

SENCORE



CONTINENTAL

MUTUAL CONDUCTANCE TUBE TESTER

- **MUTUAL CONDUCTANCE TEST**
5000 Hertz square wave — best test for voltage amplifiers
- **EMISSION TEST**
made at near full rated cathode current — best test for power tubes
- **100 MEGOHM GRID LEAKAGE TEST**
sensitive enough to pick out troublesome tubes with gas or grid leakage
- **CHECK 3000 TUBES**
includes latest announced tubes including foreign and industrial types



SENCORE

STANDARD OF THE INDUSTRY

426 SOUTH WESTGATE DRIVE, ADDISON, ILLINOIS 60101

For Fast, Easy use of tube chart:

1. Locate Tube No.

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	

2. Set FIL Switch and Plug Tube into Indicated Socket

3. For Emission Test Set BCD switches from here.
(E&F Switches set to zero)

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	

4. For Mutual Conductance Test Set BCDE&F Switches from here.

Note: Tube chart pages may be cleaned with a damp cloth.



OA2

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
J	5	0	OA2	1	15						
(Normal Shorts 2, 7, H-K) (Good Tube reads 20-45)											
J	5	0	OA3	1	4						
(Good Tube reads 70-85)											
J	5	0	OB2	1	15						
(Normal Shorts 2, 7, H-K) (Good Tube reads 50-70)											
J	5	0	OB3	1	4						
(Good Tube reads 55-70)											
J	5	0	OC2	1	15						
(Normal Shorts 2, 7, H-K) (Good Tube reads 70-85)											
J	5	0	OC3	1	4						
(Good Tube reads 50-70)											
J	5	0	OD3	1	4						
(Good Tube reads 20-45)											
G	6	2	1A3	1.5	22						
F	5	0	1A5	1.5	1						
G	5	0	1A7	1.5	1						
F	4	0	1AB6	1.5	21						
F	4	0	1AC6	1.5	21						
J	10	0	1AD2	1.5	12						
(Disregard Shorts)											
G	6	0	1AE4	1.5	22	K	6	3	2	80	
G	6	0	1AF4	1.5	22	K	6	3	2	87	
G	6	0	1AF5	1.5	21						
H	3	0		1.5	21						
H	10	0	1AG2	1.5	23						
(Disregard Shorts)											
H	10	0	1AG3	1.5	23						
(Disregard Shorts)											
G	6	0	1AH5	1.5	21						
H	3	0		1.5	21						
H	10	0	1AJ2	1.5	10						
(Disregard Shorts)											
G	6	0	1AJ4	1.5	22						
G	6	0	1AM4	1.5	22						
G	6	0	1AN4	1.5	22						
G	4	0	1AQ5	1.5	22						
G	6	0	1AR5	1.5	21						
H	3	0		1.5	21						



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
G	6	0	1AS5	1.5 21						
H	4	0		1.5 21						
H	1	0	1AU2	1 23						
(Disregard Shorts)										
J	10	0	1AU3	1.5 1						
(Disregard Shorts)										
J	10	0	1AX2	1.5 23						
(Disregard Shorts)										
H	10	0	1AY2	1.5 29						
(Touch leads into pins 1 and 5 of socket 29 and use cap leads.) (Disregard Shorts)										
H	10	0	1B3	1.5 4						
(Disregard Shorts)										
G	5	0	1B7	1.5 1						
F	5	0	1B8	1.5 1						
G	8	0		1.5 1						
G	10	0		1.5 1						
F	4	0	1C3	1.5 7						
F	5	0	1C5	1.5 1						
F	5	0	1C7	2 1						
F	10	0	1D5	2 1						
F	5	0	1D7	2 1						
F	5	0	1D8	1.5 1						
G	8	0		1.5 1						
G	10	0		1.5 1						
F	6	0	1DN5	1.5 21						
H	4	0		1.5 21						
D	2	0	1DY4	1.5 15	L	2	0	7	29	
D	1	0	1E3	1.5 26						
F	5	0	1E4	1.5 1						
G	10	0	1E5	2 1						
E	4	0	1E7	2 1						
E	5	0		2 1						
F	5	0	1F5	2 1						
G	10	0	1F7	2 1						
G	5	0		2 1						
G	4	0		2 1						
H	10	0	1G3	1.5 4						
(Disregard Shorts)										
F	5	0	1G4	1.5 1						



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
E	5	0	1G5	2 1						
F	4	0	1G6	1.5 1						
F	5	0		1.5 1						
H	10	0	1H2	1.5 23						
(Disregard Shorts)										
F	5	0	1H4	2 1						
G	10	0	1H5	1.4 1						
G	5	0		1.4 1						
F	6	0	1H6	2 1						
G	5	0		2 1						
G	4	0		2 1						
J	10	0	1J3	1.5 4						
(Disregard Shorts)										
E	5	0	1J5	2 1						
F	4	0	1J6	2 1						
F	5	0		2 1						
J	10	0	1K3	1.5 4						
(Disregard Shorts)										
F	6	0	1L4	1.5 22						
G	4	0	1L6	1.5 21						
F	6	0	1LA4	1.5 19						
F	4	0	1LA6	1.5 19						
F	6	0	1LB4	1.5 19						
F	6	0	1LB6	1.5 19						
F	4	0	1LC6	1.5 19						
G	4	0	1LD5	1.5 19						
G	6	0		1.5 19						
F	6	0	1LH4	1.5 19						
G	4	0		1.5 19						
H	10	0	1N2	1.5 4						
(Disregard Shorts)										
F	10	0	1N5	1.5 1						
F	5	0	1N6	1.5 1						
G	6	0		1.5 1						
F	10	0	1P5	1.5 1						
F	5	0	1Q5	1.5 1						
H	4	0	1R4	1.5 19						
F	4	0	1R5	1.5 22						
H	10	0	1S2	1.5 23						
(Normal Shorts 1, 6, H-K)										
F	3	0	1S4	1.5 22						



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
G	6	0	1S5	1.5 21						
H	3	0		1.5 21						
F	4	0	1SA6	1.5 1						
G	8	0	1SB6	1.5 1						
G	5	0		1.5 1						
F	6	0	1T4	1.5 22						
E	5	0	1T5	1.5 1						
H	10	0	1T6	1 6						
(Insert tube leads into pin 3 and 4. Touch cap lead to top lead on tube.)										
F	6	0	1U4	1.5 22						
G	6	0	1U5	1.5 21						
H	4	0		1.5 21						
J	10	0	1BC2	1 23						
(Normal Shorts 1, 6, H-K)										
J	10	3	1BH2	1.5 17						
(Disregard Shorts)										
J	10	2	1BQ2	1 18						
(Disregard Shorts)										
F	4	0	1C1	1.5 22						
F	4	0	1C2	1.5 21						
F	4	0	1C3	1.5 21						
G	6	2	1D13	1.5 22						
G	6	0	1F1	1.5 22						
F	6	0	1F2	1.5 22						
F	6	0	1F3	1.5 22						
G	6	0	1FD1	1.5 21						
H	3	0		1.5 21						
G	6	0	1FD9	1.5 21						
H	3	0		1.5 21						
F	4	0	1H35	1.5 21						
H	6	5	1LC5	1.5 19						
G	6	5	1LG5	1.5 19						
G	6	5	1LN5	1.5 19						
G	6	0	1P1	3 22						
F	3	0	1P10	3 22						
(Normal Shorts 2, 6)										
E	6	0	1P11	3 22						
G	4	0	1U6	1.5 21						
H	1	0	1V2	1 23						
(Disregard Shorts)										



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	6	0	1W4	1.5 21						
H	10	0	1X2	1.5 23						
(Disregard Shorts)										
D	2	0	2AF4	2.5 15	M	2	0	7	38	
H	10	0	2AH2	2.5 12						
(Disregard Shorts)										
H	10	0	2AS2	2.5 12						
(Disregard Shorts)										
H	1	0	2AV2	2 23						
(Disregard Shorts)										
H	10	0	2AZ2	2 23						
(Disregard Shorts)										
J	10	0	2B3	1.5 3						
(Disregard Shorts)										
E	1	0	2BC5	2 7	L	1	6	5	42	
F	4	0	2BH5	2 14						
E	2	0	2BN4	2.5 13	L	2	0	5	40	
(Normal Shorts 1, 6)										
G	10	0	2BJ2	2 23						
(Disregard all Shorts Except H-K)										
E	10	0	2C22	6 1						
E	10	0	2C26	6 1						
E	1	0	2C50	12 2						
E	4	0		12 2						
F	1	0	2C52	12 2						
F	4	0		12 2						
G	10	0	2CN3	2 1						
F	4	0	2CW4	2 14	L	4	0	2	29	
E	1	0	2CY5	2.5 13	L	1	6	5	32	
A	6	0	2D21	6 13						
(Emission and Shorts Test)										
A	1	0		6 13						
(Grid Leakage Test)										
C	8	0	2DF4	2.5 25						
F	4	0	2DZ4	2 14	L	4	0	2	29	
D	2	0	2DX4	2.5 15						
D	2	0	2DY4	2 15	L	2	0	7	29	
D	2	0	2D24	2.5 15	M	2	0	7	34	
D	2	0	2DZ4	2.5 15	M	2	0	7	34	
C	5	0	2E25	6 1						
A	5	0	2E26	6 1						

2E30



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
C	1	0	2E30	6 13						
E	1	0	2EA5	2.5 13						
F	4	0	2EG4	2 14	L	4	0	2	34	
F	2	0	2EN5	2 6						
F	7	0		2 6						
E	2	0	2ER5	2.5 13	L	2	0	5	32	
E	2	0	2ES5	2.5 13						
E	1	0	2EV5	2.5 13	L	1	6	5	36	
E	2	0	2FH5	2.5 13	L	2	0	5	31	
E	2	0	2FQ5	2.5 13	L	2	0	5	27	
D	1	0	2FS5	2.5 7	L	1	6	5	84	
E	1	0	2FV6	2.5 7	L	1	6	5	34	
E	2	0	2FY5	2.5 13	L	2	0	5	32	
D	2	0	2GK5	2.5 13	L	2	0	5	28	
E	1	0	2GU5	2.5 7						
D	6	0	2GW5	2.5 7	L	6	0	1	28	
E	1	0	2HA5	2 7	L	1	0	5	27	
E	1	0	2HK5	2.5 7						
E	1	0	2HM5	2 7						
E	1	0	2HQ5	2.5 7	L	1	0	5	42	
F	9	0	2HR8	2 29						
H	10	0	2J2	2 23						
(Disregard Shorts)										
G	4	0	2N-H11	2 16						
F	4	0	2N-H12	2 16						
D	2	0	2T4	2.5 15						
J	10	0	2V2	2.5 3						
(Normal Shorts 4, 6, 8, H-K)										
H	10	0	2V3	2.5 1						
B	4	0	2W3	2.5 1						
(Normal Shorts 8, H-K)										
B	10	0	2X3	2 1						
H	10	0	3A2	3 23						
(Disregard Shorts)										
H	10	0	3A3	3 1						
(Disregard Shorts)										
F	4	0	3A4	3 22						
(Normal Shorts 2, 6)										

3BM2



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	3	4	3A5	2.5 21						
F	5	4		2.5 21						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
H	5	1	3A8	2.5 1						
G	8	1		2.5 1						
G	10	1		2.5 1						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
D	2	0	3AF4	3 15	M	2	0	7	38	
E	2	0	3AJ8	3 29	L	2	1	6	69	
F	9	0		3 29	L	1	6	5	49	
E	2	0	3AL5	3 6						
E	7	0		3 6						
H	10	0	3AT2	3 12						
(Disregard Shorts)										
D	1	0	3AU6	3 6	L	1	6	5	66	
F	1	0	3AV6	3 6	K	1	0	7	74	
G	5	0		3 6						
G	6	0		3 6						
J	10	0	3AW2	3 12						
(Disregard Shorts)										
H	10	0	3AW3	3 1						
(Disregard Shorts)										
J	10	0	3B2	3 3						
(Disregard Shorts)										
H	1	6	3B4	2.5 7						
(Normal Shorts 5, H-K)										
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
E	5	8	3B5	2.5 1						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
E	3	4	3B7	2.5 19						
E	6	4		2.5 19						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
D	1	0	3BA6	3 6	L	1	6	5	61	
E	1	0	3BC5	3 7	L	1	6	5	42	
D	1	0	3BE6	3 6						
J	10	0	3BF2	3 12						
(Disregard Shorts)										
J	10	6	3BL2	3 12						
A	10	8	3BH2	3 20						
J	10	0	3BM2	3 12						
(Disregard Shorts)										

3BN2



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
J	10	0	3BN2	3 12						
(Disregard Shorts)										
E	2	0	3BN4	3 13	L	2	0	5	40	
(Normal Shorts 1, 6)										
H	5	0	3BN6	3 6						
(Emission and Shorts Test Only)										
H	2	0		3 6						
(Leakage Check)										
J	10	6	3BS2	3 12						
D	7	0	3BU8	3 29	L	7	2	3	77	
				3 29	L	7	2	8	77	
D	2	0	3BX6	3 24	L	2	8	7	37	
D	1	0	3BY6	3 6	L	1	6	5	74	
D	2	0	3BY7	3 24						
D	1	0	3BZ6	3 6	L	1	6	5	48	
H	10	0	3C2	3 3						
(Disregard Shorts)										
G	6	0	3C4	3 22						
E	5	8	3C5	2.5 1						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
F	3	7	3C6	2.5 19						
F	6	7		2.5 19						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
H	10	0	3CA3	3 4						
(Disregard Shorts)										
D	1	0	3CB6	3 6	L	1	6	5	41	
E	1	0	3CE5	3 7	L	1	6	5	40	
D	1	0	3CF6	3 6	L	1	6	5	41	
G	10	0	3CN3	3 1						
D	1	0	3CS6	3 6	L	1	6	5	72	
G	10	0	3CU3	3 1						
E	1	0	3CY5	3 13	L	1	6	5	32	
E	6	7	3D6	3 19						
A	5	0	3DG4	3 5						
(Normal Shorts 3, H-K)										
A	7	0		3 5						
D	1	0	3DK6	3 6	L	1	6	5	48	
E	1	0	3DT6	3 6	K	1	6	5	82	
D	2	0	3DX4	3 15						
D	2	0	3DY4	3 15	L	2	0	7	29	
D	2	0	3DZ4	3 15	M	2	0	7	34	

3OC1



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	6	0	3E5	3 22						
F	6	5	3E6	2.5 19						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
E	1	0	3EA5	3 13						
D	2	0	3EH7	3 24	M	2	8	7	18	
D	2	0	3EJ7	3 24	M	2	8	7	15	
E	2	0	3ER5	3 13	L	2	0	5	32	
E	2	0	3ES5	3 13						
E	1	0	3EV5	3 13	L	1	6	5	36	
E	2	0	3FH5	3 13	L	2	0	5	31	
E	2	0	3FQ5	3 13	L	2	0	5	27	
D	1	0	3FS5	3 7	L	1	6	5	84	
E	2	0	3FW7	3 29	L	2	0	1	40	
E	7	0		3 29	L	7	0	6	40	
E	2	0	3FX7	3 29	L	2	0	1	31	
E	7	0		3 29	L	7	0	6	31	
E	2	0	3FY5	3 13	L	2	0	5	32	
E	2	0	3GK5	3 13	L	2	0	5	20	
D	7	0	3GS8	3 29						
D	1	0	3GU5	3 7	L	1	6	5	18	
D	6	0	3GW5	3 7	L	6	0	1	28	
E	1	0	3HA5	3 7	L	1	0	5	27	
E	1	0	3HK5	3 7						
E	1	0	3HM5	3 7	L	1	0	5	29	
D	2	0	3HM6	3 24	M	2	8	7	21	
E	1	0	3HQ5	3 7	L	1	0	5	42	
D	7	0	3HS8	3 29	K	7	2	3	86	
—	—	—		3 29	K	7	2	8	86	
D	2	0	3HT6	3 24	M	2	8	7	21	
D	2	0	3JC6	3 26	L	2	8	7	27	
D	2	0	3JD6	3 24						
D	7	0	3KF8	3 29	K	7	6	3	78	
				3 29	K	7	9	8	78	
C	2	0	3KT6	3 29	M	2	8	7	16	
E	6	7	3LF4	3 19						
D	1	0	3M-R24	3 6						
D	1	0	3M-V7	3 6						
D	2	0	3OC1	9 29	L	2	3	6	41	
D	9	0		9 29	L	9	0	1	61	

3OL1



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
E	2	0	3OL1	7	27						
E	6	0		7	27						
E	3	0	3Q4	3	22						
(Normal Shorts 2, 6)											
E	5	8	3Q5	2.5	1						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
F	3	0	3S4	3	22						
(Normal Shorts 2, 6)											
E	6	0	3V4	3	22						
F	3	0		3	22						
(Normal Shorts 2, 6)											
F	3	0	3Z4	3	22						
(Normal Shorts 2, 6)											
G	4	1	4A6	4	1						
G	5	1		4	1						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
D	2	0	4AF4	4	15	M	2	0	7	38	
D	1	0		4	6	L	1	6	5	66	
D	2	0	4AU6	4	29	L	2	0	3	46	
D	7	0		4	29	M	7	8	9	30	
F	1	0	4AV6	4	6	K	1	0	7	74	
G	5	0		4	6						
G	6	0		4	6						
D	1	0	4BA6	4	6	L	1	6	5	61	
E	1	0		4	7	L	1	6	5	42	
E	2	0	4BC5	4	29	L	2	0	1	41	
E	7	0		4	29	L	7	0	6	41	
D	1	0	4BE6	4	6						
D	2	0		4	29	L	2	3	6	41	
D	9	0		4	29	L	9	0	1	52	
E	2	0	4BN4	4	13	L	2	0	5	40	
(Normal Shorts 1, 6)											
H	5	0	4BN6	4	6						
(Emission and Shorts Test)											
H	2	0		4	6						
(Grid Leakage)											
E	2	0	4BQ7	4	29	L	2	0	1	40	
E	7	0		4	29	L	7	0	6	40	
E	2	0	4BS8	4	29	L	2	0	1	39	
E	7	0		4	29	L	7	0	6	39	
D	7	0	4BU8	4	29	K	7	2	3	81	
				4	29	K	7	2	8	81	



4HA7

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
D	2	0	4BX6	4	24	L	2	8	7	37	
E	2	0	4BX8	4	29	L	2	0	1	41	
E	7	0		4	29	L	7	0	6	41	
D	1	0	4BZ6	4	6	L	1	6	5	48	
E	2	0	4BZ7	4	29	L	2	0	1	40	
E	7	0		4	29	L	7	0	6	40	
E	2	0	4BZ8	4	29	L	2	0	1	36	
E	7	0		4	29	L	7	0	6	36	
D	1	0	4CB6	4	6	L	1	6	5	41	
E	1	0	4CE5	4	7	L	1	6	5	40	
E	6	0	4CM4	4	23	L	6	0	1	20	
(Normal Shorts 3, 7)											
D	1	0	4CS6	4	6						
E	2	0	4CX7	4	25	L	2	0	1	42	
E	7	0		4	25	L	7	0	6	42	
E	1	0	4CY5	4	13	L	1	6	5	32	
D	1	0	4DE6	4	6	L	1	6	5	52	
D	1	0	4DK6	4	6	L	1	6	5	48	
E	1	0	4DT6	4	6	K	1	6	5	82	
D	2	0	4EH7	4	24	M	2	8	7	18	
D	2	0	4EJ7	4	24	M	2	8	7	15	
D	2	0	4ES8	4	29	M	2	0	1	29	
D	7	0		4	29	M	7	0	6	29	
D	1	0	4EW6	4	6	L	1	6	5	33	
D	2	0	4FS7	4	24						
D	6	0		4	24						
E	9	0	4GJ7	4	26						
D	2	0		4	26						
E	2	0	4GK5	4	13	L	2	0	5	20	
D	1	0	4GM6	4	6	L	1	6	5	54	
E	1	0	4GS7	4	26						
E	9	0		4	26						
D	7	0	4GS8	4	29						
D	6	0	4GW5	4	7	L	6	0	1	28	
D	2	0	4GX7	4	26	L	2	7	6	28	
D	9	0		4	26	L	9	0	8	32	
D	5	0	4GZ5	4	7						
E	1	0	4HA5	4	7	L	1	0	5	27	
E	1	0	4HA7	4	9	K	1	0	2	78	
E	9	0		4	9	L	9	0	10	67	

4HC7



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
E	1	0	4HC7	4	9					
(Normal Shorts 7, 10)										
E	9	0		4	9					
E	2	0	4HG8	4	26					
D	6	0		4	26					
E	1	0	4HK5	4	7					
D	1	0	4HM5	4	7	L	1	0	5	29
D	2	0	4HM6	4	24	M	2	8	7	21
E	1	0	4HQ5	4	7	L	1	0	5	42
F	9	0	4HR8	4	29					
D	7	0	4HS8	4	29	K	7	2	3	86
				4	29	K	7	2	8	86
D	2	0	4HT6	4	24	M	2	8	7	21
D	2	0	4JC6	4	26	L	2	8	7	27
D	2	0	4JD6	4	24	L	2	8	7	30
D	1	0	4JH6	4	6	L	1	6	5	61
D	1	0	4JK6	4	6	M	1	6	5	30
D	1	0	4JL6	4	6	M	1	6	5	16
D	9	0	4KE8	4	29	L	9	0	1	40
E	2	0		4	29	L	2	3	6	28
D	7	0	4KF8	4	29	K	7	6	3	78
				4	29	K	7	9	8	78
D	2	0	4KN8	4	29	M	2	0	1	20
D	7	0		4	29	M	7	0	6	20
C	2	0	4KT6	4	29	M	2	8	7	16
D	1	0	4LJ8	4	26					
D	9	0		4	26					
C	1	0	4M-P12	5	6					
E	2	0	4R-HH2	4	29	L	2	0	1	38
E	7	0		4	29	L	7	0	6	38
D	2	0	4R-HH8	4	29	M	2	0	1	20
D	7	0		4	29	M	7	0	6	20
C	7	0	5A6	5	25					
D	2	0	5AF4	5	15	M	2	0	7	38
C	1	0	5AF11	5	9	M	1	10	2	25
F	3	0		5	9	L	3	0	4	53
F	6	0		5	9	L	6	0	8	43
D	2	0	5AM8	5	29	L	2	3	6	43
F	8	0		5	29					
D	2	0	5AN8	5	29	L	2	0	1	68
D	8	0		5	29	L	8	7	6	49

5BK7



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
B	4	0	5AQ4	5	1					
B	6	0		5	1					
C	1	0	5AQ5	5	13	M	1	6	5	52
A	4	0	5AR4	5	1					
(Normal Shorts 8, H-K)										
A	6	0		5	1					
A	4	0	5AS4	5	1					
(Normal Shorts 8, H-K)										
A	6	0		5	1					
D	2	0	5AS8	5	29	M	2	0	9	29
F	6	0		5	29					
A	4	0	5AT4	5	1					
(Normal Shorts 8, H-K)										
A	6	0		5	1					
D	1	0	5AT8	5	29	L	1	0	3	45
D	9	0		5	29	L	9	7	6	46
A	4	0	5AU4	5	1					
(Normal Shorts 8, H-K)										
A	6	0		5	1					
E	2	0	5AV8	5	29	L	2	0	3	68
E	6	0		5	29	L	6	7	9	49
A	4	0	5AW4	5	1					
(Normal Shorts 8, H-K)										
A	6	0		5	1					
A	4	0	5AX4	5	1					
(Normal Shorts 8, H-K)										
A	6	0		5	1					
A	6	0	5AZ3	5	12					
A	7	0		5	12					
B	4	0	5AZ4	5	19					
(Normal Shorts 2, H-K)										
B	6	0		5	19					
D	2	0	5B8	5	29					
D	6	0		5	29					
A	5	0	5BC3	5	18					
(Normal Shorts 2, H-K)										
A	9	0		5	18					
D	1	0	5BE8	5	29	L	1	0	2	47
(Normal Shorts 3)										
D	9	0		5	29	L	9	7	6	54
E	2	0	5BK7	5	29	L	2	0	1	44
E	7	0		5	29	L	7	0	6	44

