### OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING EXAMPLE SYSTEM FOR A TRADITIONAL OR

#### FEATURES:

- LAMINAR FLOW DIFFUSER ARRAY WITH INTEGRATED HIGH PERFORMANCE LED LIGHTS INSIDE EACH INDIVIDUAL MODULE
- OPTIONAL PERIMETER WELDED CEILING GRID SUPPORTS ACCESS PANELS AND FLUSH-MOUNT PANELS FOR EQUIPMENT BOOM INTEGRATION
- UL 1598 CERTIFIED, AIR-HANDLING LUMINAIRE











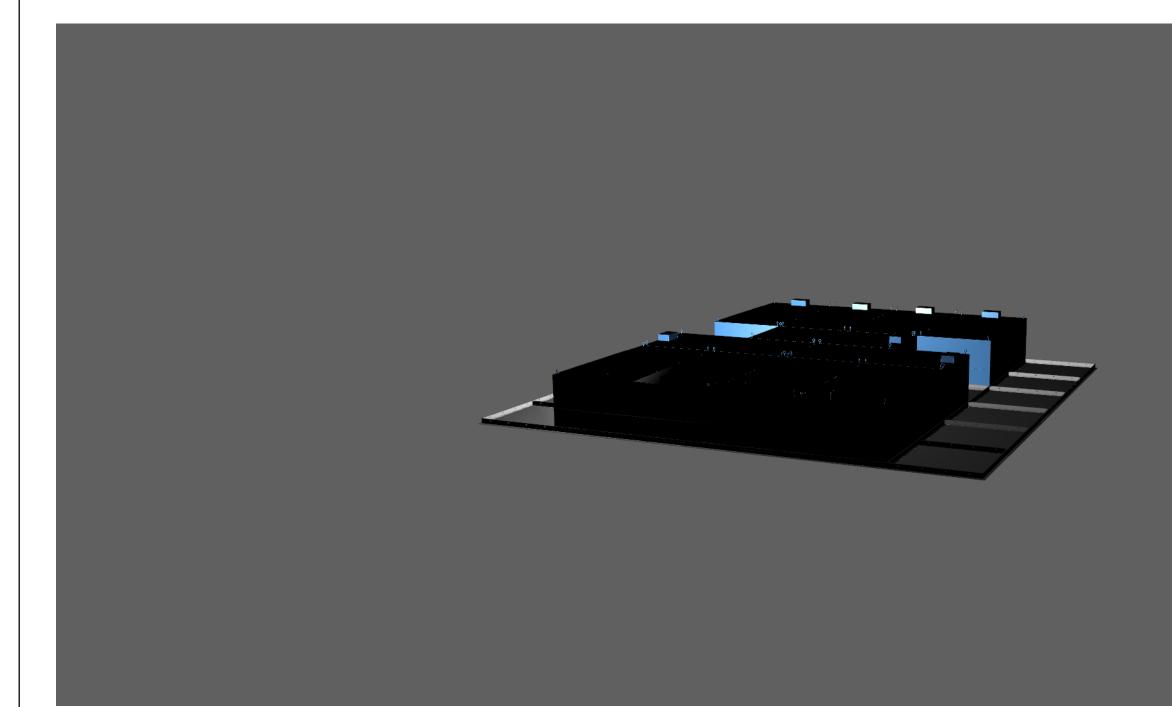
High Efficiency 90+ Im/W LED L80 > 60,000 hours IP67 Sealed LED

aled

EXAMPLE SYSTEM				
AIRFLOW	2,500	CFM		
	25	ACH		



**OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING 3D INTERACTIVE MODEL - TRADITIONAL OR** 



- USE THE SCROLL WHEEL TO ZOOM - HOLD DOWN THE LEFT MOUSE BUTTON TO ROTATE - HOLD DOWN CTRL AND LEFT MOUSE BUTTON TO MOVE

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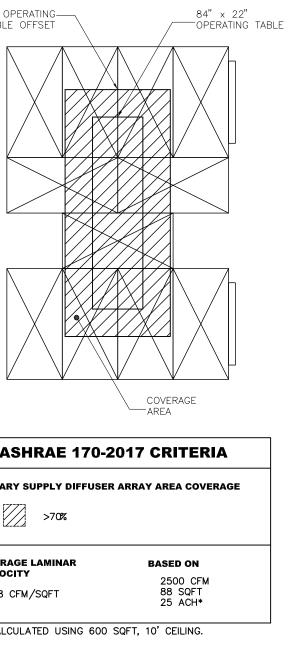
#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING**

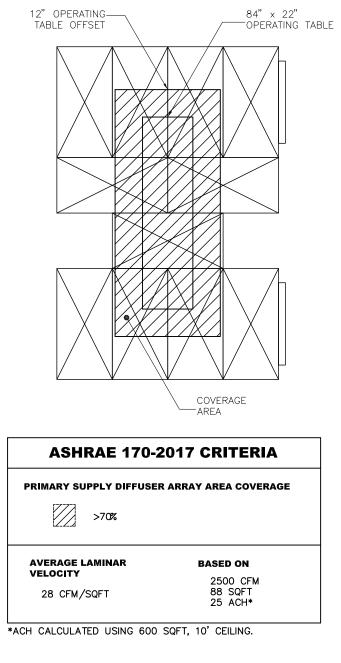
#### **REFLECTED CEILING PLAN - TRADITIONAL OR**

#### -CEILING OPENING = C TO C + $\frac{3}{4}$ = 12'-2 $\frac{1}{4}$ "-B36"×8" INLET-TYP x2 2 1 $-2\frac{1}{4}$ 12'ß U2 U3 Ш . , МФ +U5 . U6 $\odot$ 2 0 || (3) Ú7 6 4 5 OPENING 6 CEILING EQUIPMENT/LIGHT BOOM SYSTEM SHIPS IN FACTORY \_WELDED SECTIONS INDICATED PROVIDED AND INSTALLED BY OTHERS, NO ACCESS THROUGH THESE PANELS BY HEAVY LINES

TOTAL AREA = 147 sq. ft.				
USA = 88 sq. ft.	USA = 88 sq. ft. HGWC = 59 sq. ft.			
USA - ULTRASUITE MODULE	SC - SOLID CORE ACCESS PANELS	SCF - SOLID CORE FLUSH MOUNT PANELS	HGWC PERIMETER	
24 x 48 (x 11)	24 x 24 (x 12)	24 x 24 (x 2)	97" (x 2)	

TABLE OFFSET





ALL METRIC DIMENSIONS () ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER.

- B12 STANDARD WHITE FINISH

- PANEL CUTOUTS FOR BOOMS DONE IN FIELD BY OTHERS
- RECOMMENDED INLET SIZE AND LOCATION SHOWN
- THE CEILING IS FACTORY PREMANUFACTURED TO SIZES AND TOLERANCE +/- .032"
- SITE ADJUSTMENTS TO PERIMETER SOFFITS AND/OR DRYWALL MAY BE REQUIRED
- AND ARE THE RESPONSIBILITY OF THE INSTALLER

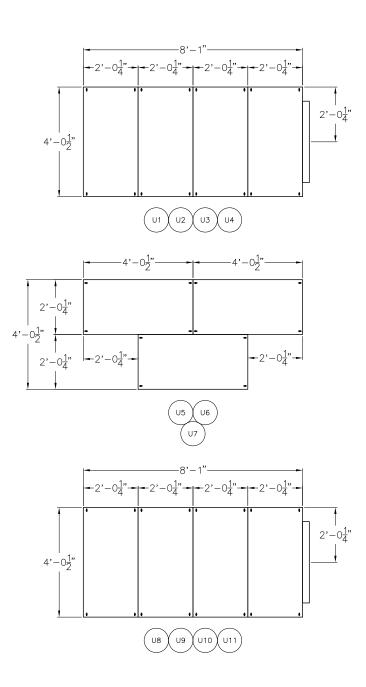
© Copyright Price Industries 2022

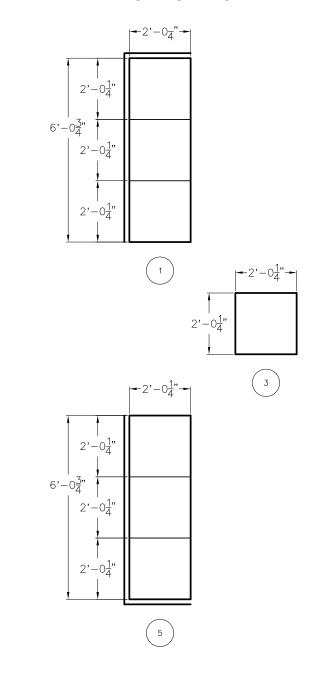
### ASHRAE 170-2017 VERIFICATION - TRADITIONAL OR

CRITICAL ENVIRONMENTS				
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#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING**

#### **USA SECTION BREAKDOWN - TRADITIONAL OR**



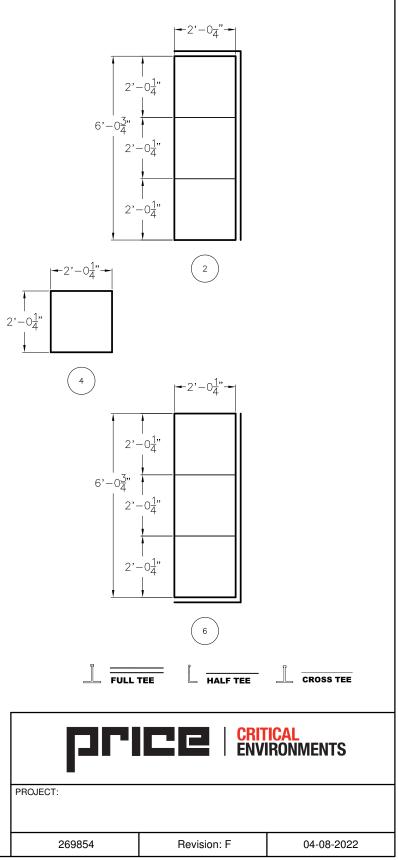


- THE ULTRASUITE ARRAY IS SUPPLIED IN MULTIPLE FACTORY ASSEMBLED SECTIONS NO LARGER THAN 10'X4'

