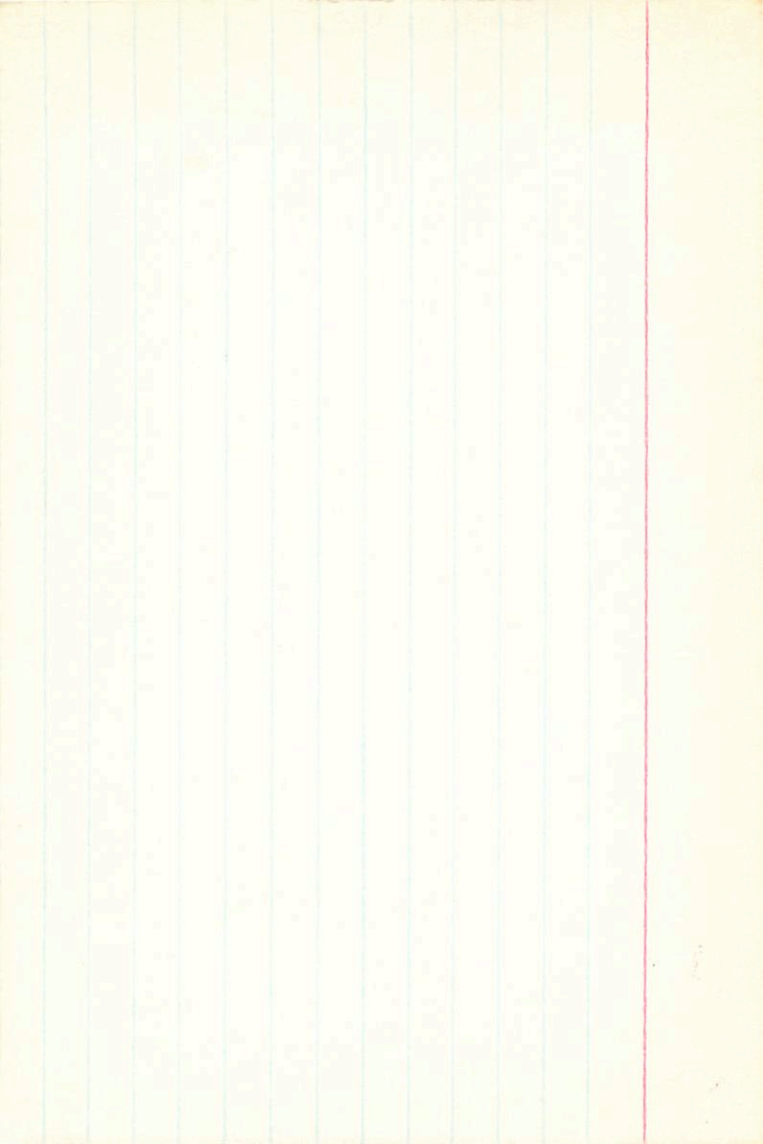


85512 9 49.1 -43 15 N5 V

42340 7.62 +1.14 +1.05 (3)
 876(u) 6.80 +0.53 (3)
 150 Y (w) $\Delta(16-u) + 0.10$
94 $\delta(2u-3) + 0.20$

41(A) 7 (pt)
 +6.58 +23
6.15
 +45 674 85
 (24) 48

" " n v w
 -9.6 +0.447 -0.432 -241 +9.9 -3.5
 " " " " " -29 0 -2



86244

9 54.2 -40 33

104 2

del

72356

9.01 + 0.905 + 0.725 ②

8.24 + 0.34 ③

636(14)

$\mu(I)$

+6.76

$\frac{29}{294}$

$\pi(104)$

.0435

0375

$\Delta(B-v) + 0.08$

$\Delta(N-v) + 0.79$

7.91

7.99

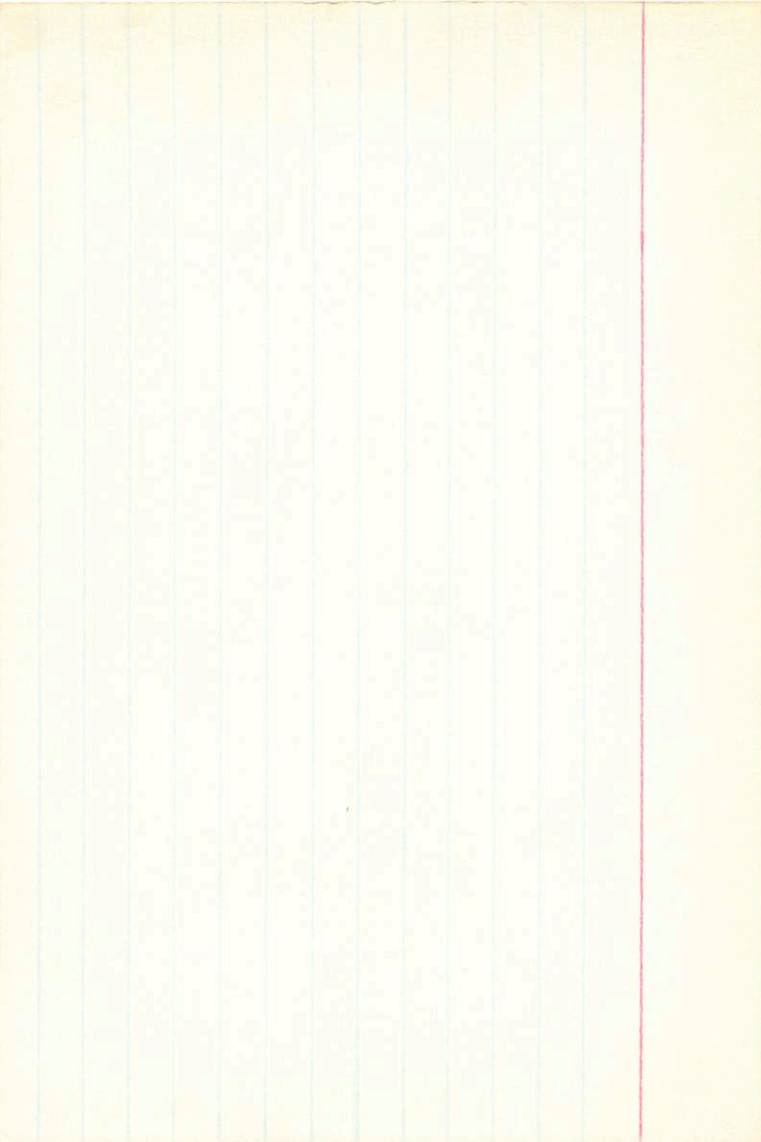
7.3

μ v w

+7.3 +9.3 -17.0

+3 -1 -6

9.01 + 0.905 + 0.725
8.24 + 0.34
7.91
7.99
7.3



+10° 2122

72348

10

10.5

+9

51

dk5

Def

-13M(6)

-7V(12)

9.99 + 0.88 + 0.555 (2)

9.44 + 0.325 (2)

S(13-1) + 04

S(13-3) + 085

m(I)

5.20

912

352

π (m)

.0165

✓

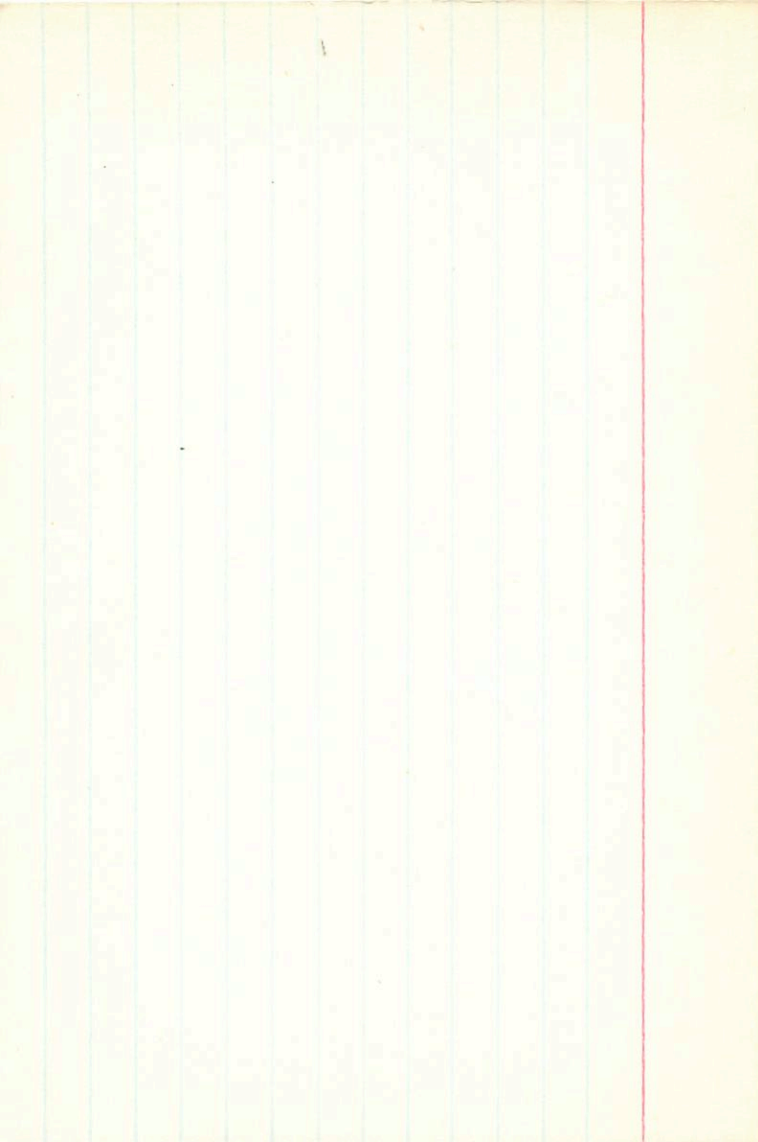
~~82.9~~ -143.4 -72.6

-13 -25 -10

-16.6

000 -0.630

-16.6



cd4

89777 10 18.9 -16 48 G8 V

42431

8 C(6)
-12 Y(17)

-3

9.33 + 0.785 + 0.325 (2)
9.10 + 0.28 (3)

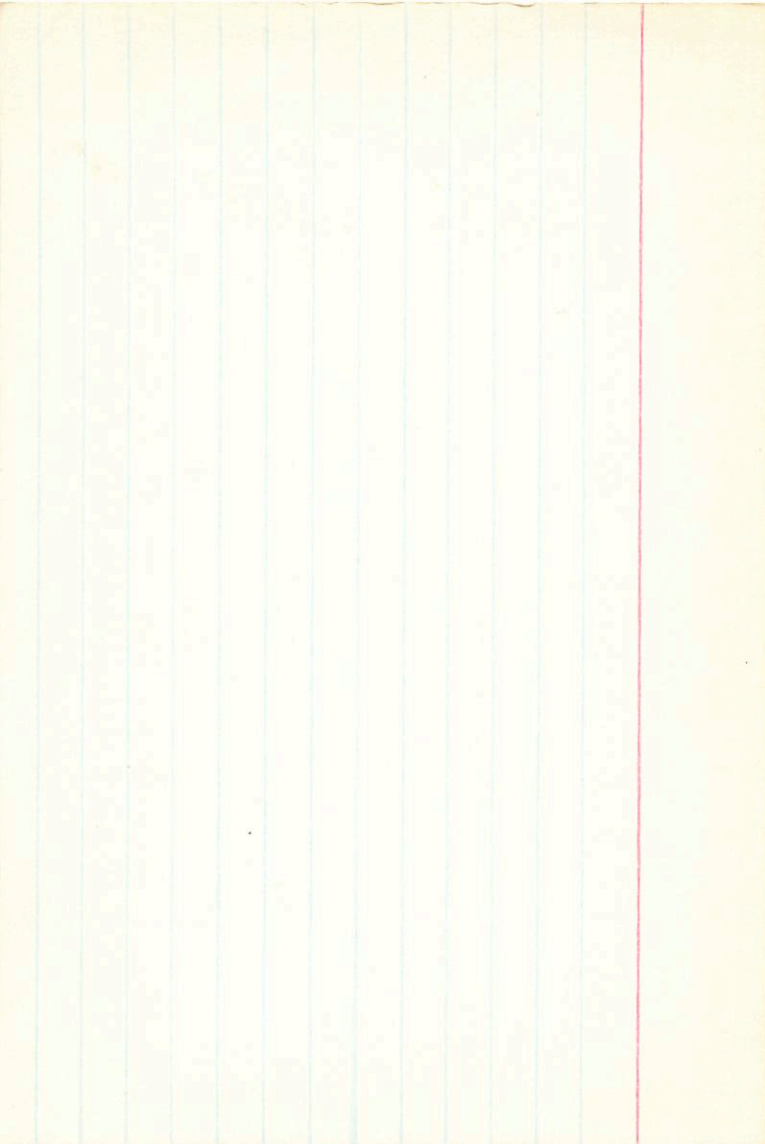
M(I)	π(wt)
+4.70	0.20
8.02	0.21
<u>2.9</u>	
3.12	

B(B-v) + 0.25

U(u-B) + 1.7

+45.0 -0.468 +0.117

u	v	w
+92.4	-430	-9.6
+21	-1	-8



044

90711 10 25.7 -6 20 100E

Y 2453

21Y(7)

446(7)

33

7.98 + 0.81 + 0.445 (1)

7.54 + 0.26 (4)

 $\Delta(B-v) - 0.65$ $\Delta(n-0) - 1.45$ M(I) π (M)

+440 .030

7.25 0.27

2.85

M V W

+18.9 -42.0 -5.0

+7 -13 -16

+28.2 -0.364 -0.240

91816 10 33.6 -11 39 DR3

Y2422
29C(7)

