DATE=10/27/2005
PART NAME : ILC DESY 1.3GHZ RF CAVITY ASSEMBLY
REV NUMBER :
SER NUMBER :
STATS COUNT : 1

'Inspected by' : Robert Riley
'Cavity Number' : ACCEL 6 000 RUN 2

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	0.000	-1.000	0.001			
FL	0.000	0.017	0.017	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	0.172	0.172	0.200	0.000	0.000

DEG	DIM ANGL1= 3D ANGLE (COMPLEMENT) FROM PLANE PL-NEAR-END-FLANGE TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.079	0.079	0.100	0.100	0.000

MM	DIM LOC2= LOCATION OF CIRCLE CR-NEAR-END -FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.037	0.037	0.200	0.200	0.000
Z	0.000	0.255	0.255	0.200	0.200	0.055
D	140.000	140.100	0.100	0.300	0.300	0.000
RN	0.000	0.011	0.011	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	1282.016	-1.384	3.000	3.000	0.000
V	0.003	1.000	0.004			
FL	0.000	0.125	0.125	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	0.601	0.601	0.200	0.000	0.401

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.276	0.276	0.100	0.100	0.176

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.156	0.156	0.200	0.200	0.000
Z	0.000	0.180	0.179	0.200	0.200	0.000
D	140.000	140.046	0.046	0.300	0.300	0.000
RN	0.000	0.045	0.045	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	129.043	0.243	0.200	0.200	0.043
V	-0.000	-1.000	0.003			
FL	0.000	0.047	0.047	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	0.287	0.287	0.200	0.000	0.087

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.147	0.147	0.100	0.100	0.047

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	1188.370	-1.630	0.200	0.200	1.430
V	-0.001	1.000	0.002			
FL	0.000	0.021	0.021	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	0.265	0.265	0.200	0.000	0.065

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.148	0.148	0.100	0.100	0.048

PICKUP ANTENNA FLANGE NW8

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-53.800	-53.873	-0.073	0.200	0.200	0.000
V	-1.000	-0.005	-0.016			
FL	0.000	0.001	0.001	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	0.429	0.429	0.200	0.000	0.229

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.956	0.956	0.100	0.100	0.856

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	96.600	96.565	-0.035	0.200	0.200	0.000
Z	0.000	-0.430	-0.430	0.200	0.200	0.230
D	33.800	33.803	0.003	0.150	0.000	0.000
RN	0.000	0.013	0.013	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	87.685	-0.315	0.200	0.200	0.115
V	1.000	-0.004	0.002			
FL	0.000	0.012	0.012	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	0.278	0.278	0.200	0.000	0.078

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.265	0.265	0.100	0.100	0.165

MM	DIM LOC8= LOCATION OF CIRCLE CR-NW-40-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1222.800	1221.388	-1.412	0.200	0.200	1.212
Z	0.000	0.159	0.159	0.200	0.200	0.000
D	76.000	76.012	0.012	0.200	0.000	0.000
RN	0.000	0.044	0.044	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	60.629	0.029	0.200	0.200	0.000

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	16.735	1.735	0.500	0.500	1.235

DEG	DIM ANGL6= 2D ANGLE (TRUE) FROM PLANE PL-NW12-HOM-FLANGE TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	34.514	-0.486	0.500	0.500	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-71.446	-71.466	-0.021	0.200	0.200	0.000
Y	1224.495	1224.514	0.019	0.200	0.200	0.000
Z	-7.498	-7.504	-0.006	0.200	0.200	0.000
D	33.800	33.733	-0.067	0.150	0.000	0.067
RN	0.000	0.050	0.050	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	68.495	0.024	0.200	0.200	0.000
Y	96.600	96.597	-0.003	0.200	0.200	0.000
Z	-40.085	-40.069	0.015	0.200	0.200	0.000
D	44.000	43.841	-0.159	0.000	0.100	0.059
RN	0.000	0.081	0.081	0.100	0.000	0.000
V	-0.864	-0.001	0.503			

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	30.000	30.177	0.177	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	89.964	-0.036	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	59.823	-0.177	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	115.727	-0.273	0.200	0.200	0.073

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	96.547	-0.053	0.200	0.200	0.000
Z	0.000	-0.241	-0.241	0.200	0.200	0.041

HOM 2 LOCATION

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-65.025	-65.060	-0.035	0.200	0.200	0.000
Y	1222.800	1221.631	-1.169	3.000	3.000	0.000
Z	-44.751	-44.760	-0.009	0.200	0.200	0.000
D	44.000	43.926	-0.074	0.000	0.100	0.000
RN	0.000	0.059	0.059	0.100	0.000	0.000
V	-0.827	0.003	-0.562			

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	60.406	-0.194	0.200	0.200	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	34.194	-0.806	0.500	0.500	0.306

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	90.000	90.172	0.172	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	55.807	0.807	0.500	0.500	0.307

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	116.000	115.042	-0.958	0.200	0.200	0.758

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	1221.394	-1.406	3.000	3.000	0.000
Z	0.000	-0.556	-0.556	0.200	0.200	0.356

