

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

TABLE 1A - DIMENSIONS A THROUGH FB

BASIC NO. AS5972 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	A	A1	B	B1	C	C1	E	EA	ED	F	FA	FB
040404	.2500	.2500	.2500	.935	.848	.935	.848	.935	.848	.466	.466	.466	.253	.253	.253
040406	.2500	.2500	.3750	.998	.911	.998	.911	1.215	1.099	.466	.466	.609	.253	.253	.378
060404	.3750	.2500	.2500	1.215	1.099	.998	.911	.998	.911	.609	.466	.466	.378	.253	.253
060406	.3750	.2500	.3750	1.215	1.099	.998	.911	1.215	1.099	.609	.466	.609	.378	.253	.378
060604	.3750	.3750	.2500	1.215	1.099	1.215	1.099	.998	.911	.609	.609	.466	.378	.378	.253
060606	.3750	.3750	.3750	1.215	1.099	1.215	1.099	1.215	1.099	.609	.609	.609	.378	.378	.378
060608	.3750	.3750	.5000	1.308	1.192	1.308	1.192	1.516	1.370	.609	.609	.783	.378	.378	.504
080606	.5000	.3750	.3750	1.516	1.370	1.308	1.192	1.308	1.192	.783	.609	.609	.504	.378	.378
080608	.5000	.3750	.5000	1.516	1.370	1.308	1.192	1.516	1.370	.783	.609	.783	.504	.378	.504
080610	.5000	.3750	.6250	1.579	1.433	1.371	1.255	1.873	1.669	.783	.609	.939	.504	.378	.629
080804	.5000	.5000	.2500	1.516	1.370	1.516	1.370	1.091	1.004	.783	.783	.466	.504	.504	.253
080806	.5000	.5000	.3750	1.516	1.370	1.516	1.370	1.308	1.192	.783	.783	.609	.504	.504	.378
080808	.5000	.5000	.5000	1.516	1.370	1.516	1.370	1.516	1.370	.783	.783	.783	.504	.504	.504
080810	.5000	.5000	.6250	1.579	1.433	1.579	1.433	1.873	1.669	.783	.783	.939	.504	.504	.629
100412	.6250	.2500	.7500	1.998	1.794	1.279	1.192	2.149	1.944	.939	.466	1.122	.629	.253	.754
100604	.6250	.3750	.2500	1.873	1.669	1.371	1.255	1.154	1.067	.939	.609	.466	.629	.378	.253
100606	.6250	.3750	.3750	1.873	1.669	1.371	1.255	1.371	1.255	.939	.609	.609	.629	.378	.378
100610	.6250	.3750	.6250	1.873	1.669	1.371	1.255	1.873	1.669	.939	.609	.939	.629	.378	.629
100612	.6250	.3750	.7500	1.998	1.794	1.496	1.380	2.149	1.944	.939	.609	1.122	.629	.378	.754
100806	.6250	.5000	.3750	1.873	1.669	1.579	1.433	1.371	1.255	.939	.783	.609	.629	.504	.378
100808	.6250	.5000	.5000	1.873	1.669	1.579	1.433	1.579	1.433	.939	.783	.783	.629	.504	.504
100810	.6250	.5000	.6250	1.873	1.669	1.579	1.433	1.873	1.669	.939	.783	.939	.629	.504	.629
101004	.6250	.6250	.2500	1.873	1.669	1.873	1.669	1.154	1.067	.939	.939	.466	.629	.629	.253
101006	.6250	.6250	.3750	1.873	1.669	1.873	1.669	1.371	1.255	.939	.939	.609	.629	.629	.378
101008	.6250	.6250	.5000	1.873	1.669	1.873	1.669	1.579	1.433	.939	.939	.783	.629	.629	.504
