-02
65	33070	9.357059e+00	8.311e-08	1.749e-01	6.964e-02
66	33571	9.357033e+00	8.304e-08	1.683e-01	7.128e-02
67	34072	9.356997e+00	8.296e-08	2.746e-01	7.903e-02
68	34573	9.356968e+00	8.289e-08	3.947e-01	7.911e-02
69	35074	9.356954e+00	8.282e-08	4.449e-01	6.463e-02
70	35575	9.356945e+00	8.275e-08	4.216e-01	6.051e-02
71	36076	9.356937e+00	8.267e-08	3.712e-01	6.119e-02
72	36577	9.356948e+00	8.260e-08	3.122e-01	6.212e-02
73	37078	9.356978e+00	8.253e-08	2.673e-01	5.665e-02
74	37579	9.357016e+00	8.246e-08	2.752e-01	6.040e-02
75	38080	9.357035e+00	8.239e-08	3.963e-01	7.501e-02
76	38581	9.357033e+00	8.231e-08	5.898e-01	1.026e-01
77	39082	9.357009e+00	8.224e-08	7.456e-01	1.071e-01
78	39583	9.357006e+00	8.217e-08	7.036e-01	9.206e-02

79	40084	9.357013e+00	8.210e-08	5.337e-01	6.190e-02
80	40585	9.357045e+00	8.203e-08	3.070e-01	5.187e-02
81	41086	9.357062e+00	8.195e-08	1.726e-01	4.374e-02
82	41587	9.357106e+00	8.188e-08	1.113e-01	5.582e-02
83	42088	9.323487e+00	6.441e-05	6.863e+00	1.209e+00
84	42589	9.321195e+00	1.441e-05	1.479e+00	4.464e-01
85	43090	9.321444e+00	1.831e-07	8.805e-01	2.172e-01
86	43591	9.321410e+00	4.711e-08	3.012e-01	3.029e-01
87	44092	9.321363e+00	3.755e-08	3.464e-01	2.717e-01
88	44593	9.321357e+00	1.636e-08	5.001e-01	1.128e-01
89	45094	9.321345e+00	1.635e-08	5.267e-01	5.594e-02
90	45595	9.321340e+00	1.635e-08	3.552e-01	4.374e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
91	46096	9.321324e+00	2.317e-08	2.381e-01	5.680e-02
92	46597	9.321313e+00	1.634e-08	1.667e-01	5.986e-02
93	47098	9.321302e+00	1.634e-08	1.232e-01	6.078e-02
94	47599	9.321299e+00	1.634e-08	2.050e-01	6.727e-02
95	48100	9.321300e+00	1.634e-08	2.974e-01	5.847e-02
96	48601	9.321304e+00	1.633e-08	3.549e-01	4.366e-02
97	49102	9.321306e+00	1.633e-08	3.300e-01	2.422e-02
98	49603	9.321307e+00	1.633e-08	1.607e-01	4.249e-02
99	50104	9.321304e+00	1.633e-08	1.299e-01	7.401e-02
100	50605	9.321297e+00	1.632e-08	2.015e-01	8.379e-02
101	51106	9.321292e+00	1.632e-08	3.018e-01	5.920e-02
102	51607	9.321291e+00	1.632e-08	2.967e-01	3.388e-02
103	52108	9.321294e+00	1.631e-08	2.490e-01	1.842e-02
104	52609	9.321299e+00	1.631e-08	1.469e-01	2.581e-02
105	53110	9.321300e+00	1.631e-08	8.435e-02	2.734e-02
106	53611	9.321298e+00	1.631e-08	1.150e-01	2.308e-02
107	54112	9.321294e+00	1.630e-08	1.108e-01	1.994e-02
108	54613	9.321288e+00	1.630e-08	8.535e-02	2.307e-02
109	55114	9.321284e+00	1.630e-08	4.768e-02	2.571e-02
110	55615	9.321282e+00	1.629e-08	8.994e-02	2.043e-02
111	56116	9.321282e+00	1.629e-08	7.826e-02	1.958e-02
112	56617	9.321282e+00	1.629e-08	3.168e-02	1.904e-02
113	57118	9.321282e+00	1.629e-08	3.614e-02	1.782e-02
114	57619	9.321281e+00	1.628e-08	3.983e-02	1.296e-02
115	58120	9.321281e+00	1.628e-08	4.455e-02	7.683e-03
116	58621	9.321282e+00	1.628e-08	1.315e-02	6.953e-03
117	59122	9.314191e+00	6.218e-06	6.466e-01	1.743e-01
118	59623	9.314096e+00	1.051e-07	4.329e-01	7.730e-02
119	60124	9.314101e+00	1.320e-08	1.760e-01	6.638e-02
120	60625	9.314101e+00	3.402e-09	8.403e-02	6.159e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
121	61126	9.314096e+00	7.202e-09	8.618e-02	6.838e-02
122	61627	9.314096e+00	3.255e-09	7.727e-02	2.733e-02
123	62128	9.314094e+00	3.255e-09	4.396e-02	2.185e-02
124	62629	9.314093e+00	3.254e-09	3.225e-02	2.694e-02
125	63130	9.314092e+00	3.254e-09	8.377e-02	3.978e-02