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	131.101	0.376	1.000	1.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.898	-0.102	0.200	0.200	0.000
RN	0.000	0.014	0.014	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	-0.019	-0.019	0.200	0.200	0.000
Y	158.307	157.921	-0.386	1.000	1.000	0.000
Z	0.000	-0.076	-0.076	0.200	0.200	0.000
D	191.200	191.177	-0.023	0.200	0.200	0.000
RN	0.000	0.038	0.038	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	0.051	0.051	0.200	0.200	0.000
Y	193.513	193.551	0.038	1.000	1.000	0.000
Z	0.000	-0.182	-0.182	0.200	0.200	0.000
D	210.300	210.534	0.234	0.200	0.200	0.034
RN	0.000	0.067	0.067	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.048	-0.048	0.200	0.200	0.000
Y	203.315	203.044	-0.271	1.000	1.000	0.000
Z	0.000	-0.197	-0.197	0.200	0.200	0.000
D	210.300	210.564	0.264	0.200	0.200	0.064
RN	0.000	0.098	0.098	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	309.514	309.668	0.154	1.000	1.000	0.000
Z	0.000	-0.423	-0.423	0.200	0.200	0.223
D	210.300	210.640	0.340	0.200	0.200	0.140
RN	0.000	0.100	0.100	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.081	-0.081	0.200	0.200	0.000
Y	319.276	319.141	-0.135	1.000	1.000	0.000
Z	0.000	-0.501	-0.501	0.200	0.200	0.301
D	210.300	210.597	0.297	0.200	0.200	0.097
RN	0.000	0.097	0.097	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.041	-0.041	0.200	0.200	0.000
Y	423.959	424.248	0.288	1.000	1.000	0.000
Z	0.000	-0.670	-0.671	0.200	0.200	0.471
D	210.300	210.664	0.364	0.200	0.200	0.164
RN	0.000	0.116	0.116	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.048	-0.048	0.200	0.200	0.000
Y	434.018	433.782	-0.236	1.000	1.000	0.000
Z	0.000	-0.678	-0.678	0.200	0.200	0.478
D	210.300	210.648	0.348	0.200	0.200	0.148
RN	0.000	0.065	0.065	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	0.002	0.002	0.200	0.200	0.000
Y	539.193	539.490	0.297	1.000	1.000	0.000
Z	0.000	-0.802	-0.802	0.200	0.200	0.602
D	210.300	210.570	0.270	0.200	0.200	0.070
RN	0.000	0.125	0.125	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	-0.012	-0.012	0.200	0.200	0.000
Y	549.308	549.056	-0.252	1.000	1.000	0.000
Z	0.000	-0.774	-0.774	0.200	0.200	0.574
D	210.300	210.509	0.208	0.200	0.200	0.008
RN	0.000	0.170	0.170	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.005	0.005	0.200	0.200	0.000
Y	654.473	654.727	0.254	1.000	1.000	0.000
Z	0.000	-0.807	-0.807	0.200	0.200	0.607
D	210.300	210.615	0.315	0.200	0.200	0.115
RN	0.000	0.249	0.249	0.200	0.000	0.049

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.052	0.052	0.200	0.200	0.000
Y	664.439	664.092	-0.348	1.000	1.000	0.000
Z	0.000	-0.851	-0.851	0.200	0.200	0.651
D	210.300	210.531	0.230	0.200	0.200	0.030
RN	0.000	0.137	0.137	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	0.058	0.058	0.200	0.200	0.000
Y	770.224	770.077	-0.147	1.000	1.000	0.000
Z	0.000	-0.812	-0.812	0.200	0.200	0.612
D	210.300	210.576	0.276	0.200	0.200	0.076
RN	0.000	0.089	0.089	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	0.073	0.073	0.200	0.200	0.000
Y	779.934	779.712	-0.222	1.000	1.000	0.000
Z	0.000	-0.828	-0.828	0.200	0.200	0.628
D	210.300	210.567	0.267	0.200	0.200	0.067
RN	0.000	0.124	0.124	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	0.084	0.084	0.200	0.200	0.000
Y	885.675	885.407	-0.268	1.000	1.000	0.000
Z	0.000	-0.695	-0.695	0.200	0.200	0.495
D	210.300	210.644	0.343	0.200	0.200	0.143
RN	0.000	0.202	0.202	0.200	0.000	0.002

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.097	0.097	0.200	0.200	0.000
Y	895.028	894.880	-0.148	1.000	1.000	0.000
Z	0.000	-0.712	-0.712	0.200	0.200	0.512
D	210.300	210.553	0.253	0.200	0.200	0.053
RN	0.000	0.139	0.139	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	0.129	0.129	0.200	0.200	0.000
Y	1000.912	1000.783	-0.129	1.000	1.000	0.000
Z	0.000	-0.469	-0.469	0.200	0.200	0.269
D	210.300	210.636	0.335	0.200	0.200	0.135
RN	0.000	0.244	0.244	0.200	0.000	0.044

