

NL335QF Lens Specification

Issuing Date : 2017. 11 . 06



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) NL335QF SPEC.

No.	Item.		Specification				
1	Focal Length		3.32mm \pm 5%				
2	Back Focal Length		5.86mm \pm 5%				
3	Flange Back Length		4.90mm				
4	Lens Construction		5 GLASS				
5	F#		2.1				
6	Max image circle		6.8mm				
7	Image sensor		ISX016_ (1280X960) 1/4" (D=4.480mm)	AR0140_ (1280X800) 1/4" (D=4.528mm)	ISX017_ (1280X960) 1/3.2" (D=5.600mm)	IMX224_ (1280X960) 1/3" (D=6.000mm)	
	Angle of View	Diagonal	81.7°	82.7°	106.4°	116.4°	
		Horizontal	64.0°	68.9°	81.7°	88.3°	
		Vertical	47.3°	42.1°	59.7°	64.3°	
8	Optical / TV Distortion		-21.8% / -7.2% \pm 5%	-22.3% / -7.4% \pm 5%	-36.8% / -12.6% \pm 5%	-43.9% / -15.2% \pm 5%	
9	Relative Illumination		78.7%	78.1%	69.9%	66.0%	
10	C.R.A		10.4°	10.5°	12.5°	13.2°	
11	MTF (100lp/mm)	AXIS		67.3 %	67.3 %	67.3 %	67.7 %
		0.6F	Sag.	70.2 %	70.2 %	69.2 %	67.8 %
			Tan.	65.0 %	65.1 %	65.6 %	65.5 %
		0.8F	Sag.	69.2 %	69.2 %	69.4 %	68.1 %
			Tan.	65.6 %	65.5 %	62.7 %	59.7 %

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3	Flange Back Length		4.90mm				
4	Lens Construction		5 GLASS				
5	F#		2.1				
6	Max image circle		6.8mm				
7	Image sensor		IMX322_ (1920X1080) 1/2.9" (D=6.168mm)	IMX290_ (1920X1080) 1/2.8" (D=6.388mm)	IMX307_ (1920X1080) 1/2.8" (D=6.388mm)	AR0230_ (1920X1080) 1/2.7" (D=6.609mm)	
	Angle of View	Diagonal	121.0°	127.2°	127.2°	134.1°	
		Horizontal	101.1°	105.6°	105.6°	110.3°	
		Vertical	53.5°	55.5°	55.5°	57.5°	
8	Optical / TV Distortion		-47.3% / -16.5% \pm 5%	-52.2% / -18.4% \pm 5%	-52.2% / -18.4% \pm 5%	-57.8% / -20.6% \pm 5%	
9	Relative Illumination		64.4%	62.6%	62.6%	60.3%	
10	C.R.A		13.5°	13.8°	13.8°	14.2°	
11	MTF (100lp/mm)	AXIS		67.9 %	68.1 %	68.1 %	68.3 %
		0.6F	Sag.	67.3 %	65.6 %	65.6 %	64.2 %
			Tan.	65.5 %	65.0 %	65.0 %	64.5 %
		0.8F	Sag.	67.0 %	65.0 %	65.0 %	61.8 %
			Tan.	57.9 %	55.2 %	55.2 %	51.7 %

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No.	Item.		Specification				
1	Focal Length		3.32mm ±5%				
2	Back Focal Length		5.86mm ±5%				
3	Flange Back Length		4.90mm				
4	Lens Construction		5 GLASS				
5	F#		2.1				
6	Max image circle		6.8mm				
7	Image sensor		OV2710_ (1920X1080) 1/2.7" (D=6.609mm)	IMX291_ (1920X1080) 1/2.8" (D=6.388mm)	IMX307_ (1920X1080) 1/2.8" (D=6.388mm)	IMX322_ (1920X1080) 1/2.9" (D=6.168mm)	
	Angle of View	Diagonal	134.1°	127.2°	127.2°	121.0°	
		Horizontal	110.3°	105.6°	105.6°	101.1°	
		Vertical	57.5°	55.5°	55.5°	53.5°	
8	Optical / TV Distortion		-57.8% / -20.6% ±5%	-52.2% / -18.4% ±5%	-52.2% / -18.4% ±5%	-47.3% / -16.5% ±5%	
9	Relative Illumination		60.2%	62.6%	62.6%	64.4%	
10	C.R.A		14.2°	13.8°	13.8°	13.5°	
11	MTF (120lp/mm)	AXIS		61.5 %	61.2 %	61.2 %	60.8 %
		0.6F	Sag.	56.5 %	58.4 %	58.4 %	60.6 %
			Tan.	58.1 %	58.5 %	58.5 %	59.0 %
		0.8F	Sag.	54.5 %	57.9 %	57.9 %	60.1 %
			Tan.	43.5 %	47.5 %	47.5 %	50.5 %

2) NL335QF Drawing

