1.) The requested additional Grant notes requested are unusual, but acceptable. Please confirm that once manufactured, the firmware cannot be re-activated in the field.

Once manufactured, single band/dual band capability won't be changed. Normal firmware updates won't affect to this capability.

2.) The Schematics are only one page, and do not seem to be complete. Only a single large scale IC is shown with a few additional support circuits. Is this all there is?

Schematics include TX, RX and synthesizer circuits, i.e. all radio frequency parts.

3.) Block Diagram does not seem to match supplied Schematic. Please review.

Actually, Block Diagram does match Schematics. Block Diagram just presents more detailed information of IC, which cannot be seen in Schematics.

4.) Test Report indicates collector voltage and collector current appear in manual. Please indicate where.

Collector voltage is 3.9V and collector current 1.9A (cellular) and 1.4A (PCS).

5.) Test Report indicates rated Pout is higher that reported Pout. Please explain.

Rated power refers to the GSM specification, which defines nominal power output. Since this specification allows some tolerances, rated power does not have necessarily anything to do with particular product measured. Instead of comparing reported power output to rated power output, it should be compared to tune-up procedure.

6.) The Test Report measurement description of radiated Pout seems a bit confusing. If you could refine this description, specifically that involving Et – Es it would be appreciated. Perhaps a sample calculation would clarify. Please explain

Radiated power peak value of tested device was first sought by rotating turntable and raising/lowering mast. Maximum field strength level was recorded as E_T. After this tested device was replaced with substitution antenna, which was fed by signal generator using the same modulation used by tested device. Peak value was again sought by raising/lowering the mast only and maximum field strength level was recorded as E_S.

Now radiated power output can be calculated from

$P_{OUT} = P_F + E_T - E_S + Gain_{Ant}$, where

P_F is conducted power fed into substitution antenna.
E_T is field strength level received from tested device, dBuV/m
E_S is field strength level received from substitution antenna, dBuV/m
$Gain_{Ant}$ is antenna gain

Full measurement data is presented in the table below.

Mode	Frequency, MHz	$Gain_{Ant}$	E_T	E_S	P_F	Power dBm	Power Watts
GSM850	824.2	0dBd	90.7	69.7	4.4	25.4 ERP	0.347 ERP
	836.4	0dBd	92.2	68.3	4.3	28.2 ERP	0.661 ERP
	848.8	0dBd	94.0	69.0	4.1	29.1 ERP	0.813 ERP
GSM1900	1850.2	-3.25dBi	87.2	52.8	0.4	31.6 EIRP	1.429 EIRP
	1880.0	-3.31dBi	86.7	53.8	0.0	29.6 EIRP	0.910 EIRP
	1909.8	-3.27dBi	86.7	52.5	-0.2	30.7 EIRP	1.183 EIRP

Some small rounding errors were found in GSM1900 results. Please update the new maximum power output for Part 24 in Form 731 accordingly.

7.) Antennas quoted for antenna substitution method are a biconical and a Roberts's style dipole. Neither antenna is capable of measurement in the PCS band. Please explain.

Used Seiberdorf precision biconical antenna is calibrated and capable to measure up to 2.5GHz with extremely flat frequency response.

8.) Measured -26dBc bandwidth is 243KHz, but requested necessary BW is 256KHz. Please explain.

As stated, 243kHz was the measured 99% OBW. However, traditionally it is requested to use a theoretical value of 256kHz in emission designator.

9.) The Field Strength of Spurious Radiation quotes the use of 10KHz RBW for frequencies below 1GHz. This measurement BW is smaller than the requested necessary BW for this device. Please explain.

There is a mistake in test report and amended page is uploaded. Used RBW was 100kHz, which in turn is higher than required in 22.917(h).