

CONTROLS

A Switch: The A switch is actually a row of 10 slide switches. Each slide switch will isolate the pin on the tube socket corresponding to its number, when switch is in down position.

B Switch: The B switch selects the filament voltage to be applied to the tube under test. Set the B switch to the range of filament voltage that includes the voltage indicated in the setup chart.

C Switch: The C LOAD switch selects the correct applied voltage and load resistance, so the tube under test can be tested at its rated current.

D Switch: The D SETUP switch selects the control grid of the tube under test for the emission and grid leakage test, and is rotated to check shorts.

OPERATING INSTRUCTIONS

With no tube in any socket set the FUNCTION switch to the SHORTS position, and adjust the METER ZERO for a zero indication on the meter.

Set the A, B, C, and D switches according to the set up chart and insert the tube in the socket indicated. Use the cap lead if the tube has a top cap.

CHECK SHORTS — Rotate the D SETUP switch to all positions, and observe the shorts indicator. The unit will indicate shorts on both electrodes if tube is shorted or has excessive leakage. Disregard any faint flashes in the short indicator. Tubes marked with an asterick (*) in the set up chart will show a normal short or leakage. This is because the filament on the tube under test is being picked up on some pin other than the standard filament connections in the test socket.

CHECK EMISSION — Rotate the **FUNCTION SWITCH** to the **EMISSION** position and return the **D SETUP** switch to the position indicated in the set up chart, and read the top scale on the meter. If the tube has good emission, make the life test.

LIFE TEST — Retain proper set up for the emission test, and push the **LIFE TEST** slide switch. The emission reading on a tube that is filament sensitive will quickly start to drop. If the emission reading drops into the questionable area with the **LIFE TEST** switch pushed, the tube should be rejected.

When replacing a costly horizontal output tube in a television receiver, it is a good idea to check the horizontal oscillator tube for emission, filament sensitive cathode, and for warm up time. If the horizontal oscillator tube is slower in warming up due to a weak cathode or filament sensitive cathode, the output tube will draw heavy current and its life will be shortened considerably. Checking the warm up time of the oscillator tube and making sure that it is as fast or faster than the output tube can reduce the chance of a call back later for the same trouble and keep your customer's confidence high in your service ability.

CHECK LEAKAGE — Retain proper set up for the emission test, rotate the **FUNCTION** switch to the **GRID LEAKAGE** position and read the bottom scale on the meter. If the meter reads in the green area, the leakage in the tube is acceptable. If the meter reads in the questionable (?) area, the tube will probably function in circuit, but should be replaced to prevent trouble in the future. Remember to make the leakage test on dual diodes such as the 6AL5, because any unbalance in the leakage on this type of tube could cause the critical horizontal AFC or burst phase detector circuits to malfunction.

TUBE	A	B	C	D	SKT
1A3	2,5	1	J	6	7
1A5	1,6,8	1	F	5	1
1A7		1	G	5	1
1AB5	7	1	E	6	9
1AB6	7	1	F	4	7
1AC6		1	F	4	7
1AD2	1,2,3,5,6,7,8,9	1	H	10	10
1AE4	5	1	G	6	7
1AF4	5	1	F	6	7
1AF5		1	G	6	7
		1	H	3	7
1AF33		1	G	3	7
		1	G	6	7
1AF34		1	G	3	7
		1	G	6	7
1AH5		1	G	6	7
		1	H	3	7
1AJ2	1,2,3,4,5,6,7,8,9,0	1	H	10	10
1AJ4	5	1	G	6	7
1AM4	5	1	G	6	7
1AN5	5	1	G	6	7
1AQ5	5	1	G	4	7
1AR5		1	G	6	7
		1	H	3	7
1AS5		1	G	6	7
1AU2	2,3,6,7,8	1	H	1	8
1AU3	1,3,4,5,6,8	1	J	10	1
1AX2	1,3,6,7	1	J	10	8
1AY2		1	J	10	3
Insert leads into pins 1&5, use top cap					
1B3	1,3,4,5,6,8	1	H	10	1
1B7		1	G	5	1
1B8		1	F	5	1
1BC2	1,2,3,6,7,8,9	1	J	10	8
1BG2		1	J	10	3
Insert leads into pins 1 & 5, use top cap					
1BH2	1,2,3,6,7,8,9,	1	J	10	8
1BK2	1,3,6,7	1	J	10	8
1BL2		1	J	10	3
Insert leads into pins 1&5, use top cap					
1BX2	1,3,6,7	1	H	10	8
1BY2	1,2,5,6,8,9	1	H	10	10

TUBE	A	B	C D	SKT
1C1	5	1	F 4	7
1C2		1	F 4	7
1C3	2	1	F 4	7
1C5	1,6,8	1	F 5	1
1C7		2	F 5	1
1D5		2	F 10	1
1D7		2	F 5	1
1D8		1	F 5	1
		1	G 10	1
1D13	2,5	1	J 6	7
1DG3*	2,4,5,6	1	H 10	2
	Normal short 3, H-K			
1DN5		1	F 6	7
		1	H 4	7
1DY4	6,7	1	D 2	4
1E3	3	1	D 1	3
1E4		1	F 5	1
1E5		2	G 10	1
1E7		2	E 4	1
1F1	5	1	G 6	7
1F2	5	1	F 6	7
1F3	5	1	F 6	7
1F5	1,6,8	1	F 5	1
1F7	1,3,4,5,6,8	2	G 10	1
1F33		1	F 6	7
1F34		1	F 6	7
1FD1	2	1	G 6	7
	2	1	H 3	7
1FD9		1	G 6	7
		1	H 3	7
1G3	1,3,4,5,6,8	1	H 10	1
1G4		1	F 5	1
1G5	1,6,8	2	F 5	1
1G6		1	F 4	1
		1	F 5	1
1H2	1,2,3,6,7,8,9	1	H 10	8
1H4	4,6	1	F 5	1
1H5		1	G 10	1
		1	G 5	1

TUBE	A	B	C D	SKT
1H6		2	F 6	1
		2	G 5	1
		2	G 4	1
1H33	5	1	F 6	7
1H34	5	1	F 6	7
1H35		1	G 4	7
1J3	1,3,4,5,6,8	1	H 10	1
1J5		2	E 5	1
1J6		2	F 4	1
		2	F 5	1
1K3	1,3,4,5,6,8	1	H 10	1
1K5	1,5,6,8	2	F 10	1
1K7	1,8,	2	F 10	1
1L4	5	1	F 6	7
1L5	1,6,8	2	D 5	1
1L6		1	G 4	7
1L33		1	E 3	7
1L34		1	F 3	7
1LA4		1	F 6	9
1LA6		1	F 4	9
1LB4	4	1	F 6	9
1LB6		1	F 6	9
1LC5	5	1	F 6	9
1LC6		1	F 4	9
1LD5		1	G 4	9
		1	G 6	9
1LE3	5	1	F 6	9
1LF3	5	1	F 6	9
1LG5	5	1	F 6	9
1LH4		1	F 6	9
		1	G 4	9
1LN5	5	1	G 6	9
1M5		2	F 10	1
1N2	1,3,4,5,6,8	1	H 10	1
1N5		1	F 10	1
1N6		1	F 5	2
		1	F 6	2
1P1	5	3	G 6	7
1P5		1	F 10	1
1P10	2,5,6	3	F 3	7
1P11	5	3	F 6	7

TUBE	A	B	C D	SKT
1Q5		1	E 5	1
1R	1,8	1	H 10	1
1R4		1	H 4	9
1R5	5	1	F 4	7
1R-K23	1,6	1	H 10	8
1R-K31		1	J 10	8
1R-K41		1	J 10	8
1S2	1,6	1	H 10	8
1S4	2,5,6	1	F 3	7
1S5		1	G 6	7
1SA6		1	F 4	1
1SB6		1	G 8	1
		1	G 5	1
1T2		1	H 10	3
Insert leads into pins 1&5, use top cap				
1T4	5	1	F 6	7
1T5		1	E 5	1
1U4	5	1	F 6	7
1U5		1	G 6	7
		1	H 4	7
1U6		1	G 4	7
1V2	2,3,6,7,8,9	1	H 1	8
1W4		1	F 6	7
1X2	1,3,6,7	1	H 10	8
1Y32	2,3,4,5,6	1	H 10	7
1Z1	1,3,4,5,6,8	1	H 10	1
1Z2	2,3,4,5,6	1	H 10	7
2A4	4,6	2	F 5	1
2A7		3	F 5	7
2AF4	6,7	2	D 2	4
2AH2	1,2,3,4,5,6,7,8,9,0	2	H 10	10
2AS2	1,2,3,5,6,7,8,9	2	H 10	10
2AV2	2,3,6,7,8,9	2	H 1	8
2AZ2	1,3,6,7	2	H 10	8
2B3	1,3,4,5,6,8	2	H 10	1
2B7		2	E 10	7
		2	F 4	7
		2	F 5	7
2B25	2,3,5,6	1	G 4	7
2B35		2	E 1	4
2BA2	2,3,6,7,8,9	1	H 1	8

TUBE	A	B	C D	SKT
2BJ2	1,2,3,6,7,8,9	2	H 10	8
2BN4	2,6	2	E 7	4
2BU2	1,2,3,5,6,7,8,9	2	H 10	10
2C22	6	6	E 10	1
2C26	6	6	E 10	1
2C50		12	C 1	2
		12	C 4	2
2C52		12	G 1	2
		12	G 4	2
2C53	3,6	6	F 5	1
2CN3	1,3,4,5,6,7,8	2	H 10	1
2CW4		2	F 4	6
2CY5	2	2	E 1	4
2D21	7	6	A 6	4
Check interruption of emission with No. 1 A switch				
	7	6	A 1	4
Grid leakage test				
2DF4	9	2	B 8	3
2DS4		2	G 4	6
2DX4	6,7	2	D 2	4
2DY4	6,7	2	D 2	4
2DZ4	6,7	2	D 2	4
2E24	1	3	C 5	1
2E25		6	C 5	1
2E26	4,6,8	6	A 5	1
2E30	7	6	C 1	4
2EA5	7	2	E 1	4
2EG4		2	F 4	6
2EN5		2	F 2	4
		2	F 7	4
2ER5	7	2	E 2	4
2ES5	7	2	E 2	4
2EV5	7	2	E 1	4
2FH5	7	2	E 2	4
2FO5	7	2	E 2	4
2FS5	2	2	D 1	4
2FV6	2	2	E 1	4
2FY5	1	2	E 2	4
2GK5	7	2	E 2	4
2GU5	2	2	E 1	4
2GW5	6	2	D 2	4

TUBE	A	B	C	D	SKT
2HA5	2	2	E	1	4
2HK5	2	2	E	1	4
2HM5	2	2	D	1	4
2HQ5	2	2	E	1	4
2HR8		2	F	9	3
2J2	1,6	2	H	10	8
2N-H11		2	G	4	6
2N-H12		2	F	4	6
2T4	6,7	2	D	2	4
2V2	1,3,4,5,6,8	2	J	10	1
2V3		2	H	10	1
2W3*		2	B	4	1
Normal short 8, H-K					
2X3		2	B	10	1
3A2	1,4,6,7	3	H	10	8
3A3	1,3,4,5,6,8	3	H	10	1
3A4	2	3	F	4	7
3A4T	2	3	F	3	7
3A5	4	3	F	3	7
	4	3	F	5	7
3A8	1	3	G	10	1
	1	3	G	8	1
	1	3	G	5	1
3AF4	6,7	3	D	2	4
3AJ8		3	E	2	3
		3	F	9	3
3AL5		3	E	2	4
		3	E	7	4
3AT2	1,2,3,5,6,8,9	3	H	10	10
3AU6		3	D	1	4
3AV6		3	F	1	4
		3	G	5	4
		3	G	6	4
3AW2	1,2,3,5,6,8,9	3	J	10	10
3AW3	1,3,4,5,6,8	3	H	10	1
3B2	1,3,5,6,8	3	H	10	1
3B5	9	3	E	5	1
3B7*		3	F	3	2
		3	F	6	2
Normal short 1, H-K					

TUBE	A	B	C	D	SKT
3BA6		3	D	1	4
3BC5	2	3	E	1	4
3BE6		3	D	1	4
3BF2	1,2,3,5,6,7,8,9,0	3	H	10	10
3BH2	2,3,6,7,8,9	3	J	10	12
3BL2	1,2,3,4,5,6,7,8,9,0	3	J	10	10
3BM2	1,2,3,4,5,6,7,8,9,0	3	H	10	10
3BN2	1,2,3,5,6,8,9	3	H	10	10
3BN4	2,6	3	E	7	4
3BN6		3	H	5	4
Emission and short test					
		3	H	2	4
Grid leakage test					
3BS2	1,2,3,5,6,7,8,9	3	J	10	10
3BT2	1,2,3,5,6,7,8,9	3	H	10	10
3BU8		3	D	7	3
3BW2	1,2,3,5,6,7,8,9	3	H	10	10
3BX6	1	3	D	2	3
3BY6		3	D	1	4
3BY7	3	3	D	2	3
3BZ6		3	D	1	4
3C2	1,3,4,5,6,8	3	H	10	1
3C4	5	3	G	6	7
3C5	8	3	F	5	1
3C6	7	3	F	4	9
3CA3	1,3,4,5,6,8	3	H	10	1
3CB6		3	D	1	4
3CD3	1,3,4,5,6,8	3	H	10	1
3CE5	2	3	E	1	4
3CF6		3	D	1	4
3CN3	1,3,4,5,6,8	3	J	10	1
3CS6		3	D	1	4
3CU3	1,2,3,5,8	3	H	10	1
3CV3	1,3,4,5,6,8	3	J	10	1
3CX3*	2,4,5,6	3	J	10	2
Normal short 3, H-K					
3CY3	1,3,5,8	3	H	10	1
3CY5	2	3	E	1	4
3CZ3	1,3,5,8	3	H	10	1
3D6	7	1	E	6	9
3D21	1	12	C	6	1

TUBE	A	B	C	D	SKT
3DA3*	2,4,5,6 Normal short 3, H-K	3	F	10	2
3DB3	1,3,5,8	3	H	10	1
3DC3	1,3,5,7	3	J	10	1
3DE6		3	D	1	4
3DF3*	2,4,5,6 Normal short 3, H-K	3	H	10	2
3DH3*	4,5,6 Normal short 3, H-K	3	H	10	2
3DJ3	1,3,5,8	3	H	10	1
3DK6		3	D	1	4
3DR3*	1,2,4,5,6 Normal short 3, H-K	3	H	10	2
3DS3*	1,2,4,5,6 Normal short 3, H-K	3	H	10	2
3DT6		3	E	1	4
3DX4	6,7	3	D	2	4
3DY4	6,7	3	D	2	4
3DZ4	6,7	3	D	2	4
3E5	5	3	F	6	7
3E6	5	3	F	6	9
3E22	3,5,6	12	A	2	2
3EA5	7	3	E	1	4
3EH7	3	3	D	2	3
3EJ7	3	3	D	2	3
3ER5	7	3	E	2	4
3ES5	7	3	E	2	4
3EV5	7	3	E	1	4
3FH5	7	3	E	2	4
3FQ5	7	3	E	2	4
3FS5	2	3	D	1	4
3FY5	1	3	E	2	4
3G10	3,5,6 Normal short 7, H-K	6	F	1	9
3GK5	7	3	E	2	4
3GS8		3	D	7	3
3GU5	2	3	D	1	4
3GW5	6	3	D	2	4
3HA5	2	3	D	1	4
3HK5	2	3	E	1	4
3HM5	2	3	D	1	4
3HM6	1	3	D	2	3

TUBE	A	B	C	D	SKT
3HQ5	2	3	E	1	4
3HS8		3	D	7	3
3HT6	1	3	D	2	3
3JC6	1	3	D	2	3
3JD6	1	3	D	2	3
3JH6		3	D	1	4
3KF8		3	D	7	3
3KT6	3	3	D	2	3
3LE4	7	3	E	6	9
3LF4	7	3	E	6	9
3M-P26		3	F	1	4
3M-R24		3	D	1	4
3M-V7		3	D	1	4
3Q4	5,6	3	F	3	7
3Q5	8	3	E	5	1
3S4	5,6	3	F	3	7
3V4	5	3	F	6	7
3W4	5,6	3	F	3	7
3Z4	5,6	3	F	3	7
4A6	8	4	G	5	1
	8	4	G	4	1
4AF4	6,7	4	D	2	4
4AG6	1,8	4	G	5	1
	1,8	4	G	4	1
4AU6		4	D	1	4
4AV6		4	F	1	4
		4	G	5	4
		4	G	6	4
4BA6		4	D	1	4
4BC5	2	4	E	1	4
4BC8	9	4	E	2	3
	9	4	E	7	3
4BE6		4	D	1	4
4BL8		4	D	2	3
		4	D	9	3
4BN4	2,6	4	E	7	4
4BN6		4	H	5	4
	Emission and short test				
		4	H	2	4
	Grid leakage test				
4BQ7	9	4	E	2	3
	9	4	E	7	3

TUBE	A	B	C	D	SKT
4BS8	9	4	E	2	3
	9	4	E	7	3
4BU8		4	D	7	3
4BX8	9	4	E	2	3
	9	4	E	7	3
4BY6		4	D	1	4
4BZ6		4	D	1	4
4BZ7	9	4	E	2	3
	9	4	E	7	3
4BZ8	9	4	E	2	3
	9	4	E	7	3
4CB6		4	D	1	4
4CE5	2	4	E	1	4
4CF6		4	D	1	4
4CM4	3	4	E	6	8
4CS6		4	E	1	4
4CX7	8	4	E	2	3
	8	4	E	7	3
4CY5	2	4	E	1	4
4DE6		4	D	1	4
4DK6		4	D	1	4
4DL4	3,6,7,8	6	D	1	3
4DT6		4	E	1	4
4EH7	3	4	D	2	3
4EJ7	3	4	D	2	3
4ES8	9	4	D	2	3
	9	4	D	7	3
4EW6		4	D	1	4
4FQ5	7	4	E	2	4
4FS7	3	4	D	2	3
	3	4	D	6	3
4FY5	6	4	E	2	4
4GJ7	3	4	D	2	3
	3	4	E	9	3
4GK5	7	4	E	2	4
4GM6		4	D	1	4
4GS7	3	4	D	1	3
	3	4	D	9	3
4GS8		4	D	7	3
4GW5	6	4	D	2	4

TUBE	A	B	C	D	SKT
4GX7	3	4	D	2	3
	3	4	D	9	3
4GZ5	5	4	C	2	4
4HA5	2	4	E	1	4
4HA7	5	4	E	9	10
	5	4	E	1	10
4HC7	7	4	D	9	10
	7	4	G	1	10
4HG8	3	4	D	2	3
	3	4	D	6	3
4HK5	2	4	E	1	4
4HM5	2	4	D	1	4
4HM6	1	4	D	2	3
4HQ5	2	4	E	1	4
4HR8		4	F	9	3
4HS8		4	D	7	3
4HT6	1	4	D	2	3
4JC6	1	4	D	2	3
4JD6	1	4	D	2	3
4JH6		4	D	1	4
4JK6		4	D	1	4
4JL6		4	D	1	4
4JW8		4	D	9	3
		4	C	2	3
4KE8		4	D	9	3
		4	E	2	3
4KF8		4	D	7	3
4KN8	9	4	D	2	3
	9	4	D	7	3
4KT6	3	4	D	2	3
4LJ8	3	4	D	1	3
	3	4	D	9	3
4LU6		4	C	1	4
4MK8		4	E	7	3
4M-P2		4	C	1	4
4M-P12		5	C	1	4
4R-HH2		4	E	2	3
		4	E	7	3
4R-HH8		4	D	2	3
		4	D	7	3

TUBE	A	B	C D	SKT
5A6	9	5	C 7	3
5A/160H		6	E 1	4
5AF4	6,7	5	D 2	4
5AM8		5	D 2	3
		5	F 8	3
5AN8		5	D 2	3
		5	D 8	3
5AQ4		5	B 4	1
		5	B 6	1
5AQ5	7	5	C 1	4
5AR4*	1	5	A 4	1
	1	5	A 6	1
	Normal short 8, H-K			
5AS4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5AS8		5	D 2	3
		5	F 6	3
5AT4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5AT8		5	D 1	3
		5	D 9	3
5AU4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5AV8		5	E 2	3
		5	E 6	3
5AW4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5AX4*		5	A 4	1
		5	A 6	1
	Normal short 8, H-K			
5AZ3	1,2,3,4,5,8,9,0	5	A 7	10
5AZ4	1,3,5,7	5	B 4	9
	1,3,5,7	5	B 6	9
5B8*		5	D 2	3
		5	D 6	3
	Normal short 1			

TUBE	A	B	C D	SKT
5BC3	2,6,9	5	A 1	12
	2,6,9	5	A 8	12
	Bend pin 7 out and use space for keyway			
5BC8	9	5	E 2	3
	9	5	E 7	3
5BE8*		5	D 1	3
		5	D 9	3
	Normal short 3			
5BK7	9	5	E 2	3
	9	5	E 7	3
5BM8		5	C 3	3
		5	F 1	3
5BQ5	1,6,8	5	C 2	3
5BQ7	9	5	E 2	3
	9	5	E 7	3
5BR8		5	D 1	3
		5	D 9	3
5BS7	9	5	E 2	3
	9	5	E 7	3
5BS8	9	5	E 2	3
	9	5	E 7	3
5BT8		5	D 8	3
		5	G 2	3
		5	G 1	3
5BW8		5	D 6	3
		5	F 3	3
		5	F 1	3
5BX8	9	5	E 2	3
	9	5	E 7	3
5BZ7	9	5	E 2	3
	9	5	E 7	3
5BZ8	9	5	E 2	3
	9	5	E 7	3
5CG4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5CG8	3	5	E 1	3
	3	5	E 9	3
5CL8		5	D 1	3
		5	D 9	3
5CM6	6	5	C 3	3

TUBE	A	B	C D	SKT
5CM8		5	E 2	3
		5	F 9	3
5CQ8		5	D 9	3
		5	D 2	3
5CR8*		5	D 2	3
		5	E 9	3
Normal short 8				
5CU4*		5	A 4	1
		5	A 6	1
Normal short 8, H-K				
5CZ5	2,6,8	5	C 3	3
5DB4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
Normal short 8 H-K				
5DH8*		5	D 9	3
		5	D 1	3
Normal short 3				
5DJ4	1,3,6,8	5	A 4	1
	1,3,6,8	5	A 5	1
5DN4		5	A 4	1
		5	A 6	1
5EA8		5	D 9	3
		5	D 2	3
5EH8	1	5	D 2	3
	1	5	D 7	3
5ES8		5	E 2	3
		5	E 7	3
5EU8		5	D 2	3
		5	D 7	3
5EW6		5	D 1	4
5FG7	3	5	D 9	3
	3	5	E 1	3
5FV8		5	D 1	3
		5	D 9	3
5GH8		5	D 2	3
		5	D 9	3
5GJ7	3	5	D 2	3
	3	5	E 9	3
5GM6		5	D 1	4
5GS7	3	5	E 1	3
	3	5	E 9	3
5GX6		5	E 1	4

TUBE	A	B	C D	SKT
5GX7	3	5	D 2	3
	3	5	D 9	3
5HA7	5	5	E 9	10
	5	5	E 1	10
5HB7	3	5	D 2	3
	3	5	D 9	3
5HC7	7	5	D 9	10
	7	5	G 1	10
5HG8	3	5	D 2	3
	3	5	D 6	3
5HZ6		5	F 1	4
5J6		5	E 5	4
		5	E 6	4
5JK6		5	D 1	4
5JL6		5	D 1	4
5JW8		5	D 9	3
		5	C 2	3
5KD8		5	D 2	3
		5	D 9	3
5KE8		5	D 9	3
		5	E 2	3
5KZ8		5	D 2	3
		5	D 9	3
5LJ8	3	5	D 1	3
	3	5	D 9	3
5MB8		5	D 1	3
		5	E 9	3
5M-HH3		5	E 5	4
		5	E 6	4
5M-K9		5	B 5	4
5MQ8		5	E 2	3
		5	D 9	3
5R4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
Normal short 8, H-K				
5R-DDH1		5	E 1	3
		5	E 6	3
5RHH2	9	5	E 2	3
	9	5	E 7	3
5R-HP1		5	D 2	3
		5	D 9	3

TUBE	A	B	C D	SKT
5R-HR1		5	D 2	3
		5	D 9	3
5R-K16		5	A 1	3
		5	A 8	3
5T4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5T8		5	F 8	3
		5	G 2	3
		5	G 6	3
		5	G 1	3
5U4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5U8		5	D 2	3
		5	D 9	3
5U9		5	D 3	11
		5	D 10	11
5V3*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5V4*	1,3,5,7	5	B 4	1
	1,3,5,7	5	B 6	1
	Normal short 8, H-K			
5V6		5	C 5	1
5V9		5	D 8	11
		5	E 3	11
5W4*	1,3,5,7	5	B 4	1
	1,3,5,7	5	B 6	1
	Normal short 8, H-K			
5X4		5	A 3	2
		5	A 5	2
5X8		5	E 2	3
		5	E 7	3
5X9		5	D 3	11
		5	E 10	11
5Y3*	1,3,5,7	5	B 4	1
	1,3,5,7	5	B 6	1
	Normal short 8, H-K			
5Y4		5	B 3	2
		5	B 5	2

