AM-18-063

American Mineralogist, Volume 63, pages 160–171, 1978

Ulexite, $NaCaB_5O_6(OH)_6 \cdot 5H_2O$: structure refinement, polyanion configuration, hydrogen bonding, and fiber optics

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Abstract

The crystal structure of ulexite, $NaCaB_5O_6(OH)_6 \cdot 5H_2O$, triclinic, $P\bar{1}$, has been refined to a conventional $R = 0.046$ using least-squares methods, partially block-diagonal, for 4911 reflections collected on a single-crystal diffractometer with graphite-monochromatized Mo radiation. All 16 hydrogen atoms in the asymmetric unit were located, and all form hydrogen bonds. Refined cell constants are: $a = 8.816(3)$, $b = 12.870(7)$, $c = 6.678(1)$ A, $\alpha = 90.36(2)°$, $\beta = 109.05(2)°$, $\gamma = 104.98(4)°$, $V = 688.4(4)$ A^3, $Z = 2$, density (calc) = 1.955 g/cm^3. The structure contains isolated pentaborate-type polyanions composed of three tetrahedra and two triangles, plus chains of Na octahedra and chains of Ca polyhedra, all cross-linked by polyanion bonds to the cations and by a network of hydrogen bonds. Average bond distances (A) are: B–O, tetrahedral 1.475, triangular 1.367; Na–O, 2.421; Ca–O, 2.484; hydrogen bonds, O–H 0.80, H···O 2.08, O···O 2.852. The octahedral and polyhedral chains are parallel to *c*, the elongation direction, and cause the fibrous habit of ulexite crystals that is essential to the optical fiber bundles. The hydrogen bonds range from strong with a minimum O···O distance of 2.595(3) A to very weak and possibly bifurcated with O···O distances of 3.082(4) and 3.194(3) A. The water molecule environments are normal; each contacts at least one Na or Ca on its lone-pair side. Bond strengths calculated using the observed O–H and H···O values agree fairly well with those obtained from an empirical relationship. A good cleavage parallel to {$\bar{1}$20}, rather than to {010} as previously suggested, breaks hydrogen and Na–OH(5) bonds only; a reproducible fracture surface is parallel to {001}.

Introduction

According to *Dana's System of Mineralogy* (Palache *et al.*, 1951, p. 345–348), ulexite has been recognized as a valid species since about 1840. Its formula, $Na_2O \cdot 2CaO \cdot 5B_2O_3 \cdot 16H_2O$, assigned by chemist George Ludwig Ulex for whom the mineral was named, has been associated with the mineral almost as long. Ulexite occurs in salt playas and dry saline lakes and has also been found associated with gypsum deposits. Frequently it occurs in bundles of fibers matted together to resemble a cotton ball, and this habit is known as "cottonball ulexite." Less frequently the fibers are oriented in parallel bundles that transmit an optical image with remarkable clarity and resolution. This phenomenon was investigated by Weichel-Moore and Potter (1963), who conclude their paper with the sentence "The discovery and study of ulexite show that it is possible to find in Nature a device almost as good as a man-made [optical] fibre bundle."

The crystallography of ulexite was studied by Murdoch (1940) and reexamined by Clark and Christ (1959), who also gave indexed X-ray diffraction powder data. Clark and Appleman (1964) solved the structure, but published only a brief report because the data were too numerous to be refined economically at that time. Even today the dimensions of the structure refinement are too large to be treated economically by the usual full-matrix least-squares method. In the present work with new data, we have been able to determine all the hydrogen positions and

0003-004X/78/0102-0160$02.00

Table 3. Comparison of observed and calculated structure factors for ulexite, $NaCaB_5O_6(OH)_6 \cdot 5H_2O$

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H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
0	0	1	1		12.61	12.24	-12.24	-.21	.07966	.37	2.15	181	
0	0	2	1		54.62	55.00	-55.00	-.59	.15931	-.38	-1.24	181	
0	0	3	1		5.27	6.13	6.11	.51	.23897	-.87	-3.54	4	
0	0	4	1		21.40	21.66	21.66	.21	.31862	-.26	-1.31	0	
0	0	5	1		3.32	2.11	-2.04	-.54	.39828	1.21	2.21	195	
0	0	6	1		5.91	5.79	-5.79	.17	.47794	.12	.32	178	
0	0	7	1		12.47	12.11	-12.11	.32	.55759	.35	1.38	178	
0	0	8	1		12.97	12.11	-12.11	-.36	.63725	.85	2.99	182	
0	0	9	1		12.51	11.33	11.33	-.02	.71690	1.17	3.64	0	
0	1	-9	1		8.82	9.26	9.26	-.10	.71402	-.44	-1.04	0	
0	1	-8	1		11.65	11.01	-11.01	-.41	.63451	.64	2.07	183	
0	1	-7	1		4.85	4.55	4.54	.40	.55503	.30	.58	4	
0	1	-6	1	L	2.62	1.65	-1.63	.22	.47562	.97	1.27	172	
0	1	-5	1		21.90	21.18	-21.17	-.57	.39631	.72	3.72	182	
0	1	-4	1		21.94	21.27	-21.27	.13	.31717	.67	3.27	179	
0	1	-3	1		16.34	16.38	16.38	.48	.23837	-.04	-.23	1	
0	1	-2	1		70.49	67.90	-67.89	-.45	.16042	2.60	8.51	181	
0	1	-1	1		41.89	39.20	-39.20	-.12	.08567	2.69	11.84	181	
0	1	0	1		36.57	40.69	40.69	.54	.04042	-4.12	-27.22	0	
0	1	1	1		24.03	22.99	22.99	-.31	.09283	1.04	4.08	0	
0	1	2	1		3.44	3.67	3.66	-.33	.16821	-.23	-.70	355	
0	1	3	1		63.84	62.04	62.04	.58	.24629	1.80	4.69	0	
0	1	4	1		20.53	20.31	-20.31	-.05	.32514	.22	1.13	181	
0	1	5	1		33.03	31.82	-31.81	-.55	.40430	1.21	3.86	181	
0	1	6	1		24.64	24.41	24.40	.37	.48363	.24	1.10	0	
0	1	7	1	L	2.54	3.27	-3.26	.28	.56304	-.73	-.80	175	
0	1	8	1		19.78	19.33	-19.32	-.46	.64252	.45	1.82	182	
0	1	9	1		5.65	4.81	-4.81	.02	.72204	.84	1.45	179	
0	2	-9	1		14.74	13.35	-13.34	-.14	.71342	1.39	4.56	181	
0	2	-8	1	L	2.42	.28	-.02	-.28	.63434	2.14	1.93	266	
0	2	-7	1		14.50	14.34	14.34	.40	.55542	.16	.64	1	
0	2	-6	1		4.57	4.74	4.74	.02	.47674	-.17	-.35	0	
0	2	-5	1		19.96	19.53	-19.53	-.53	.39845	.43	2.40	182	
0	2	-4	1		10.36	10.19	10.18	.38	.32084	.17	.91	2	
0	2	-3	1		56.42	54.09	54.09	.38	.24454	2.32	6.02	0	
0	2	-2	1		68.57	65.70	-65.70	-.69	.17133	2.86	9.08	181	
0	2	-1	1		34.48	32.44	-32.44	-.01	.10770	2.04	7.86	181	
0	2	0	1		6.92	6.59	-6.56	.72	.08083	.33	1.93	173	
0	2	1	1		15.94	15.18	15.17	-.39	.11899	.76	3.93	359	
0	2	2	1		25.12	24.02	-24.02	-.44	.18567	1.09	4.33	182	
0	2	3	1		57.42	56.20	56.19	.59	.25976	1.23	3.07	0	
0	2	4	1		29.62	29.04	-29.04	.02	.33641	.58	2.04	179	
0	2	5	1		19.45	18.75	-18.74	-.49	.41419	.70	3.82	182	
0	2	6	1		20.39	20.91	20.91	.31	.49258	-.52	-2.64	0	
0	2	7	1	L	1.79	.59	.56	.19	.57131	1.20	.94	18	
0	2	8	1		8.35	8.59	-8.58	-.39	.65027	-.24	-.61	183	
0	2	9	1		4.50	4.74	-4.74	.11	.72938	-.24	-.32	178	
0	3	-9	1		11.65	11.01	-11.01	-.22	.71511	.64	1.84	182	
0	3	-8	1		11.59	10.68	-10.68	-.31	.63674	.90	2.91	182	
0	3	-7	1		18.96	18.18	18.18	.46	.55873	.77	3.45	1	
0	3	-6	1	L	1.70	.61	-.61	.06	.48126	1.09	.90	174	
0	3	-5	1		35.06	33.76	-33.76	-.53	.40464	1.30	4.15	181	
0	3	-4	1		33.77	32.00	32.00	.29	.32946	1.77	6.43	0	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
0	3	-3	1		34.65	31.83	31.83	.33	.25700	2.82	9.80	0	
0	3	-2	1		43.46	42.50	42.50	-.52	.19038	.96	2.83	0	
0	3	-1	1		15.25	14.13	14.13	.08	.13830	1.12	6.01	0	
0	3	0	1		13.63	11.59	11.58	.47	.12125	2.03	10.60	2	
0	3	1	1		11.96	11.18	-11.17	-.47	.15154	.79	4.40	183	
0	3	2	1		34.07	34.67	34.67	-.15	.20957	-.60	-1.64	0	
0	3	3	1		44.71	42.70	42.69	.62	.27850	2.01	4.82	0	
0	3	4	1		5.06	5.49	-5.49	-.24	.35199	-.43	-1.20	183	
0	3	5	1		22.72	22.26	-22.26	-.46	.42769	.46	2.12	182	
0	3	6	1		17.76	17.24	17.23	.48	.50462	.52	2.46	1	
0	3	7	1	L	1.84	.72	.71	.14	.58227	1.11	.85	11	
0	3	8	1		11.38	10.82	-10.81	-.47	.66041	.57	1.75	183	
0	3	9	1		7.12	6.89	6.89	.14	.73886	.23	.46	1	
0	4	-9	1	L	3.00	2.55	2.53	-.24	.71907	.46	.43	355	
0	4	-8	1		13.94	13.00	-13.00	-.17	.64168	.94	3.33	181	
0	4	-7	1		8.17	7.21	7.20	.45	.56492	.96	2.93	3	
0	4	-6	1		25.47	23.83	-23.83	-.15	.48909	1.64	7.66	181	
0	4	-5	1		17.74	16.25	-16.24	-.46	.41469	1.49	8.10	182	
0	4	-4	1		26.41	24.89	24.88	.51	.34267	1.52	6.04	1	
0	4	-3	1		8.00	5.91	-5.90	.21	.27489	2.10	10.51	177	
0	4	-2	1		62.05	60.77	-60.77	-.72	.21540	1.28	3.57	181	
0	4	-1	1		3.68	2.22	-2.22	.20	.17298	1.45	4.23	174	
0	4	0	1		71.41	70.14	70.13	.61	.16166	1.27	4.14	0	
0	4	1	1		53.75	50.48	-50.48	-.53	.18719	3.27	9.74	181	
0	4	2	1		20.21	19.75	-19.75	-.25	.23798	.46	2.38	181	
0	4	3	1		13.59	13.64	13.63	.59	.30152	-.05	-.30	2	
0	4	4	1		3.77	4.19	-4.19	-.16	.37134	-.43	-.86	183	
0	4	5	1		5.80	5.76	-5.75	-.38	.44447	.04	.11	184	
0	4	6	1	L	1.74	1.65	1.60	.40	.51953	.09	.07	14	
0	4	7	1	L	1.85	1.56	1.56	.04	.59578	.29	.22	1	
0	4	8	1		16.47	15.59	-15.59	-.38	.67282	.86	3.26	182	
0	4	9	1		9.65	9.33	9.33	.22	.75041	.32	.77	1	
0	5	-9	1	L	2.11	2.66	-2.64	-.30	.72526	-.54	-.36	187	
0	5	-8	1		8.33	7.76	-7.75	-.18	.64910	.57	1.43	182	
0	5	-7	1		15.38	14.12	14.11	.48	.57390	1.26	5.19	1	
0	5	-6	1		4.85	5.16	5.16	-.10	.50007	-.31	-.66	359	
0	5	-5	1		30.79	28.93	-28.93	-.44	.42834	1.85	7.13	181	
0	5	-4	1		14.75	14.03	14.02	.41	.35995	.72	4.00	1	
0	5	-3	1		13.18	12.61	12.61	.14	.29723	.57	3.52	0	
0	5	-2	1		24.07	23.47	23.47	-.52	.24458	.60	2.46	359	
0	5	-1	1		40.91	37.82	37.82	.27	.20972	3.09	8.56	0	
0	5	0	1		14.57	14.56	-14.56	.34	.20208	.01	.06	178	
0	5	1	1		18.45	17.81	-17.80	-.57	.22445	.64	3.32	182	
0	5	2	1		4.68	4.40	-4.40	.04	.26947	.28	.88	179	
0	5	3	1		21.44	21.24	21.24	.58	.32793	.20	.95	1	
0	5	4	1		9.59	9.38	-9.37	-.40	.39389	.21	.90	183	
0	5	5	1		22.25	22.29	-22.28	-.33	.46417	-.04	-.18	181	
0	5	6	1		21.63	21.45	21.44	.54	.53707	.19	.90	1	
0	5	7	1		4.84	5.48	-5.48	-.01	.61166	-.64	-1.13	181	
0	5	8	1		13.06	12.98	-12.97	-.43	.68739	.08	.24	182	
0	6	-9	1		8.98	8.43	-8.43	-.31	.73363	.55	1.31	183	
0	6	-8	1	L	4.02	1.04	1.04	-.04	.65893	2.98	4.27	358	
0	6	-7	1		4.51	2.91	-2.88	.43	.58553	1.61	2.88	171	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
0	6	-6	1		7.81	6.66	-6.66	-.29	.51400	1.15	3.65	183	
0	6	-5	1		9.75	9.53	-9.53	-.34	.44524	.26	1.00	183	
0	6	-4	1		14.92	14.28	14.27	.59	.38075	.64	3.41	2	
0	6	-3	1		15.71	14.63	14.63	.02	.32310	1.09	6.43	0	
0	6	-2	1		38.52	36.68	-36.67	-.67	.27660	1.84	4.34	182	
0	6	-1	1		68.45	63.34	63.34	.37	.24761	5.11	13.23	0	
0	6	0	1		71.32	68.73	68.73	.45	.24250	2.59	6.79	0	
0	6	1	1		13.46	12.40	12.39	-.60	.26266	1.05	6.73	358	
0	6	2	1		17.61	17.23	-17.23	-.04	.30309	.38	2.08	181	
0	6	3	1		8.73	9.01	9.00	.53	.35697	-.28	-1.15	3	
0	6	4	1		7.25	7.11	7.10	-.31	.41914	.15	.49	358	
0	6	5	1		13.93	13.87	-13.87	-.24	.48644	.05	.25	181	
0	6	6	1		7.18	6.76	6.75	.44	.55700	.42	1.14	3	
0	6	7	1		7.61	7.36	-7.36	-.10	.62974	.25	.61	181	
0	6	8	1		8.07	7.84	-7.83	-.32	.70398	.24	.54	183	
0	7	-9	1		6.48	6.17	-6.16	-.35	.74410	.31	.57	184	
0	7	-8	1		5.01	3.23	-3.23	-.05	.67105	1.78	2.96	181	
0	7	-7	1		4.83	4.31	4.29	.44	.59967	.52	.93	5	
0	7	-6	1		10.44	10.69	-10.69	-.24	.53066	-.25	-.91	182	
0	7	-5	1		19.75	18.81	-18.81	-.30	.46506	.94	4.90	181	
0	7	-4	1		23.24	22.54	-22.53	.46	.40454	.70	3.16	178	
0	7	-3	1		17.84	16.64	-16.64	-.04	.35173	1.20	6.26	181	
0	7	-2	1		18.24	16.34	-16.33	-.45	.31059	1.90	10.17	182	
0	7	-1	1		18.26	17.21	17.20	.42	.28619	1.06	5.59	1	
0	7	0	1	L	1.46	.71	-.69	.17	.28291	.75	.72	165	
0	7	1	1	L	2.68	2.76	-2.69	-.60	.30143	-.08	-.14	193	
0	7	2	1		10.25	10.19	10.19	.22	.33819	.06	.26	1	
0	7	3	1		24.74	24.63	24.62	.49	.38804	.11	.49	1	
0	7	4	1		23.00	22.42	-22.42	-.51	.44662	.58	2.75	182	
0	7	5	1		8.59	8.45	-8.45	-.17	.51093	.14	.45	182	
0	7	6	1		6.34	5.65	5.62	.54	.57907	.68	1.60	5	
0	7	7	1		6.30	5.52	5.52	-.15	.64984	.78	1.61	359	
0	7	8	1		19.81	19.21	-19.21	-.35	.72246	.60	2.21	182	
0	8	-9	1		5.60	5.36	-5.34	-.34	.75659	.25	.37	184	
0	8	-8	1		10.25	9.47	9.46	.09	.68534	.79	2.16	0	
0	8	-7	1		11.40	10.75	10.74	.37	.61614	.66	2.15	1	
0	8	-6	1	L	3.15	1.98	-1.94	-.40	.54976	1.17	1.53	192	
0	8	-5	1		9.11	8.59	-8.59	-.19	.48742	.52	1.76	182	
0	8	-4	1		20.07	18.71	18.70	.61	.43081	1.36	7.09	1	
0	8	-3	1		5.42	5.14	5.13	-.16	.38249	.29	.77	359	
0	8	-2	1		26.48	25.25	-25.24	-.56	.34596	1.23	4.74	182	
0	8	-1	1		30.91	29.87	-29.86	.49	.32522	1.04	3.71	179	
0	8	0	1		39.07	39.16	39.16	.25	.32333	-.09	-.27	0	
0	8	1	1		16.78	15.73	-15.72	-.60	.34059	1.04	5.91	183	
0	8	2	1		42.39	41.08	41.08	.15	.37437	1.32	3.65	0	
0	8	3	1		7.92	8.01	8.00	.42	.42071	-.09	-.29	2	
0	8	4	1		16.96	17.13	-17.12	-.41	.47595	-.17	-.82	182	
0	8	5	1	L	1.60	1.41	-1.41	-.07	.53736	.40	.31	183	
0	8	6	1		10.81	10.78	10.78	.42	.60305	.03	.09	2	
0	8	7	1		5.30	5.36	5.36	-.23	.67177	-.06	-.11	358	
0	8	8	1		9.90	10.18	-10.18	-.23	.74267	-.29	-.71	182	
0	9	-8	1	L	2.10	.77	-.76	.08	.70167	1.33	.89	174	
0	9	-7	1		10.53	10.37	10.36	.36	.63476	.16	.49	1	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
0	9	-6	1	L	1.84	.76	-.68	-.33	.57113	1.08	.82	207	
0	9	-5	1		8.74	8.17	-8.17	-.14	.51201	.57	1.88	181	
0	9	-4	1		8.65	7.19	7.17	.46	.45913	1.46	5.16	3	
0	9	-3	1		14.50	13.85	13.84	-.21	.41490	.65	3.20	0	
0	9	-2	1	L	2.09	1.64	1.61	-.33	.38233	.45	.49	349	
0	9	-1	1		4.53	3.62	3.58	.51	.36455	.91	2.05	8	
0	9	0	1	L	1.66	.30	.30	-.01	.36375	1.36	1.15	359	
0	9	1	1		21.50	21.13	-21.12	-.57	.38002	.37	1.67	182	
0	9	2	1		16.04	15.61	15.61	.38	.41134	.43	2.14	1	
0	9	3	1		28.92	28.40	28.40	.35	.45463	.52	2.08	0	
0	9	4	1		15.38	15.69	-15.68	-.57	.50681	-.31	-1.37	183	
0	9	5	1		7.76	7.75	-7.75	-.00	.56544	.02	.05	181	
0	9	6	1		16.34	16.41	16.40	.49	.62871	-.06	-.25	1	
0	9	7	1		16.79	16.70	-16.70	-.27	.69535	.09	.31	181	
0	10	-8	1	L	2.17	2.73	-2.72	.20	.71990	-.56	-.37	175	
0	10	-7	1		12.07	11.08	-11.08	.28	.65535	.99	3.14	178	
0	10	-6	1		14.69	13.54	-13.53	-.46	.59447	1.15	4.42	182	
0	10	-5	1		5.07	5.49	5.49	-.03	.53851	-.42	-.84	0	
0	10	-4	1		4.77	3.61	3.56	.56	.48916	1.16	2.39	8	
0	10	-3	1	L	1.74	1.67	1.64	-.31	.44862	.07	.05	350	
0	10	-2	1		38.83	37.69	-37.69	-.41	.41944	1.14	3.55	181	
0	10	-1	1		29.63	26.31	28.30	.55	.40410	1.33	4.73	1	
0	10	0	1		13.84	13.68	13.68	.06	.40416	.16	.76	0	
0	10	1	1		25.86	25.41	-25.41	-.53	.41963	.44	1.81	182	
0	10	2	1		19.96	19.70	-19.70	.30	.44891	.26	1.36	179	
0	10	3	1		25.93	25.84	25.83	.26	.48953	.10	.41	0	
0	10	4	1		10.32	9.99	-9.98	-.45	.53894	.33	1.14	183	
0	10	5	1	L	1.90	.77	-.76	.09	.59494	1.13	.83	173	
0	10	6	1		5.49	6.01	6.00	.36	.65586	-.52	-.91	3	
0	10	7	1		10.25	10.28	-10.28	-.33	.72044	-.03	-.08	182	
0	11	-8	1	L	3.41	.46	-.42	.18	.73989	2.95	3.04	156	
0	11	-7	1		5.49	4.05	4.04	.25	.67772	1.44	2.54	3	
0	11	-6	1		4.59	4.37	-4.35	-.38	.61956	.22	.35	185	
0	11	-5	1	L	2.12	1.85	1.85	.02	.56665	.27	.23	0	
0	11	-4	1	L	3.54	3.42	-3.40	.40	.52060	.12	.18	173	
0	11	-3	1		9.90	9.60	-9.60	-.34	.48337	.29	1.04	183	
0	11	-2	1		28.46	27.66	27.66	-.18	.45712	.80	2.94	0	
0	11	-1	1		17.89	17.57	17.56	.53	.44380	.32	1.59	1	
0	11	0	1		8.68	8.25	8.25	-.18	.44458	.42	1.44	359	
0	11	1	1		22.64	22.06	-22.05	-.47	.45938	.59	2.84	182	
0	11	2	1		10.47	10.25	10.24	.49	.48693	.22	.82	2	
0	11	3	1		19.33	19.17	19.16	.18	.52523	.16	.74	0	
0	11	4	1		17.17	16.82	-16.81	-.56	.57211	.36	1.49	182	
0	11	5	1		4.21	3.21	-3.21	.15	.62566	1.00	1.46	177	
0	11	6	1		11.51	10.70	10.70	.39	.68432	.81	2.36	2	
0	11	7	1		5.34	5.52	-5.51	-.34	.74687	-.18	-.27	184	
0	12	-7	1	L	3.23	2.17	2.16	.16	.70171	1.06	1.09	4	
0	12	-6	1		18.61	16.56	-16.56	-.46	.64621	2.05	7.96	182	
0	12	-5	1	L	3.84	3.88	-3.87	.12	.59621	-.04	-.05	178	
0	12	-4	1		8.93	8.69	8.68	.46	.55321	.24	.73	3	
0	12	-3	1		14.30	13.60	-13.59	-.41	.51894	.70	2.94	182	
0	12	-2	1	L	1.80	1.95	-1.94	-.23	.49522	-.15	-.12	187	
0	12	-1	1		15.52	15.31	15.30	.54	.48362	.21	.97	2	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
0	12	0	1		11.44	11.15	11.15	-.12	.48499	.29	1.10	0	
0	12	1	1		5.57	4.92	-4.91	-.42	.49924	.65	1.47	185	
0	12	2	1		13.51	13.30	13.30	.39	.52531	.21	.83	1	
0	12	3	1	L	3.24	2.49	2.49	.10	.56156	.75	.94	2	
0	12	4	1		8.00	8.38	-8.37	-.43	.60617	-.38	-.98	183	
0	12	5	1	L	2.29	2.95	-2.94	.22	.65744	-.66	-.50	175	
0	12	6	1	L	3.40	2.52	-2.50	.25	.71393	.89	.90	174	
0	13	-7	1	L	2.71	1.90	1.90	.12	.72715	.81	.65	3	
0	13	-6	1		14.07	13.34	-13.34	-.37	.67423	.73	2.40	182	
0	13	-5	1	L	2.88	1.38	-1.37	.15	.62698	1.50	1.56	173	
0	13	-4	1	L	3.63	3.67	3.66	.30	.58678	-.04	-.06	4	
0	13	-3	1		29.10	28.18	-28.18	-.42	.55517	.92	3.43	181	
0	13	-2	1		6.00	5.12	-5.12	-.02	.53367	.87	1.97	181	
0	13	-1	1		18.72	18.79	18.78	.50	.52353	-.07	-.31	1	
0	13	0	1		6.53	6.04	-6.03	-.32	.52541	.49	1.19	184	
0	13	1	1	L	3.09	1.71	1.68	-.33	.53918	1.38	1.72	349	
0	13	2	1		6.30	5.65	5.62	.53	.56397	.65	1.49	5	
0	13	3	1		5.76	5.71	5.71	.01	.59842	.05	.09	0	
0	13	4	1	L	2.95	2.43	-2.38	-.50	.64097	.52	.51	192	
0	13	5	1		11.86	11.35	11.35	.27	.69012	.50	1.49	1	
0	13	6	1		7.51	7.86	7.85	.27	.74456	-.35	-.69	1	
0	14	-7	1	L	2.21	.75	-.75	.04	.75391	1.46	.92	177	
0	14	-6	1		11.36	10.42	-10.41	-.42	.70346	.94	2.64	183	
0	14	-5	1		7.50	7.70	7.70	.24	.65879	-.21	-.44	1	
0	14	-4	1		21.67	20.20	20.20	.33	.62118	1.47	6.18	0	
0	14	-3	1		11.97	11.46	-11.46	-.46	.59194	.50	1.69	183	
0	14	-2	1		18.97	18.52	-18.52	-.05	.57239	.46	1.99	181	
0	14	-1	1		13.65	13.70	13.69	.48	.56351	-.05	-.17	2	
0	14	0	1	L	1.88	.87	.83	-.26	.56583	1.02	.75	343	
0	14	1	1		5.29	5.25	5.24	-.27	.57919	.04	.07	358	
0	14	2	1		10.09	10.87	10.86	.43	.60287	-.78	-2.33	2	
0	14	3	1		10.03	10.06	-10.06	-.06	.63571	-.03	-.08	181	
0	14	4	1	L	2.57	2.64	-2.61	-.36	.67639	-.07	-.06	188	
0	14	5	1		11.57	11.26	11.25	.32	.72358	.31	.86	1	
0	15	-6	1		10.08	9.25	-9.24	-.32	.73375	.83	2.12	183	
0	15	-5	1	L	3.58	3.45	3.44	.25	.69151	.13	.14	4	
0	15	-4	1	L	3.75	2.12	-2.11	.17	.65625	1.63	2.02	175	
0	15	-3	1	L	4.04	4.34	-4.32	-.43	.62917	-.30	-.40	186	
0	15	-2	1	L	4.01	4.24	4.24	.12	.61133	-.23	-.32	1	
0	15	-1	1		4.52	3.19	3.17	.41	.60356	1.33	2.07	7	
0	15	0	1		11.41	11.61	-11.61	-.41	.60624	-.20	-.63	183	
0	15	1	1	L	1.99	1.57	1.56	-.18	.61925	.42	.29	354	
0	15	2	1		14.00	14.42	14.41	.52	.64195	-.42	-1.40	2	
0	15	3	1		4.58	5.14	-5.13	-.13	.67336	-.56	-.76	182	
0	15	4	1		16.76	16.86	-16.86	-.40	.71234	-.10	-.34	182	
0	16	-5	1	L	2.14	1.89	1.87	.31	.72500	.24	.16	9	
0	16	-4	1	L	2.30	1.89	1.88	.19	.69192	.41	.30	5	
0	16	-3	1		10.65	10.03	-10.02	-.45	.66676	.62	1.74	183	
0	16	-2	1	L	3.33	4.05	4.05	.10	.65044	-.72	-.76	1	
0	16	-1	1		7.37	7.19	7.18	.37	.64364	.18	.40	2	
0	16	0	1		9.87	9.52	-9.52	-.34	.64666	.35	.92	183	
0	16	1	1	L	2.08	1.79	-1.78	-.11	.65935	.29	.20	184	
0	16	2	1		14.55	15.15	15.15	.41	.68119	-.60	-1.98	1	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
0	16	3	1	L	3.37	2.52	2.51	-.19	.71132	.85	.86	356	
0	16	4	1	L	2.51	1.86	1.84	-.26	.74875	.65	.47	352	
0	17	-4	1	L	2.20	2.20	-2.20	.04	.72808	-.01	-.00	178	
0	17	-3	1		9.78	9.52	-9.51	-.40	.70467	.26	.66	183	
0	17	-2	1		14.22	13.35	13.35	.24	.68971	.87	2.84	1	
0	17	-1	1		7.45	7.27	7.27	.29	.68377	.18	.37	2	
0	17	0	1		6.15	6.86	-6.85	-.45	.68707	-.71	-1.23	184	
