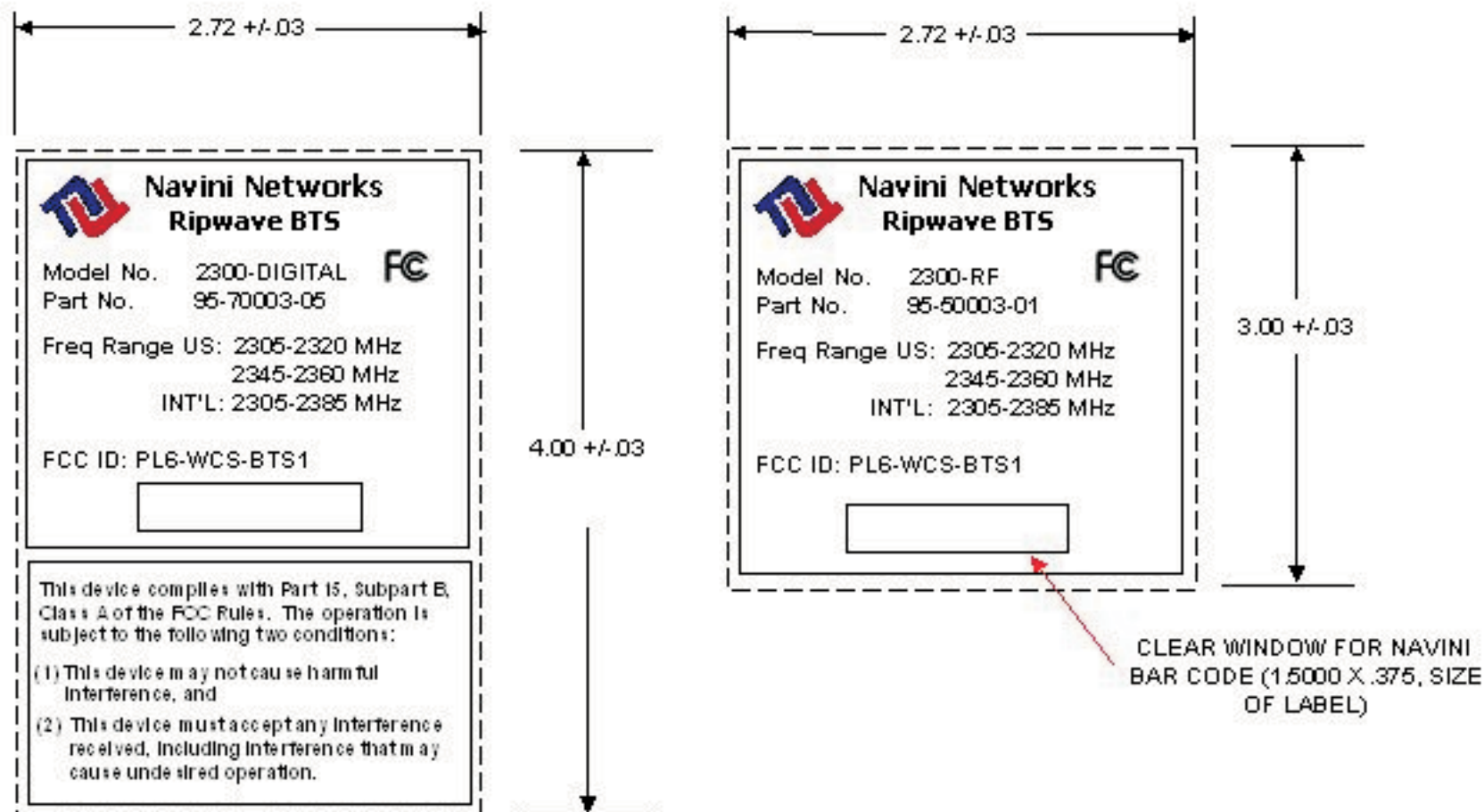
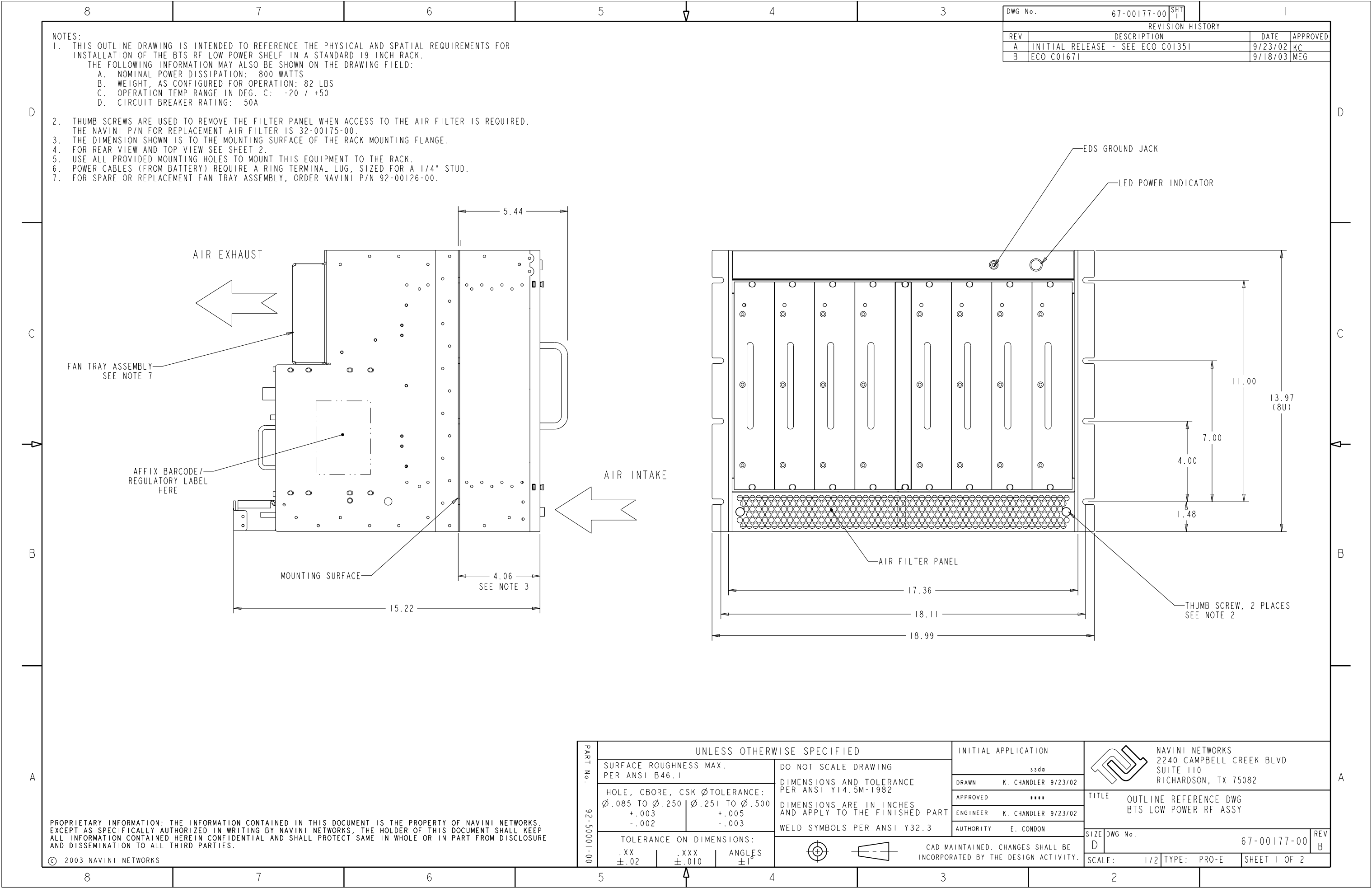