TUBE	A	B	C D	SKT
5Z4*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
5Z10*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
6/30L2		6	D 2	3
		6	D 7	3
6A5	8	6	C 5	1
6A6		6	E 3	7
		6	E 5	7
6A7		6	F 5	7
6A8		6	E 5	1
6AB4		6	E 6	4
6AB7		6	D 4	1
6AB8		6	D 9	3
		6	F 2	3
6AB9		6	D 1	11
		6	D 7	11
6AC5		6	F 5	1
6AC6		6	F 5	1
6AC7		6	D 4	1
6AC9		6	D 2	10
		6	D 3	10
		6	D 9	10
6AC10	8	6	E 1	10
	8	6	E 7	10
	8	6	E 9	10
6AC11		6	E 3	10
		6	E 6	10
		6	C 8	10
6AD5		6	F 5	1
6AD7		6	G 1	1
		6	F 5	1
6AD8		6	E 2	3
		6	G 8	3
		6	G 7	3
6AD10		6	E 3	10
		6	C 8	10
6AE5		6	G 5	1
6AE6		6	F 5	1

TUBE	A	B	C	D	SKT
6AE7		6	F	4	1
		6	F	6	1
6AE8		6	E	2	3
		6	F	7	3
6AF3	1,2,3,6,7,8	6	A	9	3
6AF4	6,7	6	D	2	4
6AF5		6	F	5	1
6AF9*		6	C	8	11
		6	D	1	11
Normal short 2					
6AF10		6	D	3	10
		6	E	10	10
6AF11		6	C	1	10
		6	F	6	10
		6	F	3	10
6AG5	2	6	E	1	4
6AG6		6	F	5	1
6AG7		6	C	4	1
6AG9		6	E	5	10
		6	C	1	10
6AG10		6	D	1	10
6AG11		6	E	8	10
		6	E	5	10
		6	F	10	10
		6	F	3	10
6AH4		6	C	1	1
6AH5		6	F	6	1
6AH6		6	D	1	4
6AH7		6	F	1	2
		6	F	5	2
6AH9	5	6	E	2	10
	5	6	C	6	10
6AJ5	2	6	G	1	4
6AJ7		6	E	4	1
6AJ8		6	E	2	3
		6	E	9	3
6AJ9		6	C	3	11
		6	D	10	11
6AK5	2	6	E	1	4
6AK6		6	D	1	4
6AK7		6	C	4	1

TUBE	A	B	C	D	SKT
6AK8		6	F	8	3
		6	G	6	3
		6	G	2	3
		6	G	1	3
6AK9*	4,6	6	E	3	10
	4,6	6	E	10	10
	4,6	6	B	8	10
Normal short, 7 H-K					
6AK10		6	E	1	10
		6	E	7	10
		6	E	9	10
6AL3	1,2,3,6,7,8	6	A	9	3
6AL5		6	E	2	4
		6	E	7	4
6AL6		6	C	5	1
6AL9	8	6	E	5	10
	8	6	C	1	10
6AL11		6	C	8	10
		6	D	3	10
6AM5		6	D	1	4
6AM6		6	E	1	4
6AM8		6	D	2	3
		6	G	8	3
6AN4	6,7	6	D	2	4
6AN5	2	6	C	1	4
6AN6		6	F	2	7
		6	F	3	7
		6	F	4	7
		6	F	5	7
6AN7		6	E	2	3
		6	F	9	3
6AN8		6	D	2	3
		6	D	8	3
6AQ4	5,6	6	E	1	4
6AQ5	7	6	C	1	4
6AQ6		6	F	1	4
		6	G	6	4
		6	G	5	4
6AQ7		6	F	4	2
		6	G	3	2
		6	G	1	2

TUBE	A	B	C	D	SKT
6AQ8	9	6	D	2	3
	9	6	D	7	3
6AR5		6	C	1	4
6AR7		6	F	10	9
		6	G	6	9
		6	G	5	9
6AR8		6	D	6	3
6AR11		6	D	5	10
		6	D	10	10
6AS4		6	B	3	1
		6	B	5	1
6AS5	5	6	C	2	4
6AS6		6	E	1	4
6AS7		6	A	1	2
		6	A	4	2
6AS8		6	D	2	3
		6	F	6	3
6AS11		6	D	1	10
		6	D	3	10
		6	D	6	10
6AT6		6	F	1	4
		6	G	5	4
		6	G	6	4
6AT7		6	E	2	3
		6	E	7	3
6AT8		6	D	1	3
		6	D	9	3
6AU4	1,2,4,6	6	A	5	2
6AU5		6	A	1	1
6AU6		6	D	1	4
6AU7	9	6	D	2	3
	9	6	D	7	3
6AU8		6	D	7	3
		6	D	2	3
6AV4		6	A	1	4
		6	A	6	4
6AV5		6	A	1	1
6AV6		6	G	1	4
		6	G	5	4
		6	G	6	4
6AV8		6	D	2	3
		6	D	8	3

TUBE	A	B	C	D	SKT
6AV11		6	D	1	10
		6	D	7	10
		6	D	9	10
6AW6		6	D	1	4
6AW7		6	F	2	2
		6	G	3	2
		6	G	4	2
6AW8		6	D	7	3
		6	F	2	3
6AX2	1,2,3,6,7,8,9	6	J	10	8
6AX3	10	6	A	4	10
6AX4	1,2,4,6	6	A	5	2
6AX5		6	B	3	1
		6	B	5	1
6AX6		6	A	3	1
		6	A	5	1
6AX7	9	6	F	2	3
	9	6	F	7	3
6AX8		6	D	2	3
		6	D	9	3
6AY3	1,3,6,7,8	6	A	2	5
6AY11		6	E	10	10
		6	E	3	10
		6	F	8	10
		6	F	5	10
6AZ8		6	D	6	3
		6	D	9	3
6B3		6	B	8	8
6B4		6	C	5	1
6B6		6	F	10	1
		6	G	5	1
		6	G	4	1
6B7		6	E	10	7
		6	E	4	7
		6	E	5	7
6B8		6	E	10	1
		6	G	5	1
		6	G	4	1
6B10		6	E	3	10
		6	E	5	10
		6	F	8	10
		6	F	10	10

TUBE	A	B	C	D	SKT
6B32		6	E	2	4
		6	E	7	4
6BA3	1,3,6,7,8	6	A	2	5
6BA6		6	D	1	4
6BA7		6	D	2	3
6BA8		6	D	7	3
		6	D	2	3
6BA11		6	D	9	10
		6	E	4	10
6BC4	2,7,8,9	6	D	3	8
6BC5	2	6	E	1	4
6BC7		6	E	2	3
		6	E	6	3
		6	E	8	3
6BC8	9	6	E	2	3
	9	6	E	7	3
6BC32		6	F	1	4
		6	G	5	4
		6	G	6	4
6BD4		6	G	5	1
6BD5		6	A	1	1
6BD6		6	D	1	4
6BD7		6	F	8	3
		6	G	6	3
		6	G	2	3
6BD11		6	D	1	10
		6	E	3	10
		6	F	6	10
6BE3	4	6	A	10	10
6BE6		6	D	1	4
6BE7	8	6	F	7	3
6BE8*		6	D	1	3
		6	D	9	3
Normal short, 3					
6BF5	7	6	C	1	4
6BF6		6	F	1	4
		6	G	5	4
		6	G	6	4

TUBE	A	B	C D	SKT
6BF8		6	F 1	3
		6	F 2	3
		6	F 3	3
		6	F 7	3
		6	F 8	3
6BF11		6	F 9	3
		6	C 8	10
6BG6		6	D 3	10
		6	A 5	1
6BH3	1,3,6,7,8	6	A 2	5
6BH5	8	6	F 2	3
6BH6		6	E 1	4
6BH8		6	D 7	3
		6	D 2	3
6BH11		6	D 4	10
		6	D 6	10
		6	D 8	10
6BJ3	4	6	A 10	10
6BJ5		6	C 1	4
6BJ6		6	D 1	4
6BJ7		6	F 2	3
		6	F 6	3
		6	F 8	3
6BJ8		6	D 8	3
		6	E 6	3
		6	E 1	3
6BK4	3,4,6,8	6	G 5	1
6BK5	7	6	C 3	3
6BK6		6	F 1	4
		6	G 5	4
		6	G 6	4
6BK7	9	6	E 2	3
	9	6	E 7	3
6BK8	2	6	E 9	3
6BK11	8	6	G 1	10
	8	6	G 7	10
	8	6	G 9	10
6BL4	2	6	A 5	2
6BL7		6	C 1	2
		6	C 4	2

TUBE	A	B	C D	SKT
6BL8		6	D 2	3
		6	D 9	3
6BM5	7	6	C 1	4
6BM8		6	C 3	3
		6	F 1	3
6BN4	2,6	6	E 7	4
6BN5	3	6	C 2	3
6BN6	Emission and short test	6	H 5	4
		6	H 2	4
		Grid leakage test		
6BN7		6	C 7	3
		6	F 2	3
6BN8		6	D 1	3
		6	D 6	3
		6	E 8	3
6BN11		6	E 3	10
		6	E 7	10
6BQ5	1,6,8	6	C 2	3
6BQ6		6	A 5	1
6BQ7	9	6	E 2	3
	9	6	E 7	3
6BR3	1,2,3,6,7,8	6	A 9	3
6BR5	3,6,8	6	G 1	3
6BR7	6,7,9	6	E 2	3
	6,9	6	E 7	3
	7,9	6	E 6	3
6BR8		6	D 9	3
		6	D 1	3
6BS3	1,3,6,7,8	6	A 2	5
6BS4	6,7	6	D 2	4
6BS5	1	6	C 2	3
6BS7	1	6	G 10	3
6BS8	9	6	E 2	3
	9	6	E 7	3
6BT6		6	F 1	4
		6	G 3	4
		6	G 6	4
6BT8		6	D 8	3
		6	G 2	3
		6	G 1	3

TUBE	A	B	C	D	SKT
6BU4	3,4,6,8	6	G	5	1
6BU5	2	6	G	4	2
6BU6		6	E	1	4
		6	G	3	4
		6	G	6	4
6BU8		6	D	7	3
6BV7	7	6	E	8	3
	7	6	G	6	3
	7	6	G	1	3
6BV8		6	E	2	3
		6	E	9	3
		6	E	6	3
6BV11		6	F	6	10
		6	F	7	10
6BW3	5,6,8,9,0	6	A	4	10
6BW4		6	B	1	3
		6	B	7	3
6BW6	1,6	6	C	2	3
6BW7	3	6	D	2	3
6BW8*		6	E	6	3
		6	F	3	3
		6	F	1	3
Normal short 7					
6BW11		6	D	1	10
		6	D	3	10
6BX4		6	A	1	4
		6	A	6	4
6BX6	1	6	D	2	3
6BX7		6	C	1	2
		6	C	4	2
6BX8	9	6	E	2	3
	9	6	E	7	3
6BY5	3	6	A	4	1
	3	6	A	5	1
6BY6		6	D	1	4
6BY7	3	6	D	2	3
6BY8		6	D	1	3
		6	E	6	3
6BY11		6	F	3	10
		6	A	8	10

TUBE	A	B	C D	SKT
6BZ3	1,2,3,5,6,8,9,0	6	A 4	10
6BZ6		6	D 1	4
6BZ7	9	6	E 2	3
	9	6	E 7	3
6BZ8	9	6	E 2	3
	9	6	E 7	3
6C4	1,5	6	E 6	4
6C5		6	E 5	1
6C7		6	F 10	7
		6	F 4	7
		6	F 5	7
6C8		6	F 5	1
		6	F 10	1
6C9		6	E 1	3
		6	E 7	3
6C10	8	6	F 1	10
	8	6	F 7	10
	8	6	F 9	10
6C12		6	E 2	3
		6	E 9	3
6C16		6	D 2	3
		6	D 9	3
6C18	6	6	E 7	3
	6	6	D 9	3
6C31		6	E 5	1
6CA4	6	6	A 1	8
	6	6	A 7	8
6CA5	5	6	C 2	4
6CA7		6	A 5	1
6CA11		6	E 3	10
		6	E 6	10
		6	C 10	10
6CB5	1,3,5,6,8	6	A 4	1
6CB6		6	D 1	4
6CB11		6	D 3	10
		6	C 1	10
6CC10		6	E 1	2
		6	E 4	2
6CC31		6	E 5	4
		6	E 6	4
6CC43	9	6	D 2	3
	9	6	D 7	3

TUBE	A	B	C D	SKT
6CD3	1,2,3,5,6,8,9,0	6	A 4	10
6CD6		6	A 5	1
6CE3	1,2,3,4,5,6,8,9	6	A 10	10
6CE5	2	6	E 1	4
6CF6		6	D 1	4
6CF8		6	F 9	3
6CG3	2,4,5,6,8,9	6	A 10	10
6CG6		6	E 1	4
6CG7	9	6	E 2	3
	9	6	E 7	3
6CG8	3	6	E 1	3
	3	6	E 9	3
6CH3	1,2,3,6,8	6	A 7	5
6CH6	1,6	6	C 2	3
6CH7	8	6	E 2	3
	8	6	E 7	3
6CH8		6	E 7	3
		6	E 8	3
6CH40		6	E 2	3
		6	E 9	3
6CJ3	1,3,6,7,8	6	A 2	5
6CJ6	1,6,7	6	C 2	3
6CK3	1,2,3,6,8	6	A 7	5
6CK4	3	6	C 1	1
6CK6		6	C 2	3
6CL3	1,3,6,7,8	6	A 2	5
6CL5	5,6,8	6	A 4	1
6CL6	8,9	6	C 2	3
6CL8		6	D 1	3
		6	D 9	3
6CM3	1,3,6,7,8	6	A 2	5
6CM4	3,6,7,8,9	6	E 2	8
6CM5	1,3	6	A 5	1
6CM6	6	6	C 3	3
6CM7	2	6	D 7	3
	2	6	D 8	3
6CM8		6	E 2	3
		6	F 9	3
6CN5	8	6	C 2	3
6CN7	9	6	F 1	3
	9	6	F 2	3
	9	6	F 7	3

TUBE	A	B	C D	SKT
6CQ4	1,2,4,6	6	A 5	2
6CQ6		6	E 1	4
6CQ8		6	D 2	3
		6	D 9	3
6CR5	2,6,7	6	C 9	3
6CR6		6	E 7	4
		6	G 2	4
6CR8*		6	D 2	3
		6	D 9	3
Normal short 8				
6CS5	6,7,8	6	C 3	3
6CS6		6	D 1	4
6CS7	2	6	C 3	3
	2	6	F 7	3
6CS8		6	D 2	3
		6	E 9	3
6CT3	1,3,6,7,8	6	A 2	3
6CU5	5	6	C 2	4
6CU6		6	A 5	1
6CU7	8	6	F 1	10
	8	6	F 7	10
	8	6	F 9	10
6CU8*		6	E 7	3
		6	E 8	3
Normal short 1				
6CW4		6	F 4	6
6CW5	1,6,8	6	C 2	3
6CW7	2	6	D 3	3
	2	6	D 7	3
6CX7	8	6	E 2	3
	8	6	E 7	3
6CX8		6	C 7	3
		6	E 2	3
6CY5	2	6	E 1	4
6CY7	2	6	C 3	3
	2	6	E 7	3
6CZ5	2,6,8	6	C 3	3
6D1	2,5	6	F 6	4
6D2		6	E 2	4
		6	E 7	4

TUBE	A	B	C D	SKT
6D4		6	F 1	4
6D5		6	C 5	1
6D7	5	6	F 10	7
6D8		6	E 5	1
6D10	8	6	E 1	10
	8	6	E 7	10
	8	6	E 9	10
6DA4	1,2,4,6	6	A 5	2
6DA5	3,6,8	6	G 1	3
6DA6	1	6	D 2	3
6DA7	2	6	C 3	3
	2	6	E 7	3
6DB5	6,7,8	6	C 3	3
6DB6		6	E 1	4
6DC6		6	E 1	4
6DC8		6	D 2	3
		6	G 7	3
		6	G 8	3
6DE4	1,2,4,6	6	A 5	2
6DE6		6	D 1	4
6DE7	3	6	C 2	3
	3	6	E 7	3
6DF12		6	D 2	3
		6	G 7	3
		6	G 8	3
6DG6		6	C 5	1
6DG7	1,6	6	D 2	3
6DJ8	9	6	D 2	3
	9	6	D 7	3
6DK3	3,6,7,8	6	A 2	5
6DK6		6	D 1	4
6DK8		6	D 2	3
		6	D 9	3
6DL3	7	6	A 2	5
6DL4	1,3,6,7	6	D 9	3
6DL5	7	6	C 1	4
6DL12		6	E 8	3
		6	G 6	3
		6	G 2	3
		6	G 1	3
6DM4	1,2,4,6	6	A 5	2

TUBE	A	B	C	D	SKT
6DM8		6	E	6	5
		6	E	8	5
		6	E	9	5
6DN3	1,3,6,7,8	6	A	2	5
6DN6		6	A	5	1
6DN7		6	C	1	2
		6	F	4	2
6DQ3	2,5,6,8,9,0	6	A	4	10
6DQ4	1,2,4,6	6	A	5	2
6DQ5	5,6,8	6	A	1	1
6DQ6		6	A	5	1
6DR4	2,5	6	F	6	4
6DR6	1,6,7	6	D	2	3
6DR7	3	6	C	2	3
	3	6	E	7	3
6DR8		6	G	8	3
		6	G	2	3
		6	G	7	3
6DS4		6	G	4	6
6DS5	7	6	C	1	4
6DS8		6	F	2	3
		6	G	9	3
6DT3	2,5,6,8,9,0	6	A	4	10
6DT4	1,2,4,6	6	A	5	2
6DT5	2,6,8	6	C	3	3
6DT6		6	E	1	4
6DT8	9	6	E	2	3
	9	6	E	7	3
6DU3	1,2,3,5,6,8,9,0	6	A	4	10
6DW4	1,3,6,7,8	6	A	2	5
6DW5	6	6	C	3	3
6DX4	6,7	6	D	2	4
6DX8		6	D	8	3
		6	F	1	3
6DY4	6,7	6	D	2	4
6DY5	1	6	B	2	3
6DY7		6	C	1	1
		6	C	5	1
6DZ4	6,7	6	D	2	4
6DZ7		6	C	1	1
		6	C	5	1

TUBE	A	B	C	D	SKT
6DZ8		6	C	3	3
		6	F	1	3
6E6		6	E	3	7
		6	E	5	7
6E7	5	6	E	10	7
6E8		6	D	10	1
6EA4	1,2,3,4,7,8,9,0	6	G	6	10
6EA5	7	6	E	1	4
6EA7		6	D	1	2
		6	F	4	2
6EA8		6	D	2	3
		6	D	9	3
6EB5		6	F	2	4
		6	F	7	4
6EB8		6	C	7	3
		6	F	2	3
6EC4	7,8	6	A	2	12
6EC7	3	6	D	1	3
6ED4	2	6	G	8	12
6EF4	1,2,3,4,7,8,9,0	6	H	6	10
6EF6		6	C	5	1
6EH4	1,2,9	6	G	6	10
6EH5	5	6	C	2	4
6EH7	3	6	D	2	3
6EH8	1	6	D	2	3
	1	6	D	7	3
6EJ4	1,2,3,4,7,8,0	6	H	6	10
6EJ7	3	6	D	2	3
6EL4	3,4,8	6	J	5	1
6EL7	1	6	D	2	3
6EM5	2,6,8	6	C	3	3
6EM7		6	D	1	2
		6	F	4	2
6EN4	6	6	G	5	1
6EQ7		6	E	2	3
		6	G	8	3
6ER5	7	6	E	2	4
6ES5	7	6	E	2	4
6ES6		6	D	1	4
6ES8	9	6	D	2	3
	9	6	D	7	3
6ET6		6	D	1	4

TUBE	A	B	C D	SKT
6ET7		6	D 7	3
		6	G 3	3
		6	G 2	3
6EU7	3	6	G 8	13
	3	6	G 5	13
6EU8		6	D 2	3
		6	D 7	3
6EV5	7	6	E 1	4
6EV7		6	E 2	3
		6	E 7	3
6EV8		6	D 1	3
		6	D 9	3
6EW6		6	D 1	4
6EW7	3	6	F 7	3
	3	6	C 2	3
6EX6		6	A 5	1
6EY5		6	C 5	1
6EY6		6	C 5	1
6EZ5		6	C 5	1
6EZ8		6	E 2	3
		6	E 7	3
		6	E 9	3
6F5		6	G 10	1
6F6		6	B 5	1
6F7		6	F 10	7
		6	F 5	7
6F8		6	E 10	1
		6	E 5	1
6F10		6	D 4	1
6F11		6	E 1	4
6F12		6	D 1	4
6F18	3	6	D 1	3
6F19	3	6	D 2	3
6F21		6	E 1	4
6F22	2	6	F 9	3
6F23	1	6	D 2	3
6F24	3	6	D 2	3
6F25	3	6	D 2	3
6F26	3	6	D 2	3
6F29	3	6	D 2	3
6F30	3	6	D 2	3
6F31		6	D 1	4
6F32	2	6	E 1	4

TUBE	A	B	C D	SKT
6F33		6	E 1	4
6F35	2	6	G 1	4
6F36		6	D 1	4
6F40	1	6	F 9	3
6FA7		6	F 7	3
		6	G 3	3
6FB8		6	H 1	3
		6	H 2	3
		6	H 3	3
		6	H 6	3
		6	H 7	3
		6	H 8	3
6FC7	7	6	D 2	3
	7	6	D 6	3
6FD6		6	F 1	4
6FD7	3	6	C 2	3
	3	6	F 7	3
6FD12		6	D 2	3
		6	G 7	3
		6	G 8	3
6FE5		6	C 5	1
6FG5	2	6	D 1	4
6FG6	2,6,8	6	G 1	3
6FG7	3	6	D 9	3
	3	6	E 1	3
6FH5	7	6	E 2	4
6FH6		6	A 5	1
6FH8		6	E 2	3
		6	E 6	3
6FJ7	6	6	E 10	10
6FM7	8	6	C 3	10
	8	6	E 10	10
6FM8		6	F 2	3
		6	F 8	3
6FN5	4,6,8	6	A 5	1
6FQ5	1	6	D 2	4
6FQ7		6	D 2	3
		6	D 7	3
6FR7	3	6	C 2	3
	3	6	F 7	3
6FS5	2	6	D 1	4
6FV6		6	E 1	4

TUBE	A	B	C	D	SKT
6FV8		6	D	1	3
		6	D	9	3
6FW5		6	A	1	1
6FW8	9	6	E	2	3
	9	6	E	7	3
6FW8	9	6	E	2	3
	9	6	E	7	4
6FX4		6	A	1	4
		6	A	6	4
6FY5	1	6	E	2	4
6FY7	8	6	C	3	10
	8	6	F	10	10
6FY8		6	E	3	3
		6	F	1	3
6G6		6	D	5	1
6G11	5	6	C	8	10
	5	6	D	3	10
6GA7	2	6	A	1	10
	2	6	A	4	10
6GA8		6	D	2	3
		6	D	7	3
6G-B3A	3	6	A	5	1
6GB5	2,7,8,9	6	A	1	12
6G-B6		6	A	5	1
6G-B7	3	6	A	5	1
6G-B9		6	A	5	1
6GC5	2,6,8	6	C	3	3
6GC6	1,6,8	6	A	5	1
6GD7	3	6	D	1	4
	3	6	D	9	4
6GE5	1,4,5,6,8,9,0	6	A	3	10
6GE8		6	B	3	3
		6	F	8	3
6GF5	1,5,6,8,9,0	6	A	3	10
6GF7		6	C	2	5
		6	G	9	5
6GH8		6	D	2	3
		6	D	9	3
6GJ5	1,6,8,9	6	A	2	5
6GJ7	3	6	D	2	3
	3	6	E	9	3

TUBE	A	B	C	D	SKT
6GJ8		6	E	2	3
		6	E	9	3
6GK5	7	6	E	2	4
6GK6	3,6	6	C	2	3
6GK7	3	6	F	2	3
6G-K17	2	6	A	5	2
6GL7		6	C	4	2
		6	E	1	2
6GM5	3	6	C	6	8
6GM6		6	D	1	4
6GM8	9	6	E	2	3
	9	6	E	7	3
6GN6	4,6,8	6	E	1	4
		6	E	7	4
6GN8		6	C	7	3
		6	G	2	3
6GQ7	3	6	E	2	3
	3	6	E	6	3
	3	6	E	8	3
6GS7	3	6	E	1	3
	3	6	E	9	3
6GS8		6	D	7	3
6GT5	1,6,8	6	A	2	5
6GU5	2	6	D	1	4
6GU7		6	D	2	3
		6	D	7	3
6GV5	1,2,6,7,8,9,0	6	A	5	10
6GV7	6	6	E	7	3
	6	6	D	9	3
6GV8		6	B	9	3
		6	F	2	3
6GW5	6	6	D	2	4
6GW6		6	A	5	1
6GW8		6	C	8	3
		6	G	1	3
6GX6		6	E	1	4
6GX7	3	6	D	2	3
	3	6	D	9	3
6GY5	1,2,6,7,8,9,0	6	A	5	10
6GY6		6	E	1	4

TUBE	A	B	C	D	SKT
6GY8*		6	E	1	3
		6	E	3	3
		6	G	6	3
Normal short H-K					
6GZ5	5	6	C	2	4
6H4		6	F	4	1
6H6		6	E	3	1
		6	E	5	1
6H8		6	D	10	1
		6	G	5	1
		6	G	4	1
6H-31		6	D	1	4
6HA5	2	6	C	1	4
6HA6	8,9	6	C	2	3
6HB5	1,5,6,8,9,0	6	A	3	10
6HB6	8,9	6	C	2	3
6HB7	3	6	D	2	3
	3	6	D	9	3
6HC8		6	C	3	3
		6	F	1	3
6HD5	1,2,6,8,9,0	6	A	3	10
6HD7	3	6	F	2	3
	3	6	F	9	3
6HE5	1,5,7,8,9,0	6	A	2	10
6HE7	3,6,7,0	6	A	2	10
	3,6,7,0	6	A	9	10
6HF5	1,2,6,7,8,9,0	6	A	5	10
6HF8		6	D	7	3
		6	F	2	3
6HG5	7	6	C	1	4
6HG8	3	6	D	2	3
	3	6	D	6	3
6HJ5	1,6,8,9,0	6	A	3	10
6HJ7	3	6	F	2	3
	3	6	F	9	3
6HJ8		6	D	2	3
		6	G	8	3
6HK5	2	6	E	1	4
6HK8		6	E	7	3
6HL5	1,6,8	6	A	2	3

TUBE	A	B	C	D	SKT
6HL8		6	D	2	3
		6	D	9	3
6HM5	2	6	D	1	4
6HM6	1	6	D	2	3
6HQ5	2	6	E	1	4
6HQ6		6	D	1	4
6HR5	7	6	A	1	4
6HR6		6	D	1	4
6HS5	1,5,6,8,9,0	6	A	2	10
6HS6		6	E	1	4
6HS8		6	D	7	3
6HT5	1,3,5,7,9	6	J	6	10
6HT6	1	6	D	2	3
6HU6	2,6,8	6	G	1	3
6HU8		6	C	2	3
		6	C	6	3
6HV5	1,5,6,8,9,0	6	A	2	10
6HW8		6	E	6	3
6HZ5	1,5,6,8,9,0	6	A	2	10
6HZ6		6	F	1	4
6HZ8		6	D	7	3
		6	E	2	3
6J4	5,6	6	H	1	4
6J5		6	E	5	1
6J6		6	E	5	4
		6	E	6	4
6J7		6	F	10	1
6J8		6	F	5	1
		6	F	10	1
6J9		6	F	7	3
		6	F	9	3
		6	F	2	3
6J10	0	6	C	1	10
	0	6	H	6	10
6J11		6	D	5	10
		6	D	1	10
6JA5	1,9,0	6	A	2	10
6JA8		6	D	7	3
		6	F	2	3
6JB5	1,9,0	6	A	2	10

TUBE	A	B	C D	SKT
6JB6	6,7,9	6	A 2	5
6JB8		6	D 2	3
		6	F 7	3
6JC5	1,9,0	6	A 2	10
6JC6	1	6	D 2	3
6JC8	1	6	E 8	3
	1	6	D 2	3
6JD5	1,5,6,8,9,0	6	A 2	10
6JD6	1	6	D 2	3
6JE6	6,7,9	6	A 2	5
6JE8		6	F 2	3
		6	D 7	3
6JF5	1,5,6,7,8,9	6	A 3	10
6JF6	6,7,9	6	A 2	5
6JG5	1,2,3	6	B 7	3
6JG6	7,8	6	A 2	5
6JH5	2,5,6,8,9,0	6	A 1	10
6JH6		6	D 1	4
6JH8		6	D 6	3
6JK5	2,5,6,8,9,0	6	A 1	10
6JK6		6	D 1	4
6JK8	9	6	E 2	3
	9	6	E 7	3
6JL6		6	D 1	4
6JL8		6	C 7	3
		6	E 2	3
6JM6	1,6,7,8,9,0	6	A 5	10
6JM8		6	D 2	3
		6	D 9	3
6JN6	5,6,8,9,0	6	A 1	10
6JN8		6	D 1	3
		6	D 9	3
6JQ6	2,7	6	A 8	3
	2,7	6	G 6	3
6JR6	7,8	6	A 2	5
6JS6	1,7,9,0	6	A 5	10
6JT6	7,8	6	A 2	5
6JT8		6	D 7	3
		6	F 2	3
6JU6	6,7,9	6	A 2	5

TUBE	A	B	C D	SKT
6JU8	1,6,8	6	E 2	3
	3,6,8	6	E 1	3
	2,6,7	6	E 8	3
	2,6,9	6	E 7	3
6JV8		6	D 7	3
		6	G 2	3
6JW6	6	6	C 2	3
6JW8		6	D 9	3
		6	C 2	3
6JX8		6	E 2	3
		6	E 9	3
6JY8		6	C 7	3
		6	D 2	3
6JZ6	1,6,7,8,9,0	6	A 5	10
6JZ8	3,5,7	6	C 6	10
	3,5,7	6	E 10	10
6K5		6	F 10	1
6K6		6	B 5	1
6K7		6	E 10	1
6K8		6	E 5	1
6K11		6	F 1	10
		6	F 7	10
		6	D 9	10
6KA8		6	E 6	3
		6	F 2	3
6KD6	1,6,7,8,9,0	6	A 5	10
6KD8		6	D 2	3
		6	D 9	3
6KE6	1,6,7,8,9,0	6	A 5	10
6KE8		6	D 9	3
		6	E 2	3
6KF8		6	D 7	3
6KG6	6,7,8	6	A 1	12
6KH8		6	C 2	3
		6	C 6	3
6KL8		6	D 2	3
		6	F 8	3
6KM6	6,7,9	6	A 2	5
6KM8		6	F 7	3
		6	H 3	3

TUBE	A	B	C D	SKT
6KN6	1,6,7,8,9,0	6	A 5	10
6KN8	9	6	D 2	3
	9	6	D 7	3
6KR8		6	D 2	3
		6	C 7	3
6KS6		6	H 5	4
	Emission and short test			
		6	H 2	4
	Grid leakage test			
6KS8		6	F 2	3
		6	C 7	3
6KT6	3	6	D 2	3
6KT8		6	D 7	3
		6	G 2	3
6KU8		6	D 7	3
		6	G 3	3
		6	G 2	3
6KV6	7,8	6	A 2	5
6KV8		6	C 7	3
		6	F 2	3
6KW6	2,8,9	6	B 1	12
6KX6		6	G 1	3
		6	G 10	3
6KX8		6	G 1	3
		6	G 9	3
6KY6	3,6	6	C 2	3
6KY8		6	C 2	5
		6	G 9	5
6KZ8		6	D 2	3
		6	D 9	3
6L5		6	F 5	1
6L6		6	C 5	1
6L7		6	F 10	1
6L10		6	C 4	1
6L12		6	D 2	3
		6	D 7	3
6L13	9	12	F 2	3
	9	12	F 7	3
6L16	2	6	D 3	3
	2	6	D 7	3
6L31	7	6	C 1	4
6L34	5,6	6	E 1	4

TUBE	A	B	C D	SKT
6L40	1,6,8	6	C 2	3
6L41	8	6	C 9	3
6L43	1,8	6	C 2	3
6LB6	1,7,9,0	6	A 5	10
6LB8		6	D 2	3
		6	D 7	3
6LC6	3,4,8	6	J 9	1
6LC8*		6	E 6	3
		6	F 2	3
	Normal short 3			
6LD6	6	6	C 2	5
6LD8		6	D 7	3
		6	D 2	3
6LD12		6	F 8	3
		6	G 6	3
		6	G 2	3
		6	G 1	3
6LD13		6	F 8	3
		6	G 6	3
		6	G 2	3
6LE8		6	D 9	3
6LF6	1,6,7,8,9,0	6	A 5	10
6LF8		6	D 7	3
		6	G 2	3
6LG6	2,3,6,7,8,9,0	6	A 5	10
6LH6	3,4,8	6	H 5	1
6LJ6	1,4,8	6	H 5	1
6LJ8	3	6	D 1	3
	3	6	D 9	3
6LM8		6	D 2	3
		6	D 9	3
6LN8		6	D 2	3
		6	D 9	3
6LP8		6	D 7	3
		6	D 2	3
6LP12		6	C 3	3
		6	F 1	3
6LQ6	6,7,9	6	A 2	5
6LQ8		6	D 2	3
		6	D 7	3
6LR6	1,6,7,8,9,0	6	A 5	10

TUBE	A	B	C D	SKT
6LR8		6	C 2	5
		6	D 9	5
6LT8	6,7,8	6	E 9	3
	1	6	C 6	3
	1	6	C 8	3
6LU6		6	B 1	4
6LU8	3,5,7	6	B 6	10
	3,5,7	6	E 10	10
6LV6	1,4,9,0	6	A 5	10
6LW6	1,6	6	A 5	2
6LX6	1,6,7,8,9,0	6	A 5	10
6LX8		6	D 9	3
		6	C 2	3
6LY8		6	F 2	3
		6	C 7	3
6LZ6	6,7,9	6	A 2	5
6M5	6,8	6	C 2	3
6M6		6	F 5	1
6M7		6	D 10	1
6M8		6	D 10	1
		6	F 5	1
		6	G 8	1
6M11		6	D 2	10
		6	E 5	10
		6	E 8	10
6MA6*	1,2,5	6	G 6	2
	Normal short 3, H-K			
6MB6	1,7,9,0	6	A 5	10
6MB8		6	D 1	3
		6	E 9	3
6MC6	6,7,9	6	A 2	5
6MD8		6	D 6	5
		6	D 9	5
		6	D 8	5
6ME6	6,7,9	6	A 2	5
6ME8		6	D 6	3
6MF8	3,5,7	6	A 6	10
	3,5,7	6	E 10	10
6MG8		6	D 9	3
		6	E 2	3
6M-H1	5,6	6	G 1	4
6MH6	1,7,9,0	6	A 5	10

TUBE	A	B	C D	SKT
6M-HH3		6	E 5	4
		6	E 6	4
6MJ8		6	D 1	10
		6	D 8	10
		6	D 10	10
6MK8		6	E 7	3
6ML8		6	D 6	3
		6	D 8	3
		6	D 9	3
6MN8		6	D 1	10
		6	D 8	10
		6	D 10	10
6M-P20		6	C 1	4
6MQ8		6	E 2	3
		6	D 9	3
6MU8		6	C 2	3
		6	E 9	3
6MV8		6	F 2	3
		6	D 7	3
6MY8	7	6	F 2	3
	7	6	D 7	3
6N3	1,2,6,7,8	6	A 9	3
6N4	6,7	6	D 1	4
6N7		6	E 4	1
		6	E 5	1
6N8		6	F 2	3
		6	G 7	3
		6	G 8	3
6N-H10		6	G 4	6
6NK7		6	F 10	1
6N-L7		6	F 4	6
6P5		6	F 5	1
6P7*		6	F 10	1
	Normal short 3, H-K			
6P8		6	E 10	1
		6	F 5	1
6P9	7	6	C 1	4
6P15	1,6,8	6	C 2	3
6P17		6	C 1	4
6P25		6	F 5	1

TUBE	A	B	C	D	SKT
6PL12		8	C	3	3
		8	F	1	3
6PP22	2,8	6	D	9	3
6Q4	7	6	G	1	8
6Q5		6	F	5	1
6Q6		6	F	10	1
		6	G	5	1
		6	G	4	1
6Q7		6	F	10	1
		6	G	5	1
		6	G	4	1
6Q8		6	E	5	1
6Q11		6	D	9	10
		6	F	7	10
		6	F	1	10
6QL6	1,2,3	6	B	9	3
6R3	1,2,3,6,7,8	6	A	9	3
6R4		6	C	1	3
6R6		6	E	10	1
6R7		6	E	10	1
		6	G	5	1
		6	G	4	1
6R8		6	E	8	3
		6	G	6	3
		6	G	2	3
		6	G	1	3
6R-HH2		6	E	2	3
		6	E	7	3
6R-HH8	9	6	D	2	3
	9	6	D	7	3
6R-K19	1,2,3,6,7,8	6	A	9	3
6R-P15	2	6	A	1	3
6R-P22	8,9	6	A	2	3
6S2	1,2,3,6,7,8,9	6	H	10	8
6S4	1,6,7,8	6	B	3	3
6S6		6	D	10	1
6S7		6	E	10	1
6S8		6	F	10	2
		6	G	4	2
		6	G	3	2
		6	G	1	2

TUBE	A	B	C	D	SKT
6SA7		6	D	5	1
6SB7		6	D	5	1
6SC7		6	F	3	2
		6	F	4	2
6SD7		6	D	4	1
6SE7		6	F	4	1
6SF5		6	F	3	2
6SF7		6	D	2	2
		6	G	5	2
6SG7	5	6	D	4	1
6SH7	5	6	D	4	1
6SH8		6	E	7	3
6SJ7		6	E	4	1
6SK7		6	D	4	1
6SL7		6	F	1	2
		6	F	4	2
6SN7		6	E	1	2
		6	E	4	2
6SQ7		6	F	2	2
		6	G	4	2
		6	G	5	2
6SR7		6	E	2	2
		6	G	4	2
		6	G	5	2
6SS7		6	E	4	1
6ST1		6	D	9	3
		6	F	2	3
6ST7		6	F	2	2
		6	G	4	2
		6	G	5	2
6SU7		6	F	1	2
		6	F	4	2
6SV7		6	F	2	2
		6	G	5	2
6SZ7		6	F	2	2
		6	G	4	2
		6	G	5	2
6T1	6,7	6	D	2	4
6T4	6,7	6	D	2	4

TUBE	A	B	C	D	SKT
6T6		6	E	10	1
		6	F	10	1
		6	G	5	1
		6	G	4	1
6T7		6	G	10	1
		6	G	5	1
		6	G	4	1
6T8		6	F	8	3
		6	G	6	3
		6	G	2	3
		6	G	1	3
6T9		6	C	8	10
		6	D	4	10
6T10		6	G	3	10
		6	B	8	10
6TE8		6	F	5	1
		6	F	10	1
6TE9		6	F	7	3
		6	F	8	3
6TH8		6	F	5	1
		6	F	10	1
6U3	1,2,6,7,8	6	A	9	3
6U4	1,2,4,6	6	A	5	2
6U6		6	C	5	1
6U7		6	E	10	1
6U8		6	D	2	3
		6	D	9	3
6U9		6	D	3	11
		6	D	10	11
6U10		6	E	1	10
		6	E	7	10
		6	E	9	10
6V3	3	6	A	7	8
6V4	6	6	A	1	8
	6	6	A	7	8
6V5		6	C	5	2
6V6		6	C	5	1
6V7		6	F	10	1
		6	G	5	1
		6	G	4	1

TUBE	A	B	C	D	SKT
6V8		6	F	6	3
		6	G	9	3
		6	G	7	3
		6	G	2	3
6V9		6	D	8	11
		6	E	3	11
6W2		6	J	10	3
Insert leads into pins 1 & 5, use top cap					
6W4	1,2,4,6	6	A	5	2
6W5		6	B	3	1
		6	B	5	1
6W6		6	C	5	1
6W7		6	F	10	1
6W9		6	C	8	11
		6	D	1	11
6X2		6	J	10	3
Insert leads into pins 1&5, use top cap					
6X4		6	B	1	4
		6	B	6	4
6X5		6	B	5	1
		6	B	3	1
6X6		6	F	3	1
		6	G	5	1
6X8		6	E	2	3
		6	E	7	3
6X9		6	D	3	11
		6	E	10	11
6Y3		6	F	10	1
6Y6		6	C	5	1
6Y7		6	F	4	1
		6	F	5	1
6Y9		6	C	8	11
		6	D	1	11
6Y10		6	C	3	10
		6	F	8	10
6Z4		6	A	1	4
		6	A	6	4
6Z7		6	F	4	1
		6	F	5	1
6Z10	0	6	C	1	10
	0	6	H	7	10

TUBE	A	B	C	D	SKT
6Z31		6	B	1	4
		6	B	6	4
6ZY5		6	A	3	1
		6	A	5	1
7A4	5	6	E	6	9
7A5		6	C	6	9
7A6		6	E	3	9
		6	E	6	9
7A7		6	E	6	9
7A8		6	E	4	9
7AB7	6,7	6	F	5	1
7AD7		6	C	6	9
7AF7		6	E	4	9
		6	E	5	9
7AG7		6	E	6	9
7AH7		6	E	6	9
7AJ7		6	E	6	9
7AK7		6	C	6	9
7AN7	7	7	E	2	3
	7	7	E	6	3
7AU7	9	7	D	2	3
	9	7	D	7	3
7B4		6	F	6	9
7B5		6	C	6	9
7B6	4	6	F	3	9
	4	6	G	5	9
	4	6	G	6	9
7B7		6	E	6	9
7B8		6	F	4	9
7BL8		6	E	2	3
		6	E	9	3
7C4		6	F	4	9
7C5		6	C	6	9
7C6	4	6	F	3	9
	4	6	G	5	9
	4	6	G	6	9
7C7		6	E	6	9
7D7		6	D	6	9
		6	F	4	9
7D9		6	D	1	4
7D10	1,6	6	C	2	3
7D11		6	A	5	1

TUBE	A	B	C	D	SKT
7DJ8		7	D	2	3
		7	D	7	3
7E5*	3,5,6	6	F	1	9
	Normal short 7, H-K				
7E6	4	6	F	3	9
	4	6	G	5	9
	4	6	G	6	9
7E7		6	E	6	9
		6	G	4	9
		6	G	3	9
7ED7	3	7	E	2	3
7EK7	7	7	E	2	3
	7	7	E	6	3
7ES8		7	D	2	3
		7	D	7	3
7EY6		7	C	5	1
7F7		6	F	4	9
		6	F	5	9
7F8		6	F	1	1
		6	F	8	1
7FC7	7	7	D	2	3
	7	7	D	6	3
7G7		6	F	6	9
7G8		6	F	4	9
		6	F	5	9
7GS7	3	7	E	1	3
		7	E	9	3
7GV7	6	7	E	9	3
	6	7	D	7	3
7H7		6	D	6	9
7HG8	3	7	D	2	3
	3	7	D	6	3
7J7		6	F	4	9
		6	E	6	9
7K7		6	F	4	9
		6	G	5	9
		6	G	6	9
7KY6	3,6	7	C	2	3
7KZ6	3,6	7	C	2	3
7L7		6	F	6	9
7M-P18	7	7	A	1	4

TUBE	A	B	C	D	SKT
7N7		6	E	4	9
		6	E	5	9
7Q7		6	E	4	9
		6	F	6	9
7R7		6	G	4	9
		6	G	3	9
7S7		6	D	6	9
		6	E	4	9
7T7		6	E	6	9
7V7		6	E	6	9
7W7	4	6	D	6	9
7X6		6	B	3	9
		6	B	6	9
7X7		6	F	3	9
		6	G	5	9
		6	G	6	9
7Y4	4	6	B	3	9
	4	6	B	6	9
7Z4	4	6	B	3	9
	4	6	B	6	9
8A8		8	D	2	3
		8	E	9	3
8AC9*		8	D	2	10
	2	8	D	3	10
		8	D	9	10
	Normal short 3				
8AC10	8	8	E	1	10
	8	8	E	7	10
	8	8	E	9	10
8AG10		8	D	1	10
8AL9	8	8	E	5	10
	8	8	C	1	10
8AR11		8	D	5	10
		8	D	10	10
8AU8		8	D	7	3
		8	E	2	3
8AV11		8	D	1	10
		8	D	7	10
		8	D	9	10

TUBE	A	B	C	D	SKT
8AW8		8	D	7	3
		8	F	2	3
8B8		8	C	3	3
		8	F	1	3
8B10		8	E	3	10
		8	E	5	10
		8	F	8	10
		8	F	10	10
8BA8		8	D	7	3
		8	E	2	3
8BA11		8	D	4	10
		8	E	9	10
8BH8		8	D	7	3
		8	E	2	3
8BM11		8	D	6	10
		8	E	1	10
8BN8		8	D	1	3
		8	D	6	3
		8	E	8	3
8BN11		8	E	3	10
		8	E	7	10
8BQ5	1,6,8	8	C	2	3
8BQ7		8	E	2	3
		8	E	7	3
8BQ11		8	E	5	10
		8	E	10	10
8BU11		8	D	4	10
		8	D	6	10
		8	D	8	10
8BV7	7	8	E	8	3
	7	8	G	6	3
	7	8	G	1	3
8CB11		8	C	5	10
		8	C	10	10
8CG7	9	8	E	2	3
	9	8	E	7	3
8CM7	2	8	D	7	3
	2	8	D	8	3

TUBE	A	B	C	D	SKT
8CN7	9	8	F	1	3
	9	8	F	2	3
	9	8	F	7	3
8CS7	2	8	C	3	3
	2	8	F	7	3
8CW5	1,6,8	8	C	2	3
8CX8		8	C	7	3
		8	E	2	3
8CY7	2	8	C	3	3
	2	8	E	7	3
8D3		6	E	1	4
8D4		6	F	10	1
8D5	6,7,9	9	E	2	3
	6,9	9	E	7	3
	7,9	9	E	6	3
8D6	3	6	D	2	3
8D7	1	6	G	10	3
8D8	2	8	G	9	3
8DX8		8	D	8	3
		8	F	1	3
8EB8		8	C	7	3
		8	F	2	3
8EM5	2,6,8	8	C	3	3
8ET7		8	D	7	3
		8	G	3	3
		8	G	2	3
8FQ7		8	D	2	3
		8	E	7	3
		8			
8GJ7	3	8	D	2	3
	3	8	E	9	3
8GK6	3	8	C	2	3
8GM6		8	D	1	4
8GM8		8	C	7	3
		8	G	2	3
8GN8		8	C	7	3
		8	F	2	3
8GU7		8	D	2	3
		8	D	7	3
8GX7	3	8	D	2	3
	3	8	D	9	3
8HA6	8,9	8	C	2	3

TUBE	A	B	C	D	SKT
8HG8	3	8	D	2	3
	3	8	D	6	3
8JE8		8	D	7	3
		8	F	2	3
8JK8	9	8	E	2	3
	9	8	E	7	3
8JL8		8	C	7	3
		8	E	2	3
8JT8		8	D	7	3
		8	F	2	3
8JU8	1,6,8	8	E	2	3
	3,6,8	8	E	1	3
	2,6,7	8	E	8	3
	2,6,9	8	E	7	3
8JV8		8	D	7	3
		8	G	2	3
8KA8		8	E	6	3
		8	F	2	3
8KR8		8	D	2	3
		8	B	7	3
8KS8		8	F	2	3
		8	C	7	3
8LC8*		8	E	6	3
		8	F	2	3
Normal short 3					
8LE8		8	D	9	3
8LN8		8	D	2	3
		8	D	9	3
8LS6	3,6	8	D	2	3
8LT8	1	8	C	6	3
	1	8	C	8	3
	6,7,8	8	E	9	3
8MU8		8	C	2	3
		8	E	9	3
8R-HP1		8	C	3	3
		8	F	1	3
8R-LP1		8	C	3	3
		8	F	1	3
8SN7		8	E	1	2
		8	E	4	2

TUBE	A	B	C	D	SKT
8TL8	6,7,8	8	E	9	3
	1	8	C	6	3
	1	8	C	8	3
8U9		8	D	3	11
		8	D	10	11
8X9		8	D	3	11
		8	E	10	11
9A8		9	D	2	3
		9	D	9	3
9AB4	2	9	E	6	4
9AH9	5	9	E	2	10
	5	9	C	6	10
9AK8		9	F	8	3
		9	G	6	3
		9	G	2	3
		9	G	1	3
9AK10		9	E	1	10
		9	E	7	10
		9	E	9	10
9AM10	8	9	E	1	10
	8	9	E	7	10
	8	9	E	9	10
9AQ8		9	D	2	3
		9	D	7	3
9AU7	9	9	D	2	3
	9	9	D	7	3
9AU8		9	E	2	3
		9	E	7	3
9BJ11		9	E	1	10
		9	E	6	10
9BM5		9	C	1	4
9BR7	6,7,9	9	E	2	3
	6,9	9	E	7	3
	7,9	9	E	6	3
9BR8		9	D	9	3
		9	E	1	3
9BW6	1,6	9	C	2	3
9CG8	3	9	E	1	3
	3	9	E	9	3
9CL8		9	D	1	3
		9	D	9	3
9D6		9	F	1	4

