

Luft- und Raumfahrt
**Biegen von Blechen und Bändern
 aus Leichtmetallen**

Maße Grenzabmaße Ausgleichswerte

DIN
9003
 Teil 5

Aerospace; bending of light metal sheet and strip; dimensions, limit deviations and compensation values

Ersatz für (Supersedes)
 LN 9003 T 4/07.66
 LN 9003 T 5/09.66

Aéronautique et espace; pliage des tôles et bandes en métaux légers; dimensions, écarts limites et valeurs de compensation

In case of dispute the German wording shall be valid.

Maße in mm

Dimensions in mm

Diese Norm ist anerkannt durch das Bundesamt für Wehrtechnik und Beschaffung und das Luftfahrt-Bundesamt.

This Standard is approved by Bundesamt für Wehrtechnik und Beschaffung and Luftfahrt-Bundesamt.

Die vorliegende DIN-Norm ist Teil 5 einer mehrteiligen Luft- und Raumfahrtnorm mit der Hauptnummer 9003, deren Teil 2 noch als LN-Norm veröffentlicht ist. Er wird bei einer späteren Überarbeitung ebenfalls als DIN-Norm herausgegeben.

The present DIN Standard is part 5 of an aerospace standard in several parts of the main number 9003, of which part 2 is still published as LN Standard. It will also be published as DIN Standard on the occasion of a later revision.

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Normenstelle Luftfahrt (NL) im DIN Deutsches Institut für Normung e. V.

Jede Art der Vervielfältigung, auch auszugsweise, nur mit Genehmigung des DIN Deutsches Institut für Normung e.V., Berlin, gestattet.

1 Anwendungsbereich und Zweck

Diese Norm ist für die Ermittlung der Ausgleichswerte an Blechen und Bändern aus Leichtmetall beim Fertigungsverfahren "Biegeumformen" ¹⁾ anzuwenden. Für welche der in DIN 8586 "Fertigungsverfahren Biegeumformen; Einordnung - Unterteilung - Begriffe" aufgeführten Untergruppen die vorliegende Norm gesicherte Ergebnisse liefert, ist sorgfältig zu prüfen und auf die innerbetriebliche Praxis abzustimmen. Im Regelfall gelten die Werte für das Gesenkbiegen (Abkanten).

2 Begriffe

2.1 Ausgleichswert V

Unter Ausgleichswert im Sinne dieser Norm ist das Maß zu verstehen, das sich aus der Bogenlänge und den Maßen des fertig gebogenen Teiles errechnet. Mit diesem Wert wird die gestreckte Länge und die Lage der Biegelinie bestimmt. Je nach Größe des Biegewinkels, des Biegehalbmessers und der Blechdicke kann dieser Wert positiv oder negativ sein und somit eine Verlängerung oder Verkürzung der gestreckten Länge gegenüber der theoretischen Länge bewirken.

2.2 Bogenlänge BA

Die Länge der neutralen Faser im Biegebereich wird als Bogenlänge BA berechnet. Streng genommen wandert die neutrale Faser von der Blechmitte $S/2$ bei kleinen Biegewinkeln in Richtung des inneren Halbmessers etwa auf $S/3$ bei großen Biegewinkeln. Für die Berechnung der Ausgleichswerte liefert die Annahme, daß die neutrale Faser bei $S/2$ liegt, ausreichend genaue Werte.

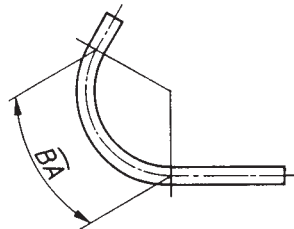


Bild 1.
(Figure 1.)

Die Bemaßung eines gebogenen Bauteiles beinhaltet im Regelfall nicht die Angabe der Bogenlänge der neutralen Faser, da sie für die Maßprüfung des fertigen Bauteiles nicht herangezogen werden kann (siehe Bild 1).

1 Field of application and scope

This Standard applies to the determination of compensation values on light metal sheet and strip subject to the manufacturing process "forming by bending" ¹⁾. It shall be carefully checked and aligned with in-house practice for which of the sub-groups specified in DIN 8586 - Manufacturing processes, forming by bending, classification, subdivision, definition - the present Standard provides well-established results. As a rule, the values apply to die bending (folding).

2 Definitions

2.1 Compensation value V

Compensation value in the sense of this Standard denotes the dimension which is calculated from the arc length and the dimensions of the part after bending. The stretched length and position of the bending line are determined by this value. This value may be positive or negative according to the size of the bending angle, the bending radius and sheet thickness, thus causing lengthening or shortening of the stretched length compared with the theoretical length.

2.2 Arc length BA

The length of the neutral fibre in the bending area is calculated as arc length BA. Strictly speaking, the neutral fibre migrates from the sheet centre $S/2$ towards the inner radius with small bending angles to approximately $S/3$ with large bending angles. The assumption that the neutral fibre lies at $S/2$ provides sufficiently accurate values for the calculation of compensation values.

Dimensioning of a bent component generally does not include the indication of the arc length of the neutral fibre, as it cannot be used for the dimensional inspection of the finished component (see figure 1).

¹⁾ Für andere Fertigungsverfahren (Druckumformen nach DIN 8583 Teil 1, Zugumformen nach DIN 8585 Teil 1 oder weitere) liegen z. Z. keine Erkenntnisse vor.

¹⁾ No information is at present available for other manufacturing processes (e.g. forming under compressive conditions to DIN 8583 part 1 or forming under tensile conditions to DIN 8585 part 1).

2.3 Winkel an gebogenen Teilen

Für die Bemaßung der gebogenen Teile aus Flacherzeugnissen und für die Berechnung der gestreckten Länge werden die beiden Ergänzungswinkel mit Biege­winkel α und Öffnungswinkel β bezeichnet (siehe Bild 2).

2.3 Angles on bent components

For dimensioning of the bent components made from flat products and the calculation of the stretched length, the two complementary angles are designated by bending angle α and aperture angle β (see figure 2).

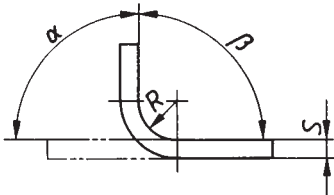


Bild 2.
(Figure 2.)

3 Biegehalbmesser R

Um die zum Herstellen und Prüfen von Biegehalbmessern benötigten Werkzeuge (z. B. Abkant­schienen), Lehren und Meßeinrichtungen einzuschrän­ken, wird empfohlen, nur die in Tabelle 1 aufge­führten Werte (Auszug aus DIN 250) zu verwenden und nach Möglichkeit diese aus der Vorzugsreihe auszu­wählen.

3 Bending radius R

In order to limit the tools (e.g. folding rails), gauges and measuring systems required for the pro­duction and checking of bending radii, it is rec­ommended to use only the values listed in table 1 (extract from DIN 250) and to select these from the preferred series, if possible.

Tabelle 1.

R	Vorzugsreihe (Preferred series)	0,6	1	1,6	2,5	4	6	10	16	20	25	32	40
	Nebenreihe (Minor series)	0,8	1,2	2	3	5	8	12	18	22	28	36	

Table 1.

Die kleinstzulässigen Biegehalbmesser sind in Ab­hängigkeit von Blechdicke und Werkstoff DIN 9003 Teil 3 zu entnehmen.

The minimum permissible bending radii shall be taken from DIN 9003 part 3 according to sheet thickness and material.

Grenzabmaße der Biegehalbmesser siehe Tabelle 2.

For limit deviations of bending radii, see table 2.

Tabelle 2.

Nennmaß R (R nominal)	bis 1,6 (up to 1,6)	über 1,6 bis 4 (above 1,6 to 4)	über 4 bis 20 (above 4 to 20)	über 20 (above 20)
Grenzabmaße (Limit deviations)	+ 1,0 0	+ 1,5 0	+ 2,5 0	+ 5 0

Table 2.

4 Kleinste Schenkellänge b_{min}

Beim maschinellen Biegeumformen von Blechen und Bändern sind für die Schenkellängen b die Mindest­maße nach Tabelle 3 und Tabelle 4 zu erreichen.

4 Smallest side length b_{min}

In mechanically forming sheet and strip by bending, the minimum values listed in table 3 and table 4 shall be obtained for side lengths b.

Table 3. Folding lengths up to 1250 mm ²⁾

Tabelle 3. Abkantlängen bis 1250 mm ²⁾

R	bis (up to) 0,3	S																		
		0,4	0,5	0,6	0,8	1,0	1,2	1,4	1,5	1,6	1,8	2,0	2,5	3,0	3,2	3,5	4,0	4,5	5,0	6,0
0,6																				
0,8																				
1			3,5	4	4	4														
1,2			4	4	4	4														
1,6			5	5	5	5														
2			5	5	5	6	6,5													
2,5			5	5	6	6,5	6,5	7,5	7,5	7,5	8									
3			6	6	6	6,5	6,5	7,5	7,5	8	8									
4			7,5	7,5	7,5	8,5	8,5	9	9	9	9	11								
5			8,5	8,5	8,5	10,5	10,5	10,5	10,5	10,5	11	11	14	14						
6			10	10	10	10,5	11	11	13	13,5	13,5	13,5	14	14	14,5					
8			13	13	13	13,5	14	14	14	14	14	16,5	17	17	17,5					
10			16	16	16	16,5	16,5	16,5	17	17	17	17	20	20	20					
12																				
16																				
20																				
25																				
32																				
40																				

Table 4. Folding lengths from 1250 mm to 2500 mm

Tabelle 4. Abkantlängen von 1250 mm bis 2500 mm

R	bis (up to)	S																							
		0,4	0,5	0,6	0,8	1,0	1,2	1,4	1,5	1,6	1,8	2,0	2,5	3,0	3,2	3,5	4,0	4,5	5,0	6,0					
0,6										b min.															
0,8																									
1																									
1,2																									
1,6			5	5	5	6	6,5																		
2			5	5	5	6	6,5																		
2,5			5	6	6	6,5	8																		
3			6	6	6	8	8	8																	
4			7,5	7,5	8	9	10	10	10	10	11	15	15	15	20	20	20								
5			10	10	10	10,5	10,5	13	13	13	15	15	15	15	20	20	20								
6			12	12	12	15	15	15	15	15	15	15	15	15	20	20	20								
8			15	15	15	15	15	20	20	20	20	20	20	20	20	20	20								
10																									
12																									
16																									
20																									
25																									
32																									
40																									

²⁾ Für die leeren Felder liegen aus der Praxis keine Erfahrungswerte vor.

²⁾ There are no empirical values available for the spaces without entry.

5 Biegewinkel α

Der Biegewinkel α kann zwischen 0 und 180° liegen.

Grenzabmaße siehe Tabelle 5.

Tabelle 5. Grenzabmaße für Biegewinkel α

Schenkellänge ¹⁾ (Side length ¹⁾)	bis 30 (up to 30)	über 30 bis 50 (above 30 to 50)	über 50 bis 80 (above 50 to 80)	über 80 bis 120 (above 80 to 120)	über 120 (above 120)
Grenzabmaße des Biegewinkels α (Limit deviations of bending angle α)	$\pm 2^\circ$	$\pm 1^\circ 45'$	$\pm 1^\circ 30'$	$\pm 1^\circ 15'$	$\pm 1^\circ$
¹⁾ Die kürzere Schenkellänge gilt als Nennmaß.			¹⁾ The shorter side length is taken as nominal dimension.		

Diese Werte gelten für das Verhältnis von $R : S \leq 4$.

Bei größeren Werten von $R : S$ muß wegen der Rückfederung mit einer größeren Abweichung gerechnet werden.

6 Verarbeitung zu Biegeformteilen

Beim Abkanten von flachgewalzten Erzeugnissen wie Bleche, Bänder usw. ist wegen der besseren Abkanteignung Rücksicht auf die Walzrichtung zu nehmen und möglichst quer zur Walzrichtung abzukanten.

Um die Abkanteignung nicht zu beeinträchtigen, müssen die Walzflächen eben und die Scherenschnittkanten geradlinig sein.

Alle Scherenschnittkanten müssen entgratet sein, um Risse von den Schnittkanten aus zu vermeiden.

Die Dicke S kann sich im Biegebereich bis zu etwa 20 % verringern.

7 Berechnung der Bogenlänge BA

Unter der Annahme, daß die neutrale Faser bei allen Biegewinkeln stets bei $S/2$ liegt, gilt für die Bogenlänge BA folgende Gleichung:

$$BA = \frac{\pi}{180^\circ} \cdot \alpha \left(R + \frac{S}{2} \right) \\ = (0,0174533 \cdot R + 0,0087266 \cdot S) \cdot \alpha$$

Für den Biegewinkel $\alpha = 90^\circ$ gilt:

$$BA = 1,5707963 \cdot R + 0,7853982 \cdot S$$

8 Bemaßungsmethoden

Je nach Anforderung an hausinterne Zeichnungssysteme kann der Konstrukteur zwischen mehreren Methoden der Bemaßung wählen. Unter Berücksichtigung, daß der Biegewinkel in 3 unterschiedlichen Bereichen liegen kann, ergeben sich 9 mögliche Formen der Bemaßung. Diese Zusammenhänge sind in Bild 3 dargestellt. Nicht dargestellt wurde die Koordinatenbemaßung und spezielle Formen, die sich aus dem rechnergestützten Konstruieren ergeben.

5 Bending angle α

The bending angle α may be situated between 0 and 180°.

For limit deviations, see table 5.

Table 5. Limit deviations of bending angle α

These values apply to the ratio $R/S \leq 4$.

With higher values R/S , a greater deviation must be allowed for owing to spring-back.

6 Forming of products by bending

When flat rolled parts such as sheet and strip are folded, the rolling direction shall be taken into account owing to better suitability for folding, and folding shall preferably be across the rolling direction.

