

STANDARD C5800 LABORATORY TEST RESULTS

Test frequencies 145.000MHz (FM mode) 144.300 (SSB/CW)
Power supply voltage 13.8V unless otherwise stated
Deviation 3kHz (5kHz for selectivity measurements)

RECEIVER SECTION

FM sensitivity for 12dB SINAD (measured as PD)	0.18uV
SSB sensitivity for 12dB SINAD	0.15 uV
FM selectivity 12.5kHz either side of test frequency	-64dB/61dB
FM selectivity 25kHz either side of test frequency	72dB/73dB
RF intermodulation performance, two generators 25kHz and 50kHz away from RX frequency for 12dB SINAD on IM product, FM mode	0.7/0.4mV PD
SSB selectivity at -6dB and -60dB	2.5kHz/5.6kHz bandwidth
RF intermodulation (SSB +50kHz, +100kHz) for S5 IM product (equivalent to 4.5uV PD)	.7.9mV
S Meter calibration characteristic FM mode S1/S5/S9/S9+20dB	0.35/2.0/3.2/4.5uV
S Meter calibration characteristic SSB mode S1/S5/S9/S9+20dB	2.2/4.5/7.9/14.1uV
Generator frequency shift for best SINAD at 145MHz	0.8kHz

TRANSMITTER SECTION

FM power output (high low setting)	23.7W/0.9W
FM power output (12V supply)	19.8W/0.9W
Maximum current consumption	5A
2nd and 3rd order harmonic products, full power FM mode	-63dB/-70dB re. carrier power
PEP SSB output power	35W PEP
As above but 12V	30W PEP
Dial calibration accuracy	-200Hz
FM deviation (peak transient/average peak)	6.4/5.2kHz
1750Hz toneburst accuracy	+20Hz
AF THD at 125mW audio output	3.2%
Audio power output, 8ohms at 10% THD	2.9W
Misuse survival. Infinite VSWR for 10s total (5s open circuit, 5s short circuit)	Satisfactory

OUR CONCLUSIONS

I had an opportunity to play around with the Standard C5800 before its despatch to the testing house and can confirm that it is a desirable little box. It compares equitably with the 2m multimodes from Yaesu (FT-480R) Trio (9130) and Icom (IC-290E). At £359 the price is on par and, with 35W of SSB on tap, the C5800 is the most powerful 2m multimode that we have tested to

date. Furthermore, the receiver sensitivity is just a nose ahead of the competition although I feel that the difference here is not significant.

There is of course a minus side. The strong signal handling characteristics were not outstanding and the Trio 9130 still comes out best in this respect. The shortfall in respect of the C5800 would not be noticed in day to day operation of the set and would only have real importance when operating

The review sample was loaned by Lee Electronics Ltd of Edgware Road, London.

The engineering section of the review was carried out at Angus McKenzie Laboratories

OUR OBSERVATIONS

At least as good as every other 2m multimode that we have tested. Top class

Once again, top of the pile although in theory, there is still room for improvement

Adequate but not stunning

As above

Dynamic range 90 dB. pretty good

OK, but doesn't compare with a decent HF transceiver

Dynamic range 65 dB in SSB mode. Not good but better than some

This S meter characteristic is a joke. Stick to audio reporting

The joke is wearing a bit thin

Satisfactory

Good

Excellent.
Excellent

Excellent

A bit on the high side

A bit off. Might not access some boxes

a contest from a crowded hilltop, or if another amateur sets up a station next door to you.

The SSB operating bandwidth is another detraction but unfortunately seems to be fairly general with VHF gear. Either the manufacturer cuts corners by specifying a cheap filter unit or, as is more likely, the manufacturer still has not come to grips with synthesiser design producing machines with noise sidebands all over the place. However, this must be put into perspective. Thankfully, the VHF bands are not as crowded as the HF ones and any shortfall will not be noticed in day to day operation.

G4JST