126	63631	9.314091e+00	3.254e-09	9.416e-02	3.905e-02
127	64132	9.314090e+00	3.254e-09	7.667e-02	1.744e-02
128	64633	9.314090e+00	3.254e-09	4.483e-02	1.655e-02
129	65134	9.314090e+00	3.254e-09	7.303e-02	8.349e-03
130	65635	9.314090e+00	3.254e-09	8.768e-02	1.259e-02
131	66136	9.314090e+00	3.254e-09	5.741e-02	1.774e-02
132	66637	9.314090e+00	3.254e-09	2.331e-02	2.477e-02
133	67138	9.314090e+00	3.254e-09	2.849e-02	2.001e-02
134	67639	9.314090e+00	3.253e-09	7.438e-02	2.271e-02
135	68140	9.314090e+00	3.253e-09	1.138e-01	3.327e-02
136	68641	9.314089e+00	3.253e-09	1.399e-01	2.410e-02
137	69142	9.314089e+00	3.253e-09	1.305e-01	1.977e-02
138	69643	9.314089e+00	3.253e-09	5.531e-02	2.015e-02
139	70144	9.314089e+00	3.253e-09	4.642e-02	1.701e-02
140	70645	9.314089e+00	3.253e-09	5.869e-02	1.202e-02
141	71146	9.314089e+00	3.253e-09	5.045e-02	1.143e-02
142	71647	9.314089e+00	3.252e-09	7.639e-02	1.618e-02
143	72148	9.314089e+00	3.252e-09	8.558e-02	1.728e-02
144	72649	9.314088e+00	3.252e-09	1.633e-01	2.616e-02
145	73150	9.314088e+00	3.252e-09	1.690e-01	1.534e-02
146	73651	9.314089e+00	3.252e-09	1.019e-01	1.061e-02
147	74152	9.314089e+00	3.252e-09	8.347e-02	1.543e-02
148	74653	9.314090e+00	3.252e-09	3.063e-02	2.444e-02
149	75154	9.314090e+00	3.252e-09	5.830e-02	3.354e-02
150	75655	9.314090e+00	3.251e-09	8.045e-02	3.258e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
151	76156	9.314090e+00	3.251e-09	5.713e-02	2.386e-02
152	76657	9.314090e+00	3.251e-09	3.949e-02	1.796e-02
153	77158	9.314089e+00	3.251e-09	3.748e-02	1.927e-02
154	77659	9.314089e+00	3.251e-09	5.415e-02	1.670e-02
155	78160	9.314090e+00	3.251e-09	1.837e-02	1.440e-02
156	78661	9.314090e+00	3.251e-09	2.593e-02	1.176e-02
157	79162	9.314090e+00	3.251e-09	5.019e-02	9.208e-03
158	79663	9.314090e+00	3.251e-09	2.725e-02	2.784e-02
159	80164	9.314090e+00	3.250e-09	9.141e-02	1.640e-02
160	80665	9.314090e+00	3.250e-09	8.646e-02	2.336e-02
161	81166	9.314090e+00	3.250e-09	1.196e-01	1.999e-02
162	81667	9.314089e+00	3.250e-09	7.065e-02	2.581e-02
163	82168	9.314090e+00	3.250e-09	4.882e-02	3.399e-02
164	82669	9.314090e+00	3.250e-09	7.235e-02	2.237e-02
165	83170	9.314090e+00	3.250e-09	6.840e-02	1.741e-02
166	83671	9.314090e+00	3.250e-09	3.913e-02	1.182e-02
167	84172	9.314090e+00	3.249e-09	8.021e-02	1.664e-02
168	84673	9.314089e+00	3.249e-09	9.346e-02	1.642e-02
169	85174	9.314089e+00	3.249e-09	2.804e-02	3.189e-02
170	85675	9.314089e+00	3.249e-09	5.918e-02	1.104e-02
171	86176	9.314090e+00	3.249e-09	3.205e-02	2.629e-02
172	86677	9.314090e+00	3.249e-09	8.827e-02	2.529e-02
173	87178	9.314090e+00	3.249e-09	8.585e-02	4.883e-02
174	87679	9.314089e+00	3.249e-09	1.913e-01	4.626e-02
175	88180	9.314090e+00	3.248e-09	1.656e-01	3.036e-02

176	88681	9.314090e+00	3.248e-09	5.223e-02	3.090e-02
177	89186	9.313001e+00	2.227e-06	5.443e-02	2.525e-02
178	89687	9.311221e+00	1.388e-06	4.593e-01	1.130e-01
179	90194	9.302080e+00	2.631e-05	6.397e-01	1.709e-01
180	90695	9.303381e+00	2.234e-05	2.136e+00	4.177e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
181	91196	9.304685e+00	1.566e-05	2.018e+00	4.891e-01

Converged to an infeasible point.

fmincon stopped because the size of the current step is less than the value of the step size tolerance but constraints are not satisfied to within the value of the constraint tolerance.

<stopping criteria details>

Your initial point x0 is not between bounds lb and ub; FMINCON shifted x0 to strictly satisfy the bounds.

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
0	501	-9.719972e+00	2.325e-01	8.615e+01	
1	1002	-9.355205e+00	1.866e-01	8.613e+01	3.783e-01
2	1503	-7.641602e+00	1.573e-01	8.612e+01	3.603e-01
3	2006	-7.264457e+00	1.535e-01	8.612e+01	8.831e-02
4	2507	-4.858045e+00	1.333e-01	8.611e+01	6.271e-01
5	3008	-4.532418e+00	1.214e-01	6.812e+01	2.686e-01
6	3509	-2.643093e+00	1.074e-01	6.229e+01	8.270e-01
7	4010	-1.636592e+00	9.984e-02	5.580e+01	6.779e-01
8	4511	-1.098523e+00	9.606e-02	9.233e+01	5.554e-01
9	5012	-5.014910e-02	9.228e-02	2.299e+02	1.231e+00
10	5514	-2.370810e-02	9.188e-02	2.638e+02	2.649e-01
11	6015	2.969988e-01	8.787e-02	2.440e+02	4.476e+00
12	6516	2.014861e-01	8.596e-02	3.432e+02	9.861e-01
13	7018	2.213841e-01	8.579e-02	3.592e+02	1.545e-01
14	7519	3.801147e-01	8.505e-02	4.012e+02	5.242e-01
15	8020	7.123741e-02	8.410e-02	4.385e+02	7.060e-01
16	8521	-3.709661e-01	8.302e-02	4.414e+02	9.095e-01
17	9023	-3.699271e-01	8.301e-02	4.415e+02	1.598e-02
18	9524	-1.192159e-01	8.204e-02	4.439e+02	2.097e+00
19	10025	2.712791e-01	8.118e-02	4.331e+02	2.074e+00
20	10526	5.674247e-01	8.063e-02	4.245e+02	1.138e+00
21	11027	9.059056e-01	7.983e-02	4.137e+02	1.411e+00
22	11528	2.077727e+00	7.795e-02	4.067e+02	4.006e+00
23	12029	2.572654e+00	7.692e-02	4.059e+02	1.865e+00
24	12530	2.685026e+00	7.665e-02	4.063e+02	3.538e-01
25	13031	3.200739e+00	7.491e-02	4.201e+02	3.161e+00
26	13532	3.312777e+00	7.455e-02	4.216e+02	5.590e-01
27	14033	5.336568e+00	7.222e-02	4.297e+02	5.355e+00
28	14535	5.345246e+00	7.217e-02	4.296e+02	5.557e-02
29	15036	5.642040e+00	7.079e-02	4.279e+02	2.205e+00
30	15537	5.872801e+00	6.951e-02	4.252e+02	2.002e+00

