DATE=10/28/2005
PART NAME : ILC DESY 1.3GHZ RF CAVITY ASSEMBLY
REV NUMBER :
SER NUMBER :
STATS COUNT : 1

'Inspected by' : Robert Riley
'Cavity Number' : ACCEL 7 000 RUN 1

BEAM PIPE FLANGE NEAR

MM	DIM LOC1= LOCATION OF PLANE PL-NEAR-END-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.000	0.000	0.200	0.200	0.000
V	0.002	-1.000	-0.001			
FL	0.000	0.018	0.018	0.200	0.000	0.000

// MM	DIM PARL1= PARALLEL OF PLANE PL-NEAR-END-FLANGE,RFS TO WORKPLANE YMINUS EXTEND=0.000					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.299	0.299	0.200	0.000	0.099

DEG	DIM ANGL1= 3D ANGLE (COMPLEMENT) FROM PLANE PL-NEAR-END-FLANGE TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.141	0.141	0.100	0.100	0.041

MM	DIM LOC2= LOCATION OF CIRCLE CR-NEAR-END -FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.139	0.139	0.200	0.200	0.000
Z	0.000	-0.212	-0.212	0.200	0.200	0.012
D	140.000	140.109	0.109	0.300	0.300	0.000
RN	0.000	0.012	0.012	0.200	0.000	0.000

BEAM PIPE FLANGE FAR

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1283.400	1282.421	-0.979	3.000	3.000	0.000
V	-0.001	1.000	0.001			
FL	0.000	0.026	0.026	0.200	0.000	0.000

// MM DIM PARL2= PARALLEL OF PLANE PL-FAR-END,RFS TO WORKPLANE YMINUS EXTEND=0.000

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.178	0.178	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.081	0.081	0.100	0.100	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.161	-0.161	0.200	0.200	0.000
Z	0.000	0.052	0.052	0.200	0.200	0.000
D	140.000	140.120	0.120	0.300	0.300	0.000
RN	0.000	0.010	0.010	0.200	0.000	0.000

DATUM-1-PLANE

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	128.800	129.054	0.254	0.200	0.200	0.054
V	0.001	-1.000	-0.001			
FL	0.000	0.096	0.096	0.200	0.000	0.000

// MM DIM PARL5= PARALLEL OF PLANE PLC-DAT-1,RFS TO WORKPLANE YMINUS EXTEND=0.000

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.165	0.165	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.083	0.083	0.100	0.100	0.000

DATUM-2-PLANE

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1190.000	1188.774	-1.226	0.200	0.200	1.026
V	-0.002	1.000	0.001			
FL	0.000	0.043	0.043	0.200	0.000	0.000

// MM DIM PARL6= PARALLEL OF PLANE PLC-DAT-2,RFS TO WORKPLANE YMINUS EXTEND=0.000

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.198	0.198	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.121	0.121	0.100	0.100	0.021

PICKUP ANTENNA FLANGE NW8

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-53.800	-53.763	0.037	0.200	0.200	0.000
V	-1.000	-0.003	-0.020			
FL	0.000	0.002	0.002	0.200	0.000	0.000

// MM DIM PARL3= PARALLEL OF PLANE PL-NW8-ANTENNA-FLANGE,RFS TO WORKPLANE XMINUS EXTEND=0.000

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.525	0.525	0.200	0.000	0.325

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	1.131	1.131	0.100	0.100	1.031

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	96.600	96.614	0.014	0.200	0.200	0.000
Z	0.000	-1.096	-1.095	0.200	0.200	0.895
D	33.800	33.804	0.004	0.150	0.000	0.000
RN	0.000	0.015	0.015	0.150	0.000	0.000

MAIN COUPLER FLANGE NW40

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	88.000	87.754	-0.246	0.200	0.200	0.046
V	1.000	0.002	-0.002			
FL	0.000	0.022	0.022	0.200	0.000	0.000

// MM DIM PARL4= PARALLEL OF PLANE PL-NW-40-FLANGE,RFS TO WORKPLANE XMINUS EXTEND=0.000

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.169	0.169	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.154	0.154	0.100	0.100	0.054

MM	DIM LOC8= LOCATION OF CIRCLE CR-NW-40-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1222.800	1222.078	-0.722	0.200	0.200	0.522
Z	0.000	-0.033	-0.033	0.200	0.200	0.000
D	76.000	75.991	-0.009	0.200	0.000	0.009
RN	0.000	0.018	0.018	0.200	0.000	0.000

MM	DIM DIST1= 2D DISTANCE FROM CIRCLE CR-NW-40-FLANGE TO PLANE PL-FAR-END PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	60.600	60.344	-0.256	0.200	0.200	0.056

HOM-2 FLANGE NW12

MM	DIM FLAT4= FLATNESS OF PLANE PL-NW12-HOM-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.002	0.002	0.200	0.000	0.000

DEG	DIM ANGL5= 2D ANGLE (COMPLEMENT) FROM PLANE PL-NW12-HOM-FLANGE TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	15.000	17.236	2.236	0.500	0.500	1.736

DEG	DIM ANGL6= 2D ANGLE (TRUE) FROM PLANE PL-NW12-HOM-FLANGE TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	35.941	0.941	0.500	0.500	0.441

MM	DIM LOC9= LOCATION OF CIRCLE CR-NW12-HOM-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-71.446	-72.573	-1.127	0.200	0.200	0.927
Y	1224.495	1224.806	0.311	0.200	0.200	0.111
Z	-7.498	-9.517	-2.019	0.200	0.200	1.819
D	33.800	33.772	-0.028	0.150	0.000	0.028
RN	0.000	0.033	0.033	0.150	0.000	0.000

HOM 1 LOCATION

MM	DIM LOC-HOM1= LOCATION OF CYLINDER CY-HOM-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	68.471	68.367	-0.104	0.200	0.200	0.000
Y	96.600	96.787	0.187	0.200	0.200	0.000
Z	-40.085	-40.170	-0.086	0.200	0.200	0.000
D	44.000	43.837	-0.163	0.000	0.100	0.063
RN	0.000	0.108	0.108	0.100	0.000	0.008
V	-0.862	-0.003	0.507			

DEG	DIM ANGL9= 3D ANGLE (COMPLEMENT) FROM CYLINDER CY-HOM-1 TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	30.000	30.453	0.453	0.500	0.500	0.000

DEG	DIM ANGL10= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	90.000	89.828	-0.172	0.500	0.500	0.000

DEG	DIM ANGL11= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	60.000	59.548	-0.452	0.500	0.500	0.000

MM	DIM LOC-HOM3= LOCATION OF POINT PT-RT-HOM-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	116.000	116.005	0.005	0.200	0.200	0.000

INTERSECTION OF HOM1 & YZ PLANE

MM	DIM LOC-HOM1 X PLANE= LOCATION OF POINT PTC-HOM1 X YZ PLANE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	96.600	96.549	-0.051	0.200	0.200	0.000
Z	0.000	0.024	0.024	0.200	0.200	0.000

HOM 2 LOCATION

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-65.025	-64.096	0.929	0.200	0.200	0.729
Y	1222.800	1221.808	-0.992	3.000	3.000	0.000
Z	-44.751	-46.113	-1.362	0.200	0.200	1.162
D	44.000	43.924	-0.076	0.000	0.100	0.000
RN	0.000	0.047	0.047	0.100	0.000	0.000
V	-0.812	-0.001	-0.584			

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	60.600	60.209	-0.391	0.200	0.200	0.191

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	35.698	0.698	0.500	0.500	0.198

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	90.000	90.032	0.032	0.500	0.500	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	55.000	54.302	-0.698	0.500	0.500	0.198

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	116.000	115.972	-0.028	0.200	0.200	0.000

INTERSECTION OF HOM2 & YZ PLANE

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	1222.800	1221.852	-0.948	3.000	3.000	0.000
Z	-0.583	-0.059	0.524	0.200	0.200	0.324

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

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	130.726	130.982	0.256	1.000	1.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.879	-0.120	0.200	0.200	0.000
RN	0.000	0.021	0.021	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.037	-0.038	0.200	0.200	0.000
Y	158.307	158.097	-0.210	1.000	1.000	0.000
Z	0.000	0.010	0.010	0.200	0.200	0.000
D	191.200	191.170	-0.030	0.200	0.200	0.000
RN	0.000	0.024	0.024	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.047	-0.047	0.200	0.200	0.000
Y	193.513	193.785	0.272	1.000	1.000	0.000
Z	0.000	-0.040	-0.040	0.200	0.200	0.000
D	210.300	210.503	0.203	0.200	0.200	0.003
RN	0.000	0.225	0.225	0.200	0.000	0.025

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.142	-0.142	0.200	0.200	0.000
Y	203.315	202.872	-0.443	1.000	1.000	0.000
Z	0.000	-0.025	-0.025	0.200	0.200	0.000
D	210.300	210.482	0.182	0.200	0.200	0.000
RN	0.000	0.216	0.216	0.200	0.000	0.016

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.223	-0.223	0.200	0.200	0.023
Y	309.514	309.124	-0.389	1.000	1.000	0.000
Z	0.000	0.060	0.059	0.200	0.200	0.000
D	210.300	210.562	0.262	0.200	0.200	0.062
RN	0.000	0.206	0.206	0.200	0.000	0.006

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.222	-0.222	0.200	0.200	0.022
Y	319.276	318.706	-0.570	1.000	1.000	0.000
Z	0.000	0.061	0.061	0.200	0.200	0.000
D	210.300	210.484	0.183	0.200	0.200	0.000
RN	0.000	0.206	0.206	0.200	0.000	0.006

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.300	-0.300	0.200	0.200	0.100
Y	423.959	424.209	0.250	1.000	1.000	0.000
Z	0.000	0.037	0.037	0.200	0.200	0.000
D	210.300	210.567	0.267	0.200	0.200	0.067
RN	0.000	0.313	0.313	0.200	0.000	0.113

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.286	-0.286	0.200	0.200	0.086
Y	434.018	433.520	-0.498	1.000	1.000	0.000
Z	0.000	-0.069	-0.069	0.200	0.200	0.000
D	210.300	210.515	0.215	0.200	0.200	0.015
RN	0.000	0.161	0.161	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.274	-0.274	0.200	0.200	0.074
Y	539.193	540.164	0.972	1.000	1.000	0.000
Z	0.000	-0.181	-0.181	0.200	0.200	0.000
D	210.300	210.682	0.382	0.200	0.200	0.182
RN	0.000	0.159	0.159	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.250	-0.250	0.200	0.200	0.050
Y	549.308	548.687	-0.621	1.000	1.000	0.000
Z	0.000	-0.181	-0.181	0.200	0.200	0.000
D	210.300	210.627	0.326	0.200	0.200	0.126
RN	0.000	0.313	0.313	0.200	0.000	0.113

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.184	-0.184	0.200	0.200	0.000
Y	654.473	655.466	0.993	1.000	1.000	0.000
Z	0.000	-0.314	-0.314	0.200	0.200	0.114
D	210.300	210.549	0.249	0.200	0.200	0.049
RN	0.000	0.232	0.232	0.200	0.000	0.032