To safeguard suitability for folding the rolled surfaces shall be even and the shear cut edges straight.

All shear cut edges shall be deburred to avoid cracks originating from the cut edges.

Thickness S may be reduced by up to about 20 % in the bending area.

7 Calculation of arc length BA

The following equation applies to arc length BA on the assumption that the neutral fibre is always at $S/2$ for all bending angles:

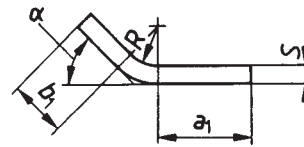
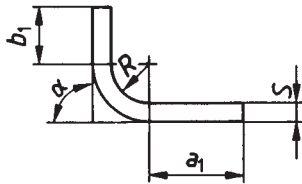
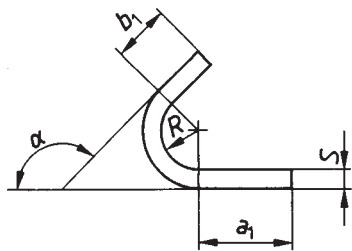
The following applies for bending angle $\alpha = 90^\circ$:

8 Dimensioning methods

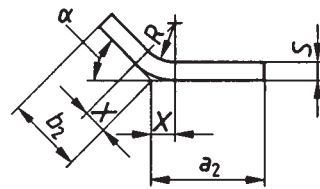
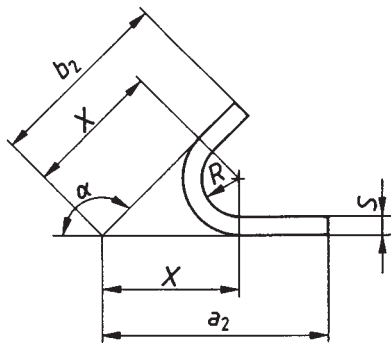
The designer may choose from several dimensioning methods according to the requirements for in-house drawing systems. If it is considered that the bending angle may be in 3 different ranges, 9 permissible forms of dimensioning are obtained. These relations are represented in figure 3. The dimensioning of coordinates and special forms obtained from computer aided design are not represented.

Methode
(Method)Biegewinkel $\alpha > 90^\circ$
(Bending angle) $\alpha = 90^\circ$ $\alpha < 90^\circ$

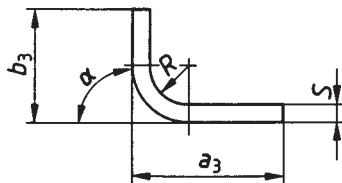
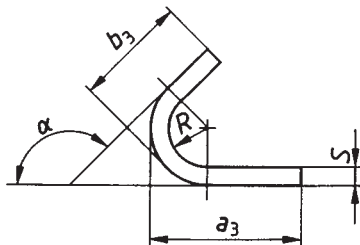
1



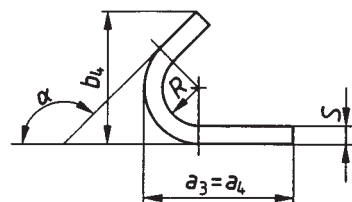
2



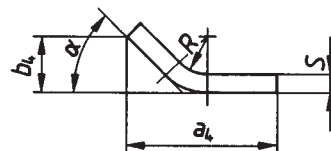
3



4



3)

Bild 3.
(Figure 3.)**9 Rechenregeln für gestreckte Längen 1**

Für die verschiedenen Methoden gelten folgende Regeln für die Berechnung der gestreckten Längen:

Methode 1

$$l = a_1 + b_1 + BA$$

Methode 2

$$\begin{aligned} l &= a_2 + b_2 + BA - 2 X \\ &= a_2 + b_2 - V \end{aligned}$$

9 Rules for calculation of stretched lengths 1

The following rules apply to the various methods for calculation of stretched lengths:

Method 1

Method 2

3) Für Biegewinkel $\alpha = 90^\circ$ gelten die Bemaßungsmethoden 2 und 33) Dimensioning methods 2 and 3 apply for bending angle $\alpha = 90^\circ$

Dabei gilt:

Where the following applies:

$$V = 2X - BA$$

$$X = (R + S) \cdot \tan \frac{\alpha}{2}$$

Für Werte $\alpha < 10^\circ$ gilt $V = 0$

$V = 0$ applies for values $\alpha < 10^\circ$

Methode 3

Method 3

$$l = a_3 + b_3 + BA - 2(R + S)$$

Methode 4

Method 4

$\alpha > 90^\circ$

$$l = a_3 + \frac{b_4}{\sin(180 - \alpha)} + BA - X - (R + S)$$

$\alpha < 90^\circ$

$$l = a_4 + b_4 \left(\frac{1}{\sin \alpha} - \frac{1}{\tan \alpha} \right) + BA - 2X$$

$$= a_4 + b_4 \left(\frac{1}{\sin \alpha} - \frac{1}{\tan \alpha} \right) - V$$

Gerechnete Ausgleichswerte V , gerechnete Werte für die Bogenlänge BA und für das Maß X auf der Grundlage vorstehend genannter Formeln für die gebräuchlichsten Biegewinkel in Abhängigkeit von Blechdicke S und Biegehalbmesser R enthält Tabelle 6.

See table 6 for calculated compensation values V , calculated values for arc length BA and for dimension X based on the above formulas for the most common bending angles as a function of sheet thickness S and bending radius R .

Gestreckte Längen sind auf volle $1/10$ Millimeter aufzurunden.

Stretched lengths shall be rounded up to full $1/10$ mm.

10 Darstellung und Lage der Biegelinien bei Abwicklungen

10 Representation and position of bending lines in developed views

Die Biegelinie gibt die Mitte der Biegerundung an und ist auf der Abwicklung durch eine schmale Vollinie darzustellen. Die Lage der Biegelinie ergibt sich aus den anliegenden Schenkellängen a und b unter Berücksichtigung der Hälfte des positiven bzw. negativen Ausgleichswertes V .

The bending line indicates the centre of the bending curvature and shall be represented by a narrow solid line in the developed view. The position of the bending line is obtained from the adjacent side lengths a and b , half the positive and negative compensation value V being taken into account.

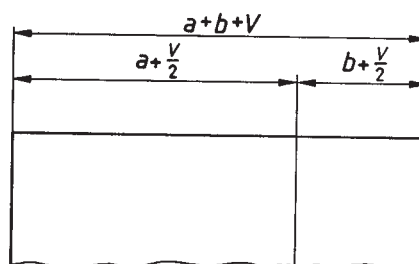


Bild 4.
(Figure 4.)

Abwicklungen sind nur dann besonders zu zeichnen, wenn die Form des Blechzuschnittes durch Bemaßung und Angabe der Biegelinie nicht eindeutig bestimmt ist.

Developed views shall be drawn separately when the shape of the sheet blank is not unambiguously determined by dimensioning and indication of the bending line.

11 Beispiele für die Berechnung von gestreckten Längen

11 Examples of calculation of stretched lengths

aus Tabelle 6: BA = 12,22 mm
(from table 6:)

X = 16,48 mm

V = 20,75 mm

$$l = a_2 + b_2 - V$$

$$l = 40 + 30 - 20,75$$

$$= 49,25$$

$$\approx 49,3 \text{ mm}$$

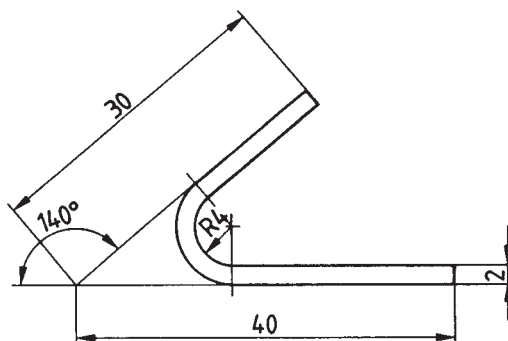


Bild 5.
(Figure 5.)

aus Tabelle 6: BA = 6,11 mm
(from table 6:)

X = 4,20 mm

V = 2,29 mm

$$l = a_1 + b_1 + BA$$

$$l = 36 + 26 + 6,11$$

$$= 68,11$$

$$\approx 68,1 \text{ mm}$$

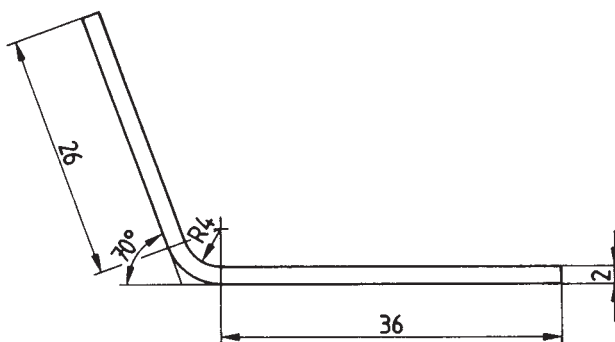


Bild 6.
(Figure 6.)

12 Berechnung des Kontrollmaßes Z

12 Calculation of reference dimension Z

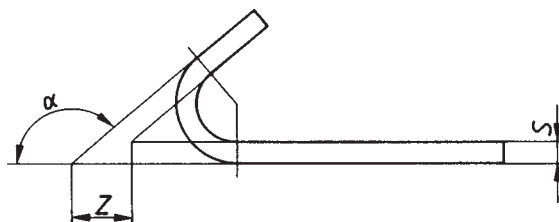


Bild 7
(Figure 7.)

$$Z = S \cdot \tan \frac{\alpha}{2}$$

Tabelle 6. Gerechnete Werte in Abhängigkeit von Biegewinkel, Blechdicke und Biegehalbmesser

Table 6. Calculated values as a function of bending angle, sheet thickness and bending radius

10 GRAD	S=	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R=1.0	BA=	0.22	0.23	0.24	0.26	0.28									
	X=	0.13	0.14	0.16	0.17	0.19									
	V=	0.04	0.05	0.07	0.09	0.11									
R=1.5	BA=	0.31	0.33	0.35	0.37	0.39	0.40								
	X=	0.17	0.18	0.20	0.22	0.24	0.26	0.27							
	V=	0.04	0.05	0.07	0.09	0.11	0.13	0.14							
R=2.0	BA=	0.39	0.40	0.42	0.44	0.45	0.48	0.49	0.51	0.52					
	X=	0.22	0.23	0.24	0.26	0.28	0.31	0.31	0.33	0.35					
	V=	0.04	0.05	0.07	0.09	0.11	0.13	0.14	0.16	0.18					
R=2.5	BA=	0.48	0.49	0.51	0.52	0.54	0.57	0.58	0.59	0.61	0.65				
	X=	0.26	0.27	0.29	0.31	0.32	0.35	0.36	0.38	0.39	0.44				
	V=	0.04	0.05	0.07	0.09	0.11	0.13	0.14	0.16	0.18	0.22				
R=3.0	BA=	0.57	0.58	0.59	0.61	0.63	0.65	0.66	0.68	0.70	0.74	0.79			
	X=	0.31	0.31	0.33	0.35	0.37	0.39	0.40	0.42	0.44	0.48	0.52			
	V=	0.05	0.05	0.07	0.09	0.11	0.13	0.14	0.16	0.18	0.22	0.26			
R=4.0	BA=	0.74	0.75	0.77	0.79	0.80	0.83	0.84	0.86	0.87	0.92	0.96	1.05		
	X=	0.39	0.40	0.42	0.44	0.45	0.48	0.49	0.51	0.52	0.57	0.61	0.70		
	V=	0.05	0.05	0.07	0.09	0.11	0.13	0.14	0.16	0.18	0.22	0.26	0.35		
R=5.0	BA=	0.92	0.93	0.94	0.96	0.98	1.00	1.01	1.03	1.05	1.09	1.13	1.22	1.31	
	X=	0.48	0.49	0.51	0.52	0.54	0.57	0.58	0.59	0.61	0.66	0.70	0.79	0.87	
	V=	0.05	0.05	0.07	0.09	0.11	0.13	0.14	0.16	0.18	0.22	0.27	0.35	0.44	
R=6.0	BA=	1.09	1.10	1.12	1.13	1.15	1.18	1.19	1.20	1.22	1.27	1.31	1.40	1.48	1.57
	X=	0.57	0.58	0.59	0.61	0.63	0.66	0.66	0.68	0.70	0.74	0.79	0.87	0.96	1.05
	V=	0.05	0.06	0.07	0.09	0.11	0.13	0.14	0.16	0.18	0.22	0.27	0.35	0.44	0.53
R=8.0	BA=	1.44	1.45	1.47	1.48	1.50	1.53	1.54	1.55	1.57	1.61	1.66	1.75	1.83	1.92
	X=	0.74	0.75	0.77	0.79	0.80	0.83	0.84	0.86	0.87	0.92	0.96	1.05	1.14	1.22
	V=	0.05	0.06	0.07	0.09	0.11	0.14	0.14	0.16	0.18	0.22	0.27	0.35	0.44	0.53
R=10.0	BA=	1.79	1.80	1.82	1.83	1.85	1.88	1.88	1.90	1.92	1.96	2.01	2.09	2.18	2.27
	X=	0.92	0.93	0.94	0.96	0.98	1.01	1.01	1.03	1.05	1.09	1.14	1.22	1.31	1.40
	V=	0.05	0.06	0.07	0.09	0.11	0.14	0.14	0.16	0.18	0.22	0.27	0.36	0.44	0.53
R=12.0	BA=	2.14	2.15	2.16	2.18	2.20	2.23	2.23	2.25	2.27	2.31	2.36	2.44	2.53	2.62
	X=	1.09	1.10	1.12	1.14	1.15	1.18	1.19	1.21	1.22	1.27	1.31	1.40	1.49	1.57
	V=	0.05	0.06	0.08	0.09	0.11	0.14	0.15	0.16	0.18	0.22	0.27	0.36	0.44	0.53
R=15.0	BA=	2.66	2.67	2.69	2.71	2.72	2.75	2.76	2.78	2.79	2.84	2.88	2.97	3.05	3.14
	X=	1.36	1.36	1.38	1.40	1.42	1.44	1.45	1.47	1.49	1.53	1.57	1.66	1.75	1.84
	V=	0.05	0.06	0.08	0.09	0.11	0.14	0.15	0.16	0.18	0.23	0.27	0.36	0.45	0.53
R=16.0	BA=	2.84	2.84	2.86	2.88	2.90	2.92	2.93	2.95	2.97	3.01	3.05	3.14	3.23	3.32
	X=	1.44	1.45	1.47	1.49	1.50	1.53	1.54	1.56	1.57	1.62	1.66	1.75	1.84	1.92
	V=	0.05	0.06	0.08	0.09	0.11	0.14	0.15	0.16	0.18	0.23	0.27	0.36	0.45	0.53
R=20.0	BA=	3.53	3.54	3.56	3.58	3.60	3.62	3.63	3.65	3.67	3.71	3.75	3.84	3.93	4.01
	X=	1.79	1.80	1.82	1.84	1.85	1.88	1.89	1.91	1.92	1.97	2.01	2.10	2.19	2.27
	V=	0.05	0.06	0.08	0.10	0.11	0.14	0.15	0.17	0.18	0.23	0.27	0.36	0.45	0.54
R=25.0	BA=	4.41	4.42	4.43	4.45	4.47	4.49	4.50	4.52	4.54	4.58	4.63	4.71	4.80	4.89
	X=	2.23	2.24	2.26	2.27	2.29	2.32	2.33	2.34	2.36	2.41	2.45	2.54	2.62	2.71
	V=	0.05	0.06	0.08	0.10	0.12	0.14	0.15	0.17	0.19	0.23	0.27	0.36	0.45	0.54
Z=		0.04	0.05	0.07	0.09	0.10	0.13	0.14	0.16	0.17	0.22	0.26	0.35	0.44	0.52

