DATE=6/9/2009 TIME=5:37:48 PM
PART NAME : PN440004-n-Trans-Rings-000-TB9AES004-v1-IR
REV NUMBER :
SER NUMBER :
STATS COUNT : 1

440004-n
FNAL 1.3GHZ TESLA
RF CAVITY
ASSEMBLY
measurement of Transition Rings
@ 000 rotational orientation

'Inspected by ' : Robert Riley
'Cavity Number' : TB9AES004
' ' :

Datum Discs

MM DIM LOC1= LOCATION OF CIRCLE CIRC_DATUM_DISC_MC

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.000	0.000	0.000
Y	25.000	26.229	1.229	10.000	10.000	0.000
Z	0.000	0.000	0.000	0.000	0.000	0.000
D	111.000	110.756	-0.244	0.050	0.050	0.194
RN	0.000	0.082	0.082	0.050	0.000	0.032

MM DIM LOC2= LOCATION OF CIRCLE CIRC_DATUM_DISC_FP

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.000	0.000	0.000
Y	-1032.384	-1031.147	1.237	10.000	10.000	0.000
Z	0.000	0.000	0.000	0.000	0.000	0.000
D	111.000	110.694	-0.306	0.050	0.050	0.256
RN	0.000	0.098	0.098	0.050	0.000	0.048

Datum Disc planes

MM DIM LOC3= LOCATION OF PLANE PLNC_DD_MC

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	27.000	28.093	1.093	10.000	10.000	0.000
FL	0.000	0.062	0.062	0.100	0.000	0.000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:48 PM

MM	DIM LOC4= LOCATION OF PLANE PLNC_DD_FP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1034.384	-1033.254	1.131	10.000	10.000	0.000
FL	0.000	0.079	0.079	0.100	0.000	0.000

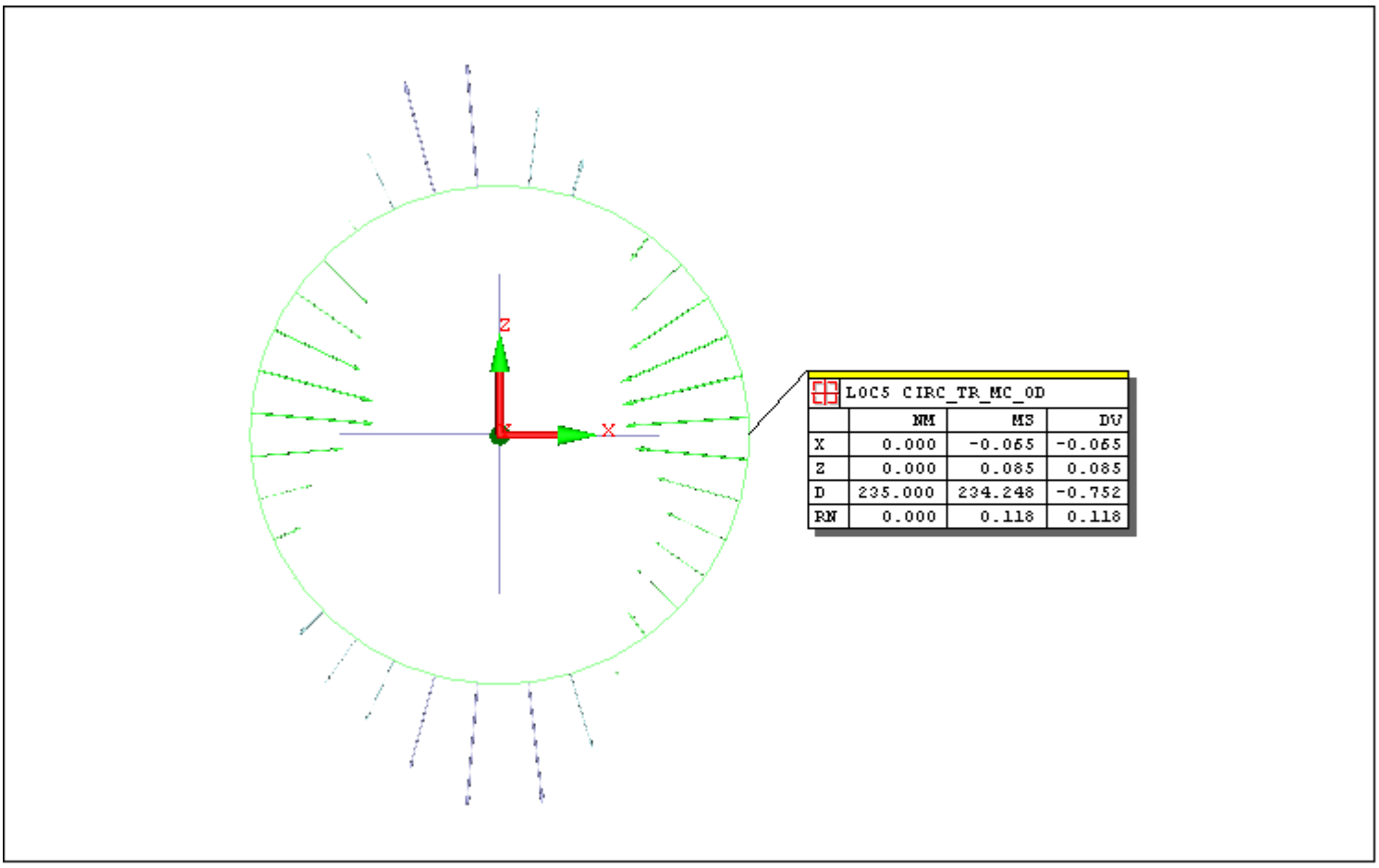
Distance between Datum Disc planes

MM	DIM DIST1= 2D DISTANCE FROM PLANE PLNC_DD_FP TO PLANE PLNC_DD_MC PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1061.060	1061.347	0.287	0.200	0.200	0.087

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:48 PM
Minimum Circumscribed 36 point constructed circle
Transition Ring Main Coupler end
235.0 O.D.