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.126	-0.126	0.200	0.200	0.000
Y	664.439	664.279	-0.161	1.000	1.000	0.000
Z	0.000	-0.283	-0.283	0.200	0.200	0.083
D	210.300	210.526	0.226	0.200	0.200	0.026
RN	0.000	0.150	0.150	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.083	-0.083	0.200	0.200	0.000
Y	770.224	770.666	0.442	1.000	1.000	0.000
Z	0.000	-0.320	-0.320	0.200	0.200	0.120
D	210.300	210.625	0.325	0.200	0.200	0.125
RN	0.000	0.121	0.121	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.074	-0.074	0.200	0.200	0.000
Y	779.934	780.042	0.108	1.000	1.000	0.000
Z	0.000	-0.335	-0.335	0.200	0.200	0.135
D	210.300	210.647	0.346	0.200	0.200	0.146
RN	0.000	0.052	0.052	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.026	-0.026	0.200	0.200	0.000
Y	885.675	886.053	0.378	1.000	1.000	0.000
Z	0.000	-0.282	-0.282	0.200	0.200	0.082
D	210.300	210.675	0.375	0.200	0.200	0.175
RN	0.000	0.126	0.126	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	895.028	894.952	-0.076	1.000	1.000	0.000
Z	0.000	-0.310	-0.310	0.200	0.200	0.110
D	210.300	210.603	0.303	0.200	0.200	0.103
RN	0.000	0.134	0.134	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.026	0.026	0.200	0.200	0.000
Y	1000.912	1001.096	0.184	1.000	1.000	0.000
Z	0.000	-0.254	-0.254	0.200	0.200	0.054
D	210.300	210.602	0.302	0.200	0.200	0.102
RN	0.000	0.076	0.076	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.058	0.058	0.200	0.200	0.000
Y	1010.509	1010.280	-0.229	1.000	1.000	0.000
Z	0.000	-0.186	-0.186	0.200	0.200	0.000
D	210.300	210.575	0.274	0.200	0.200	0.074
RN	0.000	0.181	0.181	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.089	0.089	0.200	0.200	0.000
Y	1115.741	1116.316	0.575	1.000	1.000	0.000
Z	0.000	-0.047	-0.047	0.200	0.200	0.000
D	210.300	210.567	0.266	0.200	0.200	0.066
RN	0.000	0.233	0.233	0.200	0.000	0.033

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.122	0.122	0.200	0.200	0.000
Y	1125.443	1125.503	0.060	1.000	1.000	0.000
Z	0.000	-0.085	-0.085	0.200	0.200	0.000
D	210.300	210.508	0.208	0.200	0.200	0.008
RN	0.000	0.184	0.184	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.065	0.065	0.200	0.200	0.000
Y	1156.557	1156.919	0.363	1.000	1.000	0.000
Z	0.000	-0.031	-0.031	0.200	0.200	0.000
D	200.000	200.015	0.015	0.200	0.200	0.000
RN	0.000	0.066	0.066	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	1186.394	1186.822	0.428	1.000	1.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.886	-0.114	0.200	0.200	0.000
RN	0.000	0.018	0.018	0.200	0.000	0.000

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

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

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

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.037	-0.038				
Z	0.000	0.010	0.010				
TP	RFS		0.078	0.200		0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.047	-0.047				
Z	0.000	-0.040	-0.040				
TP	RFS		0.123	0.200		0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.142	-0.142				
Z	0.000	-0.025	-0.025				
TP	RFS		0.289	0.200		0.000	0.089

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.223	-0.223				
Z	0.000	0.060	0.059				
TP	RFS		0.461	0.200		0.000	0.261

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.222	-0.222				
Z	0.000	0.061	0.061				
TP	RFS		0.460	0.200		0.000	0.260

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.300	-0.300				
Z	0.000	0.037	0.037				
TP	RFS		0.605	0.200		0.000	0.405

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.286	-0.286				
Z	0.000	-0.069	-0.069				
TP	RFS		0.588	0.200		0.000	0.388

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.274	-0.274				
Z	0.000	-0.181	-0.181				
TP	RFS		0.658	0.200		0.000	0.458

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.250	-0.250				
Z	0.000	-0.181	-0.181				
TP	RFS		0.617	0.200		0.000	0.417

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.184	-0.184				
Z	0.000	-0.314	-0.314				
TP	RFS		0.728	0.200		0.000	0.528

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.126	-0.126				
Z	0.000	-0.283	-0.283				
TP	RFS		0.620	0.200		0.000	0.420

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.083	-0.083				
Z	0.000	-0.320	-0.320				
TP	RFS		0.661	0.200		0.000	0.461

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.074	-0.074				
Z	0.000	-0.335	-0.335				
TP	RFS		0.685	0.200		0.000	0.485

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.026	-0.026				
Z	0.000	-0.282	-0.282				
TP	RFS		0.566	0.200		0.000	0.366

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.000	0.000				
Z	0.000	-0.310	-0.310				
TP	RFS		0.619	0.200		0.000	0.419

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.026	0.026				
Z	0.000	-0.254	-0.254				
TP	RFS		0.511	0.200		0.000	0.311

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.058	0.058				
Z	0.000	-0.186	-0.186				
TP	RFS		0.391	0.200		0.000	0.191

