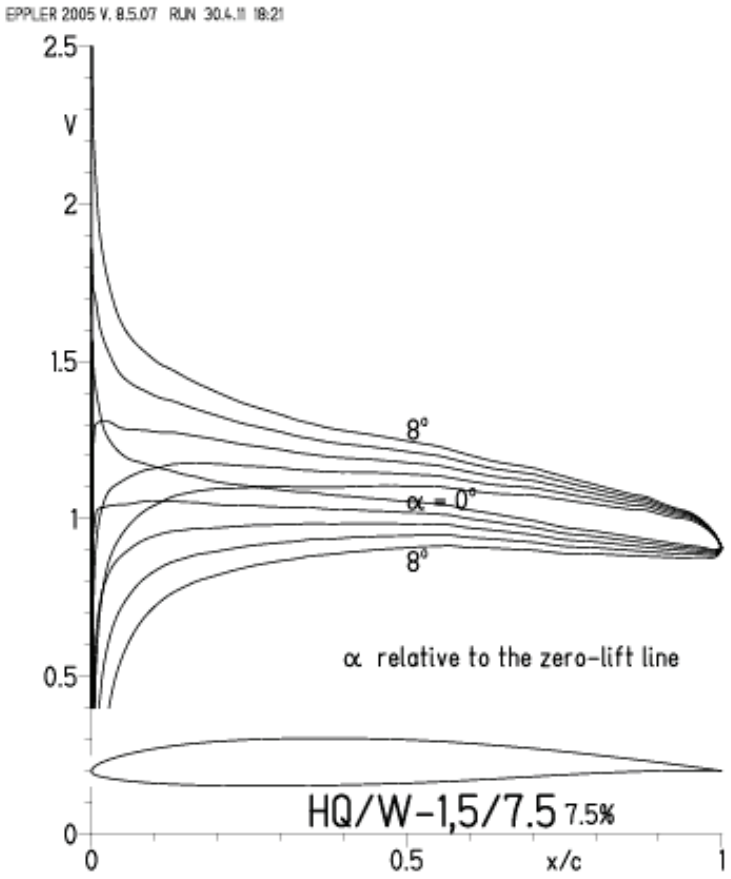
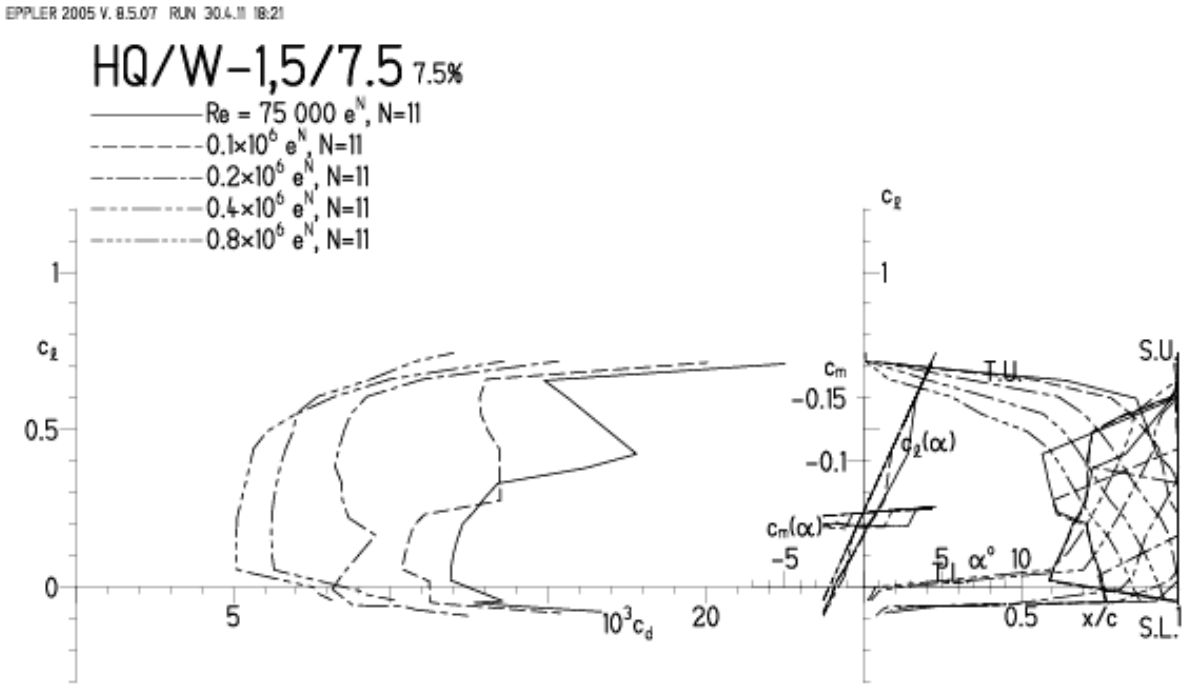
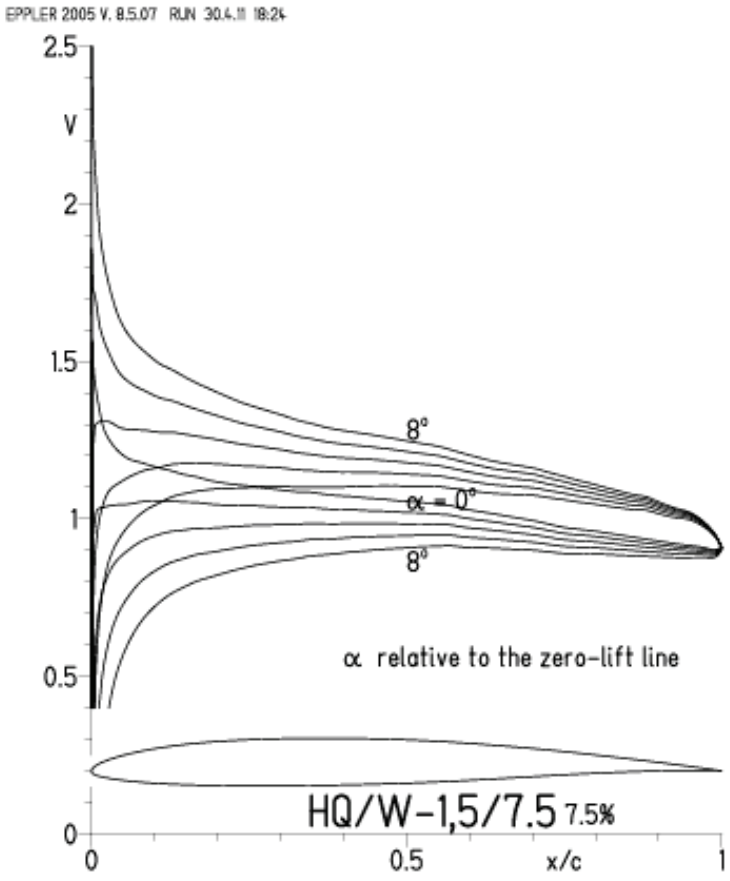
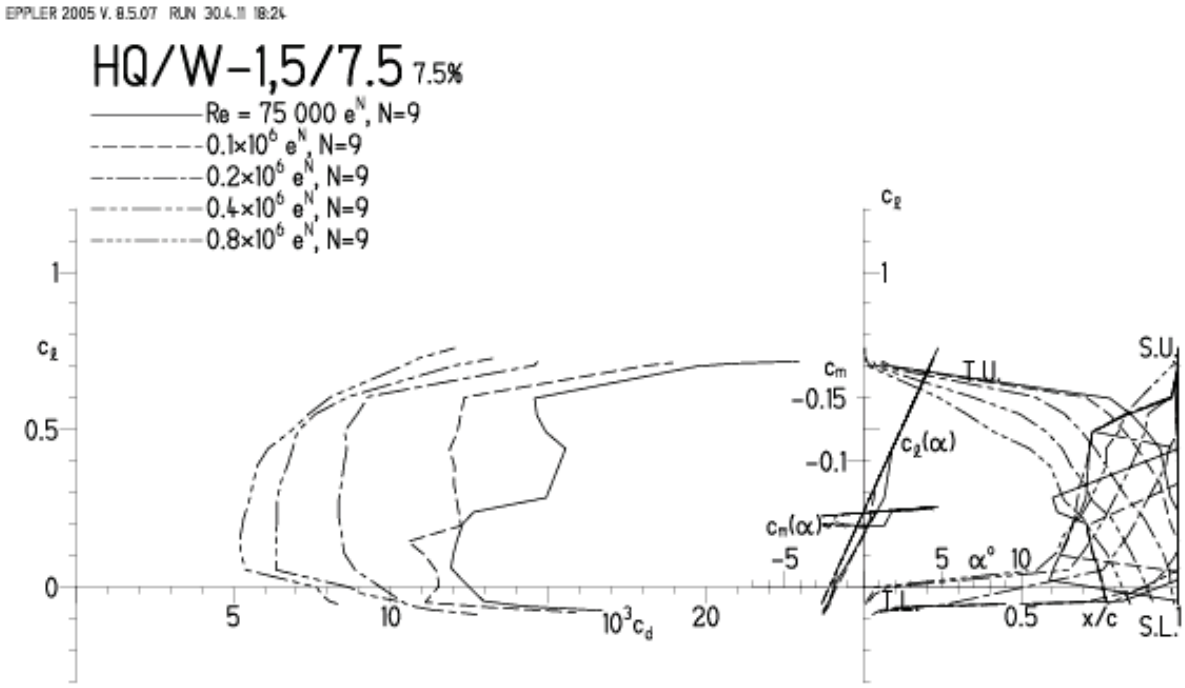
HQ/W-1,5/7,5, N=11



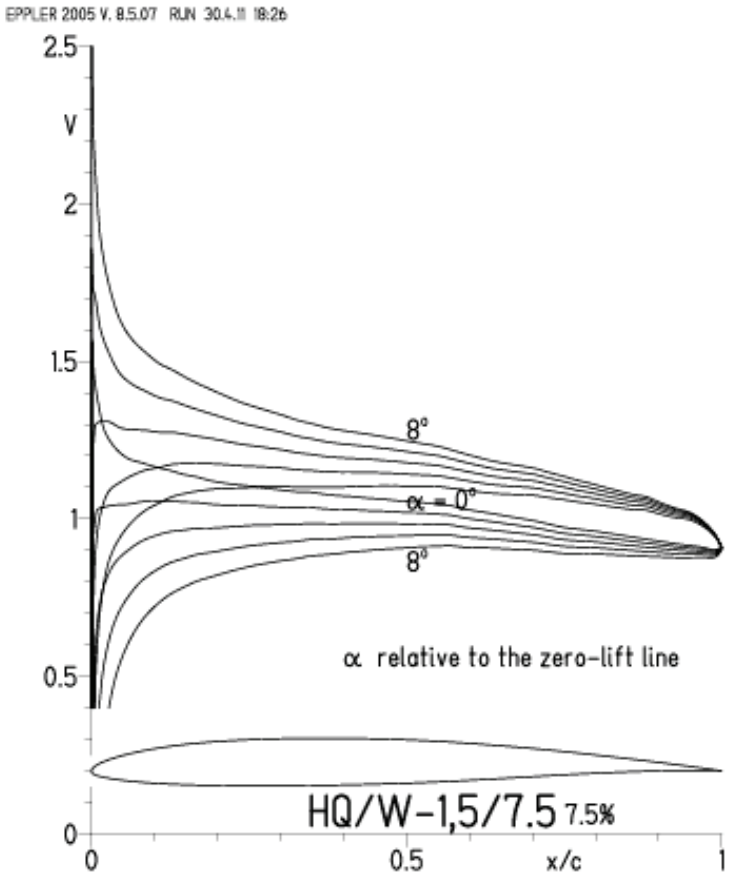


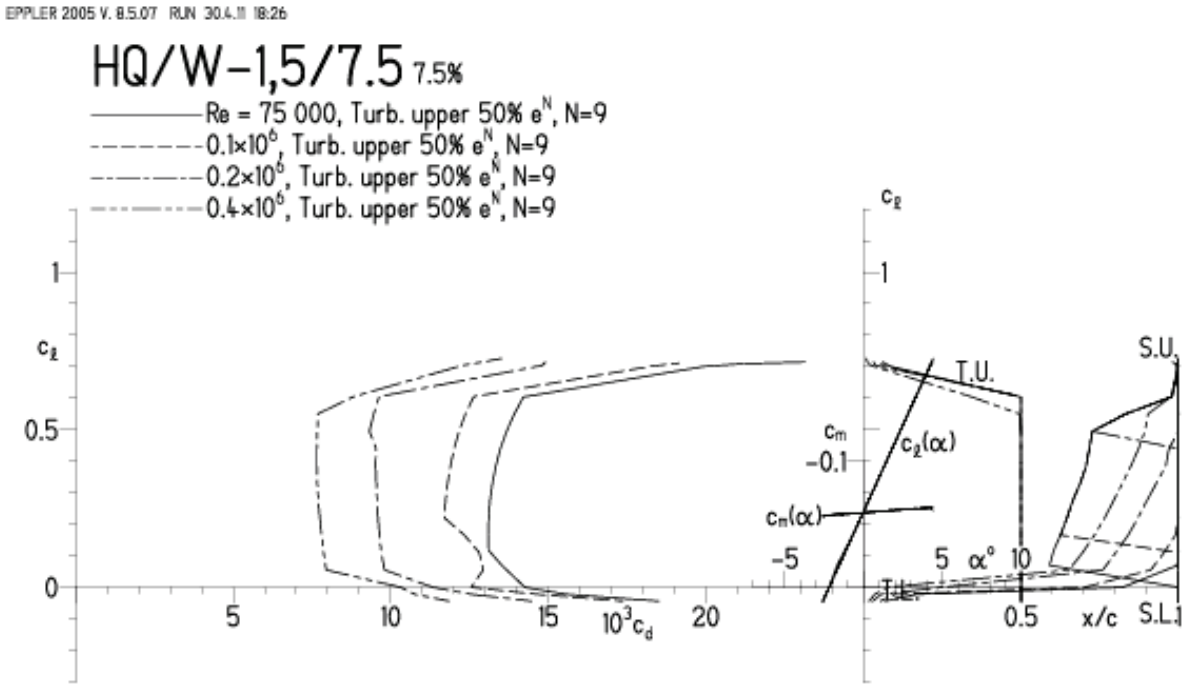
HQ/W-1,5/7,5, N=9





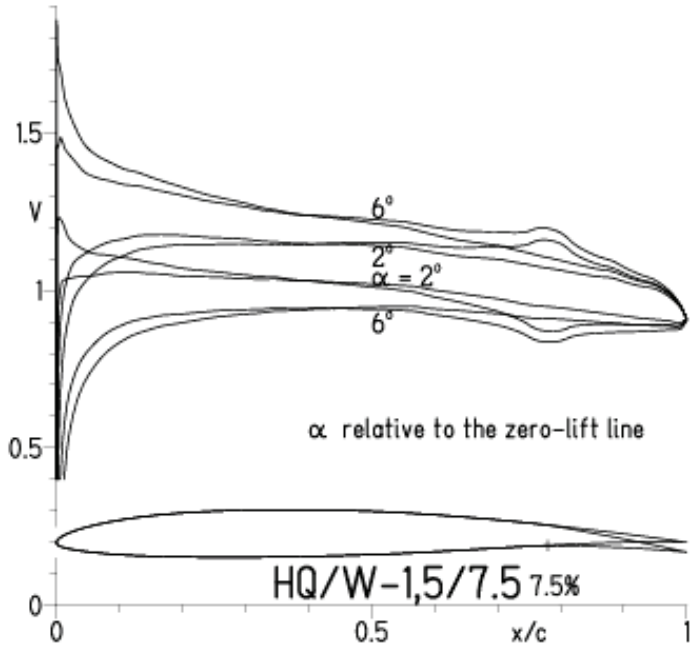
<u>HQ/W-1,5/7,5</u>, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)



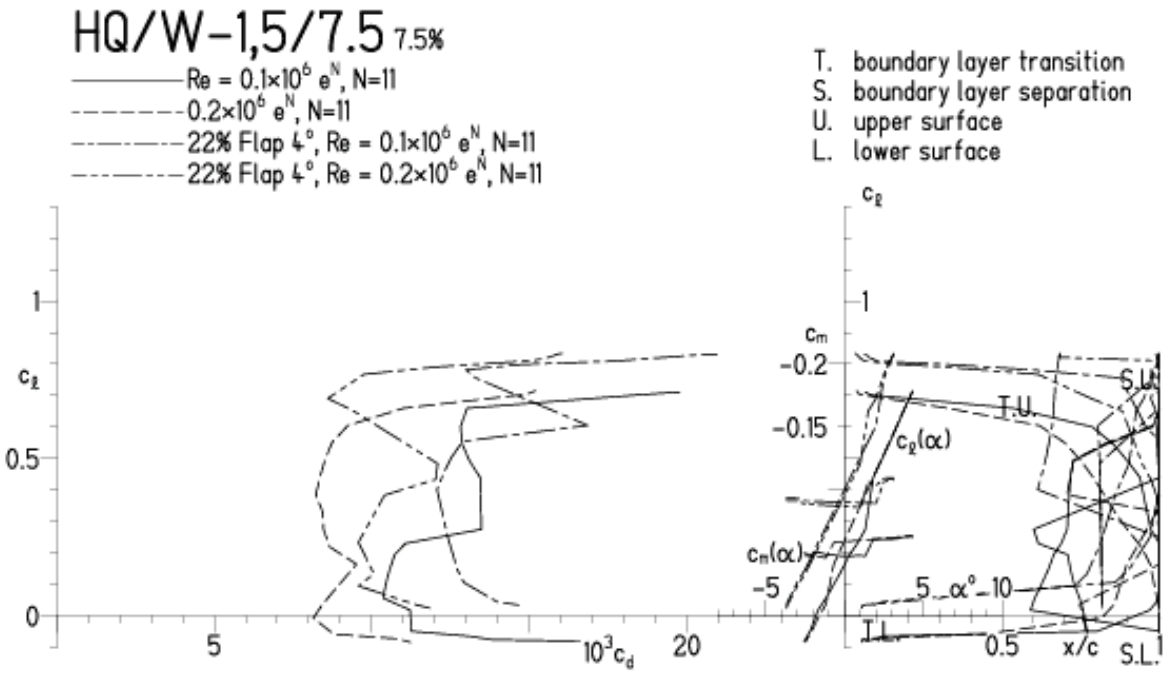


HQ/W-1,5/7,5, N=11, mit +4° Wölbklappenausschlag

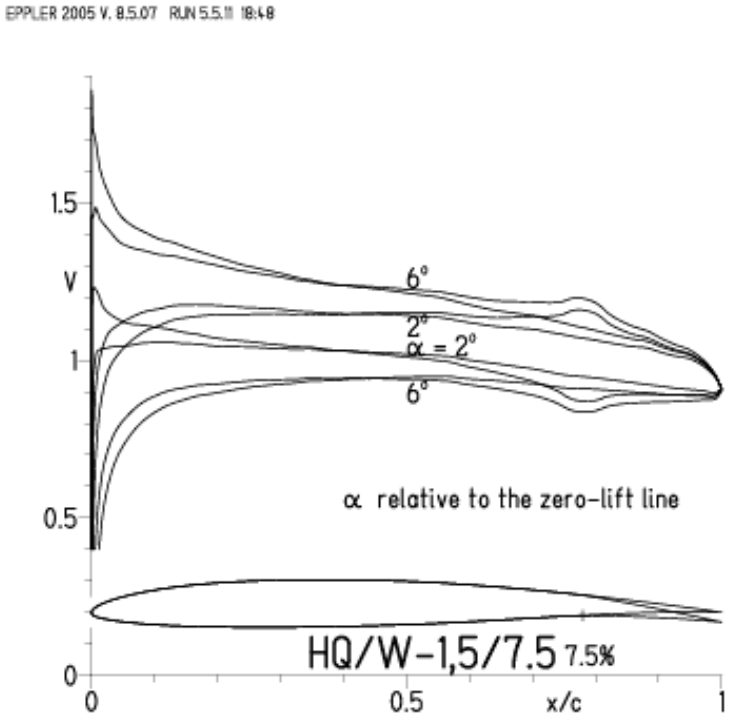
EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:44

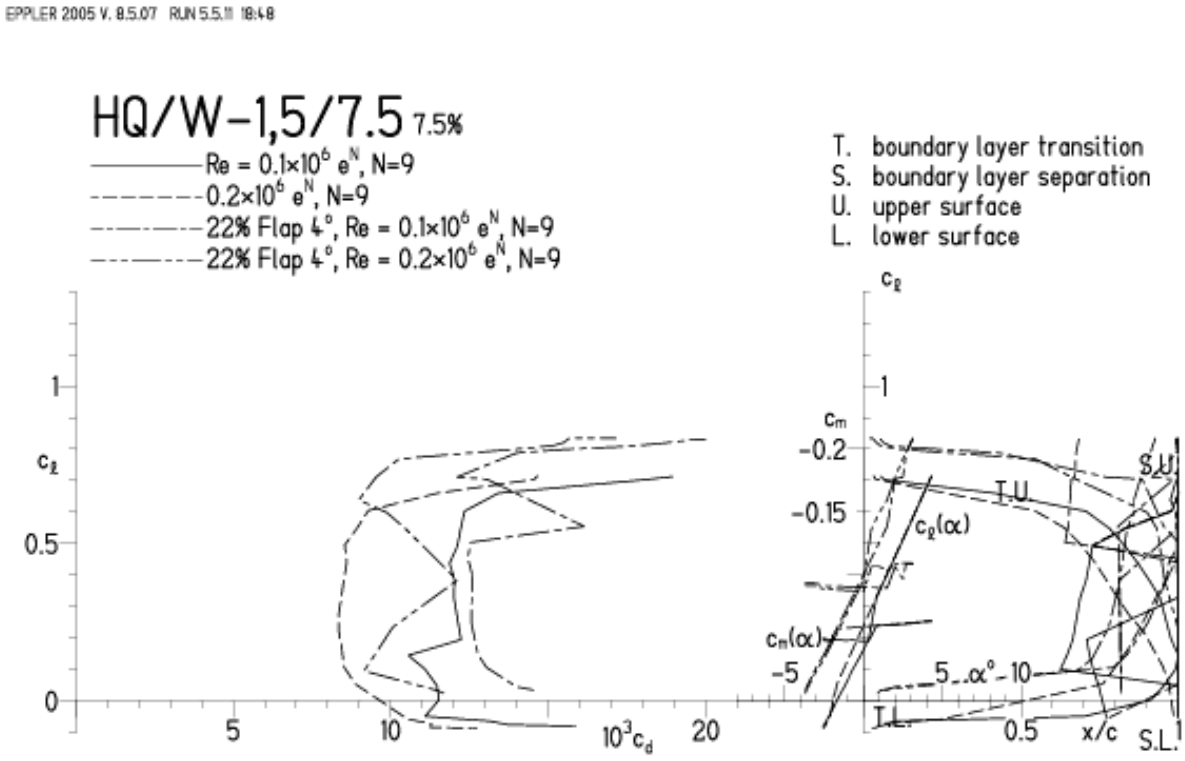


EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:44

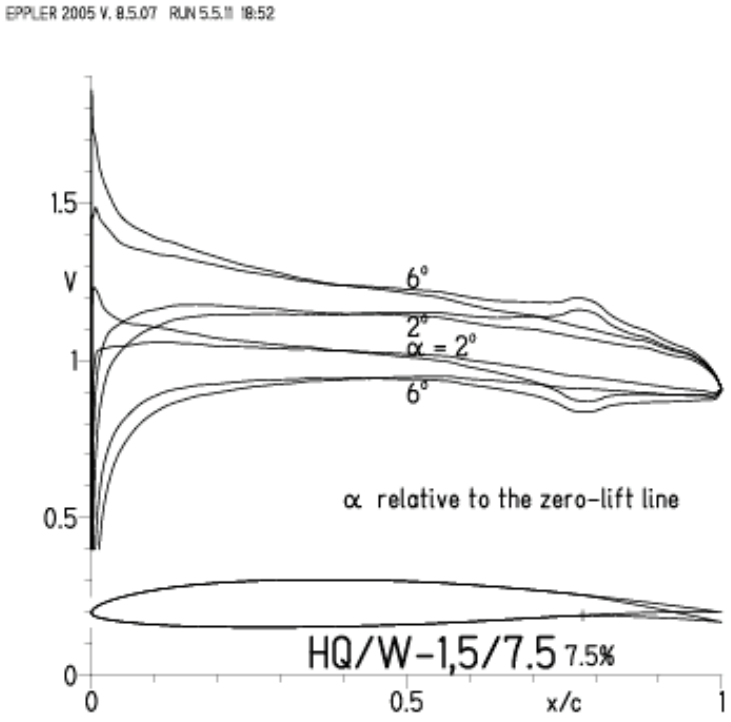


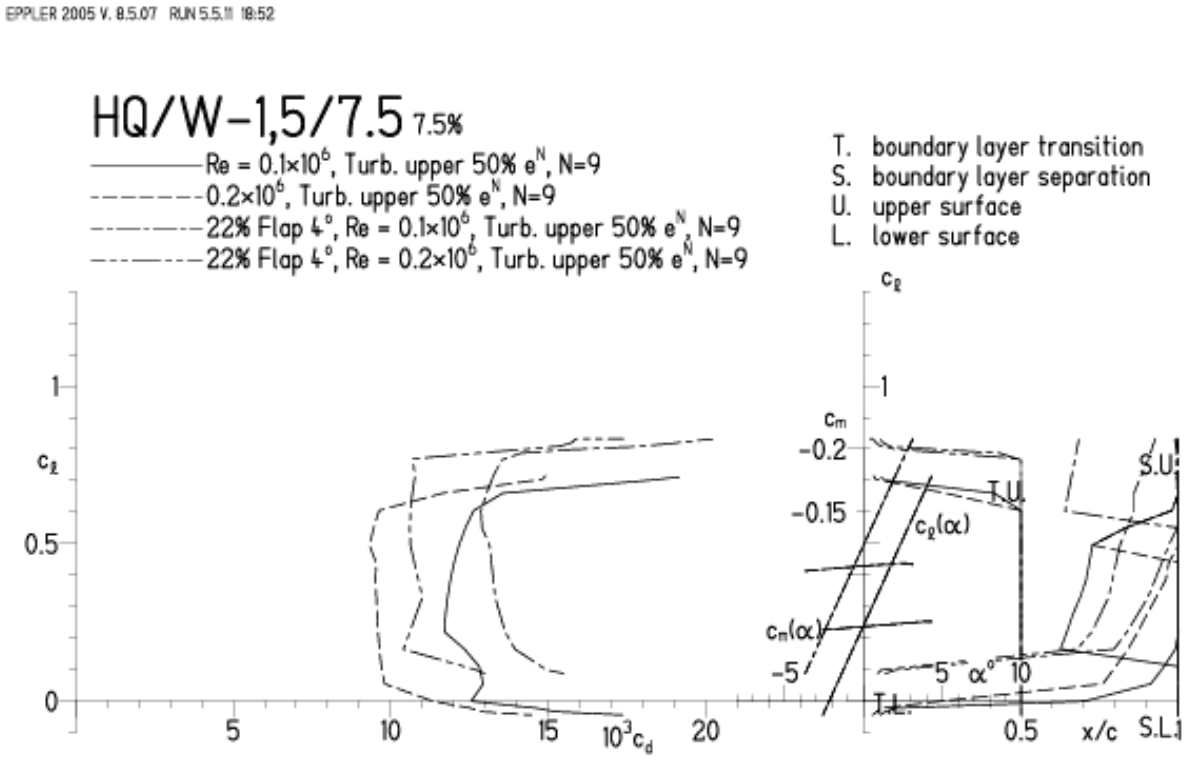
HQ/W-1,5/7,5, N=9, mit +4° Wölbklappenausschlag





