

1. Session Three

1.1. Testing the intensity through a varying number of filters between the same angle

1.1.1. Procedure (Practical Method)

1. Set up the equipment with white LEDs.
2. Turn on the micro-controller, and set two filters to the initial angle (90 degrees).
3. Record the initial intensity sensor value.
4. Add the next filter, keeping the same total angle but changing the angle between adjacent filters to ensure offset is equidistant.
5. Repeat steps 2-4 with a varying range of initial angles.

1.1.2. Table of Results

Number of filters	Total angle in degrees					
	90			60		
	Repeat 1	2	3	Repeat 1	2	3
2	1	1	0	203	203	200
3	207	205	209	403	404	400
4	264	260	269	455	454	452
5	288	288	291	360	361	355
6	287	286	290	374	375	370
7	290	291	292	323	324	320
8	272	275	270	288	290	287

Due to the more complex method, these results took longer to record than the last two experiments. In this session, I recorded three repeats for initial angles of 90 and 60 degrees.