DATE=10/27/2005
PART NAME : ILC DESY 1.3GHZ RF CAVITY ASSEMBLY 180
REV NUMBER :
SER NUMBER :
STATS COUNT : 1

'Inspected by' : Robert Riley
'Cavity Number' : ACCEL 6 180 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	-0.004			
FL	0.000	0.014	0.014	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	0.433	0.433	0.200	0.000	0.233

DEG	DIM ANGL1= 3D ANGLE (COMPLEMENT) FROM PLANE PL-NEAR-END-FLANGE TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.209	0.209	0.100	0.100	0.109

MM	DIM LOC2= LOCATION OF CIRCLE CR-NEAR-END -FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.044	0.043	0.200	0.200	0.000
Z	0.000	-0.368	-0.368	0.200	0.200	0.168
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	1282.024	-1.376	3.000	3.000	0.000
V	0.003	1.000	-0.001			
FL	0.000	0.113	0.113	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	0.419	0.419	0.200	0.000	0.219

DEG	DIM ANGL2= 3D ANGLE (COMPLEMENT) FROM PLANE PL-FAR-END TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.177	0.177	0.100	0.100	0.077

MM	DIM LOC4= LOCATION OF CIRCLE CR-FAR-END					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.130	0.130	0.200	0.200	0.000
Z	0.000	-0.281	-0.281	0.200	0.200	0.081
D	140.000	140.050	0.050	0.300	0.300	0.000
RN	0.000	0.031	0.031	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	129.023	0.223	0.200	0.200	0.023
V	-0.000	-1.000	-0.002			
FL	0.000	0.046	0.046	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	0.258	0.258	0.200	0.000	0.058

DEG	DIM ANGL7= 3D ANGLE (TRUE) FROM PLANE PLC-DAT-1 TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.137	0.137	0.100	0.100	0.037

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	1188.388	-1.612	0.200	0.200	1.412
V	-0.001	1.000	-0.003			
FL	0.000	0.020	0.020	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	0.299	0.299	0.200	0.000	0.099

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.160	0.160	0.100	0.100	0.060

PICKUP ANTENNA FLANGE NW8

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-53.800	-53.886	-0.086	0.200	0.200	0.000
V	-1.000	-0.005	-0.016			
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	0.430	0.430	0.200	0.000	0.230

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.960	0.960	0.100	0.100	0.860

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	96.600	96.566	-0.034	0.200	0.200	0.000
Z	0.000	-0.606	-0.606	0.200	0.200	0.406
D	33.800	33.803	0.003	0.150	0.000	0.000
RN	0.000	0.011	0.011	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	87.682	-0.318	0.200	0.200	0.118
V	1.000	-0.005	0.002			
FL	0.000	0.017	0.017	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	0.285	0.285	0.200	0.000	0.085

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.273	0.273	0.100	0.100	0.173

MM	DIM LOC8= LOCATION OF CIRCLE CR-NW-40-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1222.800	1221.394	-1.406	0.200	0.200	1.206
Z	0.000	-0.010	-0.010	0.200	0.200	0.000
D	76.000	76.011	0.011	0.200	0.000	0.000
RN	0.000	0.040	0.040	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	60.630	0.030	0.200	0.200	0.000

HOM-1 FLANGE NW12

MM	DIM FLAT1= FLATNESS OF PLANE PL-NW12-FLANGE-HOM1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.001	0.001	0.200	0.000	0.000

DEG	DIM ANGL16= 2D ANGLE (TRUE) FROM PLANE PL-NW12-FLANGE-HOM1 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	15.000	17.661	2.661	0.500	0.500	2.161

DEG	DIM ANGL17= 2D ANGLE (COMPLEMENT) FROM PLANE PL-NW12-FLANGE-HOM1 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	30.000	29.984	-0.016	0.500	0.500	0.000

MM	DIM LOC Z SUPPORT RING POINTS 9= LOCATION OF CIRCLE CR-NW12-FLANGE-HOM1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	39.018	38.101	-0.918	0.200	0.200	0.718
Y	93.022	93.020	-0.002	0.200	0.200	0.000
Z	-61.443	-62.400	-0.958	0.200	0.200	0.758
D	33.800	33.797	-0.003	0.150	0.000	0.003
RN	0.000	0.022	0.022	0.150	0.000	0.000

HOM-2 FLANGE NW12

MM	DIM = FLATNESS OF PLANE PL-NW12-FLANGE-HOM-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.003	0.003	0.000	0.000	0.003

DEG	DIM ANGL5= 2D ANGLE (COMPLEMENT) FROM PLANE PL-NW12-FLANGE-HOM-2 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	15.000	17.025	2.025	0.500	0.500	1.525

DEG	DIM ANGL6= 2D ANGLE (TRUE) FROM PLANE PL-NW12-FLANGE-HOM-2 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	34.544	-0.456	0.500	0.500	0.000

MM	DIM LOC9= LOCATION OF CIRCLE CR-NW12-FLANGE-HOM-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-71.322	-71.540	-0.218	0.200	0.200	0.018
Y	1224.495	1224.508	0.013	0.200	0.200	0.000
Z	-8.596	-7.579	1.018	0.200	0.200	0.818
D	33.800	33.725	-0.075	0.150	0.000	0.075
RN	0.000	0.028	0.028	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	69.079	68.427	-0.652	0.200	0.200	0.452
Y	95.996	96.796	0.800	0.200	0.200	0.600
Z	-39.027	-40.202	-1.176	0.200	0.200	0.976
D	44.000	43.844	-0.156	0.000	0.100	0.056
RN	0.000	0.082	0.082	0.100	0.000	0.000
V	-0.865	-0.003	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	30.172	0.172	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	89.822	-0.178	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	59.828	-0.172	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	115.776	-0.224	0.200	0.200	0.024