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

15 GRAC		S													
		0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	0.33	0.34	0.37	0.39	0.42									
	X=	0.20	0.21	0.24	0.26	0.29									
	V=	0.07	0.08	0.11	0.13	0.16									
R= 1.5	BA=	0.46	0.47	0.50	0.52	0.55	0.59	0.60							
	X=	0.26	0.28	0.30	0.33	0.36	0.39	0.41							
	V=	0.07	0.08	0.11	0.13	0.16	0.20	0.21							
R= 2.0	BA=	0.59	0.60	0.63	0.65	0.68	0.72	0.73	0.76	0.79					
	X=	0.33	0.34	0.37	0.39	0.42	0.46	0.47	0.50	0.53					
	V=	0.07	0.08	0.11	0.14	0.16	0.20	0.21	0.24	0.27					
R= 2.5	BA=	0.72	0.73	0.76	0.79	0.81	0.85	0.86	0.89	0.92	0.98				
	X=	0.39	0.41	0.43	0.46	0.49	0.53	0.54	0.57	0.59	0.66				
	V=	0.07	0.08	0.11	0.14	0.16	0.20	0.22	0.24	0.27	0.33				
R= 3.0	BA=	0.85	0.86	0.89	0.92	0.94	0.98	0.99	1.02	1.05	1.11	1.18			
	X=	0.46	0.47	0.50	0.53	0.55	0.59	0.61	0.63	0.66	0.72	0.79			
	V=	0.07	0.08	0.11	0.14	0.16	0.20	0.22	0.24	0.27	0.34	0.40			
R= 4.0	BA=	1.11	1.13	1.15	1.18	1.20	1.24	1.26	1.28	1.31	1.37	1.44	1.57		
	X=	0.59	0.61	0.63	0.66	0.68	0.72	0.74	0.76	0.79	0.86	0.92	1.05		
	V=	0.07	0.09	0.11	0.14	0.16	0.20	0.22	0.24	0.27	0.34	0.40	0.54		
R= 5.0	BA=	1.37	1.39	1.41	1.44	1.47	1.51	1.52	1.54	1.57	1.64	1.70	1.83	1.96	
	X=	0.72	0.74	0.76	0.79	0.82	0.86	0.87	0.90	0.92	0.99	1.05	1.18	1.32	
	V=	0.07	0.09	0.11	0.14	0.17	0.21	0.22	0.25	0.27	0.34	0.40	0.54	0.67	
R= 6.0	BA=	1.64	1.65	1.68	1.70	1.73	1.77	1.78	1.81	1.83	1.90	1.96	2.09	2.23	2.36
	X=	0.86	0.87	0.90	0.92	0.95	0.99	1.00	1.03	1.05	1.12	1.18	1.32	1.45	1.58
	V=	0.08	0.09	0.11	0.14	0.17	0.21	0.22	0.25	0.28	0.34	0.41	0.54	0.67	0.80
R= 8.0	BA=	2.16	2.17	2.20	2.23	2.25	2.29	2.30	2.33	2.36	2.42	2.49	2.62	2.75	2.88
	X=	1.12	1.13	1.16	1.18	1.21	1.25	1.26	1.29	1.32	1.38	1.45	1.58	1.71	1.84
	V=	0.08	0.09	0.12	0.14	0.17	0.21	0.22	0.25	0.28	0.34	0.41	0.54	0.67	0.81
R=10.0	BA=	2.68	2.70	2.72	2.75	2.78	2.81	2.83	2.85	2.88	2.95	3.01	3.14	3.27	3.40
	X=	1.38	1.40	1.42	1.45	1.47	1.51	1.53	1.55	1.58	1.65	1.71	1.84	1.97	2.11
	V=	0.08	0.09	0.12	0.15	0.17	0.21	0.23	0.25	0.28	0.35	0.41	0.54	0.68	0.81
R=12.0	BA=	3.21	3.22	3.25	3.27	3.30	3.34	3.35	3.38	3.40	3.47	3.53	3.67	3.80	3.93
	X=	1.65	1.66	1.69	1.71	1.74	1.78	1.79	1.82	1.84	1.91	1.97	2.11	2.24	2.37
	V=	0.08	0.10	0.12	0.15	0.18	0.22	0.23	0.26	0.28	0.35	0.42	0.55	0.68	0.81
R=15.0	BA=	3.99	4.01	4.03	4.06	4.08	4.12	4.14	4.16	4.19	4.25	4.32	4.45	4.58	4.71
	X=	2.04	2.05	2.08	2.11	2.13	2.17	2.19	2.21	2.24	2.30	2.37	2.50	2.63	2.76
	V=	0.09	0.10	0.13	0.15	0.18	0.22	0.23	0.26	0.29	0.35	0.42	0.55	0.68	0.82
R=16.0	BA=	4.25	4.27	4.29	4.32	4.35	4.39	4.40	4.42	4.45	4.52	4.58	4.71	4.84	4.97
	X=	2.17	2.19	2.21	2.24	2.26	2.30	2.32	2.34	2.37	2.44	2.50	2.63	2.76	2.90
	V=	0.09	0.10	0.13	0.16	0.18	0.22	0.24	0.26	0.29	0.36	0.42	0.55	0.69	0.82
R=20.0	BA=	5.30	5.31	5.34	5.37	5.39	5.43	5.45	5.47	5.50	5.56	5.63	5.76	5.89	6.02
	X=	2.70	2.71	2.74	2.76	2.79	2.83	2.84	2.87	2.90	2.96	3.03	3.16	3.29	3.42
	V=	0.10	0.11	0.14	0.16	0.19	0.23	0.24	0.27	0.29	0.36	0.43	0.56	0.69	0.82
R=25.0	BA=	6.61	6.62	6.65	6.68	6.70	6.74	6.75	6.78	6.81	6.87	6.94	7.07	7.20	7.33
	X=	3.36	3.37	3.40	3.42	3.45	3.49	3.50	3.53	3.55	3.62	3.69	3.82	3.95	4.08
	V=	0.10	0.12	0.14	0.17	0.20	0.24	0.25	0.28	0.30	0.37	0.43	0.57	0.70	0.83
Z=		0.07	0.08	0.11	0.13	0.16	0.20	0.21	0.24	0.26	0.33	0.39	0.53	0.66	0.79

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

20 GRAC		S																
		C.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0			
R= 1.0	BA=	0.44	0.45	0.49	0.52	0.56												
	X=	0.26	0.28	0.32	0.35	0.39												
	V=	0.09	0.11	0.15	0.18	0.22												
R= 1.5	BA=	0.61	0.63	0.66	0.70	0.73	0.79	0.80										
	X=	0.35	0.37	0.41	0.44	0.48	0.53	0.55										
	V=	0.09	0.11	0.15	0.18	0.22	0.27	0.29										
R= 2.0	BA=	0.79	0.80	0.84	0.87	0.91	0.96	0.98	1.01	1.05								
	X=	0.44	0.46	0.49	0.53	0.56	0.62	0.63	0.67	0.71								
	V=	0.10	0.11	0.15	0.19	0.22	0.27	0.29	0.33	0.36								
R= 2.5	BA=	0.96	0.98	1.01	1.05	1.08	1.13	1.15	1.19	1.22	1.31							
	X=	0.53	0.55	0.58	0.62	0.65	0.71	0.72	0.76	0.79	0.88							
	V=	0.10	0.12	0.15	0.19	0.22	0.28	0.29	0.33	0.37	0.45							
R= 3.0	BA=	1.13	1.15	1.19	1.22	1.26	1.31	1.33	1.36	1.40	1.48	1.57						
	X=	0.62	0.63	0.67	0.71	0.74	0.79	0.81	0.85	0.88	0.97	1.06						
	V=	0.10	0.12	0.15	0.19	0.22	0.28	0.30	0.33	0.37	0.46	0.55						
R= 4.0	BA=	1.48	1.50	1.54	1.57	1.61	1.66	1.68	1.71	1.75	1.83	1.92	2.09					
	X=	0.79	0.81	0.85	0.88	0.92	0.97	0.99	1.02	1.06	1.15	1.23	1.41	1.59	1.76			
	V=	0.10	0.12	0.16	0.19	0.23	0.29	0.30	0.33	0.37	0.46	0.55	0.73	0.91				
R= 5.0	BA=	1.83	1.85	1.88	1.92	1.95	2.01	2.02	2.06	2.09	2.18	2.27	2.44	2.62				
	X=	0.97	0.99	1.02	1.06	1.09	1.15	1.16	1.20	1.23	1.32	1.41	1.59	1.76				
	V=	0.11	0.12	0.16	0.20	0.23	0.29	0.30	0.34	0.37	0.46	0.55	0.73	0.91				
R= 6.0	BA=	2.18	2.20	2.23	2.27	2.30	2.36	2.37	2.41	2.44	2.53	2.62	2.79	2.97	3.14			
	X=	1.15	1.16	1.20	1.23	1.27	1.32	1.34	1.38	1.41	1.50	1.59	1.76	1.94	2.12			
	V=	0.11	0.13	0.16	0.20	0.24	0.29	0.31	0.34	0.38	0.47	0.56	0.73	0.91	1.09			
R= 8.0	BA=	2.88	2.90	2.93	2.97	3.00	3.05	3.07	3.11	3.14	3.23	3.32	3.49	3.67	3.84			
	X=	1.50	1.52	1.55	1.59	1.62	1.68	1.69	1.73	1.76	1.85	1.94	2.12	2.29	2.47			
	V=	0.12	0.14	0.17	0.21	0.24	0.30	0.31	0.35	0.38	0.47	0.56	0.74	0.92	1.10			
R=10.0	BA=	3.58	3.60	3.63	3.67	3.70	3.75	3.77	3.80	3.84	3.93	4.01	4.19	4.36	4.54			
	X=	1.85	1.87	1.90	1.94	1.97	2.03	2.05	2.08	2.12	2.20	2.29	2.47	2.64	2.82			
	V=	0.12	0.14	0.18	0.21	0.25	0.30	0.32	0.36	0.39	0.48	0.57	0.75	0.93	1.10			
R=12.0	BA=	4.28	4.29	4.33	4.36	4.40	4.45	4.47	4.50	4.54	4.63	4.71	4.89	5.06	5.24			
	X=	2.20	2.22	2.26	2.29	2.33	2.38	2.40	2.43	2.47	2.56	2.64	2.82	3.00	3.17			
	V=	0.13	0.15	0.19	0.22	0.26	0.31	0.33	0.36	0.40	0.49	0.58	0.76	0.93	1.11			
R=15.0	BA=	5.32	5.34	5.38	5.41	5.45	5.50	5.52	5.55	5.59	5.67	5.76	5.93	6.11	6.28			
	X=	2.73	2.75	2.79	2.82	2.86	2.91	2.93	2.96	3.00	3.09	3.17	3.35	3.53	3.70			
	V=	0.14	0.16	0.20	0.23	0.27	0.32	0.34	0.37	0.41	0.50	0.59	0.77	0.94	1.12			
R=16.0	BA=	5.67	5.69	5.72	5.76	5.79	5.85	5.86	5.90	5.93	6.02	6.11	6.28	6.46	6.63			
	X=	2.91	2.93	2.96	3.00	3.03	3.09	3.10	3.14	3.17	3.26	3.35	3.53	3.70	3.88			
	V=	0.15	0.16	0.20	0.24	0.27	0.32	0.34	0.38	0.41	0.50	0.59	0.77	0.95	1.13			
R=20.0	BA=	7.07	7.09	7.12	7.16	7.19	7.24	7.26	7.30	7.33	7.42	7.50	7.68	7.85	8.03			
	X=	3.61	3.63	3.67	3.70	3.74	3.79	3.81	3.84	3.88	3.97	4.06	4.23	4.41	4.58			
	V=	0.16	0.18	0.21	0.25	0.29	0.34	0.36	0.39	0.43	0.52	0.61	0.78	0.96	1.14			
R=25.0	BA=	8.81	8.83	8.87	8.90	8.94	8.99	9.01	9.04	9.08	9.16	9.25	9.42	9.60	9.77			
	X=	4.50	4.51	4.55	4.58	4.62	4.67	4.69	4.73	4.76	4.85	4.94	5.11	5.29	5.47			
	V=	0.18	0.20	0.23	0.27	0.30	0.36	0.37	0.41	0.45	0.53	0.62	0.80	0.98	1.16			
Z=		0.09	0.11	0.14	0.18	0.21	0.26	0.28	0.32	0.35	0.44	0.53	0.71	0.88	1.06			

