FERMILAB Technical Division

QUALITY CONTROL REPORT

DATE=5/8/2009 TIME=4:28:25 PM

PART NAME : PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR
REV NUMBER :
SER NUMBER :
STATS COUNT : 1

440004-n
FNAL 1.3GHZ TESLA
RF CAVITY
ASSEMBLY
@ 180 rotation

'Inspected by ' : Robert Riley
'Cavity Number' : TB9AES010
' ' : 0905080620

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	-0.001	-1.000	-0.003			
FL	0.000	0.053	0.053	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	0.339	0.339	0.200	0.000	0.139

DEG	DIM ANGL1= 3D ANGLE (COMPLEMENT) FROM PLANE PL-NEAR-END-FLANGE TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.157	0.157	0.100	0.100	0.057

MM	DIM LOC2= LOCATION OF CIRCLE CR-NEAR-END-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.120	-0.120	0.200	0.200	0.000
Z	0.000	-0.259	-0.259	0.200	0.200	0.059
D	140.000	139.986	-0.014	0.300	0.300	0.000
RN	0.000	0.009	0.009	0.200	0.000	0.000

MM	DIM DIST03= 2D DISTANCE FROM PLANE PL-NEAR-END-FLANGE TO PLANE PL-NEAR-END-FLANGE-ORING PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1.000	0.958	-0.042	0.100	0.100	0.000

True Position of 6 Bolt Holes on the
NEAR BEAM PIPE FLANGE
to flange

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⊕ MM	DIM TP NBPF BH7= TRUE POSITION OF CIRCLE CR-NEARFLANGE BH 195						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	60.010	0.010				
PA	-165.000	-166.937	-1.937				
DF	8.800	8.760	-0.040	0.300	0.300		0.000
TP	RFS		4.056	0.300		0.000	3.756
RN	0.000	0.013	0.013	0.300	0.000		0.000

⊕ MM	DIM TP NBPF BH8= TRUE POSITION OF CIRCLE CR-NEARFLANGE BH 225						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.993	-0.008				
PA	-135.000	-136.890	-1.890				
DF	8.800	8.763	-0.037	0.300	0.300		0.000
TP	RFS		3.958	0.300		0.000	3.658
RN	0.000	0.014	0.014	0.300	0.000		0.000

⊕ MM	DIM TP NBPF BH9= TRUE POSITION OF CIRCLE CR-NEARFLANGE BH 255						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.972	-0.029				
PA	-105.000	-106.889	-1.889				
DF	8.800	8.765	-0.035	0.300	0.300		0.000
TP	RFS		3.956	0.300		0.000	3.656
RN	0.000	0.008	0.008	0.300	0.000		0.000

⊕ MM	DIM TP NBPF BH10= TRUE POSITION OF CIRCLE CR-NEARFLANGE BH 285						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.715	-0.285				
PA	-75.000	-76.927	-1.927				
DF	8.800	8.765	-0.035	0.300	0.300		0.000
TP	RFS		4.066	0.300		0.000	3.766
RN	0.000	0.009	0.009	0.300	0.000		0.000

⊕ MM	DIM TP NBPF BH11= TRUE POSITION OF CIRCLE CR-NEARFLANGE BH315						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.553	-0.447				
PA	-45.000	-46.792	-1.792				
DF	8.800	8.768	-0.032	0.300	0.300		0.000
TP	RFS		3.844	0.300		0.000	3.544
RN	0.000	0.012	0.012	0.300	0.000		0.000

⊕ MM	DIM TP NBPF BH12= TRUE POSITION OF CIRCLE CR-NEARFLANGE BH 345						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.773	-0.227				
PA	-15.000	-16.812	-1.812				
DF	8.800	8.768	-0.032	0.300	0.300		0.000
TP	RFS		3.815	0.300		0.000	3.515
RN	0.000	0.010	0.010	0.300	0.000		0.000

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BEAM PIPE FLANGE FAR

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1247.400	1250.346	2.946	3.000	3.000	0.000
V	-0.001	1.000	-0.003			
FL	0.000	0.017	0.017	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	0.337	0.337	0.200	0.000	0.137

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.159	0.159	0.100	0.100	0.059

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.109	-0.109	0.200	0.200	0.000
Z	0.000	-0.206	-0.206	0.200	0.200	0.006
D	140.000	140.014	0.014	0.300	0.300	0.000
RN	0.000	0.008	0.008	0.200	0.000	0.000

MM DIM DIST04= 2D DISTANCE FROM PLANE PL-FAR-END TO PLANE PL-FAR-END-FLANGE-ORING PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1.000	0.984	-0.016	0.100	0.100	0.000

True Position of 6 Bolt Holes on the
FAR BEAM PIPE FLANGE
to flange

MM DIM TP FBPF BH7= TRUE POSITION OF CIRCLE CR-FARFLANGE BH 195

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	60.039	0.039				
PA	-165.000	-165.035	-0.035				
DF	8.800	8.747	-0.053	0.300	0.300		0.000
TP	RFS		0.107	0.300		0.000	0.000
RN	0.000	0.009	0.009	0.300	0.000		0.000

MM DIM TP FBPF BH8= TRUE POSITION OF CIRCLE CR-FARFLANGE BH 225

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.960	-0.040				
PA	-135.000	-135.072	-0.072				
DF	8.800	8.745	-0.055	0.300	0.300		0.000
TP	RFS		0.171	0.300		0.000	0.000
RN	0.000	0.015	0.015	0.300	0.000		0.000

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⊕ MM DIM TP FBPF BH9= TRUE POSITION OF CIRCLE CR-FARFLANGE BH 255

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.931	-0.070				
PA	-105.000	-105.162	-0.162				
DF	8.800	8.740	-0.060	0.300	0.300		0.000
TP	RFS		0.366	0.300		0.000	0.066
RN	0.000	0.027	0.027	0.300	0.000		0.000

⊕ MM DIM TP FBPF BH10= TRUE POSITION OF CIRCLE CR-FARFLANGE BH 285

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.988	-0.012				
PA	-75.000	-75.143	-0.143				
DF	8.800	8.749	-0.051	0.300	0.300		0.000
TP	RFS		0.300	0.300		0.000	0.000
RN	0.000	0.015	0.015	0.300	0.000		0.000

⊕ MM DIM TP FBPF BH11= TRUE POSITION OF CIRCLE CR-FARFLANGE BH 315

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	59.986	-0.014				
PA	-45.000	-45.060	-0.060				
DF	8.800	8.750	-0.050	0.300	0.300		0.000
TP	RFS		0.128	0.300		0.000	0.000
RN	0.000	0.012	0.012	0.300	0.000		0.000

⊕ MM DIM TP FBPF BH12= TRUE POSITION OF CIRCLE CR-FARFLANGE BH 345

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	60.000	60.265	0.265				
PA	-15.000	-15.123	-0.123				
DF	8.800	8.749	-0.051	0.300	0.300		0.000
TP	RFS		0.589	0.300		0.000	0.289
RN	0.000	0.010	0.010	0.300	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	92.840	92.791	-0.049	0.200	0.200	0.000
V	-0.001	-1.000	-0.001			
FL	0.000	0.081	0.081	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	0.160	0.160	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	0.076	0.076	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	1154.560	1156.890	2.330	0.200	0.200	2.130
V	0.003	1.000	-0.004			
FL	0.000	0.058	0.058	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	0.561	0.561	0.200	0.000	0.361

DEG	DIM ANGL8= 3D ANGLE (TRUE) FROM PLANE PLC-DAT-2 TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.310	0.310	0.100	0.100	0.210

MM	DIM DIST3= 2D DISTANCE FROM PLANE PLC-DAT-1 TO PLANE PLC-DAT-2 PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1061.060	1064.099	3.039	0.200	0.200	2.839

MM	DIM DIST4= 2D DISTANCE FROM PLANE PLC-DAT-2 TO PLANE PL-FAR-END PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	93.500	93.456	-0.044	0.200	0.200	0.000

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PICKUP ANTENNA FLANGE NW8

MM	DIM LOC5= LOCATION OF PLANE PL NW8 ANTENNA FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-53.800	-54.317	-0.517	0.200	0.200	0.317
V	-0.999	0.005	0.034			
FL	0.000	0.003	0.003	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	0.914	0.914	0.200	0.000	0.714

DEG	DIM ANGL3= 3D ANGLE (TRUE) FROM PLANE PL NW8 ANTENNA FLANGE TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	1.969	1.969	0.100	0.100	1.869

MM	DIM LOC6= LOCATION OF CIRCLE CR_NW8_ANTENNA_FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	60.600	60.687	0.087	0.200	0.200	0.000
Z	0.000	2.201	2.201	0.200	0.200	2.001
D	33.800	33.857	0.057	0.150	0.000	0.000
RN	0.000	0.010	0.010	0.150	0.000	0.000

MM	DIM DIST01= 2D DISTANCE FROM PLANE PL NW8 ANTENNA FLANGE TO PLANE PL NW8 ANTENNA FLANGE ORING PAR TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.500	0.563	0.063	0.050	0.000	0.013

MAIN COUPLER FLANGE NW40

MM	DIM LOC7= LOCATION OF PLANE PL NW 40 FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	88.000	87.998	-0.002	0.200	0.200	0.000
V	1.000	-0.004	0.001			
FL	0.000	0.019	0.019	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	0.311	0.311	0.200	0.000	0.111

DEG	DIM ANGL4= 3D ANGLE (TRUE) FROM PLANE PL NW 40 FLANGE TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.255	0.255	0.100	0.100	0.155

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MM DIM LOC8= LOCATION OF CIRCLE CR_NW_40_FLANGE

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1186.800	1189.091	2.291	0.200	0.200	2.091
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	76.000	76.116	0.116	0.200	0.000	0.000
RN	0.000	0.004	0.004	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	61.255	0.655	0.200	0.200	0.455

MM DIM DIST NW40 MC DEPTH OF ORING GROOVE= 2D DISTANCE FROM PLANE PL NW 40 FLANGE TO PLANE PL NW 40 FLANGE ORING PAR TO XAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.500	0.518	0.018	0.050	0.000	0.000

MM DIM TP NW40 MC BH= TRUE POSITION OF CIRCLE CR NW 40 FLANGE BH

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	31.750	31.638	-0.112				
PA	112.500	113.478	0.978				
DF	6.700	6.847	0.147	0.200	0.200		0.000
TP	RFS		1.105	0.300		0.000	0.805
RN	0.000	0.047	0.047	0.200	0.000		0.000

