FERMILAB Technical Division

QUALITY CONTROL REPORT

DATE=1/22/2009 TIME=4:14:30 PM

PART NAME : ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG
REV NUMBER :
SER NUMBER :
STATS COUNT : 1

'Inspected by ' : Robert Riley
'Cavity Number' : AES001 000 090122

BEAM PIPE FLANGE NEAR

DIM LOC1= LOCATION OF PLANE PL-NEAR-END-FLANGE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	0.000	0.000	0.000	0.200	0.200	0.000	----#----
V	-0.000	-1.000	0.003				
FL	0.000	0.042	0.042	0.200	0.000	0.000	-#-------

DIM PARL1= PARALLELISM OF PLANE PL-NEAR-END-FLANGE,RFS TO WORKPLANE YMINUS UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.340	0.340	0.200	0.000	0.140	-------->

DIM ANGL1= 3D ANGLE (COMPLEMENT) FROM PLANE PL-NEAR-END-FLANGE TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	0.000	0.161	0.161	0.100	0.100	0.061	-------->

DIM LOC2= LOCATION OF CIRCLE CR-NEAR-END -FLANGE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.073	-0.073	0.200	0.200	0.000	--#------
Z	0.000	0.425	0.425	0.200	0.200	0.225	-------->
D	140.000	140.019	0.019	0.300	0.300	0.000	----#----
RN	0.000	0.011	0.011	0.200	0.000	0.000	#--------

BEAM PIPE FLANGE FAR

DIM LOC3= LOCATION OF PLANE PL-FAR-END UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	1283.400	1280.035	-3.365	3.000	3.000	0.365	<--------
V	-0.001	1.000	0.000				
FL	0.000	0.060	0.060	0.200	0.000	0.000	--#------

DIM PARL2= PARALLELISM OF PLANE PL-FAR-END,RFS TO WORKPLANE YMINUS UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.192	0.192	0.200	0.000	0.000	--------#

DIM ANGL2= 3D ANGLE (COMPLEMENT) FROM PLANE PL-FAR-END TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	0.000	0.078	0.078	0.100	0.100	0.000	--------#

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC4= LOCATION OF CIRCLE CR-FAR-END UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.071	-0.071	0.200	0.200	0.000	--#------
Z	0.000	0.020	0.020	0.200	0.200	0.000	----#----
D	140.000	139.706	-0.294	0.300	0.300	0.000	#--------
RN	0.000	0.036	0.036	0.200	0.000	0.000	-#-------

DATUM-1-PLANE

DIM LOC-DATUM-1-PLANE= LOCATION OF PLANE PLC-DAT-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	128.800	128.357	-0.443	0.200	0.200	0.243	<--------
V	0.004	-1.000	0.001				
FL	0.000	0.094	0.094	0.200	0.000	0.000	----#----

DIM PARL5= PARALLELISM OF PLANE PLC-DAT-1,RFS TO WORKPLANE YMINUS UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.464	0.464	0.200	0.000	0.264	-------->

DIM ANGL7= 3D ANGLE (TRUE) FROM PLANE PLC-DAT-1 TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	0.000	0.252	0.252	0.100	0.100	0.152	-------->

DATUM-2-PLANE

DIM LOC-DATUM-2-PLANE= LOCATION OF PLANE PLC-DAT-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	1190.000	1186.618	-3.382	0.200	0.200	3.182	<--------
V	0.002	1.000	0.002				
FL	0.000	0.071	0.071	0.200	0.000	0.000	---#-----

DIM PARL6= PARALLELISM OF PLANE PLC-DAT-2,RFS TO WORKPLANE YMINUS UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.267	0.267	0.200	0.000	0.067	-------->

DIM ANGL8= 3D ANGLE (TRUE) FROM PLANE PLC-DAT-2 TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	0.000	0.137	0.137	0.100	0.100	0.037	-------->

PICKUP ANTENNA FLANGE NW8

DIM LOC5= LOCATION OF PLANE PL-NW8-ANTENNA-FLANGE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-53.800	-54.121	-0.321	0.200	0.200	0.121	<--------
V	-1.000	-0.002	-0.001				
FL	0.000	0.002	0.002	0.200	0.000	0.000	#--------

DIM PARL3= PARALLELISM OF PLANE PL-NW8-ANTENNA-FLANGE,RFS TO WORKPLANE XMINUS UNITS =MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.062	0.062	0.200	0.000	0.000	--#------

DIM ANGL3= 3D ANGLE (TRUE) FROM PLANE PL-NW8-ANTENNA-FLANGE TO XAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

A	0.000	0.139	0.139	0.100	0.100	0.039	-------->

DIM LOC6= LOCATION OF CIRCLE CR-NW8-ANTENNA-FLANGE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	96.600	96.498	-0.102	0.200	0.200	0.000	--#------
Z	0.000	0.338	0.338	0.200	0.200	0.138	-------->
D	33.800	33.797	-0.003	0.150	0.000	0.003	<--------
RN	0.000	0.013	0.013	0.150	0.000	0.000	#--------

MAIN COUPLER FLANGE NW40

DIM LOC7= LOCATION OF PLANE PL-NW-40-FLANGE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	88.000	88.025	0.025	0.200	0.200	0.000	-----#---
V	1.000	0.003	0.001				
FL	0.000	0.030	0.030	0.200	0.000	0.000	-#-------

DIM PARL4= PARALLELISM OF PLANE PL-NW-40-FLANGE,RFS TO WORKPLANE XMINUS UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.193	0.193	0.200	0.000	0.000	--------#

DIM ANGL4= 3D ANGLE (TRUE) FROM PLANE PL-NW-40-FLANGE TO XAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	0.000	0.167	0.167	0.100	0.100	0.067	-------->

DIM LOC8= LOCATION OF CIRCLE CR-NW-40-FLANGE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	1222.800	1219.309	-3.491	0.200	0.200	3.291	<--------
Z	0.000	0.395	0.395	0.200	0.200	0.195	-------->
D	76.000	76.025	0.025	0.200	0.000	0.000	-#-------
RN	0.000	0.010	0.010	0.200	0.000	0.000	#--------

DIM DIST1= 2D DISTANCE FROM CIRCLE CR-NW-40-FLANGE TO PLANE PL-FAR-END PAR TO YAXI
S, NO RADIUS UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	60.600	60.727	0.127	0.200	0.200	0.000	-------#-

HOM-2 FLANGE NW12

DIM FLAT4= FLATNESS OF PLANE PL-NW12-HOM-FLANGE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.002	0.002	0.200	0.000	0.000	#--------

DIM ANGL5= 2D ANGLE (COMPLEMENT) FROM PLANE PL-NW12-HOM-FLANGE TO ZAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	15.000	18.596	3.596	0.500	0.500	3.096	-------->

