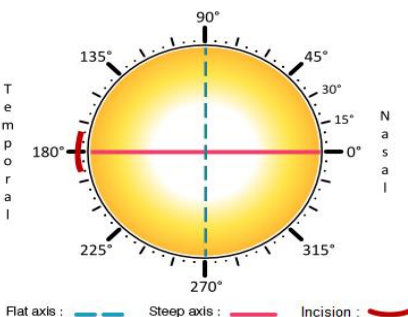


WTR
with the rule
(steep axis 90°)

Case n°1 : patient with pre-operative astigmatism WTR :
posterior corneal astigmatism considered + 0.35 D @ 0°
average value according to the study reported by Ueno et al [3]

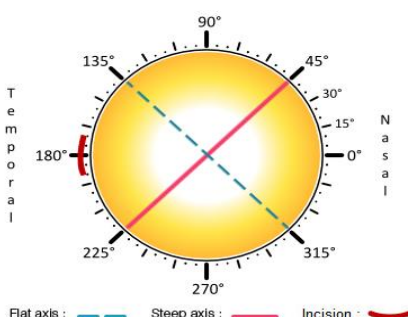
Pre-op corneal astigmatism (D)	Toric power (on IOL plane) recommended by the calculator in function of pre-op corneal astigmatism (*)																					
	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50
Cristalens Toric Calculator v2.1 [1]	0.00	0.75	0.75	1.50	1.50	2.25	2.25	3.00	3.00	3.00	3.75	3.75	4.50	4.50	5.25	5.25	6.00	6.00	6.00	6.00	6.00	
Cristalens Toric Calculator v3.0 [2]	0.00	0.00	0.00	0.75	0.75	1.50	1.50	2.25	2.25	3.00	3.00	3.75	3.75	4.50	4.50	5.25	5.25	6.00	6.00	6.00	6.00	6.00



ATR
against the rule
(steep axis 0°)

Case n°2 : patient with pre-operative astigmatism ATR :
posterior corneal astigmatism considered + 0.16 D @ 0°
average value according to the study reported by Ueno et al [3]

Pre-op corneal astigmatism (D)	Toric power (on IOL plane) recommended by the calculator in function of pre-op corneal astigmatism (*)																					
	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50
Cristalens Toric Calculator v2.1 [1]	0.00	0.75	0.75	1.50	1.50	2.25	2.25	3.00	3.00	3.00	3.75	3.75	4.50	4.50	5.25	5.25	6.00	6.00	6.00	6.00	6.00	
Cristalens Toric Calculator v3.0 [2]	0.00	0.75	0.75	1.50	1.50	2.25	2.25	3.00	3.00	3.75	3.75	4.50	4.50	5.25	5.25	6.00	6.00	6.00	6.00	6.00		



OBL
oblique
(steep axis 45°)

Case n°3 : patient with pre-operative astigmatism OBL :
posterior corneal astigmatism considered + 0.26 D @ 0°
average value according to the study reported by Ueno et al [3]

Pre-op corneal astigmatism (D)	Toric power (on IOL plane) recommended by the calculator in function of pre-op corneal astigmatism (*)																					
	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50
Cristalens Toric Calculator v2.1 [1]	0.00	0.75	0.75	1.50	1.50	2.25	2.25	3.00	3.00	3.00	3.75	3.75	4.50	4.50	5.25	5.25	6.00	6.00	6.00	6.00	6.00	
Cristalens Toric Calculator v3.0 [2]	0.00	0.75	0.75	1.50	1.50	2.25	2.25	3.00	3.00	3.00	3.75	3.75	4.50	4.50	5.25	5.25	6.00	6.00	6.00	6.00	6.00	

(*) calculations for an "average eye" with : $K_{moy} = 43 D / P_{IOL} = 20 D$

[1] without including posterior corneal astigmatism

[2] including posterior corneal astigmatism (according to the study reported by Ueno et al)

[3] Corneal Thickness Profile and Posterior Corneal Astigmatism in Normal Corneas. Yuta Ueno, MD, et al. Ophthalmology 2015;122:1072-1078.

① Information added on the calculator home page :

New:

During the calculation, you have now the possibility to include posterior corneal astigmatism (option enabled by default). The calculation of pre-operative astigmatism is then corrected according to the study reported by Ueno et al.^[1]

Start calculation

[1] Corneal Thickness Profile and Posterior Corneal Astigmatism in Normal Corneas. *Yuta Ueno, MD, et al. Ophthalmology* 2015;122:1072-1078

② Option added at the end of pre-operative information :

If the box is checked : posterior corneal astigmatism is included in the calculation

Crossed cylinder (at corneal plane): x

Include posterior corneal astigmatism

Calculation Print New calculation

If the box is unchecked : posterior corneal astigmatism is not included in the calculation

Crossed cylinder (at corneal plane): x

Include posterior corneal astigmatism

Calculation Print New calculation

③ Information displayed on the print preview page :

If the box was checked during calculation : mention displayed (posterior corneal astigmatism included)

Pre-operative information:	
IOL spherical power (SEQ):	20.0 D
Flat axis K1:	42.00 D
Steep axis K2:	44.00 D @ 90 °
Pre-operative astigmatism:	2.00 D x 90 °
Incision location:	180 °
Surgically induced astigmatism:	- 0.00 D
Crossed cylinder (at corneal plane):	2.00 D x 90 °

Include posterior corneal astigmatism

If the box was not checked during calculation : no mention (posterior corneal astigmatism not included)

Pre-operative information:	
IOL spherical power (SEQ):	20.0 D
Flat axis K1:	42.00 D
Steep axis K2:	44.00 D @ 90 °
Pre-operative astigmatism:	2.00 D x 90 °
Incision location:	180 °
Surgically induced astigmatism:	- 0.00 D
Crossed cylinder (at corneal plane):	2.00 D x 90 °