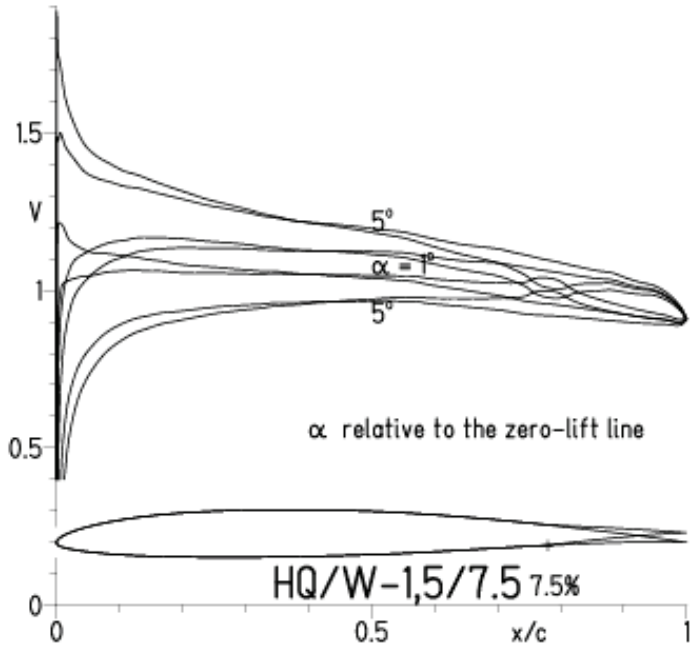
HQ/W-1,5/7,5, N=9, mit +4° Wölbklappenausschlag, Turbulatoreffekt
(Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)



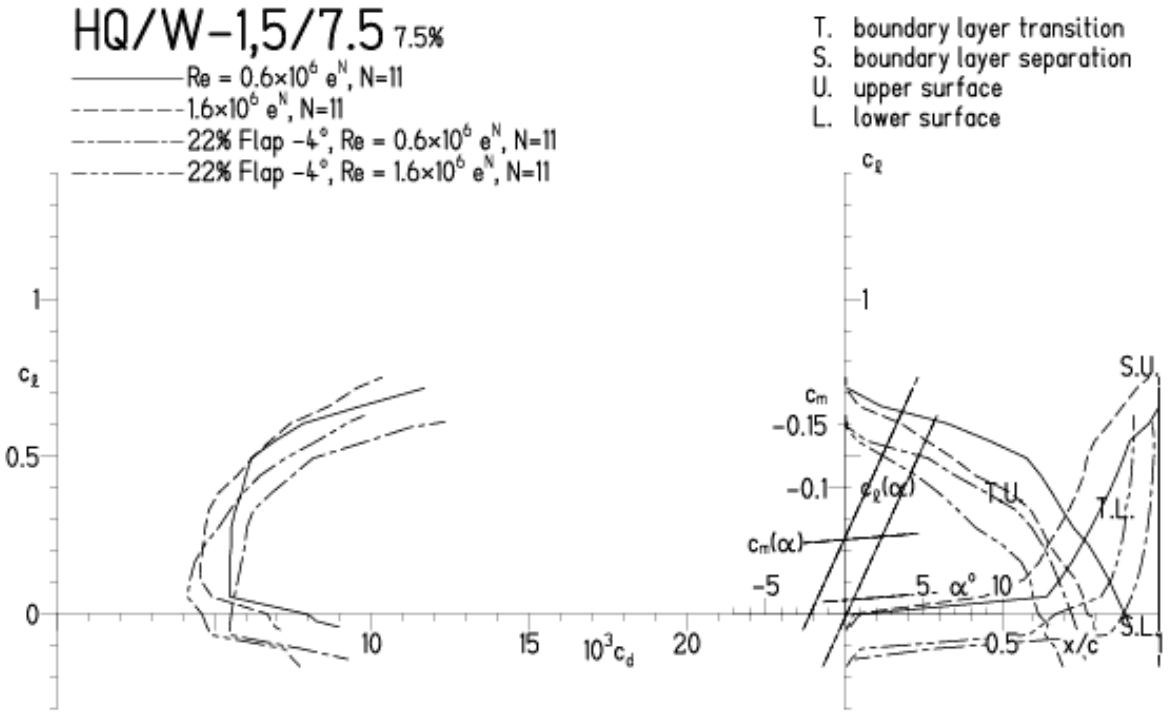


HQ/W-1,5/7,5, N=11, mit -4° Wölbklappenausschlag
(Segelmodelle mit > 50 g/dm^2 erreichen damit sicher über 300 km/h Höchstgeschwindigkeit)

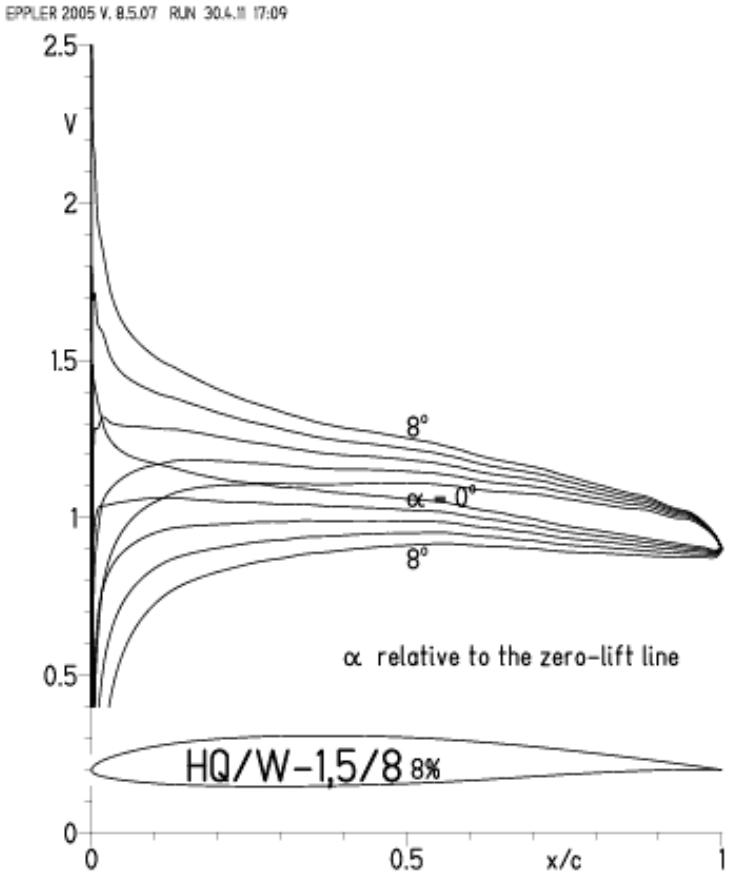
EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:58

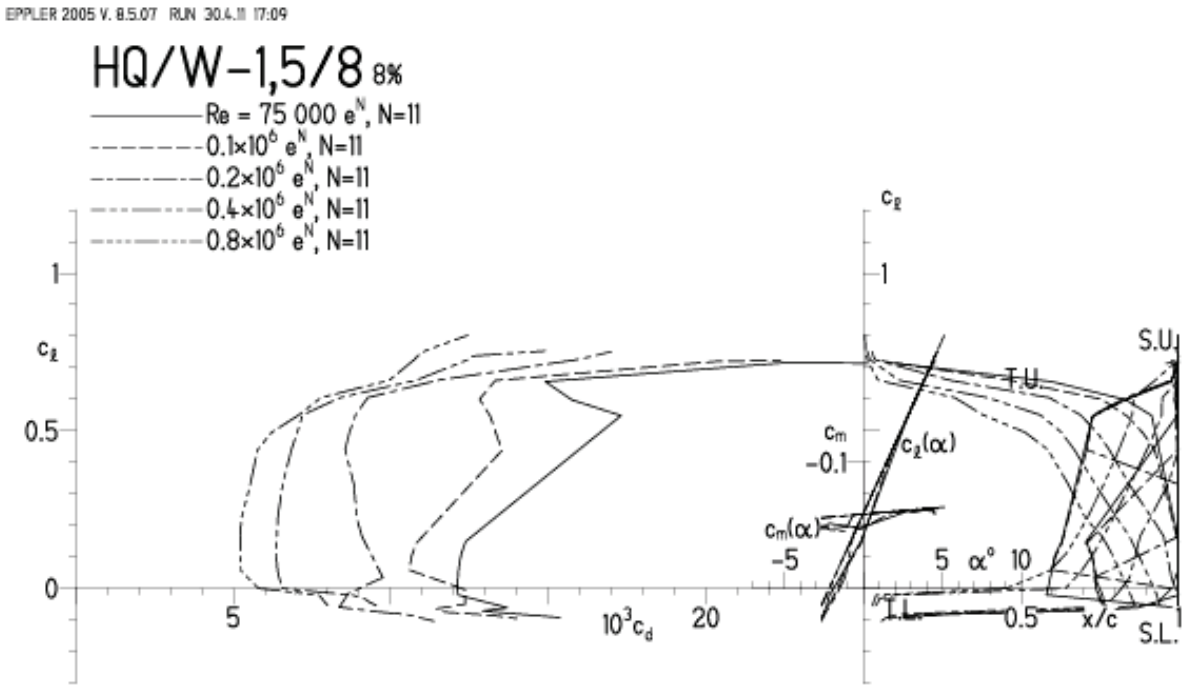


EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:58

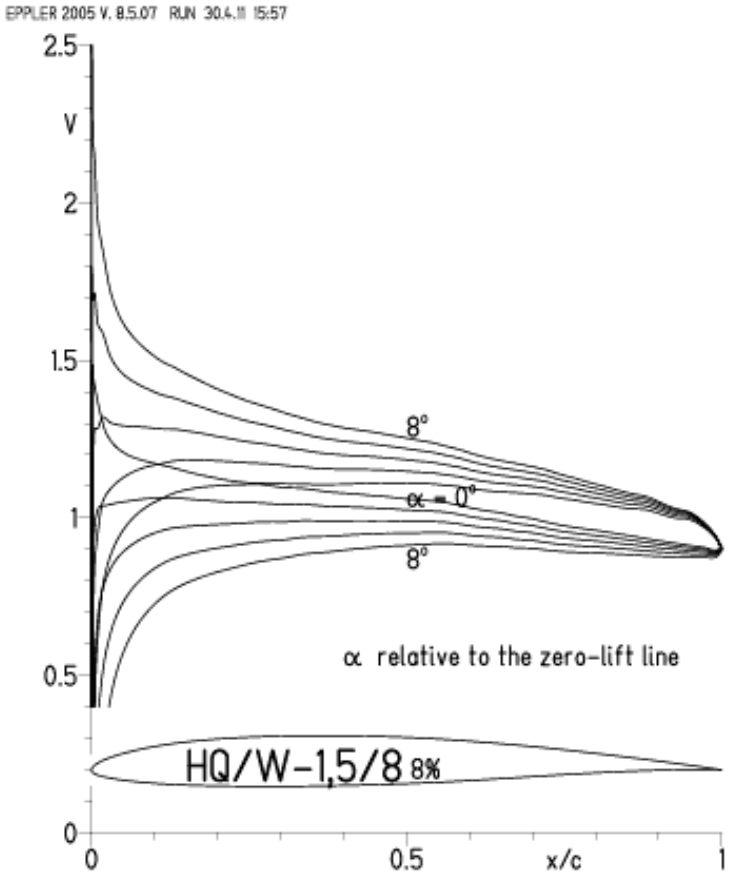


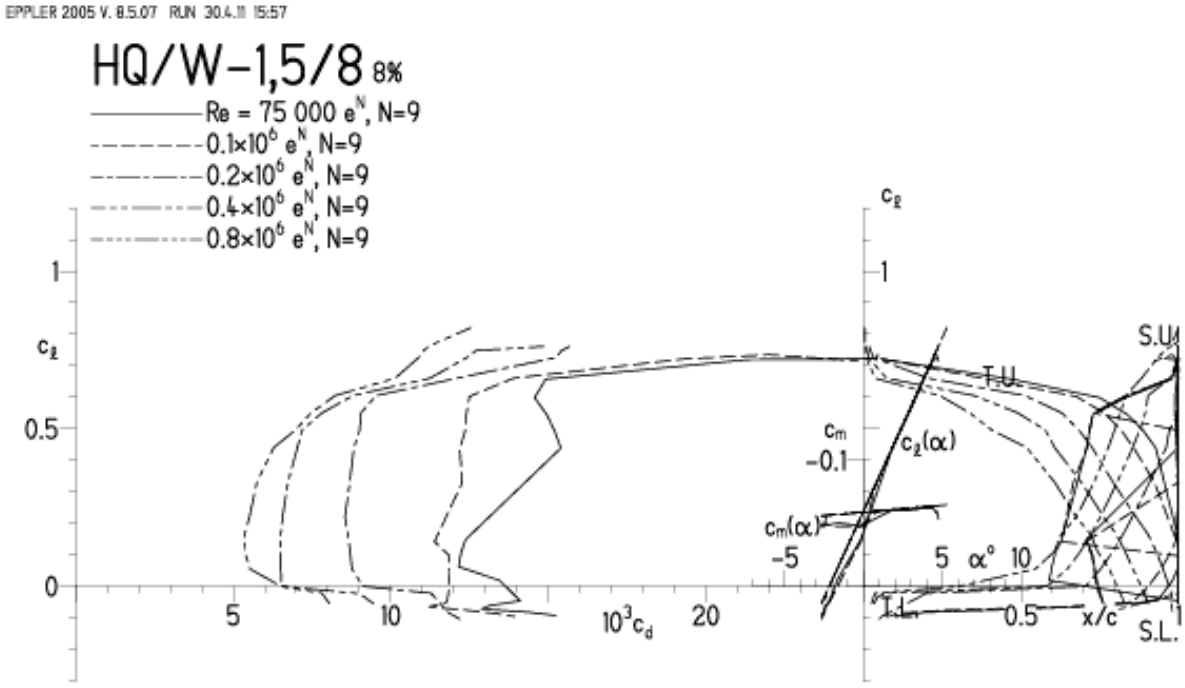
HQ/W-1,5/8, N=11


EPPLER 2005 V. 8.5.07 RUN 30.4.11 17:09
2.5
V
2
1.5
1
0.5
0
8°
α = 0°
8°
α relative to the zero-lift line
HQ/W-1,5/8 8%
0
0.5
x/c
1

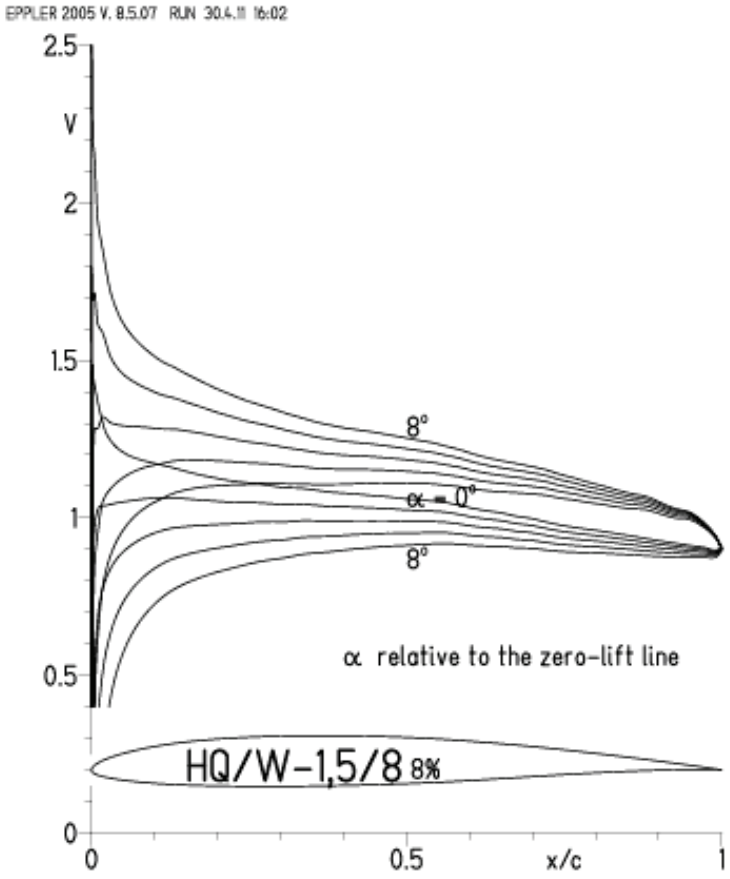

EPPLER 2005 V. 8.5.07 RUN 30.4.11 17:09
HQ/W-1,5/8 8%
Re = 75 000 e^N, N=11
0.1×10^6 e^N, N=11
0.2×10^6 e^N, N=11
0.4×10^6 e^N, N=11
0.8×10^6 e^N, N=11
c_a
1
0.5
0
5
10^3 c_d
20
c_a
1
S.U.
T.U.
c_m
-0.1
c_a(α)
c_m(α)
-5
5 α° 10
T.L.
0.5
x/c
1
S.L.

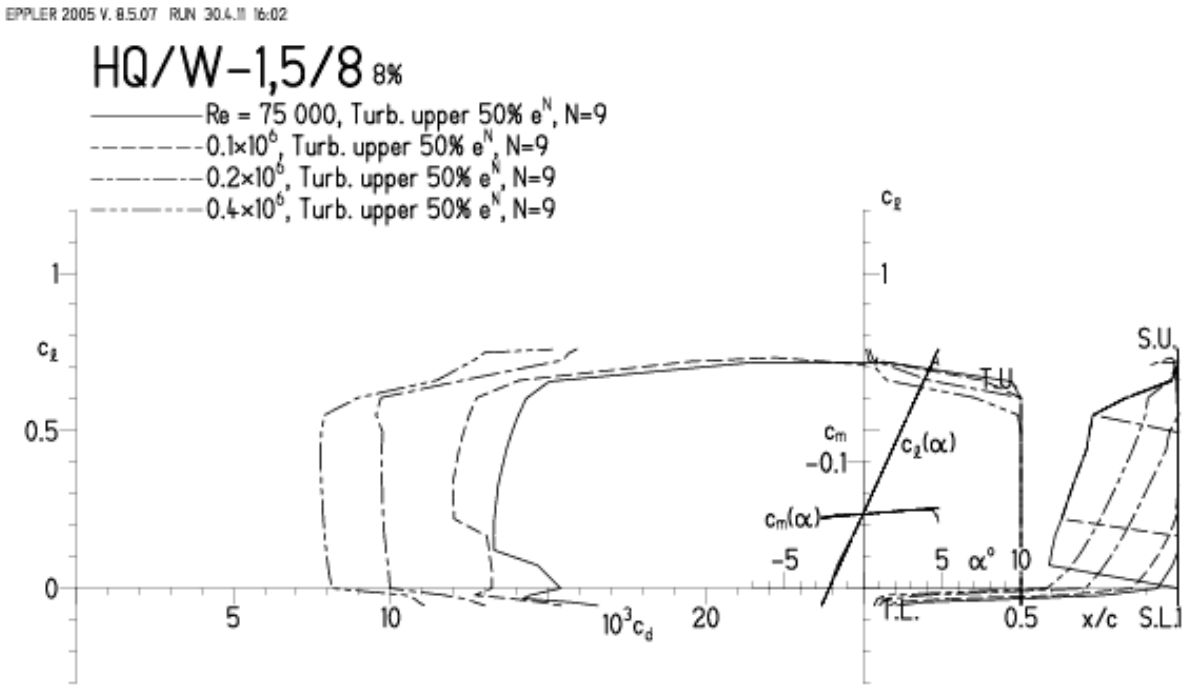
HQ/W-1,5/8, N=9





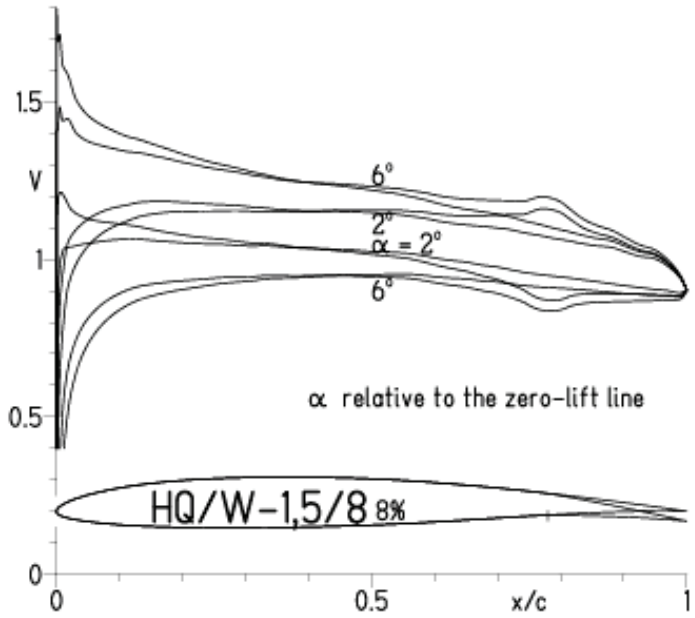
HQ/W-1,5/8, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)



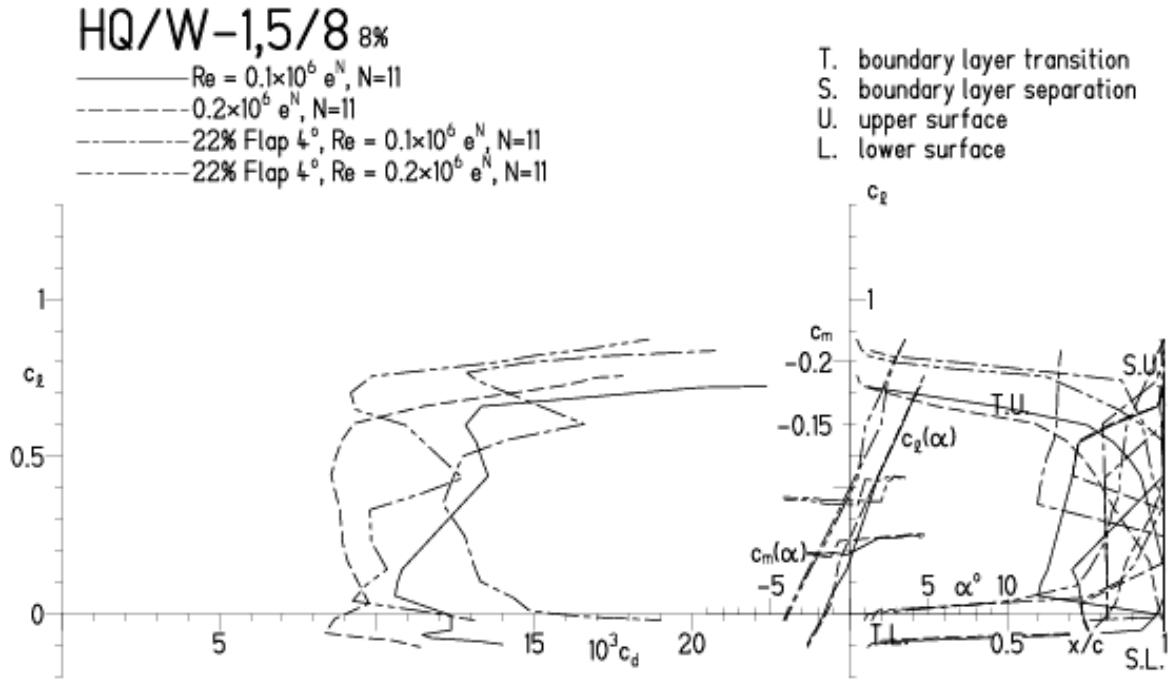


HQ/W-1,5/8, N=11, mit +4° Wölbklappenausschlag

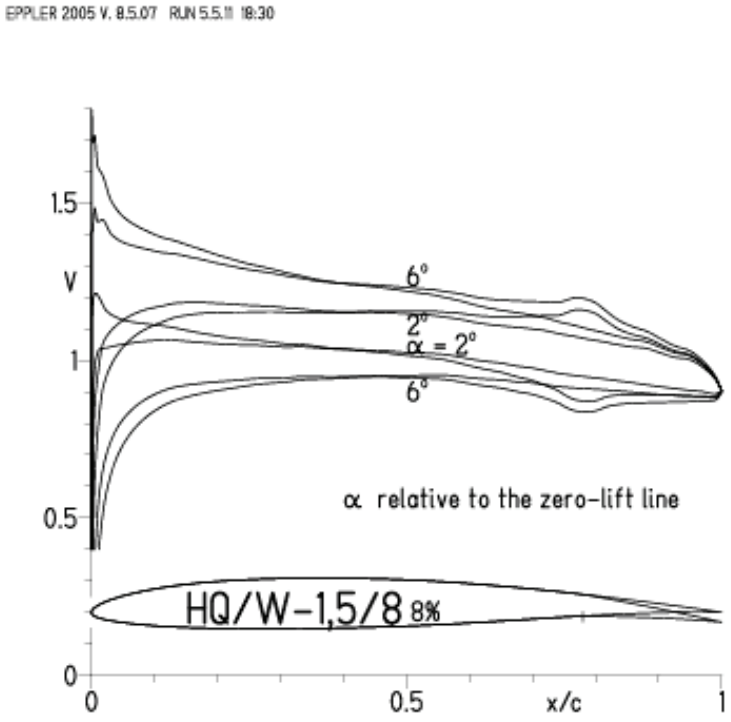
EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:25

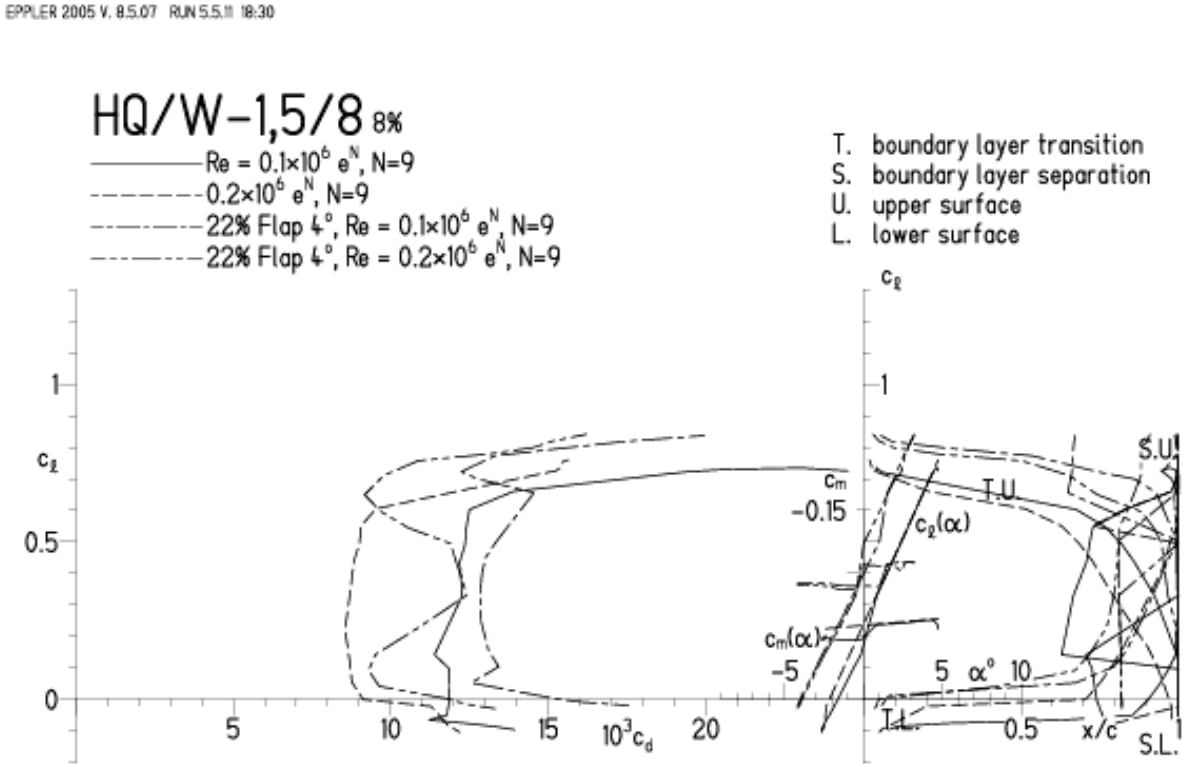


EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:25



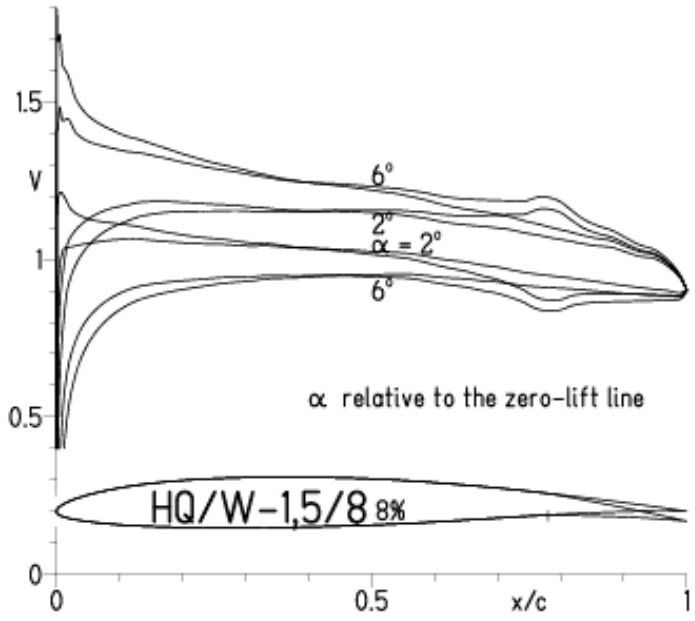
HQ/W-1,5/8, N=9, mit +4° Wölbklappenausschlag



