

+20.1080-2075 19 56.5 +19 42 198
20 0 42.1 +19 57.99

ML-AL +185° -012

~~10.2 10+7.5~~

-14° 20' 02" -116 19 56.9 -13 51 814

20 2 12.7 -13 34.89

McC-AC +.126 +.034
11.2: Mo + 9.3

+6° 44' 50"	-20 1.2	+6 16	328
	20 5 51.6	+6 32.58	

McC-AC +0.164 +0.181 10.0 K8 +7.5



141408

20 07.9 -34 141 d641 131.2 2"
5.31 +86 +1.95 3.24["]
-130.542/14

C-27642

14 5.30 +0.87 -132 Cope
-131.644 (3)

W12521 7703

+0372 13 -1570 1) #30
+0375 ±2.6 -1.565 +2.5 -6.6 -30/30
-130.7

5.3 11.59 "

9.5

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

P-S = 10.827 (1)

141527

-1452 -1570
-120.350.7

20 07.9 -34 141 d641 131.2 2"
5.31 +86 +1.95 3.24["]
-130.542/14

14 5.30 +0.87 -132 Cope
-131.644 (3)

+0372 13 -1570 1) #30
+0375 ±2.6 -1.565 +2.5 -6.6 -30/30
-130.7

9.5

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

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+118 -50 441 .171

+1452 -1570
-120.350.7

20 07.9 -34 141 d641 131.2 2"
5.31 +86 +1.95 3.24["]
-130.542/14

14 5.30 +0.87 -132 Cope
-131.644 (3)

+0372 13 -1570 1) #30
+0375 ±2.6 -1.565 +2.5 -6.6 -30/30
-130.7

9.5

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

+1452 -1570
-120.350.7

20 07.9 -34 141 d641 131.2 2"
5.31 +86 +1.95 3.24["]
-130.542/14

14 5.30 +0.87 -132 Cope
-131.644 (3)

+0372 13 -1570 1) #30
+0375 ±2.6 -1.565 +2.5 -6.6 -30/30
-130.7

9.5

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

+1452 -1570
-120.350.7

20 07.9 -34 141 d641 131.2 2"
5.31 +86 +1.95 3.24["]
-130.542/14

14 5.30 +0.87 -132 Cope
-131.644 (3)

+0372 13 -1570 1) #30
+0375 ±2.6 -1.565 +2.5 -6.6 -30/30
-130.7

9.5

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

+118 -56 447 -1400

+118 -53 449 .154

+118 -50 441 .171

+1452 -1570
-120.350.7

R.A. : 20.100
DEC. : -36.250
PM. R.A. : 572.000
PM. DEC. : %1570.000
DISTANCE : -1.200
MODULUS : -130⁶.700
RAD. VEL. :

q1 (U) : 0.513
q2 (U) : -0.029
q3 (U) : -0.858
UP : 1340.590
U : 119.830

q1 (V) : 0.185
q2 (V) : 0.980
q3 (V) : 0.077
DV : %6887.0
V : -49.694

q1 (W) : -0.838
q2 (W) : 0.198
q3 (W) : -0.508
DW : %3306.
M : 47.39

8/15

-7° 52' 23" 20 6.7 -7 42

20 " 48.1 -7 24.75

McC-AC t.011 -259

10.10 MO + 8.0

64

+77.767 20 15.4 +77.16

20 12 6 33.8 +77 33.81

W 12612

-2 C 3 w
dmo

10.700

10.704.16 +181 +016
+0.189 +0.014

$+6^{\circ} 4489$

$$\begin{array}{r} 20 \\ 20 \\ +14 \\ \hline 20 \end{array} \quad \begin{array}{r} 9.8 \\ 12.15 \\ +6 \\ +6 \\ \hline 29 \end{array}$$
$$+6^{\circ} 46.58$$