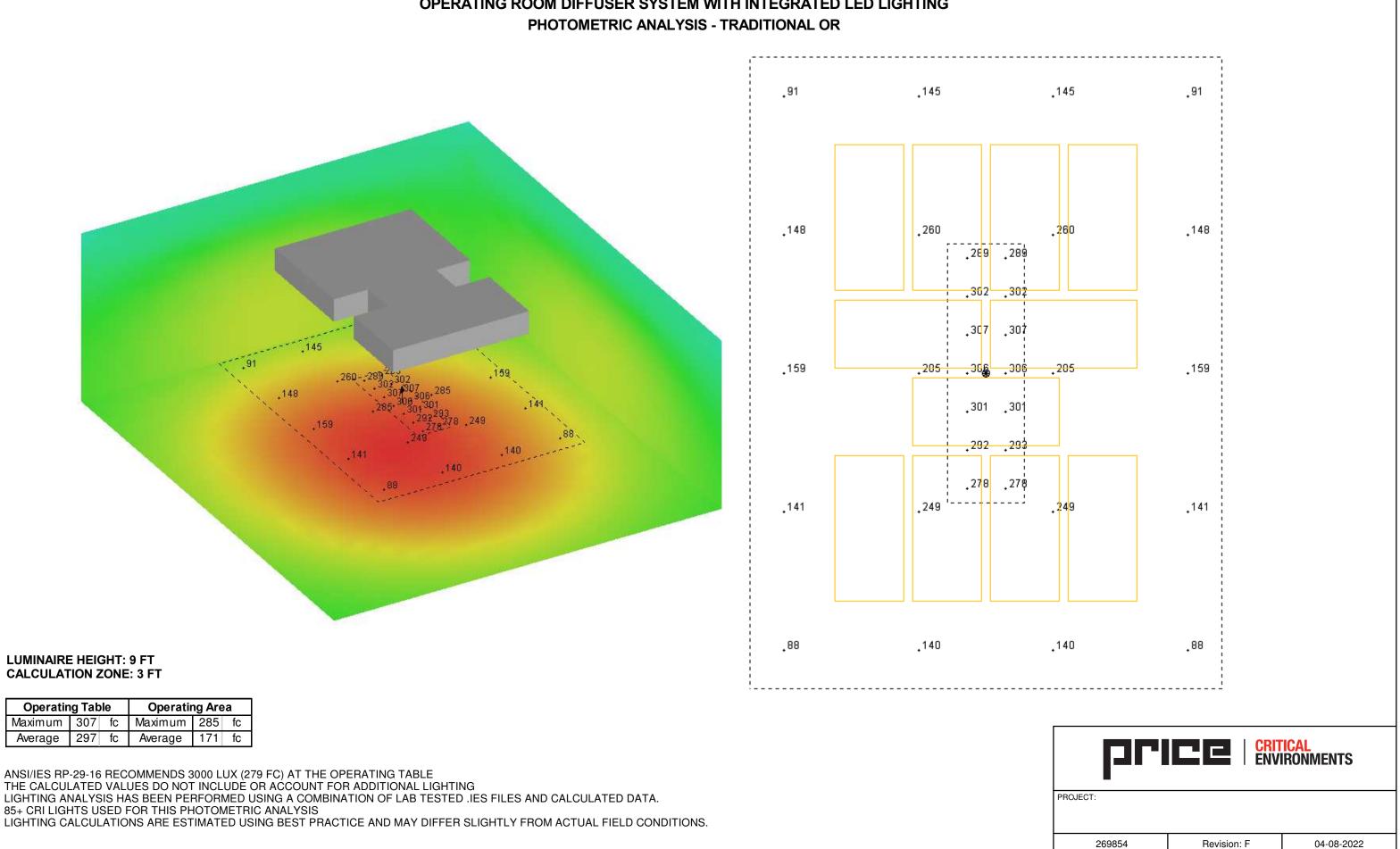
- ASSEMBLED SECTION CONNECTIONS DONE IN FIELD BY OTHERS WITH FACTORY PROVIDED HARDWARE - LED LIGHTING IS FACTORY INSTALLED AND WIRED FOR EFFORTLESS ONSITE INSTALLATION

- INSTALLATION AND MOUNTING OF THE ULTRASUITE ARRAY IS THE RESPONSIBILITY OF THE INSTALLER

#### **HGWC SECTION BREAKDOWN - TRADITIONAL OR**



# OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING

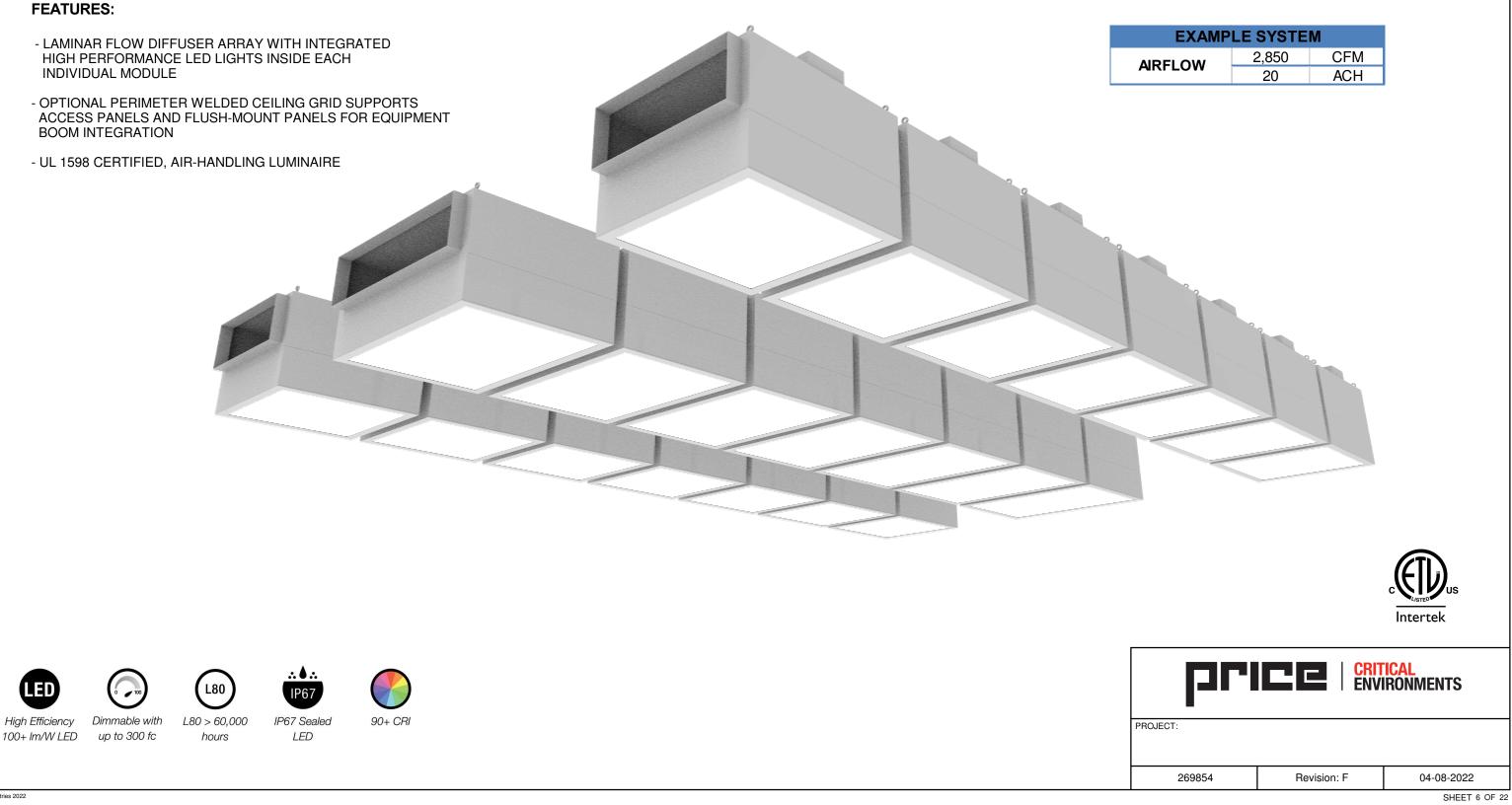


#### LUMINAIRE HEIGHT: 9 FT **CALCULATION ZONE: 3 FT**

Operating Table		Operatir	ng Are	a	
Maximum	307	fc	Maximum	285	fc
Average	297	fc	Average	171	fc

THE CALCULATED VALUES DO NOT INCLUDE OR ACCOUNT FOR ADDITIONAL LIGHTING LIGHTING ANALYSIS HAS BEEN PERFORMED USING A COMBINATION OF LAB TESTED .IES FILES AND CALCULATED DATA. 85+ CRI LIGHTS USED FOR THIS PHOTOMETRIC ANALYSIS LIGHTING CALCULATIONS ARE ESTIMATED USING BEST PRACTICE AND MAY DIFFER SLIGHTLY FROM ACTUAL FIELD CONDITIONS.