101010	.6250	.6250	.6250	1.873	1.669	1.873	1.669	1.873	1.669	.939	.939	.939	.629	.629	.629
101012	.6250	.6250	.7500	1.998	1.794	1.998	1.794	2.149	1.944	.939	.939	1.122	.629	.629	.754
101016	.6250	.6250	1.0000	2.157	1.953	2.157	1.953	2.606	2.392	.939	.939	1.495	.629	.629	1.004
120612	.7500	.3750	.7500	2.149	1.944	1.496	1.380	2.149	1.944	1.122	.609	1.122	.754	.378	.754
120812	.7500	.5000	.7500	2.149	1.944	1.704	1.558	2.149	1.944	1.122	.783	1.122	.754	.504	.754
120816	.7500	.5000	1.0000	2.308	2.103	1.863	1.717	2.606	2.392	1.122	.783	1.495	.754	.504	1.004
121004	.7500	.6250	.2500	2.149	1.944	1.998	1.794	1.279	1.192	1.122	.939	.466	.754	.629	.253
121006	.7500	.6250	.3750	2.149	1.944	1.998	1.794	1.496	1.380	1.122	.939	.609	.754	.629	.378
121008	.7500	.6250	.5000	2.149	1.944	1.998	1.794	1.704	1.558	1.122	.939	.783	.754	.629	.504
121010	.7500	.6250	.6250	2.149	1.944	1.998	1.794	1.998	1.794	1.122	.939	.939	.754	.629	.629
121012	.7500	.6250	.7500	2.149	1.944	1.998	1.794	2.149	1.944	1.122	.939	1.122	.754	.629	.754
121204	.7500	.7500	.2500	2.149	1.944	2.149	1.944	1.279	1.192	1.122	1.122	.466	.754	.754	.253
121206	.7500	.7500	.3750	2.149	1.944	2.149	1.944	1.496	1.380	1.122	1.122	.609	.754	.754	.378
121208	.7500	.7500	.5000	2.149	1.944	2.149	1.944	1.704	1.558	1.122	1.122	.783	.754	.754	.504
121210	.7500	.7500	.6250	2.149	1.944	2.149	1.944	1.998	1.794	1.122	1.122	.939	.754	.754	.629
121212	.7500	.7500	.7500	2.149	1.944	2.149	1.944	2.149	1.944	1.122	1.122	1.122	.754	.754	.754
121216	.7500	.7500	1.0000	2.308	2.103	2.308	2.103	2.606	2.392	1.122	1.122	1.495	.754	.754	1.004
160816	1.0000	.5000	1.0000	2.606	2.392	1.863	1.717	2.606	2.392	1.495	.783	1.495	1.004	.504	1.004
161008	1.0000	.6250	.5000	2.606	2.392	2.157	1.953	1.863	1.717	1.495	.939	.783	1.004	.629	.504
161016	1.0000	.6250	1.0000	2.606	2.392	2.157	1.953	2.606	2.392	1.495	.939	1.495	1.004	.629	1.004
161208	1.0000	.7500	.5000	2.606	2.392	2.308	2.103	1.863	1.717	1.495	1.122	.783	1.004	.754	.504
161210	1.0000	.7500	.6250	2.606	2.392	2.308	2.103	2.157	1.953	1.495	1.122	.939	1.004	.754	.629
161212	1.0000	.7500	.7500	2.606	2.392	2.308	2.103	2.308	2.103	1.495	1.122	1.122	1.004	.754	.754
161216	1.0000	.7500	1.0000	2.606	2.392	2.308	2.103	2.606	2.392	1.495	1.122	1.495	1.004	.754	1.004
161608	1.0000	1.0000	.5000	2.606	2.392	2.606	2.392	1.863	1.717	1.495	1.495	.783	1.004	1.004	.504
161610	1.0000	1.0000	.6250	2.606	2.392	2.606	2.392	2.157	1.953	1.495	1.495	.939	1.004	1.004	.629