MM DIM TP NW40 MC BH2= TRUE POSITION OF CIRCLE CR NW 40 FLANGE BH2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
PR	31.750	31.934	0.184				
PA	-67.500	-66.542	0.958				
DF	6.700	6.842	0.142	0.200	0.200		0.000
TP	RFS		1.127	0.300		0.000	0.827
RN	0.000	0.055	0.055	0.200	0.000		0.000

HOM-1 FLANGE NW12

MM DIM VECTOR HOM1 FLANGE= LOCATION OF PLANE PL-NW12-FLANGE-HOM1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
V	-0.517	-0.271	-0.812			

MM DIM FLAT1= FLATNESS OF PLANE PL-NW12-FLANGE-HOM1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.002	0.002	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	15.712	0.712	0.500	0.500	0.212

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MM	DIM DIST FORMTEIL1 POINT= 2D DISTANCE FROM POINT PT-FORMTEIL1 TO PLANE PL-NW12-FLANGE-HOM1 PERP TO PLANE PL-NW12-FLANGE-HOM1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	28.420	28.572	0.152	0.100	0.100	0.052

MM	DIM DIST FORMTEIL1 PLANE= 2D DISTANCE FROM PLANE PL-FORMTEIL1 TO PLANE PL-NW12-FLANGE-HOM1 PERP TO PLANE PL-NW12-FLANGE-HOM1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	28.420	28.576	0.156	0.100	0.100	0.056

MM	DIM DIST02= 2D DISTANCE FROM PLANE PL-NW12-FLANGE-HOM1 TO PLANE PL-NW12-FLANGE O-RING PAR TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.500	0.507	0.007	0.050	0.000	0.000

DEG	DIM ANGL17= 2D ANGLE (COMPLEMENT) FROM PLANE PL-NW12-FLANGE-HOM1 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	30.000	32.484	2.484	0.500	0.500	1.984

MM	DIM LOC= LOCATION OF CIRCLE CR-NW12-FLANGE-HOM1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	36.922	36.922	100.000	100.000	0.000
Y	0.000	57.311	57.311	100.000	100.000	0.000
Z	0.000	-61.813	-61.813	100.000	100.000	0.000
D	33.800	33.924	0.124	0.150	0.000	0.000
RN	0.000	0.014	0.014	0.150	0.000	0.000

HOM-2 FLANGE NW12

MM	DIM VECTOR1= LOCATION OF PLANE PL-NW12-FLANGE-HOM2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
V	-0.546	0.294	0.784			

MM	DIM FLAT4= FLATNESS OF PLANE PL-NW12-FLANGE-HOM2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.003	0.003	0.200	0.000	0.000

DEG	DIM ANGL5= 2D ANGLE (COMPLEMENT) FROM PLANE PL-NW12-FLANGE-HOM2 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	15.000	17.105	2.105	0.500	0.500	1.605

DEG	DIM ANGL6= 2D ANGLE (TRUE) FROM PLANE PL-NW12-FLANGE-HOM2 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	34.845	-0.155	0.500	0.500	0.000

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MM	DIM LOC9= LOCATION OF CIRCLE CR-NW12-FLANGE-HOM2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-71.795	-71.795	100.000	100.000	0.000
Y	0.000	1194.411	1194.411	2000.000	2000.000	0.000
Z	0.000	-8.495	-8.495	100.000	100.000	0.000
D	33.800	33.897	0.097	0.150	0.000	0.000
RN	0.000	0.002	0.002	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	0.000	66.697	66.697	100.000	100.000	0.000
Y	60.600	60.506	-0.094	0.200	0.200	0.000
Z	0.000	-42.851	-42.851	100.000	100.000	0.000
D	44.000	43.834	-0.166	0.000	0.100	0.066
RN	0.000	0.132	0.132	0.100	0.000	0.032
V	-0.844	0.000	0.536			

DEG	DIM ANGL9= 2D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	30.000	32.416	2.416	0.500	0.500	1.916

DEG	DIM ANGL10= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	90.000	89.998	-0.002	0.500	0.500	0.000

DEG	DIM ANGL11= 2D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	60.000	57.584	-2.416	0.500	0.500	1.916

MM	DIM HOM1 POINT= LOCATION OF POINT PT-RT-HOM-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	116.000	116.252	0.252	0.200	0.200	0.052

MM	DIM HOM1 PLANE= LOCATION OF PLANE PL HOM-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	111.000	111.132	0.132	0.200	0.200	0.000
FL	0.000	0.032	0.032	0.200	0.000	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	60.600	60.509	-0.091	0.200	0.200	0.000
Z	0.000	-0.497	-0.497	0.200	0.200	0.297

HOM 2 LOCATION

MM	DIM LOC-HOM2= LOCATION OF CYLINDER CY-HOM-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-64.566	-64.566	100.000	100.000	0.000
Y	1186.800	1189.633	2.833	3.000	3.000	0.000
Z	0.000	-45.709	-45.709	100.000	100.000	0.000
D	44.000	43.801	-0.199	0.000	0.100	0.099
RN	0.000	0.143	0.143	0.100	0.000	0.043
V	0.819	-0.001	0.573			

MM	DIM DIST2= 2D DISTANCE FROM CYLINDER CY-HOM-2 TO PLANE PL-FAR-END PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	60.600	60.713	0.113	0.200	0.200	0.000

DEG	DIM ANGL12= 2D ANGLE (TRUE) FROM CYLINDER CY-HOM-2 TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	34.979	-0.021	0.500	0.500	0.000

DEG	DIM ANGL13= 3D ANGLE (COMPLEMENT) FROM CYLINDER CY-HOM-2 TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	90.000	89.939	-0.061	0.500	0.500	0.000

DEG	DIM ANGL14= 2D ANGLE (TRUE) FROM CYLINDER CY-HOM-2 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	55.000	55.021	0.021	0.500	0.500	0.000

MM	DIM LOC HOM2= LOCATION OF POINT PT-HOM-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	116.000	115.683	-0.317	0.200	0.200	0.117

MM	DIM HOM2 PLANE= LOCATION OF PLANE PL HOM-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	111.000	110.654	-0.346	0.200	0.200	0.146
FL	0.000	0.015	0.015	0.200	0.000	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	1186.800	1189.550	2.750	3.000	3.000	0.000
Z	0.000	-0.534	-0.534	0.200	0.200	0.334

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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	0.000	94.825	94.825	2000.000	2000.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.812	-0.188	0.050	0.050	0.138
RN	0.000	0.039	0.039	0.050	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	0.000	123.944	123.944	2000.000	2000.000	0.000
Z	0.000	0.015	0.015	0.200	0.200	0.000
D	191.200	191.222	0.022	0.200	0.200	0.000
RN	0.000	0.050	0.050	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	0.020	0.020	0.200	0.200	0.000
Y	0.000	158.544	158.544	2000.000	2000.000	0.000
Z	0.000	0.214	0.214	0.200	0.200	0.014
D	210.300	211.067	0.767	0.200	0.200	0.567
RN	0.000	0.176	0.176	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	0.009	0.009	0.200	0.200	0.000
Y	0.000	166.787	166.787	2000.000	2000.000	0.000
Z	0.000	0.202	0.202	0.200	0.200	0.002
D	210.300	211.091	0.791	0.200	0.200	0.591
RN	0.000	0.202	0.202	0.200	0.000	0.002

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.034	0.034	0.200	0.200	0.000
Y	0.000	274.516	274.516	2000.000	2000.000	0.000
Z	0.000	0.448	0.448	0.200	0.200	0.248
D	210.300	211.087	0.787	0.200	0.200	0.587
RN	0.000	0.162	0.162	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	0.027	0.027	0.200	0.200	0.000
Y	0.000	282.889	282.889	2000.000	2000.000	0.000
Z	0.000	0.431	0.431	0.200	0.200	0.231
D	210.300	211.135	0.835	0.200	0.200	0.635
RN	0.000	0.233	0.233	0.200	0.000	0.033

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.035	0.035	0.200	0.200	0.000
Y	0.000	389.819	389.819	2000.000	2000.000	0.000
Z	0.000	0.604	0.604	0.200	0.200	0.404
D	210.300	211.219	0.919	0.200	0.200	0.719
RN	0.000	0.154	0.154	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	0.079	0.079	0.200	0.200	0.000
Y	0.000	398.487	398.487	2000.000	2000.000	0.000
Z	0.000	0.654	0.653	0.200	0.200	0.453
D	210.300	211.083	0.783	0.200	0.200	0.583
RN	0.000	0.309	0.309	0.200	0.000	0.109

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.083	0.083	0.200	0.200	0.000
Y	0.000	505.492	505.492	2000.000	2000.000	0.000
Z	0.000	0.748	0.748	0.200	0.200	0.548
D	210.300	211.080	0.781	0.200	0.200	0.581
RN	0.000	0.222	0.222	0.200	0.000	0.022

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.099	0.099	0.200	0.200	0.000
Y	0.000	514.415	514.415	2000.000	2000.000	0.000
Z	0.000	0.743	0.743	0.200	0.200	0.543
D	210.300	211.103	0.803	0.200	0.200	0.603
RN	0.000	0.251	0.251	0.200	0.000	0.051

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.107	0.107	0.200	0.200	0.000
Y	0.000	621.027	621.027	2000.000	2000.000	0.000
Z	0.000	0.803	0.803	0.200	0.200	0.603
D	210.300	211.231	0.931	0.200	0.200	0.731
RN	0.000	0.163	0.163	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.092	0.092	0.200	0.200	0.000
Y	0.000	629.751	629.751	2000.000	2000.000	0.000
Z	0.000	0.858	0.858	0.200	0.200	0.658
D	210.300	211.178	0.878	0.200	0.200	0.678
RN	0.000	0.310	0.310	0.200	0.000	0.110

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.140	0.140	0.200	0.200	0.000
Y	0.000	736.889	736.889	2000.000	2000.000	0.000
Z	0.000	0.842	0.842	0.200	0.200	0.642
D	210.300	210.999	0.699	0.200	0.200	0.499
RN	0.000	0.193	0.193	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	0.107	0.106	0.200	0.200	0.000
Y	0.000	745.860	745.860	2000.000	2000.000	0.000
Z	0.000	0.838	0.838	0.200	0.200	0.638
D	210.300	211.111	0.811	0.200	0.200	0.611
RN	0.000	0.188	0.188	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	0.103	0.103	0.200	0.200	0.000
Y	0.000	852.681	852.681	2000.000	2000.000	0.000
Z	0.000	0.714	0.714	0.200	0.200	0.514
D	210.300	211.176	0.876	0.200	0.200	0.676
RN	0.000	0.193	0.193	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	0.116	0.116	0.200	0.200	0.000
Y	0.000	861.212	861.212	2000.000	2000.000	0.000
Z	0.000	0.688	0.688	0.200	0.200	0.488
D	210.300	211.055	0.755	0.200	0.200	0.555
RN	0.000	0.237	0.237	0.200	0.000	0.037