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

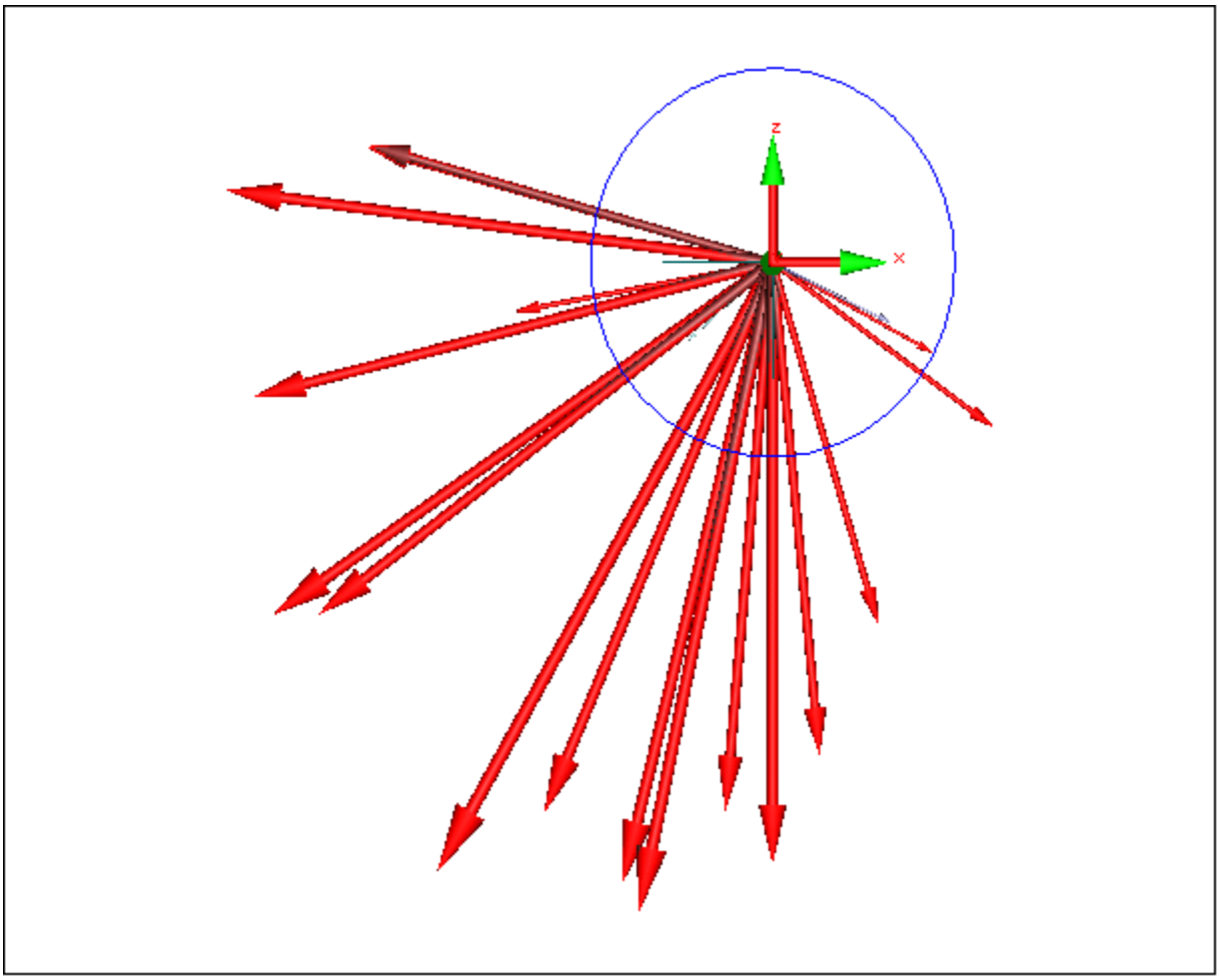
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.089	0.089				
Z	0.000	-0.047	-0.047				
TP	RFS		0.201	0.200		0.000	0.001

MM	DIM LOC-TP-CC20= TRUE POSITION OF CIRCLE CRC-CAV-9-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.122	0.122				
Z	0.000	-0.085	-0.085				
TP	RFS		0.297	0.200		0.000	0.097

MM	DIM LOC-TP-CC21= TRUE POSITION OF CIRCLE CRC-VAC-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.065	0.065				
Z	0.000	-0.031	-0.031				
TP	RFS		0.144	0.200		0.000	0.000

