

UNIVERSITY OF ILLINOIS
DIGITAL COMPUTER LABORATORY

ILLINOIS CODE R 5 - 149

TITLE: Reciprocal (DOI or SADOI)
TYPE: Closed
NUMBER OF WORDS: 17
TEMPORARY STORAGE: Locations 0, 1, 4
DURATION: $3 + n/2$ milliseconds for $2^{-(n+1)} \leq x < 2^{-n}$ with
 $0 \leq n < 39$
DESCRIPTION: When entered this routine finds the reciprocal of A,
putting the integer part in A and location 0 and the
decimal part in Q and location 4.
ENTRY:

p	any
	50 p
p + 1	26 (R5)

DATE	<u>9/28/54</u>	RT:	<u>9/25/59</u>
CODED BY	<u>B.E. Swire</u>		
APPROVED BY	<u>J.P. Nash</u>		

lgr

LOCATION	ORDER		NOTES	PAGE 1
0	00 K (R5) 40 F			
	K5 F			
1	42 16L 43 13L			
2	41 1F 50 1F			
3	26 5L LJ 1F			
4	00 1F 40 F			
5	F5 13L 42 13L			
6	LJ F 40 1F			
7	32 3L LJ 1F			
8	40 1F 66 F			
9	11 1F L5 1F			
10	36 12L K1 F			
11	50 L 26 13L			
12	S5 F 50 L			
13	10 38F 00 F			
14	10 1F 40 F			
15	S5 F 40 4F			
16	L5 F 22 F			