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	96.551	-0.049	0.200	0.200	0.000
Z	0.000	-0.422	-0.422	0.200	0.200	0.222

HOM 2 LOCATION

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-64.329	-64.915	-0.586	0.200	0.200	0.386
Y	1221.447	1221.411	-0.037	3.000	3.000	0.000
Z	-45.746	-44.833	0.912	0.200	0.200	0.712
D	44.000	43.924	-0.076	0.000	0.100	0.000
RN	0.000	0.057	0.057	0.100	0.000	0.000
V	-0.827	0.000	-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	60.128	-0.472	0.200	0.200	0.272

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	34.190	-0.810	0.500	0.500	0.310

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	90.000	90.012	0.012	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	55.810	0.810	0.500	0.500	0.310

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	116.000	115.143	-0.857	0.200	0.200	0.657

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	1221.213	1221.395	0.182	3.000	3.000	0.000
Z	0.000	-0.735	-0.735	0.200	0.200	0.535

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	130.939	0.214	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	0.012	0.012	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	-0.015	-0.015	0.200	0.200	0.000
Y	158.307	158.078	-0.229	1.000	1.000	0.000
Z	0.000	0.057	0.057	0.200	0.200	0.000
D	191.200	191.180	-0.020	0.200	0.200	0.000
RN	0.000	0.035	0.035	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	0.058	0.058	0.200	0.200	0.000
Y	193.513	193.827	0.314	1.000	1.000	0.000
Z	0.000	0.133	0.133	0.200	0.200	0.000
D	210.300	210.556	0.256	0.200	0.200	0.056
RN	0.000	0.060	0.060	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	-0.040	-0.040	0.200	0.200	0.000
Y	203.315	202.726	-0.589	1.000	1.000	0.000
Z	0.000	0.128	0.128	0.200	0.200	0.000
D	210.300	210.593	0.293	0.200	0.200	0.093
RN	0.000	0.111	0.111	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	-0.013	-0.013	0.200	0.200	0.000
Y	309.514	309.791	0.277	1.000	1.000	0.000
Z	0.000	0.399	0.399	0.200	0.200	0.199
D	210.300	210.647	0.347	0.200	0.200	0.147
RN	0.000	0.096	0.096	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	-0.074	-0.074	0.200	0.200	0.000
Y	319.276	318.913	-0.363	1.000	1.000	0.000
Z	0.000	0.329	0.329	0.200	0.200	0.129
D	210.300	210.613	0.312	0.200	0.200	0.112
RN	0.000	0.105	0.105	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	-0.055	-0.055	0.200	0.200	0.000
Y	423.959	424.330	0.371	1.000	1.000	0.000
Z	0.000	0.533	0.533	0.200	0.200	0.333
D	210.300	210.677	0.376	0.200	0.200	0.176
RN	0.000	0.123	0.123	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	-0.034	-0.034	0.200	0.200	0.000
Y	434.018	433.011	-1.007	1.000	1.000	0.007
Z	0.000	0.538	0.538	0.200	0.200	0.338
D	210.300	210.702	0.402	0.200	0.200	0.202
RN	0.000	0.073	0.073	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	-0.003	-0.003	0.200	0.200	0.000
Y	539.193	539.612	0.419	1.000	1.000	0.000
Z	0.000	0.644	0.644	0.200	0.200	0.444
D	210.300	210.580	0.279	0.200	0.200	0.079
RN	0.000	0.127	0.127	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	-0.009	-0.009	0.200	0.200	0.000
Y	549.308	548.519	-0.789	1.000	1.000	0.000
Z	0.000	0.677	0.676	0.200	0.200	0.476
D	210.300	210.542	0.242	0.200	0.200	0.042
RN	0.000	0.171	0.171	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	0.008	0.008	0.200	0.200	0.000
Y	654.473	654.768	0.295	1.000	1.000	0.000
Z	0.000	0.716	0.716	0.200	0.200	0.516
D	210.300	210.620	0.320	0.200	0.200	0.120
RN	0.000	0.259	0.259	0.200	0.000	0.059

