**Duct Data**

- **Duct Width**: 38 in
- **Duct Height**: 30 in
- **Airflow**: 12000 CFM
- **Air Velocity**: 1515.79 ft/min
- **Duct Wall Material**: Galvanized duct - rough

**UVGI Lamp Data**

- **Model**: TUVC-ADS-260Q-HO
- **Number of Units**: 2
- **Setup type for multiple units**: parallel
- **Number of Lamps per Unit**: 4
- **Lamp Length**: 1554 mm
- **UVGI Power per Lamp**: 54 W
- **Electrical Power per Lamp**: 130 W
- **Electrical Power per Module**: 520 W
- **Electrical Power (Total)**: 1040 W
- **Teflon coating**: No

**Irradiation Data**

- **Avg germicidal UV dose delivered**: 5398 µJ/cm²
- **Air temperature increase**: 0.2 °C
- **Exposure time**: 0.19 s

**Inactivation (sterilization) rates after 18000 hours**

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Single Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td><strong>Coronavirus</strong></td>
<td>&gt; 99.99%</td>
</tr>
<tr>
<td><strong>Tuberculosis</strong></td>
<td>99.95%</td>
</tr>
<tr>
<td><strong>Influenza A virus</strong></td>
<td>98.62%</td>
</tr>
<tr>
<td><strong>Adenovirus</strong></td>
<td>86.24%</td>
</tr>
</tbody>
</table>

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

![UVC dose inside the duct after 18000 hours](image)

**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.

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