2.3 GHz Licensed Band BTS Label








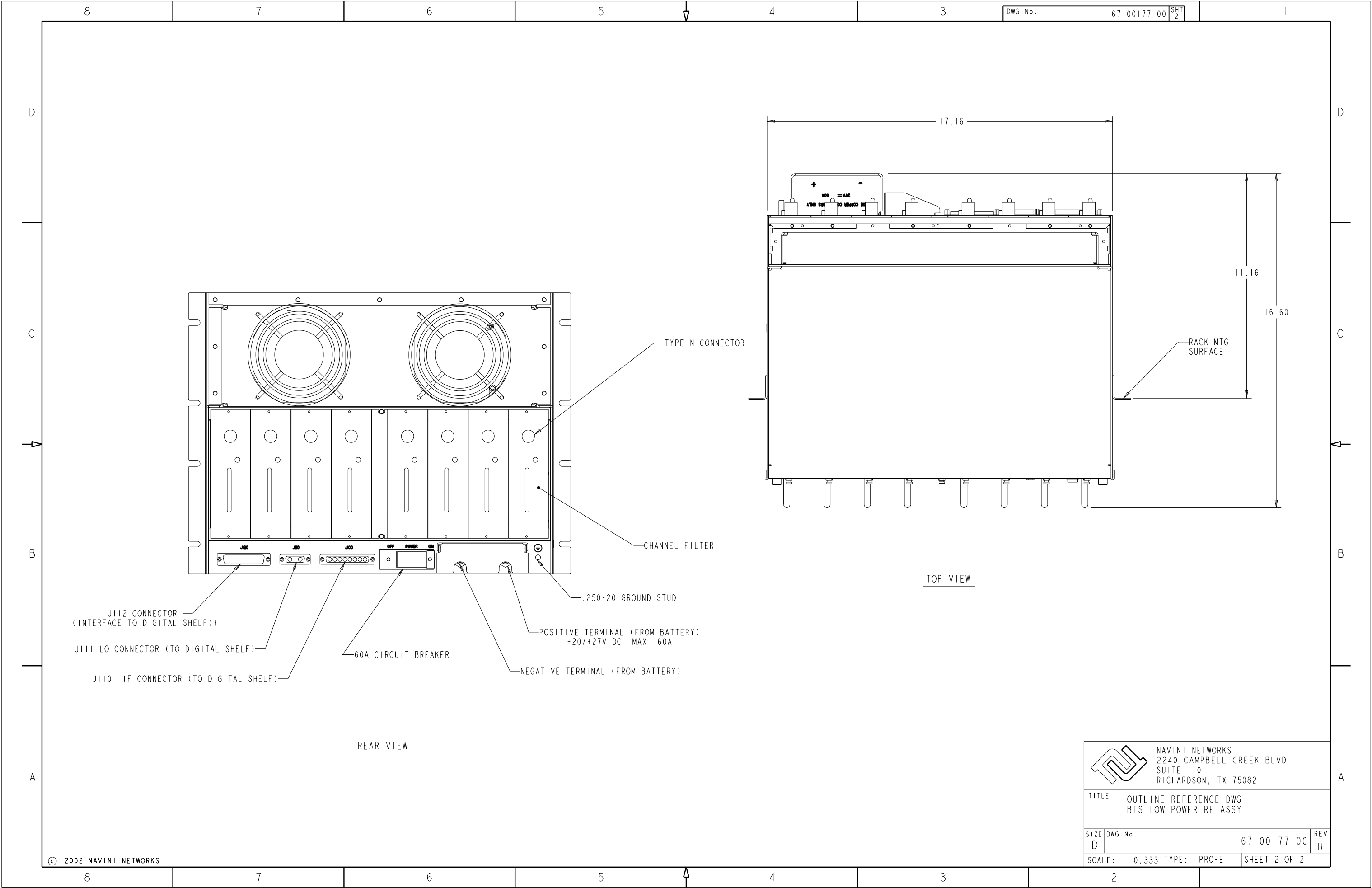
- NOTES:
- THIS OUTLINE DRAWING IS INTENDED TO REFERENCE THE PHYSICAL AND SPATIAL REQUIREMENTS FOR INSTALLATION OF THE BTS RF LOW POWER SHELF IN A STANDARD 19 INCH RACK.
THE FOLLOWING INFORMATION MAY ALSO BE SHOWN ON THE DRAWING FIELD:
A. NOMINAL POWER DISSIPATION: 800 WATTS
B. WEIGHT, AS CONFIGURED FOR OPERATION: 82 LBS
C. OPERATION TEMP RANGE IN DEG. C: -20 / +50
D. CIRCUIT BREAKER RATING: 50A
 - THUMB SCREWS ARE USED TO REMOVE THE FILTER PANEL WHEN ACCESS TO THE AIR FILTER IS REQUIRED.
THE NAVINI P/N FOR REPLACEMENT AIR FILTER IS 32-00175-00.
 - THE DIMENSION SHOWN IS TO THE MOUNTING SURFACE OF THE RACK MOUNTING FLANGE.
 - FOR REAR VIEW AND TOP VIEW SEE SHEET 2.
 - USE ALL PROVIDED MOUNTING HOLES TO MOUNT THIS EQUIPMENT TO THE RACK.
 - POWER CABLES (FROM BATTERY) REQUIRE A RING TERMINAL LUG, SIZED FOR A 1/4" STUD.
 - FOR SPARE OR REPLACEMENT FAN TRAY ASSEMBLY, ORDER NAVINI P/N 92-00126-00.


DWG No.		67-00177-00	SHT 1	I	
REVISION HISTORY					
REV	DESCRIPTION			DATE	APPROVED
A	INITIAL RELEASE - SEE ECO C01351			9/23/02	KC
B	ECO C01671			9/18/03	MEG

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PART No. 92-50001-00	UNLESS OTHERWISE SPECIFIED				INITIAL APPLICATION		 NAVINI NETWORKS 2240 CAMPBELL CREEK BLVD SUITE 110 RICHARDSON, TX 75082		
	SURFACE ROUGHNESS MAX. PER ANSI B46.1		DO NOT SCALE DRAWING		ssda				
	HOLE, CBORE, CSK ØTOLERANCE: Ø.085 TO Ø.250 Ø.251 TO Ø.500 +.003 +.005 -.002 -.003		DIMENSIONS AND TOLERANCE PER ANSI Y14.5M-1982		DRAWN K. CHANDLER 9/23/02				
			DIMENSIONS ARE IN INCHES AND APPLY TO THE FINISHED PART		APPROVED ****				
					ENGINEER K. CHANDLER 9/23/02				
	TOLERANCE ON DIMENSIONS: .XX ±.02 .XXX ±.010 ANGLES ±1°		WELD SYMBOLS PER ANSI Y32.3		AUTHORITY E. CONDON				
			  CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		TITLE OUTLINE REFERENCE DWG BTS LOW POWER RF ASSY				
					SIZE DWG No. 67-00177-00 REV B				
					SCALE: 1/2 TYPE: PRO-E SHEET 1 OF 2				