DIM ANGL6= 2D ANGLE (TRUE) FROM PLANE PL-NW12-HOM-FLANGE TO ZAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	35.000	34.986	-0.014	0.500	0.500	0.000	----#----

DIM LOC9= LOCATION OF CIRCLE CR-NW12-HOM-FLANGE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-72.363	-72.363	100.000	100.000	0.000	-#-------
Y	0.000	1223.147	1223.147	2000.000	2000.000	0.000	-------#-
Z	0.000	-8.874	-8.874	100.000	100.000	0.000	----#----
D	33.800	33.837	0.037	0.150	0.000	0.000	--#------
RN	0.000	0.012	0.012	0.150	0.000	0.000	#--------

HOM 1 LOCATION

DIM LOC-HOM1= LOCATION OF CYLINDER CY-HOM-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	68.937	68.937	100.000	100.000	0.000	-------#-
Y	96.600	96.392	-0.208	0.200	0.200	0.008	<--------
Z	0.000	-40.122	-40.122	100.000	100.000	0.000	--#------
D	44.000	43.804	-0.196	0.000	0.100	0.096	<--------
RN	0.000	0.111	0.111	0.100	0.000	0.011	-------->
V	-0.862	0.001	0.507				

DIM ANGL9= 3D ANGLE (COMPLEMENT) FROM CYLINDER CY-HOM-1 TO XAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	30.000	30.431	0.431	0.500	0.500	0.000	--------#

DIM ANGL10= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	90.000	89.965	-0.035	0.500	0.500	0.000	----#----

DIM ANGL11= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO ZAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	60.000	59.569	-0.431	0.500	0.500	0.000	#--------

DIM LOC-HOM3= LOCATION OF POINT PT-RT-HOM-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	116.000	116.189	0.189	0.200	0.200	0.000	--------#

INTERSECTION OF HOM1 & YZ PLANE

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-HOM1 X PLANE= LOCATION OF POINT PTC-HOM1 X YZ PLANE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.000	0.000	0.200	0.200	0.000	----#----
Y	96.600	96.442	-0.158	0.200	0.200	0.000	#--------
Z	0.000	0.374	0.374	0.200	0.200	0.174	-------->

HOM 2 LOCATION

DIM LOC-HOM2= LOCATION OF CYLINDER CY-HOM-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-64.433	-64.433	100.000	100.000	0.000	-#-------
Y	1222.800	1219.337	-3.463	3.000	3.000	0.463	<--------
Z	0.000	-45.633	-45.633	100.000	100.000	0.000	--#------
D	44.000	43.804	-0.196	0.000	0.100	0.096	<--------
RN	0.000	0.145	0.145	0.100	0.000	0.045	-------->
V	-0.818	-0.000	-0.575				

DIM DIST2= 2D DISTANCE FROM POINT PT-HOM-2 TO PLANE PL-FAR-END PAR TO YAXIS, NO_RA
DIUS UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	60.600	59.733	-0.867	0.200	0.200	0.667	<--------

DIM ANGL12= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-2 TO XAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	35.000	35.132	0.132	0.500	0.500	0.000	-----#---

DIM ANGL13= 3D ANGLE (COMPLEMENT) FROM CYLINDER CY-HOM-2 TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	90.000	90.013	0.013	0.500	0.500	0.000	----#----

DIM ANGL14= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-2 TO ZAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	55.000	54.868	-0.132	0.500	0.500	0.000	---#-----

DIM LOC-HOM4= LOCATION OF POINT PT-HOM-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	116.000	116.369	0.369	0.200	0.200	0.169	-------->

INTERSECTION OF HOM2 & YZ PLANE

DIM LOC-HOM2 X PLANE= LOCATION OF POINT PTC-HOM2 X YZ PLANE UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.000	0.000	0.200	0.200	0.000	----#----
Y	1222.800	1219.355	-3.445	3.000	3.000	0.445	<--------
Z	0.000	-0.296	-0.296	0.200	0.200	0.096	<--------

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

LOCATIONS OF CONSTRUCTED CIRCLES
ON 18 HALF CELLS & 2 DATUM SURFACES & 2 VACUUM SURFACES

DIM LOC-CC1= LOCATION OF CIRCLE CRC-DAT-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.000	0.000	0.200	0.200	0.000	----#----
Y	0.000	130.414	130.414	2000.000	2000.000	0.000	----#----
Z	0.000	0.000	0.000	0.200	0.200	0.000	----#----
D	111.000	110.732	-0.267	0.200	0.200	0.067	<--------
RN	0.000	0.049	0.049	0.200	0.000	0.000	--#------

DIM LOC-CC2= LOCATION OF CIRCLE CRC-VAC-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.135	-0.135	0.200	0.200	0.000	-#-------
Y	0.000	158.668	158.668	2000.000	2000.000	0.000	----#----
Z	0.000	-0.002	-0.002	0.200	0.200	0.000	----#----
D	191.200	191.231	0.030	0.200	0.200	0.000	-----#---
RN	0.000	0.102	0.102	0.200	0.000	0.000	----#----

DIM LOC-CC3= LOCATION OF CIRCLE CRC-CAV-1-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.244	-0.244	0.200	0.200	0.044	<--------
Y	0.000	193.593	193.593	2000.000	2000.000	0.000	----#----
Z	0.000	-0.083	-0.083	0.200	0.200	0.000	--#------
D	210.300	211.067	0.767	0.200	0.200	0.567	-------->
RN	0.000	0.174	0.174	0.200	0.000	0.000	-------#-

DIM LOC-CC4= LOCATION OF CIRCLE CRC-CAV-1-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.294	-0.294	0.200	0.200	0.094	<--------
Y	0.000	202.239	202.239	2000.000	2000.000	0.000	----#----
Z	0.000	-0.096	-0.096	0.200	0.200	0.000	--#------
D	210.300	211.030	0.730	0.200	0.200	0.530	-------->
RN	0.000	0.112	0.112	0.200	0.000	0.000	-----#---

DIM LOC-CC5= LOCATION OF CIRCLE CRC-CAV-2-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.376	-0.377	0.200	0.200	0.177	<--------
Y	0.000	308.903	308.903	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.352	-0.352	0.200	0.200	0.152	<--------
D	210.300	211.041	0.741	0.200	0.200	0.541	-------->
RN	0.000	0.275	0.275	0.200	0.000	0.075	-------->

DIM LOC-CC6= LOCATION OF CIRCLE CRC-CAV-2-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.354	-0.354	0.200	0.200	0.154	<--------
Y	0.000	317.642	317.642	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.315	-0.315	0.200	0.200	0.115	<--------
D	210.300	211.002	0.702	0.200	0.200	0.502	-------->
RN	0.000	0.222	0.222	0.200	0.000	0.022	-------->