TUBE	A	B	C	D	SKT
9D7	1	9	E	2	3
9DZ8		9	C	3	3
		9	F	1	3
9EA8		9	D	9	3
		9	D	2	3
9ED4	2,3,6,7,9	9	G	8	12
9EF6		9	C	5	1
9GH8		9	D	2	3
		9	D	9	3
9GV8		9	B	9	3
		9	F	2	3
9JC8	1	9	E	8	3
	1	9	D	2	3
9JW8		9	D	9	3
		9	C	2	3
9KC6		9	D	2	3
9KX6	3	9	C	2	3
9KZ6	3,6	9	C	2	3
9KZ8		9	D	2	3
		9	D	9	3
9LA6	3,6	9	C	2	3
9MP12		9	C	1	4
9ML8		9	D	6	3
		9	D	8	3
		9	D	9	3
9MN8		9	D	1	10
		9	D	8	10
		9	D	10	10
9P9	7	9	C	1	4
9R-A6	2	9	C	7	3
9R-AL1	3	9	C	2	3
	3	9	F	7	3
9R-HH2		9	D	2	3
		9	D	9	3
9RHR2		9	D	2	3
		9	D	9	3
9U8		9	D	2	3
		9	D	9	3
9V9		9	D	8	11
		9	E	3	11

TUBE	A	B	C D	SKT
9X8		9	E 2	3
		9	E 7	3
10AJ5	1,9,0	10	A 2	10
10AL11		10	C 8	10
		10	D 3	10
10BQ5	1,6,8	10	C 2	3
10C8		10	D 8	3
		10	E 2	3
10C14		19	E 2	3
		19	F 9	3
10CW5	1,6,8	10	C 2	3
10D2		12	E 2	4
		12	E 7	4
10DA7	2	10	C 3	3
	2	10	E 7	3
10DE7	3	10	C 2	3
	3	10	E 7	3
10DR7	3	10	C 2	3
	3	10	E 7	3
10DX8		10	D 8	3
		10	F 1	3
10EB8		10	C 7	3
		10	F 2	3
10EG7		10	D 1	2
		10	E 4	2
10EM7		10	C 1	2
		10	F 4	2
10EW7	3	10	B 2	3
	3	10	F 7	3
10F9		12	E 2	4
		12	E 7	4
10F18	1	12	D 2	3
10FD7	3	10	F 1	3
	3	10	C 2	3
10FD12		19	E 2	3
		19	G 7	3
		19	G 8	3
10FH6		10	A 5	1
10FR7	3	10	C 2	3
	3	10	F 7	3
10GF7		10	C 2	5
		10	G 9	5

TUBE	A	B	C D	SKT
10GK6	3,6	10	C 2	3
10GN8		10	C 7	3
		10	G 2	3
10GV8		10	C 9	3
		10	E 2	3
10HA6	3,8,9	10	C 2	3
10HF8		10	D 7	3
		10	F 2	3
10J10		10	C 1	10
		10	H 6	10
10JA5	1,9,0	10	A 2	10
10JA8		10	D 7	3
		10	F 2	3
10JT8		10	D 7	3
		10	F 2	3
10JY8		10	C 7	3
		10	D 2	3
10KR8		10	C 7	3
		10	D 2	3
10KU8		10	D 7	3
		10	G 3	3
		10	G 2	3
10LB8		10	D 2	3
		10	D 7	3
10L14		26	D 2	3
		26	D 7	3
10LD3	4	14	F 6	9
	4	14	G 5	9
	4	14	G 3	9
10LD6	9	12	E 2	3
	9	12	E 7	3
10LD12		28	F 8	3
		28	G 6	3
		28	G 2	3
		28	G 1	3
10LD13	9	14	F 2	3
	9	14	G 6	3
	9	14	G 8	3
10LE8		10	D 9	3
10LW8		10	F 2	3
		10	C 7	3

TUBE	A	B	C	D	SKT
10LY8		10	F	2	3
		10	C	7	3
10LZ8		10	E	2	3
		10	D	7	3
10P18	1,6,8	45	C	2	3
10PL12		50	C	3	3
		50	E	1	3
10PL82		50	C	3	3
		50	E	1	3
10T10		10	G	3	10
		10	B	8	10
10Z10		10	C	1	10
		10	H	6	10
11AF9*	6	11	D	1	11
	6	11	D	8	11
	Normal short 2				
11AR11		11	D	10	10
		11	D	5	10
11BM8		11	C	3	3
		11	F	1	3
11BQ11		11	E	5	10
		11	E	10	10
11BT11*		11	E	3	10
		11	E	5	10
		11	D	1	10
	Normal short 6				
11C5	5	11	C	2	4
11CA11*		11	E	3	10
		11	E	6	10
		11	C	8	10
	Normal short 7				
11CF11		10	B	5	10
		10	E	9	10
		10	E	1	10
11CH11*		11	B	1	10
		11	E	3	10
		11	E	5	10
	Normal short 6				
11CY7	2	11	C	3	3
	2	11	E	7	3
11D12		6	A	1	2
		6	A	4	2

TUBE	A	B	C	D	SKT
11DS5	7	11	C	1	4
11E13	9	12	C	1	3
	9	12	C	3	3
11FY3	8	11	C	3	10
	8	11	F	10	10
11FY7	8	11	C	3	10
11HM7	3,6	11	C	2	3
11JE8		11	F	2	3
		11	D	7	3
11KV8		11	C	7	3
		11	F	2	3
11LQ8		11	D	2	3
		11	D	7	3
11LT8	6,7,8	11	E	9	3
	1	11	C	6	3
	1	11	C	8	3
11LY6	3,6	11	C	2	3
11MS8		11	B	2	3
		11	F	9	3
11R3	1,2,3,6,7,8	11	A	9	3
11Y9		11	C	8	11
		11	D	1	11
12A3		6	F	4	9
12A4	3	12	C	7	8
12A5	6	12	B	4	7
12A6		12	C	5	1
12A7		12	E	10	7
12A8		12	E	5	1
12AB5	1,2,3	12	B	6	3
12AC6		12	F	1	4
12AC10		12	E	1	10
		12	E	7	10
		12	E	9	10
12AD5	7	12	F	2	3
12AD6		12	F	1	4
12AD7	9	12	F	2	3
	9	12	F	7	3
12AE6		12	F	1	4
		12	G	5	4
		12	G	6	4
12AE7	9	12	F	2	3
	9	12	G	7	3

TUBE	A	B	C	D	SKT
12AE10		12	F	3	10
		12	C	8	10
12AF3	1,2,3,6,7,8	12	A	9	3
12AF6		12	F	1	4
12AF11		15	C	1	10
		15	F	3	10
		15	F	6	10
12AG6		12	F	1	4
12AG7		12	C	4	1
12AH6		12	D	1	4
12AH7		12	F	1	2
		12	F	5	2
12AH8	9	12	F	2	3
	9	12	F	7	3
12AJ6		12	F	1	4
		12	G	5	4
		12	G	6	4
12AJ7		12	F	2	3
		12	G	9	3
12AJ8		12	E	2	3
		12	E	9	3
12AK7		12	C	4	1
12AL5		12	E	2	4
		12	E	7	4
12AL8		12	E	3	3
		12	G	8	3
12AL11		12	C	8	10
		12	E	3	10
12AQ5	7	12	C	1	4
12AS5	5	12	C	2	4
12AT6		12	F	1	4
		12	G	5	4
		12	G	6	4
12AT7	9	12	E	2	3
	9	12	E	7	3
12AU6		12	D	1	4
12AU7	9	12	D	2	3
	9	12	D	7	3
12AU8		12	D	7	3
		12	D	2	3
12AV5		12	A	1	1

TUBE	A	B	C	D	SKT
12AV6		12	F	1	4
		12	G	5	4
		12	G	6	4
12AV7	9	12	D	2	3
	9	12	D	7	3
12AW6		12	E	1	4
12AX3	10	12	A	4	10
12AX4	1,2,4,6	12	A	5	2
12AX7	9	12	F	2	3
	9	12	F	7	3
12AY3	1,3,6,7,8	12	A	2	5
12AY7	9	12	F	2	3
	9	12	F	7	3
12AZ7	9	12	E	2	3
	9	12	E	7	3
12B3		12	A	7	8
12B4	3	12	C	7	8
12B6		12	F	10	1
		12	G	5	1
12B7		12	E	6	9
12B8		12	E	10	1
		12	F	8	1
12BA6		12	D	1	4
12BA7		12	D	2	3
12B-B14	2,7,8,9	13	A	1	12
12BC22		12	F	1	4
		12	G	5	4
		12	G	6	4
12BC32		12	F	1	4
		12	G	5	4
		12	G	6	4
12BD5		12	A	1	1
12BD6		12	D	1	4
12BE3	4	12	A	10	10
12BE6		12	D	1	4
12BF6		12	F	1	4
		12	G	5	4
		12	G	6	4
12BF11		12	C	8	10
		12	D	3	10
12BH7	9	12	D	2	3
	9	12	D	7	3

TUBE	A	B	C	D	SKT
12BJ3	4	12	A	10	10
12BK5	7	12	C	3	3
12BK6		12	F	1	4
		12	G	5	4
		12	G	6	4
12BL6		12	F	1	4
12BM5	7	12	C	1	4
12BN6	Emission and short test	12	H	5	4
		12	H	2	4
		Grid leakage test			
12BQ6		12	A	5	1
12BR3	1,2,3,6,7,8	12	A	9	3
12BR7	6,7,9	12	E	2	3
	6,9	12	E	7	3
	7,9	12	E	6	3
12BS3	1,3,6,7,8	12	A	2	5
12BT3	4	12	A	10	10
12BT6		12	F	1	4
		12	G	5	4
		12	G	6	4
12BU6		12	E	1	4
		12	G	5	4
		12	G	6	4
12BV7	6,9	12	C	2	3
12BV11		12	F	6	10
		12	F	7	10
12BW4		12	B	1	3
		12	B	7	3
12BX6	1	12	D	2	3
12BY3	1,2,3,6,7,8	12	A	9	3
12BY7	6,9	12	C	2	3
12BZ6		12	D	1	4
12BZ7	9	12	F	2	3
	9	12	F	7	3
12C5	5	12	C	2	4
12C8		12	E	10	1
		12	G	4	1
		12	G	5	1
12CA5	5	12	C	2	4
12CK3	1,3,6,7,8	12	A	2	5
12CL3	1,3,6,7,8	12	A	2	5

TUBE	A	B	C	D	SKT
12CM6	6	12	C	3	3
12CN5	5	12	C	2	4
12CR5	6,7,8	12	C	3	3
12CR6		12	E	7	4
		12	G	2	4
12CS5	6,7,8	12	C	3	3
12CS6		12	D	1	4
12CT3	1,3,6,7,8	12	A	2	3
12CT8		12	D	8	3
		12	E	2	3
12CU5	5	12	C	2	4
12CU6		12	A	5	1
12CX6		12	F	1	4
12CY6		12	F	1	4
12D4	1,2,4,6	12	A	5	2
12DA6	6	12	D	2	3
12DB5	6,7,8	12	C	3	3
12DE8		12	F	3	3
		12	F	1	3
12DF5	9	12	B	1	3
	9	12	B	6	3
12DF7	9	12	F	2	3
	9	12	F	7	3
12DJ8	9	12	D	2	3
	9	12	D	7	3
12DK5	6,9	12	F	2	3
12DK6		12	D	1	4
12DK7	8	12	E	1	3
	8	12	G	6	3
	8	12	G	9	3
12DL8		12	C	3	3
		12	G	1	3
		12	G	9	3
12DM4	1,2,4,6	12	A	5	2
12DM5	5	12	C	2	4
12DM7	9	12	E	2	3
	9	12	E	7	3
12DM8		12	D	6	5
		12	D	8	5
		12	D	9	5
12DQ4	1,2,4,6	12	A	5	2
12DQ6		12	A	5	1

TUBE	A	B	C	D	SKT
12DQ7	6,9	12	C	2	3
12DS7		12	D	3	3
		12	G	1	3
12DT5	2,6,8	12	C	3	3
12DT6		12	E	1	4
12DT7	9	12	G	2	3
	9	12	G	7	3
12DT8	9	12	E	2	3
	9	12	E	7	3
12DU7	8	12	D	1	3
	8	12	G	7	3
	8	12	G	9	3
12DV7	9	12	G	2	3
	9	12	G	3	3
	9	12	G	7	3
12DV8		12	D	3	3
		12	G	1	3
12DW4	1,3,6,7,8	12	A	2	5
12DW5	6	12	C	3	3
12DW7	9	12	D	2	3
	9	12	F	7	3
12DW8		12	E	2	3
		12	F	7	3
		12	F	9	3
12DY8		12	D	1	3
		12	F	9	3
12DZ6		12	F	1	4
12DZ8		12	C	3	3
		12	F	1	3
12E5		12	F	5	1
12E13		6	C	5	1
12EA6		12	F	1	4
12EC8		12	F	1	3
		12	F	9	3
12ED5	5	12	C	2	4
12EF6		12	C	5	1
12EG6		12	F	1	4
12EH5	5	12	C	2	4
12EK6		12	E	1	4
12EL6		12	F	1	4
		12	G	5	4
		12	G	6	4

TUBE	A	B	C	D	SKT
12EM6	7,8	12	E	1	3
	7,8	12	G	9	3
12EN6		12	C	5	1
12EQ7		12	E	2	3
		12	G	8	3
12EZ6		12	F	1	4
12F5		12	F	10	1
12F8		12	F	8	3
		12	G	6	3
		12	G	1	3
12F31		12	D	1	4
12FA6		12	F	1	4
12FB5	1	12	C	2	3
12FK6		12	F	1	4
		12	G	5	4
		12	G	6	4
12FM6		12	F	1	4
		12	G	5	4
		12	G	6	4
12FQ7		12	D	2	3
		12	D	7	3
12FQ8		12	G	2	3
		12	G	7	3
12FR8	1,2,8,9	12	F	3	3
	8	12	G	1	3
	1,2	12	G	8	3
	Normal Short H-K				
12FS5	2	12	D	1	4
12FT6		12	E	1	4
		12	G	5	4
		12	G	6	4
12FV7	9	12	D	2	3
	9	12	D	7	3
12FX5	5	12	C	2	4
12FX8	6,8	12	F	2	3
	7	12	F	6	3
12FY8		12	E	3	3
		12	F	1	3
12G4	2,5	12	E	6	4

TUBE	A	B	C D	SKT
12G7		12	F 10	1
		12	G 5	1
		12	G 4	1
12G8	9	12	E 3	3
	9	12	E 8	3
12G11	5	12	C 8	10
	5	12	D 3	10
12GA6		12	F 1	4
12GB3	3	12	A 5	1
12G-B6		12	A 5	1
12GB7	3	12	A 5	1
12GC6	1,6,8	12	A 5	1
12GE5	1,5,6,8,9,0	12	A 3	10
12GJ5	1,6,8,9	12	A 2	5
12GK17		12	A 5	2
12GN6		12	E 1	4
		12	E 7	4
12GN7	6,9	12	D 2	3
12GT5	1,6,8	12	A 2	5
12GV5	1,2,6,7,8,9,0	12	A 5	10
12GW6		12	A 5	1
12H4	2,5	12	E 6	4
12H6		12	F 3	1
		12	F 5	1
12H31		12	D 1	4
12HE7	3,6,7,0	12	A 2	10
	3,6,7,0	12	A 9	10
12HG7	6,9	12	C 2	3
12HL5	1,6,8	12	A 2	3
12HL7	6,9	12	C 2	3
12HU8		12	C 2	3
		12	C 6	3
12J5		12	E 5	1
12J7		12	F 10	1
12J8		12	D 1	3
		12	F 8	3
		12	F 9	3
12JB6	6,7,9	12	A 2	5
12JF5	1,5,6,8,9,0	12	A 3	10
12JN6	5,6,8,9,0	12	A 1	10

TUBE	A	B	C D	SKT
12JN8		12	D 1	3
		12	D 9	3
12JQ6	2,7	12	A 8	3
	2,7	12	G 6	3
12JS6	1,6,7,8,9,0	12	A 5	10
12JT6	7,8	12	A 2	5
12JZ8	6	12	C 7	10
	6	12	E 10	10
12K5	6	12	D 5	4
12K7		12	E 10	1
12K8		12	E 5	1
12KL8		12	D 2	3
		12	F 8	3
12L6		12	C 5	1
12L8*	3	12	C 1	2
	1	12	C 3	2
	Normal short 6, H-K			
12MD8		12	D 6	5
		12	D 8	5
		12	D 9	5
12NK7		12	F 10	1
12Q7		12	F 10	1
		12	G 5	1
		12	G 4	1
12R5	5	12	C 2	4
12R-K19	1,3,6,7,8,9	12	A 2	3
12R-LL3	9	12	E 2	3
	9	12	E 7	3
12R-LL5		12	D 2	3
		12	D 7	3
12R-R19	1,2,3,6,7,8	12	A 9	3
12S8		12	F 10	2
		12	G 4	2
		12	G 3	2
		12	G 1	2
12SA7		12	D 5	1
12SC7		12	F 3	2
		12	F 4	2
12SF5		12	F 3	2
12SF7		12	D 2	2
		12	G 5	2

TUBE	A	B	C	D	SKT
12SG7	5	12	D	4	1
12SH7	5	12	D	4	1
12SJ7		12	E	4	1
12SK7		12	D	4	1
12SL7		12	F	1	2
		12	F	4	2
12SN7		12	E	1	2
		12	E	4	2
12SQ7		12	F	2	2
		12	G	4	2
		12	G	5	2
12SR7		12	E	2	2
		12	G	4	2
		12	G	5	2
12SS7		12	E	4	1
12ST7		12	E	2	2
		12	G	4	2
		12	G	5	2
12SW7		12	E	2	2
		12	G	4	2
		12	G	5	2
12SX7		12	E	1	2
		12	E	4	2
12SY7		12	D	5	1
12T10		12	C	8	10
		12	D	3	10
12TE8		12	F	5	1
		12	F	10	1
12TE9		12	F	7	3
		12	F	8	3
12U7	9	12	G	2	3
	9	12	G	7	3
12V6		12	C	5	1
12W6		12	C	5	1
12X4		12	B	1	4
		12	B	6	4
13CM5	1,3	13	A	5	1
13CW4		13	F	4	6
13D1		25	E	1	2
		25	E	4	2
13D2		6	E	1	2
		6	E	4	2

TUBE	A	B	C	D	SKT
13D3	9	13	G	7	3
	9	13	G	2	3
13DE7	3	13	C	2	3
	3	13	E	7	3
13DR7	3	13	C	2	3
	3	13	E	7	3
13EA7		15	B	1	2
		15	F	4	2
13EC7	3	13	D	1	3
13EM7		13	D	1	2
		13	F	4	2
13FD7	3	13	C	2	3
	3	13	F	7	3
13FM7	8	13	C	3	10
	8	13	E	10	10
13FR7	3	13	F	7	3
	3	13	C	2	3
13GB5	2,7,8,9	13	A	1	12
13GC8		13	C	9	3
		13	E	2	3
13GF7		13	C	2	5
		13	G	9	5
13J10	0	13	C	1	10
	0	13	H	6	10
13JZ6	7,0	13	A	5	10
13JZ8	3,5,7	13	C	6	10
	3,5,7	13	E	10	10
13V10		13	F	3	10
		13	C	8	10
13Z10	0	13	C	1	10
	0	13	H	6	10
14A4	5	14	E	6	9
14A5		14	C	6	9
14A7		14	E	6	9
14AF7		14	E	4	9
		14	E	5	9
14B6	4	14	F	3	9
	4	14	G	5	9
	4	14	G	6	9
14B8		14	F	4	9

TUBE	A	B	C D	SKT
14BL11		14	E 3	10
		14	E 5	10
		14	C 1	10
14BR11		14	C 2	10
		14	E 8	10
		14	E 10	10
14C5		12	C 6	9
14C7		12	E 6	9
14DA7	2	14	C 3	3
	2	14	E 7	3
14E6	4	12	F 3	9
	4	12	G 5	9
	4	12	G 6	9
14E7		12	E 6	9
		12	G 4	9
		12	G 3	9
14F7		12	F 4	9
		12	F 5	9
14F8		12	F 1	1
		12	F 8	1
14G6	9	14	F 2	3
	9	14	G 6	3
	9	14	G 8	3
14GT8		14	F 2	3
		14	F 6	3
		14	F 8	3
14GW8		14	C 8	3
		14	G 1	3
14H7		14	D 6	9
14J7		14	D 6	9
		14	F 4	9
14JG8		14	G 2	3
		14	G 6	3
		14	F 8	3
14L7	4	14	F 6	9
	4	14	G 5	9
	4	14	G 3	9
14N7		14	E 4	9
		14	E 5	9
14Q7		14	E 4	9

TUBE	A	B	C D	SKT
14R7		14	F 6	9
		14	G 4	9
		14	G 3	9
14S7		14	D 6	9
		14	F 4	9
14V7		14	E 6	9
14W7	4	14	D 6	9
14X7		14	F 3	9
		14	G 5	9
		14	G 6	9
14Y4	4	14	B 3	9
	4	14	B 6	9
14Y7		14	D 2	3
		14	F 9	3
15A6		15	C 2	3
15A8		15	F 3	1
		15	C 4	1
15AB9		15	D 1	11
		15	D 7	11
15AF11		15	C 1	10
		15	F 3	10
		15	F 6	10
15BD7		15	F 2	3
		15	G 6	3
		15	G 8	3
15BD11		15	D 1	10
		15	E 3	10
		15	F 6	10
15CW5	1,6,8	15	C 2	3
15DQ8		15	D 1	3
		15	D 8	3
15EA7		15	B 1	2
		15	F 4	2
15EM7		15	B 1	2
		15	F 4	2
15EW6		15	D 1	4
15EW7	3	15	F 7	3
	3	15	C 2	3
15FM7	8	15	C 3	10
	8	15	E 10	10

TUBE	A	B	C	D	SKT
15FY7	8	15	C	3	10
	8	15	E	10	10
15HA6	8,9	15	C	2	3
15HB6	8,9	15	C	2	3
15KY8		15	C	2	5
		15	G	9	5
15LE8		15	D	9	3
15MF8	7	15	A	6	10
	7	15	E	10	10
15MX8		15	C	2	5
		15	G	9	5
16A		6	D	1	4
16A5	6,8	16	C	2	3
16A8		16	C	3	3
		16	E	1	3
16AK9*	4,6	16	E	3	10
	4,6	16	E	10	10
	4,6	16	B	8	10
	Normal short 7, H-K				
16AQ3	1,2,3,6,7,8	16	A	9	3
16BQ11		16	E	5	10
		16	E	10	10
16BX11		16	D	2	10
		16	E	5	10
		16	E	8	10
16CB28	1,2,3,4,6,7,8,9,0	16	A	5	10
16G-B16	5,6,8	16	A	1	1
16GK6	3,6	16	C	2	3
16GK8		16	C	3	3
		16	F	1	3
16GY5	1,2,6,7,8,9,0	16	A	5	10
16KA6	1,2,6,7,8,9	16	A	5	10
16LU8	3,5,7	16	B	6	10
	3,5,7	16	B	10	10
16MY8	7	16	A	6	10
	7	16	A	10	10
16Y9		16	C	8	11
		16	D	1	11
17A8		17	D	2	3
		17	E	9	3

TUBE	A	B	C	D	SKT
17AB9		17	D	1	11
		17	D	6	11
17AB10	0	17	A	11	10
	0	17	H	7	10
17AV5		17	A	1	1
17AX3	10	17	A	4	10
17AX4	1,2,4,6	17	A	5	2
17AX10	0	17	H	7	10
	0	17	A	1	10
17AY3	1,3,6,7,8	17	A	2	5
17B-B14	2,7,8,9	17	A	1	12
17BE3	4	17	A	10	10
17BF11		17	C	8	10
		17	F	3	10
17BH3	1,3,6,7,8	17	A	2	5
17BJ6		17	D	1	4
17BQ6		17	A	5	1
17BR3	1,2,3,6,7,8	17	A	9	3
17BS3	1,3,6,7,8	17	A	2	5
17BW3	1,2,3,5,6,8,9,0	17	A	4	10
17BZ3	1,2,3,5,6,8,9,0	17	A	4	10
17C5	5	17	C	2	4
17C8		17	F	2	3
		17	G	7	3
		17	G	8	3
17C9		17	E	1	3
		17	E	7	3
17CA5	5	16	B	2	4
17CA9	5	17	C	2	4
17CK3	1,3,6,7,8	17	A	2	5
17CL3	1,3,6,7,8	17	A	2	5
17CQ4	2	17	A	5	2
17CT3	1,3,6,7,8	17	A	2	3
17CU5	5	17	C	2	4
17D4	1,2,4,6	17	A	5	2
17DE4	1,2,4,6	17	A	5	2
17DL8		17	C	2	3
		17	D	9	3
17DM4	1,2,4,6	17	A	5	2
17DQ4	1,2,4,6	17	A	5	2
17DQ6		17	A	5	1
17DW4	1,3,6,7,8	17	A	2	5

