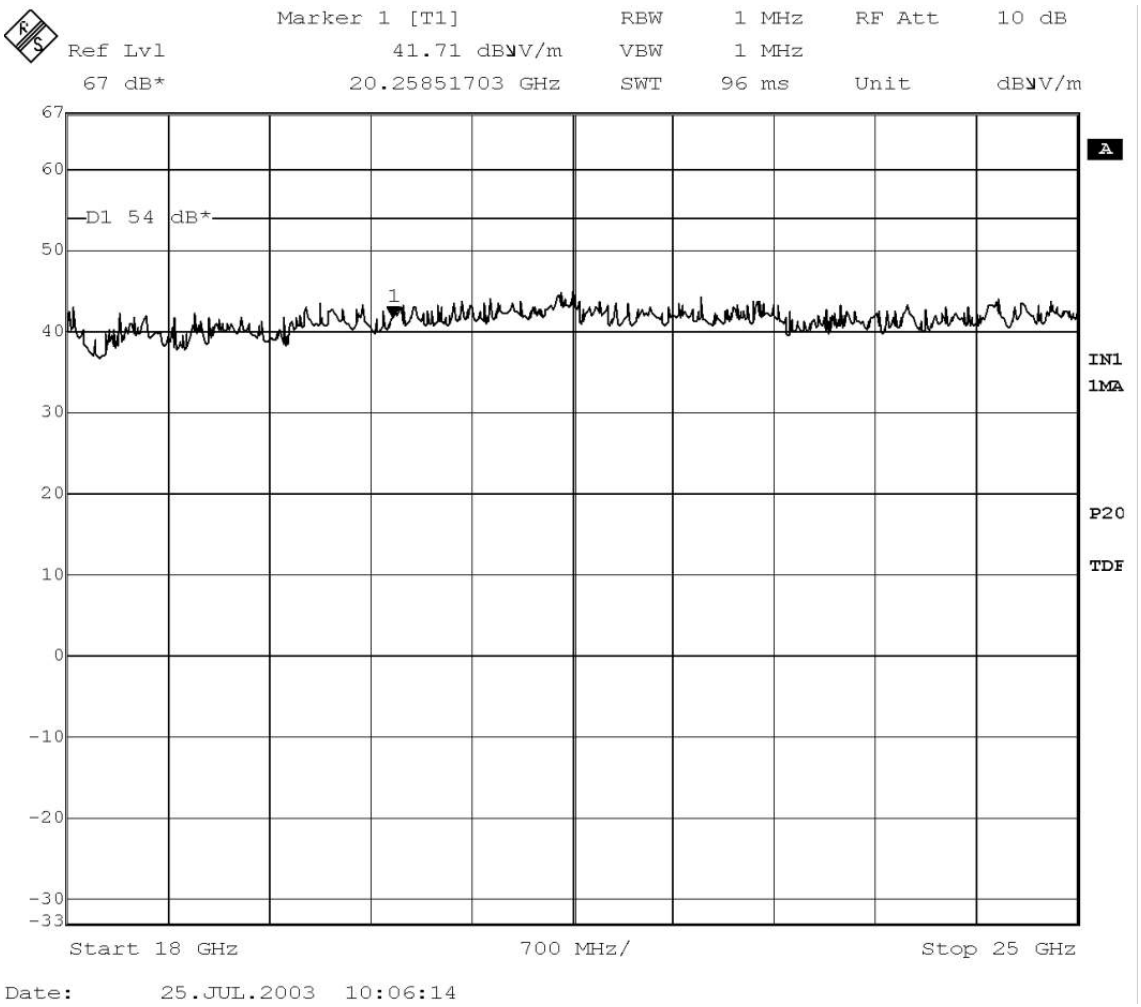
FREQUENCY RANGE 18 GHz to 25 GHz.



(This plot is valid for all three channels).

Section 15.109. Receiver spurious radiation

SPECIFICATION

The field strength shall not exceed the following values:

Frequency Range (MHz)	Field strength (µV/m)	Field strength (dBµV/m)	Measurement distance (m)
0.009-0.490	2400/F(kHz)	-	300
0.490-1.705	24000/F(kHz)	-	300
1.705 - 30.0	30	-	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
960 - 25000	500	54	3

The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table is specified when measuring with peak detector function.

RESULTS:

The situation and orientation was varied to find the maximum radiated emission. It was also rotated 360º and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in both horizontal and vertical planes of polarization.

All tests were performed in a semi-anechoic chamber at a distance of 3 m for the frequency range 30 MHz-1000 MHz and at distance of 1m for the frequency range 1 GHz-25 GHz.

The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

1. CHANNEL: LOWEST (2402 MHz).

Frequency range 30 MHz-1000 MHz.

Spurious frequency (MHz)	Polarization	Detector	Emission Level (dBµV/m)	Measurement Uncertainty (dB)
206.300	Horizontal	Quasi-peak	15.3	±3.8

Frequency range 1 GHz-25 GHz.

Spurious frequency (MHz)	Polarization	Detector	Emission Level (dBµV/m)	Measurement Uncertainty (dB)
1197.9962	Vertical	Peak	43.93	+1.92 / -1.68
1197.9962	Vertical	Average	31.11	+1.92 / -1.68

2. CHANNEL: MIDDLE (2441 MHz).

Frequency range 30 MHz-1000 MHz.

Spurious frequency (MHz)	Polarization	Detector	Emission Level (dBµV/m)	Measurement Uncertainty (dB)
187.700	Horizontal	Quasi-peak	18.6	±3.8

Frequency range 1 GHz-25 GHz.

