

knight[®] "600 SERIES" TUBE CHECKER

A L L I E D R A D I O C H I C A G O

OPERATING INSTRUCTIONS

Plug the line cord into a 117-volt, 50/60-cycle AC outlet. (Export models require 230-volt, 50/60 cycle power.)

Roll the chart to the tube type to be tested. If tube type is not listed on the roll chart look in the Supplementary Tube Chart.

Set controls as shown on chart:

A-CIRCUIT switch as in column A

B-FILAMENT switch as in column B

C-LOAD control as in column C

TUBE ELEMENTS push up the numbered lever switches listed in column U. Push down the numbered lever switches listed in column D. "0" in these columns stands for lever switch 10. Place all remaining lever switches in the center position.

Turn ON/OFF switch ON.

Insert tube in proper socket.

Let tube warm up for 30 seconds, then set the LINE ADJUST control so the meter needle points to 50.

SHORT TEST

Perform the short test as follows: Push the lever switches that are in the center position up, one at a time. If the SHORT TEST lamp glows steadily when any lever switch is pushed up the tube should be replaced (except those numbers indicated in parenthesis () to the right of the tube type number). A brief flash of the SHORT TEST lamp does not indicate a short. Tap the tube gently while making this test. CAUTION: Do not move the SHORT LINE/VALUE switch while making these short tests.

EMISSION TEST

Hold the SHORT LINE/VALUE switch in the VALUE position. Read the tube condition on the REPLACE-GOOD scale of the meter. If the meter pointer goes to the green section of the scale, cathode emission is acceptable. If the meter pointer is in the red section check the tube chart for special emission notes as: Good=26. If no such notes appear for the tube you are testing, the tube should be replaced.

GAS TEST

Hold the SHORT LINE/VALUE switch in the VALUE position. At the same time pull the lever switch, shown in parenthesis () to the right of column D, down one position. Read the lower GOOD BAD scale on the meter. NOTE: The lever switch indicated for the gas test may initially be up or in the center position; in either case pull this switch down one position only.

MULTI SECTION TUBES

Many tubes incorporate more than one set of electrodes. Such tubes have separate tests, with a separate line on the tube chart, for each tube section. Follow the testing procedure given above for each tube section.

NOTE: It is unnecessary to remove the tube from the socket when resetting the controls for additional section testing.

SPECIAL NOTES ON THE TUBE CHARTS

For testing certain tube types special information is given in addition to the setup columns Numbers appearing in parenthesis () just to the right of the tube type number indicate those lever switches which normally light the SHORT TEST lamp. Another note which frequently appears is the one concerning the emission or value test. Some tubes are good when the pointer reads only 25. This condition will be indicated in the last column on the chart.

Tuning indicator (magic eye) tubes are often tested for eye closure and opening without regard to a meter reading. Thus a good eye tube is indicated by an eye closure when the chart says "eye closed" and an open eye when the chart says "eye open".

Certain tubes have more than one external cap. A note will give special instructions for the test. Usually the note will read "Tie both top caps together". This means a wire jumper should be used to connect the two caps together.

Some tubes call for "Gas Test" under column D. This means: Make your reading on the GAS TEST SCALE as you hold the SHORT LINE/VALUE switch in the VALUE position.

TUBE TEST EXAMPLE #1—TYPE 5GH8

Plug the line cord into an 117-volt, 60 cycle AC outlet.

Turn ON/OFF switch ON.

Adjust roll chart until 5GH8 information appears in the window. This tube has two sections. Check section one first.

TUBE	A	B	C	U	D
1-5GH8 (5-8)	4	5	52	3-6	4 (3)
2-5GH8 (5-7)	4	5	60	1	4 (9)

Set A-CIRCUIT switch to 4.

Set B-FILAMENT switch to 5.

Set C-LOAD control to 52.

Set lever switches: 3 & 6 up
4 down

Insert the 5GH8 in the 9 and 10 pin miniature socket.

After 30 seconds, set the LINE ADJUST control so the meter needle points to 50.

Short test. Number 5 & 8 appears in parenthesis () next to the tube type. Pushing these lever switches up one at a time produces a glow from the SHORT TEST lamp.

Push switches 1, 2, 7, 9 & 10 up, and then back to the center position, one at a time. If the SHORT TEST lamp does not glow steadily when any of these switches is up there are no abnormal shorts in the tube.

Emission test. Slide the SHORT LINE/VALUE switch to the VALUE position and read the meter. A reading in the upper GOOD area indicates the tube has acceptable cathode emission.

Gas test. Hold the SHORT LINE/VALUE switch in the VALUE position. Pull lever switch 3 (which is now in the upper position) down one position to the center. Read the lower GOOD BAD scale on the meter.

Set the ON/OFF switch to OFF.

Reset all lever switches to the normal center position.

Test the second section by:

Set C-LOAD switch to 60.

Set lever switches: 1 up
4 down

Set ON/OFF switch to ON again.

On the short test 5 & 7 light the SHORT TEST lamp. Switches 2, 3, 6, 8, 9 & 10 are moved up one at a time. If the SHORT TEST lamp lights for any of these the tube is shorted.

Emission is tested as before. Gas test is made by bringing switch 9 down from center to the down position.

TUBE	A	B	C	U	D
00A	4	5	56	2	1
01A	4	5	65	2	1
0A2	4	Off	48	1-5	Gas Test
0A3	4	0.63	50	5	Gas Test
1-0A4	4	Off	40	5	Gas Test
2-0A4	4	Off	40	5-7	Gas Test
0A5	4	0.63	32	4-7	Gas Test
0B2	4	0.63	50	1-5	Gas Test
0B3	4	Off	40	5	Gas Test
0C2	4	Off	40	1-5	Gas Test
0C3	4	0.63	40	5	Gas Test
0D3	4	Off	30	5	Gas Test
0E3	4	Off	50	2	Gas Test
0G3	4	Off	34	1-3-5	Gas Test
0Y4	4	Off	24	5	3-7-8
1A3	1	1.4	90	2-6	7
1A4P	2	2	68	2-3	1 (3)
1A5	4	1.4	60	3-4	2 (4)
1-1A6	4	2	52	2-5	1 (5)
2-1A6	1	2	48	3-4	1 (4)
1-1A7	4	1.4	50	3-4-0	2 (4)
2-1A7	4	1.4	54	4-0	2
1AB5	4	1.4	70	2-3	1 (3)
1AB6	4	1.4	54	2-3	1 (3)
1AC6	1	1.4	38	2-4	1 (4)
1AE4	4	1.4	82	2-3	7 (3)
1AF4	1	1.4	42	2-6	7 (6)
1-1AF5	4	1.4	90	4-5	1
2-1AF5	4	1.4	34	3	Good=25
1-1AH5	4	1.4	30	5-6	1 (6)
2-1AH5	1	1.4	100	3	1
1AJ4	2	1.4	50	2-6	7 (6)
1AN5	4	1.4	100	2-3	7 (3)
1AU3	4	1.4	100	0	2
1B4P	4	2	54	2-0	Good=20
1B4T	4	2	70	2-3	1 (3)
1-1B5	2	2	54	2-5	1 (5)
2-1B5	1	2	100	3	1
3-1B5	1	2	100	4	1
1-1B7	4	1.4	46	3-4	2 (4)
2-1B7	2	1.4	50	5-6	2 (5)
1-1C1	4	1.4	50	2-3	7 (3)
2-1C1	4	1.4	50	3	7
1C2	1	1.4	38	2-4	1 (4)
1C5	4	1.4	38	3-4	2 (4)
1-1C6	4	2	48	5	1
2-1C6	4	2	46	2-5	1 (5)
1-1C7	4	2	48	3-4	2 (4)
2-1C7	1	2	44	5-6	2 (5)

TUBE	A	B	C	U	D
1C21	4	0.63	56	5	2 (0)
1D5P	2	2	54	3-0	2 (4)
1D5T	4	2	76	3-4	2 (4)
1-1D7	4	2	62	4	2
2-1D7	4	2	58	3-4	2 (4)
1-1D8	2	1.4	52	3-5	2 (5)
2-1D8	2	1.4	54	6-0	2 (0)
3-1D8	1	1.4	96	8	2
1D13	1	1.4	90	2-6	7
1-1DN5	2	1.4	78	2-6	1 (6)
2-1DN5	1	1.4	100	4	1 (6)
1E4	2	1.4	44	3-5	2 (5)
1E5P	2	2	62	3-0	2 (0)
1-1E7	4	2	46	3-8	2 (8)
2-1E7	4	2	46	6-8	2 (8)
1F1	2	1.4	50	2-6	7 (6)
1F2	4	1.4	76	2-3	7 (3)
1F3	4	1.4	76	2-3	7 (3)
1F4	4	2	50	2-4	1 (4)
1F5	4	2	54	3-4	2 (4)
1-1F6	1	2	48	2-0	1 (0)
2-1F6	1	2	40	4	1
3-1F6	1	2	40	5	Good=10
1-1F7	4	2	80	3-6	2 (6)
2-1F7	1	2	100	4	2
3-1F7	1	2	100	5	Good=40
1-1FD1	4	1.4	30	5-6	1 (6)
2-1FD1	1	1.4	100	3	1
1-1FD9	4	1.4	30	5-6	1 (6)
2-1FD9	1	1.4	92	3	1
1G4	2	1.4	46	3-5	2 (5)
1G5	2	2	52	3-5	2 (5)
1-1G6	2	1.4	46	3-4	2 (4)
2-1G6	2	1.4	46	5-6	2 (5)
1H2	4	1.4	92	0	1-4-6-9
1H4	2	2	46	3-5	2 (5)
1-1H5	1	1.4	40	3-0	2 (0)
2-1H5	1	1.4	100	5	2
1-1H6	2	2	48	3-6	2 (6)
2-1H6	1	2	78	4	2
3-1H6	1	2	78	5	2
1J5	4	2	44	3-4	2 (4)
1-1J6	2	2	46	3-4	2 (4)
2-1J6	2	2	46	5-6	2 (5)
1L4	4	1.4	76	2-3	7 (3)
1LA4	2	1.4	52	2-6	1 (6)
1LB4	4	1.4	42	2-3	1 (3)
1LC5	1	1.4	42	2-6	1 (6)

TUBE	A	B	C	U	D
1-1LC6	4	1.4	50	2-5	1 (5)
2-1LC6	2	1.4	74	3-4	1 (4)
1-1LD5	2	1.4	56	2-6	1 (6)
2-1LD5	1	1.4	100	4	1
1LE3	2	1.4	46	2-6	1 (6)
1LG5	2	1.4	48	2-6	1 (6)
1-1LH4	1	1.4	44	2-6	1 (6)
2-1LH4	1	1.4	100	4	1
1LN5	2	1.4	48	2-6	1 (6)
1N2	4	1.4	70	0	2
1N5	1	1.4	42	3-0	2 (0)
1-1N6	4	1.4	64	3-4	2 (4)
2-1N6	1	1.4	100	6	2
1P1	4	1.4	44	2-3	5 (3)
1P5	2	1.4	54	3-0	2 (0)
1P10	2	1.4	46	2-3-6	5 (3)
1P11	2	1.4	43	2-6	5 (6)
1P13	1	1.4	90	2-6	7
1Q5	2	1.4	44	3-5	2 (5)
1R4	2	1.4	86	4	1
1S2	4	2	66	0	2-5-8
1S4	1	1.4	70	2-4-6	7 (4)
1-1S5	4	1.4	30	5-6	1 (6)
2-1S5	1	1.4	92	3	1
1-1SB6	2	1.4	48	3-8	2 (8)
2-1SB6	1	1.4	100	5	2
1T5	2	1.4	52	3-5	2 (5)
1-1U6	4	1.4	60	2-5	1 (5)
2-1U6	1	1.4	50	3-4	1 (4)
1V	3	6.3	40	2	1
1W4	4	1.4	50	2-3	1 (3)
1Z2	3	1.4	80	0	2-5-7
2A3	4	2.5	30	2	1
2A4	4	2.5	26	3	2
2A5	4	2.5	44	2-3	1 (3)
1-2A6	2	2.5	42	2-0	1
2-2A6	1	2.5	94	3	1
3-2A6	1	2.5	94	4	1
1-2A7	4	2.5	48	2-3	1 (3)
2-2A7	1	2.5	40	4-5	1 (5)
2AH2	4	2	88	0	1-2-5-6-7-8
2AS2	4	2.5	78	0	2-5-6-9
2B3	4	2	56	0	2
1-2B6	4	2.5	85	2	1
2-2B6	2	2.5	48	3-4	1-5 (4)
1-2B7	4	2.5	70	2-3	1 (3)
2-2B7	1	2.5	80	4	1
2B22	3	6.3	32	0	2

TUBE	A	B	C	U	D
1-2C21 (6-7)	2	6.3	50	3-0	1 (0)
2-2C21 (2-7)	2	6.3	50	4-5	1 (4)
2C22 (7)	4	6.3	26	0	2
Tie Both Top Caps Together					
2C26 (7)	4	6.3	28	0	2
Tie Both Top Caps Together					
2C33 (7)	3	2.5	36	0	2
1-2C34 (7)	4	6.3	64	0	1
2-2C34 (7)	4	6.3	64	0	1
Right Top Cap					
2C42 (3-5-7-8)	4	6.3	26	0	2
Tie Top Cap and Middle Ring Together					
2C44 (3-4-7-8)	4	6.3	28	0	2
Tie Top Cap and Middle Ring Together					
2C46 (3-5-7-8)	4	6.3	28	0	2
Tie Top Cap and Middle Ring Together					
1-2C50 (6-8)	4	12.6	45	2	7 (1)
2-2C50 (3-8)	4	12.6	45	5	7 (4)
1-2C51 (8-9)	4	6.3	64	4	1 (3)
2-2C51 (2-9)	4	6.3	64	6	1 (7)
1-2C52 (6-8)	2	12.6	55	1-2	7 (1)
2-2C52 (3-8)	2	12.6	55	4-5	7 (4)
2C53 (7)	2	6.3	58	5-0	2 (5)
2D21 (4-5-7)	4	6.3	26	6	3
1-2E5 (6)	4	2.5	50	2-4	1
2-2E5 (6)	4	2.5	50	4	1
Eye Closed					
2E22 (5)	4	6.3	72	4-0	1 (4)
2E24 (1-4-6)	4	3	36	3-0	2-7 (3)
2E25 (7)	4	6.3	46	4-0	2 (4)
2E26 (1-4-6-7)	4	6.3	34	3-0	2 (3)
2E30 (4-7)	1	6.3	56	5	3 (1)
2E35 (2-4-7)	4	2	84	5-6	3 (6)
1-2EN5 (4)	2	2	38	2	3
2-2EN5 (4)	2	2	38	7	3
2E55 (1-4-7)	4	2	96	5	3 (2)
2F4 (4)	4	2	70	1-5	3
2FQ5 (1-4-7)	4	2.5	46	5	3
2FY5 (1-4-7)	4	2	90	5	3 (2)
2HA5 (2-4-7)	1	2.5	54	5	3 (1)
2V2 (2-4-6-7-8)	4	1.4	100	0	5
2V3 (7)	4	2.5	84	0	2
2X2 (4)	4	2.5	56	0	1
2Z2 (4)	3	2.5	56	2	1
3A2 (1-4-6-9)	4	3	64	0	2-5-8
3A4 (1-7)	4	1.4	38	2-3-6	5 (3)
1-3A5 (1-7)	4	1.4	64	2	4
2-3A5 (1-7)	4	1.4	64	6	4
1-3A8 (2-7)	1	1.4	42	3-0	1 (0)
2-3A8 (2-7)	1	1.4	44	5-6	1 (5)
3-3A8 (2-7)	1	1.4	78	8	1

TUBE	A	B	C	U	D
3AW3 (1-7-8)	4	3	66	0	2
3B2 (1-3-5-7)	4	3	100	0	2-6-8
3B4 (4-5)	4	1.4	36	1-7	2-6 (1)
3B5 (2-7)	4	1.4	40	3-4	3 (4)
1-3B7 (1-8)	2	1.4	40	2-3	4 (3)
2-3B7 (1-8)	2	1.4	40	6-7	4 (6)
1-3B22 (4)	3	2.5	30	2	1
2-3B22 (4)	3	2.5	30	3	1
3B24 (2-4)	1	2	100	0	1
Good=50					
3B25 (4)	4	2.5	26	0	1
3B26 (7)	4	2.5	38	0	2
3B27 (4)	3	2.5	38	0	1
3B28 (4)	4	4.2	28	0	1
3B29 (1)	4	2.5	90	0	4
3BN4 (1-2-4-6-7)	4	3	68	5	3
3C2 (2-4-6-7-8)	1	1.4	76	0	5
Good=30					
3C4 (1-7)	4	1.4	44	2-3	5 (3)
1-3C6 (1-8)	1	1.4	40	3-4	7 (4)
2-3C6 (1-8)	1	1.4	40	5-6	7 (5)
3C23 (4)	4	4.2	25	0	1
3C31 (4)	4	3	26	0	1
3CF6 (4)	4	3	52	5-6	3 (6)
3D6 (1-8)	4	1.4	40	2-3	7 (3)
3DX4 (2-4-6)	4	3	34	1-7	3
3DZ4 (2-4-6)	1	3	80	1-7	3
3E6 (1-8)	4	1.4	80	2-3	5 (3)
3FH5 (1-4-7)	4	3	72	5	3 (2)
1-3GS8 (5)	4	3	80	2-3	4 (2)
2-3GS8 (5)	4	3	80	2-8	4 (2)
3LF4 (1-8)	4	1.4	42	2-3	7 (3)
3Q4 (1-7)	4	1.4	40	2-4-6	5 (4)
3Q5 (2-7)	4	1.4	44	3-4	8 (4)
3S4 (1-7)	2	1.4	46	2-3-6	5 (3)
3V4 (1-7)	2	1.4	43	2-6	5 (6)
1-4AG (2-7)	2	2	47	3-4	8 (4)
2-4AG (2-7)	2	2	47	5-6	8 (5)
1-4AV6 (4)	4	4.2	28	1-7	3 (1)
2-4AV6 (4)	1	4.2	82	5	3
3-4AV6 (4)	1	4.2	100	6	3
4BA6 (4)	4	4.2	70	5-6	3 (6)
4BN4 (1-2-4-6-7)	4	4.2	66	5	3
1-4BS8 (5-8)	2	4.2	36	1-2	4 (2)
2-4BS8 (3-5)	2	4.2	36	6-7	4 (7)
1-4BX8 (5-8)	2	4.2	38	1-2	4 (2)
2-4BX8 (3-5)	2	4.2	38	6-7	4 (7)
1-4BZ8 (5-8)	4	4.2	60	1	4 (2)
2-4BZ8 (3-5)	4	4.2	60	6	4 (7)
4CY5 (2-4-7)	2	4.2	36	1-5	3 (1)