817

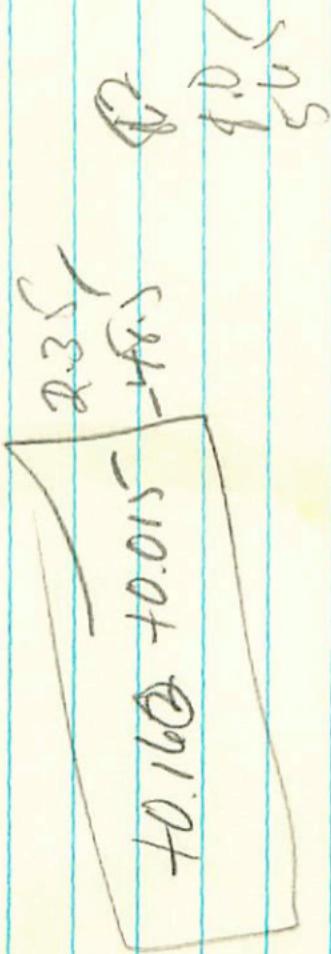
47
23
2

100W

$$\left(\begin{array}{c} 7.6 \\ -1.6 \end{array} \right) \text{ upper } -51.0$$

$$9.4: K8 f 7.3$$

$M_e C-AC +162 +.015$



317.000*

20.000*
14.500*
6.000*
47.000*
0.160*
0.015*
2.350*
29.512
-48.500

0.449
-0.628

43.687

0.169
0.731

-30.473

-0.592
-0.267

-4.518

20 21/1 21 25

12.27 12.27

+12.22

+12.27

+12.23

12.27 12.28

20.32

-20.4

+12.4

-12.5

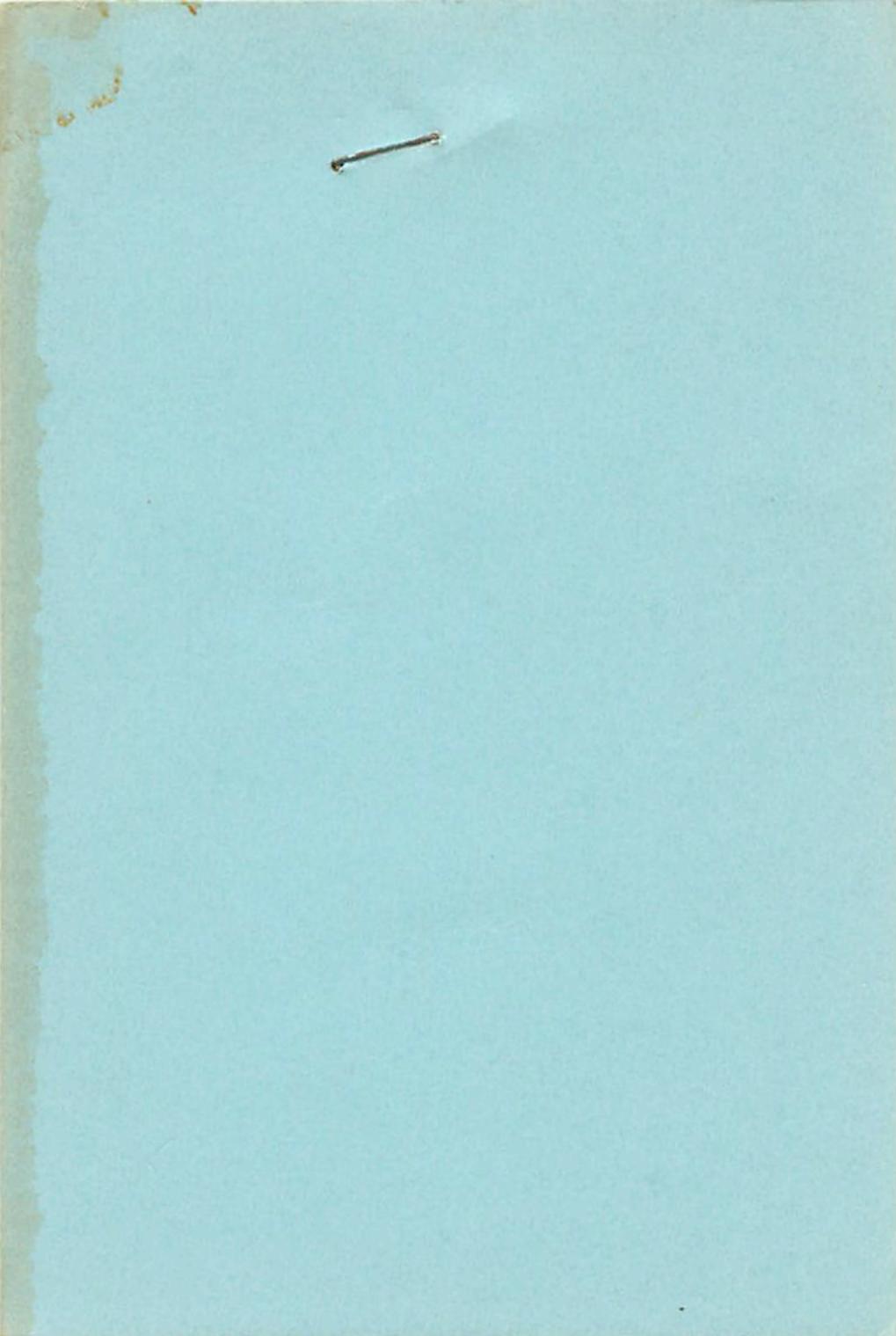
0.0

+12.2

12.2

12.2

$$M_1 \approx 19.05$$





20.330
-76.800
2846.000
0.1111 -1275.000
-0.23 0.000
122.000

0.555
-0.549
-0.625
-31.0 5925.233
-26.041

0.146
0.804
-0.576
-100 -4410.824
-114.401

-0.819
-0.228
-0.526
-745 -1143

1551546 20 21.6 - 26 80 4122:ME

1551546 153.4 1.480

657 1.273

2862

1273

1.30

4122

R.A. : 20.350
DEC. : -76.850
PM. R.A. : 2862.000
PM. DEC. : -1273.00
DISTANCE : 1.300
MODULUS : 18
RAD. VEL. : 122.000

q1 (U) : 0.558
q2 (U) : -0.546
q3 (U) : -0.624
dU : 5020.330
M^q U : 15.201

23 q1 (V) : 0.142
q2 (V) : 0.804
q3 (V) : -0.577
dV : -4414.28
V : -150.684

q1 (W) : -0.817
q2 (W) : -0.233
q3 (W) : -0.527
dW : -1115.68
W : -84.602

LFT 1.546 20 23.8 52 36 16 : 01.5

L 24070

161.4 1.283

109 1216

743

1211

1.5

161,

R.A. : 20.400
DEC. : -56.600
PM. R.A. : 743.000
PM. DEC. : % -1216.00
DISTANCE : 1.500
MODULUS : 20
RAD. VEL. : 6.000

q1 (U) : 0.567
q2 (U) : -0.290
q3 (U) : -0.771
dU : 2773.518
U : 50.715

q1 (V) : 0.134
q2 (V) : 0.956
q3 (V) : -0.262
dV : % -5249.63
V : -106.314

q1 (M) : -0.813
q2 (M) : -0.045
q3 (M) : -0.581
dM : % -1315.05
M : -29.725

822

<u>+64°14'52"</u>	<u>20</u>	<u>33'1</u>	<u>+64</u>	<u>28</u>
20	<u>33'8</u>	<u>+64</u>	<u>38</u>	
20	<u>34'5</u>	<u>464</u>	<u>464</u>	<u>48.00</u>

9.9 M0 + 8.0

846

246 1050 GL

Green. Ceph. t. 292 t. 040

15" 6m = 4 m

821 20 37.0 +4 48

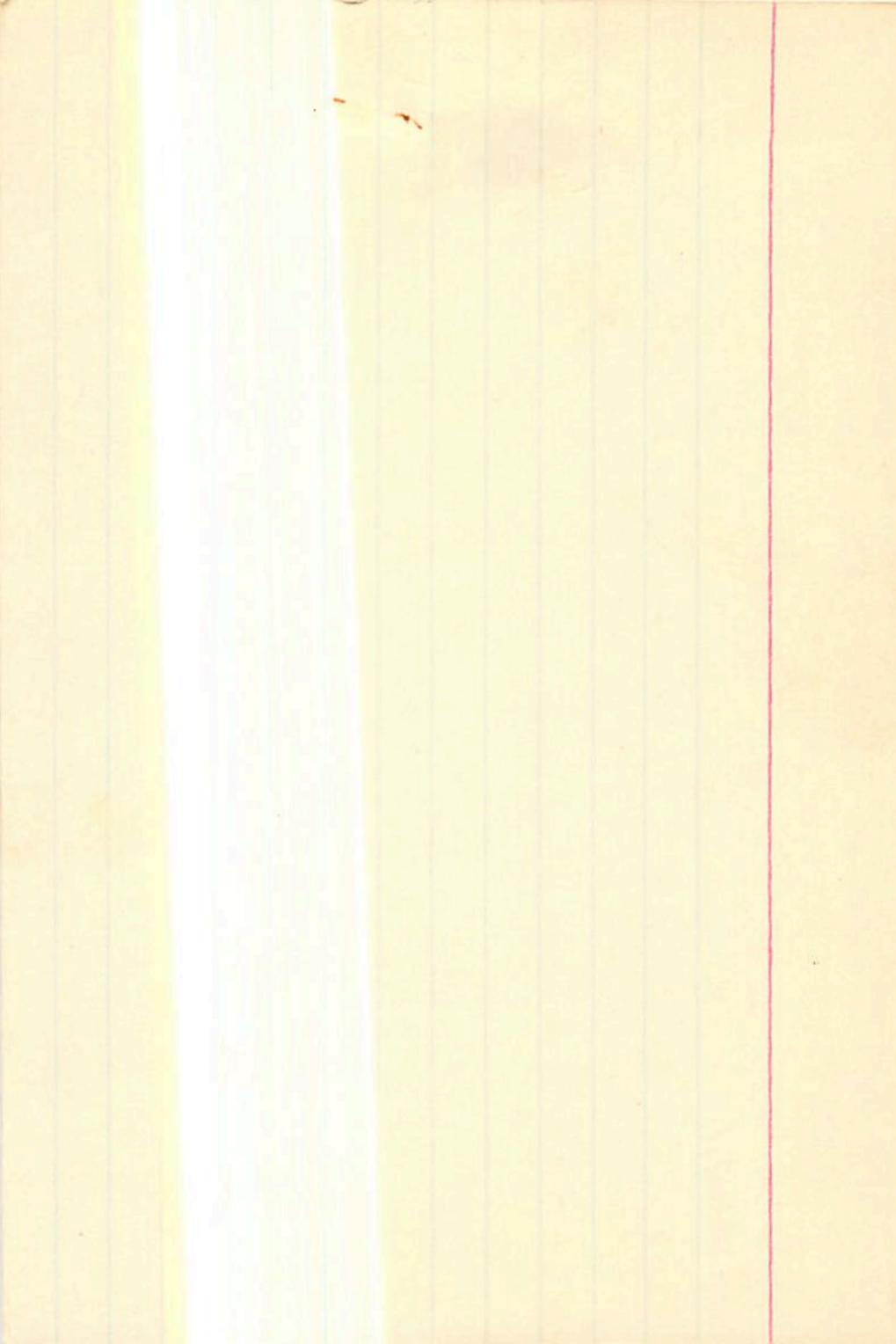
+404510
" 0.7

A/B 7.50 +1.22 +1.16 ③ +0.54 ①

$\Delta m = 1$

MAPLE MELA
MAPLE MELA

-40 \$ 10?



