FEATURES:
- FAN FILTER UNIT WITH INTEGRATED HIGH PERFORMANCE LED LIGHTS
- OPTIONAL HGMF - HOSPITAL GRADE MOUNTING FRAME FOR SURFACE MOUNT INSTALLATION
- COMPLETE CONTROL AND MONITORING VIA BACnet
UFFU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING
3D INTERACTIVE MODELS

UFFU 2 x 2
UFFU 2 x 3
UFFU 2 x 4

- USE THE SCROLL WHEEL TO ZOOM
- HOLD DOWN THE LEFT MOUSE BUTTON TO ROTATE
- HOLD DOWN CTRL AND LEFT MOUSE BUTTON TO MOVE
UFFU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING
CONSTRUCTION DETAILS AND OPTIONS

STANDARD CONSTRUCTION
- EXTRUDED ALUMINUM FILTER FRAME WITH URETHANE GEL
- TWO STAINLESS STEEL RETAINER CABLES PER UNIT
- DIFFUSER FACE SECURED WITH QUARTER TURN FASTENERS
- 14 GA (.064 THICK) ALUMINUM PLENUM
- EXTRUDED ALUMINUM OUTER FRAME AND DIFFUSER FRAME
- ZINC PLATED EYE BOLTS FOR HANGING
- MOTOR/BLOWER ACCESSIBLE FROM ROOMSIDE AND TOPSIDE
- STATIC PRESSURE AND AEROSOL SAMPLE PORT
- EC MOTOR, 50/60 Hz, 1 PHASE

FINISH
- B12 STANDARD WHITE

INLET SIZES
- NONE (UNDUCTED)
- 10" ROUND
- 12" ROUND
- 14" ROUND

PRE-FILTER
- WASHABLE PRE-FILTER
- MERV 8 PRE-FILTER

FILTER
- HEPA, 99.99% @ 0.30 MICRON, IEST RP CC001.5 TYPE C
- ULPA, 99.9995% @ 0.12 MICRON, IEST RP CC001.5 TYPE F

WHEEL TYPE
- FORWARD CURVE BLOWER WHEEL
- BACKWARD CURVE BLOWER WHEEL (NOT AVAILABLE FOR 2x2)

FAN POWER VOLTAGE
- 115V
- 208V
- 240V
- 277V

FAN CONTROLLER
- EC MOTOR STANDARD SPEED CONTROLLER
- BACnet FLOW CONTROLLER

FILTER AND MOTOR STATUS LIGHTS
- TRI-COLOR FACE MOUNTED LED FILTER AND MOTOR STATUS LIGHT
  (AVAILABLE WITH BACnet FLOW CONTROLLER ONLY)

OPTION 1
- WALL MOUNTED SPEED CONTROL (SEE FFUCS SUBMITTAL 269849)
- 3/8" NPT AEROSOL INJECTION PORT (SEE INJ DETAILS ON SHEET 5)

<table>
<thead>
<tr>
<th>NOMINAL UNIT SIZE</th>
<th>WIDTH (W)</th>
<th>LENGTH (L)</th>
<th>HEIGHT (H)</th>
<th>MAX AMPS FAN</th>
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<tbody>
<tr>
<td>FORWARD CURVE BLOWER WHEEL</td>
<td>24x36</td>
<td>33.625</td>
<td>35.625</td>
<td>17.000</td>
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<tr>
<td>BACKWARD CURVE BLOWER WHEEL</td>
<td>24x48</td>
<td>33.625</td>
<td>47.625</td>
<td>17.000</td>
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</table>

PROJECT:

ENGINEER:

CUSTOMER: 272127

SUBMITTAL DATE: JULY 2020

REVISION: 0

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LED LIGHTING SPECIFICATIONS
- LED LIGHTING INTEGRATED INTO EACH DIFFUSER MODULE
- IP67 RATED LED STRIP WITH QUICK CONNECTORS
- COLOR RENDERING INDEX (CRI) 90+
- L80 > 60,000 HRS.
- FOR IES PHOTOMETRIC FILES VISIT: www.priceindustries.com/criticalenvironments/products/uffu

LED COLOR TEMPERATURE
☐ 5000K (5000 KELVIN)

LED ROWS
☐ SINGLE ROW
☐ DOUBLE ROW

LISTINGS:
- UL 507 STANDARD FOR ELECTRIC FANS
- UL 2043 FIRE TEST FOR HEAT AND VISIBLE SMOKE RELEASE FOR DISCRETE PRODUCTS AND THEIR ACCESSORIES INSTALLED IN AIR-HANDLING SPACES
- UL2108 LOW VOLTAGE LIGHTING SYSTEM
- UL750 LIGHT EMITTING DIODE (LED) EQUIPMENT FOR USE IN LIGHTING PRODUCTS
- UL1310 CLASS 2 POWER UNITS
- UL94 FLAMMABILITY OF PLASTIC MATERIALS FOR PARTS IN DEVICES AND APPLIANCES
- IP67 RATED INGRESS PROTECTION AGAINST DUST AND LIQUIDS
- MIL-STD-461 FOR ELECTROMAGNETIC COMPATIBILITY