	$m(\pm)$	$\pi(\text{pt})$
8.04 +0.816	+5.05	.0355
7.75 +0.31	7.44	
	2.25	.0335

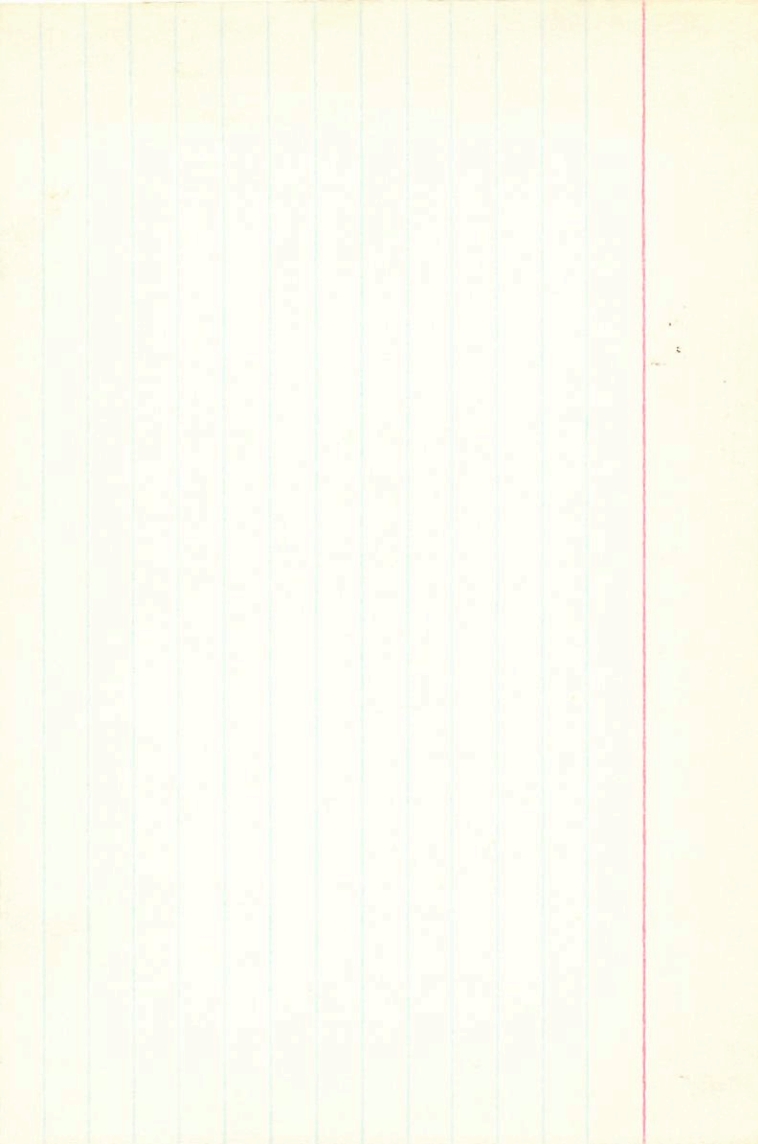
$$\Delta(B-V) +0.45$$

$$\Delta(U-B) +.135$$

u	v	w
-33.9	-19.6	-9.1
-12	-6	-4

+3.5 " +0.141 -0.263

705
1410



old

93083

10 42.0 -33 19 122

$\eta(I)$	$\pi(\mu)$
+158	10325
725	
2.87	029

8.30 +0.94 +0.715 (2)

7.64 +0.37 (3)

$\Delta(B-v) +07$

$\Delta(n-B) +135$

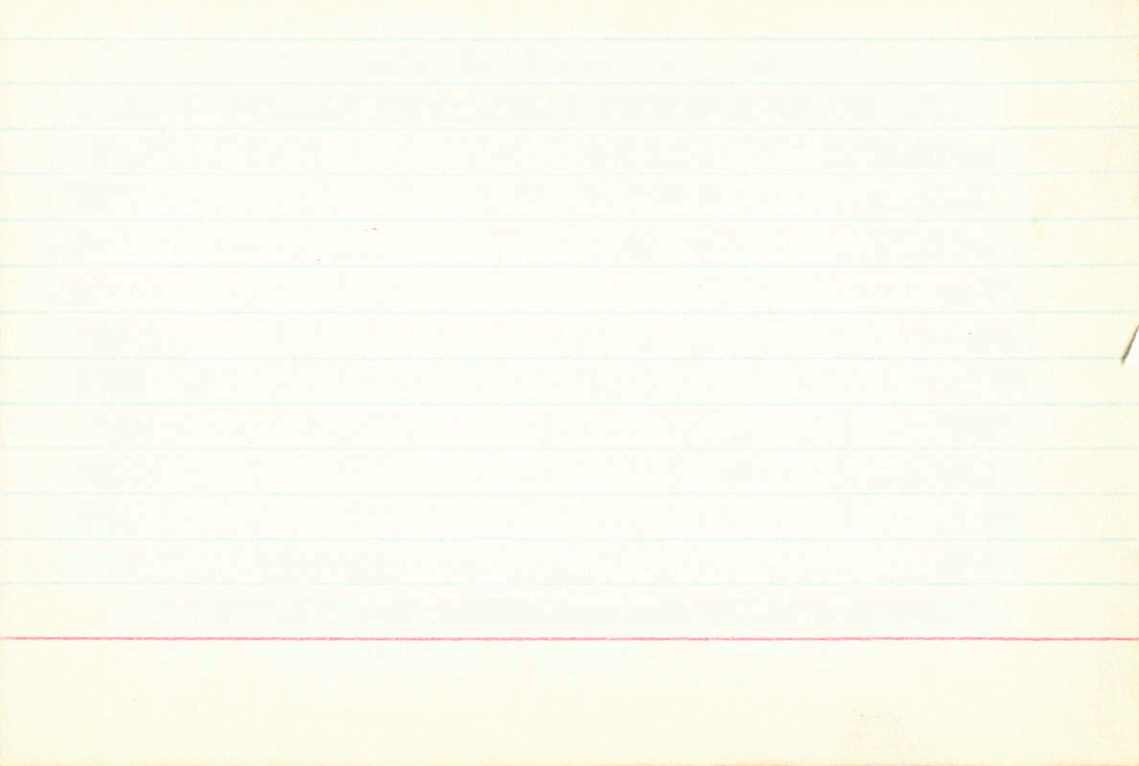
n	v	w
-----	-----	-----

-0.9 -48.1 -7.2

+1 -3 -8

+41.7 -0.104 -0.138

344
-0.7



old

93434 10 44.5 -49 07 10.5

425.8

921 +0.50 +0.675 (2)

-3665 860 +0.335 (3)

M(I)	#(N)
15.15	0.023
<u>1.2</u>	
3 10	0.24

$\Delta(B-y) + 0.07$

$\Delta(n-y) + 0.085$
~~+0.075~~

n v w

+66.5 -43.6 +0.7

+17 -4 -1

" " "
+27.2 -0.331 +0.155

112

-170.3336/7 11 12.8 -17 51 dmo

42618

49M(17)

644(12)

555(14)

57

A 9.96 + 1.31 + 1.21 (2)

9.08 - 0.58 (3)

B 10.05 + 1.32 + 1.21 (2)

9.16 + 0.60 (3)

C 13.70 + 1.55 + 1.05 (2)

12.30 + 1.14 (3)

+12.5

+11.5

+10.5

dmo

- M(I)

+ 6.55

849

1.54

7/1A

+7.04 } 10.50

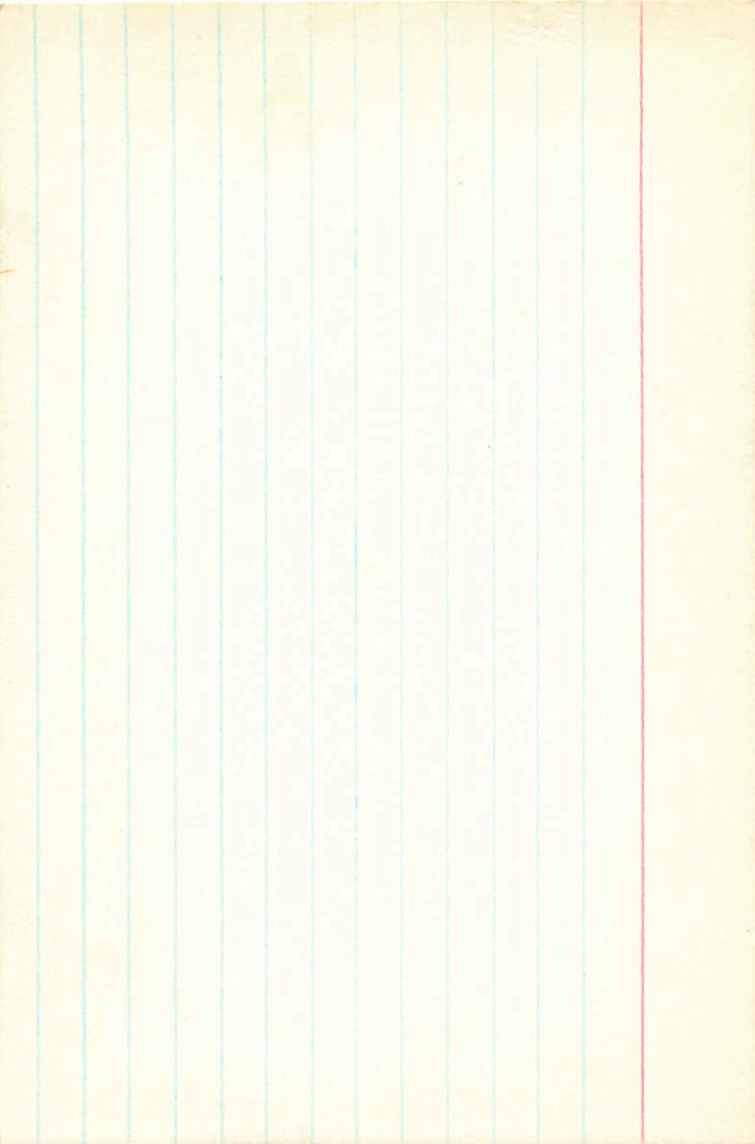
454

1.50

M(I) 21 ✓ W

-49.4 -38.1 -36.4

-24 -14 -21



18281 11 15.8 - 4 47 08 π

col

42627

7.29 +0.74 +0.245 (2)

6.94 +0.27 (4)

n(I)

+4.85

6.65

2.10

π (pt)

~~0.0425~~

0.38

$\Delta(B-v) + 0.35$

$\Delta(u-B) + 14$

44m(6)

62i(7)

38c(12)