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-CC7= LOCATION OF CIRCLE CRC-CAV-3-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.382	-0.382	0.200	0.200	0.182	<--------
Y	0.000	423.764	423.764	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.508	-0.508	0.200	0.200	0.308	<--------
D	210.300	211.063	0.763	0.200	0.200	0.563	-------->
RN	0.000	0.295	0.295	0.200	0.000	0.095	-------->

DIM LOC-CC8= LOCATION OF CIRCLE CRC-CAV-3-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.357	-0.357	0.200	0.200	0.157	<--------
Y	0.000	432.250	432.250	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.538	-0.538	0.200	0.200	0.338	<--------
D	210.300	211.015	0.714	0.200	0.200	0.514	-------->
RN	0.000	0.200	0.200	0.200	0.000	0.000	--------#

DIM LOC-CC9= LOCATION OF CIRCLE CRC-CAV-4-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.325	-0.325	0.200	0.200	0.125	<--------
Y	0.000	539.322	539.322	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.664	-0.665	0.200	0.200	0.465	<--------
D	210.300	211.129	0.828	0.200	0.200	0.628	-------->
RN	0.000	0.245	0.245	0.200	0.000	0.045	-------->

DIM LOC-CC10= LOCATION OF CIRCLE CRC-CAV-4-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.301	-0.301	0.200	0.200	0.101	<--------
Y	0.000	547.549	547.549	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.652	-0.652	0.200	0.200	0.452	<--------
D	210.300	211.027	0.726	0.200	0.200	0.526	-------->
RN	0.000	0.218	0.218	0.200	0.000	0.018	-------->

DIM LOC-CC11= LOCATION OF CIRCLE CRC-CAV-5-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.384	-0.384	0.200	0.200	0.184	<--------
Y	0.000	653.609	653.609	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.648	-0.648	0.200	0.200	0.448	<--------
D	210.300	211.273	0.973	0.200	0.200	0.773	-------->
RN	0.000	0.106	0.106	0.200	0.000	0.000	----#----

DIM LOC-CC12= LOCATION OF CIRCLE CRC-CAV-5-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.341	-0.341	0.200	0.200	0.141	<--------
Y	0.000	662.292	662.292	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.635	-0.635	0.200	0.200	0.435	<--------
D	210.300	211.156	0.856	0.200	0.200	0.656	-------->
RN	0.000	0.344	0.344	0.200	0.000	0.144	-------->

DIM LOC-CC13= LOCATION OF CIRCLE CRC-CAV-6-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.391	-0.391	0.200	0.200	0.191	<--------
Y	0.000	768.961	768.961	2000.000	2000.000	0.000	------#--
Z	0.000	-0.533	-0.533	0.200	0.200	0.333	<--------
D	210.300	211.114	0.814	0.200	0.200	0.614	-------->
RN	0.000	0.103	0.103	0.200	0.000	0.000	----#----

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-CC14= LOCATION OF CIRCLE CRC-CAV-6-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.390	-0.390	0.200	0.200	0.190	<--------
Y	0.000	777.795	777.795	2000.000	2000.000	0.000	------#--
Z	0.000	-0.531	-0.531	0.200	0.200	0.331	<--------
D	210.300	211.002	0.702	0.200	0.200	0.502	-------->
RN	0.000	0.319	0.319	0.200	0.000	0.119	-------->

DIM LOC-CC15= LOCATION OF CIRCLE CRC-CAV-7-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.364	-0.364	0.200	0.200	0.164	<--------
Y	0.000	884.004	884.004	2000.000	2000.000	0.000	------#--
Z	0.000	-0.423	-0.423	0.200	0.200	0.223	<--------
D	210.300	211.075	0.774	0.200	0.200	0.574	-------->
RN	0.000	0.199	0.199	0.200	0.000	0.000	--------#

DIM LOC-CC16= LOCATION OF CIRCLE CRC-CAV-7-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.376	-0.376	0.200	0.200	0.176	<--------
Y	0.000	892.661	892.661	2000.000	2000.000	0.000	------#--
Z	0.000	-0.421	-0.422	0.200	0.200	0.222	<--------
D	210.300	211.046	0.746	0.200	0.200	0.546	-------->
RN	0.000	0.229	0.229	0.200	0.000	0.029	-------->

DIM LOC-CC17= LOCATION OF CIRCLE CRC-CAV-8-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.292	-0.292	0.200	0.200	0.092	<--------
Y	0.000	999.475	999.475	2000.000	2000.000	0.000	------#--
Z	0.000	-0.212	-0.212	0.200	0.200	0.012	<--------
D	210.300	211.080	0.779	0.200	0.200	0.579	-------->
RN	0.000	0.247	0.247	0.200	0.000	0.047	-------->

DIM LOC-CC18= LOCATION OF CIRCLE CRC-CAV-8-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.254	-0.254	0.200	0.200	0.054	<--------
Y	0.000	1008.197	1008.197	2000.000	2000.000	0.000	------#--
Z	0.000	-0.150	-0.150	0.200	0.200	0.000	-#-------
D	210.300	210.995	0.694	0.200	0.200	0.494	-------->
RN	0.000	0.195	0.195	0.200	0.000	0.000	--------#

DIM LOC-CC19= LOCATION OF CIRCLE CRC-CAV-9-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.227	-0.227	0.200	0.200	0.027	<--------
Y	0.000	1114.308	1114.308	2000.000	2000.000	0.000	-------#-
Z	0.000	0.018	0.018	0.200	0.200	0.000	----#----
D	210.300	211.114	0.813	0.200	0.200	0.613	-------->
RN	0.000	0.249	0.249	0.200	0.000	0.049	-------->

DIM LOC-CC20= LOCATION OF CIRCLE CRC-CAV-9-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.242	-0.242	0.200	0.200	0.042	<--------
Y	0.000	1122.816	1122.816	2000.000	2000.000	0.000	-------#-
Z	0.000	-0.071	-0.071	0.200	0.200	0.000	--#------
D	210.300	210.910	0.610	0.200	0.200	0.410	-------->
RN	0.000	0.211	0.211	0.200	0.000	0.011	-------->

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-CC21= LOCATION OF CIRCLE CRC-VAC-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.068	-0.069	0.200	0.200	0.000	--#------
Y	0.000	1153.698	1153.698	2000.000	2000.000	0.000	-------#-
Z	0.000	-0.057	-0.057	0.200	0.200	0.000	---#-----
D	200.000	200.087	0.087	0.200	0.200	0.000	------#--
RN	0.000	0.180	0.180	0.200	0.000	0.000	--------#

DIM LOC-CC22= LOCATION OF CIRCLE CRC-DAT-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.000	0.000	0.200	0.200	0.000	----#----
Y	0.000	1184.576	1184.576	2000.000	2000.000	0.000	-------#-
Z	0.000	0.000	0.000	0.200	0.200	0.000	----#----
D	111.000	110.814	-0.185	0.200	0.200	0.000	#--------
RN	0.000	0.072	0.072	0.200	0.000	0.000	---#-----