## **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING EXAMPLE SYSTEM FOR A HYBRID OR/IMAGING SUITE**











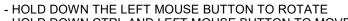
100+ Im/W LED

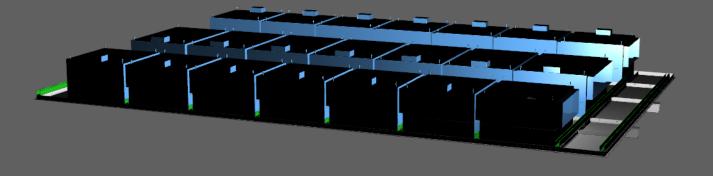
EXAMPLE SYSTEM				
AIRFLOW	2,850	CFM		
	20	ACH		

CEILING LEVEL UNISTRUT (OR EQUIVALENT), SUPPORT TO STRUCTURE, AND MEDICAL EQUIPMENT RAILS ARE DESIGNED, PROVIDED, AND INSTALLED BY OTHERS.

- HOLD DOWN CTRL AND LEFT MOUSE BUTTON TO MOVE

- USE THE SCROLL WHEEL TO ZOOM





**OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING 3D INTERACTIVE MODEL - HYBRID OR/IMAGING SUITE** 

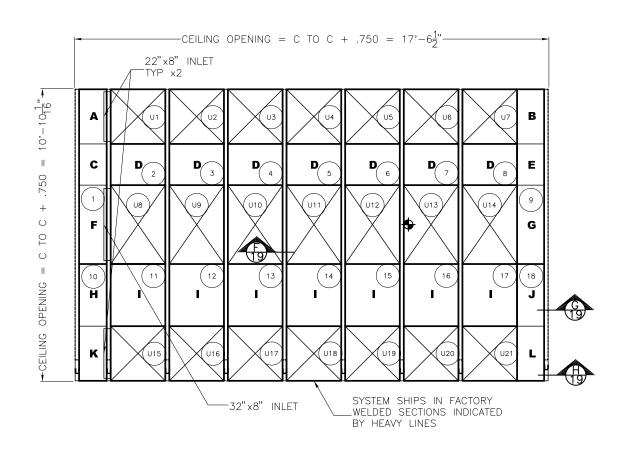
# **ULTRASUITE**®

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#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING**

#### **REFLECTED CEILING PLAN - HYBRID OR/IMAGING SUITE**

## ASHRAE 170-2017 VERIFICATION - HYBRID OR/IMAGING SUITE



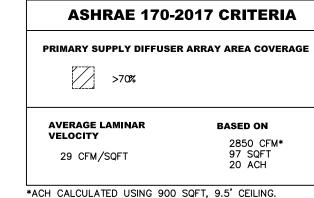
TOTAL AREA = 188 sq. ft.				
USA = 97 sq. ft.	USA = 97 sq. ft. HGWC = 91 sq. ft.			
USA - ULTRASUITE MODULE 24 x 24 (x 14) 24 x 35 (x 7)	SC - SOLID CORE ACCESS PANELS   A: 12.1 x 24 (x 1)   B: 11.9 x 24 (x 1)   C: 12.1 x 18.1 (x 1)   D: 18.1 x 24 (x 7)   E: 11.9 x 18.1 (x 1)	F: 12.1 x 34.6 (x 1) G: 11.9 x 34.6 (x 1) H: 12.1 x 27.3 (x 1) I: 24 x 27.3 (x 7) J: 11.9 x 27.3 (x 7) K: 12.1 x 24 (x 1) L: 11.9 x 24 (x 1)	Image: Left bit bit bit bit bit bit bit bit bit bi	

COVERAGE AREA-

12" OPERATING-

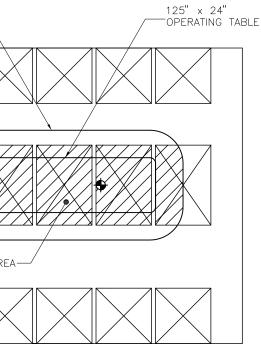
TABLE OFFSET





- B12 STANDARD WHITE FINISH

- PANEL CUTOUTS FOR BOOMS DONE IN FIELD BY OTHERS
- RECOMMENDED INLET SIZE AND LOCATION SHOWN
- THE CEILING IS FACTORY PREMANUFACTURED TO SIZES AND TOLERANCE +/- .032"
- SITE ADJUSTMENTS TO PERIMETER SOFFITS AND/OR DRYWALL MAY BE REQUIRED AND ARE THE RESPONSIBILITY OF THE INSTALLER

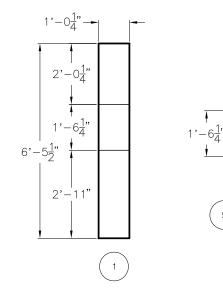


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#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING**

#### **USA SECTION BREAKDOWN - HYBRID OR/IMAGING SUITE**

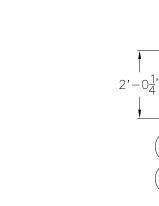
#### **HGWC SECTION BREAKDOWN - HYBRID OR/IMAGING SUITE**

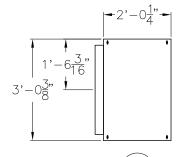


# 1'−0<u>1</u>"-- $2' - 3\frac{9}{16}$ $2' - 3\frac{9}{16}$ $2' - 0\frac{1}{4}''$ 10

14

 $4' - 3\frac{13}{16}$ 





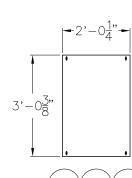
 $1' - 0\frac{1}{8}"$ 

 $2' - 0\frac{1}{4}"$ 

-2'-0<u>1</u>

U1

( U8 )



U2

U5

-2'-0<sup>⊥</sup>/<sub>4</sub>

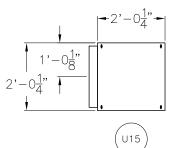
U3

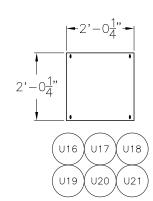
U6

U4

U7



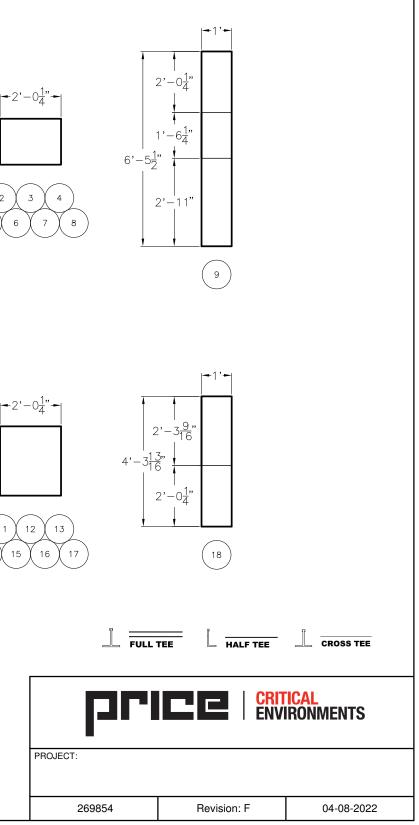




- THE ULTRASUITE ARRAY IS SUPPLIED IN MULTIPLE FACTORY ASSEMBLED SECTIONS NO LARGER THAN 10'X4'

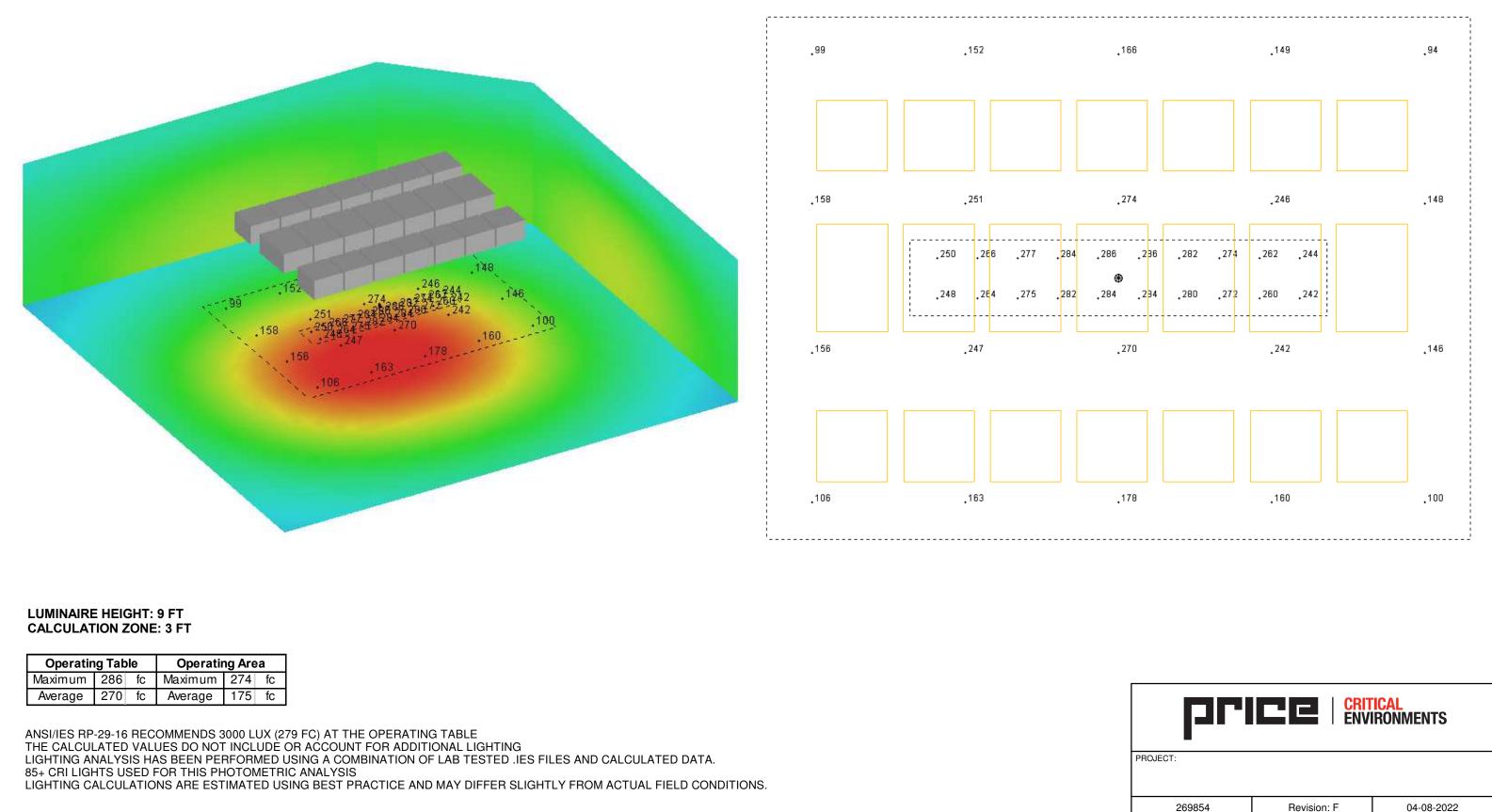
- ASSEMBLED SECTION CONNECTIONS DONE IN FIELD BY OTHERS WITH FACTORY PROVIDED HARDWARE - LED LIGHTING IS FACTORY INSTALLED AND WIRED FOR EFFORTLESS ONSITE INSTALLATION

