

Re: FCC ID KQL-PKLR2400
 Applicant: AeroComm Corporation
 Correspondence Reference Number: 11176
 731 Confirmation Number: EA95245
 Date of Your Original E-Mail: 12/23/1999

Dear Mr. Dichoso,

This concerns your correspondence # 11176

1) **FCC Question:** You did not correct the antenna gain of the AeroComm NZH2400 antenna in the table of antennas from 5 dBi to 1 dBi. You stated it but the table was not corrected.

Answer: Please see the corrected table below as well as the corrected antenna specification in the Users manual for the Aerocomm NZH2400 antenna.

	Mfr	Model	Freq	Gain	Type	Connector	Dimensions	Installation	Measured EIRP (mW)	Calculated EIRP = TP+G (mW)	RF Safety Distance (cm)	Application Uses
1	Centurion	WXE2400	2.4-2.5	2dBi	Omni	MMCX	<2.25"	Integrated	13.2	15.8	1.0	Portable
2	Maxrad	MFB24008	2.4-2.5	8dBi	Omni	N-F	17"	Professional 20cm min	81.2	63.0	2.1	Mobile & Base
3	Maxrad	BMMG24000MMCX6'	2.4-2.5	unity	Omni-mobile	MMCX	1.75"	Professional 20cm min	20.9	10.0	1.3	Mobile
4	Maxrad	BMMG24000RPSMA12'	2.4-2.5	5dBi	Omni-mobile	R-SMA-M	9"	Professional 20cm min	7.7	31.6	0.8	Mobile
5	AeroComm	NZH2400	2.4-2.5	1dBi	Omni	Integrated	1"x0.3"	Integrated	22.4	12.6	1.3	Portable
6	Maxrad	MP24013FC	2.4-2.5	13dBi	Panel	TNC-F	8.7x7.9x1.1	Professional 20cm min	138	199.5	3.3	Base
7	Maxrad	MUF24005	2.4-2.5	5dBi	Omni-Mobile	R-SMA-M	8.75"	Professional 20cm min	22.4	31.6	1.3	Mobile & Base
8	Centurion	WXR2400SMRP	2.4-2.5	2dBi	Omni	R-SMA-M	<2.25"	User	0.3	15.8	0.1	Portable

FCC Question: Also, you did not answer/explain item 1(c) of the last e-mail, "When you take into account the maximum power of 10 mW and the listed Antenna gains, the EIPR levels do not agree" Please address this discrepancy.

Answer: We have already provided the answer on our last response. I am not so sure if you are satisfy with the answer. However, this is what we found: the answer is the discrepancy of measurements are based on in-accuracy of the antenna manufacturer's specified gains. We checked the accuracy of our measurements by measuring the gain of our calibrated test antenna using 10mW RF source, and then compare it with its manufacturer's rating. The results show our measurement is accurate. Please see below:

Standard Check using the signal generator (10 mW output) and calibrated test substitution antenna (Spec @ 7.1 dBi gain & Measured at 7.5 dBi gain at 2.4-2.5GHz)

Antenna Number	Substitution Antenna	Power input to Tx Antenna (dBm)	Measured Field Strength E (dBuV/m)	Measured EIRP (dBm)	Calculated EIRP from E (dBm)	Measured Antenna Gain (dBi)	Manufacturer's Spec. Gain (dBi)	Diff. Wrt. Mfg.'s Rating (dB)
0	A.H. Systems Calibrated Test Antenna	10.0	113.0	17.5	17.8	7.5	7.1	+0.4

2) **FCC Question:** You did not address item 2 of the last e-mail with regard to the PC Board. Verify that you will not sell the PC Board version of this device. Because the device will be professionally installed, only the version of the device that has the PC Board within a case can be marketed and will only be covered by the grant.

Answer: I believe that Mr.Daniel @ Aerocomm has answered this question in our last response. Aerocomm and we are now not so sure how we can satisfy FCC request regarding to this question. Aerocomm will ensure that all antennas using standard connectors for Mobile and Base operation will be professional installed by its non-end-users clients (Manufacturers) by having them to sign the agreement for "Professional Installation Matters" upon using this radio module. In fact, Aerocomm will open for any suggestion from FCC. Attached under "Attestation statement" Exhibit please see manufactuer's aggreement from written by Aerocomm's attorney. PLEASE ADVISE

FCC Questions: ***Also, address the following RF safety issues and place the response to them in the RF exposure info folder separately from the above.

Answer: The RF Safety Exposure Warning and the correction of the gain of the Aerocomm NZH2400 antenna listed in the Users' manual are revised and re-sent to you in "Users Manual" Exhibit..

AeroComm, EA 95245 -

1. SAR results for 5 antennas were submitted on 12/22/99. Cover letter indicated one of those no longer applies and has been withdrawn (CAF 28777) . We can only identify 2 out of the other 4 antennas, Centurion WXE2400 and Centurion WXR200SMRP. The other two antennas are indicated as antenna #1 and antenna #2. Antenna #1 is indicated as a strip-line antenna in the SAR report, which we cannot associate with any of the 8 antennas indicated in the antenna list. Antenna #2 needs to be identified. The antenna list has only 3 portable antennas, numbers 1, 5, and 8, please clarify accordingly.

The Antenna #1 indicated in the SAR test report is a stripline or patch antenna which was sent to 3D-EMC Laboratory from Aerocomm by mistake. Therefore, please delete this one from the certification.

The Antenna #2 indicated in the SAR test report is the Aerocomm NZH2400 Antenna with the gain = 1 dBi.

2. Please clarify the antenna gain for antenna #5 in the antenna list, is it 1 or 5 dBi ? The correct antenna gain is 1 dBi. We made a mistake in the original report, and this mistake was carried over to 3D EMC Lab.

3. Please revise latest RF exposure warning statement to indicate it is for purpose of FCC RF exposure compliance.
The revised warning with the statement "for purpose of FCC RF Exposure Compliance" and correction of the gain of the Aerocomm NZH2400 has been sent to you under "Users manual" Exhibit.

Happy Holidays

Tri M. Luu, P.Eng.
Ultratech Engineering Labs Inc.