

From: Les Payne [les@dnbenginc.com]
Sent: Thursday, November 20, 2003 5:07 PM
To: Steve Cheng
Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base Station

One set of corrected values (1st set) is dBuV/m
Other set second set is in uV/m

Same value 40dBuV/m = 100uV/m example

Les

-----Original Message-----

From: Steve Cheng [mailto:SCheng@CCSEMC.com]
Sent: Thursday, November 20, 2003 11:30 AM
To: 'Les Payne'
Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base Station

Hi Les,

For Q2, my question is that you have only one set of measurement reading, but why you have two sets of corrected values?

Best regards,
Steve

-----Original Message-----

From: Les Payne [mailto:les@dnbenginc.com]
Sent: Thursday, November 20, 2003 11:19 AM
To: Steve Cheng
Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base Station

Greetings Steve,

Looked through my e-mails did not receive the request for additional data.

Here is the answer to the second part. I will work on the photos and try to have to you by this afternoon.

The highlighted data is in uV/m vs dBuV/m.

Les

-----Original Message-----

From: Steve Cheng [mailto:SCheng@CCSEMC.com]
Sent: Thursday, November 20, 2003 10:03 AM
To: 'Les Payne'
Cc: Mike Kuo
Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base Station

Hi Les,

Have you receive the following mail I sent on 11/05? I can issue the grant when you fix the following minor document issues.

a.. We need at least 5 External photos, i.e. front, rear, 2 laterals and topside view.

b.. Cannot understand second part of radiated emission data as high lighted in attached file. Please explain or correct.

Best regards,
Steve

-----Original Message-----

From: Les Payne [mailto:les@dnbenginc.com]
Sent: Tuesday, November 04, 2003 1:50 PM
To: Steve Cheng
Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base Station

Greetings Steve,

Here is the reply from IP MobileNet. So I would issue the grant for the appropriate frequency range in Part 90 - 150-174M.

Les

"It is our understanding that the frequency range listed is the capability of the transmitter, however not a license to operate in that band. If you feel that this will hold up the grant then we can accept a grant with the frequency listed as the licensable portion of the band. The test data will show that the product was tested across the band which our customer has the permission to operate."

-----Original Message-----

From: Steve Cheng [mailto:SCheng@CCSEMC.com]
Sent: Monday, November 03, 2003 6:45 PM
To: 'Les Payne'
Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base Station

Hi Les,

While I am composing the grant, I found that this EUT is claiming to transmit from 138M to 174M. But 138M to 150M is not a designated frequency band for Part 90. Could you clarify why this EUT can use 138M to 174M under part 90?

Best regards,
Steve

-----Original Message-----

From: Les Payne [mailto:les@dnbenginc.com]
Sent: Thursday, October 30, 2003 8:32 AM
To: SCheng@CCSEMC.com
Subject: FW: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base Station

Greetings Steve,

Please let me know if this clears things up.

Les

-----Original Message-----

From: Jim Lukes [mailto:jlukes@ipmobilenetinc.com]

Sent: Thursday, October 30, 2003 8:06 AM

To: Les Payne

Subject: Re: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base Station

Les,

Here is a copy of the installation manual which should clear up this issue.

Jim

----- Original Message -----

From: Les Payne

To: Jim Lukes

Sent: Wednesday, October 29, 2003 8:50 AM

Subject: FW: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base

Station

Jim, could you review the following. Note if this is a stationary unit (base station) please include in the base station manual that this is intended for permanent location. For the mobile unit I will need to antenna gain to finish the calculation the way CCSEMC wants it.

Les

-----Original Message-----

From: Steve Cheng [mailto:SCheng@CCSEMC.com]

Sent: Tuesday, October 28, 2003 6:09 PM

To: 'Les Payne'

Cc: Mike Kuo

Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base

Station

Hi Les,

If this Unit is designed for permanent installation, then the description you have supplied in the test report is OK, but the problem is that I cannot find any wording in the service manual to support it. If this is a fix mount device, please modify the service manual to include fix mount information.