LIGHTING MAXIMUM AMP DRAW

<table>
<thead>
<tr>
<th>NOMINAL UNIT SIZE</th>
<th>SINGLE ROW</th>
<th>DOUBLE ROW</th>
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<tbody>
<tr>
<td>24x24</td>
<td>1.2/0.6/0.5</td>
<td>1.2/0.6/0.5</td>
</tr>
<tr>
<td>24x36</td>
<td>1.2/0.6/0.5</td>
<td>2.4/1.1/1.0</td>
</tr>
<tr>
<td>24x48</td>
<td>1.2/0.6/0.5</td>
<td>2.4/1.1/1.0</td>
</tr>
</tbody>
</table>

LED LIGHT DETAILS

SINGLE ROW LED LIGHTS

DOUBLE ROW LED LIGHTS

ALL METRIC DIMENSIONS ( ) ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER.
UFFU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING
FILTRATION DETAILS

NOTES
- FILTER PLEATS RUN PARALLEL TO THE WIDTH (W) DIMENSION
- DIMENSIONS A & B TOLERANCES +/-1/16
- FILTERS COME WITH GEL SEAL FILLED CHANNEL
- FRAME DETAILS:
  - MATERIAL: ANODIZED EXTRUDED ALUMINUM
  - THICKNESS: 1 1/16" (MINIMUM)
- FILTERS ARE UL 900 CLASS 1 CERTIFIED
- EFFICIENCY AND LEAK SCAN TESTED
  - HEPA EFFICIENCY: 99.99% (3 MICRON)
  - ULPA EFFICIENCY: 99.999% (.12 MICRON)
  - MINIMUM MODULE WIDTH FOR ROOMSIDE HEPA FILTRATION IS 12"
- FILTER PACKAGED SEPARATELY FROM DIFFUSER FOR JOB SITE INSTALLATION BY OTHERS

ACTUAL FILTER SIZE

<table>
<thead>
<tr>
<th>WIDTH (W)</th>
<th>LENGTH (L)</th>
<th>HEIGHT (H)</th>
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</thead>
<tbody>
<tr>
<td>20.69</td>
<td>20.69</td>
<td>3.50</td>
</tr>
<tr>
<td>20.69</td>
<td>32.69</td>
<td>3.50</td>
</tr>
<tr>
<td>20.69</td>
<td>44.69</td>
<td>3.50</td>
</tr>
</tbody>
</table>

FILTER WITH GEL SEAL INSTALLED ROOMSIDE INTO UFFU KNIFE EDGE FRAME

DIFFUSER FACE SECURED WITH STAINLESS STEEL 1/4 TURN FASTENERS

TRANSLUCENT PERFORATED POLYCARBONATE DIFFUSER FACE 13% FREE AREA

LIGHT DEFLECTOR BAFFLE

VISIT PRICE INDUSTRIES WEBSITE FOR FILTER QUICK START GUIDE
UFFU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING
DETAIL VIEWS

AEROSOL/STATIC PORT DETAIL

3/8" NPT AEROSOL INJECTION PORT

LED LIGHTS BELOW INJ PORT MUST BE REMOVED TO ACCESS THE PORT. FOR DETAILS ON REMOVING LEDs, SEE UCA MANUAL HERE

SEE INJ - AEROSOL INJECTION PORT MANUAL HERE

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Project:

UFFU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING

Engineer:

Customer:

Submittal Date:

Revision:

July 2020

Sheet 6 of 11

UFFU-TX
NOTES:
- LAY IN CEILING INSTALLATION ONLY. UNIT SIZE DESIGNED FOR 1" WIDE T-BAR OR 1.5" WIDE T-BAR.
- FOR SURFACE MOUNT INSTALLATION ORDER SEPARATE HOSPITAL GRADE MOUNTING FRAME. 
  SEE HGMF SUBMITTAL HERE:
UFFU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING

- DIMMER - TYPICAL WIRING DETAILS

LOW VOLTAGE 0-10V FIELD CONNECTIONS

HIGH VOLTAGE FIELD CONNECTIONS

- 0-10V DIMMER SHIPS LOOSE. THE TOTAL 0-10V CONTROL SIGNAL WIRING FOR THIS CONTROL SHOULD NOT EXCEED 500 ft. DO NOT USE WIRE SMALLER THAN 20 AWG.
- SEE UCA (ULTRA COMPONENTS AND ACCESSORIES) SUBMITTAL HERE
- REFERENCE LED WIRING DIAGRAMS HERE
- REFERENCE FAN WIRING DIAGRAMS HERE

