

	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 300 Voting Booths (With One EVM - VVPAT Pair In Each Booth, When VVPAT Counts Are Cross Checked With EVM Counts) (This is "Source Excel File-300 Booths with 5 Cross Checks" or "SEF-300 booths - 5 Cr Cks", Sheet-10) (Prepared By Dr Ramesh Bellamkonda, 2019-04-15)						
2	No. of booths in constituency =		300 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	300	10	290	0.966666667	0.966666667	96.67%
5	2	299	10	289	0.966555184	0.934336678	93.43%
6	3	298	10	288	0.966442953	0.902983098	90.30%
7	4	297	10	287	0.966329966	0.872579627	87.26%
8	5	296	10	286	0.966216216	0.843100585	84.31%
9							
10	Non-Detection Probability With Five (5) Random Cross Checks =						84.31%
11	Detection Probability With Five (5) Random Cross Checks =						15.69%