TRUE POSITIONS OF CONSTRUCTED CIRCLES
ON 18 HALF CELLS & 2 DATUM SURFACES & 2 VACUUM SURFACES

DIM LOC-TP-CC1= TRUE POSITION OF CIRCLE CRC-DAT-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.000	0.000					
Z	0.000	0.000	0.000					
TP	RFS		0.000	0.200		0.000	0.000	#---

DIM LOC-TP-CC2= TRUE POSITION OF CIRCLE CRC-VAC-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.135	-0.135					
Z	0.000	-0.002	-0.002					
TP	RFS		0.269	0.200		0.000	0.069	----

---->

DIM LOC-TP-CC3= TRUE POSITION OF CIRCLE CRC-CAV-1-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.244	-0.244					
Z	0.000	-0.083	-0.083					
TP	RFS		0.515	0.200		0.000	0.315	----

---->

DIM LOC-TP-CC4= TRUE POSITION OF CIRCLE CRC-CAV-1-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.294	-0.294					
Z	0.000	-0.096	-0.096					
TP	RFS		0.618	0.200		0.000	0.418	----

---->

DIM LOC-TP-CC5= TRUE POSITION OF CIRCLE CRC-CAV-2-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.376	-0.377					
Z	0.000	-0.352	-0.352					
TP	RFS		1.031	0.200		0.000	0.831	----

---->

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-TP-CC6= TRUE POSITION OF CIRCLE CRC-CAV-2-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.354	-0.354					
Z	0.000	-0.315	-0.315					
TP	RFS		0.948	0.200		0.000	0.748	---->

DIM LOC-TP-CC7= TRUE POSITION OF CIRCLE CRC-CAV-3-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.382	-0.382					
Z	0.000	-0.508	-0.508					
TP	RFS		1.271	0.200		0.000	1.071	---->

DIM LOC-TP-CC8= TRUE POSITION OF CIRCLE CRC-CAV-3-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.357	-0.357					
Z	0.000	-0.538	-0.538					
TP	RFS		1.292	0.200		0.000	1.092	---->

DIM LOC-TP-CC9= TRUE POSITION OF CIRCLE CRC-CAV-4-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.325	-0.325					
Z	0.000	-0.664	-0.665					
TP	RFS		1.480	0.200		0.000	1.280	---->

DIM LOC-TP-CC10= TRUE POSITION OF CIRCLE CRC-CAV-4-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.301	-0.301					
Z	0.000	-0.652	-0.652					
TP	RFS		1.437	0.200		0.000	1.237	---->

DIM LOC-TP-CC11= TRUE POSITION OF CIRCLE CRC-CAV-5-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.384	-0.384					
Z	0.000	-0.648	-0.648					
TP	RFS		1.506	0.200		0.000	1.306	---->

DIM LOC-TP-CC12= TRUE POSITION OF CIRCLE CRC-CAV-5-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.341	-0.341					
Z	0.000	-0.635	-0.635					
TP	RFS		1.442	0.200		0.000	1.242	---->

DIM LOC-TP-CC13= TRUE POSITION OF CIRCLE CRC-CAV-6-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.391	-0.391					
Z	0.000	-0.533	-0.533					
TP	RFS		1.321	0.200		0.000	1.121	---->

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-TP-CC14= TRUE POSITION OF CIRCLE CRC-CAV-6-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.390	-0.390					
Z	0.000	-0.531	-0.531					
TP	RFS		1.318	0.200		0.000	1.118	---->

DIM LOC-TP-CC15= TRUE POSITION OF CIRCLE CRC-CAV-7-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.364	-0.364					
Z	0.000	-0.423	-0.423					
TP	RFS		1.116	0.200		0.000	0.916	---->

DIM LOC-TP-CC16= TRUE POSITION OF CIRCLE CRC-CAV-7-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.376	-0.376					
Z	0.000	-0.421	-0.422					
TP	RFS		1.130	0.200		0.000	0.930	---->

DIM LOC-TP-CC17= TRUE POSITION OF CIRCLE CRC-CAV-8-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.292	-0.292					
Z	0.000	-0.212	-0.212					
TP	RFS		0.723	0.200		0.000	0.523	---->

DIM LOC-TP-CC18= TRUE POSITION OF CIRCLE CRC-CAV-8-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.254	-0.254					
Z	0.000	-0.150	-0.150					
TP	RFS		0.590	0.200		0.000	0.390	---->

DIM LOC-TP-CC19= TRUE POSITION OF CIRCLE CRC-CAV-9-1 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.227	-0.227					
Z	0.000	0.018	0.018					
TP	RFS		0.456	0.200		0.000	0.256	---->

DIM LOC-TP-CC20= TRUE POSITION OF CIRCLE CRC-CAV-9-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.242	-0.242					
Z	0.000	-0.071	-0.071					
TP	RFS		0.505	0.200		0.000	0.305	---->

DIM LOC-TP-CC21= TRUE POSITION OF CIRCLE CRC-VAC-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.068	-0.069					
Z	0.000	-0.057	-0.057					
TP	RFS		0.178	0.200		0.000	0.000	----#

