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SB 692: Favorable with amendments

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**Today I come to voice my support for the legalization of cannabis. I believe it is long past due for Maryland to legalize the recreational use of cannabis for adults. I believe the legalization of cannabis will bolster our economy and provide Marylanders with the job experience needed for the future. The success of our current medical industry speaks to that itself. Unfortunately, it is the current cannabis industry's manufacturing practices that I must draw your attention to.**

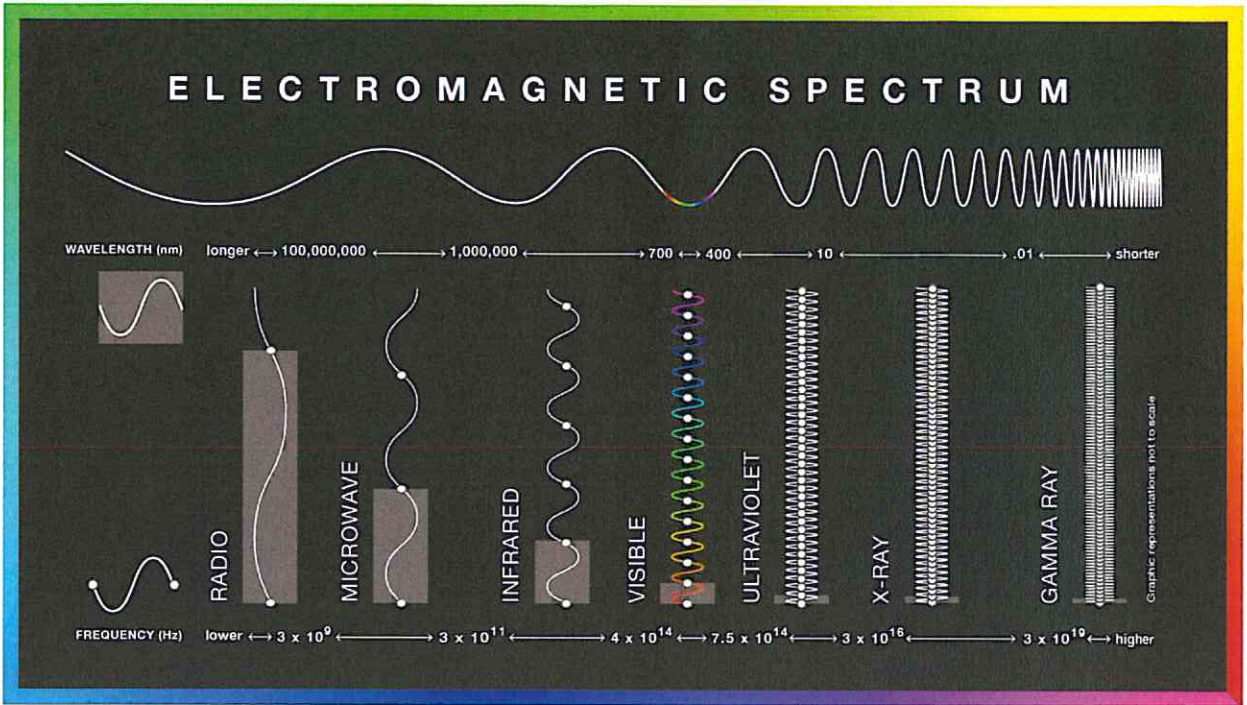
**Currently in Maryland, and nationwide, the common cannabis cultivation method includes the use of light-emitting diode grow light systems. Although these LEDs were originally used as maintenance troubleshooting tools for printed circuit boards, cannabis cultivators chose them because of their relatively low energy usage, compared to other lighting options. The other significant difference is the directional square waveform emitted, and that is of particular concern to me. With all plants being photosensitive, and cannabis highly photosensitive, the light created by LED lights will mutate plants in general, and cannabis specifically.**

**To date, I have associated two (2) mutations to the cannabis plant via LED lighting. The first is auto-seeding throughout the cannabis flower itself. This occurs at every calyx, seedpod, within the cannabis flower and is a survival mechanism for the plant. The second is a mutation called cylindrical flower formations. This mutation is common with cannabis and is generally associated with too much atmospheric heat. So with that in mind, I experimented, with some help. After flowering a known feminized strain with LED lighting and monitoring**

atmospheric conditions throughout the plant's entire life cycle, I believe LED lighting creates heat within the flower itself. It does this by destabilizing the cells which trigger both mutations.

