

n	(p, q)	γ	ε_V	deviation	B	$\ B\ _E^2$	S/N/E	covolume
1	(3, 3)	$-1.77184 + 1.11514i$	$3 \leftrightarrow 13$	2.55×10^{-15}	$(-0.04, 0.31, 0.21)$	0.14	10/7/15	0.264774439883296
		$-1.77184 - 1.11514i$	$4 \leftrightarrow 14$	5.33×10^{-15}	$(0.24, 0.31, 0.17)$	0.18	14/12/24	0.264774439883378
	(3, 2)	$-2.41964 + 0.60629i$	$3 \leftrightarrow 14$	2.22×10^{-15}	$(0.19, 0.25, 0.14)$	0.12	14/12/24	0.132387219941707
		$-2.41964 - 0.60629i$	$4 \leftrightarrow 14$	2.44×10^{-15}	$(0.25, 0.14, 0.22)$	0.13	8/9/15	0.132387219941693
	(2, 3)	$-0.58036 + 0.60629i$	$4 \leftrightarrow 13$	1.73×10^{-14}	$(-0.17, 0.27, -0.02)$	0.10	22/24/44	0.132318149806017
		$-0.58036 - 0.60629i$	$4 \leftrightarrow 13$	2.98×10^{-14}	$(-0.17, 0.25, 0.11)$	0.10	22/24/44	0.132403276354546
		$-2.41964 + 0.60629i$	$3 \leftrightarrow 14$	2.44×10^{-15}	$(0.14, 0.21, -0.14)$	0.08	14/12/24	0.132387219941619
		$-2.41964 - 0.60629i$	$3 \leftrightarrow 14$	2.66×10^{-15}	$(0.14, 0.21, 0.14)$	0.08	14/12/24	0.132387219941758
		$-0.58036 + 0.60629i$	$5 \leftrightarrow 12$	2.30×10^{-14}	$(0.05, 0.21, 0.24)$	0.10	22/24/44	0.132426403921074
		$-0.58036 - 0.60629i$	$5 \leftrightarrow 12$	2.41×10^{-14}	$(0.15, 0.19, 0.15)$	0.08	22/24/44	0.132158766596323
2	(3, 3)	$-0.68055 + 1.63317i$	$5 \leftrightarrow 13$	1.53×10^{-14}	$(0.19, 0.45, 0.19)$	0.27	16/14/28	0.661714937315159
		$-0.68055 - 1.63317i$	$5 \leftrightarrow 13$	1.42×10^{-14}	$(0.34, 0.40, 0.24)$	0.34	16/14/28	0.661714937315199
	(3, 2)	$-0.11535 - 0.58974i$	$6 \leftrightarrow 13$	3.17×10^{-13}	$(-0.11, 0.30, 0.19)$	0.14	24/32/54	0.330857468657992
		$-0.11535 + 0.58974i$	$4 \leftrightarrow 13$	2.13×10^{-14}	$(-0.11, 0.35, -0.04)$	0.14	24/32/54	0.330857468657719
	(2, 3)	$-2.88465 - 0.58974i$	$4 \leftrightarrow 14$	2.71×10^{-14}	$(0.33, 0.03, 0.36)$	0.24	22/24/44	0.330802402206134
		$-2.88465 + 0.58974i$	$4 \leftrightarrow 14$	5.02×10^{-14}	$(0.33, 0.29, 0.22)$	0.24	22/24/44	0.330264970254204
		$-0.11535 - 0.58974i$	$4 \leftrightarrow 12$	5.85×10^{-14}	$(0.30, 0.24, 0.19)$	0.18	24/32/54	0.330857468657576
		$-0.11535 + 0.58974i$	$4 \leftrightarrow 12$	2.89×10^{-14}	$(0.21, 0.26, 0.26)$	0.18	24/32/54	0.330857468657535
		$-2.88465 - 0.58974i$	$4 \leftrightarrow 13$	2.89×10^{-14}	$(0.29, 0.22, 0.23)$	0.18	22/24/44	0.330788586067824
		$-2.88465 + 0.58974i$	$5 \leftrightarrow 13$	1.47×10^{-14}	$(-0.04, 0.08, 0.40)$	0.17	22/24/44	0.330717107428080
3	(3, 3)	$0.19927 + 1.58951i$	$5 \leftrightarrow 11$	1.35×10^{-14}	$(0.31, 0.51, 0.14)$	0.38	20/24/42	0.982766244039437
		$0.19927 - 1.58951i$	$6 \leftrightarrow 13$	1.97×10^{-13}	$(0.42, 0.39, 0.33)$	0.44	20/24/42	0.982766244039443
	(3, 2)	$-3.13846 + 0.48506i$	$4 \leftrightarrow 14$	9.77×10^{-15}	$(-0.28, 0.09, 0.39)$	0.24	18/18/34	0.492361631010875