0	17	1	1	L	4.26	2.56	-2.56	-.03	.69949	1.70	2.20	181	
0	17	2	1		7.58	7.52	7.50	.46	.72056	.06	.13	3	
0	17	3	1	L	4.63	4.61	-4.61	-.24	.74953	.02	.02	184	
0	18	-3	1	L	2.22	.68	-.56	-.39	.74284	1.53	.97	215	
0	18	-2	1	L	3.56	2.12	-2.11	.21	.72911	1.44	1.45	174	
0	18	-1	1		5.51	4.81	4.81	.24	.72393	.70	1.09	2	
0	18	0	1		5.05	4.24	-4.22	-.37	.72749	.81	1.15	186	
0	18	1	1		9.11	8.69	8.69	.03	.73966	.42	.95	0	
1	-19	0	1	L	2.22	2.43	2.42	-.19	.75309	-.21	-.13	356	
1	-19	1	1		9.66	9.17	9.16	.41	.75148	.49	1.14	2	
1	-18	-2	1		12.27	13.00	12.99	.42	.74145	-.72	-1.98	1	
1	-18	-1	1	L	2.22	3.14	-3.13	-.30	.72290	-.92	-.58	186	
1	-18	0	1	L	3.35	4.26	4.26	-.22	.71281	-.91	-.89	358	
1	-18	1	1		11.89	12.20	12.19	.41	.71155	-.31	-.87	1	
1	-18	2	1	L	2.72	.71	-.71	-.07	.71917	2.01	1.68	166	
1	-18	3	1	L	2.17	.58	.48	-.32	.73539	1.59	1.03	327	
1	-17	-3	1	L	2.22	2.28	-2.27	.13	.72933	-.06	-.04	176	
1	-17	-2	1	L	2.16	1.35	1.31	.32	.70192	.81	.52	13	
1	-17	-1	1		17.84	17.85	-17.84	-.38	.68276	-.01	-.02	182	
1	-17	0	1	L	3.36	1.00	.99	-.08	.67255	2.37	2.51	356	
1	-17	1	1		17.41	16.95	16.94	.46	.67169	.46	1.67	1	
1	-17	2	1		13.76	13.26	-13.26	-.22	.68022	.49	1.58	181	
1	-17	3	1		10.99	11.07	-11.07	-.32	.69781	-.08	-.22	182	
1	-17	4	1		4.96	6.03	6.01	.39	.72378	-1.07	-1.50	3	
1	-17	5	1		6.10	5.66	5.66	.07	.75727	.44	.75	0	
1	-16	-4	1	L	3.29	3.68	-3.65	-.47	.72716	-.40	-.36	188	
1	-16	-3	1		14.48	14.30	14.30	.18	.69100	.17	.57	0	
1	-16	-2	1		9.53	9.98	9.98	.37	.66250	-.46	-1.17	2	
1	-16	-1	1		13.51	13.53	-13.52	-.41	.64266	-.02	-.08	182	
1	-16	0	1		8.33	7.94	-7.94	-.10	.63230	.39	.96	181	
1	-16	1	1		21.04	20.63	20.63	.43	.63190	.41	1.69	1	
1	-16	2	1	L	2.04	2.43	-2.42	-.20	.64146	-.38	-.26	185	
1	-16	3	1		13.09	12.98	-12.97	-.25	.66056	.12	.38	182	
1	-16	4	1	L	4.24	4.56	4.55	.36	.68840	-.33	-.42	4	
1	-16	5	1		11.65	10.40	-10.40	-.03	.72398	1.25	3.50	181	
1	-15	-5	1	L	2.17	1.29	1.29	.03	.73504	.89	.57	1	
1	-15	-4	1		5.36	6.74	-6.73	-.39	.69062	-1.38	-2.12	184	
1	-15	-3	1		10.91	11.25	11.25	.27	.65293	-.34	-.95	1	
1	-15	-2	1		7.52	7.80	7.80	.23	.62320	-.28	-.65	1	
1	-15	-1	1		13.04	12.51	-12.50	-.48	.60260	.53	1.84	183	
1	-15	0	1		21.46	21.28	21.28	.08	.59208	.18	.77	0	
1	-15	1	1		22.05	21.40	21.40	.46	.59219	.65	2.87	1	
1	-15	2	1		11.34	10.42	-10.41	-.37	.60291	.92	3.02	183	
1	-15	3	1	L	1.98	1.28	-1.25	-.24	.62371	.70	.50	191	
1	-15	4	1		19.42	18.80	18.79	.47	.65361	.63	2.41	1	
1	-15	5	1		4.97	5.38	-5.38	-.06	.69145	-.41	-.62	181	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	-15	6	1		7.49	6.84	-6.84	-.36	.73599	.64	1.31	184	
1	-14	-6	1		5.98	6.91	6.89	.44	.75264	-.93	-1.48	3	
1	-14	-5	1		5.95	5.80	-5.80	-.03	.70078	.15	.26	181	
1	-14	-4	1		23.07	22.88	-22.88	-.47	.65453	.19	.76	182	
1	-14	-3	1		7.86	8.40	8.40	.33	.61516	-.54	-1.30	2	
1	-14	-2	1		9.89	9.50	9.50	.28	.58405	.39	1.16	1	
1	-14	-1	1		9.76	10.37	-10.36	-.49	.56259	-.61	-1.85	183	
1	-14	0	1		10.90	11.56	-11.56	.05	.55189	-.66	-2.20	179	
1	-14	1	1		8.13	8.99	8.99	.41	.55258	-.86	-2.37	2	
1	-14	2	1		9.02	9.25	-9.24	-.33	.56463	-.23	-.67	183	
1	-14	3	1		6.81	5.71	5.71	-.14	.58733	1.09	2.58	359	
1	-14	4	1		10.13	9.35	9.34	.41	.61951	.77	2.26	2	
1	-14	5	1		10.57	10.05	-10.05	-.16	.65978	.52	1.48	181	
1	-14	6	1		13.07	11.56	-11.56	-.27	.70678	1.51	4.65	182	
1	-13	-6	1		12.21	13.34	13.33	.38	.72106	-1.13	-3.14	1	
1	-13	-5	1		9.64	9.85	-9.85	-.11	.66722	-.22	-.56	181	
1	-13	-4	1		9.82	10.11	-10.10	-.35	.61899	-.28	-.82	182	
1	-13	-3	1		11.00	11.60	11.59	.41	.57775	-.60	-1.92	2	
1	-13	-2	1		7.66	7.84	7.84	.09	.54509	-.18	-.49	0	
1	-13	-1	1		9.25	9.67	-9.65	-.54	.52264	-.42	-1.33	184	
1	-13	0	1		17.74	17.60	17.60	.25	.51173	.14	.66	0	
1	-13	1	1		13.69	13.37	13.36	.41	.51310	.32	1.32	1	
1	-13	2	1		13.13	12.85	-12.84	-.50	.52666	.28	1.13	183	
1	-13	3	1		4.40	3.05	-3.05	-.11	.55151	1.35	2.40	183	
1	-13	4	1		11.58	11.11	11.10	.51	.58620	.47	1.59	2	
1	-13	5	1	L	3.62	4.32	-4.32	-.19	.62913	-.71	-.87	183	
1	-13	6	1		13.07	12.33	-12.33	-.31	.67872	.73	2.30	182	
1	-13	7	1		9.15	8.23	8.22	.33	.73363	.92	2.23	2	
1	-12	-7	1	L	3.55	3.72	-3.72	-.11	.75062	-.17	-.17	182	
1	-12	-6	1		13.96	13.98	13.98	.48	.69039	-.02	-.08	1	
1	-12	-5	1		12.53	12.96	-12.96	-.18	.63446	-.43	-1.37	181	
1	-12	-4	1		14.48	14.85	-14.85	-.42	.58407	-.37	-1.40	182	
1	-12	-3	1		9.40	9.33	9.32	.45	.54076	.07	.21	2	
1	-12	-2	1		4.56	3.44	3.43	.14	.50636	1.12	2.10	2	
1	-12	-1	1	L	1.79	.56	-.23	-.51	.48277	1.23	.96	247	
1	-12	0	1		13.21	13.42	13.42	.21	.47162	-.22	-.91	0	
1	-12	1	1		13.83	13.89	13.89	.32	.47378	-.07	-.30	1	
1	-12	2	1		6.20	6.05	6.03	-.43	.48909	.15	.38	356	
1	-12	3	1	L	1.79	1.91	1.91	.02	.51636	-.12	-.10	0	
1	-12	4	1		20.99	20.97	20.97	.41	.55385	.01	.06	1	
1	-12	5	1		10.23	9.41	-9.41	-.30	.59963	.82	2.63	182	
1	-12	6	1	L	2.01	3.10	-3.09	-.19	.65196	-1.09	-.76	184	
1	-12	7	1	L	2.10	1.56	-1.51	.40	.70939	.54	.36	165	
1	-11	-7	1	L	2.15	.62	-.62	-.05	.72303	1.53	1.00	185	
1	-11	-6	1	L	2.43	.40	.04	.40	.66077	2.03	1.62	84	
1	-11	-5	1	L	2.59	2.65	2.64	-.26	.60263	-.06	-.06	355	
1	-11	-4	1		13.54	13.19	-13.18	-.26	.54991	.36	1.39	182	
1	-11	-3	1		12.90	13.09	13.08	.51	.50431	-.19	-.76	2	
1	-11	-2	1		36.40	36.92	-36.92	-.08	.46791	-.52	-1.51	181	
1	-11	-1	1		35.81	35.42	-35.42	-.54	.44300	.39	1.15	181	
1	-11	0	1		30.40	29.90	29.90	.43	.43156	.51	1.72	0	
1	-11	1	1		10.08	9.48	9.48	.30	.43466	.60	2.34	1	
1	-11	2	1		19.90	19.94	-19.93	-.60	.45200	-.03	-.16	182	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	w*DF	ANGLE CALC	ANGLE STAT
1	-11	3	1		6.05	5.56	-5.56	.05	.48205	.48	1.21	179	
1	-11	4	1		6.40	5.70	5.68	.50	.52262	.69	1.81	4	
1	-11	5	1		8.85	8.68	8.67	-.32	.57147	.17	.51	358	
1	-11	6	1	L	3.08	.25	-.13	-.21	.62667	2.83	3.23	240	
1	-11	7	1		6.80	5.81	5.79	.38	.68669	.99	2.12	3	
1	-11	8	1		7.71	6.92	-6.92	-.07	.75037	.79	1.62	181	
1	-10	-7	1	L	2.09	1.31	1.31	.02	.69669	.78	.52	0	
1	-10	-6	1		14.27	13.60	13.60	.48	.63235	.67	2.38	2	
1	-10	-5	1		5.32	5.70	-5.69	-.33	.57189	-.39	-.76	184	
1	-10	-4	1	L	3.52	4.22	-4.21	-.32	.51665	-.70	-1.01	185	
1	-10	-3	1		32.01	31.76	31.76	.53	.46851	.25	.92	0	
1	-10	-2	1		22.76	22.56	22.56	-.02	.42983	.20	.92	0	
1	-10	-1	1		30.46	31.06	-31.06	-.48	.40336	-.60	-2.12	181	
1	-10	0	1		4.04	3.22	3.20	.36	.39158	.82	1.59	6	
1	-10	1	1		14.96	14.25	14.25	.19	.39580	.70	3.57	0	
1	-10	2	1		6.33	5.79	-5.77	-.48	.41554	.54	1.52	185	
1	-10	3	1		7.56	6.85	6.84	.19	.44875	.71	2.32	1	
1	-10	4	1		7.81	7.21	-7.21	.35	.49272	.60	1.91	177	
1	-10	5	1		12.47	11.57	-11.57	-.43	.54485	.89	3.40	183	
1	-10	6	1		6.56	5.92	5.92	-.06	.60302	.64	1.46	0	
1	-10	7	1		20.23	18.52	18.52	.43	.66566	1.71	6.63	1	
1	-10	8	1		6.33	6.03	-6.03	-.19	.73161	.30	.54	182	
1	-9	-8	1	L	2.71	4.63	-4.62	-.36	.74082	-1.93	-1.49	185	
1	-9	-7	1		10.87	10.30	-10.30	.09	.67176	.57	1.67	179	
1	-9	-6	1	L	2.65	2.44	2.42	.35	.60530	.21	.21	8	
1	-9	-5	1		9.75	10.27	-10.27	-.40	.54242	-.53	-1.73	183	
1	-9	-5	1		9.62	10.27	-10.27	-.40	.54242	-.65	-2.07	183	
1	-9	-4	1		8.34	8.51	-8.51	-.11	.48449	-.17	-.53	181	
1	-9	-3	1		21.48	20.87	20.86	.57	.43351	.62	3.34	1	
1	-9	-2	1		10.97	11.02	11.02	-.27	.39221	-.06	-.24	359	
1	-9	-1	1		11.55	11.48	-11.47	-.47	.36389	.07	.32	183	
1	-9	0	1		36.36	36.42	36.41	.58	.35169	-.06	-.16	0	
1	-9	1	1		26.39	26.34	26.34	.14	.35729	.05	.18	0	
1	-9	2	1		28.32	27.42	-27.42	-.64	.37988	.89	3.26	182	
1	-9	3	1		18.71	18.35	18.35	.22	.41672	.36	1.80	0	
1	-9	4	1		11.50	10.93	10.92	.43	.46442	.57	2.42	2	
1	-9	5	1		27.55	26.90	-26.89	-.43	.52001	.66	2.39	181	
1	-9	6	1		16.58	15.19	-15.19	-.08	.58123	1.39	5.85	181	
1	-9	7	1		9.85	9.91	9.90	.39	.64648	-.06	-.16	2	
1	-9	8	1	L	2.57	2.16	2.15	-.19	.71465	.41	.34	356	
1	-8	-8	1		12.11	11.60	-11.59	-.45	.71925	.51	1.45	183	
1	-8	-7	1	L	2.36	.41	.38	.16	.64838	1.95	1.61	23	
1	-8	-6	1		6.32	5.67	5.65	.43	.57980	.65	1.48	4	
1	-8	-5	1		17.24	16.75	-16.75	-.45	.51443	.49	2.24	182	
1	-8	-4	1		37.78	37.24	-37.24	-.17	.45364	.54	1.82	181	
1	-8	-3	1		14.19	14.08	-14.06	.56	.39955	.12	.59	177	
1	-8	-2	1		24.09	24.51	24.51	-.20	.35521	-.41	-1.71	0	
1	-8	-1	1		3.88	3.22	-3.20	-.38	.32465	.66	1.42	187	
1	-8	0	1		19.19	19.34	-19.33	.47	.31195	-.15	-.74	178	
1	-8	1	1		7.16	6.52	6.52	.01	.31924	.64	2.42	0	
1	-8	2	1		13.48	12.92	-12.92	-.48	.34527	.56	3.03	183	
1	-8	3	1		40.43	39.15	39.15	.36	.38626	1.28	3.45	0	
1	-8	4	1		24.34	23.35	23.35	.24	.43803	.99	4.31	0	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	-8	5	1		39.47	38.33	-38.33	-.52	.49723	1.14	3.19	181	
1	-8	6	1		5.72	5.05	-5.05	.09	.56151	.68	1.50	179	
1	-8	7	1		7.87	7.36	7.35	.42	.62931	.51	1.31	3	
1	-8	8	1		7.97	7.28	-7.28	-.30	.69962	.69	1.62	183	
1	-7	-8	1		5.76	6.11	-6.10	-.37	.69935	-.33	-.57	184	
1	-7	-7	1		14.92	14.98	14.98	.23	.62675	-.07	-.24	0	
1	-7	-6	1	L	1.83	.62	-.56	.26	.55608	1.21	.93	154	
1	-7	-5	1	L	3.09	3.69	-3.66	-.50	.48819	-.61	-.64	188	
1	-7	-4	1	L	2.87	2.88	2.88	.06	.42441	-.02	-.02	1	
1	-7	-3	1		21.57	20.81	20.81	.56	.36689	.75	3.98	1	
1	-7	-2	1	L	1.63	1.05	-.94	-.45	.31903	.59	.57	206	
1	-7	-1	1		48.23	47.63	-47.63	-.35	.28574	.60	1.40	181	
1	-7	0	1		50.37	48.68	48.67	.69	.27239	1.69	4.09	0	
1	-7	1	1		17.56	17.06	17.06	-.04	.28186	.50	2.46	0	
1	-7	2	1	L	1.46	1.39	-1.25	-.62	.31205	.06	.06	207	
1	-7	3	1	L	2.52	1.82	1.78	.38	.35777	.69	1.01	12	
1	-7	4	1		30.51	28.79	28.79	.30	.41390	1.72	6.10	0	
1	-7	5	1		12.33	11.64	-11.63	-.49	.47678	.69	3.06	183	
1	-7	6	1		6.73	5.69	5.69	.06	.54407	1.04	2.79	0	
1	-7	7	1		8.82	8.14	8.14	.35	.61433	.68	1.93	2	
1	-7	8	1		13.73	12.45	-12.44	-.29	.68664	1.28	4.27	182	
1	-6	-9	1	L	2.17	1.13	1.13	-.01	.75661	1.04	.67	0	
1	-6	-8	1		15.90	14.85	-14.85	-.44	.68127	1.05	3.67	182	
1	-6	-7	1		9.79	9.81	9.81	.30	.60703	-.02	-.06	1	
1	-6	-6	1		4.56	3.47	3.46	.32	.53436	1.09	2.03	5	
1	-6	-5	1		22.44	22.24	-22.24	-.53	.46399	.19	1.04	182	
1	-6	-4	1		15.85	15.36	-15.36	.00	.39714	.49	2.61	179	
1	-6	-3	1		16.99	16.61	16.60	.52	.33592	.39	2.32	1	
1	-6	-2	1		3.91	4.25	4.23	-.36	.28400	-.34	-.86	356	
1	-6	-1	1	L	1.39	1.10	-1.07	-.23	.24731	.29	.30	193	
1	-6	0	1		5.00	3.60	3.56	.53	.23314	1.40	4.88	8	
1	-6	1	1		27.70	24.81	24.81	-.19	.24544	2.89	9.95	0	
1	-6	2	1		50.52	49.56	-49.55	-.41	.28074	.97	2.29	181	
1	-6	3	1		34.64	32.68	32.67	.50	.33178	1.96	5.81	0	
1	-6	4	1		15.57	15.14	15.14	.08	.39247	.43	2.31	0	
1	-6	5	1		18.19	16.91	-16.90	-.55	.45899	1.28	6.59	182	
1	-6	6	1		5.01	2.98	2.97	.24	.52916	2.03	4.59	4	
1	-6	7	1		4.21	3.81	3.79	.35	.60169	.40	.63	5	
1	-6	8	1		19.32	18.03	-18.03	-.40	.67583	1.29	4.91	182	
1	-6	9	1	L	2.10	.83	.83	-.07	.75110	1.27	.85	356	
1	-5	-9	1	L	3.83	3.27	3.27	-.06	.74170	.56	.65	359	
1	-5	-8	1		6.09	5.19	-5.18	-.33	.66516	.89	1.74	184	
1	-5	-7	1		14.98	14.71	-14.71	.35	.58944	.26	1.03	178	
1	-5	-6	1		15.58	15.23	15.23	.13	.51491	.35	1.57	0	
1	-5	-5	1		18.99	18.54	-18.53	-.54	.44217	.46	2.42	182	
1	-5	-4	1	L	1.59	.39	-.30	.25	.37227	1.20	1.06	140	
1	-5	-3	1		14.68	14.08	-14.07	.49	.30716	.61	3.75	178	
1	-5	-2	1		76.03	73.56	-73.56	-.61	.25060	2.48	6.37	181	
1	-5	-1	1		13.76	12.67	12.67	-.17	.20963	1.09	6.53	0	
1	-5	0	1		74.27	73.47	73.46	.72	.19437	.80	2.38	0	
1	-5	1	1		8.57	8.78	8.78	-.24	.21048	-.22	-1.26	359	
1	-5	2	1		79.37	78.98	-78.98	-.53	.25202	.39	.99	181	
1	-5	3	1		34.89	33.43	33.43	.51	.30890	1.46	4.52	0	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	-5	4	1		30.87	30.61	30.61	.14	.37418	.25	.83	0	
1	-5	5	1		12.66	12.13	-12.12	-.50	.44418	.53	2.45	183	
1	-5	6	1		4.09	3.24	-3.24	.21	.51698	.84	1.55	176	
1	-5	7	1		10.21	10.13	10.13	.26	.59155	.07	.24	1	
1	-5	8	1		8.11	8.88	-8.87	-.36	.66730	-.77	-1.80	183	
1	-5	9	1		5.07	3.59	3.59	.02	.74386	1.48	2.29	0	
1	-4	-9	1	L	2.14	2.43	2.42	-.13	.72873	-.28	-.19	357	
1	-4	-8	1		10.84	10.08	-10.07	-.38	.65116	.76	2.27	183	
1	-4	-7	1		5.61	5.25	5.23	.41	.57415	.36	.77	4	
1	-4	-6	1		27.94	27.99	27.98	.18	.49798	-.04	-.21	0	
1	-4	-5	1		7.11	6.47	-6.45	-.55	.42309	.64	2.11	185	
1	-4	-4	1		5.15	4.33	4.32	.18	.35031	.83	2.34	2	
1	-4	-3	1		3.45	3.17	3.15	.42	.28128	.28	.65	7	
1	-4	-2	1		12.82	13.37	13.36	-.47	.21957	-.55	-3.87	358	
1	-4	-1	1		10.11	10.05	-10.05	-.04	.17319	.06	.36	181	
1	-4	0	1		56.46	54.28	54.28	.52	.15642	2.18	7.20	0	
1	-4	1	1		23.25	22.65	-22.65	-.37	.17785	.60	2.30	181	
1	-4	2	1	L	1.28	1.09	-1.06	-.28	.22690	.19	.21	195	
1	-4	3	1		8.16	8.15	8.13	.60	.28988	.00	.01	4	
1	-4	4	1		13.82	13.20	13.20	-.10	.35953	.61	3.43	0	
1	-4	5	1		25.60	25.69	-25.68	-.53	.43265	-.09	-.38	182	
1	-4	6	1		25.55	25.34	25.34	.39	.50774	.21	.91	0	
1	-4	7	1		9.04	8.03	8.03	.25	.58404	1.01	3.16	1	
1	-4	8	1		15.75	15.14	-15.13	-.45	.66113	.62	2.26	182	
1	-4	9	1	L	2.16	3.45	3.45	.05	.73877	-1.28	-.86	0	
1	-3	-9	1		4.83	3.91	-3.90	-.18	.71781	.93	1.43	183	
1	-3	-8	1		10.02	9.68	-9.67	-.25	.63941	.35	1.02	182	
1	-3	-7	1		8.74	8.45	8.43	.44	.56136	.30	.93	2	
1	-3	-6	1		29.51	28.99	-28.99	-.03	.48384	.53	2.90	181	
1	-3	-5	1		15.99	15.18	-15.17	-.53	.40714	.81	4.30	183	
1	-3	-4	1		13.40	13.23	13.23	.42	.33183	.16	.93	1	
1	-3	-3	1		75.28	71.49	71.49	.36	.25915	3.78	9.49	0	
1	-3	-2	1		78.17	76.94	-76.94	-.70	.19206	1.23	3.66	181	
1	-3	-1	1		45.09	43.15	-43.15	.03	.13897	1.94	6.63	179	
1	-3	0	1		64.04	62.26	62.26	.69	.12010	1.77	6.75	0	
1	-3	1	1		12.88	12.30	12.29	-.42	.14909	.58	3.43	359	
1	-3	2	1		34.66	31.45	31.45	-.38	.20669	3.21	8.83	0	
1	-3	3	1		19.32	18.76	-18.76	.57	.27551	.56	2.90	178	
1	-3	4	1		21.83	21.10	-21.10	-.04	.34897	.74	3.44	181	
1	-3	5	1		16.21	16.16	-16.15	-.44	.42467	.05	.26	182	
1	-3	6	1	L	1.69	.82	-.75	.34	.50159	.87	.72	155	
1	-3	7	1		7.01	6.97	6.97	.14	.57926	.04	.09	1	
1	-3	8	1		17.87	17.26	-17.26	-.39	.65740	.61	2.34	182	
1	-3	9	1	L	2.11	2.28	-2.27	.14	.73586	-.16	-.11	176	
1	-2	-9	1		7.88	7.85	-7.85	-.25	.70903	.03	.07	182	
1	-2	-8	1		5.46	4.89	-4.88	-.29	.63004	.56	1.08	184	
1	-2	-7	1		8.32	7.26	7.25	.47	.55125	1.06	3.16	3	
1	-2	-6	1		9.00	8.85	-8.85	.01	.47274	.15	.53	179	
1	-2	-5	1		37.96	36.60	-36.59	-.51	.39470	1.36	5.73	181	
1	-2	-4	1		17.79	17.82	-17.82	.33	.31746	-.03	-.21	178	
1	-2	-3	1	L	1.32	.31	.17	.26	.24179	1.01	1.07	57	
1	-2	-2	1	L	2.36	.56	-.16	-.53	.16980	1.81	3.66	253	
1	-2	-1	1		32.68	31.35	31.35	.16	.10907	1.33	4.97	0	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	-2	0	1		8.20	6.74	6.73	.44	.08745	1.46	8.64	3	
1	-2	1	1		8.43	7.35	-7.33	-.53	.12685	1.08	7.26	185	
1	-2	2	1		26.95	26.64	26.64	-.10	.19293	.31	1.20	0	
1	-2	3	1		75.57	73.33	73.32	.63	.26655	2.24	5.62	0	
1	-2	4	1		22.60	21.69	-21.69	-.28	.34287	.91	4.32	181	
1	-2	5	1		10.98	10.27	-10.26	-.44	.42043	.71	3.15	183	
1	-2	6	1		6.40	6.00	5.98	.50	.49865	.40	1.12	4	
1	-2	7	1		4.29	4.09	4.09	.11	.57727	.20	.36	1	
1	-2	8	1		8.24	7.87	-7.86	-.46	.65613	.37	.92	184	
1	-2	9	1	L	3.50	1.21	-1.20	.17	.73517	2.29	2.60	172	
1	-1	-9	1		4.42	3.51	-3.50	-.28	.70246	.91	1.33	185	
1	-1	-8	1		10.83	10.57	10.57	-.13	.62316	.27	.85	0	
1	-1	-7	1	L	1.77	.47	-.01	.47	.54395	1.30	1.03	91	
1	-1	-6	1		3.76	4.62	4.61	-.20	.46491	-.86	-1.54	358	
1	-1	-5	1		20.24	19.54	-19.53	-.46	.38611	.70	4.17	182	
1	-1	-4	1		28.23	28.31	28.30	.56	.30775	-.08	-.40	1	
1	-1	-3	1		5.12	4.47	-4.47	.18	.23029	.65	2.51	177	
1	-1	-2	1		68.85	66.90	-66.89	-.73	.15506	1.95	6.45	181	
1	-1	-1	1		29.99	28.57	28.57	.24	.08802	1.43	5.95	0	
1	-1	0	1		50.38	49.94	49.94	.58	.06433	.44	2.30	0	
1	-1	1	1		20.52	19.11	-19.10	-.55	.11498	1.41	6.64	182	
1	-1	2	1		13.43	14.02	14.02	-.19	.18707	-.59	-3.57	0	
1	-1	3	1		47.13	45.44	45.44	.58	.26355	1.69	4.19	0	
1	-1	4	1		7.32	7.85	7.84	-.22	.34148	-.53	-2.08	359	
1	-1	5	1	L	2.63	1.70	-1.66	-.33	.42006	.93	1.32	192	
1	-1	6	1	L	3.30	3.65	3.62	.42	.49898	-.35	-.55	6	
1	-1	7	1		9.99	9.64	-9.64	-.01	.57811	.36	1.16	181	
1	-1	8	1	L	1.97	1.93	-1.90	-.37	.65736	.03	.02	192	
1	-1	9	1	L	3.11	3.69	3.68	.25	.73670	-.58	-.57	3	
1	0	-9	1		7.98	7.65	-7.65	-.33	.69818	.33	.77	183	
1	0	-8	1		5.75	4.34	-4.33	-.16	.61884	1.41	2.91	183	
1	0	-7	1		12.20	12.08	12.07	.49	.53960	.12	.45	2	
1	0	-6	1		14.82	14.39	-14.38	-.15	.46050	.43	2.06	181	
1	0	-5	1	L	2.18	1.05	.97	-.41	.38163	1.13	1.46	338	
1	0	-4	1		11.91	11.49	-11.48	.44	.30317	.42	2.47	177	
1	0	-3	1		27.87	26.76	-26.76	.08	.22555	1.10	5.69	179	
1	0	-2	1		17.58	15.89	-15.88	-.52	.15008	1.69	10.46	182	
1	0	-1	1		7.43	6.30	-6.29	.35	.08285	1.13	7.74	176	
1	0	0	1		31.83	30.77	30.76	.31	.06242	1.06	5.41	0	
1	0	1	1		25.34	23.68	-23.67	-.63	.11670	1.66	5.83	182	
1	0	2	1		28.78	29.24	-29.24	.10	.18982	-.46	-1.82	179	
1	0	3	1		26.52	27.30	27.29	.60	.26671	-.77	-3.12	1	
1	0	4	1	L	3.01	3.17	-3.14	-.45	.34486	-.17	-.30	189	
1	0	5	1	L	2.13	1.23	1.19	-.31	.42357	.90	1.01	346	
1	0	6	1		11.36	10.82	10.81	.56	.50257	.54	2.19	2	
1	0	7	1		17.81	17.56	-17.56	-.04	.58176	.25	1.07	181	
1	0	8	1		21.55	20.48	-20.47	-.42	.66106	1.07	4.34	182	
1	0	9	1	L	3.24	3.91	3.90	.27	.74043	-.67	-.65	3	
1	1	-9	1	L	3.62	3.95	-3.93	-.35	.69622	-.33	-.39	186	
1	1	-8	1		6.74	6.64	6.64	.00	.61715	.09	.21	0	
1	1	-7	1		10.67	10.68	10.67	.46	.53825	-.01	-.05	2	
1	1	-6	1		35.44	35.10	-35.10	-.35	.45961	.34	1.27	181	
1	1	-5	1		5.74	6.05	6.04	-.33	.38140	-.31	-.95	357	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	1	-4	1		28.62	28.18	28.17	.65	.30393	.45	1.66	1	
1	1	-3	1		19.45	18.69	-18.69	-.02	.22798	.76	4.06	181	
1	1	-2	1		13.46	11.80	-11.78	-.69	.15578	1.65	11.48	184	
1	1	-1	1		20.07	20.12	-20.12	.41	.09617	-.05	-.26	178	
1	1	0	1		49.84	49.33	49.33	.42	.08319	.52	2.35	0	
1	1	1	1		20.91	20.08	-20.07	-.62	.13146	.83	3.60	182	
1	1	2	1		18.35	17.45	17.45	.01	.20083	.90	5.03	0	
1	1	3	1		11.64	10.75	10.74	.51	.27582	.89	5.49	2	
1	1	4	1		29.25	29.35	29.35	-.36	.35286	-.10	-.46	0	
1	1	5	1	L	1.64	1.87	1.86	-.18	.43085	-.23	-.20	355	
1	1	6	1		15.20	15.14	15.13	.46	.50935	.06	.29	1	
1	1	7	1		7.06	7.06	7.06	-.16	.58817	-.00	-.00	359	
1	1	8	1		8.25	7.76	-7.75	-.31	.66719	.49	1.21	183	
1	1	9	1	L	4.04	4.35	4.34	.34	.74634	-.31	-.37	4	
1	2	-9	1		15.15	13.72	-13.71	-.39	.69660	1.44	4.87	182	
1	2	-8	1	L	3.00	2.77	2.77	-.02	.61810	.23	.26	0	
1	2	-7	1		20.70	19.80	19.79	.45	.53993	.91	4.33	1	
1	2	-6	1		9.28	8.67	-8.67	-.29	.46227	.60	2.28	182	
1	2	-5	1	L	1.55	.37	.26	-.27	.38543	1.18	1.07	315	
1	2	-4	1		7.93	7.68	-7.67	.50	.31001	.24	1.14	176	
1	2	-3	1		28.14	25.84	-25.84	-.12	.23738	2.30	8.22	181	
1	2	-2	1		66.34	63.85	63.85	-.45	.17111	2.50	7.85	0	
1	2	-1	1		23.02	21.73	21.72	.50	.12207	1.29	6.08	1	
1	2	0	1		48.04	47.69	-47.69	.12	.11494	.35	1.34	179	
1	2	1	1		18.64	19.15	19.14	-.66	.15561	-.51	-2.40	359	
1	2	2	1		13.31	11.87	-11.86	.29	.21887	1.45	10.23	178	
1	2	3	1		12.25	12.16	12.15	.50	.29032	.09	.53	2	
