

Intensity of Early and Late CBM vs. Multi-turn Intensity

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Summary of Study (Intensity)

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| | MULTITURN | EARLY MONITOR 4 ms | LATE MONITOR | COMMENT |
|---------------|------------------------------------|--------------------------------|---|---|
| BEFORE STUDY | $1-1.2 \times 10^{12}$ P/P | 7×10^{12} P/P | 5×10^{12} P/P | checked present without danger |
| TUES. 5/22 | 1.4×10^{12} (5), (6) | $8-8.5 \times 10^{12}$ | $\leq 6.3 \times 10^{12}$ P/P | LATE MONITOR SATURATING (1), (2), (3), (4) (1.25) |
| WED. 5/23 | 1.4×10^{12} (5), (6) | 8.5×10^{12} | $\leq 8.27 \times 10^{12}$ P/P | LATE MONITOR SATURATING (7), (8) |
| THURS 5/24 | $1.8-2 \times 10^{12}$ (5), (6) | $8.5-9 \times 10^{12}$ (11) | $\leq 9.78 \times 10^{12}$ (10) (12) | LATE MONITOR (1.7) (7), (8), (9) |

Just
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Code for page ①

②

- ① clamp raised - 1×10^{12}
- ② off frequency on flat top eliminated
- ③ dwell time lengthened
- ④ all magnets retracted - E10
- ⑤ Linac improvement
- ⑥ Injection improvement -
- ⑦ No loss of initial bunching
- ⑧ Early bunching - on frequency
- ⑨ Vertical orbit harmonic correction (9th)
- ⑩ Rates of low level run signal, $\frac{\text{THUR}}{\text{WED}} = \frac{6.2}{4.8} = 1.3$
- ⑪ Early monitor did not increase.
- ⑫ B15 transformer check - (2:1) and 1.22 turns ratio