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

25 GRAD	S	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	0.55	0.57	0.61	0.65	0.70									
	X=	0.33	0.35	0.40	0.44	0.49									
	V=	0.12	0.14	0.19	0.23	0.28									
R= 1.5	BA=	0.76	0.79	0.83	0.87	0.92	0.98	1.00							
	X=	0.44	0.47	0.51	0.55	0.60	0.67	0.69							
	V=	0.12	0.15	0.19	0.24	0.28	0.35	0.37							
R= 2.0	BA=	0.98	1.00	1.05	1.09	1.13	1.20	1.22	1.27	1.31					
	X=	0.55	0.58	0.62	0.67	0.71	0.78	0.80	0.84	0.89					
	V=	0.13	0.15	0.19	0.24	0.28	0.35	0.37	0.42	0.46					
R= 2.5	BA=	1.20	1.22	1.27	1.31	1.35	1.42	1.44	1.48	1.53	1.64				
	X=	0.67	0.69	0.73	0.78	0.82	0.89	0.91	0.95	1.00	1.11	1.22	1.33		
	V=	0.13	0.15	0.20	0.24	0.29	0.36	0.38	0.42	0.47	0.58	0.70			
R= 3.0	BA=	1.42	1.44	1.48	1.53	1.57	1.64	1.66	1.70	1.75	1.85	1.96			
	X=	0.78	0.80	0.84	0.89	0.93	1.00	1.02	1.06	1.11	1.22	1.33			
	V=	0.13	0.16	0.20	0.25	0.29	0.36	0.38	0.43	0.47	0.58	0.70			
R= 4.0	BA=	1.85	1.88	1.92	1.96	2.01	2.07	2.09	2.14	2.18	2.29	2.40	2.62		
	X=	1.00	1.02	1.06	1.11	1.15	1.22	1.24	1.29	1.33	1.44	1.55	1.77		
	V=	0.14	0.16	0.21	0.25	0.30	0.37	0.39	0.43	0.48	0.59	0.70	0.93		
R= 5.0	BA=	2.29	2.31	2.36	2.40	2.44	2.51	2.53	2.57	2.62	2.73	2.84	3.05	3.27	
	X=	1.22	1.24	1.29	1.33	1.37	1.44	1.46	1.51	1.55	1.66	1.77	2.00	2.22	
	V=	0.15	0.17	0.22	0.26	0.31	0.37	0.40	0.44	0.49	0.60	0.71	0.94	1.16	
R= 6.0	BA=	2.73	2.75	2.79	2.84	2.88	2.95	2.97	3.01	3.05	3.16	3.27	3.49	3.71	3.93
	X=	1.44	1.46	1.51	1.55	1.60	1.66	1.68	1.73	1.77	1.88	2.00	2.22	2.44	2.66
	V=	0.15	0.18	0.22	0.27	0.31	0.38	0.40	0.45	0.49	0.61	0.72	0.94	1.17	1.39
R= 8.0	BA=	3.60	3.62	3.67	3.71	3.75	3.82	3.84	3.88	3.93	4.04	4.15	4.36	4.58	4.80
	X=	1.88	1.91	1.95	2.00	2.04	2.11	2.13	2.17	2.22	2.33	2.44	2.66	2.88	3.10
	V=	0.17	0.19	0.24	0.28	0.33	0.39	0.42	0.46	0.51	0.62	0.73	0.96	1.18	1.41
R=10.0	BA=	4.47	4.49	4.54	4.58	4.63	4.69	4.71	4.76	4.80	4.91	5.02	5.24	5.45	5.67
	X=	2.33	2.35	2.39	2.44	2.48	2.55	2.57	2.62	2.66	2.77	2.88	3.10	3.33	3.55
	V=	0.18	0.21	0.25	0.30	0.34	0.41	0.43	0.48	0.52	0.63	0.75	0.97	1.20	1.42
R=12.0	BA=	5.35	5.37	5.41	5.45	5.50	5.56	5.59	5.63	5.67	5.78	5.89	6.11	6.33	6.54
	X=	2.77	2.79	2.84	2.88	2.93	3.00	3.02	3.06	3.10	3.21	3.33	3.55	3.77	3.99
	V=	0.20	0.22	0.26	0.31	0.35	0.42	0.45	0.49	0.54	0.65	0.76	0.99	1.21	1.44
R=15.0	BA=	6.65	6.68	6.72	6.76	6.81	6.87	6.89	6.94	6.98	7.09	7.20	7.42	7.64	7.85
	X=	3.44	3.46	3.50	3.55	3.59	3.66	3.68	3.72	3.77	3.88	3.99	4.21	4.43	4.66
	V=	0.22	0.24	0.29	0.33	0.38	0.44	0.47	0.51	0.56	0.67	0.78	1.01	1.23	1.46
R=16.0	BA=	7.09	7.11	7.16	7.20	7.24	7.31	7.33	7.37	7.42	7.53	7.64	7.85	8.07	8.29
	X=	3.66	3.68	3.72	3.77	3.81	3.88	3.90	3.95	3.99	4.10	4.21	4.43	4.66	4.88
	V=	0.23	0.25	0.29	0.34	0.38	0.45	0.47	0.52	0.56	0.68	0.79	1.01	1.24	1.46
R=20.0	BA=	8.84	8.86	8.90	8.94	8.99	9.05	9.08	9.12	9.16	9.27	9.38	9.60	9.82	10.04
	X=	4.54	4.57	4.61	4.66	4.70	4.77	4.79	4.83	4.88	4.99	5.10	5.32	5.54	5.76
	V=	0.25	0.28	0.32	0.37	0.41	0.48	0.50	0.55	0.59	0.70	0.82	1.04	1.27	1.49
R=25.0	BA=	11.02	11.04	11.08	11.13	11.17	11.24	11.26	11.30	11.34	11.45	11.56	11.78	12.00	12.22
	X=	5.65	5.68	5.72	5.76	5.81	5.87	5.90	5.94	5.99	6.10	6.21	6.43	6.65	6.87
	V=	0.29	0.31	0.36	0.40	0.45	0.51	0.54	0.58	0.63	0.74	0.85	1.08	1.30	1.53
Z=		0.11	0.13	0.18	0.22	0.27	0.33	0.35	0.40	0.44	0.55	0.67	0.89	1.11	1.33

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

30 GRAD		S=	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	0.65	0.68	0.73	0.79	0.84										
	X=	0.40	0.43	0.48	0.54	0.59										
	V=	0.15	0.18	0.23	0.29	0.34										
R= 1.5	BA=	0.92	0.94	0.99	1.05	1.10	1.18	1.20								
	X=	0.54	0.56	0.62	0.67	0.72	0.80	0.83								
	V=	0.16	0.18	0.24	0.29	0.35	0.43	0.46								
R= 2.0	BA=	1.18	1.20	1.26	1.31	1.36	1.44	1.47	1.52	1.57						
	X=	0.67	0.70	0.75	0.80	0.86	0.94	0.96	1.02	1.07						
	V=	0.16	0.19	0.24	0.30	0.35	0.44	0.46	0.52	0.57						
R= 2.5	BA=	1.44	1.47	1.52	1.57	1.62	1.70	1.73	1.78	1.83	1.96					
	X=	0.80	0.83	0.88	0.94	0.99	1.07	1.10	1.15	1.21	1.34					
	V=	0.17	0.20	0.25	0.30	0.36	0.44	0.47	0.52	0.58	0.72					
R= 3.0	BA=	1.70	1.73	1.78	1.83	1.88	1.96	1.99	2.04	2.09	2.23	2.36				
	X=	0.94	0.96	1.02	1.07	1.13	1.21	1.23	1.29	1.34	1.47	1.61				
	V=	0.17	0.20	0.26	0.31	0.37	0.45	0.48	0.53	0.59	0.72	0.86				
R= 4.0	BA=	2.23	2.25	2.30	2.36	2.41	2.49	2.51	2.57	2.62	2.75	2.88	3.14			
	X=	1.21	1.23	1.29	1.34	1.39	1.47	1.50	1.55	1.61	1.74	1.88	2.14			
	V=	0.19	0.21	0.27	0.32	0.38	0.46	0.49	0.54	0.60	0.73	0.87	1.15			
R= 5.0	BA=	2.75	2.78	2.83	2.88	2.93	3.01	3.04	3.09	3.14	3.27	3.40	3.67	3.93		
	X=	1.47	1.50	1.55	1.61	1.66	1.74	1.77	1.82	1.88	2.01	2.14	2.41	2.68		
	V=	0.20	0.23	0.28	0.34	0.39	0.47	0.50	0.55	0.61	0.75	0.88	1.16	1.43		
R= 6.0	BA=	3.27	3.30	3.35	3.40	3.46	3.53	3.56	3.61	3.67	3.80	3.93	4.19	4.45	4.71	
	X=	1.74	1.77	1.82	1.88	1.93	2.01	2.04	2.09	2.14	2.28	2.41	2.68	2.95	3.22	
	V=	0.21	0.24	0.29	0.35	0.40	0.48	0.51	0.57	0.62	0.76	0.90	1.17	1.44	1.72	
R= 8.0	BA=	4.32	4.35	4.40	4.45	4.50	4.58	4.61	4.66	4.71	4.84	4.97	5.24	5.50	5.76	
	X=	2.28	2.30	2.36	2.41	2.47	2.55	2.57	2.63	2.68	2.81	2.95	3.22	3.48	3.75	
	V=	0.24	0.26	0.32	0.37	0.43	0.51	0.54	0.59	0.65	0.78	0.92	1.19	1.47	1.74	
R=10.0	BA=	5.37	5.39	5.45	5.50	5.55	5.63	5.65	5.71	5.76	5.89	6.02	6.28	6.54	6.81	
	X=	2.81	2.84	2.89	2.95	3.00	3.08	3.11	3.16	3.22	3.35	3.48	3.75	4.02	4.29	
	V=	0.26	0.29	0.34	0.40	0.45	0.53	0.56	0.62	0.67	0.81	0.95	1.22	1.49	1.77	
R=12.0	BA=	6.41	6.44	6.49	6.54	6.60	6.68	6.70	6.75	6.81	6.94	7.07	7.33	7.59	7.85	
	X=	3.35	3.38	3.43	3.48	3.54	3.62	3.64	3.70	3.75	3.89	4.02	4.29	4.56	4.82	
	V=	0.28	0.31	0.37	0.42	0.48	0.56	0.59	0.64	0.70	0.83	0.97	1.24	1.52	1.79	
R=15.0	BA=	7.98	8.01	8.06	8.12	8.17	8.25	8.27	8.33	8.38	8.51	8.64	8.90	9.16	9.42	
	X=	4.15	4.18	4.23	4.29	4.34	4.42	4.45	4.50	4.56	4.69	4.82	5.09	5.36	5.63	
	V=	0.32	0.35	0.40	0.46	0.51	0.60	0.62	0.68	0.73	0.87	1.01	1.28	1.55	1.83	
R=16.0	BA=	8.51	8.53	8.59	8.64	8.69	8.77	8.80	8.85	8.90	9.03	9.16	9.42	9.69	9.95	
	X=	4.42	4.45	4.50	4.56	4.61	4.69	4.72	4.77	4.82	4.96	5.09	5.36	5.63	5.89	
	V=	0.33	0.36	0.42	0.47	0.53	0.61	0.64	0.69	0.74	0.88	1.02	1.29	1.57	1.84	
R=20.0	BA=	10.60	10.63	10.68	10.73	10.79	10.86	10.89	10.94	11.00	11.13	11.26	11.52	11.78	12.04	
	X=	5.49	5.52	5.57	5.63	5.68	5.76	5.79	5.84	5.89	6.03	6.16	6.43	6.70	6.97	
	V=	0.38	0.41	0.47	0.52	0.58	0.66	0.68	0.74	0.79	0.93	1.07	1.34	1.62	1.89	
R=25.0	BA=	13.22	13.25	13.30	13.35	13.40	13.48	13.51	13.56	13.61	13.74	13.88	14.14	14.40	14.66	
	X=	6.83	6.86	6.91	6.97	7.02	7.10	7.13	7.18	7.23	7.37	7.50	7.77	8.04	8.31	
	V=	0.44	0.47	0.53	0.58	0.64	0.72	0.75	0.80	0.86	0.99	1.13	1.40	1.68	1.95	
Z=		0.13	0.16	0.21	0.27	0.32	0.40	0.43	0.48	0.54	0.67	0.80	1.07	1.34	1.61	