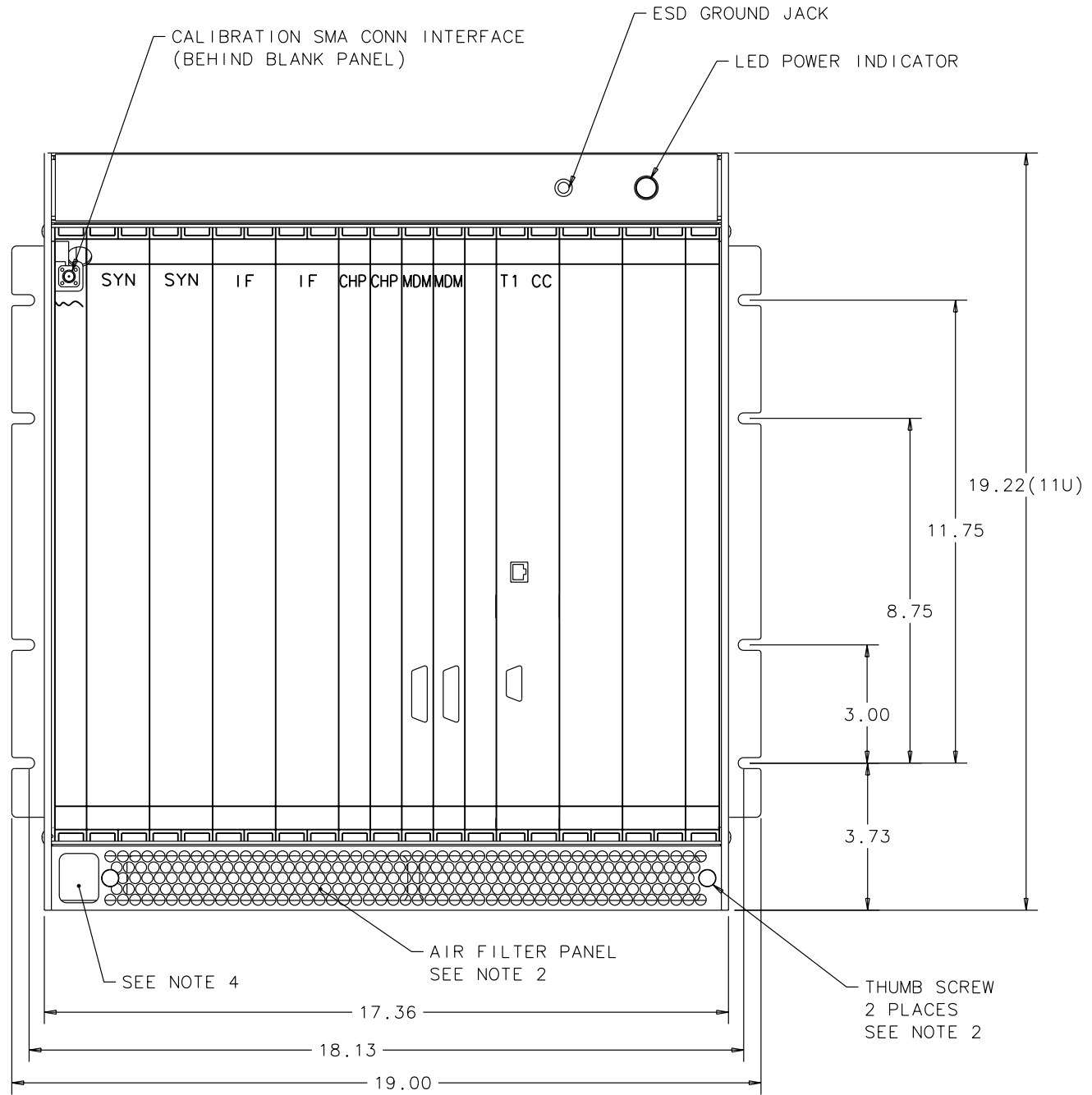
