

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
0°	0.00000	0.08726	0.17450	0.26168	0.34878	0.43578	0.52264	0.60935	0.69587	0.78217
1°	0.00145	0.08872	0.17595	0.26313	0.35023	0.43723	0.52409	0.61079	0.69731	0.78361
2°	0.00291	0.09017	0.17740	0.26458	0.35168	0.43868	0.52554	0.61223	0.69875	0.78505
3°	0.00436	0.09162	0.17886	0.26604	0.35313	0.44013	0.52698	0.61368	0.70019	0.78648
4°	0.00582	0.09308	0.18031	0.26749	0.35459	0.44157	0.52843	0.61512	0.70163	0.78792
5°	0.00727	0.09453	0.18177	0.26894	0.35604	0.44302	0.52987	0.61656	0.70307	0.78935
6°	0.00873	0.09599	0.18322	0.27039	0.35749	0.44447	0.53132	0.61801	0.70451	0.79079
7°	0.01018	0.09744	0.18467	0.27185	0.35894	0.44592	0.53277	0.61945	0.70595	0.79223
8°	0.01164	0.09890	0.18613	0.27330	0.36039	0.44737	0.53421	0.62089	0.70739	0.79366
9°	0.01309	0.10035	0.18758	0.27475	0.36184	0.44882	0.53566	0.62234	0.70883	0.79510
10°	0.01454	0.10180	0.18903	0.27620	0.36329	0.45027	0.53710	0.62378	0.71027	0.79653
11°	0.01600	0.10326	0.19049	0.27766	0.36474	0.45171	0.53855	0.62522	0.71171	0.79797
12°	0.01745	0.10471	0.19194	0.27911	0.36619	0.45316	0.54000	0.62667	0.71314	0.79941
13°	0.01891	0.10617	0.19339	0.28056	0.36764	0.45461	0.54144	0.62811	0.71458	0.80084
14°	0.02036	0.10762	0.19485	0.28201	0.36909	0.45606	0.54289	0.62955	0.71602	0.80228
15°	0.02182	0.10907	0.19630	0.28346	0.37054	0.45751	0.54433	0.63099	0.71746	0.80371
16°	0.02327	0.11053	0.19775	0.28492	0.37199	0.45896	0.54578	0.63244	0.71890	0.80515
17°	0.02473	0.11198	0.19921	0.28637	0.37344	0.46040	0.54723	0.63388	0.72034	0.80658
18°	0.02618	0.11344	0.20066	0.28782	0.37489	0.46185	0.54867	0.63532	0.72178	0.80802
19°	0.02763	0.11489	0.20211	0.28927	0.37634	0.46330	0.55012	0.63677	0.72322	0.80945
20°	0.02909	0.11634	0.20357	0.29072	0.37779	0.46475	0.55156	0.63821	0.72466	0.81089
21°	0.03054	0.11780	0.20502	0.29218	0.37924	0.46620	0.55301	0.63965	0.72610	0.81232
22°	0.03200	0.11925	0.20647	0.29363	0.38069	0.46765	0.55445	0.64109	0.72754	0.81376
23°	0.03345	0.12071	0.20793	0.29508	0.38214	0.46909	0.55590	0.64254	0.72898	0.81519
24°	0.03491	0.12216	0.20938	0.29653	0.38360	0.47054	0.55734	0.64398	0.73042	0.81663
25°	0.03636	0.12361	0.21083	0.29798	0.38505	0.47199	0.55879	0.64542	0.73185	0.81806
26°	0.03782	0.12507	0.21228	0.29944	0.38650	0.47344	0.56024	0.64686	0.73329	0.81950
27°	0.03927	0.12652	0.21374	0.30089	0.38795	0.47489	0.56168	0.64830	0.73473	0.82093
28°	0.04072	0.12798	0.21519	0.30234	0.38940	0.47633	0.56313	0.64975	0.73617	0.82237
29°	0.04218	0.12943	0.21664	0.30379	0.39085	0.47778	0.56457	0.65119	0.73761	0.82380
30°	0.04363	0.13088	0.21810	0.30524	0.39230	0.47923	0.56602	0.65263	0.73905	0.82524
31°	0.04509	0.13234	0.21955	0.30669	0.39375	0.48068	0.56746	0.65407	0.74049	0.82667
32°	0.04654	0.13379	0.22100	0.30815	0.39520	0.48212	0.56891	0.65551	0.74192	0.82811
33°	0.04800	0.13525	0.22246	0.30960	0.39665	0.48357	0.57035	0.65696	0.74336	0.82954
34°	0.04945	0.13670	0.22391	0.31105	0.39810	0.48502	0.57180	0.65840	0.74480	0.83098
35°	0.05090	0.13815	0.22536	0.31250	0.39954	0.48647	0.57324	0.65984	0.74624	0.83241
36°	0.05236	0.13961	0.22681	0.31395	0.40099	0.48791	0.57469	0.66128	0.74768	0.83384
37°	0.05381	0.14106	0.22827	0.31540	0.40244	0.48936	0.57613	0.66272	0.74911	0.83528
38°	0.05527	0.14252	0.22972	0.31686	0.40389	0.49081	0.57758	0.66417	0.75055	0.83671
39°	0.05672	0.14397	0.23117	0.31831	0.40534	0.49226	0.57902	0.66561	0.75199	0.83815
40°	0.05818	0.14542	0.23263	0.31976	0.40679	0.49370	0.58046	0.66705	0.75343	0.83958
41°	0.05963	0.14688	0.23408	0.32121	0.40824	0.49515	0.58191	0.66849	0.75487	0.84101
42°	0.06109	0.14833	0.23553	0.32266	0.40969	0.49660	0.58335	0.66993	0.75630	0.84245
43°	0.06254	0.14979	0.23699	0.32411	0.41114	0.49805	0.58480	0.67137	0.75774	0.84388
44°	0.06399	0.15124	0.23844	0.32556	0.41259	0.49949	0.58624	0.67281	0.75918	0.84531
45°	0.06545	0.15269	0.23989	0.32702	0.41404	0.50094	0.58769	0.67425	0.76062	0.84675
46°	0.06690	0.15415	0.24134	0.32847	0.41549	0.50239	0.58913	0.67570	0.76205	0.84818
47°	0.06836	0.15560	0.24280	0.32992	0.41694	0.50383	0.59058	0.67714	0.76349	0.84961
48°	0.06981	0.15705	0.24425	0.33137	0.41839	0.50528	0.59202	0.67858	0.76493	0.85105
49°	0.07127	0.15851	0.24570	0.33282	0.41984	0.50673	0.59346	0.68002	0.76637	0.85248
50°	0.07272	0.15996	0.24715	0.33427	0.42129	0.50818	0.59491	0.68146	0.76780	0.85391
51°	0.07417	0.16141	0.24861	0.33572	0.42274	0.50962	0.59635	0.68290	0.76924	0.85535
52°	0.07563	0.16287	0.25006	0.33717	0.42419	0.51107	0.59780	0.68434	0.77068	0.85678
53°	0.07708	0.16432	0.25151	0.33863	0.42564	0.51252	0.59924	0.68578	0.77211	0.85821
54°	0.07854	0.16578	0.25296	0.34008	0.42708	0.51396	0.60068	0.68722	0.77355	0.85965
55°	0.07999	0.16723	0.25442	0.34153	0.42853	0.51541	0.60213	0.68866	0.77499	0.86108
56°	0.08145	0.16868	0.25587	0.34298	0.42998	0.51686	0.60357	0.69010	0.77643	0.86251
57°	0.08290	0.17014	0.25732	0.34443	0.43143	0.51830	0.60502	0.69154	0.77786	0.86394
58°	0.08435	0.17159	0.25877	0.34588	0.43288	0.51975	0.60646	0.69298	0.77930	0.86538
59°	0.08581	0.17304	0.26023	0.34733	0.43433	0.52120	0.60790	0.69443	0.78074	0.86681
60°	0.08726	0.17450	0.26168	0.34878	0.43578	0.52264	0.60935	0.69587	0.78217	0.86824