161612	1.0000	1.0000	.7500	2.606	2.392	2.606	2.392	2.308	2.103	1.495	1.495	1.122	1.004	1.004	.754
161616	1.0000	1.0000	1.0000	2.606	2.392	2.606	2.392	2.606	2.392	1.495	1.495	1.495	1.004	1.004	1.004
201020	1.2500	.6250	1.2500	3.020	2.796	2.279	2.075	3.020	2.796	1.758	.939	1.758	1.255	.629	1.255
201210	1.2500	.7500	.6250	3.020	2.796	2.430	2.225	2.279	2.075	1.758	1.122	.939	1.255	.754	.629
201220	1.2500	.7500	1.2500	3.020	2.796	2.430	2.225	3.020	2.796	1.758	1.122	1.758	1.255	.754	1.255
201610	1.2500	1.0000	.6250	3.020	2.796	2.728	2.514	2.279	2.075	1.758	1.495	.939	1.255	1.004	.629
201612	1.2500	1.0000	.7500	3.020	2.796	2.728	2.514	2.430	2.225	1.758	1.495	1.122	1.255	1.004	.754
201616	1.2500	1.0000	1.0000	3.020	2.796	2.728	2.514	2.728	2.514	1.758	1.495	1.495	1.255	1.004	1.004
201620	1.2500	1.0000	1.2500	3.020	2.796	2.728	2.514	3.020	2.796	1.758	1.495	1.758	1.255	1.004	1.255
202010	1.2500	1.2500	.6250	3.020	2.796	3.020	2.796	2.279	2.075	1.758	1.758	.939	1.255	1.255	.629
202012	1.2500	1.2500	.7500	3.020	2.796	3.020	2.796	2.430	2.225	1.758	1.758	1.122	1.255	1.255	.754
202016	1.2500	1.2500	1.0000	3.020	2.796	3.020	2.796	2.728	2.514	1.758	1.758	1.495	1.255	1.255	1.004
202020	1.2500	1.2500	1.2500	3.020	2.796	3.020	2.796	3.020	2.796	1.758	1.758	1.758	1.255	1.255	1.255

TABLE 1B - DIMENSIONS G THROUGH PB

BASIC NO. AS5972 /11/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	G	J /11/ TUBE DEDUCT	JA /11/ TUBE DEDUCT	JB /11/ TUBE DEDUCT	M	P	PA	PB
040404	.2500	.2500	.2500	.380/.348	.353 ±.150	.353 ±.150	.353 ±.150	.043	.198	.198	.198
040406	.2500	.2500	.3750	.509/.477	.416 ±.150	.416 ±.150	.416 ±.150	.045	.198	.198	.302
060404	.3750	.2500	.2500	.509/.477	.416 ±.150	.416 ±.150	.416 ±.150	.045	.302	.198	.198
060406	.3750	.2500	.3750	.509/.477	.416 ±.150	.416 ±.150	.416 ±.150	.045	.302	.198	.302
060604	.3750	.3750	.2500	.509/.477	.416 ±.150	.416 ±.150	.416 ±.150	.045	.302	.302	.198
060606	.3750	.3750	.3750	.509/.477	.416 ±.150	.416 ±.150	.416 ±.150	.045	.302	.302	.302
060608	.3750	.3750	.5000	.647/.615	.509 ±.150	.509 ±.150	.517 ±.175	.052	.302	.302	.401
080606	.5000	.3750	.3750	.647/.615	.517 ±.175	.509 ±.150	.509 ±.150	.052	.401	.302	.302
080608	.5000	.3750	.5000	.647/.615	.517 ±.175	.509 ±.150	.517 ±.175	.052	.401	.302	.401
080610	.5000	.3750	.6250	.783/.751	.580 ±.175	.572 ±.150	.580 ±.175	.057	.401	.302	.507
080804	.5000	.5000	.2500	.647/.615	.517 ±.175	.517 ±.175	.509 ±.150	.052	.401	.401	.198