TUBE	A	B	C	U	D
4DK6 (4)	4	4.2	58	5-6	3 (1)
4GZ5 (2-4-5)	4	4.2	40	6-7	3 (6)
4HA5 (2-4-7)	4	4.2	51	5	3 (1)
4HT6 (1-3-5)	4	4.2	44	7-8	4 (2)
4X150A (2-4-6-7-8)	4	6.3	30	1-5-0	3
5A/170K (1-3-5)	4	6.3	40	7-9	4 (9)
5A6 (3-4-5-8)	4	2.5	36	1-6	9 (6)
1-5AQ4 (8)	3	6.3	30	4	2
2-5AQ4 (8)	3	6.3	30	6	2
1-5AS8 (5-8)	4	5	52	1-7	4 (1)
2-5AS8 (3-5)	4	5	26	6	4
1-5AW4 (6)	3	5	34	4	2
2-5AW4 (6)	3	5	34	6	2
1-5AX4 (6)	3	5	54	4	2
2-5AX4 (6)	3	5	54	6	2
1-5AZ4 (8)	3	5	58	4	2
2-5AZ4 (8)	3	5	58	6	2
1-5BC3 (3-8-9)	3	5	40	5-6	1
2-5BC3 (3-5-9)	3	5	40	8-9	1
1-5BC8 (5-8)	4	5	66	1	4 (2)
2-5BC8 (3-5)	4	5	66	6	4 (7)
1-5BZ7 (5-8)	4	5	55	1	4 (2)
2-5BZ7 (3-5)	4	5	55	6	4 (7)
1-5CL8 (5-8)	4	5	58	2	4 (1)
2-5CL8 (3-5)	4	5	50	6-7	4 (7)
1-5EG8 (5-6)	4	5	52	1-9	4 (9)
2-5EG8 (5-8)	2	5	36	2-3	4 (2)
1-5K08 (5-7)	4	5	48	1	4 (9)
2-5K08 (5-8)	4	5	56	3-6	4 (2)
1-5R4 (8)	3	5	42	4	2
2-5R4 (8)	3	5	42	6	2
1-5T4 (8)	3	5	34	4	2
2-5T4 (8)	3	5	34	6	2
1-5V4 (8)	3	5	30	4	2
2-5V4 (8)	3	5	30	6	2
5V6 (7)	4	5	42	3-4	2 (4)
1-5W4 (8)	3	5	58	4	2
2-5W4 (8)	3	5	58	6	2
1-5X3 (4)	3	5	54	2	1
2-5X3 (4)	3	5	54	3	1
1-5X4 (8)	3	5	40	3	7
2-5X4 (8)	3	5	40	5	7
1-5Y4 (8)	3	5	52	3	7
2-5Y4 (8)	3	5	52	5	7
1-5Z3 (4)	3	5	34	2	1
2-5Z3 (4)	3	5	34	3	1
1-5Z4 (8)	3	5	34	4	2
2-5Z4 (8)	3	5	34	6	2
6A3 (4)	4	6.3	30	2	1
6A4 (5)	4	6.3	40	2-4	1 (4)
6A5 (2-7)	4	3	30	3	8
1-6A6 (7)	2	6.3	48	2-3	1 (3)
2-6A6 (7)	2	6.3	48	5-6	1 (5)

TUBE	A	B	C	U	D	TUBE	A	B	C	U	D	
1-6AB5	(6)	4	6.3	24	2-4	1	6AM5	(4)	4	6.3	48	5-7
2-6AB5	(6)	4	6.3	24	4	Eye Closed	6AM6	(4)	4	6.3	80	5-7
6AB7	(7)	4	6.3	74	6-8	Eye Open	6AN4	(4)	1	6.3	42	1-2-6-7
1-6AB8	(5)	4	6.3	50	4	2 (6)	6AN5	(2-4-7)	4	6.3	32	5-6
2-6AB8	(5)	2	6.3	45	1-2	4 (8)	6AQ4	(1-2-4-5-6)	4	6.3	80	7
1-6A7	(7)	4	6.3	48	2-3	4 (2)	6AR6	(8)	4	6.3	34	3-5
2-6A7	(7)	1	6.3	48	4-5	1 (3)	1-6AR8	(5)	4	6.3	82	3-9
1-6A8	(7)	4	6.3	50	1-3-4-0	1 (5)	2-6AR8	(5)	4	6.3	82	3-8
2-6A8	(7)	1	6.3	50	5-6	2 (5)	6AS6	(4)	4	6.3	58	5-6
1-6AC6	(7)	2	6.3	75	3	2	1-6AS7	(6-8)	4	6.3	28	2
2-6AC6	(7)	1	6.3	100	4	2-8	2-6AS7	(3-8)	4	6.3	28	5
1-6AD6	(7)	4	6.3	0	5	2-8 (5)	1-6AS11	(5-7)	4	6.3	34	2-0
2-6AD6	(7)	4	6.3	0	3-4-5	2	2-6AS11	(5-9)	2	6.3	40	3-4
1-6AD7	(7)	4	6.3	46	3-4	2	3-6AS11	(7-9)	2	6.3	36	6-8
2-6AD7	(7)	1	6.3	70	1-6	2	1-6AU7	(4-5-8)	4	3	70	1
6AE5	(7)	2	6.3	46	3-5	2 (4)	2-6AU7	(3-4-5)	4	3	70	6
1-6AE6	(7)	2	6.3	53	3-5	2 (1)	1-6AV11	(4-6)	4	6.3	71	2
2-6AE6	(7)	2	6.3	53	4-5	2-8 (5)	2-6AV11	(3-4)	4	6.3	71	5
1-6AE7	(7-8)	2	6.3	48	3-4	2 (5)	3-6AV11	(3-6)	4	6.3	71	0
2-6AE7	(5-7)	2	6.3	48	3-6	2 (4)	1-6AX6	(7-8)	3	6.3	28	3
6AF5	(7)	4	6.3	44	3	2 (6)	2-6AX6	(4-7)	3	6.3	28	5
1-6AF6	(7)	4	6.3	0	3-4-5	2	1-6AX7	(4-5-8)	2	3	40	1-2
2-6AF6	(7)	4	6.3	0	4-5	2	2-6AX7	(3-4-5)	2	3	40	6-7
3-6AF6	(7)	4	6.3	0	3-5	2	1-6AX8	(5-8)	4	6.3	46	3-6
6AG6	(7)	4	6.3	34	3-4	2 (4)	2-6AX8	(5-7)	4	6.3	58	1
1-6AG11	(1-4-9)	3	6.3	32	3	2	6B4	(7)	4	6.3	30	3
2-6AG11	(2-4-9)	3	6.3	32	0	2	1-6B6	(7)	2	6.3	50	3-0
3-6AG11	(1-2-9)	4	6.3	66	6	2-8	2-6B6	(7)	2	6.3	72	4
4-6AG11	(1-2-4)	4	6.3	66	7	2-8	3-6B6	(7)	2	6.3	72	4
6AJ4	(1-3-4-6-8-9)	4	6.3	56	5	2-8	1-6B7	(7)	4	6.3	70	2-3
6AJ5	(2-4-7)	2	6.3	42	1-5	Good=40	2-6B7	(7)	1	6.3	68	4
6AJ6	(7)	4	6.3	40	3-4	2-8	3-6B7	(7)	1	6.3	68	5
6AJ7	(7)	4	6.3	56	6-8	Good=40	1-6B8	(7)	1	6.3	50	5
1-6AJ8	(5)	4	6.3	66	1-6	2 (6)	2-6B8	(7)	1	6.3	50	4
2-6AJ8	(5)	2	6.3	44	8-9	2 (5)	3-6B8	(7)	4	6.3	84	3-6
6AK6	(4)	4	6.3	50	5-6	2 (8)	1-6BC7	(5-7-9)	1	6.3	40	2
6AK7	(7)	4	6.3	40	6-8	2 (6)	2-6BC7	(1-5-9)	1	6.3	40	6
1-6AK8	(3-5)	1	6.3	42	1	4	3-6BC7	(1-5-7)	1	6.3	40	8
2-6AK8	(5-7)	1	6.3	42	2	4	6BD4	(7)	2	6.3	90	5-0
3-6AK8	(3-5)	2	6.3	46	8-9	4 (1)	6BD5	(7)	4	6.3	36	5-8
4-6AK8	(3-5)	1	6.3	64	6	4-7	1-6BD7	(5-7-9)	2	6.3	45	1-2
1-6AL7	(7)	4	6.3	0	3	2-8	2-6BD7	(5-7-9)	1	6.3	66	6
2-6AL7	(7)	4	6.3	0	3	Eye Closed	3-6BD7	(5-7-9)	1	6.3	100	8
3-6AL7	(7)	4	6.3	0	3	2-4-8	1-6BE7	(3-5-8)	4	6.3	64	1-6
4-6AL7	(7)	4	6.3	40	1-3	Right Eye Open	2-6BE7	(3-5-8)	4	6.3	66	1
						Left Eye Open	1-6BF8	(5)	1	6.3	45	4
							2-6BF8	(5)	1	6.3	45	4
							3-6BF8	(5)	1	6.3	45	4
							4-6BF8	(5)	1	6.3	45	4
							5-6BF8	(5)	1	6.3	45	4
							6-6BF8	(5)	1	6.3	45	4
							6BL4	(8)	3	6.3	26	5
												7

6AB5-6DB6

6DC8-6Q4

TUBE	A	B	C	U	D
1-6DC8	4	6.3	56	1-6	4 (1)
2-6DC8	1	6.3	100	7	4
3-6DC8	1	6.3	100	8	4
1-6DJ8	4	6.3	40	1	4 (2)
2-6DJ8	4	6.3	40	6	4 (7)
6DL5	4	6.3	44	5-6	3 (6)
6DM4	4	6.3	25	5	7
6DN6	4	6.3	28	8-0	2 (8)
6DR4	2	6.3	46	1-5-6	3 (6)
1-6DR8	4	6.3	24	2-6	4 (2)
2-6DR8	1	6.3	74	8	3-4
3-6DR8	1	6.3	56	7	3-4
1-6DS8	4	6.3	48	1-6	4 (1)
2-6DS8	4	6.3	60	8	4
6DX4	4	6.3	37	1-7	3
6DY6	2	6.3	92	7-9	4 (2)
1-6DZ8	4	6.3	32	6-7	4 (7)
2-6DZ8	2	6.3	80	1-9	4 (1)
1-6E5	4	6.3	30	2-4	1
2-6E5	4	6.3	30	4	Eye Closed 1 Eye Open
1-6E6	4	6.3	50	2	1
2-6E6	4	6.3	50	6	1
6E7	4	6.3	58	2-3	1 (3)
6EA5	4	6.3	66	5-6	3 (6)
1-6EB5	2	6.3	64	2	3
2-6EB5	2	6.3	64	7	3
6ET6	2	6.3	65	5-6	3 (6)
1-6EZ8	4	6.3	92	3	4 (2)
2-6EZ8	4	6.3	36	6	4 (7)
3-6EZ8	4	6.3	36	8	4 (9)
6F5	2	6.3	40	4-0	2 (0)
6F6	4	6.3	46	3-4	2 (4)
1-6F7	2	6.3	78	2-0	1 (0)
2-6F7	1	6.3	90	4-5	1 (5)
1-6F8	4	6.3	72	3	2 (0)
2-6F8	4	6.3	72	6	2 (5)
6F12	4	6.3	90	5-7	3 (7)
6F19	4	6.3	46	7-8	4 (8)
6F21	4	6.3	100	5-7	3 (7)
1-6FA7	4	6.3	90	1-8	4 (8)
2-6FA7	4	6.3	90	8-9	4 (8)
3-6FA7	1	6.3	80	3	4-6
6FD6	2	6.3	40	1-5	3 (1)
6FE5	4	6.3	30	3-4	2 (4)
1-6FF6	2	6.3	70	1-9	4 (1)
2-6FF6	4	6.3	0	2-6-7-8-9	4
3-6FF6	4	6.3	0	2-6-7-8-9	Eye Closed 4
6FW5	2	6.3	75	5-8	2 (1)

TUBE	A	B	C	U	D
1-6FW8	4	6.3	48	1	4 (2)
2-6FW8	4	6.3	40	6	4 (7)
1-6G5	4	6.3	50	2-4	1
2-6G5	4	6.3	50	4	Eye Closed 1 Eye Open
6G6	4	6.3	50	3-4	2 (4)
1-6GA7	2	6.3	78	2-3-7	— (4)
2-6GA7	1	6.3	44	1	—
6GB5	4	6.3	28	6-7-0	4
6GC5	4	6.3	30	1-8-9	4
1-6GE8	4	6.3	30	6	4
2-6GE8	4	6.3	82	1-9	4 (1)
6GF5	4	6.3	30	2-7	—
6GK7	4	6.3	70	7-8-9	4 (2)
1-6GM8	2	6.3	100	6	4 (7)
2-6GM8	2	6.3	100	1	4 (2)
1-6GV8	4	6.3	78	1	4 (2)
2-6GV8	2	6.3	84	6-7	4 (9)
1-6GY8	4	6.3	100	2	5 (1)
2-6GY8	4	6.3	100	9	5 (3)
3-6GY8	4	6.3	100	6	5
6GZ5	1	6.3	83	6-7	3 (6)
6H4	2	6.3	52	4	2
1-6H5	4	6.3	50	2-4	1
2-6H5	4	6.3	50	4	Eye Closed 1 Eye Open
1-6H8	1	6.3	50	5	2-8
2-6H8	1	6.3	50	4	Good=40 2-8
3-6H8	4	6.3	84	3-6	Good=40 2 (6)
1-6HC8	4	6.3	36	6-7	4 (7)
2-6HC8	2	6.3	42	1-9	4 (1)
6HM6	4	6.3	40	7-8	4 (2)
6HR6	4	6.3	42	5-6	3 (1)
6HS6	4	6.3	40	5-6	3 (6)
6HT6	4	6.3	40	7-8	4 (2)
1-6HU6	2	6.3	44	1-9	4 (1)
2-6HU6	4	6.3	0	2-6-7-8	4
3-6HU6	4	6.3	0	2-6-7-8	Eye Closed 4
1-6HW8	4	6.3	73	2-3	4 (6)
2-6HW8	4	6.3	73	2-8	4 (6)
1-6HZ8	4	6.3	100	3	4 (2)
2-6HZ8	4	6.3	36	8-9	4 (7)
6J4	4	6.3	64	7	3
6J5	4	6.3	76	3	2 (5)
1-6I8	2	6.3	52	3-0	2 (0)
2-6I8	2	6.3	56	5-6	2 (5)

TUBE	A	B	C	U	D
1-6J9	4	6.3	82	8	4 (7)
2-6J9	4	6.3	82	6	4 (9)
3-6J9	4	6.3	76	1	4 (2)
1-6J10	4	6.3	32	2-9	— (2)
2-6J10	4	6.3	80	4-5-6	— (6)
1-6J11	4	6.3	46	2-3	— (5)
2-6J11	4	6.3	36	7-9	— (1)
1-6J18	4	6.3	100	3	4 (2)
2-6J18	4	6.3	45	8-9	4 (7)
1-6J18	4	6.3	55	3-6	4 (2)
2-6J18	4	6.3	60	5	4 (9)
6K5	2	6.3	44	3-0	2 (0)
6K7	2	6.3	60	3-0	2 (0)
1-6K8	4	6.3	46	1-3-4-0	2 (4)
2-6K8	4	6.3	86	6	2 (5)
1-6KD8	4	6.3	54	1	4 (9)
2-6KD8	4	6.3	51	3-6	4 (2)
1-6KL8	4	6.3	75	6-7	4 (2)
2-6KL8	1	6.3	100	8	4
1-6KZ8	4	6.3	44	1	4 (9)
2-6KZ8	4	6.3	53	6-7	4 (2)
6L5	4	6.3	78	3	2 (5)
1-6L7	4	6.3	26	0-4	2 (0)
2-6L7	4	6.3	28	3-0	2 (0)
1-6L12	4	6.3	84	1	4 (2)
2-6L12	4	6.3	84	6	4 (7)
1-6LD12	1	6.3	42	1	4
2-6LD12	1	6.3	42	2	4
3-6LD12	2	6.3	46	8-9	4 (8)
4-6LD12	1	6.3	64	6	4-7
1-6M2	4	6.3	0	3-5-6	2
2-6M2	4	6.3	0	5-6	Eyes Closed 2
3-6M2	4	6.3	0	3-5	Left Eye Open 2 Right Eye Open
6M6	4	6.3	34	3-4	2 (4)
1-6M11	4	6.3	46	1-3	— (2)
2-6M11	4	6.3	72	6	— (5)
3-6M11	4	6.3	68	7	— (8)
1-6N5	4	6.3	40	2-4	1
2-6N5	4	6.3	40	4	Eye Closed 1 Eye Open
1-6N6	2	6.3	68	4-5	2 (5)
2-6N6	2	6.3	46	3-5	2-8
1-6N8	4	6.3	56	1-6	4 (1)
2-6N8	1	6.3	64	7	3-4
3-6N8	1	6.3	52	8	3-4
6P5	4	6.3	76	3	2 (5)
6P15	4	6.3	35	7-9	4 (9)
6P17	4	6.3	48	5-7	3 (7)
6P4	4	6.3	64	9	4

TUBE	A	B	C	U	D
1-7AU7 (4-5-8)	4	3	26	1-2	9 (2)
2-7AU7 (3-4-5)	4	3	26	6-7	9 (7)
7B4	2	6.3	74	2-8	1 (6)
7B5	4	6.3	42	2-3	1 (3)
1-7B6 (4-7-8)	2	6.3	46	2-3	1 (3)
2-7B6 (4-7-8)	1	6.3	100	5	1
3-7B6 (4-7-8)	1	6.3	100	6	1
7B7	4	6.3	62	2-3	1 (3)
1-7B8 (8)	4	6.3	46	2-5	1 (5)
2-7B8 (8)	2	6.3	44	3-4	1 (4)
7C4	3	6.3	72	4	1
1-7C6 (4-7-8)	2	6.3	52	2-3	1 (3)
2-7C6 (8)	1	6.3	60	5	14-7
3-7C6 (8)	1	6.3	80	6	14-7
7C7	4	6.3	78	2-3	1 (3)
7D9	4	6.3	48	5-7	3 (7)
1-7D18 (5-8)	4	7.5	40	1	4 (2)
2-7D18 (3-5)	4	7.5	40	6	4 (7)
7E5 (1-4-5-6-8)	4	6.3	94	3-7	2
1-7E6 (4-7-8)	2	6.3	50	2-3	1 (3)
2-7E6 (4-7-8)	1	6.3	100	5	1
3-7E6 (4-7-8)	1	6.3	100	6	1
1-7E7 (8)	2	6.3	52	3	1-7
2-7E7 (8)	2	6.3	52	4	1-7
3-7E7 (8)	4	6.3	60	2-5	1 (5)
7EY6 (7)	4	7.5	34	3-4	2 (4)
1-7F8 (5-7)	2	6.3	42	1-3	2 (1)
2-7F8 (4-7)	2	6.3	42	6-8	2 (8)
1-7FC7 (1-5-7-8)	4	7.5	36	9	4 (6)
2-7FC7 (5-7-8)	4	7.5	30	3	4 (2)
7G7 (8)	4	7.5	50	2-3	1 (3)
7H7 (8)	4	6.3	58	2-3	1 (3)
1-7HG8 (1-3-5)	4	7.5	38	7	4
2-7HG8 (1-3-5)	4	7.5	48	8-9	4 (2)
1-7J7 (8)	2	6.3	52	3-4	1 (4)
2-7J7 (8)	4	6.3	64	2-5	1 (5)
3-7J7 (8)	2	6.3	42	5-6	1 (6)
1-7K7 (7-8)	2	6.3	48	3-4	1 (4)
2-7K7 (2-8)	1	6.3	75	5	1-7
3-7K7 (2-8)	1	6.3	75	6	1-7
7L7 (8)	4	6.3	70	2-3	1 (3)
1-7Q7 (8)	4	7.5	44	2-3	1 (3)
2-7Q7 (8)	2	7.5	42	3-4	1 (4)
1-7R7 (8)	1	6.3	82	3	1-7
2-7R7 (8)	1	6.3	82	4	1-7
3-7R7 (8)	4	6.3	72	2-5	1 (5)
1-7S7 (8)	2	6.3	62	3-4	1 (4)
2-7S7 (8)	4	6.3	82	2-5	1 (5)
3-7S7 (8)	2	6.3	46	5-6	1 (6)
7T7 (8)	4	6.3	62	2-3	1 (3)
7V7 (8)	4	6.3	52	2-3	1 (3)
7W7 (4-7-8)	4	7.5	50	2-3	1 (3)

