

	A	B	C	D	E	F	G
1	Calculations for Non-Detection Probability of Tampering, With Five (5) Random Cross Checks In a Constituency With 200 Voting Booths (With One EVM - VVPAT Pair In Each Booth, When VVPAT Counts Are Cross Checked With EVM Counts) (This is "Source Excel File-200 Booths with 5 Cross Checks" or "SEF-200 booths - 5 Cr Cks", Sheet-10) (Prepared By Dr Ramesh Bellamkonda, 2019-04-15)						
2	No. of booths in constituency =		200 Assumed No of Booths Tampered =			10	
3	Random Cross Check No. (for VVPAT-EVM Counts)	Total No. of EVM-VVPAT Pairs in the pool that are yet to be cross checked	Absolute no. of EVMS Assumed to be tampered in the constituency	Absolute no. of non-tampered EVMS that remain, given that no tampered EVMS detected thus far	Probability of not detecting tampering of any EVM, in the particular random cross check of VVPAT-EVM counts	Probability of not detecting tampering of any EVM, in the cumulative random cross checks of VVPAT-EVM counts, till that point	Probability of not detecting tampering of any EVM, in the cumulative random cross checks of VVPAT-EVM counts, till that point, % age
4	1	200	10	190	0.95	0.95	95.00%
5	2	199	10	189	0.949748744	0.902261307	90.23%
6	3	198	10	188	0.949494949	0.856692554	85.67%
7	4	197	10	187	0.949238579	0.813205622	81.32%
8	5	196	10	186	0.948979592	0.771715539	77.17%
9							
10	Non-Detection Probability With Five (5) Random Cross Checks =						77.17%
11	Detection Probability With Five (5) Random Cross Checks =						22.83%