- INSTALLATION AND MOUNTING OF THE ULTRASUITE ARRAY IS THE RESPONSIBILITY OF THE INSTALLER



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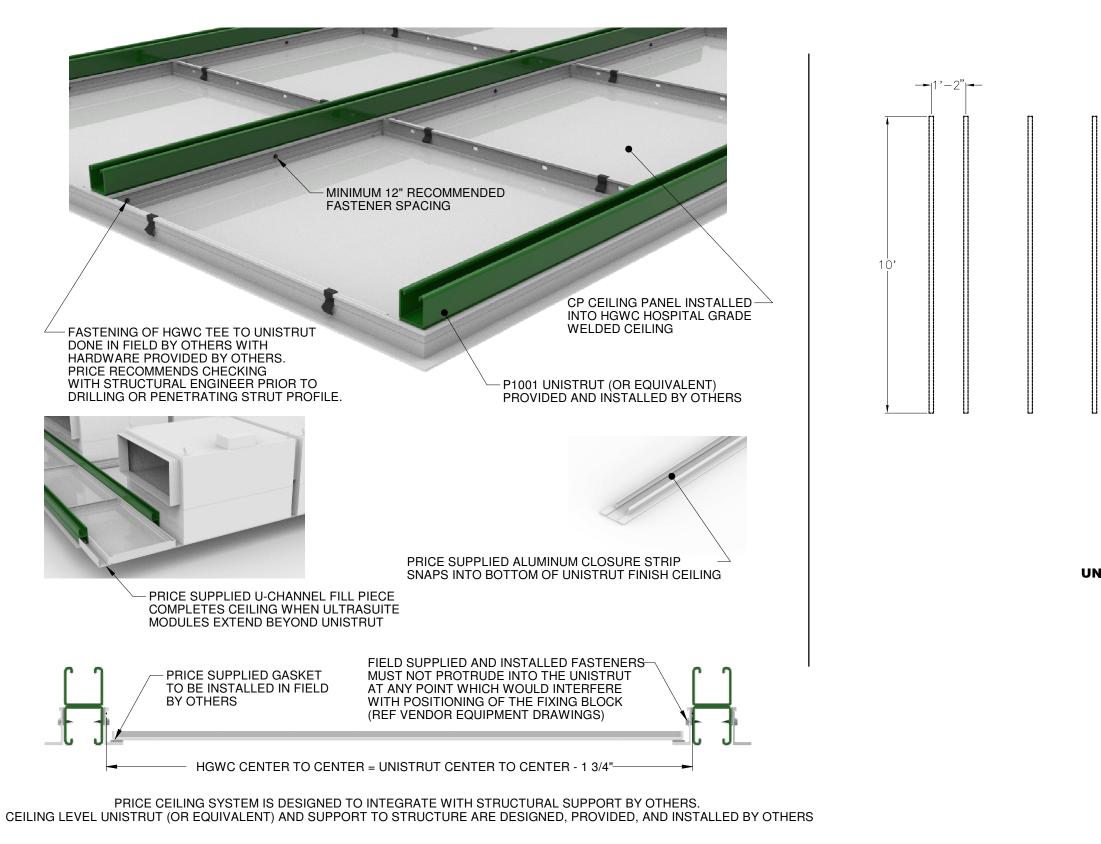
## **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING** PHOTOMETRIC ANALYSIS - HYBRID OR/IMAGING SUITE



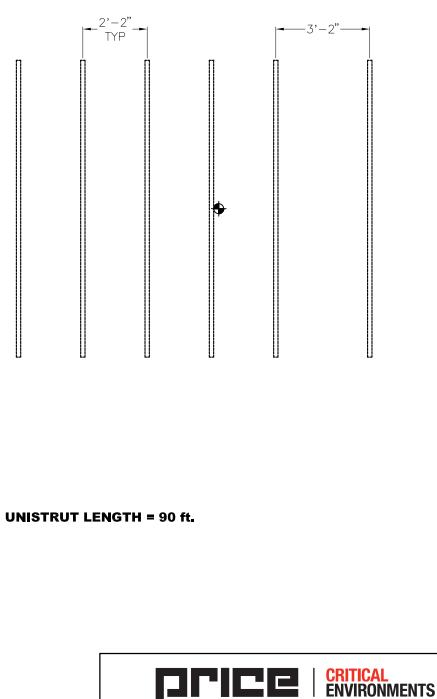
Operatin	ng Tab	le	Operatii	ng Are	a
Maximum	286	fc	Maximum	274	fc
Average	270	fc	Average	175	fc

#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING**



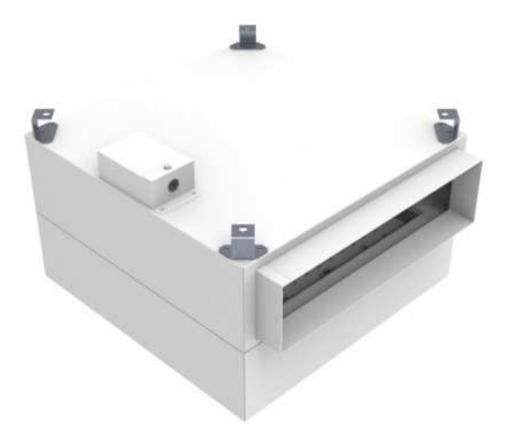


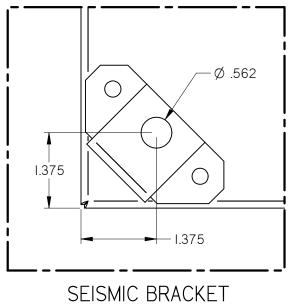
### **UNISTRUT LAYOUT - HYBRID OR/IMAGING SUITE**



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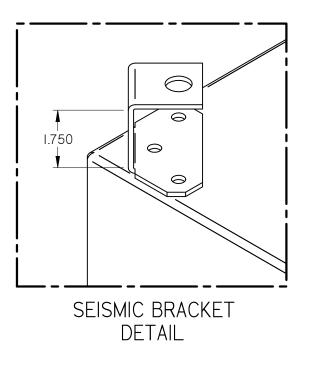
## OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING OSHPD SEISMIC CERTIFICATION PRE-APPROVAL (OSP-0627-10)





CORNER MOUNTING HOLE DETAIL

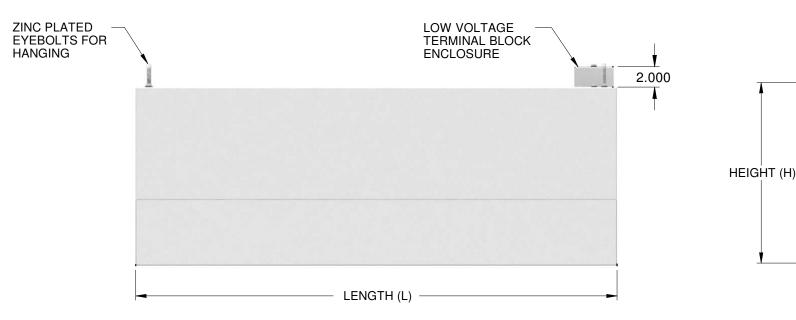
-OSHPD SPECIAL SEISMIC CERTIFICATION PREAPPROVAL AS PER OSP-0627-10 -ENGINEERED STRUCTURAL DRAWINGS (BY OTHERS) ARE REQUIRED IN ACCORDANCE WITH OSP-0627-10. -12 GA GALVANIZED STEEL HANGER BRACKETS -MASON SCB2/SCBH2 CABLE BRACES REQUIRED AS PER OSP-0627-10 REPORT -LATERAL BRACING REQUIRED AS PER OSP-0627-10 REPORT -MOUNTING HARDWARE & SUPPORTS PROVIDED BY OTHERS. -BOOM DIMENSIONS ARE SHOWN TO CENTER OF CEILING PANEL. -HANGING POINTS DETERMINED BY OTHERS. RECOMMENDED MAX SPACING BETWEEN HANGING POINTS IS 50". -INSTALLATION WORK MUST BE DONE BY QUALIFIED PERSON(S) IN ACCORDANCE WITH ALL APPLICABLE CODES & STANDARDS.



