

SCOPO

Lo scopo di questo studio era di mostrare gli effetti di diversi strumenti su vari materiali.

MATERIALI E METODI

Sei diversi blocchi monolitici sono stati fresati partendo dallo stesso progetto CAD.

I campioni, trattati come richiesto dal protocollo, sono stati divisi in tre parti: mesio-buccale, disto-buccale e palatino.

Ogni parte è stata trattata con diverse frese e lucidature. Le misurazioni sono state eseguite da Alicona Infinite Focus.

MISURE

La misura della rugosità **Ra**, espressa in micron, è il valore medio aritmetico degli scostamenti (presi in valore assoluto) del profilo reale della superficie rispetto alla linea media.

Rq, invece, rappresenta la media quadratica degli scostamenti dei punti del profilo dalla linea media; tale parametro, essendo una media quadratica, è più sensibile ai bruschi scostamenti del profilo da un andamento regolare ed è in generale maggiore rispetto al valore **Ra**.

Rz è la media aritmetica dei valori assoluti dei 5 picchi più alti e delle 5 valli più profonde compresi in un intervallo.

RISULTATI

I risultati mostrano che le diverse aree devono essere trattate correttamente per avere una superficie molto lucida, con gli strumenti appropriati, seguendo il protocollo corretto.

CONCLUSIONI

Entro i limiti di questo studio, la misurazione dei diversi blocchi trattati mostra che l'uso corretto del "Digital Prosthetic Essential Kit" del Dr. Claudio De Vito produce una superficie migliore, a volte anche della sola glasura.



CE 0197

Digital Prosthetic Essential Kit

Dr. Claudio de Vito - Sorrento (Italy) · REF 4685

Preparation

 DM10 314 009	 S6856 314 012	 6847KRD 314 016	 S6368 314 023	 845KRD 314 025
 H375R 314 012	 8847KR 314 016	 8368 314 023	 8845KR 314 025	

Finishing

Temp/Comp

 H375R 314 012	 H97A 314 011
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Hybrid/Ceramic

 8847KR 314 016	 H97A 314 011
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Cer/ZrO₂

 8368 314 023	 ZR6390 314 016
 S6368 314 023	 9686 204 040

Polishing

Temp/Comp

 94021M 204 130	 94021F 204 130
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Ceramic

 94021C 204 100	 94021F 204 100
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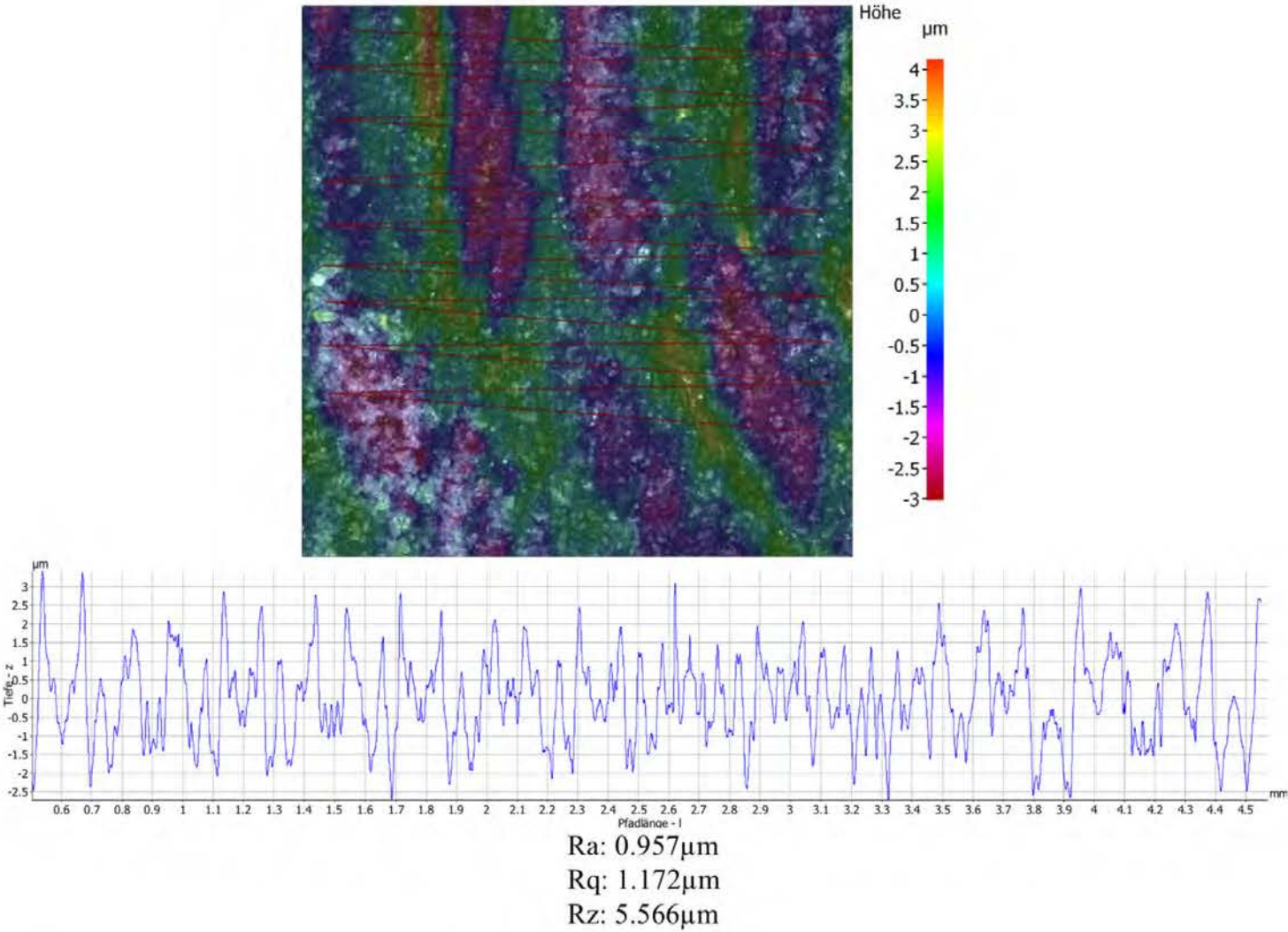
ZrO₂

 94021C 204 050	 94021F 204 050
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Messprotokoll Profilmessung

