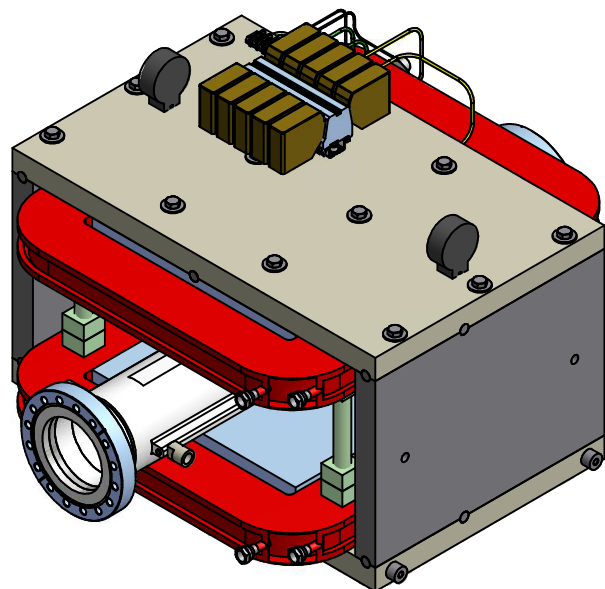
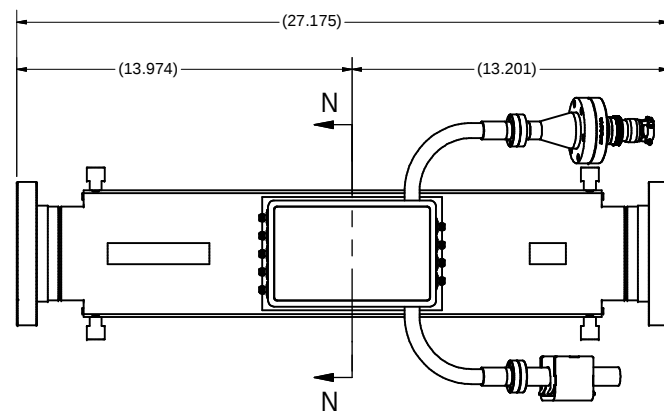
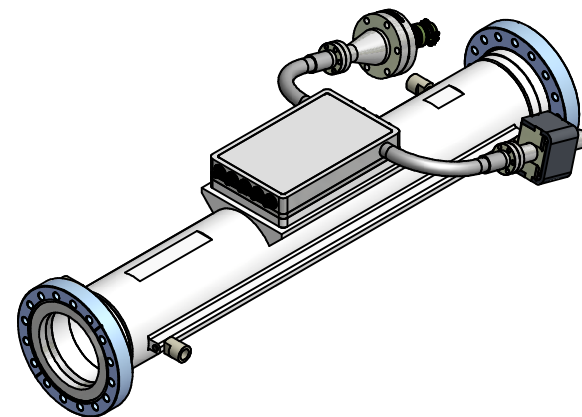
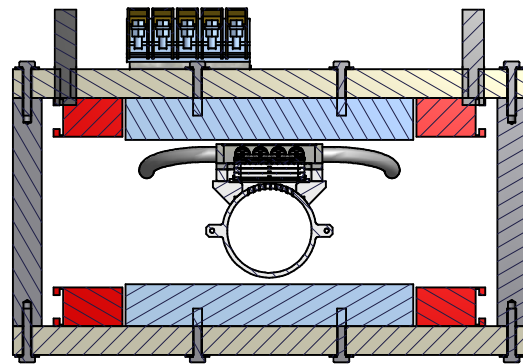
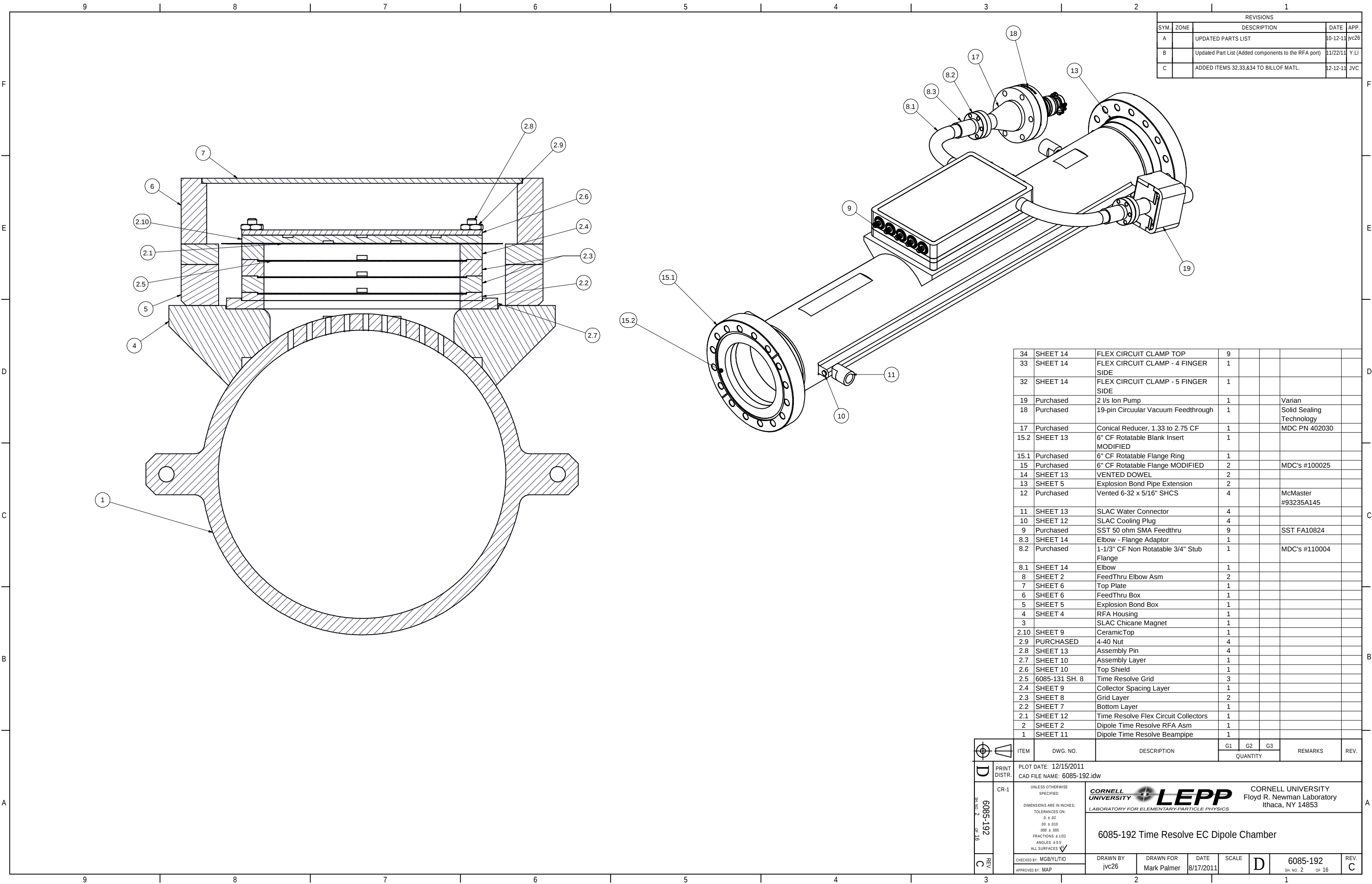




 	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
	PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw								
	CR-1 UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES 	 CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853 LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS			6085-192 Time Resolve EC Dipole Chamber					
SH. NO. 1 OF 16 6085-192	REV.	CHECKED BY: MGB/YL/TJD APPROVED BY: MAP		DRAWN BY jvc26	DRAWN FOR Mark Palmer	DATE 8/17/2011	SCALE		6085-192 SH. NO. 1 OF 16	REV.

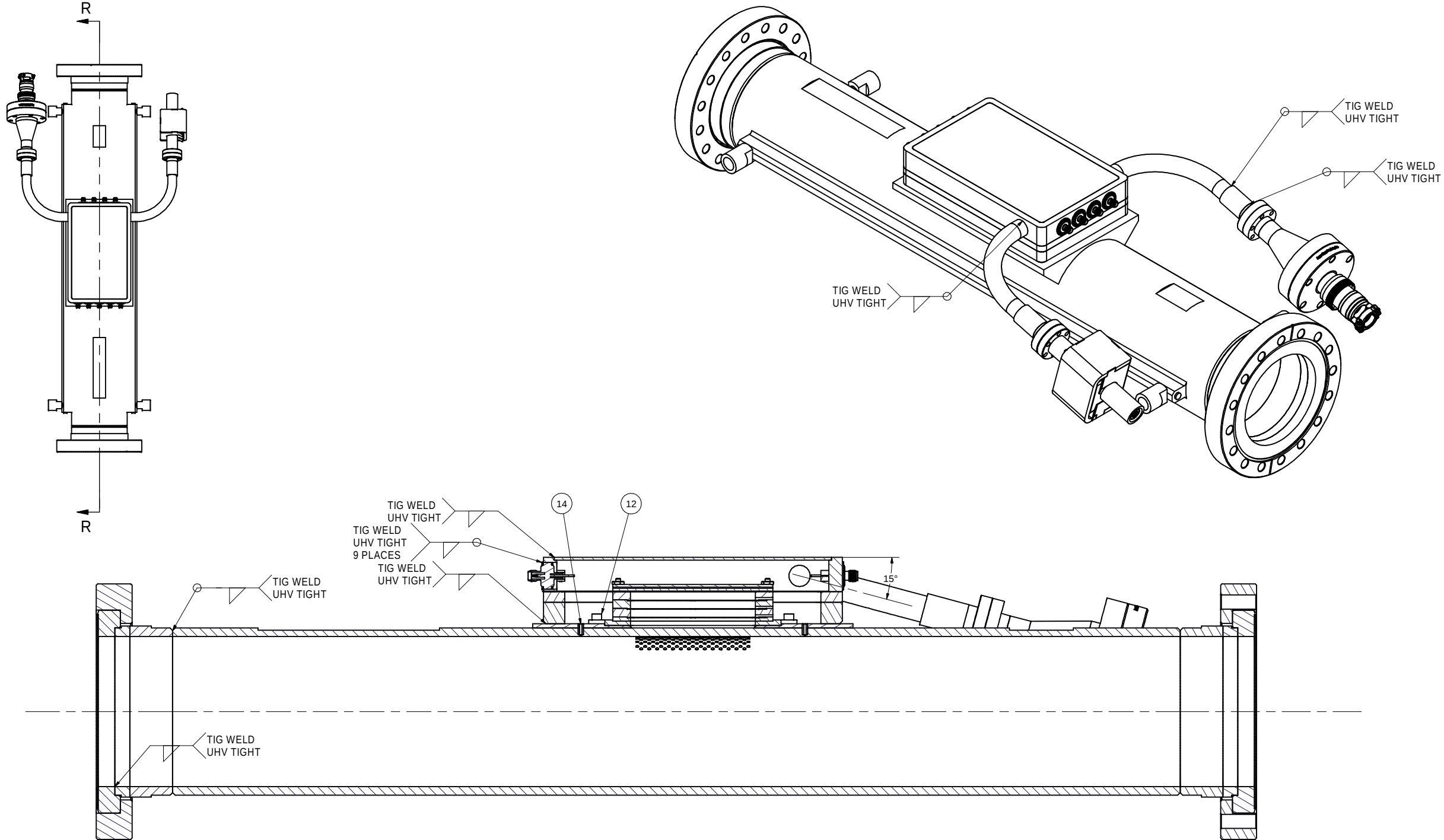


REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		UPDATED PARTS LIST	10-12-11	jvc26
B		Updated Part List (Added components to the RFA port)	11/22/11	Y.LI
C		ADDED ITEMS 32,33,&34 TO BILLOF MATL.	12-12-11	JVC