5BQ5



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
C	2	0	5BQ5 (Normal Shorts 6, 8)	5 24	M	2	9	7	29	
E	2	0		5 29	L	2	0	1	40	
E	7	0	5BQ7	5 29	L	7	0	6	40	
D	1	0	5BR8	5 29	L	1	0	2	37	
D	9	0		5 29	L	9	7	6	47	
E	2	0	5BS8	5 29	L	2	0	1	39	
E	7	0		5 29	L	7	0	6	39	
G	1	0	5BT8	5 29						
G	2	0		5 29						
D	8	0		5 29						
F	1	0	5BW8	5 29						
F	3	0		5 29						
D	6	0		5 29	L	6	8	9	56	
E	2	0	5BZ7	5 29	L	2	0	1	40	
E	7	0		5 29	L	7	0	6	40	
A	4	0	5CG4 (Normal Shorts 8, H-K)	5 1						
A	6	0		5 1						
E	1	0	5CG8	5 26	L	1	0	2	45	
E	9	0		5 26	L	9	7	6	48	
D	1	0	5CL8	5 29	L	1	0	2	44	
D	9	0		5 29	L	9	7	6	50	
C	3	0	5CM6	5 27						
E	2	0	5CM8	5 29						
F	9	0		5 29						
D	2	0	5CQ8	5 29	L	2	3	6	65	
D	9	0		5 29	L	9	0	1	47	
D	2	0	5CR8	5 29						
E	9	0		5 29						
A	4	0	5CU4 (Normal Shorts 8, H-K)	5 1						
A	6	0		5 1						
C	3	0	5CZ5	5 27						
D	1	0	5DH8 (Normal Shorts 3)	5 29	L	1	0	2	44	
D	9	0		5 29	L	9	7	6	39	
A	3	0	5DJ4 (Normal Shorts 7, H-K)	5 5						
A	5	0		5 5						
D	2	0	5EA8	5 29	L	2	3	6	48	
D	9	0		5 29	L	9	0	1	42	

5KZ8



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	2	0	5EH8	5 24	L	2	0	3	46	
D	7	0		5 24	L	7	8	9	55	
D	2	0	5ES8	5 29	M	2	0	1	29	
D	7	0		5 29	M	7	0	6	29	
D	2	0	5EU8	5 29	L	2	0	3	43	
D	7	0		5 29	L	7	9	1	56	
D	1	0	5EW6	5 6	L	1	6	5	33	
D	4	0	5FG7	5 26	L	4	0	2	58	
E	9	0		5 26	L	9	7	6	45	
D	1	0	5FV8	5 29	L	1	0	2	39	
D	9	0		5 29	L	9	7	6	59	
D	2	0	5GH8	5 29	L	2	3	6	49	
D	9	0		5 29	L	9	0	1	43	
D	2	0	5GJ7	5 26						
E	9	0		5 26						
C	1	0	5GM6	5 6	M	1	6	5	27	
E	1	0	5GS7	5 26						
E	9	0		5 26						
E	1	0	5GX6	5 6	L	1	6	5	47	
D	2	0	5GX7	5 26	L	2	7	6	28	
D	9	0		5 26	L	9	0	8	32	
E	1	0	5HA7	5 9	K	1	0	2	78	
E	9	0		5 9	L	9	0	10	67	
D	2	0	5HB7	5 26	L	2	7	6	56	
D	9	0		5 26	L	9	0	8	46	
E	1	0	5HC7 (Normal Shorts 7, 10)	5 9						
E	9	0		5 9						
E	2	0	5HG8	5 26	L	2	9	8	27	
D	6	0		5 26	L	6	0	7	58	
F	1	0	5HZ6	5 6	L	1	6	5	47	
D	5	0	5J6	5 6	L	5	0	2	49	
D	6	0		5 6	L	6	0	1	49	
D	1	0	5JK6	5 6	M	1	6	5	30	
D	1	0	5JL6	5 6	M	1	6	5	16	
D	2	0	5KD8	5 29	L	2	3	6	43	
D	9	0		5 29	L	9	0	1	37	
D	2	0	5KE8	5 29	L	2	3	6	28	
D	9	0		5 29	L	9	0	1	40	
D	2	0	5KZ8	5 29	L	2	7	6	50	
D	9	0		5 29	L	9	0	1	45	

5LJ8



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	1	0	5LJ8	5	26					
D	9	0		5	26					
E	5	0	5M-HH3	5	6	L	5	0	1	49
E	6	0		5	6	L	6	0	4	49
D	1	0	5MB8	5	29	L	1	0	2	44
E	9	0		5	29	L	9	7	6	29
C	5	0	5P-29	7	1					
A	4	0	5R4 (Normal Shorts 8, H-K)	5	1					
A	6	0		5	1					
E	1	0	5R-DP1	5	29					
E	6	0		5	29					
D	2	0	5R-HP1	5	29					
D	9	0		5	29					
A	2	0	5R-K16	5	29					
A	9	0		5	29					
A	4	0	5T4 (Normal Shorts 8, H-K)	5	1					
A	6	0		5	1					
F	8	0	5T8	5	29	K	8	0	9	77
E	2	0		5	29					
E	6	0		5	29					
E	1	0		5	29					
A	4	0	5U4 (Normal Shorts 8, H-K)	5	1					
A	6	0		5	1					
D	2	0	5U8	5	29	L	2	3	6	54
D	9	0		5	29	L	9	0	1	47
D	3	0	5U9	5	30	M	3	8	7	17
D	10	0		5	30	L	10	0	9	58
A	4	0	5V3 (Normal Shorts 8, H-K)	5	1					
A	6	0		5	1					
B	4	0	5V4 (Normal Shorts 8, H-K)	5	1					
B	6	0		5	1					
C	5	0	5V6	5	1					
D	8	0	5V9	5	30	L	8	0	10	38
E	3	0		5	30	L	3	2	7	78
B	4	0	5W4 (Normal Shorts 8, H-K)	5	1					
B	6	0		5	1					

6AD8



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
A	3	0	5X4	5	2					
A	5	0		5	2					
E	2	0	5X8	5	29	L	2	0	3	46
E	7	0		5	29	L	7	8	9	66
D	3	0	5X9	5	30	M	3	8	7	16
E	10	0		5	30	L	10	0	9	50
B	4	0	5Y3 (Normal Shorts 8, H-K)	5	1					
B	6	0		5	1					
B	3	0	5Y4	5	2					
B	5	0		5	2					
A	4	0	5Z4 (Normal Shorts 8, H-K)	5	1					
A	6	0		5	1					
A	4	0	5Z10	5	1					
A	6	0		5	1					
C	5	8	6A5 (COMPLETE SETUP BEFORE INSERTING TUBE)	6	1					
E	5	0		6	1					
E	6	0	6A8	6	1					
E	6	0	6AB4	6	6	L	6	0	1	41
D	4	0	6AB7	6	1					
D	9	0	6AB8	6	29					
F	2	0		6	29					
D	3	0	6AB9	6	30	L	3	2	1	34
D	9	0		6	30	L	9	8	7	34
F	5	0	6AC5	6	1					
D	4	0	6AC7	6	1	L	4	6	8	34
D	2	0	6AC9 (Normal Shorts 3)	6	9					
D	3	0		6	9					
D	9	0	6AC10	6	9	L	9	10	1	42
E	1	0		6	9	L	1	0	2	42
E	7	0		6	9	L	7	0	5	42
E	9	0	6AD5	6	9	L	9	0	10	42
F	5	0		6	1					
B	5	0	6AD7	6	1	M	5	4	3	63
G	1	0		6	1	L	1	0	6	92
F	2	0	6AD8	6	29					
G	7	0		6	29					
G	8	0		6	29					

6AD10



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
F	3	0	6AD10	6	9	K	3	6	7	68
B	8	0		6	9	M	8	10	1	47
G	5	0	6AE5	6	1					
F	5	0	6AE6	6	1					
F	4	0	6AE7	6	1					
F	6	0		6	1					
E	2	0	6AE8	6	29					
F	7	0		6	29					
A	2	0	6AF3	6	25					
(Disregard all Shorts but H-K)										
D	2	0	6AF4	6	15	M	2	0	7	38
F	5	0	6AF5	6	1					
			6AF6	6	1	L	1	3	5	0
				6	1	L	1	4	5	0
(0° shadow angle on one side—maximum on other. Should change sides with setting of "D" switch.)										
C	8	0	6AF9	6	30	M	8	9	10	16
E	1	0		6	30	L	1	3	4	50
D	3	0	6AF10	6	9					
E	10	0		6	9					
C	1	0	6AF11	6	9	M	1	10	2	25
F	3	0		6	9	L	3	0	4	53
F	6	0		6	9	L	6	0	8	43
E	1	0	6AG5	6	7	L	1	6	5	44
F	5	0	6AG6	6	1					
C	4	0	6AG7	6	1	M	4	6	8	28
B	1	0	6AG9	6	9	M	1	10	2	9
F	5	0		6	9	L	5	0	7	37
C	1	0	6AG10	6	9					
E	8	0	6AG11	6	9	L	8	0	7	34
E	5	0		6	9	L	5	0	6	34
F	3	0		6	9					
F	10	0		6	9					
C	1	0	6AH4	6	1	M	1	0	5	39
F	6	0	6AH5	6	1					
D	1	0	6AH6	6	6	L	1	6	5	37
F	1	0	6AH7	6	2					
F	5	0		6	2					
E	2	0	6AH9	6	9	L	2	0	3	69
C	5	6		6	9					
(Normal Shorts 5, 6)										
G	1	0	6AJ5	6	7					



6AQ5

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	4	0	6AJ7	6	1					
E	2	0	6AJ8	6	29	L	2	1	6	69
E	9	0		6	29	L	9	0	8	65
F	1	0	6AK5	6	7	L	1	6	5	49
C	1	0	6AK6	6	6	M	1	6	5	58
C	4	0	6AK7	6	1					
F	8	0	6AK8	6	29					
G	6	0		6	29					
G	2	0		6	29					
G	1	0		6	29					
A	8	0	6AK9	6	9					
F	10	0		6	9					
F	3	0		6	9					
E	1	0	6AK10	6	9					
E	7	0		6	9					
E	9	0		6	9					
A	3	0	6AL3	6	23					
(Disregard all Shorts but H-K)										
E	2	0	6AL5	6	6					
E	7	0		6	6					
C	5	0	6AL6	6	1					
C	1	0	6AL9	6	9					
E	5	0		6	9					
C	8	0	6AL11	6	9	K	8	10	1	80
D	3	0		6	9	L	3	7	6	72
D	1	0	6AM5	6	4					
E	1	0	6AM6	6	6					
D	2	0	6AM8	6	29	L	2	3	6	43
G	8	0		6	29					
D	2	0	6AN4	6	15	L	2	0	7	37
C	1	0	6AN5	6	7	M	1	6	5	36
G	2	0	6AN6	6	21					
G	3	0		6	21					
G	4	0		6	21					
G	5	0		6	21					
E	2	0	6AN7	6	29					
F	9	0		6	29					
D	2	0	6AN8	6	29	L	2	0	1	64
D	8	0		6	29	L	8	7	6	44
E	1	0	6AQ4	6	15					
(Normal Shorts 2, 5)										
C	1	0	6AQ5	6	13	M	1	6	5	52

6AQ6



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	1	0	6AQ6	6	6	K	1	0	7	80
G	5	0		6	6					
G	6	0		6	6					
F	4	0	6AQ7	6	2	K	4	0	5	83
G	3	0		6	2					
G	1	0		6	2					
D	2	0	6AQ8	6	29	L	2	0	1	40
D	7	0		6	29	L	7	0	6	40
C	1	0	6AR5	6	13	M	1	6	5	64
G	5	0	6AR6	6	2					
(Emission and Shorts Test only; Normal Shorts 6, H-K)										
F	10	0	6AR7	6	19					
G	6	0		6	19					
G	5	0		6	19					
D	6	0	6AR8	6	29	K	6	3	9	70
				6	29	K	6	3	8	70
D	5	0	6AR11	6	9	M	5	3	2	30
D	10	0		6	9	M	10	9	8	30
C	5	0	6AS5	6	7	M	5	6	7	47
E	1	0	6AS6	6	6	L	1	6	5	57
A	1	0	6AS7	6	2	M	1	0	2	56
A	4	0		6	2	M	4	0	5	56
D	2	0	6AS8	6	29	L	2	1	9	46
F	6	0		6	29					
D	1	0	6AS11	6	9	M	1	10	2	26
D	3	0		6	9	L	3	0	4	50
D	6	0		6	9	L	6	0	8	40
F	1	0	6AT6	6	6	K	1	0	7	72
G	5	0		6	6					
G	6	0		6	6					
E	2	0	6AT7	6	29	L	2	0	1	43
E	7	0		6	29	L	7	0	6	43
D	1	0	6AT8	6	29	L	1	0	2	42
D	9	0		6	29	L	9	7	6	45
A	5	0	6AU4	6	2					
A	1	0	6AU5	6	1					
D	1	0	6AU6	6	6	L	1	6	5	52
D	2	0	6AU7	6	25	L	2	0	1	67
D	7	0		6	25	L	7	0	6	67
D	2	0	6AU8	6	29	L	2	0	3	46
D	7	0		6	29	M	7	8	9	30

6B8



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
A	1	0	6AV4	6	6					
A	6	0		6	6					
A	1	0	6AV5	6	1	M	1	8	5	50
C	1	0	6AV6	6	6	K	1	0	7	74
G	5	0		6	6					
G	6	0		6	6					
E	1	0	6AV11	6	9	L	1	0	2	67
E	7	0		6	9	L	7	0	5	67
E	9	0		6	9	L	9	0	10	67
F	2	0	6AW7	6	2					
G	3	0		6	2					
G	4	0		6	2					
D	7	0	6AW8	6	29	M	7	8	9	24
F	2	0		6	29	K	2	0	3	58
A	10	0	6AX3	6	10					
A	5	0	6AX4	6	2					
B	3	0	6AX5	6	1					
B	5	0		6	1					
A	3	0	6AX6	6	1					
A	5	0		6	1					
F	2	0	6AX7	6	25	K	2	0	1	78
F	7	0		6	25	K	7	0	6	78
D	2	0	6AX8	6	29					
D	9	0		6	29					
A	7	3	6AY3	6	17					
(Disregard all Shorts but H-K)										
E	8	0	6AY11	6	9	K	8	0	7	58
E	5	0		6	9	K	5	0	6	58
F	3	0		6	9					
F	10	0		6	9					
D	6	0	6AZ8	6	29	L	6	2	1	47
D	9	0		6	29	L	9	0	8	65
B	8	0	6B3	6	23					
C	5	0	6B4	6	1					
F	10	0	6B6	6	1					
G	5	0		6	1					
G	4	0		6	1					
E	10	0	6B8	6	1					
G	5	0		6	1					
G	4	0		6	1					

6B10



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
E	3	0	6B10	6	9	L	3	0	4	63	
E	5	0		6	9	L	5	0	6	63	
F	8	0		6	9						
F	10	0		6	9						
A	7	0	6BA3	6	17						
D	1	0	6BA6	6	6	L	1	6	5	71	
D	2	0	6BA7	6	29	L	2	1	9	68	
E	2	0	6BA8	6	29	L	2	0	3	63	
D	7	0		6	29	M	7	8	9	27	
E	9	0	6BA11	6	9	L	9	0	1	66	
E	4	0		6	9	K	4	3	2	84	
				6	9	K	4	3	6	84	
D	7	3	6BC4	6	23						
E	1	0	6BC5	6	7	L	1	6	5	42	
E	2	0	6BC7	6	29						
E	6	0		6	29						
E	8	0		6	29						
E	2	0	6BC8	6	29	L	2	0	1	42	
E	7	0		6	29	L	7	0	6	42	
C	1	0	6BC32	6	6	K	1	0	7	74	
G	5	0		6	6						
G	6	0		6	6						
E	7	0	6BD4	6	1						
A	1	0	6BD5	6	1						
C	1	0	6BD6	6	6	L	1	6	5	80	
F	8	0	6BD7	6	29						
G	6	0		6	29						
G	2	0		6	29						
D	1	0	6BD11	6	9	M	1	10	2	26	
E	3	0		6	9	L	3	0	4	53	
F	6	0		6	9	L	6	0	8	43	
A	10	0	6BE3	6	10						
D	1	0	6BE6	6	6	K	1	6	5	86	
F	7	0	6BE7	6	26						
D	1	0	6BE8	6	29	L	1	0	2	34	
D	9	0		6	29	L	9	7	6	47	
C	1	0	6BF5	6	13	M	1	6	5	47	
F	1	0	6BF6	6	6	L	1	0	7	77	
G	5	0		6	6						
G	6	0		6	6						

6BL4



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
F	1	0	6BF8	6	29						
F	2	0		6	29						
F	3	0		6	29						
F	7	0		6	29						
F	8	0		6	29						
F	9	0		6	29						
C	8	0	6BF11	6	9	M	8	10	1	40	
D	3	0		6	9	L	3	6	7	76	
A	5	0	6BG6	6	1	M	5	8	10	54	
A	7	0	6BH3	6	17						
(Disregard Shorts except H-K)											
F	2	0	6BH5	6	25						
(Normal Shorts 7, 8)											
E	1	0	6BH6	6	6	L	1	6	5	50	
D	2	0	6BH8	6	29	L	2	0	3	61	
D	7	0		6	29	M	7	8	9	33	
D	4	0	6BH11	6	9	L	4	0	3	49	
D	6	0		6	9	L	6	0	7	49	
D	8	0		6	9	L	8	9	10	48	
A	10	0	6BJ3	6	10						
C	1	0	6BJ5	6	6						
D	1	0	6BJ6	6	6	L	1	6	5	66	
F	2	0	6BJ7	6	29						
F	6	0		6	29						
F	8	0		6	29						
E	8	0	6BJ8	6	29	L	8	0	7	60	
E	6	0		6	29						
E	1	0		6	29						
G	5	0	6BK4	6	4						
(Disregard all Shorts except H-K)											
C	7	0	6BK5	6	26	M	7	8	1	34	
F	1	0	6BK6	6	6	K	1	0	7	73	
G	5	0		6	6						
G	6	0		6	6						
E	2	0	6BK7	6	29	L	2	0	1	44	
E	7	0		6	29	L	7	0	6	44	
E	9	0	6BK8	6	29						
(Normal Shorts 2, 7)											
G	10	0	6BK11	6	9						
G	5	0		6	9						
G	2	0		6	9						
A	5	0	6BL4	6	2						

6BL7



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
C	1	0	6BL7	6	2	M	1	0	2	38
C	4	0		6	2	M	4	0	5	38
D	2	0	6BL8	6	29	L	2	3	6	42
D	9	0		6	29	L	9	0	1	59
C	1	0	6BM5	6	13					
C	3	0	6BM8	6	29	M	3	7	6	40
F	1	0		6	29	K	1	0	9	70
E	2	0	6BN4	6	13	L	2	0	5	40
(Normal Shorts 1, 6)										
C	2	0	6BN5	6	26					
H	5	0	6BN6	6	6					
(Emission and Shorts only)										
H	2	0		6	6					
(Grid Leakage)										
C	7	0	6BN7	6	29					
F	2	0		6	29					
E	8	0	6BN8	6	29	K	8	0	7	58
D	6	0		6	29					
D	1	0		6	29					
D	3	0	6BN11	6	9	L	3	4	5	28
D	7	0		6	9	L	7	9	1	28
C	2	0	6BQ5	6	24	M	2	9	7	29
(Normal Shorts 6, 8)										
A	5	0	6BQ6	6	1					
E	2	0	6BQ7	6	29	L	2	0	1	40
E	7	0		6	29	L	7	0	6	40
A	9	0	6BR3	6	24					
(Disregard Shorts except H-K)										
F	2	0	6BR7	6	24					
D	1	0	6BR8	6	29	L	1	0	2	46
C	9	0		6	29	L	9	7	6	56
A	7	0	6BS3	6	17					
(Disregard Shorts except H-K)										
C	2	0	6BS5	6	24					
G	10	0	6BS7	6	24					
E	2	0	6BS8	6	29	L	2	0	1	39
E	7	0		6	29	L	7	0	6	39
F	1	0	6BT6	6	6	K	1	0	7	78
G	3	0		6	6					
G	6	0		6	6					
D	8	0	6BT8	6	29	M	8	7	6	29
G	2	0		6	29					
G	1	0		6	29					

6BZ3



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
G	5	0	6BU4	6	4					
(Disregard all Shorts except H-K)										
G	5	0	6BU5	6	2					
(Normal Shorts B, F)										
E	1	0	6BU6	6	6	L	1	0	7	77
G	3	0		6	6					
G	6	0		6	6					
D	7	0	6BU8	6	29	L	7	2	3	77
				6	29	L	7	2	8	77
E	8	0	6BV7	6	25					
E	6	0		6	25					
E	1	0		6	25					
E	2	0	6BV8	6	29	L	2	0	3	42
E	6	0		6	29					
E	9	0		6	29					
E	7	0	6BV11	6	9	L	7	9	10	56
E	6	0		6	9	L	6	4	3	56
B	1	0	6BW4	6	29					
B	7	0		6	29					
C	2	0	6BW6	6	24					
D	2	0	6BW7	6	26					
C	6	0	6BW8	6	29	L	6	8	9	52
F	3	0		6	29					
F	1	0		6	29					
C	1	0	6BW11	6	9	M	1	9	8	34
D	3	0		6	9	L	3	4	5	27
A	1	0	6BX4	6	6					
A	6	0		6	6					
D	2	0	6BX6	6	24	L	2	8	7	37
C	1	0	6BX7	6	2	M	1	0	2	38
C	4	0		6	2	M	4	0	5	38
E	2	0	6BX8	6	29	L	2	0	1	41
E	7	0		6	29	L	7	0	6	41
A	4	0	6BY5	6	1					
A	5	0		6	1					
D	1	0	6BY6	6	6	L	1	6	5	74
D	2	0	6BY7	6	26					
D	1	0	6BY8	6	29	L	1	8	7	65
E	6	0		6	29					
F	3	0	6BY11	6	9	K	3	6	7	68
B	8	0		6	9	M	8	10	1	54
A	10	0	6BZ3	6	10					

6BZ6



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	1	0	6BZ6	6 6	L	1	6	5	48	
E	2	0	6BZ7	6 29	L	2	0	1	40	
E	7	0		6 29	L	7	0	6	40	
E	2	0	6BZ8	6 29	L	2	0	1	40	
E	7	0		6 29	L	7	0	6	40	
A	10	0	6B23	6 10						
(Disregard Shorts except H-K)										
F	2	0	6B32	6 6						
E	7	0		6 6						
C	6	0	6C4	6 7						
(Normal Shorts 1, 5)										
E	5	0	6C5	6 1	L	5	0	3	70	
F	5	0	6C8	6 1						
F	10	0		6 1						
E	1	0	6C9	6 29						
E	7	0		6 29						
F	1	0	6C10	6 9	K	1	0	2	77	
F	7	0		6 9	K	7	0	5	77	
F	9	0		6 9	K	9	0	10	77	
E	2	0	6C12	6 29	L	2	1	6	69	
E	9	0		6 29	L	9	0	8	65	
D	2	0	6C16	6 29	L	2	3	6	42	
D	9	0		6 29	L	9	0	1	59	
E	7	0	6C18	6 27						
D	9	0		6 27						
A	1	0	6CA4	6 23						
A	7	0		6 23						
C	5	0	6CA5	6 7	M	5	6	7	33	
A	5	0	6CA7	6 1	M	5	4	3	36	
C	8	0	6CA11	6 9	M	8	10	1	14	
E	7	0		6 9	L	7	0	4	46	
E	3	0		6 9	L	3	0	2	48	
A	4	1	6CB5	6 3						
(Normal Shorts 3, 6)										
D	1	0	6CB6	6 6	L	1	6	5	43	
D	5	0	6CB11	6 9	L	5	3	2	27	
D	10	0		6 9	L	10	9	8	27	
C	5	0	6CC31	6 6	L	5	0	2	49	
C	6	0		6 6	L	6	0	1	49	
A	10	4	6CD3	6 9						
A	5	0	6CD6	6 1	M	5	8	10	42	

6CM7



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
A	10	4	6CE3	6 9						
(Disregard Shorts except H-K)										
E	1	0	6CE5	6 7	L	1	6	5	40	
D	1	0	6CF6	6 6	L	1	6	5	41	
F	9	0	6CF8	6 29						
A	10	4	6CG3	6 9						
(Disregard Shorts except H-K)										
E	1	0	6CG6	6 6						
E	2	0	6CG7	6 29	L	2	0	1	66	
E	7	0		6 29	L	7	0	6	66	
E	1	0	6CG8	6 26	L	1	0	2	46	
E	9	0		6 26	L	9	7	6	49	
A	7	2	6CH3	6 24						
(Disregard Shorts except H-K)										
C	2	0	6CH6	6 24						
(Normal Shorts 5, 6)										
E	2	0	6CH7	6 25						
E	7	0		6 25						
E	7	0	6CH8	6 29	M	7	3	2	30	
E	8	0		6 29	L	8	0	9	58	
A	2	7	6CJ3	6 18						
C	2	0	6CJ6	6 24						
(Normal Shorts 6, 7, 8, 9)										
A	7	0	6CK3	6 17						
(Disregard Shorts except H-K)										
C	1	0	6CK4	6 4	M	1	0	5	42	
C	2	0	6CK6	6 29						
A	2	7	6CL3	6 18						
A	4	1	6CL5	6 3						
(Normal Shorts 3, 6)										
C	2	3	6CL6	6 25						
(Normal Shorts 3, 8)										
D	1	0	6CL8	6 29	L	1	0	2	46	
D	9	0		6 29	L	9	7	6	50	
A	7	0	6CM3	6 17						
E	6	0	6CM4	6 23	L	6	0	1	20	
(Normal Shorts 3, 7)										
A	5	0	6CM5	6 4						
A	3	0	6CM6	6 27	M	3	1	9	52	
C	8	0	6CM7	6 29	L	8	0	1	59	
E	7	0		6 29	L	7	0	6	67	