Probe A-1 partical treatment_x50

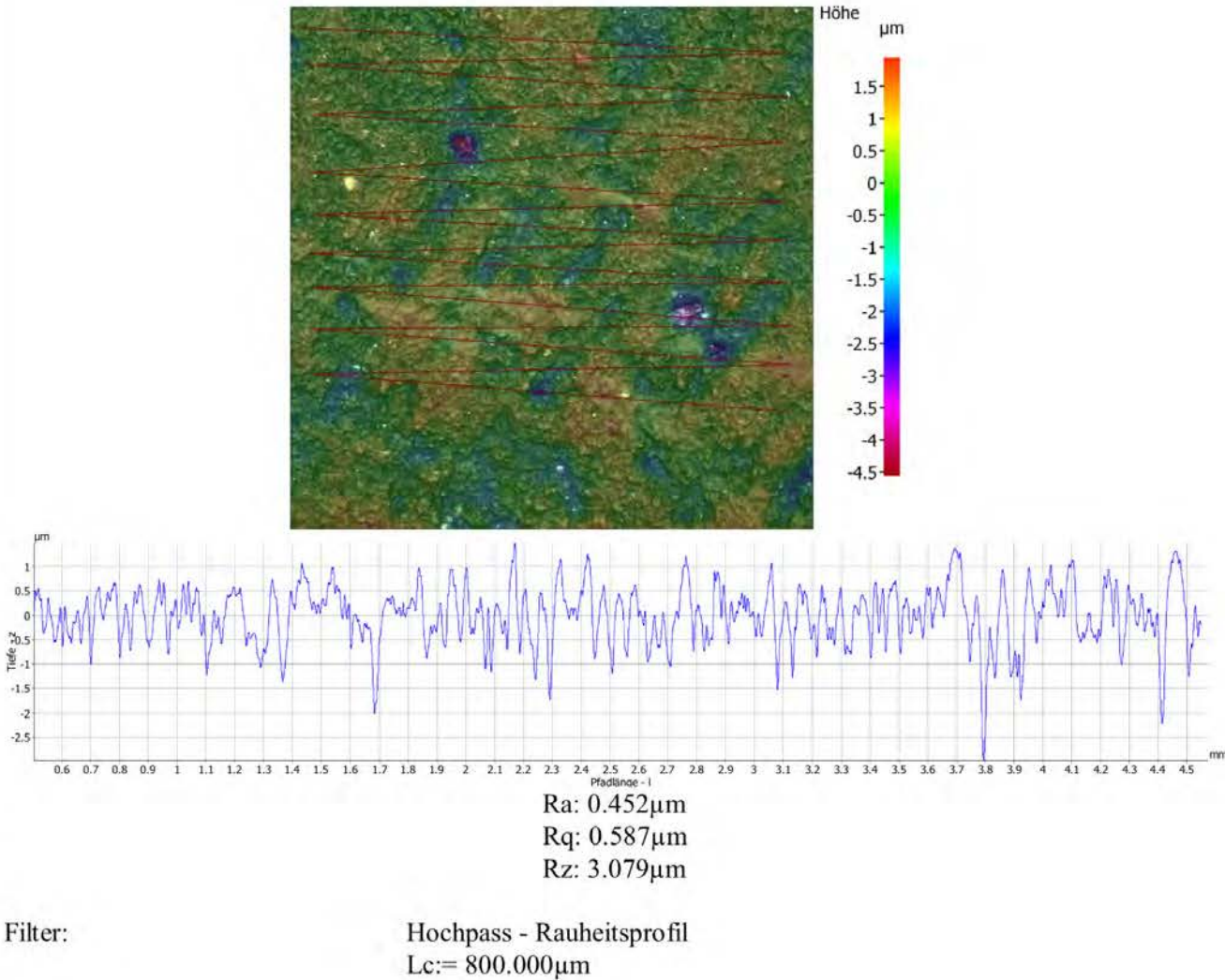


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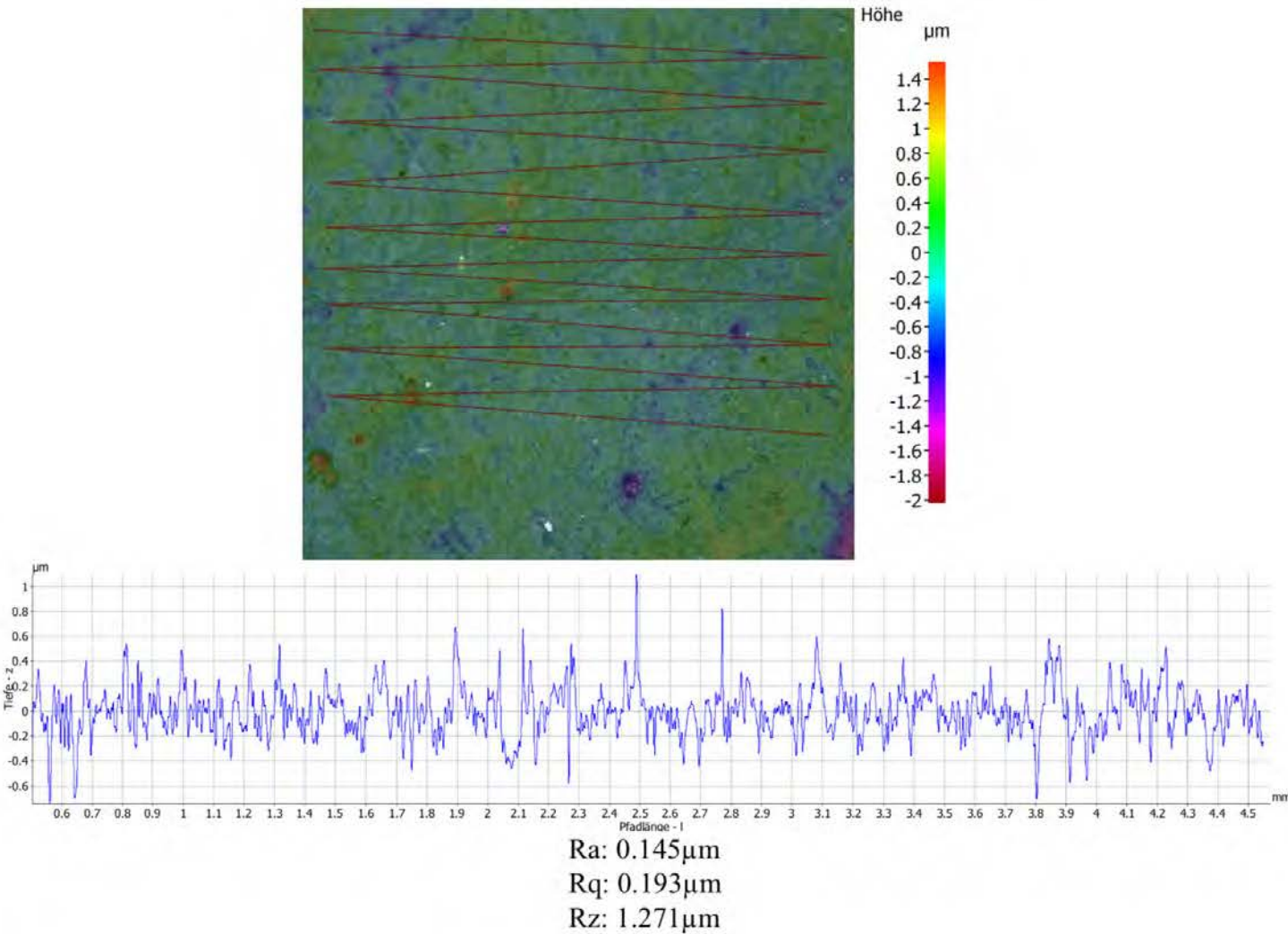
Messprotokoll Profilmessung

Probe A-1 palatinal_x50



Messprotokoll Profilmessung

Probe A-1 complete treatment_x50



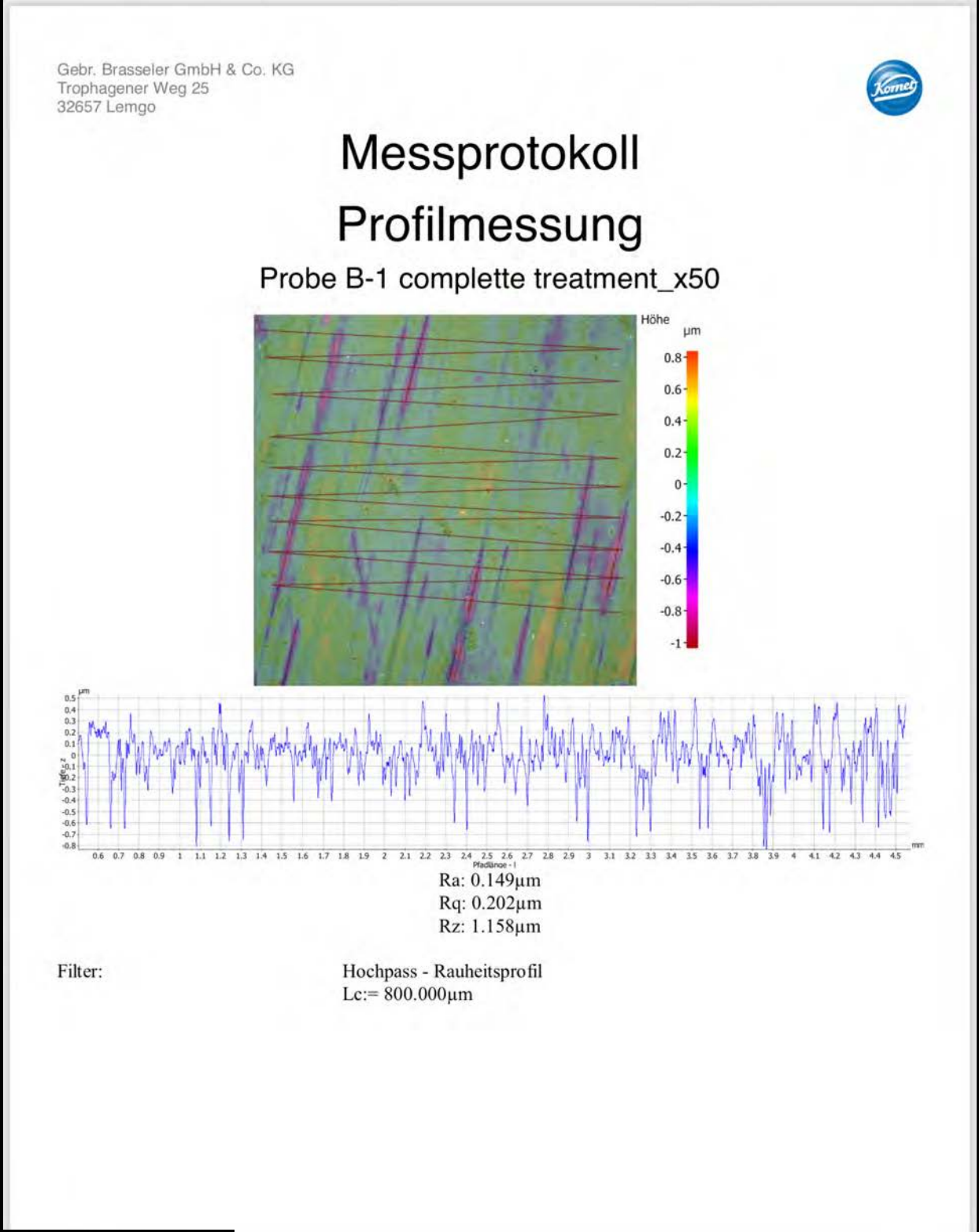
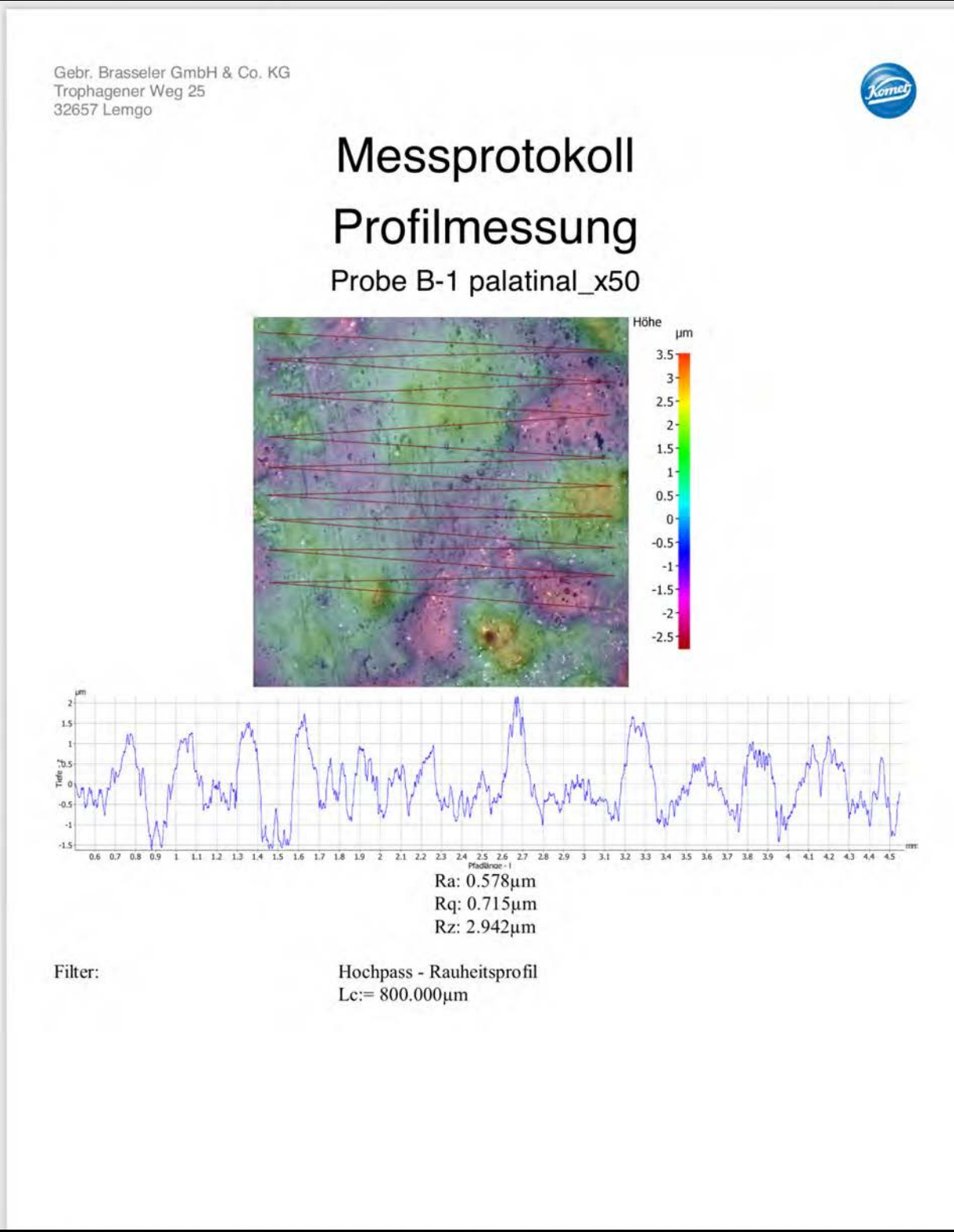
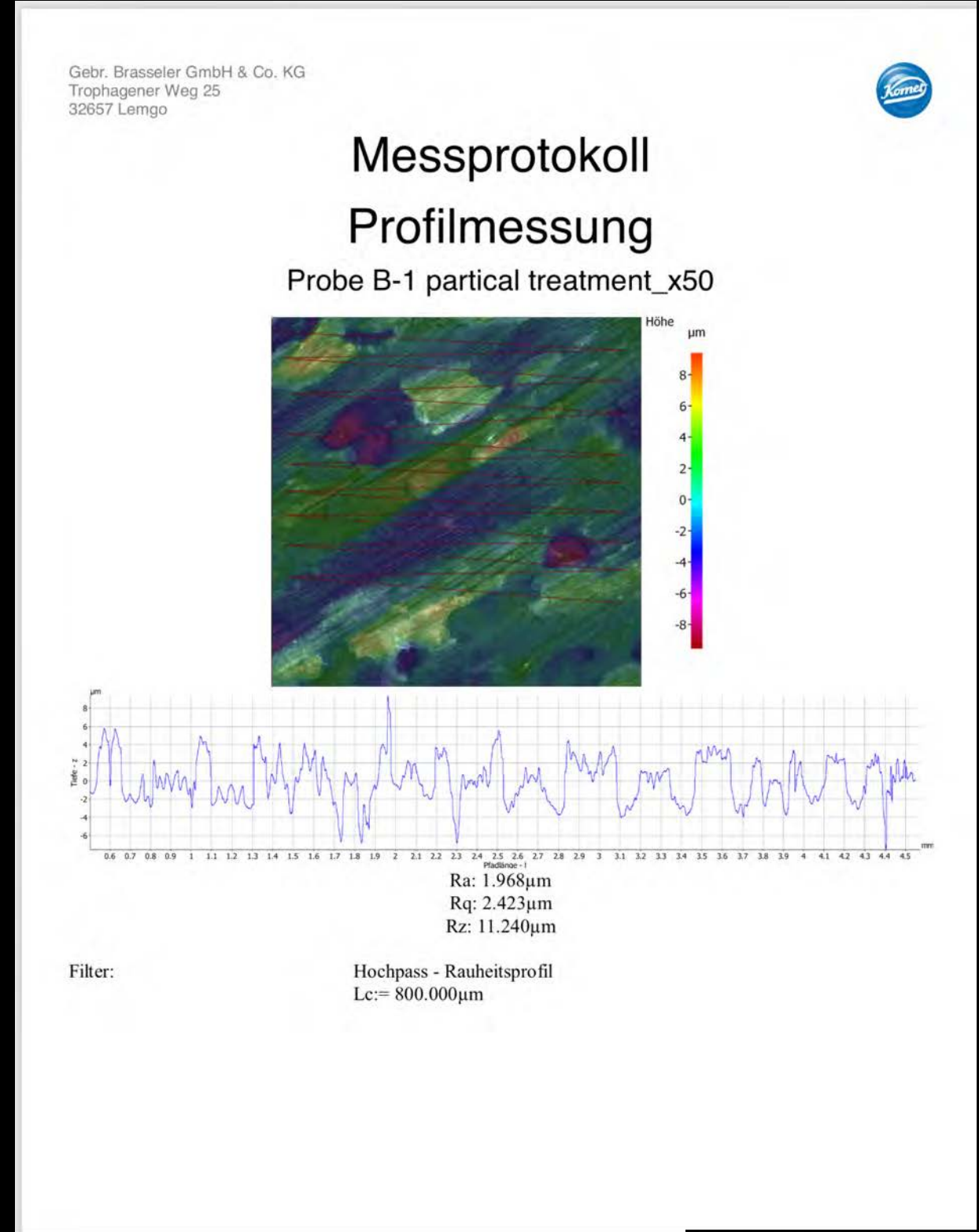
Filter: Hochpass - Rauheitsprofil
Lc:= 800.000µm

