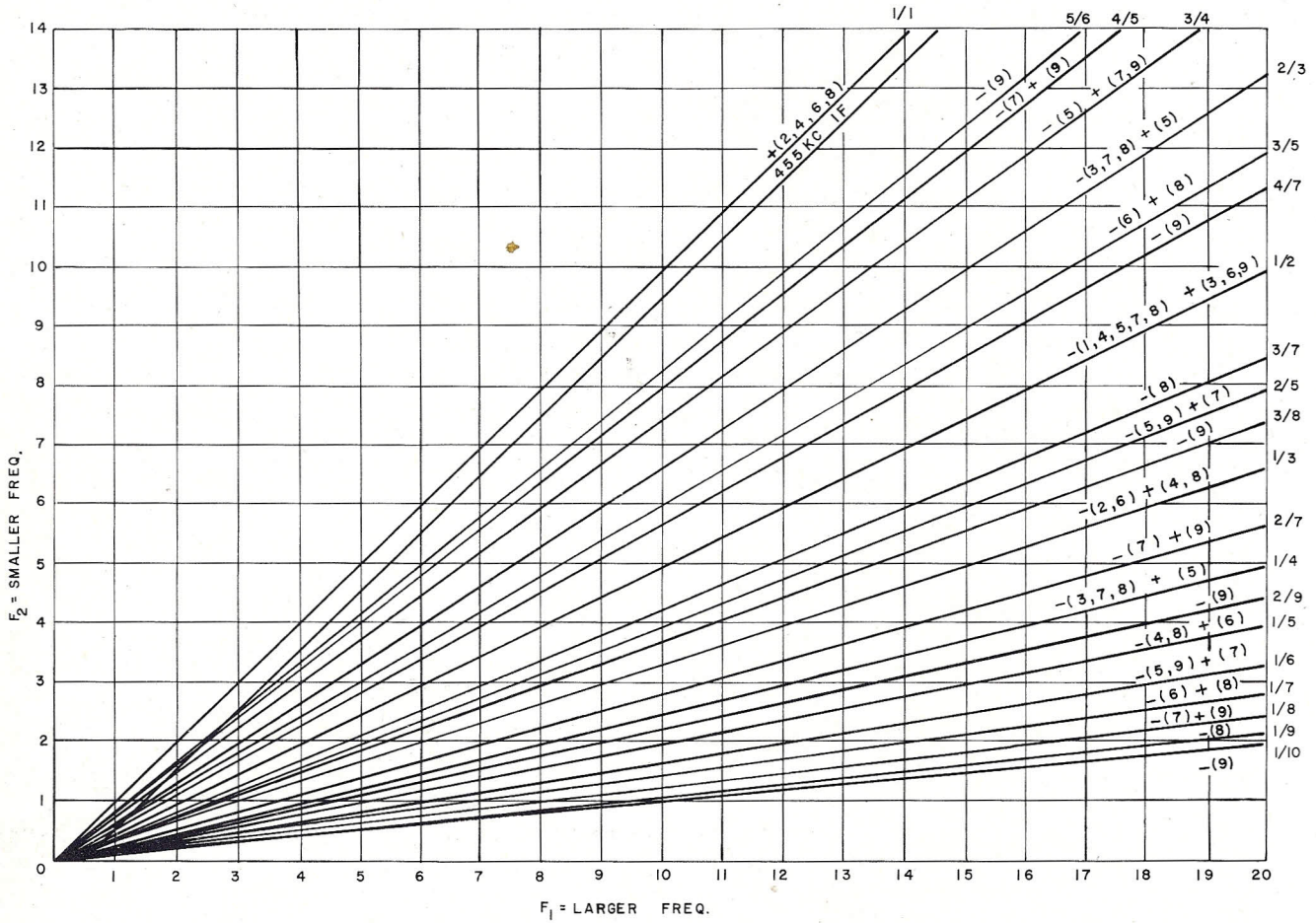


TABLE 2-2. SPURIOUS RESPONSE CHART



ORDER	$F_2 \sim F_1$								
	1	2	3	4	5	6	7	8	9
1/1		•00 •02		•13 •31		•24 •42		•35 •53	
1/2	10		•12 •30	•31	•32	•33 •51	52	53	•54 •72
1/3		20		•22 •40		•42 •51		53	•71
1/4			30		•32 •50		52	71	
1/5				40		•42 •60		62	
1/6					50		•52 •70		72
1/7						60		•62 •80	
1/8							70		•72 •90
1/9								80	
1/10									90
2/3			21		•23 •41		43	53	

ORDER	$F_2 \sim F_1$								
	1	2	3	4	5	6	7	8	9
2/5				41			•43 •61		63
2/7							61		•63 •81
2/9									81
3/4					32		•34 •52		54
3/5						42		•44 •62	
3/7								62	
3/8									72
4/5							43		•45 •63
4/7									63
5/6									54

