



C-band accelerating module

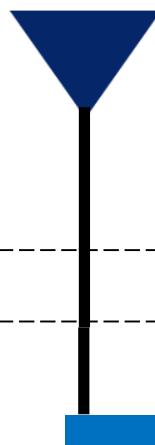
XLS WP4 progress meeting, 27/08/2020

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FORMER C-BAND MODULE

Canon E37212	
Operating frequency [GHz]	5.712
Klystron pulse length [us]	3
Klystron peak power [MW]	50
Pulse rate [pps]	100

7 MW, 0.5 μ s,
1 kHz

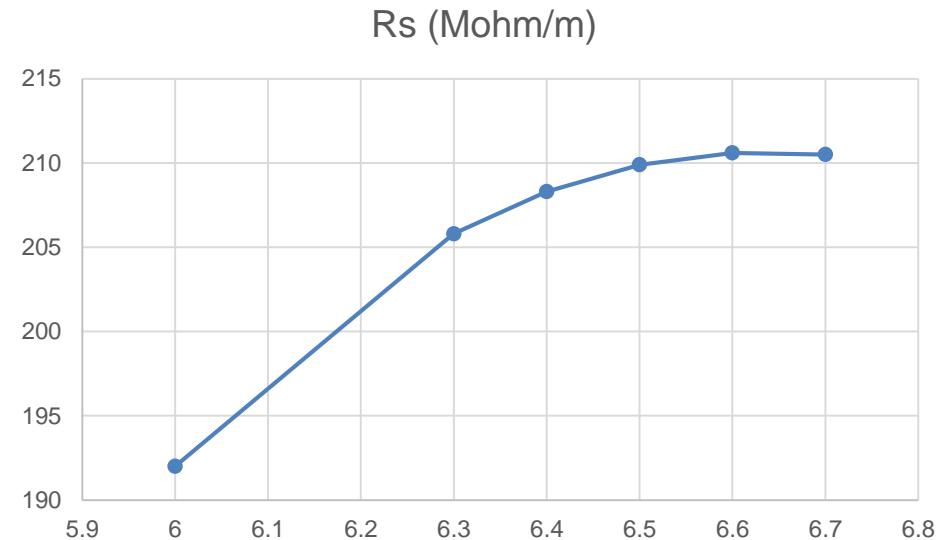
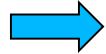


50 MW, 3 μ s,
100 Hz
Canon E37212

Acc. Structure		
Phase advance	2pi/3	
Cell length [mm]	17.495	
Number of cells	115	
Total length [m]	2	
Average iris radius [mm]	6.6	
Tapering angle [deg]	0.08	
Iris radius (first - last) [mm]	7.980 - 5.220	
Shunt imp. [MOhm/m]	70 - 96	
Q	10280 - 10123	
Group velocity/c [%]	3.2 -0.7	
Filling time [ns]	464	
Repetition rate [Hz]	100	1000
Avg. acc. gradient [MV/m]	40	15

NEW C-BAND MODULE WITH BOC

a (mm)	Rs (Mohm/m)
6	192
6.3	205.8
6.4	208.3
6.5	209.9
6.6	210.6
6.7	210.5



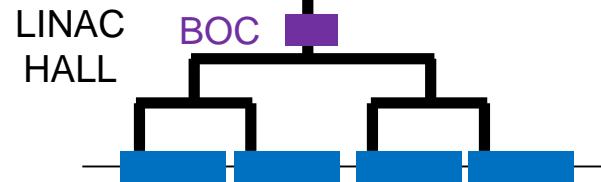
NEW C-BAND MODULE WITH BOC

NEW CPI Klystron	
Operating frequency [GHz]	5.996
Klystron pulse length [us]	2
Klystron peak power [MW]	15
Pulse rate [pps]	1000

Acc. Structure		
Phase advance	2pi/3	
Cell length [mm]	16.667	
Number of cells	120	
Total length [m]	2	
Average iris radius [mm]	6.6	
Tapering angle [deg]	0.02	
Iris radius (first - last) [mm]	6.943 – 6.257	
Shunt imp. [MOhm/m]	77 - 84	
Q	9986 - 9943	
Group velocity/c [%]	2.4 – 1.6	
Filling time [ns]	336	
Repetition rate [Hz]	1000	
Avg. acc. gradient [MV/m]	15	17.75
Pk per struct. w loss [MW]	2.65	3