VITA Enamic



Probe B			
Nr.	Benennung	Rz Ergebniss [μm]	Sonstiges
1	Probe B-1 partical treatment	11,2	grobe Oberfläche
2	Probe B-2 partical treatment	10,9	grobe Oberfläche
3	Probe B-1 complete treatment	1,2	-
4	Probe B-2 complete treatment	1,0	-
5	Probe B-1 palatinal	2,9	-
6	Probe B-2 palatinal	2,4	-

The top photograph shows a dental bridge with a central pontic and two abutments. Red lines point from labels 1, 2, 3, and 4 to specific areas: 1 points to the left abutment, 2 to the left side of the pontic, 3 to the right side of the pontic, and 4 to the right abutment. The bottom photograph is a close-up of the pontic area, with red lines pointing from labels 5 and 6 to the palatal and lingual sides of the pontic respectively.



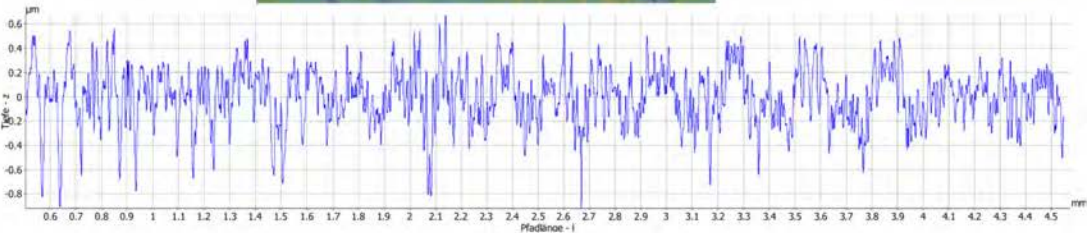
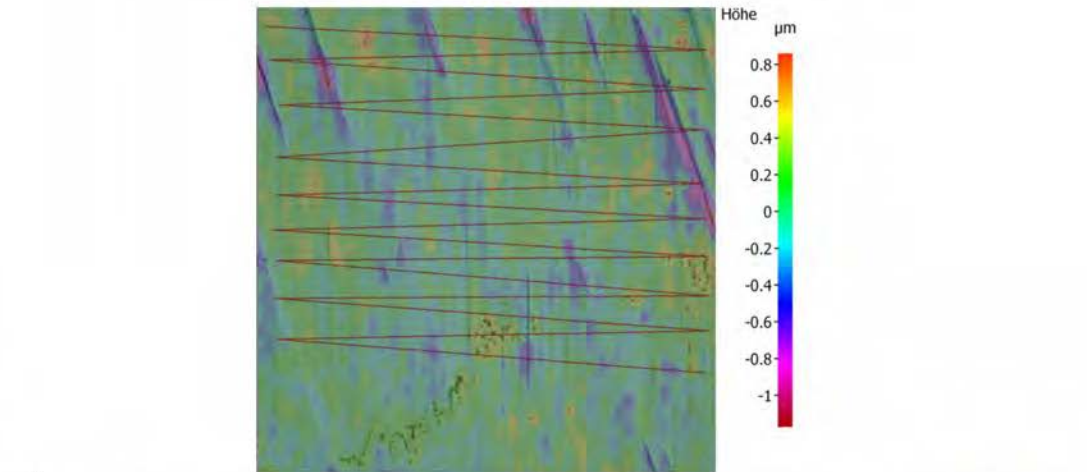
Ivoclar E.Max





Messprotokoll Profilmessung

Probe C-1 complete treatment_x50



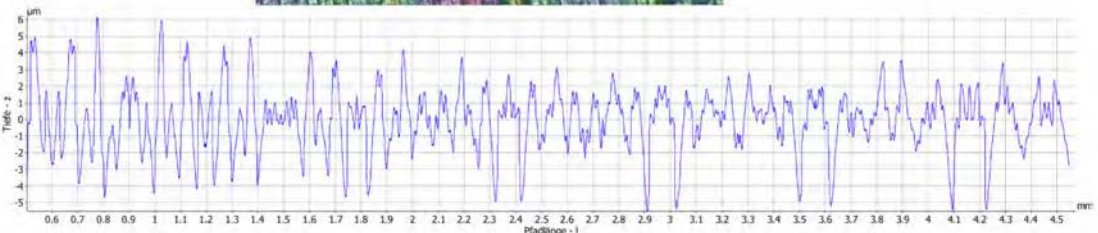
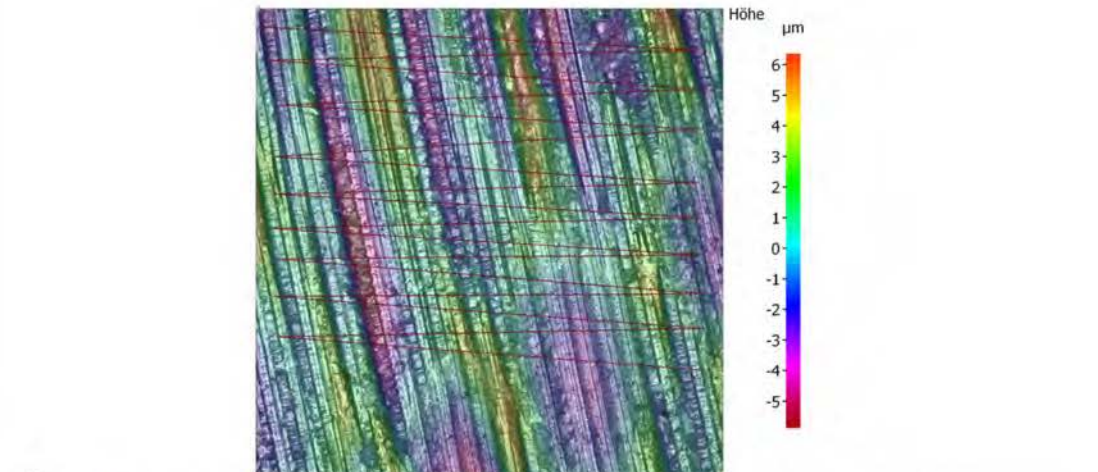
Ra: 0.180µm
Rq: 0.231µm
Rz: 1.363µm