6CM8



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
E	2	0	6CM8	6	29					
F	9	0		6	29					
C	5	0	6CN6	7	1					
F	1	0	6CN7	6	25					
F	2	0		6	25					
F	7	0		6	25	K	7	0	8	78
A	5	0	6CQ4	6	2					
E	1	0	6CQ6	6	6					
D	2	0	6CQ8	6	29	L	2	3	6	55
D	9	0		6	29	L	9	0	1	47
C	8	0	6CR5	6	26					
(Normal Shorts 1, 2, 6, 7)										
E	7	0	6CR6	6	6	L	7	6	5	80
G	2	0		6	6					
D	2	0	6CR8	6	29					
D	9	0		6	29					
C	3	0	6CS5	6	27	M	3	1	9	38
D	1	0	6CS6	6	6	L	1	6	5	72
C	3	0	6CS7	6	29	M	3	0	1	40
F	7	0		6	29	L	7	0	6	69
D	2	0	6CS8	6	29					
E	9	0		6	29					
A	2	6	6CT3	6	26					
C	5	0	6CU5	6	7	M	5	6	7	47
A	5	0	6CU6	6	1	M	5	4	10	48
C	7	0	6CU8	6	29	M	7	3	2	28
(Normal Shorts 1)										
C	8	0		6	29	L	8	0	9	60
F	4	0	6CW4	6	14	L	4	0	2	29
A	2	0	6CW5	6	24					
(Normal Shorts 7, 8)										
E	2	0	6CX7	6	25	L	2	0	1	42
E	7	0		6	25	L	7	0	6	42
C	7	0	6CX8	6	29	M	7	8	9	29
E	2	0		6	29	L	2	0	3	50
E	1	0	6CY5	6	13	L	1	6	5	45
C	2	0	6CY7	6	26	M	2	0	1	50
F	7	0		6	26	K	7	0	6	79
C	3	0	6CZ5	6	27	M	3	1	9	45
F	6	0	6D1	6	7					
(Normal Shorts 1, 5)										

6DN7



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
E	2	0	6D2	6	6					
E	7	0		6	6					
D	1	0	6D4	6	6					
C	5	0	6D5	6	1					
E	5	0	6D8	6	1					
E	1	0	6D10	6	9	L	1	0	2	39
E	7	0		6	9	L	7	0	5	39
E	9	0		6	9	L	9	0	10	39
A	5	0	6DA4	6	2					
D	2	0	6DA6	6	24	L	2	8	7	63
C	3	0	6DA7	6	29					
E	7	0		6	29					
C	3	0	6DB5	6	27	M	3	1	9	42
(Normal Shorts 2, 7)										
E	1	0	6DB6	6	6					
E	1	0	6DC6	6	6					
D	2	0	6DC8	6	29	L	2	1	5	62
G	7	0		6	29					
G	8	0		6	29					
A	5	0	6DE4	6	2					
C	1	0	6DE6	6	6	M	1	6	5	34
C	2	0	6DE7	6	26	M	2	0	1	37
F	7	0		6	26	L	7	0	6	68
A	7	0	6DG4	6	5					
(Normal Shorts 3, H-K)										
A	7	0		6	5					
C	5	0	6DG6	6	1	M	5	4	3	40
D	2	0	6DG7	6	24					
D	2	0	6DJ8	6	29	L	2	0	1	36
D	7	0		6	29	L	7	0	6	36
D	1	0	6DK6	6	6	L	1	6	5	40
G	8	0	6DL4	6	25					
(Emission and Shorts Test only, Normal Shorts 1, 3, 6, 7)										
C	1	0	6DL5	6	13	M	1	6	5	42
A	5	0	6DM4	6	2					
E	6	0	6DM8	6	16					
E	8	0		6	16					
E	9	0		6	16					
A	5	0	6DN6	6	1					
C	1	0	6DN7	6	2	M	1	0	2	32
F	4	0		6	2	L	4	0	5	66

6DQ4



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
A	5	0	6DQ4	6	2						
A	1	0	6DQ5	6	3						
(Normal Shorts 3, 4, 6, 8)											
A	5	0	6DQ6	6	1	M	5	4	10	48	
F	6	0	6DR4	6	7						
(Normal Shorts 1, 5)											
D	2	0	6DR6	6	24						
C	2	0	6DR7	6	26	M	2	0	1	44	
E	7	0		6	26	K	7	0	6	70	
G	8	0	6DR8	6	29						
G	7	0		6	29						
G	2	0		6	29						
G	4	0	6DS4	6	14	L	4	0	2	29	
C	1	0	6DS5	6	13	M	1	6	5	40	
F	2	0	6DS8	6	29						
G	7	0		6	29						
A	5	0	6DT4	6	2						
C	3	0	6DT5	6	27	M	3	1	9	34	
E	1	0	6DT6	6	6	L	1	6	5	70	
E	2	0	6DT8	6	29	L	2	0	1	43	
E	7	0		6	29	L	7	0	6	43	
A	7	0	6DW4	6	17						
(Disregard Shorts except H-K)											
C	3	0	6DW5	6	27						
D	2	0	6DX4	6	15						
D	8	0	6DX8	6	29	L	8	9	6	38	
F	1	0		6	29						
D	2	0	6DY4	6	15	L	2	0	7	29	
B	2	0	6DY5	6	29						
C	1	0	6DY7	6	1						
C	5	0		6	1						
D	2	0	6DZ4	6	15	M	2	0	7	34	
C	1	0	6DZ7	6	1	M	1	4	3	47	
C	5	0		6	1	M	5	4	6	47	
C	3	0	6DZ8	6	29						
F	1	0		6	29						
D	10	0	6E8	6	1						
G	6	0	6EA4	6	10						
(Disregard Shorts except H-K)											
E	1	0	6EA5	6	13	L	1	6	5	42	

6EV5



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
D	1	0	6EA7	6	2	M	1	0	2	30	
F	4	0		6	2	K	4	0	5	74	
C	2	0	6EA8	6	29	L	2	3	6	48	
C	9	0		6	29	L	9	0	1	45	
F	2	0	6EB5	6	6						
F	7	0		6	6						
C	7	0	6EB8	6	29	M	7	8	9	23	
F	2	0		6	29	K	2	0	3	62	
A	8	0	6EC4	6	20						
(Disregard Shorts)											
D	1	0	6EC7	6	26						
J	6	0	6EF4	6	9						
(Disregard Shorts except H-K)											
C	5	0	6EF6	6	1						
J	6	2	6EH4	6	10						
C	5	0	6EH5	6	7	M	5	6	7	27	
D	2	0	6EH7	6	24	L	2	8	7	50	
D	2	0	6EH8	6	24	L	2	0	3	46	
D	7	0		6	24	L	7	8	9	55	
J	6	2	6EJ4	6	10						
D	2	0	6EJ7	6	26	M	2	8	7	13	
D	2	0	6EL7	6	24						
C	3	0	6EM5	6	27	M	3	1	9	46	
D	1	0	6EM7	6	2	M	1	0	2	42	
F	4	0		6	2	K	4	0	5	76	
D	2	0	6EQ7	6	29	L	2	6	7	75	
G	8	0		6	29						
E	2	0	6ER5	6	13	L	2	0	5	32	
E	2	0	6ES5	6	13	L	2	0	5	40	
D	2	0	6ES8	6	29	M	2	0	1	18	
D	7	0		6	29	M	7	0	6	18	
D	1	0	6ET6	6	6						
D	7	0	6ET7	6	29	M	7	0	8	21	
G	3	0		6	29						
G	2	0		6	29						
G	5	0	6EU7	6	28	K	5	0	6	74	
G	8	0		6	28	K	8	0	7	74	
D	2	0	6EU8	6	29	L	2	0	3	43	
D	7	0		6	29	L	7	9	1	56	
E	1	0	6EV5	6	13	L	1	6	5	36	

6EV7



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	2	0	6EV7	6	29	L	2	0	1	51
E	7	0		6	29	L	7	0	6	51
D	1	0	6EV8	6	29					
D	9	0		6	29					
D	1	0	6EW6	6	6	L	1	6	5	27
F	7	0	6EW7	6	26	L	7	0	6	76
C	2	0		6	26	M	2	0	1	40
A	5	0	6EX6	6	1					
C	5	0	6EY6	6	1	M	5	4	3	50
A	5	0	6EZ5	6	1	M	5	4	3	52
C	5	0	6EZ6	6	1	M	5	4	3	63
E	2	0	6EZ8	6	29	L	2	0	3	40
E	7	0		6	29	L	7	0	6	40
E	9	0		6	29	L	9	0	8	40
F	10	0	6F5	6	1					
B	5	0	6F6	6	1	M	5	4	3	64
E	5	0	6F8	6	1					
E	1	0		6	1					
D	4	0	6F10	6	1	L	4	6	8	34
E	1	0	6F12	6	6					
D	1	0	6F18	6	26					
D	2	0	6F19	6	26					
E	1	0	6F21	6	6					
F	9	0	6F22	6	29	K	9	1	6	76
(Normal Shorts 2, 7)										
D	2	0	6F23	6	24					
D	2	0	6F26	6	26					
D	2	0	6F29	6	24	L	2	8	7	50
D	2	0	6F30	6	24	M	2	8	7	15
D	1	0	6F31	6	6	L	1	6	5	61
E	1	0	6F33	6	6	L	1	6	5	57
G	1	0	6F35	6	7					
D	1	0	6F36	6	6	L	1	6	5	37
G	3	0	6FA7	6	29					
F	7	0		6	29	K	7	8	1	66
				6	29	K	7	8	9	66

6FV8



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
H	1	0	6FB8	6	29					
H	2	0		6	29					
H	3	0		6	29					
H	6	0		6	29					
H	7	0		6	29					
H	8	0		6	29					
D	2	0	6FC7	6	29					
D	6	0		6	29					
(Normal Shorts 7, 8)										
F	1	0	6FD6	6	6					
C	2	0	6FD7	6	26	K	2	0	1	69
F	7	0		6	26	M	7	0	6	45
D	2	0	6FD12	6	29					
G	7	0		6	29					
G	8	0		6	29					
C	5	0	6FE5	6	1					
D	1	0	6FG5	6	7	K	1	6	5	63
D	9	0	6FG7	6	26	L	9	7	6	45
E	1	0		6	26	L	1	0	2	50
E	2	0	6FH5	6	13	L	2	0	5	31
A	5	0	6FH6	6	1					
E	2	0	6FH8	6	29	L	2	0	3	46
E	6	0		6	29	K	6	7	9	61
(Normal Shorts H-K)										
C	3	0	6FJ7	6	9	M	3	0	5	34
F	10	0		6	9	L	10	0	1	66
C	8	0	6FM7	6	10	M	8	0	5	42
E	10	0		6	9	K	10	0	1	70
(Normal Shorts 3, 8)										
E	2	0	6FM8	6	29					
E	6	0		6	29					
F	8	0		6	29	K	8	0	9	77
A	4	0	6FN5	6	3					
(Normal Shorts 1, 3, 6, 8)										
D	2	0	6FQ5	6	13	L	2	0	5	27
D	2	0	6FQ7	6	29	L	2	0	1	67
D	7	0		6	29	L	7	0	6	67
C	2	0	6FR7	6	26					
F	7	0		6	26					
D	1	0	6FS5	6	7	L	1	6	5	38
E	1	0	6FV6	6	6	L	1	6	5	40
D	1	0	6FV8	6	29	L	1	0	2	39
D	9	0		6	29	L	9	7	6	45

6FW5



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
A	1	0	6FW5	6 1	M	1	8	5	47	
E	2	0	6FW7	6 29	L	2	0	1	40	
E	7	0		6 29	L	7	0	6	40	
E	2	0	6FW8	6 29						
E	7	0		6 29						
A	1	0	6FX4	6 6						
A	6	0		6 6						
E	2	0	6FX7	6 29	L	2	0	1	31	
E	7	0		6 29	L	7	0	6	31	
D	2	0	6FY5	6 15	L	2	0	5	32	
C	3	0	6FY7	6 9	M	3	0	5	40	
E	10	0		6 9	K	10	0	1	73	
E	3	0	6FY8	6 29						
F	1	0		6 29						
D	5	0	6G6	6 1						
C	8	0	6G11	6 9	M	8	10	1	47	
D	3	0		6 9						
A	1	0	6GA7	6 9						
A	4	0		6 9						
(Normal Shorts 2, 3)										
A	5	0	6G-B3A	6 4						
A	1	0	6GB5	6 20						
(Normal Shorts 2, 3)										
A	5	0	6G-B7	6 4						
A	5	0	6G-B9	6 1						
C	3	0	6GC5	6 27						
(Normal Shorts 1, 8)										
A	5	0	6GC6	6 1						
Normal Shorts 4, 8)										
D	1	0	6GD7	6 26						
D	9	0		6 26						
A	1	0	6GE5	6 10	M	1	2	7	46	
D	3	0	6GE8	6 29	M	3	0	6	42	
F	8	0		6 29	L	8	1	9	54	
A	1	0	6GF5	6 10	M	1	2	7	44	
C	2	0	6GF7	6 16	M	2	0	6	48	
G	9	0		6 16	K	9	0	8	73	
D	2	0	6GH8	6 29	L	2	3	6	49	
D	9	0		6 29	L	9	0	1	43	
A	6	0	6GJ5	6 17						
(Normal Shorts 1, 7)										

6GX6



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	2	0	6GJ7	6 26	L	2	7	6	38	
E	9	0		6 26	L	9	0	8	42	
E	2	0	6GJ8	6 29	L	2	3	5	46	
E	9	0		6 29	L	9	0	1	41	
E	2	0	6GK5	6 13	L	2	0	5	27	
C	2	0	6GK6	6 26	M	2	8	7	31	
E	1	0	6GK7	6 26						
A	5	0	6G-K17	6 2						
A	1	0	6GL7	6 2	M	1	0	2	52	
F	4	0		6 2	L	4	0	5	68	
C	6	0	6GM5	6 26						
C	1	0	6GM6	6 6	M	1	6	5	27	
E	2	0	6GM8	6 29						
E	7	0		6 29						
D	1	0	6GN6	6 6						
G	7	0		6 6						
D	2	0	6GN7	6 27	M	2	8	7	6	
(Normal Shorts 3, 9)										
C	7	0	6GN8	6 29	M	7	8	9	26	
G	2	0		6 29	K	2	0	3	57	
E	2	0	6GQ7	6 26						
E	6	0		6 26						
E	8	0		6 26						
D	7	0	6GS8	6 29						
A	6	0	6GT5	6 17						
(Normal Shorts 1, 7)										
D	1	0	6GU5	6 7	L	1	6	5	36	
D	2	0	6GU7	6 29	L	2	0	1	58	
D	7	0		6 29	L	7	0	6	58	
A	5	0	6GV5	6 10						
(Normal Shorts 1, 7)										
E	7	0	6GV7	6 27						
D	9	0		6 27						
E	2	0	6GV8	6 29	L	2	0	1	40	
C	9	0		6 29	M	9	7	6	40	
D	6	0	6GW5	6 7	L	6	0	1	28	
A	5	0	6GW6	6 1	M	5	4	10	40	
G	1	0	6GW8	6 29	K	1	0	9	76	
C	8	0		6 29	M	8	3	6	30	
E	1	0	6GX6	6 6	L	1	6	5	47	

6GX7



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
D	2	0	6GX7	6	26	L	2	7	6	28
D	9	0		6	26	L	9	0	8	32
A	5	0	6GY5	6	10					
(Normal Shorts 1, 7)										
E	1	0	6GY6	6	6	L	1	6	5	47
E	1	0	6GY8	6	29	L	1	0	2	44
E	3	0		6	29	L	3	0	9	44
G	6	0		6	29					
(Normal Shorts H-K)										
D	5	0	6GZ5	6	7					
F	4	0	6H4	6	1					
E	3	0	6H6	6	1					
E	5	0		6	1					
D	10	0	6H8	6	1					
G	5	0		6	1					
G	4	0		6	1					
D	1	0	6HA5	6	7	L	1	0	5	27
C	2	0	6HA6	6	27	M	2	8	7	15
(Normal Shorts 3, 9)										
A	1	0	6HB5	6	10					
C	2	0	6HB6	6	27	M	2	8	7	16
(Normal Shorts 3, 9)										
D	2	0	6HB7	6	26	L	2	7	6	56
D	9	0		6	26	L	9	0	8	46
C	3	0	6HC8	6	29					
F	1	0		6	29					
A	1	0	6HD5	6	10					
F	2	0	6HD7	6	26					
F	9	0		6	26					
C	2	0	6HE5	6	10	M	2	10	6	56
A	9	10	6HE7	6	9					
A	2	10		6	9					
A	5	0	6HF5	6	10					
(Normal Shorts 1, 6, 8)										
D	7	0	6HF8	6	29	M	7	8	9	24
F	2	0		6	29	K	2	0	3	60
C	1	0	6HG5	6	13	M	1	6	5	56
D	2	0	6HG8	6	26	L	2	9	8	27
D	6	0		6	26	L	6	0	7	58
A	1	0	6HJ5	6	10	M	1	5	7	44
F	2	0	6HJ7	6	26					
F	9	0		6	26					

6J9



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE									
B	C	D		A	SKT	B	C	D	E	F					
C	2	0	6HJ8	6	29	L	2	3	6	39					
F	8	0		6	29										
E	1	0	6HK5	6	7										
E	2	0	6HK8	6	29										
E	7	0		6	29										
A	2	0	6HL5	6	24										
D	2	0	6HL7 (Normal Shorts 3, 9)	6	27	M	2	8	7	6					
D	2	0	6HL8	6	29	L	2	3	6	34					
D	9	0		6	29						L	9	0	1	42
D	1	0	6HM5	6	7	L	1	6	5	29					
D	2	0	6HM6	6	26	M	2	8	7	21					
E	1	0	6HQ5	6	7	L	1	0	5	30					
D	1	0	6HQ6	6	6										
B	1	0	6HR5	6	13										
D	1	0	6HR6	6	6	L	1	6	5	51					
A	1	2	6HS5 (Normal Shorts 3, 10)	6	9										
D	1	0	6HS6	6	6	L	1	6	5	37					
D	7	0	6HS8	6	29	K	7	2	3	86					
				6	29						K	7	2	8	86
J	6	2	6HT5 (Disregard Shorts except H-K)	6	10										
D	2	0	6HT6	6	24	M	2	8	7	21					
C	2	0	6HU8	6	29	M	2	1	3	36					
C	6	0		6	29						M	6	9	8	36
E	6	0	6HW8	6	29	L	6	3	2	54					
				6	29						L	6	3	8	54
F	1	0	6HZ6	6	6	L	1	6	5	47					
B	7	0	6HZ8	6	29	M	7	8	9	23					
E	2	0		6	29						K	2	0	3	58
C	5	0	6J4	6	15	L	5	0	7	38					
E	5	0	6J5	6	1	L	5	0	3	63					
C	5	0	6J6	6	6	L	5	0	2	49					
C	6	0		6	6						L	6	0	1	49
F	10	0	6J7	6	1										
F	5	0	6J8	6	1										
F	10	0		6	1										
F	2	0	6J9	6	29	L	2	0	1	27					
F	7	0		6	29						L	7	0	6	27
F	9	0		6	29						L	9	0	8	27

6J10



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
C	1	0	6J10	6	9	M	1	2	9	34
H	6	0		6	9					
D	5	0	6J11	6	9	L	5	2	3	35
D	1	0		6	9	L	1	7	9	35
D	2	0	6JA8	6	29	K	2	0	3	73
F	7	0		6	29	M	7	8	9	21
A	6	0	6JB6 (Normal Shorts 1, 7)	6	17					
D	2	0								
D	2	0	6JC6	6	26	L	2	8	7	27
D	2	0	6JC8	6	24	L	2	3	6	49
D	8	0		6	24	L	8	0	9	48
C	2	0	6JD6	6	26	L	2	8	7	30
A	6	0	6JE6 (Normal Shorts 1, 7)	6	17					
D	7	0								
F	2	0	6JE8	6	29	M	7	8	9	21
				6	29	K	2	0	3	60
A	2	1	6JF6	6	18					
A	2	0	6JG6 (Normal Shorts 1, 7)	6	16					
D	1	0								
D	6	0	6JH8	6	29	L	6	3	9	52
				6	29	L	6	3	8	52
D	1	0	6JK6	6	6	M	1	6	5	15
E	2	0	6JK8	6	29	L	2	0	1	30
E	7	0		6	29	L	7	0	6	36
D	1	0	6JL6	6	6	M	1	6	5	16
C	2	0	6JL8	6	29	L	2	0	3	76
E	7	0		6	29	M	7	8	9	29
A	5	0	6JM6	6	10					
A	1	0	6JN6	6	10					
D	1	0	6JN8	6	29					
D	9	0		6	29					
G	6	7	6JQ6	6	9					
A	8	7		6	9					
A	2	1	6JR6	6	16					
A	5	0	6JS6	6	10	M	5	1	10	48
A	2	0	6JT6 (Normal Shorts 1, 7)	6	16					
C	7	0								
F	2	0	6JT8	6	29	M	7	8	9	12
				6	29	K	2	0	3	64
A	2	6	6JU6 (Normal Shorts 1, 7)	6	16					

6KM6



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
E	1	0	6JU8	6	27						
E	2	0		6	27						
E	7	0		6	27						
E	8	0		6	27						
(Normal Shorts 2, 8)											
C	7	0	6JV8	6	29	M	7	8	9	22	
E	2	0		6	29	K	2	0	3	60	
D	9	0	6JW8	6	29						
C	2	0		6	29						
E	2	0	6JX8	6	29						
E	9	0		6	29	L	9	0	8	54	
A	5	0	6JZ6	6	8						
(Normal Shorts 4, 10)											
E	10	0	6JZ8	6	9	L	10	0	2	66	
A	7	6		6	9						
(Normal Shorts 6, 7)											
F	10	0	6K5	6	1						
B	5	0	6K6	6	1	M	5	4	3	66	
E	10	0	6K7	6	1	L	10	4	3	81	
E	5	0	6K8	6	1						
D	9	0	6K11	6	9	L	9	0	10	67	
F	7	0		6	9	K	7	0	5	77	
F	1	0		6	9	K	1	0	2	77	
F	2	0	6KA8	6	29	K	2	0	1	60	
E	6	0		6	29	L	6	8	9	42	
				6	29	L	7	8	9	70	
A	5	0	6KD6	6	10	M	5	1	10	62	
D	2	0	6KD8	6	29	L	2	3	6	52	
D	9	0		6	29	L	9	0	1	50	
A	5	1	6KE6	6	10						
D	9	0	6KE8	6	29	L	9	0	1	40	
E	2	0		6	29	L	2	3	6	28	
D	7	0	6KF8	6	29	K	7	2	3	78	
				6	29	K	7	2	8	78	
C	2	0	6KH8	6	29						
C	6	0		6	29						
A	8	1	6KG6	6	20						
(Normal Shorts 3, 6)											
D	2	0	6KL8	6	29	L	2	6	7	51	
F	8	0		6	29						
A	2	6	6KM6	6	17						
(Normal Shorts 1, 7)											

6KM8



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
H	3	0	6KM8	6	29						
F	7	0		6	29	K	7	8	1	76	
				6	29	K	7	8	2	76	
				6	29	K	7	8	9	73	
A	5	9	6KN6 (Normal Shorts 4, 10)	6	8						
D	2	0		6	29	M	2	0	1	20	
D	7	0	6KN8	6	29	M	7	0	6	20	
C	7	0	6KR8	6	29	M	7	8	9	12	
D	2	0		6	29	L	2	0	3	38	
F	2	0	6KS6	6	6						
F	2	0	6KS8	6	29						
C	7	0		6	29						
C	2	0	6KT6	6	29	M	2	8	7	16	
D	7	0	6KT8	6	29						
G	2	0		6	29						
D	7	0	6KU8	6	29	L	7	8	9	18	
G	3	0		6	29						
G	2	0		6	29						
A	2	1	6KV6	6	16						
C	7	0	6KV8	6	29	L	7	8	9	20	
F	2	0		6	29	K	2	0	3	58	
C	2	0	6KY6	6	29	M	2	8	7	11	
C	2	0	6KY8	6	16	M	2	7	6	47	
G	9	0		6	16	K	9	0	8	76	
D	2	0	6KZ8	6	29	L	2	7	6	50	
D	9	0		6	29	L	9	0	1	45	
F	5	0	6L5	6	1						
A	5	0	6L6	6	1	M	5	4	3	50	
F	10	0	6L7	6	1						
C	4	0	6L10	6	1	M	4	6	8	28	
C	2	3	6L43 (Normal Shorts 3, 8)	6	25						
A	5	9		6	8						
			6LB6 (Normal Shorts 4, 10)								
D	2	0		6	29	L	2	0	3	56	
D	7	0	6LB8	6	29	M	7	8	9	9	
J	5	0	6LC6	6	1						
E	6	0	6LC8	6	29	L	6	8	9	42	
F	2	0		6	29	K	2	0	1	60	
			6LD6 (Normal Shorts 3)								
C	2	3		6	18						

