BLUECALC™

AIR DISINFECTION ANALYSIS - REPORT

Customer / Project: **50 Ton 44x38 20000cfm SINGLE**

Duct Data

Duct Width	44	in
Duct Height	38	in
Airflow	20000	CFM
Air Velocity	1722.49	ft/min
Duct Wall Material	Galvanized duct - rough	

Irradiation Data

Avg germicidal UV dose delivered	5784	µJ/cm2
Air temperature increase	0.1	°C
Exposure time	0.17	s

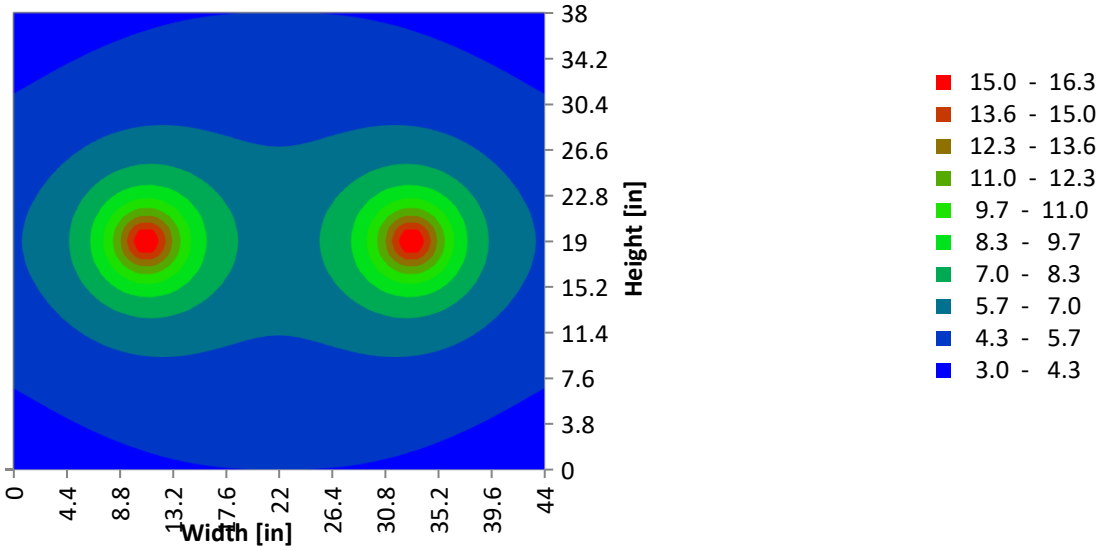
UVGI Lamp Data

Model	TUVC-ADS-260H-HO	
Number of Units	2	
Setup type for multiple units	parallel	
Number of Lamps per Unit	6	
Lamp Length	1554	mm
UVGI Power per Lamp	54	W
Electrical Power per Lamp	130	W
Electrical Power per Module	780	W
Electrical Power (Total)	1560	W
Teflon coating	No	

Inactivation (sterilization) rates after 18000 hours

Microorganism	Single Pass		
	Minimum	Average	LOG Average
Coronavirus	> 99.99%	> 99.99%	> 4
Tuberculosis	99.97%	> 99.99%	> 4
Influenza A virus	98.81%	99.90%	2
Adenovirus	87.18%	95.85%	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.