

ΓE^*		β											
		9	10	11	12	13	14						
0.475	1	138.3 51.8(29.9,21.8)	137.8 44.5(27.3,17.2)	137.6 38.8(23.8,15.0)	137.4 37.8(26.4,11.5)	137.8 34.8(24.4,10.4)	137.4 26.3(21.9,4.4)						
	1.2	137.8 42.3(27.0,15.3)	137.8 34.8(24.4,10.4)	137.7 33.5(23.0,10.5)	137.6 27.1(18.3,8.8)	137.6 23.6(18.0,5.6)							
	1.4	137.8 36.8(23.4,13.4)	137.9 34.4(23.6,10.9)	137.9 30.4(21.2,9.2)									
0.525	1	137.4 46.9(26.9,20.1)	137.5 39.4(24.6,14.8)	137.3 37.2(24.5,12.7)	137.4 32.4(24.6,7.8)	137.4 28.5(22.7,5.8)	137.4 24.0(19.1,4.9)						
	1.2	137.5 39.7(23.1,16.6)	137.8 33.6(24.3,9.3)	137.6 28.7(19.9,8.8)	137.4 26.5(21.6,4.9)	137.5 18.7(15.7,3.0)							
	1.4	138.0 33.3(22.3,11.0)	137.8 28.4(20.6,7.9)	137.9 27.5(18.7,8.8)									
0.575	1	137.0 46.4(27.0,19.4)	137.5 38.8(27.9,10.9)	137.2 28.5(21.6,6.9)	137.3 28.1(23.3,4.8)	137.1 21.0(19.4,1.5)	137.5 24.8(23.0,1.8)						
	1.2	137.5 31.4(24.4,7.0)	137.6 30.8(25.3,5.5)	137.3 24.2(21.7,2.5)	137.5 21.0(19.7,1.2)	137.3 18.1(16.3,1.8)							
	1.4	137.6 31.1(24.9,6.2)	137.7 25.3(19.0,6.3)	137.5 19.4(18.9,0.5)									
0.625	1	135.9 42.4(22.9,19.5)	136.2 35.4(25.5,9.8)	136.8 27.7(22.8,4.9)	136.8 24.0(20.5,3.4)	136.8 20.9(18.4,2.5)	136.9 18.6(17.2,1.5)						
	1.2	136.8 28.3(21.2,7.0)	136.7 22.1(17.6,4.5)	136.8 21.5(18.6,2.9)	136.8 14.8(14.4,0.4)	136.9 10.9(10.7,0.2)							
	1.4	136.9 21.1(19.5,1.6)	137.0 16.1(14.2,1.8)	136.8 13.1(12.1,1.1)									
0.65	1	136.0 36.9(24.1,12.9)	136.4 30.0(22.3,7.7)	136.6 23.9(19.2,4.7)	136.8 18.4(15.7,2.8)	136.8 15.3(13.9,1.4)	136.96 11.4(11.0,0.4)						
	1.2	136.7 27.5(23.6,3.9)	136.8 21.6(19.7,1.9)	136.8 14.6(13.8,0.7)	136.8 10.6(9.7,0.8)	136.9 7.5(7.3,0.2)							
	1.4	136.9,0.7 18.6(16.5,2.0)	136.9,0.5 14.9(13.9,1.0)	136.8,0.3 8.5(7.7,0.7)									
0.7	1	135.5 35.9(24.6,11.3)	136.6 29.8(23.1,6.8)	136.4 26.4(22.2,4.2)	136.8 20.6(18.1,2.5)	137.1 14.3(12.3,1.9)	137.1 12.3(11.6,0.7)						
	1.2	136.7 26.5(20.2,6.3)	136.7 21.5(18.3,3.2)	137.0 12.5(11.2,1.3)	137.2 12.7(11.9,0.7)	137.0 9.3(8.6,0.7)							
	1.4	137.0 16.6(16.0,0.6)	137.0 13.1(11.8,1.2)	137.0 10.1(9.7,0.4)									

Table 1: Average angle (top value) and permutation frequency values (bottom values), for $0.475 \leq \Gamma \leq 0.7$