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.054	0.054	0.200	0.200	0.000
Y	664.439	663.925	-0.515	1.000	1.000	0.000
Z	0.000	0.669	0.669	0.200	0.200	0.469
D	210.300	210.544	0.243	0.200	0.200	0.043
RN	0.000	0.134	0.134	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	0.044	0.044	0.200	0.200	0.000
Y	770.224	770.327	0.104	1.000	1.000	0.000
Z	0.000	0.621	0.621	0.200	0.200	0.421
D	210.300	210.598	0.298	0.200	0.200	0.098
RN	0.000	0.095	0.095	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	0.086	0.086	0.200	0.200	0.000
Y	779.934	779.178	-0.756	1.000	1.000	0.000
Z	0.000	0.599	0.599	0.200	0.200	0.399
D	210.300	210.602	0.302	0.200	0.200	0.102
RN	0.000	0.139	0.139	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	0.078	0.077	0.200	0.200	0.000
Y	885.675	885.503	-0.172	1.000	1.000	0.000
Z	0.000	0.494	0.494	0.200	0.200	0.294
D	210.300	210.651	0.350	0.200	0.200	0.150
RN	0.000	0.199	0.199	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	0.118	0.118	0.200	0.200	0.000
Y	895.028	894.175	-0.853	1.000	1.000	0.000
Z	0.000	0.468	0.467	0.200	0.200	0.267
D	210.300	210.602	0.301	0.200	0.200	0.101
RN	0.000	0.159	0.159	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	0.120	0.120	0.200	0.200	0.000
Y	1000.912	1000.939	0.027	1.000	1.000	0.000
Z	0.000	0.336	0.336	0.200	0.200	0.136
D	210.300	210.649	0.348	0.200	0.200	0.148
RN	0.000	0.240	0.240	0.200	0.000	0.040

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.152	0.152	0.200	0.200	0.000
Y	1010.509	1009.771	-0.737	1.000	1.000	0.000
Z	0.000	0.332	0.332	0.200	0.200	0.132
D	210.300	210.587	0.287	0.200	0.200	0.087
RN	0.000	0.136	0.136	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	0.146	0.146	0.200	0.200	0.000
Y	1115.741	1115.657	-0.084	1.000	1.000	0.000
Z	0.000	0.126	0.126	0.200	0.200	0.000
D	210.300	210.528	0.227	0.200	0.200	0.027
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	0.132	0.132	0.200	0.200	0.000
Y	1125.443	1124.854	-0.589	1.000	1.000	0.000
Z	0.000	0.114	0.114	0.200	0.200	0.000
D	210.300	210.497	0.196	0.200	0.200	0.000
RN	0.000	0.220	0.220	0.200	0.000	0.020

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.051	0.050	0.200	0.200	0.000
Y	1156.557	1156.198	-0.358	1.000	1.000	0.000
Z	0.000	0.092	0.092	0.200	0.200	0.000
D	200.000	199.972	-0.028	0.200	0.200	0.000
RN	0.000	0.033	0.033	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	1186.549	0.155	1.000	1.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.918	-0.082	0.200	0.200	0.000
RN	0.000	0.017	0.017	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	-0.015	-0.015				
Z	0.000	0.057	0.057				
TP	RFS		0.117	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	0.058	0.058				
Z	0.000	0.133	0.133				
TP	RFS		0.290	0.200		0.000	0.090

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.040	-0.040				
Z	0.000	0.128	0.128				
TP	RFS		0.269	0.200		0.000	0.069

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.013	-0.013				
Z	0.000	0.399	0.399				
TP	RFS		0.799	0.200		0.000	0.599

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.074	-0.074				
Z	0.000	0.329	0.329				
TP	RFS		0.675	0.200		0.000	0.475

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.055	-0.055				
Z	0.000	0.533	0.533				
TP	RFS		1.072	0.200		0.000	0.872

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.034	-0.034				
Z	0.000	0.538	0.538				
TP	RFS		1.078	0.200		0.000	0.878

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.003	-0.003				
Z	0.000	0.644	0.644				
TP	RFS		1.288	0.200		0.000	1.088

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.009	-0.009				
Z	0.000	0.677	0.676				
TP	RFS		1.353	0.200		0.000	1.153

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.008	0.008				
Z	0.000	0.716	0.716				
TP	RFS		1.432	0.200		0.000	1.232

⊕ MM	DIM LOC-TP-CC12= TRUE POSITION OF CIRCLE CRC-CAV-5-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.054	0.054				
Z	0.000	0.669	0.669				
TP	RFS		1.342	0.200		0.000	1.142

⊕ MM	DIM LOC-TP-CC13= TRUE POSITION OF CIRCLE CRC-CAV-6-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.044	0.044				
Z	0.000	0.621	0.621				
TP	RFS		1.245	0.200		0.000	1.045

⊕ MM	DIM LOC-TP-CC14= TRUE POSITION OF CIRCLE CRC-CAV-6-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.086	0.086				
Z	0.000	0.599	0.599				
TP	RFS		1.210	0.200		0.000	1.010

⊕ MM	DIM LOC-TP-CC15= TRUE POSITION OF CIRCLE CRC-CAV-7-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.078	0.077				
Z	0.000	0.494	0.494				
TP	RFS		0.999	0.200		0.000	0.799

⊕ MM	DIM LOC-TP-CC16= TRUE POSITION OF CIRCLE CRC-CAV-7-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.118	0.118				
Z	0.000	0.468	0.467				
TP	RFS		0.964	0.200		0.000	0.764

⊕ MM	DIM LOC-TP-CC17= TRUE POSITION OF CIRCLE CRC-CAV-8-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.120	0.120				
Z	0.000	0.336	0.336				
TP	RFS		0.713	0.200		0.000	0.513

⊕ MM	DIM LOC-TP-CC18= TRUE POSITION OF CIRCLE CRC-CAV-8-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.152	0.152				
Z	0.000	0.332	0.332				
TP	RFS		0.729	0.200		0.000	0.529

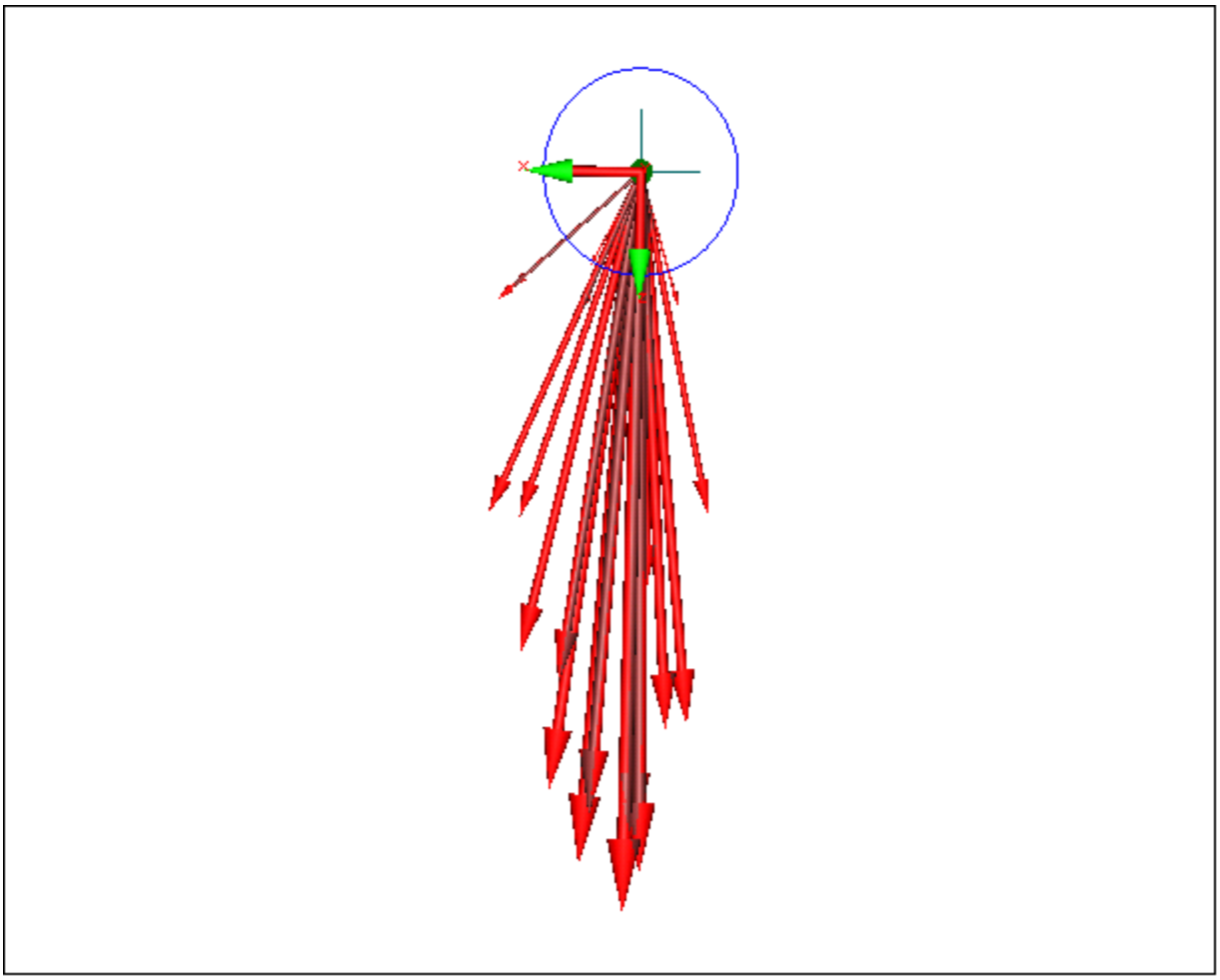
⊕ MM	DIM LOC-TP-CC19= TRUE POSITION OF CIRCLE CRC-CAV-9-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.146	0.146				
Z	0.000	0.126	0.126				
TP	RFS		0.386	0.200		0.000	0.186

MM	DIM LOC-TP-CC20= TRUE POSITION OF CIRCLE CRC-CAV-9-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.132	0.132				
Z	0.000	0.114	0.114				
TP	RFS		0.350	0.200		0.000	0.150

MM	DIM LOC-TP-CC21= TRUE POSITION OF CIRCLE CRC-VAC-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.051	0.050				
Z	0.000	0.092	0.092				
TP	RFS		0.210	0.200		0.000	0.010

