

RE: ATCB006319 – Original Equipment / Single Certification  
FCC ID: STI-CS700 & IC: 5788A-RG (model number RG) for Klipsch LLC

### Responses to ATCB questions

1. Please explain what you mean by the statements in Section 1 of both the FCC and IC test reports from DLS which state “ Testing and submittal for this product has been done for this product based on test data from Accurate Technology Company LTD. That laboratory was unable to provide data for emissions above 7 GHz. D. L. S. Electronic Systems, Inc. performed only measurements from 30 MHz to 26 GHz (conducted at the antenna terminals) and from 7 GHz to 25 GHz (radiated spurious emissions).” Please note that spurious radiated test data exists in the Accurate Technology test report submitted with this application above 7 GHz. Please see pages 40 through 45 of 49 of the Accurate Technology test report. Please clarify what this statement means or change it. ( I note that the DLS data above 7 GHz is completely different from the Accurate Technology data above 7 GHz).

**Answer:** DLS was asked to provide data above 7GHz since Accurate Technologies was unable to provide data that met the FCC requirements, due to their noise floor levels (this was pointed out by Bill Graff). The data provided by Accurate Technologies for any frequency above 7GHz should be “replaced” by the data provided by D.L.S. Electronic Systems, Inc.

2. Based on measurements of conducted emissions at the antenna terminals in the DLS test report, the output power and PSD measurements on antenna port B in the Accurate Technology test report are not correct. DLS measurements indicate that the output power and PSD should be higher on antenna port B than they are on antenna port A (not lower like the Accurate Technology data shows). Please measure the output power and PSD on each channel for antenna port B for this device.

**Answer:** Only one antenna is active at a time, and due to leakage of the RF switch, one antenna port will measure about 18 - 20dB less than the active antenna port. We (DLS) took data on antenna Port A and Antenna Port B, with each antenna port selected and “forced active” to transmit during the measurements. Accurate technologies did not force each antenna port active during their measurements. The data provided in the DLS test report is therefore correct. DLS has taken measurements for this requirement and provided additional exhibits to support this request. See the Updated test Report.

3. The FCC will also need some assurance that the device measured in May of 2008 is identical to the device measured in February of 2007. Please measure the output power and the 6 dB bandwidth for all three channels on antenna port A. These results should be comparable to the Accurate Technology test data from February of 2007.

**Answer:** DLS has taken measurements for this requirement and provided additional exhibits to support this request. See the Updated test Report.

4. In Section 10.5.1 and 10.5.2 of the Accurate Technology test report, the delta marker values do not agree with the band edge plots immediately following this data. For example, the upper band edge delta is shown as 46.87 dB but the plot level of 6.1 dBm and a drop of 38.01 dB do not equal a 46.87 dB difference (delta). Please correct this calculation.

**Answer:** DLS has taken measurements for this requirement and provided additional exhibits to support this request. See the Updated test Report.

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5. In the DLS test report, the field strength of fundamental and spurious emission measurements for antenna ports A and B have no sample calculation to derive the limits or values reported. Do these test results account for the 1 meter test distance and the duty factor calculated on page 56 of 59 of this test report?

Average limit at 3 meters: 54 dB $\mu$ V/m

Peak limit at 3 meters: 74 dB $\mu$ V/m

Testing done at 1 meter.

The limits are extrapolated to a one meter test distance, using 20 dB/decade (FCC Pt. 15.31(f) and RSS-GEN 7.2.5(a)).

Average limit at 1 meter: 63.5 dB $\mu$ V/m

Peak limit at 1 meter: 84.5 dB $\mu$ V/m

Sample Calculation:  $20 \text{ Log } (3\text{m}/1\text{m}) = 9.5 \text{ dB}$

Average Limit at 1m = 54 dB $\mu$ V/m + 9.5 dB = 63.5 dB $\mu$ V/m