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.141	0.141	0.200	0.200	0.000
Y	1010.509	1010.134	-0.375	1.000	1.000	0.000
Z	0.000	-0.465	-0.465	0.200	0.200	0.265
D	210.300	210.562	0.261	0.200	0.200	0.061
RN	0.000	0.131	0.131	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	0.152	0.152	0.200	0.200	0.000
Y	1115.741	1115.787	0.046	1.000	1.000	0.000
Z	0.000	-0.187	-0.187	0.200	0.200	0.000
D	210.300	210.540	0.240	0.200	0.200	0.040
RN	0.000	0.162	0.162	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.140	0.140	0.200	0.200	0.000
Y	1125.443	1125.479	0.035	1.000	1.000	0.000
Z	0.000	-0.181	-0.182	0.200	0.200	0.000
D	210.300	210.471	0.170	0.200	0.200	0.000
RN	0.000	0.213	0.213	0.200	0.000	0.013

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.048	0.048	0.200	0.200	0.000
Y	1156.557	1156.257	-0.300	1.000	1.000	0.000
Z	0.000	-0.055	-0.055	0.200	0.200	0.000
D	200.000	199.975	-0.026	0.200	0.200	0.000
RN	0.000	0.038	0.038	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	1186.242	-0.153	1.000	1.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.917	-0.082	0.200	0.200	0.000
RN	0.000	0.013	0.013	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	-0.019	-0.019				
Z	0.000	-0.076	-0.076				
TP	RFS		0.157	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	0.051	0.051				
Z	0.000	-0.182	-0.182				
TP	RFS		0.379	0.200		0.000	0.179

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.048	-0.048					
Z	0.000	-0.197	-0.197					
TP	RFS		0.406	0.200		0.000	0.206	

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.000	0.000					
Z	0.000	-0.423	-0.423					
TP	RFS		0.847	0.200		0.000	0.647	

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.081	-0.081					
Z	0.000	-0.501	-0.501					
TP	RFS		1.015	0.200		0.000	0.815	

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.041	-0.041					
Z	0.000	-0.670	-0.671					
TP	RFS		1.344	0.200		0.000	1.144	

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.048	-0.048					
Z	0.000	-0.678	-0.678					
TP	RFS		1.359	0.200		0.000	1.159	

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.002	0.002					
Z	0.000	-0.802	-0.802					
TP	RFS		1.604	0.200		0.000	1.404	

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	-0.012	-0.012					
Z	0.000	-0.774	-0.774					
TP	RFS		1.549	0.200		0.000	1.349	

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.005	0.005					
Z	0.000	-0.807	-0.807					
TP	RFS		1.614	0.200		0.000	1.414	

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.052	0.052				
Z	0.000	-0.851	-0.851				
TP	RFS		1.705	0.200		0.000	1.505

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.058	0.058				
Z	0.000	-0.812	-0.812				
TP	RFS		1.628	0.200		0.000	1.428

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.073	0.073				
Z	0.000	-0.828	-0.828				
TP	RFS		1.662	0.200		0.000	1.462

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.084	0.084				
Z	0.000	-0.695	-0.695				
TP	RFS		1.400	0.200		0.000	1.200

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.097	0.097				
Z	0.000	-0.712	-0.712				
TP	RFS		1.437	0.200		0.000	1.237

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.129	0.129				
Z	0.000	-0.469	-0.469				
TP	RFS		0.973	0.200		0.000	0.773

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.141	0.141				
Z	0.000	-0.465	-0.465				
TP	RFS		0.972	0.200		0.000	0.772

