

Results:

(a) NF-105A measured carrier level as 24 volts.
 $(24)^2/50 = 11.52$ watts
 This is in good agreement with the 11.9 watts indicated by the RF wattmeter.

(b) Measured spurious outputs are tabulated below.
 For a mean power output of 14.4 watts, the maximum permissible spurious output relative to the carrier is:

$$4.3 + 10 \log(14.4) = 54.6 \text{ dB}$$

Frequency, Mhz	voltage	dB relative to carrier
41.05	300 uv	-98
61.575	2.4 mv	-80
82.10	1.2 mv	-86
113.0	.015 v	-64
123.15	24 v	0 (carrier)
133.85	.038 v	-56 (note 1)
164.2	240 uv	-100
246.3	24 mv	-60
369.45	24 mv	-60
492.6	19 mv	-62
615.75	3.8 mv	-76
738.9	4.8 mv	-74
862.05	850 uv	-89
985.2	6 mv	-72
1108.35	less than 2 mv	better than -80 (Note 2)
1231.5	less than 2 mv	better than -80 "

All other measured spurious outputs were better than -100 dB.

Notes: 1. 133.85 is receiver local oscillator frequency.
 2. Limit of spectrum analyzer sensitivity for level of "local oscillator" injection used was 2 mv.