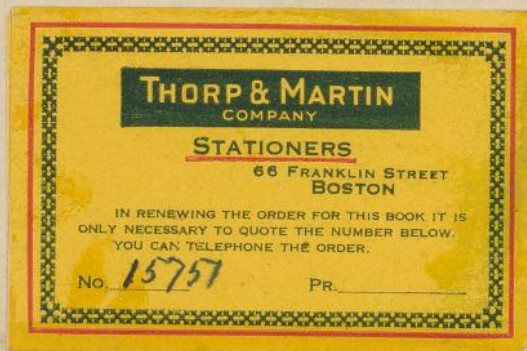


1930phae, proj. 2339M

B



Concentration, Form and Position angles

Plate No.	Page	Plate No.	Page	Plate No.	Page	Plate No.	Page
A.3092	5	6419	143				
6586	11	6417	143				
4184	18	4749	159				
3339	32	5546	164				
3346	62	5695	168				
4181	75	4599	174				
4183	83	4598	176				
12790	104	4724	176				
4179	144	4609	177				
5044	132	4733	177				
5202	132	5550	179				
5049	132	5458	179				
5102	133	6840	181				
5104	133	6851	183				
5106	134	6910	184				
5349	134	7426	184				
5355	134	4611	187				
5376	134	9017	189				
5451	134	7447	189				
5453	135	6504	197				
5455	137						
5459	137	5373	198				
13719	111	8494	198				
13036	117	8377	213				
13037	118	7451	204				
3657							
3654	122	6852	214				
6770	124	7424	215				
13362	129	13331	215				
6124	142	5655	217				
6134	142						

J. F. M.

n
Re
of

A 3092 (plate has not been examined for δ - in G. with W.S.L.)
 1 ic6 3.0 = 36"

5 f5

3.0

7 f4

2.6

9 a7

3.4

10 a6

3.3

3 d9

3.6

13 c4

4.3

14

double star?

15 f8:

2.6

edge of plate

16 ic10

2.1

Mentioned in

Perinelli's survey
 of G.C. objects.

6

A 3092

17 C 9

3.1

Mentioned in Remmelt's
survey of G.C. objects.

18 C 7

3.3

20 E 10

2.0

22 d 9

2.6.

24 f 4

4.3

25 d 8

2.1

I.C. 987

27 Si C 3

7.7

NGC. 5492

29 C 10

3.4

defect ~~30~~ ~~e 9~~

32 a 9

2.3

A3092

33 c6

2.4

34 b8

2.4

35 s: b2

5.6

36 s: d3

11.2

37 a7

4.0

40 c9

2.7

41 d7

2.5

I.C. 1004

42 i b8

2.8

possibly star
superposed?

44 b8

2.3

46 c5

3.3

I.C. 4410

8

A 3092

48

d9

1.6

I.C. 999

49

d9

2.4

I.C. 1000

50

c5

3.6

56

ic4

3.0

st. sup. m f

57

e8

1.9

~~58 a10~~

defect.

59

b8

1.8

61

b7

2.0

This plate is badly fogged and covered with defects which cannot be distinguished from the nebulae. If it were better, many more faint objects could be certainly identified on it as nebulae. We have taken only those of which we were certain.

N.G.C. objects identified on 3092 A.

5490 — just preceding # 17.
 5492 = # 27
 5509
 5513
 5518.

I.C. objects on A 3092

982 } just north of group of faint nebulae following
 983 } N.G.C. 5490.
 984
 987 = # 25
 999 = # 48
 1000 = # 49
 1004 = # 41

 4410 = # 46

See over the page for descriptions of Catalogue objects not previously described.

There are more objects from I.C. (2) far in the south following corner of the plate where they cannot easily be identified.

10

A 3092

NGC 5490 C9

2.4

5509 C10

6.7

5513 L7

4.3

5518 d8

3.0

I.C. 982 d5

1.5

983 C6

2.7

984 S: d2

8.4

A 6586	Diameter			Classification		
	AA	S.F.M.		AA		
1	2.5	3.0	2.5	a7	b7	a7
2	2.5	4.5	3.5	b9	a9	a9
3	3.0	3.5	3.5	b6	b8	b7
4	3.0	3.0	3.0	a8	a9	a8
5	2.5	2.0	2.5	c10	a9	b10
6	2.0	2.0	2.0	c8	b8	c8
7	2.5	3.0	3.0	f9	a9	a9
8	1.5	2.0	1.5	c7	b8	c8
9	2.0	2.5	2.5	a8	b8	b8
10	1.5	1.5	1.5	b7	b8	b8
11	3.5	2.5	3.0	d5	c7	d6
12	1.5	2.0	1.5	a10	a9	a10
13	1.5	2.5	2.0	c7	b10	b8
14				none?		
15a	2.5	2.0	2.0	c8	c9	a8

12

A6586

AA SFM.

~~16~~ 1.5 1.5 neb?~~a9~~

15b 2.0 2.5 2.0

b7 b7 b7

17 2.0 2.0 2.0

b8 b5 b6

18 2.5 2.0 2.0

b10 b9 b10

19a 2.0 2.0 2.0

c9 b7 c8

19b

20 2.5 1.5 2.0

a8 a6 a7

21 2.5 3.5 3.0

b9 a7 a8

22 2.5 2.0 2.5

d7 c6 d6

23 2.0

two ch.

24 2.0 3.0 2.5

c8 c5 c6

25 2.0 2.5 2.5

b10 b8 b9

26 1.5 1.5 1.5

c10 c9 c10

27 2.0 1.5 2.0

c8 b7 b8

28 1.5 1.0 1.0

b10 b8 b9

29 1.5 1.5 1.5

b9 b7 b8

A. 65-86

L.F.M.

L.F.M.

30

5.0

a 3

40°

31

3.5

b 6

32

3.0

c 9

33

2.5

c 8

34

3.5

b 8

35

2.0

b 8

36

3.0

c 9

37

2.0

b 8

38

3.0

c 10

39

2.5

a 8

40

2.0

c 10

41

4.0

c 9

42

3.0

a 8.

43

2.5

a 9

44

2.0

c 9

14

A. 6586

45

3.0

a3

100°

46

3.0

c9

47

2.0

d9

48

2.0

b9

49

3.0

c7

50

1.5

c6

51

2.0

b8

52

1.5

d8

53

2.0

b7

54

2.0

c8

55

3.0

b9

56

2.0

b7

57

2.5

b7

58

3.0

c10

59

5.0

S: b7

A.6586

60	3.0	b8
61	3.5	b10
62	3.0	b8
63	3.0	b8
64	4.0	b8
65	3.0	a9
66	3.0	a9
67	29.5	Lic2
68	4.0	pSc7
69	2.5	c9
70	3.0	b9
71	2.5	b6
72	2.0	b7
73	3.5	pSc8
74	3.0	b7

40°

16

A1586

75

2.0

b8

76

4.0

a10

77

3.0

b8

78

2.5

b7

79

5.0

Lc3

60°

P0

3.0

b9

P1

5.0

c6

P2

2.0

b10

P3

4.0

b9

P4

2.0

c8

P5

4.0

i a7

A6586


NGC 1096

5.0

LC4

40°

18

A. 4124


I.C. 1955	5.0	4.5	5.0 ✓	a9	b8	a9 ✓	60.0 ✓	
I.C. 1960	4.0	5.0	4.5 ✓	b7	c7	c7 ✓	54.0 ✓	
I.C. 1965	5.5	5.0	5.0 ✓	a10	c10	b10 ✓	60.0 ✓	
I.C. 1979	6.0	5.5	6.0 ✓	b4	b5	b5 ✓	72.0 ✓	10°
I.C. 1980	8.0	8.0	8.0 ✓	b4	c5	b4 ✓	96.0 ✓	15°
I.C. 1982	3.0	3.0	3.0 ✓	b8	c9	c9 ✓	36.0 ✓	
I.C. 1987	5.0	5.0	5.0 ✓	c9	c9	c9 ✓	60.0 ✓	
I.C. 1996	4.0	4.0	4.0 ✓	b3	c4	b3 ✓	48.0 ✓	95°
I.C. 1997	5.0	5.5	5.5 ✓	d7	d8	d8 ✓	66.0 ✓	
I.C. 1999	3.0	3.5	3.0 ✓	b8	c6	c7 ✓	36.0 ✓	
I.C. 2010	5.0	5.0	5.0 ✓	c6	d6	c6 ✓	60.0 ✓	
I.C. 2011	6.0	6.0	6.0 ✓	c9	e9	d9 ✓	72.0 ✓	
I.C. 2012	7.5	7.0	7.0 ✓	Lib3	Lib4	Lib3 ✓	84.0 ✓	40°
I.C. 2014	5.5	5.5	5.5 ✓	b7	c7	c7 ✓	66.0 ✓	

A.4124

I.C. 2017	4.0	5.0	4.5 [✓]	b9	id8	icc8 [✓]	54.0 [✓]	
								Concentration off centre
I.C. 2022	14.0	14.5	14.0 [✓]	ic1	ic1	ic1 [✓]	168.0 [✓]	10°
I.C. 2032	8.0	7.0	7.5 [✓]	ib9:	ib8:	ib8:9 [✓]	90.0 [✓]	
								Most peculiar; very faint extension for some distance beyond nucleus on l side
								Faint ring surrounding?
I.C. 2034	8.0	9.0	8.5 [✓]	ib4	cb4	ib4 [✓]	102.0 [✓] 78.0	120°
I.C. 2037	8.5	8.5	8.5 [✓]	Lc4	Ld4	Lc4 [✓]	102.0 [✓] 78.0	100°
I.C. 2038	20.0	20.0	20.0 [✓]	d1	d1	d1 [✓]	240.0 [✓]	150° 150°
								Long spindle, very faint extensions from nucleus along both arms
I.C. 2039	5.5	5.0	5.0 [✓]	c8	c8	c8 [✓]	60.0 [✓]	
I.C. 2049	5.0	6.0	5.5 [✓]	c9	c9	c9 [✓]	66.0 [✓]	
I.C. 2050	18.0	18.0	18.0 [✓]	b2	c2	c2 [✓]	216.0 [✓]	15° 25°
I.C. 2060	2.5 8.0	2.5 8.0	2.5 [✓] 8.0	d7 c5	d7 c5	d7 [✓] c5	30 [✓] 96.0	170°

Re-measured on 15844 when it is not so near the edge.

M.C.C.	3.5	3.5	3.5 [✓]	c10	c10	c10 [✓]	42 [✓]	
1463								
1533	7.0	7.0	7.0 [✓]	f10	f9	f9 [✓]		
								Very brilliant nucleus
1536	8.5	[7.5] not in 88 ² Cp. Book J.	8.0 [✓]	ic6	id6	ic6 [✓]	96.0 [✓]	
1543	10.0	N.B. difference in scale reading	10.0 [✓]	Lc4	Lc4	Lc4 [✓]		100°
								Very brilliant nucleus
1546	7.0	9.0	9.0 [✓]	b3	d4	c4 [✓]		150° 160°

20

A. 41F4

21.66

15°49'.

15°53'

cp

book J

N.B

difference

in scale readings

c6

d6

c6

N.N.

7

~~2.5~~

rejected

b7

5

3.0

b8

2

2.0

b8

9

3.0

4.0

3.5 ✓

b10

b9

b10 ✓

42.0 ✓

10

2.0

3.0

2.0 ✓

a9

b9

b9 ✓

30.0 ✓

25

2.0

3.0

2.5 ✓

a10

b8

a9 ✓

30.0 ✓

11

1.5

rejected

a10

21a

2.0

rejected

a10

21b

1.5

2.5

2.0 ✓

a7

b7

b7 ✓

24.0 ✓

12

2.0

rejected

b9

13

2.0

b8

a

3.0

3.5

3.0 ✓

a10

b10

a10 ✓

36.0 ✓

17

2.0

b7

A.4124

FF	2.0	rejected			c10		
✓ 19	3.0	30	3.0 ✓	36.0 ✓	a9	a8	a9 ✓✓
✓ 20	2.0	35	3.0 ✓	36.0 ✓	a7	b5	a6 ✓✓
✓ 31	1.0	25	2.0 ✓	24.0 ✓	a9	a9	a9 ✓✓
✓ 41	2.0	25	2.5 ✓	30.0 ✓	b9	b9	b9 ✓✓
47					c10	not a neb.	
✓ 119	3.0	30	3.0 ✓	36.0 ✓	a8	a8	a8 ✓✓
✓ 2	3.0	40	3.5 ✓	42.0 ✓	b4	b4	b4 ✓✓
✓ 121	3.0	30	3.0 ✓	36.0 ✓	b6	b8	b7 ✓✓
✓ 120	1.5	2.0	2.0 ✓	24.0 ✓	b10	b10	b10 ✓✓
123	0.5				defect		
✓ 122	2.0	30	2.5 ✓	30.0 ✓	b7	c8	b8 ✓✓
✓ 124	1.5	2.5	2.0 ✓	24.0 ✓	b8	b8	b8 ✓✓
✓ 125	1.5	20	1.5 ✓	18.0 ✓	b9	b10	b9 ✓✓

Concentration off centre

Concentration off centre

0°
190°

22

A. 4164

✓ 126	1.5	1.5	1.5 [✓]	18.0 [✓]	f10	f10	f10 ^{✓✓}
✓ 129	1.5	2.0	2.0 [✓]	24.0 ^{✓✓}	b8	c7	c7 ^{✓✓}
51	2.0	rejected			b7		
42	defect						
8	2.5	rejected			b7		
45	2.0	"			b6		
49	2.0	"			b70		
44b	1.5	"			b9		
113	1.5	"			a9		
115	2.0	"			a9		
✓ 114	3.0	2.5	3.0 [✓]	36.0 [✓]	b9	b9	b9 [✓]
✓ 116	1.5	2.0	2.0 [✓]	24.0 [✓]	c10	c9	c10 ^{✓✓}
41	2.0	duplicate g.p.	2.0 [✓]	24.0 [✓]	b7		
52	2.0	rejected			b10		
53	1.5	"			a8		

A.41F4

star: cf A14299
~~55~~ ~~2.0~~~~67~~

✓ 34	1.5	2.5	2.0 ✓	24.0 ✓	a10	b10	✓ a10
------	-----	-----	-------	--------	-----	-----	----------

44	2.0	rejected			67		
----	-----	----------	--	--	----	--	--

48	2.5	..			at		
----	-----	----	--	--	----	--	--

103	1.5	not found			c10		
-----	-----	-----------	--	--	-----	--	--

✓ 48	1.5	2.0	1.5 ✓	18.0 ✓	b10	c10	✓ c10
------	-----	-----	-------	--------	-----	-----	----------

✓ 46	2.0	2.0	2.0 ✓	24.0 ✓	b10	b10	✓ b10
------	-----	-----	-------	--------	-----	-----	----------

✓ 45	1.5	2.0	2.0 ✓	24.0 ✓	a10	b9	✓ a9
------	-----	-----	-------	--------	-----	----	---------

229	1.5	rejected			b10		
-----	-----	----------	--	--	-----	--	--

46	2.0	..			67		
----	-----	----	--	--	----	--	--

59	2.0	star			a7		
----	-----	------	--	--	----	--	--

✓ f	5.0	5.5	5.0 ✓	60.0 ✓	ias	c67	✓ i68
-----	-----	-----	-------	--------	-----	-----	----------

e	3.0	rejected			67		
---	-----	----------	--	--	----	--	--

✓ 928	3.5	3.5	3.5 ✓	42.0 ✓	a9	c8	✓ b8
-------	-----	-----	-------	--------	----	----	---------

24

4.4124

95	1.5	rejected		f10			
✓ 94	3.5	3.5	3.5 ✓ 42.0 ✓	b9	c8	b9 ✓	
93	1.0	star		c10			
92	1.0	rejected		c10			
91	1.5			b9			
90	1.5			b9			
89	2.0			sp			
✓ 88	3.0	4.0	3.5 ✓ 42.0 ✓	ia9	ib10	ib10 ✓	
87	4.5	rejected		a9			40°
✓ 61	4.0	5.0	4.5 ✓ 54.0 ✓	a7	c6	b7 ✓	
✓ 62	3.5	4.0	4.0 ✓ 48.0 ✓	a8	c8	b8 ✓	
✓ 63	4.0	5.0	4.5 ✓ 54.0 ✓	a9	b9	a9 ✓	
✓ 64	3.0	4.0	3.5 ✓ 42.0 ✓	a8	a8	a8 ✓	
✓ 65	3.0	3.5	3.0 ✓ 36.0 ✓	ba	c9	c9 ✓	

A. 41F4

✓ 66	2.0	2.5	2.5 ✓	38.0 ✓	a 9	b 8	✓ a 9 ✓
✓ 72	3.0	3.5	3.0 ✓	36.0 ✓	a 9	b 8	✓ b 8 ✓
✓ 71	3.0	3.0	3.0 ✓	36.0 ✓	b 10	c 9	✓ b 10 ✓
70	3.0	rejected			Lid 2		70°
69	2.0		"		a 9		
68	2.5		"		a 9		
✓ 67	3.0	3.0	3.0 ✓	36.0 ✓	b 10	b 10	✓ b 10 ✓
154	2.0	rejected			a 9		
✓ 153	2.5	3.5	3.0 ✓	36.0 ✓	i b 8	i c 9	✓ i c 9 ✓
✓ 152	2.0	2.0	2.0 ✓	24.0 ✓	b 9	b 10	✓ b 9 ✓
✓ 151	3.5	3.5	3.5 ✓	42.0 ✓	a 7	c 7	✓ b 7 ✓
✓ 91	1.0	2.0	1.5 ✓	18.0 ✓	b 9	b 8	✓ b 8 ✓
✓ 8	2.5	2.5	2.5 ✓	30.0 ✓	b 8	c 8	✓ b 8 ✓
✓ 90	2.0	2.0	2.0 ✓	24.0 ✓	b 8	c 9	✓ c 8 ✓

26

A.41P4

✓ 89	3.0	4.5	4.5 ✓	Lib3	Lid4	L:c 4 ✓✓✓	18° 54.0 ✓
✓ 107	2.0	= 6 (blue) in cluster		210	b9		
		conv # 14299. marks there					
✓ 108	1.5	= 4 (blue) as above		210	c10		
109	1.5			b9			
110	1.0			b10			
111	1.5			c10			
112	2.0			c10			
115	1.0			b10			
126	2.0			b10			
✓ 96	2.0	(blue)	= 11 on 17 14299 (cluster)		210	b9	
		marks there					
✓ 97	1.5	= 10 (blue) as above		b9	b10		
✓ 98a	2.0	2.0	2.0 ✓	b10	c9	b9 ✓✓	24.0 ✓
101	1.5			c10			
104	1.0			c9			

A.4144

✓ 99	2.0	2.5	2.0 ✓ 24.0	a9	b9	a9 ✓
† 100	† 99 = no. 14 (blue) on cluster 14299. Use class. then			b9	b9	
✓ 144	2.0	3.0	2.5 ✓ 30.0	c9	d7	d8 ✓
✓ 145	1.0	2.0	1.5 ✓ 18.0	b7	b8	b8 ✓
✓ 146	2.5	2.5	2.5 ✓ 30.0	c10	c10	c10 ✓
✓ 147	1.0	1.5	1.5 ✓ 18.0	b10	b10	b10 ✓
✓ 148	2.0	3.0	2.5 ✓ 30.0	b10	b9	b10 ✓
✓ 150	1.5	2.5	2.0 ✓ 24.0	c9	d10	c10 ✓
✓ 151	1.5	2.0	1.5 ✓ 18.0	b10	b10	b10 ✓
✓ 152	2.0	3.0	2.5 ✓ 30.0	b9	b9	b9 ✓
† 153	2.0			f10		
✓ 159	1.5	2.0	2.0 ✓ 24.0	b10	b10	b10 ✓
✓ 158	2.0	2.5	2.0 ✓ 24.0	a7	c7	b7 ✓
✓ 9	3.0	3.0	3.0 ✓ 36.0	a10	a10	a10 ✓

Hard; stellar

28

A.41P4

160	2.0			b10				
161	2.5			b9				
✓ 165	2.0	2.0	2.0 ✓	a8	b8	b8 ✓	24.0 ✓	
164	2.0	rejected		b8				
✓ 163	2.0	2.5	2.5 ✓	b10	b10	b10 ✓	30.0 ✓	
162	1.5	star		b10				
161	2.0	star		b9				
166	1.0	rejected		b10				
167	2.0			b8				
✓ 168	3.0	3.5	3.5 ✓	a8	a6	b7 ✓	42.0 ✓	
✓ 169	1.5	2.0	1.5 ✓	a10	b10	a10 ✓	18.0 ✓	
✓ 170	2.0	3.0	3.0 ✓	a8	b8	b8 ✓	36.0 ✓	
✓ 171	2.0	2.0	2.0 ✓	b9	b10	b9 ✓	24.0 ✓	
172	2.0	rejected		a10				

A.41F4

173	1.5	rejected		a9			
✓141	2.0	2.5	2.0 ✓	a9	c9	b9 ✓	24.0 ✓
✓142	3.0	3.0	3.0 ✓	b9	d8	c8 ✓	36.0 ✓
174	1.5	rejected		d10			
✓139	1.0	2.0	2.0 ✓	c10	c8	c9 ✓	24.0 ✓
✓140	2.0	2.0	2.0 ✓	a9	b10	a9 ✓	24.0 ✓
✓136	2.0	3.0	2.5 ✓	a9	b9	b9 ✓	30.0 ✓
✓135	1.0	2.0	1.5 ✓	b9	b9	b9 ✓	18.0 ✓
175	2.0			a9			
✓130	2.0	2.0	2.0 ✓	b10	c10	b10 ✓	12.0 ✓
176	2.0			d10			
✓133	4.0	4.0	4.0 ✓	b9	b9	b9 ✓	48.0 ✓
✓132	2.5	2.5	2.5 ✓	b9	b10	b9 ✓	30.0 ✓
177	2.5	rejected		i66			

A.41F4

								u.fanc
217	2.5	rejected	bs					
✓ 219	3.0	3.0	3.0 ✓	b5	c5	c5 ✓✓	20°	✓ 36.0
✓ 220	4.0	4.0	4.0 ✓	b10	b10	b10 ✓✓		✓ 48.0
✓ 221	2.0	3.0	2.5 ✓	c9	c9	c9 ✓		✓ 30.0
✓ 222	3.0	3.0	3.0 ✓	b5	a5	b5 ✓✓	25°	✓ 36.0
✓ 2	3.5	3.5	3.5 ✓	a8	b6	b7 ✓✓		✓ 42.0
✓ 1	3.0	3.5	3.0 ✓	a9	b7	a8 ✓✓		✓ 36.0
215	2.0	rejected	fr					
✓ 216	2.0	2.5	2.5 ✓	a8	c9	b9 ✓		✓ 30.0
✓ 218	2.0	2.5	2.0 ✓	a9	c10	b9 ✓✓		✓ 24.0
214	2.0	rejected	b7					
✓ 213	3.0	3.0	3.0 ✓	b7	d5	c6 ✓✓		✓ 36.0
212			double star					
211	2.0	rejected	as					
✓ 209	1.5	2.0	2.0 ✓	b8	b9	b9 ✓✓		✓ 24.0

A. 4124

✓ 207	3.5	4.0	3.5 ✓	a 10	b 9	b 10 ✓	42.0 ✓
206	2.0	rejected		d 7			
p	1.5	"		b 5			30.0
204	1.5	star		b 9			
✓ 205	1.0	2.0	1.5 ✓	b 10	c 10	b 10 ✓	18.0 ✓
✓ 209	3.0	3.5	3.5 ✓	a 8	b 8	b 8 ✓	42.0 ✓
✓ 0	4.0	4.0	4.0 ✓	f 10	f 9	f 9 ✓	48.0 ✓
202	1.5			b 9			
188	2.0	star		a 8			
✓ 185	2.0	3.0	2.5 ✓	a 7	b 6	a 7 ✓	30.0 ✓
✓ 184	2.0	2.5	2.0 ✓	b 9	b 8	b 8 ✓	24.0 ✓
181	1.5	rejected		d 10			
✓ 177	3.0	4.0	3.5 ✓	i a 6	i c 4	i b 5 ✓	155° 42.0 ✓
				Concentration off centre			
✓ 176 a }	3.0	3.0	3.0 ✓	a 7	c 9	b 8 ✓	36.0 ✓
Double in contact							
✓ 176 b }	3.0	3.5	3.5 ✓	b 7	c 8	c 7 ✓	42.0 ✓
176 c }	2.0	2.0	2.0 ✓	b 9	b 9	b 9 ✓	24.0 ✓

A. 4124 & A. 3339

✓ 175	3.0	2.5	3.0 ✓	a 10	b 10	✓ a 10 ✓	✓ 36.0
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174	1.5	rejected		b 10			
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230	2.0	"		a 9			
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A	2.5	"		b 9			
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All nebulae in purple () to be classified on 14272

A. 3339

343	1.0	class. on 14269 (cl.)		a 10			
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322	2.0	" " 14272		a 9			
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323	2.0	rejected		a 6			
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324	1.5	"		b 9			
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342	2.0	class. on 14272		a 9			
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341	1.5	"		a 10			
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340a	1.0	"		A 7			
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325	2.0	"		c 10			
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(10) 339a	1.5	"		a 9			
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(11) 349b	2.0	"		a 6			
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A. 8339

(23) 330 2.5 class 14272 a6

(22) 331 2.0 " c10

(21) 332 2.0 " c10

(20) 333 2.0 " c7

(19) 334 2.0 " b9

(18) 335 2.0 " b9

(12) 336 2.0 " a9

337 4.0 b6

338 2.0 rejected c9

339 1.0 class 14272 c10

340 1.5 class 14269 c9

340b 1.0 rejected a10

261 3.5 " b9

260 2.5 2.5 2.5 c9 b8 c7 300

rejected

262 3.0 class 14272 c9

34

A.3339

	265	1.5	class 14272	c9		
	264	2.0	rejected	b9		
(28)	266	6.5	class 14272	f5+	upper half faintly ringed?	70°
(29)	269	2.0	"	a9		
(27)	269	2.0	"	a9		
	268	2.0		b9		
(15)	270	2.0	class 14272	b9		
(14)	271	4.0	"	a9		
	272	2.0		a10		
	279a	4.0	?	a9		
	282	3.0	class 14272	b9		
	301	2.0	class 14269	a9		
	300	7.5	"	b10		
	309	1.5	"	d7		
	303	1.5	"	f9		

A3339

303	1.5	"		b8		
304	1.0	"		c10		
309	1.5	"		a10		
308	1.5	"		c10		
312	1.5	"		c10		
311	1.5	"		a9		
322	1.5	"		b10		
211	2.0	2.5	2.0 [✓] 24.0 [✓]	b6	c8	c7 ^{✓✓}
212	1.0			<u>a10</u>		
213	not a nebula					
299	"					
298	1.5	2.0	2.0 [✓] 24.0 [✓]	b10	a8	b9 ^{✓✓}
214	1.5	2.5	2.0 [✓] 24.0 [✓]	c10	c9	c9 ^{✓✓}
222	defect					

36

A.3339

215	1.5	class. 14269		c10			
221	2.0			c5			85°
223	1.5			b4			
220	1.5	"		c8			
215	1.5			c9			
219	2.0	class. 14269		d10			
217	1.5	"		c10			
216	2.5	"		LC 5			20°
✓ 192	2.0	2.5	2.0 ✓ 24. ✓	b8	c8	✓ c 8 ✓	
✓ 191	2.0	3.0	2.5 ✓ 30. ✓	b9	c9	✓ b 9 ✓	
313	1.5	class. 14269		b9			
305	1.0			c10			
306	2.0	class. 14269		a9			
307	1.5	"		f10			
317	1.5	"		b10			

A.3339

316	1.0	class 14269	b10
285	1.5	"	d7
284	1.5	"	a9
286	1.5	"	b9
289	1.5	"	d9
288	2.0	"	b10
283	1.0	"	d10
249	1.5	"	c9
279	1.5		b9
281	1.0	rejected	c10
280	2.0	class 14269	d10
282	2.5	"	d6
305		not a sub.	
314	1.5	class 14269	c9
346	1.5	"	b10

4.3339

277	2.0	class 14269			CP		
27P	2.5	"			CP		
(16) 276	2.0	"			C9		
275	2.5	"			CP		
290	2.0	"			C9		
347	1.5	"			B9		
274	3.0	"			A10		
273	2.0	"			B7		
✓ 177	1.0	1.5	1.5 ✓	18.0 ✓	B10	C10	✓ ✓ C10
✓ 176	2.0	3.0	2.5 ✓	30.0 ✓	B7	C7	✓ ✓ B7
✓ 209 a	1.0	2.0	1.5 ✓	18.0 ✓	B9	C9	✓ ✓ C9
✓ 17F	3.0	3.0	3.0 ✓	38.0 ✓	A7	A6	✓ ✓ A7
126	not a nebula						
16P	" " "						
✓ 125 a	1.5	2.0	1.5 ✓	18.0 ✓	C9	C9	✓ ✓ C9

A3339

✓ 125A	3.5	3.5	3.5 ✓	42.0 ✓	b7	d6	c7 ✓
170	2.0		class 14269		a9		
169	1.5		"		a10		
118	1.5		"		a10		
117	1.5		"		b9		
179	1.0		"		b10		
110	1.5		"		c10		
109	1.5		"		b9		
391	1.0		"		b10		
131	not a nebula						
389							
✓ 133	1.5	2.0	2.0 ✓	24.0 ✓	b8	a8	b8 ✓
✓ 134	1.5	2.0	1.5 ✓	18.0 ✓	b10	b9	b9 ✓
✓ 130	1.5	2.0	2.0 ✓	24.0 ✓	c10	c10	c10 ✓
✓ 40A	1.0	2.0	1.5 ✓	18.0 ✓	b9	b9	b9 ✓

A.3339

✓ 129	2.0	2.5	2.0 ✓	24.0 ✓	a8	a9	a 8 ✓ ✓
✓ 104	1.5	2.5	2.0 ✓	24.0 ✓	b10	c10	c 10 ✓ ✓
✓ 106	2.5	2.5	2.5 ✓	30.0 ✓	a10	b9	a 9 ✓ ✓
111	1.5	rejected			b10		
a8	1.5	class 14269			c10		
a7	1.5	"			d9		
a6	1.5	"			c10		
a5	2.0	"			a9		
91	1.5				b10		
91	2.0				a9		
a9	1.5	class 14269			b10		
120 a	1.0	"			a9		
119	2.0	"			a8		
350	1.5	"			c9		
✓ 206	3.0	2.5	2.5 ✓	30.0 ✓	a7	a8	a 7 ✓ ✓

4.3339

229	7.0	rejected			dro		
174	3.0	4.0	3.5 [✓]	42.0 [✓]	b9	c10	c10 ^{✓✓}
✓172	2.0	2.5	2.0 [✓]	26.0 [✓]	c9	c9	c9 ^{✓✓}
✓209 b	2.5	3.0	3.0 [✓]	36.0 [✓]	a9	b9	a9 ^{✓✓}
✓120 b	1.5	2.5	2.0 [✓]	24.0 [✓]	c9	b10	b9 ^{✓✓}
252	2.0	class 14269			c7:		
251	2.0				a9		
171	2.0	class 14269			b8		
72	2.0				a9		
P1	2.5	class 14269			b10		
92	2.0	"			a8		
P2	2.0	"			b9		
P3	2.0	"			a10		
P4	1.5	"			a10		
85	3.0	"			a8		

A.3339

70	2.0	class 14269	a 9
71	2.0	"	b 9
69	1.5	"	b 10
68	2.0		a 8
67	1.5		c 9
72	1.5		d 10
73	2.0	class 14269	d 9
76	1.5	"	c 9
75	2.0	"	a 10
416	2.5	"	c 7
417	2.0	"	c 9
418	2.0	"	c 8
35C	2.0	"	b 9
65	2.0		a 9
66	1.5	class 14269	c 8

A. 3339

54	1.5	class 14269	C9			
✓ 55	2.0	2.5	2.0 ✓ 240	b9	C10	b10 ✓✓
✓ 205	1.0	2.0	1.0 ✓ 180	C8	b9	b8 ✓✓
<u>203</u>	<u>2.0</u>			C9		
204	1.5			b9		
✓ 419	2.0	2.5	2.0 ✓ 300	C9	C9	C9 ✓✓
✓ 202	1.5	2.0	1.0 ✓ 180	b8	a8	b8 ✓✓
✓ 175	1.5	2.0	2.0 ✓ 240	b9	C8	C8 ✓✓
✓ 201	1.5	2.0	1.0 ✓ 180	C9	C7	C8 ✓✓
193	2.0	rejected		a9		
344	1.5	class 14272		b9		
326	2.0	"		b8		
342	1.5	"		a8		
a	2.0	"		a9		
b	2.0	"		a10		

A. 3339

(17) 265 ^{possibly} 2 stars?	2.0	class 14272	a10			
244	3.5	rejected	a10			
245	2.5	"	b9	near edge of plate: images somewhat elongated		
327	3.0	class 14272	b9	elongation of images allowed for in classification		
c	3.0	"	b9			
✓ 293	1.5	2.0	2.0 ✓ 24.0	c9	b8	✓ c9 ✓
✓ 258	3.0	4.0	3.0 ✓ 42.0	a7	c8	✓ b8 ✓
✓ 257	2.5	3.5	3.0 ✓ 36.0	b10	a10	✓ a10 ✓
✓ 259 a	2.0	2.0	2.0 ✓ 24.0	c10	c10	✓ c10 ✓
✓ 329	1.5	2.5	2.0 ✓ 24.0	c9	c10	✓ c9 ✓
✓ 256	2.0	3.0	2.0 ✓ 30.0	b10	b9	✓ b9 ✓
✓ 194.	2.0	2.0	2.0 ✓ 24.0	a9	b10	✓ a9 ✓
✓ 224	4.5	4.5	4.5 ✓ 54.0	e6	f5	✓ f5 ✓ 60°
✓ 296	2.5	3.0	2.0 ✓ 30.0	a10	b9	✓ a10 ✓
✓ 195	1.5	2.5	2.0 ✓ 24.0	d9	f10	✓ e10 ✓

A.3339

✓ 196	3.5	2.5	3.0 ✓	3.6 ✓	b9	b10	b9 ✓
✓ 189	2.0	3.0	2.5 ✓	3.0 ✓	a8	b8	b8 ✓
✓ 197	2.0	2.5	2.5 ✓	3.0 ✓	a10	c10	b10 ✓
✓ 199	2.0	3.0	2.5 ✓	3.0 ✓	a10	c9	b9 ✓
200	2.0				b9		
198	3.0	duplicated p. 48			a8		
✓ 184	3.0	4.0	3.5 ✓	4.2 ✓	b9	b8	b9 ✓
196	2.5				b10		
195	5.0				c4		
✓ 225 b	4.0	5.0	4.0 ✓	5.4 ✓	p5 c10	p5 d8	p5 c9 ✓
✓ 226	3.0	3.5	3.0 ✓	3.6 ✓	b6	c6	c6 ✓
✓ 254	2.0	2.5	2.5 ✓	3.0 ✓	c10	c10	c10 ✓
2496					star		
259 b	2.0	class 14269			a9		
292	1.5				a10		

70°

A.3339

260	2.5	duplicate, cf. p. 35	608			
255	3.0	cf. 4179	612	cf. 4179		
80	1.5	class 14269	a10			
116	1.2	rejected	116			
79	2.0	class 14269	b10			
✓ 190	2.0	20	2.0 ✓ 24.0	a8	a8	✓ ✓ a8
✓ 349	2.0	25	2.0 ✓ 24.0	a10	a8	✓ ✓ a9
✓ 297	1.5	20	2.0 ✓ 24.0	a9	b9	✓ ✓ a9
✓ 115	3.5	35	3.5 ✓ 42.0	b9	c9	✓ ✓ c9
✓ 121	1.5	25	2.0 ✓ 24.0	a10	c10	✓ ✓ c10
✓ 96	2.0	25	2.0 ✓ 24.0	a9	b10	✓ ✓ a10
✓ 95	2.0	25	2.5 ✓ 30.0	a10	c9	✓ ✓ b10
✓ 183	2.0	30	2.5 ✓ 30.0	b10	c9	✓ ✓ c9
✓ 182	2.0	30	2.5 ✓ 30.0	a10	b10	✓ ✓ a10
✓ 78	1.5	25	2.0 ✓ 24.0	a9	c9	✓ ✓ b9

A.3339

✓ 114	1.5	2.5	2.0 ✓	2.40 ✓	a10	b9	b9 ✓
✓ 351	2.0	3.0	2.5 ✓	3.00 ✓	a9	c8	b9 ✓
47	2.0				a6		
✓ 127	1.5	2.5	2.0 ✓	2.40 ✓	a10	c9	b9 ✓
121	2.0				a9		
✓ d	4.0	4.0	4.0 ✓	4.80 ✓	b9	a8	b9 ✓
✓ 10	4.5	4.5	4.5 ✓	5.40 ✓	a8	c8	b8 ✓
✓ 47	4.0	4.0	4.0 ✓	4.80 ✓	b8	b9	b8 ✓
53	2.0		rejected		a10		
✓ 51	2.5	2.5	2.5 ✓	3.00 ✓	b9	b7	b7 ✓
52	2.0				b9		
✓ 50	11.0	11.0	11.0 ✓	132.0 ✓	Lb4	Lc5	Lc4 ✓
✓ 46	5.0	5.0	5.0 ✓	6.00 ✓	c9	c8	c8 ✓
✓ 49	4.0	4.0	4.0 ✓	4.80 ✓	b7	c7	b7 ✓
✓ 11	4.0	5.0	4.5 ✓	5.40 ✓	a7	c7	b7 ✓

15°

A.3339

✓ 3P3	4.5	40	4.5 ✓	54.0 ✓	b7	c7	c7 ✓✓
✓ 45	3.0	40	3.5 ✓	42.0 ✓	a10	b9	a10 ✓✓
✓ 7	3.0	35	3.5 ✓	42.0 ✓	b8	b7	b7 ✓✓
✓ 3P4	4.0	40	4.0 ✓	48.0 ✓	a10	a8	a9 ✓✓
✓ 36	2.5	35	3.0 ✓	36.0 ✓	bP	c8	c8 ✓✓
5P	2.5	rejected			b7		
✓ 407	2.0	25	2.0 ✓	24.0 ✓	cP	c9	c8 ✓✓
✓ 356	1.5	20	2.0 ✓	24.0 ✓	a9	b9	a9 ✓✓
✓ 13P	3.0	40	3.5 ✓	42.0 ✓	aP	c9	b9 ✓✓
✓ 19P	2.5	30	2.5 ✓	30.0 ✓	e9	c10	d9 ✓✓
✓ 136	1.5	20	2.0 ✓	24.0 ✓	a10	b9	b9 ✓✓
✓ 107	3.5	35	3.5 ✓	42.0 ✓	e9	c9	d9 ✓✓
137	2.0	rejected			e10		
304	2.0	class 14269			i c8		
✓ 99	3.0	35	3.0 ✓	36.0 ✓	b8	b6	b7 ✓✓

A.3339

33	3.0				29		
✓32	2.0	3.0	2.5 ✓	30.0 ✓	c10	c10	✓✓ c10
✓35b	5.0	5.0	5.0 ✓	60.0 ✓	b9	c9	✓✓ b9
✓40	4.0	3.5	3.5 ✓	42.0 ✓	a8	a9	✓✓ a8

100

✓387	3.0	3.5	3.0 ✓	36.0 ✓	b4	c5	✓✓ c5
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40°

144a	2.0				610		
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344	2.0				c9		
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✓113	3.0	3.5	3.5 ✓	42.0 ✓	a6	b6	✓✓ a6
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✓103	3.5	4.0	3.5 ✓	42.0 ✓	a9	c8	✓✓ b9
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✓390	3.0	2.5	2.5 ✓	30.0 ✓	b8	b8	✓✓ b8
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100	2.0	injected			610		
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✓105	2.0	3.0	2.5 ✓	30.0 ✓	c10	d9	✓✓ d9
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✓104 b	2.0	3.0	2.5 ✓	30.0 ✓	e10	c9	✓✓ d10
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37	2.0	injected			a9		
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50

A.3339

✓ 39 b	5.0	5.0	5.0 ✓	60.0 ✓	a8	a8	✓✓ a8
✓ 41	3.0	4.0	3.5 ✓	42.0 ✓	b10	c9	✓✓ b9
✓ 42	3.5	3.5	3.5 ✓	42.0 ✓	a10	c9	✓✓ b10
45	retar				b8		
42	4.5	rejected			b10		
46	3.0	"			b3		30°
✓ 64	3.0	3.0	3.0 ✓	36.0 ✓	a10	b9	✓✓ b9
✓ 44	5.0	5.0	5.0 ✓	60.0 ✓	b7	c9	✓✓ b8
45	3.0	rejected			b10		
47	3.0	"			b7		
✓ 12 a	4.0	4.0	4.0 ✓	48.0 ✓	a10	b8	✓✓ a9
✓ 61	2.0	3.0	2.5 ✓	36.0 ✓	b9	c9	✓✓ b9
42	4.0				b10		
35 a	3.0	3.0	3.0 ✓	36.0 ✓	a7	a7	✓✓ a7
✓ 56	3.0	4.0	3.5 ✓	42.0 ✓	b7	b7	✓✓ b7

A.3339

✓ 57	1.5	2.5	2.0 ✓	24.0 ✓	a10	c9	b10 ✓✓
✓ 459	2.0	3.0	2.5 ✓	30.0 ✓	b10	c9	c9 ✓✓
30	2.0	class. 14269			a9		
555	2.0	rejected			a9		
✓ 29	3.5	3.5	3.5 ✓	42.0 ✓	b10	b10	b10 ✓✓
413	2.0	rejected			a10		
✓ 143	1.0	2.5	1.0 ✓	12.0 ✓	b10	c10	b10 ✓✓
✓ 149	2.0	3.0	2.5 ✓	30.0 ✓	a10	b9	b10 ✓✓
413	1.0				b10		
✓ 25	2.0	2.5	2.5 ✓	30.0 ✓	a9	a9	a9 ✓✓
229	1.5	rejected			b10		
✓ 24	3.0	3.5	3.5 ✓	42.0 ✓	a10	c9	b10 ✓✓
230	1.5	rejected			b10		
✓ 231	3.5	3.5	3.5 ✓	42.0 ✓	b9	b8	b8 ✓✓
232	1.5	rejected			b9		

A.3339

X 239	2.0				209		
244	1.5		rejected		210		
✓ 363	2.0	3.0	2.5 ✓ 3.0 ✓	a8	b9	a9 ✓✓	
✓ 414	3.0	2.5	3.0 ✓ 3.0 ✓	a10	a9	a10 ✓✓	
✓ 369	2.0	2.5	2.5 ✓ 3.0 ✓	b10	b10	b10 ✓✓	
23	1.5		rejected	29			
22	3.5	3.0	3.5 ✓ 4.2 ✓	i68	ic8	ic8 ✓✓✓	
21	2.0		rejected	a10			
✓ 2	3.0	3.5	3.5 ✓ 4.0 ✓	b7	c7	b7 ✓✓	
224				star			
✓ 225 a	3.0	3.0	3.0 ✓ 3.0 ✓	a9	a7	a8 ✓✓	
226	2.0		rejected	29			
4	2.0			29			
27	3.0			26			
28	2.5			28			

A.3339

✓ 245	1.5	2.5	2.0 ✓	24.0 ✓	a 10	ag	a 9 ✓
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2A	6.0	rejected			isab.		
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✓ 6	2.5	3.0	2.0 ✓	30.0 ✓	a 10	b8	a 9 ✓
-----	-----	-----	-------	--------	------	----	-------

✓ 5	3.5	4.0	4.0 ✓	48.0 ✓	a 7	c6	b 7 ✓
-----	-----	-----	-------	--------	-----	----	-------

✓ 247	2.0	2.0	2.0 ✓	24.0 ✓	a 10	c9	b 9 ✓
-------	-----	-----	-------	--------	------	----	-------

✓ 140	1.5	2.5	2.0 ✓	24.0 ✓	c 10	c 10	c 10 ✓
-------	-----	-----	-------	--------	------	------	--------

✓ 139	1.5	2.5	2.0 ✓	24.0 ✓	b 10	c 10	b 10 ✓
-------	-----	-----	-------	--------	------	------	--------

✓ 371	1.0	2.0	1.5 ✓	18.0 ✓	b 10	b9	b 10 ✓
-------	-----	-----	-------	--------	------	----	--------

✓ 373	1.5	2.0	1.5 ✓	18.0 ✓	b9	b 10	b 10 ✓
-------	-----	-----	-------	--------	----	------	--------

✓ 144	2.0	2.0	2.0 ✓	24.0 ✓	c 10	c 10	c 10 ✓
-------	-----	-----	-------	--------	------	------	--------

390	1.5	rejected			a 10		
-----	-----	----------	--	--	------	--	--

✓ 248	3.0	3.0	3.0 ✓	36.0 ✓	a 10	b9	b 10 ✓
-------	-----	-----	-------	--------	------	----	--------

Star of 1914269

✓ 412	1.5	2.0	2.0 ✓	24.0 ✓	a 9	b8	a 8 ✓
-------	-----	-----	-------	--------	-----	----	-------

250	1.0	rejected			d7		
-----	-----	----------	--	--	----	--	--

✓ 148	1.5	2.0	1.5 ✓	18.0 ✓	b 10	b 10	b 10 ✓
-------	-----	-----	-------	--------	------	------	--------

54

A. 3339

✓ 358	2.0	1.5	1.5 ✓	18.0 ✓	b10	a8	a9 ✓✓	
✓ 161	1.5	2.0	1.5 ✓	18.0 ✓	c10	c10	c10 ✓✓	
✓ 162	1.0	2.0	1.5 ✓	18.0 ✓	d10	b9	c10 ✓✓	
✓ 359	2.0	2.5	2.5 ✓	30.0 ✓	d6	b5	c5 ✓✓	45°
✓ 375	1.0	2.0	1.5 ✓	18.0 ✓	c10	c10	c10 ✓✓	
✓ 163	1.5	2.0	1.5 ✓	18.0 ✓	c10	b10	c10 ✓✓	
161	1.0	rejected			c9			
117	1.5				b9			
166	2.0				b7			
✓ 165	4.0	4.0	4.0 ✓	48.0 ✓	e5	e5	e5 ✓✓	70°
127	1.5	rejected			c10			
✓ 128	2.0	2.0	2.0 ✓	24.0 ✓	c9	b9	b9 ✓✓	
409	1.5	rejected			b7			
✓ 142	2.0	1.5	1.5 ✓	18.0 ✓	b9	b10	b9 ✓✓	
✓ 141	1.5	2.0	1.5 ✓	18.0 ✓	b8	c9	b9 ✓✓	

<u>A. 3339</u>							
✓ 158	2.0	2.0	2.0 [✓]	240 [✓]	b10	c10	c10 ^{✓✓}
✓ 164	2.0	3.0	2.5 [✓]	30.0 [✓]	Ld4	Ld5	244 ^{✓✓}
f	3.0				a7		
✓ 249	2.5	3.0	3.0 [✓]	36.0 [✓]	c8	c8	c8 ^{✓✓}
✓ 402	1.5	1.5	1.5 [✓]	18.0 [✓]	c10	b10	c10 ^{✓✓}
372	1.0	rejected			c9		
✓ 360	2.0	2.0	2.0 [✓]	240 [✓]	b9	c10	c10 ^{✓✓}
✓ 395	2.0	2.5	2.0 [✓]	240 [✓]	c10	c10	c10 ^{✓✓}
410	2.0	rejected			c9		
✓ 411	1.0	2.0	1.5 [✓]	18.0 [✓]	c10	b10	c10 ^{✓✓}
✓ 396	1.0	2.0	1.5 [✓]	18.0 [✓]	d10	c10	c10 ^{✓✓}
✓ 366	4.0	4.0	4.0 [✓]	48.0 [✓]	c9	c8	c9 ^{✓✓}
✓ 365a	1.5	2.0	2.0 [✓]	24.0 [✓]	c10	b10	c10 ^{✓✓}
✓ 361	1.5	2.5	2.0 [✓]	24.0 [✓]	a9	b9	b9 ^{✓✓}
✓ 362	1.5	2.5	2.0 [✓]	24.0 [✓]	a10	b10	a10 ^{✓✓}

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A.3339

✓39F

	1.0	2.0	1.5 ✓	C10	C10	✓✓ C10	no fac 18.0
✓147	1.5	2.0	1.0 ✓	b2	b9	✓✓ b9	18.0
✓364	2.0	2.0	2.0 ✓	a10	b10	✓✓ b10	24.0
452	2.0			a2			
✓232	2.0	2.5	2.5 ✓	b2	c7	✓✓ b2	30.0 24.0
397	1.5	rejected		b10			
369	2.0			b9			
456	2.0			a10			
✓234	2.0	2.5	2.0 ✓	a10	a8	✓✓ a9	24.0
17	2.0	rejected		b10			
247	2.0			a9			
155	2.5			b9			
21	2.0	rejected		b7			
542	2.5			c9			
240	2.0	rejected		a2			

A.3339

~~233~~~~2.5~~~~a10~~

3

3.0

3.5

3.5[✓] 42.0[✓]

a10

c9

b9^{✓✓}

✓1

3.0

4.0

3.5[✓] 42.0[✓]

c8

c8

c8^{✓✓}

✓12 b

3.0

4.0

3.5[✓] 42.0[✓]

c7

c7

c7^{✓✓}

In contact with star

~~454~~~~2.0~~

rejected

~~c9~~~~401~~~~2.0~~

"

~~b9~~

✓19

5.0

5.0

5.0[✓] 60.0[✓]

a8

a9

a8^{✓✓}~~16~~~~3.5~~

rejected

~~b8~~

✓9

2.0

2.5

2.0[✓] 24.0[✓]

a9

c8

b8^{✓✓}

✓368

2.0

2.5

2.5[✓] 30.0[✓]

b10

c10

c10^{✓✓}

✓365 b

2.0

2.0

2.0[✓] 24.0[✓]

b10

c9

b10^{✓✓}

400

1.5

class 3346

a10

399

1.5

"

a9

~~153~~~~1.5~~

rejected

~~b8~~~~151~~~~1.5~~~~a9~~

A. 3339

447	1.5				ad		
450	2.0		rejected		ag		
451	4.0	40	4.0 [✓]	48.0 [✓]	ag	c8	ad ^{✓✓}
452	2.0		rejected		bid		
I.C.							
1903 [✓]	5.0	50	5.0 [✓]	80.0 [✓]	al	b7	ad ^{✓✓}
1908	8.0	9.0	8.0 [✓]	102.0 [✓]	cf	d8	ad ^{✓✓}
1912 [✓]	5.5	5.5	5.5 [✓]	66.0 [✓]	b7	c5	ad ^{✓✓}
1914	see page 61						
1915 [✓]	3.0	25	3.0 [✓]	36.0 [✓]	cf	d7	ad ^{✓✓}
1917	5.0	55	5.5 [✓]	66.0 [✓]	f7	f5	ad ^{✓✓}
	Ring around nucleus						
1920 [✓]	3.0	4.0	3.5 [✓]	42.0 [✓]	cl	d8	ad ^{✓✓}
1921 [✓]	2.0	25	2.0 [✓]	24.0 [✓]	b9	d9	ad ^{✓✓}
1922 [✓]	1.5	2.0	2.0 [✓]	24.0 [✓]	b10	b8	ad ^{✓✓}
					Identity?		
1923 [✓]	2.0	30	2.5 [✓]	30.0 [✓]	ic6	ic7	ad ^{✓✓✓}
1924 [✓]	3.0	35	3.0 [✓]	36.0 [✓]	a7	b7	ad ^{✓✓}
1925 [✓]	7.0	7.0	7.0 [✓]	84.0 [✓]	e8	d8	ad ^{✓✓}

A.3339

I.C.

✓ 1926	3.5	3.5	3.5	42.0	b7	c7	b7	
✓ 1927	2.5	1.5	2.0	24.0	ia7	c9	ib7	
✓ 1929	2.5	3.0	3.0	36.0	a5	b6	b6	15.0
✓ 1932	3.5	4.5	4.0	48.0	Le5	Le5	Le5	15.0
✓ 1933	14.5	14.5	14.5	174.0	iSc7	iSc5	iSc6	
✓ 1935	5.0	6.0	5.5	66.0	pSc8	pSc7	pSc7	
✓ 1936	3.5	3.5	3.5	42.0	c9	c8	c8	
✓ 1938	3.0	4.0	3.5	42.0	e7	d7	e7	
1939	4.0				defect ??			
✓ 1940	4.0	5.0	4.5	54.0	ie9	ie9	ie9	
✓ 1942	2.0	3.0	2.5	30.0	d7	c6	c7	
✓ 1945	3.0	3.0	3.0	36.0	d7	d7	d7	
✓ 1946	1.00	6.0	6.0	72.0	Le5	Le5	Le5	70° 160°
✓ 1947	2.5	3.5	3.0	36.0	d10	c10	c10	
✓ 1950	9.0	9.0	9.0	108.0	Xc4	Ld4	Lc4	155°

A. 3339							
✓ 1951	3.0	4.0	3.5 [✓] 4.0 [✓] b3	b5	b4 ^{✓✓}	440° 540°	
✓ 1954	11.0	11.0	11.0 [✓] 11.0 [✓] S e 6	S d 5	S d 5 ^{✓✓✓}	65° 155°	
(from Book J: n.b. difference in scale reading.)							
✓ 1957	5.0	6.0	5.5 [✓] 6.0 [✓] L c 2	L d 3	L c 2 ^{✓✓✓}	135° 450°	
✓ 1958	2.0	3.0	2.0 [✓] 3.0 [✓] c 9	c 8	c 8 ^{✓✓}		
✓ 1959	23.0	23.0	23.0 [✓] 23.0 [✓] c 2	c 3	c 2 ^{✓✓}	150°	
✓ 1964	2.5	3.5	3.0 [✓] 3.6 [✓] c 7	d 6	d 6 ^{✓✓}		
✓ 1966	3.0	4.0	3.5 [✓] 4.2 [✓] e 7	d 7	e 7 ^{✓✓}		
✓ 1968	2.0	3.0	2.5 [✓] 3.0 [✓] c 9	d 8	d 9 ^{✓✓}		
✓ 1971	2.5	3.5	3.0 [✓] 3.6 [✓] i d 7	i d 6	i d 6 ^{✓✓}		
✓ 1972	3.0	4.0	3.5 [✓] 4.0 [✓] p L c 5	p L c 5	p L c 5 ^{✓✓✓}	60° 150°	
✓ 1973	2.0	2.5	2.0 [✓] 2.4 [✓] d 7	c 6	d 7 ^{✓✓}		
1974			see page 62				
✓ 1978	6.0	6.0	6.0 [✓] 7.2 [✓] L c 3	L d 3	L d 3 ^{✓✓}	10°	
✓ 1989	4.0	4.0	4.0 [✓] 4.8 [✓] c 10	c 10	c 10 ^{✓✓}		
✓ 1991	5.0	6.0	5.5 [✓] 6.6 [✓] i L c 4	i L c 4	i L c 4 ^{✓✓✓}	120° 30°	
✓ 1992	2.0	2.0	2.0 [✓] 2.4 [✓] c 8	c 9	c 9 ^{✓✓}		

A. 3339

✓ 1994

4.0

4.0

4.0 ✓

48.0 ✓

C6

C5

C6 ✓✓

N. b. C.

✓ 1356

11.0

11.0

11.0 ✓

132.0 ✓

IS E9

iSE8

iSE8 ✓✓✓✓

✓ 1311

25.0

25.0

25.0 ✓

300.0 ✓

Ld2

Ld3

Ld2 ✓✓✓✓

40°

Menzels

1305-53550

15.0

14.0

14.0 ✓

172.0 ✓

Ld1

Ld2

Ld2 ✓✓✓✓

45°

Knot at one end

J.C. 1914 ✓

21.0

21.0

21.0 ✓

252.0 ✓

plc8

plc7

pld8 ✓✓✓✓

N.N

(see Bk. II p. 201)

A

3.0

a9

B

3.5

3.5

3.5 ✓

42.0 ✓

b7

b7

b7

C

3.5

class 14269

fa

D

3.0

a3

80°

E

4.5

psd9

F

2.5

d9

G

2.0

b10

H

1.5

e10

K

4.0

d10

L

1.5

e8

62 For 73346: 1. All neb. with added nos. in violet to be classified on 714272
 2. green 714269
 3. blue 714280

A. 3339 + A. 3346

✓ 199	4.5	4.5	4.5	54	b9	c9	c9
✓ N	2.0	2.5	2.5	30	f10	d9	e9
A 3346							
199✓	3.0	3.0	3.0	36	a8	b8	a8
(7) 17P	3.0				b9		
(11) 130	2.5				a10		
(10) 177	3.0				a10		
(57) 191a	1.5				c9		
(52) 191b	2.0				a9		
(48) 179	4.0				i b3		145°
(49) 193	1.5				c10		
(50) 192	1.0				a9		
{classified on 714179	1.5				a9		
(67) 163	1.5				c9		
(66) 200	2.0				a9		

A. 3346

(34) 190	1.5				a 10		
(36) 162	3.5				a 9		
{ 197 ✓	2.5 2.0	2.5 2.0	2.5 2.0	30.0 ✓	ib 7	b 8	ib 8 ✓ ✓
double, see also 473, Bk. E, p. 56 ←							
194 ✓	3.0 2.0	3.0 2.0	3.0 2.0	36.0 ✓	e 9	e 9	e 9 ✓
203 ✓	✓ 2.5	2.0	2.5 ✓	30.0 ✓	b 8	b 8	b 8 ✓ ✓
195 ✓	2.0 1.5	2.0 1.5	2.0 1.5	20.0 ✓	c 10	b 10	b 10 ✓
196 ✓	2.5 1.5	2.5 2.0	2.5 2.0	30.0 ✓	a 9	a 9	a 9 ✓ ✓
199 ✓	3.0 2.0	3.0 2.0	3.0 2.0	36.0 ✓	a 9	a 10	a 9 ✓ ✓
160 ✓	2.5 1.5	2.5 2.0	2.5 1.5	30.0 ✓	b 9	c 9	b 9 ✓
161 ✓	2.5 2.0	2.5 2.0	2.5 2.0	30.0 ✓	b 9	b 9	b 9 ✓ ✓
202 ✓	3.0 2.0	3.0 2.0	3.0 2.0	36.0 ✓	c 8	c 9	c 9 ✓ ✓
15 ✓	2.0	2.0	2.0		a 7	b 8	a 8
defect; see #14289							
144 ✓	3.0 2.0	3.0 2.0	3.0 2.0	30.0 ✓	c 7	a 7	b 7 ✓
145 ✓	3.5 2.5	3.5 2.0	3.5 2.5	42.0 ✓	a 6	b 8	b 7 ✓
205 ✓	{ 2.0 2.5 5.0	{ 2.0 2.0	{ 2.0 2.0	{ 30.0 30.0 ✓	{ a 8 i a 3	a 8	a 8 ✓ ✓
faint star touching nebula							

70°

				A. 3346			
146✓	4.0 3.5	4.0 3.5	4.0✓ 3.5	4.0✓ 48.0	b7	b7	b7✓
(17) 170	1.0				c9		
(15) 171	1.5				d10		
(14) 176a	1.5				a7		
(74) 176b	2.0				b8		
176c	1.0				c9	rejected	
(13) 128	1.5				c9		
(12) 131	2.0				b6		
(18) 133	2.0				a10		
(19) 132	1.5				c9		
127✓	3.0 1.5	3.0 2.0	3.0✓ 2.0	3.0✓ 36.0	a10	a10	a10✓
201✓	1.5 1.0	1.5 1.0	1.5✓ 1.0	1.5✓ 18.0	b10	b10	b10✓
134✓	2.0 1.5	2.0 1.5	2.0✓ 1.5	2.0✓ 24.0	a7	a9	a8✓
182✓	2.0 1.5	2.0 1.5	2.0✓ 1.5	2.0✓ 24.0	c9	b9	c9✓
181✓	3.0 1.0	3.0 1.5	3.0✓ 1.0	3.0✓ 36.0	c10	c10	c10✓

A.3346

126 ✓	3.5 2.0	3.5 2.0	3.5 2.0	✓ 4.2.0	b7	b7	✓ b7
113 ✓	2.0 1.5	2.0 1.5	2.0 1.5	✓ 2.4.0	c9	b9	✓ b9
180 ✓	2.0	1.5	2.0	✓ 2.4.0	c9	b9	✓ c9
(66) 135	2.0				a9		
(75) 164	1.0				a10		
(7) 140	1.0				a9		
(33) 141	2.0				b9		
(32) 136	1.5				a10		
137 ✓	2.0	1.5	1.5	✓ 18.0	a8	a8	✓ a8
138 ✓	2.5 1.5	2.5 1.5	2.5 1.5	✓ 30.0	c8	c9	✓ c9
143 ✓	2.0 1.5	2.0 1.5	2.0 1.5	✓ 24.0	a10	a9	✓ a10
142 ✓	2.0 1.5	2.0 1.5	2.0 1.5	✓ 24.0	a10	b10	✓ b10
123 ✓	3.0 2.0	3.0 2.0	3.0 2.0	✓ 36.0	a6	a7	✓ a7
122 ✓	2.0 1.5	2.0 1.5	2.0 1.5	✓ 24.0	c9	b9	✓ c9
187 ✓	2.5 1.5	2.5 1.5	2.5 1.5	✓ 30.0	b10	b9	✓ b10

A.3346

108 J	2.15 2.0	2.5 2.0	2.5 2.0	✓ 30.0	a7	b8	✓ b8
98 J	2.0 1.5	2.0 1.5	2.0 1.5	✓ 24.0	b7 b7	b6	✓ b7
99 J	2.0 1.5	2.0 1.0	2.0 1.0	✓ 24.0	a9	a10	✓ a10
101 J	2.5 2.0	2.5 2.0	2.5 2.0	✓ 30.0	d10	e10	✓ d10
111	2.0	rejected			e10		
152 J	2.5 1.5	2.5 2.0	2.5 1.5	✓ 30.0	a8	b9	✓ b8
108 J	{1.5 1.0	2.0	1.5	✓ 18.0	d10	c10	✓ d10
150 J	1.5	✓ 2.0	✓ 2.0	✓ 24.0	a10	b10	✓ b10
106 J	2.5 2.0	2.5 2.0	2.5 2.0	✓ 30.0	f9 b9	f9	✓ f9
107 J	✓ 1.5	1.0	✓ 1.5	✓ 18.0	b10 d10	b10	✓ b10
149 J	2.0 1.5	2.0 1.0	2.0 1.5	✓ 24.0	c10	c9	✓ c9
{ I.C. 1916	4.0 2.5	5.0 4.0	5.0 4.0	4.0	c6	c7	c6
	2.0 1.5	2.0 1.5	2.0 1.5	✓ 24.0	b10	b10	✓ b10
154	1.5	rejected			d9		
204 J	✓ 2.0	1.5	✓ 1.5	✓ 18.0	c9	b9	✓ c9
109 J	2.5 2.0	2.5 2.0	2.5 2.0	✓ 30.0	c7	c6	✓ c6

A13346

105V	3.0 [✓]	4.0	3.5 [✓]	4.2 [✓]	2f7	2e5	2e6 ^{✓✓✓}	40° 160°
100V	2.0	2.5 [✓]	2.0 [✓]	2.8 [✓]	b6	a6	b6 ^{✓✓}	
(5) 14P	5.0				2c5-			60°
(4) 147	2.0				a8			
12 (20, 14, 22)								
11	4.0				plis			100°
(9) 17	3.0				a8			
19V	2.5 [✓]	2.5	2.5 [✓]	3.0 [✓]	a8	b8	b8 ^{✓✓}	
103V	2.0 [✓]	2.0	2.0 [✓]	2.8 [✓]	b9	b8	b9 ^{✓✓}	
102	1.0				e9			
97V	2.0 [✓] 1.5	2.0 [✓] 1.5	2.0 [✓] 1.5	2.8 [✓] 2.8	c10	c10	c10 ^{✓✓}	
22V	2.5 [✓] 1.5	2.5 [✓] 2.0	2.5 [✓] 2.0	3.0 [✓] 3.0	b8	c8	b8 ^{✓✓}	
21V	2.0 [✓] 1.5	2.0 [✓] 1.5	2.0 [✓] 1.5	2.8 [✓] 2.8	a9	a9	a9 ^{✓✓}	
20V	1.5 [✓]	2.0 [✓]	1.5 [✓]	1.8 [✓]	c7	b7	b7 ^{✓✓}	
94V	2.0 [✓]	2.5 [✓]	2.5 [✓]	3.0 [✓]	a9	a6	a6 ^{✓✓}	

95✓	1.5	2.0 ✓	1.5 ✓	18.0 ✓	b9	a9	b9 ✓✓
111	defect				a10		
103✓	2.0 1.5	2.0 1.5	2.0 1.5	24.0 ✓	b10	a9	a10 ✓✓
103✓	2.0 1.5	2.0 1.5	2.0 1.5	24.0 ✓	a9	b10	a10 ✓✓
125✓	1.5	2.0 ✓	1.5 ✓	18.0 ✓	b10	b10	b10 ✓✓
166✓	1.5	2.0 ✓	2.0 ✓	24.0 ✓	c8	c7	c8 ✓✓
167✓	1.5	2.0 ✓	1.5 ✓	18.0 ✓	a10	b9	a9 ✓✓
168✓	4.0 ✓	4.5	4.5 ✓	54.0 ✓	a7	b7	b7 ✓✓
119✓	2.0 1.5	2.0 1.5	2.0 1.5	24.0 ✓✓	a9	a8	a8 ✓✓
87✓	2.0 1.5	2.0 1.5	2.0 1.5	24.0 ✓	c10	c9	c10 ✓✓
92✓	2.0 1.5	4.0 2.5	4.0 2.0	48.0 ✓	a6	a5	a5 ✓✓
90✓	2.0 1.5	2.0 1.5	2.0 1.5	24.0 ✓✓	c10	c9	c10 ✓✓
91✓	2.0 1.5	2.0 1.5	2.0 1.5	24.0 ✓	c10	b10	c10 ✓✓
84✓	2.0 1.5	2.0 1.5	2.0 1.5	24.0 ✓	c10	c10	c10 ✓✓
88✓	2.0 ✓	2.0	2.0 ✓	24.0 ✓	a9	a9	a9 ✓✓

$$\frac{15.0}{120.0}$$

A.3346

93 ✓	2.5 [✓]	2.0	2.0	2.0 [✓]	240 [✓]	b9	a8	a8 [✓]
89 ✓	2.0 [✓] 1.5 [✓]	2.0 [✓] 1.5 [✓]	2.0 [✓] 1.5 [✓]	2.0 [✓]	240 [✓]	c9	b9	c9 [✓]
96	2.0					a8		
(51) 185	1.5					b9		
(45) 186	1.5					a10		
(46) 184	2.0					c9		
(58) 113	1.5					c10		
(125) 112	1.5					f9		
118 ✓	1.5 [✓]	2.0	1.5 [✓]	180 [✓]	240 [✓]	a8	c8	d8 [✓]
169 ✓✓	2.0 [✓]	2.0	2.0 [✓]	240 [✓]	240 [✓]	b8	b8	b8 [✓]
(60) 180	1.5					c10		
93 ✓	2.5 [✓] 1.5 [✓]	2.5 [✓] 2.0	2.5 [✓] 2.0	300 [✓]	300 [✓]	c9	b8	c9 [✓]
85 ✓	1.5	2.0	1.5 [✓]	180 [✓]	240 [✓]	d10	c8	c9 [✓]
(53) 189	2.0					d9		
(52) 119	2.0					a9		

A. 3346

74	1.0	used on 17	14269	d9			
73	1.5	"		e10			
72	1.5	"		b10			
66	1.5	"		c9			
(145) 116	3.0			a6			
(144) 115	1.5			a9			
(57) 114	1.5			b10			
49	2.5	"		d6			
70	1.5	"		a8			
P3	1.5			a8			
P3 J	1.5	2.0 ✓	2.0 ✓	2.0 ✓	c10	b10	c10 ✓
P1 J	2.5 2.0	2.5 2.0	2.5 ✓ 2.0	3.0 ✓	a8	a8	a8 ✓
P6 J	1.0	1.5 ✓	1.0 ✓	12.0 ✓	c10	b10	b10 ✓
79 J	2.5 1.5	2.5 2.0	2.5 ✓ 2.0	20.0 ✓	c9	c9	c9 ✓
7P J	1.5	1.5 ✓	1.5 ✓	18.0 ✓	b10	a9	b9 ✓

A.3346

✓ 97 ✓	1.0	✓ 2.0	✓ 1.5	✓ 18.0	a7	b9	✓✓ b8
(90a) 76	2.0				at		
75	1.5		used on #14269		b10		
27	2.0		"		b7		
25	1.0		"		a7		
24 ✓	1.5	✓ 2.0	✓ 1.5	✓ 18.0	c10	c9	✓✓ c10
23 ✓	2.0	✓ 2.5	✓ 2.5	✓ 30.0	f9	e9	✓✓ f9
60	2.0		"		b10		
59	2.0		"		a10		
58	= 302 on A.3339				at		
32	3.0		used on #14269		b7		
31	2.0		"		a9		
33	2.0		"		at		
34	1.5		"		b8		
35	2.0		"		a10		

A.3346

35	1.5	used on 1714269	b9
36	1.0	"	b9
37	2.0	"	a10
54	2.0	"	a9
53	1.5	"	a10
39	2.0	"	a10
43	2.0	"	c9
44	1.5	"	b9
41	2.0	"	a10
40	2.0	"	c10
42	2.0	"	b9
45	2.0	"	a9
46	1.5	"	c9
47	2.0	"	a9
52	1.5	"	b6

A. 3346

4P	1.5	used on 1714269			b10			
50	1.5		"		b10			
51	1.5		"		a10			
52	1.5				c8			
56	1.5		"		a8			
57	2.0		"		a9			
68	4.0		"		a4			60°
69	2.0		"		b9			
71	2.0	2.5	2.0 ✓	24.0 ✓	a9	a8	a8 ✓✓	
3	2.5	rejected			c7			
12V	2.5 2.0	2.5 2.0	2.5 ✓ 2.0	30.0 ✓	b10	a10	a10 ✓✓	
6V	2.0	2.5 ✓ 2.0	2.5 ✓ 2.0	30.0 ✓	a9	a10	a9 ✓✓	
13	2.0				b9			
14V	3.0 2.0	3.0 2.0	3.0 ✓ 2.0	36.0 ✓	a8	c10	b9 ✓✓	
15	1.5				b10			
10	2.5				a6			

74

I.C.		A. 3346					
✓ 1916 ✓	4.5 1*	5.0 ✓	4.5 ✓	54.0 ✓	c6	c6	c6 ✓✓
✓ 1937	4.0 4.5	4.5 ✓	4.5 ✓	54.0 ✓	c9	c9	c9 ✓✓
✓ 1944	2.5	3.0 ✓	3.0 ✓	36.0 ✓	b10	c9	b9 ✓✓
✓ 1948	5.0	5.0 ✓	5.0 ✓	60.0 ✓	d9	c9	c9 ✓✓
✓ 1949	6.0 5.0	6.0 5.5	6.0 ✓	72.0 ✓	p5c8	p5d8	p5d8 ✓✓✓
1961	3.0	3.0 ✓	3.0 ✓	36.0 ✓	c9	b8	c9 ✓✓

Other I.C. objects on this plate have been classified under plate A. 3339.

74

A

defect

B

to

rejected

c10

C

D

E

defects

see note Bb-II p. 201

cont. in Bb-D. p. 213

For all nebulae preceded by a check mark, classification
and diameter superseded in Bk E, p. 176

75

A. 4181

✓ 86	2.0		c10
✓ 89	2.0		a8
✓ 91	3.0		b8
✓ 105	1.5		d8
✓ 94	1.5		c9
8	2.0	rejected	b9
✓ 81	2.0		a9
✓ 82	2.0		c7
83	1.5	rejected	a9
✓ 84	3.0		b8
✓ 80	2.5		a9
✓ 70	1.5		b9
71	2.0	rejected	b10
72	2.0	rejected	b9
✓ 73	3.5		a5

135-0

A. 4181

1 13P	1.5		a 10	
65	1.5	rejected	a 9	
66	2.0	"	a 10	
43	3.0	"	a 7	
64	1.0	rejected	a 10	
125	1.5		b 10	used on 3346?
4P	3.0		a 9	" "
49	1.5	rejected	a 7	
55	1.5	"	d 10	
135	2.0	"	a 9	
63	1.5		a 9	used on 1714260
✓ 61	2.0		b 10	
✓ 62	2.0		a 10	
51	1.5	rejected	a 8	
54	1.5	"	a 9	

A. 4181

52	1.5	rejected	a8		
50	3.0	"	a7		
51	6.5	nebula?	L12	used on H3346?	40°
132	2.0	rejected			
✓ 133	2.0		b9		
✓ 59	2.0		c9		
✓ 75	3.0		c7		
76		= I.C. 1976			
✓ 78	4.0		a4		5-0
126	1.5	rejected	e10		
118	2.0	"	e10		
109	1.0	"	d10		
79	1.5	"	d9		
✓ 122	2.0		a9		
✓ 121	2.5		c9		
✓ 120	1.5		c10		

78

A.4121

96	2.0	rejected	c10
97	2.0	..	b8
98	3.0	..	a9
95	2.0	..	b9
✓ 119	2.0		a8
✓ 118	4.5		a8
✓ 139	2.5		b2
✓ 123	1.5		d9
✓ 109	2.0		d9
✓ 124	2.0		c10
✓ 117	1.5		c9
✓ 116	2.0		d10
✓ 115	3.0		b9
✓ 114	2.0		a9
✓ 110	3.0		a9

A. 41 P1

113 — 2.0	rejected	b9
✓ 11 — 1.5		c10
111 — 2.0	rejected	c9
9 — 3.0	"	a9
1 — 3.5	"	c10
f — 11.0	"	f10
✓ a — 5.0		b7
2 — 3.0	rejected	a6
4 — 3.0	"	a7
13 — 2.0	"	c7
✓ 10 — 3.0		iab
✓ 7 — 2.5		a10
✓ 8 — 4.0		b9
✓ 6 — 3.0		a10
3 — 3.0	rejected	a10

A.4,181

5	5.0	rejected	a6
24	1.5	"	b9
20	2.0	"	c10
✓ 18	1.5		b9
101	1.5	rejected	c10
21	4.0	"	a7
✓ d	3.5		a10
14	2.0	rejected	a7
c	2.0	"	int
✓ 15	2.5		b10
✓ 16	3.0		c9
25	1.5	rejected	b10
26	1.5	"	b2
27	1.5	"	c10
✓ 28	3.0		a9

A. 4151

h	3.0	rejected	a9
38	3.0	"	a8
37	4.0	"	a6
35	4.0	"	a10
36	3.5	"	a7
129	2.0	"	a9
✓ 31	2.0		a10
✓ 30	1.5		c10
29	3.0	rejected	a9
✓ 99	2.0		c10
98	1.5	rejected	c9
✓ 129	2.0		b9
128	2.0	rejected	c10
44	3.0	"	b10
✓ 39	2.5		c9

	1	2	mean	11.4121	1	2	mean	Unit
40	3.5				c9			
42	2.0		rejected		bp			
✓ 41	2.0				a10			
<u>N.G.C.</u>								
1433	27.0		cf. diam. of	bl. neb. Sd8	Sd8			
✓ 1442	43.0		"	"	Ld2	Ld2		45°
1457??		equals N1442		not seen				
1483	7.5	8.0	7.5	90.0 ✓	c10	c9	c10	
<u>I.C.</u>								
✓ 1969	8.0	9.0	8.5	102.0 ✓	Lf3	iLf4	iLf4	45°
✓ 1976	5.0	5.5	5.5	66.0 ✓	c7	ic7	ic7	
✓ 1984	4.0	4.0	4.0	48.0 ✓	b6	c6	c6	
✓ 1986	6.0	6.5	6.0	72.0 ✓	bp	ic7	ib7	
✓ 2000	22.5	23.5	23.0	276.0 ✓	c2	c2	c2	40°
2001	3.5		two stars - N.S.		bp			
✓ 2009	8.0	8.0	8.0	96.0 ✓	b10	c9	c10	

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				^u	A. 4183			
✓ 241 ✓	2.5	3.0	2.5 ✓	30.0 ✓	c8	c7	c8 ✓✓	
✓ 277 ✓	3.0	2.0	2.5 ✓	30.0 ✓	a8	b9	b9 ✓✓	
✓ 35 ✓	2.5	2.5	2.5 ✓	30.0 ✓	b10	b10	b10 ✓✓	
298 ✓	2.0				b9			
✓ 38 ✓	2.5	3.0	3.0 ✓	36.0 ✓	a10	b9	a10 ✓✓	
39					faint star			
✓ 42 ✓	3.0	3.0	3.0 ✓	36.0 ✓	d10	c10	c10 ✓✓	
43 ✓	2.0				b9			
✓ 44 ✓	3.0	3.0	3.0 ✓	36.0 ✓	b7	b8	b8 ✓✓	
292 ✓	3.5	3.0	3.5		a10	a8	a9	
✓ 45 ✓	3.5	3.5	3.5 ✓	42.0 ✓	c7	c7	c7 ✓✓	
202 ✓	3.5				b9			
292 ✓	2.0				a10			
✓ 293 ✓	2.5	2.5	2.5 ✓	30.0 ✓	c9	b8	c9 ✓✓	
✓ 294 ✓	2.0	2.0	2.0 ✓	24.0 ✓	c8	b8	b8 ✓✓	

A. 4183

242 ✓	1.5				dy			
✓ 284 ✓	4.0	5.0	4.5 ✓	5.0 ✓	a7	a6	a6 ✓✓	
✓ 297 ✓	2.0	3.0	2.5 ✓	3.0 ✓	c8	b7	c8 ✓✓	
✓ 295 ✓	3.0	4.0	3.5 ✓	4.0 ✓	a10	a8	a9 ✓✓	
✓ 41 ✓	2.5	2.0	2.0 ✓	2.0 ✓	b9	b8	b8 ✓✓	
34 ✓	2.0				a7			
27 ✓	1.5				a10			
✓ 29 ✓	2.0	2.0	2.0 ✓	2.0 ✓	b9	c10	c9 ✓✓	
✓ 30 ✓	2.0	2.5	2.0 ✓	2.0 ✓	c9	b9	c9 ✓✓	
✓ 305 ✓	1.0	1.5	1.5 ✓	1.5 ✓	a10	a10	a10 ✓✓	
✓ 254 ✓	2.0	1.5	2.0 ✓	2.0 ✓	a9	a8	a8 ✓✓	
✓ 255 ✓	1.5	2.0	2.0 ✓	2.0 ✓	b10	b9	b10 ✓✓	
274 ✓	1.0				a10			
✓ 286 ✓	1.5	2.0	1.5 ✓	1.5 ✓	a9	b9	b9 ✓✓	
✓ 285 ✓	2.0	2.5	2.5 ✓	3.0 ✓	a7	a8	a8 ✓✓	

(1) 1290 ✓	1.5	2.0	1.5 ✓	180 ✓	A.4183 a10	b10	a10 ✓✓
1288 ✓	1.5	2.0	2.0 ✓	240 ✓	a9	a9	a9 ✓✓
1291 ✓	1.5	2.0	1.5 ✓	180 ✓	b9	a9	a9 ✓✓
1283 ✓	2.0	2.0	2.0 ✓	240 ✓	d7	b6	c7 ✓✓
1276 ✓	2.0	3.0	2.5 ✓	300 ✓	a10	b10	a10 ✓✓
1274 ✓	1.5	2.5	2.0 ✓	240 ✓	b9	b8	b8 ✓✓
1275 ✓	1.5	2.0	2.0 ✓	240 ✓	b9	c9	c9 ✓✓
1272 ✓	2.0	2.5	2.0 ✓	240 ✓	f10	f10	f10 ✓✓
291 ✓	1.5				a10		
1270 ✓	2.0	2.5	2.5 ✓	300 ✓	a7	b8	a7 ✓✓
303 ✓	1.5				a9		
269					defect		
1300 ✓	1.5	2.0	1.5 ✓	180 ✓	c9	b10	b10 ✓✓
1 ✓	4.0				a8		
13 ✓	3.0	4.0	3.5 ✓	420 ✓	b7:	b7:	b7: ✓✓✓

nr. edge

A. 4123

✓ a ✓	2.5	3.0	3.0 ✓	36.0 ✓	a10	a1	a9 ✓✓
✓ 8 ✓	3.0	4.0	3.5 ✓	42.0 ✓	a10	b1	a9 ✓✓
✓ 9 ✓	4.5	5.5	5.0 ✓	60.0 ✓	c7	c7	c7 ✓✓
✓ 10 ✓	3.0	2.5	3.0 ✓	36.0 ✓	a9	a9	a9 ✓✓
✓ 11 ✓	2.0				b10		
✓ 6 ✓	2.5	2.5	2.5 ✓	30.0 ✓	a9	c10	b9 ✓✓
✓ 7 ✓	3.0	3.5	3.5 ✓	42.0 ✓	a10	b9	b9 ✓✓
✓ 12 ✓	2.5				a1		
✓ 5 ✓	2.0				a9		
✓ 13 ✓	2.0	2.0	2.0 ✓	24.0 ✓	a9	b9	a9 ✓✓
✓ 242 ✓	1.5	2.5	2.0 ✓	24.0 ✓	a9	b10	b9 ✓✓
(19) ✓ 236 ✓	3.0	3.0	3.0 ✓	36.0 ✓	b7	c7	b7 ✓✓
(11) ✓ 21 ✓	2.0	3.0	2.5 ✓	30.0 ✓	a9	b9	b9 ✓✓
✓ 14 ✓	2.0	2.0	2.0 ✓	24.0 ✓	a10	b9	a9 ✓✓

faint star

A.41F3								
✓ 13 ✓	2.0	2.0	2.0 ✓	24.0 ✓	a9	b9	b9 ✓	
✓ 16 ✓	3.0	3.0	3.0 ✓	36.0 ✓	a10	c10	b10 ✓	
✓ 17 ✓	2.0	3.0	2.5 ✓	36.0 ✓	c10	b9	c10 ✓	
star in contact								
✓ 19 ✓	1.5	2.0	1.5 ✓	18.0 ✓	a9	a9	a9 ✓	
(12) 24a ✓	3.5	2.5	3.0 ✓	36.0 ✓	a10	a10	a10 ✓	
✓ 23 ✓	1.5	2.0	2.0 ✓	24.0 ✓	d10	c10	c10 ✓	
(13) ✓ 22 ✓	2.0	2.0	2.0 ✓	24.0 ✓	a9	a9	a9 ✓	
(14) 24b ✓	2.0	2.0	2.0 ✓	24.0 ✓	a9	a9	a9 ✓	
✓ 221 ✓	2.5	3.0	2.5 ✓	30.0 ✓	b9	b9	b9 ✓	
✓ 222 ✓	2.0	3.0	2.5 ✓	30.0 ✓	d10	c10	d10 ✓	
✓ 223 ✓	2.0	2.5	2.5 ✓	30.0 ✓	c9	c9	c9 ✓	
✓ 224 ✓	2.5	2.5	2.5 ✓	30.0 ✓	d10	c9	c9 ✓	
✓ 225 ✓	2.0	3.0	2.5 ✓	30.0 ✓	a9	b9	a9 ✓	
(4) ✓ 18 ✓	3.0	3.5	3.0 ✓	36.0 ✓	a9	a9	a9 ✓	
1 ✓	4.0	4.0	4.0 ✓	48.0 ✓	a9	b9	b9 ✓	
rejected								
encircled by BT: plate elongated								

A. 41P3							
344 ✓	2.0				a9	b9	
	used on # 15F44						
✓ 346 ✓	3.0	"			a6	a7	
✓ 345 ✓	2.5	"			a9	a9	
227 ✓	1.5	"			b9		
219 ✓	2.5	"			a10		
234 ✓	1.5	sig. tel			a9		
232 ✓	2.0				c10		
	used on # 15F44						
227 ✓	2.0				a10		
228 ✓	1.5				c10		
✓ 234 ✓	1.5	1.5	1.5 ✓	1.5 ✓	c10	b10	c10 ✓
(36) ✓ 235 ✓	2.0	2.0	2.0 ✓	2.0 ✓	a7	b7	b7 ✓
✓ 230 ✓	1.5	2.0	2.0 ✓	2.0 ✓	a10	b10	a10 ✓
214 ✓	2.0				c10		
	used on # 15F44						
177 ✓	2.0	"			d9		
178 ✓	2.0	"			e9		

A.4123

176 ✓	2.0	class on 17 15 PM 4	2.0	2.0	a9			
175 ✓	5.0	"			a2			10°
✓ 170 ✓	2.0	3.0	2.5 ✓	3.0 ✓	a9	b7	b8 ✓✓	
✓ 179 ✓	4.0	5.0	4.5 ✓	5.0 ✓	c6	d6	c6 ✓✓	
✓ 181 ✓	1.5	2.0	1.5 ✓	1.8 ✓	d10	b9	c10 ✓✓	
✓ 182 ✓	5.0	5.0	5.0 ✓	6.0 ✓	c6	b6	b6 ✓✓	
✓ 174 ✓	2.0	2.0	2.0 ✓	2.4 ✓	a7	a8	a8 ✓✓	
p ✓	2.5	class on 17 15 PM 4			a1			10°
✓ 167 ✓	1.5	2.0	2.0 ✓	2.4 ✓	b9	b10	b9 ✓✓	
✓ 173 ✓	2.5	2.0	2.5 ✓	3.0 ✓	c8	a7	b7 ✓✓	
✓ 168 ✓	2.0	2.5	2.5 ✓	3.0 ✓	c9	b8	c9 ✓✓	
✓ 172 ✓	1.5	2.5	2.0 ✓	2.4 ✓	d10	c8	c8 ✓✓	
✓ 171 ✓	1.5	2.0	1.5 ✓	1.8 ✓	b10	c9	b9 ✓✓	
✓ 169 ✓	1.5	2.0	2.0 ✓	2.4 ✓	b10	b9	b10 ✓✓	
✓ 170 ✓	1.5	2.0	1.5 ✓	1.8 ✓	a8	b8	b8 ✓✓	

				11.5 ✓	<u>A. 41F3</u>			
✓ 183 ✓	1.0	1.5	1.5 ✓	18.0 ✓	c10	c10	c10 ✓	
✓ 26 ✓	2.5	3.0	2.5 ✓	30.0 ✓	bf	c7	b7 ✓	
20A					star			
✓ 251 ✓	2.5	3.0	3.0 ✓	36.0 ✓	iε4	iε4	iε4 ✓	75° 10°
	nucleus set in <u>very</u> fr. elongated background							
✓ 206 ✓	1.5	2.0	1.5 ✓	18.0 ✓	c10	c9	c10 ✓	
205					star			
(159) ✓ 204 ✓	3.5	4.0	4.0 ✓	48.0 ✓	d10	c9	c9 ✓	
(163) ✓ 203 ✓	1.5	2.5	2.0 ✓	24.0 ✓	b9	b9	b9 ✓	
✓ 202 ✓	1.0	1.0	1.0 ✓	12.0 ✓	b10	b10	b10 ✓	
(165) ✓ 201 ✓	1.0	1.5	1.0 ✓	12.0 ✓	d10	c10	d10 ✓	
✓ 200 ✓	1.0	1.5	1.5 ✓	18.0 ✓	d10	c9	c10 ✓	
(168) ✓ 199 ✓	1.5	1.5	1.5 ✓	18.0 ✓	b10	b9	b9 ✓	
(167) ✓ 198 ✓	1.5	1.5	1.5 ✓	18.0 ✓	b10	c9	b10 ✓	
✓ 196 ✓	2.0	2.0	2.0 ✓	24.0 ✓	af	c7	b7 ✓	
(286) ✓ 195 ✓	2.5	2.5	2.5 ✓	30.0 ✓	d10	c10	c10 ✓	

✓ 194 ✓	1.5	1.5	1.5	18.0 ✓	A.4183 b10	b10	b10 ✓	(2)
= *17 (15844)								
✓ 192 ✓	2.5	3.0	2.5	20.0 ✓	a8	b6	a7 ✓	
= *19 (15844)								
✓ 193 ✓	1.0	1.5	1.5	18.0 ✓	b10	b8	b9 ✓	
(294) ✓ 191 ✓	1.5	1.5	1.5	18.0 ✓	b10	c10	c10 ✓	
✓ 185 ✓	2.0	2.5	2.0	20.0 ✓	a8	b8	c8 ✓	
✓ 244 ✓	2.0	2.0	2.0	20.0 ✓	a7	c6	b7 ✓	
✓ 245 ✓	4.0	3.0	3.5	40.0 ✓	b6	c5	c5 ✓	135° ✓ (106)
246 ✓	4.0				b10			
(41) ✓ 247 ✓	1.5	2.0	2.0	20.0 ✓	a9	b8	a9 ✓	(105)
248 ✓	4.0				a10			
✓ 249 ✓	2.0	1.5	2.0	20.0 ✓	a9	a10	a10 ✓	
(40) ✓ 250 ✓	2.0	2.5	2.5	30.0 ✓	d10	c9	c10 ✓	
✓ 251 ✓	1.5	2.0	1.5	18.0 ✓	a10	a9	a9 ✓	
(39) ✓ 252 ✓	1.0	1.5	1.5	18.0 ✓	e10	c10	d10 ✓	
✓ 253 ✓	1.0	1.5	1.0	10.0 ✓	a10	a10	a10 ✓	(29)

					A.4183			
(23) ✓ 26 ✓	1.0	1.5	1.5 ✓	18.0 ✓	c10	c10	c10 ✓	
✓ 124 ✓	1.5	1.5	1.5 ✓	18.0 ✓	d10	b10	c10 ✓	
212	1.5				defect			
✓ 209 ✓	1.5	1.5	1.5 ✓	18.0 ✓	b9	b9	b9 ✓	
✓ 211 ✓	2.0	2.0	2.0 ✓	24.0 ✓	a9	b9	a9 ✓	
✓ 257 ✓	1.5	2.0	1.5 ✓	18.0 ✓	a9	b9	b9 ✓	
(106) ✓ 210 ✓	1.5	2.0	2.0 ✓	24.0 ✓	b10	b9	b10 ✓	
✓ 258 ✓	1.5	2.0	1.5 ✓	18.0 ✓	d9	b9	c8 ✓	
(105) ✓ 259 ✓	3.0	4.0	3.5 ✓	42.0 ✓	a7	c8	b7 ✓	
✓ 260 ✓	4.0	3.5	3.5 ✓	42.0 ✓	a3	a4	a4 ✓	65.0 20.0
✓ 262 ✓	4.0	4.0	4.0 ✓	42.0 ✓	c6	c6	c6 ✓	
✓ 263 ✓	2.0	2.5	2.0 ✓	24.0 ✓	c10	c8	d9 ✓	
✓ 264 ✓	3.0	2.5	2.5 ✓	30.0 ✓	a10	b9	a9 ✓	
✓ 261 ✓	1.5	1.5	1.5 ✓	18.0 ✓	a9	b9	b9 ✓	
(2942) ✓ 190 ✓	1.5	2.0	1.5 ✓	18.0 ✓	f10	f10	f10 ✓	

					A.41F3		
195 ✓	1.5	1.5	1.5 ✓	18.0 ✓	a10	a10	a10 ✓✓
194 ✓	2.0	2.0	2.0 ✓	24.0 ✓	a9	a8	a9 ✓✓
67 ✓	1.5				a10		
162 ✓	3.0	2.0	2.5 ✓	30.0 ✓	a10	a9	a9 ✓✓
170 ✓	1.0	1.5	1.5 ✓	18.0 ✓	c10	b10	c10 ✓✓
16A ✓	2.0	3.0	2.5 ✓	30.0 ✓	a10	b10	b10 ✓✓
171 ✓	1.0	2.0	1.5 ✓	18.0 ✓	a9	a9	a9 ✓✓
167 ✓	2.0	3.0	2.5 ✓	30.0 ✓	c10	c9	c10 ✓✓
165 ✓	3.0	4.0	3.5 ✓	42.0 ✓	a9	a8	a8 ✓✓
178 ✓	1.0	1.5	1.0 ✓	12.0 ✓	a10	b9	a10 ✓✓
179 ✓	3.0	4.0	3.5 ✓	42.0 ✓	a9	b7	b8 ✓✓
177 ✓	3.0	3.0	3.0 ✓	36.0 ✓	a7	b7	a7 ✓✓
180 ✓	2.5	2.5	2.5 ✓	30.0 ✓	b8	b8	b8 ✓✓
76 ✓	2.0				d10		
46 ✓	1.5				a10		

A 41123

'73 ✓	1.5	2.0	2.0 ✓	2.4 ✓	a9	b10	b10 ✓
'74 ✓	2.0	2.5	2.0 ✓	2.4 ✓	c9	c9	c9 ✓
'75 ✓	4.0	4.5	4.5 ✓	5.4 ✓	a6	b7	a6 ✓
'72 ✓	2.0	2.0	2.0 ✓	2.4 ✓	a9	b9	b9 ✓
'83 ✓	3.0	3.0	3.0 ✓	3.6 ✓	a7	a7	a7 ✓

41

dyeck

'84 ✓	3.0	3.0	3.0 ✓	3.6 ✓	c9	c7	c8 ✓
'85 ✓	2.0	3.0	2.5 ✓	3.0 ✓	b8	b7	b8 ✓

97

star

'87 ✓	1.5	1.5	1.5 ✓	1.8 ✓	a9	b8	a8 ✓
-------	-----	-----	-------	-------	----	----	------

92

star

'93 ✓	1.0	2.0	1.5 ✓	1.8 ✓	b10	b10	b10 ✓
'92 ✓	2.0	2.0	2.0 ✓	2.4 ✓	a10	b8	b9 ✓
'99 ✓	1.0	2.0	1.5 ✓	1.8 ✓	b10	b10	b10 ✓
'98 ✓	1.5	1.5	1.5 ✓	1.8 ✓	b10	b10	b10 ✓

A.41P3

190 ✓	2.5	3.0	2.5 ✓	3.0 ✓	a3	b5	a4 ✓✓	150°
189 ✓	2.0	2.5	2.5 ✓	3.0 ✓	a7	a7	a7 ✓✓	
188 ✓	1.0	1.5	1.0 ✓	1.2 ✓	b10	b10	b10 ✓✓	
1100 ✓	1.0	1.5	1.5 ✓	1.8 ✓	c10	b10	b10 ✓✓	
1106 ✓	1.0	1.5	1.0 ✓	1.2 ✓	c10	b9	c10 ✓✓	
1102 ✓	1.5	2.0	2.0 ✓	2.4 ✓	a10	a10	a10 ✓✓	
1103 ✓	1.5	1.5	1.5 ✓	1.8 ✓	b10	b10	b10 ✓✓	
1104 ✓	2.5	3.0	2.5 ✓	3.0 ✓	a10	a9	a9 ✓✓	
1105 ✓	1.0	2.0	1.5 ✓	1.8 ✓	a9	a8	a9 ✓✓	
1239 ✓	1.0	2.0	1.5 ✓	1.8 ✓	a7	b7	b7 ✓✓	
(360) 1108 ✓	1.0	1.5	1.5 ✓	1.8 ✓	b10	b9	b9 ✓✓	
1109 ✓	1.5	2.0	1.5 ✓	1.8 ✓	c10	c9	c10 ✓✓	
1166 ✓	1.5	2.0	2.0 ✓	2.4 ✓	c10	b9	c9 ✓✓	
1165 ✓	2.0	3.0	2.5 ✓	3.0 ✓	a7	b5	b6 ✓✓	
1166 ✓	2.0	2.0	2.0 ✓	2.4 ✓	d9	c9	d9 ✓✓	

					<u>A.4163</u>			
✓147 ✓	3.0	3.5	3.0 ✓	3.0 ✓	a8	b8	b8 ✓✓	
✓148 ✓	2.0	3.0	2.5 ✓	3.0 ✓	c7	a8	c7 ✓✓	
(303) ✓149 ✓	1.5	2.0	2.0 ✓	2.0 ✓	a10	b9	a9 ✓✓	
✓147 ✓	1.5	2.0	1.5 ✓	1.5 ✓	b10	b9	b10 ✓✓	
✓155 ✓	2.0	2.5	2.5 ✓	3.0 ✓	a10	c9	b9 ✓✓	
✓157 ✓	2.5	3.0	2.5 ✓	3.0 ✓	a9	c9	b9 ✓✓	
✓158 ✓	1.0	2.0	1.5 ✓	1.5 ✓	a9	c9	b9 ✓✓	
✓156 ✓	2.0	2.5	2.5 ✓	3.0 ✓	e10	c9	d10 ✓✓	
✓151 ✓	2.0	3.0	2.5 ✓	3.0 ✓	d10	i d9	i d9 ✓✓✓	
✓150 ✓	2.5	class on 15F44			a6	c5		
✓149					star			
✓152 ✓	1.0	1.5	1.0 ✓	1.0 ✓	c10	b10	b10 ✓✓	
✓153 ✓	2.0	2.5	2.5 ✓	3.0 ✓	a10	a9	a10 ✓✓	
✓154 ✓	2.0	2.0	2.0 ✓	2.0 ✓	b9	b8	b8 ✓✓	
✓151 ✓	2.0	class on # 15F44			e10			

A.4183

314 ✓	1.5				a7			
1163 ✓	5.0	4.0	4.5 ✓	5.0 ✓	a5	b5	a5 ✓✓	15.0°
1160 ✓	2.0	class on 1715844			a10			
1164 ✓	3.0	3.0	3.0 ✓	3.0 ✓	a6	b5	b6 ✓✓	
g ✓	2.0				11			
116 ✓	5.0				a6			
116 ✓	5.0				a7			
g ✓	7.0	class on 1715844			a2			30.0°
f ✓	5.0	"	"		a7			
e ✓	3.0	"	"		a9			
d ✓	5.0	"	"	1.0 ✓	a3			
1144 ✓	2.0	"	"	1.0 ✓	a10			
116 ✓	3.0	"	"		a10			
e' ✓	4.0	"	"	3.0 ✓	a9			
d' ✓	2.0	class on 1715844			-			

					A.4183			
141 ✓	2.0	class on 15844			a10			
138 ✓	2.0	" "			e9			
139 ✓	2.0	" "			e9			
140 ✓	2.0	" "			b9			
136 ✓	2.0	rejected			b10			
135 ✓	2.0	class on 15844			e9			
134 ✓	2.0	" "			b9			
132 ✓	2.0	" "			e9			
137 ✓	2.0	" "			b9			
147 ✓	2.0	" "			e9			
(530) 123A ✓	1.5	1.5	1.5 ✓	18-0 ✓	d10	d10	d10 ✓✓	
	very flaring about nucleus.							
131 ✓	2.0	2.0	2.0 ✓	28-0 ✓	a10	b10	a10 ✓✓	
130 ✓	1.5				b10			
12A ✓	3.5	4.5	4.0 ✓	48-0 ✓	c6:	b6:	b6: ✓✓	
126 ✓	2.5	3.0	2.5 ✓	30-0 ✓	a10	c8	b9 ✓✓	

A. 4183

$\frac{1}{27}$ ✓	2.5	3.0	3.0 ✓	36.0 ✓	a9	c8	b8 ✓✓
$\frac{1}{24}$ ✓	3.5	4.5	4.0 ✓	48.0 ✓	a9	a9	a9 ✓✓
$\frac{1}{22}$ ✓	2.0	2.5	2.0 ✓	24.0 ✓	c9	c9	d9 ✓✓
(569) $\frac{1}{240}$ ✓	1.5	2.0	2.0 ✓	24.0 ✓	a10	b9	a10 ✓✓
$\frac{1}{20}$ ✓	4.5	5.5	5.0 ✓	60.0 ✓	c8	c8	c8 ✓✓
$\frac{1}{19}$ ✓	3.0	3.0	3.0 ✓	36.0 ✓	a9	b8	b8 ✓✓
$\frac{1}{15}$ ✓	3.0	4.0	3.5 ✓	42.0 ✓	c7	c9	c8 ✓✓
$\frac{1}{17}$ ✓	2.5	3.0	2.5 ✓	30.0 ✓	a8	a7	a8 ✓✓
$\frac{1}{14}$ ✓	2.0	3.0	2.5 ✓	30.0 ✓	a9	b9	a9 ✓✓
$\frac{1}{13}$ ✓	2.5	3.5	3.0 ✓	36.0 ✓	b9	c9	c9 ✓✓
$\frac{1}{11}$ ✓	5.0 :	5.0 :	5.0 ✓	60.0 ✓	a10	b9	a9 ✓✓
	hazy to edge						
$\frac{1}{12}$ ✓	3.0	5.0	5.0 ✓	60.0 ✓	a7	b8	b7 ✓✓
$\frac{1}{10}$ ✓	3.0	3.0	3.0 ✓	36.0 ✓	a9	b9	a9 ✓✓

I.C.		A. 4183						
2018 ✓	4.0	4.0	4.0 ✓	48.0 ✓	c9	c8	c8 ✓✓	
2020 ✓	3.0	3.5	3.5 ✓	42.0 ✓	b10	c10	c10 ✓✓	
2021 ✓	3.0	3.0	3.0 ✓	36.0 ✓	b9	c10	b9 ✓✓	
2023 ✓	2.0	2.5	2.0 ✓	24.0 ✓	c9	c9	c9 ✓✓	
2024 ✓	7.0	7.0	7.0 ✓	84.0 ✓	a2	c3	b3 ✓✓	30° 60°
2025 ✓	2.0	3.0	2.5 ✓	30.0 ✓	c7	c7	c7 ✓✓	
2028 ✓	3.0	3.0	3.0 ✓	36.0 ✓	e10	d8	d9 ✓✓	
2029 ✓	3.5	3.5	3.5 ✓	42.0 ✓	c10	c9	c10 ✓✓	
2033 ✓	2.5	2.5	2.5 ✓	30.0 ✓	c8	c8	c8 ✓✓	
2043 ✓	7.5	7.0	7.0 ✓	84.0 ✓	Le2	Le3	Le3 ✓✓	5° 85°
✓ 2044 ✓	2.0	2.5	2.0 ✓	24.0 ✓	a10	c9	b10 ✓✓	
✓ 2046 ✓	3.0	3.0	3.0 ✓	36.0 ✓	e10	c9	d9 ✓✓	
2050 ✓	4.0	4.0	4.0 ✓	48.0 ✓	f8	e8	f8 ✓✓	
2052 ✓	5.0	5.5	5.5 ✓	66.0 ✓	Lc4	Lc5	Lc4 ✓✓	165° 170°
✓ 2066 ✓	5.5	5.5	5.5 ✓	66.0 ✓	b9	c9	c9 ✓✓	

I.C.

A. 4183

2071 ✓

5.0

5.0

5.0 ✓

6.0 ✓

a7

c6

b6 ✓✓

519 almost in contact

2073 ✓

7.0

7.5

7.0 ✓

8.0 ✓

i2c4

i2d5

i2c4 ✓✓✓

50°

nucleus slightly off center

2079 ✓

5.0

5.0

5.0 ✓

6.0 ✓

e8

d8

e8 ✓✓

2081 ✓

3.0

3.0

3.0 ✓

3.0 ✓

e9

c8

d8 ✓✓

2082 ✓

3.5

4.0

4.0 ✓

4.0 ✓

fg

d8

e9 ✓✓

2083 ✓

3.0

3.5

3.0 ✓

3.0 ✓

c9

c9

c9 ✓✓

✓ 2085 ✓

15.0

15.0

15.0 ✓

18.0 ✓

Lc3

Lc3

Lc3 ✓✓✓

115°

140

2086 ✓

3.0

3.0

3.0 ✓

3.0 ✓

a7

b7

b7 ✓✓✓

N.G.C.

1500 ✓

3.0

3.0

3.0 ✓

3.0 ✓

c9

c9

c9 ✓✓

1506 ✓

3.0

3.0

3.0 ✓

3.0 ✓

c10

c9

c9 ✓✓

1515 ✓

3.0

spherical

Ld2

Ld3

Ld2 ✓✓✓

10°

80°

blast nebulae

1522 ✓

2.5

3.0

3.0 ✓

3.0 ✓

b9

b8

b8 ✓✓

only an extremely hard nucleus

1523 ✓

10

Not found

a9

question

N.G.C.

A.4183

1536								
1556v	7.0	7.0	7.0 [✓]	84.0 [✓]	Ld4	Ld4	Ld4 ^{✓✓}	165° 105°
✓1566v	21.0	see diams. of b'test nebulae			Sd6	Sd8	Sd7 ^{✓✓}	
1578v	5.0	5.0	5.0 [✓]	60.0 [✓]	b10	c9	b10 [✓]	
		extremely hard & bright						
✓1581	9.0	9.0	9.0 [✓]	108.0 [✓]	f7	d7	e7 ^{✓✓}	
✓1596v	13.0	see diams. of b'test nebulae			Ld3	Ld3	Ld3 ^{✓✓✓}	20° 10°
1617v	20.0	" "			d4	d4	d4 ^{✓✓}	105°
N.N:								
A	2.0	class on 1715844			d8			
B	5.0				e7			
C	15.0				e4			140°
D	5.0	class on 1715844			e7			
315	1.5				b10			

104

A 12790

121 5.0 b9

122 1.5 a9

54 M. G. C. 1473

103 3.5 c7

104 1.5 a10

101 2.0 a8

4A 2.0 c9

120 6.0 a9

46 2.0 a10

ε 5.0 a10

108 1.5 d9

109 1.5 d9

47 1.5 a10

44 2.0 c8

45 1.0 c10

		A. 12790	
43	2.0	d10	
114	1.5	b1	
49	5.0	b3	90°
105	2.0	b9	
126	3.5	a7	
55	2.0	b10	
56	1.5	d10	
50	1.5	a9	
51	4.0	a10	
52	2.0	a9	
62	3.5	a10	
63	2.0	a7	
64	5.5	LE 4	105°
65	16.0	Sic E3	110°
66	6.0	a2	95°

A. 12790

53	1.5	a10	
124	2.0	b10	
93	4.5	a7	
123	5.0	a4	100°
91	2.5	a8	
97	5.0	a3	125°
96	1.0	a10	
95	1.5	a10	
94	1.5	c10	
92	1.5	b9	
84	1.5	a9	
70	3.0	b8	
113	2.0	b6	
98	2.0	c9	
68	1.5	d10	

A. 12790

69	2.0	aP	
112	3.0	a10	
99	2.0	c7	
101	5.0	LE2	35°
102	2.5	a9	
67	5.0	a4	170°
PF	3.0	c7	
90	2.0	b9	
P3	1.5	c9	
P2	2.0	b10	
118	4.0	a10	
115	3.0	a7	
79	2.0	bP	
P0	2.0	b10	
1	3.0	a10	

A. 12990

76 2.0

c7

75 2.0

c8

6 3.0

b9

1

M.S.C. 1644

127: 3.5

a5

direct? nebula
touching star?

140°

f6 2.0

b10

f7 3.5

ib7

59 2.0

c10

71 2.0

c8

72 1.5

c9

37

M.S.C. 1652

40 4.0

b9

38

three stars

39 4.0

c7

28 2.5

c9

		A. 12790	
30	3.0	EP	
31	2.0	C6	
33	5.0	B10	
34	4.0	C9	
35	5.0	(a10)	
57	3.5	C6	
106	2.5	C7	
58	2.0	C10	
41	5.5	a4	100 ⁰
42	1.5	d9	
23	2.5	a9	
22		two stars	
19	4.0	a7	
18	7.0	C9	

110

A12790

M. G. C.

1493

6.0

iEP

= N. N. 54

1644

3.5

c8

= N. N. 1

1649

existence doubted

= N. N. 35

1652

3.5

c7

= N. N. 37

1676

4.0

BP

	1	2	mean	2	1	Mean	2	1
					A. 13719			
1	11.0	11.0 11.0	11.0	f6	e6	e6		
(2)	7.0	7.0	7.0	f6	f5	f5		50°
W.L.C. 5086								
(3)	6.0	6.5	6.5	e9	e9	e9		
W.L.C. 5090								
(4)	7.0	8.0	7.5	e4	f2	f3	130°	130°
W.L.C. 5091								
5	2.5	2.0	2.0	b9	b8	b8		
6	4.0	4.0	4.0	b9	b8	b9		
7	5.0	4.5	5.0	b6	a4	a5		140°
(8)	6.0	6.0	6.0	e8	e7	e8		
W.L.C. 5082								
9	2.0	2.0	2.0	b10	a9	b10		
10	2.0	2.0	2.0	b7	a7	a7		
11	2.0	2.5	2.0	a10	a9	a9		
12	2.0	2.0	2.0	b9	b8	b9		
13	6.0	5.5	6.0	f5	f4	f4	165°	170°
14	3.0	3.0	3.0	b8	b7	b8		
15	3.5	3.0	3.0	a10	a9	a9		

	1	2	mean	2	1	Mean
				A. 13719		
16	2.5	2.5	2.5	b7	c6	c7
17	2.0	3.0	2.5	a9	a9	a9
18	1.5	2.0	2.0	b8	b7	b7
19	2.0	2.0	2.0	b10	b10	b10
20	2.0	2.5	2.0	b9	b10	b9
21	1.5	1.5	1.5	b9	c9	b9
22	2.0	2.0	2.0	a10	a10	a10
23	1.0	1.5	1.5	a8	c8	b8
24	4.0	3.5	3.5	c8	a7	b8
25	1.5	1.5	1.5	b10	a10	b10
26	2.0	2.5	2.5	a10	a9	a9
27	"	"	"	not a web.		
28	2.0	2.0	2.0	c10	c10	c10
29	2.0	2.0	2.0	a8	a7	a8
30	2.0	1.5	1.5	a9	a9	a9

	1	2	3	mean	2	1		
					A. 13719			
31	2.0	4.0	7.0 7.5	p Sib 4	S: b 3	S: b 3	10°	10°
32	5.0	5.0	5.0	i b 4 L b 4 Li H #	Lib 4	ft. ring around nebula?	50°	50°
33					not a neb.			
34	1.5	2.0	2.0	b 10	b 10	b 10		
35	9.0	9.0	9.0	E 5	E 6	E 6	10°	
36					not a neb.			
37	1.5	2.0	1.5	b 10	C 9	b 9		
38	2.0	2.0	2.0	d 9	d 8	d 9		
39	2.5	2.0	2.5	b 8	b 7	b 7		
40					not a neb.			
41	2.0	2.0	2.0	b 9	C 8	C 9		
42	3.0	3.0	3.0	a 8	i a 8	a 8		
43	2.0	2.0	2.0	b 8	C 8	b 8		
44	2.0	2.0	2.0	b 8 a 7	H 7	b 7		
45	2.5	2.5	2.5	b 7 b 7	i E 5	b 7		50°

			mean	A. 13719		
46	3.0	3.0	3.0	a9	a7	a8
47				not a neb.		
48	2.0	2.0	2.0	b10	a10	b10
49	1.5	1.5	1.5	a10	a10	a10
50	3.0	4.0	3.5	a9	a9	a9 a hazy ind. limits object.
51				not a neb.		
52				not a neb.		
53	2.5	2.0	2.0	b8	b8	b8
54	1.5	1.0	1.5	b10	b10	b10
55	2.0	2.0	2.0	a9	a8	a8
56				not a neb.		
57	1.5	2.0	1.5	b9	a8	a9
58	1.0	2.0	1.5	b10	a9	b9
59				not a neb.		
60	1.5	2.0	2.0	b9	a9	a9

1 2 3 Mean 2 1
A. 13719

61					not a neb.	
62	4.0	2.0	2.0	2.0	b9	b10
63a	2.0	2.0		2.0	a8	a9
63b	2.0	2.0		2.0	a7	a7
64	1.5	1.5		1.5	a9	a9
65	1.5	1.5		1.5	a10	b9
66	1.5	1.0		1.0	a10	a9
67	2.0	2.0		2.0	a9	b9
68	1.0	1.5		1.5	a10	b10
69					not a neb.	
70					not a neb.	
71	2.0	2.0		2.0	b8	b7
72	1.5	2.0		1.5	b10	c9
73	1.0	1.5		1.5	b10	a8
<u>11.5.C.</u>						
5082	6.0					e7
11.11.8						
5086	7.0					
11.11.2						

5.5

5.0

116

M. G. C. (cont.)

A. 13719~~5090~~

6.0

~~E9~~

{ = M. N. 3

5091

7.0

Ly 2

130°

{ = M. N. 4

5128

55.0:

i c 9

74

b 9 (SFM)

A. 13036

15a	3.0	a9
11a	2.5-	a9
13	6.0	a2
c	3.0	a2
11b	3.0	b2
14	3.0	b9
d	2.0	a2
9	2.5	a9
15-b	1.0	a10
p	3.0	a10
7	3.0	b9
6	3.0	a7
5	1.0	a9
b	2.5-	a7
3	2.0	b2

40°

		<u>A. 13036</u>		
N.C. 4468	9.0	S: C3		150°
4501	6.0	d7		
N.C. 5734	2.5	d7		
5743	3.0	C6		
		<u>A. 13037</u>		
13	1.5	C10		
9	1.5	d10		
7	2.5	b9		
5	2.5	a9		
6	1.5	b9		
8	2.5	b9		
10	3.0	a8		
11	1.5	b9		
13	1.0	d9		
14	3.5	C5		90°
12	2.0	b6		

A:13037

16	2.0	c 6
17	1.0	d 7
18	0.0	d 8
19	0.5	a 9
20	3.0	c 7
= 150 m A. 13039		
21		not a neb
- 150 m A. 13040		
22	0.0	not a neb a 8
23	2.0	b 9
24	2.0	a 8

to be completed

JM Classification on A3346.

<u>No</u>	<u>Cl.</u>	<u>Ori.</u>	<u>No</u>	<u>Cl.</u>	<u>Ori.</u>
206			231		
207			227		
208			228		
209			229		
210			230		
211			250		
212			251		
213			BK B 152	q8, b9 b6 +1	2
271			108	d10, c10 c9 -1	1
218			150	a10, b10 c9 +2	1
219			106	f9, f9 c8 -3	1
223			107	b10, b10 a8 -1	2
222			149	c10, c9 a8 -2	1
215			121	b10, b10 b8 0	2
216			204	c9, b9 c10 0	-1
217			109	c7, c6 a4 +2	3
214			105	f6 f7 0	1
232			100	b9 a6 -1	3
233			+6		
224			19	a8 c9 +2	-1
225			103	b9 d b1 -2	-2
226			102		
221			97	c10 d10 +2	0

A 3346
cont

N ^o	$\frac{a}{b}$
22	$\frac{b8}{c7}$
21	$\frac{a9}{b4}$ —
20	$\frac{c7}{c8}$
94	$\frac{a7}{b5}$
95	$\frac{b9}{a7}$
111	
153	
183	$\frac{a9}{a9}$
125	
166	$\frac{c8}{b8}$
167	$\frac{a10}{c10}$
168	$\frac{a7}{a8}$
119	
87	
92	
90	
91	
84	$\frac{c10}{c9}$
88	$\frac{a9}{a10}$

A 3346

N ^o	JM	SFM	± 1	± 1
74				
73	c9	edge 210	-2	-1
72	a9	b10	-1	-1
66	c10	" c9	0	+1
49	c7	" d6	-1	+1
70			—	—
82	d	a8	—	—
83	b8	c10	-1	-2
81	a9	a8	0	+1
86	a10	c10	-2	0
79	d8	c9	+1	-1
78	d15	b10	—	—
77	a8	a7	0	+1
75	b9	a8	+1	+1
27	a10 (edge)	b7	-1	+3
25	a9 (edge)	a7	0	+2
24	b10	210	-3	0
23	b8	19	-4	-1
60	a10 (edge)	b10	-1	0
59	a10	" a10	0	0
58		a8	—	—
32	b8 (edge)	b7	0	+1
31	b9 (edge)	a9	+1	0
33	a7	" a8	0	-1

		<u>4.3657</u>	
6	3.0	c9	
16	2.0	b7	
7	3.5	b9	a hazy indefinite object
P	2.0	cP	
I.C. 4358	7.0	sc9	
4361	3.0	b7	
4363	3.0	c6	
4364	4.0	a9	
4368	2.5	c9	
H.G.C. 5442	3.5	id7	
N IV 17	3.0	b9	
18	2.5	a7	
13 a	3.0	aP	
12	2.0	aP	
11	3.0	a9	

		4.3659	
10	4.5	a8	
14	5.0	a7	
13.5	2.5	b9	
9	2.5	i b7	
22	5.0	b8	
23	3.0	b9	
2	5.0	c10	
19	3.5	c4	40°
20	1.5	d9	
21	2.0	b8	
32	2.0	b8	
3.0	1.5	a8	
1	2.5	c8	

48	1.5	A.6770 c8	
72 a	1.5	a4	75°
72 b	1.0	b9	
76	1.5	c10	
47	5.5	b2	165°
61		star	
33	1.5	a9	
32	1.5	a9	
73	1.5	a9	
52		star	
50	3.0	a8	
51	3.5	L25	170°
78	3.5	a8	
10	2.5	b7	
71	1.5	b7	
66	1.5	b8	

			A.6770
			<u>a6</u>
69	2.0-		
74	2.0		a9
53	2.0		a9
65	3.0		c9
57	4.0		a8
56	3.0		b7
49	2.0		a8
37	1.5-		a9
36	2.0		a9
77	2.0		a9
34	1.5-		b8
78	1.0		b8
79	2.0		a8
64	3.0-		a9
21	1.5-		b9

		A.6770	
12	2.0	a9	
22	2.0	b5	45°
4	1.5	a10	
13	3.5	Ld4	165°
14	1.5	a10	
15	3.0	a5	20°
43	2.0	b9	
16	3.0	a7	
17	1.5	a10	
20	3.0	a7	
19	6.0	a3	120°
18	3.0	a6	
27	2.0	c8	
20	5.0	a3	80°
24	3.0	a7	
(22)	3.5	a7	
= I.C. 5043			
67	3.0	a6	

I.C. 4950	5.5	A.6770	25	40°
4952	4.0		c7	
4957	3.0		a9	
4963	5.0		c9	
4965	2.0		c9	
4973	4.0		b9	
4980	6.0		Lc4	130°
4986	5.0		a10	
4989	4.0		a3	160°
5001	2.0		c9	
5002	1.5		f9	
5012	4.0		a7	
5017	3.5		Lc15	170°
5027	2.0		b9	
5033	2.0		b9	

		A.C. 770	
I.C. 5034	1.5	c9	
5035	2.0	a9	
5036	5.0	a2	120°
5037	6.5	b3	170°
5043	3.5	a7	
5059	4.0	a8	
5063	3.0	c9	
5064	3.5	i b8	
N.C. 6A55	3.5	b6	
6A62	5.0	b9	
6A67	8.0	a4	155°

A. 13362

Zf4

120°

62

7.0

64

3.0

b8

65

5.0

c4

10°

67

2.0

b8

68

3.0

b9

69

3.5

e7

70

3.0

c9

72

2.5

b9

75

2.0

b7

77

3.5

c8

78

3.0

e8

79

5.0

Zf3

170°

80

6.0

f6

(A3)

2.0

f9

= IC-3813

16P

3.0

e9

180

A.13362

169	7.0	a3	120°
170	5.5	Lf3	25°
60	2.5	a8	
61	1.5	a9	
63	2.0	a7	
66	1.5	a9	
71	1.5	c9	
74	4.0	a2	30°
76	3.0	a3	10°
54	12.0	Lε1	130°
57	5.0	a9	
159	10.0	b7	
161	6.0	b3	30°
151	5.0	L:ε5	25°
152	4.5	a4	20°

163	4.0	A. 13362 Lc5	20°
164	3.5	Lc6	
175	6.5	Lc8	
173	9.0	Lc2 to be completed	60°

		<u>A. 5044</u>	
2		star	
3	4.0	c7	
10	2.0	f9	
12	2.0	ic7	
13	1.5	b6	
M.C. 3136	2.0	f9	
J.C. 2554	10.0	pSi c2	10°
		<u>A. 5202</u>	
6	2.5	c6	
11	3.0	c9	
15	3.0	b10	
24	2.0	d10	
25	2.0	d9	
		<u>A. 5049</u>	
7	2.0	a2	
11	2.0	b9	
13	6.0	a2	175°

M.C.		A. 5049 (cont.)		100°
2788	7.0		b4	
2836	9.0		d7	
2822			not seen	
I.C.				
2448	3.0	doubtful	b9	
2504			not seen	
			A. 5102	
7	4.0	defect	E10	
8			star	
I.C. 2596	1.0		b8	
M.C. 3059	2.5		a6	
			A. 5104	
4	1.0		a10	
6			two stars	
10	1.5		a8	
12	1.5	two stars?	c10	

15	1.0	<u>A. 5104 (cont.)</u> b9	
2	2.0	<u>A. 5106</u> c7	
25	1.5	<u>A. 5349</u> c10	
M.C. 4091	2.5	b9	
0	1.5	<u>A. 5355</u> c8	
J.C. 2980		defect ??	
M.C. 5844	5.0	<u>A. 5376</u> i a9	
71.71. 2			
8	5.0	<u>A. 5451</u> b8	
7	12.0	LE3	50°
6	2.0	d8	
a	1.5	c9	
5	6.0	cc3	25°
4	5.0	b8	

A. 5451 (cont.)

i 67:

5

10.0:

H.N. 1825

4.0

c 9

1828

3.0

d 8

1830

2.0

c 9

(on A. 5453)

H.N.C. 6156

4.0

f 9

A. 5453

15

crossed off

~~d 9~~

by H.S.

1

8.0

i a 7

2

6.0

i 67

5

star

9

3.0

e 9

10

star

12

1.5

d 9

13

5.0

c 8

H.N.C.

6156

8.0

c 8

N. A. C. (cont.)

6300

15.0

A. 5453 (cont.)

f7

a nebulous ring
around 3 stars

J. C. 4653

4.0

b8

H. N.

1832

2.0

d9

1833

3.0

c8

1835

10.0

a2

135°

1836

12.0

a4

120°

1837

5.0

a6

1838

2.5

b9

1839

3.0

b8

1840

2.0

a9

1841

3.0

b9

1843

5.0

c5

140°

Other H. N.'s on this plate are too near edge
and therefore classified under A. 5377
H. N. 1825, 1826 and 1830 on this plate already
classified under A. 5451 - see p. 135

J.C.

4653 3.0

~~4655 1.5~~

4656 6.0

4662 8.5

4664 5.0

M.B.C.

6398 1.0

6328 1.5

6403 1.0

6407 3.0

6483 3.0

A.5455 (no N.Y., no. 5 = I.C. 4655)c9 (classified p. 136 under
A.5453)~~b9~~ 3 stars - see A.8377

b6

i d 7

c9

e9

b9

e9

d8

b8

A.5459

c 2.0

a3

50°

f 7.0

= no. 26 on A.13337

a6

1 7.0

a5

60°

9 5.0

Lb3

10°

6 3.5

b8

7 3.5

b4

20°

A. 5459 (cont.)

10	4.0	b9	
11	5.5	Lc 2	150°
17	2.0	b8	
18	3.0	b+	
19	2.0	d9	
20	1.5	b9	
21	3.0	b9	
22	3.0	b+	
29	3.0	b9	
28	2.0	d10	
26	5.0	b7	
25	5.0	c10	
30	2.0	c8	
24	2.0	e10	

<u>J.C</u>		A. 5459 (cont.)	
4672	4.0	b9	
4674	9.0	L:C 3	20°
4680	6.0	E7	
4696	13.0	b3	70°
4698	6.0	L:C 3	40°
4711	5.0	Ld2	130°
4718	3.5	c6	
4723	2.5	d8	
4726	1.5	c8	
4729	1.5	f8	
4728	2.5	d9	
4730	3.0	c9	
4731	9.0	Lf3	27°
4735	5.0	d9	
4737	2.0	d9	

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<u>J.C.</u>		<u>A. 5459 (comb.)</u>	
4738	3.0	a9	
4739	4.0	f8	
4741	6.5	f7	
4742	4.0	if9	
4743	1.5	e10	
4744	3.0	b9	
4745	9.0	b1	3°
4758		off plate	
4759	3.0	c7	
4760	2.0	c8	
4764	3.5	i d7	
4765	2.5	e10	
4766	5.0	d7	
4767	4.0	z d4	35°
4769	7.5	d7	

J.C.

A.5459 (cont.)

4770 3.0

a9

4771 3.0

a8

4772 3.0

d9

4779 4.5

a10

4781 4.0

a5

150°

4784 3.0

e10

4785 7.0

a3

38°

4790 6.0

c8

4793 8.0

b9

4794 6.0

d6

4795 4.0

a9

4798 5.0

e7

4797 15.0

id8

4800 5.0

e7

4801 6.0

f8

M.C.

6545

2.0

A. 5459 (cont.)

f9

6588

1.5

c8

6614

1.5

f10

6630

2.0

d9

6673

8.0

L f3

200

6684

20.0

f17

6706

5.5

c7

A. 6124

11

1.5

c9

A. 6134

2

1.5

c9

3

2.0

a9

8

~~2.5~~

defect

~~d8~~

Menzel 1906 - 29123

2.5

d9

M.C. 6797

3.0

E6

H.N.			A. 6134	
1908	3.5		a 8	
1911	5.0		a 4	40°
1912	1.5		b 7	
1915	1.5		c 10	
1921	3.0		b 5	25°
1939	2.0		d 8	
			A. 6419	
3	4.0		b 8	
a	1.0		d 9	
8	4.0	faint star checked on H 5914		10°
I.C. 4311	5.0		d 8	
I.C. 4312	1.5		f 10	
M.C. 5307	2.5		f 8	
			A. 6417	
25	3.0		a 10	
I.C. 4628			not seen	
I.C. 4637			not seen	

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All nebulae in purple () to be classified on #14272

A.4179

5	2.0	rejected	c9
10	2.5	"	b7
11	2.0	"	b7
28	2.0	used on #3346	c8
27	2.0	"	b8
8	1.5	"	d9
9	2.0	"	a9
32	2.0	"	d7
22	2.5	"	a18
18	2.5	"	b7
19	2.0	"	d9
24	2.0	"	b7
15	1.5	used on #3346	a9
16	1.5	"	d12
65	2.0	used on #14269	b8

~~66~~ — 2.0

A. 4179

~~ab~~
~~a~~ —

not a neb.

✓ 42	1.5	2.0	1.5 ✓	18.0 ✓	c10	c9	c10 ✓✓
✓ 43	1.0	1.5	1.5 ✓	18.0 ✓	a10	a10	a10 ✓✓
✓ 44	1.5	2.0	1.5 ✓	18.0 ✓	b10	b10	b10 ✓✓
✓ 45	1.5	1.5	1.5 ✓	18.0 ✓	d10	c10	d10 ✓✓
✓ 50	1.0	1.5	1.5 ✓	18.0 ✓	c9	c9	c9 ✓✓
✓ 47	1.5	2.0	1.5 ✓	18.0 ✓	d8	c9	c9 ✓✓
✓ 41	1.5	2.0	2.0 ✓	24.0 ✓	a7	a8	a7 ✓✓

~~62~~ — 1.5

rejected

~~ca~~
~~70~~ — 2.0

rejected

~~a7~~

✓ 77a	1.5	1.5	1.5 ✓	18.0 ✓	b9	b9	b9 ✓✓
✓ 77-b	2.0	2.0	2.0 ✓	24.0 ✓	a8	a9	a9 ✓✓
✓ 82	2.0	2.0	2.0 ✓	24.0 ✓	c8	b9	c8 ✓✓
✓ 80	1.5	2.0	1.5 ✓	18.0 ✓	c9	b8	b8 ✓✓

"A. 4179

✓ P1	1.5	2.0	2.0 ✓ 24.0	a10	a8	a9 ✓
✓ P7	3.0	3.0	3.0 ✓ 36.0	a6	a6	a6 ✓
54			star			
✓ 53	1.5	1.5	1.5 ✓ 18.0	a10	a9	a10 ✓
✓ 57	2.0	2.0	2.0 ✓ 24.0	b9	a8	b8 ✓
✓ 52	1.5	1.5	1.5 ✓ 18.0	d9	c8	c9 ✓
111	2.5	on 1714269		a10		
✓ 76	1.5	1.5	1.5 ✓ 18.0	b10	c10	b10 ✓
116	2.5	used on 1714269		a6		
		or 14272				
h	2.0	"		b8		
114	1.5	on 1714272		a10		
✓ 112	1.5	1.5	1.5 ✓ 18.0	e10	d9	d9 ✓
✓ 226	1.0	2.0	1.5 ✓ 18.0	a9	a9	a9 ✓
74	1.0			c9		
130	2.0	see 1714272		a9	extremely faint neb.?	
					very bright star	
211	2.0	"		c8		

217	2.0	see 1714272	<u>A-4179</u> c10
220	2.0	"	a10
135	1.5	"	a9
126	1.5	"	ba
230	2.0		a4
229	2.0		ba
224	1.5	see 1714269	a7
145	2.0	see 1714272	a8
107	2.0	"	a7
155	1.5	rejected	ba
198	1.0	see 1714272	b10
200	2.0	"	c9
257			two stars
205	1.5	"	b10
419	2.0		ba

480

138	2.5	SEE A14272	A.4179	a9		
71	2.0	rejected		c9		
156	1.5	"		star		
157	3.0	SEE A14272		b3		40°
4	3.0			b3		
(76) v 171	1.5	"		b10		
177		rejected		star		
(77) v 196	1.0	SEE A14272		c9		
v 165	1.5	2.0	1.5 ✓ 18.0 ✓	c7	bc	c7 ✓
v 166	3.0	3.0	3.0 ✓ 36.0 ✓	fr	fr	fr ✓
(75) 172	1.5	SEE A14272		fr		
v 187	1.5	1.5	1.5 ✓ 18.0 ✓	a10	a8	a9 ✓
v 191	2.0	2.0	2.0 ✓ 24.0 ✓	b8	b8	b8 ✓
v 188	1.0	1.5	1.5 ✓ 18.0 ✓	b9	a9	a9 ✓
v 160	2.5	2.5	2.5 ✓ 30.0 ✓	c8	c7	c7 ✓
v 184	1.5	2.0	1.5 ✓ 18.0 ✓	d8	d8	d8 star
v p	4.0	4.0	4.0 ✓ 48.0 ✓	b8	b8	b8 ✓
v 180	2.0	2.5	2.5 ✓ 30.0 ✓	b6	b6	b6 ✓
v ab	1.5	1.0	1.5 ✓ 18.0 ✓	b9	a8	b9 ✓

✓ 330	1.0	2.0	1.5 [✓]	18.0 [✓]	<u>H. 4179</u> b9	a8	a8 ^{✓✓}
✓ 347	1.5	2.0	2.0 [✓]	24.0 [✓]	d9	d9	d9 ^{✓✓}
✓ 346	1.0	2.0	1.5 [✓]	18.0 [✓]	d9	d9	d9 ^{✓✓}
✓ 345	1.5	2.0	1.5 [✓]	18.0 [✓]	b8	b7	b8 ^{✓✓}
✓ 344	2.5	2.0	2.0 [✓]	24.0 [✓]	b6	b6	b6 ^{✓✓}
✓ 343	1.5	2.0	1.5 [✓]	18.0 [✓]	a7	c7	b7 ^{✓✓}
✓ 336	2.0	2.0	2.0 [✓]	24.0 [✓]	d9	b9	c9 ^{✓✓}
✓ 337	1.5	2.0	2.0 [✓]	24.0 [✓]	d9	b10	c10 ^{✓✓}
✓ 335	1.0	2.0	1.5 [✓]	18.0 [✓]	d9	b9	c9 ^{✓✓}
✓ 341	1.5	2.0	1.5 [✓]	18.0 [✓]	b8	a8	b8 ^{✓✓}
96	1.5		rejected		d9		
106	1.5		SEE #14272		CA		
103	1.5		rejected		b9		
102	1.5		"		d8		
✓ 101	1.5	2.0	2.0 [✓]	24.0 [✓]	a9	b9	b9 ^{✓✓}

A. 4179

~~bg~~~~180~~ ——— ~~2.0~~~~20~~

star

✓ 22	2.0	2.0	2.0 ✓	24.0 ✓	a9	b9	a9 ✓✓
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✓ 357	3.0	3.0	3.0 ✓	36.0 ✓	a9	a7	a8 ✓✓
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~~363~~ ——— ~~2.0~~~~a9~~

✓ 362	2.0	2.0	2.0 ✓	24 ✓	a9	b9	b9 ✓✓
-------	-----	-----	-------	------	----	----	-------

~~343~~ ——— ~~2.0~~~~a8~~~~394~~ ——— ~~2.0~~~~ia8~~

✓ 360	1.5	2.0	1.5 ✓	18.0 ✓	b9	b9	b9 ✓✓
-------	-----	-----	-------	--------	----	----	-------

✓ 359	2.0	1.5	1.5 ✓	18.0 ✓	b8	a9	b8 ✓✓
-------	-----	-----	-------	--------	----	----	-------

✓ 361	3.0	3.0	3.0 ✓	36.0 ✓	b9	i b8	i b8 ✓✓
-------	-----	-----	-------	--------	----	------	---------

✓ 392	1.5	2.0	1.5 ✓	18.0 ✓	c9	b10	b10 ✓✓
-------	-----	-----	-------	--------	----	-----	--------

✓ 355	2.0	2.0	2.0 ✓	24.0 ✓	b9	a10	b9 ✓✓
-------	-----	-----	-------	--------	----	-----	-------

✓ 354	2.0	2.0	2.0 ✓	24.0 ✓	c10	b9	b9 ✓✓
-------	-----	-----	-------	--------	-----	----	-------

~~351~~ ——— ~~1.5~~~~d10~~

					4.4179		
✓ 350 a	1.5	1.5	1.5	✓ 12.0	bp	b9	b9
371	1.0		rejected		dg		
✓ 370	1.5	1.5	1.5	✓ 18.0	a9	a9	✓ a9
✓ 373	1.0	1.5	1.5	✓ 18.0	b9	b9	✓ b9
✓ 374	1.0	1.5	1.0	✓ 12.0	b10	b9	✓ b9
✓ 372	1.5	2.0	2.0	✓ 24.0	b9	b9	✓ b9
394	1.0		rejected		a10		
369	1.5		rejected		a9		
395	1.5		"		a10		
✓ 367	2.0	2.5	2.0	✓ 24.0	a9	a9	✓ a9
✓ 368	2.0	2.5	2.5	✓ 30.0	i b9	b9	✓ i b9
✓ 381	1.0	1.5	1.5	✓ 18.0	a9	b9	✓ a9
382					two stars		
383	1.0				dg		
✓ 384	1.5	2.0	1.5	✓ 18.0	a9	a9	✓ a9
✓ 385	1.0	2.0	1.5	✓ 18.0	a9	a8	✓ a8

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A. 4179

✓ 388	2.0	2.0	2.0 ✓	24.0 ✓	c7	br	b7 ✓✓
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386	1.0		rejected		c9		
----------------	-----	--	----------	--	----	--	--

ab	1.0		"		a10		
---------------	-----	--	---	--	----------------	--	--

378	1.5		"		d9		
----------------	-----	--	---	--	---------------	--	--

✓ 331	2.0	2.0	2.0 ✓	24.0 ✓	c8	b7	c7 ✓✓
-------	-----	-----	-------	--------	----	----	-------

329			rejected		istar		
----------------	--	--	----------	--	-------	--	--

330	1.5		"		a9		
----------------	-----	--	---	--	---------------	--	--

✓ 332	1.5	2.0	2.0 ✓	24.0 ✓	b9	br	b9 ✓✓
-------	-----	-----	-------	--------	----	----	-------

✓ 377	1.0	2.0	1.5 ✓	18.0 ✓	c9	c9	c9 ✓✓
-------	-----	-----	-------	--------	----	----	-------

✓ 376	1.5	2.0	1.5 ✓	18.0 ✓	a8	a9	a9 ✓✓
-------	-----	-----	-------	--------	----	----	-------

✓ 342	1.0	1.5	1.5 ✓	18.0 ✓	a9	a8	a9 ✓✓
-------	-----	-----	-------	--------	----	----	-------

328					istar		
----------------	--	--	--	--	-------	--	--

✓ 334	1.5	2.0	1.5 ✓	18.0 ✓	b9	a9	a9 ✓✓
-------	-----	-----	-------	--------	----	----	-------

~~343~~

= M.C.C. 1249

ab	2.0				ea		
---------------	-----	--	--	--	---------------	--	--

~~Le1~~~~75°~~

ah	2.0			h H. 4179	af		
364	2.0				ag		
u	2.0				b10		
✓ 299	2.0	2.0	2.0 ✓	24.0 ✓	b9	a9	b9 ✓✓
300	1.5				ag		
✓ t	1.5	1.5	1.5 ✓	18.0 ✓	ag	ag	ag ✓✓
✓ m	2.0	2.0	2.0 ✓	24.0 ✓	ag	ag	ag ✓✓
309	1.0				b10		
✓ 390	1.0	2.0	1.5 ✓	18.0 ✓	b9	af	af ✓✓
391	1.0				af		
301	1.0				c10		
391	1.0				c10		
397	1.0				ag		
✓ 302	2.5	3.0	3.0 ✓	36.0 ✓	b7	b7	b7 ✓✓
298	1.0				b7		
u	2.0				ag		

A.4179

star

~~324~~ — 1.5~~1.5~~

✓ 326	1.0	1.5	1.0 ✓	12.0 ✓	b10	b10.	b10 ✓✓
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~~328~~ — 1.0~~1.0~~

✓ 327	1.5	2.0	2.0 ✓	24.0 ✓	a7	a7	a7 ✓✓
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✓ 305	2.0	2.0	2.0 ✓	24.0 ✓	a9	i b9	i a9 ✓✓
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✓ 306	1.5	2.0	1.5 ✓	18.0 ✓	a10	a9	a10 ✓✓
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✓ 307	2.0	2.0	2.0 ✓	24.0 ✓	a6	a7	a7 ✓✓
-------	-----	-----	-------	--------	----	----	-------

✓ 308	1.0	1.5	1.5 ✓	18.0 ✓	b10	a10	a10 ✓✓
-------	-----	-----	-------	--------	-----	-----	--------

✓ 316	1.5	2.0	1.5 ✓	18.0 ✓	a10	b10	a10 ✓✓
-------	-----	-----	-------	--------	-----	-----	--------

~~315~~ — 1.5~~1.5~~

✓ 317	2.0	3.0	2.5 ✓	30.0 ✓	b6	b7	b6 ✓✓
-------	-----	-----	-------	--------	----	----	-------

~~318~~

defect

✓ 398	1.5	1.5	1.5 ✓	18.0 ✓	c10	c10	c10 ✓✓
-------	-----	-----	-------	--------	-----	-----	--------

✓ 323	1.0	1.0	1.0 ✓	12.0 ✓	c10	c9	c9 ✓✓
-------	-----	-----	-------	--------	-----	----	-------

					4.4179		
✓ 324	2.5 ⁻	2.0	2.0 ⁻	28.0 [✓]	b9	a9	a9 ^{✓✓}
✓ 322	3.0	3.0	3.0 [✓]	36.0 [✓]	c7	c9	c9 ^{✓✓}
311	1.0				410		
✓ 312	2.5 ⁻	3.0	2.5 [✓]	30.0 [✓]	a9	b9	a9 ^{✓✓}
309					defect?		
✓ 310	2.0	2.0	2.0 [✓]	28.0 [✓]	a9	a9	a9 ^{✓✓}
✓ 295	1.0	2.0	1.5 ⁻	18.0 [✓]	c10	b10	b10 ^{✓✓}
✓ 293	1.5 ⁻	1.5 ⁻	1.5 ⁻	18.0 [✓]	c10	b9	a9 ^{✓✓}
✓ 294	1.5 ⁻	2.0	2.0 ⁻	28.0 [✓]	b10	b9	b9 ^{✓✓}
291					defect		
299	1.5⁻				49		
✓ 321	2.0	3.0	2.5 [✓]	30.0 [✓]	ia6	a9	ia7 ^{✓✓}
✓ 289	1.5 ⁻	2.0	1.5 [✓]	18.0 [✓]	a10	b9	b10 ^{✓✓}
✓ 288	1.0	2.0	1.5 [✓]	18.0 [✓]	b10	b9	b9 ^{✓✓}
✓ 285	1.5 ⁻	2.0	2.0 [✓]	28.0 [✓]	a9	b9	a9 ^{✓✓}

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A.4179

2F1	2.0						
					c9		
2	2.0				a9		
✓ 2F4	3.0	2.0	2.5 ✓	30.0 ↓	a8	a9	✓
✓ 2F3	3.0	2.0	2.5 ✓	30.0 ↓	b9	b9	✓
✓ 2F2	2.0	2.5	2.0 ✓	24.0 ↓	b9	b10	✓
✓ 400	1.5	2.0	2.0 ✓	24.0 ↓	a8	c8	✓
2F6	2.0				a10		
✓ 319	1.0	2.0	1.5 ✓	18.0 ↓	c9	a9	✓
254	1.0				a7		
✓ 2F0	2.0	2.0	2.0 ✓	24.0 ↓	a6	a7	✓
255					star		
✓ 253	3.0	2.5	3.0 ✓	36.0 ↓	a10	a8	✓
✓ 401	3.0	3.0	3.0 ✓	36.0 ↓	d8	c8	✓
✓ 99	2.0	2.0	2.0 ✓	24.0 ↓	c8	c7	✓
✓ 268	1.0	1.0	1.0 ✓	12.0 ↓	d10	b9	✓

				<u>A.4179</u>			
✓ 269	2.0	1.5	1.5 [✓]	18.0 [✓]	c8	a8	b8 ^{✓✓}
✓ H.S.1	2.0	2.0	2.0 [✓]	24.0 [✓]	c9	c9	c9 ^{✓✓}
✓ 271a	1.0	1.0	1.0 [✓]	12.0 [✓]	d9	b9	c9 ^{✓✓}
238	2.0	used on 3346			b9		
39	1.5	"	"		d8		
404	1.5	"	"		a9		
403	1.5	"	"		c8		
402	2.0	"	"		c9		
102					star		
✓ 103	1.0	1.5	1.0 [✓]	12.0 [✓]	c10	b9	c10 ^{✓✓}
85					star		
87	3.0	4.0	3.5 [✓]	42.0 [✓]	a5	a5	a5 ^{✓✓}
✓ 273	1.5	1.5	1.5 [✓]	18.0 [✓]	b9	b9	b9 ^{✓✓}
✓ 271 b	1.0	1.0	1.0 [✓]	12.0 [✓]	c9	b9	b9 ^{✓✓}
✓ 215	2.0	2.5	2.5 [✓]	30.0 [✓]	b7	i b7	i b7 ^{✓✓}
35	2.0	used on A3346			a9		

40°

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					A. 4179			
36	2.0	ward on 7 33.46			CP			
37					star			
I.C.								
1 1277	4.0	5.0	4.5 ✓	5.0 ✓	a3	c5	b4 ✓✓	150°
1 127A	4.0	3.0	3.5 ✓	4.0 ✓	p88d5 i67	p88d5 b2	p88d5 i68	5°
		scratched						
1 1279	5.0	6.0	5.5 ✓	6.0 ✓	L23	L24	L23 ✓✓	135°
1 1296	3.0	4.0	3.5 ✓	4.0 ✓	C6	C6	C6 ✓✓	
N. S. C.								
1249	12.0	cf. diam. 13.0			S f5	S i f5	S i f5 ✓✓✓	75°
= 343								
A	2.5				a3			40°
✓ B	3.0	3.0	3.0 ✓	3.0 ✓	C9	C9	C9 ✓✓	
C	3.0				a9			
D	2.0				a1			30°
141	2.0				a2			

			<u>A.4749</u>	
3	3.0		b8	
8	2.5		a7	
4	4.0		a6	
-7	1.8 2.0	in 82 g	a9	
6	4.0		a9	
a	3.5		a6	
53	2.0		b7	
51	1.0		c8	
36	1.5		b9	
40	2.0		b7	
41	1.0		b8	
42	1.0		b9	
90	2.0		a9	
30	1.5		a8	
43	1.0		b7	

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A.4749

20	1.5	a7	
19	1.5	a9	
93	1.0	a8	
45	1.5	b9	
28		faint star	
64	3.0	a7	
63	5.0	LC3	40°
55	1.5	d+	
56	3.0	a6	
110	2.5	a9	
61	2.0	b9	
74	1.0	c10	
72	3.0	c7	
68	1.0	c10	
69	2.0	b9	

		<u>1.4749</u>	
95	1.5	a f	
67	2.0	b f	
71	2.0	c g	
96	2.0	a f	
75	2.0	d f	
98	2.0	a f	
109	2.0	b 7	
97	3.0	a 9	
I.C.			
4899	4.0	b 7	
4903	3.0	a f	
4904	4.0	a f	
4929	7.0	b 3	20°
4945	5.0	2 b 5	5°
4958	1.0	b 10	
4960	5.0	d 6	

162

			A. 4749	
4962	1.0		c7	
4967	2.0		c8	
4970	2.0		d8	
4971	3.0		a9	
4972	5.0		Lc5	20°
4981	2.0		b7	
4982	1.5		c8	
4985	2.0		c8	
4992	12.5		Lb1	50°
5008	3.0		a8	
5009	4.0		d8	
5014	1.5		c10	
5016	2.0		a9	
5024	4.0		i65	possibly spiral arms on southern end? 15°
5044	2.0		a8	

			<u>A.4749</u>	
5045	2.0		b7	
5048	3.0		b8	
5051	2.5		a9	
5053	5.0		d8	
5054	5.0		c6	
5060	3.0		a9	
5066	2.0		c9	
5069	4.0		b9	
5071	18.5		Ld2	15°
5072	2.0		a9	
5073	2.5		c9	
<u>N.B.C.</u>				
6872	14.0		5f8	
6876	6.0		e9	
6877	4.0		e8	
6880	6.5		Lf3	30°

A.C. 6932

6.0

A.4749

f6

A.5546

6	2.0			a6	
		26	b9		1.0
7	1.5			b8	
		27	a8		1.5
15	1.0			b9	
		25	c9		1.5
8	1.5, 2.0, 1.0	triple nebula		a8, b8, f9	
		24	b9		1.0
9	4.0			a9	
		29	b8		1.5
10	2.0			c8	
		30	b8		1.0
11	2.0			c9	
		31	a7		2.0
12	4.0			a4	20°
21	2.0			d9	
20	1.5			d10	
26	6.0			a7	
20	2.0			b9	
21	2.0			a8	
79	2.5			a10	

			<u>4.5546</u>	
3	2.0		b ₉	
14	2.0		a ₉	
13	3.0		a ₉	
(17)	2.0		c ₉	
= H.N. 1881				
18	2.0		a ₉	
19	3.0		c ₉	
= IC. 4845				
120	2.0		b ₉	star?
16	3.0		a ₉	
62	2.0		a ₉	
54	4.0		b ₉	
63	2.0		a ₉	
C	2.0		a ₉	
(24)	2.0		a ₉	
= H.N. 1871				
(23)	4.5		c ₉	
= H.N. 1865				

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I.C.		A.5546	
4748	1.5	c8	
4749	2.0	a7	
4750	2.0	a9	
4751	2.5	c8	
4752	3.0	a9	
4753	2.0	b8	
4754	2.0	b9	
4755	5.0	a6	
4803	2.0	a9	
4804	2.5	c8	
4805	6.0	LC3	30°
4809	4.0	a7	
4815	2.0	d9	
4820	3.0	a9	
4823	2.5, 1.5	b8, a9	double nebula

<u>I.C.</u>		<u>A.5546</u>	
4P24	10.5'	ias	90°
4P27	10.0	Lf2	170°
4P28	5.0	as	
4P31	20.0	Ld2	110°
4P33	2.0	a10	
4P34	2.0	a9	
4P36	6.0	a10	
4P38	4.0	a9	
4P42	3.0	c9	
4P45	3.5	bg	
4P49	4.0	a9	
4P52	6.0	as	
<u>N.B.C.</u>			
6722	11.0	Ld3	170°
6733	4.0	fg	
6739	5.0	fb	

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Y. b. c.

6744

43.0;

6746

2.0

6769

10.0

6770

6.0

6771

5.0

6782

5.0

A. 5546

s/9

f/10

e8

a8

b8

b8

A. 5695

H. N. 2026

2.0

a8

2028

1.5

c9

2031

4.0

a7

2038

5.0

a6

2047

1.0

b9

2052

2.0

c9

2053

2.0

a8

2088

3.0

b8

2095

2.0

c8

H.N. 2097	1.0	<u>4.5695</u> C10	
2100	3.5	a4	20°
2101	2.5	a8	
2105	1.5	b2	
2106	1.5	f10	
2108	3.5	a6	
2109	3.0	a8	
2112	3.0	a9	
2113	5.0	a4	120°
2114	1.0	a10	
2115	4.0	a4	140°
2118	6.0	a2	20°
2119	1.0	b10	
2120	1.5	a8	
2123	1.5	E9	

170

A. 56 93-

H.N. 2124

1.5

a8

2125-

1.0

b8

2126

1.5

a8

2132

2.0

a8

2136

2.0

b9

2138

2.0

b9

2139

1.5

b8

2143

1.0

c9

2145-

2.0

a6

2148

1.5

b9

2157

1.5

b6

2158

2.0

a6

2162

1.5

a7

2165-

2.0

b9

2176

2.0

a8

		<u>A. 5695</u>	
H.N. 2181	2.0	a9	
2182	2.0	a7	
2183	1.0	a7	
2190	3.0	a8	
2199	3.0	c7	
2201	1.5	b9	
2204	1.5	c7	
2208	2.0	b9	
2210	4.0	a8	
2213	2.0	a8	
2215	4.0	a8	
2216	1.5	a9	
2222	1.0	a9	
2254	2.0	b8	
2256	3.0	b5	

20°

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4.5695

H.N. 2267	1.0	a9	
2273	1.5	cf	
2274	1.5	a9	
2275	1.5	c9	
2276	3.0	a10	
2281	3.0	c6	
2288	2.0	cf	
2303	3.0	a8	
2305	2.0	a9	
I.C. 4871	10.0	a2	10°
4872	3.5	a4	175°
4878	8.0	a3	40°
4880	2.0	c9	
4881	5.0	bf	
4882	3.0	bf	

A.S. 695-

I.C. 4883	5.0	b6	
4884	3.5	c7	
4890	2.0	b9	
4896	3.0	b8	
4901	5.0	d9	
4902	3.0	a7	
4908	2.0	b9	
4910	2.0	b7	
4919	4.0	b9	
4933	6.0	Ld5-	40°
4935	6.5	Ld5-	0°
4937	6.0	Lc4	5°
NGC. 6810	13.5	Lf3	175°
6812	2.0	d9	
6848	7.5	Lc4	160°

H.G.C. 6850

2.5

A. 5695

e9

N.N. 1

3.0

a9

2

5.0

a6

3

3.5

b6

A. 4599

b9

2

3.0

1

3.5

c8

9

2.0

a8

10

2.5

c7

16

2.0

a8

17

1.0

c9

38

1.5

b10

39

1.5

a9

40

3.5

a8

41

1.5

c8

18

2.0

a8

A. 4599

15	1.5	b9	
2	3.0	a9	
19	2.0	b9	
31	2.0	b9	
33	2.0	b9	
29	5.0	a10	
42	1.5	b9	
37	5.0	a9	
IC. 4644	9.0:	i a4	140°
4654	5.5	c9	
4661	19.0	c9	
4682	6.5	2d5-	140°
4704	3.0	e9	
4705	5.0	b8	
4712	5.0	c8	

H.G.C. 6392		5.0	<u>A. 4599</u> as	
6633		4.0	as	
1		3.5	<u>A. 4599</u> b9	
2		2.5	as	
3		3.0	b9	
4		6.0	as	20°
6		2.0	a9	
7		3.0	b9	
d		2.0	<u>A. 4724</u> ds	
4		2.0	b9	
I.C. 4746		2.0	as	
4747		3.0	LC4	70°
4773		5.5	as	
4822.		2.5	b9	