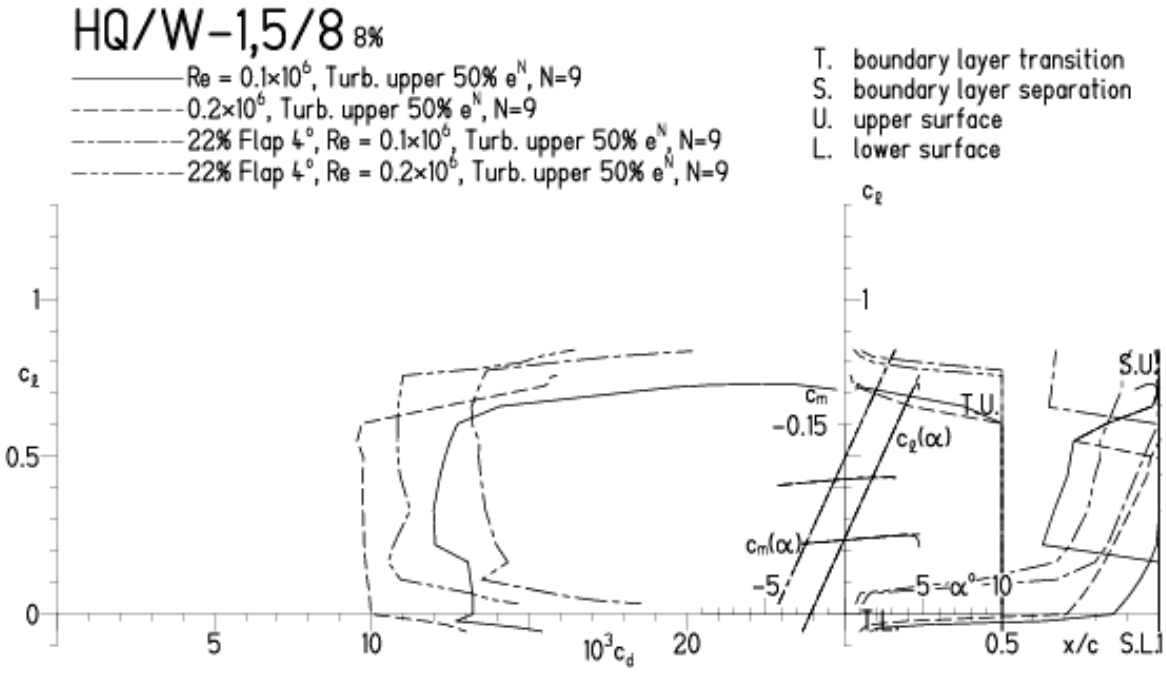


HQ/W-1,5/8, N=9, mit +4° Wölbklappenausschlag, Turbulatoreffekt
(Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:35

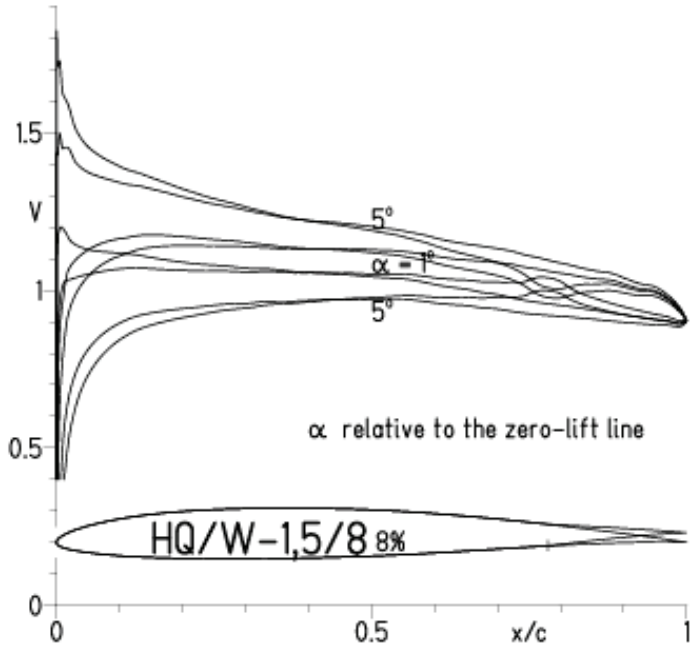


EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:35

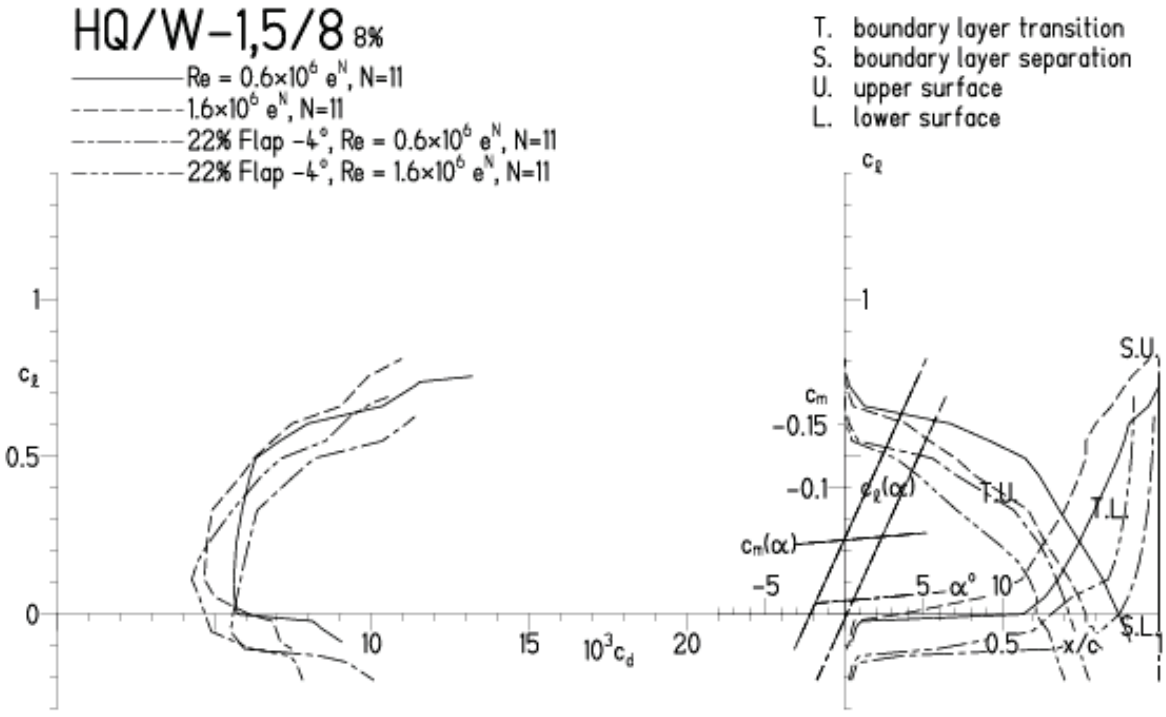


HQ/W-1,5/8, N=11, mit -4° Wölbklappenausschlag
(Segelmodelle mit > 50 g/dm^2 erreichen damit gut über 300 km/h Höchstgeschwindigkeit)

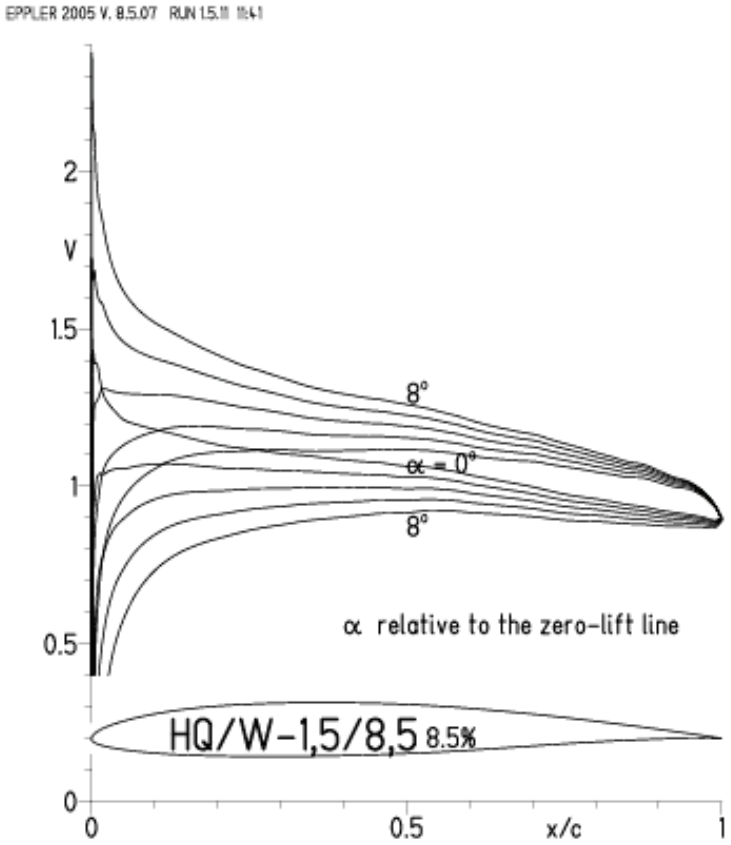
EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:40

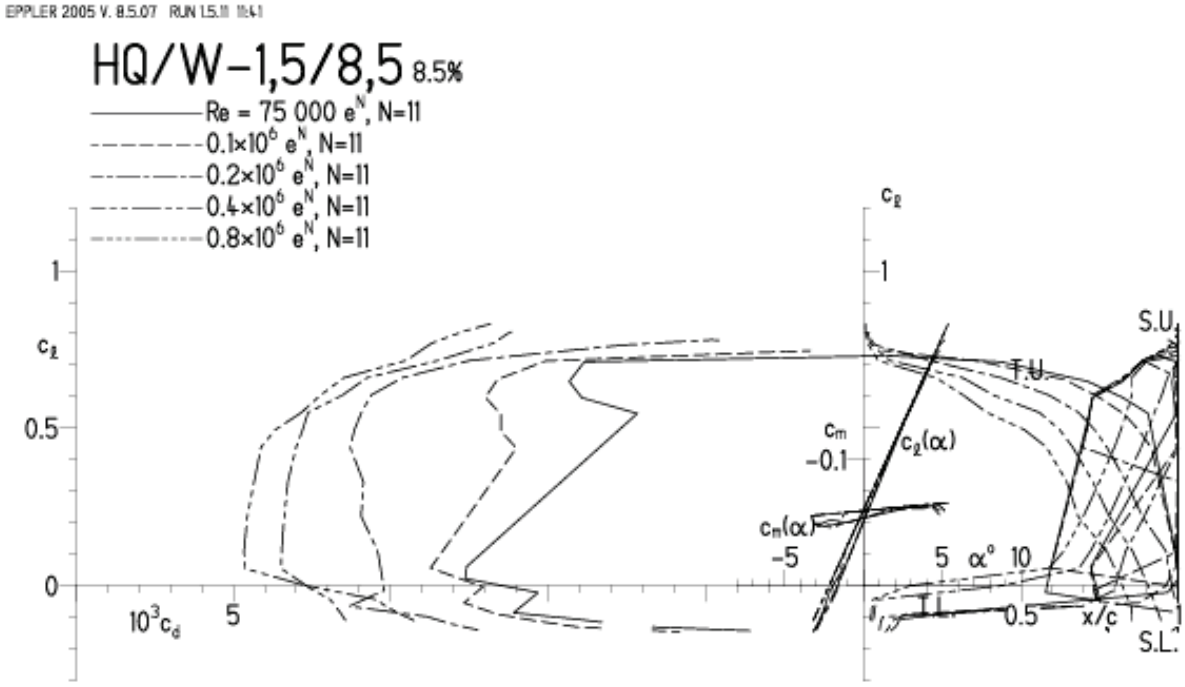


EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:40

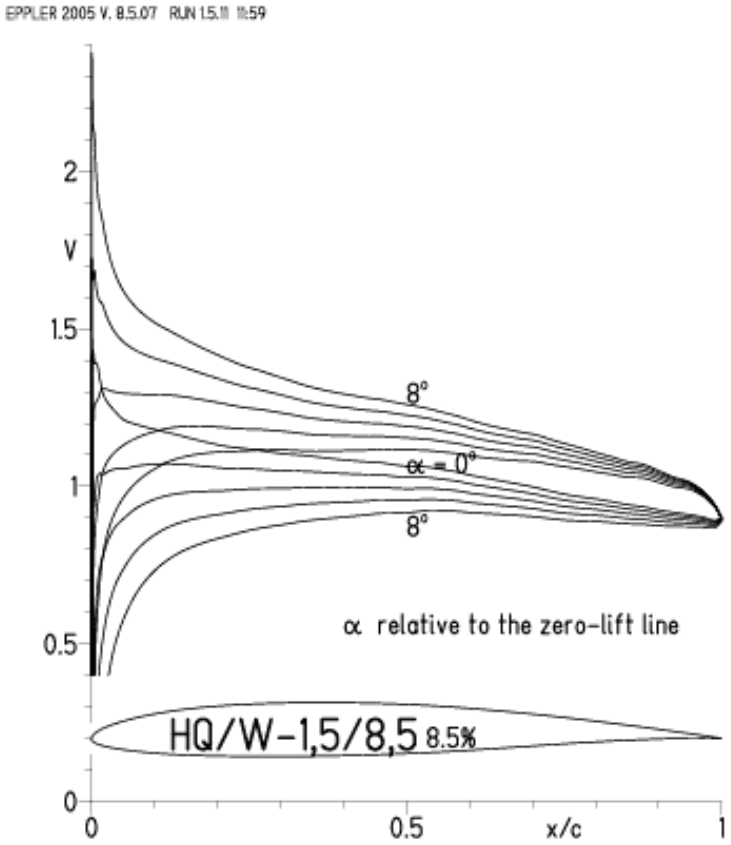


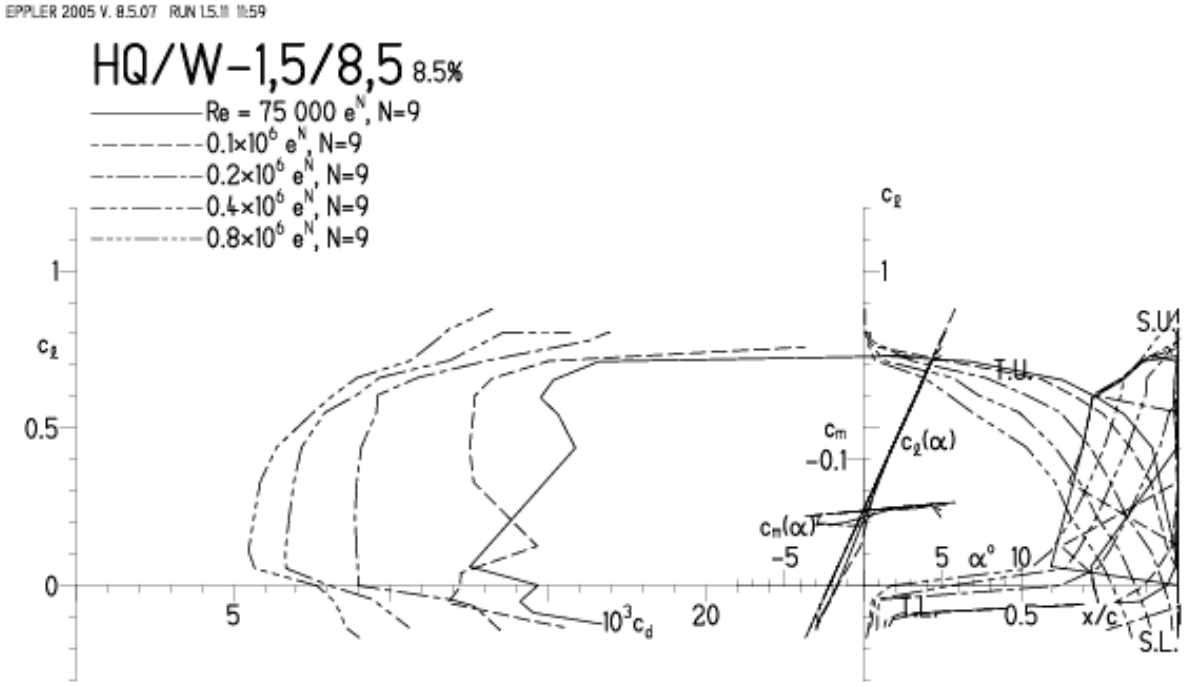
HQ/W-1,5/8,5, N=11


EPPLER 2005 V. 8.5.07 RUN 1.5.11 16:41
2
V
1.5
1
0.5
0
8°
α = 0°
8°
α relative to the zero-lift line
HQ/W-1,5/8,5 8.5%
0
0.5
x/c
1

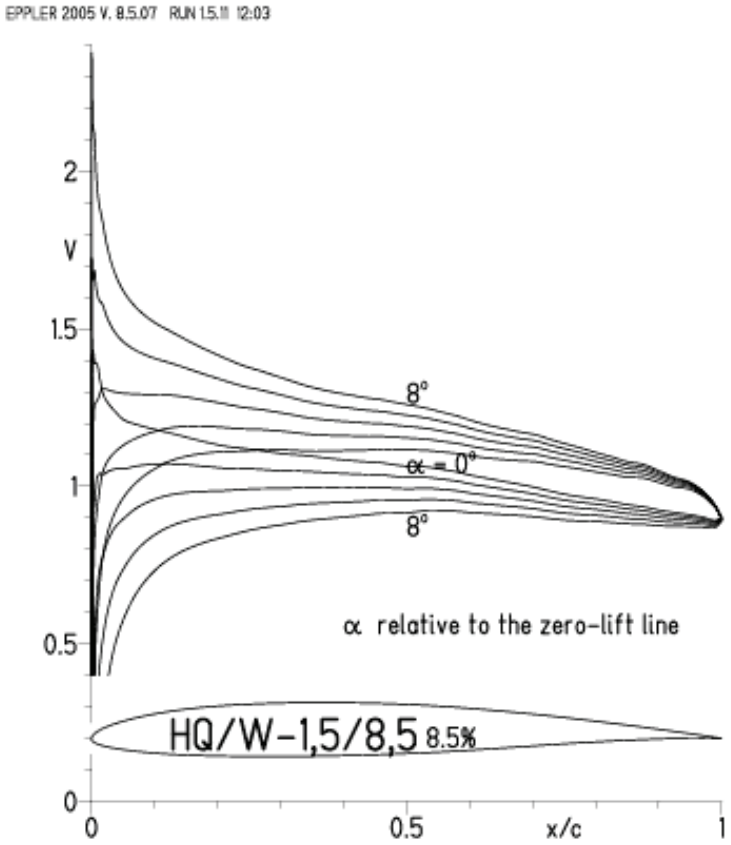

EPPLER 2005 V. 8.5.07 RUN 1.5.11 16:41
HQ/W-1,5/8,5 8.5%
Re = 75 000 e^N, N=11
0.1×10^6 e^N, N=11
0.2×10^6 e^N, N=11
0.4×10^6 e^N, N=11
0.8×10^6 e^N, N=11
c_l
1
0.5
0
10^3 c_d
5
c_l
1
S.U.
T.U.
c_m
-0.1
c_m(α)
-5
c_l(α)
5 α° 10
0.5
x/c
1
S.L.

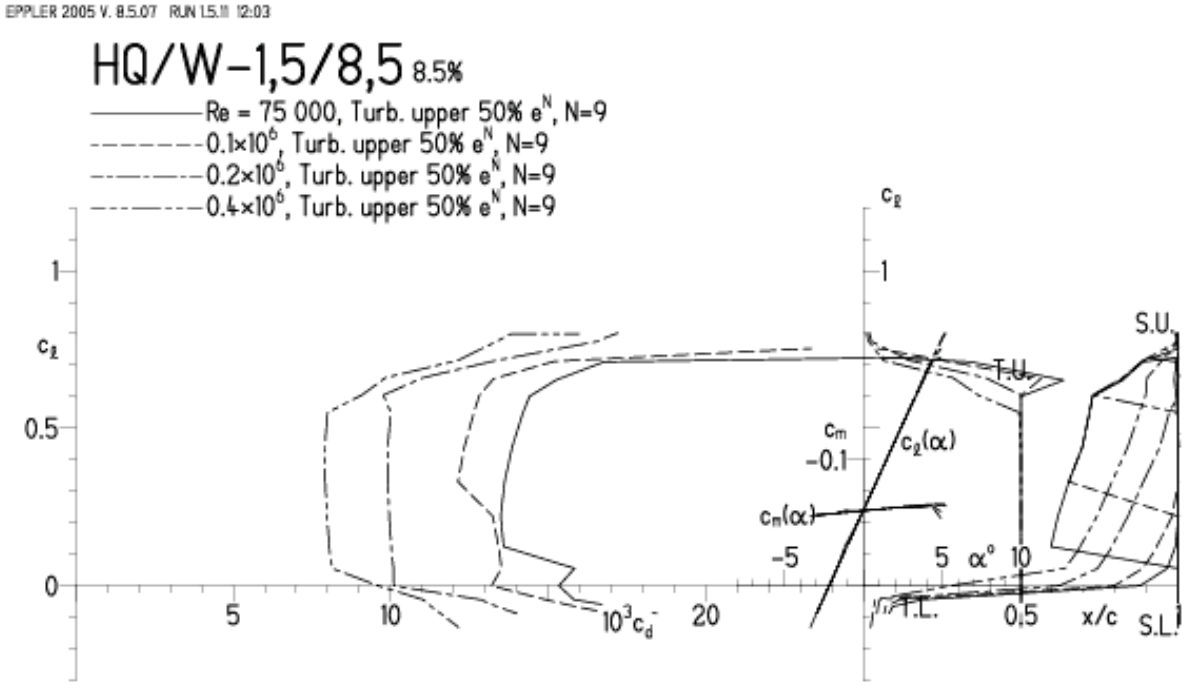
HQ/W-1,5/8,5, N=9



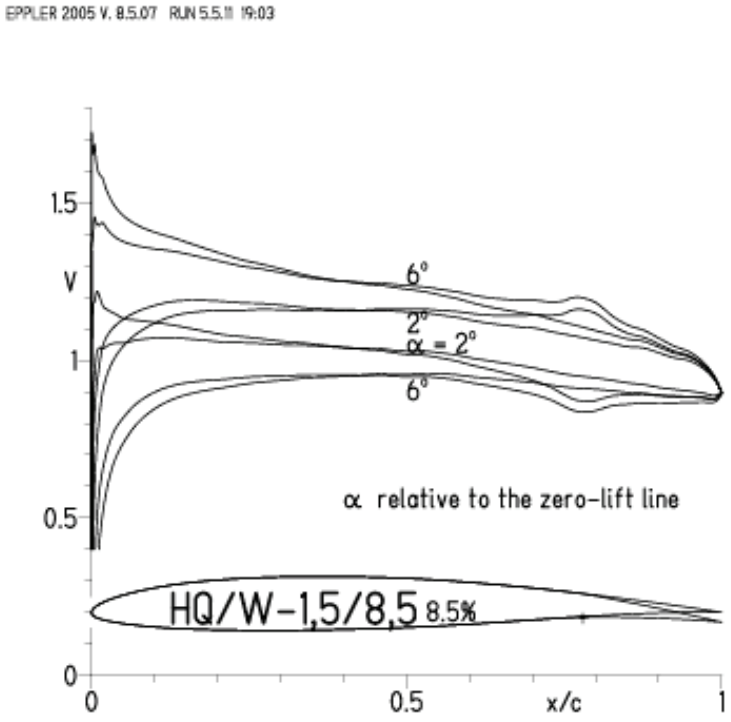


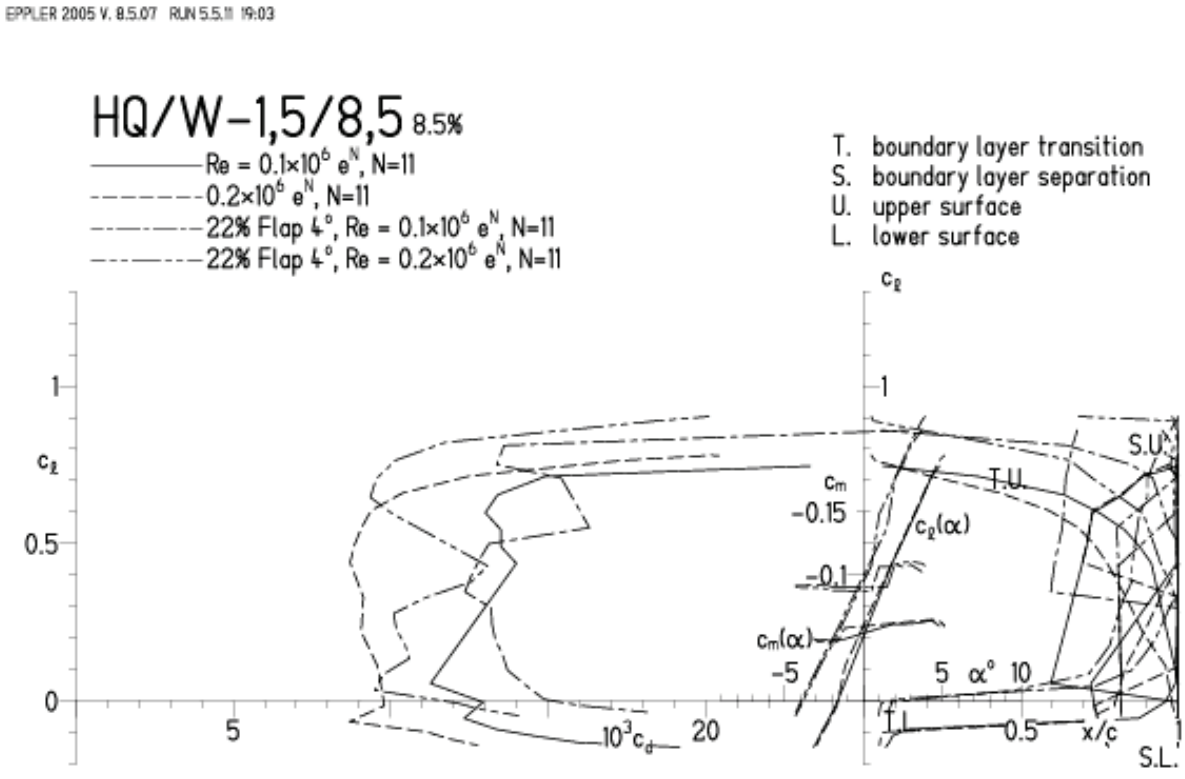
HQ/W-1,5/8,5, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)





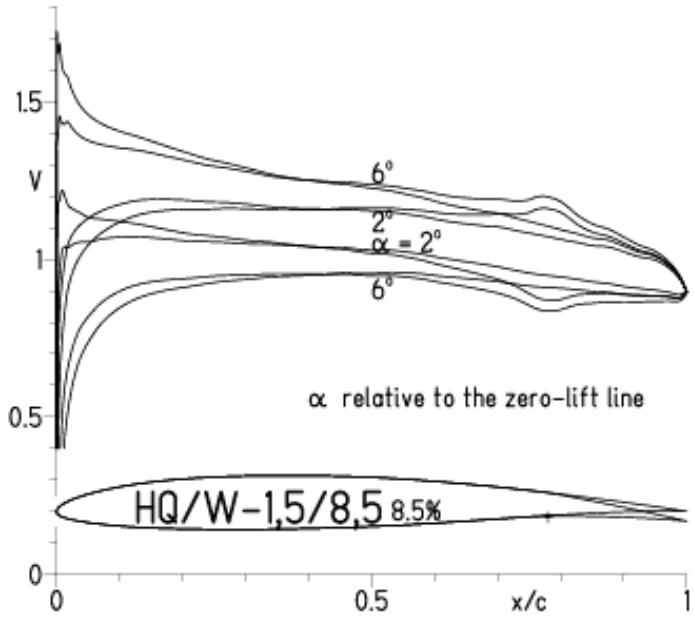
HQ/W-1,5/8,5, N=11, mit +4° Wölbklappenausschlag



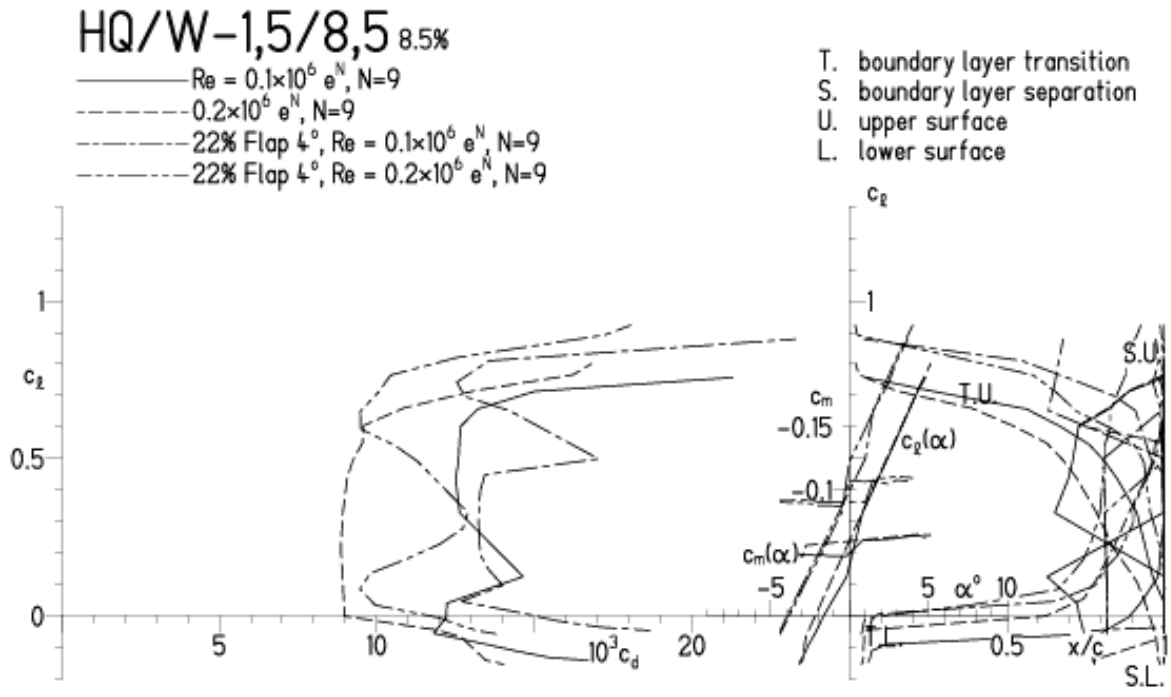


HQ/W-1,5/8,5, N=9, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:07

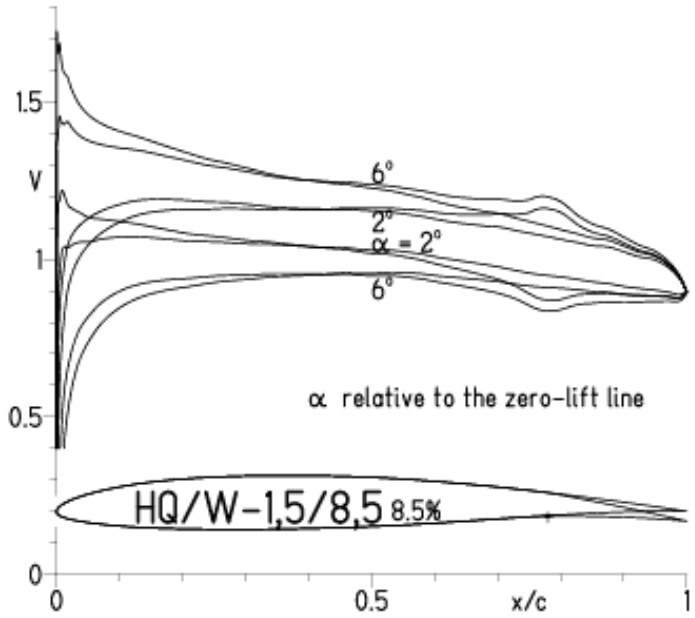


EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:07

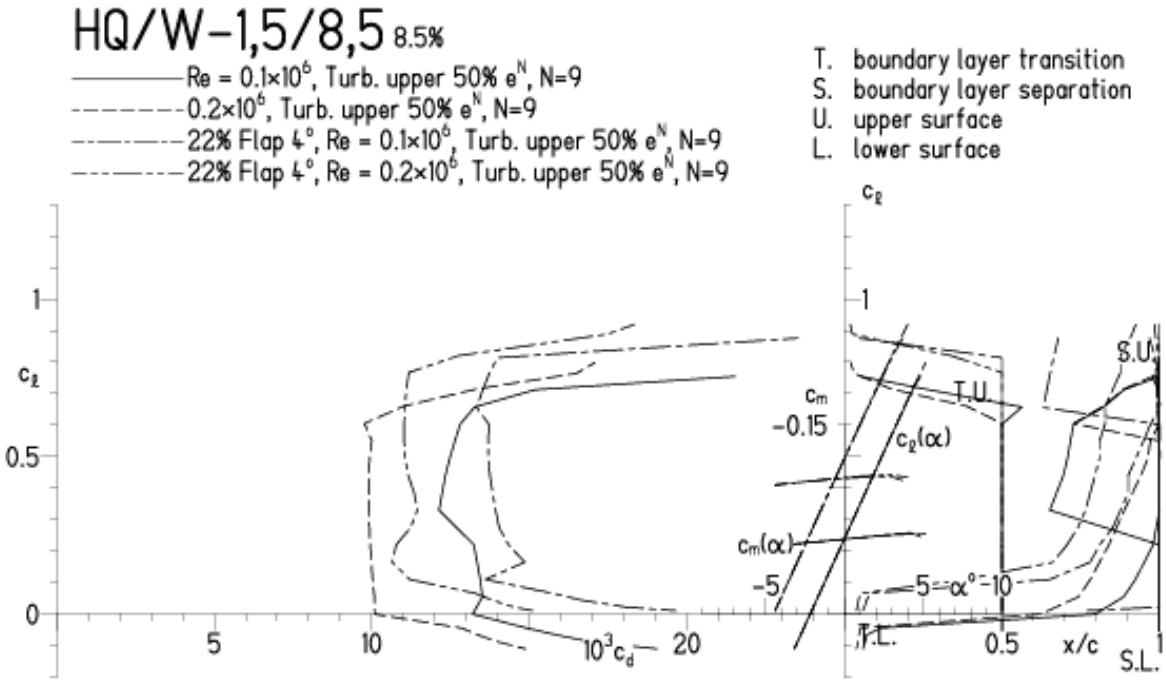


HQ/W-1,5/8,5, N=9, mit +4° Wölbklappenausschlag, Turbulatoreffekt
(Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:10

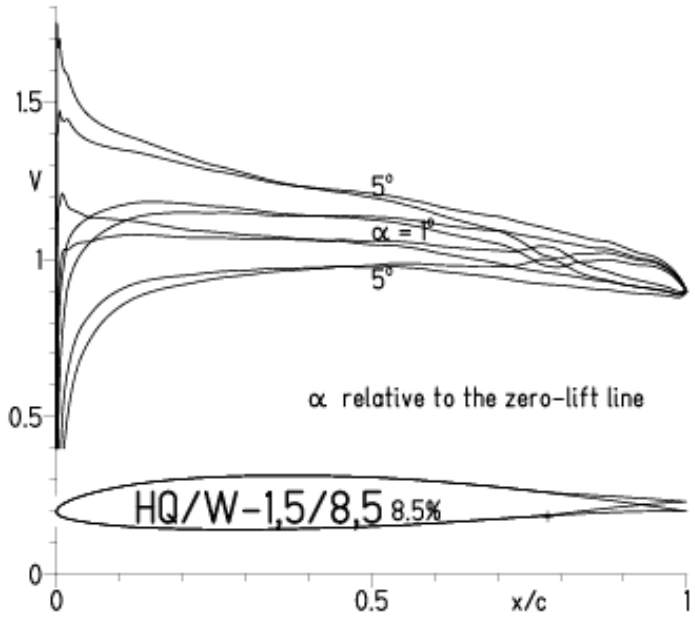


EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:10

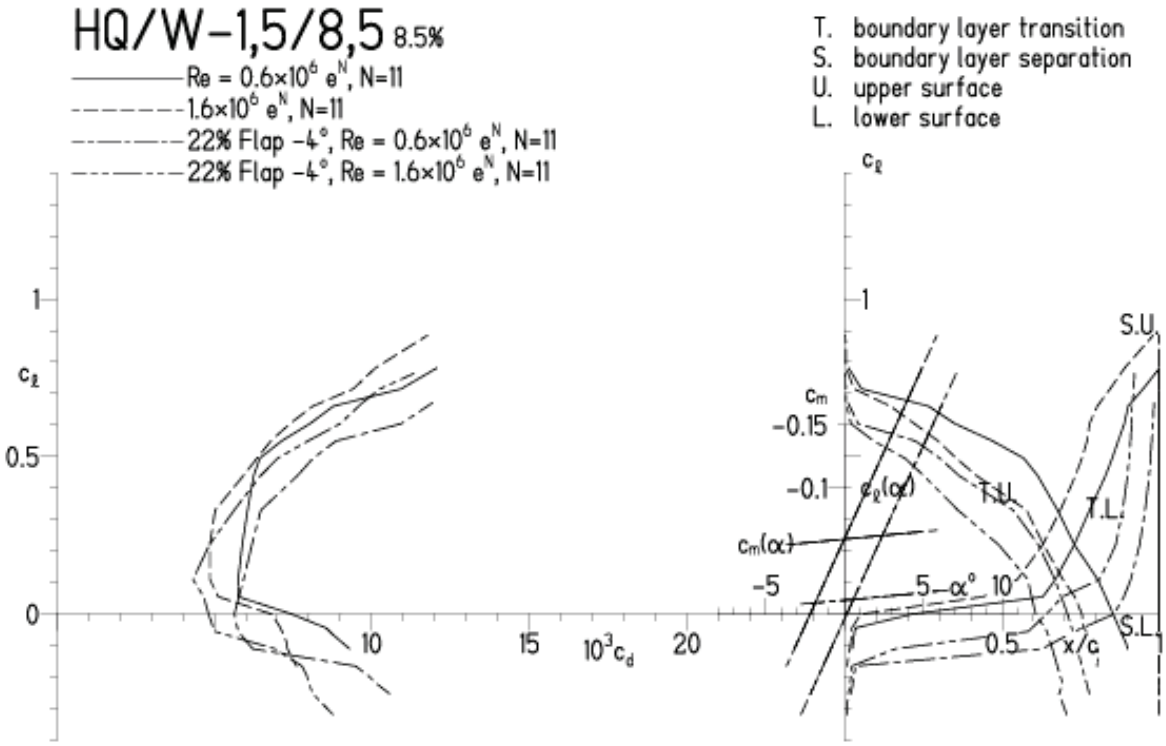


HQ/W-1,5/8,5, N=11, mit -4° Wölbklappenausschlag
(Segelflugmodelle mit > 50 g/dm^2 erreichen damit gut über 300 km/h Höchstgeschwindigkeit)

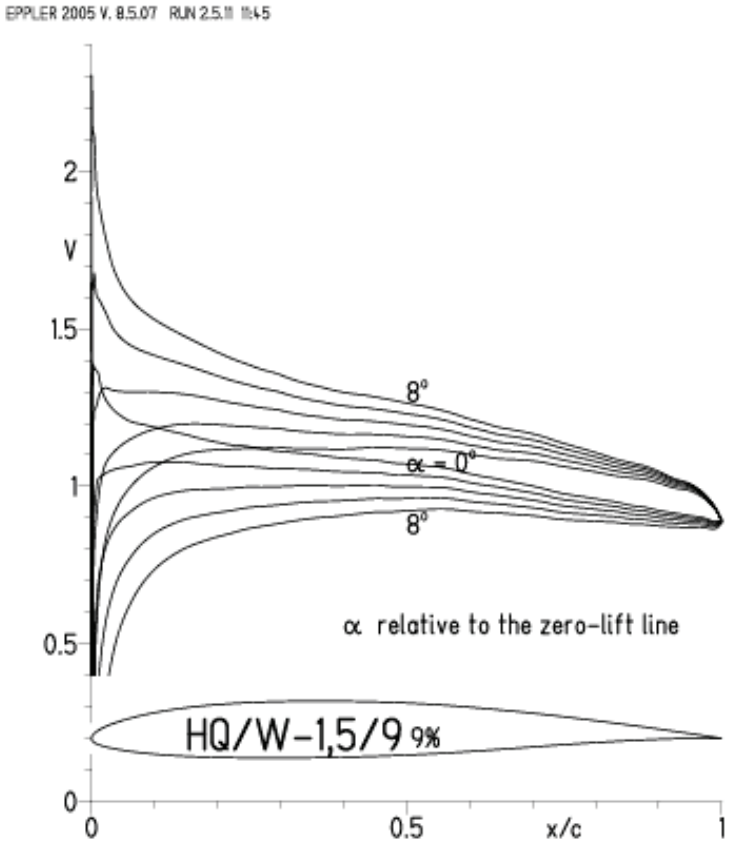
EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:13

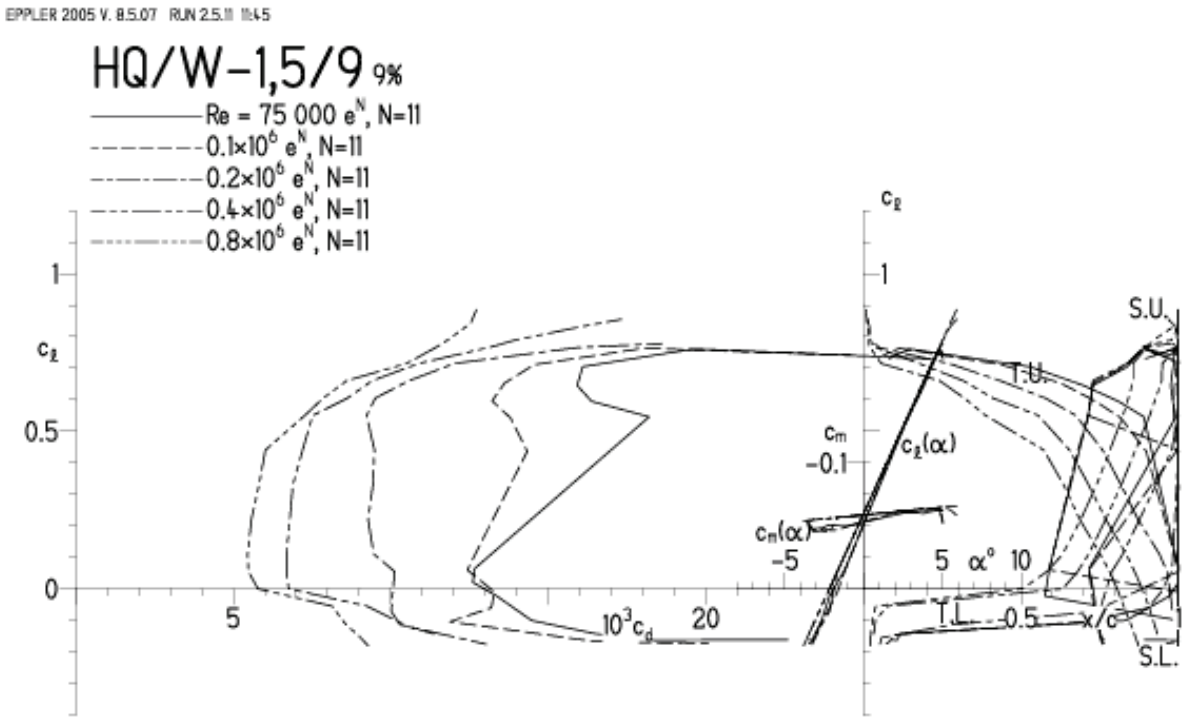


EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:13

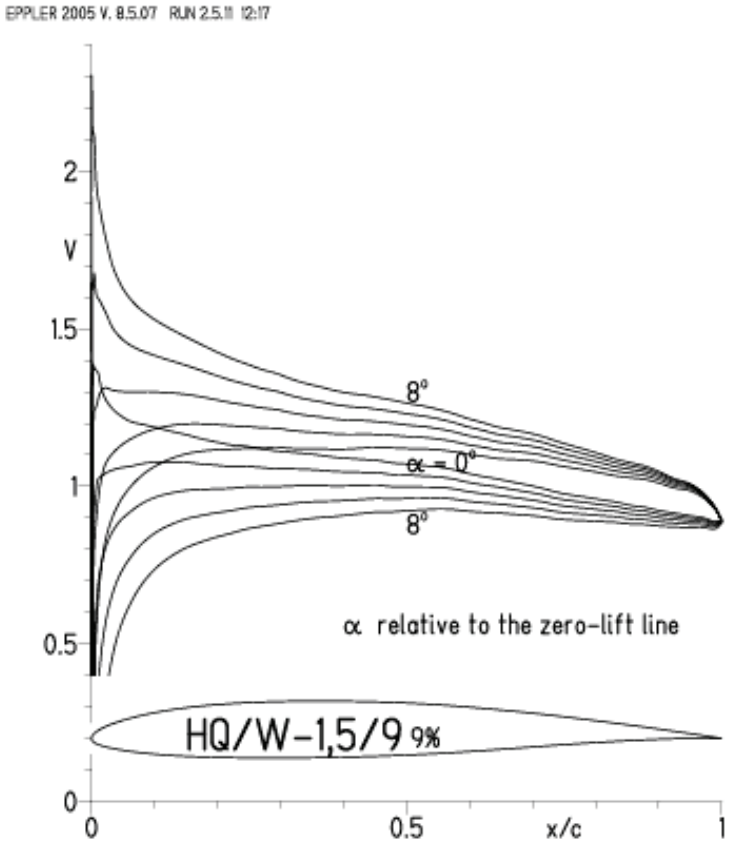


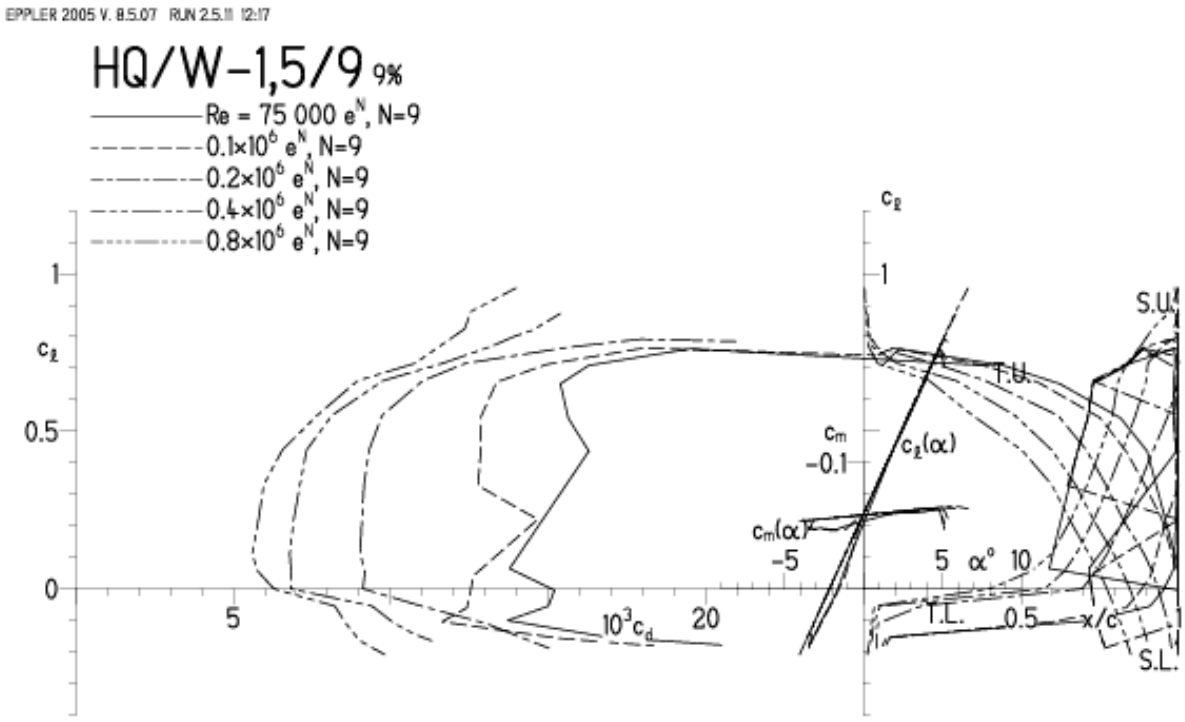
HQ/W-1,5/9, N=11


EPPLER 2005 V. 8.5.07 RUN 2.5.11 11:45
V
8°
α = 0°
8°
α relative to the zero-lift line
HQ/W-1,5/9 9%
x/c

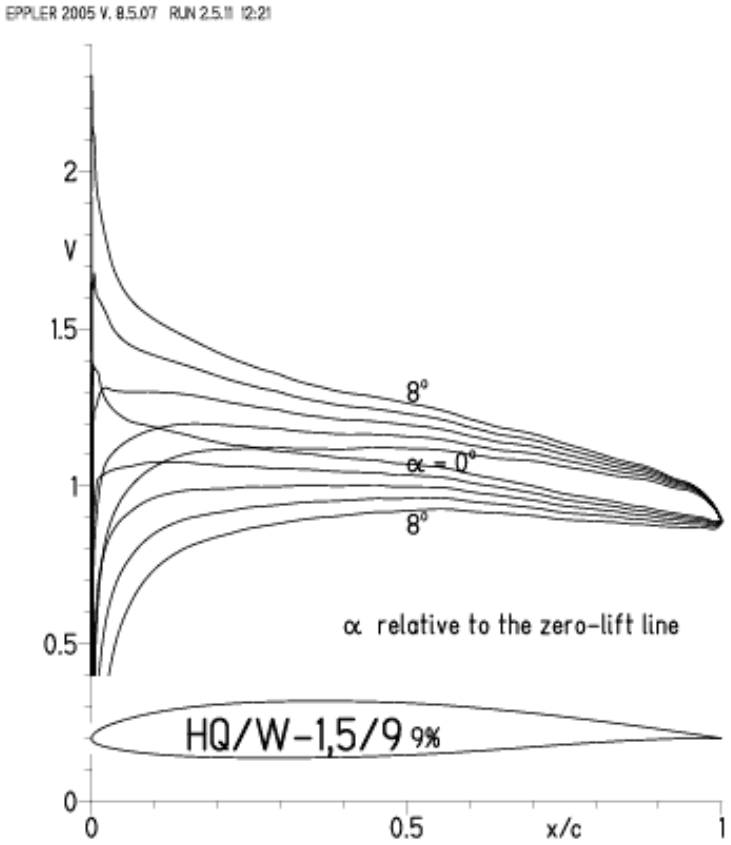

EPPLER 2005 V. 8.5.07 RUN 2.5.11 11:45
HQ/W-1,5/9 9%
Re = 75 000 e^N, N=11
0.1×10^6 e^N, N=11
0.2×10^6 e^N, N=11
0.4×10^6 e^N, N=11
0.8×10^6 e^N, N=11
c_l
c_m
c_l(α)
c_m(α)
10^3 c_d
S.U.
T.U.
T.L.
S.L.
x/c

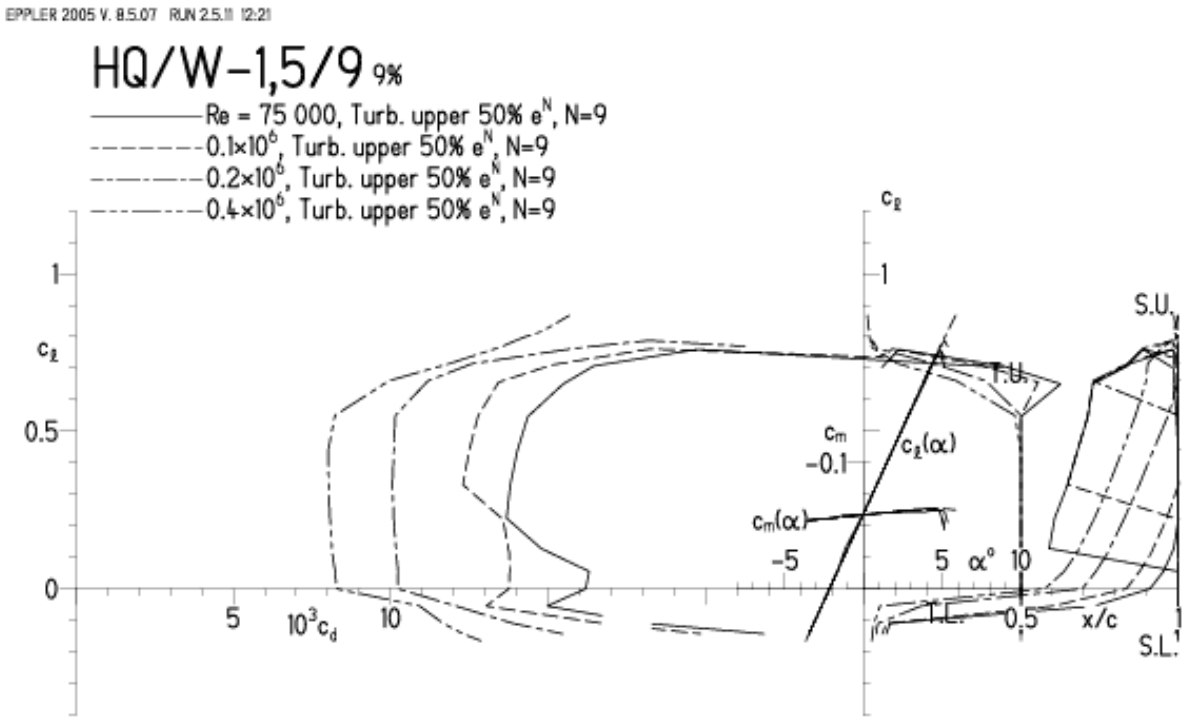
HQ/W-1,5/9, N=9





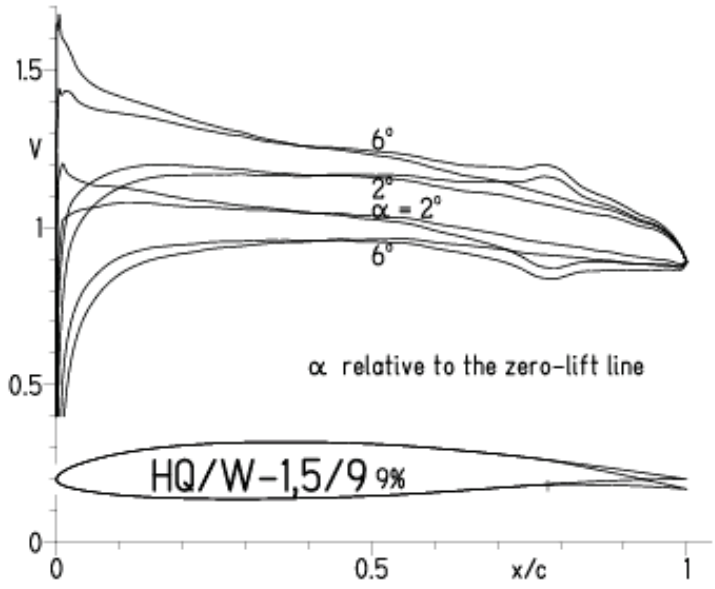
HQ/W-1,5/9, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)



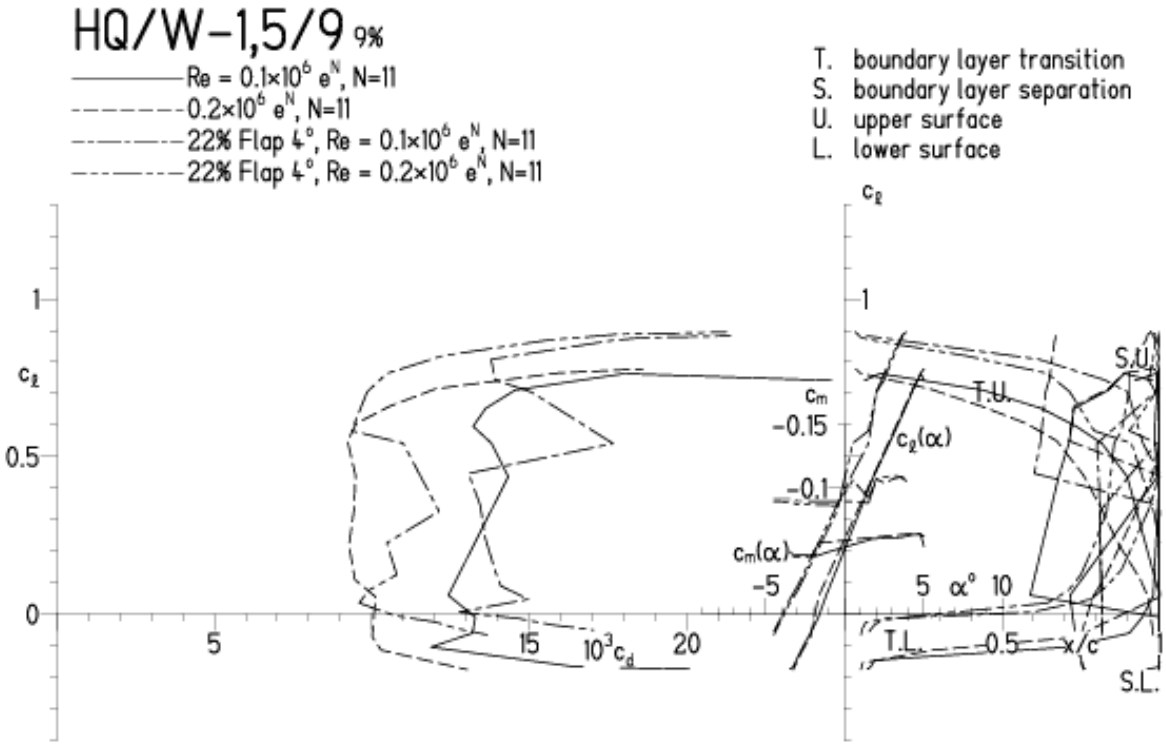


HQ/W-1,5/9, N=11, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:53

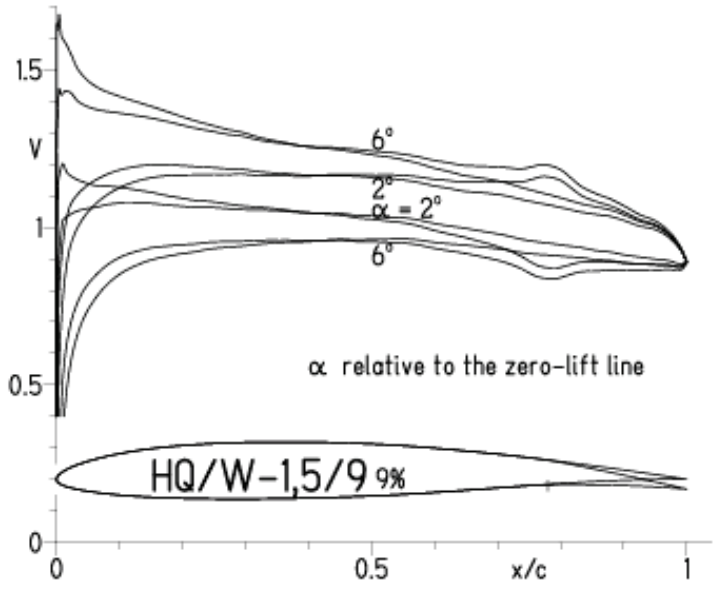


EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:5

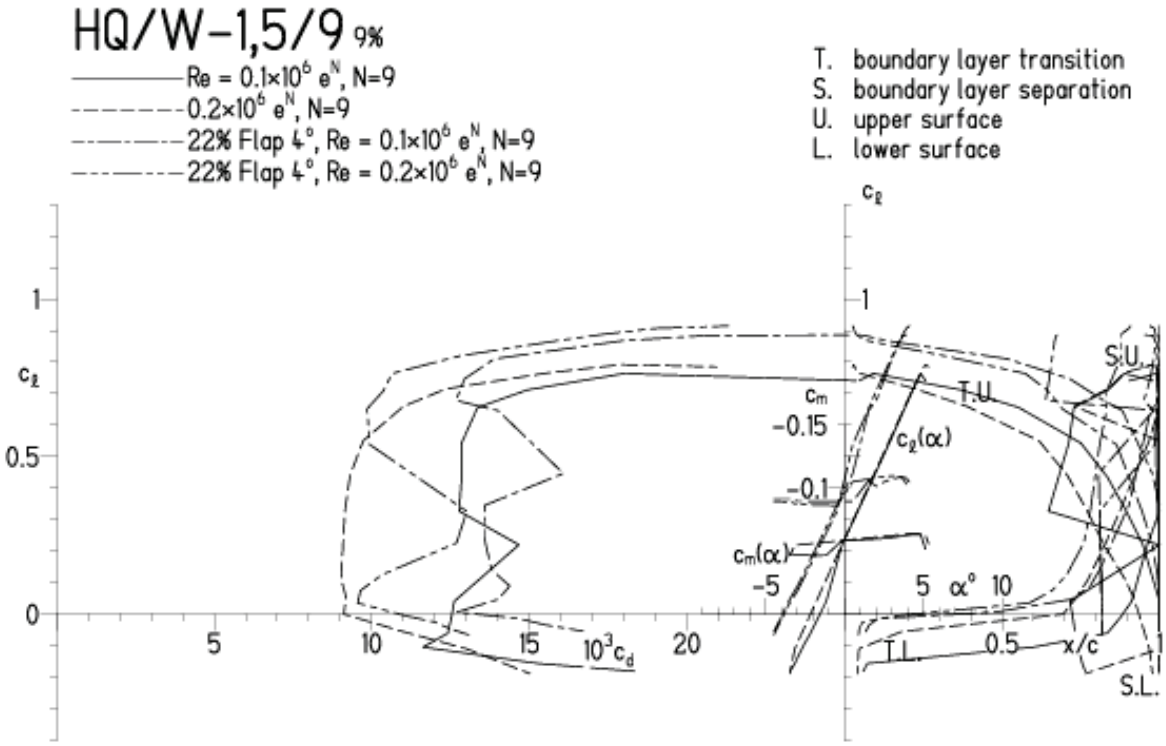


HQ/W-1,5/9, N=9, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:56

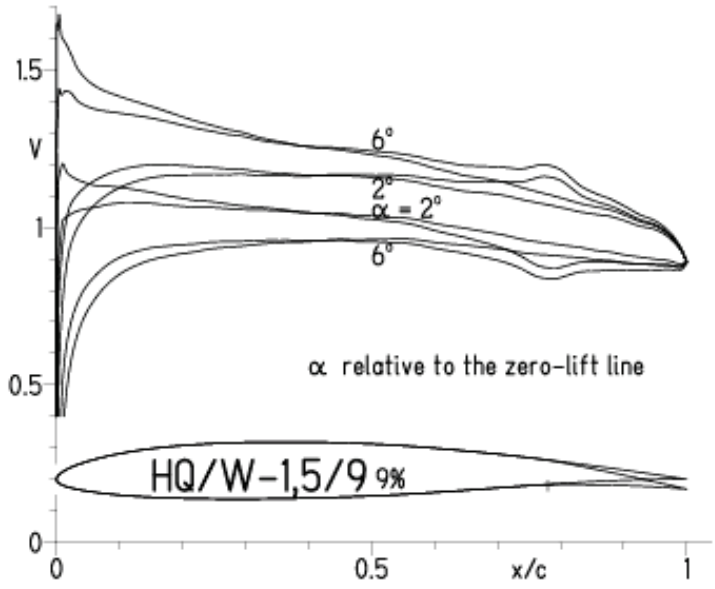


EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:56

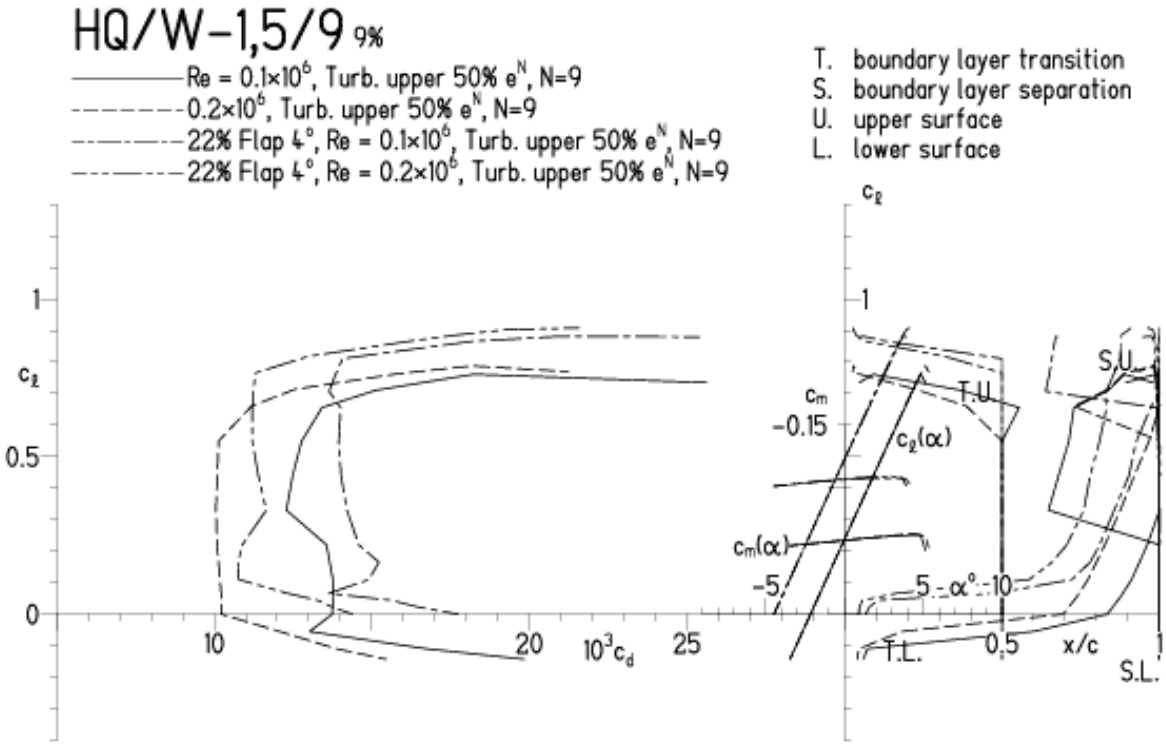


HQ/W-1,5/9, N=9, mit +4° Wölbklappenausschlag, Turbulatoreffekt
(Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 5.5.11 19:59

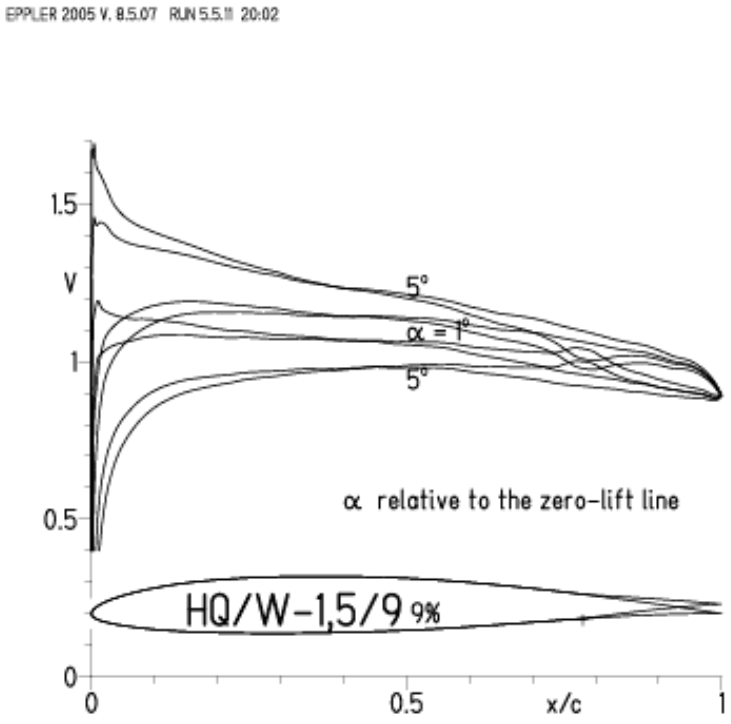


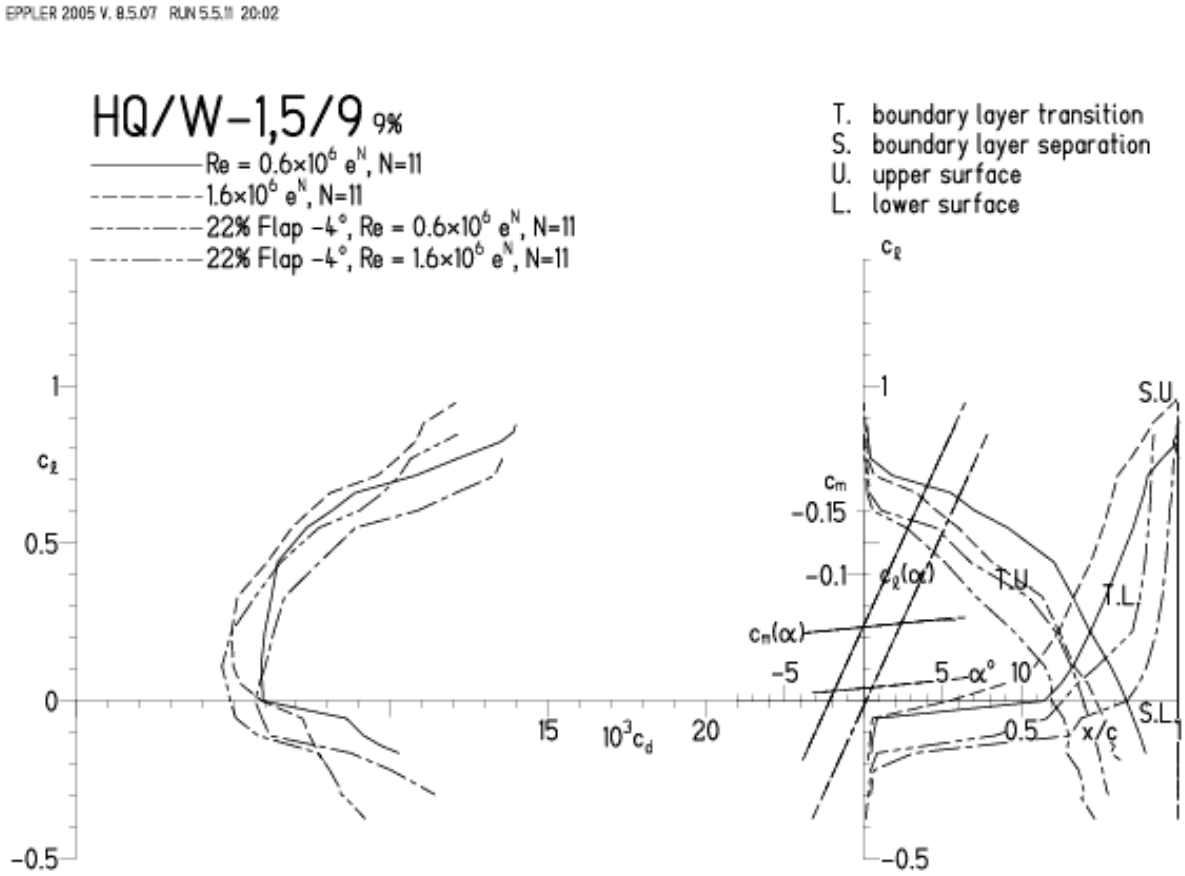
EPPLER 2005 V



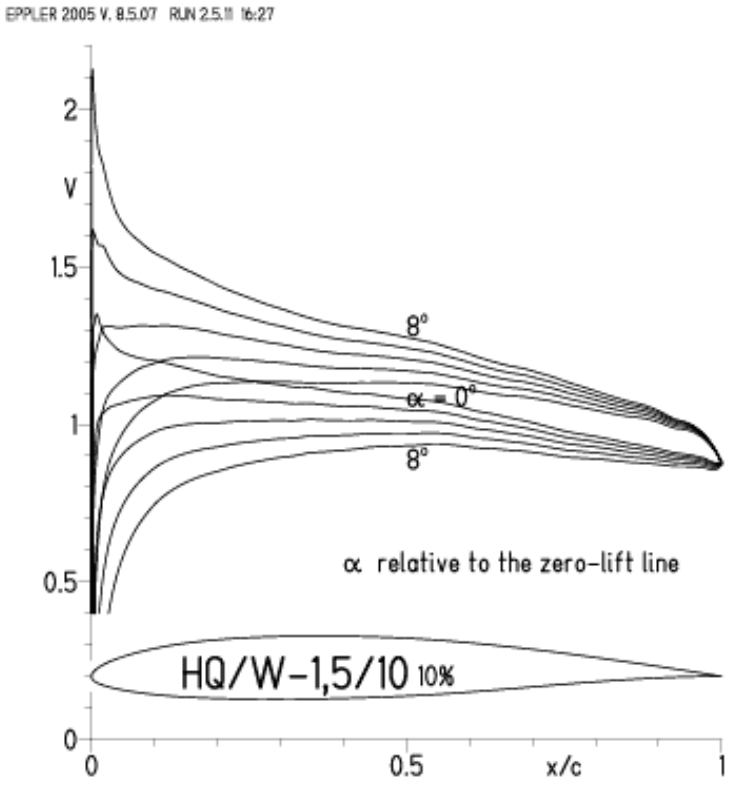
HQ/W-1,5/9, N=11, mit -4° Wölbklappenausschlag

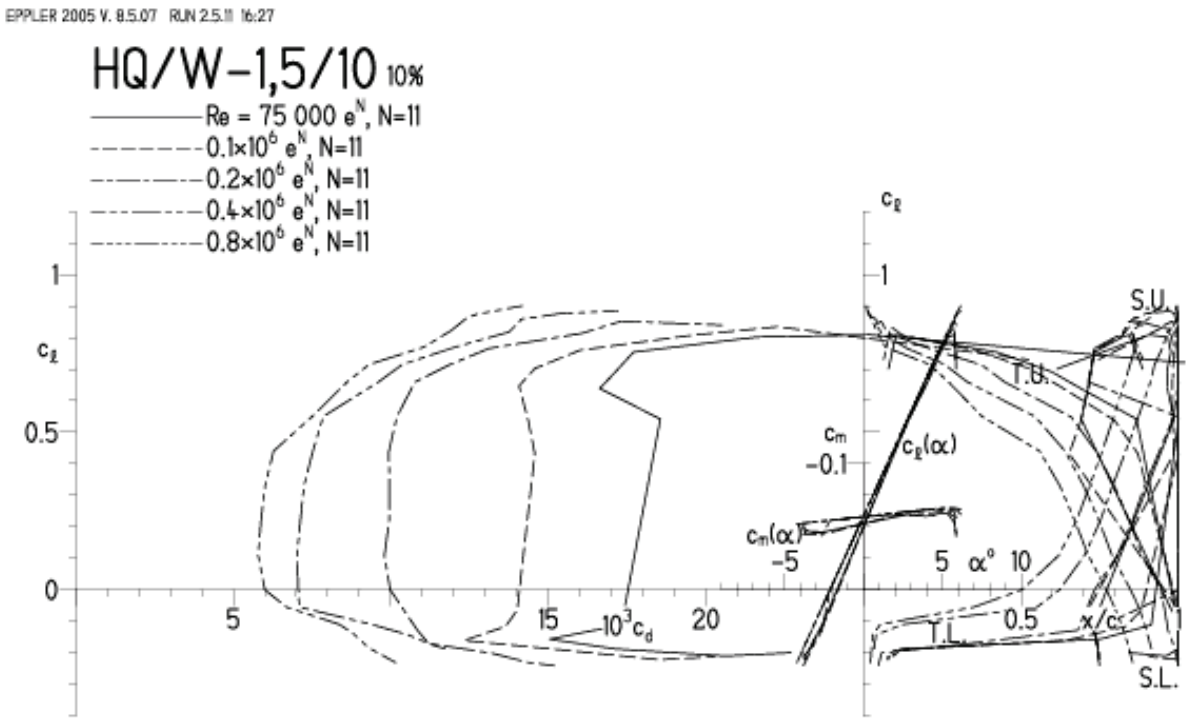
(Segelflugmodelle mit > 50 g/dm^2 erreichen damit gut über 300 km/h Höchstgeschwindigkeit)



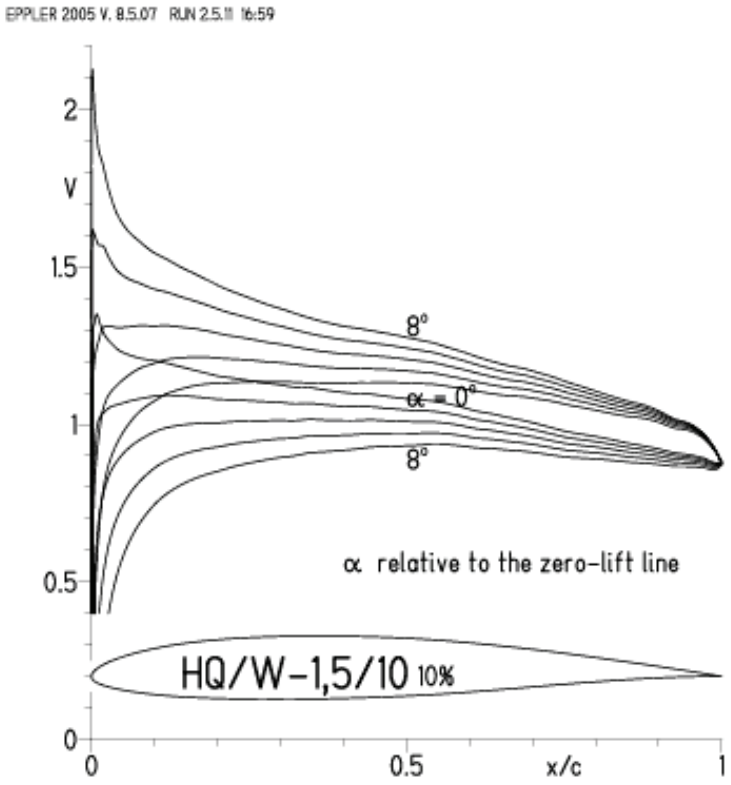


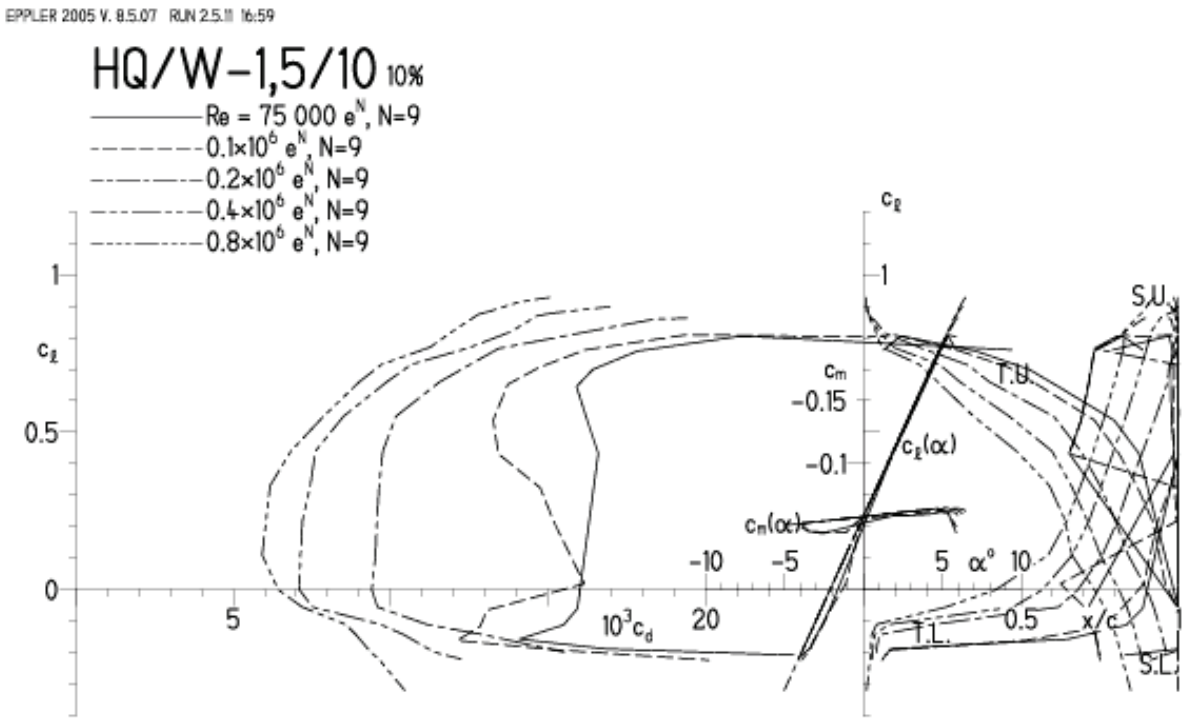
<u>HQ/W-1,5/10</u>, N=11


EPPLER 2005 V. 8.5.07 RUN 2.5.11 16:27
2
V
1.5
1
0.5
0
8°
α = 0°
8°
α relative to the zero-lift line
HQ/W-1,5/10 10%
0
0.5
x/c
1

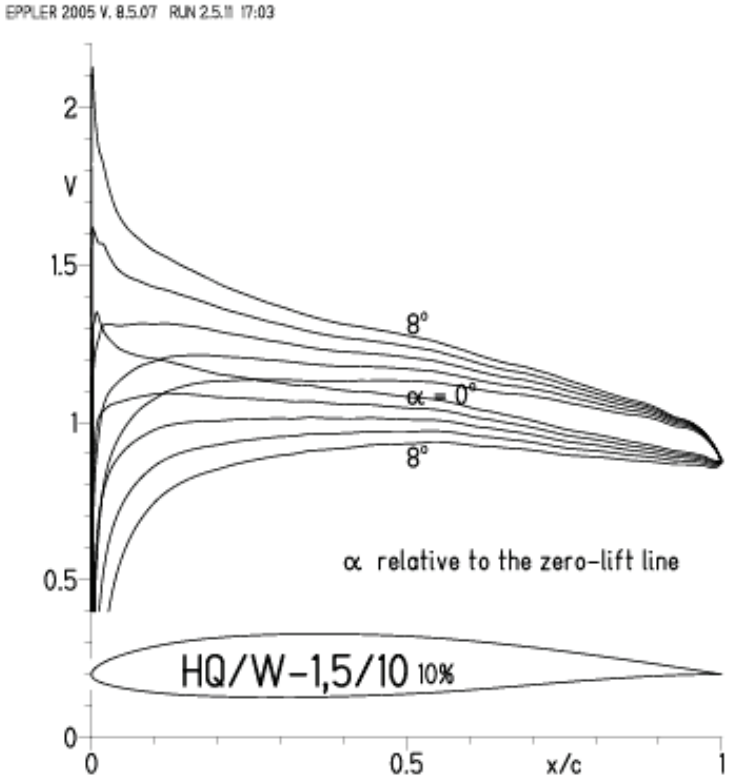

EPPLER 2005 V. 8.5.07 RUN 2.5.11 16:27
HQ/W-1,5/10 10%
Re = 75 000 e^N, N=11
0.1×10^6 e^N, N=11
0.2×10^6 e^N, N=11
0.4×10^6 e^N, N=11
0.8×10^6 e^N, N=11
c_l
1
0.5
0
5
15
10^3 c_d
20
c_l
1
S.U.
T.U.
c_m
-0.1
c_l(α)
c_m(α)
-5
5 α° 10
T.L.
0.5
x/c
S.L.

