

Kentucky Method 64-112-05
Revised 1/5/05
Supersedes KM 64-112-03
Dated 6/20/03

NUMERICAL LIMITS FOR COMPARING TEST RESULTS
(INDEPENDENT ASSURANCE SAMPLING AND TESTING PROGRAM)

1. This method provides numerical limits to use when comparing independent assurance test results, required by the Department of Highways' Independent Assurance Testing Program, to the accompanying comparison tests.
2. General:
 - 2.1. The attached table designates maximum limits of variability between an individual independent assurance test result and a comparison test result for the various types of material and tests included within this program. Differences between results in excess of those indicated in the table should be investigated for an assignable cause (including additional testing as necessary). Document subsequent findings and/or corrective actions (if any) as part of the independent assurance report.
 - 2.2. The limits in the table are intended for use only when tests are performed as nearly as feasible on the same material, at the same time, and using the same test method or comparable test method permitted for determining acceptance, but by different personnel using different test equipment.
 - 2.3. When it is the intent to provide limits in establishing whether erroneous testing procedures, equipment, or both are present, it is necessary to eliminate, insofar as feasible, differences in test results which would be attributable to inherent batch-to-batch or other sources of materials variability and sampling techniques. Therefore, for materials which require sampling, a well-blended quantity sufficient to perform both independent assurance and comparison tests shall be obtained. Test portions shall be obtained by quartering, splitting, or other acceptable procedure such as to minimize sampling variation. For sieve analysis of aggregates, independent assurance testing should be performed on the identical test portion used for acceptance testing to entirely eliminate any sampling variations.

APPROVED _____
Director
Division of Materials

DATE 1/5/05

Kentucky Method 64-112-05
Revised 1/5/05
Supersedes KM 64-112-03
Dated 6/20/03
Attachment

km11205b.doc

KM 64-112-05

TABLE

(For Comparing Independent Assurance and Comparison Test Results)

TYPE OF TEST	MATERIAL	MAXIMUM DIFFERENCE BETWEEN TEST RESULTS
(1) ASPHALT CONTENT DETERMINATION	ASPHALT MIXES	0.5 PERCENT BY WEIGHT OF TOTAL MIXTURE
(2) SIEVE ANALYSIS AND –200 WASH TEST	<p>ASPHALT AGGREGATE</p> <p>DENSE-GRADED AGG. CRUSHED STONE BASE, & CONCRETE AGG.</p>	<p>½-in. and larger Sieves 5%</p> <p>¾-in., No. 4, No. 8, and No. 16 Sieves 4%</p> <p>No. 30, No. 50, and No. 100 Sieves 3%</p> <p>No. 200 Sieve 2.0%</p> <p>Sieves > #8 6%</p> <p>Sieves #100 Thru # 16 4%</p> <p>Sieve # 200 by washing 1.0%</p>
(3) MIXTURE PROPERTIES PERCENT AIR VOIDS AND VOIDS-IN-MINERAL AGGREGATE	ASPHALT MIXES	1.5%
(4) DENSITY	SOIL, DGA, CSB	4 pcf
(4a) PROCTOR DENSITY	SOIL	4 pcf
(5) AIR CONTENT	CEMENT CONCRETE	±0.75%
(6) SLUMP	CEMENT CONCRETE	±25% of the Maximum Limit
(7) COMPRESSIVE STRENGTH (CYLINDERS)	CEMENT CONCRETE	The IAS result shall not be less than 85% nor more than 115% of the average of the two acceptance cylinders used for comparison.
(8) TEMPERATURE (CONCRETE)	CEMENT CONCRETE	±3°F