1.1.1.3 Special Photodiode Sensors

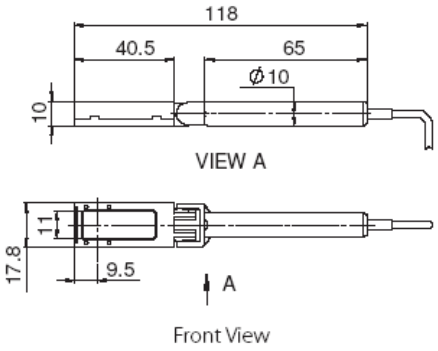
Features

- BC20 for measuring scanned beams such as bar code light sources

BC20

Model	BC20 [(b)]
Use	Scanned beams e.g. bar code
Detector Type	Silicon with peak and hold circuit
Aperture	10x10mm
Spectral Range nm	633, 650, 675 (others available)
Filter Mode	
Power Range	100µW to 20mW
Power Scales	20mW to 2mW
Resolution nW	0.001
Accuracy	±3% for >10% of full scale. Deviation from calibration -3% at 30,000 inch/s scan rate on sensor
Damage Threshold W/cm²	50
Max Pulse Energy µJ	NA
Noise Level pW	5µW
Response Time with Meters s	Two modes of operation: Hold: holds highest reading for 5s then updates. No Hold: updates reading 3 times per second.
Beam Position Dependence	±2%
Background Subtraction	Background is automatically subtracted from both scanned and static beams.
Fiber Adapters Available (see page 68)	NA
Version	
Part Number	7Z02422A [(a)]
Notes:	(a) Swivel stand for BC20 sensor P/N 1Z09004
Notes:	(b) The PD300-CIE and BC20 sensors are not fully supported by Ophir PC Interfaces (USBI, Pulsar and Quasar) or by StarLite Meter.
* For graphs see page 26 (Note: graphs are in page 2 of this spec)	

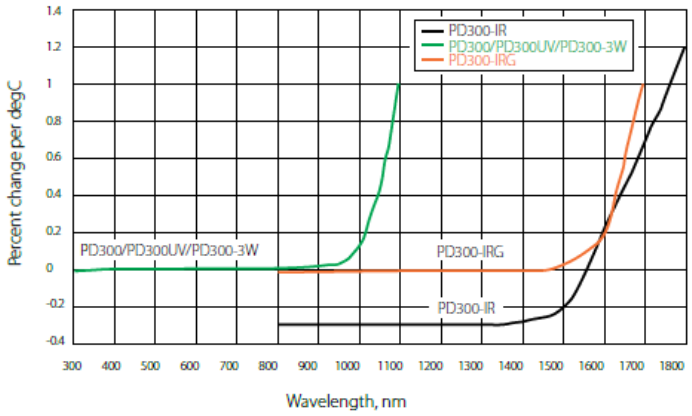
BC20



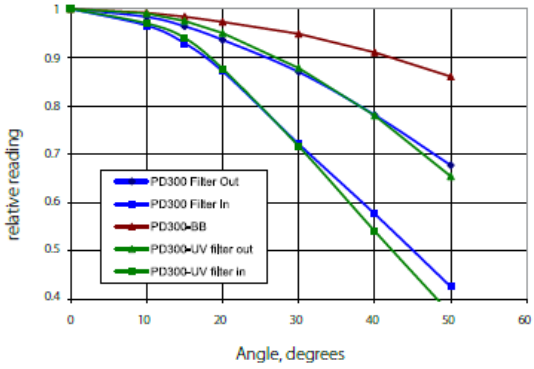
Rev15/spc/29.02.16/eg

1.1.1.4 Graphs

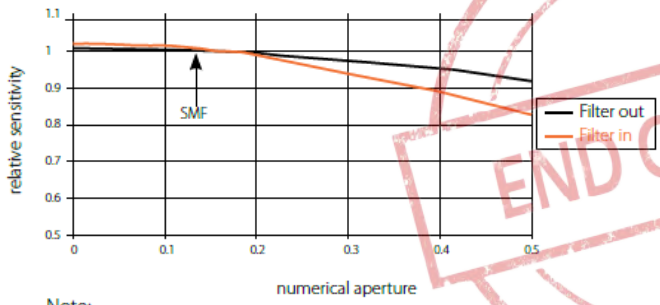
Temperature Coefficient of Sensitivity



PD300 Angle Dependence



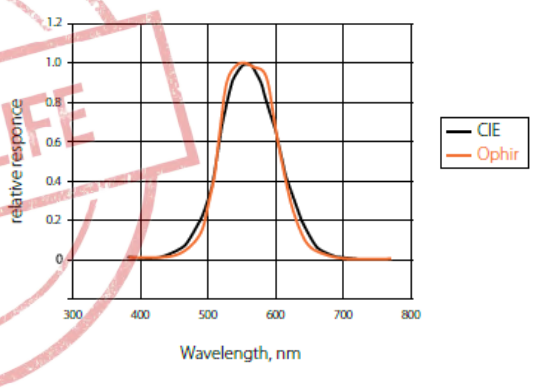
Dependence of Sensitivity on Numerical Aperture (PD300 - IRG)



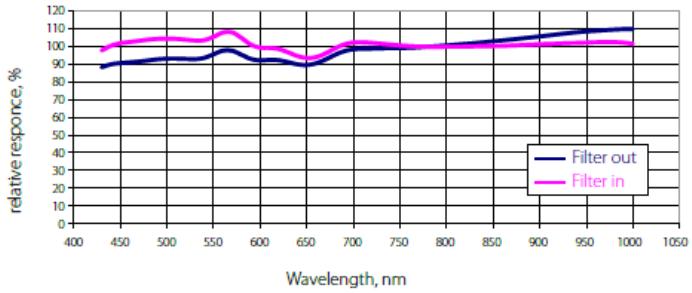
Note:

1. Graph assumes equal intensity into all angles up to maximum N.A.
2. Calibration is done with SMF, N.A. 0.13

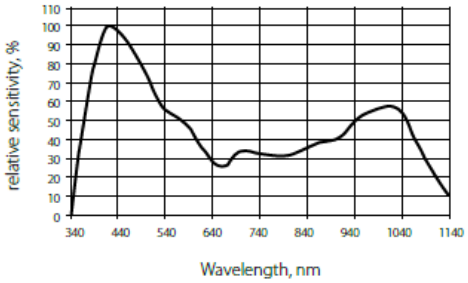
PD300-CIE Spectral Response vs. CIE Curve



Typical Sensitivity Curve of PD300-BB Sensors



Relative Spectral Response of BC20



Graph of the approximate relative spectral response of the BC20 for purpose of interpolation, if the instrument is to be used at a wavelength other than the ones that are factory calibrated