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

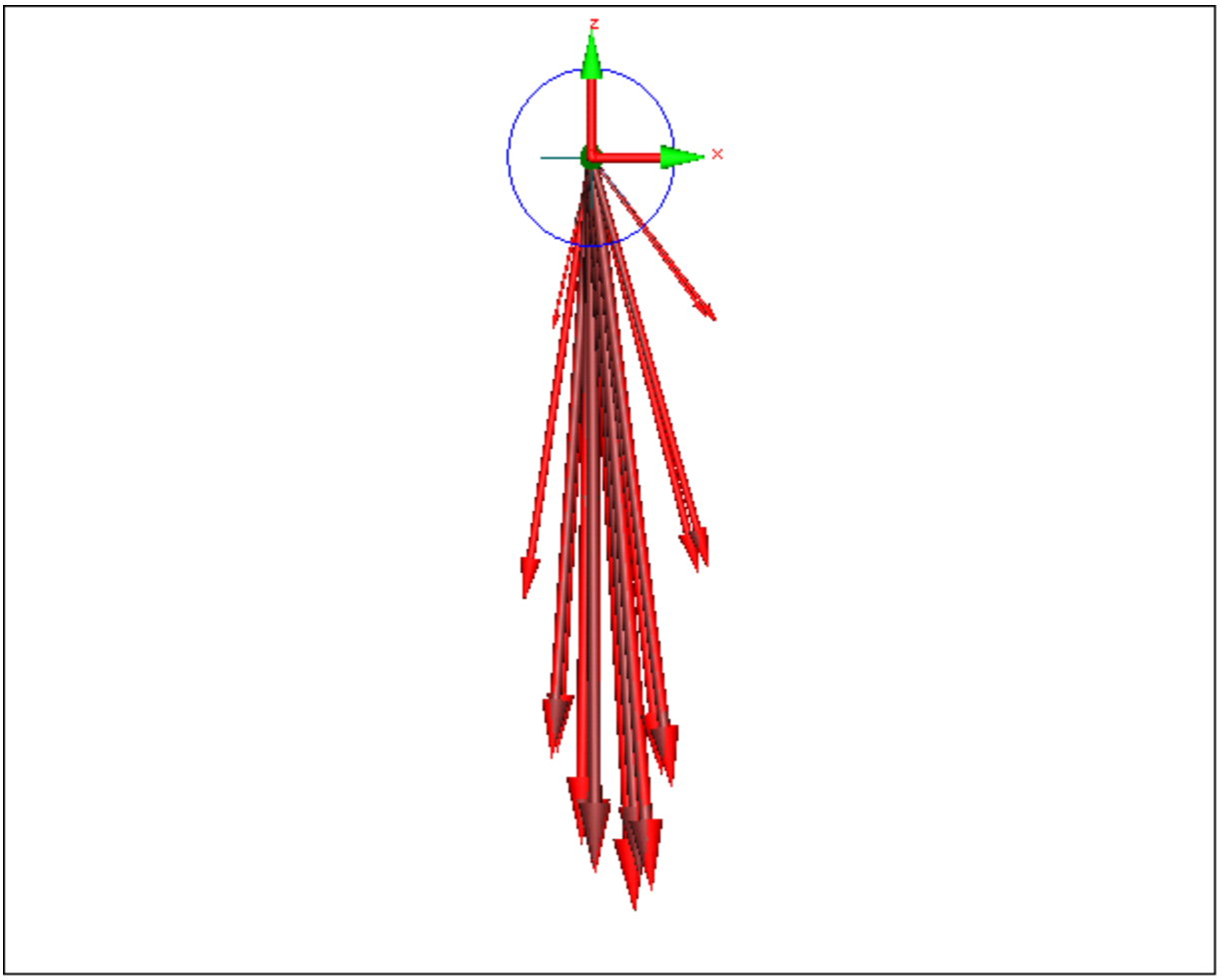
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.152	0.152				
Z	0.000	-0.187	-0.187				
TP	RFS		0.483	0.200		0.000	0.283

MM	DIM LOC-TP-CC20= TRUE POSITION OF CIRCLE CRC-CAV-9-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.140	0.140				
Z	0.000	-0.181	-0.182				
TP	RFS		0.459	0.200		0.000	0.259

MM	DIM LOC-TP-CC21= TRUE POSITION OF CIRCLE CRC-VAC-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.048	0.048				
Z	0.000	-0.055	-0.055				
TP	RFS		0.145	0.200		0.000	0.000

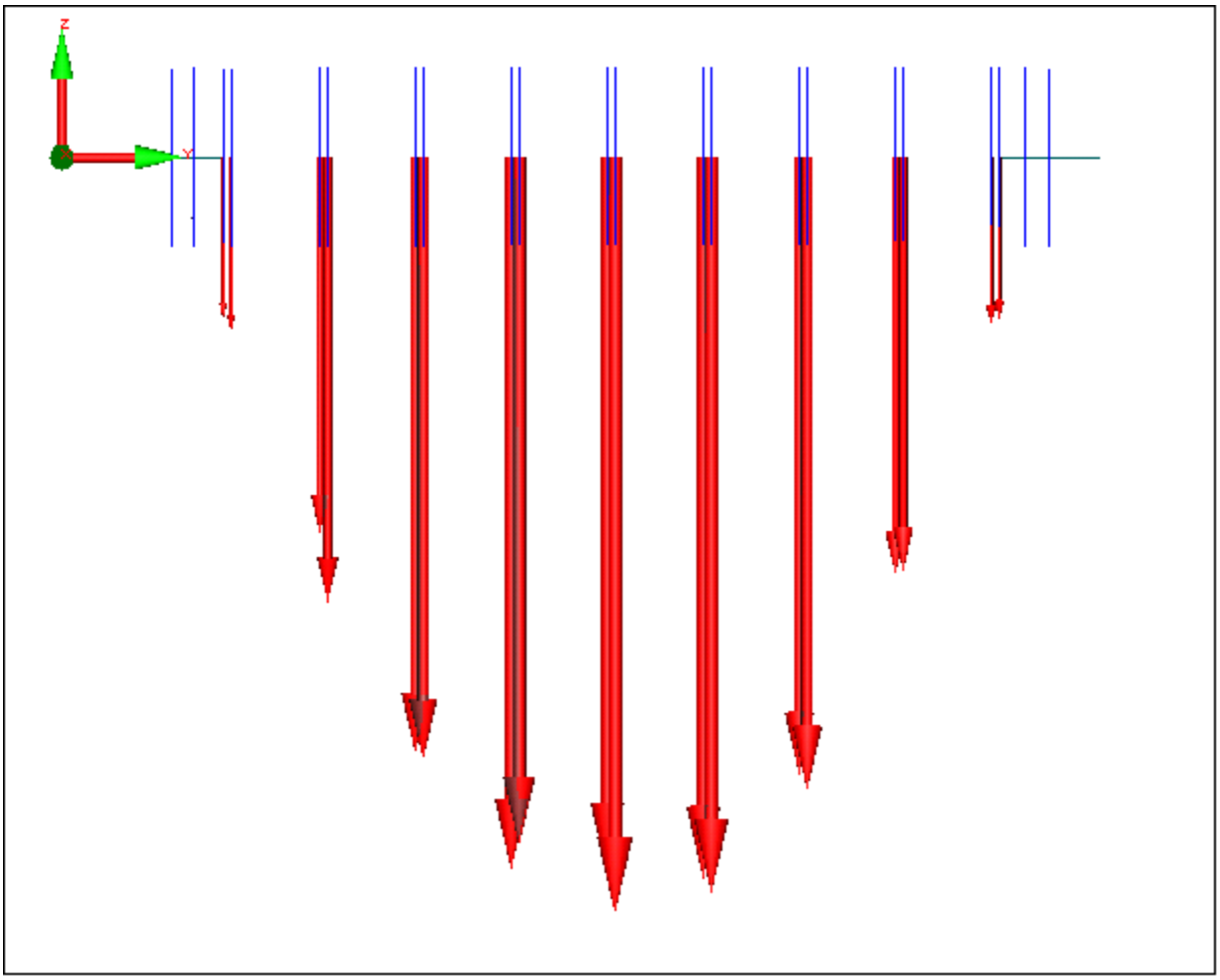
MM	DIM LOC-TP-CC22= TRUE POSITION OF CIRCLE CRC-DAT-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.000	0.000				
Z	0.000	0.000	0.000				
TP	RFS		0.000	0.200		0.000	0.000