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.123	0.123	0.200	0.200	0.000
Y	0.000	968.441	968.441	2000.000	2000.000	0.000
Z	0.000	0.477	0.477	0.200	0.200	0.277
D	210.300	211.084	0.784	0.200	0.200	0.584
RN	0.000	0.243	0.243	0.200	0.000	0.043

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.151	0.151	0.200	0.200	0.000
Y	0.000	977.284	977.284	2000.000	2000.000	0.000
Z	0.000	0.450	0.450	0.200	0.200	0.250
D	210.300	211.138	0.838	0.200	0.200	0.638
RN	0.000	0.185	0.185	0.200	0.000	0.000

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.054	0.054	0.200	0.200	0.000
Y	0.000	1084.450	1084.450	2000.000	2000.000	0.000
Z	0.000	0.210	0.210	0.200	0.200	0.010
D	210.300	211.138	0.838	0.200	0.200	0.638
RN	0.000	0.179	0.179	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	0.058	0.058	0.200	0.200	0.000
Y	0.000	1093.126	1093.126	2000.000	2000.000	0.000
Z	0.000	0.168	0.168	0.200	0.200	0.000
D	210.300	210.948	0.648	0.200	0.200	0.448
RN	0.000	0.229	0.229	0.200	0.000	0.029

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.105	-0.105	0.200	0.200	0.000
Y	0.000	1123.006	1123.006	2000.000	2000.000	0.000
Z	0.000	0.142	0.142	0.200	0.200	0.000
D	200.000	200.016	0.016	0.200	0.200	0.000
RN	0.000	0.051	0.051	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	0.000	1154.804	1154.804	2000.000	2000.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.839	-0.161	0.050	0.050	0.111
RN	0.000	0.023	0.023	0.050	0.000	0.000

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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	0.400		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	0.015	0.015				
TP	RFS		0.048	0.400		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	0.020	0.020				
Z	0.000	0.214	0.214				
TP	RFS		0.430	0.400		0.000	0.030

⊕ MM	DIM LOC-TP-CC4= TRUE POSITION OF CIRCLE CRC-CAV-1-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.009	0.009				
Z	0.000	0.202	0.202				
TP	RFS		0.404	0.400		0.000	0.004

⊕ MM	DIM LOC-TP-CC5= TRUE POSITION OF CIRCLE CRC-CAV-2-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.034	0.034				
Z	0.000	0.448	0.448				
TP	RFS		0.898	0.400		0.000	0.498

⊕ MM	DIM LOC-TP-CC6= TRUE POSITION OF CIRCLE CRC-CAV-2-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.027	0.027				
Z	0.000	0.431	0.431				
TP	RFS		0.863	0.400		0.000	0.463

⊕ MM	DIM LOC-TP-CC7= TRUE POSITION OF CIRCLE CRC-CAV-3-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.035	0.035				
Z	0.000	0.604	0.604				
TP	RFS		1.210	0.400		0.000	0.810

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⊕ MM	DIM LOC-TP-CC8= TRUE POSITION OF CIRCLE CRC-CAV-3-2							
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.079	0.079					
Z	0.000	0.654	0.653					
TP	RFS		1.316	0.400		0.000	0.916	

⊕ MM	DIM LOC-TP-CC9= TRUE POSITION OF CIRCLE CRC-CAV-4-1							
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.083	0.083					
Z	0.000	0.748	0.748					
TP	RFS		1.504	0.400		0.000	1.104	

⊕ MM	DIM LOC-TP-CC10= TRUE POSITION OF CIRCLE CRC-CAV-4-2							
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.099	0.099					
Z	0.000	0.743	0.743					
TP	RFS		1.498	0.400		0.000	1.098	

⊕ MM	DIM LOC-TP-CC11= TRUE POSITION OF CIRCLE CRC-CAV-5-1							
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.107	0.107					
Z	0.000	0.803	0.803					
TP	RFS		1.620	0.400		0.000	1.220	

⊕ MM	DIM LOC-TP-CC12= TRUE POSITION OF CIRCLE CRC-CAV-5-2							
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.092	0.092					
Z	0.000	0.858	0.858					
TP	RFS		1.726	0.400		0.000	1.326	

⊕ MM	DIM LOC-TP-CC13= TRUE POSITION OF CIRCLE CRC-CAV-6-1							
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.140	0.140					
Z	0.000	0.842	0.842					
TP	RFS		1.706	0.400		0.000	1.306	

⊕ MM	DIM LOC-TP-CC14= TRUE POSITION OF CIRCLE CRC-CAV-6-2							
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.107	0.106					
Z	0.000	0.838	0.838					
TP	RFS		1.689	0.400		0.000	1.289	

⊕ MM	DIM LOC-TP-CC15= TRUE POSITION OF CIRCLE CRC-CAV-7-1							
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.103	0.103					
Z	0.000	0.714	0.714					
TP	RFS		1.442	0.400		0.000	1.042	

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⊕ MM	DIM LOC-TP-CC16= TRUE POSITION OF CIRCLE CRC-CAV-7-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.116	0.116				
Z	0.000	0.688	0.688				
TP	RFS		1.395	0.400		0.000	0.995

⊕ MM	DIM LOC-TP-CC17= TRUE POSITION OF CIRCLE CRC-CAV-8-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.123	0.123				
Z	0.000	0.477	0.477				
TP	RFS		0.985	0.400		0.000	0.585

⊕ MM	DIM LOC-TP-CC18= TRUE POSITION OF CIRCLE CRC-CAV-8-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.151	0.151				
Z	0.000	0.450	0.450				
TP	RFS		0.950	0.400		0.000	0.550

⊕ MM	DIM LOC-TP-CC19= TRUE POSITION OF CIRCLE CRC-CAV-9-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.054	0.054				
Z	0.000	0.210	0.210				
TP	RFS		0.433	0.400		0.000	0.033

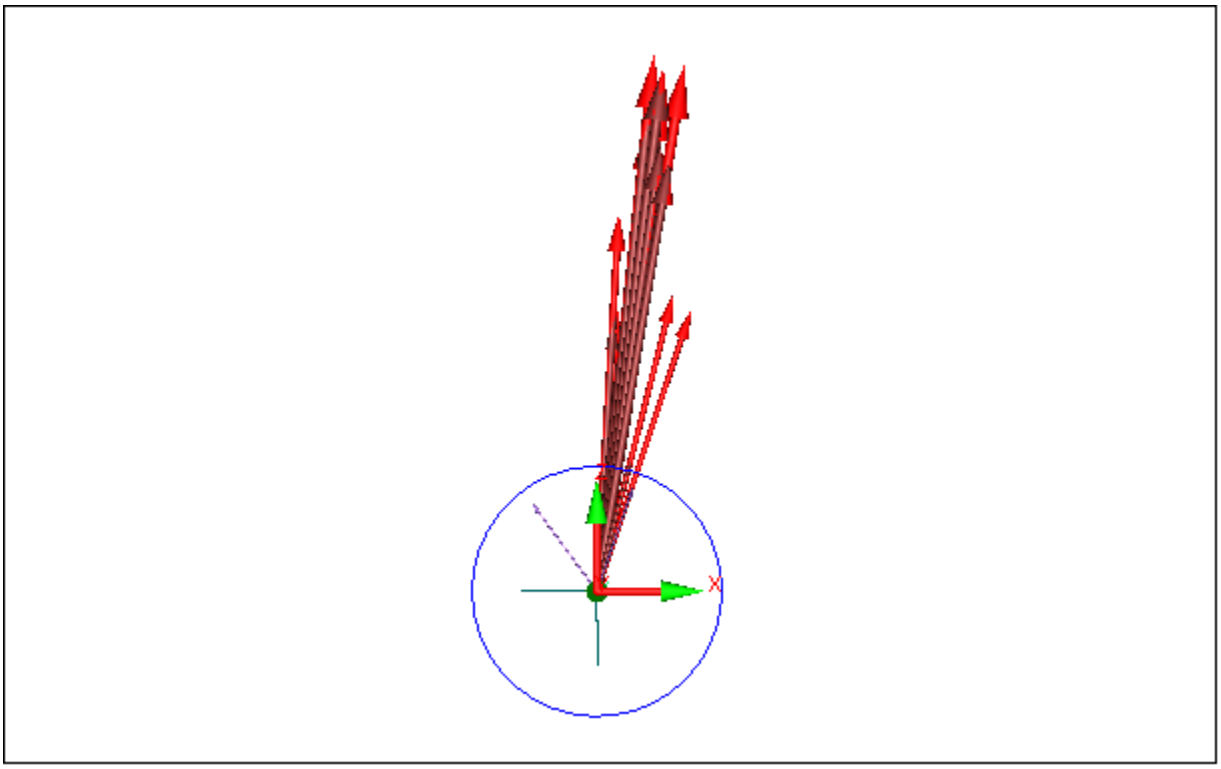
⊕ MM	DIM LOC-TP-CC20= TRUE POSITION OF CIRCLE CRC-CAV-9-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.058	0.058				
Z	0.000	0.168	0.168				
TP	RFS		0.355	0.400		0.000	0.000

⊕ MM	DIM LOC-TP-CC21= TRUE POSITION OF CIRCLE CRC-VAC-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	-0.105	-0.105				
Z	0.000	0.142	0.142				
TP	RFS		0.354	0.400		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	0.400		0.000	0.000

