

	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 400 Voting Booths (With One EVM - VVPAT Pair In Each Booth, When VVPAT Counts Are Cross Checked With EVM Counts) (This is "Source Excel File-400 Booths with 5 Cross Checks" or "SEF-400 booths - 5 Cr Cks", Sheet-10) (Prepared By Dr Ramesh Bellamkonda, 2019-04-15)						
2	No. of booths in constituency =		400 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	400	10	390	0.975	0.975	97.50%
5	2	399	10	389	0.974937343	0.95056391	95.06%
6	3	398	10	388	0.974874372	0.926680394	92.67%
7	4	397	10	387	0.974811083	0.903338319	90.33%
8	5	396	10	386	0.974747475	0.880526745	88.05%
9							
10	Non-Detection Probability With Five (5) Random Cross Checks =						88.05%
11	Detection Probability With Five (5) Random Cross Checks =						11.95%