CRITICAL ENVIRONMENTS				
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#### OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING





#### STANDARD CONSTRUCTION

- 14 GA (.064 THICK) ALUMINUM PLENUM
- EXTRUDED ALUMINUM OUTER FRAME AND DIFFUSER FACE FRAME
- TIG WELDED PLENUM, DIFFUSER FACE AND OUTER FRAME
- ZINC PLATED EYE BOLTS FOR HANGING
- ROOM SIDE ADJUSTABLE APERTURE PLATE DAMPER
- 2 STAINLESS STEEL RETAINER CABLES PER DIFFUSER FACE
- DIFFUSER FACE SECURED WITH COUNTERSUNK FLAT HEAD MACHINE SCREWS

#### 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/ultrasuite

#### FINISH

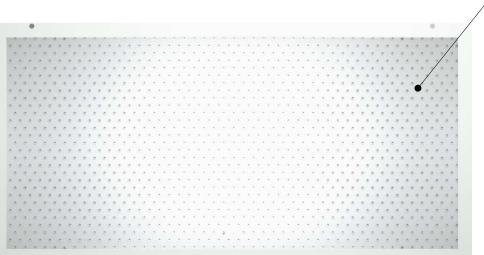
- B12 STANDARD WHITE

#### LED COLOR TEMPERATURE

- 4300K (4300 KELVIN)
- 5000K (5000 KELVIN)

#### LISTINGS

- UL 1598 AIR-HANDLING LUMINAIRES
- **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
- UL8750 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

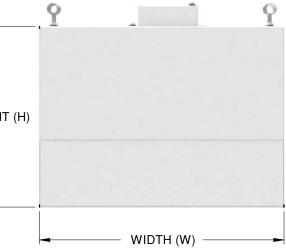




TRANSLUCENT

DIFFUSER FACE

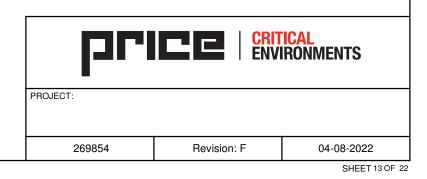
13% FREE AREA



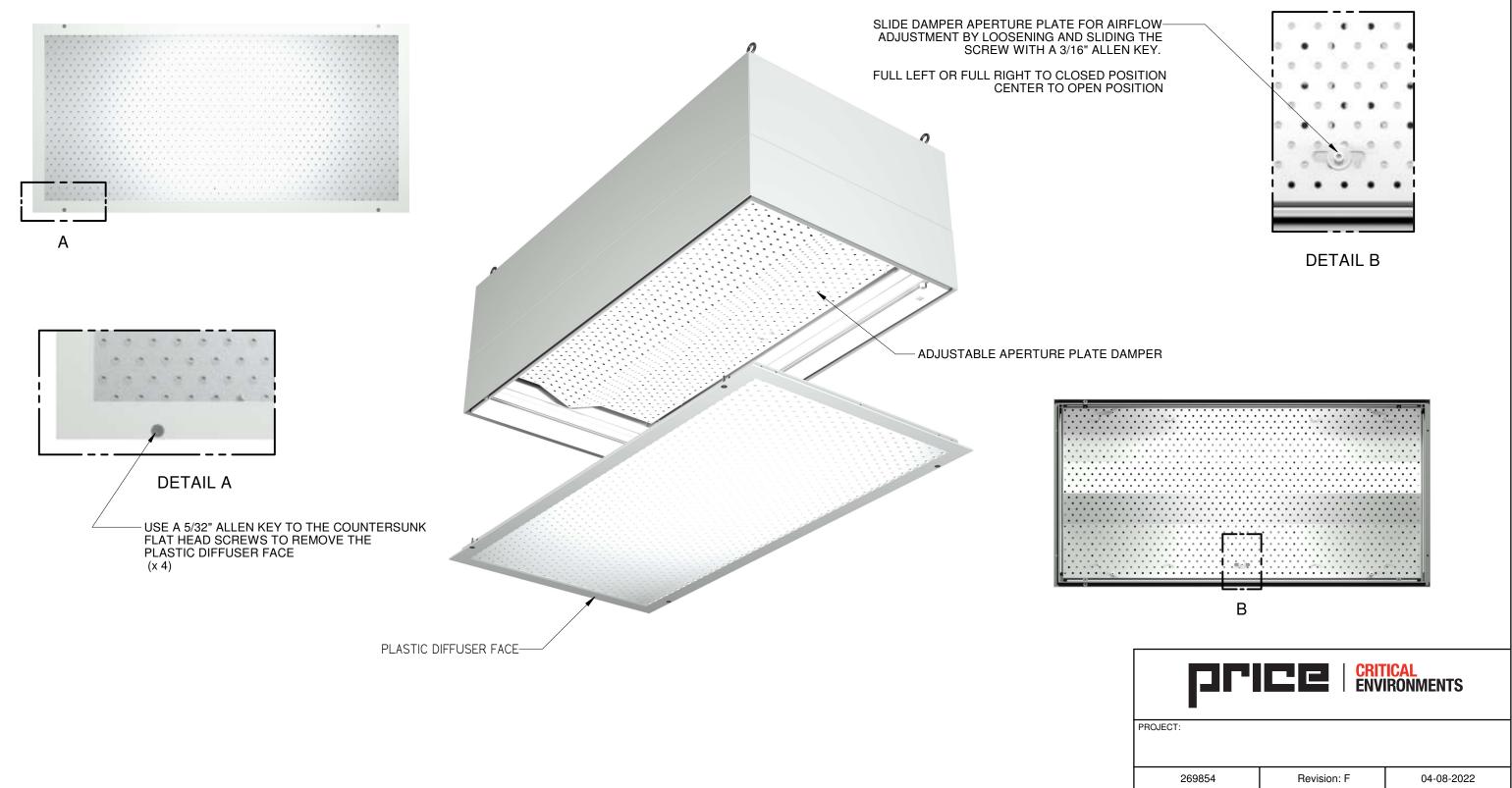
#### POLYMER PERFORATED

OMINAL	WIDTH	LENGTH	HEIGHT (H)	
JNIT SIZE	(W)	(L)	MIN	MAX
2x2	24.250	24.250	12.000	21.000
2x3	24.250	36.375	12.000	21.000
2x4	24.250	48.500	12.000	21.000

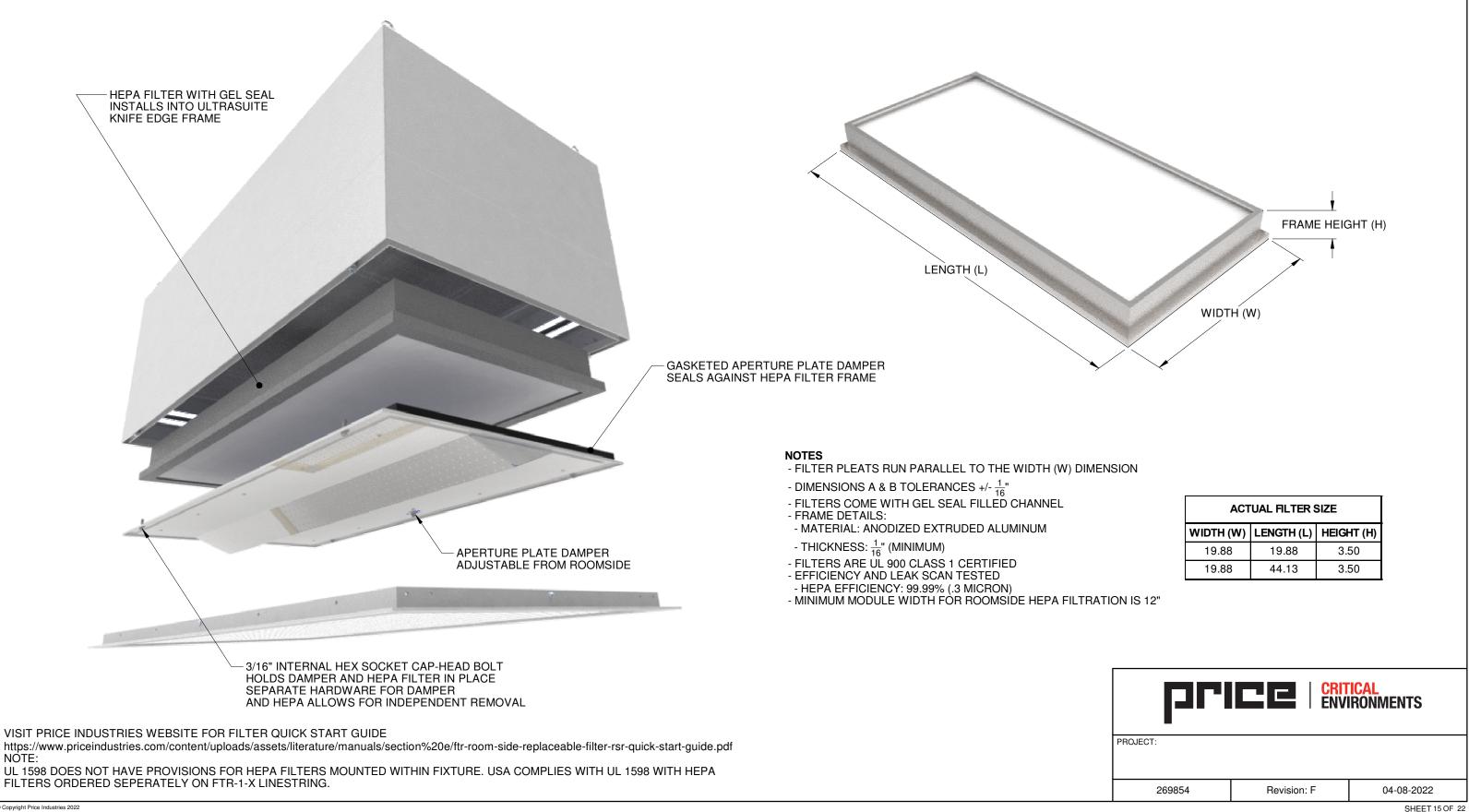
- STANDARD HEIGHT (H) = 16" - MAX INLET HEIGHT = (H) - 8"



