Waveguide Distribution for ACC2 and ACC3

Klystron 5

4/2/08 V.Katalev

Eacc, MeV	335

Pkly_5	3.5	MW

15% waveguide losses + 10% circulator

without beam

Elinac	1030	Mev

tinj, mks	P_ACC2, MW	P_ACC3, MW
500	0.9	1.9

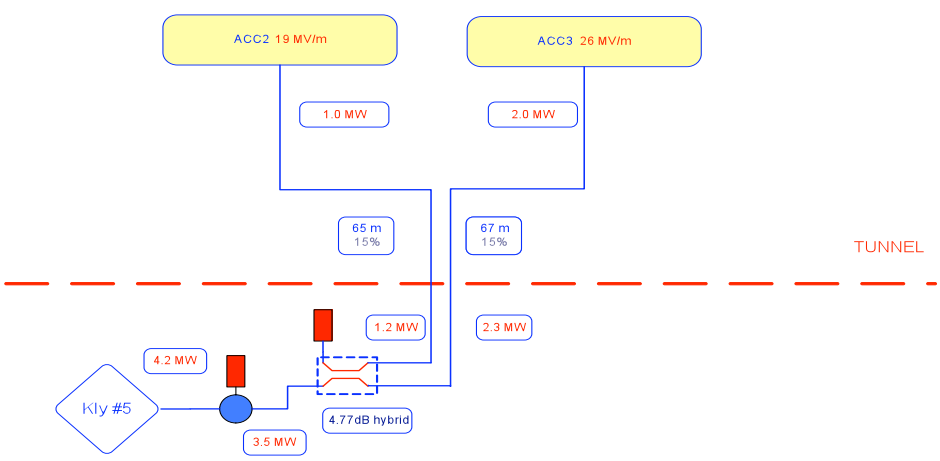
there are the editing data in green cells

Hybrid

S41, dB	S31, dB	S41*S41	S31*S31
4.77	1.76	0.333	0.667

Pcirc_max 390 Lcav = 1,038 m

ACC2	15.9 MV/m			132 MeV			Max	192	Mev	Δ	60
Pin, MW	0.93	RF power	OK								
Qext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
A, dB	10.5	12.5	9.5	9.5	9.5	11.5	9.5	9.5	not measured		
Pcav, kW	83.2	52.5	104.8	104.8	104.8	66.1	104.8	104.8		725.6	208
Ecav, MV/m	15.30	12.15	17.16	17.16	17.16	13.63	17.16	17.16		15.9 MV/m	
Ecav, max	22	18	25	27	25	19	25	24		23.1	
	Cav 1	Cav 2	Cav 3	Cav 4	Cav 5	Cav 6	Cav 7	Cav 8			
Δφ	not measured									beam - forward RF	

ACC3	24.4 MV/m			203 MeV			Max	234	Mev	Δ	31
Pin, MW	1.87	RF power	OK								
Qext	2.85	3.08	2.91	3.04	2.85	2.92	2.97	2.93	8/18/07		
A, dB	9.33	9.32	9.37	9.36	9.5	9.7	9.6	9.63	measured		
Pcav, kW	217.8	218.3	215.8	216.3	209.4	200.0	204.6	203.2		1685.4	181
Ecav, MV/m	24.99	24.65	24.78	24.60	24.51	23.84	24.04	24.02		24.4 MV/m	
Ecav, max	28	30	29	30	30	25	25	28		28.1	
	Cav 1	Cav 2	Cav 3	Cav 4	Cav 5	Cav 6	Cav 7	Cav 8			
Δφ	0	-5	-4	-3	-4	0	-6	-11		beam - forward RF	

Waveguide distribution for klystron #5 *(status 06.08.07)*