



Violux Ultraviolet

Antimicrobial Evaluation of Violux UV Treated Articles

Test Method Details

Test Method	Modified ASTM E2197
Test Organism	<i>Escherichia coli</i> (ATCC #25922) (E.coli)
Test Solution	Phosphate Buffered Saline (1x) with Serum (5%)
Test Discs	20mm diameter magnetic stainless steel discs with 0.10 mL Tryptic Soy Agar overlay
Inoculum Applied to Test Disc	0.010 mL applied to each disc and spread to within 1 mm of edges, then dried
Recovery Solution	5 mL Phosphate Buffered Saline (1x) with Triton X-100 surfactant (0.1%)
Measuring Method of Number of Viable Bacteria	Dilution Plate Method onto nutritive Tryptic Soy Agar (1x)

Results – E.coli disc testing

Modified ASTM E2197: Standard Quantitative Disk Carrier Test Method				
Number of Replicate Experiments		2		
Number of Replicate Discs per Experiment		3		
Exposure Device and Time	Average Bacterial Burden (CFU/disc)	Average Log Bacterial Burden (CFU/disc)	Log Reduction (vs Control)	Percent Reduction (vs Control)
Control	1.58E+07	7.20	--	--
Luma (16W)- 2 minutes	2.95E+04	4.47	2.73	99.81%
Luma (16W)- 3 minutes	1.95E+04	4.29	2.91	99.88%
Luma Pro (32W)- 1 minute	3.06E+04	4.49	2.71	99.81%
Luma Pro (32W)- 2 minutes	1.70E+04	4.23	2.97	99.89%