

# Waveguide Distribution for ACC1

ACTUAL SETUP PER KATALEV AND AYVAZYAN (24 AUG 2009)

Eacc, MeV **126**

Pkly\_2 **0.98** MW

without beam

# Klystron 2

4/2/08 V.Katalev

Elinac **1030** Mev

15% waveguide losses + 15% circulator

tinj, mks  
**500**

P\_ACC11, MW  
**0.21**

P\_ACC12, MW  
**0.54**

Power divider  
P2/P1  
**2.60**

Pcirc\_max **390**

Lcav = 1,038 m

there are the editing data in green cells

<b>ACC1</b>	<b>15.1 MV/m</b>								<b>126 MeV</b>	Max	176	Mev	Δ	51
Pin_1, MW	<b>0.21</b>	<b>RF power OK</b>												
Pin_2, MW	<b>0.54</b>													
Qext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0						
Hybrid, dB	0.0	3.0	4.8	6.0	6.0	4.8	3.0	0.0	not measured	Old				
Pcav, kW	52.1	52.4	52.3	52.6	136.8	135.0	68.3	136.0			685.5		68	
Ecav, MV/m	12.11	12.14	12.13	12.16	19.61	19.49	13.86	19.56			15.1		68	
*Ecav, max	16	15	19	22	34	22	17	25			21.25			
	Cav 1	Cav 2	Cav 3	Cav 4	Cav 5	Cav 6	Cav 7	Cav 8						
Δφ	not measured										beam - forward RF			

<b>New distribution</b>	<b>500</b>	Pkly_2	<b>1.30</b> MW	Power divider	<b>2.80</b>									
			<b>0.26</b>		<b>0.74</b>									
<b>ACC1</b>	<b>17.6 MV/m</b>								<b>146 MeV</b>	Max	176	Mev	Δ	30
Pin_1, MW	<b>0.26</b>	<b>RF power OK</b>												
Pin_2, MW	<b>0.74</b>													
Qext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0						
Hybrid, dB	0.0	3.0	4.8	4.8	3.0	4.8	6.0	0.0	not measured	New				
Pcav, kW	58.3	58.6	58.5	87.7	369.3	121.7	61.8	184.1			1000.0		0	
Ecav, MV/m	12.81	12.84	12.83	15.71	32.23	18.50	13.18	22.75			17.6		0	
*Ecav, max	16	15	19	22	34	22	17	25			21.25			
	Cav 1	Cav 2	Cav 3	Cav 4	Cav 5	Cav 6	Cav 7	Cav 8						

## Waveguide distribution for klystron #2 (status 03.04.08)