MM	DIM LOC5= LOCATION OF CIRCLE CIRC_TR_MC_OD					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.065	-0.065	0.250	0.250	0.000
Z	0.000	0.085	0.085	0.250	0.250	0.000
D	235.000	234.248	-0.752	0.250	0.250	0.502
RN	0.000	0.118	0.118	0.250	0.000	0.000

MM	DIM RND1= ROUNDNESS OF CIRCLE CIRC_TR_MC_OD					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.118	0.118	0.250	0.000	0.000

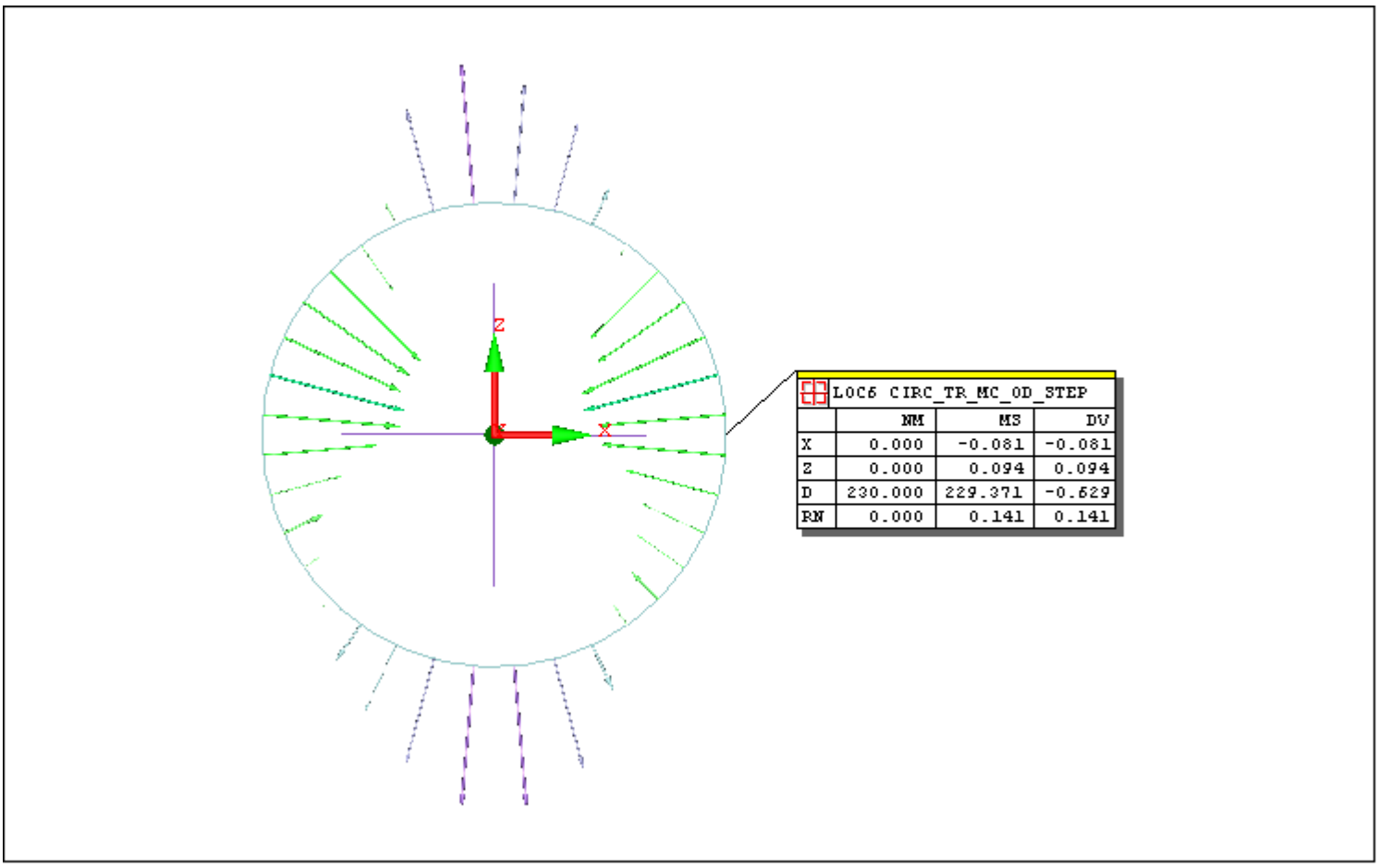


Minimum Circumscribed 36 point constructed circle
Transition Ring Main Coupler end
235.0 O.D. x1000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:49 PM
Minimum Circumscribed 36 point constructed circle
Transition Ring Main Coupler end
233.00 O.D. step

MM	DIM LOC6= LOCATION OF CIRCLE CIRC_TR_MC_OD_STEP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.081	-0.081	0.250	0.250	0.000
Z	0.000	0.094	0.094	0.250	0.250	0.000
D	230.000	229.371	-0.629	0.000	0.250	0.379
RN	0.000	0.141	0.141	0.250	0.000	0.000

MM	DIM RND2= ROUNDNESS OF CIRCLE CIRC_TR_MC_OD_STEP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.141	0.141	0.250	0.000	0.000