Filter: Hochpass - Rauheitsprofil
Lc:= 800.000µm



Messprotokoll Profilmessung

Probe C-1 partial treatment_x50



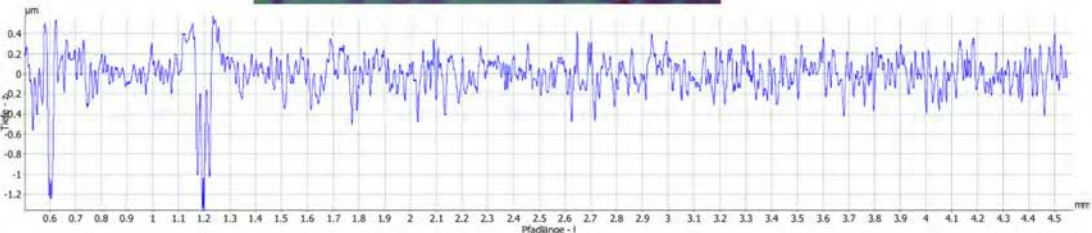
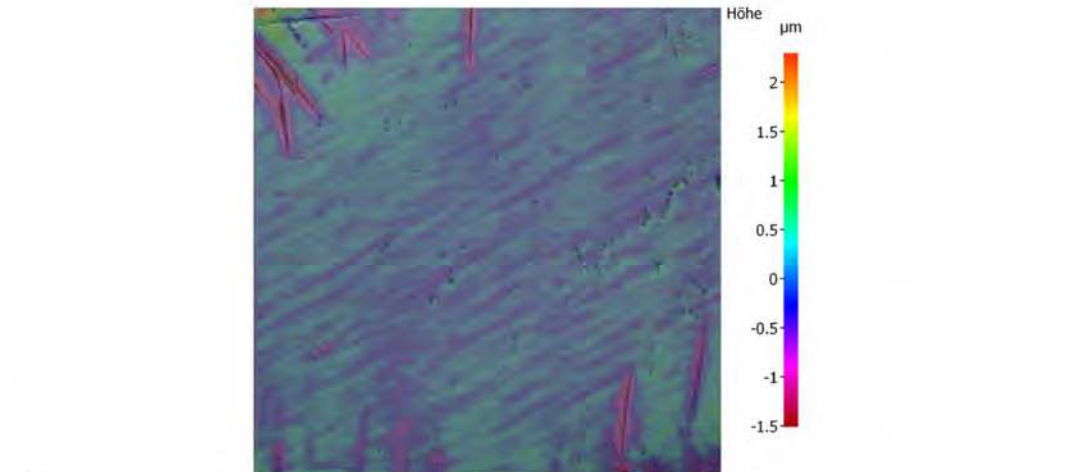
Ra: 1.438µm
Rq: 1.907µm
Rz: 9.356µm

Filter: Hochpass - Rauheitsprofil
Lc:= 800.000µm



Messprotokoll Profilmessung

Probe C-2 complete treatment_x50



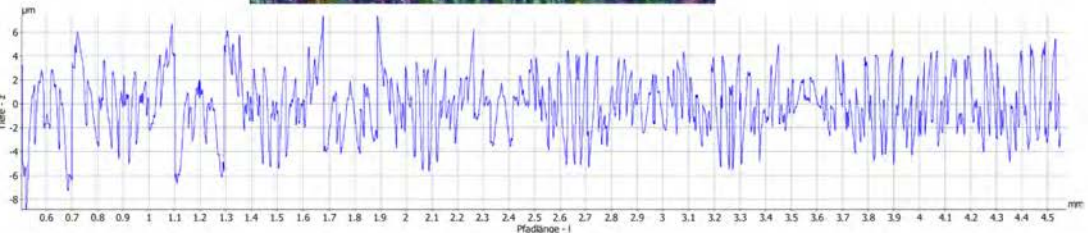
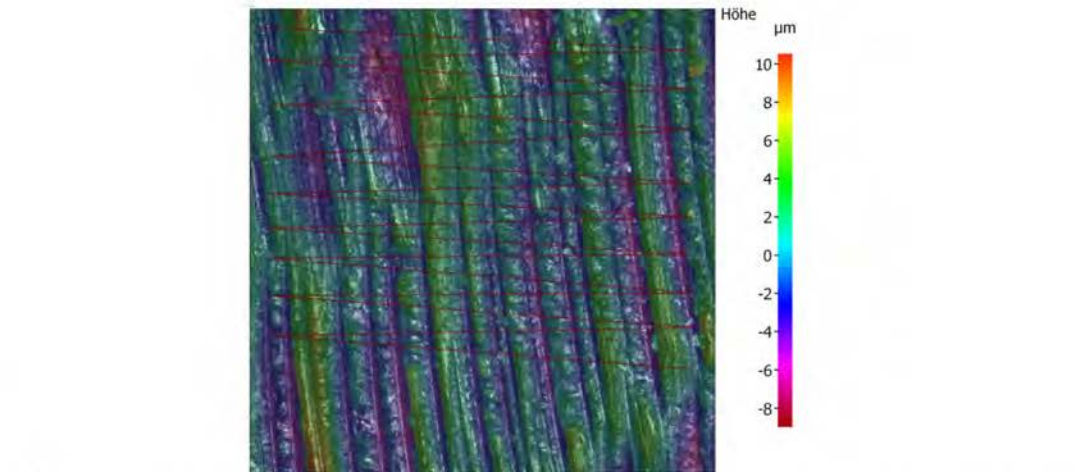
Ra: 0.137µm
Rq: 0.200µm
Rz: 1.064µm

