

**純序列(或序列.非序列混雜)情況下,
想在coating情況下看到同時呈現穿透以及反射**

Lens Data Editor: Config 1/2

Edit Solves View Help

Surf	Type	Glass	Semi-Diameter	Conic	Par 0 (unused)	Decenter X	Decenter Y	Tilt About X	Tilt About Y
OBJ	Standard		5.000	0.000					
1*	Standard	BK7	12.000	0.000					
2*	Standard		12.000	0.000					
3*	Standard	BK7	20.000	0.000					
4*	Tilted	BK7	20.000	0.000		0.000			
5	Coordinat...	--	0.000			0.000			
6*	Tilted	BK7	20.000	0.000		0.000			
7*	Standard		20.000	0.000					
8*	Standard	BK7	16.000	0.000					
9*	Standard		16.000	0.000					
10*	Standard	BK7	16.000	0.000					
11*	Standard		16.000	0.000					

3: Shaded Model Z = -69.783188, Y = -50.513157

Update Settings Print Window Text Zoom Spin

Transmission Fan 1

Settings Print Window Text Zoom

Transmission Fan Plot

litter model with 2 zooms unpolarized.

Beam splitter_zmx Configuration 1 of 2

Multi-Configuration Editor

Edit Solves Tools View Help

Active : 1/2	Config 1*	Config 2
1: GLSS	4	MIRROR
2: THIC	6	-20.000
3: THIC	7	-10.000
4: THIC	8	-5.000
5: THIC	9	-10.000
6: CRVT	8	0.012 V
7: CRVT	9	-2.849E-003 V
8: PRAM	5/3	0.000
9: PRAM	6/2	1.000
10: THIC	10	-10.000
11: THIC	11	-50.000
12: GLSS	10	BK7
13: SDIA	10	16.000
14: SDIA	11	16.000

Layout

Settings Print Window Text Zoom

Transmission Fan 2

Settings Print Window Text Zoom

Transmission Fan Plot

litter model with 2 zooms unpolarized.

Beam splitter_zmx Configuration 2 of 2

只有序列

利用Aperture擋光來篩選欲呈現角度_Beam splitter瑋倫教學2019AUG15.SES

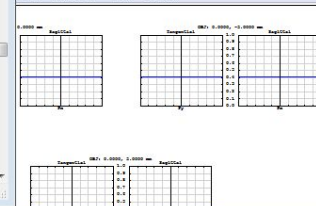
Lens Data Editor: Config 1/3

Edit Solves View Help

Surf:Type	Comment	Radius	Thickness	Glass	Semi-Diameter	Conic	Par 0 (unused)	X Tangent	Y Tangent	Par 3 (unused)
OBJ	Standard	Infinity	60.000		5.000	0.000				
1*	Standard	320.007 V	5.000	BK7	12.000 U	0.000				
2*	Standard	-38.553 V	10.000		12.000 U	0.000				
3*	Standard	Infinity	20.000	BK7	20.000 U	0.000				
4*	Tilted		0.000	BK7	20.000 U			0.000	1.000	
5	Coordinat...		0.000	-	0.000			0.000	0.000	0.000
6*	Tilted		20.000	BK7	20.000 U			0.000	1.000	
7*	Standard	Infinity	10.000		20.000 U	0.000				
8*	Standard	84.770 V	5.000	BK7	16.000 U	0.000				
9*	Standard	-350.952 V	10.000		16.000 U	0.000				
10*	Standard	37.973 V	10.000	BK7	16.000 U	0.000				
11*	Standard	107.149 V	50.000		16.000 U	0.000				

n1

Print Window Text Zoom



Update Settings Print Window Text Zoom

Multi-Configuration Editor

Edit Solves Tools View Help

Active : 1/3	Config 1*	Config 2	Config 3
1: GLSS	4	BK7	MIRROR
2: THIC	6	20.000	-20.000
3: THIC	7	10.000	-10.000
4: THIC	8	5.000	-5.000
5: THIC	9	10.000	-10.000
6: CRVT	8	0.012 V	-0.023 V
7: CRVT	9	-2.849E-003 V	4.403E-003 V
8: PRAM	5/3	0.000	90.000
9: PRAM	6/2	1.000	-1.000
10: TH*	10	10.000	-10.000
11: TH*	11	50.000	-50.000
12: GL*	10	BK7	
13: SD*	10	16.000	0.000
14: SD*	11	16.000	0.000