6MB8



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
F	8	0	6LD12	6	29						
G	6	0		6	29						
G	2	0		6	29						
G	1	0		6	29						
D	9	0	6LE8	6	29	L	9	8	1	43	
				6	29	L	9	8	6	43	
A	5	0	6LF6	6	10						
D	7	0	6LF8	6	29	M	7	8	9	28	
G	2	0		6	29	K	2	0	3	65	
A	5	0	6LG6	6	10						
J	5	0	6LH6	6	4						
J	5	4	6LJ6	6	1						
D	1	0		6	26						
D	9	0	6LJ8	6	26						
D	2	0		6	29	M	2	3	6	28	
D	9	0	6LM8	6	29	L	9	0	1	42	
D	2	0		6	29	L	2	3	6	41	
D	9	0	6LN8	6	29	L	9	0	1	52	
D	2	0		6	29	L	2	0	3	40	
D	7	0	6LQ8	6	29	M	7	8	9	10	
C	9	0		6	29	L	9	0	8	38	
A	2	0	6LR8	6	29	M	2	7	6	47	
E	9	0		6	29	L	9	2	3	30	
C	6	0	6LT8	6	29						
C	8	0		6	29						
B	6	7	6LU8	6	9						
E	10	0		6	9	L	10	0	2	38	
D	9	0	6LX8	6	29						
C	2	0		6	29						
D	7	0	6LY8	6	29	M	7	8	9	14	
C	2	0		6	29	K	2	0	3	67	
C	2	0	6M5	6	27						
F	5	0	6M6	6	1						
D	10	0	6M7	6	1						
D	10	0	6M8	6	1						
F	5	0		6	1						
G	8	0		6	1						
D	2	0	6M11	6	9	L	2	3	1	30	
E	5	0		6	9	L	5	0	6	33	
E	8	0		6	9	L	8	0	7	33	
D	9	0	6MB8	6	28	L	9	7	6	25	
E	1	0		6	28	L	1	0	2	34	

6MD8



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	6	0	6MD8	6	16	L	6	0	3	51
D	8	0		6	16	L	8	0	2	51
D	9	0		6	16	L	9	0	1	51
D	6	0	6ME8	6	24	L	6	3	8	51
				6	24	L	6	3	9	51
B	6	7	6MF8	6	9					
F	10	0		6	9	K	10	0	2	55
D	2	0	6MG8	6	29	L	2	3	6	54
D	9	0		6	29	L	9	0	1	47
E	1	0	6MJ8	6	9	L	1	0	2	63
E	8	0		6	9	L	8	0	6	63
E	10	0		6	9	L	10	0	4	63
E	7	0	6MK8	6	28	K	7	2	3	78
				6	28	K	7	2	8	78
D	6		6ML8	6	29	L	6	0	3	42
D	8			6	29	L	8	0	2	42
D	9			6	29	L	9	0	1	42
D	5	0	6M-H1	6	15					
E	5	0	6M-HH3	6	6	L	5	0	2	49
E	6	0		6	6	L	6	0	1	49
C	1	0	6M-P20	6	6					
A	9	0	6N3	6	29					
(Disregard Shorts)										
D	1	0	6N4	6	13					
(Normal Shorts 2, 6)										
E	4	0	6N7	6	1	L	4	0	3	75
E	5	0		6	1	L	5	0	6	75
F	2	0	6N8	6	29					
G	7	0		6	29					
G	8	0		6	29					
G	4	0	6N-H10	6	14					
F	4	0	6N-L7	6	14					
F	5	0	6P5	6	1					
F	10	0	6P7	6	1					
(Normal Shorts 3)										
E	10	0	6P8	6	1					
F	5	0		6	1					
G	9	0	6Q4	6	24					
(Emission and Shorts test only; Normal Shorts 1, 2, 7, 8)										
F	5	0	6Q5	6	1					
F	10	0	6Q6	6	1					
G	5	0		6	1					

6SF7



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	10	0	6Q7	6	1					
G	5	0		6	1					
G	4	0		6	1					
D	9	0	6Q11	6	9	L	9	0	10	67
F	7	0		6	9	K	7	0	5	78
F	1	0		6	9	K	1	0	2	78
A	9	0	6R3	6	29					
(Disregard Shorts except H-K)										
C	1	0	6R4	6	29	L	8	0	1	63
E	10	0	6R6	6	1					
E	10	0	6R7	6	1					
G	5	0		6	1					
G	4	0		6	1					
E	8	0	6R8	6	29	L	8	0	9	78
G	6	0		6	29					
G	2	0		6	29					
G	1	0		6	29					
E	2	0	6R-HH2	6	29	L	2	0	1	38
E	7	0		6	29	L	7	0	6	38
D	2	0	6R-HH8	6	29	M	2	0	1	20
D	7	0		6	29	M	7	0	6	20
A	9	0	6R-K19	6	27					
(Disregard Shorts except H-K)										
H	10	0	6S2	6	23					
(Disregard Shorts except H-K)										
C	6	0	6S4	6	26	L	6	0	9	57
(Disregard Shorts except H-K)										
D	10	0	6S6	6	1					
E	10	0	6S7	6	1					
F	10	0	6S8	6	2					
G	4	0		6	2					
G	3	0		6	2					
G	1	0		6	2					
D	5	0	6SA7	6	1					
D	5	0	6SB7	6	1					
F	3	0	6SC7	6	2	K	3	0	2	83
F	4	0		6	2	K	4	0	5	83
D	4	0	6SD7	6	1	L	4	6	8	58
F	4	0	6SE7	6	1					
F	3	0	6SF5	6	2					
D	2	0	6SF7	6	2					
G	5	0		6	2					

6SG7



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	4	0	6SG7	6 3	L	4	6	8	58	
D	4	0	6SH7	6 3	L	4	6	8	51	
E	4	0	6SJ7	6 1	L	4	6	8	66	
D	4	0	6SK7	6 1	K	4	6	8	85	
F	1	0	6SL7	6 2	K	1	0	2	80	
F	4	0		6 2	K	4	0	5	80	
E	1	0	6SN7	6 2	L	1	0	2	66	
E	4	0		6 2	L	4	0	5	66	
F	2	0	6SQ7	6 2						
G	4	0		6 2						
G	5	0		6 2						
F	2	0	6SR7	6 2						
G	4	0		6 2						
G	5	0		6 2						
E	4	0	6SS7	6 1	L	4	6	8	80	
F	2	0	6ST7	6 2						
G	4	0		6 2						
G	5	0		6 2						
F	1	0	6SU7	6 2						
F	4	0		6 2						
F	2	0	6SV7	6 2						
F	2	0	6SZ7	6 2						
G	4	0		6 2						
G	5	0		6 2						
D	2	0	6T4	6 15	M	2	0	7	45	
E	10	0	6T6	6 1						
F	10	0	6T7	6 1						
G	5	0		6 1						
G	4	0		6 1						
F	8	0	6T8	6 29	K	8	0	9	77	
E	6	0		6 29						
E	2	0		6 29						
E	1	0		6 29						
C	8	0	6T9	6 9	M	8	10	1	36	
D	4	0		6 9	K	4	0	2	58	
C	8	0	6T10	6 9	M	8	10	1	33	
D	3	0		6 9	K	3	6	7	80	
A	9	0	6U3	6 24						
(Disregard Shorts except H-K)										
A	5	0	6U4	6 2						
C	5	0	6U6	6 1						
E	10	0	6U7	6 1						

6Y7



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	2	0	6U8	6 29	L	2	3	6	54	
D	9	0		6 29	L	9	0	1	47	
D	3	0	6U9	6 30	M	3	8	7	17	
D	10	0		6 30	L	10	0	9	58	
E	1	0	6U10	6 9	L	1	0	2	66	
E	7	0		6 9	K	7	0	5	78	
E	9	0		6 9	L	9	0	10	66	
A	7	0	6V3	6 23						
A	1	0	6V4	6 23						
A	7	0		6 23						
C	5	0	6V5	6 2						
C	5	0	6V6	6 1	M	5	4	3	50	
F	10	0	6V7	6 1						
G	5	0		6 1						
G	4	0		6 1						
F	6	0	6V8	6 29						
G	9	0		6 29						
G	7	0		6 29						
G	2	0		6 29						
D	8	0	6V9	6 30	L	8	0	10	38	
E	3	0		6 30						
A	5	0	6W4	6 2						
B	3	0	6W5	6 1						
B	5	0		6 1						
C	5	0	6W6	6 1	M	5	4	3	47	
F	10	0	6W7	6 1						
C	8	0	6W9	6 30						
D	1	0		6 30						
B	1	0	6X4	6 6						
B	6	0		6 6						
B	3	0	6X5	6 1						
B	5	0		6 1						
F	3	0	6X6	6 1						
G	5	0		6 1						
E	2	0	6X8	6 29	L	2	0	3	48	
E	7	0		6 29	L	7	8	9	47	
D	3	0	6X9	6 30	M	3	8	7	16	
E	10	0		6 30	L	10	0	9	50	
F	10	0	6Y3	6 1						
C	5	0	6Y6	6 1	M	5	4	3	48	
F	4	0	6Y7	6 1						
F	5	0		6 1						

6Y9



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
C	8	0	6Y9	6	30	M	8	9	10	14	
D	1	0		6	30	L	1	3	4	37	
F	4	0	6Z7	6	1						
F	5	0		6	1						
F	1	0	6Z10	6	9	M	1	2	9	34	
C	7	0		6	9	K	7	6	4	87	
B	1	0	6Z31	6	6						
B	6	0		6	6						
B	3	0	6ZY5	6	1						
B	5	0		6	1						
E	6	0	7A4	6	19						
C	6	0	7A5	6	19	M	6	3	2	48	
E	3	0	7A6	6	19						
E	6	0		6	19						
E	6	0	7A7	6	19	L	6	3	2	77	
E	4	0	7A8	6	19						
C	6	0	7AD7	6	19						
E	4	0	7AF7	6	19						
E	5	0		6	19						
E	6	0	7AG7	6	19						
E	6	0	7AH7	6	19						
E	6	0	7AJ7	6	19						
C	6	0	7AK7	6	19	M	6	3	2	43	
E	2	0	7AN7	7	27						
E	6	0		7	27						
D	2	0	7AU7	7	25	L	2	0	1	67	
D	7	0		7	25	L	7	0	6	67	
F	6	0	7B4	6	19						
C	6	0	7B5	6	19						
F	3	0	7B6	6	19						
G	5	0		6	19						
G	6	0		6	19						
E	6	0	7B7	6	19						
F	4	0	7B8	6	19						
F	4	0	7C4	6	19						
C	6	0	7C5	6	19						
F	3	0	7C6	6	19						
G	5	0		6	19						
G	6	0		6	19						
E	6	0	7C7	6	19	L	6	3	2	68	

7L7



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
D	6	0	7D7	6	19						
F	4	0		6	19						
A	5	0	7D11	6	1						
D	2	0	7DJ8	7	29	L	2	0	1	36	
D	7	0		7	29	L	7	0	6	36	
F	3	0	7E6	6	19						
G	5	0		6	19						
G	6	0		6	19						
F	3	0	7E7	6	19						
G	4	0		6	19						
G	6	0		6	19						
E	2	0	7ED7	7	26						
E	2	0	7EK7	7	29						
E	6	0		7	29						
(Normal Shorts 7, 8)											
D	2	0	7ES8	7	29						
D	7	0		7	29						
C	5	0	7EY6	7	1	M	5	4	3	47	
D	2	0	7FC7	7	29						
D	6	0		7	29						
(Normal Shorts 7, 8)											
F	4	0	7F7	6	19	K	4	0	3	83	
F	5	0		6	19	K	5	0	6	83	
F	6	0	7G7	6	19						
F	4	0	7G8	6	19						
F	5	0		6	19						
E	1	0	7GS7	7	26						
E	9	0		7	26						
E	7	0	7GV7	7	27						
D	9	0		7	27						
D	6	0	7H7	6	19						
D	2	0	7HG8	7	26	L	2	9	8	27	
D	6	0		7	26	L	6	0	7	58	
F	4	0	7J7	6	19						
E	6	0		6	19						
F	4	0	7K7	6	19						
G	5	0		6	19						
G	6	0		6	19						
C	2	0	7KY6	7	28	M	2	8	7	11	
C	2	0	7KZ6	7	25	M	2	8	7	11	
F	6	0	7L7	6	19						

7N7



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	4	0	7N7	6	19	L	4	0	3	68
E	5	0		6	19	L	5	0	6	68
E	4	0	7Q7	6	19					
F	6	0	7R7	6	19					
G	4	0		6	19					
G	3	0		6	19					
D	6	0	7S7	6	19					
E	4	0		6	19					
E	6	0	7T7	6	19					
E	6	0	7V7	6	19	L	6	3	2	50
D	6	0	7W7	6	19					
(Normal Shorts 4, 7)										
B	3	0	7X6	6	19					
B	6	0		6	19					
F	3	0	7X7	6	19					
G	5	0		6	19					
G	6	0		6	19					
B	3	0	7Y4	6	19					
B	6	0		6	19					
B	3	0	7Z4	6	19					
B	6	0		6	19					
D	2	0	8A8	8	27	L	2	3	6	41
E	9	0		8	27	L	9	0	1	61
D	3	0	8AC9	8	9					
D	2	0		8	9					
D	9	0		8	9	L	9	10	1	42
(Normal Short 3)										
E	1	0	8AC10	8	9	L	1	0	2	42
E	7	0		8	9	L	7	0	5	42
E	9	0		8	9	L	9	0	10	42
C	1	0	8AL9	8	9					
E	5	0		8	9					
D	5	0	8AR11	8	9	L	5	3	2	34
D	10	0		8	9	L	10	9	8	34
D	7	0	8AU8	8	29	M	7	8	9	29
E	2	0		8	29	L	2	0	3	43
E	1	0	8AV11	8	9	L	1	0	2	67
E	7	0		8	9	L	7	0	5	67
E	9	0		8	9	L	9	0	10	67
D	7	0	8AW8	8	29	M	7	8	9	24
F	2	0		8	29	K	2	0	3	62

8CH8



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
C	3	0	8B8	8	29	M	3	7	6	45
F	1	0		8	29	K	1	0	9	71
E	3	0	8B10	8	9	L	3	0	4	63
E	5	0		8	9	L	5	0	6	63
F	8	0		8	9					
F	10	0		8	9					
D	7	0	8BA8	8	29	M	7	8	9	27
E	2	0		8	29	L	2	0	3	63
D	4	0	8BA11	8	9	L	9	0	1	66
E	9	0		8	9	K	4	3	2	84
						K	4	3	6	84
D	7	0	8BH8	8	29	M	7	8	9	35
E	2	0		8	29	L	2	0	3	60
D	6	0	8BM11	8	9	L	6	3	2	42
D	1	0		8	9	L	1	9	7	76
D	1	0	8BN8	8	29					
D	6	0		8	29					
E	8	0		8	29	K	8	0	7	58
D	3	0	8BN11	8	9	L	3	4	5	28
D	7	0		8	9	L	7	9	1	28
C	2	0	8BQ5 (Normal Shorts 6, 8)	8	24	M	2	9	7	29
E	2	0								
E	2	0	8BQ7	8	29	L	2	0	1	40
E	7	0		8	29	L	7	0	6	40
E	5	0	8BQ11	8	9	L	5	3	2	34
E	10	0		8	9	L	10	9	8	58
D	4	0	8BU11	8	9					
D	6	0		8	9					
D	8	0		8	9					
E	8	0	8BV7	8	25					
G	6	0		8	25					
G	1	0		8	25					
E	2	0	8BV8	8	29					
G	6	0		8	29					
G	9	0		8	29					
D	5	0	8CB11	8	9	L	5	3	2	27
D	10	0		8	9	L	10	9	8	27
E	2	0	8CG7	8	29	L	2	0	1	62
E	7	0		8	29	L	7	0	6	62
E	7	0	8CH8	8	29	M	7	3	2	30
E	8	0		8	29	L	8	0	9	58

8CM7



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
D	7	0	8CM7	8	29	L	7	0	1	67
D	8	0		8	29	L	8	0	6	59
F	1	0	8CN7	8	25					
F	2	0		8	25					
F	7	0		8	25	K	7	0	8	78
C	3	0	8CS7	8	29					
F	7	0		8	29					
C	7	0	8CU8 (Normal Shorts 1)	8	29	M	7	3	2	28
C	2	0		8CW5	8	24				
C	7	0	8CX8	8	29	M	7	8	9	29
E	2	0		8	29	L	2	0	3	50
C	2	0	8CY7	8	26	K	2	0	1	76
E	7	0		8	26	M	7	0	6	75
G	9	0	8D8	6	29					
C	2	0	8DE7	8	26	M	2	0	1	37
F	7	0		8	26	L	7	0	6	68
D	8	0	8DX8	8	29	L	8	9	6	38
F	1	0		8	29					
C	7	0	8EB8	8	29	M	7	8	9	23
F	2	0		8	29	K	2	0	3	62
C	3	0	8EM5	8	27	M	3	1	9	46
D	7	0	8ET7	8	29	M	7	0	8	21
G	3	0		8	29					
G	2	0		8	29					
D	2	0	8FQ7	8	29	L	2	0	1	67
D	7	0		8	29	L	7	0	6	67
D	2	0	8GJ7	8	26	L	2	7	6	38
E	9	0		8	26	L	9	0	8	42
C	2	0	8GK6	8	26	M	2	8	7	31
C	7	0	8GN8	8	29	M	7	8	9	50
G	2	0		8	29	K	2	0	3	57
D	2	0	8GU7	8	29	L	2	0	1	58
D	7	0		8	29	L	7	0	6	58
D	2	0	8GX7	8	26	L	2	7	6	28
D	9	0		8	26	L	9	0	8	32
C	2	0	8HA6 (Normal Shorts 3, 9)	8	27	M	2	8	7	15
D	2	0		8HG8	8	26	L	2	9	8
D	6	0		8	26	L	6	0	7	58

9AK8



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
D	7	0	8JE8	8	29	M	7	8	9	45
F	2	0		8	29	K	2	0	3	60
E	2	0	8JK8	8	29	L	2	0	1	24
E	7	0		8	29	L	7	0	6	34
C	2	0	8JL8	8	29	L	2	0	3	76
E	7	0		8	29	M	7	8	9	29
C	7	0	8JT8	8	29	M	7	8	9	12
F	2	0		8	29	K	2	0	3	67
E	1	0	8JU8	8	27					
E	2	0		8	27					
E	7	0		8	27					
E	8	0		8	27					
D	7	0	8JV8	8	29	M	7	8	9	22
G	2	0		8	29	K	2	0	3	60
E	6	0	8KA8	8	29	L	6	8	9	25
F	2	0		8	29	K	2	0	1	73
C	7	0	8KR8	8	29	M	7	8	9	12
D	2	0		8	29	L	2	0	3	38
F	2	0	8KS8	8	29					
C	7	0		8	29					
E	6	0	8LC8	8	29	L	6	8	9	42
F	2	0		8	29	K	2	0	1	73
D	9	0	8LE8	8	29	L	9	8	1	39
				8	29	L	9	8	6	39
E	9	0	8LT8	8	29	L	9	2	3	30
C	6	0		8	29					
C	8	0		8	29					
C	3	0	8R-LP1	8	29					
F	1	0		8	29					
E	1	0	8SN7	8	2	L	1	0	2	66
E	4	0		8	2	L	4	0	5	66
D	3	0	8U9	8	30	M	3	8	7	17
D	10	0		8	30	L	10	0	9	58
D	3	0	8X9	8	30	M	3	8	7	16
E	10	0		8	30	L	10	0	9	50
D	2	0	9A8	9	29	L	2	3	6	41
D	9	0		9	29	L	9	0	1	61
F	8	0	9AK8	9	29					
G	6	0		9	29					
G	2	0		9	29					
G	1	0		9	29					

9AK10



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
E	1	0	9AK10	9	9						
E	7	0		9	9						
E	9	0		9	9						
D	2	0	9AQ8	9	29						
D	7	0		9	29						
D	2	0	9AU7	9	25	L	2	0	1	67	
D	7	0		9	25	L	7	0	6	67	
C	1	0	9BM5	9	13						
E	2	0	9BR7	9	25	L	2	0	1	45	
E	6	0		9	25						
E	7	0		9	25						
D	1	0	9BR8	9	29						
D	9	0		9	29						
D	6	0	9BJ11	9	9						
E	1	0		9	9						
C	2	0	9BW6	9	24						
E	1	0	9CG8	9	26	L	1	0	2	46	
E	9	0		9	26	L	9	7	6	49	
D	1	0	9CL8	9	29						
D	9	0		9	29						
F	1	0	9D6	9	9						
E	2	0	9D7	9	24						
C	3	0	9DZ8	9	29						
F	1	0		9	29						
D	2	0	9EA8	9	29	L	2	3	6	48	
D	9	0		9	29	L	9	0	1	42	
C	5	0	9EF6	9	1						
C	9	0	9GV8	9	29	M	9	7	6	40	
E	2	0		9	29	L	2	0	1	38	
D	2	0	9JC8	9	24	L	2	3	6	58	
E	8	0		9	24	L	8	0	9	48	
D	9	0	9JW8	9	29	L	9	0	1	49	
C	2	0		9	29	L	2	3	6	38	
D	2	0	9KC6	9	29						
C	2	0	9KX6	9	25	M	2	8	7	7	
D	2	0	9KZ8	9	29	L	2	7	6	50	
D	7	0		9	29	L	9	0	1	45	
C	2	0	9LA6	9	25	M	2	8	7	14	
C	2	0	9R-AL1	9	26						
F	7	0		9	26						



10GF7

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
D	2	0	9U8	9	29	L	2	3	6	54	
D	9	0		9	29	L	9	0	1	47	
D	8	0	9V9	9	30	L	8	0	10	38	
E	3	0		9	30	L	3	2	7	78	
E	2	0	9X8	9	29	L	2	0	3	46	
E	7	0		9	29	L	7	8	9	66	
C	1	0	10AF11	10	9	M	1	10	2	25	
F	3	0		10	9	L	3	0	4	53	
F	6	0		10	9	L	6	0	8	43	
C	8	0	10AL11	10	9						
D	3	0		10	9	K	3	7	6	87	
C	2	0	10BQ5	10	24	M	2	9	7	29	
(Normal Shorts 6, 8)											
A	2	0	10CW5	10	24						
(Normal Shorts 7, 8)											
D	8	0	10C8	10	29	L	8	7	6	42	
E	2	0		10	29	L	2	0	1	38	
C	3	0	10DA7	10	29						
E	7	0		10	29						
C	2	0	10DE7	10	26	M	2	0	1	37	
E	7	0		10	26	L	7	0	6	68	
C	2	0	10DR7	10	26	M	2	0	1	44	
E	7	0		10	26	K	7	0	6	78	
D	8	0	10DX8	10	29	L	8	9	6	38	
F	1	0		10	29						
C	7	0	10EB8	10	29	M	7	8	9	23	
F	2	0		10	29	K	2	0	3	62	
D	1	0	10EG7	10	2	M	1	0	2	45	
E	4	0		10	2	L	4	0	5	70	
D	1	0	10EM7	10	2	M	1	0	3	42	
A	5	0		10	2	K	4	0	5	76	
F	7	0	10EW7	10	26	L	7	0	6	76	
C	2	0		10	26	M	2	0	1	40	
C	7	0	10FD7	10	26	M	7	0	6	45	
D	2	0		10	26	K	2	0	1	69	
C	2	0	10FR7	10	26						
F	7	0		10	26						
C	2	0	10FG7	10	16	M	2	0	6	48	
G	9	0		10	16	K	9	0	8	73	
C	2	0	10GF7	10	16	M	2	0	6	48	
G	9	0		10	16	K	9	0	8	73	

10GK6



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
C	2	0	10GK6	10	26	M	2	8	7	31	
E	2	0	10GM8	10	29						
E	7	0		10	29						
C	7	0	10GN8	10	29	M	7	8	9	50	
G	2	0		10	29	K	2	0	3	57	
C	2	0	10HA6	10	26	M	2	8	7	15	
(Normal Shorts 6, 7)											
D	7	0	10HF8	10	29	M	7	8	9	24	
F	2	0		10	29	K	2	0	3	62	
D	7	0	10JA8	10	29	M	7	8	9	21	
F	2	0		10	29	K	2	0	3	73	
D	7	0	10JT8	10	29	M	7	8	9	12	
F	2	0		10	29	K	2	0	3	67	
C	7	0	10JY8	10	29	M	7	8	9	23	
D	2	0		10	29	L	2	0	3	38	
C	7	0	10KR8	10	29	M	7	8	9	12	
D	2	0		10	29	L	2	0	3	38	
D	7	0	10KU8	10	29	L	7	8	9	18	
G	3	0		10	29						
G	2	0		10	29						
D	2	0	10LB8	10	29	L	2	0	3	56	
D	7	0		10	29	M	7	8	9	9	
F	8	0	10LD12	28	29						
G	6	0		28	29						
G	2	0		28	29						
G	1	0		28	29						
D	9	0	10LE8	10	29	L	9	8	1	43	
				10	29	L	9	8	6	43	
F	2	0	10LW8	10	29	K	2	0	3	52	
C	7	0		10	29	M	7	8	9	13	
F	2	0	10LZ8	10	29	K	2	0	3	63	
C	7	0		10	29	L	7	8	9	33	
D	5	0	11AR11	11	9	L	5	3	2	34	
D	10	0		11	9	L	10	9	8	34	
C	3	0	11BM8	11	29	M	3	7	6	40	
F	1	0		11	29	K	1	0	9	70	
E	5	0	11BQ11	11	9	L	5	3	2	34	
E	10	0		11	9	L	10	9	8	58	
E	3	0	11BT11	11	9	L	3	0	9	36	
E	5	0		11	9	L	5	0	7	45	
D	1	0		11	9	M	1	10	2	12	