Spurious frequency (MHz)	Polarization	Detector	Emission Level (dBµV/m)	Measurement Uncertainty (dB)
1220.8417	Vertical	Peak	44.26	+1.92 / -1.68
1220.8417	Vertical	Average	34.34	+1.92 / -1.68

3. CHANNEL: HIGHEST (2480 MHz).

Frequency range 30 MHz-1000 MHz.

Spurious frequency (MHz)	Polarization	Detector	Emission Level (dBµV/m)	Measurement Uncertainty (dB)
185.300	Horizontal	Quasi-peak	15.9	±3.8
224.300	Horizontal	Quasi-peak	19.1	±3.8

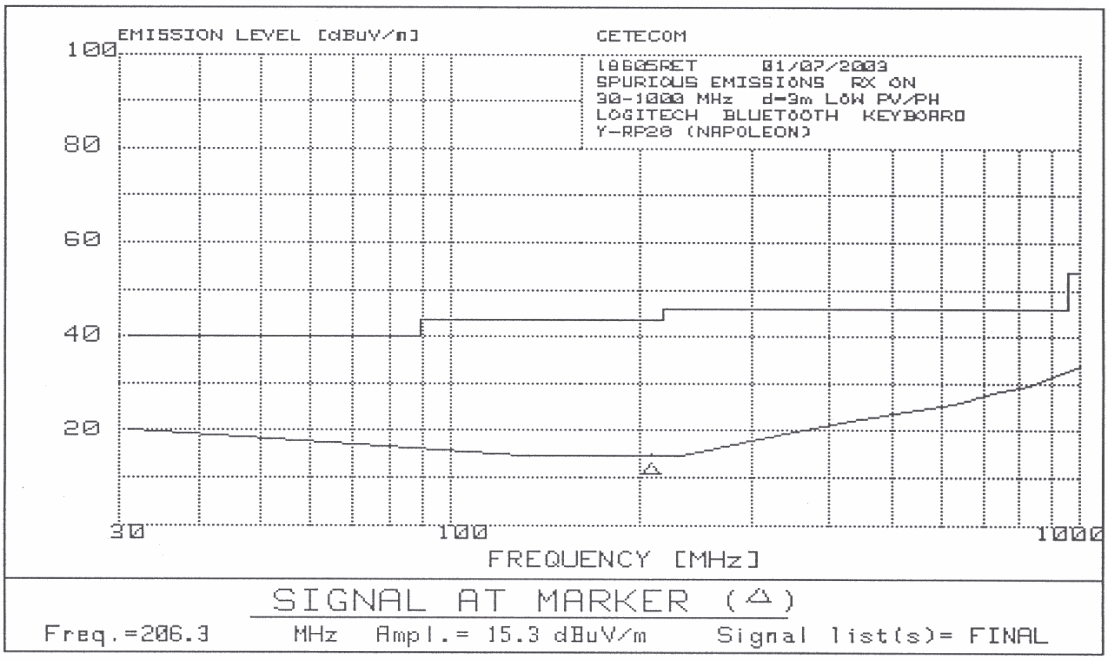
Frequency range 1 GHz-25 GHz.

Spurious frequency (MHz)	Polarization	Detector	Emission Level (dBµV/m)	Measurement Uncertainty (dB)
1239.8796	Vertical	Peak	42.45	+1.92 / -1.68
1239.8796	Vertical	Average	36.19	+1.92 / -1.68

Verdict: PASS

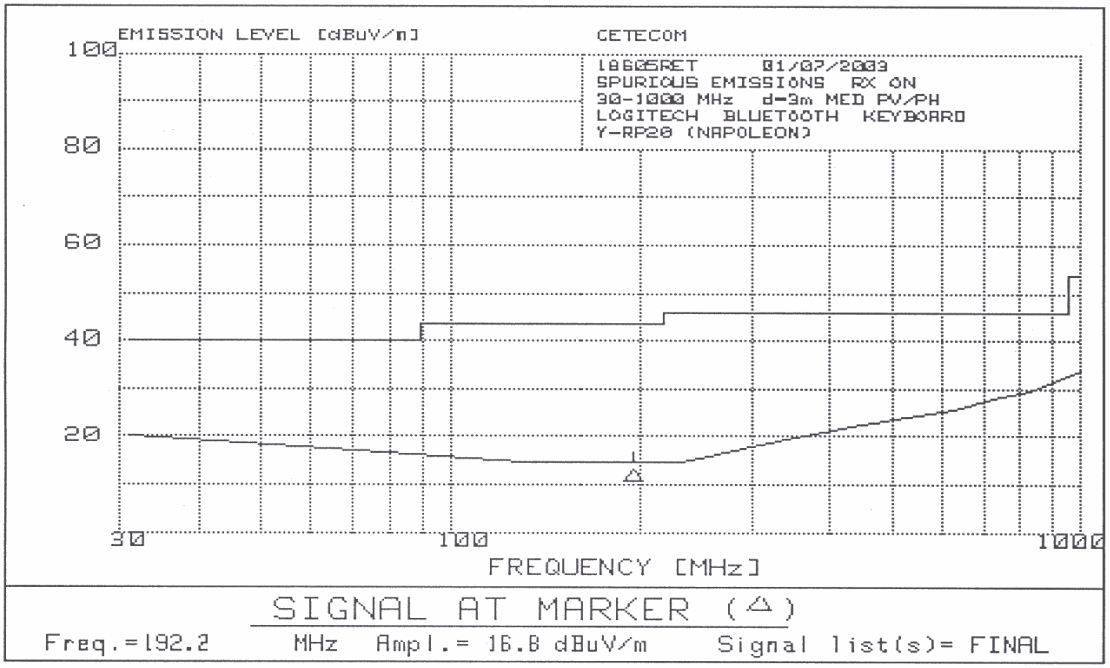
FREQUENCY RANGE 30 MHz-1000 MHz.