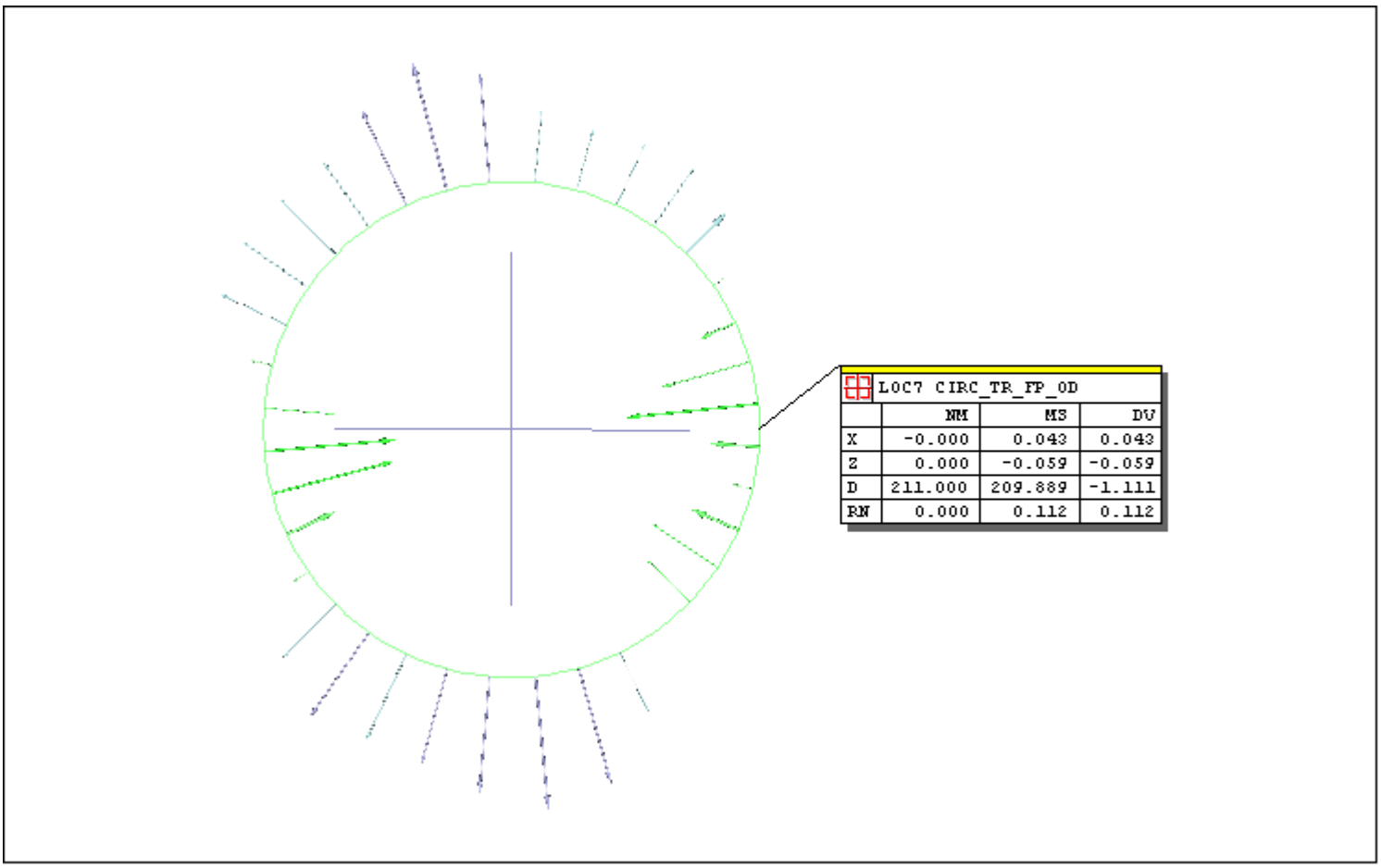


Minimum Circumscribed 36 point constructed circle
Transition Ring Main Coupler end
233.00 O.D. step x1000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:49 PM
Minimum Circumscribed 36 point constructed circle
Transition Ring Field Probe end
211.0 O.D.

MM	DIM LOC7= LOCATION OF CIRCLE CIRC_TR_FP_OD					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.043	0.043	0.250	0.250	0.000
Z	0.000	-0.059	-0.059	0.250	0.250	0.000
D	211.000	209.889	-1.111	0.250	0.250	0.861
RN	0.000	0.112	0.112	0.250	0.000	0.000

MM	DIM RND3= ROUNDNESS OF CIRCLE CIRC_TR_FP_OD					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.112	0.112	0.250	0.000	0.000



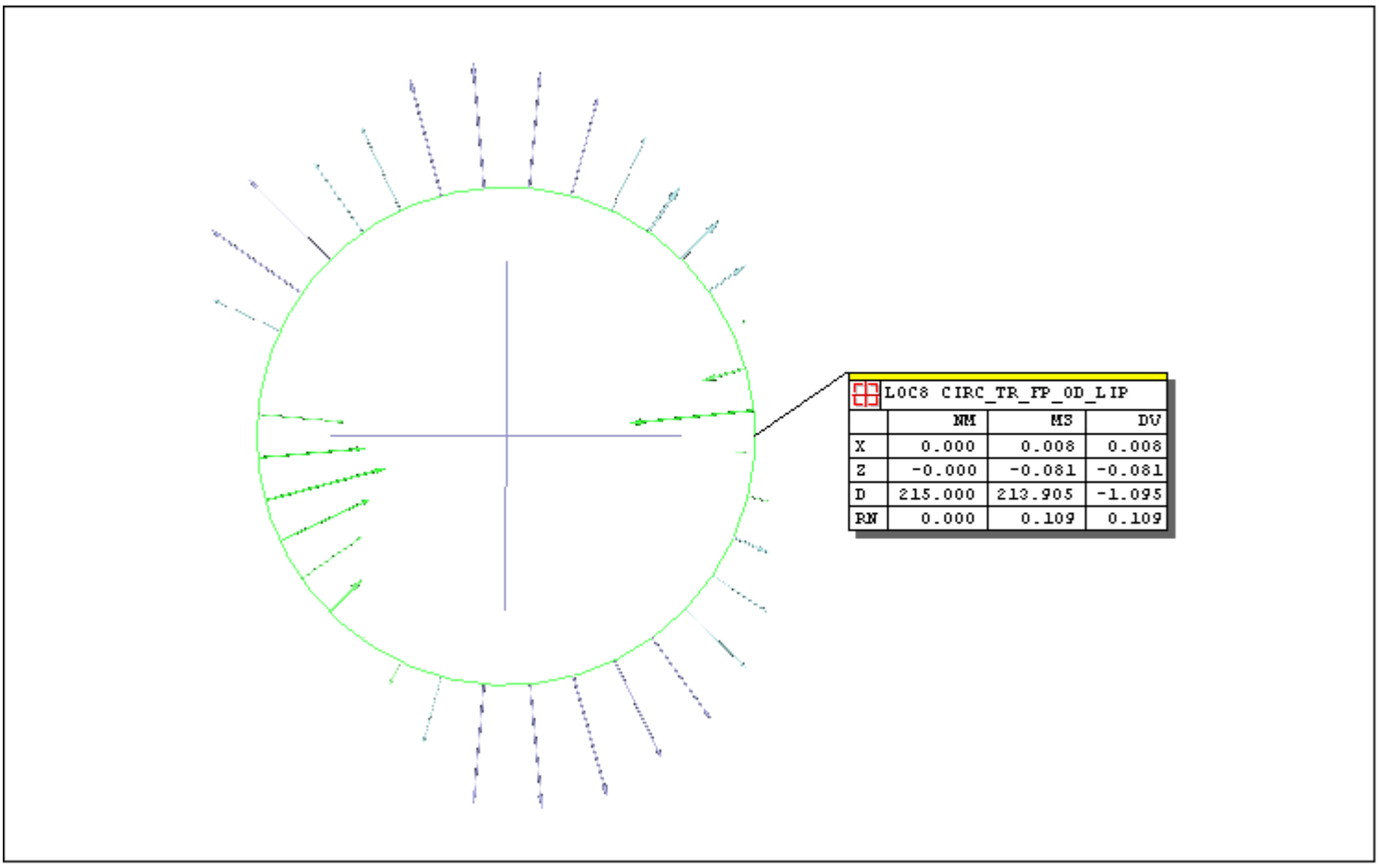
Minimum Circumscribed 36 point constructed circle
Transition Ring Field Probe end
211.0 O.D. x1000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:49 PM