	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
0°	0.86824	0.95404	1.03956	1.12476	1.20961	1.29410	1.37819	1.46186	1.54508	1.62784
1°	0.86967	0.95547	1.04098	1.12617	1.21102	1.29550	1.37958	1.46325	1.54647	1.62922
2°	0.87111	0.95690	1.04240	1.12759	1.21243	1.29690	1.38098	1.46464	1.54785	1.63059
3°	0.87254	0.95833	1.04383	1.12901	1.21384	1.29831	1.38238	1.46603	1.54923	1.63197
4°	0.87397	0.95976	1.04525	1.13042	1.21525	1.29971	1.38378	1.46742	1.55062	1.63334
5°	0.87540	0.96118	1.04667	1.13184	1.21666	1.30112	1.38518	1.46881	1.55200	1.63472
6°	0.87683	0.96261	1.04809	1.13326	1.21808	1.30252	1.38657	1.47020	1.55338	1.63609
7°	0.87827	0.96404	1.04951	1.13467	1.21949	1.30393	1.38797	1.47159	1.55476	1.63746
8°	0.87970	0.96546	1.05094	1.13609	1.22090	1.30533	1.38937	1.47298	1.55615	1.63884
9°	0.88113	0.96689	1.05236	1.13751	1.22231	1.30673	1.39076	1.47437	1.55753	1.64021
10°	0.88256	0.96832	1.05378	1.13892	1.22372	1.30814	1.39216	1.47576	1.55891	1.64159
11°	0.88399	0.96974	1.05520	1.14034	1.22513	1.30954	1.39356	1.47715	1.56029	1.64296
12°	0.88542	0.97117	1.05662	1.14175	1.22654	1.31095	1.39496	1.47854	1.56167	1.64433
13°	0.88686	0.97260	1.05805	1.14317	1.22795	1.31235	1.39635	1.47993	1.56306	1.64571
14°	0.88829	0.97403	1.05947	1.14459	1.22936	1.31375	1.39775	1.48132	1.56444	1.64708
15°	0.88972	0.97545	1.06089	1.14600	1.23077	1.31516	1.39915	1.48271	1.56582	1.64845
16°	0.89115	0.97688	1.06231	1.14742	1.23218	1.31656	1.40054	1.48410	1.56720	1.64983
17°	0.89258	0.97830	1.06373	1.14883	1.23359	1.31796	1.40194	1.48549	1.56858	1.65120
18°	0.89401	0.97973	1.06515	1.15025	1.23500	1.31937	1.40333	1.48687	1.56996	1.65257
19°	0.89544	0.98116	1.06657	1.15166	1.23640	1.32077	1.40473	1.48826	1.57134	1.65394
20°	0.89687	0.98258	1.06799	1.15308	1.23781	1.32217	1.40613	1.48965	1.57272	1.65532
21°	0.89830	0.98401	1.06941	1.15449	1.23922	1.32357	1.40752	1.49104	1.57410	1.65669
22°	0.89973	0.98544	1.07084	1.15591	1.24063	1.32498	1.40892	1.49243	1.57548	1.65806
23°	0.90117	0.98686	1.07226	1.15732	1.24204	1.32638	1.41031	1.49382	1.57687	1.65943
24°	0.90260	0.98829	1.07368	1.15874	1.24345	1.32778	1.41171	1.49520	1.57825	1.66081
25°	0.90403	0.98971	1.07510	1.16015	1.24486	1.32918	1.41310	1.49659	1.57963	1.66218
26°	0.90546	0.99114	1.07652	1.16157	1.24627	1.33058	1.41450	1.49798	1.58101	1.66355
27°	0.90689	0.99256	1.07794	1.16298	1.24768	1.33199	1.41589	1.49937	1.58238	1.66492
28°	0.90832	0.99399	1.07936	1.16440	1.24908	1.33339	1.41729	1.50075	1.58376	1.66629
29°	0.90975	0.99541	1.08078	1.16581	1.25049	1.33479	1.41868	1.50214	1.58514	1.66766
