

Opened Command File: HQDISP.IN

Eta data used: 0W:2W 4W 7W:48E 46E 44E:0E
Eta data used: 0W:2W 4W 7W:48E 46E 44E:24E 22E:0E
Custom Variables vars used:
Quad K1 vars used: 3W:3E
Skew Quad K1 vars used:
SC Solenoid Ks vars used:
Sex K2 vars used:
Skew Sex K2 vars used:
SC Solenoid Ks vars used:
Horiz Steering vars used:
Vert Steering vars used:
SCIR Cam Rho vars used:
H_Separator vars used:
V_Separator vars used:
BPM Tilt vars used:
Set: ORBIT_X_WGT(0: 99) = 0.
Set: ORBIT_Y_WGT(0: 99) = 0.
Set: ETA_X_WGT(0: 99) = 2.
Set: ETA_Y_WGT(0: 99) = 0.
Limits are now NOT Active
Optimizing using: ALL_VARS
Data to Optimize: ORBIT & TWISS
Dmerit: Allocated dm_dv matrix 1763 1016
Dmerit: Read dMerit matrix from Digested Dmerit File.
Initial merit: 12.31515
Loop Merit A_lambda
1 5.421 1.00E-04
2 5.407 1.00E-05
3 5.404 1.00E-06
4 5.402 1.00E-07
5 5.400 0.00E+00

Top10 merit			Top10 derivative			Top10 delta		
Name	ix	Value	Name	ix	Derivative	Name	ix	delta
Eta_X	24	0.6	Quad_K1	24	-1.258E+01	Quad_K1	50	0.006658
Eta_X	26	0.4	Quad_K1	30	9.628E+00	Quad_K1	19	0.006130
Eta_X	83	0.4	Quad_K1	89	9.112E+00	Quad_K1	84	0.005828
Eta_X	30	0.3	Quad_K1	18	9.055E+00	Quad_K1	80	0.005574
Eta_X	32	0.2	Quad_K1	34	-8.922E+00	Quad_K1	96	0.005565
Eta_X	28	0.2	Quad_K1	40	8.701E+00	Quad_K1	13	0.005355
Eta_X	22	0.2	Quad_K1	26	-7.358E+00	Quad_K1	31	0.004709
Eta_X	84	0.2	Quad_K1	45	-6.895E+00	Quad_K1	15	0.004509
Quad_K1	28	0.2	Quad_K1	91	6.850E+00	Quad_K1	29	0.004375
Quad_K1	30	0.1	Quad_K1	14	-5.720E+00	Quad_K1	49	-0.004324

Merit: 5.400498

Merit sum for: Orbit_X 0.00000E+00
Merit sum for: Orbit_Y 0.00000E+00
Merit sum for: Eta_X 4.4213E+00
Merit sum for: Eta_Y 0.00000E+00
Merit sum for: dE/E 2.2150E-05

Merit sum for: Quad K1 9.7916E-01
X | Y

Model Design | Model Design

Chrom 0.819 0.996 0.434 0.652 ! dQ/(dE/E)

dChrom 0.000 0.000

[dChrom = (Model - Data) - (Design - Ref) if a reference is being used.]

[dChrom = (Model - Data) otherwise.]