TUBE	A	B	C	D	SKT
17EM7		17	D	1	2
		17	F	4	2
17EW8	9	17	E	2	3
	9	17	E	7	3
17G-B3	3	17	A	5	1
17GE5	1,5,6,8,9,0	17	A	3	10
17GJ5	1,6,8,9	17	A	2	5
17GT5	1,6,8	17	A	2	5
17GV5	1,2,6,7,8,9,0	17	A	5	10
17GW6		17	A	5	1
17H3	2,6,7,8,9	17	A	3	8
17H-B25	1,7,8	17	A	2	12
17HC8		17	C	3	3
		17	F	1	3
17JB6	6,7,9	17	A	2	5
17JF6	6,7,9	17	A	2	5
17JG6	7,8	17	A	2	5
17JK8	9	17	F	7	3
	9	17	E	2	3
17JM6	1,6,7,8,9,0	17	A	5	10
17JN6	5,6,8,9,0	17	A	1	10
17JQ6	2,7	17	A	8	3
	2,7	17	G	6	3
17JR6	7,8	17	A	2	5
17JT6	7,8	17	A	2	5
17JZ8	3,5,7	17	C	6	10
	3,5,7	17	E	10	10
17KV6	7,8	17	A	2	5
17KW6	2,8,9	17	B	1	12
17L6		17	C	5	1
17LD8		17	C	2	5
		17	G	9	5
17N8		17	F	2	3
		17	G	7	3
		17	G	8	3
17R5	5	17	C	2	4
17R-HH2		17	E	2	3
		17	E	7	3
17R-K19	1,2,3,6,7,8	17	A	9	3

TUBE	A	B	C	D	SKT
17W6		17	C	5	1
17X3	1,2,3,6,7,8	17	A	9	3
17X10	0	17	B	1	10
	0	17	H	6	10
17Y9		17	D	1	11
		17	C	8	11
17Z3	1,2,3,6,7,8	17	A	9	3
18A5		18	A	1	1
18AJ10		18	F	3	10
		18	B	8	10
18AK5	2	18	E	1	4
18AQ5	7	18	C	1	4
18AW6		19	F	1	4
18D2		10	D	9	3
		10	D	2	3
18D9		1	G	6	7
		1	H	3	7
18DZ8		18	C	1	3
		18	F	3	3
18FW6		18	D	1	4
18FX6		18	E	1	4
18FY6		18	F	1	4
		18	G	5	4
		18	G	6	4
18GB5	2,7,8,9	18	A	1	12
18GD6		18	D	1	4
18GE6		18	F	1	4
		18	G	5	4
		18	G	6	4
18GV8		18	B	9	3
		18	F	2	3
18HB8		18	C	9	3
		18	F	1	3
18J6		18	E	5	4
		18	E	6	4
18RAL1	3	18	C	2	3
	3	18	F	7	3

TUBE	A	B	C D	SKT
19A3	6	19	A 5	4
19AJ8		19	E 2	3
		19	F 9	3
19AQ5	7	19	C 1	4
19AU4	1,2,4,6	19	A 5	2
19AU6		19	D 1	4
19BA6		19	D 1	4
19BD	1,2,6,7,8	19	A 9	3
19BG6		19	A 5	1
19BX6	1	19	D 2	3
19BY7	3	19	D 2	3
19C8		19	F 8	3
		19	G 6	3
		19	G 2	3
		19	G 1	3
19CG3	2,4,5,6,8,9	19	A 10	10
19CL8		19	D 1	3
		19	D 9	3
19CS4		19	A 5	2
19D8		19	E 2	3
		19	F 9	3
19DC8		19	E 2	3
		19	G 7	3
		19	G 8	3
19DE3	2,5,6,7,8,9,0	19	A 4	10
19DE7	3	19	C 2	3
	3	19	E 7	3
19DK3	3,6,7,8	19	A 2	5
19DQ3	2,5,6,8,9,0	19	A 4	10
19EA8		19	D 2	3
		19	D 9	3
19EW7	3	19	F 7	3
	3	19	C 2	3
19EZ8		19	E 2	3
		19	E 7	3
		19	E 9	3
19FK6	1,8	19	A 7	12

TUBE	A	B	C D	SKT
19FL8		19	E 2	3
		19	G 7	3
		19	G 8	3
19FX5	5	19	B 2	4
19GQ7	3	19	E 2	3
	3	19	E 6	3
	3	19	E 8	3
19HR6		19	D 1	4
19HS6		19	E 1	4
19HV8		19	D 9	3
		19	F 1	3
19J6		19	E 5	4
		19	E 6	4
19JN8		19	D 9	3
		19	D 1	3
19KF6	1,8	19	A 7	12
19KG8		19	D 2	3
		19	E 9	3
19M-R9		19	F 1	4
19M-R10		19	E 1	4
19M-R19		19	E 1	4
19Q9		19	D 2	3
		19	D 8	3
19R-P11		19	C 1	8
19SU	1,2,6,7,8,9	19	A 9	3
19T8		19	F 8	3
		19	G 6	3
		19	G 2	3
		19	G 1	3
19U3	1,2,6,7,8	19	A 9	3
19V8		19	F 6	3
		19	G 9	3
		19	G 7	3
		19	G 2	3
19W3	1,2,6,7,8	19	A 9	3
19X3	1,2,6,7,8	19	A 9	3
19X8		19	E 2	3
		19	E 7	3

TUBE	A	B	C D	SKT
19Y3	1,2,6,7,8	19	A 9	3
20AQ3	1,2,3,6,7,8	20	A 9	3
20D3	9	12	F 2	3
	9	12	F 7	3
20D4		20	D 2	3
		20	D 9	3
20EQ7		20	E 2	3
		20	G 8	3
20EW7	3	20	C 2	3
	3	20	F 7	3
20EZ7	3	20	D 5	13
	3	20	D 8	13
20J8		20	E 10	1
		20	F 5	1
20LF6	3,4,5,6,7,8	20	A 9	10
20LX6	1,6,7,8,9,0	20	A 5	10
20P18	1,2,6,7,8	15	C 2	3
21A6	1,6,7	21	C 2	3
21A7		21	E 6	9
		21	F 4	9
21B6	1,6,7	21	C 2	3
21EX6		21	A 5	1
21GY5	1,2,6,7,8,9,0	21	A 5	10
21HB5	1,5,6,8,9,0	21	A 3	10
21HD5	1,2,6,8,9,0	21	A 3	10
21HJ5	1,6,8,9,0	21	A 3	10
21JS6	1,7,9,0	21	A 5	10
21JV6	5,6,8,9,0	21	A 1	10
21JZ6	1,6,7,8,9,0	21	A 5	10
21KA6	1,2,6,7,8,9	21	A 5	10
21KQ6	6,7,8	21	A 1	12
21LG6	2,3,6,7,8,9,0	21	A 5	10
21LR8		21	C 2	5
		21	D 9	5
21LU8	3,5,7	21	B 6	10
	3,5,7	21	E 10	10
21MY8	7	21	A 6	10
	7	21	A 10	10
22BA3	1,3,6,7,8	17	A 2	5
22BH3	1,3,6,7,8	22	A 2	5
22BW3	1,2,3,5,6,8,9,0	22	A 4	10

TUBE	A	B	C D	SKT
22DE4	1,2,4,6	22	A 5	2
22JF6	6,7,9	22	A 2	5
22JG6	7,8	22	A 2	5
22JR6	7,8	22	A 2	5
22JU6	6,7,9	22	A 2	5
22KM6	6,7,9	22	A 2	5
22KV6	7,8	22	A 2	5
23JS6	1,6,7,8,9,0	23	A 5	10
23MB6	1,7,9,0	23	A 5	10
23Z9*	4,6	23	E 3	10
	4,6	23	E 10	10
	4,6	23	C 8	10
	Normal short 7, H-K			
24AX4	2	24	A 5	2
24BF11		24	C 8	10
		24	D 3	10
24GA7	2	24	A 4	10
	2	24	A 1	10
24JE6	6,7,9	24	A 2	5
24JZ8	3,5,7	24	C 6	10
	3,5,7	24	E 10	10
24LQ6	6,7,9	24	A 2	5
24LZ6	6,7,9	24	A 2	5
25A6		25	C 5	1
25A7		25	B 6	1
		25	C 5	1
25AC5		25	F 5	1
25AU4	1,2,4,6	25	A 5	2
25AV5		25	A 1	1
25AX4	1,2,4,6	25	A 5	2
25B6		25	C 5	1
25B8		25	E 10	1
		25	F 8	1
25B-B14	1,6,7,8	25	A 2	12
25BK5	7	25	C 3	3
25BQ5		25	A 5	1
25BQ6		25	A 5	1
25BR3	1,2,3,6,7,8	25	A 9	3
25C5	5	25	C 2	4
25C6		25	C 5	1

TUBE	A	B	C	D	SKT
25CA5	5	25	C	2	4
25CD6		25	A	5	1
25CG3	2,4,5,6,8,9	25	A	10	10
25CK3	1,3,6,7,8	25	A	2	5
25CM3	1,3,6,7,8	25	A	2	5
25CR5	6,7,8	25	C	3	3
25CT3	1,3,6,7,8	25	A	2	3
25CU6		25	A	5	1
25D4	1,2,4,6	25	A	5	2
25D8		25	E	10	1
		25	G	8	1
		25	G	5	1
25DK3	3,6,7,8	25	A	2	5
25DK4	7	25	B	5	4
25DN6		25	A	5	1
25DQ6		25	A	5	1
25DT5	2,6,8	25	C	3	3
25E5	1,3	25	C	5	1
25EC6		25	A	5	1
25EH5	5	25	C	2	4
25F5	5	25	C	2	4
25FY8		25	E	3	3
		25	F	1	3
25GB5	2,7,8,9	25	A	1	12
25G-86		25	A	5	1
25GF6	1	25	C	5	1
25HX5	3,7,8	25	A	1	12
25JQ6	2,7	25	A	8	3
	2,7	25	G	6	3
25JZ8	6	25	C	7	10
	6	25	E	10	10
25L6		25	C	5	1
25LQ6	6,7,9	24	A	2	5
25M-P20		25	A	1	4
25N6		25	A	5	1
25R-K19	1,2,3,6,7,8	25	A	9	3
25SN7		25	E	1	2
		25	E	4	2
25U4	1,2,4,6	25	A	5	2
25W4	1,2,4,6	25	A	5	2
25W6		25	C	5	1

TUBE	A	B	C	D	SKT
25X6		25	B	3	1
		25	B	5	1
25Y4		25	B	5	1
25Z4	1,3,4,6	25	B	5	1
25Z6		25	B	3	1
		25	B	5	1
26A6		26	D	1	4
26A7*	3	26	C	1	2
	1	26	C	3	2
Normal short 6, H-K					
26AQ8		26	D	2	3
		26	D	7	3
26BK6		26	F	1	4
		26	G	5	4
		26	G	6	4
26C6		26	F	1	4
		26	G	5	4
		26	G	6	4
26CG6		26	E	1	4
26D6		26	E	1	4
26E6		26	C	5	1
26HU5	5,6	26	A	1	2
26LW6	1,6	26	A	5	2
26LX6	1,6,7,8,9,0	26	A	5	10
26Z5	9	26	B	1	3
	9	26	B	6	3
27BL7		27	D	2	3
		27	D	9	3
27BL8		27	D	2	3
		27	D	9	3
27GB5	2,7,8,9	27	A	1	12
27KG6	6,7,8	27	A	1	12
28AK8		28	F	8	3
		28	G	6	3
		28	G	2	3
		28	G	1	3
28D7		28	D	2	9
		28	D	7	9
28GB5	2,7,8,9	28	A	1	12
28HA6	8,9	28	C	2	3

TUBE	A	B	C	D	SKT
28HD5	1,2,6,8,9,0	28	A	3	10
28Z5	4	28	B	3	9
	4	28	B	6	9
29AQ8		26	E	2	3
		26	E	7	3
29GK6	3,6	29	C	2	3
29HA6	3,7	29	C	2	3
29KQ6	6,7,8	29	A	1	12
29LE6	6,7,8	29	A	1	12
30A5	5	30	C	2	4
30AE3	1,2,3,6,7,8	30	A	9	3
30AG3	1,2,3,6,7,8	30	A	9	3
30AG11		30	E	5	10
		30	E	8	10
		30	F	3	10
		30	F	10	10
30C1		9	D	2	3
		9	D	9	3
30C13		9	D	2	3
		9	D	9	3
30C18	6	7	E	9	3
	6	7	D	7	3
30CW5	1,6,8	30	C	2	3
30F5	3	7	E	2	3
30HD5	1,2,6,8,9	30	A	3	10
30HJ5	1,6,8,9,0	30	A	3	10
30JZ6	1,6,7,8,9,0	30	A	5	10
30KD6	1,6,7,8,9,0	30	A	5	10
30L1	7	7	E	2	3
	7	7	E	6	3
30L15	7	7	E	2	3
	7	7	E	6	3
30MB6	1,7,9,0	30	A	5	10
30M-P27	2	30	B	5	4
30P4	1	25	C	5	1
30P12	1	12	C	2	3
30P16	6	16	C	2	3
30P18	1,6,8	15	C	2	3
30P19	1	25	C	5	1
30PL1		13	C	9	3
		13	E	2	3

TUBE	A	B	C	D	SKT
30PL10		13	C	9	3
		13	E	2	3
30PL12		16	C	3	3
		16	E	1	3
30PL13		16	C	3	3
		16	F	1	3
30PL14		16	C	3	3
		16	F	1	3
31AL10	6	31	F	1	10
	6	31	F	3	10
	6	31	A	8	10
31AV3	1,2,6,7,8	31	A	9	3
31JS6	1,6,7,8,9,0	31	A	5	10
31LQ6	6,7,9	31	A	2	5
31LR8		31	C	2	5
		31	D	9	5
31LZ6	6,7,9	31	A	2	5
32A8		32	C	3	3
		32	G	1	3
32ET5	5	32	C	2	4
32GA7	2	32	A	4	10
	2	32	A	1	10
32HQ7	3,6,7	32	A	2	10
	3,6,7	32	A	9	10
32L7		32	A	6	1
		32	C	5	1
33GT7	3,6,7,9	33	A	2	10
	3,6,7,9	33	A	1	10
33GY7	3,6,7,9	33	A	2	10
	3,6,7,9	33	A	10	10
33HE7	3,6,7,0	33	A	2	10
	3,6,7,0	33	A	9	10
33HK7	3,6,7,0	33	A	2	10
	3,6,7,0	33	A	9	10
33JR6	7,8	33	A	2	5
33JV6	5,6,8,9,0	33	A	1	10
34CD3	1,2,3,5,6,8,9,0	34	A	4	10
34CE3	1,2,3,4,5,6,8,9	34	A	10	10
34CM3	1,3,6,7,8	34	A	2	5
34DK3	3,6,7,8	25	A	2	5

TUBE	A	B	C	D	SKT
34GD5	5	34	C	2	4
34R3	1,2,3,6,7,8	34	A	9	3
35A3		35	B	5	4
35A5		35	C	6	9
35B5	7	35	C	1	4
35C3		35	B	5	4
35C5	5	35	C	2	4
35CD6		35	A	5	1
35D5	7,8,9	35	C	1	3
35DZ8		35	C	3	3
		35	F	1	3
35EH5	5	35	C	2	4
35FM5	4,6,8	35	A	5	1
35GL6	6	35	C	2	4
35HB8		35	C	9	3
		35	F	1	3
35L6		35	C	5	1
35LR6	1,6,7,8,9,0	35	A	5	10
35QL6	7,8,9	35	C	1	3
35W4	6	35	A	5	4
35X4		35	A	5	4
35Y4	4	35	A	2	9
35Z3		35	A	2	9
35Z4	1,3,4,6	35	B	5	1
35Z5	3	35	B	5	1
35Z6		35	B	3	1
		35	B	5	1
36AM3	6	36	A	5	4
36KD6	1,6,7,8,9,0	36	A	5	10
36LW6	1,6	36	A	5	2
36MC6	6,7,9	36	A	2	5
38A3	1,2,6,7,8	38	A	9	3
38HE7	3,6,7,0	38	A	2	10
	3,6,7,0	38	A	9	10
38HK7	3,6,7,0	38	A	2	10
	3,6,7,0	38	A	9	10
40FR5	5	40	C	2	4
40KD6	1,6,7,8,9,0	40	A	5	10
40KG6	6,7,8	40	A	1	12
40SUA		2	F	10	1
40Z5	3	40	B	5	1
42EC4	1,3,6,7,8,9	42	A	2	12

TUBE	A	B	C	D	SKT
42EL4	1,3,6,7,8,9	42	A	2	12
42KN6	1,6,7,8,9,0	42	A	5	10
45B5	1,6,8	45	C	2	3
45Z3	3,5,6	45	B	2	7
45Z5	3	45	B	5	1
48A8		50	C	3	3
		50	F	1	3
50A5		50	C	6	9
50AX6		50	A	3	1
		50	A	5	1
50B5	7	50	C	1	4
50BK5	7	50	C	3	3
50BM8		50	C	3	3
		50	F	1	3
50C5	5	50	C	2	4
50C6		50	C	5	1
50CA5	5	50	C	2	4
50CD6		50	A	5	1
50DC4	6	50	A	5	4
50E5	1,3	50	C	5	1
50EH5	5	50	C	2	4
50FA5	5	50	C	2	4
50FE5		50	C	5	1
50FK5		50	C	2	4
50FY8		50	E	3	3
		50	F	1	3
50GY7	3,6,7,9	50	A	2	10
	3,6,7,9	50	A	10	10
50HC6	6	50	C	2	4
50HC8	6	50	C	2	4
50HK6	6	50	C	2	4
50HN5	1,6,8	50	C	2	3
50JY6		50	A	5	1
50L6		50	C	5	1
50X6		50	A	3	9
		50	A	6	9
50Y6		50	B	3	1
		50	B	5	1
50Y7	6	50	A	3	1
	6	50	A	5	1
50Z6		50	A	3	1
		50	A	5	1

TUBE	A	B	C D	SKT
50Z7	6	50	A 3	1
	6	50	A 5	1
52KU*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
	Normal short 8, H-K			
53		2	C 3	7
		2	C 5	7
53HK7	3,6,7,0	53	A 2	10
	3,6,7,0	53	A 9	10
54KU		5	B 4	1
		5	B 6	1
55A3	1,2,6,7,8	50	A 9	3
55N3	1,2,6,7,8	50	A 9	3
58HE7	3,6,7,0	58	A 2	10
	3,6,7,0	58	A 9	10
59		3	B 4	7
60E3		60	A 5	4
60EH5	5	50	D 2	4
60FX5	5	50	C 2	4
60HL5	1,8,8	60	A 2	3
62TH	8	6	E 1	10
	8	6	E 7	10
	8	6	E 9	10
63T1		6	D 7	3
		6	D 2	3
63TP		6	D 9	3
		6	F 2	3
64SPT	1	6	D 2	3
64STP	3	6	D 2	3
65ME	3,6,8	6	G 1	3
70A7	6	50	D 5	1
70L7		50	C 8	1
		50	D 5	1
117L7		50	B 6	1
		50	B 4	1
117M7		50	B 6	1
		50	B 4	1
117N7	1,8	50	B 4	1
117P7	1,8	50	B 4	1
117Z3	1,2,7	50	B 5	4
117Z4	1,3,4,6	50	B 5	1
117Z6	1,6	50	F 3	1
	1,6	50	F 5	1

TUBE	A	B	C D	SKT
141DDT	4	14	F 6	9
	4	14	G 5	9
	4	14	G 3	9
163PEN	6,8	16	C 2	3
171DDP		17	F 2	3
		17	G 7	3
		17	G 8	3
213PEN	1,6,7	21	C 2	3
387	Normal short	3	F 3	2
	1, H-K	3	F 6	2
401A	7	6	F 1	4
403B	7	6	E 1	4
408A	2	20	E 1	4
409		6	E 1	4
884		6	F 5	1
1201*	3,5,6	6	F 1	9
	Normal Short 7, H-K			
1203A	2,3,5,6	6	F 4	9
1204	6	6	F 5	9
1206		6	F 4	9
		6	F 5	9
1216		6	G 5	4
		6	G 6	4
1217		6	F 1	4
1220	2	6	D 1	4
1222		6	F 5	1
1223		6	F 10	1
1225		6	F 10	1
1231		6	E 9	9
1232		6	F 9	9
1238		28	D 2	9
		28	D 7	9
1252		6	D 2	3
		6	D 9	3
1273		6	F 9	9
1274	4	6	B 3	9
	4	6	B 6	9
1280		6	F 9	9
1282	4	6	D 6	9
1284		14	E 6	9
1288		3	F 3	2
		3	F 6	2

Normal short, 1, H-K

TUBE	A	B	C D	SKT
1291*		6	F 3	2
		6	F 6	2
Normal short 1, H-K				
1292		3	F 3	2
		3	F 6	2
Normal short 1, H-K				
1293	5	1	F 6	9
1294		1	H 4	9
1299	7	1	E 6	9
1302		6	E 1	2
		6	E 4	2
1611		6	B 5	1
1612		6	F 10	1
1613		6	B 5	1
1614		6	A 5	1
1619		2	A 5	1
1620		6	F 10	1
1621		6	C 5	1
1622		6	C 5	1
1625	2,5	13	A 4	7
1626		12	E 5	1
1629		12	F 5	1
1631		12	C 5	1
1632		12	C 1	2
1633		25	E 1	2
		25	E 4	2
1634		12	F 3	2
		12	F 4	2
1635		6	F 4	1
		6	F 5	1
1639		6	F 10	1
		6	G 5	1
		6	G 4	1
1644*	3	12	C 1	2
	1	12	C 3	2
Normal short 6, H-K				
1649		6	D 4	1
1654	2,3,4,5,6	1	H 10	7
1655		6	F 3	2
		6	F 4	2
1662	5,6	3	F 4	7

TUBE	A	B	C D	SKT
1664		12	E 10	1
		12	G 4	1
		12	G 5	1
1679		6	E 5	4
		6	E 6	4
1852		6	D 4	1
1853		6	D 4	1
2014	8,9	6	C 2	3
2057		6	E 3	1
		6	E 5	1
2076*	1,3,5,7	5	A 4	1
	1,3,5,7	5	A 6	1
Normal short 8, H-K				
2081		6	D 7	3
		6	D 2	3
2082	9	12	E 2	3
	9	12	E 7	3
2329	3	7	E 2	3
4037	3,8	6	C 10	1
4623	2,5	6	F 6	4
4651	6	6	A 1	8
	6	6	A 7	8
5187		6	C 4	1
5590	7	6	F 1	4
5591	7	6	E 1	4
5592		6	C 1	2
		6	C 4	2
5595	2	6	E 1	4
5608		7	F 3	7
		7	F 5	7
5610	5	6	D 6	4
5618	5	6	C 6	7
5642		1	H 10	3
Insert leads into pins 1&5, use top cap				
5654	2	6	D 1	4
5656	2	6	E 1	4
5659		12	C 5	1
5660		12	E 10	1
		12	G 4	1
		12	G 5	1
5661		12	D 4	1

TUBE	A	B	C	D	SKT
5670	1	6	E	3	3
	1	6	E	7	3
	Jumper pins 1 & 5				
	Normal shorts H-K				
5679	4	6	E	3	9
	4	6	E	6	9
5686	3,8,9	6	C	2	3
5687	8	12	D	2	3
	8	12	D	7	3
5691		6	F	1	2
		6	F	4	2
5692		6	E	1	2
		6	E	4	2
5693		6	F	4	1
5694		6	F	4	1
		6	F	5	1
5696	7	6	B	6	4
	Check interruption of emission with No. 1 A switch				
	7	6	B	1	4
	Grid leakage test				
5721	9	12	F	2	3
	9	12	F	7	3
5725		6	E	1	4
5726		6	E	2	4
		6	E	7	4
5727	7	6	A	6	4
	Check interruption of emission with No. 1 A switch				
	7	6	A	1	4
	Grid leakage test				
5729	2	6	E	1	4
5732		6	E	10	1
5749		6	D	1	4
5750		6	D	1	4
5751	9	12	F	2	3
	9	12	F	7	3
5755		6	F	1	2
		6	F	4	2
5763	8	6	C	9	3
5814	9	12	D	2	3
	9	12	D	7	3

TUBE	A	B	C	D	SKT
5824		25	C	5	1
5838		12	B	3	1
		12	B	5	1
5839		26	B	3	1
		26	B	5	1
5844		6	G	5	4
		6	G	6	4
5845	7	5	G	1	4
	7	5	G	5	4
5852		6	B	3	1
		6	B	5	1
5871		6	C	5	1
5873	9	6	E	2	3
	9	6	E	7	3
5879		6	F	1	3
5881		6	C	5	1
5890	7	6	G	2	10
5910	5	1	G	6	7
5915		6	E	1	4
5920		6	E	5	4
		6	E	6	4
5928	2	6	F	9	3
5931*	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
	Normal short 8, H-K				
5932		6	C	5	1
5961		6	D	5	1
5963	9	12	E	2	3
	9	12	E	7	3
5964		6	E	5	4
		6	E	6	4
5965	9	12	E	2	3
	9	12	E	7	3
5969*		1	G	2	2
		1	G	7	2
	Normal short 1, H-K				
5970*		1	G	2	2
		1	G	7	2
	Normal short 1, H-K				
5992		6	C	5	1
5993		6	A	1	4
		6	A	6	4