30°	0.91118	0.99684	1.08220	1.16723	1.25190	1.33619	1.42008	1.50353	1.58652	1.66903
31°	0.91261	0.99826	1.08362	1.16864	1.25331	1.33759	1.42147	1.50492	1.58790	1.67041
32°	0.91404	0.99969	1.08504	1.17006	1.25472	1.33899	1.42287	1.50630	1.58928	1.67178
33°	0.91547	1.00112	1.08646	1.17147	1.25612	1.34040	1.42426	1.50769	1.59066	1.67315
34°	0.91690	1.00254	1.08788	1.17288	1.25753	1.34180	1.42565	1.50908	1.59204	1.67452
35°	0.91833	1.00396	1.08930	1.17430	1.25894	1.34320	1.42705	1.51046	1.59342	1.67589
36°	0.91976	1.00539	1.09072	1.17571	1.26035	1.34460	1.42844	1.51185	1.59480	1.67726
37°	0.92119	1.00681	1.09214	1.17712	1.26175	1.34600	1.42984	1.51324	1.59617	1.67863
38°	0.92262	1.00824	1.09355	1.17854	1.26316	1.34740	1.43123	1.51462	1.59755	1.68000
39°	0.92405	1.00966	1.09497	1.17995	1.26457	1.34880	1.43262	1.51601	1.59893	1.68137
40°	0.92547	1.01109	1.09639	1.18136	1.26598	1.35020	1.43402	1.51739	1.60031	1.68274
41°	0.92690	1.01251	1.09781	1.18278	1.26738	1.35160	1.43541	1.51878	1.60169	1.68411
42°	0.92833	1.01394	1.09923	1.18419	1.26879	1.35300	1.43680	1.52017	1.60306	1.68548
43°	0.92976	1.01536	1.10065	1.18560	1.27020	1.35440	1.43820	1.52155	1.60444	1.68685
44°	0.93119	1.01678	1.10207	1.18702	1.27160	1.35580	1.43959	1.52294	1.60582	1.68821
45°	0.93262	1.01821	1.10349	1.18843	1.27301	1.35720	1.44098	1.52432	1.60720	1.68958
46°	0.93405	1.01963	1.10491	1.18984	1.27442	1.35860	1.44237	1.52571	1.60857	1.69095
47°	0.93548	1.02106	1.10632	1.19125	1.27582	1.36000	1.44377	1.52709	1.60995	1.69232
48°	0.93691	1.02248	1.10774	1.19267	1.27723	1.36140	1.44516	1.52848	1.61133	1.69369
49°	0.93834	1.02390	1.10916	1.19408	1.27863	1.36280	1.44655	1.52986	1.61271	1.69506
50°	0.93976	1.02533	1.11058	1.19549	1.28004	1.36420	1.44794	1.53125	1.61408	1.69643
51°	0.94119	1.02675	1.11200	1.19690	1.28145	1.36560	1.44934	1.53263	1.61546	1.69779
52°	0.94262	1.02817	1.11341	1.19832	1.28285	1.36700	1.45073	1.53401	1.61683	1.69916
53°	0.94405	1.02960	1.11483	1.19973	1.28426	1.36840	1.45212	1.53540	1.61821	1.70053
54°	0.94548	1.03102	1.11625	1.20114	1.28566	1.36980	1.45351	1.53678	1.61959	1.70190
55°	0.94691	1.03244	1.11767	1.20255	1.28707	1.37119	1.45490	1.53817	1.62096	1.70327
56°	0.94833	1.03387	1.11909	1.20396	1.28847	1.37259	1.45629	1.53955	1.62234	1.70463
57°	0.94976	1.03529	1.12050	1.20538	1.28988	1.37399	1.45769	1.54093	1.62371	1.70600
58°	0.95119	1.03671	1.12192	1.20679	1.29129	1.37539	1.45908	1.54232	1.62509	1.70737
59°	0.95262	1.03814	1.12334	1.20820	1.29269	1.37679	1.46047	1.54370	1.62647	1.70873
60°	0.95404	1.03956	1.12476	1.20961	1.29410	1.37819	1.46186	1.54508	1.62784	1.71010