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
31	16038	5.892080e+00	6.941e-02	4.251e+02	1.091e-01
32	16539	6.155139e+00	6.841e-02	4.302e+02	1.555e+00
33	17040	6.393123e+00	6.779e-02	4.372e+02	1.265e+00
34	17541	6.447640e+00	6.748e-02	4.389e+02	6.770e-01
35	18042	6.825156e+00	6.593e-02	4.449e+02	3.685e+00
36	18543	7.252893e+00	6.440e-02	4.411e+02	2.148e+00
37	19044	7.346247e+00	6.413e-02	4.398e+02	5.114e-01
38	19545	7.534752e+00	6.351e-02	4.363e+02	1.346e+00
39	20046	7.697245e+00	6.303e-02	4.333e+02	9.388e-01
40	20547	8.018152e+00	6.215e-02	4.266e+02	1.624e+00
41	21048	8.124453e+00	6.185e-02	4.249e+02	7.975e-01
42	21549	9.349055e+00	5.927e-02	4.008e+02	4.037e+00
43	22050	1.040088e+01	5.769e-02	3.862e+02	2.747e+00
44	22551	1.089625e+01	5.733e-02	3.835e+02	6.252e-01
45	23052	1.238758e+01	5.618e-02	3.793e+02	1.861e+00
46	23553	1.285384e+01	5.572e-02	3.786e+02	9.727e-01
47	24054	1.314019e+01	5.495e-02	3.817e+02	1.320e+00
48	24555	1.331853e+01	5.436e-02	3.822e+02	8.709e-01
49	25056	1.345802e+01	5.404e-02	3.852e+02	7.685e-01
50	25557	1.407616e+01	5.279e-02	3.916e+02	3.384e+00
51	26058	1.445289e+01	5.206e-02	3.955e+02	1.197e+00
52	26559	1.459911e+01	5.175e-02	3.973e+02	4.636e-01
53	27060	1.481963e+01	5.112e-02	4.006e+02	1.003e+00
54	27561	1.497367e+01	5.069e-02	4.024e+02	5.358e-01
55	28062	1.598448e+01	4.862e-02	4.119e+02	3.910e+00
56	28563	1.623013e+01	4.813e-02	4.134e+02	8.338e-01
57	29064	1.683101e+01	4.712e-02	4.174e+02	2.044e+00
58	29565	1.705675e+01	4.673e-02	4.183e+02	7.632e-01
59	30066	1.772683e+01	4.564e-02	4.183e+02	2.392e+00
60	30567	1.787130e+01	4.536e-02	4.185e+02	3.911e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
61	31068	1.863678e+01	4.386e-02	4.131e+02	2.238e+00
62	31569	1.867228e+01	4.375e-02	4.126e+02	1.208e-01
63	32070	1.885675e+01	4.318e-02	4.107e+02	7.406e-01
64	32571	1.957224e+01	4.140e-02	3.983e+02	3.023e+00
65	33072	1.998082e+01	4.056e-02	3.927e+02	1.451e+00
66	33573	2.026071e+01	3.966e-02	3.901e+02	1.546e+00
67	34074	2.046417e+01	3.901e-02	3.881e+02	1.135e+00
68	34575	2.060014e+01	3.854e-02	3.863e+02	8.903e-01
69	35076	2.064356e+01	3.845e-02	3.856e+02	8.737e-02
70	35577	2.074237e+01	3.822e-02	3.847e+02	3.790e-01
71	36078	2.118394e+01	3.776e-02	3.807e+02	1.413e+00
72	36579	2.141565e+01	3.753e-02	3.788e+02	5.446e-01
73	37080	2.168794e+01	3.731e-02	3.771e+02	8.760e-01
74	37581	2.231137e+01	3.703e-02	3.721e+02	2.053e+00
75	38082	2.357244e+01	3.651e-02	3.620e+02	2.925e+00
76	38584	2.359626e+01	3.650e-02	3.619e+02	2.011e-02
77	39085	2.418593e+01	3.635e-02	3.579e+02	6.461e-01

78	39586	2.458365e+01	3.626e-02	3.561e+02	3.853e-01
79	40087	2.518733e+01	3.604e-02	3.534e+02	7.989e-01
80	40589	2.520057e+01	3.602e-02	3.532e+02	6.278e-02
81	41091	2.520924e+01	3.601e-02	3.531e+02	4.652e-02
82	41593	2.523226e+01	3.598e-02	3.528e+02	1.264e-01
83	42094	2.550157e+01	3.573e-02	3.488e+02	1.559e+00
84	42595	2.581589e+01	3.536e-02	3.432e+02	1.509e+00
85	43096	2.625325e+01	3.509e-02	3.368e+02	2.536e+00
86	43598	2.626933e+01	3.506e-02	3.363e+02	5.734e-02
87	44099	2.635386e+01	3.487e-02	3.345e+02	1.763e-01
88	44600	2.660524e+01	3.454e-02	3.289e+02	4.875e-01
89	45101	2.716687e+01	3.405e-02	3.214e+02	1.929e+00
90	45602	2.762916e+01	3.376e-02	3.160e+02	1.013e+00

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
91	46103	2.784740e+01	3.364e-02	3.138e+02	2.263e-01
92	46604	2.884150e+01	3.365e-02	3.022e+02	1.353e+00
93	47105	2.929565e+01	3.363e-02	2.963e+02	6.700e-01
94	47606	3.080238e+01	3.367e-02	2.788e+02	1.819e+00
95	48107	3.114288e+01	3.352e-02	2.729e+02	7.595e-01
96	48608	3.200832e+01	3.319e-02	2.740e+02	2.138e+00
97	49109	3.226771e+01	3.309e-02	2.745e+02	4.759e-01
98	49610	3.267664e+01	3.296e-02	2.755e+02	7.651e-01
99	50111	3.318356e+01	3.281e-02	2.772e+02	1.105e+00
100	50612	3.368589e+01	3.270e-02	2.791e+02	1.074e+00
101	51113	3.390384e+01	3.262e-02	2.794e+02	3.516e-01
102	51614	3.428963e+01	3.249e-02	2.802e+02	6.470e-01
103	52115	3.462858e+01	3.225e-02	2.837e+02	1.472e+00
104	52616	3.485875e+01	3.196e-02	2.855e+02	9.426e-01
105	53117	3.492234e+01	3.189e-02	2.856e+02	2.164e-01
106	53618	3.514251e+01	3.165e-02	2.874e+02	8.013e-01
107	54119	3.552876e+01	3.132e-02	2.879e+02	1.075e+00
108	54621	3.554230e+01	3.131e-02	2.880e+02	3.295e-02
109	55122	3.576957e+01	3.115e-02	2.906e+02	4.989e-01
110	55623	3.588363e+01	3.110e-02	2.921e+02	2.438e-01
111	56124	3.668543e+01	3.073e-02	3.060e+02	1.715e+00
112	56625	3.704977e+01	3.051e-02	3.066e+02	8.856e-01
113	57126	3.731728e+01	3.030e-02	3.064e+02	5.656e-01
114	57627	3.740578e+01	3.021e-02	3.064e+02	1.888e-01
115	58128	3.779397e+01	2.978e-02	3.063e+02	1.044e+00
116	58630	3.783079e+01	2.976e-02	3.063e+02	9.487e-02
117	59132	3.787464e+01	2.973e-02	3.064e+02	1.121e-01
118	59634	3.790662e+01	2.971e-02	3.064e+02	1.053e-01
119	60135	3.806642e+01	2.962e-02	3.069e+02	5.906e-01
120	60636	3.834218e+01	2.948e-02	3.078e+02	1.204e+00