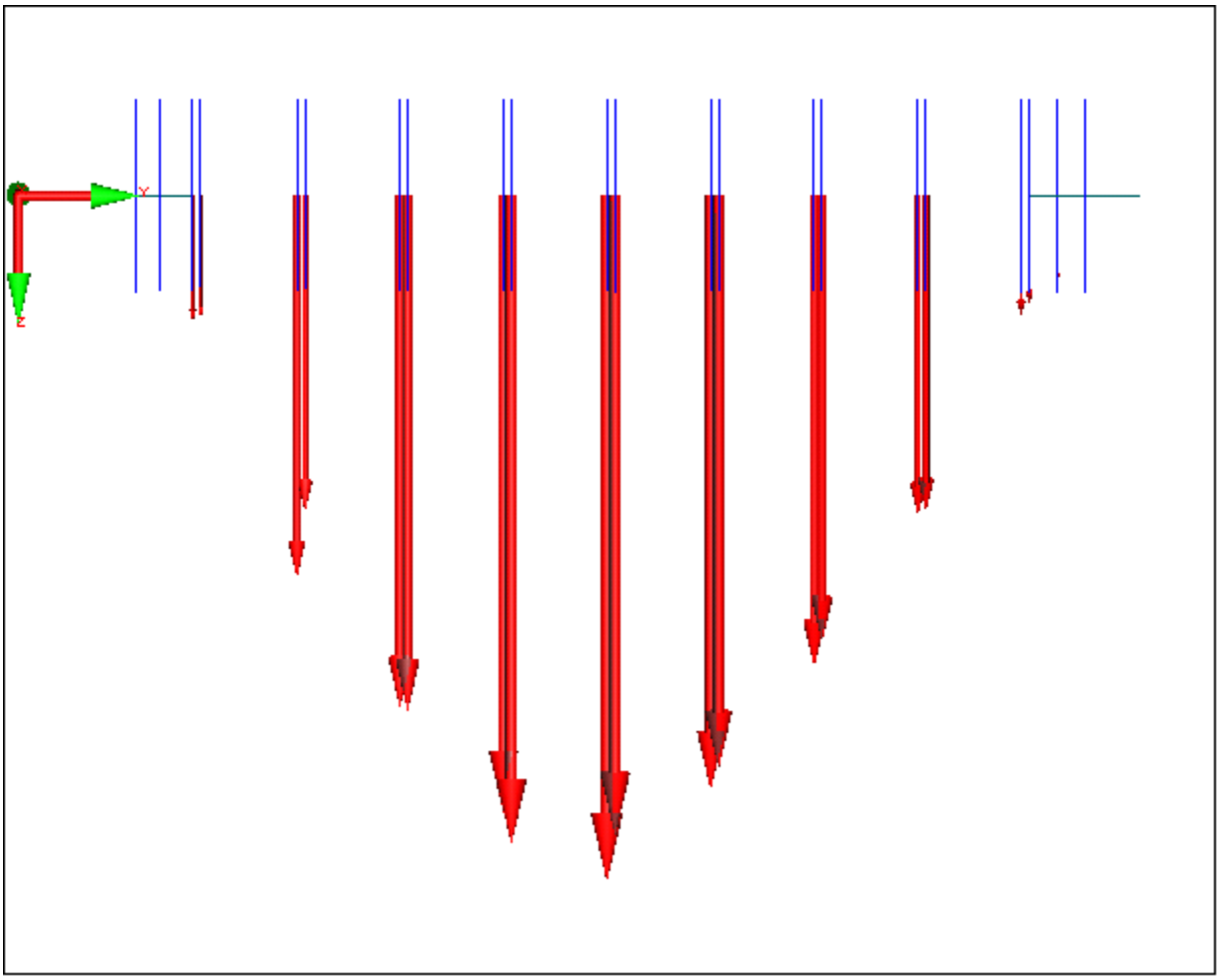
MM	DIM LOC-TP-CC22= TRUE POSITION OF CIRCLE CRC-DAT-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.000	0.000				
Z	0.000	0.000	0.000				
TP	RFS		0.000	0.200		0.000	0.000

True Position plots from 3 views
x1000



-Y View

x1000



+X View
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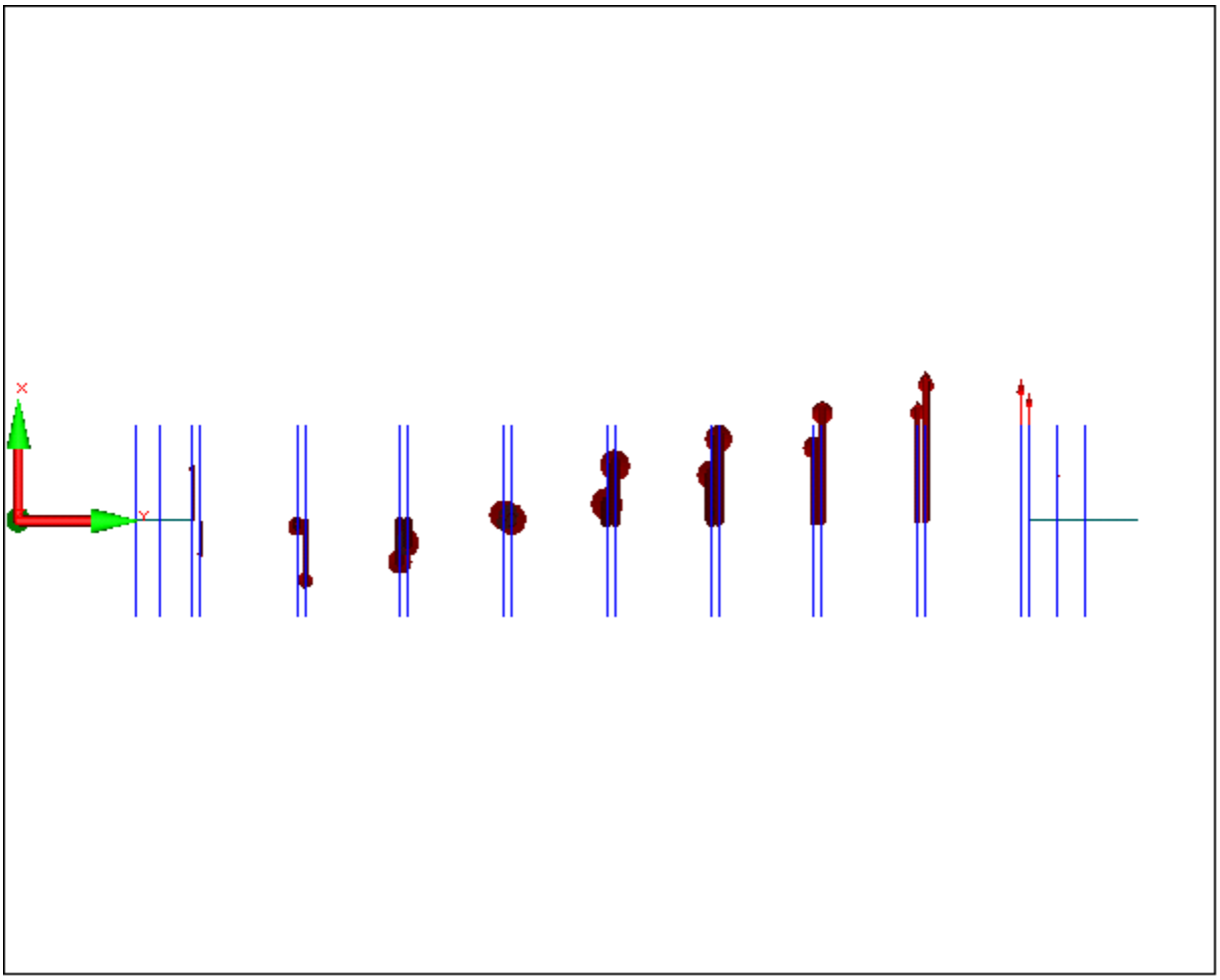


