

February 15, 1961

POWER AMPLIFIER TRIODE TYPE 7748

The type 7748 is a three electrode tube designed for service as an oscillator, amplifier or modulator in Class B & C operation. The anode is water cooled with an integral water jacket and is capable of dissipating 35 kilowatts during C.C.S. The cathode is a thoriated tungsten filament which may be operated either with d-c or single-phase a-c. Maximum ratings apply to 30 megacycles.

ELECTRICAL:

Cathode.....	Thoriated Tungsten Filament
Filament:	
Voltage.....	8.0 Volts
Current.....	150 Amperes
Minimum Heating Time.....	15 Seconds
Amplification Factor.....	20
Direct Interelectrode Capacitances:	
Grid to Plate.....	79 μft
Grid to Filament.....	71 μft
Plate to Filament.....	4 μft

MECHANICAL:

Mounting Position.....	Vertical, Anode Down
Type of Cooling.....	Water
Water Flow Required.....	30 GPM
Static Pressure (at 30 GPM).....	8 PSI
Maximum Outlet-Water Temperature.....	70 °C
Maximum Grid and Filament Seal Temperature.....	180 °C
Net Weight.....	18 Pounds

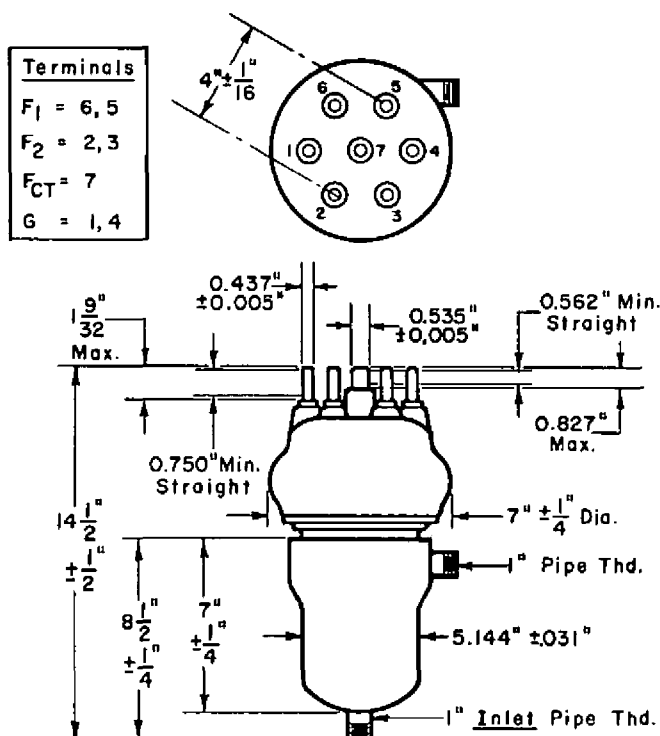
MAXIMUM RATINGS:

Absolute Maximum Values

DC Plate Voltage.....	12.5 max.	Kilovolts
DC Plate Current.....	10 max.	Amperes
DC Grid Voltage.....	-3000 max.	Volts
DC Grid Current.....	1.25 max.	Amperes
Plate Power Input.....	80 max.	Kilowatts
Plate Dissipation.....	35 max.	Kilowatts