TUBE	A	B	C	D	SKT
5998		6	C	1	2
		6	C	4	2
6000		26	C	1	1
6004*		5	B	10	1
		5	B	10	1
Change clip lead from one tube cap to other; Normal short 8, H-K					
6005	7	6	C	1	4
6006	5	6	D	4	1
6028	2	20	E	1	4
6030		6	E	5	4
		6	E	6	4
6042		6	E	1	2
		6	E	4	2
6045		6	E	5	4
		6	E	6	4
6046		25	C	5	1
6054		6	F	10	1
6057	9	12	G	2	3
	9	12	G	7	3
6058		6	E	2	4
		6	E	7	4
6059		6	F	10	1
6060	9	12	E	2	3
	9	12	E	7	3
6061		6	C	5	1
6062	8	6	C	9	3
6063		6	B	1	4
		6	B	6	4
6064		6	D	1	4
6065		6	E	1	4
6066		6	F	1	4
		6	G	5	4
		6	G	6	4
6067	9	12	D	2	3
	9	12	D	7	3
6072	9	12	F	2	3
	9	12	F	7	3
6080		6	A	1	2
		6	A	4	2
6082		26	A	1	2
		26	A	4	2

TUBE	A	B	C	D	SKT
6084	7	6	G	9	3
6085	0,9	12	E	2	3
	0,9	12	E	7	3
6087*	1,3,5,7	5	B	4	1
	Normal short 8, H-K				
6094*	6,7,9	6	C	1	3
	Normal short 3, H-K				
6095		6	C	1	4
6096		6	E	1	4
6097		6	E	2	4
		6	E	7	4
6099		6	E	5	4
		6	E	6	4
6100	2,5	6	E	6	4
6101		6	E	5	4
		6	E	6	4
6106*	1,3,5,9	5	B	4	1
	1,3,5,9	5	B	6	1
	Normal short 8, H-K				
6113		6	F	1	2
		6	F	4	2
6118		6	G	10	1
		6	H	4	1
		6	H	5	1
6132	1,6	6	C	2	3
6134		6	D	4	1
6135	2,5	6	E	6	4
6136		6	D	1	4
6137		6	D	4	1
6145		6	E	6	9
6146	4,6,8	6	C	5	1
6158	9	13	G	7	3
	9	13	G	2	3
6159	4,6,8	26	C	5	1
6180		6	E	1	2
		6	E	4	2
6186		6	E	1	4
6187		6	E	1	4
6188		6	F	1	2
		6	F	4	2

TUBE	A	B	C D	SKT
6189	9	12	D 2	3
	9	12	D 7	3
6197	8,9	6	C 2	3
6201	9	12	E 2	3
	9	12	E 7	3
6202		6	B 1	4
		6	B 6	4
6203		6	B 1	3
		6	B 9	3
6211	9	12	F 2	3
	9	12	F 7	3
6215*	3	1	H 10	1
	Normal short 8, H-K			
6216	6,8	6	C 2	3
6218	8	6	H 2	3
6227	1	6	C 2	3
6265		6	E 1	4
6267	2	6	F 9	3
6277	1	6	C 2	3
6287	6,7,9	6	C 8	3
6293	1,6	6	A 5	1
6297	8,9	6	C 2	3
6325		6	A 3	2
		6	A 5	2
6327	1	6	C 5	1
6336		6	C 1	2
		6	C 4	2
6350	9	12	E 3	3
	9	12	E 8	3
6352	4	3	G 5	2
6360	9	12	C 1	3
	9	12	C 3	3
6374	1,2,3,6,7,8,9	6	A 10	3
6394		26	C 1	2
		26	C 4	2
6414	9	12	E 2	3
	9	12	E 7	3
6417	9	12	A 8	3
6463	9	12	E 3	3
	9	12	E 8	3

TUBE	A	B	C D	SKT
6485		6	E 1	4
6516		6	C 1	4
6520		6	A 1	2
		6	A 4	2
6525	7	6	B 6	4
	Check interruption of emission with No. 1 A switch			
	7	6	B 1	4
	Grid leakage test			
6528		6	C 1	2
		6	C 4	2
6550		6	A 5	1
6660	2	6	D 1	4
6661		6	E 1	4
6662		6	E 1	4
6663		6	E 2	4
		6	E 7	4
6664	2	6	E 6	4
6669	7	6	C 1	4
6671	9	12	E 2	3
	9	12	E 7	3
6676		6	D 1	4
6677	1,8	6	C 2	3
6678		6	D 2	3
		6	D 9	3
6679	9	12	E 2	3
	9	12	E 7	3
6680	9	12	D 2	3
	9	12	D 7	3
6681	9	12	F 2	3
	9	12	F 7	3
6686	1	6	C 2	3
6687		6	F 1	4
6688	1	6	D 2	3
6689		6	E 2	3
6754		6	B 1	3
		6	B 9	3
6778		6	D 2	3
		6	D 9	3

TUBE	A	B	C	D	SKT
6792	4,6,8	6	F	5	1
6829	9	12	E	2	3
	9	12	E	7	3
6840	9	12	D	3	3
	9	12	D	8	3
6846		25	C	5	1
6851	9	6	F	2	3
	9	6	F	7	3
6853*	3,5,7	5	B	4	1
		5	B	6	1
Normal short 8, H-K					
6870	6,9	12	C	2	3
6877*	2,6,7,9	6	C	1	3
Normal short 3, H-K					
6883	4,6,8	12	C	5	1
6887		6	E	2	4
		6	E	7	4
6888		6	C	4	1
6893	1,6	12	A	5	1
6900	8	12	C	2	3
	8	12	C	7	3
6913	9	12	E	2	3
	9	12	E	7	3
6919		6	E	2	4
		6	E	7	4
6922		6	E	2	3
		6	E	7	3
6927		6	E	5	4
		6	E	6	4
6928		6	C	1	4
6939	9	12	C	1	3
	9	12	C	3	3
6954		6	E	1	4
6955	9	12	D	2	3
	9	12	D	7	3
6968	2	6	E	1	4
6973	2,6,8	6	C	3	3
6998	2	6	E	1	4
7000		6	F	10	1

TUBE	A	B	C	D	SKT
7001	2	6	C	1	4
7025	9	12	G	2	3
	9	12	G	7	3
7027	4,6	6	C	5	1
7036		6	D	1	4
7044	8	12	C	2	3
	8	12	C	7	3
7054	6,9	13	C	2	3
7055		13	E	2	4
		13	E	7	4
7056		13	E	1	4
7057	9	13	E	2	3
	9	13	E	7	3
7058	9	13	F	2	3
	9	13	F	7	3
7059		13	D	2	3
		13	D	9	3
7060		13	D	2	3
		13	D	8	3
7061	2,6,8	13	C	3	3
7062	9	12	E	2	3
	9	12	E	7	3
7105		13	C	1	2
		13	C	4	2
7119	9	12	D	2	3
	9	12	D	7	3
7137	5,6	6	H	1	4
7167	2	13	E	1	4
7184		6	C	5	1
7189	1,6,8	6	C	2	3
7194	9	12	F	2	3
	9	12	F	7	3
7199		6	D	7	3
		6	E	9	3
7212	4,6,8	6	C	5	1
7227	4,6	27	C	2	3
7233	3,6,7,9	6	A	2	3
7239	3,7,8	6	C	1	3
7244		6	E	5	4
		6	E	6	4

TUBE	A	B	C	D	SKT
7245	5,6	6	H	1	4
7247	9	12	D	2	3
	9	12	D	7	3
7258		13	D	2	3
		13	D	8	3
7308		6	E	2	3
		6	E	7	3
7316	9	12	E	2	3
	9	12	E	7	3
7318	9	12	E	2	3
	9	12	E	7	3
7320	1,6,8	6	C	2	3
7355		6	C	6	1
7357	4,6,8	26	A	5	1
7358	4,6,8	6	A	5	1
7360		6	E	3	3
7370	7	40	D	2	3
	7	40	D	7	3
7408		6	C	5	1
7489	9	12	D	2	3
	9	12	D	7	3
7492	9	12	E	2	3
	9	12	E	7	3
7494	9	12	F	2	3
	9	12	F	7	3
7496		6	D	1	4
7498		6	D	1	4
7499	1,6	6	C	2	3
7502		6	D	1	4
7534	1,3,6	6	C	5	1
7543		6	D	1	4
7548	3	6	C	2	3
7551	1,8	12	C	2	3
7558	1,8	6	C	2	3
7576	2,4,5	6	C	7	9
7581		6	C	5	1
7586		6	F	4	6
7587		6	F	4	6
7591	4	6	C	6	1
7607	4,6,8	6	B	5	1
7623		6	A	5	1

TUBE	A	B	C	D	SKT
7624		12	A	5	1
7631		6	E	2	4
		6	E	7	4
7643		6	D	2	3
		6	E	9	3
7645	9	12	B	2	3
	9	12	B	3	3
7683	6,7,9	6	E	1	3
7687		6	E	2	3
		6	F	9	3
7693		6	E	1	4
7694		6	D	1	4
7695	3	50	A	6	8
7699	9	6	D	1	3
	9	6	D	3	3
7701	3,8,9	13	C	2	3
7716		13	D	7	3
		13	F	2	3
7717	2	6	E	1	4
7719	1	12	F	7	8
7721	1,6	6	C	2	3
7722	1,6	6	C	2	3
7724		14	F	8	3
		14	G	6	3
		14	G	2	3
7728	9	12	E	2	3
	9	12	E	7	3
7729	9	12	F	2	3
	9	12	F	7	3
7730	9	12	D	2	3
	9	12	D	7	3
7731		6	D	2	3
		6	D	9	3
7732		6	D	1	4
7733	6,9	12	C	2	3
7734		6	B	3	3
		6	F	8	3
7737	1	6	D	2	3
7738	6,7	6	D	2	4
7740		6	E	5	4
		6	E	6	4
7751		6	A	5	1

TUBE	A	B	C D	SKT
7752		6	E 1	4
7754	3	6	A 6	8
7755	2	6	G 1	4
7763		6	E 6	3
7788	3,9	6	C 2	3
7802		6	A 1	2
		6	A 4	2
7803	9	6	C 2	3
	9	6	C 7	3
7867		6	C 5	1
7868	1,6,8	6	A 2	5
7892	8	12	D 2	3
	8	12	D 7	3
7895		6	G 4	6
7898	9	12	E 2	3
	9	12	E 7	3
7983	9	3	A 1	3
	9	3	A 3	3
7984	1,4,5,6,8,9	13	C 10	10
7994	2,4,5	6	D 7	9
8016	1,3,4,5,6,8	1	H 10	1
8032	4,6,8	13	B 5	1
8056		6	G 4	6
8058	2,8	6	E 10	6
	Connect to large lug			
8068		6	D 5	1
8077	6,9	13	C 2	3
8084		13	E 1	4
8102		13	E 3	3
		13	E 9	3
8106	6,8,9	13	D 7	3
8113	2	6	D 1	4
8136		6	E 1	4
8149	1,3,5,7,8,9	12	A 10	10
8150	1,3,4,6,7,8,9	13	A 10	10
8156	1,4,5,6,8,9	13	B 10	10
8185	2,4,5	6	C 7	9
8186	2,4,5	25	C 7	9
8203		6	E 4	6
8212	8,9	12	C 3	3
8223	9	6	B 2	3
	9	6	B 7	3

TUBE	A	B	C D	SKT
8232	5,6	6	H 1	4
8233	6,9	6	D 8	5
8236	5,6,8	6	A 1	1
8255	1,3,6,7	6	D 9	3
8278	3,6,8	6	C 7	5
8298	4,6,8	6	A 5	1
8323	6,9	6	A 8	5
8327	1,6,8	6	C 2	3
8334	6,7	6	C 2	4
8348	9	1	A 1	5
	9	1	A 3	5
	Normal shorts 2, H-K			
8380		6	F 4	6
8382		6	E 4	6
8393		13	G 4	6
8417		6	A 5	1
8425	2	6	E 1	4
8426		12	D 1	4
8431	9	12	C 2	3
	9	12	C 7	3
8441		6	F 4	6
8445		6	D 2	3
		6	D 9	3
8446		6	D 1	3
		6	D 9	3
8447	6,7,9	12	E 2	3
	6,9	12	E 7	3
	7,9	12	E 6	3
8448	6,9	6	C 2	3
8449		6	D 2	3
		6	D 9	3
8456		6	F 4	6
8457	9	6	C 1	3
	9	6	C 3	3
8458	9	6	A 1	5
	9	6	A 3	5
8463	7 9	1	B 3	3
8489		6	D 2	3
		6	D 8	3
8532	5,6	6	G 1	4
8552	4,6,8	12	C 5	1
8556	1,3,5	6	G 8	8

TUBE	A	B	C	D	SKT
8608	2,9	6	B	8	12
8627	2,8	6	E	10	6
	Connect to large lug				
8628		6	F	4	6
8632	1,3,4,6	6	H	5	1
8908	6	6	A	5	2
8950	1,6,7,9,0	13	A	5	10
9001	2	6	F	1	4
9002	2,5	6	E	6	4
9003	2	6	E	1	4
9006	1,7	6	F	5	4
A61	1,2,3,6,7,8	17	A	9	3
A863		6	F	10	1
A1834		6	A	1	2
		6	A	4	2
A2900	9	12	E	2	3
	9	12	E	7	3
AA91E		6	E	2	4
		6	E	7	4
ABC91		12	C	5	1
AFX212		6	F	1	4
B36		12	E	1	2
		12	E	4	2
B63		6	E	3	7
		6	E	5	7
B65		6	E	1	2
		6	E	4	2
B109		26	D	2	3
		26	D	7	3
B139	7	7	E	2	3
	7	7	E	6	3
B152	9	12	E	2	3
	9	12	E	7	3
B309	9	12	E	2	3
	9	12	E	7	3
B317	6	7	E	2	3
	6	7	E	6	3
B319	7	7	E	2	3
	7	7	E	6	3
B329	9	12	D	2	3
	9	12	D	7	3
B339	9	12	F	2	3
	9	12	F	7	3

TUBE	A	B	C	D	SKT
B349	7	7	E	2	3
	7	7	E	6	3
B719		6	D	2	3
		6	D	7	3
B729		6	D	2	3
		6	D	7	3
B739	9	12	E	2	3
	9	12	E	7	3
B749	9	12	D	2	3
	9	12	D	7	3
B759	9	12	F	2	3
	9	12	F	7	3
BPM04	7	6	C	1	4
BVA264		6	F	5	1
BVA265		6	F	5	1
C10B		2	F	10	1
C86E		6	D	2	3
		6	D	9	3
C610		6	F	4	9
CC81E	9	12	E	2	3
	9	12	E	7	3
CC86E	9	6	E	2	3
	9	6	E	7	3
CCA		6	E	2	3
		6	E	7	3
CSF80		4	D	2	3
		4	D	9	3
CV131		6	E	1	4
CV133	1,5	6	E	6	4
CV136		6	D	1	4
CV138		6	E	1	4
CV140		6	E	2	4
		6	E	7	4
CV281		6	E	5	1
CV283		6	E	2	4
		6	E	7	4
CV303		6	F	6	9
CV346	4	6	B	3	9
	4	6	B	6	9
CV417	5,6	6	E	1	4
CV426		6	J	10	3

Insert leads into pins 1&5, use top cap

TUBE	A	B	C	D	SKT
CV452		6	F	1	4
		6	G	5	4
		6	G	6	4
CV453		6	D	1	4
CV454		6	D	1	4
CV455	9	12	E	2	3
	9	12	E	7	3
CV484	5,6	3	F	3	7
CV491	9	12	D	2	3
	9	12	D	7	3
CV492	9	12	F	2	3
	9	12	F	7	3
CV493		6	B	1	4
		6	B	6	4
CV500		6	G	10	1
		6	G	5	1
		6	G	4	1
CV503*	1,3,5,7	5	B	4	1
	1,3,5,7	5	B	6	1
Normal short 8, H-K					
CV509		6	C	5	1
CV510		6	C	5	1
CV511		6	C	5	1
CV512		6	F	10	1
CV515		6	C	5	1
CV522		6	E	6	9
CV525		12	C	5	1
CV526		12	C	5	1
CV529		12	F	1	2
		12	F	5	2
CV531		12	E	10	1
		12	G	4	1
		12	G	5	1
CV534		12	E	5	1
CV535		12	E	5	1
CV537		12	D	5	1
CV538		12	D	5	1
CV540		12	F	3	2
		12	F	4	2
CV543		12	D	4	1
CV544		12	D	4	1

TUBE	A	B	C	D	SKT
CV546		12	F	2	2
		12	G	4	2
		12	G	5	2
CV547		12	F	2	2
		12	G	4	2
		12	G	5	2
CV549		25	C	5	1
CV550		25	C	5	1
CV551		25	C	5	1
CV552		25	C	5	1
CV553		25	C	5	1
CV561		35	C	5	1
CV562		35	C	5	1
CV568	3	35	B	5	1
CV569		6	F	1	2
		6	F	4	2
CV571		50	C	5	1
CV574		6	B	5	1
		6	B	3	1
CV578		6	E	5	1
CV579		6	E	5	1
CV580		6	E	5	1
CV581		6	E	5	1
CV582		6	E	5	1
CV583		6	E	5	1
CV586		6	C	5	1
CV587		6	F	10	1
		6	G	5	1
		6	G	4	1
CV588		6	F	10	1
		6	G	5	1
		6	G	4	1
CV589		6	F	10	1
		6	G	5	1
		6	G	4	1
CV590		6	E	4	1
CV591		6	E	4	1
CV592		6	E	4	1
CV593		5	B	4	1
		5	B	6	1
CV594	5	6	D	4	1
CV595	5	6	D	4	1
CV660		6	D	4	1

TUBE	A	B	C	D	SKT
CV661		6	D	4	1
CV694	5	12	D	4	1
CV698		12	E	4	1
CV700		12	E	2	2
		12	G	4	2
		12	G	5	2
CV703		12	E	5	1
CV705		2	F	10	1
CV706		6	E	10	1
CV728		1	F	10	1
CV729*	1,3,5,7	5	B	4	1
	1,3,5,7	5	B	6	1
Normal short 8, H-K					
CV731		6	C	5	1
CV741		6	A	5	1
CV747		6	D	4	1
CV753	2,5	1	J	6	7
CV755		1	E	5	1
CV756	1,6,8	1	F	5	1
CV760		1	G	5	1
CV765		2	F	5	1
CV766		2	G	10	1
CV768	1,6,8	1	F	5	1
CV770	1,3,4,5,6,8	2	G	10	1
CV771	1,6,8	2	F	5	1
CV772		1	F	4	1
		1	F	5	1
CV773		1	F	4	1
		1	F	5	1
CV774	4,6	1	F	5	1
CV775		1	F	4	9
CV776	4	1	F	6	9
CV777	5	1	F	6	9
CV778		1	F	4	9
CV779		1	G	4	9
		1	G	6	9
CV780		1	F	6	9
		1	G	4	9
CV781	5	1	G	6	9
CV782	5	1	F	4	7
CV783	2,5,6	1	F	3	7
CV784		1	G	6	7
		1	H	3	7

TUBE	A	B	C	D	SKT
CV785	5	1	F	6	7
CV786		1	E	5	1
CV807	2	3	F	4	7
CV808	4	3	F	3	7
	4	3	F	5	7
CV815	7	1	E	6	9
CV818	5,6	3	F	3	7
CV819	8	3	E	5	1
CV820	5,6	3	F	3	7
CV837		12	E	10	1
		12	G	4	1
		12	G	5	1
CV844		6	F	5	1
CV845		6	F	5	1
CV846		6	D	4	1
CV848	2	6	E	1	4
CV849		6	D	4	1
CV850	2	6	E	1	4
CV851		6	C	5	1
CV852	1,5	6	E	6	4
CV858		6	E	5	4
		6	E	6	4
CV859		6	F	5	1
		6	F	10	1
CV860		6	F	10	1
CV861		6	F	10	1
CV862		6	F	5	1
CV864		6	F	5	1
CV865		6	D	4	1
CV866		6	E	4	1
CV867		6	E	2	2
		6	G	4	2
		6	G	5	2
CV870		6	F	10	1
		6	G	5	1
		6	G	4	1
CV872		6	F	4	1
		6	F	5	1
CV873		6	A	3	1
		6	A	5	1
CV876		6	E	3	9
		6	E	6	9

TUBE	A	B	C	D	SKT
CV877		6	E	6	9
CV878		6	E	4	9
CV879		6	F	6	9
CV880		6	C	6	9
CV881		6	C	6	9
CV882	4	6	F	3	9
	4	6	G	5	9
	4	6	G	6	9
CV883		6	F	4	9
CV885		6	C	6	9
CV886		6	C	6	9
CV887	4	6	F	3	9
	4	6	G	5	9
	4	6	G	6	9
CV888		6	D	6	9
		6	F	4	9
CV890*	3,5,6	6	F	1	9
	Normal short 7, H-K				
CV891	4	6	F	3	9
	4	6	G	5	9
	4	6	G	6	9
CV892		6	E	6	9
		6	G	4	9
		6	G	3	9
CV893		6	F	4	9
		6	F	5	9
CV894		6	F	6	9
CV895		6	D	6	9
CV896		6	F	4	9
		6	G	5	9
		6	G	6	9
CV897		6	F	4	9
		6	E	6	9
CV898		6	E	4	9
		6	E	5	9
CV899		6	E	4	9
CV900		6	F	6	9
		6	G	4	9
		6	G	3	9
CV901	4	6	B	3	9
	4	6	B	6	9
CV902	4	6	D	6	9

TUBE	A	B	C	D	SKT
CV910		12	E	5	1
CV911		12	E	10	1
		12	F	8	1
CV916		12	F	3	1
		12	F	5	1
CV917		12	F	10	1
CV918		12	E	10	1
CV919		12	F	3	2
CV920		12	F	3	2
CV921		12	D	2	2
		12	G	5	2
CV922	5	12	D	4	1
CV923		12	E	4	1
CV924		12	F	1	2
		12	F	4	2
CV925		12	E	1	2
		12	E	4	2
CV930		12	F	4	9
		12	F	5	9
CV937		25	B	6	1
		25	C	5	1
CV938		25	F	5	1
CV939		25	C	5	1
CV940		25	E	10	1
		25	F	8	1
CV945		28	D	2	9
		28	D	7	9
CV946		28	D	2	9
		28	D	7	9
CV948		32	A	6	1
		32	C	5	1
CV995	2	6	G	1	4
CV1067		6	E	5	1
CV1074		6	E	5	1
CV1075		6	C	5	1
CV1100		6	E	10	1
CV1195		6	E	10	1
CV1280		6	F	10	1
CV1285		6	E	4	1
		6	E	5	1
CV1286		6	C	5	1

TUBE	A	B	C	D	SKT
CV1287		25	C	5	1
CV1301		6	E	3	1
		6	E	5	1
CV1347		6	D	10	1
CV1375	3	6	D	2	3
CV1376	1	6	D	2	3
CV1377*	1	5	A	4	1
	1	5	A	6	1
	Normal short 8, H-K				
CV1535	6	6	A	1	8
	6	6	A	7	8
CV1633	5	3	F	6	7
CV1741		6	A	5	1
CV1753		35	C	6	9
CV1758	5	1	F	6	7
CV1762		6	D	1	4
CV1763	5,6	6	H	1	4
CV1770	5	6	E	6	9
CV1777		6	E	6	9
CV1784		6	C	4	1
CV1800		1	G	5	1
CV1802		1	G	5	1
CV1803	1,6,8	1	F	5	1
CV1805	1,6,8	1	F	5	1
CV1806		2	F	10	1
CV1811		1	F	5	1
		1	G	10	1
CV1812		2	E	4	1
CV1815		6	F	5	1
CV1817		1	F	5	1
CV1818		1	G	10	1
		1	G	5	1
CV1819		6	F	5	1
CV1820		1	G	10	1
		1	G	5	1
CV1821		1	F	10	1
CV1823		1	F	10	1
CV1824		1	E	5	1
CV1826		1	E	5	1
CV1829		1	E	5	1

TUBE	A	B	C	D	SKT
CV1854*	1,3,5,7	5	B	4	1
	1,3,5,7	5	B	6	1
	Normal short 8, H-K				
CV1856*	1,3,5,7	5	B	4	1
	1,3,5,7	5	B	6	1
	Normal short 8, H-K				
CV1862	7	6	C	1	4
CV1865		6	C	1	3
CV1873		6	D	4	1
CV1878		6	G	1	1
		6	F	5	1
CV1882		6	C	4	1
CV1886	7	6	G	1	8
CV1887		6	F	10	1
		6	G	5	1
		6	G	4	1
CV1888		6	C	1	3
CV1893		6	E	10	1
		6	G	5	1
		6	G	4	1
CV1894		6	E	10	1
		6	G	5	1
		6	G	4	1
CV1896		6	F	5	1
		6	F	10	1
CV1901		6	E	1	4
CV1902		6	E	5	1
CV1908		6	G	10	1
CV1909		6	G	10	1
CV1910		6	G	10	1
CV1911		6	B	5	1
CV1912		6	B	5	1
CV1917		6	E	10	1
		6	E	5	1
CV1918		6	E	10	1
		6	E	5	1
CV1926		6	D	5	1
CV1928		12	D	1	4
CV1929		6	E	3	1
		6	E	5	1