34	SHEET 14	FLEX CIRCUIT CLAMP TOP	9				
33	SHEET 14	FLEX CIRCUIT CLAMP - 4 FINGER SIDE	1				
32	SHEET 14	FLEX CIRCUIT CLAMP - 5 FINGER SIDE	1				
19	Purchased	2 l/s Ion Pump	1			Varian	
18	Purchased	19-pin Circular Vacuum Feedthrough	1			Solid Sealing Technology	
17	Purchased	Conical Reducer, 1.33 to 2.75 CF	1			MDC PN 402030	
15.2	SHEET 13	6" CF Rotatable Blank Insert MODIFIED	1				
15.1	Purchased	6" CF Rotatable Flange Ring	1				
15	Purchased	6" CF Rotatable Flange MODIFIED	2			MDC's #100025	
14	SHEET 13	VENTED DOWEL	2				
13	SHEET 5	Explosion Bond Pipe Extension	2				
12	Purchased	Vented 6-32 x 5/16" SHCS	4			McMaster #93235A145	
11	SHEET 13	SLAC Water Connector	4				
10	SHEET 12	SLAC Cooling Plug	4				
9	Purchased	SST 50 ohm SMA Feedthru	9			SST FA10824	
8.3	SHEET 14	Elbow - Flange Adaptor	1				
8.2	Purchased	1-1/3" CF Non Rotatable 3/4" Stub Flange	1			MDC's #110004	
8.1	SHEET 14	Elbow	1				
8	SHEET 2	FeedThru Elbow Asm	2				
7	SHEET 6	Top Plate	1				
6	SHEET 6	FeedThru Box	1				
5	SHEET 5	Explosion Bond Box	1				
4	SHEET 4	RFA Housing	1				
3		SLAC Chicane Magnet	1				
2.10	SHEET 9	CeramicTop	1				
2.9	PURCHASED	4-40 Nut	4				
2.8	SHEET 13	Assembly Pin	4				
2.7	SHEET 10	Assembly Layer	1				
2.6	SHEET 10	Top Shield	1				
2.5	6085-131 SH. 8	Time Resolve Grid	3				
2.4	SHEET 9	Collector Spacing Layer	1				
2.3	SHEET 8	Grid Layer	2				
2.2	SHEET 7	Bottom Layer	1				
2.1	SHEET 12	Time Resolve Flex Circuit Collectors	1				
2	SHEET 2	Dipole Time Resolve RFA Asm	1				
1	SHEET 11	Dipole Time Resolve Beampipe	1				

		ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS		REV.	
		QUANTITY											
D	PRINT DISTR.	PLOT DATE: 12/15/2011											
		CAD FILE NAME: 6085-192.idw											
SH. NO. 2 OF 16	6085-192	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .000 ± .010 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓		CORNELL UNIVERSITY  CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853 6085-192 Time Resolve EC Dipole Chamber								
C	REV.	CHECKED BY: MGB/YLT/IO		DRAWN BY jvc26		DRAWN FOR Mark Palmer		DATE 8/17/2011		SCALE	D	6085-192	REV. C
		APPROVED BY: MAP		SH. NO. 2 OF 16									

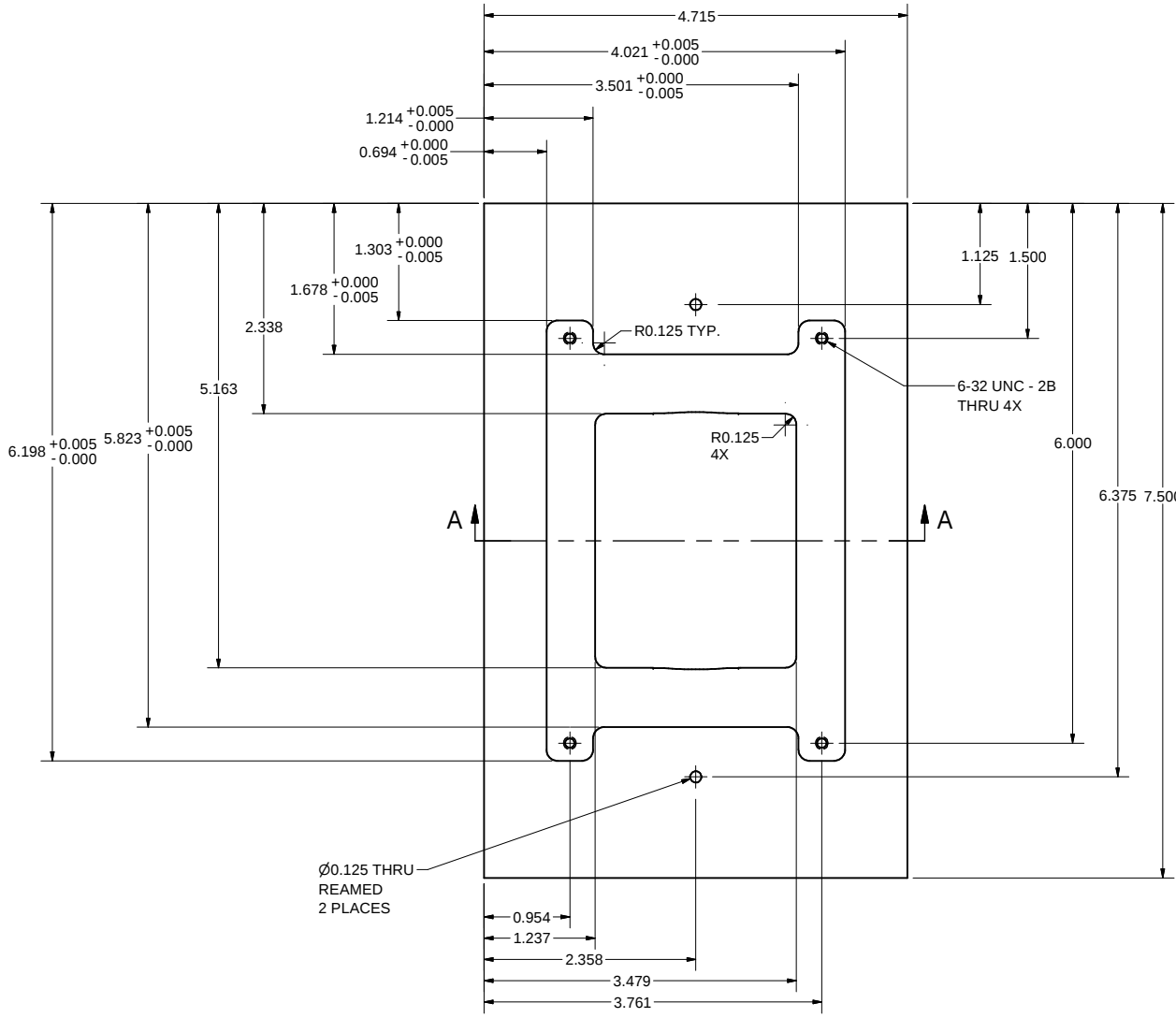
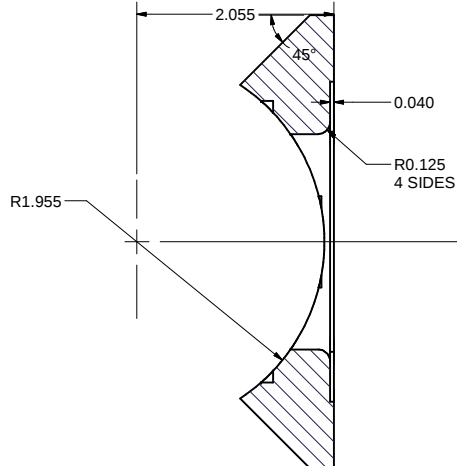
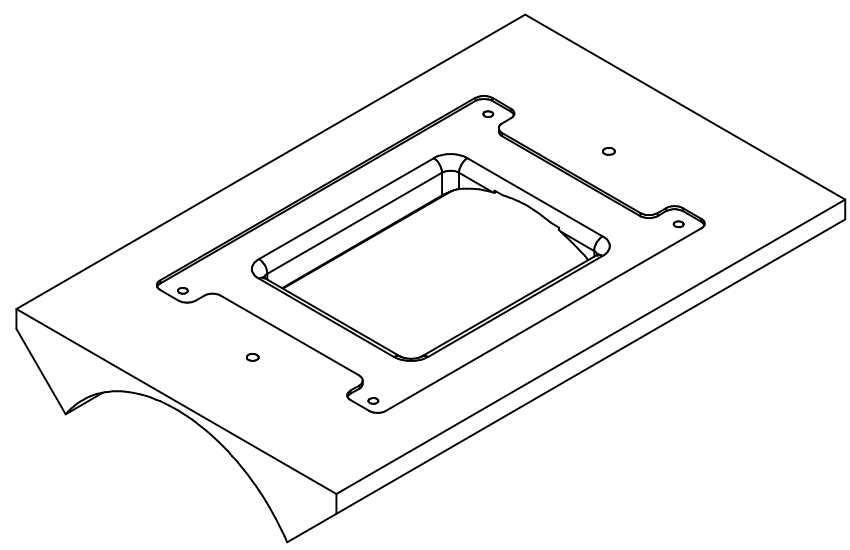
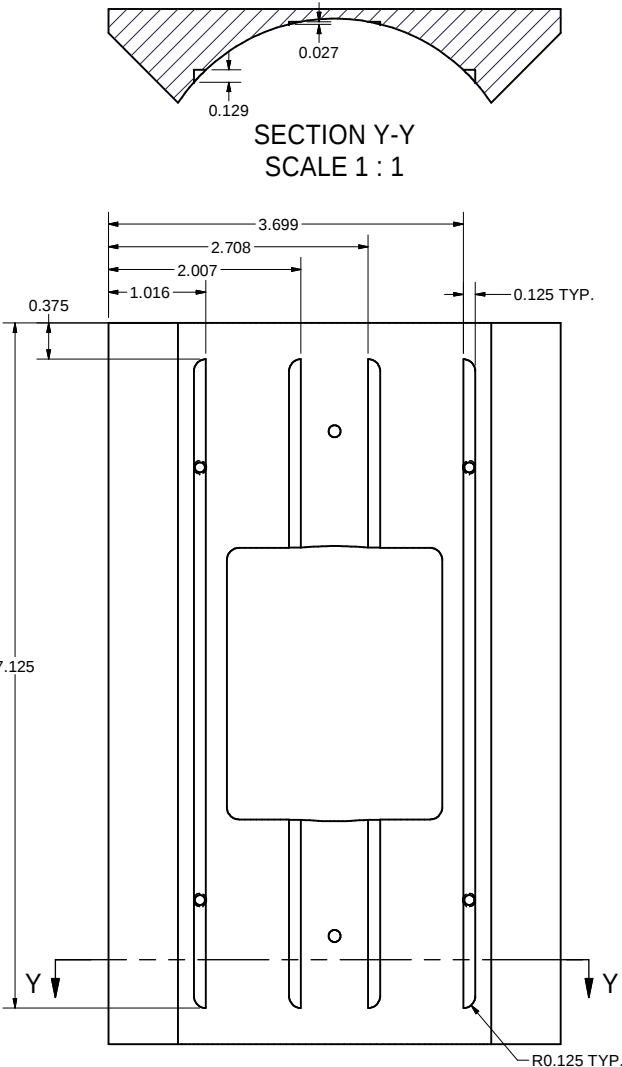
REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



34	SHEET 14	FLEX CIRCUIT CLAMP TOP	9				
19	Purchased	2 l/s Ion Pump	1			Varian	
18	Purchased	19-pin Circular Vacuum Feedthrough	1			Solid Sealing Technology	
						MDC PN 402030	
17	Purchased	Conical Reducer, 1.33 to 2.75 CF	1				
14	SHEET 13	VENTED DOWEL	2				
12	Purchased	Vented 6-32 x 5/16" SHCS	4			McMaster #93235A145	
9	Purchased	SST 50 ohm SMA Feedthru	9			SST FA10824	
8.1	SHEET 14	Elbow	2				