080806	.5000	.5000	.3750	.647/.615	.517 ±.175	.517 ±.175	.509 ±.150	.052	.401	.401	.302
080808	.5000	.5000	.5000	.647/.615	.517 ±.175	.517 ±.175	.517 ±.175	.052	.401	.401	.401
080810	.5000	.5000	.6250	.783/.751	.580 ±.175	.580 ±.175	.580 ±.175	.057	.401	.401	.507
100412	.6250	.2500	.7500	.783/.751	.705 ±.175	.717 ±.150	.712 ±.175	.065	.507	.198	.604
100604	.6250	.3750	.2500	.783/.751	.580 ±.175	.572 ±.150	.572 ±.150	.057	.507	.302	.198
100606	.6250	.3750	.3750	.783/.751	.580 ±.175	.572 ±.150	.572 ±.150	.057	.507	.302	.302
100610	.6250	.3750	.6250	.783/.751	.580 ±.175	.572 ±.150	.580 ±.175	.057	.507	.302	.507
100612	.6250	.3750	.7500	.925/.893	.705 ±.175	.697 ±.150	.712 ±.175	.057	.507	.302	.604
100806	.6250	.5000	.3750	.783/.751	.580 ±.175	.580 ±.175	.580 ±.175	.057	.507	.401	.302
100808	.6250	.5000	.5000	.783/.751	.580 ±.175	.580 ±.175	.580 ±.175	.057	.507	.401	.401
100810	.6250	.5000	.6250	.783/.751	.580 ±.175	.580 ±.175	.580 ±.175	.057	.507	.401	.507
101004	.6250	.6250	.2500	.783/.751	.580 ±.175	.580 ±.175	.572 ±.150	.057	.507	.507	.198
101006	.6250	.6250	.3750	.783/.751	.580 ±.175	.580 ±.175	.580 ±.175	.057	.507	.507	.302
101008	.6250	.6250	.5000	.783/.751	.580 ±.175	.580 ±.175	.580 ±.175	.057	.507	.507	.401
101010	.6250	.6250	.6250	.783/.751	.580 ±.175	.580 ±.175	.580 ±.175	.057	.507	.507	.507
101012	.6250	.6250	.7500	.925/.893	.705 ±.175	.705 ±.175	.712 ±.175	.065	.507	.507	.604
101016	.6250	.6250	1.0000	1.213/1.181	.864 ±.175	.864 ±.175	.878 ±.200	.084	.507	.507	.802
120612	.7500	.3750	.7500	.925/.893	.712 ±.175	.697 ±.150	.712 ±.175	.065	.604	.302	.604
120812	.7500	.5000	.7500	.925/.893	.712 ±.175	.705 ±.175	.712 ±.175	.065	.604	.401	.604
120816	.7500	.5000	1.0000	1.213/1.181	.878 ±.175	.864 ±.175	.878 ±.200	.084	.604	.401	.802
121004	.7500	.6250	.2500	.925/.893	.712 ±.175	.705 ±.175	.717 ±.150	.065	.604	.507	.198
121006	.7500	.6250	.3750	.925/.893	.712 ±.175	.705 ±.175	.697 ±.150	.065	.604	.507	.302
121008	.7500	.6250	.5000	.925/.893	.712 ±.175	.705 ±.175	.705 ±.175	.065	.604	.507	.401
121010	.7500	.6250	.6250	.925/.893	.712 ±.175	.705 ±.175	.705 ±.175	.065	.604	.507	.507
121012	.7500	.6250	.7500	.925/.893	.712 ±.175	.705 ±.175	.712 ±.175	.065	.604	.507	.604
121204	.7500	.7500	.2500	.925/.893	.712 ±.175	.712 ±.175	.717 ±.150	.065	.604	.604	.198
121206	.7500	.7500	.3750	.925/.893	.712 ±.175	.712 ±.175	.697 ±.150	.065	.604	.604	.302
121208	.7500	.7500	.5000	.925/.893	.712 ±.175	.712 ±.175	.705 ±.175	.065	.604	.604	.401
