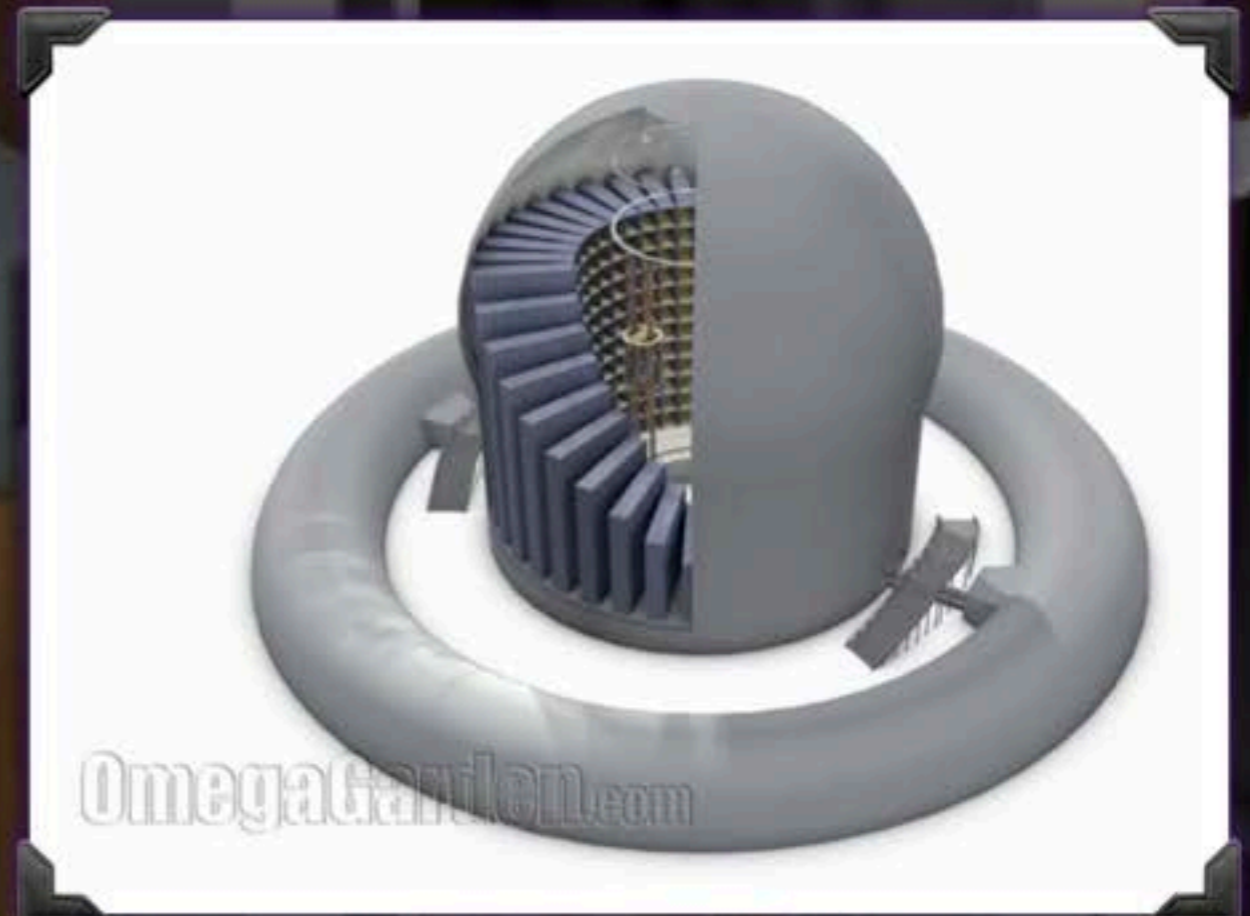


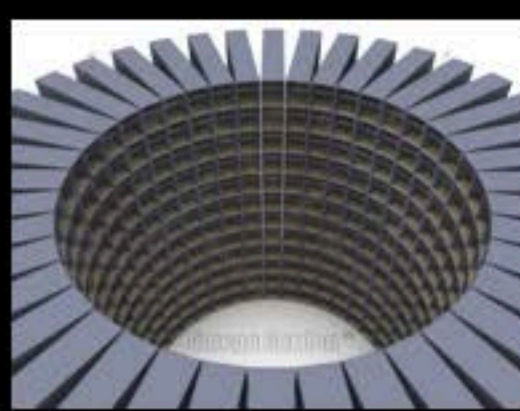
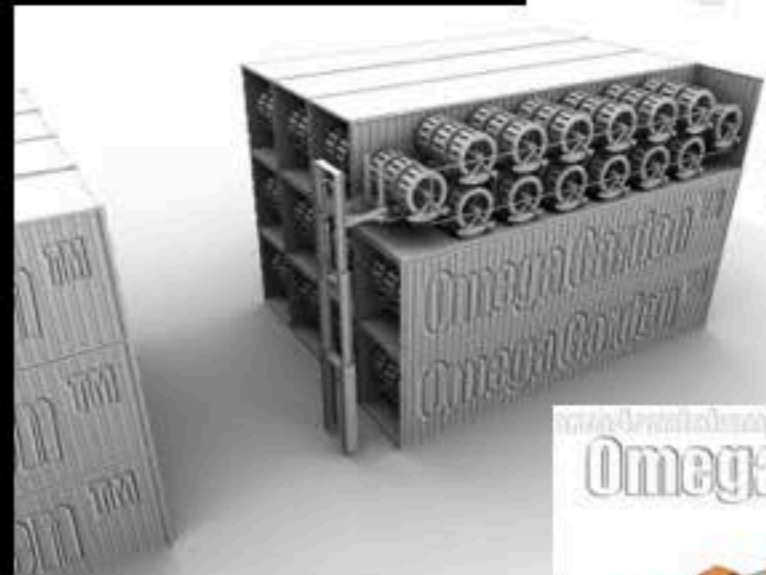
FARMDOMINIUM™

- In an ideal low carbon or carbon neutral future, we will be able to walk everywhere we need to go, and get to know all of our neighbours in the process.
- The Farmdominium™ is a binary design with the farming in the central dome, surrounded by a habitat ring.
- Ideally, both structures are hardened concrete, with a protected green space in between.
- Sprayable concrete over inflatable forms will create the structure, similar to the technology seen at www.monolithic.com
- The dome is a 300' diameter half sphere, and the habitat ring has a cross section of 150' by 75' tall.