INSTALLATION WORK AND ELECTRICAL WIRING MUST BE COMPLETED BY A CERTIFIED ELECTRICIAN AND/OR QUALIFIED PERSONS IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES AND STANDARDS
UFPU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING

- BAS - BUILDING AUTOMATION SYSTEM - TYPICAL WIRING DETAILS

- SEE UCA (ULTRA COMPONENTS AND ACCESSORIES) SUBMITTAL HERE

- REFERENCE LED WIRING DIAGRAMS HERE

- REFERENCE FAN WIRING DIAGRAMS HERE

INSTALLATION WORK AND ELECTRICAL WIRING MUST BE COMPLETED BY A CERTIFIED ELECTRICIAN AND/OR QUALIFIED PERSON(S) IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES AND STANDARDS
UFFU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING

□ BACNET - TYPICAL WIRING DETAILS

- PRE-WIRED FACTORY CONNECTION
- FIELD CONNECTION
  G GROUND
  N NEUTRAL
  L LINE CONNECTION

HIGH VOLTAGE FIELD CONNECTIONS

FAN HIGH VOLTAGE FIELD CONNECTIONS

G N L G N

INSTALLATION WORK AND ELECTRICAL WIRING MUST BE COMPLETED BY A CERTIFIED ELECTRICIAN AND/OR QUALIFIED PERSON(S) IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES AND STANDARDS.

- SEE UCA (ULTRA COMPONENTS AND ACCESSORIES) SUBMITTAL HERE
- REFERENCE LED WIRING DIAGRAMS HERE
- REFERENCE FAN WIRING DIAGRAMS HERE

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UFFU
ULTRA FAN FILTER UNIT WITH INTEGRATED LED LIGHTING
PHOTOMETRIC ANALYSIS - EXAMPLE LAYOUTS

ROOM DIMENSION PARAMETERS:
800 SQ FT
10 FT CEILING HEIGHT
3 FT WORKPLANE

ROOM REFLECTANCES:
CEILINGS: 80%
WALLS: 50%
FLOORS: 20%

THE CALCULATED VALUES DO NOT INCLUDE OR ACCOUNT FOR ADDITIONAL LIGHTING.
LIGHTING ANALYSIS HAS BEEN PERFORMED USING LAB TESTED IES FILES AND STANDARD ROOM REFLECTANCE VALUES.
LIGHTING CALCULATIONS ARE ESTIMATED USING BEST PRACTICE AND MAY DIFFER SLIGHTLY FROM ACTUAL FIELD CONDITIONS.

THE CALCULATED VALUES DO NOT INCLUDE OR ACCOUNT FOR ADDITIONAL LIGHTING.
LIGHTING ANALYSIS HAS BEEN PERFORMED USING LAB TESTED IES FILES AND STANDARD ROOM REFLECTANCE VALUES.
LIGHTING CALCULATIONS ARE ESTIMATED USING BEST PRACTICE AND MAY DIFFER SLIGHTLY FROM ACTUAL FIELD CONDITIONS.

TARGET AVERAGE ILLUMINANCE (FC) NUMBER OF ROWS OF LED LIGHTS PER MODULE

24 x 48 UFFU MODULES

<table>
<thead>
<tr>
<th>TARGET AVERAGE ILLUMINANCE (FC)</th>
<th>SINGLE ROW</th>
<th>DUAL ROW</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 FC</td>
<td>21%</td>
<td>12%</td>
</tr>
<tr>
<td>75 FC</td>
<td>32%</td>
<td>18%</td>
</tr>
<tr>
<td>100 FC</td>
<td>45%</td>
<td>24%</td>
</tr>
</tbody>
</table>

24 x 24 UFFU MODULES

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<th>SINGLE ROW</th>
<th>DUAL ROW</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 FC</td>
<td>39%</td>
<td>21%</td>
</tr>
<tr>
<td>75 FC</td>
<td>57%</td>
<td>32%</td>
</tr>
<tr>
<td>100 FC</td>
<td>78%</td>
<td>42%</td>
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% CEILING COVERAGE REQUIREMENT

- THE TABLES REFLECT THE PERCENTAGE OF UFFU CEILING COVERAGE REQUIRED TO MEET AVERAGE ILLUMINANCE (FC) REQUIREMENTS.
- 50 FC AVERAGE ILLUMINATION WITH 2 ROWS OF LIGHTS PER MODULE SHOWN.