CHANNEL: Lowest (2402 MHz).



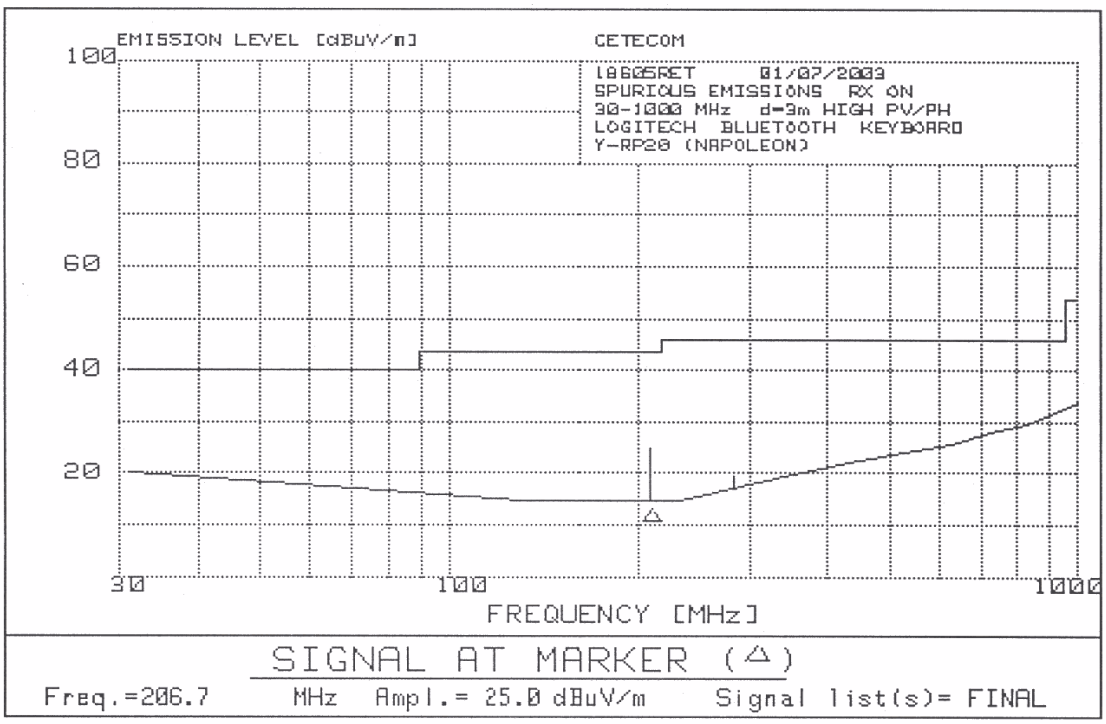
Resolution bandwidth = 100 kHz.
Video bandwidth = 100 kHz.

CHANNEL: Middle (2441 MHz).



Resolution bandwidth = 100 kHz.
Video bandwidth = 100 kHz.

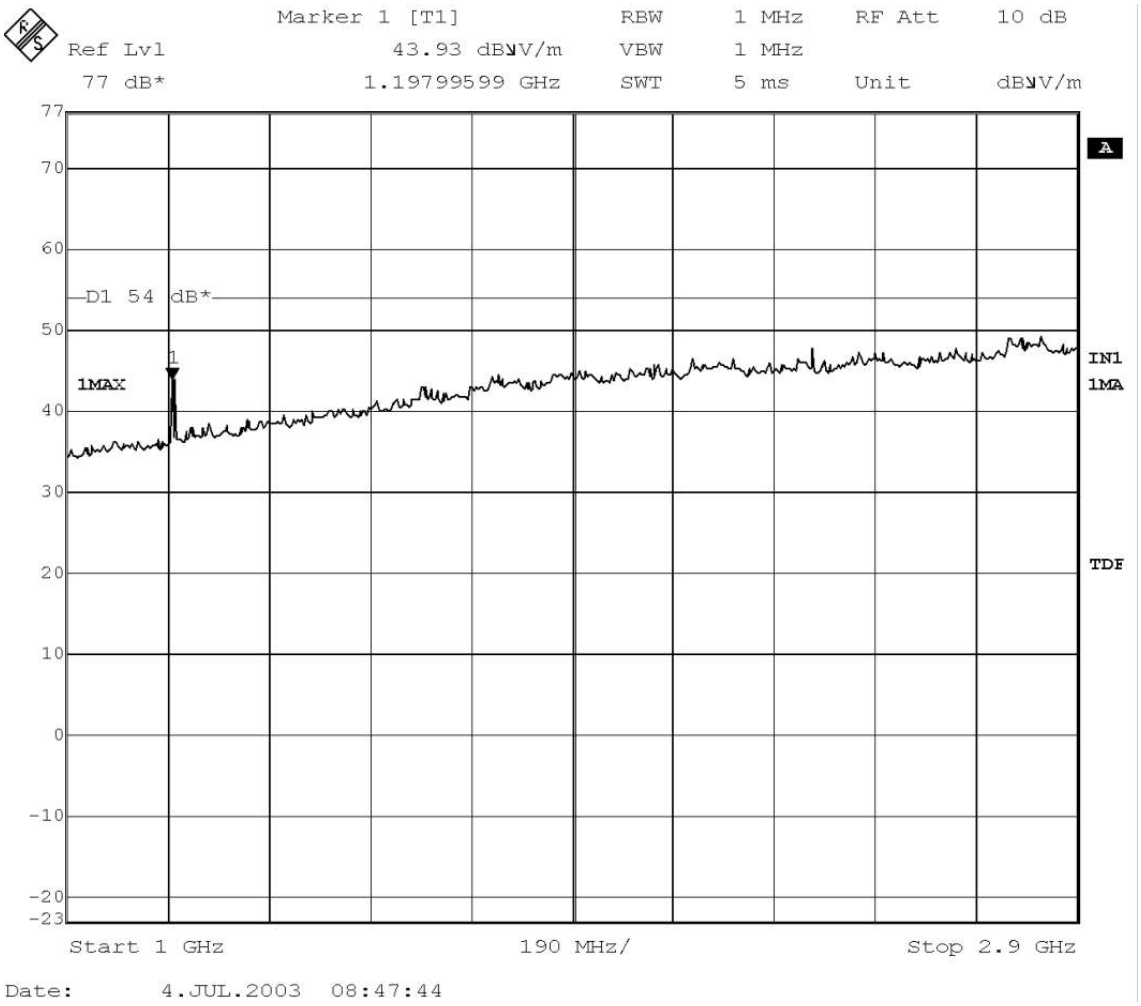
CHANNEL: Highest (2480 MHz).