TUBE	A	B	C	U	D
1-6T10 (2)	4	6.3	40	1-0	— (8)
2-6T10 (9)	4	6.3	74	5-6-7	— (3)
6U3	3	6.3	28	8	4
6U4	3	6.3	28	5	7
1-6U5 (6)	4	6.3	50	2-4	1
2-6U5 (6)	4	6.3	50	4	Eye Closed 1
6U6 (7)	4	6.3	30	3-4	2 (4)
6U7 (7)	4	6.3	54	3-4	2 (4)
1-6V4 (5)	3	6.3	46	1	4
2-6V4 (5)	3	6.3	46	7	4
6V5 (8)	4	6.3	40	3-4	7 (4)
1-6V7 (7)	4	6.3	25	3-0	2 (0)
2-6V7 (7)	1	6.3	86	4	2
3-6V7 (7)	1	6.3	86	5	2
1-6V8 (5-8)	1	6.3	40	2	4
2-6V8 (5-8)	1	6.3	100	9	4
3-6V8 (5-8)	2	6.3	45	1-6	4 (6)
4-6V8 (3-5)	1	6.3	40	7	4
6W7 (7)	4	6.3	80	3-4	2 (4)
1-6Y5 (6)	3	6.3	40	3	1
2-6Y5 (6)	3	6.3	40	5	1
6Y6 (7)	4	6.3	30	3-4	2 (4)
1-6Y7 (7)	4	6.3	26	3-4	2 (4)
2-6Y7 (7)	4	6.3	26	5-6	2 (5)
6Z3 (4)	3	6.3	40	2	1
1-6Z4 (5)	3	6.3	43	2	1
2-6Z4 (5)	3	6.3	43	3	1
1-6Z5 (2-6)	3	6.3	40	3	1
2-6Z5 (2-6)	3	6.3	40	5	1
1-6Z6 (7-8)	3	6.3	38	3	2
2-6Z6 (4-7)	3	6.3	38	5	2
1-6Z7 (7)	2	6.3	46	3-4	2 (4)
2-6Z7 (7)	2	6.3	46	5-6	2 (5)
1-6ZY5 (7)	3	6.3	46	3	2
2-6ZY5 (7)	3	6.3	46	5	2
7A4 (8)	4	6.3	70	2	1 (6)
7A5 (8)	4	6.3	32	2-3	1 (3)
1-7A6 (7-8)	2	6.3	54	3	1
2-7A6 (2-8)	2	6.3	54	6	1
7A7 (8)	4	7.5	54	2-3	1 (3)
1-7A8 (8)	4	7.5	45	2-5	1 (5)
2-7A8 (8)	2	7.5	50	3-4	1 (4)
7AD7 (8)	4	7.5	40	2-3	1 (3)
1-7AF7 (7-8)	4	7.5	68	3	1 (4)
2-7AF7 (2-8)	4	7.5	68	6	1 (5)
7AG7 (8)	4	6.3	100	2-3	1 (3)
7AH7 (8)	4	6.3	92	2-3	1 (3)
7AK7 (8)	4	6.3	38	2-3	1 (3)
1-7AN7 (1-5-7-8)	4	7.5	44	9	4 (6)
2-7AN7 (5-7-8)	4	7.5	40	3	4 (2)

TUBE	A	B	C	U	D
1-6Q6 (7)	2	6.3	46	3-0	2 (0)
2-6Q6 (7)	2	6.3	74	4	2-8
1-6Q7 (7)	2	6.3	48	3-0	2 (0)
2-6Q7 (7)	1	6.3	66	5	2-8
3-6Q7 (7)	1	6.3	68	4	2-8
1-6Q11 (3-6)	4	6.3	68	0	(9)
2-6Q11 (3-4)	2	6.3	44	5-7	(7)
3-6Q11 (4-6)	2	6.3	44	1-2	(1)
6R3 (5)	3	6.3	25	2-9	4-0
6R4 (5)	4	6.3	48	8	4
6R6 (7)	4	6.3	74	3-5	2 (3)
1-6R7 (7)	2	6.3	46	3-0	2 (0)
2-6R7 (7)	1	6.3	68	4	2-8
3-6R7 (7)	1	6.3	68	5	2-8
1-6R8 (5-7)	2	6.3	46	2	4
2-6R8 (3-5)	1	6.3	44	1	4
3-6R8 (3-5)	1	6.3	44	6	4
4-6R8 (3-5)	4	6.3	75	9	4 (8)
6S2 (1-4-6-9)	4	6.3	64	0	2-5-8
6S7 (7)	2	6.3	54	3-0	2 (0)
1-6S8 (5-8)	2	6.3	46	6-0	7 (0)
2-6S8 (5-8)	1	6.3	66	1	2-7
3-6S8 (5-8)	1	6.3	70	4	7
4-6S8 (2-8)	1	6.3	62	3	5-7
1-6SB7 (7)	4	6.3	40	4	2
2-6SB7 (7)	4	6.3	38	3-4	2 (4)
6SD7 (7)	4	6.3	50	6-8	2 (6)
6SF5 (8)	4	6.3	44	3-5	7 (3)
1-6SF7 (8)	4	6.3	50	4-6	7 (4)
2-6SF7 (8)	1	6.3	100	5	7
6SG7 (3-5-7)	4	6.3	58	6-8	2 (6)
6SH7 (3-5-7)	4	6.3	70	6-8	2 (6)
1-6SR7 (8)	4	6.3	26	2-6	7 (2)
2-6SR7 (8)	1	6.3	80	4	3-7
3-6SR7 (8)	1	6.3	80	5	3-7
6SS7 (7)	4	6.3	56	6-8	2 (6)
1-6ST7 (8)	4	6.3	73	6	7 (2)
2-6ST7 (8)	1	6.3	74	4	3-7
3-6ST7 (8)	1	6.3	74	5	3-7
1-6SU7 (3-8)	2	6.3	48	4-5	7 (4)
2-6SU7 (6-8)	2	6.3	48	1-2	7 (1)
1-6SV7 (8)	4	6.3	88	4-6	7 (4)
2-6SV7 (8)	1	6.3	48	5	7
1-6SZ7 (8)	2	6.3	48	2-6	7 (2)
2-6SZ7 (8)	1	6.3	96	4	3-7
3-6SZ7 (8)	1	6.3	96	5	3-7
6T4 (2-4-6)	4	6.3	42	1-7	3
6T5 (6)	4	6.3	0	2-4	1
1-6T9 (9)	3	6.3	30	2-4	— (4)
2-6T9 (5)	4	6.3	40	1-0	— (8)
1-6T7 (7)	2	6.3	46	3-0	2 (0)
2-6T7 (7)	2	6.3	74	4	2-8
3-6T7 (7)	2	6.3	74	5	2-8

6Q6-7W7

7X6-12J7

TUBE	A	B	C	U	D
1-12DW7 (4-5-8)	4	6.3	68	1	9 (2)
2-12DW7 (3-4-5)	2	6.3	40	6-7	9 (7)
1-12DW8 (5-8)	2	12.6	66	1	4 (2)
2-12DW8 (3-5)	1	12.6	100	6	4 (7)
3-12DW8 (3-5)	1	12.6	72	9	4
1-12DY8 (5-7)	2	12.6	70	3-6	4 (3)
2-12DY8 (2-5)	2	12.6	54	8-9	4 (9)
12E5 (7)	4	12.6	76	3	2 (5)
1-12EC6 (4)	2	12.6	54	1-6	3 (1)
2-12EC6 (4)	2	12.6	54	1-5-6	3 (1)
1-12EC8 (5-8)	2	12.6	48	1-2	4 (1)
2-12EC8 (3-5)	2	12.6	46	6-9	4 (9)
12EH5 (2-4-5)	4	12.6	32	6-7	3 (6)
1-12EL6 (4)	2	12.6	56	1-2	3 (1)
2-12EL6 (4)	1	12.6	60	5	3-7
3-12EL6 (4)	1	12.6	76	6	3-7
1-12EM6 (5)	2	12.6	80	3-6	4 (3)
2-12EM6 (5)	1	12.6	78	9	2-4
12EZ6 (4)	2	12.6	48	1-5	3 (1)
12F5 (7)	2	12.6	56	4-0	2 (0)
12FA6 (4)	2	12.6	50	1-5-6	3 (1)
1-12FK6 (4)	2	12.6	52	1-7	3 (1)
2-12FK6 (4)	1	12.6	66	5	2-3
3-12FK6 (4)	1	12.6	53	6	2-3
1-12FM6 (4)	2	12.6	52	1-7	3 (1)
2-12FM6 (4)	1	12.6	66	5	2-3
3-12FM6 (4)	1	12.6	86	6	2-3
1-12FQ8 (5)	2	12.6	56	1-2	4 (2)
2-12FQ8 (5)	2	12.6	56	2-3	4 (2)
3-12FQ8 (5)	2	12.6	56	6-7	4 (7)
4-12FQ8 (5)	2	12.6	56	7-8	4 (7)
1-12FR8 (2-5)	2	12.6	92	6-7	4 (6)
2-12FR8 (5)	2	12.6	52	1-9	4 (1)
3-12FR8 (5)	1	12.6	74	8	2-4
12FU6 (4)	4	12.6	36	5-6	3 (6)
1-12FV7 (5-8-9)	4	12.6	31	1	4 (2)
2-12FV7 (3-4-9)	4	12.6	31	6	5 (7)
12FX5 (2-4-5)	4	12.6	31	6-7	3
1-12FX8 (5)	4	12.6	28	1-3	4 (1)
2-12FX8 (5-7)	4	12.6	43	8	4 (6)
1-12G8 (4-5-7)	2	6.3	36	1-3	9 (3)
2-12G8 (2-4-5)	2	6.3	36	6-8	9 (8)
1-12GA6 (4)	2	12.6	52	1-5	3 (1)
2-12GA6 (4)	1	12.6	100	5-6	3 (6)
12GW6 (7)	4	12.6	30	4-0	2 (4)
1-12H6 (7-8)	3	12.6	86	3	2
2-12H6 (4-7)	3	12.6	86	5	2
1-12HK6 (4)	2	12.6	56	1-7	3 (1)
2-12HK6 (4)	1	12.6	56	5	2-3
3-12HK6 (4)	1	12.6	56	6	2-3
12J5 (7)	4	12.6	66	3	2 (5)

TUBE	A	B	C	U	D
12AS5 (2-4-5)	4	12.6	32	6-7	3 (6)
1-12AV6 (4)	2	12.6	56	1-7	3 (1)
2-12AV6 (4)	1	12.6	56	5	2-3
3-12AV6 (4)	1	12.6	56	6	2-3
12AW6 (4)	4	12.6	76	5-6	3 (6)
12B7 (8)	4	12.6	54	2-3	1 (3)
1-12B8 (6-7)	2	12.6	62	3-0	2 (0)
2-12B8 (1-7)	2	12.6	52	5-8	2 (8)
1-12BF6 (4)	4	12.6	82	7	3 (1)
2-12BF6 (4)	1	12.6	50	5	2-3
3-12BF6 (4)	1	12.6	70	6	2-3
12BN6 (4)	4	12.6	68	5-7	3 (5)
12BS3 (5)	3	12.6	34	2-7	4
12BV7 (3-4-5-9)	4	6.3	44	7-8	6 (8)
1-12BW4 (5)	3	12.6	74	7	4
2-12BW4 (5)	3	12.6	74	1	4
12BZ6 (4)	4	12.6	48	5-6	3 (6)
1-12C8 (7)	4	12.6	74	3-6	2 (6)
2-12C8 (7)	1	12.6	100	4	2-8
3-12C8 (7)	1	12.6	100	5	2-8
12CN5 (2-4-5)	2	12.6	100	6-7	3 (6)
1-12CR6 (4)	4	12.6	52	5-6	3 (6)
2-12CR6 (4)	1	12.6	46	2	1-3
12CS6 (4)	2	12.6	60	1-5-6	3 (1)
1-12CT8 (5-9)	4	12.6	84	1	4 (2)
2-12CT8 (3-5)	4	12.6	40	6-7	4 (7)
12CU6 (7)	4	12.6	31	4-0	2 (4)
12CX6 (4)	2	12.6	50	1-5	3 (1)
1-12DE8 (5-9)	1	12.6	68	3	4
2-12DE8 (2-5)	2	12.6	52	1-6	4 (1)
1-12DF7 (4-5-8)	2	6.3	44	1-2	9 (2)
2-12DF7 (3-4-5)	2	6.3	44	6-7	9 (7)
1-12DJ8 (5-8)	4	12.6	40	1	4 (2)
2-12DJ8 (3-5)	4	12.6	40	6	4 (7)
12DK6 (4)	4	12.6	54	5-6	3 (6)
1-12DK7 (1-5-8)	2	12.6	68	3-7	4 (3)
2-12DK7 (1-5-8)	1	12.6	66	6	2-4
3-12DK7 (1-5-8)	1	12.6	100	9	2-4
12DM4 (8)	4	12.6	25	5	7
1-12DM7 (4-5-8)	2	6.3	46	1-2	9 (2)
2-12DM7 (3-4-5)	2	6.3	46	6-7	9 (7)
12DQ4 (8)	4	12.6	26	5	7
1-12DT7 (4-5-8)	2	6.3	46	1-2	9 (2)
2-12DT7 (3-4-5)	2	6.3	46	6-7	9 (7)
1-12DU7 (5)	2	12.6	62	3-6	4 (3)
2-12DU7 (5)	1	12.6	100	7	2-4
3-12DU7 (5)	1	12.6	100	9	2-4
1-12DV7 (4-5-8)	1	6.3	100	2	1-9
2-12DV7 (4-5-8)	1	6.3	100	3	1-9
3-12DV7 (1-4-5)	2	6.3	48	6-7	9 (7)
1-12DV8 (5-8)	4	12.6	78	6-7	4 (7)
2-12DV8 (2-5)	1	12.6	50	1	4-8

TUBE	A	B	C	U	D
1-7X6 (7-8)	3	6.3	30	3	1
2-7X6 (2-8)	3	6.3	30	6	1
1-7X7 (7-8)	2	6.3	56	2-3	1 (3)
2-7X7 (7-8)	1	6.3	100	5	1
3-7X7 (4-8)	1	6.3	100	6	1
1-7Y4 (8)	3	6.3	43	3	1
2-7Y4 (8)	3	6.3	43	6	1
1-7Z4 (8)	3	6.3	58	3	1
2-7Z4 (8)	3	6.3	58	6	1
1-8A8 (5-8)	4	7.5	68	3-6	4 (3)
2-8A8 (5-7)	4	7.5	46	1	4 (9)
8B05 (1-2-5)	4	7.5	36	7-9	4 (9)
1-8CN7 (4-5-6)	1	4.2	38	2	9
2-8CN7 (4-5-6)	1	4.2	38	1	9
3-8CN7 (3-4-5)	2	4.2	42	7-8	9 (7)
8D3 (4)	4	6.3	90	5-7	3 (7)
1-8SN7 (6-8)	4	7.5	28	1-2	7 (1)
2-8SN7 (3-8)	4	7.5	28	4-5	7 (4)
9AB4 (4)	2	7.5	44	1-6	3 (6)
1-9AK8 (3-5)	2	7.5	46	8-9	4 (8)
2-9AK8 (3-5)	1	7.5	100	6	4
3-9AK8 (3-5)	1	7.5	46	1	4
4-9AK8 (5-7)	1	7.5	46	2	4
1-9AQ8 (3-5)	4	7.5	88	6	4 (7)
2-9AQ8 (5-8)	4	7.5	100	1	4 (2)
1-9CG8 (3-5-8)	1	7.5	46	1-2	4 (1)
2-9CG8 (3-5-8)	2	7.5	42	6-9	4 (9)
9D6 (4)	4	6.3	100	5-7	3 (7)
1-9DZ8 (5-8)	4	7.5	32	6-7	4 (7)
2-9DZ8 (2-5)	2	7.5	80	1-9	4 (1)
1-9U8 (5-8)	4	7.5	60	3-6	4 (3)
2-9U8 (5-7)	4	7.5	62	1	4 (9)
10 (4)	4	7.5	50	2	1
1-10C8 (5-9)	4	12.6	90	1	4 (2)
2-10C8 (3-5)	4	12.6	48	6-7	4 (7)
1-10EW7 (2-3-5-8)	4	7.5	28	1	4
2-10EW7 (2-3-5-9)	4	7.5	64	6	4
1-10GF7 (1-5)	2	7.5	90	6	4 (2)
2-10GF7 (3-5)	2	7.5	48	8-9	4 (9)
1-10L14 (3-5)	4	2.5	88	6	4 (7)
2-10L14 (5-8)	4	2.5	88	1	4 (2)
1-10LD12 (3-5)	1	3.2	30	1	4-7
2-10LD12 (5-7)	1	3.2	30	2	3-4
3-10LD12 (3-5)	4	3.2	28	8-9	4 (8)
4-10LD12 (3-5)	1	3.2	72	6	4-7
12A (4)	4	5	42	2	1
12A4 (2-4-5-7)	4	6.3	40	9	3
12A5 (1-7)	4	6.3	36	2-3	6 (3)
12A6 (7)	4	12.6	52	3-4	2 (4)
1-12A7 (4-7)	2	12.6	86	2-0	1 (0)
2-12A7 (6-7)	3	12.6	46	5	1
1-12A8 (7)	4	12.6	54	3-4	2 (4)
2-12A8 (7)	2	12.6	68	5-6	2 (5)