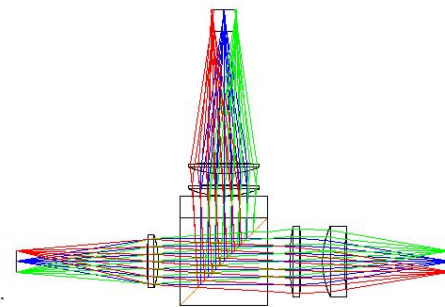
4: 3D Layout1

Update Settings Print Window Text Zoom



5: 3D Layout 2 Z = 26.269544, Y = -0.75641602

Update Settings Print Window Text Zoom



3D Layout

A beamsplitter model with 2 zooms
2019/8/15Beam splitter.zmx
Configuration: All 3

Transmission Fan Plot

A beamsplitter model with 2 zooms
2019/8/15
Field is unpolarised.
0.950Beam splitter.zmx
Configuration: All 2

EFFL: 54.3231

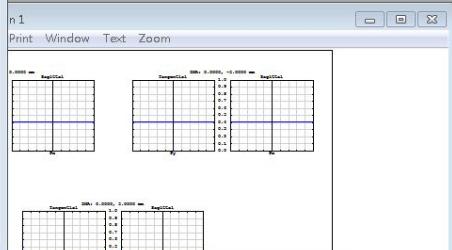
WFNO: 2.98614

ENP

Lens Data Editor: Config 1/2

Edit Solves View Help

Surf	Type	Comment	Radius	Thickness	Glass	Semi-Diameter	Conic	Par 0 (unused)	Par 1 (unused)	Par 2 (unused)	Par 3 (unused)
OBJ	Standard		Infinity	0.100		5.126	0.000				
1*	Standard		Infinity	60.000		5.134	0.000				
*	Standard		320.007 V	5.000	BK7	12.000 U	0.000				
3*	Standard		-38.553 V	10.000		12.000 U	0.000				
4*	Standard		Infinity	20.000	BK7	20.000 U	0.000				
5*	Tilted			0.000	BK7	20.000 U			0.000	1.000	
6	Coordinat...		0.000		-	0.000			0.000	0.000	0.000
7*	Tilted			20.000	BK7	20.000 U			0.000	1.000	
8*	Standard		Infinity	10.000		20.000 U	0.000				
9*	Standard		84.770 V	5.000	BK7	16.000 U	0.000				
10*	Standard		-350.952 V	10.000		16.000 U	0.000				
11*	Standard		37.973 V	10.000	BK7	16.000 U	0.000				

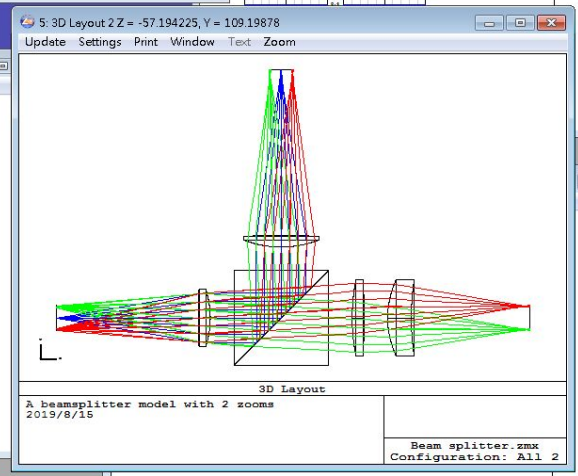
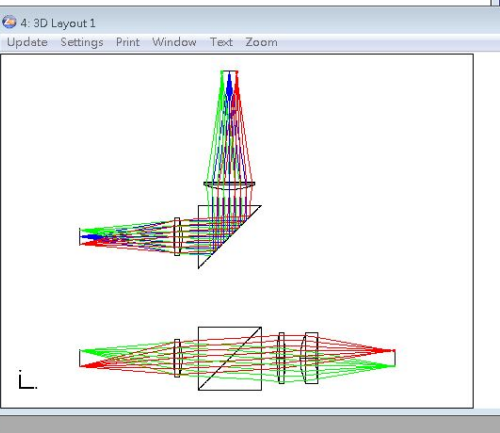


