DOCKETED	
Docket Number:	19-BSTD-03
Project Title:	2022 Energy Code Pre-Rulemaking
TN #:	235690
Document Title:	Alcala Consulting Engineers, Daniel Alcala PE Comments - Horticultural lighting requirements in upcoming code
Description:	N/A
Filer:	System
Organization:	Alcala Consulting Engineers, Daniel Alcala PE
Submitter Role:	Public
Submission Date:	11/18/2020 10:20:06 PM
Docketed Date:	11/19/2020

Comment Received From: Alcala Consulting Engineers, Daniel Alcala PE Submitted On: 11/18/2020 Docket Number: 19-BSTD-03

Horticultural lighting requirements in upcoming code

l'm an expert in the field of cannabis facility engineering. A 1,000watt Gavita HPS electronic ballast is capable of covering a 5x7'footprint for flowering plants. A 645watt Gavita LED covers a 4'x4' area. Divide power over area. HPS:1000w/35sqft = 29w/sqft. LED:645w/16sqft= 40w/sqft. LED uses more energy and creates more heat than HPS. These are real world numbers l've seen as a professional in this industry.

I believe the new rules should put limits on watts per sqft not micromoles/joule. This way the energy consumption is regulated and the grower has choice to use what they believe is best.

l've seen that LED can cost 6 times more than HPS. The industry is already regulated so much that it cannot compete with low cost of black market. New legislation that requires LED will give more advantage to the black market than there is right now.

Please contact me at danielsalcala@hotmail.com for any questions, I would love to be a part of the rule making process. l'm a licensed mechanics engineer I I believe my understanding of energy and cannabis horticulture is among the best in the world.