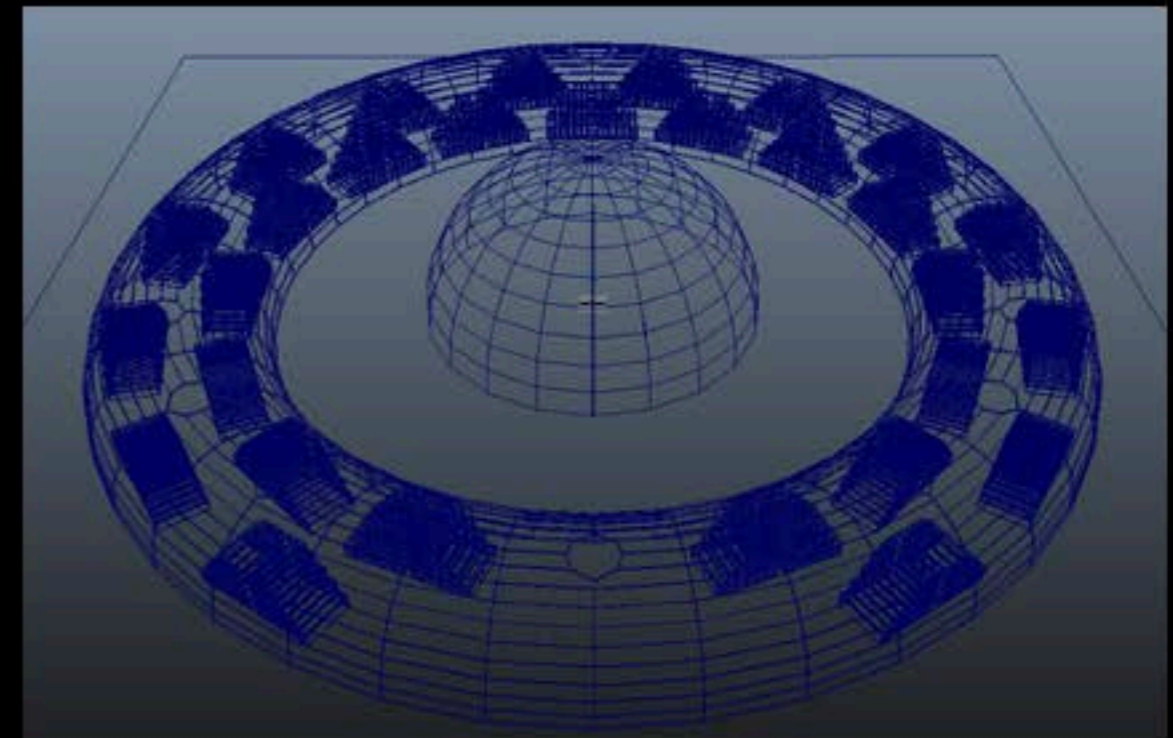
FARMDOMINIUM™

- The exterior of the ring, although concrete, can have a covering of plants such as ivy, making it friendly to birds and insects.
- The inside surface can be covered in OLED technology which can project the outside environment on it's inner surface, or anything desired, similar to a Planetarium.
- By utilizing shipping containers and Omega Garden™ patented carousel systems, over 110,000 garden barrels can be housed and operated with automated storage and produce retrieval (patented).
- This year-round all-weather, storm, drought and disaster-proof production system is equivalent to more then 1,000 acres of high value, high production farm land.