True Position plots from 3 views
x1000

PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009



-Y View
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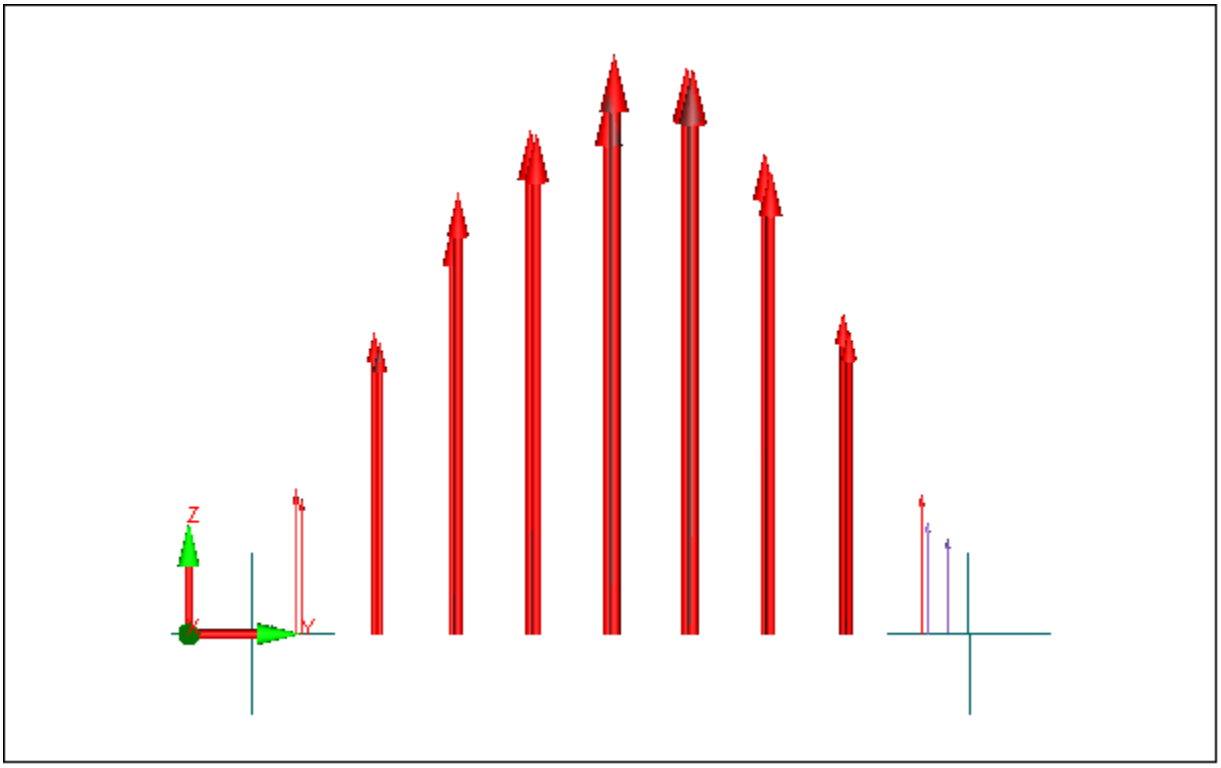

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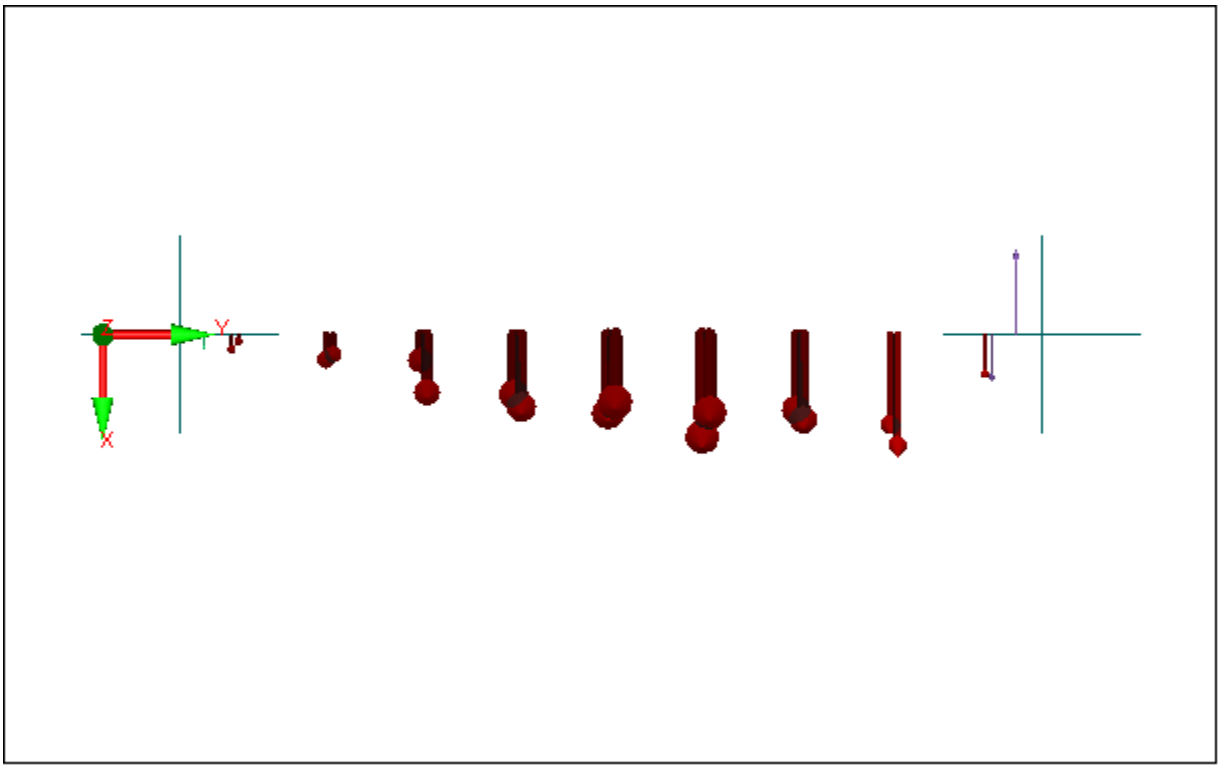
PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009



+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	0.061	0.061	0.200	0.200	0.000
Y	0.000	625.375	625.375	2000.000	2000.000	0.000
Z	0.000	0.466	0.466	0.200	0.200	0.266
ST	0.000	0.889	0.889	0.200	0.000	0.689

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SUPPORT RING CIRCLE LOCATIONS
Positive side

MM	DIM LOC-SUPPORT RING-P1= LOCATION OF CIRCLE CR-SUPPORT-RING-P12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.270	0.270	0.200	0.200	0.070
Y	0.000	220.795	220.795	2000.000	2000.000	0.000
Z	0.000	0.448	0.448	0.200	0.200	0.248
R	56.500	56.036	-0.464	0.200	0.200	0.264
RN	0.000	0.043	0.043	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-P2= LOCATION OF CIRCLE CR-SUPPORT-RING-P23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.580	0.580	0.200	0.200	0.380
Y	0.000	336.784	336.784	2000.000	2000.000	0.000
Z	0.000	0.759	0.759	0.200	0.200	0.559
R	56.500	56.004	-0.496	0.200	0.200	0.296
RN	0.000	0.113	0.113	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-P3= LOCATION OF CIRCLE CR-SUPPORT-RING-P34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	1.311	1.311	0.200	0.200	1.111
Y	0.000	452.785	452.785	2000.000	2000.000	0.000
Z	0.000	0.510	0.510	0.200	0.200	0.310
R	56.500	55.876	-0.624	0.200	0.200	0.424
RN	0.000	0.088	0.088	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-P4= LOCATION OF CIRCLE CR-SUPPORT-RING-P45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.078	0.078	0.200	0.200	0.000
Y	0.000	568.793	568.793	2000.000	2000.000	0.000
Z	0.000	0.940	0.940	0.200	0.200	0.740
R	56.500	56.317	-0.183	0.200	0.200	0.000
RN	0.000	0.059	0.059	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-P5= LOCATION OF CIRCLE CR-SUPPORT-RING-P56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.671	0.671	0.200	0.200	0.471
Y	0.000	684.787	684.787	2000.000	2000.000	0.000
Z	0.000	0.907	0.907	0.200	0.200	0.707
R	56.500	56.002	-0.498	0.200	0.200	0.298
RN	0.000	0.525	0.525	0.200	0.000	0.325

MM	DIM LOC-SUPPORT RING-P6= LOCATION OF CIRCLE CR-SUPPORT-RING-P67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.233	0.233	0.200	0.200	0.033
Y	0.000	799.789	799.789	2000.000	2000.000	0.000
Z	0.000	0.594	0.594	0.200	0.200	0.394
R	56.500	56.061	-0.439	0.200	0.200	0.239
RN	0.000	0.022	0.022	0.200	0.000	0.000

PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009

MM	DIM LOC-SUPPORT RING-P7= LOCATION OF CIRCLE CR-SUPPORT-RING-P78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.079	0.079	0.200	0.200	0.000
Y	0.000	915.790	915.790	2000.000	2000.000	0.000
Z	0.000	0.716	0.716	0.200	0.200	0.516
R	56.500	56.110	-0.390	0.200	0.200	0.190
RN	0.000	0.062	0.062	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-P8= LOCATION OF CIRCLE CR-SUPPORT-RING-P89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.263	0.263	0.200	0.200	0.063
Y	0.000	1031.786	1031.786	2000.000	2000.000	0.000
Z	0.000	0.242	0.242	0.200	0.200	0.042
R	56.500	56.116	-0.384	0.200	0.200	0.184
RN	0.000	0.001	0.001	0.200	0.000	0.000

PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009

SUPPORT RING POINT LOCATIONS
Positive Side

MM	DIM LOC-SUPPORT RING-PTP1= LOCATION OF POINT PT-SUPPORT-RING-P12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.276	-0.224	0.200	0.200	0.024
Y	0.000	213.495	213.495	2000.000	2000.000	0.000
Z	0.000	-0.036	-0.036	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTP2= LOCATION OF POINT PT-SUPPORT-RING-P23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.425	-0.075	0.200	0.200	0.000
Y	0.000	329.695	329.695	2000.000	2000.000	0.000
Z	0.000	-0.032	-0.032	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTP3= LOCATION OF POINT PT-SUPPORT-RING-P34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	57.110	0.610	0.200	0.200	0.410
Y	0.000	446.295	446.295	2000.000	2000.000	0.000
Z	0.000	-0.027	-0.027	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTP4= LOCATION OF POINT PT-SUPPORT-RING-P45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.336	-0.164	0.200	0.200	0.000
Y	0.000	561.995	561.995	2000.000	2000.000	0.000
Z	0.000	-0.022	-0.022	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTP5= LOCATION OF POINT PT-SUPPORT-RING-P56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.530	0.030	0.200	0.200	0.000
Y	0.000	677.695	677.695	2000.000	2000.000	0.000
Z	0.000	-0.017	-0.017	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTP6= LOCATION OF POINT PT-SUPPORT-RING-P67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.310	-0.190	0.200	0.200	0.000
Y	0.000	793.895	793.895	2000.000	2000.000	0.000
Z	0.000	-0.012	-0.012	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTP7= LOCATION OF POINT PT-SUPPORT-RING-P78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.126	-0.374	0.200	0.200	0.174
Y	0.000	909.295	909.295	2000.000	2000.000	0.000
Z	0.000	-0.007	-0.007	0.200	0.200	0.000

PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009

MM	DIM LOC-SUPPORT RING-PTP8= LOCATION OF POINT PT-SUPPORT-RING-P89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.368	-0.132	0.200	0.200	0.000
Y	0.000	1025.395	1025.395	2000.000	2000.000	0.000
Z	0.000	-0.002	-0.002	0.200	0.200	0.000

SUPPORT RING CIRCLES IN Y
Positive Side

MM	DIM LOC X SUPPORT RING CIRCLES P1= LOCATION OF CIRCLE CR-SUPPORT-RING-P12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.270	0.270	0.200	0.200	0.070

MM	DIM LOC X SUPPORT RING CIRCLES P2= LOCATION OF CIRCLE CR-SUPPORT-RING-P23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.580	0.580	0.200	0.200	0.380

MM	DIM LOC X SUPPORT RING CIRCLES P3= LOCATION OF CIRCLE CR-SUPPORT-RING-P34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	1.311	1.311	0.200	0.200	1.111

MM	DIM LOC X SUPPORT RING CIRCLES P4= LOCATION OF CIRCLE CR-SUPPORT-RING-P45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.078	0.078	0.200	0.200	0.000

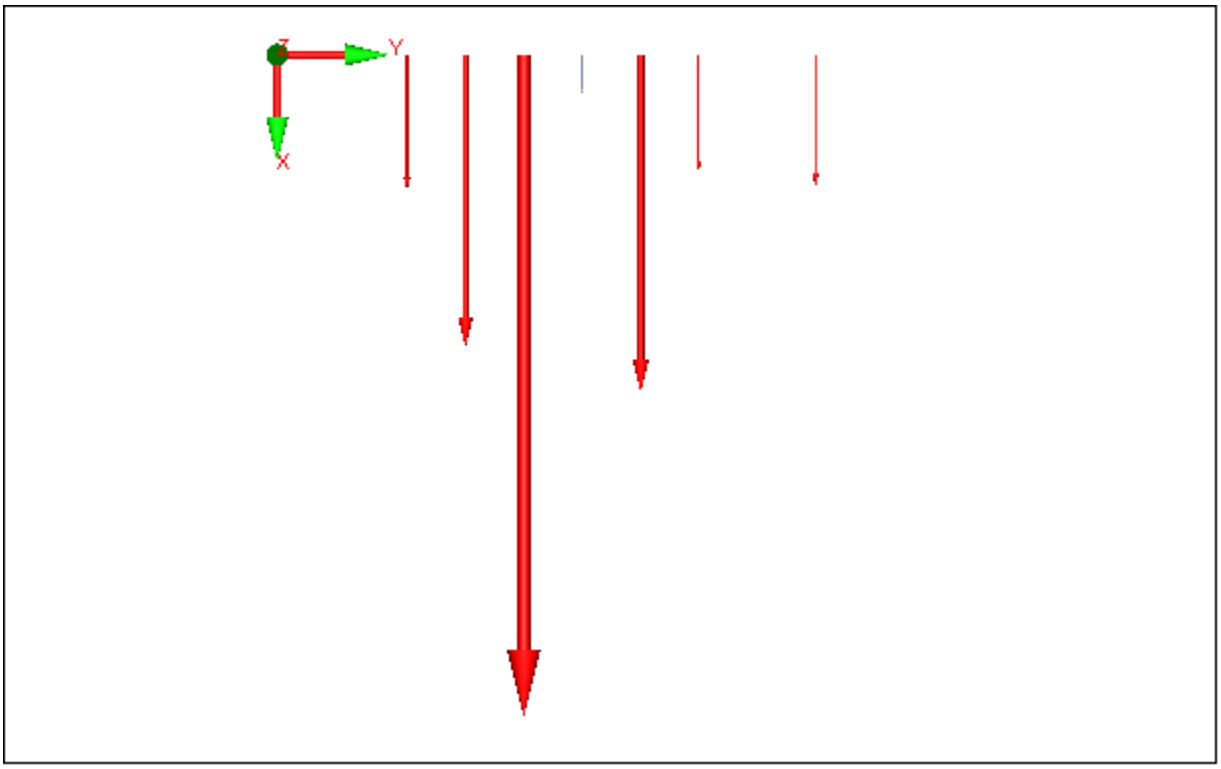
MM	DIM LOC X SUPPORT RING CIRCLES P5= LOCATION OF CIRCLE CR-SUPPORT-RING-P56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.671	0.671	0.200	0.200	0.471

MM	DIM LOC X SUPPORT RING CIRCLES P6= LOCATION OF CIRCLE CR-SUPPORT-RING-P67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.233	0.233	0.200	0.200	0.033

MM	DIM LOC X SUPPORT RING CIRCLES P7= LOCATION OF CIRCLE CR-SUPPORT-RING-P78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.079	0.079	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING CIRCLES P8= LOCATION OF CIRCLE CR-SUPPORT-RING-P89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.263	0.263	0.200	0.200	0.063

PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009



SUPPORT RING CIRCLES IN X
Positive Side
x1000

SUPPORT RING POINTS IN X
Positive Side

MM	DIM LOC X SUPPORT RING POINTS P1= LOCATION OF POINT PT-SUPPORT-RING-P12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.276	-0.224	0.200	0.200	0.024

MM	DIM LOC X SUPPORT RING POINTS P2= LOCATION OF POINT PT-SUPPORT-RING-P23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.425	-0.075	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING POINTS P3= LOCATION OF POINT PT-SUPPORT-RING-P34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	57.110	0.611	0.200	0.200	0.411

MM	DIM LOC X SUPPORT RING POINTS P4= LOCATION OF POINT PT-SUPPORT-RING-P45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.336	-0.164	0.200	0.200	0.000

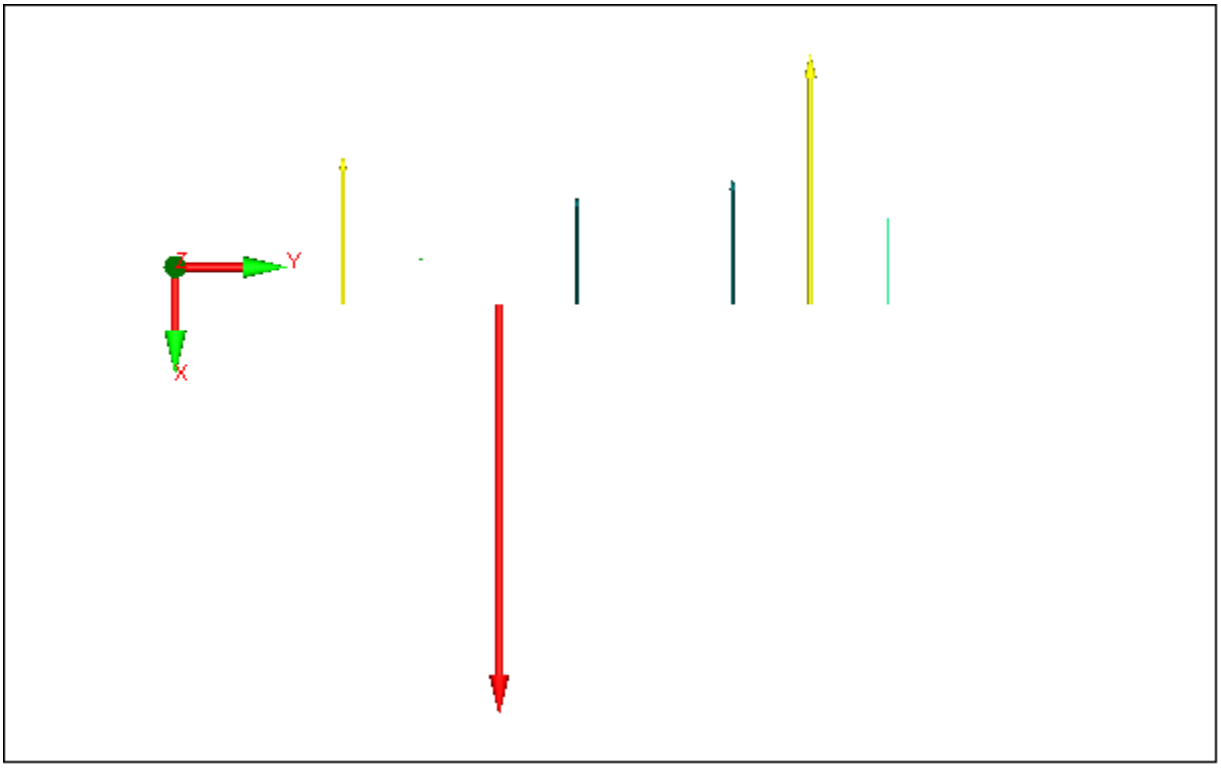
PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009

MM	DIM LOC X SUPPORT RING POINTS P5= LOCATION OF POINT PT-SUPPORT-RING-P56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.530	0.030	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING POINTS P6= LOCATION OF POINT PT-SUPPORT-RING-P67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.310	-0.190	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING POINTS P7= LOCATION OF POINT PT-SUPPORT-RING-P78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.126	-0.374	0.200	0.200	0.174

MM	DIM LOC X SUPPORT RING POINTS P8= LOCATION OF POINT PT-SUPPORT-RING-P89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	56.500	56.368	-0.132	0.200	0.200	0.000



SUPPORT RING POINTS IN X
Positive Side
x1000

SUPPORT RING CIRCLE LOCATIONS
Negative side

PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009

MM	DIM LOC-SUPPORT RING-N1= LOCATION OF CIRCLE CR-SUPPORT-RING-N12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.071	0.071	0.200	0.200	0.000
Y	0.000	220.798	220.798	2000.000	2000.000	0.000
Z	0.000	0.453	0.453	0.200	0.200	0.253
R	56.500	56.157	-0.343	0.200	0.200	0.143
RN	0.000	0.274	0.274	0.200	0.000	0.074