		$-3.13846 - 0.48506i$	$4 \leftrightarrow 14$	9.33×10^{-15}	$(-0.28, 0.28, 0.29)$	0.24	18/18/34	0.492361631011032
	(2, 3)	$0.13846 + 0.48506i$	$4 \leftrightarrow 13$	6.95×10^{-14}	$(-0.08, 0.39, -0.05)$	0.16	24/32/54	0.491693878116127
		$0.13846 - 0.48506i$	$4 \leftrightarrow 13$	6.14×10^{-14}	$(-0.08, 0.31, 0.24)$	0.16	24/32/54	0.491677333327298
		$-3.13846 + 0.48506i$	$4 \leftrightarrow 13$	7.44×10^{-15}	$(0.07, 0.06, 0.36)$	0.14	18/18/34	0.492361631010930
		$-3.13846 - 0.48506i$	$4 \leftrightarrow 13$	3.55×10^{-15}	$(0.34, 0.27, 0.23)$	0.24	18/18/34	0.492361631010942
		$0.13846 + 0.48506i$	$4 \leftrightarrow 12$	9.04×10^{-14}	$(-0.26, 0.21, 0.26)$	0.18	24/32/54	0.491677333327583
		$0.13846 - 0.48506i$	$4 \leftrightarrow 13$	4.00×10^{-14}	$(-0.19, 0.33, 0.20)$	0.18	24/32/54	0.491484440296781
4	(3, 3)	$-2.80606 + 1.15645i$	$4 \leftrightarrow 13$	1.61×10^{-14}	$(0.31, 0.41, 0.35)$	0.38	18/18/34	1.090072770048188
		$-2.80606 - 1.15645i$	$6 \leftrightarrow 12$	8.88×10^{-15}	$(0.58, 0.24, 0.46)$	0.61	18/23/39	1.090072770048278
	(3, 2)	$-0.89704 + 0.95897i$	$5 \leftrightarrow 13$	7.66×10^{-15}	$(0.14, 0.43, 0.06)$	0.21	18/16/32	0.544958718160841
		$-0.89704 - 0.95897i$	$5 \leftrightarrow 13$	1.73×10^{-14}	$(0.16, 0.43, -0.04)$	0.21	18/16/32	0.544962897261796
	(2, 3)	$-2.10296 + 0.95897i$	$4 \leftrightarrow 13$	1.38×10^{-14}	$(0.15, 0.37, 0.13)$	0.18	18/17/33	0.545036385024126
		$-2.10296 - 0.95897i$	$5 \leftrightarrow 14$	7.11×10^{-15}	$(0.45, 0.30, 0.28)$	0.38	18/17/33	0.544739451493277
		$-0.89704 + 0.95897i$	$3 \leftrightarrow 14$	3.33×10^{-15}	$(0.08, 0.34, 0.05)$	0.13	18/16/32	0.545209773747604
		$-0.89704 - 0.95897i$	$5 \leftrightarrow 14$	6.55×10^{-15}	$(0.12, 0.35, 0.15)$	0.16	18/16/32	0.544974108710528
		$-2.10210 + 0.95897i$	$5 \leftrightarrow 13$	6.44×10^{-15}	$(0.23, 0.07, 0.37)$	0.19	18/17/33	0.544786544898183
		$-2.10210 - 0.95897i$	$4 \leftrightarrow 13$	8.22×10^{-15}	$(0.19, 0.33, 0.08)$	0.15	18/17/33	0.545036385024131
5	(3, 3)	$0.84236 + 1.35530i$	$4 \leftrightarrow 12$	4.85×10^{-14}	$(0.37, 0.54, 0.10)$	0.45	20/26/44	1.232257018353899
		$0.84236 - 1.35530i$	$4 \leftrightarrow 12$	3.62×10^{-14}	$(0.45, 0.37, 0.39)$	0.50	20/26/44	1.232257018354058
	(3, 2)	$0.29843 + 0.37680i$	$4 \leftrightarrow 11$	3.21×10^{-13}	$(-0.07, 0.41, -0.06)$	0.17	26/36/60	0.616139999305901
		$0.29843 - 0.37680i$	$4 \leftrightarrow 13$	1.71×10^{-13}	$(-0.07, 0.31, 0.27)$	0.17	26/36/60	0.616139999304282
	(2, 3)	$-3.29843 + 0.37680i$	$5 \leftrightarrow 13$	2.36×10^{-13}	$(-0.30, 0.09, 0.44)$	0.29	24/26/48	0.616097893053077
		$-3.29843 - 0.37680i$	$5 \leftrightarrow 13$	1.45×10^{-14}	$(-0.31, 0.32, 0.32)$	0.30	24/26/48	0.615425771551932