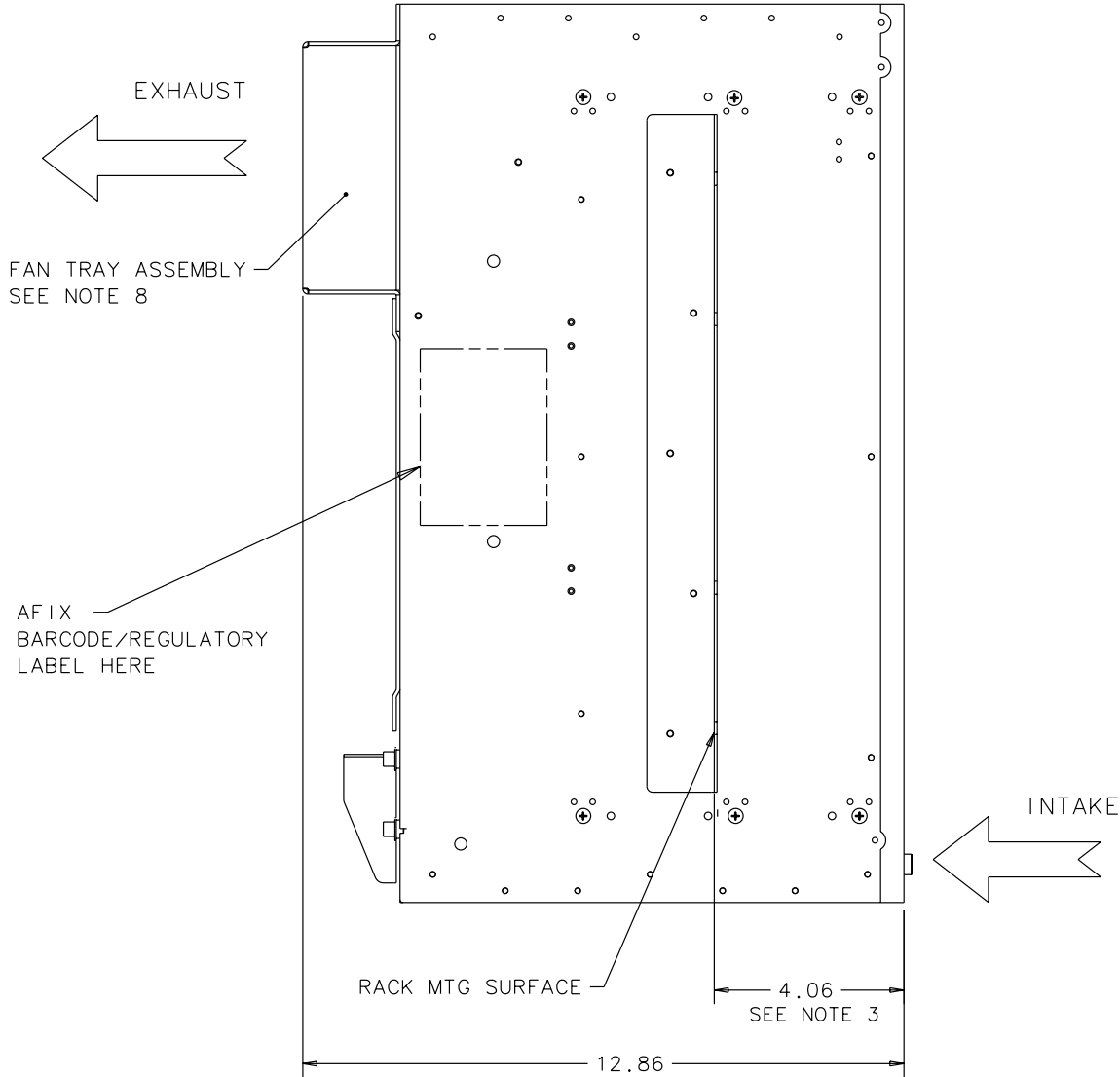