MM	DIM LOC-SUPPORT RING-N2= LOCATION OF CIRCLE CR-SUPPORT-RING-N23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.075	-0.075	0.200	0.200	0.000
Y	0.000	336.795	336.795	2000.000	2000.000	0.000
Z	0.000	0.865	0.865	0.200	0.200	0.665
R	56.500	56.227	-0.273	0.200	0.200	0.073
RN	0.000	0.030	0.030	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-N3= LOCATION OF CIRCLE CR-SUPPORT-RING-N34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.163	0.163	0.200	0.200	0.000
Y	0.000	452.798	452.798	2000.000	2000.000	0.000
Z	0.000	0.592	0.592	0.200	0.200	0.392
R	56.500	56.109	-0.391	0.200	0.200	0.191
RN	0.000	0.031	0.031	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-N4= LOCATION OF CIRCLE CR-SUPPORT-RING-N45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.015	0.015	0.200	0.200	0.000
Y	0.000	568.791	568.791	2000.000	2000.000	0.000
Z	0.000	1.016	1.016	0.200	0.200	0.816
R	56.500	56.207	-0.293	0.200	0.200	0.093
RN	0.000	0.035	0.035	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-N5= LOCATION OF CIRCLE CR-SUPPORT-RING-N56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.190	0.190	0.200	0.200	0.000
Y	0.000	684.796	684.796	2000.000	2000.000	0.000
Z	0.000	0.757	0.757	0.200	0.200	0.557
R	56.500	56.238	-0.262	0.200	0.200	0.062
RN	0.000	0.042	0.042	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-N6= LOCATION OF CIRCLE CR-SUPPORT-RING-N67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.084	-0.084	0.200	0.200	0.000
Y	0.000	799.789	799.789	2000.000	2000.000	0.000
Z	0.000	0.700	0.700	0.200	0.200	0.500
R	56.500	56.075	-0.425	0.200	0.200	0.225
RN	0.000	0.306	0.306	0.200	0.000	0.106

PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009

MM	DIM LOC-SUPPORT RING-N7= LOCATION OF CIRCLE CR-SUPPORT-RING-N78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.124	-0.124	0.200	0.200	0.000
Y	0.000	915.794	915.794	2000.000	2000.000	0.000
Z	0.000	0.647	0.647	0.200	0.200	0.447
R	56.500	56.089	-0.411	0.200	0.200	0.211
RN	0.000	0.017	0.017	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-N8= LOCATION OF CIRCLE CR-SUPPORT-RING-N89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.098	0.098	0.200	0.200	0.000
Y	0.000	1031.791	1031.791	2000.000	2000.000	0.000
Z	0.000	0.317	0.317	0.200	0.200	0.117
R	56.500	56.108	-0.392	0.200	0.200	0.192
RN	0.000	0.069	0.069	0.200	0.000	0.000

SUPPORT RING POINT LOCATIONS
Negative side

MM	DIM LOC-SUPPORT RING-PTN1= LOCATION OF POINT PT-SUPPORT-RING-N12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.079	0.421	0.200	0.200	0.221
Y	0.000	213.495	213.495	2000.000	2000.000	0.000
Z	0.000	-0.008	-0.008	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTN2= LOCATION OF POINT PT-SUPPORT-RING-N23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.130	0.370	0.200	0.200	0.170
Y	0.000	329.695	329.695	2000.000	2000.000	0.000
Z	0.000	-0.003	-0.003	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTN3= LOCATION OF POINT PT-SUPPORT-RING-N34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-55.959	0.541	0.200	0.200	0.341
Y	0.000	446.295	446.295	2000.000	2000.000	0.000
Z	0.000	0.002	0.001	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTN4= LOCATION OF POINT PT-SUPPORT-RING-N45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.111	0.389	0.200	0.200	0.189
Y	0.000	561.995	561.995	2000.000	2000.000	0.000
Z	0.000	0.007	0.006	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTN5= LOCATION OF POINT PT-SUPPORT-RING-N56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-55.925	0.575	0.200	0.200	0.375
Y	0.000	677.695	677.695	2000.000	2000.000	0.000
Z	0.000	0.011	0.011	0.200	0.200	0.000

PART NUMBER=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR DATE=5/8/2009

MM	DIM LOC-SUPPORT RING-PTN6= LOCATION OF POINT PT-SUPPORT-RING-N67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.101	0.399	0.200	0.200	0.199
Y	0.000	793.895	793.895	2000.000	2000.000	0.000
Z	0.000	0.016	0.016	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTN7= LOCATION OF POINT PT-SUPPORT-RING-N78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.166	0.334	0.200	0.200	0.134
Y	0.000	909.295	909.295	2000.000	2000.000	0.000
Z	0.000	0.021	0.021	0.200	0.200	0.000

MM	DIM LOC-SUPPORT RING-PTN8= LOCATION OF POINT PT-SUPPORT-RING-N89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-55.951	0.549	0.200	0.200	0.349
Y	0.000	1025.395	1025.395	2000.000	2000.000	0.000
Z	0.000	0.026	0.026	0.200	0.200	0.000

SUPPORT RING CIRCLES IN Y
Negative side

MM	DIM LOC X SUPPORT RING CIRCLES N1= LOCATION OF CIRCLE CR-SUPPORT-RING-N12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.071	0.071	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING CIRCLES N2= LOCATION OF CIRCLE CR-SUPPORT-RING-N23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.075	-0.075	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING CIRCLES N3= LOCATION OF CIRCLE CR-SUPPORT-RING-N34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.163	0.163	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING CIRCLES N4= LOCATION OF CIRCLE CR-SUPPORT-RING-N45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.015	0.015	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING CIRCLES N5= LOCATION OF CIRCLE CR-SUPPORT-RING-N56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.190	0.190	0.200	0.200	0.000

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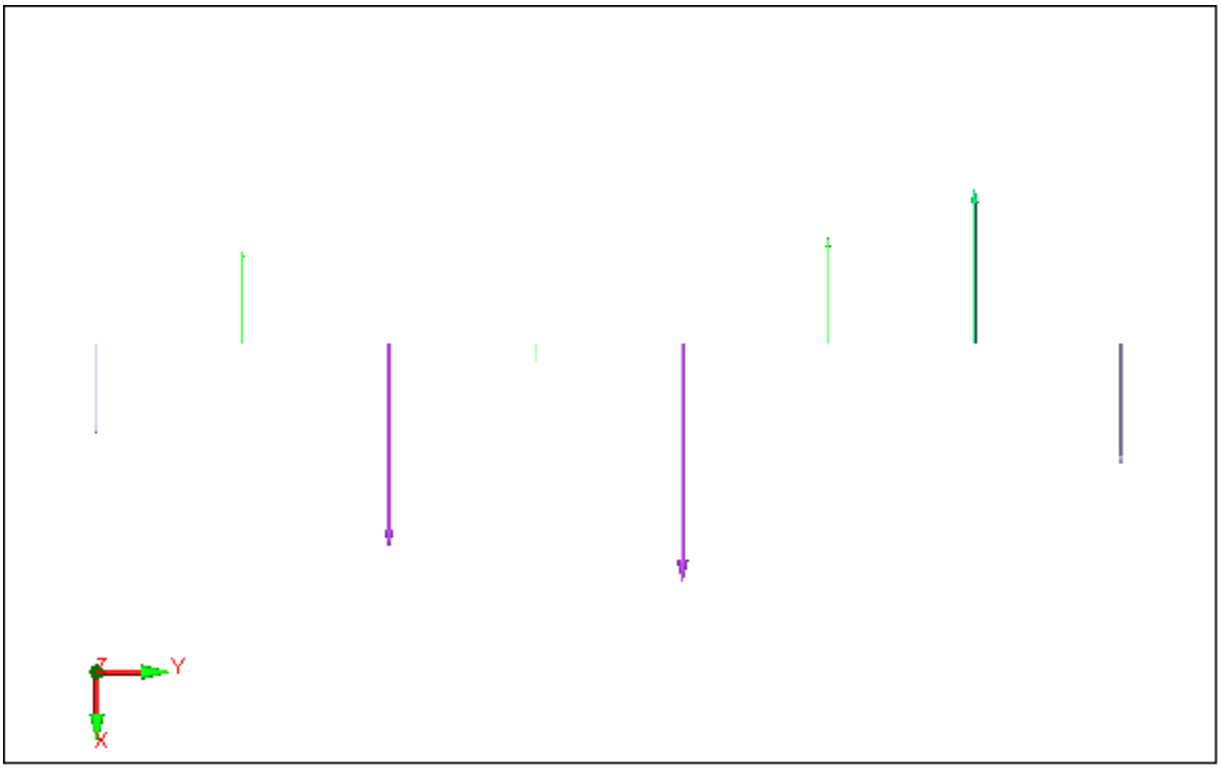
MM	DIM LOC X SUPPORT RING CIRCLES N6= LOCATION OF CIRCLE CR-SUPPORT-RING-N67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.084	-0.084	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING CIRCLES N7= LOCATION OF CIRCLE CR-SUPPORT-RING-N78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.124	-0.124	0.200	0.200	0.000

MM	DIM LOC X SUPPORT RING CIRCLES N8= LOCATION OF CIRCLE CR-SUPPORT-RING-N89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.098	0.098	0.200	0.200	0.000



SUPPORT RING CIRCLES IN X
Negative Side
x1000

SUPPORT RING POINTS IN X
Negative side

MM	DIM LOC X SUPPORT RING POINTS N1= LOCATION OF POINT PT-SUPPORT-RING-N1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.079	0.421	0.200	0.200	0.221

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MM DIM LOC X SUPPORT RING POINTS N2= LOCATION OF POINT PT-SUPPORT-RING-N2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.130	0.370	0.200	0.200	0.170

MM DIM LOC X SUPPORT RING POINTS N3= LOCATION OF POINT PT-SUPPORT-RING-N3

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-55.959	0.541	0.200	0.200	0.341

MM DIM LOC X SUPPORT RING POINTS N4= LOCATION OF POINT PT-SUPPORT-RING-N4

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.111	0.389	0.200	0.200	0.189

MM DIM LOC X SUPPORT RING POINTS N5= LOCATION OF POINT PT-SUPPORT-RING-N5

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-55.925	0.575	0.200	0.200	0.375

MM DIM LOC X SUPPORT RING POINTS N6= LOCATION OF POINT PT-SUPPORT-RING-N6

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.101	0.399	0.200	0.200	0.199

MM DIM LOC X SUPPORT RING POINTS N7= LOCATION OF POINT PT-SUPPORT-RING-N7

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-56.166	0.334	0.200	0.200	0.134

MM DIM LOC X SUPPORT RING POINTS N8= LOCATION OF POINT PT-SUPPORT-RING-N8

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-56.500	-55.951	0.549	0.200	0.200	0.349