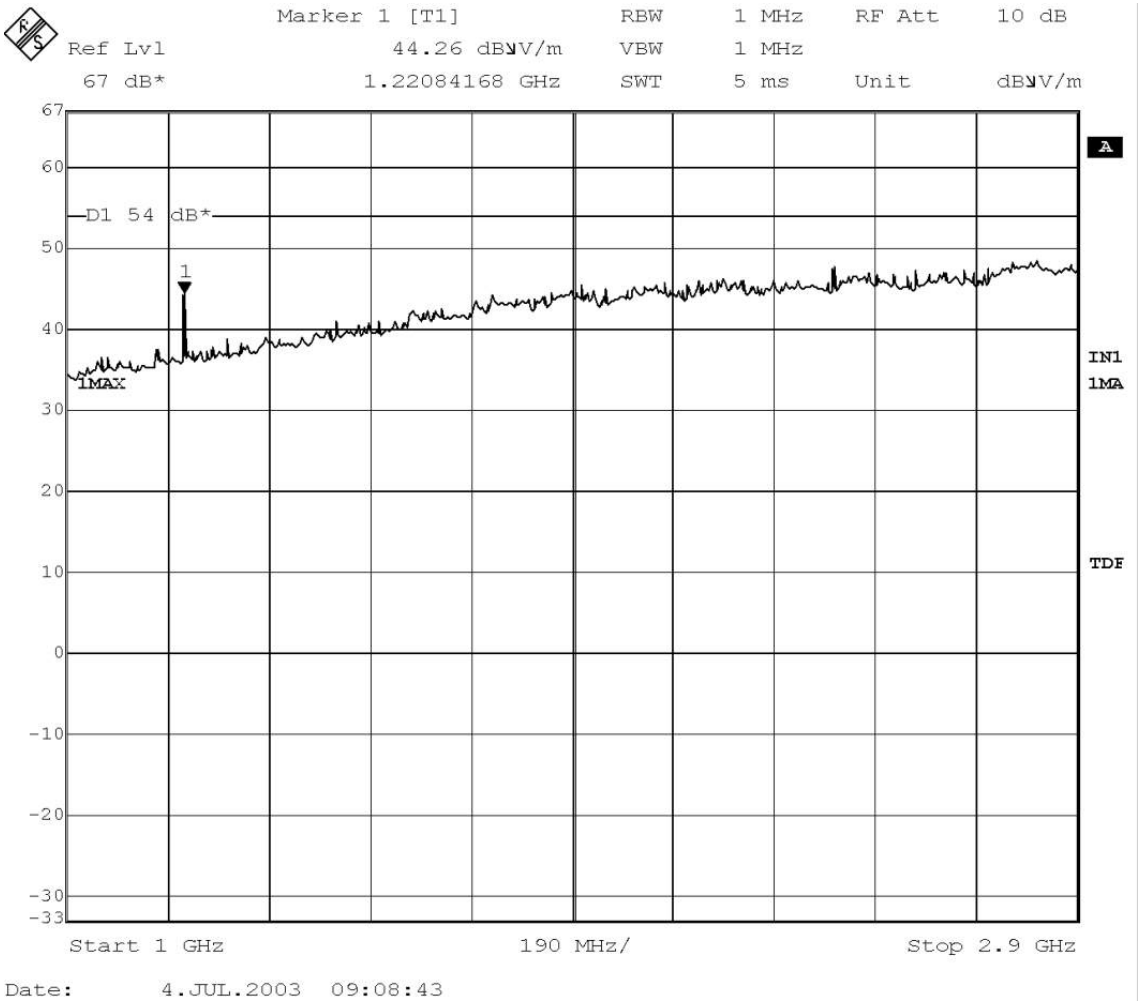
Resolution bandwidth = 100 kHz.
Video bandwidih = 100 kHz.

FREQUENCY RANGE 1 GHz-2.9 GHz.

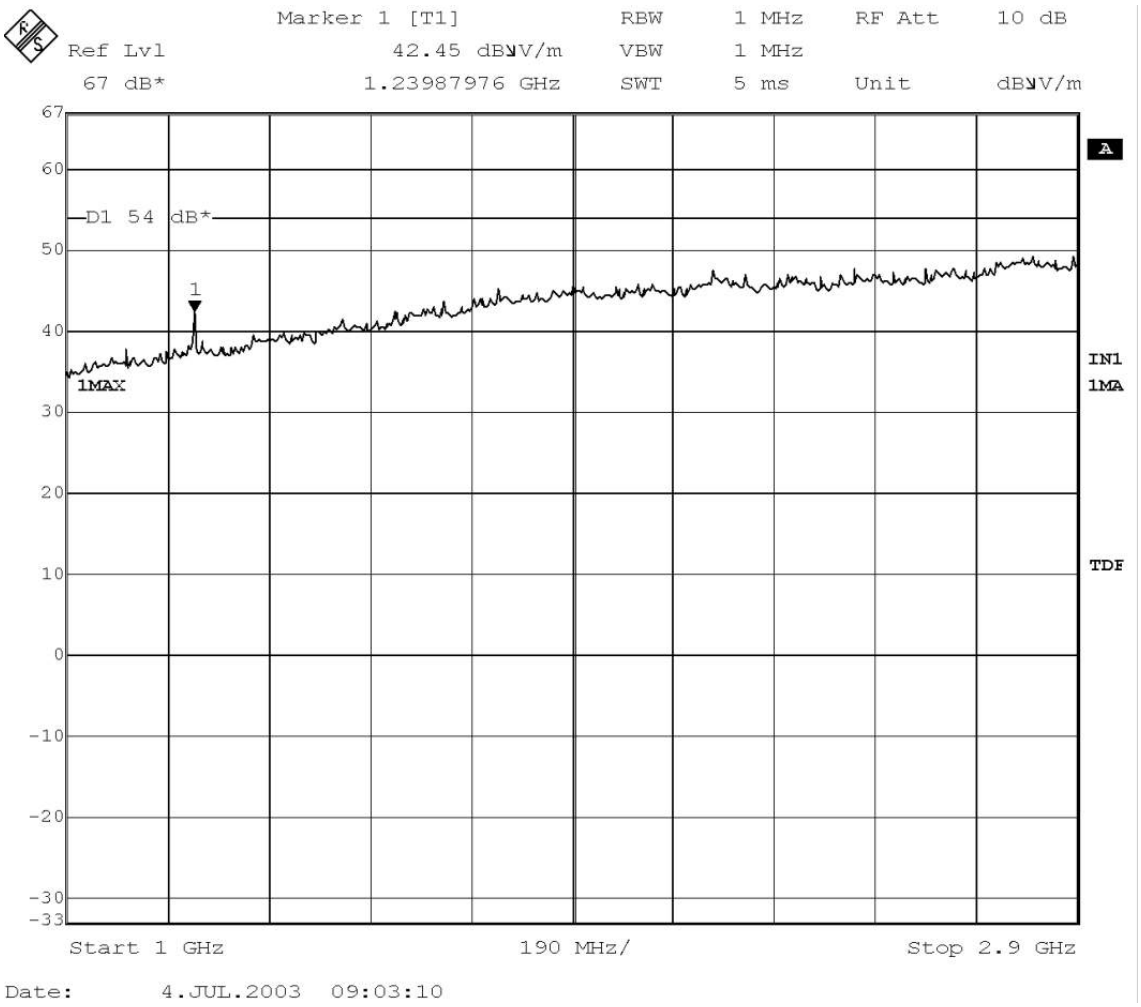
CHANNEL: Lowest (2402 MHz).



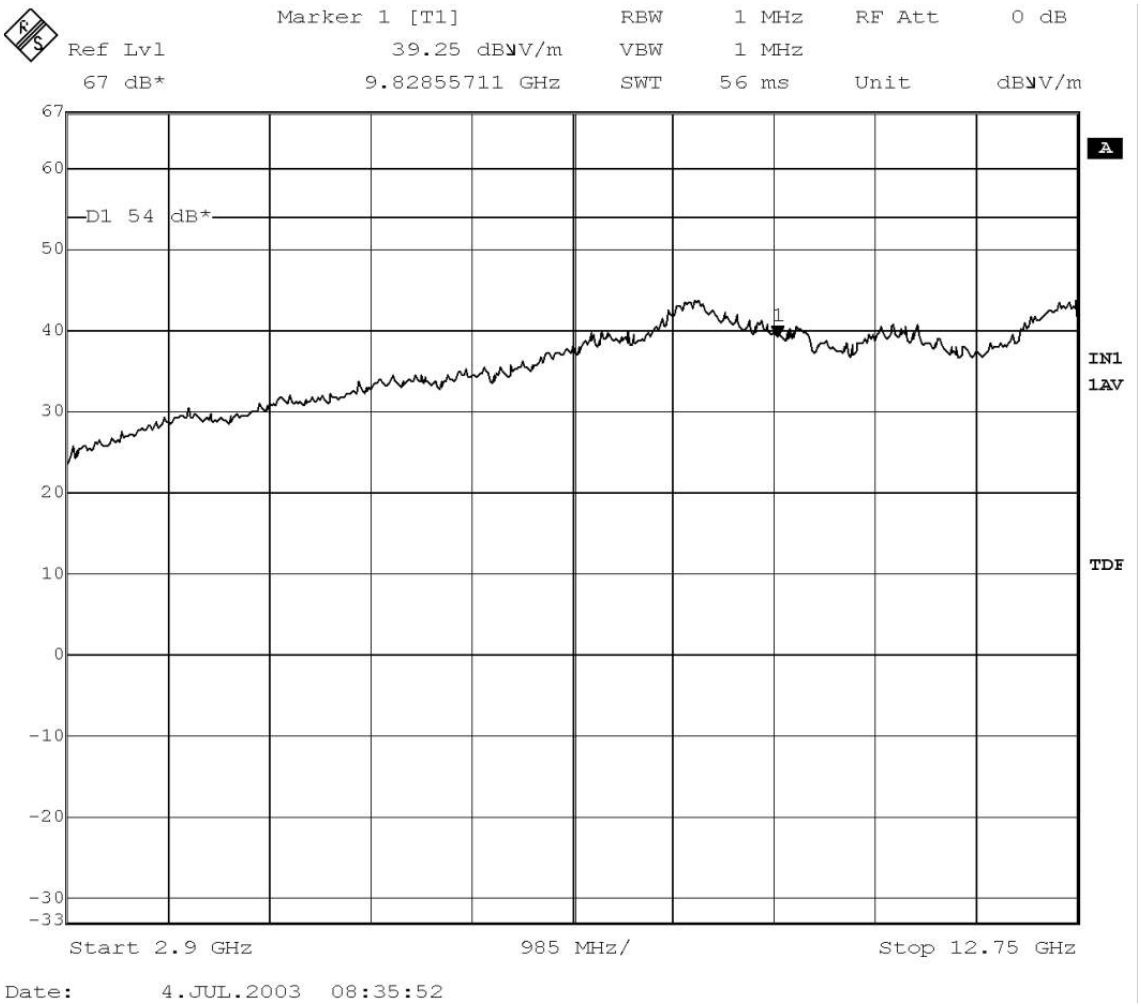
CHANNEL: Middle (2441 MHz).