196745 20 37.1 +4 48 DR 4 -43.4 SW (8)

GL28771
W12436

+104510

84520

All 8m = 1mm

1.10

189.3

+8640

+815

+8556

+8556

+8556

+8556

+8556

+8556

+8556

+8556

+8556

0575

0577

0774

0775

0775

0775

0775

0775

0775

0775

0775

0775

+74 -19 -35 -054

+51 -24 -12 -160

+59 -23 -22 .05

+65 -20 -24 .07

+62 -22 -24 .075

5.395

3.214

3.984 (5903)

36.70

30.87
- 5.022
15.849

34.04 1986.59

40

20.600
4.800
860.000
85.000
1.100
17
-39.300

0.601
0.535
0.593
2658.150
67.435

0.100
0.687
0.726
680.930
-16.998

-0.793
0.492
0.360
-3022.212
-35.020

4057842 + 109543
+ 05793
+ 043
47 31.89 15909

$+4^{\circ}45'10$

821

$\gamma 4920$

$20 \quad 32.3 \quad +4 \quad 28$

$20 \quad 39.6 \quad +4 \quad 37$

$20 \quad 37.0 \quad +4 \quad 48.09$

$65^{\circ}56'15$

$\Delta m = 1.0 \text{ mag}$

$48.4(16) \quad 7.89 + 1.22 + 1.17 \text{ RSTR} \quad -4.346800$

$72.1(18) \quad 7.61 + 1.22 + 1.11 \text{ K} \quad d \text{ NC}$

$51.4(12) \quad 7.61 + 1.22 + 1.11 \text{ K}$

$67.4(3) \quad 50.4(10) \quad 50.4(10)$

$G.C. 28771 +.858 +.085$

~~66 V~~

~~new~~

~~184.5~~

~~1.5~~

~~d NC~~

~~R~~

$8.3: K8 + 7.9$

$\rightarrow 0.056$

6.80

6.07

6.12

7.18

7.15

7.14

7.12

$R-T$

R

621.0000

20.000
37.000
4.000
48.000
0.862
0.078
1.500
19.953