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

35 GRAD	S	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	0.76	0.75	0.86	0.92	0.98									
	X=	0.47	0.50	0.57	0.63	0.69									
	V=	0.18	0.21	0.28	0.34	0.41									
R= 1.5	BA=	1.07	1.10	1.16	1.22	1.28	1.37	1.40							
	X=	0.63	0.66	0.73	0.79	0.85	0.95	0.98							
	V=	0.19	0.22	0.29	0.35	0.42	0.52	0.55							
R= 2.0	BA=	1.37	1.40	1.47	1.53	1.59	1.68	1.71	1.77	1.83					
	X=	0.79	0.82	0.88	0.95	1.01	1.10	1.14	1.20	1.26					
	V=	0.20	0.23	0.30	0.36	0.43	0.53	0.56	0.62	0.69					
R= 2.5	BA=	1.68	1.71	1.77	1.83	1.89	1.99	2.02	2.08	2.14	2.29				
	X=	0.95	0.98	1.04	1.10	1.17	1.26	1.29	1.36	1.42	1.58				
	V=	0.21	0.24	0.31	0.37	0.44	0.54	0.57	0.63	0.70	0.86				
R= 3.0	BA=	1.99	2.02	2.08	2.14	2.20	2.29	2.32	2.38	2.44	2.60	2.75			
	X=	1.10	1.14	1.20	1.26	1.32	1.42	1.45	1.51	1.58	1.73	1.89			
	V=	0.22	0.25	0.32	0.38	0.45	0.55	0.58	0.64	0.71	0.87	1.03			
R= 4.0	BA=	2.60	2.63	2.69	2.75	2.81	2.90	2.93	2.99	3.05	3.21	3.36	3.67		
	X=	1.42	1.45	1.51	1.58	1.64	1.73	1.77	1.83	1.89	2.05	2.21	2.52		
	V=	0.24	0.27	0.34	0.40	0.47	0.57	0.60	0.66	0.73	0.89	1.05	1.38		
R= 5.0	BA=	3.21	3.24	3.30	3.36	3.42	3.51	3.54	3.60	3.67	3.82	3.97	4.28	4.58	
	X=	1.73	1.77	1.83	1.89	1.95	2.05	2.08	2.14	2.21	2.36	2.52	2.84	3.15	
	V=	0.26	0.29	0.36	0.42	0.49	0.59	0.62	0.68	0.75	0.91	1.07	1.40	1.72	
R= 6.0	BA=	3.82	3.85	3.91	3.97	4.03	4.12	4.15	4.21	4.28	4.43	4.58	4.89	5.19	5.50
	X=	2.05	2.08	2.14	2.21	2.27	2.36	2.40	2.46	2.52	2.68	2.84	3.15	3.47	3.78
	V=	0.28	0.31	0.38	0.44	0.51	0.61	0.64	0.70	0.77	0.93	1.09	1.42	1.74	2.07
R= 8.0	BA=	5.04	5.07	5.13	5.19	5.25	5.35	5.38	5.44	5.50	5.65	5.80	6.11	6.41	6.72
	X=	2.68	2.71	2.77	2.84	2.90	3.00	3.03	3.09	3.15	3.31	3.47	3.78	4.10	4.41
	V=	0.32	0.35	0.42	0.48	0.55	0.65	0.68	0.74	0.81	0.97	1.13	1.46	1.78	2.11
R=10.0	BA=	6.26	6.29	6.35	6.41	6.48	6.57	6.60	6.66	6.72	6.87	7.02	7.33	7.64	7.94
	X=	3.31	3.34	3.41	3.47	3.53	3.63	3.66	3.72	3.78	3.94	4.10	4.41	4.73	5.04
	V=	0.36	0.39	0.46	0.52	0.59	0.69	0.72	0.78	0.85	1.01	1.17	1.50	1.82	2.15
R=12.0	BA=	7.48	7.51	7.57	7.64	7.70	7.79	7.82	7.88	7.94	8.09	8.25	8.55	8.86	9.16
	X=	3.94	3.97	4.04	4.10	4.16	4.26	4.29	4.35	4.41	4.57	4.73	5.04	5.36	5.68
	V=	0.40	0.43	0.50	0.56	0.63	0.72	0.76	0.82	0.89	1.05	1.21	1.54	1.86	2.19
R=15.0	BA=	9.32	9.35	9.41	9.47	9.53	9.62	9.65	9.71	9.77	9.93	10.08	10.38	10.69	11.00
	X=	4.89	4.92	4.98	5.04	5.11	5.20	5.23	5.30	5.36	5.52	5.68	5.99	6.31	6.62
	V=	0.46	0.49	0.56	0.62	0.69	0.78	0.82	0.88	0.95	1.11	1.27	1.60	1.92	2.25
R=16.0	BA=	9.93	9.96	10.02	10.08	10.14	10.23	10.26	10.32	10.38	10.54	10.69	11.00	11.30	11.61
	X=	5.20	5.23	5.30	5.36	5.42	5.52	5.55	5.61	5.68	5.83	5.99	6.31	6.62	6.94
	V=	0.48	0.51	0.58	0.64	0.71	0.80	0.84	0.90	0.97	1.13	1.29	1.62	1.94	2.27
R=20.0	BA=	12.37	12.40	12.46	12.52	12.58	12.68	12.71	12.77	12.83	12.98	13.13	13.44	13.74	14.05
	X=	6.46	6.50	6.56	6.62	6.68	6.78	6.81	6.87	6.94	7.09	7.25	7.57	7.88	8.20
	V=	0.56	0.59	0.65	0.72	0.78	0.88	0.91	0.98	1.04	1.21	1.37	1.70	2.02	2.35
R=25.0	BA=	15.42	15.45	15.52	15.58	15.64	15.73	15.76	15.82	15.88	16.04	16.19	16.49	16.80	17.10
	X=	8.04	8.07	8.13	8.20	8.26	8.36	8.39	8.45	8.51	8.67	8.83	9.14	9.46	9.77
	V=	0.66	0.69	0.75	0.82	0.88	0.98	1.01	1.08	1.14	1.31	1.47	1.79	2.12	2.44
Z=		0.16	0.19	0.25	0.32	0.38	0.47	0.50	0.57	0.63	0.79	0.95	1.26	1.58	1.89

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

40 GRAD		S														
		0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0	
R= 1.0 C	BA=	C.87	C.91	0.98	1.05	1.12										
	X=	0.55	0.58	0.66	0.73	0.80										
	V=	0.22	0.26	0.33	0.41	0.48										
R= 1.5	BA=	1.22	1.26	1.33	1.40	1.47	1.57	1.61								
	X=	0.73	0.76	0.84	0.91	0.98	1.09	1.13								
	V=	0.23	0.27	0.35	0.42	0.50	0.61	0.65								
R= 2.0	BA=	1.57	1.61	1.68	1.75	1.82	1.92	1.95	2.02	2.09						
	X=	0.91	0.95	1.02	1.09	1.16	1.27	1.31	1.38	1.46						
	V=	0.25	0.29	0.36	0.44	0.51	0.63	0.67	0.74	0.82						
R= 2.5	BA=	1.92	1.95	2.02	2.09	2.16	2.27	2.30	2.37	2.44	2.62					
	X=	1.09	1.13	1.20	1.27	1.35	1.46	1.49	1.57	1.64	1.82					
	V=	0.26	0.30	0.38	0.45	0.53	0.64	0.68	0.76	0.83	1.02					
R= 3.0	BA=	2.27	2.30	2.37	2.44	2.51	2.62	2.65	2.72	2.79	2.97	3.14				
	X=	1.27	1.31	1.38	1.46	1.53	1.64	1.67	1.75	1.82	2.00	2.18				
	V=	0.28	0.32	0.39	0.47	0.54	0.66	0.70	0.77	0.85	1.04	1.23				
R= 4.0	BA=	2.97	3.00	3.07	3.14	3.21	3.32	3.35	3.42	3.49	3.67	3.84	4.19			
	X=	1.64	1.67	1.75	1.82	1.89	2.00	2.04	2.11	2.18	2.37	2.55	2.91			
	V=	0.31	0.35	0.42	0.50	0.57	0.69	0.73	0.80	0.88	1.07	1.26	1.63			
R= 5.0	BA=	3.67	3.70	3.77	3.84	3.91	4.01	4.05	4.12	4.19	4.36	4.54	4.89	5.24		
	X=	2.00	2.04	2.11	2.18	2.26	2.37	2.40	2.47	2.55	2.73	2.91	3.28	3.64		
	V=	0.34	0.38	0.45	0.53	0.60	0.72	0.76	0.83	0.91	1.10	1.29	1.66	2.04		
R= 6.0	BA=	4.36	4.40	4.47	4.54	4.61	4.71	4.75	4.82	4.89	5.06	5.24	5.59	5.93	6.28	
	X=	2.37	2.40	2.47	2.55	2.62	2.73	2.77	2.84	2.91	3.09	3.28	3.64	4.00	4.37	
	V=	0.37	0.41	0.48	0.56	0.63	0.75	0.79	0.86	0.94	1.13	1.32	1.69	2.07	2.45	
R= 8.0	BA=	5.76	5.79	5.86	5.93	6.00	6.11	6.14	6.21	6.28	6.46	6.63	6.98	7.33	7.68	
	X=	3.09	3.13	3.20	3.28	3.35	3.46	3.49	3.57	3.64	3.82	4.00	4.37	4.73	5.10	
	V=	0.43	0.47	0.54	0.62	0.69	0.81	0.84	0.92	1.00	1.19	1.38	1.75	2.13	2.51	
R=10.0	BA=	7.16	7.19	7.26	7.33	7.40	7.50	7.54	7.61	7.68	7.85	8.03	8.38	8.73	9.08	
	X=	3.82	3.86	3.93	4.00	4.08	4.19	4.22	4.29	4.37	4.55	4.73	5.10	5.46	5.82	
	V=	0.49	0.53	0.60	0.68	0.75	0.87	0.90	0.98	1.06	1.25	1.43	1.81	2.19	2.57	
R=12.0	BA=	8.55	8.59	8.66	8.73	8.80	8.90	8.94	9.01	9.08	9.25	9.42	9.77	10.12	10.47	
	X=	4.55	4.59	4.66	4.73	4.80	4.91	4.95	5.02	5.10	5.28	5.46	5.82	6.19	6.55	
	V=	0.55	0.59	0.66	0.74	0.81	0.93	0.96	1.04	1.12	1.30	1.49	1.87	2.25	2.63	
R=15.0	BA=	10.65	10.68	10.75	10.82	10.89	11.00	11.03	11.10	11.17	11.34	11.52	11.87	12.22	12.57	
	X=	5.64	5.68	5.75	5.82	5.90	6.01	6.04	6.11	6.19	6.37	6.55	6.92	7.28	7.64	
	V=	0.64	0.67	0.75	0.83	0.90	1.02	1.05	1.13	1.20	1.39	1.58	1.96	2.34	2.72	
R=16.0 C	BA=	11.34	11.38	11.45	11.52	11.59	11.69	11.73	11.80	11.87	12.04	12.22	12.57	12.92	13.26	
	X=	6.01	6.04	6.11	6.19	6.26	6.37	6.41	6.48	6.55	6.73	6.92	7.28	7.64	8.01	
	V=	0.67	0.70	0.78	0.86	0.93	1.05	1.08	1.16	1.23	1.42	1.61	1.99	2.37	2.75	
R=20.0	BA=	14.14	14.17	14.24	14.31	14.38	14.49	14.52	14.59	14.66	14.84	15.01	15.36	15.71	16.06	
	X=	7.46	7.50	7.57	7.64	7.72	7.83	7.86	7.93	8.01	8.19	8.37	8.74	9.10	9.46	
	V=	0.79	0.82	0.90	0.98	1.05	1.16	1.20	1.28	1.35	1.54	1.73	2.11	2.49	2.87	
R=25.0	BA=	17.63	17.66	17.73	17.80	17.87	17.98	18.01	18.08	18.15	18.33	18.50	18.85	19.20	19.55	
	X=	9.28	9.32	9.39	9.46	9.54	9.65	9.68	9.75	9.83	10.01	10.19	10.56	10.92	11.28	
	V=	0.93	0.97	1.05	1.12	1.20	1.31	1.35	1.43	1.50	1.69	1.88	2.26	2.64	3.02	
Z=		0.18	0.22	0.29	0.36	0.44	0.55	0.58	0.66	0.73	0.91	1.09	1.46	1.82	2.18	