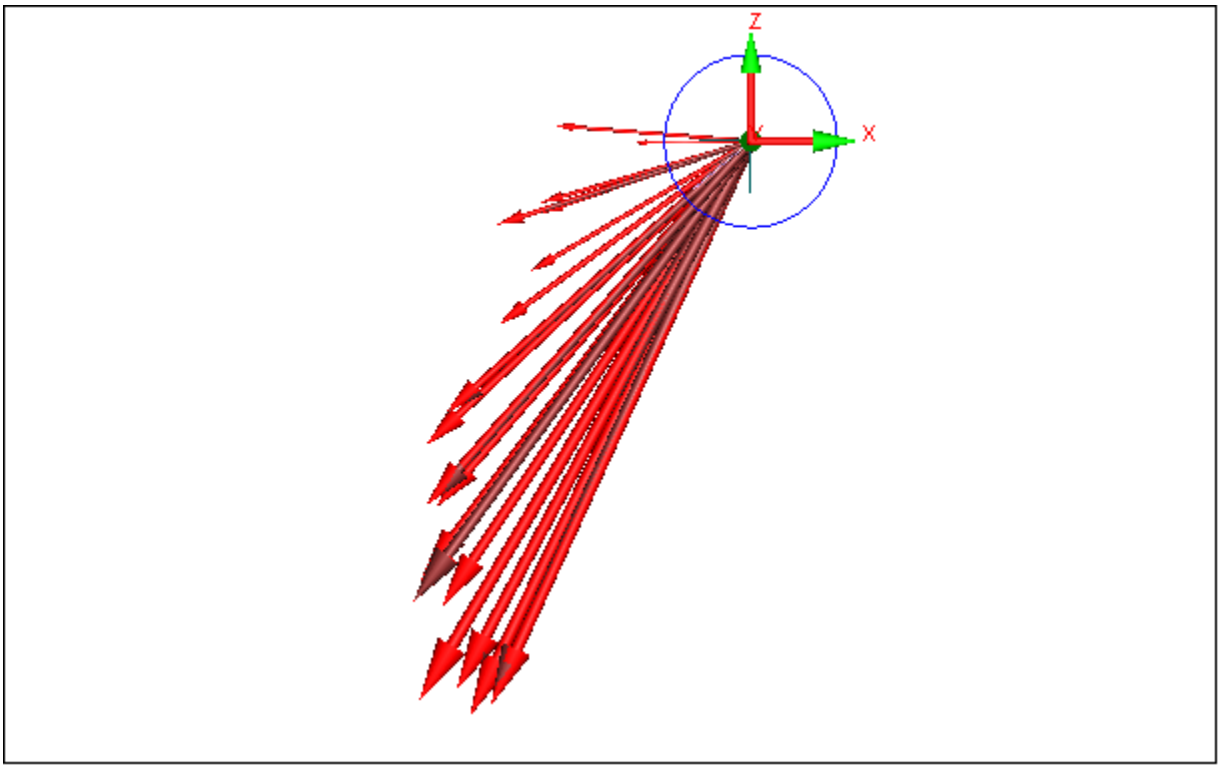
PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-TP-CC22= TRUE POSITION OF CIRCLE CRC-DAT-2 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.000	0.000				
Z	0.000	0.000	0.000				
TP	RFS		0.000	0.200		0.000	0.000 #---