Multi-Configuration Editor

Edit Solves Tools View Help

Active : 1/2

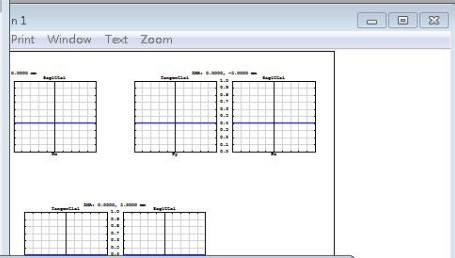
		Config 1*	Config 2
1:	GLSS	5 BK7	MIRROR
2:	THIC	7 20.000	-20.000
3:	THIC	8 10.000	-10.000
4:	THIC	9 5.000	-5.000
5:	THIC	10 10.000	-10.000
6:	CRVT	9 0.012 V	-0.023 V
7:	CRVT	10 -2.849E-003 V	4.403E-003 V
8:	PRAM	6/3 0.000	90.000
9:	PRAM	7/2 1.000	-1.000
10:	THIC	11 10.000	-10.000
11:	THIC	12 50.000	-50.000
12:	GLSS	11 BK7	
13:	SDIA	11 16.000	0.000
14:	SDIA	12 16.000	0.000
15:	FLTP	0 3	33
16:	APMN	1 0.100	0.000



Lens Data Editor: Config 1/2

Edit Solves View Help

Surf	Type	Comment	Radius	Thickness	Glass	Semi-Diameter	Conic	Par 0 (unused)	Par 1 (unused)	Par 2 (unused)	Par 3 (unused)
OBJ	Standard		Infinity	0.100		5.126	0.000				
1*	Standard		Infinity	60.000		5.134	0.000				
2*	Standard		320.007 V	5.000	BK7	12.000 U	0.000				
3*	Standard		-38.553 V	10.000		12.000 U	0.000				
4*	Standard		Infinity	20.000	BK7	20.000 U	0.000				
5*	Tilted			0.000	BK7	20.000 U		0.000	1.000		
6	Coordinat...		0.000		-	0.000		0.000	0.000	0.000	
7*	Tilted			20.000	BK7	20.000 U		0.000	1.000		
8*	Standard		Infinity	10.000		20.000 U	0.000				
9*	Standard		84.770 V	5.000	BK7	16.000 U	0.000				
10*	Standard		-350.952 V	10.000		16.000 U	0.000				
11*	Standard		37.973 V	10.000	BK7	16.000 U	0.000				
12*	Standard		107.149 V	50.000		16.000 U	0.000				
IMA	Standard		Infinity	-		5.292	0.000				

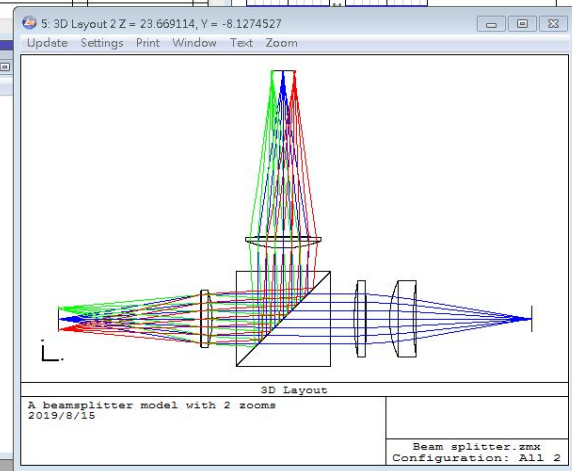
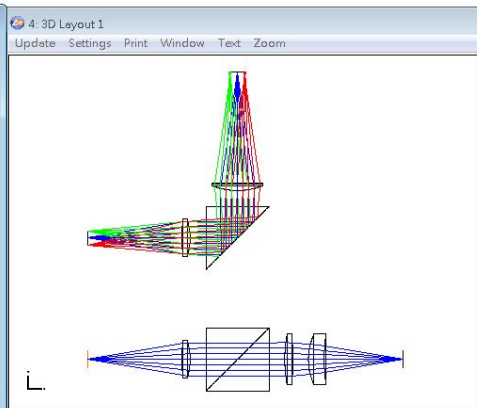