	20°	21°	22°	23°	24°	25°	26°	27°	28°	29°
0'	1.71010	1.79184	1.87303	1.95366	2.03368	2.11309	2.19186	2.26995	2.34736	2.42405
1'	1.71147	1.79320	1.87438	1.95499	2.03501	2.11441	2.19316	2.27125	2.34864	2.42532
2'	1.71283	1.79456	1.87573	1.95633	2.03634	2.11573	2.19447	2.27254	2.34993	2.42659
3'	1.71420	1.79591	1.87708	1.95767	2.03767	2.11705	2.19578	2.27384	2.35121	2.42786
4'	1.71557	1.79727	1.87843	1.95901	2.03900	2.11836	2.19708	2.27513	2.35249	2.42913
5'	1.71693	1.79863	1.87977	1.96035	2.04032	2.11968	2.19839	2.27643	2.35378	2.43041
6'	1.71830	1.79998	1.88112	1.96169	2.04165	2.12100	2.19970	2.27772	2.35506	2.43168
7'	1.71966	1.80134	1.88247	1.96302	2.04298	2.12231	2.20100	2.27902	2.35634	2.43295
8'	1.72103	1.80270	1.88382	1.96436	2.04431	2.12363	2.20231	2.28031	2.35763	2.43422
9'	1.72240	1.80405	1.88516	1.96570	2.04563	2.12495	2.20361	2.28161	2.35891	2.43549
10'	1.72376	1.80541	1.88651	1.96704	2.04696	2.12626	2.20492	2.28290	2.36019	2.43676
11'	1.72513	1.80677	1.88786	1.96837	2.04829	2.12758	2.20622	2.28420	2.36147	2.43803
12'	1.72649	1.80812	1.88920	1.96971	2.04962	2.12890	2.20753	2.28549	2.36275	2.43930
13'	1.72786	1.80948	1.89055	1.97105	2.05094	2.13021	2.20883	2.28678	2.36404	2.44057
14'	1.72922	1.81083	1.89190	1.97238	2.05227	2.13153	2.21014	2.28808	2.36532	2.44184
15'	1.73059	1.81219	1.89324	1.97372	2.05359	2.13284	2.21144	2.28937	2.36660	2.44311
16'	1.73195	1.81355	1.89459	1.97506	2.05492	2.13416	2.21275	2.29066	2.36788	2.44438
17'	1.73331	1.81490	1.89594	1.97639	2.05625	2.13547	2.21405	2.29196	2.36916	2.44564
18'	1.73468	1.81626	1.89728	1.97773	2.05757	2.13679	2.21536	2.29325	2.37044	2.44691
19'	1.73604	1.81761	1.89863	1.97906	2.05890	2.13810	2.21666	2.29454	2.37172	2.44818
20'	1.73741	1.81897	1.89997	1.98040	2.06022	2.13942	2.21796	2.29583	2.37300	2.44945
21'	1.73877	1.82032	1.90132	1.98173	2.06155	2.14073	2.21927	2.29712	2.37428	2.45072
22'	1.74013	1.82168	1.90266	1.98307	2.06287	2.14205	2.22057	2.29842	2.37556	2.45198
23'	1.74150	1.82303	1.90401	1.98440	2.06420	2.14336	2.22187	2.29971	2.37684	2.45325
24'	1.74286	1.82438	1.90535	1.98574	2.06552	2.14468	2.22318	2.30100	2.37812	2.45452
25'	1.74422	1.82574	1.90670	1.98707	2.06685	2.14599	2.22448	2.30229	2.37940	2.45579
26'	1.74559	1.82709	1.90804	1.98841	2.06817	2.14730	2.22578	2.30358	2.38068	2.45705
27'	1.74695	1.82845	1.90939	1.98974	2.06949	2.14862	2.22708	2.30487	2.38196	2.45832
28'	1.74831	1.82980	1.91073	1.99108	2.07082	2.14993	2.22839	2.30616	2.38324	2.45959
29'	1.74967	1.83115	1.91207	1.99241	2.07214	2.15124	2.22969	2.30745	2.38452	2.46085