u

v

w

-85.8

+13.5

+30.8

-36

+8

+10.0

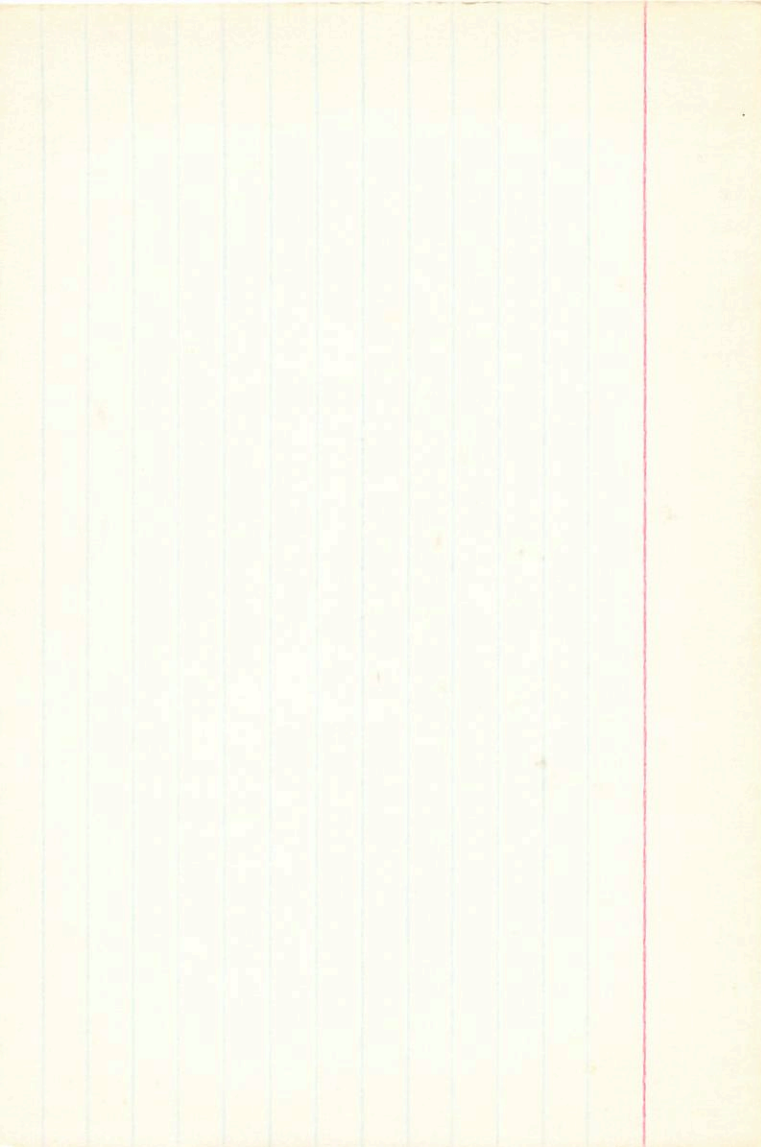
49 +10.1 +0.790 -0.145

236

264

8

2



your

101349 11 37.0 -48 12 120E

Netzd

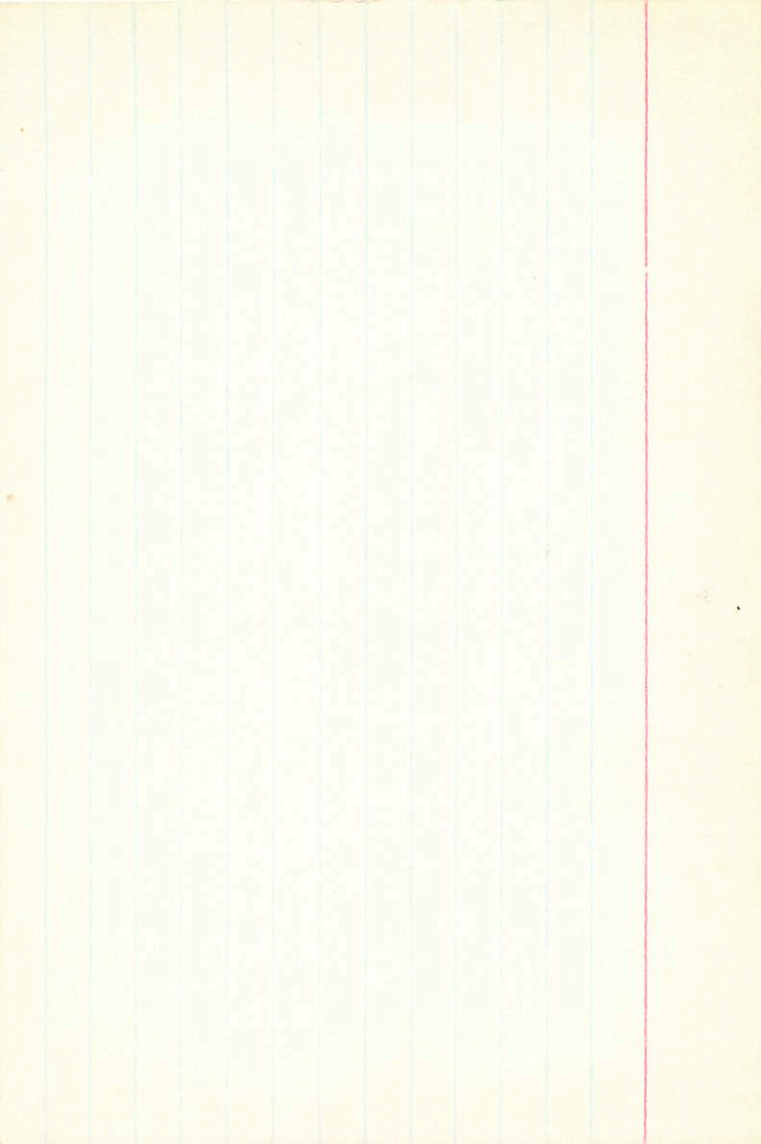
8.96 + 0.87 + 0.305 (2)
8.60 + 0.30 (4)

$\pi(n)$ 5.58
 $\pi(n)$ 7.96
0.035
2.38

$\Delta(B-n) = 0.0$
 $\Delta(n-B) = 1.5$

5.20
 $\frac{18.30}{2.60} \pi = 0.30$

+ 2.2 - 7.2 - 9.3
+ 7 - 3 - 3



add

103932 11 55.5 -27 25 9552

72762

987(10)
936(6)

96

6.98 + 1.14 + 1.06 (2)

6.42 + 0.42 (8)

$n(I)$ $\pi(10)$
+6.03 .106

6.03 1015

$\Delta(B-U) - 0.45$

$\Delta(U-A) - 0.07$

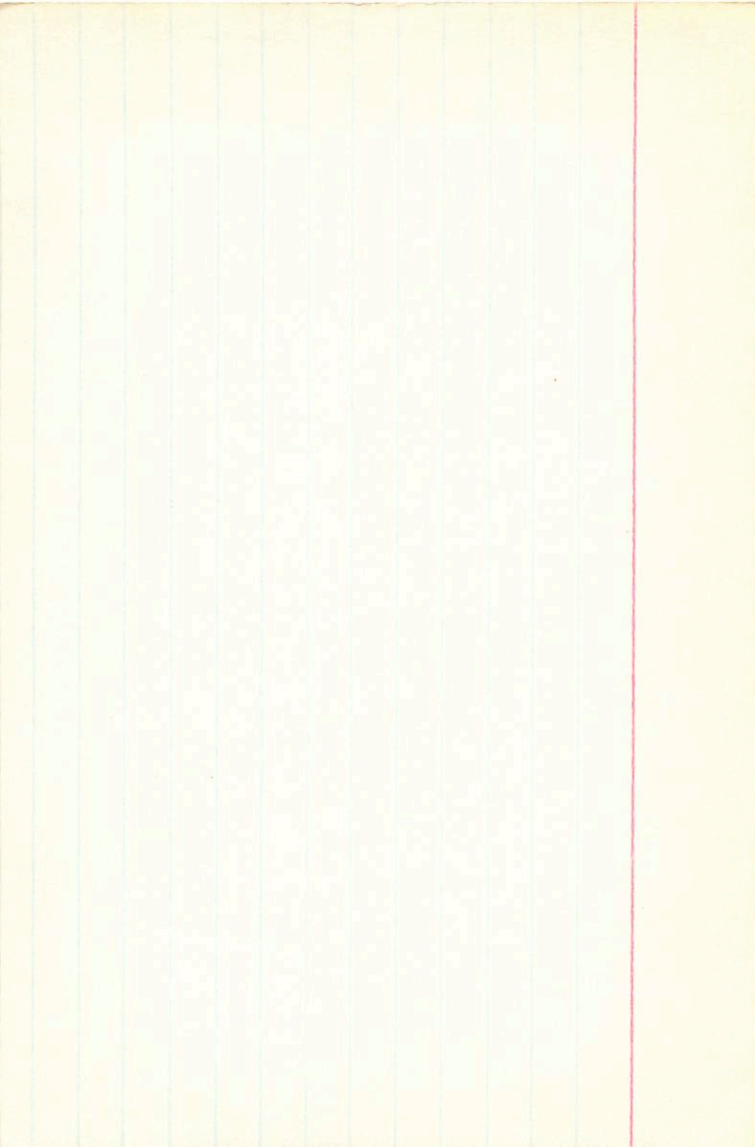
-1.084 - 0.623

u v w

+18.1 - 72.0 - 5.3

+33 - 35 - 37

4410



cell phone old

104304 11 58.2 -10 10 d67

42767

88M (6)
857 (10)
566 (7)
77A (20)
58

5.54 40.77 +0.39 (2)
5.16 40.27 (4)

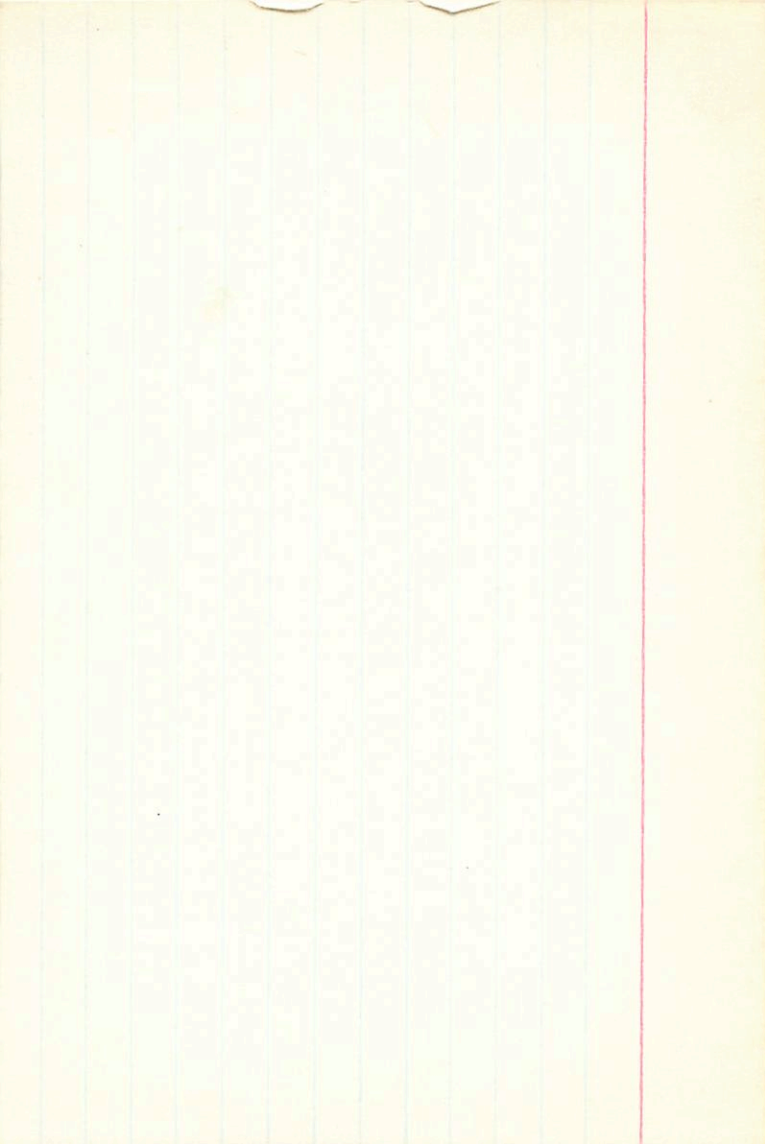
M(I) π (M)
+ 4.25
4.10
6.5
4.55
1.89 IT 885
+3

$U(B-V) - 0.4 + 0.5$
 $S(M-B) - 1.5$

M V W
-22.3 -17.6 -17.7
-16 -12 -13

Revised

10.4 +0.118 -0.495



Young

104724

12 00.9

-71 55

654

New York

8.04 + 0.78 + 0.33 (2)

9.77 + 0.26 (4)

M(I)

A (uA)

0.35

5.22
751
2.29

$\Delta(10-u) = 0.35$

$\Delta(11-u) = 0.00$

0.033 - 0.022

12.14

-873 +084 -481
+450 -238 -860
+178 967 -100

+1366 -8040
-0704 +0248
-0294 -1005

+1276 -8.1 -11.7
-0456 -22.3 -21.0
-1302 -7.7 -4.1

old

104988 12 02.7 -1 14 688
 42790
 -10M(7)
 14C(6)
 3

8.16 + 0.76 + 0.255 (2)
 7.83 + 0.28 (2)

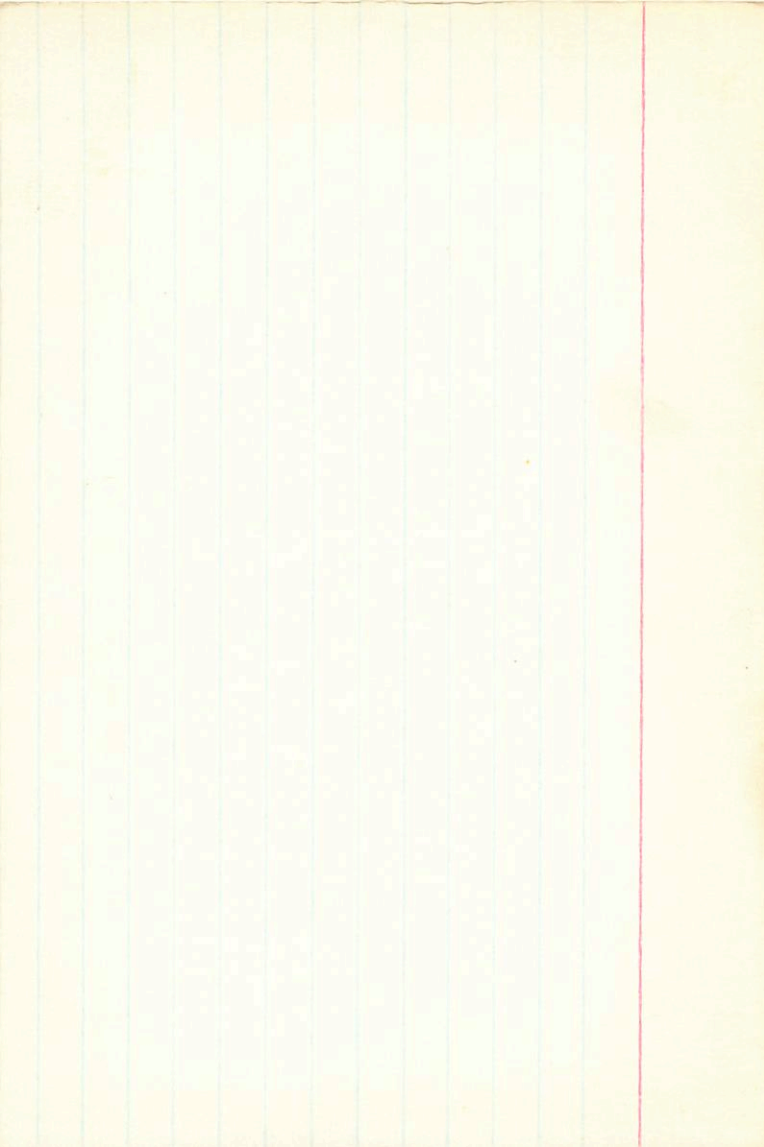
$\mu(F)$ $\mu(P)$
~~4.70~~ 0.030
~~2.85~~ 0.27

$\Delta(B-v) + 0.5$
 $\Delta(n-0) + 1.8$

μ v w

" -0.512 + 0.053

+72.9 -37.2 +2.0
 +22 -9 -3



108682 12 26.7 -30 34 100 \bar{V}

42878

380(7)

9.06 + 0.79 + 0.245 (2)

8.72 + 0.265 (6)