FARMDOMINIUM™

- Traceability allows for this technology to be deployed in a variety of business, shared community, profit, non-profit, government or combination models, as every garden in the system can be allotted and monitored.
- The Farmdominium™ binary village design can exchange the oxygen generated in the farm dome with the CO₂ created in the habitat ring, creating an ideal atmosphere for plant growing and human health, as well as benefitting the surrounding natural environment.
- *"In order to change an existing paradigm you do not struggle to try and change the problematic model. You create a new model and make the old one obsolete."* - R. Buckminster Fuller architect, designer, systems theorist, author and inventor.



THE OMEGA GARDEN™ ROTARY PLANT GROWING SYSTEM

- Optimized Biomass Production System
- No Direct Sunlight Required
- Manufactured
- Shippable
- Stackable
- Expandable
- Traceable / Trackable
- Automation Ready
- Rapid Deployment
- Weatherproof Year-Round Production
- 99% Less Water Compared to Traditional Agriculture
- 90% Less Power Compared to Greenhouse Systems
- Many Times Faster Growth Rates
- Auto-Pollination of Produce



THE OMEGA GARDEN™ ROTARY PLANT GROWING SYSTEM

- The Omega Garden™ rotary plant growing technology represents a simple yet profound system of production, based on the optimization of elemental relationships.
- At the nucleus of the system is a cylinder, housing rows of plants slowly rotating around a central light source (patented).
- This is the type of configuration an astronaut or astrophysicist would want to have at home.
- In fact, NASA was working with this type of system several decades ago with the idea to rotate the cylinder fast enough to create a gravitational force to help the plants grow in a zero-gravity environment.



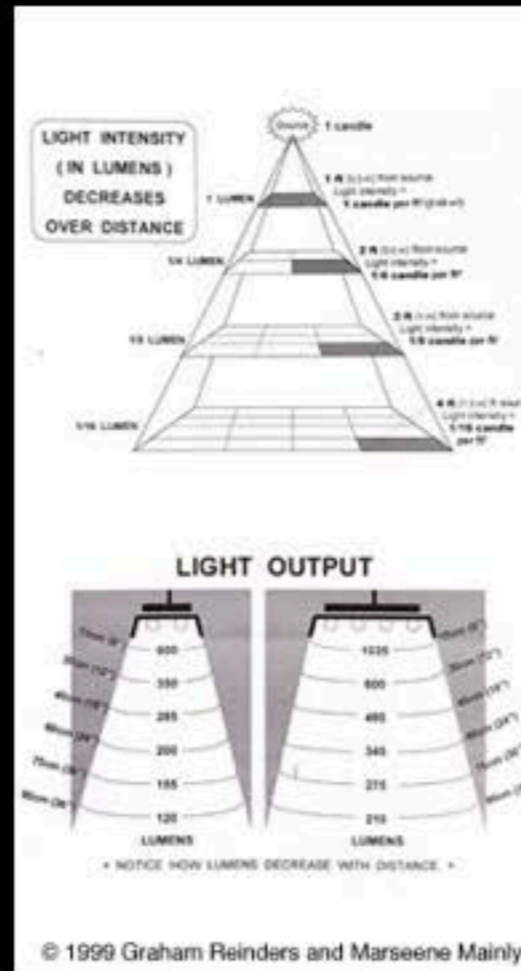
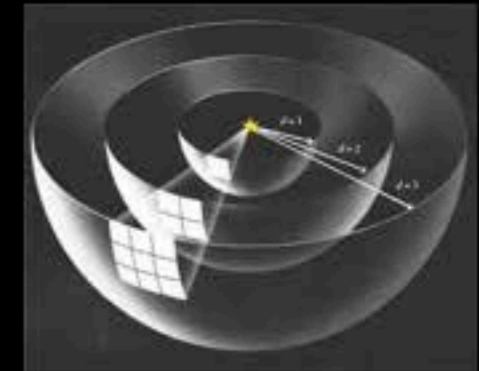
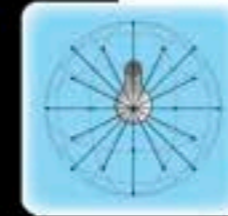
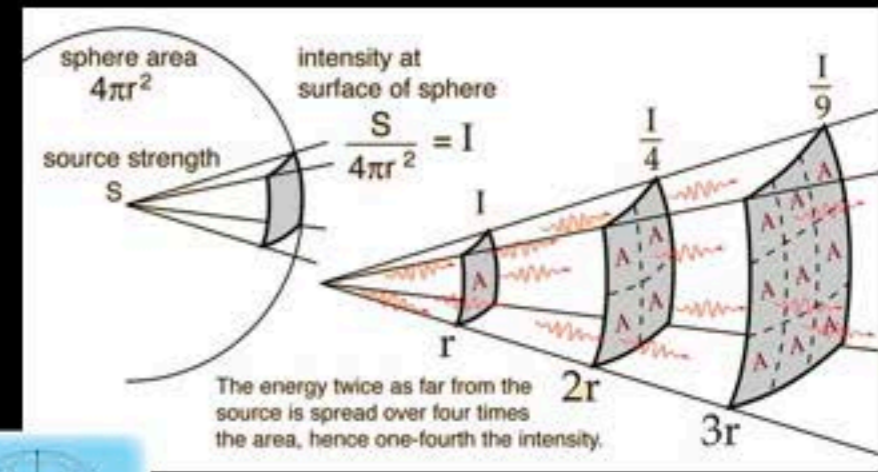
A QUESTION OF GEOMETRY