30'	1.75104	1.83251	1.91342	1.99375	2.07347	2.15256	2.23099	2.30874	2.38579	2.46212
31'	1.75240	1.83386	1.91476	1.99508	2.07479	2.15387	2.23229	2.31003	2.38707	2.46338
32'	1.75376	1.83521	1.91610	1.99641	2.07611	2.15518	2.23359	2.31132	2.38835	2.46465
33'	1.75512	1.83657	1.91745	1.99775	2.07744	2.15649	2.23489	2.31261	2.38963	2.46591
34'	1.75649	1.83792	1.91879	1.99908	2.07876	2.15781	2.23619	2.31390	2.39090	2.46718
35'	1.75785	1.83927	1.92013	2.00041	2.08008	2.15912	2.23749	2.31519	2.39218	2.46844
36'	1.75921	1.84062	1.92148	2.00175	2.08140	2.16043	2.23880	2.31648	2.39346	2.46971
37'	1.76057	1.84197	1.92282	2.00308	2.08273	2.16174	2.24010	2.31777	2.39474	2.47097
38'	1.76193	1.84333	1.92416	2.00441	2.08405	2.16305	2.24140	2.31906	2.39601	2.47224
39'	1.76329	1.84468	1.92550	2.00574	2.08537	2.16436	2.24270	2.32035	2.39729	2.47350
40'	1.76465	1.84603	1.92685	2.00707	2.08669	2.16567	2.24400	2.32163	2.39857	2.47477
41'	1.76601	1.84738	1.92819	2.00841	2.08801	2.16698	2.24530	2.32292	2.39984	2.47603
42'	1.76737	1.84873	1.92953	2.00974	2.08934	2.16830	2.24659	2.32421	2.40112	2.47729
43'	1.76873	1.85009	1.93087	2.01107	2.09066	2.16961	2.24789	2.32550	2.40239	2.47856
44'	1.77010	1.85144	1.93221	2.01240	2.09198	2.17092	2.24919	2.32679	2.40367	2.47982
45'	1.77146	1.85279	1.93355	2.01373	2.09330	2.17223	2.25049	2.32807	2.40494	2.48108
46'	1.77282	1.85414	1.93490	2.01506	2.09462	2.17354	2.25179	2.32936	2.40622	2.48235
47'	1.77418	1.85549	1.93624	2.01640	2.09594	2.17485	2.25309	2.33065	2.40749	2.48361
48'	1.77553	1.85684	1.93758	2.01773	2.09726	2.17616	2.25439	2.33193	2.40877	2.48487
49'	1.77689	1.85819	1.93892	2.01906	2.09858	2.17746	2.25569	2.33322	2.41004	2.48613
50'	1.77825	1.85954	1.94026	2.02039	2.09990	2.17877	2.25698	2.33451	2.41132	2.48739
51'	1.77961	1.86089	1.94160	2.02172	2.10122	2.18008	2.25828	2.33579	2.41259	2.48866
52'	1.78097	1.86224	1.94294	2.02305	2.10254	2.18139	2.25958	2.33708	2.41386	2.48992
53'	1.78233	1.86359	1.94428	2.02438	2.10386	2.18270	2.26088	2.33836	2.41514	2.49118
54'	1.78369	1.86494	1.94562	2.02571	2.10518	2.18401	2.26217	2.33965	2.41641	2.49244
55'	1.78505	1.86629	1.94696	2.02704	2.10650	2.18532	2.26347	2.34093	2.41769	2.49370
56'	1.78641	1.86764	1.94830	2.02837	2.10782	2.18663	2.26477	2.34222	2.41896	2.49496
57'	1.78777	1.86899	1.94964	2.02970	2.10914	2.18793	2.26606	2.34350	2.42023	2.49622
58'	1.78912	1.87034	1.95098	2.03103	2.11045	2.18924	2.26736	2.34479	2.42150	2.49748
59'	1.79048	1.87168	1.95232	2.03235	2.11177	2.19055	2.26866	2.34607	2.42278	2.49874
60'	1.79184	1.87303	1.95366	2.03368	2.11309	2.19186	2.26995	2.34736	2.42405	2.50000