15 MW, 2 μ s,
1 kHz CPI

MODULATOR HALL



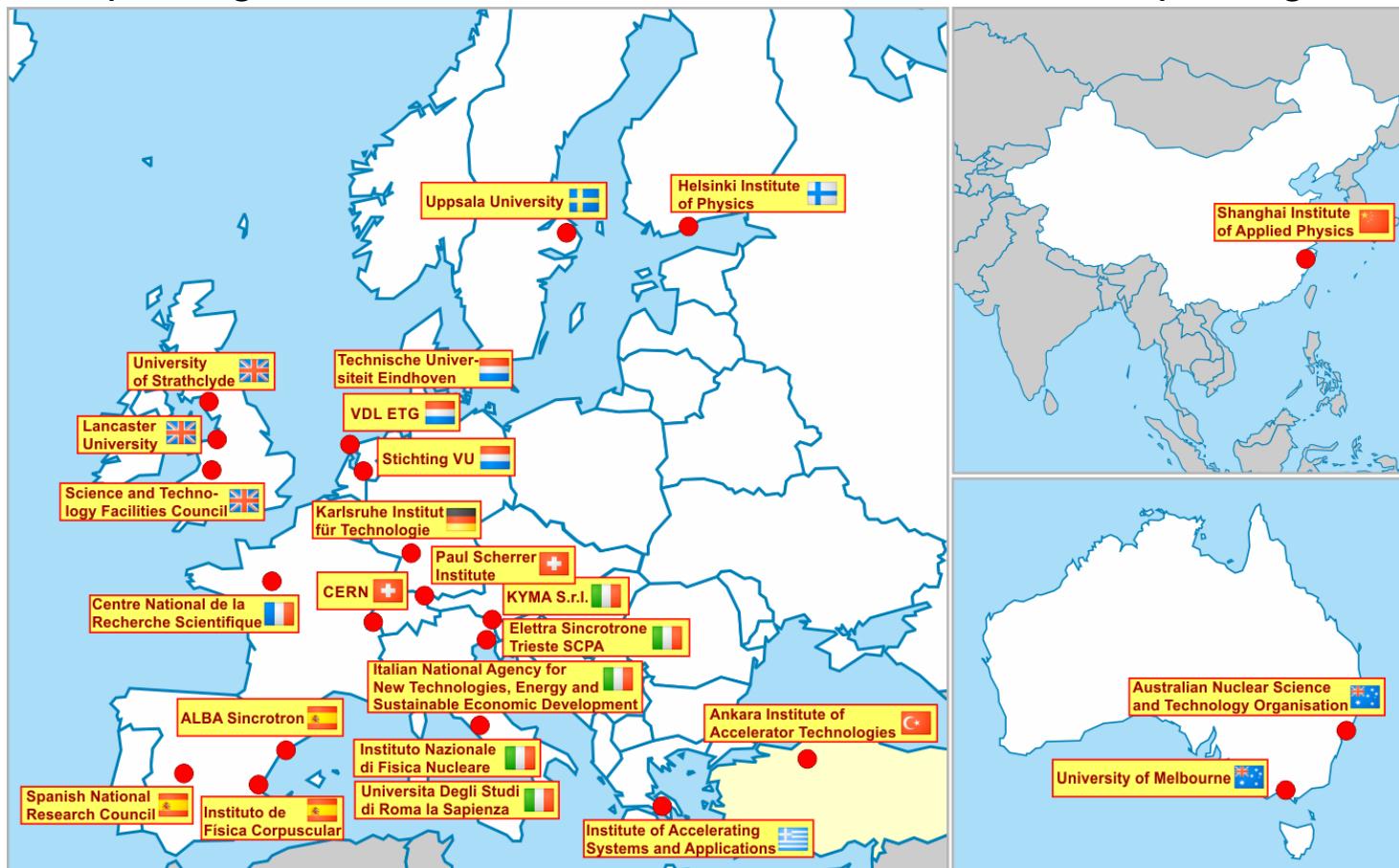


Funded by the
European Union

Thank you!

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CompactLight is funded by the European Union's Horizon2020 research and innovation programme under Grant Agreement No. 777431.