Minimum Circumscribed 36 point constructed circle
Transition Ring Field Probe end
215.0 O.D. lip

MM	DIM LOC8= LOCATION OF CIRCLE CIRC_TR_FP_OD_LIP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.008	0.008	0.250	0.250	0.000
Z	0.000	-0.081	-0.081	0.250	0.250	0.000
D	215.000	213.905	-1.095	0.250	0.250	0.845
RN	0.000	0.109	0.109	0.250	0.000	0.000

MM	DIM RND4= ROUNDNESS OF CIRCLE CIRC_TR_FP_OD_LIP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.109	0.109	0.250	0.000	0.000



Minimum Circumscribed 36 point constructed circle
Transition Ring Field Probe end
215.0 O.D. lip x1000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:49 PM

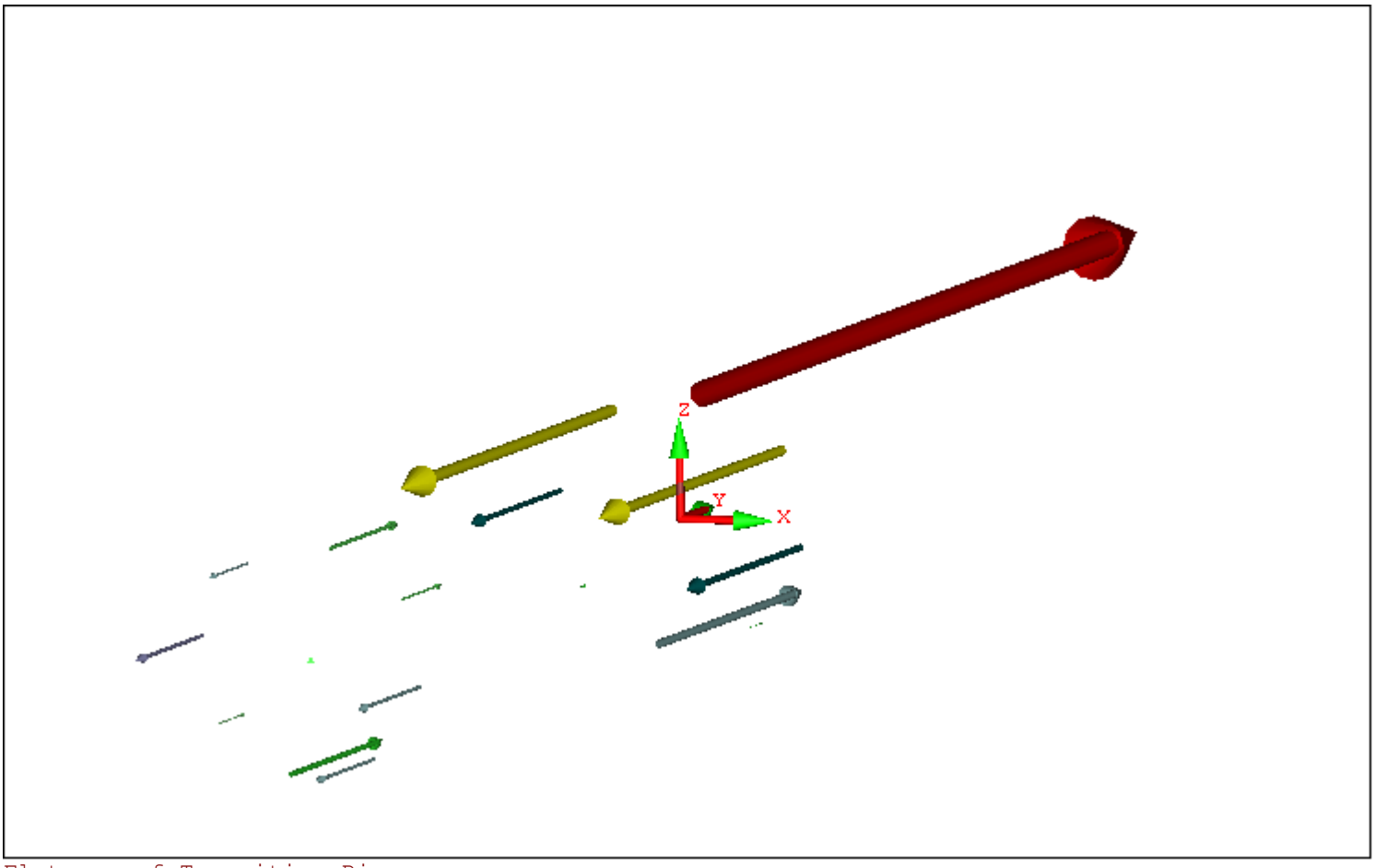
Transition Ring planes

MM	DIM LOC9= LOCATION OF PLANE PLNC_TR_MC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.000	0.000	0.000	0.000	0.000
FL	0.000	0.348	0.348	0.200	0.000	0.148

MM	DIM LOC10= LOCATION OF PLANE PLNC_TR_FP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.550	-0.050	10.000	10.000	0.000
FL	0.000	0.086	0.086	0.200	0.000	0.000

MM	DIM FLAT3= FLATNESS OF PLANE PLNC_TR_MC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.348	0.348	0.250	0.000	0.098

MM	DIM FLAT4= FLATNESS OF PLANE PLNC_TR_FP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.086	0.086	0.250	0.000	0.000