Filter: Hochpass - Rauheitsprofil
Lc:= 800.000µm



Messprotokoll Profilmessung

Probe C-2 partial treatment_x50



Ra: 1.960µm
Rq: 2.480µm
Rz: 12.177µm

Filter: Hochpass - Rauheitsprofil
Lc:= 800.000µm

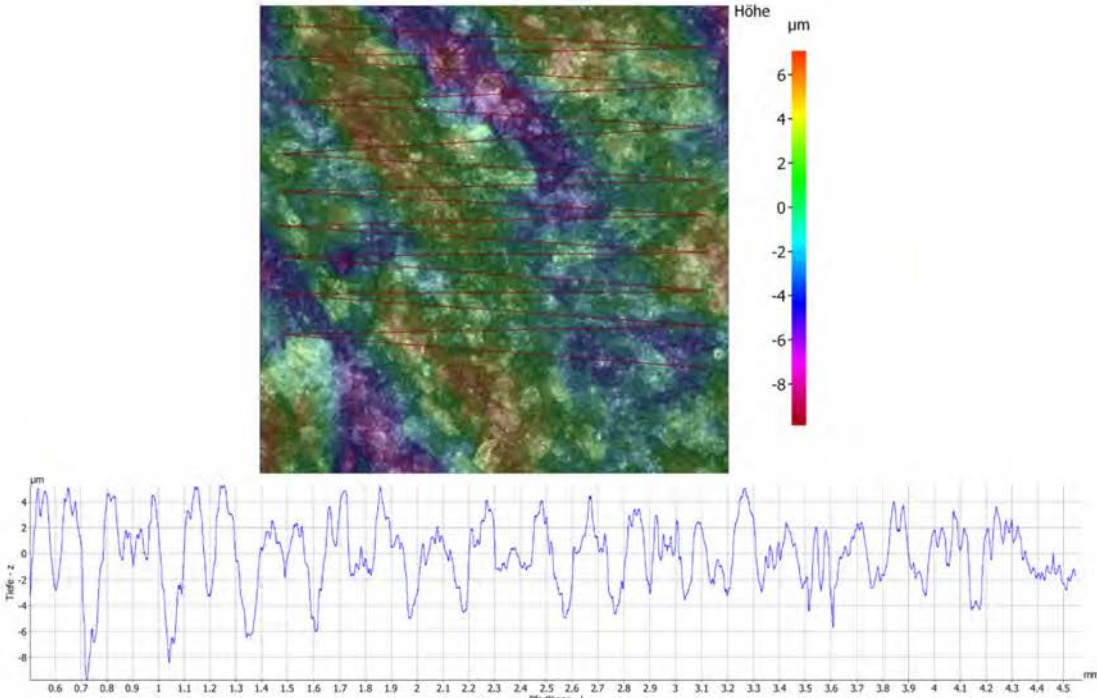
IVOCLAR ZirCAD





Messprotokoll Profilmessung

Probe D-1 partical treatment_x50



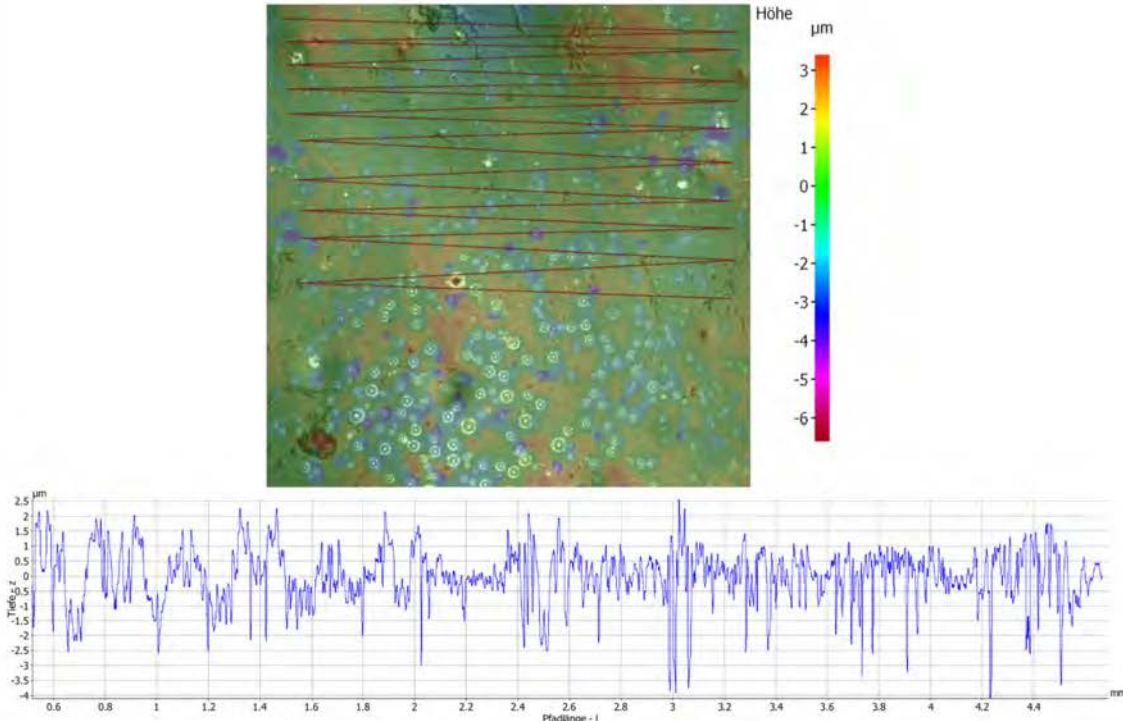
Ra: 2.115µm
Rq: 2.654µm
Rz: 11.055µm

Filter: Hochpass - Rauheitsprofil