		ITEM		DWG. NO.		DESCRIPTION			G1G2G3			REMARKS		REV.	
									QUANTITY						
D		PRINT DISTR.		PLOT DATE: 12/15/2011											
				CAD FILE NAME: 6085-192.idw											
SH. NO. 3 OF 16 6085-192		CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: 0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓			CORNELL UNIVERSITYCORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853								
							6085-192 Time Resolve EC Dipole Chamber								
REV.		CHECKED BY: MGB/YLT/IO		DRAWN BY jvc26		DRAWN FOR Mark Palmer		DATE 8/17/2011		SCALE		D	6085-192		REV.
		APPROVED BY: MAP											SH. NO. 3 OF 16		

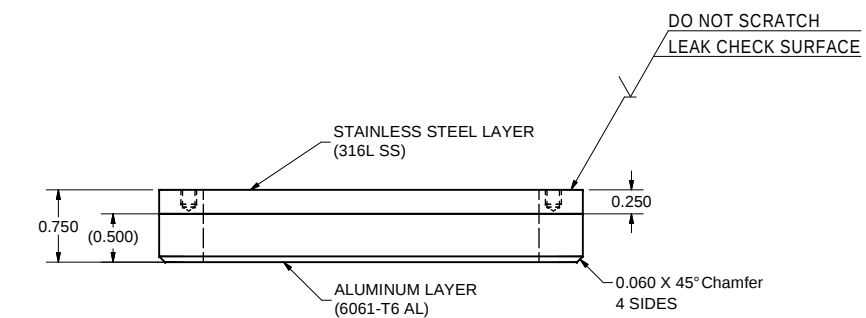
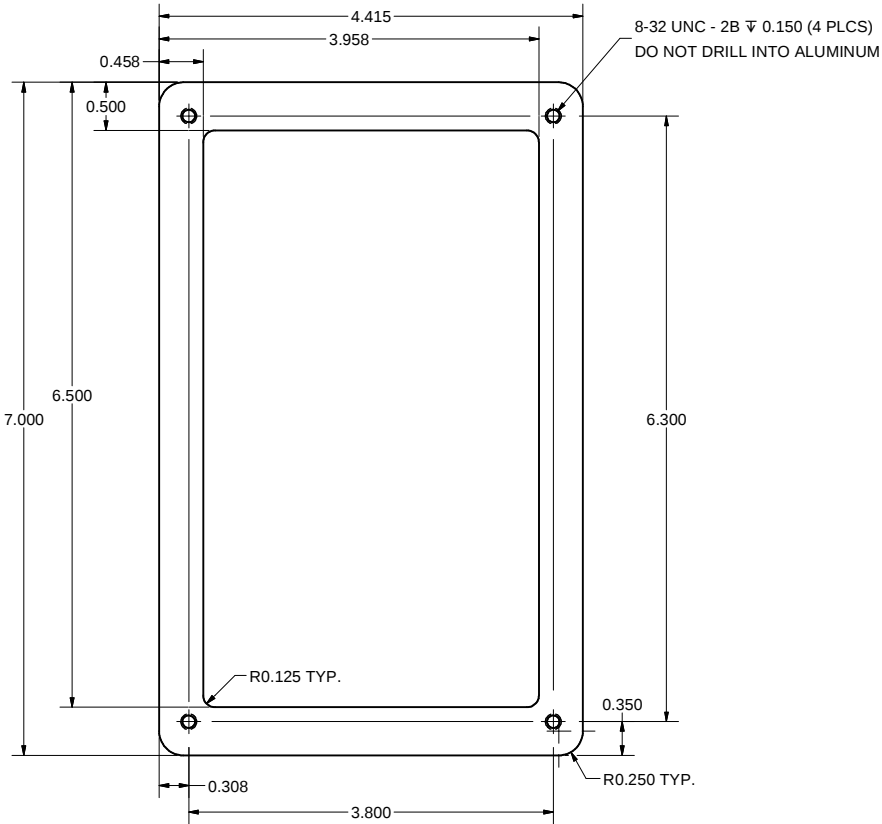
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.



4 RFA Housing
FILE NAME: 6085-192
SHEET NO.: 4
DFT. SCALE: 2:3
MATERIAL: AL
QTY: 1
NOTES:

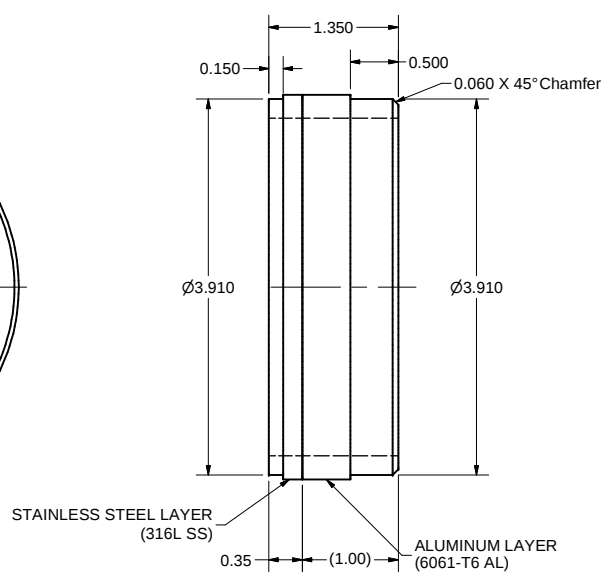
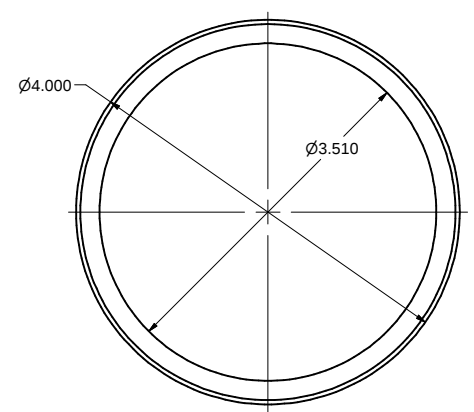
 	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
D	PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw								
SH. NO. 4 OF 16	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES 			CORNELL UNIVERSITY  CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853 6085-192 Time Resolve EC Dipole Chamber					
REV.	CHECKED BY: MGB/YLT/IO	DRAWN BY jvc26		DRAWN FOR Mark Palmer		DATE 8/17/2011		SCALE D	6085-192	REV.
	APPROVED BY: MAP	SH. NO. 4 OF 16								

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	D4	CHANGED BOND ZONE OUTER DIAMETER OF ITEM 13 TO 4in. ALSO ADDED STEPS ON END TO MATCH WELDED PARTS	11-18-11	jvc26
B		Added 4 tapped (8-32) holes on Part 5	11/29/11	Y.LI



5 Explosion Bond Box

FILE NAME: 6085-192
SHEET NO.: 5
DFT. SCALE: 1:1
MATERIAL: EXPLOSION BONDED AL-SS
QTY: 1
NOTES:

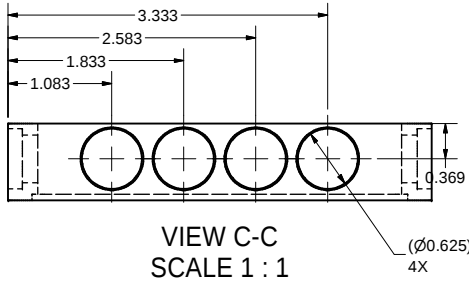
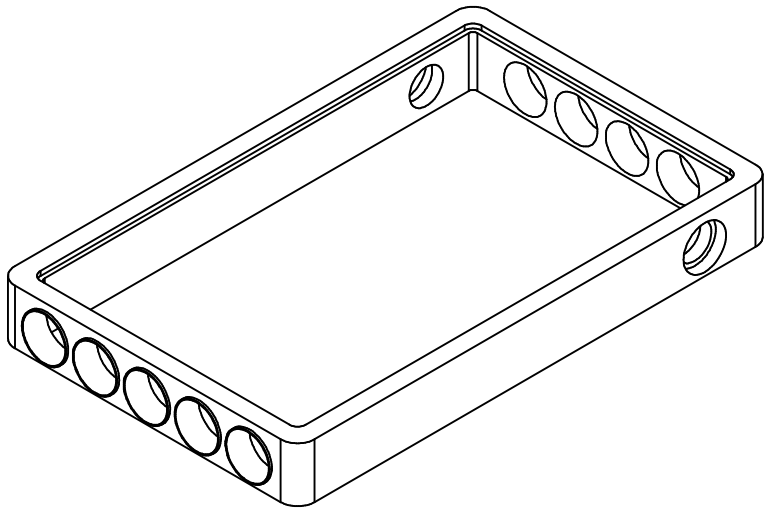


13 Explosion Bond Pipe Extension

FILE NAME: 6085-192
SHEET NO.: 5
DFT. SCALE: 1:1
MATERIAL: AL-SS EXPL. BOND
QTY: 2
NOTES:

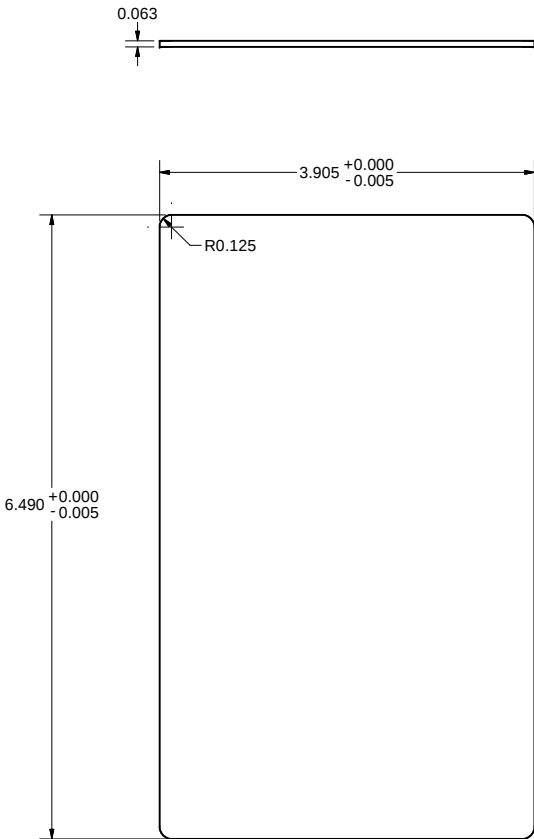
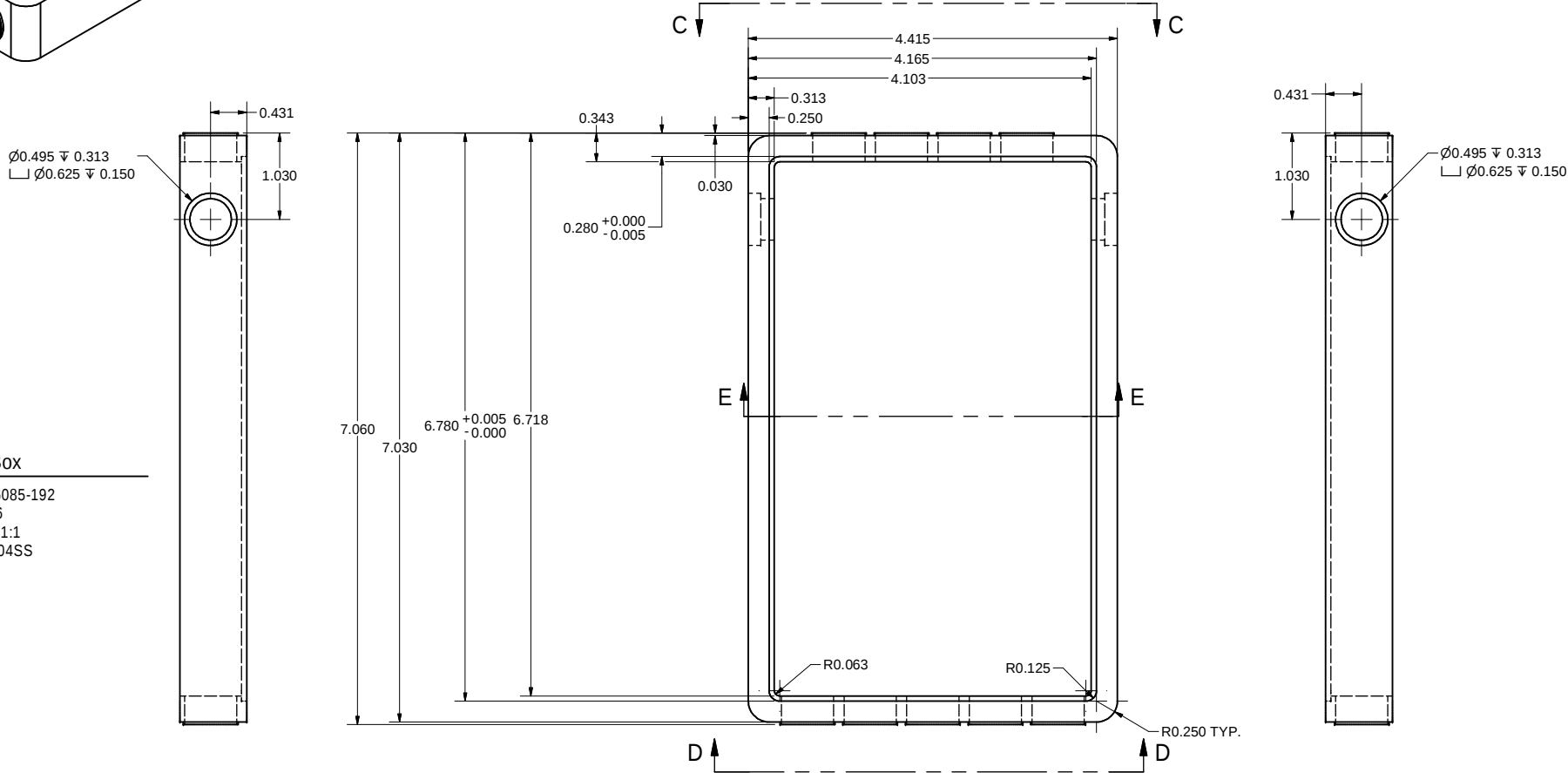
		ITEM	DWG. NO.	DESCRIPTION	G1G2G3			REMARKS	REV.	
					QUANTITY					
D	PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw								
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: 0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓				CORNELL UNIVERSITY LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853				
SH. NO. 5 OF 16		6085-192 Time Resolve EC Dipole Chamber								
B	REV.	CHECKED BY: MGB/YLT/IO		DRAWN BY jvc26	DRAWN FOR Mark Palmer	DATE 8/17/2011	SCALE	D	6085-192	REV. B
	APPROVED BY: MAP		SH. NO. 5 OF 16							

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	A7	ITEM 6 WELD PREP CHANGED FROM GROOVE TO BOSS	9/27/11	jvc26



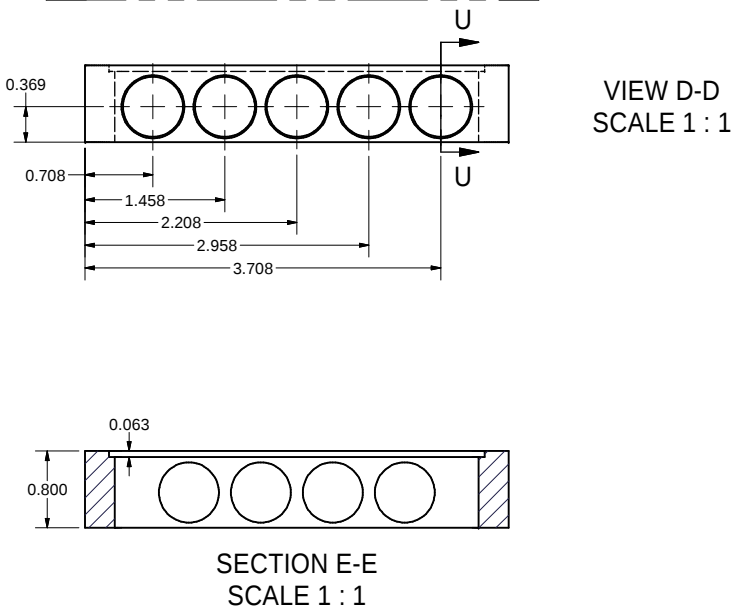
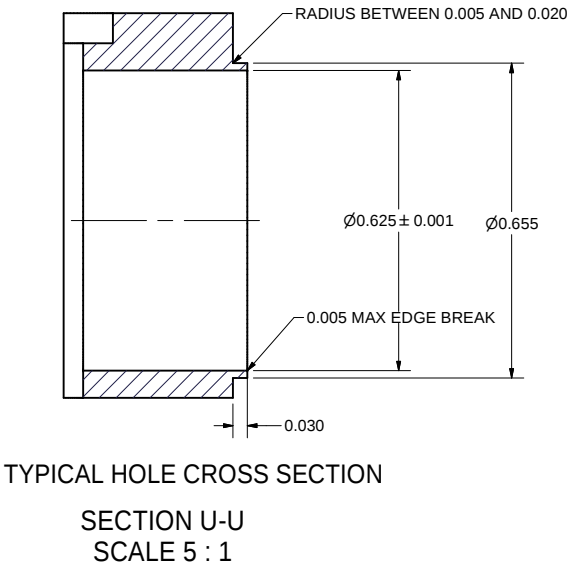
6 FeedThru Box

FILE NAME: 6085-192
SHEET NO.: 6
DFT. SCALE: 1:1
MATERIAL: 304SS
QTY: 1
NOTES:



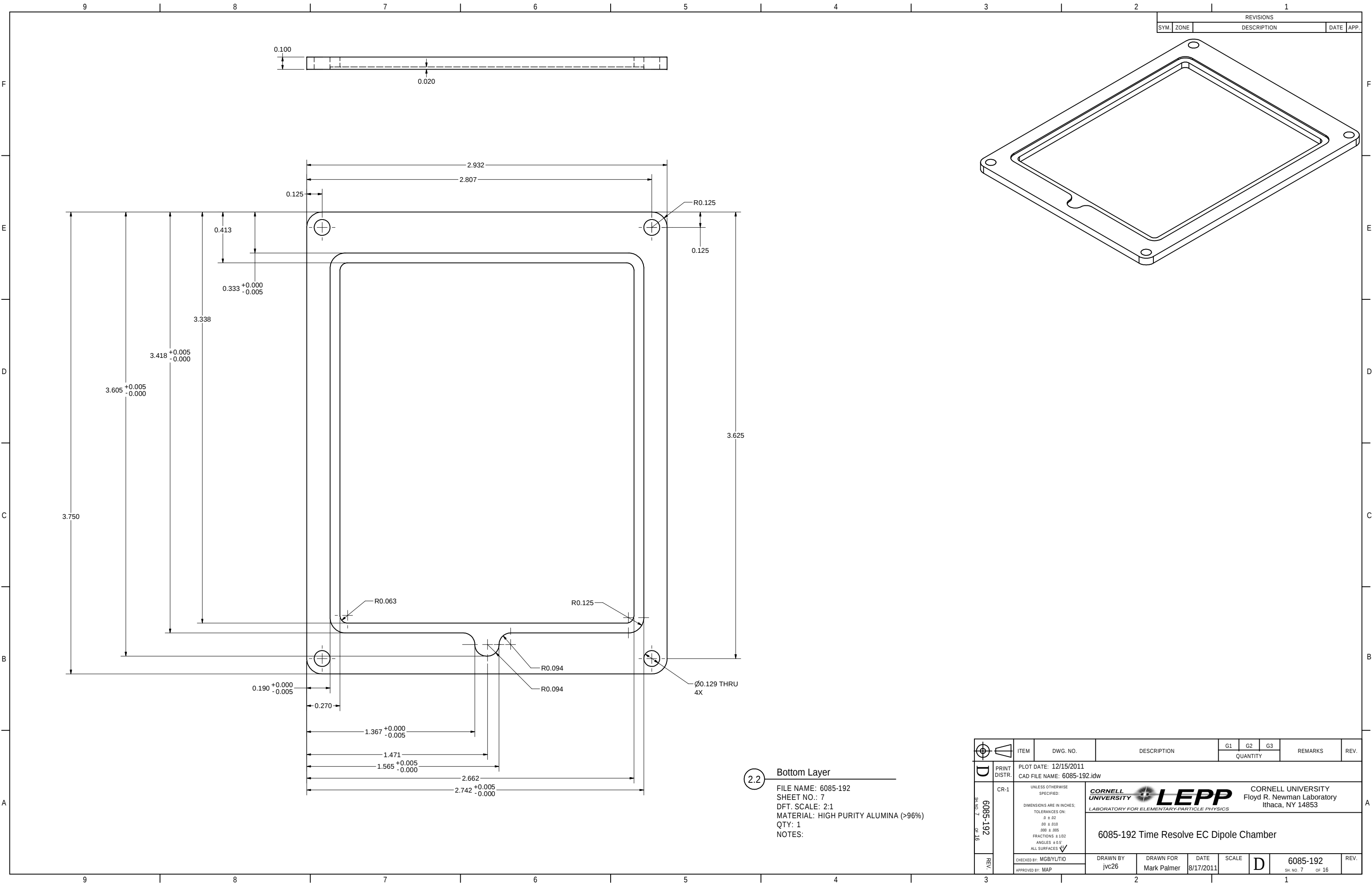
7 Top Plate

FILE NAME: 6085-192
SHEET NO.: 6
DFT. SCALE: 1:1
MATERIAL: 304SS
QTY: 1
NOTES:

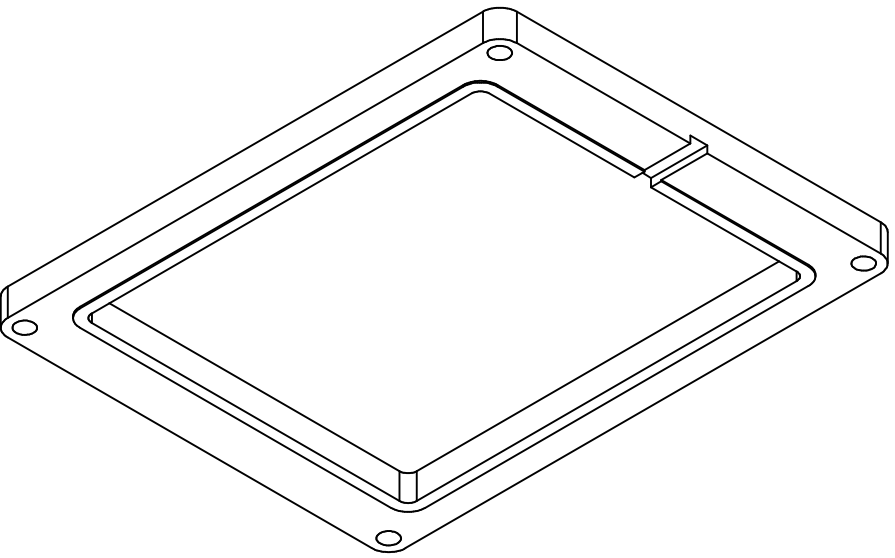
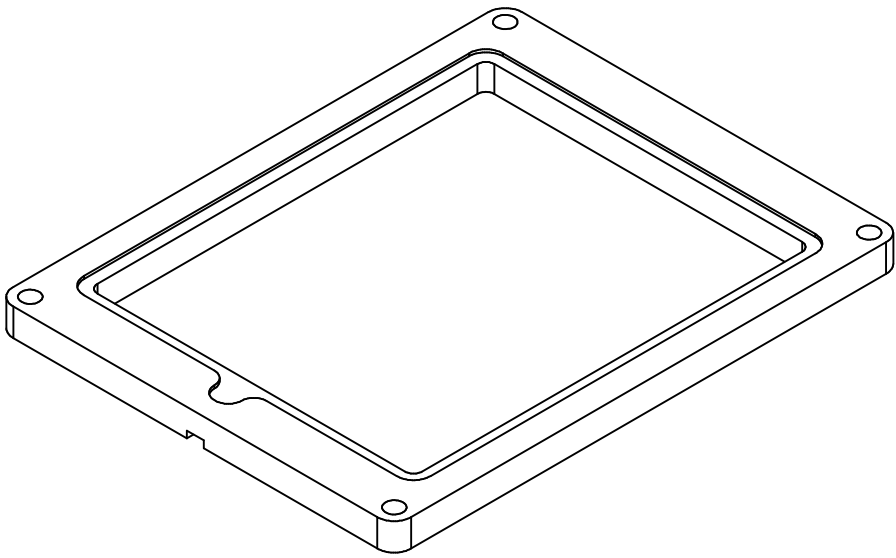
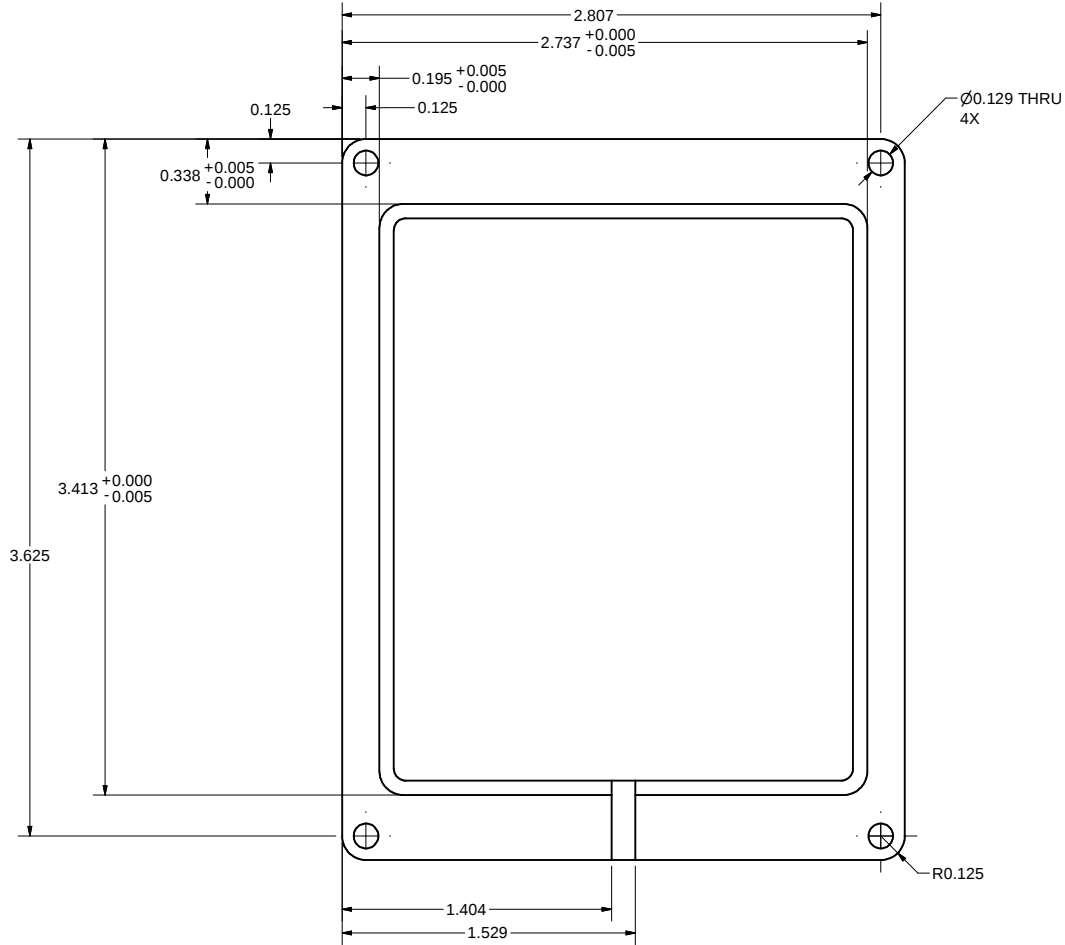
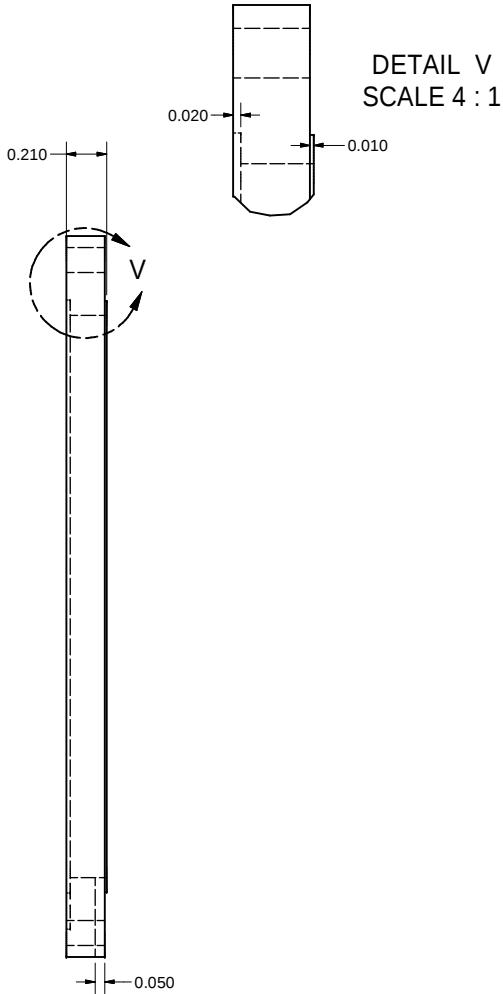
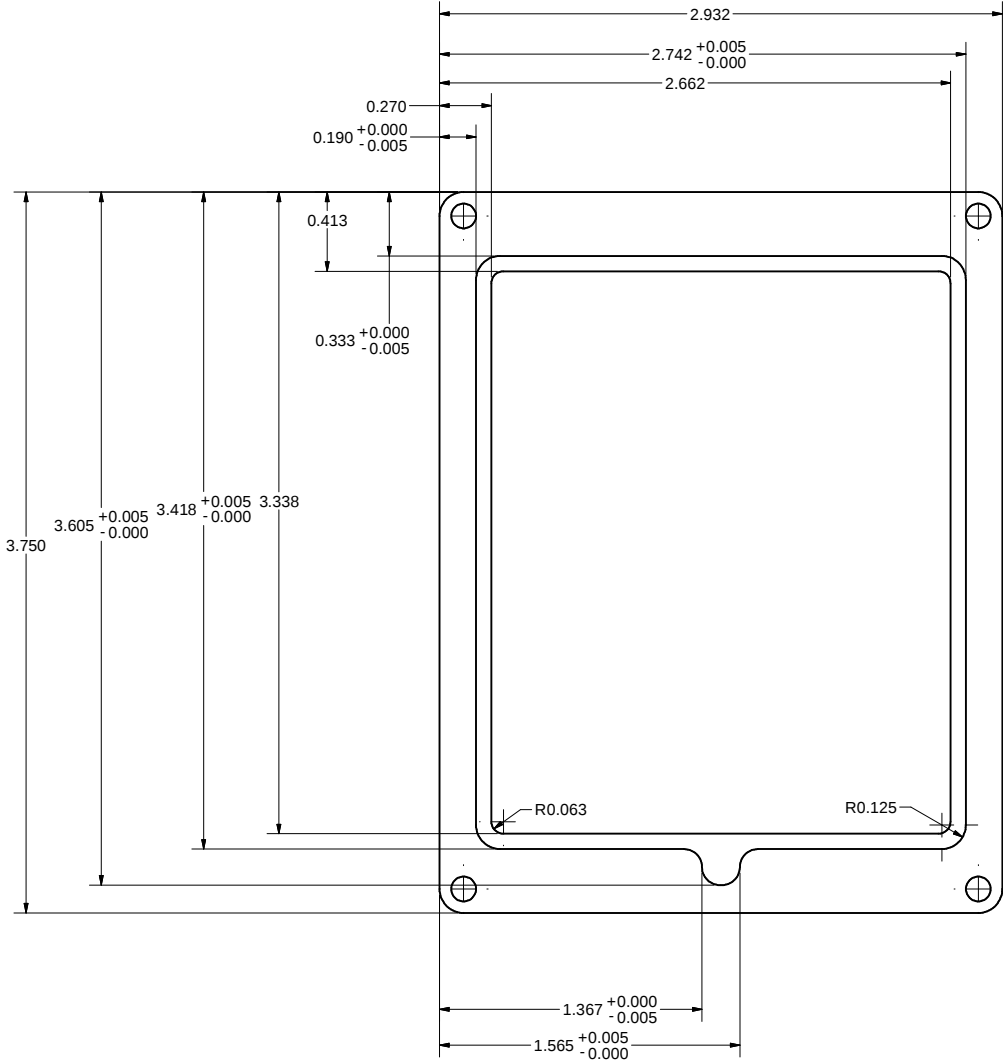


		ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS		REV.
D		PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw									
6085-192 SH. NO. 6 OF 16		CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓		 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853 6085-192 Time Resolve EC Dipole Chamber							
A		REV.	CHECKED BY: MGB/YLT/IO APPROVED BY: MAP		DRAWN BY jvc26		DRAWN FOR Mark Palmer		DATE 8/17/2011		SCALE D	6085-192 SH. NO. 6 OF 16 REV. A