TUBE	A	B	C	U	D
1-12J8 (5-7)	2	12.6	60	3-6	4 (3)
2-12J8 (2-5)	1	12.6	64	8	4
3-12J8 (2-5)	1	12.6	64	9	4
1-12K8 (7)	4	12.6	56	3-4	2 (4)
2-12K8 (7)	4	12.6	70	6	2 (5)
1-12KL8 (5)	4	12.6	76	6-7	4 (2)
2-12KL8 (5)	1	12.6	50	8	4
Good=35					
1-12L8 (7)	4	12.6	44	4-5	6 (5)
2-12L8 (7)	4	12.6	44	5-8	6 (5)
1-12Q7 (7)	2	12.6	60	3-0	2 (0)
2-12Q7 (7)	1	12.6	54	4	2-8
3-12Q7 (7)	1	12.6	54	5	2-8
1-12R5 (2-4-5)	4	12.6	30	6-7	3 (6)
1-12S8 (5-8)	2	12.6	62	6-0	7 (0)
2-12S8 (5-8)	1	12.6	62	1	2-7
3-12S8 (5-8)	1	12.6	62	4	2-7
4-12S8 (2-8)	1	12.6	64	3	5-7
1-12SC7 (8)	2	12.6	68	2-3	7 (3)
2-12SC7 (8)	2	12.6	68	4-5	7 (4)
1-12SF5 (8)	2	12.6	60	3-5	7 (3)
1-12SF7 (8)	4	12.6	53	4-6	7 (4)
2-12SF7 (8)	1	12.6	74	5	3-7
1-12SG7 (3-5-7)	4	12.6	54	6-8	2 (6)
1-12SH7 (3-5-7)	4	12.6	70	6-8	2 (6)
1-12SQ7 (8)	2	12.6	62	2-6	7 (2)
2-12SQ7 (8)	1	12.6	56	4	3-7
3-12SQ7 (8)	1	12.6	48	5	3-7
1-12SR7 (8)	4	12.6	82	6	7 (2)
2-12SR7 (8)	1	12.6	100	4	3-7
3-12SR7 (8)	1	12.6	70	5	3-7
1-12SW7 (8)	2	12.6	68	2-6	7 (2)
2-12SW7 (8)	1	12.6	66	4	3-7
3-12SW7 (8)	1	12.6	66	5	3-7
1-12SX7 (6-8)	4	12.6	80	2	7 (1)
2-12SX7 (3-8)	4	12.6	74	5	7 (4)
1-12SY7 (7)	4	12.6	48	3-4	2 (4)
2-12SY7 (7)	2	12.6	58	5-8	2 (5)
1-12X3 (4)	4	12.6	40	0	1
1-12Z3 (4)	3	12.6	42	2	1
1-12Z5 (2-6)	3	6.3	40	3	1
2-12Z5 (2-6)	3	6.3	40	5	1
1-13 (4)	3	5	48	2	1
2-13 (4)	3	5	54	3	1
1-13D2 (6-8)	4	6.3	72	2	7 (1)
2-13D2 (3-8)	4	6.3	72	5	7 (4)
1-13J10 (8)	4	12.6	34	2-9	— (2)
2-13J10 (3)	4	12.6	80	4-5-8	— (6)
1-14A4 (8)	4	12.6	76	2	1 (6)
1-14A5 (8)	4	12.6	48	2-3	1 (3)
1-14A7 (8)	4	12.6	52	2-3	1 (3)
1-14AF7 (7-8)	4	12.6	70	3	1 (4)
2-14AF7 (2-8)	4	12.6	70	6	1 (5)

TUBE	A	B	C	U	D
1-14B6 (4-7-8)	2	12.6	60	2-3	1 (3)
2-14B6 (8)	1	12.6	88	5	1-4-7
3-14B6 (8)	1	12.6	88	6	1-4-7
1-14B8 (8)	4	12.6	46	2-5	1 (5)
2-14B8 (8)	2	12.6	56	3-4	1 (4)
1-14C5 (8)	4	12.6	44	2-3	1 (3)
1-14C7 (8)	4	12.6	78	2-3	1 (3)
1-14E6 (8)	4	12.6	40	2	1-4-7 (3)
2-14E6 (8)	1	12.6	68	5	1-4-7
3-14E6 (8)	1	12.6	68	6	1-4-7
1-14E7 (8)	1	12.6	100	3	1-7
2-14E7 (8)	1	12.6	100	4	1-7
3-14E7 (8)	4	12.6	65	2-5	1 (5)
1-14F7 (7-8)	4	12.6	65	3-4	1 (4)
2-14F7 (2-8)	4	12.6	65	5-6	1 (5)
1-14F8 (5-7)	4	12.6	26	1-3	2 (1)
2-14F8 (4-7)	4	12.6	26	6-8	2 (8)
1-14G7 (1-5-7)	1	12.6	66	2	4
2-14G7 (3-5-7)	1	12.6	66	6	4
3-14G7 (1-3-5)	2	12.6	62	8-9	4 (8)
1-14H7 (8)	4	12.6	54	2-3	1 (3)
1-14J7 (8)	2	12.6	72	3-4	1 (4)
2-14J7 (8)	2	12.6	54	2-6	1 (6)
1-14J8 (1-5-7)	1	12.6	72	2	4
2-14J8 (3-5-7)	1	12.6	72	6	4
3-14J8 (1-3-5)	2	12.6	60	8-9	4 (8)
1-14N7 (7-8)	4	12.6	76	3	1 (4)
2-14N7 (2-8)	4	12.6	76	6	1 (5)
1-14Q7 (8)	4	12.6	42	2-3	1 (3)
2-14Q7 (8)	2	12.6	50	3-4	1 (4)
1-14R7 (8)	2	12.6	54	2-6	1 (6)
2-14R7 (8)	1	12.6	56	4	1-7
3-14R7 (8)	1	12.6	56	3	1-7
1-14S7 (8)	2	12.6	82	3-4	1 (4)
2-14S7 (8)	2	12.6	54	2-6	1 (6)
1-14W7 (4-7-8)	4	12.6	54	2-3	1 (3)
1-14X7 (7-8)	2	12.6	68	2-3	1 (3)
2-14X7 (7-8)	1	12.6	70	5	1
3-14X7 (4-8)	1	12.6	70	6	1
1-14Y4 (8)	3	12.6	58	3	1
2-14Y4 (8)	3	12.6	58	6	1
15 (5)	2	2	60	2-0	1 (0)
15A6 (5)	4	12.6	44	1-7	4 (1)
1-15DQ8 (3-5)	4	12.6	56	6-9	4 (9)
2-15DQ8 (5-7)	4	12.6	24	1-2	4 (1)
15EW6 (4)	4	12.6	50	5-6	3 (6)
16A5 (5)	4	19.6	32	7-9	4 (9)
1-16A8 (5-8)	4	19.6	32	6-7	4 (7)
2-16A8 (2-5)	3	19.6	24	1-9	4 (1)
16BK6 (3-5-9)	4	12.6	38	7-8	4 (8)
16GV5 (4-5-9-0)	4	12.6	29	1-3-7	—
17 (5)	4	12.6	82	2	1 (3)
17AV5 (7)	4	19.6	30	5-8	2 (8)

TUBE	A	B	C	U	D
17C5 (2-4-5)	4	19.6	34	6-7	3 (6)
1-17C8 (5)	4	19.6	52	1-6	4 (1)
2-17C8 (5)	1	19.6	50	7	3-4
3-17C8 (5)	1	19.6	62	8	3-4
1-17EW8 (5-8)	4	19.6	74	1	4 (2)
2-17EW8 (3-5)	4	19.6	74	6	4 (7)
1-17HC8 (5-8)	4	19.6	34	6-7	4 (7)
2-17HC8 (2-5)	2	19.6	68	1-9	4 (1)
17L6 (7)	4	19.6	30	3-4	2 (4)
17R5 (2-4-5)	4	19.6	30	6-7	3 (6)
17W6 (7)	4	19.6	32	3-4	2 (4)
17Z3 (5)	3	19.6	50	2-8	4
18 (6)	2	12.6	58	2-4	1 (4)
18A5 (7)	4	19.6	32	5-8	2 (8)
18A05 (1-4-7)	4	19.6	42	5-6	3 (6)
1-18C51 (8-9)	4	19.6	68	4	1 (3)
2-18C51 (2-9)	4	19.6	68	6	1 (7)
1-18DZ8 (5-8)	4	19.6	32	6-7	4 (7)
2-18DZ8 (2-5)	2	19.6	80	1-9	4 (1)
1-18HB8 (5-8)	4	19.6	100	3	4 (1)
2-18HB8 (2-5)	4	19.6	33	6-7	4 (9)
1-19 (6)	4	2	28	2-3	1 (3)
2-19 (6)	4	2	28	4-5	1 (4)
1-19BR5 (3-5-8-9)	2	19.6	100	1-7	4 (1)
2-19BR5 (5)	4	19.6	0	3-7-8-9	4
3-19BR5 (5)	4	19.6	0	3-8-9	4
1-19C8 (5-7)	2	19.6	90	2	4
2-19C8 (3-5)	2	19.6	94	8-9	4 (8)
3-19C8 (3-5)	2	19.6	86	6	4
4-19C8 (3-5)	2	19.6	86	1	4
1-19D8 (5)	4	19.6	58	1	4
2-19D8 (5)	4	19.6	54	1-6	4 (1)
3-19D8 (5)	4	19.6	68	8	4 (9)
1-19HV8 (5-8)	2	19.6	100	1-2	4 (1)
2-19HV8 (3-5)	4	19.6	50	6-7	4 (7)
1-19J6 (4)	4	19.6	80	1	3 (6)
2-19J6 (4)	4	19.6	68	2	3 (5)
1-19KG8 (5-8)	4	19.6	57	1	4 (2)
2-19KG8 (3-5)	4	19.6	78	6	4-8 (9)
1-19V8 (5-8)	1	19.6	62	9	3-4
2-19V8 (5-8)	1	19.6	30	2	3-4
3-19V8 (5-8)	2	19.6	94	1-6	4 (6)
4-19V8 (3-5)	2	19.6	76	7	4
19X3 (5)	3	19.6	46	9	4
20 (4)	1	3	52	2-3	1
1-20EQ7 (5)	4	19.6	60	6-7	4 (6)
2-20EQ7 (5)	1	19.6	100	8	3-4
21A6 (1-5-6-9)	4	19.6	30	7-8-0	4
21EX6 (7)	4	25	28	8-0	2 (8)
22 (4)	4	3	80	2-3	1 (3)
24A (5)	4	2.5	78	2-3	1 (3)
25A6 (7)	4	25	34	3-4	2 (4)

12J8-25A6

25A7-85A2

TUBE	A	B	C	U	D
1-25A7 (1-7)	4	25	36	3-4	2 (4)
2-25A7 (7-8)	2	25	32	6	1-2
25AC5 (7)	4	25	28	3-5	2 (5)
1-25B5 (6)	2	25	65	3-4	1-5 (4)
2-25B5 (6)	2	25	34	2	1-5
25B6 (7)	4	25	30	3-4	2 (4)
1-25B8 (6-7)	4	25	60	3-4	2 (4)
2-25B8 (1-7)	4	25	28	5-8	2 (8)
25C6 (7)	4	25	30	3-4	2 (4)
25DK4 (4-6)	3	25	94	5	3
25DQ6 (7)	4	25	30	4-0	2 (4)
25E5 (3-7-8)	4	25	30	1-4-0	2 (5)
25F5 (2-3-5)	4	25	38	6-7	4 (6)
25N6 (7)	2	25	34	3	2-8
1-25S (6)	2	2	54	2-5	1 (5)
2-25S (6)	1	2	100	3	1
3-25S (6)	1	2	100	4	1
25W4 (8)	3	25	90	5	7
25W6 (7)	4	25	32	3-4	2 (4)
1-25Y5 (4-6)	4	25	27	2	1
2-25Y5 (3-6)	4	25	27	5	1
1-25Z5 (4-6)	3	25	84	2	1
2-25Z5 (3-6)	3	25	85	5	1
1-25Z6 (7-8)	3	25	90	3	2
2-25Z6 (4-7)	3	25	90	5	2
26 (4)	4	1.4	48	2-3	1 (3)
26A6 (4)	4	25	48	5-6	3 (6)
1-26A7 (7)	4	32	100	4	6 (3)
2-26A7 (7)	4	32	100	8	6 (1)
1-26C6 (4)	4	25	88	7	3 (1)
2-26C6 (4)	1	25	100	5	2-3
3-26C6 (4)	1	25	100	6	2-3
1-26D6 (4)	4	25	62	5-6	3 (6)
2-26D6 (4)	4	25	64	6	3
1-26Z5 (4-5-8)	3	12.6	46	1	9
2-26Z5 (3-4-5)	3	12.6	46	6	9
27 (5)	2	2.5	52	2-3	1 (3)
1-28AK8 (3-5)	1	32	30	1	4-7
2-28AK8 (5-7)	1	32	30	2	3-4
3-28AK8 (3-5)	4	32	28	8-9	4 (8)
4-28AK8 (3-5)	1	32	72	6	4-7
1-28D7 (8)	4	25	30	3-4	1 (3)
2-28D7 (8)	4	25	30	3-5	1 (3)
1-29 (6)	2	2.5	52	2-3	1 (3)
2-29 (6)	2	2.5	52	2-4	1 (4)
29GK6 (3-5-9)	4	32	40	7-8	4 (8)
30 (4)	2	2	46	2-3	1 (3)
30A5 (2-4-5)	4	32	26	7	1-3
1-30C1 (5-8)	4	7.5	68	3-6	4 (3)
2-30C1 (5-7)	4	7.5	46	1	4 (9)
1-30L1 (1-5-7-8)	4	7.5	44	9	4 (6)
2-30L1 (5-7-8)	4	7.5	40	3	4 (2)
30P16 (5)	4	19.6	32	7-8	4 (9)

TUBE	A	B	C	U	D
31 (4)	2	2	52	2-3	1 (3)
32 (4)	4	2	78	2-3	1 (3)
1-32L7 (1-7)	4	32	33	3-4	2 (4)
2-32L7 (7-8)	4	32	26	6	2
33 (5)	4	2	40	2-4	1 (4)
1-33GY7 (7-9-0)	1	12.6	57	2	—
2-33GY7 (4-9-0)	4	12.6	30	1-5	7
34 (4)	4	2	62	2-3	1 (3)
35 (5)	4	2.5	56	2-3	1 (3)
35A5 (8)	4	32	35	2-3	1 (3)
35B5 (1-4-7)	4	32	35	5-6	3 (6)
1-35DZ8 (5-8)	4	32	32	6-7	4 (7)
2-35DZ8 (2-5)	4	32	30	1-9	4 (1)
1-35HB8 (5-8)	4	32	100	3	4
2-35HB8 (2-5)	4	32	34	6-7	Good=32 4 (6)
35T (4)	4	6.3	26	0	1
35TG (4)	4	6.3	26	0	1
35Z3 (8)	4	35	28	2	1
35Z4 (7)	3	32	22	5	2-8
36 (5)	4	6.3	74	2-3	1 (3)
37 (5)	4	6.3	54	2-3	1 (3)
38 (5)	4	6.3	48	2-3	1 (3)
38A3 (5)	4	32	28	1-6-9	4
39 (5)	4	6.3	64	2-3	1 (3)
40 (4)	2	5	48	2-3	1 (3)
40Z5 (2-3)	3	50	46	5	7
41 (6)	4	6.3	44	2-3	1 (3)
42 (6)	4	6.3	46	2-3	1 (3)
43 (6)	4	25	35	2-3	1 (3)
44 (5)	4	6.3	64	2-3	1 (3)
45 (4)	4	2.5	38	2	1
45B5 (1-2-5)	4	50	36	6-7-8-9	4
45Z3 (7)	3	50	48	2-6	1
45Z5 (2-3)	3	50	46	5	7
46 (5)	4	2.5	36	2-4	1 (4)
47 (5)	4	2.5	40	2-4	1 (4)
48 (6)	4	32	30	2-3	1 (3)
49 (5)	2	2	54	2-3	1 (3)
50 (4)	4	7.5	36	2	1
50A5 (8)	4	50	34	2-3	1 (3)
1-50BM8 (5-8)	4	50	38	6-7	4 (7)
2-50BM8 (2-5)	4	50	30	1-9	4 (1)
50C6 (7)	4	50	34	3-4	2 (4)
50CD6 (7)	4	50	30	8-0	2 (8)
50FK5 (2-4-5)	4	50	42	6-7	3 (6)
50HC6 (4-6)	4	50	34	5-7	3
1-50X6 (7-8)	3	50	52	3	1
2-50X6 (2-8)	3	50	52	6	1

TUBE	A	B	C	U	D
1-50Y6 (7-8)	3	50	52	3	2
2-50Y6 (4-7)	3	50	52	5	2
1-50Y7 (6-7-8)	3	50	50	3	2
2-50Y7 (4-6-7)	3	50	50	5	2
1-50Z7 (6-8)	1	50	76	3	2
2-50Z7 (4-6-7)	1	50	76	5	2
1-51ARC (7)	4	2.5	60	3-5	2 (5)
2-51ARC (5)	4	2.5	56	2-3	1 (3)
52 (5)	4	6.3	100	2	1 (3)
1-53 (7)	2	2.5	46	2-3	1 (3)
2-53 (7)	2	2.5	46	5-6	1 (5)
1-55 (6)	4	2.5	64	2	1
2-55 (6)	1	2.5	70	3	1
3-55 (6)	1	2.5	70	4	1
56 (5)	2	2.5	42	2-3	1 (3)
57 (6)	4	2.5	92	2-3	1 (3)
58 (6)	4	2.5	54	2-3	1 (3)
59 (7)	4	2.5	44	2-3	1 (3)
60FX5 (2-4-5)	4	70	40	6-7	3 (6)
1-70A7 (2)	4	70	38	3-4	1-6-7 (4)
2-70A7 (—)	3	70	20	—	1-6-7
Allow tube to warm up, return levers 6 & 7 to "U" position. Good tube will kick to 70.					
1-70L7 (7)	3	70	24	8	2
2-70L7 (7)	4	70	38	3-4	2 (4)
71A (4)	2	5	76	2	1 (3)
72 (4)	4	2.5	36	0	1
73 (7)	1	2.5	70	0	2
1-75 (6)	2	6.3	46	2-0	1 (0)
2-75 (6)	1	6.3	90	3	1
3-75 (6)	1	6.3	90	4	1
75C1 (2-4-7)	4	0.63	28	1-3-5	Gas Test
76 (5)	2	6.3	50	2-3	1 (3)
77 (6)	4	6.3	88	2-3	1 (3)
78 (6)	4	6.3	60	2-3	1 (3)
1-79 (6)	4	6.3	28	2-3	1 (3)
2-79 (6)	4	6.3	28	5-0	1 (0)
1-80 (4)	3	5	48	2	1
2-80 (4)	3	5	54	3	1
81 (4)	3	7.5	88	2	1
1-82 (4)	3	2.5	35	2	1
2-82 (4)	3	2.5	35	3	1
1-83 (4)	4	6.3	26	2	1
2-83 (4)	4	6.3	26	3	1
1-83V (4)	3	5	30	2	1
2-83V (4)	3	5	30	3	1
1-84 (5)	3	6.3	43	2	1
2-84 (5)	3	6.3	43	3	1
1-85 (6)	2	6.3	56	2-0	1 (0)
2-85 (6)	1	6.3	64	3	1-6
3-85 (6)	1	6.3	64	4	1-6
85A1 (4-8)	4	Off	50	2	Gas Test
85A2 (2-4-7)	4	Off	74	1-2-5	Gas Test

TUBE	A	B	C	U	D
615	(7)	2	6.3	48	2
Tie Both Top Caps Together					
708	(3-5-7)	2	1.4	55	1
Locat Socket Arrows to Pins 1 & 5					
713	(3-5-7)	2	6.3	40	4-8
717	(3-5-7)	2	6.3	42	4-8
722	(4-5)	4	3	26	0
800	(4)	4	7.5	28	0
Tie Both Top Caps Together					
801	(4)	4	7.5	60	2
802	(7)	1	6.3	34	5-0
807	(5)	4	6.3	36	2-0
808	(4)	4	7.5	26	0
Tie Both Top Caps Together					
809	(4)	4	7.5	28	3-0
811	(4)	4	7.5	28	3-0
1-815	(1-3-6-8)	4	6.3	32	4-0
2-815	(1-3-6-8)	4	6.3	32	4-0
816	(4)	4	2.5	26	0
830B	(4)	4	7.5	100	0
836	(4)	3	3	32	0
837	(7)	4	12.6	38	3-0
841	(4)	4	7.5	28	2-3
843	(5)	4	2.5	62	2
864	(4)	2	1.4	62	2-3
865	(4)	4	7.5	44	1-0
866A	(4)	4	3	26	0
866JR	(4)	4	3	26	2
874	(2-4)	4	0.63	54	3
878	(3-4)	4	3	80	0
879	(4)	4	2.5	56	0
884	(7)	3	6.3	42	3
885	(5)	4	2.5	26	2
950	(5)	2	2	56	2-3
951	(4)	4	2	70	2-3
1-1003	—	4	0.63	27	3
2-1003	—	4	0.63	27	5
1-1005	(8)	4	6.3	28	3
2-1005	(8)	4	6.3	28	5
1-1006	(4)	4	2	26	2
2-1006	(4)	4	2	34	3
1-1007	(8)	4	1.4	26	3
2-1007	(8)	4	1.4	26	5
1-1012	(4)	4	1.4	30	2
2-1012	(4)	4	1.4	30	3
1013	(1-2-6-7)	4	0.63	38	4-0
1201	(4-6-8)	2	6.3	40	1-3-5-7
1203	(8)	1	6.3	70	4