+Z View
x1000

MM	DIM LOC-BEST FIT CONSTRUCTED LINE= LOCATION OF LINE LNC-BEST-FIT					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.037	0.036	0.200	0.200	0.000
Y	658.560	659.163	0.603	1.000	1.000	0.000
Z	0.000	0.364	0.364	0.200	0.200	0.164
ST	0.000	0.728	0.728	0.200	0.000	0.528

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	-0.049	-0.050	0.200	0.200	0.000
Y	256.462	256.445	-0.017	1.000	1.000	0.000
Z	0.000	0.255	0.255	0.200	0.200	0.055
R	56.500	56.393	-0.107	0.200	0.200	0.000
RN	0.000	0.006	0.006	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	-0.065	-0.065	0.200	0.200	0.000
Y	371.792	371.774	-0.019	1.000	1.000	0.000
Z	0.000	0.400	0.400	0.200	0.200	0.200
R	56.500	56.291	-0.209	0.200	0.200	0.009
RN	0.000	0.013	0.013	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	-0.069	-0.070	0.200	0.200	0.000
Y	487.122	487.105	-0.017	1.000	1.000	0.000
Z	0.000	0.530	0.530	0.200	0.200	0.330
R	56.500	56.300	-0.200	0.200	0.200	0.000
RN	0.000	0.023	0.023	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	-0.042	-0.042	0.200	0.200	0.000
Y	602.452	602.435	-0.017	1.000	1.000	0.000
Z	0.000	0.655	0.655	0.200	0.200	0.455
R	56.500	56.366	-0.134	0.200	0.200	0.000
RN	0.000	0.020	0.020	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	0.073	0.072	0.200	0.200	0.000
Y	717.557	717.541	-0.016	1.000	1.000	0.000
Z	0.000	0.704	0.703	0.200	0.200	0.503
R	56.500	56.370	-0.130	0.200	0.200	0.000
RN	0.000	0.024	0.024	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	0.045	0.045	0.200	0.200	0.000
Y	832.757	832.739	-0.018	1.000	1.000	0.000
Z	0.000	0.566	0.566	0.200	0.200	0.366
R	56.500	56.342	-0.158	0.200	0.200	0.000
RN	0.000	0.016	0.016	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	0.162	0.161	0.200	0.200	0.000
Y	948.157	948.135	-0.022	1.000	1.000	0.000
Z	0.000	0.316	0.316	0.200	0.200	0.116
R	56.500	56.264	-0.236	0.200	0.200	0.036
RN	0.000	0.022	0.022	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	0.087	0.087	0.200	0.200	0.000
Y	1063.457	1063.441	-0.016	1.000	1.000	0.000
Z	0.000	0.260	0.260	0.200	0.200	0.060
R	56.500	56.369	-0.131	0.200	0.200	0.000
RN	0.000	0.007	0.007	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	-0.002	-0.002	0.200	0.200	0.000
Y	250.557	250.535	-0.022	1.000	1.000	0.000
Z	-56.500	-56.155	0.345	0.200	0.200	0.145

MM	DIM LOC-SUPPORT RING-PT2= LOCATION OF POINT PT-SUPPORT-RING-T23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.001	-0.001	0.200	0.200	0.000
Y	365.887	365.865	-0.022	1.000	1.000	0.000
Z	-56.500	-55.935	0.565	0.200	0.200	0.365

MM	DIM LOC-SUPPORT RING-PT3= LOCATION OF POINT PT-SUPPORT-RING-T34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.001	-0.001	0.200	0.200	0.000
Y	481.217	481.195	-0.022	1.000	1.000	0.000
Z	-56.500	-55.742	0.758	0.200	0.200	0.558