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
121	61137	3.863574e+01	2.922e-02	3.079e+02	1.505e+00
122	61638	3.891921e+01	2.897e-02	3.084e+02	1.365e+00
123	62140	3.893101e+01	2.896e-02	3.084e+02	3.277e-02
124	62641	3.898461e+01	2.889e-02	3.082e+02	1.276e-01

125	63142	3.915840e+01	2.872e-02	3.085e+02	3.047e-01
126	63643	3.970330e+01	2.838e-02	3.089e+02	7.845e-01
127	64144	4.000068e+01	2.827e-02	3.087e+02	3.729e-01
128	64645	4.119573e+01	2.801e-02	3.094e+02	1.346e+00
129	65147	4.127675e+01	2.799e-02	3.095e+02	8.416e-02
130	65648	4.204141e+01	2.784e-02	3.101e+02	7.783e-01
131	66149	4.283033e+01	2.770e-02	3.111e+02	7.114e-01
132	66651	4.287682e+01	2.768e-02	3.111e+02	3.422e-02
133	67152	4.332065e+01	2.755e-02	3.115e+02	2.972e-01
134	67653	4.372971e+01	2.733e-02	3.125e+02	8.323e-01
135	68154	4.402183e+01	2.719e-02	3.119e+02	4.104e-01
136	68655	4.410843e+01	2.714e-02	3.121e+02	1.042e-01
137	69156	4.452004e+01	2.692e-02	3.117e+02	6.204e-01
138	69657	4.482828e+01	2.685e-02	3.114e+02	5.206e-01
139	70158	4.515387e+01	2.679e-02	3.113e+02	5.548e-01
140	70659	4.555411e+01	2.671e-02	3.114e+02	6.917e-01
141	71160	4.603191e+01	2.660e-02	3.113e+02	7.854e-01
142	71661	4.652584e+01	2.652e-02	3.124e+02	9.863e-01
143	72163	4.655531e+01	2.651e-02	3.125e+02	6.186e-02
144	72665	4.657993e+01	2.650e-02	3.125e+02	5.033e-02
145	73166	4.670660e+01	2.640e-02	3.121e+02	3.336e-01
146	73667	4.694171e+01	2.631e-02	3.109e+02	7.328e-01
147	74168	4.706534e+01	2.625e-02	3.100e+02	3.403e-01
148	74669	4.773120e+01	2.592e-02	3.022e+02	1.305e+00
149	75170	4.776842e+01	2.585e-02	3.026e+02	1.221e-01
150	75671	4.801185e+01	2.565e-02	3.054e+02	9.958e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
151	76172	4.830056e+01	2.545e-02	3.088e+02	1.042e+00
152	76673	4.848063e+01	2.529e-02	3.105e+02	4.244e-01
153	77174	4.895393e+01	2.505e-02	3.140e+02	1.033e+00
154	77676	4.896387e+01	2.503e-02	3.140e+02	1.683e-02
155	78177	4.928059e+01	2.470e-02	3.167e+02	5.629e-01
156	78678	4.956527e+01	2.449e-02	3.176e+02	5.224e-01
157	79179	4.975137e+01	2.441e-02	3.183e+02	3.169e-01
158	79680	5.000401e+01	2.432e-02	3.192e+02	4.074e-01
159	80181	5.016384e+01	2.426e-02	3.197e+02	2.364e-01
160	80682	5.117253e+01	2.383e-02	3.215e+02	1.512e+00
161	81183	5.162834e+01	2.347e-02	3.224e+02	6.539e-01
162	81684	5.210846e+01	2.315e-02	3.221e+02	6.918e-01
163	82185	5.254439e+01	2.279e-02	3.216e+02	6.318e-01
164	82687	5.256715e+01	2.278e-02	3.217e+02	2.957e-02
165	83188	5.278060e+01	2.276e-02	3.213e+02	2.529e-01
166	83689	5.375139e+01	2.266e-02	3.217e+02	1.139e+00
167	84191	5.375951e+01	2.266e-02	3.217e+02	9.645e-03
168	84692	5.411666e+01	2.260e-02	3.221e+02	3.840e-01
169	85193	5.418511e+01	2.259e-02	3.220e+02	8.444e-02
170	85694	5.454403e+01	2.249e-02	3.216e+02	6.905e-01
171	86195	5.472977e+01	2.245e-02	3.217e+02	4.082e-01
172	86696	5.504758e+01	2.241e-02	3.214e+02	7.873e-01
173	87197	5.531176e+01	2.237e-02	3.210e+02	6.798e-01
174	87698	5.621176e+01	2.227e-02	3.192e+02	2.309e+00

175	88200	5.624401e+01	2.226e-02	3.191e+02	6.603e-02
176	88702	5.631648e+01	2.226e-02	3.189e+02	1.467e-01
177	89203	5.698962e+01	2.218e-02	3.180e+02	1.331e+00
178	89704	5.810018e+01	2.205e-02	3.162e+02	1.652e+00
179	90205	5.832124e+01	2.202e-02	3.159e+02	2.331e-01
180	90706	5.945001e+01	2.187e-02	3.160e+02	1.219e+00