NAVINI NETWORKS
2240 CAMPBELL CREEK BLVD
SUITE 110
RICHARDSON, TX 75082

TITLE		OUTLINE REFERENCE DWG BTS LOW POWER RF ASSY	
SIZE	DWG No.	67-00177-00	REV
D			B
SCALE:	0.333	TYPE:	PRO-E
		SHEET 2 OF 2	

NOTE:




- THIS OUTLINE DRAWING IS INTENDED TO REFERENCE THE PHYSICAL AND SPATIAL REQUIREMENTS FOR INSTALLATION OF THE BTS DIGITAL SHELF IN A STANDARD 19 INCH RACK.
THE FOLLOWING INFORMATION MAY ALSO BE SHOWN ON THE DRAWING FIELD:
 - NOMINAL POWER DISSIPATION: 300 WATTS
 - WEIGHT, AS CONFIGURED FOR OPERATION: 33 LBS.
 - OPERATING TEMP RANGE: 0°C TO +50°C
 - CIRCUIT BREAKER RATING: 20A
- THUMBS SCREWS ARE USED TO REMOVE THE FILTER PANEL WHEN ACCESS TO THE AIR FILTER IS REQUIRED.
NAVINI P/N FOR REPLACEMENT AIR FILTER IS 32-00175-01.
- THE DIMENSION SHOWN IS TO THE MOUNTING SURFACE OF THE RACK MOUNTING FLANGE.
- FOR FRONT-TO-REAR CABLE/WIRE ACCESS THROUGH THE BTS DIGITAL SHELF.
- SEE SHEET 2 FOR REAR VIEW AND TOP VIEW.
- USE ALL PROVIDED MOUNTING HOLES TO MOUNT THIS CHASSIS.
- POWER (FROM BATTERY) CABLES REQUIRE A RING TERMINAL LUG, SIZED FOR A 1/4" STUD.
- FOR REPLACEMENT OR SPARE FAN TRAY ASSEMBLY: NAVINI P/N 92-00125-00