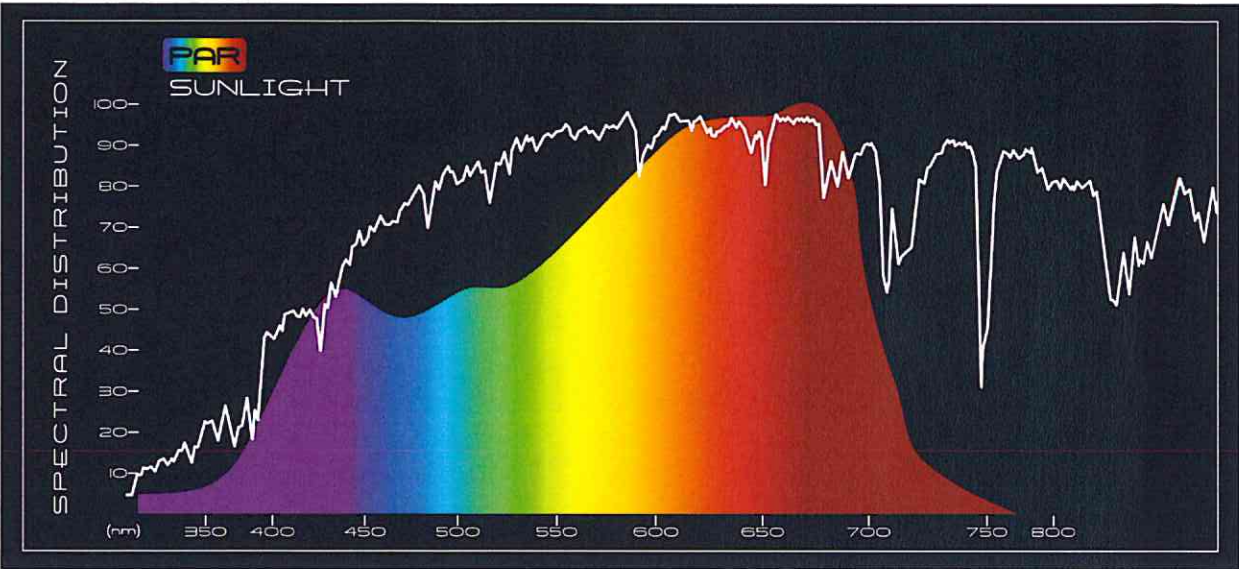
Knowing this and still receiving seeded cannabis flower from businesses within the Maryland Medical Cannabis Commission jurisdiction, I made the commission and certain cultivators aware of what I found. Although my intentions were pure, I was not received well. The commission refuses to accept what I found as reality. Cultivators blame the problem on poor genetics. Meanwhile, patients are stuck with a bait and switch and cannabis industry employees simply refuse to discuss the problem, likely because they are too busy counting money.

I support the legalization of cannabis in general, however, I believe some amendments need to be added. I would like the use of LED lighting banned for cannabis flower production; or have all cannabis flower manufactured with LED lighting be labeled as such. Led lighting may be used for flower production only if the cannabis flower is processed for the concentrate within it. Additionally, having found these mutations, reported them appropriately to government and business alike, and being dismissed, I believe citizens deserve the right to cultivate their cannabis, with limitations. I trusted and asked the Maryland Medical Cannabis Commission and their businesses to do the right thing and they have simply refused.



This chart shows different natural waveforms. The visible light waveform shown has an artificial equivalent, high-pressure sodium. The square waveform emitted by LED lights does not have a natural equivalent. Instead, the waveform of LED lighting can only be compared to that of gamma rays, with their increased frequency and tightly stacked wavelength.





**This is a visual representation of a square waveform emitted by LED lighting. The waveform is directional and lacks a frequency. The bottom picture is a representation of natural light and the waveform of all lights using alternating current.**