Flatness of Transition Rings
x5000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:49 PM
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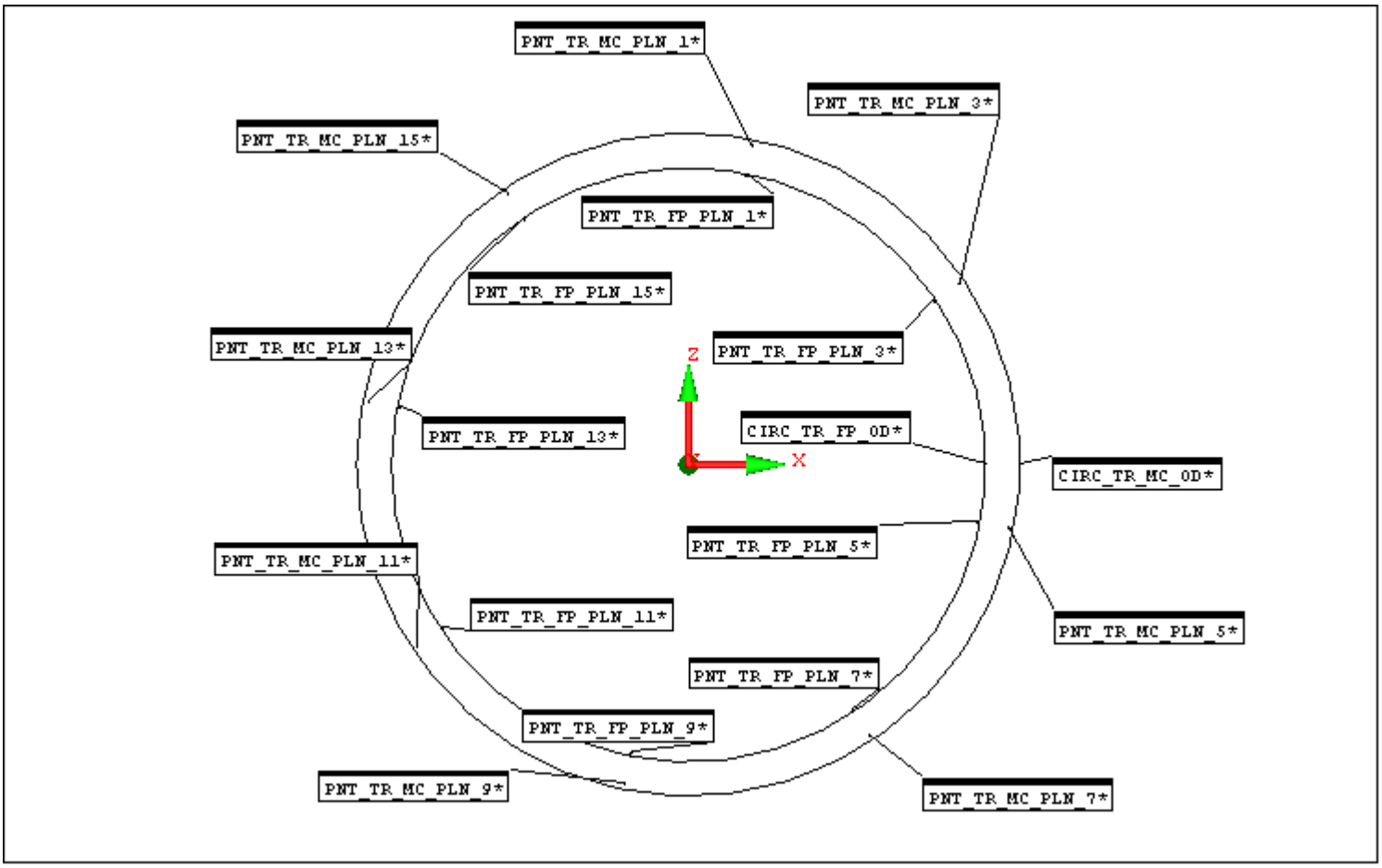

Transition Ring points Main Coupler end

MM	DIM LOC11= LOCATION OF POINT PNT_TR_MC_PLN_1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.476	0.476	1.000	1.000	0.000
PR	115.000	114.885	-0.115	1.000	1.000	0.000
PA	101.250	101.263	0.013	1.000	1.000	0.000

MM	DIM LOC12= LOCATION OF POINT PNT_TR_MC_PLN_3					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.247	-0.247	1.000	1.000	0.000
PR	115.000	114.936	-0.064	1.000	1.000	0.000
PA	146.250	146.303	0.053	1.000	1.000	0.000

MM	DIM LOC13= LOCATION OF POINT PNT_TR_MC_PLN_5					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.514	-0.514	1.000	1.000	0.000
PR	115.000	115.028	0.028	1.000	1.000	0.000
PA	-168.750	-168.696	0.054	1.000	1.000	0.000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:49 PM

MM	DIM LOC14= LOCATION OF POINT PNT_TR_MC_PLN_7					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.484	-0.484	1.000	1.000	0.000
PR	115.000	115.108	0.108	1.000	1.000	0.000
PA	-123.750	-123.713	0.037	1.000	1.000	0.000

MM	DIM LOC15= LOCATION OF POINT PNT_TR_MC_PLN_9					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.165	-0.164	1.000	1.000	0.000
PR	115.000	115.121	0.121	1.000	1.000	0.000
PA	-78.750	-78.765	-0.015	1.000	1.000	0.000

MM	DIM LOC16= LOCATION OF POINT PNT_TR_MC_PLN_11					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.152	0.152	1.000	1.000	0.000
PR	115.000	115.069	0.069	1.000	1.000	0.000
PA	-33.750	-33.804	-0.054	1.000	1.000	0.000

MM	DIM LOC17= LOCATION OF POINT PNT_TR_MC_PLN_13					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.403	0.403	1.000	1.000	0.000
PR	115.000	114.980	-0.020	1.000	1.000	0.000
PA	11.250	11.188	-0.062	1.000	1.000	0.000

MM	DIM LOC18= LOCATION OF POINT PNT_TR_MC_PLN_15					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.377	0.377	1.000	1.000	0.000
PR	115.000	114.904	-0.096	1.000	1.000	0.000
PA	56.250	56.215	-0.035	1.000	1.000	0.000

Transition Ring points Field Probe end

MM	DIM LOC19= LOCATION OF POINT PNT_TR_FP_PLN_1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.138	0.362	1.000	1.000	0.000
PR	104.000	103.919	-0.081	1.000	1.000	0.000
PA	101.250	101.268	0.018	1.000	1.000	0.000

MM	DIM LOC20= LOCATION OF POINT PNT_TR_FP_PLN_3					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.172	0.328	1.000	1.000	0.000
PR	104.000	103.962	-0.038	1.000	1.000	0.000
PA	146.250	146.307	0.057	1.000	1.000	0.000

MM	DIM LOC21= LOCATION OF POINT PNT_TR_FP_PLN_5					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.454	0.046	1.000	1.000	0.000
PR	104.000	104.042	0.042	1.000	1.000	0.000
PA	-168.750	-168.708	0.042	1.000	1.000	0.000

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MM DIM LOC22= LOCATION OF POINT PNT_TR_FP_PLN_7

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.756	-0.256	1.000	1.000	0.000
PR	104.000	104.083	0.083	1.000	1.000	0.000
PA	-123.750	-123.729	0.021	1.000	1.000	0.000

MM DIM LOC23= LOCATION OF POINT PNT_TR_FP_PLN_9

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.875	-0.375	1.000	1.000	0.000
PR	104.000	104.049	0.049	1.000	1.000	0.000
PA	-78.750	-78.729	0.021	1.000	1.000	0.000