121210	.7500	.7500	.6250	.925/.893	.712 ±.175	.712 ±.175	.705 ±.175	.065	.604	.604	.507
121212	.7500	.7500	.7500	.925/.893	.712 ±.175	.712 ±.175	.712 ±.175	.065	.604	.604	.604
121216	.7500	.7500	1.0000	1.213/1.181	.878 ±.175	.878 ±.175	.878 ±.200	.084	.604	.604	.802
160816	1.0000	.5000	1.0000	1.213/1.181	.878 ±.200	.864 ±.175	.878 ±.200	.084	.802	.401	.802
161008	1.0000	.6250	.5000	1.213/1.181	.878 ±.200	.864 ±.175	.864 ±.175	.084	.802	.507	.401
161016	1.0000	.6250	1.0000	1.213/1.181	.878 ±.200	.864 ±.175	.878 ±.200	.084	.802	.507	.802
161208	1.0000	.7500	.5000	1.213/1.181	.878 ±.200	.878 ±.175	.864 ±.175	.084	.802	.604	.401
161210	1.0000	.7500	.6250	1.213/1.181	.878 ±.200	.878 ±.175	.864 ±.175	.084	.802	.604	.507
161212	1.0000	.7500	.7500	1.213/1.181	.878 ±.200	.878 ±.175	.878 ±.175	.084	.802	.604	.604
161216	1.0000	.7500	1.0000	1.213/1.181	.878 ±.200	.878 ±.175	.878 ±.200	.084	.802	.604	.802
161608	1.0000	1.0000	.5000	1.213/1.181	.878 ±.200	.878 ±.200	.864 ±.175	.084	.802	.802	.401
161610	1.0000	1.0000	.6250	1.213/1.181	.878 ±.200	.878 ±.200	.864 ±.175	.084	.802	.802	.507
161612	1.0000	1.0000	.7500	1.213/1.181	.878 ±.200	.878 ±.200	.878 ±.175	.084	.802	.802	.604
161616	1.0000	1.0000	1.0000	1.213/1.181	.878 ±.200	.878 ±.200	.878 ±.200	.084	.802	.802	.802
201020	1.2500	.6250	1.2500	1.641/1.609	1.009 ±.200	.986 ±.175	1.009 ±.200	.174	1.011	.507	1.011
201210	1.2500	.7500	.6250	1.641/1.609	1.009 ±.200	.993 ±.175	.986 ±.175	.174	1.011	.604	.507
201220	1.2500	.7500	1.2500	1.641/1.609	1.009 ±.200	.993 ±.175	1.009 ±.200	.174	1.011	.604	1.011
201610	1.2500	1.0000	.6250	1.641/1.609	1.009 ±.200	1.000 ±.200	.986 ±.175	.174	1.011	.802	.507
201612	1.2500	1.0000	.7500	1.641/1.609	1.009 ±.200	1.000 ±.200	.993 ±.175	.174	1.011	.802	.604
201616	1.2500	1.0000	1.0000	1.641/1.609	1.009 ±.200	1.000 ±.200	1.000 ±.200	.174	1.011	.802	.802
201620	1.2500	1.0000	1.2500	1.641/1.609	1.009 ±.200	1.000 ±.200	1.009 ±.200	.174	1.011	.802	1.011
202010	1.2500	1.2500	.6250	1.641/1.609	1.009 ±.200	1.009 ±.200	.986 ±.175	.174	1.011	1.011	.507
202012	1.2500	1.2500	.7500	1.641/1.609	1.009 ±.200	1.009 ±.200	.993 ±.175	.174	1.011	1.011	.604
202016	1.2500	1.2500	1.0000	1.641/1.609	1.009 ±.200	1.009 ±.200	1.000 ±.200	.174	1.011	1.011	.802
202020	1.2500	1.2500	1.2500	1.641/1.609	1.009 ±.200	1.009 ±.200	1.009 ±.200	.174	1.011	1.011	1.011

TABLE 1C - DIMENSIONS W THROUGH W2B

BASIC NO. AS5972 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	W	WA	WB	W1	W1A	W1B	W2 ±.0015	W2A ±.0015	W2B ±.0015
