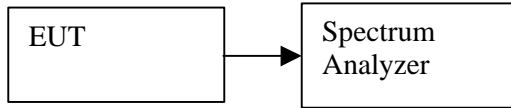


## 6.2. OCCUPIED BANDWIDTH

### TEST SETUP



### TEST PROCEDURE

The EUT's output RF connector (made solely for the purpose of the test) was connected with a short cable to the spectrum analyzer, RES BW was set to about 1% of 99 %emission BW , the occupied BW is the delta frequency between the two points.

### RESULT

No non-compliance noted.



FREQUENCY (GHz)	BANDWIDTH (MHz)
1.85125	1.619
1.88000	1.579
1.90875	1.462

## TEST PROCEDURE

### Frequency stability versus environmental temperature

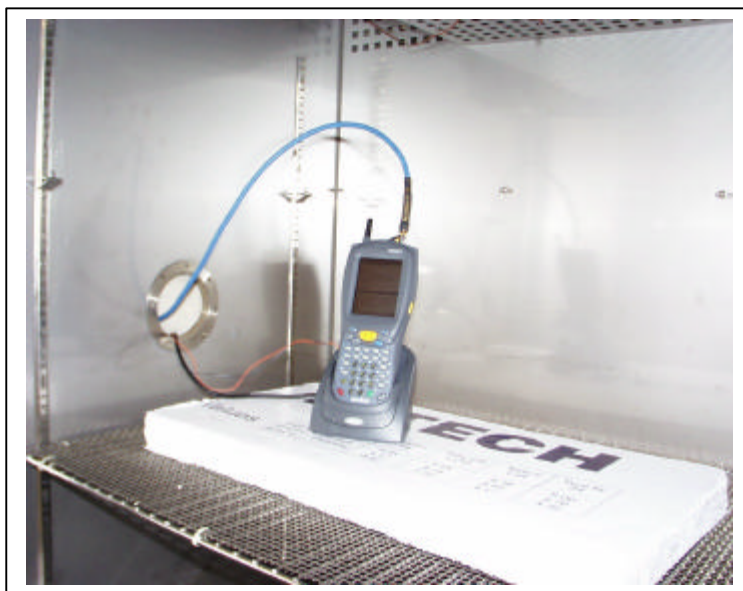
- 1). Setup the configuration per figure 6 for frequencies measurement inside the environmental chamber. Set the temperature of the chamber to 25°C. Set SA Resolution Bandwidth low enough to obtain the desired frequency resolution and measure the EUT 25°C operating frequency as reference frequency.
- 2). Turn EUT off and set Chamber temperature to -30°C.
- 3). Allow sufficient time (approximately 20 to 30 mins after chamber reach the assigned temperature) for EUT to stabilize. Turn on EUT and measure the EUT operating frequency. Turn off EUT after the measurement.
- 4). Repeat step 3 with a 10°C increased per stage until the highest temperature of +50°C reached, record all measured frequencies on each temperature step.

### Frequency stability Ac Voltage

- 1). Setup the configuration per figure 6 and set chamber temperature to 25°C. Use a variable DC power supply to power the EUT and set DC output voltage to EUT nominal input DC voltage. Set SA Resolution Bandwidth low enough to obtain the desired frequency resolution and measure the EUT 25°C operating frequency as reference frequency.
- 2). Slowly reduce the EUT input voltage to specified extreme voltage variation and record the maximum frequency change.

## RESULT

No non-compliance noted.

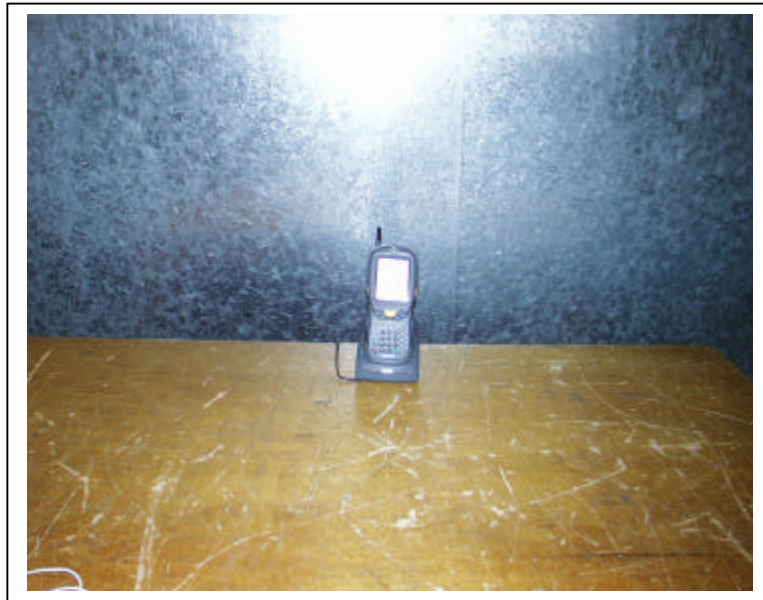




Reference Frequency: PCS Mid Channel 1880.00003MHz @ 25°C				
Limit: to stay ± 2.5 ppm = 4701.655 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
5.00	50	1880.65892	1.627	± 2.5
5.00	40	1880.65912	1.521	± 2.5
5.00	30	1880.65922	1.468	± 2.5
<b>5.00</b>	<b>25</b>	<b>1880.66198</b>	<b>0</b>	<b>± 2.5</b>
5.00	20	1880.66203	-0.027	± 2.5
5.00	10	1880.66211	-0.069	± 2.5
5.00	0	1880.66214	-0.085	± 2.5
5.00	-10	1880.66221	-0.122	± 2.5
5.00	-20	1880.66421	-1.186	± 2.5
5.00	-30	1880.66422	-1.191	± 2.5
4.00 (end point)	25	1880.65929	1.430	± 2.5
4	25	1880.65929	1.430	± 2.5
6	25	1880.66607	-2.175	± 2.5

### Radiated Emission photos





**END OF REPORT**