True Position plots from 3 views
x1000



-Y View

x1000



+X View
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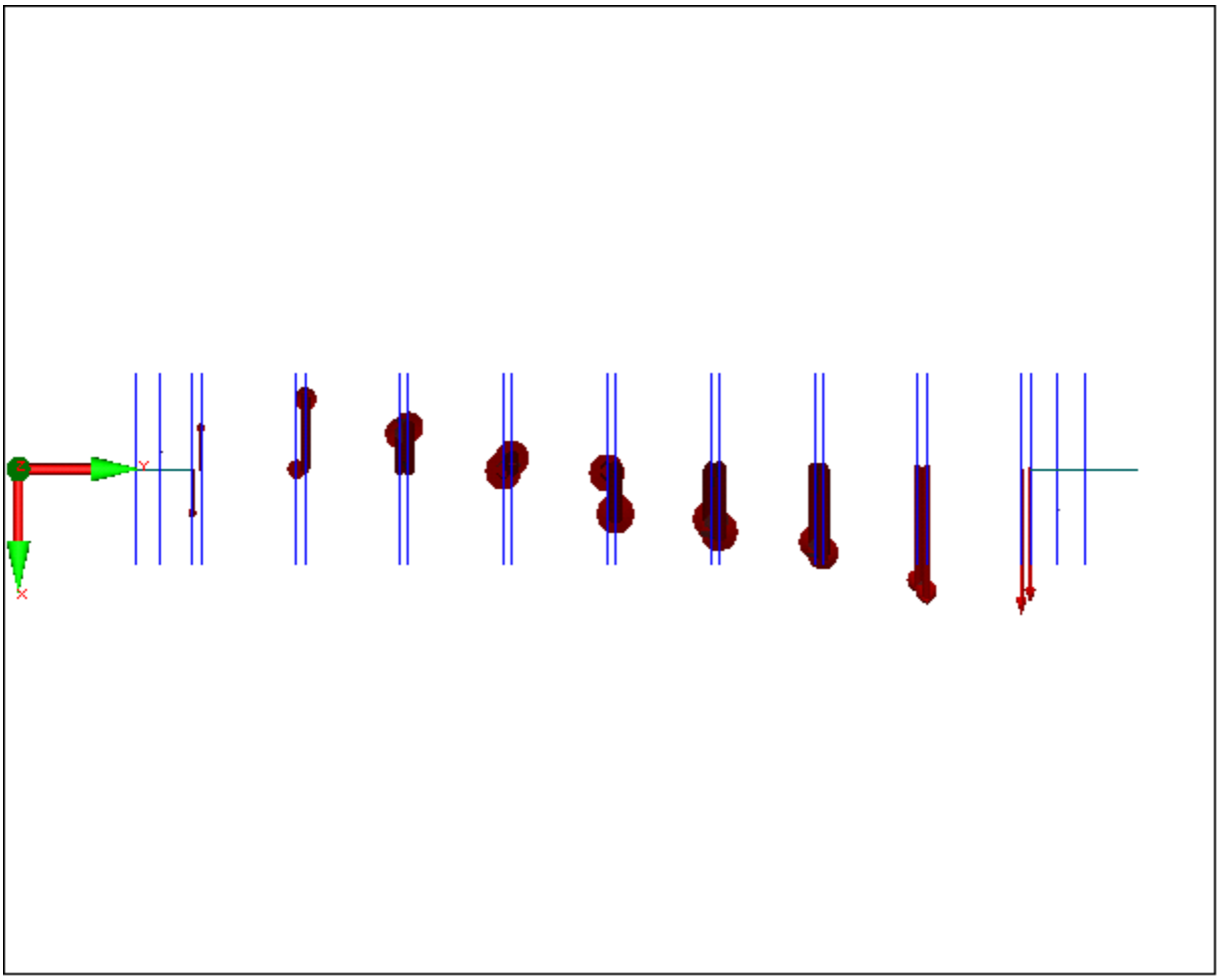


