

<b>Born &amp; Wolf</b>		$R_n^m(\rho) \left\{ \begin{array}{l} \cos m\theta \\ \sin m\theta \end{array} \right\}$	Description	<b>Wyko</b>
Radial	Azimuthal			
n	m			
0	0			
		1	Piston	0
1	1			
		$\rho \cos \theta$	X-Tilt	1
		$\rho \sin \theta$	Y-Tilt	2
2	0			
		$2\rho^2 - 1$	Power	3
2	2			
		$\rho^2 \cos 2\theta$	Astigmatism, axis at $0^\circ$	4
		$\rho^2 \sin 2\theta$	Astigmatism, axis at $45^\circ$	5
3	1			
		$(3\rho^3 - 2\rho) \cos \theta$	3rd order Coma, y-axis	6
		$(3\rho^3 - 2\rho) \sin \theta$	3rd order Coma, x-axis	7
3	3			
		$\rho^3 \cos 3\theta$	Tri-Foil, base of y-axis	9
		$\rho^3 \sin 3\theta$	Tri-Foil, base of x-axis	10
4	0			
		$6\rho^4 - 6\rho^2 + 1$	3rd order Spherical Aberration	8
4	2			
		$(4\rho^4 - 3\rho^2) \cos 2\theta$		11
		$(4\rho^4 - 3\rho^2) \sin 2\theta$		12
4	4			
		$\rho^4 \cos 4\theta$		16
		$\rho^4 \sin 4\theta$		17
5	1			
		$(10\rho^5 - 12\rho^3 + 3\rho) \cos \theta$		13
		$(10\rho^5 - 12\rho^3 + 3\rho) \sin \theta$		14
5	3			
		$(5\rho^5 - 4\rho^3) \cos 3\theta$		18
		$(5\rho^5 - 4\rho^3) \sin 3\theta$		19
5	5			
		$\rho^5 \cos 5\theta$		25
		$\rho^5 \sin 5\theta$		26

Born & Wolf		$R_n^m(\rho) \begin{Bmatrix} \cos m\theta \\ \sin m\theta \end{Bmatrix}$	Description	Wyko
Radial	Azimuthal			
n	m			
6	0			
		$20\rho^6 - 30\rho^4 + 12\rho^2 - 1$		15
6	2			
		$(15\rho^6 - 20\rho^4 + 6\rho^2) \cos 2\theta$		20
		$(15\rho^6 - 20\rho^4 + 6\rho^2) \sin 2\theta$		21
6	4			
		$(6\rho^6 - 5\rho^4) \cos 4\theta$		27
		$(6\rho^6 - 5\rho^4) \sin 4\theta$		28
6	6			
		$\rho^6 \cos 6\theta$		
		$\rho^6 \sin 6\theta$		
7	1			
		$(35\rho^7 - 60\rho^5 + 30\rho^3 - 4\rho) \cos \theta$		22
		$(35\rho^7 - 60\rho^5 + 30\rho^3 - 4\rho) \sin \theta$		23
7	3			
		$(21\rho^7 - 30\rho^5 + 10\rho^3) \cos 3\theta$		29
		$(21\rho^7 - 30\rho^5 + 10\rho^3) \sin 3\theta$		30
7	5			
		$(7\rho^7 - 6\rho^5) \cos 5\theta$		
		$(7\rho^7 - 6\rho^5) \sin 5\theta$		
7	7			
		$\rho^7 \cos 7\theta$		
		$\rho^7 \sin 7\theta$		
8	0			
		$70\rho^8 - 140\rho^6 + 90\rho^4 - 20\rho^2 + 1$		24
8	2			
		$(56\rho^8 - 105\rho^6 + 60\rho^4 - 10\rho^2) \cos 2\theta$		31
		$(56\rho^8 - 105\rho^6 + 60\rho^4 - 10\rho^2) \sin 2\theta$		32
9	1			
		$(126\rho^9 - 280\rho^7 + 210\rho^5 - 60\rho^3 + 5\rho) \cos \theta$		33
		$(126\rho^9 - 280\rho^7 + 210\rho^5 - 60\rho^3 + 5\rho) \sin \theta$		34
10	0			
		$252\rho^{10} - 630\rho^8 + 560\rho^6 - 210\rho^4 + 30\rho^2 - 1$		35
12	0			
		$924\rho^{12} - 2772\rho^{10} + 3150\rho^8 - 1680\rho^6 + 420\rho^4 - 42\rho^2 + 1$		36