$\Gamma \mid E^*$	β	9	10	11	12	13	14
0.75	1	136.5 32.6(21.6,11.0)	136.2 30.7(21.2,9.5)	136.7 22.8(18.1,4.7)	137.3 15.5(11.9,3.5)	137.6 11.4(10.5,0.9)	137.4 10.6(10.6,0.0)
	1.2	136.9 22.4(19.6,2.8)	136.5 21.4(17.4,4.0)	136.6 11.1(10.1,1.0)	137.3 10.0(9.2,0.9)	137.3 6.9(6.9,0.0)	
	1.4	136.5 16.5(14.9,1.7)	136.9 14.8(12.4,2.4)	137.0 8.7(8.3,0.4)			
0.8	1	137.2 32.3(23.2,9.1)	136.6 29.0(21.2,7.8)	137.3 19.8(14.1,5.7)	137.7 14.7(12.4,2.3)	138.3 10.7(9.7,0.9)	137.9 10.5(9.6,0.9)
	1.2	136.4 25.6(19.7,5.9)	136.6 21.5(18.1,3.4)	137.4 11.7(10.4,1.2)	136.8 13.6(12.4,1.1)	137.7 7.2(7.0,0.2)	
	1.4	136.5 15.9(13.5,2.4)	137.2 11.2(10.8,0.4)	137.2 8.3(8.3,0.0)			
0.85	1	138.5 22.7(15.7,7.0)	138.5 17.6(13.5,4.1)	138.9 10.9(10.5,0.4)	138.8 9.4(9.2,0.2)	138.7 8.2(7.8,0.4)	139.1 4.0(3.6,0.4)
	1.2	137.7 18.1(14.5,3.6)	138.0 11.9(11.0,0.9)	138.3 9.2(8.8,0.4)	138.2 7.3(6.9,0.4)	138.5 4.0(4.0,0.0)	
	1.4	137.6 12.2(11.5,0.7)	137.6 9.6(8.2,1.4)	137.9 4.5(4.5,0.0)			
0.9	1	138.7 20.6(14.5,6.1)	139.3 15.8(10.7,5.1)	139.5 10.7(9.0,1.6)	139.5 7.2(6.1,1.1)	139.7 5.5(5.3,0.2)	140.0 2.3(2.3,0.0)
	1.2	138.3 17.8(14.8,3.1)	138.6 11.4(8.3,3.1)	138.9 8.9(8.1,0.8)	138.7 7.1(6.9,0.2)	139.1 4.0(4.0,0.0)	
	1.4	138.1 11.9(11.2,0.7)	138.4 8.3(8.1,0.2)	138.5 4.5(4.5,0.0)			
0.95	1	139.8 17.7(14.3,3.3)	139.9 11.7(9.8,1.8)	139.7 8.9(7.6,1.2)	140.1 4.8(4.4,0.4)	139.9 4.4(4.2,0.2)	139.9 2.7(2.7,0.0)
	1.2	139.4 10.3(9.3,1.0)	139.5 6.0(6.0,0.0)	139.3 5.3(5.3,0.0)	139.6 4.1(3.8,0.4)		
	1.4	139.0 8.2(7.5,0.7)	138.9 6.5(6.5,0.0)	139.3 2.9(2.9,0.0)			
0.975	1	140.2 17.7(16.3,1.4)	139.5 7.7(6.9,0.8)	140.3 7.3(7.3,0.0)	140.2 3.7(3.7,0.0)	140.3 3.5(3.5,0.0)	140.3 1.2(1.2,0)
	1.2	139.7 10.0(8.6,1.4)	139.9 5.7(5.1,0.6)	139.8 4.0(3.6,0.4)	140.1 1.7(1.7,0.0)	140.1 0.8(0.8,0.0)	
	1.4	139.3 8.0(7.9,0.2)	139.5 4.8(4.6,0.2)	139.5 2.6(2.6,0.0)			

Table 2: Average angle (top value) and permutation frequency values (bottom values), for $0.75 \leq \Gamma \leq 0.975$