TUBE	A	B	C	U	D
271	(4)	2	5	76	2
1-274A	(4)	3	5	50	2
2-274A	(4)	3	5	50	3
1-274B	(8)	3	5	50	4
2-274B	(8)	3	5	50	6
1-280	(4)	3	5	48	2
2-280	(4)	3	5	54	3
282	(4)	4	7.5	40	2-0
287	(5)	4	2	82	2
301	(4)	4	5	24	3
307A	(5)	4	5	70	4-0
310	(4)	4	7.5	50	2
311A	(5)	2	7.5	26	2
1-313	(4)	3	5	48	2
2-313	(4)	3	5	54	3
326	(4)	4	1.4	48	2-3
327	(5)	2	2.5	52	2-3
330	(4)	2	2	46	2-3
332	(4)	4	2	78	2-3
333	(5)	4	2	40	2-4
334	(4)	4	2	62	2-3
335	(5)	4	2.5	56	2-3
337	(5)	4	6.3	54	2-3
338	(5)	4	6.3	48	2-3
345	(4)	4	2.5	38	2
350	(7)	4	6.3	32	3-4
367	(7)	4	6.3	36	2-4
Allow 2 Minute Warm Up					
393A	(7-8)	4	2.5	26	0
1-396	(8-9)	4	6.3	74	4
2-396	(2-9)	4	6.3	74	6
401A	(2-4-7)	4	6.3	45	5-6
403A	(2-4-7)	4	6.3	50	5-6
403B	(2-4-7)	4	6.3	58	5-6
404A	(9)	4	6.3	34	6-8
1-407	(1-8-9)	2	19.6	100	3-4
2-407	(1-2-9)	2	19.6	100	6-7
408	(2-4-7)	2	19.6	92	1-5
409A	(4)	4	6.3	55	5-6
423A	(2-3)	4	0.63	50	7-8
440	(4)	2	5	46	2-3
446	(3-5-7-8)	2	6.3	50	0
Tie Top Cap & Middle Ring Together					
482B	(4)	4	5	38	2
483	(4)	4	5	38	2
484	(5)	4	2.5	76	2
485	(5)	4	3	68	2
502A	(7)	4	6.3	26	3-6
559	(1-3-5-7-8)	3	6.3	38	0
565	(4)	1	7.5	46	2-3

1-85AS	(6)	4	6.3	100	2	1	(0)
2-85AS	(6)	1	6.3	90	3	1-5	
3-85AS	(6)	1	6.3	70	4	1-5	
89	(6)	4	6.3	46	2-3	1	(3)
90C1	(2-4-7)	4	0.63	28	1-3-5	Gas Test	
99	(4)	4	3	100	2	1	
100TH	(4)	4	6.3	26	0	1	
Tie Side Pin and Top Cap Together							
108C1	(2-4-7)	4	0.63	50	1-5	Gas Test	
1-117L7	(7)	4	110	50	3-5	2	(5)
2-117L7	(7)	1	110	14	6	2	
1-117M7	(7)	4	110	50	3-5	2	(5)
2-117M7	(7)	1	110	14	6	2	
1-117N7	(2)	4	110	50	3-5	7-8	(5)
2-117N7	(2)	3	110	15	—	7-8	
(Allow tube to heat up. Return lever 7 to "U" position. Press valve switch. Good tube will kick to 70.)							
1-117P7	(2)	4	110	50	3-5	7-8	(5)
2-117P7	(2)	3	110	16	—	7-8	
(Allow tube to heat up. Return lever 7 to "U" position. Press valve switch. Good tube will kick to 70.)							
117Z3	(4)	3	110	22	5	3-6	
117Z4	(7)	3	110	14	5	2	
1-117Z6	(7)	3	110	22	3	2-4	
2-117Z6	(7)	3	110	22	5	2-8	
120	(4)	1	3	52	2-3	1	
130ARC	(4)	4	2.5	72	2	1	
150C2	(2-4-7)	4	Off	48	1-5		
171A	(4)	4	5	34	2	1	
182B	(4)	4	5	38	2	1	
183	(4)	4	5	38	2	1	
210	(4)	4	7.5	50	2	1	
1-213	(4)	3	5	48	2	1	
2-213	(4)	3	5	54	3	1	
224	(5)	4	2.5	78	2-3	1	(3)
226	(4)	4	2.5	58	2	1	
227	(5)	4	2.5	56	2	1	
230	(4)	2	2	46	2-3	1	(3)
231	(4)	2	2	52	2-3	1	(3)
232	(4)	4	2	78	2-3	1	(3)
234	(4)	4	2	62	2-3	1	(3)
235	(5)	4	2.5	56	2-3	1	(3)
236	(5)	4	6.3	74	2-3	1	(3)
238	(5)	4	5	58	3	1	(0)
240	(4)	2	5	48	2-3	1	(3)
245	(4)	4	2.5	38	2	1	
247	(5)	4	2.5	40	2-4	1	(4)
250	(4)	4	7.5	36	2	1	
262	(4)	2	12.6	76	2-0	1	(0)
264	(4)	2	1.4	62	2-3	1	(3)

85AS-1203



1216-6097

TUBE	A	B	C	U	D		
1-1216	(4)	4	6.3	52	1	3	(6)
2-1216	(4)	4	6.3	52	2	3	(5)
1217	(4)	4	6.3	40	5-6	3	(6)
1-1219	(8-9)	4	6.3	64	4	1	(3)
2-1219	(2-9)	4	6.3	64	6	1	(7)
1220	(2-4-7)	4	6.3	50	5-6	3	(6)
1221	(6)	4	6.3	86	2-3	1	(3)
1222	(6)	4	6.3	36	2-3	1	(3)
1223	(7)	4	6.3	26	4-0	2	(0)
1-1224	(7)	4	6.3	72	3	2-8	(4)
2-1224	(7)	4	6.3	72	6	2-8	(5)
1229	(4)	4	2	70	2-3	1	(3)
1231	(8)	4	6.3	55	2-3	1	(3)
1232	(8)	4	6.3	50	2-3	1	(3)
1236	(6-7-8)	1	2.5	100	4-5	1-2-3	
1273	(8)	4	6.3	78	2-3	1	(3)
1-1274	(7)	3	6.3	46	3	2	
2-1274	(7)	3	6.3	46	5	2	
1280	(8)	4	12.6	78	2-3	1	(3)
1-1291	(1-8)	2	1.4	40	2-3	4	(3)
2-1291	(1-8)	2	1.4	40	6-7	4	(6)
1294	(8)	1	1.4	68	4	1	
1299	(1-8)	4	1.4	40	2-3	7	(3)
1300/01/05	(4-5-7)	4	6.3	26	6	3	
1367	(4)	2	6.3	90	5	3	
1603	(6)	4	6.3	84	2-3	1	(3)
1611	(7)	4	6.3	46	3-4	2	(4)
1612	(7)	4	6.3	48	3-4	2	(4)
1613	(7)	4	6.3	48	3-4	2	(4)
1614	(7)	4	6.3	36	3-4	2	(4)
1616	(4)	4	3	28	0	1	
1619	(7)	4	2.5	46	3-4	2	(4)
1620	(7)	4	6.3	88	3-4	2	(4)
1621	(7)	4	6.3	44	3-4	2	
1622	(7)	4	6.3	26	3-4	2	(4)
1624	(5)	4	2.5	42	2-0	1	(2)
1625	(7)	4	12.6	36	3-0	1	(3)
1626	(7)	2	12.6	66	3-5	2	(5)
1-1629	(7)	4	12.6	30	3-4	2	
2-1629	(7)	4	12.6	30	4	2	
1631	(7)	4	12.6	36	3-4	2	(4)
1632	(7)	4	12.6	32	3-4	2	(4)
1-1633	(6-8)	4	25	78	2	7	(1)
2-1633	(3-8)	4	25	78	5	7	(4)
1-1634	(8)	4	12.6	26	2-3	7	(3)
2-1634	(8)	4	12.6	26	4-5	7	(4)
1-1635	(7)	4	6.3	26	3-4	2	(4)
2-1635	(7)	4	6.3	26	5-6	2	(5)

TUBE	A	B	C	U	D		
1-1641	(4)	4	6.3	26	0	1	Right Top Cap
2-1641	(4)	4	6.3	26	0	1	Left Top Cap
1-1642	(6-7)	2	6.3	50	3-0	1	(0)
2-1642	(2-7)	2	6.3	50	4-5	1	(4)
1-1644	(7)	4	12.6	42	4-5	6	(5)
2-1644	(7)	4	12.6	42	5-8	6	(5)
1-1655	(8)	2	6.3	50	2-3	7	(3)
2-1655	(8)	2	6.3	50	4-5	7	(4)
1851	(7)	4	6.3	68	3-4	2	(4)
1852	(7)	4	6.3	56	6-8	2	(6)
1853	(7)	4	6.3	74	6-8	2	(6)
2050	(7)	4	6.3	26	3	2	
2051	(7)	4	6.3	26	3-6	2	(5)
5121	(4-5-7)	4	6.3	26	6	3	
5517	(1-2-6-7)	4	0.63	38	4-0	—	
5590	(2-4-7)	4	6.3	45	5-6	3	
5610	(4)	4	6.3	48	1-5	3	
5618	(1-7)	4	3	94	2	5	
5642	—	1	1.4	100	0	—	
Base leads to pins 1 & 12 of Compactron Socket							
Top cap to Upper wide lead Good=34							
5651	(2-4-7)	4	0.63	38	1-5	Gas Test	
5654	(2-4-7)	4	6.3	54	5-6	3	(6)
1-5656	(5-6-9)	4	6.3	26	2-8	4	(2)
2-5656	(5-6-9)	4	6.3	26	3-7	4	(3)
5662	(2-4-5)	4	6.3	26	7	3	
5663	(4)	3	6.3	36	7	3	
1-5670	(8-9)	4	6.3	64	4	1	(3)
2-5670	(2-9)	4	6.3	64	6	1	(7)
5686	(1-3-5-8)	4	6.3	48	6-7-9	4	
1-5687	(4-5-6)	4	6.3	38	1	8	(2)
2-5687	(3-4-5)	4	6.3	38	9	8	(7)
1-5691	(6-8)	2	6.3	48	1-2	7	(1)
2-5691	(3-8)	2	6.3	48	4-5	7	(4)
1-5692	(6-8)	4	6.3	72	2	7	(1)
2-5692	(3-8)	4	6.3	72	5	7	(4)
5693	(7)	4	6.3	66	6-8	2	(6)
5696	(4-5-7)	3	6.3	32	6	3	
5722	(3-4)	4	5	28	1-6	7	
5725	(4)	4	6.3	55	5-6	3	(6)
1-5726	(1-4)	1	6.3	40	2	3	
2-5726	(4-5)	1	6.3	40	7	3	
5727	(4-5-7)	4	6.3	26	6	3	
5749	(4)	4	6.3	50	5-6	3	(6)
1-5750	(4)	4	6.3	40	5-6	3	(6)
2-5750	(4)	4	6.3	42	6	3	
1-5751	(4-5-8)	2	6.3	46	1-2	9	(2)
2-5751	(3-4-5)	2	6.3	46	6-7	9	(7)
5763	(5-8-9)	4	6.3	40	1-6	4	(6)
1-5814	(4-5-8)	4	6.3	58	1	9	(2)
2-5814	(3-4-5)	4	6.3	52	6	9	(7)

TUBE	A	B	C	U	D		
5823	(3-7)	4	6.3	47	1-4	—	
5824	(7)	4	25	30	3-4	2	(4)
1-5844	(4)	4	6.3	52	1	3	(6)
2-5844	(4)	4	6.3	52	2	3	(5)
5847	(9)	4	6.3	34	6-8	3	(8)
5879	(5)	2	6.3	56	1-8	4	(1)
5881	(7)	4	6.3	37	3-4	2	(4)
5910	(1-5)	1	1.4	38	2-6	7	(6)
1-5915	(4)	4	6.3	42	5-6	3	(6)
2-5915	(4)	4	6.3	26	1-6	3	
1-5920	(4)	4	6.3	48	1	3	(6)
2-5920	(4)	4	6.3	48	2	3	(5)
5930	(4)	4	2.5	30	2	1	
1-5931	(8)	3	5	36	4	2	
2-5931	(8)	3	5	36	6	2	
5932	(7)	4	6.3	36	3-4	2	(4)
5933	(5)	4	6.3	36	2-0	1	(2)
1-5963	(4-5-8)	4	6.3	70	1	9	(2)
2-5963	(3-4-5)	4	6.3	70	6	9	(7)
1-5964	(4)	4	6.3	44	2	3	(5)
2-5964	(4)	4	6.3	48	1	3	(6)
1-5965	(4-5-8)	4	6.3	42	1	9	(2)
2-5965	(3-4-5)	4	6.3	52	6	9	(7)
5992	(7)	4	6.3	42	3-4	2	(4)
1-6004	(8)	3	5	50	0	2	
2-6004	(8)	3	5	50	0	2	
Upper Top Cap							
Lower Top Cap							
6005	(1-4-7)	4	6.3	40	5-6	3	(6)
6046	(7)	4	25	30	3-4	2	(4)
1-6060	(4-5-8)	4	6.3	84	1	9	(2)
2-6060	(3-4-5)	4	6.3	84	6	9	(7)
1-6063	(4)	4	6.3	28	6	3	
2-6063	(4)	4	6.3	28	1	3	
6065	(4)	4	6.3	94	5-7	3	(7)
6069	(2-4-7)	4	6.3	52	5-6	3	(6)
1-6072	(4-5-8)	4	6.3	26	1-2	9	(2)
2-6072	(3-4-5)	4	6.3	26	6-7	9	(7)
6073	(2-4-7)	4	0.11	48	1-5	—	
6074	(2-4-7)	4	0.63	50	1-5	Gas Test	
1-6080	(6-8)	4	6.3	28	2	7	
2-6080	(3-8)	4	6.3	28	5	7	
1-6082	(6-8)	4	25	28	2	7	
2-6082	(3-8)	4	25	28	5	7	
6084	(2-5-7)	4	6.3	76	1-6	4	(1)
1-6085	(4-5-8)	4	6.3	90	1	9	(2)
2-6085	(3-4-5)	4	6.3	90	6	9	(7)
1-6087	(8)	3	5	60	4	2	
2-6087	(8)	3	5	60	6	2	
6095	(1-4-7)	4	6.3	40	5-6	3	(6)
1-6097	(1-4)	1	6.3	40	2	3	
2-6097	(4-5)	1	6.3	40	7	3	

TUBE	A	B	C	U	D
1-7119	(4-5-6)	4	6.3	36	8 (2)
2-7119	(3-4-5)	4	6.3	36	8 (7)
7167	(2-4-7)	4	12.6	86	3 (6)
7189	(1-2-5)	4	6.3	38	4 (9)
7193	(7)	2	6.3	42	2
Tie Both Top Caps Together.					
7212	(1-4-6-7)	4	6.3	30	2 (3)
1-7244	(4)	4	6.3	58	2 (5)
2-7244	(4)	4	6.3	52	1 (6)
7245	(1-4-5-6)	4	6.3	56	7 (3)
1-7247	(4-5-8)	4	6.3	78	1 (2)
2-7247	(3-4-5)	2	6.3	46	8-7 (7)
1-7258	(5-9)	4	12.6	56	1 (4)
2-7258	(3-5)	4	12.6	54	6-7 (7)
1-7316	(4-5-8)	4	6.3	62	1 (2)
2-7316	(3-4-5)	4	6.3	62	6 (7)
7355	(7)	4	6.3	34	3-8 (2) (8)
7360	(5)	4	6.3	70	2-6 (4) (3)
7408	(7)	4	6.3	40	3-4 (2) (4)
7543	(4)	4	6.3	74	5-6 (3) (6)
7551	(1-5-9)	4	12.6	36	3-6-8 (4)
7558	(1-5-9)	4	6.3	37	3-6-8 (4)
7581	(7)	4	6.3	36	3-4 (2) (4)
7586	(5)	1	6.3	100	1 (4) (2)
7587	(5)	1	6.3	72	0 (3-4) (1)
1-7643	(5-8)	4	6.3	66	3-6 (4) (3)
2-7643	(5-7)	4	6.3	48	1 (4)
1-7687	(5-7)	4	6.3	54	1 (4)
2-7687	(5-8)	4	6.3	54	3-6 (4) (3)
7693	(4)	1	6.3	36	1-5 (3) (1)
7695	(5)	4	50	30	1-9 (4) (6)
7700	(6)	4	6.3	90	2-3-4 (1) (0)
7717	(2-4-7)	4	6.3	48	5-6 (3) (6)
1-7724	(1-5-7)	1	12.6	66	2 (3)
2-7724	(3-5-7)	1	12.6	66	6 (3)
3-7724	(1-3-5)	2	12.6	62	8-9 (3) (8)
1-7734	(5-7)	4	6.3	32	6 (4)
2-7734	(2-5)	4	6.3	100	1-9 (4) (1)
7754	(5)	4	6.3	28	1-9 (4) (1)
7756	(8)	4	6.3	34	3-5 (6) (5)
1-7803	(5-8)	4	6.3	41	1 (4) (2)
2-7803	(3-5)	4	6.3	41	6 (4) (7)
7867	(7)	2	6.3	55	8-0 (2) (5)
7895	(5)	1	6.3	50	1-2 (4) (2)
1-7896	(8-9)	4	6.3	86	1 (4-5) (2)
2-7896	(3-9)	4	6.3	86	6 (4-5) (7)
7905	(1-9)	4	3	34	3-6-8 (4-5)
7984	(2-6-8-9)	2	12.6	86	1-3-4-5-7 (10)
8016	(7)	4	1.4	66	0 (2)
8020	(4)	4	6.3	40	0 (1)
8056	(1-2-3-5)	1	6.3	40	0 (4)
Connect base ring and top cap together					