Wyko	$R_n^m(\rho) \begin{Bmatrix} \cos m\theta \\ \sin m\theta \end{Bmatrix}$	Description	Born & Wolf	
			Radial	Azimuthal
			n	m
0	1	Piston	0	0
1	$\rho \cos \theta$	X-Tilt	1	1
2	$\rho \sin \theta$	Y-Tilt		
3	$2\rho^2 - 1$	Power	2	0
4	$\rho^2 \cos 2\theta$	Astigmatism, axis at $0^\circ$	2	2
5	$\rho^2 \sin 2\theta$	Astigmatism, axis at $45^\circ$		
6	$(3\rho^3 - 2\rho) \cos \theta$	3rd order Coma, y-axis	3	1
7	$(3\rho^3 - 2\rho) \sin \theta$	3rd order Coma, x-axis		
8	$6\rho^4 - 6\rho^2 + 1$	3rd order Spherical Aberration	4	0
9	$\rho^3 \cos 3\theta$	Tri-Foil, base of y-axis	3	3
10	$\rho^3 \sin 3\theta$	Tri-Foil, base of x-axis		
11	$(4\rho^4 - 3\rho^2) \cos 2\theta$		4	2
12	$(4\rho^4 - 3\rho^2) \sin 2\theta$			
13	$(10\rho^5 - 12\rho^3 + 3\rho) \cos \theta$		5	1
14	$(10\rho^5 - 12\rho^3 + 3\rho) \sin \theta$			
15	$20\rho^6 - 30\rho^4 + 12\rho^2 - 1$		6	0
16	$\rho^4 \cos 4\theta$		4	4
17	$\rho^4 \sin 4\theta$			
18	$(5\rho^5 - 4\rho^3) \cos 3\theta$		5	3
19	$(5\rho^5 - 4\rho^3) \sin 3\theta$			
20	$(15\rho^6 - 20\rho^4 + 6\rho^2) \cos 2\theta$		6	2
21	$(15\rho^6 - 20\rho^4 + 6\rho^2) \sin 2\theta$			
22	$(35\rho^7 - 60\rho^5 + 30\rho^3 - 4\rho) \cos \theta$		7	1
23	$(35\rho^7 - 60\rho^5 + 30\rho^3 - 4\rho) \sin \theta$			
24	$70\rho^8 - 140\rho^6 + 90\rho^4 - 20\rho^2 + 1$		8	0
25	$\rho^5 \cos 5\theta$		5	5
26	$\rho^5 \sin 5\theta$			
27	$(6\rho^6 - 5\rho^4) \cos 4\theta$		6	4
28	$(6\rho^6 - 5\rho^4) \sin 4\theta$			
29	$(21\rho^7 - 30\rho^5 + 10\rho^3) \cos 3\theta$		7	3
30	$(21\rho^7 - 30\rho^5 + 10\rho^3) \sin 3\theta$			
31	$(56\rho^8 - 105\rho^6 + 60\rho^4 - 10\rho^2) \cos 2\theta$		8	2
32	$(56\rho^8 - 105\rho^6 + 60\rho^4 - 10\rho^2) \sin 2\theta$			
33	$(126\rho^9 - 280\rho^7 + 210\rho^5 - 60\rho^3 + 5\rho) \cos \theta$		9	1
34	$(126\rho^9 - 280\rho^7 + 210\rho^5 - 60\rho^3 + 5\rho) \sin \theta$			
35	$252\rho^{10} - 630\rho^8 + 560\rho^6 - 210\rho^4 + 30\rho^2 - 1$		10	0
36	$924\rho^{12} - 2772\rho^{10} + 3150\rho^8 - 1680\rho^6 + 420\rho^4 - 42\rho^2 + 1$		12	0