MM	DIM LOC-SUPPORT RING-PT4= LOCATION OF POINT PT-SUPPORT-RING-T45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	596.547	596.525	-0.022	1.000	1.000	0.000
Z	-56.500	-55.684	0.816	0.200	0.200	0.616

MM	DIM LOC-SUPPORT RING-PT5= LOCATION OF POINT PT-SUPPORT-RING-T56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	711.557	711.535	-0.022	1.000	1.000	0.000
Z	-56.500	-55.634	0.866	0.200	0.200	0.666

MM	DIM LOC-SUPPORT RING-PT6= LOCATION OF POINT PT-SUPPORT-RING-T67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	826.857	826.835	-0.022	1.000	1.000	0.000
Z	-56.500	-55.738	0.762	0.200	0.200	0.562

MM	DIM LOC-SUPPORT RING-PT7= LOCATION OF POINT PT-SUPPORT-RING-T78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.001	0.001	0.200	0.200	0.000
Y	942.157	942.135	-0.022	1.000	1.000	0.000
Z	-56.500	-55.957	0.543	0.200	0.200	0.343

MM	DIM LOC-SUPPORT RING-PT8= LOCATION OF POINT PT-SUPPORT-RING-T89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.001	0.001	0.200	0.200	0.000
Y	1057.557	1057.535	-0.022	1.000	1.000	0.000
Z	-56.500	-56.105	0.395	0.200	0.200	0.195

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	0.255	0.255	0.200	0.200	0.055

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	0.400	0.400	0.200	0.200	0.200

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	0.530	0.530	0.200	0.200	0.330

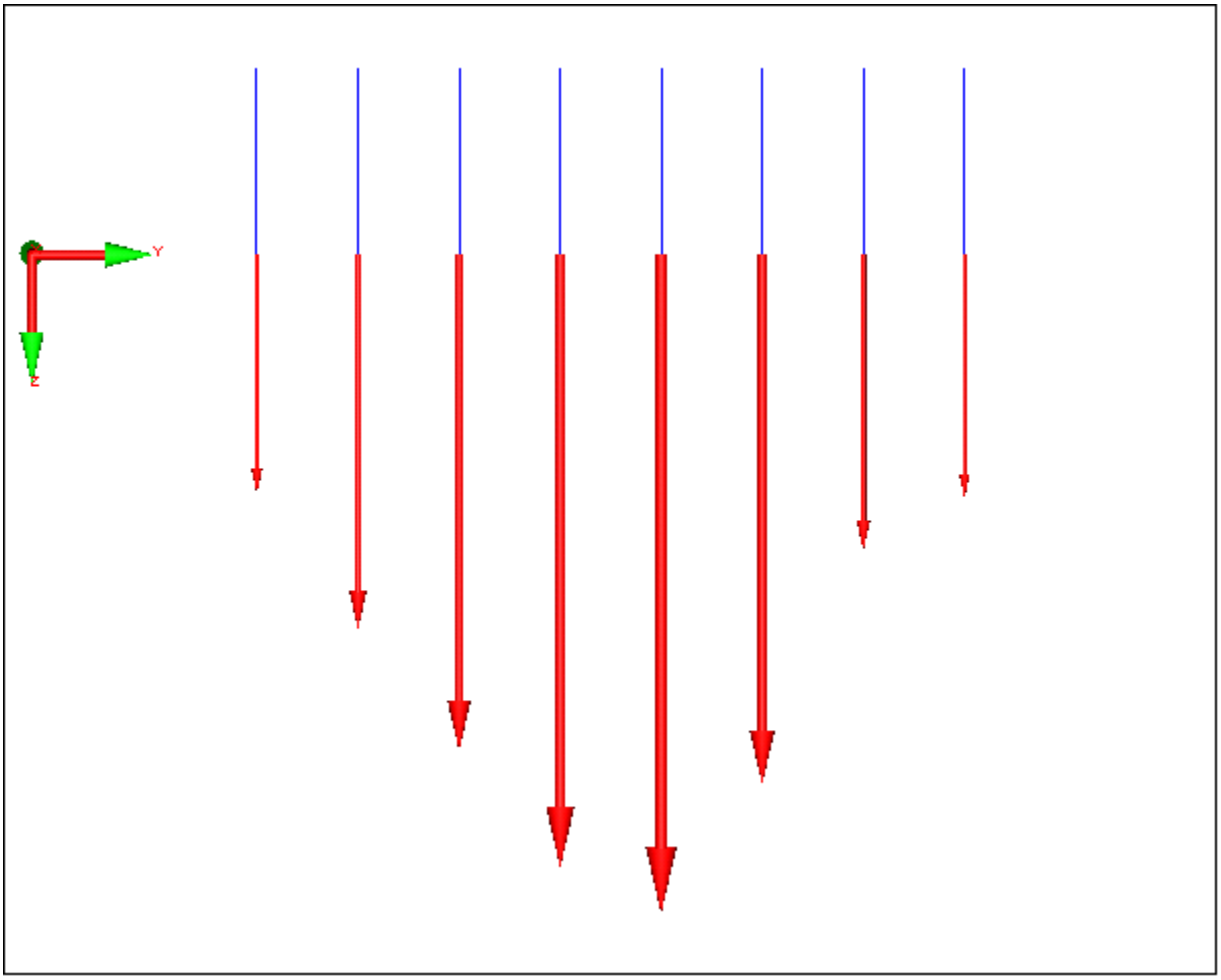
MM	DIM LOC Z SUPPORT RING CIRCLES 4= LOCATION OF CIRCLE CR-SUPPORT-RING-T4					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	0.655	0.655	0.200	0.200	0.455