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
181	91208	5.948702e+01	2.187e-02	3.160e+02	3.795e-02
182	91709	6.051402e+01	2.176e-02	3.161e+02	1.204e+00
183	92211	6.053186e+01	2.176e-02	3.161e+02	2.421e-02
184	92712	6.150439e+01	2.165e-02	3.147e+02	1.205e+00
185	93213	6.192116e+01	2.161e-02	3.140e+02	5.277e-01
186	93714	6.194220e+01	2.160e-02	3.140e+02	4.936e-02
187	94215	6.243673e+01	2.149e-02	3.138e+02	1.264e+00
188	94716	6.256491e+01	2.147e-02	3.135e+02	3.152e-01
189	95217	6.295076e+01	2.141e-02	3.121e+02	8.652e-01
190	95718	6.422168e+01	2.125e-02	3.058e+02	2.256e+00
191	96220	6.423006e+01	2.125e-02	3.058e+02	7.993e-03
192	96721	6.449998e+01	2.121e-02	3.049e+02	3.646e-01
193	97222	6.469694e+01	2.118e-02	3.047e+02	2.564e-01
194	97723	6.475600e+01	2.116e-02	3.046e+02	1.369e-01
195	98224	6.491177e+01	2.112e-02	3.048e+02	3.783e-01
196	98725	6.520577e+01	2.107e-02	3.054e+02	6.390e-01
197	99226	6.528420e+01	2.106e-02	3.055e+02	1.322e-01
198	99727	6.635886e+01	2.093e-02	3.064e+02	1.220e+00
199	100228	6.737072e+01	2.082e-02	3.071e+02	1.078e+00
200	100730	6.737598e+01	2.082e-02	3.071e+02	6.371e-03
201	101231	6.794196e+01	2.065e-02	3.067e+02	1.341e+00
202	101732	6.798427e+01	2.064e-02	3.066e+02	9.116e-02
203	102233	6.909621e+01	2.043e-02	2.998e+02	2.169e+00
204	102735	6.910521e+01	2.043e-02	2.997e+02	1.183e-02
205	103236	6.955647e+01	2.034e-02	2.977e+02	6.317e-01
206	103738	6.956964e+01	2.034e-02	2.977e+02	2.138e-02
207	104239	7.013515e+01	2.022e-02	2.953e+02	1.089e+00
208	104741	7.014568e+01	2.022e-02	2.952e+02	2.144e-02
209	105242	7.038522e+01	2.017e-02	2.934e+02	4.688e-01
210	105743	7.079964e+01	2.009e-02	2.904e+02	9.273e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
211	106245	7.081056e+01	2.009e-02	2.903e+02	2.567e-02
212	106746	7.085462e+01	2.008e-02	2.899e+02	1.568e-01
213	107247	7.125023e+01	2.000e-02	2.850e+02	1.601e+00
214	107748	7.138697e+01	1.997e-02	2.828e+02	4.285e-01
215	108249	7.164268e+01	1.991e-02	2.798e+02	6.082e-01
216	108750	7.176577e+01	1.987e-02	2.782e+02	2.245e-01
217	109251	7.195625e+01	1.981e-02	2.755e+02	3.376e-01
218	109752	7.211310e+01	1.977e-02	2.737e+02	2.896e-01
219	110253	7.218659e+01	1.974e-02	2.734e+02	1.784e-01
220	110754	7.235288e+01	1.968e-02	2.732e+02	4.013e-01
221	111255	7.238707e+01	1.967e-02	2.729e+02	6.087e-02

222	111756	7.271265e+01	1.958e-02	2.713e+02	8.421e-01
223	112257	7.308785e+01	1.949e-02	2.688e+02	8.523e-01
224	112758	7.330301e+01	1.943e-02	2.669e+02	5.368e-01
225	113259	7.333894e+01	1.942e-02	2.665e+02	7.694e-02
226	113760	7.345936e+01	1.940e-02	2.648e+02	2.739e-01
227	114261	7.369075e+01	1.935e-02	2.614e+02	5.347e-01
228	114762	7.394995e+01	1.931e-02	2.573e+02	5.929e-01
229	115264	7.399405e+01	1.931e-02	2.567e+02	1.074e-01
230	115765	7.414871e+01	1.928e-02	2.544e+02	3.841e-01
231	116266	7.482084e+01	1.917e-02	2.613e+02	1.641e+00
232	116767	7.489081e+01	1.916e-02	2.607e+02	1.523e-01
233	117268	7.532877e+01	1.909e-02	2.538e+02	9.934e-01
234	117769	7.545280e+01	1.906e-02	2.493e+02	3.057e-01
235	118270	7.550060e+01	1.903e-02	2.440e+02	3.817e-01
236	118771	7.557750e+01	1.896e-02	2.481e+02	6.667e-01
237	119272	7.558865e+01	1.895e-02	2.485e+02	5.085e-02
238	119773	7.566986e+01	1.888e-02	2.519e+02	5.106e-01
239	120274	7.571455e+01	1.884e-02	2.539e+02	3.179e-01
240	120775	7.572963e+01	1.883e-02	2.541e+02	1.289e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
241	121276	7.577453e+01	1.878e-02	2.534e+02	5.225e-01
242	121777	7.580282e+01	1.875e-02	2.518e+02	3.726e-01
243	122278	7.581591e+01	1.874e-02	2.520e+02	4.633e-02
244	122779	7.587374e+01	1.869e-02	2.540e+02	4.965e-01
245	123280	7.589135e+01	1.867e-02	2.546e+02	1.310e-01
246	123781	7.592065e+01	1.864e-02	2.566e+02	2.936e-01
247	124282	7.597719e+01	1.859e-02	2.570e+02	3.911e-01
248	124783	7.616285e+01	1.842e-02	2.594e+02	1.687e+00
249	125284	7.616815e+01	1.841e-02	2.596e+02	4.632e-02
250	125785	7.621491e+01	1.836e-02	2.629e+02	6.016e-01
251	126286	7.623821e+01	1.833e-02	2.650e+02	3.481e-01
252	126787	7.634271e+01	1.818e-02	2.758e+02	1.779e+00
253	127288	7.634805e+01	1.818e-02	2.758e+02	4.553e-02
254	127789	7.639866e+01	1.811e-02	2.750e+02	7.459e-01
255	128290	7.642014e+01	1.809e-02	2.745e+02	3.145e-01
256	128791	7.658923e+01	1.786e-02	2.668e+02	1.978e+00
257	129292	7.665788e+01	1.775e-02	2.611e+02	1.389e+00
258	129794	7.665964e+01	1.775e-02	2.611e+02	4.357e-02
259	130295	7.667553e+01	1.772e-02	2.632e+02	6.382e-01
260	130796	7.668099e+01	1.771e-02	2.634e+02	9.182e-02
261	131297	7.674426e+01	1.766e-02	2.709e+02	1.246e+00
262	131798	7.679184e+01	1.760e-02	2.807e+02	1.585e+00
263	132299	7.684156e+01	1.755e-02	2.866e+02	7.708e-01
264	132800	7.686799e+01	1.752e-02	2.898e+02	4.676e-01
265	133301	7.693585e+01	1.743e-02	3.083e+02	1.613e+00
266	133802	7.697918e+01	1.738e-02	3.153e+02	1.217e+00
267	134303	7.698727e+01	1.737e-02	3.152e+02	5.457e-01
268	134804	7.701561e+01	1.735e-02	3.160e+02	9.943e-01
269	135305	7.703490e+01	1.733e-02	3.156e+02	7.470e-01
270	135806	7.704787e+01	1.732e-02	3.141e+02	5.079e-01

