

**DOSAGE CALCULATOR**

**PROPRIETARY: Do Not Circulate Share or Reproduce**

<b>Target Surface Distance (m):</b>	<b>1.000</b>	Output Usually @ 30-40% Max of Input; <b>TRUE of ALL</b> <b>LP-tube BULBS</b>
<b>Input Bulb Wattage (W/inp.):</b>	<b>25.0</b>	
<b>Output Bulb Wattage (W/eff.):</b>	<b>8.3</b>	

**!! RELATIVE ESTIMATES ONLY !!**  
**Not Responsible For Dosage Accuracy**

	Energy Dosage of UV Radiation UV Dose in uW/cm^2 Needed for Kill Factor		99% 2 Log Reduction					
	90% 1 Log Reduction	99% 2 Log Reduction	Dose(J/m^2)	Bulb Pwr(W/cm^2)	Time(sec)	Time(min)	Time(Hrs)	Bulb Dist(m)
<b>Bacteria</b>								
<b>CUSTOM-----&gt;</b>	0	500	5	8	8	0.1	0.0	1.00
Bacillus anthracis - Anthrax	4,520	8,700	87	8	133	2.2	0.0	1.00
Bacillus anthracis spores - Anthrax spores	24,320	46,200	462	8	704	11.7	0.2	1.00
Bacillus magaterium sp. (spores)	2,730	5,200	52	8	79	1.3	0.0	1.00
Bacillus magaterium sp. (veg.)	1,300	2,500	25	8	38	0.6	0.0	1.00
Bacillus paratyphus	3,200	6,100	61	8	93	1.5	0.0	1.00
Bacillus subtilis spores	11,600	22,000	220	8	335	5.6	0.1	1.00
Bacillus subtilis	5,800	11,000	110	8	168	2.8	0.0	1.00
Clostridium tetani	13,000	22,000	220	8	335	5.6	0.1	1.00
Corynebacterium diphtheriae	3,370	6,510	65	8	99	1.7	0.0	1.00
Ebertelia typhosa	2,140	4,100	41	8	62	1.0	0.0	1.00
Escherichia coli	3,000	6,600	66	8	101	1.7	0.0	1.00
Leptospiracanicola - infectious Jaundice	3,150	6,000	60	8	91	1.5	0.0	1.00
Micrococcus candidus	6,050	12,300	123	8	187	3.1	0.1	1.00
Micrococcus sphaeroides	1,000	15,400	154	8	235	3.9	0.1	1.00
Mycobacterium tuberculosis	6,200	10,000	100	8	152	2.5	0.0	1.00
Neisseria catarrhalis	4,400	8,500	85	8	129	2.2	0.0	1.00
Phytomonas tumefaciens	4,400	8,000	80	8	122	2.0	0.0	1.00
Proteus vulgaris	3,000	6,600	66	8	101	1.7	0.0	1.00
Pseudomonas aeruginosa	5,500	10,500	105	8	160	2.7	0.0	1.00
Pseudomonas fluorescens	3,500	6,600	66	8	101	1.7	0.0	1.00
Salmonella enteritidis	4,000	7,600	76	8	116	1.9	0.0	1.00
Salmonela paratyphi - Enteric fever	3,200	6,100	61	8	93	1.5	0.0	1.00
Salmonella typhosa - Typhoid fever	2,150	4,100	41	8	62	1.0	0.0	1.00
Salmonella typhimurium	8,000	15,200	152	8	232	3.9	0.1	1.00
Sarcina lutea	19,700	26,400	264	8	402	6.7	0.1	1.00
Serratia marcescens	2,420	6,160	62	8	94	1.6	0.0	1.00
Shigella dyseteriae - Dysentery	2,200	4,200	42	8	64	1.1	0.0	1.00
Shigella flexneri - Dysentery	1,700	3,400	34	8	52	0.9	0.0	1.00
Shigella paradysenteriae	1,680	3,400	34	8	52	0.9	0.0	1.00
Spirillum rubrum	4,400	6,160	62	8	94	1.6	0.0	1.00
Staphylococcus albus	1,840	5,720	57	8	87	1.5	0.0	1.00
Staphylococcus aureus	2,600	6,600	66	8	101	1.7	0.0	1.00

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Staphylococcus hemolyticus	2,160	5,500	55	8	84	1.4	0.0	1.00
Staphylococcus lactis	6,150	8,800	88	8	134	2.2	0.0	1.00
Streptococcus viridans	2,000	3,800	38	8	58	1.0	0.0	1.00
Vibrio comma - Cholera	3,375	6,500	65	8	99	1.7	0.0	1.00
<b>Molds</b>								
Aspergillus flavus	60,000	99,000	990	8	1508	25.1	0.4	1.00
Aspergillus glaucus	44,000	88,000	880	8	1340	22.3	0.4	1.00
Aspergillus niger	132,000	330,000	3,300	8	5027	83.8	1.4	1.00
Mucor racemosus A	17,000	35,200	352	8	536	8.9	0.1	1.00
Mucor racemosus B	17,000	35,200	352	8	536	8.9	0.1	1.00
Oospora lactis	5,000	11,000	110	8	168	2.8	0.0	1.00
Penicillium expansum	13,000	22,000	220	8	335	5.6	0.1	1.00
Penicillium roqueforti	13,000	26,400	264	8	402	6.7	0.1	1.00
Penicillium digitatum	44,000	88,000	880	8	1340	22.3	0.4	1.00
Rhisopus nigricans	111,000	220,000	2,200	8	3351	55.9	0.9	1.00
<b>Protozoa</b>								
Chlorella Vulgaris	13,000	22,000	220	8	335	5.6	0.1	1.00
Nematode Eggs	45,000	92,000	920	8	1401	23.4	0.4	1.00
Paramecium	11,000	20,000	200	8	305	5.1	0.1	1.00
<b>Virus</b>								
Adeno Virus Type III 3		4,500	45	8	69	1.1	0.0	1.00
Bacteriophage - E. Coli 1,3,4,5,6,9	2,600	6,600	66	8	101	1.7	0.0	1.00
<b>*** Covid-19 (Estimate / Unknown)</b>	<b>8,200</b>	<b>15,000</b>	<b>150</b>	<b>8</b>	<b>228</b>	<b>3.8</b>	<b>0.1</b>	<b>1.00</b>
Coxsackie		6,300	63	8	96	1.6	0.0	1.00
Infectious Hepatitis 1,5,7,9	5,800	8,000	80	8	122	2.0	0.0	1.00
Influenza 1,2,3,4,5,7,9	3,400	6,600	66	8	101	1.7	0.0	1.00
Poliovirus - Poliomyelitis	3,150	6,600	66	8	101	1.7	0.0	1.00
Tobacco mosaic	240,000	440,000	4,400	8	6702	111.7	1.9	1.00
<b>Yeast</b>								
Brewers yeast	3,300	6,600	66	8	101	1.7	0.0	1.00
Common yeast cake	6,000	13,200	132	8	201	3.4	0.1	1.00
Saccharomyces carevisiae	6,000	13,200	132	8	201	3.4	0.1	1.00
Saccharomyces ellipsoideus	6,000	13,200	132	8	201	3.4	0.1	1.00
Saccharomyces spores	8,000	17,600	176	8	268	4.5	0.1	1.00