Best regards,

Steve

-----Original Message-----

From: Les Payne [mailto:les@dnbenginc.com]

Sent: Tuesday, October 28, 2003 4:10 PM

To: Steve Cheng

Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base

Station

Greetings Steve,

The following statement should have been included in the reports for both the base station and the mobile units. This was acceptable to Mike the first go round, is this acceptable to you this go round for this device. If so I will change over to the calculated format on the next submittal, if not please let me know so I can resolve quickly.

Les

"The information contained in "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields", OET Bulletin 65; August 1997 is applicable when a radiating antenna is connected to this amplifier. Paging stations that utilize this amplifier authorized under Part 22 (Subpart E) and Part 90 are subject to routine environmental evaluation for RF exposure if an antenna is located on a rooftop and if its ERP exceeds 1000 watts.

This product is certified to meet the RF exposure guidelines of OET-65 as a stand-alone device. The RF spurious emissions recorded when the antenna output connector is terminated into a non-radiating 50 ohm load do not exceed the 27.5 V/m limit specified for General Population/Uncontrolled Exposure in OET Bulletin 65."

-----Original Message-----

From: Steve Cheng [mailto:SCheng@CCSEMC.com]

Sent: Tuesday, October 28, 2003 2:48 PM

To: 'Les Payne'; Steve Cheng

Cc: Mike Kuo

Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base

Station

Hi Les,

Please advise if Base station will be installed at a permanent location or is subject to moving? If device is subject to moving, could you finish MPE related document which I sent to you yesterday ASAP so that I can close up the project and issue the base station grant. Thanks.

Also, please notice that there still some questions pending on mobile station portion, please address them ASAP.

Best regards,
Steve

-----Original Message-----

From: Les Payne [mailto:les@dnbenginc.com]

Sent: Tuesday, October 28, 2003 2:15 PM

To: Steve Cheng

Cc: Mike Kuo

Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317 Base

Station

Greetings Steve,

The radios this test was performed with were different radios, although they are identical models the difference was in the transmit frequency. The difference in the plots is due to the frequency at which the test was performed. The transient response is due to the frequency synthesizer and any variations in the surrounding components. The transients come from the time after keying the radio to the time the frequency settles.

Les

-----Original Message-----

From: Steve Cheng [mailto:SCheng@CCSEMC.com]

Sent: Monday, October 27, 2003 4:41 PM

To: 'Les Payne'

Cc: Mike Kuo

Subject: RE: Re: IP MobileNet Inc, AN03T3161, IPB1317

Base Station

Hi Les,

Somehow the plot you supplied this time is very different from the original test (The original test shown roughly 15K transient at T1 and T3, but the new test shown almost perfect transient on both end). Could you explain what make it so different? Is same EUT used for both test? This is the last item, upon you clarify this issue I can issue the grant within a business day. Thanks for your attention and patient.

Best regards,

Steve

-----Original Message-----

From: Les Payne [mailto:les@dnbenginc.com]

Sent: Monday, October 27, 2003 10:38 AM

To: SCheng@CCSEMC.com

Subject: FW: Re: IP MobileNet Inc, AN03T3161, IPB1317

Base Station

Here are plots that indicate the t3 and the 1 kHz tone.

Les

Could you please let me knowm if this resolves everything.

Les

-----Original Message-----

From: Steve Cheng [mailto:SCheng@CCSEMC.com]

Sent: Thursday, October 16, 2003 9:59 AM

To: 'Les Payne'

Cc: Mike Kuo; Jim Lukes

Subject: RE: Re: IP MobileNet Inc, AN03T3161,

IPB1317 Base Station

Hi Les,

I still cannot find proper T3 info from attached 2 plots, please supply a proper test plot to demonstrate the compliance of 90.214 T3 requirement. Thanks.

Best regards,
Steve

-----Original Message-----

From: Les Payne [mailto:les@dnbenginc.com]

Sent: Friday, October 10, 2003 12:34 PM

To: Steve Cheng

Cc: Anne Liang; Mike Kuo; Jim Lukes

Subject: RE: Re: IP MobileNet Inc, AN03T3161,

IPB1317 Base Station

Greetings Steve,

This should be the last item to clear things up. Please review the comments and the attached plots. This is identical to what was supplied the last time when Mike approved the previous IP transmitter.

