PEAK OUTPUT POWER OF THE BASE

Standard: FCC Part 15

Test procedure: paragraph 15.247

Test equipment:

TYPE	BRAND	EMITECH NUMBER
Spectrum analyzer FSP 40	Rohde & Schwarz	4088
Antenna RGA60	Electrometrics	1204
Open site	EMITECH	1274
Radio frequency generator SME06	Rohde & Schwarz	1669
High pass filter HPM11630	Micro-tronics	1673
Low-noise amplifier 1 to 18 GHz	ALC	2648
Variac R213	Dereix	1419
Power meter 8541B	Gigatronics	3479
Power sensor 80401A	Gigatronics	3182

Test set up:

The system is tested in an open area test site (OATS).
The test unit is placed on a rotating table, 0.8 m from a ground plane. Zero degree azimuth corresponds to the front of the equipment under test.
We use for this measure outdoor test site,. The measuring distance between the equipment and the test antenna is 3 m. The antenna have been oriented in the two polarizations, we have recorded only highest level.

Measurement of the electro-magnetic field is realized, with a resolution bandwidth and video bandwidth adjusted at 1 MHz with a peak detector.

Distance of antenna: 3 meters

Antenna height: 1 to 4 meters

Antenna polarization: vertical and horizontal

Equipment under test operating condition:

The equipment is blocked in continuous transmission mode, modulated by internal data signal.

Results:

Ambient temperature (°C):　　19
Relative humidity (%):　　　36

Polarization of test antenna:　horizontal (height: 239 cm)
Position of equipment:　　　use position (azimuth: 249 degrees)

Sample n° 1　　Channel 1 (Low channel)

		Level dBµV	Cable loss dB	Antenna factor dB	Electro-magnetic field (dBµV/m):	P* (W)
Normal test conditions	Nominal power source (V): 115	74.25	4.41	27.77	106.43	7.99 x 10^{-3}

Sample n° 1　　Channel 40 (middle channel)

		Level dBµV	Cable loss dB	Antenna factor dB	Electro-magnetic field (dBµV/m):	P* (W)
Normal test conditions	Nominal power source (V): 115	75.26	4.41	27.77	107.44	10.08 x 10^{-3}

Sample n° 1　　Channel 79 (high channel)

		Level dBµV	Cable loss dB	Antenna factor dB	Electro-magnetic field (dBµV/m):	P* (W)
Normal test conditions	Nominal power source (V): 115	75.49	4.41	27.77	107.67	10.63 x 10^{-3}

* $P = (E \times d)^2 / 30.Gp$,　with d=3 and Gp = 1.65

Test conclusion:

RESPECTED STANDARD