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
271	136307	7.707853e+01	1.729e-02	3.178e+02	7.813e-01
272	136808	7.710431e+01	1.724e-02	3.177e+02	1.136e+00
273	137309	7.710445e+01	1.725e-02	3.172e+02	6.149e-01
274	137810	7.710585e+01	1.725e-02	3.182e+02	5.570e-01
275	138311	7.710600e+01	1.725e-02	3.156e+02	7.325e-01
276	138813	7.710634e+01	1.725e-02	3.150e+02	2.222e-01
277	139314	7.710689e+01	1.725e-02	3.149e+02	7.767e-01
278	139817	7.710696e+01	1.726e-02	3.141e+02	1.430e-01
279	140319	7.710708e+01	1.726e-02	3.129e+02	3.033e-01
280	140820	7.710731e+01	1.726e-02	3.092e+02	7.506e-01
281	141325	7.710732e+01	1.728e-02	1.542e+02	5.156e-01
282	141826	7.710726e+01	1.738e-02	1.542e+02	2.548e-01
283	142327	7.710712e+01	1.730e-02	1.542e+02	2.598e-01
284	142829	7.710689e+01	1.729e-02	1.542e+02	2.982e-01
285	143331	7.710644e+01	1.728e-02	1.542e+02	5.437e-01
286	143833	7.710610e+01	1.727e-02	1.542e+02	2.985e-01
287	144335	7.710602e+01	1.727e-02	1.542e+02	1.856e-01
288	144847	7.710602e+01	1.727e-02	1.542e+02	1.263e-04
289	145352	7.710602e+01	1.727e-02	1.542e+02	1.390e-04
290	145857	7.710602e+01	1.727e-02	1.542e+02	1.474e-04
291	146362	7.710602e+01	1.727e-02	1.542e+02	1.519e-04
292	146867	7.710602e+01	1.727e-02	1.542e+02	1.586e-04
293	147372	7.710602e+01	1.727e-02	1.542e+02	1.671e-04
294	147878	7.710602e+01	1.727e-02	1.542e+02	4.123e-05
295	148383	7.710602e+01	1.727e-02	1.542e+02	4.773e-05
296	148888	7.710602e+01	1.727e-02	1.542e+02	5.763e-05
297	149393	7.710602e+01	1.727e-02	1.542e+02	6.157e-05
298	149898	7.710602e+01	1.727e-02	1.542e+02	6.272e-05
299	150403	7.710602e+01	1.727e-02	1.542e+02	6.321e-05
300	150908	7.710602e+01	1.727e-02	1.542e+02	6.354e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
301	151413	7.710602e+01	1.727e-02	1.542e+02	6.378e-05
302	151918	7.710602e+01	1.727e-02	1.542e+02	6.397e-05
303	152423	7.710602e+01	1.727e-02	1.542e+02	6.414e-05
304	152928	7.710602e+01	1.727e-02	1.542e+02	6.430e-05
305	153433	7.710602e+01	1.727e-02	1.542e+02	6.445e-05
306	153938	7.710602e+01	1.727e-02	1.542e+02	6.458e-05
307	154443	7.710602e+01	1.727e-02	1.542e+02	6.470e-05
308	154948	7.710602e+01	1.727e-02	1.542e+02	6.479e-05
309	155453	7.710602e+01	1.727e-02	1.542e+02	6.489e-05
310	155958	7.710602e+01	1.727e-02	1.542e+02	6.498e-05
311	156463	7.710602e+01	1.727e-02	1.542e+02	6.505e-05
312	156968	7.710602e+01	1.727e-02	1.542e+02	6.511e-05
313	157473	7.710602e+01	1.727e-02	1.542e+02	6.515e-05
314	157978	7.710602e+01	1.727e-02	1.542e+02	6.523e-05
315	158483	7.710602e+01	1.727e-02	1.542e+02	6.518e-05
316	158988	7.710602e+01	1.727e-02	1.542e+02	6.511e-05
317	159493	7.710602e+01	1.727e-02	1.542e+02	6.531e-05
318	159998	7.710602e+01	1.727e-02	1.542e+02	6.537e-05



319	160503	7.710602e+01	1.727e-02	1.542e+02	6.546e-05
320	161008	7.710602e+01	1.727e-02	1.542e+02	6.547e-05
321	161513	7.710602e+01	1.727e-02	1.542e+02	6.584e-05
322	162018	7.710602e+01	1.727e-02	1.542e+02	6.546e-05
323	162523	7.710602e+01	1.727e-02	1.542e+02	6.549e-05
324	163028	7.710602e+01	1.727e-02	1.542e+02	6.585e-05
325	163533	7.710602e+01	1.727e-02	1.542e+02	6.559e-05
326	164038	7.710602e+01	1.727e-02	1.542e+02	6.609e-05
327	164543	7.710602e+01	1.727e-02	1.542e+02	6.555e-05
328	165048	7.710602e+01	1.727e-02	1.542e+02	6.558e-05
329	165553	7.710602e+01	1.727e-02	1.542e+02	6.532e-05
330	166058	7.710602e+01	1.727e-02	1.542e+02	6.573e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
331	166563	7.710602e+01	1.727e-02	1.542e+02	6.575e-05
332	167068	7.710602e+01	1.727e-02	1.542e+02	6.570e-05
333	167573	7.710602e+01	1.727e-02	1.542e+02	6.553e-05
334	168078	7.710602e+01	1.727e-02	1.542e+02	6.573e-05
335	168583	7.710602e+01	1.727e-02	1.542e+02	6.628e-05
336	169088	7.710602e+01	1.727e-02	1.542e+02	6.572e-05
337	169593	7.710602e+01	1.727e-02	1.542e+02	6.494e-05
338	170098	7.710602e+01	1.727e-02	1.542e+02	6.583e-05
339	170603	7.710602e+01	1.727e-02	1.542e+02	6.545e-05
340	171108	7.710602e+01	1.727e-02	1.542e+02	6.594e-05
341	171613	7.710602e+01	1.727e-02	1.542e+02	6.594e-05
342	172118	7.710602e+01	1.727e-02	1.542e+02	6.552e-05
343	172623	7.710602e+01	1.727e-02	1.542e+02	6.600e-05
344	173128	7.710602e+01	1.727e-02	1.542e+02	6.602e-05
345	173633	7.710602e+01	1.727e-02	1.542e+02	6.598e-05
346	174138	7.710602e+01	1.727e-02	1.542e+02	6.578e-05
347	174643	7.710602e+01	1.727e-02	1.542e+02	6.594e-05
348	175148	7.710602e+01	1.727e-02	1.542e+02	6.565e-05
349	175653	7.710602e+01	1.727e-02	1.542e+02	6.594e-05
350	176158	7.710602e+01	1.727e-02	1.542e+02	6.613e-05
351	176663	7.710602e+01	1.727e-02	1.542e+02	6.602e-05
352	177168	7.710602e+01	1.727e-02	1.542e+02	6.622e-05
353	177673	7.710602e+01	1.727e-02	1.542e+02	6.596e-05
354	178178	7.710602e+01	1.727e-02	1.542e+02	6.561e-05
355	178683	7.710602e+01	1.727e-02	1.542e+02	6.600e-05
356	179188	7.710602e+01	1.727e-02	1.542e+02	6.548e-05
357	179693	7.710602e+01	1.727e-02	1.542e+02	6.603e-05
358	180198	7.710602e+01	1.727e-02	1.542e+02	6.568e-05
359	180703	7.710602e+01	1.727e-02	1.542e+02	6.602e-05
360	181208	7.710602e+01	1.727e-02	1.542e+02	6.556e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
361	181713	7.710602e+01	1.727e-02	1.542e+02	6.606e-05
362	182218	7.710602e+01	1.727e-02	1.542e+02	6.569e-05
363	182723	7.710602e+01	1.727e-02	1.542e+02	6.607e-05
364	183228	7.710602e+01	1.727e-02	1.542e+02	6.572e-05
365	183733	7.710602e+01	1.727e-02	1.542e+02	6.610e-05