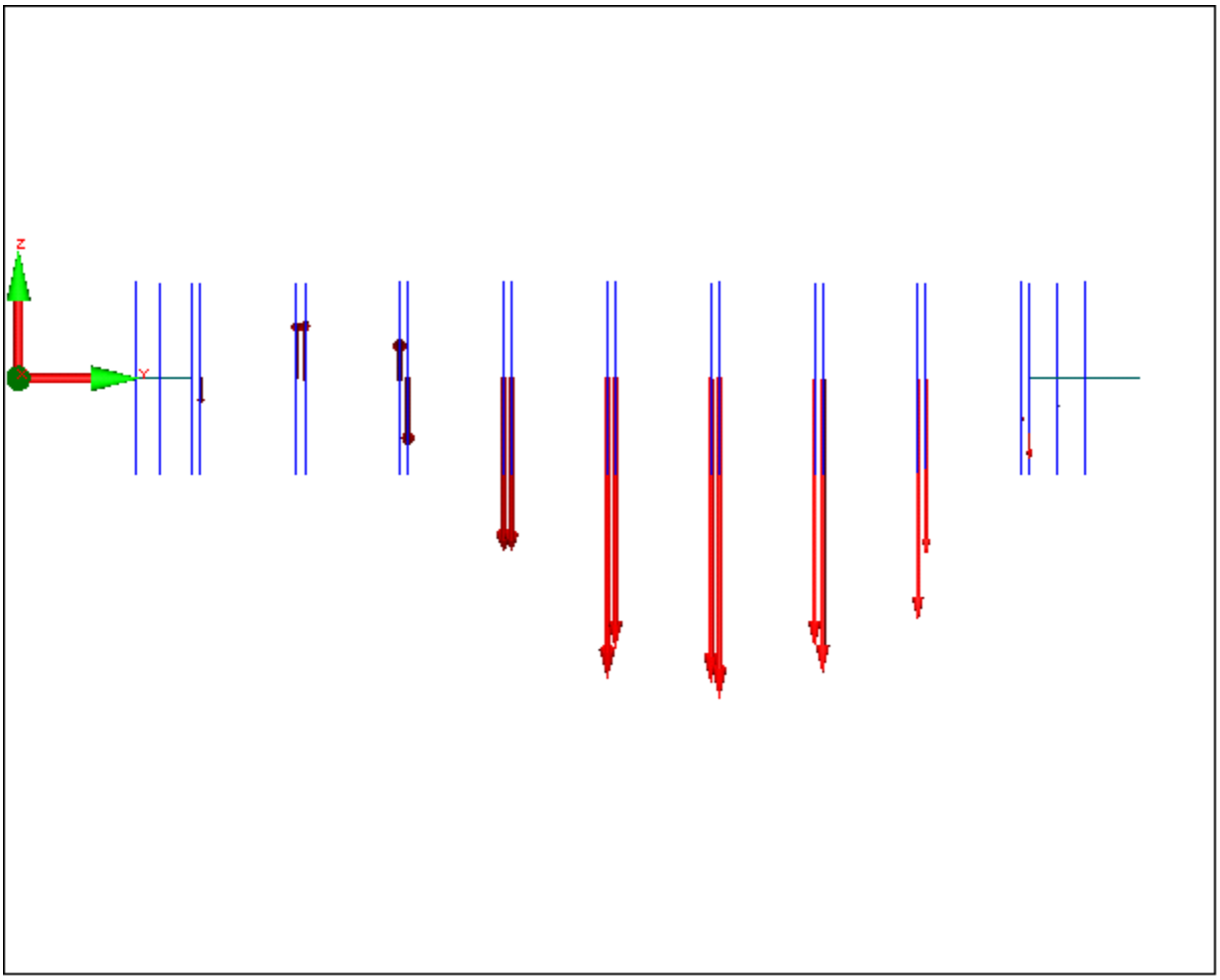
MM	DIM LOC-TP-CC22= TRUE POSITION OF CIRCLE CRC-DAT-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.000	0.000				
Z	0.000	0.000	0.000				
TP	RFS		0.000	0.200		0.000	0.000

True Position plots from 3 views
x1000



-Y View

x1000



+X View
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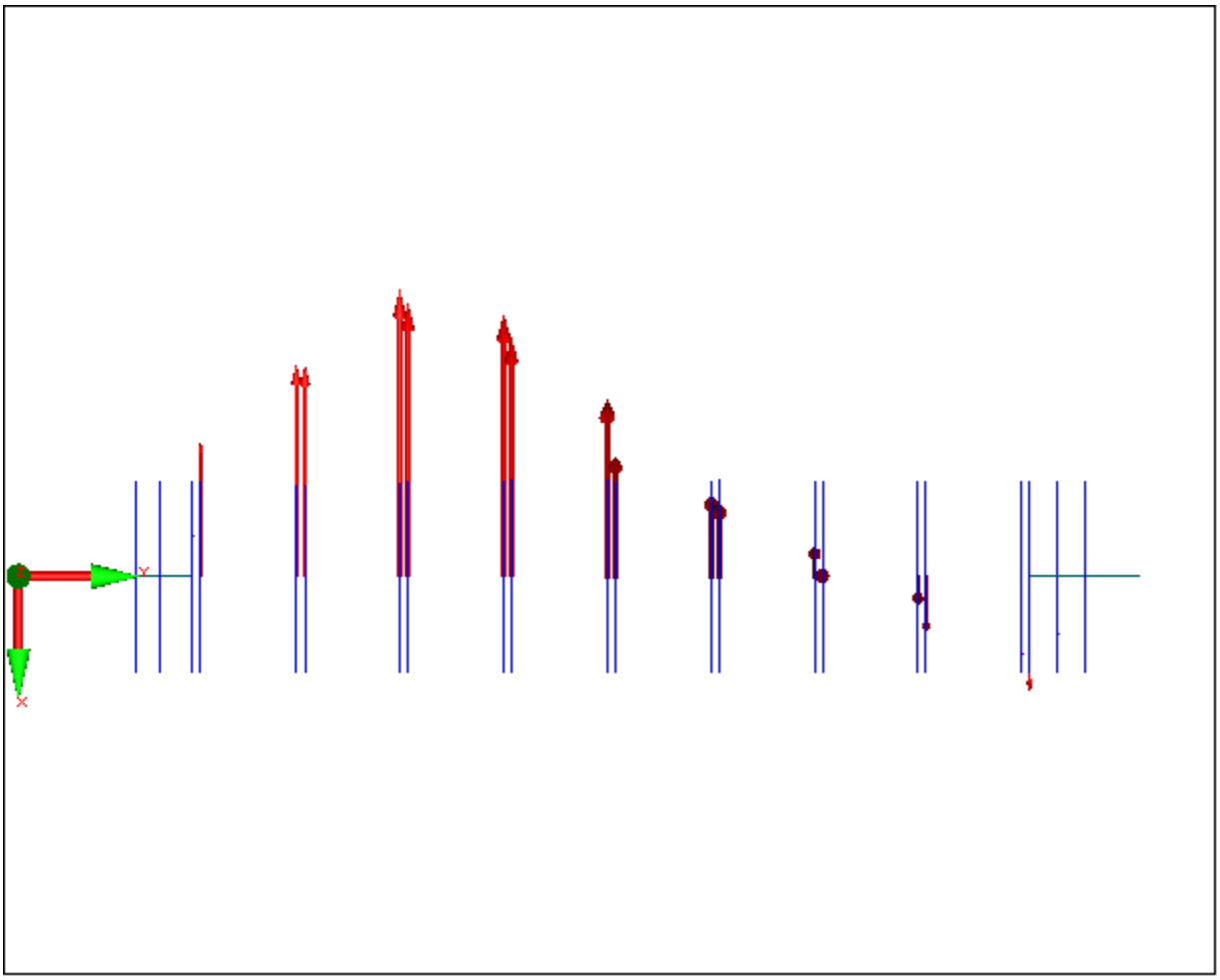