1	2	4	1		30.09	29.88	-29.87	-.57	.36518	.21	.92	182	
1	2	5	1		9.61	9.28	-9.28	-.14	.44172	.33	1.33	181	
1	2	6	1		32.93	32.28	32.28	.56	.51920	.65	2.64	1	
1	2	7	1		4.14	3.77	3.77	-.19	.59726	.36	.59	358	
1	2	8	1		8.44	8.25	-8.24	-.34	.67568	.20	.49	183	
1	2	9	1	L	3.26	1.47	1.43	.34	.75437	1.79	1.82	13	
1	3	-9	1		18.15	16.63	-16.63	-.38	.69933	1.51	5.50	182	
1	3	-8	1		12.49	11.03	11.03	.14	.62168	1.47	5.19	0	
1	3	-7	1		6.37	5.36	5.35	.39	.54462	1.01	2.62	4	
1	3	-6	1		27.97	25.63	-25.63	-.47	.46842	2.34	9.45	182	
1	3	-5	1		30.98	29.62	-29.62	-.17	.39360	1.35	4.32	181	
1	3	-4	1		34.05	33.06	33.05	.66	.32110	.99	2.98	1	
1	3	-3	1		6.39	6.39	6.39	-.21	.25296	-.00	-.01	359	
1	3	-2	1		50.69	47.76	-47.75	-.58	.19380	2.93	8.54	181	
1	3	-1	1		16.42	15.10	15.09	.54	.15434	1.33	6.92	2	
1	3	0	1		41.12	39.57	-39.57	.22	.15090	1.55	5.06	179	
1	3	1	1		96.22	94.08	94.08	-.61	.18550	2.14	6.57	0	
1	3	2	1	L	1.93	.42	-.37	.20	.24237	1.50	2.18	151	
1	3	3	1		9.10	8.54	-8.53	.39	.30946	.56	2.74	177	
1	3	4	1		34.51	33.75	-33.75	-.46	.38141	.76	2.52	181	
1	3	5	1		11.57	11.84	-11.84	-.01	.45593	-.27	-1.14	181	
1	3	6	1		5.18	4.50	4.48	.43	.53195	.68	1.52	5	
1	3	7	1		6.06	6.52	-6.52	-.29	.60889	-.46	-1.01	183	
1	3	8	1		13.99	13.58	-13.58	-.21	.68646	.41	1.38	181	
1	4	-9	1		7.37	6.48	-6.47	-.39	.70436	.89	1.95	184	
1	4	-8	1	L	1.94	.65	.64	.12	.62785	1.28	.93	10	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	4	-7	1		9.37	8.72	8.71	.36	.55223	.65	2.13	2	
1	4	-6	1		7.41	7.92	-7.91	-.38	.47792	-.51	-1.62	183	
1	4	-5	1		9.16	8.90	-8.90	-.10	.40564	.26	1.02	181	
1	4	-4	1		5.04	4.96	4.93	.49	.33671	.08	.24	5	
1	4	-3	1		43.98	41.07	-41.06	-.29	.27367	2.92	7.00	181	
1	4	-2	1		16.89	17.15	17.15	-.31	.22160	-.25	-1.44	359	
1	4	-1	1	L	2.52	1.28	1.14	.59	.18975	1.24	2.52	27	
1	4	0	1		49.75	48.70	48.70	-.07	.18867	1.05	3.12	0	
1	4	1	1		3.62	3.66	-3.61	-.61	.21881	-.04	-.11	190	
1	4	2	1		66.26	62.62	62.62	.46	.26990	3.66	9.07	0	
1	4	3	1		32.49	31.99	31.98	.35	.33243	.50	1.81	0	
1	4	4	1		6.44	4.64	4.59	-.63	.40107	1.80	5.57	353	
1	4	5	1		7.80	8.06	-8.06	.03	.47318	-.26	-.85	179	
1	4	6	1		13.91	13.76	13.75	.51	.54739	.15	.63	2	
1	4	7	1	L	1.93	.99	-.94	-.31	.62294	.94	.68	199	
1	4	8	1		9.87	9.46	-9.45	-.22	.69940	.42	1.12	182	
1	5	-9	1		5.73	4.49	4.48	-.36	.71166	1.24	2.16	356	
1	5	-8	1	L	3.52	2.97	-2.96	.26	.63653	.55	.70	174	
1	5	-7	1		4.37	4.46	4.45	.28	.56264	-.09	-.15	3	
1	5	-6	1		10.38	10.57	-10.56	-.53	.49057	-.19	-.71	183	
1	5	-5	1		8.66	8.36	8.36	.00	.42123	.29	1.11	0	
1	5	-4	1	L	1.90	1.02	.82	.61	.35624	.88	1.00	36	
1	5	-3	1		27.98	25.72	-25.72	-.37	.29844	2.26	8.53	181	
1	5	-2	1		25.40	23.84	-23.84	-.41	.25282	1.55	6.29	181	
1	5	-1	1		31.36	30.57	30.56	.60	.22684	.79	2.88	1	
1	5	0	1		11.03	10.04	-10.04	.01	.22735	.99	6.22	179	
1	5	1	1		67.44	65.69	-65.69	-.54	.25418	1.75	4.49	181	
1	5	2	1		25.11	24.29	24.29	.36	.30036	.82	3.46	0	
1	5	3	1		24.66	24.32	24.32	.23	.35850	.34	1.56	0	
1	5	4	1		20.08	20.31	20.30	-.49	.42369	-.23	-1.25	359	
1	5	5	1		15.04	15.10	-15.10	.15	.49314	-.06	-.28	179	
1	5	6	1	L	1.96	2.25	-2.22	.36	.56530	-.29	-.24	170	
1	5	7	1	L	3.46	.70	.58	-.39	.63924	2.76	3.51	327	
1	5	8	1	L	2.04	.48	.47	-.09	.71440	1.57	1.07	350	
1	6	-9	1		9.50	8.12	-8.11	-.36	.72115	1.38	3.45	183	
1	6	-8	1	L	2.04	2.43	2.42	.23	.64762	-.38	-.28	5	
1	6	-7	1	L	1.84	1.12	-1.09	.24	.57572	.72	.55	167	
1	6	-6	1	L	1.73	1.12	-1.03	-.43	.50614	.61	.49	203	
1	6	-5	1		5.39	4.85	4.85	.07	.44000	.55	1.41	0	
1	6	-4	1		18.41	17.27	-17.27	.42	.37909	1.14	5.71	178	
1	6	-3	1		17.25	16.65	-16.65	-.43	.32636	.60	3.43	182	
1	6	-2	1		11.46	10.66	-10.66	-.14	.28635	.80	4.61	181	
1	6	-1	1		41.02	39.67	39.66	.62	.26491	1.35	3.28	0	
1	6	0	1		29.93	29.63	-29.63	-.26	.26655	.30	.97	181	
1	6	1	1		11.93	10.63	-10.62	-.51	.29087	1.30	7.37	183	
1	6	2	1	L	1.86	2.44	2.37	.58	.33295	-.58	-.62	13	
1	6	3	1		17.64	17.63	17.63	.17	.38704	.01	.05	0	
1	6	4	1		21.35	20.94	-20.93	-.62	.44881	.42	2.26	182	
1	6	5	1		9.61	9.63	9.63	.20	.51551	-.03	-.10	1	
1	6	6	1		4.51	3.99	3.97	.41	.58546	.52	.90	5	
1	6	7	1		13.50	13.94	-13.93	-.39	.65762	-.44	-1.45	182	
1	6	8	1		8.75	7.84	-7.84	-.09	.73133	.91	2.15	181	
1	7	-9	1		7.29	6.65	-6.64	-.31	.73276	.64	1.29	183	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	7	-8	1		28.46	25.74	25.74	.35	.66100	2.71	10.65	0	
1	7	-7	1	L	2.81	2.38	-2.37	.15	.59127	.43	.49	176	
1	7	-6	1		18.52	16.54	-16.54	-.54	.52437	1.97	9.32	182	
1	7	-5	1		12.30	11.48	-11.48	.17	.46155	.82	3.54	179	
1	7	-4	1		36.35	35.67	35.67	.51	.40469	.68	1.75	0	
1	7	-3	1		7.27	6.89	-6.87	-.48	.35667	.38	1.37	185	
1	7	-2	1		24.05	22.35	-22.35	-.22	.32147	1.70	6.75	181	
1	7	-1	1		20.10	18.67	18.66	.60	.30358	1.43	6.92	1	
1	7	0	1		3.87	4.10	-4.09	-.18	.30606	-.22	-.51	183	
1	7	1	1		12.09	11.83	11.82	-.41	.32844	.26	1.35	358	
1	7	2	1		29.67	29.40	29.40	.45	.36710	.27	1.01	0	
1	7	3	1		6.00	5.54	5.54	.04	.41754	.46	1.26	0	
1	7	4	1		4.42	3.76	3.73	-.47	.47604	.66	1.32	353	
1	7	5	1		21.31	21.81	21.81	.30	.53997	-.50	-2.39	0	
1	7	6	1		7.30	7.28	7.27	.24	.60764	.02	.06	1	
1	7	7	1		9.45	9.25	-9.24	-.44	.67791	.20	.53	183	
1	7	8	1	L	2.16	1.18	1.18	.04	.75006	.98	.64	2	
1	8	-9	1		10.89	9.68	-9.67	-.29	.74637	1.21	3.32	182	
1	8	-8	1		7.45	6.36	6.35	.30	.67653	1.08	2.48	2	
1	8	-7	1		8.90	7.69	7.69	.10	.60911	1.20	3.43	0	
1	8	-6	1		14.75	13.37	-13.36	-.42	.54500	1.39	5.72	182	
1	8	-5	1		13.06	12.35	12.34	.22	.48551	.72	3.12	1	
1	8	-4	1		7.73	7.47	-7.46	.30	.43256	.26	.88	177	
1	8	-3	1		23.64	22.55	-22.55	-.51	.38883	1.09	4.65	182	
1	8	-2	1		7.55	7.65	7.65	.04	.35771	-.09	-.34	0	
1	8	-1	1		8.03	8.24	8.22	.57	.34266	-.21	-.81	3	
1	8	0	1		17.60	17.47	-17.47	-.42	.34578	.13	.62	182	
1	8	1	1		42.48	41.97	-41.97	-.35	.36661	.51	1.42	181	
1	8	2	1		28.39	27.39	27.38	.63	.40241	1.01	3.56	1	
1	8	3	1		8.17	8.62	-8.62	-.02	.44962	-.45	-1.48	181	
1	8	4	1		23.94	23.56	-23.55	-.56	.50504	.38	1.96	182	
1	8	5	1		17.94	18.40	18.40	.33	.56627	-.46	-1.97	1	
1	8	6	1		7.46	7.55	7.54	.27	.63163	-.09	-.22	2	
1	8	7	1	L	3.17	2.68	-2.65	-.42	.69995	.49	.50	189	
1	9	-8	1	L	2.52	1.78	1.74	.40	.69407	.74	.60	12	
1	9	-7	1	L	1.95	.33	.33	.01	.62904	1.62	1.16	1	
1	9	-6	1		21.09	19.43	-19.43	-.49	.56775	1.66	7.66	182	
1	9	-5	1		10.84	10.39	10.38	.30	.51155	.46	1.71	1	
1	9	-4	1		9.41	8.73	8.72	.36	.46229	.69	2.52	2	
1	9	-3	1		24.11	22.75	-22.74	-.53	.42241	1.37	6.01	182	
1	9	-2	1		6.06	5.40	5.40	-.03	.39476	.66	1.87	0	
1	9	-1	1		33.01	32.74	32.74	.52	.38202	.27	.87	0	
1	9	0	1		5.03	4.67	4.66	-.33	.38565	.35	.82	357	
1	9	1	1		14.31	14.46	-14.46	-.25	.40522	-.16	-.76	181	
1	9	2	1		10.07	9.78	9.77	.49	.43860	.28	1.07	2	
1	9	3	1		10.60	10.92	-10.92	-.13	.48294	-.32	-1.19	181	
1	9	4	1		8.71	9.01	-9.00	-.39	.53552	-.30	-.94	183	
1	9	5	1		7.17	6.89	6.88	.40	.59416	.28	.68	3	
1	9	6	1		6.50	5.87	-5.87	.11	.65723	.63	1.30	178	
1	9	7	1		11.58	12.57	-12.57	-.44	.72358	-1.00	-2.71	182	
1	10	-8	1		10.57	8.97	8.96	.34	.71348	1.60	4.49	2	
1	10	-7	1		8.86	7.74	-7.74	-.04	.65088	1.12	2.95	181	
1	10	-6	1		11.96	11.29	-11.28	-.36	.59240	.68	2.33	182	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	10	-5	1		15.79	14.60	14.60	.34	.53936	1.19	5.12	1	
1	10	-4	1		6.97	6.21	-6.20	.15	.49354	.77	2.16	178	
1	10	-3	1		34.73	33.76	-33.76	-.53	.45710	.97	2.81	181	
1	10	-2	1		7.27	6.99	6.99	.21	.43242	.28	.86	1	
1	10	-1	1		21.51	21.44	21.43	.47	.42157	.08	.34	1	
1	10	0	1		7.73	7.44	7.42	-.53	.42562	.29	.94	356	
1	10	1	1		23.47	23.98	23.98	-.17	.44415	-.51	-2.11	0	
1	10	2	1		22.67	22.54	22.53	.62	.47548	.13	.62	1	
1	10	3	1	L	1.83	2.47	2.46	-.19	.51728	-.64	-.49	356	
1	10	4	1		6.67	6.91	-6.89	-.44	.56725	-.24	-.57	184	
1	10	5	1		12.28	11.92	11.91	.41	.62342	.36	1.22	1	
1	10	6	1		5.53	5.29	5.28	.12	.68426	.24	.41	1	
1	10	7	1		16.90	17.11	-17.11	-.40	.74865	-.21	-.70	182	
1	11	-8	1		17.51	15.77	15.76	.40	.73459	1.74	5.85	1	
1	11	-7	1	L	3.63	2.66	-2.66	-.12	.67443	.97	1.15	183	
1	11	-6	1		17.75	16.39	-16.38	-.40	.61870	1.36	5.49	182	
1	11	-5	1		11.59	10.67	10.66	.39	.56869	.92	3.21	2	
1	11	-4	1	L	2.80	.32	-.26	.19	.52604	2.48	3.02	143	
1	11	-3	1		33.92	33.15	-33.15	-.52	.49266	.76	2.42	181	
1	11	-2	1		7.36	7.03	-7.03	.15	.47053	.33	.95	178	
1	11	-1	1	L	2.39	1.55	-1.50	.40	.46128	.84	.92	165	
1	11	0	1		39.83	39.17	-39.17	-.42	.46567	.66	1.95	181	
1	11	1	1		16.21	16.48	16.48	-.07	.48333	-.27	-1.23	0	
1	11	2	1		5.71	6.04	6.02	.46	.51289	-.33	-.73	4	
1	11	3	1		5.42	5.73	5.72	-.28	.55244	-.31	-.64	358	
1	11	4	1	L	1.95	.56	.49	-.26	.60002	1.39	1.00	332	
1	11	5	1		5.81	6.32	6.30	.45	.65386	-.51	-.94	4	
1	11	6	1		5.42	4.68	-4.68	-.03	.71256	.73	1.18	181	
1	12	-8	1		9.45	7.99	7.99	.32	.75728	1.45	3.46	2	
1	12	-7	1	L	3.33	.21	.14	-.16	.69953	3.12	3.41	312	
1	12	-6	1		5.79	5.76	-5.77	-.26	.64646	.01	.02	183	
1	12	-5	1		19.76	18.75	18.75	.40	.59931	1.00	4.27	1	
1	12	-4	1	L	1.85	.42	-.42	-.00	.55957	1.43	1.68	181	
1	12	-3	1		18.04	17.97	-17.96	-.48	.52892	.07	.33	182	
1	12	-2	1		24.62	23.99	23.99	.34	.50900	.63	2.60	0	
1	12	-1	1		6.69	6.47	-6.46	.32	.50110	.22	.58	177	
1	12	0	1		25.74	24.80	-24.80	-.57	.50577	.94	3.72	182	
1	12	1	1	L	2.62	.41	.41	.01	.52269	2.21	2.41	1	
1	12	2	1		22.95	23.02	23.01	.54	.55072	-.07	-.35	1	
1	12	3	1		12.17	12.62	-12.62	-.32	.58828	-.45	-1.55	182	
1	12	4	1	L	2.01	.44	.33	-.29	.63367	1.57	1.09	319	
1	12	5	1		13.08	12.43	12.42	.44	.68535	.65	2.03	2	
1	12	6	1	L	3.07	1.05	-1.05	-.03	.74199	2.02	1.85	182	
1	13	-7	1		5.70	5.04	-5.04	-.22	.72601	.66	1.09	183	
1	13	-6	1		19.79	17.64	-17.63	-.28	.67550	2.15	8.21	181	
1	13	-5	1		8.28	7.80	7.79	.43	.63103	.48	1.18	3	
1	13	-4	1		15.78	14.70	14.70	.03	.59396	1.08	4.25	0	
1	13	-3	1		17.39	15.88	-15.87	-.45	.56574	1.51	6.45	182	
1	13	-2	1		8.44	8.07	8.07	.28	.54775	.37	1.06	1	
1	13	-1	1		5.80	6.51	6.51	.25	.54101	-.71	-1.53	2	
1	13	0	1		5.94	6.07	-6.06	-.45	.54593	-.13	-.29	185	
1	13	1	1		10.25	9.92	9.92	.10	.56220	.33	1.07	0	
1	13	2	1		7.39	7.47	7.47	.38	.58890	-.09	-.21	2	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	13	3	1		18.03	17.78	-17.77	-.38	.62467	.25	.99	182	
1	13	4	1		15.87	15.96	15.96	-.12	.66808	-.09	-.31	0	
1	13	5	1		12.71	12.81	12.80	.45	.71772	-.10	-.30	2	
1	14	-7	1		10.73	9.45	-9.45	-.24	.75373	1.28	3.24	182	
1	14	-6	1		8.34	7.59	-7.59	-.14	.70566	.75	1.71	182	
1	14	-5	1		6.05	5.45	5.43	.41	.66370	.60	1.11	4	
1	14	-4	1		7.07	6.88	-6.88	-.14	.62906	.19	.42	182	
1	14	-3	1		11.12	9.89	-9.88	-.39	.60302	1.23	3.97	183	
1	14	-2	1		5.13	5.83	-5.81	.43	.58672	-.69	-1.23	175	
1	14	-1	1	L	2.44	3.50	3.49	.16	.58098	-1.05	-.94	2	
1	14	0	1		20.66	20.76	-20.76	-.55	.58611	-.10	-.43	182	
1	14	1	1		10.49	10.92	10.92	.16	.60184	-.43	-1.30	0	
1	14	2	1	L	2.14	2.92	2.89	.42	.62735	-.78	-.57	8	
1	14	3	1		13.64	13.38	-13.37	-.40	.66154	.26	.86	182	
1	14	4	1		7.10	6.91	-6.91	-.13	.70312	.19	.38	182	
1	14	5	1		11.54	12.23	12.23	.41	.75088	-.69	-1.83	1	
1	15	-6	1	L	4.05	2.01	2.01	-.15	.73681	2.04	2.40	356	
1	15	-5	1	L	3.80	1.97	1.92	.41	.69718	1.84	2.16	12	
1	15	-4	1	L	4.05	4.09	-4.09	-.11	.66477	-.04	-.05	182	
1	15	-3	1	L	2.05	2.57	-2.55	-.35	.64069	-.52	-.36	188	
1	15	-2	1		15.40	15.51	15.50	.36	.62588	-.11	-.39	1	
1	15	-1	1		4.64	4.11	4.11	.09	.62102	.53	.83	1	
1	15	0	1		13.80	13.39	-13.38	-.42	.62633	.41	1.41	182	
1	15	1	1		8.12	7.46	7.46	.23	.64157	.66	1.57	1	
1	15	2	1		6.59	7.97	7.96	.26	.66604	-1.38	-2.67	1	
1	15	3	1		4.85	4.94	-4.92	-.42	.69879	-.09	-.12	185	
1	15	4	1	L	2.90	.17	.17	.02	.73871	2.73	2.39	5	
1	16	-5	1	L	3.33	3.68	3.66	.37	.73136	-.35	-.34	5	
1	16	-4	1		18.50	17.03	-17.03	-.25	.70100	1.47	5.30	181	
1	16	-3	1	L	3.21	3.81	-3.80	-.27	.67867	-.61	-.60	185	
1	16	-2	1		15.12	14.57	14.56	.46	.66519	.55	1.86	1	
1	16	-1	1	L	2.06	1.62	-1.62	.01	.66110	.44	.30	179	
1	16	0	1		5.77	5.39	-5.37	-.48	.66657	.37	.64	186	
1	16	1	1		4.92	5.77	5.77	.28	.68138	-.86	-1.22	2	
1	16	2	1		19.90	19.56	19.56	.28	.70493	.34	1.24	0	
1	16	3	1		10.93	11.17	-11.16	-.42	.73636	-.24	-.62	183	
1	17	-4	1		10.10	10.03	-10.03	-.22	.73765	.07	.17	182	
1	17	-3	1		15.51	14.65	-14.65	-.22	.71691	.86	2.75	181	
1	17	-2	1	L	2.14	1.48	1.43	.38	.70462	.67	.44	14	
1	17	-1	1		5.09	4.85	-4.85	-.06	.70122	.24	.35	181	
1	17	0	1		9.81	10.06	-10.06	-.35	.70683	-.26	-.64	182	
1	17	1	1		8.17	8.05	8.05	.32	.72126	.12	.26	2	
1	17	2	1	L	4.24	4.28	4.28	.13	.74397	-.04	-.04	1	
1	18	-3	1		4.82	4.51	-4.51	-.14	.75539	.30	.39	182	
1	18	-2	1		4.77	5.18	5.16	.44	.74416	-.41	-.55	4	
1	18	-1	1	L	4.53	3.97	-3.96	-.13	.74137	.56	.72	182	
1	18	0	1		10.31	10.39	-10.39	-.37	.74711	-.08	-.19	183	
2	-19	-1	1		5.61	6.73	-6.72	-.39	.75110	-1.12	-1.68	184	
2	-19	0	1		7.42	6.71	-6.71	.09	.74324	.70	1.35	179	
2	-19	1	1		5.80	6.26	6.26	.31	.74388	-.46	-.72	2	
2	-19	2	1		11.80	12.64	-12.64	-.30	.75299	-.84	-2.20	182	
2	-18	-3	1		8.48	8.70	8.70	.36	.75242	-.23	-.48	2	
2	-18	-2	1	L	2.18	1.61	1.61	.05	.72777	.57	.36	1	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-18	-1	1		8.11	8.34	-8.33	-.44	.71124	-.23	-.46	184	
2	-18	0	1		4.98	4.17	4.17	.23	.70339	.81	1.17	3	
2	-18	1	1		12.53	12.44	12.43	.31	.70451	.10	.28	1	
2	-18	2	1		16.18	15.18	-15.18	-.41	.71457	1.00	3.35	182	
2	-18	3	1		5.44	5.07	-5.07	-.05	.73320	.38	.56	181	
2	-17	-4	1	L	4.56	5.61	-5.61	-.32	.74724	-1.04	-1.33	184	
2	-17	-3	1	L	3.98	4.29	-4.27	.38	.71402	-.31	-.35	174	
2	-17	-2	1		8.77	8.84	8.84	.07	.68846	-.06	-.15	0	
2	-17	-1	1		6.56	6.05	-6.04	-.41	.67144	.51	1.01	194	
2	-17	0	1		9.89	9.82	9.82	.22	.66360	.07	.19	1	
2	-17	1	1		8.19	8.51	8.51	.23	.66527	-.31	-.72	1	
2	-17	2	1	L	3.07	3.15	-3.13	-.38	.67639	-.09	-.09	187	
2	-17	3	1	L	2.13	2.56	2.56	.05	.69650	-.43	-.28	1	
2	-17	4	1		9.34	9.48	9.48	.33	.72485	-.15	-.36	2	
2	-16	-5	1		7.32	7.25	-7.24	-.26	.75184	.07	.14	183	
2	-16	-4	1		4.55	2.71	2.70	-.19	.71041	1.84	2.49	356	
2	-16	-3	1		7.06	7.03	7.01	.45	.67586	.04	.08	3	
2	-16	-2	1		13.69	13.58	-13.58	-.10	.64929	.11	.36	181	
2	-16	-1	1		11.82	11.15	-11.14	-.44	.63172	.67	2.14	183	
2	-16	0	1		15.10	15.19	15.19	.38	.62389	-.09	-.32	1	
2	-16	1	1		11.30	11.67	11.67	.22	.62618	-.37	-1.11	1	
2	-16	2	1	L	4.21	4.89	-4.86	-.49	.63848	-.67	-.92	186	
2	-16	3	1		8.68	7.99	-7.99	.08	.66023	.69	1.75	179	
2	-16	4	1		12.17	11.81	11.81	.38	.69053	.35	1.06	1	
2	-16	5	1	L	2.16	3.15	-3.14	-.29	.72833	-.99	-.64	186	
2	-15	-5	1		9.74	10.22	-10.21	-.30	.71709	-.48	-1.16	182	
2	-15	-4	1		5.83	5.93	-5.93	-.23	.67400	-.11	-.18	183	
2	-15	-3	1		8.67	8.44	8.43	.45	.63798	.23	.58	3	
2	-15	-2	1		11.09	11.58	-11.57	-.08	.61028	-.48	-1.51	181	
2	-15	-1	1		4.52	5.68	-5.67	-.38	.59209	-1.16	-1.81	184	
2	-15	0	1	L	2.76	.77	-.69	.34	.58428	1.99	2.10	153	
2	-15	1	1		20.00	19.98	19.98	.11	.58727	.02	.08	0	
2	-15	2	1		9.54	9.75	-9.74	-.42	.60090	-.21	-.63	183	
2	-15	3	1	L	2.51	.51	.46	.20	.62447	2.01	1.78	23	
2	-15	4	1		4.64	4.98	4.97	.28	.65692	-.34	-.50	3	
2	-15	5	1		9.61	9.11	-9.10	-.38	.69700	.50	1.27	183	
2	-15	6	1		4.82	3.57	3.57	-.03	.74348	1.25	1.74	0	
2	-14	-6	1	L	2.21	2.85	2.84	.30	.73378	-.65	-.41	5	
2	-14	-5	1		13.59	13.79	-13.78	-.38	.68296	-.19	-.62	182	
2	-14	-4	1	L	2.99	3.20	-3.20	-.07	.63806	-.21	-.21	182	
2	-14	-3	1		13.31	13.47	13.46	.50	.60042	-.16	-.55	2	
2	-14	-2	1		6.69	6.81	-6.81	-.26	.57147	-.12	-.29	183	
2	-14	-1	1		14.67	15.10	-15.09	-.39	.55258	-.42	-1.68	182	
2	-14	0	1	L	3.80	3.77	3.74	.51	.54479	.03	.04	7	
2	-14	1	1		7.80	8.33	8.33	.09	.54858	-.53	-1.48	0	
2	-14	2	1		13.52	13.34	13.33	-.53	.56371	.18	.70	358	
2	-14	3	1		11.53	11.53	11.53	.22	.58932	-.01	-.02	1	
2	-14	4	1		12.93	12.62	12.62	.32	.62411	.31	1.04	1	
2	-14	5	1		8.81	7.78	-7.77	-.38	.66665	1.02	2.60	183	
2	-14	6	1		5.22	4.50	-4.50	-.03	.71555	.71	1.08	181	
2	-13	-6	1		14.63	14.30	14.30	.34	.70233	.33	1.06	1	
2	-13	-5	1		5.97	6.82	-6.81	-.41	.64955	-.85	-1.54	184	
2	-13	-4	1		15.40	14.90	-14.90	-.10	.60270	.49	1.86	181	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-13	-3	1	L	2.05	.55	-.29	.47	.56326	1.50	1.21	121	
2	-13	-2	1		12.95	13.04	13.04	-.23	.53290	-.09	-.36	0	
2	-13	-1	1		7.95	7.85	-7.84	-.29	.51321	.10	.29	183	
2	-13	0	1		13.85	14.39	-14.38	.44	.50544	-.54	-2.23	178	
2	-13	1	1		19.27	18.98	-18.98	-.05	.51015	.29	1.35	181	
2	-13	2	1		5.07	4.09	4.07	-.42	.52700	.98	1.99	355	
2	-13	3	1		18.50	18.18	18.18	.35	.55488	.32	1.41	1	
2	-13	4	1		4.81	4.20	4.20	.18	.59224	.61	1.08	2	
2	-13	5	1		10.98	10.66	-10.65	-.46	.63741	.32	.96	183	
2	-13	6	1		6.49	6.47	-6.47	.10	.68886	.03	.05	179	
2	-13	7	1		19.01	18.24	18.24	.35	.74529	.77	2.66	1	
2	-12	-7	1		4.71	2.03	-2.01	.24	.73129	2.68	3.71	173	
2	-12	-6	1	L	2.52	1.83	1.81	.21	.67184	.70	.58	6	
2	-12	-5	1		10.40	10.63	-10.62	-.47	.61697	-.23	-.68	183	
2	-12	-4	1		9.13	9.18	9.18	.09	.56800	-.05	-.14	0	
2	-12	-3	1		14.98	15.00	14.99	.49	.52658	-.02	-.07	1	
2	-12	-2	1		18.71	18.90	-18.89	-.43	.49462	-.19	-.93	182	
2	-12	-1	1		3.82	4.21	-4.20	-.26	.47401	-.39	-.64	184	
2	-12	0	1		14.96	14.47	14.46	.60	.46628	.50	2.29	2	
2	-12	1	1	L	1.78	3.45	-3.45	-.08	.47206	-1.67	-1.32	182	
2	-12	2	1		16.73	16.97	-16.96	-.51	.49087	-.24	-1.14	182	
2	-12	3	1	L	1.78	1.24	-1.19	.36	.52131	.53	.42	163	
2	-12	4	1		13.35	13.16	13.15	.21	.56147	.20	.76	0	
2	-12	5	1	L	1.94	.77	-.65	-.43	.60946	1.16	.84	214	
2	-12	6	1		7.29	6.86	-6.86	.10	.66356	.43	.97	179	
2	-12	7	1	L	2.08	1.37	-1.35	.28	.72241	.71	.48	168	
2	-11	-7	1	L	2.13	1.14	-1.10	.29	.70393	.99	.69	165	
2	-11	-6	1	L	4.08	1.92	-1.91	.25	.64246	2.16	3.03	172	
2	-11	-5	1		6.29	6.81	-6.79	-.47	.58538	-.52	-1.13	184	
2	-11	-4	1	L	1.84	.35	.34	.05	.53412	1.49	1.13	9	
2	-11	-3	1		5.69	5.13	5.12	.43	.49049	.56	1.31	4	
2	-11	-2	1		4.99	4.38	-4.37	-.36	.45670	.60	1.31	185	
2	-11	-1	1		4.35	4.34	4.34	-.15	.43504	.01	.02	359	
2	-11	0	1		35.87	35.58	35.58	.49	.42736	.29	.89	0	
2	-11	1	1	L	1.72	1.68	1.67	-.23	.43439	.04	.03	353	
2	-11	2	1		15.92	15.56	-15.55	-.35	.45546	.36	1.73	182	
2	-11	3	1		13.39	13.74	13.74	.48	.48876	-.36	-1.52	2	
2	-11	4	1		12.77	12.30	12.30	.04	.53200	.47	1.91	0	
2	-11	5	1	L	2.00	3.63	-3.60	-.49	.58296	-1.63	-1.28	188	
2	-11	6	1		16.75	15.76	15.76	.24	.63981	.99	3.74	0	
2	-11	7	1	L	2.08	1.98	-1.96	.29	.70112	.10	.07	171	
2	-10	-8	1	L	3.51	2.91	-2.90	-.29	.74454	.60	.62	186	
2	-10	-7	1		12.88	12.79	12.79	.35	.67788	.09	.28	1	
2	-10	-6	1		9.21	9.16	-9.16	.08	.61432	.05	.14	179	
2	-10	-5	1		12.59	12.03	-12.01	-.51	.55493	.57	2.15	183	
2	-10	-4	1		15.33	14.90	-14.90	.26	.50120	.43	1.91	178	
2	-10	-3	1		12.27	12.53	12.52	.43	.45513	-.26	-1.11	1	
2	-10	-2	1		21.80	22.07	-22.07	-.57	.41926	-.27	-1.14	182	
2	-10	-1	1		8.68	8.63	-8.63	-.12	.39636	.05	.19	181	
2	-10	0	1		17.49	16.99	16.98	.64	.38873	.50	2.46	2	