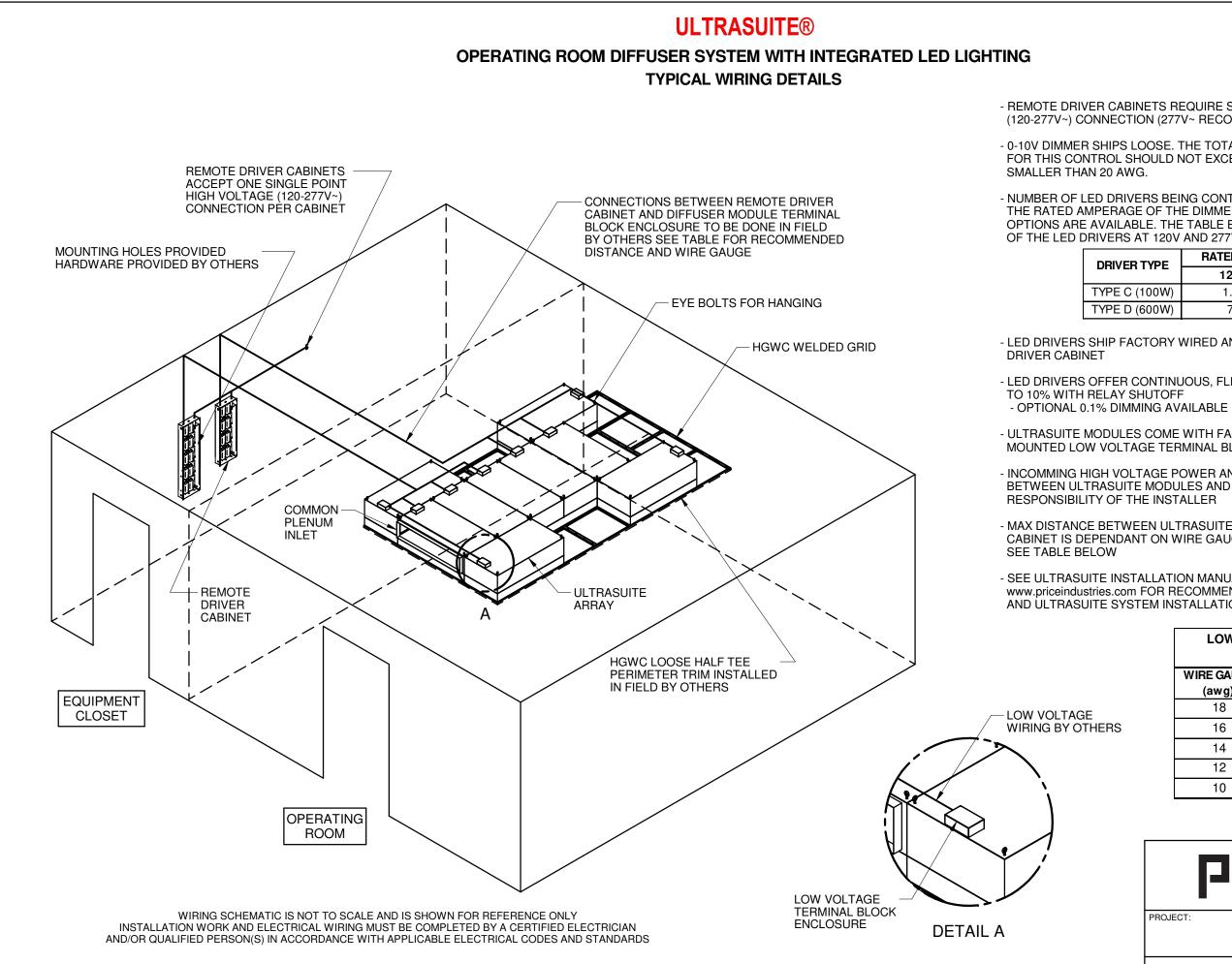
### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING**



#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING OPTIONAL ROOMSIDE HEPA FILTRATION**



ACTUAL FILTER SIZE			
WIDTH (W) LENGTH (L) HEIGHT (H)			
19.88	19.88	3.50	
19.88	44.13	3.50	



#### - REMOTE DRIVER CABINETS REQUIRE SINGLE POINT HIGH VOLTAGE (120-277V~) CONNECTION (277V~ RECOMMENDED)

- 0-10V DIMMER SHIPS LOOSE. THE TOTAL 0-10V CONTROL SIGNAL WIRING FOR THIS CONTROL SHOULD NOT EXCEED 500 ft. DO NOT USE WIRE

- NUMBER OF LED DRIVERS BEING CONTROLLED BY A DIMMER DEPENDS ON THE RATED AMPERAGE OF THE DIMMER BEING USED. 8A AND 16A DIMMER OPTIONS ARE AVAILABLE. THE TABLE BELOW SHOWS THE RATED AMPERAGE OF THE LED DRIVERS AT 120V AND 277V.

IVER TYPE	RATED AMPERAGE PER DRIVER		
	120V	277V	
PE C (100W)	1.2A	0.5A	
PE D (600W)	7A	2.9A	

- LED DRIVERS SHIP FACTORY WIRED AND INSTALLED IN REMOTE

- LED DRIVERS OFFER CONTINUOUS, FLICKER-FREE DIMMING FROM 100%

- ULTRASUITE MODULES COME WITH FACTORY WIRED AND INSTALLED TOP MOUNTED LOW VOLTAGE TERMINAL BLOCK ENCLOSURE

- INCOMMING HIGH VOLTAGE POWER AND LOW VOLTAGE CONNECTION BETWEEN ULTRASUITE MODULES AND REMOTE DRIVER CABINET ARE THE

- MAX DISTANCE BETWEEN ULTRASUITE MODULE AND REMOTE DRIVER CABINET IS DEPENDANT ON WIRE GAUGE TO MINIMIZE VOLTAGE DROP,

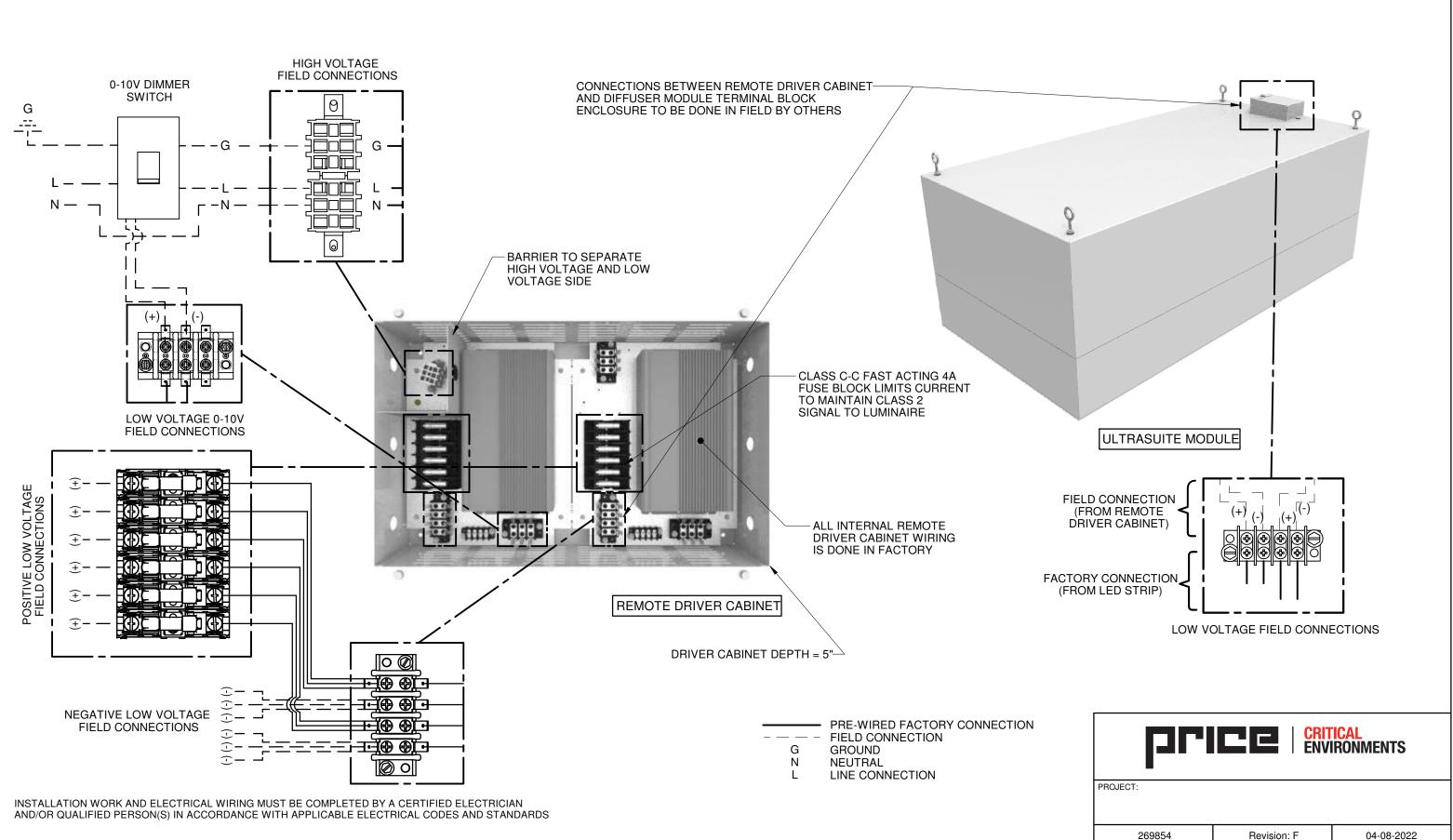
- SEE ULTRASUITE INSTALLATION MANUAL AVAILABLE AT www.priceindustries.com FOR RECOMMENDED REMOTE DRIVER CABINET AND ULTRASUITE SYSTEM INSTALLATION