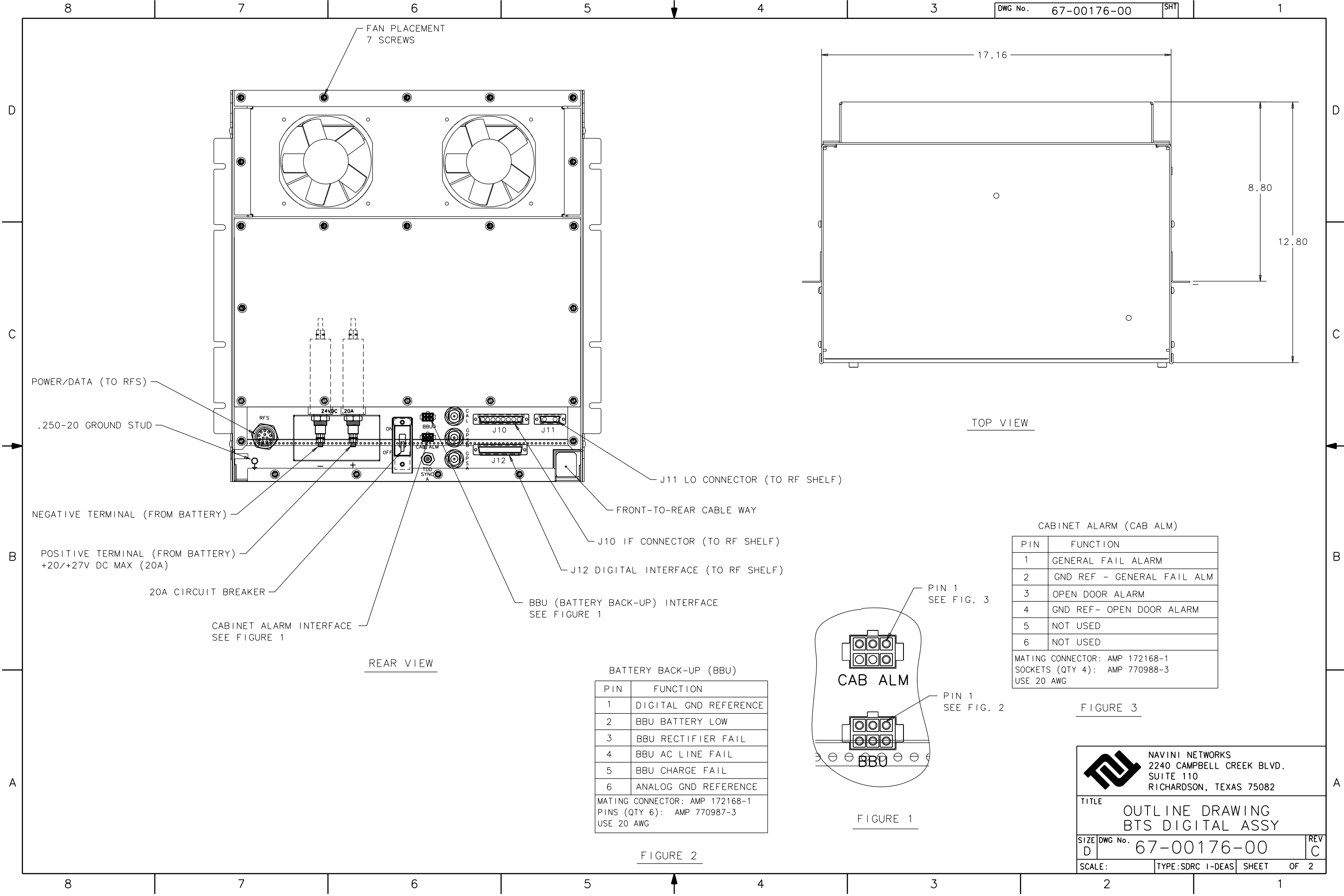


DWG No. 67-00176-00		SHT 1	1
REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE - SEE ECO No.C01351	09/23/02	KC
B	ECO C01627: 3.73 DIMENSION WAS 3.44	08/04/03	KC
C	ADD REGULATORY LABEL - SEE ECO C01671	09/18/03	EBC