MM DIM LOC24= LOCATION OF POINT PNT_TR_FP_PLN_11

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.893	-0.393	1.000	1.000	0.000
PR	104.000	104.070	0.070	1.000	1.000	0.000
PA	-33.750	-33.751	-0.001	1.000	1.000	0.000

MM DIM LOC25= LOCATION OF POINT PNT_TR_FP_PLN_13

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.715	-0.215	1.000	1.000	0.000
PR	104.000	104.047	0.048	1.000	1.000	0.000
PA	11.250	11.220	-0.030	1.000	1.000	0.000

MM DIM LOC26= LOCATION OF POINT PNT_TR_FP_PLN_15

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-1007.500	-1007.397	0.103	1.000	1.000	0.000
PR	104.000	103.988	-0.012	1.000	1.000	0.000
PA	56.250	56.216	-0.034	1.000	1.000	0.000

Distances between matching points on Transition Rings

MM DIM DIST_PA_11.25= 2D DISTANCE FROM POINT PNT_TR_MC_PLN_13 TO POINT PNT_TR_FP_PLN_13 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1008.118	0.618	1.000	1.000	0.000

MM DIM DIST_PA_56.25= 2D DISTANCE FROM POINT PNT_TR_MC_PLN_15 TO POINT PNT_TR_FP_PLN_15 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1007.774	0.274	1.000	1.000	0.000

MM DIM DIST_PA_101.25= 2D DISTANCE FROM POINT PNT_TR_MC_PLN_1 TO POINT PNT_TR_FP_PLN_1 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1007.614	0.114	1.000	1.000	0.000

MM DIM DIST_PA_146.25= 2D DISTANCE FROM POINT PNT_TR_MC_PLN_3 TO POINT PNT_TR_FP_PLN_3 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1006.925	-0.575	1.000	1.000	0.000

MM DIM DIST_PA_-168.75= 2D DISTANCE FROM POINT PNT_TR_MC_PLN_5 TO POINT PNT_TR_FP_PLN_5 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1006.941	-0.559	1.000	1.000	0.000

MM DIM DIST_PA_-123.75= 2D DISTANCE FROM POINT PNT_TR_MC_PLN_7 TO POINT PNT_TR_FP_PLN_7 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1007.272	-0.228	1.000	1.000	0.000

MM DIM DIST_PA_-78.75= 2D DISTANCE FROM POINT PNT_TR_MC_PLN_9 TO POINT PNT_TR_FP_PLN_9 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1007.710	0.210	1.000	1.000	0.000

MM DIM DIST_PA_-33.75= 2D DISTANCE FROM POINT PNT_TR_MC_PLN_11 TO POINT PNT_TR_FP_PLN_11 PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1008.044	0.544	1.000	1.000	0.000

MM DIM DIST_BETWEEN_PLANES= 2D DISTANCE FROM PLANE PLNC_TR_MC TO PLANE PLNC_TR_FP PAR TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	1007.500	1007.550	0.050	1.000	1.000	0.000

LOCATIONS OF CONSTRUCTED CIRCLES
ON 18 HALF CELLS

MM DIM LOC_CC3= LOCATION OF CIRCLE CIRC_CAV_1_1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.054	-0.054	0.200	0.200	0.000
Y	0.000	-968.384	-968.384	2000.000	2000.000	0.000
Z	0.000	-0.061	-0.061	0.200	0.200	0.000
D	210.300	211.036	0.736	0.200	0.200	0.536
RN	0.000	0.152	0.152	0.200	0.000	0.000

MM DIM LOC_CC4= LOCATION OF CIRCLE CIRC_CAV_1_2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.041	-0.041	0.200	0.200	0.000
Y	0.000	-959.578	-959.578	2000.000	2000.000	0.000
Z	0.000	-0.080	-0.080	0.200	0.200	0.000
D	210.300	211.000	0.700	0.200	0.200	0.500
RN	0.000	0.164	0.164	0.200	0.000	0.000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:49 PM

MM DIM LOC_CC5= LOCATION OF CIRCLE CIRC_CAV_2_1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.059	0.059	0.200	0.200	0.000
Y	0.000	-852.885	-852.885	2000.000	2000.000	0.000
Z	0.000	-0.159	-0.159	0.200	0.200	0.000
D	210.300	211.373	1.073	0.200	0.200	0.873
RN	0.000	0.188	0.188	0.200	0.000	0.000

MM DIM LOC_CC6= LOCATION OF CIRCLE CIRC_CAV_2_2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.043	0.043	0.200	0.200	0.000
Y	0.000	-844.076	-844.076	2000.000	2000.000	0.000
Z	0.000	-0.145	-0.145	0.200	0.200	0.000
D	210.300	211.371	1.071	0.200	0.200	0.871
RN	0.000	0.173	0.173	0.200	0.000	0.000

MM DIM LOC_CC7= LOCATION OF CIRCLE CIRC_CAV_3_1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.104	0.104	0.200	0.200	0.000
Y	0.000	-737.672	-737.672	2000.000	2000.000	0.000
Z	0.000	-0.174	-0.174	0.200	0.200	0.000
D	210.300	211.325	1.025	0.200	0.200	0.825
RN	0.000	0.248	0.248	0.200	0.000	0.048

MM DIM LOC_CC8= LOCATION OF CIRCLE CIRC_CAV_3_2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.164	0.164	0.200	0.200	0.000
Y	0.000	-728.436	-728.436	2000.000	2000.000	0.000
Z	0.000	-0.095	-0.095	0.200	0.200	0.000
D	210.300	211.245	0.945	0.200	0.200	0.745
RN	0.000	0.182	0.182	0.200	0.000	0.000

MM DIM LOC_CC9= LOCATION OF CIRCLE CIRC_CAV_4_1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.145	0.145	0.200	0.200	0.000
Y	0.000	-621.735	-621.735	2000.000	2000.000	0.000
Z	0.000	-0.048	-0.048	0.200	0.200	0.000
D	210.300	211.327	1.027	0.200	0.200	0.827
RN	0.000	0.184	0.184	0.200	0.000	0.000

MM DIM LOC_CC10= LOCATION OF CIRCLE CIRC_CAV_4_2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.119	0.119	0.200	0.200	0.000
Y	0.000	-612.988	-612.988	2000.000	2000.000	0.000
Z	0.000	-0.065	-0.065	0.200	0.200	0.000
D	210.300	211.315	1.015	0.200	0.200	0.815
RN	0.000	0.142	0.142	0.200	0.000	0.000