LOW VOLTAGE WIRE LENGTHS			
WIRE GAUGE	LENGTH OF WIRE		
(awg)	(feet)		
18	15		
16	25		
14	45		
12	70		
10	115		

CRITICAL ENVIRONMENTS				
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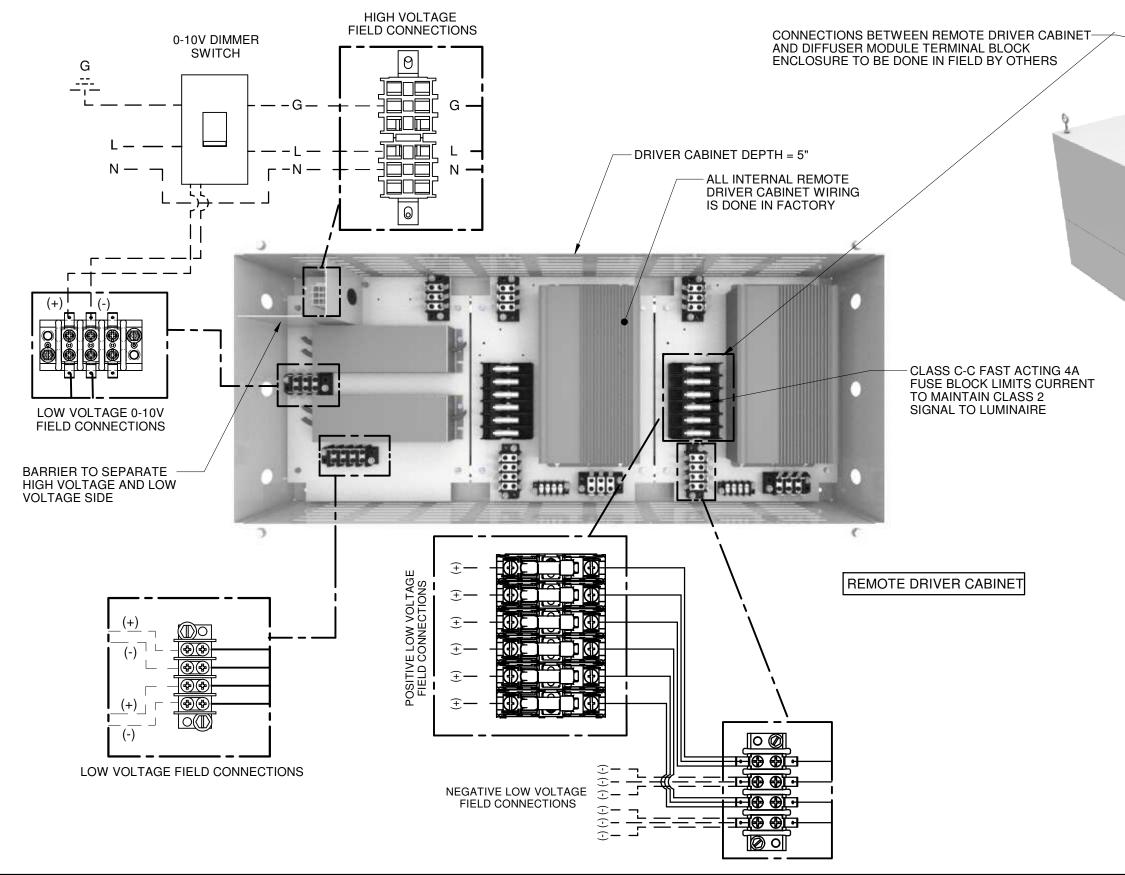
#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING**

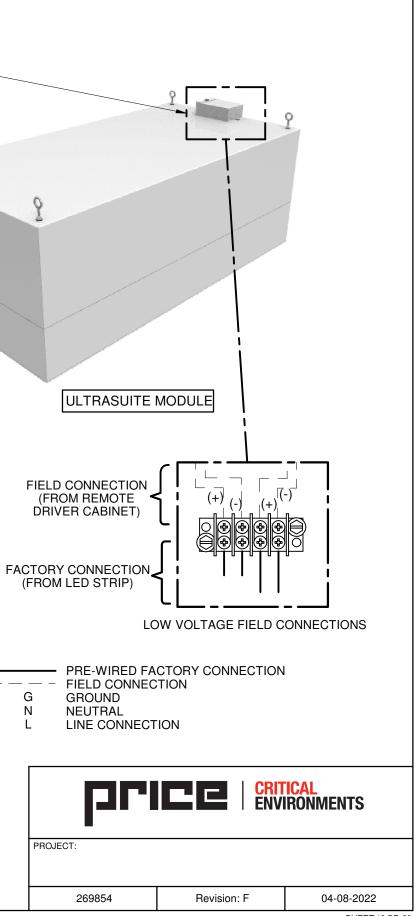
**TYPICAL WIRING DETAILS** 



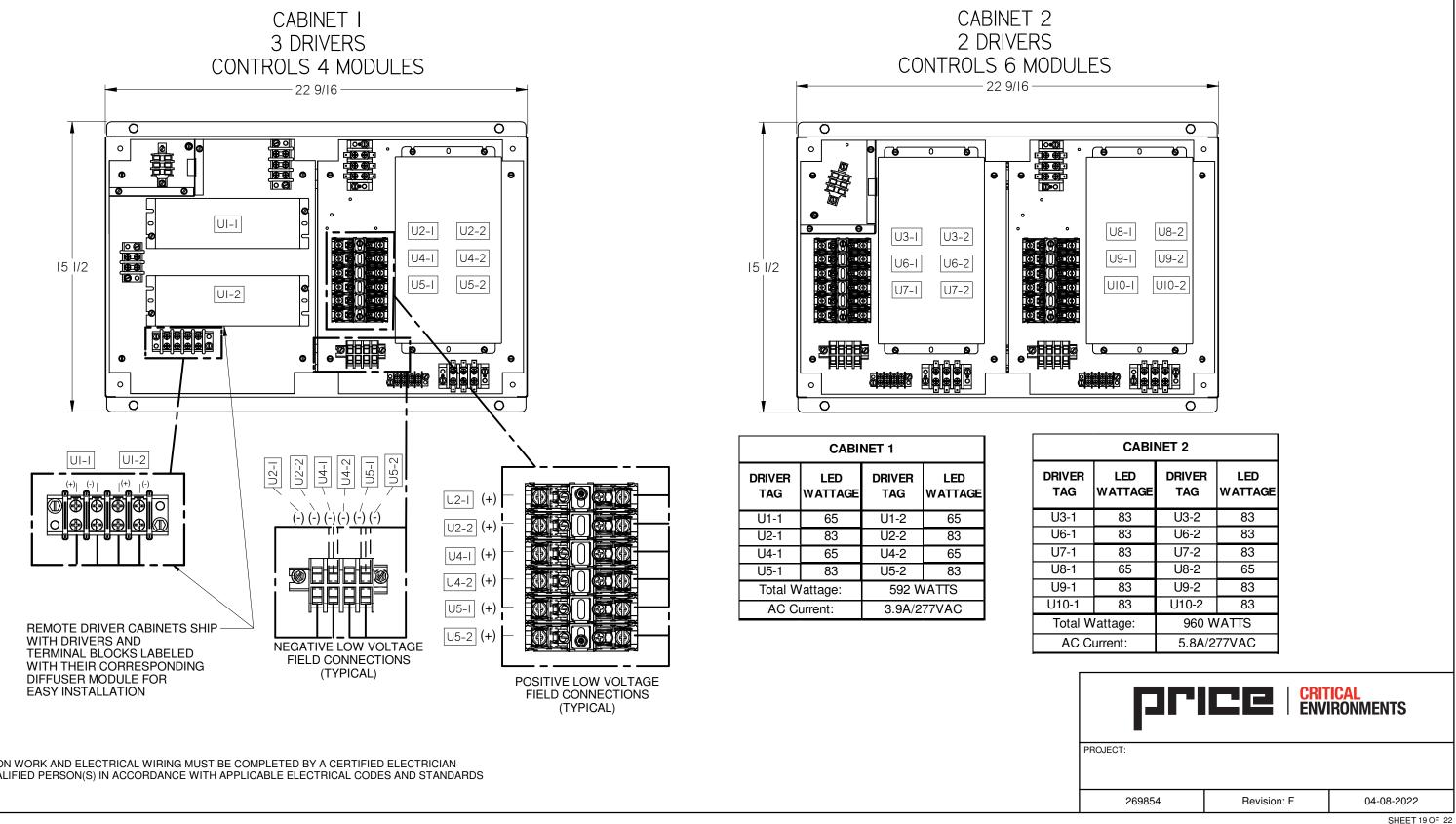
#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING**

