**Boundary Element Method Open Source Software in Matlab**

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| File / Module(s) | [OkGeometry2lc\_tests.m](http://www.boundary-element-method.com/mfiles/OkGeometry2lc_tests.m)/ OkGeometry2lc\_tests.m |
| Title | A set of tests to verify the function [OkGeometry2lc.m](http://www.boundary-element-method.com/mfiles/OkGeometry2lc.m) |
| Version(Date) and History | **1.** (September 2015). |
| Description | A description of the tests is given in the document [Verifying the Geometry in Computing the Discrete Operators in 2D](http://www.boundary-element-method.com/verification/Verifying%20the%20Geometry%20in%20Computing%20the%20Discrete%20Operators%20in%202D.pdf) |
| Interface | function [passed]=OkGeometry2lc(p, vecp, qa, qb, lponel, tolGeom)  p,qa,qb are 1⨯2 real vectors  vecp is a 2⨯1 real vector  lponel is Boolean  tolGeom is real |
| Web source of code. | <http://www.boundary-element-method.com/mfiles/OkGeometry2lc_tests.m> |
| Web source of this guide | <http://www.boundary-element-method.com/mfiles/OkGeometry2lc_tests_m.pdf> |
| Web source of the algorithm | Not applicable. |
| Dependent routines | None |
| Test problems or modules tested | The function [www.boundary-element-method.com/mfiles/OkGeometry2lc.m](http://www.boundary-element-method.com/mfiles/OkGeometry2lc_tests.m) is tested. |
| Licence | This is ‘open source’; the software may be used and applied within other systems as long as its provenance is appropriately acknowledged. See the [GNU Licence](http://www.gnu.org/licenses/lgpl.txt) for more information or contact [webmaster@boundary-element-method.com](mailto:webmaster@boundary-element-method.com) . |
| Codes that this may be used alongside this one | Not applcable. |
| Similar codes that may be of interest | A similar Fortran test code is available:  <http://www.boundary-element-method.com/fortran/VG2LC_TESTS.FOR>  A similar code in Excel VBA is available in the file  [www.boundary-element-method.com/Excel\_VBA/OkGeometry2lc.xlsm](http://www.boundary-element-method.com/Excel_VBA/OkGeometry2lc.xlsm) |
| Applications | To be included in the file libem2.xlsm on the [www.boundary-element-method.com](http://www.boundary-element-method.com) website |
| Author | [Stephen Kirkup](https://www.researchgate.net/profile/Stephen_Kirkup) |
| References | 1. [www.boundary-element-method.com](http://www.boundary-element-method.com)  2. [Vector Arithmetic and Geometry](http://www.appliedmathematics.info/tutorials/Vector%20Geometry.htm)  3. [Introduction to Matlab/Freemat/Octave/Scilab](http://www.freemat.info) |