STABILITY OF COUETTE-POISEUILLE FLOW
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FM1035

TABLE 1

Neutral Stability for $U_2=0$.

c	α	R
0.2	2.029	53,500
0.22	2.128	31,100
0.25	2.188	18,500
0.265	2.179	13,200
0.267	2.040	10,800
0.265	2.010	10,800
0.25	1.856	12,300
0.2	1.501	24,000
0.175	1.351	37,100

TABLE 2

Neutral Stability for $U_2=.05W$.

c	α	R
0.2	1.762	73,500
0.22	1.865	46,700
0.25	1.978	24,500
0.265	1.993	17,400
0.269	1.919	14,300
0.265	1.857	14,400
0.25	1.714	16,600
0.2	1.373	34,800
0.18	1.252	50,900

TABLE 3

Neutral Stability for $U_2 = .1W$

c	α	R
0.20	1.536	71,500
0.22	1.618	45,700
0.23	1.648	36,500
0.24	1.655	28,600
0.241	1.595	25,500
0.24	1.580	25,600
0.22	1.402	32,700
0.20	1.262	45,500
0.18	1.128	66,900

TABLE 4

Neutral Stability for $U_2 = .15W$

c	α	R
0.20	1.392	78,500
0.21	1.430	62,100
0.22	1.459	49,200
0.23	1.468	38,400
0.233	1.432	34,000
0.23	1.378	34,200
0.21	1.193	45,400
0.19	1.041	65,700

TABLE 5

Neutral Stability for $U_2 = .2W$

c	α	R
0.205	1.296	80,700
0.22	1.345	56,800
0.23	1.363	44,900
0.236	1.355	38,400
0.236	1.282	35,500
0.23	1.206	37,900
0.21	1.021	52,200
0.19	0.864	78,900

TABLE 6

Neutral Stability for $U_2 = .3W$

c	α	R
0.22	1.123	79,500
0.23	1.165	63,400
0.25	1.213	40,700
0.257	1.203	34,600
0.259	1.138	31,700
0.257	1.093	32,200
0.24	0.881	42,500
0.22	0.663	67,400

TABLE 7

Neutral Stability for $U_2 = .4W$

c	α	R
0.24	.948	73,600
0.25	1.000	58,900
0.27	1.035	38,600
0.277	1.015	33,200
0.278	0.917	32,000
0.277	0.891	32,500
0.26	0.615	49,300
0.25	0.453	71,900

TABLE 8

Neutral Stability for $U_2 = .5W$

c	α	R
0.26	0.746	75,300
0.27	0.786	59,800
0.285	0.820	43,600
0.295	0.786	36,400
0.296	0.768	35,900
0.295	0.634	39,400
0.29	0.494	49,800
0.285	0.358	69,700

TABLE 9

Neutral Stability for $U_2 = .6W$

c	α	R
0.28	0.564	84,400
0.29	0.584	68,600
0.30	0.585	56,800
0.308	0.559	50,500
0.31	0.542	49,700
0.313	0.490	50,500
0.314	0.443	53,500
0.314	0.320	69,900

TABLE 10

Neutral Stability for $U_2 = 0.64W$

c	α	R
0.30	0.419	82,700
0.31	0.438	66,800
0.3125	0.434	64,400
0.315	0.427	62,500
0.3175	0.410	61,800
0.3185	0.402	61,800
0.32	0.379	63,100
0.3215	0.344	67,000

TABLE 11

Neutral Stability for $U_2 = .66W$

c	α	R
0.305	0.337	97,600
0.31	0.349	86,500
0.3125	0.351	82,500
0.315	0.348	79,600
0.3175	0.339	78,000
0.32	0.321	78,500
0.3225	0.287	82,900

TABLE 12

Neutral Stability for $U_2 = .68W$

c	α	R
.31	.225	138,000
.315	.236	121,000
.32	.221	119,000
.321	.213	121,000
.3215	.208	122,000
.322	.202	124,000
.3225	.196	127,000

TABLE 14

Neutral Stability for $U_2 = .6875W$

c	α	R
0.310	0.152	206,000
0.315	0.173	167,000
0.317	0.173	161,000
0.318	0.172	160,000
0.319	0.168	161,000
0.320	0.163	163,000
0.321	0.155	169,000
0.322	0.144	178,000
0.323	0.129	195,000

TABLE 16

Neutral Stability for $U_2 = .6925W$

c	α	R
0.310	0.071	449,000
0.313	0.104	291,000
0.315	0.114	256,000
0.317	0.116	243,000
0.318	0.115	240,000
0.319	0.112	244,000
0.320	0.106	253,000
0.321	0.096	274,000
0.322	0.081	319,000

TABLE 18

Neutral Stability for $U_2 = .69625W$

c	α	R
0.316	0.0286	1,009,000
0.317	0.0344	824,000
0.3175	0.0348	809,000
0.318	0.0335	833,000
0.31825	0.0321	863,000