040404	.2500	.2500	.2500	.123	.123	.123	.488	.488	.488	.3005	.3005	.3005
040406	.2500	.2500	.3750	.123	.123	.153	.488	.488	.675	.3005	.3005	.4475
060404	.3750	.2500	.2500	.153	.123	.123	.675	.488	.488	.4475	.3005	.3005
060406	.3750	.2500	.3750	.153	.123	.153	.675	.488	.675	.4475	.3005	.4475
060604	.3750	.3750	.2500	.153	.153	.123	.675	.675	.488	.4475	.4475	.3005
060606	.3750	.3750	.3750	.153	.153	.153	.675	.675	.675	.4475	.4475	.4475
060608	.3750	.3750	.5000	.153	.153	.165	.675	.675	.871	.4475	.4475	.5945
080606	.5000	.3750	.3750	.165	.153	.153	.871	.675	.675	.5945	.4475	.4475
080608	.5000	.3750	.5000	.165	.153	.165	.871	.675	.871	.5945	.4475	.5945
080610	.5000	.3750	.6250	.165	.153	.140	.871	.675	1.190	.5945	.4475	.7365
080804	.5000	.5000	.2500	.165	.165	.123	.871	.871	.488	.5945	.5945	.3005
080806	.5000	.5000	.3750	.165	.165	.153	.871	.871	.675	.5945	.5945	.4475
080808	.5000	.5000	.5000	.165	.165	.165	.871	.871	.871	.5945	.5945	.5945
080810	.5000	.5000	.6250	.165	.165	.140	.871	.871	1.190	.5945	.5945	.7365
100412	.6250	.2500	.7500	.140	.123	.154	1.190	.488	1.327	.7365	.3005	.8805
100604	.5000	.3750	.2500	.140	.153	.123	1.190	.675	.488	.7365	.4475	.3005
100606	.6250	.3750	.3750	.140	.153	.153	1.190	.675	.675	.7365	.4475	.4475
100610	.6250	.3750	.6250	.140	.153	.140	1.190	.675	1.190	.7365	.4475	.7365
100612	.6250	.3750	.7500	.140	.153	.154	1.190	.675	1.327	.7365	.4475	.8805
100806	.6250	.5000	.3750	.140	.165	.153	1.190	.871	.675	.7365	.5945	.4475
100808	.6250	.3750	.5000	.140	.165	.165	1.190	.871	.871	.7365	.5945	.5945
100810	.6250	.5000	.6250	.140	.165	.140	1.190	.871	1.190	.7365	.5945	.7365
101004	.6250	.6250	.2500	.140	.140	.123	1.190	1.190	.488	.7365	.7365	.3005
101006	.6250	.6250	.3750	.140	.140	.153	1.190	1.190	.675	.7365	.7365	.4475
101008	.6250	.6250	.5000	.140	.140	.165	1.190	1.190	.871	.7365	.7365	.5945
101010	.6250	.6250	.6250	.140	.140	.140	1.190	1.190	1.190	.7365	.7365	.7365
101012	.6250	.6250	.7500	.140	.140	.154	1.190	1.190	1.327	.7365	.7365	.8805
101016	.6250	.6250	1.0000	.140	.140	.167	1.190	1.190	1.612	.7365	.7365	1.1725
120612	.7500	.3750	.7500	.154	.153	.154	1.327	.675	1.327	.8805	.4475	.8805
120812	.7500	.5000	.7500	.154	.165	.154	1.327	.871	1.327	.8805	.5945	.8805
120816	.7500	.5000	1.0000	.154	.165	.167	1.327	.871	1.612	.8805	.5945	1.1725
121004	.7500	.6250	.2500	.154	.140	.123	1.327	1.190	.488	.8805	.7365	.3005
121006	.7500	.6250	.3750	.154	.140	.153	1.327	1.190	.675	.8805	.7365	.4475