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PART No. 95-70001-xx	UNLESS OTHERWISE SPECIFIED			INITIAL APPLICATION BTS		 NAVINI NETWORKS 2240 CAMPBELL CREEK BLVD. SUITE 110 RICHARDSON, TEXAS 75082	
	SURFACE ROUGHNESS MAX. PER ANSI B46.1		DO NOT SCALE DRAWING DIMENSIONS AND TOLERANCE PER ANSI Y14.5M-1982		DRAWN KC 09/23/02		
	HOLE, CBORE, CSK ØTOLERANCE: Ø.085 TO Ø.250 Ø.251 TO Ø.500 +.003 +.005 -.002 -.003		DIMENSIONS ARE IN INCHES AND APPLY TO THE FINISHED PART WELD SYMBOLS PER ANSI Y32.3		APPROVED		
	TOLERANCE ON DIMENSIONS: .XX .XXX ANGLES ± .015 ± .010 ±1°				ENGINEER KC 09/23/02		
					AUTHORITY EBC 09/00/02		
			 		CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		
TITLE OUTLINE DRAWING BTS DIGITAL ASSY						SIZE DWG No. 67-00176-00	REV C
SCALE: 1/2						TYPE:SDRC I-DEAS	SHEET 1 OF 2



BATTERY BACK-UP (BBU)	
PIN	FUNCTION
1	DIGITAL GND REFERENCE
2	BBU BATTERY LOW
3	BBU RECTIFIER FAIL
4	BBU AC LINE FAIL
5	BBU CHARGE FAIL
6	ANALOG GND REFERENCE
MATING CONNECTOR: AMP 172168-1 PINS (QTY 6): AMP 770987-3 USE 20 AWG	

FIGURE 2

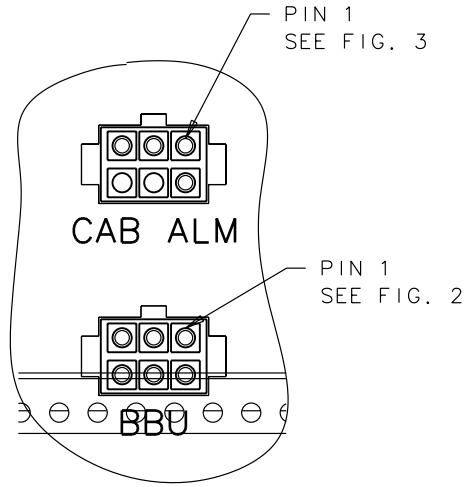



FIGURE 1

CABINET ALARM (CAB ALM)	
PIN	FUNCTION
1	GENERAL FAIL ALARM
2	GND REF - GENERAL FAIL ALM
3	OPEN DOOR ALARM
4	GND REF- OPEN DOOR ALARM
5	NOT USED
6	NOT USED
MATING CONNECTOR: AMP 172168-1 SOCKETS (QTY 4): AMP 770988-3 USE 20 AWG	

FIGURE 3



NAVINI NETWORKS
2240 CAMPBELL CREEK BLVD.
SUITE 110
RICHARDSON, TEXAS 75082

TITLE

OUTLINE DRAWING
BTS DIGITAL ASSY

SIZE
D

DWG No.
67-00176-00

REV
C

SCALE:

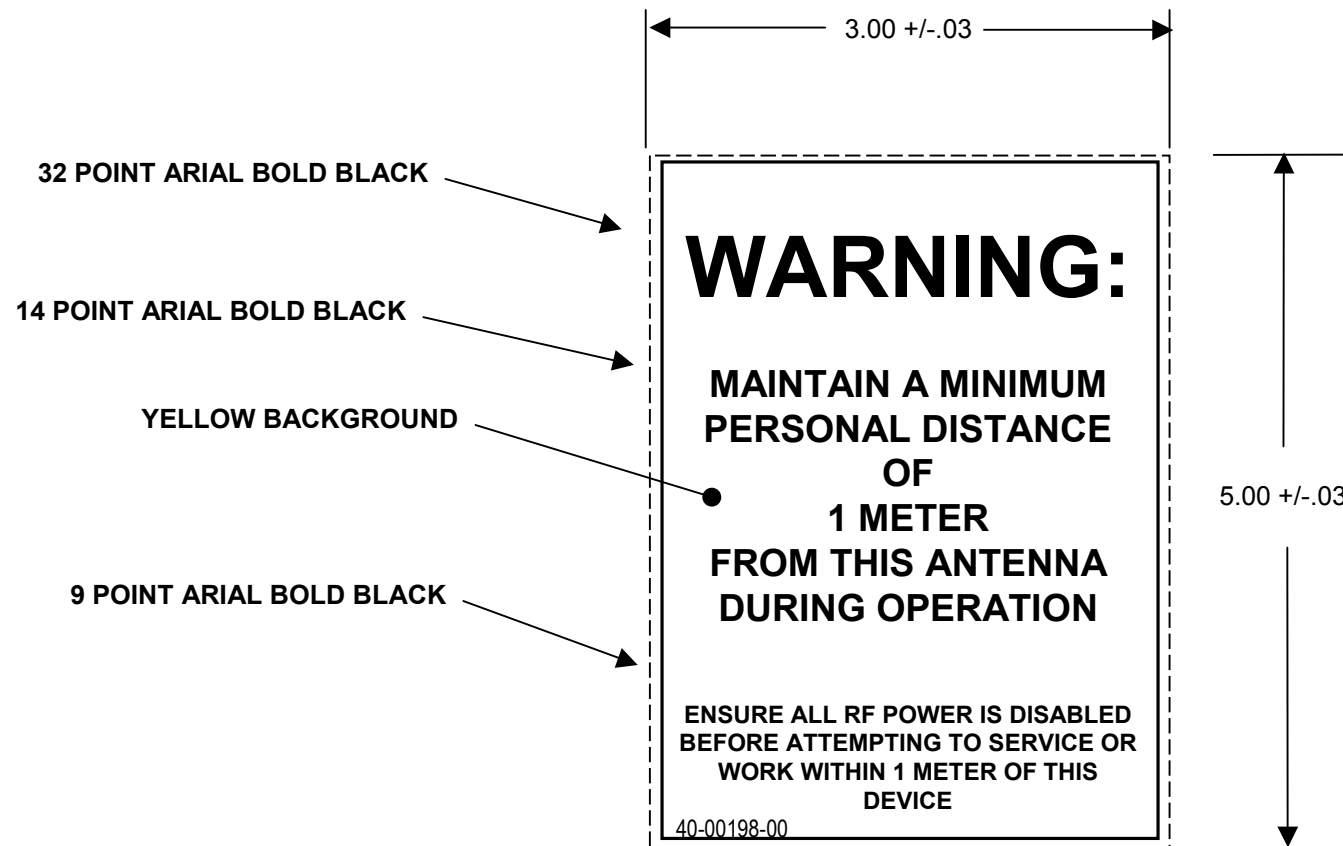
TYPE:SDRC I-DEAS

SHEET
OF 2

Navini RFS Warning Label

Navini Part Number: 40-00198-00

Material: Polycarbonate, .010 thick with TEDLAR lamination, adhesive backed with 3M 467 (or equivalent) adhesive.



NOTE:

WEIGHT
ANTENNA: 69.0 LBS
FIXED MOUNT: 3.2 LBS.
ADJ MOUNT: 8.6 LBS.

100 MPH WIND LOAD: BASIC LATERAL WIND LOAD IS 220 LBS.
DOES NOT INCLUDE ICE.

Ø4 1/2 OD PIPE
SCH 40 PIPE
W(.237) WALL

NOTE:
MOUNTS MUST BE SET UP ON
57.5 INCH CENTERS FOR
ADJUSTABLE MOUNT HINGE
AND ANTENNA TO PIVOT
PROPERLY. MOUNTS TO BE
SET WITH ANTENNA IN
VERTICAL ZERO DEGREE
POSITION AS SHOWN.

GALVANIZED
ANTENNA
MOUNTING
PIPE

NAVINI "ID"
LABEL

ANTENNA ELEMENT
COAX N CONNECTORS


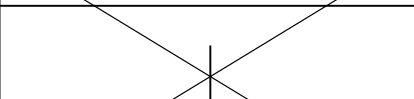

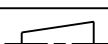
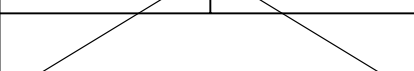

ANTENNA POWER AND
DATA 12 PIN CONNECTOR

ANTENNA CALIBRATION
COAX N CONNECTOR

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DWG No. 68-00410-00		SHT 1	1
REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE - SEE ECO No.C01261	09/19/02	BCO
B	ECO No.C01437	02/05/03	MEG
C	LABEL LOCATIONS ADDED - SEE ECO No.C01671	09/26/03	EBC

PART No. 68-00410-00	UNLESS OTHERWISE SPECIFIED		INITIAL APPLICATION		 <div>NAVINI NETWORKS 2210 CAMPBELL CREEK BLVD. SUITE 110 RICHARDSON, TEXAS 75082</div>	
	SURFACE ROUGHNESS MAX. PER ANSI B46.1		RFS			
			DRAWN BCO 09/19/02		TITLE DRAWING INSTALLATION SECTOR ANTENNA	
			APPROVED			
			ENGINEER BCO 09/19/02			
	DO NOT SCALE DRAWING		AUTHORITY EBC 09/19/02		SIZE DWG No. 68-00410-00 REV C	
	DIMENSIONS AND TOLERANCE PER ANSI Y14.5M-1982					
	DIMENSIONS ARE IN INCHES AND APPLY TO THE FINISHED PART					
	WELD SYMBOLS PER ANSI Y32.3		  <div>CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.</div>			
						
				SCALE: NTS TYPE:SDRC I-DEAS SHEET 1 OF 1		