Calculating iD Network Resistance

Network of iD PLUS biscuits:

No of biscuits	*Nominal resistance*	*No of biscuits*	*Nominal resistance*	*No of biscuits*	*Nominal resistance*
1	1250K	11	114K	21	59.5K
2	625K	12	104K	22	56.8K
3	417K	13	96K	23	54.3K
4	313K	14	89K	24	52.1K
5	250K	15	83K	25	50.0K
6	208K	16	78K	26	48.1K
7	179K	17	73.5K	27	46.3K
8	156K	18	69.4K	28	44.6K
9	139K	19	65.8K	29	43.1K
10	125K	20	62.5K	30	41.7K

Network of old iD biscuits:

No of biscuits	*Nominal resistance*	*No of biscuits*	*Nominal resistance*	*No of biscuits*	*Nominal resistance*
1	87K	11	7.9K	21	4.1K
2	43.5K	12	7.3K	22	3.9K
3	29K	13	6.7K	23	3.7K
4	21.8K	14	6.2K	24	3.6K
5	17.4K	15	5.8K	25	3.5K
6	14.7K	16	5.4K	26	3.3K
7	12.5K	17	5.1K	27	3.2K
8	10.9K	18	4.8K	28	3.1K
9	9.7K	19	4.6K	29	3.0K
10	8.7K	20	4.4K	30	2.9K

Network of Mixed Biscuits (in K ohm):

$$\frac{1}{\Omega_{tot}} = \frac{No.Old}{87K} + \frac{No.New}{1250K}$$

or

$$\Omega_{tot} = \frac{1}{\frac{No.Old}{87K} + \frac{No.New}{1250K}}$$

These readings are a guide to the effectiveness of the wiring, and that all biscuits are correctly connected. This is NOT a diagnostic test for the biscuits themselves. A range of tolerance, roughly equivalent to the next figure above and below, should be expected.