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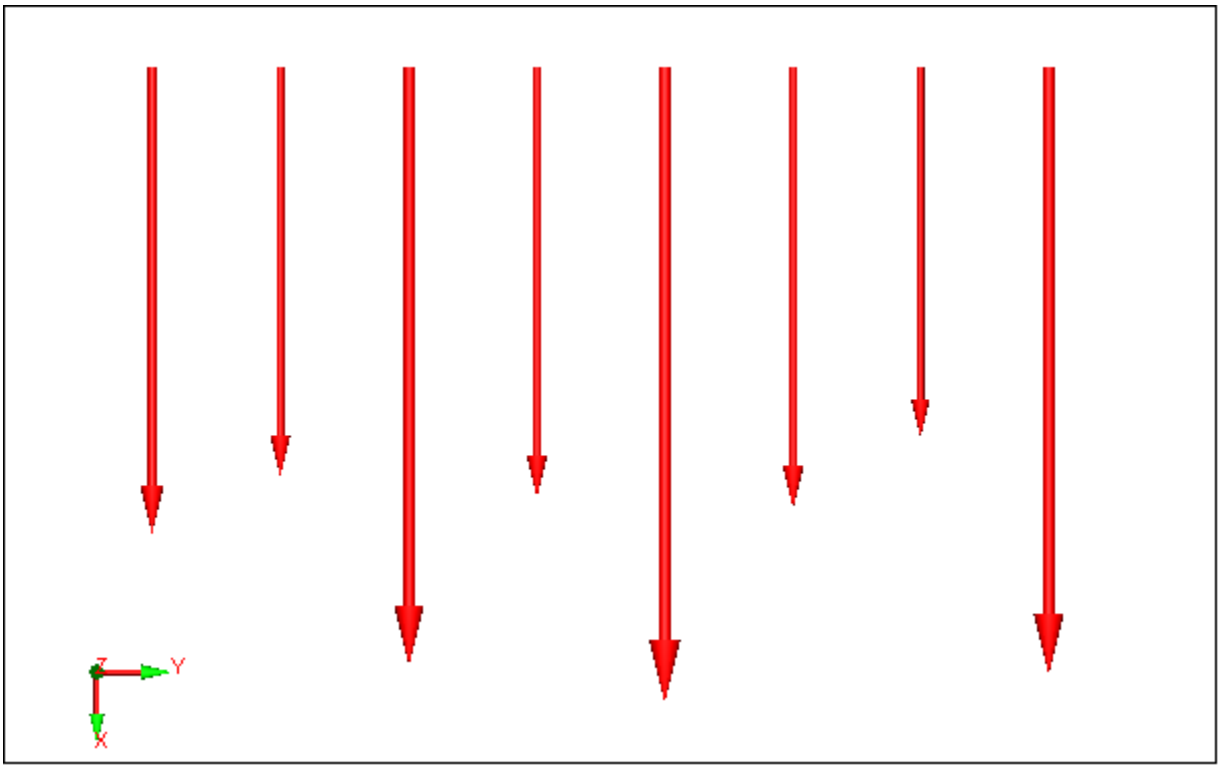

SUPPORT RING POINT IN X
Negative Side
x1000

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---------- Report for Excel ----------

MM	DIM A= 2D DISTANCE FROM PLANE PL-NEAR-END-FLANGE TO PLANE PL-FAR-END PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1247.000	1250.346	3.346	0.200	0.200	3.146

MM	DIM B= 2D DISTANCE FROM PLANE PLC-DAT-1 TO PLANE PLC-DAT-2 PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1061.060	1064.099	3.039	0.200	0.200	2.839

MM	DIM C= 2D DISTANCE FROM PLANE PLC-DAT-1 TO CIRCLE CR_NW8_ANTENNA_FLANGE PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	32.240	32.103	-0.137	0.200	0.200	0.000

MM	DIM D= 2D DISTANCE FROM PLANE PLC-DAT-2 TO CIRCLE CR_NW_40_FLANGE PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	32.900	32.201	-0.699	0.200	0.200	0.499

MM	DIM E= 2D DISTANCE FROM LINE LNC-LEVEL TO PLANE PL NW8 ANTENNA FLANGE PAR TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	53.800	54.317	0.517	0.200	0.200	0.317

MM	DIM F= 2D DISTANCE FROM LINE LNC-LEVEL TO PLANE PL NW 40 FLANGE PAR TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	88.000	87.998	-0.002	0.200	0.200	0.000

MM	DIM G= 2D DISTANCE FROM PLANE PL-FORMTEIL1 TO PLANE PL-NW12-FLANGE-HOM1 PERP TO PLANE PL-NW12-FLANGE-HOM1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	28.420	28.576	0.156	0.100	0.100	0.056

MM	DIM H= LOCATION OF POINT NOTINTHISORIENTATION					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
T	0.000	0.000	0.000	0.000	0.000	0.000

MM	DIM I1= 2D DISTANCE FROM PLANE PL-NEAR-END-FLANGE TO CYLINDER CY-HOM-1 PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	60.600	60.506	-0.094	0.200	0.200	0.000

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MM DIM I2= 2D DISTANCE FROM PLANE PL-NEAR-END-FLANGE TO CYLINDER CY-HOM-2 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1186.800	1189.633	2.833	0.200	0.200	2.633

MM DIM I3= 2D DISTANCE FROM PLANE PL-NEAR-END-FLANGE TO CIRCLE CR_NW_40_FLANGE PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1186.800	1189.091	2.291	0.200	0.200	2.091

MM DIM J1= 2D DISTANCE FROM PLANE PL-NEAR-END-FLANGE-ORING TO PLANE PL-NEAR-END-FLANGE PERP TO PLANE PL-NEAR-END-FLANGE

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1.000	0.958	-0.042	0.100	0.100	0.000

MM DIM J2= 2D DISTANCE FROM PLANE PL-NW12-FLANGE O-RING TO PLANE PL-NW12-FLANGE-HOM1 PERP TO PLANE PL-NW12-FLANGE-HOM1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.500	0.507	0.007	0.050	0.000	0.000

MM DIM J3= 2D DISTANCE FROM PLANE PL NW8 ANTENNA FLANGE ORING TO PLANE PL NW8 ANTENNA FLANGE PAR TO XAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.500	0.563	0.063	0.050	0.000	0.013

MM DIM J4= 2D DISTANCE FROM PLANE PL-NW12-FLANGE-HOM2 O-RING TO PLANE PL-NW12-FLANGE-HOM2 PAR TO ZAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.500	0.519	0.019	0.050	0.000	0.000

MM DIM J5= 2D DISTANCE FROM PLANE PL NW 40 FLANGE ORING TO PLANE PL NW 40 FLANGE PERP TO PLANE PL NW 40 FLANGE

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.500	0.518	0.018	0.050	0.000	0.000

MM DIM J6= 2D DISTANCE FROM PLANE PL-FAR-END-FLANGE-ORING TO PLANE PL-FAR-END PERP TO PLANE PL-FAR-END

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1.000	0.984	-0.016	0.100	0.100	0.000

DEG DIM K= 2D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO XAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	30.000	32.416	2.416	0.500	0.500	1.916

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

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	34.979	-0.021	0.500	0.500	0.000

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DEG	DIM M= 2D ANGLE (TRUE) FROM LINE LINC_AXIS_NW40 TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.000	0.000	0.500	0.500	0.000

MM	DIM N7= LOCATION OF CIRCLE CR-NEARFLANGE BH 195					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-165.000	-166.937	-1.936	1.000	1.000	0.936

MM	DIM N8= LOCATION OF CIRCLE CR-NEARFLANGE BH 225					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-135.000	-136.890	-1.890	1.000	1.000	0.890

MM	DIM N9= LOCATION OF CIRCLE CR-NEARFLANGE BH 255					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-105.000	-106.889	-1.889	1.000	1.000	0.889

MM	DIM N10= LOCATION OF CIRCLE CR-NEARFLANGE BH 285					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-75.000	-76.927	-1.927	1.000	1.000	0.927

MM	DIM N11= LOCATION OF CIRCLE CR-NEARFLANGE BH315					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-45.000	-46.792	-1.792	1.000	1.000	0.792

MM	DIM N12= LOCATION OF CIRCLE CR-NEARFLANGE BH 345					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-15.000	-16.812	-1.812	1.000	1.000	0.812

MM	DIM N19= LOCATION OF CIRCLE CR-FARFLANGE BH 195					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-165.000	-165.035	-0.035	1.000	1.000	0.000

MM	DIM N20= LOCATION OF CIRCLE CR-FARFLANGE BH 225					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-135.000	-135.072	-0.072	1.000	1.000	0.000

MM	DIM N21= LOCATION OF CIRCLE CR-FARFLANGE BH 255					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-105.000	-105.162	-0.162	1.000	1.000	0.000

MM	DIM N22= LOCATION OF CIRCLE CR-FARFLANGE BH 285					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-75.000	-75.143	-0.143	1.000	1.000	0.000

MM	DIM N23= LOCATION OF CIRCLE CR-FARFLANGE BH 315					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-45.000	-45.060	-0.060	1.000	1.000	0.000

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MM	DIM N24= LOCATION OF CIRCLE CR-FARFLANGE BH 345					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PA	-15.000	-15.123	-0.123	1.000	1.000	0.000

MM	DIM O1= LOCATION OF CIRCLE CR-NEAR-END-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	140.000	139.986	-0.014	0.300	0.300	0.000

MM	DIM O2= LOCATION OF CIRCLE CR-FAR-END					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	140.000	140.014	0.014	0.300	0.300	0.000

MM	DIM P1= LOCATION OF CIRCLE CRC-CAV-1-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.067	0.766	0.050	0.050	0.716

MM	DIM P2= LOCATION OF CIRCLE CRC-CAV-1-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.091	0.790	0.050	0.050	0.740

MM	DIM P3= LOCATION OF CIRCLE CRC-CAV-2-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.087	0.787	0.050	0.050	0.737

MM	DIM P4= LOCATION OF CIRCLE CRC-CAV-2-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.135	0.834	0.050	0.050	0.784

MM	DIM P5= LOCATION OF CIRCLE CRC-CAV-3-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.219	0.918	0.050	0.050	0.868

MM	DIM P6= LOCATION OF CIRCLE CRC-CAV-3-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.083	0.783	0.050	0.050	0.733

MM	DIM P7= LOCATION OF CIRCLE CRC-CAV-4-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.080	0.780	0.050	0.050	0.730

MM	DIM P8= LOCATION OF CIRCLE CRC-CAV-4-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.103	0.802	0.050	0.050	0.752

MM	DIM P9= LOCATION OF CIRCLE CRC-CAV-5-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.231	0.931	0.050	0.050	0.881

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MM	DIM P10= LOCATION OF CIRCLE CRC-CAV-5-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.178	0.878	0.050	0.050	0.828

MM	DIM P11= LOCATION OF CIRCLE CRC-CAV-6-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	210.999	0.698	0.050	0.050	0.648

MM	DIM P12= LOCATION OF CIRCLE CRC-CAV-6-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.111	0.811	0.050	0.050	0.761

MM	DIM P13= LOCATION OF CIRCLE CRC-CAV-7-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.176	0.875	0.050	0.050	0.825

MM	DIM P14= LOCATION OF CIRCLE CRC-CAV-7-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.055	0.755	0.050	0.050	0.705