TUBE	A	B	C	U	D
6627	(2-4-7)	4	0.63	50	1-5 Gas Test
6660	(4)	4	6.3	50	5-6 3 (6)
6661	(4)	1	6.3	36	1-5 3 (1)
6662	(4)	4	6.3	57	5-6 3 (6)
1-6663	(1-4)	1	6.3	40	2 (3)
2-6663	(4-5)	1	6.3	40	7 (3)
6664	(4)	4	6.3	80	1 (3) (6)
6669	(1-4-7)	4	6.3	40	5-6 3 (6)
6676	(4)	4	6.3	56	5-6 3 (6)
6677	(2-5-9)	4	6.3	38	3-6-8 4 (4)
1-6678	(5-8)	4	6.3	62	3-6 4 (3)
2-6678	(5-7)	4	6.3	56	1 (4) (9)
1-6679	(4-5-8)	4	6.3	84	1 (2) (9)
2-6679	(3-4-5)	4	6.3	84	6 (9) (7)
1-6680	(4-5-8)	4	6.3	62	1 (9) (2)
2-6680	(3-4-5)	4	6.3	62	6 (9) (7)
1-6681	(4-5-8)	2	6.3	44	1-2 (9) (2)
2-6681	(3-4-5)	2	6.3	44	6-7 (9) (7)
6686	(1-5-6)	4	6.3	46	7-8 (4) (8)
1-6687	(4)	4	6.3	42	5-6 3 (6)
2-6687	(4)	4	6.3	26	1-6 3 (6)
6688	(1-3-5)	4	6.3	40	7-9 4 (9)
6689	(1-5-6)	4	6.3	46	7-8 4 (8)
6842	(1-3-5-6-7)	1	6.3	46	4-0 2 (4)
6883	(1-4-6-7)	4	12.6	30	3-0 2 (3)
6888	(7)	4	6.3	36	6-8 2 (6)
1-6922	(5-8)	4	6.3	42	1 (4) (2)
2-6922	(3-5)	4	6.3	42	6 (4) (7)
6968	(2-4-7)	4	6.3	52	5-6 3 (1)
7000	(7)	4	6.3	94	3-4 2 (4)
1-7025	(4-5-8)	2	6.3	42	1-2 (9) (2)
2-7025	(3-4-5)	2	6.3	42	6-7 (9) (7)
7027	(5-6-7)	4	6.3	37	1-3-4 2 (2)
7034	(2-4-6-7-8)	4	6.3	30	1-5-0 3 (3)
1-7044	(6-8)	4	6.3	38	1 (4-5) (2)
2-7044	(3-8)	4	6.3	38	9 (4-5) (7)
7054	(3-5-9)	4	12.6	50	7-8 4 (8)
1-7055	(1-4)	1	12.6	66	2 (3)
2-7055	(4-5)	1	12.6	66	7 (3)
7056	(4)	4	12.6	48	5-6 3 (6)
1-7057	(5-8)	4	12.6	66	1 (4) (2)
2-7057	(3-5)	4	12.6	66	6 (4) (7)
1-7058	(5-9)	2	12.6	60	1-2 (4) (2)
2-7058	(4-9)	2	12.6	60	6-7 (5) (7)
1-7059	(5-7)	2	12.6	42	1-9 (4) (9)
2-7059	(5-8)	2	12.6	57	3-6 (4) (2)
1-7060	(5-9)	2	12.6	74	1 (4) (2)
2-7060	(3-5)	4	12.6	44	6-7 (4) (8)
7061	(3-5-6)	4	12.6	43	1-8-9 4 (4)
1-7062	(4-5-8)	4	6.3	60	1 (9) (2)
2-7062	(3-4-5)	4	6.3	60	6 (9) (7)

TUBE	A	B	C	U	D
6098	(8)	4	6.3	34	3-5 6 (5)
1-6099	(4)	4	6.3	64	1 (3) (6)
2-6099	(4)	4	6.3	60	2 (3) (5)
6100	(4)	4	6.3	66	1-5 3 (6)
1-6101	(4)	4	6.3	64	1 (3) (6)
2-6101	(4)	4	6.3	60	2 (3) (5)
1-6106	(2)	2	5	42	4 (8)
2-6106	(2)	2	5	42	6 (8)
6130	(1)	4	6.3	30	3-0 2-4
6134	(7)	4	6.3	44	6-8 2 (6)
6135	(4)	4	6.3	72	1-5 3 (6)
6136	(4)	4	6.3	64	5-6 3 (6)
6137	(7)	4	6.3	52	6-8 2 (6)
6140	(2-3)	4	0.63	50	7-8 Gas Test
6145	(8)	4	6.3	38	2-3-4 1 (6)
6146	(1-4-6-7)	4	6.3	30	3-0 2 (3)
6186	(2-4-7)	4	6.3	64	5-6 3 (6)
6187	(4)	4	6.3	58	5-6 3 (6)
1-6188	(3-8)	2	6.3	48	4-5 7 (4)
2-6188	(6-8)	2	6.3	48	1-2 7 (1)
1-6189	(4-5-8)	4	6.3	62	1 (9) (2)
2-6189	(3-4-5)	4	6.3	62	6 (9) (7)
6197	(2-5-9)	4	6.3	36	3-6-8 4 (4)
1-6201	(4-5-8)	4	6.3	84	1 (9) (2)
2-6201	(3-4-5)	4	6.3	84	6 (9) (7)
1-6202	(4)	4	6.3	28	6 (3) (3)
2-6202	(4)	4	6.3	28	1 (3) (3)
1-6203	(5)	3	6.3	42	1 (4) (4)
2-6203	(5)	3	6.3	42	9 (4) (4)
1-6211	(5-9)	4	6.3	60	1 (4) (2)
2-6211	(4-9)	4	6.3	60	6 (5) (7)
6216	(3-5-8)	4	6.3	92	1-6-7 4 (2)
6227	(1-5-6)	4	6.3	38	7-8 4 (8)
6265	(4)	1	6.3	36	1-5 3 (1)
6267	(2-5-7)	4	6.3	26	6-9 4 (9)
1-6350	(7-9)	4	6.3	44	1 (4-5) (3)
2-6350	(2-9)	4	6.3	44	6 (4-5) (8)
1-6360	(4-5)	4	6.3	26	3-8 9 (3)
2-6360	(4-5)	4	6.3	26	1-6 9 (1)
6374	(5)	3	6.3	32	0 (4)
1-6386	(8-9)	4	6.3	48	4 (1) (3)
2-6386	(2-9)	4	6.3	46	6 (1) (7)
6417	(5-8-9)	4	12.6	40	1-6 4 (6)
1-6463	(7-9)	4	6.3	44	1 (4-5) (3)
2-6463	(2-9)	4	6.3	44	6 (4-5) (8)
6485	(4)	4	6.3	47	5-6 4 (1)
1-6507	(6-8)	2	6.3	46	1-2 (1) (1)
2-6507	(3-8)	2	6.3	46	4-5 (1) (4)
6516	(4)	4	6.3	46	5-7 3 (7)
6550	(7)	4	6.3	52	3-4 2 (4)
6574	(7)	4	6.3	24	3-6 1 (1)
6626	(2-4-7)	4	Off	48	1-5

6098-8058

8077-EC61

TUBE	A	B	C	U	D		
8077	(3-5-9)	4	12.6	50	7-8	4	(8)
8084	(4)	4	12.6	47	5-6	3	(1)
8106	(2-5-6-9)	4	12.6	40	1-3-8	4	(7)
8113	(2-4-7)	4	6.3	45	5-6	3	(1)
8149	(1-2-3-9)	2	6.3	93	4-5-6-7-8	—	(0)
8150	(1-2-4-6-9)	4	6.3	34	5-8	—	—
8156	(2-6-8-9)	4	12.6	32	1-3-5-7	—	—
8298	(1-4-5-7)	4	6.3	30	3-0	2	(3)
8417	(7)	4	6.3	32	3-4	2	(4)
9001	(2-4-7)	1	6.3	45	1-5	3	(1)
9002	(2-4-7)	4	6.3	82	1-5	3	(6)
9003	(2-4-7)	2	6.3	46	1-5	3	(1)
9006	(2-4-7)	2	6.3	72	1-5	3	3
AG5209	(2-4-7)	4	Off	34	1-3-5	Gas Test	—
AG5210	(2-4-7)	4	0.63	50	1-5	Gas Test	—
AG5211	(2-4-7)	4	Off	48	1-5	—	—
1-AZ31	(8)	3	4.2	52	4	2	2
2-AZ31	(8)	3	4.2	54	6	2	2
1-B36	(6-8)	4	12.6	78	2	7	(1)
2-B36	(3-8)	4	12.6	78	5	7	7
1-B65	(6-8)	4	6.3	72	2	7	(1)
2-B65	(3-8)	4	6.3	72	5	7	(4)
1-B152	(4-5-8)	4	6.3	84	1	9	(2)
2-B152	(3-4-5)	4	6.3	84	6	9	(7)
1-B309	(4-5-8)	4	6.3	84	1	9	(2)
2-B309	(3-4-5)	4	6.3	84	6	9	(7)
1-B329	(4-5-8)	4	6.3	62	1	9	(2)
2-B329	(3-4-5)	4	6.3	62	6	9	(7)
1-B339	(4-5-8)	2	6.3	44	1-2	9	(2)
2-B339	(3-4-5)	2	6.3	44	6-7	9	(7)
BPM04	(1-4-7)	4	6.3	40	5-6	3	(6)
BR	(2-3)	4	Off	38	4	—	—
C1B	(4)	4	3	26	0	1	1
1-CCa	(5-8)	4	6.3	42	1	4	(2)
2-CCa	(3-5)	4	6.3	42	6	4	(7)
1-CCH35	(7)	4	7.5	62	3-4	2	(4)
2-CCH35	(7)	4	7.5	80	6	2	(5)
CL33	(7)	4	32	34	3-4	2	(4)
CY31	(7)	3	19.6	54	5	2	2
1-D2M9	(1-4)	1	6.3	40	2	3	3
2-D2M9	(4-5)	1	6.3	40	7	3	3
1-D77	(1-4)	1	6.3	40	2	3	3
2-D77	(4-5)	1	6.3	40	7	3	3
1-D152	(1-4)	1	6.3	40	2	3	3
2-D152	(4-5)	1	6.3	40	7	3	3
DA90	(1-5)	1	1.4	90	2-6	7	7
1-DAC32	(7)	1	1.4	40	3-0	2	(0)
2-DAC32	(7)	1	1.4	100	5	2	2
1-DAF91	(7)	4	1.4	30	5-6	1	(6)
2-DAF91	(7)	1	1.4	92	3	1	1
1-DAF92	(7)	1	1.4	45	2-6	1	(6)
2-DAF92	(7)	1	1.4	100	4	1	1

TUBE	A	B	C	U	D		
1-DAF96	(7)	4	1.4	30	5-6	1	(6)
2-DAF96	(7)	1	1.4	100	3	1	1
1-DCC90	(1-7)	4	1.4	64	2	4	4
2-DCC90	(1-7)	4	1.4	64	6	4	4
DCG4/10006	(4)	4	3	26	0	1	1
DF33	(7)	1	1.4	42	3-0	2	(0)
DF91	(1-5)	4	1.4	76	2-3	7	(3)
DF92	(1-5)	4	1.4	76	2-3	7	(3)
DF96	(1-5)	2	1.4	50	2-6	7	(6)
DF97	(1-5)	4	1.4	100	2-3	7	(3)
DF904	(1-5)	2	1.4	42	2-6	7	(6)
1-DH63	(7)	2	6.3	48	3-0	2	(0)
2-DH63	(7)	1	6.3	66	5	2-8	2-8
3-DH63	(7)	1	6.3	68	4	2-8	2-8
1-DH77	(4)	2	6.3	42	1-7	3	(1)
2-DH77	(4)	1	6.3	56	5	2-3	2-3
3-DH77	(4)	1	6.3	70	6	2-3	2-3
1-DH719	(3-5)	1	6.3	42	1	4	4
2-DH718	(5-7)	1	6.3	42	2	4	4
3-DH719	(3-5)	2	6.3	46	8-9	4	(8)
4-DH719	(3-5)	1	6.3	64	6	4-7	4-7
1-DK32	(7)	4	1.4	50	3-4-0	2	(4)
2-DK32	(7)	4	1.4	54	4-0	2	2
1-DK91	(1-5)	4	1.4	50	2-3	7	(3)
2-DK91	(1-5)	4	1.4	50	3	7	7
DK92	(7)	1	1.4	38	2-4	1	(4)
DK96	(7)	4	1.4	54	2-3	1	(3)
DL33	(2-7)	4	1.4	44	3-4	8	(4)
DL35	(7)	4	1.4	38	3-4	2	(4)
DL91	(1-5)	1	1.4	70	2-4-6	7	(4)
DL92	(1-7)	2	1.4	46	2-3-6	5	(3)
DL93	(1-7)	4	1.4	38	2-3-6	5	(3)
DL94	(1-7)	2	1.4	43	2-6	5	(6)
DL95	(1-7)	4	1.4	40	2-4-6	5	(4)
DL96	(1-7)	4	1.4	44	2-3	5	(3)
DL98	(4-5)	4	1.4	36	1-7	2-6	(1)
DP61	(2-4-7)	4	6.3	52	5-6	3	(6)
DY80	(1-4-6-9)	4	1.4	74	0	2-5-8	—
DY87	(1-4-6-9)	4	2	66	0	2-5-8	—
1-E80CC	(4-5-8)	4	6.3	90	1	9	(2)
2-E80CC	(3-4-5)	4	6.3	90	6	9	(7)
1-E80CF	(5-8)	4	6.3	66	3-6	4	(3)
2-E80CF	(5-7)	4	6.3	48	1	4	4
E80F	(2-5-7)	4	6.3	76	1-6	4	(1)
E80L	(1-5-6)	4	6.3	38	7-8	4	(8)
1-E81CC	(4-5-8)	4	6.3	84	1	9	(2)
2-E81CC	(3-4-5)	4	6.3	84	6	9	(7)
E81L	(1-5-6)	4	6.3	46	7-8	4	(8)
E83F	(1-5-6)	4	6.3	46	7-8	4	(8)
1-E88CC	(5-8)	4	6.3	42	1	4	(2)
2-E88CC	(3-5)	4	6.3	42	6	4	(7)
1-E90CC	(4)	4	6.3	48	1	3	(6)
2-E90CC	(4)	4	6.3	48	2	3	(5)

TUBE	A	B	C	U	D		
E90F	(4)	1	6.3	36	1-5	3	(1)
1-E91AA	(1-4)	1	6.3	40	2	3	3
2-E91AA	(4-5)	1	6.3	40	7	3	3
1-E91H	(4)	4	6.3	42	5-6	3	(6)
2-E91H	(4)	4	6.3	26	1-6	3	3
1-E92CC	(4)	4	6.3	66	2	3	(5)
2-E92CC	(4)	4	6.3	66	1	3	(6)
E95F	(2-4-7)	4	6.3	52	5-8	3	(6)
1-E180CC	(4-5-8)	4	6.3	60	1	9	(2)
2-E180CC	(3-4-5)	4	6.3	60	6	9	(7)
E180F	(1-3-5)	4	6.3	40	7-9	4	(9)
1-E182CC	(4-5-6)	4	6.3	36	1	8	(2)
2-E182CC	(3-4-5)	4	6.3	36	9	8	(7)
E1148	(7)	4	6.3	26	0	2	2
Tie Both Top Caps Together							
1-EAA91	(1-4)	1	6.3	40	2	3	3
2-EAA91	(4-5)	1	6.3	40	7	3	3
1-EAA901S	(1-4)	1	6.3	40	2	3	3
2-EAA901S	(4-5)	1	6.3	40	7	3	3
1-EABC80	(3-5)	1	6.3	42	1	4	4
2-EABC80	(5-7)	1	6.3	42	2	4	4
3-EABC80	(3-5)	2	6.3	46	8-9	4	(8)
4-EABC80	(3-5)	1	6.3	64	6	4-7	4-7
1-EAC91	(2-4)	4	6.3	96	7	3	(6)
2-EAC91	(4-5)	2	6.3	40	1	3	3
1-EB34	(7-8)	3	6.3	62	3	2	2
2-EB34	(4-7)	3	6.3	62	5	2	2
1-EB91	(1-4)	1	6.3	40	2	3	3
2-EB91	(4-5)	1	6.3	40	7	3	3
1-EBC33	(7)	4	6.3	100	3	2	(0)
2-EBC33	(7)	1	6.3	60	4	2	2
3-EBC33	(7)	1	6.3	48	5	2	2
1-EBC81	(5-7-9)	2	6.3	45	1-2	4	(2)
2-EBC81	(5-7-9)	1	6.3	66	6	3-4	3-4
3-EBC81	(5-7-9)	1	6.3	100	8	3-4	3-4
1-EBC90	(4)	2	6.3	42	1-7	3	(1)
2-EBC90	(4)	1	6.3	42	5	2-3	2-3
3-EBC90	(4)	1	6.3	70	6	2-3	2-3
1-EBC91	(4)	1	6.3	44	1-7	3	(1)
2-EBC91	(4)	1	6.3	67	5	3	3
3-EBC91	(4)	1	6.3	100	6	3	3
1-EBF80	(5)	4	6.3	56	1-6	4	(1)
2-EBF80	(5)	1	6.3	64	7	3-4	3-4
3-EBF80	(5)	1	6.3	52	8	3-4	3-4
1-EBF83	(5)	4	6.3	24	2-6	4	(2)
2-EBF83	(5)	1	6.3	74	8	3-4	3-4
3-EBF83	(5)	1	6.3	56	7	3-4	3-4
1-EBF89	(5)	4	6.3	56	1-6	4	(1)
2-EBF89	(5)	1	6.3	100	7	4	4
3-EBF89	(5)	1	6.3	100	8	4	4
1-EBL31	(7)	4	6.3	40	3-6	2	(0)
2-EBL31	(7)	1	6.3	70	5	2	2
3-EBL31	(7)	1	6.3	52	4	2	2
EC80	(1-2-5-7-8)	4	6.3	64	9	4	4
EC81	(5)	4	6.3	48	8	4	4

TUBE	A	B	C	U	D		
EL84	(1-2-5)	4	6.3	35	7-8	4	(9)
EL85	(1-2-5-6-8)	4	6.3	48	7-9	4	(9)
EL86	(1-2-5)	4	6.3	30	7-8-9	4	(9)
EL90	(1-4-7)	4	6.3	40	5-6	3	(6)
EL91	(4)	4	6.3	48	5-7	3	(7)
EL95	(1-4-7)	4	6.3	44	5-5	3	(6)
EL180	(3-4-5-9)	4	6.3	38	7-8	6	(8)
EL360	(3-7-8)	4	6.3	28	1-4-0	2	
EL500	(1-2-3-5-8)	4	6.3	28	6-7-0	4	
EL803	(5)	4	6.3	42	1-7	4	(1)
EL821	(5)	4	6.3	42	7-8	4	(8)
EL822	(5)	4	6.3	38	7-8	4	(8)
1-EM34	(7)	4	6.3	0	3-5-6	2	Eyes Closed
2-EM34	(7)	4	6.3	0	5-6	2	Left Eye Open
3-EM34	(7)	4	6.3	0	3-5	2	Right Eye Open
1-EM80	(3-4-8-9)	1	6.3	50	1-7	5	(1)
2-EM80	(4)	4	6.3	0	3-7-8-9	5	Eye Open
3-EM80	(4)	4	6.3	0	3-8-9	5	Eye Closed
EM81	(3-5-8-9)	2	6.3	70	1-6	4	(1)
1-EM84	(2-5-6-8)	2	6.3	70	1-9	4	(1)
2-EM84	(5)	4	6.3	0	2-6-7-8-9	4	
3-EM84	(5)	4	6.3	0	2-6-7-8-9	4	Eye Closed
1-EM87	(2-5-6-8)	2	6.3	44	1-9	4	(1)
2-EM87	(5)	4	6.3	0	2-6-7-8	4	Eye Closed
3-EM87	(5)	4	6.3	0	2-6-7-8	4	Eye Closed
EN32	(7)	4	6.3	24	3-6	1	
EN93	(4)	4	6.3	26	7	3	
1-E080	(3-5-8)	4	6.3	64	1-6	4	(1)
2-E080	(3-5-8)	4	6.3	66	1	4	(7)
EY80	(5)	3	6.3	28	9	4	
EY81	(5)	3	6.3	25	2-9	4-0	
EY84	(5)	3	6.3	32	0	4	
EY86	(1-4-6-9)	4	6.3	64	0	2-5-8	
EY88	(1-2-5)	3	6.3	28	3-6-7-8-9	4	
EY91	(4)	3	6.3	28	1-5	3	
1-EZ35	(7)	3	6.3	40	3	2	
2-EZ35	(7)	3	6.3	40	5	2	
1-EZ80	(5)	3	6.3	46	1	4	
2-EZ80	(5)	3	6.3	46	7	4	
1-EZ81	(5)	3	6.3	30	1	4	
2-EZ81	(5)	3	6.3	30	7	4	
1-EZ90	(4)	4	6.3	28	6	3	
2-EZ90	(4)	4	6.3	28	1	3	
FM1000	(8)	4	6.3	40	4-5	1	(5)
64	(5)	3	6.3	43	2	1	