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

45 GRAD	S	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	0.98	1.02	1.10	1.18	1.26									
	X=	0.62	0.66	0.75	0.83	0.91									
	V=	0.26	0.30	0.39	0.48	0.57									
R= 1.5	BA=	1.37	1.41	1.49	1.57	1.65	1.77	1.81							
	X=	0.83	0.87	0.95	1.04	1.12	1.24	1.28							
	V=	0.28	0.33	0.41	0.50	0.59	0.72	0.76							
R= 2.0	BA=	1.77	1.81	1.88	1.96	2.04	2.16	2.20	2.28	2.36					
	X=	1.04	1.08	1.16	1.24	1.33	1.45	1.49	1.57	1.66					
	V=	0.30	0.35	0.43	0.52	0.61	0.74	0.78	0.87	0.96					
R= 2.5	BA=	2.16	2.20	2.28	2.36	2.43	2.55	2.59	2.67	2.75	2.95				
	X=	1.24	1.28	1.37	1.45	1.53	1.66	1.70	1.78	1.86	2.07				
	V=	0.33	0.37	0.46	0.54	0.63	0.76	0.80	0.89	0.98	1.20				
R= 3.0	BA=	2.55	2.59	2.67	2.75	2.83	2.95	2.98	3.06	3.14	3.34	3.53			
	X=	1.45	1.49	1.57	1.66	1.74	1.86	1.91	1.99	2.07	2.28	2.49			
	V=	0.35	0.39	0.48	0.56	0.65	0.78	0.83	0.91	1.00	1.22	1.44			
R= 4.0	BA=	3.34	3.38	3.46	3.53	3.61	3.73	3.77	3.85	3.93	4.12	4.32	4.71		
	X=	1.86	1.91	1.99	2.07	2.15	2.28	2.32	2.40	2.49	2.69	2.90	3.31		
	V=	0.39	0.43	0.52	0.61	0.69	0.83	0.87	0.96	1.04	1.26	1.48	1.92		
R= 5.0	BA=	4.12	4.16	4.24	4.32	4.40	4.52	4.56	4.63	4.71	4.91	5.11	5.50	5.89	
	X=	2.28	2.32	2.40	2.49	2.57	2.69	2.73	2.82	2.90	3.11	3.31	3.73	4.14	
	V=	0.43	0.48	0.56	0.65	0.74	0.87	0.91	1.00	1.09	1.30	1.52	1.96	2.39	
R= 6.0	BA=	4.91	4.95	5.03	5.11	5.18	5.30	5.34	5.42	5.50	5.69	5.89	6.28	6.68	7.07
	X=	2.69	2.73	2.82	2.90	2.98	3.11	3.15	3.23	3.31	3.52	3.73	4.14	4.56	4.97
	V=	0.48	0.52	0.61	0.69	0.78	0.91	0.96	1.04	1.13	1.35	1.57	2.00	2.44	2.87
R= 8.0	BA=	6.48	6.52	6.60	6.68	6.75	6.87	6.91	6.99	7.07	7.26	7.46	7.85	8.25	8.64
	X=	3.52	3.56	3.65	3.73	3.81	3.94	3.98	4.06	4.14	4.35	4.56	4.97	5.38	5.80
	V=	0.56	0.61	0.69	0.78	0.87	1.00	1.04	1.13	1.22	1.43	1.65	2.09	2.52	2.96
R=10.0	BA=	8.05	8.09	8.17	8.25	8.33	8.44	8.48	8.56	8.64	8.84	9.03	9.42	9.82	10.21
	X=	4.35	4.39	4.47	4.56	4.64	4.76	4.80	4.89	4.97	5.18	5.38	5.80	6.21	6.63
	V=	0.65	0.69	0.78	0.87	0.95	1.08	1.13	1.21	1.30	1.52	1.74	2.17	2.61	3.04
R=12.0	BA=	9.62	9.66	9.74	9.82	9.90	10.01	10.05	10.13	10.21	10.41	10.60	11.00	11.39	11.78
	X=	5.18	5.22	5.30	5.38	5.47	5.59	5.63	5.72	5.80	6.01	6.21	6.63	7.04	7.46
	V=	0.73	0.78	0.86	0.95	1.04	1.17	1.21	1.30	1.39	1.61	1.82	2.26	2.69	3.13
R=15.0	BA=	11.98	12.02	12.10	12.17	12.25	12.37	12.41	12.49	12.57	12.76	12.96	13.35	13.74	14.14
	X=	6.42	6.46	6.54	6.63	6.71	6.83	6.88	6.96	7.04	7.25	7.46	7.87	8.28	8.70
	V=	0.86	0.91	0.99	1.08	1.17	1.30	1.34	1.43	1.52	1.73	1.95	2.39	2.82	3.26
R=16.0	BA=	12.76	12.80	12.88	12.96	13.04	13.16	13.19	13.27	13.35	13.55	13.74	14.14	14.53	14.92
	X=	6.83	6.88	6.96	7.04	7.12	7.25	7.29	7.37	7.46	7.66	7.87	8.28	8.70	9.11
	V=	0.91	0.95	1.04	1.12	1.21	1.34	1.39	1.47	1.56	1.78	2.00	2.43	2.87	3.30
R=20.0	BA=	15.90	15.94	16.02	16.10	16.18	16.30	16.34	16.41	16.49	16.69	16.89	17.28	17.67	18.06
	X=	8.49	8.53	8.62	8.70	8.78	8.91	8.95	9.03	9.11	9.32	9.53	9.94	10.36	10.77
	V=	1.08	1.12	1.21	1.30	1.38	1.51	1.56	1.64	1.73	1.95	2.17	2.60	3.04	3.47
R=25.0	BA=	19.83	19.87	19.95	20.03	20.11	20.22	20.26	20.34	20.42	20.62	20.81	21.21	21.60	21.99
	X=	10.56	10.60	10.69	10.77	10.85	10.98	11.02	11.10	11.18	11.39	11.60	12.01	12.43	12.84
	V=	1.29	1.34	1.42	1.51	1.60	1.73	1.77	1.86	1.95	2.17	2.38	2.82	3.25	3.69
Z=		0.21	0.25	0.33	0.41	0.50	0.62	0.66	0.75	0.83	1.04	1.24	1.66	2.07	2.49

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

50 GRAD	S=	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R=1.0	BA=	1.09	1.13	1.22	1.31	1.40									
	X=	0.7C	0.75	0.84	0.93	1.03									
	V=	0.31	0.36	0.46	0.56	0.66									
R=1.5	BA=	1.53	1.57	1.66	1.75	1.83	1.96	2.01							
	X=	0.93	0.98	1.07	1.17	1.26	1.45	1.45							
	V=	0.34	0.39	0.49	0.59	0.69	0.83	0.88							
R=2.0	BA=	1.96	2.01	2.09	2.18	2.27	2.40	2.44	2.53	2.62					
	X=	1.17	1.21	1.31	1.40	1.49	1.63	1.68	1.77	1.87					
	V=	0.37	0.42	0.52	0.62	0.72	0.86	0.91	1.01	1.11					
R=2.5	BA=	2.40	2.44	2.53	2.62	2.71	2.84	2.88	2.97	3.05	3.27				
	X=	1.40	1.45	1.54	1.63	1.73	1.87	1.91	2.01	2.10	2.33				
	V=	0.40	0.45	0.55	0.65	0.75	0.89	0.94	1.04	1.14	1.39				
R=3.0	BA=	2.84	2.88	2.97	3.05	3.14	3.27	3.32	3.40	3.49	3.71	3.93			
	X=	1.63	1.68	1.77	1.87	1.96	2.10	2.15	2.24	2.33	2.56	2.80			
	V=	0.43	0.48	0.58	0.68	0.78	0.92	0.97	1.07	1.17	1.42	1.67			
R=4.0	BA=	3.71	3.75	3.84	3.93	4.01	4.15	4.19	4.28	4.36	4.58	4.80	5.24		
	X=	2.10	2.15	2.24	2.33	2.42	2.56	2.61	2.70	2.80	3.03	3.26	3.73		
	V=	0.49	0.54	0.64	0.74	0.84	0.98	1.03	1.13	1.23	1.48	1.73	2.22		
R=5.0	BA=	4.58	4.63	4.71	4.80	4.89	5.02	5.06	5.15	5.24	5.45	5.67	6.11	6.54	
	X=	2.56	2.61	2.70	2.80	2.89	3.03	3.08	3.17	3.26	3.50	3.73	4.20	4.66	
	V=	0.55	0.60	0.70	0.80	0.90	1.04	1.09	1.19	1.29	1.54	1.79	2.28	2.78	
R=6.0	BA=	5.45	5.50	5.59	5.67	5.76	5.89	5.93	6.02	6.11	6.33	6.54	6.98	7.42	7.85
	X=	3.03	3.08	3.17	3.26	3.36	3.50	3.54	3.63	3.73	3.96	4.20	4.66	5.13	5.60
	V=	0.61	0.66	0.76	0.86	0.96	1.10	1.15	1.25	1.35	1.60	1.85	2.34	2.84	3.34
R=8.0	BA=	7.20	7.24	7.33	7.42	7.50	7.64	7.68	7.77	7.85	8.07	8.29	8.73	9.16	9.60
	X=	3.96	4.01	4.10	4.20	4.29	4.43	4.48	4.57	4.66	4.90	5.13	5.60	6.06	6.53
	V=	0.73	0.78	0.88	0.98	1.08	1.22	1.27	1.37	1.47	1.72	1.97	2.46	2.96	3.46
R=10.0	BA=	8.94	8.99	9.08	9.16	9.25	9.38	9.42	9.51	9.60	9.82	10.04	10.47	10.91	11.34
	X=	4.90	4.94	5.04	5.13	5.22	5.36	5.41	5.50	5.60	5.83	6.06	6.53	6.99	7.46
	V=	0.85	0.90	1.00	1.10	1.20	1.34	1.39	1.49	1.59	1.84	2.09	2.58	3.08	3.58
R=12.0	BA=	10.69	10.73	10.82	10.91	11.00	11.13	11.17	11.26	11.34	11.56	11.78	12.22	12.65	13.09
	X=	5.83	5.88	5.97	6.06	6.16	6.30	6.34	6.44	6.53	6.76	6.99	7.46	7.93	8.39
	V=	0.97	1.02	1.12	1.22	1.31	1.46	1.51	1.61	1.71	1.96	2.21	2.70	3.20	3.70
R=15.0	BA=	13.31	13.35	13.44	13.53	13.61	13.74	13.79	13.88	13.96	14.18	14.40	14.84	15.27	15.71
	X=	7.23	7.27	7.37	7.46	7.55	7.69	7.74	7.83	7.93	8.16	8.39	8.86	9.33	9.79
	V=	1.15	1.20	1.30	1.40	1.49	1.64	1.69	1.79	1.89	2.14	2.39	2.88	3.38	3.88
R=16.0	BA=	14.18	14.22	14.31	14.40	14.49	14.62	14.66	14.75	14.84	15.05	15.27	15.71	16.14	16.58
	X=	7.69	7.74	7.83	7.93	8.02	8.16	8.21	8.30	8.39	8.63	8.86	9.33	9.79	10.26
	V=	1.21	1.26	1.36	1.46	1.55	1.70	1.75	1.85	1.95	2.20	2.45	2.94	3.44	3.94
R=20.0	BA=	17.67	17.72	17.80	17.89	17.98	18.11	18.15	18.24	18.33	18.54	18.76	19.20	19.63	20.07
	X=	9.56	9.61	9.70	9.79	9.89	10.03	10.07	10.17	10.26	10.49	10.73	11.19	11.66	12.12
	V=	1.45	1.50	1.60	1.70	1.79	1.94	1.99	2.09	2.19	2.44	2.69	3.18	3.68	4.18
R=25.0	BA=	22.03	22.08	22.17	22.25	22.34	22.47	22.51	22.60	22.69	22.91	23.13	23.56	24.00	24.43
	X=	11.89	11.94	12.03	12.12	12.22	12.36	12.40	12.50	12.59	12.82	13.06	13.52	13.99	14.46
	V=	1.75	1.80	1.90	2.00	2.09	2.24	2.29	2.39	2.49	2.74	2.99	3.48	3.98	4.48
Z=		0.23	0.28	0.37	0.47	0.56	0.70	0.75	0.84	0.93	1.17	1.40	1.87	2.33	2.80

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

55 GRAD	S=	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	1.20	1.25	1.34	1.44	1.54									
	X=	0.78	0.83	0.94	1.04	1.15									
	V=	0.36	0.42	0.53	0.64	0.75									
R= 1.5	BA=	1.68	1.73	1.82	1.92	2.02	2.16	2.21							
	X=	1.04	1.09	1.20	1.30	1.41	1.56	1.61							
	V=	0.40	0.46	0.57	0.68	0.80	0.96	1.02							
R= 2.0	BA=	2.16	2.21	2.30	2.40	2.50	2.64	2.69	2.78	2.88					
	X=	1.30	1.35	1.46	1.56	1.67	1.82	1.87	1.98	2.08					
	V=	0.44	0.50	0.61	0.72	0.84	1.00	1.06	1.17	1.28					
R= 2.5	BA=	2.64	2.69	2.78	2.88	2.98	3.12	3.17	3.26	3.36	3.60				
	X=	1.56	1.61	1.72	1.82	1.93	2.08	2.13	2.24	2.34	2.60				
	V=	0.48	0.54	0.65	0.76	0.88	1.04	1.10	1.21	1.33	1.61				
R= 3.0	BA=	3.12	3.17	3.26	3.36	3.46	3.60	3.65	3.74	3.84	4.08	4.32			
	X=	1.82	1.87	1.98	2.08	2.19	2.34	2.39	2.50	2.60	2.86	3.12			
	V=	0.52	0.58	0.69	0.80	0.92	1.09	1.14	1.25	1.37	1.65	1.93			
R= 4.0	BA=	4.08	4.13	4.22	4.32	4.42	4.56	4.61	4.70	4.80	5.04	5.28	5.76		
	X=	2.34	2.39	2.50	2.60	2.71	2.86	2.92	3.02	3.12	3.38	3.64	4.16		
	V=	0.61	0.66	0.77	0.89	1.00	1.17	1.22	1.33	1.45	1.73	2.01	2.57		
R= 5.0	BA=	5.04	5.09	5.18	5.28	5.38	5.52	5.57	5.66	5.76	6.00	6.24	6.72	7.20	
	X=	2.86	2.92	3.02	3.12	3.23	3.38	3.44	3.54	3.64	3.90	4.16	4.69	5.21	
	V=	0.69	0.74	0.85	0.97	1.08	1.25	1.30	1.42	1.53	1.81	2.09	2.65	3.21	
R= 6.0	BA=	6.00	6.05	6.14	6.24	6.34	6.48	6.53	6.62	6.72	6.96	7.20	7.68	8.16	8.64
	X=	3.38	3.44	3.54	3.64	3.75	3.90	3.96	4.06	4.16	4.42	4.69	5.21	5.73	6.25
	V=	0.77	0.82	0.94	1.05	1.16	1.33	1.39	1.50	1.61	1.89	2.17	2.73	3.29	3.85
R= 8.0	BA=	7.92	7.97	8.06	8.16	8.26	8.40	8.45	8.54	8.64	8.88	9.12	9.60	10.08	10.56
	X=	4.42	4.48	4.58	4.69	4.79	4.95	5.00	5.10	5.21	5.47	5.73	6.25	6.77	7.29
	V=	0.93	0.99	1.10	1.21	1.32	1.49	1.55	1.66	1.77	2.05	2.33	2.89	3.46	4.02
R=10.0	BA=	9.84	9.89	9.98	10.08	10.18	10.32	10.37	10.46	10.56	10.80	11.04	11.52	12.00	12.48
	X=	5.47	5.52	5.62	5.73	5.83	5.99	6.04	6.14	6.25	6.51	6.77	7.29	7.81	8.33
	V=	1.09	1.15	1.26	1.37	1.49	1.65	1.71	1.82	1.93	2.21	2.50	3.06	3.62	4.18
R=12.0	BA=	11.76	11.81	11.90	12.00	12.10	12.24	12.29	12.38	12.48	12.72	12.96	13.44	13.92	14.40
	X=	6.51	6.56	6.66	6.77	6.87	7.03	7.08	7.18	7.29	7.55	7.81	8.33	8.85	9.37
	V=	1.26	1.31	1.42	1.54	1.65	1.82	1.87	1.98	2.10	2.38	2.66	3.22	3.78	4.34
R=15.0	BA=	14.64	14.69	14.78	14.88	14.97	15.12	15.17	15.26	15.36	15.60	15.84	16.32	16.80	17.28
	X=	8.07	8.12	8.22	8.33	8.43	8.59	8.64	8.75	8.85	9.11	9.37	9.89	10.41	10.93
	V=	1.50	1.55	1.67	1.78	1.89	2.06	2.12	2.23	2.34	2.62	2.90	3.46	4.02	4.59
R=16.0	BA=	15.60	15.65	15.74	15.84	15.93	16.08	16.13	16.22	16.32	16.56	16.80	17.28	17.76	18.24
	X=	8.59	8.64	8.75	8.85	8.95	9.11	9.16	9.27	9.37	9.63	9.89	10.41	10.93	11.45
	V=	1.58	1.64	1.75	1.86	1.97	2.14	2.20	2.31	2.42	2.70	2.98	3.54	4.11	4.67
R=20.0	BA=	19.44	19.49	19.58	19.68	19.77	19.92	19.97	20.06	20.16	20.40	20.64	21.12	21.60	22.08
	X=	10.67	10.72	10.83	10.93	11.04	11.19	11.24	11.35	11.45	11.71	11.97	12.49	13.01	13.53
	V=	1.90	1.96	2.07	2.19	2.30	2.47	2.52	2.63	2.75	3.03	3.31	3.87	4.43	4.99
R=25.0	BA=	24.24	24.29	24.38	24.48	24.57	24.72	24.77	24.86	24.96	25.20	25.44	25.92	26.40	26.88
	X=	13.27	13.33	13.43	13.53	13.64	13.80	13.85	13.95	14.06	14.32	14.58	15.10	15.62	16.14
	V=	2.31	2.37	2.48	2.59	2.70	2.87	2.93	3.04	3.15	3.43	3.71	4.27	4.84	5.40
Z=		0.26	0.31	0.42	0.52	0.62	0.78	0.83	0.94	1.04	1.30	1.56	2.08	2.60	3.12