CHANNEL: Highest (2480 MHz).

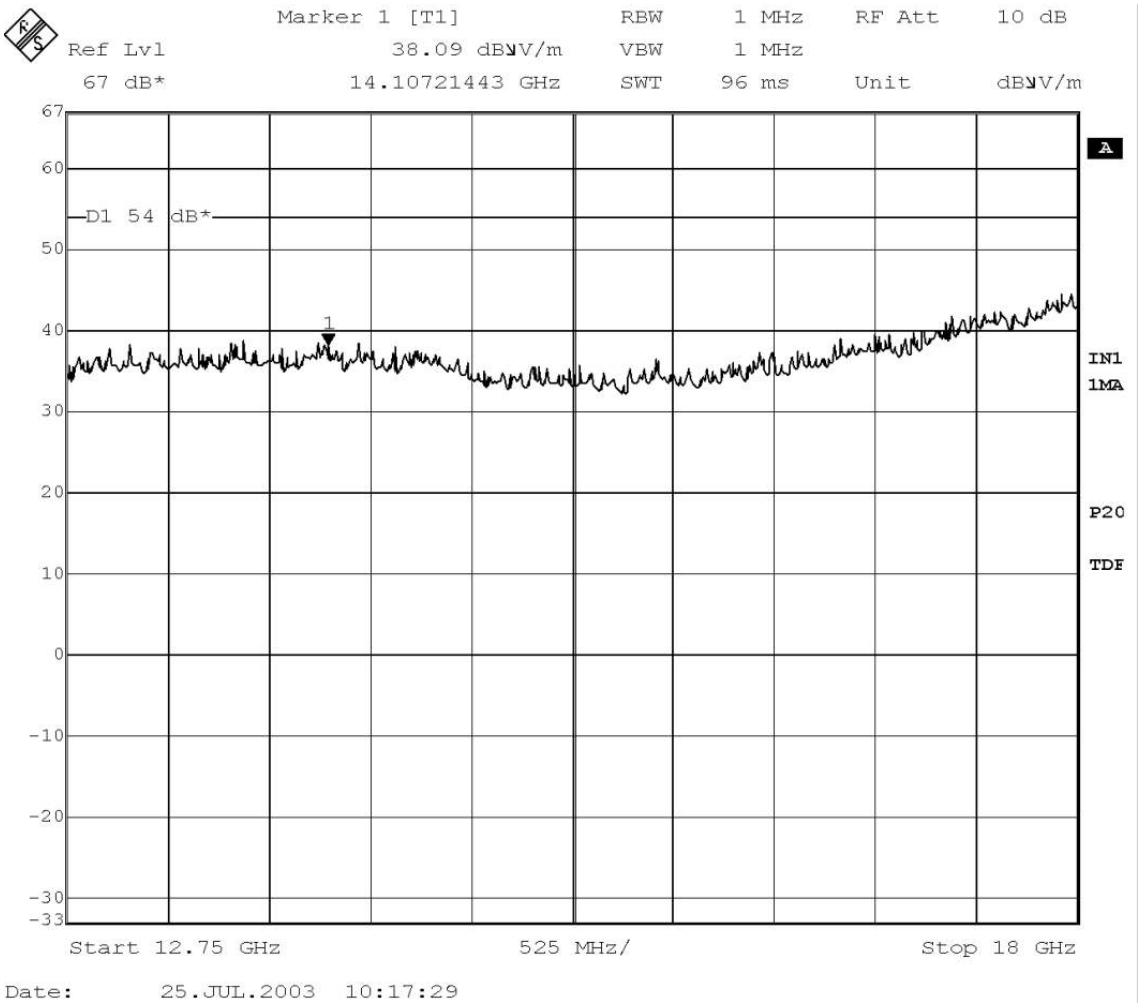


FREQUENCY RANGE 2.9 GHz-12.75 GHz.