-39.500

2.666
-0.591

76.529

0.649
0.720

-15.515

-3.050
-0.363

-46.514

-21°58'11 20 35.6 -21 52 823

20 41 6.8 -21 31.51

McC-AC +.091 -.283

10.2: MO +8.7

20" $\Delta m = 2^m$

*
825

~~20 42.4
20 46.7
20 57.2~~
47.0

ADS 14333; $d = 0.^{\prime\prime}8$
 $\Delta m = 0.0 \text{ mag.}$

+10° 4385

20 42.4
20 46.7
20 57.2

9.32 +1.09 +0.96
9.4 9.8 +7.3

-7 +2
+232 -174 (66)
277

Fall Zone +.210 -.125

8.70

275

-4.6 106W

7.6

9.3

5V

825.000*

20.000*

47.000*

11.000*

13.000*

0.283*

-0.121*

2.750*

35.481

-7.700

0.268

-0.501

13.351

-0.280

0.796

-16.053

-1.051

-0.339

-34.685

922

+6401452

9.4 ml ✓

10.23 +1.18 +1.07 ②

+0.4501



825

20 47.0 +11 13

+104385

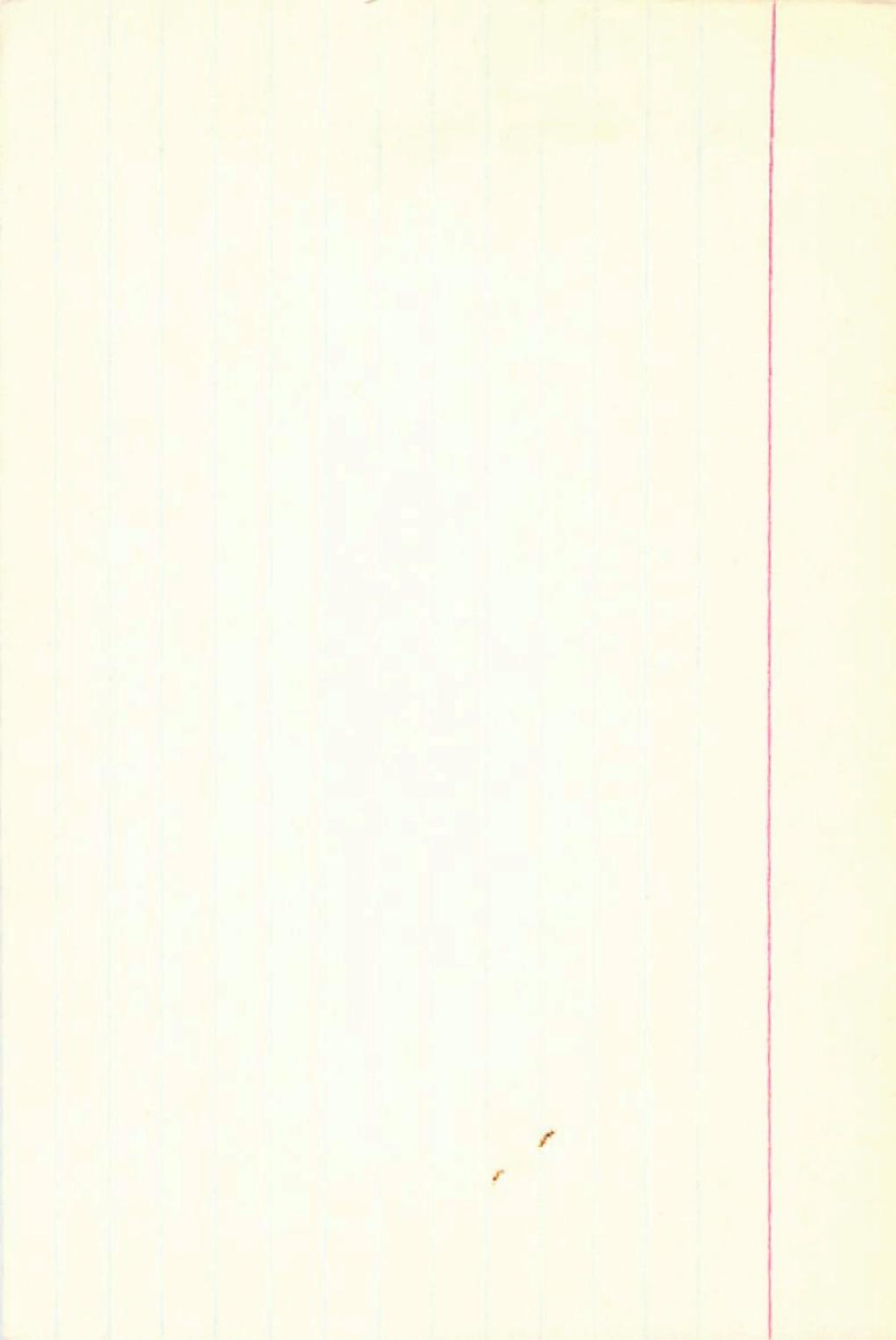
ADS14333

AB 9.82 +1.085 +1.00 ♂ +0.44 ♂

0.8

Δn = 0.0

-7.7



331

+30° 41' 55"

20 37.9

+30 47

Decl: $\delta = 4^\circ 4''$

20 41. 47.5

+31 7.64

$\Delta m = 3$ mag.

17.7 ①

McC-HC + 1.015 0.000

10.0 K8 + 7.9

* Prob. is Regio 366 - A DS 14230;
Reg in orig. catalogued it as 80 + 30° 41' 59.
 latter appears simple on Byasotsky & Makarov plates.

467°7346 20 44.8 +67 25° 826

20 45 48.7 +67 46.21

McC-HC - 0.3 = 0.44
10.7: K8 + 7.4

Devant?

69

+10,440.9 20 48.3 +10,43.5⁴
20 50.2 20 52.9 51.9 +11 4.75

(2 Upper)