#### **TYPICAL WIRING DETAILS**





#### **OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING REMOTE DRIVER CABINETS**

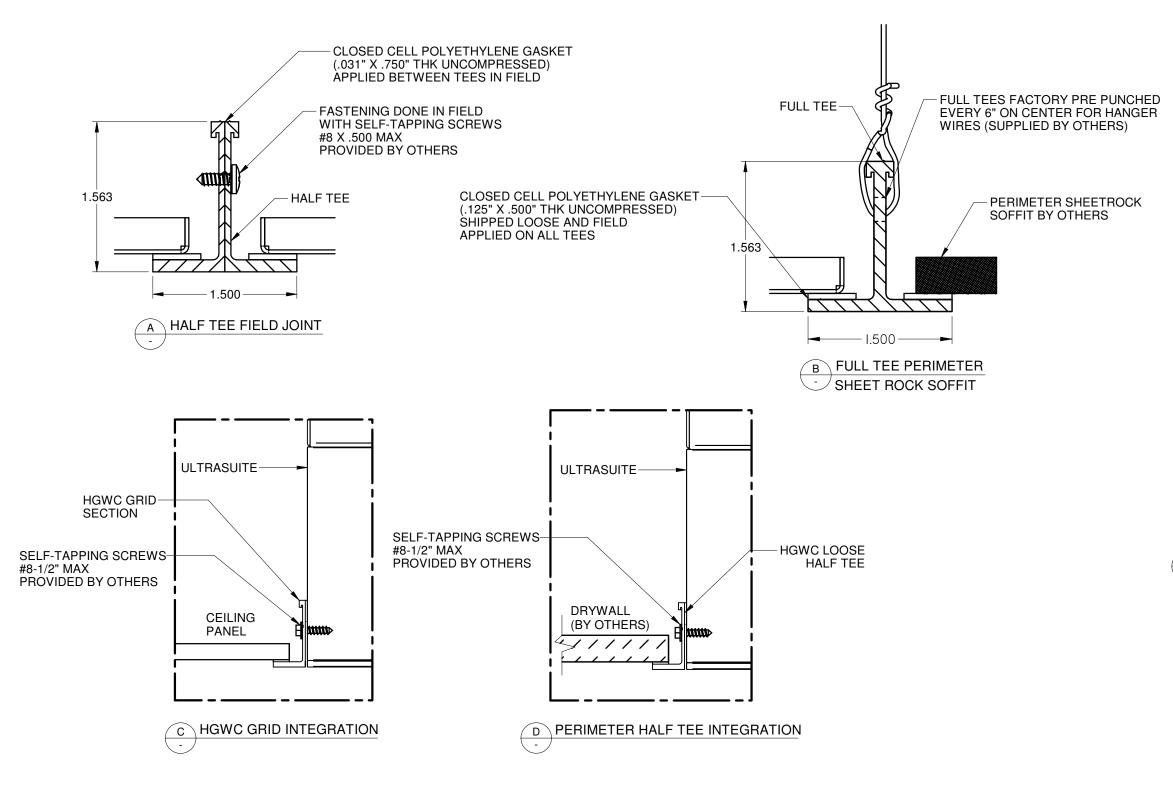


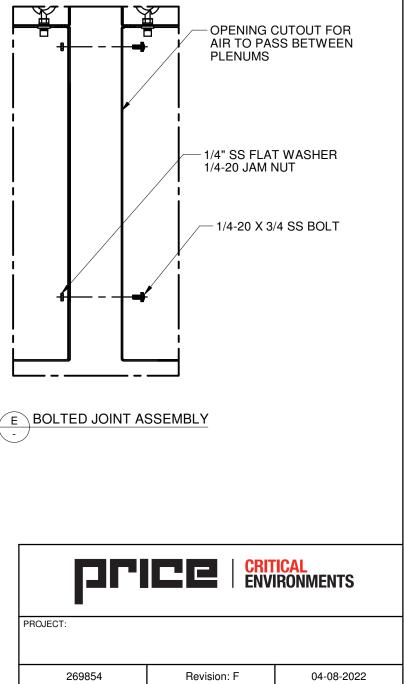
INSTALLATION WORK AND ELECTRICAL WIRING MUST BE COMPLETED BY A CERTIFIED ELECTRICIAN AND/OR QUALIFIED PERSON(S) IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES AND STANDARDS

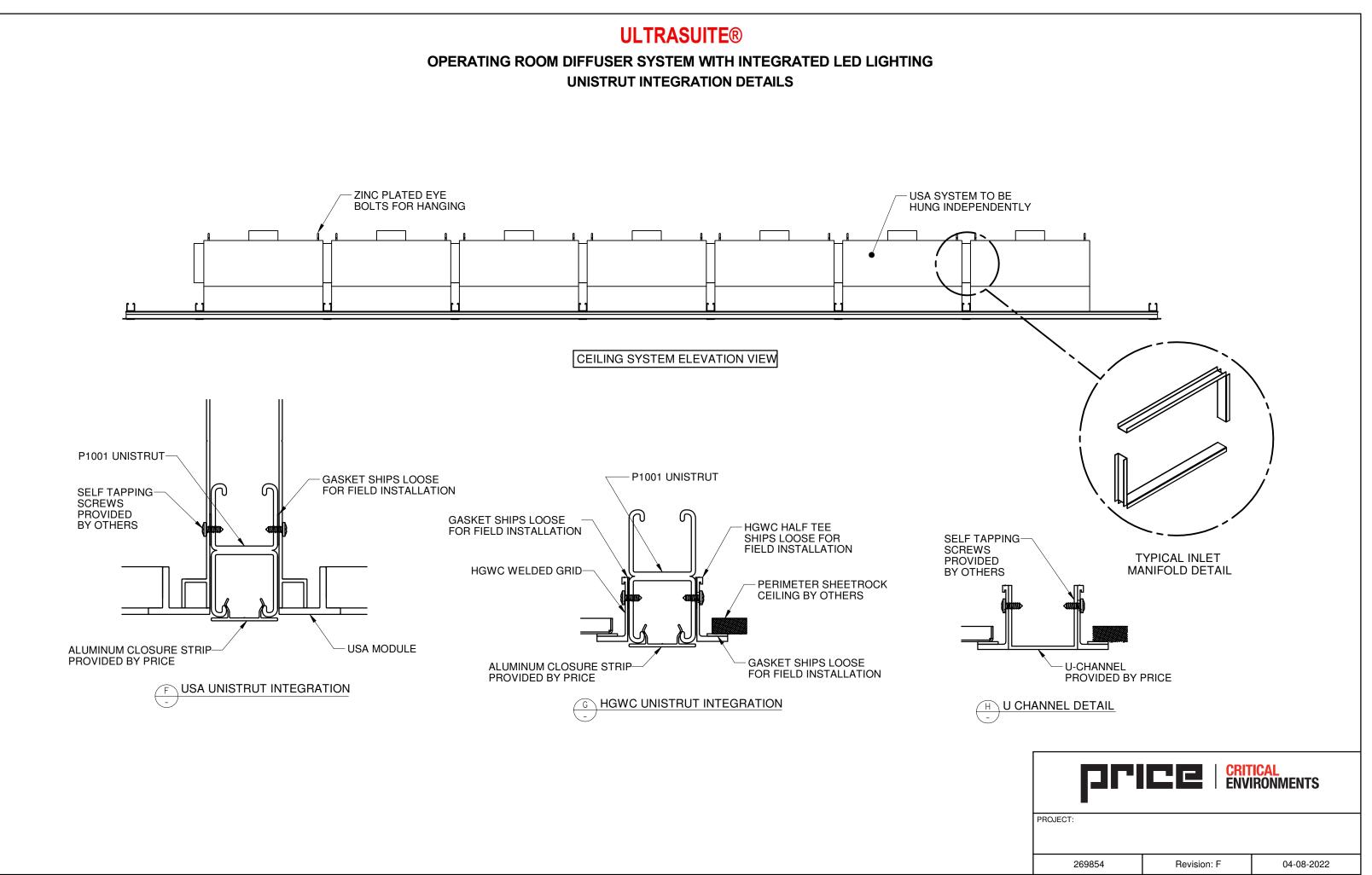
CABINET 2			
DRIVER TAG	LED WATTAGE	DRIVER TAG	LED WATTAGE
U3-1	83	U3-2	83
U6-1	83	U6-2	83
U7-1	83	U7-2	83
U8-1	65	U8-2	65
U9-1	83	U9-2	83
U10-1	83	U10-2	83
Total Wattage:		960 W	/ATTS
AC Current:		5.8A/277VAC	

# OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING

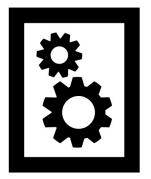
HGWC INTEGRATION DETAILS







**OPERATING ROOM DIFFUSER SYSTEM WITH INTEGRATED LED LIGHTING** SUPPORTING CONTENT



# MANUALS

FTR ROOMSIDE REPLACEABLE FILTER QUICK START GUIDE UCA ULTRA COMPONENTS AND ACCESSORIES MANUAL URDC ULTRA DRIVER CABINET MANUAL **USA ULTRASUITE MANUAL** 

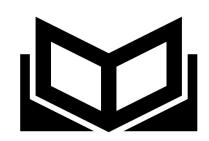


# **SUBMITTALS**

UCA ULTRA COMPONENTS AND ACCESSORIES SUBMITTAL

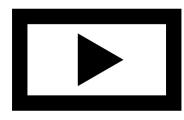


CATALOG **USA ULTRASUITE CATALOG** 



# LITERATURE

USA ULTRASUITE BROCHURE USA ULTRASUITE CASE STUDY LIBRARY



# **VIDEOS**

USA ULTRASUITE INSTALLATION TIME LAPSE VIDEO USA ULTRASUITE LAUNCH VIDEO **USA SEISMIC TESTING VIDEO USA SMOKE TEST VIDEO** HEPA FILTER REPLACEMENT VIDEO









FOR MORE INFORMATION ON PRICE ULTRASUITE, VISIT PRICEINDUSTRIES.COM

<b>CRITICAL</b> ENVIRONMENTS				
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