+Z View
x1000

MM	DIM LOC-BEST FIT CONSTRUCTED LINE= LOCATION OF LINE LNC-BEST-FIT					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.087	-0.087	0.200	0.200	0.000
Y	658.560	659.479	0.919	1.000	1.000	0.000
Z	0.000	-0.126	-0.126	0.200	0.200	0.000
ST	0.000	0.401	0.401	0.200	0.000	0.201

SUPPORT RING CIRCLE LOCATIONS

MM	DIM LOC-SUPPORT RING-1= LOCATION OF CIRCLE CR-SUPPORT-RING-T12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.128	-0.128	0.200	0.200	0.000
Y	256.462	256.226	-0.236	1.000	1.000	0.000
Z	0.000	0.134	0.134	0.200	0.200	0.000
R	56.500	56.381	-0.119	0.200	0.200	0.000
RN	0.000	0.010	0.010	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.206	-0.206	0.200	0.200	0.006
Y	371.792	371.551	-0.241	1.000	1.000	0.000
Z	0.000	0.168	0.168	0.200	0.200	0.000
R	56.500	56.253	-0.247	0.200	0.200	0.047
RN	0.000	0.009	0.009	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.377	-0.378	0.200	0.200	0.178
Y	487.122	486.882	-0.240	1.000	1.000	0.000
Z	0.000	-0.010	-0.011	0.200	0.200	0.000
R	56.500	56.387	-0.113	0.200	0.200	0.000
RN	0.000	0.013	0.013	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.228	-0.228	0.200	0.200	0.028
Y	602.452	602.212	-0.240	1.000	1.000	0.000
Z	0.000	-0.223	-0.223	0.200	0.200	0.023
R	56.500	56.397	-0.103	0.200	0.200	0.000
RN	0.000	0.016	0.016	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.113	-0.114	0.200	0.200	0.000
Y	717.557	717.317	-0.240	1.000	1.000	0.000
Z	0.000	-0.370	-0.370	0.200	0.200	0.170
R	56.500	56.390	-0.110	0.200	0.200	0.000
RN	0.000	0.010	0.010	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.101	-0.101	0.200	0.200	0.000
Y	832.757	832.517	-0.240	1.000	1.000	0.000
Z	0.000	-0.214	-0.214	0.200	0.200	0.014
R	56.500	56.333	-0.167	0.200	0.200	0.000
RN	0.000	0.014	0.014	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.054	0.054	0.200	0.200	0.000
Y	948.157	947.915	-0.242	1.000	1.000	0.000
Z	0.000	-0.257	-0.257	0.200	0.200	0.057
R	56.500	56.416	-0.084	0.200	0.200	0.000
RN	0.000	0.016	0.016	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-8= LOCATION OF CIRCLE CR-SUPPORT-RING-T89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.067	0.067	0.200	0.200	0.000
Y	1063.457	1063.214	-0.243	1.000	1.000	0.000
Z	0.000	-0.058	-0.058	0.200	0.200	0.000
R	56.500	56.329	-0.171	0.200	0.200	0.000
RN	0.000	0.045	0.045	0.200	0.000	0.000

SUPPORT RING POINT LOCATIONS

MM	DIM LOC-SUPPORT RING-PT1= LOCATION OF POINT PT-SUPPORT-RING-T12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.070	-0.070	0.200	0.200	0.000
Y	250.557	250.320	-0.237	1.000	1.000	0.000
Z	56.500	56.487	-0.013	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PT2= LOCATION OF POINT PT-SUPPORT-RING-T23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.070	-0.070	0.200	0.200	0.000
Y	365.887	365.650	-0.237	1.000	1.000	0.000
Z	56.500	56.401	-0.099	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PT3= LOCATION OF POINT PT-SUPPORT-RING-T34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.070	-0.070	0.200	0.200	0.000
Y	481.217	480.980	-0.237	1.000	1.000	0.000
Z	56.500	56.409	-0.091	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PT4= LOCATION OF POINT PT-SUPPORT-RING-T45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.070	-0.070	0.200	0.200	0.000
Y	596.547	596.310	-0.237	1.000	1.000	0.000
Z	56.500	56.155	-0.345	0.200	0.200	0.145

MM	DIM LOC-SUPPORT RING-PT5= LOCATION OF POINT PT-SUPPORT-RING-T56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.070	-0.070	0.200	0.200	0.000
Y	711.557	711.320	-0.237	1.000	1.000	0.000
Z	56.500	56.017	-0.483	0.200	0.200	0.283

MM	DIM LOC-SUPPORT RING-PT6= LOCATION OF POINT PT-SUPPORT-RING-T67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.070	-0.070	0.200	0.200	0.000
Y	826.857	826.620	-0.237	1.000	1.000	0.000
Z	56.500	56.124	-0.376	0.200	0.200	0.176

MM	DIM LOC-SUPPORT RING-PT7= LOCATION OF POINT PT-SUPPORT-RING-T78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.070	-0.070	0.200	0.200	0.000
Y	942.157	941.920	-0.237	1.000	1.000	0.000
Z	56.500	56.141	-0.359	0.200	0.200	0.159

MM	DIM LOC-SUPPORT RING-PT8= LOCATION OF POINT PT-SUPPORT-RING-T89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.070	-0.070	0.200	0.200	0.000
Y	1057.557	1057.320	-0.237	1.000	1.000	0.000
Z	56.500	56.273	-0.228	0.200	0.200	0.028