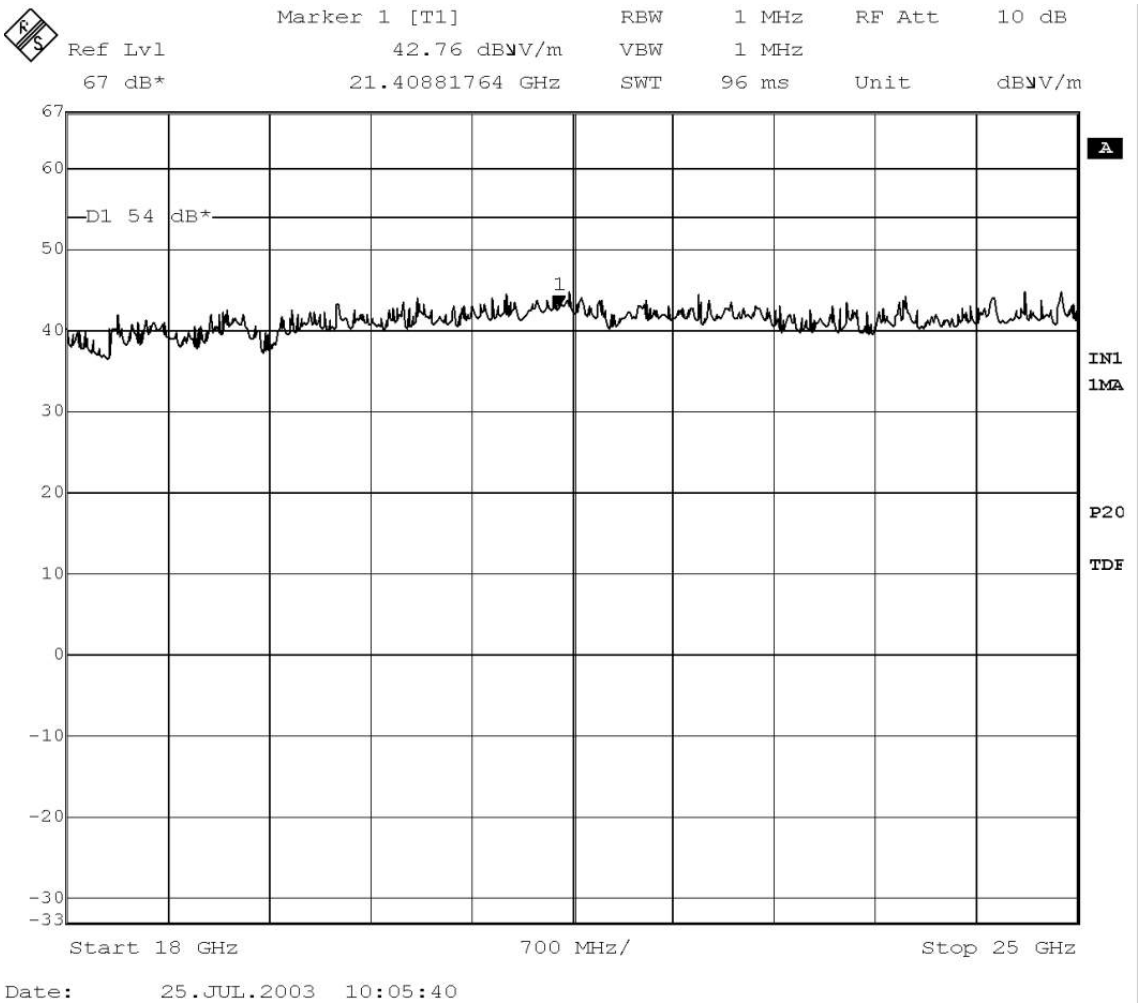
(This plot is valid for all three channels).

FREQUENCY RANGE 12.75 GHz-18 GHz.



(This plot is valid for all three channels).

FREQUENCY RANGE 18 GHz-25 GHz.



(This plot is valid for all three channels).

ANNEX B

PHOTOGRAPHS
(Number of photographs: 6)

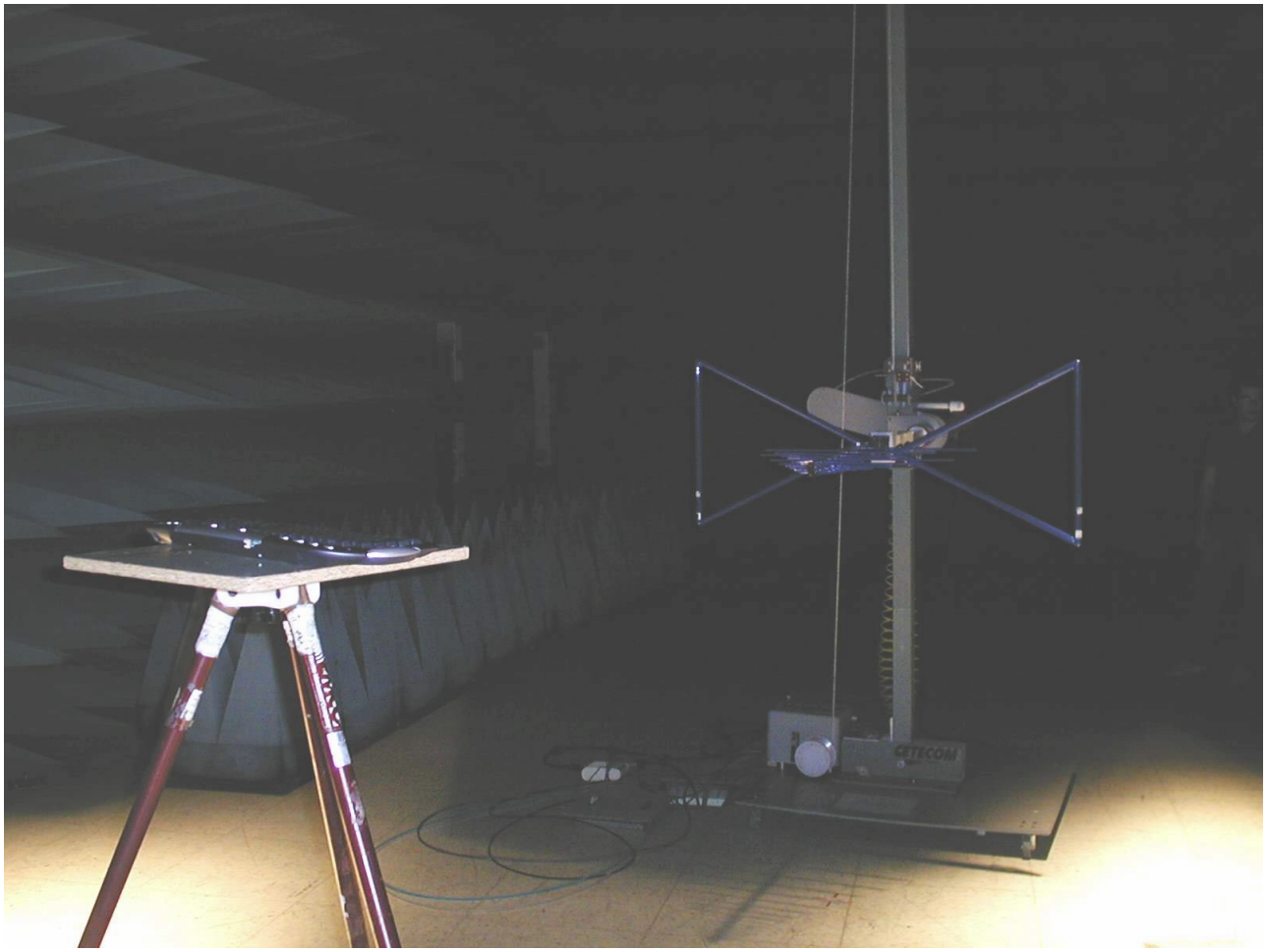
Report No.: 18605RET.101

1. Equipment (front view)

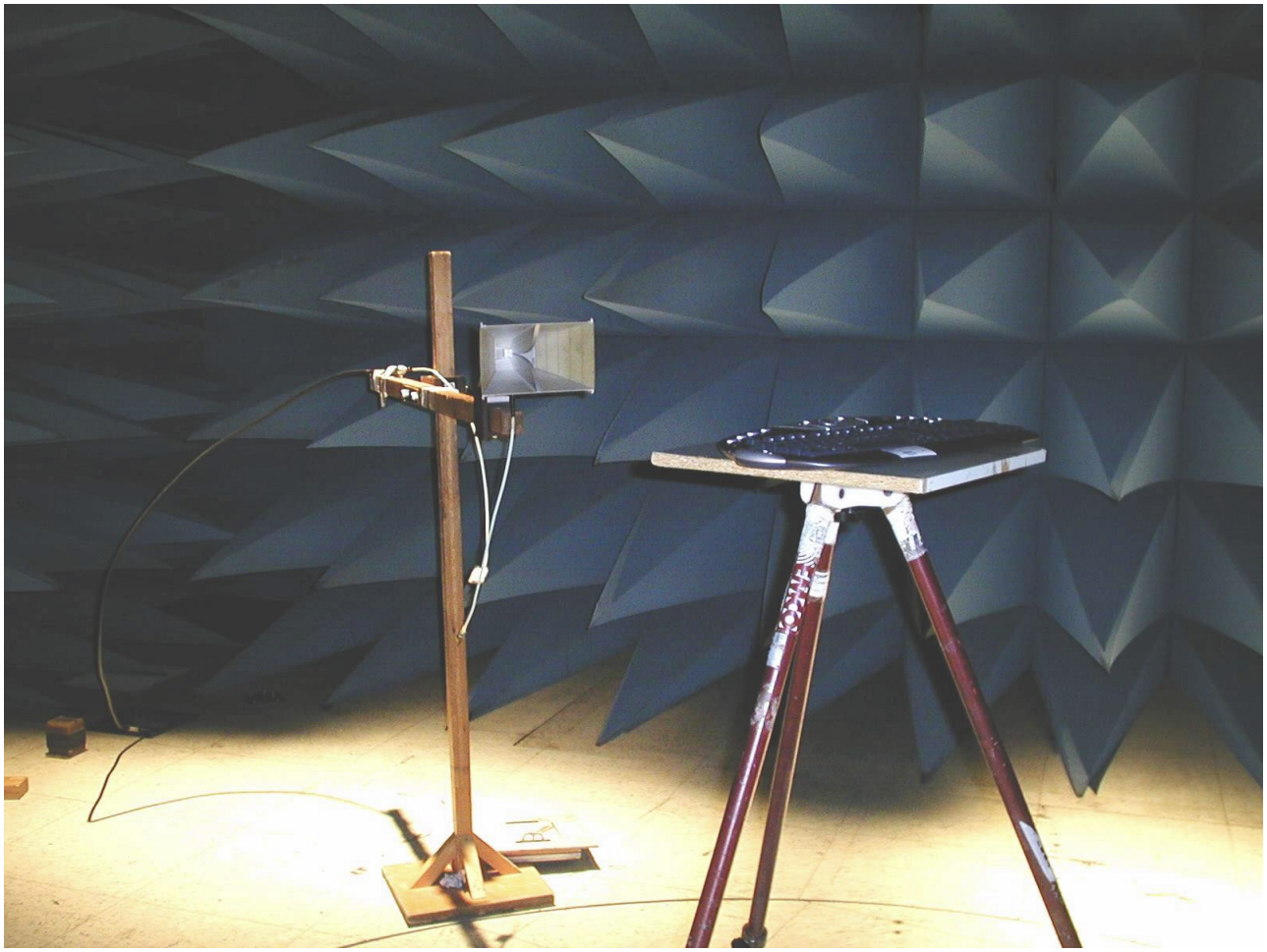
2. Equipment (back view).

3. General test set-up for radiated measurements.

4. Test set-up for radiated measurements below 1 GHz.



5. Test set-up for radiated measurements above 1 GHz.



6. Test set-up for RF conducted measurements.