

PATHOGEN	uJ/sq cm*	KILL FACTOR for 99% (Log 2) reduction **
Bacteria		
Acintobacter baumannii (MDRAB)	6,600	× 62
Bacillus anthracis - Anthrax	5,500	× 72
Bacillus anthracis - Anthrax spores	8,800	× 45
Bacillus magaterium sp. (spores)	3,800	× 105
Bacillus magaterium sp. (eg.)	6,500	× 61
Bacillus paratyphusus	99,000	× 4.0
Bacillus subtilis spores	88,000	× 4.5
Bacillus subtilis	330,000	× 1.2
Clostridium difficile (Spores)	35,200	× 11
Clostridium tetani	35,200	× 11
Corynebacterium diphtheriae	11,000	× 36
Ebertelia typhosa	22,000	× 18
Escherichia coli	26,400	× 15
Klebsiella pneumoniae (CRKP)	88,000	× 4.5
Leptospiracanicola	220,000	× 1.8
Micrococcus candidus	22,000	× 18
Micrococcus sphaeroides	92,000	× 4.3
MRSA	20,000	× 20
Mycobacterium tuberculosis	10,000	× 40
Neisseria catarrhalis	8,500	× 47
Phytomonas tumefaciens	8,000	× 50
Proteus wlgaris	6,600	× 60
Pseudomonas aeruginosa	10,500	× 38

NOTE

** KILL FACTOR = MULTIPLE OF MINIMUM ENERGY TO KILL PATHOGENS

“uJ” = Micro-Joules = Micro-Watt-Seconds

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Bacteria		
Pseudomonas fluorescens	6,600	× 60
Salmonella enteritidis	7,600	× 52
Salmonella paratyphi - Enteric fever	6,100	× 65
Salmonella typhosa - Typhoid fever	4,100	× 97
Salmonella typhimurium	15,200	× 26
Sarcina lutea	26,400	× 15
Serratia marcescens	6,160	× 65
Shigella dysenteriae - Dysentery	4,200	× 95
Shigella flexneri - Dysentery	3,400	× 117
Shigella paradysenteriae	3,400	× 117
Spirillum rubrum	6,160	× 65
Staphylococcus albus	5,720	× 70
Staphylococcus aureus	6,600	× 60
Staphylococcus hemolyticus	5,500	× 72
Staphylococcus lactis	8,800	× 45
Streptococcus viridans	3,800	× 105
Vibrio comma - Cholera	6,500	× 61
VRE	8,400	× 47
Molds		
Aspergillus flavus	99,000	× 4
Aspergillus glaucus	88,000	× 4.5
Aspergillus niger	330,000	× 1.2
Mucor racemosus A	35,200	× 11
Mucor racemosus B	35,200	× 11

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Molds		
Oospora lactis	11,000	× 36
Penicillium expansum	22,000	× 18
Penicillium roqueforti	26,400	× 15
Penicillium digitatum	88,000	× 4.5
Rhisopus nigricans	220,000	× 1.8
Protozoa		
Chiarella Vulgaris	22,000	× 18
Nematode Eggs	92,000	× 4.3
Paramecium	20,000	× 20
Virus		
Bacteriophage - E. Coli	6,600	× 60
Herpes simplex	7,500	× 53
HIV Retrol.irus	36,000	× 11
Infectious Hepatitis	14,000	× 28
Influenza - A (flu)	6,600	× 60
Poliovirus - Poliomyelitis	16,000	× 25
Norovirus	29,500	× 13
Yeast		
Brewers yeast	6,600	× 60
Common yeast cake	13,200	× 30
Saccharomyces carellisiae	13,200	× 30
Saccharomyces ellipsoideus	13,200	× 30
Saccharomyces spores	17,600	× 23