12AF6



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
C	5	0	11C5	11	7	M	5	6	7	47	
C	8	0	11CA11	11	9	M	8	10	1	14	
E	7	0		11	9	L	7	0	4	46	
E	3	0		11	9	L	3	0	2	48	
C	2	0	11CY7	11	26	K	2	0	1	76	
E	7	0		11	26	M	7	0	6	75	
C	3	0	11FY7	11	9	M	3	0	5	40	
F	10	0		11	9	K	10	0	1	73	
C	2	0	11HM7	11	27	M	2	8	7	10	
(Normal Shorts 3, 9)											
D	7	0	11JE8	11	29	M	7	8	9	45	
F	2	0		11	29	K	2	0	3	60	
C	7	0	11KV8	11	29	M	7	8	9	11	
F	2	0		11	29	K	2	0	3	58	
D	2	0	11LQ8	11	29	L	2	0	3	40	
D	7	0		11	29	M	7	8	9	10	
C	8	0	11Y9	11	30	M	8	9	10	14	
D	1	0		11	30	L	1	3	4	37	
C	7	2	12A4	12	26						
B	4	6	12A5	12	21						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
C	5	0	12A6	12	1						
E	5	0	12A8	12	1						
C	6	0	12AB5	12	26						
(Normal Shorts 1, 8)											
F	1	0	12AC6	12	6						
F	2	0	12AD5	12	25						
F	1	0	12AD6	12	6						
F	2	0	12AD7	12	25	K	2	0	1	77	
F	7	0		12	25	K	7	0	6	77	
F	1	0	12AE6	12	6						
G	5	0		12	6						
G	6	0		12	6						
F	2	0	12AE7	12	25						
F	7	0		12	25						
C	8	0	12AE10	12	9	M	8	10	1	47	
F	3	0		12	9	K	3	6	7	87	
A	2	0	12AF3	12	25						
(Disregard Shorts except H-K)											
G	1	0	12AF6	12	6						

12AG6



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
F	1	0	12AG6	12	6						
D	1	0	12AH6	12	6	L	1	6	5	37	
F	1	0	12AH7	12	2	L	1	0	3	74	
F	5	0		12	2	L	5	0	6	74	
F	2	0	12AH8	12	25						
F	7	0		12	25						
F	1	0	12AJ6	12	6						
G	5	0		12	6						
G	6	0		12	6						
F	2	0	12AJ7	12	29						
G	9	0		12	29						
E	2	0	12AJ8	12	29						
E	9	0		12	29						
C	4	0	12AK7	12	1						
E	2	0	12AL5	12	6						
E	7	0		12	6						
E	3	0	12AL8	12	29						
G	8	0		12	29						
C	8	0	12AL11	12	9	K	8	10	1	80	
D	3	0		12	9	L	3	7	6	72	
C	1	0	12AQ5	12	13	M	1	6	5	52	
C	5	0	12AS5	12	7	M	5	6	7	47	
F	1	0	12AT6	12	6	K	1	0	7	77	
G	5	0		12	6						
G	6	0		12	6						
E	2	0	12AT7	12	25	L	2	0	1	40	
E	7	0		12	25	L	7	0	6	40	
A	1	0	12AU5	12	1						
D	1	0	12AU6	12	6	L	1	6	5	66	
D	2	0	12AU7	12	25	L	2	0	1	67	
D	7	0		12	25	L	7	0	6	67	
D	2	0	12AU8	12	29	L	2	0	3	43	
D	7	0		12	29	M	7	8	9	29	
A	1	0	12AV5	12	1	M	1	8	5	50	
F	1	0	12AV6	12	6	K	1	0	7	74	
G	5	0		12	6						
G	6	0		12	6						
D	2	0	12AV7	12	25	L	2	0	1	47	
D	7	0		12	25	L	7	0	6	47	
E	1	0	12AW6	12	6	L	1	6	5	51	

12BK5



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
D	7	0	12AW8	12	29	M	7	8	9	24	
F	2	0		12	29	K	2	0	3	58	
A	10	0	12AX3	12	10						
A	5	0	12AX4	12	2						
F	2	0	12AX7	12	25	K	2	0	1	78	
F	7	0		12	25	K	7	0	6	78	
A	7	0	12AY3	12	17						
(Disregard Shorts except H-K)											
F	2	0	12AY7	12	25	L	2	0	1	77	
F	7	0		12	25	L	7	0	6	77	
E	2	0	12AZ7	12	25	L	2	0	1	40	
E	7	0		12	25	L	7	0	6	40	
A	7	0	12B3	12	23						
C	2	7	12B4	12	26						
F	10	0	12B6	12	1						
G	5	0		12	1						
E	6	0	12B7	12	19	L	6	3	2	77	
E	10	0	12B8	12	1						
F	8	0		12	1						
D	1	0	12BA6	12	6	L	1	6	5	71	
D	2	0	12BA7	12	29						
E	9	0	12BA11	12	9	L	9	0	1	66	
E	4	0		12	9	K	4	3	2	84	
				12	9	K	4	3	6	84	
A	2	0	12B-B14	12	20						
A	1	0	12BD5	12	1						
D	1	0	12BD6	12	6	L	1	6	5	76	
A	10	0	12BE3	12	10						
D	1	0	12BE6	12	6	K	1	6	5	86	
F	1	0	12BF6	12	6	L	1	0	7	77	
G	5	0		12	6						
G	6	0		12	6						
C	8	0	12BF11	12	9	M	8	10	1	40	
D	3	0		12	9	L	3	6	7	76	
D	2	0	12BH7	12	25	L	2	0	1	59	
D	7	0		12	25	L	7	0	6	59	
A	10	0	12BJ3	12	10						
C	7	0	12BK5	12	26	M	7	8	1	34	

12BK6



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
F	1	0	12BK6	12	6	K	1	0	7	72
G	5	0		12	6					
G	6	0		12	6					
F	1	0	12BL6	12	6					
C	1	0	12BM5	12	13					
H	5	0	12BN6 (Emission and Shorts)	12	6					
H	2	0		12	6					
(Leakage check)										
A	5	0	12BQ6	12	1					
A	9	0	12BR3 (Disregard Shorts except H-K)	12	24					
E	2	0		12BR7	12	25	L	2	0	1
E	6	0		12	25					
E	7	0		12	25					
(Normal Shorts 6, 7)										
A	7	0	12BS3 (Disregard Shorts except H-K)	12	17					
A	10	0		12BT3	12	10				
F	1	0	12BT6	12	6	K	1	0	7	78
G	5	0		12	6					
G	6	0		12	6					
E	1	0	12BU6	12	6	L	1	0	7	77
G	5	0		12	6					
G	6	0		12	6					
C	2	0	12BV7 (Normal Shorts 3, 9)	12	27	M	2	8	7	24
F	6	0		12BV11	12	9	K	6	4	3
F	7	0		12	9	K	7	9	10	56
B	1	0	12BW4	12	29					
B	7	0		12	29					
D	2	0	12BX6	12	24	L	2	8	7	37
C	1	0	12BX7	12	2	M	1	0	2	38
C	4	0		12	2	M	4	0	5	38
C	2	0	12BY7 (Normal Shorts 3, 9)	12	27	M	2	8	7	23
D	1	0		12BZ6	12	6	L	1	6	5
F	2	0	12BZ7	12	25	L	2	0	1	60
F	7	0		12	25	L	7	0	6	60
C	5	0	12C5	12	7	M	5	6	7	47

12DK7



EMISSION			TUBE No. ↓	FIL A SKT		MUTUAL CONDUCTANCE				
B	C	D				B	C	D	E	F
E	10	0	12C8	12	1					
G	5	0		12	1					
G	4	0		12	1					
C	5	0	12CA5	12	7	M	5	6	7	33
A	7	0	12CK3	12	17					
(Disregard Shorts except H-K)										
D	2	0	12CK6	12	29					
A	2	7	12CL3	12	18					
C	5	0	12CM6	12	27					
F	5	0	12CN5	12	7					
C	8	0	12CR5	12	26					
(Normal Shorts 1, 2, 6, 7)										
E	7	0	12CR6	12	6	L	1	6	5	73
G	2	0		12	6					
C	3	0	12CS5	12	27	M	3	1	9	35
D	1	0	12CS6	12	6					
D	8	0	12CT8	12	29	L	8	7	6	47
E	2	0		12	29	L	2	0	1	46
C	5	0	12CU5	12	7	M	5	6	7	47
A	5	0	12CU6	12	1	M	5	4	10	63
F	1	0	12CX6	12	6					
F	1	0	12CY6	12	6					
A	5	0	12D4	12	2					
D	2	0	12DA6	12	24					
C	3	0	12DB5	12	27	M	3	1	9	37
(Normal Shorts 2, 7)										
F	1	0	12DE8	12	29					
F	3	0		12	29					
B	1	0	12DF5	12	25					
B	6	0		12	25					
F	2	0	12DF7	12	25	K	2	0	1	78
F	7	0		12	25	K	7	0	6	78
D	2	0	12DJ8	12	29	L	2	0	1	36
D	7	0		12	29	L	7	0	6	36
B	2	0	12DK5	12	25					
D	1	0	12DK6	12	6	L	1	6	5	48
E	1	0	12DK7	12	29					
G	6	0		12	29					
G	9	0		12	29					

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
C	3	0	12DL8	12	29					
G	1	0		12	29					
G	9	0		12	29					
A	5	0	12DM4	12	2					
C	5	0	12DM5	12	7	M	5	6	7	36
E	2	0	12DM7	12	25					
E	7	0		12	25					
A	5	0	12DQ4	12	2					
A	5	0	12DQ6	12	1	M	5	4	10	48
C	2	0	12DQ7	12	27	M	2	8	7	28
(Normal Shorts 3, 9)										
D	3	0	12DS7	12	29					
G	1	0		12	29					
G	9	0		12	29					
C	3	0	12DT5	12	27					
E	1	0	12DT6	12	6	L	1	6	5	70
G	2	0	12DT7	12	25					
G	7	0		12	25					
E	2	0	12DT8	12	29	L	2	0	1	39
E	7	0		12	29	L	7	0	6	39
D	1	0	12DU7	12	29					
G	7	0		12	29					
G	9	0		12	29					
G	2	0	12DV7	12	25					
G	3	0		12	25					
G	7	0		12	25					
D	3	0	12DV8	12	29					
G	1	0		12	29					
G	9	0		12	29					
A	7	0	12DW4	12	17					
(Disregard Shorts except H-K)										
C	3	0	12DW5	12	27					
E	2	0	12DW7	12	25	L	2	0	1	67
F	7	0		12	25	K	7	0	6	78
E	2	0	12DW8	12	29					
F	7	0		12	29					
F	9	0		12	29					
D	1	0	12DY8	12	29					
F	9	0		12	29					

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	1	0	12DZ6	12	6					
C	3	0	12DZ8	12	29					
F	1	0		12	29					
F	5	0	12E5	12	1					
F	1	0	12EA6	12	6					
F	1	0	12EC8	12	29					
F	9	0		12	29					
C	5	0	12ED5	12	7	M	5	6	7	34
C	5	0	12EF6	12	1					
F	1	0	12EG6	12	6					
C	5	0	12EH5	12	7	M	5	6	7	27
E	1	0	12EK6	12	6					
F	1	0	12EL6	12	6					
G	5	0		12	6					
G	6	0		12	6					
E	1	0	12EM6	12	29					
G	9	0		12	29					
C	5	0	12EN6	12	1	M	5	4	3	38
E	2	0	12EQ7	12	29	L	2	6	7	63
G	8	0		12	29					
F	1	0	12EZ6	12	6					
F	10	0	12F5	12	1					
F	8	0	12F8	12	29					
G	6	0		12	29					
G	1	0		12	29					
F	1	0	12FA6	12	6					
C	2	0	12FB5	12	24					
F	1	0	12FK6	12	6					
F	5	0		12	6					
G	6	0		12	6					
F	1	0	12FM6	12	6					
G	5	0		12	6					
G	6	0		12	6					
G	2	0	12FQ8	12	29	K	2	0	1	86
				12	29	K	2	0	3	86
G	7	0		12	29	K	7	0	6	86
				12	29	K	7	0	8	86
E	3	0	12FR8	12	29					
G	1	0		12	29					
G	9	0		12	29					

(Normal Shorts H-K)

12FT6



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	1	0	12FT6	12	6					
G	5	0		12	6					
G	6	0		12	6					
D	2	0	12FV7	12	25	M	2	0	1	27
D	7	0		12	25	M	7	0	6	27
C	5	0	12FX5	12	7	M	5	6	7	25
E	2	0	12FX8	12	29					
F	6	0		12	29					
E	3	0	12FY8	12	29					
F	1	0		12	29					
E	6	0	12G4	12	7					
(Normal Shorts 1, 5)										
F	10	0	12G7	12	1					
G	5	0		12	1					
G	4	0		12	1					
E	3	0	12G8	12	25					
E	8	0		12	25					
C	8	0	12G11	12	9					
D	3	0		12	9					
F	1	0	12GA6	12	6					
A	5	0	12G-B3	12	4					
A	5	0	12G-B7	12	4					
A	5	0	12GC6	12	1					
(Normal Shorts 4, 8)										
A	1	0	12GE5	12	10	M	1	2	7	46
A	5	0	12G-K17	12	2					
D	1	0	12GN6	12	6					
G	7	0		12	6					
D	2	0	12GN7	12	27	M	2	8	7	6
(Normal Shorts 3, 9)										
A	6	0	12GJ5	12	17					
(Normal Shorts 1, 7)										
A	2	0	12GL5	12	24					
A	6	0	12GT5	12	17					
(Normal Shorts 1, 7)										
A	5	0	12GW6	12	1	M	5	4	10	34
E	6	0	12H4	12	7					
(Normal Shorts 1, 5)										

12Q7



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	3	0	12H6	12	1					
F	5	0		12	1					
A	9	10	12HE7	12	9					
A	2	10		12	9					
C	2	0	12HG7	12	27	M	2	8	7	14
(Normal Shorts 3, 9)										
D	2	0	12HL7	12	27	M	2	8	7	6
(Normal Shorts 3, 9)										
C	2	0	12HU8	12	3					
C	6	0		12	3					
E	10	0	12J28	12	9	L	10	0	2	66
(Normal Shorts 6, 7)										
E	5	0	12J5	12	1	L	5	0	3	63
F	10	0	12J7	12	1					
D	1	0	12J8	12	29					
F	8	0		12	29					
F	9	0		12	29					
A	6	0	12JB6	12	17					
(Normal Shorts 1, 7)										
A	1	0	12JN6	12	10					
D	1	0	12JN8	12	29					
D	9	0		12	29					
G	6	7	12JQ6	12	29					
A	8	7		12	29					
A	5	0	12JS6	12	10	M	5	1	10	48
A	2	0	12JT6	12	16					
(Normal Shorts 1, 7)										
G	2	0	12K5	12	6					
(Normal Shorts 5, 6)										
E	10	0	12K7	12	1	L	10	4	3	81
E	5	0	12K8	12	1					
D	2	0	12KL8	12	29	L	2	6	7	51
F	8	0		12	29					
C	5	0	12L6	12	1	M	5	4	3	52
D	6	0	12MD8	12	16	L	6	0	3	51
D	8	0		12	16	L	8	0	2	51
D	9	0		12	16	L	9	0	1	51
F	10	0	12Q7	12	1					
G	5	0		12	1					
G	4	0		12	1					

12R5



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
C	5	0	12R5	12	7	M	5	6	7	48	
A	9	0	12R-K19	12	27						
(Disregard Shorts except H-K)											
E	2	0	12R-LL3	12	25						
E	9	0		12	25						
F	10	0	12S8	12	2						
G	4	0		12	2						
G	3	0		12	2						
G	1	0		12	2						
D	5	0	12SA7	12	1						
F	3	0	12SC7	12	2	K	3	0	2	83	
F	4	0		12	2	K	4	0	5	83	
F	3	0	12SF5	12	2						
D	2	0	12SF7	12	2						
G	5	0		12	2						
D	4	0	12SG7	12	3	L	4	6	8	58	
D	4	0	12SH7	12	3	L	4	6	8	51	
E	4	0	12SJ7	12	1	L	4	6	8	66	
E	4	0	12SK7	12	1	L	4	6	8	85	
F	1	0	12SL7	12	2	K	1	0	2	80	
F	4	0		12	2	K	4	0	5	80	
E	1	0	12SN7	12	2	L	1	0	2	66	
E	4	0		12	2	L	4	0	5	66	
F	2	0	12SQ7	12	2						
G	4	0		12	2						
G	5	0		12	2						
E	2	0	12SR7	12	2						
G	4	0		12	2						
G	5	0		12	2						
E	4	0	12SS7	12	1	L	4	6	8	80	
F	2	0	12ST7	12	2						
G	4	0		12	2						
G	5	0		12	2						
E	2	0	12SW7	12	2						
G	4	0		12	2						
G	5	0		12	2						
E	1	0	12SX7	12	2						
E	4	0		12	2						
D	5	0	12SY7	12	1						

13J10



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
C	8	0	12T10	12	9	M	8	10	1	33	
D	3	0		12	9	K	3	6	7	68	
G	2	0	12U7	12	25						
G	7	0		12	25						
C	5	0	12V6	12	1						
C	5	0	12W6	12	1						
B	1	0	12X4	12	6						
B	6	0		12	6						
A	5	0	13CM5	12	4						
F	4	0	13CW4	12	14						
E	1	0	13D2	6	2	L	1	0	2	66	
E	4	0		6	2	L	4	0	5	66	
G	2	0	13D3	12	25						
G	7	0		12	25						
C	2	0	13DE7	13	26	M	2	0	1	37	
E	7	0		13	26	L	7	0	6	78	
F	2	0	13DF7	13	25	K	2	0	1	78	
F	7	0		13	25	K	7	0	6	78	
C	2	0	13DR7	13	26	M	2	0	1	44	
C	7	0		13	26	K	7	0	6	78	
D	1	0	13EC7	13	26						
D	1	0	13EM7	13	2	M	1	0	2	42	
F	4	0		13	2	K	4	0	5	76	
C	2	0	13FD7	13	26	K	2	0	1	69	
F	7	0		13	26	M	7	0	6	45	
C	2	0	13FG7	13	16						
G	9	0		13	16						
E	10	0	13FM7	13	9						
C	8	0		13	10						
(Normal Shorts 3, 8)											
C	2	0	13FR7	13	26						
F	7	0		13	26						
A	1	0	13GB5	13	20						
(Normal Shorts 3, 8)											
C	2	0	13GC8	13	29						
E	9	0		13	29						
C	2	0	13GF7	13	16	M	2	0	6	48	
G	9	0		13	16	K	9	0	8	73	
A	5	0	13JZ6	13	8						
(Normal Shorts 4, 10)											
C	1	0	13J10	13	9	M	1	2	9	34	
H	6	0		13	9						

13V10



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
F	3	0	13V10	13	9	K	3	6	7	76
C	8	0		13	9	M	8	10	1	45
F	1	0	13Z10	13	9	M	1	2	9	34
C	7	0		13	9	K	7	6	4	87
E	6	0	14A4	14	19					
C	6	0	14A5	14	19					
E	6	0	14A7	14	19	L	6	3	2	77
E	4	0	14AF7	14	19					
E	5	0		14	19					
F	3	0	14B6	14	19					
G	5	0		14	19					
G	6	0		14	19					
F	4	0	14B8	14	19					
C	3	0	14BL11	14	9	L	3	0	9	36
C	5	0		14	9	L	5	0	7	46
F	1	0		14	9	L	1	10	2	11
C	2	0	14BR11	14	9	M	2	3	1	28
E	8	0		14	9	L	8	0	6	53
E	10	0		14	9	L	10	0	9	43
C	6	0	14C5	14	19					
E	6	0	14C7	14	19	L	6	3	2	68
C	3	0	14DA7	14	29					
E	7	0		14	29					
F	3	0	14E6	14	19					
G	5	0		14	19					
G	6	0		14	19					
E	3	0	14E7	14	19					
G	5	0		14	19					
G	6	0		14	19					
F	4	0	14F7	14	19	K	4	0	3	38
F	5	0		14	19	K	5	0	6	38
E	5	0	14F8	14	1					
E	10	0		14	1					
F	2	0	14G6	14	25					
G	6	0		14	25					
G	8	0		14	25					
F	2	0	14GT8	14	29					
F	6	0		14	29					
F	8	0		14	29	K	8	0	9	81
G	1	0	14GW8	14	29	K	1	0	9	76
C	8	0		14	29	M	8	3	6	30
D	6	0	14H7	14	19					

15EW7



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
F	4	0	14J7	14	19					
E	6	0		14	19					
F	8	0	14JG8	14	29	K	8	0	9	72
G	6	0		14	29					
G	2	0		14	29					
E	4	0	14N7	14	19	L	4	0	3	68
E	5	0		14	19	L	5	0	6	68
E	4	0	14Q7	14	19					
F	6	0	14R7	14	19					
G	4	0		14	19					
G	3	0		14	19					
D	6	0	14S7	14	19					
E	4	0		14	19					
E	6	0	14V7	14	19					
D	6	0	14W7	14	19					
			(Normal Shorts 4, 7)							
F	3	0	14X7	14	19					
G	5	0		14	19					
G	6	0		14	19					
B	3	0	14Y4	14	19					
B	6	0		14	19					
D	2	0	14Y7	14	29					
F	9	0		14	29					
C	2	0	15A6	15	29					
C	4	0	15A8	15	1					
F	3	0		15	1					
D	3	0	15AB9	15	30	L	3	2	1	34
D	9	0		15	30	L	9	8	7	34
C	1	0	15AF11	15	9	M	1	10	2	24
F	3	0		15	9	L	3	0	4	53
F	6	0		15	9	L	6	0	8	43
D	1	0	15BD11	15	9	M	1	10	2	26
E	3	0		15	9	L	3	0	4	53
F	6	0		15	9	L	6	0	8	43
C	2	0	15CW5	15	24	M	2	9	7	47
D	1	0	15DQ8	15	29					
D	8	0		15	29					
D	1	0	15EA7	15	2	M	1	0	2	30
F	4	0		15	2	K	4	0	5	74
D	1	0	15EW6	15	6	L	1	6	5	33
F	7	0	15EW7	15	26	L	7	0	6	76
C	2	0		15	26	M	2	0	1	40

15FM7



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	10	0	15FM7	15	9	K	10	0	1	70
C	8	3		15	9					
(Normal Shorts 3, 8)										
C	3	0	15FY7	15	9	M	3	0	5	40
E	10	0		15	9	K	10	0	1	73
C	2	0	15HA6	15	27	M	2	8	7	15
(Normal Shorts 3, 9)										
C	2	0	15HB6	15	27	M	2	8	7	17
(Normal Shorts 3, 9)										
C	2	0	15KY8	15	16	M	2	7	6	38
G	9	0		15	16	K	9	0	8	76
D	9	0	15LE8	15	29	L	9	8	1	43
				15	29	L	9	8	6	43
C	2	0	16A5	16	27	M	2	9	7	40
(Normal Shorts 8)										
C	3	0	16A8	16	29	M	3	7	6	45
E	1	0		16	29	K	1	0	9	70
A	8	0	16AK9	16	9					
F	10	0		16	9					
F	3	0		16	9					
(Normal Shorts 7)										
A	3	0	16AQ3	16	23					
(Disregard Shorts except H-K)										
D	1	0	16CL8	16	29	L	1	0	2	46
D	9	0		16	29	L	9	7	6	50
C	2	0	16GK6	16	26	M	2	8	7	31
C	3	0	16GK8	16	29					
F	1	0		16	29					
A	5	0	16GY5	16	10					
(Normal Shorts 1, 7)										
A	5	0	16KA6	16	10					
(Normal Shorts 1, 7)										
B	6	7	16LU8	16	9					
E	10	0		16	9	L	10	0	2	38
C	8	0	16Y9	16	30	M	8	9	10	14
D	1	0		16	30	L	1	3	4	37
D	2	0	17A8	17	27					
E	9	0		17	27					
D	3	0	17AB9	17	30	L	3	2	1	34
D	9	0		17	30	L	9	8	7	34

