Subject: Re: PL6-MMDS-CPE-R2 request for info

Date: Wed, 19 Jun 2002 14:57:44 -0700 From: Dennis Ward dennis@yosemite.net>

Organization: dt Associates To: Denise.Godfrey@nemkona.com

Hi Denise

All the pages of the report are there. I have a couple of items however, that need addressing.

Part 21 devices are generally EIRP power. The report states 33dBm EIRP on page 4. However, the antenna terminal measurement shows 28.3dBm and the gain of the antenna is listed elsewhere as 6.5dBi. This means the power is not 33dBm (2 watts) as stated in the report but is closer to 3 watts. While the report gives a

generic formula for calculation of the EIRP, the report does not show the actual calculation used to acheive the listed value in the report. It shows a measured antenna value of 28.3dBm but the report does not give any indication of what antenna gain was used. I cannot assume these values, even if they exist in other

documents. They must be in the report of measurements and mut be provided by the

applicant. Therefore, please show in a clear and unambiguous manner how you derived at the 33dBm EIRP. Give the actual antenna gain used and show how this is

in line with the FCCs accepted methods.

The report gives 2 power output values, one conducted one EIRP (again, no calculation or values to get the EIRP are evident). Reported values must be consistent. Power on the grant is listed in Watts. Please show the conversion from dBm to Watts.

Also, the report states that the "Rated Output Power" is 25 dBm and 28 dBm, but does

not state if this is conducted or EIRP. Again, I cannot make assumptions, the data must be clear and unambiguous.

Once these items are cleared up, I can proceed with the examinatin.

Thanks
Dennis
dward@americantcb.com

Subject: RE: PL6-MMDS-CPE-R2 request for info

Date: Thu, 11 Jul 2002 10:25:56 -0500

From: Denise.Godfrey@nemkona.com
To: dennis@yosemite.net

Please see responses below to your comments :

----Original Message----

RESPONSES

Hi Dennis

Please note that the 33 dBW referred to on Page 4 reflects the spec limit, NOT the actual rated power output. It should be 33 dBW + 10 $\log(X/6)$ dBW per 21.904(a) with X representing the signal bandwidth. This equals 28.2 dBW or 58.2 dBm or 661 Watts. The report will be corrected to reflect this.

The rated power at the antenna terminal is listed on page 5 in dBm and mW which is the power output that should be stated on the grant as this is a licensed device.

The antenna gain in $6.5 \, \mathrm{dBi}$ and is only relevant to the MPE prediction as this is a licensed device.

The report has been revised 2L0210RUS1rev2.doc and is attached to this email

Name: 2L0210RUS1rev2.doc

2L0210RUS1rev2.doc Type: Microsoft Word Document (application/msword)

Encoding: base64

Subject: Re: PL6-MMDS-CPE-R2 request for info

Date: Thu, 11 Jul 2002 11:11:24 -0700 From: Dennis Ward <dennis@yosemite.net>

Organization: dt Associates To: Denise.Godfrey@nemkona.com

Hi Denise

thanks for the information. However, please note that for licensed type devices the FCC allows both conducted and EIRP or ERP power to be listed on the grant. Information in the report expressed EIRP values and conducted values. Since it is the conducted values that are desired to be on the grant, the grant would also specify the antennae used to be those listed in the certification application.

thanks Dennis

Denise.Godfrey@nemkona.com wrote: