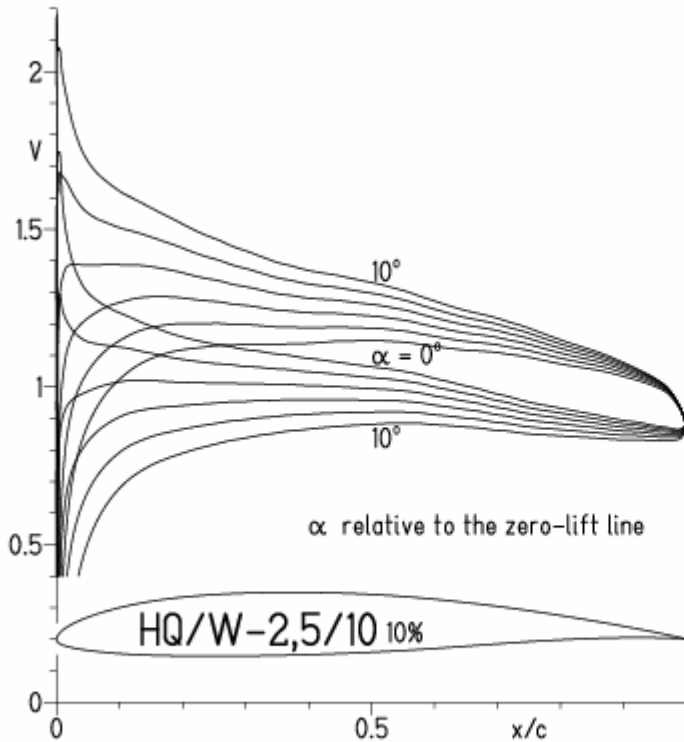
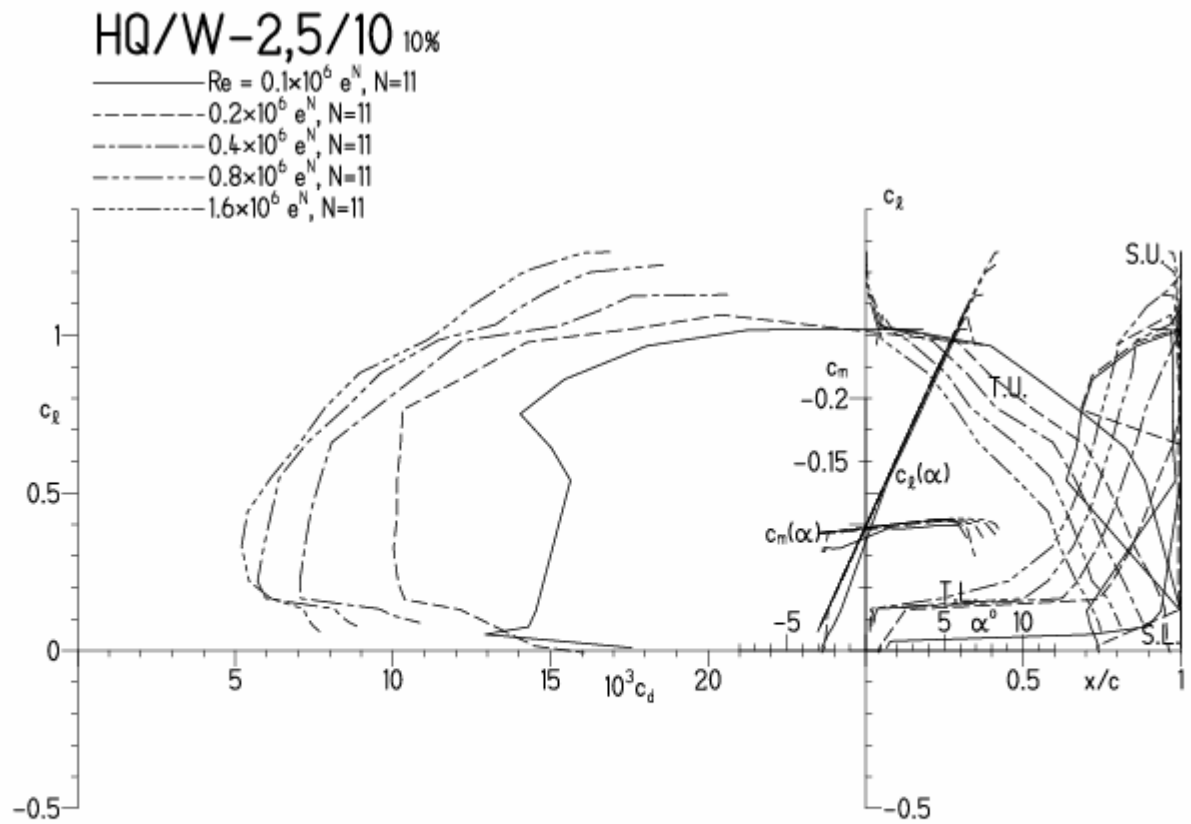


HQ/W-2,5/10, N=11 (Schnellere und Großsegelflugmodelle)

EPPLER 2005 V. 8.5.07 RUN 20.3.11 19:06

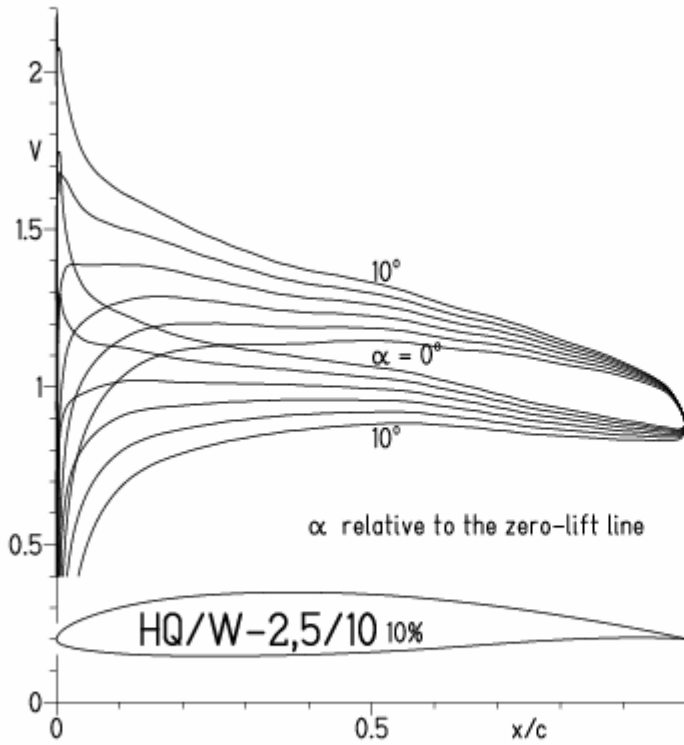


EPPLER 2005 V. 8.5.07 RUN 20.3.11 19:06



HQ/W-2,5/10, N=9 (Schnellere und Großsegelflugmodelle)

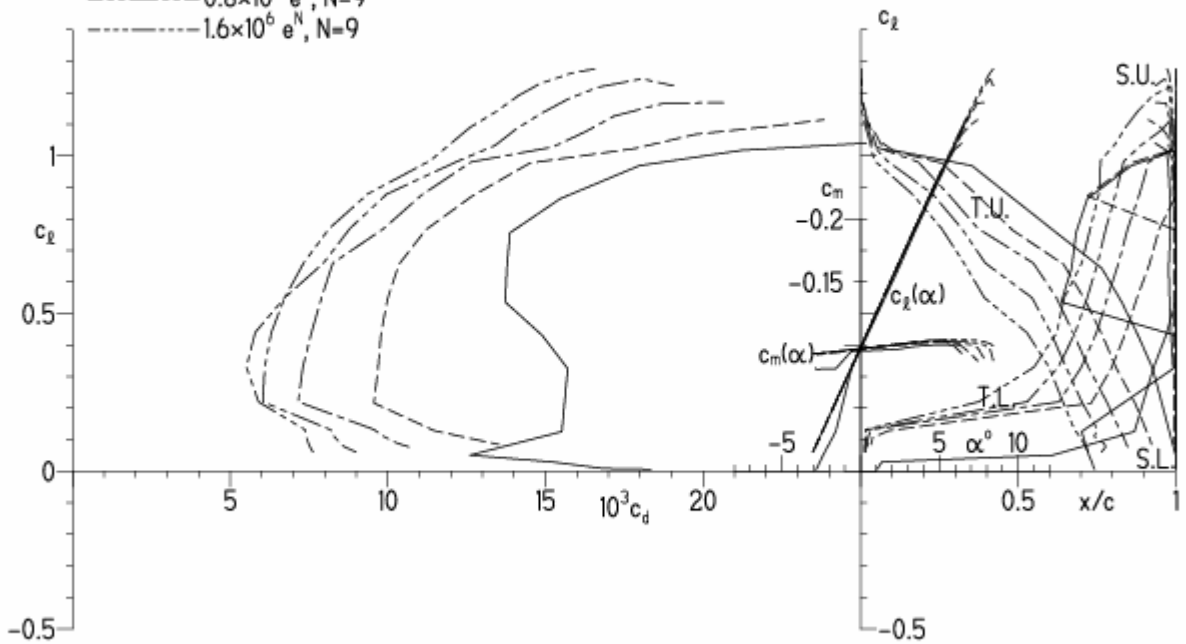
EPPLER 2005 V. 8.5.07 RUN 21.3.11 17:33



EPPLER 2005 V. 8.5.07 RUN 21.3.11 17:33

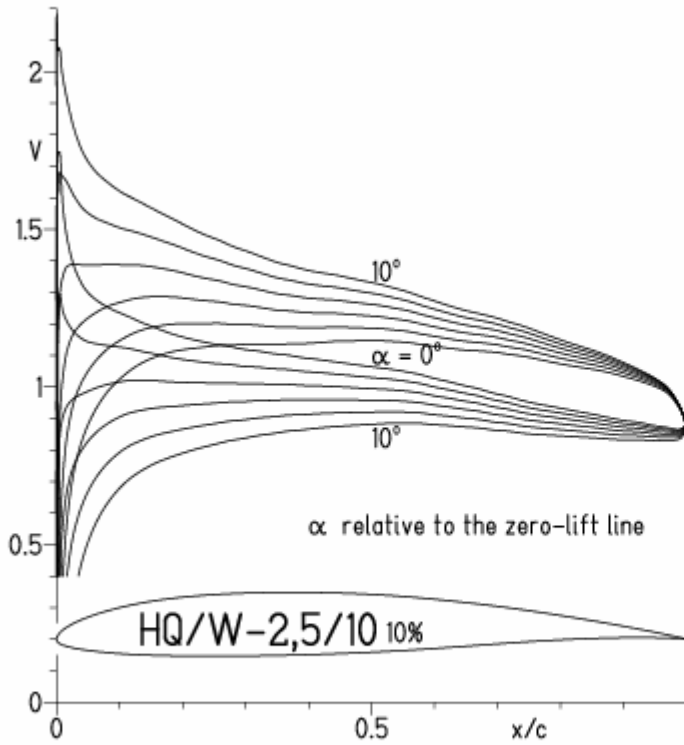
HQ/W-2,5/10 10%

- $Re = 0.1 \times 10^6 e^N, N=9$
- - - $0.2 \times 10^6 e^N, N=9$
- · - $0.4 \times 10^6 e^N, N=9$
- · - · $0.8 \times 10^6 e^N, N=9$
- · - · - $1.6 \times 10^6 e^N, N=9$



HQ/W-2,5/10, N=9, Turbulatoreffekt bei niedrigen Re-Zahlen

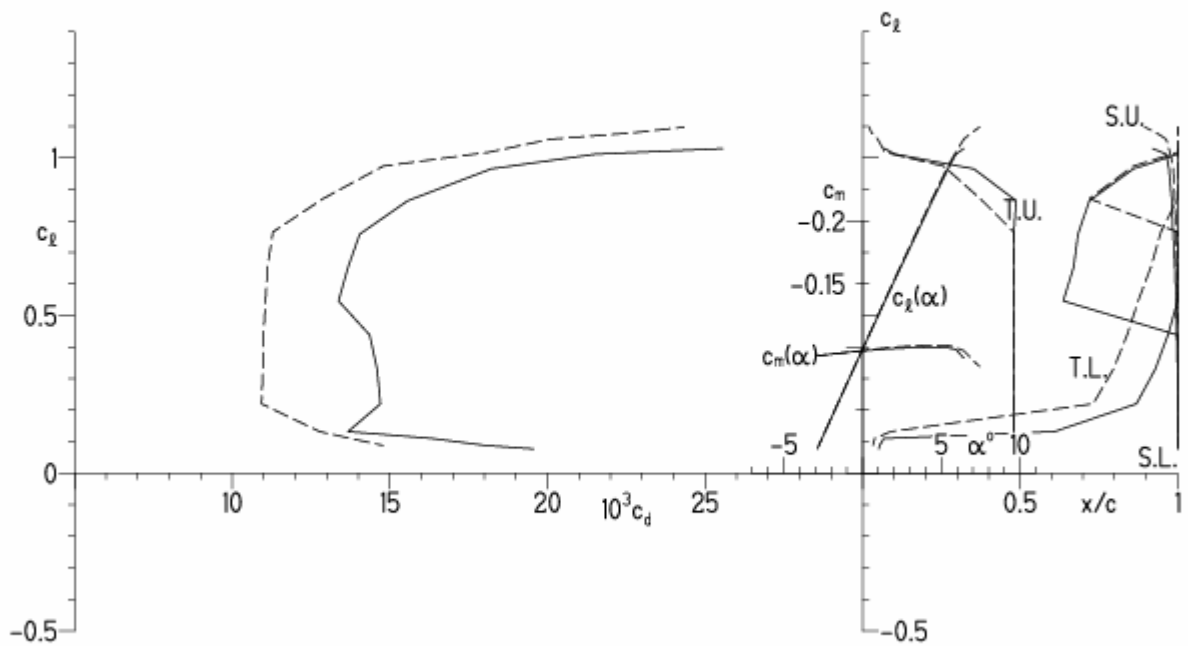
EPPLER 2005 V. 8.5.07 RUN 21.3.11 17:51



EPPLER 20

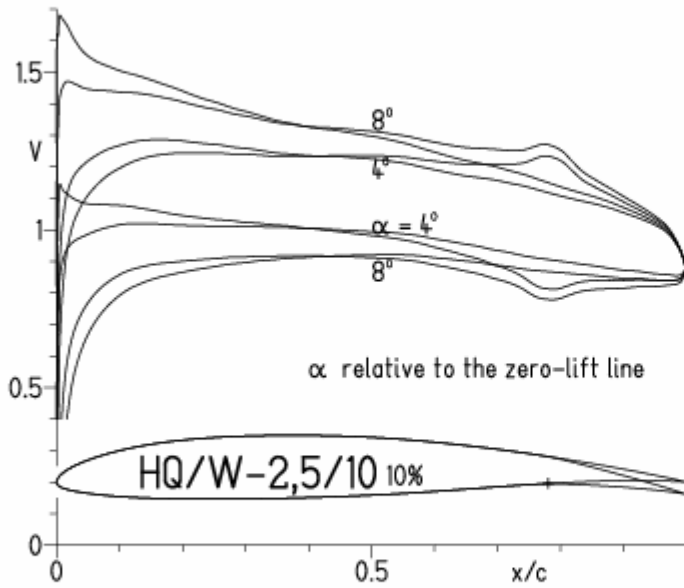
HQ/W-2,5/10 10%

— $Re = 0.1 \times 10^6$, Turb. upper 48% e^N , $N=9$
 - - - 0.2×10^6 , Turb. upper 48% e^N , $N=9$



HQ/W-2,5/10, N=11, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 21.3.11 18:17

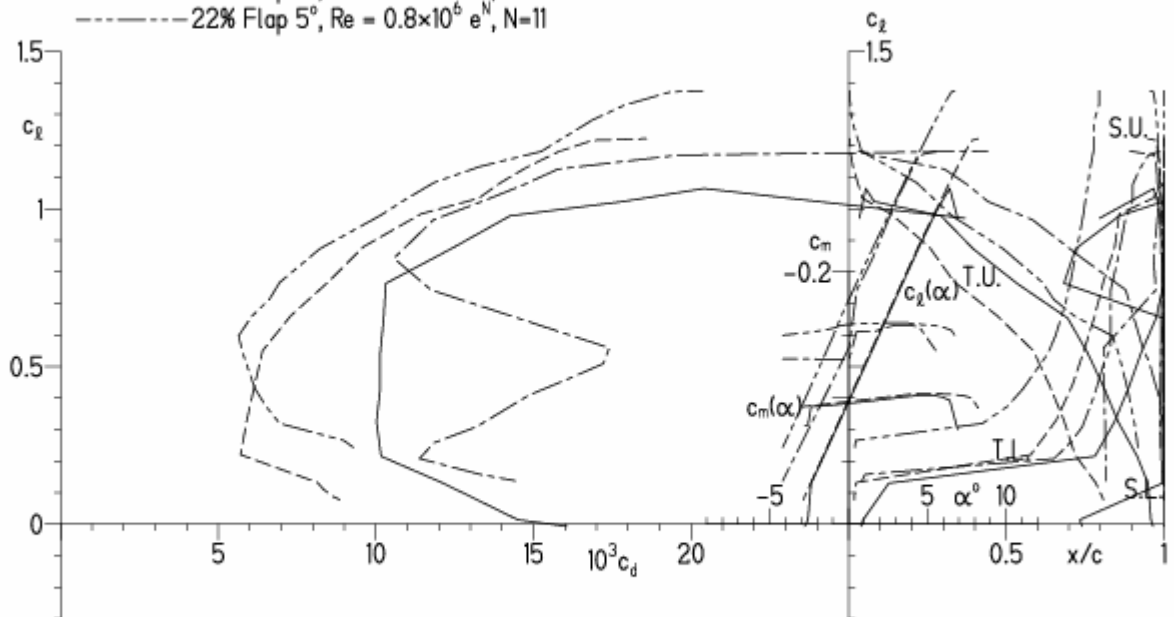


EPPLER 2005 V.

HQ/W-2,5/10 10%

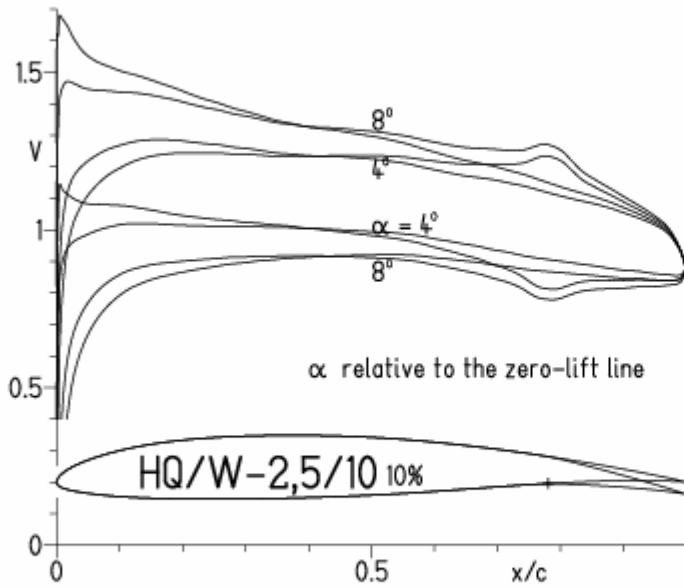
- $Re = 0.2 \times 10^6 e^N, N=11$
- - - $0.8 \times 10^6 e^N, N=11$
- · - $22\% \text{ Flap } 5^\circ, Re = 0.2 \times 10^6 e^N, N=11$
- · - $22\% \text{ Flap } 5^\circ, Re = 0.8 \times 10^6 e^N, N=11$

- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface



HQ/W-2,5/10, N=9, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 21.3.11 18:24

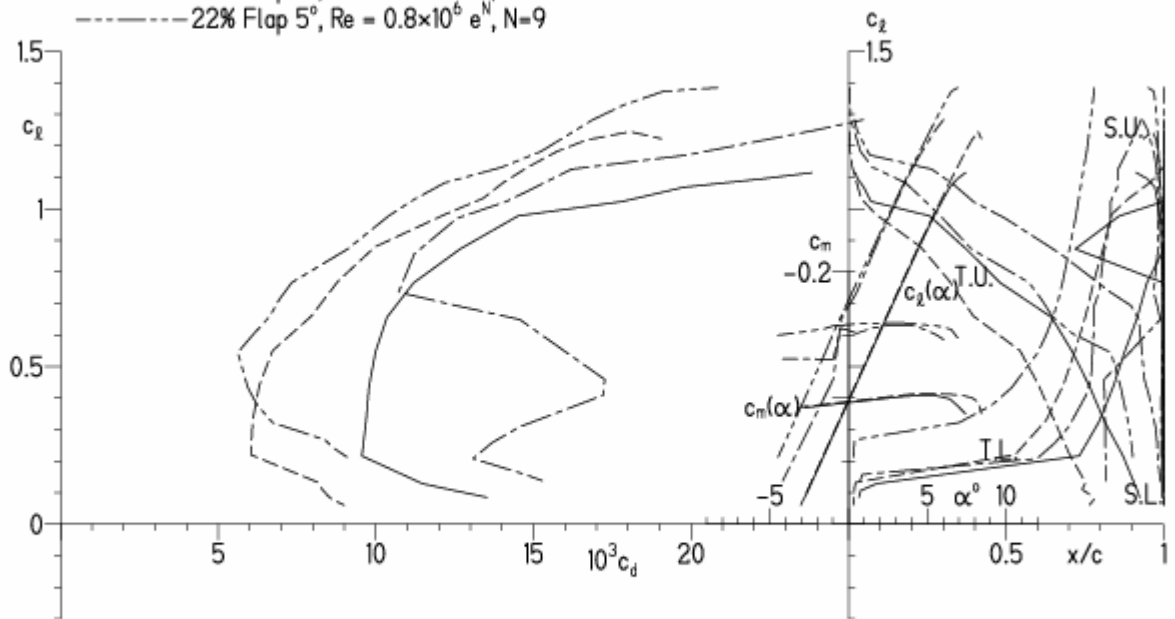


EPPLER 2005 V. 8.5.07 RUN 21.3.11 1

HQ/W-2,5/10 10%

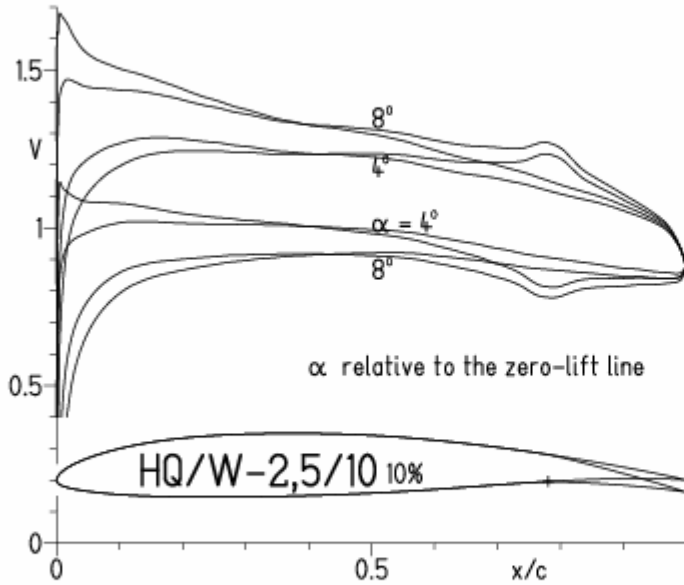
- $Re = 0.2 \times 10^6 e^N, N=9$
- - - $0.8 \times 10^6 e^N, N=9$
- · - · 22% Flap 5°, $Re = 0.2 \times 10^6 e^N, N=9$
- · - · 22% Flap 5°, $Re = 0.8 \times 10^6 e^N, N=9$

- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface



HQ/W-2,5/10, N=9, mit 5° Wölbklappenausschlag, Turbulatoreffekt
 (optimale Turbulatorposition bei 50% - 60% der Profiltiefe)

EPPLER 2005 V. 8.5.07 RUN 21.3.11 18:27

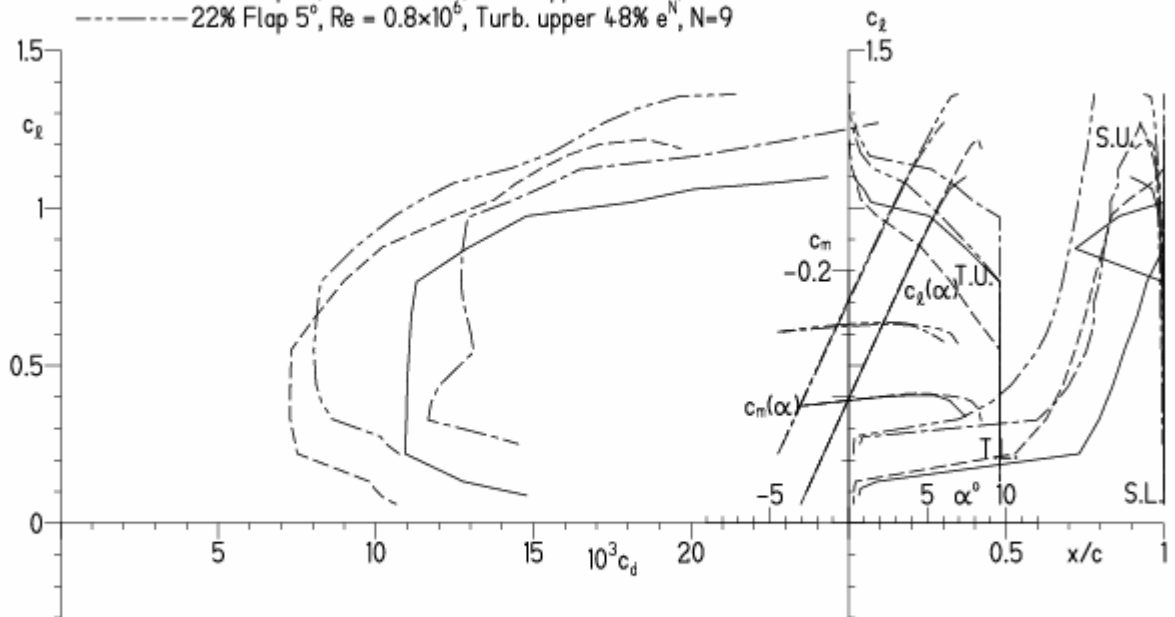


EPPLER 200

HQ/W-2,5/10 10%

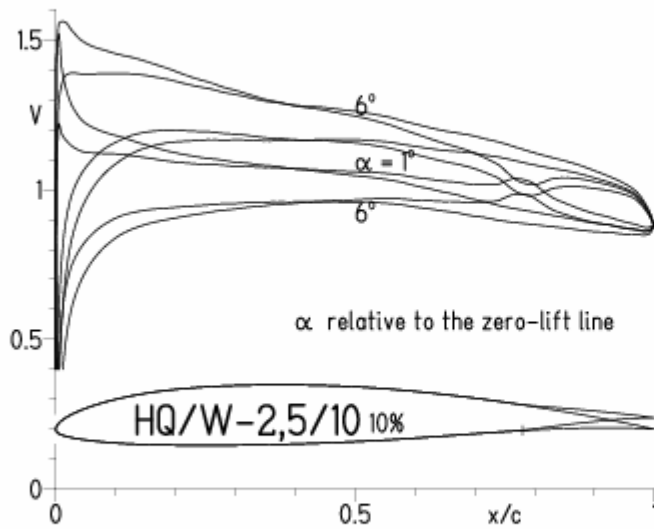
- Re = 0.2×10^6 , Turb. upper 48% e^N , N=9
- - - 0.8×10^6 , Turb. upper 48% e^N , N=9
- · - 22% Flap 5°, Re = 0.2×10^6 , Turb. upper 48% e^N , N=9
- · - 22% Flap 5°, Re = 0.8×10^6 , Turb. upper 48% e^N , N=9

- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface

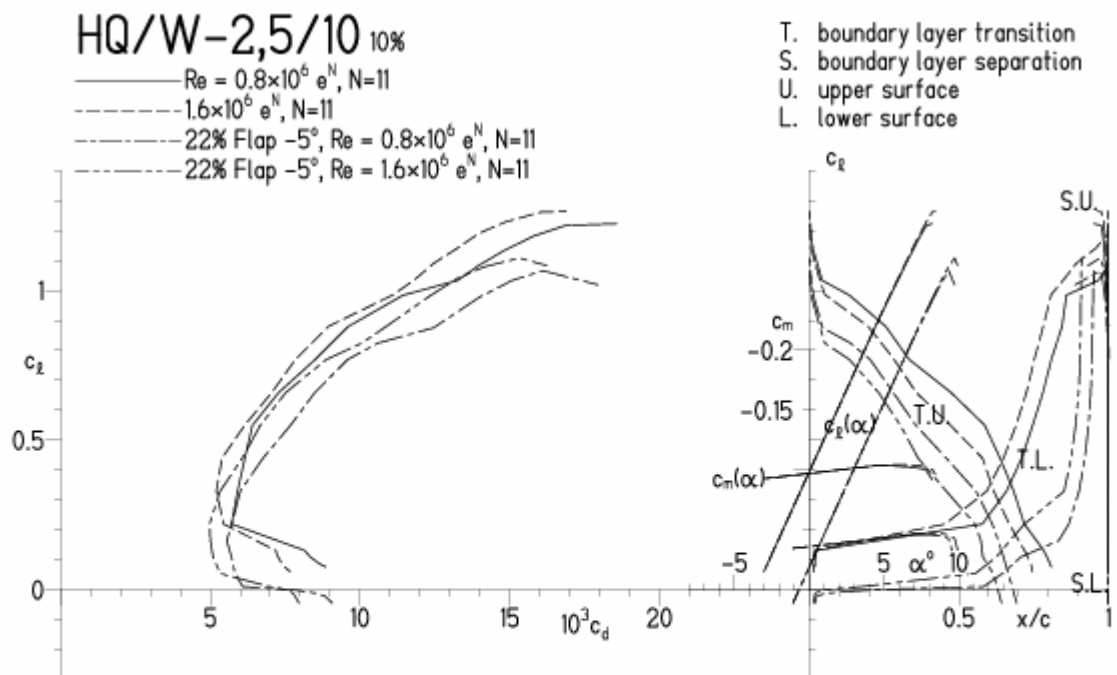


HQ/W-2,5/10, N=11, mit -5° Wölbklappenausschlag (Schnellflug)
Damit lassen sich sehr hohe Maximalgeschwindigkeiten erzielen!

EPPLER 2005 V. 8.5.07 RUN 15.5.11 17:17

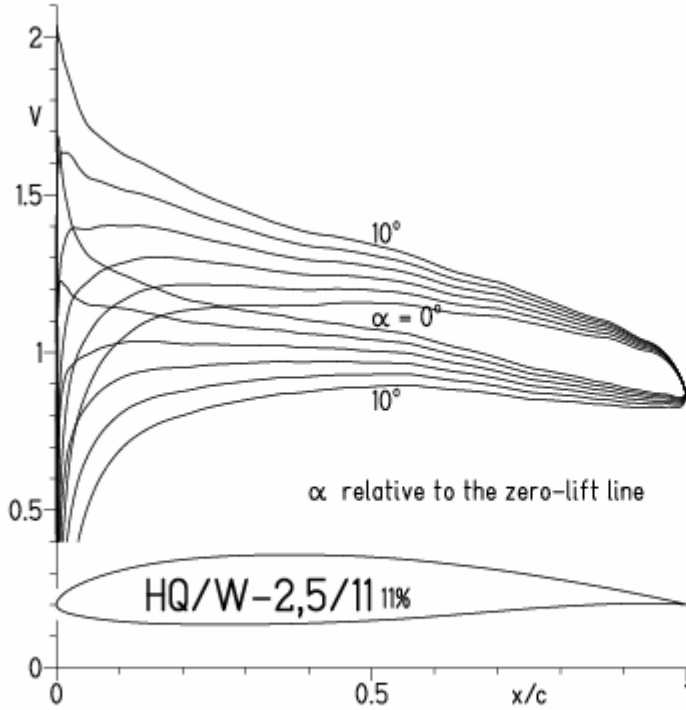


EPPLER 2005 V. 8.5.07 RUN 15.5.11 17:17



HQ/W-2,5/11, N=11

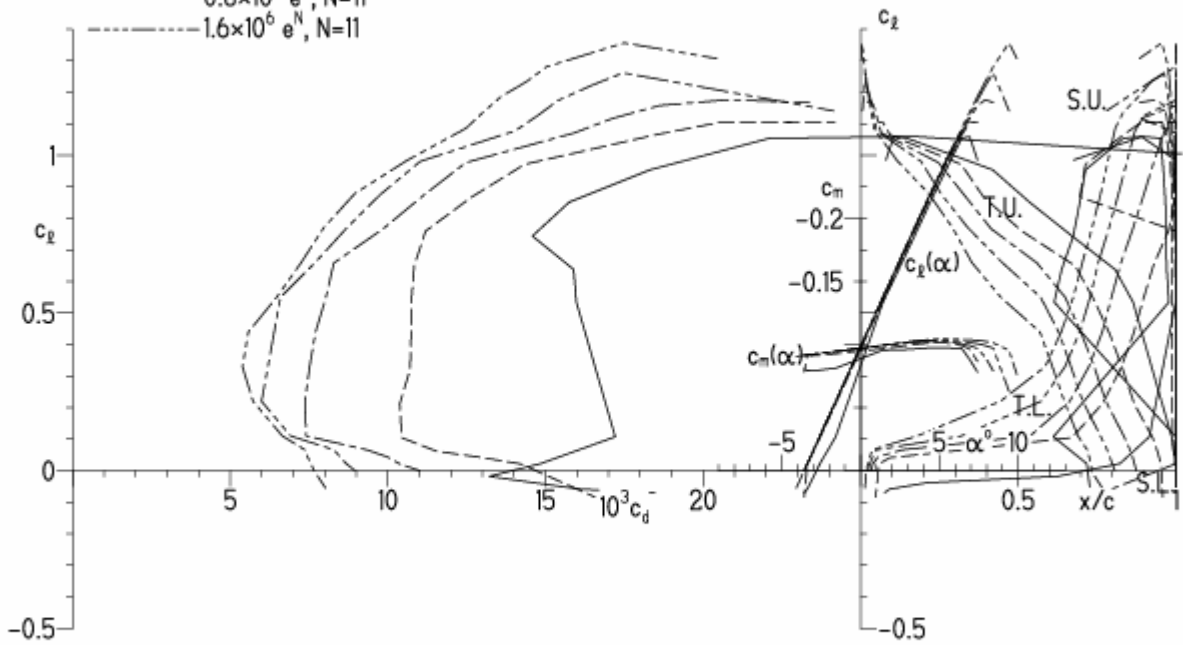
EPPLER 2005 V. 8.5.07 RUN 30.3.11 16:14



EPPLER 2005 V. 8.5.07

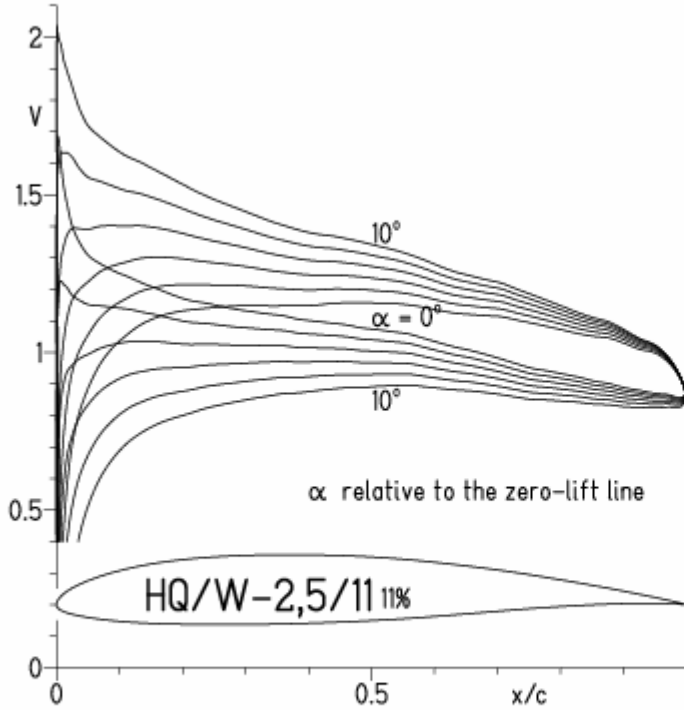
HQ/W-2,5/11 11%

- $Re = 0.1 \times 10^6 e^N, N=11$
- - - $0.2 \times 10^6 e^N, N=11$
- · - $0.4 \times 10^6 e^N, N=11$
- · - · $0.8 \times 10^6 e^N, N=11$
- · - · - $1.6 \times 10^6 e^N, N=11$

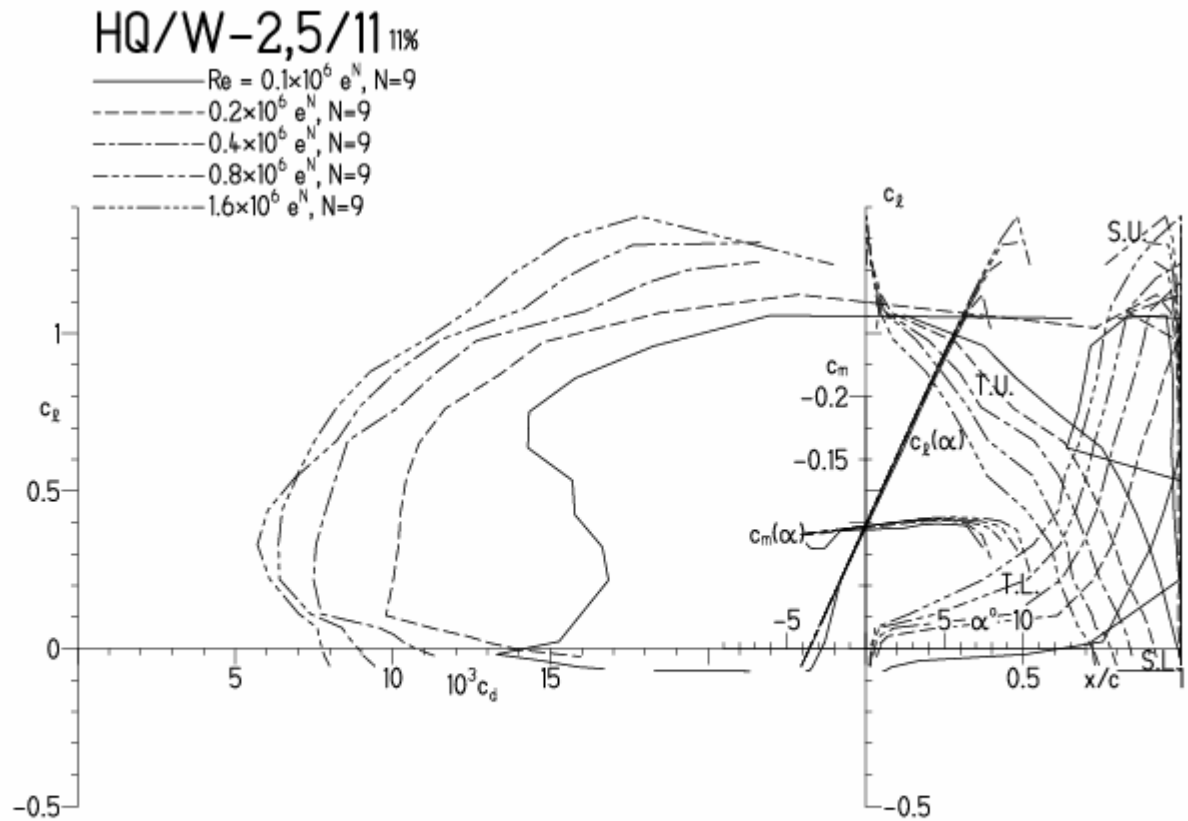


HQ/W-2,5/11, N=9

EPPLER 2005 V. 8.5.07 RUN 30.3.11 16:24

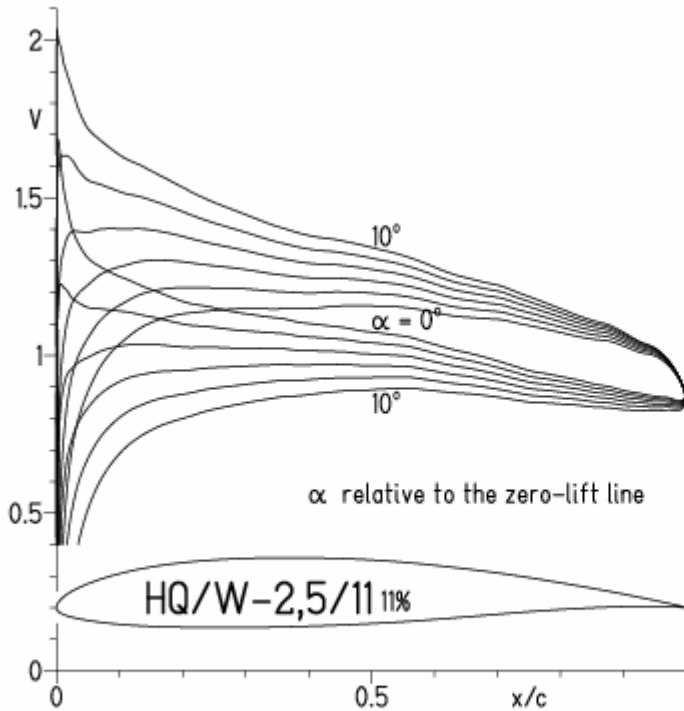


EPPLER 2005 V. 8.5.07 RUN 30.3.11 16:24



HQ/W-2,5/11, N=9, Turbulatoreffekt bei niedrigen Re-Zahlen

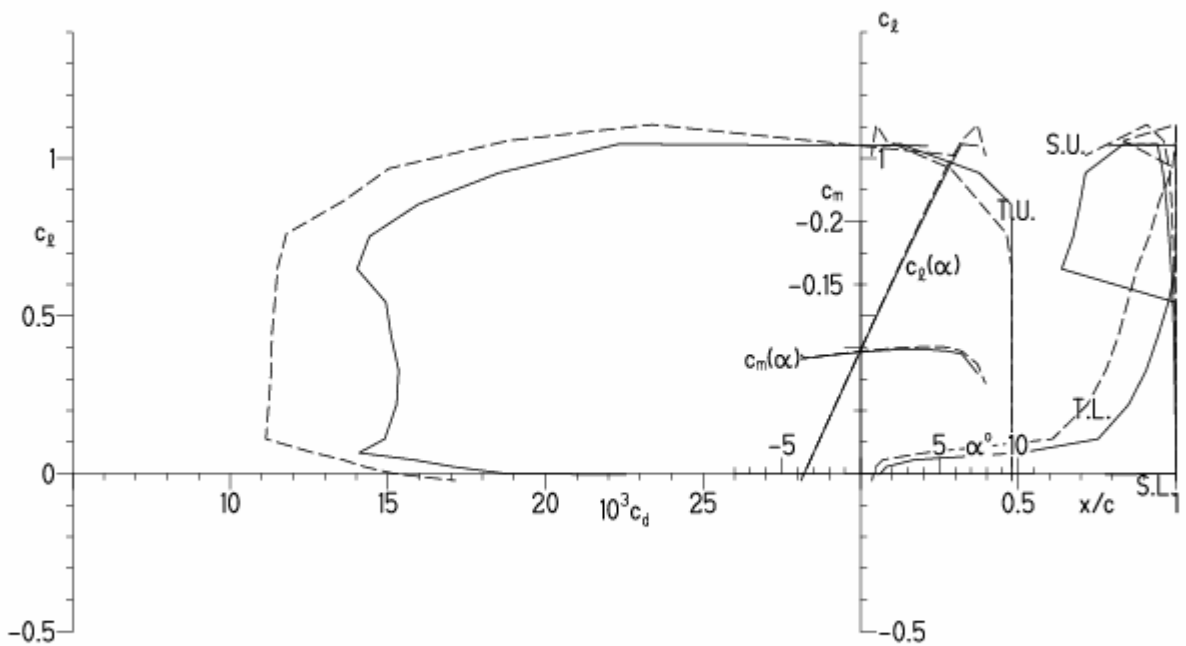
EPPLER 2005 V. 8.5.07 RUN 30.3.11 16:34



EPPLER 2005 V. 8.5.07 RUN 30.3.11 16:34

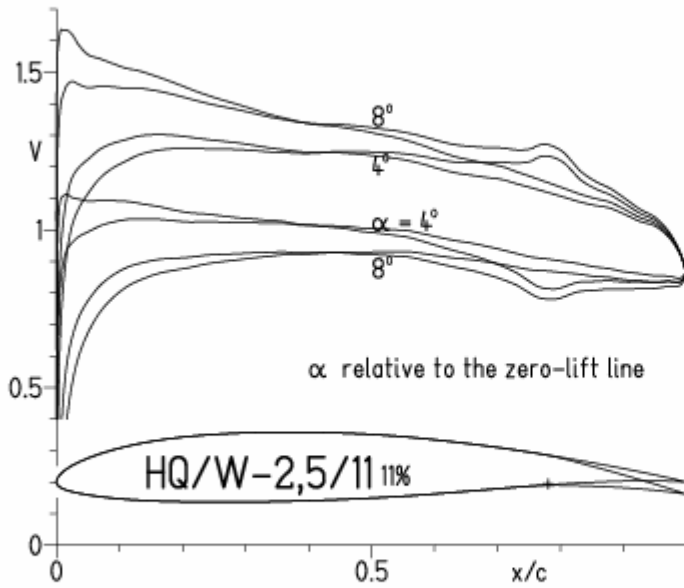
HQ/W-2,5/11 11%

— $Re = 0.1 \times 10^6$, Turb. upper 48% e^N , N=9
 - - - 0.2×10^6 , Turb. upper 48% e^N , N=9

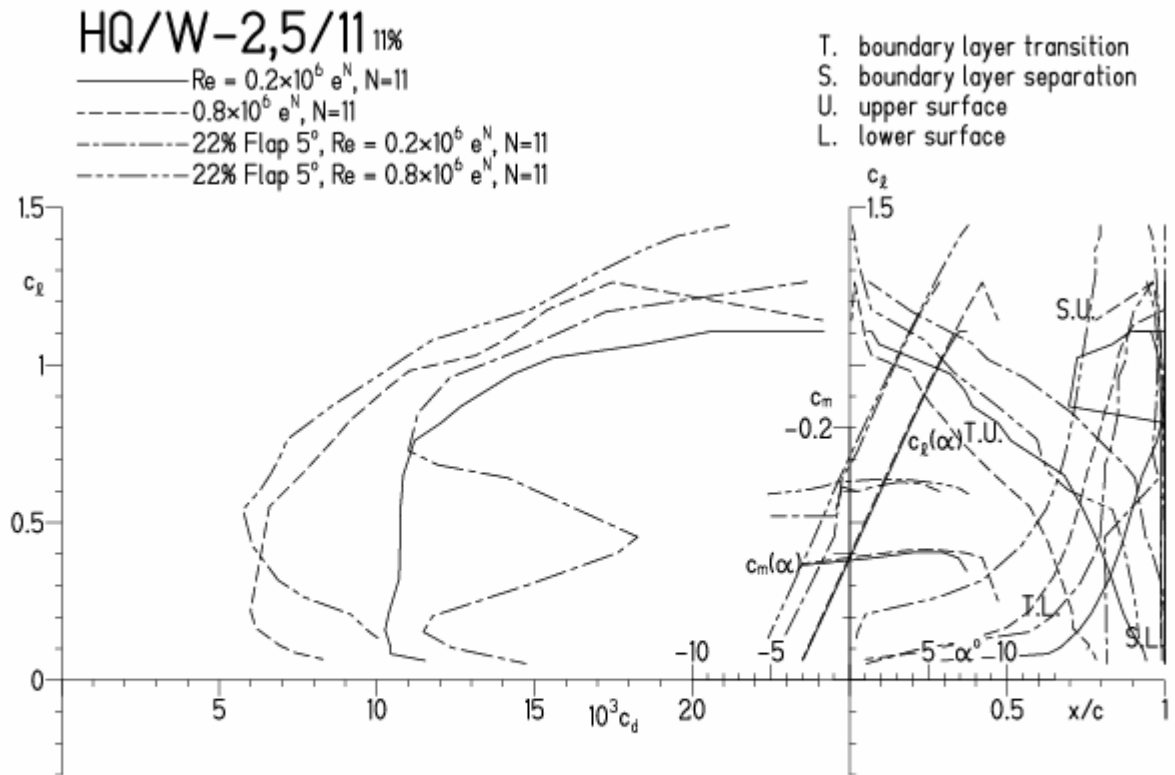


HQ/W-2,5/11, N=11, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 30.3.11 17:01

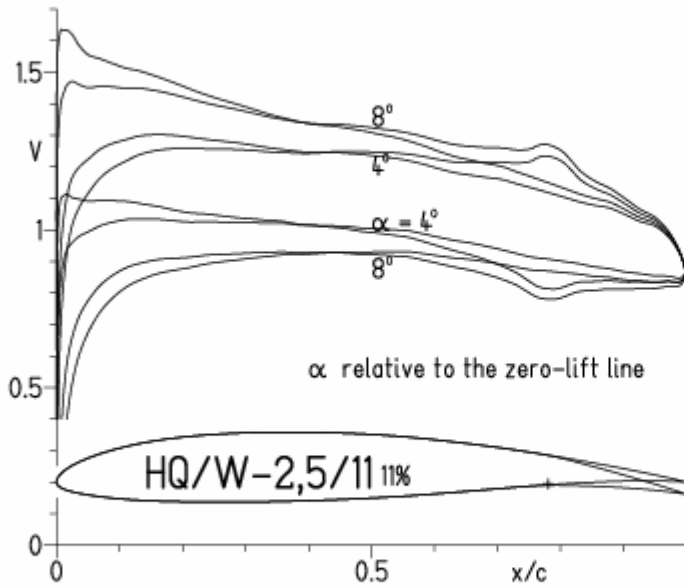


EPPLER 2005 V. 8.5.07 RUN 30.3.11 17:01



HQ/W-2,5/11, N=9, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 30.3.11 17:11

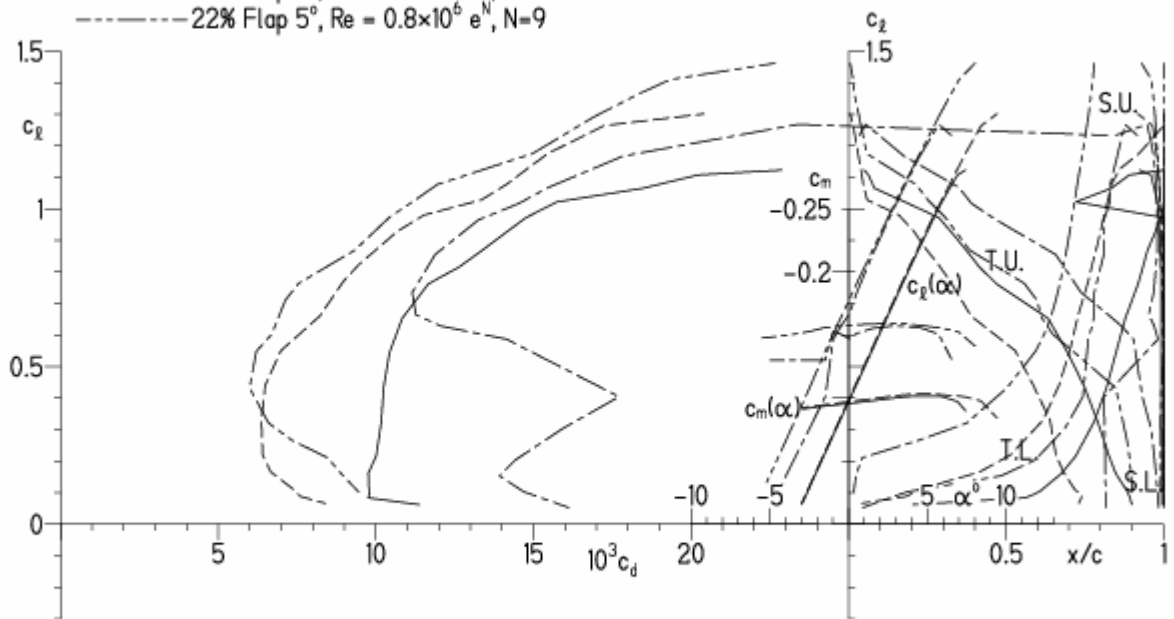


EPPLER 2005 V. 8.5.07 RUN 30.3.11 17:11

HQ/W-2,5/11 11%

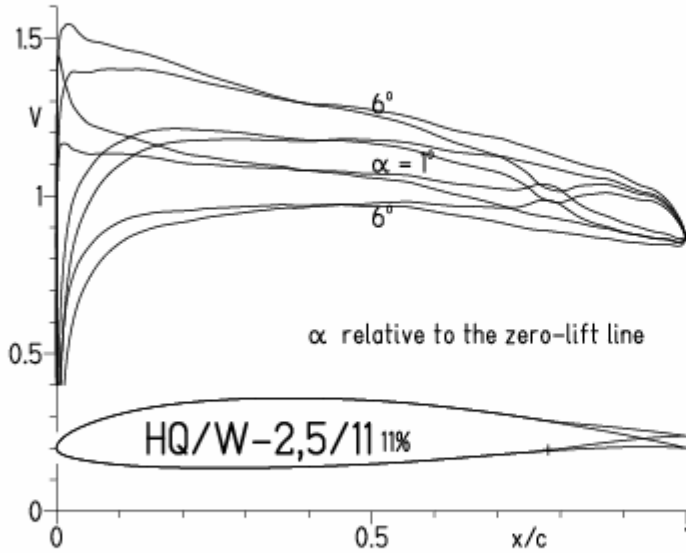
- $Re = 0.2 \times 10^6 e^N, N=9$
- - - $0.8 \times 10^6 e^N, N=9$
- · - · 22% Flap 5°, $Re = 0.2 \times 10^6 e^N, N=9$
- · - · 22% Flap 5°, $Re = 0.8 \times 10^6 e^N, N=9$

- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface

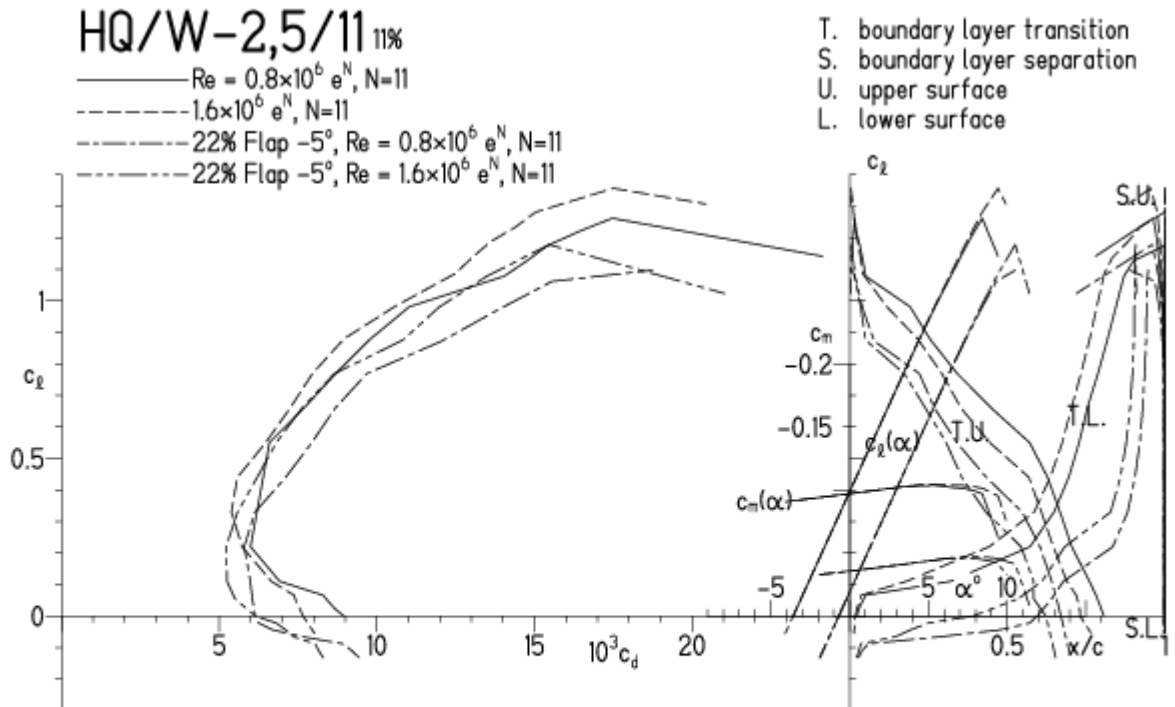


HQ/W-2,5/11, N=11, mit -5° Wölbklappenausschlag (Schnellflug)

EPPLER 2005 V. 8.5.07 RUN 30.3.11 17:28

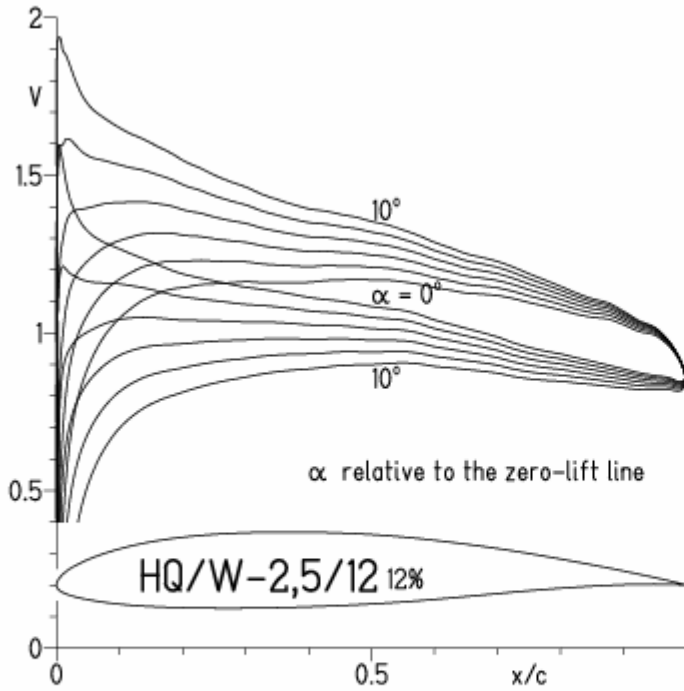


EPPLER 200



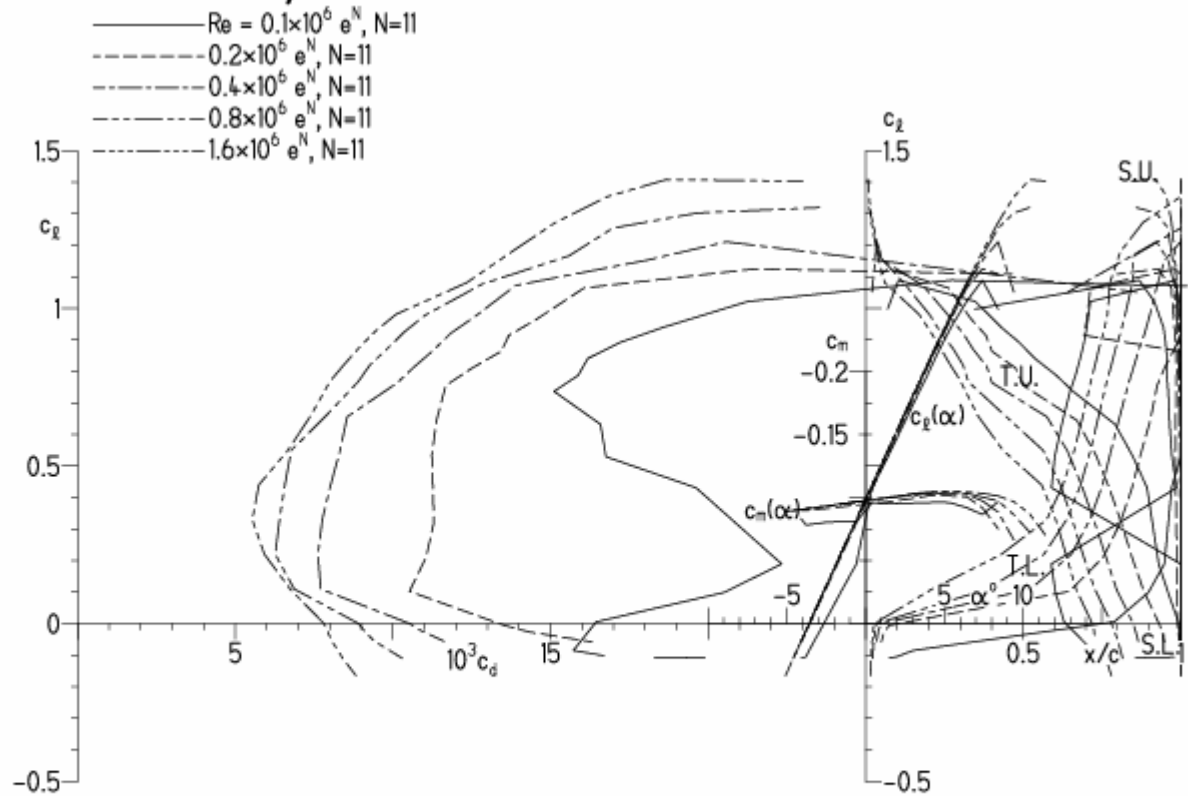
HQ/W-2,5/12, N=11

EPPLER 2005 V. 8.5.07 RUN 31.3.11 11:40



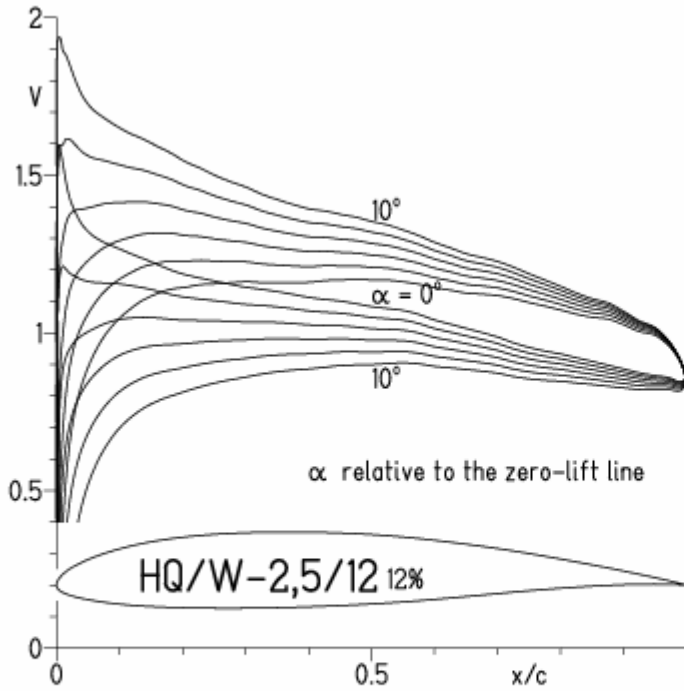
EPPLER 2005 V. 8.5.07 RUN 31.3.11 11:40

HQ/W-2,5/12 12%



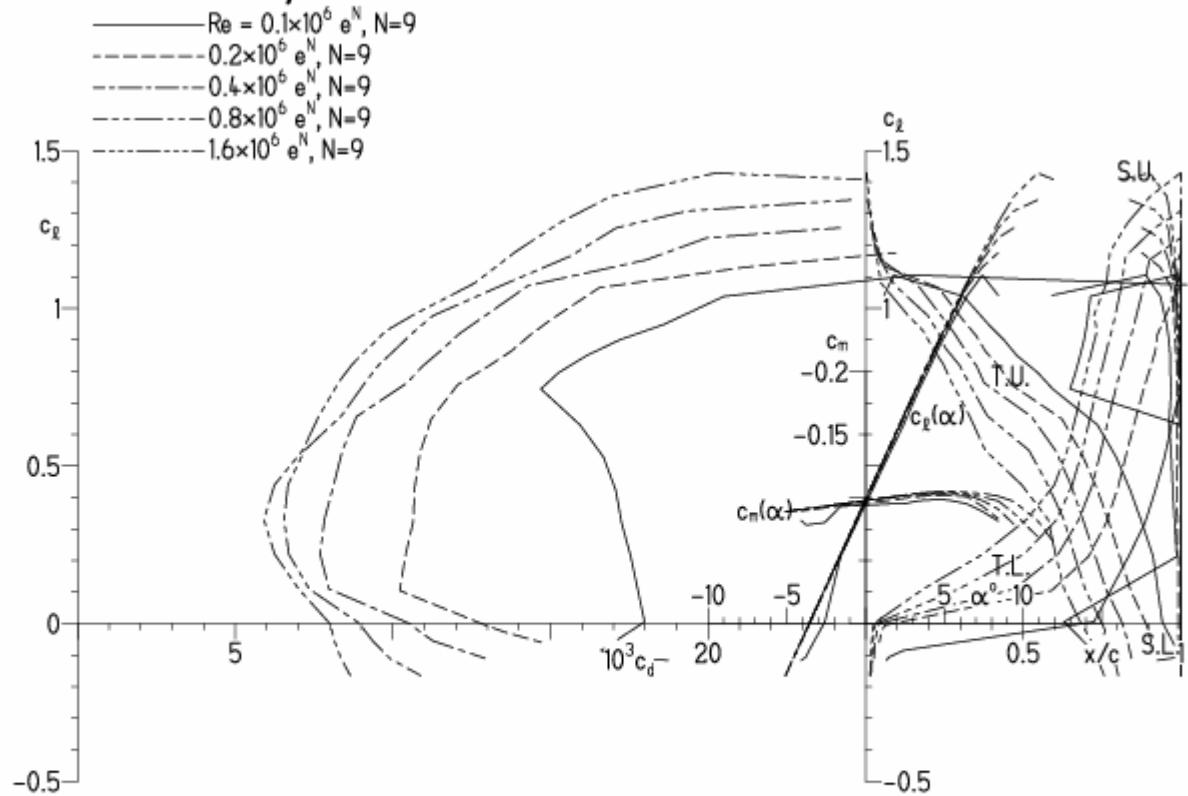
HQ/W-2,5/12, N=9

EPPLER 2005 V. 8.5.07 RUN 31.3.11 11:47



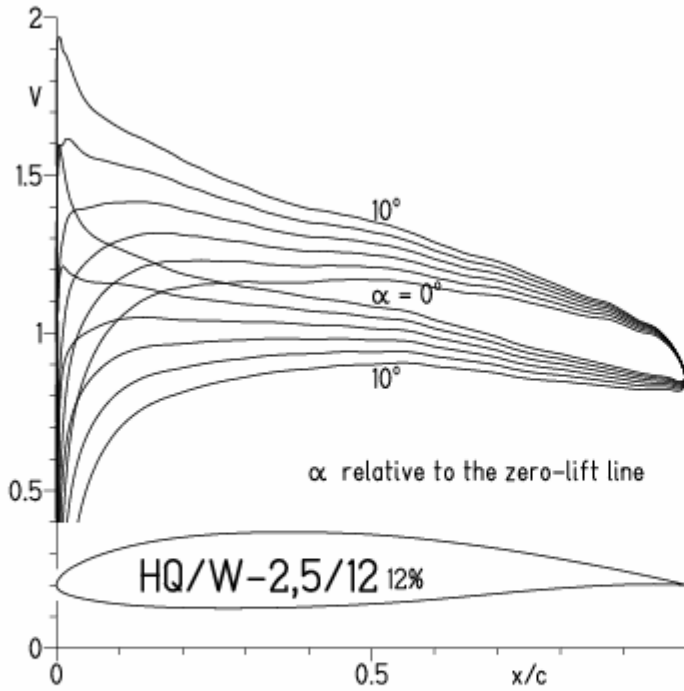
EPPLER 2005 V. 8.5.07 R

HQ/W-2,5/12 12%



HQ/W-2,5/12, N=9, Turbulatoreffekt bei niedrigen Re-Zahlen

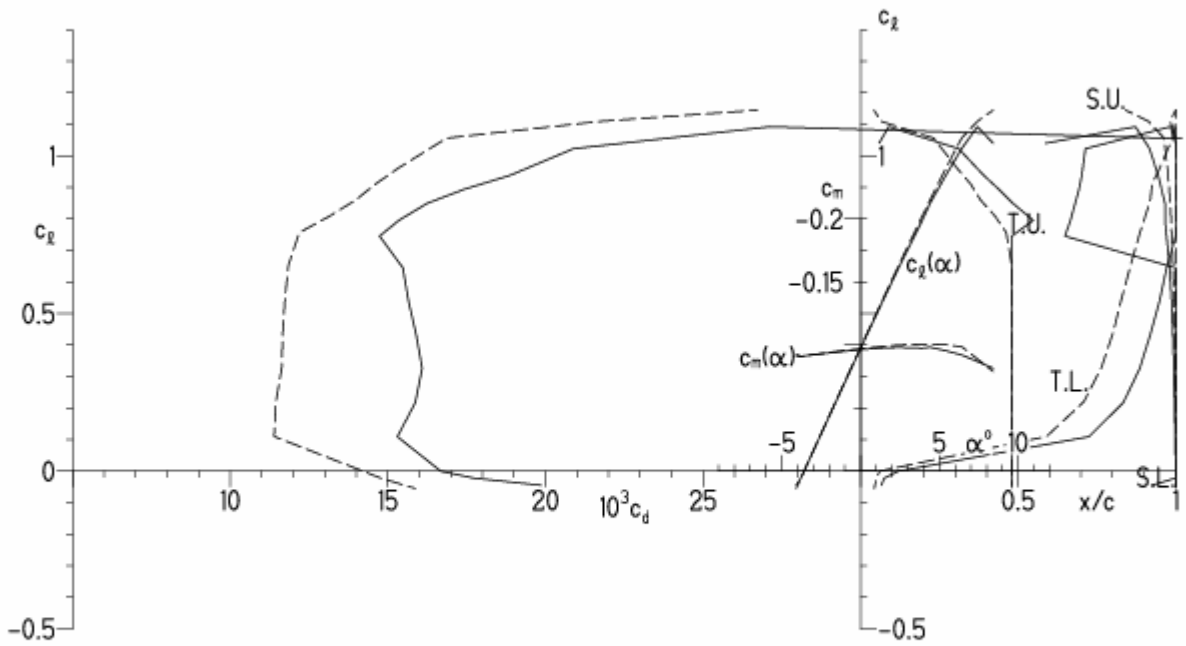
EPPLER 2005 V. 8.5.07 RUN 31.3.11 11:55



EPPLER 2005 V. 8.5.07 RUN 31.3.11 11:

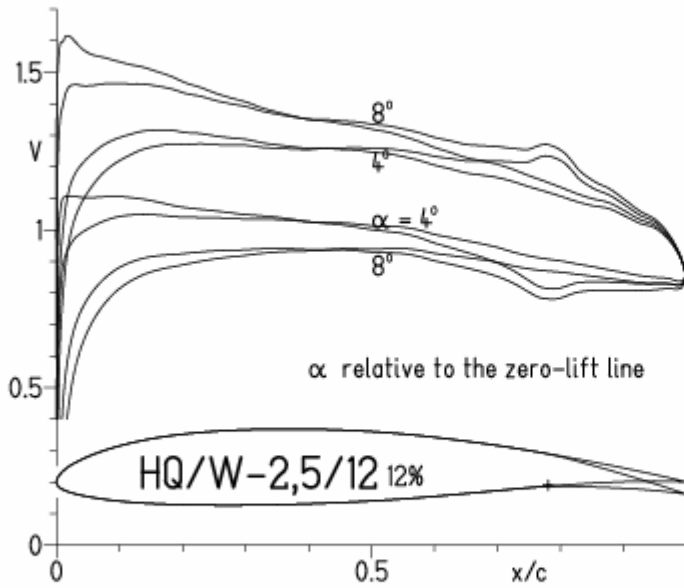
HQ/W-2,5/12 12%

— $Re = 0.1 \times 10^6$, Turb. upper 48% e^N , N=9
 - - - 0.2×10^6 , Turb. upper 48% e^N , N=9

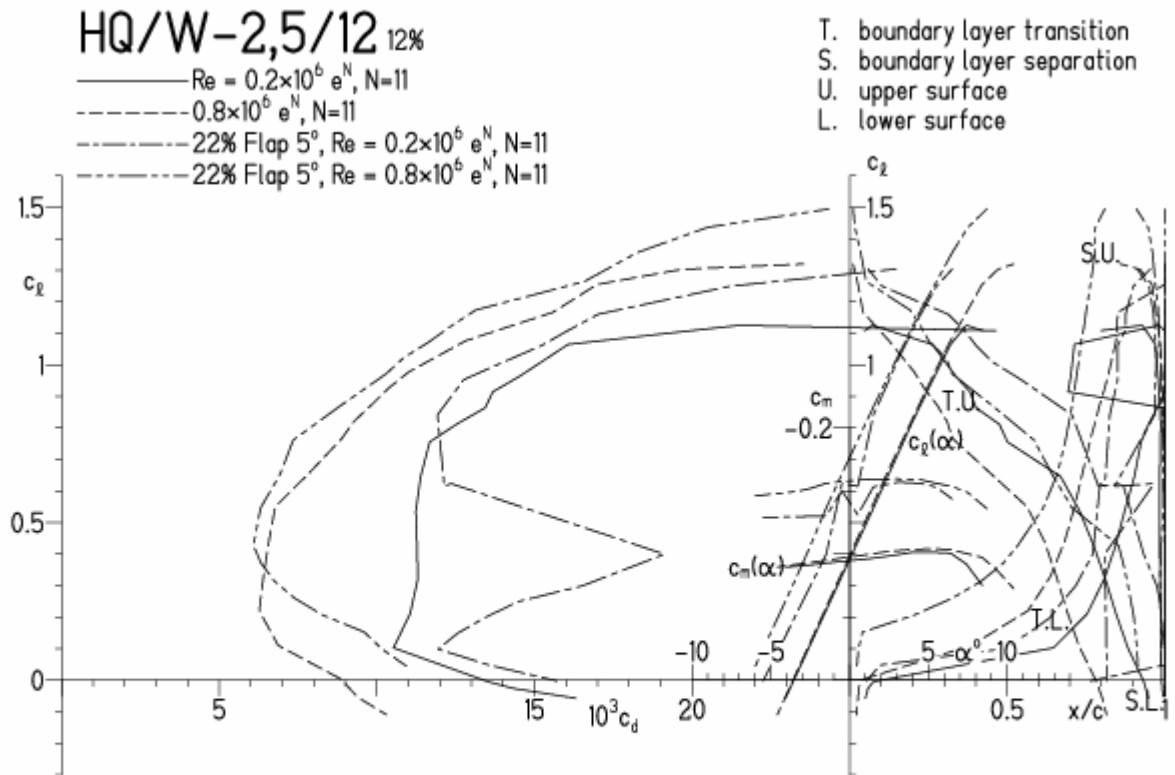


HQ/W-2,5/12, N=11, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 31.3.11 12:13

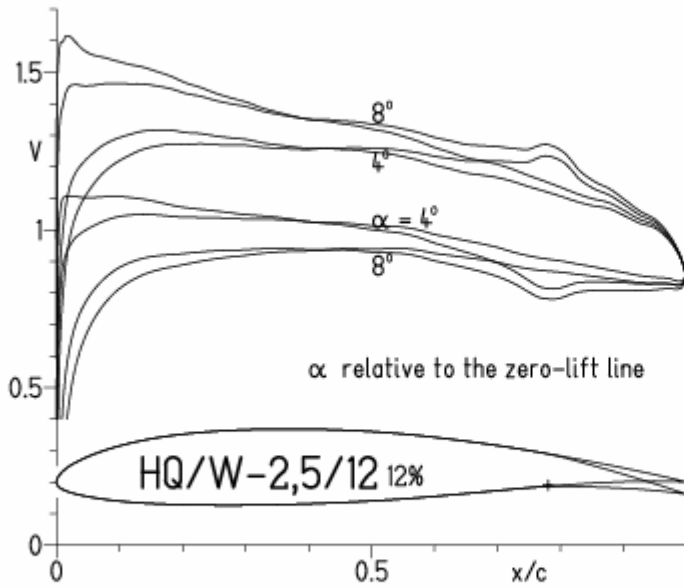


EPPLER 2005 V. 8.5.

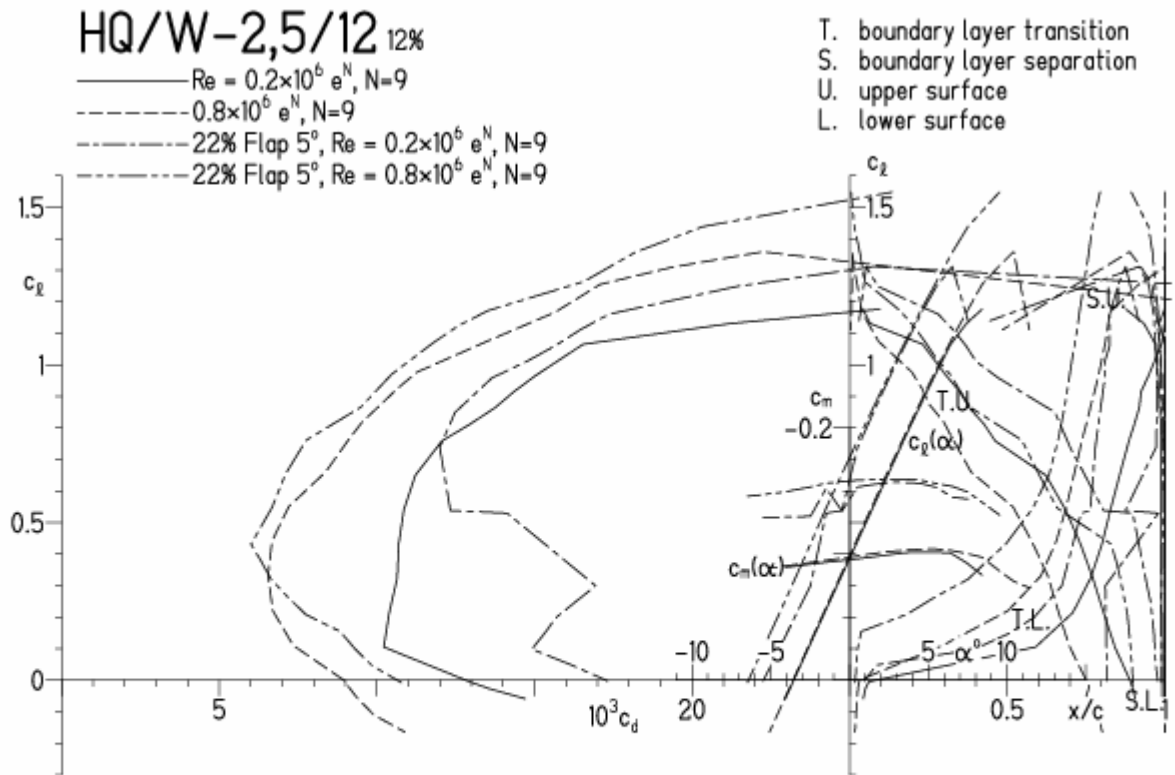


HQ/W-2,5/12, N=9, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 31.3.11 12:22

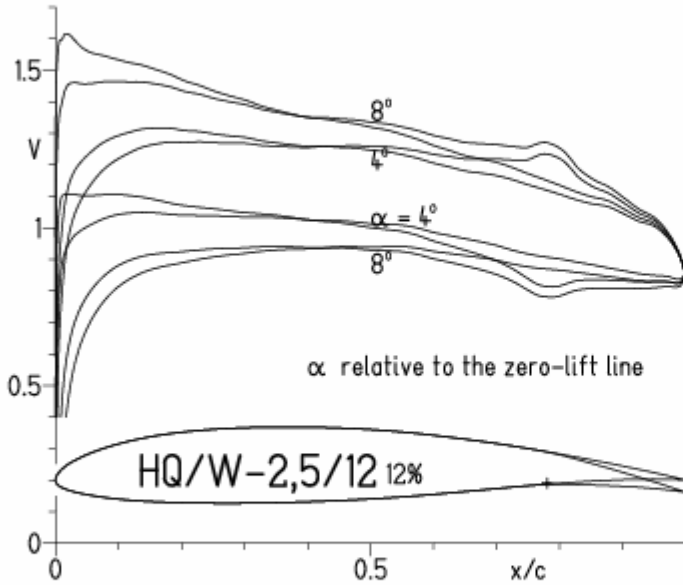


EPPLER 2005 V. 8.5.07 RUN 31.3.11 12:22

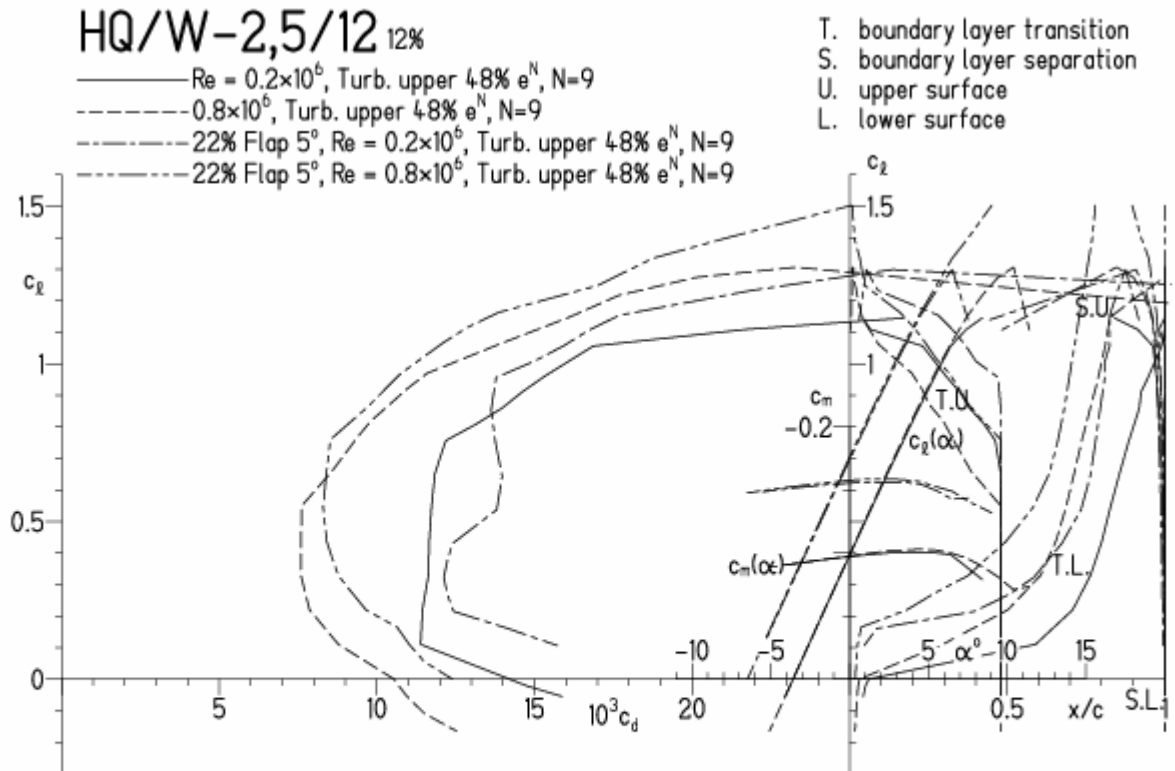


HQ/W-2,5/12, N=9, mit 5° Wölbklappenausschlag, Turbulatoreffekt
 (optimale Turbulatorposition bei 50% - 60% der Profiltiefe)

EPPLER 2005 V. 8.5.07 RUN 31.3.11 12:45

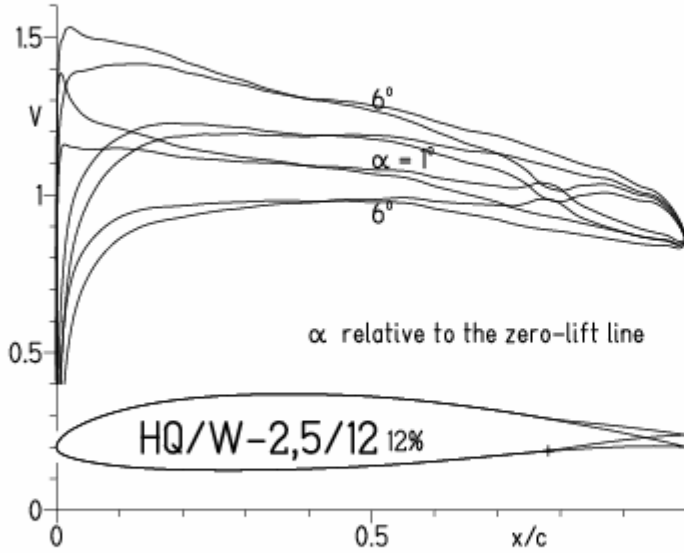


EPPLER 2005 V. 8.5.07 RUN 31.3.11 12

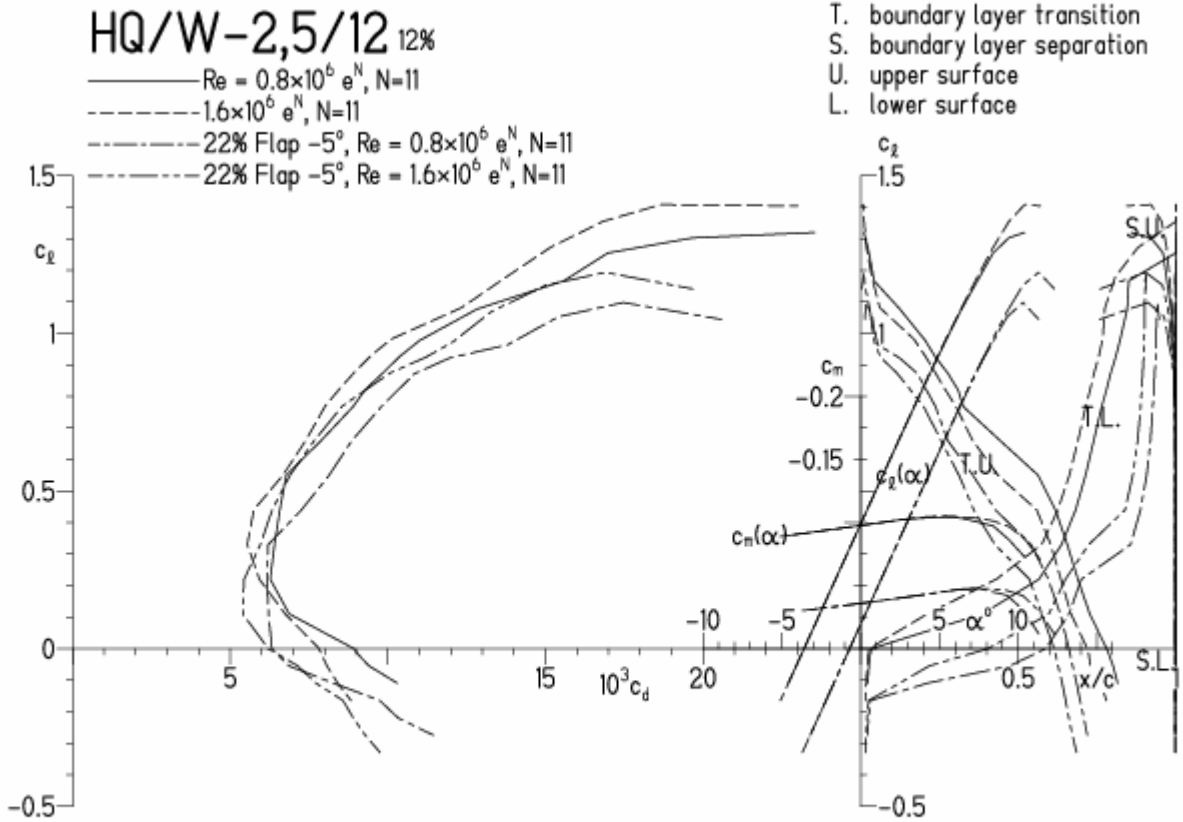


HQ/W-2,5/12, N=11, mit -5° Wölbklappenausschlag (Schnellflug)