Multi-Configuration Editor

Edit Solves Tools View Help

Active : 1/2

	Config 1*	Config 2
1: GLSS	5	BK7
2: THIC	7	20.000
3: THIC	8	10.000
4: THIC	9	5.000
5: THIC	10	10.000
6: CRVT	9	0.012 V
7: CRVT	10	-2.849E-003 V
8: PRAM	6/3	0.000
9: PRAM	7/2	1.000
10: THIC	11	10.000
11: THIC	12	50.000
12: GLSS	11	BK7
13: SDIA	11	16.000
14: SDIA	12	16.000
15: APMN	1	0.100
16: APMX	1	5.281



Transmission Fan Plot

A beamsplitter model with 2 zooms
2019/8/15
Field is unpolarised.
0.950

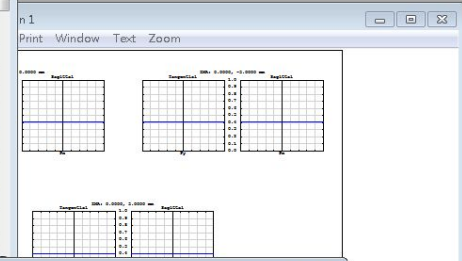
Beam splitter.zmx
Configuration: All 2

Surf	Type	Comment	Radius	Thickness	Glass	Semi-Diameter	Conic	Par 0 (unused)	Par 1 (unused)	Par 2 (unused)	Par 3 (unused)
OBJ	Standard		Infinity	0.100		5.126	0.000				
1*	Standard		Infinity	60.000		5.134	0.000				
2*	Standard		320.007 V	5.000	BK7	12.000 U	0.000				
3*	Standard		-38.553 V	10.000		12.000 U	0.000				
4*	Standard		Infinity	20.000	BK7	20.000 U	0.000				
5*	Tilted			0.000	BK7	20.000 U		0.000	1.000		
6	Coordinat...		0.000		-	0.000		0.000	0.000	0.000	
7*	Tilted			20.000	BK7	20.000 U		0.000	1.000		
8*	Standard		Infinity	10.000		20.000 U	0.000				
9*	Standard		84.770 V	5.000	BK7	16.000 U	0.000				
10*	Standard		-350.952 V	10.000		16.000 U	0.000				
11*	Standard		37.973 V	10.000	BK7	16.000 U	0.000				
12*	Standard		107.149 V	50.000		16.000 U	0.000				
IMA	Standard		Infinity	-		5.292	0.000				

Active : 1/2	Config 1*	Config 2
1: GLSS	5	BK7
2: THIC	7	20.000
3: THIC	8	10.000
4: THIC	9	5.000
5: THIC	10	10.000
6: CRVT	9	0.012 V
7: CRVT	10	-2.849E-003 V
8: PRAM	6/3	0.000
9: PRAM	7/2	1.000
10: THIC	11	10.000
11: THIC	12	50.000
12: GLSS	11	BK7
13: SDIA	11	16.000
14: SDIA	12	16.000
15: APMN	1	0.300
16: APMX	1	5.281
17: APDX	1	0.000
18: APDY	1	0.300