TUBE	A	B	C	D	SKT
CV1930		6	E	3	1
		6	E	5	1
CV1931		6	E	3	1
		6	E	5	1
CV1932		6	E	5	1
CV1933		6	E	5	1
CV1934		6	E	5	1
CV1935		6	F	10	1
CV1936		6	F	10	1
CV1937		6	F	10	1
CV1938		6	B	5	1
CV1940		6	B	5	1
CV1941		6	E	10	1
CV1942		6	E	10	1
CV1943		6	E	10	1
CV1944		6	E	5	1
CV1945		6	E	5	1
CV1946		6	E	5	1
CV1947		6	C	5	1
CV1948		6	C	5	1
CV1949		6	F	1	4
CV1950		6	F	10	1
CV1951		6	F	10	1
CV1956		6	E	4	1
		6	E	5	1
CV1957		6	E	4	1
		6	E	5	1
CV1958		6	E	4	1
		6	E	5	1
CV1959	5	50	C	2	4
CV1960		6	E	10	1
CV1961		12	D	1	4
CV1962		6	E	10	1
		6	G	5	1
		6	G	4	1
CV1963		6	E	10	1
		6	G	5	1
		6	G	4	1
CV1964		6	E	10	1
		6	G	5	1
		6	G	4	1
CV1966		6	D	5	1

TUBE	A	B	C	D	SKT
CV1967		6	D	5	1
CV1969		6	F	3	2
		6	F	4	2
CV1970		6	F	3	2
		6	F	4	2
CV1971	5	1	F	6	7
CV1972		6	F	3	2
CV1973		6	F	3	2
CV1974		6	E	10	1
CV1975		6	E	10	1
CV1978	5	6	D	4	1
CV1981		6	D	4	1
CV1982		6	D	4	1
CV1984		6	F	1	2
		6	F	4	2
CV1985		6	F	1	2
		6	F	4	2
CV1986		6	E	1	2
		6	E	4	2
CV1988		6	E	1	2
		6	E	4	2
CV1990		6	F	2	2
		6	G	4	2
		6	G	5	2
CV1991		6	F	2	2
		6	G	4	2
		6	G	5	2
CV1993		6	E	4	1
CV1995		6	F	2	2
		6	G	4	2
		6	G	5	2
CV1996		6	F	2	2
		6	G	4	2
		6	G	5	2
CV2004		6	E	2	4
		6	E	7	4
CV2005		6	E	2	4
		6	E	7	4
CV2007	9	12	D	2	3
	9	12	D	7	3
CV2009	5,6	6	E	1	4

TUBE	A	B	C	D	SKT
CV2010		6	E	5	4
		6	E	6	4
CV2011	9	12	D	2	3
	9	12	D	7	3
CV2013	1,6	6	C	2	3
CV2014	8	6	C	9	3
CV2016	9	12	E	2	3
	9	12	E	7	3
CV2020	2	6	E	1	4
CV2021		6	B	1	4
		6	B	6	4
CV2022	1,6	6	C	2	3
CV2023		6	E	1	4
CV2024		6	D	1	4
CV2026		6	D	1	4
CV2105	2,6,8	6	C	3	3
CV2127	1,6	6	C	2	3
CV2128		6	E	2	3
		6	E	9	3
CV2129	8	6	C	9	3
CV2135	6,7,9	9	E	2	3
	6,9	9	E	7	3
	7,9	9	E	6	3
CV2136	1,6	6	C	2	3
CV2195		6	E	1	4
CV2241		1	H	10	3
Insert leads into pins 1&5, use top cap					
CV2300	2	3	F	4	7
CV2361	5	3	G	6	7
CV2370	5,6	3	F	3	7
CV2382	8	6	E	2	3
	8	6	E	7	3
CV2390	2	3	F	4	7
CV2466	9	12	C	1	3
	9	12	C	3	3
CV2492	9	6	D	2	3
	9	6	D	7	3
CV2500	1,3,4,6	35	B	5	1
CV2507	5	1	F	6	7
CV2522		6	E	1	4
CV2523		6	A	1	2
		6	A	4	2

TUBE	A	B	C	D	SKT
CV2524		6	D	1	4
CV2526		6	F	1	4
		6	G	5	4
		6	G	6	4
CV2527		6	D	2	3
CV2530	3	45	B	5	1
CV2534		50	C	5	1
CV2556		50	B	6	1
		50	B	4	1
CV2557	1,8	50	B	4	1
CV2558	1,6	50	F	3	1
	1,6	50	F	5	1
CV2578	8	12	D	2	3
	8	12	D	7	3
CV2704*	3,5,6	6	F	1	9
Normal short 7, H-K					
CV2706		6	F	4	9
CV2707		6	E	9	9
CV2709		1	H	4	9
CV2710	7	1	E	6	9
CV2714		6	A	5	1
CV2716		6	F	3	2
		6	F	4	2
CV2721	1,6,7	6	C	2	3
CV2726		6	C	2	3
CV2729		6	G	9	3
CV2742	5	1	F	6	7
CV2748*	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
Normal short 8, H-K					
CV2769	1,7	6	F	5	4
CV2795	5	1	F	6	7
CV2798	9	12	C	1	3
	9	12	C	3	3
CV2842	1,5	6	E	6	4
CV2844		6	B	1	4
		6	B	6	4
CV2854	2	6	C	1	4
CV2877	2	6	D	1	4
CV2882		6	E	2	4
		6	E	7	4
CV2883	7	6	C	1	4

TUBE	A	B	C	D	SKT
CV2884		6	E	1	4
CV2901	2	6	F	9	3
CV2940	1,3	6	A	5	1
CV2975	1,6,8	6	C	2	3
CV2983	5	3	F	6	7
CV2984		6	A	1	2
		6	A	4	2
CV3508	9	12	E	2	3
	9	12	E	7	3
CV3523	4,6,8	6	C	5	1
CV3526	3	6	C	2	3
CV3908		6	E	1	4
CV3912		1	G	6	7
		1	H	4	7
CV3990	4,6,8	6	A	5	1
CV3995		6	D	1	4
CV3998	1	6	D	2	3
CV4003	9	12	D	2	3
	9	12	D	7	3
CV4004	9	12	F	2	3
	9	12	F	7	3
CV4007		6	E	2	4
		6	E	7	4
CV4009		6	D	1	4
CV4010	2	6	D	1	4
CV4011		6	E	1	4
CV4012		6	D	1	4
CV4014		6	G	9	3
CV4015		6	E	1	4
CV4016	9	12	D	2	3
	9	12	D	7	3
CV4017	9	12	F	2	3
	9	12	F	7	3
CV4019	7	6	C	1	4
CV4022	2,5	6	E	6	4
CV4023		6	D	1	4
CV4024	9	12	E	2	3
	9	12	E	7	3
CV4025		6	E	2	4
		6	E	7	4
CV4026		6	C	1	3

TUBE	A	B	C	D	SKT
CV4031		6	E	5	4
		6	E	6	4
CV4039	8	6	C	9	3
CV4058	2,5	6	E	6	4
CV4108		6	E	2	3
		6	E	7	3
CV5008		6	A	1	2
		6	A	4	2
CV5021	3	6	A	7	8
CV5032	1,3,6,7	1	H	10	8
CV5034	2,6,8	6	G	1	3
CV5036	6,7	6	D	2	4
CV5037		6	D	1	4
CV5040		6	A	5	1
CV5042	9	12	D	2	3
	9	12	D	7	3
CV5055	3,6,8	6	G	1	3
CV5065		6	D	2	3
		6	D	9	3
CV5071	6	6	A	1	8
	6	6	A	7	8
CV5072	6	6	A	1	8
	6	6	A	7	8
CV5074	6,7	6	D	2	4
CV5077	1,6,7	21	C	2	3
CV5094	1,6,8	6	C	2	3
CV5156	1	6	D	2	3
CV5172		1	F	4	7
CV5181*	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
	Normal short 8, H-K				
CV5189		6	E	2	4
		6	E	7	4
CV5190	7	6	C	1	4
CV5192	7	7	E	2	3
	7	7	E	6	3
CV5212	9	12	E	2	3
	9	12	E	7	3
CV5214		6	E	5	4
		6	E	6	4
CV5215		6	D	2	3
		6	D	9	3

TUBE	A	B	C	D	SKT
CV5216	2	6	D	1	4
CV5220		6	A	5	1
CV5231		6	E	2	3
		6	E	7	3
CV5281	2	6	D	3	3
	2	6	D	7	3
CV5311	5,6	6	H	1	4
CV5331	9	6	D	2	3
	9	6	D	7	3
CV5354		6	E	2	3
		6	E	7	3
CV5358	9	6	D	2	3
	9	6	D	7	3
CV5365	9	6	E	2	3
	9	6	E	7	3
CV5404	9	12	E	3	3
	9	12	E	8	3
CV5427	1,3,6,7	1	H	10	8
CV5434	2,6,8	6	G	1	3
CV5724	8	6	H	2	3
CV5817	3	6	D	2	3
CV5831	3	6	D	2	3
CV5843	9	12	E	2	3
	9	12	E	7	3
CV5893	2	6	D	1	4
CV5895		6	D	1	4
CV5896		6	D	1	4
CV5905	1,2,3,6,7,8	6	A	9	3
CV5989	0	12	E	2	3
	0	12	E	7	3
CV8017		6	E	1	4
CV8020		6	E	1	4
CV8045	1,6	6	C	2	3
CV8047	6,7,9	9	E	2	3
	6,9	9	E	7	3
	7,9	9	E	6	3
CV8048	1,6	6	C	2	3
CV8065		6	E	2	3
		6	E	7	3
CV8068	2	6	F	9	3
CV8069	1,6,8	6	C	2	3
CV8070		6	F	10	1

TUBE	A	B	C	D	SKT
CV8071		6	E	1	4
CV8073	9	12	F	2	3
	9	12	F	7	3
CV8076	1,6	6	C	2	3
CV8154	9	12	E	2	3
	9	12	E	7	3
CV8155	9	12	D	2	3
	9	12	D	7	3
CV8156	9	12	F	2	3
	9	12	F	7	3
CV8159	2	6	E	1	4
CV8160		6	E	5	4
		6	E	6	4
CV8189*	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
	Normal short 8, H-K				
CV8190		6	D	1	4
CV8191	8,9	6	C	2	3
CV8192	5,6	6	H	1	4
CV8200		6	E	2	4
		6	E	7	4
CV8201		6	D	1	4
CV8202		6	D	1	4
CV8203		6	B	1	4
		6	B	6	4
CV8204*	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
	Normal short 8, H-K				
CV8205		6	F	1	4
CV8206	8	6	C	9	3
CV8208		6	D	1	4
CV8209		6	E	1	4
CV8210		6	D	1	4
CV8211	2	6	C	1	4
CV8215	2	6	E	1	4
CV8216		6	A	1	2
		6	A	4	2
CV8218	4,6,8	6	C	5	1
CV8221	9	12	D	2	3
	9	12	D	7	3
CV8222	9	12	F	2	3
	9	12	F	7	3

TUBE	A	B	C	D	SKT
CV8223		6	B	1	4
		6	B	6	4
CV8224		6	E	2	4
		6	E	7	4
CV8225	2	6	E	1	4
CV8226		6	E	1	4
CV8227		6	D	1	4
CV8229	7	6	C	1	4
CV8231		6	E	5	4
		6	E	6	4
CV8232		6	A	1	2
		6	A	4	2
CV8237		6	B	1	4
		6	B	6	4
CV8246	2	6	D	1	4
CV8248		6	D	1	4
CV8249		6	D	1	4
CV8280		6	B	3	1
		6	B	5	1
CV8287	3,8,9	6	C	2	3
CV8297		6	C	8	3
		6	G	1	3
CV8310		6	E	1	4
CV8311		6	E	2	4
		6	E	7	4
CV8312	9	12	F	2	3
	9	12	F	7	3
CV8403		6	D	1	4
CV8430	3,4,6,8	6	G	5	1
CV8431	9	12	E	2	3
	9	12	E	7	3
CV8433		9	D	2	3
		9	D	9	3
CV8458	7	6	C	1	4
CV8470		6	F	4	6
CXF80		4	D	2	3
		4	D	9	3
D2M9		6	E	2	4
		6	E	7	4
D63		6	F	3	1
		6	F	5	1

TUBE	A	B	C	D	SKT
D77		6	E	2	4
		6	E	7	4
D152		6	E	7	4
		6	E	2	4
D193	5,6	3	F	4	7
D717		6	E	2	4
		6	E	7	4
DA90	2,5	1	J	6	7
DAC21		1	G	6	7
		1	H	3	7
DAC32		1	G	10	1
		1	G	5	1
DAE32		1	F	10	1
		1	G	5	1
DAF90	2,5	1	J	6	7
DAF91		1	G	6	7
		1	H	3	7
DAF92		1	G	6	7
		1	H	4	7
DAF96	2	1	G	6	7
	2	1	H	3	7
DAF97	5	1	G	6	7
DC80	3	1	D	1	3
DCC90	4	3	F	3	7
	4	3	F	5	7
DD6		6	E	2	4
		6	E	7	4
DD7		6	C	1	4
DD77		6	E	2	4
		6	E	7	4
DDR7		6	D	1	4
DDT6		6	F	8	3
		6	G	6	3
		6	G	2	3
DF26		1	G	6	7
		1	H	3	7
DF33		1	F	10	1
DF91	5	1	F	6	7
DF92	5	1	F	6	7
DF96	5	1	G	6	7
DF97	2	1	G	1	4
DF904	5	1	F	6	7

TUBE	A	B	C	D	SKT
DH63		6	F	10	1
		6	G	5	1
		6	G	4	1
DH73		6	F	10	1
		6	G	5	1
DH74		12	F	10	1
		12	G	5	1
		12	G	4	1
DH76		12	F	10	1
		12	G	5	1
		12	G	4	1
DH77		6	F	1	4
		6	G	5	4
		6	G	6	4
DH81	4	6	F	3	9
	4	6	G	5	9
	4	6	G	6	9
DH109		28	F	8	3
		28	G	6	3
		28	G	2	3
		28	G	1	3
DH118	4	14	F	6	9
	4	14	G	5	9
	4	14	G	3	9
DH119	9	14	F	2	3
	9	14	G	6	3
	9	14	G	8	3
DH142	4	14	F	6	9
	4	14	G	5	9
	4	14	G	3	9
DH147		6	F	10	1
		6	G	5	1
		6	G	4	1
DH149	4	6	F	6	9
	4	6	G	5	9
	4	6	G	3	9
DH719		6	F	8	3
		6	G	6	3
		6	G	2	3
		6	G	1	3
DK32		1	G	5	1
DK91	5	1	F	4	7

TUBE	A	B	C	D	SKT
DK92		1	F	4	7
DK96		1	F	4	7
DK97	7	1	F	4	7
DL12		6	F	8	2
		6	G	6	3
		6	G	2	3
		6	G	1	3
DL29	7	1	E	6	9
DL31	1,6,8	1	F	5	1
DL33	8	3	D	5	1
DL35		1	F	5	1
DL36		1	E	5	1
DL37		6	C	5	1
DL63		6	F	10	1
		6	G	5	1
		6	G	4	1
DL74M		12	F	10	1
		12	G	5	1
		12	G	4	1
DL82	4	6	F	3	9
	4	6	G	5	9
	4	6	G	6	9
DL91	5,6	1	F	3	7
DL92	5,6	3	F	3	7
DL93	5,6	3	F	4	7
DL94	5	3	F	6	7
DL95	5,6	3	F	3	7
DL96	5	3	G	6	7
DL193	5	3	F	4	7
DM74		12	F	10	1
		12	G	5	1
		12	G	4	1
DM76		12	F	10	1
		12	G	5	1
		12	G	4	1
DP51	2	6	E	1	4
DP61	2	6	E	1	4
DY30*	2	1	H	10	1
Normal short 8, H-K					
DY51		1	J	10	3

Insert leads into pins 1&5, use top cap

TUBE	A	B	C	D	SKT
DY70		1	H	10	3
Insert leads into pins 1 & 5, use top cap					
DY80	1,2,3,6,7,8,9	1	H	10	8
DY86	1,2,3,6,7,8,9	1	H	10	8
DY87	1,2,3,6,7,8,9	1	H	10	8
E55L	6,9	6	D	8	5
E80CC	9	12	E	2	3
	9	12	E	7	3
E80CF		6	D	2	3
		6	E	9	3
E80F		6	G	9	3
E80L	1	6	C	2	3
E80T	8	6	H	2	3
E81CC	9	12	E	2	3
	9	12	E	7	3
E81L	1	6	C	2	3
E82CC	9	12	D	2	3
	9	12	D	7	3
E82CF		6	D	2	3
		6	D	9	3
E83CC	9	12	F	2	3
	9	12	F	7	3
E83F		6	E	2	3
E84L	1,6,8	6	C	2	3
E86C	6,7,8,9	6	D	2	8
E88C	3,6,7,9	6	H	8	3
E88CC		6	E	2	3
		6	E	7	3
E89F	1,6	6	D	2	3
E90C		6	E	5	4
		6	E	6	4
E90F		6	E	1	4
E90Z		6	B	1	4
		6	B	6	4
E91AA		6	E	2	3
		6	E	7	3
E91H		6	F	1	4
E92CC		6	E	5	4
		6	E	6	4
E95F	2	6	E	1	4
E99F		6	E	1	4
E130L	1,3,6	6	C	5	1

TUBE	A	B	C	D	SKT
E180CC	9	12	E	2	3
	9	12	E	7	3
E180F	1	6	D	2	3
E180L	1,3,6	6	C	5	1
E182CC	8	12	D	2	3
	8	12	D	7	3
E186F	1	6	D	2	3
E188CC		6	E	2	3
		6	E	7	3
E280F	1,6	6	C	2	3
E288C	9	6	B	2	3
	9	6	B	7	3
E810F	3,9	6	C	2	3
E902		6	B	1	4
		6	B	6	4
E1485	2	3	F	4	7
E2016		6	E	1	4
E2157	9	12	E	2	3
	9	12	E	7	3
E2163	9	12	D	2	3
	9	12	D	7	3
E2164	9	12	F	2	3
	9	12	F	7	3
EA50		2	E	1	4
EAA91		6	E	2	4
		6	E	7	4
EAA901		6	E	2	4
		6	E	7	4
EAB80		6	F	8	3
		6	G	7	3
		6	G	2	3
		6	G	1	3
EABC80		6	F	8	3
		6	G	6	3
		6	G	2	3
		6	G	1	3
EA801		6	D	2	3
		6	D	8	3
EB34		6	E	3	1
		6	E	5	1
EB91		6	E	2	4
		6	E	7	4

TUBE	A	B	C D	SKT
EBC3		6	F 8	3
		6	G 6	3
		6	G 2	3
EBC33		6	E 10	1
		6	G 5	1
		6	G 4	1
EBC80		6	F 8	3
		6	G 6	3
		6	G 2	3
EBC81		6	F 8	3
		6	G 6	3
		6	G 2	3
EBC90		6	F 1	4
		6	G 5	4
		6	G 6	4
EBC91		6	F 1	4
		6	G 5	4
		6	G 6	4
EBD80		6	E 2	3
		6	E 6	3
		6	E 8	3
EBF80		6	F 2	3
		6	G 7	3
		6	G 8	3
EBF81		6	E 2	3
		6	G 7	3
		6	G 8	3
EBF83		6	G 2	3
		6	G 7	3
		6	G 8	3
EBF85		6	D 2	3
		6	G 7	3
		6	G 8	3
EBF89		6	D 2	3
		6	G 7	3
		6	G 8	3
EC22		6	C 1	3
EC52		6	E 6	4
EC53		6	E 6	A
EC80	7	6	D 1	8
EC81		6	C 1	3
EC86	6,7,8,9	6	E 2	8

TUBE	A	B	C D	SKT
EC88	1,3,6,7	6	D 9	3
EC90	1	6	D 6	4
EC91	5,6	6	E 1	4
EC92	2	6	E 6	4
EC93	6,7	6	D 2	4
EC94	6,7	6	D 2	4
EC95	7	6	E 2	4
EC97	1	6	E 2	4
EC806	2,7,8,9	6	D 6	8
EC900	2	6	E 1	4
EC903	6,7	6	D 2	4
EC8010	1,3,7,9	6	G 6	8
EC8020	1,3,7,9	6	G 6	8
EC8605	2,7,8,9	6	D 6	8
ECC32		6	E 1	2
		6	E 4	2
ECC33		6	E 1	2
		6	E 4	2
ECC35		6	F 1	2
		6	F 4	2
ECC70	9	12	E 2	3
	9	12	E 7	3
ECC81	9	12	E 2	3
	9	12	E 7	3
ECC82	9	12	D 2	3
	9	12	D 7	3
ECC83	9	12	F 2	3
	9	12	F 7	3
ECC84	2	6	D 3	3
	2	6	D 7	3
ECC85		6	D 2	3
		6	D 7	3
ECC86		6	E 2	3
		6	E 7	3
ECC88		6	D 2	3
		6	D 7	3
ECC89	7	6	D 2	3
	7	6	D 6	3
ECC91		6	E 5	4
		6	E 6	4
ECC180		6	E 7	3
		6	E 2	3

TUBE	A	B	C D	SKT
ECC186	9	12	D 2	3
	9	12	D 7	3
ECC189	9	6	D 2	3
	9	6	D 7	3
ECC230		6	A 1	2
		6	A 4	2
ECC801	9	12	E 2	3
	9	12	E 7	3
ECC802	9	12	D 2	3
	9	12	D 7	3
ECC803	9	12	F 2	3
	9	12	F 7	3
ECC804		6	D 2	3
		6	D 7	3
ECC807		6	G 2	3
		6	G 9	3
ECC808		6	G 1	3
		6	G 9	3
ECC813	9	12	E 3	3
	9	12	E 8	3
ECC863	9	12	G 2	3
	9	12	G 7	3
ECC900	2	6	E 1	4
ECC960		6	E 6	4
		6	E 5	4
ECC962		6	E 3	3
		6	E 6	3
ECC2000	1	6	D 3	11
	1	6	D 8	11
ECF80		6	E 2	3
		6	E 9	3
ECF82		6	D 2	3
		6	D 9	3
ECF83		6	F 9	3
		6	F 2	3
ECF86		6	D 2	3
		6	D 6	3
ECF200		6	D 3	11
		6	E 10	11
ECF201		6	D 3	11
		6	D 10	11

TUBE	A	B	C D	SKT
ECF202		6	C 3	11
		6	D 10	11
ECF801	3	6	D 2	3
	3	6	E 9	3
ECF802		6	D 9	3
		6	D 2	3
ECF804		6	E 2	3
		6	D 9	3
ECF805	6	6	E 7	3
	6	6	D 9	3
ECH32		6	E 5	1
ECH33		6	E 5	1
ECH35		6	D 10	1
ECH36		6	E 5	1
ECH42	8	6	E 1	10
	8	6	E 7	10
	8	6	E 9	10
ECH43	8	6	E 1	10
	8	6	E 7	10
	8	6	E 9	10
ECH80		6	E 2	3
		6	F 9	3
ECH81		6	E 2	3
		6	E 9	3
ECH82		6	D 10	1
ECH83		6	F 2	3
		6	G 9	3
ECH84		6	E 2	3
		6	E 9	3
ECH113	8	6	E 1	10
	8	6	E 7	10
	8	6	E 9	10
ECH200		6	D 8	11
		6	E 3	11
ECL80		6	D 9	3
		6	F 2	3
ECL82		8	C 3	3
		8	F 1	3
ECL83		6	C 9	3
		6	G 2	3
ECL84		6	D 8	3
		6	F 1	3

TUBE	A	B	C D	SKT
ECL85		6	C 9	3
		6	E 2	3
ECL86		6	C 8	3
		6	G 1	3
ECL821	1,6	6	C 2	3
ECLL800		6	F 2	3
		6	C 6	3
ED2		6	E 2	4
		6	E 7	4
EDF86		4	D 2	3
		4	D 9	3
ED500	2	6	G 8	12
EF2	1	6	D 2	4
EF5	1	6	D 2	3
EF13	1	6	D 2	3
EF22		6	F 6	9
EF32	2	6	E 1	4
EF36		6	F 10	1
EF37		6	F 10	1
EF39		6	E 10	1
EF80	1	6	D 2	3
EF81	8	6	F 2	3
EF82	1,6	6	C 2	3
EF83	2	6	E 9	3
EF85	3	6	D 2	3
EF86	2	6	F 9	3
EF87		6	F 9	3
EF89	1	6	D 2	3
EF89F	1,6	6	D 2	3
EF91		6	D 1	4
EF92		6	E 1	4
EF93		6	D 1	4
EF94		6	D 1	4
EF95	2	6	E 1	4
EF96		6	D 1	4
EF97		6	D 1	4
EF98		6	D 1	4
EF180		6	D 1	4
EF183	1	6	D 2	3
EF184	1	6	D 2	3
EF190		6	D 1	4
EF804	1	6	F 9	3