22 10 VV

9 30 170 55

Not dry

Not dry

+8.5

Mel-AL -0.4 -0.24

1.75
+0.84 1 2 years

-10.3 -0.14 VVR 9.28 +1.68 +1.84 1 Meters

4562471 20 37.9 456 54 68
20 40₃ 15.2 157 14.56

46980 31.017) 0345016 119400
W1.2976 31.017) 0345016 119400
W011010 0.80

MC724.1 +0.96 +20.2
10.104 +0.207

10.5-110 8.3
9361 3275
3576 0410
1076 0353
2.65

W
111 2.15

2.15

198
205
2.15
234

R.A. : 20.650
DEC. : 57.250
PM. R.A. : 188.000
PM. DEC. : 208.000
DISTANCE : 2.150
MODULUS : 27
RAD. VEL. : -23.400

q1 (U) : 0.610
q2 (U) : 0.790
q3 (U) : 0.067
dU : 1072.647
U : 27.306

q1 (V) : 0.091
q2 (V) : -0.153
q3 (V) : 0.984
dV : -107.420
V : -25.916

q1 (W) : -0.788
q2 (W) : 0.594
q3 (W) : 0.165
dW : 205.739
W : 1.670

+17°53'33"-46' 20 53.8 +16 50 829
20 56.0 +17 1
20 58 12 11 9 +17 12 29

9.9 K8 +7.1
/

McCAC - .075 - .179

830

-1397-20 20 54.2 -1 2
20 59 5.2 -0 39.65

Half 905 + .18 -.15

10.7 Mo + 8.9

828

-33°/5343

20 52.7

20 58 33.1

-32 42.75

21

McCAC +.240 -105°

10.5° MO + 8.7

+2011 -059 ✓

$$\begin{array}{r} \boxed{2011} \\ -059 \\ \hline \boxed{1412} \end{array}$$

0887

2.06

— —

10873

20 582 200 10.4

20.9

+22.15

82.1
82.1

10873

10.83 925 102

10.86 101 102

82.6

17.5

10.4

-32.1

1 1

-32.1

20.900
22.150
826.000
-175.000
1.400
19
-32.100

0.649
0.669
-0.361
1799.707
45.892

0.047
0.439
0.897
-191.856
.32.463

-0.759
0.608
-0.253
-3249.994
-53.884

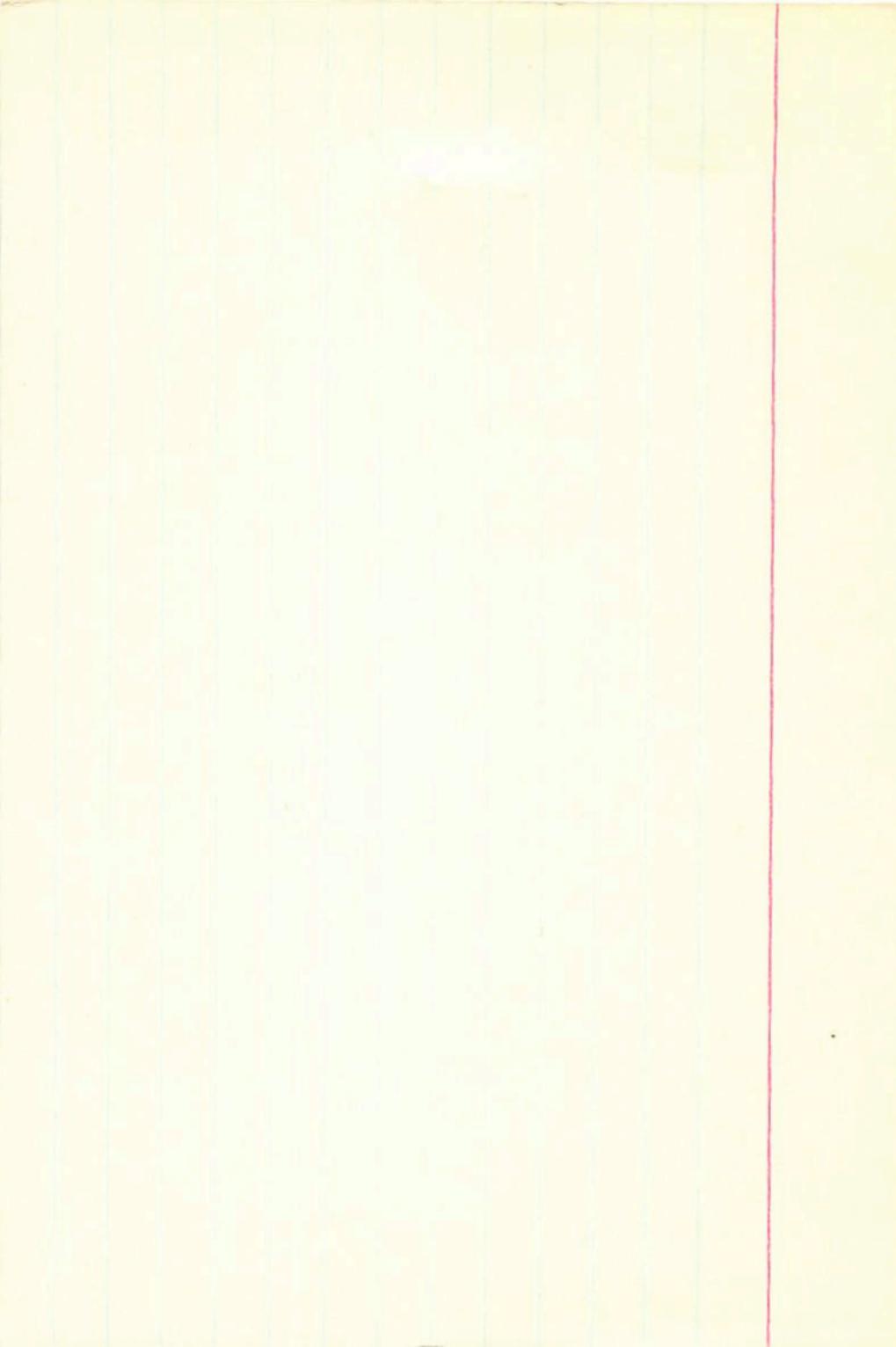
832

+7001157

9.38 + 1.12 + 1.05 (2)

10.41 (2)