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MM DIM LOC_CC11= LOCATION OF CIRCLE CIRC_CAV_5_1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.102	0.102	0.200	0.200	0.000
Y	0.000	-506.127	-506.127	2000.000	2000.000	0.000
Z	0.000	-0.092	-0.092	0.200	0.200	0.000
D	210.300	211.503	1.203	0.200	0.200	1.003
RN	0.000	0.133	0.133	0.200	0.000	0.000

MM DIM LOC_CC12= LOCATION OF CIRCLE CIRC_CAV_5_2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.158	0.158	0.200	0.200	0.000
Y	0.000	-497.621	-497.621	2000.000	2000.000	0.000
Z	0.000	-0.097	-0.097	0.200	0.200	0.000
D	210.300	211.530	1.230	0.200	0.200	1.030
RN	0.000	0.228	0.228	0.200	0.000	0.028

MM DIM LOC_CC13= LOCATION OF CIRCLE CIRC_CAV_6_1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.061	0.061	0.200	0.200	0.000
Y	0.000	-390.644	-390.644	2000.000	2000.000	0.000
Z	0.000	-0.070	-0.070	0.200	0.200	0.000
D	210.300	211.412	1.112	0.200	0.200	0.912
RN	0.000	0.185	0.185	0.200	0.000	0.000

MM DIM LOC_CC14= LOCATION OF CIRCLE CIRC_CAV_6_2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.001	-0.001	0.200	0.200	0.000
Y	0.000	-381.900	-381.900	2000.000	2000.000	0.000
Z	0.000	-0.093	-0.093	0.200	0.200	0.000
D	210.300	211.419	1.119	0.200	0.200	0.919
RN	0.000	0.190	0.190	0.200	0.000	0.000

MM DIM LOC_CC15= LOCATION OF CIRCLE CIRC_CAV_7_1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.059	-0.059	0.200	0.200	0.000
Y	0.000	-275.284	-275.284	2000.000	2000.000	0.000
Z	0.000	-0.036	-0.036	0.200	0.200	0.000
D	210.300	211.377	1.077	0.200	0.200	0.877
RN	0.000	0.225	0.225	0.200	0.000	0.025

MM DIM LOC_CC16= LOCATION OF CIRCLE CIRC_CAV_7_2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.068	-0.068	0.200	0.200	0.000
Y	0.000	-266.419	-266.419	2000.000	2000.000	0.000
Z	0.000	0.069	0.069	0.200	0.200	0.000
D	210.300	211.367	1.067	0.200	0.200	0.867
RN	0.000	0.222	0.222	0.200	0.000	0.022

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MM	DIM LOC_CC17= LOCATION OF CIRCLE CIRC_CAV_8_1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.211	-0.211	0.200	0.200	0.011
Y	0.000	-160.107	-160.107	2000.000	2000.000	0.000
Z	0.000	0.145	0.145	0.200	0.200	0.000
D	210.300	211.263	0.963	0.200	0.200	0.763
RN	0.000	0.230	0.230	0.200	0.000	0.030

MM	DIM LOC_CC18= LOCATION OF CIRCLE CIRC_CAV_8_2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.190	-0.190	0.200	0.200	0.000
Y	0.000	-151.430	-151.430	2000.000	2000.000	0.000
Z	0.000	0.147	0.147	0.200	0.200	0.000
D	210.300	211.436	1.136	0.200	0.200	0.936
RN	0.000	0.197	0.197	0.200	0.000	0.000

MM	DIM LOC_CC19= LOCATION OF CIRCLE CIRC_CAV_9_1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.292	-0.292	0.200	0.200	0.092
Y	0.000	-43.940	-43.940	2000.000	2000.000	0.000
Z	0.000	0.159	0.159	0.200	0.200	0.000
D	210.300	210.988	0.688	0.200	0.200	0.488
RN	0.000	0.124	0.124	0.200	0.000	0.000

MM	DIM LOC_CC20= LOCATION OF CIRCLE CIRC_CAV_9_2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.170	-0.170	0.200	0.200	0.000
Y	0.000	-35.035	-35.035	2000.000	2000.000	0.000
Z	0.000	0.113	0.113	0.200	0.200	0.000
D	210.300	210.870	0.570	0.200	0.200	0.370
RN	0.000	0.216	0.216	0.200	0.000	0.016

Location of End Flanges

MM	DIM LOC_23= LOCATION OF CIRCLE CIR_END_FLANGE_MC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.026	-0.026	0.200	0.200	0.000
Y	0.000	116.031	116.031	2000.000	2000.000	0.000
Z	0.000	-0.107	-0.107	0.200	0.200	0.000
D	140.000	140.031	0.031	0.300	0.300	0.000
RN	0.000	0.005	0.005	0.200	0.000	0.000

MM	DIM LOC_24= LOCATION OF CIRCLE CIR_END_FLANGE_FP					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.307	-0.307	0.200	0.200	0.107
Y	-1153.884	-1152.647	1.237	2000.000	2000.000	0.000
Z	0.000	0.701	0.701	0.200	0.200	0.501
D	140.000	140.015	0.015	0.300	0.300	0.000
RN	0.000	0.019	0.019	0.200	0.000	0.000