SUPPORT RING CIRCLES IN Z

MM	DIM LOC Z SUPPORT RING CIRCLES 1= LOCATION OF CIRCLE CR-SUPPORT-RING-T1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	0.134	0.134	0.200	0.200	0.000

MM	DIM LOC Z SUPPORT RING CIRCLES 2= LOCATION OF CIRCLE CR-SUPPORT-RING-T2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	0.168	0.168	0.200	0.200	0.000

MM	DIM LOC Z SUPPORT RING CIRCLES 3= LOCATION OF CIRCLE CR-SUPPORT-RING-T3					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.010	-0.011	0.200	0.200	0.000

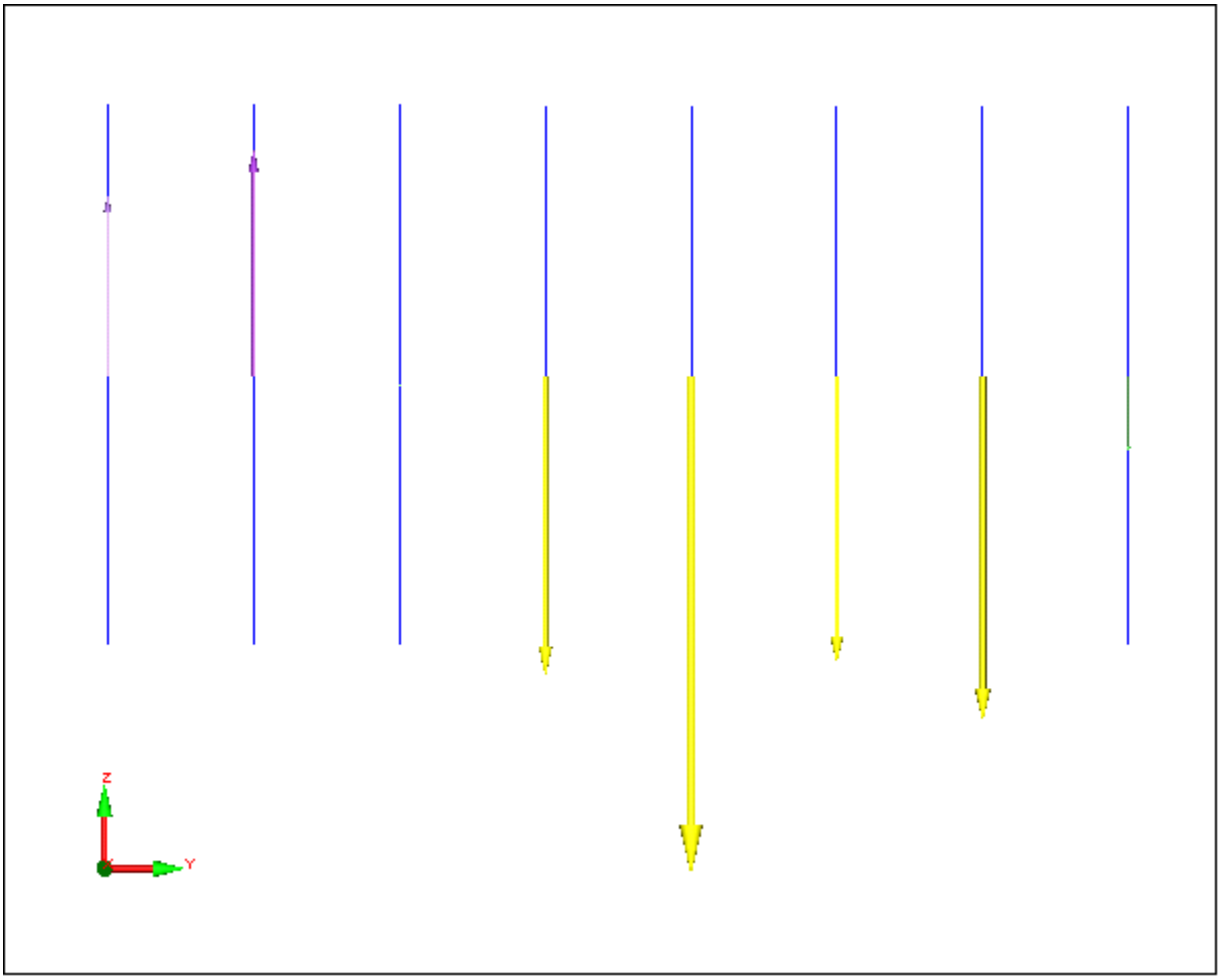
MM	DIM LOC Z SUPPORT RING CIRCLES 4= LOCATION OF CIRCLE CR-SUPPORT-RING-T4					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.223	-0.223	0.200	0.200	0.023

MM	DIM LOC Z SUPPORT RING CIRCLES 5= LOCATION OF CIRCLE CR-SUPPORT-RING-T5					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.370	-0.370	0.200	0.200	0.170

MM	DIM LOC Z SUPPORT RING CIRCLES 6= LOCATION OF CIRCLE CR-SUPPORT-RING-T6					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.214	-0.214	0.200	0.200	0.014

MM	DIM LOC Z SUPPORT RING CIRCLES 7= LOCATION OF CIRCLE CR-SUPPORT-RING-T7					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.257	-0.257	0.200	0.200	0.057

MM	DIM LOC Z SUPPORT RING CIRCLES 8= LOCATION OF CIRCLE CR-SUPPORT-RING-T8					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.058	-0.058	0.200	0.200	0.000



SUPPORT RING CIRCLES IN Z
x1000

SUPPORT RING POINTS IN Z

MM	DIM LOC Z SUPPORT RING POINTS 1= LOCATION OF POINT PT-SUPPORT-RING-T12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.487	-0.013	0.200	0.200	0.000