4.47 π
4.46 0.19
4.00
4.00 0.16

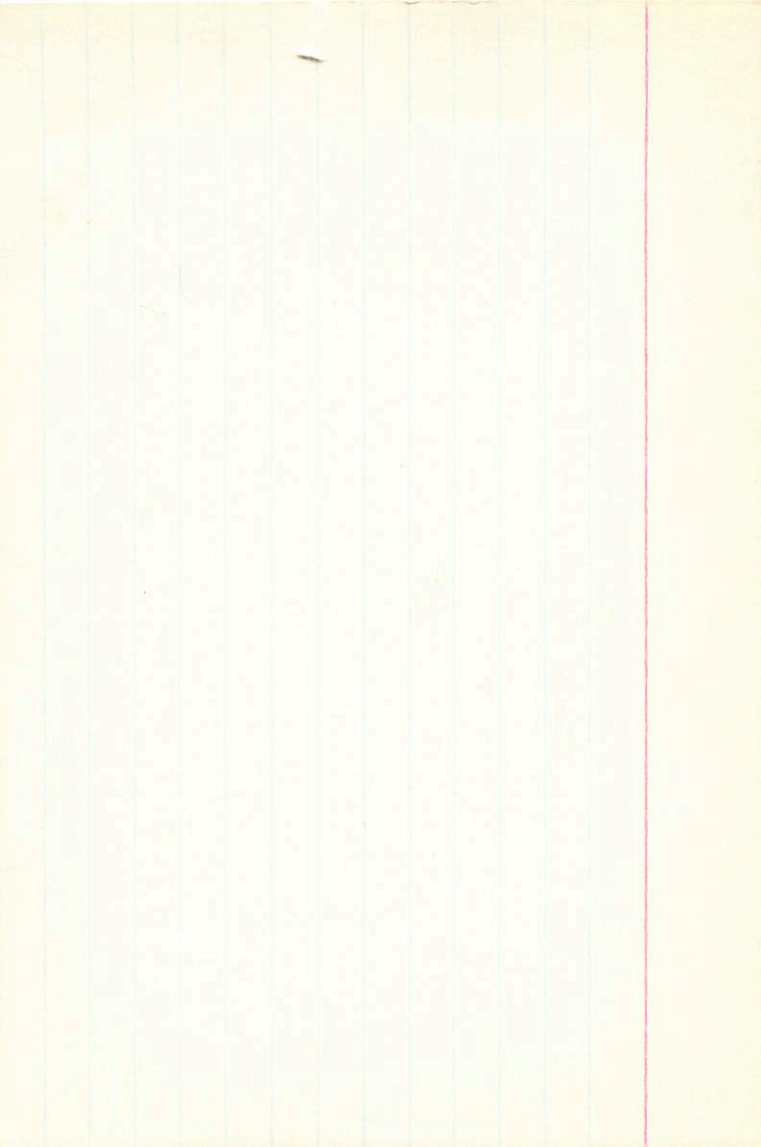
$\Delta(B-D)$ - 1.4
 $\Delta(N-B)$ + 1.05

aka
Do Redapin

+257 - 322

416.2

-104.0 -13.6 -65.5
-16 0 -12



clw

108784 12 27.2 -3 03 GFD

M(I)	$\pi(M)$
1485	0.019
<u>543</u>	0.165
3.90	

Y 2879 9.04 +0.70 +0.14 ①

4607 8.72 +0.27 ②

834 $\Delta(B-V)$ +075

39 $\Delta(M-B)$ +245

775

769

624

r v w

+6.6 -143.2 -82.5

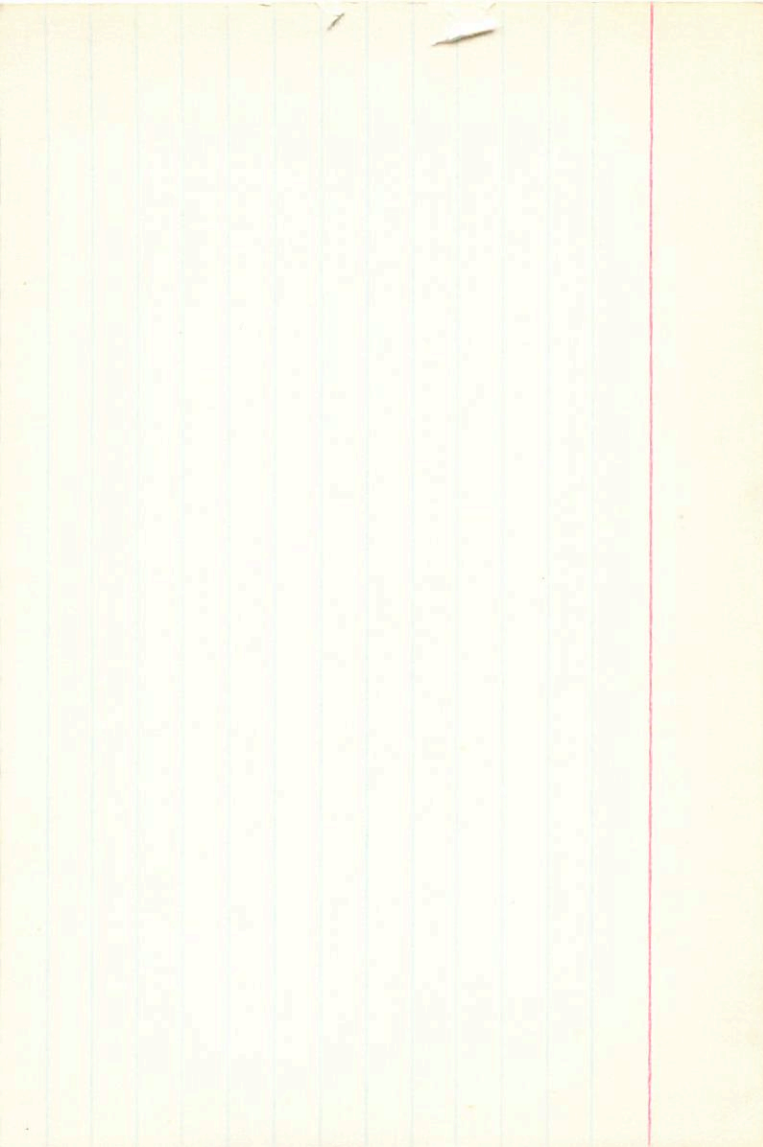
+1 -27 -15

"

-4.1 -0.336 -0.560

9.04 +0.70 +0.14 0.046 1.69

8.72 +0.27 1.2



Yearly

109017 12 29.2 31 38 100 2

Not job

10^m
10^{''}
0.6

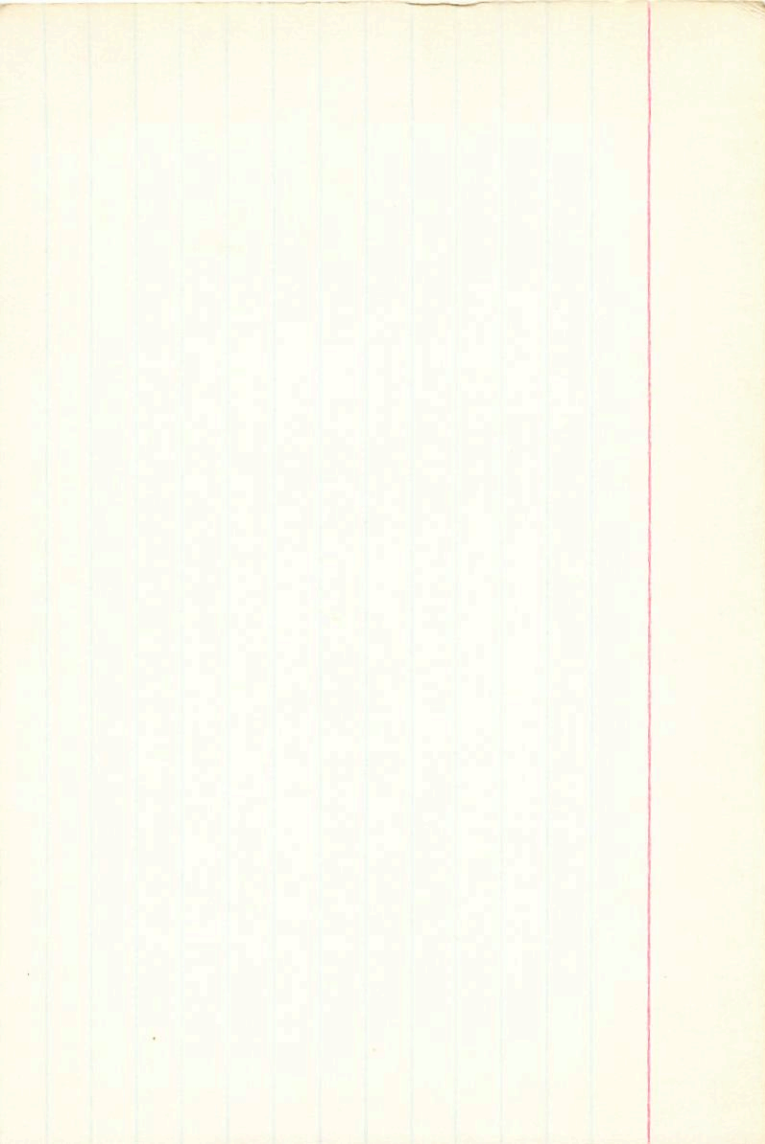
M(D) π(MT)
+5.80 0.029
7.59
7.89 0.12

8.26 + 0.97 + 0.46 (2)
7.99 + 0.30 (4)

$\delta(B-v) = 0.00$
 $\delta(n-B) = 0.08$

n v w
+8.0 +7.9 -3.4
+1 0 +1

-110 - 0.026 + 0.023



109333

12 31.4

-14

22

114

old

Y2893

9.14

+1.11

+1.01

(3)

277(6)

8.40

+0.42

(6)

23(7)

$A(B-V) - 0.015$

26

$A(U-B) = 0.07$

m(I) 17 (1st)

+6.02

0.0415

$\frac{8.04}{2.04}$

.0395

" 480
- 2.124

+10.4

" -0.033

η v w

+422 - 363 + 17

+19 - 13 - 2

old

113538

13 02.1

-52 09

129 V

Y 2941

9.11 +1.34 +1.255 (2)

1.255

M(I) 7/100

8.30 +0.58 (3)

+6.92

7.67

8.75

071

46 7/16)

532 (16)

350 (17)

47

38
7.92
7.98
14
7.14
1904
5.

$\Delta(B-r) = +0.25$

$\Delta(r-B) = +0.035$

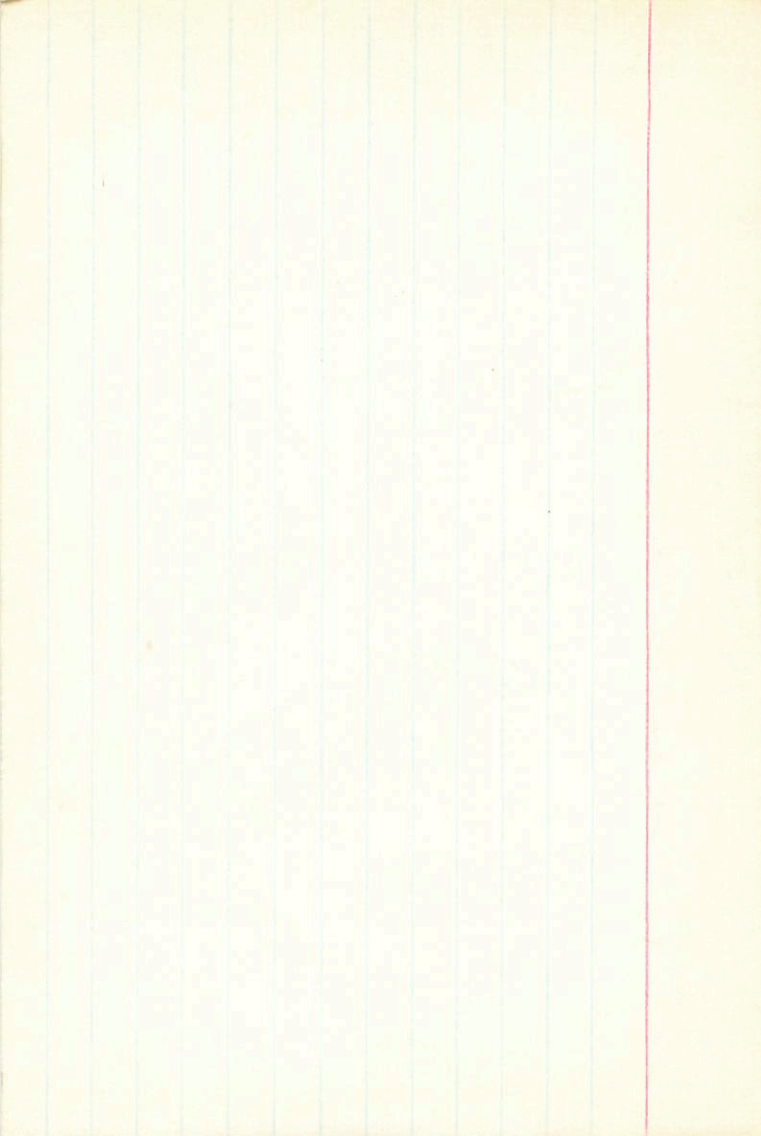
~~ok~~

+37.8 -0.742 -0.812

+20.6 -72.0 -47.6

+28 -28 -36

+46
-57
150 } 1.90



113767 13 03.7 -49 25 100 \bar{E}

72952 $\mu(I)$ π (pt)

8.44 +0.84 +0.38 (1) +5.326
7.56

326(8) 7.90 +0.34 (2) ~~2.44~~
355

$\Delta(B-V) +12$ 2.4

$\Delta(M-B) +375$

M V W

+43.1 -5.3 -12.8

+11 -10 -5

-24.2 -0.315 -0.125

old

~~70~~ old

114260 13 07.0 -21 55 d 07

43003

m(I) π (nt)