Lens Data Editor: Config 1/2

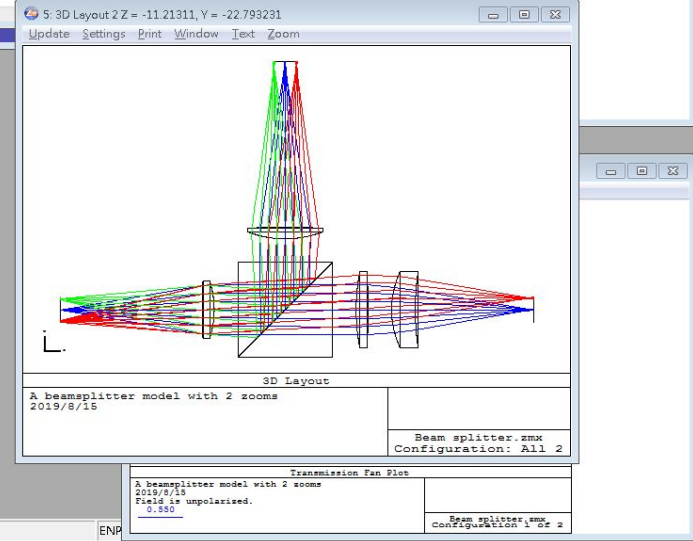
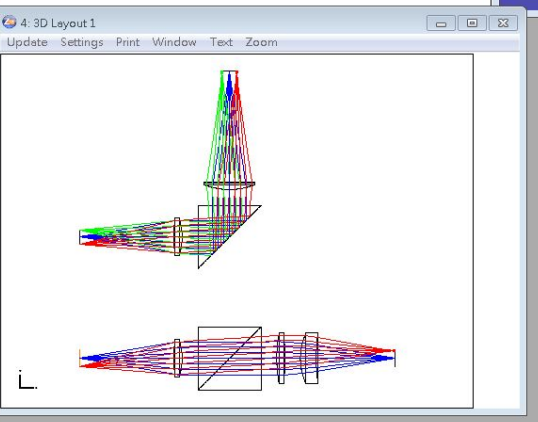
Surf	Type	Radius	Glass	Semi-Diameter	Conic	Par 0 (unused)	Par 1 (unused)	Par 2 (unused)	Par 3 (unused)
OBJ	Stand			5.126	0.000				
1*	Stand			5.134	0.000				
2*	Stand		BK7	12.000	U	0.000			
3*	Stand			12.000	U	0.000			
4*	Stand		BK7	20.000	U	0.000			
5*	Tilted		BK7	20.000	U		0.000	1.000	
6	Coordinat...			0.000			0.000	0.000	0.000
7*	Tilted		BK7	20.000	U		0.000	1.000	
8*	Standard			10.000					
9*	Standard		BK7	16.000	U	0.000			
10*	Standard			10.000					
11*	Standard		BK7	16.000	U	0.000			
12*	Standard			50.000					
IMA	Standard				5.292	0.000			



Multi-Configuration Editor

Active : 1/2

		Config 1*	Config 2
1:	GLSS	5	BK7
2:	THIC	7	20.000
3:	THIC	8	10.000
4:	THIC	9	5.000
5:	THIC	10	10.000
6:	CRVT	9	0.012 V
7:	CRVT	10	-2.849E-003 V
8:	PRAM	6/3	0.000
9:	PRAM	7/2	1.000
10:	THIC	11	10.000
11:	THIC	12	50.000
12:	GLSS	11	BK7
13:	SDIA	11	16.000
14:	SDIA	12	16.000
15:	APMN	1	0.400
16:	APMX	1	5.281
17:	APDX	1	0.000
18:	APDY	1	0.300

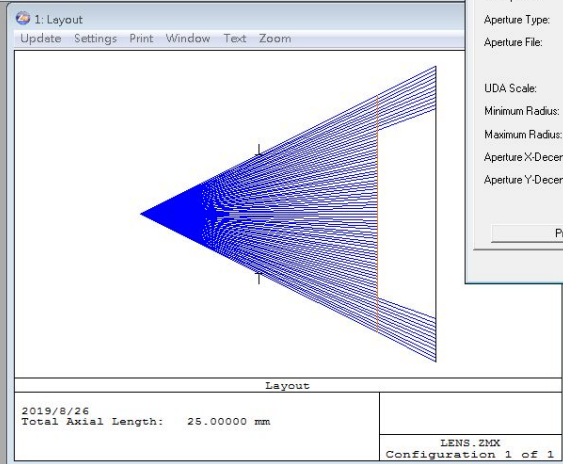


aperture (透光圈)

或

obscuration (擋光板)

Lens Data Editor												
Edit Solves View Help												
Surf	Type	Comment	Radius	Thickness	Glass	Semi-Diameter	Conic	Par 0 (unused)	Par 1 (unused)	Par 2 (unused)	Par 3	
OBJ	Standard		Infinity	10.000		0.000	0.000					
STO	Standard		Infinity	10.000		5.000	0.000					
2*	Standard		Infinity	5.000		10.000	0.000					
IMA	Standard		Infinity	-		12.500	0.000					



Surface 2 Properties

Type | Draw | Aperture | Scattering | Tilt/Decenter | Physical Optics | Coating

Pickup From: None

Aperture Type: Circular Obscuration

Aperture File:

Edit Aperture File

UDA Scale: 1

Minimum Radius: 0

Maximum Radius: 7

Aperture X-Decenter: 0

Aperture Y-Decenter: 0

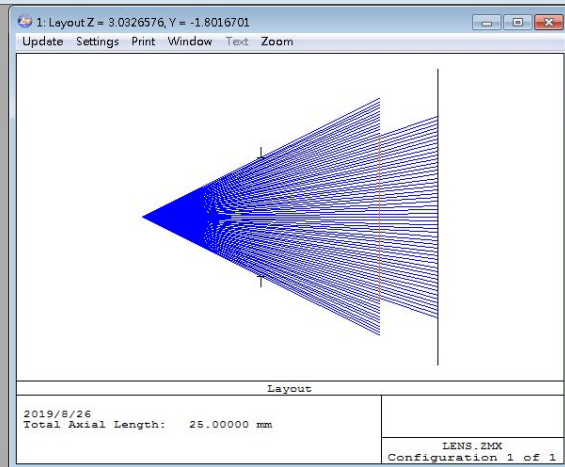
Previous Surface Next Surface

確定 取消 說明

Lens Data Editor

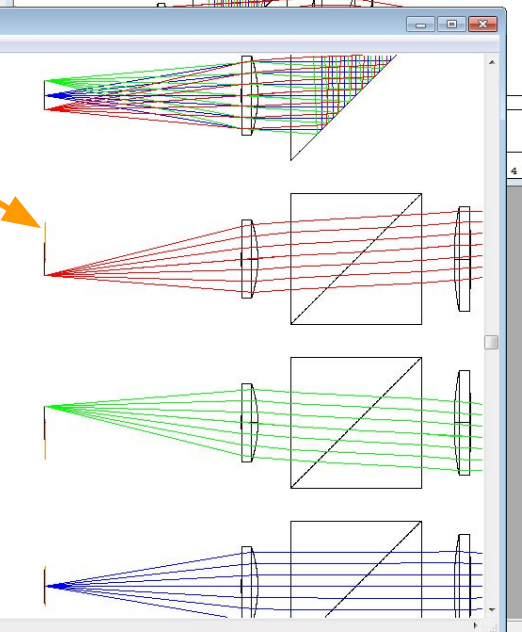
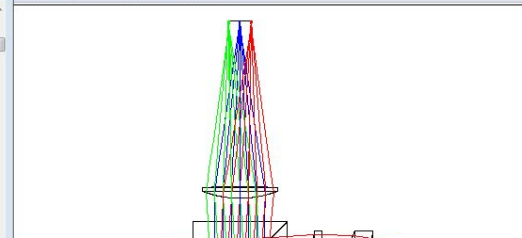
Edit Solves View Help

Surf	Type	Comment	Radius	Thickness	Glass	Semi-Diameter	Conic	Par 0 (unused)	Par 1 (unused)	Par 2 (unused)	Par 3
OBJ	Standard		Infinity	10.000		0.000	0.000				
STO	Standard		Infinity	10.000		5.000	0.000				
2*	Standard		Infinity	5.000		10.000	0.000				
IMA	Standard		Infinity	-		12.500	0.000				



Surf	Type	Comment	Radius	Thickness	Glass	Semi-Diameter	Conic	Par 0 (unused)	Par 1 (unused)	Par 2 (unused)	Par 3
OBJ	Standard		Infinity	0.100		4.442	0.000				
1*	Standard		Infinity	60.000		4.451	0.000				
2*	Standard		320.007 V	5.000	BK7	12.000 U	0.000				
3*	Standard		-38.553 V	10.000		12.000 U	0.000				
4*	Standard		Infinity	20.000	BK7	20.000 U	0.000				
5*	Tilted			0.000	MIRROR	20.000 U			0.000	1.000	
6	Coordinat...			0.000	-	0.000			0.000	0.000	
7*	Tilted			-20.000	BK7	20.000 U			0.000	-1.000	
8*	Standard		Infinity	-10.000		20.000 U	0.000				
9*	Standard		-43.434 V	-5.000	BK7	16.000 U	0.000				
10*	Standard		227.105 V	-10.000		16.000 U	0.000				
11*	Standard		37.973 V	-10.000		0.000 U	0.000				
12*	Standard		107.149 V	-50.000		0.000 U	0.000				
IMA	Standard		Infinity	-		5.184	0.000				