- The inside surface growing area (ISGA) of the cylinder is a little over three times the footprint of the same cylinder.
- If this ISGA was laid out flat, it would require many more light sources to achieve the same light levels the plants receive inside the cylinder.
- Plants grow mainly in the opposite direction to the pull of gravity, and one result of rotation is faster growth rates due to stresses similar to the effect of exercise for humans.
- Apart from rotational stress, all other growth factors were the same for these two plants:



DISTANCE MATTERS

- The diameter of the cylinder dictates the size and power/wattage of the central light source. The math is known as the 'inverse square law'.
- Research has brought us to the present 24" diameter cylinder which also happens to be the size of a 55 US gallon barrel that is reworked for our specific purpose.
- Since the only popular crop we know of that is grown without any direct sunlight is cannabis, we will use this to illustrate the production efficiency:
- According to the Northwest Power and Conservation Council, which carries out energy planning for the Columbia River Basin states (Montana, Idaho, Washington and Oregon), **growing marijuana indoors consumes up to 5,000 kilowatt-hours of electricity per kilogram** of output.
- We estimate the equivalent production in the Omega Garden™ system at **approximately 8% to 10% of the 5,000 kWh figure.**

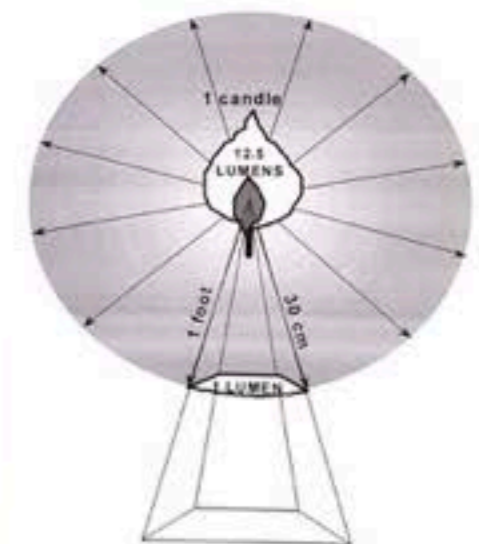


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Getting the Most Out of Artificial Lights

The light illuminating from a source is not fully utilized. To illustrate, one candle actually puts out a total of 12.5 lumens in all directions, but only one of those twelve lumens actually falls onto a square foot of paper held one foot away from the candle. Thus, there is only "1 lumen" on the paper, and the other 11.5 lumens are shooting into space (see sketch below).



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AGRO DIVERSITY

- Cannabis is far from the only crop worth growing in this way though - we have been focused mainly on the hardware more than the 'software'.
- However, we have successfully grown leafy greens like lettuces and kale, herbs such as basil and mint, beans and peas, medium size tomatoes, peppers, eggplant and fruit such as strawberries.
- Many other foods including grains can be grown in this way in urban settings without the added costs of packaging, shipping, spoilage, advertising and employee commutes.
- The Omega Garden™ method will lead to improved food quality, higher nutrient density, sovereignty, control and security, community development, etc.



OMEGA GARDEN INC.

We currently have the following patents on the Volksgarden® Supra™ system:

U.S. Patent # 6604321

U.S. Patent # 7188451

CAN Patent # 2503705

CAN Patent # 2343254

INDIA Patent # 210316

S. AFRICA Patent # 2005/041993

U.K. Patent # 2410882

We have the following patents on the Farmdominium™ system:

U.S. Patent # 8104226, 9693508

CAN Patent # 2850233

Other International Patents Pending

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