* INDICATES SUM MIXING
OTHER - DIFF MIXING

TABLE 2-1. CALCULATED FREQUENCY PRODUCTS CONTAINED IN THE PLATE CURRENT OF A 12AU7 TRIODE MIXER

CALCULATED FREQUENCY PRODUCTS CONTAINED IN THE PLATE CURRENT OF A 12AU7 TRIODE MIXER

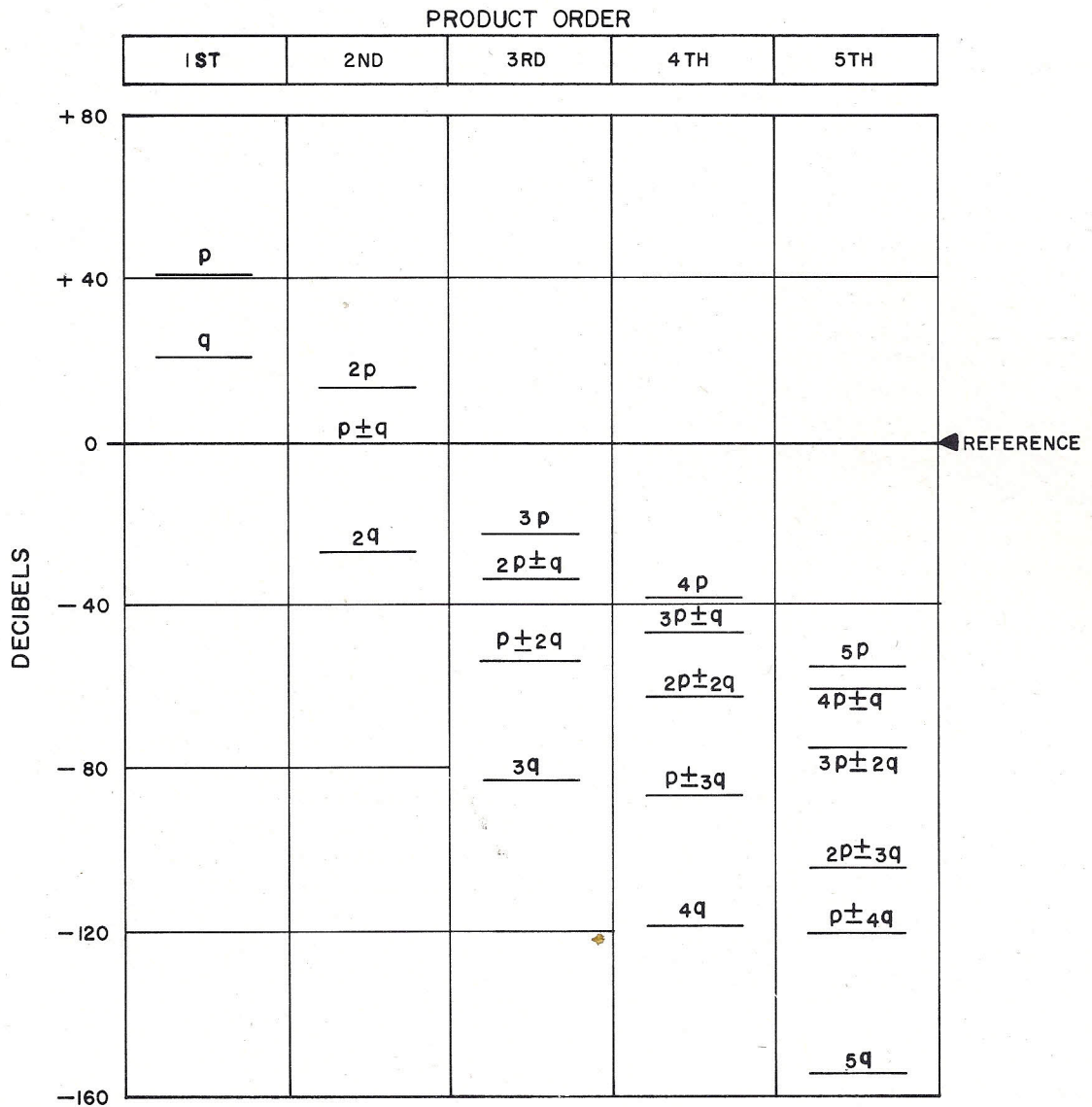
$$e_{osc} = P \cos pt = 2V_{rms} \quad e_{sig} = Q \cos qt = .2V_{rms}$$

$$E_b = 250V \quad E_k = 10V \quad E_{bb} = 415V \quad R_L = 10K$$

TABLE DERIVED FROM POWER SERIES EXPANSION

WHERE $e_{in} = P \cos pt + Q \cos qt$

ZERO DB REFERENCE IS MAGNITUDE OF $(p \pm q)$



COEFFICIENTS OF POWER SERIES FROM REPORT BY

DR. V.W. BOLIE DUAL TRIODE MIXERS 7/23/53

$$a_1 = 3.47 \times 10^{-4}, \quad a_2 = 1.47 \times 10^{-5}, \quad a_3 = 2.2 \times 10^{-7}, \quad a_4 = 3.7 \times 10^{-8}, \quad a_5 = 5.7 \times 10^{-9}$$