

March 8, 1999

Mr. Joe Dichoso
Federal Communications Commission
Chief Authorization Branch
Authorization & Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

RE: Backgrounds Unlimited, Inc.
FCC ID: NH5WVTXBD11A
Correspondence reference Number: 6371
Conf. Number: EA92849

Dear Joe,

Attached is the requested information for the aforementioned reference application.
If you have any further questions please feel free to call.

Sincerely,

Desmond a. Fraser

President

1. FCC PART 2.202 (A): NECESSARY BANDWIDTH

Necessary bandwidth			
Description of emission	Formula	Calculation	Designation of emission
Single channel with analog information Frequency Modulation Video and audio	$B_n = 2M + 2D$	10.6 MHz*	10M6

with D peak frequency deviation (i.e. half the difference between the maximum and minimum value of the instantaneous frequency - the instantaneous frequency in Hz is the time rate of change in phase in radians divided by 2), M maximum modulation frequency in Hz, and B_n Necessary bandwidth in Hz.

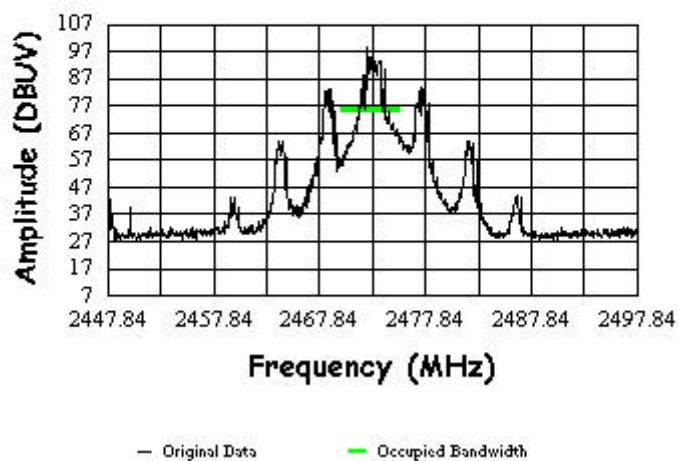
*Calculations and data test results:

$$D = (2 \times \Delta f_p) / 2 = 1.42 / 2 = 0.71 \text{ MHz} \quad \text{and} \quad f_m = 4.6 \text{ MHz} = M$$

2. Occupied bandwidth plot

Occupied Bandwidth = 2.15 MHz

RBW = 30 kHz VBW = 300 kHz Sweep = 2 s Atten = 10 dB



2.47284GHz

3.

First Witness
FCCID: NH5FWVTXBD11A
Limit/Distance: FCC/3M
Name: Dan Baltzell
Channel frequency = 2.47284 GHz

EMISSION FREQUENCY (GHz)	ANTENNA POLARITY (H/V)	ANALYZER READING (dBuV)	SITE CORRECTION FACTOR (dB/m)	EMISSION LEVEL (dBuV/m)	FCC LIMIT (dBuV/m)	EN55022 / CISPR22 MARGIN (dBuV/m)
4.94570	V	53.8	-3.5	50.3	84.4	-34.1
7.41861	H	50.98	-1.2	49.7	84.4	-34.7
9.89139	H	49.1	3.75	52.9	84.4	-31.5
12.36424	H	43.9	4.6	48.5	84.4	-35.9
14.83710	H	39.3	11.0	50.3	84.4	-34.1
17.30992	H	40.8	11.2	52.0	84.4	-32.4
19.78294	H	40.8	15.1	55.9	84.4	-28.5

4. The center frequency of the lowest and highest frequencies channels are 2.41080 GHz, and 2.47284 GHz respectively.