MM	DIM P15= LOCATION OF CIRCLE CRC-CAV-8-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.084	0.783	0.050	0.050	0.733

MM	DIM P16= LOCATION OF CIRCLE CRC-CAV-8-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.138	0.838	0.050	0.050	0.788

MM	DIM P17= LOCATION OF CIRCLE CRC-CAV-9-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	211.138	0.838	0.050	0.050	0.788

MM	DIM P18= LOCATION OF CIRCLE CRC-CAV-9-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	210.300	210.948	0.647	0.050	0.050	0.597

MM	DIM Q1= LOCATION OF CIRCLE CR-SUPPORT-RING-P12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.036	-0.464	0.080	0.080	0.384

MM	DIM Q2= LOCATION OF CIRCLE CR-SUPPORT-RING-P23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.004	-0.496	0.080	0.080	0.416

MM	DIM Q3= LOCATION OF CIRCLE CR-SUPPORT-RING-P34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	55.876	-0.624	0.080	0.080	0.544

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MM	DIM Q4= LOCATION OF CIRCLE CR-SUPPORT-RING-P45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.317	-0.183	0.080	0.080	0.103

MM	DIM Q5= LOCATION OF CIRCLE CR-SUPPORT-RING-P56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.002	-0.498	0.080	0.080	0.418

MM	DIM Q6= LOCATION OF CIRCLE CR-SUPPORT-RING-P67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.061	-0.439	0.080	0.080	0.359

MM	DIM Q7= LOCATION OF CIRCLE CR-SUPPORT-RING-P78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.110	-0.390	0.080	0.080	0.310

MM	DIM Q8= LOCATION OF CIRCLE CR-SUPPORT-RING-P89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.116	-0.384	0.080	0.080	0.304

MM	DIM Q9= LOCATION OF CIRCLE CR-SUPPORT-RING-N12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.157	-0.343	0.080	0.080	0.263

MM	DIM Q10= LOCATION OF CIRCLE CR-SUPPORT-RING-N23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.227	-0.273	0.080	0.080	0.193

MM	DIM Q11= LOCATION OF CIRCLE CR-SUPPORT-RING-N34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.109	-0.391	0.080	0.080	0.311

MM	DIM Q12= LOCATION OF CIRCLE CR-SUPPORT-RING-N45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.207	-0.293	0.080	0.080	0.213

MM	DIM Q13= LOCATION OF CIRCLE CR-SUPPORT-RING-N56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.238	-0.262	0.080	0.080	0.182

MM	DIM Q14= LOCATION OF CIRCLE CR-SUPPORT-RING-N67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.075	-0.425	0.080	0.080	0.345

MM	DIM Q15= LOCATION OF CIRCLE CR-SUPPORT-RING-N78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.089	-0.411	0.080	0.080	0.331

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MM	DIM Q16= LOCATION OF CIRCLE CR-SUPPORT-RING-N89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	56.500	56.108	-0.392	0.080	0.080	0.312

MM	DIM R1= LOCATION OF CIRCLE CRC-VAC-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	191.200	191.222	0.021	0.200	0.200	0.000

MM	DIM R2= LOCATION OF CIRCLE CRC-VAC-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
D	200.000	200.016	0.015	0.200	0.200	0.000

MM	DIM S1= LOCATION OF CIRCLE CRC_BC_NEF					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	60.000	59.893	-0.107	0.300	0.300	0.000

MM	DIM S2= LOCATION OF CIRCLE CRC_BC_FEF					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
R	60.000	60.214	0.214	0.300	0.300	0.000

MM	DIM T1= LOCATION OF POINT NOTINTHISORIENTATION					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
T	0.000	0.000	0.000	0.000	0.000	0.000

MM	DIM T2= LOCATION OF POINT NOTINTHISORIENTATION					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
T	0.000	0.000	0.000	0.000	0.000	0.000

MM	DIM T3= LOCATION OF POINT NOTINTHISORIENTATION					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
T	0.000	0.000	0.000	0.000	0.000	0.000

MM	DIM T4= LOCATION OF POINT NOTINTHISORIENTATION					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
T	0.000	0.000	0.000	0.000	0.000	0.000

MM	DIM T5= LOCATION OF POINT NOTINTHISORIENTATION					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
T	0.000	0.000	0.000	0.000	0.000	0.000

MM	DIM T6= LOCATION OF POINT NOTINTHISORIENTATION					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
T	0.000	0.000	0.000	0.000	0.000	0.000

MM	DIM U1= CONCENTRICITY FROM CIRCLE CR-NEAR-END-FLANGE TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.571	0.571	0.400	0.000	0.171

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◎ MM	DIM U2= CONCENTRICITY FROM CIRCLE CR-FAR-END TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.466	0.466	0.400	0.000	0.066	

◎ MM	DIM U3= CONCENTRICITY FROM CIRCLE CRC-CAV-1-1 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.430	0.430	0.400	0.000	0.030	

◎ MM	DIM U4= CONCENTRICITY FROM CIRCLE CRC-CAV-1-2 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.404	0.404	0.400	0.000	0.004	

◎ MM	DIM U5= CONCENTRICITY FROM CIRCLE CRC-CAV-2-1 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.898	0.898	0.400	0.000	0.498	

◎ MM	DIM U6= CONCENTRICITY FROM CIRCLE CRC-CAV-2-2 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.864	0.864	0.400	0.000	0.464	

◎ MM	DIM U7= CONCENTRICITY FROM CIRCLE CRC-CAV-3-1 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.211	1.211	0.400	0.000	0.811	

◎ MM	DIM U8= CONCENTRICITY FROM CIRCLE CRC-CAV-3-2 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.317	1.317	0.400	0.000	0.917	

◎ MM	DIM U9= CONCENTRICITY FROM CIRCLE CRC-CAV-4-1 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.504	1.504	0.400	0.000	1.104	

◎ MM	DIM U10= CONCENTRICITY FROM CIRCLE CRC-CAV-4-2 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.498	1.498	0.400	0.000	1.098	

◎ MM	DIM U11= CONCENTRICITY FROM CIRCLE CRC-CAV-5-1 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.620	1.620	0.400	0.000	1.220	

◎ MM	DIM U12= CONCENTRICITY FROM CIRCLE CRC-CAV-5-2 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.727	1.727	0.400	0.000	1.327	

◎ MM	DIM U13= CONCENTRICITY FROM CIRCLE CRC-CAV-6-1 TO LINE LNC-LEVEL						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.706	1.706	0.400	0.000	1.306	

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MM	DIM U14= CONCENTRICITY FROM CIRCLE CRC-CAV-6-2 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	1.689	1.689	0.400	0.000	1.289

MM	DIM U15= CONCENTRICITY FROM CIRCLE CRC-CAV-7-1 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	1.442	1.442	0.400	0.000	1.042

MM	DIM U16= CONCENTRICITY FROM CIRCLE CRC-CAV-7-2 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	1.396	1.396	0.400	0.000	0.996

MM	DIM U17= CONCENTRICITY FROM CIRCLE CRC-CAV-8-1 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.986	0.986	0.400	0.000	0.586

MM	DIM U18= CONCENTRICITY FROM CIRCLE CRC-CAV-8-2 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.950	0.950	0.400	0.000	0.550

MM	DIM U19= CONCENTRICITY FROM CIRCLE CRC-CAV-9-1 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.433	0.433	0.400	0.000	0.033

MM	DIM U20= CONCENTRICITY FROM CIRCLE CRC-CAV-9-2 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.356	0.356	0.400	0.000	0.000

MM	DIM U21= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-P12 TO LINE LNC-LEVE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	1.046	1.046	0.400	0.000	0.646

MM	DIM U22= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-P23 TO LINE LNC-LEVE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	1.910	1.910	0.400	0.000	1.510

MM	DIM U23= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-P34 TO LINE LNC-LEVE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	2.814	2.814	0.400	0.000	2.414

MM	DIM U24= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-P45 TO LINE LNC-LEVE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	1.887	1.887	0.400	0.000	1.487

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◎ MM	DIM U25= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-P56 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	2.256	2.256	0.400	0.000	1.856	

◎ MM	DIM U26= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-P67 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.277	1.277	0.400	0.000	0.877	

◎ MM	DIM U27= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-P78 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.441	1.441	0.400	0.000	1.041	

◎ MM	DIM U28= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-P89 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.715	0.715	0.400	0.000	0.315	

◎ MM	DIM U29= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-N12 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	0.917	0.917	0.400	0.000	0.517	

◎ MM	DIM U30= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-N23 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.737	1.737	0.400	0.000	1.337	

◎ MM	DIM U31= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-N34 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.228	1.228	0.400	0.000	0.828	

◎ MM	DIM U32= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-N45 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	2.033	2.033	0.400	0.000	1.633	

◎ MM	DIM U33= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-N56 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.561	1.561	0.400	0.000	1.161	

◎ MM	DIM U34= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-N67 TO LINE LNC-LEVE						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	0.000	1.411	1.411	0.400	0.000	1.011	

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◎ MM	DIM U35= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-N78 TO LINE LNC-LEVE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	1.317	1.317	0.400	0.000	0.917

◎ MM	DIM U36= CONCENTRICITY FROM CIRCLE CR-SUPPORT-RING-N89 TO LINE LNC-LEVE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.664	0.664	0.400	0.000	0.264

◎ MM	DIM U37= CONCENTRICITY FROM CIRCLE CRC-DAT-1 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.000	0.000	0.400	0.000	0.000

◎ MM	DIM U38= CONCENTRICITY FROM CIRCLE CRC-DAT-2 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.000	0.000	0.400	0.000	0.000

◎ MM	DIM U39= CONCENTRICITY FROM CIRCLE CRC-VAC-1 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.049	0.049	0.400	0.000	0.000

◎ MM	DIM U40= CONCENTRICITY FROM CIRCLE CRC-VAC-2 TO LINE LNC-LEVEL					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.354	0.354	0.400	0.000	0.000

⊥ MM	DIM V1= PERPEND OF PLANE PL-NEAR-END-FLANGE,RFS TO LINE LNC-LEVEL,RFS EXTEND=0.000					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.339	0.339	0.200	0.000	0.139

⊥ MM	DIM V2= PERPEND OF PLANE PL-FAR-END,RFS TO LINE LNC-LEVEL,RFS EXTEND=0.000					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.337	0.337	0.200	0.000	0.137

END OF MEASUREMENT FOR
PN=PN440004-n ILC 1p3GHZ RF CAVITY ASSEMBLY 180 TB9AES010 v4s IR
DWG= SN=
TOTAL # OF MEAS =539 # OUT OF TOL =264