

Testing GlassBR

June 8, 2017

Table 1: testCalculations

Ref	Test Name	fileName.py	Test Purpose	Traceability	Input File	Significant Input	Expected Output	Notes
1	?	testCalculations	to make sure expected pb values is returned	uses equations from DD1's B and IM1's Pb	defaultInput.txt	see Input File	'For the given input parameters, the glass is considered safe'	Improve: instead of equality of floats (assertEqual), should use some epsilon error
2	?	testCalculations2	"	"	testInput1.txt	"	"	"
3	?	testCalculations3	"	"	testInput2.txt	"	"	"
4	?	testCalculations4	"	"	testInput3.txt	"	"	"
5	?	testCalculations5	"	"	testInput4.txt	"	"	"
6	?	testCalculations6	"	"	testInput5.txt	"	"	"
7	?	testCalculations7	"	"	testInput6.txt	"	"	"

Table 2: My caption

Ref	Test Name	fileName.py	Test Purpose	Traceability
8	?	testCheckConstraints	to ensure a (i.e. length) >0	Following A1 (glass must be of rectangular shape)
9	?	testCheckConstraints2	to ensure b (i.e. breadth) >0	Following physical constraint from Table 2 where b =>dmin
10	?	testCheckConstraints3	to ensure 1 <a/b <5	length should pertain to the longer side, following software constraint from Table 2
11	?	testCheckConstraints4	to ensure a/b (i.e. aspect ratio) <5	following software constraint from Table 2
12	?	testCheckConstraints5	to ensure input t value (i.e. nominal thickness) is one of the industrial standard thicknesses	following R1 (t description)
13	?	testCheckConstraints6	to ensure input w value (i.e. weight of charge) is >minimum permissible input charge weight	following value of wmin (4.5 kg) from Table 3
14	?	testCheckConstraints7	to ensure input w value (i.e. weight of charge) is <maximum permissible input charge weight	following value of wmax (910 kg) from Table 3
15	?	testCheckConstraints8	to ensure input tnt value (i.e. TNT equivalent factor) >0	following physical constraint from Table 2
16	?	testCheckConstraints9	to see if input SD (i.e. Stand off Distance) is >minimum stand off distance permissible for input	following value of SDmin (6 m) from Table 3
17	?	testCheckConstraints10	to see if input SD (i.e. Stand off Distance) is <maximum stand off distance permissible for input	following value of SDmax (130 m) from Table 3
18	?	testCheckConstraints11	see 8	see 8
19	?	testCheckConstraints12	see 9	see 9
20	?	testCheckConstraints13	see 15	see 15
21	?	testCheckConstraints14	see 10	see 10
22	?	testCheckConstraints15	see 11	see 11
23	?	testCheckConstraints16	see 13	see 13
24	?	testCheckConstraints17	see 14	see 14
25	?	testCheckConstraints18	”	”
26	?	testCheckConstraints19	see 16	see 16