TUBE	A	B	C	U	D		
1-ECH81	(5)	4	6.3	66	1-6	4	(1)
2-ECH81	(5)	2	6.3	44	8-9	4	(9)
1-ECH83	(5)	4	6.3	48	1-6	4	(1)
2-ECH83	(5)	4	6.3	60	8	4	
1-ECL80	(5)	4	6.3	50	6-8	4	(8)
2-ECL80	(5)	2	6.3	45	1-2	4	(2)
1-ECL82	(5-8)	4	6.3	30	6-7	4	(7)
2-ECL82	(2-5)	4	6.3	26	1-9	4	(1)
1-ECL83	(3-5)	4	6.3	40	6-8	4	(8)
2-ECL83	(5-7)	4	6.3	26	1-2	4	(2)
1-ECL84	(3-5)	4	6.3	51	6-9	4	(6)
2-ECL84	(5-7)	2	6.3	38	1-2	4	(1)
1-ECL85	(5-8)	4	6.3	78	1	4	(2)
2-ECL85	(3-5)	2	6.3	84	6-7	4	(9)
1-ECL86	(2-5)	4	6.3	40	3-6	4	(3)
2-ECL86	(5-7)	2	6.3	42	1-9	4	(1)
1-ED2	(1-4)	1	6.3	40	2	3	
2-ED2	(4-5)	1	6.3	40	7	3	
EF22	(8)	4	7.5	50	2-3	1	(3)
EF36	(7)	4	6.3	75	3-4	2	(0)
EF37	(7)	1	6.3	75	3-4	2	(0)
EF39	(7)	4	6.3	56	3-4	2	(4)
EF80	(1-3-5)	4	6.3	50	7-8	4	(8)
EF85	(1-3-5)	4	6.3	46	7-8	4	(8)
EF86	(2-5-7)	4	6.3	26	6-9	4	(9)
EF89	(1-5-6)	4	6.3	48	7-8	4	(8)
EF91	(4)	4	6.3	90	5-7	3	(7)
EF92	(4)	4	6.3	100	5-7	3	(7)
EF93	(4)	4	6.3	50	5-6	3	(6)
EF94	(4)	4	6.3	54	5-6	3	(6)
EF95	(2-4-7)	4	6.3	52	5-6	3	(6)
EF96	(2-4-7)	4	6.3	64	5-6	3	(6)
EF98	(4)	2	6.3	65	5-6	3	(6)
EF183	(1-3-5)	4	6.3	32	7-8	4	(8)
EF184	(1-3-5)	4	6.3	40	7-8	4	(8)
EF861	(1-3-5)	4	6.3	40	7-9	4	(9)
1-EH90	(4)	4	6.3	48	6	3	
2-EH90	(4)	4	6.3	46	5-6	3	(6)
1-EH900S	(4)	4	6.3	42	5-6	3	(6)
2-EH900S	(4)	4	6.3	26	1-6	3	
1-EK90	(4)	4	6.3	48	6	3	
2-EK90	(4)	4	6.3	46	5-6	3	(6)
EL31	(7)	4	6.3	32	4-0	2	
EL32	(7)	4	6.3	40	3-4	2	
EL33	(7)	4	6.3	34	3-4	2	(4)
EL34	(7)	4	6.3	32	3-4	2	(4)
EL36	(1-3-4-7-8)	4	6.3	26	5-0	2	(5)
EL37	(7)	4	6.3	30	3-4	2	(4)
EL38	(7)	4	6.3	34	4-0	2	(4)
EL81	(1-5-6-9)	4	6.3	30	7-8-0	4	
EL82	(5)	2	6.3	92	7-9	4	(2)
EL83	(5)	4	6.3	42	1-7	4	(1)

TUBE	A	B	C	U	D		
EC86	(2-3-5-6-7-8)	4	6.3	59	1-9	4	
EC88	(1-3-5-6-7-9)	4	6.3	52	8	4	
EC90	(4)	4	6.3	66	1-5	3	(6)
EC91	(1-2-4-5-6)	4	6.3	80	7	3	
EC92	(4)	4	6.3	80	1	3	(6)
EC95	(1-4-7)	4	6.3	66	5	3	(2)
EC97	(1-4-7)	4	6.3	50	5	3	(2)
EC900	(2-4-7)	4	6.3	53	5	3	(1)
1-ECC32	(6-8)	4	6.3	100	2	7	(1)
2-ECC32	(3-8)	4	6.3	100	5	7	(4)
1-ECC33	(6-8)	4	6.3	76	2	7	(1)
2-ECC33	(3-8)	4	6.3	84	5	7	(4)
1-ECC34	(6-8)	4	6.3	48	2	7	
2-ECC34	(3-8)	4	6.3	48	5	7	
1-ECC35	(6-8)	2	6.3	48	1-2	7	(1)
2-ECC35	(3-8)	2	6.3	48	4-5	7	(4)
1-ECC81	(4-5-8)	4	6.3	84	1	9	(2)
2-ECC81	(3-4-5)	4	6.3	84	6	9	(7)
1-ECC82	(4-5-8)	4	6.3	62	1	9	(2)
2-ECC82	(3-4-5)	4	6.3	62	6	9	(7)
1-ECC83	(4-5-8)	2	6.3	44	1-2	9	(2)
2-ECC83	(3-4-5)	2	6.3	44	6-7	9	(7)
1-ECC84	(5-7-8)	4	6.3	50	3	4	(2)
2-ECC84	(1-5-8)	4	6.3	50	9	4	(6)
1-ECC85	(5-8)	4	6.3	84	1	4	(2)
2-ECC85	(3-5)	4	6.3	84	6	4	(7)
1-ECC86	(3-5)	2	6.3	100	6	4	(7)
2-ECC86	(5-8)	2	6.3	100	1	4	(2)
1-ECC88	(5-8)	4	6.3	40	1	4	(2)
2-ECC88	(3-5)	4	6.3	40	6	4	(7)
1-ECC91	(4)	4	6.3	64	1	3	(6)
2-ECC91	(4)	4	6.3	60	2	3	(5)
1-ECC180	(5-8)	4	6.3	64	1	4	(2)
2-ECC180	(3-5)	4	6.3	56	6	4	(7)
1-ECC186	(4-5-8)	4	6.3	62	1	9	(2)
2-ECC186	(3-4-5)	4	6.3	62	6	9	(7)
1-ECC189	(5-8)	4	6.3	42	1	4	(2)
2-ECC189	(3-5)	4	6.3	42	6	4	(7)
1-ECC801S	(4-5-8)	4	6.3	84	1	9	(2)
2-ECC801S	(3-4-5)	4	6.3	84	6	9	(7)
1-ECC802S	(4-5-8)	4	6.3	62	1	9	(2)
2-ECC802S	(3-4-5)	4	6.3	62	6	9	(7)
1-ECC960	(4)	4	6.3	48	1	3	(6)
2-ECC960	(4)	4	6.3	48	2	3	(5)
1-ECC962	(4)	4	6.3	66	2	3	(5)
2-ECC962	(4)	4	6.3	66	1	3	(6)
1-ECF80	(5-8)	4	6.3	62	3-6	4	(3)
2-ECF80	(5-7)	4	6.3	50	1	4	(9)
1-ECF82	(5-8)	4	6.3	62	3-6	4	(3)
2-ECF82	(5-7)	4	6.3	56	1	4	(9)
1-ECF801	(1-3-5)	1	6.3	80	6-7	4	(2)
2-ECF801	(1-3-5)	1	6.3	90	8	4	(9)
1-ECH35	(7)	4	6.3	60	3-4	2	(4)
2-ECH35	(7)	4	6.3	74	6	2	(5)

TUBE	A	B	C	U	D
G84	3	2.5	56	2	1
1-GZ30	3	5	34	4	2
2-GZ30	3	5	34	6	2
1-GZ33	3	5	25	4	2
2-GZ33	3	5	25	6	2
1-GZ34	3	5	26	4	2
2-GZ34	3	5	26	6	2
H63	2	6.3	40	4-0	2 (0)
1-HAA91 (1-4)	1	12.6	40	2	3
2-HAA91 (4-5)	1	12.6	40	7	3
1-HABC80 (5-7)	1	19.6	30	2	3-4
2-HABC80 (3-5)	2	19.6	100	8-9	4
3-HABC80 (3-5)	1	19.6	30	6	4-7
4-HABC80 (3-5)	1	19.6	30	1	4-7
1-HBC90 (4)	2	12.6	62	1-7	3 (1)
2-HBC90 (4)	1	12.6	88	5	2-3
3-HBC90 (4)	1	12.6	70	6	2-3
1-HBC91 (4)	2	12.6	56	1-7	3 (1)
2-HBC91 (4)	1	12.6	56	5	2-3
3-HBC91 (4)	1	12.6	56	6	2-3
1-HCC85 (5-8)	4	19.6	74	1	4 (2)
2-HCC85 (3-5)	4	19.6	74	6	4 (7)
1-HD14 (7)	1	1.4	40	3-0	2
2-HD14 (7)	1	1.4	100	5	2
HF93	4	12.6	52	5-6	3 (6)
HF94	4	12.6	80	5-6	3 (6)
1-HK90 (4)	4	12.6	44	5-6	3 (6)
2-HK90 (4)	4	12.6	46	6	3
HL92 (2-4-5)	4	50	34	6-7	3 (6)
HL94 (2-4-5)	4	32	26	7	1-3
1-HM04 (4)	4	6.3	48	6	3
2-HM04 (4)	4	6.3	46	5-6	3 (6)
HY40	4	6.3	100	0	1
HY65 (7)	4	6.3	36	4-0	2 (4)
HY90 (4-6)	4	32	26	5	3
KT61 (7)	4	6.3	34	3-4	2 (4)
KT63 (7)	4	6.3	34	3-4	2 (4)
KT66 (7)	4	6.3	34	3-4	2 (4)
KT77 (7)	4	6.3	32	3-4	2 (4)
KT88 (7)	4	6.3	30	3-4	2 (4)
KTZ63 (7)	2	6.3	54	3-0	2 (0)
L63 (7)	4	6.3	76	3	2 (5)
L77 (4)	4	6.3	66	1-5	3 (6)
LA (5)	4	6.3	40	2-4	1 (4)
LC900 (2-4-7)	4	3	50	5	3 (1)
1-LCL84 (3-5)	4	7.5	51	6-9	4 (8)
2-LCL84 (5-7)	2	7.5	38	1-2	4 (1)
1-LN119 (5-8)	4	50	38	6-7	4 (7)
2-LN119 (2-5)	4	50	30	1-9	4 (1)
1-M8081 (4)	4	6.3	64	2	3 (5)
2-M8081 (4)	4	6.3	64	1	3 (6)
M8082 (4)	4	6.3	46	5-7	3 (7)
M8100 (2-4-7)	4	6.3	52	5-6	3 (6)

TUBE	A	B	C	U	D
M8161 (4)	4	6.3	94	5-7	3 (7)
M8196 (4)	4	6.3	55	5-6	3 (6)
M8204 (4-5-7)	4	6.3	26	6	3
1-M8212 (1-4)	1	6.3	40	2	3
2-M8212 (4-5)	1	6.3	40	7	3
M8223 (2-4-7)	4	Off	48	1-5	Gas Test
M8224 (2-4-7)	4	0.63	50	1-5	Gas Test
M8232 (1-4-5-6)	4	6.3	64	7	3
M8245 (1-4-7)	4	6.3	40	5-6	3 (6)
N16 (2-7)	4	1.4	44	3-4	8 (4)
N17 (1-7)	2	1.4	46	2-3-6	5 (3)
N18 (1-7)	4	1.4	40	2-4-6	5 (4)
N19 (1-7)	2	1.4	43	2-6	5 (6)
N152 (1-5-6-9)	4	19.6	30	7-8-0	4
N153 (5)	4	12.6	44	1-7	4 (1)
N154 (5)	4	19.6	32	7-9	4 (9)
N329 (5)	4	19.6	32	7-9	4 (9)
N359 (1-5-6-9)	4	19.6	30	7-8-0	4
N709 (1-2-5)	4	6.3	35	7-9	4 (9)
N727 (1-4-7)	4	6.3	40	5-6	3 (6)
1-PABC80 (3-5)	2	7.5	46	8-9	4 (8)
2-PABC80 (3-5)	1	7.5	100	6	4
3-PABC80 (3-5)	1	7.5	46	1	4
4-PABC80 (5-7)	1	7.5	46	2	4
PC900 (2-4-7)	4	4.2	51	5	3 (1)
1-PCC84 (1-5-7-8)	4	7.5	44	9	4 (6)
2-PCC84 (5-7-8)	4	7.5	40	3	4 (2)
1-PCC85 (3-5)	4	7.5	88	6	4 (7)
2-PCC85 (5-8)	4	7.5	100	1	4 (2)
1-PCC88 (5-8)	4	7.5	40	1	4 (2)
2-PCC88 (3-5)	4	7.5	40	6	4 (7)
1-PCC89 (1-5-7-8)	4	7.5	36	9	4 (6)
2-PCC89 (5-7-8)	4	7.5	30	3	4 (2)
1-PCF80 (5-8)	4	7.5	68	3-6	4 (3)
2-PCF80 (5-7)	4	7.5	46	1	4 (9)
1-PCF82 (5-8)	4	7.5	60	3-6	4 (3)
2-PCF82 (5-7)	4	7.5	62	1	4 (9)
1-PCF86 (1-3-5)	4	7.5	38	7	4
2-PCF86 (1-3-5)	4	7.5	48	8-9	4 (2)
1-PCL82 (5-8)	4	19.6	32	6-7	4 (7)
2-PCL82 (2-5)	3	19.6	24	1-9	4 (1)
1-PCL83 (3-5)	4	12.6	36	6-8	4 (8)
2-PCL83 (5-7)	4	12.6	78	1	4 (2)
1-PCL84 (3-5)	4	12.6	56	6-9	4 (9)
2-PCL84 (5-7)	4	12.6	24	1-2	4 (1)
PL21 (4-5-7)	4	6.3	26	6	3
PL36 (3-7-8)	4	25	30	1-4-0	2 (5)
PL38 (7)	4	32	36	4-0	2 (4)
PL81 (1-5-6-9)	4	19.6	30	7-8-0	4
PL82 (5)	4	19.6	32	7-9	4 (9)
PL83 (5)	4	12.6	44	1-7	4 (1)
PL84 (1-2-5)	4	19.6	30	7-8-9	4 (9)

TUBE	A	B	C	U	D
PL500 (1-2-3-5-8)	4	25	28	6-7-0	4
PM04 (4)	4	6.3	50	5-6	3 (6)
PY32 (7)	3	32	20	3-5	2-8
PY80 (5)	3	19.6	46	9	4
PY81 (5)	3	19.6	50	2-9	4
PY82 (5)	3	19.6	48	9	1
QE03/10 (3-5-9)	4	6.3	40	1-6	4 (6)
QE06/50 (5)	4	6.3	36	2-0	1 (2)
1-QQE03/12 (4-5)	4	6.3	26	3-8	9 (3)
2-QQE03/12 (4-5)	4	6.3	26	1-6	9 (1)
1-QQV03-10 (4-5)	4	6.3	26	3-8	9 (3)
2-QQV03-10 (4-5)	4	6.3	26	1-6	9 (1)
QV06-20 (1-4-6-7)	4	6.3	30	3-0	2 (3)
1-R52 (8)	3	5	34	4	2
2-R52 (8)	3	5	34	6	2
RA-1 (4)	1	12.6	75	2-3	1
1-RK34 (7)	4	6.3	64	0	1
2-RK34 (7)	4	6.3	64	0	1
1-RK60 (4)	4	6.3	26	0	1
2-RK60 (4)	4	6.3	26	0	1
RK75 (5)	4	5	70	4-0	1 (4)
RX233 (7)	3	2.5	36	0	2
SR2 (2-4-7)	4	Off	34	1-3-5	Gas Test
SR3 (2-4-7)	4	0.63	50	1-5	Gas Test
STV85/10 (2-4-7)	4	Off	34	1-3-5	Gas Test
STV108/30 (2-4-7)	4	0.63	50	1-5	Gas Test
STV150/30 (2-4-7)	4	Off	48	1-5	Gas Test
1-T2M05 (4)	4	6.3	64	1	3 (6)
2-T2M05 (4)	4	6.3	60	2	3 (5)
1-U50 (8)	3	5	48	6	2
2-U50 (8)	3	5	31	4	2
1-U52 (8)	3	5	36	4	2
2-U52 (8)	3	5	36	6	2
1-U78 (4)	4	6.3	28	6	3
2-U78 (4)	4	6.3	28	1	3
1-U147 (7)	3	6.3	40	3	2
2-U147 (7)	3	6.3	40	5	2
1-U149 (8)	3	6.3	43	3	1
2-U149 (8)	3	6.3	43	6	1
U153 (5)	3	19.6	50	2-9	4
1-U709 (5)	3	6.3	30	1	4
2-U709 (5)	3	6.3	30	7	4
1-UABC80 (3-5)	1	32	30	1	4-7
2-UABC80 (5-7)	1	32	30	2	3-4
3-UABC80 (3-5)	4	32	28	8-9	4 (8)
4-UABC80 (3-5)	1	32	72	6	4-7
1-UBC81 (5-7-9)	2	12.6	58	1-2	4 (2)
2-UBC81 (5-7-9)	1	12.6	100	6	3-4
3-UBC81 (5-7-9)	1	12.6	64	8	3-4