366	184238	7.710602e+01	1.727e-02	1.542e+02	6.588e-05
367	184743	7.710602e+01	1.727e-02	1.542e+02	6.603e-05
368	185248	7.710602e+01	1.727e-02	1.542e+02	6.547e-05
369	185753	7.710602e+01	1.727e-02	1.542e+02	6.607e-05
370	186258	7.710602e+01	1.727e-02	1.542e+02	6.586e-05
371	186763	7.710602e+01	1.727e-02	1.542e+02	6.605e-05
372	187268	7.710602e+01	1.727e-02	1.542e+02	6.586e-05
373	187773	7.710602e+01	1.727e-02	1.542e+02	6.604e-05
374	188278	7.710602e+01	1.727e-02	1.542e+02	6.559e-05
375	188783	7.710602e+01	1.727e-02	1.542e+02	6.608e-05
376	189288	7.710602e+01	1.727e-02	1.542e+02	6.631e-05
377	189793	7.710602e+01	1.727e-02	1.542e+02	6.618e-05
378	190298	7.710602e+01	1.727e-02	1.542e+02	6.635e-05
379	190803	7.710602e+01	1.727e-02	1.542e+02	6.623e-05
380	191308	7.710602e+01	1.727e-02	1.542e+02	6.619e-05
381	191813	7.710602e+01	1.727e-02	1.542e+02	6.630e-05
382	192318	7.710602e+01	1.727e-02	1.542e+02	6.680e-05
383	192823	7.710602e+01	1.727e-02	1.542e+02	6.611e-05
384	193328	7.710602e+01	1.727e-02	1.542e+02	6.602e-05
385	193833	7.710602e+01	1.727e-02	1.542e+02	6.601e-05
386	194338	7.710602e+01	1.727e-02	1.542e+02	6.634e-05
387	194843	7.710602e+01	1.727e-02	1.542e+02	6.606e-05
388	195348	7.710602e+01	1.727e-02	1.542e+02	6.631e-05
389	195853	7.710602e+01	1.727e-02	1.542e+02	6.613e-05
390	196358	7.710602e+01	1.727e-02	1.542e+02	6.661e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
391	196863	7.710602e+01	1.727e-02	1.542e+02	6.610e-05
392	197368	7.710602e+01	1.727e-02	1.542e+02	6.664e-05
393	197873	7.710602e+01	1.727e-02	1.542e+02	6.607e-05
394	198378	7.710602e+01	1.727e-02	1.542e+02	6.637e-05
395	198883	7.710602e+01	1.727e-02	1.542e+02	6.613e-05
396	199388	7.710602e+01	1.727e-02	1.542e+02	6.678e-05
397	199893	7.710602e+01	1.727e-02	1.542e+02	6.606e-05
398	200398	7.710602e+01	1.727e-02	1.542e+02	6.631e-05
399	200903	7.710602e+01	1.727e-02	1.542e+02	6.626e-05
400	201408	7.710602e+01	1.727e-02	1.542e+02	6.739e-05
401	201913	7.710602e+01	1.727e-02	1.542e+02	6.613e-05
402	202418	7.710602e+01	1.727e-02	1.542e+02	6.627e-05
403	202923	7.710602e+01	1.727e-02	1.542e+02	6.763e-05
404	203428	7.710602e+01	1.727e-02	1.542e+02	6.613e-05
405	203933	7.710602e+01	1.727e-02	1.542e+02	6.634e-05
406	204438	7.710602e+01	1.727e-02	1.542e+02	6.671e-05
407	204943	7.710602e+01	1.727e-02	1.542e+02	6.601e-05
408	205448	7.710602e+01	1.727e-02	1.542e+02	6.592e-05
409	205953	7.710602e+01	1.727e-02	1.542e+02	6.597e-05
410	206458	7.710602e+01	1.727e-02	1.542e+02	6.649e-05
411	206963	7.710602e+01	1.727e-02	1.542e+02	6.600e-05
412	207468	7.710602e+01	1.727e-02	1.542e+02	6.671e-05
413	207973	7.710602e+01	1.727e-02	1.542e+02	6.604e-05
414	208478	7.710602e+01	1.727e-02	1.542e+02	6.537e-05
415	208983	7.710602e+01	1.727e-02	1.542e+02	6.604e-05