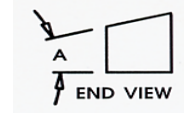
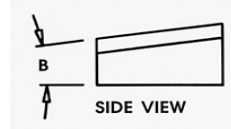
	30°	31°	32°	33°	34°	35°	36°	37°	38°	39°
0'	2.50000	2.57519	2.64960	2.72320	2.79596	2.86788	2.93893	3.00908	3.07831	3.14660
1'	2.50126	2.57644	2.65083	2.72441	2.79717	2.86907	2.94010	3.01024	3.07945	3.14773
2'	2.50252	2.57768	2.65206	2.72563	2.79838	2.87026	2.94128	3.01140	3.08060	3.14886
3'	2.50378	2.57893	2.65330	2.72685	2.79958	2.87146	2.94246	3.01256	3.08174	3.14999
4'	2.50504	2.58018	2.65453	2.72807	2.80079	2.87265	2.94363	3.01372	3.08289	3.15112
5'	2.50630	2.58142	2.65576	2.72929	2.80199	2.87384	2.94481	3.01488	3.08403	3.15225
6'	2.50755	2.58267	2.65699	2.73051	2.80319	2.87503	2.94598	3.01604	3.08518	3.15338
7'	2.50881	2.58391	2.65822	2.73173	2.80440	2.87622	2.94716	3.01720	3.08632	3.15451
8'	2.51007	2.58516	2.65946	2.73295	2.80560	2.87741	2.94833	3.01836	3.08747	3.15564
9'	2.51133	2.58640	2.66069	2.73416	2.80681	2.87860	2.94951	3.01952	3.08861	3.15676
10'	2.51259	2.58765	2.66192	2.73538	2.80801	2.87978	2.95068	3.02068	3.08976	3.15789
11'	2.51384	2.58889	2.66315	2.73660	2.80921	2.88097	2.95185	3.02184	3.09090	3.15902
12'	2.51510	2.59014	2.66438	2.73782	2.81042	2.88216	2.95303	3.02300	3.09204	3.16015
13'	2.51636	2.59138	2.66561	2.73903	2.81162	2.88335	2.95420	3.02415	3.09318	3.16127
14'	2.51761	2.59262	2.66684	2.74025	2.81282	2.88454	2.95538	3.02531	3.09433	3.16240
15'	2.51887	2.59387	2.66807	2.74147	2.81402	2.88573	2.95655	3.02647	3.09547	3.16353
16'	2.52013	2.59511	2.66930	2.74268	2.81523	2.88691	2.95772	3.02763	3.09661	3.16465
17'	2.52138	2.59635	2.67053	2.74390	2.81643	2.88810	2.95889	3.02878	3.09775	3.16578
18'	2.52264	2.59760	2.67176	2.74511	2.81763	2.88929	2.96007	3.02994	3.09890	3.16690
19'	2.52389	2.59884	2.67299	2.74633	2.81883	2.89048	2.96124	3.03110	3.10004	3.16803
20'	2.52515	2.60008	2.67422	2.74754	2.82003	2.89166	2.96241	3.03226	3.10118	3.16915
21'	2.52640	2.60132	2.67545	2.74876	2.82123	2.89285	2.96358	3.03341	3.10232	3.17028
22'	2.52766	2.60256	2.67668	2.74997	2.82243	2.89403	2.96475	3.03457	3.10346	3.17140
23'	2.52891	2.60381	2.67791	2.75119	2.82363	2.89522	2.96592	3.03572	3.10460	3.17253
24'	2.53017	2.60505	2.67913	2.75240	2.82484	2.89641	2.96709	3.03688	3.10574	3.17365
25'	2.53142	2.60629	2.68036	2.75362	2.82603	2.89759	2.96826	3.03803	3.10688	3.17478
26'	2.53268	2.60753	2.68159	2.75483	2.82723	2.89878	2.96944	3.03919	3.10802	3.17590
27'	2.53393	2.60877	2.68282	2.75605	2.82843	2.89996	2.97061	3.04034	3.10916	3.17702
28'	2.53519	2.61001	2.68404	2.75726	2.82963	2.90115	2.97178	3.04150	3.11030	3.17815
29'	2.53644	2.61125	2.68527	2.75847	2.83083	2.90233	2.97294	3.04265	3.11143	3.17927