121008	.7500	.6250	.5000	.154	.140	.165	1.327	1.190	.871	.8805	.7365	.5945
121010	.7500	.6250	.6250	.154	.140	.140	1.327	1.190	1.190	.8805	.7365	.7365
121012	.7500	.6250	.7500	.154	.140	.154	1.327	1.190	1.327	.8805	.7365	.8805
121204	.7500	.7500	.2500	.154	.154	.123	1.327	1.327	.488	.8805	.8805	.3005
121206	.7500	.7500	.3750	.154	.154	.153	1.327	1.327	.675	.8805	.8805	.4475
121208	.7500	.7500	.5000	.154	.154	.165	1.327	1.327	.871	.8805	.8805	.5945
121210	.7500	.7500	.6250	.154	.154	.140	1.327	1.327	1.190	.8805	.8805	.7365
121212	.7500	.7500	.7500	.154	.154	.154	1.327	1.327	1.327	.8805	.8805	.8805
121216	.7500	.7500	1.0000	.154	.154	.167	1.327	1.327	1.612	.8805	.8805	1.1725
160816	1.0000	.5000	1.0000	.167	.165	.167	1.612	.871	1.612	1.1725	.5945	1.1725
161008	1.0000	.6250	.5000	.167	.140	.165	1.612	1.190	.871	1.1725	.7365	.5945
161016	1.0000	.7500	1.0000	.167	.140	.167	1.612	1.190	1.612	1.1725	.7365	1.1725
161208	1.0000	.7500	.5000	.167	.154	.165	1.612	1.327	.871	1.1725	.8805	.5945
161210	1.0000	.7500	.6250	.167	.154	.140	1.612	1.327	1.190	1.1725	.8805	.7365
161212	1.0000	.7500	.7500	.167	.154	.154	1.612	1.327	1.327	1.1725	.8805	.8805
161216	1.0000	.7500	1.0000	.167	.154	.167	1.612	1.327	1.612	1.1725	.8805	1.1725
161608	1.0000	1.0000	.5000	.167	.167	.165	1.612	1.612	.871	1.1725	1.1725	.5945
161610	1.0000	1.0000	.6250	.167	.167	.140	1.612	1.612	1.190	1.1725	1.1725	.7365
161612	1.0000	1.0000	.7500	.167	.167	.154	1.612	1.612	1.327	1.1725	1.1725	.8805
161616	1.0000	1.0000	1.0000	.167	.167	.167	1.612	1.612	1.612	1.1725	1.1725	1.1725
201020	1.2500	.6250	1.2500	.185	.140	.185	1.886	1.190	1.886	1.4345	.7365	1.4345
201210	1.2500	.7500	.6250	.185	.154	.140	1.886	1.327	1.190	1.4345	.8805	.7365
201220	1.2500	.7500	1.2500	.185	.154	.185	1.886	1.327	1.886	1.4345	.8805	1.4345
201610	1.2500	1.0000	.6250	.185	.167	.140	1.886	1.612	1.190	1.4345	1.1725	.7365
201612	1.2500	1.0000	.7500	.185	.167	.154	1.886	1.612	1.327	1.4345	1.1725	.8805
201616	1.2500	1.0000	1.0000	.185	.167	.167	1.886	1.612	1.612	1.4345	1.1725	1.1725
201620	1.2500	1.0000	1.2500	.185	.167	.185	1.886	1.612	1.886	1.4345	1.1725	1.4345
202010	1.2500	1.2500	.6250	.185	.185	.140	1.886	1.886	1.190	1.4345	1.4345	.7365
202012	1.2500	1.2500	.7500	.185	.185	.154	1.886	1.886	1.327	1.4345	1.4345	.8805
202016	1.2500	1.2500	1.0000	.185	.185	.167	1.886	1.886	1.612	1.4345	1.4345	1.1725
202020	1.2500	1.2500	1.2500	.185	.185	.185	1.886	1.886	1.886	1.4345	1.4345	1.4345