2	-10	1	1	L	3.43	3.24	-3.24	-.25	.39726	.18	.30	185	
2	-10	2	1		16.12	15.86	-15.85	-.43	.42096	.26	1.32	182	
2	-10	3	1		17.92	17.99	17.99	.47	.45748	-.07	-.37	1	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-10	4	1	L	2.27	2.46	-2.46	.07	.50405	-.19	-.21	178	
2	-10	5	1		18.49	17.73	-17.72	-.43	.55814	.76	3.33	182	
2	-10	6	1	L	2.25	1.00	-.97	.23	.61780	1.25	1.09	166	
2	-10	7	1		10.91	9.69	9.68	.20	.68156	1.23	3.55	1	
2	-10	8	1		9.34	9.45	-9.44	-.34	.74837	-.11	-.26	183	
2	-9	-8	1		7.92	8.26	-8.25	-.33	.72178	-.34	-.73	183	
2	-9	-7	1		16.19	16.25	16.24	.39	.65329	-.06	-.22	1	
2	-9	-6	1		10.71	10.60	10.60	.12	.58762	.11	.35	0	
2	-9	-5	1		10.96	10.98	-10.97	-.49	.52583	-.03	-.09	183	
2	-9	-4	1		14.54	14.67	-14.67	.21	.46946	-.14	-.61	179	
2	-9	-3	1		19.46	19.22	-19.22	.33	.42068	.24	1.24	179	
2	-9	-2	1		10.11	10.72	10.71	-.47	.36242	-.61	-2.45	358	
2	-9	-1	1		7.07	7.32	-7.32	.03	.35806	-.26	-.84	179	
2	-9	0	1		19.72	18.84	18.83	.47	.35051	.89	4.14	1	
2	-9	1	1	L	1.62	1.11	-1.03	-.40	.36083	.51	.44	202	
2	-9	2	1	L	2.72	3.21	-3.20	-.23	.38760	-.48	-.69	185	
2	-9	3	1		37.39	36.97	36.96	.57	.42773	.42	1.29	0	
2	-9	4	1		9.67	9.41	-9.41	-.13	.47788	.26	.97	181	
2	-9	5	1		12.35	11.55	-11.55	-.47	.53523	.79	3.08	183	
2	-9	6	1		4.77	4.48	4.47	.37	.59771	.29	.52	4	
2	-9	7	1		6.79	5.34	5.33	.19	.66389	1.45	3.06	2	
2	-9	8	1		19.08	18.53	-18.53	-.40	.73275	.55	1.95	182	
2	-8	-8	1	L	2.09	.76	.73	-.21	.70062	1.33	.69	344	
2	-8	-7	1		10.23	9.57	9.56	.43	.63034	.66	1.95	2	
2	-8	-6	1	L	1.83	.24	.23	-.07	.56256	1.59	1.22	343	
2	-8	-5	1		18.46	18.70	-18.70	-.50	.49831	-.24	-1.16	182	
2	-8	-4	1		37.86	36.79	36.79	.43	.43914	1.07	3.75	0	
2	-8	-3	1		10.58	10.95	-10.94	.30	.38738	-.37	-1.54	178	
2	-8	-2	1		37.95	37.50	-37.49	-.66	.34638	.45	1.29	182	
2	-8	-1	1		9.88	9.19	-9.19	.07	.32028	.69	3.21	179	
2	-8	0	1		21.14	21.00	20.99	.61	.31284	.14	.63	1	
2	-8	1	1		5.92	5.91	5.90	-.41	.32535	.01	.02	357	
2	-8	2	1		8.39	8.09	8.09	-.29	.35570	.30	1.17	358	
2	-8	3	1		22.10	21.72	21.71	.52	.39986	.38	1.70	1	
2	-8	4	1		27.19	27.23	27.23	-.09	.45380	-.05	-.20	0	
2	-8	5	1		5.51	5.04	-5.03	-.37	.51447	.47	1.12	185	
2	-8	6	1		16.54	16.27	16.26	.34	.57975	.28	1.15	1	
2	-8	7	1	L	3.00	.57	.56	.08	.64826	2.43	2.64	8	
2	-8	8	1	L	3.03	1.34	-1.29	-.36	.71906	1.69	1.66	196	
2	-7	-9	1	L	2.45	1.14	-1.11	-.26	.75473	1.31	.98	193	
2	-7	-8	1		14.73	14.51	-14.51	-.24	.68119	.22	.74	181	
2	-7	-7	1		16.45	16.21	16.20	.45	.60920	.24	.94	1	
2	-7	-6	1		7.83	7.34	-7.33	-.03	.53937	.49	1.45	181	
2	-7	-5	1	L	3.55	2.25	-2.21	-.45	.47265	1.30	2.16	192	
2	-7	-4	1		9.77	8.85	8.84	.35	.41057	.92	3.64	2	
2	-7	-3	1		7.56	7.49	-7.48	.19	.35557	.07	.26	178	
2	-7	-2	1		46.04	45.80	-45.80	-.51	.31141	.24	.53	181	
2	-7	-1	1		11.03	10.65	10.65	.22	.28323	.38	2.04	1	
2	-7	0	1		34.38	32.61	-32.61	.39	.27596	1.77	5.79	179	
2	-7	1	1		37.25	36.06	-36.06	-.54	.29116	1.19	3.81	181	
2	-7	2	1		3.25	3.06	-3.06	-.06	.32571	.19	.38	182	
2	-7	3	1		14.87	14.50	14.49	.60	.37428	.37	1.99	2	
2	-7	4	1		17.12	16.92	-16.92	-.30	.43218	.19	.99	182	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-7	5	1		10.07	10.47	-10.46	-.39	.49614	-.40	-1.49	183	
2	-7	6	1		22.97	21.93	21.92	.48	.56412	1.04	4.70	1	
2	-7	7	1	L	1.98	.45	.44	.07	.63482	1.53	1.08	8	
2	-7	8	1	L	2.06	3.14	-3.12	-.41	.70742	-1.06	-.72	188	
2	-6	-9	1	L	2.25	2.85	-2.84	-.30	.73851	-.61	-.40	187	
2	-6	-8	1		6.28	6.25	-6.25	-.09	.66367	.03	.07	181	
2	-6	-7	1		16.33	15.93	15.92	.47	.59008	.40	1.64	1	
2	-6	-6	1		16.15	15.92	-15.91	-.24	.51829	.24	1.08	181	
2	-6	-5	1		19.05	18.58	-18.58	-.43	.44916	.47	2.43	182	
2	-6	-4	1		40.66	40.22	40.21	.57	.38413	.46	1.52	0	
2	-6	-3	1		17.07	16.64	16.64	.14	.32566	.43	2.66	0	
2	-6	-2	1		39.84	39.96	-39.95	-.69	.27793	-.11	-.27	181	
2	-6	-1	1		44.82	40.36	40.36	.26	.24724	4.46	11.32	0	
2	-6	0	1		15.65	15.36	15.35	.51	.24020	.29	1.59	1	
2	-6	1	1		30.18	29.53	-29.52	-.53	.25876	.66	2.20	182	
2	-6	2	1		9.74	9.80	9.80	-.12	.29818	-.06	-.31	0	
2	-6	3	1		6.60	5.97	5.95	.52	.35150	.62	2.19	5	
2	-6	4	1		4.18	4.59	4.58	-.25	.41338	-.41	-.87	357	
2	-6	5	1	L	1.68	.42	-.32	-.27	.48052	1.26	1.05	220	
2	-6	6	1		5.47	4.83	-4.81	.42	.55101	.65	1.47	175	
2	-6	7	1		4.47	4.39	-4.39	-.05	.62371	.08	.12	181	
2	-6	8	1		9.22	8.54	-8.53	-.34	.69793	.68	1.73	183	
2	-5	-9	1	L	2.70	3.52	-3.50	-.34	.72420	-.82	-.68	186	
2	-5	-8	1	L	2.00	1.77	-1.77	-.12	.64819	.23	.16	184	
2	-5	-7	1	L	3.50	2.75	2.72	.46	.57318	.74	1.06	9	
2	-5	-6	1		4.69	3.98	-3.97	-.19	.49960	.71	1.50	183	
2	-5	-5	1		11.93	12.43	-12.43	-.35	.42821	-.50	-2.21	182	
2	-5	-4	1		22.22	21.93	21.93	.45	.36029	.29	1.74	1	
2	-5	-3	1		36.53	35.52	-35.52	.00	.29825	1.01	3.17	179	
2	-5	-2	1		28.20	27.02	-27.02	-.50	.24654	1.18	4.93	182	
2	-5	-1	1		53.17	51.94	51.94	.40	.21284	1.23	3.40	0	
2	-5	0	1		53.01	50.54	50.54	.26	.20618	2.47	6.99	0	
2	-5	1	1		31.70	31.12	-31.11	-.64	.22894	.58	2.09	182	
2	-5	2	1		15.02	14.84	14.84	.14	.27387	.18	1.10	0	
2	-5	3	1		22.41	21.87	21.86	.57	.33209	.54	2.60	1	
2	-5	4	1	L	1.59	.46	-.03	-.46	.39781	1.13	1.00	266	
2	-5	5	1		15.14	15.12	15.12	-.26	.46788	.02	.11	359	
2	-5	6	1		5.72	5.79	5.77	.53	.54062	-.07	-.15	5	
2	-5	7	1		4.86	4.24	-4.24	-.07	.61507	.62	1.09	182	
2	-5	8	1		13.18	12.36	-12.36	-.38	.69068	.82	2.65	182	
2	-4	-9	1		5.18	5.00	-4.99	-.37	.71189	.18	.29	185	
2	-4	-8	1		12.86	11.88	11.88	.04	.63491	.98	3.34	0	
2	-4	-7	1		6.20	4.88	4.85	.45	.55869	1.32	3.26	5	
2	-4	-6	1		18.37	18.14	-18.14	-.39	.48357	.23	1.12	182	
2	-4	-5	1		29.63	29.54	-29.54	-.30	.41017	.08	.43	181	
2	-4	-4	1		29.14	28.04	28.04	.65	.33961	1.10	5.37	1	
2	-4	-3	1		26.83	25.68	-25.68	-.06	.27407	1.15	5.76	181	
2	-4	-2	1		63.19	60.25	-60.25	-.65	.21813	2.94	8.10	181	
2	-4	-1	1		38.56	36.92	36.92	.43	.18095	1.64	4.85	0	
2	-4	0	1		64.88	64.82	-64.81	.36	.17491	.07	.21	179	
2	-4	1	1		25.26	25.01	-25.01	-.59	.20281	.24	.90	182	
2	-4	2	1		5.73	4.53	4.53	.07	.25370	1.20	4.72	0	
2	-4	3	1	L	2.65	2.81	2.77	.46	.31668	-.16	-.27	9	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-4	4	1		6.48	6.73	-6.72	-.39	.38587	-.25	-.79	184	
2	-4	5	1		3.81	1.90	1.90	-.12	.45847	1.91	3.71	357	
2	-4	6	1		6.22	6.41	6.39	.45	.53309	-.18	-.46	4	
2	-4	7	1	L	2.16	.84	-.82	-.20	.60899	1.32	1.15	194	
2	-4	8	1		4.82	5.24	-5.23	-.28	.68574	-.42	-.64	184	
2	-3	-9	1		13.52	13.61	-13.60	-.39	.70170	-.09	-.30	182	
2	-3	-8	1		8.88	8.68	8.68	.02	.62398	.20	.55	0	
2	-3	-7	1		22.88	22.48	22.46	.42	.54681	.40	1.93	1	
2	-3	-6	1		12.21	12.38	-12.37	-.32	.47048	-.16	-.69	182	
2	-3	-5	1		5.54	6.47	-6.47	-.21	.39547	-.93	-2.57	182	
2	-3	-4	1	L	2.60	2.94	-2.90	.50	.32268	-.35	-.57	170	
2	-3	-3	1	L	1.35	2.71	-2.71	-.19	.25405	-1.36	-1.42	184	
2	-3	-2	1		15.01	15.87	15.87	-.41	.19404	-.86	-5.59	359	
2	-3	-1	1		14.32	13.73	13.72	.55	.15314	.59	3.26	2	
2	-3	0	1	L	1.29	.11	-.08	.07	.14812	1.19	1.28	138	
2	-3	1	1		13.48	12.88	-12.87	-.66	.18199	.59	3.77	183	
2	-3	2	1		93.21	89.50	89.50	.33	.23873	3.71	9.87	0	
2	-3	3	1		10.57	10.52	-10.50	.47	.30586	.05	.28	177	
2	-3	4	1		33.42	32.89	-32.88	-.58	.37789	.53	1.76	182	
2	-3	5	1		7.03	6.46	6.46	-.10	.45248	.57	1.84	0	
2	-3	6	1		23.91	23.68	23.67	.54	.52856	.24	1.08	1	
2	-3	7	1		3.88	3.69	-3.69	-.21	.60555	.18	.28	184	
2	-3	8	1		7.69	7.51	-7.51	-.29	.68316	.17	.39	183	
2	-2	-9	1		8.57	8.93	-8.92	-.39	.69371	-.36	-.86	183	
2	-2	-8	1		14.84	14.38	14.37	.18	.61550	.46	1.72	0	
2	-2	-7	1		26.45	25.88	25.88	.38	.53772	.57	2.86	0	
2	-2	-6	1		37.34	38.19	-38.19	-.50	.46058	-.86	-4.36	181	
2	-2	-5	1	L	3.02	1.86	-1.86	-.14	.38446	1.16	1.99	185	
2	-2	-4	1		15.92	15.50	15.49	.67	.31013	.41	2.65	2	
2	-2	-3	1		26.26	25.58	-25.58	-.25	.23924	.68	3.71	181	
2	-2	-2	1		73.87	71.09	-71.09	-.54	.17603	2.78	8.66	181	
2	-2	-1	1		9.59	8.67	8.65	.55	.13201	.92	5.44	3	
2	-2	0	1		15.33	14.86	14.86	.16	.12867	.47	2.56	0	
2	-2	1	1	L	2.29	3.99	3.95	-.59	.16845	-1.71	-3.18	352	
2	-2	2	1		33.13	32.77	32.77	.25	.22997	.36	.92	0	
2	-2	3	1		5.04	3.66	3.65	.33	.30014	1.38	4.51	5	
2	-2	4	1		8.34	8.33	8.32	-.48	.37413	.00	.01	357	
2	-2	5	1		22.15	22.76	22.76	.05	.45006	-.61	-3.08	0	
2	-2	6	1	L	3.28	3.07	3.04	.42	.52709	.22	.32	7	
2	-2	7	1		12.70	12.08	-12.07	-.33	.60480	.62	2.25	182	
2	-2	8	1		5.62	4.25	-4.24	-.18	.68296	1.38	2.48	183	
2	-1	-9	1		11.91	11.24	-11.24	-.40	.68801	.66	2.03	183	
2	-1	-8	1		5.10	5.28	5.28	.15	.60960	-.18	-.35	1	
2	-1	-7	1	L	2.35	2.39	2.37	.33	.53155	-.04	-.05	7	
2	-1	-6	1	L	2.55	.59	-.42	-.41	.45406	1.96	2.57	225	
2	-1	-5	1		21.72	21.45	21.45	-.03	.37748	.27	1.63	0	
2	-1	-4	1		7.16	6.36	6.34	.48	.30249	.80	3.54	4	
2	-1	-3	1		63.33	58.90	-58.90	-.37	.23065	4.43	11.88	181	
2	-1	-2	1		67.97	66.59	-66.59	-.27	.16610	1.38	4.42	181	
2	-1	-1	1		21.00	21.29	-21.28	.64	.12111	-.29	-1.34	178	
2	-1	0	1		37.47	37.55	-37.55	-.13	.12015	-.08	-.30	181	
2	-1	1	1		45.48	44.02	-44.01	-.62	.16400	1.47	4.65	181	
2	-1	2	1		9.71	7.89	-7.88	.51	.22814	1.82	11.27	176	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-1	3	1		40.89	39.84	39.84	.32	.29981	1.05	2.38	0	
2	-1	4	1		42.50	42.44	-42.44	-.64	.37472	.06	.17	181	
2	-1	5	1		17.14	17.10	17.10	.07	.45126	.04	.18	0	
2	-1	6	1		16.64	16.57	16.57	.49	.52872	.07	.32	1	
2	-1	7	1	L	2.35	2.55	2.53	-.33	.60675	-.21	-.19	353	
2	-1	8	1	L	2.06	2.98	-2.98	-.16	.66515	-.92	-.63	184	
2	0	-9	1		14.74	14.67	-14.66	-.38	.68465	.07	.24	182	
2	0	-8	1		8.15	8.04	8.03	.31	.60633	.12	.32	2	
2	0	-7	1		3.93	4.30	4.29	.27	.52841	-.37	-.63	3	
2	0	-6	1	L	1.64	1.07	-.90	-.57	.45109	.58	.49	213	
2	0	-5	1		6.17	6.54	-6.54	.04	.37476	-.37	-1.22	179	
2	0	-4	1		53.52	55.36	55.35	.62	.30015	-1.83	-5.96	0	
2	0	-3	1		17.66	16.83	-16.82	-.41	.22898	.83	5.49	182	
2	0	-2	1		70.65	66.86	68.86	-.38	.16571	1.79	5.78	0	
2	0	-1	1		24.08	22.73	22.72	.61	.12319	1.35	6.38	1	
2	0	0	1		30.22	29.65	-29.65	-.04	.12484	.57	1.94	181	
2	0	1	1		35.08	34.88	-34.88	-.51	.16937	.20	.62	181	
2	0	2	1		12.15	11.20	11.19	.40	.23340	.95	6.16	2	
2	0	3	1		27.27	27.63	27.63	.16	.30488	-.37	-1.35	0	
2	0	4	1		7.60	7.86	-7.85	-.51	.37963	-.26	-.95	184	
2	0	5	1		12.46	12.74	-12.73	.22	.45605	-.28	-1.24	179	
2	0	6	1		17.53	17.55	17.54	.34	.53341	-.02	-.07	1	
2	0	7	1		5.31	5.91	-5.90	-.42	.61137	-.60	-1.15	185	
2	0	8	1		10.35	10.07	10.07	-.05	.68971	.28	.80	0	
2	1	-9	1		7.59	7.30	-7.29	-.36	.68367	.30	.69	183	
2	1	-8	1	L	3.92	3.37	-3.36	.27	.60575	.55	.84	175	
2	1	-7	1		9.72	8.98	8.97	.20	.52835	.75	2.74	1	
2	1	-6	1		32.63	32.29	-32.29	-.45	.45173	.34	1.40	181	
2	1	-5	1		6.48	6.40	6.40	.14	.37638	.08	.27	1	
2	1	-4	1		23.06	21.64	-21.63	.40	.30323	1.42	6.04	178	
2	1	-3	1		11.83	14.36	-14.35	-.50	.23436	-2.53	-17.27	183	
2	1	-2	1		3.43	2.42	-2.42	-.09	.17491	1.01	3.03	183	
2	1	-1	1		29.09	27.60	27.59	.66	.13767	1.49	4.92	1	
2	1	0	1		2.99	3.10	-3.09	-.33	.14143	-.11	-.28	187	
2	1	1	1		26.96	27.48	-27.47	-.51	.18368	-.51	-2.02	182	
2	1	2	1		52.47	52.87	52.86	.63	.24529	-.40	-1.02	0	
2	1	3	1		4.55	5.03	5.03	.13	.31510	-.48	-1.32	1	
2	1	4	1		16.74	16.46	-16.45	-.63	.38871	.27	1.56	183	
2	1	5	1		5.92	6.21	-6.21	.23	.46432	-.30	-.80	177	
2	1	6	1		10.07	9.98	9.97	.38	.54110	.09	.32	2	
2	1	7	1		14.32	14.18	-14.17	-.41	.61860	.15	.53	182	
2	1	8	1	L	3.11	1.07	-1.07	-.05	.69659	2.04	2.10	183	
2	2	-9	1		4.16	2.99	2.97	-.32	.68508	1.17	1.71	354	
2	2	-8	1		15.52	14.60	14.60	.40	.60787	.91	3.59	1	
2	2	-7	1		18.14	17.05	17.05	.13	.53137	1.08	5.05	0	
2	2	-6	1		45.95	43.58	-43.58	-.58	.45597	2.37	5.87	181	
2	2	-5	1		3.43	3.03	-3.03	.21	.38229	.40	.78	175	
2	2	-4	1		20.17	20.19	20.19	.51	.31156	-.03	-.15	1	
2	2	-3	1		43.46	51.78	-51.78	-.52	.24635	-8.32	-21.01	181	
2	2	-2	1		60.08	62.17	-62.17	-.18	.19235	-2.09	-6.15	181	
2	2	-1	1		37.05	36.27	36.27	.60	.16123	.78	2.40	0	
2	2	0	1		34.47	34.25	-34.25	-.23	.16638	.22	.67	181	
2	2	1	1		6.68	6.98	-6.97	-.37	.20509	-.30	-1.43	184	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	2	2	1		3.51	2.83	2.79	.50	.26293	.68	1.68	10	
2	2	3	1	L	1.52	1.64	1.64	-.02	.32998	-.13	-.12	0	
2	2	4	1		7.30	6.87	6.86	-.47	.40167	.43	1.48	357	
2	2	5	1		22.28	22.02	22.02	.36	.47589	.26	1.35	0	
2	2	6	1	L	1.78	.60	-.56	.22	.55164	1.18	.92	158	
2	2	7	1		15.76	15.66	-15.65	-.47	.62835	.10	.39	182	
2	2	8	1		4.68	3.91	-3.91	.08	.70571	.77	1.14	178	
2	3	-9	1		5.99	6.02	-6.01	-.28	.68886	-.03	-.05	183	
2	3	-8	1		16.04	14.52	14.51	.34	.61264	1.52	6.03	1	
2	3	-7	1		10.62	9.89	9.89	.05	.53743	.73	2.70	0	
2	3	-6	1		6.74	6.82	6.81	-.43	.46370	-.08	-.25	357	
2	3	-5	1		11.07	11.54	-11.53	.30	.39229	-.47	-2.20	178	
2	3	-4	1		38.58	38.99	38.99	.27	.32475	-.40	-1.20	0	
2	3	-3	1		24.45	25.02	-25.01	-.58	.26405	-.57	-2.88	182	
2	3	-2	1	L	1.28	.32	-.31	.10	.21603	.96	1.05	161	
2	3	-1	1		32.14	31.46	31.45	.61	.19054	.68	2.68	1	
2	3	0	1		46.55	44.18	-44.18	-.50	.19655	2.37	6.85	181	
2	3	1	1		4.86	6.02	-6.01	-.34	.23163	-1.17	-4.06	184	
2	3	2	1		70.93	70.03	70.03	.69	.28523	.90	2.15	0	
2	3	3	1	L	1.55	1.21	-1.21	-.06	.34894	.34	.30	183	
2	3	4	1		32.46	32.77	-32.76	-.57	.41815	-.31	-1.09	181	
2	3	5	1		25.31	25.48	25.48	.37	.49053	-.18	-.86	0	
2	3	6	1		20.04	19.89	19.89	.24	.56488	.15	.67	0	
2	3	7	1		6.39	6.78	-6.77	-.44	.64051	-.39	-.82	184	
2	3	8	1	L	3.11	2.28	-2.28	.09	.71701	.83	.81	177	
2	4	-9	1		10.73	10.08	-10.07	-.22	.69497	.65	1.83	182	
2	4	-8	1		6.54	6.18	6.16	.45	.62003	.36	.82	4	
2	4	-7	1		12.01	10.24	10.24	-.02	.54641	1.77	6.88	0	
2	4	-6	1		9.61	8.28	-8.26	-.53	.47476	1.33	5.01	184	
2	4	-5	1		22.04	21.39	-21.39	.36	.40609	.65	2.90	179	
2	4	-4	1		13.69	14.04	14.04	.35	.34223	-.36	-2.02	1	
2	4	-3	1		44.24	48.82	-48.82	-.58	.28639	-4.58	-16.42	181	
2	4	-2	1		20.02	19.49	-19.49	.02	.24414	.53	3.18	179	
2	4	-1	1		61.33	59.94	59.94	.52	.22334	1.40	3.79	0	
2	4	0	1		52.52	49.18	-49.18	-.38	.22989	3.33	8.86	181	
2	4	1	1		26.57	25.31	-25.31	-.20	.26174	1.26	5.05	181	
2	4	2	1		16.35	15.22	15.21	.53	.31121	1.12	6.45	1	
2	4	3	1		4.89	4.05	4.04	-.21	.37134	.84	2.12	358	
2	4	4	1		3.93	3.85	-3.83	-.38	.43774	.08	.15	186	
2	4	5	1		16.60	16.69	16.69	.47	.50797	-.09	-.42	1	
2	4	6	1	L	3.51	2.48	-2.48	.07	.58064	1.03	1.45	178	
2	4	7	1		12.22	12.38	-12.37	-.47	.65494	-.16	-.50	183	
2	4	8	1		10.16	9.33	9.32	.21	.73036	.83	2.20	1	
2	5	-9	1	L	2.09	.25	.17	-.18	.70336	1.84	1.23	315	
2	5	-8	1	L	1.94	.85	-.77	.37	.62992	1.09	.79	154	
2	5	-7	1	L	1.77	.47	-.46	-.09	.55819	1.30	1.03	192	
2	5	-6	1		5.36	4.71	4.69	-.36	.48892	.65	1.54	356	
2	5	-5	1		31.25	30.53	30.53	.42	.42332	.72	2.49	0	
2	5	-4	1		19.40	18.77	-18.77	.11	.36338	.63	3.83	179	
2	5	-3	1		52.50	51.82	-51.81	-.60	.31238	.69	1.51	181	
2	5	-2	1		20.57	18.92	-18.92	.29	.27533	1.65	8.60	179	
2	5	-1	1		50.82	48.40	48.40	.50	.25831	2.42	5.99	0	
2	5	0	1		29.96	28.22	-28.21	-.61	.26520	1.75	5.72	182	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	5	1	1		60.34	58.69	-58.69	-.15	.29433	1.65	3.85	181	
2	5	2	1		49.85	49.54	49.54	.67	.34003	.30	.64	0	
2	5	3	1		11.47	10.94	-10.94	-.24	.39660	.52	2.41	182	
2	5	4	1	L	1.69	.45	.06	-.44	.46007	1.24	1.03	279	
2	5	5	1		14.48	14.13	14.12	.45	.52794	.35	1.51	1	
2	5	6	1	L	1.90	2.98	-2.97	.08	.59872	-1.08	-.79	178	
2	5	7	1		4.33	1.38	1.32	-.41	.67149	2.95	4.36	343	
2	5	8	1		12.56	12.52	12.52	.20	.74568	.04	.12	0	
2	6	-9	1	L	2.10	.14	-.09	-.11	.71394	1.95	1.30	230	
2	6	-8	1		10.94	9.48	9.47	.45	.64221	1.47	4.54	2	
2	6	-7	1	L	1.81	.47	-.44	-.17	.57258	1.34	1.04	201	
2	6	-6	1		11.96	10.48	-10.47	-.43	.50592	1.47	5.90	183	
2	6	-5	1		39.55	37.96	37.96	.45	.44356	1.59	4.77	0	
2	6	-4	1		21.08	20.55	20.55	.17	.38760	.54	2.77	0	
2	6	-3	1		30.79	29.79	-29.78	-.56	.34119	1.00	4.02	182	
2	6	-2	1		4.18	3.80	3.79	.20	.30867	.38	.99	3	
2	6	-1	1		25.32	24.36	24.36	.39	.29468	.96	4.04	0	
2	6	0	1		10.46	10.06	-10.05	-.48	.30180	.41	2.09	183	
2	6	1	1		8.17	7.52	-7.52	-.01	.32866	.65	2.57	181	
2	6	2	1		19.77	19.38	19.38	.49	.37101	.39	1.97	1	
2	6	3	1		24.07	24.46	-24.46	-.36	.42422	-.40	-1.72	181	
2	6	4	1		4.28	4.30	4.30	-.25	.48474	-.02	-.03	357	
2	6	5	1		20.24	20.78	20.78	.52	.55015	-.54	-2.49	1	
2	6	6	1		6.98	6.14	-6.14	-.08	.61891	.84	2.04	181	
2	6	7	1		9.98	9.53	-9.52	-.42	.69002	.46	1.24	183	
2	7	-9	1		6.87	6.08	-6.08	-.06	.72661	.79	1.56	181	
2	7	-8	1		15.73	13.63	13.63	.36	.65676	2.10	7.56	1	
2	7	-7	1		19.16	17.62	-17.62	-.22	.58940	1.54	6.64	181	
2	7	-6	1		21.76	19.94	-19.94	-.25	.52548	1.82	8.79	181	
2	7	-5	1		7.19	6.12	6.10	.48	.46644	1.07	3.32	4	
2	7	-4	1		7.24	6.36	6.36	-.06	.41436	.88	2.89	0	
2	7	-3	1		5.41	4.64	-4.60	-.54	.37217	.77	2.13	187	
2	7	-2	1		5.56	5.00	-4.98	.44	.34354	.56	1.64	174	
2	7	-1	1	L	2.12	2.65	-2.62	.33	.33198	-.53	-.63	172	
2	7	0	1		53.08	50.82	-50.82	-.66	.33926	2.25	4.72	181	
2	7	1	1		32.10	30.88	30.88	.05	.36425	1.21	4.04	0	
2	7	2	1		27.64	28.41	28.40	.59	.40366	-.76	-3.00	1	
2	7	3	1		17.62	17.91	-17.91	-.38	.45376	-.29	-1.44	182	
2	7	4	1		28.24	28.58	-28.58	-.28	.51142	-.34	-1.46	181	
2	7	5	1		26.22	26.17	26.16	.48	.57435	.06	.26	1	
2	7	6	1		7.13	7.16	-7.16	-.07	.64102	-.03	-.07	181	
2	7	7	1		10.39	10.13	-10.12	-.34	.71037	.27	.72	182	
2	8	-9	1	L	3.13	3.07	3.07	.01	.74128	.06	.06	0	
2	8	-8	1		24.97	22.25	22.25	.41	.67342	2.71	10.64	1	
2	8	-7	1		9.60	8.17	-8.16	-.28	.60844	1.43	4.37	182	
2	8	-6	1		21.50	20.06	-20.06	-.30	.54734	1.44	6.81	181	
2	8	-5	1		4.72	4.11	4.08	.49	.49158	.61	1.24	6	
2	8	-4	1		13.29	13.02	13.02	-.01	.44319	.27	1.21	0	
2	8	-3	1		35.30	33.72	-33.72	-.48	.40482	1.58	4.92	181	
2	8	-2	1		8.07	7.62	7.62	.34	.37950	.44	1.61	2	
2	8	-1	1	L	1.66	.31	-.21	.22	.36994	1.35	1.14	134	
2	8	0	1	L	1.66	.51	-.02	-.51	.37734	1.15	.97	268	
2	8	1	1		7.33	7.15	7.15	.17	.40075	.18	.56	1	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	8	2	1		4.20	3.69	3.66	.40	.43761	.51	.97	6	
2	8	3	1		7.08	5.76	-5.74	-.47	.48487	1.32	3.78	185	
2	8	4	1		6.68	7.94	7.94	-.09	.53980	-1.26	-3.07	0	
2	8	5	1		26.39	25.77	25.76	.51	.60030	.63	2.85	1	
2	8	6	1		8.14	7.25	-7.24	-.22	.66486	.90	2.25	182	
2	8	7	1		11.95	11.98	-11.97	-.33	.73239	-.03	-.08	182	
2	9	-9	1		10.27	8.83	8.83	.05	.75782	1.43	3.64	0	
2	9	-8	1		8.68	7.89	7.88	.30	.69205	.79	1.98	2	
2	9	-7	1	L	1.95	.84	.78	-.31	.62950	1.11	.86	338	
2	9	-6	1	L	1.86	.95	-.95	-.12	.57122	.91	.68	188	
2	9	-5	1		22.30	21.70	21.70	.49	.51666	.60	2.81	1	
2	9	-4	1		19.32	18.32	-18.32	-.22	.47372	1.00	5.10	181	
2	9	-3	1		15.66	14.89	-14.89	-.44	.43876	.77	3.76	182	
2	9	-2	1		18.19	17.16	17.15	.53	.41628	1.03	5.19	1	
2	9	-1	1	L	2.12	3.56	-3.55	.15	.40837	-1.43	-1.43	177	
2	9	0	1		14.61	14.81	-14.79	-.64	.41585	-.20	-.94	183	
2	9	1	1		10.85	10.52	-10.52	.22	.43794	.32	1.27	178	
2	9	2	1		31.27	31.17	31.16	.46	.47258	.10	.32	0	
2	9	3	1		12.22	11.92	-11.91	-.46	.51727	.31	1.19	183	