30'	2.53769	2.61249	2.68650	2.75968	2.83203	2.90351	2.97411	3.04381	3.11257	3.18039
31'	2.53894	2.61373	2.68772	2.76090	2.83323	2.90470	2.97528	3.04496	3.11371	3.18151
32'	2.54020	2.61497	2.68895	2.76211	2.83443	2.90588	2.97645	3.04611	3.11485	3.18264
33'	2.54145	2.61621	2.69018	2.76332	2.83563	2.90707	2.97762	3.04727	3.11599	3.18376
34'	2.54270	2.61745	2.69140	2.76453	2.83682	2.90825	2.97879	3.04842	3.11712	3.18488
35'	2.54396	2.61869	2.69263	2.76575	2.83802	2.90943	2.97996	3.04957	3.11826	3.18600
36'	2.54521	2.61993	2.69385	2.76696	2.83922	2.91061	2.98112	3.05073	3.11940	3.18712
37'	2.54646	2.62117	2.69508	2.76817	2.84042	2.91180	2.98229	3.05188	3.12053	3.18824
38'	2.54771	2.62241	2.69630	2.76938	2.84161	2.91298	2.98346	3.05303	3.12167	3.18936
39'	2.54896	2.62364	2.69753	2.77059	2.84281	2.91416	2.98463	3.05418	3.12281	3.19048
40'	2.55021	2.62488	2.69875	2.77180	2.84401	2.91534	2.98579	3.05533	3.12394	3.19160
41'	2.55146	2.62612	2.69998	2.77301	2.84520	2.91652	2.98696	3.05648	3.12508	3.19272
42'	2.55271	2.62736	2.70120	2.77422	2.84640	2.91771	2.98813	3.05764	3.12621	3.19384
43'	2.55397	2.62860	2.70243	2.77543	2.84759	2.91889	2.98929	3.05879	3.12735	3.19496
44'	2.55522	2.62983	2.70365	2.77664	2.84879	2.92007	2.99046	3.05994	3.12848	3.19608
45'	2.55647	2.63107	2.70487	2.77785	2.84998	2.92125	2.99162	3.06109	3.12962	3.19720
46'	2.55772	2.63231	2.70610	2.77906	2.85118	2.92243	2.99279	3.06224	3.13075	3.19831
47'	2.55896	2.63354	2.70732	2.78027	2.85237	2.92361	2.99395	3.06339	3.13189	3.19943
48'	2.56021	2.63478	2.70854	2.78148	2.85357	2.92479	2.99512	3.06454	3.13302	3.20055
49'	2.56146	2.63601	2.70976	2.78269	2.85476	2.92597	2.99628	3.06568	3.13415	3.20167
50'	2.56271	2.63725	2.71099	2.78389	2.85596	2.92715	2.99745	3.06683	3.13529	3.20278
51'	2.56396	2.63849	2.71221	2.78510	2.85715	2.92833	2.99861	3.06798	3.13642	3.20390
52'	2.56521	2.63972	2.71343	2.78631	2.85834	2.92950	2.99977	3.06913	3.13755	3.20502
53'	2.56646	2.64096	2.71465	2.78752	2.85954	2.93068	3.00094	3.07028	3.13868	3.20613
54'	2.56771	2.64219	2.71587	2.78873	2.86073	2.93186	3.00210	3.07143	3.13982	3.20725
55'	2.56895	2.64343	2.71709	2.78993	2.86192	2.93304	3.00326	3.07257	3.14095	3.20836
56'	2.57020	2.64466	2.71831	2.79114	2.86311	2.93422	3.00443	3.07372	3.14208	3.20948
57'	2.57145	2.64590	2.71953	2.79235	2.86431	2.93540	3.00559	3.07487	3.14321	3.21059
58'	2.57270	2.64713	2.72076	2.79355	2.86550	2.93657	3.00675	3.07601	3.14434	3.21171
59'	2.57394	2.64836	2.72198	2.79476	2.86669	2.93775	3.00791	3.07716	3.14547	3.21282
60'	2.57519	2.64960	2.72320	2.79596	2.86788	2.93893	3.00908	3.07831	3.14660	3.21394