		A. 4724
IC. 4825	2.0	c9
4841	3.0	b10
4853	3.5	b6
4892	4.0	a7
4893	5.0	a8
η. b. C. 6777	1.5	a8
6808	6.0	b8

A. 4609

A	2.0	a8
11	2.0	a6
12	1.5	e10
C	2.5	a8
2	5.0	a4

20°

A. 4733

13	3.0	b6
7	4.0	b8
6	1.0	a9
3	5.0	a5

100°

178

			A. 4733	
2	1.5		a p	
9	6.5		b 6	
I.C. 4847	3.0		b 9	
4859	5.0		Lb 5	20°
4860	2.0		c 9	
4862	7.5		Lb 4	179°
4870	3.0		f p	
4887	2.5		c 9	
4921	2.5		b p	
4934	5.5		a 3	20°
4968	4.0		a 9	
4988	3.0	nebula ??	b p	
4990	5.0		b 7	
4993	3.0		a p	
N.C. 6784	2.5		c p	
6844	2.5		f 9	

A. 5-45-8

8	2.0	29
9	2.5	f7
2	3.0	29
7	3.0	b7
8	2.0	a7
10	1.5	d9
17	2.5	a7
21	3.0	b6
22	3.0	28

A. 555-0

8	5.0	a7
7	3.0	b7
6	2.5	c9
5	3.5	a7
4	2.0	a6
3	2.0	b9

180

A. 50-50

1	4.0	a3	10°
b	1.5	a9	
10	2.0	aP	
14	2.0	bP	
13a	2.0	bP	
16	4.0	a4	175°
19	5.0	b9	
20	9.0	Lb4	110°
12	1.5	b9	
13-b	2.0	c10	
21	2.0	bP	
I.C. 4866	3.0	c9	
4869	3.0	c7	
4885	7.0	b4	80°
4905	3.0	b5	110°

A. 5250

I.C. 4906	2.5	f9	
4936	5.0	b5	10°
4938	5.5	ε9	ring nebula
4939	2.0	a9	
4951	11.0	Ld2	170°
4953	2.0	b2	
4974	1.0, 1.0	b9, c9	double nebula
4976	1.5	a9	
N.C.C. 6860	4.0	f7	

A. 6840

1	1.0	a9	
2	3.0	b3	30°
7	3.0	a3	5°
8	1.5	a7	
9	2.0	b7	

		<u>4.6840</u>	
17		<i>faint star</i>	
18		"	
19	2.0	a8	
20	2.0	a8	
22	2.0	a7	
9	2.5	i a 7:	
23	3.0	a7	
24	2.5	d 9	
I.C. 4679	3.0	a9	
4686	1.5	b7	
4687	1.5	a8	
4689	1.5	a8	
4692	3.0	i b8	
4694	4.0	b6	
4695		not seen	

H. 6 P 40

b2:

A. 6 P 5-1

a9

af

c9

af

c9

a9

a9

a9

a9

b6

b6

d8

a9

I.C. 4702

3.0

2

3.5

4

3.0

3

3.0

5

2.0

7

1.5

8

1.5

12

4.0

8

3.0

11

2.0

14

2.0

Menzel

1800-5204.6

5.0

1800-5256.7

1.0

1810-5443.8

4.0

		<u>A. 6910</u>	
4	2.5	a9	
5	1.5	a9	
a	3.0	a4	2°
c	2.0	a6	

I.C. 4F65

not seen (Lunar)

4F68

not seen (Lunar)

4F73

2.0

c9

4F74

4.0

d9

A. 7426

1 2.5

a9

3 1.5

d9

4 3.0

b8

5 1.5

c9

c 2.0

a8

b 1.5

a9

2 1.0

b8

d	1.5		a9	
17	2.0		a7	
18	1.5		a8	
f	2.0		b6	
15	2.0		a7	
14	1.5		c9	
12	2.0		a2	
9	1.0		c9	
A	2.5		b2	
7	1.0		a8	
6	1.5		a2	
g	2.0		b8:	
I.C. 4F02	10.0		Ld4	45°
Menzel				
1850 - 4908.7	2.0		d8	
1853 - 4914.0	1.0		d9	

186

Menzel

1853 - 4720.3	6.0	A. 7426 a3	175°
1857 - 4759.6	4.0	Lf5	20°
1859 - 4644.2	= H.N. 1874		
1901 - 4809.1	1.0	a9	
1902 - 4815.5	1.0	c9	
1904 - 4732.9	4.0	a7	
1905 - 4957.5	distinctly 5 stars here but on A. 9026, appear nebulous		
1905 - 4610.8	= H.N. 1883		
1905 - 4555.8	3.0	a8	
1906 - 4713.9	= H.N. 1885		
1906 - 4634.6	2.0	b9	
1907 - 4646.0	= H.N. 1887		
1848 - 5004.8	2.0	c8	

		A.4611	
3	2.0	ap	
4	1.5	ap	
9	4.0	a6	
21		two stars	
24		two stars	
33 a	3.0	b8	
28	2.0	c9	
27	3.5	d6	
29	2.5	b8	
35	2.0	ap	
40	1.5	b9	
33 b	4.0	Lb3	g-o
30		fair star	
37	2.0	ap	
47	3.0	b9	

		A. 4611	
L.C. 4710	16.0	b9	
4713	3.0	c9	
4714	5.0	a4	0°
4724	3.5	b7	
4729	5.0	e9	
4740	4.0	d8	
4752	5.0	b8	
4787	6.0:	i.a.p.: very differe. hard to classify	
4789	3.0	c7	
4811		too near edge of plate - classify on H. 4728	
4813			
N.G.C. 6492	7.0	c6	
6502	3.0	b6:	near edge of plate
6684	10.0	f7	
671A	3.5	b8	

N.G.C. 6719	6.0	<u>A. 4611</u> c7	
22	2.0	<u>A. 9017</u> a10	
21	6.0	2b4	105°
20	2.0	b9	
12 } HN 1891	6.0	b2	75°
11 } HN 1893	2.5	b7	
5	2.0	a9	
8 } HN 1978	4.0	a9	
H.N. 2050	1.5	<u>A. 7447</u> d10	
2054	1.0	b9	
2066	2.0	d8	
2067	1.5	d8	
2074	1.0	c9	
2076	4.5	a7	

190

H. N. 2078	2.0	A.7447 df	hazy star?	
2082	1.5	b9		
2086	1.0	d9		
2092	1.5	b2		
2094	1.5	a9		
2096	5.0	a3		20°
2099	1.0	b9		
2107	3.0	a6		
2116	1.5	b9		
2122	2.0	a9		
2130	5.0	b2		120°
2133	6.0	LC3		20°
2134	2.0	b6		
2135	1.5	b9	incorrect R.A. sec correction in copy in C 26	(19 ^h 49 ^m 22 ^s) corrected R.A.
2140	1.5	a9		

		A.7447	
H.N. 2142	1.5	ca	
2146	1.0	ba	
2149	3.5	ba	60°
2151	1.0	c10	
2152	1.0	a9	
2153	1.0	ba	
2154	4.0	b3	130°
2155	2.0	ba	
2156	2.0	a9	
2159	3.0	ba	
2161	4.0	LE2	95°
2164	1.5	ba	
2169	2.0	b7	
2170	2.0	ic7	
2172	2.5	ba	

H.N. 2173	1.5	<u>A. 7447</u> b9	
2174	1.0	c9	
2175	1.5	a9	
2178	1.5	b9	
2180	1.0	b9	
2184	2.0	a9	
2185	1.5	c8	
2187	2.0	a8	
2188	2.0	a5	100°
2189	1.0	c9	
2191	2.0	a8	
2197	2.0	a8	
2203	2.0	b8	
2205	1.5	c9	
2209	3.0	d7	

A.7447

H.N. 2211

1.5

a7

2212

1.0

b10

2214

2.0

a9

221A

1.5

b9

2221

1.5

b7

2224

2.0

a5

60°

2225

2.0

a7

2227

2.5

b2

2229

2.0

c7

2231

1.5

e7

2233

1.5

d9

2235

2.0

b2

2236

4.0

a4

35°

2237

1.0

e9

223P

1.5

a9

H.N. 2239	0.5'	A. 7447	ag	H.N.
2243	1.5'		ag	
2245	2.0		as	
2248	2.0		bs	
2249	4.0	Lf4		103°
2253	1.5'		bg	
2257	3.0		ag	
2259	2.5'		bg	
2260	1.5'		bg	
2261	2.0		bg	
2262	1.5'		dg	
2263	5.0		bs	50°
2264	2.0		ag	
2265	2.0	Ld4		25°
2268	3.0		ag	

H.N. 2269	2.5	A. 7447 a5	50°
2270	1.0	c9	
2271	1.0	b9	
2278	2.5	a6	
2279	1.5	c8	
2280	1.0	b8	
2283	2.5	b7	
2284	4.0	Lb5	40°
2285		two stars - checked from H. 8494	
2286	2.0	a8	
2287	6.0	b3	90°
2289	2.0	b8	
2294	2.0	c9	
2297	9.0	b2	80°
2298	3.0	L: b4	20°

196

A. 7447

N. 2302

1.5

b7

2306

7.5

a7

2310

4.0:

b7:

2316

2.5

ca

2317

3.0

a8

2318

3.5

b9

2321

2.0:

dp:

2325

4.0:

ca:

2326

3.0

a8

2327

2.0

ca

2329

3.0

b9

N.G.C. 6445

4.5

Lf4

145°

6451

4.0

f7

6461

5.0

f7

6468

5.0

f7

		<u>H. 7447</u>		
NGC. 6870	6.0	Lds		90°
6875	3.0	fa		
687A	5.0	b9		
I.C. 4943	1.5	fg		
4949		not seen		
4956		not seen		
N.N. 1	1.5	a9		
a	1.0	c7		
		<u>A. 6504</u>		
1	4.0	Ld4		50°
2	1.5	da		
3	1.0	ca		
4	2.0	c7		
5	1.0	b9		
6	2.0	b9		
8	2.0	b7		

		<u>A. 6504</u>	
9	2.0	b7	
10	4.0	b5-	70°
I.C. 4761	3.5	d9	
4777	2.0	e8	
4796	3.0	d8	
4797	4.0	e8	
N.G.C. 6707	7.0	b5	145°
6708	3.0	c9	
6725	7.0	Lb4	40°
		<u>A. 5373</u>	
1	2.0	b9	
		<u>A. P494</u>	
96	1.0	a8	
103	3.0	b5	135°
105	6.0	i b7	
a	1.0	a8	
m	1.5	a8	

No. b.	Diam.	Class.	No. b.	Diam.	Class.
aa	1.0	A. 2494 a9	138	3.0	b10
133	2.0	a8	139	2.0	a9
134	3.0	a9	140	3.0	b9
78	1.5	b7	141	2.0	a7
77	2.0	b6	142	1.5	b8
76	1.0	c8	143	5.0	a7
79	2.5	b9	144	1.5	a7
80	1.0	c9	145	1.0	b10
74	1.5	b8	146	2.5	c8
73	1.0	b9	147	1.5	b9
v	1.5	a6	148	1.0	a10
123	2.0	c9	149	1.5	b9
m	2.0	d8	150	1.5	b8
u	0.5	c9	151	1.0	a10
j	2.0	a8	152	4.0	Lb11

100°

200

A.P.494

58	2.0		b9	
127	5.0		b6	
128	3.5		d9	
129	3.0		a8	
136	4.0		c7	
137	3.0		c7	
54	1.0		af	
55	4.0		sd9	
56	1.5		ef	
57	2.0		fa	
59	1.0		c9	
39	5.0		a3	30°
67	3.0		a8	
38	1.5		a9	
34	2.0		14	100°

		A. 2494	Neb.	Diagn.	Class.	
33	9.0	Lc2	153			75°
			153	2.0	b6	
32	2.0	d9	154	2.0	a7	
31	5.0	b3	155	3.0	b7	150°
30	1.5	f9	156	2.0	b9	
36a	3.0	d9	157	1.0	c9	
36-b	2.0	b7	158	2.0	b7	
37	1.5	f9	159	0.0	Lb4	100°
124	4.0	b3	160	H.N. 2354		
40	1.0	b10	161	2.0	b8	
41	1.0	c9	162	2.0	b8	
42	4.0	Ld3	163	2.0	b6	110°
43	4.0	b4	164	2.0	a9	50°
44	2.0	b9	165	2.0	b9	
45a	1.0	b8	166	1.0	b9	
47	3.0	LE5	167	1.0	b7	170°

			A.P.494	No. 6.	Diam	Class.
49	2.0		a9			
				168	1.5	a7
45-6	3.0		b8			
				169	1.5	a9
65	1.0		c9			
				170	1.0	b10
8	1.0		b9			
				171	1.0	a9
125	3.0		b3			
				172	3.0	a7
51	3.0		a8			
				173	1.0	a9
53	2.0		b7			
				174	1.5	a9
29	1.5		e9			
				175	1.5	b10
28	2.5		a6			
				176	1.5	f10
27	1.5		c6			
				177	1.5	d10
26	3.0		b8			
				178	5.0	a6
20	1.0		b8			
				179	1.5	a8
19	2.0		a8			
				180	1.0	b10
21	2.5		b5			
				181	1.5	b8
16	2.0		c9			
				182	1.5	a8

60°

15°

			A. P494	Neb.	Diam.	Class.	
17	3.0		b5				105°
				1P3	1.0	a10	
6	2.0		a7				
				1P4	2.0	b9	
3	3.5		a7				
				1P5	2.0	a9	
2	4.0		b9				
				1P6	3.0	a7	
1	2.5		a7				
				1P7	4.0	b5	
25	1.0		c9				
24	1.0		a8				
23			star				
9	2.0		a9				
9	2.0		a8				
2	2.0		b7				
15	4.0		b7				
M.C.C. 6893	1.0		f10				
6909	5.0		f7				
6918	2.5		CP				

		A. 745-1	
-3	3.0	bp	two stars
2	3.0	29	two stars
Δ	2.0	a9	
Δ	1.0	a9	
Δ	3.0	a9	
Δ	2.0	bp	
Δ	1.5	b9	
H.N. 2200	4.0	as	
2255		see 2258	
2258		prob. an asteroid trail. see Bailey p. 53	
2266	1.5	as	
2272	1.5	a9	
2295	1.0	c9	
2296	2.0	a10	
2299	1.0	b9	

H. 7451

H.N. 2300 22.0

b9

2307 1.0

a9

2308 1.5

a10

2309 1.5

b9

2311 2.0

b9

2313 2.0

b9

2314 2.5

a5

110°

2319 1.5

c2

2320 2.0

a2

2322 2.0

b9

2324 2.0

b10

2326 1.0

c10

2330 1.0

a9

2331 1.0

b9

2332 1.5

b9

A. 7451

1.1V.2333	1.0	d10	
2334	1.0	d10	
2335	3.5	b5	140°
2336	1.5	a8	
2337	1.5	c9	
2339	2.0	a9	
2340	1.0	c10	
2342	2.5	b5	125°
2344	1.0	b10	
2345 ⁺	2.0	b8	
2346	1.5	d8	
2347	1.5	c10	
2348	1.0	b9	
2349	2.0	2c5	130°
2350	1.0	b9	

A. 745¹

b4

3°

H.N. 2351 5.0

2352 2.5

c7

2353 2.0

c10

2354 2.0

b9

2355 2.0

b9

2356 1.0

d9

2357 1.5

b10

2358 1.5

b9

2359 1.5

c10

2360 1.5

b2

2361 1.0

c10

2362 2.0

a10

2363 2.0

c9

2364 2.0

a2

2365 2.0

b7

N. 2366	1.0	A.7451 dg	
2367	3.0	as	140°
2368	1.0	bp	
2369	1.5	bt	
2370	1.0	dg	
2371	1.0	dg	
2372	3.5	a7	
2373	1.5	a9	
2374	2.5	a6	
2375	1.0	b10	
2376	5.0	Lb4	5°
2377	4.0	as	60°
2378	1.5	bg	
2379	4.0	Lc4	10°
2380	1.5	bg	

A. 7451

H.N. 2381

3.5

a5

very faint ring 1.0 from trail
Orbit? Bailey
90°
130°

2382

4.0

a5

2383

1.0

d9

2384

1.0

c9

2385

1.0

c9

2386

1.0

a9

2387

1.0

a9

2388

1.5

a9

2389

2.0

b2

2390

2.0

b2

2391

2.0

a9

2392

2.0

b6

2393

2.0

c2

2394

2.0

a2

2395

3.5

c2

210

N. 2396

2.0

3.0

A.7451

a7

a7

probably double

2397

5.5

c9

2398

3.0

a8

2399

1.0

b9

2400

4.0

a8

2401

2.5

a8

2402

3.0

a9

2403

10.0

f9

2404

2.0

b10

2405

2.0

a9

2406

2.0

b8

2407

5.0

c8

2408

3.0

c6:

2409

3.5

a9

2410

2.0

a8

		A. 7451	
N.N. 2411	2.5	ca:	
2412	5.0	ca:	
2413	3.5	a9	
N.G.C. 6254	2.0	ca	
6887	10.0	Ld3	105°
6889	4.0	c9	
6899	9.0	da	
6935	6.0	d9	
6937	5.0	da	
6942	3.0	ba	
I.C. 4916	3.0	ba	
4917	2.0	ca	
4918	2.0	a9	
4920	2.0	bg	
4923	1.0	a9	

A.7451

4925 3.0 a8

4927 3.5 c6

4930 ~~not seen~~

4932 2.0 b8

4941 2.5 a9

4942 1.5 a10

4944 2.5 c9

4947 1.0 d9

4959 ~~not seen~~

4961 6.0 a4

90°

4966 3 stars mistaken for an elongated nebula?

4969 1.5 c9

4975 1.0 d9

4978 2.5 b7

4979 3.0 a8

I.C. 4983	4.0			A. 7451	b9		
4984	1.0				b8		
4987	1.0				c9		
4994	1.0				e9		
4995	1.0				e10		
5021	3.0				a8		
				A. 8377			
1	2.0				b8		
9	1.0				b10	not a neb. NS	
H.N. 1831	2.0				b8		
1842	2.0				a5		120°
1844	6.5				b2		70°
1845	1.0				c9		
1846	1.5				d10		
1847	1.5				c8		
1848	2.0				c8		
1849	2.0				b8		

		<u>A. 8377</u>		
N. 1850	1.0	d10		
1852	1.0	d10		
1853	2.5	b9		
1854	3.0	b8		
I.C. 4646	7.0	a8		
4652	5.0	b5		10°
N.G.C. 6215	6.0	c9		
6221	12.5	i d8	<u>N.G.C. 6221</u> described in catalogue as globular cluster but appears on this plate as rather diffuse nebula	I.C.
6305	2.5	f10		Menz
		<u>A. 6852</u>		
2	3.0	a8		
4	2.0	a7		
11	1.5	a9		
12	3.0	a9		
13		star		

15

2.5

A. 6252

d7

16

1.5

d9

18

3.0

b7

A. 7424

1

2.0

a9

2

2.0

b2

3

3.0

d7

I.C. 4699

not seen

Menzel 1826-46373 2.5

a8

A. 13331

3

2.0

c7

4

2.0

b9

20

1.5

b9

5

2.5

a7

6

3.0

b9

7

4.0

a8

16	6.0	<u>A. 13331</u> Lc3	45°
10	2.5	c7	
11	3.0	b4	
19	2.0	d7	
12	7.0	pLb3	20°
13	5.0	b3	star in center? 175°
14	4.0	Ld4	0°
15	2.0	a5	45°
17	1.5	b4	
21	3.0	d6	
22	3.0	b4	
24	8.0	a2	120°
25	3.5	a4	60°
26	5.0	Lc5	90°
27	2.0	a7	

A. 13331

28 2.0

d7

32 2.0

a7

32a 1.5

a9

32b 2.0

b7

23 { 2.0
1.5{ a2
a9 (double nebula)

34 1.5

a9

35 3.0

a7

37 2.0

a2

3A 3.0

a7

A. 5655

10 3.0

id7

4 1.5

a9

2 2.0

b10

7 1.5

b9

2 1.0

a9

(1) 2.0

b2

= H.N. 1868

		A. 5-6-5-5	
5	3.0	a8	
9	2.0	a9	
3	4.0	a4	25°
12	3.5	b4	20°
11		star	
(13)	4.5	a6	
= H.N. 1888			
I.C. 4720	5.0	Ld5	160°
4721	20.0	a4	150°
4722	7.0	b8	
4734	3.0	b9	
4736	5.0	b8	
4757	3.0	a8	
4774	5.0	d8	
4775	4.0	b4	
4780	3.5	b8	

A. 5-655

TC47F2

3.0

B_A

47F3

5.0

a_A

47F5

0.0

L_fA

47F6

4.0

b₅-

170°

4792

4.0

Ld₅-

4806

10.0

L_f3

20°

4807

3.0

B_A

4810

16.0

LC 1

135°

4814

4.0

C_A

4817

3.0

C₇

4818

4.0

Lb₅-

80°

4819

7.5

LC 2

130°

4821

8.0

b₅-

5°

4826

2.5

C_A

4829

3.0

a₆

220

I.C. 4P30	6.0	c9	
4P32	7.5	Ld4	150°
4P35	3.0	b9	
4P37	9.0	d7	
4P39	8.0	d7	
4P40	3.5	a8	
4P43	3.0	a7	
4P44	3.0	c7	
4P46	3.0	a8	
N.G.C. 6699	7.0	Sf10	
6721	3.0	f10	
6753	12.0	d9	
A perfect example of the 'd' class: four definite sets of rings almost circular in shape.			
6758	2.5	f10	The outer circle is of uniform shading almost to the edge where it darkens perceptibly.
6780	7.0	b9	Appears in 4.5656 but not as well.

8377 - SEC 62 21

1930phae.proj.2339M