2	9	4	1	L	1.86	1.95	1.95	-.11	.56965	-.09	-.07	357	
2	9	5	1		5.50	6.21	6.19	.45	.62779	-.72	-1.26	4	
2	9	6	1	L	2.06	1.12	1.10	-.20	.69023	.94	.64	350	
2	9	7	1		7.52	7.46	-7.46	-.24	.75592	.05	.10	182	
2	10	-8	1		6.34	4.93	4.92	.33	.71248	1.41	2.60	3	
2	10	-7	1		5.19	4.19	4.18	-.35	.65239	1.00	1.73	356	
2	10	-6	1		7.89	7.22	-7.22	-.14	.59688	.67	1.80	182	
2	10	-5	1		13.57	12.99	12.98	.47	.54738	.59	2.34	2	
2	10	-4	1		18.19	17.48	-17.48	-.16	.50564	.70	3.28	181	
2	10	-3	1		11.89	11.43	-11.42	-.36	.47372	.46	1.84	182	
2	10	-2	1		5.86	5.42	5.41	.43	.45369	.44	1.10	4	
2	10	-1	1		10.33	9.98	-9.98	.04	.44715	.35	1.33	179	
2	10	0	1		22.79	22.56	-22.56	-.47	.45470	.23	.93	182	
2	10	1	1		10.55	10.96	10.96	.32	.47566	-.41	-1.54	1	
2	10	2	1		6.56	6.90	-6.90	.26	.50836	-.34	-.87	177	
2	10	3	1		4.00	3.59	-3.55	-.52	.55074	.42	.67	189	
2	10	4	1	L	3.67	3.39	3.39	.07	.60073	.28	.38	1	
2	10	5	1		12.40	12.63	12.62	.45	.65661	-.23	-.73	2	
2	10	6	1	L	3.49	1.22	-1.18	-.33	.71699	2.27	2.41	196	
2	11	-8	1		10.07	9.21	9.20	.21	.73457	.87	2.15	1	
2	11	-7	1		5.62	6.34	-6.33	-.36	.67691	-.72	-1.22	184	
2	11	-6	1		11.49	10.77	10.77	.02	.62411	.72	2.34	0	
2	11	-5	1	L	3.36	3.36	3.33	.44	.57751	.00	.01	7	
2	11	-4	1	L	2.49	.96	-.89	-.34	.53870	1.54	1.58	201	
2	11	-3	1		8.61	8.28	-8.27	-.29	.50948	.34	1.06	183	
2	11	-2	1		18.41	18.00	17.99	.57	.49157	.40	1.90	1	
2	11	-1	1	L	3.04	3.42	-3.42	-.03	.48620	-.38	-.49	181	
2	11	0	1		31.75	30.88	-30.88	-.56	.49380	.86	2.72	182	
2	11	1	1		13.89	14.16	14.16	.35	.51378	-.27	-1.10	1	
2	11	2	1		5.85	6.06	6.05	.30	.54479	-.21	-.47	2	
2	11	3	1		5.86	5.52	-5.50	-.49	.58508	.34	.70	186	
2	11	4	1	L	2.00	2.13	2.13	.05	.63287	-.14	-.09	1	
2	11	5	1		13.33	13.31	13.31	.38	.68660	.02	.06	1	
2	11	6	1		5.02	4.61	4.60	-.30	.74498	.41	.58	357	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	12	-8	1	L	4.41	3.55	3.55	.22	.75818	.85	1.08	3	
2	12	-7	1		6.02	5.72	-5.71	-.38	.70291	.30	.53	184	
2	12	-6	1	L	2.01	.21	-.21	.00	.65271	1.81	1.26	179	
2	12	-5	1		11.45	10.92	10.91	.41	.60882	.54	1.73	2	
2	12	-4	1		5.84	5.76	5.76	-.28	.57270	.07	.15	358	
2	12	-3	1		16.59	15.50	-15.50	-.21	.54590	1.09	4.64	181	
2	12	-2	1		6.37	6.77	6.75	.45	.52982	-.39	-.92	3	
2	12	-1	1	L	1.84	.54	.53	-.13	.52546	1.30	.99	347	
2	12	0	1	L	3.65	3.08	-3.05	-.38	.53309	.57	.85	188	
2	12	1	1		7.85	7.69	7.68	.42	.55224	.16	.43	3	
2	12	2	1		7.56	7.85	-7.85	.11	.58175	-.29	-.74	179	
2	12	3	1		22.88	22.68	-22.68	-.50	.62015	.19	.82	182	
2	12	4	1	L	2.57	1.86	1.85	.21	.66590	.71	.58	6	
2	12	5	1		8.90	9.32	9.31	.35	.71761	-.42	-.98	2	
2	13	-7	1		5.33	5.48	-5.47	-.37	.73023	-.15	-.23	184	
2	13	-6	1	L	3.56	2.43	-2.43	.14	.68250	1.13	1.28	176	
2	13	-5	1	L	2.95	1.62	1.58	.35	.64116	1.33	1.34	12	
2	13	-4	1		7.03	6.38	-6.36	-.42	.60750	.65	1.51	184	
2	13	-3	1	L	1.91	.54	-.52	-.14	.58284	1.37	1.01	195	
2	13	-2	1	L	1.89	1.08	-.93	.54	.56837	.81	.60	149	
2	13	-1	1	L	1.99	2.58	-2.57	-.19	.56487	-.59	-.45	185	
2	13	0	1		14.60	13.81	-13.80	-.43	.57254	.79	3.00	182	
2	13	1	1		11.23	11.11	11.10	.43	.59095	.12	.38	2	
2	13	2	1		22.37	22.52	22.52	.12	.61913	-.16	-.65	0	
2	13	3	1		18.73	19.01	-19.00	-.45	.65584	-.28	-1.07	182	
2	13	4	1	L	2.88	1.82	-1.81	.19	.69972	1.06	.93	174	
2	13	5	1	L	2.69	3.29	3.28	.27	.74952	-.59	-.45	4	
2	14	-6	1	L	3.38	3.19	3.19	.12	.71334	.19	.19	2	
2	14	-5	1	L	3.00	2.00	1.98	.30	.67437	1.00	.96	8	
2	14	-4	1	L	4.09	4.57	-4.55	-.35	.64294	-.48	-.63	185	
2	14	-3	1	L	1.99	.53	-.52	-.06	.62022	1.47	1.03	187	
2	14	-2	1	L	3.83	.87	.77	.41	.60717	2.96	4.15	28	
2	14	-1	1		6.98	6.44	-6.43	-.26	.60442	.54	1.24	183	
2	14	0	1	L	4.03	4.97	-4.96	-.25	.61212	-.94	-1.28	183	
2	14	1	1		5.99	6.42	6.41	.46	.62988	-.44	-.82	4	
2	14	2	1		10.41	10.50	10.50	-.05	.65688	-.09	-.25	0	
2	14	3	1	L	2.12	2.04	-2.00	-.44	.69204	.08	.05	193	
2	14	4	1		11.47	11.92	11.92	.31	.73420	-.45	-1.20	1	
2	15	-6	1		13.59	12.55	12.55	.24	.74510	1.04	3.15	1	
2	15	-5	1	L	2.14	1.36	-1.34	.24	.70833	.78	.51	169	
2	15	-4	1		13.05	12.82	-12.82	-.44	.67895	.23	.71	182	
2	15	-3	1	L	2.08	2.44	2.44	.01	.65795	-.36	-.24	0	
2	15	-2	1		8.61	8.50	8.48	.47	.64616	.11	.28	3	
2	15	-1	1	L	2.51	3.67	-3.65	-.30	.64408	-1.16	-.94	185	
2	15	0	1		26.10	24.96	-24.96	-.27	.65180	1.14	4.81	181	
2	15	1	1	L	2.09	1.05	.95	.45	.66898	1.05	.70	25	
2	15	2	1	L	2.12	.62	-.61	-.04	.69493	1.50	.99	184	
2	15	3	1	L	3.06	1.33	-1.27	-.37	.72870	1.73	1.55	197	
2	16	-5	1	L	3.93	3.52	3.51	.18	.74293	.41	.46	2	
2	16	-4	1		12.40	11.93	-11.93	-.36	.71542	.47	1.37	182	
2	16	-3	1	L	2.14	.23	.21	.08	.69599	1.91	1.25	21	
2	16	-2	1		8.51	8.74	8.73	.33	.68532	-.22	-.53	2	
2	16	-1	1		10.19	10.36	-10.36	-.34	.68383	-.17	-.43	182	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	16	0	1	L	2.14	.63	-.62	-.11	.69157	1.51	.99	191	
2	16	1	1		7.62	6.66	6.65	.45	.70824	.96	2.02	3	
2	16	2	1	L	2.86	3.64	-3.63	-.18	.73323	-.78	-.63	183	
2	17	-4	1		10.26	9.38	-9.37	-.42	.75230	.90	2.27	183	
2	17	-3	1	L	2.21	1.80	1.79	.14	.73428	.41	.26	4	
2	17	-2	1		10.87	9.96	9.95	.36	.72462	.91	2.35	2	
2	17	-1	1		10.93	11.04	-11.04	-.36	.72365	-.11	-.30	182	
2	17	0	1		5.45	5.37	-5.37	-.12	.73140	.08	.12	182	
2	17	1	1	L	2.23	3.60	3.57	.41	.74761	-1.37	-.86	6	
3	-19	-1	1		6.54	6.48	-6.48	-.29	.74420	.06	.10	183	
3	-19	0	1	L	2.20	.82	-.71	.41	.73855	1.38	.88	149	
3	-19	1	1	L	4.61	4.74	4.74	.04	.74147	-.13	-.16	0	
3	-19	2	1		9.46	9.20	-9.19	-.40	.75286	.26	.60	183	
3	-18	-3	1		7.00	7.54	7.53	.37	.74192	-.54	-.99	2	
3	-18	-2	1	L	2.97	.49	.43	-.23	.71926	2.49	2.19	332	
3	-18	-1	1	L	2.22	3.02	-3.02	-.20	.70493	-.81	-.54	184	
3	-18	0	1	L	2.13	.68	.57	.38	.69942	1.44	.95	33	
3	-18	1	1		10.89	10.43	10.43	-.08	.70296	.46	1.22	0	
3	-18	2	1		5.63	4.44	4.43	-.34	.71541	1.19	1.95	356	
3	-18	3	1		11.22	12.05	12.05	.31	.73631	-.83	-2.15	1	
3	-17	-4	1	L	4.25	3.60	3.60	.10	.73532	.65	.76	1	
3	-17	-3	1	L	2.17	2.20	2.17	.40	.70394	-.03	-.02	10	
3	-17	-2	1		15.40	15.40	-15.40	-.37	.68049	.00	.00	182	
3	-17	-1	1	L	3.91	3.86	-3.86	-.20	.66580	.05	.06	183	
3	-17	0	1	L	3.32	3.34	3.30	.49	.66045	-.02	-.02	8	
3	-17	1	1		6.12	5.96	-5.96	-.10	.66468	.16	.30	181	
3	-17	2	1	L	3.64	2.60	-2.57	-.38	.67830	1.04	1.22	189	
3	-17	3	1		10.82	11.66	11.66	.32	.70077	-.64	-2.26	1	
3	-17	4	1		13.46	13.61	13.61	.13	.73126	-.15	-.43	0	
3	-16	-5	1	L	2.77	3.95	-3.93	-.40	.73865	-1.18	-.93	186	
3	-16	-4	1	L	2.16	1.75	1.74	.09	.69886	.42	.27	3	
3	-16	-3	1	L	2.09	1.59	-1.56	.33	.66624	.50	.33	167	
3	-16	-2	1		16.19	16.07	-16.06	-.34	.64191	.13	.46	182	
3	-16	-1	1		4.92	4.90	-4.90	-.08	.62683	.02	.03	181	
3	-16	0	1		11.10	11.07	11.07	.42	.62166	.03	.09	2	
3	-16	1	1		22.38	22.66	-22.66	-.23	.62666	-.28	-1.18	181	
3	-16	2	1		9.17	9.29	-9.28	-.28	.64159	-.12	-.31	182	
3	-16	3	1		7.01	6.98	6.96	.42	.66578	.03	.07	3	
3	-16	4	1		5.80	5.68	5.68	.01	.69826	.12	.21	0	
3	-16	5	1	L	2.11	1.38	-1.32	-.40	.73795	.73	.48	197	
3	-15	-6	1		7.38	7.59	7.59	.04	.75180	-.20	-.38	0	
3	-15	-5	1		15.14	15.53	-15.52	-.44	.70424	-.39	-1.26	182	
3	-15	-4	1		10.97	11.36	11.36	.25	.66286	-.39	-1.10	1	
3	-15	-3	1		17.80	17.63	17.63	.34	.62889	.17	.66	1	
3	-15	-2	1		10.79	10.92	-10.91	-.49	.60358	-.13	-.42	183	
3	-15	-1	1	L	3.41	2.38	2.38	-.06	.58806	1.02	1.31	359	
3	-15	0	1		10.51	10.12	10.10	.52	.58310	.40	1.29	2	
3	-15	1	1	L	2.75	2.13	-2.11	-.24	.58897	.63	.63	187	
3	-15	2	1		5.30	5.09	-5.09	-.31	.60535	.21	.37	184	
3	-15	3	1		5.11	4.02	4.00	.40	.63144	1.09	1.86	5	
3	-15	4	1	L	4.31	4.42	4.42	.01	.66608	-.11	-.15	0	
3	-15	5	1		9.97	9.10	-9.10	-.34	.70803	.87	2.24	183	
3	-15	6	1		13.96	12.87	12.87	.23	.75607	1.09	3.28	1	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-14	-6	1	L	3.00	3.79	3.79	.06	.71984	-.79	-.69	0	
3	-14	-5	1		14.25	14.73	-14.73	-.41	.67049	-.48	-1.56	182	
3	-14	-4	1		10.14	9.99	-9.99	.23	.62739	.15	.43	178	
3	-14	-3	1		11.52	10.97	10.97	.24	.59193	.55	1.85	1	
3	-14	-2	1		16.25	16.51	-16.50	-.43	.56504	-.26	-1.06	182	
3	-14	-1	1	L	1.89	2.03	2.03	.08	.54952	-.14	-.11	2	
3	-14	0	1	L	2.67	3.34	-3.32	.40	.54480	-.67	-.69	173	
3	-14	1	1		7.51	7.52	-7.51	-.38	.55166	-.01	-.02	183	
3	-14	2	1	L	1.86	.19	.08	-.17	.56968	1.67	1.26	295	
3	-14	3	1		19.99	20.13	20.12	.50	.59786	-.13	-.55	1	
3	-14	4	1		15.04	13.80	-13.80	-.13	.63484	1.25	4.46	181	
3	-14	5	1		9.01	8.27	-8.26	-.38	.67920	.74	1.86	183	
3	-14	6	1		8.57	7.93	7.92	.33	.72957	.64	1.43	2	
3	-13	-7	1		13.17	12.68	12.67	.40	.74503	.49	1.44	1	
3	-13	-6	1	L	4.28	4.33	4.33	-.09	.68877	-.05	-.07	359	
3	-13	-5	1		10.80	10.89	-10.88	-.43	.63751	-.08	-.25	183	
3	-13	-4	1		6.91	6.48	6.47	.40	.59257	.43	.98	3	
3	-13	-3	1	L	1.87	.43	.36	.23	.55546	1.44	1.08	33	
3	-13	-2	1		17.50	17.59	-17.58	-.57	.52785	-.10	-.43	182	
3	-13	-1	1	L	2.91	3.48	3.48	.10	.51128	-.57	-.68	1	
3	-13	0	1		13.61	12.98	12.97	.49	.50683	.63	2.58	2	
3	-13	1	1		27.81	28.52	-28.52	-.38	.51481	-.71	-2.56	181	
3	-13	2	1	L	3.78	4.46	-4.45	-.20	.53468	-.68	-1.03	183	
3	-13	3	1		16.79	16.61	16.61	.45	.56518	.17	.73	1	
3	-13	4	1		1.94	1.50	-1.50	-.13	.60469	.44	.31	186	
3	-13	5	1	L	2.53	2.14	-2.12	-.29	.65159	.39	.33	188	
3	-13	6	1	L	2.64	1.86	1.83	.32	.70441	.79	.66	10	
3	-12	-7	1		6.31	5.92	5.90	.40	.71689	.39	.69	3	
3	-12	-6	1	L	3.78	3.52	3.52	-.08	.65871	.26	.31	359	
3	-12	-5	1	L	1.99	.41	-.18	-.37	.60544	1.58	1.11	244	
3	-12	-4	1		12.12	12.20	12.19	.35	.55849	-.07	-.26	1	
3	-12	-3	1	L	1.82	.65	.64	.11	.51957	1.17	.90	9	
3	-12	-2	1		12.65	12.58	-12.57	-.47	.49059	.07	.29	183	
3	-12	-1	1		4.32	4.28	4.27	.25	.47339	.05	.09	3	
3	-12	0	1		36.03	36.77	36.77	.33	.46927	-.74	-2.11	0	
3	-12	1	1		31.23	31.33	-31.33	-.51	.47855	-.11	-.37	181	
3	-12	2	1		16.40	16.59	16.59	-.02	.50050	-.19	-.86	0	
3	-12	3	1		14.00	13.91	13.90	.53	.53355	.09	.34	2	
3	-12	4	1		15.44	15.33	-15.32	-.29	.57580	.12	.47	182	
3	-12	5	1		4.64	4.30	-4.29	-.31	.62539	.34	.55	185	
3	-12	6	1		11.90	10.85	10.85	.42	.68071	1.05	3.22	2	
3	-12	7	1	L	2.45	3.22	-3.22	.03	.74047	-.77	-.57	179	
3	-11	-8	1	L	2.20	2.21	-2.21	-.06	.75375	-.01	-.01	182	
3	-11	-7	1		7.98	7.64	7.62	.43	.68997	.34	.78	3	
3	-11	-6	1		13.84	13.76	-13.76	-.24	.62982	.08	.27	182	
3	-11	-5	1		18.21	17.54	-17.54	-.36	.57443	.67	2.85	182	
3	-11	-4	1		13.02	12.82	12.81	.52	.52532	.20	.78	2	
3	-11	-3	1		5.24	4.56	-4.56	.09	.48439	.68	1.49	178	
3	-11	-2	1		50.36	49.65	-49.65	-.60	.45388	.70	1.74	181	
3	-11	-1	1		8.57	7.92	7.92	.26	.43596	.64	2.16	1	
3	-11	0	1		16.27	16.54	16.53	.40	.43222	-.26	-1.30	1	
3	-11	1	1		7.10	7.99	-7.98	-.48	.44300	-.89	-2.56	184	
3	-11	2	1		16.53	16.42	-16.42	-.04	.46731	.11	.53	181	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-11	3	1		28.20	27.80	27.80	.44	.50319	.39	1.47	0	
3	-11	4	1	L	1.81	.52	.44	-.27	.54837	1.29	1.00	329	
3	-11	5	1	L	2.33	.54	-.50	-.20	.60076	1.79	1.65	202	
3	-11	6	1		8.04	7.09	7.08	.39	.65864	.95	2.33	3	
3	-11	7	1		23.83	21.93	-21.93	-.09	.72068	1.91	7.20	181	
3	-10	-8	1	L	3.49	3.99	3.99	-.07	.73000	-.51	-.53	0	
3	-10	-7	1		11.29	11.31	11.30	.41	.66442	-.02	-.05	2	
3	-10	-6	1	L	2.18	2.22	2.21	-.21	.60225	-.04	-.04	355	
3	-10	-5	1	L	2.46	2.08	2.07	-.27	.54465	.38	.38	353	
3	-10	-4	1		11.90	11.39	11.38	.44	.49322	.51	2.02	2	
3	-10	-3	1		9.60	9.41	-9.41	-.06	.45010	.19	.71	181	
3	-10	-2	1		30.96	30.83	-30.83	-.45	.41785	.13	.43	181	
3	-10	-1	1		8.34	7.99	7.97	.42	.39912	.35	1.22	2	
3	-10	0	1		5.81	5.57	-5.56	.20	.39583	.24	.63	177	
3	-10	1	1		34.60	34.29	-34.28	-.59	.40837	.31	.98	181	
3	-10	2	1	L	1.71	2.14	2.13	.16	.43535	-.44	-.36	4	
3	-10	3	1		36.86	36.93	36.93	.50	.47433	-.07	-.21	0	
3	-10	4	1		5.49	4.56	-4.54	-.43	.52263	.93	2.15	186	
3	-10	5	1		5.14	5.12	5.11	-.20	.57791	.03	.06	358	
3	-10	6	1		20.14	19.80	19.79	.47	.63837	.34	1.37	1	
3	-10	7	1	L	2.98	2.77	-2.76	-.10	.70266	.22	.21	183	
3	-9	-8	1	L	2.13	1.44	1.44	.07	.70775	.70	.46	2	
3	-9	-7	1		24.40	24.08	24.07	.42	.64040	.33	1.40	0	
3	-9	-6	1		11.19	11.34	-11.33	-.38	.57619	-.15	-.50	182	
3	-9	-5	1		4.85	4.26	-4.25	-.25	.51631	.60	1.20	184	
3	-9	-4	1		34.83	34.77	34.76	.60	.46244	.06	.22	0	
3	-9	-3	1	L	2.46	2.31	2.31	-.09	.41690	.16	.18	358	
3	-9	-2	1		5.59	5.12	-5.09	-.56	.38269	.46	1.22	187	
3	-9	-1	1		6.68	6.84	6.82	.41	.36303	-.16	-.48	3	
3	-9	0	1		5.50	4.96	-4.95	.26	.36031	.54	1.45	176	
3	-9	1	1		29.39	29.48	-29.47	-.53	.37489	-.09	-.27	182	
3	-9	2	1	L	1.68	2.53	-2.52	.13	.40491	-.85	-.71	177	
3	-9	3	1	L	2.16	2.57	-2.54	.36	.44727	-.40	-.42	171	
3	-9	4	1		8.06	7.89	-7.88	-.39	.49884	.18	.56	183	
3	-9	5	1		8.14	8.10	8.10	-.06	.55706	.04	.11	0	
3	-9	6	1		20.10	19.44	19.44	.41	.62007	.66	2.74	1	
3	-9	7	1	L	2.96	.36	.29	-.22	.68655	2.60	2.58	324	
3	-9	8	1		11.77	11.29	-11.29	-.23	.75558	.48	1.33	182	
3	-8	-9	1		9.69	10.34	-10.34	-.37	.75832	-.65	-1.55	183	
3	-8	-8	1	L	2.09	2.55	-2.55	.06	.68717	-.47	-.31	178	
3	-8	-7	1		12.36	12.44	12.44	.36	.61809	-.09	-.29	1	
3	-8	-6	1		20.91	20.17	-20.17	-.33	.55187	.74	3.39	181	
3	-8	-5	1		21.62	21.36	-21.36	-.14	.48968	.26	1.33	181	
3	-8	-4	1		18.14	18.31	18.30	.48	.43323	-.16	-.85	1	
3	-8	-3	1		4.52	4.23	-4.22	-.24	.38508	.29	.63	184	
3	-8	-2	1		10.74	10.55	-10.54	-.36	.34868	.19	.88	182	
3	-8	-1	1		10.15	10.04	10.02	.55	.32796	.11	.51	3	
3	-8	0	1		17.54	16.77	-16.77	.03	.32592	.77	3.86	179	
3	-8	1	1		14.36	14.52	-14.50	-.62	.34290	-.16	-.89	183	
3	-8	2	1		30.02	29.59	29.59	.34	.37634	.43	1.58	0	
3	-8	3	1		10.60	10.77	-10.77	.41	.42234	-.17	-.72	177	
3	-8	4	1		34.11	34.26	-34.26	-.54	.47728	-.16	-.51	181	
3	-8	5	1	L	3.67	3.53	3.53	-.06	.53844	.14	.22	0	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-8	6	1		16.32	15.43	15.42	.47	.60393	.89	3.57	1	
3	-8	7	1	L	2.01	.26	.14	-.22	.67248	1.74	1.22	303	
3	-8	8	1		10.08	9.74	-9.74	-.23	.74325	.34	.65	182	
3	-7	-9	1	L	2.15	1.10	-1.03	-.38	.74092	1.05	.68	201	
3	-7	-8	1		8.16	8.26	8.26	.21	.66840	-.10	-.24	1	
3	-7	-7	1		14.66	14.32	14.32	.35	.59769	.34	1.28	1	
3	-7	-6	1		4.83	4.99	-4.97	-.50	.52953	-.17	-.32	186	
3	-7	-5	1		16.31	16.05	-16.05	-.10	.46503	.26	1.26	181	
3	-7	-4	1		36.60	35.68	35.67	.62	.40596	.93	3.37	0	
3	-7	-3	1		39.02	38.34	-38.34	-.26	.35502	.67	1.92	181	
3	-7	-2	1		29.67	29.01	-29.01	-.46	.31618	.66	2.37	181	
3	-7	-1	1		50.88	49.60	49.60	.52	.29426	1.27	2.94	0	
3	-7	0	1		11.97	12.99	12.98	.09	.29308	-1.02	-5.69	0	
3	-7	1	1		16.46	15.66	-15.65	-.52	.31288	.80	4.60	182	
3	-7	2	1	L	2.57	3.40	-3.39	.29	.35012	-.83	-1.18	175	
3	-7	3	1		10.06	9.52	9.51	.26	.39995	.54	2.27	1	
3	-7	4	1		8.11	8.50	8.49	-.47	.45829	-.39	-1.30	357	
3	-7	5	1		4.83	4.01	4.01	.10	.52229	.83	1.70	1	
3	-7	6	1		10.93	11.10	11.10	.38	.59012	-.17	-.58	1	
3	-7	7	1		13.71	12.78	-12.77	-.33	.66059	.94	3.14	182	
3	-7	8	1		11.62	10.74	10.74	-.14	.73294	.88	2.44	0	
3	-6	-9	1	L	2.10	.46	-.28	-.37	.72536	1.64	1.09	234	
3	-6	-8	1	L	4.17	3.91	-3.91	.18	.65159	.25	.36	177	
3	-6	-7	1	L	3.25	3.21	3.20	.28	.57939	.04	.05	4	
3	-6	-6	1		7.61	7.30	7.29	-.41	.50941	.31	.94	357	
3	-6	-5	1		20.20	19.83	19.83	.03	.44271	.37	2.02	0	
3	-6	-4	1	L	2.40	1.29	-1.21	.45	.38103	1.10	1.43	159	
3	-6	-3	1		15.09	14.17	-14.17	-.41	.32720	.92	5.42	182	
3	-6	-2	1		51.05	49.05	-49.05	-.22	.28571	2.00	4.71	181	
3	-6	-1	1		55.98	52.56	52.55	.64	.26246	3.42	8.47	0	
3	-6	0	1		18.93	18.86	-18.86	-.17	.26236	.07	.34	181	
3	-6	1	1		37.14	36.75	-36.74	-.58	.28543	.39	1.26	181	
3	-6	2	1		26.94	26.77	26.76	.51	.32680	.17	.70	1	
3	-6	3	1		12.76	12.41	12.41	.27	.38055	.35	1.75	1	
3	-6	4	1		19.18	18.81	-18.80	-.60	.44218	.37	1.80	182	
3	-6	5	1	L	2.49	2.61	-2.61	.10	.50885	-.12	-.14	177	
3	-6	6	1		9.51	8.95	8.94	.42	.57880	.56	1.83	2	
3	-6	7	1		7.44	7.03	-7.03	-.33	.65099	.41	.95	183	
3	-6	8	1		4.40	4.18	-4.18	-.13	.72475	.21	.30	182	
3	-5	-9	1		7.27	7.65	-7.64	-.36	.71176	-.38	-.79	183	
3	-5	-8	1		7.82	7.85	7.84	.33	.63692	-.03	-.07	2	
3	-5	-7	1		4.22	3.86	3.85	.24	.56340	.36	.63	3	
3	-5	-6	1		21.22	21.44	-21.43	-.56	.49180	-.22	-1.15	182	
3	-5	-5	1		3.71	3.39	-3.39	.07	.42309	.32	.60	178	
3	-5	-4	1		16.97	16.02	16.01	.57	.35893	.95	5.55	2	
3	-5	-3	1		4.79	4.50	-4.48	-.42	.30224	.29	.88	186	
3	-5	-2	1		50.77	48.32	-48.32	-.31	.25798	2.45	6.15	181	
3	-5	-1	1		15.51	14.94	-14.93	.58	.23335	.58	3.22	177	
3	-5	0	1		14.15	14.45	14.45	-.10	.23460	-.30	-1.80	0	
3	-5	1	1	L	2.02	2.03	-1.98	-.44	.26137	-.01	-.01	193	
3	-5	2	1		8.74	7.73	7.72	.43	.30706	1.01	4.64	3	
3	-5	3	1	L	1.83	1.44	1.44	.09	.36461	.39	.41	3	
3	-5	4	1		16.03	15.98	-15.98	-.49	.42929	.05	.24	182	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-5	5	1		20.25	20.84	20.84	.26	.49833	-.60	-2.88	0	
3	-5	6	1		6.70	6.18	6.17	.30	.57014	.53	1.34	2	
3	-5	7	1		5.73	5.91	-5.89	-.43	.64380	-.18	-.34	185	
3	-5	8	1		15.18	14.45	-14.45	-.02	.71874	.73	2.41	181	
3	-4	-9	1	L	2.05	.98	-.92	-.33	.70022	1.07	.73	200	
3	-4	-8	1		23.26	23.38	23.38	.29	.62451	-.12	-.49	0	
3	-4	-7	1	L	2.25	2.12	2.12	.15	.54992	.12	.12	4	
3	-4	-6	1	L	1.80	1.12	1.03	-.45	.47697	.68	.60	337	
3	-4	-5	1		10.19	10.31	-10.31	.20	.40654	-.12	-.52	178	
3	-4	-4	1		26.53	24.57	24.57	.37	.34021	1.96	10.93	0	
3	-4	-3	1	L	2.93	2.56	2.50	-.54	.28089	.37	.75	348	
3	-4	-2	1	L	2.32	1.72	1.72	-.04	.23398	.59	1.07	359	
3	-4	-1	1		50.06	48.06	-48.05	.66	.20805	2.01	5.64	179	
3	-4	0	1		21.01	21.24	-21.24	-.37	.21098	-.23	-1.11	181	
3	-4	1	1		48.36	45.83	-45.83	-.47	.24172	2.54	6.59	181	
3	-4	2	1		75.49	74.82	74.82	.62	.29161	.67	1.57	0	
3	-4	3	1		18.41	18.13	18.13	.09	.35261	.28	1.29	0	
3	-4	4	1		19.77	20.13	-20.12	-.59	.41991	-.36	-1.73	182	
3	-4	5	1		9.68	9.67	9.67	.26	.49092	.01	.02	1	
3	-4	6	1		20.60	20.39	20.39	.33	.56424	.20	.94	0	
3	-4	7	1		5.65	5.71	5.69	-.40	.63908	-.06	-.11	357	
3	-4	8	1	L	2.11	3.36	3.36	-.00	.71496	-1.25	-.63	0	
3	-3	-9	1		6.13	6.40	-6.40	-.30	.69086	-.27	-.50	183	
3	-3	-8	1		12.38	12.93	12.92	.43	.61452	-.55	-1.93	1	
3	-3	-7	1		13.63	13.82	13.82	.10	.53914	-.19	-.80	0	
3	-3	-6	1		9.17	8.92	-8.90	-.57	.46519	.25	.93	184	
3	-3	-5	1		8.77	8.75	8.75	.24	.39347	.02	.07	1	
3	-3	-4	1		15.24	14.60	14.59	.47	.32546	.64	3.89	1	
3	-3	-3	1	L	1.34	.73	-.50	-.53	.26405	.61	.64	227	
3	-3	-2	1		21.78	21.71	-21.71	-.12	.21496	.07	.30	181	
3	-3	-1	1		6.21	5.34	5.31	.56	.18810	.87	3.90	6	
3	-3	0	1		38.33	37.88	-37.88	-.28	.19300	.44	1.27	181	
3	-3	1	1		58.49	56.08	-56.08	-.31	.22761	2.41	6.50	181	
3	-3	2	1		19.22	20.04	-20.03	.51	.28117	-.82	-4.17	178	
3	-3	3	1		9.72	9.29	9.29	-.09	.34495	.44	1.99	0	
3	-3	4	1		20.40	20.53	-20.52	-.45	.41427	-.12	-.57	182	
3	-3	5	1		12.35	11.62	11.61	.40	.48676	.73	3.11	1	
3	-3	6	1		10.81	11.34	11.33	.18	.56120	-.53	-1.84	0	
3	-3	7	1		20.29	20.06	-20.05	-.47	.63690	.23	.96	182	
3	-3	8	1		11.05	10.97	10.97	.11	.71346	.07	.21	0	
3	-2	-9	1		9.16	10.20	-10.19	-.25	.68377	-1.04	-2.69	182	