6085-192 Time Resolve EC Dipole Chamber



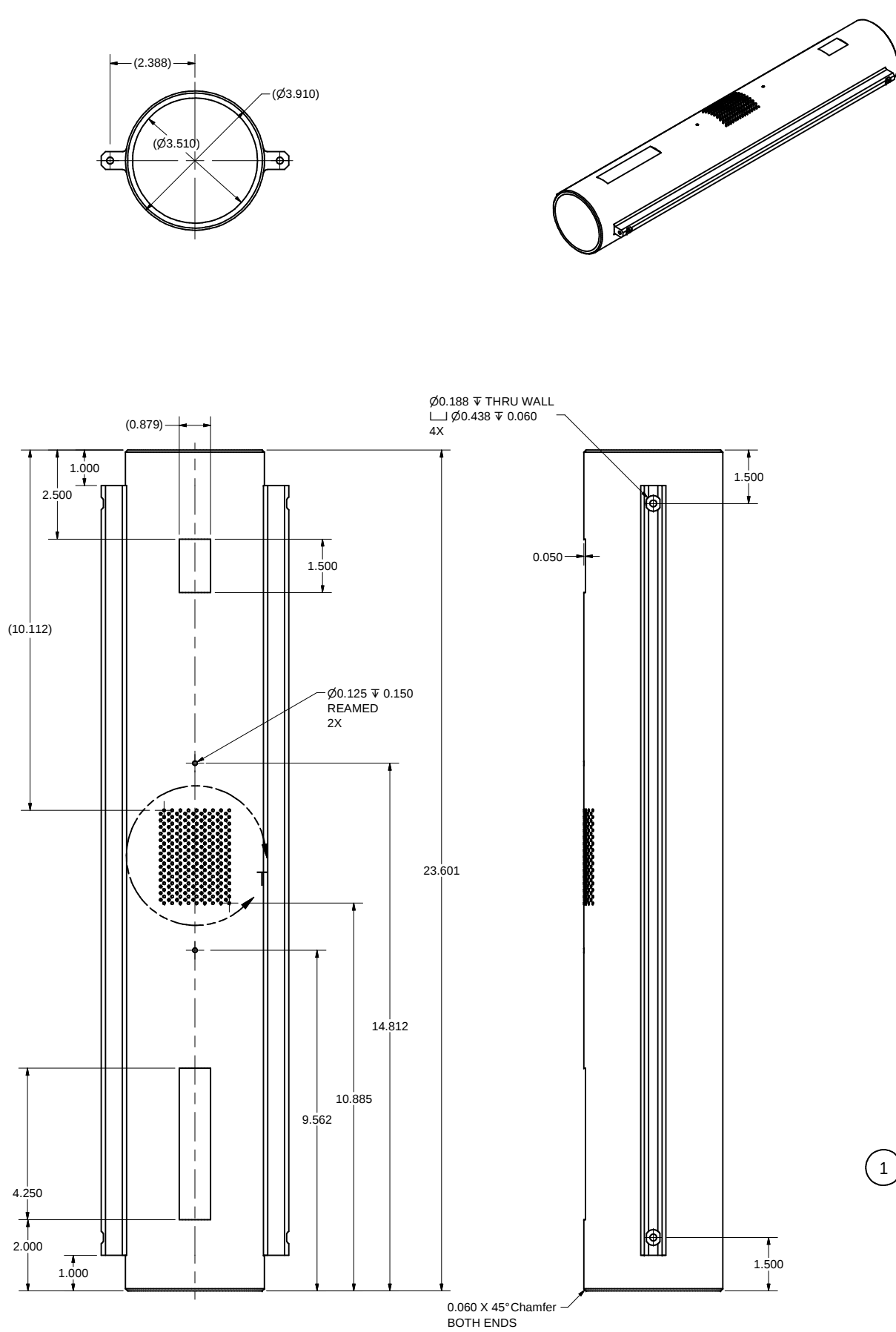
REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



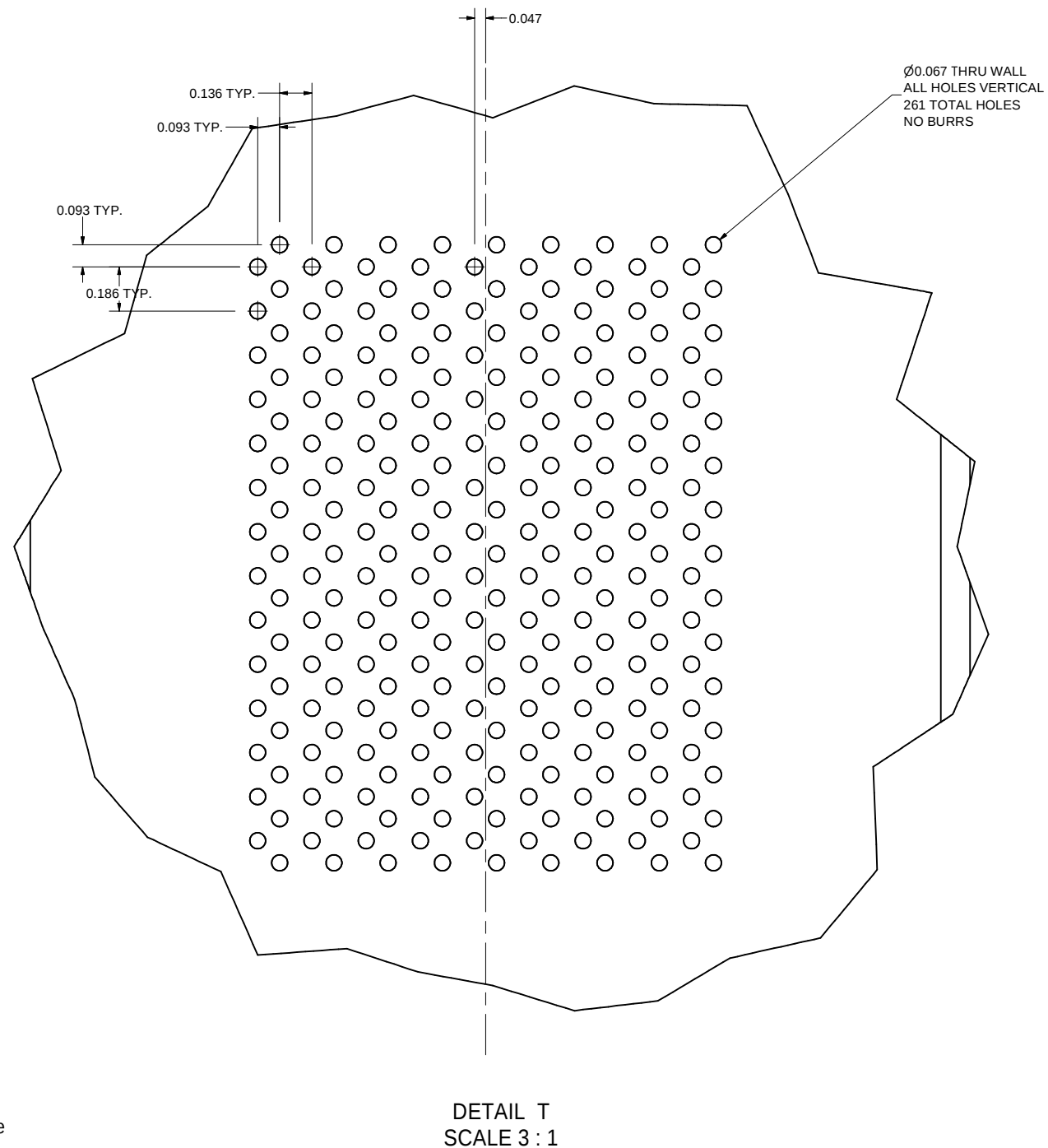
2.3 Grid Layer
FILE NAME: 6085-192
SHEET NO.: 8
DFT. SCALE: 2:1
MATERIAL: HIGH PURITY ALUMINA (>96%)
QTY: 2
NOTES:

	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
D	PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw								
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓		 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853 6085-192 Time Resolve EC Dipole Chamber						
6085-192 SH. NO. 8 OF 16	REV.	CHECKED BY: MGB/YLT/IO	DRAWN BY: jvc26	DRAWN FOR: Mark Palmer	DATE: 8/17/2011	SCALE: D	6085-192 SH. NO. 8 OF 16		REV.	

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added overall dimension to item 1	10/17/11	TIO



1 Dipole Time Resolve Beampipe
FILE NAME: 6085-192
SHEET NO.: 11
DFT. SCALE: 1:2
MATERIAL: Aluminum SLAC Extrusion
QTY: 1
NOTES:



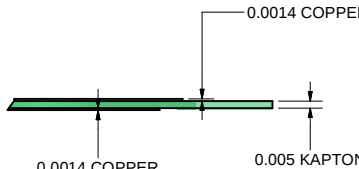
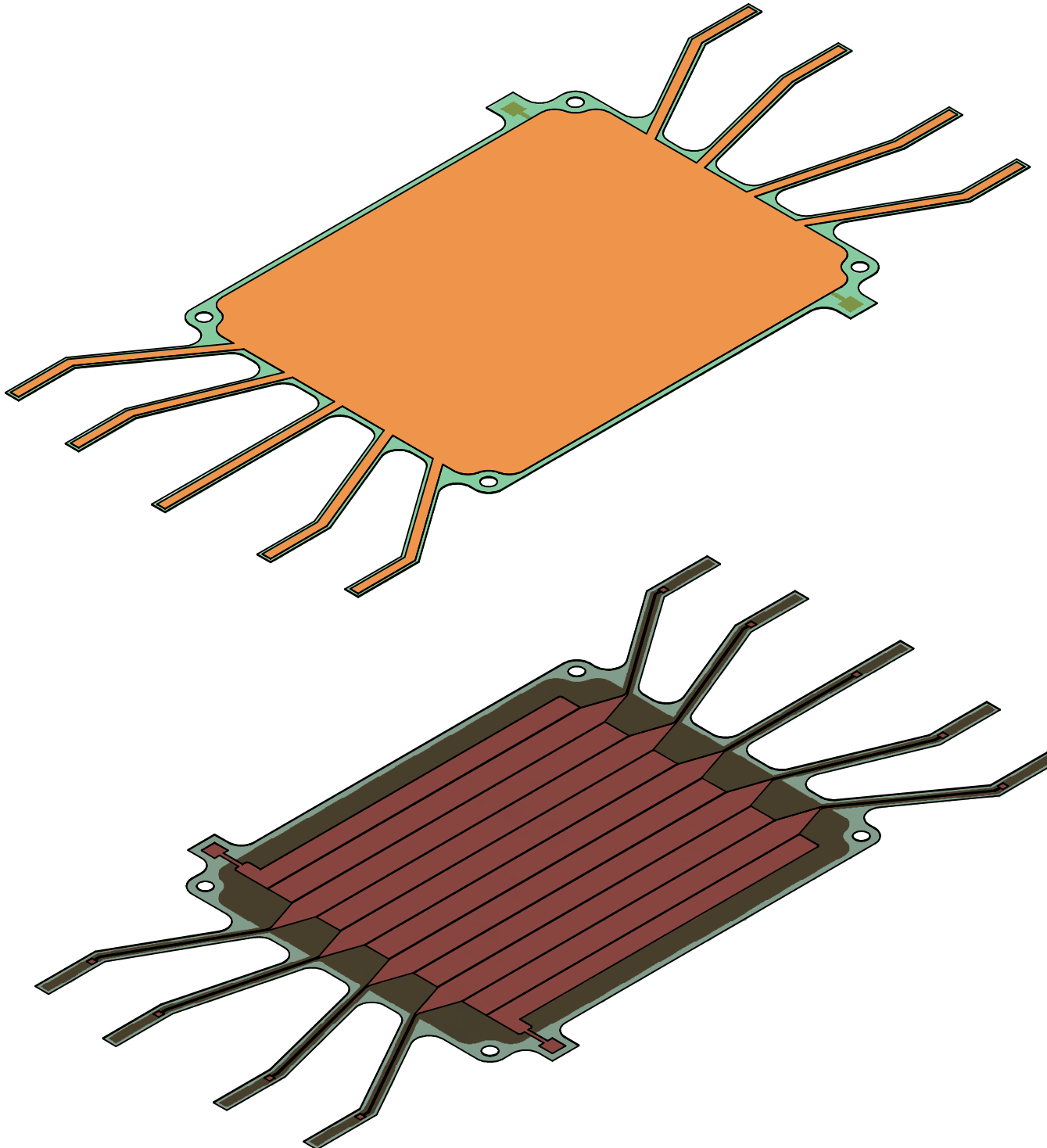
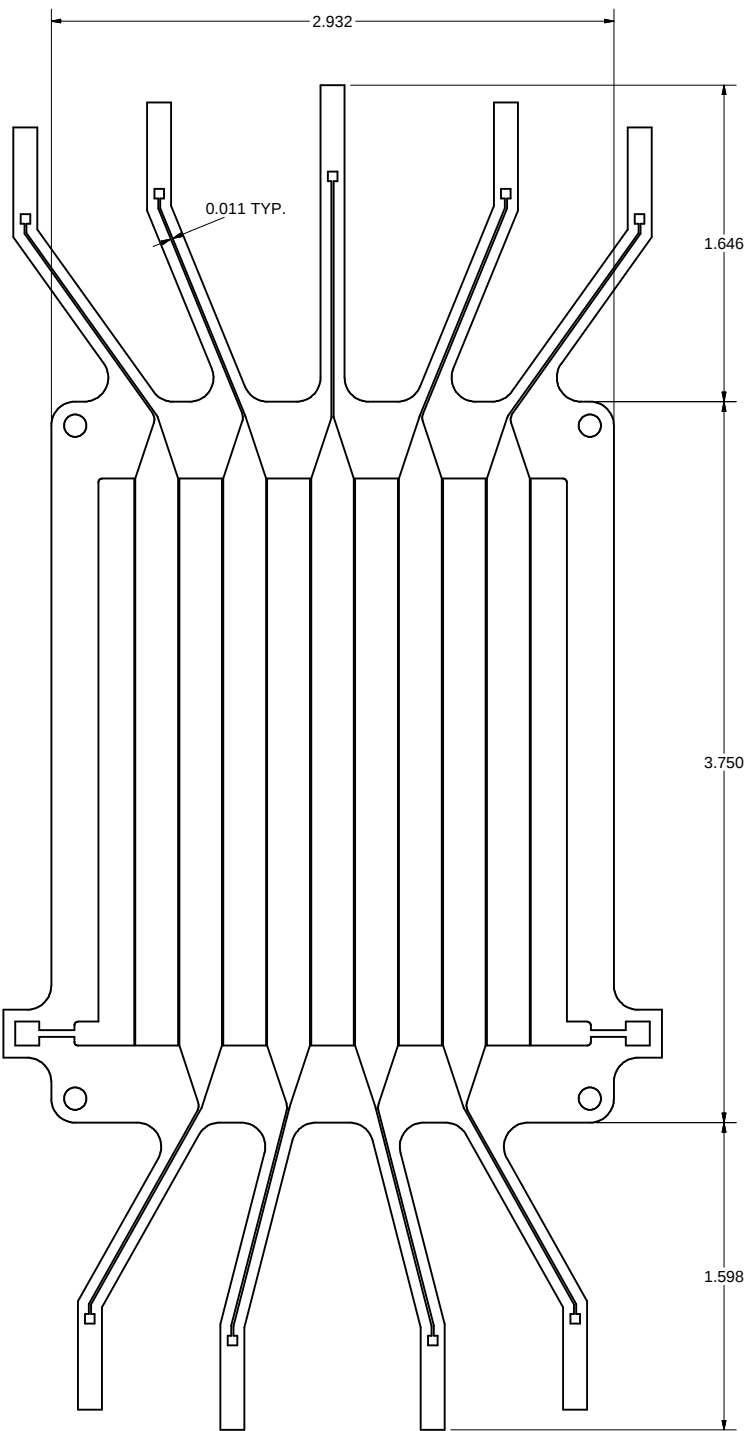
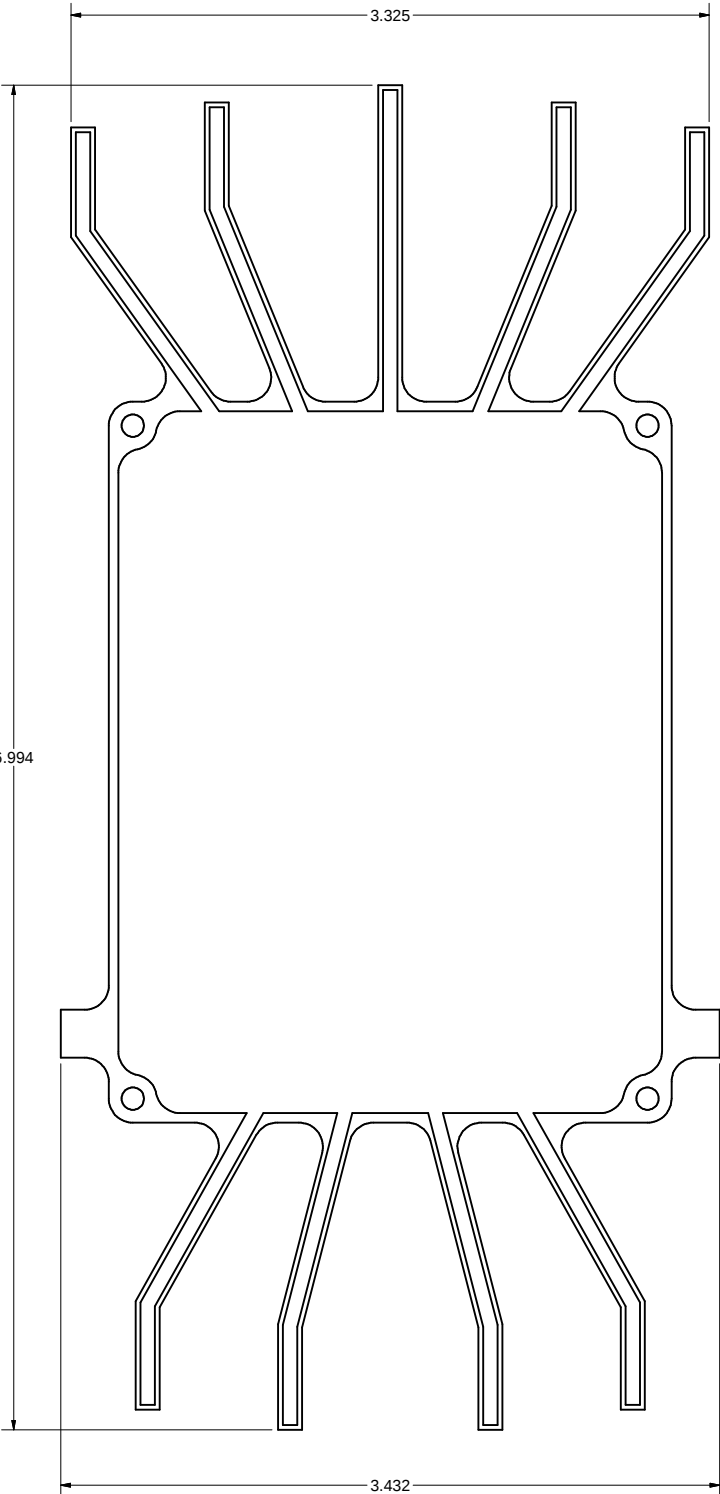
	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
	PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw								
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓			 LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS			CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853		
SH. NO. 11 OF 16 6085-192	6085-192 Time Resolve EC Dipole Chamber									
A	REV.	CHECKED BY: MGB/YLT/IO		DRAWN BY jvc26	DRAWN FOR Mark Palmer	DATE 8/17/2011	SCALE		6085-192	REV. A
		APPROVED BY: MAP		SH. NO. 11 OF 16						

2.1

Time Resolve Flex Circuit Collectors

FILE NAME: 6085-192
SHEET NO.: 12
DFT. SCALE: 3:1
MATERIAL:
QTY: 1
NOTES:

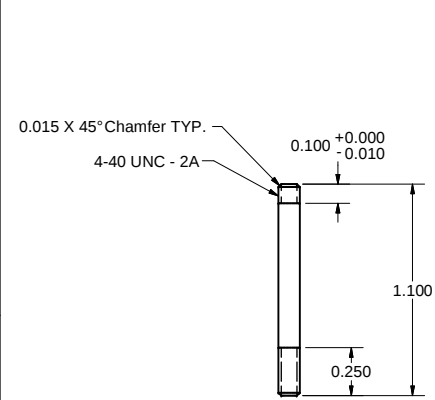
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		UPDATED OVERALL LAYOUT	10-12-11	jvc26



DETAIL AB
SCALE 15 : 1

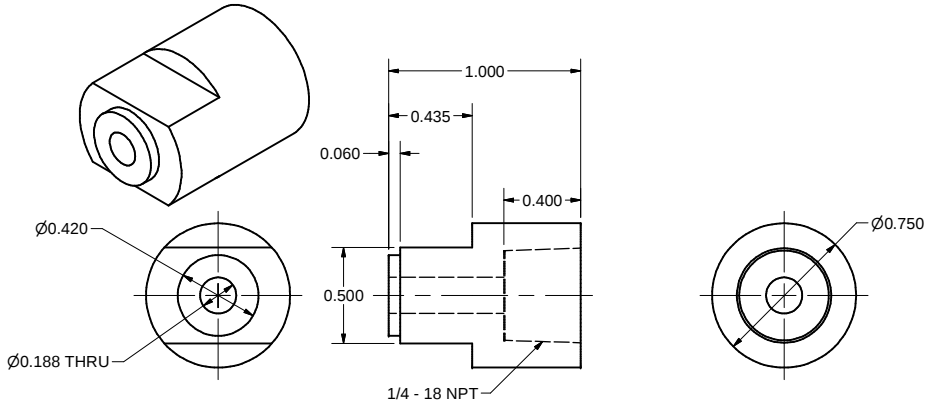
	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw									
6085-192 SH. NO. 12 OF 16	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓	 CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY Ithaca, NY 14853			6085-192 Time Resolve EC Dipole Chamber				
A	REV.	CHECKED BY: MGB/YLT/IO	DRAWN BY jvc26	DRAWN FOR Mark Palmer	DATE 8/17/2011	SCALE	D	6085-192 SH. NO. 12 OF 16		REV. A
		APPROVED BY: MAP								

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		ADDED SHEET 14	10-12-11	jvc26



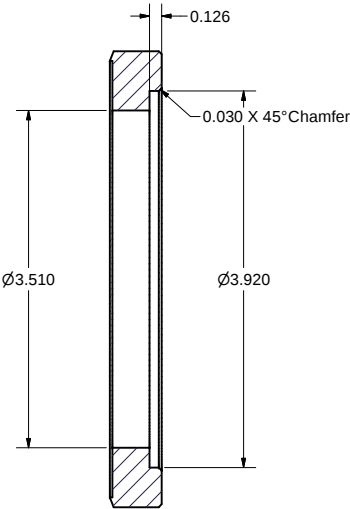
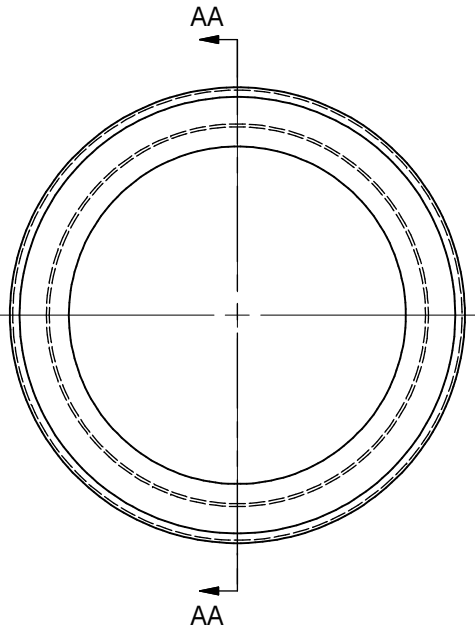
2.10 Assembly Pin

FILE NAME: 6085-192
SHEET NO.: 13
DFT. SCALE: 2:1
MATERIAL: 304SS
QTY: 4
NOTES:



17 SLAC Water Connector

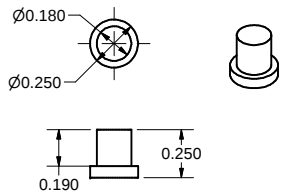
FILE NAME: 6085-192
SHEET NO.: 13
DFT. SCALE: 2:1
MATERIAL: AL
QTY: 4
NOTES:



SECTION AA-AA
SCALE 1 : 1

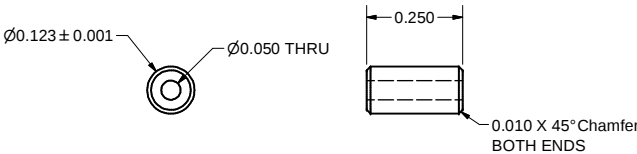
15.2 6" CF Rotatable Blank Insert MODIFIED

FILE NAME: 6085-192
SHEET NO.: 13
DFT. SCALE: 1:1
MATERIAL: BLANK 6" ROT CF FLANGE
QTY: 2
NOTES:



16 SLAC Cooling Plug

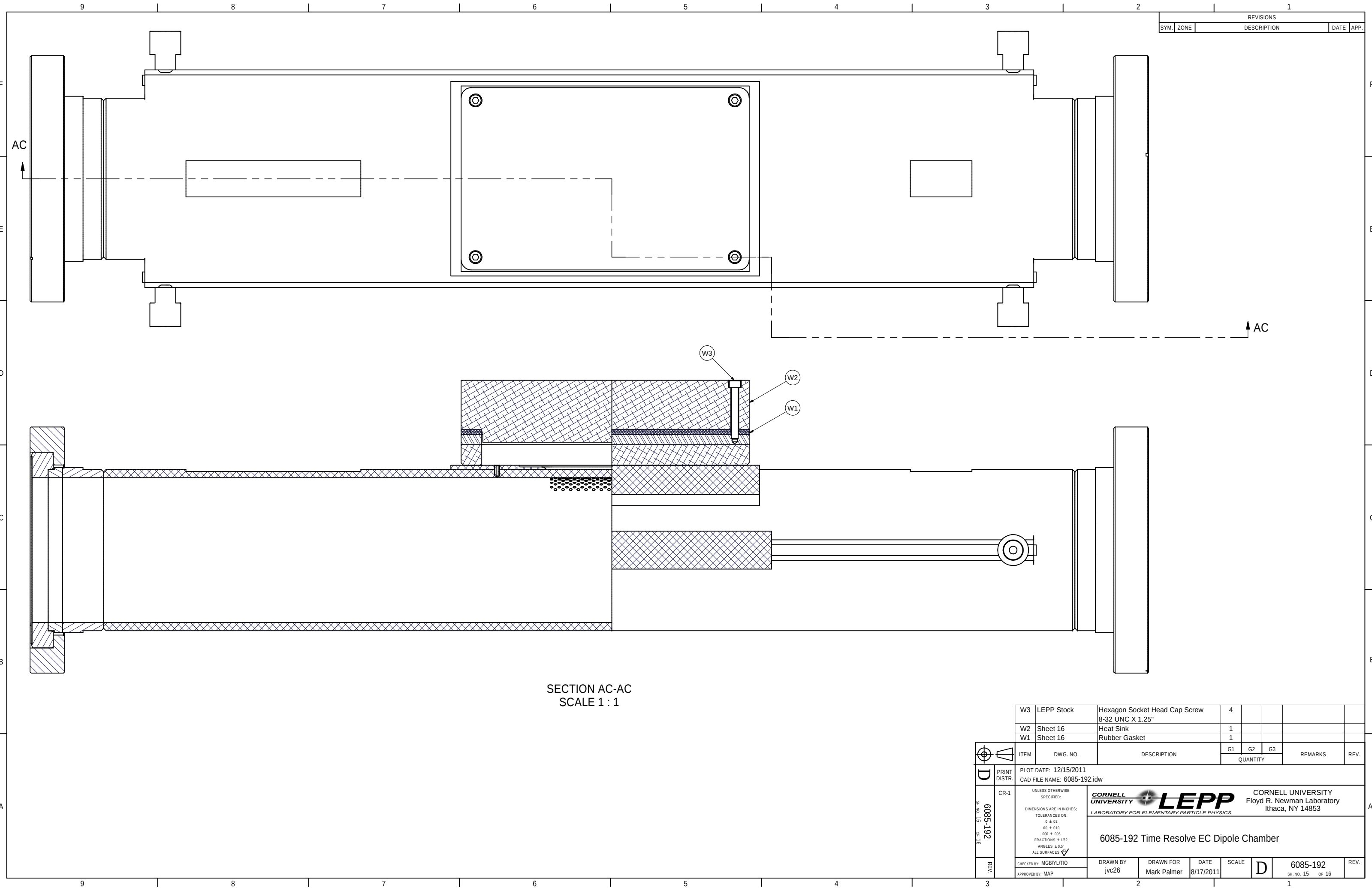
FILE NAME: 6085-192
SHEET NO.: 13
DFT. SCALE: 2:1
MATERIAL: AL
QTY: 4
NOTES:



14 VENTED DOWEL

FILE NAME: 6085-192
SHEET NO.: 13
DFT. SCALE: 4:1
MATERIAL: 316 SS
QTY: 2
NOTES:

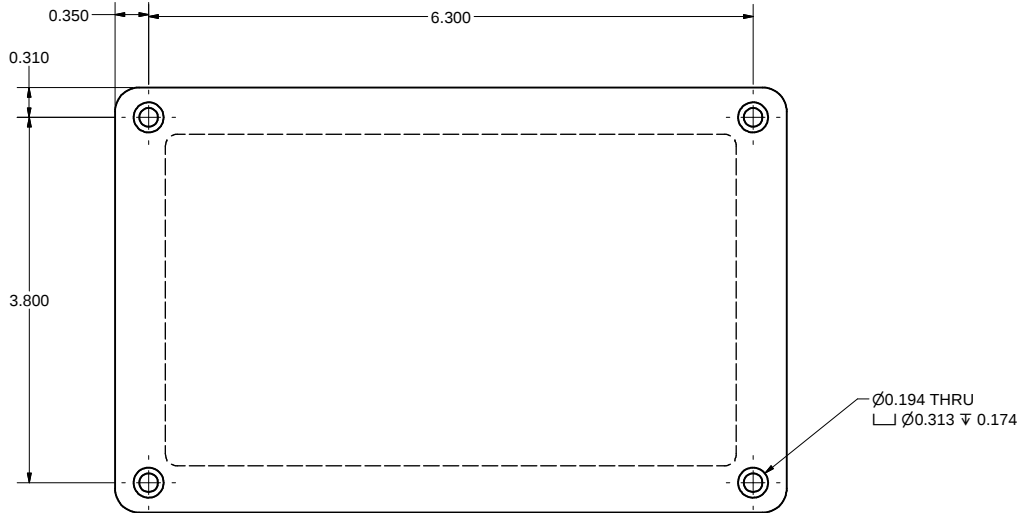
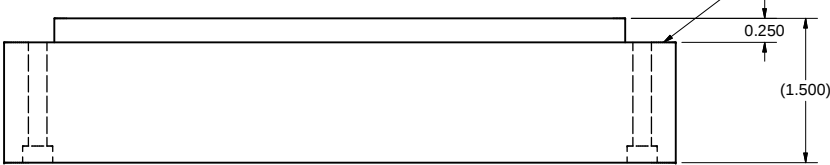
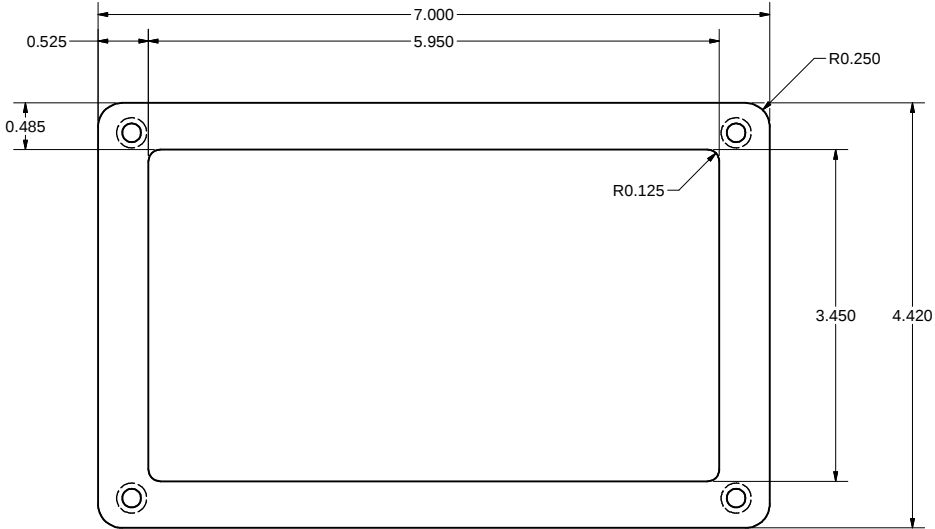
		ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS		REV.
								QUANTITY				
D		PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw									
6085-192 SH. NO. 13 OF 16		CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES		 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853 LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS			6085-192 Time Resolve EC Dipole Chamber				
REV. A		CHECKED BY: MGB/YLT/IO APPROVED BY: MAP	DRAWN BY jvc26	DRAWN FOR Mark Palmer	DATE 8/17/2011	SCALE	D	6085-192 SH. NO. 13 OF 16		REV. A		



REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

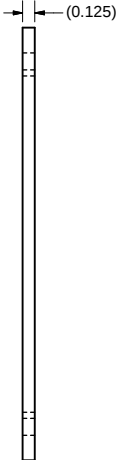
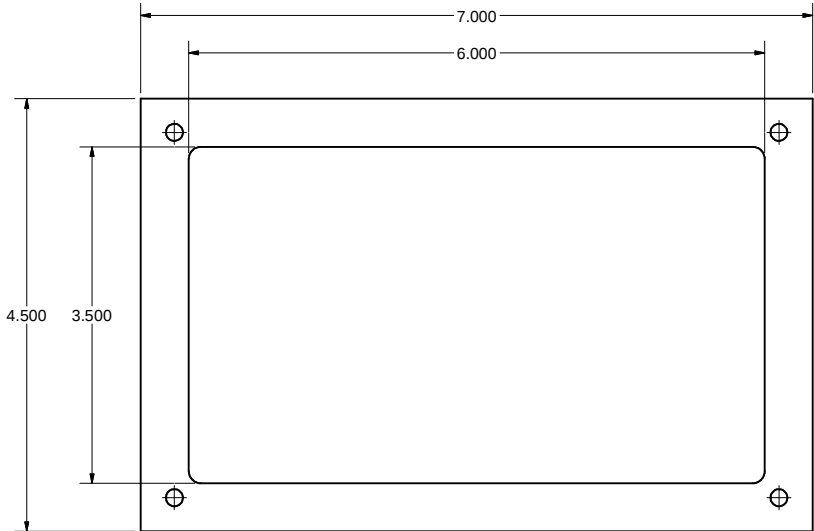
W3	LEPP Stock	Hexagon Socket Head Cap Screw	4					
W2	Sheet 16	Heat Sink	1					
W1	Sheet 16	Rubber Gasket	1					
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.	
			QUANTITY					
PLOT DATE: 12/15/2011								
CAD FILE NAME: 6085-192.idw								
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓		CORNELL UNIVERSITY  LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853						
		6085-192 Time Resolve EC Dipole Chamber						
CHECKED BY: MGB/YLT/IO		DRAWN BY jvc26	DRAWN FOR Mark Palmer	DATE 8/17/2011	SCALE D	6085-192 SH. NO. 15 OF 16	REV.	
APPROVED BY: MAP								

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



W2 Heat Sink and Vacuum Cap

FILE NAME: 6085-192
SHEET NO.: 16
DFT. SCALE: 1 : 1
MATERIAL: 6061-T6 Alum., 1.50 THK
QTY: 1
NOTES:



W1 Rubber Gasket

FILE NAME: 6085-192
SHEET NO.: 16
DFT. SCALE: 1 : 1
MATERIAL:
QTY:
NOTES: TO BE MADE ON FIELD

		ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.	
								QUANTITY				
	PRINT DISTR.	PLOT DATE: 12/15/2011 CAD FILE NAME: 6085-192.idw										
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES			CORNELL UNIVERSITY  LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853							
SH. NO. 16 OF 16 6085-192		6085-192 Time Resolve EC Dipole Chamber										
	REV.	CHECKED BY: MGB/YLT/IO		DRAWN BY jvc26		DRAWN FOR Mark Palmer		DATE 8/17/2011		SCALE D	6085-192	REV.
		APPROVED BY: MAP		SH. NO. 16 OF 16								