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TUBE	A	B	C D	SKT
EF806	2	6	F 9	3
EF811	3	6	D 2	3
EF812	1	6	D 2	3
EF814	3	6	D 2	3
EF861	1	6	D 2	3
EF905	2	6	D 1	4
EFL200		6	C 8	11
		6	D 1	11
EH90		6	D 1	4
EH900		6	D 1	4
EK90		6	D 1	4
EL33		6	F 5	1
EL34		6	A 5	1
EL35		6	A 5	1
EL36	1,3	6	A 5	1
EL37		6	C 5	1
EL80	6,8	6	C 2	3
EL81	1,6,7	6	C 2	3
EL82	1	6	B 2	3
EL83		6	C 2	3
EL84	1,6,8	6	C 2	3
EL85	8	6	C 2	3
EL86	1,6,8	6	C 2	3
EL90	7	6	C 1	4
EL91		6	C 1	4
EL95	7	6	C 1	4
EL180	6,9	12	C 2	3
EL300	4,6,8	6	A 5	1
EL500	2,7,8,9	6	A 1	12
EL503	3,6,8	6	C 7	5
EL504	2,7,8,9	6	A 1	12
EL505	6,7,8	6	A 1	12
EL508	8	6	B 1	12
EL509	6,7,8	6	A 1	12
EL802	6	6	C 2	5
EL803		6	C 2	3
EL820	1,6,7	6	C 2	3
EL821	1,6	6	C 2	3
EL822		6	C 2	3
EL861	1	6	C 2	3
EL900	2	6	E 1	4

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TUBE	A	B	C	D	SKT
ELF86		4	D	2	3
		4	D	9	3
ELL80		6	C	2	3
		6	C	6	3
EM81	3,6,8	6	G	1	3
EM84	2,6,8	6	G	1	3
EM85	1,6	6	D	2	3
EM87	2,6,8	6	G	1	3
EM840	2,6,8	6	G	1	3
EN93		6	F	1	4
EQ80	8	6	F	7	3
EY51		6	J	10	3
Insert leads into pins 1&5, use top cap					
EY80	1,2,6,7,8	6	A	9	3
EY81	1,2,3,6,7,8	6	A	9	3
EY82	1,2,6,7,8	6	A	9	3
EY86	1,2,3,6,7,8,9	6	H	10	8
EY87	1,2,3,6,7,8	6	J	10	8
EY88	1,2,3,6,7,8	6	A	9	3
EY500	7,8	6	A	2	12
EY500A	1,3,6,7,8,9	6	A	2	12
EZ3	6	6	A	1	8
	6	6	A	7	8
EZ4	6	6	A	1	8
	6	6	A	7	8
EZ11	6	6	A	1	8
	6	6	A	7	8
EZ22	4	6	B	3	9
	4	6	B	6	9
EZ35		6	B	3	1
		6	B	5	1
EZ80	6	6	A	1	8
	6	6	A	7	8
EZ81	6	6	A	1	8
	6	6	A	7	8
EZ90		6	B	1	3
		6	B	6	3
EZ91		6	A	1	4
		6	A	6	4
EZ900		6	B	1	4
		6	B	6	4
F1EL	3,6,8	6	C	7	5

TUBE	A	B	C	D	SKT
FF95	2	6	E	1	4
GY501*	1	3	J	10	8
Normal short 6, H-K					
GZ30*		5	B	4	1
		5	B	6	1
Normal short 8, H-K					
GZ31*		5	B	4	1
		5	B	6	1
Normal short 8, H-K					
GZ32*		5	B	4	1
		5	B	6	1
Normal short 8, H-K					
GZ34*	1	5	A	4	1
		5	A	6	1
Normal short 8, H-K					
GZ37	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
Normal short 8, H-K					
H36		6	G	10	1
H52*		5	A	4	1
		5	A	6	1
Normal short 8, H-K					
H63		6	F	10	1
H1112		6	F	4	6
H1208		6	F	4	6
HAA9		12	E	2	4
		12	E	7	4
HAA91		12	E	2	4
		12	E	7	4
HABC80		19	F	8	3
		19	G	7	3
		19	G	2	3
		19	G	1	3
HBC80		19	F	8	3
		19	G	6	3
		19	G	2	3
		19	G	1	3
HBC90		12	F	1	4
		12	G	5	4
		12	G	6	4

TUBE	A	B	C	D	SKT
HBC91		12	F	1	4
		12	G	5	4
		12	G	6	4
HC85	9	17	E	2	3
	9	17	E	7	3
HCC85		17	E	2	3
		17	E	7	3
HCH81		12	F	2	3
		12	G	9	3
HD14		1	G	5	1
		1	F	10	1
HD93	1,3,6,7	1	H	10	8
HD94		6	A	5	1
HD96		25	A	5	1
HF93		12	D	1	4
HF94		12	D	1	4
HK90		12	D	1	4
HL86	1,6,8	30	C	2	3
HL90	7	19	C	1	4
HL92	5	50	C	2	4
HL94	5	30	C	2	4
HM04		6	D	1	4
HP6		6	E	1	4
HY65		6	A	5	1
HY90	6	35	A	5	4
HY145	5	1	F	6	7
HZ90		12	B	1	4
		12	B	6	4
KBC32		2	F	6	1
		2	G	5	1
		2	G	4	1
KF35		2	F	4	1
KK32		1	E	5	1
KL35		2	E	5	1
KT32		25	C	5	1
KT33		25	C	5	1
KT61		6	F	5	1
KT63		6	B	5	1
KT66		6	C	5	1
KT71		50	C	5	1
KT77		6	A	5	1
KT81		6	C	6	9

TUBE	A	B	C	D	SKT
KT88		6	C	5	1
KTW1		6	F	10	1
KTW63		6	E	10	1
KTW74M		12	F	10	1
KTZ63		6	F	10	1
KY80	1,6	2	H	10	8
L63		6	E	5	1
L77	1	6	E	5	4
LC97	7	3	E	2	4
LC900	2	3	E	1	4
LCC189		5	E	2	3
		5	E	7	3
LCF80		8	D	2	3
		8	D	9	3
LCF86	3	5	D	2	3
	3	5	D	6	3
LCF200		5	D	3	11
		5	E	10	11
LCF201		5	D	3	11
		5	D	10	11
LCF801	3	5	D	2	3
	3	5	E	9	3
LCF802		6	D	9	3
		6	C	2	3
LCH200		5	D	8	11
		5	E	3	11
LCL82		11	C	3	3
		11	F	1	3
LCL84		10	D	8	3
		10	F	1	3
LCL85		10	C	9	3
		10	E	2	3
LCL200		11	C	8	11
		11	D	1	11
LF183	3	4	D	2	3
LF184	3	4	D	2	3
LFL200		11	C	8	11
		11	D	1	11
LL86	1,6,8	10	C	2	3
LL500	2,7,8,9	18	A	1	12
LL505	1,2,3	27	A	8	12
LL521	1,2,3	21	A	8	12

TUBE	A	B	C	D	SKT
LL802	9	12	F	2	3
	9	12	F	7	3
LN119		50	C	3	3
		50	F	1	3
LN152		6	D	9	3
		6	F	2	3
LN309		16	C	3	3
		16	E	1	3
LN319		13	C	9	3
		13	E	2	3
LY81	1,2,3,6,7,8	11	A	9	3
LY88	1,2,3,6,7,8	20	A	9	3
LZ319		9	D	2	3
		9	D	9	3
LZ329		9	D	2	3
		9	D	9	3
M7		50	B	6	1
		50	B	4	1
M8063		6	E	1	4
M8079		6	E	2	4
		6	E	7	4
M8080	1	6	E	6	4
M8081		6	E	5	4
		6	E	6	4
M8082	1,6,7	6	C	2	3
M8083		6	D	1	4
M8096	8	6	C	9	3
M8100	2	6	E	1	4
M8136	9	12	D	2	3
	9	12	D	7	3
M8137	9	12	F	2	3
	9	12	F	7	3
M8161		6	E	1	4
M8162	9	12	E	2	3
	9	12	E	7	3
M8195		6	F	9	3
M8196		6	E	1	4
M8212		6	E	2	4
		6	E	7	4
M8232	5,6	6	G	1	4
M8245	7	6	C	1	4
MV6-5		6	D	5	1

TUBE	A	B	C	D	SKT
N2ED	1,3,5,7,9	6	J	6	10
N14		1	E	5	1
N15		3	G	6	7
N16	8	3	F	5	1
N17	5,6	3	F	3	7
N18	5,6	3	F	3	7
N19	5	3	F	6	7
N22LL	1,8	19	A	7	12
N25	5	3	G	6	7
N30EL	1,6,7,8,9,0	6	A	5	10
N47		6	D	1	4
N63		6	B	5	1
N66		6	C	5	1
N77		6	C	1	4
N78		6	C	1	4
N119	1,6,8	45	C	2	3
N144		6	C	1	4
N147		6	F	5	1
N148		6	C	b	9
N152	1,6,8	21	C	2	3
N153		15	C	2	3
N154	6,8	16	C	2	3
N155	3	6	C	2	3
N300		15	C	2	3
N308	1	25	C	5	1
N309		15	C	2	3
N329	6	16	C	2	3
N339	1,6,7	21	C	2	3
N359	6,8	21	C	2	3
N369	6	16	C	3	3
		16	E	1	3
N378	1,6,8	15	C	2	3
N379	1,6,8	15	C	2	3
N389	1	25	C	5	1
N707	1,6,8	6	C	2	3
N709	1,6,8	6	C	2	3
N727	7	6	C	1	4
OBC		12	F	2	2
		12	G	4	2
		12	G	5	2

TUBE	A	B	C	D	SKT
OBC3		12	F	2	2
		12	G	4	2
		12	G	5	2
OF1		6	E	10	1
OF5		12	E	10	1
OH4		12	E	5	1
OM5		6	E	10	1
OM6		6	E	10	1
OM9		6	F	5	1
OM10		6	E	5	1
OM558		6	E	1	4
OSW2190		6	D	4	1
OSW2192		6	C	4	1
OSW2600		6	D	4	1
OSW2601		6	C	4	1
OSW3104		6	D	5	1
OSW3105		6	F	2	2
		6	G	4	2
		6	G	5	2
OSW3106		6	F	5	1
OSW3107*	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
Normal short 8, H-K					
OSW3109		6	E	3	1
		6	E	5	1
OSW3111		6	D	4	1
OSW3112		6	E	5	1
OSWR190		6	D	4	1
PABC80		9	F	8	3
		9	G	6	3
		9	G	2	3
		9	G	1	3
PC86	3	4	E	6	8
PC88	3,6,7,8	6	D	1	3
PC95	7	4	E	2	4
PC97	1	4	E	2	4
PC200		8	D	3	11
		8	E	5	11
PC800	2	4	E	1	4
PC900	2	4	E	1	4
PCC84	8	7	E	2	3
	8	7	E	6	3

TUBE	A	B	C	D	SKT
PCC85		9	E	2	3
		9	E	7	3
PCC88		7	D	2	3
		7	D	7	3
PCC89	7	7	D	2	3
	7	7	D	6	3
PCC186	9	7	D	2	3
	9	7	D	7	3
PCC189		7	E	2	3
		7	E	7	3
PCC805	7	7	E	2	3
	7	7	E	6	3
PCF80		9	D	2	3
		9	D	9	3
PCF82		9	D	2	3
		9	D	9	3
PCF86		8	D	2	3
		8	E	6	3
PCF200		8	D	3	11
		8	E	10	11
PCF201		8	D	3	11
		8	D	10	11
PCF801	3	8	D	2	3
	3	8	E	9	3
PCF802		9	D	9	3
		9	C	2	3
PCF805	6	7	E	9	3
	6	7	D	7	3
PCF806	3	8	D	2	3
	3	8	E	9	3
PCH200		9	D	8	11
		9	E	3	11
PCL82		16	C	3	3
		16	E	1	3
PCL83		12	C	9	3
		12	G	2	3
PCL84		15	D	1	3
		15	D	8	3
PCL85		18	C	9	3
		18	E	2	3
PCL86		14	C	8	3
		14	G	1	3

TUBE	A	B	C	D	SKT
PCL88		16	C	3	3
		16	F	1	3
PCL800		16	C	3	3
		16	F	1	3
PCL801		13	C	9	3
		13	E	2	3
PD500	2,3,6,7,9	9	G	8	12
PF4		6	E	5	1
PF9		6	E	10	1
PF86		4	F	9	3
PF818	3	7	E	2	3
PFL200		16	D	1	11
		16	C	8	11
PH4		6	E	5	1
PL36	1	25	C	5	1
PL81	1	22	C	2	3
PL82	6	16	C	2	3
PL83		15	C	2	3
PL84	1,6,8	15	C	2	3
PL86		14	C	8	3
		14	G	1	3
PL87	6,8	16	C	2	3
PL302	1	25	C	5	1
PL500	6,7,8	27	A	1	12
PL505	6,7,8	40	A	1	12
PL508	3,6,7,8	17	B	1	12
PL509	6,7,8	40	A	1	12
PL521	7	15	A	8	12
PL801	1	12	C	2	3
PL820	1,6,7	21	C	2	3
PLL80		12	C	2	3
		12	C	6	3
PM95		6	D	1	4
PM04		6	D	1	4
PM05	2	6	E	1	4
PM07		6	D	1	4
PP6BG		6	F	5	1
PY32	3	29	A	5	1
PY33	3	29	A	5	1
PY80	1,2,6,7,8	19	A	9	3
PY81	1,2,3,6,7,8	17	A	9	3
PY82	1,2,6,7,8	19	A	9	3
PY83	1,2,3,6,7,8	17	A	9	3

TUBE	A	B	C	D	SKT
PY88	1,2,3,6,7,8	30	A	9	3
PY301		19	A	5	2
PY500	7,8	42	A	2	12
PY800	1,2,3,6,7,8	19	A	9	3
PY801		19	A	9	3
QA2400		6	E	1	4
QA2401	1	6	E	6	4
QA2402		6	D	1	4
QA2403		6	E	1	4
QA2404		6	E	2	4
		6	E	7	4
QA2406	9	12	E	2	3
	9	12	E	7	3
QA2407		6	B	1	4
		6	B	6	4
QA2408		6	E	1	2
		6	E	4	2
QB65		6	E	1	2
		6	E	4	2
QB309	9	12	E	2	3
	9	12	E	7	3
QB329	9	12	D	2	3
	9	12	D	7	3
QB339	9	12	F	2	3
	9	12	F	7	3
QE03/10	8	6	C	9	3
QE05/40	4,6	6	C	5	1
QL77	1,5	6	E	6	4
QM328	3,8,9	6	C	2	3
QM556		6	B	1	4
		6	B	6	4
QM557	2	6	D	1	4
QM558		6	E	1	4
QM559		6	E	2	4
		6	E	7	4
QQE02/5	9	12	C	1	3
	9	12	C	3	3
QQE03/12	9	12	C	1	3
	9	12	C	3	3
QQV02-6	9	12	C	1	3
	9	12	C	3	3

TUBE	A	B	C	D	SKT
QQV03-10	9	12	C	1	3
	9	12	C	3	3
QS2404		6	E	2	3
		6	E	7	3
QS2406	9	12	E	2	3
	9	12	E	7	3
QV03-12	8	6	C	9	3
QV06-20	4,6	6	C	5	1
QW77		6	E	1	4
QZ77		6	E	1	4
RZ		2	F	5	1
R3		1	F	6	7
R12		6	J	10	3
Insert leads into pins 1&5, use top cap					
R16		1	H	10	4
Insert leads into pins 1&5, use top cap					
R17	1,2,3,6,7,8,9	6	A	10	8
R18	1,2,3,6,7,8,9	6	A	10	8
R19	1,2,3,6,7,8,9	1	H	10	8
R20	1,2,3,6,7,8,9	2	H	10	8
R52*	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
Normal short 8, H-K					
R144		6	E	1	4
RE1		5	A	4	1
		5	A	6	1
Normal short 8, H-K					
RL16		6	E	6	4
RL18		6	E	6	4
RS2*	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
Normal short 8, H-K					
RS1029	9	12	C	1	3
	9	12	C	3	3
S6F12		6	E	1	4
SP6		6	D	1	4
SU61		6	J	10	3
Insert leads into pins 1&5, use top cap					
T2M05		6	E	5	4
		6	E	6	4
TD24	9	12	C	1	3
	9	12	C	3	3

TUBE	A	B	C	D	SKT
TE5		6	B	3	1
		6	B	5	1
TE8		6	F	5	1
TE10	1,2,4,6	6	A	5	2
TE22	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
Normal short 8, H-K					
TE45	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
Normal short 8, H-K					
TJ-880	3,6	6	C	2	3
TM12		6	F	10	1
TS229	8	12	D	2	3
	8	12	D	7	3
TT23	9	12	C	1	3
	9	12	C	3	3
TT24	9	12	C	1	3
		12	C	3	3
TTZ63		6	F	10	1
U26	1,2,3,6,7,8,9	6	H	10	8
U31	1,3,4,6	25	B	5	1
U37	5	1	F	6	7
U41	1,3,4,5,6,8	1	H	10	1
U43		6	J	10	3
Insert leads into pins 1&5, use top cap					
U49	1	6	H	10	8
U50		5	B	4	1
		5	B	6	1
U51*	1,3,5,7	5	B	4	1
	1,3,5,7	5	B	6	1
Normal short 8, H-K					
U52		5	A	4	1
		5	A	6	1
U54	1,3,5,7	5	A	4	1
	1,3,5,7	5	A	6	1
Normal short 8, H-K					
U70		6	B	3	1
		6	B	5	1
U74		35	B	5	1
U76		35	B	5	1

TUBE	A	B	C D	SKT
U77*	1	5	A 4	1
	1	5	A 6	1
	Normal short 8, H-K			
U78		6	B 1	4
U82	4	6	B 3	9
	4	6	B 6	9
U119	1,2,6,7,8	38	A 9	3
U147		6	B 3	1
		6	B 5	1
U149	4	6	B 3	9
	4	6	B 6	9
U151		6	B 1	4
		6	B 6	4
U152	1,2,6,7,8	19	A 9	3
U153	1,2,3,6,7,8	17	A 9	3
U154	1,2,6,7,8	19	A 9	3
U191		19	A 5	2
U192	1,2,6,7,8	19	A 9	3
U193	1,2,3,6,7,8	17	A 9	3
U251	1,2,3,6,7,8	25	A 9	3
U291	4,5,6	29	A 3	1
U309	1,2,6,7,8	20	A 9	3
U319		20	A 9	3
U329	1,2,3,6,7,8	25	A 9	3
U339		19	A 5	2
U349	1,2,3,6,7,8	17	A 9	3
U381	1,2,6,7,8	38	A 9	3
U707		6	B 1	4
		6	B 6	4
U709	6	6	A 1	8
	6	6	A 7	8
U4020		2	F 5	1
UABC80		28	F 8	3
		28	G 6	3
		28	G 2	3
		28	G 1	3
UAVC80		28	F 8	3
		28	G 6	3
		28	G 2	3
		28	G 1	3

TUBE	A	B	C D	SKT
UBC41	4	14	F 6	9
	4	14	G 5	9
	4	14	G 3	9
UBC80	9	14	F 2	3
	9	14	G 6	3
	9	14	G 8	3
UBC81	9	14	F 2	3
	9	14	G 6	3
	9	14	G 8	3
UBF80		17	F 2	3
		17	G 7	3
		17	G 8	3
UBF89		19	E 2	3
		19	G 7	3
		19	G 8	3
UC92	2	9	E 6	4
UCC85		26	D 2	3
		26	D 7	3
UCF80		27	D 2	3
		27	D 9	3
UCH80		14	D 2	3
		14	F 9	3
UCH81		19	E 2	3
		19	F 9	3
UCL82		50	C 3	3
		50	E 1	3
UCL83		38	C 9	3
		38	E 2	3
UCL86		43	C 8	3
		43	F 1	3
UF80	1	19	D 2	3
UF85	1	19	D 2	3
UF86	2	12	D 9	3
UF89	6	12	D 2	3
UL84	1,6,8	45	C 2	3
UR1C		2	F 5	1
UU12	6	6	A 1	8
	6	6	A 7	8
UY82	1,2,6,7,8	50	A 9	3
UY85	1,2,6,7,8	38	A 9	3
UY89	1,2,6,7,8	31	A 9	3

TUBE	A	B	C	D	SKT
V2M70		6	B	1	4
		6	B	6	4
V86		6	D	1	4
V177		6	E	1	4
V741	1	6	E	6	4
V884		6	E	1	4
V886		6	D	1	4
VP6		6	F	1	4
VP12D		12	F	10	1
		12	G	5	1
		12	G	4	1
W17	5	1	F	6	7
W25	5	1	G	6	7
W26	5	1	G	6	7
W61		6	E	10	1
W63		6	E	10	1
W76		12	E	10	1
W77		6	E	1	4
W81		6	E	6	9
W110	3	13	D	1	3
W119	3	13	D	1	3
W143		6	E	6	9
W147		6	E	10	1
W148		6	E	6	9
W149		6	E	6	9
W179		6	D	2	3
W719		6	C	1	2
		6	C	4	2
W727		6	D	1	4
W739	3	6	D	1	3
WD119		19	E	2	3
		19	G	7	3
		19	G	8	3
WD709		6	F	2	3
		6	G	7	3
		6	G	8	3
X14		1	G	5	1
X17	5	1	F	4	7
X18		1	F	4	7
X20		1	F	4	7
X25		1	F	4	7
X61M		6	E	5	1

TUBE	A	B	C	D	SKT
X63		6	E	5	1
X64	5	6	E	10	1
X65		6	E	5	1
X66		6	E	5	1
X71M		12	E	5	1
X73M		6	E	5	1
X75		12	E	5	1
X76M		12	E	5	1
X77		6	D	1	4
X79		6	E	2	3
		6	F	7	3
X81		6	D	6	9
		6	E	4	9
X107		18	E	1	4
X119		19	E	2	3
		19	F	9	3
X147		6	D	10	1
X148		6	D	6	9
		6	E	4	9
X150	8	6	F	1	10
	8	6	F	7	10
	8	6	F	9	10
X155		6	E	2	3
		6	E	7	3
X719		6	E	2	3
		6	E	9	3
X727		6	D	1	4
X729		6	F	9	3
X6030	4	3	G	5	1
XAA91		3	E	2	4
		3	E	7	4
XB91		6	E	2	4
		6	E	7	4
XC95	7	2	E	2	4
XC97	1	2	E	2	4
XC900	2	2	E	1	4
XCC82	9	7	D	2	3
	9	7	D	7	3
XCC189		4	D	2	3
		4	D	7	3

TUBE	A	B	C	D	SKT
XCE801	3	4	D	2	3
	3	4	E	9	3
XCF80		4	D	2	3
		4	D	9	3
XCF82		5	D	2	3
		5	D	9	3
XCF801	3	4	D	2	3
	3	4	E	9	3
XCH81		3	E	2	3
		3	F	9	3
XCL82		8	C	3	3
		8	F	1	3
XCL84		8	D	8	3
		8	F	1	3
XCL85		9	C	9	3
		9	E	2	3
XF80	1	3	D	2	3
XF85	3	3	D	2	3
XF86		2	F	9	3
XF94		3	D	1	4
XF183	3	3	D	2	3
XF184	3	3	D	2	3
XL36	1,3	13	A	5	1
XL82		8	C	3	3
		8	F	1	3
XL84	1,6,8	8	C	2	3
XL86	1,6,8	8	C	2	3
XL500	2,7,8,9	13	A	1	12
XXA91		3	E	2	4
		3	E	7	4
XXB	7	3	F	4	9
	7	3	F	5	9
XXD		14	E	4	9
		14	E	5	9
XXFM		6	F	3	9
		6	G	5	9
		6	G	6	9
XXL	5	6	E	6	9
XY88	1,2,3,6,7,8	16	A	9	3
YC95	7	3	E	2	4
YC97	1	3	E	2	4

TUBE	A	B	C	D	SKT
YCC189		5	E	2	3
		5	E	7	3
YCF86	3	5	D	2	3
	3	5	D	6	3
YCL84		10	D	8	3
		10	F	1	3
YF183	1	4	D	2	3
YF184	1	4	D	2	3
YL	1,6,8	10	C	2	3
YL84	1,6,8	10	C	2	3
YL86	1,6,8	10	C	2	3
YL1370	4,6,8	6	C	5	1
YL1371	4,6,8	13	B	5	1
YL1372	4,6,8	26	C	5	1
Z14		1	F	10	1
Z63		6	F	10	1
Z77		6	D	1	4
Z150	8	6	F	1	10
	8	6	F	7	10
	8	6	F	9	10
Z152		6	D	2	3
Z179		6	D	2	3
Z329	3	7	E	2	3
Z719		6	D	2	3
Z729	2	6	F	9	3
Z749	1	6	D	2	3
Z1494	2	6	D	1	4
Z1751		6	E	2	4
		6	E	7	4
ZD17		1	G	6	7
		1	H	3	7
ZD25		1	G	6	7
		1	H	3	7
ZD152		6	F	2	3
		6	G	7	3
		6	G	8	3