Les

Test conditions: The RF port of the EUT is connected to a combiner which combines a Audio signal (1kHz, +-5kHz deviation) from an audio source. The combined signal is connected to the input port of a spectrum analyzer. The audio monitor output of the spectrum analyzer is connected to CH1 of an oscilloscope. Channel 2 of the oscilloscope is connected to the TX high test point of the EUT.

The transient time under investigation is the transition time of the TX high to complete silence of the 1kHz tone (attack) and the transition time of the TX high to complete recovery of the 1kHz tone for the release time.

please supply following data

missing during T3 test?

per division, it is not clear

Question #13: For Transient Frequency Test,

-Please advice why 1K tone is

-Please advice the time scale

on the plot

-25K deviation was

following the know test

-Please describe how -12.5K and

established, and detail test procedure if not

standard.

Additonal plots have been provided showing the 1khz tone.

<Steve> Plots not found please re-sent .

before processing can continue
provide the requested
mail date may result in
filing fee. Also, please note
and should not be submitted.
correspondence should be directed to
sender.

The items indicated above must be submitted
on the above referenced application. Failure to
information within 60 days of the original e-
application dismissal and forfeiture of the
that partial responses increase processing time
Any questions about the content of this
the e-mail address listed below the name of the

Best Regards

Steve Cheng
Compliance Certification Services
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Morgan Hill, CA 95037
Tel: (408) 463-0885 x:119
Fax: (408) 463-0888
scheng@ccsemc.com
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SAME AANSWER AS ABOVE AS THOSE BELOW

Mobile Radio Single Station

Mobile Radio Single Station

distance info and designed

include each individual test.

system will amplify the audio

please justify why

per 2.1047 is not necessary?

Emission mask, why region 2 "10k to

> -----Original Message-----
> From: Steve Cheng
> Sent: Friday, August 15, 2003 1:30 PM
> To: 'les@dnbenginc.com'
> Cc: Mike Kuo
> Subject: Re: IP MobileNet Inc, AN03T3160,
> certification
>
> RT for project: IP MobileNet Inc, AN03T3160,
>
> Question #1: Please supply the intended cover
> channel spacing.
>
> Question #2: Please revise Setup photo to
>
> Question #3: Service manual shown that the
> signal and use the signal to modulate the VCO,
> modulation limit and Audio frequency response
>
> Question #4: Please clarify, on P35 of

compliance per 90.214 Transient

used in P29 power measurement,
is a FM modulated signal.

please confirm if modulating

and detector/measurement
Test. TIA/EIA 603 2.2.1.1
Output Power Rating.

and instruments setting to
resolution to measure the quoted

communicate with control PC
considered a composite device.

evaluation per 47CFR 1.1310.

bandwidth shall be use for
100K-resolution bandwidth

before processing can continue
to provide the requested
mail date may result in
filing fee. Also, please note
time and should not be
this correspondence should

> 250%" has a flat step?
>
> Question #5: No test data demonstrates the
> frequency behavior
> Please supply.
>
> Question #6: a 3K resolution bandwidth was
> please explain if single is CW carrier or it
>
> Question #7: On P40 Spurious emission test,
> signal was per 2.1049?
>
> Question #8: Please describe equipment setup
> bandwidth used in Radiated Field Strength
> documented in test report refer to Carrier
>
> Question #9: Please describe equipments used
> confirm if equipment setup has enough
> ppm.
>
> Question #10: EUT equipped with RS232 port to
> during the voice/data transmission, and is
> Please supply 15,109/107 test data.
>
> Question #11: Please supply RF exposure
>
> Question #12: Per 90.210(n). 1M-resolution
unwanted emission above 1G, but P41 to P44 used
for above 1G measurement. Please correct.

> The items indicated above must be submitted
> on the above referenced application. Failure
> information within 60 days of the original e-
> application dismissal and forfeiture of the
> that partial responses increase processing
> submitted. Any questions about the content of

the name of the sender.

> be directed to the e-mail address listed below

>

> Best Regards

>

> Steve Cheng

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