True Position plots from 3 views

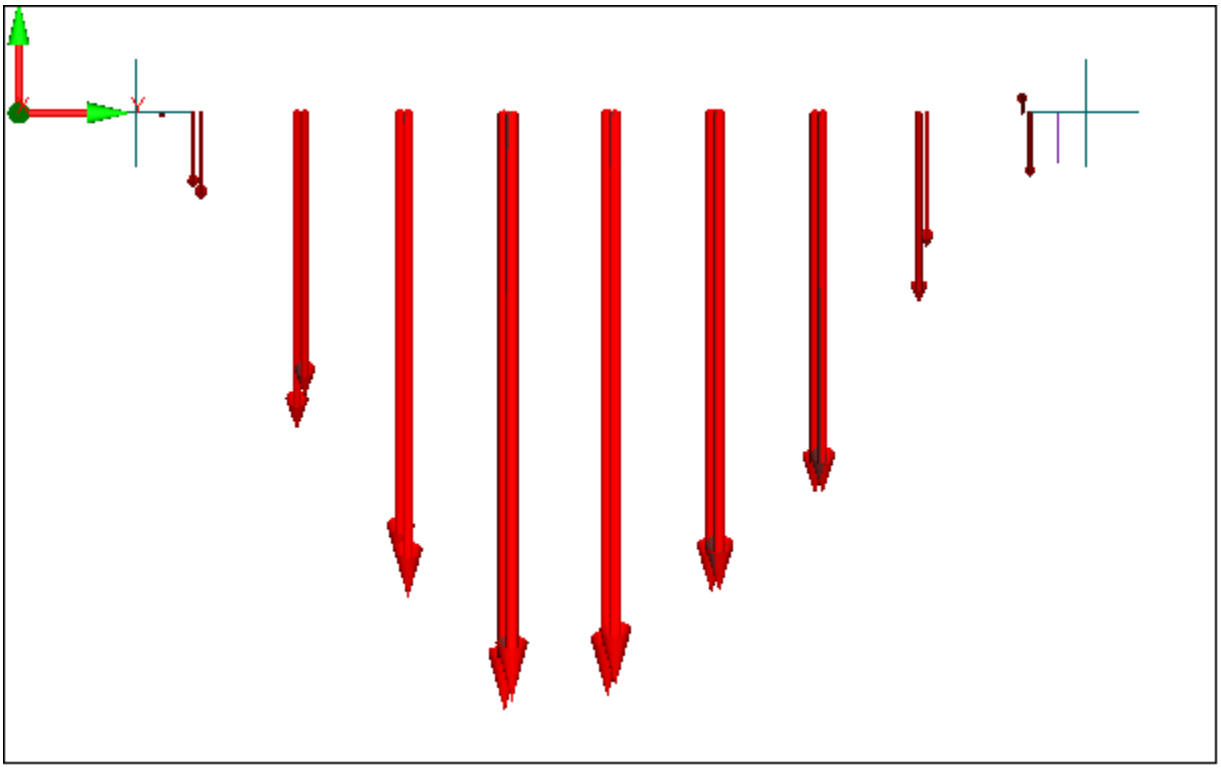
x1000



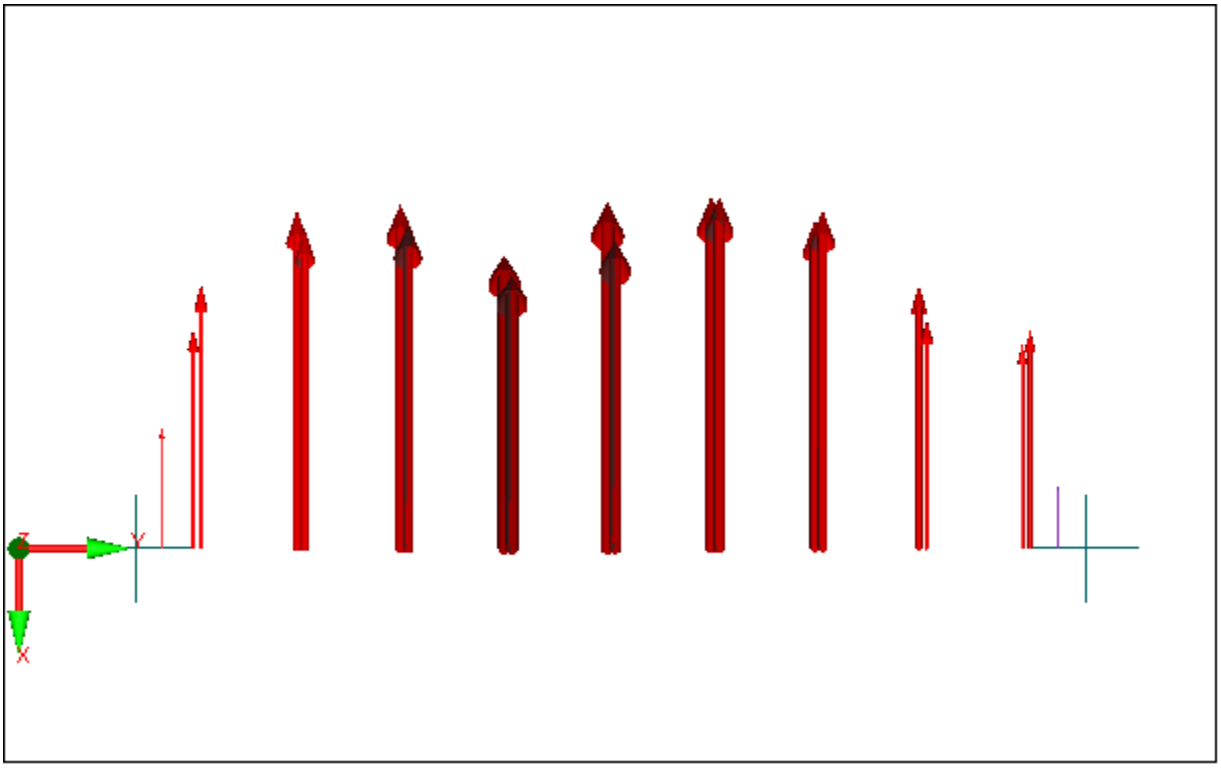
-Y View

x1000

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:



+X View
x1000



+Z View
x1000

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-BEST FIT CONSTRUCTED LINE= LOCATION OF LINE LNC-BEST-FIT UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.277	-0.277	0.200	0.200	0.077	<--------
Y	0.000	658.034	658.034	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.312	-0.313	0.200	0.200	0.113	<--------
ST	0.000	0.800	0.800	0.200	0.000	0.600	-------->

SUPPORT RING CIRCLE LOCATIONS

DIM LOC-SUPPORT RING-1= LOCATION OF CIRCLE CR-SUPPORT-RING-T12 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.632	-0.632	0.200	0.200	0.432	<--------
Y	0.000	255.628	255.628	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.271	-0.272	0.200	0.200	0.072	<--------
R	56.500	56.465	-0.035	0.200	0.200	0.000	---#-----
RN	0.000	0.095	0.095	0.200	0.000	0.000	----#----

DIM LOC-SUPPORT RING-2= LOCATION OF CIRCLE CR-SUPPORT-RING-T23 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-1.054	-1.054	0.200	0.200	0.854	<--------
Y	0.000	370.957	370.957	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.411	-0.411	0.200	0.200	0.211	<--------
R	56.500	56.208	-0.292	0.200	0.200	0.092	<--------
RN	0.000	0.180	0.180	0.200	0.000	0.000	--------#

DIM LOC-SUPPORT RING-3= LOCATION OF CIRCLE CR-SUPPORT-RING-T34 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.304	0.304	0.200	0.200	0.104	-------->
Y	0.000	486.292	486.292	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.649	-0.649	0.200	0.200	0.449	<--------
R	56.500	57.231	0.731	0.200	0.200	0.531	-------->
RN	0.000	0.008	0.008	0.200	0.000	0.000	#--------

DIM LOC-SUPPORT RING-4= LOCATION OF CIRCLE CR-SUPPORT-RING-T45 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.468	-0.469	0.200	0.200	0.269	<--------
Y	0.000	601.622	601.622	2000.000	2000.000	0.000	-----#---
Z	0.000	-0.654	-0.654	0.200	0.200	0.454	<--------
R	56.500	56.537	0.037	0.200	0.200	0.000	-----#---
RN	0.000	0.020	0.020	0.200	0.000	0.000	#--------

DIM LOC-SUPPORT RING-5= LOCATION OF CIRCLE CR-SUPPORT-RING-T56 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.042	-0.042	0.200	0.200	0.000	---#-----
Y	0.000	716.730	716.730	2000.000	2000.000	0.000	------#--
Z	0.000	-0.680	-0.680	0.200	0.200	0.480	<--------
R	56.500	56.911	0.411	0.200	0.200	0.211	-------->
RN	0.000	0.016	0.016	0.200	0.000	0.000	#--------

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-SUPPORT RING-6= LOCATION OF CIRCLE CR-SUPPORT-RING-T67 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.419	-0.419	0.200	0.200	0.219	<--------
Y	0.000	831.930	831.930	2000.000	2000.000	0.000	------#--
Z	0.000	-0.524	-0.524	0.200	0.200	0.324	<--------
R	56.500	56.599	0.099	0.200	0.200	0.000	------#--
RN	0.000	0.021	0.021	0.200	0.000	0.000	#--------

DIM LOC-SUPPORT RING-7= LOCATION OF CIRCLE CR-SUPPORT-RING-T78 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	-0.996	-0.997	0.200	0.200	0.797	<--------
Y	0.000	947.331	947.331	2000.000	2000.000	0.000	------#--
Z	0.000	-0.279	-0.280	0.200	0.200	0.080	<--------
R	56.500	56.403	-0.097	0.200	0.200	0.000	--#------
RN	0.000	0.144	0.144	0.200	0.000	0.000	------#--

DIM LOC-SUPPORT RING-8= LOCATION OF CIRCLE CR-SUPPORT-RING-T89 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	0.000	0.419	0.418	0.200	0.200	0.218	-------->
Y	0.000	1062.631	1062.631	2000.000	2000.000	0.000	------#--
Z	0.000	-0.364	-0.365	0.200	0.200	0.165	<--------
R	56.500	57.092	0.592	0.200	0.200	0.392	-------->
RN	0.000	0.021	0.021	0.200	0.000	0.000	#--------

SUPPORT RING POINT LOCATIONS

DIM LOC-SUPPORT RING-PT1= LOCATION OF POINT PT-SUPPORT-RING-T12 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.101	-0.601	0.200	0.200	0.401	<--------
Y	0.000	248.931	248.931	2000.000	2000.000	0.000	-----#---
Z	0.000	0.439	0.439	0.200	0.200	0.239	-------->

DIM LOC-SUPPORT RING-PT2= LOCATION OF POINT PT-SUPPORT-RING-T23 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.436	-0.936	0.200	0.200	0.736	<--------
Y	0.000	363.131	363.131	2000.000	2000.000	0.000	-----#---
Z	0.000	0.404	0.404	0.200	0.200	0.204	-------->

DIM LOC-SUPPORT RING-PT3= LOCATION OF POINT PT-SUPPORT-RING-T34 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.071	-0.571	0.200	0.200	0.371	<--------
Y	0.000	477.531	477.531	2000.000	2000.000	0.000	-----#---
Z	0.000	0.367	0.367	0.200	0.200	0.167	-------->

DIM LOC-SUPPORT RING-PT4= LOCATION OF POINT PT-SUPPORT-RING-T45 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.242	-0.742	0.200	0.200	0.542	<--------
Y	0.000	592.831	592.831	2000.000	2000.000	0.000	-----#---
Z	0.000	0.330	0.330	0.200	0.200	0.130	-------->