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

6C GRAD	S=	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	1.31	1.36	1.47	1.57	1.68									
	X=	0.87	0.92	1.04	1.15	1.27									
	V=	0.42	0.49	0.61	0.74	0.86									
R= 1.5	BA=	1.83	1.88	1.99	2.09	2.20	2.36	2.41							
	X=	1.15	1.21	1.33	1.44	1.56	1.79	1.79							
	V=	0.48	0.54	0.67	0.79	0.92	1.11	1.17							
R= 2.0	BA=	2.36	2.41	2.51	2.62	2.72	2.88	2.93	3.04	3.14					
	X=	1.44	1.50	1.62	1.73	1.85	2.02	2.08	2.19	2.31					
	V=	0.53	0.59	0.72	0.85	0.97	1.16	1.22	1.35	1.48					
R= 2.5	BA=	2.88	2.93	3.04	3.14	3.25	3.40	3.46	3.56	3.67	3.93				
	X=	1.73	1.79	1.91	2.02	2.14	2.31	2.37	2.48	2.60	2.89				
	V=	0.58	0.65	0.77	0.90	1.03	1.22	1.28	1.40	1.53	1.85				
R= 3.0	BA=	3.40	3.46	3.56	3.67	3.77	3.93	3.98	4.08	4.19	4.45	4.71			
	X=	2.02	2.08	2.19	2.31	2.42	2.60	2.66	2.77	2.89	3.18	3.46			
	V=	0.64	0.70	0.83	0.95	1.08	1.27	1.33	1.46	1.58	1.90	2.22			
R= 4.0	BA=	4.45	4.50	4.61	4.71	4.82	4.97	5.03	5.13	5.24	5.50	5.76	6.28		
	X=	2.60	2.66	2.77	2.89	3.00	3.18	3.23	3.35	3.46	3.75	4.04	4.62		
	V=	0.75	0.81	0.93	1.06	1.19	1.38	1.44	1.57	1.69	2.01	2.32	2.95		
R= 5.0	BA=	5.50	5.55	5.65	5.76	5.86	6.02	6.07	6.18	6.28	6.54	6.81	7.33	7.85	
	X=	3.18	3.23	3.35	3.46	3.58	3.75	3.81	3.93	4.04	4.33	4.62	5.20	5.77	
	V=	0.85	0.92	1.04	1.17	1.29	1.48	1.55	1.67	1.80	2.12	2.43	3.06	3.69	
R= 6.0	BA=	6.54	6.60	6.70	6.81	6.91	7.07	7.12	7.23	7.33	7.59	7.85	8.38	8.90	9.42
	X=	3.75	3.81	3.93	4.04	4.16	4.33	4.39	4.50	4.62	4.91	5.20	5.77	6.35	6.93
	V=	0.96	1.02	1.15	1.28	1.40	1.59	1.65	1.78	1.91	2.22	2.54	3.17	3.80	4.43
R= 8.0	BA=	8.64	8.69	8.80	8.90	9.01	9.16	9.22	9.32	9.42	9.69	9.95	10.47	11.00	11.52
	X=	4.91	4.97	5.08	5.20	5.31	5.48	5.54	5.66	5.77	6.06	6.35	6.93	7.51	8.08
	V=	1.18	1.24	1.36	1.49	1.62	1.81	1.87	2.00	2.12	2.44	2.75	3.38	4.02	4.65
R=10.0	BA=	10.73	10.79	10.89	11.00	11.10	11.26	11.31	11.41	11.52	11.78	12.04	12.57	13.09	13.61
	X=	6.06	6.12	6.24	6.35	6.47	6.64	6.70	6.81	6.93	7.22	7.51	8.08	8.66	9.24
	V=	1.39	1.45	1.58	1.71	1.83	2.02	2.08	2.21	2.34	2.65	2.97	3.60	4.23	4.86
R=12.0	BA=	12.83	12.88	12.99	13.09	13.19	13.35	13.40	13.51	13.61	13.88	14.14	14.66	15.18	15.71
	X=	7.22	7.27	7.39	7.51	7.62	7.79	7.85	7.97	8.08	8.37	8.66	9.24	9.81	10.39
	V=	1.61	1.67	1.79	1.92	2.05	2.24	2.30	2.43	2.55	2.87	3.18	3.81	4.45	5.08
R=15.0	BA=	15.97	16.02	16.13	16.23	16.34	16.49	16.55	16.65	16.76	17.02	17.28	17.80	18.33	18.85
	X=	8.95	9.01	9.12	9.24	9.35	9.53	9.58	9.70	9.81	10.10	10.39	10.97	11.55	12.12
	V=	1.93	1.99	2.12	2.24	2.37	2.56	2.62	2.75	2.87	3.19	3.51	4.14	4.77	5.40
R=16.0	BA=	17.02	17.07	17.17	17.28	17.38	17.54	17.59	17.70	17.80	18.06	18.33	18.85	19.37	19.90
	X=	9.53	9.58	9.70	9.81	9.93	10.10	10.16	10.28	10.39	10.68	10.97	11.55	12.12	12.70
	V=	2.04	2.10	2.22	2.35	2.48	2.67	2.73	2.86	2.98	3.30	3.61	4.24	4.88	5.51
R=20.0	BA=	21.21	21.26	21.36	21.47	21.57	21.73	21.78	21.89	21.99	22.25	22.51	23.04	23.56	24.09
	X=	11.84	11.89	12.01	12.12	12.24	12.41	12.47	12.59	12.70	13.00	13.28	13.86	14.43	15.01
	V=	2.47	2.53	2.65	2.78	2.91	3.10	3.16	3.29	3.41	3.73	4.04	4.67	5.31	5.94
R=25.0	BA=	26.44	26.49	26.60	26.70	26.81	26.97	27.02	27.12	27.23	27.49	27.75	28.27	28.80	29.32
	X=	14.72	14.78	14.90	15.01	15.13	15.30	15.36	15.47	15.59	15.88	16.17	16.74	17.32	17.90
	V=	3.00	3.07	3.19	3.32	3.44	3.63	3.70	3.82	3.95	4.27	4.58	5.21	5.84	6.47
Z=		0.29	0.35	0.46	0.58	0.69	0.87	0.92	1.04	1.15	1.44	1.73	2.31	2.89	3.46

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

65 GRAD	S=	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	1.42	1.47	1.59	1.70	1.82									
	X=	0.96	1.02	1.15	1.27	1.40									
	V=	0.49	0.56	0.71	0.85	0.99									
R= 1.5	BA=	1.99	2.04	2.16	2.27	2.38	2.55	2.61							
	X=	1.27	1.34	1.47	1.59	1.72	1.91	1.97							
	V=	0.56	0.63	0.78	0.92	1.06	1.27	1.34							
R= 2.0	BA=	2.55	2.61	2.72	2.84	2.95	3.12	3.18	3.29	3.40					
	X=	1.59	1.66	1.78	1.91	2.04	2.23	2.29	2.42	2.55					
	V=	0.63	0.70	0.84	0.99	1.13	1.34	1.41	1.55	1.69					
R= 2.5	BA=	3.12	3.18	3.29	3.40	3.52	3.69	3.74	3.86	3.97	4.25				
	X=	1.91	1.97	2.10	2.23	2.36	2.55	2.61	2.74	2.87	3.19				
	V=	0.70	0.77	0.91	1.06	1.20	1.41	1.48	1.62	1.76	2.12				
R= 3.0	BA=	3.69	3.74	3.86	3.97	4.08	4.26	4.31	4.42	4.54	4.82	5.11			
	X=	2.23	2.29	2.42	2.55	2.68	2.87	2.93	3.06	3.19	3.50	3.82			
	V=	0.77	0.84	0.98	1.13	1.27	1.48	1.55	1.69	1.83	2.19	2.54			
R= 4.0	BA=	4.82	4.88	4.99	5.11	5.22	5.39	5.45	5.56	5.67	5.96	6.24	6.81		
	X=	2.87	2.93	3.06	3.19	3.31	3.50	3.57	3.70	3.82	4.14	4.46	5.10		
	V=	0.91	0.98	1.12	1.27	1.41	1.62	1.69	1.83	1.97	2.33	2.68	3.39		
R= 5.0	BA=	5.96	6.01	6.13	6.24	6.35	6.52	6.58	6.69	6.81	7.09	7.37	7.94	8.51	
	X=	3.50	3.57	3.70	3.82	3.95	4.14	4.20	4.33	4.46	4.78	5.10	5.73	6.37	
	V=	1.05	1.12	1.26	1.41	1.55	1.76	1.83	1.97	2.11	2.47	2.82	3.53	4.23	
R= 6.0	BA=	7.09	7.15	7.26	7.37	7.49	7.66	7.71	7.83	7.94	8.22	8.51	9.08	9.64	10.21
	X=	4.14	4.20	4.33	4.46	4.59	4.78	4.84	4.97	5.10	5.42	5.73	6.37	7.01	7.64
	V=	1.19	1.26	1.40	1.54	1.69	1.90	1.97	2.11	2.25	2.61	2.96	3.67	4.37	5.08
R= 8.0	BA=	9.36	9.42	9.53	9.64	9.76	9.93	9.98	10.10	10.21	10.49	10.78	11.34	11.91	12.48
	X=	5.42	5.48	5.61	5.73	5.86	6.05	6.12	6.24	6.37	6.69	7.01	7.64	8.28	8.92
	V=	1.47	1.54	1.68	1.82	1.97	2.18	2.25	2.39	2.53	2.88	3.24	3.95	4.65	5.36
R=10.0	BA=	11.63	11.68	11.80	11.91	12.03	12.20	12.25	12.37	12.48	12.76	13.05	13.61	14.18	14.75
	X=	6.69	6.75	6.88	7.01	7.14	7.33	7.39	7.52	7.64	7.96	8.28	8.92	9.56	10.19
	V=	1.75	1.82	1.96	2.10	2.25	2.46	2.53	2.67	2.81	3.16	3.52	4.22	4.93	5.64
R=12.0	BA=	13.90	13.95	14.07	14.18	14.29	14.46	14.52	14.63	14.75	15.03	15.32	15.88	16.45	17.02
	X=	7.96	8.03	8.15	8.28	8.41	8.60	8.66	8.79	8.92	9.24	9.56	10.19	10.83	11.47
	V=	2.03	2.10	2.24	2.38	2.52	2.74	2.81	2.95	3.09	3.44	3.80	4.50	5.21	5.92
R=15.0	BA=	17.30	17.36	17.47	17.58	17.70	17.87	17.92	18.04	18.15	18.44	18.72	19.29	19.85	20.42
	X=	9.87	9.94	10.07	10.19	10.32	10.51	10.58	10.70	10.83	11.15	11.47	12.10	12.74	13.38
	V=	2.45	2.52	2.66	2.80	2.94	3.16	3.23	3.37	3.51	3.86	4.22	4.92	5.63	6.34
R=16.0	BA=	18.44	18.45	18.61	18.72	18.83	19.00	19.06	19.17	19.29	19.57	19.85	20.42	20.99	21.55
	X=	10.51	10.58	10.70	10.83	10.96	11.15	11.21	11.34	11.47	11.79	12.10	12.74	13.38	14.02
	V=	2.59	2.66	2.80	2.94	3.08	3.30	3.37	3.51	3.65	4.00	4.36	5.06	5.77	6.48
R=20.0	BA=	22.97	23.03	23.14	23.26	23.37	23.54	23.60	23.71	23.82	24.11	24.39	24.96	25.53	26.09
	X=	13.06	13.12	13.25	13.38	13.51	13.70	13.76	13.89	14.02	14.33	14.65	15.29	15.93	16.56
	V=	3.15	3.22	3.36	3.50	3.64	3.85	3.92	4.07	4.21	4.56	4.91	5.62	6.33	7.03
R=25.0	BA=	28.65	28.70	28.82	28.93	29.04	29.21	29.27	29.38	29.50	29.78	30.06	30.63	31.20	31.76
	X=	16.25	16.31	16.44	16.56	16.69	16.88	16.95	17.07	17.20	17.52	17.84	18.48	19.11	19.75
	V=	3.85	3.92	4.06	4.20	4.34	4.55	4.62	4.76	4.91	5.26	5.61	6.32	7.03	7.73
Z=		C.32	C.38	C.51	0.64	0.76	0.96	1.02	1.15	1.27	1.59	1.91	2.55	3.19	3.82