+Z View
x1000

MM	DIM LOC-BEST FIT CONSTRUCTED LINE= LOCATION OF LINE LNC-BEST-FIT					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.036	0.036	0.200	0.200	0.000
Y	658.560	659.299	0.739	1.000	1.000	0.000
Z	0.000	-0.471	-0.471	0.200	0.200	0.271
ST	0.000	0.862	0.862	0.200	0.000	0.662

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	-0.028	-0.028	0.200	0.200	0.000
Y	256.462	256.453	-0.009	1.000	1.000	0.000
Z	0.000	-0.280	-0.280	0.200	0.200	0.080
R	56.500	56.347	-0.153	0.200	0.200	0.000
RN	0.000	0.003	0.003	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	-0.048	-0.048	0.200	0.200	0.000
Y	371.792	371.785	-0.007	1.000	1.000	0.000
Z	0.000	-0.617	-0.617	0.200	0.200	0.417
R	56.500	56.316	-0.184	0.200	0.200	0.000
RN	0.000	0.000	0.000	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	-0.031	-0.031	0.200	0.200	0.000
Y	487.122	487.114	-0.008	1.000	1.000	0.000
Z	0.000	-0.680	-0.680	0.200	0.200	0.480
R	56.500	56.399	-0.101	0.200	0.200	0.000
RN	0.000	0.007	0.007	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	-0.040	-0.040	0.200	0.200	0.000
Y	602.452	602.443	-0.009	1.000	1.000	0.000
Z	0.000	-0.646	-0.646	0.200	0.200	0.446
R	56.500	56.290	-0.210	0.200	0.200	0.010
RN	0.000	0.036	0.036	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	0.031	0.030	0.200	0.200	0.000
Y	717.557	717.547	-0.010	1.000	1.000	0.000
Z	0.000	-0.714	-0.714	0.200	0.200	0.514
R	56.500	56.321	-0.179	0.200	0.200	0.000
RN	0.000	0.016	0.016	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	0.012	0.012	0.200	0.200	0.000
Y	832.757	832.747	-0.010	1.000	1.000	0.000
Z	0.000	-0.811	-0.812	0.200	0.200	0.612
R	56.500	56.406	-0.094	0.200	0.200	0.000
RN	0.000	0.015	0.015	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	0.097	0.097	0.200	0.200	0.000
Y	948.157	948.147	-0.010	1.000	1.000	0.000
Z	0.000	-0.499	-0.499	0.200	0.200	0.299
R	56.500	56.355	-0.145	0.200	0.200	0.000
RN	0.000	0.021	0.021	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	0.079	0.079	0.200	0.200	0.000
Y	1063.457	1063.449	-0.008	1.000	1.000	0.000
Z	0.000	-0.203	-0.203	0.200	0.200	0.003
R	56.500	56.298	-0.202	0.200	0.200	0.002
RN	0.000	0.021	0.021	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	0.004	0.004	0.200	0.200	0.000
Y	250.557	250.555	-0.002	1.000	1.000	0.000
Z	56.500	56.091	-0.409	0.200	0.200	0.209

MM	DIM LOC-SUPPORT RING-PT2= LOCATION OF POINT PT-SUPPORT-RING-T23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.004	0.005	0.200	0.200	0.000
Y	365.887	365.885	-0.002	1.000	1.000	0.000
Z	56.500	55.753	-0.747	0.200	0.200	0.547

MM	DIM LOC-SUPPORT RING-PT3= LOCATION OF POINT PT-SUPPORT-RING-T34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.005	0.005	0.200	0.200	0.000
Y	481.217	481.215	-0.002	1.000	1.000	0.000
Z	56.500	55.781	-0.719	0.200	0.200	0.519

MM	DIM LOC-SUPPORT RING-PT4= LOCATION OF POINT PT-SUPPORT-RING-T45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.005	0.005	0.200	0.200	0.000
Y	596.547	596.545	-0.002	1.000	1.000	0.000
Z	56.500	55.607	-0.893	0.200	0.200	0.693

MM	DIM LOC-SUPPORT RING-PT5= LOCATION OF POINT PT-SUPPORT-RING-T56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.005	0.005	0.200	0.200	0.000
Y	711.557	711.555	-0.002	1.000	1.000	0.000
Z	56.500	55.601	-0.899	0.200	0.200	0.699