1



+70° 11' 57" 832
20 59.0 +70 78
20 59.3 +70
20 59.740/4 +70 29.62

830
776\ 9.9: 18 +7.3
Green. Auk. +.140 -.042

989

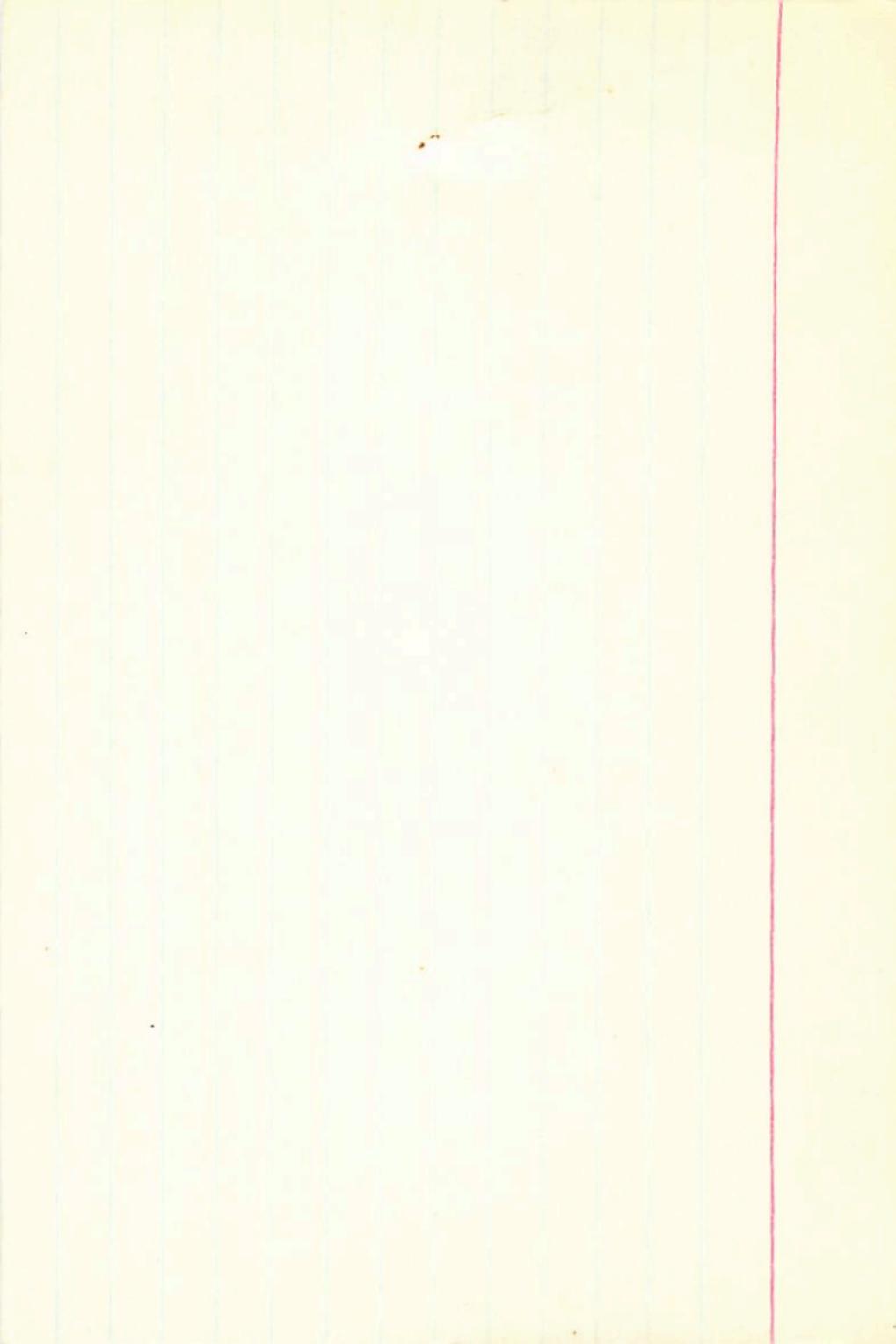
21 05.6 29 34

+2904321

9.63 +1.04 +0.89 \textcircled{D}

+0.4652

-1.0



$$+24^{\circ} 43.29$$

$$\begin{array}{r} 21 \quad 1.6 \\ 21 \quad 3.7 \\ \hline 21 \quad 5.84701 \end{array}$$
$$\begin{array}{r} +24 \quad 36 \\ +24 \quad 48 \\ \hline +24 \quad 59.04 \end{array}$$

$$333$$

9.1 106.41

9.8 K8 #7:

$$\ln C - AC = 0.021 - 0.160$$

$$\boxed{\begin{array}{r} 2.6 -4.6 682 \\ -0.021 -0.160 \\ \hline 4.57 \end{array}}$$