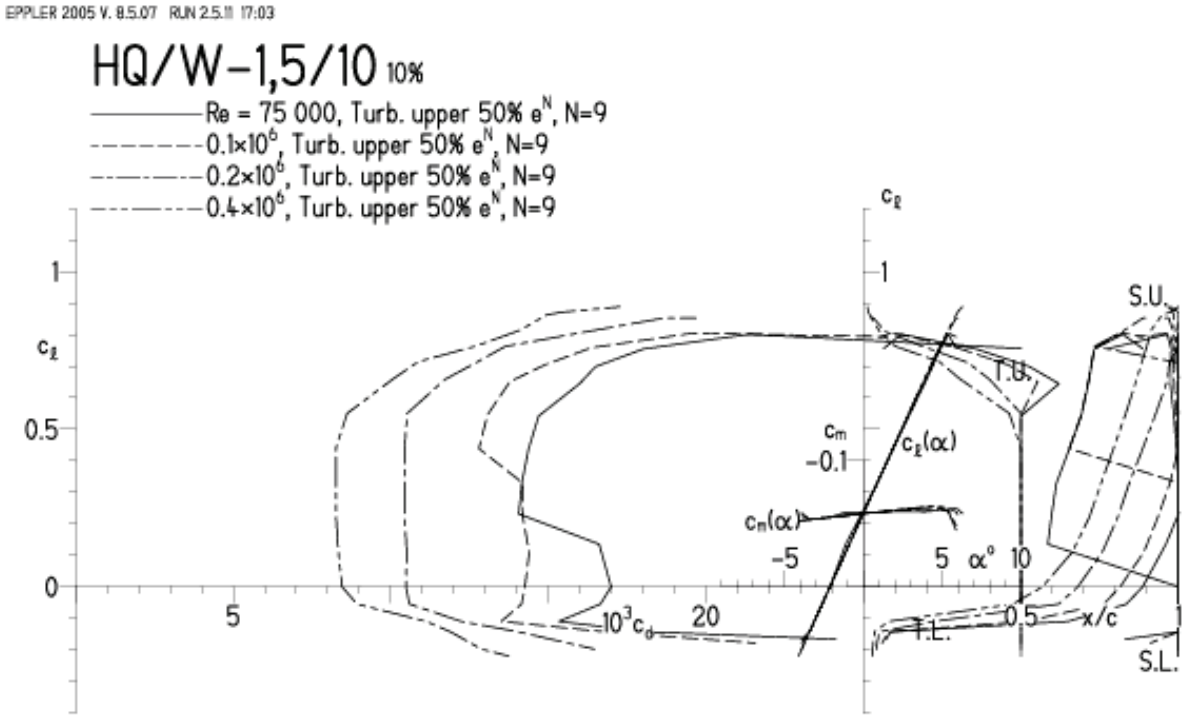
HQ/W-1,5/10, N=9





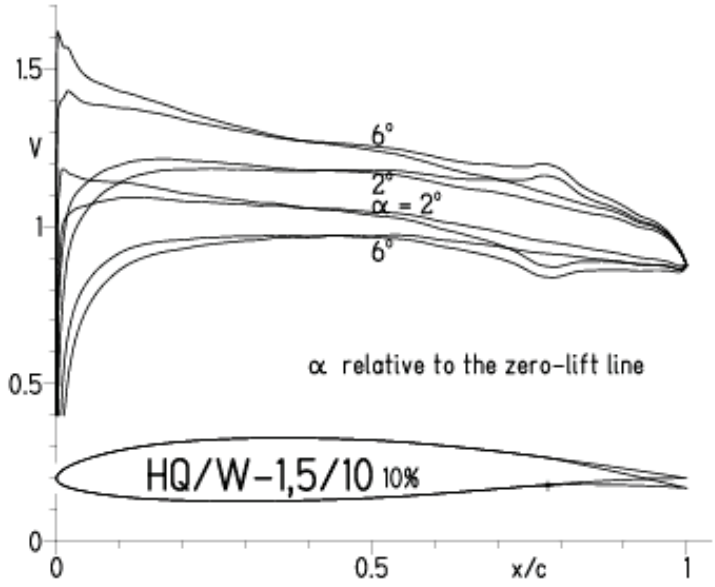
HQ/W-1,5/10, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)



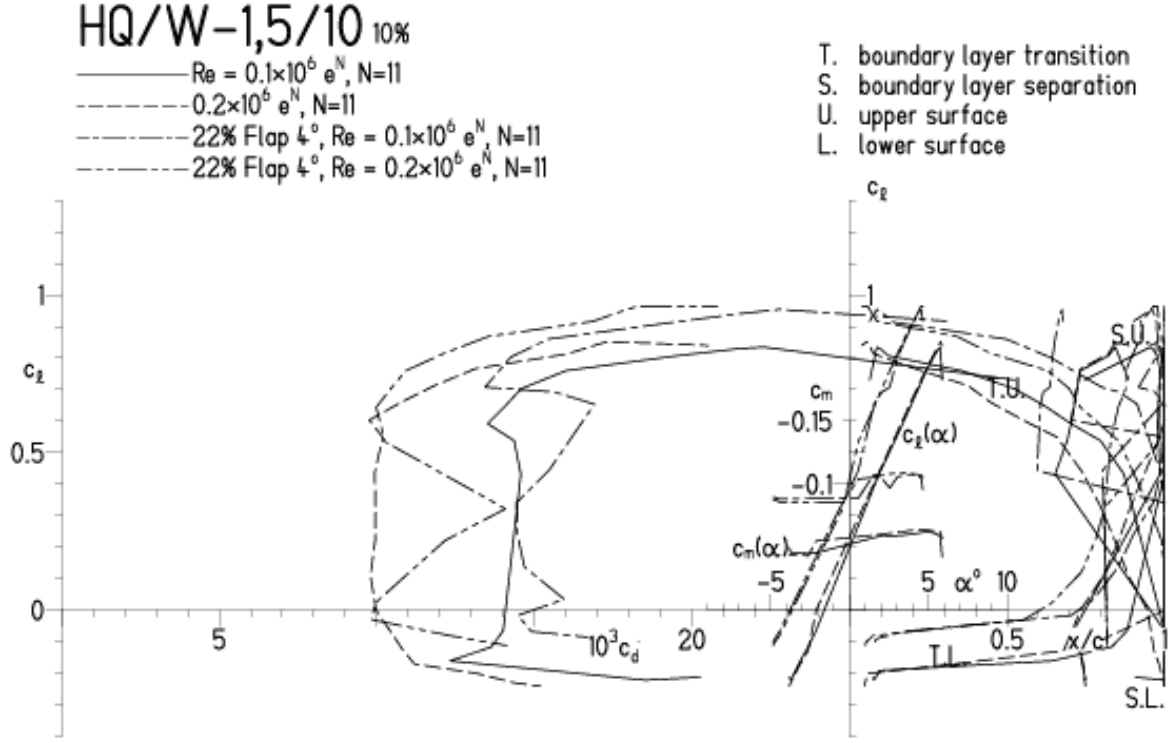


HQ/W-1,5/10, N=11, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:06

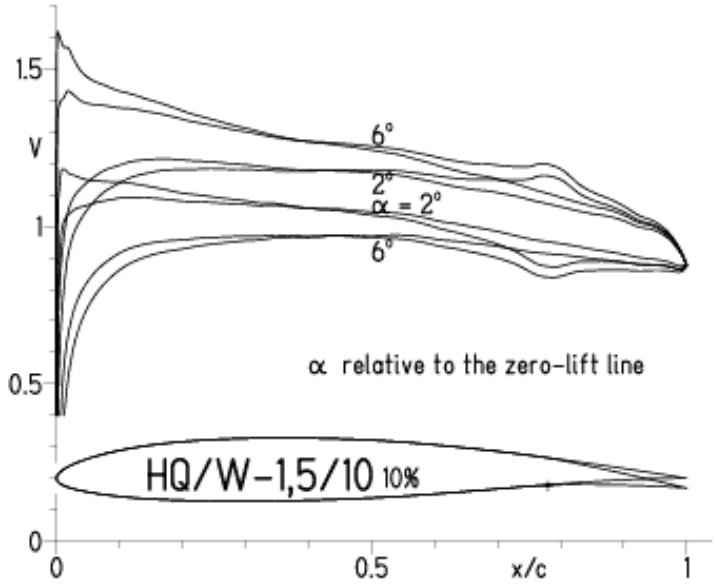


EPPLER 2005 V. 8.5.07 RUN 5.5.11 2

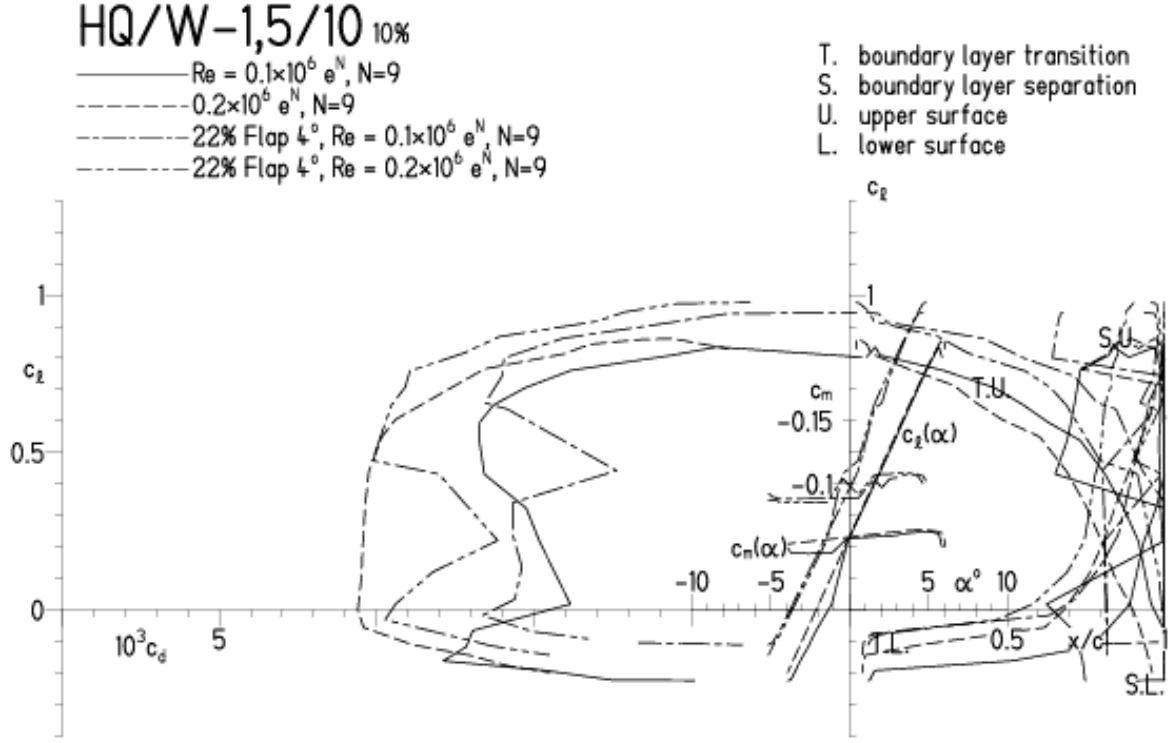


HQ/W-1,5/10, N=9, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:09



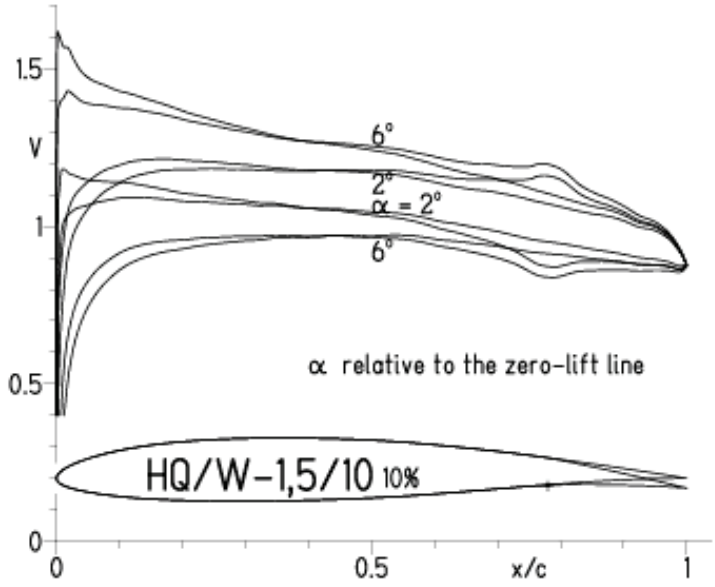
EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:09



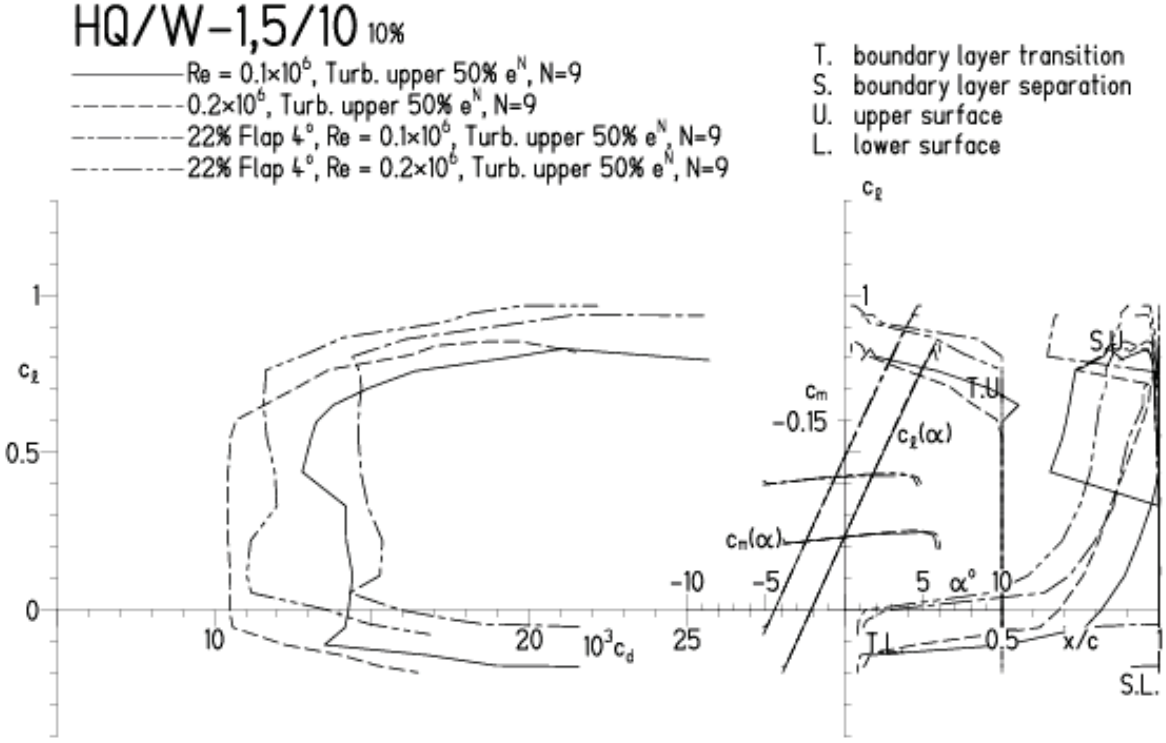
HQ/W-1,5/10, N=9, mit +4° Wölbklappenausschlag, Turbulatoreffekt

(Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:12

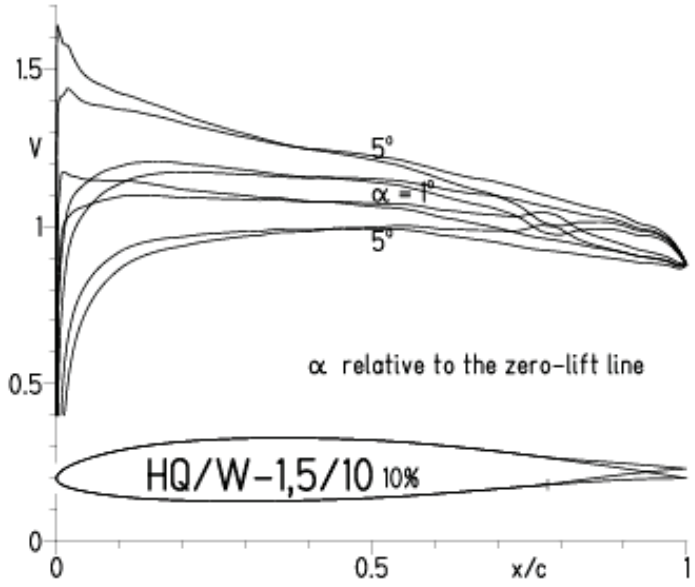


EPPLER 2005 V. 8.5.07 RUN 5.5.

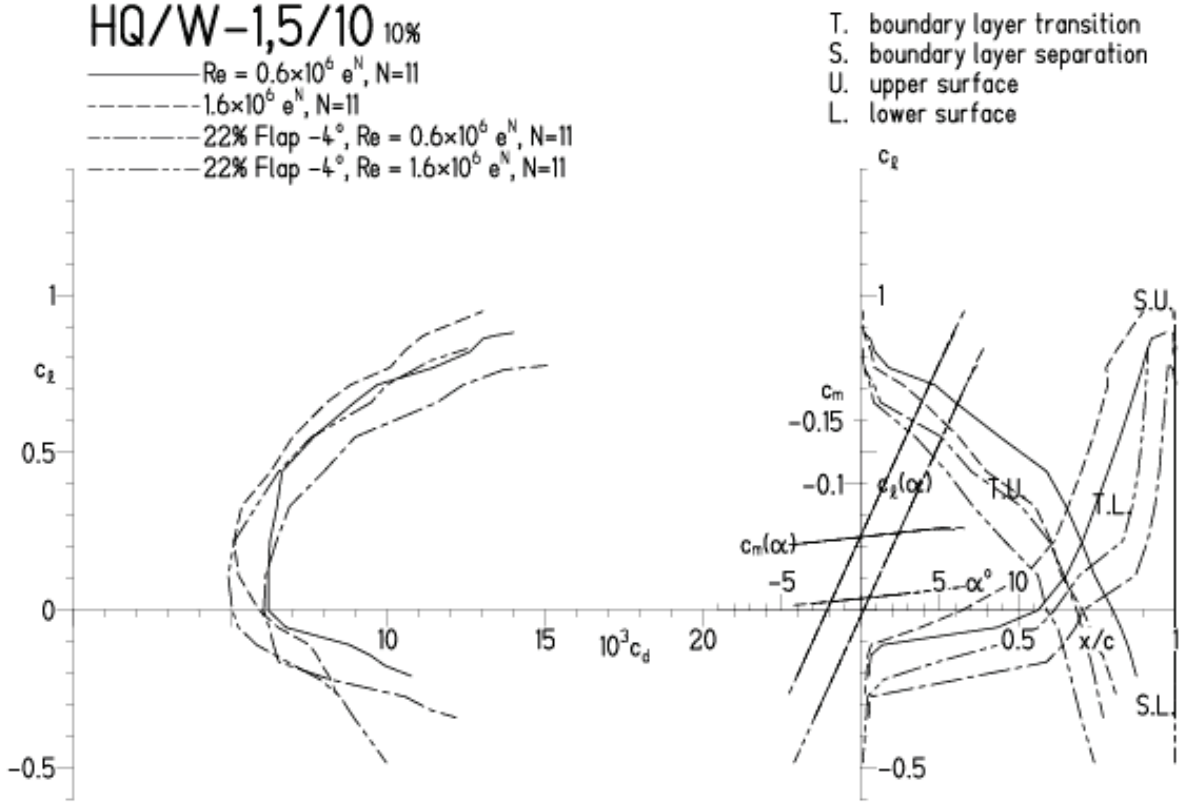


HQ/W-1,5/10, N=11, mit -4° Wölbklappenausschlag
(Segelflugmodelle mit > 50 g/dm^2 erreichen damit gut über 300 km/h)

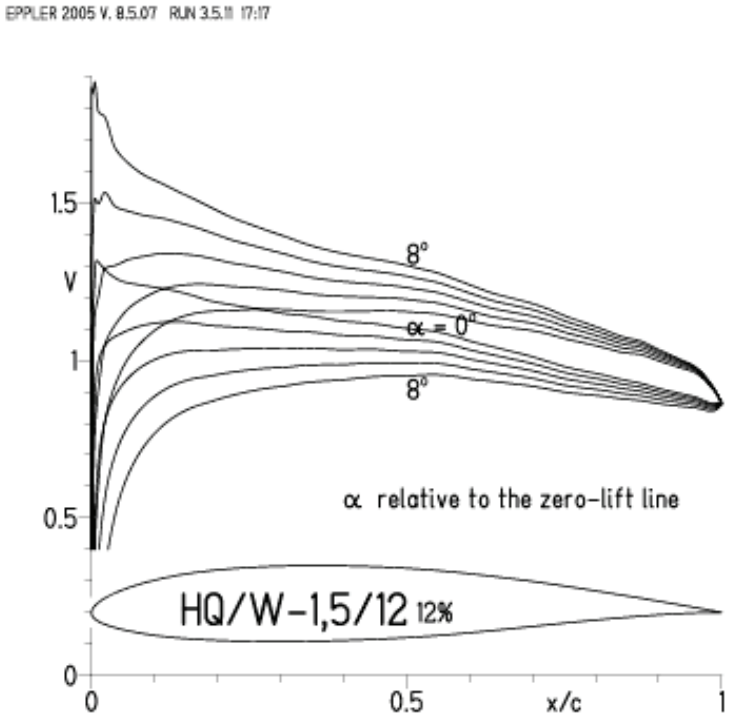
EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:16

