

# NL325QF Lens Specification

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N a n o A d v a n c e d O p t i c a l T e c h n o l o g y

<http://www.naotech.co.kr>

# 1) NL325QF SPEC.

No.	Item.		Specification				
1	Focal Length		3.22mm $\pm$ 5%				
2	Back Focal Length		4.93mm $\pm$ 5%				
3	Flange Back Length		4.06mm				
4	Lens Construction		5 GLASS				
5	F#		1.9				
6	Max image circle		4.6mm				
7	Image sensor		OV9281 (1280 X 720) 1/4" (D=4.406mm)	ISX016_ (1280 X 960) 1/4" (D=4.480mm)	OV9710_ (1280 X 800) 1/4" (D=4.528mm)	640 X 480 1/4" (D=4.800)	
	Angle of View	Diagonal	87.4°	89.4°	90.7°	98.3°	
		Horizontal	73.7°	<b>67.9°</b>	<b>73.7°</b>	<b>73.7°</b>	
		Vertical	39.2°	49.4°	43.8°	53.2°	
8	Optical / TV Distortion		-28.7% / -9.8% $\pm$ 5%	-29.9% / -10.3% $\pm$ 5%	-30.8% / -10.6% $\pm$ 5%	-35.8% / -12.5% $\pm$ 5%	
9	Relative Illumination		80.9%	80.2%	80.0%	77.5%	
10	C.R.A		13.7°	13.9°	14.0°	14.8°	
11	MTF (80lp/mm)	AXIS		40.8 %	40.9 %	40.9 %	41.0 %
		0.6F	Sag.	54.6 %	55.1 %	55.3 %	56.4 %
			Tan.	49.4 %	49.9 %	50.4 %	52.6 %
		0.8F	Sag.	62.8 %	63.7 %	64.3 %	68.1 %
			Tan.	59.4 %	59.5 %	59.5 %	57.7 %

# 1) NL325QF SPEC.

No.	Item.		Specification				
1	Focal Length		3.22mm ±5%				
2	Back Focal Length		4.93mm ±5%				
3	Flange Back Length		4.06mm				
4	Lens Construction		5 GLASS				
5	F#		1.9				
6	Max image circle		4.6mm				
7	Image sensor		ASX340AT_ (640 X 480) 1/4" (D=4.480mm)	OV7955_ (640 X 480) 1/3.75" (D=4.800mm)			
	Angle of View	Diagonal	89.4°	98.3°			
		Horizontal	67.9°	73.7°			
		Vertical	49.4°	53.2°			
8	Optical / TV Distortion		-29.9% / -10.3% ±5%	-35.8% / -12.4% ±5%			
9	Relative Illumination		80.1%	77.5%			
10	C.R.A		13.9°	14.8°			
11	MTF (80lp/mm)	AXIS		40.1 %	40.4 %		
		0.6F	Sag.	55.1 %	56.5 %		
			Tan.	48.9 %	51.8 %		
		0.8F	Sag.	64.5 %	68.7 %		
			Tan.	59.6 %	58.1 %		

## 2) NL325QF Drawing