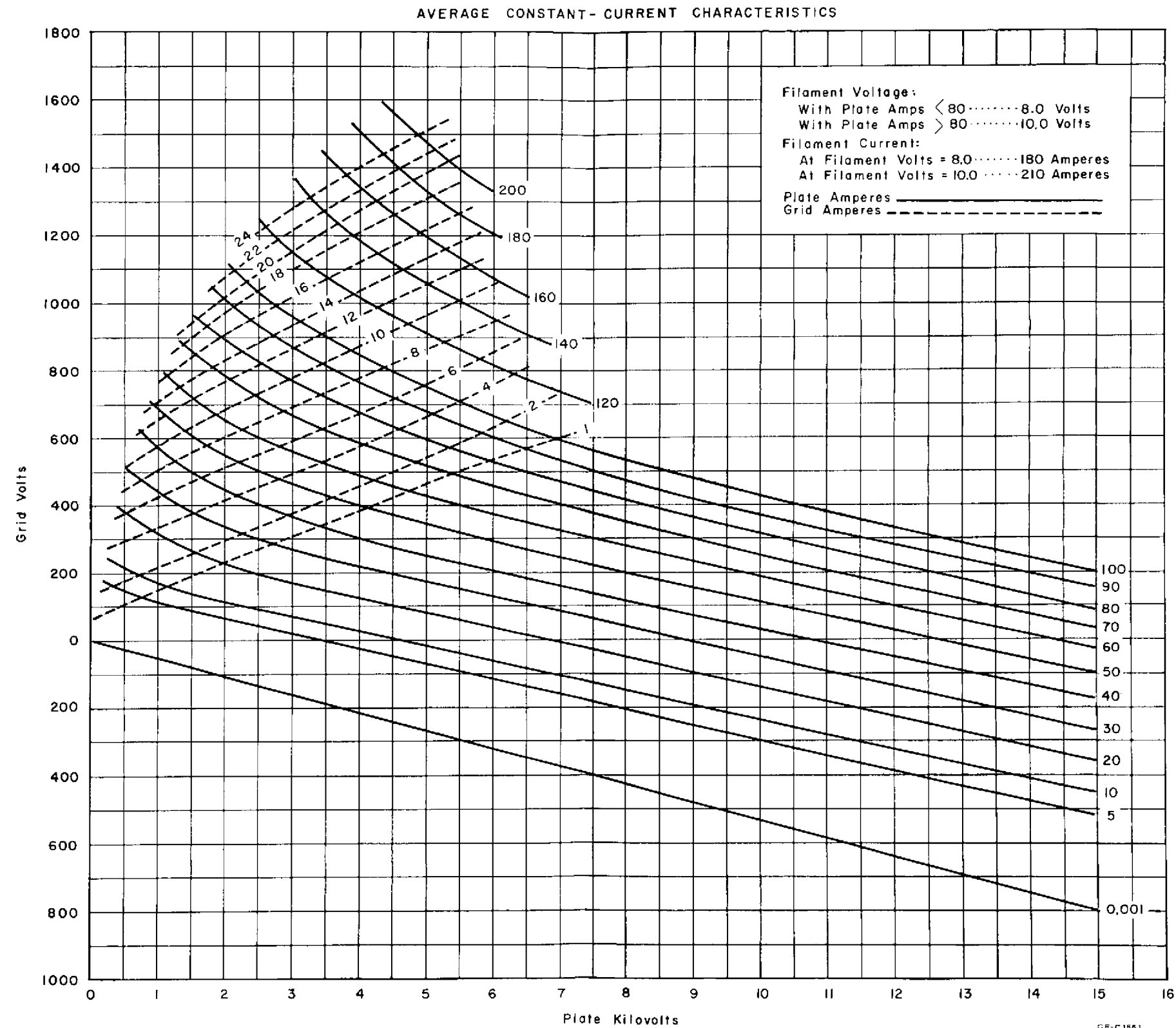
TYPICAL OPERATING CHARACTERISTICS:

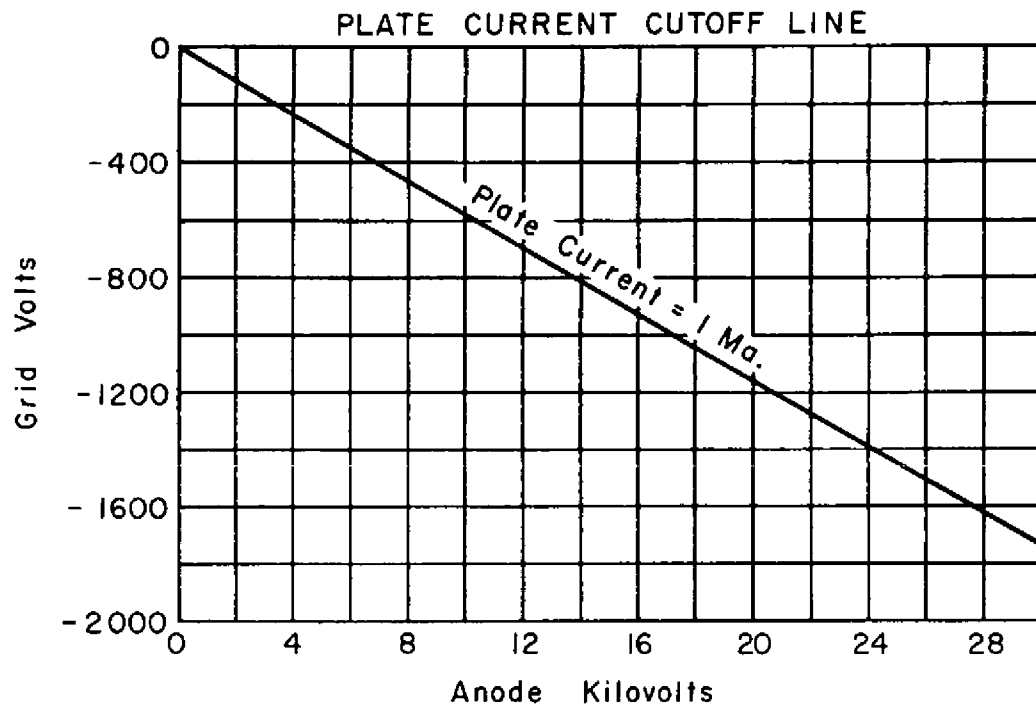
DC Plate Voltage.....	7500	10000	12500	Volts
DC Grid Voltage.....	-800	-1100	-1300	Volts
Peak R.F. Grid Voltage.....	1250	1500	1700	Volts
DC Plate Current.....	5.5	4.7	4.25	Amperes
DC Grid Current.....	0.875	0.58	0.59	Amperes
Driving Power.....	1050	850	970	Watts
Power Output.....	33.5	40	46.5	Kilowatts



High Vacuum Amplifier Section

WESTINGHOUSE ELECTRIC CORPORATION, ELECTRONIC TUBE DIVISION, ELMIRA, NEW YORK





CE-A1675