dward

From: Klaus.Kettunen@nokia.com

Sent: Wednesday, April 09, 2003 4:25 PM

To: dward@americantcb.com

Cc: sdcertification@nokia.com; whgraff@qwest.net

Subject: RE: QMNRH-44 & QMNRH-3 comments

Hi Dennis,

There was no attachment on your earlier email and I did not know you referred to QMNRH-44, I referred to QMNRH-3.

The QMNRH-3 display line (-13dBm) is just above the -14.6dBm line and the QMNRH-44 display line is just above

the -14.4dBm line (Ref. 25.6dBm-10-10-10 = -14.4dBm)

Anyway the both applications have same issue, the plots resolutions are not very accurate and we have to rely to the

marker readings. Due the 10 dB/DIV amplitude resolution the markers are shown over the display line.

I tried to zoom in the plots (attached to this email) but the plots resolutions are not good enough to see detailed info.

To see more detailed plots, the Spectrum Analyzer settings (Span, Amplitude division, . .) could be changed, but don't

know if it is acceptable to change the measurement method (settings).

Please, let me know if you need more information.

BR. Klaus

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

From: ext dward [mailto:dward@atcb.com] Sent: Wednesday, April 09, 2003 12:06 PM To: Kettunen Klaus (NMP/SanDiego)

Cc: Sd Certification (RES/SanDiego); Bill Graff

Subject: RE: QMNRH-44 comments

Hi Klaus

The page I sent was page 15 of 27 from the "QMNRH-44_Test Plots.pdf' file. Please look at the new notes on this item. If it is a -14.6dBm line, please show me where it is so indicated.

Thanks Dennis

----Original Message-----

From: Klaus.Kettunen@nokia.com [mailto:Klaus.Kettunen@nokia.com]

Sent: Wednesday, April 09, 2003 11:47 AM

To: dward@americantcb.com
Cc: sdcertification@nokia.com
Subject: RE: QMNRH-44 comments

Hi Dennis

I believe the line you are looking at (QMNRH-3) is not the -13dBm limit line but the -14.6 dBm line showing 10dB/DIV.

It appears to me that the both handsets data is shown the same way.

Therefore the marker is not significantly above the limit line.

Please, let me know if you need more information.

BR. Klaus

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

From: ext dward [mailto:dward@atcb.com] Sent: Wednesday, April 09, 2003 10:00 AM

To: Kettunen Klaus (NMP/SanDiego) Cc: Sd Certification (RES/SanDiego) Subject: RE: QMNRH-44 comments

Hi Klaus

Some analyzers include the offset values in the data and display lines on the printed plots. If you look at the plots mentioned, you will see that the -13 dB level is significantly below the marker and yet the marker is said to be below the -13dBm point. Please see attachment. Maybe I am reading it incorrectly, but you need to clearly explain and show how it is compliant (below -13dBm).

Thanks Dennis

----Original Message-----

From: Klaus.Kettunen@nokia.com [mailto:Klaus.Kettunen@nokia.com]

Sent: Wednesday, April 09, 2003 9:39 AM

To: dward@americantcb.com
Cc: sdcertification@nokia.com
Subject: RE: QMNRH-44 comments

Hi Dennis,

We are a bit puzzled about one of your question concerning the QMNRH-3 and QMNRH-44 and need to clarify it.

We assume that your query is related to the limit (-13 dBm).

Could you give more details to the question number 2 / QMNRH-44 and the question number 3 / QMNRH-3, please.

BR. Klaus

----Original Message----

From: ext dward [mailto:dward@atcb.com] Sent: Friday, April 04, 2003 4:03 PM

To: Kettunen Klaus (NMP/SanDiego); Sd Certification (RES/SanDiego)

Subject: RE: QMNRH-44 comments

See attached Thanks Dennis