		$0.29843 + 0.37680i$	$4 \leftrightarrow 12$	7.59×10^{-14}	$(-0.23, 0.24, 0.26)$	0.18	26/36/60	0.616139999303372
		$0.29843 - 0.37680i$	$3 \leftrightarrow 12$	1.12×10^{-13}	$(-0.18, 0.33, 0.22)$	0.19	26/36/60	0.616024211234735
		$-3.29843 + 0.37680i$	$5 \leftrightarrow 14$	4.62×10^{-14}	$(0.14, 0.05, 0.40)$	0.18	24/26/48	0.616128509177734
		$-3.29843 - 0.37680i$	5	4.86×10^{-14}				0.616128509177205
6	(3, 3)	$-3.19690 + 0.90182i$	$6 \leftrightarrow 11$	2.19×10^{-13}	$(-0.33, 0.27, 0.54)$	0.47	20/20/38	1.696240561334349
		$-3.19690 - 0.90182i$	$5 \leftrightarrow 13$	6.10×10^{-14}	$(-0.33, 0.28, 0.54)$	0.48	20/20/38	1.696240561334381
	(3, 2)	$-1.92469 + 1.06173i$	$4 \leftrightarrow 13$	5.00×10^{-14}	$(0.14, 0.39, 0.13)$	0.19	22/24/44	0.848365358302074
		$-1.92469 - 1.06173i$	$4 \leftrightarrow 12$	5.66×10^{-15}	$(0.55, 0.21, 0.38)$	0.49	22/26/46	0.847936929164838
	(2, 3)	$-1.07530 + 1.06173i$	$4 \leftrightarrow 13$	2.29×10^{-13}	$(0.20, 0.45, 0.07)$	0.25	26/28/52	0.847904607792574
		$-1.07530 - 1.06173i$	$5 \leftrightarrow 14$	2.99×10^{-13}	$(0.27, 0.44, 0.13)$	0.28	26/28/52	0.847904607792901
		$-1.92469 + 1.06173i$	$4 \leftrightarrow 14$	8.44×10^{-15}	$(0.16, 0.12, 0.37)$	0.18	20/20/38	0.847979373190956
		$-1.92469 - 1.06173i$	$3 \leftrightarrow 13$	5.46×10^{-14}	$(0.19, 0.35, 0.08)$	0.16	22/24/44	0.847921705316328
		$-1.07531 + 1.06173i$	$5 \leftrightarrow 14$	2.16×10^{-13}	$(-0.05, 0.21, 0.40)$	0.21	26/28/52	0.849015226143611
		$-1.07531 - 1.06173i$	$5 \leftrightarrow 14$	1.80×10^{-13}	$(0.19, 0.37, 0.15)$	0.20	26/28/52	0.848229498305300
7	(3, 3)	$0.68088 + 1.73330i$	$5 \leftrightarrow 12$	3.06×10^{-13}	$(0.57, 0.60, 0.10)$	0.69	24/30/52	2.446924195119881
		$0.68088 - 1.73330i$	$5 \leftrightarrow 13$	8.67×10^{-13}	$(0.68, 0.40, 0.42)$	0.80	24/30/52	2.446924195121926
	(3, 2)	$0.27988 + 0.48692i$	$4 \leftrightarrow 12$	4.98×10^{-13}	$(0.16, 0.50, -0.04)$	0.28	26/34/58	1.222531911485409
		$0.27988 - 0.48692i$	$4 \leftrightarrow 12$	2.95×10^{-13}	$(0.16, 0.50, 0.03)$	0.28	26/34/58	1.222412331605630
	(2, 3)	$-3.27988 + 0.48692i$	$6 \leftrightarrow 12$	2.07×10^{-12}	$(-0.55, 0.07, 0.47)$	0.53	28/30/56	1.220360017152392
		$-3.27988 - 0.48692i$	$5 \leftrightarrow 13$	1.64×10^{-12}	$(-0.32, 0.32, 0.35)$	0.33	28/30/56	1.221755633824927
		$0.27988 + 0.48692i$	$5 \leftrightarrow 12$	7.88×10^{-13}	$(0.10, 0.40, 0.13)$	0.19	26/36/60	1.221708487472495
		$0.27988 - 0.48692i$	$4 \leftrightarrow 12$	2.44×10^{-13}	$(0.12, 0.40, 0.18)$	0.21	26/34/58	1.223512318246351
		$-3.27988 + 0.48692i$	$4 \leftrightarrow 13$	1.71×10^{-12}	$(0.14, 0.07, 0.43)$	0.21	28/30/56	1.221624951511321
		$-3.27988 - 0.48692i$	$5 \leftrightarrow 13$	1.09×10^{-12}	$(0.48, 0.32, 0.53)$	0.61	28/30/56	1.220360017153322

Table 1: Summary output for Alun data list one.