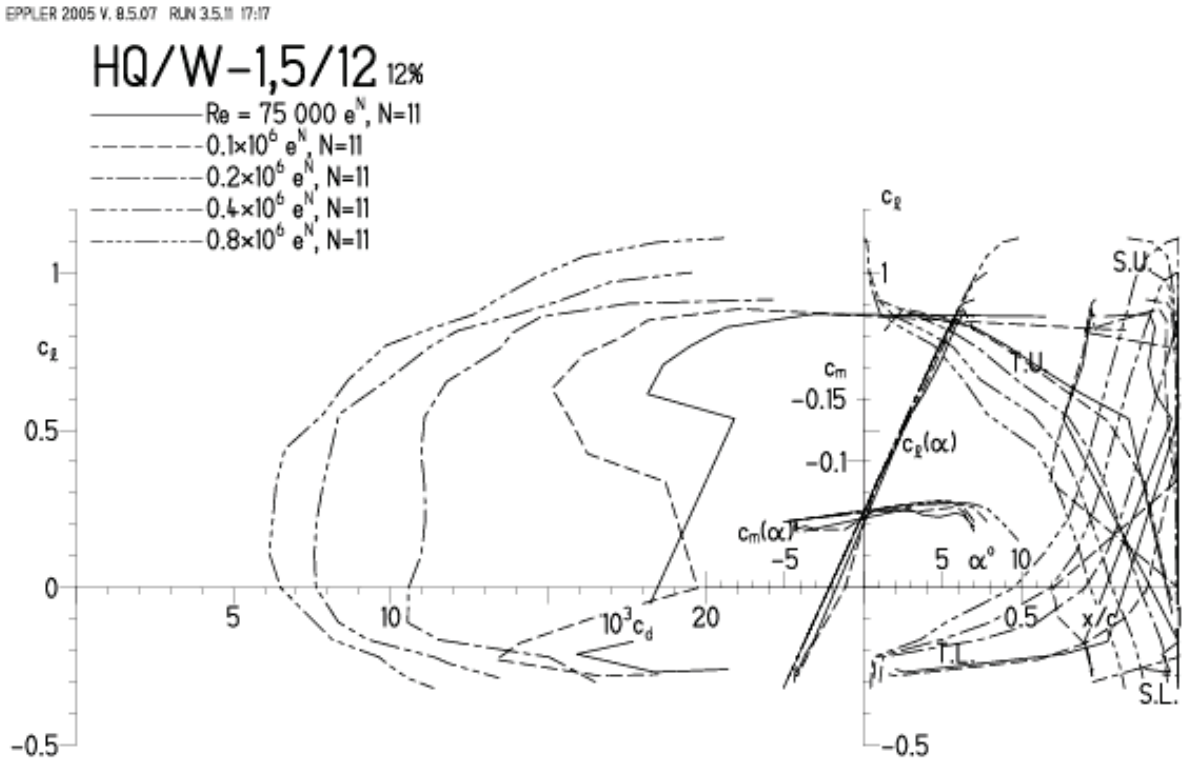


EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:16

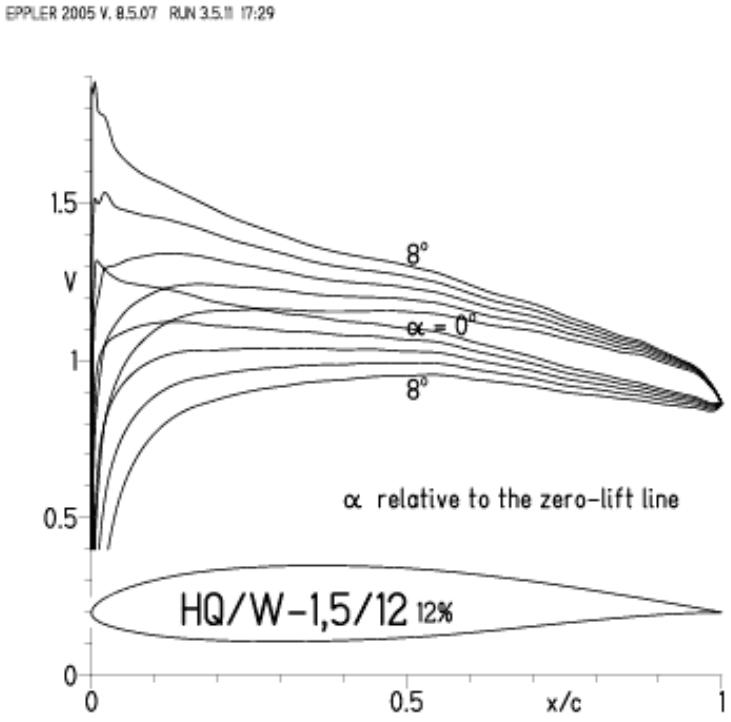


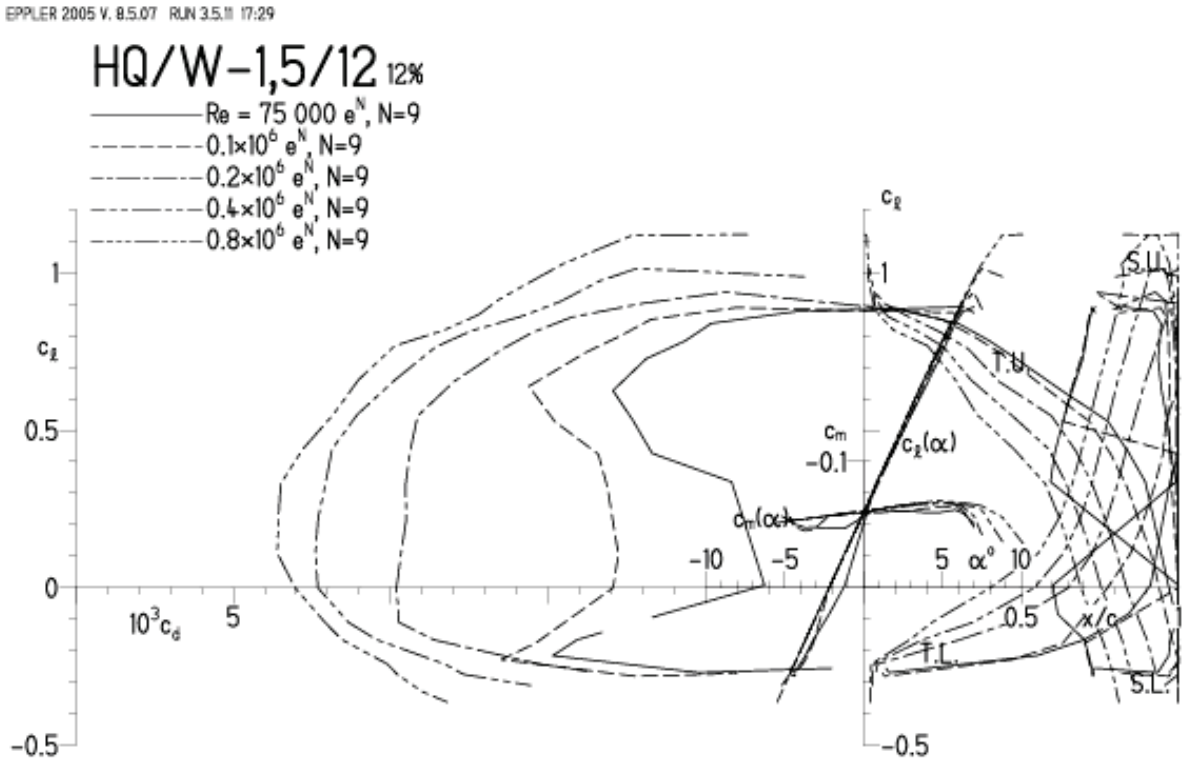
HQ/W-1,5/12, N=11


EPPLER 2005 V. 8.5.07 RUN 3.5.11 17:17
1.5
V
1
0.5
0
8°
α = 0°
8°
α relative to the zero-lift line
HQ/W-1,5/12 12%
0
0.5
x/c
1

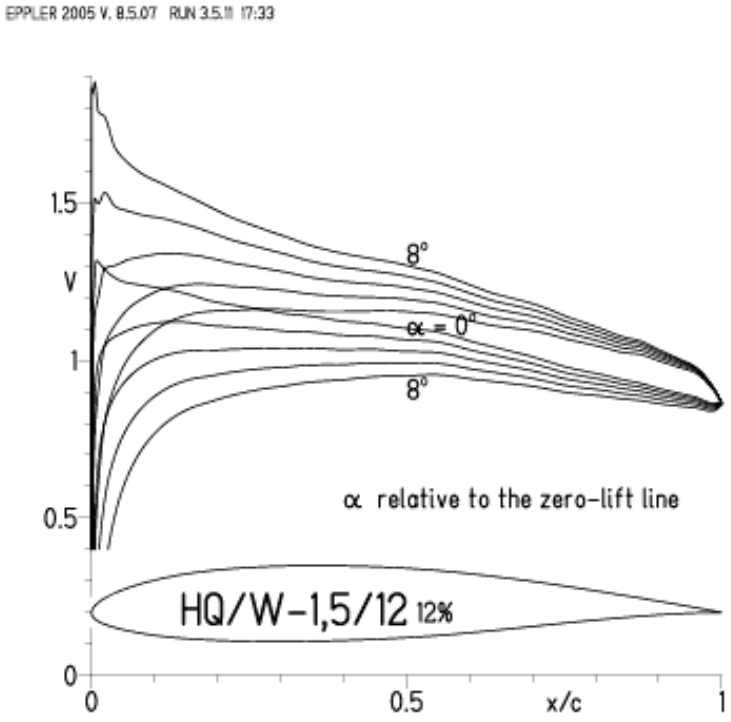

EPPLER 2005 V. 8.5.07 RUN 3.5.11 17:17
HQ/W-1,5/12 12%
Re = 75 000 e^N, N=11
0.1×10^6 e^N, N=11
0.2×10^6 e^N, N=11
0.4×10^6 e^N, N=11
0.8×10^6 e^N, N=11
c_g
1
0.5
0
-0.5
5
10
10^3 c_d
20
c_g
1
S.U.
T.U.
c_m
-0.15
-0.1
c_g(α)
c_m(α)
-5
5
α°
10
0.5
x/c
T.L.
S.L.
-0.5

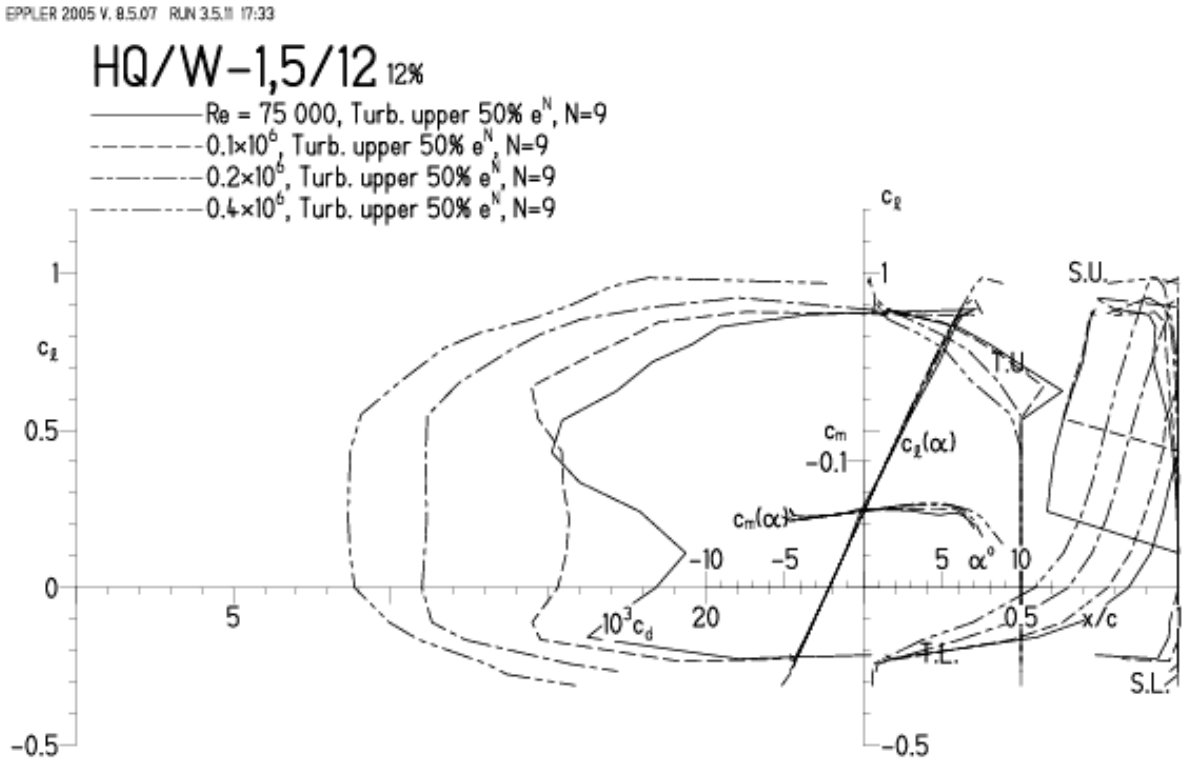
HQ/W-1,5/12, N=9





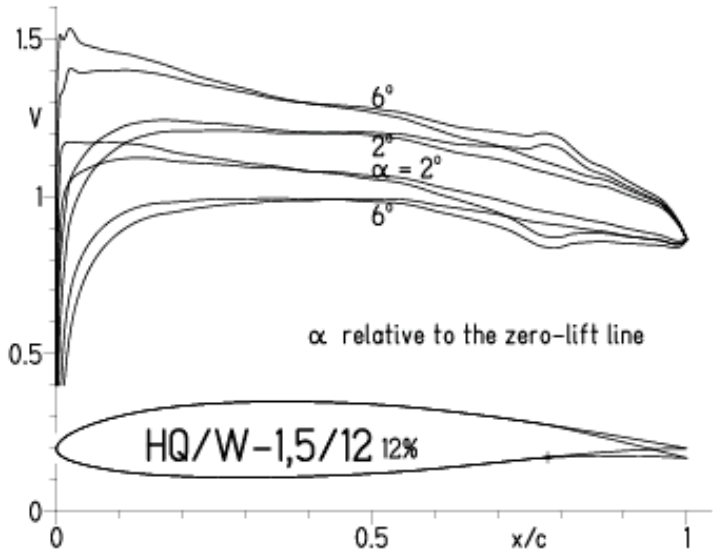
HQ/W-1,5/12, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)



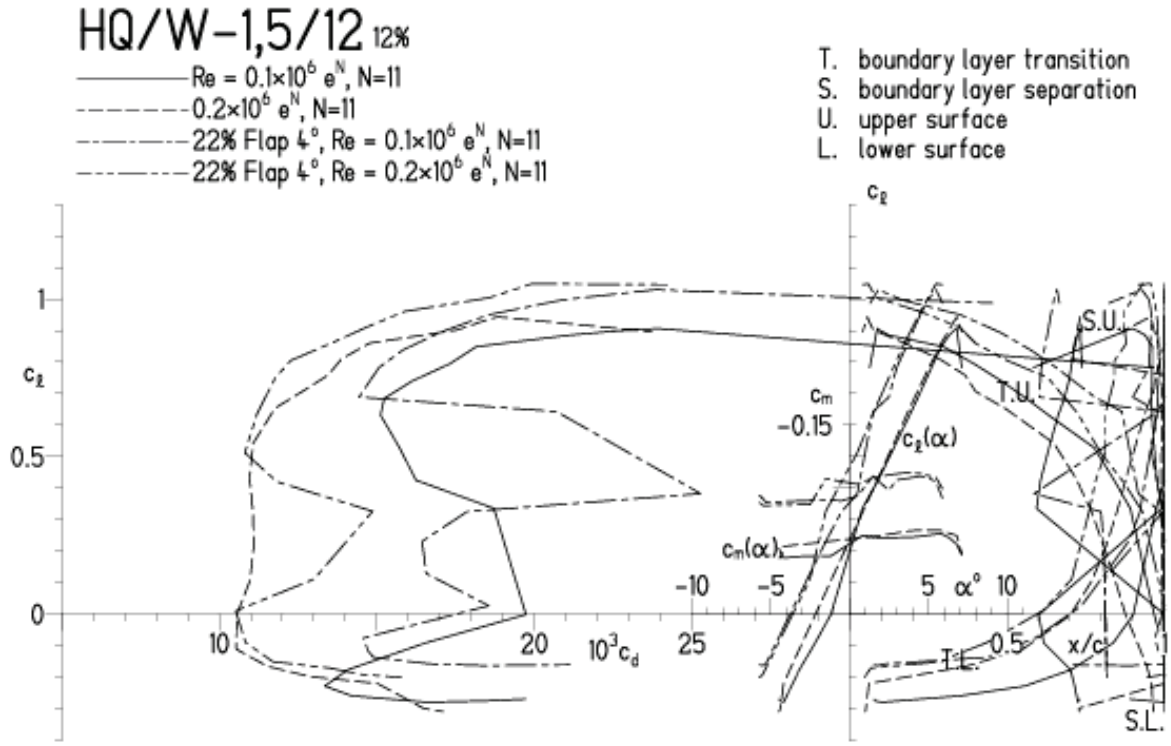


HQ/W-1,5/12, N=11, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:19

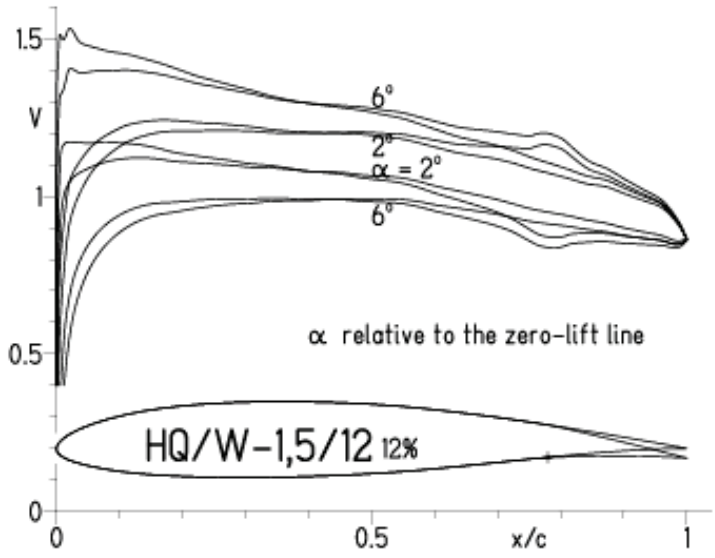


EPPLER 200

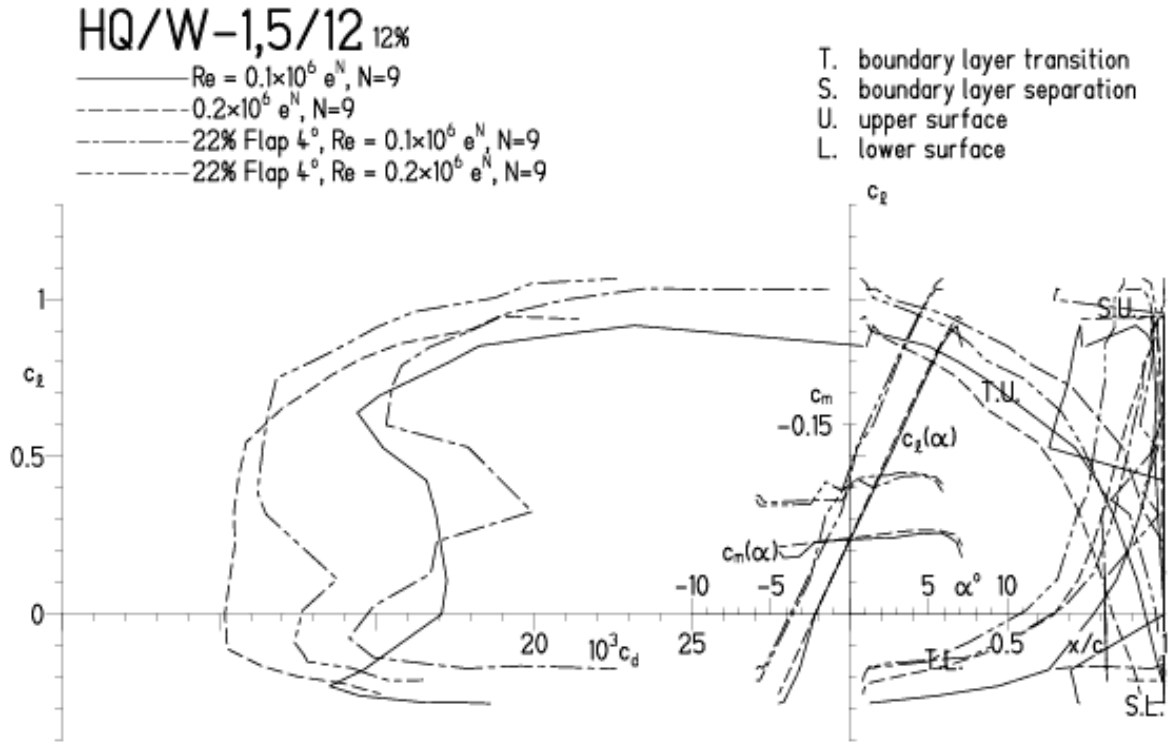


HQ/W-1,5/12, N=9, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:22

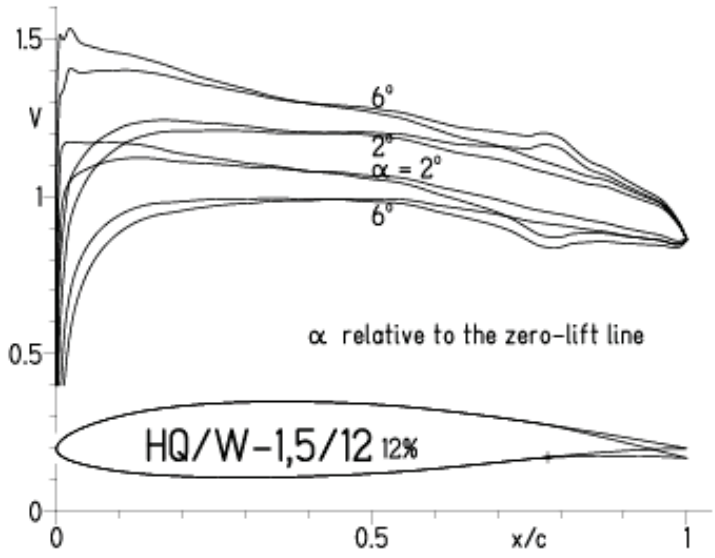


EPPLER 2005 V. 8.

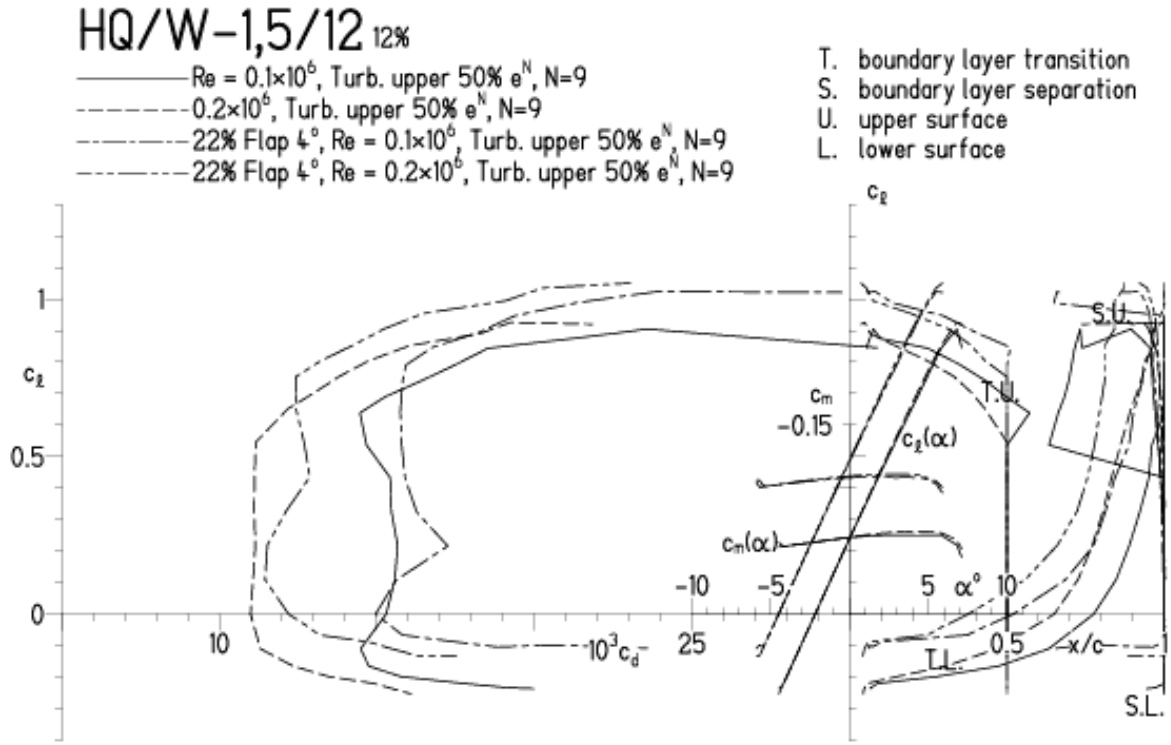


HQ/W-1,5/12, N=9, mit +4° Wölbklappenausschlag, Turbulatoreffekt
(Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:24

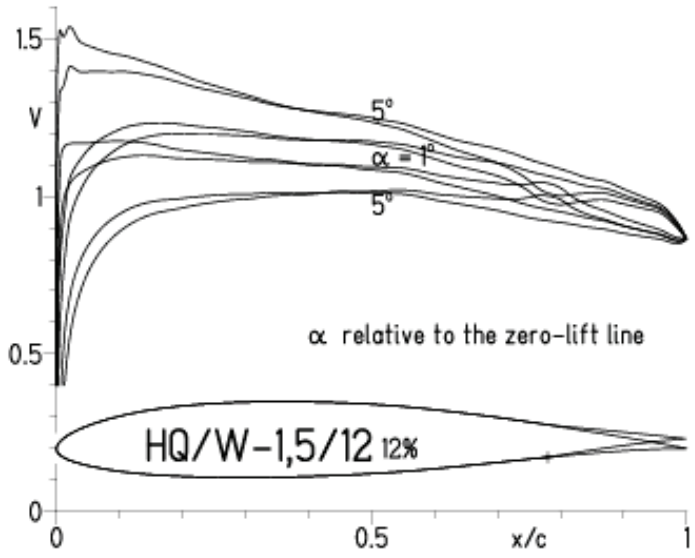


EPPLER 2005 V. 8.5.07 RUN 5.5.11 2

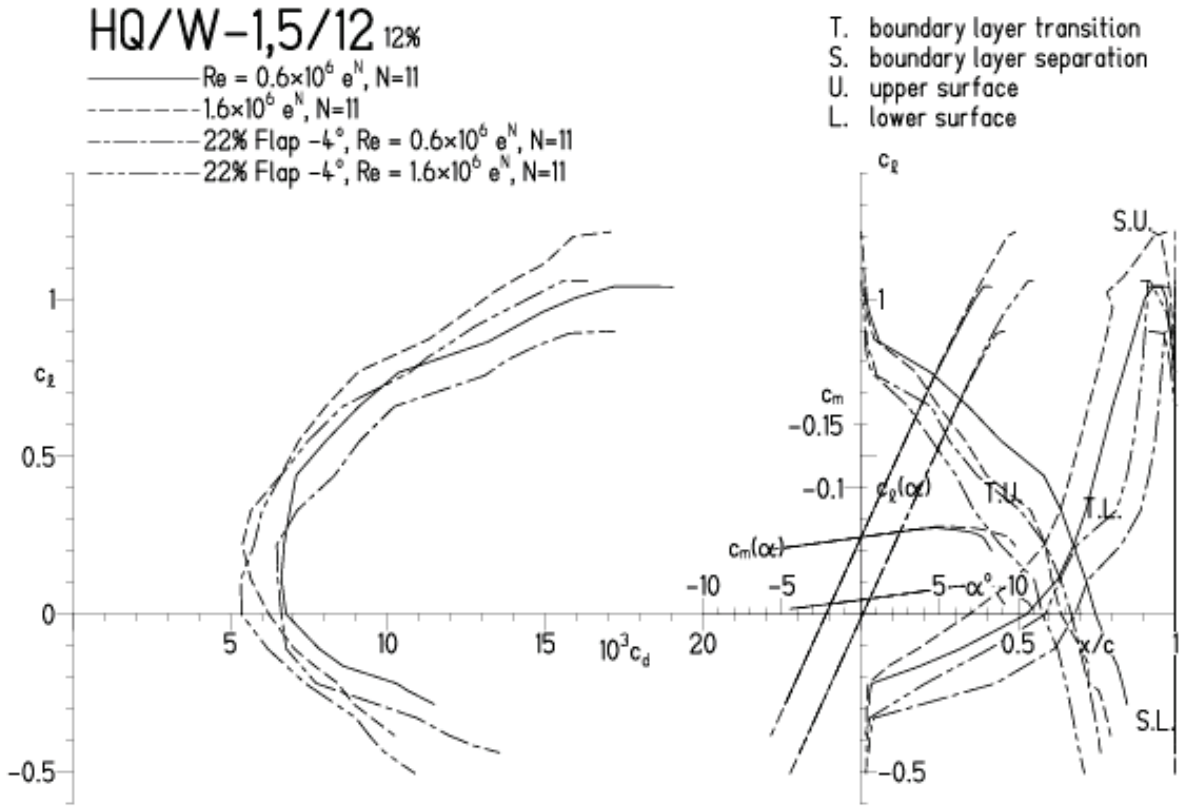


HQ/W-1,5/12, N=11, mit -4° Wölbklappenausschlag
(Segelmodelle erreichen damit hohe Endgeschwindigkeiten)

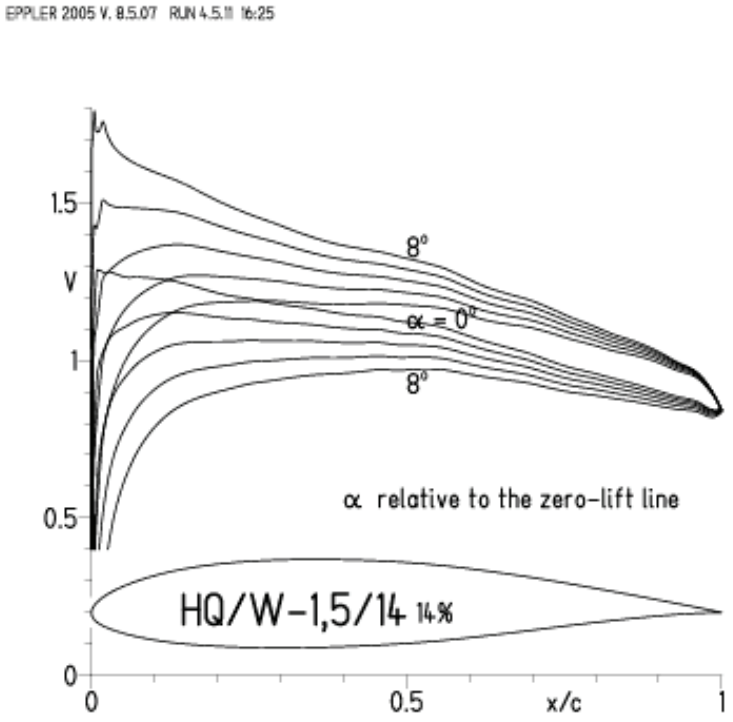
EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:27