7.36 + 0.73 0.24 (2)

~~455~~

~~0.0115~~

716(7)

7.09 + 0.25 (3)

674

0.036

~~229~~

$\Delta(B-v) - 0.15$

4.20

0.30

$\Delta(v-B) + 0.4$

~~684~~
264

n

v

w

-28.9

-9.5

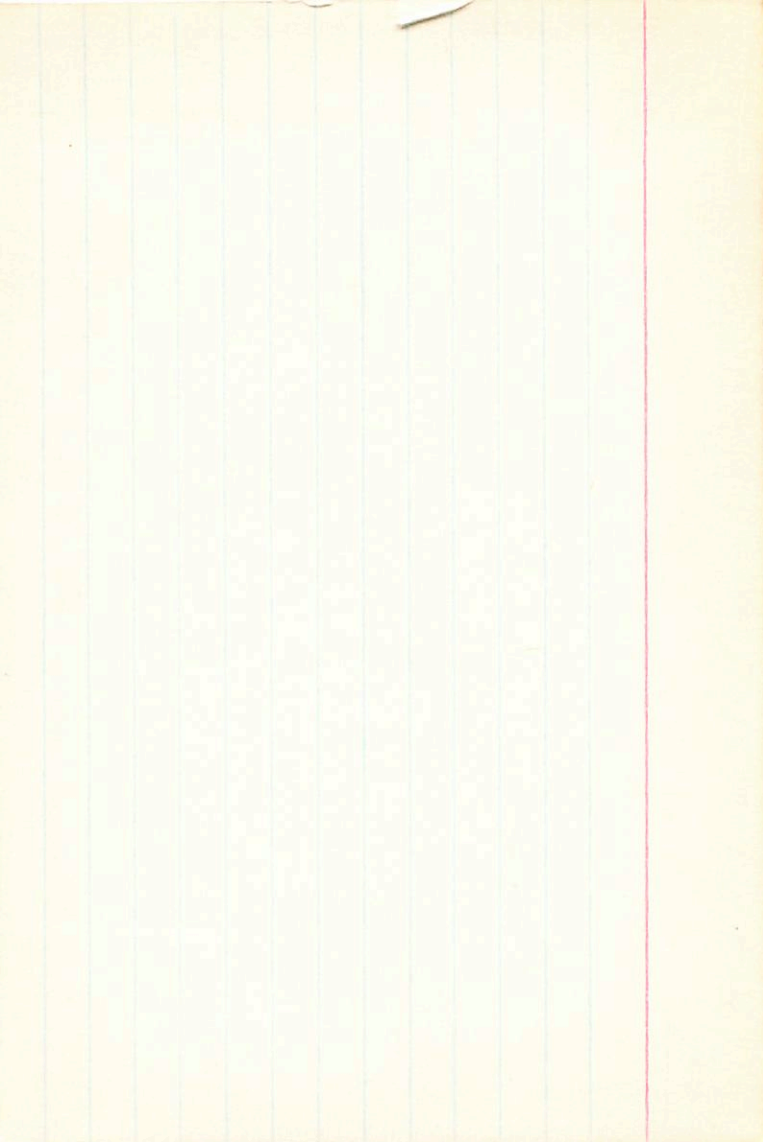
-40.3

-12

-5

-13

-6.8 + 0.155 - 0.347



114606

13 089 +09 53 G-3D

084

Y' 3010

44 A(20)

54 M(8)

37(10)

M0

$$8.74 + 0.62 + 0.05 \text{ (4)}$$

$$8.42 + 0.24 \text{ (2)}$$

$$12.33 + 1.28 + 1.05 \text{ (1)}$$

$$11.42 + 0.61 \text{ (2)}$$

4410

818

408

$$\Delta(10-4) + 07$$

$$\Delta(10-8) + 20$$

2.03

1081

3.78

+10

+21

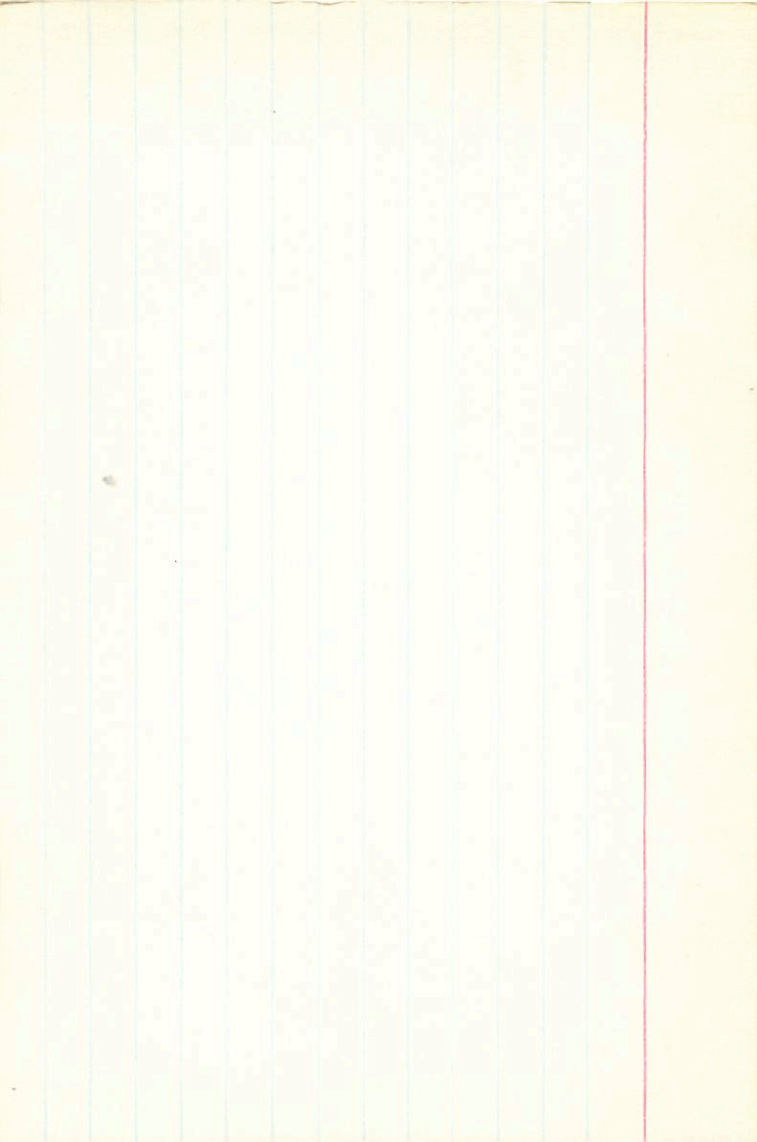
$\pi(10^4) 0165$

$$-0.526 + 10.253$$

+03.0

$$\downarrow 160.7 = 290 + 57.7$$

$$+27 - 4 + 6$$



115617 13 15.8 -18 02 RGT

43034

4.74 +0.71 +0.26 STD

4.44 +0.235 STD

M(I)

131 M(7)

125 71 (10)

846 (15)

D(B-V) -03

D(U-R) -025

+4.85

4.20

-15

7(M)

.1075

M V W

+25.5 -52.1 -346

+23 -61 -31

9.5

-22° 3557 13 16.5 -22 46 d100

Y 3043

10.26 + 0.83 + 0.345 (4)
9.86 + 0.33 (2)

30M(5)

36(6)

14

$$\Delta(B-v) = +10$$

$$\Delta(M-B) = +34$$

34

old

$\alpha(I)$ $\pi(\mu)$

75.5 .0155

9.73
4.63

5.24
9.53
4.3

014

u

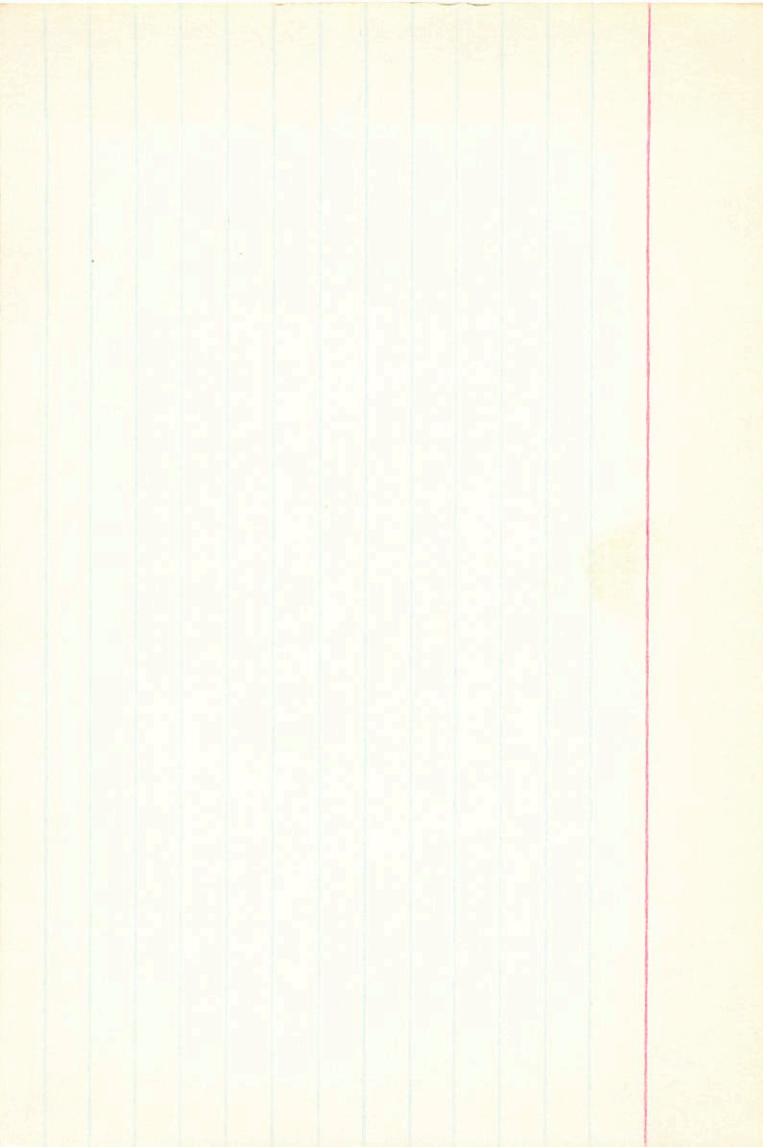
v

w

+99.1 -28.2 -37.0

+11 -10 0

-58.1 -0.310 -0.046



1/6012

13 18.2 +04 23

old

1024

43051

26m(8)

247(10)
25

$$8.58 + 0.95 + 0.74 \textcircled{2}$$

$$8.11 + 0.32 \textcircled{4}$$

$$\Delta(B-v) - 04$$

$$\Delta(M-B) - 105$$

m(I) 11(M)

+5.16

774

263

030

~~033~~

030

21 v w

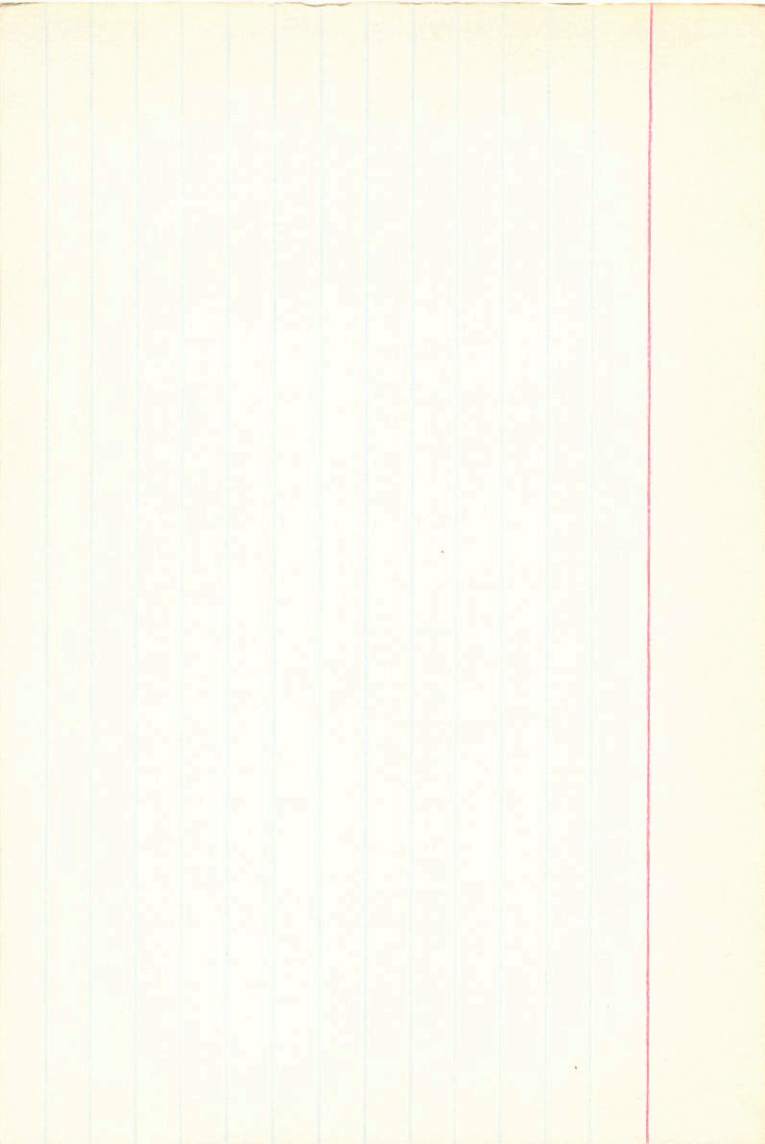
+79.6 -144 -2.2

+24 -7 +6

-25.5 -0.505 +0.197

333

215



young

116858/920

13

23.9

-24

02

d110
d111

43067/68

A 8.72 +0.89 +0.63 ①

8.26 +0.34 ③

$\Delta(B-v) +06$
 $\Delta(N-B) +10$

M(I)