PART NUMBER=PN440004-n-Trans-Rings-000-TB9AES004-v1-IR DATE=6/9/2009 TIME=5:37:49 PM
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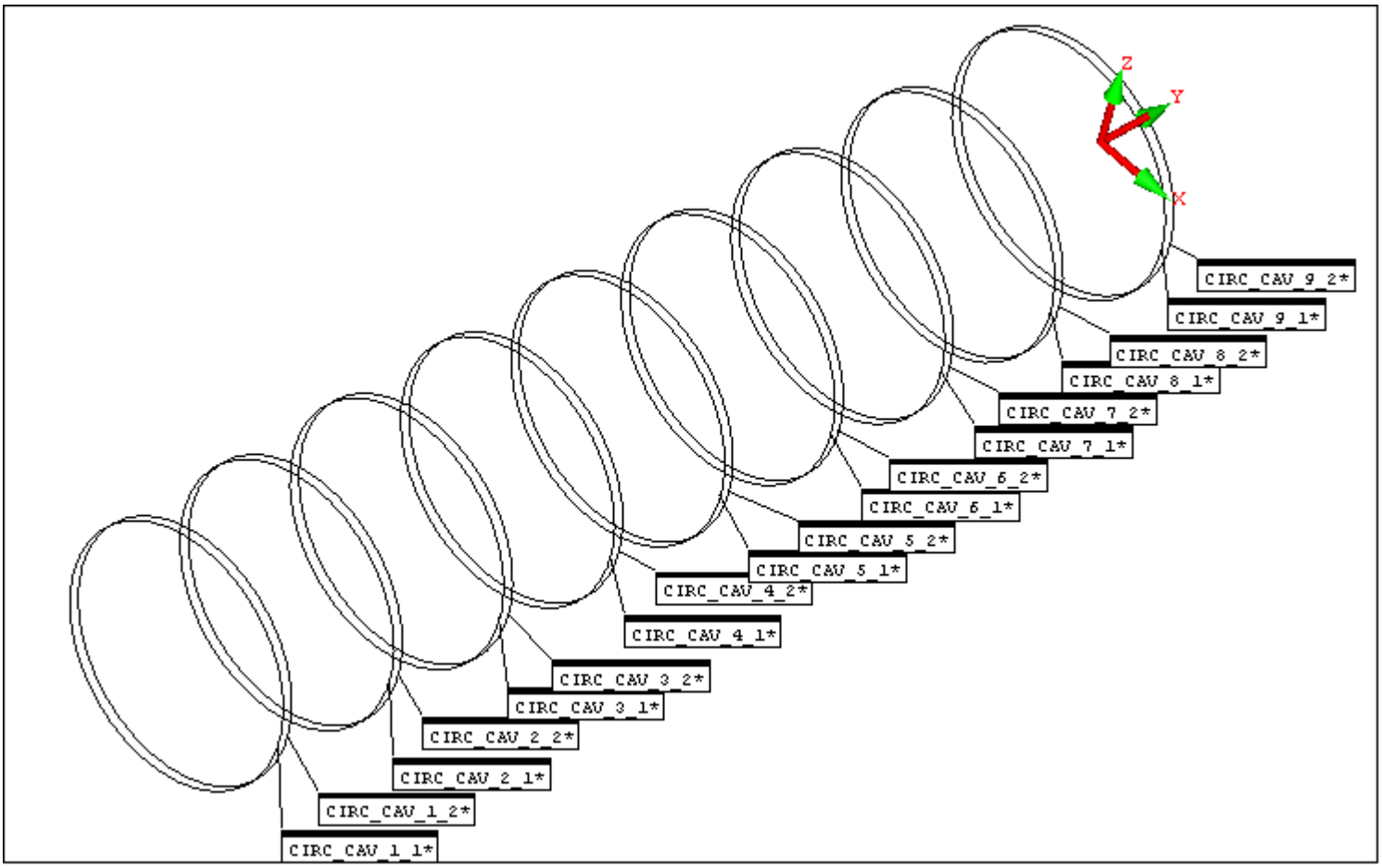

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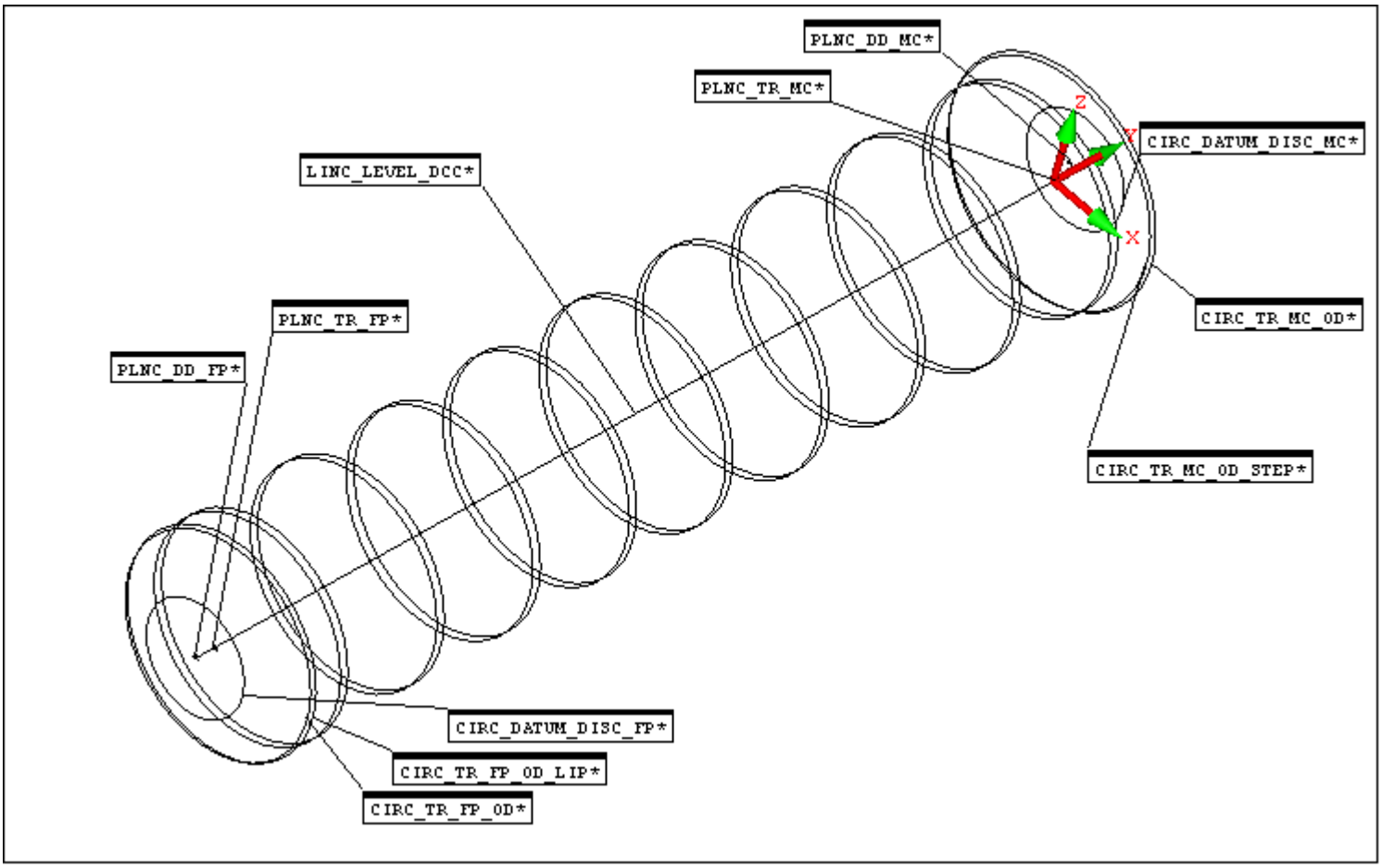

END OF MEASUREMENT FOR
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