3	-2	-8	1	L	1.87	.76	.66	.36	.60706	1.11	.83	28	
3	-2	-7	1	L	1.78	3.01	3.01	.00	.53123	-1.23	-.97	0	
3	-2	-6	1		11.38	10.90	-10.89	-.42	.45669	.48	2.09	183	
3	-2	-5	1		10.11	9.15	9.15	.36	.38422	.96	4.37	2	
3	-2	-4	1		6.77	7.15	-7.14	.23	.31523	-.38	-1.53	178	
3	-2	-3	1		26.29	24.43	24.42	-.62	.25260	1.87	7.70	359	
3	-2	-2	1		20.61	19.37	-19.37	.16	.20232	1.24	5.51	179	
3	-2	-1	1		48.88	45.12	45.12	.61	.17535	3.76	11.55	0	
3	-2	0	1		31.95	30.82	-30.82	-.53	.18236	1.13	3.24	181	
3	-2	1	1		42.23	41.88	-41.88	-.31	.22012	.35	.93	181	
3	-2	2	1		29.17	30.55	30.54	.68	.27629	-1.38	-4.47	1	
3	-2	3	1	L	1.91	3.04	3.04	-.10	.34193	-1.13	-1.27	259	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-2	4	1		33.44	33.85	-33.85	-.53	.41253	-.41	-1.28	181	
3	-2	5	1		18.64	18.66	18.65	.38	.48594	-.01	-.07	1	
3	-2	6	1		14.56	14.32	14.32	.19	.56106	.24	.98	0	
3	-2	7	1		14.37	14.79	-14.78	-.42	.63728	-.42	-1.48	182	
3	-2	8	1	L	3.48	3.03	3.03	.12	.71425	.45	.50	2	
3	-1	-10	1	L	2.14	1.51	1.49	-.25	.75639	.63	.41	351	
3	-1	-9	1		5.34	4.65	-4.64	-.21	.67901	.70	1.19	183	
3	-1	-8	1		12.16	12.24	12.23	.48	.60223	-.08	-.27	2	
3	-1	-7	1		9.22	9.03	9.03	-.06	.52631	.19	.65	0	
3	-1	-6	1		15.20	16.32	-16.31	-.53	.45167	-1.12	-5.48	182	
3	-1	-5	1		6.80	6.19	6.17	.38	.37908	.61	2.16	3	
3	-1	-4	1		14.63	14.72	14.71	.31	.30997	-.08	-.52	1	
3	-1	-3	1		35.53	33.94	-33.94	-.57	.24731	1.59	5.63	181	
3	-1	-2	1		5.38	3.62	3.62	.08	.19730	1.75	7.32	1	
3	-1	-1	1		21.60	21.25	21.24	.48	.17141	.35	1.67	1	
3	-1	0	1		60.84	60.41	60.41	-.43	.18036	.43	1.33	0	
3	-1	1	1		39.27	38.89	-38.89	-.13	.21992	.38	1.03	181	
3	-1	2	1		2.99	1.09	-.95	.53	.27729	1.90	4.14	150	
3	-1	3	1		4.72	4.82	4.81	-.27	.34367	-.10	-.26	357	
3	-1	4	1		10.27	9.94	-9.93	-.36	.41475	.33	1.40	183	
3	-1	5	1		21.33	21.68	21.68	.50	.48848	-.35	-1.78	1	
3	-1	6	1		10.37	10.33	10.33	.03	.56382	.04	.12	0	
3	-1	7	1		9.00	8.46	-8.44	-.47	.64021	.55	1.48	184	
3	-1	8	1		11.27	11.29	11.29	.23	.71732	-.02	-.06	1	
3	0	-10	1	L	3.46	.73	-.69	-.23	.75383	2.73	2.85	199	
3	0	-9	1	L	2.07	.56	-.55	-.14	.67664	1.51	1.11	195	
3	0	-8	1	L	1.90	.92	.84	.39	.60009	.98	.77	24	
3	0	-7	1	L	3.04	1.92	1.92	-.15	.52446	1.11	1.53	356	
3	0	-6	1		14.19	14.39	14.39	-.35	.45023	-.20	-.96	359	
3	0	-5	1	L	2.19	1.24	1.15	.47	.37821	.95	1.20	22	
3	0	-4	1		21.13	21.32	-21.32	.06	.30994	-.19	-.96	179	
3	0	-3	1		64.02	61.41	-61.41	-.63	.24856	2.61	6.77	181	
3	0	-2	1		31.40	30.24	30.23	.35	.20047	1.16	4.51	0	
3	0	-1	1		50.78	49.93	49.92	.49	.17687	.85	2.61	0	
3	0	0	1		86.22	87.16	-87.16	-.65	.18726	-.95	-2.88	181	
3	0	1	1		50.98	50.33	-50.33	-.12	.22703	.65	1.74	181	
3	0	2	1		30.72	30.45	30.45	.67	.28409	.27	.86	1	
3	0	3	1		18.69	18.23	18.23	-.27	.35009	.46	2.30	0	
3	0	4	1		34.96	34.61	-34.61	-.41	.42085	.35	1.27	181	
3	0	5	1		11.37	11.72	-11.71	.47	.49432	-.35	-1.41	177	
3	0	6	1	L	2.76	2.58	-2.58	.03	.56945	.18	.20	179	
3	0	7	1	L	3.24	4.12	-4.10	-.40	.64567	-.88	-.99	186	
3	0	8	1		8.11	7.64	7.64	.24	.72263	.46	1.04	1	
3	1	-10	1		5.90	4.62	-4.61	-.33	.75344	1.28	2.21	185	
3	1	-9	1		4.87	3.36	-3.36	-.09	.67668	1.51	2.50	182	
3	1	-8	1		6.82	6.49	6.47	.48	.60066	.34	.82	4	
3	1	-7	1		4.22	3.92	3.91	-.20	.52573	.30	.56	358	
3	1	-6	1	L	2.42	.82	-.70	-.42	.45241	1.61	2.05	212	
3	1	-5	1		13.57	18.54	18.54	.48	.38164	-4.97	-25.61	1	
3	1	-4	1		17.20	17.53	17.53	.13	.31514	-.34	-2.18	0	
3	1	-3	1		63.88	64.34	-64.34	-.56	.25626	-.46	-1.15	181	
3	1	-2	1		11.05	10.16	-10.16	.26	.21146	.89	6.10	178	
3	1	-1	1		9.83	8.21	8.20	.34	.19092	1.62	10.38	2	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	1	0	1		6.32	6.38	-6.36	-.52	.20217	-.06	-.27	185	
3	1	1	1		33.03	32.65	32.65	.07	.24081	.38	1.37	0	
3	1	2	1		12.14	11.62	11.61	.49	.29630	.52	3.02	2	
3	1	3	1		10.51	10.42	-10.42	-.43	.36096	.08	.39	183	
3	1	4	1		6.96	7.16	7.16	-.21	.43067	-.20	-.65	359	
3	1	5	1		21.60	21.61	21.61	.56	.50334	-.02	-.08	1	
3	1	6	1	L	1.83	1.21	1.20	-.12	.57786	.62	.48	355	
3	1	7	1		20.19	20.23	-20.23	-.42	.65359	-.04	-.16	182	
3	1	8	1		8.59	7.37	7.36	.33	.73015	1.22	2.92	2	
3	2	-10	1	L	2.14	3.82	-3.81	-.29	.75522	-1.68	-1.10	185	
3	2	-9	1		10.78	8.85	8.85	-.02	.67912	1.92	5.82	0	
3	2	-8	1		10.10	10.09	10.08	.37	.60395	.01	.04	2	
3	2	-7	1	L	2.65	2.60	-2.58	-.28	.53008	.05	.06	187	
3	2	-6	1		14.75	14.05	-14.05	-.23	.45816	.70	3.44	181	
3	2	-5	1		22.90	32.98	32.97	.54	.38926	-10.08	-43.43	0	
3	2	-4	1		21.51	26.34	26.34	-.12	.32531	-4.82	-24.83	0	
3	2	-3	1		11.89	13.89	-13.88	-.57	.26986	-2.01	-12.62	183	
3	2	-2	1		42.48	38.44	-38.44	.51	.22915	4.04	10.53	179	
3	2	-1	1		10.51	9.84	-9.84	.32	.21186	.67	4.36	178	
3	2	0	1		67.09	67.28	-67.28	-.70	.22349	-.19	-.53	181	
3	2	1	1		11.49	10.63	10.63	.09	.26020	.87	5.12	0	
3	2	2	1		45.17	44.01	44.01	.59	.31329	1.15	2.54	0	
3	2	3	1		34.12	34.06	-34.05	-.41	.37588	.06	.20	181	
3	2	4	1		16.48	16.65	16.64	-.25	.44397	-.17	-.84	0	
3	2	5	1		25.96	26.21	26.20	.49	.51539	-.25	-1.12	1	
3	2	6	1		7.10	7.01	7.01	-.12	.58892	.09	.22	0	
3	2	7	1		5.29	5.06	-5.05	-.33	.66387	.22	.39	184	
3	2	8	1		8.86	8.96	8.96	.32	.73981	-.11	-.25	2	
3	3	-9	1		8.21	6.13	6.13	.04	.68395	2.08	5.16	0	
3	3	-8	1		11.27	10.37	10.36	.43	.60990	.90	3.00	2	
3	3	-7	1		11.50	10.21	-10.20	-.32	.53745	1.30	4.95	182	
3	3	-6	1		17.21	17.47	-17.47	-.28	.46734	-.27	-1.32	181	
3	3	-5	1		22.49	28.45	28.44	.52	.40083	-5.95	-28.43	1	
3	3	-4	1		12.90	16.20	16.20	-.05	.34001	-3.31	-18.20	0	
3	3	-3	1		3.86	4.22	-4.20	-.47	.28852	-.37	-.99	187	
3	3	-2	1		23.44	23.78	-23.78	.40	.25213	-.34	-1.75	179	
3	3	-1	1		10.72	10.13	-10.13	.16	.23787	.59	3.61	179	
3	3	0	1		45.90	41.93	-41.93	-.54	.24958	3.96	10.01	181	
3	3	1	1		18.33	17.79	-17.79	.25	.28405	.54	2.88	179	
3	3	2	1		22.26	22.86	-22.85	.39	.33432	-.60	-2.57	179	
3	3	3	1		31.47	31.10	-31.09	-.54	.39439	.37	1.36	181	
3	3	4	1		8.58	9.27	-9.27	-.05	.46044	-.69	-2.39	181	
3	3	5	1		21.57	21.44	21.44	.55	.53025	.13	.63	1	
3	3	6	1		12.99	13.04	-13.03	-.27	.60250	-.05	-.18	182	
3	3	7	1	L	2.00	.32	.02	-.32	.67642	1.68	1.17	274	
3	3	8	1		8.68	8.35	8.34	.40	.75151	.33	.75	2	
3	4	-9	1	L	2.74	3.23	3.23	.10	.69111	-.50	-.44	1	
3	4	-8	1		7.84	6.34	6.33	.30	.61844	1.50	3.99	2	
3	4	-7	1		16.56	15.78	-15.77	-.38	.54770	.78	3.41	182	
3	4	-6	1		24.54	26.88	26.88	-.08	.47977	-2.34	-10.77	0	
3	4	-5	1		10.45	11.23	-11.22	.55	.41602	-.79	-3.39	177	
3	4	-4	1		6.64	8.59	-8.58	-.29	.35869	-1.95	-6.84	182	
3	4	-3	1		5.12	5.54	-5.52	-.46	.31134	-.42	-1.34	185	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	4	-2	1		78.78	78.06	78.06	.61	.27910	.72	1.71	0	
3	4	-1	1		24.48	23.03	23.03	.13	.26749	1.44	6.50	0	
3	4	0	1		44.19	44.37	-44.37	-.68	.27910	-.18	-.43	181	
3	4	1	1		10.62	10.71	-10.70	.27	.31134	-.09	-.44	178	
3	4	2	1		31.56	31.57	31.57	.46	.35868	-.02	-.05	0	
3	4	3	1	L	1.67	.75	.55	-.50	.41602	.92	.77	318	
3	4	4	1		7.09	6.27	-6.27	-.07	.47976	.82	2.41	181	
3	4	5	1		4.74	3.95	3.92	.46	.54769	.79	1.56	6	
3	4	6	1		6.19	6.64	-6.64	-.25	.61843	-.46	-.94	183	
3	4	7	1	L	2.05	.63	-.60	-.22	.69111	1.42	.97	200	
3	5	-9	1		6.82	5.58	5.58	.15	.70054	1.24	2.52	1	
3	5	-8	1		13.50	11.61	11.60	.34	.62946	1.89	6.75	1	
3	5	-7	1		8.93	9.34	-9.33	-.40	.56069	-.41	-1.25	183	
3	5	-6	1	L	3.13	3.50	3.50	-.12	.49519	-.37	-.53	358	
3	5	-5	1		11.09	12.59	12.58	.50	.43445	-1.51	-6.42	2	
3	5	-4	1		21.32	23.54	-23.54	-.22	.38075	-2.22	-10.88	181	
3	5	-3	1		4.43	4.10	-4.08	-.34	.33747	.33	.84	185	
3	5	-2	1		5.19	4.99	4.96	.48	.30902	.20	.62	5	
3	5	-1	1		22.16	21.70	-21.70	-.03	.29964	.46	2.27	181	
3	5	0	1		16.04	14.80	14.79	-.49	.31108	1.25	6.95	359	
3	5	1	1		5.76	6.02	6.00	.41	.34124	-.26	-.75	3	
3	5	2	1		6.47	5.89	-5.89	.24	.38576	.57	1.75	177	
3	5	3	1		17.25	17.46	-17.45	-.59	.44030	-.22	-1.09	182	
3	5	4	1		11.74	11.93	11.92	.12	.50160	-.18	-.72	0	
3	5	5	1		16.49	16.60	16.59	.48	.56749	-.11	-.45	1	
3	5	6	1	L	1.97	1.72	-1.67	-.38	.63653	.26	.18	193	
3	5	7	1		7.20	7.31	-7.31	-.20	.70780	-.11	-.24	182	
3	6	-9	1		9.90	8.87	8.86	.20	.71214	1.03	2.68	1	
3	6	-8	1		5.10	4.82	4.82	.20	.64284	.28	.48	2	
3	6	-7	1		8.67	9.51	-9.50	-.43	.57623	-.83	-2.45	183	
3	6	-6	1	L	2.92	2.11	2.11	.07	.51334	.80	1.04	1	
3	6	-5	1		24.11	26.13	26.13	.49	.45573	-2.02	-8.90	1	
3	6	-4	1		39.42	42.58	-42.58	-.43	.40566	-3.17	-8.05	181	
3	6	-3	1		6.09	5.97	5.96	-.30	.36621	.13	.39	358	
3	6	-2	1	L	1.56	2.43	2.35	.65	.34111	-.87	-.78	15	
3	6	-1	1		4.24	3.43	-3.43	-.07	.33360	.81	1.89	182	
3	6	0	1		36.07	34.96	-34.96	-.59	.34483	1.11	3.16	181	
3	6	1	1		5.44	4.86	-4.85	.41	.37313	.58	1.50	175	
3	6	2	1	L	2.67	2.29	-2.28	.28	.41500	.38	.48	172	
3	6	3	1		15.89	16.55	-16.54	-.52	.46682	-.65	-3.09	182	
3	6	4	1	L	1.82	1.96	-1.96	.10	.52565	-.14	-.11	176	
3	6	5	1		4.03	3.90	3.88	.38	.58939	.13	.20	5	
3	6	6	1		6.12	6.50	-6.49	-.35	.65662	-.38	-.74	184	
3	6	7	1	L	2.14	1.89	1.89	-.09	.72636	.25	.16	358	
3	7	-9	1		6.56	5.61	5.61	.24	.72580	.95	1.80	2	
3	7	-8	1		12.51	10.93	10.93	.23	.65843	1.58	5.21	1	
3	7	-7	1		13.48	13.24	-13.23	-.43	.59411	.24	.89	182	
3	7	-6	1		5.47	5.30	5.30	.04	.53394	.17	.39	0	
3	7	-5	1		20.23	22.76	22.75	.42	.47948	-2.52	-12.83	1	
3	7	-4	1		3.81	3.50	-3.48	-.34	.43290	.31	.56	186	
3	7	-3	1		4.85	3.60	-3.59	-.18	.39699	1.25	3.07	183	
3	7	-2	1	L	1.62	1.56	1.48	.50	.37481	.06	.05	18	
3	7	-1	1		17.77	17.37	-17.37	-.21	.36886	.41	2.10	181	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	7	0	1		32.67	32.91	32.91	-.39	.37989	-.25	-.79	0	
3	7	1	1		21.48	21.35	21.35	.52	.40654	.13	.58	1	
3	7	2	1		4.19	2.68	-2.68	.06	.44600	1.52	2.90	178	
3	7	3	1		13.57	13.33	-13.32	-.57	.49523	.23	.99	183	
3	7	4	1		4.88	3.64	3.63	.28	.55161	1.24	2.34	4	
3	7	5	1		19.16	18.86	18.86	.37	.61318	.30	1.24	1	
3	7	6	1		7.26	6.96	-6.95	-.45	.67852	.30	.64	184	
3	7	7	1		5.08	4.99	-4.99	-.06	.74665	.09	.14	181	
3	8	-9	1		12.01	10.46	10.45	.28	.74142	1.55	4.33	1	
3	8	-8	1		4.80	4.80	4.80	.09	.67609	.00	.01	1	
3	8	-7	1		8.61	8.69	-8.68	-.43	.61414	-.08	-.23	183	
3	8	-6	1		13.65	13.00	13.00	.21	.55671	.65	2.54	0	
3	8	-5	1	L	2.50	1.09	1.02	.39	.50535	1.41	1.63	20	
3	8	-4	1	L	2.56	.79	-.60	-.51	.46208	1.77	2.19	221	
3	8	-3	1		16.07	15.49	-15.49	-.12	.42937	.58	2.88	181	
3	8	-2	1	L	1.92	.88	-.63	.62	.40973	1.04	.98	135	
3	8	-1	1		27.79	27.59	-27.59	-.24	.40508	.20	.78	181	
3	8	0	1		17.03	16.74	-16.74	-.45	.41593	.28	1.43	182	
3	8	1	1		15.14	14.91	14.90	.49	.44112	.23	1.06	1	
3	8	2	1		4.29	3.62	-3.62	.09	.47840	.68	1.29	178	
3	8	3	1	L	1.84	1.15	-1.04	-.49	.52521	.69	.52	206	
3	8	4	1	L	1.88	.36	-.25	.25	.57923	1.52	1.13	135	
3	8	5	1		14.93	15.05	15.05	.25	.63864	-.13	-.45	0	
3	8	6	1	L	2.08	.40	.03	-.40	.70207	1.68	1.13	275	
3	9	-8	1	L	2.07	2.82	2.82	.10	.69564	-.75	-.50	2	
3	9	-7	1	L	3.11	3.48	-3.45	-.41	.63610	-.37	-.40	187	
3	9	-6	1		4.16	3.47	3.47	.17	.58140	.68	1.08	2	
3	9	-5	1		13.67	13.49	13.49	.31	.53303	.18	.72	1	
3	9	-4	1		4.74	4.07	4.05	-.41	.49285	.67	1.40	355	
3	9	-3	1		15.37	14.85	14.85	-.00	.46301	.52	2.40	0	
3	9	-2	1		4.28	4.61	-4.58	.45	.44558	-.33	-.61	174	
3	9	-1	1		38.97	38.49	-38.49	-.35	.44203	.48	1.45	181	
3	9	0	1		11.60	11.34	-11.34	-.24	.45270	.25	1.02	182	
3	9	1	1		3.94	3.68	3.64	.56	.47662	.26	.43	8	
3	9	2	1		10.30	10.51	-10.51	-.11	.51195	-.21	-.73	181	
3	9	3	1		12.89	12.47	-12.46	-.50	.55651	.42	1.62	183	
3	9	4	1	L	2.94	3.34	-3.32	.39	.60828	-.40	-.42	173	
3	9	5	1		6.50	5.11	5.11	.23	.66556	1.39	2.80	2	
3	9	6	1	L	3.14	3.01	2.97	-.46	.72711	.14	.13	352	
3	10	-8	1		7.58	7.32	-7.32	-.03	.71694	.26	.53	181	
3	10	-7	1	L	3.76	2.83	2.80	-.38	.65982	.94	1.19	353	
3	10	-6	1		10.56	10.71	10.71	.32	.60778	-.15	-.45	1	
3	10	-5	1	L	1.83	2.21	2.19	.25	.56226	-.37	-.28	6	
3	10	-4	1		18.28	17.54	-17.54	-.54	.52493	.73	3.35	182	
3	10	-3	1		26.50	25.38	25.38	.05	.49766	1.12	4.44	0	
3	10	-2	1		48.46	47.82	47.82	.53	.48215	.63	1.49	0	
3	10	-1	1	L	3.37	2.94	-2.91	-.37	.47954	.43	.62	188	
3	10	0	1		27.63	27.07	-27.07	-.28	.49005	.56	2.12	181	
3	10	1	1	L	1.82	1.28	1.18	.51	.51285	.54	.41	23	
3	10	2	1		12.79	12.57	12.57	-.08	.54642	.22	.81	0	
3	10	3	1		5.16	4.62	-4.61	-.40	.58892	.54	1.01	185	
3	10	4	1		5.48	6.17	6.16	.35	.63857	-.69	-1.23	3	
3	10	5	1		14.92	14.47	-14.47	.11	.69384	.45	1.51	179	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	10	6	1	L	3.16	.94	.85	-.40	.75348	2.22	2.12	336	
3	11	-8	1	L	2.97	.57	-.57	-.02	.73984	2.40	2.16	183	
3	11	-7	1		6.65	5.99	-5.98	-.34	.66510	.66	1.32	184	
3	11	-6	1	L	3.39	1.71	1.69	.27	.63564	1.68	2.01	9	
3	11	-5	1	L	2.12	3.90	-3.89	.17	.59280	-1.78	-1.41	177	
3	11	-4	1		19.75	19.00	-18.99	-.43	.55810	.75	3.40	182	
3	11	-3	1	L	3.36	2.85	2.84	.15	.53313	.52	.69	3	
3	11	-2	1		5.34	5.46	5.45	.36	.51929	-.12	-.26	3	
3	11	-1	1		6.07	5.74	-5.73	-.45	.51749	.33	.76	185	
3	11	0	1		6.55	6.27	-6.27	-.08	.52785	.27	.66	181	
3	11	1	1		17.12	16.80	16.79	.54	.54967	.32	1.37	1	
3	11	2	1		13.05	13.27	-13.27	-.25	.58167	-.22	-.78	182	
3	11	3	1		9.55	9.44	-9.43	-.38	.62228	.11	.31	183	
3	11	4	1		9.97	10.52	10.51	.46	.66993	-.55	-1.45	2	
3	11	5	1	L	2.15	.21	.19	.08	.72324	1.94	1.27	21	
3	12	-7	1		5.48	5.27	-5.27	-.30	.71178	.20	.33	184	
3	12	-6	1		18.62	17.46	17.45	.38	.66479	1.16	4.35	1	
3	12	-5	1	L	1.99	1.77	-1.76	.11	.62446	.23	.16	176	
3	12	-4	1		6.27	4.69	-4.67	-.51	.59216	1.58	3.58	187	
3	12	-3	1		15.47	14.54	-14.54	.20	.56925	.93	3.74	179	
3	12	-2	1		8.37	8.17	8.16	.40	.55689	.20	.56	2	
3	12	-1	1		5.07	5.43	-5.41	-.44	.55579	-.36	-.67	185	
3	12	0	1		8.74	8.84	-8.84	-.10	.56601	-.10	-.30	181	
3	12	1	1		12.51	11.63	11.62	.47	.58695	.88	3.10	2	
3	12	2	1		13.59	14.15	-14.15	-.23	.61754	-.56	-1.89	181	
3	12	3	1		5.09	5.14	-5.13	-.27	.65642	-.05	-.08	184	
3	12	4	1		13.20	13.10	13.09	.40	.70222	.11	.33	1	
3	12	5	1		5.36	5.74	5.74	-.03	.75367	-.39	-.57	0	
3	13	-7	1		4.64	4.16	-4.15	-.25	.73970	.48	.66	184	
3	13	-6	1		16.68	15.23	15.23	.33	.69507	1.44	4.98	1	
3	13	-5	1		7.15	7.33	7.33	.03	.65709	-.18	-.38	0	
3	13	-4	1	L	2.98	2.74	-2.71	-.39	.62698	.24	.24	189	
3	13	-3	1		9.39	9.27	9.26	.27	.60592	.12	.34	1	
3	13	-2	1	L	1.96	1.00	.97	.23	.59486	.96	.69	13	
3	13	-1	1		12.91	12.79	-12.78	-.48	.59437	.12	.40	183	
3	13	0	1		9.82	9.59	9.59	.08	.60446	.22	.66	0	
3	13	1	1	L	3.45	3.67	3.64	.46	.62463	-.22	-.26	7	
3	13	2	1	L	2.07	.46	-.29	-.36	.65395	1.60	1.09	231	
3	13	3	1		9.66	10.64	-10.63	-.23	.69124	-.95	-2.39	182	
3	13	4	1		13.36	13.43	13.42	.47	.73531	-.07	-.21	1	
3	14	-6	1		14.41	12.81	12.80	.40	.72633	1.60	4.89	1	
3	14	-5	1	L	3.00	1.36	1.36	-.03	.69054	1.65	1.56	359	
3	14	-4	1		26.61	24.81	-24.80	-.43	.66244	1.80	7.52	181	
3	14	-3	1		12.36	11.66	11.65	.30	.64304	.71	2.24	1	
3	14	-2	1	L	2.74	3.07	3.06	.25	.63313	-.34	-.30	4	
3	14	-1	1		9.69	9.81	-9.80	-.45	.63317	-.12	-.33	183	
3	14	0	1		7.40	6.83	-6.83	.06	.64316	.57	1.28	179	
3	14	1	1	L	2.11	1.53	-1.48	.38	.66263	.58	.38	165	
3	14	2	1		8.80	8.88	-8.87	-.32	.69080	-.08	-.19	183	
3	14	3	1	L	3.45	1.01	-1.00	-.13	.72665	2.44	2.50	188	
3	15	-5	1		5.50	3.89	3.89	-.10	.72470	1.61	2.50	359	
3	15	-4	1		5.65	5.44	-5.43	-.31	.69843	.21	.35	184	
3	15	-3	1		14.86	14.03	14.03	.35	.68053	.83	2.75	1	

H	K	L	GRP	FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	15	-2	1	5.83	5.33	-5.33	.09	.67166	.50	.84	179	
3	15	-1	1	16.50	16.61	-16.60	-.46	.67217	-.11	-.39	182	
3	15	0	1	9.57	8.99	8.99	.21	.66205	.58	1.42	1	
3	15	1	1	6.73	6.78	6.77	.35	.70090	-.05	-.09	2	
3	15	2	1	16.37	16.22	-16.22	-.42	.72803	.15	.48	182	
3	16	-4	1 L	2.19	.58	-.48	-.32	.73489	1.61	1.03	214	
3	16	-3	1	10.44	10.19	10.18	.36	.71834	.25	.64	2	
3	16	-2	1	10.69	10.06	10.06	.10	.71039	.62	1.67	0	
3	16	-1	1	16.21	15.36	-15.35	-.41	.71132	.85	2.64	182	
3	16	0	1	6.76	6.56	6.56	.19	.72111	.22	.39	1	
3	16	1	1	6.34	5.85	5.84	.26	.73940	.49	.81	2	
3	17	-3	1	13.15	12.40	12.40	.38	.75642	.75	2.08	1	
3	17	-2	1 L	2.23	2.47	-2.47	-.04	.74930	-.24	-.15	181	
3	17	-1	1	12.82	11.89	-11.89	-.39	.75061	.93	2.57	182	
4	-19	-2	1	6.35	7.52	-7.51	-.37	.75431	-1.17	-1.96	183	
4	-19	-1	1	7.56	6.34	-6.34	.10	.74249	1.22	2.45	179	
4	-19	0	1 L	4.46	3.87	3.86	.32	.73913	.59	.74	4	
4	-19	1	1	6.84	7.66	-7.66	-.33	.74432	-.83	-1.46	183	
4	-18	-3	1 L	3.43	2.63	2.63	.16	.73658	.79	.79	3	
4	-18	-2	1	14.18	13.81	-13.80	-.46	.71612	.38	1.18	182	
4	-18	-1	1 L	3.24	2.43	2.43	.11	.70412	.81	.79	2	
4	-18	0	1	8.09	7.66	-7.65	.36	.70102	.43	.93	177	
4	-18	1	1	7.76	7.47	-7.46	-.33	.70694	.29	.60	183	
4	-18	2	1	14.36	14.49	-14.49	-.11	.72166	-.13	-.39	181	
4	-18	3	1	10.06	10.00	10.00	.36	.74466	.05	.13	2	
4	-17	-4	1	11.70	12.62	12.61	.32	.72857	-.92	-2.44	1	
4	-17	-3	1 L	3.38	2.68	2.68	.05	.69931	.70	.71	1	
4	-17	-2	1	11.29	11.80	-11.80	-.40	.67819	-.51	-1.46	182	
4	-17	-1	1	10.33	10.18	10.18	.25	.66599	.15	.41	1	
4	-17	0	1	6.53	6.25	6.24	.26	.66319	.28	.56	2	
4	-17	1	1	14.58	14.38	-14.37	-.44	.66993	.20	.65	182	
4	-17	2	1 L	3.46	3.15	-3.15	.01	.68591	.31	.32	179	
4	-17	3	1	10.69	11.61	11.60	.42	.71051	-.92	-2.38	2	
4	-17	4	1 L	4.56	5.51	-5.51	-.25	.74289	-.96	-1.21	183	
4	-16	-5	1 L	2.20	2.70	-2.68	-.29	.73058	-.49	-.31	187	
4	-16	-4	1	11.67	12.82	12.81	.44	.69276	-1.14	-3.20	1	
4	-16	-3	1 L	2.10	.57	.57	.04	.66240	1.53	1.02	3	
4	-16	-2	1	17.56	17.26	-17.26	-.48	.64056	.30	1.13	182	
4	-16	-1	1 L	1.99	.29	.15	.25	.62814	1.69	1.19	58	
4	-16	0	1	22.30	22.28	22.28	.29	.62569	.02	.07	0	
4	-16	1	1	19.22	19.66	-19.65	-.41	.63333	-.43	-1.70	182	
4	-16	2	1 L	3.30	3.75	-3.75	.02	.65070	-.44	-.47	179	
4	-16	3	1 L	3.79	4.87	4.85	.35	.67706	-1.08	-1.27	4	
4	-16	4	1 L	2.42	2.20	2.18	-.26	.71141	.22	.16	354	
4	-16	5	1 L	4.49	3.69	-3.69	-.13	.75265	.80	1.03	183	
4	-15	-6	1 L	2.19	2.05	-2.03	-.22	.74253	.14	.09	187	
4	-15	-5	1 L	2.12	.29	-.22	-.20	.69676	1.83	1.21	222	
4	-15	-4	1 L	2.08	2.07	-2.03	.40	.65748	.01	.01	168	
4	-15	-3	1	10.10	10.36	10.36	-.10	.62592	-.26	-.74	0	
4	-15	-2	1	11.68	12.01	-12.00	-.37	.60330	-.33	-1.06	182	
4	-15	-1	1	7.01	7.13	7.12	.39	.59063	-.12	-.28	3	
4	-15	0	1	5.91	6.07	-6.07	.15	.58857	-.15	-.32	178	
4	-15	1	1	28.42	28.51	-28.50	-.51	.59722	-.09	-.34	183	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	w*DF	ANGLE CALC	ANGLE STAT
4	-15	2	1		7.68	7.63	7.62	.16	.61613	.05	.12	1	
4	-15	3	1		11.02	10.10	10.09	.40	.64440	.91	2.70	2	
4	-15	4	1		12.85	13.31	-13.31	-.37	.68087	-.47	-1.44	182	
4	-15	5	1		13.17	12.72	-12.72	-.14	.72429	.46	1.36	181	
4	-14	-6	1		4.78	4.36	-4.35	-.35	.71113	.42	.59	185	
4	-14	-5	1		9.18	9.26	-9.26	-.19	.66368	-.09	-.22	182	
4	-14	-4	1		12.80	12.51	12.50	.51	.62283	.29	.96	2	
4	-14	-3	1	L	1.97	3.60	3.60	-.11	.58996	-1.64	-1.17	359	
4	-14	-2	1		6.02	6.42	-6.41	-.44	.56646	-.40	-.84	184	
4	-14	-1	1		8.35	8.79	8.78	.38	.55353	-.44	-1.26	2	
4	-14	0	1		6.77	7.42	7.42	.17	.55191	-.65	-1.56	1	