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	0.704	0.703	0.200	0.200	0.503

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	0.566	0.566	0.200	0.200	0.366

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	0.316	0.316	0.200	0.200	0.116

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	0.260	0.260	0.200	0.200	0.060



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	-56.155	0.345	0.200	0.200	0.145

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	-55.935	0.565	0.200	0.200	0.365

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	-55.742	0.758	0.200	0.200	0.558

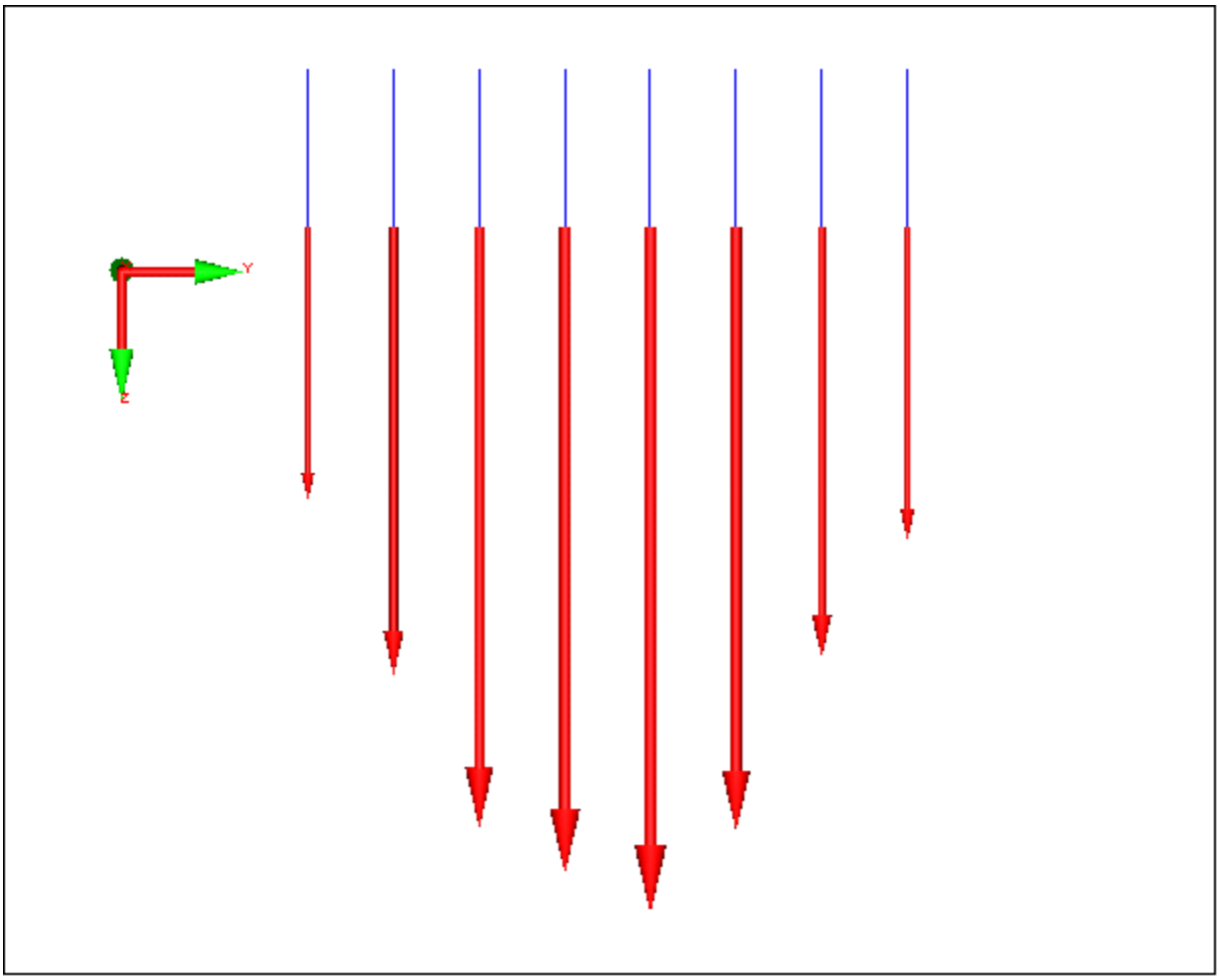
MM	DIM LOC Z SUPPORT RING POINTS 4= LOCATION OF POINT PT-SUPPORT-RING-T45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	-56.500	-55.684	0.816	0.200	0.200	0.616

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	-55.634	0.866	0.200	0.200	0.666

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	-55.738	0.762	0.200	0.200	0.562

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	-55.957	0.543	0.200	0.200	0.343

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	-56.105	0.395	0.200	0.200	0.195



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	14.118	14.118	0.000	0.500	0.500	0.000

ANGLE I: 0.2439225
ANGLE K: 0.9697947

END OF MEASUREMENT FOR
PN=ILC DESY 1.3GHZ RF CAVITY ASSEMBLY 180 DWG= SN=
TOTAL # OF MEAS =299 # OUT OF TOL =131