17DQ6



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
C	1	0	17AB10	17	9	M	1	2	9	38
E	7	0		17	9	K	7	6	4	87
A	1	0	17AV5	17	1					
A	10	0	17AX3	17	10					
A	5	0	17AX4	17	2					
A	7	0	17AY3	17	17					
(Disregard Shorts except H-K)										
A	10	0	17BE3	17	10					
(Disregard Shorts except H-K)										
C	8	0	17BF11	17	9					
D	3	0		17	9					
A	7	0	17BH3	17	17					
(Disregard Shorts except H-K)										
D	1	0	17BJ6	17	6					
A	5	0	17BQ6	17	1					
A	9	2	17BR3	17	24					
(Disregard Shorts except H-K)										
A	7	0	17BS3	17	17					
(Disregard Shorts except H-K)										
A	10	0	17BZ3	17	10					
C	5	0	17C5	17	7	M	5	6	7	47
F	2	0	17C8	17	29					
G	7	0		17	29					
G	8	0		17	29					
E	1	0	17C9	17	29					
E	7	0		17	29					
C	5	0	17CA5	17	7	M	5	6	7	33
A	7	0	17CK3	17	17					
(Disregard Shorts except H-K)										
A	2	7	17CL3	17	18					
A	5	0	17CQ4	17	2					
A	2	6	17CT3	17	26					
C	5	0	17CU5	17	7					
A	5	0	17D4	17	2					
A	5	0	17DE4	17	2					
C	2	0	17DL8	17	29					
D	9	0		17	29					
A	5	0	17DM4	17	2					
A	5	0	17DQ4	17	2					
A	5	0	17DQ6	17	1	M	5	4	10	48

17DW4



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
A	7	0	17DW4	17 17						
(Disregard Shorts except H-K)										
D	1	0	17EM7	17 2						
F	4	0		17 2						
E	2	0	17EW8	17 29	L	2	0	1	40	
E	7	0		17 29	L	7	0	6	40	
A	1	0	17GE5	17 10						
A	6	0	17GJ5	17 17						
(Normal Shorts 1, 7)										
A	6	0	17GT5	17 17						
(Normal Shorts 1, 7)										
A	5	0	17GV5	17 10						
(Normal Shorts 1, 7)										
C	9	0	17GV8	17 29						
E	2	0		17 29						
A	5	0	17GW6	17 1	M	5	4	10	34	
A	3	0	17H3	17 23						
(Disregard Shorts except H-K)										
A	1	3	17H-B25	17 20						
C	3	0	17HC8	17 29						
F	1	0		17 29						
A	6	0	17JB6	17 17						
(Normal Shorts 1, 7)										
A	2	0	17JG6	17 16						
(Normal Shorts 1, 7)										
E	2	0	17JK8	17 29	L	2	0	1	24	
F	7	0		17 29	L	7	0	6	34	
A	5	0	17JM6	17 10						
A	1	0	17JN6	17 10						
G	6	7	17JQ6	17 9						
A	8	7		17 9						
A	2	1	17JR6	17 16						
A	2	0	17JT6	17 16						
(Normal Shorts 1, 7)										
C	7	0	17JV8	17 29	M	7	8	9	22	
E	2	0		17 29	K	2	0	3	60	
E	10	0	17JZ8	17 9						
A	6	7		17 9						
(Normal Shorts 6, 7)										
A	2	1	17KV6	17 16						
C	5	0	17L6	17 1						

19C8



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
B	2	0	17LD8	17 29	M	2	7	6	37	
F	9	0		17 29	K	9	0	8	75	
C	5	0	17R5	17 7	M	5	6	7	47	
E	2	0	17R-HH2	17 29	L	2	0	1	38	
E	7	0		17 29	L	7	0	6	38	
C	5	0	17W6	17 1						
A	1	0	17X10	17 9	M	1	2	9	36	
H	6	0		17 9	K	7	6	4	44	
A	9	0	17Z3	17 29						
(Disregard Shorts except H-K)										
A	1	0	18A5	18 1						
E	1	0	18AK5	18 7						
C	1	0	18AQ5	18 13						
D	2	0	18D2	10 29						
D	9	0		10 29						
C	3	0	18DZ8	18 29						
F	1	0		18 29						
D	1	0	18FW6	18 6	L	1	6	5	66	
E	1	0	18FX6	18 6						
F	1	0	18FY6	18 6	K	1	0	7	74	
G	5	0		18 6						
G	6	0		18 6						
A	1	0	18GB5	18 20						
(Normal Shorts 3, 6, 8)										
D	1	0	18GD6	18 6	L	1	6	5	48	
F	1	0	18GE6	18 6	K	1	0	7	73	
G	5	0		18 6						
G	6	0		18 6						
C	9	0	18GV8	18 29						
E	2	0		18 29						
C	9	0	18HB8	18 29	M	9	6	7	42	
F	1	0		18 29	K	1	0	3	55	
E	5	0	18J6	18 6						
E	6	0		18 6						
A	5	0	19A3	19 15						
C	1	0	19AQ5	19 13	M	1	6	5	52	
A	5	0	19AU4	19 2						
A	5	0	19BG6	19 1	M	5	8	10	54	
F	8	0	19C8	19 29						
G	6	0		19 29						
G	2	0		19 29						
G	1	0		19 29						

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
A	10	4	19CG3	19	9					
(Disregard Shorts except H-K)										
D	1	0	19CL8	19	29	L	1	0	3	44
D	9	0		19	29	L	9	7	6	50
A	5	0	19CS4	19	2					
E	2	0	19D8	19	29					
F	9	0		19	29					
C	2	0	19DE7	19	26	M	2	0	1	37
E	7	0		19	26	L	7	0	5	78
A	5	0	19DN6	19	1					
D	2	0	19EA8	19	29	L	2	3	6	48
D	9	0		19	29	L	9	0	1	42
C	2	0	19EW7	19	26	M	2	0	1	40
F	7	0		19	26	L	7	0	6	76
E	2	0	19EZ8	19	29	L	2	0	3	40
E	7	0		19	29	L	7	0	6	40
E	9	0		19	29	L	9	0	8	40
E	2	0	19FL8	19	29					
G	7	0		19	29					
G	8	0		19	29					
E	2	0	19GQ7	19	26					
E	6	0		19	26					
E	8	0		19	26					
A	5	0	19GY5	19	10					
(Normal Shorts 1, 7)										
D	1	0	19HR6	19	6	L	1	6	5	51
E	1	0	19HS6	19	6	L	1	6	5	37
D	9	0	19HV8	19	29	L	9	7	6	50
F	1	0		19	29	K	1	0	2	78
E	5	0	19J6	19	6	L	5	0	4	49
E	6	0		19	6	L	6	0	1	49
D	9	0	19JN8	19	29	L	9	7	6	42
D	1	0		19	29	L	1	0	2	45
A	1	0	19KF6	19	20					
D	2	0	19KG8	19	29	L	2	0	1	45
D	9	0		19	29	L	9	7	6	40
E	1	0	19M-R10	19	6	L	1	6	5	43
D	1	0	19Q9	19	29					
D	8	0		19	29					
C	1	0	19R-P11	19	23	M	1	7	6	47

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
F	8	0	19T8	19	29	K	8	0	9	77
E	6	0		19	29					
E	2	0		19	29					
E	1	0		19	29					
F	6	0	19V8	19	29					
G	9	0		19	29					
G	7	0		19	29					
G	1	0		19	29					
A	9	0	19X3	19	27					
(Disregard Shorts except H-K)										
E	2	0	19X8	19	29					
E	7	0		19	29	L	2	0	3	40
A	9	0	19Y3	19	27					
(Disregard Shorts except H-K)										
A	3	0	20AQ3	20	23					
(Disregard Shorts except H-K)										
D	2	0	20D4	20	29					
D	9	0		20	29					
E	2	0	20EQ7	20	29	L	2	6	7	63
G	8	0		20	29					
C	2	0	20EW7	20	26	M	2	0	1	40
F	7	0		20	26					
F	5	3	20EZ7	20	28					
F	8	3		20	28					
E	10	0	20J8	20	1					
F	5	0		20	1					
C	2	0	21A6	21	24					
(Disregard Shorts on 6, 7)										
E	6	0	21A7	21	19					
F	4	0		21	19					
C	2	0	21B6	21	24					
(Disregard Shorts on 6, 7)										
A	5	0	21EX6	21	1					
A	5	0	21GY5	21	10					
(Normal Shorts 1, 7)										
A	5	0	21HB5	21	10					
A	5	0	21HD5	21	10					
A	5	0	21HJ5	21	10					
A	1	4	21JV6	21	9					
A	5	0	21JZ6	21	10					
A	5	0	21KA6	21	10					
(Normal Shorts 1, 7)										

21KQ6



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
A	1	0	21KQ6	21	18					
(Normal Shorts 2, 7)										
A	5	0	21LG6	21	10					
C	9	0	21LR8	21	16	L	9	0	8	38
A	2	0		21	16	M	2	7	6	47
B	6	7	21LU8	21	9					
E	10	0		21	9	L	10	0	2	38
A	3	0	22AL3	22	23					
(Disregard Shorts except H-K)										
A	7	0	22BH3	22	17					
(Disregard Shorts except H-K)										
A	10	0	22BW3	22	10					
A	5	0	22DE4	22	2					
A	2	1	22JF6	22	18					
A	2	0	22JG6	22	16					
(Normal Shorts 1, 7)										
A	2	1	22JR6	22	16					
A	2	1	22JU6	22	18					
A	2	1	22KM6	22	18					
A	5	9	22KN6	22	8					
(Normal Shorts 4, 10)										
C	8	0	23Z9	23	9	M	8	9	5	47
E	3	0		23	9	L	3	0	2	66
E	10	0		23	9	L	10	0	1	45
A	5	0	23JS6	23	10	M	5	1	10	48
C	8	0	24BF11	24	9	M	8	10	1	40
D	3	0		24	9	L	3	6	7	76
A	1	0	24GA7	24	9					
A	4	0		24	9					
(Normal Shorts 2, 3)										
E	10	0	24J28	24	9	L	10	0	2	66
(Normal Shorts 6, 7)										
A	2	1	24JE6	24	18					
C	5	0	25A6	25	1					
B	6	0	25A7	25	1					
C	5	0		25	1					
F	5	0	25AC5	25	1					
A	5	0	25AU4	25	2					
A	1	0	25AV5	25	2	M	1	8	5	53
A	5	0	25AX4	25	2					
C	5	0	25B6	25	1					

25X6



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	10	0	25B8	25	1					
F	8	0		25	1					
C	7	0	25BK5	25	26					
A	5	0	25BQ6	25	1					
A	9	0	25BR3	25	24					
(Disregard Shorts except H-K)										
C	5	0	25C5	25	7	M	5	6	7	47
C	5	0	25C6	25	1					
C	5	0	25CA5	25	7					
A	5	0	25CD6	25	1					
E	10	0	25CG3	25	9					
(Disregard Shorts except H-K)										
A	7	0	25CM3	25	17					
C	8	0	25CR5	25	26					
(Normal Shorts 1, 2, 6, 7)										
A	5	0	25CU6	25	1	M	5	4	10	50
A	5	0	25D4	25	2					
E	10	0	25D8	25	1					
G	8	0		25	1					
G	5	0		25	1					
B	5	0	25DK4	25	15					
A	5	0	25DN6	25	1					
A	5	0	25DQ6	25	1	M	5	4	10	48
C	5	0	25DT5	25	27					
C	5	0	25E5	25	4					
A	5	0	25EC6	25	1					
C	5	0	25EH5	25	7					
C	5	0	25F5	25	7	M	5	6	7	54
E	3	0	25FY8	25	29					
F	1	0		25	29					
G	6	7	25JQ6	25	9					
G	8	7		25	9					
C	5	0	25L6	25	1	M	5	4	3	48
E	1	0	25SN7	25	2	L	1	0	2	66
E	4	0		25	2	L	4	0	5	66
A	5	0	25U4	25	2					
A	5	0	25W4	25	2					
C	5	0	25W6	25	1					
B	3	0	25X6	25	1					
B	5	0		25	1					

25Y4



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
B	5	0	25Y4	25	1					
B	5	0	25Z4	25	1					
B	3	0	25Z6	25	1					
B	5	0		25	1					
D	1	0	26A6	26	6					
F	1	0	25BK6	26	6					
G	5	0		26	6					
G	6	0		26	6					
F	1	0	26C6	26	6					
G	5	0		26	6					
G	6	0		26	6					
E	1	0	26CG6	26	6					
E	1	0	26D6	26	6					
C	5	0	26E6	26	1					
B	1	0	26Z5	26	25					
B	6	0		26	25					
A	1	0	27GB5	27	20					
(Normal Shorts 3, 8)										
A	8	1	27KG6	27	20					
(Normal Shorts 3, 6)										
F	8	0	28AK8	28	29					
G	6	0		28	29					
G	2	0		28	29					
G	1	0		28	29					
C	2	0	28D7	28	19	L	2	0	4	70
C	7	0		28	19	L	7	0	5	70
A	1	0	28GB5	28	20					
(Normal Shorts 3, 8)										
C	2	0	28HA6	28	27	M	2	8	7	15
(Normal Shorts 3, 9)										
A	1	0	28HD5	28	10					
C	3	4	28Z5	28	19					
C	6	4		28	19					
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
C	2	0	29GK6	29	26					
C	2	0	29HA6	27	26	M	2	8	7	15
(Normal Shorts 3, 9)										
A	1	0	29KQ6	29	18					
(Normal Shorts 2, 7)										
C	5	0	30A5	30	7	M	5	6	7	32
A	3	0	30AE3	30	23					
(Disregard Shorts except H-K)										

35FM5



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
A	3	0	30AG3	30	23					
(Disregard Shorts except H-K)										
E	8	0	30AG11	30	9	K	8	0	7	34
E	5	0		30	9	K	5	0	6	34
F	3	0		30	9					
F	10	0		30	9					
C	2	0	30CW5	30	24					
A	1	0	30HD5	30	10					
A	1	0	30HJ5	30	10	M	1	5	7	44
A	5	0	30KD6	30	10	M	5	1	10	62
A	5	0	31JS6	31	10					
C	3	0	32A8	32	29	M	3	7	6	38
G	1	0		32	29	K	1	0	9	72
C	5	0	32ET5	32	7	M	5	6	7	48
A	1	0	32GA7	32	9					
A	4	0		32	9					
A	6	0	32L7	32	1					
C	5	0		32	1					
A	1	7	†33GT7	16	10					
(Normal Shorts 7, H-K)										
A	2	7		33	9					
A	9	10	33GY7	33	8					
A	2	10		33	8					
A	1	0	33JV6	33	10					
A	1	0	34CD3	34	10					
(Normal Shorts 5, 6, 8)										
A	10	4	34CE3	34	9					
(Disregard Shorts except H-K)										
A	7	0	34CM3	34	17					
C	5	0	34GD5	34	7	M	5	6	7	47
B	5	0	35A3	35	6					
B	6	0	35A5	35	19					
C	1	0	35B5	35	13	M	1	6	5	46
B	5	0	35C3	35	6					
C	5	0	35C5	35	7	M	5	6	7	47
A	5	0	35CD6	35	1					
C	3	0	35DZ8	35	29					
F	1	0		35	29					
C	5	0	35EH5	35	7	M	5	6	7	27
A	4	0	35FM5	35	3					
(Normal Shorts 1, 3, 6, 8)										

† Long warm-up time is normal.

35GL6



EMISSION			TUBE No.	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
A	2	6	35GL6	35	6						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
C	9	0	35HB8	35	29	M	9	6	7	42	
F	1	0		35	29	K	1	0	3	55	
C	5	0	35L6	35	1	M	5	4	3	52	
A	5	0	35W4	35	15						
A	2	4	35Y4	35	19						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
A	2	0	35Z3	35	19						
B	5	0	35Z4	35	1						
A	5	0	35Z5	35	4						
B	3	0	35Z6	35	1						
B	5	0		35	1						
A	5	0	36AM3	36	15						
A	9	0	38A3	38	24						
(Disregard Shorts except H-K)											
A	9	10	†38HE7	38	9						
A	2	10		38	9						
A	2	10	38HK7	38	9						
A	9	10		38	9						
C	5	0	40FR5	40	7	M	5	6	7	42	
A	5	0	40KD6	40	10						
A	8	1	40KG6	40	20	M	5	1	10	62	
(Normal Shorts 3, 7)											
B	5	0	40Z5	40	4						
A	8	0	42EC4	42	20						
(Disregard Shorts)											
A	5	9	42KN6	42	8						
(Normal Shorts 4, 10)											
C	2	0	45B5	45	24						
(Normal Shorts 6, 7, 8, 9)											
B	5	0	45Z5	45	4						
C	6	0	50A5	50	19						
A	3	0	50AX6	50	1						
A	5	0		50	1						
C	1	0	50B5	50	13	M	1	6	5	38	
C	7	0	50BK5	50	26						
C	3	0	50BM8	50	29	M	3	0	9	62	
F	1	0		50	29	K	1	7	6	70	
C	5	0	50C5	50	7	M	5	6	7	42	

† Long warm-up time is normal.

60FX5



EMISSION			TUBE No.	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
C	5	0	50C6	50	1						
C	5	0	50CA5	50	7	M	5	6	7	33	
A	5	0	50CD6	50	1						
A	5	0	50DC4	50	15						
C	5	0	50EH5	50	7	M	5	6	7	27	
C	5	0	50FA5	50	7	M	5	6	7	45	
C	5	0	50FE5	50	1						
C	5	0	50FK5	50	7	M	5	6	7	27	
E	3	0	50FY8	50	29	M	3	7	6	47	
F	1	0		50	29	K	1	0	9	67	
A	2	6	50HC6	50	6						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
C	2	0	50HC8	50	15						
A	2	6	50HK6	50	6						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
C	2	0	50HN5	50	24						
A	5	0	50JY6	50	1						
A	5	0	50L6	50	1	M	5	4	3	44	
A	3	0	50X6	50	19						
A	6	0		50	19						
B	3	0	50Y6	50	1						
B	5	0		50	1						
A	3	6	50Y7	50	1						
A	5	6		50	1						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
A	3	0	50Z6	50	1						
A	5	0		50	1						
A	3	6	50Z7	50	1						
A	5	6		50	1						
(COMPLETE SETUP BEFORE INSERTING TUBES)											
A	2	0	53HK7	53	9						
A	9	0		53	9						
A	9	0	55N3	50	24						
(Disregard Shorts except H-K)											
G	3	0	56R9	56	8						
B	9	0		56	8						
A	2	0	†58HE7	58	9						
A	9	0		58	9						
J	5	0	60E3	60	6						
C	5	0	60EH5	60	7						
C	5	0	†60FX5	60	7	M	5	6	7	28	

† Long warm-up time is normal.



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
A	2	0	60HL5	60	24						
(Normal Shorts 6, 8 and one other Pin.)											
C	5	6	70A7	70	1						
(COMPLETE SETUP BEFORE INSERTING TUBE.)											
C	8	0	70L7	70	1						
D	5	0		70	1						
J	5	0	90C1	1	15						
F	4	0	†117L7	117	1						
F	4	0	†117N7	117	1						
F	4	0	†117P7	117	1						
F	5	0	†117Z3	117	6						
F	5	0	†117Z4	117	1						
F	3	0	†117Z6	117	1						
F	5	0		117	1						
F	1	0	401A	6	13						
E	1	0	403B	6	13						
F	3	0	407A	20	29	L	3	0	4	54	
F	7	0		20	29	L	7	0	6	54	
(Normal Shorts 1, 9, H-K)											
E	1	0	408A	20	7						
A	3	0	502A	6	1						
(Emission and Shorts Test)											
A	5	0		6	1						
(Grid Leakage Test)											
A	3	0	884	6	1						
(Emission and Shorts Test)											
A	5	0		6	1						
(Grid Leakage Test)											
F	4	0	1203A	6	19						
F	4	0	1206	6	19						
F	5	0		6	19						
G	5	0	1216	6	6						
G	6	0		6	6						
F	1	0	1217	6	6						
F	10	0	1223	6	1						
E	6	0	1231	6	19						
F	6	0	1232	6	19						
D	2	0	1238	28	2						
(Disregard Shorts except H-K)											
F	6	0	1273	6	19						

† Long warm-up time is normal.



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
F	6	0	1280	12	19						
F	3	0	1291	3	19						
(Normal Shorts 1, 4, H-K)											
H	4	0	1294	1	19						
G	6	0	1299	1	19						
B	5	0	1611	6	1						
F	10	0	1612	6	1						
B	5	0	1613	6	1						
A	5	0	1614	6	1						
A	5	0	1619	2	1						
F	10	0	1620	6	1						
C	5	0	1621	6	1	M	5	4	3	64	
C	5	0	1622	6	1	M	5	4	3	50	
E	6	0	1626	12	1						
C	5	0	1631	12	1						
C	5	0	1632	12	1						
E	1	0	1633	25	2						
E	4	0		25	2						
F	3	0	1634	12	2	K	3	0	2	83	
F	4	0		12	2	K	4	0	5	83	
F	4	0	1635	6	1						
F	5	0		6	1						
D	4	0	1649	6	1						
H	10	0	1654	1	21						
(Disregard Shorts)											
F	3	0	1655	6	2						
F	4	0		6	2						
F	4	0	1662	3	22						
(Normal Shorts 2, 6)											
E	5	0	1679	6	6						
E	6	0		6	6						
D	4	0	1852	6	1						
D	4	0	1853	6	1						
A	3	0	2050	6	1						
(Emission and Shorts Test)											
A	5	0		6	1						
(Grid Leakage Test)											
C	10	0	4037	6	4						
(Normal Shorts 5, 8)											
F	1	0	5590	6	13						
E	1	0	5591	6	13						



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
D	6	0	5610	6	6					
(Normal Shorts 1, 5)										
C	10	0	5618	6	22					
H	10	0	5642	1.5	16					
(Insert two base leads into pins 4 & 5 of socket 16; Touch cap lead to top lead of tube.)										
J	5	0	5651	1	15					
E	1	0	5654	6	7	L	1	6	5	49
E	1	0	5656	6	7					
C	5	0	5659	12	1					
E	10	0	5660	12	1					
G	5	0		12	1					
G	4	0		12	1					
D	4	0	5661	12	1					
A	7	0	5663	6	6					
(Emission and Shorts Test)										
A	1	0		6	6					
(Grid Leakage)										
C	2	0	5686	6	26					
(Normal Shorts 6, 9)										
C	2	8	5687	12	29					
C	7	8		12	29					
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
F	1	0	5691	6	2	K	1	0	2	80
F	4	0		6	2	K	4	0	5	80
E	1	0	5692	6	2	L	1	0	2	66
E	4	0		6	2	L	4	0	5	66
F	4	0	5693	6	1	L	4	6	8	66
F	4	0	5694	6	1					
F	5	0		6	1					
A	6	0	5696	6	13					
(Emission and Shorts Test)										
A	1	0		6	13					
(Grid Leakage Test)										
E	1	0	5725	6	6	L	1	6	5	57
E	2	0	5726	6	6					
E	7	0		6	6					
A	6	0	5727	6	13					
(Emission and Shorts Test)										
A	1	0		6	13					
(Grid Leakage Test)										
E	10	0	5732	6	1					
D	1	0	5749	6	6	L	1	6	5	61



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
D	1	0	5750	6	6	K	1	6	5	82	
F	2	0	5751	12	25	K	2	0	1	78	
F	7	0		12	25	K	7	0	6	78	
C	8	0	5763	6	25						
E	2	0	5814	12	25	L	2	0	1	67	
E	7	0		12	25	L	7	0	6	67	
C	5	0	5824	25	1						
B	3	0	5838	12	1						
B	5	0		12	1						
B	3	0	5839	26	1						
B	5	0		26	1						
G	5	0	5844	6	6						
G	6	0		6	6						
G	1	0	5845	5	13						
G	5	0		5	13						
B	3	0	5852	6	1						
B	5	0		6	1						
C	5	0	5871	6	1						
F	1	0	5879	6	29	K	1	7	8	87	
C	5	0	5881	6	1						
G	6	0	5910	1	22						
E	1	0	5915	6	6						
E	5	0	5920	6	6	L	5	0	2	48	
E	6	0		6	6	L	6	0	1	48	
A	4	0	5931	5	1						
A	6	0		5	1						
(Normal Shorts H-K)											
C	5	0	5932	6	1						
E	2	0	5963	12	25	K	2	0	1	63	
E	7	0		12	25	K	7	0	6	63	
E	5	0	5964	6	6	K	5	0	2	47	
E	6	0		6	6	K	6	0	1	47	
E	2	0	5965	12	25	K	2	0	1	43	
E	7	0		12	25	K	7	0	6	43	
C	5	0	5992	6	1						
C	1	0	5998	6	2	M	1	0	5	32	
C	4	0		6	2	M	4	0	2	32	
C	1	0	6000	26	1						
B	10	0	6004	5	1						
B	10	0		5	1						