333.000%

21.000%
5.800%
24.000%
59.000%
-0.021%
-0.168%
2.500%
31.623
-4.800

-0.577
-0.297

-16.822

-0.299
0.919

-13.881

-0.403
-0.258

-11.509

3.23

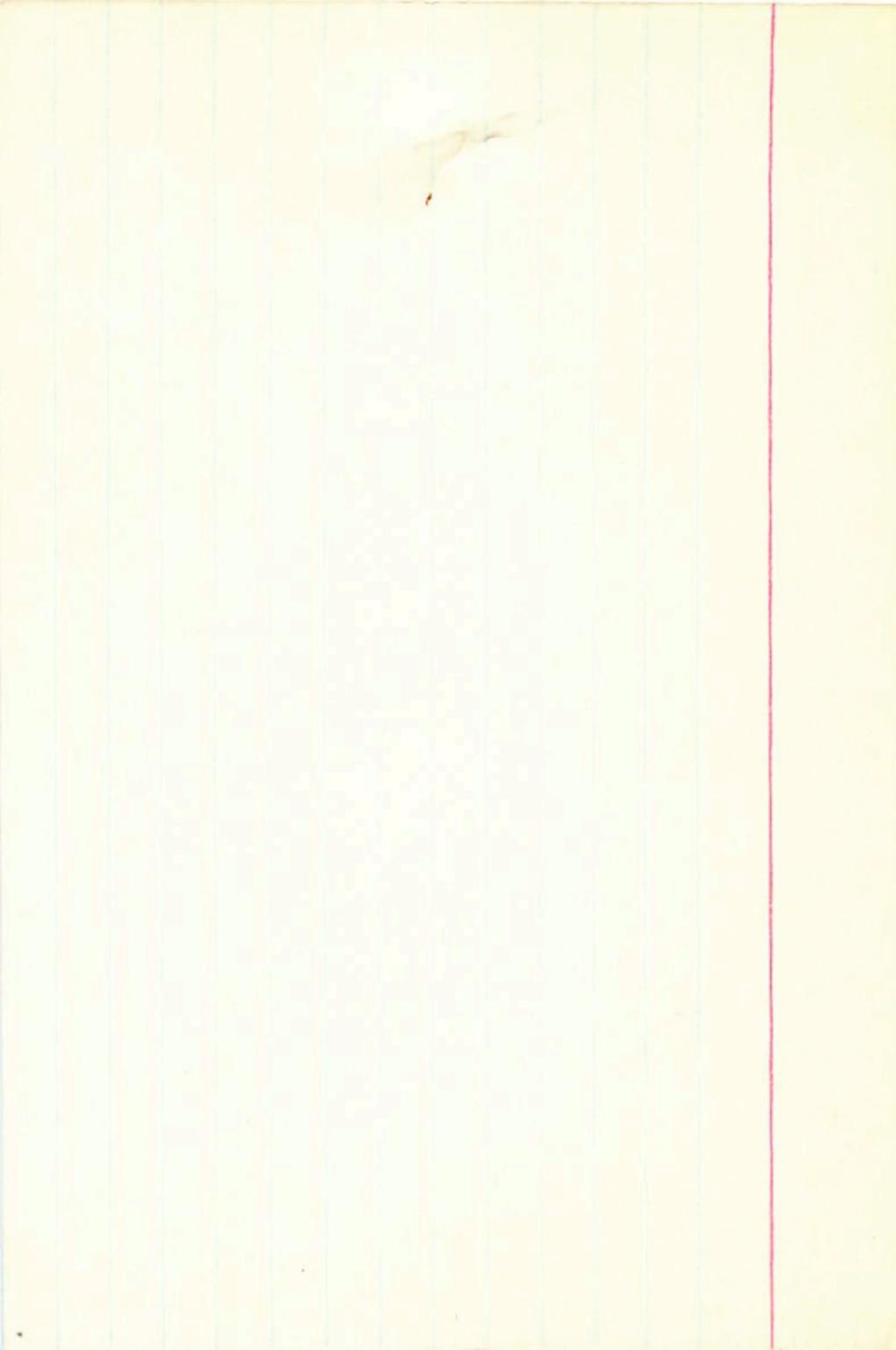
2) 05.9 + 24 59

+ 2404326

6.98 + 11.6 + 10.5 0

+ 0.4552

- 4.6



W1106

34 06.7 453 32 -200

1029-1774

-2027

1814

54

200

R.A. : 21.100
DEC. : 59.500
PM. R.A. : %2027.0
PM. DEC. : %1819.0
DISTANCE : 1.900
MODULUS : 24
RAD. VEL. : -260.000

q1 (U) : 0.679
q2 (U) : 0.721
q3 (U) : 0.136
dU : %9530.1
U : -264.071

q1 (V) : 0.013
q2 (V) : -0.197
q3 (V) : 0.980
dV : 1638.840
V : -215.564

q1 (W) : -0.734
q2 (W) : 0.664
q3 (W) : 0.143
dW : %2147.22
W : -88.669

CHECKSUM ERROR

+ 0803 44.1	+ 5574.1
+ 0894	+ 548
- 907 907 948 25' 2	+ 345
- 244 376 244 376 - 625	+ 550 - 350

1.3 515 327 20 120 + 74 25

VULcep

197433

675
675
25164

612953

675
675
80, VV

355 174

355 174

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355 174

+43 -53 -4 .050

4344

-53

4344

-53

4344

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-53

100 631

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