TUBE	A	B	C	U	D		
1-UBF80	(5)	4	19.6	52	1-6	4	(1)
2-UBF80	(5)	1	19.6	50	7	3-4	
3-UBF80	(5)	1	19.6	62	8	3-4	
1-UBL21	(8)	4	50	34	2-4	1	(4)
2-UBL21	(8)	1	50	100	5	1	
3-UBL21	(8)	1	50	100	6	1	
UC92	(4)	2	7.5	44	1-6	3	(6)
1-UCC84	(1-5-7-8)	4	19.6	50	9	4	(6)
2-UCC84	(5-7-8)	4	19.6	50	3	4	(2)
1-UCC85	(3-5)	4	2.5	88	6	4	(7)
2-UCC85	(5-8)	4	2.5	88	1	4	(2)
1-UCF80	(5-8)	4	25	68	3-6	4	(3)
2-UCF80	(5-7)	4	25	54	1	4	(9)
1-UCH81	(5)	4	19.6	58	1	4	
2-UCH81	(5)	4	19.6	54	1-6	4	(1)
3-UCH81	(5)	4	19.6	68	8	4	(9)
1-UCL82	(5-8)	4	50	38	6-7	4	(7)
2-UCL82	(2-5)	4	50	30	1-9	4	(1)
1-UCL83	(3-5)	4	32	40	6-8	4	(8)
2-UCL83	(5-7)	4	32	28	1-2	4	(2)
UF80	(1-3-5)	4	19.6	54	7-8	4	(8)
UF85	(1-3-5)	4	19.6	44	7-8	4	(8)
UF86	(2-5-7)	2	12.6	58	6-9	4	(9)
UF89	(1-5-6)	4	12.6	50	7-8	4	(8)
UL84	(1-2-5)	4	50	36	6-7-8-9	4	
1-UM4	(8)	4	12.6	0	4	1	
2-UM4	(8)	4	12.6	0	3-4	1	
3-UM4	(8)	4	12.6	0	4-6	1	
1-UM80	(3-5-8-9)	2	19.6	100	1-7	4	(1)
2-UM80	(5)	4	19.6	0	3-7-8-9	4	
3-UM80	(5)	4	19.6	0	3-8-9	4	
1-UU12	(5)	3	6.3	30	1	4	
2-UU12	(5)	3	6.3	30	7	4	
UY85	(5)	4	32	28	1-6-9	4	
1-V2M70	(4)	4	6.3	28	6	3	
2-V2M70	(4)	4	6.3	28	1	3	
VR75	(3-7)	4	0.63	50	5	Gas Test	
VR90	(3-7)	4	Off	40	5	Gas Test	
VR105	(3-7)	4	0.63	40	5	Gas Test	
VR150	(3-7)	4	Off	30	5	Gas Test	
VT24	(4)	2	1.4	62	2-3	1	(3)
VT25	(4)	4	7.5	50	2	1	
VT26	(4)	4	3	80	2-3	1	(3)
VT27	(4)	2	2	46	2-3	1	(3)
VT28	(5)	4	2.5	78	2-3	1	(3)
VT29	(5)	2	2.5	52	2-3	1	(3)
VT30	(4)	5	5	65	2	1	
VT31	(4)	2	2	52	2-3	1	(3)
VT33	(5)	4	2	40	2-4	1	(4)

TUBE	A	B	C	U	D		
VT35	(5)	4	2.5	56	2-3	1	(3)
VT36	(5)	4	6.3	74	2-3	1	(3)
VT37	(5)	4	6.3	54	2-3	1	(3)
VT38	(5)	4	6.3	48	2-3	1	(3)
VT40	(4)	2	5	48	2-3	1	(3)
VT44	(4)	4	2	78	2-3	1	(3)
VT45	(4)	4	2.5	38	2	1	
VT46A	(4)	4	3	26	0	1	
VT47	(5)	4	2.5	40	2-4	1	(4)
VT48	(6)	4	6.3	44	2-3	1	(3)
VT49	(5)	4	6.3	64	2-3	1	(3)
VT50	(4)	4	7.5	36	2	1	
VT51	(4)	4	7.5	28	2-3	1	(3)
VT52	(4)	4	5	38	2	1	
VT54	(4)	4	2	62	2-3	1	(3)
VT55	(4)	4	7.5	44	1-0	1	(3)
VT56	(5)	2	2.5	42	2-3	1	(3)
VT57	(6)	4	2.5	92	2-3	1	(3)
VT58	(6)	4	2.5	54	2-3	1	(3)
VT62	(4)	4	7.5	60	2	1	
VT63	(5)	4	2.5	36	2-4	1	(4)
VT64	(4)	4	7.5	28	0	1	
VT65	(7)	4	6.3	82	3	2	(5)
VT66	(7)	4	6.3	46	3-4	2	(4)
1-VT68	(7)	4	6.3	70	2-3	1	(3)
2-VT68	(7)	1	6.3	68	4	1-6	
3-VT68	(7)	1	6.3	68	5	1-6	
VT69	(6)	4	6.3	60	2-3	1	(3)
1-VT70	(7)	2	6.3	78	2-0	1	
2-VT70	(7)	1	6.3	90	4-5	1	(5)
VT73	(5)	4	2.5	62	2	1	
1-VT74	(8)	3	5	34	4	2	
2-VT74	(8)	3	5	34	6	2	
1-VT75	(6)	2	6.3	46	2-0	1	(0)
2-VT75	(6)	1	6.3	90	3	1	
3-VT75	(6)	1	6.3	90	4	1	
VT76	(5)	2	6.3	50	2-3	1	(3)
VT77	(6)	4	6.3	88	2-3	1	(3)
VT78	(6)	4	6.3	60	2-3	1	(3)
1-VT80	(4)	3	5	48	2	1	
2-VT80	(4)	3	5	54	3	1	
1-VT83	(4)	4	6.3	26	2	1	
2-VT83	(4)	4	6.3	26	2	1	
VT84	(5)	3	6.3	43	2	1	
VT86	(7)	2	6.3	60	3-6	2	
1-VT87	(7)	4	6.3	26	0-4	2	
2-VT87	(7)	4	6.3	28	3-0	2	
1-VT88	(7)	2	6.3	46	3-0	2	
2-VT88	(7)	1	6.3	68	4	2-8	
3-VT88	(7)	1	6.3	68	5	2-8	

TUBE	A	B	C	U	D		
VT89	(6)	4	6.3	46	2-3	1	(3)
1-VT90	(7-8)	3	6.3	62	3	2	
2-VT90	(4-7)	3	6.3	62	5	2	
VT91	(7)	2	6.3	54	3-0	2	
1-VT92	(7)	2	6.3	48	3-0	2	
2-VT92	(7)	1	6.3	66	5	2-8	
3-VT92	(7)	1	6.3	68	4	2-8	
1-VT93	(7)	1	6.3	50	5	2-8	
2-VT93	(7)	1	6.3	50	4	Good=40	
3-VT93	(7)	4	6.3	84	3-6	2	(6)
VT94	(7)	4	6.3	76	3	2	(5)
VT95	(4)	4	2.5	30	2	1	
1-VT96	(7)	4	6.3	27	3-4	2	(4)
2-VT96	(7)	4	6.3	27	5-6	2	(5)
1-VT97	(8)	3	5	58	4	2	
2-VT97	(8)	3	5	58	6	2	
1-VT98	(6)	4	6.3	50	2-4	1	
2-VT98	(6)	4	6.3	50	4	Eye Closed	
1-VT99	(7-8)	4	6.3	72	3	2	
2-VT99	(4-7)	4	6.3	72	6	2	(5)
VT100	(5)	4	6.3	36	2-0	1	(2)
VT101	(7)	4	12.6	38	3-0	1	(3)
1-VT103	(8)	2	6.3	50	2-6	7	(2)
2-VT103	(8)	1	6.3	78	4	3-7	
3-VT103	(8)	1	6.3	78	5	3-7	
1-VT104	(8)	2	12.6	62	2-6	7	(3)
2-VT104	(8)	1	12.6	56	4	3-7	
3-VT104	(8)	1	12.6	48	5	3-7	
1-VT105	(8)	2	6.3	50	2-3	7	(3)
2-VT105	(8)	2	6.3	50	4-5	7	(4)
VT107	(7)	4	6.3	42	3-4	2	(4)
VT109	(7)	4	6.3	26	3-6	2	(5)
VT112	(7)	4	6.3	56	6-8	2	(6)
1-VT114	(8)	3	5	34	4	2	
2-VT114	(8)	3	5	34	6	2	
VT115	(7)	4	6.3	36	3-4	2	(4)
VT116	(7)	4	6.3	66	6-8	2	(6)
VT117	(7)	4	6.3	52	6-8	2	(6)
VT119	(4)	4	2.5	56	0	1	
VT124	(7)	4	1.4	60	3-4	2	(4)
VT125	(7)	4	1.4	38	3-4	2	(4)
1-VT126	(7)	3	6.3	40	3	2	
2-VT126	(7)	3	6.3	40	5	2	
VT131	(7)	4	12.6	52	6-8	2	(6)
1-VT133	(8)	4	12.6	82	6	7	(2)
2-VT133	(8)	1	12.6	100	4	3-7	
3-VT133	(8)	1	12.6	70	5	3-7	
VT134	(7)	4	12.6	52	3-4	2	(4)
VT135	(7)	4	12.6	66	3	2	(5)
VT136	(7)	4	12.6	36	3-0	1	(3)

TUBE	A	B	C	U	D
VT137	(7)	2	12.6	66	3-5 2 (5)
1-VT138	(7)	4	12.6	30	3-4 2 Eye Closed
2-VT138	(7)	4	12.6	30	4 2 Eye Open
VT139	(3-7)	4	Off	30	5 Gas Test
1-VT145	(4)	3	5	34	2 1
2-VT145	(4)	3	5	34	3 1
VT146	(7)	1	1.4	42	3-0 2 (0)
1-VT147	(7)	4	1.4	50	3-4-0 2 (4)
2-VT147	(7)	4	1.4	54	4-0 2
1-VT148	(7)	2	1.4	52	3-5 2 (5)
2-VT148	(7)	2	1.4	54	6-0 2
3-VT148	(7)	1	1.4	96	8 2
1-VT149	(2-7)	1	1.4	42	3-0 1
2-VT149	(2-7)	1	1.4	44	5-6 1 (5)
3-VT149	(2-7)	1	1.4	78	8 1
1-VT150	(7)	4	6.3	45	4 2
2-VT150	(7)	4	6.3	44	3-4 2 (4)
1-VT151	(7-0)	4	6.3	50	1-3-4-0 2
2-VT151	(1-7-0)	1	6.3	50	5-6 2 (5)
VT152	(7)	4	6.3	44	3-4 2 (4)
1-VT161	(7)	4	12.6	45	4 2
2-VT161	(7)	4	12.6	44	3-4 2 (4)
VT162	(7)	4	12.6	66	6-8 2 (6)
1-VT163	(7-8)	2	6.3	54	3-0 2
2-VT163	(4-7)	2	6.3	50	5-6 2 (5)
VT164	(7)	4	2.5	46	3-4 2 (4)
VT165	(5)	4	2.5	42	2-0 1 (2)
1-VT167	(7)	4	6.3	46	1-3-4-0 2 (4)
2-VT167	(7)	4	6.3	86	6 2 (5)
VT168	(7)	4	6.3	30	3-4 2 (4)
1-VT169	(7)	4	12.6	74	3-6 2 (6)
2-VT169	(7)	1	12.6	100	4 2-8
3-VT169	(7)	1	12.6	100	5 2-8
VT170	(7)	2	2	62	3-0 2
1-VT171	(1-5)	4	1.4	50	2-3 7 (3)
2-VT171	(1-5)	4	1.4	50	3 7
1-VT172	(7)	4	1.4	30	5-6 1 (6)
2-VT172	(7)	1	1.4	92	3 1
VT173	(1-5)	4	1.4	76	2-3 7 (3)
VT174	(1-7)	2	1.4	46	2-3-6 5 (3)
VT175	(7)	4	6.3	48	3-4 2 (4)
VT176	(7)	4	6.3	74	6-8 2 (6)
1-VT177	(8)	1	1.4	44	2-6 1 (6)
2-VT177	(8)	1	1.4	100	4 1
1-VT178	(8)	4	1.4	50	2-5 1 (5)
2-VT178	(8)	2	1.4	74	3-4 1 (4)
VT179	(5-8)	2	1.4	48	2-6 1 (6)
VT180	(1-8)	4	1.4	42	2-3 7 (3)
1-VT181	(8)	3	6.3	58	3 1
2-VT181	(8)	3	6.3	58	6 1
1-VT182	(1-8)	2	1.4	40	2-3 4 (3)
2-VT182	(1-8)	2	1.4	40	6-7 4 (6)

TUBE	A	B	C	U	D
VT183	(8)	2	1.4	86	4 1
VT184	(3-7)	4	Off	40	5 Gas Test
VT185	(1-8)	4	1.4	40	2-3 1 (3)
1-VT188	(4-7-8)	2	6.3	50	2-3 1 (3)
2-VT188	(4-7-8)	1	6.3	100	5 1
3-VT188	(4-7-8)	1	6.3	100	6 1
1-VT189	(7-8)	2	6.3	48	3-4 1 (4)
2-VT189	(2-8)	2	6.3	48	5-6 1 (5)
VT190	(8)	4	6.3	58	2-3 1 (3)
VT192	(8)	2	6.3	44	2-6 1 (6)
VT193	(8)	4	6.3	78	2-3 1 (3)
1-VT194	(8)	2	6.3	52	3-4 1 (4)
2-VT194	(8)	4	6.3	64	2-5 1 (5)
3-VT194	(8)	2	6.3	42	5-6 1 (6)
1-VT195	(8)	4	6.3	28	3 6
2-VT195	(8)	4	6.3	28	5 6
1-VT197A	(8)	3	5	48	4 2
2-VT197A	(8)	3	5	31	4-0 2 (4)
VT198A	(4)	4	6.3	50	3-4 2 (4)
VT199	(7)	4	6.3	56	6-8 2 (6)
VT200	(3-7)	4	6.3	40	5 Gas Test
VT201	(7)	4	2.5	36	3-4 2 (4)
VT202	(2-4-7)	4	6.3	82	1-5 3 (6)
VT203	(2-4-7)	2	6.3	46	1-5 3 (1)
1-VT205	(8)	4	6.3	73	6 7 (2)
2-VT205	(8)	1	6.3	74	4 3-7
3-VT205	(8)	1	6.3	74	5 3-7
1-VT206A	(8)	3	5	30	4 2
2-VT206A	(8)	3	5	30	6 2
1-VT207	(4-8)	4	12.6	80	3 7 (1)
2-VT207	(2-8)	4	12.6	80	6 7 (5)
1-VT208	(8)	4	6.3	46	2-5 1 (5)
2-VT208	(8)	2	6.3	44	3-4 1 (4)
VT209	(3-5-7)	4	12.6	54	6-8 2 (6)
VT210	(1-5)	1	1.4	70	2-4-6 7 (4)
VT211	(3-5-7)	4	6.3	58	6-8 2 (6)
VT213A	(7)	4	6.3	78	3 2 (5)
1-VT214	(7-8)	3	12.6	86	3 2
2-VT214	(4-7)	3	12.6	86	5 2
1-VT215	(6)	4	6.3	30	2-4 1 Eye Closed
2-VT215	(6)	4	6.3	30	4 1 Eye Open
VT216	(4)	4	2.5	26	0 1
VT217	(4)	4	6.3	28	3-0 3
VT218	(4)	4	6.3	26	0 1
VT221	(2-7)	4	1.4	44	3-4 8 (4)
VT222	(7)	3	6.3	42	3 2 (5)
1-VT224	(7)	4	6.3	64	0 1 Right Top Cap
2-VT224	(7)	4	6.3	64	0 1 Left Top Cap

TUBE	A	B	C	U	D
VT225	(5)	4	5	70	4-0 1 (4)
1-VT229	(6-8)	2	6.3	48	1-2 7 (7)
2-VT229	(3-8)	2	6.3	48	4-5 7 (7)
VT230	(7)	4	6.3	32	3-4 2
1-VT231	(6-8)	4	6.3	72	2 2
2-VT231	(3-8)	4	6.3	72	5 7 (7)
VT232	(7)	4	6.3	26	0 2
1-VT233	(8)	4	6.3	26	2-6 7 (7)
2-VT233	(8)	1	6.3	80	4 3-7
3-VT233	(8)	1	6.3	80	5 3-7
VT235	(7)	2	6.3	48	0 2
VT236	(4)	3	3	32	0 1
VT239	(8)	2	1.4	46	2-6 1 (6)
VT241	(1-4-5-6-8)	4	6.3	94	3-7 2
VT243	(8)	3	6.3	72	4 1
1-VT244	(8)	3	5	36	4 2
2-VT244	(8)	3	5	36	6 2
VT245	(7)	4	6.3	26	3 2
VT247	(7)	4	6.3	40	6-8 2 (6)
VT260	(3-7)	4	0.63	50	5 Gas Test
VT264	(1-7)	4	1.4	40	2-4-6 5 (4)
VT266	(4)	4	3	28	0 1
1-VT268	(8)	2	12.6	68	2-3 7 (3)
2-VT268	(8)	2	12.6	68	4-5 7 (4)
VT269	(3-5-7)	2	6.3	42	4-8 2 (4)
1-VT287	(1-3-6-8)	4	6.3	32	4-0 5 (4)
2-VT287	(1-3-6-8)	4	6.3	32	4-0 5 (4)
VT288	(3-5-7)	4	12.6	70	6-8 2 (6)
1-VT289	(6-8)	2	12.6	70	1-2 7 (1)
2-VT289	(3-8)	2	12.6	70	4-5 7 (4)
WT17	(1-5)	4	1.4	76	2-3 7 (3)
WT19	(1-3-5)	4	6.3	46	7-8 4 (8)
WT27	(4)	4	6.3	50	5-6 3 (6)
1-X14	(7)	4	1.4	50	3-4-0 2 (4)
2-X14	(7)	4	1.4	54	4-0 2
1-X17	(1-5)	4	1.4	50	2-3 7 (3)
2-X17	(1-5)	4	1.4	50	3 7
X99	(4)	2	3.0	60	2-3 1 (3)
1-X719	(5)	4	6.3	66	1-6 4 (1)
2-X719	(5)	2	6.3	44	8-9 4 (9)
1-X727	(4)	4	6.3	48	6 3
2-X727	(4)	4	6.3	46	5-6 3 (6)
X95	(1-4-7)	4	2	90	5 3 (2)
X97	(1-4-7)	2	2	32	2-5 3 (2)
X900	(2-4-7)	1	2.5	54	5 3 (1)
1-XCC189	(5-8)	4	4.2	36	1 4 (2)
2-XCC189	(3-5)	4	4.2	36	6 4 (7)
1-XCF80	(5-7)	4	4.2	46	1 4
2-XCF80	(5-8)	4	4.2	66	3-6 4 (3)

TUBE	A	B	C	U	D	TUBE	A	B	C	U	D	TUBE	A	B	C	U	D
1-XCL85 (5-8)	4	7.5	90	1	4 (2)	2-XXD (7-8)	4	12.6	76	3	1 (4)	YF183 (1-3-5)	4	4.2	40	7-8	4 (8)
2-XCL85 (3-5)	2	7.5	100	6-7	4 (9)	2-XXD (2-8)	4	12.6	76	6	1 (5)	YF184 (1-3-5)	4	4.2	43	7-8	4 (2)
XF183 (1-3-5)	4	3	36	7-8	4 (8)	1-XXFM (7-8)	2	6.3	56	2-3	1 (3)	Z14 (7)	1	1.4	42	3-0	2
XF184 (1-3-5)	4	3	44	7-8	4 (2)	2-XXFM (7-8)	1	6.3	100	5	1	Z63 (7)	2	6.3	54	3-0	2
XL84 (1-2-5)	4	7.5	36	7-8	4 (9)	3-XXFM (4-8)	1	6.3	100	6	1	Z728 (2-5-7)	4	6.3	26	6-9	4 (9)
XL500 (1-2-3-5-8)	4	12.6	28	6-7-0	4	XXL (8)	4	6.3	66	2	1 (6)	Z900T (3-7)	4	.63	47	1-4	—
1-XXB (1-8)	1	1.4	40	3-4	7 (4)	XY88 (1-2-5)	3	18.6	40	3-6-7-8-9	4	1-ZD17 (7)	4	1.4	30	5-6	1 (6)
2-XXB (1-8)	1	1.4	40	5-6	7 (5)	YC95 (1-4-7)	4	3	72	5	3 (2)	2-ZD17 (7)	1	1.4	92	3	1