(Change cap lead from one tube cap to the other.
Normal Shorts 8, H-K)

6005



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
C	1	0	6005	6	13	M	1	6	5	52
D	4	0	6006	6	3					
A	5	0	6012	6	1					
(Emission and Shorts Test)										
A	3	0		6	1					
(Grid Leakage Test)										
E	1	0	6028	20	7					
E	5	0	6045	6	6					
E	6	0		6	6					
C	5	0	6046	25	1	M	5	4	3	52
G	5	0	6057	12	25					
G	6	0		12	25					
E	2	0	6058	6	6					
E	7	0		6	6					
E	2	0	6060	12	25					
E	7	0		12	25					
C	5	0	6061	6	1					
B	1	0	6063	6	6					
B	6	0		6	6					
D	1	0	6064	6	6					
E	1	0	6065	6	6					
F	1	0	6066	6	6					
G	5	0		6	6					
G	6	0		6	6					
D	2	0	6067	12	25					
D	7	0		12	25					
D	2	0	6072	12	25	L	2	0	1	77
D	7	0		12	25	L	7	0	6	77
A	1	0	6080	6	2					
A	4	0		6	2					
A	1	0	6082	26	2					
A	4	0		26	2					
G	9	0	6084	6	29	K	9	1	6	73
E	2	0	6085	12	25	L	2	0	1	68
E	7	0		12	25	L	7	0	6	68
B	4	0	6087	5	1					
B	6	0		5	1					
(Normal Shorts 8, H-K)										
C	1	0	6094	6	27					
(Normal Shorts 2, 3, 7, 9, H-K)										
C	1	0	6095	6	13					
E	1	0	6096	6	7					

6202



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	2	0	6097	6	6					
E	7	0		6	6					
G	5	0	6098	6	2					
(Emission and Shorts test only; Normal Shorts 8, H-K)										
E	5	0	6099	6	6					
E	6	0		6	6					
E	6	0	6100	6	7					
(Normal Shorts 1, 5)										
E	5	0	6101	6	6	L	5	0	1	49
E	6	0		6	6	L	6	0	4	49
B	4	0	6106	5	1					
B	6	0		5	1					
F	1	1	6113	6	2	K	1	0	2	80
F	4	1		6	2					
G	10	0	6118	6	1					
H	5	0		6	1					
H	4	0		6	1					
C	2	0	6132	6	24					
D	4	0	6134	6	1	M	4	6	8	16
E	6	0	6135	6	7					
(Normal Shorts 1, 5)										
D	1	0	6136	6	6	L	1	6	5	66
D	4	0	6137	6	1	L	4	6	8	85
E	6	0	6145	6	19					
A	5	0	6146	6	1	M	5	3	10	47
(Normal Shorts 1, 4, 6)										
C	5	0	6159	26	1	M	5	3	10	47
(Normal Shorts 1, 4, 6)										
E	1	0	6180	6	2					
E	4	0		6	2					
E	1	0	6186	6	7	L	1	6	5	49
E	1	0	6187	6	6	L	1	6	5	57
F	1	0	6188	6	2					
F	4	0		6	2					
D	2	0	6189	12	25	L	2	0	1	67
D	7	0		12	25	L	7	0	6	67
C	2	0	6197	6	25					
(Normal Shorts 3, 8)										
E	2	0	6201	12	25	L	2	0	1	40
E	7	0		12	25	L	7	0	6	40
B	1	0	6202	6	6					
B	6	0		6	6					

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
B	1	0	6203	6	29					
B	9	0		6	29					
F	2	0	6211	12	25	L	2	0	1	48
F	7	0		12	25	L	7	0	6	48
H	10	0	6215	1	4					
(Normal Shorts 8, H-K)										
C	2	0	6216	6	27					
(Normal Shorts 3, 8)										
H	2	0	6218	6	29					
C	2	0	6227	6	24					
E	1	0	6265	6	6	L	1	6	5	58
F	9	0	6267	6	29	K	9	1	6	76
(Normal Shorts 2, 7)										
C	8	0	6287	6	27					
(Normal Shorts 2, 3, 7, 9)										
A	5	0	6293	6	1					
(Normal Shorts 1, 4, 6)										
A	3	0	6325	6	2					
A	5	0		6	2					
A	5	0	6327	6	1					
C	1	0	6336	6	2					
C	4	0		6	2					
E	3	0	6350	12	25					
E	8	0		12	25					
C	1	0	6360	12	25					
C	3	0		12	25					
G	5	0	6384	6	2					
(Emission and Shorts test only. Normal Shorts H-K)										
C	1	0	6394	26	2					
C	4	0		26	2					
E	2	0	6414	12	25					
E	7	0		12	25					
A	8	0	6417	12	29					
E	3	0	6463	12	25	M	3	0	1	42
E	8	0		12	25	M	8	0	6	42
E	1	0	6485	6	6					
C	1	0	6516	6	6					
A	1	0	6520	6	2					
A	4	0		6	2					
A	6	0	6525	6	13					
(Emission and Shorts Test)										
A	1	0		6	13					
(Grid Leakage Test)										

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
C	1	0	6528	6	2					
C	4	0		6	2					
A	5	0	6550	6	1					
D	1	0	6660	6	6	L	1	6	5	61
D	1	0	6661	6	6	L	1	6	5	58
E	1	0	6662	6	6	L	1	6	5	66
E	2	0	6663	6	6					
E	7	0		6	6					
E	6	0	6664	6	7	L	6	0	1	42
C	1	0	6669	6	13	M	1	6	5	52
D	1	0	6676	6	6	L	1	6	5	41
C	2	0	6677	6	25					
(Normal Shorts 3, 8)										
D	2	0	6678	6	25	L	2	3	6	54
D	9	0		6	25	L	9	0	1	47
E	2	0	6679	12	25	L	2	0	1	40
E	7	0		12	25	L	7	0	6	40
D	2	0	6680	12	25	L	2	0	1	67
D	7	0		12	25	L	7	0	6	67
F	2	0	6681	12	25	K	2	0	1	78
F	7	0		12	25	K	7	0	6	78
C	2	0	6686	6	24					
F	1	0	6687	6	6					
D	2	0	6688	6	24					
E	2	0	6689	6	3	L	2	1	6	34
B	1	0	6754	6	29					
G	5	0	6792	6	1					
E	2	0	6829	12	25					
E	7	0		12	25					
D	3	0	6840	12	25					
D	8	0		12	25					
F	4	0	6842	6	13					
(Normal Shorts 3, 5)										
F	2	0	6851	6	25					
F	7	0		6	25					
B	4	0	6853	5	1					
B	6	0		5	1					
(Normal Shorts 8, H-K)										
C	2	0	6870	12	27					
(Normal Shorts 3, 9)										
C	1	0	6877	6	27					
(Normal Shorts 3, 9, H-K)										



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
C	5	0	6883	12 1	M	5	3	10	47	
(Normal Shorts 1, 4, 6)										
E	2	0	6887	6 6						
E	7	0		6 6						
C	4	0	6888	6 1						
A	5	0	6893	12 1						
C	2	8	6900	12 29						
C	7	8		12 29						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
E	2	0	6913	12 25						
E	7	0		12 25						
E	2	0	6919	6 6						
E	7	0		6 6						
E	2	0	6922	6 29	M	2	0	1	22	
E	7	0		6 29	M	7	0	6	22	
E	5	0	6927	6 6						
E	6	0		6 6						
C	1	0	6928	6 13						
C	1	0	6939	12 25						
C	3	0		12 25						
D	2	0	6954	12 25						
D	7	0		12 25						
E	1	0	6968	6 7						
C	3	0	6973	6 27						
(Normal Shorts 1, 8)										
F	10	0	7000	6 1						
C	1	0	7001	6 7						
G	2	0	7025	12 25	K	2	0	1	63	
G	7	0		12 25	K	7	0	6	63	
C	6	0	7027	6 3						
(Normal Shorts 1, 4)										
D	1	0	7036	6 6						
C	2	8	7044	12 29						
C	7	8		12 29						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
C	2	0	7054	13 25						
E	2	0	7055	13 6						
E	7	0		13 6						
E	1	0	7056	13 6						
E	2	0	7057	13 29						
E	7	0		13 29						



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	2	0	7058	13 29						
F	7	0		13 29						
D	2	0	7059	13 29						
D	9	0		13 29						
D	2	0	7060	13 29						
D	9	0		13 29						
C	3	0	7061	13 27						
(Normal Shorts 1, 8)										
E	2	0	7062	12 25	L	2	0	1	50	
E	7	0		12 25	L	7	0	6	50	
C	1	0	7105	13 2						
C	4	0		13 2						
D	7	0	7119	12 23	M	7	0	9	21	
D	2	0		12 23	M	2	0	1	21	
D	5	0	7137	6 15						
E	1	0	7167	13 7						
A	2	0	7189	6 24	M	2	9	7	30	
(Normal Shorts 6, 9)										
D	7	0	7199	6 29	L	7	3	2	52	
E	9	0		6 29	L	9	0	1	61	
C	5	0	7212	6 1						
(Normal Shorts 1, 4, 6)										
C	2	0	7227	27 27						
A	2	7	7233	6 25						
(Normal Shorts 1, 3, 6)										
C	1	0	7236	6 2						
C	4	0		6 2						
B	1	0	7239	6 26						
(Normal Shorts 2, 7)										
E	5	0	7244	6 6						
E	6	0		6 6						
D	5	0	7245	6 15						
D	2	0	7247	12 25	L	2	0	1	67	
G	7	0		12 25	K	7	0	6	77	
D	2	0	7258	13 29						
D	8	0		13 29						
E	2	0	7308	6 29	L	2	0	1	38	
E	7	0		6 29	L	7	0	6	38	
E	2	0	7316	12 25	L	2	0	1	76	
E	7	0		12 25	L	7	0	6	76	
E	7	0	7318	12 25						
E	2	0		12 25						



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
C	2	0	7320	6 24						
(Normal Shorts 6, 8)										
C	6	0	7355	6 1						
A	5	0	7358	6 1						
(Normal Shorts 1, 4, 6)										
E	3	0	7360	6 29	K	3	2	6	72	
				6 29	K	3	2	7	72	
C	2	8	7370	40 29						
C	7	8		40 29						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
C	5	0	7408	6 1	M	5	4	3	50	
C	5	0	7534	6 4						
(Normal Shorts 1, 6)										
D	1	0	7543	6 6	L	1	6	5	50	
C	2	0	7551	12 24						
(Normal Shorts 3, 8)										
C	2	0	7558	6 24						
(Normal Shorts 3, 8)										
C	6	0	7581	6 1						
F	4	0	7586	6 14	L	4	0	2	38	
F	4	0	7587	6 14						
C	6	0	7591	6 1						
(Normal Shorts 4, 8)										
D	2	0	7643	6 29	L	2	3	6	44	
E	9	0		6 29	L	9	0	1	62	
C	1	0	7645	12 25						
C	3	0		12 25						
E	2	0	7687	6 29	L	2	3	6	52	
F	9	0		6 29	L	9	0	1	61	
F	2	0	7689	6 11	K	2	0	6	78	
F	4	0		6 11	K	4	0	8	78	
F	9	0		6 11	K	9	0	10	78	
E	2	0	7690	6 11	L	2	0	6	40	
E	4	0		6 11	L	4	0	8	40	
E	9	0		6 11	L	9	0	10	40	
E	1	0	7693	6 6						
E	1	0	7694	6 6						
A	5	0	7695	50 26	M	6	1	9	45	
D	1	0	7699	6 29						
D	3	0		6 29						
C	2	0	7701	13 24						
(Normal Shorts 3, 7, 8, 9)										



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	7	0	7716	13 29						
F	2	0		13 29						
E	1	0	7717	6 7						
F	7	6	7719	12 23						
C	2	0	7721	6 24						
(Normal Shorts 6)										
F	8	0	7724	14 29						
G	6	0		14 29						
G	2	0		14 29						
E	2	0	7728	12 25						
E	7	0		12 25						
F	2	0	7729	12 25						
F	7	0		12 25						
D	2	0	7730	12 25						
D	7	0		12 25						
D	2	0	7731	6 29						
D	9	0		6 29						
D	1	0	7732	6 6						
C	2	0	7733	12 23						
(Normal Shorts 3, 9)										
D	2	0	7737	6 24						
A	6	0	7754	6 23						
C	2	0	7788	6 24						
(Normal Shorts 6, 9)										
C	2	0	7803	6 29						
C	7	0		6 29						
C	5	0	7867	6 1						
A	6	0	7868	6 17						
(Normal Shorts 1, 7)										
A	2	8	7892	12 29						
A	7	8		12 29						
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
G	4	0	7895	6 14	L	4	0	2	30	
E	2	0	7898	12 25	L	2	0	1	46	
E	7	0		12 25	L	7	0	6	46	
A	10	0	7984	12 10						
(Normal Shorts 2, 6, 7, 8)										
G	4	0	8056	6 14						
F	10	0	8058	6 14						
(Touch cap lead to lower half of shell of tube.)										
(Normal Shorts 2, 4, 8, 10)										
C	2	0	8077	13 25						

8084



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	1	0	8084	13	6					
D	7	0	8106	13	26					
D	1	0	8136	13	6					
D	2	0	8223	6	28					
D	7	0		6	28					
A	5	0	8298	6	1	M	5	3	10	47
(Normal Shorts 1, 4, 6)										
C	2	0	8334	6	15					
A	5	0	8417	6	1					
E	1	0	8425	6	6					
E	1	0	8426	12	6					
D	2	0	8431	12	28					
D	7	0		12	28					
E	2	0	8445	6	28					
E	9	0		6	28					
E	2	0	8446	6	28					
E	9	0		6	28					
E	2	0	8447	6	25					
E	6	0		6	25					
E	7	0		6	25					
D	2	0	8448	6	25					
(Normal Shorts H-K)										
D	8	0	8449	6	28					
D	2	0		6	28					
D	3	0	8102	13	29	L	3	0	1	44
C	9	0		13	29	L	9	7	6	46
D	1	0	8113	6	7	L	1	6	5	45
A	10	1	8149	13	10					
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
A	10	1	8150	13	10					
(Normal Shorts 2, 5, 6, 8)										
(COMPLETE SETUP BEFORE INSERTING TUBE.)										
B	10	0	8156	13	10					
(Normal Shorts 1, 2, 6, 7, 8)										
E	4	0	8203	6	14	M	4	0	2	17
C	3	0	8212	12	24	M	3	0	1	9
C	8	0	8233	6	20	M	8	3	1	7
A	7	8	8278	6	17					
C	2	0	8327	6	29					
F	4	0	8380	6	14					
E	4	0	8382	6	14	L	4	0	2	32



B329

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
F	4	0	8393	13	14	L	4	0	2	38
F	4	0	8441	6	14	L	4	0	2	30
F	4	0	8456	6	14					
D	5	0	8532	6	15	L	5	0	7	28
F	1	0	9001	6	7	K	1	6	5	83
E	6	0	9002	6	7					
(Normal Shorts 1, 5)										
E	1	0	9003	6	7	L	1	6	5	76
E	5	0	9006	6	15					
F	10	0	A863	6	1					
A	1	0	A1834	6	2	M	2	0	1	56
A	4	0		6	2	M	5	0	4	56
G	9	7	A40607C	6	26					
B	8	7		6	26					
G	9	7	A40608F	17	26					
B	8	7		17	26					
G	9	7	A40612	12	26					
B	8	7		12	26					
E	2	0	AA91E	6	6					
E	7	0		6	6					
A	6	0	ASG5121	6	13					
(Emission and Shorts Test)										
A	1	0		6	13					
(Grid Leakage Test)										
A	6	0	ASG5696	6	13					
(Emission and Shorts Test)										
A	1	0		6	13					
(Grid Leakage Test)										
E	1	0	B36	12	2	L	1	0	2	66
E	4	0		12	2	L	4	0	5	66
E	1	0	B65	6	2	L	1	0	2	66
E	4	0		6	2	L	4	0	5	66
D	2	0	B109	26	29					
D	7	0		26	29					
E	2	0	B152	12	25	L	2	0	1	40
E	7	0		12	25	L	7	0	6	40
E	2	0	B309	12	25	L	2	0	1	40
E	7	0		12	25	L	7	0	6	40
E	2	0	B319	7	27					
E	7	0		7	27					
D	2	0	B329	12	25	L	2	0	1	67
D	7	0		12	25	L	7	0	6	67



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
D	2	0	B339	12	25	K	2	0	1	78
D	7	0		12	25	K	7	0	6	78
D	2	0	B719	6	29	L	2	0	1	46
D	7	0		6	29	L	7	0	6	46
E	2	0	B739	12	25					
E	7	0		12	25					
D	2	0	B749	12	25					
D	7	0		12	25					
F	2	0	B759	12	25					
F	7	0		12	25					
C	1	0	BPM04	6	13	M	1	6	5	52
F	5	0	C10B	2	1					
E	2	0	CCa	6	29	M	2	0	1	22
E	7	0		6	29	M	7	0	6	22
E	2	0	CC81E	12	25	L	2	0	1	40
E	7	0		12	25	L	7	0	6	40
E	2	0	CV455	12	25					
E	7	0		12	25					
D	2	0	CV491	12	29					
D	7	0		12	29					
F	6	2	CV753	1	22					
A	6	0	CV797 (Emission and Shorts Test)	6	13					
A	1	0		6	13					
				(Grid Leakage Test)						
A	5	0	CV1741	6	1					
			CV1832 (See Type OA2)							
			CV1833 (See Type OB2)							
E	2	0	CV2128	6	29					
E	9	0		6	29					
E	2	0	CV2492	6	29					
E	7	0		6	29					
F	9	0	CV2901 (Normal Shorts 2, 7)	6	29					
C	2	0	CV2975	6	24					
A	1	0	CV2984	6	2					
A	4	0		6	2					
A	6	0	CV3512 (Emission and Shorts Test)	6	13					
A	1	0		6	13					
				(Grid Leakage Test)						
D	2	0	CV3998	6	24					



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
D	2	0	CV4007	12	29					
D	7	0		12	29					
D	1	0	CV4009	6	6	L	1	6	5	61
E	1	0	CV4010	6	7	L	1	6	5	49
D	2	0	CV4016	12	29					
D	7	0		12	29					
C	1	0	CV4019	6	13					
			CV4020 (See Type OA2)							
E	2	0	CV4024	12	29					
E	7	0		12	29					
			CV4028 (See Type OB2)							
D	2	0	CV4032	12	29					
D	7	0		12	29					
A	1	0	CV5008	6	2					
A	4	0		6	2					
A	1	0	CV5072	6	23					
A	7	0		6	23					
C	2	0	CV5077 (Normal Shorts 6, 7)	22	24					
C	2	0		CV5093	6	29				
C	2	0	CV5094 (Normal Shorts 6, 8)	6	24					
E	2	0		D2M9	6	6				
E	7	0		6	6					
F	3	0	D63	6	1					
F	5	0		6	1					
E	2	0	D77	6	6					
E	7	0		6	6					
E	2	0	D152	6	6					
E	7	0		6	6					
F	4	0	D193 (Normal Shorts 2, 6)	3	22					
H	10	0		D430 (Disregard Shorts)	1	6				
G	6	2	DA90	1.5	22					
G	10	0	DAC32	1	1					
G	5	0		1	1					
F	10	0	DAE32	1	1					
G	5	0		1	1					
G	6	0	DAF91	1	21					
H	3	0		1	21					

DAF92



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
G	6	0	DAF92	1	21						
H	4	0		1	21						
G	6	0	DAF96	1	21						
H	3	0		1	21						
G	2	0	DCC90	1	6						
F	5	0		1	6						
(Normal Shorts 1, 7, H-K)											
E	2	0	DD6	6	6						
E	7	0		6	6						
C	1	0	DD7	6	6						
D	1	0	DDR7	6	4						
F	10	0	DF33	1	22						
F	6	0	DF91	1.5	22						
F	6	0	DF92	1	22						
G	6	0	DF96	1	22						
G	1	0	DF97	1	7						
F	6	0	DF904	1	22						
F	10	0	DH63	6	1						
G	5	0		6	1						
G	4	0		6	1						
F	10	0	DH74	12	1						
G	5	0		12	1						
G	4	0		12	1						
F	10	0	DH76	12	1						
G	5	0		12	1						
G	4	0		12	1						
F	1	0	DH77	6	6	K	1	0	7	77	
G	5	0		6	6						
G	6	0		6	6						
F	8	0	DH109	28	29						
G	6	0		28	29						
G	2	0		28	29						
G	1	0		28	29						
F	10	0	DH147	6	1						
G	5	0		6	1						
G	4	0		6	1						
F	6	0	DH149	6	19						
G	5	0		6	19						
G	3	0		6	19						
F	8	0	DH719	6	29	K	8	0	9	77	
G	6	0		6	29						
G	2	0		6	29						
G	1	0		6	29						



E80CF

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
G	5	0	DK32	1	1						
F	4	0	DK91	1	22						
F	4	0	DK92	1	21						
F	4	0	DK96	1	21						
F	5	0	DL35	1	1						
E	5	0	DL36	1	1						
F	10	0	DL63	6	1						
G	5	0		6	1						
G	4	0		6	1						
F	10	0	DL74M	12	1						
G	5	0		12	1						
G	4	0		12	1						
F	3	0	DL91	1	22						
(Normal Shorts 2, 6)											
F	3	0	DL92	3	22						
(Normal Shorts 2, 6)											
F	4	0	DL93	3	22						
(Normal Shorts 2, 6)											
F	6	0	DL94	3	22						
F	3	0	DL95	3	22						
(Normal Shorts 2, 6)											
G	6	0	DL96	3	22						
F	4	0	DL193	3	22						
(Normal Shorts 2, 6)											
E	1	0	DP51	6	7						
E	1	0	DP61	6	7	L	1	6	5	49	
H	10	0	DY30	1	1						
(Disregard Shorts)											
H	10	0	DY70	1	6						
(Insert two tube leads into Pins 3 and 4 of socket 6; touch cap lead to top lead on tube. Disregard Shorts.)											
H	10	0	DY80	1	23						
(Disregard Shorts)											
H	10	0	DY86	1	23						
(Disregard Shorts)											
H	10	0	DY87	1	23						
(Disregard Shorts)											
C	8	0	E55L	6	20	M	8	3	1	7	
E	2	0	E80CC	12	25	L	2	0	1	68	
E	7	0		12	25	L	7	0	6	68	
D	2	0	E80CF	6	29	L	2	3	6	44	
E	9	0		6	29	L	9	0	1	62	

E80F



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
G	9	0	E80F	6	29	K	9	1	6	73	
C	2	0	E80L	6	24						
H	2	0	E80T	6	25						
E	2	0	E81CC	12	25	L	2	0	1	40	
E	7	0		12	25	L	7	0	6	40	
C	2	0	E81L	6	24						
D	2	0	E82CC	12	25	L	2	0	1	67	
D	7	0		12	25	L	7	0	6	67	
D	2	0	E82CF	6	29						
D	9	0		6	29						
F	2	0	E83CC	12	25	K	2	0	1	78	
F	7	0		12	25	K	7	0	6	78	
E	2	0	E83F	6	29	L	2	1	6	34	
E	2	0	E88CC	6	29	M	2	0	1	22	
E	7	0		6	29	M	7	0	6	22	
E	5	0	E90CC	6	6	L	5	0	2	48	
E	6	0		6	6	L	6	0	1	48	
E	1	0	E90F	6	6	L	1	6	5	58	
E	2	0	E91AA	6	29						
E	7	0		6	29						
F	1	0	E91H	6	6						
E	3	0	E92CC	6	29						
E	6	0		6	29						
E	1	0	E95F	6	7						
E	1	0	E99F	6	6						
C	5	0	E130L	6	4						
(Normal Shorts 1, 2, 6)											
E	2	0	E180CC	12	25						
E	7	0		12	25						
D	2	0	E180F	6	24						
G	1	0	E182CC	12	23						
D	7	0		12	23						
E	2	0	E188CC	6	29	M	2	0	1	21	
E	7	0		6	29	M	7	0	9	21	
D	2	0	E186F	6	24						
E	1	0	EA50	2	7						
E	2	0	EAA91	6	6						
E	7	0		6	6						
E	2	0	EAA901	6	6						
E	7	0		6	6						

EC81



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
F	8	0	EAB80	6	29						
G	7	0		6	29						
G	2	0		6	29						
G	1	0		6	29						
F	8	0	EABC80	6	29	K	8	0	9	77	
G	6	0		6	29						
G	2	0		6	29						
G	1	0		6	29						
D	2	0	EAF801	6	29						
D	8	0		6	29						
E	3	0	EB34	6	1						
E	5	0		6	1						
E	2	0	EB91	6	6						
E	7	0		6	6						
E	10	0	EBC33	6	1						
G	5	0		6	1						
G	4	0		6	1						
F	8	0	EBC80	6	29						
G	6	0		6	29						
G	2	0		6	29						
F	8	0	EBC81	6	29						
G	6	0		6	29						
G	2	0		6	29						
F	1	0	EBC90	6	6	K	1	0	7	77	
G	5	0		6	6						
G	6	0		6	6						
F	1	0	EBC91	6	6	K	1	0	7	74	
G	5	0		6	6						
G	6	0		6	6						
F	2	0	EBF80	6	29						
G	7	0		6	29						
G	8	0		6	29						
E	2	0	EBF81	6	29						
G	7	0		6	29						
G	8	0		6	29						
G	2	0	EBF83	6	29						
G	7	0		6	29						
G	8	0		6	29						
D	2	0	EBF89	6	29	L	2	1	5	62	
G	7	0		6	29						
G	8	0		6	29						
G	9	0	EC80	6	23						
(Emission and Shorts test only. Normal Shorts 1, 2, 7, 8)											
D	1	0	EC81	6	29	L	8	0	1	63	