EPPLER 2005 V. 8.5.07 RUN 31.3.11 12:35

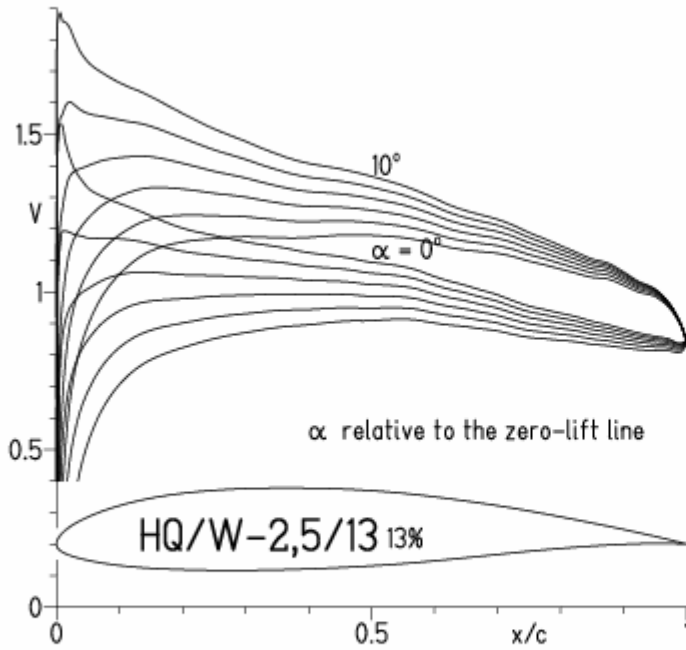


EPPLER 2005 V. 8.5.07 RUN 31.3.11 12:35

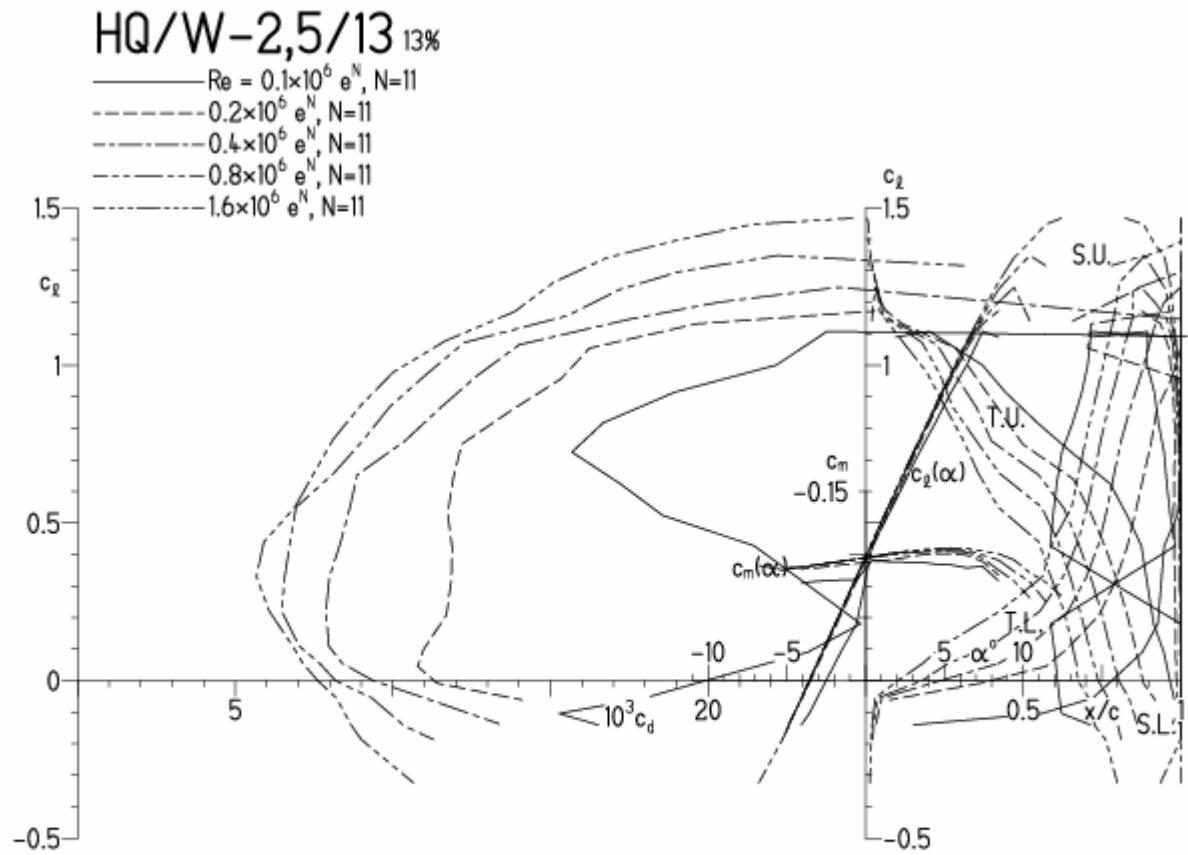


HQ/W-2,5/13, N=11

EPPLER 2005 V. 8.5.07 RUN 31.3.11 17:58

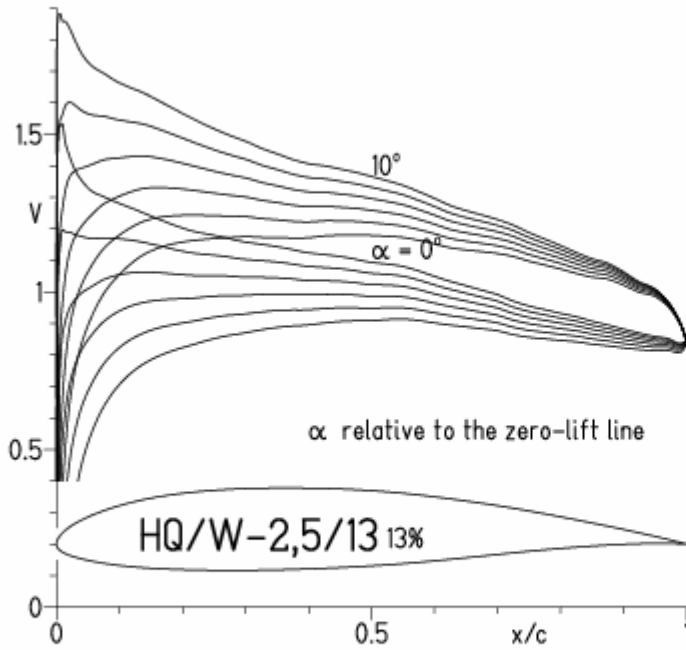


EPPLER 2005 V. 8.5.07 RUN 31.3.11 17:58

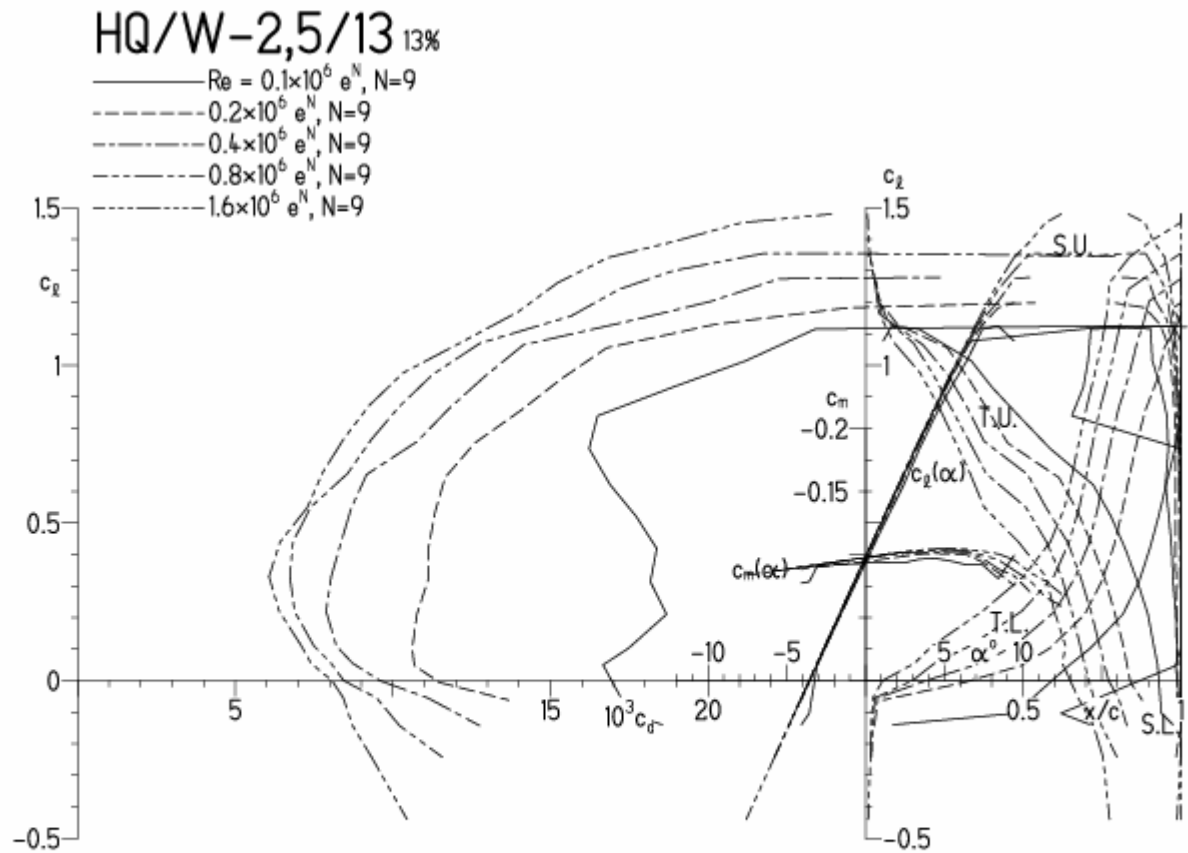


HQ/W-2,5/13, N=9

EPPLER 2005 V. 8.5.07 RUN 31.3.11 19:02

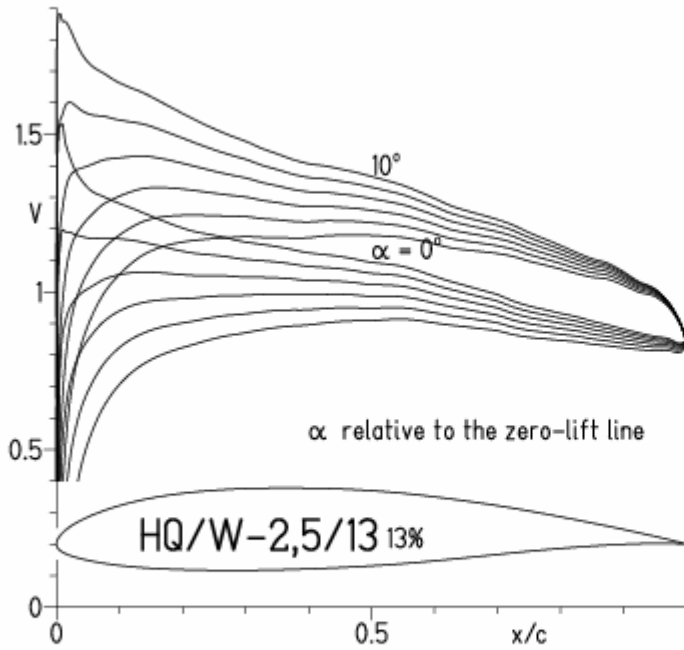


EPPLER 2005 V. 8.5.07 RUN 31.3.



HQ/W-2,5/13, N=9, Turbulatoreffekt bei niedrigen Re-Zahlen

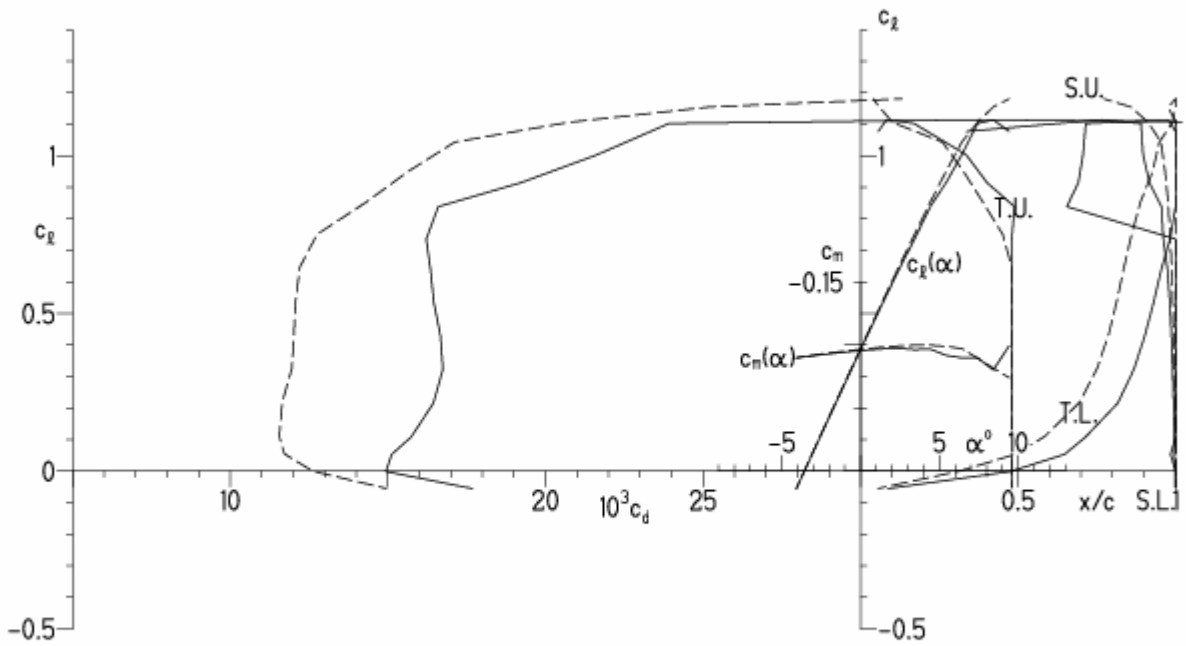
EPPLER 2005 V. 8.5.07 RUN 31.3.11 19:11



EPPLER 2005 V. 8

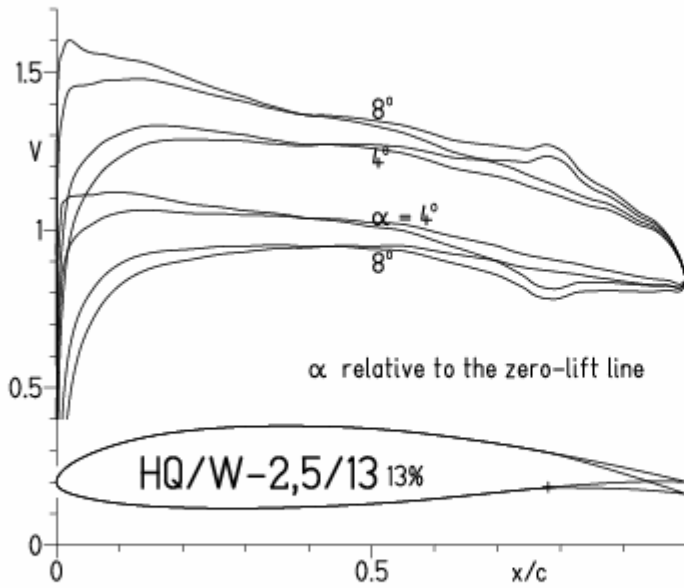
HQ/W-2,5/13 13%

— $Re = 0.1 \times 10^6$, Turb. upper 48% e^N , N=9
 - - - 0.2×10^6 , Turb. upper 48% e^N , N=9

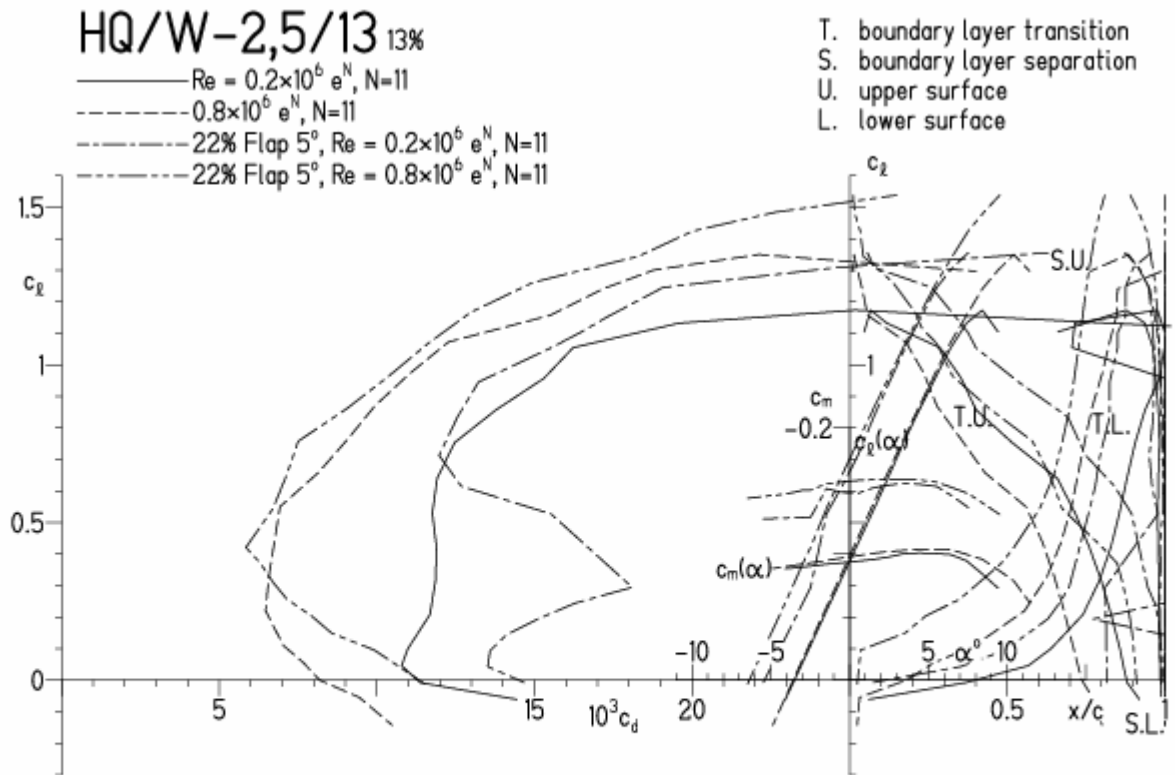


HQ/W-2,5/13, N=11, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 14.11 13:22

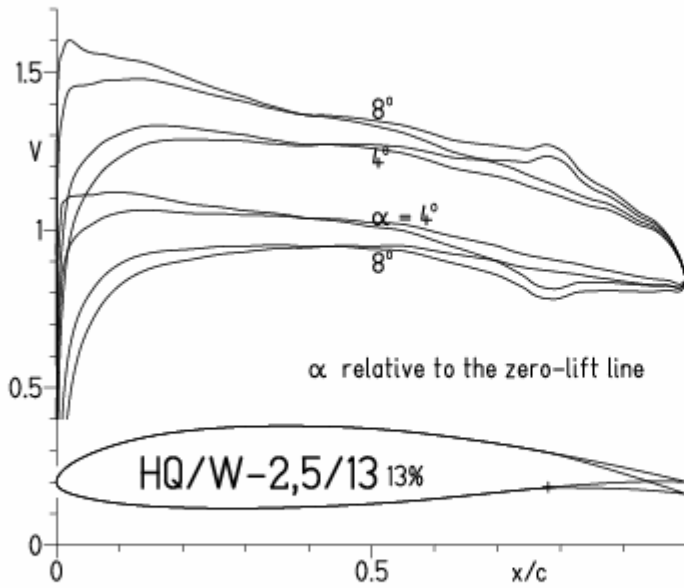


EPPLER 2005 V.

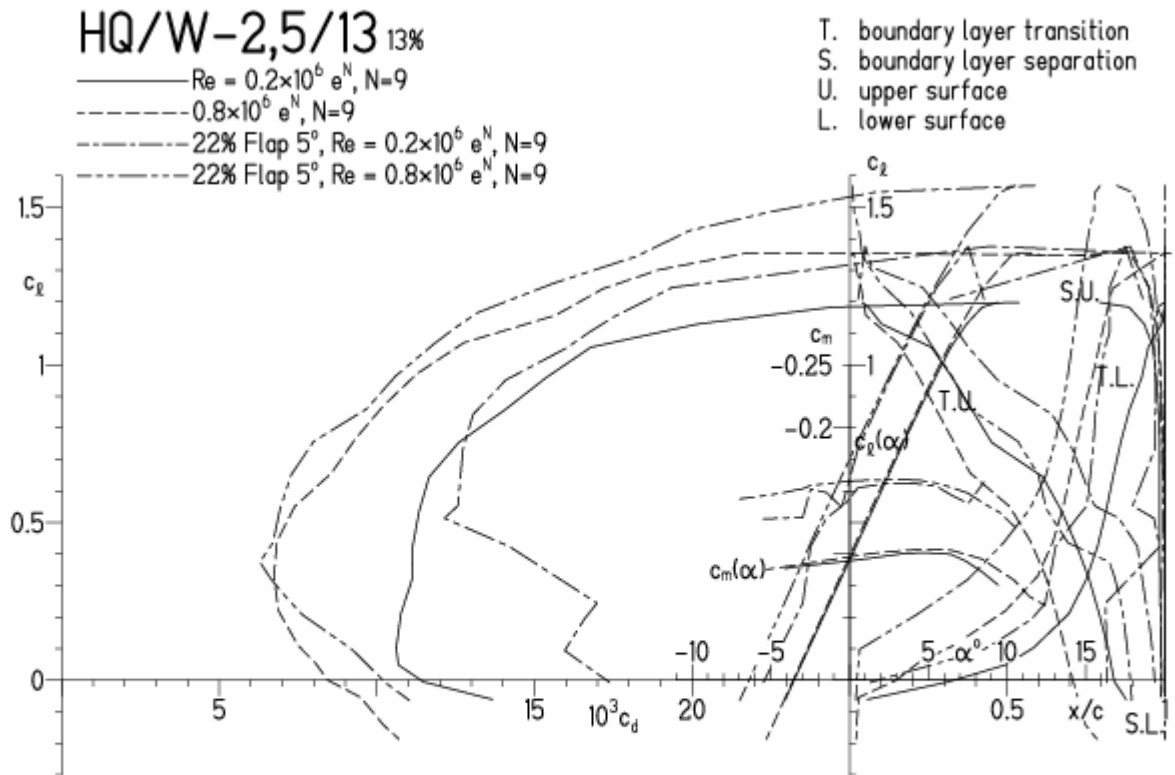


HQ/W-2,5/13, N=9, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 14.11 13:10

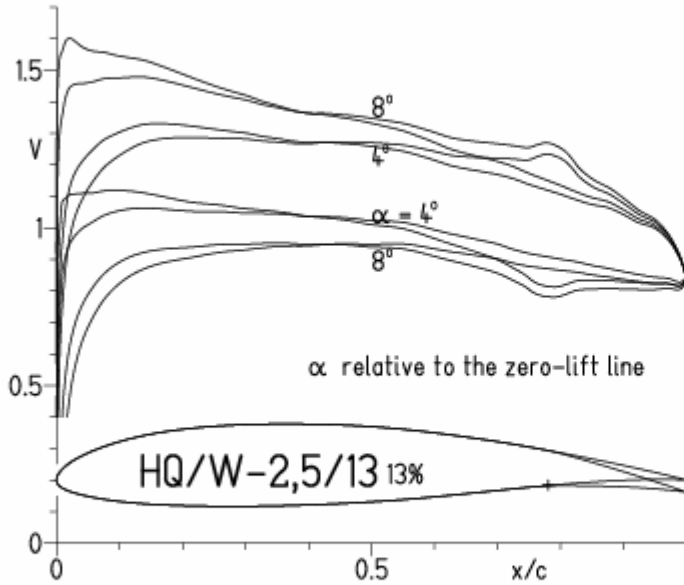


EPPLER 2005 V. 8.5.07 RUN 14.11 13:10

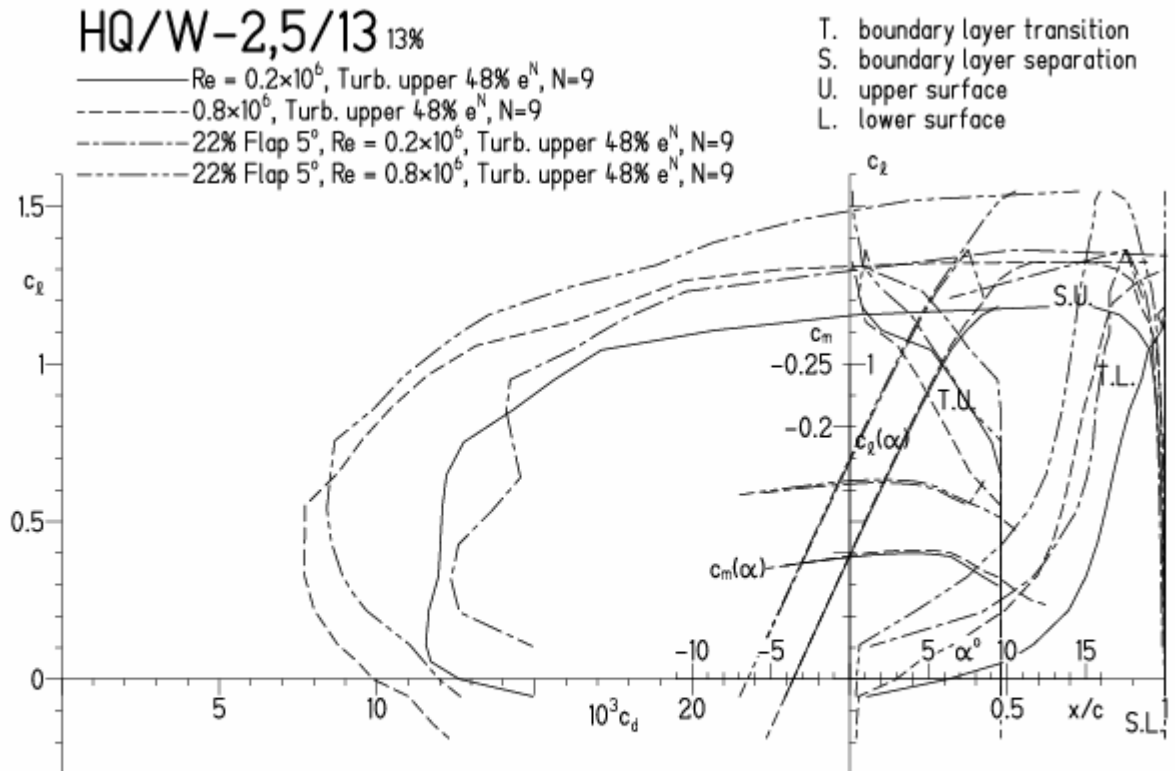


HQ/W-2,5/13, N=9, mit 5° Wölbklappenausschlag, Turbulatoreffekt
 (optimale Turbulatorposition bei 50% - 60% der Profiltiefe)

