

CONFIDENTIAL TEST REPORT No. VL-7a September 17, 2020

Violux Ultraviolet

Antimicrobial Evaluation of Violux UV Treated Articles

Test Method Details

Test Method	Modified ASTM E2197		
Test Organism	Salmonella typhimurium (ATCC #14028)		
Test Solution	Phosphate Buffered Saline (1x) with Serum (5%)		
Test Discs	20mm diameter magnetic stainless steel discs		
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 - Salmonella disc testing

Modified ASTM E2197: Standard Quantitative Disk Carrier Test Method					
Number of Replicate Experiments		2	2		
Number of Replicate Discs per Experiment		3	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	1.14E+06	6.06			
Luma (16W)- 2 minutes	5.00E+01	1.70	4.36	>99.99%	
Luma (16W)- 3 minutes	3.50E+02	2.54	3.51	99.97%	
Luma Pro (32W)- 1 minute	0.00E+00	0.00	6.06	100.00%	
Luma Pro (32W)- 2 minutes	2.50E+01	1.40	4.66	>99.99%	