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC-SUPPORT RING-PT5= LOCATION OF POINT PT-SUPPORT-RING-T56 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.016	-0.516	0.200	0.200	0.316	<--------
Y	0.000	707.831	707.831	2000.000	2000.000	0.000	------#--
Z	0.000	0.294	0.294	0.200	0.200	0.094	-------->

DIM LOC-SUPPORT RING-PT6= LOCATION OF POINT PT-SUPPORT-RING-T67 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.288	-0.788	0.200	0.200	0.588	<--------
Y	0.000	823.131	823.131	2000.000	2000.000	0.000	------#--
Z	0.000	0.258	0.258	0.200	0.200	0.058	-------->

DIM LOC-SUPPORT RING-PT7= LOCATION OF POINT PT-SUPPORT-RING-T78 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.617	-1.117	0.200	0.200	0.917	<--------
Y	0.000	938.431	938.431	2000.000	2000.000	0.000	------#--
Z	0.000	0.222	0.222	0.200	0.200	0.022	-------->

DIM LOC-SUPPORT RING-PT8= LOCATION OF POINT PT-SUPPORT-RING-T89 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-56.780	-0.280	0.200	0.200	0.080	<--------
Y	0.000	1053.831	1053.831	2000.000	2000.000	0.000	------#--
Z	0.000	0.184	0.184	0.200	0.200	0.000	--------#

SUPPORT RING CIRCLES IN Z

DIM LOC Z SUPPORT RING CIRCLES 1= LOCATION OF CIRCLE CR-SUPPORT-RING-T12 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	0.000	-0.271	-0.272	0.200	0.200	0.072	<--------

DIM LOC Z SUPPORT RING CIRCLES 2= LOCATION OF CIRCLE CR-SUPPORT-RING-T23 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	0.000	-0.411	-0.411	0.200	0.200	0.211	<--------

DIM LOC Z SUPPORT RING CIRCLES 3= LOCATION OF CIRCLE CR-SUPPORT-RING-T34 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	0.000	-0.649	-0.649	0.200	0.200	0.449	<--------

DIM LOC Z SUPPORT RING CIRCLES 4= LOCATION OF CIRCLE CR-SUPPORT-RING-T45 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	0.000	-0.654	-0.654	0.200	0.200	0.454	<--------

DIM LOC Z SUPPORT RING CIRCLES 5= LOCATION OF CIRCLE CR-SUPPORT-RING-T56 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	0.000	-0.680	-0.680	0.200	0.200	0.480	<--------

DIM LOC Z SUPPORT RING CIRCLES 6= LOCATION OF CIRCLE CR-SUPPORT-RING-T67 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	0.000	-0.524	-0.524	0.200	0.200	0.324	<--------

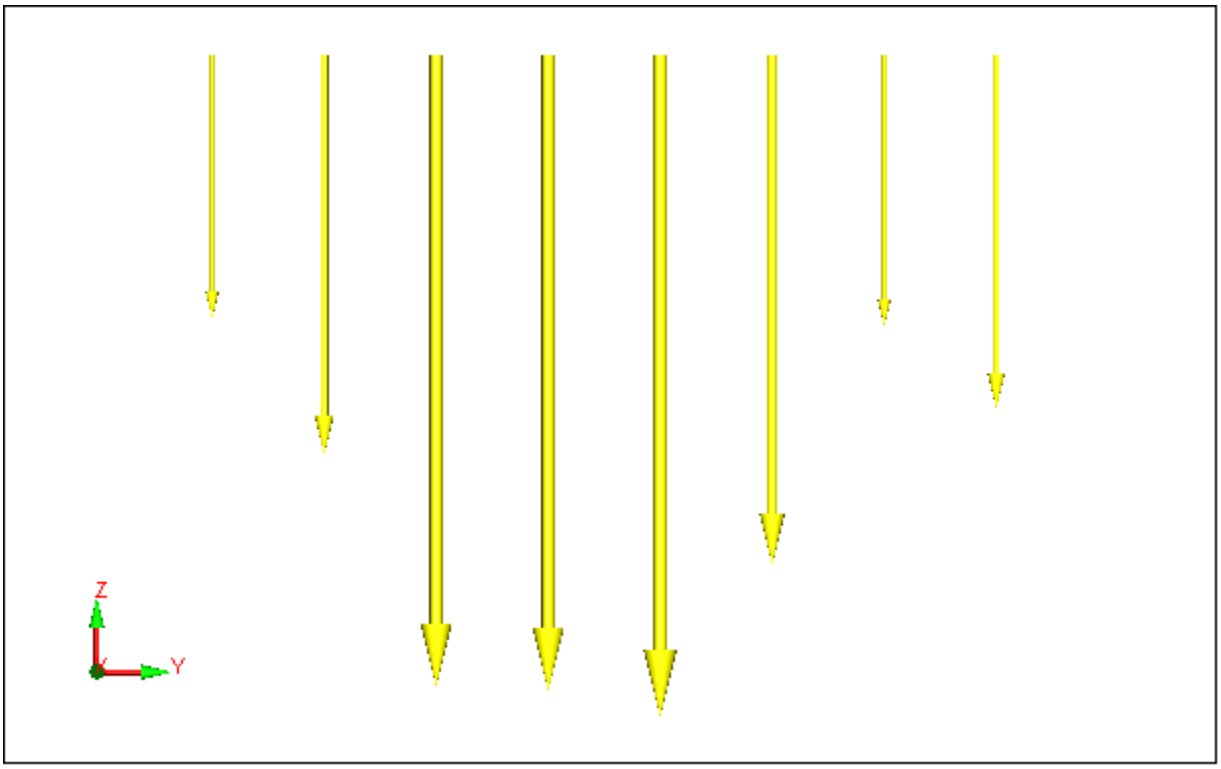
DIM LOC Z SUPPORT RING CIRCLES 7= LOCATION OF CIRCLE CR-SUPPORT-RING-T78 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	0.000	-0.279	-0.280	0.200	0.200	0.080	<--------

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC Z SUPPORT RING CIRCLES 8= LOCATION OF CIRCLE CR-SUPPORT-RING-T89 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Z	0.000	-0.364	-0.365	0.200	0.200	0.165	<--------



SUPPORT RING CIRCLES IN Z
x1000

SUPPORT RING POINTS IN X

DIM LOC Z SUPPORT RING POINTS 1= LOCATION OF POINT PT-SUPPORT-RING-T12 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.101	-0.601	0.200	0.200	0.401	<--------

DIM LOC Z SUPPORT RING POINTS 2= LOCATION OF POINT PT-SUPPORT-RING-T23 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.436	-0.936	0.200	0.200	0.736	<--------