+5.96

792

2.02

π(PT)

542(6)

5c(4)

B 8.90 +0.42 +0.59 ①

8.31 +0.345 ④

$\Delta(B-v) +04$
 $\Delta(N-B) +165$

1543

794

2.03

0.38

039

n v w

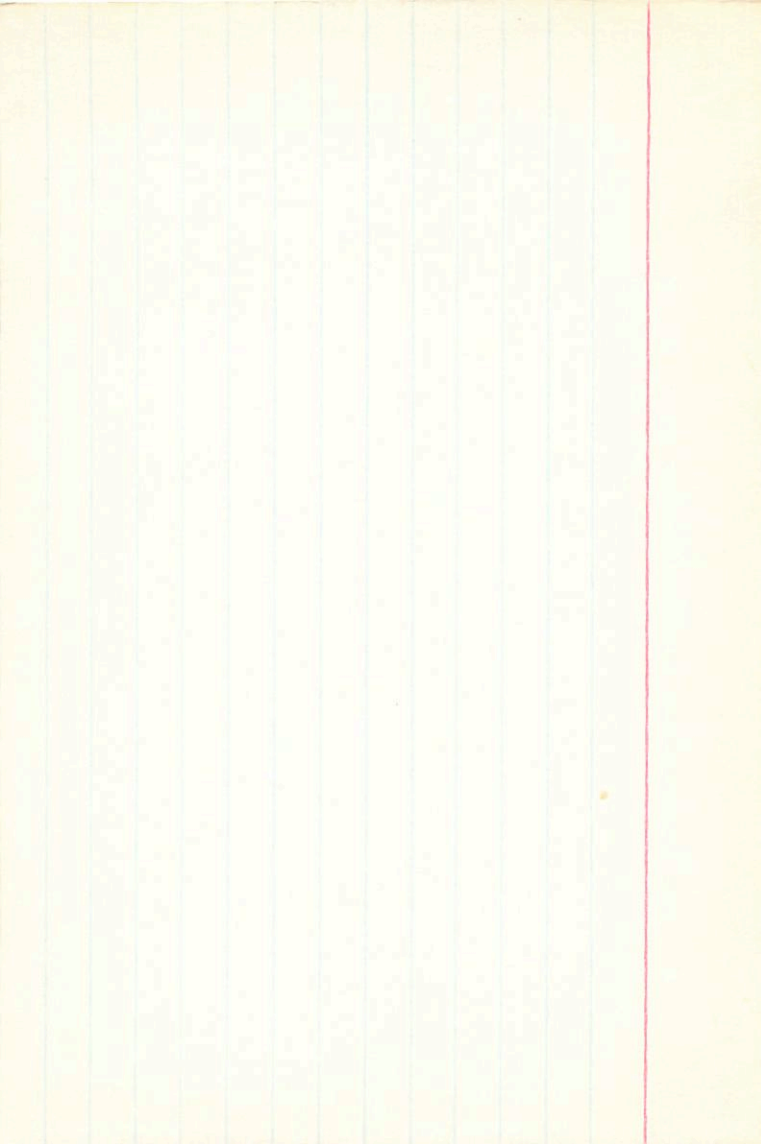
+354 -23.7 -58

+12 -11 0

"

"

-4.0 -0.332 +0.063



117635

13 29.1 - 204

692

Y3086

7.40 + 0.75 + 0.30 ①

6.99 + 0.29 ③

23M(4)
45C(6)

34

$\Delta(10-V) + 1.09$

$\Delta(20-0) + 1.99$

71(10⁴)

M(I)

+985

670

~~145~~

185

047

425

u

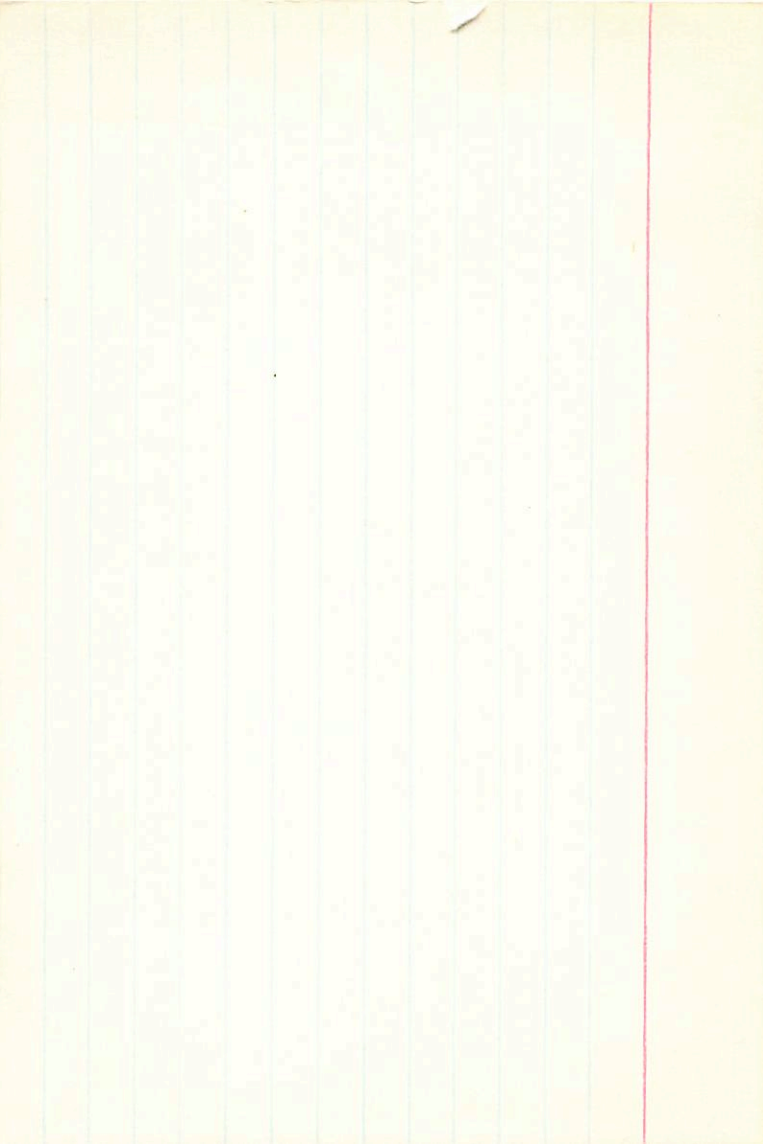
v

w

+100.9 - 14.0 - 20.3

-54.4 " " -0.834 + 0.264

+37 - 15 + 12



119070

13 39.0 -48 13 65- \bar{I}

not yd

9.13 +0.79 +0.315 (3)

8.68 +0.305 (3)

$$\Delta(B-v) = +0.9$$

$$\Delta(u-B) = +2.5$$

u(±) v(±)

~~+5.20~~~~1.028~~

2.78

5.72

295

838

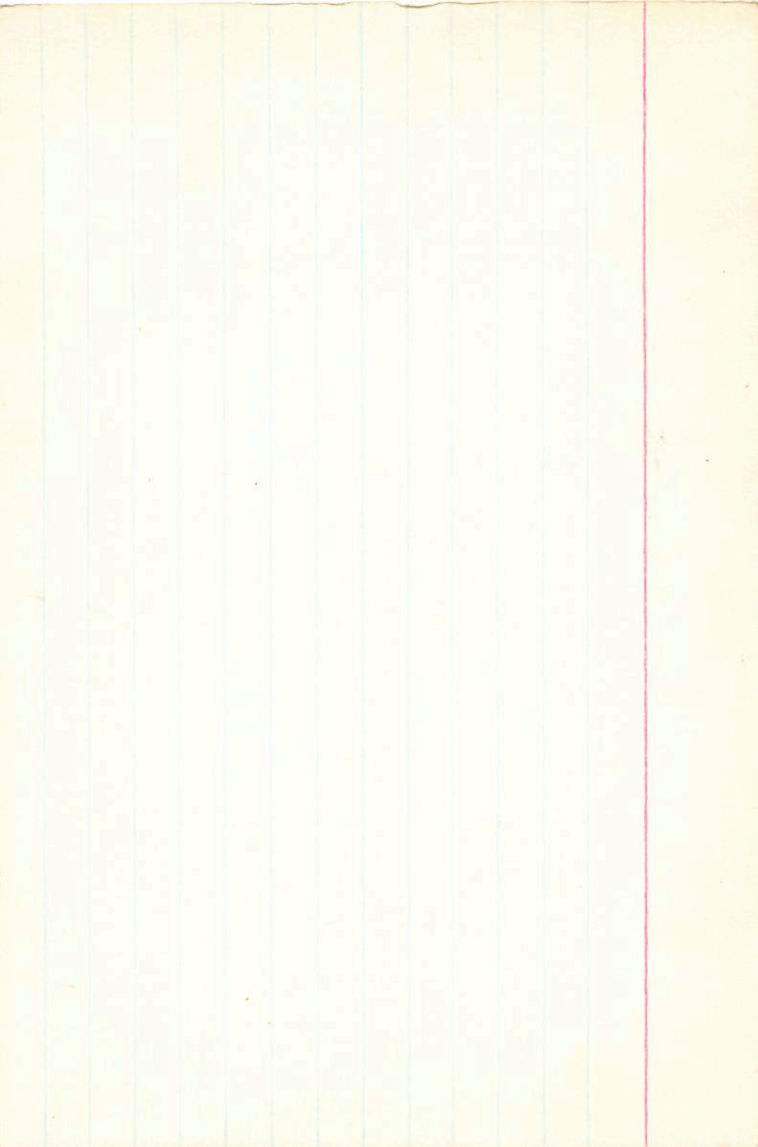
246

u v w

+20.2 -31.3 -19.9

+4 -8 -6

+5.0 ["]-0.176 ["]-0.164



-5° 3763 13 74.8 -5 53 d104

43143

$$10.26 + 1.025 + 0.855$$

$$9.71 + 0.40 \text{ (4)}$$

266 (17)

324 (12)

30

$$\Delta(18-v) + 042$$

$$\Delta(21-0) + 095$$

M($\frac{I}{pt}$) π (pt)

$$+6.0 \cdot 0.022$$

$$\frac{2.1}{20.1} \cdot 585 = 205$$

$$\frac{93}{46}$$

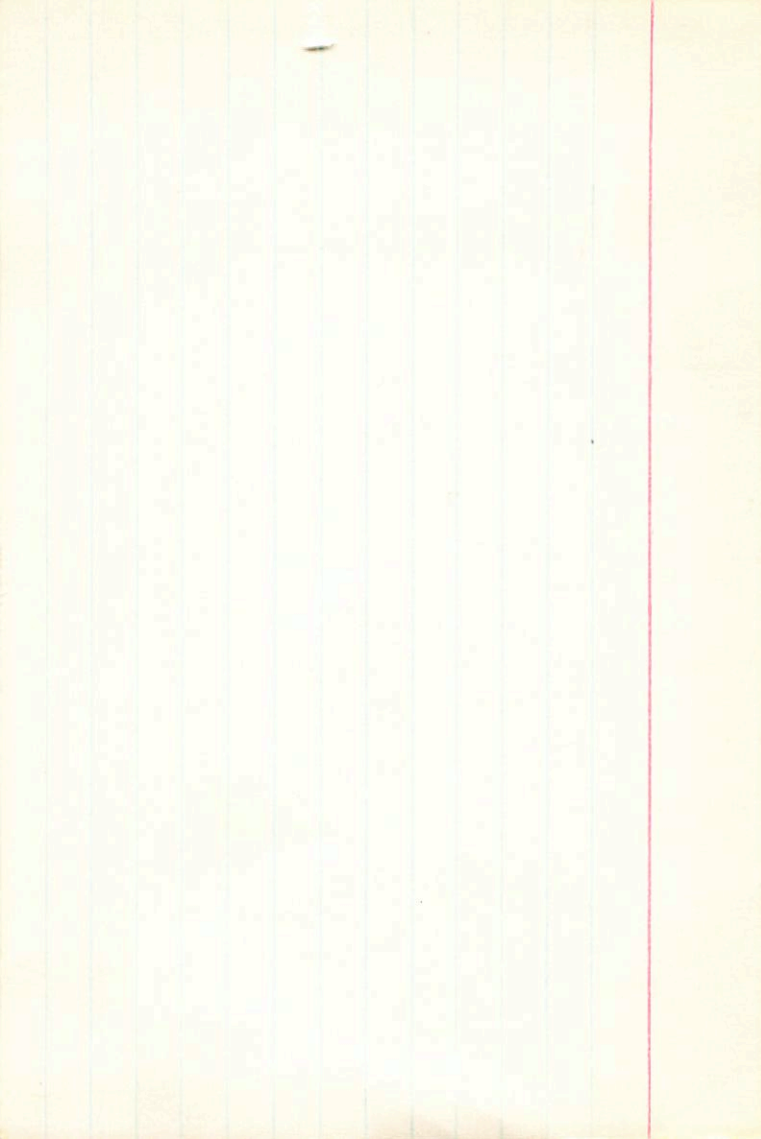
$$3$$

μ \checkmark w

$$+27.4 - 113.4 - 87.1$$

$$+1 - 29 - 11$$

$$-46.1 - 0.352 - 0.559$$



old

120253 13 46.1 -40 38 68 2-11

11.67 11.14
+5.92 0.40
2.48
2.16 0.37

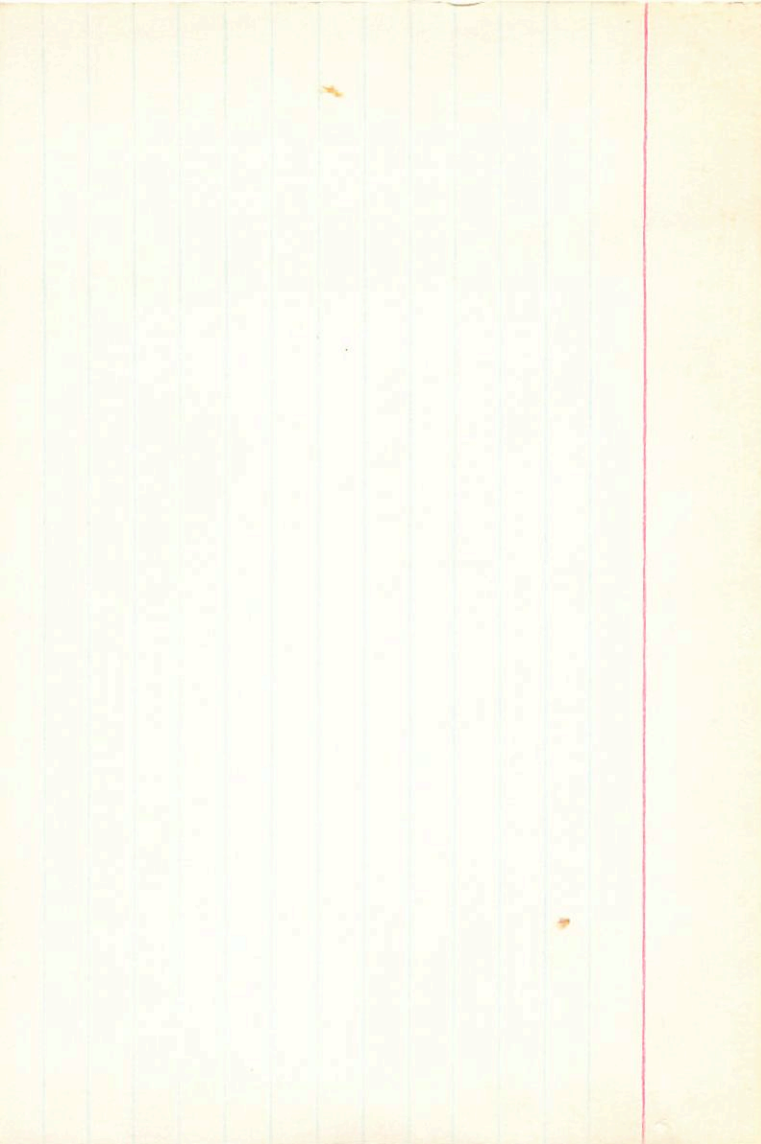
80
8.77 + 0.415 + 0.375 (2)
8.26 + 0.385 (3)

$\Delta(B-v) + 12$
 $\Delta(n-v) + 525$

M U W
+62.8 +25.1 -10.3
+8 -5 +5

-143 -0.225 +0.060

43146.1
06(17)



213467 22 29.2 -31 26 GS

45445

8.53 +0.735 +0.03 ②

8.16 +0.31

44(10)

726(18)

-3

A(B-V) + 155

B(U-B) + 56

Planck

yield dust to grain

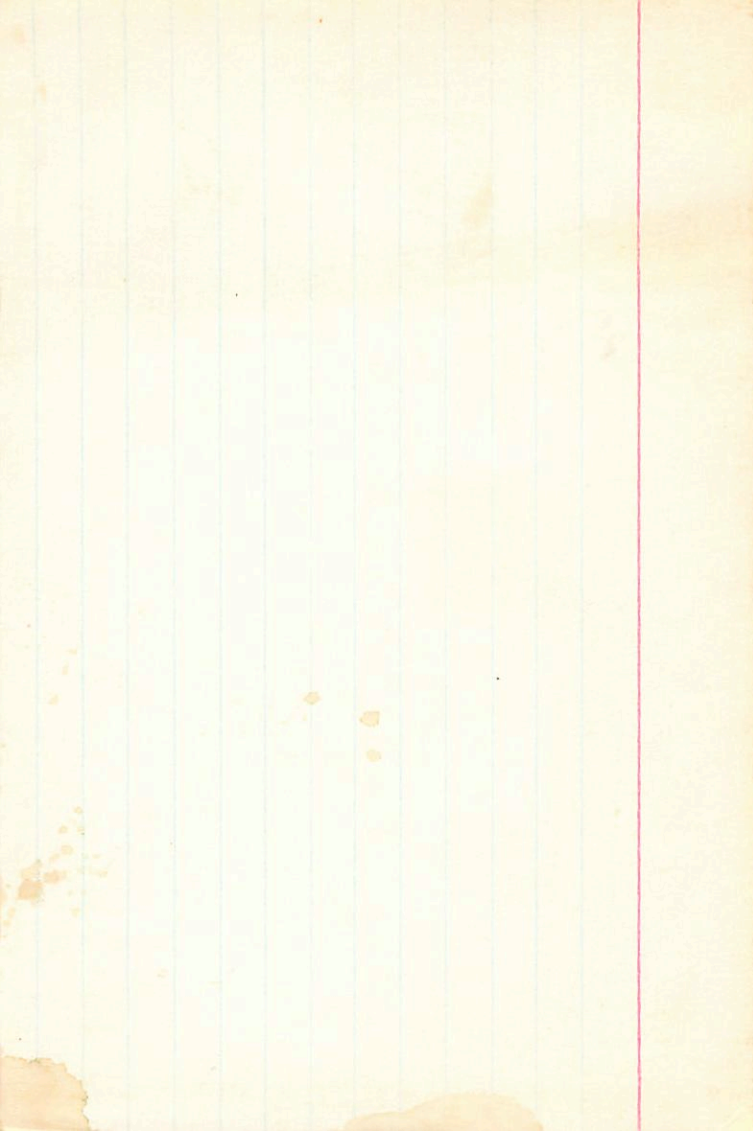
U V W

$A_V = +1$

+322 -393 -143

" ' '
+0.286 -0.195

400



Double 0" 1 5m=00

3460 00 34.9 -37 34 6-5 IV

note

6.98 +0.72 +0.17 (3)
6.74 +0.27 (3)

4.7 5.5 2.2
1.54
1.74
3

-18.7 +0.545 -0.030

0.75
0.46
0.3
7.22
0.9
0.3

M(II) 17 (M)
+4.5 0.0275

A(B-V) +0.055 +80.5 -51.7 +14.4
Δ(B-B) +0.09 +21 -15 -1

u v w

6169 27

→ 1027

+436 027 → +82.2 -53.0 +14.2

2.22
6.87
4.48
2.74

Old

(X)

5633

0 55.1 -62 31

147 2

HIP
Emin

7193

8.55 +1.28 +1.25 (2)

8.72 +0.54 (4)

A(10-v) +0.06

54 Y(12)

45 C(10)

55

M(I) π/μ

6.70 0.050

1.15
1.48

21 ✓ W

+83.2 -52.7 -12.6

+43 -24 -2

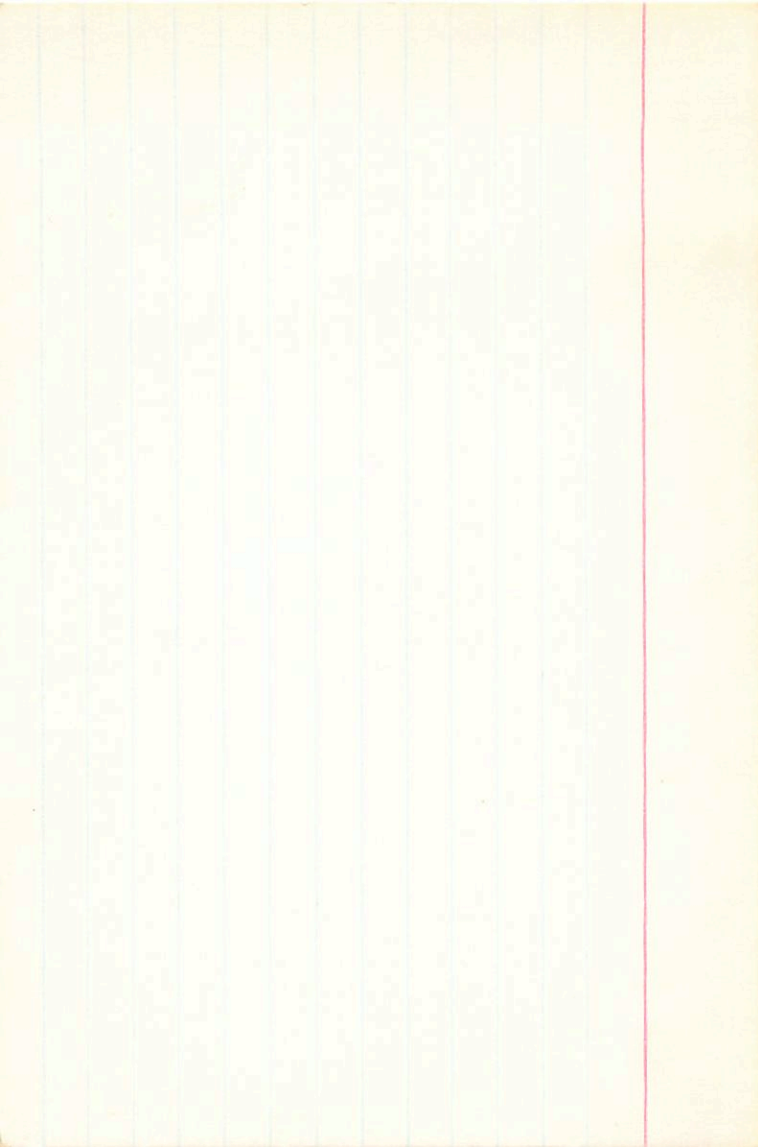
4147

+11.0 +1.034 +0.110

46.67

0.50

+83.6 -53.0 -12.6



Calcd

4630137

1 03.6 +63 40 127 5

(X)

4217

994(4)

6814(5)

815(10)

446(5)

580(4)

69

8.98 +1.30 +1.21 ②

8.14 +0.565 ②

758

MI(I) 14 (14)

+6.05

758

73

071

$\Delta(B-v) + 05$

$\Delta(n-B) + 07$

.0775

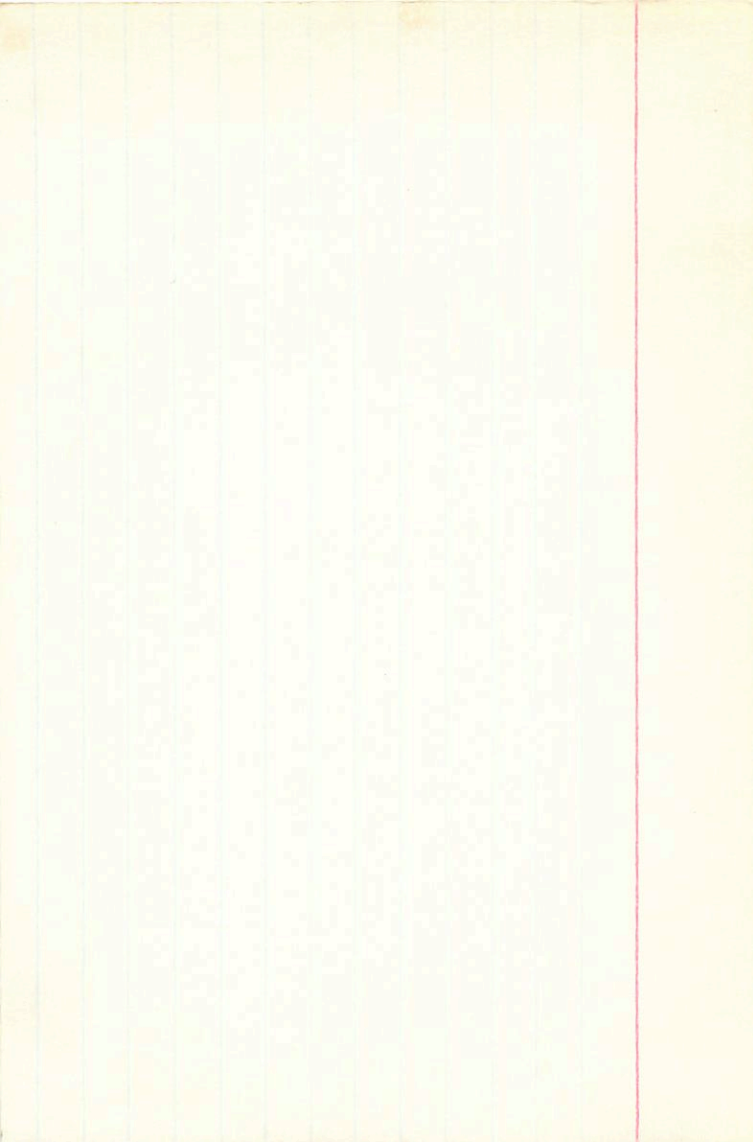
69007
" 11520
" 10209

21 V W

+81.2 -58.7 +25.3

+58 -41 +18

+7.03 +73.5 -53.0 +22.9



17663

2 47.7 +10 29

dG6

Nut 4/6

9.30 +0.895 +0.52 (3)

8.75 +0.29 (2)

846

515

+331

 $\Delta(B-V) -0.04$ $\Delta(U-B) -0.01$ $q \approx \pi 0.095^{2.5}$ $m-M = 5.15$ $M(\pm) = +3.3$

probably 29

u v w

+99.4 -53.2 -2.4

61 Cyg

+54.4 +0.171 -0.014

23183

Net job

(NO)

3 40.9 +19 31

NO 15

6.17 +0.98 +0.73 ③

5.69 +0.36 2 Anyue

5.33

535
0.00

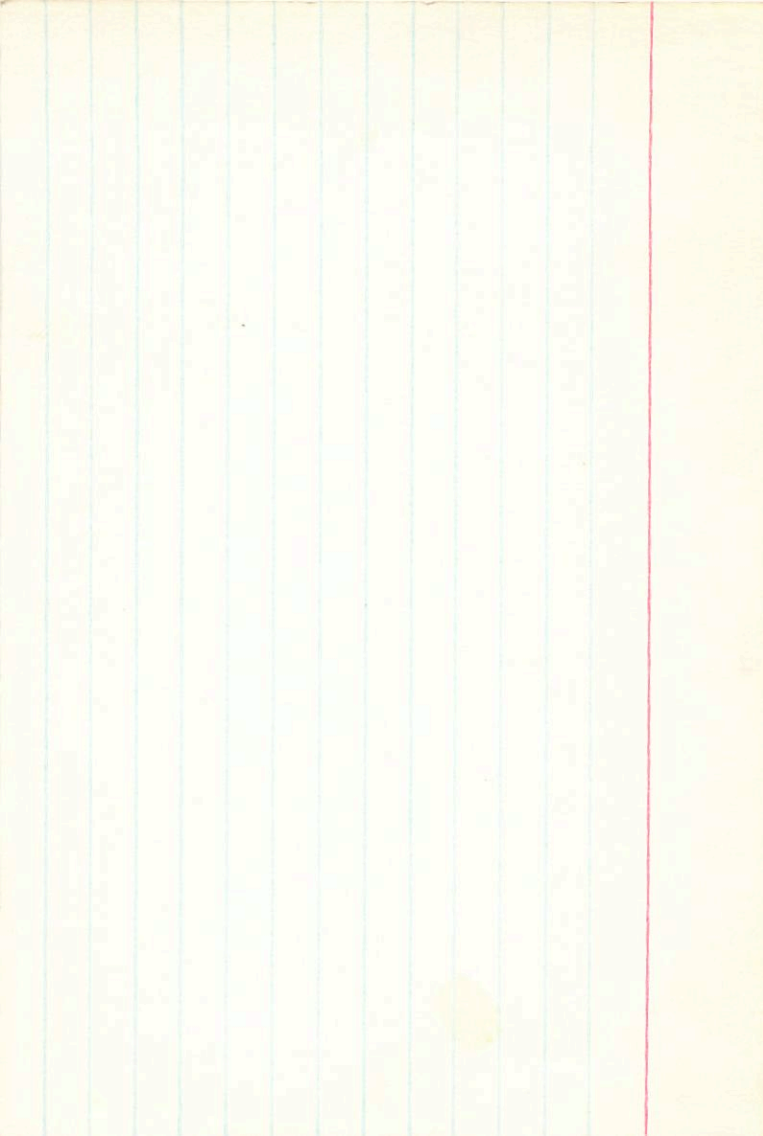
6(B-V) +01

6(N-Q) +085

491.6 -53.0 -14.7

00085 →

+2 -6 +2



29666 4 36.8 -40 17 NO 3 - ~~1~~

+137

9.20 +0.64 +0.10 (2) π/NA

9.06 +0.28 (2) $\delta(B-V) -5$

9.46 $m(\pm)$ $\delta(B-R) +7$

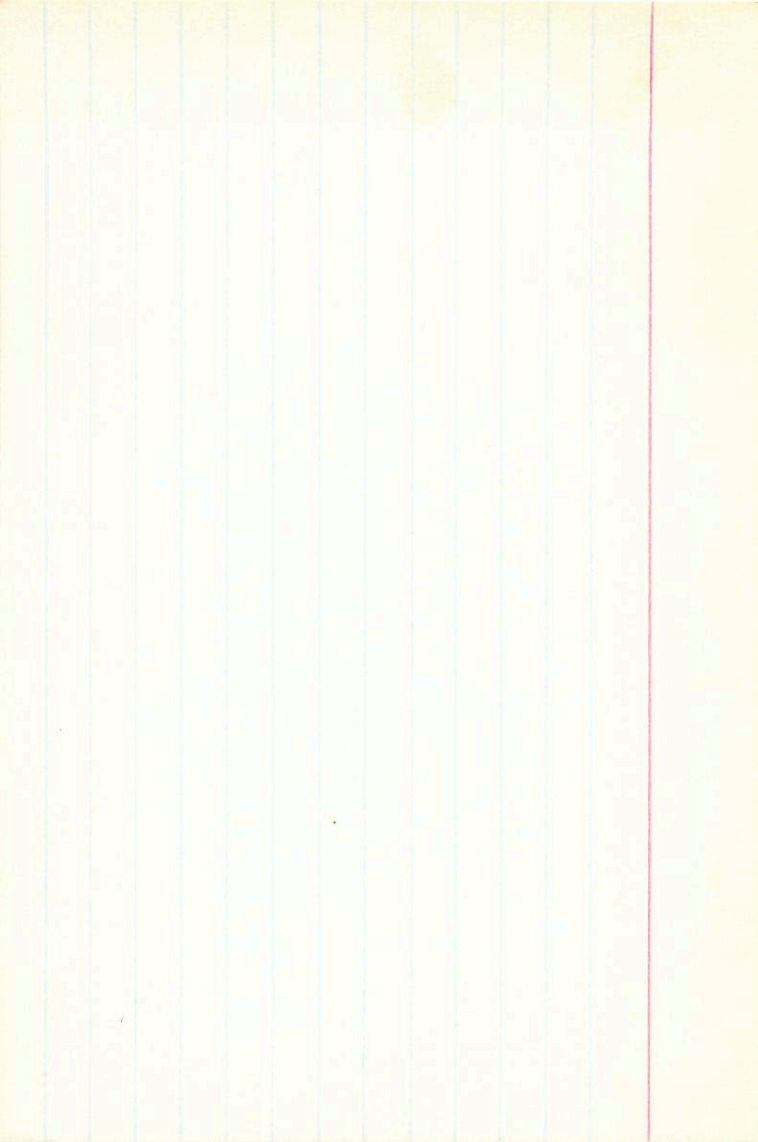
$\pi(\text{gr})$ 0.145
0.16
 $m - M$ 4.22

m	V	W
+85.2	-52.8	+25.0
+10	-3	+8

445.6 +0.233 +0.200

700 Blue Lilly group

0.13
→ (+4.39) +86.2 -53.0 -25.7



HB

34911 5 15.4 +40 03 GO D

Y1199

654(14)

65m(7)

695(6)

64

4.70 +0.60 +0.14 ③

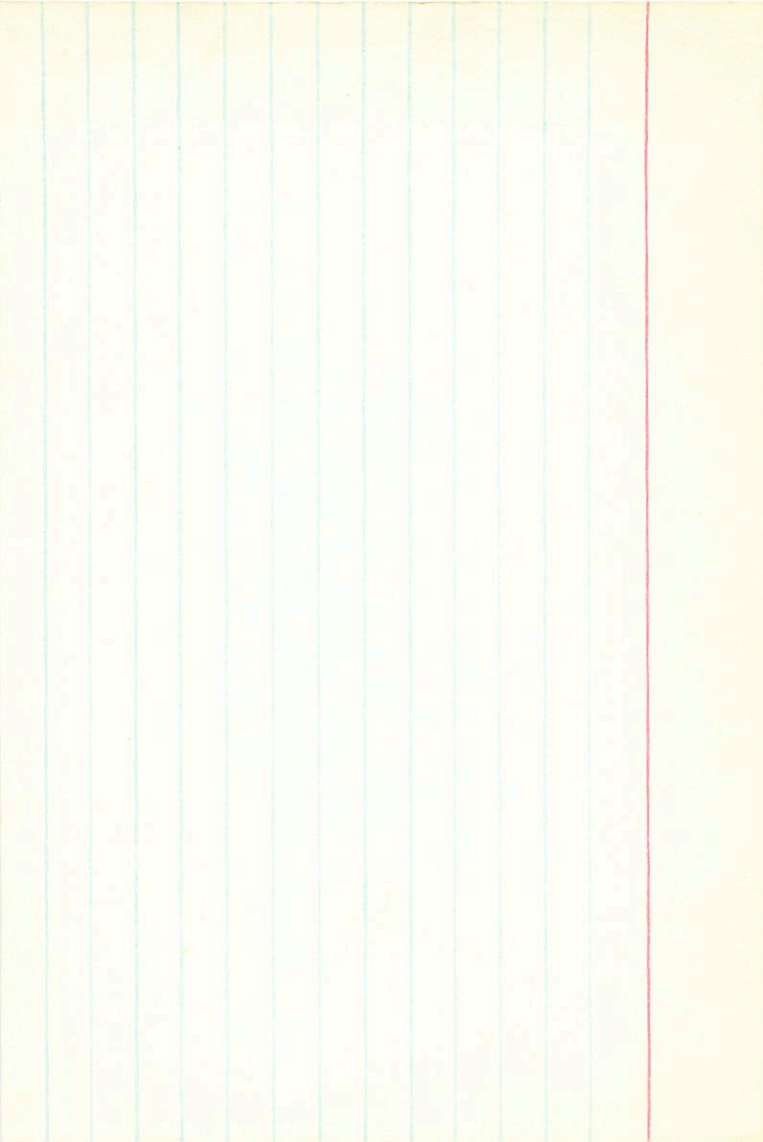
4.45 +0.209 5.67

+28

118

+207 $\Delta(B-D) +01$ $\Delta(HRS) -1.5$.058 \rightarrow +98.7 -53.0 +5.9

+8 -39 +2



39425

5 44.2 -35 47

102 111

41350

54(10)

456(17)

23

3.11 + 1.15 + 1.20 + 3.11 + 1.15 + 1.20 + 5

2.60 + 0.40 ③

2.99

2/6
+0.03

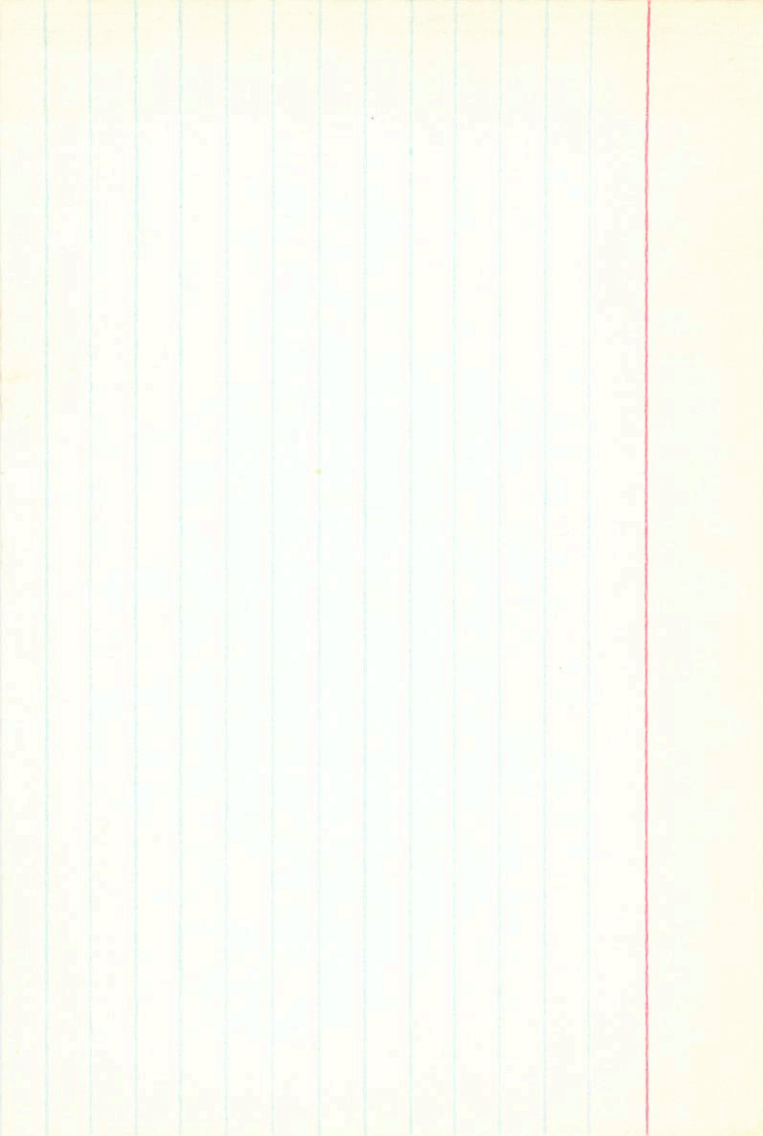
$\Delta(R-v) = 0.75$

$\Delta(M-S) = 23$

+840 -530 -20.2

.037 →

+17 +5 +7



NO

X
249
58
27

50778

6 51.9 -11 58 10414

71617

$$\left. \begin{array}{l} 4.07 + 1.44 + 1.64 \\ 4.05 + 1.43 + 1.64 \end{array} \right\} 4.09 + 1.435 + 1.64$$

$$330 + 0.58 \text{ (3)}$$

24 A (29)

17 M (8)

22 i (12)

10 y (6)

21

$$\begin{array}{r} 272 \\ 430 \\ \hline -158 \end{array}$$

$$\begin{array}{l} \delta(B-U) - 07.5 \\ b(n-u) - 40.0 \end{array}$$

$$.0135 \rightarrow \begin{array}{r} +793 \quad -53.0 \quad -530 \\ +1 \quad +2 \quad -6 \end{array}$$

