For sine wave:

For 1 point, 3.1 V resulted in 5 mW.

For 2 points, 4.6 V resulted in the same.

For 4 points, 5 V resulted in roughly 3.5 mW on average.

There is a considerable dependance on the angle. When the detector is perpendicular to the beam, you get over 7 mW, but when it is flat and the laser is coming obliquoiely, you get 5mW.

For 80% duty cycle square wave:

For 1 point, 3.1 V resulted in 15 mW.

For 2 points, 5 V resulted in 13 mW. Err..

For 1 point, 2.6 V resulted in 10 mW.

For 2 points, 4.3 V resulted in the same.

For 4 points, 5 V resulted in roughly 7.3 mW on average.