EC86



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	6	0	EC86 (Normal Shorts 3, 7)	6	23	L	6	0	1	20
G	8	0		EC88 (Emission and Shorts test only. Normal Shorts 1, 3, 6, 7)	6	25				
D	6	0	EC90 (Normal Shorts 1, 5)	6	7					
E	1	0		EC91 (Normal Shorts 2, 5)	6	15				
E	6	0	EC92	6	6	L	6	0	1	41
D	2	0		EC93 (Normal Shorts 1, 7)	6	15				
D	2	0	EC94 (Normal Shorts 1, 7)	6	15	M	2	0	7	38
E	2	0		EC95	6	13	L	2	0	5
E	2	0	EC97	6	13	L	2	0	5	32
E	1	0	EC900	6	7	L	1	6	5	29
E	1	0	ECC32	6	2					
E	4	0		6	2					
E	1	0	ECC33	6	2					
E	4	0		6	2					
F	1	0	ECC35	6	2					
F	4	0		6	2					
E	2	0	ECC81	12	25	L	2	0	1	40
E	7	0		12	25	L	7	0	6	40
D	2	0	ECC82	12	25	L	2	0	1	67
D	7	0		12	25	L	7	0	6	67
F	2	0	ECC83	12	25	K	2	0	1	78
F	7	0		12	25	K	7	0	6	78
D	6	0	ECC84	6	29	L	6	0	9	55
E	2	0		6	29	L	2	0	3	58
(Normal Shorts 7, 8)										
D	2	0	ECC85	6	29	L	2	0	1	46
D	7	0		6	29	L	7	0	6	46
E	2	0	ECC86	6	29					
E	7	0		6	29					
D	2	0	ECC88	6	29	L	2	0	1	32
D	7	0		6	29	L	7	0	6	32
D	2	0	ECC89	6	29					
D	6	0		6	29					
(Normal Shorts 7, 8)										
E	5	0	ECC91	6	6	L	5	0	1	49
E	6	0		6	6	L	6	0	4	49



ECH83

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
E	2	0	ECC180	6	29	L	2	0	1	40
E	7	0		6	29	L	7	0	6	40
D	2	0	ECC189	6	29	M	2	0	1	29
D	7	0		6	29	M	7	0	6	29
A	1	0	ECC230	6	2					
A	4	0		6	2					
E	2	0	ECC801	12	25	L	2	0	1	40
E	7	0		12	25	L	7	0	6	40
D	2	0	ECC802	12	29	L	2	0	1	67
D	7	0		12	29	L	7	0	6	67
F	2	0	ECC803	12	25	K	2	0	1	78
F	7	0		12	25	K	7	0	6	78
G	2	0	ECC807	6	29	K	2	0	3	59
G	9	0		6	29	K	9	0	8	59
E	5	0	ECC960	6	6	L	5	0	2	48
E	6	0		6	6	L	6	0	1	48
D	3	0	ECC2000	6	30					
D	8	0		6	30					
E	2	0	ECF80	6	29	L	2	3	6	42
E	9	0		6	29	L	9	0	1	52
D	2	0	ECF82	6	29	L	2	3	6	54
D	9	0		6	29	L	9	0	1	47
D	2	0	ECF86	6	29	L	2	9	8	27
D	6	0		6	29	L	6	0	7	58
D	3	0	ECF200	6	30					
E	10	0		6	30					
D	3	0	ECF201	6	30	M	3	8	7	17
D	10	0		6	30	L	10	0	9	58
D	2	0	ECF801	6	26					
D	9	0		6	26					
C	2	0	ECF802	6	29					
C	9	0		6	29					
D	9	0	ECF804	6	29					
E	2	0		6	29					
E	5	0	ECH33	6	1					
D	10	0	ECH35	6	1					
E	5	0	ECH36	6	1					
E	2	0	ECH80	6	29					
F	9	0		6	29					
E	2	0	ECH81	6	29	L	2	1	6	69
E	9	0		6	29	L	9	0	8	65
F	2	0	ECH83	6	29					
G	7	0		6	29					

ECH84



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
E	2	0	ECH84	6 29						
E	7	0		6 29						
D	8	0	ECH200	6 30	L	8	0	10	38	
E	3	0		6 30	L	3	2	7	78	
D	9	0	ECL80	6 29						
F	2	0		6 29						
C	3	0	ECL82	6 29	M	3	7	6	40	
F	1	0		6 29	K	1	0	9	70	
C	9	0	ECL83	6 29						
G	2	0		6 29						
D	8	0	ECL84	6 29						
F	1	0		6 29						
D	9	0	ECL85	6 29	M	9	7	6	40	
D	2	0		6 29	L	2	0	1	40	
C	8	0	ECL86	6 29	M	8	3	6	30	
G	1	0		6 29	K	1	0	9	70	
E	2	0	ED2	6 6						
E	7	0		6 6						
C	8	0	EFL200	6 30						
D	1	0		6 30						
D	2	0	EF5	6 24	L	2	8	7	63	
D	2	0	EF13	6 24	L	2	8	7	63	
F	6	0	EF22	6 19						
E	10	0	EF39	6 1						
D	2	0	EF80	6 24	L	2	8	7	37	
F	2	0	EF81	6 25						
(Normal Shorts 7, 8)										
C	2	0	EF82	6 24						
D	2	0	EF85	6 26						
F	9	0	EF86	6 29	K	9	1	6	76	
(Normal Shorts 2, 7)										
D	2	0	EF89	6 24	L	2	8	7	63	
D	1	0	EF91	6 6						
E	1	0	EF92	6 6						
D	1	0	EF93	6 6	L	1	6	5	61	
D	1	0	EF94	6 6	L	1	6	5	66	
E	1	0	EF95	6 7	L	1	6	5	49	
D	1	0	EF96	6 6	L	1	6	5	49	
D	1	0	EF97	6 6						
D	1	0	EF98	6 6						
D	2	0	EF183	6 24	L	2	8	7	50	

EY82



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	2	0	EF184	6 24	M	2	8	7	15	
D	1	0	EF190	6 6	L	1	6	5	41	
F	9	0	EF804	6 24						
D	2	0	EF812	6 24						
D	1	0	EH90	6 6						
D	1	0	EK90	6 6						
F	5	0	EL33	6 1						
A	5	1	EL34	6 1	M	5	4	3	36	
A	5	0	EL36	6 4						
C	5	0	EL37	6 1						
C	5	0	EL38	6 1						
C	2	0	EL81	6 24						
(Normal Shorts 6, 7)										
C	2	0	EL83	6 29						
C	2	0	EL84	6 24	M	2	9	7	29	
(Normal Shorts 6, 8)										
C	2	0	EL85	6 25						
C	2	0	EL86	6 24	M	2	9	7	47	
(Normal Shorts 6, 8)										
C	1	0	EL90	6 29	M	1	6	5	52	
C	1	0	EL91	6 29						
C	1	0	EL95	6 13	M	1	6	5	42	
C	2	0	EL180	12 27	M	2	8	7	23	
(Normal Shorts 3, 9)										
A	8	1	EL505	6 20						
(Normal Shorts 3, 7)										
C	2	0	EL821	6 24						
C	2	0	EL822	6 29						
C	2	0	ELL80	6 29						
C	6	0		6 29						
D	2	0	EM85	6 24						
F	1	0	EN93	6 6						
F	7	0	EQ80	6 26						
(Normal Shorts 3, 8)										
A	9	0	EY80	6 24						
(Disregard Shorts)										
A	9	0	EY81	6 29						
(Disregard Shorts except H-K)										
A	9	0	EY82	6 29						
(Disregard Shorts except H-K)										



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
A	9	0	EY83	6 24						
(Disregard Shorts except H-K)										
J	10	0	EY86	6 23						
(Disregard Shorts)										
J	10	0	EY87	6 23						
(Disregard Shorts)										
A	9	0	EY88	6 24						
(Disregard Shorts except H-K)										
A	8	0	EY500	6 20						
(Disregard Shorts)										
A	8	1	EY505	6 20						
(Normal Shorts 3, 7)										
A	1	0	EZ3	6 23						
A	7	0		6 23						
A	1	0	EZ4	6 23						
A	7	0		6 23						
A	1	0	EZ11	6 23						
A	10	0		6 23						
B	3	0	EZ35	6 1						
B	5	0		6 1						
A	1	0	EZ80	6 23						
A	7	0		6 23						
A	1	0	EZ81	6 23						
A	7	0		6 23						
B	1	0	EZ90	6 29						
B	6	0		6 29						
A	10	8	GY501	3 20						
B	4	0	GZ30	5 1						
B	6	0		5 1						
(Normal Shorts 8, H-K)										
B	4	0	GZ31	5 1						
B	6	0		5 1						
(Normal Shorts 8, H-K)										
A	4	0	GZ32	5 1						
A	6	0		5 1						
(Normal Shorts 8, H-K)										
A	4	0	GZ34	5 1						
A	6	0		5 1						
(Normal Shorts 8, H-K)										
G	10	0	H36	6 1						
A	4	0	H52	5 1						
A	6	0		5 1						
(Normal Shorts 8, H-K)										



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
F	10	0	H63	6 1						
F	4	0	H1112	6 14						
F	4	0	H1208	6 14						
E	2	0	HAA91	12 6						
E	7	0		12 6						
F	8	0	HABC80	19 6	K	8	0	9	77	
G	7	0		19 6						
G	2	0		19 6						
G	1	0		19 6						
F	1	0	HBC90	12 6	K	1	0	7	77	
G	5	0		12 6						
G	6	0		12 6						
F	1	0	HBC91	12 6	K	1	0	7	74	
G	5	0		12 6						
G	6	0		12 6						
E	2	0	HCC85	17 29						
E	7	0		17 29						
F	2	0	HCH81	12 29						
G	9	0		12 29						
G	5	0	HD14	1 1						
F	10	0		1 1						
H	10	0	HD93	1.5 23						
(Disregard Shorts)										
A	5	0	HD94	6 1						
A	5	0	HD96	25 1						
D	1	0	HF93	12 6	L	1	6	5	61	
D	1	0	HF94	12 6	L	1	6	5	66	
D	1	0	HK90	12 6						
C	1	0	HL90	19 13						
C	5	0	HL92	50 7	M	5	6	7	47	
C	5	0	HL94	30 7	M	5	6	7	32	
D	1	0	HM04	6 6						
E	1	0	HP6	6 6						
A	5	0	HY65	6 1						
A	6	0	HY90	35 15						
B	1	0	HZ90	12 6						
B	6	0		12 6						
F	6	0	KBC32	2 1						
G	5	0		2 1						
G	4	0		2 1						
F	5	0	KF35	2 1						
E	5	0	KK32	1 1						

KL35



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
E	5	0	KL35	2	1						
C	5	0	KT32	25	1						
F	5	0	KT61	6	1						
B	5	0	KT63	6	1						
C	5	0	KT66	6	1						
C	5	0	KT71	50	1						
A	5	0	KT77	6	1						
C	5	0	KT88	6	1						
E	10	0	KTW63	6	1						
F	10	0	KTZ63	6	1	L	10	4	3	63	
E	5	0	L63	6	1	L	5	0	3	63	
D	6	0	L77	6	7						
(Normal Shorts 1, 5)											
E	1	0	LC900	3	7						
D	2	0	LCF80	6	29						
D	9	0		6	29						
D	3	0	LCF200	5	30						
E	10	0		5	30						
D	3	0	LCF201	5	30						
D	10	0		5	30						
D	2	0	LCF801	5	26						
E	9	0		5	26						
C	2	0	LCF802	6	29						
D	9	0		6	29						
D	8	0	LCH200	5	30						
E	3	0		5	30						
D	2	0	LF183	4	29						
D	2	0	LF184	4	29						
(Normal Shorts 1, 3)											
C	8	0	LFL200	11	30						
D	1	0		11	30						
A	2	0	LL86	10	24						
(Normal Shorts 7, 8)											
C	3	0	LN119	50	29	M	3	0	9	62	
F	1	0		50	29	K	1	7	6	70	
D	9	0	LN152	6	29						
F	2	0		6	29						
A	9	0	LY88	20	24						
(Disregard Shorts except H-K)											
D	2	0	LZ319	9	29						
D	9	0		9	29						

N153



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
D	2	0	LZ329	9	29	L	2	3	6	41	
D	9	0		9	29	L	9	0	1	61	
E	2	0	M8079	6	6						
E	7	0		6	6						
E	6	0	M8080	6	24						
E	5	0	M8081	6	6	L	5	0	1	49	
E	6	0		6	6	L	6	0	4	49	
D	1	0	M8083	6	6						
C	8	0	M8096	6	25						
E	1	0	M8100	6	7	L	1	6	5	49	
D	2	0	M8136	12	25	L	2	0	1	67	
D	7	0		12	25	L	7	0	6	67	
F	2	0	M8137	12	25	K	2	0	1	78	
F	7	0		12	25	K	7	0	6	78	
E	2	0	M8161	6	6						
E	2	0	M8162	12	25	L	2	0	1	40	
E	7	0		12	25	L	7	0	6	40	
E	1	0	M8196	6	6	L	1	6	5	57	
E	2	0	M8212	6	6						
E	7	0		6	6						
D	5	0	M8232	6	15	L	5	0	7	38	
C	1	0	M8245	6	13						
F	5	0	N14	1	1						
E	5	0	N15	1	2						
(Normal Shorts 2, H-K)											
F	5	0	N16	1	2						
F	3	0	N17	3	22						
(Normal Shorts 2, 6)											
F	3	0	N18	3	22						
F	5	0	N19	3	22						
G	5	0	N25	3	22						
C	1	0	N77	6	29						
C	1	0	N78	6	29						
C	2	0	N119	45	24						
(Normal Shorts 6, 7, 8, 9)											
C	1	0	N144	6	6						
F	5	0	N147	6	1						
C	2	0	N152	21	24						
(Normal Shorts 6, 7)											
C	2	0	N153	15	29						

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
C	2	0	N154	16	27	M	2	9	7	40
(Normal Shorts 8)										
C	2	0	N155	6	26					
C	2	0	N329	16	27					
C	2	0	N359	21	24					
(Normal Shorts 6, 7)										
C	3	0	N369	16	29	M	3	7	6	45
B	1	0		16	29	K	1	0	9	70
C	2	0	N379	15	24	M	2	9	7	47
(Normal Shorts 6, 7)										
C	2	0	N707	6	24					
C	2	0	N709	6	24	M	2	9	7	29
C	1	0	N727	6	13	M	1	6	5	52
J	6	2	N2ED	6	10					
(Disregard Shorts except H-K)										
A	1	0	N22LL	19	20					
F	2	0	OBC3	12	2					
G	4	0		12	2					
G	5	0		12	2					
E	10	0	OF1	6	1					
E	5	0	OH4	12	1					
E	10	0	OM6	6	1					
E	5	0	OM10	6	1					
E	1	0	OMO5	6	7					
C	4	0	OSW2601	6	1	M	4	6	8	28
D	4	0	OSW3111	6	1					
F	8	0	PABC80	9	29					
G	6	0		9	29					
G	2	0		9	29					
G	1	0		9	29					
E	6	0	PC86	4	23	L	6	0	1	20
(Normal Shorts 3, 7)										
E	2	0	PC97	4	13	L	2	0	5	32
E	1	0	PC900	4	7					
E	2	0	PCC84	7	27					
E	6	0		7	27					
E	2	0	PCC85	9	29					
E	7	0		9	29					
D	2	0	PCC88	7	29	L	2	0	1	32
D	7	0		7	29	L	7	0	6	32

EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
D	2	0	PCC89	7	29					
D	6	0		7	29					
(Normal Shorts 7, 8)										
E	2	0	PCC189	7	29	M	2	0	1	29
E	7	0		7	29	M	7	0	6	29
D	2	0	PCF80	9	29	L	2	3	6	41
D	9	0		9	29	L	9	0	1	61
D	2	0	PCF82	9	29					
D	9	0		9	29					
D	2	0	PCF86	7	26					
D	6	0		7	26					
D	3	0	PCF200	8	30					
E	5	0		8	30					
D	3	0	PCF201	8	30					
D	10	0		8	30					
D	2	0	PCF801	8	26					
E	9	0		8	26					
D	8	0	PCH200	9	30					
E	3	0		9	30					
C	3	0	PCL82	16	29	M	3	7	6	62
E	1	0		16	29	K	1	0	9	70
C	9	0	PCL83	12	29					
G	2	0		12	29					
D	1	0	PCL84	15	29					
D	8	0		15	29					
C	9	0	PCL85	18	29					
E	2	0		18	29					
C	8	0	PCL86	14	29					
G	1	0		14	29					
E	10	0	PF9	6	1					
D	1	0	PFL200	16	30					
C	8	0		16	30					
E	5	0	PH4	6	1					
C	5	0	PL36	25	4					
C	2	0	PL81	22	24					
(Normal Shorts 6, 7)										
C	2	0	PL82	16	27	M	2	9	7	40
C	2	0	PL83	15	29					
C	2	0	PL84	15	24	L	6	0	1	28
(Normal Shorts 6, 8)										
C	2	0	PL87	16	27					
(Normal Shorts 8)										

U70



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
B	3	0	U70	6	1						
B	5	0		6	1						
B	5	0	U74	35	1						
B	5	0	U76	35	1						
B	1	0	U78	6	6						
B	6	0		6	6						
A	9	0	U119	38	24						
(Disregard Shorts except H-K)											
B	3	0	U147	6	1						
B	5	0		6	1						
B	3	0	U149	6	19						
B	6	0		6	19						
A	9	0	U152	19	27						
(Disregard Shorts except H-K)											
A	9	0	U153	17	27						
(Disregard Shorts except H-K)											
A	9	0	U154	19	27						
(Disregard Shorts except H-K)											
A	9	0	U192	19	27						
(Disregard Shorts except H-K)											
A	5	0	U291	29	4						
A	9	0	U319	19	27						
(Disregard Shorts except H-K)											
A	9	0	U381	38	24						
(Disregard Shorts except H-K)											
B	1	0	U707	6	6						
B	6	0		6	6						
A	1	0	U709	6	23						
A	7	0		6	23						
F	5	0	U4020	2	1						
E	2	0	UAA91	12	6						
E	7	0		12	6						
F	8	0	UABC80	28	29						
G	6	0		28	29						
G	2	0		28	29						
G	1	0		28	29						
F	2	0	UBC81	14	25						
G	6	0		14	25						
E	2	0	UBF80	17	29						
G	7	0		17	29						
G	8	0		17	29						

W17



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F	
E	2	0	UBF89	19	29						
G	7	0		19	29						
G	8	0		19	29						
E	6	0	UC92	9	7						
E	2	0	UCC85	26	29						
E	7	0		26	29						
D	2	0	UCF80	27	29						
D	9	0		27	29						
D	2	0	UCH80	14	29						
F	9	0		14	29						
E	2	0	UCH81	19	29						
F	9	0		19	29						
C	3	0	UCL82	50	29	M	3	0	9	62	
E	1	0		50	29	K	1	7	6	70	
C	9	0	UCL83	38	29						
E	2	0		38	29						
C	8	0	UCL86	43	29						
D	2	0		43	29						
D	2	0	UF80	19	24						
D	2	0	UF85	19	24						
D	2	0	UF89	12	27						
C	2	0	UL84	45	24						
(Normal Shorts 6, 7, 8, 9)											
F	5	0	UR1C	2	1						
A	1	0	UU12	6	18						
A	7	0		6	18						
A	9	0	UY42	50	29						
A	9	0	UY82	55	24						
(Disregard Shorts except H-K)											
A	9	0	UY85	38	24						
(Disregard Shorts except H-K)											
B	1	0	V2M70	6	6						
B	6	0		6	6						
C	6	0	V741	6	7						
(Normal Shorts 1, 5)											
E	1	0	V884	6	6						
D	1	0	V886	6	4						
E	1	0	VP6	6	6						
F	10	0	VP12D	12	1						
G	5	0		12	1						
G	4	0		12	1						
F	6	0	W17	1	22						



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
G	6	0	W25	1.5 22						
E	10	0	W61	6 1						
E	10	0	W63	6 1						
E	10	0	W76	12 1						
E	1	0	W77	6 6						
E	10	0	W147	6 1						
E	6	0	W149	6 19						
D	2	0	W179	6 29						
C	1	0	W719	6 2						
C	4	0		6 2						
D	1	0	W727	6 6	L	1	6	5	61	
F	2	0	WD709	6 29						
G	7	0		6 29						
G	8	0		6 29						
G	5	0	X14	1 1						
F	4	0	X17	1 22						
F	4	0	X18	1 21						
F	4	0	X20	1 21						
F	4	0	X25	1 21						
E	5	0	X63	6 1						
E	10	0	X64	6 3						
E	5	0	X65	6 1						
E	5	0	X66	6 1						
E	5	0	X71M	12 1						
E	5	0	X75	12 1						
E	5	0	X76M	12 1						
D	1	0	X77	6 6						
E	2	0	X79	6 29						
F	7	0		6 29						
E	2	0	X119	19 29						
F	9	0		19 29						
E	2	0	X155	6 29						
E	7	0		6 29						
E	2	0	X719	6 29	L	2	1	6	69	
E	9	0		6 29	L	9	0	8	65	
D	1	0	X727	6 6						
E	2	0	XC95	2 13	L	2	0	5	32	
E	2	0	XC97	2.5 13						
E	1	0	XC900	2 7						



EMISSION			TUBE No. ↓	FIL A SKT	MUTUAL CONDUCTANCE					
B	C	D			B	C	D	E	F	
D	2	0	XCC82	7 25	L	2	0	1	67	
D	7	0		7 25	L	7	0	6	67	
D	2	0	XCC189	4 29	M	2	0	1	29	
D	7	0		4 29	M	7	0	6	29	
D	2	0	XCF80	4 29	L	2	3	5	41	
D	9	0		4 29	L	9	0	1	52	
D	2	0	XCF86	5 26						
D	6	0		5 26						
E	2	0	XCH81	3 29	L	2	1	6	69	
E	9	0		3 29	L	1	6	5	49	
C	3	0	XCL82	8 29	M	3	7	6	36	
F	1	0		8 29	K	1	0	9	71	
C	9	0	XCL85	9 29						
E	2	0		9 29						
D	2	0	XF80	3 24	L	2	8	7	37	
D	2	0	XF85	3 24						
D	2	0	XF183	3 24	L	2	8	7	11	
D	2	0	XF184	3 24	L	2	8	7	15	
A	5	0	XL36	12 4						
C	2	0	XL84	8 24	M	2	9	7	29	
(Normal Shorts 6, 8)										
C	2	0	XL86	8 24						
C	2	0	XL184	8 24						
C	2	0	XL186	8 24						
(Normal Shorts 6, 8)										
E	4	0	XXD	14 19						
E	5	0		14 19						
F	3	0	XXFM	6 19						
G	5	0		6 19						
G	6	0		6 19						
A	3	0	XY88	16 23						
(Disregard Shorts except H-K)										
E	2	0	YC95	3 13	L	2	0	5	32	
E	2	0	YC97	3 13	L	2	0	5	32	
D	2	0	YCC189	5 29	M	2	0	1	29	
D	7	0		5 29	M	7	0	6	29	
D	2	0	YF183	4 24	L	2	8	7	11	
D	2	0	YF184	4 24	L	2	8	7	15	
F	10	0	Z14	1 1						
F	10	0	Z63	6 1						
D	1	0	Z77	6 6						

ZD152



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F
D	2	0	Z152	6	29	L	2	8	7	37
D	2	0	Z179	6	29					
D	2	0	Z719	6	29	L	2	8	7	37
F	9	0	Z729	6	29	K	9	1	6	76
(Disregard Shorts 2, 7)										
G	6	0	ZD17	1	21					
H	3	0		1	21					
G	6	0	ZD25	1.5	21					
H	3	0		1.5	21					
F	2	0	ZD152	6	29					
G	7	0		6	29					
G	8	0		6	29					



EMISSION			TUBE No. ↓	FIL		MUTUAL CONDUCTANCE				
B	C	D		A	SKT	B	C	D	E	F



EMISSION			TUBE No. 	FIL	MUTUAL CONDUCTANCE					
B	C	D		A	SKT	B	C	D	E	F



EMISSION	TUBE No.	FIL	MUTUAL CONDUCTANCE
B C D		A SKT	B C D E F