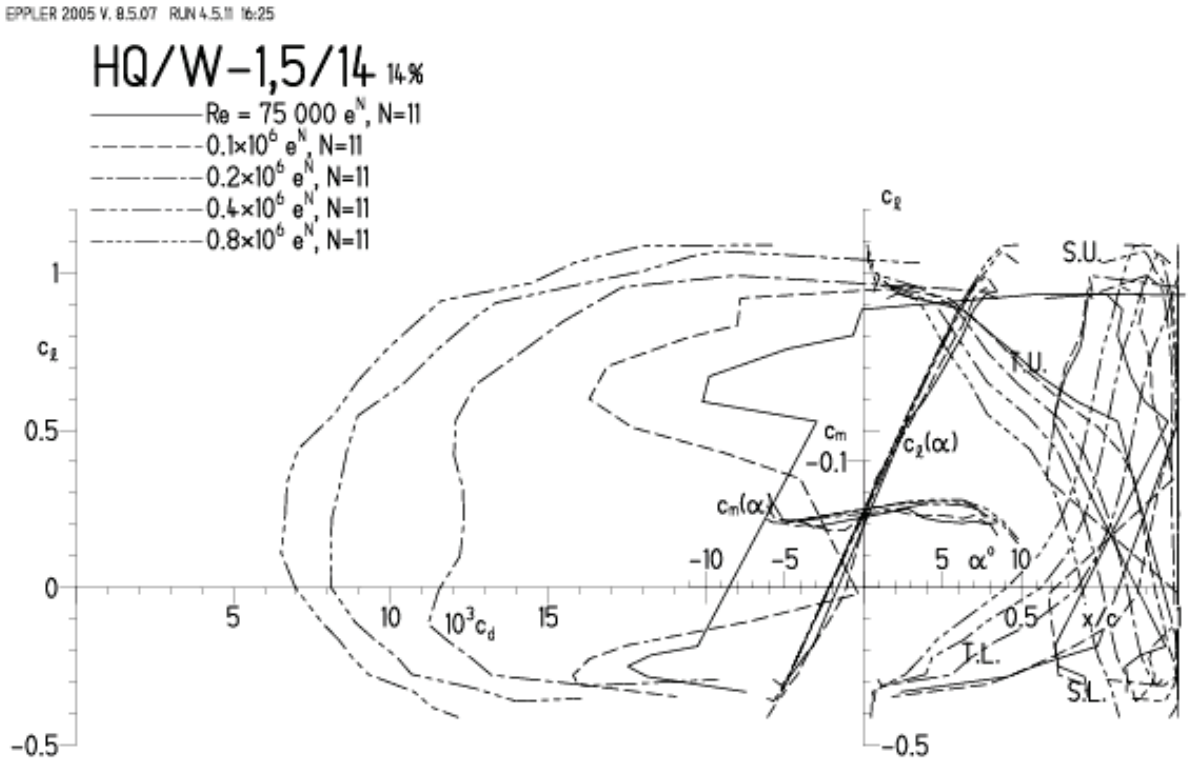


EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:27

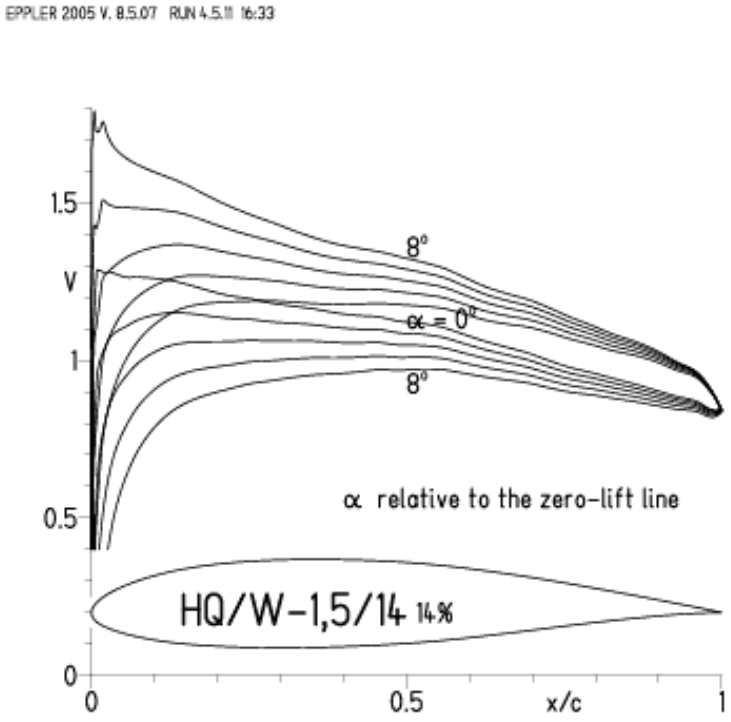


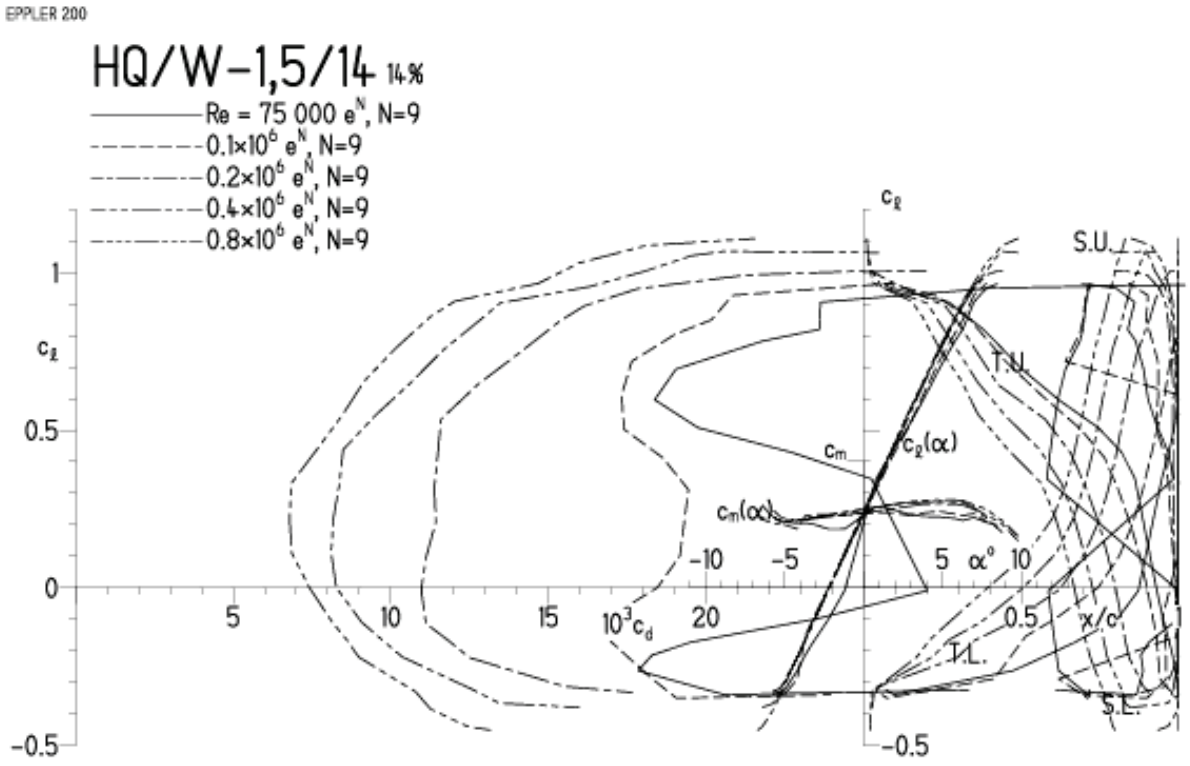
HQ/W-1,5/14, N=11


EPPLER 2005 V. 8.5.07 RUN 4.5.11 16:25
1.5
V
1
0.5
0
8°
α = 0°
8°
α relative to the zero-lift line
HQ/W-1,5/14 14%
0
0.5
x/c
1

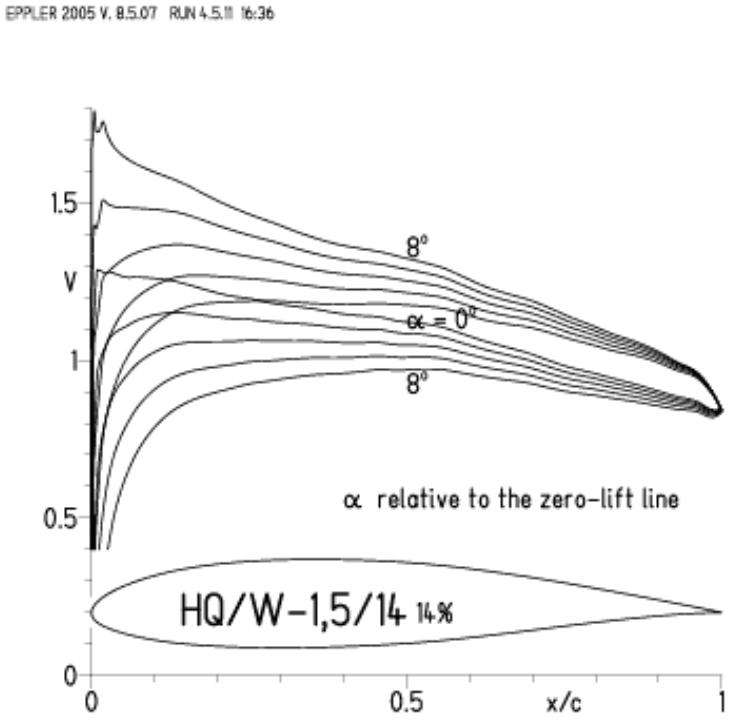

EPPLER 2005 V. 8.5.07 RUN 4.5.11 16:25
HQ/W-1,5/14 14%
Re = 75 000 e^N, N=11
0.1×10^6 e^N, N=11
0.2×10^6 e^N, N=11
0.4×10^6 e^N, N=11
0.8×10^6 e^N, N=11
c_g
1
0.5
0
-0.5
5
10
10^3 c_d
15
S.U.
T.U.
c_m
-0.1
c_g(α)
c_m(α)
-10
-5
5
α°
10
0.5
x/c
T.L.
S.L.
-0.5

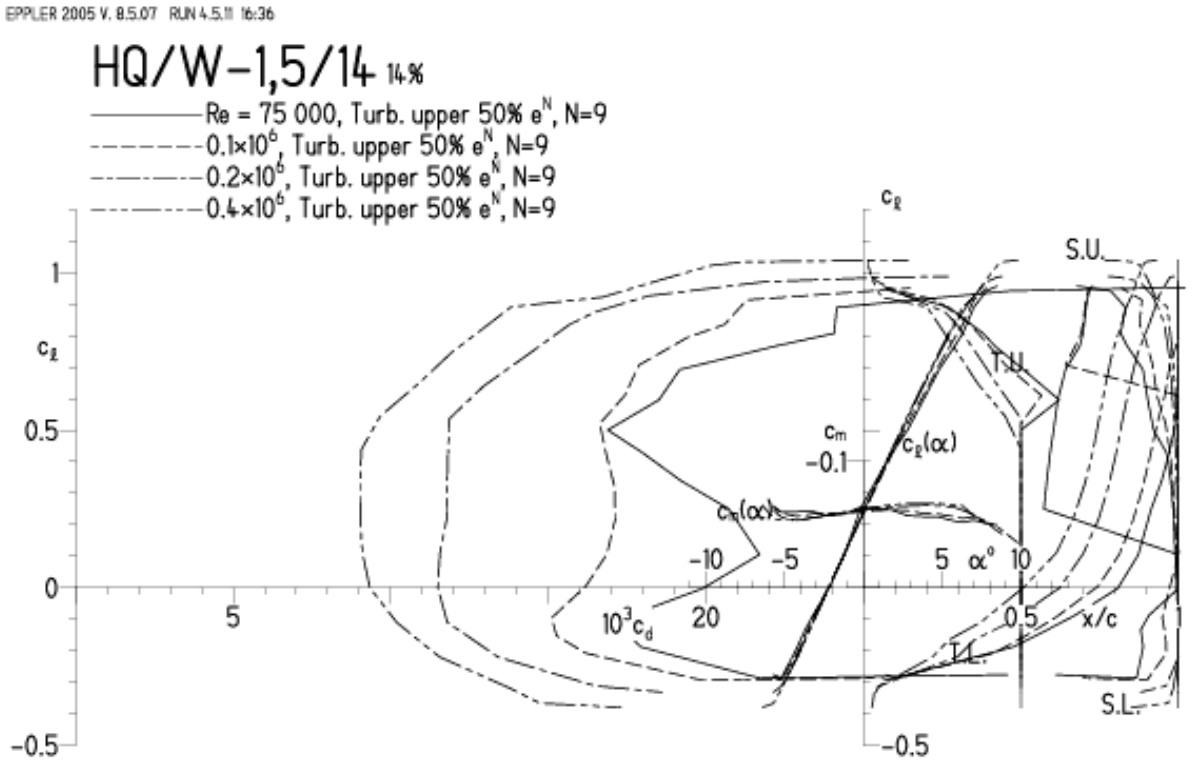
HQ/W-1,5/14, N=9





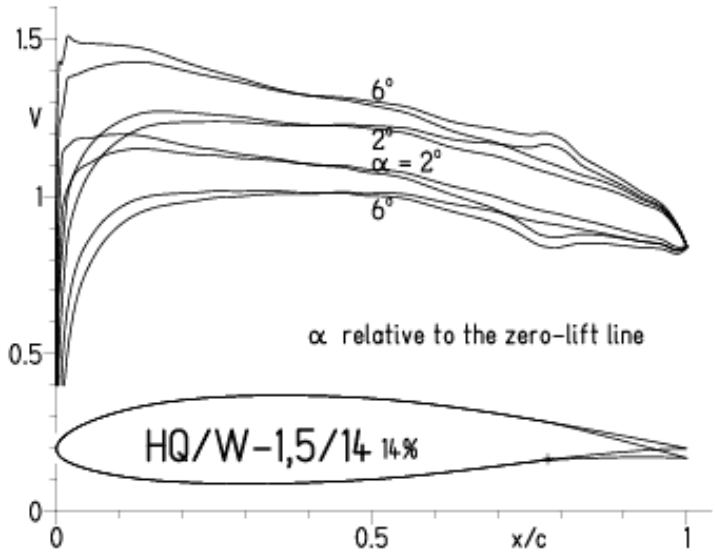
HQ/W-1,5/14, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)



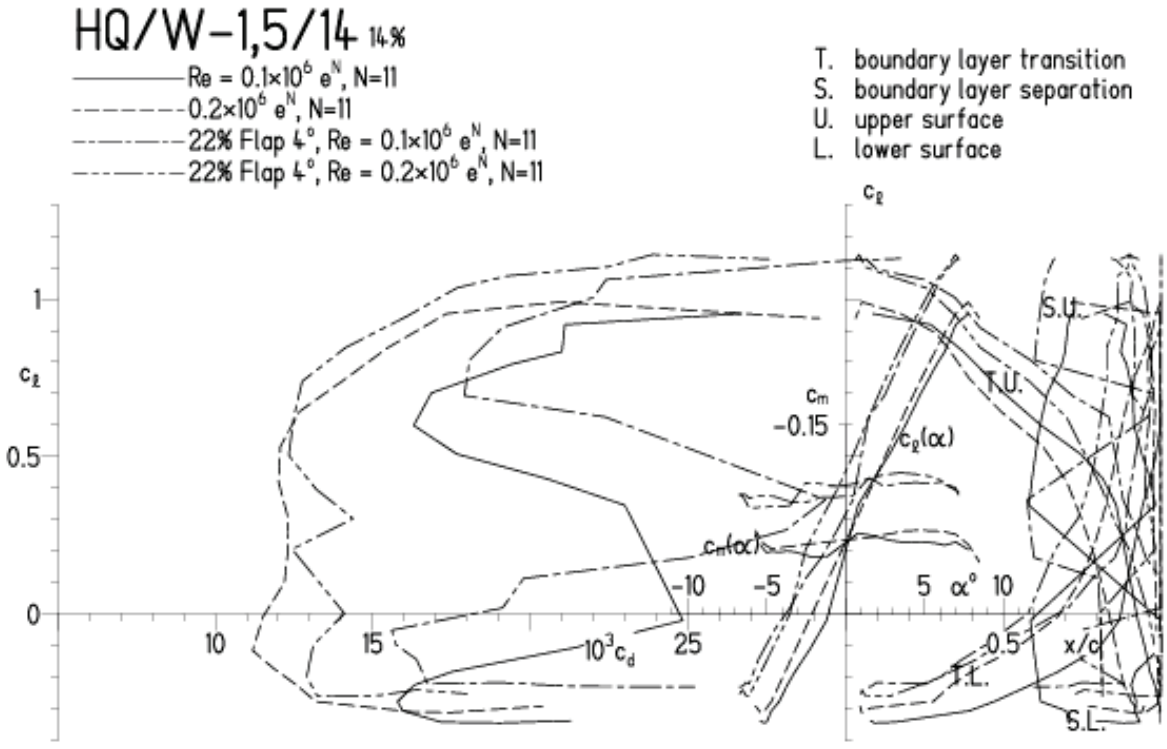


HQ/W-1,5/14, N=11, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:31

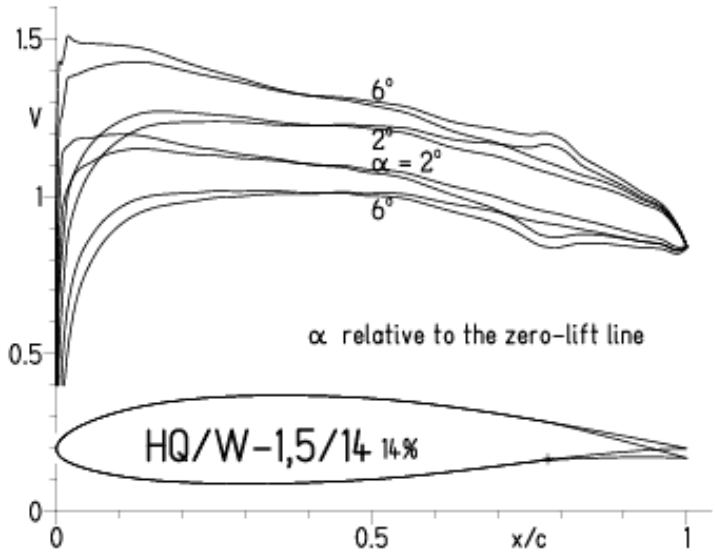


EPPLER 20

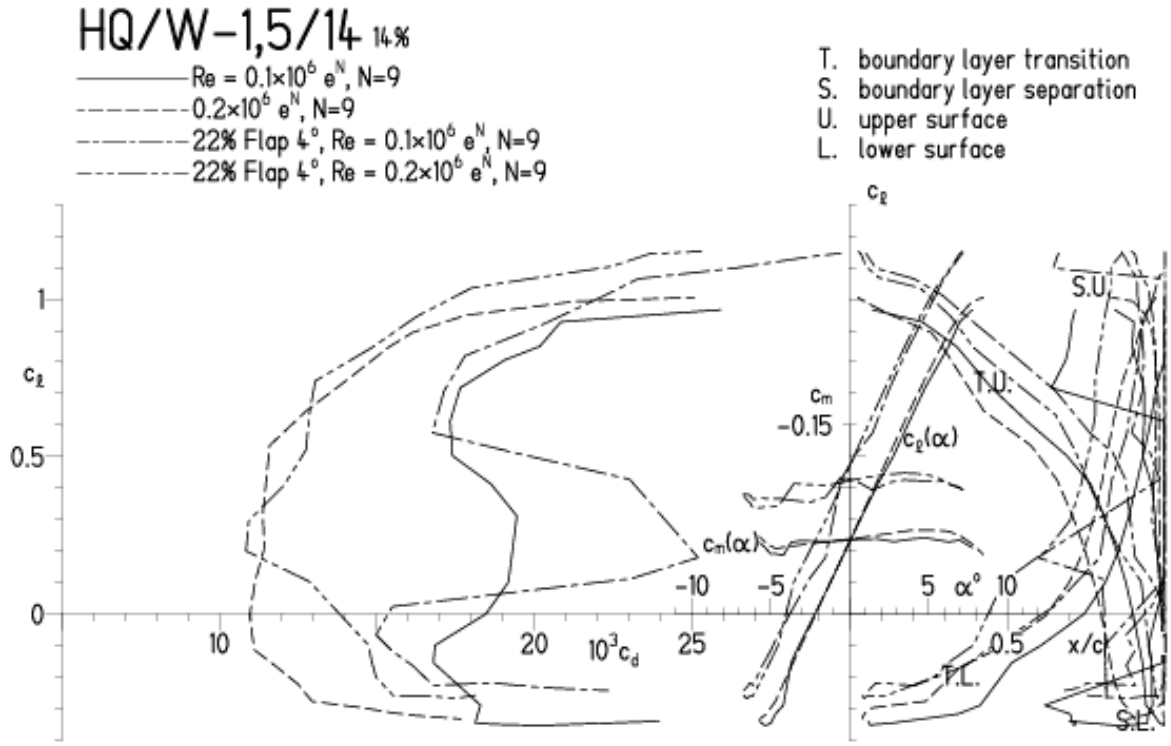


HQ/W-1,5/14, N=9, mit +4° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:34

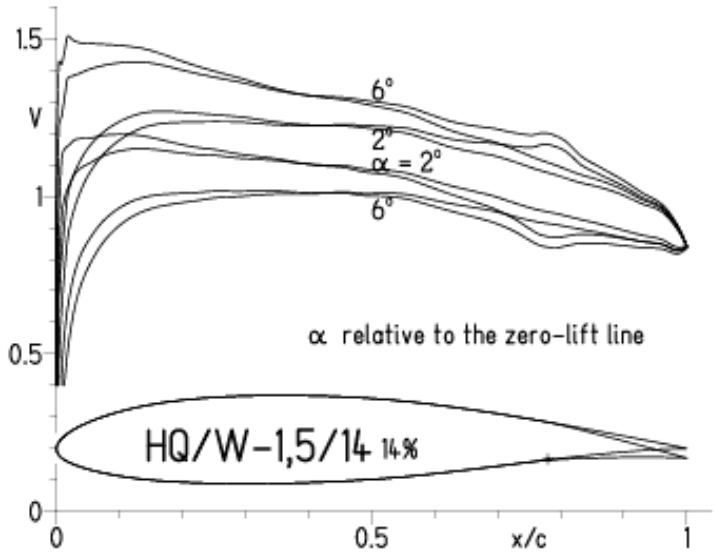


EPPLER 20

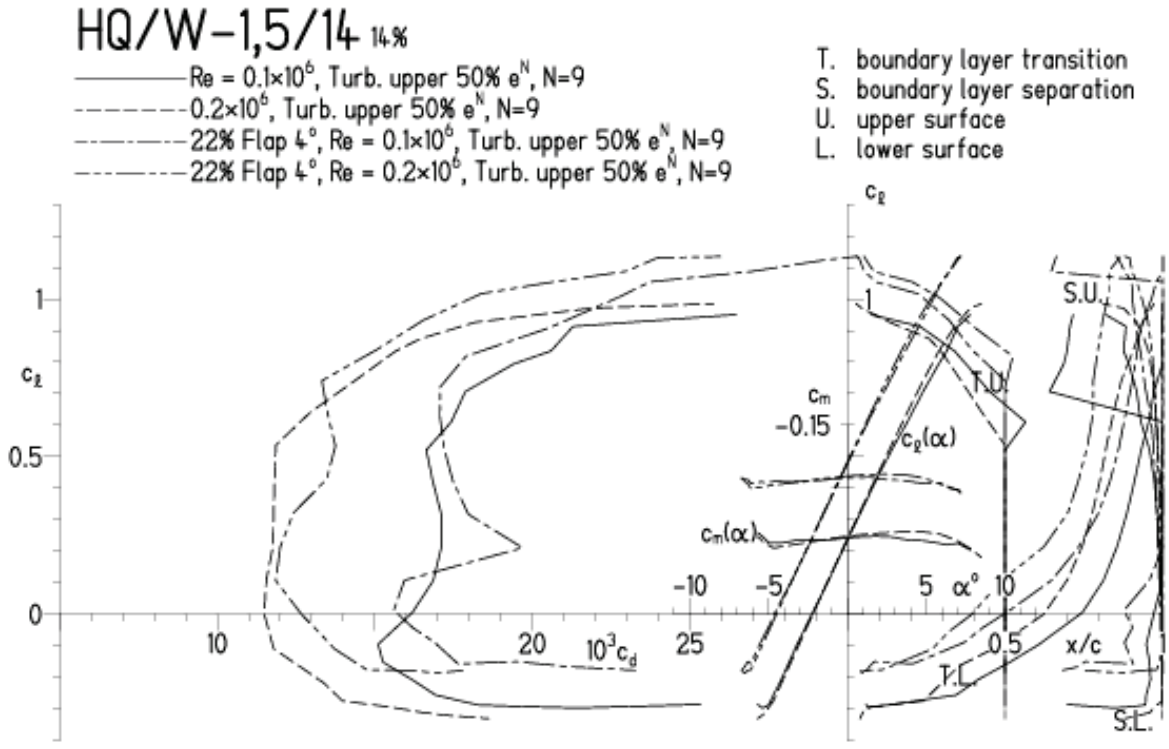


HQ/W-1,5/14, N=9, mit +4° Wölbklappenausschlag, Turbulatoreffekt
(Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:36

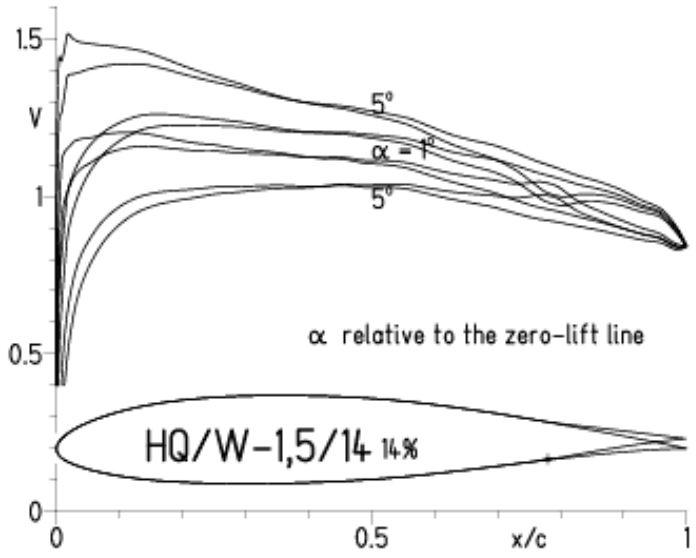


EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:36



HQ/W-1,5/14, N=11, mit -4° Wölbklappenausschlag
(Segelmodelle erreichen damit hohe Endgeschwindigkeiten)

EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:40



EPPLER 2005 V. 8.5.07 RUN 5.5.11 20:40