MM	DIM LOC Z SUPPORT RING POINTS 2= LOCATION OF POINT PT-SUPPORT-RING-T23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.401	-0.099	0.200	0.200	0.000

MM	DIM LOC Z SUPPORT RING POINTS 3= LOCATION OF POINT PT-SUPPORT-RING-T34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.409	-0.091	0.200	0.200	0.000

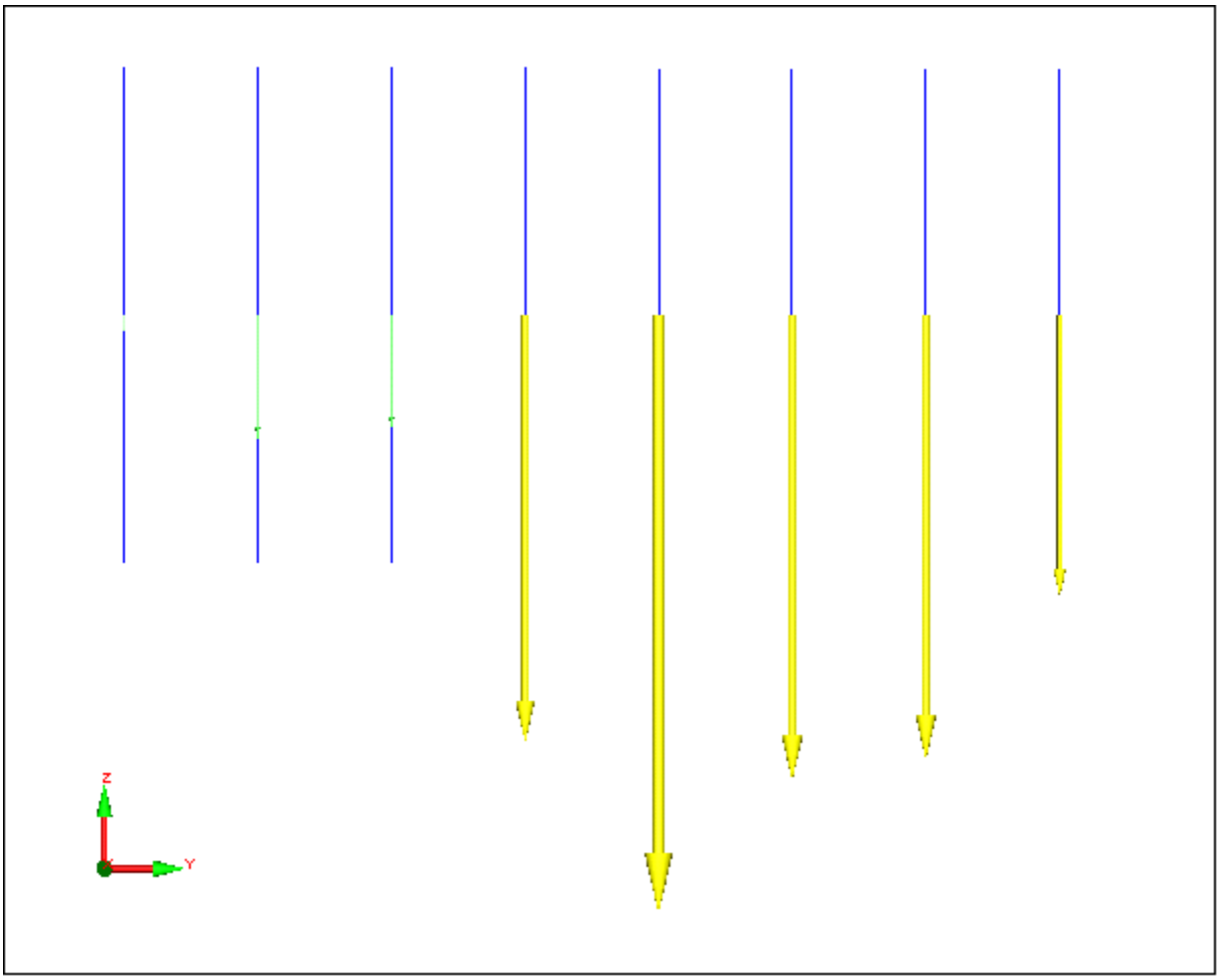
MM	DIM LOC Z SUPPORT RING POINTS 4= LOCATION OF POINT PT-SUPPORT-RING-T45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.155	-0.345	0.200	0.200	0.145

MM	DIM LOC Z SUPPORT RING POINTS 5= LOCATION OF POINT PT-SUPPORT-RING-T56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.017	-0.483	0.200	0.200	0.283

MM	DIM LOC Z SUPPORT RING POINTS 6= LOCATION OF POINT PT-SUPPORT-RING-T67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.124	-0.376	0.200	0.200	0.176

MM	DIM LOC Z SUPPORT RING POINTS 7= LOCATION OF POINT PT-SUPPORT-RING-T78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.141	-0.359	0.200	0.200	0.159

MM	DIM LOC Z SUPPORT RING POINTS 8= LOCATION OF POINT PT-SUPPORT-RING-T89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.273	-0.228	0.200	0.200	0.028



SUPPORT RING POINTS IN Z
x1000

DEG	DIM ANGL15= 2D ANGLE (TRUE) FROM LINE LNC-FOR 180 OFFSET TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	15.000	13.996	-1.004	0.500	0.500	0.504

ANGLE I: 0.2588121
ANGLE K: 0.9659277

END OF MEASUREMENT FOR
PN=ILC DESY 1.3GHZ RF CAVITY ASSEMBLY DWG= SN=
TOTAL # OF MEAS =291 # OUT OF TOL =106