4	-14	1	1	L	1.88	1.24	-1.15	-.45	.56170	.64	.48	202	
4	-14	2	1	L	3.84	2.73	-2.72	.16	.58231	1.11	1.57	176	
4	-14	3	1		12.08	11.72	11.72	.29	.61267	.36	1.21	1	
4	-14	4	1		8.94	8.95	-8.94	-.36	.65141	-.01	-.03	183	
4	-14	5	1		9.01	9.37	9.37	-.02	.69713	-.36	-.85	0	
4	-14	6	1		11.13	10.20	10.19	.35	.74856	.93	2.46	1	
4	-13	-7	1		5.14	5.20	5.19	.29	.73527	-.06	-.09	3	
4	-13	-6	1		5.47	6.28	-6.27	-.32	.68069	-.81	-1.33	183	
4	-13	-5	1	L	3.07	4.15	-4.14	-.07	.63145	-1.08	-1.11	182	
4	-13	-4	1		7.83	8.25	8.24	.42	.58891	-.42	-1.08	2	
4	-13	-3	1		9.91	9.20	-9.19	-.26	.55461	.71	2.31	182	
4	-13	-2	1		14.92	15.75	-15.75	-.30	.53015	-.83	-3.39	182	
4	-13	-1	1		9.33	9.92	9.90	.51	.51693	-.59	-1.91	2	
4	-13	0	1	L	2.68	2.48	-2.48	-.01	.51582	.20	.23	181	
4	-13	1	1		16.85	16.91	-16.91	-.53	.52688	-.07	-.29	182	
4	-13	2	1		5.83	6.19	6.18	.32	.54939	-.36	-.78	2	
4	-13	3	1		8.09	8.12	8.12	.32	.58202	-.03	-.09	2	
4	-13	4	1		11.48	11.10	-11.09	-.46	.62318	.38	1.19	183	
4	-13	5	1		10.55	10.03	10.03	-.01	.67131	.52	1.48	0	
4	-13	6	1		9.39	9.61	9.60	.38	.72501	-.22	-.53	2	
4	-12	-7	1		13.08	13.61	13.61	.29	.70773	-.53	-1.57	1	
4	-12	-6	1		9.23	9.29	-9.27	-.45	.65132	-.05	-.13	183	
4	-12	-5	1		13.52	13.36	13.36	-.05	.60022	.15	.55	0	
4	-12	-4	1		7.70	7.85	7.83	.53	.55587	-.15	-.40	3	
4	-12	-3	1		15.63	15.94	-15.94	-.26	.52000	-.31	-1.34	181	
4	-12	-2	1		15.87	16.57	-16.57	-.35	.49448	-.70	-3.16	182	
4	-12	-1	1	L	1.76	1.88	-1.82	.47	.48094	-.10	-.08	165	
4	-12	0	1		9.44	9.70	9.70	.01	.48041	-.26	-.88	0	
4	-12	1	1		27.07	27.84	-27.84	-.43	.49292	-.77	-3.12	181	
4	-12	2	1		6.24	6.11	-6.10	.30	.51753	.13	.31	177	
4	-12	3	1	L	1.84	.47	.43	.18	.55262	1.37	1.04	22	
4	-12	4	1		12.11	12.36	-12.35	-.43	.59636	-.25	-.88	182	
4	-12	5	1	L	2.84	2.86	2.86	.12	.64698	-.02	-.02	2	
4	-12	6	1		7.31	6.95	6.94	.32	.70300	.36	.75	2	
4	-11	-8	1	L	3.04	2.30	-2.29	.20	.74371	.74	.67	175	
4	-11	-7	1	L	2.31	5.05	5.04	.21	.68146	-2.73	-1.97	2	
4	-11	-6	1		6.67	5.50	5.48	-.39	.62320	1.18	2.58	356	
4	-11	-5	1		16.13	15.93	15.93	.08	.57014	.20	.81	0	
4	-11	-4	1		6.87	7.47	7.46	.40	.52385	-.61	-1.52	3	
4	-11	-3	1		11.49	11.45	-11.44	-.41	.48629	.04	.16	183	
4	-11	-2	1		13.75	13.88	13.88	-.17	.45959	-.14	-.60	0	
4	-11	-1	1		15.83	15.73	15.72	.59	.44571	.10	.47	2	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	-11	0	1	L	3.02	4.14	-4.14	-.18	.44586	-1.12	-1.48	183	
4	-11	1	1		25.33	25.89	-25.88	-.50	.46000	-.56	-2.14	182	
4	-11	2	1		15.04	14.89	14.88	.46	.48694	.15	.66	1	
4	-11	3	1		11.98	12.22	12.22	.20	.52470	-.24	-.92	0	
4	-11	4	1	L	2.19	1.27	-1.16	-.51	.57113	.92	.80	204	
4	-11	5	1	L	3.83	4.04	-4.04	.13	.62432	-.21	-.28	178	
4	-11	6	1		15.99	15.50	15.49	.34	.68267	.49	1.71	1	
4	-11	7	1		5.94	4.82	-4.81	-.30	.74498	1.12	1.89	184	
4	-10	-8	1		5.03	6.37	6.36	.32	.72058	-1.34	-1.89	2	
4	-10	-7	1	L	3.55	4.22	-4.22	.19	.65664	-.67	-.76	177	
4	-10	-6	1		17.70	17.24	-17.23	-.51	.59649	.46	1.89	182	
4	-10	-5	1		13.07	13.69	13.69	.10	.54140	-.62	-2.36	0	
4	-10	-4	1		23.38	23.05	23.05	.49	.49308	.32	1.66	1	
4	-10	-3	1		12.58	11.99	-11.99	-.40	.45367	.59	2.52	182	
4	-10	-2	1		21.51	21.45	-21.45	-.22	.42568	.06	.31	181	
4	-10	-1	1	L	1.95	2.21	-2.15	.51	.41144	-.27	-.25	166	
4	-10	0	1	L	1.70	.51	-.48	-.15	.41237	1.19	.98	198	
4	-10	1	1		15.78	16.14	16.13	-.36	.42837	-.36	-1.77	359	
4	-10	2	1		33.15	34.43	-34.43	.42	.45788	-1.28	-4.24	179	
4	-10	3	1		5.88	5.61	-5.61	.03	.49[illegible]	.26	.63	179	
4	-10	4	1		9.32	9.47	-9.46	-.44	.54774	-.15	-.49	183	
4	-10	5	1		11.56	11.34	11.34	.27	.60352	.22	.74	1	
4	-10	6	1		14.35	13.91	13.91	.25	.66418	.44	1.49	1	
4	-10	7	1		11.97	11.00	-10.99	-.39	.72852	.97	2.79	183	
4	-9	-8	1		14.28	14.57	14.57	.29	.69904	-.29	-.95	1	
4	-9	-7	1		4.28	5.33	-5.33	.09	.63343	-1.05	-1.56	179	
4	-9	-6	1		16.51	16.30	-16.30	-.42	.57140	.21	.87	182	
4	-9	-5	1	L	2.98	1.85	1.84	.24	.51425	1.12	1.48	7	
4	-9	-4	1		18.67	18.57	18.56	.32	.46378	.10	.49	0	
4	-9	-3	1	L	1.71	.53	.02	-.53	.42241	1.18	.97	272	
4	-9	-2	1		4.21	3.38	3.38	-.00	.39301	.83	1.66	0	
4	-9	-1	1		4.06	4.98	4.94	.60	.37838	-.92	-1.78	6	
4	-9	0	1		39.67	39.52	-39.52	-.37	.38023	.15	.41	181	
4	-9	1	1		8.42	9.17	9.16	-.40	.39834	-.75	-2.66	358	
4	-9	2	1		8.61	8.62	8.60	.57	.43065	-.01	-.03	3	
4	-9	3	1		8.10	8.52	-8.52	.04	.47427	-.42	-1.36	179	
4	-9	4	1		27.57	27.71	-27.70	-.51	.52640	-.14	-.51	182	
4	-9	5	1		5.30	5.35	-5.35	.26	.58477	-.05	-.11	177	
4	-9	6	1		8.28	8.26	8.25	.25	.64769	.02	.06	1	
4	-9	7	1	L	2.11	1.37	1.32	-.36	.71396	.74	.49	345	
4	-8	-9	1		5.11	5.09	-5.08	-.27	.74887	.03	.04	184	
4	-8	-8	1		16.54	16.24	16.23	.41	.67921	.30	1.07	1	
4	-8	-7	1		12.01	11.95	11.95	.06	.61200	.06	.20	0	
4	-8	-6	1		16.93	16.46	-16.45	-.52	.54813	.47	2.06	182	
4	-8	-5	1		4.02	4.75	-4.74	.25	.48892	-.73	-1.30	176	
4	-8	-4	1		17.03	16.89	16.88	.39	.43627	.14	.72	1	
4	-8	-3	1		6.27	6.42	6.40	-.49	.39282	-.14	-.41	356	
4	-8	-2	1		20.46	20.17	20.17	-.05	.36190	.29	1.32	0	
4	-8	-1	1		20.76	20.36	-20.36	.49	.34688	.39	1.86	178	
4	-8	0	1		10.07	10.16	10.16	-.32	.34982	-.09	-.41	359	
4	-8	1	1		3.49	3.32	3.31	-.23	.37028	.17	.31	357	
4	-8	2	1		49.63	48.96	48.96	.49	.40563	.67	1.76	0	
4	-8	3	1		11.33	11.70	-11.70	-.14	.45238	-.37	-1.51	181	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	-8	4	1		6.71	6.88	-6.87	-.40	.50740	-.17	-.46	184	
4	-8	5	1		3.85	3.78	3.76	.40	.56829	.07	.10	6	
4	-8	6	1		9.22	9.29	9.28	.14	.63335	-.06	-.18	0	
4	-8	7	1	L	3.04	5.06	-5.04	-.44	.70144	-2.02	-1.93	185	
4	-7	-9	1	L	3.22	.88	.85	-.21	.73220	2.34	2.37	347	
4	-7	-8	1	L	2.46	2.45	2.43	.36	.66127	.01	.01	8	
4	-7	-7	1		6.74	7.19	7.19	-.05	.59256	-.45	-1.08	0	
4	-7	-6	1		4.78	4.57	4.55	-.39	.52695	.21	.42	356	
4	-7	-5	1	L	1.72	1.20	-1.14	.38	.46574	.51	.42	161	
4	-7	-4	1		19.35	19.54	-19.53	.19	.41089	-.19	-1.04	179	
4	-7	-3	1		21.23	20.13	-20.12	-.60	.36531	1.10	5.43	182	
4	-7	-2	1	L	2.73	2.30	-2.30	.19	.33280	.42	.63	175	
4	-7	-1	1		24.33	24.22	24.22	.56	.31741	.10	.41	1	
4	-7	0	1		49.01	49.26	-49.26	-.52	.32161	-.25	-.54	181	
4	-7	1	1		46.29	46.07	-46.07	-.25	.34469	.21	.44	181	
4	-7	2	1		15.90	16.36	16.35	.63	.38324	-.46	-2.43	2	
4	-7	3	1		12.36	12.08	12.08	-.13	.43316	.28	1.27	0	
4	-7	4	1	L	3.36	3.87	3.84	-.45	.49099	-.51	-.77	354	
4	-7	5	1		5.07	4.70	4.69	.37	.55427	.37	.75	4	
4	-7	6	1	L	3.66	3.95	3.94	.13	.62132	-.28	-.36	1	
4	-7	7	1		7.08	7.52	-7.51	-.38	.69105	-.44	-.90	183	
4	-6	-9	1	L	4.30	.52	-.49	-.18	.71741	3.78	5.01	200	
4	-6	-8	1		9.84	9.94	9.93	.46	.64536	-.10	-.29	2	
4	-6	-7	1		9.01	8.95	-8.95	-.08	.57531	.06	.18	181	
4	-6	-6	1		11.44	11.95	11.94	-.48	.50810	-.51	-1.98	358	
4	-6	-5	1		25.04	24.44	24.43	.39	.44502	.61	3.39	0	
4	-6	-4	1		9.42	9.07	9.07	.25	.38808	.35	1.42	1	
4	-6	-3	1		13.13	12.91	-12.90	-.54	.34038	.22	1.19	183	
4	-6	-2	1		22.71	22.01	-22.01	.13	.30627	.70	3.20	179	
4	-6	-1	1		28.79	27.65	27.64	.41	.29058	1.15	3.55	0	
4	-6	0	1		7.76	6.46	-6.45	-.45	.29625	1.30	5.46	184	
4	-6	1	1		28.35	27.33	-27.33	-.06	.32215	1.02	3.58	181	
4	-6	2	1		32.58	32.90	-32.90	.51	.36398	-.32	-1.05	179	
4	-6	3	1	L	2.09	1.47	1.44	-.31	.41699	.62	.65	348	
4	-6	4	1		12.65	12.24	-12.23	-.31	.47745	.41	1.79	182	
4	-6	5	1		17.96	17.83	17.82	.50	.54290	.14	.61	1	
4	-6	6	1	L	1.93	2.78	2.78	-.00	.61172	-.85	-.62	0	
4	-6	7	1		5.36	4.44	-4.42	-.44	.68291	.92	1.65	186	
4	-6	8	1		14.55	14.44	14.44	.24	.75578	.11	.32	0	
4	-5	-9	1		5.28	5.98	-5.98	-.10	.70464	-.71	-1.14	181	
4	-5	-8	1		9.56	10.18	10.17	.38	.63164	-.62	-1.77	2	
4	-5	-7	1		7.61	8.04	-8.04	-.19	.56045	-.43	-1.19	182	
4	-5	-6	1		12.84	13.55	13.54	-.31	.49186	-.71	-2.98	359	
4	-5	-5	1		18.22	18.10	18.10	.50	.42713	.12	.63	1	
4	-5	-4	1		8.94	8.75	-8.75	.02	.36830	.18	.75	179	
4	-5	-3	1		4.39	3.91	3.86	-.61	.31865	.48	1.24	351	
4	-5	-2	1		47.10	46.30	46.30	.37	.28306	.79	1.86	0	
4	-5	-1	1		36.16	36.48	36.48	.44	.26720	-.32	-.75	0	
4	-5	0	1		32.60	32.98	-32.98	-.64	.27452	-.38	-1.25	182	
4	-5	1	1		18.58	18.49	-18.49	-.07	.30334	.09	.46	181	
4	-5	2	1		34.11	34.35	34.35	.62	.34837	-.25	-.70	1	
4	-5	3	1		7.39	7.11	-7.10	-.29	.40422	.28	.94	183	
4	-5	4	1		19.90	20.47	-20.46	-.34	.46703	-.56	-2.54	181	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	-5	5	1		4.40	3.87	3.84	.45	.53435	.53	.99	6	
4	-5	6	1		6.35	6.51	6.51	-.02	.60468	-.16	-.36	0	
4	-5	7	1	L	2.51	.80	.72	-.36	.67708	1.71	1.47	334	
4	-5	8	1	L	2.97	3.22	3.21	.25	.75094	-.25	-.22	4	
4	-4	-9	1		7.99	8.68	-8.68	-.06	.69400	-.69	-1.54	181	
4	-4	-8	1		16.94	16.75	16.74	.47	.62025	.19	.75	1	
4	-4	-7	1	L	3.05	2.70	-2.69	-.23	.54817	.35	.46	185	
4	-4	-6	1		25.26	25.65	-25.65	-.38	.47849	-.39	-2.14	181	
4	-4	-5	1		23.45	23.05	23.05	.48	.41244	.39	2.33	1	
4	-4	-4	1		6.27	5.66	-5.66	.07	.35206	.61	2.08	179	
4	-4	-3	1		4.55	4.04	-4.01	-.51	.30080	.51	1.48	188	
4	-4	-2	1		19.36	19.35	-19.34	.30	.26402	.01	.07	179	
4	-4	-1	1		47.50	45.07	-45.07	.27	.24823	2.43	6.22	179	
4	-4	0	1		6.55	6.11	6.09	-.52	.25734	.44	1.82	356	
4	-4	1	1		3.95	5.50	5.50	.13	.28899	-1.55	-3.85	1	
4	-4	2	1		14.98	15.03	15.02	.46	.33690	-.04	-.24	1	
4	-4	3	1		39.71	40.28	-40.27	-.46	.39519	-.57	-1.50	181	
4	-4	4	1		14.82	14.76	-14.76	-.17	.45993	.05	.24	181	
4	-4	5	1		23.11	23.04	23.03	.55	.52877	.07	.33	1	
4	-4	6	1		5.93	6.66	-6.66	-.15	.60028	-.73	-1.57	182	
4	-4	7	1		6.17	6.37	-6.36	-.39	.67363	-.20	-.38	184	
4	-4	8	1	L	3.03	4.13	4.12	.34	.74826	-1.11	-.98	4	
4	-3	-9	1	L	2.06	2.39	2.39	.02	.68557	-.33	-.23	0	
4	-3	-8	1		8.69	8.98	8.98	.36	.61133	-.29	-.81	2	
4	-3	-7	1		10.98	11.08	-11.07	-.33	.53864	-.10	-.38	182	
4	-3	-6	1	L	1.70	.59	.55	-.19	.46823	1.12	.92	342	
4	-3	-5	1		37.42	35.93	35.93	.56	.40129	1.49	5.50	0	
4	-3	-4	1		19.90	18.41	18.41	-.17	.33988	1.49	8.84	0	
4	-3	-3	1		44.62	42.86	-42.85	-.56	.28756	1.76	4.11	181	
4	-3	-2	1		47.91	47.52	47.52	.53	.25011	.38	.96	0	
4	-3	-1	1		12.16	13.47	13.47	.28	.23475	-1.31	-8.25	1	
4	-3	0	1		27.67	29.75	-29.75	-.69	.24567	-2.08	-7.12	182	
4	-3	1	1		8.67	8.37	-8.37	.12	.27980	.30	1.44	179	
4	-3	2	1	L	2.65	4.32	4.28	.54	.33001	-1.66	-2.55	7	
4	-3	3	1		14.98	15.15	-15.14	-.42	.39016	-.17	-.90	182	
4	-3	4	1		4.00	2.83	-2.83	-.19	.45632	1.17	2.31	184	
4	-3	5	1		10.45	10.06	10.05	.47	.52623	.39	1.45	2	
4	-3	6	1		4.66	3.70	-3.70	-.16	.59859	.96	1.70	183	
4	-3	7	1		7.37	6.85	-6.85	-.28	.67259	.52	1.18	183	
4	-3	8	1		18.96	17.96	17.95	.33	.74776	1.00	3.54	1	
4	-2	-10	1		4.59	3.45	-3.43	-.38	.75496	1.14	1.58	187	
4	-2	-9	1	L	2.01	2.13	2.13	.06	.67944	-.13	-.09	1	
4	-2	-8	1		7.34	8.07	8.06	.42	.60498	-.73	-1.82	2	
4	-2	-7	1		14.77	14.49	-14.49	-.34	.53203	.28	1.20	182	
4	-2	-6	1		12.70	12.04	-12.04	-.24	.46130	.65	2.92	182	
4	-2	-5	1		32.54	30.82	30.81	.51	.39400	1.72	7.09	0	
4	-2	-4	1		4.28	4.87	4.86	-.11	.33220	-.59	-1.51	359	
4	-2	-3	1	L	1.37	.67	-.51	-.43	.27959	.70	.72	220	
4	-2	-2	1		31.18	30.21	30.21	.43	.24222	.97	3.39	0	
4	-2	-1	1		3.22	2.98	-2.98	.09	.22774	.24	.58	178	
4	-2	0	1		18.95	17.67	-17.66	-.54	.24031	1.28	6.36	182	
4	-2	1	1		40.14	38.55	38.55	.32	.27626	1.58	3.74	0	
4	-2	2	1		6.84	6.73	6.72	.35	.32800	.12	.42	3	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	-2	3	1		8.76	8.68	-8.66	-.57	.36928	.08	.32	184	
4	-2	4	1		10.32	10.21	-10.21	-.00	.45627	.11	.43	181	
4	-2	5	1		6.19	5.74	5.71	.54	.52680	.45	1.16	5	
4	-2	6	1		7.41	6.76	-6.76	-.29	.59962	.65	1.66	183	
4	-2	7	1		11.56	10.92	-10.92	-.29	.67398	.64	1.96	182	
4	-2	8	1		16.72	15.95	15.95	.40	.74944	.77	2.55	1	
4	-1	-10	1	L	4.01	2.96	-2.94	-.32	.75116	1.06	1.30	187	
4	-1	-9	1	L	2.00	.74	.72	.14	.67568	1.26	.88	11	
4	-1	-8	1		6.46	6.77	6.77	.29	.60129	-.31	-.72	2	
4	-1	-7	1	L	2.83	2.16	-2.11	-.42	.52843	.68	.87	192	
4	-1	-6	1	L	2.15	.07	-.06	-.04	.45785	2.08	2.27	212	
4	-1	-5	1		13.55	13.00	12.98	.56	.39077	.56	2.80	2	
4	-1	-4	1		63.51	61.20	-61.20	-.34	.32933	2.31	5.07	181	
4	-1	-3	1		24.54	25.75	-25.75	-.44	.27733	-1.22	-5.42	181	
4	-1	-2	1		55.12	53.17	53.17	.64	.24095	1.95	5.08	0	
4	-1	-1	1		3.60	2.18	-2.18	.09	.22779	1.42	3.76	177	
4	-1	0	1		98.64	96.95	-96.95	-.67	.24169	1.69	4.47	181	
4	-1	1	1		15.11	14.71	14.70	.30	.27861	.41	2.26	1	
4	-1	2	1	L	2.74	2.00	1.96	.41	.33095	.74	1.20	11	
4	-1	3	1		9.79	10.12	10.11	-.51	.39258	-.33	-1.36	358	
4	-1	4	1		7.02	7.04	7.04	-.01	.45979	-.02	-.05	0	
4	-1	5	1	L	2.84	.64	-.47	.43	.53045	2.20	2.80	137	
4	-1	6	1		9.85	10.11	-10.11	-.29	.60336	-.25	-.77	182	
4	-1	7	1	L	3.75	1.99	-1.98	-.18	.67779	1.76	2.28	186	
4	-1	8	1	L	2.15	1.24	1.18	.37	.75329	.91	.59	17	
4	0	-10	1		11.00	10.70	-10.70	-.37	.74951	.30	.79	183	
4	0	-9	1		5.96	5.36	5.36	.18	.67433	.60	1.14	1	
4	0	-8	1		20.59	19.93	19.93	.33	.60030	.66	2.69	0	
4	0	-7	1		6.88	7.44	-7.43	-.42	.52792	-.56	-1.53	184	
4	0	-6	1		12.53	11.91	11.91	-.08	.45795	.62	2.76	0	
4	0	-5	1		39.33	37.96	37.96	.49	.39170	1.37	3.67	0	
4	0	-4	1		7.93	7.40	7.40	-.27	.33141	.53	2.24	358	
4	0	-3	1		13.39	13.20	-13.19	-.29	.26094	.19	1.19	182	
4	0	-2	1		46.77	44.83	44.83	.51	.24639	1.94	4.93	0	
4	0	-1	1		50.33	50.34	-50.34	-.10	.23490	-.00	-.00	181	
4	0	0	1		5.19	5.42	-5.40	-.48	.24969	-.23	-.79	186	
4	0	1	1		6.35	5.80	-5.79	.47	.28670	.54	2.06	175	
4	0	2	1		16.03	16.32	-16.32	.20	.33873	-.29	-1.56	179	
4	0	3	1		28.19	28.48	-28.48	-.62	.39996	-.29	-1.02	182	
4	0	4	1		35.08	34.80	34.80	.17	.46679	.27	.79	0	
4	0	5	1		13.30	12.96	12.95	.47	.53713	.34	1.37	2	
4	0	6	1		6.97	6.73	-6.72	-.41	.60976	.24	.56	184	
4	0	7	1		5.85	6.37	6.37	-.17	.68396	-.52	-.93	359	
4	1	-10	1		16.40	15.37	-15.37	-.30	.75005	1.02	3.24	182	
4	1	-9	1		9.84	9.62	9.62	.25	.67540	.22	.50	1	
4	1	-8	1		5.76	5.74	-5.74	.18	.60203	.02	.04	178	
4	1	-7	1		17.43	17.66	-17.66	-.47	.53049	-.23	-1.05	182	
4	1	-6	1		16.62	16.48	16.48	.12	.46160	.14	.73	0	
4	1	-5	1		34.31	34.40	34.40	.51	.39677	-.09	-.30	0	
4	1	-4	1		4.31	4.57	-4.54	-.48	.33834	-.26	-.67	187	
4	1	-3	1		25.24	24.72	-24.72	-.28	.29018	.52	2.23	181	
4	1	-2	1		74.10	73.39	73.39	.68	.25812	.71	1.78	0	
4	1	-1	1		4.90	4.71	4.71	-.11	.24847	.19	.62	359	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	1	0	1		30.39	31.15	-31.14	-.58	.26371	-.76	-2.51	182	
4	1	1	1		15.86	15.21	15.20	.44	.30005	.67	3.71	1	
4	1	2	1		32.62	32.94	-32.94	.24	.35102	-.32	-.89	179	
4	1	3	1		35.04	35.15	-35.14	-.53	.41120	-.10	-.32	181	
4	1	4	1		11.35	11.04	11.04	.16	.47713	.30	1.23	0	
4	1	5	1	L	1.81	1.42	1.38	.35	.54672	.39	.80	14	
4	1	6	1	L	1.94	.89	-.81	-.38	.61875	1.05	.76	206	
4	1	7	1	L	2.15	1.10	1.10	-.04	.69244	1.05	.72	358	
4	2	-10	1		13.29	11.47	-11.46	-.33	.75275	1.82	5.48	182	
4	2	-9	1		9.59	8.96	8.95	.28	.67887	.63	1.70	1	
4	2	-8	1		5.36	4.02	4.01	.21	.60646	1.35	2.76	2	
4	2	-7	1		17.28	22.45	-22.45	-.45	.53610	-5.17	-23.29	182	
4	2	-6	1		5.72	9.18	-9.18	.08	.46873	-3.45	-8.65	179	
4	2	-5	1		8.88	10.10	10.09	.41	.40583	-1.22	-4.75	2	
4	2	-4	1		9.67	10.11	-10.10	-.39	.34982	-.44	-2.02	183	
4	2	-3	1		22.09	22.64	22.64	-.12	.30455	-.55	-2.67	0	
4	2	-2	1		25.30	25.81	-25.80	.52	.27534	-.51	-2.26	178	
4	2	-1	1		13.86	14.26	-14.26	-.29	.26751	-.40	-2.62	182	
4	2	0	1		5.69	4.93	-4.92	-.37	.28285	.76	2.61	185	
4	2	1	1		56.63	55.83	55.83	.58	.31802	.80	1.78	0	
4	2	2	1		22.59	22.33	-22.33	.02	.36737	.26	1.13	179	
4	2	3	1		39.44	39.87	-39.86	-.60	.42599	-.42	-1.32	181	
4	2	4	1	L	1.74	1.17	-1.12	.33	.49059	.58	.46	163	
4	2	5	1		11.01	10.83	10.83	.36	.55908	.17	.61	1	
4	2	6	1		12.66	12.26	-12.25	-.48	.63020	.39	1.35	183	
4	2	7	1	L	2.07	.90	.89	-.03	.70315	1.18	.80	359	
4	3	-10	1	L	2.12	1.36	-1.34	-.24	.75761	.75	.50	191	
4	3	-9	1		13.55	12.01	12.01	.32	.68472	1.54	5.07	1	
4	3	-8	1		5.50	6.46	6.46	.05	.61352	-.96	-1.84	0	
4	3	-7	1		9.80	13.49	-13.48	-.47	.54466	-3.69	-12.72	182	
4	3	-6	1		15.05	22.46	22.46	.27	.47916	-7.41	-33.75	0	
4	3	-5	1		16.45	21.89	21.88	.40	.41860	-5.44	-28.00	1	
4	3	-4	1		16.72	18.71	-18.70	-.57	.36545	-1.99	-11.42	182	
4	3	-3	1	L	1.53	2.28	-2.27	-.09	.32336	-.75	-.73	183	
4	3	-2	1		17.90	17.91	17.89	.65	.29709	-.00	-.02	2	
4	3	-1	1		6.10	6.05	6.05	-.29	.29095	.04	.16	358	
4	3	0	1		6.61	5.39	5.38	-.44	.30616	1.21	4.37	356	
4	3	1	1		9.31	8.56	8.55	.52	.33986	.75	3.27	3	
4	3	2	1	L	1.66	.81	-.81	.04	.38726	.85	.72	176	
4	3	3	1		14.18	13.78	-13.77	-.48	.44398	.40	1.86	183	
4	3	4	1		14.23	13.89	13.89	.30	.50692	.34	1.46	1	
4	3	5	1	L	1.85	1.86	1.85	.22	.57402	-.01	-.00	6	
4	3	6	1		10.10	10.56	-10.55	-.43	.64399	-.46	-1.33	183	
4	3	7	1	L	3.11	3.77	3.77	.09	.71598	-.66	-.64	1	
4	4	-9	1		9.53	8.62	8.61	.34	.69288	.92	2.37	2	
4	4	-8	1	L	2.81	4.10	4.10	.07	.62313	-1.29	-1.31	1	
4	4	-7	1		13.75	18.71	-18.71	-.42	.55604	-4.96	-20.07	182	
4	4	-6	1		7.78	10.95	10.95	.22	.49270	-3.17	-9.81	1	
4	4	-5	1		8.35	11.33	11.33	.28	.43477	-2.99	-10.87	1	
4	4	-4	1		6.60	8.38	-8.37	-.46	.38469	-1.78	-5.73	184	
4	4	-3	1		25.73	26.90	26.90	.06	.34589	-1.17	-5.46	0	
4	4	-2	1		3.63	3.82	-3.79	.47	.32246	-.19	-.41	172	
4	4	-1	1		41.19	39.52	-39.51	-.44	.31783	1.67	5.10	181	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	4	0	1		4.37	4.09	4.08	-.21	.33277	.29	.68	357	
4	4	1	1		10.22	9.63	9.61	.62	.36489	.59	2.51	3	
4	4	2	1		4.30	4.38	4.38	-.16	.41018	-.08	-.15	358	
4	4	3	1		19.10	18.80	-18.79	-.52	.46480	.31	1.59	182	
4	4	4	1	L	1.79	.51	.24	.45	.52585	1.28	1.00	62	
4	4	5	1	L	1.88	.64	.61	.21	.59135	1.24	.92	19	
4	4	6	1		13.71	13.73	-13.72	-.49	.65997	-.02	-.06	183	
4	4	7	1	L	3.57	3.26	3.26	.11	.73083	.31	.34	1	
4	5	-9	1	L	4.26	4.73	4.72	.36	.70327	-.47	-.63	4	
4	5	-8	1	L	1.95	.46	-.46	-.08	.63517	1.48	1.07	190	
4	5	-7	1		6.09	7.39	-7.38	-.42	.57006	-1.30	-3.07	184	
4	5	-6	1		10.18	13.13	13.12	.39	.50910	-2.94	-10.91	1	
4	5	-5	1		4.89	6.34	-6.34	.25	.45398	-1.46	-3.30	177	
4	5	-4	1		21.62	24.20	-24.20	-.60	.40706	-2.58	-12.64	182	
4	5	-3	1		12.48	12.08	12.08	.09	.37147	.40	1.97	0	
4	5	-2	1		44.49	42.56	42.55	.56	.35067	1.94	5.56	0	
4	5	-1	1		46.69	45.95	-45.95	-.42	.34733	.74	1.50	181	
4	5	0	1		30.32	30.06	-30.06	-.26	.36194	.27	.88	181	
4	5	1	1		20.44	20.06	20.05	.54	.39249	.38	1.67	1	
4	5	2	1		3.92	4.97	4.97	-.14	.43565	-1.05	-1.86	359	
4	5	3	1	L	1.75	.58	-.44	-.39	.48808	1.17	.93	222	
4	5	4	1		4.41	4.60	-4.58	.40	.54712	-.20	-.34	174	
4	5	5	1	L	4.10	4.16	4.16	.07	.61087	-.06	-.08	0	
4	5	6	1	L	2.05	.68	.53	-.42	.67798	1.38	.94	322	
4	5	7	1		7.45	6.96	6.96	.22	.74756	.48	.99	1	
4	6	-9	1		6.74	5.80	5.79	.35	.71580	.94	1.87	3	
4	6	-8	1		11.64	12.88	12.88	-.06	.64950	-1.24	-3.84	0	
4	6	-7	1	L	2.23	.60	-.48	-.35	.58653	1.63	1.50	217	
4	6	-6	1		4.15	4.52	4.51	.32	.52809	-.37	-.66	4	
4	6	-5	1		7.02	8.75	8.75	.13	.47585	-1.73	-5.08	0	
4	6	-4	1		5.94	6.50	-6.48	-.47	.43205	-.56	-1.51	185	
4	6	-3	1		28.96	29.12	29.12	.23	.39950	-.16	-.65	0	