2: THIC	7	20.000	20.000	20.000	-20.000
3: THIC	8	10.000	10.000	10.000	-10.000
4: THIC	9	5.000	5.000	5.000	-5.000
5: THIC	10	10.000	10.000	10.000	-10.000
6: CRVT	9	0.012 V	0.012 V	0.012 V	-0.023 V
7: CRVT	10	-2.849E-003 V	-2.849E-003 V	-2.849E-003 V	4.403E-003 V
8: PRAM	6/3	0.000	0.000	0.000	90.000
9: PRAM	7/2	1.000	1.000	1.000	-1.000
10: THIC	11	10.000	10.000	10.000	-10.000
11: THIC	12	50.000	50.000	50.000	-50.000
12: GLSS	11	BK7	BK7	BK7	
13: SDIA	11	16.000	16.000	16.000	0.000
14: SDIA	12	16.000	16.000	16.000	0.000
15: APMV	1	1.000	0.000	0.000	0.000
16: APMX	1	6.000	6.000	6.000	0.000
17: APDX	1	0.000	0.000	0.000	0.000
18: APDY	1	0.000	-5.000	5.000	0.000



aperture (透光圈)
或
obscuration (擋光板)
加在出光面前方

序列 混合 非序列

Zemax 13 Premium - 25647 - D:\usersdata\林忠達\Zemax\Multi-configuration方塊反射與透鏡教學2019Aug6.ZMX

File Editors System Analysis Tools Reports Macros Extensions Window Help

New

- ✓ Lens Data Shift+F1
- Merit Function F6
- ✓ Multi-Configuration F7
- Tolerance Data Shift+F2
- Extra Data F8
- ✓ Non-Sequential Components Shift+F3
- Undo F3
- Redo Ctrl+F3

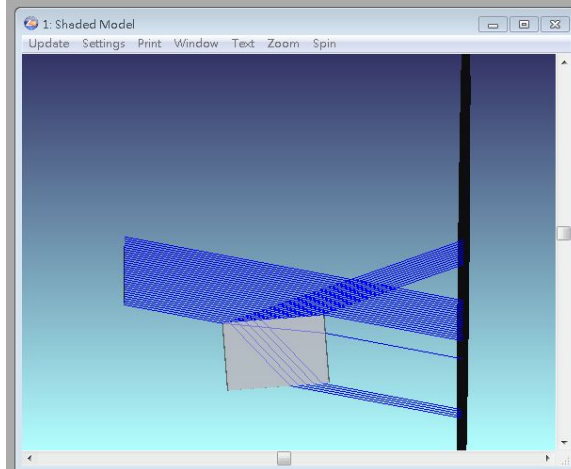
IMA Standard

Radius	Thickness	Glass	Semi-Diameter	Conic	Par 0 (unused)	Par 1 (unused)	Par 2 (unused)	Par 3 (unused)	Par 4 (unused)	Par 5 (unused)	Par 6 (unused)	Par
Infinity	Infinity		Infinity	0.000								
Infinity	0.000		1.000 U	0.000								
Infinity	0.000		1.000 U	0.000								
Infinity	-		1.000	0.000	3	0.000	0.000	10.000	0.000	0.000	0.000	
Infinity	-		10.000 U	0.000								

Non-Sequential Component Editor: Component Group on Surface 3 Config 1/2

Edit Solves Tools View Help

Object Type	Comment	Ref Object	Inside Of	X Position	Y Position	Z Position	Tilt About X	Tilt About Y	Tilt About Z	Material	X1 Half Width	Y1 Half Width	Z Length	X2 Half Width
1 Rectangul...		0	0	0.000	-2.500	3.000	-5.000	0.000	0.000	BK7	1.000	1.000	3.000	1.000



Multi-Configuration Editor

Edit Solves Tools View Help

Active : 1/2	Config 1*	Config 2
1: NGLS	3/1	BK7
		mirror

Open the Multi-Configuration Editor

EFFL: 1e+010

WFNO: 10000

ENPD: 2

TOTR: 0

Update Settings Print Window Text Zoom Spin



第一個組態是bk7: 穿透

Edit Solves Tools View Help

ENPD: 2