MM	DIM LOC-SUPPORT RING-PT6= LOCATION OF POINT PT-SUPPORT-RING-T67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.006	0.006	0.200	0.200	0.000
Y	826.857	826.855	-0.002	1.000	1.000	0.000
Z	56.500	55.600	-0.900	0.200	0.200	0.700

MM	DIM LOC-SUPPORT RING-PT7= LOCATION OF POINT PT-SUPPORT-RING-T78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.006	0.006	0.200	0.200	0.000
Y	942.157	942.155	-0.002	1.000	1.000	0.000
Z	56.500	55.838	-0.662	0.200	0.200	0.462

MM	DIM LOC-SUPPORT RING-PT8= LOCATION OF POINT PT-SUPPORT-RING-T89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.006	0.006	0.200	0.200	0.000
Y	1057.557	1057.555	-0.002	1.000	1.000	0.000
Z	56.500	56.114	-0.386	0.200	0.200	0.186

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	-0.280	-0.280	0.200	0.200	0.080

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	-0.617	-0.617	0.200	0.200	0.417

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	-0.680	-0.680	0.200	0.200	0.480

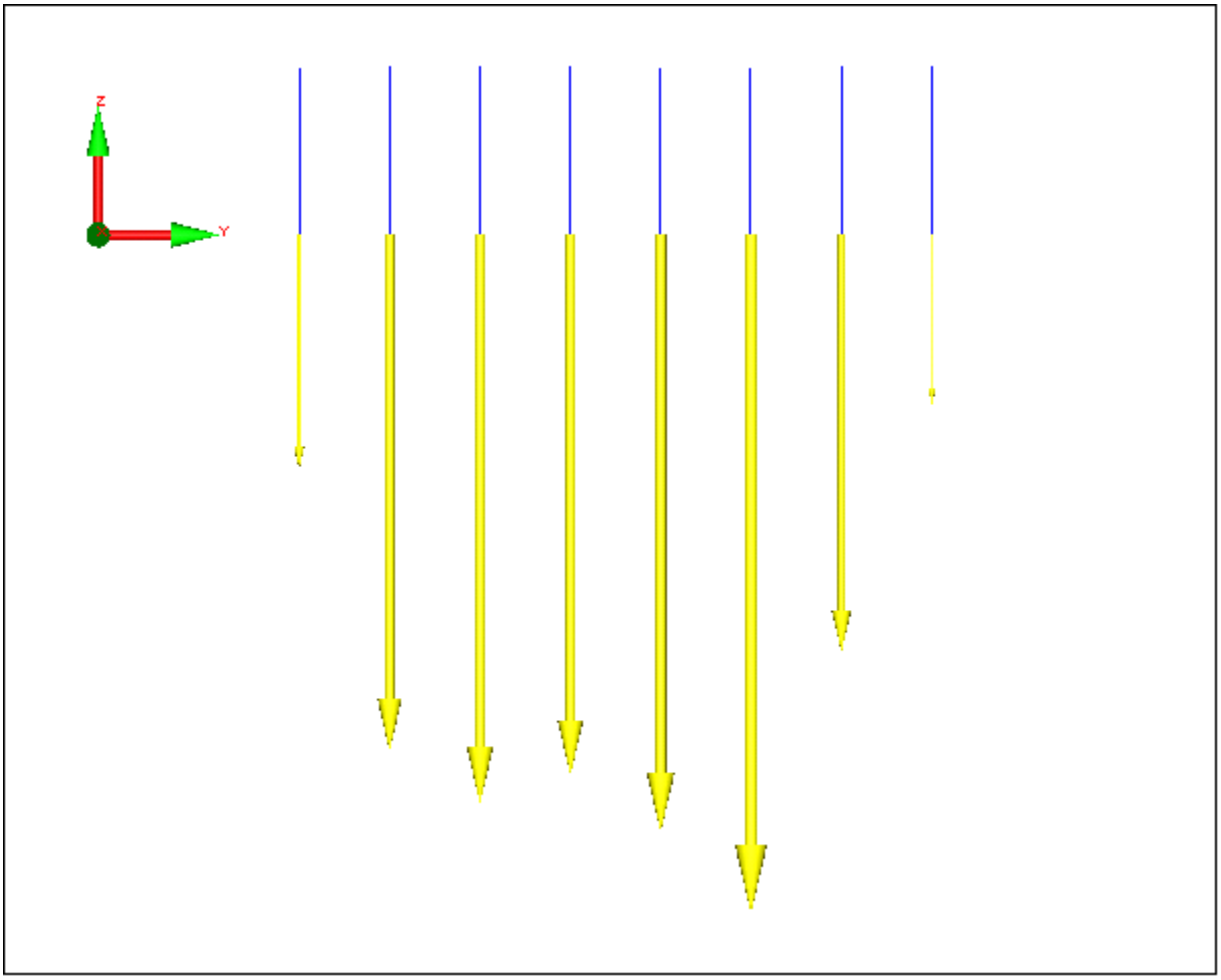
MM	DIM LOC Z SUPPORT RING CIRCLES 4= LOCATION OF CIRCLE CR-SUPPORT-RING-T4					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.646	-0.646	0.200	0.200	0.446