4	6	-2	1		17.90	16.67	16.67	.36	.38108	1.23	6.75	1	
4	6	-1	1		30.33	29.37	-29.36	-.53	.37886	.96	3.52	182	
4	6	0	1		11.74	11.44	-11.44	-.04	.39311	.30	1.34	181	
4	6	1	1		10.29	10.09	10.07	.60	.42216	.20	.77	3	
4	6	2	1		8.03	7.45	-7.44	-.32	.46325	.59	1.87	183	
4	6	3	1		12.32	11.69	-11.68	-.39	.51349	.64	2.52	182	
4	6	4	1		18.25	18.04	18.04	.52	.57047	.21	.90	1	
4	6	5	1	L	2.95	1.21	1.21	.05	.63237	1.73	1.81	2	
4	6	6	1		8.67	8.50	-8.49	-.46	.69787	.17	.41	184	
4	7	-9	1	L	2.12	.79	.70	.36	.73035	1.33	.88	26	
4	7	-8	1		8.43	9.33	-9.33	-.19	.66598	-.90	-2.23	182	
4	7	-7	1		5.89	5.82	-5.81	-.32	.60526	.07	.14	184	
4	7	-6	1		10.16	10.75	10.74	.46	.54940	-.59	-2.06	2	
4	7	-5	1		27.34	31.02	31.02	.09	.50003	-3.67	-14.71	0	
4	7	-4	1		28.05	28.77	-28.77	-.57	.45925	-.72	-2.82	182	
4	7	-3	1		6.22	6.22	-6.21	.25	.42951	.01	.02	177	
4	7	-2	1		23.06	22.15	22.15	.42	.41321	.90	3.94	1	
4	7	-1	1		9.07	9.36	9.35	-.50	.41194	-.29	-1.04	357	
4	7	0	1		11.73	11.65	-11.65	-.07	.42583	.08	.35	181	
4	7	1	1		5.30	5.06	-5.04	.50	.45350	.24	.55	174	
4	7	2	1		33.38	33.69	-33.69	-.29	.49263	-.31	-1.00	181	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	7	3	1		10.14	9.52	-9.52	-.25	.54073	.62	2.12	182	
4	7	4	1		12.52	12.56	12.55	.45	.59565	-.04	-.14	2	
4	7	5	1	L	3.68	3.71	-3.71	-.08	.65566	-.03	-.04	182	
4	7	6	1		15.91	16.02	-16.01	-.37	.71949	-.10	-.34	182	
4	8	-9	1	L	2.92	2.45	2.43	.33	.74681	.47	.41	7	
4	8	-8	1	L	3.17	4.28	-4.28	-.17	.68446	-1.11	-1.13	183	
4	8	-7	1		10.54	11.94	-11.94	-.25	.62604	-1.41	-4.35	182	
4	8	-6	1		7.47	7.70	7.69	.38	.57277	-.23	-.62	2	
4	8	-5	1	L	1.78	.90	.90	-.02	.52621	.88	.69	359	
4	8	-4	1	L	1.77	2.63	2.60	-.42	.48828	-.86	-.68	351	
4	8	-3	1		8.24	8.10	8.10	.36	.46112	.13	.43	2	
4	8	-2	1		14.52	14.15	14.15	.22	.44668	.38	1.73	0	
4	8	-1	1		17.80	17.39	-17.38	-.57	.44623	.41	2.01	182	
4	8	0	1		11.67	11.80	11.80	.14	.45978	-.13	-.52	0	
4	8	1	1		22.20	21.33	21.32	.51	.48618	.88	3.86	1	
4	8	2	1		17.84	18.36	-18.35	-.44	.52348	-.52	-2.33	182	
4	8	3	1		13.68	13.95	-13.95	-.23	.56954	-.27	-1.01	181	
4	8	4	1		12.01	11.93	11.92	.53	.62243	.08	.26	2	
4	8	5	1	L	2.09	1.72	1.72	-.10	.68055	.37	.25	357	
4	8	6	1		5.16	5.97	-5.95	-.37	.74268	-.81	-1.19	184	
4	9	-8	1	L	2.87	4.70	-4.69	-.28	.70477	-1.83	-1.66	184	
4	9	-7	1	L	2.00	.59	.56	-.20	.64868	1.41	.98	340	
4	9	-6	1		12.58	12.80	12.79	.48	.59797	-.22	-.79	2	
4	9	-5	1		4.21	6.06	-6.06	-.07	.55411	-1.85	-3.07	181	
4	9	-4	1		8.68	8.55	-8.54	-.48	.51884	.13	.40	184	
4	9	-3	1		5.64	4.83	4.82	.37	.49401	.80	1.89	4	
4	9	-2	1		33.28	32.63	32.63	.25	.48123	.65	2.06	0	
4	9	-1	1		27.73	26.55	-26.54	-.51	.48147	1.19	4.52	182	
4	9	0	1		4.88	4.07	4.06	.11	.49470	.82	1.65	1	
4	9	1	1		21.29	21.94	21.94	.40	.51994	-.65	-2.96	1	
4	9	2	1		12.75	12.49	-12.48	-.39	.55555	.26	.98	182	
4	9	3	1		7.09	7.15	-7.15	-.09	.59969	-.05	-.12	181	
4	9	4	1	L	2.05	3.37	3.34	.44	.65062	-1.32	-.90	7	
4	9	5	1		11.82	11.58	-11.57	-.22	.70688	.24	.67	182	
4	10	-8	1	L	3.34	4.59	-4.59	-.25	.72676	-1.25	-1.24	184	
4	10	-7	1	L	2.71	1.06	1.06	-.13	.67298	1.65	1.49	354	
4	10	-6	1		5.93	6.04	6.03	.39	.62476	-.11	-.22	3	
4	10	-5	1	L	1.91	3.08	-3.08	-.16	.58347	-1.17	-.86	184	
4	10	-4	1		18.73	18.86	-18.86	-.32	.55067	-.14	-.61	181	
4	10	-3	1		19.92	19.22	19.22	.44	.52794	.69	3.23	1	
4	10	-2	1	L	1.65	.48	.48	.05	.51663	1.37	1.04	6	
4	10	-1	1		16.76	16.51	-16.50	-.54	.51747	.25	1.11	182	
4	10	0	1		7.93	7.20	-7.19	.29	.53041	.73	2.13	177	
4	10	1	1		19.38	19.24	19.23	.38	.55460	.14	.64	1	
4	10	2	1		13.81	14.32	-14.31	-.50	.58866	-.50	-1.83	183	
4	10	3	1	L	2.04	3.09	-3.09	-.06	.63099	-1.05	-.72	182	
4	10	4	1		10.28	10.03	10.02	.48	.68005	.25	.69	2	
4	10	5	1		22.45	22.37	-22.36	-.23	.73449	.09	.32	181	
4	11	-8	1		8.10	8.69	-8.68	-.33	.75029	-.58	-1.21	183	
4	11	-7	1	L	2.11	2.34	-2.33	-.08	.69878	-.23	-.15	182	
4	11	-6	1		18.75	18.56	18.56	.45	.65296	.19	.73	1	
4	11	-5	1		9.59	8.58	8.58	-.20	.61409	1.01	2.91	359	
4	11	-4	1		16.65	16.24	-16.24	-.36	.58356	.41	1.65	182	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	11	-3	1		6.85	6.16	6.14	.43	.56273	.69	1.71	4	
4	11	-2	1		6.20	5.71	5.71	.07	.55271	.49	1.12	0	
4	11	-1	1		9.99	9.48	-9.47	-.46	.55407	.51	1.63	183	
4	11	0	1	L	3.52	2.86	2.85	.25	.56674	.66	.88	5	
4	11	1	1		10.75	10.29	10.29	.26	.58999	.46	1.48	1	
4	11	2	1		7.46	7.78	-7.77	-.44	.62263	-.32	-.73	184	
4	11	3	1		6.42	5.24	5.24	.06	.66328	1.18	2.37	0	
4	11	4	1		20.04	20.46	20.46	.38	.71056	-.42	-1.52	1	
4	12	-7	1		5.47	5.09	-5.09	-.00	.72591	.38	.59	181	
4	12	-6	1		14.85	14.33	14.33	.34	.68239	.52	1.73	1	
4	12	-5	1	L	3.53	4.36	-4.35	-.27	.64579	-.83	-.97	184	
4	12	-4	1		10.15	9.29	9.29	-.20	.61735	.86	2.54	359	
4	12	-3	1		12.84	12.93	12.92	.47	.59823	-.09	-.31	2	
4	12	-2	1		5.94	5.59	-5.59	-.10	.58936	.35	.71	182	
4	12	-1	1		14.37	13.82	-13.82	-.46	.59118	.55	2.04	182	
4	12	0	1	L	2.15	2.99	2.97	.39	.60360	-.84	-.64	7	
4	12	1	1		4.61	3.01	-3.00	.23	.62599	1.60	2.47	175	
4	12	2	1		17.91	17.79	-17.78	-.51	.65733	.12	.44	182	
4	12	3	1	L	3.27	1.03	-1.02	.09	.69641	2.24	2.24	175	
4	12	4	1		16.45	15.66	15.65	.39	.74201	.79	2.57	1	
4	13	-7	1		5.69	4.55	-4.55	.04	.75424	1.14	1.84	179	
4	13	-6	1		11.91	11.63	11.62	.37	.71289	.28	.80	1	
4	13	-5	1	L	3.45	3.00	-2.99	-.29	.67841	.45	.49	186	
4	13	-4	1	L	2.62	2.95	-2.94	-.21	.65189	-.33	-.28	185	
4	13	-3	1		11.66	11.09	11.08	.44	.63432	.58	1.76	2	
4	13	-2	1		4.87	4.06	4.06	-.08	.62647	.81	1.29	359	
4	13	-1	1	L	2.03	3.21	-3.19	-.37	.62869	-1.18	-.81	187	
4	13	0	1		10.25	9.99	9.99	.35	.64088	.26	.73	1	
4	13	1	1		11.57	11.00	-11.00	.11	.66249	.57	1.65	179	
4	13	2	1		20.36	20.90	-20.89	-.42	.69265	-.53	-2.00	182	
4	13	3	1	L	2.46	1.51	1.49	.19	.73028	.96	.69	7	
4	14	-6	1		6.61	5.90	5.89	.27	.74434	.71	1.28	2	
4	14	-5	1		8.76	7.04	-7.03	-.34	.71184	1.72	4.02	183	
4	14	-4	1	L	3.46	3.28	-3.28	-.07	.68707	.18	.19	182	
4	14	-3	1		20.30	18.95	18.94	.44	.67091	1.35	5.14	1	
4	14	-2	1	L	2.94	2.63	-2.62	-.22	.66397	.31	.36	185	
4	14	-1	1	L	2.07	.36	-.11	-.34	.66654	1.72	1.16	252	
4	14	0	1		20.32	20.34	20.33	.44	.67853	-.02	-.09	1	
4	14	1	1	L	2.63	.35	.34	.07	.69943	2.29	1.62	11	
4	14	2	1		6.55	7.01	-7.00	-.46	.72849	-.46	-.80	184	
4	15	-5	1	L	2.58	1.04	-.99	-.34	.74595	1.54	1.15	199	
4	15	-4	1		7.34	6.64	-6.64	-.07	.72280	.70	1.36	181	
4	15	-3	1		12.77	12.19	12.18	.39	.70791	.58	1.71	1	
4	15	-2	1		10.50	9.85	-9.85	-.20	.70179	.65	1.74	182	
4	15	-1	1		11.49	10.27	-10.26	-.24	.70468	1.22	3.36	182	
4	15	0	1		11.75	11.73	11.73	.38	.71647	.02	.05	1	
4	15	1	1		4.77	3.32	3.32	-.03	.73674	1.45	1.95	0	
4	16	-3	1		5.51	6.11	6.10	.37	.74526	-.60	-.90	3	
4	16	-2	1	L	3.47	4.10	-4.09	-.31	.73989	-.64	-.62	185	
4	16	-1	1		6.31	6.48	-6.47	-.20	.74306	-.16	-.28	182	
4	16	0	1		6.49	6.04	6.03	.44	.75468	.44	.74	4	
5	-19	-2	1	L	3.81	4.52	-4.51	-.32	.75555	-.71	-.73	185	
5	-19	-1	1	L	3.02	1.95	1.93	.32	.74603	1.07	.91	9	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
5	-19	0	1		8.38	9.40	-9.40	.09	.74495	-1.01	-2.05	179	
5	-19	1	1		11.92	12.36	-12.35	-.36	.75234	-.43	-1.17	182	
5	-18	-3	1		7.37	7.68	-7.67	-.24	.73651	-.31	-.58	182	
5	-18	-2	1	L	2.17	1.52	1.50	-.23	.71840	.65	.42	352	
5	-18	-1	1		28.09	28.41	28.41	.43	.70883	-.32	-1.20	0	
5	-18	0	1	L	2.10	2.50	-2.50	-.03	.70814	-.40	-.26	181	
5	-18	1	1		18.77	18.71	-18.71	-.42	.71636	.05	.16	182	
5	-18	2	1	L	2.47	1.50	-1.47	.28	.73320	.97	.72	169	
5	-17	-4	1		12.44	13.05	13.04	.41	.72713	-.61	-1.73	1	
5	-17	-3	1		9.15	10.02	-10.01	-.25	.70023	-.86	-2.01	182	
5	-17	-2	1		8.90	8.61	-8.61	-.25	.68162	.29	.69	182	
5	-17	-1	1		17.31	17.68	17.68	.39	.67200	-.37	-1.33	1	
5	-17	0	1		8.35	8.82	8.82	-.04	.67175	-.47	-1.06	0	
5	-17	1	1	L	2.11	1.46	-1.44	-.34	.68088	.63	.42	194	
5	-17	2	1	L	2.15	.56	.48	.29	.69903	1.59	1.03	30	
5	-17	3	1	L	2.17	2.42	-2.42	.12	.72552	-.25	-.16	177	
5	-16	-5	1	L	2.18	.11	-.02	.10	.72779	2.07	1.33	100	
5	-16	-4	1	L	3.17	2.79	2.77	.33	.69225	.38	.37	6	
5	-16	-3	1		14.58	14.74	-14.73	-.37	.66442	-.16	-.53	182	
5	-16	-2	1		6.62	6.58	-6.58	-.12	.64527	.03	.07	182	
5	-16	-1	1		8.20	8.32	8.30	.49	.63560	-.12	-.29	3	
5	-16	0	1		8.27	8.99	-8.99	-.18	.63584	-.72	-1.72	182	
5	-16	1	1		7.16	7.03	-7.02	-.39	.64598	.13	.27	184	
5	-16	2	1		9.54	8.98	8.98	.39	.66556	.56	1.43	2	
5	-16	3	1	L	2.11	1.33	1.32	.13	.69380	.79	.52	5	
5	-16	4	1		6.74	6.62	-6.61	-.41	.72967	.12	.22	184	
5	-15	-6	1		8.29	8.80	-8.79	-.43	.73844	-.51	-1.08	183	
5	-15	-5	1		19.86	19.83	19.83	.12	.69483	.03	.12	0	
5	-15	-4	1		9.44	9.63	9.63	.38	.65801	-.19	-.50	2	
5	-15	-3	1	L	2.04	.74	-.65	-.36	.62917	1.29	.90	209	
5	-15	-2	1	L	1.98	1.70	-1.70	-.13	.60944	.28	.20	185	
5	-15	-1	1		4.28	2.82	-2.79	.43	.59972	1.46	2.20	171	
5	-15	0	1		4.46	3.23	3.23	-.18	.60051	1.23	1.93	357	
5	-15	1	1		10.34	11.05	-11.05	-.27	.61176	-.71	-2.11	182	
5	-15	2	1		12.54	12.26	12.26	.39	.63291	.27	.89	1	
5	-15	3	1		10.83	10.41	-10.41	-.01	.66301	.42	1.19	181	
5	-15	4	1	L	2.12	.75	-.65	-.37	.70092	1.37	.91	210	
5	-15	5	1	L	3.97	5.15	5.14	.25	.74545	-1.18	-1.35	2	
5	-14	-6	1		14.70	14.59	-14.58	-.37	.70784	.11	.36	182	
5	-14	-5	1		19.09	19.12	19.12	.24	.66270	-.04	-.14	0	
5	-14	-4	1		5.23	4.88	4.88	.26	.62450	.34	.60	3	
5	-14	-3	1		8.85	8.95	-8.94	-.48	.59457	-.11	-.30	184	
5	-14	-2	1		4.70	3.98	3.98	.03	.57421	.72	1.24	0	
5	-14	-1	1		13.00	12.93	12.92	.51	.56446	.07	.25	2	
5	-14	0	1		16.89	16.72	-16.71	-.33	.56586	.16	.73	182	
5	-14	1	1	L	1.89	.90	-.84	-.31	.57834	1.00	.74	201	
5	-14	2	1		4.32	4.07	4.05	.49	.60120	.24	.38	6	
5	-14	3	1		8.64	8.34	-8.34	-.00	.63332	.30	.79	181	
5	-14	4	1		12.59	13.09	-13.08	-.41	.67336	-.49	-1.49	182	
5	-14	5	1		5.26	5.03	5.03	.25	.72005	.22	.34	2	
5	-13	-7	1	L	3.38	3.77	-3.77	.02	.73073	-.39	-.39	179	
5	-13	-6	1		18.86	18.37	-18.36	-.44	.67828	.50	1.83	182	
5	-13	-5	1	L	3.09	1.75	1.73	.25	.63153	1.34	1.41	8	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
5	-13	-4	1		21.20	20.85	20.85	.29	.59186	.35	1.54	0	
5	-13	-3	1	L	3.44	3.27	-3.24	-.44	.56076	.18	.23	188	
5	-13	-2	1	L	2.32	2.32	-2.32	.02	.53971	.01	.00	179	
5	-13	-1	1		11.53	12.26	-12.25	.40	.52993	-.73	-2.55	178	
5	-13	0	1		13.04	13.57	-13.57	-.32	.53202	-.54	-2.04	182	
5	-13	1	1		14.39	14.04	14.03	-.16	.54586	.36	1.41	0	
5	-13	2	1	L	3.09	2.93	2.90	.45	.57059	.16	.19	8	
5	-13	3	1		5.58	5.56	-5.56	-.16	.60487	.02	.04	182	
5	-13	4	1		19.32	19.03	-19.03	-.34	.64718	.29	1.11	182	
5	-13	5	1		20.34	19.46	19.45	.37	.69608	.89	3.31	1	
5	-13	6	1	L	2.16	2.79	2.79	.09	.75026	-.63	-.41	1	
5	-12	-7	1	L	3.94	3.70	3.70	-.09	.70400	.24	.29	359	
5	-12	-6	1	L	2.02	1.10	-1.05	-.34	.64988	.92	.64	199	
5	-12	-5	1		10.32	11.04	11.03	.38	.60146	-.72	-2.17	1	
5	-12	-4	1		11.11	10.55	10.55	.14	.56023	.56	1.93	0	
5	-12	-3	1		14.88	14.69	-14.68	-.54	.52787	.19	.79	183	
5	-12	-2	1		34.60	34.61	34.61	.20	.50609	-.02	-.05	0	
5	-12	-1	1		15.04	15.00	14.99	.47	.49629	.04	.19	1	
5	-12	0	1		18.12	18.45	-18.44	-.47	.49917	-.33	-1.54	182	
5	-12	1	1		22.06	22.13	-22.13	-.18	.51451	-.07	-.33	181	
5	-12	2	1		5.97	6.18	6.15	.53	.54126	-.20	-.45	4	
5	-12	3	1	L	1.90	.96	.94	-.15	.57784	.94	.70	351	
5	-12	4	1		4.17	4.47	-4.46	-.35	.62251	-.30	-.43	185	
5	-12	5	1	L	2.03	1.76	-1.72	.34	.67368	.27	.19	168	
5	-12	6	1		5.79	6.30	6.30	.07	.72996	-.51	-.82	0	
5	-11	-8	1	L	2.87	2.63	-2.60	.41	.73882	.24	.20	170	
5	-11	-7	1	L	2.08	.99	.98	-.11	.67862	1.10	.74	354	
5	-11	-6	1		15.97	15.89	-15.89	-.40	.62280	.08	.31	182	
5	-11	-5	1		16.80	16.74	16.74	.36	.57266	.06	.25	1	
5	-11	-4	1		13.85	13.98	-13.98	.16	.52979	-.12	-.50	179	
5	-11	-3	1	L	1.81	1.76	-1.70	-.47	.49610	.05	.04	196	
5	-11	-2	1		17.15	18.00	18.00	.18	.47354	-.86	-4.04	0	
5	-11	-1	1		20.23	20.17	20.17	.32	.46374	.06	.26	0	
5	-11	0	1		7.43	7.86	-7.85	-.43	.46750	-.43	-1.26	184	
5	-11	1	1		13.56	13.38	-13.38	-.00	.48451	.18	.77	181	
5	-11	2	1		6.49	6.15	6.13	.46	.51345	.34	.84	4	
5	-11	3	1		15.60	15.45	-15.45	-.31	.55245	.15	.61	182	
5	-11	4	1		7.22	7.89	-7.88	-.25	.59956	-.66	-1.59	182	
5	-11	5	1		9.81	9.22	-9.21	.45	.65301	.59	1.66	177	
5	-11	6	1	L	2.11	3.48	-3.48	-.03	.71138	-1.37	-.91	181	
5	-10	-8	1		6.44	5.89	5.88	.35	.71651	.55	1.01	3	
5	-10	-7	1	L	2.14	2.53	-2.52	-.22	.65475	-.39	-.26	185	
5	-10	-6	1		7.19	6.92	-6.91	-.27	.59724	.27	.66	183	
5	-10	-5	1		9.20	9.00	8.99	.48	.54534	.20	.63	3	
5	-10	-4	1		5.87	6.30	-6.30	-.02	.50077	-.43	-1.01	181	
5	-10	-3	1		31.40	31.60	-31.59	-.55	.46567	-.20	-.65	182	
5	-10	-2	1		15.39	15.98	15.97	.36	.44228	-.59	-2.78	1	
5	-10	-1	1		21.03	21.18	21.18	.37	.43251	-.15	-.67	0	
5	-10	0	1		18.04	17.44	-17.43	-.57	.43727	.60	3.04	182	
5	-10	1	1		22.77	23.32	23.32	-.02	.45611	-.55	-2.37	0	
5	-10	2	1		9.30	9.45	9.43	.52	.48740	-.15	-.50	3	
5	-10	3	1		10.49	10.19	-10.19	-.29	.52894	.30	1.05	182	
5	-10	4	1		5.76	5.39	-5.39	-.25	.57851	.37	.78	183	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
5	-10	5	1		9.28	9.65	9.64	.40	.63425	-.37	-1.02	2	
5	-10	6	1	L	4.16	2.72	2.72	-.06	.69466	1.44	1.87	359	
5	-9	-8	1		24.56	24.95	24.94	.42	.69584	-.38	-1.51	0	
5	-9	-7	1	L	2.71	2.43	-2.42	-.23	.63257	.28	.27	186	
5	-9	-6	1		6.75	6.39	-6.38	-.31	.57339	.37	.86	183	
5	-9	-5	1		8.74	8.07	8.06	.44	.51972	.66	2.11	3	
5	-9	-4	1		35.03	34.48	34.48	.01	.47343	.55	1.81	0	
5	-9	-3	1		14.94	14.36	-14.35	-.44	.43686	.58	2.77	182	
5	-9	-2	1		10.67	11.49	-11.49	.33	.41261	-.82	-3.33	178	
5	-9	-1	1		12.73	12.65	-12.64	.19	.40292	.08	.36	179	
5	-9	0	1		23.02	22.73	-22.73	-.50	.40881	.29	1.24	182	
5	-9	1	1		29.21	29.87	29.87	.17	.42965	-.66	-2.21	0	
5	-9	2	1		10.61	11.02	11.01	.41	.46342	-.21	-.80	2	
5	-9	3	1		23.61	24.00	-24.00	-.45	.50756	-.39	-1.56	182	
5	-9	4	1		4.01	3.51	-3.51	-.13	.55960	.50	.82	183	
5	-9	5	1		23.35	22.94	22.93	.50	.61757	.42	1.61	1	
5	-9	6	1		5.63	5.76	-5.76	-.17	.67994	-.13	-.22	182	
5	-9	7	1	L	4.22	3.66	-3.65	-.33	.74561	.56	.71	186	
5	-8	-9	1		7.23	5.79	-5.79	.06	.74455	1.44	2.84	179	
5	-8	-8	1	L	3.12	.62	-.53	.32	.67695	2.50	2.64	148	
5	-8	-7	1		6.36	6.40	-6.39	-.34	.61225	-.02	-.04	184	
5	-8	-6	1	L	3.31	.29	.25	-.15	.55148	3.02	4.15	330	
5	-8	-5	1		25.85	25.18	25.18	.54	.49609	.66	3.37	1	
5	-8	-4	1		4.93	4.52	4.51	-.19	.44807	.42	.93	358	
5	-8	-3	1		25.31	24.64	-24.63	-.50	.41002	.67	2.53	182	
5	-8	-2	1		20.79	20.57	20.56	.51	.38491	.22	.98	1	
5	-8	-1	1		26.26	26.19	26.19	.22	.37535	.07	.27	0	
5	-8	0	1		51.25	51.96	-51.96	-.62	.36251	-.71	-1.38	181	
5	-8	1	1		13.74	14.15	-14.15	.15	.40549	-.42	-1.96	179	
5	-8	2	1		13.82	14.11	14.11	.45	.44184	-.30	-1.35	1	
5	-8	3	1		21.36	21.81	-21.80	-.41	.48859	-.45	-2.07	182	
5	-8	4	1		9.00	8.96	-8.96	-.12	.54305	.04	.12	181	
5	-8	5	1		5.63	5.42	5.41	.42	.60314	.21	.42	4	
5	-8	6	1		9.21	9.34	-9.34	-.19	.66734	-.13	-.35	182	
5	-8	7	1	L	2.36	1.00	.97	-.23	.73457	1.37	1.00	347	
5	-7	-9	1		6.43	5.62	-5.62	.09	.72873	.81	1.51	179	
5	-7	-8	1	L	3.24	3.18	3.15	.37	.65999	.07	.07	6	
5	-7	-7	1		7.76	6.46	-6.45	-.34	.59399	1.30	3.53	184	
5	-7	-6	1		7.63	6.97	-6.96	-.18	.53174	.66	1.94	182	
5	-7	-5	1		13.60	13.03	13.02	.47	.47472	.57	2.57	2	
5	-7	-4	1	L	1.94	1.38	-1.37	-.15	.42504	.56	.53	187	
5	-7	-3	1		14.83	14.58	14.58	-.36	.38555	.25	1.30	359	
5	-7	-2	1		28.67	27.98	27.97	.44	.35963	.70	2.28	0	
5	-7	-1	1		4.64	5.15	5.15	.02	.35029	-.51	-1.19	0	
5	-7	0	1		19.78	20.05	-20.04	-.51	.35884	-.27	-1.22	182	
5	-7	1	1		6.66	6.66	-6.65	.35	.38408	.00	.00	176	
5	-7	2	1		40.47	41.17	41.17	.30	.42304	-.69	-1.76	0	
5	-7	3	1		32.26	33.21	-33.20	-.55	.47233	-.94	-3.02	181	
5	-7	4	1		5.90	5.69	5.69	.03	.52907	.21	.49	0	
5	-7	5	1		7.90	8.13	8.11	.49	.59112	-.23	-.63	3	
5	-7	6	1		8.65	7.51	-7.50	-.30	.65698	1.14	2.97	183	
5	-7	7	1	L	2.42	3.18	3.17	-.24	.72562	-.77	-.58	356	
5	-6	-9	1	L	2.10	3.34	3.33	.18	.71485	-1.23	-.82	3	

H	K	L	GRP		FO	FC	A	B	SINTH/LM	DF	w*DF	ANGLE CALC	ANGLE STAT
5	-6	-8	1		5.50	4.45	4.45	.25	.64513	1.04	1.98	3	
5	-6	-7	1		9.09	8.49	-8.48	-.43	.57798	.60	1.83	183	
5	-6	-6	1	L	3.46	3.86	3.86	.00	.51442	-.39	-.60	0	
5	-6	-5	1		23.50	23.31	23.30	.54	.45594	.20	.98	1	
5	-6	-4	1		21.41	20.41	-20.41	-.36	.40475	1.00	4.95	182	
5	-6	-3	1		15.89	15.46	-15.46	-.39	.36394	.43	2.42	182	
5	-6	-2	1		51.27	49.74	49.73	.61	.33730	1.53	3.23	0	
5	-6	-1	1		16.59	16.28	16.28	.04	.32830	.30	1.64	0	
5	-6	0	1		37.82	37.20	-37.19	-.60	.33836	.62	1.79	181	
5	-6	1	1	L	2.07	.68	-.61	.32	.36589	1.39	1.51	152	
5	-6	2	1	L	1.69	2.61	2.59	.33	.40738	-.92	-.76	7	
5	-6	3	1		11.07	10.71	-10.70	-.48	.45905	.36	1.44	183	
5	-6	4	1	L	3.56	4.62	-4.62	.04	.51787	-1.06	-1.63	179	
5	-6	5	1	L	1.86	1.64	1.60	.38	.58167	.22	.17	13	
5	-6	6	1		13.83	13.85	-13.85	-.31	.64899	-.02	-.06	182	
5	-6	7	1	L	2.09	.48	.47	-.13	.71883	1.61	1.08	345	
5	-5	-9	1	L	3.01	1.68	-1.67	.20	.70302	1.33	1.35	173	
5	-5	-8	1		13.54	12.90	12.90	.29	.63251	.64	2.23	1	
5	-5	-7	1		22.50	22.23	-22.23	-.41	.56442	.27	1.25	182	
5	-5	-6	1	L	3.55	2.50	-2.50	-.03	.49978	1.06	1.68	181	
5	-5	-5	1		17.22	16.70	16.69	.44	.44008	.52	2.69	1	
5	-5	-4	1		13.83	13.14	-13.13	-.30	.38762	.70	3.49	182	
5	-5	-3	1	L	2.34	.29	.18	-.22	.34571	2.05	2.73	310	
5	-5	-2	1		36.18	35.25	35.24	.51	.31856	.94	2.84	0	
5	-5	-1	1		12.98	11.96	11.96	-.16	.31005	1.01	5.75	0	
5	-5	0	1		39.78	38.45	-38.44	-.45	.32167	1.33	4.04	181	
5	-5	1	1		21.98	21.85	21.84	.50	.35143	.13	.58	1	
5	-5	2	1		20.80	20.44	-20.44	.15	.39525	.37	1.74	179	
5	-5	3	1		10.07	9.33	-9.31	-.60	.44904	.74	2.84	184	
5	-5	4	1	L	1.75	1.30	-1.28	.20	.50965	.46	.37	171	
5	-5	5	1		8.86	7.38	7.36	.43	.57492	1.49	4.46	3	
5	-5	6	1		32.74	32.11	-32.11	-.40	.64344	.63	2.17	181	
5	-5	7	1	L	3.22	2.35	-2.34	-.13	.71427	.87	.91	184	
5	-4	-9	1	L	2.61	.57	-.49	.28	.69335	2.05	1.77	150	
5	-4	-8	1		6.94	7.17	7.17	.15	.62225	-.24	-.55	1	
5	-4	-7	1		20.83	20.06	-20.06	-.48	.55349	.77	3.59	182	
5	-4	-6	1	L	3.17	3.12	3.11	.16	.48805	.05	.08	2	
5	-4	-5	1		36.52	35.54	35.54	.49	.42746	.98	3.45	0	
5	-4	-4	1		22.57	21.29	-21.28	-.50	.37409	1.28	6.04	182	
5	-4	-3	1		40.11	39.12	-39.12	-.24	.33144	.99	2.94	181	
5	-4	-2	1		61.10	60.67	60.66	.65	.30406	.43	.99	0	
5	-4	-1	1	L	1.48	.81	.80	-.14	.29622	.67	.63	350	
5	-4	0	1		20.34	18.69	18.68	-.52	.30940	1.66	7.91	359	
5	-4	1	1		27.03	26.01	26.00	.44	.34117	1.03	4.00	0	
5	-4	2	1	L	3.17	1.86	1.85	.17	.38699	1.31	2.12	5	
5	-4	3	1		24.77	24.77	-24.77	-.49	.44250	-.00	-.01	182	
5	-4	4	1		20.55	21.21	21.20	.20	.50453	-.65	-3.20	0	
5	-4	5	1		17.29	17.73	17.73	.29	.57095	-.44	-1.87	0	
5	-4	6	1		6.82	6.84	-6.82	-.39	.64039	-.02	-.04	184	
5	-4	7	1		5.21	4.23	-4.23	-.00	.71198	.98	1.58	181	
5	-3	-9	1		9.67	9.70	9.70	.29	.68593	-.03	-.09	1	
5	-3	-8	1		11.88	11.80	11.80	.17	.61450	.08	.27	0	
5	-3	-7	1		4.74	3.72	-3.70	-.44	.54534	1.02	1.99	187	