

## Non-Conformities FCC ID: M5VG03301 (CKC CS Ref # E07-000110-FCC-01)

The items listed below represent requests for information following review of this application for certification under United States (FCC) regulations. Further question may arise pending review of responses to these items.

<b>OK</b>	<b>#</b>	<b>Non-Conformity or Comment</b>	<b>Submitted Response</b>	<b>Respondent / Date of Response</b>
X	1	The confidentiality letter provided includes a request for confidentiality for internal photos. This request must be justified in order to be considered legitimate; proper justification includes such items as (for example) this item is normally potted and any attempt to remove the potting material would destroy the unit. Please provide a revised confidentiality letter either providing proper justification for the request or removing the internal photos from the confidentiality request.	Updated confidentiality letter provided.	11/15/07 Gallagher
X	2	The operational description, schematics and block diagrams provided appear to be only from the 134kHz transmitter within the equipment. Please provide updated or additional documents containing the necessary information required by 2.1033.	Additional Items provided.	1/25/08 Sonoar / Gallagher
X	3	The information provided at the time of filing did not include the BT portion of the equipment. Please confirm the following changes to the application form: a) device is composite equipment, b) composite FCC ID is M5VG03301 and is presently pending c) equipment specifications are frequency range 2402-2480MHz, output power (see below), rule part 15C, equipment class DSS. Please confirm these changes are correct.	Approved	1/10/08 Gallagher
x	4	The power output measured in the test report does not clearly indicate if the values have been corrected for antenna gain. The requirements of 15.247(b) are for conducted output power. It appears that the standard falloff of 11.8 dB has been used to calculate the conducted levels for the transmitter output – this method is inaccurate since it does not take into account the antenna gain for comparison of the conducted output power limit (see annex of DA00-705 for further details). Please clarify the method used provide conducted output power measurements for comparison to the limit. Please update the test report as necessary. Please note that the rated output power listed in the test report on page 5 indicates 0dBm output power, while the measurements indicate -11dBm. This large discrepancy is (in part) the source of the question (see below).	Updated test report provided	1/10/08 Gallagher

X	5	The test setup photos indicate testing with the unit lying on a wooden table. The FCC is concerned about the possible attenuation of field strength levels with measurements above 1 GHz especially for 2.4GHz devices. Please confirm that this test setup indicates the highest field strength measurements and is equivalent to measurement of the emissions when in free-space (such as using a non-conductive support with dielectric constant near 1.0, for example Styrofoam).	Updated test report provided.	1/10/08 Gallagher
X	6	Due to the portable nature of this equipment, please confirm that the configuration used is representative of the worst case emissions from three orthogonal polarities of the equipment as required for preliminary investigations by ANSI C63.4.	Updated test report provided	1/10/08 Gallagher
X	7	The horn antenna listed in the equipment list on page 25 does not appear to cover the frequency range necessary for measurement of spurious emissions up to 25GHz as required by 15.33. Please explain and update test report as necessary.	Updated test report provided.	1/10/08 Gallagher
X	8	Voltage variations required by 15.31(e) do not appear to have been performed according to the test report. Please update test report as necessary.	The reader is normally powered by batteries and was tested with a fully charged battery.	Gallagher 11/15/07
X	9	Please provide an updated users manual incorporating the statement required by 15.21.	Updated users manual provided.	Gallagher 11/15/07
X	10	Please provide an updated label or manual as appropriate with labeling requirements in accordance with 15.19. Please review FCC labelling guidelines at <a href="http://www.fcc.gov/oet/ea/Labelling_Guidelines_Parts_15_and_18_final.pdf">http://www.fcc.gov/oet/ea/Labelling_Guidelines_Parts_15_and_18_final.pdf</a>	Updated users manual provided.	Gallagher 11/15/07
X	11	for compliance under 15.247(d), spurious emissions the actual value of the emissions from the measurements. Please update test report as necessary.	Updated test report provided	Gallagher 1/10/08