EPPLER 2005 V. 8.5.07 RUN 14.11 13:15

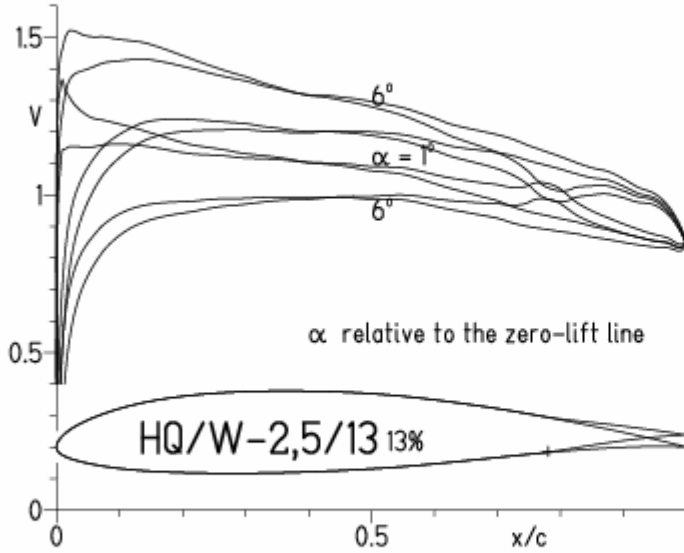


EPPLER 2005 V. 8.5.07 RUN 14.11 13:15

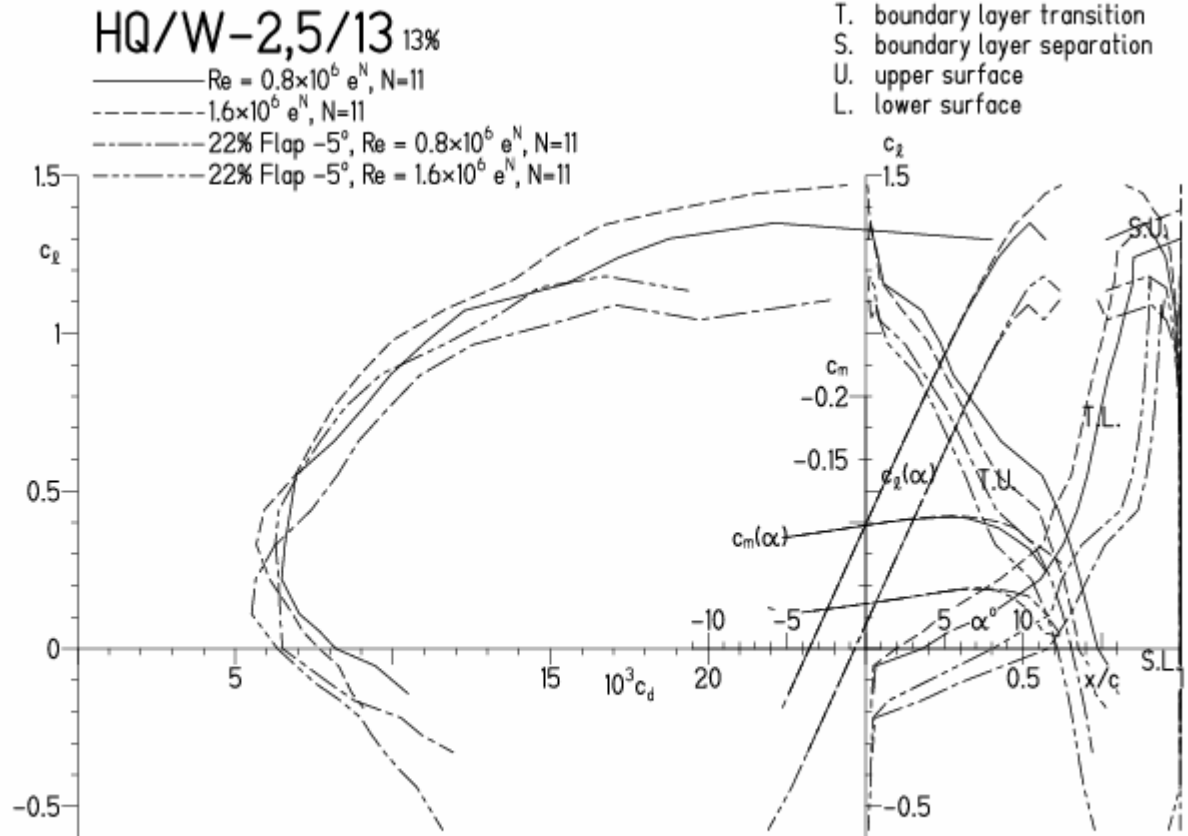


HQ/W-2,5/13, N=11, mit -5° Wölbklappenausschlag (Schnellflug)

EPPLER 2005 V. 8.5.07 RUN 2.4.11 12:40

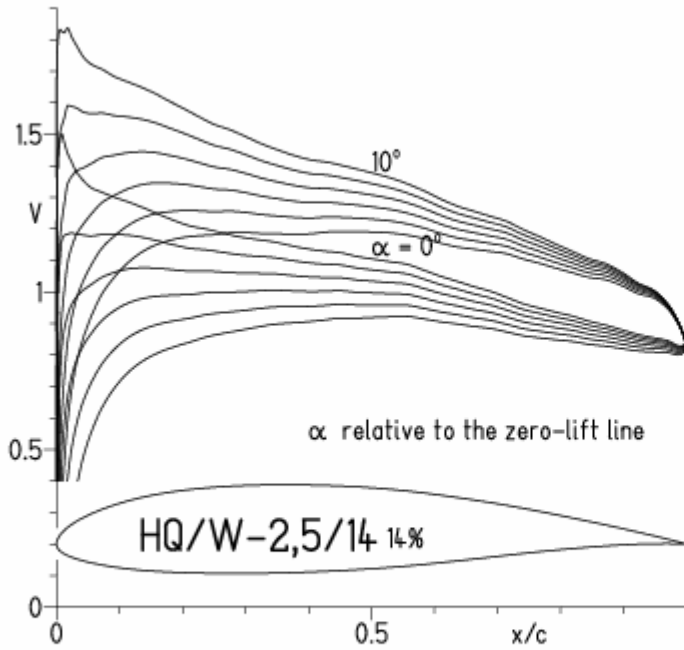


EPPLER 2005 V. 8.5.07 RUN 2.4.11 12:40

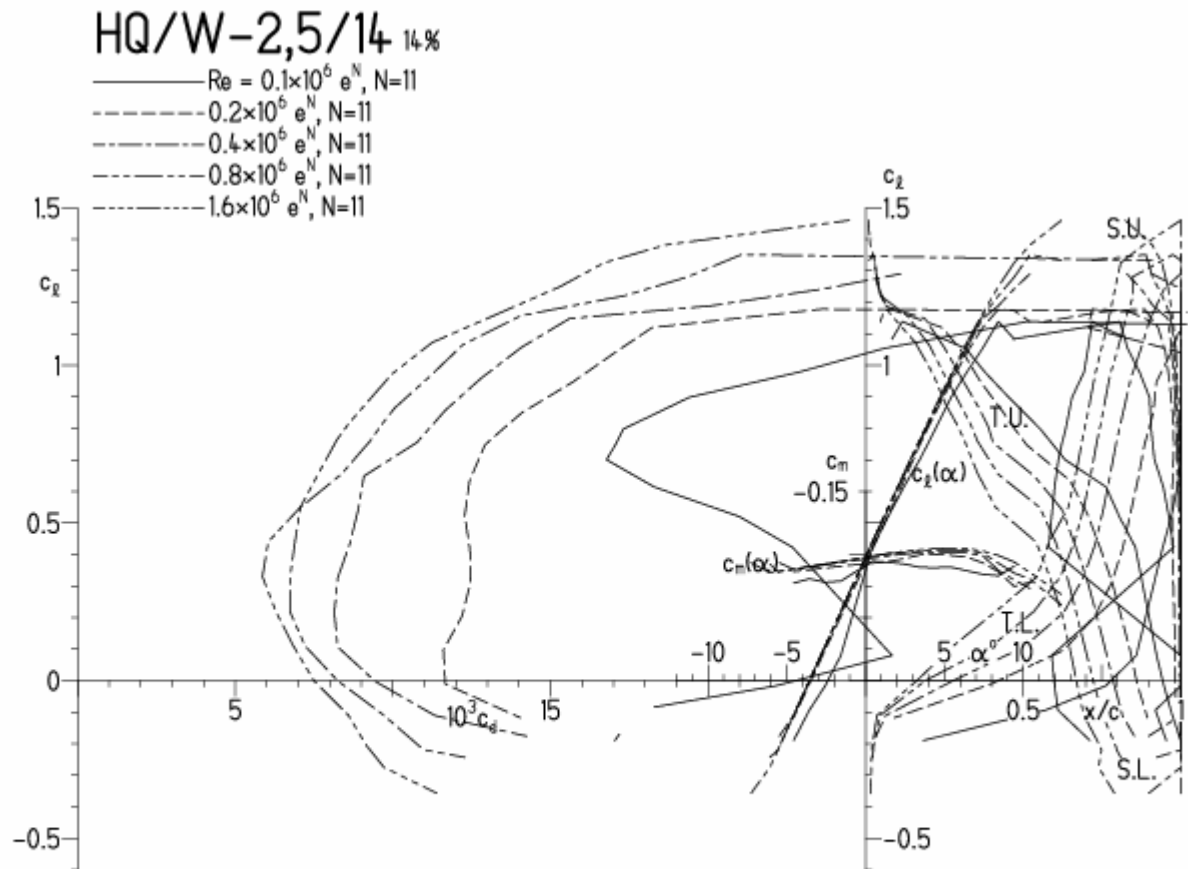


HQ/W-2,5/14, N=11

EPPLER 2005 V. 8.5.07 RUN 2.A.11 13:07

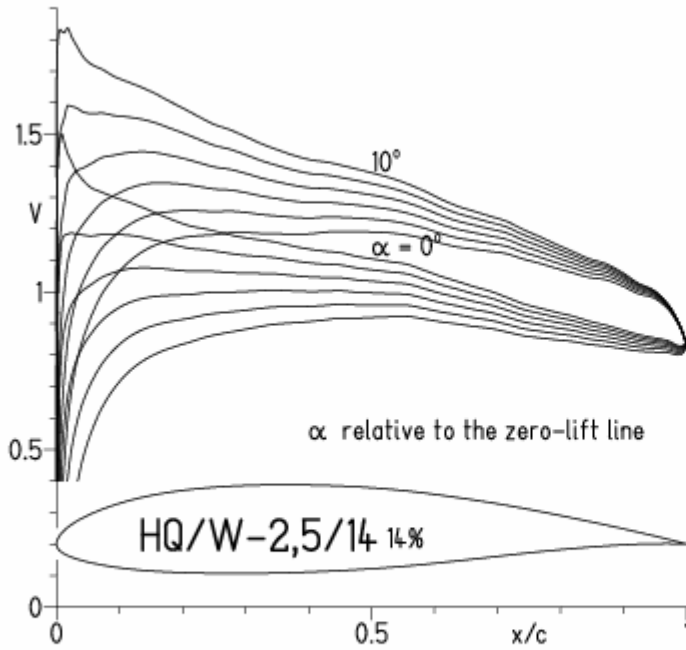


EPPLER 2005 V. 8.5.07 RUN 2.A.11 13



HQ/W-2,5/14, N=9

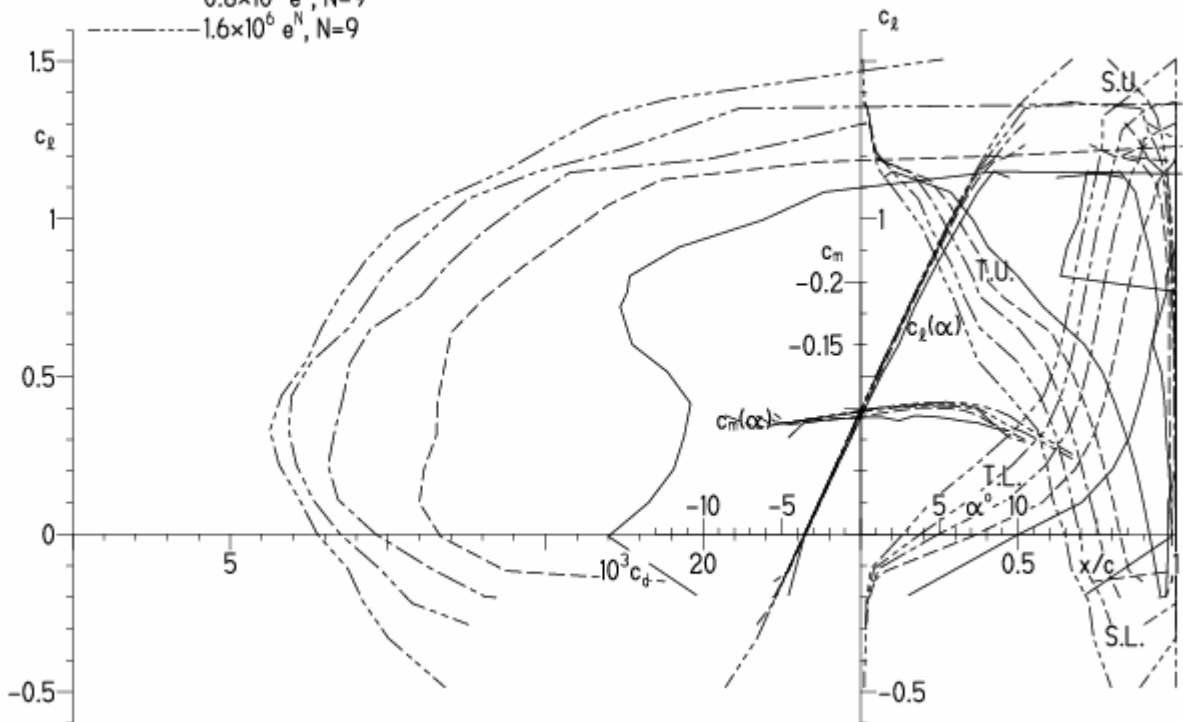
EPPLER 2005 V. 8.5.07 RUN 2.4.11 13:12



EPPLER

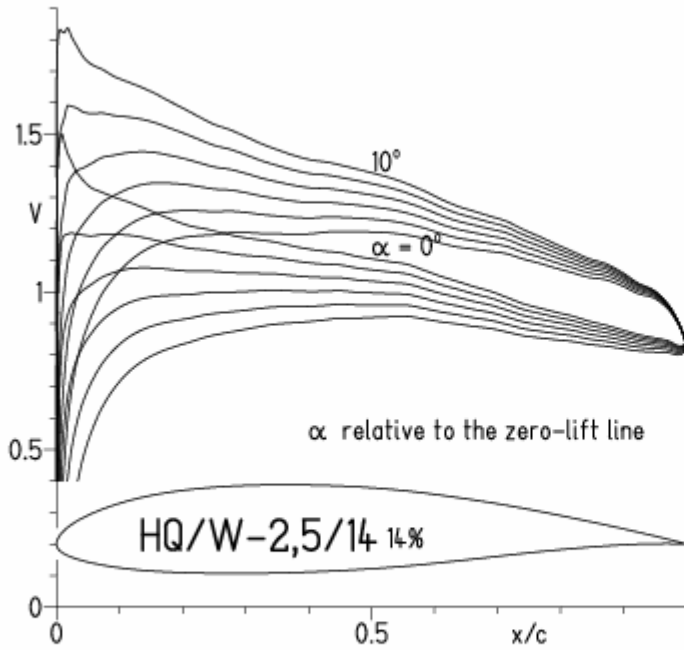
HQ/W-2,5/14 14%

- $Re = 0.1 \times 10^6 e^N, N=9$
- - - $0.2 \times 10^6 e^N, N=9$
- · - $0.4 \times 10^6 e^N, N=9$
- · · - $0.8 \times 10^6 e^N, N=9$
- · · · - $1.6 \times 10^6 e^N, N=9$



HQ/W-2,5/14, N=9, Turbulatoreffekt

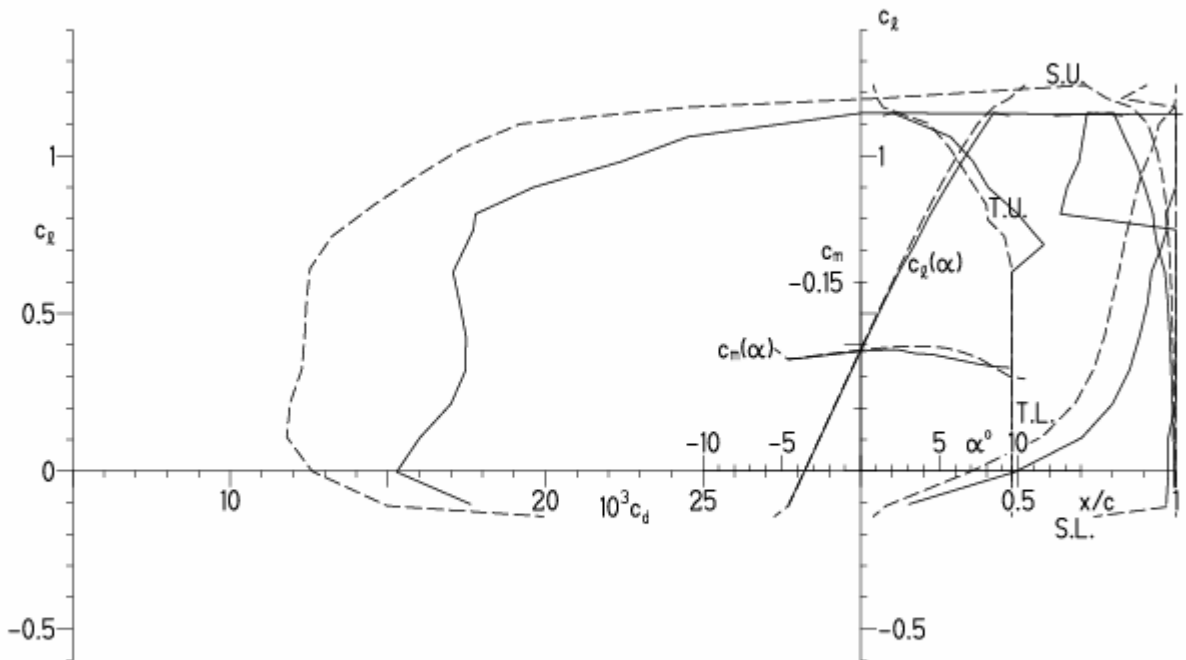
EPPLER 2005 V. 8.5.07 RUN 2.A.II 13:17



EPPLER 2005 V. 8.5.07 RUN 2.A.II 13:17

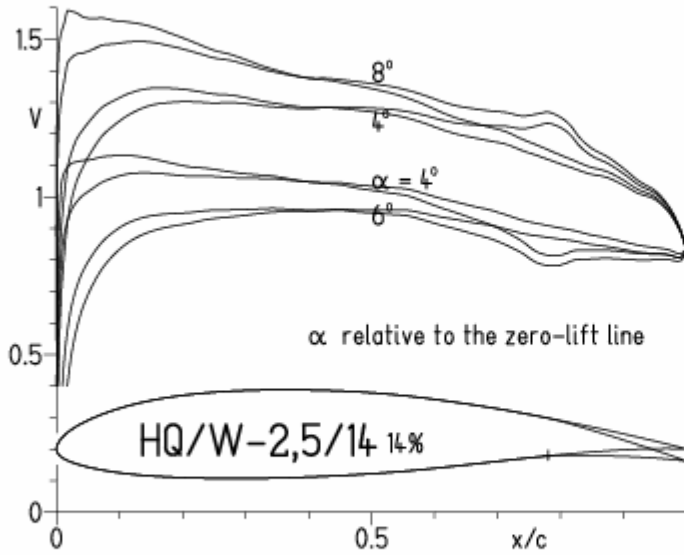
HQ/W-2,5/14 14%

— Re = 0.1×10^6 , Turb. upper 48% e^N, N=9
 - - - 0.2×10^6 , Turb. upper 48% e^N, N=9



HQ/W-2,5/14, N=11, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 4.A.11 18:13

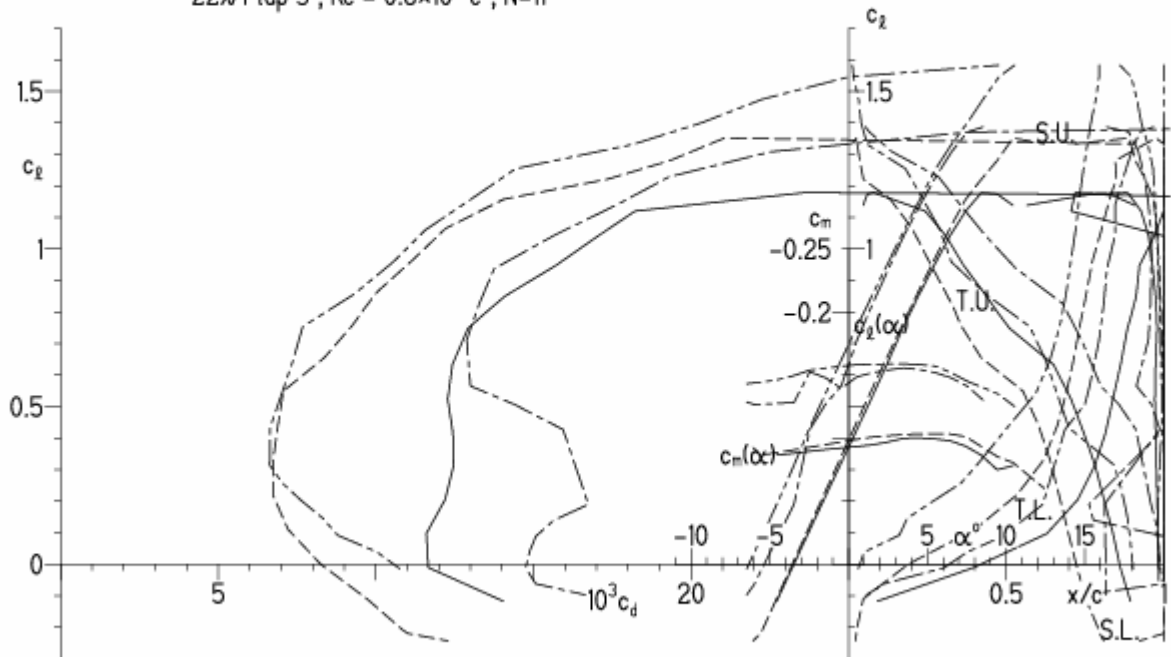


EPPLER 2005 V. 8.5.07 RUN 4.A.11 18:13

HQ/W-2,5/14 14%

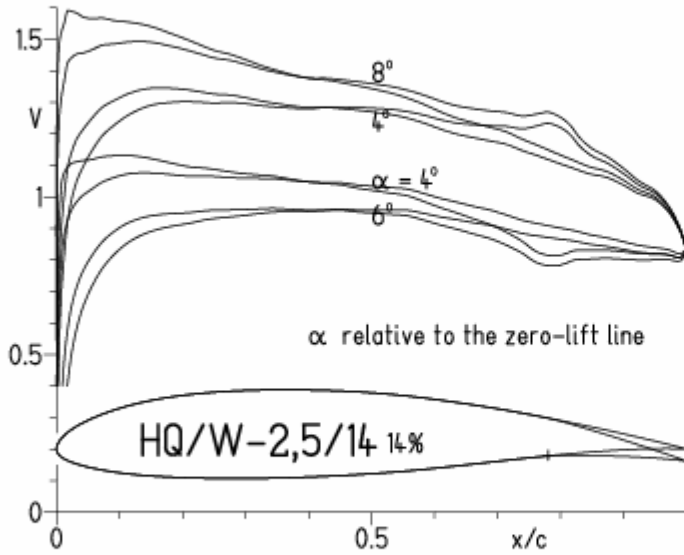
- $Re = 0.2 \times 10^6$, $N=11$
- - - 0.8×10^6 , $N=11$
- · - 22% Flap 5° , $Re = 0.2 \times 10^6$, $N=11$
- · - 22% Flap 5° , $Re = 0.8 \times 10^6$, $N=11$

- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface



HQ/W-2,5/14, N=9, mit 5° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 4.4.11 18:21

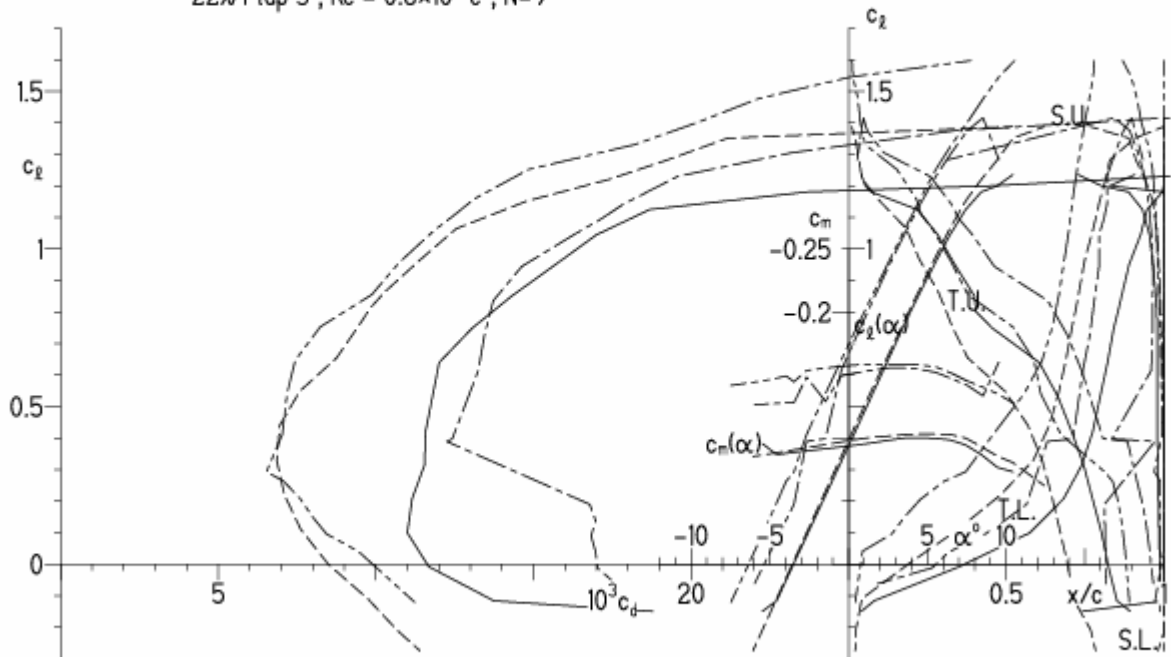


EPPLER 2005 V. 8.5.07 RUN 4.4.11 18:21

HQ/W-2,5/14 14%

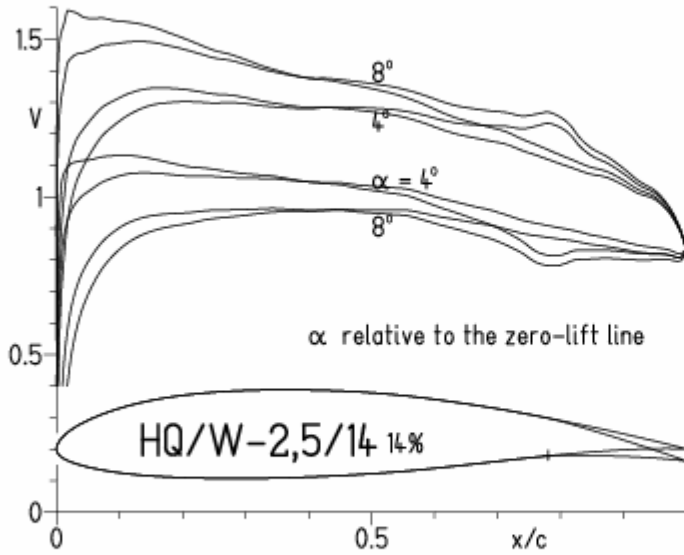
- $Re = 0.2 \times 10^6$ e^N, N=9
- - - 0.8×10^6 e^N, N=9
- · - · - 22% Flap 5°, $Re = 0.2 \times 10^6$ e^N, N=9
- · - · - 22% Flap 5°, $Re = 0.8 \times 10^6$ e^N, N=9

- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface



HQ/W-2,5/14, N=9, mit 5° Wölbklappenausschlag, Turbulatoreffekt
 (optimale Turbulatorposition bei 50% - 60% der Profiltiefe)

EPPLER 2005 V. 8.5.07 RUN 4.A.11 18:37

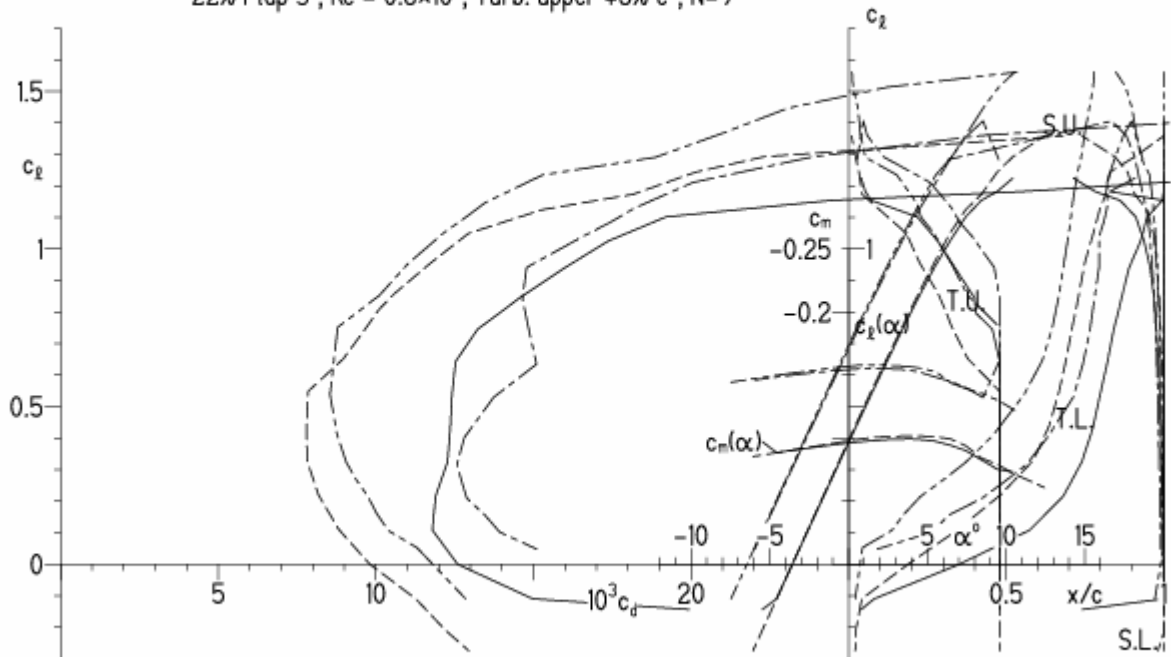


EPPLER 2005 V. 8.5.07 RUN 4.A.11 18

HQ/W-2,5/14 14%

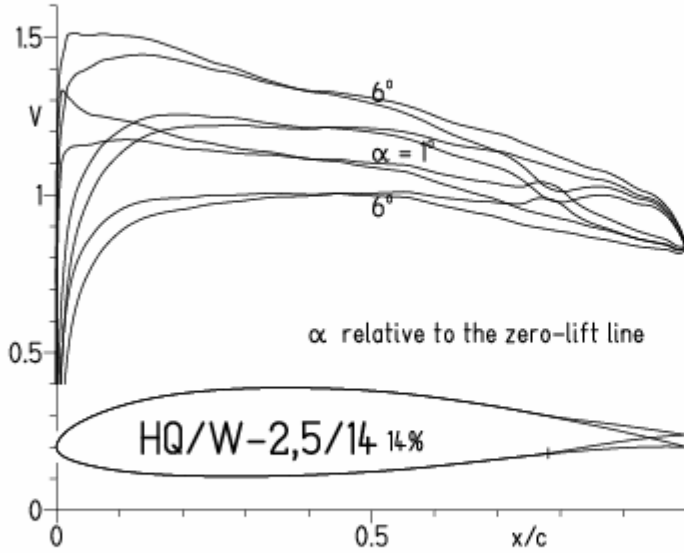
- Re = 0.2×10^6 , Turb. upper 48% e^N , N=9
- - - 0.8×10^6 , Turb. upper 48% e^N , N=9
- · - · 22% Flap 5°, Re = 0.2×10^6 , Turb. upper 48% e^N , N=9
- · - · 22% Flap 5°, Re = 0.8×10^6 , Turb. upper 48% e^N , N=9

- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface

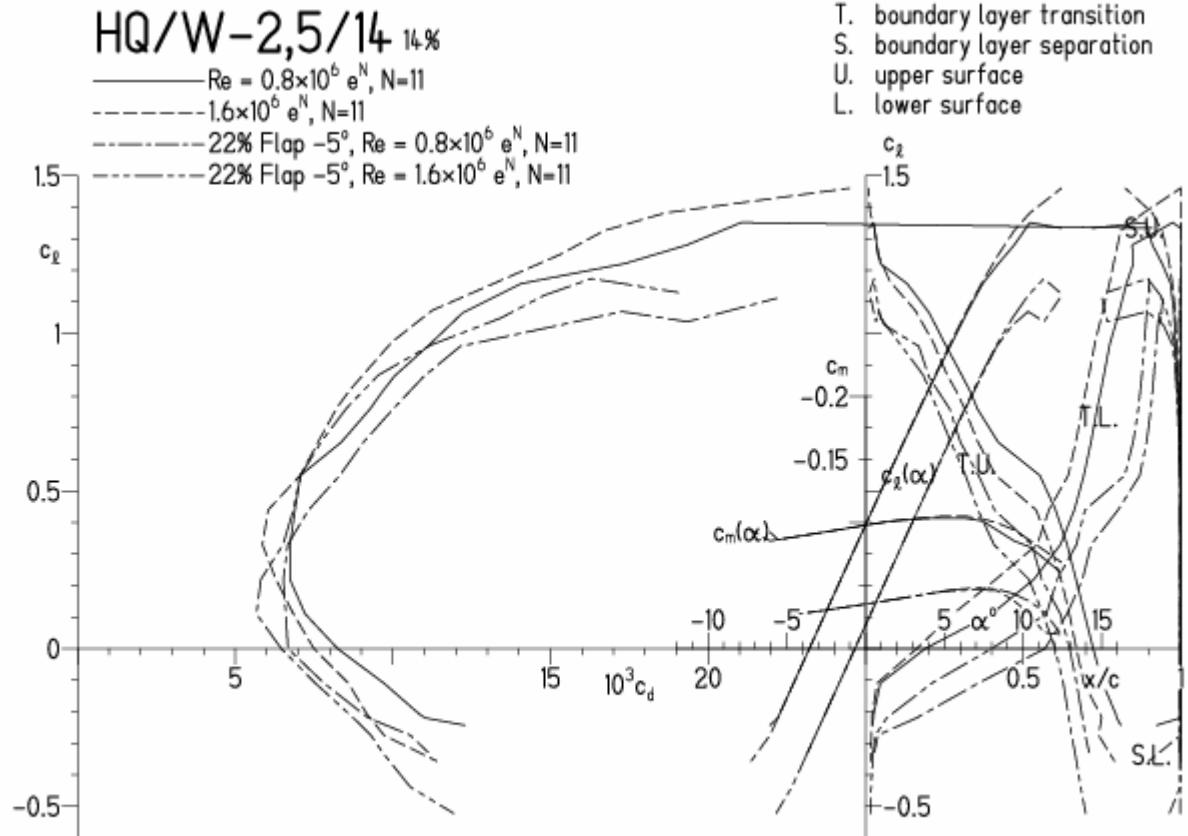


HQ/W-2,5/14, N=11, mit -5° Wölbklappenausschlag (Schnellflug)

EPPLER 2005 V. 8.5.07 RUN 4.4.11 19:12

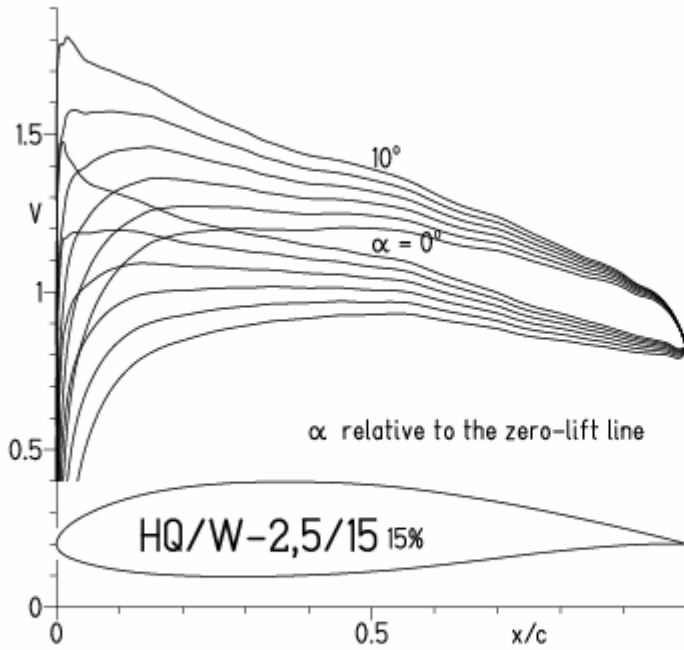


EPPLER

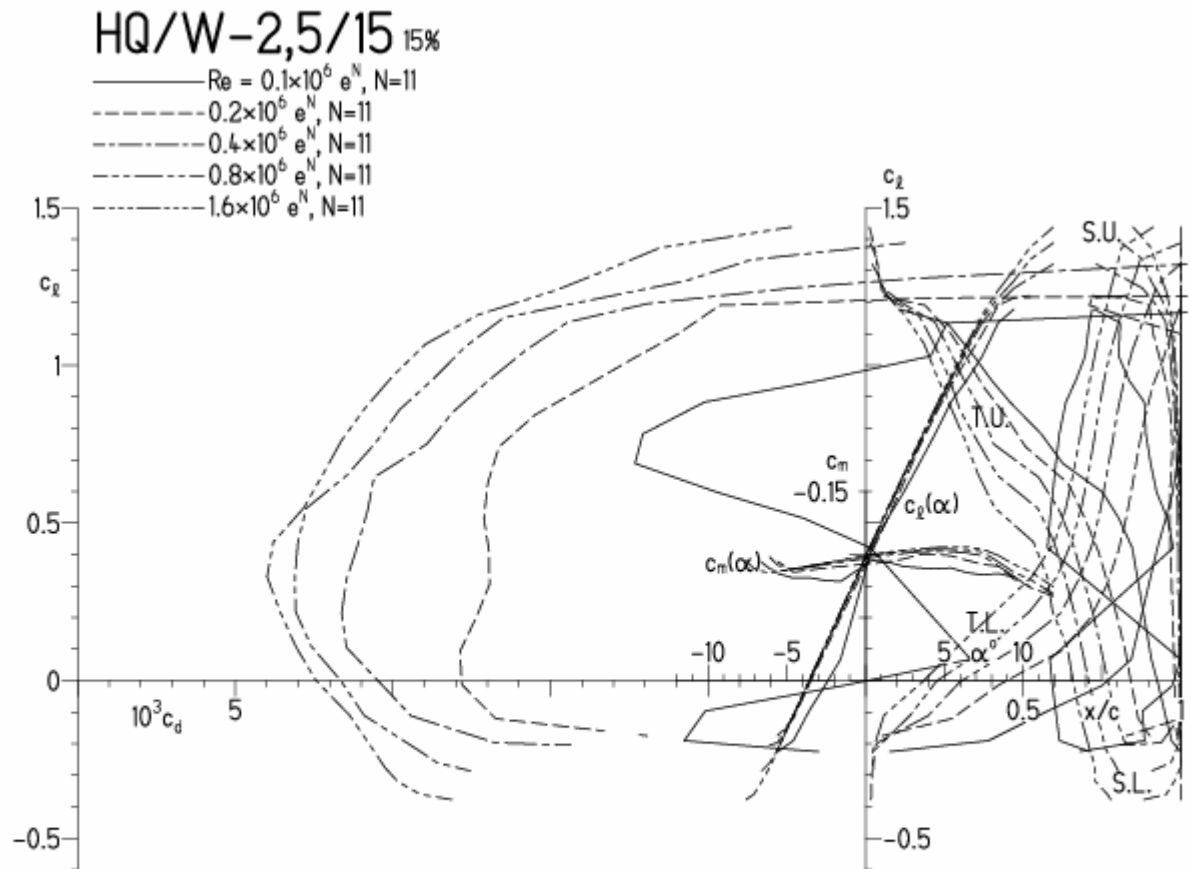


HQ/W-2,5/15, N=11

EPPLER 2005 V. 8.5.07 RUN 5.4.11 15:52

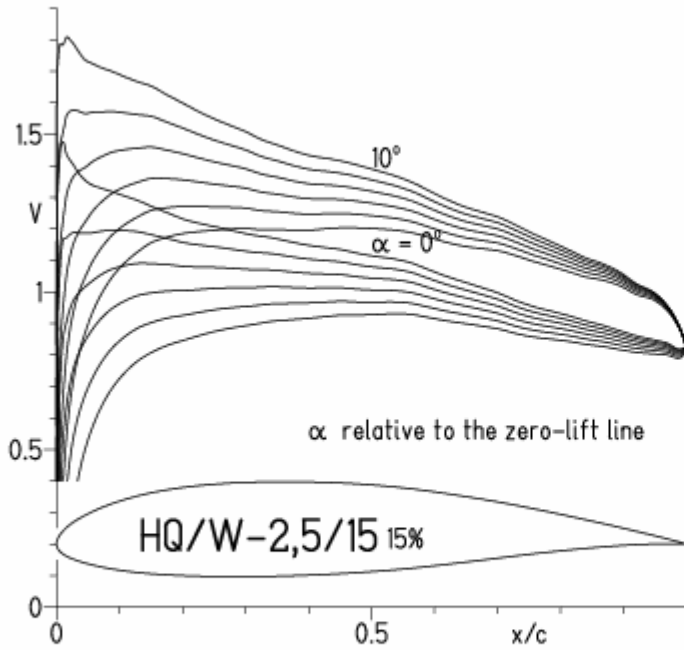


EPPLER 2005 V. 8.5.07 RUN 5

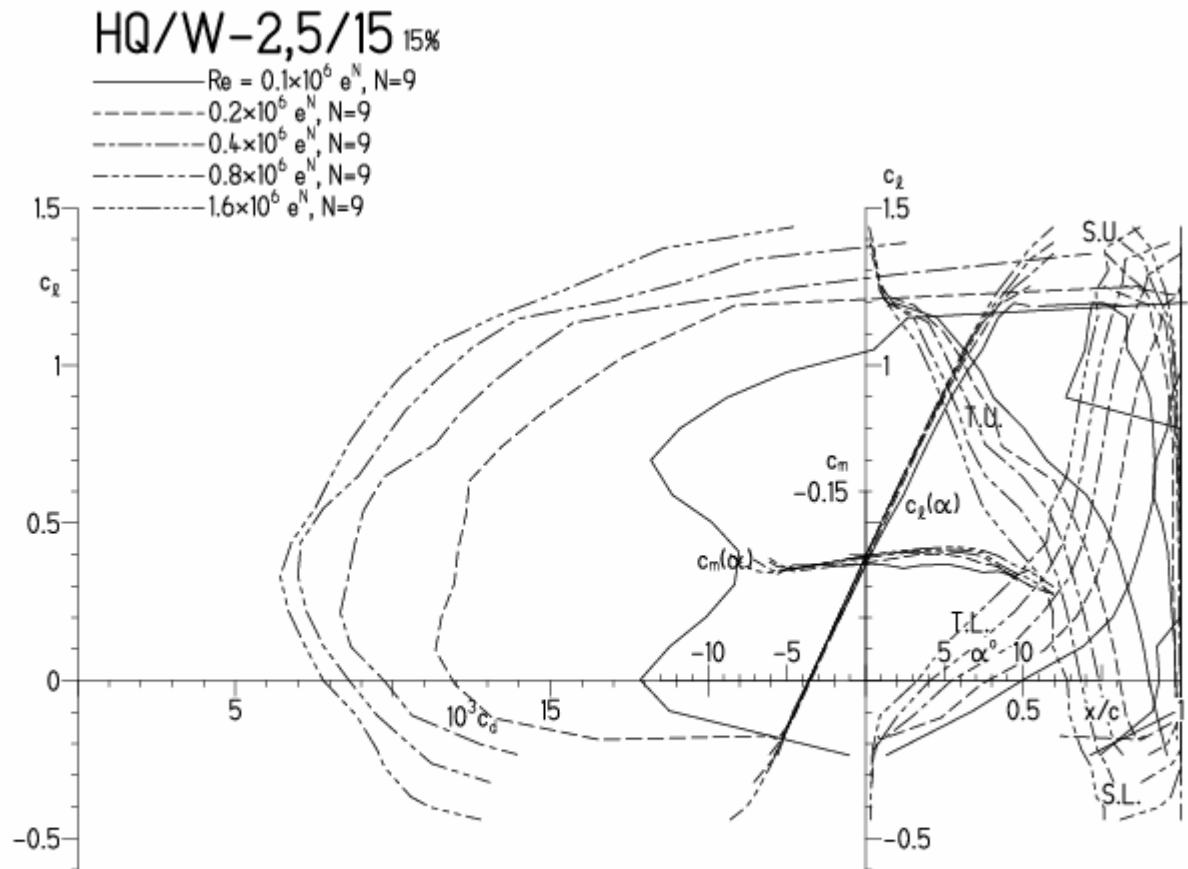


HQ/W-2,5/15, N=9

EPPLER 2005 V. 8.5.07 RUN 5.A.11 16:02

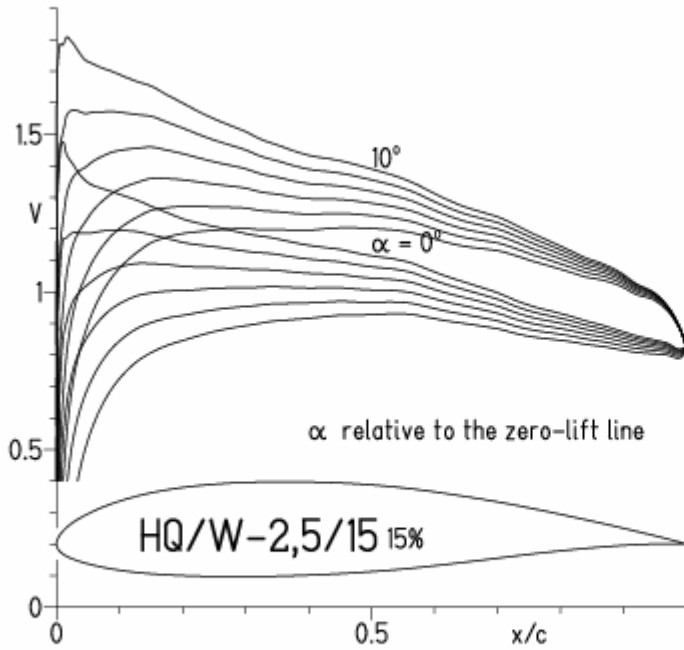


EPPLER 2005 V. 8.5.07 RUN 5.A.11 16:02



HQ/W-2,5/15, N=9, Turbulatoreffekt

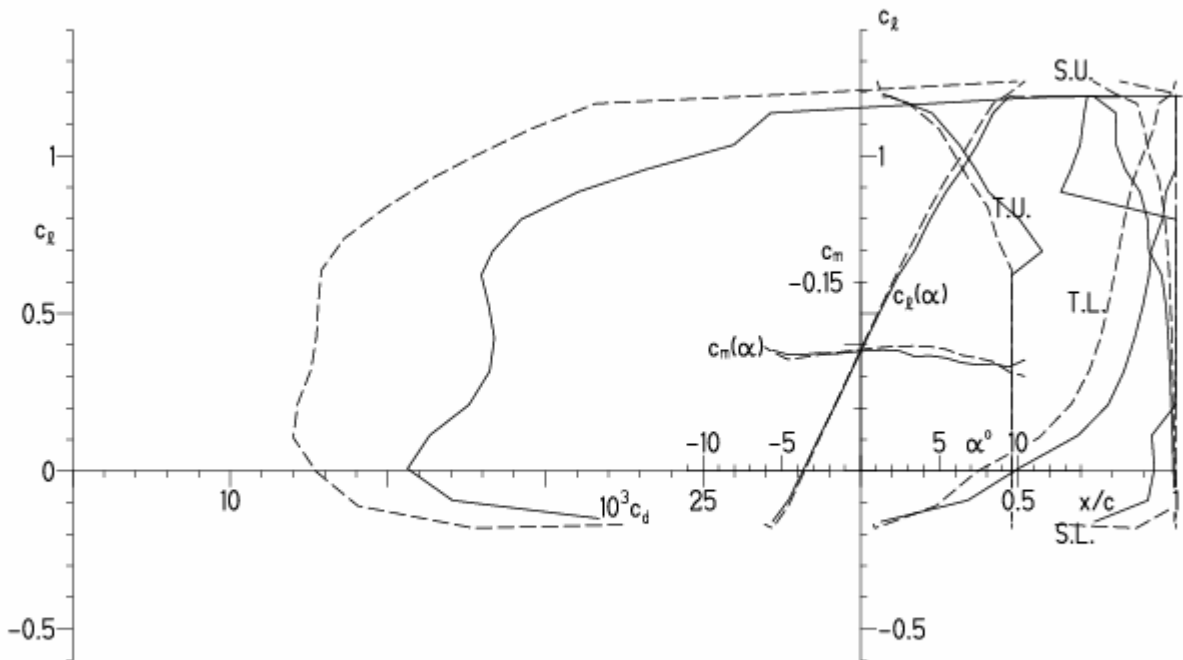
EPPLER 2005 V. 8.5.07 RUN 5.4.11 16:08



EPPLER 200

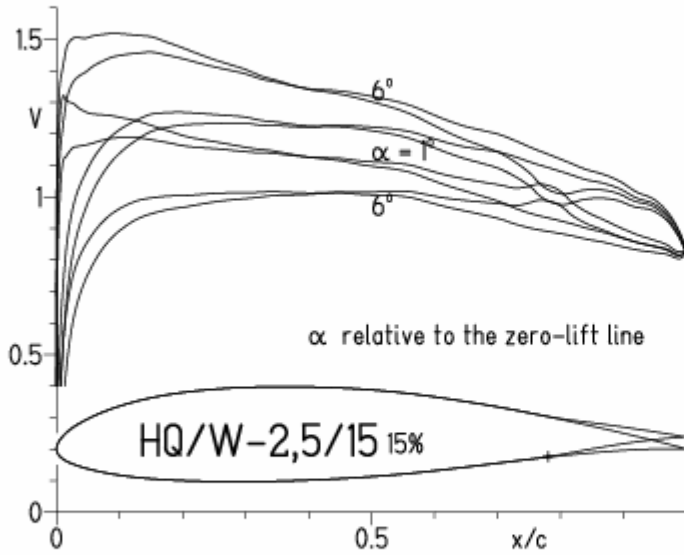
HQ/W-2,5/15 15%

— $Re = 0.1 \times 10^6$, Turb. upper 48% e^N , N=9
 - - - 0.2×10^6 , Turb. upper 48% e^N , N=9

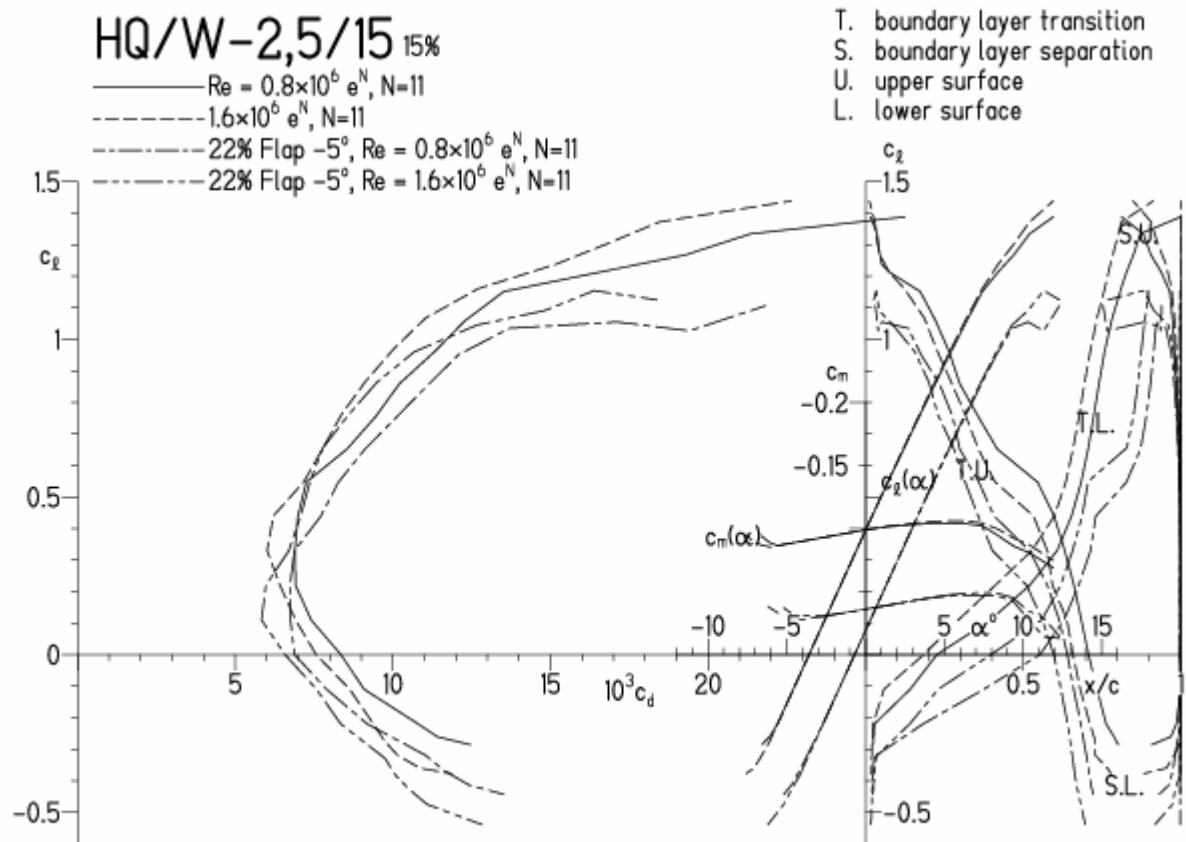


HQ/W-2,5/15, N=11, mit -5° Wölbklappenausschlag (Schnellflug)

EPPLER 2005 V. 8.5.07 RUN 5.4.11 16:28

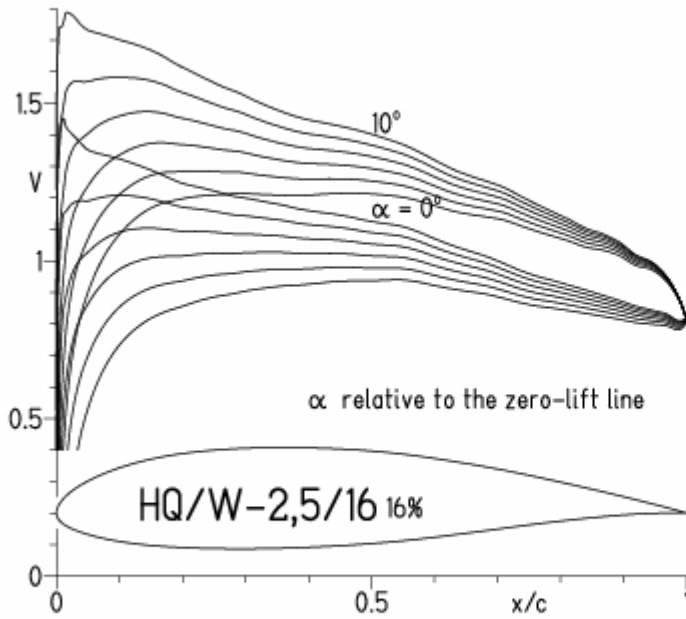


EPPLER 2005 V. 8.5.



HQ/W-2,5/16, N=11

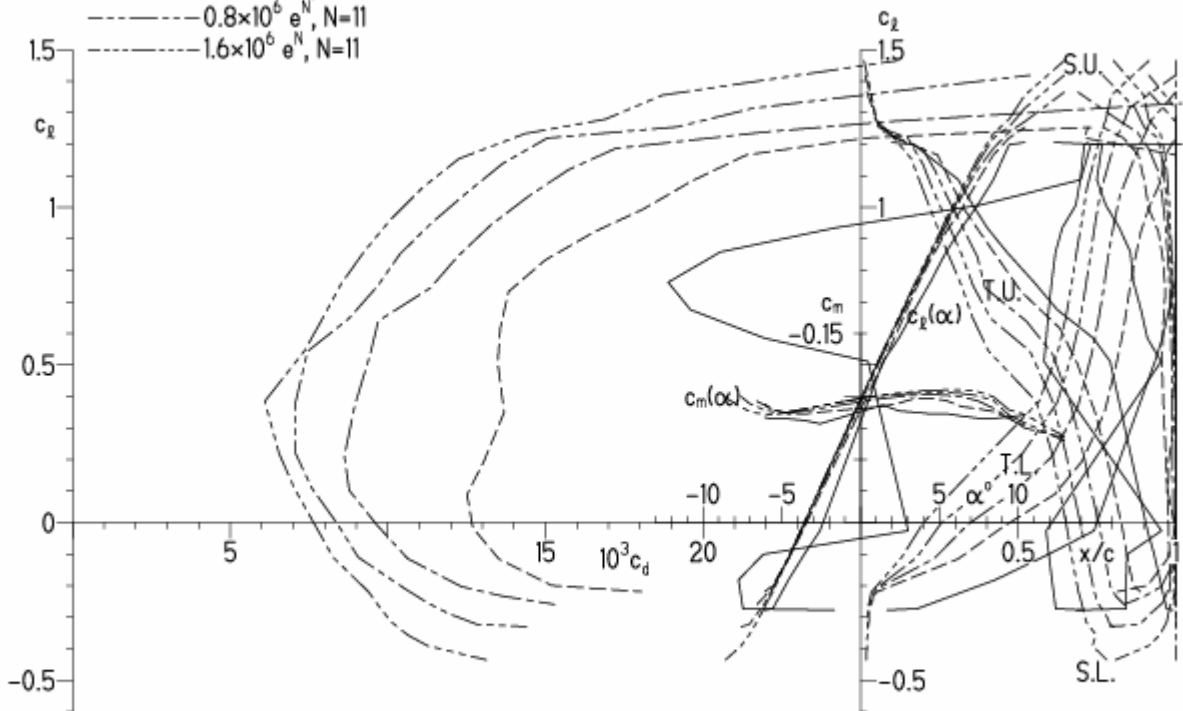
EPPLER 2005 V. 8.5.07 RUN 5.4.11 16:51



EPPLER

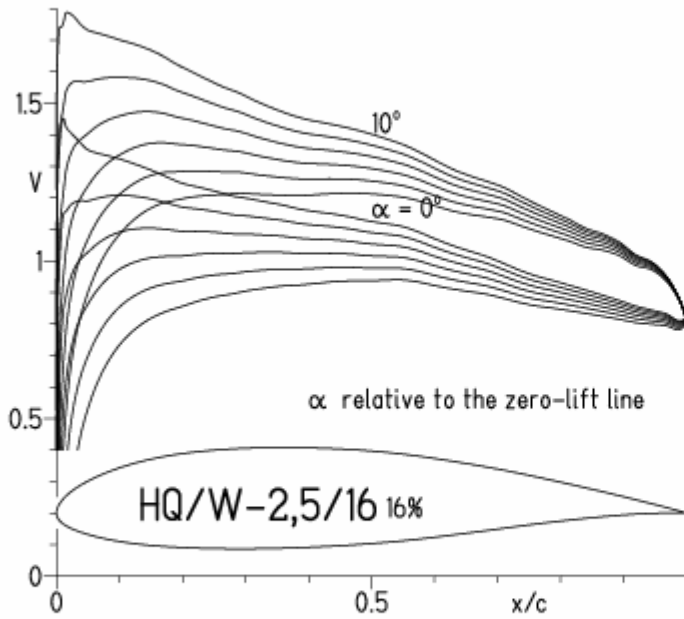
HQ/W-2,5/16 16%

- $Re = 0.1 \times 10^6$, 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 , $N=11$
- · - · - 1.6×10^6 , e^N , $N=11$

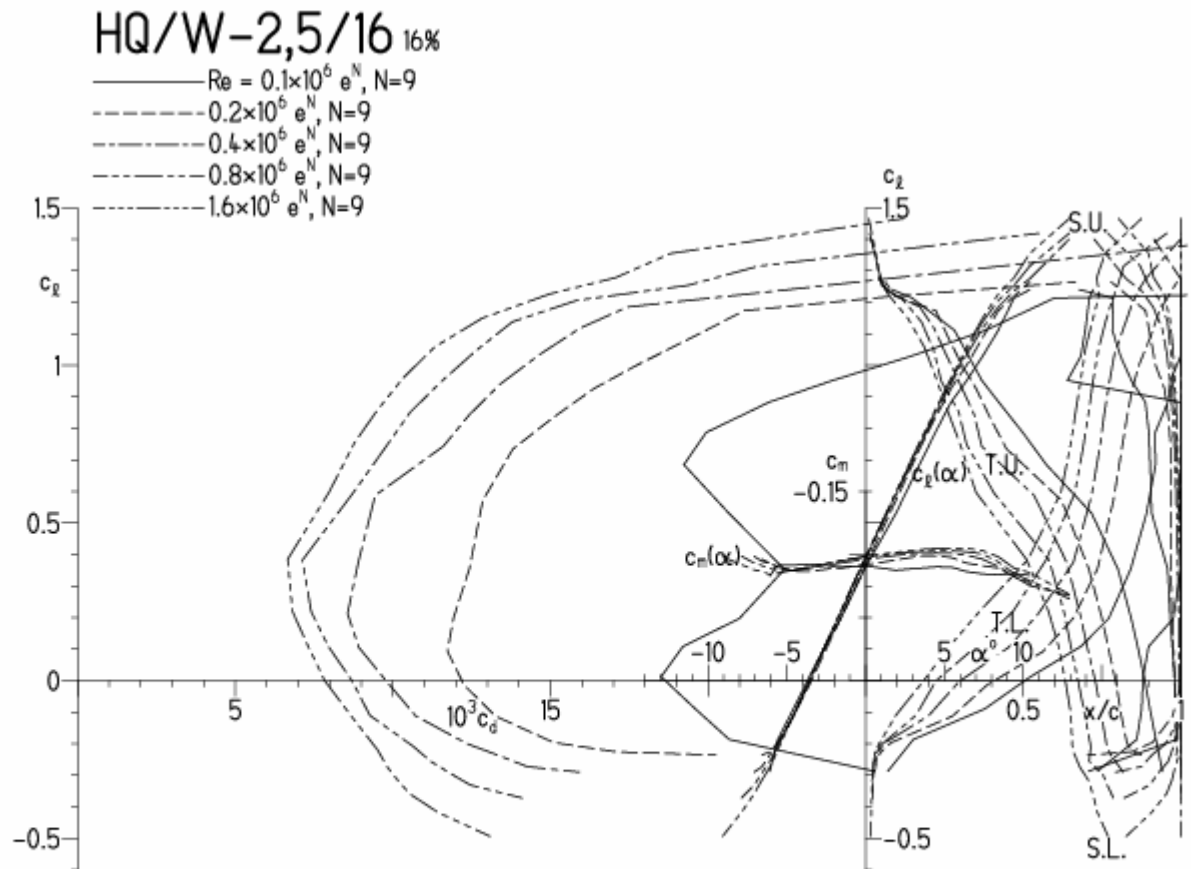


HQ/W-2,5/16, N=9

EPPLER 2005 V. 8.5.07 RUN 5.A.II 17:01

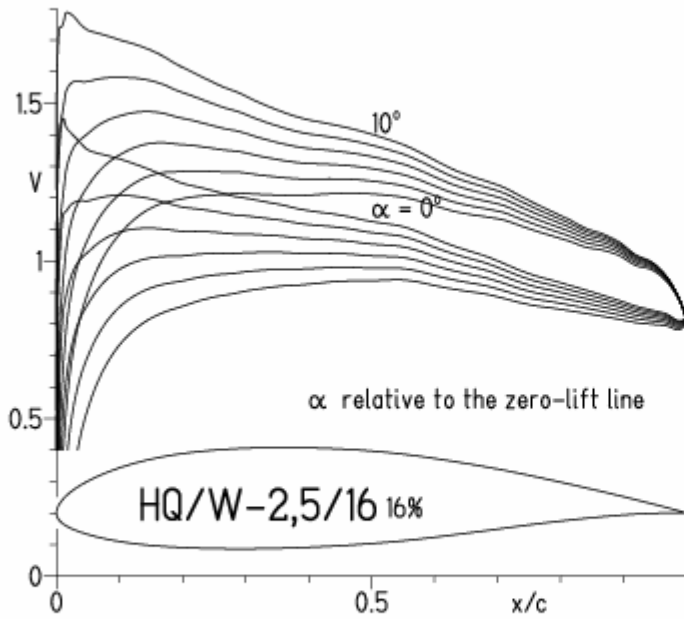


EPPLER 2005 V. 8.5.07 RUN 5.A.II 17:01



HQ/W-2,5/16, N=9, Turbulatoreffekt

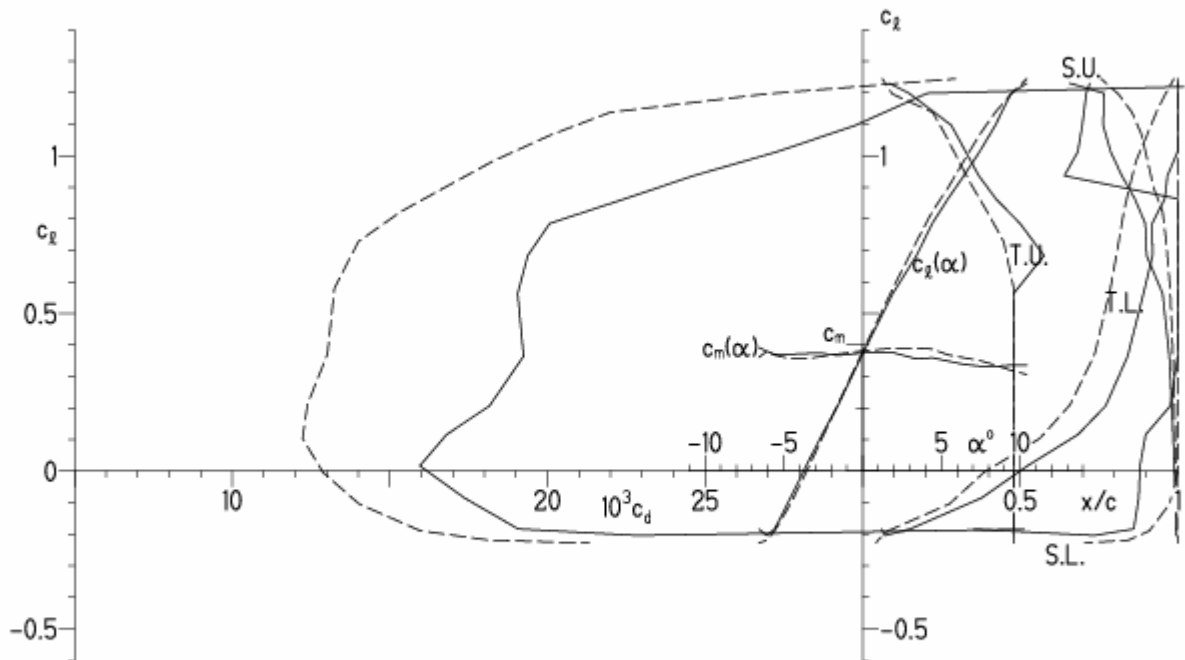
EPPLER 2005 V. 8.5.07 RUN 5.4.11 17:06



EPPLER 2005 V.

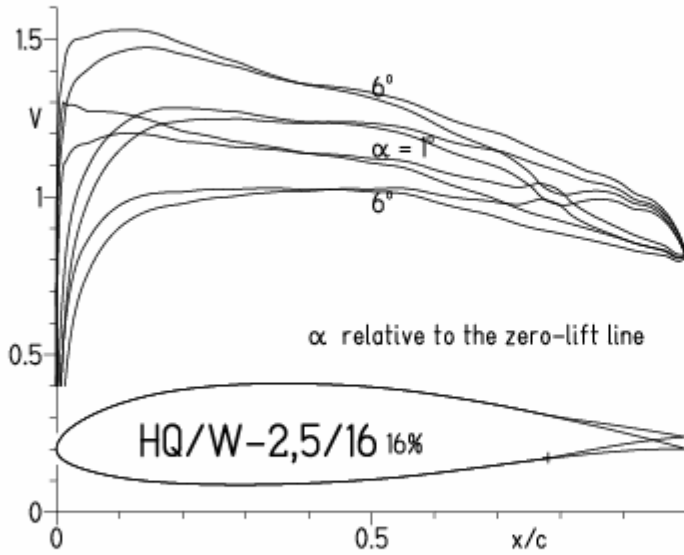
HQ/W-2,5/16 16%

— $Re = 0.1 \times 10^6$, Turb. upper 48% e^N , N=9
 - - - 0.2×10^6 , Turb. upper 48% e^N , N=9



HQ/W-2,5/16, N=11, mit -5° Wölbklappenausschlag (Schnellflug)

EPPLER 2005 V. 8.5.07 RUN 5.A.11 17:21



EPPLER 2005 V. 8.5.07 RUN 5.A.11 17:21