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	-0.714	-0.714	0.200	0.200	0.514

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	-0.811	-0.812	0.200	0.200	0.612

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	-0.499	-0.499	0.200	0.200	0.299

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	-0.203	-0.203	0.200	0.200	0.003



SUPPORT RING CIRCLES IN Z
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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	56.091	-0.409	0.200	0.200	0.209

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	55.753	-0.747	0.200	0.200	0.547

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	55.781	-0.719	0.200	0.200	0.519

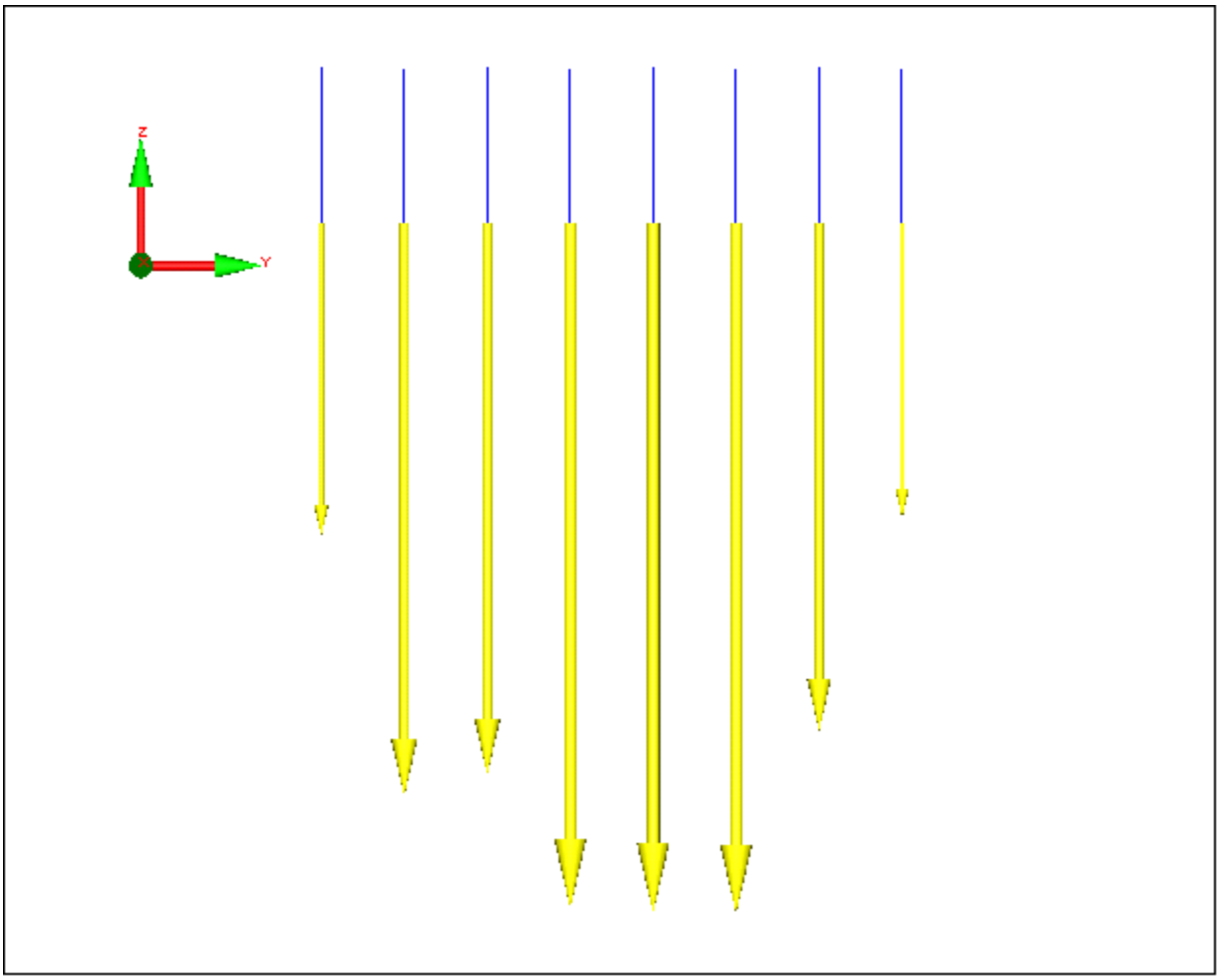
MM	DIM LOC Z SUPPORT RING POINTS 4= LOCATION OF POINT PT-SUPPORT-RING-T45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	55.607	-0.893	0.200	0.200	0.693

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	55.601	-0.899	0.200	0.200	0.699

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	55.600	-0.900	0.200	0.200	0.700

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	55.838	-0.662	0.200	0.200	0.462

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	56.114	-0.386	0.200	0.200	0.186



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	14.118	-0.881	0.500	0.500	0.381

ANGLE I: 0.2439278
ANGLE K: 0.9697934

END OF MEASUREMENT FOR
PN=ILC DESY 1.3GHZ RF CAVITY ASSEMBLY DWG= SN=
TOTAL # OF MEAS =291 # OUT OF TOL =115