BLUECALC™

AIR DISINFECTION ANALYSIS - REPORT

Customer / Project: **5 Ton 20x14 2000cfm SINGLE**

Duct Data

Duct Width	20	in
Duct Height	14	in
Airflow	2000	CFM
Air Velocity	1028.57	ft/min
Duct Wall Material	Galvanized duct - rough	

Irradiation Data

Avg germicidal UV dose delivered	5070	µJ/cm2
Air temperature increase	0.4	°C
Exposure time	0.20	s

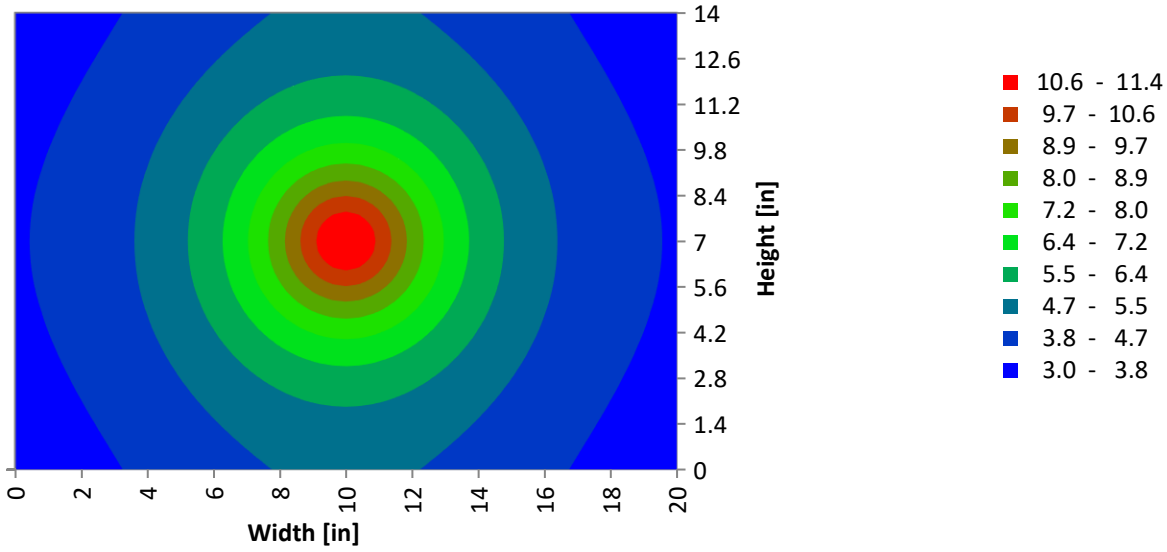
UVGI Lamp Data

Model	TUVC-ADS-246Q-HO	
Number of Units	1	
Setup type for multiple units	n/a	
Number of Lamps per Unit	4	
Lamp Length	1148	mm
UVGI Power per Lamp	34	W
Electrical Power per Lamp	100	W
Electrical Power per Module	400	W
Electrical Power (Total)	400	W
Teflon coating	No	

Inactivation (sterilization) rates after 18000 hours

Microorganism	Single Pass		
	Minimum	Average	LOG Average
Coronavirus	> 99.99%	> 99.99%	> 4
Tuberculosis	99.92%	> 99.99%	4
Influenza A virus	98.12%	99.76%	2
Adenovirus	84.13%	93.85%	1

UVC dose inside the duct after 18000 hours (mJ/cm²)



Note: 4-log inactivation equals 99.99%. Higher than 4-log inactivation are achieved in real-life scenarios but the exact predictions/model would be inaccurate because the UV disinfection analysis utilises single stage decay data and equations.