DIM LOC Z SUPPORT RING POINTS 3= LOCATION OF POINT PT-SUPPORT-RING-T34 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.071	-0.571	0.200	0.200	0.371	<--------

DIM LOC Z SUPPORT RING POINTS 4= LOCATION OF POINT PT-SUPPORT-RING-T45 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.242	-0.742	0.200	0.200	0.542	<--------

DIM LOC Z SUPPORT RING POINTS 5= LOCATION OF POINT PT-SUPPORT-RING-T56 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.016	-0.516	0.200	0.200	0.316	<--------

PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG DATE=1/22/2009 TIME=4:

DIM LOC Z SUPPORT RING POINTS 6= LOCATION OF POINT PT-SUPPORT-RING-T67 UNITS=MM

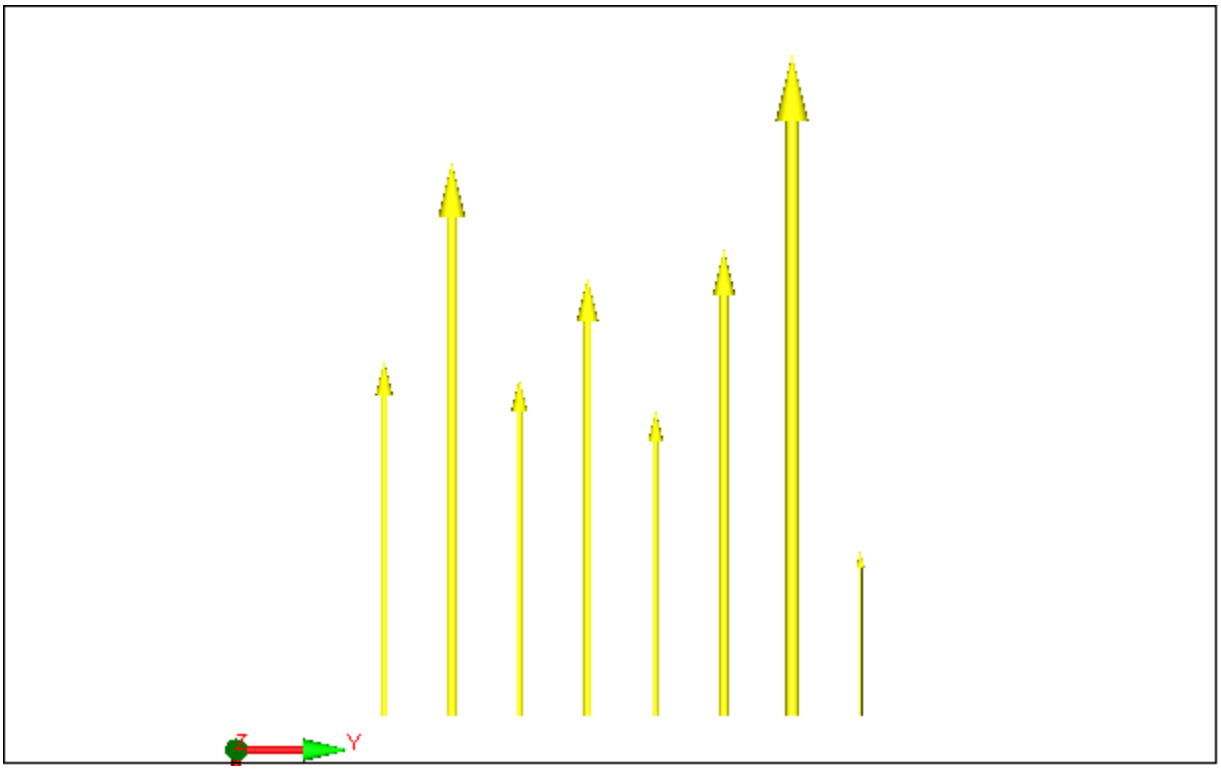
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.288	-0.788	0.200	0.200	0.588	<--------

DIM LOC Z SUPPORT RING POINTS 7= LOCATION OF POINT PT-SUPPORT-RING-T78 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-57.617	-1.117	0.200	0.200	0.917	<--------

DIM LOC Z SUPPORT RING POINTS 8= LOCATION OF POINT PT-SUPPORT-RING-T89 UNITS=MM

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-56.500	-56.780	-0.280	0.200	0.200	0.080	<--------



SUPPORT RING POINTS IN X
x1000

DIM ANGL15= 2D ANGLE (TRUE) FROM LINE LNC-FOR 180 OFFSET TO ZAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
A	15.000	15.423	0.423	0.500	0.500	0.000	--------#

POINTDATA	HIT#	MEAS X	Y	Z	VEC I	J	K	DEVIATION
LNC-FOR 180 OFFSET								
	0	-0.114	-0.019	0.505	0.266	-0.000	0.964	0.517
AX	0	0.000	0.000	0.000	0.000	0.000	1.000	0.000

```
PART NUMBER=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG    DATE=1/22/2009     TIME=4:
(1)  ANGLE I:  0.2659458  -  15.42315996
     ANGLE K:  0.9639880
(4)  ANGLE I:  0.2593126  -  15.02927818
     ANGLE K:  0.9657934
(9)  ANGLE I:  0.2631146  -  15.25495207
     ANGLE K:  0.9647646
(7)  ANGLE I:  0.2588121  -  14.99958804
     ANGLE K:  0.9659277
(6)  ANGLE I:  0.2439225  -  14.11816578
     ANGLE K:  0.9697947



4 distances between vacuum flanges
Starting with Top (+Z), Left (-X), Bottom (-Z), Right (+X)
DIM DIST_VAC1= 2D DISTANCE FROM POINT PT_VAC_1_T TO POINT PT_VAC_2_T PAR TO   YAXIS,
             NO RADIUS  UNITS=MM
AX    MEAS
M     992.077 ---#-----

DIM DIST VAC2= 2D DISTANCE FROM POINT PT VAC 1 L TO POINT PT VAC 2 L PAR TO   YAXIS,
             NO_RADIUS  UNITS=MM
AX    MEAS
M     992.069 ---#-----

DIM DIST_VAC3= 2D DISTANCE FROM POINT PT_VAC_1_B TO POINT PT_VAC_2_B PAR TO   YAXIS,
             NO_RADIUS  UNITS=MM
AX    MEAS
M     992.724 ---#-----

DIM DIST_VAC4= 2D DISTANCE FROM POINT PT_VAC_1_R TO POINT PT_VAC_2_R PAR TO   YAXIS,
             NO_RADIUS  UNITS=MM
AX    MEAS
M     990.785 ---#-----

                           END OF MEASUREMENT FOR
       PN=ILC AES 1.3GHZ RF CAVITY ASSEMBLY-AES001-000-IR.PRG             DWG=
                   SN=
     TOTAL # OF MEAS =0     # OUT OF TOL =0
```