416	209488	7.710602e+01	1.727e-02	1.542e+02	6.684e-05
417	209993	7.710602e+01	1.727e-02	1.542e+02	6.601e-05
418	210498	7.710602e+01	1.727e-02	1.542e+02	6.645e-05
419	211003	7.710602e+01	1.727e-02	1.542e+02	6.596e-05
420	211508	7.710602e+01	1.727e-02	1.542e+02	6.625e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
421	212013	7.710602e+01	1.727e-02	1.542e+02	6.609e-05
422	212518	7.710602e+01	1.727e-02	1.542e+02	6.686e-05
423	213023	7.710602e+01	1.727e-02	1.542e+02	6.612e-05
424	213528	7.710602e+01	1.727e-02	1.542e+02	6.613e-05
425	214033	7.710602e+01	1.727e-02	1.542e+02	6.805e-05
426	214538	7.710602e+01	1.727e-02	1.542e+02	6.596e-05
427	215043	7.710602e+01	1.727e-02	1.542e+02	6.628e-05
428	215548	7.710602e+01	1.727e-02	1.542e+02	6.640e-05
429	216053	7.710602e+01	1.727e-02	1.542e+02	6.644e-05
430	216558	7.710602e+01	1.727e-02	1.542e+02	6.683e-05
431	217063	7.710602e+01	1.727e-02	1.542e+02	6.620e-05
432	217568	7.710602e+01	1.727e-02	1.542e+02	6.618e-05
433	218073	7.710602e+01	1.727e-02	1.542e+02	6.647e-05
434	218578	7.710602e+01	1.727e-02	1.542e+02	6.628e-05
435	219083	7.710602e+01	1.727e-02	1.542e+02	6.779e-05
436	219588	7.710602e+01	1.727e-02	1.542e+02	6.624e-05
437	220093	7.710602e+01	1.727e-02	1.542e+02	6.703e-05
438	220598	7.710602e+01	1.727e-02	1.542e+02	6.611e-05
439	221103	7.710602e+01	1.727e-02	1.542e+02	6.630e-05
440	221608	7.710602e+01	1.727e-02	1.542e+02	6.710e-05
441	222113	7.710602e+01	1.727e-02	1.542e+02	6.609e-05
442	222618	7.710602e+01	1.727e-02	1.542e+02	6.624e-05
443	223123	7.710602e+01	1.727e-02	1.542e+02	6.724e-05
444	223628	7.710602e+01	1.727e-02	1.542e+02	6.620e-05
445	224133	7.710602e+01	1.727e-02	1.542e+02	6.730e-05
446	224638	7.710602e+01	1.727e-02	1.542e+02	6.620e-05
447	225143	7.710602e+01	1.727e-02	1.542e+02	6.755e-05
448	225648	7.710602e+01	1.727e-02	1.542e+02	6.615e-05
449	226153	7.710602e+01	1.727e-02	1.542e+02	6.689e-05
450	226658	7.710602e+01	1.727e-02	1.542e+02	6.613e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
451	227163	7.710602e+01	1.727e-02	1.542e+02	6.658e-05
452	227668	7.710602e+01	1.727e-02	1.542e+02	6.617e-05
453	228173	7.710602e+01	1.727e-02	1.542e+02	6.664e-05
454	228678	7.710602e+01	1.727e-02	1.542e+02	6.621e-05
455	229183	7.710602e+01	1.727e-02	1.542e+02	6.614e-05
456	229688	7.710602e+01	1.727e-02	1.542e+02	6.598e-05
457	230193	7.710602e+01	1.727e-02	1.542e+02	6.608e-05
458	230698	7.710602e+01	1.727e-02	1.542e+02	6.526e-05
459	231203	7.710602e+01	1.727e-02	1.542e+02	6.608e-05
460	231708	7.710602e+01	1.727e-02	1.542e+02	6.575e-05
461	232213	7.710602e+01	1.727e-02	1.542e+02	6.624e-05
462	232718	7.710602e+01	1.727e-02	1.542e+02	6.637e-05

463	233223	7.710602e+01	1.727e-02	1.542e+02	6.645e-05
464	233728	7.710602e+01	1.727e-02	1.542e+02	6.659e-05
465	234233	7.710602e+01	1.727e-02	1.542e+02	6.649e-05
466	234738	7.710602e+01	1.727e-02	1.542e+02	6.744e-05
467	235243	7.710602e+01	1.727e-02	1.542e+02	6.641e-05
468	235748	7.710602e+01	1.727e-02	1.542e+02	6.724e-05
469	236253	7.710602e+01	1.727e-02	1.542e+02	6.627e-05
470	236758	7.710602e+01	1.727e-02	1.542e+02	6.628e-05
471	237263	7.710602e+01	1.727e-02	1.542e+02	6.673e-05
472	237768	7.710602e+01	1.727e-02	1.542e+02	6.630e-05
473	238273	7.710602e+01	1.727e-02	1.542e+02	6.618e-05
474	238778	7.710602e+01	1.727e-02	1.542e+02	6.619e-05
475	239283	7.710602e+01	1.727e-02	1.542e+02	6.611e-05
476	239788	7.710602e+01	1.727e-02	1.542e+02	6.610e-05
477	240293	7.710602e+01	1.727e-02	1.542e+02	6.579e-05
478	240798	7.710602e+01	1.727e-02	1.542e+02	6.616e-05
479	241303	7.710602e+01	1.727e-02	1.542e+02	6.607e-05
480	241808	7.710602e+01	1.727e-02	1.542e+02	6.602e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
481	242313	7.710602e+01	1.727e-02	1.542e+02	6.595e-05
482	242818	7.710602e+01	1.727e-02	1.542e+02	6.601e-05
483	243323	7.710602e+01	1.727e-02	1.542e+02	6.599e-05
484	243828	7.710602e+01	1.727e-02	1.542e+02	6.665e-05
485	244333	7.710602e+01	1.727e-02	1.542e+02	6.593e-05
486	244838	7.710602e+01	1.727e-02	1.542e+02	6.589e-05
487	245343	7.710602e+01	1.727e-02	1.542e+02	6.553e-05
488	245848	7.710602e+01	1.727e-02	1.542e+02	6.610e-05
489	246353	7.710602e+01	1.727e-02	1.542e+02	6.620e-05
490	246858	7.710602e+01	1.727e-02	1.542e+02	6.624e-05
491	247363	7.710602e+01	1.727e-02	1.542e+02	6.618e-05
492	247868	7.710602e+01	1.727e-02	1.542e+02	6.617e-05
493	248373	7.710602e+01	1.727e-02	1.542e+02	6.617e-05
494	248878	7.710602e+01	1.727e-02	1.542e+02	6.668e-05
495	249383	7.710602e+01	1.727e-02	1.542e+02	6.610e-05
496	249888	7.710602e+01	1.727e-02	1.542e+02	6.634e-05
497	250393	7.710602e+01	1.727e-02	1.542e+02	6.624e-05
498	250898	7.710602e+01	1.727e-02	1.542e+02	6.717e-05
499	251403	7.710602e+01	1.727e-02	1.542e+02	6.617e-05
500	251908	7.710602e+01	1.727e-02	1.542e+02	6.739e-05

Solver stopped prematurely.

fmincon stopped because it exceeded the iteration limit,  
options.MaxIterations = 5.000000e+02.

```
>> el_time.DT_tot = el_time.DT_SC1_leg1+el_time.DT_SC1_leg2+el_time.DT_SC2_lega+el_time.DT_SC2_legb;
>> el_time.DT_tot = (el_time.DT_SC1_leg1+el_time.DT_SC1_leg2+el_time.DT_SC2_lega+el_time.DT_SC2_legb)/60; % min
>>
```