	40°	41°	42°	43°	44°
0°	3.21394	3.28030	3.34565	3.40999	3.47329
1°	3.21505	3.28139	3.34673	3.41106	3.47434
2°	3.21617	3.28249	3.34781	3.41212	3.47538
3°	3.21728	3.28359	3.34889	3.41318	3.47643
4°	3.21839	3.28468	3.34997	3.41424	3.47747
5°	3.21951	3.28578	3.35105	3.41531	3.47852
6°	3.22062	3.28688	3.35213	3.41637	3.47956
7°	3.22173	3.28797	3.35321	3.41743	3.48061
8°	3.22284	3.28907	3.35429	3.41849	3.48165
9°	3.22395	3.29016	3.35537	3.41955	3.48270
10°	3.22507	3.29126	3.35645	3.42061	3.48374
11°	3.22618	3.29235	3.35753	3.42168	3.48478
12°	3.22729	3.29345	3.35860	3.42274	3.48583
13°	3.22840	3.29454	3.35968	3.42380	3.48687
14°	3.22951	3.29564	3.36076	3.42486	3.48791
15°	3.23062	3.29673	3.36183	3.42591	3.48895
16°	3.23173	3.29782	3.36291	3.42697	3.48999
17°	3.23284	3.29892	3.36399	3.42803	3.49104
18°	3.23395	3.30001	3.36506	3.42909	3.49208
19°	3.23506	3.30110	3.36614	3.43015	3.49312
20°	3.23617	3.30219	3.36721	3.43121	3.49416
21°	3.23728	3.30329	3.36829	3.43227	3.49520
22°	3.23838	3.30438	3.36936	3.43332	3.49624
23°	3.23949	3.30547	3.37044	3.43438	3.49728
24°	3.24060	3.30656	3.37151	3.43544	3.49832
25°	3.24171	3.30765	3.37259	3.43649	3.49936
26°	3.24281	3.30874	3.37366	3.43755	3.50039
27°	3.24392	3.30983	3.37473	3.43861	3.50143
28°	3.24503	3.31092	3.37581	3.43966	3.50247
29°	3.24613	3.31201	3.37688	3.44072	3.50351
30°	3.24724	3.31310	3.37795	3.44177	3.50455
31°	3.24835	3.31419	3.37902	3.44283	3.50558
32°	3.24945	3.31528	3.38010	3.44388	3.50662
33°	3.25056	3.31637	3.38117	3.44494	3.50766
34°	3.25166	3.31746	3.38224	3.44599	3.50869
35°	3.25277	3.31854	3.38331	3.44704	3.50973
36°	3.25387	3.31963	3.38438	3.44810	3.51077
37°	3.25498	3.32072	3.38545	3.44915	3.51180
38°	3.25608	3.32181	3.38652	3.45020	3.51284
39°	3.25718	3.32289	3.38759	3.45126	3.51387
40°	3.25829	3.32398	3.38866	3.45231	3.51491
41°	3.25939	3.32507	3.38973	3.45336	3.51594
42°	3.26049	3.32615	3.39080	3.45441	3.51697
43°	3.26159	3.32724	3.39187	3.45546	3.51801
44°	3.26270	3.32832	3.39294	3.45651	3.51904
45°	3.26380	3.32941	3.39400	3.45757	3.52007
46°	3.26490	3.33049	3.39507	3.45862	3.52111
47°	3.26600	3.33158	3.39614	3.45967	3.52214
48°	3.26710	3.33266	3.39721	3.46072	3.52317
49°	3.26820	3.33375	3.39827	3.46177	3.52420
50°	3.26930	3.33483	3.39934	3.46281	3.52523
51°	3.27040	3.33591	3.40041	3.46386	3.52627
52°	3.27150	3.33700	3.40147	3.46491	3.52730
53°	3.27260	3.33808	3.40254	3.46596	3.52833
54°	3.27370	3.33916	3.40360	3.46701	3.52936
55°	3.27480	3.34025	3.40467	3.46806	3.53039
56°	3.27590	3.34133	3.40573	3.46910	3.53142
57°	3.27700	3.34241	3.40680	3.47015	3.53245
58°	3.27810	3.34349	3.40786	3.47120	3.53348
59°	3.27920	3.34457	3.40893	3.47225	3.53451
60°	3.28030	3.34565	3.40999	3.47329	3.53553

COMPOUND ANGLE COMPENSATION

When setting compound angles, it is necessary to compensate for the first angle set in order to correctly set the second angle. To obtain this compensation, refer to the following drawings and procedures.

where:



Angle A = First desired angle

Angle B = Second desired angle

Angle C = True angle setting required to get angle B

INSTRUCTIONS:

1. Set the first of the desired angles (Angle A) on the top section of your compound sine plate.

2. Calculate the tangent of the true Angle (Angle C) using the formula:

$$\text{TAN (True Angle C)} = \text{TAN (Angle B)} \times \text{COS (Angle A)}$$

3. Use the inverse tangent function on your calculator to find the true angle (Angle C).

4. Set the lower section of your compound sine plate, using the proper sine table and the True Angle (Angle C).

5. RESULTS: The compound sine plate is now set to obtain the desired angles (Angles A & B) in their respective planes.



PART ON COMPOUND SINE PLATE