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

70 GRAD	S=	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R= 1.0	BA=	1.53	1.59	1.71	1.83	1.95									
	X=	1.05	1.12	1.26	1.40	1.54									
	V=	0.57	0.65	0.81	0.97	1.13									
R= 1.5	BA=	2.14	2.20	2.32	2.44	2.57	2.75	2.81							
	X=	1.40	1.47	1.61	1.75	1.89	2.10	2.17							
	V=	0.66	0.74	0.90	1.06	1.22	1.45	1.53							
R= 2.0	BA=	2.75	2.81	2.93	3.05	3.18	3.36	3.42	3.54	3.67					
	X=	1.75	1.82	1.96	2.10	2.24	2.45	2.52	2.66	2.80					
	V=	0.75	0.83	0.99	1.15	1.30	1.54	1.62	1.78	1.94					
R= 2.5	BA=	3.36	3.42	3.54	3.67	3.79	3.97	4.03	4.15	4.28	4.58				
	X=	2.10	2.17	2.31	2.45	2.59	2.80	2.87	3.01	3.15	3.50				
	V=	0.84	0.92	1.08	1.24	1.39	1.63	1.71	1.87	2.03	2.42				
R= 3.0	BA=	3.97	4.03	4.15	4.28	4.40	4.58	4.64	4.76	4.89	5.19	5.50			
	X=	2.45	2.52	2.66	2.80	2.94	3.15	3.22	3.36	3.50	3.85	4.20			
	V=	0.93	1.01	1.17	1.33	1.48	1.72	1.80	1.96	2.12	2.51	2.90			
R= 4.0	BA=	5.19	5.25	5.38	5.50	5.62	5.80	5.86	5.99	6.11	6.41	6.72	7.33		
	X=	3.15	3.22	3.36	3.50	3.64	3.85	3.92	4.06	4.20	4.55	4.90	5.60		
	V=	1.11	1.19	1.35	1.50	1.66	1.90	1.98	2.14	2.29	2.69	3.08	3.87		
R= 5.0	BA=	6.41	6.48	6.60	6.72	6.84	7.02	7.09	7.21	7.33	7.64	7.94	8.55	9.16	
	X=	3.85	3.92	4.06	4.20	4.34	4.55	4.62	4.76	4.90	5.25	5.60	6.30	7.00	
	V=	1.29	1.37	1.53	1.68	1.84	2.08	2.16	2.31	2.47	2.87	3.26	4.05	4.84	
R= 6.0	BA=	7.64	7.70	7.82	7.94	8.06	8.25	8.31	8.43	8.55	8.86	9.16	9.77	10.38	11.00
	X=	4.55	4.62	4.76	4.90	5.04	5.25	5.32	5.46	5.60	5.95	6.30	7.00	7.70	8.40
	V=	1.47	1.55	1.70	1.86	2.02	2.26	2.34	2.49	2.65	3.05	3.44	4.23	5.02	5.81
R= 8.0	BA=	10.08	10.14	10.26	10.38	10.51	10.69	10.75	10.87	11.00	11.30	11.61	12.22	12.83	13.44
	X=	5.95	6.02	6.16	6.30	6.44	6.65	6.72	6.86	7.00	7.35	7.70	8.40	9.10	9.80
	V=	1.82	1.90	2.06	2.22	2.38	2.61	2.69	2.85	3.01	3.40	3.80	4.59	5.38	6.17
R=10.0	BA=	12.52	12.58	12.71	12.83	12.95	13.13	13.19	13.32	13.44	13.74	14.05	14.66	15.27	15.88
	X=	7.35	7.42	7.56	7.70	7.84	8.05	8.12	8.26	8.40	8.75	9.10	9.80	10.50	11.20
	V=	2.18	2.26	2.42	2.58	2.73	2.97	3.05	3.21	3.37	3.76	4.16	4.95	5.73	6.52
R=12.0	BA=	14.97	15.03	15.15	15.27	15.39	15.58	15.64	15.76	15.88	16.19	16.49	17.10	17.72	18.33
	X=	8.75	8.82	8.96	9.10	9.24	9.45	9.52	9.66	9.80	10.15	10.50	11.20	11.90	12.60
	V=	2.54	2.62	2.78	2.93	3.09	3.33	3.41	3.57	3.72	4.12	4.51	5.30	6.09	6.88
R=15.0	BA=	18.63	18.69	18.81	18.94	19.06	19.24	19.30	19.43	19.55	19.85	20.16	20.77	21.38	21.99
	X=	10.85	10.92	11.06	11.20	11.34	11.55	11.62	11.76	11.90	12.25	12.60	13.30	14.00	14.70
	V=	3.08	3.15	3.31	3.47	3.63	3.86	3.94	4.10	4.26	4.65	5.05	5.84	6.63	7.42
R=16.0	BA=	19.85	19.91	20.04	20.16	20.28	20.46	20.53	20.65	20.77	21.07	21.38	21.99	22.60	23.21
	X=	11.55	11.62	11.76	11.90	12.04	12.25	12.32	12.46	12.60	12.95	13.30	14.00	14.70	15.40
	V=	3.25	3.33	3.49	3.65	3.81	4.04	4.12	4.28	4.44	4.83	5.23	6.02	6.81	7.60
R=20.0	BA=	24.74	24.80	24.92	25.05	25.17	25.35	25.41	25.53	25.66	25.96	26.27	26.88	27.49	28.10
	X=	14.35	14.42	14.56	14.70	14.84	15.05	15.12	15.26	15.40	15.75	16.10	16.80	17.51	18.21
	V=	3.97	4.05	4.21	4.36	4.52	4.76	4.84	4.99	5.15	5.55	5.94	6.73	7.52	8.31
R=25.0	BA=	30.85	30.91	31.03	31.15	31.28	31.46	31.52	31.64	31.76	32.07	32.38	32.99	33.60	34.21
	X=	17.86	17.93	18.07	18.21	18.35	18.56	18.63	18.77	18.91	19.26	19.61	20.31	21.01	21.71
	V=	4.86	4.94	5.10	5.26	5.41	5.65	5.73	5.89	6.05	6.44	6.84	7.63	8.41	9.20
Z=		0.35	0.42	0.56	0.70	0.84	1.05	1.12	1.26	1.40	1.75	2.10	2.80	3.50	4.20

Tabelle 6. (Fortsetzung)

Table 6. (Continued)

75 GRAD	S =	0.5	0.6	0.8	1.0	1.2	1.5	1.6	1.8	2.0	2.5	3.0	4.0	5.0	6.0
R = 1.0	BA =	1.64	1.70	1.83	1.96	2.09									
	X =	1.15	1.23	1.38	1.53	1.69									
	V =	0.67	0.75	0.93	1.11	1.28									
R = 1.5	BA =	2.29	2.36	2.49	2.62	2.75	2.95	3.01							
	X =	1.53	1.61	1.76	1.92	2.07	2.30	2.38							
	V =	0.78	0.87	1.04	1.22	1.39	1.66	1.75							
R = 2.0	BA =	2.95	3.01	3.14	3.27	3.40	3.60	3.67	3.80	3.93					
	X =	1.92	2.00	2.15	2.30	2.46	2.69	2.76	2.92	3.07					
	V =	0.89	0.98	1.16	1.33	1.51	1.77	1.86	2.04	2.21					
R = 2.5	BA =	3.60	3.67	3.80	3.93	4.06	4.25	4.32	4.45	4.58	4.91				
	X =	2.30	2.38	2.53	2.69	2.84	3.07	3.15	3.30	3.45	3.84				
	V =	1.00	1.09	1.27	1.44	1.62	1.88	1.97	2.15	2.32	2.76				
R = 3.0	BA =	4.25	4.32	4.45	4.58	4.71	4.91	4.97	5.11	5.24	5.56	5.89			
	X =	2.69	2.76	2.92	3.07	3.22	3.45	3.53	3.68	3.84	4.22	4.60			
	V =	1.12	1.21	1.38	1.56	1.73	2.00	2.09	2.26	2.44	2.88	3.32			
R = 4.0	BA =	5.56	5.63	5.76	5.89	6.02	6.22	6.28	6.41	6.54	6.87	7.20	7.85		
	X =	3.45	3.53	3.68	3.84	3.99	4.22	4.30	4.45	4.60	4.99	5.37	6.14		
	V =	1.34	1.43	1.61	1.78	1.96	2.22	2.31	2.49	2.66	3.10	3.54	4.42		
R = 5.0	BA =	6.87	6.94	7.07	7.20	7.33	7.53	7.59	7.72	7.85	8.18	8.51	9.16	9.82	
	X =	4.22	4.30	4.45	4.60	4.76	4.99	5.06	5.22	5.37	5.75	6.14	6.91	7.67	
	V =	1.57	1.66	1.83	2.01	2.18	2.45	2.54	2.71	2.89	3.33	3.77	4.65	5.53	
R = 6.0	BA =	8.18	8.25	8.38	8.51	8.64	8.84	8.90	9.03	9.16	9.49	9.82	10.47	11.13	11.78
	X =	4.99	5.06	5.22	5.37	5.52	5.75	5.83	5.99	6.14	6.52	6.91	7.67	8.44	9.21
	V =	1.79	1.88	2.06	2.23	2.41	2.67	2.76	2.94	3.11	3.55	3.99	4.87	5.75	6.63
R = 8.0	BA =	10.80	10.86	11.00	11.13	11.26	11.45	11.52	11.65	11.78	12.11	12.44	13.09	13.74	14.40
	X =	6.52	6.60	6.75	6.91	7.06	7.29	7.37	7.52	7.67	8.06	8.44	9.21	9.98	10.74
	V =	2.25	2.33	2.51	2.69	2.86	3.13	3.21	3.39	3.57	4.01	4.45	5.33	6.21	7.09
R = 10.0	BA =	13.42	13.48	13.61	13.74	13.88	14.07	14.14	14.27	14.40	14.73	15.05	15.71	16.36	17.02
	X =	8.06	8.13	8.29	8.44	8.59	8.82	8.90	9.05	9.21	9.59	9.98	10.74	11.51	12.28
	V =	2.70	2.78	2.96	3.14	3.31	3.58	3.66	3.84	4.02	4.46	4.90	5.78	6.66	7.54
R = 12.0	BA =	16.04	16.10	16.23	16.36	16.49	16.69	16.76	16.89	17.02	17.34	17.67	18.33	18.98	19.63
	X =	9.59	9.67	9.82	9.98	10.13	10.36	10.44	10.59	10.74	11.13	11.51	12.28	13.04	13.81
	V =	3.15	3.24	3.41	3.59	3.76	4.03	4.12	4.29	4.47	4.91	5.35	6.23	7.11	7.99
R = 15.0	BA =	19.96	20.03	20.16	20.29	20.42	20.62	20.68	20.81	20.94	21.27	21.60	22.25	22.91	23.56
	X =	11.89	11.97	12.12	12.28	12.43	12.66	12.74	12.89	13.04	13.43	13.81	14.58	15.35	16.11
	V =	3.82	3.91	4.09	4.26	4.44	4.71	4.79	4.97	5.15	5.59	6.03	6.91	7.79	8.67
R = 16.0	BA =	21.27	21.34	21.47	21.60	21.73	21.93	21.99	22.12	22.25	22.58	22.91	23.56	24.22	24.87
	X =	12.66	12.74	12.89	13.04	13.20	13.43	13.50	13.66	13.81	14.20	14.58	15.35	16.11	16.88
	V =	4.05	4.14	4.31	4.49	4.67	4.93	5.02	5.19	5.37	5.81	6.25	7.13	8.01	8.89
R = 20.0	BA =	26.51	26.57	26.70	26.83	26.97	27.16	27.23	27.36	27.49	27.82	28.14	28.80	29.45	30.11
	X =	15.73	15.81	15.96	16.11	16.27	16.50	16.57	16.73	16.88	17.26	17.65	18.42	19.18	19.95
	V =	4.95	5.04	5.22	5.39	5.57	5.83	5.92	6.10	6.27	6.71	7.15	8.03	8.91	9.79
R = 25.0	BA =	33.05	33.12	33.25	33.38	33.51	33.71	33.77	33.90	34.03	34.36	34.69	35.34	36.00	36.65
	X =	19.57	19.64	19.80	19.95	20.10	20.33	20.41	20.56	20.72	21.10	21.49	22.25	23.02	23.79
	V =	6.08	6.17	6.35	6.52	6.70	6.96	7.05	7.23	7.40	7.84	8.28	9.16	10.04	10.92
Z =		0.38	0.46	0.61	0.77	0.92	1.15	1.23	1.38	1.53	1.92	2.30	3.07	3.84	4.60