Lc:= 800.000µm



Messprotokoll Profilmessung

Probe D-1 palatinal_x50



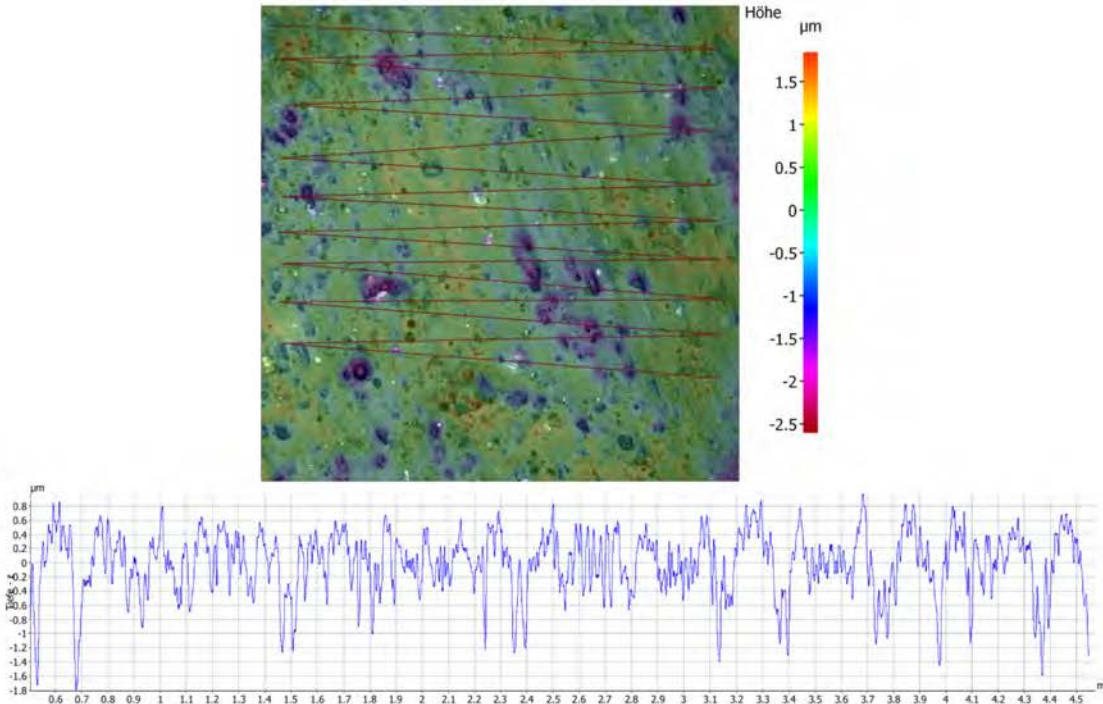
Ra: 0.687µm
Rq: 0.915µm
Rz: 5.695µm

Filter: Hochpass - Rauheitsprofil
Lc:= 800.000µm



Messprotokoll Profilmessung

Probe D-1 complete treatment_x50



Ra: 0.349µm
Rq: 0.451µm
Rz: 2.302µm

Filter: Hochpass - Rauheitsprofil
Lc:= 800.000µm

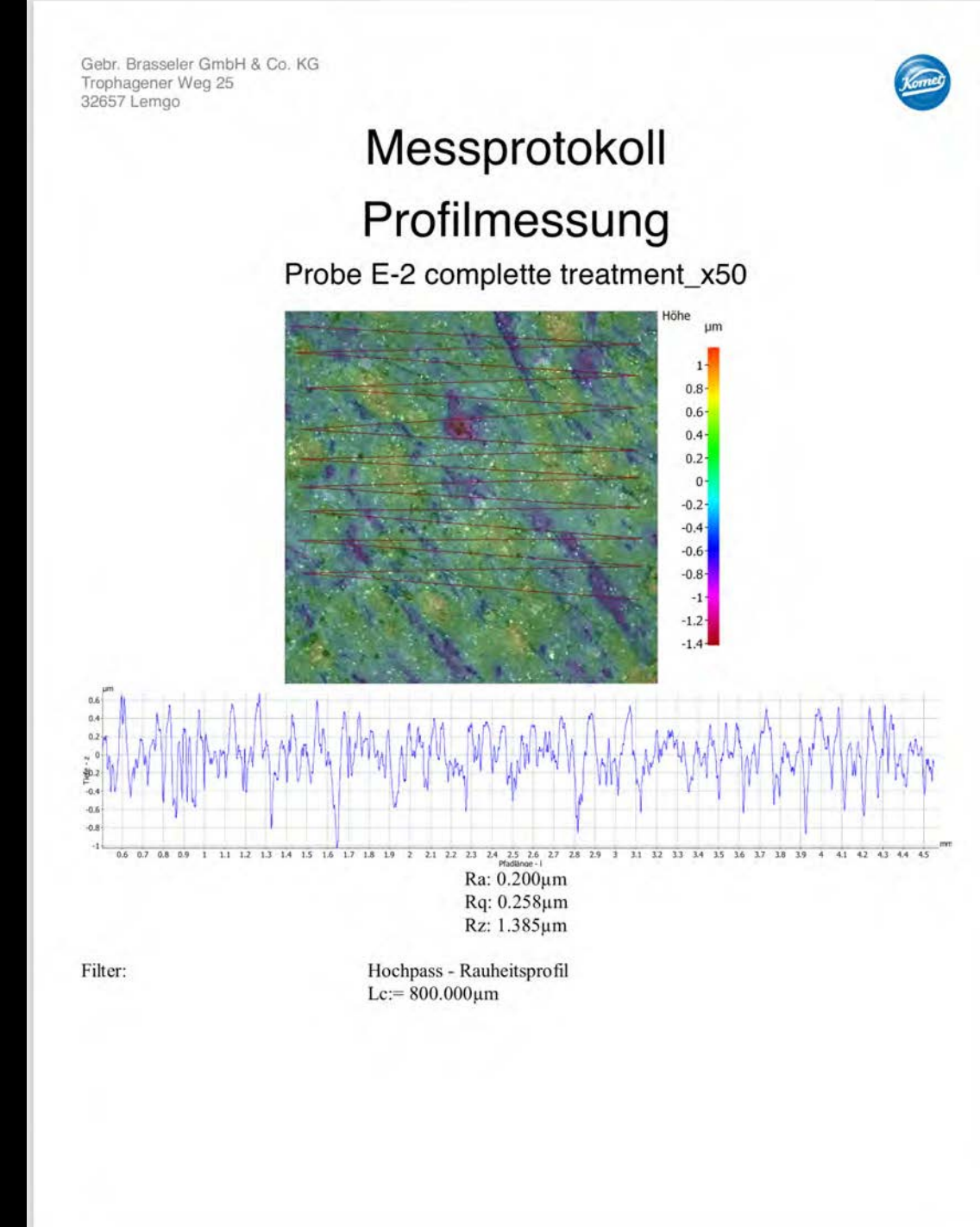
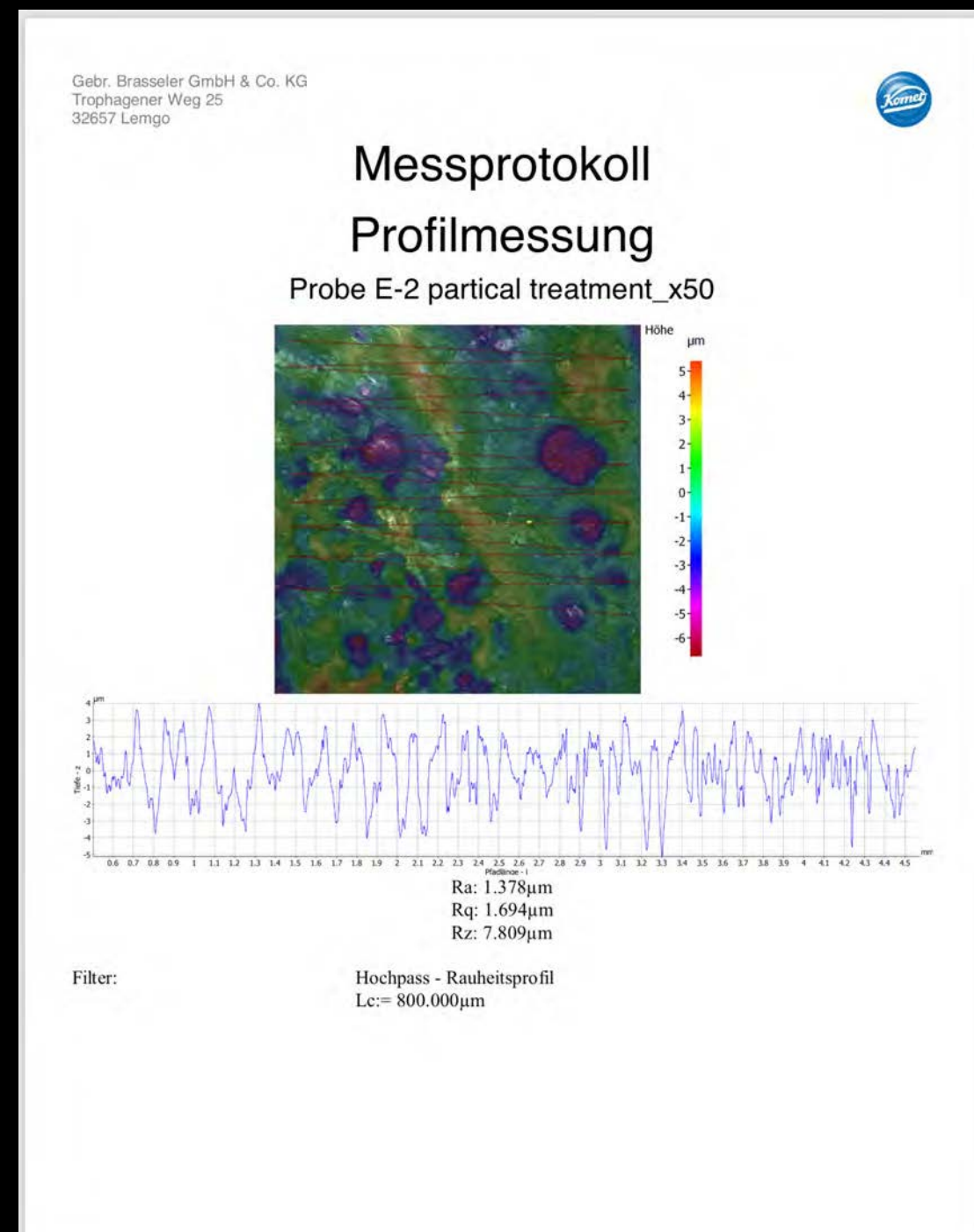
GC Initial

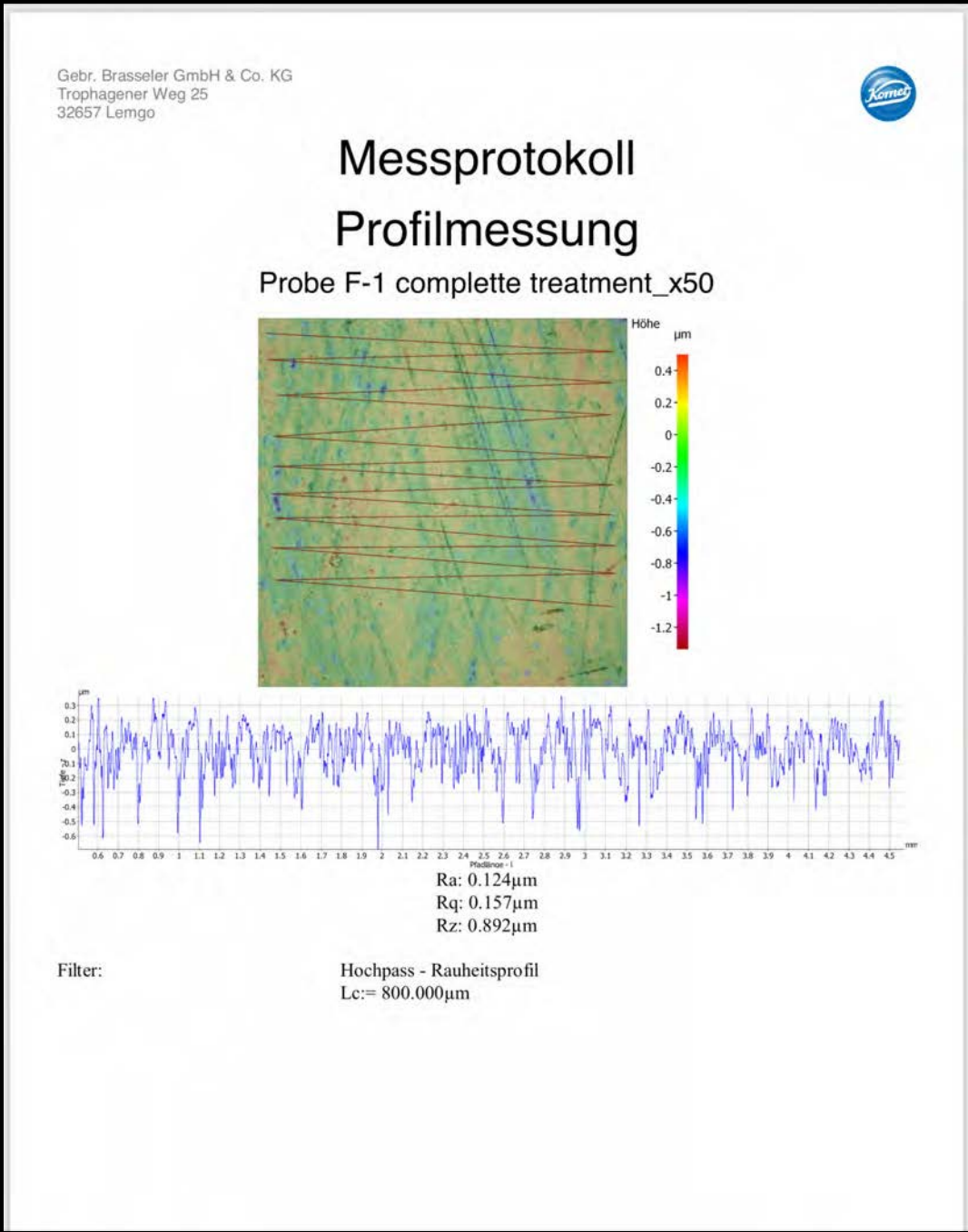
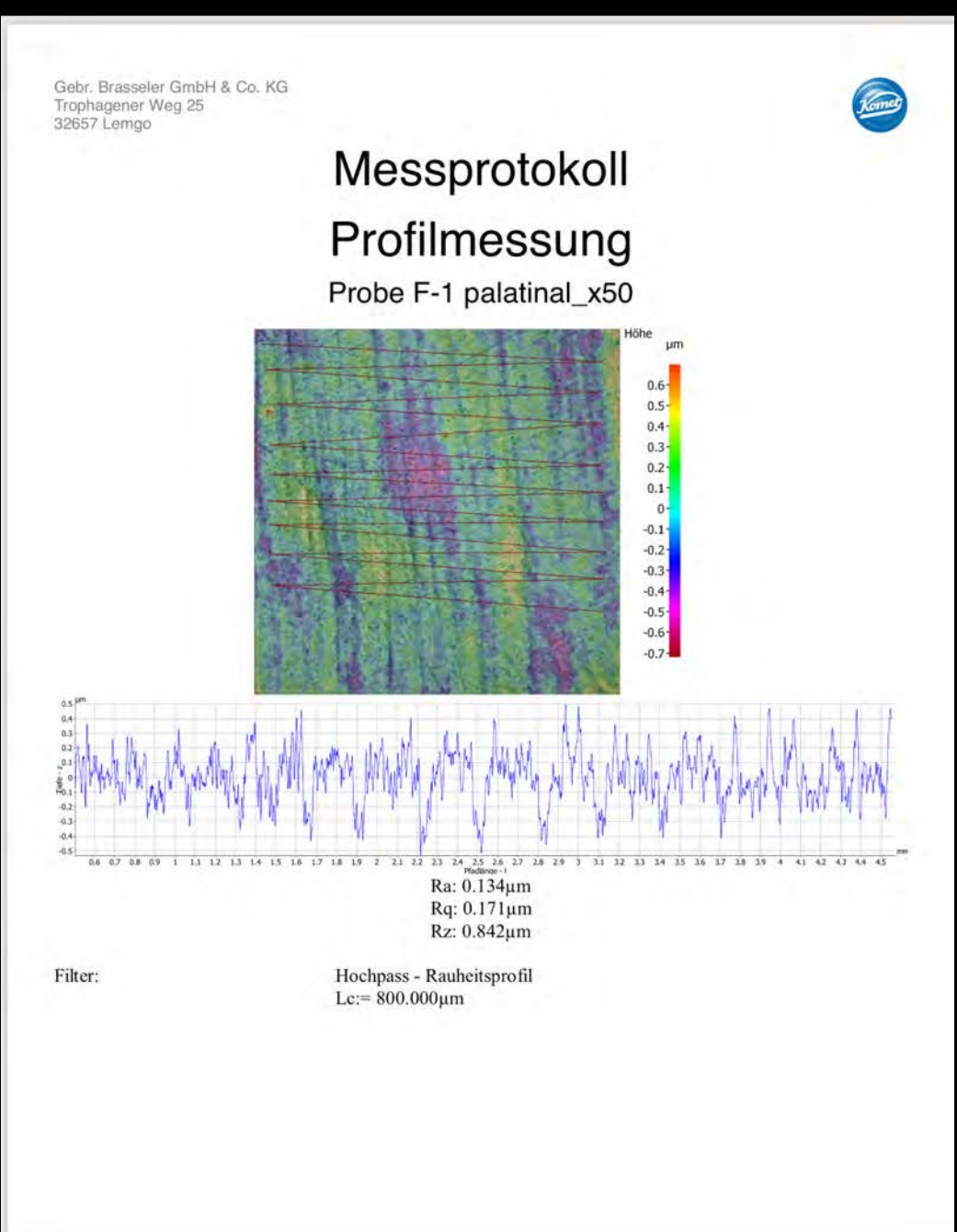
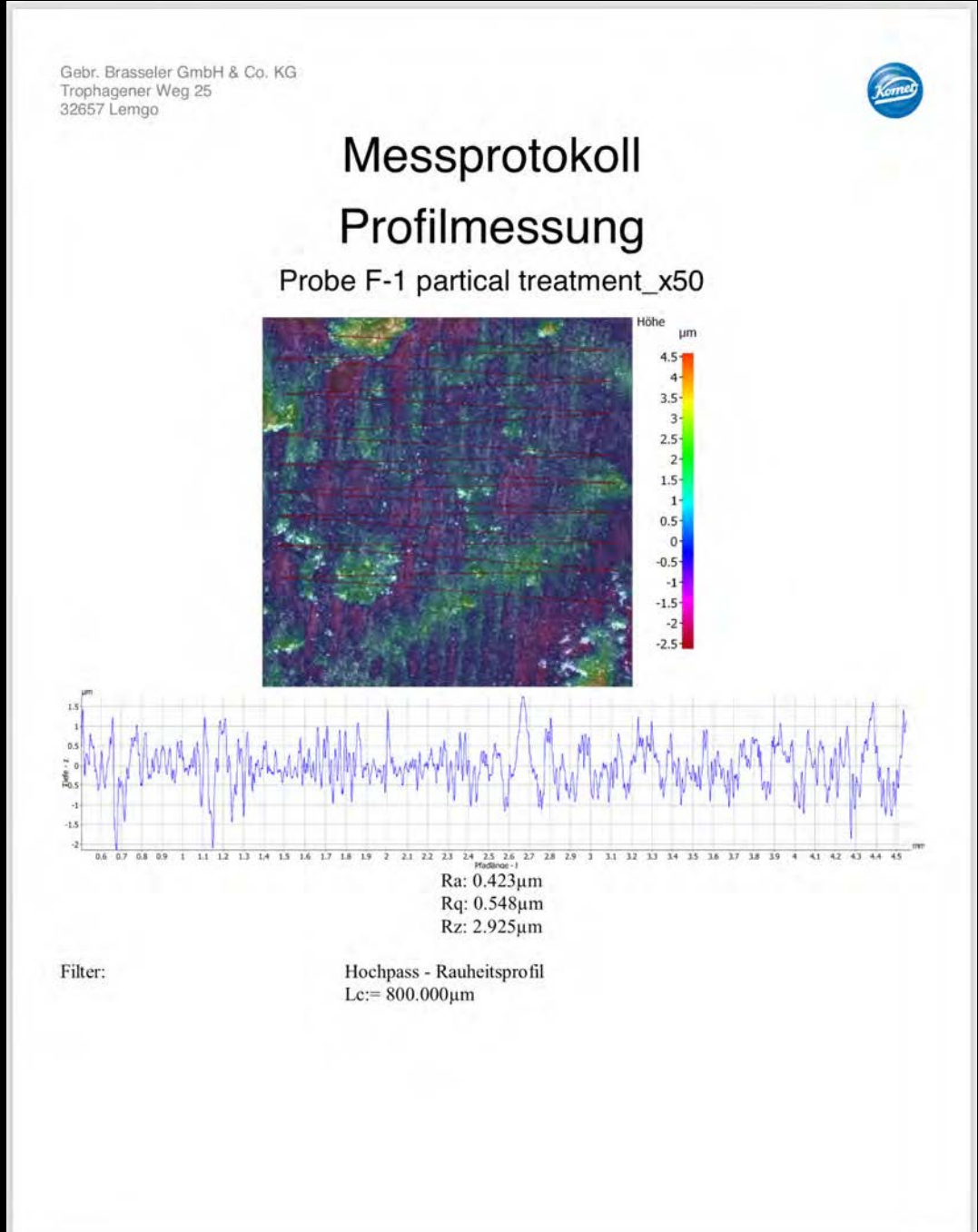


Probe E			
Nr.	Benennung	Rz Ergebniss [μm]	Sonstiges
1	Probe E-1 partical treatment	7,5	grobe Oberfläche
2	Probe E-2 partical treatment	7,8	grobe Oberfläche
3	Probe E-1 complete treatment	1,1	-
4	Probe E-2 complete treatment	1,4	-
5	Probe E-1 palatinal	nicht messbar	glänzende Oberfläche
6	Probe E-2 palatinal	nicht messbar	glänzende Oberfläche

The top photograph shows a dental model with a central vertical groove. Red lines point to four specific areas: 1 (upper left curve), 2 (lower left curve), 3 (upper right curve), and 4 (lower right curve). The bottom photograph shows a dental model with a curved surface. Red lines point to two specific areas: 5 (lower left curve) and 6 (upper right curve).

VITA CADtemp





IVOCLAR Tetric

